

## AGENDA ITEM Public Utilities Commission City and County of San Francisco



DEPARTMENT Infrastructure Division

AGENDA NO.

10

MEETING DATE May 27, 2014

**Construction Modification:** Regular Calendar **Project Manager:** Bessie Tam

## Approve Contract No. WW-483RR, Increase of Contingency, North Shore to Channel Force Main Drainage Improvement and Pavement Renovation

| Summary of         | Approve an increase in the construction contract cost contingency for  |
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| Proposed           | the Wastewater Enterprise (WWE) funded Contract No. WW-483RR,  |
| Commission Action: | North Shore to Channel Force Main Drainage Improvement (the Project) with KJ Woods Construction, in the amount of \$12,726,300, for a total revised contract amount up to \$45,087,100, and an increase in the contract duration contingency of 60 consecutive calendar days, for a total revised contract duration up to 1,079 consecutive calendar days;   |
|                    | Approve a reallocation of the remaining/allocated balances (current projection is \$2,000,000) from Interim WWE Capital Improvement Program (CIP) to be reallocated to CENMSCIC52 to support the Project; Approve a transfer of funds in the amount of \$10,000,000 from Project CWP11001, Treasure Island and \$11,000,000 from Project CWWSIPDP, Biosolids/Digester to Construction Contract WW-483RR for additional project management, engineering support, environmental mitigation monitoring, construction and construction management support of the Project. There is an unfunded amount of \$2,700,000 that the Commission had previously authorized for the General Manager to accept and expend from PG&E for re-design and construct sewer improvements to avoid PG&E has failed to relocate its facilities and would not enter into an agreement to pay for SFPUC to avoid its facilities. |
|                    | Approve an increase in Project cost for Contract No. WW-483RR in the amount of \$23,000,000, for a total revised Project amount of \$61,317,332;   |
|                    | Authorize the General Manager of the San Francisco Public Utilities<br>Commission (SFPUC) to approve future modifications to the contract,<br>if appropriate;  |

## APPROVAL:

COMMISSION SECRETARY

Donna Hood

Authorize the General Manager to seek Board of Supervisor's authorization for appropriation of funds for the project.

The increase in the Project costs, which includes contract cost contingency, and the increase in construction duration contingency is needed for unforeseeable differing site conditions and additional utility conflicts encountered when constructing the pipeline in downtown San Francisco, and the subsequent schedule delays related to these issues. Some of the unforeseen conditions included encountering and removing seven abandoned underground storage tanks and associated concrete basements, and removing portions of abandoned wharves that were constructed with multiple decks separated by large rocks and fill. The time needed to remove abandoned obstructions increased the complexity of construction tremendously in this busy, downtown area, which has a high volume of cars, pedestrians, and buses. The construction area in downtown San Francisco is surrounded by major transportation activity such as the Embarcadero BART station, California Cable Car line, several MUNI bus lines, and the Ferry Building; therefore, pedestrian traffic during peak hours is very heavy. The traffic reconfigurations required to minimize impacts to different modes of transportation created new and costly challenges for the project. As such, increased costs are needed to ensure pedestrian safety and to reduce impacts to people and businesses in the heart of the Financial District. After years of coordination with PG&E and a year-long negotiation, PG&E has not relocated its facilities and refused to enter into an agreement with SFPUC to re-design and construct the sewers to avoid its facilities, at the estimated costs of \$2,700,000. In summary, the increase in cost and duration contingencies are

needed to address unforeseen/unforeseeable site conditions, traffic impact, utility conflicts and potential delay costs associated with the construction. The cost also includes unfunded amounts of \$2,700,000 that SFPUC has been seeking from PG&E. The requested increase included cost-saving measures, such as changing construction methods from open-cut to trenchless excavations (whenever practical) to reduce schedule delays.

serve as a redundant line to the portion of the NSFM that is most vulnerable to failure. As part of this project, approximately 3,000 feet

| Background:                           | The existing North Shore Force Main (NSFM) is a critical life-line   |
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|                                       | that transports all the sewer flow from the northeastern regions of San  |
|                                       | Francisco, including the Financial District and the Port of San  |
|                                       | Francisco, to the Southeast Wastewater Treatment Plant for treatment   |
|                                       | before the flow is discharged to the San Francisco Bay.  |
|                                       | Due to previous failures of the existing NSFM in 2008, the Project<br>was initiated to ensure that the SFPUC continues to provide reliable |
| · · · · · · · · · · · · · · · · · · · | sewer services. This project will provide an auxiliary force main to   |

|                                  | of pipe will be installed through the heart of the financial district, and<br>a valve-vault will be constructed in the sidewalk area on The<br>Embarcadero, between Washington and Broadway Streets.<br>The NSFM currently cannot operate at full capacity due to multiple<br>joint failures discovered in March 2012 and June 2012. Emergency<br>repairs of the existing NSFM have been completed under separate<br>emergency contracts. However, a portion of the existing NSFM<br>cannot be rehabilitated until the redundant force main is completed<br>under this Project.  |
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| Description of Scope<br>of Work: | <ul> <li>Description of Scope of Work:</li> <li>Construction contract work is located within downtown San Francisco. The contract work consists of:</li> <li>Installation of a valve-vault in The Embarcadero sidewalk and roadway;</li> <li>Construction of approximately 3,000-feet of new sewer force main to serve as a redundant force main on Drumm Street, between Jackson and California Streets (in front of the Embarcadero Center's offices and retail fronts, and the Hyatt Regency Hotel), across a pedestrian plaza between California and Spear Streets (adjacent to the California Cable Car turnaround and a major BART and MUNI entrance/exit); and on Spear Street, between Market and Howard Streets;</li> <li>Replacement or relocation of approximately 2,070-feet of water mains along the project alignment (partially funded by the Water Enterprise); and</li> <li>Pavement and curb ramp renovation (funded by San Francisco Department of Public Works (DPW)).</li> <li>Construction activities are approximately 65% complete as of May 2014.</li> <li>Sections 6.22(H)(1) and 6.22(H)(2) of the Administrative Code require that any cumulative increases in contract price or contract duration in excess of 10% of the original contract price or duration be approved by the Commission.</li> <li>In March 2013, staff obtained approval from the Commission to increase the contract cost and duration to address field conditions that were not anticipated during the planning and design of the project.</li> <li>Since March 2013, the project team encountered substantial amounts of underground obstructions, including abandoned and buried wharfs that were built at every intersection on Drumm Street, seven (7) underground storage tanks associated bandoned and buried building foundations, and additional unanticipated utility conflicts. These issues delayed the construction progress and extended the time the</li> </ul> |

> contractor needed to complete the contract work; therefore, the support costs needed for pedestrian and vehicular safety, and for reducing impact to MUNI's bus and cable car services increased. The increase in duration also delayed the work beyond the 2013 holiday moratorium season; this required the contractor to restore Drumm Street back to pre-construction conditions, a major effort that included re-instating MUNI overhead trolley lines, modifying traffic signals, and repaving and restriping the streets. These unforeseen issues warranted an additional increase in cost and schedule duration which the project team had identified as potential change orders and trends that will require additional modifications beyond the existing contract limits.

> To avoid potential delays in implementing and performing the necessary change order work, the project team is seeking the preapproval of additional cost contingency and contract duration contingency to cover future contract modifications determined by the General Manager to be necessary to complete the work.

## **Previously Approved Change to Contract Contingency:**

In March 2013, contract contingency in the amount of \$15,324,000 was approved by the Commission to address the following:

- 1. Design modifications required to overcome unforeseen site conditions such as abandoned concrete slab with pile-foundation footing and an abandoned underground storage tank;
- 2. Design modifications required to avoid existing utilities not previously identified by both public and private utility companies;
- 3. Potential Memorandum of Understanding with PG&E upon their request and agreement to pay for design modifications in lieu of relocation or postponement of full relocation of PG&E facilities;
- 4. Additional traffic design, routing, and support work required to be implemented by the contractor in support of SFMTA's requirements;
- 5. Additional exploration work by the contractor to verify potential utility conflicts;
- 6. Additional cost for handling and transporting hazardous soil beyond the original quantities estimated in the bid package;
- 7. Additional cost for handling and disposing of ground water beyond the original quantities estimated in the bid package;
- 8. Recovery plan to make up for schedule delays;
- 9. Ten percent (10%) contingency for work not yet performed.

Current Requested Change to Pre-Approved Contract Contingency:

Additional contingency in the amount of \$12,726,800 is being

| <ol> <li>requested to address the following:         <ol> <li>Additional design modifications required to overcome unforeseen site conditions such as abandoned timber piles, abandoned utility ductbanks, abandoned reinforced concrete slabs, pile-foundations, and footings;</li> <li>Additional remediation and disposal costs for handling and disposal of seven (7) abandoned underground storage tanks that held used oil and the associated contaminated soil surrounding the tanks;</li> <li>Observation of holiday moratorium since the project is located in a business district and work could not be completed before the holidays. This may require the closed-off areas of the street to be restored to allow through-traffic, including reinstating overhead trolley lines, changing traffic signals, and repaving and restriping the streets;</li> <li>Additional design modifications required to avoid existing utilities not previously identified by both public and private utility companies;</li> <li>Design modifications and related changes in construction work on Spear Street to avoid PG&amp;E facilities. After over a year of negotiation, PG&amp;E did not move its facilities and has refused to sign a Reimbursement Agreement with the City. To prevent further delays, staff recommends moving forward with the redesign and change in construction work. In addition, staff is working with the City Attorney's to pursue all remedies against PG&amp;E under the Franchise Agreement and under an existing lawsuit between the City and PG&amp;E</li> <li>Additional traffic design, routing, and support work required to minimize impact to mass transit such as MUNI's buses and cable cars;</li> <li>Potential delay costs associated with the additional time requested in the <u>previous</u> Commission approval. The delay costs could not be quantified previously, but some direct costs for contractor-requested stand-by equipment and personnel can be paid upon verification as allowed by the contr</li></ol></li></ol> |
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| <b>Contract Modifications to Date:</b><br>The original contract amount was \$15,488,000. SFPUC Commission previously approved an increase in contingency of up to \$15,324,000 for a revised contract limit of \$32,360,800. There have been approved contract modifications to date in the amount of \$10,620,979 (69% of the approved contingency amount), which increased the total contract value to \$26,108,979.   |
| <b>Change Orders, Trends, and 10% Contingency</b><br>The change orders and trends, and remaining contingency of work not<br>yet performed for Construction Contract WW-483RR – North Shore<br>to Channel Force Main Drainage Improvement and Pavement<br>Renovations are as follows:   |

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| Approved Change Orders and 10% Contingency:         • Approved Change Orders (COs):\$10,620,979*         • Remaining Approved Contingency:\$6,251,821*         • Sub-Total of Approved COs and Remaining Approved Contingency\$6,251,821*         • Requested Change Orders, Trends and 10% Contingency:         • Pending Change Orders (COs):\$0         • Potential Change Orders (COs):\$0  |
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| <ul> <li>Sub-Total of Request Change Orders (COs): \$2,799,800*</li> <li>Trends:\$9,926,500*</li> <li>Total of Change Orders and Trends:\$12,726,300*</li> </ul>  |
| Total of Approved and Requested Change<br>Orders, Trends and 10% Contingency:\$29,599,100*  |
| Requested Contract Limit:\$45,087,100*<br>*All numbers rounded to nearest dollar  |
| Approved COs are changes that have received all required approvals;<br>Pending COs are changes approved by the SFPUC that have yet to be<br>authorized by the City Controller's Office; Potential COs are changes<br>still to be negotiated with the Contractor; Trends are issues likely to<br>result in future change orders but have yet to be officially submitted as<br>a Proposed Change Order or Change Order Request.   |
| The total forecasted value of the work associated with significant<br>change orders, trends, and risks are primarily related to handling<br>unforeseen issues (such as disposal of the seven underground storage<br>tanks, associated soil-remediation costs, and removal of building<br>foundations, and removal of abandoned wharfs); design modifications<br>and the changing of construction methods (from open-cut to<br>trenchless pipeline installation to avoid utility conflicts; and additional<br>support costs to ensure pedestrian and vehicular safety, and minimize<br>impact to mass transit.   |
| <b>Reimbursement Agreement with PG&amp;E (PG&amp;E Agreement):</b><br>Although PG&E notified SFPUC that its facilities were relocated out<br>of the new sewer force main alignment, utility conflicts due to PG&E<br>facilities were identified when construction began. SFPUC promptly<br>notified PG&E to fulfill its obligations under the Franchise Agreement<br>by relocating its facilities as soon as possible. PG&E notified SFPUC<br>that it has not been able to resolve all the utility conflicts in a timely<br>manner, and had previously requested and agreed to fully fund a<br>Contract Modification to the Project, including funds for staff support<br>for re-design around PG&E facilities when feasible. |
| After over a year of negotiation on the Reimbursement Agreement, PG&E informed SFPUC that it would not enter into a Reimbursement   |

|                         | Agreement, even though its facilities are still in conflict with the new sewer force main alignment. At this time, SFPUC staff recommends the project proceed with the trenchless design to avoid the PG&E utilities and vigorously pursue all legal remedies against PG&E that exist in the City's favor under the 1939 Franchise Agreement.<br>The \$2,700,000 funding estimate from PG&E is included in the \$23,000,000 additional funding request for the project cost increase. Of the \$2,700,000, \$2,100,000 was estimated as construction contract cost and \$600,000 was estimated as non-contract costs, such as project management, construction management and engineering support. |
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| Result of Inaction:     | A delay in approving this item and authorizing the General Manager<br>or his designee to approve any contract modifications as specified<br>herein will delay completion of the project. This will require the<br>Contractor to stop work until a fully negotiated change order is ready<br>for SFPUC Commission approval and will result in costly increases to<br>the project.  |
| Environmental<br>Review | On March 21, 2012, the Environmental Review Officer adopted a<br>Mitigated Negative Declaration (MND) for the North Shore to<br>Channel Force Main Project. On April 24, 2012, per Resolution No.<br>12-0065, this Commission adopted the MND, California<br>Environmental Quality Act (California Environmental Quality Act)<br>CEQA findings and a Mitigation Monitoring and Reporting Program<br>(MMRP), as required by CEQA, and approved the Project and the<br>award of Contract No. WW-483RR, North Shore to Channel Force<br>Main Drainage Improvement and Pavement Renovation.   |
|                         | Subsequently, the Planning Department reviewed project<br>modifications, evaluated and compared the potential environmental<br>effects of the proposed modifications to the impacts identified in the<br>MND, and determined that the proposed modifications would not<br>result in any new significant environmental impacts or substantial<br>increases in the severity of previously identified environmental effects<br>and would not require any new mitigation measures.<br>The requested Commission action would not require further   |
|                         | environmental review by the Planning Department.  |
| Budget & Costs:         | SFPUC staff recommends the Commission authorize the General<br>Manager to seek additional funding appropriation to the project as<br>explained in this agenda item.   |
|                         | <b>Funding:</b> is available in CENMSCICSR00, CWP11001 and CWWSIPDP, and can be reallocated, subject to further approval, as may be required.   |
|                         | Original Award Amount: \$15,488,000   |

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|  | Previously Approved Contract Amount Limit : \$32,360,800*<br>Contract Change Orders Approved to Date: \$10,620,979*<br>Total Revised Contract Amount: \$26,108,979*<br>Remaining Approved Contract Contingency: \$6,251,821*<br>Additional Contract Contingency Requested: \$12,726,300*<br>Total Contract Amount Limit Requested: \$45,087,100*<br>Total Revised Project Amount Estimated: \$61,317,332* |
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|  | (Current Project Funding is \$38,317,322*)<br>*All numbers rounded to the nearest dollar value.   |
| Schedule:  | Notice-To-Proceed Date: May 29, 2012<br>Original Duration: 553 consecutive calendar days<br>Revised Duration Approved to Date: 446 consecutive calendar days<br>Total Revised Duration: 1,019 consecutive calendar days<br>Increase in Contract Duration Requested: 60 consecutive calendar<br>days<br>Total Revised Contract Duration Requested: 1,079 consecutive<br>calendar days                      |
| Compliance With<br>Chapter 14b: Local<br>Business Enterprise<br>And Non-<br>Discrimination In<br>Contracting<br>Ordinance: | Contract Monitoring Division (CMD) subcontracting goal of 15%<br>Local Business Enterprise (LBE) participation was originally<br>established for this construction contract. K.J. Woods Construction<br>committed to 20.7% LBE participation at the time of bid.  |
| Recommendation:  | SFPUC staff recommends that the Commission adopt the attached resolution.   |
| Attachments:   | 1. SFPUC Resolution   |