

central subway

Connecting people. Connecting communities.

Building Demolition

Future Chinatown Station at 933-949 Stockton Street



Progress Report

October 2013



SFMTA
Municipal
Transportation
Agency

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Cover photo : In October, demolition of the building at 933-949 Stockton commenced. The site will be used to build the head house for the future Chinatown Station. Crews demolished the building from the inside out, pulling the walls inward to minimize street impacts. Next, a temporary covered walkway will be built on Stockton Street.



In October, 76 Gas Station was demolished to prepare the site for the future Yerba Buena/ Moscone Station construction.

Executive Summary

Demolition of the Pagoda Palace Theater: Working complete; administrative close out items continue.

The Southbound TBM continues to mine and the Northbound TBM was launched on October 31, 2013. Piles at Union Square Market Street Station (UMS) North Headwall completed on October 30, 2013. Pre-conditioning for compensation grouting at Ellis Street finished on October 12, 2013. Completed the sound wall and construction of the soil mix pit at the retrieval shaft.

Completed building demolition at future head house sites at Chinatown and Yerba Buena/ Moscone Stations.

Current Cost estimate for the program remains unchanged and on target at \$1.578 billion. Costs to date are approximately \$445.89 million with total committed funding of \$785.41 million. Total cost contingency is at \$69.48 million, which is an 70.52 million unfavorable level below the current minimum of \$140 million. Cost contingency recovery efforts are being evaluated and developed for review and approval by FTA.

The Revenue Service Date remains unchanged and on target for December 26, 2018. Schedule contingency remained at 4.8 months, an unfavorable level below the current minimum of 8 months. Revisions to Schedule Contingency minimum levels have been developed and are currently under final review by FTA.

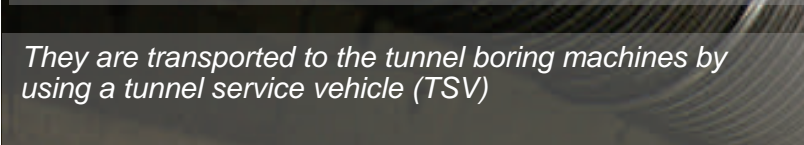
The Program's Safety and Security activities include Project 1252 Safety statistics thru October 2013.

Building the Southbound Tunnel

Milestones



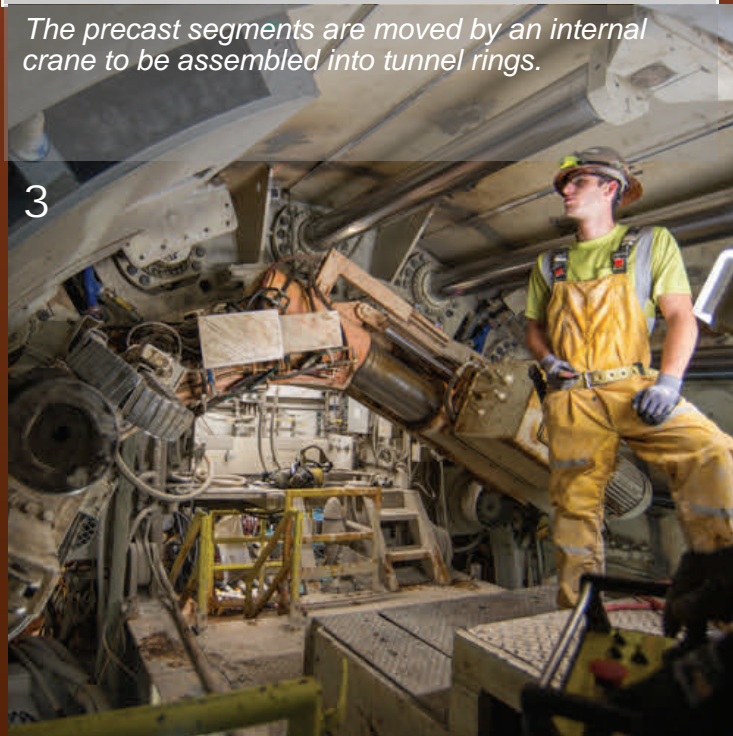
A crane lowers precast concrete segments into the launch box.



They are transported to the tunnel boring machines by using a tunnel service vehicle (TSV)



MILESTONE	DATE EXPECTED
General	
Revenue Service	December 2018
Contract 1252 Tunnels	
TBM Launch	July 2013 (A)
Milestone 1—Complete Cross Passages 1 & 2	July 9, 2014
Milestone 2—Complete Cross Passages 3 & 4	August 29, 2014
Substantial Completion	May 11, 2015
Contract 1300 Stations, Surface, Track, and Systems:	
Notice to Proceed (NTP 1)	June 17, 2013 (A)
Notice to Proceed (NTP 2)	January 12, 2014
Substantial Completion	February 2018



The precast segments are moved by an internal crane to be assembled into tunnel rings.

Costs and Schedule

Costs (See Appendix A for Details)

The Current Cost Estimate (CCE) for the Central Subway Project is **\$1.5783 billion** in year of expenditure dollars (\$YOE) and is the basis of the total project cost as presented in the 2011 New Starts Report submittal. This capital cost projection incorporates allocated and unallocated contingencies to cover the various risks associated with completion of the project.

Total net incurred costs for the project are \$445.89 million. This figure reflects expenditures through FAMIS 786 Report (\$391.03 million) plus the utilities joint trench Form B Reimbursement payment (\$8.28 million) and estimates of outstanding pay requests (\$46.58 million). This incurred amount equals 28.24% of the total project budget of \$1.5783 billion.

The current funding level to date is \$785.40 million. This represents 50% of the total project budget.

The current Total Project Contingency is \$69.48 million, which is a \$70.52 million unfavorable balance against the current Minimum Contingency level of \$140 million. The Earned Value Cash Flow Curve is attached in the Reports and in Appendix A of this report to illustrate the full scope of the contingency drawdown over the life of the project.

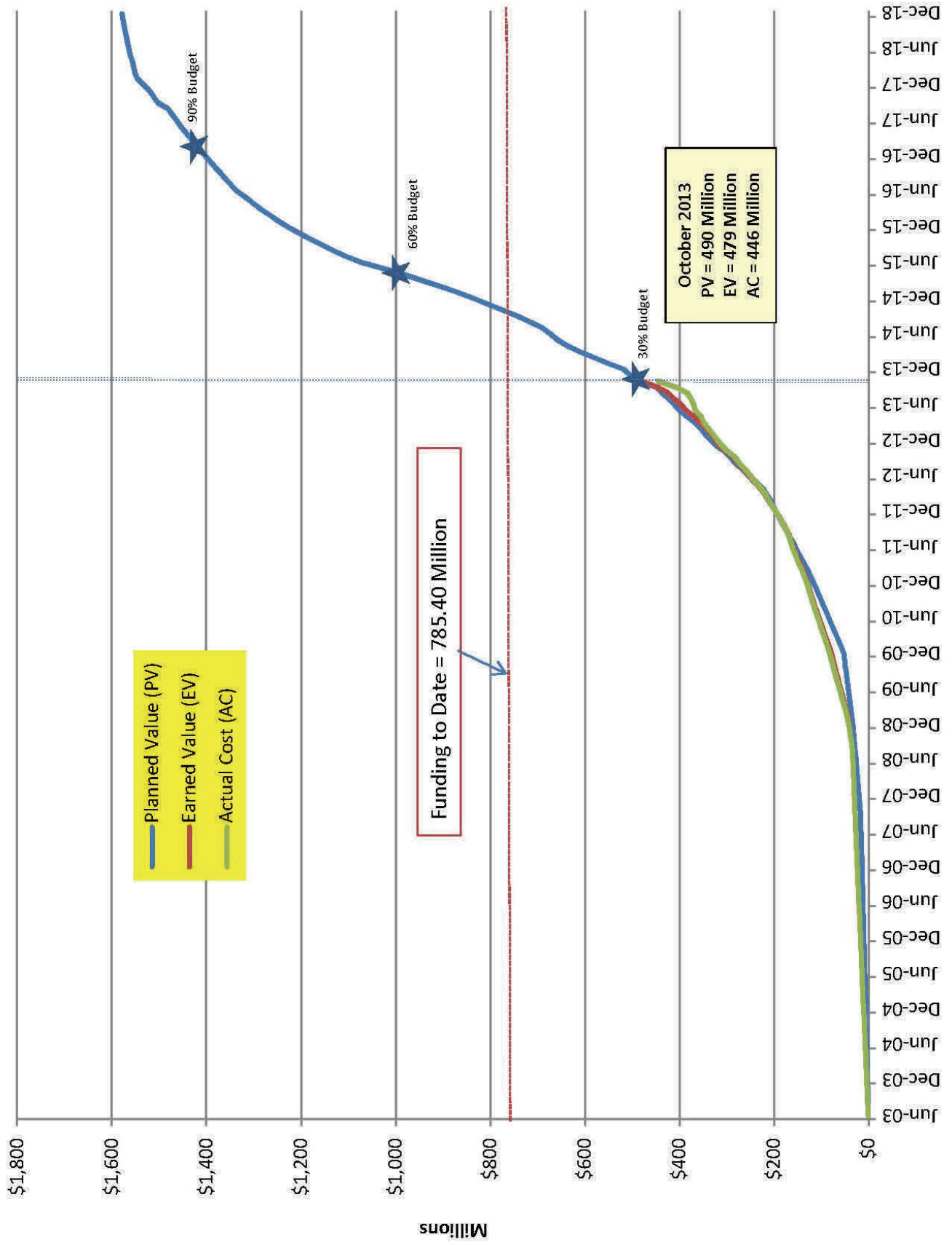
Earned Value Analysis (See Appendix A for Details)

The project baseline Master Project Schedule (MPS) is set as the current schedule which computes the planned values based on the budget at completion multiplied by the schedule % complete.

October Earned Value Indices:

Overall Budgeted Cost:	\$1,578,300,000
Planned Value:	\$ 490,267,966
Earned Value:	\$ 479,111,454
Actual Cost:	\$ 445,886,809
Schedule Performance Index (SPI):	0.98
Cost Performance Index (CPI):	1.07
% Complete:	31.75%

SFMTA Earned Value Cash Flow Curve



Funding, Expenditures & Available Cash

The Funding/Expenditure Summary Table below, organized by federal, state, and regional/local funding sources, reports the grant funds received and expended and the cash balance by source. Appendix C details the sources and amounts now committed to the Project.

Total funds booked in project accounts and available for current billing, is \$605.56 million (Column D). The total cash now available and not yet booked to specific cost accounts, is \$179.84 million. Total cash and funding levels are projected to be sufficient for the scheduled contract partial certifications and other Program costs during the FY2014.

A	Funding		Expenditures		Available Cash on Hand		
	Committed Funding Sources	Total Awarded Funds to Date	Encumbrances to Date	Expenditures Billed to Date	Available for Billing Budgeted Expenses	Percent of Awarded Funds Allocated	Available for 2013 Additional Expenditures
A	B	C	D	E	F	G	H
<i>This row provides explanations and source of values</i>	<i>CS/Grants Inputs Baseline Budget</i>	<i>CS/Grants Inputs from Grants Records (786)</i>	<i>Amounts in the Approved Expenditures Authorizations/ Budget Revisions</i>	<i>Monthly SFMTA Accounting</i>	<i>D - E</i>	<i>D / C</i>	<i>C - D</i>
Federal							
Sect. 5309-NS	\$942,200	\$319,182	\$176,187	\$176,187	\$0	55.20%	\$142,995
CMAQ	\$41,025	\$41,025	\$41,025	\$41,025	\$0	100.00%	\$0
Federal Subtotal	\$983,225	\$360,207	\$217,212	\$217,212	\$0	60.30%	\$142,995
State							
TCRP	\$14,000	\$14,000	\$14,000	\$14,000	\$0	100.00%	\$0
State RIP	\$88,000	\$0	\$0	\$0	\$0	\$0.00	\$0
Prop. 1B (I-Bond) PTIMSE	\$307,792	\$225,912	\$195,616	\$88,413	\$107,202	86.59%	\$30,296
Prop. 1A (HSR-Bond)	\$61,308	\$61,308	\$61,308	\$17,744	\$43,564	\$0.00	\$0
State Subtotal	\$471,100	\$301,220	\$270,924	\$120,157	\$150,767	\$0.00	\$30,296
Local							
Prop. K	\$123,975	\$123,975	\$117,425	\$100,230	\$17,194	94.72%	\$6,550
Local Subtotal	\$123,975	\$123,975	\$117,425	\$100,230	\$17,194	\$0.00	\$6,550
Project Total	\$1,578,300	\$785,401	\$605,561	\$437,600	\$167,961	77.10%	\$179,841

Schedule Highlights (See Appendix B for Details)

The summary Master Project Schedule (MPS) shown on page 12 includes progress through October 31, 2013. The expected dates of future major project milestones are shown in the chart on page 4. See Appendix B for schedule details.

The October 2013 Update of the Master Project Schedule (MPS) continues to forecast the Revenue Service Date (RSD) of December 26, 2018.

The controlling critical (longest) path of the MPS runs through CTS succeeded by Commissioning and Pre-Revenue Activities to the Baseline Finish and Revenue Service Date. (See Appendix B – Longest Path). The critical path for Contract 1252 is described in the Tunnel section.

The Schedule Contingency is 4.8 months on the critical path of the MPS, which is below the Minimum Schedule Contingency level of 8 months. Revisions to Schedule Contingency minimum levels have been developed and are currently under final review by FTA..

Demolition of Pagoda Theater for the Retrieval Shaft (1277):

MH Construction is physically complete with contract work.



A temporary sound wall has been built at the site of the former Pagoda Theater in North Beach. Workers can be seen here lifting individual sections of the padded wall.

Schedule Highlights - Continued

Tunnels (1252):

The critical path of Contract 1252 starts with Northbound tunneling. After Northbound tunneling, the critical path moves through the completion of Cross Passages 2, 4, and 5 and finishes with the completion of the Tunnel Portal Structure.

The Northbound TMB launch date slipped again this month from Recovery Schedule 4 due to electrical and controls systems problems during testing and commissioning. Instead of launching on the Recovery Schedule 4 date of October 4, 2013 it launched on October 31, 2013. The delays to the Northbound TBM launch date has pushed out all of the Contract Milestones. BIH is currently working on Recovery Schedule 5.

	Required Finish	September Finish	October Finish	Ahead/ Behind Requirement
Milestone 1 - Complete Cross Passages 1&2 (CTS)	10-Jun-14	20-Jun-14	09-Jul-14	(29) Days
Milestone 2 - Complete Cross Passages 3&4 (UMS)	13-Aug-14	22-Aug-14	29-Aug-14	(16) Day
Contract 1252 Tunnel Substantial Completion	12-Apr-15	20-Apr-15	11-May-15	(29) Days

The last pile was complete at UMS on October 30, 2013. BIH has started demobilizing and restoring the site in Union Square.

Pregrouting at the Ellis Shaft finished on October 12, 2013.

Construction at the Pagoda Place Retrieval Shaft has slipped which could impact 1252 intermediate Milestones 1 & 2 as well as cause potential delays to the Southbound TBM. Acceleration efforts are being evaluated.

Contract 1300- UMS (1253)/ CTS (1254R)/ YBM (1255)/ STS (1256):

Contract 1300 schedule currently shows a summary version of Tutor Perini Corporation's bid schedule. The summary bid schedule will be replaced and updated with Tutor's Baseline Schedule once it is approved. The Baseline Schedule for Chinatown Station (CTS) and Yerba Buena/Moscone Station (YBM) was submitted on 9/12/13. Tutor Perini plans to submit the Baseline Schedule for Union Square/Market Street (UMS) next followed by the schedule for the Surface, Track and Systems (STS) work package.

Contract 1300 has several interface points with Contract 1252. The timing of these interface points correlate to when the NTP was issued for Contract 1300. This table represents the current status of these interface points with respect to the Contract 1252 update.

Schedule Highlights - Continued

	CN1300 Re-requirement	CN 1252 Oct Finish	Variance
CTS Tunnel Interface Complete	9-Sep-14	9-Jul-14	62 CD
1252 MS 1 - Complete Cross Passages 1&2 (CTS)			
UMS Tunnel Interface Complete	26-Feb-15	29-Aug-14	181 CD
1252 MS2 - Complete Cross Passages 3&4 (UMS)			
YBM Tunnel Interface Complete	26-Feb-15	30-Sep-14	149 CD
Tunnel Portal Completion	24-Sep-15	8-Jun-15	108 CD

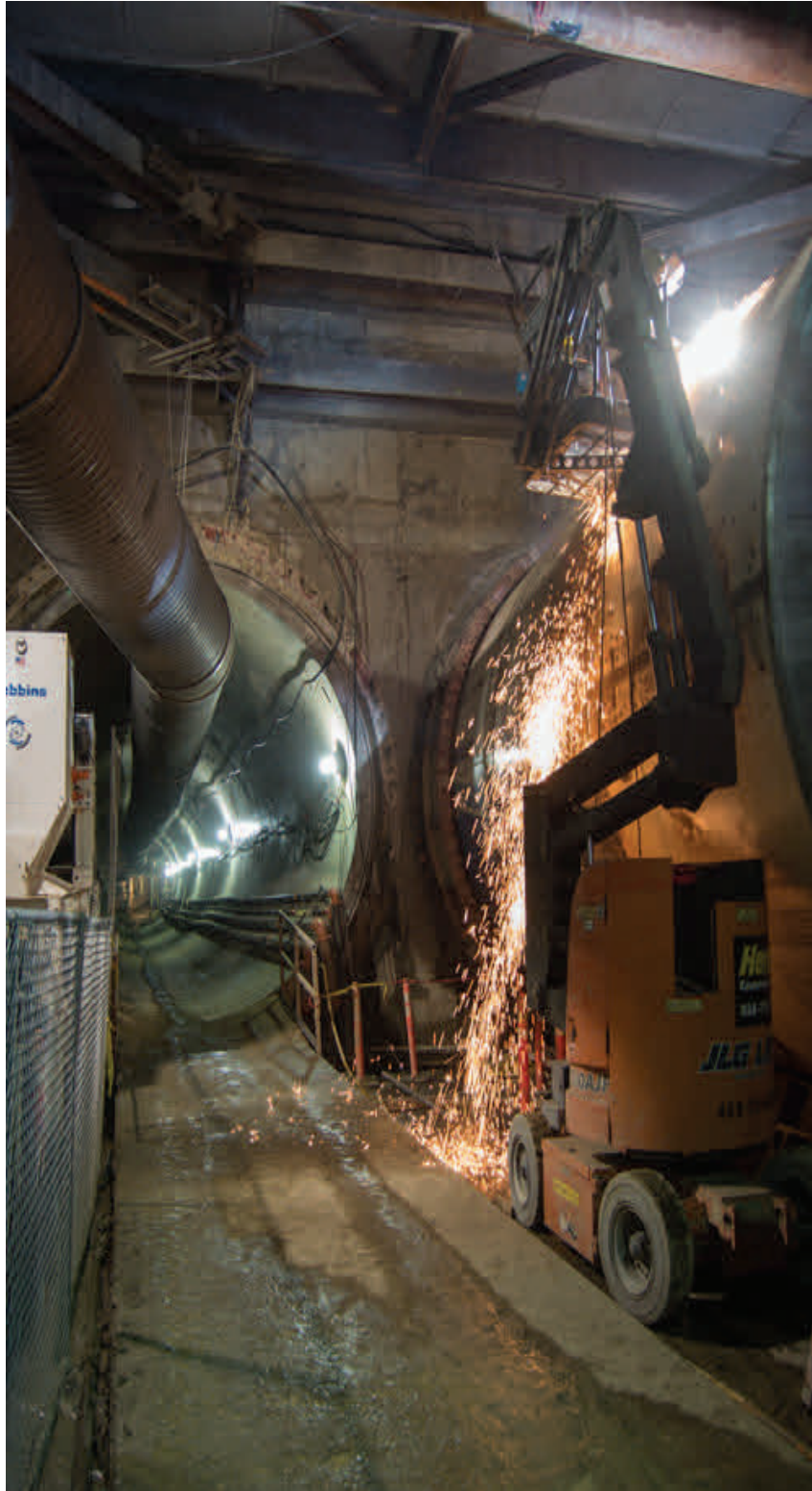
Contract 1300 has performed the following work this period:

- Performed Hazardous Material Abatement for building at 933-949 Stockton.
- Preparing Contract Modification on CTS Headhouse wall demolition at pole.
- Demolition of CTS building at 933-949 Stockton (Ground level and above).
- Ongoing Instrument Monitoring (Noise/Vibration), Preconstruction Photographic & Video Surveys, Utility Potholing and Sewer Video Surveys.
- Completed demolition of Gas Station on 16OCT13.
- Removal of underground Storage Tanks scheduled for early November



An operator uses an excavator at the future Yerba Buena/Moscone station site to remove material from the 76 gas station which formerly occupied the site.

Schedule Highlights - Continued



Welders can be seen aiding in the assembly of the forward shield portion of tunnel boring machine Big Alma.

Program Components

Program and Design Support During Construction

Program Management/Construction Management CS-149

- Monthly meeting with PMOC – October 28, 2013
- CMB held weekly on 2nd, 9th, 16th and 30th of October 2013
- Risk Meeting held on October 8, 2013

Contract No.	CS-149 Central Subway Partnership	
Contract Description:	Project management and construction management	
Status:	On-going	
As of 10/31/13	Base Contract Value	\$85,139,092
	Approved Change Orders	-0-
	Current Contract Value	\$85,139,092
	Expended to Date (est.)	\$37,000,000
	% Expended	43.46%
	DBE Participation	37.17%

Project Controls Contract CS-156

- **Reporting:** Prepared Monthly Report and supporting Appendices A & B material.
- **Support:** Provided document control support for all contracts, utilizing EDMS and contract manager. Provide Estimating support for construction change orders.
- **Cost/schedule support:** Perform schedule and progress payment review and approval for Contract Contracts CN 1252,1277 and CN 1300. Provide cost and schedule data for Monthly Report; input data and provide analysis within Monthly Report.

Contract No.	CS 156 Project Controls To Date	
Contract Description:	Project Controls Cost and Schedule Project Consultant Support	
Status:	Ongoing	
As of 10/31/13	Base Contract Value	\$17,112,873
	Approved Change Orders	-0-
	Current Contract Value	\$17,112,873
	Expended to Date (est.)	\$6,448,481
	% Expended	37.68%
	DBE Participation	24.31%

Program and Design Support During Construction Continued

Tunnel Design CS-155-1

Design support this month focuses on the following tunnel activity:

RFIs October 2013:

Received 5 RFIs related to retrieval shaft Construction and Instrumentation and Monitoring.

Responded 3 RFIs and 6 RFIs remain in review as of October 31, 2013

Submittals October 2013:

Received 16 Submittals related to the Green Street Shaft Design, TBM Construction and Tunneling, Jet Grout, Compensation Grout, Retrieval Shaft Construction, Sewer Slip Lining.

Responded 38 Submittals and 13 Submittals remain in review as of October 31, 2013

Contract No.	CS-155-1 PB/ Telemon (Unexercised options not included in figures)	
Contract Description:	Design Package 1 for contracts 1250, 1251 and 1252.	
Status:	Design is complete. Construction support ongoing	
As of 10/31/13	Base Contract Value	\$5,795,000 (includes exercised options)
	Approved Change Orders (6)	\$1,697,245
	Current Contract Value	\$7,492,245
	Expended to Date (est.)	\$7,072,142
	% Expended	94.79%
	DBE Participation	32.85%



Demolition of the building at 933-949 Stockton commenced. The site will be used to build the head house for the future Chinatown Station.

Program and Design Support (Continued)

Subway Station Design CS-155-2: The current focus is design support with project integration, permits and bidding during construction.

- Reviewed Contract 1252 RFI No. 00278
- Reviewed Contract 1252 Submittals (Submittal Nos. 31 62 13.15-017, 31 62 13.15-018, 31 32 13.36-022)
- Reviewed Contract 1300 RFI Nos. 00023, 00024, 00033 through 00038, 000421 through 00051, 00054 and 00055
- Reviewed Contract 1300 Submittal No. 31 09 16.30-001

Contract No.	CS-155-2 Central Subway Design Group (includes exercised option per CS Letter 1348)	
Contract Description:	Design Package 2 for 1253 UMS, 1254 CTS, 1255 YBM Stations.	
Status:	Design contract complete. Bid support for Contract 1300 is underway.	
As of 10/31/13	Base Contract Value	\$35,059,252
	Approved Change Orders (2)	\$1,460,360
	Current Contract Value	\$36,519,612
	Expended to Date (est.)	\$26,450,685
	% Expended	72.43%
	DBE Participation	43.40%

Surface, Trackwork and Systems Design CS-155-3

- Reviewed RFI #061, RFI #029 and Supported coordination for ductbank relocation on 4th street
 - Reviewed Thales Contract 1266 - Payment Schedule Clarified design criteria for artwork
 - Revised LEED Sustainability Report, Rev. 0

Contract No.	CS-155-3 HNTB-B&C (Unexercised options not included in figures)	
Contract Description:	Design Package 3 for Systems, Track work, and Surface station.	
Status:	Design is complete. Bid support in progress.	
As of 10/31/13	Base Contract Value	\$16,822,238
	Approved Change Orders (4)	\$312,814
	Current Contract Value	\$17,177,252
	Expended to Date (est.)	\$11,565,749
	% Expended	67.33%
	SBE Participation	30.20%

Program and Design Support (Continued)



Demolition equipment arrived at the 76 gas station site in early October. The site has since been cleared to make way for the future Yerba Buena/Moscone station head house.

Real Estate and Relocation

Acquisition and relocation activities are essentially complete with ongoing administrative and final negotiations for easements tasks continuing.

Third-Party Agreements

Negotiations continue for the two outstanding temporary licenses required for construction of the stations.

950 Stockton Street (Mandarin Tower)

The project team received signed agreements from the Mandarin Tower Homeowners association, and the owner of the basement commercial condominiums. The agreement with the land owners is outstanding.

The Project team, with the City Attorney's office filed for condemnation of the temporary license required for the Mandarin Tower building at 950 Stockton Street on July 8th, 2013 and continues with the condemnation process while negotiating the terms of the license with the owner concurrently.

19 Stockton Street

The Project filed for condemnation of the license at 19 Stockton St on February 2nd, 2013. A pre-judgment possession hearing was held September 26th, 2013, a 'right to take' hearing has been set for November 18th, 2013 and a compensation trial for March 30th, 2014.

Pre-judgment possession of the license was awarded to the City and County of San Francisco to on October 3rd, 2013 granting the City access to install monitoring equipment, and compensation grout tubes at this property. The City attorney's office filed a 'Notice of Entry' on October 7th, making access to the building effective as of November 6th, 2013.

Risk Management

Risk Mitigation Meetings No. 51 was conducted on October 8, 2013. The Risk Assessment Committee reviewed and discussed the risk items above Risk Rating 6 and active risk items. Risk Register Rev 25 was published on October 8, 2013.

Quality Assurance

This section presents the Quality Assurance monthly activity of oversight, surveillance, audits, proactive feedback and QA records with the construction management, resident engineers, contractors and subcontractors.

Tunnel Contract CN1252 – On Going

- Current QA Monitoring: Implementation of the Contractor's Quality Control Program for Jet and Compensation Grouting, Ellis Street Shaft, completion of the UMS Secant Piles, assembly of the TBM and continued preparation for initial start of tunneling in the Northbound tunnel, tunneling of the Southbound tunnel and the installation of precast segment tunnel liners, installation; baselining, monitoring and evaluation of instrumentation and resulting data. Completion of assembly and subsequent startup and commissioning of TBM 2. Quality Staff attends the daily Tunnel Task Force Meetings.

Quality Assurance - continued

- Document comment and review: Contractor submittals and RFIs related to quality. QA Staff continues to perform random/spot checks of the 1252 Contractor's Field Testing lab results; comments are then provided to the Chief Inspector for subsequent use/information and as warranted, follow up with the Contractor.
- QA Issues: Ongoing documentation associated with the advance of TBM 1 and status of instrumentation installation and monitoring.
- QA Concerns: Inadvertent installation of a "Red Dot" designated as a Type 2 Segment installed as a permanent Type 1 Segment. Undercrossing of BART Tunnels.

Stations and Systems Contract CN1300 – On Going

- Current QA Monitoring: Preparatory and Initial Phase Meetings associated with utilities, geotechnical and demolition work.
- Document Comment and Review: TCP's Construction Quality Management - Quality Control Program (QCP) was Approved as Noted (no resubmittal required).
- QA Issues: Various Preparatory and Initial Phase meetings were conducted by TPC as required by 01 45 00. QA Staff continues to make TPC cognizant of what the SFMTA's expectations are regarding the preparation and conduct of each Preparatory and Initial Phase Meeting and that no work will be allowed until the Preparatory and Initial Phase Meetings are conducted and all prerequisites as required by the Contract Documents have been met.
- QA Concerns: Contractor's Quality Control Manager (QCM) and CTS and YMB Assistant QCMs are not "woven" into TPC management structure such that they are able to become inherent in TPCs planning of the Work.

Other Program QA Practices Implemented

- Close-out of Corrective Action Requests: Close outs continued from Quality Assurance staff's Audits, Surveillances and PMOC Quarterly Reviews. The status is tracked in the Corrective Action Log that is provided to the project team and the FTA PMOC.
- Quality Assurance Surveillance QAS054, review of documentation and design mix for Launch Box Slurry Wall Panel P28 was posted to the EDMS.
- Indoctrination to the CSP Quality Program continues as new Project Staff are added to the Team.

Technical Capacity

The Program continues recruitment efforts for project controls staff and field inspectors.



As part of hazardous materials abatement at the future Chinatown station site, the exterior stucco was removed prior to building demolition. Here, workers uncovered part of the sign of a former business.

Community Outreach

Outreach Events/Public Activities/Presentations for the month of October:

Moscone Center Introductory Meeting	October 1, 2013
SEAONC Presentation	October 1, 2013
Chinatown TRIP	October 2, 2013
Ceatrice Polite Housing	October 8, 2013
Woolf House	October 14, 2013
AACE	October 29, 2013
FTA quarterly	October 30, 2013

Additional Outreach

- Community meetings were held with residents at Ceatrice Polite Housing and Woolf House regarding the construction of Yerba Buena/Moscone Station
- Team members translated construction signage and notice into Chinese.
- Coordinated with Yerba Buena community about new construction zone at 4th and Folsom
- Created communication materials to inform North Beach community about utility work and reen Street ground improvement shaft
- Outreach to property owners at 716 Columbus, 770 Filbert and 650 Filbert to get third party agreement signed for prism installation
- Conducted weekly photography and video shoots at all the project work sites
- Coordinated time-lapse camera placement for TBM activity and Chinatown site demolition for potential video use
- Designed four banner for North Beach retrieval shaft site fence

Outreach in Support of Mitigation and Monitoring

- Team members participated in weekly progress meetings related to construction activity such as Pagoda, Tunnel and Stations, Tracks and System.

Media Coverage

Central Subway Media Coverage			
Date	Title (with link to story)	Source	Reporter/Writer
10/03/13	SFMTA begins construction of Central Subway stations, tracks and operating systems	RT&S (Railway Track and	None listed
10/15/13	Layne Christensen Awarded \$57 Million Subcontract for Central Subway Project in San Francisco	Marketwatch	None listed
10/28/2013	What's Happening at the SoMa 76 Station at 4th and Folsom?	Curbed SF	Alex Bevk

Outreach - Continued

- Member of the outreach team continue ongoing outreach in North Beach, Chinatown, Yerba Buena and SoMa.



The Central Subway outreach team helps deliver a presentation to the community at the Mendelsohn House senior facility, with the help of translator Charles Chan.



Resident Engineer for the Yerba Buena/Moscone Station Mark Vilcheck, can be seen giving a presentation at the Mendelsohn House community meeting.

Staffing

The table below shows Planned and Actual full-time equivalent staff (FTEs) working on the Program by organizational function and responsibility.

Actual staffing levels are tracking closely to the planned FTEs.

Central Subway Staffing Table

	Aug 2013		Sept 2013		Oct 2013	
	Planned	Actual	Planned	Actual	Planned	Actual
Project Management						
Project Management	7.85	7.85	7.85	7.85	7.85	7.85
Quality Assurance	1.75	1.75	1.75	1.75	2.25	1.75
Contract Administration	1.40	1.40	1.40	1.40	1.40	1.40
Community Outreach	5.50	5.50	5.50	5.50	5.50	5.50
Finance	3.90	3.90	3.90	3.90	3.90	3.90
Project Controls	8.55	8.55	8.55	8.55	8.55	8.55
Subtotal	28.95	28.95	28.95	28.95	29.45	29.45
Construction Management						
CM - CN 1252	13.10	12.98	13.55	12.93	14.00	14.00
CM - CN 1300	18.10	9.48	18.55	10.43	13.95	8.80
Design Support - CN 1252	1.30	1.30	1.30	1.30	1.19	1.19
Design Support - CN 1300	8.17	8.17	8.17	8.17	15.24	14.99
Subtotal	40.67	31.92	41.57	32.82	44.38	38.98
Start Up						
Start Up / Safety & Security	0.83	0.78	0.83	0.78	0.42	0.37
Subtotal	0.83	0.78	0.83	0.78	0.42	0.37
Total	70.45	61.65	71.35	62.55	74.25	68.80

Program Safety & Security

The San Francisco Municipal Transportation Agency (SFMTA) is committed to the highest practical level of safety and security standards and practices in the public transit industry and has developed a Safety and Security Management Plan (SSMP) expressly for the purpose of carrying out the FTA intentions for the Central Subway Project. This commitment is consistent with the SFMTA's:

- Mission
- Rail System Safety Program Plan
- System Security Program Plan
- Emergency Preparedness Program
- Central Subway Project Management Plan
- CPUC Approved Safety Certification of Third Street Light Rail Phase 1 Operation and Metro Maintenance facility in 2007-2008.

The project-specific SSMP, prepared by an SFMTA Project team in concert with the FTA, is the road map to integrate safety and security into the Phase 2 Project, achieve SFMTA's safety and security commitment and implement all FTA and California Public Utilities Commission (CPUC) requirements. Several of the important components of the plan are reported on below. More information and details will be provided as appropriate for the particular phase of the project.

Construction Conformance verification and documentation

The construction specification conformance process consists of preparation and verification of Specification Conformance Checklist for each certifiable project element. The purpose of the checklist is to provide a method to track and verify that the project elements provided under construction, procurement, and installation contracts conform to the specified safety and security requirements of technical specifications, drawings and contract documents.

Contractor Safety and Security

The purpose of the construction safety and security program will be to outline the minimum health, safety and security requirements to which all participating SFMTA employees and Central Subway Project construction contractors and subcontractors shall adhere to for preventing job-related injuries, illnesses, and providing protection during construction activities at the Pro-

Project Safety Record - Contract 1252					SAFETY GOALS			
Through Month End - October 2013					OSHA Recordable Accidents, <3.8			
					Lost Time Cases, <1.3			
JOB TO DATE					BIH	Subs	Total Project	Rate*
OSHA Recordable Accidents					2	3	5	2.32
Job Transfer or Restricted Duty Cases					2	0	2	0.93
Lost Time Cases					1	1	2	0.93
Total Project Incidents					5	4	9	4.17
Man Hours Worked Through M/E - October 31, 2013					191,354	239,826	431,180	
YEAR TO DATE (Month ,Day, Year to Month, Day, Year)					BIH	Subs	Total Project	Rate*
OSHA Recordable Accidents					1	1	2	1.44
Job Transfer or Restricted Duty Cases					2	0	2	1.44
Lost Time Cases					1	1	2	1.44
Total Project Incidents					4	2	6	4.31
Man Hours Worked Through M/E - October 31, 2013					148,418	130,182	278,600	



Demolition of the 76 gas station at the corner of Folsom and 4th Street in SoMa has completed. Next, crews will excavate the underground tanks and begin archaeological and environmental probing.

Contracts & Construction

Contracts Completed (See Appendix D for details)

Contract 1250: Moscone Station and Portal Utilities Relocation

Contract 1251: Union Square/Market Street Station Utility Relocation

Construction Contracts In Progress

Contract 1277: Pagoda Theater Site Demolition

- Contractor: MH Construction
- Amount: \$498,995
- Contract Status: Contract closeout

Contract 1252: Central Subway Tunneling

- Contractor: Barnard Impregilo Healy (BIH) JV
- Amount: \$231.26 million
- Contract Status: 66.07% complete construction

Contract 1300 - Combined Work Packages 1253, 1254, 1255, 1256

- Contractor: Tutor - Perini Corporation
- Amount: \$839.47 million
- Contract Status: 3.79% complete construction



At the site of the future Union Square/Market Street station, crews are working to restore the work zone for traffic, ahead of the holiday moratorium which will go into effect before Thanksgiving.

Central Subway Tunneling

Contract 1252

Contractor: Barnard Impregilo Healy Joint Venture

Description

1.7-mile twin bore tunnels from Hwy I-80 to North Beach using two tunnel boring machines (TBMs) simultaneously; Contractor procurement of TBMs; settlement monitoring and protection of existing utilities, buildings and BART tunnels; TBM launch box and retrieval shaft excavation support; Yerba Buena/Moscone Station and Union Square/Market Street Station end walls; tunnel excavation and lining of precast segmental lining, 4th Street portal and cross passages.

Status

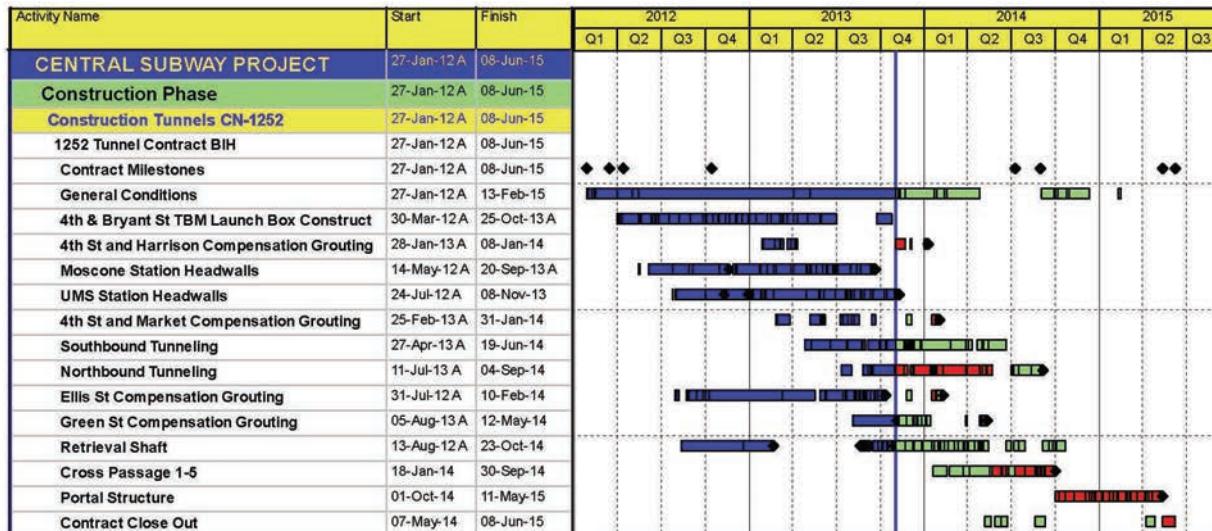
- Launch Box- Launched the Northbound (NB) TBM and continued Southbound (SB) tunneling to Sta. 148+96 (installed total of 1,457 feet/ 286 rings of tunnel segmental lining).
- 4th and Folsom- Set up the compensation grout plant for NB tunneling.
- UMS- Finished piles at the north headwall and started demobilizing.
- Ellis Shaft- Finished pre-conditioning for compensation grouting.
- Retrieval Shaft- Complete installation of instrumentation. Finished building the sound wall, and finished constructing the soil mix pit at Pagoda Theater. Started sewer slip lining.

Contract Details	
Contract Awarded:	August 8, 2011
Notice to Proceed 1:	January 27, 2012
Notice to Proceed 2:	March 14, 2012
Partial NTP 3:	April 13, 2012
Notice to Proceed 3:	October 15, 2012
Substantial Completion:	April 12, 2015
Contract Award Value:	\$233,584,015
Modifications to Date:	\$ (2,323,819)
Current Contract Value:	\$231,260,196

Budget/Expenditures	
Category	Amount
Current Budget	\$254,201,766
Expenditures to Date	\$151,835,412

Work Expected Next Month & Schedule

- Tunneling- Continue NB and SB tunneling.
- 4th and Folsom- Inject compensation grouting if needed during NB tunneling.
- 4th St. & Market- Set up for and inject grout if needed during tunneling.
- UMS- Finish demobilizing and perform final restoration.
- Green St (BofA)- Set up work area and start auger cast piles.
- Retrieval Shaft- Start soil mix walls and continue sewer slip lining.



Central Subway Pagoda Palace Demolition

Contract 1277

Contractor: MH Construction

Contract Details	
Contract Awarded:	June 12, 2013
Notice to Proceed:	July 15, 2013
Substantial Completion:	Sept. 24, 2013
Contract Award Value:	\$498,995
Modifications to Date:	under review
Current Contract Value:	\$498,995

Description

Demolish and clear the former Pagoda Theater for future use of the site to recover the tunnel boring machines when tunnel is completed. Locate and supply contractor facilities and installations. Obtain permits and approvals and coordinate work with City agencies and utility companies. Furnish and install signs and distribute notices to the local community prior to commencing with construction, cleanup and remove of debris from the site.

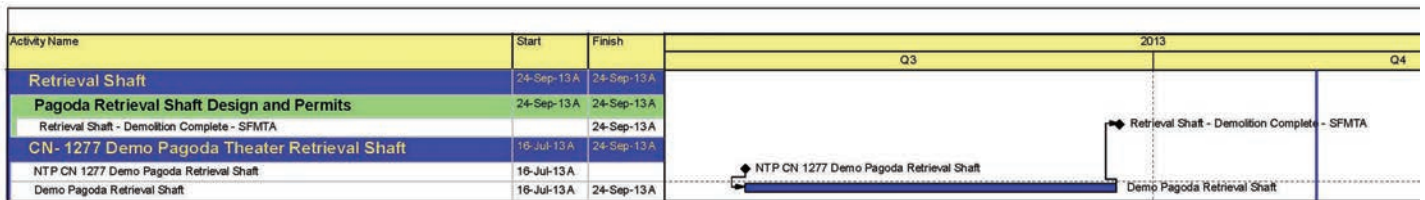
Status

MH Construction demolition of the form Pagoda Theater site continued through the month. Discovered unforeseeable condition that the original theater foundation was a slap poured on top of the remains of a basement from a building that was destroyed during the 1906 earthquake and earthquake.

Budget/Expenditures	
Category	Amount
Current Budget	\$498,995
Expenditures to Date	\$498,995

Current Status

Work was substantially completed on Sept. 24, 2013. Continue work on the punch list items. Started working on the cost estimate for contract change orders items.

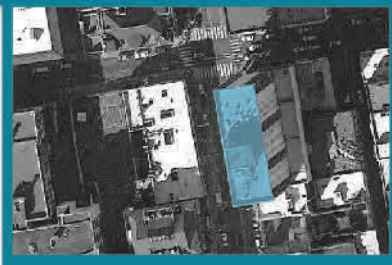


central T subway

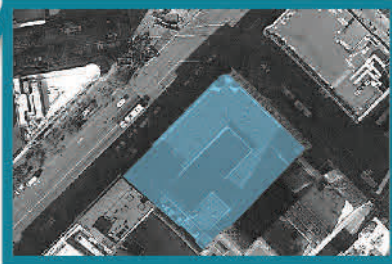
Monthly Progress Construction Activity

1

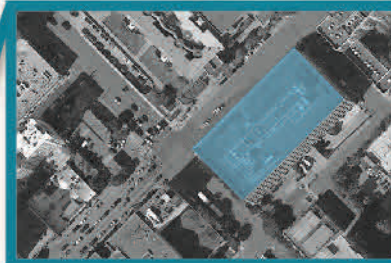
Chinatown Station



Union Square/Market Street Station



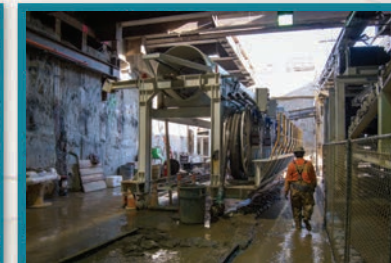
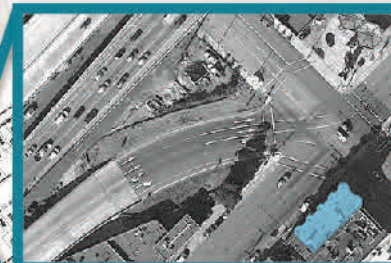
Yerba Buena/Moscone Station



Tunnel Launch Box North



Tunnel Launch Box South



3

4a

4b

1N



The original brick façade of 733-749 Stockton has been exposed, following hazardous material abatement. The building will be demolished to make way for the Chinatown station head house.



View looking at the intersection of 4th Street from the roof of 795 Folsom. Workers have demolished the above-ground structures of the former 76 gas station to make way for construction of the Yerba Buena/Moscone station head house.

4a



The forward "shield" portion of TBM Big Alma can be seen being assembled here, with the trailing gear being lowered in piece by piece in the background.

4b



At the south end of the 4th Street TBM launch box, the trailing gear of TBM Big Alma can be seen being assembled and rolled on rails to the forward end of the launch box

central **T** subway

Central Subway Project Office
821 Howard Street
San Francisco, CA 94103
Phone: 415.701.4371
Fax: 415.701.5222
Email: central.subway@sfmta.com



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SFMTA
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Police help with traffic enforcement at the intersection of Stockton and Washington, adjacent to the Chinatown station construction site.



Potholing and utility relocation work has begun on Stockton at the future Chinatown station site. Workers can be seen here cutting the roadway prior to excavation.