THIS PRINT COVERS CALENDAR ITEM NO. : 11

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Capital Programs and Construction

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute Amendment No. 1 to San Francisco Municipal Transportation Agency Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC, for Phase 2 construction services, increasing the contract amount by $193,027,555, for the Phase 2 work, for a total contract amount of $193,827,555, and for an overall contract term not to exceed five years.

SUMMARY:

- On July 7, 2015, the SFMTA Board of Directors authorized the award of Contract No. 1289, Van Ness Corridor Transit Improvement Project to Walsh Construction Company (Walsh), for Phase 1 (pre-construction services), for a target duration of 300 calendar days, and in an amount not to exceed $800,000.
- The Van Ness Corridor Transit Improvement Project (the Project) will implement the first Bus Rapid Transit (BRT) service in San Francisco, which will improve transit reliability for the 47 and 49 Muni routes and provide reliable transit connections, and will implement Vision Zero improvements to enhance pedestrian safety.
- The SFMTA will deliver the Project using a Construction Manager/General Contractor (CM/GC) project delivery approach, under which the SFMTA retained Walsh to complete the design phase (Phase 1) and construct the project after completion of design (Phase 2).
- The Agency negotiated a guaranteed maximum price (GMP) of $193,027,555 for Phase 2.

ENCLOSURES:
1. SFMTAB Resolution
2. Project Budget and Funding Plan
3. Contract Modification No. 1
4. Van Ness BRT Project Final EIS/EIR: http://www.sfcta.org/van-ness-avenue-bus-rapid-transit- planning-and-environmental-studies.
5. SFMTA Board Resolution No. 13-214: https://www.sfmta.com/sites/default/files/agendaitems/9-17-13%20Item%2011%20Van%20Ness%20BRT%20LPA.pdf

APPROVALS: **DATE**

DIRECTOR _____ 8/11/16

SECRETARY _____ 8/11/16

ASSIGNED SFMTAB CALENDAR DATE: August 16, 2016

PURPOSE

The purpose of this calendar item is to authorize the Director of Transportation to execute Amendment No. 1 to San Francisco Municipal Transportation Agency Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC, for Phase 2 construction services, increasing the contract amount by $193,027,555 for the Phase 2 work, for a total contract amount of $193,827,555, and for an overall contract term not to exceed five years.

GOAL

Contract No. 1289 would assist in meeting or furthering the following goals of the SFMTA Strategic Plan:

Goal 1: Create a safer transportation experience for everyone

Objective 1.1: Improve security for transportation system users
Objective 1.3: Improve the safety of the transportation system

Goal 2: Make transit, walking, bicycling, taxi, ridesharing and car sharing the most attractive and preferred means of travel

Objective 2.1: Improve customer service & communications
Objective 2.2: Improve transit performance
Objective 2.3: Increase use of all non-private auto modes

Goal 3: Improve the environment and quality of life in San

Francisco

Objective 3.1: Reduce the Agency's and the transportation system's resource consumption, emissions, waste, and noise
Objective 3.2: Increase the transportation system's positive impact to the economy
Objective 3.3: Allocate capital resources effectively
Objective 3.4: Deliver services efficiently
Objective 3.5: Reduce capital and operating structural deficits

DESCRIPTION

The Project

The Van Ness Corridor Transit Improvement Project [formerly known as the Van Ness Bus Rapid Transit (BRT) Project], will implement the first BRT service in San Francisco, and implement pedestrian safety improvements along Van Ness Avenue. The project will improve transit reliability for the 47 Van Ness and 49 Van Ness-Mission Muni routes, as well as for Golden Gate Transit buses, and provide reliable transit connections to transfer routes.

The transit service and infrastructure changes are expected to reduce transit travel times by more than 30 percent. With the implementation of BRT, ridership is projected to be greater than 60,000 passengers per day by 2035. The 47 Van Ness and 49 Van Ness-Mission Muni routes currently service approximately 45,000 passengers per day, so this is about a 33% increase. Once completed, the Van Ness BRT will be an integral part of the Muni "Rapid" network of transit service that will gradually be implemented on all major corridors in San Francisco.

Van Ness Avenue is a high-injury corridor. To improve safety in line with the Vision Zero policy, the Project will install pedestrian countdown timers, pedestrian bulb-outs, and eliminate the majority of left turns that currently exist along the corridor. The Project will also enhance the urban design of Van Ness Avenue.

CM/GC Contract

On October 7, 2014, the SFMTA Board of Directors adopted Resolution No. 14-147, which authorized the SFMTA to use a Construction Manager/General Contractor (CM/GC) project delivery method for the Project to include a team of core trade subcontractors, minimum qualifications for the CM/GC and certain subcontractors; evaluation of the CM/GC primarily on non-cost criteria; and negotiation of a guaranteed maximum price (GMP) with the selected CM/GC, provided the price is fair and reasonable.

The major benefit of the CM/GC contracting process is that SFMTA has a general contractor that understands the Project completely and has a plan in place to execute the work. This differs from the traditional design-bid-build contracting process, which often results in numerous requests for information, leading to change orders and claims due to inconsistencies or ambiguities in the construction documents.

On December 9, 2014, the Board of Supervisors approved Ordinance No. 255-14, which authorized the SFMTA to use the CM/GC delivery method for the Project.

On July 7, 2015, the SFMTA Board of Directors adopted Resolution No. 15-108, authorizing the Director of Transportation to execute San Francisco Municipal Transportation Agency Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC (Walsh), to provide pre-construction services (Phase 1) for a target duration of 300 calendar days, and in an amount not to exceed $800,000.

GMP Negotiation Process

Under Phase 1, Walsh and its core subcontractors have substantially completed the pre-construction services and deliverables identified in the Contract. To reach 100% design completion, the SFMTA engineers incorporated various Walsh-recommended improvements to the Project configuration. The construction sequencing and traffic management plans, in particular, were given significant attention by Walsh and the design team.

The contract negotiation process to arrive at the GMP started with a series of meetings to confirm scope and quantities among the City's engineers, the independent cost estimators (from SFMTA consultant HNTB), and Walsh. This process highlighted some inconsistencies and overlap between the various design disciplines (e.g., power and communication conduits and cables that were incorrectly counted initially; City-supplied pipes and equipment that the Contractor believed it had to supply), which have now been resolved and reconciled in the construction documents and the cost estimates.

After the scope and quantity reconciliation was complete, the SFMTA reviewed and negotiated Walsh's construction costs through a series of negotiation sessions which addressed material pricing, construction crews, equipment and the general management effort for the entire project.

The "self-performed" construction work by Walsh Construction and its core subcontractors has been fully negotiated as a fixed cost to be reimbursed as the work is progressed and complete. The self-performed work includes: traffic management, overhead line replacement, traffic poles and signals and roadway reconstruction. The remainder of the construction scope, including water and sewer, Auxiliary Water Supply System (AWSS), green infrastructure, landscaping, and BRT station work, will be competitively bid through Walsh in an open bid environment and will be reimbursable based on the bids received.[1] The Project will reimburse Walsh for the actual bid prices received up to the GMP limit for the entire contract. If the bids come in lower than Walsh's estimate, the Project will benefit from the lower bid pricing.

Based on the independent cost estimate from the SFMTA's consultants, SFMTA believes that the GMP is fair and reasonable for the work being performed. Walsh's contract will only be further amended if the City requires or agrees to changes in project configuration and scope during the construction phase or if unforeseen conditions require changes to the contract. There are allowances included in the contract price for unforeseen site conditions, hazardous material handling, and complications due to sewer and water line installation.

Staff previously estimated a construction contract cost of $136 million at the 35% design phase, and a total project budget of $259,898,200, based primarily on past projects in San Francisco. During the course of negotiating and clarifying the Project scope and GMP with Walsh, it became evident that there are additional and unforeseen challenges and complications for work in the high-density environment of the Van Ness Corridor, especially since it is a Caltrans right-of-way (i.e., US-101, a state highway). Examples include:

- Comprehensive construction sequencing and maximized construction work zones that make construction more efficient, while limiting effects on neighbors and businesses by maintaining traffic circulation and preserving parking.
- Improving project lifecycle and saving long-term maintenance costs by adjusting scope (e.g., replacing more roadbed and water mains; upgrading pavement and utilities to highway standards)
- Traffic management and control and safety enhancements that meet both City and Caltrans standards
- Improved station finishes through work with the Historic Preservation Commission and the San Francisco Arts Commission

As a result, our independent cost estimate for the construction came in at $192,244,643 (within six percent of the proposed GMP of $203,092,342). Staff now recommends a total project budget of $316,408,394.

[1] Initially, Walsh had named a core subcontractor to perform SFPUC water and sewer and related traffic control work. However, the SFPUC could not agree to the subcontractor's price for such work, and requested that the water and sewer work be bid out. Walsh will self-perform the traffic control piece as part of the overall traffic control work. The subcontractor objected to the reclassification of its work from core to non-core work. The independent hearing officer held a hearing on the subcontractor's objections and determined that the objections were without merit

Both Walsh and the Project team believe that this Project will be executed within the GMP, and with a minimum of change orders.

Scope of Services

Primary elements of the BRT portion of the Project include:

- Dedicated bus lanes separated from regular (mixed-flow) traffic to reduce delays and improve reliability.
- Low floor boarding to decrease passenger loading time, increase service reliability, and improved access for all users.
- Consolidated transit stops to reduce delays due to existing stop spacing that does not meet minimum standards.
- High-quality stations, each with an elevated platform, vehicle arrival time information, landscaping, and other amenities. Platforms would be large enough to safely and comfortably accommodate waiting passengers, long enough to load two BRT vehicles, and designed to provide ADA accessibility.
- Traffic signal optimization using technology upgrades to allow real-time traffic management and optimal signal timing.
- Transit signal priority to recognize bus locations and provide additional green light time for buses approaching intersections and reduce delay at red lights.
- Fewer left-turn pocket lanes for mixed-flow traffic by eliminating left turns at certain intersections to reduce conflicts with the BRT operation and to enhance pedestrian safety.

Elements of pedestrian enhancement include:

- Pedestrian safety enhancements, including enhanced median refuges, nose cones, and curb bulbs to reduce crossing distances at intersections and increase safety.
- Accessible pedestrian signals with crossing time countdowns at all signalized intersections in the project corridor.
- Improved streetscape design to increase the green and permeable area of the corridor.
- New pedestrian and street lighting to improve safety, comfort, and reduce ongoing maintenance costs.

Additional infrastructure work being performed under the Project includes:

- Replacement of the overhead trolley bus contact system and supporting poles.
- Replacement of street lights.
- Replacement of the existing traffic signals with new traffic signals.
- Replacement of the existing sewer with new parallel sewer lines and catch basins along the length of Van Ness Avenue.
- Replacement of the existing domestic water lines with new domestic water lines along the length of Van Ness Avenue.
- Reconstruction and some relocation of the existing Auxiliary Water Supply System (AWSS).

STAKEHOLDER ENGAGEMENT

A project as large and complex as Van Ness Corridor Transit Improvement Project has a great number of stakeholders along the corridor, within the City, and regionally. Staff conducted extensive outreach to disseminate information about the Project and gather information from the affected communities.

Residents, businesses, and organizations raised many concerns about construction impacts, such as noise, dust, traffic congestion, night work, and access to property and storefronts for customers and deliveries. The Project team, including Walsh Construction, the CM/GC, has worked closely with the community to minimize these impacts during construction. A detailed traffic management plan was prepared by the Project team and approved by Caltrans to minimize traffic congestion. Walsh and City staff have met with businesses to address access concerns and plan for the temporary relocation of loading zones. Moving forward into construction, the Project team will continue to have a high level of community involvement so that people affected by the Project will have a clear understanding of likely Project impacts and so the Project can way the community's concerns and take appropriate action.

The following is the stakeholder outreach that SFMTA staff has performed during the design phase of the Project:

- An agency-hosted Project e-mail address and telephone line was set-up to provide a forum for the public to make comments and inquiries, for which a log is maintained. A Project website was established to provide the public with accurate and up-to-date project information.
- The SFMTA created the Van Ness BRT Community Advisory Committee that meets on the fourth Thursday of each month to offer input to the Project team by providing varied perspectives from the surrounding communities and City, and guide decisions related to the design, construction and implementation of the Project. Initial committee applicants were recruited through bus stop shelter advertisements, website notice, and an email to 77 subscribers of the Project updates email list. Subsequent committee applicants have been recruited through website notices and emails to 1,082 and 1,227 subscribers of the Project updates email list.
- Project staff presented project briefings to Senator Barbara Boxer's office, Congressional Transportation Aides and had discussions with the Board of Supervisors and their staff including briefings to the offices of Supervisors Breed, Christensen, Farrell, Kim, Mar, Tang and Yee.
- Project staff had coordination meetings with other construction projects along the corridor such as CPMC Hospital, 1500 Mission Street, HealthRight 360, 1001 Van Ness, 1200 Van Ness, Build Inc., Crescent Heights and Related California.
- Project staff contacted and met with impacted merchants to discuss proposed changes and alternatives to color curbs, green infrastructure and sub-sidewalk basement work. Staff also reached out to merchants who front Bus Rapid Transit boarding platforms.
- Project staff met with 38 community, merchant, stakeholder and advocacy groups to provide Project presentations and information.
- On August 22, 2014, the SFMTA Board of Directors held a public hearing to discuss the parking and traffic changes for the Project. Notices for the hearing were posted on utility poles along Van Ness Avenue and on the SFMTA Public Meeting webpage. A project

brochure was mailed to 22,000 addresses within the Project area, including those on Gough, Franklin, Van Ness, Polk, Larkin, and cross streets between Mission and North Point. In addition, an e- mail blast was sent to 744 subscribers of the Project updates e-mail list. Project staff also had ongoing communications with transit riders, neighbors and residents, merchant and advocacy groups, and senior housing complexes.

- On November 18, 2014, the SFMTA Board of Directors held a public hearing to make final approval of the sidewalk, roadway and parking changes. A public notice was emailed to 768 subscribers of the Project updates email list and posted to the Project website.
- On November 18, 2014, the SFMTA Board also approved the removal of six bus stops along Van Ness Avenue for the bus stop consolidation implemented on June 4, 2016. Three bus stops (Grove northbound/southbound and California northbound) were removed under the City Traffic Engineer's Authority under San Francisco Transportation Code Section 201(a)(5) for the construction duration of the Van Ness Improvement Project. These three bus stops were also shared commuter shuttle stops, so they were not rescinded on November 18, 2014. These three bus stops went to the SFMTA Board on July 19, 2016, for permanent removal, since the Commuter Shuttle Program has recently decided to use Franklin Street and
  Gough Street instead of Van Ness Avenue during and after the Van Ness Project construction.
- On January 29, 2015, a Tree Selection Open House was held for community members to learn about the tree selection process for the project, the tree species that were evaluated and selected, and the latest information about the Project. Invites were sent to 797 subscribers of the Project updates email list and posted to the Project website. In January and February 2015, public notices regarding the installation of equipment cabinets were posted on utility polls for 30 days on Van Ness Avenue and side streets. An email was sent to 811 subscribers of the Project update email list and an update was posted to the Project website. SFMTA staff met with concerned community members to identify an alternate location for one cabinet.
- In the spring of 2015, the SFMTA conducted a multilingual (English, Chinese and Spanish) construction impact survey. Notification of the survey was posted on the Project website and mailed to 2,225 Van Ness Avenue-facing properties. Emails were sent to 840 subscribers of the Project update email list. The corridor was canvassed 16 times and door hangers with mail-in surveys were left at addresses where respondents were not available. Responses were received from 85-percent of properties along the corridor.
- On July 7, 2015, the SFMTA Board of Directors held a public hearing awarding the contract for the Project's construction services. Notification was emailed to 1,062 subscribers of the Project updates email list and posted to the Project website.
- On August 24, 2015, Public Works held a public hearing for the Project's tree removal permit. The notices for the hearing were posted on trees along Van Ness Avenue. A public notice was emailed to 1,062 subscribers of the Project updates email list and posted to the Project website.
- On October 21, 2015, the San Francisco Arts Commission held a Visual Arts Committee meeting to receive public comment on its Van Ness Public Art Proposal. The proposal was displayed in the San Francisco Public Library in September 2015, and notice of the exhibit and opportunity to provide public comment was emailed to 1,067 subscribers of the Project update email list and posted to the Project website. A *Moving SF* blog article was also published to promote the opportunity.
- On November 18, 2015, the Historic Preservation Commission held a hearing to grant the Project a Certificate of Appropriateness for Project work planned in the Civic Center Historic District. For the hearing, notification was mailed to 32 community groups in the Downtown

Civic Center and South of Market neighborhoods, as well as 1,425 properties within 300 feet of Van Ness Avenue from Golden Gate Avenue to Fell Street. Public notices were also posted on utility poles in this same area. A *Moving SF* blog article was also published about the hearing.

- Project staff met with groups representing the blind and low-vision community, including Lighthouse for the Blind, Independent Living Resource Center, the Mayor's Office on Disability, California Council for the Blind, San Francisco Unified School District and the SFMTA Multimodal Accessibility Advisory Committee to inform wayfinding design treatments.
- The SFMTA created a Van Ness Business Advisory Committee made up of representatives from a diverse cross-section of Van Ness Project Corridor businesses that meets on the third Thursday of each month to provide recommendations and advice on how staff can best work with local businesses during the construction and implementation of the Project. Committee applicants were recruited through a mailer to 1,159 Van Ness Avenue-facing businesses, an email to 1,087 subscribers of the Project updates email list, an update on the Project website, and a *Moving SF* blog article to promote the opportunity.
- In late 2015, a project newsletter was established to provide project updates to the community quarterly. The inaugural winter 2016 issue was emailed to 1,164 subscribers of the Project email update list, key stakeholders and community groups in Districts 2, 3, 5 and 6. The spring 2016 was mailed to 30,120 Project neighbors and emailed to 1,137 subscribers of the Project email update list, key stakeholders and community groups in Districts 2, 3, 5 and 6.
- The Project team facilitated the development of an informational Project video produced by SFGov TV, *What's Next SF? – BRT Muni* promoted with a *Moving SF* blog article.
- On March 2, 2016, the Project team hosted the first Van Ness Improvement Project Overview Walking Tour public engagement event attended by nearly 40 participants. The tour highlighted features of the Van Ness Improvement Project once completed and was promoted via email to subscribers of the Project updates email list and a *Moving SF* blog article reviewed the event.
- The Project team coordinated cross-project and interagency communications for joint messaging with outreach teams at SFMTA, Public Works and SFPUC.
- The Project team collaborated with adjacent project teams for Lombard and Polk streets.
- The Project team provided project updates to the Mayor's Office of Neighborhood Services (MONS) on near and long term activities that may be of concern to the community.
- Monthly project updates are sent to 1,128 email and text message subscribers.

ALTERNATIVES CONSIDERED

Should the SFMTA and Walsh had been unable to agree on a GMP, the alternative would have been to bid out the construction work to the lowest responsive and responsible bidder. This would not have been the preferred alternative, as another contractor would not be as familiar with the Project.

FUNDING IMPACT

The funding plan for the Project is provided in Enclosure 2.

ENVIRONMENTAL REVIEW

On May 15, 2012, the SFMTA Board of Directors adopted Resolution No. 12-070, selecting the Center-running BRT with Right Side Boarding Platforms Single Median and Limited Left Turns as the Locally Preferred Alternative (LPA) for the Van Ness Avenue BRT Project to be analyzed in the final EIS/EIR. Under this alignment of the Project, BRT lanes would flank the center median except at stations where the BRT vehicles would transition to the center of the roadway and be protected by right side boarding platforms. This alignment would also eliminate all left turns from Van Ness Avenue between Mission and Lombard streets, with the exception of a two-lane left turn onto Broadway from southbound Van Ness, in order to gain the most transit travel time benefits.

On September 10, 2013, the Transportation Authority, as lead agency under CEQA, certified the Final EIS/EIR for the Project under Resolution 14-18, adopted CEQA Findings and a Statement of Overriding Considerations, adopted the Mitigation Monitoring and Reporting Plan, and approved the Locally Preferred Alternative (LPA). The certification of the Final EIS/EIR included incorporating the Vallejo Northbound Station Variant into the Project.

On September 17, 2013, the SFMTA Board of Directors, acting in the capacity as a responsible agency under CEQA, adopted Resolution No. 13-214, approving the Van Ness BRT Project, analyzed as the LPA in the Final EIS/EIR, including an amendment to include the Vallejo Northbound Station Variant in the approval of the LPA. As part of the resolution, the Board also adopted the CEQA Findings, a Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan for the EIS/EIR and authorized the Director of Transportation to direct staff to continue with obtaining the necessary approvals to implement the Van Ness BRT Project.

On December 20, 2013, the Federal Transit Administration issued a Record of Decision (ROD) for the Project, determining that the requirements of the National Environmental Policy Act have been met through the Final Environmental Impact Statement document and process.

Since the adoption of CEQA Findings and the approval of the Van Ness BRT Project, the Transportation Authority has prepared a memo to file dated July 15, 2014, titled "Van Ness Avenue Bus Rapid Transit Project – Environmental Compliance for the Proposed Parking Removal from Conceptual Engineering Report" (Memo to File), which concludes that the removal of eleven parking spaces more than assumed in the Van Ness BRT Project Final EIS/EIR, as proposed by SFMTA in the Conceptual Engineering Report, will not result in a new significant environmental impact due to parking loss.

Based on its review and consideration of the information contained in the Van Ness BRT Final EIS/EIR, the SFMTA Board found, on July 7, 2015, under Resolution No. 15-108, that the proposed actions to remove parking spaces are within the scope of the Van Ness BRT Project Final EIS/EIR, and that no additional environmental review is required under Public Resources Code section 21166. https://www.sfmta.com/sites/default/files/agendaitems/2015/7-7-15%20Item%2012%20Contract%20Award%20-%20Van%20Ness%20BRT%20CMGC%20Resolution.pdf

On March 4, 2016, the SFCTA issued an "Addendum to Environmental Impact Report" for the Van Ness BRT Project, which concludes that removal and replacement of various trees along the Van Ness corridor not previously identified in the Van Ness BRT Project Final EIS/EIR would not result in a

new significant environmental impact.

Based on its review of the Addendum, the SFMTA Board found, on April 5, 2016, under Resolution No. 16-044, that proposed actions to remove and replace trees, as outlined in the Addendum, are within the scope of the Van Ness BRT Project Final EIS/EIR and that no additional environmental review is required under Public Resources Code section 21166.
https://www.sfmta.com/sites/default/files/agendaitems/2016/4-5-16%20Item%2016%20Revenue%20Bond%20-%20Resolution.pdf

The proposed Modification is within the scope of the Van Ness BRT Project Final EIS/EIR.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

No other approvals are required for this amendment.

Two fund sources identified in Enclosure 2 (Active Transportation Program and State Highway Operation and Protection Program) require approval from the California Transportation Commission prior to execution of this contact amendment. The project must receive an encroachment permit from Caltrans prior to start of construction.

The Contract Compliance Office has established SBE goals for each of the core subcontracts packages:

Paving	25%
Overhead Contact System	20%
Traffic Control	10%

The Contract Compliance Office will work with Walsh to establish SBE goals for each of the trade packages to be competitively bid.

The City Attorney's Office has reviewed this Calendar Item.

RECOMMENDATION

Staff recommends that the SFMTA Board of Directors authorize the Director of Transportation to execute the First Amendment to San Francisco Municipal Transportation Agency Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC, for Phase 2 (construction services), increasing the contract amount by $193,027,555 for the Phase 2 work, for a total contract amount of $193,827,555, and for an overall contract term not to exceed five years.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, The goals of the Van Ness Bus Rapid Transit Project are robust and stable ridership, efficient, effective and equitable transit service, neighborhood livability and community vitality, and links to a citywide rapid transit network; and,

WHEREAS, On May 15, 2012, the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors adopted Resolution No. 12-070, which identified and endorsed the Locally Approved Alternative (LPA) for the Van Ness Avenue Bus Rapid Transit Project, "The Center-running BRT with Right Side Boarding Platforms Single Median and Limited Left Turns," for further analysis in the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR); and,

WHEREAS, The San Francisco County Transportation Authority (SFCTA) Board certified the EIS/EIR, including an amendment to include the Vallejo Northbound Station Variant as adequate, accurate and objective and reflecting the independent judgment of the SFCTA on September 10, 2013; and,

WHEREAS, On September 17, 2013, the SFMTA Board of Directors adopted Resolution No. 13-214, approving the Van Ness Avenue Bus Rapid Transit Project, analyzed as the Locally Preferred Alternative in the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Project, including an amendment to include the Vallejo Northbound Station Variant in the approval of the LPA, and adopted the CEQA Findings and Statement of Overriding Considerations for the EIS/EIR; and,

WHEREAS, Since the adoption of CEQA Findings and the approval of the Van Ness BRT Project, the SFCTA has prepared a memo to file dated July 15, 2014, titled "Van Ness Avenue Bus Rapid Transit Project – Environmental Compliance for the Proposed Parking Removal from Conceptual Engineering Report" (Memo to File), which concludes that the removal of eleven parking spaces more than assumed in the Van Ness BRT Project Final EIS/EIR, as proposed by SFMTA in its Conceptual Engineering Report, will not result in a new significant environmental impact due to parking loss; and

WHEREAS, On March 4, 2016, the SFCTA issued an "Addendum to Environmental Impact Report" for the Van Ness BRT Project (Addendum), which concludes that removal and replacement of various trees along the Van Ness corridor not previously identified in the Van Ness BRT Project Final EIS/EIR would not result in a new significant environmental impact; and,

WHEREAS, Based on its review and consideration of the information contained in the Van Ness BRT Final EIS/EIR, the SFMTA Board found, on July 7, 2015, under Resolution No. 15-108, that the proposed actions to remove parking spaces are within the scope of the Van Ness BRT Project Final EIS/EIR, and that no additional environmental review is required under Public Resources Code section 21166; and,

WHEREAS, Based on its review of the Addendum, the SFMTA Board found, on April 5, 2016, under Resolution No. 16-044, that proposed actions to remove and replace trees, as outlined in the Addendum, are within the scope of the Van Ness BRT Project Final EIS/EIR and that no additional environmental review is required under Public Resources Code section 21166; and

WHEREAS, Hereinafter, the Van Ness BRT Project Final EIS/EIR, including the Memo to File and Addendum, shall be collectively referred to as the "Van Ness BRT Project Final EIS/EIR"; and

WHEREAS, The Project files, including the Final EIS/EIR and SFMTA Resolution No. 13- 214, have been made available for review by the SFMTA and the public, and those files are part of the record before this Board; and,

WHEREAS, The SFMTA Board has reviewed and considered the information contained in the Van Ness BRT Project Final EIS/EIR, and based on such review, the SFMTA Board finds that the proposed actions for approval are within the scope of the Van Ness BRT Project Final EIS/EIR and that no additional environmental review is required under Public Resources Code section 21166; and

WHEREAS, On October 7, 2014, the SFMTA Board of Directors adopted Resolution No. 14- 147, which authorized the SFMTA to use a Construction Manager/General Contractor (CM/GC) project delivery method for the Van Ness BRT Project; and

WHEREAS, On December 9, 2014, the Board of Supervisors approved Ordinance No. 255- 14, enabling the SFMTA to proceed with a CM/GC implementation for the Van Ness BRT Project, to include the CM/GC and a team of Core Subcontractors in the following trades: paving, overhead contact system, sewer and water main replacement, and traffic control; and

WHEREAS, The Agency advertised an Request for Proposals (RFP) for the CM/GC contract on January 16, 2015, and received two proposals in response to the RFP on March 19, 2015, from Walsh Construction and Van Ness Corridor Constructors, a joint venture between Stacy Witbeck and Shimmick Construction; and

WHEREAS, On July 7, 2015, the Municipal Transportation Agency Board of Directors awarded Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC, for Phase 1 (pre-construction services), for a target duration of 300 calendar days, and in an amount not to exceed $800,000 ; now, therefore, be it

RESOLVED, That the SFMTA Board has reviewed and considered the Van Ness BRT Project Final EIS/EIR and record as a whole, finds that the Van Ness BRT Project Final EIS/EIR is adequate for the Board's use as the decision-making body for the actions taken herein relative to construction of the Project, and incorporates the CEQA findings contained in SFMTA Board Resolution No. 13-214, No. 15-108 (with respect to deletion of parking spaces), and No. 16-044 (with respect to the removal and replacement of trees) by this reference as though set forth in this Resolution; and be it

FURTHER RESOLVED, That the SFMTA Board further finds that since the Van Ness BRT Project Final EIS/EIR was finalized, there have been no substantial project changes and no substantial changes in project circumstances that would require major revisions to said Final EIS/EIR due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the Van Ness BRT FEIR; and be it

FURTHER RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Amendment #1 to San Francisco Municipal Transportation Agency Contract No. 1289, Van Ness Corridor Transit Improvement Project, with Walsh Construction Company II, LLC, for Phase 2 construction services, increasing the contract amount by $193,027,555 for the Phase 2 work, for a total contract amount of $193,827,555, and for an overall contract term not to exceed five years.

I certify that the foregoing resolution was adopted by the Municipal Transportation Agency Board of Directors at its meeting of August 16, 2016.

_____
Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

Enclosure 2

Project Budget and Funding Plan

Project Budget (by Type of Work)	Amount
Core Bus Rapid Transit (BRT)	$185.5 M
Water Line Replacement	$26.8 M
Sewer Replacement	$20.6 M
SFGo Traffic Signals	$24.6 M
Muni Forward	$4.3 M
Emergency Firefighting System Replacement	$6.2 M
Bus Procurement	$4.0 M
Bus Power Overhead Contact System and Pole Replacement	$30.3 M
Lighting Replacement	$13.0 M
Green Infrastructure	$1.2 M
Total	**$316.4 M**

Project Budget (by Phase)	Amount
Environmental	$6.0 M
Conceptual Engineering	$8.9 M
Detailed Design	$15.9 M
Construction	$281.7 M
Total	**$316.4 M**

Funding Sources	Amount
FTA 5309 Small Starts	$74,999,999
Active Transportation Program	$4,058,000
California Pacific Medical Center Contribution	$5,000,000
Central Freeway Parcel Revenues	$12,654,135
FTA 5307 Formula Funds	$3,980,000
FTA 5309 State of Good Repair Funds	$23,871,440
FTA Congestion Mitigation and Air Quality	$20,000,000
PPM: Planning, Programming and Monitoring funds	$197,907
Prop B Population based General Fund Set Aside	$8,134,232
Prop K Sales Tax	$44,898,444
PUC Local Funds	$61,543,618
SFMTA Series 2013 Revenue Bonds	$1,765,751
SFMTA Series 2016 Revenue Bonds	$48,000,000
State Highway Operation and Protection Program (SHOPP)	$7,304,868
TOTAL	**$316,408,394**

Modification No. 1 to
Agreement for CM/GC Pre-Construction Services
for the Van Ness Corridor Transit Improvement Project

Contract No. 1289
CCO 15-1331

This Modification No. 1 to Agreement for CM/GC Pre-Construction Services for the Van Ness Corridor Transit Improvement Project is made this _____ day of _____, 2016, in the City and County of San Francisco, State of California, by and between: Walsh Construction Company II, LLC, 929 W. Adams, Chicago, IL 60607 (Contractor or CM/GC), and the City and County of San Francisco, a municipal corporation (City), acting by and through its Municipal Transportation Agency (SFMTA).

RECITALS

A. On or about July 10, 2015, the City entered into a Pre-Construction Services Agreement (P-CS Agreement) with Contractor for Phase 1 of the Van Ness Transit Improvement Project (Project).

B. Phase 1 has been substantially completed, and the SFMTA and Contractor have negotiated a modification to the P-CS Agreement for Phase 2 construction services (Modification). The P-CS Agreement, as modified, shall be referred to as "Agreement".

C. The SFMTA and Contractor have negotiated a Guaranteed Maximum Price (GMP), which will cover all Work under Phase 2 of the Contract. Because the parties have been unable to agree on a price for the core sewer and water Work (SFPUC Work), the CM/GC will bid out such work.

Modification

1 PC-S Agreement Provisions to Remain in Effect

Unless otherwise indicated or expressly modified by this Modification, the provisions of the PC-S Agreement, including the FTA Provisions (Exhibit C) and the SBE Program (Exhibit D) shall remain in effect. To the extent there is a conflict between the FTA Provisions and any other provision of the P-CS Agreement, the FTA Provisions shall control.

2 **Definitions**. The PC-S Agreement is modified to add or amend the following definitions as follows:

2.1 **Core Subcontractors:** Subcontractors that are part of the CM/GC & CS Team in the following trades: paving, overhead contact system, traffic signals and street lighting, and traffic control.

2.2 **Core Work**: The Work designated as Core Work on Attachment 2 (Schedule of Pay Items) of the Agreement.

2.3 **Non-Core Work**: The Work on Attachment 2 not designated as Core Work.

2.4 **Unit Price Items**. Pay Items SR-1 through SR-4 and GC-2 on Attachment 2.

3 Scope of Services

The scope of services of Phase 2 of the Project is the construction of the Project, as described more fully in the General Provisions (Attachment 6), the Special Provisions (Attachment 3), and the Technical Specifications (Attachment 5). To the extent there is a conflict between the Special Provisions and the Technical Specifications, the Special Provisions shall control.

4 Modification Provisions

The Contract Documents listed below are incorporated into the Contract by reference, and are in descending order of precedance. Subject to Section 1, any conflict between or among any of the documents shall be resolved in favor of the document with the higher precedence. Contractor and its Subcontractors shall comply fully with all Contract Documents, including all Attachments to this Modification.

4.1 This Modification, including all Attachments (Attachments 2 through 6 are listed in descending order of precedence);

4.2 PC-S Agreement provisions;

4.3 Addenda to RFP;

4.4 RFP;

4.5 Contractor's Proposal to the RFP.

5 Construction Tasks

The following pre-construction Task Order deliverables must be finalized and approved by the SFMTA prior to commencement of actual construction, but may be subject to modification during Phase 2.

5.1 Construction Plan

5.2 Supplemental Archaeological Mitigation Plan

5.3 Recycling Plan

5.4 Contracting Plan (including SBE Contracting Plan)

5.5 Baseline CPM Schedule

5.6 Safety Plan

5.7 Quality Assurance Process/Quality Control Plan

5.8 HazMat Plan

5.9 Workforce Development Plan

5.10 Stormwater Plan

5.11 Safety Certification Plan

5.12 Risk Management Plan

6 Contracting Plan

6.1 **Essential Element of Work**. The Contracting Plan referred to in Section 5.5 above is an essential element of the Work under this Contract. All construction trade work shall be performed in accordance with the Contracting Plan after its approval by the SFMTA. No changes shall be made in the Contracting Plan or in the method of procurement or performance of the construction trade work without the written approval of SFMTA's Program Manager. In particular, the trade work package component of the Contracting Plan shall be subject to the SFMTA's

written approval. Any breach of this provision shall be considered a material breach of this Contract.

6.2 Bidding of Subcontractor Packages

6.2.1 Compliance with Contracting Plan and FTA Requirements. In compliance with the Contracting Plan, Contractor shall bid out all construction trade Work that is Non-Core Work, in compliance with SFMTA procedures and FTA procurement requirements applicable to responsive and responsible low, sealed bid contracting (see Attachment 1). See, e.g., FTA Circular 4220.1F (Third Party Contracting Guidance). **Since the Project will be funded with FTA grants, compliance with FTA requirements is also a material provision of this Contract.**

6.2.2 Non-Core Work Bid Packages. The SFMTA will oversee/monitor all sealed bid processes and must approve all Non-Core Work Bid packages and bidding procedures throughout Phase 2. Such Bid packages shall include standard contract documents, bidding information, bidding forms, specific General Provisions, Special Provisions, pass-through clauses, and bid schedules. Unless otherwise authorized by the SFMTA Contract Administrator, Contractor shall not submit to the SFMTA for review more than two bid packages a week. The CM/GC shall manage the master Project CPM schedule (referenced in Section 5.6 above) for inclusion in every Bid package, and shall include in the Bid package that portion or subset of the master Project schedule that applies to that trade in order to provide updated monthly construction schedules. The CM/GC shall identify and incorporate any supplemental provisions (with the SFMTA's participation and approval) that address the Non-Core trade Subcontracts, schedule for trade Subcontracts and the responsibilities of all Subcontractors. The CM/GC shall be responsible for ensuring completion of any scope of Work that the CM/GC neglects or fails to include in the Bid packages. Preparation of the Bid packages shall include, but not be limited to, the following tasks:

(a) Preparation of the engineer's estimate for each Bid package;

(b) Prequalifying or preparing minimum qualifications for various specialty trades, where required, including first finalizing proper prequalification criteria/documents for SFMTA's review and approval;

(c) Advertising for Bid all Bid packages, including outreach to SBEs and other trade contractors to engender interest in order to obtain multiple bids for each package;

(d) Assembling and reproducing Bid packages for distribution (all costs borne by CM/GC);

(e) Conducting pre-bid conferences for all Bid packages;

(f) Conducting pre-bid site visits;

(g) Resolving and responding to questions from prospective Bidders;

(h) Preparing and issuing all necessary Addenda;

(i) Conducting public bid openings for all Bid packages;

(j) Responding to all Bid protests;

(k) Preparing Bid analyses, including responsiveness verification, cost/price analysis, and verification of Subcontractor responsibility, as required by FTA;

(l) Subject to SFMTA review and approval, notifying Bidders of results of solicitation and awarding contract(s) to lowest responsive and responsible Bidders; or rebidding, as appropriate;

(m) Entering into contracts with all first tier subcontractors and suppliers awarded the work.

(n) Serving as general (prime) contractor from award of the contract to closeout of contract

(o) Manage, coordinate, and supervise all construction work.

7 Guaranteed Maximum Price (GMP)

Contractor agrees to a GMP not to exceed Two Hundred Three Million, Ninety-Two Thousand, Three Hundred Forty-Two Dollars ($193,827,555) for all Work under Phase 2 of the Contract. The GMP shall consist of the following:

Reimbursable Costs (including Allowances)	$180,159,246
Fixed Fee	**$** 12,868,309*
Total	$193,027,555

See Attachment 2 (Schedule of Pay Items), including Exhibit A (back-up) for a detailed breakdown of the GMP. All Pay Items identified as Core Work and the Fixed Fee have been fully negotiated for the assigned scope of work and shall not be subject to change except pursuant to General Provisions Article 6.

*Modifying Section 5.3 of the Pre-CS Agreement

All Pay Items identified as Non-Core Work represent the CM/GC's estimate for such Work. Subject to Section 7.1 below, all of these Pay Items will be updated to reflect Bids received for the Work.

7.1 Non-Core Work Bid Packages.

7.1.1 Should the aggregate Bid prices for the Non-Core Work Bid packages equal or exceed the CM/GC's estimate for such Work ($37,708,152), the excess amount shall not change the GMP.

7.1.2 Should the aggregate Bid prices of the Non-Core Work trade packages be less than the CM/GC's estimate for such Work, the difference between the aggregate Bid prices and the CM/GC's estimate shall be distributed as follows:

(a) Any of the difference resulting from lower Bids for Water Non-Core Work shall be placed in Pay Item G-WD (Water Department Contingency), which may be used for Change Order Work that exceeds the amount of the G-09 Contract Allowance.

(b) Forty-five percent of any of the difference resulting from lower Bids for Sewer Non-Core Work shall be placed in Pay Item G-SWCont (Sewer Contingency), which may be used for Change Order Work that exceeds the amount of the G-04 Contract Allowance.

(c) Any difference resulting from lower Bids for other than Water or Sewer Non-Core Work, plus 55 percent of the difference resulting from lower Bids for Sewer Non-Core Work, shall be placed in Pay Item G-Cont (SFMTA Contingency), which may be used for Change Order Work that exceeds the amount of the non-Water and Sewer Contract Allowances.

(d) Pay Items G-WD and G-SWCont may be used by the Contractor to cover Bids received for Water Non-Core Work and/or Sewer Non-Core Work to the extent that the succesful Bid(s) for any such Work are in excess of the amounts listed for such Work in Attachment 2, up to a maximum of $2,450,000.

(e) At Final Completion of the Work, any amount remaining in the SFMTA Contingency shall be placed in Pay Item G-Incentive, to be distributed to the Contractor in the event of Substantial Completion prior to the number of Days specified in the Special Provisions (Early Completion), as they may be extended to Owner-initiated Change Order Work. The Incentives will be earned as follows:

(i) $50,000 for each Day of Early Completion.

(ii) The total incentive payment shall not exceed the lower of the amount remaining in the SFMTA Contingency or $2,000,000.

7.2 Acceptance of Contract Documents; Change Orders. The Contractor agrees that it has reviewed and accepted the above-referenced Contract Documents as complete. The Contractor has no right to any Change Orders for schedule relief, extra work or other costs of any kind (including, without limitation, direct and indirect costs, delay and disruption damages, overhead, profit or mark-up) resulting from conflicts, ambiguities, errors or omissions in the Contract Documents that should reasonably have been part of a constructability review during Phase 1 of the Project, where the Contractor failed to recommend alternative solutions during Phase 1, as required in the PC-S Agreement. Contractor may be entitled to change orders for schedule relief, extra work or other costs (including, without limitation, direct and indirect costs, delay and disruption damages, overhead, profit or Mark-Up) in the event the SFMTA received, and chose not to follow, the Contractor's recommendations regarding alternative design solutions during the Phase 1 of the Project where design details have affected construction feasibility, schedule or cost.

8 Reimbursable Costs

8.1 Construction Trade Costs. Reimbursable Costs include the costs for all construction trade Work performed by the CMGC and its Subcontractors.

8.2 General Conditions Costs. Reimbursable Costs include the costs for the General Conditions. The General Conditions include compliance with all requirements of the General Provisions and Division 1 of the Technical Specifications, and include, but are not limited to, the following:

8.2.1 Individual gross salaries plus cost of fringe benefits;

8.2.2 Safety, including awards, training, lunches, any drug and alcohol testing, first aid and temporary fire protection costs;

8.2.3 Bond premiums; insurance premiums; payroll taxes; payroll-based insurance premiums; costs of any CCIP;

8.2.4 Field office facilities and related appurtenances such as structures (shacks, offices, pedestrian walkways), utilities, furnishings and necessary janitorial and security services, field office supplies;

8.2.5 Costs for storage of materials, on- and off-site, as approved by SFMTA;

8.2.6 Procurement of non-core Subcontractors, including packaging of Bid Documents;

8.2.7 All administrative costs of the CM/GC in managing the Contract;

8.2.8 Any costs borne by a general contractor under a traditional design-bid-build contract (such costs shall not be assigned to Subcontractors under this Contract).

9 Fixed Fee

9.1 SFMTA agrees to pay the Contractor a lump sum Fixed Fee, as set forth above. Profit on Allowances is not included in the Fixed Fee. Except for any approved Change Orders, the Fixed Fee will not change.

9.2 Costs Included in the Fixed Fee: The Fixed Fee shall be the Contractor's sole compensation for profit and costs itemized in Section 5.3 of the P-CS Agreement.

10 Construction Management Trainee Program

10.1 The intent of this Program is to provide technical training and job opportunities in a construction office environment for economically disadvantaged individuals as on-the-job trainees. These training opportunities will be executed throughout the Term of this Contract. In hiring prospective trainees, the Contractor shall comply with the non-discrimination provisions of Section 15.02 of the General Provisions.

10.2 Trainees shall be obtained through the designated community based organizations (CBOs) and other similar employment and training agencies. Outreach should be done to include individuals from the communities surrounding the Project, in as much as these communities will be impacted by the construction activities of the Project. CBOs that are working with public agencies have job readiness programs designed to teach applicants how to meet the pre-requisites of potential job opportunities on construction projects. A list of CBOs may be obtained from SFMTA.

10.3 The Construction Management Trainee Program will consist of at least 50,000 hours of on-the-job training, which shall be implemented by the Contractor. These individuals will be hired as regular employees of the

firm(s) and shall receive any benefits that they may be entitled to under State labor laws.

10.4 The trainee must be hired in a non-trade professional construction management or meaningful construction management support position in areas such as the following:

10.4.1 Project Management

10.4.2 Construction Management

10.4.3 Scheduling

10.4.4 Cost Estimating

10.4.5 Quality Control

10.4.6 Project Engineer

10.4.7 Field Engineer

10.4.8 Office Administration

For all positions above, with the exception of Office Administration, no more than 30 percent of trainee time should be spent on clerical work.

10.5 No existing employee may be counted towards meeting the trainee goal. However, the new trainees can be part of the pool of new employees that the Contractor may have to hire anyway for a new project of this magnitude and therefore need not be an "extra" cost to the Contractor or to the City.

10.6 The Contractor may satisfy the above 50,000 trainee hours through other projects it has in the San Francisco Bay Area within three years after the of the Notice to Proceed.

10.7 The Contractor is responsible for providing On-The-Job Training (OJT). The Contractor shall hire the trainee on a full-time basis for at least 12 months or on a part-time basis for 24 months, offering him/her OJT, which allows the trainee to progress on a career path. The Contractor may hire the trainee(s) for the Term of the Contract.

10.8 The Contractor should submit for approval a job description to SFMTA and summary of the training program for each trainee, with the proposed rate of pay (commensurate with the job requirements).

10.9 The trainee shall be a socially and economically disadvantaged individual who:

10.9.1 Is unemployed, has a history of unemployment, or who is currently in a job training program; and

10.9.2 Will receive training in a non-trade discipline associated with the construction industry.

The term "socially and economically disadvantaged individual" shall have same meaning as the term is defined in 49 CFR Section 26.5.

10.10 The Contractor shall provide additional office equipment (i.e., computers, desks and chairs) for trainees. The Contractor shall provide travel costs if the individual has to travel 50 miles or more to get to the job.

10.11 The Contractor shall design a training program specifically for the trainee. The program shall include, but not be limited to company's personnel policy procedures manual, benefit package and OJT duties and

responsibilities. Construction Management trainees are not permitted to work in a trade position.

10.12 The Contractor shall provide SFMTA within 30 Working Days of Award of the Contract the following information in order to expedite time in securing the appropriate person to participate during the Project:

10.12.1 Indicate number of trainees to be hired. The hiring of trainees can be phased in over a period of time.

10.12.2 Provide the name and telephone number of Contractor's contact person.

10.12.3 The Contractor shall provide a job description used to recruit the trainee(s).

10.12.4 A college degree is not a requirement for a trainee and the job description should so indicate.

10.13 The Contractor shall submit to SFMTA on a monthly basis a Workforce Information Report regarding the status of the trainees.

10.14 SFMTA's Contract Compliance Office will monitor the contract trainee requirements for compliance.

10.15 The Contractor agrees that the City may withhold pending and future progress payments should the Contractor not demonstrate good faith efforts toward satisfying the required number of trainee hours.

11 SBE Trucking Set-Aside Requirement

11.1 In addition to the SBE participation goal established for this Contract, the Contractor shall set aside to certified SBE trucking firm(s) the performance of 100 percent of the trucking/hauling Work to off-haul and dispose Materials from the Project limits.

11.2 An SBE is a for-profit, small business concern with a three-year average gross revenue not exceeding $12 million and is certified under any of the following programs: the State of California's Small Business Program, the City and County of San Francisco's LBE Program, or the Federal DBE Program (see the SFMTA SBE Program).

11.3 The Contractor shall provide to SFMTA a monthly report demonstrating its compliance with the set-aside requirements. The Contractor shall comply with the SFMTA's requests for additional information or documentation to verify compliance.

11.4 The SFMTA will monitor and enforce the SBE trucking set-aside requirements in accordance with the provisions of the SBE Program included in the Contract Documents. Failure to comply with the set-aside requirements in good faith may subject Contractor to the enforcement mechanisms provided for in the SBE Program. Refer to Part One, Sec. IV.C.6 of the SBE Program.

IN WITNESS WHEREOF, the parties hereto have executed this Modification on the day first mentioned above.

CITY	CONTRACTOR
San Francisco Municipal Transportation Agency	Walsh Construction Company II, LLC
_____ Edward D. Reiskin Director of Transportation	_____ Authorized Signature
SFMTA Board of Directors Resolution No. _____	Sean C. Walsh_____ Printed Name
Dated: _____	President_____ Title
Attest:	Address: 1390 Willow Pass Road, Suite 950 Concord, CA 94520
_____ Secretary	City Vendor ID No.: 97753
Approved as to Form:	Federal Employee ID No: 27-0887958
Dennis J. Herrera City Attorney	
By _____ Robin M. Reitzes Deputy City Attorney	

ACKNOWLEDGEMENT OF LARGE VEHICLE DRIVER SAFETY TRAINING REQUIREMENTS

I acknowledge that I have read and understand GP Section 12.06: Large Vehicle Driver Safety Training Requirements.

I agree that, before any of the Contractor's employees or Subcontractors drive large vehicles within the City of San Francisco, these employees and Subcontractors will successfully complete either (a) the

SFMTA's "Large Vehicle Urban Driving Safety" training program or (b) a training program that meets the SFMTA's approved standards for large vehicle urban driving safety. I understand that this requirement does not apply to drivers providing delivery services who are not employees or Subcontractors of the Contractor. For purposes of this section, I understand that "large vehicle" means any single vehicle or combination of vehicle and trailer with an unladen weight of 10,000 lbs or more, or a van designed to carry 10 or more people.

Signature: _____

Date: _____

Attachments

1. SFMTA Policies and Procedures Manual for Federally Assisted Procurements
2. Schedule of Pay Items, including Exhibit A (back-up)
3. Special Provisions, including Exhibit A
4. List of Final Drawings (drawings in separate volume)
5. Technical Specifications
6. General Provisions

ATTACHMENT 2
Schedule of Pay Items

VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

CONTRACT NO. 1289

PAY ITEM GROUPS	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL
ALLOWANCES					
G-02	Allowance for Differing Site Conditions	AL	--	--	$1,755,000
G-03	Allowance for Reimbursable Expenses	AL	--	--	$1,750,000
G-04	Allowance for Unforeseen Sewer Work	AL	--	--	$325,000
G-05	Allowance for Unforeseen Overhead Contact System Work	AL	--	--	$300,000
G-06	Allowance for Unforeseen Traction Power Work	AL	--	--	$100,000
G-07	Allowance for Unforeseen Electrical and Communication Work	AL	--	--	$180,000
G-08	Allowance for Unforeseen Landscape Architecture/Green Infrastructure Work	AL	--	--	$80,000
G-09	Allowance for Unforeseen Water Work	AL	--	--	$200,000
G-09A	Allowance for Additional Excavation and Backfill	AL	--	--	$123,200
G-09B	Allowance for Trench Shoring and Bracing per all Applicable Safety Orders	AL	--	--	$330,000
G-09C	Allowance for Repair and Replacement of Side Sewers for Water Work	AL	--	--	$122,000
G-10	Allowance for Unforeseen Structural Work	AL	--	--	$15,000
G-11	Allowance for Unforeseen AWSS Work	AL	--	--	$300,000
G-12	Allowance for Work Related to Hazardous Material	AL	--	--	$0
G-13	Allowance for Unforeseen Archaeological Conditions	AL	--	--	$100,000

PAY ITEM GROUPS	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL
G-14	Allowance for Conducting a Nesting Habitat Survey	AL	--	--	$50,000
G-15	Allowance for Scheduler Services	AL	--	--	$270,000
G-16	Allowance for Community Relations Support	AL	--	--	$985,000
G-17	Allowance for Off-Duty SFPD Officers	AL	--	--	$2,000,000
G-18	Allowance for Traffic Control Crews & Supervisors, and Signal Persons	AL	--	--	$500,000
G-19	Allowance for Special Inspections and Testing Agencies	AL	--	--	$100,000
G-20	Allowance for Agency's Share of Partnering Costs	AL	--	--	$150,000
G-21	Allowance for Traffic Control Plans	AL	--	--	$2,000,000
G-22	Allowance for Furnish Tyton Joint Fittings, Mechanical Joint Fittings And All Gaskets	AL	--	--	$0
G-23	Allowance for Additional Materials	AL	--	--	$0
G-WD	Water Department Contingency	AL	--	--	$1,000,000
G-SWCont	Sewer Contingency	AL	--	--	$1,500,000
G-Cont	SFMTA Contingency	AL	--	--	$0
G-Incentive	Schedule Incentive	AL	--	--	$0
PAY ITEM GROUPS	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL
SUBTOTAL					$14,235,200
CORE WORK					
MOB	MOBILIZATION CORE	LS	--	--	$13,297,061
QC/QA	Project QA/QC CORE	LS	--	--	$6,023,200
SR - 2	Handling, Treatment, and Disposal California Class I (Non-RCRA) Hazardous Waste	TN	14,563	$74.61	$1,086,545
SR - 4	Handling, Treatment, and Disposal of California Class II Non-Hazardous Waste	TN	31,295	$51.16	$1,601,052
CV	CIVIL CORE (CV-10, CV-13 and CV-14)	LS	--	--	$7,362,572
RD	ROADWAY CORE	LS	--	--	$22,436,007
SL	STREETLIGHT CORE	LS	--	--	$4,512,345
TP	TRACTION POWER CORE	LS	--	--	$4,971,697
DB	DUCTBANK CORE	LS	--	--	$3,184,113

PAY ITEM GROUPS	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL
CN	COMMUNICATIONS CORE	LS	--	--	$3,062,597
OV	OCS CORE	LS	--	--	$19,691,805
ET	TRAFFIC SIGNAL CORE	LS	--	--	$7,820,545
TR	TRAFFIC CONTROL/TEMP STRIPING CORE	LS	--	--	$16,046,885
SUBTOTAL					**$111,096,424**
NON - CORE					
CV	CIVIL NON-CORE (CV-1 thru CV-9, CV-11 and CV-12)	LS	--	--	$1,881,751
SR - 1	Transportation of California Class I (non- RCRA) Hazardous Waste for Disposal	TN	14,563	$75.25	$1,095,866
PAY ITEM GROUPS	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITIES	UNIT PRICE	TOTAL
SR - 3	Transportation of California Class II Non-Hazardous Waste	TN	31,295	$21.50	$672,843
AR	ARCHITECTURE NON - CORE	LS	--	--	$3,038,935
LA	LANDSCAPE NON - CORE	LS	--	--	$10,259,979
ST	STRUCTURAL NON - CORE	LS	--	--	$150,981
SW	SEWER NON - CORE	LS	--	--	$10,664,185
WD	WATER NON - CORE	LS	--	--	$4,606,270
GI	GREEN INFRASTRUCTURE NON - CORE	LS	--	--	$472,753
MA	AWSS NON - CORE	LS	--	--	$3,014,162
DE	DELETABLE BID ITEMS NON - CORE	LS	--	--	$1,850,427
SUBTOTAL					$37,708,152
General Conditions					
GC-1	GENERAL CONDITIONS (LS)	LS	--	--	$2,402,551
GC-2	GENERAL CONDITIONS (MO)	MO	36	$408,803.29	$14,716,918
SUBTOTAL					**$17,119,469**
SUB TOTAL					**$180,159,246**
Fixed Fee					
FF	FIXED FEE	LS	--	--	$12,868,309
TOTAL					**$193,027,555**

VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

CONTRACT NO. 1289

Back-up to Schedule of Pay Items

Note: CY = Cubic Yard, EA = Each, F - Final Pay Quantity, LF = Linear Feet, LS = Lump Sum, US Ton = U.S. Ton, SF = Square Foot, DAY = Day, AL = Allowance

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
1	**G-01**	Mobilization and Demobilization	--	LS	--	$13,297,061	$13,297,061
1A	**G-01A**	Project QA/QC	--	LS	--	$6,023,200	$6,023,200
2	**G-02**	Allowance for Differing Site Conditions	--	AL	--	$1,755,000	
3	**G-03**	Allowance for Reimbursable Expenses	--	AL	--	$1,750,000	
4	**G-04**	Allowance for Unforeseen Sewer Work	--	AL	--	$325,000	
5	**G-05**	Allowance for Unforeseen Overhead Contact System Work	--	AL	--	$300,000	
6	**G-06**	Allowance for Unforeseen Traction Power Work	--	AL	--	$100,000	
7	**G-07**	Allowance for Unforeseen Electrical and Communication Work	--	AL	--	$180,000	
8	**G-08**	Allowance for Unforeseen Landscape Architecture/Green Infrastructure Work	--	AL	--	$80,000	
9	**G-09**	Allowance for Unforeseen Water Work	--	AL	--	$200,000	
9A	**G-09A**	Additional Excavation and Backfill	--	AL	--	$123,200	
9B	**G-09B**	Trench Shoring and Bracing per all Applicable Safety Orders	--	AL	--	$330,000	
9C	**G-09C**	Repair and Replacement of Side Sewers for Water Work	--	AL	--	$122,000	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
10	**G-10**	Allowance for Unforeseen Structural Work	--	AL	--	$15,000	
11	**G-11**	Allowance for Unforeseen AWSS Work	--	AL	--	$300,000	
12	**G-12**	Allowance for Work Related to Hazardous Material	--	AL	--	$0	
13	**G-13**	Allowance for Unforeseen Archaeological Conditions	--	AL	--	$100,000	
14	**G-14**	Allowance for Conducting a Nesting Habitat Survey	--	AL	--	$50,000	
15	**G-15**	Allowance for Scheduler Services	--	AL	--	$270,000	
16	**G-16**	Allowance for Community Relations Support	--	AL	--	$985,000	
17	**G-17**	Allowance for Off-Duty SFPD Officers	--	AL	--	$2,000,000	
18	**G-18**	Allowance for Traffic Control Crews & Supervisors, and Signal Persons	--	AL	--	$500,000	
19	**G-19**	Allowance for Special Inspections and Testing Agencies	--	AL	--	$100,000	
20	**G-20**	Allowance for Agency's Share of Partnering Costs	--	AL	--	$150,000	
20-1	**G-21**	Allowance for Traffic Control Plans	--	AL	--	$2,000,000	
G-Alow	**WD-20**	Furnish Tyton Joint Fittings, Mechanical Joint Fittings And All Gaskets	--	AL	--	$0	
G-Alow	**WD-21**	Allowance for Additional Materials	--	AL	--	$0	
G-Alow-1	G-WD	Water Department Contingency	--	AL	--	$1,000,000	
G-Alow-2	G-SWCont	Sewer Contingency	--	AL	--	$1,500,000	
G-Alow-3	G-Cont	SFMTA Contingency	--	AL	--	$0	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
G-Alow-4	G-Incentive	Schedule Incentive	--	AL	--	$0	
GENERAL TOTAL:						**$33,555,461**	**$19,320,261**
21	SR-1	Transportation of California Class I (non- RCRA) Hazardous Waste for Disposal	14,563	TON	$75.25	$1,095,866	
22	**SR-2**	rr	14,563	TON	$74.61	$1,086,545.43	
23	**SR-3**	Transportation of California Class II Non- Hazardous Waste	31,295	TON	$21.50	$672,842.50	
24	**SR-4**	Handling, Treatment, and Disposal of California Class II Non-Hazardous Waste	31,295	TON	$51.16	$1,601,052.20	
SITE REMEDIATION TOTAL:						**$4,456,306**	
25	**CV-1**	Market Street Boarding Islands	--	LS	--	$82,975.73	
26	**CV-2**	McAllister Street Boarding Islands	--	LS	--	$82,975.73	
27	**CV-3**	Eddy Street Boarding Islands	--	LS	--	$82,975.73	
28	**CV-4**	Geary/O'Farrell Streets Boarding Islands	--	LS	--	$169,593.64	
29	**CV-5**	Bush/Sutter Streets Boarding Islands	--	LS	--	$82,975.73	
30	**CV-6**	Clay/Sacramento Streets Boarding Islands	--	LS	--	$82,975.73	
31	**CV-7**	Pacific/Jackson Streets Boarding Islands	--	LS	--	$82,975.73	
32	**CV-8**	Vallejo Street Boarding Islands	--	LS	--	$82,975.73	
33	**CV-9**	Union Street Boarding Islands	--	LS	--	$82,975.73	
34	**CV-10**	JPCP Concrete Busway Pavement	--	LS	--	$5,153,935.16	$5,153,935.16
35	**CV-11**	Landscaped Median Concrete Curb	--	LS	--	$669,268.53	
36	**CV-12**	Refuge areas with Cast-in-place Detectable Surface Tiles	--	LS	--	$379,082.67	
37	**CV-13**	Demolition of pavement for busway, boarding islands and landscaped medians	--	LS	--	$1,539,629.23	$1,539,629.23

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
38	**CV-14**	Temp Paving of Medians	--	LS	--	$669,007.90	
CIVIL TOTAL:						**$9,244,323**	**$6,693,564**
38	**RD-1**	Asphalt Concrete (Type A, 1/2-inch maximum with medium grading)	--	LS	--	$2,557,585.14	$2,557,585.14
39	**RD-1A**	Rubberized Hot Mix Asphalt (Gap Graded, 1/2 Inch maximum with medium grading)	--	LS	--	$0.00	
40	**RD-1B**	Paving Fabric	--	LS	--	$0.00	
41	**RD-2**	Full Depth Planing per 3-inch Depth of Cut	--	LS	--	$439,084.08	$439,084.08
42	**RD-3**	10-inch Thick Concrete Base	--	LS	--	$4,734,609.75	$4,734,609.75
43	**RD-4**	12-inch Thick Concrete Base	--	LS	--	$6,834,179.02	$6,834,179.02
44	**RD-5**	10-inch Thick Concrete Pavement, Parking Strip and Gutter	--	LS	--	$3,284,267.36	$3,284,267.36
45	**RD-6**	10-inch Thick Reinforced Concrete Bus Pad (per SFPDW Standard Plan 96,607)	--	LS	--	$245,368.32	$245,368.32
46	**RD-7**	Brick Sidewalk over Concrete Base	--	LS	--	$110,640.00	$110,640.00
47	**RD-8**	6-inch Wide Concrete Curb	--	LS	--	$381,490.72	$381,490.72
48	**RD-9**	Granite Curb	--	LS	--	$19,236.00	$19,236.00
49	**RD-10**	Granite Warning Band at Brick Curb Ramps	--	LS	--	$10,687.00	$10,687.00
50	**RD-11**	Brick Curb Ramp with Detectable Surface Tiles	--	LS	--	$92,431.60	$92,431.60
51	**RD-12**	Concrete Curb Ramp with Detectable Surface Tiles	--	LS	--	$1,346,923.02	$1,346,923.02
52	**RD-13**	Adjust City Owned-Manhole Frame and Casting to Grade	--	LS	--	$7,667.40	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
52.1	**RD-14**	Cistern Ring and Pavers	--	LS	--	$60,446.24	
52.1A	**RD-14A**	Project SWPPP and Dust Control	--	LS	--	$2,311,391.13	
ROADWAY TOTAL:						**$22,436,007**	**$20,056,502**
53	**AR-1**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Market Street Boarding Islands	--	LS	--	$311,450.76	
54	**AR-2**	Guardrails with Integrated Lighting, Handrails and Pavers associated with McAllister Street Boarding Islands	--	LS	--	$311,830.46	
55	**AR-3**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Eddy Street Boarding Islands	--	LS	--	$313,132.29	
56	**AR-4**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Geary/O'Farrell Streets Boarding Islands	--	LS	--	$544,586.98	
57	**AR-5**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Bush/Sutter Streets Boarding Islands	--	LS	--	$311,450.76	
58	**AR-6**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Clay/Sacramento Streets Boarding Islands	--	LS	--	$311,993.20	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
59	**AR-7**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Pacific/Jackson Streets Boarding Islands	--	LS	--	$312,832.79	
60	**AR-8**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Vallejo Street Boarding Islands	--	LS	--	$308,065.95	
61	**AR-9**	Guardrails with Integrated Lighting, Handrails and Pavers associated with Union Street Boarding Islands	--	LS	--	$313,592.18	
ARCHITECTURE TOTAL:						**$3,038,935**	
62	**LA-1**	Median Tree Removal	--	LS	--	$140,327.10	
63	**LA-2**	Sidewalk Tree Removal	--	LS	--	$160,596.57	
64	**LA-3**	Median Tree Protection	--	LS	--	$78,225.72	
65	**LA-4**	Soil Excavation for Sidewalk Unit Pavers	--	LS	--	$13,243.23	
66	**LA-5**	Soil Import for Medians	--	LS	--	$546,121.64	
67	**LA-6**	Integral Color Sidewalk Repaving (Bulbouts and City-Owned Utilities)	--	LS	--	$2,415,589.07	
68	**LA-7**	CCSF Standard Concrete Paving	--	LS	--	$436,966.32	
69	**LA-8**	Special Concrete Pavement: Golden Gate to Turk, West Side	--	LS	--	$81,153.60	
70	**LA-9**	Special Unit Pavers to Match Existing: Turk and Van Ness, Northwest	--	LS	--	$60,664.40	
71	**LA-10**	Special Unit Pavers to Match Existing: Market St and Van Ness, Northwest	--	LS	--	$17,591.07	
72	**LA-11**	Integral Color Concrete: Fern to Bush St, West Side	--	LS	--	$33,616.08	
73	**LA-12**	Integral Color Concrete: Between Washington to Jackson, East Side	--	LS	--	$6,923.25	
74	**LA-13**	Sidewalk Unit Pavers	--	LS	--	$1,481,246.76	
75	**LA-14**	Median Fence: Grove to McAllister	--	LS	--	$344,332.36	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
76	**LA-15**	Median Gate at Fence: Grove to McAllister	--	LS	--	$1.01	
77	**LA-16**	12" Wide Unit Paver Maintenance Strip at Medians	--	LS	--	$547,245.60	
78	**LA-17**	12th Street Sidewalk Planters and Railing	--	LS	--	$330,743.52	
79	**LA-18**	12th Street Unit Pavers	--	LS	--	$43,707.60	
80	**LA-19**	Trash Receptacles	--	LS	--	$102,285.60	
81	**LA-20**	Bike Racks	--	LS	--	$52,900.80	
82	**LA-21**	Tree Relocation	--	LS	--	$43,411.30	
83	**LA-22**	36" Box Median Tree	--	LS	--	$334,397.70	
84	**LA-23**	36" Box Sidewalk Tree	--	LS	--	$301,373.40	
85	**LA-24**	12' Tall Brown Trunk Height Palm Tree	--	LS	--	$19,236.64	
86	**LA-25**	5 Gallon Shrub / Groundcover	--	LS	--	$166,379.17	
87	**LA-26**	3" Depth Felton Gold Rock Mulch	--	LS	--	$121,566.25	
88	**LA-27**	Weed Barrier Fabric	--	LS	--	$36,936.40	
89	**LA-28**	2 Year Long Term Plant Establishment Period	--	LS	--	$504,427.48	
90	**LA-29**	Irrigation Systems Work - System A	--	LS	--	$128,648.50	
91	**LA-30**	Irrigation Systems Work - System B	--	LS	--	$63,267.18	
92	**LA-31**	Irrigation Systems Work - System C	--	LS	--	$120,919.27	
93	**LA-32**	Irrigation Systems Work - System D	--	LS	--	$114,721.05	
94	**LA-33**	Irrigation Systems Work - System E	--	LS	--	$167,157.60	
95	**LA-34**	Irrigation Systems Work - System F	--	LS	--	$152,823.00	
96	**LA-35**	Irrigation Systems Work - System G	--	LS	--	$182,548.21	
97	**LA-36**	Irrigation Systems Work - System H	--	LS	--	$238,013.10	
98	**LA-37**	Irrigation Systems Work - System I	--	LS	--	$168,157.22	
99	**LA-38**	Irrigation Systems Work - System J	--	LS	--	$148,729.26	
100	**LA-39**	Irrigation Systems Work - System K	--	LS	--	$148,142.14	
101	**LA-40**	Irrigation Systems Work - System L	--	LS	--	$161,046.99	
102	**LA-41**	Irrigation Systems Work - System M	--	LS	--	$31,023.69	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
103	**LA-42**	Irrigation Systems Work - System N	--	LS	--	$13,572.52	
LANDSCAPE TOTAL:						**$10,259,979**	
104	**ST-1**	Relocate Fire Cistern Manhole and Modify Existing Cistern at Van Ness and Oak Street	--	LS	--	$80,981.03	
105	**ST-2**	Reconstruction Of Curb Ramps And Sub- Sidewalk Basement Roofs	--	LS	--	$70,000.00	
STRUCTURAL TOTAL:						**$150,981**	
106	**SL-1**	Provide Van Ness Style Roadway Luminaire and Straight Bracket Arm	--	LS	--	$698,981.70	
107	**SL-2**	Provide Van Ness Style Pedestrian Luminaire and Straight Bracket Arm	--	LS	--	$290,829.94	
108	**SL-3**	Provide Non-Van Ness Ave Luminaire and Elliptical Bracket Arm	--	LS	--	$41,988.64	
109	**SL-4**	Furnish Spare Streetlight Parts	--	LS	--	$128,640.78	
110	**SL-5**	Remove & Relocate Luminaire and Bracket Arm	--	LS	--	$5,145.64	
111	**SL-6**	Provide Streetlight Pole	--	LS	--	$113,718.44	
112	**SL-7**	Provide Temporary Streetlight	--	LS	--	$185,242.80	
113	**SL-8**	Provide Streetlight Wiring and Related Work	--	LS	--	$205,825.25	
114	**SL-9**	Provide 1- 1.5" GRS Conduits (Underground)	--	LS	--	$2,422,294.30	
115	**SL-10**	Provide Flexible Metal Conduit In Combination Streetlight/Trolley Feeder Riser Poles	--	LS	--	$112,689.37	
116	**SL-11**	Provide Streetlight Pull Box	--	LS	--	$168,775.68	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
117	**SL-12**	Remove Streetlight Luminaire & Bracket Arm	--	LS	--	$48,472.18	
118	**SL-13**	Remove Streetlight Pole	--	LS	--	$42,193.92	
119	**SL-14**	Remove Streetlight Pull Box	--	LS	--	$47,545.96	
STREETLIGHT TOTAL:						**$4,512,345**	
120	**TP-1**	Provide 750 kcmil Feeder Cables	--	LS	--	$3,379,386.60	
121	**TP-2**	Provide 500 kcmil Riser Cables	--	LS	--	$143,402.75	
122	**TP-3**	Furnish Spare Traction Power Cable Parts	--	LS	--	$130,924.21	
123	**TP-4**	Provide 1- 2” GRS Conduit Underground For Riser Cable	--	LS	--	$569,487.50	
124	**TP-5**	Provide 1- 4” GRS Conduit Underground For Feeder Cable	--	LS	--	$232,522.80	
125	**TP-6**	Provide 1- 2” GRS Conduit External on Pole For Riser Cable	--	LS	--	$1,963.75	
126	**TP-7**	Provide In-Line Splice Connector	--	LS	--	$3,770.64	
127	**TP-8**	Provide 6-Pt Multi-Tap Splice Connectors	--	LS	--	$6,284.34	
128	**TP-9**	Provide 8-Pt Multi-Tap Splice Connectors	--	LS	--	$165,488.41	
129	**TP-10**	Provide 10-Pt Multi-Tap Splice Connectors	--	LS	--	$13,825.62	
130	**TP-11**	Provide 12-Pt Multi-Tap Splice Connectors	--	LS	--	$5,236.98	
131	**TP-12**	Provide Grounding of New Trolley Pole	--	LS	--	$112,543.13	
132	**TP-13**	Provide DC Feeder Breaker	--	LS	--	$81,173.01	
133	**TP-14**	Install City Furnished DC Feeder Breaker	--	LS	--	$15,710.91	
134	**TP-15**	Provide DC Load-Break, Motor Operated Sectionalizing Switch	--	LS	--	$83,791.49	
135	**TP-16**	Remove and Relocate Pole Mounted Manual Switch	--	LS	--	$26,184.84	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
TRACTION POWER TOTAL:						**$4,971,697**	
136	**DB-1**	Traction Power Ductbank	--	LS	--	$2,738,971.10	
137	**DB-2**	Pre-cast Concrete Manhole	--	LS	--	$78,554.52	
138	**DB-3**	Installation of Conduits Under Streetcar Tracks (Market Street & Van Ness Avenue)	--	LS	--	$366,587.79	
DUCTBANK TOTAL:						**$3,184,113**	
139	**CN-1**	New NextBus LED Signs	--	LS	--	$469,820.52	
140	**CN-2**	Electrical Cabinet, Electrical Panels, and PG&E Electrical Service	--	LS	--	$281,257.70	
141	**CN-3**	Communications Cabinet	--	LS	--	$83,720.70	
142	**CN-4**	Concrete Foundations for Electrical & Communications Cabinet	--	LS	--	$36,640.08	
143	**CN-5**	Closed Circuit Television System including Software and DVR	--	LS	--	$256,086.78	
144	**CN-6**	Raceway System	--	LS	--	$830,778.76	
145	**CN-7**	Courtesy Phone System	--	LS	--	$152,667.12	
146	**CN-8**	Public Announcement System	--	LS	--	$203,556.16	
147	**CN-9**	UPS System	--	LS	--	$183,200.58	
148	**CN-10**	Fiber Optics Cable System	--	LS	--	$254,445.20	
149	**CN-11**	Client Node Networking System including fiber installation and integration	--	LS	--	$254,445.20	
150	**CN-12**	Spare Parts and Operations and Maintenance Manuals	--	LS	--	$30,533.42	
151	**CN-13**	Systems Training	--	LS	--	$25,444.52	
COMMUNICATIONS TOTAL:						**$3,062,597**	
152	**TR-1**	Traffic Routing	--	LS	--	$12,921,821.73	$12,921,821.73

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
153	**TR-2**	Removal of Existing and Installation of Temporary Pavement Striping, Messages, and Pavement Markers for All Phases of Construction	--	LS	--	$3,003,485.84	$3,003,485.84
154	**TR-3**	Temporary Pavement Marking, Delineation Tape, and Overlay Marking After Final Paving	--	LS	--	$121,577.76	$121,577.76
155	**TR-4**	Pedestrian Monitors (NOT USED)					
TRAFFIC TOTAL:						**$16,046,885**	**$16,046,885**
156	**OV-01**	Overhead Special Work at South Van Ness Ave and Mission Street	--	LS	--	$1,771,926.95	$1,771,926.95
157	**OV-02**	Overhead Special Work at South Van Ness Ave and Market Street	--	LS	--	$415,658.85	$415,658.85
158	**OV-03**	Overhead Special Work at Van Ness Ave and Hayes Street	--	LS	--	$757,946.37	$757,946.37
159	**OV-04**	Overhead Special Work at Van Ness Ave and Grove Street	--	LS	--	$398,781.58	$398,781.58
160	**OV-05**	Overhead Special Work at Van Ness Ave and McAllister Street	--	LS	--	$445,213.49	$445,213.49
161	**OV-06**	Overhead Special Work at Van Ness Ave and Eddy Street	--	LS	--	$160,428.19	$160,428.19
162	**OV-07**	Overhead Special Work at Van Ness Ave and Post Street	--	LS	--	$664,095.29	$664,095.29
163	**OV-08**	Overhead Special Work at Van Ness Ave and Sutter Street	--	LS	--	$475,401.41	$475,401.41
164	**OV-09**	Overhead Special Work at Van Ness Ave and Sacramento Street	--	LS	--	$812,816.92	$812,816.92
165	**OV-10**	Overhead Special Work at Van Ness Ave and Clay Street	--	LS	--	$800,811.66	$800,811.66
166	**OV-11**	Overhead Special Work at Van Ness Ave and Union Street	--	LS	--	$1,329,179.32	$1,329,179.32

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
167	**OV-12**	Overhead Special Work at Van Ness Ave and Filbert Street	--	LS	--	$116,124.60	$116,124.60
168	**OV-13**	Overhead Special Work at Van Ness Ave and Chestnut Street	--	LS	--	$145,211.76	$145,211.76
169	**OV-14**	Provide 2/0 Trolleywire	--	LS	--	$1,653,480.00	$1,653,480.00
170	**OV-15**	Provide 4/0 Trolleywire	--	LS	--	$67,752.00	$67,752.00
171	**OV-16**	Provide Tangent or Inverted Span	--	LS	--	$257,382.84	$257,382.84
172	**OV-17**	Provide Feed Span	--	LS	--	$945,820.39	$945,820.39
173	**OV-18**	Provide Equalizer Span	--	LS	--	$755,480.22	$755,480.22
174	**OV-19**	Provide Pull-Off	--	LS	--	$64,880.40	$64,880.40
175	**OV-20**	Provide Standard 765N Trolley Pole	--	LS	--	$15,612.24	
176	**OV-21**	Provide Standard 770 Trolley Pole	--	LS	--	$481,122.29	$481,122.29
177	**OV-22**	Provide Van Ness Style 765N Trolley Pole	--	LS	--	$812,040.36	$812,040.36
178	**OV-23**	Provide Van Ness Style 767 Trolley Pole	--	LS	--	$111,428.59	$111,428.59
179	**OV-24**	Provide Van Ness Style 770 Trolley Pole	--	LS	--	$2,016,938.08	$2,016,938.08
180	**OV-25**	Provide Trolley Pole Foundation for Type 765N Pole	--	LS	--	$663,265.00	$663,265.00
181	**OV-26**	Provide Trolley Pole Foundation for Type 767 Pole	--	LS	--	$95,510.22	$95,510.22
182	**OV-27**	Provide Trolley Pole Foundation for Type 770 Pole	--	LS	--	$1,601,835.92	$1,601,835.92
183	**OV-28**	Prospect Hole for Depth up to 3 ft (NOT USED)					
184	**OV-29**	Prospect Hole for Depth Greater than 3 ft (NOT USED)					
185	**OV-30**	Remove and Salvage or Dispose of Existing Trolley Pole and Dispose of Foundation 3 ft below finish grade	--	LS	--	$431,122.25	$431,122.25

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
186	**OV-31**	Remove and Salvage or Dispose of Existing Trolley Pole and Dispose of Foundation Entirely	--	LS	--	$69,795.74	$69,795.74
187	**OV-32**	Paint Existing Steel Trolley Pole	--	LS	--	$34,285.72	$34,285.72
188	**OV-33**	Furnish Overhead Spare Parts	--	LS	--	$1,069,435.61	$1,069,435.61
189	**OV-34**	Special Pole Foundations	--	LS	--	$251,020.41	$251,020.41
OVERHEAD TOTAL:						**$19,691,805**	**$19,676,192**
190	**ET-1**	(3S12") 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, and Green	--	LS	--	$354,865.17	
191	**ET-2**	(3S12" GUA) 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, and Green Up Arrow	--	LS	--	$56,700.22	
192	**ET-3**	(4S12"GLA) 4-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, Green, and Green Left Arrow	--	LS	--	$2,469.70	
193	**ET-4**	(3S12"LA) 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red Left Arrow, Yellow Left Arrow, and Green Left Arrow	--	LS	--	$12,708.67	
194	**ET-5**	(3S12"FY) 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, and Flashing Yellow	--	LS	--	$1,955.18	
195	**ET-6**	(3S12"LAV) 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, and Green with Left Angled Visors	--	LS	--	$1,955.18	
196	**ET-7**	(3S12"RAV) 3-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, and Green with Right Angled Visors	--	LS	--	$977.59	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
197	**ET-8**	(4S12"GLA-LAV) 4-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, Green, and Green Left Arrow with Left Angled Visors	--	LS	--	$1,234.84	
198	**ET-9**	(4S12"GRA) 4-Section, 12-inch Vehicle Signal Face with Type 1 LED Red, Yellow, Green, and Green Right Arrow	--	LS	--	$3,704.52	
199	**ET-10**	(2S12"RB) 2-Section, 12-inch Transit Signal Face with Type 1 LED (White Horizontal Bar and White Right 45 Degree Bar)	--	LS	--	$2,469.70	
200	**ET-11**	(2S12"VB) 2-Section, 12-inch Transit Signal Face with Type 1 LED (White Horizontal Bar and White Vertical Bar)	--	LS	--	$2,469.70	
201	**ET-12**	(3S12"LB) 3-Section, 12-inch Transit Signal Face with Type 1 LED (White Horizontal Bar, White Vertical Bar, and White Left 45 Degree Bar)	--	LS	--	$27,166.48	
202	**ET-13**	(3S12"RB) 3-Section, 12-inch Transit Signal Face with Type 1 LED (White Horizontal Bar, White Vertical Bar, and White Right 45 Degree Bar)	--	LS	--	$12,348.40	
203	**ET-14**	(3S12"LRB) 3-Section, 12-inch Transit Signal Face with Type 1 LED (White Horizontal Bar, White Left 45 Degree Bar, and White Right 45 Degree Bar)	--	LS	--	$2,469.70	
204	**ET-15**	Signal Back Plate (2-Section Head)	--	LS	--	$329.32	
205	**ET-16**	Signal Back Plate (3-Section Head)	--	LS	--	$43,804.53	
206	**ET-17**	Signal Back Plate (4-Section Head)	--	LS	--	$617.40	
207	**ET-18**	(TV-1-T) One Way Top Mounted Vehicle Signal Mounting with Terminal Compartment	--	LS	--	$47,541.34	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
208	**ET-19**	(TV-2-T) Two Way Top Mounted Vehicle Signal Mounting with Terminal Compartment	--	LS	--	$18,728.58	
209	**ET-20**	(TV-2-T-SFA) Two Way Top Mounted Vehicle Signal Mounting with San Francisco Standard in Configuration A	--	LS	--	$2,160.99	
210	**ET-21**	(SV-1-T) One Way Side Mounted Vehicle Signal Mounting with Terminal Compartment	--	LS	--	$121,838.04	
211	**ET-22**	(SV-2-TA) Two Way Side Mounted Vehicle Signal Mounting with Terminal Compartment In Configuration A	--	LS	--	$15,744.42	
212	**ET-23**	(SV-2-TC) Two Way Side Mounted Vehicle Signal Mounting with Terminal Compartment In Configuration C	--	LS	--	$926.13	
213	**ET-24**	(SV-3-TA) Three Way Side Mounted Vehicle Signal Mounting with Terminal Compartment In Configuration A	--	LS	--	$1,131.94	
214	**ET-25**	(1S-COUNT Housing) One Section LED Pedestrian Countdown Signal Housing	--	LS	--	$66,887.60	
215	**ET-26**	Labor Only to Install City Furnished (1S-COUNT Module) One Section LED Pedestrian Countdown Signal Module	--	LS	--	$40,133.60	
216	**ET-27**	(SP-1) One Way Side Mounted Pedestrian Signal Mounting	--	LS	--	$105,579.96	
217	**ET-27A**	(SP-1 (22")) One Way Side Mounted Pedestrian Signal Mounting with 22-inch Nipples, San Francisco Standard and with One Way Side Mounted Pedestrian Signal Mounting	--	LS	--	$1,389.21	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
218	**ET-27B**	(SP-1-T) One Way Side Mounted Pedestrian Signal Mounting with Terminal Compartment	--	LS	--	$1,234.84	
219	**ET-28**	(SP-2-T) Two Way Side Mounted Pedestrian Signal Mounting with Terminal Compartment	--	LS	--	$823.23	
220	**ET-29**	(SP-1-SF) One Way Side Mounted Pedestrian Signal Mounting with 12-inch Nipples, San Francisco Standard	--	LS	--	$1,466.40	
221	**ET-30**	(TP-1) One Way Top Mounted Pedestrian Signal Mounting	--	LS	--	$7,203.40	
222	**ET-31**	(TP-2-T) Two Way Top Mounted Pedestrian Signal Mounting	--	LS	--	$565.98	
223	**ET-32**	Type 1-A Pole (5') with Concrete Foundation	--	LS	--	$3,704.54	
224	**ET-33**	Type 1-A Pole (7') with Concrete Foundation	--	LS	--	$24,079.51	
225	**ET-34**	Type 1-A Pole (10') with Concrete Foundation	--	LS	--	$192,636.08	
226	**ET-34A**	Type 1-A Pole (10') with Special Foundation	--	LS	--	$5,659.70	
227	**ET-35**	Type 1-A Pole (13') with Concrete Foundation	--	LS	--	$3,601.63	
228	**ET-36**	Pedestrian Push Button Pole with Concrete Foundation	--	LS	--	$35,501.88	
229	**ET-37**	Transit Signal Push Button Assembly	--	LS	--	$9,261.36	
230	**ET-38**	Transit Signal Push Button Pole (6.5') with Concrete Foundation	--	LS	--	$21,609.70	
231	**ET-39**	Bollard with Concrete Foundation	--	LS	--	$2,675.52	
232	**ET-40**	Existing OCS Pole Modification At Market and Van Ness with 5' Horizontal Signal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$36,016.26	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
233	**ET-41**	Existing OCS Pole Modification At Market and Van Ness with 10' Horizontal Signal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$36,016.26	
234	**ET-42**	Existing OCS Pole Modification At Market and Van Ness with 15' Horizontal Signal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$36,016.26	
235	**ET-43**	Existing OCS Pole Modification At Market and Van Ness with 20' Horizontal Signal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$36,016.26	
236	**ET-44**	Van Ness Special 10' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$6,688.76	
237	**ET-45**	Van Ness Special 15' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$3,395.82	
238	**ET-46**	Van Ness Special 20' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$11,731.02	
239	**ET-47**	Van Ness Special 25' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$17,699.44	
240	**ET-48**	Van Ness Special 30' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$67,916.40	
241	**ET-49**	Van Ness Special 35' Horizontal Signal Mast Arm with MAS Signal Mounting (to be mounted on the OCS pole)	--	LS	--	$25,725.90	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
242	**ET-50**	Van Ness Special (16-3-100) Mast Arm Pole with 20' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$13,377.47	
243	**ET-51**	Van Ness Special (18-3-100) Mast Arm Pole with 25' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$59,684.12	
244	**ET-52**	Van Ness Special (18-3-100) Mast Arm Pole with 30' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$268,578.36	
245	**ET-53**	Van Ness Special (19-3-100) Mast Arm Pole with 30' Horizontal Mast Arm, MAS Mounting, Van Ness Style street light, and Concrete Foundation	--	LS	--	$15,641.35	
246	**ET-54**	Van Ness Special (23-3-100) Mast Arm Pole with 35' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$169,791.00	
247	**ET-55**	Van Ness Special (24-3-100) Mast Arm Pole with 35' Horizontal Mast Arm, MAS Mounting, Van Ness Style street light, and Concrete Foundation	--	LS	--	$17,493.61	
248	**ET-56**	Van Ness Special (27-3-100) Mast Arm Pole with 40' Horizontal Mast Arm, MAS Mounting, Van Ness Style street light, and Concrete Foundation	--	LS	--	$20,580.72	
249	**ET-57**	Van Ness Special Mast Arm Pole with 35' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$22,124.28	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
250	**ET-58**	Van Ness Special Mast Arm Pole with 40' Horizontal Mast Arm, MAS Mounting, and Concrete Foundation	--	LS	--	$22,124.28	
251	**ET-59**	Type 16-1-100 Pole with 8' Signal Mast Arm, MAS mounting, and Concrete Foundation	--	LS	--	$10,290.36	
252	**ET-60**	Type 16-1-100 Pole with 10' Signal Mast Arm, MAS mounting, and Concrete Foundation	--	LS	--	$10,290.36	
253	**ET-61**	Type 16-2-100 Pole with 20' Signal Mast Arm, MAS mounting, and Concrete Foundation	--	LS	--	$49,393.72	
254	**ET-62**	Type 17-2-100 Pole with 10' Signal Mast Arm, MAS mounting, 6' Luminaire Arm, LED Luminaire, and Concrete Foundation	--	LS	--	$12,862.95	
255	**ET-63**	Type 17-2-100 Pole with 20' Signal Mast Arm, MAS mounting, 6' Luminaire Arm, LED Luminaire, and Concrete Foundation	--	LS	--	$80,264.82	
256	**ET-64**	Type 18-2-100 Pole with 25' Signal Mast Arm, MAS mounting, and Concrete Foundation	--	LS	--	$108,048.78	
257	**ET-65**	Type 18-3-100 Pole with 25' Signal Mast Arm, MAS mounting, and Concrete Foundation	--	LS	--	$16,979.10	
258	**ET-66**	Type 19-1-100 Pole with 10' Signal Mast Arm, MAS mounting, 6' Luminaire Arm, and Concrete Foundation	--	LS	--	$0.00	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
259	**ET-67**	Type 19-2-100 Pole with 25' Signal Mast Arm, MAS mounting, 6' Luminaire Arm, and Concrete Foundation	--	LS	--	$47,850.18	
260	**ET-68**	Type 19-2-100 Pole with 30' Signal Mast Arm, MAS mounting, 6' Luminaire Arm, and Concrete Foundation	--	LS	--	$16,464.58	
261	**ET-69**	Pull Box Caltrans Type 6 (Fiberlyte)	--	LS	--	$226,388.25	
262	**ET-70**	Pull Box Caltrans Type 6, Traffic Rated (Bolt-Down Metal Cover)	--	LS	--	$4,939.36	
263	**ET-71**	Interconnect Pullbox Type 48X	--	LS	--	$61,124.91	
264	**ET-72**	Interconnect Pullbox Type 36X	--	LS	--	$3,087.12	
265	**ET-73**	1 - 1" GRS Conduit (Underground)	--	LS	--	$27,177.28	
266	**ET-74**	1 - 1" PVC Schedule 80 Conduit (Underground)	--	LS	--	$48,391.20	
267	**ET-75**	1 - 2" PVC Schedule 80 Conduit (Underground)	--	LS	--	$500,824.48	
268	**ET-76**	1 - 1.5" GRS Conduit (External on Pole) including Condulet, Connectors, and Straps	--	LS	--	$4,301.44	
269	**ET-77**	1 - 3" PVC Schedule 80 Conduit (Underground)	--	LS	--	$183,691.04	
270	**ET-78**	1 - 3" & 1 - 2" PVC Schedule 80 Conduit (Underground) in Same Trench	--	LS	--	$127,479.04	
271	**ET-79**	2 - 2" PVC Schedule 80 Conduit (Underground) in Same Trench	--	LS	--	$140,285.60	
272	**ET-80**	2-2" HDPE Conduit (Underground) in Same Trench	--	LS	--	$80,945.28	
273	**ET-81**	3-2" PVC Schedule 80 Conduit (Underground) in Same Trench	--	LS	--	$390,453.44	
274	**ET-82**	4-2" PVC Schedule 80 Conduit (Underground) in Same Trench	--	LS	--	$396,710.08	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
275	**ET-83**	4-2" HDPE Conduit (Underground) in Same Trench	--	LS	--	$888,778.17	
276	**ET-84**	4-2" GRS Conduit (Underground) in Same Trench	--	LS	--	$39,788.32	
277	**ET-85**	Battery Back-Up System	--	LS	--	$78,206.72	
278	**ET-86**	Construct Caltrans 332 Foundation for ITS Traffic Signal Cabinet (fits ITS Model 342 Cabinets)	--	LS	--	$54,333.18	
279	**ET-87**	Labor Only To Install City Furnished ITS Model 342 Cabinet For Type 2070 Intersection Controllers	--	LS	--	$30,562.29	
280	**ET-88**	Extinguishable Message Sign (36"X36") - No Right Turn (Symbol)	--	LS	--	$23,462.04	
281	**ET-89**	Variable Message Sign (VMS) System - Daktronics VF2420-36x90- 34-RGB, 120V	--	LS	--	$185,226.52	
282	**ET-90**	Variable Message Sign (VMS) Pole with New Concrete Foundation	--	LS	--	$41,161.46	
283	**ET-91**	NEMA 4X Pad-Lockable 60A Non-Fuse Disconnect Switch	--	LS	--	$3,087.12	
284	**ET-92**	All wiring including all miscellaneous electrical work including work to furnish and install ground rods, fuses, pull tape, conduit plugs, junction boxes, and temporary signals	--	LS	--	$1,481,812.04	
285	**ET-93**	Remove and Salvage as City Property Certain Existing Signal Poles, Vehicle Signals & Mountings, and Street Light Poles	--	LS	--	$118,853.28	
286	**ET-94**	Remove as Contractor's Property Certain Existing Pole and Controller Concrete Foundations, Pull Boxes, Wires and Conduits	--	LS	--	$164,645.78	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
287	**ET-95**	Labor to Install City Furnished Traffic Cameras	--	LS	--	$15,435.54	
TRAFFIC SIGNAL TOTAL:						**$7,820,545**	
288	**SW-1**	Trench And Excavation Support Work	--	LS	--	$1,264,692.96	$1,264,692.96
289	**SW-2**	Concrete Manhole For 12-Inch To 24-Inch Diameter Sewers With Frame And Cover Per SFDPW Standard Plan 87,181	--	LS	--	$1,187,712.00	$1,187,712.00
290	**SW-3**	Concrete Manhole For 27-Inch To 48-Inch Diameter Sewers With Frame And Cover Per SFDPW Standard Plan 87,182	--	LS	--	$98,975.97	$98,975.97
291	**SW-4**	Concrete Manhole For 51-Inch to 120-Inch Diameter Sewers With Frame And Cover Per SFDPW Standard Plan 87,183	--	LS	--	$71,482.65	$71,482.65
292	**SW-5**	Modified Box Manhole to connect to brick sewer per SFDPW Standard Plan 87,184	--	LS	--	$19,795.20	$19,795.20
293	**SW-6**	Bulkhead to Connect to 3'x5' Brick Sewer per SFDPW Standard Plan 87,197	--	LS	--	$131,967.90	$131,967.90
294	**SW-7**	Precast Manhole on Existing Brick Sewer per SFDPW Standard plan 87,185	--	LS	--	$98,976.00	$98,976.00
295	**SW-8**	10-Inch Diameter VCP Culvert	--	LS	--	$654,156.09	$654,156.09
296	**SW-9**	12-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$3,102,558.43	$3,102,558.43
297	**SW-10**	14-Inch Diameter HDPE Sewer in Steel Casing	--	LS	--	$152,906.08	
298	**SW-11**	15-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$813,883.84	$813,883.84

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
299	**SW-12**	16-Inch Diameter HDPE Sewer in Steel Casing	--	LS	--	$57,076.16	$57,076.16
300	**SW-13**	18-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$976,053.96	$976,053.96
301	**SW-14**	18-Inch Diameter HDPE Sewer in Steel Casing	--	LS	--	$46,189.20	$46,189.20
302	**SW-15**	21-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$159,240.18	$159,240.18
303	**SW-16**	24-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$400,739.79	$400,739.79
304	**SW-17**	27-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$61,035.57	$61,035.57
305	**SW-18**	33-Inch Diameter VCP Sewer On Crushed Rock Bedding (NOT USED)					
306	**SW-19**	34-Inch Diameter HDPE Sewer in Steel Casing (NOT USED)					
307	**SW-20**	36-Inch Diameter VCP Sewer On Crushed Rock Bedding	--	LS	--	$61,694.70	$61,694.70
308	**SW-21**	48-Inch Diameter RCP Sewer On Crushed Rock Bedding	--	LS	--	$253,572.35	$253,572.35
309	**SW-22**	54-Inch Diameter RCP Sewer On Crushed Rock Bedding	--	LS	--	$81,820.16	$81,820.16
310	**SW-23**	6-Inch Or 8-Inch Diameter Side Sewer Connection	--	LS	--	$224,621.25	$224,621.25
311	**SW-24**	6-Inch Or 8-Inch Diameter Side Sewer Replacement Or Construction	--	LS	--	$726,826.42	$726,826.42
312	**SW-25**	Side Sewer Trap And Air Vent Assembly	--	LS	--	$84,349.35	$84,349.35
313	**SW-26**	4-inch Diameter CIP Side Sewer	--	LS	--	$43,472.38	$43,472.38
314	**SW-27**	15-feet Long Trench Drain System	--	LS	--	$79,477.74	
315	**SW-28**	6-Inch Diameter HDPE Culvert for Trench Drain	--	LS	--	$112,201.53	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
316	**SW-29**	Concrete Encasement Type II Per SFDPW Standard Plan 87,195	--	LS	--	$117,671.43	$117,671.43
317	**SW-30**	Concrete Catch Basin Without Curb Inlet And With New Frame And Grating Per SFDPW Standard Plan 87,188	--	LS	--	$448,690.86	$448,690.86
318	**SW-31**	Television Inspection Of Existing 6-Inch Or 8- Inch Diameter Side Sewers and 10-Inch Diameter Culverts	--	LS	--	$2,841.72	$2,841.72
319	**SW-32**	Post-Construction Television Inspection Of Newly Constructed And Rehabilitated Main Sewers	--	LS	--	$202,350.87	$202,350.87
320	**SW-33**	Post-Construction Television Inspection Of Newly Constructed Side Sewers & Culverts	--	LS	--	$30,060.48	$30,060.48
321	**SW-34**	Exploratory Potholes (NOT USED)	--	LS	--		
322	**SW-35**	Cast Iron Water Trap For Catch Basin Including Cleanout Cap Per SFDPW Standard Plan 87,194	--	LS	--	$24,634.12	$24,634.12
323	**SW-36**	Plug and Fill Existing Sewer With Slurry Grout	--	LS	--	$341,722.78	$341,722.78
SEWER TOTAL:						**$12,133,450**	**$11,788,865**
324	**WD-1**	Excavation and Backfill For 4-, 6-, 8-Inch Pipe Trench	--	LS	--	$2,135,693.60	$2,135,693.60
325	**WD-2**	Excavation and Backfill For 12-Inch Pipe Trench	--	LS	--	$140,995.48	$140,995.48
326	**WD-3**	Excavation and Backfill For 16-Inch Pipe Trench	--	LS	--	$30,553.20	$30,553.20
327	**WD-4**	Additional Excavation and Backfill (NOT USED)	--	LS	--		
328	**WD-5**	Removal and Installation of Meter Box	--	LS	--	$9,022.05	$9,022.05

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
329	**WD-6**	Installation of 4-, 6-, 8-Inch Ductile Iron Pipe With Polyethylene Encasement	--	LS	--	$2,009,957.76	$2,009,957.76
330	**WD-7**	Installation of 12-Inch Ductile Iron Pipe With Polyethylene Encasement	--	LS	--	$91,643.48	$91,643.48
331	**WD-8**	Installation of 16-Inch Ductile Iron Pipe With Polyethylene Encasement	--	LS	--	$22,914.90	$22,914.90
332	**WD-9**	Installation of Ductile Iron Tyton Joint Fittings With Polyethylene Encasement	--	LS	--	$128,612.37	$128,612.37
333	**WD-10**	Installation of Ductile Iron TR Flex Joint Fittings With Polyethylene Encasement	--	LS	--	$22,617.36	$22,617.36
334	**WD-11**	Trench Shoring and Bracing per all Applicable Safety Orders (NOT USED)					
335	**WD-12**	Installation of Screw Taps and Service Saddles	--	LS	--	$116,571.78	$116,571.78
336	**WD-13**	Support Work for Renewal of 1-Inch Plastic Service Pipe - Trenchless Installation	--	LS	--	$95,918.03	$95,918.03
337	**WD-14**	Support Work for Installation of Service Pipe - Open Cut	--	LS	--	$222,960.40	$222,960.40
338	**WD-15**	Removal of SFWD Owned Valve Boxes and Covers	--	LS	--	$3,653.10	$3,653.10
339	**WD-16**	Repair and Replacement of Side Sewers for Water Work (NOT USED)					
340	**WD-17**	Pipe Abandonment	--	LS	--	$51,475.50	$51,475.50
341	**WD-18**	Purchase, Install, Excavate and Backfill 24- Inch Ductile Iron Pipe with Polyethylene Encasement	--	LS	--	$459,577.74	
342	**WD-19**	Special Joint Wrap	--	LS	--	$46,274.12	
WATER TOTAL:						**$5,588,441**	**$5,082,589**

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
343	**GI-1**	Demolition for Bioretention: Removal & Disposal of (E) Pavement + Base	--	LS	--	$34,638.68	
344	**GI-2**	Excavation for Bioretention (Includes off haul & disposal of excavated material)	--	LS	--	$26,073.36	
345	**GI-3**	Bioretention Basin Curb (9" Precast Concrete Curb)	--	LS	--	$124,200.00	
346	**GI-4**	Bioretention Basin Walls (9" Wide, up to 50" Deep)	--	LS	--	$21,395.22	
347	**GI-5**	DRI Infiltration Testing Following Excavation	--	LS	--	$1,974.96	
348	**GI-6**	Replace Sidewalk at Bioretention Units	--	LS	--	$30,454.48	
349	**GI-7**	Sidewalk Bioretention Inlets/Outlets - Curb Cuts	--	LS	--	$5,001.48	
350	**GI-8**	Bioretention Catch Basin to Reduce Drainage Management Area	--	LS	--	$5,482.44	
351	**GI-9**	Decorative Bioretention Fabricated Metal Fence	--	LS	--	$148,195.44	
352	**GI-10**	Bioretention ASTM NO. 7 Aggregate Layer - 9-Inch Depth	--	LS	--	$11,439.36	
353	**GI-11**	Bioretention ASTM No. 9 Choking Course Layer - 3-Inch Depth	--	LS	--	$4,328.28	
354	**GI-12**	Bioretention Soil Filter Mix 18" Depth	--	LS	--	$10,772.64	
355	**GI-13**	Planting - 1 Gallon Plants - Bioretention	--	LS	--	$5,129.60	
356	**GI-14**	Planting - 5 Gallon Plants - Bioretention	--	LS	--	$7,079.04	
357	**GI-15**	Organic Mulch - Bioretention (3" average thickness)	--	LS	--	$6,171.76	
358	**GI-16**	Irrigation Tie To Water Supply System	--	LS	--	$13,251.91	
359	**GI-17**	Irrigation	--	LS	--	$920.20	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
360	**GI-18**	Inlet Protection	--	LS	--	$2,992.37	
361	**GI-19**	6-Month Bioretention Unit Operation and Maintenance Period	--	LS	--	$13,251.91	
GREEN INFRASTRUCTURE TOTAL:						**$472,753**	
362	**MA-1**	AWSS Work Location No. 1	--	LS	--	$187,877.77	
363	**MA-2**	AWSS Work Location No. 2	--	LS	--	$516,083.98	
364	**MA-3**	AWSS Work Location No. 3	--	LS	--	$59,146.70	
365	**MA-4**	AWSS Work Location No. 4	--	LS	--	$54,507.75	
366	**MA-5**	AWSS Work Location No. 5	--	LS	--	$699,322.79	
367	**MA-6**	AWSS Work Location No. 6	--	LS	--	$169,321.94	
368	**MA-7**	AWSS Work Location No. 7	--	LS	--	$147,286.89	
369	**MA-8**	AWSS Work Location No. 8	--	LS	--	$128,731.06	
370	**MA-9**	AWSS Work Location No. 9	--	LS	--	$408,228.23	
371	**MA-10**	AWSS Work Location No. 10	--	LS	--	$218,030.99	
372	**MA-11**	AWSS Work Location A	--	LS	--	$9,277.91	
373	**MA-12**	AWSS Work Location B	--	LS	--	$28,993.48	
374	**MA-13**	AWSS Work Location C	--	LS	--	$6,958.44	
375	**MA-14**	AWSS Work Location D	--	LS	--	$13,916.87	
376	**MA-15**	AWSS Work Location E	--	LS	--	$31,312.96	
377	**MA-16**	AWSS Work Location F	--	LS	--	$15,076.61	
378	**MA-17**	AWSS Work Location G	--	LS	--	$6,958.44	
379	**MA-18**	AWSS Work Location H	--	LS	--	$9,277.91	
380	**MA-19**	AWSS Work Location I	--	LS	--	$28,993.48	
381	**MA-20**	AWSS Work Location J	--	LS	--	$16,236.35	
382	**MA-21**	AWSS Work Location K	--	LS	--	$23,194.79	
383	**MA-22**	AWSS Work Location L	--	LS	--	$9,277.91	
384	**MA-23**	AWSS Work Location M	--	LS	--	$22,035.05	
385	**MA-24**	AWSS Work Location N	--	LS	--	$33,632.44	
386	**MA-25**	AWSS Work Location O	--	LS	--	$15,076.61	
387	**MA-26**	AWSS Work Location P	--	LS	--	$18,555.83	
388	**MA-27**	AWSS Work Location Q	--	LS	--	$13,916.87	
389	**MA-28**	AWSS Work Location R	--	LS	--	$19,715.57	

Ref No.	BID ITEM	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	PRICE	CORE WORK
390	**MA-29**	AWSS Work Location S	--	LS	--	$8,118.18	
391	**MA-30**	AWSS Work Location T	--	LS	--	$15,076.61	
392	**MA-31**	AWSS Work Location U	--	LS	--	$22,035.05	
393	**MA-32**	AWSS Work Location V	--	LS	--	$25,514.26	
394	**MA-33**	AWSS Work Location W	--	LS	--	$32,472.70	
AWSS TOTAL:						**$3,014,162**	
395	**DE-3**	Bioretention Underdrain System (Optional Bid Item)	--	LS	--	$24,000.00	
396	**DE-4**	Subsurface Connection Between Adjacent Bioretention Features (Optional Bid Item)	--	LS	--	$1,200.01	
397	**DE-1**	Integral Sidewalk Repaving (Deletable Bid Item)	--	LS	--	$1,043,201.92	
398	**DE-2**	Surface Mounted Lane Separator System (Deletable Bid Item)	--	LS	--	$782,025.20	
DELETABLE BID ITEMS TOTAL:						**$1,850,427**	
CONSTRUCTION CONTRACT						**$163,039,777**	**$111,096,424**
GENERAL CONDITIONS (MO)			36.00	MO	$408,803	$14,716,918	$14,716,918
GENERAL CONDITIONS (LS)			--	LS	--	$2,402,551	$2,402,551
Contractor Contingency			--	LS	--	--	LS
Walsh Total General Conditions						**$17,119,469**	**$17,119,469**
Total Less Fee						**$180,159,246**	
less Allowance Items						**$14,235,200**	
Subtotal						**$165,924,046**	
Fee on GMP excluding Allowances						**$12,868,309**	
ESTIMATE TOTAL CONSTRUCTION COST						**$193,027,555**	
Core Work						$141,084,202.85	
Allowances						$14,235,200	
All other Work						$37,708,152	