


## Memorandum

CS Memorandum No. 1309

**To:** Distribution

**From:** Susan MacKenzie, Document Control Manager 

**Date:** December 13, 2012

**Reference:** Project No. M544.1, Contract No. CS-149  
Task No. 1-8.02, Change Control

**Subject:** Configuration Management Board Meeting No. 102

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Attached please find minutes for Configuration Management Board Meeting No. 102 held on November 21, 2012.

Attachments: CMB Meeting No. 102 Rev. 0 Minutes with attachments

**Cc:** David Kuehn, STV (w/attachments) [david.kuehn@stvinc.com](mailto:david.kuehn@stvinc.com)  
Brad Lebovitz, STV (w/attachments) [bradley.lebovitz@stvinc.com](mailto:bradley.lebovitz@stvinc.com)  
Luis Zurinaga, SFCTA (w/attachments) [luis.zurinaga@sfcta.org](mailto:luis.zurinaga@sfcta.org)  
Matt Lee, SFCTA (w/attachments) [matt@sfcta.org](mailto:matt@sfcta.org)  
Shahnam Farhangi, SFMTA (w/attachments)  
Joon Park, SFMTA (w/attachments)  
Roger Nguyen, SFMTA (w/attachments)  
Arthur Wong, SFMTA (w/attachments)  
Jane Wang, SFMTA (w/attachments)  
Richard Redmond, CSP (w/attachments)  
Quon Chin, CSP (w/attachments)  
Mark Benson, CSP (w/attachments)  
Mark Latch, CSP (w/attachments)  
Carlos Campillo, CSP (w/attachments)  
Beverly Ward, CSP (w/attachments)  
Chuck Morganson, HNTB/B&C (w/attachments)  
Aileen Read, CSDG (w/attachments)  
CS File No. M544.1.5.0890

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**Distribution:**

John Funghi, SFMTA  
Albert Hoe, SFMTA  
Ross Edwards, CSP  
Eric Stassevitch, CSP  
Sarah Wilson, CSP  
Matt Hembd, CSP

## CMB Meeting Minutes #102

DATE: November 26, 2012

MEETING DATE: **November 21, 2012**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J Funghi (JF), A. Hoe (AH), R. Edwards (RE), E. Stassevitch (ES), S. Wilson (SW), M. Hembd (MH)

COPIES TO: Attendees: S. Farhangi (SF), A. Wong (AW), J. Park (JP), R. Nguyen (RN), R Redmond (RR), M. Latch (ML), M. Benson (MB), B. Ward (BW), L. Zurinaga (LZ), Q. Chin (QC), C. Campillo (CC), J. Wang (JW), C. Morganson (CM), A. Read (AR), M. Lee (ML), B. Lebovitz (BL), D. Kuehn (DK), File No. M544.1.5.0890

REFERENCE: Project No. M544.1, Contract No. 149 Task 1-8.02  
Final Design

SUBJECT: Configuration Management Board Meeting # 102– Rev. No. 0

### RECORD OF MEETING *(Italicized text indicates status update of open items)*

ITEM #	DISCUSSION	ACTION BY DUE DATE
5- 11/07/12	1252 - Sarah Wilson presented Evaluation of Merit of, COR 23 – MOS Brick Wall #2 - for removal, hauling and disposal of a second existing brick wall discovered at the location of the north headwall for Moscone Station. The CMB suggested the rationale write up for the COR merit evaluation be revised to provide a better description and justification for the change and be brought back to the CMB for approval. <i>11/14 Status: A revised COR was presented expanding the justification for the change, however the CMB requested additional revisions to the evaluation emphasizing the partial merit for the COR is recognized due to the need for the Contractor to use additional resources and different method of excavation. The COR will be brought back to the CMB for approval. 11/21 Status: Additional information from contract provided justification to find the COR has no merit. CMB agreed that COR 23 has no merit based on work contained in the Contract Documents. <b>CLOSED</b></i>	S. Wilson 11/21/12
1- 11/14/12	1252 - Sarah Wilson presented Evaluation of Merit of, COR 17 – MOS - Standby Time at south headwall due to Live Traffic Signal lines. Three live traffic signal lines were discovered which ran lengthwise through the headwall construction (not shown on dwg UD-403). The Contractor was unable to perform utility demolition and guidewall installation work as planned and is seeking compensation for standby by time while a resolution to relocate the traffic signal was received from SFMTA. RE is recommending rejecting this COR. Justification for rejection of merit is due to other work the Contractor could have performed while waiting for a response to RFI #110 – Proposal to Permanently Reroute Traffic Lines. A letter will be sent to the Contractor rejecting the COR's merit. <i>11/21 Status: This item was revisited to clarify that the issue is related to CMB action from item 3 -7/25/12 (Mtg #88) specifically acted on 08/01/12 (CMB Mtg. 89) referred originally as Trend #15. <b>CLOSED</b></i>	
2- 11/14/12	1252 - Sarah Wilson presented Evaluation of Merit of, COR 18 – MOS South Headwall re-design previously presented to the CMB in August (mtg #93). The Contractor	

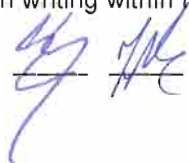
ITEM #	DISCUSSION	ACTION BY DUE DATE
	<p>contends that end stops are not required at the end of the return wall depicted on contract drawing (ES-421 Rev 0). RE is recommending a possible compensation value of \$135K. Based on the information presented the CMB found some merit for labor and material cost but were unclear from the COR, what element of work actually constituted the change. The RE is to proceed with a scoping meeting with a special emphasis on obtaining description of work as bid by Contractor so that the change can be better defined and quantified. 11/21 Status: <i>Revisited COR 18 due to confusion from some members resulting from last week's discussion. Supporting material was reviewed and the CMB agreed that the COR has no merit and a corrected response to RFI 136.2 be provided to the Contractor no later than Monday 11/26. This direction is consistent with that taken by the CMB on August 29<sup>th</sup> (Mtg 93).</i> <b>CLOSED</b></p>	
<p>3- 11/14/12</p>	<p>1252 - Sarah Wilson presented Evaluation of Merit of, COR 33 Ret Shaft - 20" Water Line Conflict – Contract drawings depict 20" water line being installed further east to the Muni (MRY) electrical duct bank instead of to the side as depicted on the contractor drawings to be installed to the side. Due to the proximity of MRY duck bank the Contractor must excavate and shore a larger hole in order to demolish the concrete around the duct bank to allow for 18" for welding all around the pipe. Based on the information presented the CMB found some merit for additional labor and material costs but were unable to clearly establish what element of work constituted the change as presented in the COR. RE will proceed with scoping the work to better define and quantify the change. 11/21 Status: <i>COR revisited do to confusion from some members resulting from last week's discussion.</i></p>	

**ACTION ITEMS**

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
5	08/08/12	08/29/12	1252 – PCC 1252-02 UMS Headwalls	M. Benson	10/10/12	Open
1	11/07/12	11/07/12	1300 – WP 1254 – SF Planning Request	R. Edwards	11/28/12	Open
5	11/07/12	11/14/12	1252 – COR 023 – Brick Wall @ MOS	S. Wilson	11/21/12	CLOSED
2	11/14/12	11/14/12	1252 – COR 018 – MOS Headwalls - Endstops	S. Wilson	11/21/12	CLOSED
3	11/14/12	11/14/12	1252 – COR 033 – Retrieval Shaft – 20" Water Line	S. Wilson	11/21/12	Open

Meeting adjourned at 5:00pm

These meeting minutes have been prepared by E. Stassevitch and reviewed by, R. Edwards and are the preparer's interpretation of discussions that took place. If the reader's interpretation differs, please contact the author in writing within four (4) days of receipt of these minutes.

Signed:  [initials of preparer & reviewer] Date: Dec 11, 2012 [Date review completed]

*Copy*

## Meeting Agenda

**Project No. M544.1, Contract No. CS-149**  
**Program/Construction Management**  
**Configuration Management Board (CMB) Meeting No. 102**  
**November 21, 2012**  
**3:00pm – 5:00pm**  
Central Subway Project Office  
821 Howard St. 2<sup>nd</sup> Floor  
Main Conference Room

**Attendees:**

Mark Benson	Albert Hoe	Matt Lee	Beverly Ward
Ross Edwards	Jim Kelly	Roger Nguyen	Arthur Wong
Shahnam Farhangi	David Kuehn	Joon Park	Luis Zurinaga
John Funghi	Mark Latch	Richard Redmond	
John Haley	Brad Lebovitz	Eric Stassevitch	

1. **1250** – Nothing to Report
2. **1251** -- Nothing to Report
3. **1252** –
  - Trend No. 13, COR 017 - MOS - Standby Time @ south headwall due to live TS lines – Revisit
  - Trend No. 29, COR 018 - MOS - South Headwall re-design – Revisit Merit Evaluation
  - Trend No. 18, COR 023 - MOS - Brick Wall #2 discovered @ north headwall – Revisit Merit Evaluation
  - Trend No. 44, COR 033 - Ret Shaft - 20" Water Line Conflict – Merit
4. **1253 (UMS)** – Nothing to Report
5. **1254 (CTS)** – Nothing to Report
6. **1255 (MOS)** – Nothing to Report
7. **1256 (STS)** – Nothing to Report
8. **Trend/Change Log** – Review Current update
9. **Other Business** –

## Meeting Attendance Sheet

**Project No. M544.1, Contract No. 149**  
**Program/Construction Management**  
**Configuration Management Board Meeting No. 102**  
**November 21, 2012**  
**3:00 p.m. – 5:00 p.m.**  
 Central Subway Project Office  
 821 Howard, 2<sup>nd</sup> Floor  
 Main Conference Room

*Deliver Meeting Attendance Sheet with original signatures/initials to Document Control.*

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Please enter initials if your name is listed below. Please enter name, affiliation, phone number and email address if your name is not listed below.				
Benson, Mark	CSP	(415) 701-4295	Mark.Benson@sfmta.com	
Dombrowski, Charles	Hill/PCC	(415) 701-5272	Charles.Dombrowski@sfmta.com	
Edwards, Ross	CSP	(415) 701-5296	Ross.Edwards@sfmta.com	
Farhangi, Shahnam	SFMTA	(415) 554-0721	Shahnam.Farhangi@sfmta.com	
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	
Haley, John	SFMTA		John.Haley@sfmta.com	
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com	
Kelly, Jim	SFMTA		Jim.Kelly@sfmta.com	
Kuehn, David	STV/PMOC	(510) 464-8053	David.kuehn@stvinc.com	
Latch, Mark	CSP	(415) 701-5294	Mark.Latch@sfmta.com	
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	
Lee, Matt	SFCTA	(415) 522-4813	matt@sfcta.org	

central  subway

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	
Park, Joon	SFMTA	(415) 701-4742	Joon.Park@sfmta.com	
Redmond, Richard	CSP	(415) 701-4288	Richard.Redmond@sfmta.com	
Stassevitch, Eric	CSP	(415) 701-4426	Eric.Stassevitch@sfmta.com	ES
Ward, Beverly	CSP	(415) 701-5291	Beverly.Ward@sfmta.com	
Wong, Arthur	SFMTA	(415) 701-4305	Arthur.Wong@sfmta.com	
Zurinaga, Luis	SFCTA	(415) 716-6956	Luis.zurinaga@sfcta.org	
Wilson, Sarah	SFMTA	415.243.0950	sarah.wilson@sfmta.com	SW
Humbel, Matt	SFMTA	415-243-0949	matthew.humbel@sfmta.com	MH

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

**EVALUATION OF MERIT**

**COR 023**

**Recommendation:** Accept justification of Merit for COR 023 for additional costs. Additional costs for removal, hauling and disposal of an existing brick wall discovered at the location of the north headwall for Moscone Station shall be considered for compensation.

**Facts:** BIH's subcontractor, Synergy Project Management (SPM), uncovered a buried brick wall, beneath the west curb at the location of the north headwall for Moscone Station, not shown in the contract documents, but in the vicinity of a buried brick wall that was shown on the contract drawings. The Contractor submitted RFI #114 on 7/10/12 with notification of the discovery of the 18-24" thick brick wall of unknown depth.

**Rationale for COR:** Additional costs were incurred by the Contractor for differing site conditions involving removal of a buried brick wall not shown in the contract documents, that interfered with construction of the north headwall for Moscone Station.

**Justification:** The contract documents do not show the existing buried wall at the location of the north headwall for Moscone Station. Removal of the buried wall was needed prior to installation of the headwall and required additional resources to demolish. Furthermore the brick wall could not be excavated below the limits of the guidewall with the equipment originally anticipated. The demolition of the wall required use of an excavator below the limits of the guide walls where slurry wall excavation equipment would normally have been used. Due to the fact that the existence of the buried wall was not anticipated and because additional resources and different methods of excavation were required the additional costs for demolition of the wall should be compensable.

By: \_\_\_\_\_ Date \_\_\_\_\_  
Sarah Wilson  
Resident Engineer

\_\_\_\_\_ Date \_\_\_\_\_  
Configuration Management Board  
Approval







SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

**EVALUATION OF MERIT**

**COR 017**


**Recommendation:** Accept justification of No Merit for all costs and impacts associated with COR 017.


**Facts:** During utility demolition at the Moscone south headwall, the Contractor discovered three existing live traffic signal conduits which ran across the planned headwall. The locations of the live traffic signal lines encountered prevented the Contractor from performing utility demolition and guide wall installation work as originally planned.

COR 017 was submitted by the Contractor to cover standby costs while a resolution to relocate the traffic signal outside the footprint of the south station headwall was being determined. Costs for re-routing the traffic signal lines have been evaluated separately under COR 011.

**Contractor Rationale for COR:** The contract documents do not accurately depict the location of the existing traffic signal lines. The actual location of the TS lines prevented the Contractor from performing utility demolition or guide wall work in accordance with the contract documents.

**Justification:** Technical direction to re-route the TS lines was provided four days after receipt of the RFI related to this work. The work activity is not on the critical path and other work was available to be performed in the same area.

By:  \_\_\_\_\_ 11/21/12  
Sarah Wilson Date  
Resident Engineer

 \_\_\_\_\_ 11-21-12  
Configuration Management Board Date  
Approval

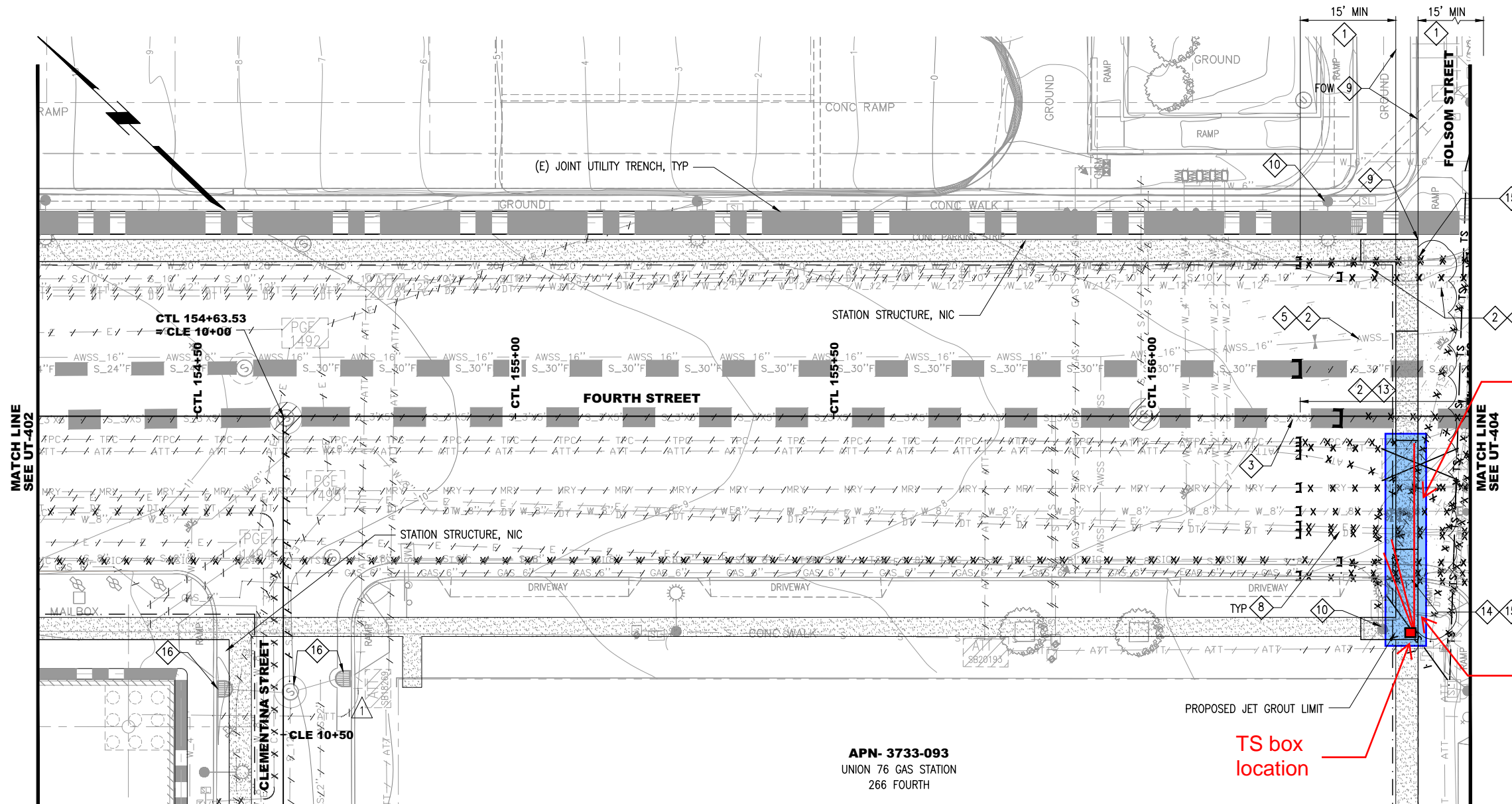
- Attachments: 1. Relevant Specification sections and Drawings  
2. Timeline of events

**SFMTA Contract No. 1252**

**Contractor:** Barnard Impregilo Healy JV (BIH)

## **COR 17 - TIMELINE**

- 06/18/12 - BIH/SPM submitted RFI 103 to address the existence of a SFDT utility box located against the southwest corner of the south MOS headwall.
- 06/22/12- The RE indicated that the utility in question was a traffic signal box and suggested potholing to expose the lines leading up to this box to determine what needs to be protected during guide wall and headwall installation.
- 06/28/12 - 06/29/12 - SPM performed potholing for the traffic signal and discovered that several traffic signal lines (not shown correctly on UD-403, Rev. 1) were installed across the headwall.
- 07/02/12 - SPM provided RFI 110 which contained a proposal to permanently re-route these lines per the attached sketch and photos.
- 07/06/12 – SFMTA provided a response to RFI 110 to reroute the utilities across the north leg of the intersection so that it would not interfere with the work at the headwall.
- 07/25/12 - SFMTA authorized to proceed with the work summarized in the response to RFI 110 and COR 11.
- 07/27/12 - SPM commenced traffic signal relocation.
- 08/02/12 - Work was completed.



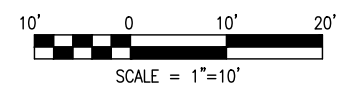
All utilities in this area of demo limits shown to be abandoned

TS line as discovered in field

TS box location

**NOTES:**

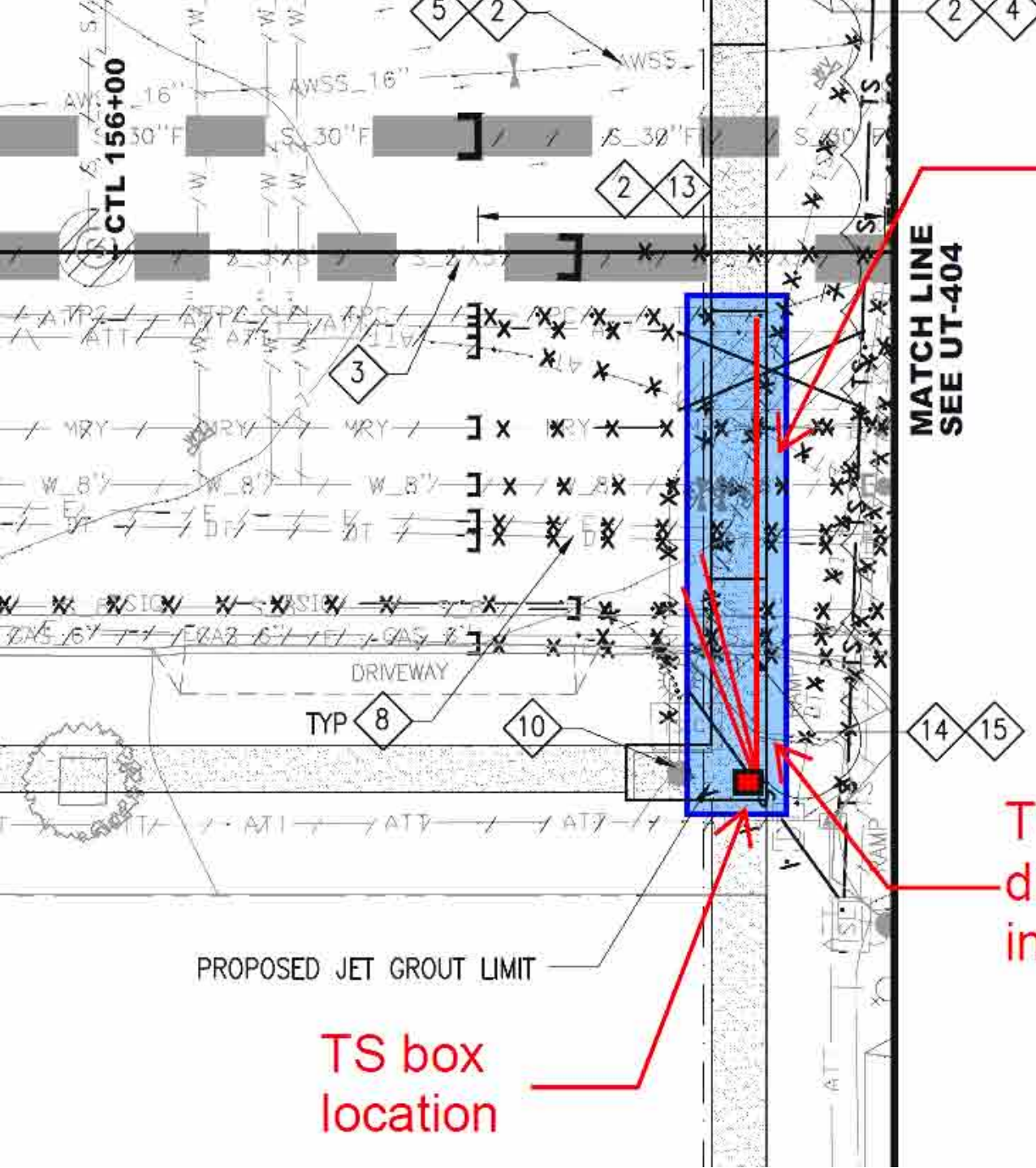
- DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, AT JET GROUT OR HEADWALL LIMIT.
- ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT OVER, UNLESS OTHERWISE NOTED. COORDINATE DEMOLITION WITH HEADWALL CONSTRUCTION PHASING.
- PROTECT (E) SEWER.
- SEE (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL OF WATER FACILITIES.
- SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
- PROTECT (E) AT&T FACILITIES.
- PROTECT (E) JOINT TRENCH.
- CAP OR PLUG ALL ABANDONED FACILITIES INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS AT JET GROUT LIMIT.
- PROPOSED STATION HEADWALL. SEE (ES) DRAWINGS FOR LOCATION AND DETAILS. CONTRACTOR SHALL VERIFY THE HEADWALL LOCATION PRIOR TO COMMENCEMENT OF DEMOLITION.
- TEMPORARILY REMOVE (E) STREET LIGHT AND REINSTALL AFTER HEADWALL CONSTRUCTION.
- (E) PARKING METERS. CONTACT DPT IF DEMOLITION IS REQUIRED. SEE CONTRACT SPECIFICATIONS FOR MORE INFORMATION. IF REMOVED, REINSTALL IN SAME LOCATION AFTER HEADWALL CONSTRUCTION.
- REMOVE (E) TREE AS CONTRACTOR'S PROPERTY. PRIOR TO REMOVAL CONFIRM STREET TREE REMOVAL PERMIT WAS OBTAINED.
- SEE (UT) DRAWINGS FOR TEMPORARY REMOVAL OF SEWER.
- REMOVE (E) CURB AND GUTTER AS NECESSARY AND REINSTALL AFTER HEADWALL CONSTRUCTION.
- SEE (PD) & (RP) FOR PAVEMENT REMOVAL AND RESTORATION.
- (E) CATCH BASINS WILL REMAIN ACTIVE AND RE-DIRECT SEWER FLOW AWAY FROM STATION JET GROUT WALL.



**CONFORMED**

\\s6nos003\m544.1\FinalDesign\Drawing-821\2-Civil\Utility Demolition\Sheet Files CP03\M54423UD403\_R1C.dwg fboyani Thu Aug 25,2011 9:21 am UD-403\_R1C

				DESIGNED: M. DEFORGE DRAWN: E. MATIAS CHECKED: D. ZUJURING REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21, 2011		REV. 0 SEALED BY M. CHAN				CITY AND COUNTY OF SAN FRANCISCO <b>MUNICIPAL TRANSPORTATION AGENCY</b>		APPROVED CARTER R. ROHAN EXECUTIVE DIRECTOR/CEO		THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. <b>1252</b>	
05/04/2011 ISSUED FOR ADDENDUM 5		01/21/2011 ISSUED FOR BID		DATE DESCRIPTION		FOR ORIGINAL SIGNATURES, SEE CL-18030, REV. 0.		SCALE = 1"=10'		UTILITY DEMOLITION MOSCONE STATION CTL 154+25 TO 156+50		SFMTA CONTROL NO. <b>CL-18030</b>		DRAWING NO. <b>UD-403</b>		REVISION <b>1</b>	



All utilities in this area of demo limits shown to be abandoned

TS line as discovered in field

TS box location



SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

**EVALUATION OF MERIT**

**COR 018**

**Recommendation:** Accept justification of Merit for COR 018 for additional cost. The contract documents do not depict permanent endstops at the ends of the Moscone headwalls. Additional effort (labor, equipment and materials) will be required to accomplish this work. There is no request for a time extension for this work.

**Facts:** SFMTA is requiring that BIH leave end stops at the Moscone headwalls in place at the completion of CN 1252. (Refer to the responses to RFI 00122, 00136, and 00136.1.) The following activities are required to be performed in order to install permanent end stops: install 4 wide flange beams per the attached SFMTA sketch (see attached Figure 1) including procurement of wide flange beams, installing Styrofoam to blocking, installing Nelson Studs on beams, and installing beams in concrete panels.

**Rationale for COR:** BIH believes that the contract does not require endstops or waterstops to be installed at the ends of Moscone headwalls because they are not indicated on the contract drawings.

**Justification:** Contract drawing ES-421 Rev. 0, Note 2 states “End stops are not shown. See specifications.” Specification Section 31 66 16 1.06 11 states that the contractor shall “Provide a comprehensive Construction Work Plan detailing the overall construction sequence for the slurry wall system, including: Approach for constructing joints between adjacent wall panels, including the use of end stops and waterstops...”.

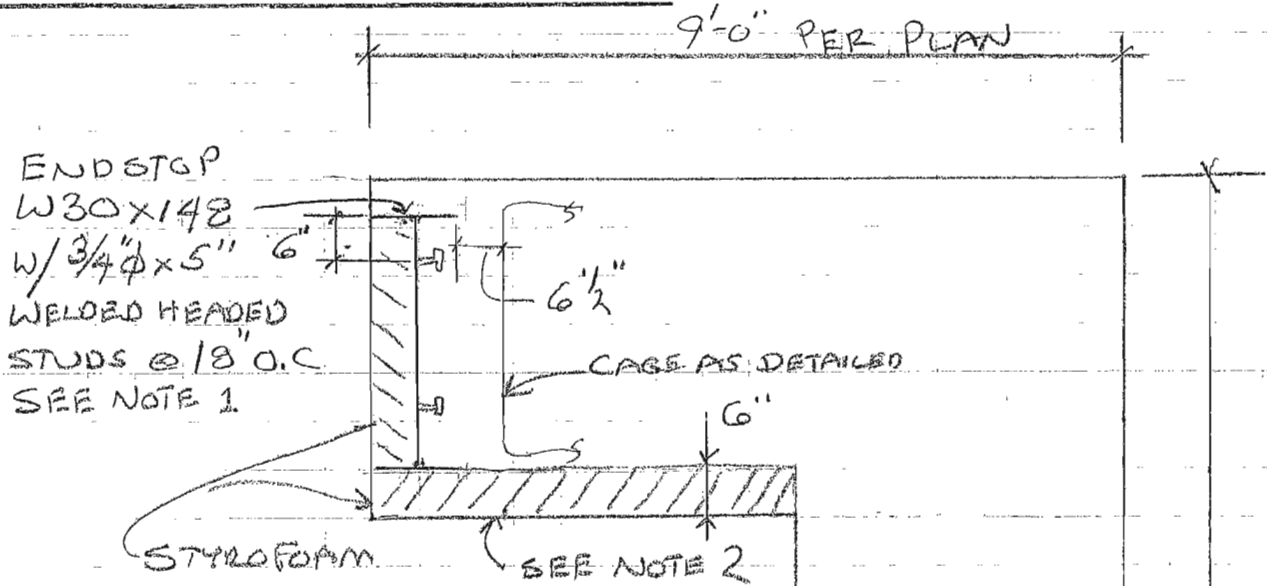
Section 11 titled “Construction Joints” of BIH’s approved Construction Work Plan states that “Endstop with continuous waterstop will be used at all panel joints at the Moscone station location only.” BIH indicated end stops will be at all panel joints; however, the contract drawings do not indicate panels adjacent to the return walls being installed under this contract.

The locations and requirement for permanent end stops at the ends of the Moscone headwalls is not clear in the contract documents, therefore, compensation for permanent end stops is justified.

By: \_\_\_\_\_ Date \_\_\_\_\_  
Sarah Wilson  
Resident Engineer

\_\_\_\_\_ Date \_\_\_\_\_  
Configuration Management Board  
Approval

END STOP - WF OPTION



NOTES:

1. END STOP TO EXTEND TO 15 FEET BELOW BOTTOM OF INVERT SLAB. SPLICE USING AISC MINIMUM PARTIAL JOINT PENETRATION WELDS AT FLANGES AND WEB. USE MULTIPLE PICK POINTS AS REQUIRED TO PREVENT DAMAGE DURING LIFTING.
2. SPACERS MAY BE USED IN LIEU OF THE 6 INCHES OF STYROFOAM AT THIS LOCATION ONLY. STYROFOAM BLOCKOUT IS REQUIRED AT END STOP WEB AS SHOWN.

TYPICAL CORNER PANEL - WF END STOP  
1/2" = 1'-0"

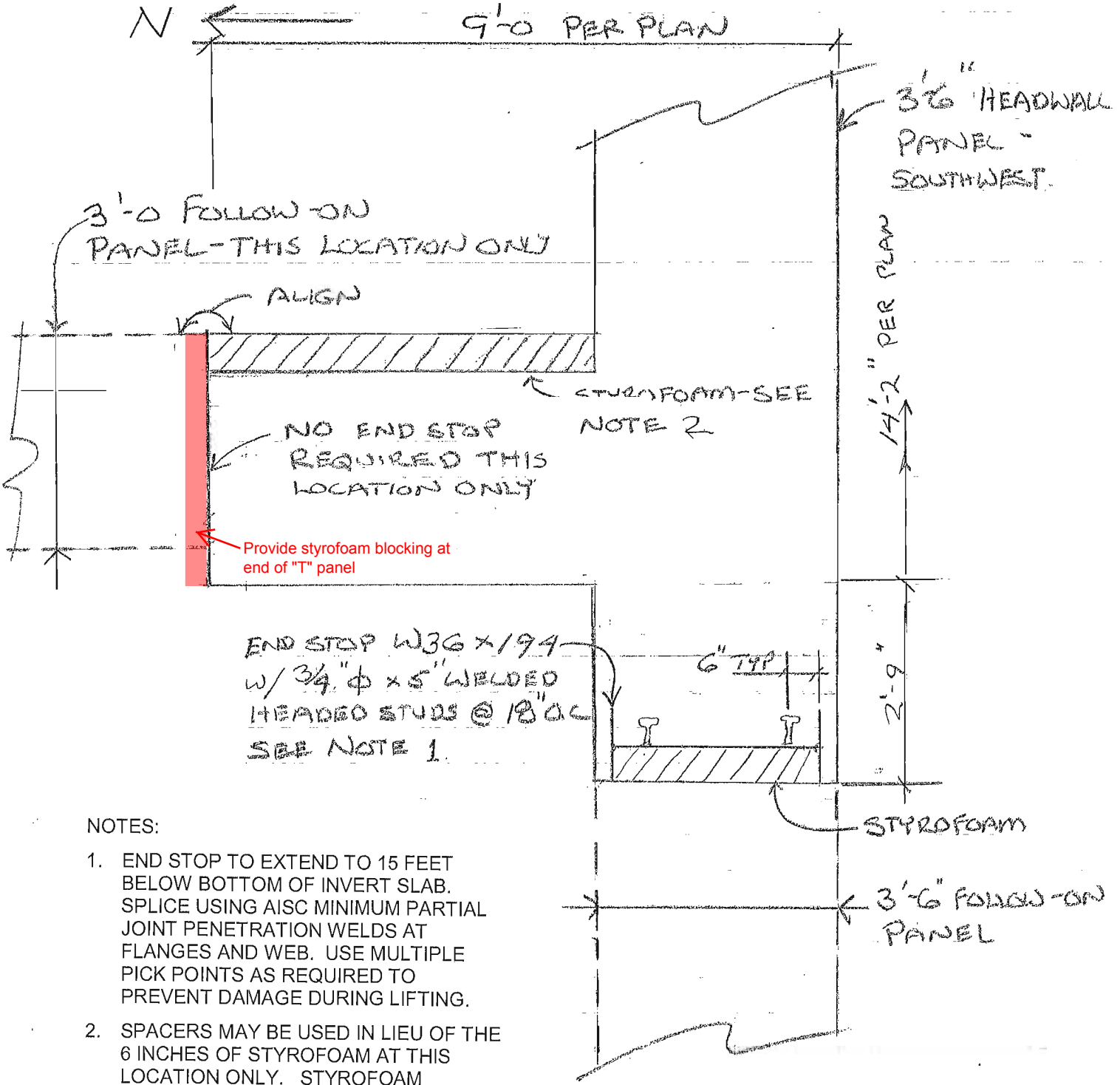




48 Colin P. Kelly Street  
 San Francisco CA 94107  
 T 415 989 9900  
 F 415 989 9909  
 www.soha.com

PROJECT CENTRAL SUBWAY - 1252  
 JOB NO. 100504  
 DATE 8-14-12 BY AD  
 SHEET 2 OF 2

END STOP - WF OPTION



NOTES:

1. END STOP TO EXTEND TO 15 FEET BELOW BOTTOM OF INVERT SLAB. SPLICE USING AISC MINIMUM PARTIAL JOINT PENETRATION WELDS AT FLANGES AND WEB. USE MULTIPLE PICK POINTS AS REQUIRED TO PREVENT DAMAGE DURING LIFTING.
2. SPACERS MAY BE USED IN LIEU OF THE 6 INCHES OF STYROFOAM AT THIS LOCATION ONLY. STYROFOAM BLOCKOUT IS REQUIRED AT END STOP WEB AS SHOWN.

SOUTHWEST CORNER - WF END STOP

1/2" = 1'-0"

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

### EVALUATION OF MERIT

#### COR 033

**Recommendation:** Accept justification of Merit for costs associated with COR 033. The contract documents do not accurately depict the correct location of an existing 20" water line. The water line's location and position underneath a MUNI (MRY) electrical duct bank will impact the contract work associated with the installation of the new low pressure water line. Additional effort will be required to mitigate impacts to the contract work. No additional time will be granted as this work will not affect the critical path of the project.

**Facts:** The relevant contract drawings are UD-701 Rev.0, UT-701 Rev.1 and UT-721 Rev.1. WD-701 Rev.0.

The existing MRY duct bank which runs south to north at the intersection of Columbus Ave. and Union St. is shown in the contract drawings to have been installed to the side of an existing 20" low pressure water line. During the excavation required for the contract water line removal and relocation work BIH's subcontractor, Synergy Project Management (Synergy or SPM), discovered that the existing water line was actually further east than was indicated in the drawings which positioned the tie-in connection for the new water line directly underneath the MRY duct bank.

**Rationale for COR:** SPM states that they originally intended on excavating a 5' x 5' tie-in hole to enable the water department to cap the existing line then backfill after the water department completed its work. Due to the close proximity of the existing water line to the MRY duct bank, SPM is now required to excavate and shore a larger hole in order to demolish the concrete around the duct bank and allow room for the water department to stub the existing 20" water line out from underneath the MUNI lines. SPM states that they must demolish more of the duct bank than was anticipated so that they can lift the MUNI electrical lines out of the way. After the tie-in is complete SPM will install a split duct to cover existing cables and restore the concrete encasement around the MUNI duct. As a result of having a larger excavation more shoring, steel plates, backfill and paving will be required than was originally anticipated. SPM claims that they will not be able to achieve the same production rates as assumed during the time of bid due to the presence of live electrical lines within the ductbank.

**Justification:** The contract drawings do not accurately depict the correct location of the 20" water line and therefore the additional costs that will be incurred to mitigate impacts to the installation of the new low pressure water line should be made compensable. The appropriate dimensions of the original excavation will be confirmed and compared to the revised excavation dimensions.

**SFMTA Contract No. 1252**

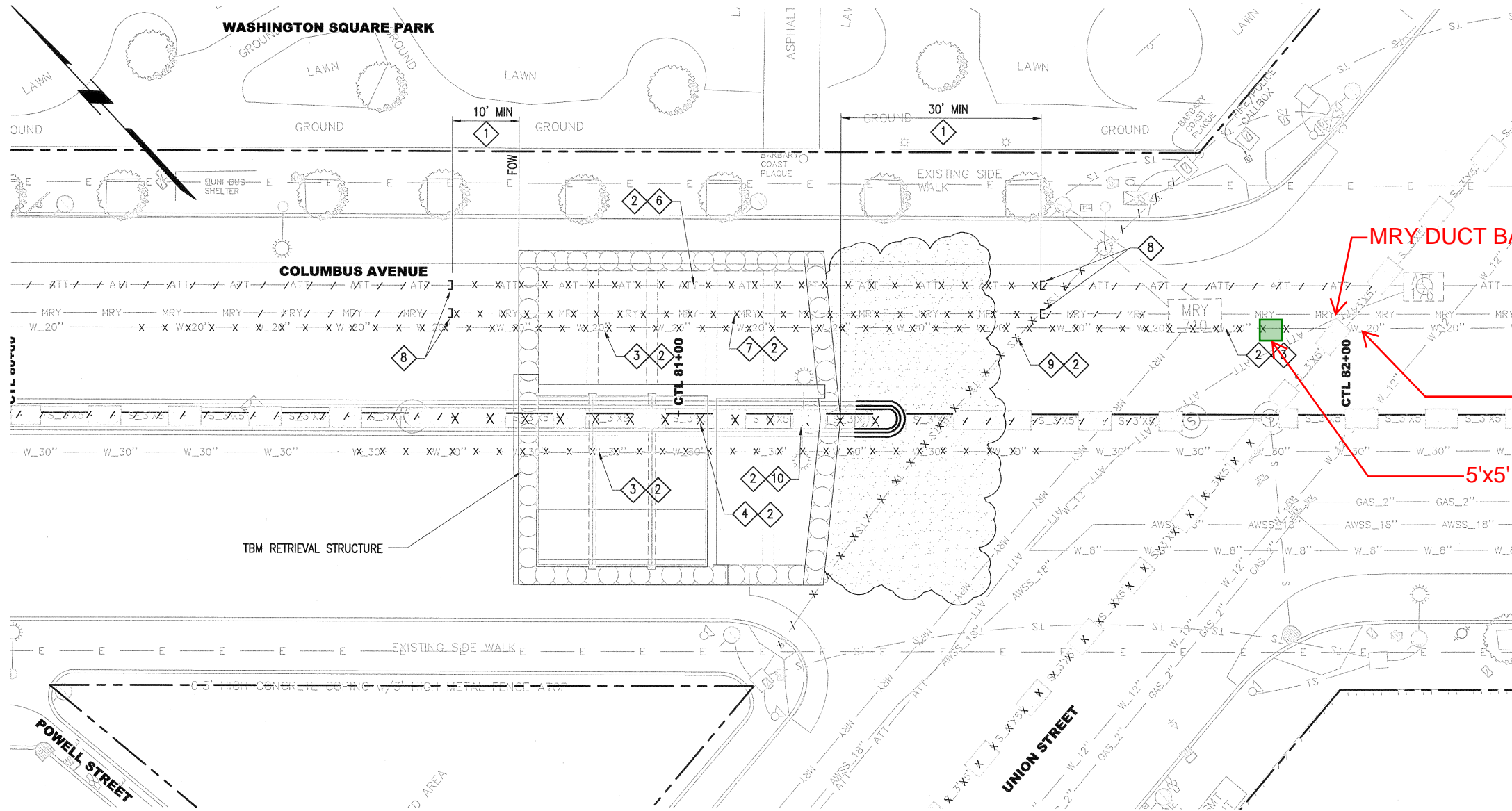
**Contractor:**

Barnard Impregilo Healy JV (BIH)

By: \_\_\_\_\_ Date \_\_\_\_\_  
Sarah Wilson  
Resident Engineer

\_\_\_\_\_ Date \_\_\_\_\_  
Configuration Management Board  
Approval

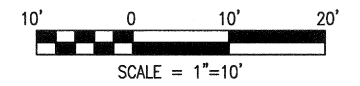
Work claimed by SPM to be anticipated per plans.



MRY DUCT BANK  
20\"/>

**NOTES:**

1. DEMOLISH AND REMOVE ALL ABANDONED UTILITY FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, WITHIN LIMITS OF RETRIEVAL SHAFT STRUCTURE AND TO THE LIMITS INDICATED, UNLESS OTHERWISE NOTED.
2. ACTIVE UTILITIES SHALL BE MAINTAINED UNTIL RELOCATION OR CUT-OVER, UNLESS OTHERWISE NOTED. COORDINATE DEMOLITION WITH RETRIEVAL SHAFT CONSTRUCTION PHASING.
3. REMOVE WATER LINE. SEE WATER DISTRIBUTION (WD) DRAWINGS FOR ABANDONMENT AND REMOVAL.
4. REMOVE SEWER. SEE (SW) DRAWINGS FOR ABANDONMENT.
5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
6. REMOVE AT&T DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
7. REMOVE MRY DUCT BANK. SEE (JT) DRAWINGS FOR ABANDONMENT.
8. CAP OR PLUG ALL ABANDONED FACILITIES, INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS, AT JET GROUT OR SECANT PILE LIMIT.
9. REMOVE TRAFFIC SIGNAL CONDUIT. SEE (TS) DRAWINGS FOR ABANDONMENT.
10. SEE STREET LIGHT (SL) DRAWINGS FOR REMOVAL/RELOCATION.

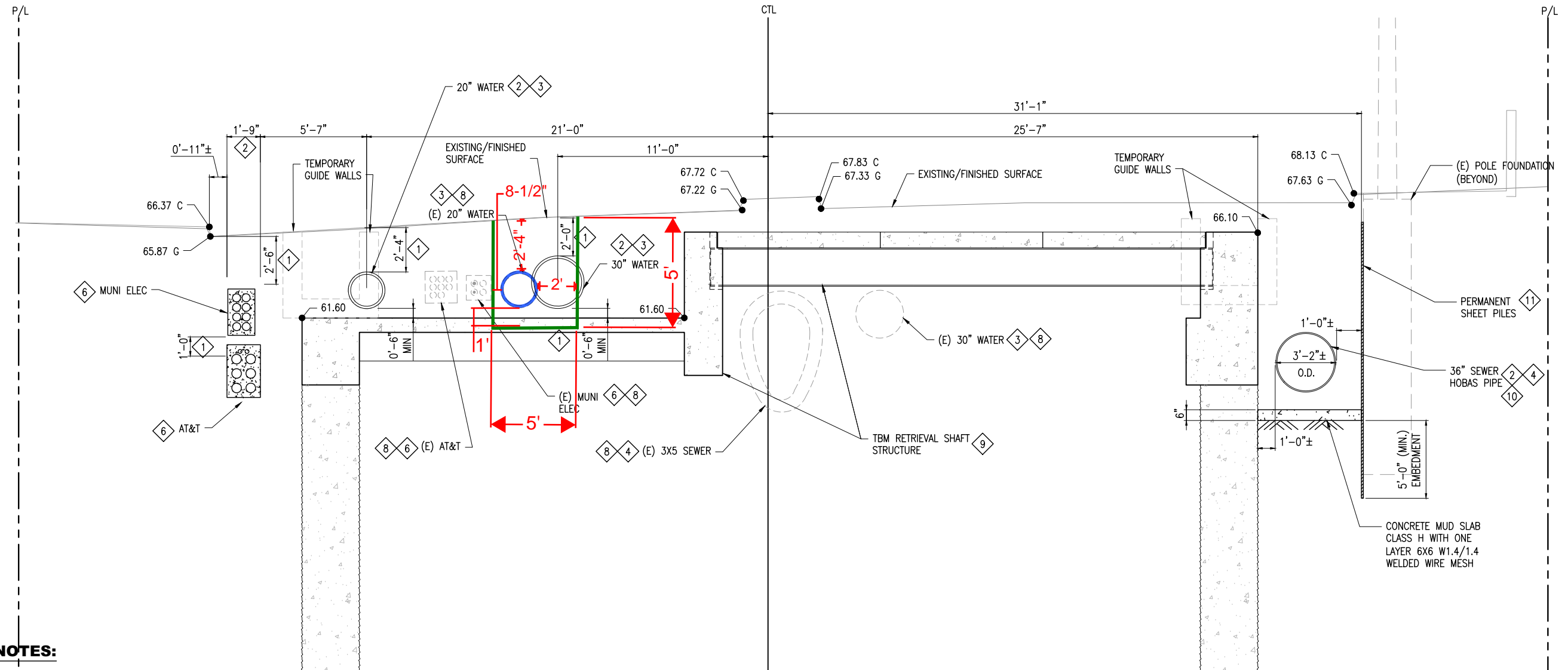


**CONFORMED**

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				CITY AND COUNTY OF SAN FRANCISCO <b>MUNICIPAL TRANSPORTATION AGENCY</b>		THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. <b>1252</b>	
				APPROVED  EXECUTIVE DIRECTOR/CEO		UTILITY DEMOLITION TBM RETRIEVAL SHAFT CTL 80+00 TO 82+25		SFMTA CONTROL NO. <b>CL-18035</b>	
01/21/2011 ISSUED FOR BID		DESIGNED M. DEFORGE DRAWN F. BAYANI CHECKED D. ZUURING REVIEWED M. CHAN RECOMMENDED M. FOWLER APPROVED R. EDWARDS DATE JAN 21 2011		SHEET NO. <b>28</b>		REVISION <b>0</b>		DRAWING NO. <b>UD-701</b>	

Work claimed by SPM to be anticipated per plans.



**NOTES:**

1. DIMENSION INDICATED IS MINIMUM ALLOWED.
2. DIMENSION APPROXIMATE, SUBJECT TO CONTRACTOR'S LAYOUT. SUBMIT FOR APPROVAL PRIOR TO INSTALLATION.
3. WATER PIPE - SEE WD DRAWINGS.
4. SEWER PIPE - SEE SW DRAWINGS.
5. AWSS PIPE - SEE AW DRAWINGS.
6. CONDUIT BANK - SEE JT DRAWINGS.
7. SEE REFERENCE DRAWINGS FOR LOCATION OF DESIGN LINE.
8. SEE DEMOLITION (UD) DRAWINGS.
9. SEE STRUCTURAL (ST) DRAWINGS.
10. COORDINATE CONSTRUCTION OF 36" SEWER WITH CONSTRUCTION SEQUENCING OF TBM RETRIEVAL STRUCTURE. INSTALL AND BACKFILL ACCORDING TO SFDPW STANDARDS.
11. INSTALL TO REMAIN AS PERMANENT USS INTERLOCKING SHEET PILING SECTION PSX32 (WEIGHT = 32 LB/FT/FT, SECTION MODULUS = 2.4 CUBIC INCH/FT) ASTM A328 OR APPROVED EQUIVALENT.
12. TEMPORARY BRACING AND WALERS FOR SHEET PILING TO BE DESIGNED BY CONTRACTOR. MAXIMUM SPACING BETWEEN BRACING LEVELS SHALL NOT EXCEED 6'-0".

**SECTION @ CTL 80+76  
LOOKING SOUTH**



**CONFORMED**

FOR ORIGINAL SIGNATURES, SEE CL-18002, REV. 0.

DATE	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED
05/05/2011	ISSUED FOR ADDENDUM 5	0	DZ	MC	RE
01/21/2011	ISSUED FOR BID	0	-	-	-

**PB TELAMON**  
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED M. DEFORGE
DRAWN F. BAYANI
CHECKED P. WILSON
REVIEWED M. CHAN
RECOMMENDED M. FOWLER
APPROVED R. EDWARDS
DATE JAN 21, 2011

REV. 0  
SEALED BY  
M. CHAN



CITY AND COUNTY OF SAN FRANCISCO  
**MUNICIPAL TRANSPORTATION AGENCY**

APPROVED  
CARTER R. ROHAN  
EXECUTIVE DIRECTOR/CEO

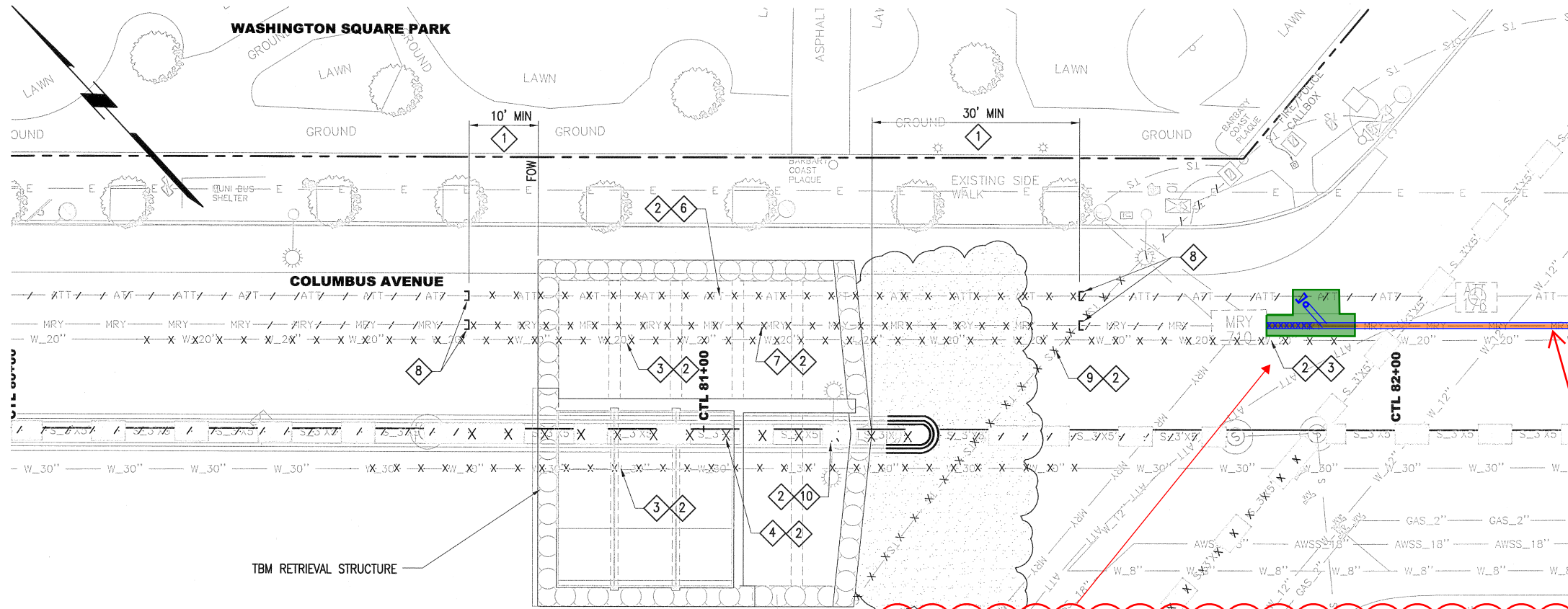
THIRD STREET LIGHT RAIL PROGRAM  
PHASE 2 - CENTRAL SUBWAY TUNNELS

UTILITY COMPOSITE  
TBM RETRIEVAL SHAFT  
CROSS SECTION AT CTL 80+76

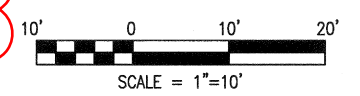
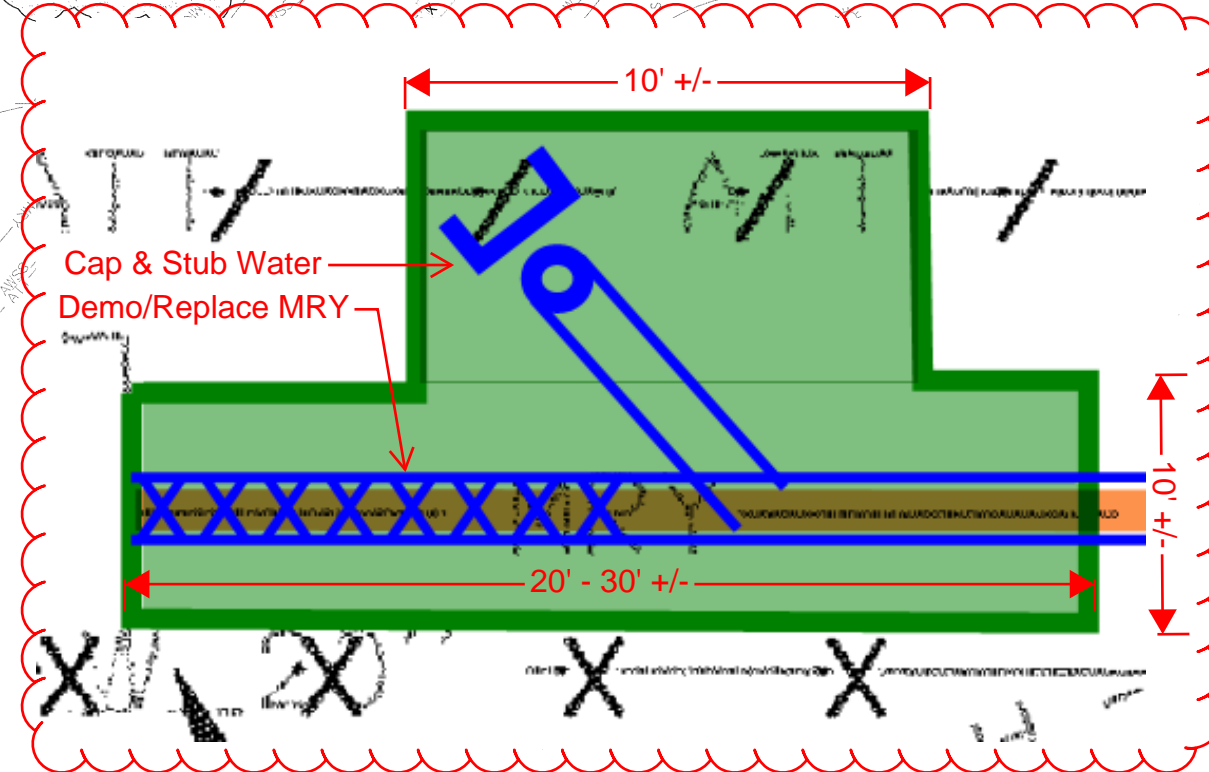
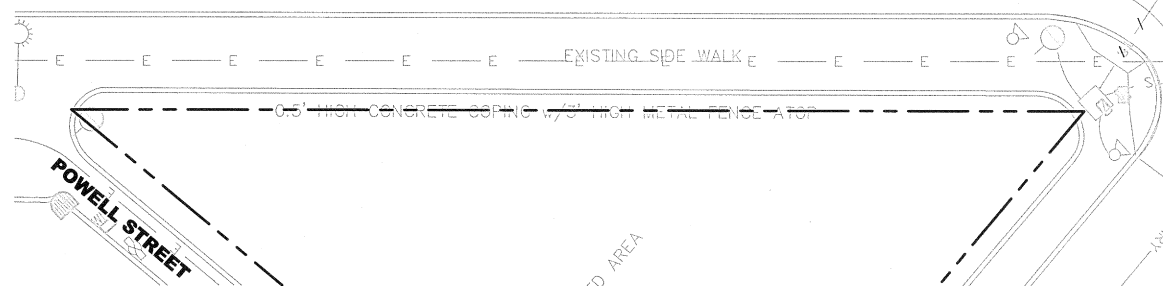
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SFMTA CONTROL NO. <b>CL-18002</b>
DRAWING NO. <b>UT-721</b>
SHEET NO. <b>1</b>

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Work proposed by SPM to be done per actual conditions in the field.



ACTUAL LOCATION OF 20" LOW PRESSURE WATER (DIRECTLY UNDERNEATH MRY DUCT BANK)  
MRY DUCT BANK IN SAME LOCATION AS SHOWN ON PLANS



**NOTES:**

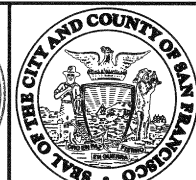
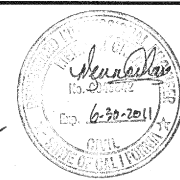
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DATE	ISSUED FOR	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED
01/21/2011	ISSUED FOR BID		0			

**PB TELAMON**  
TELAMON ENGINEERING CONSULTANTS INC.

DESIGNED: M. DEFORGE  
DRAWN: F. BAYANI  
CHECKED: D. ZUURING  
REVIEWED: M. CHAN  
RECOMMENDED: M. FOWLER  
APPROVED: R. EDWARDS  
DATE: JAN 21 2011



CITY AND COUNTY OF SAN FRANCISCO  
**MUNICIPAL TRANSPORTATION AGENCY**

APPROVED  
EXECUTIVE DIRECTOR/CEO

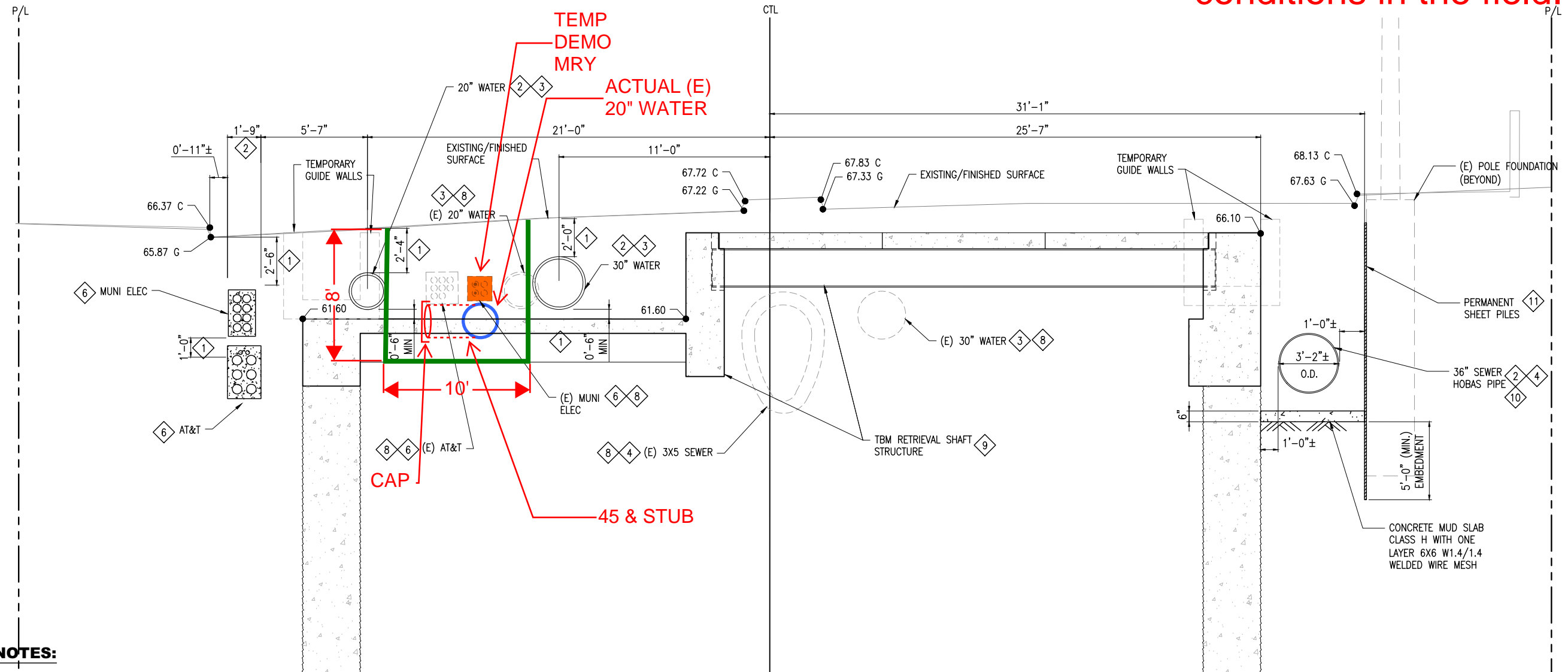
THIRD STREET LIGHT RAIL PROGRAM  
PHASE 2 - CENTRAL SUBWAY TUNNELS

UTILITY DEMOLITION  
TBM RETRIEVAL SHAFT  
CTL 80+00 TO 82+25

**CONFORMED**

CONTRACT NO. <b>1252</b>
SFMTA CONTROL NO. <b>CL-18035</b>
DRAWING NO. <b>UD-701</b>
SHEET NO. <b>28</b>
REVISION <b>0</b>

Work proposed by SPM to be done per actual conditions in the field.



**NOTES:**

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**SECTION @ CTL 80+76  
LOOKING SOUTH**



**CONFORMED**

FOR ORIGINAL SIGNATURES, SEE CL-18002, REV. 0.

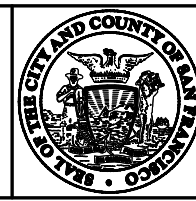
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**TELAMON ENGINEERING CONSULTANTS INC.**

REV. 0  
SEALED BY  
M. CHAN



CITY AND COUNTY OF SAN FRANCISCO  
**MUNICIPAL TRANSPORTATION AGENCY**

APPROVED  
 CARTER R. ROHAN  
 EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM  
 PHASE 2 - CENTRAL SUBWAY TUNNELS

**UTILITY COMPOSITE  
 TBM RETRIEVAL SHAFT  
 CROSS SECTION AT CTL 80+76**

CONTRACT NO.	1252
SFMTA CONTROL NO.	CL-18002
DRAWING NO.	UT-721
SHEET NO.	1

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