

**APPENDIX 6-A: SAN JOSE TO MERCED PROJECT SECTION: PEPD
RECORD SET CAPITAL COST ESTIMATE REPORT**

California High Speed Rail Authority

San Jose to Merced Project Section

PEPD Record Set Capital Cost Estimate Report

July 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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1.0 INTRODUCTION

1.1 Purpose and Scope

The purpose of this report is to present the Capital Cost Estimating Methodology (CCEM) in the preparation of reasonably reliable and accurate capital cost estimates for the PEPD Design level.

This document describes the methodology for preparation of estimated capital cost for the California High-Speed Rail Project (CHSRP) San Jose to Merced PEPD document. In addition, it presents the summary of Capital Cost Estimates along with detailed FRA Standard Cost Categories (SCC) and sub-categories or cost elements. Refinement of these cost estimates will be on-going during the advancement of engineering during subsequent project development phases.

The primary objectives of this report are:

- Identify the methods and processes used to develop the capital cost estimate during PEPD Design Level Phase;
- Identify the source documents and/or methodology used for pricing work;
- Specify how estimating assumptions have been documented during the course of the estimate development;
- Describe Unit Price Elements;
- Define the approach and methodology with respect to FRA Standard Cost Categories (SCC);
- Present estimates have been developed for each complete alignment alternative for the San Jose to Merced Project Section.

The estimating approach has been done in a manner that (1) allows consistent application to each alternative to facilitate comparisons; (2) provides the proper foundation for more detailed estimates as selected alternative(s) are further evaluated; and (3) provides the basis for subsequent construction package procurement level estimates with additional guidelines for a more detailed capital cost estimate.

Considering CHSRP's size, complexity, phased design, and number of participants, it is important that the CCEM is flexible enough to be applied at each point in the project development process to appropriately support the tracking, monitoring and control of cost changes through each of the program's design and implementation phases. This document addresses only the capital cost estimating requirements for the PEPD Design level. Additional guidelines have been developed for the preparation of capital cost estimates for subsequent phases of the CHSRP.

1.2 Statement of Technical Issue

The document is intended to address the preparation of a program cost estimate, including construction, acquisition of right-of-way, vehicles, and professional services during execution of the project.

The CCEM is intended to provide guidelines for accurately and consistently estimating the costs of capital infrastructure and systems for the PEPD Design level. It also provides a framework for defining the scope and technical basis for the estimates, the roles and responsibilities for specific estimating tasks among the project participations, and the structure, organization, and format for reporting capital costs for all geographic sections of CHSRP.

1.3 General Information

1.3.1 Definition of Terms

Technical terms, acronyms, or other cost estimating terminology specifically used for capital cost estimating purposes, unless otherwise indicated, will follow the standard definition of terms published by the Association for the Advancement of Cost Engineering (AACE) International in their Recommend Practice No. 10S-90 – Cost Engineering Terminology.

The following acronyms used in this document have specific connotations with regard to California High Speed Rail system.

Acronyms

AACE	Association for the Advancement of Cost Engineering
CCEM	Capital Cost Estimating Methodology
Authority	California High-Speed Rail Authority
CHSRP	California High-Speed Rail Project
ENR	Engineering News Record
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HST	High Speed Train
LCCA	Life Cycle Cost Analysis
O&M	Operating and Maintenance
PMT	Program Management Team
RC	Regional Consultant(s)
SCC	Standard Cost Categories
TM	Technical Memorandum
WBS	Work Breakdown Structure

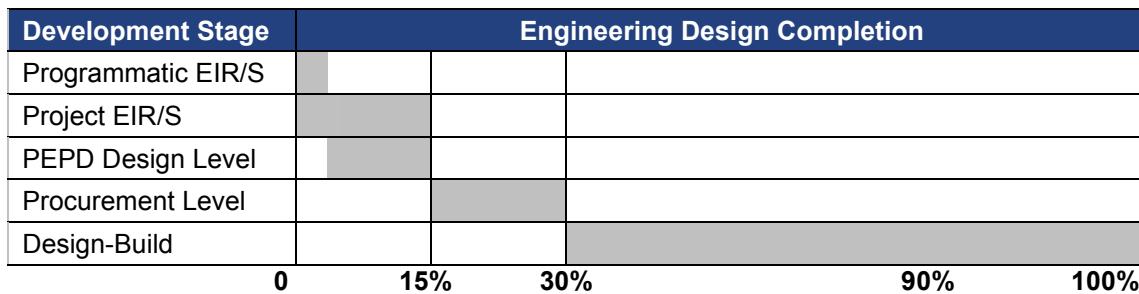
1.3.2 Units

The California High-Speed Rail Project is based on U.S. Customary Units consistent with guidelines prepared by the California Department of Transportation and defined by the National Institute of Standards and Technology (NIST). U.S. Customary Units are officially used in the United States and are also known in the US as “English” or “Imperial” units. In order to avoid confusion, all formal references to units of measure shall be made in terms of U.S. Customary Units.

Guidance for units of measure terminology, values, and conversions can be found in the Caltrans Metric Program Transitional Plan, Appendix B U.S. Customary General Primer (<http://www.dot.ca.gov/hq/oppd/metric/TransitionPlan/Appendice-B-US-Customary-General-Primer.pdf>). Caltrans Metric Program Transitional Plan, Appendix B can also be found as an attachment to the CHSRP Mapping and Survey Technical Memorandum.

2.0 CAPITAL COST ESTIMATING METHODOLOGY

Estimating methodologies are not static and must be flexible enough to adjust to the needs of the project's stage in the development process. The development process is described by the overall level of engineering design associated with the major development stages defined for the CHSRP:



Each development stage is represented by a range of engineering design completion and influenced by ongoing updates to the ridership demand forecast and associated revisions to estimated system capacity, service design and operating plans. Because of this variability, the appropriate estimating methods or procedures at a given milestone will be based on the actual levels of project engineering and scope definition present at that time. Because the program will be designed in multiple segments, the level of engineering design completed for major high-speed rail system elements will be at different levels at any point in time. The goal of using established estimating methodologies is to assure that project estimates are prepared in a consistent and uniform manner, organized and standardized in methods, and formatted in order to facilitate estimate review and reporting.

2.1 Estimating Format

A consistent format is developed for the reporting, estimating, and managing of the project's capital costs. This document recommends using standard cost categories (SCC) established by the Federal Railroad Administration (FRA) as part of American Recovery and Reinvestment Act (ARRA) grant application requirements. Preparation of capital costs in SCC format is adopted throughout the PEPD Design phase.

2.2 Estimating Software

Commercially available database software systems are used depending on the type of work elements. For example, Timberline is used for surface heavy construction work elements and HCSS is used for underground work elements. However, in order to provide uniformity between numerous work elements and sections of the corridor and to provide consistent platform for reporting and analysis requirements, the cost data are exported to Microsoft Excel. This will better enable the review, edit consolidation and reporting of estimate components over the course and provide more flexibility to make adjustments.

2.3 FRA Standard Cost Category (SCC)

The methodology used for generating capital cost estimates has been consistent with FRA guidelines for estimating capital costs. The heart of the FRA guidance is the SCC, which enables FRA-funded projects to develop budget baselines that summarize to the SCC. This cost structure is used for capital cost detail and summary sheets and is described below. Where the level of design does not support quantity measurements, parametric estimating techniques were utilized.

2.3.1 Work Breakdown Structure (WBS)

This involves the development of the Work Breakdown Structure (WBS) that is applied to cost estimating and cost reporting. The WBS for estimating includes a coding system that is used for estimating elements. The WBS for reporting includes the development of a coding system that allows the cost estimates to be sorted and presented by categories and subcategories as prescribed by the FRA.

The WBS for capital cost estimates for the PEPD Design level is based upon the FRA Standard Cost Categories is presented in Appendix A.

The primary WBS for quantities and unit prices are Unit Price Element's (UPE's). UPE's were originally developed as an estimating tool to assist in the development of conceptual level cost estimates and provide a method for translating typical construction items into a unit-based unit of measurement. The scope and definition of UPE's are developed by the Regional Consultant based on the unique design present in their project section.

2.3.2 Estimated Unit Costs

The development of construction unit costs for each of the construction activities that is identified and quantified from the design documents. The development of individual or composite estimated unit costs is accomplished through the use of historical bid data and by unit cost analysis, as appropriate, using labor, equipment and material rates. Unit costs are expressed in current year dollars and are adjusted to reflect any regional variations.

These methods are used either individually or in combination. For the PEPD Design level, when limited engineering details are available, the historical bid price method is typically used.

2.3.2.1 Historical Bid Price Method

Historical bid prices are typically used to develop costs for common construction elements. When using this method, the time of bid and conditions of the historical project used for pricing is considered and factors applied as needed:

- Adjust bid prices where the bid date is older than 12 months from the current date by using an appropriate escalation factor
- Adjust bid prices to reflect conditions of the project, such as type of terrain, geographical location, soil, traffic and other related factors. For location factor adjustments, the City Cost Index as published by RS Means is used.

Sources for historical bid prices that are used may come from local, regional, statewide and national levels, as well as from international high-speed rail projects with unique high-speed elements. Historical unit prices that are used for the CHSRP will be verified for appropriateness and documented as to their source as well as any adjustments for site, escalation or location factors.

2.3.2.2 Unit Cost Analysis Method

The estimated unit cost analysis method is typically used to develop costs for complex construction elements including but not limited to viaducts, retained earth systems, tunneling and underground structures. This method allows for unit costs to be developed based on current local construction and market conditions, such as changes which might affect productivity or the cost of labor or materials. The following steps are required in order to develop a unit price using this method:

- Analyze the proposed construction conditions
- Estimate production rates where applicable
- Obtain materials prices using local available sources
- Determine labor and equipment rates where applicable
- Calculate direct unit price using the above factors

The following sources are used to obtain basic cost data that is input into the database estimating program in order to develop any needed construction unit prices:

- Labor Rates – RS Means national wages adjusted by City Cost Index factor, Federal Davis-Bacon Wage Determination and/or California Department of Industrial Relations Prevailing Wage Determinations.
- Equipment Rates – RS Means and/or Corp of Engineers Construction Equipment Ownership and Operating Expense Schedule, Region VII.
- Material Prices - Material and supply prices for locally available material are obtained from local supplier quotes, if possible. Secondary sources of material cost data may be taken from RS Means, Engineering News-Report (ENR) or other published resource.

A list of prototypical work elements and the units of measure are estimated for PEPD Design level with corresponding estimated unit cost. Appendix A presents the list of variable cost elements within each FRA SCC 10's to 60's series. When required, additional project-specific work elements reflecting unique site conditions and configurations are identified and their estimated costs are developed in addition to prototypical unit costs. Examples of these project-specific unit costs include very high and/or long span iconic bridge structures, grade separations, specific roadway improvements, unique utility relocations, staged construction to accommodate existing rail or vehicular traffic, or restrictive site access conditions in urban areas.

2.3.3 Quantity Takeoffs

The task of quantity takeoffs involves preparation of estimated quantities either by direct measurement and calculation of construction elements that are shown in design drawings, sketches, electronically calculated from CADD files or established as an allowance quantity based on professional experience and judgment. Quantity take-offs have been prepared by the Regional Consultant and are presented in the San Jose to Merced PEPD quantities document "JM Draft_PEPD_AppA-Qty-v9_20190515."

2.3.4 Allocated and Unallocated Contingencies

Contingency, in the statistical sense, is the estimated percentage by which a calculated value may differ from its true or final value and is typically included in an estimate as an allowance for the level of engineering design completion or to address imperfections in the estimating methods used at the various project development stages. Contingency is typically added to a particular item or group of items by the use of percentage multipliers. Contingency is generally greatest for the early stage of project development and decreases with advancement in the level of engineering design and pricing detail. During the preliminary design of the high-speed rail project, the limited level of design information that is available requires the use of contingency allowances that are allocated against specific construction or procurement cost categories. The percentage selected for a given cost category are generally based on level of definition of the scope of work involved and substantiated by professional judgment and experience relative to level of uncertainty and historical cost variability typically seen for work within a particular cost category. For the purposes of this estimating program, contingency is assigned into two major categories – allocated and unallocated.

Allocated contingency is added to each cost category based on an assessment of the quality of design information; means and methods; and site accessibility available for individual items of work. This contingency typically falls in a range of 10% to 25%. The exact percentage selected for each cost category is based on professional judgment and experience related to the cost variability typically seen for items of work within a particular cost category. The contingency is generally higher for underground elements reflecting the additional exposure for unknowns as well as the construction complexity. It is also higher for stations, terminals, storage yard facilities and utilities since their design progress is still in the conceptual level and identification of all the utilities are not determined. The percentages shown in Table 2-1 are the values that are normally used; however, slightly higher or lower values are used if a project-specific condition warrant.

Unallocated contingency is typically included to address uncertainties that are more global in nature like schedule delays, changes in contracting environment, or other such issues that are not associated with individual construction activities. Unallocated contingencies will be estimated at 5 percent of the total construction costs.

Table 2-1 Allocated Contingency Percentages by Cost Category

Cost Category No.	Description	Allocated Contingency Percentage
10 Track Structures and Track		
10.01	Track structure: Viaduct	15%
10.02	Track structure: Major/Movable bridges	15%
10.03	Track structure: Under grade bridges	15%
10.04	Track structure: Culverts and drainage structures	15%
10.05	Track structure: Cut and Fill (> 4' height/depth)	20%
10.06	Track structure: At-grade (grading and subgrade stabilization)	10%
10.07	Track structure: Tunnel	25%
10.08	Track structure: Retaining walls and systems	15%
10.09	Track new construction: Conventional ballasted	15%
10.10	Track new construction: Non-ballasted	15%
10.11	Track rehabilitation: Ballast and surfacing	15%
10.12	Track rehabilitation: Ditching and drainage	15%
10.13	Track rehabilitation: Component replacement (rail, ties, etc)	15%
10.14	Track: Special track work (switches, turnouts, insulated joints)	15%
10.15	Track: Major interlocking	15%
10.16	Track: Switch heaters (with power and control)	15%
10.17	Track: Vibration and noise dampening	15%
10.18	Other linear structures including fencing, sound walls	15%
20 Stations, Terminals, Intermodal		25%
30 Support Facilities: Yards, Shops, Admin. Bldgs		25%
40 Sitework, Right of Way, Land, Existing Improvements		
40.01	Demolition, clearing, site preparation	25%
40.02	Site utilities, utility relocation	25%
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments	15%
40.04	Environmental mitigation: wetlands, historic/archeology, parks	20%
40.05	Site structures including retaining walls, sound walls	25%
40.06	Temporary facilities and other indirect costs during construction	10%

40.07	Purchase or lease of real estate	40%
40.08	Highway/pedestrian overpass/grade separations	20%
40.09	Relocation of existing households and businesses	0%
50 Communications & Signaling		15%
60 Electric Traction		15%
70 Vehicles		0%
80 Professional Services		0%

2.3.5 Environmental Mitigation

An allowance to account for the cost of environmental mitigation that relates to hydrology and water resources; wetland impact; hazardous material and waste; historic/archeology; safety and security; noise, vibration and air quality during construction and permanent aesthetic is included in the total capital cost. This allowance is based on 3% of the total cost of track structures, track work, station buildings, roadway modification and highway grade separation.

2.3.6 Right-of-Way Cost Estimate

This involves preparing estimated quantities of impacted properties, either permanent takes or temporary easements, which result from construction, operation, and maintenance of proposed high-speed rail alignment alternatives. In order to arrive at the estimated cost, professional experience and judgment in the area of property valuation, business damages, and legal and administrative issues as they relate to the estimation of right-of-way costs have been applied. The values used in the cost estimate were developed by the Regional consultant to reflect the design changes "JM_Record_PEPD_ROW_Report_March_2019."

2.3.7 Vehicle Estimate

The costs for the San Jose to Merced section do not include acquisition of high-speed train vehicles. Acquisition of trainsets is considered to be a system-wide procurement and is not associated with construction of individual sections of the CHSRR System. Consistent with the Revised 2016 Business Plan, the cost of vehicles was determined by using publicly available data regarding recent sales of comparable equipment to other CHSRR projects around the world and by informal consultations with the manufacturers.

2.3.8 Program Implementation/Professional Services Add-ons

Program Implementation costs are included to represent the costs of engineering, project and construction management, contract administration, permits and fees, training/start-up/testing and any force account work. These add-on costs are calculated as a percentage of construction costs only (applied individually and not cumulatively and excluding vehicle procurement and right-of-way costs) and presented under Professional Services cost category in the estimate. The management and administration cost associated with right-of-way and rolling stock are included with the respective items.

Preliminary Engineering	2.0%
Program Management	3.0%
Final Design	6.0%
Construction Management	4.0%
Agency Costs	0.5%
Total	15.5%

In addition, an allowance for system start-up and pre-revenue testing is added to the Professional Services cost category in the amount of 6% of the Train Controls, Communications and Electrification construction costs.

2.3.9 Escalation

Estimates are prepared in Base Year dollars with the Base Year defined as the current calendar year. Unit costs are updated annually or as required. For cost estimates with a base year that is older than the current calendar by one or more years, actual historical construction cost index values are used to calculate the escalation rate to be applied to bring a cost from the period in question to the present.

2.3.10 Finance Charge

Finance charges are not included in the capital cost estimates.

2.4 Estimate Validation

Following preparation of the PEPD Design level estimates, cost estimates are subjected to a validation process including reviews by subject matter experts in the areas of engineering and construction.

2.5 Estimate Reconciliation

Reconciliations are made between current cost estimates and cost estimates that were developed in previous design phases. The goal of reconciliation is to identify and document significant changes that may have occurred since the preparation of the prior capital cost estimate. Significant changes are identified in the reconciliation under one of three categories that best reflects the cause for the change: Quantity, Unit Price, or Scope, as applicable.

2.6 Estimate Assumption and Exclusions

- All costs are in 2018\$ Q3
- Allocated Contingency is included in all costs.
- ROW costs have been included based on current ROW report as referenced in the list of documents from the RC. An average price between the high and low has been used.
- ROW costs do not include costs for an agreement or procurement of ROW with railroads within the shared corridor.

- Subsection SS99 Complete contains alternative wide elements that cannot be assigned to a specific subsection such as professional services, ROW, systems, and unallocated contingency in the Appendix C detailed estimate tables.

APPENDIX A**WORK BREAKDOWN STRUCTURE (WBS)****WORK BREAKDOWN STRUCTURE (FRA STANDARD COST CATEGORIES)****10 TRACK STRUCTURES & TRACK**

10.01	Track structure: Viaduct
10.02	Track structure: Major/Movable bridge
10.03	Track structure: Under grade Bridges
10.04	Track structure: Culverts and drainage structures
10.05	Track structure: Cut and Fill (> 4' height/depth)
10.06	Track structure: At-grade (grading and subgrade stabilization)
10.07	Track structure: Tunnel
10.08	Track structure: Retaining walls and systems
10.09	Track new construction: Conventional ballasted
10.10	Track new construction: Non-ballasted
10.11	Track rehabilitation: Ballast and surfacing
10.12	Track rehabilitation: Ditching and drainage
10.13	Track rehabilitation: Component replacement (rail, ties, etc)
10.14	Track: Special track work (switches, turnouts, insulated joints)
10.15	Track: Major interlockings
10.16	Track: Switch heaters (with power and control)
10.17	Track: Vibration and noise dampening
10.18	Other linear structures including fencing, sound walls

20 STATIONS, TERMINALS, INTERMODAL

20.01	Station buildings: Intercity passenger rail only
20.02	Station buildings: Joint use (commuter rail, intercity bus)
20.03	Platforms
20.04	Elevators, escalators
20.05	Joint commercial development
20.06	Pedestrian / bike access and accommodation, landscaping, parking lots
20.07	Automobile, bus, van accessways including roads
20.08	Fare collection systems and equipment
20.09	Station security

30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS

30.01	Administration building: Office, sales, storage, revenue counting
30.02	Light maintenance facility
30.03	Heavy maintenance facility
30.04	Storage or maintenance-of-way building/bases
30.05	Yard and yard track

40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS

40.01	Demolition, clearing, site preparation
40.02	Site utilities, utility relocation
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments
40.04	Environmental mitigation: wetlands, historic/archeology, parks
40.05	Site structures including retaining walls, sound walls
40.06	Temporary facilities and other indirect costs during construction
40.07	Purchase or lease of real estate
40.08	Highway/pedestrian overpass/grade separations
40.09	Relocation of existing households and businesses

50 COMMUNICATIONS & SIGNALING

50.01	Wayside signaling equipment
50.02	Signal power access and distribution
50.03	On-board signaling equipment
50.04	Traffic control and dispatching systems
50.05	Communications
50.06	Grade crossing protection
50.07	Hazard detectors: dragging equipment high water, slide, etc.
50.08	Station train approach warning system

60 ELECTRIC TRACTION

60.01	Traction power transmission: High voltage
60.02	Traction power supply: Substations
60.03	Traction power distribution: Catenary and third rail
60.04	Traction power control

70 VEHICLES

70.00	Vehicle acquisition: Electric locomotive
70.01	Vehicle acquisition: Non-electric locomotive

70.02	Vehicle acquisition: Electric multiple unit
70.03	Vehicle acquisition: Diesel multiple unit
70.04	Vehicle acquisition: Loco-hauled passenger cars w/ ticketed space
70.05	Vehicle acquisition: Loco-hauled passenger cars w/o ticketed space
70.06	Vehicle acquisition: Maintenance of way vehicles
70.07	Vehicle acquisition: Non-railroad support vehicles
70.08	Vehicle refurbishment: Electric locomotive
70.09	Vehicle refurbishment: Non-electric locomotive
70.10	Vehicle refurbishment: Electric multiple unit
70.11	Vehicle refurbishment: Diesel multiple unit
70.12	Vehicle refurbished: Passenger loco-hauled car w/ ticketed space
70.13	Vehicle refurbished: Non-passenger loco-hauled car w/o ticketed space
70.14	Vehicle refurbishment: Maintenance of way vehicles
70.15	Spare parts

80 PROFESSIONAL SERVICES (applies to Cats. 10 & 60)

80.01	Service Development Plan/Service Environmental
80.02	Preliminary Engineering/Project Environmental
80.03	Final design
80.04	Project management for design and construction
80.05	Construction administration & management
80.06	Professional liability and other non-construction insurance
80.07	Legal; Permits; Review Fees by other agencies, cities, etc.
80.08	Surveys, testing, investigation
80.09	Engineering inspection
80.10	Start up

90 UNALLOCATED CONTINGENCY**100 FINANCE CHARGES**

APPENDIX B**TYPICAL UNIT COST ELEMENTS**

No.	DESCRIPTION	UNIT
10.01	Track structure: Viaduct	
10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht)	Route Mile
10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht)	Route Mile
10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht)	Route Mile
10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht)	Route Mile
10.01.242	Elevated Structure - 4 Track (20' Avg. Pier Ht)	Route Mile
10.01.243	Elevated Structure - 4 Track (30' Avg. Pier Ht)	Route Mile
10.01.244	Elevated Structure - 4 Track (40' Avg. Pier Ht)	Route Mile
10.01.245	Elevated Structure - 4 Track (50' Avg. Pier Ht)	Route Mile
10.01.246	Elevated Structure - 4 Track (60' Avg. Pier Ht)	Route Mile
10.01.247	Elevated Structure - 4 Track (70' Avg. Pier Ht)	Route Mile
10.01.322	Elevated Structure (LS) - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.323	Elevated Structure (LS) - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.324	Elevated Structure (LS) - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.325	Elevated Structure (LS) - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.326	Elevated Structure (LS) - 1 Track (60' Avg. Pier Ht)	Route Mile
10.01.327	Elevated Structure (LS) - 1 Track (70' Avg. Pier Ht)	Route Mile
10.01.422	Elevated Structure (LS) - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.423	Elevated Structure (LS) - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.424	Elevated Structure (LS) - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.425	Elevated Structure (LS) - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.426	Elevated Structure (LS) - 2 Track (60' Avg. Pier Ht)	Route Mile
10.01.427	Elevated Structure (LS) - 2 Track (70' Avg. Pier Ht)	Route Mile
10.01.431	Elevated Structure (LS-Tall) - 2-Single Tracks (110' Avg. Pier Ht)	Route Mile

No.	DESCRIPTION	UNIT
10.01.432	Elevated Structure (LS-Tall) - 2-Single Tracks (120' Avg. Pier Ht)	Route Mile
10.01.512	Elevated Structure Straddle over 2 RR - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.513	Elevated Structure Straddle over 2 RR - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.514	Elevated Structure Straddle over 2 RR - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.515	Elevated Structure Straddle over 2 RR - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.522	Elevated Structure Straddle over 2 RR - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.523	Elevated Structure Straddle over 2 RR - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.524	Elevated Structure Straddle over 2 RR - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.525	Elevated Structure Straddle over 2 RR - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.612	Elevated Structure Straddle over 4 RR - 1 Track (20' Avg. Pier Ht)	Route Mile
10.01.613	Elevated Structure Straddle over 4 RR - 1 Track (30' Avg. Pier Ht)	Route Mile
10.01.614	Elevated Structure Straddle over 4 RR - 1 Track (40' Avg. Pier Ht)	Route Mile
10.01.615	Elevated Structure Straddle over 4 RR - 1 Track (50' Avg. Pier Ht)	Route Mile
10.01.622	Elevated Structure Straddle over 4 RR - 2 Track (20' Avg. Pier Ht)	Route Mile
10.01.623	Elevated Structure Straddle over 4 RR - 2 Track (30' Avg. Pier Ht)	Route Mile
10.01.624	Elevated Structure Straddle over 4 RR - 2 Track (40' Avg. Pier Ht)	Route Mile
10.01.625	Elevated Structure Straddle over 4 RR - 2 Track (50' Avg. Pier Ht)	Route Mile
10.01.944	Elevated Structure - 2 Track w/ 2 Single Trenches	Route Mile
10.02	Track structure: Major/Movable bridge	
10.02.013	Bridge Structure - 3 span with 1 Track	Route Mile
10.02.023	Bridge Structure - 3 span with 2 Track	Route Mile
10.02.043	Bridge Structure - 3 span with 4 Track	Route Mile
10.05	Track structure: Cut and Fill (> 4' height/depth)	
10.05.111	At-Grade Track-bed in Cut - 1 Track (5' Avg. Exc Depth)	Route Mile

No.	DESCRIPTION	UNIT
10.05.112	At-Grade Track-bed in Cut - 1 Track (10' Avg. Exc Depth)	Route Mile
10.05.113	At-Grade Track-bed in Cut - 1 Track (15' Avg. Exc Depth)	Route Mile
10.05.114	At-Grade Track-bed in Cut - 1 Track (20' Avg. Exc Depth)	Route Mile
10.05.121	At-Grade Track-bed in Cut - 2 Track (5' Avg. Exc Depth)	Route Mile
10.05.122	At-Grade Track-bed in Cut - 2 Track (10' Avg. Exc Depth)	Route Mile
10.05.123	At-Grade Track-bed in Cut - 2 Track (15' Avg. Exc Depth)	Route Mile
10.05.124	At-Grade Track-bed in Cut - 2 Track (20' Avg. Exc Depth)	Route Mile
10.05.126	At-Grade Track-bed in Cut - 2 Track (40' Avg. Exc Depth)	Route Mile
10.05.128	At-Grade Track-bed in Cut - 2 Track (60' Avg. Exc Depth)	Route Mile
10.05.130	At-Grade Track-bed in Cut - 2 Track (80' Avg. Exc Depth)	Route Mile
10.05.132	At-Grade Track-bed in Cut - 2 Track (100' Avg. Exc Depth)	Route Mile
10.05.211	At-Grade Track-bed in Fill - 1 Track (5' Avg. Fill Ht)	Route Mile
10.05.212	At-Grade Track-bed in Fill - 1 Track (10' Avg. Fill Ht)	Route Mile
10.05.213	At-Grade Track-bed in Fill - 1 Track (15' Avg. Fill Ht)	Route Mile
10.05.214	At-Grade Track-bed in Fill - 1 Track (20' Avg. Fill Ht)	Route Mile
10.05.221	At-Grade Track-bed in Fill - 2 Track (5' Avg. Fill Ht)	Route Mile
10.05.222	At-Grade Track-bed in Fill - 2 Track (10' Avg. Fill Ht)	Route Mile
10.05.223	At-Grade Track-bed in Fill - 2 Track (15' Avg. Fill Ht)	Route Mile
10.05.224	At-Grade Track-bed in Fill - 2 Track (20' Avg. Fill Ht)	Route Mile
10.05.226	At-Grade Track-bed in Fill - 2 Track (40' Avg. Fill Ht)	Route Mile
10.05.228	At-Grade Track-bed in Fill - 2 Track (60' Avg. Fill Ht)	Route Mile
10.05.230	At-Grade Track-bed in Fill - 2 Track (80' Avg. Fill Ht)	Route Mile
10.05.232	At-Grade Track-bed in Fill - 2 Track (100' Avg. Fill Ht)	Route Mile
10.06	Track structure: At-grade (grading and subgrade stabilization)	
10.06.210	At-Grade Track-bed with Closed Drainage - 1 Track	Route Mile
10.06.220	At-Grade Track-bed with Closed Drainage - 2 Track	Route Mile
10.06.230	At-Grade Track-bed with Closed Drainage - 3 Track	Route Mile
10.06.240	At-Grade Track-bed with Closed Drainage - 4 Track	Route Mile
10.07	Track structure: Tunnel	
10.07.101	TBM Single Track Twin Tunnel 30ft ID Unpressurized TBM in hard rock	Route Mile
10.07.102	TBM Single Track Twin Tunnel 30ft ID Slurry TBM in hard rock	Route Mile
10.07.103	TBM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.104	TBM Double Track Tunnel 50ft ID in soft ground	Route Mile

No.	DESCRIPTION	UNIT
10.07.105	TBM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.201	D&B Single Track Twin Tunnel 30ft ID in hard rock	Route Mile
10.07.202	D&B Single Track Twin Tunnel 30ft ID in rock	Route Mile
10.07.203	D&B Double Track Tunnel 40ft ID in hard rock	Route Mile
10.07.204	D&B Double Track Tunnel 40ft ID in rock	Route Mile
10.07.205	D&B Double Track Tunnel 50ft ID in hard rock	Route Mile
10.07.206	D&B Double Track Tunnel 50ft ID in rock	Route Mile
10.07.301	SEM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.302	SEM Single Track Twin Tunnel 30ft ID in soft ground	Route Mile
10.07.303	SEM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.304	SEM Double Track Tunnel 40ft ID in soft ground	Route Mile
10.07.305	SEM Double Track Tunnel 50ft ID in soft ground	Route Mile
10.07.306	SEM Double Track Tunnel 50ft ID in soft ground	Route Mile
10.07.401	RH Single Track Twin Tunnel 30ft ID in soft rock	Route Mile
10.07.402	RH Single Track Twin Tunnel 30ft ID in soft rock	Route Mile
10.07.403	RH Double Track Tunnel 40ft ID in soft rock	Route Mile
10.07.404	RH Double Track Tunnel 40ft ID in soft rock	Route Mile
10.07.405	RH Double Track Tunnel 50ft ID in soft rock	Route Mile
10.07.406	RH Double Track Tunnel 50ft ID in soft rock	Route Mile
10.07.207	D&B Cross Passage conservative cost in rock	Linear Feet
10.07.407	RH Cross Passage conservative cost in soft rock	Linear Feet
10.07.501	Cross Passage in Soft Ground	Linear Feet
10.07.502	Cross Passage in Soft Ground, including jet grout	Linear Feet
10.07.114	Cut & Cover Box - 1 Track/ 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.115	Cut & Cover Box - 1 Track/ 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.116	Cut & Cover Box - 1 Track/ 1 Box (60' Avg. Exc Depth)	Route Mile
10.07.214	Cut & Cover Box - 2 Track / 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.215	Cut & Cover Box - 2 Track / 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.216	Cut & Cover Box - 2 Track / 1 Box (60' Avg. Exc Depth)	Route Mile
10.07.224	Cut & Cover Box - 2 Track/ 2 Box (40' Avg. Exc Depth)	Route Mile
10.07.225	Cut & Cover Box - 2 Track / 2 Box (50' Avg. Exc Depth)	Route Mile
10.07.226	Cut & Cover Box - 2 Track / 2 Box (60' Avg. Exc Depth)	Route Mile
10.07.414	Cut & Cover Box - 4 Track / 1 Box (40' Avg. Exc Depth)	Route Mile
10.07.415	Cut & Cover Box - 4 Track / 1 Box (50' Avg. Exc Depth)	Route Mile
10.07.416	Cut & Cover Box - 4 Track / 1 Box (60' Avg. Exc Depth)	Route Mile

No.	DESCRIPTION	UNIT
10.07.801	Ventilation Shaft	VF
10.07.802	Mid-Line Ventilation Structure	LS
10.07.803	Tunnel Portal Structure	LS
10.07.805	Emergency Access Shaft	VF
10.07.850	Pumping Station	EA
10.07.901	Mechanical & Electrical Allowance for Underground (Single)	Route Mile
10.07.902	Mechanical & Electrical Allowance for Underground (Double)	Route Mile
10.07.920	Ventilation Equipment Allowance	EA
10.07.922	Double Deck - 2 Track Trench on Top of 2 Track C&C Box	Route Mile
10.07.950	Allowance for Construction Monitoring	Route Mile
10.08	Track structure: Retaining walls and systems	
10.08.211	Retained Cut, Trench - 1 Track (10' Avg. Exc Depth)	Route Mile
10.08.212	Retained Cut, Trench - 1 Track (20' Avg. Exc Depth)	Route Mile
10.08.213	Retained Cut, Trench - 1 Track (30' Avg. Exc Depth)	Route Mile
10.08.221	Retained Cut, Trench - 2 Track (10' Avg. Exc Depth)	Route Mile
10.08.222	Retained Cut, Trench - 2 Track (20' Avg. Exc Depth)	Route Mile
10.08.223	Retained Cut, Trench - 2 Track (30' Avg. Exc Depth)	Route Mile
10.08.241	Retained Cut, Trench - 4 Track (10' Avg. Exc Depth)	Route Mile
10.08.242	Retained Cut, Trench - 4 Track (20' Avg. Exc Depth)	Route Mile
10.08.243	Retained Cut, Trench - 4 Track (30' Avg. Exc Depth)	Route Mile
10.08.344	Retained Cut, Staged Trench - 4 Track (40' Avg. Exc Depth)	Route Mile
10.08.346	Retained Cut, Staged Trench - 4 Track (60' Avg. Exc Depth)	Route Mile
10.08.411	Retained Fill, Walls Both Sides - 1 Tracks (10' Avg. Wall Ht)	Route Mile
10.08.412	Retained Fill, Walls Both Sides - 1 Tracks (20' Avg. Wall Ht)	Route Mile
10.08.413	Retained Fill, Walls Both Sides - 1 Tracks (30' Avg. Wall Ht)	Route Mile
10.08.421	Retained Fill, Walls Both Sides - 2 Tracks (10' Avg. Wall Ht)	Route Mile
10.08.422	Retained Fill, Walls Both Sides - 2 Tracks (20' Avg. Wall Ht)	Route Mile
10.08.423	Retained Fill, Walls Both Sides - 2 Tracks (30' Avg. Wall Ht)	Route Mile
10.09	Track new construction: Conventional ballasted	
10.09.110	Ballasted Track - 1 Track	Route Mile
10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	Route Mile
10.09.120	Ballasted Track - 2 Track	Route Mile
10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	Route Mile
10.09.240	Ballasted Track - 2 Track (Station Track)	Route Mile
10.09.810	Ballasted Freight Track - 1 Track	Route Mile

No.	DESCRIPTION	UNIT
10.09.820	Ballasted Freight Track - 2 Track	Route Mile
10.09.910	Ballasted Track Relocation - 1 Track (Temporary)	Route Mile
10.09.920	Ballasted Track Relocation - 1 Track (Permanent)	Route Mile
10.10	Track new construction: Non-ballasted	
10.10.110	Direct Fixation Track - 1 Track	Route Mile
10.10.120	Direct Fixation Track - 2 Track	Route Mile
10.10.140	Direct Fixation Track - 4 Track	Route Mile
10.10.210	Independent Dual Block Track - 1 Track	Route Mile
10.10.220	Independent Dual Block Track - 2 Track	Route Mile
10.10.240	Independent Dual Block Track - 4 Track	Route Mile
10.14	Track: Special track work (switches, turnouts, insulated joints)	
10.14.100	Direct Fixation Turnout (60 MPH)	EA
10.14.105	Direct Fixation Turnout (80 MPH)	EA
10.14.110	Direct Fixation Turnout (110 MPH)	EA
10.14.115	Direct Fixation Turnout (150 MPH)	EA
10.14.130	Direct Fixation Crossover (60 MPH)	EA
10.14.135	Direct Fixation Crossover (80 MPH)	EA
10.14.140	Direct Fixation Crossover (110 MPH)	EA
10.14.145	Direct Fixation Crossover (150 MPH)	EA
10.14.200	Ballasted Turnout (60 MPH)	EA
10.14.205	Ballasted Turnout (80 MPH)	EA
10.14.210	Ballasted Turnout (110 MPH)	EA
10.14.215	Ballasted Turnout (150 MPH)	EA
10.14.300	Ballasted Crossover (60 MPH)	EA
10.14.305	Ballasted Crossover (80 MPH)	EA
10.14.310	Ballasted Crossover (110 MPH)	EA
10.14.315	Ballasted Crossover (150 MPH)	EA
10.14.400	Terminal - Bumping Post	
20.01	Station buildings: Intercity passenger rail only	
20.01.105	Millbrae Station	LS
20.01.105	Millbrae Station - Site Elements	LS
20.02.200	Redwood/Palo Alto Station	LS
20.02.201	Redwood/Palo Alto Station - Site Elements	LS
20.02.215	Gilroy Station	LS

No.	DESCRIPTION	UNIT
20.02.216	Gilroy Station - Site Elements	LS
20.02.225	San Jose Station	LS
20.02.226	San Jose Station-Site Elements	LS
20.01.100	Artic Station	LS
20.01.110	LA Union Station	LS
20.02.205	Norwalk Station	LS
20.02.206	Norwalk Station - Site Elements	LS
20.02.210	Tulare Station	LS
20.02.211	Tulare Station - Site Elements	LS
20.02.220	Burbank Station	LS
20.02.221	Burbank Station - Site Elements	LS
20.02.230	Merced Station	LS
20.02.231	Merced Station - Site Elements	LS
20.02.235	Fresno Station	LS
20.02.236	Fresno Station - Site Elements	LS
20.02.240	Bakersfield Station	LS
20.02.241	Bakersfield Station - Site Elements	LS
20.02.245	Palmdale Station	LS
20.02.246	Palmdale Station - Site Elements	LS
20.02.250	Sylmar Station	LS
20.02.251	Sylmar Station - Site Elements	LS
20.06	Pedestrian / bike access and accommodation, landscaping, parking lots	
20.06.120	Pedestrian Access (Cut & Cover)	LF
20.06.140	Pedestrian Plaza	SF
20.06.160	Pedestrian Access, Vertical Structure, 30' Height	EA
20.06.210	Parking - At Grade	STL
20.06.250	Parking - Structured (Above Grade)	STL
20.06.800	Landscaping Allowance	SF
20.06.810	Landscaping Allowance, Guideway	Route Mile
20.07	Automobile, bus, van accessways including roads	
20.07.010	Roadway Modification, New AC Paving	SF
20.07.020	Roadway Modification, New AC Paving (including Curb & Sidewalk)	SF
20.07.710	Permanent Service/Emergency Access Road (20' Wide)	Route Mile

No.	DESCRIPTION	UNIT
20.07.715	Access Road Entrance Point	EA
20.07.800	Streetscaping Allowance	ESF
30.02	Light maintenance facility	
30.02.010	Light Maintenance Facility (LMF)	EA
30.03	Heavy maintenance facility	
30.03.010	Heavy Maintenance Facility (HMF)	EA
30.04	Storage or maintenance-of-way building/bases	
30.04.010	Maintenance of Way Facility (MOWF)	EA
30.05	Yard and yard track	
30.05.110	Ballasted Track - Yard Track	Route Mile
30.05.200	Ballasted Turnout, No. 15	EA
30.05.210	Ballasted Diamond Crossover, No. 15	EA
30.05.250	Heavy Duty Rubber Grade Crossing	TF
40.01	Demolition, clearing, site preparation	
40.01.010	Demolition Allowance, Bridge	SF
40.01.050	Demolition Allowance, Building (1 Story)	SF
40.01.060	Demolition Allowance, Building (2 Story)	SF
40.01.110	Demolition Allowance, Asphalt Pavement	SY
40.01.140	Demolition Allowance, Concrete Curb	LF
40.01.150	Demolition Allowance, Concrete Sidewalk	SY
40.01.810	Demolition Allowance, Remove Railroad Track	Route Mile
40.01.900	Miscellaneous Excavation & Support Items	LS
40.02	Site utilities, utility relocation	
40.02.001	Utility Relocation Allowance, Level 1	Route Mile
40.02.002	Utility Relocation Allowance, Level 2	Route Mile
40.02.003	Utility Relocation Allowance, Level 3	Route Mile
40.02.004	Utility Relocation Allowance, Level 4	Route Mile
40.02.005	Utility Relocation Allowance, Level 5	Route Mile
40.02.050	Site Utility Allowance	Route Mile
40.03	Hazardous material, contaminated soil removal/mitigation, ground water treatments	
40.03.100	Hazardous Material Removal Allowance, Light	Route Mile
40.03.105	Hazardous Material Removal Allowance, Medium	Route Mile
40.03.110	Hazardous Material Removal Allowance, Heavy	Route Mile
40.03.150	Removal of Contaminated Soil	CF

No.	DESCRIPTION	UNIT
40.04	Environmental mitigation: wetlands, historic/archeology, parks	
40.04.100	Environmental Mitigation Allowance, Light	Route Mile
40.04.105	Environmental Mitigation Allowance, Medium	Route Mile
40.04.110	Environmental Mitigation Allowance, Heavy	Route Mile
40.05	Site structures including retaining walls, sound walls	
40.05.012	Retaining Wall - 1 Wall (12' Avg. Height)	LF
40.05.111	Containment (Crash) Wall - 1 Wall (6' Avg. Height Above Rail)	LF
40.05.120	Blast Wall (At Stations) - 1 Wall (20' Avg. Height Above Platform)	LF
40.05.211	Sound Wall - 1 Wall (8' Avg. Height)	LF
40.05.310	Intrusion Protection Berm	LF
40.06	Temporary facilities and other indirect costs during construction	
40.07	Purchase or lease of real estate	
	Right-of-Way Required for Segment	
40.07.100	Dense Urban	Acre
40.07.101	Urban	Acre
40.07.102	Dense Suburban	Acre
40.07.103	Suburban	Acre
40.07.104	Farmland	Acre
40.07.105	Undeveloped	Acre
	Right-of-Way Required for Stations and Maintenance Facilities	
40.07.200	Dense Urban	Acre
40.07.201	Urban	Acre
40.07.202	Dense Suburban	Acre
40.07.203	Suburban	Acre
40.07.204	Undeveloped	Acre
40.08	Highway/pedestrian overpass/grade separations	
40.08.322	Roadway Overcrossing HSR - 2 lane retained fill roadway over 2 tracks	EA
40.08.324	Roadway Overcrossing HSR - 4 lane retained fill roadway over 2 tracks	EA
40.08.326	Roadway Overcrossing HSR - 6 lane retained fill roadway over 2 tracks	EA

No.	DESCRIPTION	UNIT
40.08.342	Roadway Overcrossing HSR - 2 lane retained fill roadway over 4 tracks	EA
40.08.344	Roadway Overcrossing HSR - 4 lane retained fill roadway over 4 tracks	EA
40.08.346	Roadway Overcrossing HSR - 6 lane retained fill roadway over 4 tracks	EA
40.08.422	Roadway Overcrossing HSR - 2 lane roadway on embankment over 2 tracks	EA
40.08.424	Roadway Overcrossing HSR - 4 lane roadway on embankment over 2 tracks	EA
40.08.426	Roadway Overcrossing HSR - 6 lane roadway on embankment over 2 tracks	EA
50.01	Wayside signaling equipment	
50.01.010	Train Controls (ATC)	Route Mile
50.01.020	Wayside Protection System	Route Mile
50.01.030	Train Control, Wayside Facility Site Work	EA
50.05	Communications	
50.05.010	Communications (w/Fiber Optic Backbone)	Route Mile
60.02	Traction power supply: Substations	
60.02.100	Traction Power Supply	Route Mile
60.02.010	Traction Power, Supply Station Site Work	EA
60.02.020	Traction Power, Switching Station Site Work	EA
60.02.030	Traction Power, Paralleling Station Site Work	EA
60.03	Traction power distribution: Catenary and third rail	
60.03.100	Traction Power Distribution	Route Mile

APPENDIX C DETAILED COST BUDGET

Detail Cost Budget Data

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
1			Alternative 1					
	SS1		San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	0.040	RM	153,610,002.00	/RM	6,144,400
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.020	RM	149,970,179.00	/RM	2,999,404
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.330	RM	159,615,652.94	/RM	52,673,165
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.030	RM	209,849,175.00	/RM	6,295,475
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.040	RM	168,268,197.75	/RM	6,730,728
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.050	RM	138,495,187.60	/RM	6,924,759
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.290	RM	457,655,966.66	/RM	132,720,230
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.190	RM	542,670,801.37	/RM	103,107,452
		10.02.048	Scott-Diridon - BC -160-220-160 Span - Taylor St	0.100	RM	113,104,734.60	/RM	11,310,473
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.070	RM	92,236,436.43	/RM	6,456,551
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.100	RM	213,382,927.30	/RM	21,338,293
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	3.110	RM	3,857,628.14	/RM	11,997,224
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	3.000	RM	6,739,287.41	/RM	20,217,862
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.680	RM	7,015,822.81	/RM	4,770,760
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.850	RM	7,286,698.05	/RM	6,193,693
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.130	RM	12,136,551.31	/RM	1,577,752
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.090	RM	20,516,322.67	/RM	1,846,469

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	3.110	RM	1,474,842.88	/RM	4,586,761
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	3.230	RM	2,897,105.64	/RM	9,357,651
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.680	RM	4,438,862.74	/RM	3,018,427
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.850	RM	5,911,520.73	/RM	5,024,793
		10.10.120	Direct Fixation Trk - 2 Trk	0.680	RM	4,260,727.43	/RM	2,897,295
		10.10.140	Direct Fixation Track - 4 Track	0.580	RM	8,537,777.78	/RM	4,951,911
		10.14.201	Ballasted Turnout #9	2.000	EA	119,861.28	/EA	239,723
		10.14.202	Ballasted Turnout #10	2.000	EA	130,515.62	/EA	261,031
		10.14.203	Ballasted Turnout #11 & #14	4.000	EA	146,497.12	/EA	585,988
		10.14.204	Ballasted Turnout #15	2.000	EA	199,768.80	/EA	399,538
		10.14.206	Ballasted Turnout #20	2.000	EA	319,630.08	/EA	639,260
		10.14.321	Ballasted Crossover #10	3.000	EA	679,213.92	/EA	2,037,642
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.34	/EA	85,235
		20.02.225	San Jose (Diridon) Sta	1.000	LS	289,669,562.97	/LS	289,669,563
		20.06.173	Ped Brdg Undercrossing HSR & Ramps/Stairs (College Park Sta):	1.000	EA	21,431,590.61	/EA	21,431,591
		20.06.210	Parking, at grade	207.000	STL	8,095.26	/STL	1,675,719
		20.07.010	Roadway Modification, New AC Paving	60,800.000	SF	160.56	/SF	9,762,098
		20.07.715	Access Road Entrance Point	1.000	EA	45,836.67	/EA	45,837
		40.02.002	Natural Gas/Oil, 9"-16"	1,890.000	LF	183.36	/LF	346,547
		40.02.003	Potable Water, 10"-16"	3,267.000	LF	289.52	/LF	945,862
		40.02.005	Sanitary Sewer, 24"-36"	1,233.000	LF	185.78	/LF	229,067
		40.02.006	Sanitary Sewer, 37"-48"	1,964.000	LF	376.38	/LF	739,202
		40.02.008	Storm Drain, 42"-54"	2,295.000	LF	328.61	/LF	754,155
		40.02.011	Pump Station (Storm)	2.000	EA	361,900.00	/EA	723,800
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,301.000	LF	266.69	/LF	613,644
		40.02.020	Electric OH, 115 kV	6,753.000	LF	230.75	/LF	1,558,241

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.022	Electric OH, unknown	153.000	LF	183.13	/LF	28,020
		40.08.100.v	Rdwy Overxng HSR (West Hedding): 2-Ln Rdwy Over 2 Trk	1.000	EA	25,149,627.10	/EA	25,149,627
		40.08.200.ad	Rdwy Underxng HSR (West Taylor): 2-Ln Rdwy Under 3 Trk	1.000	EA	4,120,183.99	/EA	4,120,184
		40.08.200.ad1	Rdwy Underxng Rail- 3 Trk (Main) Over 4 Ln Rdwy	1.000	EA	5,836,021.25	/EA	5,836,021
		40.08.200.ad2	Trench Base Slab - Taylor	1.000	EA	14,326,585.55	/EA	14,326,586
			SS1 San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)	4.180	RM	195,058,781.72	/RM	815,345,708
SS12			Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn					
		10.01.001	Topsoil	270,683.000	CY	3.99	/CY	1,080,781
		10.01.002	Cut	4,432,073.000	CY	12.65	/CY	56,057,564
		10.01.004	Overbreak In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.005	Embankment	1,866,629.000	CY	21.30	/CY	39,765,771
		10.01.006	Overbreak Fill In Cut	55,866.000	CY	18.65	/CY	1,041,912
		10.01.007	Overbreak Fill In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.008	Subballast	38,915.000	CY	55.94	/CY	2,176,809
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.110	RM	106,926,987.82	/RM	11,761,969
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.060	RM	107,301,157.17	/RM	6,438,069
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.250	RM	109,952,539.96	/RM	27,488,135
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.030	RM	100,719,249.00	/RM	3,021,577
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.710	RM	115,484,881.90	/RM	197,479,148
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.070	RM	110,676,850.29	/RM	7,747,380
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.200	RM	154,415,021.15	/RM	30,883,004
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.000	EA	180,803.26	/EA	361,607

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.000	EA	927,065.73	/EA	3,708,263
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.000	EA	2,699,648.01	/EA	16,197,888
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.000	EA	278,158.88	/EA	278,159
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.000	EA	1,426,254.95	/EA	2,852,510
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.570	RM	204,371,295.12	/RM	320,862,933
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.000	If	31,653.02	/If	31,653,018
		10.07.950	Allowance For Construction Monitoring	1.570	RM	256,000.00	/RM	401,920
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.040	RM	2,215,058.89	/RM	8,948,838
		10.09.120	Ballasted Trk - 2 Trk	0.840	RM	4,377,095.94	/RM	3,676,761
		10.10.110	Direct Fixation Track - 1 Track	3.740	RM	2,136,969.18	/RM	7,992,265
		10.16.100	Drainage	59.000	EA	181,789.61	/EA	10,725,587
		20.07.020	Rdwy, New AC Paving - Access Rd	124,230.000	SF	160.56	/SF	19,946,471
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.000	LF	3,619.00	/LF	1,990,450
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.000	LF	7,238.00	/LF	4,212,516
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.000	LF	8,685.60	/LF	2,388,540
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.000	LF	10,133.20	/LF	2,431,968
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.000	LF	11,580.80	/LF	3,995,376

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.000	LF	8,685.60	/LF	5,940,950
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.500	LF	11,580.80	/LF	6,803,720
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2-Ln Rdwy Over MF	1.000	EA	69,711,020.07	/EA	69,711,020
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	4.320	RM	215,146,619.87	/RM	929,433,398
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.830	CY	3.99	/CY	3,362,943
		10.01.002	Cut	15,347,083.000	CY	12.65	/CY	194,112,361
		10.01.004	Overbreak In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.005	Embankment	8,678,515.000	CY	21.30	/CY	184,882,909
		10.01.006	Overbreak Fill In Cut	72,100.000	CY	18.65	/CY	1,344,681
		10.01.007	Overbreak Fill In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.008	Subballast	143,484.000	CY	55.94	/CY	8,026,176
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.580	RM	120,620,029.64	/RM	69,959,617
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.110	RM	119,533,031.55	/RM	13,148,633
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.080	RM	116,835,191.63	/RM	9,346,815
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.930	RM	125,741,647.91	/RM	116,939,733
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.380	RM	128,687,221.08	/RM	306,275,586
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.020	RM	121,823,554.50	/RM	2,436,471
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.070	RM	142,812,858.57	/RM	9,996,900
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.120	RM	128,434,238.92	/RM	15,412,109
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	136,176,890.64	/RM	14,979,458

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.270	RM	140,733,598.78	/RM	37,998,072
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.270	RM	143,725,067.33	/RM	38,805,768
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.730	RM	144,706,717.23	/RM	105,635,904
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.190	RM	155,863,552.42	/RM	29,614,075
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.120	RM	142,079,390.58	/RM	17,049,527
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.100	RM	150,993,514.20	/RM	15,099,351
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.000	EA	180,803.29	/EA	723,213
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.000	EA	927,065.75	/EA	16,687,183
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.000	EA	2,699,648.01	/EA	53,992,960
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.000	EA	278,158.87	/EA	1,112,635
		10.05.320	Transition Wedge 1 Trk Embankment-Slab	4.000	EA	9,048.33	/EA	36,193
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.000	EA	10,851.93	/EA	43,408
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.000	EA	13,221.05	/EA	52,884
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.610	RM	204,371,295.12	/RM	2,781,493,327
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.000	If	31,653.02	/If	284,877,158
		10.07.850	Pumping Sta	1.000	EA	320,000.00	/EA	320,000
		10.07.920	Ventilation Equipment Allowance	4.000	EA	163,854,333.44	/EA	655,417,334
		10.07.950	Allowance For Construction Monitoring	13.610	RM	256,000.00	/RM	3,484,160
		10.07.970	Fault Chamber	2.000	EA	156,842,010.24	/EA	313,684,020
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.240	RM	2,215,058.90	/RM	9,391,850
		10.09.120	Ballasted Trk - 2 Trk	13.300	RM	4,377,095.92	/RM	58,215,376
		10.10.110	Direct Fixation Track - 1 Track	31.000	RM	2,136,969.19	/RM	66,246,045
		10.10.120	Direct Fixation Trk - 2 Trk	0.240	RM	4,260,727.42	/RM	1,022,575
		10.15.101	Wildlife Crossing	10.000	EA	67,202.22	/EA	672,022
		10.16.100	Drainage	2.000	EA	181,789.60	/EA	363,579
		20.07.020	Rdwy, New AC Paving - Access Rd	777,970.000	SF	160.56	/SF	124,911,501
		40.02.020	Electric OH, 115 kV	455.000	LF	230.75	/LF	104,990
		40.02.021	Electric OH, 230 kV	1,340.000	LF	183.13	/LF	245,400
		40.02.022	Electirc OH, unknown	1,925.000	LF	183.13	/LF	352,533
		40.02.025	Potable Water, 120"	1,230.000	LF	7,238.00	/LF	8,902,740
		40.02.043	Drainage Canal, All Sizes	785.000	LF	473.20	/LF	371,462
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.000	LF	183.13	/LF	76,001
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.000	LF	3,619.00	/LF	5,895,351
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.000	LF	8,685.60	/LF	8,260,006
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.000	LF	10,133.20	/LF	6,860,176
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.000	LF	13,028.40	/LF	12,898,116
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.000	LF	17,371.20	/LF	18,343,987
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.840	LF	11,580.80	/LF	35,782,819
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.000	EA	683,384.69	/EA	683,385
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.000	EA	8,578.08	/EA	8,578
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.000	EA	39,528.72	/EA	39,529
			SS14 Pacheco Pass Deep Tunnel	24.270	RM	235,187,134.26	/RM	5,707,991,748

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.000	CY	3.99	/CY	1,786,438
		10.01.002	Cut	23,638.000	CY	12.65	/CY	298,979
		10.01.004	Overbreak In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.005	Embankment	2,531,377.000	CY	21.30	/CY	53,927,237
		10.01.006	Overbreak Fill In Cut	1,701.000	CY	18.65	/CY	31,722
		10.01.007	Overbreak Fill In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.008	Subballast	128,198.000	CY	55.94	/CY	7,171,112
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.710	RM	139,515,659.06	/RM	378,087,436
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.630	RM	142,812,858.48	/RM	232,784,959
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.670	RM	145,457,939.73	/RM	97,456,820
		10.02.036	BC - 150-275-150 - Cherokee	0.110	RM	159,283,843.18	/RM	17,521,223
		10.02.037	BC - 200-350-200 - San Luis	0.140	RM	127,207,955.86	/RM	17,809,114
		10.02.038	BC - 120-220-120 Span - Los Banos	0.090	RM	186,700,879.89	/RM	16,803,079
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.000	EA	1,426,254.99	/EA	11,410,040
		10.09.110	Ballasted Trk - 1 Trk	0.550	RM	2,215,058.89	/RM	1,218,282
		10.09.120	Ballasted Trk - 2 Trk	12.750	RM	4,377,095.92	/RM	55,807,973
		10.10.120	Direct Fixation Trk - 2 Trk	5.370	RM	4,242,295.00	/RM	22,781,124
		10.14.206	Ballasted Turnout #20	3.000	EA	319,630.08	/EA	958,890
		10.14.300	Ballasted Crossover (60 MPH)	2.000	EA	1,997,688.00	/EA	3,995,376
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504
		10.14.400	Terminal - Bumping Post	1.000	EA	42,617.34	/EA	42,617
		10.15.101	Wildlife Crossing	67.000	EA	67,202.22	/EA	4,502,549
		10.16.100	Drainage	42.000	EA	181,789.61	/EA	7,635,164
		20.07.020	Rdwy, New AC Paving - Access Rd	746,920.000	SF	160.56	/SF	119,926,088
		30.04.010c	MOIF Siding	1.000	EA	3,404,290.52	/EA	3,404,291

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.000	LF	266.69	/LF	1,412,102
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.000	LF	266.69	/LF	1,668,121
		40.02.019	Electric OH, 51-114 KV	3,770.000	LF	122.18	/LF	460,611
		40.02.022	Electirc OH, unknown	23,930.000	LF	183.13	/LF	4,382,397
		40.02.035	Potable Water Storage Tank	1.000	EA	72,380.00	/EA	72,380
		40.02.043	Drainage Canal, All Sizes	29,515.000	LF	473.20	/LF	13,966,498
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.000	LF	183.13	/LF	2,246,139
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.660	LF	3,619.02	/LF	2,389
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	46,621,346.35	/EA	46,621,346
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	26,219,109.36	/EA	26,219,109
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	24,861,294.13	/EA	24,861,294
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	25,261,504.53	/EA	25,261,505
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.000	EA	28,308,009.38	/EA	28,308,009
			SS16 San Joaquin Valley	18.130	RM	69,322,727.09	/RM	1,256,821,042
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave					
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.142	RM	139,370,863.24	/RM	19,790,663
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.114	RM	141,833,943.95	/RM	16,169,070
		10.02.040	Diridon-Tamien - 2 Track	1.059	RM	133,481,705.52	/RM	141,357,126
		10.02.041	Diridon-Tamien - 4 Track	0.517	RM	327,544,070.97	/RM	169,340,285
		10.10.120	Direct Fixation Trk - 2 Trk	1.348	RM	4,243,224.84	/RM	5,719,867
		10.10.140	Direct Fixation Track - 4 Track	0.485	RM	8,575,433.94	/RM	4,159,085
		10.14.150	Direct Fixation Crossover #15	1.000	EA	2,401,862.40	/EA	2,401,862
		20.06.211	Bike Path Realignment (Almaden Expy)	1.000	EA	21,023,374.97	/EA	21,023,375

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020	Rdwy, New AC Paving - Access Rd	9,800.000	SF	160.56	/SF	1,573,496
		40.02.005	Sanitary Sewer, 24"-36"	750.000	LF	185.78	/LF	139,335
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.000	LF	266.69	/LF	544,039
		40.02.020	Electric OH, 115 kV	1,400.000	LF	230.75	/LF	323,047
		40.02.024	Transmission Tower	1.000	EA	579,040.00	/EA	579,040
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave				/RM	383,120,291
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.200	RM	132,645,183.80	/RM	26,529,037
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	0.280	RM	3,814,448.21	/RM	1,068,046
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	2.160	RM	6,749,093.55	/RM	14,578,042
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.270	RM	6,890,604.89	/RM	1,860,463
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.140	RM	12,074,630.29	/RM	1,690,448
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.280	RM	20,052,761.50	/RM	5,614,773
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.280	RM	1,458,334.39	/RM	408,334
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.590	RM	2,898,241.61	/RM	7,506,446
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.270	RM	4,356,661.56	/RM	1,176,299
		10.10.120	Direct Fixation Trk - 2 Trk	0.190	RM	4,271,050.53	/RM	811,500
		10.14.201	Ballasted Turnout #9	2.000	EA	119,861.28	/EA	239,723
		10.14.203	Ballasted Turnout #11 & #14	1.000	EA	146,497.12	/EA	146,497
		10.14.320	Ballasted Crossover	1.000	EA	559,352.64	/EA	559,353
		20.07.020	Rdwy, New AC Paving - Access Rd	53,020.000	SF	160.56	/SF	8,512,935
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.000	LF	183.36	/LF	271,370
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.000	LF	266.69	/LF	4,277,643

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.023	Electric OH & Telecom OH on JP, 51-114 KV	2,520.000	LF	230.75	/LF	581,485
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.000	EA	15,159,236.23	/EA	15,159,236
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.000	EA	10,654,389.06	/EA	10,654,389
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.000	EA	409,576.92	/EA	409,577
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.000	EA	2,022,372.34	/EA	2,022,372
		40.08.200.aj1	HSR Underpass	1.000	EA	8,545,621.79	/EA	8,545,622
		40.08.200.aj2	Caltrain & UPRR Underpass	1.000	EA	1,930,061.25	/EA	1,930,061
			SS4 San Jose to Monterey Corridor: Alma Ave to Communication Hill				/RM	114,553,650
SS67			Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)					
		10.01.001	Topsoil	25,218.000	CY	3.99	/CY	100,692
		10.01.002	Cut	12,217.000	CY	12.65	/CY	154,522
		10.01.004	Overbreak In Embankment	32,019.000	CY	18.65	/CY	597,158
		10.01.005	Embankment	157,306.000	CY	21.30	/CY	3,351,167
		10.01.006	Overbreak Fill In Cut	6,300.000	CY	18.65	/CY	117,488
		10.01.007	Overbreak Fill In Embankment	32,019.000	CY	18.65	/CY	597,158
		10.01.008	Subballast	7,424.000	CY	55.94	/CY	415,271
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	1.770	RM	147,755,935.37	/RM	261,528,006
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.090	RM	175,890,952.22	/RM	15,830,186
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	7.050	RM	150,906,499.02	/RM	1,063,890,818
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.050	RM	142,812,858.40	/RM	7,140,643
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.040	RM	132,645,185.00	/RM	5,305,807
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	3.720	RM	154,355,222.47	/RM	574,201,428

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.160	RM	150,247,078.81	/RM	24,039,533
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	133,359,435.82	/RM	14,669,538
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 80' Spacing	0.070	RM	212,911,004.43	/RM	14,903,770
		10.01.225a	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 90' Spacing	0.020	RM	143,317,009.00	/RM	2,866,340
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	1.780	RM	158,332,224.72	/RM	281,831,360
		10.01.225c	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 120' Spacing	0.340	RM	150,266,206.32	/RM	51,090,510
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht, 80' Span)	0.060	RM	201,227,840.17	/RM	12,073,670
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.150	RM	186,718,053.60	/RM	28,007,708
		10.01.226b	Elevated Structure - 2 Track (60' Avg. Pier Ht, 100' Span)	0.080	RM	162,969,850.00	/RM	13,037,588
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	1.590	RM	161,071,813.73	/RM	256,104,184
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.050	RM	138,495,187.80	/RM	6,924,759
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.080	RM	142,489,927.00	/RM	11,399,194
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht, 80' Span)	0.060	RM	203,903,205.00	/RM	12,234,192
		10.01.227a	Elevated Structure - 2 Track (70' Avg. Pier Ht, 90' Span)	0.130	RM	196,991,219.62	/RM	25,608,859
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	1.170	RM	164,451,592.10	/RM	192,408,363
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.060	RM	137,546,751.00	/RM	8,252,805
		10.02.020	BC - 225-225-225-225 - UPRR	0.040	RM	300,866,972.50	/RM	12,034,679
		10.02.021	BC - 155-310-155 Span - Monterey	0.120	RM	170,141,261.58	/RM	20,416,951
		10.02.023	BC - 90-180'-90 Span - Capitol	0.070	RM	201,673,568.43	/RM	14,117,150
		10.02.024	BC - 110-220-220-110 Span - Blossom	0.130	RM	157,168,560.08	/RM	20,431,913
		10.02.025	BC - 205-410-205 Span - Sr85	0.160	RM	134,533,606.13	/RM	21,525,377
		10.02.026	BC - 115-230-115 Span - Bernal	0.090	RM	169,108,476.11	/RM	15,219,763

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.02.027	BC - 110-220-110 Span -Bailey	0.080	RM	186,032,767.75	/RM	14,882,621
		10.02.028	BC - 260-260 - Cochrane 1	0.100	RM	140,672,554.70	/RM	14,067,255
		10.02.029	BC - 233-233-233-233 - Cochrane 2	0.180	RM	184,712,972.78	/RM	33,248,335
		10.02.030	BC - 260-260 - Dunne	0.100	RM	137,152,017.80	/RM	13,715,202
		10.02.031	BC - 240-240 - Tennant	0.090	RM	156,102,604.44	/RM	14,049,234
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	1.000	EA	1,426,254.94	/EA	1,426,255
		10.09.110	Ballasted Trk - 1 Trk	0.300	RM	2,237,433.20	/RM	671,230
		10.09.120	Ballasted Trk - 2 Trk	0.710	RM	4,360,983.08	/RM	3,096,298
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	1.610	RM	266,638.02	/RM	429,287
		10.10.120	Direct Fixation Trk - 2 Trk	19.900	RM	4,243,102.50	/RM	84,437,740
		10.14.200	Special Trackwork - Ballasted	1.000	EA	605,965.36	/EA	605,965
		10.14.202	Ballasted Turnout #10	5.000	EA	130,515.62	/EA	652,578
		10.14.203	Ballasted Turnout #11 & #14	5.000	EA	146,497.12	/EA	732,486
		10.15.102	Wildlife Crossing - 30' wide	2.000	EA	370,770.89	/EA	741,542
		10.15.103	Wildlife Crossing - 40' wide	2.000	EA	680,598.98	/EA	1,361,198
		20.07.020	Rdwy, New AC Paving - Access Rd	100,240.000	SF	160.56	/SF	16,094,617
		40.01.110	Demolition Allowance, Asphalt Pavement	392,200.000	SY	12.80	/SY	5,018,591
		40.01.810	Demolition Allowance, Remove Railroad Trks	1.610	RM	289,879.66	/RM	466,706
		40.02.001	Natural Gas/Oil, 4.5"-8"	760.000	LF	154.41	/LF	117,349
		40.02.002	Natural Gas/Oil, 9"-16"	830.000	LF	183.36	/LF	152,187
		40.02.007	Sanitary Sewer, 49"-54"	15,980.000	LF	411.12	/LF	6,569,762
		40.02.008	Storm Drain, 42"-54"	1,080.000	LF	328.61	/LF	354,897
		40.02.009	Storm Drain, 55"-72"	320.000	LF	350.32	/LF	112,103
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	43,280.000	LF	266.69	/LF	11,542,170
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,265.000	LF	266.69	/LF	1,670,788
		40.02.015	Telecommunication Facility	1.000	EA	434,280.00	/EA	434,280
		40.02.019	Electric OH, 51-114 kV	230.000	LF	122.18	/LF	28,101

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.020	Electric OH, 115 kV	2,600.000	LF	230.75	/LF	599,945
		40.02.021	Electric OH, 230 kV	5,465.000	LF	183.13	/LF	1,000,827
		40.02.022	Electric OH, unknown	5,320.000	LF	183.13	/LF	974,273
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	8,280.000	LF	230.75	/LF	1,910,593
		40.02.047	Recycled Water, All Sizes	10,050.000		140.00		1,407,000
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	4,375.000	LF	8,685.60	/LF	37,999,500
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	3,735.000	LF	10,133.20	/LF	37,847,502
		40.08.200.a	Rdwy Underxing HSR (NB Monterey Rd Realignment): 2-Ln Rdwy Under 2 Trk	1.000	EA	1,572,754.61	/EA	1,572,755
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)				/RM	3,302,419,721
SS9			Morgan Hill & Gilroy: Viaduct (D. Gilroy)					
		10.01.001	Topsoil	84,525.000	CY	3.99	/CY	337,492
		10.01.002	Cut	4,272.000	CY	12.65	/CY	54,038
		10.01.004	Overbreak In Embankment	157,741.000	CY	18.77	/CY	2,960,560
		10.01.005	Embankment	638,406.000	CY	21.30	/CY	13,600,288
		10.01.006	Overbreak Fill In Cut	8,698.000	CY	18.65	/CY	162,227
		10.01.007	Overbreak Fill In Embankment	158,741.000	CY	18.65	/CY	2,960,560
		10.01.008	Subballast	28,716.000	CY	55.94	/CY	1,606,302
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.490	RM	108,605,592.59	/RM	53,216,740
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.160	RM	107,126,965.69	/RM	17,140,315
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	4.800	RM	147,320,134.94	/RM	707,136,648
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.050	RM	139,515,659.00	/RM	6,975,783
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	5.150	RM	150,916,935.00	/RM	777,222,215
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	0.190	RM	154,008,715.47	/RM	29,261,656

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.070	RM	168,268,197.71	/RM	11,778,774
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.050	RM	138,495,187.80	/RM	6,924,759
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.030	RM	142,489,926.67	/RM	4,274,698
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.110	RM	164,451,592.27	/RM	18,089,675
		10.01.242	Elevated Structure - 4 Track (20' Avg. Pier Ht) - 110' Spacing	0.270	RM	232,410,574.78	/RM	62,750,855
		10.01.243	Elevated Structure - 4 Track (30' Avg. Pier Ht) - 110' Spacing	0.180	RM	232,983,686.50	/RM	41,937,064
		10.01.248	Elevated Structure - 4 Track + 2 Platforms (20' Avg. Pier Ht)	0.170	RM	232,602,832.06	/RM	39,542,481
		10.02.032	BC - 110-220-110 Span - Llagas	0.080	RM	220,936,338.00	/RM	17,674,907
		10.02.053	BC - 130-260-260-260-130 Span - US101	0.200	RM	136,744,120.75	/RM	27,348,824
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.000	EA	278,158.89	/EA	278,159
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.000	EA	1,426,254.99	/EA	7,131,275
		10.09.120	Ballasted Trk - 2 Trk	6.710	RM	4,376,626.45	/RM	29,367,163
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	2.910	RM	266,638.02	/RM	775,917
		10.10.110	Direct Fixation Track - 1 Track	1.780	RM	2,136,969.19	/RM	3,803,805
		10.10.120	Direct Fixation Trk - 2 Trk	7.500	RM	4,239,616.78	/RM	31,797,126
		10.14.100	Special Trackwork - Direct Fixation	6.000	EA	665,896.00	/EA	3,995,376
		10.14.135	Direct Fixation Crossover (80 MPH)	2.000	EA	1,997,688.00	/EA	3,995,376
		10.14.201	Ballasted Turnout #9	8.000	EA	119,861.28	/EA	958,890
		10.14.203	Ballasted Turnout #11 & #14	6.000	EA	266,448.56	/EA	1,598,691
		10.14.206	Ballasted Turnout #20	2.000	EA	319,630.08	/EA	639,260
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.35	/EA	85,235
		10.15.100	Wildlife Crossing	1.000	EA	26,635.84	/EA	26,636
		10.16.100	Drainage	65.000	EA	181,789.61	/EA	11,816,325

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.16.101	Superficial drainage system for flood plain mitigation	3.800	RM	10,509,032.47	/RM	39,934,323
		20.02.215a	Downtown Gilroy Sta - Viaduct	1.000	LS	131,826,094.77	/LS	131,826,095
		20.07.020	Rdwy, New AC Paving - Access Rd	397,850.000	SF	160.56	/SF	63,879,122
		30.04.010a	MOWF Downtown Gilroy	1.000	EA	236,686,528.72	/EA	236,686,529
		40.02.001	Natural Gas/Oil, 4.5"-8"	270.000	LF	154.41	/LF	41,690
		40.02.003	Potable Water, 10"-16"	2,565.000	LF	289.52	/LF	742,619
		40.02.005	Sanitary Sewer, 24"-36"	190.000	LF	185.78	/LF	35,298
		40.02.010	Box Culvert, All Sizes	100.000	LF	2,316.16	/LF	231,616
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	18,475.000	LF	266.69	/LF	4,927,024
		40.02.014	Telecom/Fiber Optic OH, All Sizes	380.000	LF	266.69	/LF	101,341
		40.02.020	Electric OH, 115 kV	3,515.000	LF	230.75	/LF	811,079
		40.02.022	Electirc OH, unknown	4,555.000	LF	183.13	/LF	834,175
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	4,810.000	LF	230.75	/LF	1,109,898
		40.02.024	Transmission Tower	1.000	EA	579,040.00	/EA	579,040
		40.02.030	Potable Water, 4"-9"	525.000	LF	62.54	/LF	32,832
		40.02.045	Electric OH & Telecom OH on JP, Unknown	3,005.000	LF	183.13	/LF	550,318
			SS9 Morgan Hill & Gilroy: Viaduct (D. Gilroy)	14.200	RM	170,744,337.91	/RM	2,424,569,598
	SS99-1		Alternative 1 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.000	LS	464,158,974.06	/LS	464,158,974
		40.06.100	Temporary facilities and other indirect costs during construction	1.000	LS	567,305,412.74	/LS	567,305,413
		40.07.100	ROW Procurement Acquisition	1.000	LS	2,487,235,000.00	/LS	2,487,235,000
		50.01.020	Wayside signalling equipment	101.700	RM	2,071,549.90	/RM	210,676,624
		50.05.010	Communications (W/ Fiber Optic Backbone)	104.140	RM	858,908.52	/RM	89,446,733
		50.07.020	Hazard Detectors	104.140	RM	596,639.56	/RM	62,134,044

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		60.01.020	Traction power transmission: High voltage	1.000	LS	157,073,968.02	/LS	157,073,968
		60.01.030	Distribution Line Pacheco Pass	1.000	LS	65,769,550.90	/LS	65,769,551
		60.01.040	PG&E Construction Power Drop Sites	1.000	LS	1,409,867.10	/LS	1,409,867
		60.02.010	Traction power supply: Substations	1.000	LS	191,224,162.26	/LS	191,224,162
		60.03.100	Traction power distribution: Catenary and third rail	90.030	RM	2,547,175.87	/RM	229,322,244
		60.04.100	Traction power control	1.000	LS	528,564.38	/LS	528,564
		80.00.00	Professional Services	1.000	LS	2,710,860,971.66	/LS	2,710,860,972
		90.00.00	Unallocated Contingency	1.000	LS	836,613,973.84	/LS	836,613,974
		SS99-1 Alternative 1 Complete						8,073,760,090
		1 Alternative 1					/RM	23,008,015,245
2		Alternative 2						
	SS12	Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn						
		10.01.001	Topsoil	270,683.000	CY	3.99	/CY	1,080,781
		10.01.002	Cut	4,432,073.000	CY	12.65	/CY	56,057,564
		10.01.004	Overbreak In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.005	Embankment	1,866,629.000	CY	21.30	/CY	39,765,771
		10.01.006	Overbreak Fill In Cut	55,866.000	CY	18.65	/CY	1,041,912
		10.01.007	Overbreak Fill In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.008	Subballast	38,915.000	CY	55.94	/CY	2,176,809
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.110	RM	106,926,987.91	/RM	11,761,969
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.060	RM	107,301,157.33	/RM	6,438,069
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.250	RM	109,952,539.96	/RM	27,488,135
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.030	RM	100,719,248.67	/RM	3,021,577
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.710	RM	115,484,881.91	/RM	197,479,148

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.070	RM	110,676,850.43	/RM	7,747,380
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.200	RM	154,415,021.05	/RM	30,883,004
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.000	EA	180,803.26	/EA	361,607
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.000	EA	927,065.73	/EA	3,708,263
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.000	EA	2,699,648.01	/EA	16,197,888
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.000	EA	278,158.88	/EA	278,159
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.000	EA	1,426,254.96	/EA	2,852,510
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.570	RM	204,371,295.12	/RM	320,862,933
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.000	If	31,653.02	/If	31,653,018
		10.07.950	Allowance For Construction Monitoring	1.570	RM	256,000.00	/RM	401,920
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.040	RM	2,215,058.90	/RM	8,948,838
		10.09.120	Ballasted Trk - 2 Trk	0.840	RM	4,377,095.93	/RM	3,676,761
		10.10.110	Direct Fixation Track - 1 Track	3.740	RM	2,136,969.18	/RM	7,992,265
		10.16.100	Drainage	59.000	EA	181,789.61	/EA	10,725,587
		20.07.020	Rdwy, New AC Paving - Access Rd	124,230.000	SF	160.56	/SF	19,946,471
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.000	LF	3,619.00	/LF	1,990,450
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.000	LF	7,238.00	/LF	4,212,516

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.000	LF	8,685.60	/LF	2,388,540
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.000	LF	10,133.20	/LF	2,431,968
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.000	LF	11,580.80	/LF	3,995,376
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.000	LF	8,685.60	/LF	5,940,950
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.500	LF	11,580.80	/LF	6,803,720
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2- Ln Rdwy Over MF	1.000	EA	69,711,020.06	/EA	69,711,020
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn				/RM	929,433,398
	SS14		Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.830	CY	3.99	/CY	3,362,943
		10.01.002	Cut	15,347,083.000	CY	12.65	/CY	194,112,361
		10.01.004	Overbreak In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.005	Embankment	8,678,515.000	CY	21.30	/CY	184,882,909
		10.01.006	Overbreak Fill In Cut	72,100.000	CY	18.65	/CY	1,344,681
		10.01.007	Overbreak Fill In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.008	Subballast	143,484.000	CY	55.94	/CY	8,026,176
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.580	RM	120,620,029.69	/RM	69,959,617
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.110	RM	119,533,031.45	/RM	13,148,633
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.080	RM	116,835,191.25	/RM	9,346,815
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.930	RM	125,741,647.95	/RM	116,939,733
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.380	RM	128,687,221.07	/RM	306,275,586
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.020	RM	121,823,554.00	/RM	2,436,471

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.070	RM	142,812,858.57	/RM	9,996,900
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.120	RM	128,434,239.17	/RM	15,412,109
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	136,176,890.55	/RM	14,979,458
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.270	RM	140,733,598.78	/RM	37,998,072
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.270	RM	143,725,067.41	/RM	38,805,768
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.730	RM	144,706,717.21	/RM	105,635,904
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.190	RM	155,863,552.47	/RM	29,614,075
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.120	RM	142,079,390.58	/RM	17,049,527
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.100	RM	150,993,514.10	/RM	15,099,351
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.000	EA	180,803.29	/EA	723,213
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.000	EA	927,065.74	/EA	16,687,183
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.000	EA	2,699,648.01	/EA	53,992,960
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.000	EA	278,158.87	/EA	1,112,635
		10.05.320	Transition Wedge 1 Trk Embankment-Slab	4.000	EA	9,048.33	/EA	36,193
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.000	EA	10,851.94	/EA	43,408
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.000	EA	13,221.05	/EA	52,884
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.610	RM	204,371,295.12	/RM	2,781,493,327
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.000	If	31,653.02	/If	284,877,158
		10.07.850	Pumping Sta	1.000	EA	320,000.00	/EA	320,000
		10.07.920	Ventilation Equipment Allowance	4.000	EA	163,854,333.44	/EA	655,417,334
		10.07.950	Allowance For Construction Monitoring	13.610	RM	256,000.00	/RM	3,484,160
		10.07.970	Fault Chamber	2.000	EA	156,842,010.24	/EA	313,684,020

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.240	RM	2,215,058.90	/RM	9,391,850
		10.09.120	Ballasted Trk - 2 Trk	13.300	RM	4,377,095.92	/RM	58,215,376
		10.10.110	Direct Fixation Track - 1 Track	31.000	RM	2,136,969.19	/RM	66,246,045
		10.10.120	Direct Fixation Trk - 2 Trk	0.240	RM	4,260,727.46	/RM	1,022,575
		10.15.101	Wildlife Crossing	10.000	EA	67,202.22	/EA	672,022
		10.16.100	Drainage	2.000	EA	181,789.61	/EA	363,579
		20.07.020	Rdwy, New AC Paving - Access Rd	777,970.000	SF	160.56	/SF	124,911,501
		40.02.020	Electric OH, 115 KV	455.000	LF	230.75	/LF	104,990
		40.02.021	Electric OH, 230 KV	1,340.000	LF	183.13	/LF	245,400
		40.02.022	Electric OH, unknown	1,925.000	LF	183.13	/LF	352,533
		40.02.025	Potable Water, 120"	1,230.000	LF	7,238.00	/LF	8,902,740
		40.02.043	Drainage Canal, All Sizes	785.000	LF	473.20	/LF	371,462
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.000	LF	183.13	/LF	76,001
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.000	LF	3,619.00	/LF	5,895,351
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.000	LF	8,685.60	/LF	8,260,006
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.000	LF	10,133.20	/LF	6,860,176
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.000	LF	13,028.40	/LF	12,898,116
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.000	LF	17,371.20	/LF	18,343,987
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.840	LF	11,580.80	/LF	35,782,819

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.000	EA	683,384.71	/EA	683,385
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.000	EA	8,578.07	/EA	8,578
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.000	EA	39,528.73	/EA	39,529
			SS14 Pacheco Pass Deep Tunnel				/RM	5,707,991,748
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,515.000	CY	3.99	/CY	1,786,438
		10.01.002	Cut	23,638.000	CY	12.65	/CY	298,979
		10.01.004	Overbreak In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.005	Embankment	2,531,377.000	CY	21.30	/CY	53,927,236
		10.01.006	Overbreak Fill In Cut	1,701.000	CY	18.65	/CY	31,722
		10.01.007	Overbreak Fill In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.008	Subballast	128,498.000	CY	55.81	/CY	7,171,112
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.710	RM	139,515,659.06	/RM	378,087,436
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.630	RM	142,812,858.48	/RM	232,784,959
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.670	RM	145,457,939.73	/RM	97,456,820
		10.02.036	BC - 150-275-150 - Cherokee	0.110	RM	159,283,843.18	/RM	17,521,223
		10.02.037	BC - 200-350-200 - San Luis	0.140	RM	127,207,955.86	/RM	17,809,114
		10.02.038	BC - 120-220-120 Span - Los Banos	0.090	RM	186,700,879.89	/RM	16,803,079
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.000	EA	1,426,254.99	/EA	11,410,040
		10.09.110	Ballasted Trk - 1 Trk	0.550	RM	2,215,058.89	/RM	1,218,282
		10.09.120	Ballasted Trk - 2 Trk	12.750	RM	4,377,095.92	/RM	55,807,973
		10.10.120	Direct Fixation Trk - 2 Trk	5.370	RM	4,242,295.00	/RM	22,781,124
		10.14.206	Ballasted Turnout #20	3.000	EA	319,630.08	/EA	958,890
		10.14.300	Ballasted Crossover (60 MPH)	2.000	EA	1,997,688.00	/EA	3,995,376
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.400	Terminal - Bumping Post	1.000	EA	42,617.34	/EA	42,617
		10.15.101	Wildlife Crossing	67.000	EA	67,202.22	/EA	4,502,549
		10.16.100	Drainage	42.000	EA	181,789.61	/EA	7,635,164
		20.07.020	Rdwy, New AC Paving - Access Rd	746,920.000	SF	160.56	/SF	119,926,088
		30.04.010c	MOIF Siding	1.000	EA	3,404,290.51	/EA	3,404,291
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.000	LF	266.69	/LF	1,412,102
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,225.000	LF	267.97	/LF	1,668,121
		40.02.019	Electric OH, 51-114 KV	3,770.000	LF	122.18	/LF	460,611
		40.02.022	Electirc OH, unknown	23,930.000	LF	183.13	/LF	4,382,397
		40.02.035	Potable Water Storage Tank	1.000	EA	72,380.00	/EA	72,380
		40.02.043	Drainage Canal, All Sizes	29,515.000	LF	473.20	/LF	13,966,498
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.000	LF	183.13	/LF	2,246,138
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.660	LF	3,619.02	/LF	2,389
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	46,621,346.37	/EA	46,621,346
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	26,219,109.36	/EA	26,219,109
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	24,861,294.12	/EA	24,861,294
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	25,261,504.53	/EA	25,261,505
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.000	EA	28,308,009.37	/EA	28,308,009
			SS16 San Joaquin Valley				/RM	1,256,821,042
	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	0.230	RM	146,931,301.87	/RM	33,794,199
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.160	RM	138,653,188.94	/RM	22,184,510
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.140	RM	132,303,278.79	/RM	18,522,459

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.290	RM	178,757,577.31	/RM	51,839,697
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.880	RM	150,125,703.67	/RM	132,110,619
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	0.310	RM	155,747,510.81	/RM	48,281,728
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.020	RM	171,932,740.50	/RM	3,438,655
		10.02.042	Scott-Diridon - 2 Trk over 3 Trk (30' Avg. Pier Ht) - 110' Spacing	0.230	RM	407,621,463.04	/RM	93,752,937
		10.02.043	Scott-Diridon - 2 Trk over 5 Trk (30' Avg. Pier Ht) - 110' Spacing	0.150	RM	429,859,853.53	/RM	64,478,978
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.290	RM	457,655,966.66	/RM	132,720,230
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.190	RM	542,670,801.32	/RM	103,107,452
		10.02.046	Scott-Diridon - BC -160-220-160 Span - Lafayette St	0.100	RM	156,623,021.00	/RM	15,662,302
		10.02.047	Scott-Diridon - BC -160-220-160 Span - I-880	0.100	RM	114,847,450.80	/RM	11,484,745
		10.02.048	Scott-Diridon - BC -160-220-160 Span - Taylor St	0.100	RM	113,104,734.60	/RM	11,310,473
		10.02.049	Scott-Diridon - BC-120-240-120 Span - Santa Clara Sta	0.090	RM	163,995,443.11	/RM	14,759,590
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.140	RM	92,236,438.43	/RM	12,913,101
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.100	RM	213,382,927.20	/RM	21,338,293
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	0.740	RM	3,885,060.01	/RM	2,874,944
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	0.120	RM	6,805,213.00	/RM	816,626
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	1.200	RM	7,021,034.19	/RM	8,425,241
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.770	RM	7,245,659.00	/RM	5,579,157
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.140	RM	12,074,630.36	/RM	1,690,448
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.200	RM	19,689,389.35	/RM	3,937,878

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.740	RM	1,485,330.59	/RM	1,099,145
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	0.460	RM	2,907,808.85	/RM	1,337,592
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	1.200	RM	4,442,561.78	/RM	5,331,074
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.770	RM	5,880,051.96	/RM	4,527,640
		10.10.120	Direct Fixation Trk - 2 Trk	2.920	RM	4,236,076.40	/RM	12,369,343
		10.10.140	Direct Fixation Track - 4 Track	0.560	RM	8,578,693.96	/RM	4,804,069
		10.14.321	Ballasted Crossover #10	1.000	EA	679,213.92	/EA	679,214
		10.14.322	Ballasted Crossover #11	3.000	EA	760,453.23	/EA	2,281,360
		10.14.323	Ballasted Crossover #14	4.000	EA	945,572.32	/EA	3,782,289
		10.14.324	Ballasted Crossover #20	1.000	EA	1,331,792.00	/EA	1,331,792
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.34	/EA	85,235
		20.02.225	San Jose (Diridon) Sta	1.000	LS	289,669,562.97	/LS	289,669,563
		20.06.120	Ped Access (Cut & Cover)	650.000	LF	29,233.32	/LF	19,001,660
		20.06.172	Ped Brdg Undercrossing HSR (Lafayette St) Alt2:	1.000	EA	2,367,538.59	/EA	2,367,539
		20.06.210	Parking, at grade	242.000	STL	8,095.26	/STL	1,959,053
		20.07.010	Roadway Modification, New AC Paving	60,800.000	SF	160.56	/SF	9,762,098
		20.07.715	Access Road Entrance Point	1.000	EA	45,836.66	/EA	45,837
		40.02.002	Natural Gas/Oil, 9"-16"	472.000	LF	183.36	/LF	86,545
		40.02.003	Potable Water, 10"-16"	1,703.000	LF	289.52	/LF	493,053
		40.02.005	Sanitary Sewer, 24"-36"	1,650.000	LF	185.78	/LF	306,537
		40.02.006	Sanitary Sewer, 37"-48"	2,404.000	LF	376.38	/LF	904,808
		40.02.008	Storm Drain, 42"-54"	631.000	LF	328.61	/LF	207,352
		40.02.009	Storm Drain, 55"-72"	1,592.000	LF	350.32	/LF	557,713
		40.02.011	Pump Station (Storm)	2.000	EA	361,900.00	/EA	723,800
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	29,283.000	LF	266.69	/LF	7,809,366
		40.02.016	Electric UG	3,478.000	LF	292.04	/LF	1,015,715

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.019	Electric OH, 51-114 KV	2,971.000	LF	122.18	/LF	362,991
		40.02.020	Electric OH, 115 KV	7,511.000	LF	230.75	/LF	1,733,148
		40.08.200.ae	Rdwy Underxing HSR (West Hedding): 2-Ln Rdwy Under 5 Trk	1.000	EA	10,869,831.55	/EA	10,869,832
		40.08.200.ae1	Rdwy Overxing Rdwy - 2-Ln Rdwy Over 4-Ln Rdwy (Stockton St)	1.000	EA	1,243,730.68	/EA	1,243,731
		40.08.200.ae2	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 1)	1.000	EA	2,847,474.77	/EA	2,847,475
		40.08.200.ae3	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 2)	1.000	EA	2,753,219.78	/EA	2,753,220
		40.08.200.ae4	RR Overxing Rdwy- 5 Trk Over 4-Ln Rdwy	1.000	EA	2,716,379.53	/EA	2,716,380
		40.08.200.ae5	Trench Base Slab - Hedding	1.000	EA	21,202,172.34	/EA	21,202,172
		40.08.200.af	Rdwy Uxing HSR (De La Cruz Blvd): 5-Ln, RF Rdwy Under 7 Trks/6-Ln Rdwy	1.000	EA	16,702,064.40	/EA	16,702,064
		40.08.200.af1	Rdwy Overxing Rdwy- 2 Ln Rdwy Over 1 Ln Rdwy De La Cruz Blvd (South)	1.000	EA	1,667,988.75	/EA	1,667,989
		40.08.200.af2	Rdwy Overxing Rdwy- 1 Ln Rdwy Over 1 Ln Rdwy De La Cruz (North)	1.000	EA	529,294.99	/EA	529,295
		40.08.200.af3	Rdwy Overxing Rdwy- 6 Ln Rdwy Over 4 Ln Rdwy De La Cruz (El Camino)	1.000	EA	3,037,800.41	/EA	3,037,800
		40.08.200.af4	RR Overxing Rdwy- 3 Trk Over 4 Ln Rdwy (UPRR)	1.000	EA	2,760,720.20	/EA	2,760,720
		40.08.200.af5	RR Overxing Rdwy- 2 Trk Over 4 Ln Rdwy (JPB)	1.000	EA	1,797,917.80	/EA	1,797,918
		40.08.200.af6	Trench Base Slab - De La Cruz	1.000	EA	49,161,247.53	/EA	49,161,248
		40.08.200.ah	Rdwy Underxing UPRR (Lafayette St) - 1 Trk (Main) Over 4 Ln Rdwy	1.000	EA	1,773,199.67	/EA	1,773,200
			SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)				/RM	1,308,722,836
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave					
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.142	RM	139,370,863.38	/RM	19,790,663
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.114	RM	141,833,943.95	/RM	16,169,070
		10.02.040	Diridon-Tamien - 2 Track	1.059	RM	133,481,705.53	/RM	141,357,126

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.02.041	Diridon-Tamien - 4 Track	0.517	RM	327,544,070.97	/RM	169,340,285
		10.10.120	Direct Fixation Trk - 2 Trk	1.348	RM	4,243,224.82	/RM	5,719,867
		10.10.140	Direct Fixation Track - 4 Track	0.485	RM	8,575,433.96	/RM	4,159,085
		10.14.150	Direct Fixation Crossover #15	1.000	EA	2,401,862.40	/EA	2,401,862
		20.06.211	Bike Path Realignment (Almaden Expy)	1.000	EA	21,023,374.97	/EA	21,023,375
		20.07.020	Rdwy, New AC Paving - Access Rd	9,800.000	SF	160.56	/SF	1,573,496
		40.02.005	Sanitary Sewer, 24"-36"	750.000	LF	185.78	/LF	139,335
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.000	LF	266.69	/LF	544,039
		40.02.020	Electric OH, 115 kV	1,400.000	LF	230.75	/LF	323,047
		40.02.024	Transmission Tower	1.000	EA	579,040.00	/EA	579,040
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave				/RM	383,120,291
SS4			San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.200	RM	132,645,183.65	/RM	26,529,037
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	0.280	RM	3,814,448.29	/RM	1,068,046
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	2.160	RM	6,749,093.54	/RM	14,578,042
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.270	RM	6,890,604.93	/RM	1,860,463
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.140	RM	12,074,630.29	/RM	1,690,448
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.280	RM	20,052,761.54	/RM	5,614,773
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.280	RM	1,458,334.32	/RM	408,334
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.590	RM	2,898,241.62	/RM	7,506,446
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.270	RM	4,356,661.56	/RM	1,176,299
		10.10.120	Direct Fixation Trk - 2 Trk	0.190	RM	4,271,050.58	/RM	811,500
		10.14.201	Ballasted Turnout #9	2.000	EA	119,861.28	/EA	239,723
		10.14.203	Ballasted Turnout #11 & #14	1.000	EA	146,497.12	/EA	146,497

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.320	Ballasted Crossover	1.000	EA	559,352.64	/EA	559,353
		20.07.020	Rdwy, New AC Paving - Access Rd	53,020.000	SF	160.56	/SF	8,512,935
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.000	LF	183.36	/LF	271,370
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.000	LF	266.69	/LF	4,277,643
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	2,520.000	LF	230.75	/LF	581,485
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.000	EA	15,159,236.24	/EA	15,159,236
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.000	EA	10,654,389.05	/EA	10,654,389
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.000	EA	409,576.94	/EA	409,577
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.000	EA	2,022,372.33	/EA	2,022,372
		40.08.200.aj1	HSR Underpass	1.000	EA	8,545,621.79	/EA	8,545,622
		40.08.200.aj2	Caltrain & UPRR Underpass	1.000	EA	1,930,061.25	/EA	1,930,061
			SS4 San Jose to Monterey Corridor: Alma Ave to Communication Hill				/RM	114,553,650
SS5810			Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)					
		10.01.001	Topsoil	299,423.000	CY	3.99	/CY	1,195,535
		10.01.002	Cut	491,804.000	CY	12.65	/CY	6,220,417
		10.01.004	Overbreak In Embankment	372,489.000	CY	18.65	/CY	6,947,010
		10.01.005	Embankment	1,706,565.000	CY	21.30	/CY	36,355,849
		10.01.006	Overbreak Fill In Cut	167,879.000	CY	18.65	/CY	3,130,979
		10.01.007	Overbreak Fill In Embankment	372,489.000	CY	18.65	/CY	6,947,010
		10.01.008	Subballast	106,357.000	CY	55.94	/CY	5,949,402
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.560	RM	150,023,573.48	/RM	84,013,201
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	1.430	RM	154,902,601.15	/RM	221,510,720
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.340	RM	157,737,827.26	/RM	53,630,861
		10.02.022	BC - 205-205-205-205 Span - Capitol, Alt 2	0.160	RM	235,684,299.19	/RM	37,709,488

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.05.121	At-Grade Trk-bed in Cut - 2 Trk (5' Avg. Exc Depth)	1.210	RM	7,624,359.82	/RM	9,225,475
		10.05.222	At-Grade Trk-bed in Fill - 2 Trk (10' Avg. Fill Ht)	0.030	RM	7,179,543.00	/RM	215,386
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.000	EA	1,426,254.99	/EA	7,131,275
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	7.620	RM	6,739,906.99	/RM	51,358,091
		10.07.215a	Cut & Cover Box - 2 Track / 1 Box (50' Avg. Exc Depth)	0.200	RM	403,362,708.00	/RM	80,672,542
		10.08.221	Retained Cut, Trench - 2 Trk (10' Avg. Exc Depth)	0.280	RM	70,444,469.11	/RM	19,724,451
		10.08.222	Retained Cut, Trench - 2 Trk (20' Avg. Exc Depth)	0.380	RM	123,385,319.18	/RM	46,886,421
		10.08.222a	Ret Cut, Trench - 2 Trk (20' Avg. Exc Depth)	0.100	RM	156,929,943.00	/RM	15,692,994
		10.08.223	Retained Cut, Trench - 2 Trk (30' Avg. Exc Depth)	0.230	RM	171,316,133.22	/RM	39,402,711
		10.08.223a	Ret Cut, Trench - 2 Trk (30' Avg. Exc Depth)	0.110	RM	208,212,220.55	/RM	22,903,344
		10.08.224a	Ret Cut, Staged Trench - 2 Trk (40' Avg. Exc Depth)	0.290	RM	331,717,106.62	/RM	96,197,961
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	11.950	RM	11,901,509.94	/RM	142,223,044
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20' Avg. Wall Ht)	5.670	RM	19,891,595.06	/RM	112,785,344
		10.08.423	Ret Fill, Walls Both Sides - 2 Trk (30' Avg. Wall Ht)	0.630	RM	19,971,732.29	/RM	12,582,191
		10.09.110	Ballasted Trk - 1 Trk	1.800	RM	2,212,728.24	/RM	3,982,911
		10.09.120	Ballasted Trk - 2 Trk	13.180	RM	4,377,699.74	/RM	57,698,083
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	27.110	RM	2,900,186.12	/RM	78,624,046
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	3.290	RM	266,638.02	/RM	877,239
		10.10.120	Direct Fixation Trk - 2 Trk	2.540	RM	4,245,078.65	/RM	10,782,500
		10.14.100	Special Trackwork - Direct Fixation	2.000	EA	665,896.00	/EA	1,331,792
		10.14.130	Direct Fixation Crossover (60 MPH)	1.000	EA	1,997,688.00	/EA	1,997,688
		10.14.200	Special Trackwork - Ballasted	8.000	EA	605,965.36	/EA	4,847,723

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.300	Ballasted Crossover (60 MPH)	1.000	EA	1,997,688.00	/EA	1,997,688
		10.14.305	Ballasted Crossover (80 MPH)	4.000	EA	1,510,252.13	/EA	6,041,009
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.34	/EA	85,235
		10.14.500	Ballasted Turnout Caltrain #9	10.000	EA	42,617.34	/EA	426,173
		10.14.600	Ballasted Crossover Caltrain	2.000	EA	42,617.35	/EA	85,235
		10.15.100	Wildlife Crossing	6.000	EA	26,635.84	/EA	159,815
		10.15.102	Wildlife Crossing - 30' wide	2.000	EA	370,770.89	/EA	741,542
		10.15.103	Wildlife Crossing - 40' wide	6.000	EA	680,598.98	/EA	4,083,594
		10.16.100	Drainage	17.000	EA	181,789.61	/EA	3,090,423
		10.16.101	Superficial drainage system for flood plain mitigation	3.800	RM	10,509,032.47	/RM	39,934,323
		20.02.215b	Downtown Gilroy Sta - At Grade	1.000	LS	153,873,042.77	/LS	153,873,043
		20.06.170	Ped Brdg Overcrossing HSR (Branham Ln):	1.000	EA	16,777,976.22	/EA	16,777,976
		20.06.171	Ped Brdg Overcrossing HSR (Blossom Hill Sta):	1.000	EA	7,103,394.93	/EA	7,103,395
		20.07.020	Rdwy, New AC Paving - Access Rd	144,860.000	SF	160.56	/SF	23,258,840
		30.04.010a	MOWF Downtown Gilroy	1.000	EA	236,686,528.72	/EA	236,686,529
		40.02.001	Natural Gas/Oil, 4.5"-8"	1,410.000	LF	242.01	/LF	341,237
		40.02.002	Natural Gas/Oil, 9"-16"	1,570.000	LF	183.36	/LF	287,872
		40.02.003	Potable Water, 10"-16"	1,800.000	LF	289.52	/LF	521,136
		40.02.004	Potable Water, 72"	1,550.000	LF	868.56	/LF	1,346,268
		40.02.005	Sanitary Sewer, 24"-36"	12,140.000	LF	185.78	/LF	2,255,369
		40.02.006	Sanitary Sewer, 37"-48"	8,910.000	LF	376.38	/LF	3,353,510
		40.02.007	Sanitary Sewer, 49"-54"	8,010.000	LF	411.12	/LF	3,293,103
		40.02.008	Storm Drain, 42"-54"	5,120.000	LF	328.61	/LF	1,682,473
		40.02.011	Pump Station (Storm)	23.000	EA	361,900.00	/EA	8,323,700
		40.02.012	Pump Station (Sanitary)	7.000	EA	528,374.00	/EA	3,698,618
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	194,340.000	LF	266.69	/LF	51,827,757
		40.02.014	Telecom/Fiber Optic OH, All Sizes	12,290.000	LF	266.69	/LF	3,277,571

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.015	Telecommunication Facility	1.000	EA	434,280.00	/EA	434,280
		40.02.019	Electric OH, 51-114 kV	2,430.000	LF	122.18	/LF	296,893
		40.02.020	Electric OH, 115 kV	3,430.000	LF	230.75	/LF	791,466
		40.02.021	Electric OH, 230 kV	2,540.000	LF	183.13	/LF	465,160
		40.02.022	Electric OH, unknown	101,405.000	LF	183.13	/LF	18,570,703
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	25,770.000	LF	230.75	/LF	5,946,376
		40.02.024	Transmission Tower	3.000	EA	579,040.00	/EA	1,737,120
		40.02.030	Potable Water, 4"-9"	2,305.000	LF	62.54	/LF	144,150
		40.02.045	Electric OH & Telecom OH on JP, Unknown	1,875.000	LF	183.13	/LF	343,376
		40.05.310	Intrusion Protection Barrier	120,815.330	LF	3,058.58	/LF	369,523,728
		40.08.100.I	Rdwy Overxing HSR (Palm Ave): 2-Ln Rdwy Over 4 Trk & 4-Ln Rdwy	1.000	EA	23,604,512.41	/EA	23,604,512
		40.08.100.m	Rdwy Overxing HSR (Live Oak Ave): 2-Ln Rdwy Over 4 Trk & 4-Ln Rdwy	1.000	EA	25,833,886.96	/EA	25,833,887
		40.08.100.n	Rdwy Overxing HSR (E. Middle Ave): 2-Ln Rdwy Over 3 Trk & 4-Ln Rdwy	1.000	EA	43,046,875.60	/EA	43,046,876
		40.08.100.o	Rdwy Overxing HSR (Church Ave): 4-Ln Rdwy Over 3 Trk & 4-Ln Rdwy	1.000	EA	23,207,430.80	/EA	23,207,431
		40.08.100.p	Rdwy Overxing HSR (US101 - NB):	1.000	EA	15,670,869.19	/EA	15,670,869
		40.08.100.q	Rdwy Overxing HSR (US101 - SB):	1.000	EA	25,765,953.54	/EA	25,765,954
		40.08.100.t	Rdwy Overxing HSR (Capitol Expr): 4-Ln Rdwy Over 4-Ln Rdwy	1.000	EA	9,059,978.85	/EA	9,059,979
		40.08.100.u	Rdwy Overxing HSR (Butterfield Blvd): 4-Ln Rdwy Over 2-Ln Rdwy	1.000	EA	8,261,056.22	/EA	8,261,056
		40.08.200.aa	Rdwy Underxing HSR (9Th Street): 2-Ln Rdwy Under 6 Trk	1.000	EA	1,886,239.84	/EA	1,886,240
		40.08.200.aa1	HSR Underpass	1.000	EA	7,631,878.00	/EA	7,631,878
		40.08.200.aa2	UPRR Underpass	1.000	EA	9,238,554.40	/EA	9,238,554
		40.08.200.ab	Rdwy Underxing HSR (10Th Street): 4-Ln Rdwy Under 7 Trk	1.000	EA	2,992,273.84	/EA	2,992,274
		40.08.200.ab1	HSR Underpass	1.000	EA	6,086,392.71	/EA	6,086,393
		40.08.200.ab2	UPRR Underpass	1.000	EA	7,819,758.25	/EA	7,819,758

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.200.ao	Rdwy Underxing HSR (Cohansey): 4-Ln Rdwy Under 3 Trk	1.000	EA	385,466.51	/EA	385,467
		40.08.200.ao1	HSR Underpass	1.000	EA	4,153,419.37	/EA	4,153,419
		40.08.200.ao2	UPRR Underpass	1.000	EA	2,918,398.15	/EA	2,918,398
		40.08.200.ap	Rdwy Underxing HSR (Casey): 4-Ln Rdwy Under 3 Trk	1.000	EA	433,924.97	/EA	433,925
		40.08.200.ap1	HSR Underpass	1.000	EA	2,655,277.04	/EA	2,655,277
		40.08.200.ap2	UPRR Underpass	1.000	EA	2,518,542.82	/EA	2,518,543
		40.08.200.aq	Rdwy Underxing HSR (Monterey Rd At Morgan Hill): Exist Rd Under 2 Trk	1.000	EA	3,450,320.18	/EA	3,450,320
		40.08.200.as1	HSR Underpass	1.000	EA	3,769,381.79	/EA	3,769,382
		40.08.200.as2	UPRR Underpass	1.000	EA	5,833,507.49	/EA	5,833,507
		40.08.200.b	Rdwy Uxing HSR (Skyway Dr Opt A): 4 Ln, RF Rdwy Under 4 Trks/4 Ln Rdwy	1.000	EA	8,787,653.41	/EA	8,787,653
		40.08.200.b1	HSR Underpass	1.000	EA	2,598,400.92	/EA	2,598,401
		40.08.200.b2	UPRR Underpass	1.000	EA	5,949,148.50	/EA	5,949,149
		40.08.200.b3	Rdwy Underpass	1.000	EA	7,090,887.96	/EA	7,090,888
		40.08.200.c	Rdwy Underxing HSR (Monterey Rd At Skyway Drive): 4-Ln, Ret Fill Rdwy	1.000	EA	16,925,380.43	/EA	16,925,380
		40.08.200.d	Rdwy Underxing HSR (Branham Ln): 4-Ln, Ret Fill Rdwy Under 4 Trk	1.000	EA	8,890,726.45	/EA	8,890,726
		40.08.200.d1	HSR Underpass	1.000	EA	4,455,832.78	/EA	4,455,833
		40.08.200.d2	UPRR Underpass	1.000	EA	6,452,342.79	/EA	6,452,343
		40.08.200.e	Rdwy Underxing HSR (Monterey Rd At Branham Ln): 4-Ln, Ret Fill Rdwy	1.000	EA	13,533,896.53	/EA	13,533,897
		40.08.200.f	Rdwy Underxing HSR (Chynoweth Ave): 5-Ln, Ret Fill Rdwy Under 4 Trk	1.000	EA	5,556,155.53	/EA	5,556,156
		40.08.200.f1	HSR Underpass	1.000	EA	3,985,012.42	/EA	3,985,012
		40.08.200.f2	UPRR Underpass	1.000	EA	7,689,723.64	/EA	7,689,724
		40.08.200.g	Rdwy Underxing HSR (Monterey Rd At Chynoweth Ave): 4-Ln, Ret Fill Rdwy	1.000	EA	10,232,384.11	/EA	10,232,384
		40.08.200.h	Rdwy Underxing HSR (Madr1 Parkway): 5-Ln Rdwy Under 4 Trk & 4-Ln Rdwy	1.000	EA	12,754,358.83	/EA	12,754,359
		40.08.200.h1	HSR Underpass	1.000	EA	3,136,265.02	/EA	3,136,265

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		40.08.200.h2	UPRR Underpass	1.000	EA	3,699,907.05	/EA	3,699,907
		40.08.200.h3	Rdwy Underpass	1.000	EA	9,909,840.96	/EA	9,909,841
		40.08.200.i	Rdwy Underxing HSR (Main Ave): 4-Ln Rdwy Under 3 Trk	1.000	EA	4,213,171.09	/EA	4,213,171
		40.08.200.i1	HSR Underpass	1.000	EA	4,398,996.20	/EA	4,398,996
		40.08.200.i2	UPRR Underpass	1.000	EA	3,593,686.22	/EA	3,593,686
		40.08.200.j	Rdwy Underxing HSR (E. Dunne Ave): 4-Ln Rdwy Under 3 Trk	1.000	EA	5,500,218.34	/EA	5,500,218
		40.08.200.j1	HSR Underpass	1.000	EA	4,539,976.81	/EA	4,539,977
		40.08.200.j2	UPRR Underpass	1.000	EA	3,672,800.73	/EA	3,672,801
		40.08.200.k	Rdwy Underxing HSR (San Pedro Ave): 2-Ln Rdwy Under 3 Trk	1.000	EA	9,539,777.55	/EA	9,539,778
		40.08.200.k1	HSR Underpass	1.000	EA	4,316,881.05	/EA	4,316,881
		40.08.200.k2	UPRR Underpass	1.000	EA	3,263,786.75	/EA	3,263,787
		40.08.200.k3	Rdwy Underpass (Church St)	1.000	EA	3,993,998.23	/EA	3,993,998
		40.08.200.l	Rdwy Underxing HSR (Tennant Ave): 4-Ln Rdwy Under 3 Trk	1.000	EA	21,439,183.26	/EA	21,439,183
		40.08.200.l1	HSR Underpass	1.000	EA	4,642,397.73	/EA	4,642,398
		40.08.200.l2	UPRR Underpass	1.000	EA	7,798,818.86	/EA	7,798,819
		40.08.200.m	Rdwy Uxing HSR (Monterey Rd/E. Middle Rd): 4-Ln Rdwy Under 2-Ln Rdwy	1.000	EA	5,483,959.59	/EA	5,483,960
		40.08.200.m1	HSR Underpass	1.000	EA	6,527,023.30	/EA	6,527,023
		40.08.200.m2	UPRR Underpass	1.000	EA	5,078,024.91	/EA	5,078,025
		40.08.200.m3	Rdwy Underpass (Monterey Over Llagas)	1.000	EA	28,901,014.55	/EA	28,901,015
		40.08.200.n	Rdwy Uxing HSR (W. San Martin Ave): 2-Ln Rdwy Under 3 Trks/4-Ln Rdwy	1.000	EA	6,328,942.87	/EA	6,328,943
		40.08.200.n1	HSR Underpass	1.000	EA	2,811,813.35	/EA	2,811,813
		40.08.200.n2	UPRR Underpass	1.000	EA	2,778,973.10	/EA	2,778,973
		40.08.200.n3	Rdwy Underpass (Monterey Over San Martin)	1.000	EA	10,491,466.28	/EA	10,491,466
		40.08.200.n4	Rdwy Underpass (Depot Over San Martin)	1.000	EA	4,708,303.29	/EA	4,708,303

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.200.n5	Rdwy Underpass (San Martin Over Llagas)	1.000	EA	6,755,887.31	/EA	6,755,887
		40.08.200.o	Rdwy Underxing HSR (Mas10 Ave): 4-Ln Rdwy Under 3 Trk & 4-Ln Rdwy	1.000	EA	19,846,142.43	/EA	19,846,142
		40.08.200.o1	HSR Underpass	1.000	EA	3,671,396.12	/EA	3,671,396
		40.08.200.o2	UPRR Underpass	1.000	EA	5,374,004.82	/EA	5,374,005
		40.08.200.p	Rdwy Underxing HSR (Monterey Rd At Mas10 Ave): 4-Ln Rdwy	1.000	EA	12,462,256.65	/EA	12,462,257
		40.08.200.q	Rdwy Underxing HSR (Rucker Ave): 2-Ln Rdwy Under 3 Trk & 4-Ln Rdwy	1.000	EA	10,528,088.60	/EA	10,528,089
		40.08.200.q1	HSR Underpass	1.000	EA	2,742,209.33	/EA	2,742,209
		40.08.200.q2	UPRR Underpass	1.000	EA	2,506,495.69	/EA	2,506,496
		40.08.200.q3	Rdwy Underpass	1.000	EA	5,898,344.51	/EA	5,898,345
		40.08.200.r	Rdwy Underxing HSR (Buena Vista Ave): 4-Ln Rdwy Under 3 Trk	1.000	EA	12,993,078.81	/EA	12,993,079
		40.08.200.r1	HSR Underpass	1.000	EA	3,880,187.38	/EA	3,880,187
		40.08.200.r2	UPRR Underpass	1.000	EA	5,810,235.70	/EA	5,810,236
		40.08.200.s	Rdwy Underxing HSR (Monterey Rd At Buena Vista Ave): 4-Ln Rdwy	1.000	EA	11,977,255.86	/EA	11,977,256
		40.08.200.t1	HSR Underpass	1.000	EA	2,169,569.03	/EA	2,169,569
		40.08.200.t2	UPRR Underpass	1.000	EA	1,532,751.89	/EA	1,532,752
		40.08.200.v	Rdwy Underxing HSR (Leavesley Rd): 4-Ln Rdwy Under 3 Trk	1.000	EA	4,982,529.77	/EA	4,982,530
		40.08.200.v1	HSR Underpass	1.000	EA	4,682,922.25	/EA	4,682,922
		40.08.200.v2	UPRR Underpass	1.000	EA	4,351,292.03	/EA	4,351,292
		40.08.200.w	Rdwy Underxing HSR (Loof Ave): 4-Ln Rdwy Under 3 Trk	1.000	EA	4,551,390.01	/EA	4,551,390
		40.08.200.w1	HSR Underpass	1.000	EA	2,928,647.73	/EA	2,928,648
		40.08.200.w2	UPRR Underpass	1.000	EA	2,677,826.43	/EA	2,677,826
		40.08.200.x	Rdwy Underxing HSR (Lewis Street): 2-Ln Rdwy Under 3 Trk	1.000	EA	2,176,410.37	/EA	2,176,410
		40.08.200.x1	HSR Underpass	1.000	EA	2,731,591.19	/EA	2,731,591
		40.08.200.x2	UPRR Underpass	1.000	EA	2,677,826.42	/EA	2,677,826

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.200.y	Rdwy Underxing HSR (6Th Street): 2-Ln Rdwy Under 5 Trk	1.000	EA	2,247,401.36	/EA	2,247,401
		40.08.200.y1	HSR Underpass	1.000	EA	5,247,449.49	/EA	5,247,449
		40.08.200.y2	UPRR Underpass	1.000	EA	5,239,936.11	/EA	5,239,936
		40.08.200.z	Rdwy Underxing HSR (Old Gilroy Street): 2-Ln Rdwy Under 6 Trk	1.000	EA	2,735,276.35	/EA	2,735,276
		40.08.200.z1	HSR Underpass	1.000	EA	4,623,426.60	/EA	4,623,427
		40.08.200.z2	UPRR Underpass	1.000	EA	5,331,283.65	/EA	5,331,284
			SS5810 Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)				/RM	2,940,788,514
	SS99-2		Alternative 2 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.000	LS	389,497,703.54	/LS	389,497,704
		40.06.100	Temporary facilities and other indirect costs during construction	1.000	LS	476,052,748.78	/LS	476,052,749
		40.07.100	ROW Procurement Acquisition	1.000	LS	3,216,556,500.00	/LS	3,216,556,500
		50.01.020	Wayside signalling equipment	90.250	RM	2,176,069.18	/RM	196,390,244
		50.05.010	Communications (W/ Fiber Optic Backbone)	103.810	RM	861,355.24	/RM	89,417,288
		50.07.020	Hazard Detectors	103.810	RM	597,507.01	/RM	62,027,203
		60.01.020	Traction power transmission: High voltage	1.000	LS	157,073,968.02	/LS	157,073,968
		60.01.030	Distribution Line Pacheco Pass	1.000	LS	65,836,890.77	/LS	65,836,891
		60.01.040	PG&E Construction Power Drop Sites	1.000	LS	2,116,964.96	/LS	2,116,965
		60.02.010	Traction power supply: Substations	1.000	LS	203,328,587.76	/LS	203,328,588
		60.03.100	Traction power distribution: Catenary and third rail	96.190	RM	2,535,782.30	/RM	243,916,899
		60.04.100	Traction power control	1.000	LS	527,429.09	/LS	527,429
		80.00.00	Professional Services	1.000	LS	2,306,537,544.83	/LS	2,306,445,981
		90.00.00	Unallocated Contingency	1.000	LS	762,595,386.70	/LS	762,569,365
			SS99-2 Alternative 2 Complete					8,171,718,861
			2 Alternative 2		RM		/RM	20,813,150,339

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
3			Alternative 3					
	SS1113		Morgan Hill & Gilroy: Viaduct thru E Gilroy					
		10.01.001	Topsoil	566,208.000	CY	3.99	/CY	2,260,754
		10.01.002	Cut	4,419,287.000	CY	12.65	/CY	55,895,850
		10.01.004	Overbreak In Embankment	535,090.000	CY	18.65	/CY	9,979,558
		10.01.005	Embankment	4,482,346.000	CY	21.30	/CY	95,489,740
		10.01.006	Overbreak Fill In Cut	64,223.000	CY	18.65	/CY	1,197,775
		10.01.007	Overbreak Fill In Embankment	535,090.000	CY	18.65	/CY	9,979,558
		10.01.008	Subballast	114,129.000	CY	55.94	/CY	6,384,109
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	6.100	RM	108,518,084.93	/RM	661,960,318
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.440	RM	109,644,797.30	/RM	48,243,711
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.680	RM	112,617,875.07	/RM	76,580,155
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.140	RM	125,741,648.00	/RM	17,603,831
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	1.330	RM	113,804,122.34	/RM	151,359,483
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.450	RM	115,675,946.76	/RM	167,730,123
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.120	RM	118,733,784.58	/RM	14,248,054
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	0.060	RM	153,609,996.83	/RM	9,216,600
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	2.550	RM	150,781,714.04	/RM	384,493,371
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	0.760	RM	155,240,773.11	/RM	117,982,988
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	0.920	RM	157,349,369.91	/RM	144,761,420
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	0.050	RM	156,030,558.60	/RM	7,801,528
		10.02.039	BC - 220-220 Span - US101 - HSR	0.080	RM	139,387,813.13	/RM	11,151,025

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.02.039a	BC - 220-220 Span - US101 - UPRR	0.080	RM	128,852,586.63	/RM	10,308,207
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	20.000	EA	180,803.27	/EA	3,616,065
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.000	EA	927,065.75	/EA	7,416,526
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	2.000	EA	2,699,648.01	/EA	5,399,296
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	7.000	EA	1,426,254.99	/EA	9,983,785
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.570	RM	204,371,295.12	/RM	320,862,933
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.000	If	31,653.02	/If	31,653,018
		10.07.950	Allowance For Construction Monitoring	1.570	RM	256,000.00	/RM	401,920
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	11.340	RM	2,214,644.56	/RM	25,114,069
		10.09.120	Ballasted Trk - 2 Trk	6.540	RM	4,376,563.54	/RM	28,622,726
		10.10.110	Direct Fixation Track - 1 Track	4.750	RM	5,902,190.04	/RM	28,035,403
		10.10.120	Direct Fixation Trk - 2 Trk	3.340	RM	4,239,841.31	/RM	14,161,070
		10.14.200	Special Trackwork - Ballasted	6.000	EA	605,965.36	/EA	3,635,792
		10.14.300	Ballasted Crossover (60 MPH)	1.000	EA	1,997,688.00	/EA	1,997,688
		10.14.305	Ballasted Crossover (80 MPH)	4.000	EA	1,510,252.13	/EA	6,041,009
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.35	/EA	85,235
		10.15.100	Wildlife Crossing	2.000	EA	26,635.84	/EA	53,272
		10.16.100	Drainage	108.000	EA	181,789.61	/EA	19,633,278
		10.16.101	Superficial drainage system for flood plain mitigation	5.390	RM	10,513,433.09	/RM	56,667,404

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.02.215c	East Gilroy Sta	1.000	LS	130,115,061.55	/LS	130,115,062
		20.07.020	Rdwy, New AC Paving - Access Rd	801,740.000	SF	160.56	/SF	128,728,032
		30.04.010b	Comb. MOWF & LMF - East Glry	1.000	EA	278,549,105.26	/EA	278,549,105
		40.02.001	Natural Gas/Oil, 4.5"-8"	250.000	LF	154.41	/LF	38,602
		40.02.002	Natural Gas/Oil, 9"-16"	290.000	LF	183.36	/LF	53,174
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,000.000	LF	266.69	/LF	533,372
		40.02.022	Electirc OH, unknown	17,290.000	LF	183.13	/LF	3,166,387
		40.02.023	Electric OH & Telecom OH on JP, 51-114 KV	3,320.000	LF	230.75	/LF	766,083
		40.02.045	Electric OH & Telecom OH on JP, Unknown	20,145.000	LF	183.13	/LF	3,689,234
		40.08.100.a	Rdwy Overxing HSR (SR152): 4-Ln Rdwy Over MF	1.000	EA	132,565,998.97	/EA	132,565,999
		40.08.100.h	Rdwy Overxing HSR (Las Animas Ave): 2-Ln Rdwy Over 2 Trk - Alt 3	1.000	EA	20,346,195.19	/EA	20,346,195
		40.08.100.k	Rdwy Overxing HSR (Leavesley Rd): 4-Ln Rdwy Over 2 Trk - Alt 3	1.000	EA	30,542,995.80	/EA	30,542,996
		40.08.200.ak	Rdwy Underxing HSR (Holsclaw Farm Rd): 2-Ln Rdwy Under 2 Trk	1.000	EA	253,934.47	/EA	253,934
			SS1113 Morgan Hill & Gilroy: Viaduct thru E Gilroy				/RM	3,310,104,853
SS14			Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.830	CY	3.99	/CY	3,362,943
		10.01.002	Cut	15,347,083.000	CY	12.65	/CY	194,112,361
		10.01.004	Overbreak In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.005	Embankment	8,678,515.000	CY	21.30	/CY	184,882,909
		10.01.006	Overbreak Fill In Cut	72,100.000	CY	18.65	/CY	1,344,681
		10.01.007	Overbreak Fill In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.008	Subballast	143,484.000	CY	55.94	/CY	8,026,176
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.580	RM	120,620,029.67	/RM	69,959,617
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.110	RM	119,533,031.45	/RM	13,148,633

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.080	RM	116,835,191.37	/RM	9,346,815
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.930	RM	125,741,647.94	/RM	116,939,733
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.380	RM	128,687,221.08	/RM	306,275,586
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.020	RM	121,823,554.50	/RM	2,436,471
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.070	RM	142,812,858.57	/RM	9,996,900
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.120	RM	128,434,239.08	/RM	15,412,109
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	136,176,890.55	/RM	14,979,458
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.270	RM	140,733,598.78	/RM	37,998,072
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.270	RM	143,725,067.37	/RM	38,805,768
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.730	RM	144,706,717.21	/RM	105,635,904
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.190	RM	155,863,552.53	/RM	29,614,075
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.120	RM	142,079,390.58	/RM	17,049,527
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.100	RM	150,993,514.10	/RM	15,099,351
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.000	EA	180,803.28	/EA	723,213
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.000	EA	927,065.75	/EA	16,687,183
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.000	EA	2,699,648.01	/EA	53,992,960
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.000	EA	278,158.87	/EA	1,112,635
		10.05.320	Transition Wedge 1 Trk Embankment-Slab	4.000	EA	9,048.34	/EA	36,193
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.000	EA	10,851.93	/EA	43,408
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.000	EA	13,221.05	/EA	52,884
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.610	RM	204,371,295.12	/RM	2,781,493,327

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.000	If	31,653.02	/If	284,877,158
		10.07.850	Pumping Sta	1.000	EA	320,000.00	/EA	320,000
		10.07.920	Ventilation Equipment Allowance	4.000	EA	163,854,333.44	/EA	655,417,334
		10.07.950	Allowance For Construction Monitoring	13.610	RM	256,000.00	/RM	3,484,160
		10.07.970	Fault Chamber	2.000	EA	156,842,010.24	/EA	313,684,020
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.240	RM	2,215,058.90	/RM	9,391,850
		10.09.120	Ballasted Trk - 2 Trk	13.300	RM	4,377,095.92	/RM	58,215,376
		10.10.110	Direct Fixation Track - 1 Track	31.000	RM	2,136,969.19	/RM	66,246,045
		10.10.120	Direct Fixation Trk - 2 Trk	0.240	RM	4,260,727.46	/RM	1,022,575
		10.15.101	Wildlife Crossing	10.000	EA	67,202.23	/EA	672,022
		10.16.100	Drainage	2.000	EA	181,789.61	/EA	363,579
		20.07.020	Rdwy, New AC Paving - Access Rd	777,970.000	SF	160.56	/SF	124,911,501
		40.02.020	Electric OH, 115 KV	455.000	LF	230.75	/LF	104,990
		40.02.021	Electric OH, 230 KV	1,340.000	LF	183.13	/LF	245,400
		40.02.022	Electric OH, unknown	1,925.000	LF	183.13	/LF	352,533
		40.02.025	Potable Water, 120"	1,230.000	LF	7,238.00	/LF	8,902,740
		40.02.043	Drainage Canal, All Sizes	785.000	LF	473.20	/LF	371,462
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.000	LF	183.13	/LF	76,001
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.000	LF	3,619.00	/LF	5,895,351
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.000	LF	8,685.60	/LF	8,260,006

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.000	LF	10,133.20	/LF	6,860,176
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.000	LF	13,028.40	/LF	12,898,116
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.000	LF	17,371.20	/LF	18,343,987
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,089.840	LF	11,580.80	/LF	35,782,819
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.000	EA	683,384.71	/EA	683,385
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.000	EA	8,578.08	/EA	8,578
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.000	EA	39,528.72	/EA	39,529
		SS14 Pacheco Pass Deep Tunnel					/RM	5,707,991,748
SS16	San Joaquin Valley							
		10.01.001	Topsoil	447,415.000	CY	3.99	/CY	1,786,438
		10.01.002	Cut	23,638.000	CY	12.65	/CY	298,979
		10.01.004	Overbreak In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.005	Embankment	2,531,377.000	CY	21.30	/CY	53,927,237
		10.01.006	Overbreak Fill In Cut	1,701.000	CY	18.65	/CY	31,722
		10.01.007	Overbreak Fill In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.008	Subballast	128,198.000	CY	55.94	/CY	7,171,112
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.700	RM	140,032,383.73	/RM	378,087,436
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.630	RM	142,812,858.48	/RM	232,784,959
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.670	RM	145,457,939.72	/RM	97,456,820
		10.02.036	BC - 150-275-150 - Cherokee	0.110	RM	159,283,843.36	/RM	17,521,223
		10.02.037	BC - 200-350-200 - San Luis	0.140	RM	127,207,955.86	/RM	17,809,114
		10.02.038	BC - 120-220-120 Span - Los Banos	0.090	RM	186,700,879.78	/RM	16,803,079
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.000	EA	1,426,254.99	/EA	11,410,040
		10.09.110	Ballasted Trk - 1 Trk	0.550	RM	2,215,058.91	/RM	1,218,282

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.09.120	Ballasted Trk - 2 Trk	12.750	RM	4,377,095.92	/RM	55,807,973
		10.10.120	Direct Fixation Trk - 2 Trk	5.370	RM	4,242,294.99	/RM	22,781,124
		10.14.206	Ballasted Turnout #20	3.000	EA	319,630.08	/EA	958,890
		10.14.300	Ballasted Crossover (60 MPH)	2.000	EA	1,997,688.00	/EA	3,995,376
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504
		10.14.400	Terminal - Bumping Post	1.000	EA	42,617.34	/EA	42,617
		10.15.101	Wildlife Crossing	67.000	EA	67,202.22	/EA	4,502,549
		10.16.100	Drainage	42.000	EA	181,789.61	/EA	7,635,164
		20.07.020	Rdwy, New AC Paving - Access Rd	746,920.000	SF	160.56	/SF	119,926,088
		30.04.010c	MOIF Siding	1.000	EA	3,404,290.52	/EA	3,404,291
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.000	LF	266.69	/LF	1,412,102
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.000	LF	266.69	/LF	1,668,121
		40.02.019	Electric OH, 51-114 KV	3,770.000	LF	122.18	/LF	460,611
		40.02.022	Electirc OH, unknown	23,930.000	LF	183.13	/LF	4,382,397
		40.02.035	Potable Water Storage Tank	1.000	EA	72,380.00	/EA	72,380
		40.02.043	Drainage Canal, All Sizes	29,515.000	LF	473.20	/LF	13,966,498
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.000	LF	183.13	/LF	2,246,138
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.660	LF	3,619.02	/LF	2,389
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	46,621,346.36	/EA	46,621,346
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	26,219,109.38	/EA	26,219,109
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	24,861,294.11	/EA	24,861,294
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	25,261,504.54	/EA	25,261,505
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys	1.000	EA	28,308,009.36	/EA	28,308,009
			SS16 San Joaquin Valley				/RM	1,256,821,042
	SS2		San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)					

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	0.230	RM	146,931,301.83	/RM	33,794,199
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.160	RM	138,653,188.94	/RM	22,184,510
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.140	RM	132,303,278.93	/RM	18,522,459
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.290	RM	178,757,577.28	/RM	51,839,697
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.880	RM	150,125,703.66	/RM	132,110,619
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	0.310	RM	155,747,510.81	/RM	48,281,728
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	0.020	RM	171,932,741.50	/RM	3,438,655
		10.02.042	Scott-Diridon - 2 Trk over 3 Trk (30' Avg. Pier Ht) - 110' Spacing	0.230	RM	407,621,462.96	/RM	93,752,936
		10.02.043	Scott-Diridon - 2 Trk over 5 Trk (30' Avg. Pier Ht) - 110' Spacing	0.150	RM	429,859,853.60	/RM	64,478,978
		10.02.044	Scott-Diridon - 4 Trk over 3 Trk (60' Avg. Pier Ht) - 120' Spacing	0.290	RM	457,655,966.69	/RM	132,720,230
		10.02.045	Scott-Diridon - Diridon-Tamien - 4 Trk	0.190	RM	542,670,801.32	/RM	103,107,452
		10.02.046	Scott-Diridon - BC -160-220-160 Span - Lafayette St	0.100	RM	156,623,020.90	/RM	15,662,302
		10.02.047	Scott-Diridon - BC -160-220-160 Span - I-880	0.100	RM	114,847,450.70	/RM	11,484,745
		10.02.048	Scott-Diridon - BC -160-220-160 Span - Taylor St	0.100	RM	113,104,734.70	/RM	11,310,473
		10.02.049	Scott-Diridon - BC-120-240-120 Span - Santa Clara Sta	0.090	RM	163,995,443.11	/RM	14,759,590
		10.02.051	Scott-Diridon - BC -180-180 span - SJ City Market, Wye S Trk	0.140	RM	92,236,438.36	/RM	12,913,101
		10.02.052	Scott-Diridon - 4 Trk BC-150-240-150 Span - Santa Clara Street	0.100	RM	213,382,927.40	/RM	21,338,293
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	0.740	RM	3,885,060.01	/RM	2,874,944
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	0.120	RM	6,805,213.00	/RM	816,626
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	1.200	RM	7,021,034.19	/RM	8,425,241

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.06.240	At-Grade Track-Bed With Closed Drainage - 4 Track	0.770	RM	7,245,659.00	/RM	5,579,157
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.140	RM	12,074,630.29	/RM	1,690,448
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.200	RM	19,689,389.35	/RM	3,937,878
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.740	RM	1,485,330.58	/RM	1,099,145
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	0.460	RM	2,907,808.87	/RM	1,337,592
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	1.200	RM	4,442,561.78	/RM	5,331,074
		10.09.142	Ballasted Track (Track Laying Machine) - 4 Track	0.770	RM	5,880,051.95	/RM	4,527,640
		10.10.120	Direct Fixation Trk - 2 Trk	2.920	RM	4,236,076.40	/RM	12,369,343
		10.10.140	Direct Fixation Track - 4 Track	0.560	RM	8,578,693.98	/RM	4,804,069
		10.14.321	Ballasted Crossover #10	1.000	EA	679,213.92	/EA	679,214
		10.14.322	Ballasted Crossover #11	3.000	EA	760,453.23	/EA	2,281,360
		10.14.323	Ballasted Crossover #14	4.000	EA	945,572.32	/EA	3,782,289
		10.14.324	Ballasted Crossover #20	1.000	EA	1,331,792.00	/EA	1,331,792
		10.14.400	Terminal - Bumping Post	2.000	EA	42,617.35	/EA	85,235
		20.02.225	San Jose (Diridon) Sta	1.000	LS	289,669,562.96	/LS	289,669,563
		20.06.120	Ped Access (Cut & Cover)	650.000	LF	29,233.32	/LF	19,001,660
		20.06.172	Ped Brdg Undercrossing HSR (Lafayette St) Alt2:	1.000	EA	2,367,538.60	/EA	2,367,539
		20.06.210	Parking, at grade	242.000	STL	8,095.26	/STL	1,959,053
		20.07.010	Roadway Modification, New AC Paving	60,800.000	SF	160.56	/SF	9,762,098
		20.07.715	Access Road Entrance Point	1.000	EA	45,836.67	/EA	45,837
		40.02.002	Natural Gas/Oil, 9"-16"	472.000	LF	183.36	/LF	86,545
		40.02.003	Potable Water, 10"-16"	1,703.000	LF	289.52	/LF	493,053
		40.02.005	Sanitary Sewer, 24"-36"	1,650.000	LF	185.78	/LF	306,537
		40.02.006	Sanitary Sewer, 37"-48"	2,404.000	LF	376.38	/LF	904,808
		40.02.008	Storm Drain, 42"-54"	631.000	LF	328.61	/LF	207,352

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.009	Storm Drain, 55"-72"	1,592.000	LF	350.32	/LF	557,713
		40.02.011	Pump Station (Storm)	2.000	EA	361,900.00	/EA	723,800
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	29,238.000	LF	267.10	/LF	7,809,366
		40.02.016	Electric UG	3,478.000	LF	292.04	/LF	1,015,715
		40.02.019	Electric OH, 51-114 kV	2,971.000	LF	122.18	/LF	362,991
		40.02.020	Electric OH, 115 kV	7,511.000	LF	230.75	/LF	1,733,148
		40.08.200.ae	Rdwy Underxing HSR (West Hedding): 2-Ln Rdwy Under 5 Trk	1.000	EA	10,869,831.55	/EA	10,869,832
		40.08.200.ae1	Rdwy Overxing Rdwy - 2-Ln Rdwy Over 4-Ln Rdwy (Stockton St)	1.000	EA	1,243,730.66	/EA	1,243,731
		40.08.200.ae2	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 1)	1.000	EA	2,847,474.79	/EA	2,847,475
		40.08.200.ae3	Rdwy Overxing Rdwy- 10-Ln Rdwy Over 4-Ln Rdwy (Bellarmine Pking Lot 2)	1.000	EA	2,753,219.77	/EA	2,753,220
		40.08.200.ae4	RR Overxing Rdwy- 5 Trk Over 4-Ln Rdwy	1.000	EA	2,716,379.54	/EA	2,716,380
		40.08.200.ae5	Trench Base Slab - Hedding	1.000	EA	21,202,172.32	/EA	21,202,172
		40.08.200.af	Rdwy Uxing HSR (De La Cruz Blvd): 5-Ln, RF Rdwy Under 7 Trks/6-Ln Rdwy	1.000	EA	16,702,064.40	/EA	16,702,064
		40.08.200.af1	Rdwy Overxing Rdwy- 2 Ln Rdwy Over 1 Ln Rdwy De La Cruz Blvd (South)	1.000	EA	1,667,988.77	/EA	1,667,989
		40.08.200.af2	Rdwy Overxing Rdwy- 1 Ln Rdwy Over 1 Ln Rdwy De La Cruz (North)	1.000	EA	529,294.98	/EA	529,295
		40.08.200.af3	Rdwy Overxing Rdwy- 6 Ln Rdwy Over 4 Ln Rdwy De La Cruz (El Camino)	1.000	EA	3,037,800.42	/EA	3,037,800
		40.08.200.af4	RR Overxing Rdwy- 3 Trk Over 4 Ln Rdwy (UPRR)	1.000	EA	2,760,720.19	/EA	2,760,720
		40.08.200.af5	RR Overxing Rdwy- 2 Trk Over 4 Ln Rdwy (JPB)	1.000	EA	1,797,917.81	/EA	1,797,918
		40.08.200.af6	Trench Base Slab - De La Cruz	1.000	EA	49,161,247.51	/EA	49,161,248
		40.08.200.ah	Rdwy Underxing UPRR (Lafayette St) - 1 Trk (Main) Over 4 Ln Rdwy	1.000	EA	1,773,199.69	/EA	1,773,200
	SS3		SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)				/RM	1,308,722,836
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave					

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.140	RM	141,361,875.50	/RM	19,790,663
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.100	RM	161,690,696.30	/RM	16,169,070
		10.02.040	Diridon-Tamien - 2 Track	1.060	RM	133,355,779.39	/RM	141,357,126
		10.02.041	Diridon-Tamien - 4 Track	0.520	RM	325,654,393.62	/RM	169,340,285
		10.10.120	Direct Fixation Trk - 2 Trk	1.350	RM	4,236,938.57	/RM	5,719,867
		10.10.140	Direct Fixation Track - 4 Track	0.480	RM	8,664,761.40	/RM	4,159,085
		10.14.150	Direct Fixation Crossover #15	1.000	EA	2,401,862.40	/EA	2,401,862
		20.06.211	Bike Path Realignment (Almaden Expy)	1.000	EA	21,023,374.97	/EA	21,023,375
		20.07.020	Rdwy, New AC Paving - Access Rd	9,800.000	SF	160.56	/SF	1,573,496
		40.02.005	Sanitary Sewer, 24"-36"	750.000	LF	185.78	/LF	139,335
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	2,040.000	LF	266.69	/LF	544,039
		40.02.020	Electric OH, 115 kV	1,400.000	LF	230.75	/LF	323,047
		40.02.024	Transmission Tower	1.000	EA	579,040.00	/EA	579,040
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave				/RM	383,120,291
SS4			San Jose to Monterey Corridor:Alma Ave to Communication Hill					
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.200	RM	132,645,183.70	/RM	26,529,037
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	0.280	RM	3,814,448.25	/RM	1,068,046
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	2.160	RM	6,749,093.54	/RM	14,578,042
		10.06.230	At-Grade Track-Bed With Closed Drainage - 3 Track	0.270	RM	6,890,604.93	/RM	1,860,463
		10.08.421	Ret Fill, Walls Both Sides - 2 Trk (10' Avg. Wall Ht)	0.140	RM	12,074,630.21	/RM	1,690,448
		10.08.422	Retained Fill, Wall Both Sides - 2 Trks (20'Avg. Wall Ht)	0.280	RM	20,052,761.54	/RM	5,614,773
		10.09.112	Ballasted Track (Track Laying Machine) - 1 Track	0.280	RM	1,458,334.43	/RM	408,334
		10.09.122	Ballasted Track (Track Laying Machine) - 2 Track	2.590	RM	2,898,241.61	/RM	7,506,446

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.09.132	Ballasted Track (Track Laying Machine) - 3 Track	0.270	RM	4,356,661.56	/RM	1,176,299
		10.10.120	Direct Fixation Trk - 2 Trk	0.190	RM	4,271,050.58	/RM	811,500
		10.14.201	Ballasted Turnout #9	2.000	EA	119,861.28	/EA	239,723
		10.14.203	Ballasted Turnout #11 & #14	1.000	EA	146,497.12	/EA	146,497
		10.14.320	Ballasted Crossover	1.000	EA	559,352.64	/EA	559,353
		20.07.020	Rdwy, New AC Paving - Access Rd	53,020.000	SF	160.56	/SF	8,512,935
		40.02.002	Natural Gas/Oil, 9"-16"	1,480.000	LF	183.36	/LF	271,370
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	16,040.000	LF	266.69	/LF	4,277,643
		40.02.023	Electric OH & Telecom OH on JP, 51-114 KV	2,520.000	LF	230.75	/LF	581,485
		40.08.100.r	Rdwy Overxing HSR (Curtner Ave): 4-Ln Rdwy Over 4 Trk	1.000	EA	15,159,236.25	/EA	15,159,236
		40.08.100.s	Rdwy Overxing HSR (Almaden Expr): 4-Ln Rdwy Over 4 Trk	1.000	EA	10,654,389.05	/EA	10,654,389
		40.08.200.ai	Rdwy Underxing HSR (SR87): 1-Ln Rdwy Under Eight-Ln Highway	1.000	EA	409,576.92	/EA	409,577
		40.08.200.aj	Rdwy Underxing HSR (Almaden Rd): 2-Ln Rdwy Under 4 Trk	1.000	EA	2,022,372.34	/EA	2,022,372
		40.08.200.aj1	HSR Underpass	1.000	EA	8,545,621.78	/EA	8,545,622
		40.08.200.aj2	Caltrain & UPRR Underpass	1.000	EA	1,930,061.25	/EA	1,930,061
			SS4 San Jose to Monterey Corridor: Alma Ave to Communication Hill				/RM	114,553,650
SS67			Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)					
		10.01.001	Topsoil	25,218.000	CY	3.99	/CY	100,692
		10.01.002	Cut	12,217.000	CY	12.65	/CY	154,522
		10.01.004	Overbreak In Embankment	32,019.000	CY	18.65	/CY	597,158
		10.01.005	Embankment	157,306.000	CY	21.30	/CY	3,351,167
		10.01.006	Overbreak Fill In Cut	6,300.000	CY	18.65	/CY	117,488
		10.01.007	Overbreak Fill In Embankment	32,019.000	CY	18.65	/CY	597,158
		10.01.008	Subballast	7,424.000	CY	55.94	/CY	415,271

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	1.770	RM	147,755,935.36	/RM	261,528,006
		10.01.223	Elevated Structure - 2 Track (30' Avg. Pier Ht, 90' Span)	0.090	RM	175,890,952.33	/RM	15,830,186
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	7.050	RM	150,906,499.02	/RM	1,063,890,818
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.050	RM	142,812,858.40	/RM	7,140,643
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.040	RM	132,645,184.75	/RM	5,305,807
		10.01.224	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 110' Spacing	3.720	RM	154,355,222.47	/RM	574,201,428
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.160	RM	150,247,078.88	/RM	24,039,533
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	133,359,435.82	/RM	14,669,538
		10.01.225	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 80' Spacing	0.070	RM	212,911,004.43	/RM	14,903,770
		10.01.225a	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 90' Spacing	0.020	RM	143,317,009.00	/RM	2,866,340
		10.01.225b	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 110' Spacing	1.780	RM	158,332,224.72	/RM	281,831,360
		10.01.225c	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 120' Spacing	0.340	RM	150,266,206.29	/RM	51,090,510
		10.01.226	Elevated Structure - 2 Track (60' Avg. Pier Ht, 80' Span)	0.060	RM	201,227,840.50	/RM	12,073,670
		10.01.226a	Elevated Structure - 2 Track (60' Avg. Pier Ht, 90' Span)	0.150	RM	186,718,053.53	/RM	28,007,708
		10.01.226b	Elevated Structure - 2 Track (60' Avg. Pier Ht, 100' Span)	0.080	RM	162,969,850.12	/RM	13,037,588
		10.01.226c	Elevated Structure - 2 Track (60' Avg. Pier Ht) - 110' Spacing	1.590	RM	161,071,813.72	/RM	256,104,184
		10.01.226d	Elevated Structure - 2 Track (60' Avg. Pier Ht, 120' Span)	0.050	RM	138,495,187.80	/RM	6,924,759
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.080	RM	142,489,927.00	/RM	11,399,194
		10.01.227	Elevated Structure - 2 Track (70' Avg. Pier Ht, 80' Span)	0.060	RM	203,903,205.17	/RM	12,234,192
		10.01.227a	Elevated Structure - 2 Track (70' Avg. Pier Ht, 90' Span)	0.130	RM	196,991,219.54	/RM	25,608,859

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.227b	Elevated Structure - 2 Track (70' Avg. Pier Ht, 110' Span)	1.170	RM	164,451,592.10	/RM	192,408,363
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.060	RM	137,546,751.00	/RM	8,252,805
		10.02.020	BC - 225-225-225-225 - UPRR	0.040	RM	300,866,972.25	/RM	12,034,679
		10.02.021	BC - 155-310-155 Span - Monterey	0.120	RM	170,141,261.75	/RM	20,416,951
		10.02.023	BC - 90-180'-90 Span - Capitol	0.070	RM	201,673,568.43	/RM	14,117,150
		10.02.024	BC - 110-220-220-110 Span - Blossom	0.130	RM	157,168,560.00	/RM	20,431,913
		10.02.025	BC - 205-410-205 Span - Sr85	0.160	RM	134,533,606.19	/RM	21,525,377
		10.02.026	BC - 115-230-115 Span - Bernal	0.090	RM	169,108,476.11	/RM	15,219,763
		10.02.027	BC - 110-220-110 Span - Bailey	0.080	RM	186,032,767.63	/RM	14,882,621
		10.02.028	BC - 260-260 - Cochrane 1	0.100	RM	140,672,554.80	/RM	14,067,255
		10.02.029	BC - 233-233-233-233 - Cochrane 2	0.180	RM	184,712,972.78	/RM	33,248,335
		10.02.030	BC - 260-260 - Dunne	0.100	RM	137,152,017.70	/RM	13,715,202
		10.02.031	BC - 240-240 - Tennant	0.090	RM	156,102,604.33	/RM	14,049,234
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	1.000	EA	1,426,254.95	/EA	1,426,255
		10.09.110	Ballasted Trk - 1 Trk	0.300	RM	2,237,433.20	/RM	671,230
		10.09.120	Ballasted Trk - 2 Trk	0.710	RM	4,360,983.08	/RM	3,096,298
		10.09.920	Ballasted Trk Relocation - 1 Trk (Permanent)	1.610	RM	266,638.02	/RM	429,287
		10.10.120	Direct Fixation Trk - 2 Trk	19.900	RM	4,243,102.50	/RM	84,437,740
		10.14.200	Special Trackwork - Ballasted	1.000	EA	605,965.36	/EA	605,965
		10.14.202	Ballasted Turnout #10	5.000	EA	130,515.62	/EA	652,578
		10.14.203	Ballasted Turnout #11 & #14	5.000	EA	146,497.12	/EA	732,486
		10.15.102	Wildlife Crossing - 30' wide	2.000	EA	370,770.89	/EA	741,542
		10.15.103	Wildlife Crossing - 40' wide	2.000	EA	680,598.98	/EA	1,361,198
		20.07.020	Rdwy, New AC Paving - Access Rd	100,240.000	SF	160.56	/SF	16,094,617
		40.01.110	Demolition Allowance, Asphalt Pavement	392,200.000	SY	12.80	/SY	5,018,591
		40.01.810	Demolition Allowance, Remove Railroad Trks	1.610	RM	289,879.65	/RM	466,706

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.001	Natural Gas/Oil, 4.5"-8"	760.000	LF	154.41	/LF	117,349
		40.02.002	Natural Gas/Oil, 9"-16"	830.000	LF	183.36	/LF	152,187
		40.02.007	Sanitary Sewer, 49"-54"	15,980.000	LF	411.12	/LF	6,569,762
		40.02.008	Storm Drain, 42"-54"	1,080.000	LF	328.61	/LF	354,897
		40.02.009	Storm Drain, 55"-72"	320.000	LF	350.32	/LF	112,103
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	43,280.000	LF	266.69	/LF	11,542,170
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,265.000	LF	266.69	/LF	1,670,788
		40.02.015	Telecommunication Facility	1.000	EA	434,280.00	/EA	434,280
		40.02.019	Electric OH, 51-114 kV	230.000	LF	122.18	/LF	28,101
		40.02.020	Electric OH, 115 kV	2,600.000	LF	230.75	/LF	599,945
		40.02.021	Electric OH, 230 kV	5,465.000	LF	183.13	/LF	1,000,827
		40.02.022	Electirc OH, unknown	5,320.000	LF	183.13	/LF	974,273
		40.02.023	Electric OH & Telecom OH on JP, 51-114 kV	8,280.000	LF	230.75	/LF	1,910,593
		40.02.047	Recycled Water, All Sizes					1,407,000
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	4,375.000	LF	8,685.60	/LF	37,999,500
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	3,735.000	LF	10,133.20	/LF	37,847,502
		40.08.200.a	Rdwy Underxing HSR (NB Monterey Rd Realignment): 2-Ln Rdwy Under 2 Trk	1.000	EA	1,572,754.61	/EA	1,572,755
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)				/RM	3,302,419,721
SS99-3			Alternative 3 Complete					
		40.04.110	Environmental Mitigation Allowance, Heavy	1.000	LS	477,647,461.62	/LS	477,647,462
		40.06.100	Temporary facilities and other indirect costs during construction	1.000	LS	583,791,341.98	/LS	583,791,342
		40.07.100	ROW Procurement Acquisition	1.000	LS	2,248,982,000.00	/LS	2,248,982,000
		50.01.020	Wayside signalling equipment	98.310	RM	2,108,887.20	/RM	207,324,701
		50.05.010	Communications (W/ Fiber Optic Backbone)	98.310	RM	870,879.93	/RM	85,616,206
		50.07.020	Hazard Detectors	98.310	RM	601,655.96	/RM	59,148,797

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		60.01.020	Traction power transmission: High voltage	1.000	LS	157,073,968.01	/LS	157,073,968
		60.01.030	Distribution Line Pacheco Pass	1.000	LS	61,964,699.80	/LS	61,964,700
		60.01.040	PG&E Construction Power Drop Sites	1.000	LS	1,410,417.23	/LS	1,410,417
		60.02.010	Traction power supply: Substations	1.000	LS	192,923,668.83	/LS	192,923,669
		60.03.100	Traction power distribution: Catenary and third rail	88.030	RM	2,588,915.41	/RM	227,902,224
		60.04.100	Traction power control	1.000	LS	499,169.33	/LS	499,169
		80.00.00	Professional Services	1.000	LS	2,777,297,343.99	/LS	2,777,204,613
		90.00.00	Unallocated Contingency	1.000	LS	844,194,472.70	/LS	844,168,451
		SS99-3 Alternative 3 Complete					/RM	7,925,618,807
		3 Alternative 3			RM		/RM	23,309,352,947
4		Alternative 4						
	SS12	Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn						
		10.01.001	Topsoil	270,683.000	CY	3.99	/CY	1,080,781
		10.01.002	Cut	4,432,073.000	CY	12.65	/CY	56,057,564
		10.01.004	Overbreak In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.005	Embankment	1,866,629.000	CY	21.30	/CY	39,765,771
		10.01.006	Overbreak Fill In Cut	55,866.000	CY	18.65	/CY	1,041,912
		10.01.007	Overbreak Fill In Embankment	178,617.000	CY	18.65	/CY	3,331,244
		10.01.008	Subballast	38,915.000	CY	55.94	/CY	2,176,809
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.110	RM	106,926,987.82	/RM	11,761,969
		10.01.123	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 110' Spacing	0.060	RM	107,301,157.50	/RM	6,438,069
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.250	RM	109,952,539.92	/RM	27,488,135
		10.01.125	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 110' Spacing	0.030	RM	100,719,249.33	/RM	3,021,577
		10.01.126	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 110' Spacing	1.710	RM	115,484,881.89	/RM	197,479,148

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.127	Elevated Structure - 1 Track (70' Avg. Pier Ht) - 110' Spacing	0.070	RM	110,676,850.29	/RM	7,747,380
		10.01.223a	Elevated Structure - 2 Track (30' Avg. Pier Ht) - 110' Spacing	0.200	RM	154,415,021.05	/RM	30,883,004
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	2.000	EA	180,803.26	/EA	361,607
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	4.000	EA	927,065.73	/EA	3,708,263
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	6.000	EA	2,699,648.00	/EA	16,197,888
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	1.000	EA	278,158.89	/EA	278,159
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	2.000	EA	1,426,254.96	/EA	2,852,510
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	1.570	RM	204,371,295.12	/RM	320,862,933
		10.07.207	D&B Cross Passage Conservative Cost In Rock	1,000.000	If	31,653.02	/If	31,653,018
		10.07.950	Allowance For Construction Monitoring	1.570	RM	256,000.00	/RM	401,920
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.040	RM	2,215,058.89	/RM	8,948,838
		10.09.120	Ballasted Trk - 2 Trk	0.840	RM	4,377,095.94	/RM	3,676,761
		10.10.110	Direct Fixation Track - 1 Track	3.740	RM	2,136,969.18	/RM	7,992,265
		10.16.100	Drainage	59.000	EA	181,789.61	/EA	10,725,587
		20.07.020	Rdwy, New AC Paving - Access Rd	124,230.000	SF	160.56	/SF	19,946,471
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	550.000	LF	3,619.00	/LF	1,990,450
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	582.000	LF	7,238.00	/LF	4,212,516

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	275.000	LF	8,685.60	/LF	2,388,540
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	240.000	LF	10,133.20	/LF	2,431,968
		40.05.028	Retaining Wall In Fill - 1 Wall (50' Avg. Height)	345.000	LF	11,580.80	/LF	3,995,376
		40.05.052	Retaining Wall In Cut - 1 Wall (30' Avg. Exc Depth)	684.000	LF	8,685.60	/LF	5,940,950
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	587.000	LF	11,590.66	/LF	6,803,720
		40.08.100.b	Rdwy Overxing HSR (Bloomfield Ave): 2- Ln Rdwy Over MF	1.000	EA	69,711,020.06	/EA	69,711,020
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn				/RM	929,433,398
SS14			Pacheco Pass Deep Tunnel					
		10.01.001	Topsoil	842,251.000	CY	3.99	/CY	3,362,943
		10.01.002	Cut	15,347,083.000	CY	12.65	/CY	194,112,361
		10.01.004	Overbreak In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.005	Embankment	87,678,515.000	CY	2.11	/CY	184,882,909
		10.01.006	Overbreak Fill In Cut	72,100.000	CY	18.65	/CY	1,344,681
		10.01.007	Overbreak Fill In Embankment	784,015.000	CY	18.65	/CY	14,622,065
		10.01.008	Subballast	143,484.000	CY	55.94	/CY	8,026,176
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.580	RM	120,620,029.67	/RM	69,959,617
		10.01.123a	Elevated Structure - 1 Track (30' Avg. Pier Ht) - 150' Spacing	0.110	RM	119,533,031.45	/RM	13,148,633
		10.01.124	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 110' Spacing	0.080	RM	116,835,191.37	/RM	9,346,815
		10.01.124a	Elevated Structure - 1 Track (40' Avg. Pier Ht) - 150' Spacing	0.930	RM	125,741,647.94	/RM	116,939,733
		10.01.125a	Elevated Structure - 1 Track (50' Avg. Pier Ht) - 150' Spacing	2.380	RM	128,687,221.08	/RM	306,275,586
		10.01.126a	Elevated Structure - 1 Track (60' Avg. Pier Ht) - 150' Spacing	0.020	RM	121,823,554.50	/RM	2,436,471
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	0.070	RM	142,812,858.71	/RM	9,996,900

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.223c	Elevated Structure - 2 Track (30' Avg. Pier Ht, 150' Span)	0.120	RM	128,434,239.00	/RM	15,412,109
		10.01.224b	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 150' Spacing	0.110	RM	136,176,890.55	/RM	14,979,458
		10.01.225d	Elevated Structure - 2 Track (50' Avg. Pier Ht) - 150' Spacing	0.270	RM	140,733,598.78	/RM	37,998,072
		10.01.226e	Elevated Structure - 2 Track (60' Avg. Pier Ht, 150' Span)	0.270	RM	143,725,067.37	/RM	38,805,768
		10.01.227c	Elevated Structure - 2 Track (70' Avg. Pier Ht, 150' Span)	0.730	RM	144,706,717.22	/RM	105,635,904
		10.02.034	BC - 250-500-250 Span - Cal Aqueduct	0.190	RM	155,863,552.47	/RM	29,614,075
		10.02.035	BC - 160-320-160 Span - Delta Mendota	0.120	RM	142,079,390.58	/RM	17,049,527
		10.02.054	BC-150-240-120 Span - Ccid Outside Canal	0.100	RM	150,993,514.20	/RM	15,099,351
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	4.000	EA	180,803.28	/EA	723,213
		10.05.301	Transition Wedge - 1 Trk (20' Avg. < Fill Ht < 40' Avg.)	18.000	EA	927,065.75	/EA	16,687,183
		10.05.302	Transition Wedge - 1 Trk (Fill Ht > 40' Avg.)	20.000	EA	2,699,648.01	/EA	53,992,960
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.000	EA	278,158.87	/EA	1,112,635
		10.05.320	Transition Wedge 1 Trk Embankment-Slab	4.000	EA	9,048.33	/EA	36,193
		10.05.321	Transition Wedge 1 Trk Embankment-Cut	4.000	EA	10,851.94	/EA	43,408
		10.05.322	Transition Wedge 2 Trk Embankment-Cut	4.000	EA	13,221.05	/EA	52,884
		10.07.102	TBM Single Trk Twin Tunnel 30Ft ID Slurry TBM In Hard Rock	13.610	RM	204,371,295.12	/RM	2,781,493,327
		10.07.207	D&B Cross Passage Conservative Cost In Rock	9,000.000	If	31,653.02	/If	284,877,158
		10.07.850	Pumping Sta	1.000	EA	320,000.00	/EA	320,000
		10.07.920	Ventilation Equipment Allowance	4.000	EA	163,854,333.44	/EA	655,417,334
		10.07.950	Allowance For Construction Monitoring	13.610	RM	256,000.00	/RM	3,484,160
		10.07.970	Fault Chamber	2.000	EA	156,842,010.24	/EA	313,684,020
		10.07.971	Radio Antenna Area	20,000.000	SF	38.40	/SF	768,000
		10.07.972	Emergency Vehicle Area	22,500.000	SF	76.80	/SF	1,728,000

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.07.973	Water Supply Area	20,000.000	SF	38.40	/SF	768,000
		10.07.974	Rescue Area	10,000.000	SF	38.40	/SF	384,000
		10.07.975	Traction Power SubSta Area	3,640.000	SF	108.80	/SF	396,032
		10.07.976	Traction Power Facility Area	80,000.000	SF	108.80	/SF	8,704,000
		10.09.110	Ballasted Trk - 1 Trk	4.240	RM	2,215,058.89	/RM	9,391,850
		10.09.120	Ballasted Trk - 2 Trk	13.300	RM	4,377,095.92	/RM	58,215,376
		10.10.110	Direct Fixation Track - 1 Track	31.000	RM	2,136,969.19	/RM	66,246,045
		10.10.120	Direct Fixation Trk - 2 Trk	0.240	RM	4,260,727.46	/RM	1,022,575
		10.15.101	Wildlife Crossing	10.000	EA	67,202.22	/EA	672,022
		10.16.100	Drainage	2.000	EA	181,789.61	/EA	363,579
		20.07.020	Rdwy, New AC Paving - Access Rd	777,970.000	SF	160.56	/SF	124,911,501
		40.02.020	Electric OH, 115 KV	455.000	LF	230.75	/LF	104,990
		40.02.021	Electric OH, 230 KV	1,340.000	LF	183.13	/LF	245,400
		40.02.022	Electirc OH, unknown	1,925.000	LF	183.13	/LF	352,533
		40.02.025	Potable Water, 120"	1,230.000	LF	7,238.00	/LF	8,902,740
		40.02.043	Drainage Canal, All Sizes	785.000	LF	473.20	/LF	371,462
		40.02.045	Electric OH & Telecom OH on JP, Unknown	415.000	LF	183.13	/LF	76,001
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	1,629.000	LF	3,619.00	/LF	5,895,351
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	951.000	LF	8,685.60	/LF	8,260,006
		40.05.027	Retaining Wall In Fill - 1 Wall (40' Avg. Height)	677.000	LF	10,133.20	/LF	6,860,176
		40.05.029	Retaining Wall In Fill - 1 Wall (60' Avg. Height)	990.000	LF	13,028.40	/LF	12,898,116
		40.05.030	Retaining Wall In Fill - 1 Wall (70' Avg. Height)	1,056.000	LF	17,371.20	/LF	18,343,987
		40.05.054	Retaining Wall In Cut - 1 Wall (50' Avg. Exc Depth)	3,086.000	LF	11,595.21	/LF	35,782,819
		40.08.200.al	Rdwy Modification (Romero Rd), New AC Paving	1.000	EA	683,384.71	/EA	683,385
		40.08.200.am	Rdwy Modification (Fahey), Restriping	1.000	EA	8,578.08	/EA	8,578

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.08.200.an	Rdwy Modification (CA152), Restriping	1.000	EA	39,528.72	/EA	39,529
			SS14 Pacheco Pass Deep Tunnel				/RM	5,707,991,748
	SS16		San Joaquin Valley					
		10.01.001	Topsoil	447,415.000	CY	3.99	/CY	1,786,438
		10.01.002	Cut	23,638.000	CY	12.65	/CY	298,979
		10.01.004	Overbreak In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.005	Embankment	2,531,377.000	CY	21.30	/CY	53,927,237
		10.01.006	Overbreak Fill In Cut	1,701.000	CY	18.65	/CY	31,722
		10.01.007	Overbreak Fill In Embankment	615,491.000	CY	18.65	/CY	11,479,063
		10.01.008	Subballast	128,198.000	CY	55.94	/CY	7,171,112
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	2.710	RM	139,515,659.06	/RM	378,087,436
		10.01.223b	Elevated Structure - 2 Track (30' Avg. Pier Ht, 120' Span)	1.630	RM	142,812,858.48	/RM	232,784,959
		10.01.224a	Elevated Structure - 2 Track (40' Avg. Pier Ht) - 120' Spacing	0.670	RM	145,457,939.72	/RM	97,456,820
		10.02.036	BC - 150-275-150 - Cherokee	0.110	RM	159,283,843.45	/RM	17,521,223
		10.02.037	BC - 200-350-200 - San Luis	0.140	RM	127,207,955.86	/RM	17,809,114
		10.02.038	BC - 120-220-120 Span - Los Banos	0.090	RM	186,700,879.78	/RM	16,803,079
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	8.000	EA	1,426,254.99	/EA	11,410,040
		10.09.110	Ballasted Trk - 1 Trk	0.550	RM	2,215,058.91	/RM	1,218,282
		10.09.120	Ballasted Trk - 2 Trk	12.750	RM	4,377,095.92	/RM	55,807,973
		10.10.120	Direct Fixation Trk - 2 Trk	5.370	RM	4,242,295.00	/RM	22,781,124
		10.14.206	Ballasted Turnout #20	3.000	EA	319,630.08	/EA	958,890
		10.14.300	Ballasted Crossover (60 MPH)	2.000	EA	1,997,688.00	/EA	3,995,376
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504
		10.14.400	Terminal - Bumping Post	1.000	EA	42,617.35	/EA	42,617
		10.15.101	Wildlife Crossing	67.000	EA	67,202.22	/EA	4,502,549
		10.16.100	Drainage	42.000	EA	181,789.61	/EA	7,635,164

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		20.07.020	Rdwy, New AC Paving - Access Rd	746,920.000	SF	160.56	/SF	119,926,088
		30.04.010c	MOIF Siding	1.000	EA	3,404,290.53	/EA	3,404,291
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	5,295.000	LF	266.69	/LF	1,412,102
		40.02.014	Telecom/Fiber Optic OH, All Sizes	6,255.000	LF	266.69	/LF	1,668,121
		40.02.019	Electric OH, 51-114 kV	3,770.000	LF	122.18	/LF	460,611
		40.02.022	Electirc OH, unknown	23,930.000	LF	183.13	/LF	4,382,397
		40.02.035	Potable Water Storage Tank	1.000	EA	72,380.00	/EA	72,380
		40.02.043	Drainage Canal, All Sizes	29,515.000	LF	473.20	/LF	13,966,498
		40.02.045	Electric OH & Telecom OH on JP, Unknown	12,265.000	LF	183.13	/LF	2,246,139
		40.05.012	Retaining Wall In Fill - 1 Wall (12' Avg. Height)	0.660	LF	3,618.98	/LF	2,389
		40.08.100.d	Rdwy Overxing HSR (Henry Miller Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	46,621,346.37	/EA	46,621,346
		40.08.100.e	Rdwy Overxing HSR (Mercey Springs Rd): 2-Ln Rdwy Over 2 Trk	1.000	EA	26,219,109.37	/EA	26,219,109
		40.08.100.f	Rdwy Overxing HSR (Delta Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	24,861,294.13	/EA	24,861,294
		40.08.100.g	Rdwy Overxing HSR (Turner Island Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwy	1.000	EA	25,261,504.52	/EA	25,261,505
		40.08.100.j	Rdwy Overxing HSR (Carlucci Rd): 2-Ln Rdwy Over 2 Trk & 2-Ln Rdwys SS16 San Joaquin Valley	1.000	EA	28,308,009.37	/EA	28,308,009
	SS401		Scott Blvd to Diridon Station				/RM	1,256,821,042
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	14.000	EA	180,803.40	/EA	2,531,248
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	6.000	EA	649,037.41	/EA	3,894,224
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	1.300	RM	3,862,520.72	/RM	5,021,277
		10.09.110	Ballasted Trk - 1 Trk	1.300	RM	2,215,058.90	/RM	2,879,577
		10.14.201	Ballasted Turnout #9	2.000	EA	119,861.28	/EA	239,723
		10.14.202	Ballasted Turnout #10	2.000	EA	130,515.62	/EA	261,031
		10.14.320	Ballasted Crossover	3.000	EA	615,287.90	/EA	1,845,864

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.321	Ballasted Crossover #10	3.000	EA	679,213.92	/EA	2,037,642
		10.14.323	Ballasted Crossover #14	2.000	EA	945,572.32	/EA	1,891,145
		20.02.225	San Jose (Diridon) Sta	1.000	LS	163,469,711.96	/LS	163,469,712
		20.02.297	College Park Station	1.000	LS	1,542,240.00	/LS	1,542,240
		20.07.020	Rdwy, New AC Paving - Access Rd	10,800.000	SF	160.56	/SF	1,734,057
		40.02.011	Pump Station (Storm)	1.000	EA	361,900.00	/EA	361,900
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	11,505.000	LF	266.69	/LF	3,068,222
		40.02.016	Electric UG	300.000	LF	292.04	/LF	87,612
		40.02.020	Electric OH, 115 kV	920.000	LF	230.75	/LF	212,288
		40.02.024	Transmission Tower	1.000	EA	579,040.00	/EA	579,040
		40.02.039	Storm Drain, 6"-18"	70.000	LF	204.67	/LF	14,327
		40.02.040	Storm Drain, 19"-30"	620.000	LF	298.20	/LF	184,884
		40.08.200.au	Rdwy Underxing UPRR (Taylor St): Exist Rd Under 1 Trk	1.000	EA	3,153,117.02	/EA	3,153,117
			SS401 Scott Blvd to Diridon Station				/RM	195,009,129
SS402			Diridon Station to Alma Ave					
		10.01.001	Topsoil	14,929.000	CY	3.99	/CY	59,609
		10.01.002	Cut	27,305.000	CY	12.65	/CY	345,358
		10.01.004	Overbreak In Embankment	8,515.000	CY	18.65	/CY	158,807
		10.01.005	Embankment	27,994.000	CY	21.30	/CY	596,371
		10.01.006	Overbreak Fill In Cut	17,083.000	CY	18.65	/CY	318,602
		10.01.007	Overbreak Fill In Embankment	8,515.000	CY	18.65	/CY	158,807
		10.01.008	Subballast	11,250.000	CY	55.94	/CY	629,301
		10.02.055	Steel Through Girder - I-280	1.000	EA	10,548,179.81	/EA	10,548,180
		10.02.056	Concrete Through Girder - SR-87	1.000	EA	15,761,881.29	/EA	15,761,881
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	1.950	RM	3,862,508.41	/RM	7,531,891
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	1.790	RM	6,737,074.27	/RM	12,059,363
		10.09.110	Ballasted Trk - 1 Trk	1.950	RM	2,215,058.90	/RM	4,319,365

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.09.120	Ballasted Trk - 2 Trk	1.790	RM	4,377,095.93	/RM	7,835,002
		10.14.202	Ballasted Turnout #10	7.000	EA	130,515.62	/EA	913,609
		10.14.323	Ballasted Crossover #14	3.000	EA	945,572.32	/EA	2,836,717
		20.06.211	Bike Path Realignment (Almaden Expy)	1.000	EA	21,023,374.98	/EA	21,023,375
		20.07.020	Rdwy, New AC Paving - Access Rd	6,100.000	SF	160.56	/SF	979,421
		20.07.801	Quad Gate Prototype A	2.000	EA	2,354,820.46	/EA	4,709,641
		40.02.011	Pump Station (Storm)	2.000	EA	361,900.00	/EA	723,800
		40.02.022	Electirc OH, unknown	370.000	LF	183.13	/LF	67,760
		40.02.045	Electric OH & Telecom OH on JP, Unknown	1,150.000	LF	183.13	/LF	210,604
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	4,584.000	LF	7,238.16	/LF	33,179,716
		40.05.026	Retaining Wall In Fill - 1 Wall (30' Avg. Height)	237.940	LF	8,685.60	/LF	2,066,652
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	1,966.250	LF	2,895.20	/LF	5,692,687
		40.08.200.av	Rdwy Underxing HSR (Guadalupe River): Creek Under 1 Trk	1.000	EA	4,345,792.24	/EA	4,345,792
		40.08.200.aw1	Southbound Underpass	1.000	EA	3,771,274.28	/EA	3,771,274
		40.08.200.aw2	Northbound Underpass	1.000	EA	4,355,246.29	/EA	4,355,246
		40.08.200.ax	Rdwy Underxing HSR (Delmas Ave): Exist Rd Under 3 Trk	1.000	EA	3,619,305.40	/EA	3,619,305
		40.08.200/ay	Rdwy Underxing HSR (Prevost St): Exist Rd Under 1 Trk	1.000	EA	1,709,253.17	/EA	1,709,253
		40.08.200.az	Rdwy Underxing HSR (Willow St): Exist Rd Under 1 Trk	1.000	EA	3,218,243.22	/EA	3,218,243
		40.08.200.ba	Rdwy Underxing HSR (Alma Ave): Exist Rd Under 2 Trk	1.000	EA	3,125,672.92	/EA	3,125,673
			SS402 Diridon Station to Alma Ave				/RM	156,871,304
SS403			Alma Ave to Gilroy					
		10.01.001	Topsoil	137,499.000	CY	3.99	/CY	549,006
		10.01.002	Cut	1,850,893.000	CY	12.65	/CY	23,410,391
		10.01.004	Overbreak In Embankment	328,081.000	CY	18.65	/CY	6,118,789

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.01.005	Embankment	1,960,300.000	CY	21.30	/CY	41,761,290
		10.01.006	Overbreak Fill In Cut	1,004,358.000	CY	18.65	/CY	18,731,518
		10.01.007	Overbreak Fill In Embankment	328,081.000	CY	18.65	/CY	6,118,789
		10.01.008	Subballast	375,555.000	CY	55.94	/CY	21,007,735
		10.01.122	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 110' Spacing	0.330	RM	109,668,708.24	/RM	36,190,674
		10.01.122a	Elevated Structure - 1 Track (20' Avg. Pier Ht) - 150' Spacing	0.060	RM	126,755,019.83	/RM	7,605,301
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	0.500	RM	147,744,888.24	/RM	73,872,444
		10.01.222a	Elevated Structure - 2 Track (20' Avg. Pier Ht, 120' Span)	0.030	RM	160,221,498.00	/RM	4,806,645
		10.01.222b	Elevated Structure - 2 Track (20' Avg. Pier Ht, 150' Span)	0.030	RM	123,524,253.00	/RM	3,705,728
		10.02.057	2-Track Steel Truss Over 3 Tracks	1.000	EA	40,093,684.40	/EA	40,093,684
		10.02.057a	1-Track Steel Truss Over 3 Tracks	1.000	EA	25,064,592.69	/EA	25,064,593
		10.05.300	Transition Wedge - 1 Trk (Fill Ht < 20' Avg.)	6.000	EA	180,803.41	/EA	1,084,820
		10.05.310	Transition Wedge - 2 Trk (Fill Ht < 20' Avg.)	4.000	EA	177,997.36	/EA	711,989
		10.05.311	Transition Wedge - 2 Trk (20' Avg. < Fill Ht < 40' Avg.)	5.000	EA	1,426,255.03	/EA	7,131,275
		10.06.210	At-Grade Track-Bed With Closed Drainage - 1 Track	34.630	RM	3,858,285.44	/RM	133,612,425
		10.06.220	At-Grade Track-Bed With Closed Drainage - 2 Track	32.870	RM	6,737,160.79	/RM	221,450,475
		10.09.110	Ballasted Trk - 1 Trk	34.630	RM	2,215,058.90	/RM	76,707,490
		10.09.120	Ballasted Trk - 2 Trk	32.870	RM	4,377,095.92	/RM	143,875,143
		10.14.202	Ballasted Turnout #10	10.000	EA	130,515.62	/EA	1,305,156
		10.14.203a	Ballasted Turnout #14	7.000		146,497.12		1,025,480
		10.14.206	Ballasted Turnout #20	1.000	EA	319,630.08	/EA	319,630
		10.14.300	Ballasted Crossover (60 MPH)	1.000	EA	1,997,688.00	/EA	1,997,688
		10.14.305	Ballasted Crossover (80 MPH)	2.000	EA	1,510,252.13	/EA	3,020,504
		10.14.321	Ballasted Crossover #10	3.000	EA	679,213.92	/EA	2,037,642

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		10.14.324	Ballasted Crossover #20	12.000	EA	1,331,792.00	/EA	15,981,504
		10.14.352	Ballasted Double Crossover #10	1.000		816,592.00		816,592
		10.14.400	Terminal - Bumping Post	9.000	EA	42,617.34	/EA	383,556
		10.15.100	Wildlife Crossing	3.000	EA	26,635.84	/EA	79,908
		10.15.102	Wildlife Crossing - 30' wide	2.000	EA	370,770.89	/EA	741,542
		10.15.103	Wildlife Crossing - 40' wide	6.000	EA	680,598.98	/EA	4,083,594
		10.16.100	Drainage	8.000	EA	181,789.61	/EA	1,454,317
		20.07.010	Roadway Modification, New AC Paving	270,900.000	SF	160.56	/SF	43,495,926
		20.07.020	Rdwy, New AC Paving - Access Rd	578,550.000	SF	160.56	/SF	92,892,462
		20.07.021	OCS Portal Protection	1.000	EA	159,236.00	/EA	159,236
		20.07.801	Quad Gate Prototype A	11.000	EA	2,354,820.45	/EA	25,903,025
		20.07.802	Quad Gate Prototype A1	2.000	EA	3,335,681.04	/EA	6,671,362
		20.07.803	Quad Gate Prototype B	1.000	EA	5,412,395.67	/EA	5,412,396
		20.07.804	Quad Gate Prototype C	2.000	EA	3,732,631.58	/EA	7,465,263
		20.07.805	Quad Gate Prototype C1	2.000	EA	5,830,893.05	/EA	11,661,786
		20.07.806	Quad Gate Prototype C2	6.000	EA	3,177,657.02	/EA	19,065,942
		20.07.807	Quad Gate Prototype D	2.000	EA	5,758,779.47	/EA	11,517,559
		20.07.808	Quad Gate Prototype D1	1.000	EA	6,057,667.29	/EA	6,057,667
		30.04.010d	Comb. MOWF & LMF - Dwtn Glry	1.000	EA	259,374,776.85	/EA	259,374,777
		40.02.001	Natural Gas/Oil, 4.5"-8"	75.000	LF	154.41	/LF	11,580
		40.02.005	Sanitary Sewer, 24"-36"	5,555.000	LF	185.78	/LF	1,032,008
		40.02.009	Storm Drain, 55"-72"	30.000	LF	350.32	/LF	10,510
		40.02.011	Pump Station (Storm)	13.000	EA	361,900.00	/EA	4,704,700
		40.02.013	Telecomm/Fiber Optic UG, All Sizes	1,179,805.000	LF	266.69	/LF	314,637,476
		40.02.014	Telecom/Fiber Optic OH, All Sizes	1,590.000	LF	266.69	/LF	424,031
		40.02.019	Electric OH, 51-114 kV	380.000	LF	122.18	/LF	46,428
		40.02.020	Electric OH, 115 kV	3,620.000	LF	230.75	/LF	835,308
		40.02.022	Electirc OH, unknown	15,550.000	LF	183.13	/LF	2,847,734

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.02.030	Potable Water, 4"-9"	480.000	LF	62.54	/LF	30,018
		40.02.036	Sanitary Sewer, 6"-15"	4,130.000	LF	86.86	/LF	358,715
		40.02.039	Storm Drain, 6"-18"	1,770.000	LF	204.67	/LF	362,259
		40.02.040	Storm Drain, 19"-30"	370.000	LF	298.20	/LF	110,334
		40.02.043	Drainage Canal, All Sizes	2,030.000	LF	473.20	/LF	960,596
		40.02.045	Electric OH & Telecom OH on JP, Unknown	11,300.000	LF	183.13	/LF	2,069,414
		40.05.025	Retaining Wall In Fill - 1 Wall (20' Avg. Height)	7,806.160	LF	7,238.00	/LF	56,500,986
		40.05.050	Retaining Wall In Cut - 1 Wall (10' Avg. Exc Depth)	3,020.870	LF	2,895.20	/LF	8,746,023
		40.05.051	Retaining Wall In Cut - 1 Wall (20' Avg. Exc Depth)	4,316.700	LF	7,313.45	/LF	31,569,985
		40.08.200.ar1	HSR Underpass	1.000	EA	8,294,662.05	/EA	8,294,662
		40.08.200.ar2	UPRR Underpass	1.000	EA	4,969,128.99	/EA	4,969,129
		40.08.200.at	Rdwy Underxing HSR (Upper Llagas Creek); Creek Under 3 Trk	1.000	EA	11,479,124.63	/EA	11,479,125
		40.08.200.bb	Rdwy Underxing HSR (Almaden Rd): Exist Rd Under 3 Trk	1.000	EA	6,576,125.40	/EA	6,576,125
		40.08.200.bc	Rdwy Modification (Perimeter Rd): New AC Paving	1.000	EA	634,243.57	/EA	634,244
		40.08.200.bd	Rdwy Modification (Richmond Ave): New AC Paving	1.000	EA	776,972.67	/EA	776,973
		40.08.200.be	Rdwy Modification (Diane Ave): New AC Paving	1.000	EA	41,957.08	/EA	41,957
			SS403 Alma Ave to Gilroy				/RM	1,874,565,038
SS403R			Gilroy/MOWF to South of D. Gilroy					
		10.01.222	Elevated Structure - 2 Track (20' Avg. Pier Ht) - 110' Spacing	2.800	RM	147,226,205.68	/RM	412,233,376
		20.07.020	Rdwy, New AC Paving - Access Rd	61,370.000	SF	160.56	/SF	9,853,618
		40.02.020	Electric OH, 115 KV	555.000	LF	230.75	/LF	128,065
		40.02.032	Potable Water, 25"-36"	835.000	LF	399.43	/LF	333,527
			SS403R Gilroy/MOWF to South of D. Gilroy				/RM	422,548,586
SS99-4			Alternative 4 Complete					

Alt	Sub Section	UPE	Description	Takeoff QTY		Grand total Unit Price		Grand Total
		40.04.110	Environmental Mitigation Allowance, Heavy	1.000	LS	328,163,792.96	/LS	328,163,793
		40.06.100	Temporary facilities and other indirect costs during construction	1.000	LS	401,089,080.28	/LS	401,089,080
		40.07.100	ROW Procurement Acquisition	1.000	LS	1,649,401,500.00	/LS	1,649,401,500
		50.01.020	Wayside signalling equipment	106.960	RM	2,179,903.12	/RM	233,162,438
		50.05.010	Communications (W/ Fiber Optic Backbone)	106.960	RM	854,607.03	/RM	91,408,768
		50.07.020	Hazard Detectors	106.960	RM	584,017.87	/RM	62,466,551
		60.01.020	Traction power transmission: High voltage	1.000	LS	157,073,968.01	/LS	157,073,968
		60.01.030	Distribution Line Pacheco Pass	1.000	LS	65,670,592.10	/LS	65,670,592
		60.01.040	PG&E Construction Power Drop Sites	1.000	LS	1,407,744.85	/LS	1,407,745
		60.02.010	Traction power supply: Substations	1.000	LS	159,772,337.68	/LS	159,772,338
		60.03.100	Traction power distribution: Catenary and third rail	82.730	RM	2,578,172.40	/RM	213,292,202
		60.04.100	Traction power control	1.000	LS	542,060.62	/LS	542,061
		80.00.00	Professional Services	1.000	LS	1,981,345,573.93	/LS	1,981,345,574
		90.00.00	Unallocated Contingency	1.000	LS	590,573,616.71	/LS	590,573,617
		SS99-4 Alternative 4 Complete						5,935,370,226
		4 Alternative 4			RM		/RM	16,478,610,471

Detail Cost Budget Data (By Major Task)

ALT	Sub Section	SCC-Major	Description	Grand Total
1			Alternative 1	
	SS1		San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)	
		10.00	Track Structure & Track	437,389,944
		20.00	Stations, Terminals, Intermodal	322,584,807
		40.00	Sitework, Right of Way, Land, Existing Conditions	55,370,956
			SS1 San Jose Diridon Sta Approach: Viaduct to I-880 (Scott to Diridon Sta)	815,345,708
	SS12		Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	812,012,387
		20.00	Stations, Terminals, Intermodal	19,946,471
		40.00	Sitework, Right of Way, Land, Existing Conditions	97,474,540
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	929,433,398
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	5,484,255,175
		20.00	Stations, Terminals, Intermodal	124,911,501
		40.00	Sitework, Right of Way, Land, Existing Conditions	98,825,072
			SS14 Pacheco Pass Deep Tunnel	5,707,991,748
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	958,008,764
		20.00	Stations, Terminals, Intermodal	119,926,088
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	3,404,291
		40.00	Sitework, Right of Way, Land, Existing Conditions	175,481,900
			SS16 San Joaquin Valley	1,256,821,042
	SS3		San Jose to Monterey Corridor:Diridon Sta to Alma Ave	
		10.00	Track Structure & Track	358,937,958
		20.00	Stations, Terminals, Intermodal	22,596,871
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,585,462
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave	383,120,291
	SS4		San Jose to Monterey Corridor:Alma Ave to Communication Hill	
		10.00	Track Structure & Track	62,188,959
		20.00	Stations, Terminals, Intermodal	8,512,935
		40.00	Sitework, Right of Way, Land, Existing Conditions	43,851,756
			SS4 San Jose to Monterey Corridor:Alma Ave to Communication Hill	114,553,650
	SS67		Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	
		10.00	Track Structure & Track	3,176,545,776
		20.00	Stations, Terminals, Intermodal	16,094,617

		40.00	Sitework, Right of Way, Land, Existing Conditions	109,779,328
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	3,302,419,721
SS9			Morgan Hill & Gilroy: Viaduct (D. Gilroy)	
		10.00	Track Structure & Track	1,982,180,923
		20.00	Stations, Terminals, Intermodal	195,705,217
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	236,686,529
		40.00	Sitework, Right of Way, Land, Existing Conditions	9,996,930
			SS9 Morgan Hill & Gilroy: Viaduct (D. Gilroy)	2,424,569,598
SS99-1			Alternative 1 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	3,518,699,387
		50.00	Communications & Signaling	362,257,401
		60.00	Electric Traction	645,328,356
		80.00	Professional Services	2,710,860,972
		90.00	Unallocated Contingency	836,613,974
			SS99-1 Alternative 1 Complete	8,073,760,090
			1 Alternative 1	23,008,015,245
2			Alternative 2	
SS12			Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	812,012,387
		20.00	Stations, Terminals, Intermodal	19,946,471
		40.00	Sitework, Right of Way, Land, Existing Conditions	97,474,540
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	929,433,398
SS14			Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	5,484,255,175
		20.00	Stations, Terminals, Intermodal	124,911,501
		40.00	Sitework, Right of Way, Land, Existing Conditions	98,825,072
			SS14 Pacheco Pass Deep Tunnel	5,707,991,748
SS16			San Joaquin Valley	
		10.00	Track Structure & Track	958,008,764
		20.00	Stations, Terminals, Intermodal	119,926,088
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	3,404,291
		40.00	Sitework, Right of Way, Land, Existing Conditions	175,481,900
			SS16 San Joaquin Valley	1,256,821,042
SS2			San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	
		10.00	Track Structure & Track	852,653,017
		20.00	Stations, Terminals, Intermodal	322,805,749
		40.00	Sitework, Right of Way, Land, Existing Conditions	133,264,069
			SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	1,308,722,836
SS3			San Jose to Monterey Corridor:Diridon Sta to Alma Ave	

		10.00	Track Structure & Track	358,937,958
		20.00	Stations, Terminals, Intermodal	22,596,871
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,585,462
			SS3 San Jose to Monterey Corridor: Diridon Sta to Alma Ave	383,120,291
	SS4		San Jose to Monterey Corridor: Alma Ave to Communication Hill	
		10.00	Track Structure & Track	62,188,959
		20.00	Stations, Terminals, Intermodal	8,512,935
		40.00	Sitework, Right of Way, Land, Existing Conditions	43,851,756
			SS4 San Jose to Monterey Corridor: Alma Ave to Communication Hill	114,553,650
	SS5810		Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)	
		10.00	Track Structure & Track	1,337,398,720
		20.00	Stations, Terminals, Intermodal	201,013,254
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	236,686,529
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,165,690,011
			SS5810 Morgan Hill & Gilroy: Embkmt (Com Hill. Thru D. Gilroy)	2,940,788,514
	SS99-2		Alternative 2 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	4,082,106,952
		50.00	Communications & Signaling	347,834,734
		60.00	Electric Traction	672,800,740
		80.00	Professional Services	2,306,445,981
		90.00	Unallocated Contingency	762,569,365
			SS99-2 Alternative 2 Complete	8,171,718,861
			2 Alternative 2	20,813,150,339
3			Alternative 3	
	SS1113		Morgan Hill & Gilroy: Viaduct thru E Gilroy	
		10.00	Track Structure & Track	2,580,756,678
		20.00	Stations, Terminals, Intermodal	258,843,093
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	278,549,105
		40.00	Sitework, Right of Way, Land, Existing Conditions	191,955,976
			SS1113 Morgan Hill & Gilroy: Viaduct thru E Gilroy	3,310,104,853
	SS14		Pacheco Pass Deep Tunnel	
		10.00	Track Structure & Track	5,484,255,175
		20.00	Stations, Terminals, Intermodal	124,911,501
		40.00	Sitework, Right of Way, Land, Existing Conditions	98,825,072
			SS14 Pacheco Pass Deep Tunnel	5,707,991,748
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	958,008,764
		20.00	Stations, Terminals, Intermodal	119,926,088
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	3,404,291

		40.00	Sitework, Right of Way, Land, Existing Conditions	175,481,900
			SS16 San Joaquin Valley	1,256,821,042
SS2			San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	
		10.00	Track Structure & Track	852,653,017
		20.00	Stations, Terminals, Intermodal	322,805,749
		40.00	Sitework, Right of Way, Land, Existing Conditions	133,264,069
			SS2 San Jose Diridon Sta Approach: Viaduct to Scott (Scott to Diridon Sta)	1,308,722,836
SS3			San Jose to Monterey Corridor:Diridon Sta to Alma Ave	
		10.00	Track Structure & Track	358,937,958
		20.00	Stations, Terminals, Intermodal	22,596,871
		40.00	Sitework, Right of Way, Land, Existing Conditions	1,585,462
			SS3 San Jose to Monterey Corridor:Diridon Sta to Alma Ave	383,120,291
SS4			San Jose to Monterey Corridor:Alma Ave to Communication Hill	
		10.00	Track Structure & Track	62,188,959
		20.00	Stations, Terminals, Intermodal	8,512,935
		40.00	Sitework, Right of Way, Land, Existing Conditions	43,851,756
			SS4 San Jose to Monterey Corridor:Alma Ave to Communication Hill	114,553,650
SS67			Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	
		10.00	Track Structure & Track	3,176,545,776
		20.00	Stations, Terminals, Intermodal	16,094,617
		40.00	Sitework, Right of Way, Land, Existing Conditions	109,779,328
			SS67 Morgan Hill & Gilroy: Viaduct (Com Hill. to D.Gilroy)	3,302,419,721
SS99-3			Alternative 3 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	3,310,420,804
		50.00	Communications & Signaling	352,089,704
		60.00	Electric Traction	641,774,147
		80.00	Professional Services	2,777,204,613
		90.00	Unallocated Contingency	844,168,451
			SS99-3 Alternative 3 Complete	7,925,618,807
			3 Alternative 3	23,309,352,947
4			Alternative 4	
SS12			Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	
		10.00	Track Structure & Track	812,012,387
		20.00	Stations, Terminals, Intermodal	19,946,471
		40.00	Sitework, Right of Way, Land, Existing Conditions	97,474,540
			SS12 Morgan Hill&Gilroy: Viaduct to Embkmnt(South of D. Gilroy thru Tunn	929,433,398
SS14			Pacheco Pass Deep Tunnel	

		10.00	Track Structure & Track	5,484,255,175
		20.00	Stations, Terminals, Intermodal	124,911,501
		40.00	Sitework, Right of Way, Land, Existing Conditions	98,825,072
			SS14 Pacheco Pass Deep Tunnel	5,707,991,748
	SS16		San Joaquin Valley	
		10.00	Track Structure & Track	958,008,764
		20.00	Stations, Terminals, Intermodal	119,926,088
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	3,404,291
		40.00	Sitework, Right of Way, Land, Existing Conditions	175,481,900
			SS16 San Joaquin Valley	1,256,821,042
	SS401		Scott Blvd to Diridon Station	
		10.00	Track Structure & Track	20,601,730
		20.00	Stations, Terminals, Intermodal	166,746,009
		40.00	Sitework, Right of Way, Land, Existing Conditions	7,661,390
			SS401 Scott Blvd to Diridon Station	195,009,129
	SS402		Diridon Station to Alma Ave	
		10.00	Track Structure & Track	64,072,862
		20.00	Stations, Terminals, Intermodal	26,712,437
		40.00	Sitework, Right of Way, Land, Existing Conditions	66,086,006
			SS402 Diridon Station to Alma Ave	156,871,304
	SS403		Alma Ave to Gilroy	
		10.00	Track Structure & Track	926,857,317
		20.00	Stations, Terminals, Intermodal	230,302,625
		30.00	Support Facilities: Yards, Shops, Admin. Bldgs	259,374,777
		40.00	Sitework, Right of Way, Land, Existing Conditions	458,030,319
			SS403 Alma Ave to Gilroy	1,874,565,038
	SS403R		Gilroy/MOWF to South of D. Gilroy	
		10.00	Track Structure & Track	412,233,376
		20.00	Stations, Terminals, Intermodal	9,853,618
		40.00	Sitework, Right of Way, Land, Existing Conditions	461,593
			SS403R Gilroy/MOWF to South of D. Gilroy	422,548,586
	SS99-4		Alternative 4 Complete	
		40.00	Sitework, Right of Way, Land, Existing Conditions	2,378,654,373
		50.00	Communications & Signaling	387,037,757
		60.00	Electric Traction	597,758,906
		80.00	Professional Services	1,981,345,574
		90.00	Unallocated Contingency	590,573,617
			SS99-4 Alternative 4 Complete	5,935,370,226
			4 Alternative 4	16,478,610,471

APPENDIX D LIST OF DOCUMENTS

The following documents were provided.

- JM_Record_PEPD_Alt1_Consolidated_red
- JM_Record_PEPD_Alt2_Consolidated_red
- JM_Record_PEPD_Alt3_Consolidated_red
- JM_Record_PEPD_Alt4_Consolidated_red
- JM_Record_PEPD_ROW_Report_March_2019
- JM_Record_PEPD_Tunnels_Report_March_2019
- JM_Record_PEPD_BasisOfQuantitiesEstimate_March_2019
- JM_RecordPEPD_ConstructabilityAssessmentReport_App_H_March_2019
- JM_Record_PEPD_Hydrology_Hydraulics_Report_March_2019

The following Quantity files were provided

- JM_Draft_PEPD_AppA-Qty-v6_r1_112718
- JM_Draft_PEPD_AppA-Qty-v8_20190508
- JM_Draft_PEPD_AppA-Qty-v9_20190515