



Department of Public Works
Engineering Division

January 10, 2025

CITY OF BERKELEY
SANITARY SEWER REHABILITATION – ADELINE ST, SHATTUCK AVE, ET AL.
SPECIFICATION NO. 25-11688-C
ADDENDUM NO. 2

Dear Bidder:

The City of Berkeley has revised the Plans for Specification No. 25-11688-C, Sanitary Sewer Rehabilitation Project – Adeline Street, Shattuck Avenue, et al. The following Sheets in the Contract Plans have revisions and are included as Attachment 2 of this Addendum:

Plan Sheet Title	Plan Sheet Number	Notes
Title Sheet	Sheet 1 of 29	Revisions No. 1
Vicinity Maps and Sheet Key	Sheet 2 of 29	Revisions No. 1
Adeline Street 1 27" SS Plan and Profile	Sheet 4 of 29	Revisions No. 1
Adeline Street 1 27"-36"-45" SS Plan and Profile	Sheet 5 of 29	Revisions No. 1
Adeline Street 1 45" SS Plan and Profile	Sheet 6 of 29	Revisions No. 1
Adeline Street 1 45" SS Plan and Profile	Sheet 7 of 29	Revisions No. 1
Adeline Street 1 45" SS Plan and Profile	Sheet 8 of 29	Revisions No. 1
Adeline Street 1 45"-48" – 18" SS Plan and Profile	Sheet 9 of 29	Revisions No. 1
Adeline Street 2 8" SS Plan and Profile	Sheet 10 of 29	Revisions No. 1
Kala Bagai Way 27" SS Plan and Profile	Sheet 11 of 29	Revisions No. 1
Kala Bagai Way 36" SS Plan and Profile	Sheet 13 of 29	Revisions No. 1
Shattuck Avenue 36" SS Plan and Profile	Sheet 14 of 29	Revisions No. 1
Oxford Street 27" SS Plan and Profile	Sheet 18 of 29	Revisions No. 1
INSERT NEW SHEET Bid Package B (Bid Alt 1) at Oxford Street near University Ave – Plan and Profile	Sheet 18A	(Bid Package B, Bid Alternate 1)
INSERT NEW SHEET Bid Package B (Bid Alt 1) at Oxford Street near University Ave – Details	Sheet 18B	(Bid Package B, Bid Alternate 1)
Oxford Street 27" SS Plan and Profile	Sheet 19 of 29	Revisions No. 1
INSERT NEW SHEET	Sheet 19A	(Bid Package C, Bid Alternate 2 fronting

Bid Package C & D (Bid Alt 2 & 3) along Oxford Street between University Ave and Center St – Plan and Profile		future Berkeley Innovation Zone, and Bid Package D, Bid Alternate 3 fronting 2150 Oxford Street)
Oxford Street 27” – 33” SS Plan and Profile	Sheet 20 of 29	Revisions No. 1
INSERT NEW SHEET Bid Package D & E (Bid Alt 3 and 4) along Oxford St between Center St and Allston Way Plan and Profile	Sheet 20A	(Bid Package D and E, Bid Alternate 3 fronting 2150 Oxford St and Bid Alternate 4 fronting 2128 Oxford Street between Addison Street and Allston Way)
Woolsey Street 24” SS Plan and Profile	Sheet 23 of 29	Revisions No. 1
Woolsey Street 24” SS Plan and Profile	Sheet 24 of 29	Revisions No. 1
Details	Sheet 26 of 29	Revisions No. 1 (Revised Detail 12, Trunk Maintenance Hole)

The City of Berkeley has revised the Specifications of Specification No. 25-11688-C, Sanitary Sewer Rehabilitation – Adeline St, Shattuck Ave, et al. The following item in the Contract Specifications have revisions:

The following amendments are hereby made to the subject documents:

1. Specifications: Cover Sheet, Tentative Schedule, Notice to Bidders, and Bidders and Contractors Checklist

Bid opening date changed to 2:00 PM, Tuesday, January 28, 2025
Pre-Award Conference changed to 10:00 A.M., Thursday February 20, 2025
Contract Documents Due changed to before April 1, 2025
Contract Award (Notice to Proceed) changed to April 15, 2025
Start Construction changed to May 7, 2025
Complete Construction changed to August 15, 2025

Revised ‘Tentative Schedule’ page is included as Attachment 1 of this Addendum.

2. Specifications: Notice to Bidders Section 20, Questions and Addendums

Deadline to submit questions changed to 5:00 P.M., Thursday January 16, 2025

3. Specifications, Attention Page

The Attention page after the Specification signature page is updated per changes below.

Item 1 at the top of the page is modified to:

1. THE CONTRACTOR SHALL SUBMIT ALL CONTRACT DOCUMENTS INCLUDING BONDS AND INSURANCE BEFORE:
~~March 11~~ **April 1, 2025**

Revised ‘Attention’ page is included as Attachment 1 of this Addendum

4. Specifications, Table of Contents, Page T1 and T6

The Table of Contents Page T1 is revised per updated page numbers for Part A “Bidding Contractual Documents” and Part B “Special Provisions.

The Table of Contents Page T6 is revised per added Appendix 11 “2013 Encroachment Permit 13-11”.

Revised Page T1-T6 are included as Attachment 1 of this Addendum.

5. Specifications, Part A, Bidding Contractual Documents - Notice to Bidders through Bidder's Proposal pages A1-A17

Page A1, item 3 "Scope of Work", first sentence is modified to

The work to be done for Bid Package A "Base Bid" consists of, but is not limited to:

Page A2, include the following after the last paragraph of item 3 "Scope of Work":

Bid Package B:

The work to be done for Bid Package B "Bid Alternate 1" consists of, but is not limited to removing the existing sanitary sewer maintenance hole, constructing a new 60-inch inside diameter trunk sanitary sewer maintenance hole located at Oxford Street near University Avenue, and reconnecting multiple sewer force main and lateral connections to the new sanitary sewer maintenance hole including construction of a new drop inlet.

Bid Package C:

The work to be done for Bid Package C "Bid Alternate 2" consists of, but is not limited to constructing and new 60-inch inside diameter trunk sewer maintenance hole on the existing 27-inch sewer trunk main on Oxford Street between University Avenue and Addison Street and a new sanitary sewer lateral stub-out for future service to UCB BCH Innovation Zone.

Bid Package D:

The work to be done for Bid Package D "Bid Alternate 3" consists of, but is not limited to point (spot) repairs of 27-inch sanitary sewer main totaling approximately 54 linear feet at Oxford Street between Addison Street and Center Street (approximately 15-feet to 20-feet below existing grade), and 260 linear feet of Cured-In-Place Pipe Liner (Method "A") inside the 27-inch diameter sanitary sewer pipe.

Bid Package E:

The work to be done for Bid Package E "Bid Alternate 4" consists of, but is not limited to constructing a new 60-inch inside diameter maintenance hole on the existing 33-inch sanitary sewer trunk main on Oxford Street between Center Street and Alston Way, and a new sanitary sewer lateral stub-out for future service to 2128 Oxford Street.

Page A5, first paragraph of item 22 "Questions and Addendums", modify the question submittal deadline to no later than **5:00 P.M. Thursday January 16, 2025.**

Page A6, "Bidder's and Contractor's Checklist", revise first line as follows and revise page number references within checklist:

Items Required at Bid Opening: 2:00 P.M., Tuesday, ~~January 14~~ **January 28, 2025**

Revised Page A6 is included as Attachment 1 of this Addendum.

Page A9, A10, A11, A12, A13 and A14 of "Bidders Proposal", add at the top of the table that the table refers to **BID PACKAGE A: BASE Bid.**

Page A14 "Bidder's Proposal", bottom of the page is revised to:

Total **Cost of Bid Package A (Base Bid)** in Words and in Figures.

Following Page A14, insert pages A15-A16 for Bid Package B, Bid Alternate 1; Bid Package C, Bid Alternate 2, Bid Package D, Bid Alternate 3; Bid Package E, Bid Alternate 4.

Following above inserted Bid Alternate 4 table to "Bidder's Proposal", insert the following as page A17 for Basis of Award of Contract:

BASIS OF AWARD OF CONTRACT:

Determination of the lowest responsible bidder will be based on the combined total for BID PACKAGE A "BASE BID" plus BID PACKAGE D "BID ALTERNATE 3".

BID PACAKGES B, C, and E totals WILL NOT be used as basis of award but are still required in order to submit a responsible bid.

The City reserves the right to award all, none, or any combination of the various bid items.

Note:

*** Refer to Project Plans and/or Description of Bid Items section in Technical Provisions section of specifications for description of work included in bid items.**

**** Bid Item 23 of BID PACKAGE A - Supplemental Work is in addition to the Project's scope of work. This additional work may or may not be authorized to be performed by the Contractor as part of this Contract.**

Revise page numbering for subsequent Part A pages.

Revised Pages A1-A43 are included as Attachment 1 of this Addendum.

6. Specifications, Part B, Technical Provisions

Page B12, Bid Item 12: Sewer Construction and Replacement by Method "C" Traditional Open Trench Method, includes Repair of Sags, first sentence is modified as follows:

This item shall include all labor, materials, and equipment necessary for the execution and completion of this work including, but not limited to saw cutting of existing surface, excavation, hand excavation including potholing to determine the location of existing sewer and adjacent main and service utilities before trenching, correction of conflict between new sewer and utilities, removal and disposal of abandoned utilities as required, surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18), flow control, diversion or bypass pumping (Note: Bypass Pumping for sewer mains 15" and larger, shall be included in Bid Item No. ~~28~~ 27), locating wire, connection to existing structures, dewatering, bypass pumping, pipe provision and installation, bedding, backfill, including imported backfill, aggregate base material, compaction of bedding material beneath and around the main and at the locations of active lateral connections, pipe cleaning, pipe installation, temporary resurfacing, permanent resurfacing including concrete pavement reconstruction, testing of new sewer line, and all other work (excluding maintenance holes) necessary to install the pipe complete and in place.

Page B15, Bid Item 16: Post-Construction Closed Circuit Television (CCTV) Inspection and Construction As-Built Drawings, the last word of the second sentence of first paragraph is modified to refer to Bid Item 27 per below:

Post-construction CCTV inspection shall be performed to determine if the construction of the new pipe is in compliance with the plans and specifications. This item shall include labor, CCTV equipment, videos and other CCTV related materials for proper documentation of the newly installed sewer pipes. Flow control, diversion and/or bypass pumping required in order to facilitate the post-construction CCTV of the large diameter sewer pipe shall be included in Bid Item No. ~~28~~ 27.

Insert Bid Item No. 34 as Pages B32 through B33 after Bid Item No. 33 specific to Bid Package B "Bid Alternate 1" fronting Hellen Diller Anchor House which includes adjustment in Working Days following award of bid alternate(s):

[See new text for Bid Item No 34 included within Attachment 1]

Insert Bid Item No. 35 as Pages B33 through B34 after Bid Item No. 34 specific to Bid Package C "Bid Alternate 2" fronting future Berkeley Innovation Zone building which includes adjustment in Working Days following award of bid alternate(s):

[See new text for Bid Item No 35 is included within Attachment 1]

Insert Bid Item No. 36 as Pages B34 through B36 after Bid Item No. 35 specific to Bid Package D “Bid Alternate 3” fronting Berkeley Art Museum and Pacific Film Archive building.

[See new text for Bid Item No 36 is included within Attachment 1]

NOTE: use link below to access CCTV video recorded October 29, 2024 within the 27-inch diameter clay pipe sewer main along Oxford Street traveling south (traveling with the downstream direction of sewer flow) from Addison St SSMH 17-050-20 towards Center Street intersection SSMH 17-050-19 per Stationing on Sheet 19 and Sheet 19A:

https://sandersonstewart062-my.sharepoint.com/:v/g/personal/dchoy_sanbell_com/EUVRIxtb109DrV5sVBEIVF4BXZGCzswsfB8AjGEqIJYIRg?nav=eyJyZWZlcjJhbEluZm8iOnsicmVmZXJyYWxBcHAiOiJpbmVEcmI2ZUZvckJlc2luZXNzIiwicmVmZXJyYWxBcHBObGF0Zm9ybSI6IldlYiIsInJlZmVycmFsTW9kZSI6InZpZXciLCJyZWZlcjJhbEluZm9kZSI6InZpZXciOiJNeUZpbGVzTGlua0NvcHkiX0&e=8zXAcO&referrer=Outlook.Desktop&referrerScenario=email-linkwithoutembed (if link does not work, email fmeneau@berkeleyca.gov to request new link)

- a. See video time stamp: 5 min 55 sec for pipe damage 69.9- feet downstream @ Station 30+63±
- b. See video time stamp: 7 min 24 sec for pipe damage 77.4- feet downstream @ Station 30+69±
- c. See video time stamp: 9 min 28 sec for pipe damage 87.7- feet downstream @ Station 30+80±
- d. See video time stamp: 16 min 37 sec for pipe damage 154.3-feet downstream @ Station 31+47±

Insert Bid Item No. 37 after Bid Item No. 36 as Pages B36 through B37 specific to Bid Package E “Bid Alternate 4” fronting 2128 Oxford Street which includes adjustment in Working Days following award of bid alternate(s):

[See new text for Bid Item No 37 is included within Attachment 1]

Revise Plan Sheet Titles and Sheet Numbers referenced on Page B38 to include Sheets 18A, 18B, 19A, and 20A.

Revise Page Numbers for Description of General and Special Conditions to B39 thru B75

Revise Page B35 to Page B40-B41 (Addendum 2- Attachment 1) “General Condition No. 3: Holidays”, Section 3.03, by adding Cesar Chavez on or nearest Monday March 31 as City Holidays where no work shall be performed unless previously authorized by the Engineer.

Revise Page to Page 41-42 (Addendum 2- Attachment 1) “General Condition No. 3: Holidays”, Section 3.07, per below:

- December 8th, 2023
- December 26th, 2023
- December 27th, 2023
- December 28th, 2023
- December 29th, 2023
- January 12th, 2024
- February 9th, 2024
- March 8th, 2024
- April 12th, 2024
- May 10th, 2024
- June 14th, 2024
- March 14, 2025**
- April 11, 2025**
- May 9, 2025**
- June 13, 2025**

A complete revised PART B (Revised Pages B1-B75) is enclosed as Attachment 1 of this Addendum.

7. Specifications, Appendices:

Appendix 6 – Bay Area Rapid Transit (BART) DISTRICT PERMIT TO ENTER

Insert Appendix 6, Addendum #2 pages 1 thru 12 “BART Draft Permit Conditions” at the end of the Appendix 6 “Permit Pending” information.

(Pages 2 through 12 consist of a sample “Site Specific Work Plan” template provided by BART.)

Insert Appendix 6, Addendum #2 “Exhibit C” (pages 1 thru 4) – Insurance Requirements”

Appendix 10 – Bypass Plan Flow Data and Hydrograph:

Insert additional page at end of Appendix 10 showing graph of 24-hour sanitary sewer flow (hydrograph) located at Adeline Street near Ashby Bart (48” .

Note that public City GIS portal link below can be used to obtain Sanitary Sewer Nodes, or Maintenance Hole IDs, to request individual pipe segment when requesting additional flow data be provided by City:
<https://berkeley.maps.arcgis.com/apps/webappviewer/index.html?id=2c7dfafbb1f64e159f4fdf28a52f51c6&showLayers=Berkeley%20Parcels;Planning%20and%20Building>

Appendix 11 (NEW) – 2013 Encroachment Permit 13-11 (Reference Document)

Insert Appendix 11 as added reference showing prior Minor Encroachment Permit tie-rod details issued by City to others in 2013 with tie-rod installation work completed in 2013. (See reference to permit 13-11 fronting 2150 Oxford St within Sheet 19 and Sheet 19A of Attachment 2 of this Addendum.)

Soil Boring Data within prior City 1990 Geotechnical Report by Kaldveer Associates titled “Subsurface Soil Investigation Fulton-Oxford relief Sewer System, Berkeley California” is available. To request the report please email fmeneau@berkeleyca.gov. Note the report information is dated and actual project field conditions may defer from that shown in the report which was generated prior to trenching work since completed to install the current Oxford Street Trunk Sewer main.

All other provisions of the contract documents shall remain the same. **Bidders shall submit a signed copy of Addendum No. 2 along with their Bidder’s Proposal. Failure to do so may result in bid rejection.**

Sincerely,



Daniel Akagi, Supervising Civil Engineer

BIDDER’S ACKNOWLEDGEMENT:

Name of Company: _____

Address, City, State, Zip: _____

Signature: _____ Title: _____

Print Name: _____ Date: _____

- Attachments: Revised Contract Specifications and Plan Sheets
- Attachment 1: Amended Pages: Attention, Tentative Schedule, T1-T6, A1 - A43, and B1 – B75
 - Appendix 6 – BART Permit Insurance Requirements & Draft Permit Conditions (NEW),
 - Appendix 10 – Flow Data,
 - Appendix 11 (NEW) – 2013 Encroachment Permit 13-11
 - Attachment 2: Amended Plan Sheets – Sheet 1, Sheet 2, Sheet 4, Sheet 5-14, Sheet 18, Sheet 18A (NEW), Sheet 18B (NEW), Sheet 19, Sheet 19A (NEW), Sheet 20, Sheet 20A (NEW), Sheet 23-24, and Sheet 26

ATTACHMENT 1: Specification (Select Pages)

BID ADDENDUM 2

**SANITARY SEWER REHABILITATION:
ADELINE ST, SHATTUCK AVE, ET AL
SPECIFICATION 25-11688-C**

ATTENTION

1. THE CONTRACTOR SHALL SUBMIT ALL CONTRACT DOCUMENTS INCLUDING BONDS AND INSURANCE BEFORE:
~~March 11~~ **April 1, 2025**
2. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS AND GUIDELINES OF ALL REGULATORY AGENCIES.
3. THE CONTRACTOR SHALL READ ALL BID ITEMS CAREFULLY AS SOME OF THE ITEMS MAY HAVE CHANGED.
4. THE CITY RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSALS.
5. DURING CONSTRUCTION, THE CONTRACTOR MAY BE REQUIRED TO ATTEND WEEKLY MEETINGS AT THE ENGINEER'S OFFICE.
6. THIS PROJECT IS SUBJECT TO STATE OF CALIFORNIA SB 854 – PUBLIC WORKS REFORM.
7. SEE SPECIAL CONDITION NO. 41 FOR FIRST ORDER OF BUSINESS.
8. CONTRACTOR SHALL SECURE EBMUD PERMITS AS NEEDED FOR DISCHARGE OF CIPP INSTALLATION WASTE INCLUDING CURING WATER OR STEAM CONDENSATE.

TENTATIVE SCHEDULE **(DATES SUBJECT TO CHANGE)**

- | | | |
|----|--------------------------------------------|-------------------------------------------------------------------|
| 1. | Advertisement | December 10, 2024 |
| 2. | OPTIONAL: Pre-Bid Meeting
and Site Walk | December 19, 2024 |
| 3. | Bid Opening | January 14 January 14 <u>January 28</u> , 2025 |
| 4. | Pre-Award Conference | February 4 February 4 <u>February 20</u> , 2025 |
| 5. | Council Award | February 25 February 25 <u>March 18</u> , 2025 |
| 6. | Contract Documents Due | March 11 March 11 <u>April 1</u> , 2025 |
| 7. | Contract Award
(Notice to Proceed) | April 8 April 8 <u>April 15</u> , 2025 |
| 8. | Start Construction | April 29 April 29 <u>May 7</u> , 2025 |
| 9. | Complete Construction | August 8 August 8 <u>August 15</u> , 2025 |

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City Monument Rehabilitation in New Sidewalk or Driveway	Plan 8091
City Monument Installation in Unpaved Surface	Plan 8179
Standard Detail – Trench Excavation and Surface Restoration	Plan 8136
Standard Detail – Manhole Frame & Cover Adjustment	Plan 8193
Standard Detail – Manhole Frame & Cover Adjustment – Lowering	Plan 8194
Standard Detail – Sewer Lateral Repair	Plan 8214
Submittal Transmittal Form	
Oppressive States Form	
Pedestrian Access during Construction Projects	
Detail Specification No. 16 – Asphalt Concrete	

APPENDICES

APPENDIX 1	CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS
APPENDIX 2	RESOLUTION NO. 59,853 – N.S. REFERENCE TO OPPRESSIVE STATES STATEMENT RESOLUTION NO. 60,382 – N.S. AMENDMENT TO APPENDIX A

RESOLUTION NO. 70,606 – N.S. OF RESOLUTION NO. 59,853-N.S.
AMENDMENT TO APPENDIX A
OF RESOLUTION NO. 59,853-N.S.

- APPENDIX 3 ORDINANCE NO. 6623 - N. S., CHAPTER 13.29 – PROVISION OF EQUAL BENEFITS TO EMPLOYEES OF CITY CONTRACTORS
- APPENDIX 4 CITY OF BERKELEY MONUMENT REFERENCING GUIDELINES
- APPENDIX 5 RESOLUTION NO. 70,926 – N. S. REFERENCE TO COMMUNITY WORKFORCE AGREEMENT FOR CONSTRUCTION PROJECTS OVER \$500,000
- APPENDIX 6 BAY AREA RAPID TRANSIT (BART) DISTRICT PERMIT TO ENTER
- APPENDIX 7 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) – ENCROACHMENT PERMIT
- APPENDIX 8 EBMUD CHEMICAL ROOT CONTROL AND CURED-IN-PLACE (CIPP) NOTIFICATION PROCEDURES
- APPENDIX 9 CITY OF BERKELEY – CITY OF BERKELEY PEDESTRIAN, BICYCLE, AND BUS FACILITY ACCOMODATION IN CONSTRUCTION ZONES
- APPENDIX 10 BYPASS PLAN – FLOW DATA AND FLOW HYDROGRAPH
- APPENDIX 11 2013 ENCROACHMENT PERMIT 13-11**

NOTICE TO BIDDERS

1. Sealed bids will be received by the Finance Department – General Services Division in their office, **2180 Milvia Street, 3rd Floor**, Berkeley, California up to the hour of:

2:00 P.M., Tuesday, ~~January 14~~ January 28, 2025

at which time bids will be publicly opened and read by a representative of the General Services Division for the work provided for in the plans and specifications. One (1) full set of originals and two (2) additional original signature pages (Page A13) of the bid must be submitted, on forms which were prepared for this purpose and furnished by the City. Proposals must be submitted in a sealed envelope marked **SANITARY SEWER REHABILITATION – ADELINE STREET, SHATTUCK AVENUE SEWER REHABILITATION, SPECIFICATION No. 25-11688-C**

Pre-Award Conference: The apparent low bidder will be invited to a pre-award conference scheduled for 10:00 A.M., Tuesday, ~~February 4~~ February 20, 2025 at 1947 Center Street, 4th Floor, Berkeley, CA.

2. Optional Pre-Bid Office Meeting: A non-mandatory pre-bid office meeting will meet at 9:00 A.M., Thursday, December 19, 2024 via Zoom.

Join Zoom Meeting

<https://us06web.zoom.us/j/83597628135>

Meeting ID: 835 9762 8135

Dial-in: +1 669 900 6833

3. Scope of Work:

~~The work to be done~~ **Bid Package A “Base Bid”** consists of, but is not limited to:

a) Cured-In-Place Pipe Liner (Method "A") of approximately 6,375 linear feet of sanitary sewer pipe ranging in size from 20-inch to 45-inch diameter.

b) Pipe Bursting (Method "B") or Traditional Open Trench (Method "C"), at the discretion of the Contractor, of approximately 285 linear feet of sanitary sewer pipe ranging in size from 8-inch to 20-inch diameter.

c) Traditional Open Trench (Method "C") of approximately 575 linear feet of 24-inch diameter sanitary sewer mains.

d) Reconstruction of all lower laterals, including lateral connections, approximately 387 linear feet, to the main and two-way cleanouts, and point (spot) repairs of sanitary sewer mains, approximately 327 feet of various pipe sizes. The work requires coordination with City and private property owners.

- e) Construction and rehabilitation of maintenance holes including excavation and related work.
- f) Preparing and implementing bypass plans to facilitate the work and to maintain uninterrupted sewer service during construction.
- g) Sanitary sewer work will be performed on streets subject to a paving moratorium.
- h) Cold planing existing asphalt, hot mix asphalt paving, and related work.
- i) Traffic Control Plans (TCP) shall prioritize pedestrian, bicycle, and bus facilities over vehicular traffic, in alignment with the City of Berkeley's policies. TCPs must follow the guidance and intent provided in APPENDIX 9.
- j) Caltrans Encroachment Permit conditions apply for work in the Adeline Street in the vicinity of Ashby Avenue (SR 13) intersection. BART permit conditions apply for work along Adeline Street and Shattuck Avenue.

Bid Package B: The work to be done for Bid Package B “Bid Alternate 1” consists of, but is not limited to removing the existing sanitary sewer maintenance hole, constructing a new 60-inch inside diameter trunk sanitary sewer maintenance hole located at Oxford Street near University Avenue, and reconnecting multiple sewer force main and lateral connections to the new sanitary sewer maintenance hole including constructing a new drop inlet.

Bid Package C: The work to be done for Bid Package C “Bid Alternate 2” consists of, but is not limited to constructing and new 60-inch inside diameter trunk sewer maintenance hole on the existing 27-inch sewer trunk main on Oxford Street between University Avenue and Addison Street and a new sanitary sewer lateral stub-out for future service to UCB BCH Innovation Zone.

Bid Package D: The work to be done for Bid Package D “Bid Alternate 3” consists of, but is not limited to point (spot) repairs of 27-inch sanitary sewer main totaling approximately 54 linear feet at Oxford Street between Addison Street and Center Street (approximately 15-feet to 20-feet below existing grade), and 260 linear feet of Cured-In-Place Pipe Liner (Method "A") inside the 27-inch diameter sanitary sewer pipe.

Bid Package E: The work to be done for Bid Package E “Bid Alternate 4” consists of, but is not limited to constructing a new 60-inch inside diameter maintenance hole on the existing 33-inch sanitary sewer trunk main on Oxford Street between Center Street and Alston Way, and a new sanitary sewer lateral stub-out for future service to 2128 Oxford Street.

4. California Contractor License Classification required:

- A General Engineering, or
 - C-34 Pipeline, or
 - C-42 Sanitation System
5. Location: Various Locations through the City. See location map and plan herein.
 6. Plans and Specifications will be made available online for download, under the project's listing, at the City of Berkeley's Public Works website under Current Construction Project Bid Opportunities: <https://berkeleyca.gov/doing-business/working-city/bid-proposal-opportunities>. Bidders are responsible for notifying Felix Meneau, P.E., Associate Civil Engineer via email at FMeneau@berkeleyca.gov to be included on the Planholders List. Please include the following in the email subject header: "Spec. 25-11688-C – Request to be included in project Planholders List". In the body of the email, please state the Company Name, Address, Telephone Number, and Fax Number.
 7. Compliance with SB 854: Public Works Reform: No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
 8. The plans and specifications may be examined by appointment at the Engineering Office, 1947 Center Street, 4th Floor, Berkeley, California. Hard copies are no longer available for purchase or shipping. Bid documents are available online for download at the web address shown above.
 9. Each proposal must be accompanied by an unconditionally certified or cashier's check or bid bond made payable to the City of Berkeley, and such check or bond shall be in an amount equal to at least 10% of the amount of the bid.
 10. During construction, the City may request or authorize additional work as part of the contract. Prior to commencement of any Contract Change Order (CCO) or Contract Amendment (CA), the Contractor shall submit Surety Company Bond Riders for the new contract amount. The new contract amount is the contractor's bid amount or authorized contract amount plus the CCO or CA. The Riders for any additional work shall be provided at no cost to the City. Typically, the maximum authorized contract amount requiring a Rider is the Contractor's bid amount plus 10%.
 11. Pursuant to City Council Resolution No. 59,853-N.S., each proposal must include a signed

- copy of the Oppressive States Resolution Disclosure Form regarding the Contractor's relationships with certain entities in Oppressive States.
12. Each proposal must include a signed copy of the Nuclear Free Zone Disclosure Form.
 13. Each proposal must include a signed copy of the Equal Benefits Ordinance Disclosure Form.
 14. Each proposal must include a signed copy of the Sanctuary City compliance Statement Form
 15. Each proposal must include a signed copy of the Experience and Financial Qualifications and Taxpayer Identification Report.
 16. Pursuant to City Council Resolution No. 70,926-N.S., this contract will be subject to the Community Workforce Agreement approved by the Berkeley City Council on June 27, 2023. The successful bidder and **all** subcontractors, at **any tier, will be required to sign** an Agreement to be Bound as a condition precedent to entering into any contract for this project. A copy of the Report and Resolution is attached herein. Refer to Appendix 5 of the Specifications. "Contractor(s)" and/or "Subcontractor(s)" means any individual, firm, partnership or corporation, or combination thereof, including joint ventures, which is an independent business enterprise and has entered into a contract with the City or any of its contractors or subcontractors of any tier, with respect to the construction work necessary for any part of the Project. This shall include subcontractors not required to be listed in the bid documents. As applicable depending on its context, "Contractor" shall refer to Contractor or Contractor and Subcontractor.
 17. Prior to starting work, the Contractor must furnish the following:
 - a. Faithful Performance Bond in an amount not less than 100% of the amount of the contract, executed on the City of Berkeley Standard Performance Bond agreement form.
 - b. Labor and Material Bond in the sum of not less than 100% of the amount of the contract.
 - c. A certificate of Worker's Compensation Insurance with waiver of subrogation in favor of the City of Berkeley.
 - d. Commercial general liability insurance coverage of no less than \$2 million each occurrence Bodily Injury and \$2 million each occurrence Property Damage, with defense costs payable in addition to policy limits.
 - e. Comprehensive automobile liability insurance of no less than \$2 million each occurrence Bodily Injury and \$2 million each occurrence Property Damage.
 - f. Commercial Pollution Liability Insurance of no less than \$1,000,000 Per Occurrence and \$2,000,000 General Aggregate limit for bodily injury property damage

(including loss of use of damaged property or of property which has not been physically injured or destroyed). See Special Condition No. 29 for additional information.

- g. Insurance policies shall contain an endorsement naming the City, their employees, representatives and agents as additional insureds, but only with respect to liability arising out of the activities of the named insured.
 - h. The policies shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.
 - i. Written notice of cancellation or of any limits reduction or change in said policy shall be mailed to the City and the Project Manager thirty (30) days in advance of the effective date thereof.
 - j. Contractor's insurance shall be primary insurance and no other insurance or self-insured retention carried or held by City shall be called upon to contribute to a loss covered by insurance for the named insured.
18. All forms and insurance certificates must have original signatures in blue ink.
19. See attached BIDDER'S AND CONTRACTOR'S CHECK LIST for additional items to be submitted.
20. In accordance with California State Labor Code, the wage scale is on file with the Engineering Office, or is attached herewith.
21. Award will be made by the City Council at a meeting within 75 days subsequent to the date set for bid opening. The Council reserves the right to reject any or all bids or any combination of bids.
22. Questions and Addendums:
- a. General information or plan holder's list: (510) 981-6400.
 - b. Questions concerning the anticipated work or scope of the project should be directed via email only to Felix Meneau, P.E., Associate Civil Engineer FMeneau@berkeleyca.gov or the Engineering Division, 1947 Center Street, 4th Floor, Berkeley, CA 94704, at (510) 981-6400, **no later than 9:00 A.M., Monday, December 23, 2024 5:00 P.M Thursday, January 16, 2025.**
 - c. It is the bidder's responsibility to check for answers to questions or any addenda on the City of Berkeley's website at:
<https://berkeleyca.gov/doing-business/working-city/bid-proposal-opportunities>.

General Services Manager

BIDDER'S AND CONTRACTOR'S CHECK LIST**Items Required at Bid Opening: 2:00 P.M., Tuesday, January 14-January 28, 2025**

- Bidder's Proposals (**One full set of originals, Pages A6-A11 A6-A18; and two additional original signature pages, Page A11 A18, signed in BLUE ink**)
- Addenda (if any)
- Bid Bond – At least 10% of Total Base Bid
- Experience and Financial Qualifications (**Page A12-A19**)
- Taxpayer Identification Report (**Page A13-A20**)
- Nuclear Free Zone Disclosure Form (**Page A18-A25**)
- Oppressive States Compliance Statement (**Pages A19-A20-A26-A27**)
- Sanctuary City Compliance Statement (**Page A21-A28**)
- Equal Benefits Ordinance Disclosure Form (**Pages A24-A25 A31-A32**)

Items Required at Pre-Award (Non-Discrimination and Contract Compliance) Conference:**10:00 A.M., Tuesday, February 4, 2025**

- Memorandum of Understanding (**Page A14-A21**)
 - Work Force Composition Form (**Pages A15-A16-A22-A23**)
 - Agreement for Change in Sub-Contractors (**Page A17-A24**)
 - Right to Audit Form (**Page A22-A29**)
 - Certification of Compliance with Equal Benefits Ordinance (Form EBO-1) (**Pages A26-A27-A33-A34**)
 - First Source Agreement (Engineer's Estimate less than \$500,000) (**Pages A32-A34 A39-A41**)
- OR**
- Community Workforce Agreement To Be Bound and Hiring Plan (Engineer's Estimate of \$500,000 or greater) (**Pages A42-A43 A35-A36**)*
 - MBE/WBE Certification from Caltrans, Oakland, or San Francisco
 - Proof of Compliance with SB 854

Items Required After Contract Award by City Council and Prior to Construction:

- Commercial General and Automobile Liability Endorsement form (**Page A28 A35**)
- Worker's Compensation Insurance - Statutory Amount
- Liability Insurance - \$2,000,000
- Performance Bond - 100% (executed on enclosed Performance Bond form) (**Pages A29-A31 A36-A38**)
- Labor and Material Bond- 100%
- Copy of City of Berkeley Business License
- Copy of State of California Contractor's License
- Work Schedule
- Submittals required at pre-construction meeting

Items Required During Construction:

- Work Schedule updates
- Weekly Payroll Statement (Fed Form WH-347 or equivalent)
- Monthly Manpower Utilization Report (DPR 356 or Fed Form 257)**
- Correspondence with unions and minority/female organizations

Items Required Upon Completion of Project:

- Guarantee Bond - 10%
- Post-Construction CCTV and logs
- As-Built Drawings

* This project is subject to the Community Workforce Agreement

** DPR-State Department of Parks and Recreation

BIDDER'S PROPOSAL

Bidders submitting proposals shall be very careful to follow all requirements in connection therewith. A checklist has been attached for guidance in complying with all phases of the bid process and project. Any proposal not complying with all these requirements may be rejected.

TO THE HONORABLE MAYOR AND
MEMBERS OF THE CITY COUNCIL

Pursuant to the provisions of the plans, specifications and contract documents, the undersigned proposed to perform the work as described therein a manner satisfactory to the responsible City official. All material, equipment, tools, labor and services necessary to the work will be furnished by the undersigned. All laws and ordinances relating to the work will be complied with, and a business license to do business in the City will be obtained. The undersigned declares that the plans, specifications, contract documents and the site of the work have been thoroughly examined and that this proposal is made without collusion with any person, firm, or corporation.

Execution of the proposal by the undersigned bidder shall become a binding contract on the parties when the award of a contract pursuant to said proposal is authorized by resolution of the City Council, where or as required by the Charter of the City of Berkeley, and the proposal is executed in writing in the name of the City by the City Manager, or an officer who is his/her authorized representative.

The undersigned agrees that when his proposal is executed he will furnish specified bonds and insurance, and he will begin work within the time specified, and complete work within the contract period or agree to the assessment of liquidated damages, all as stipulated in the attached pages of the Bidder's Proposal.

As a guaranty that the terms of this proposal will be complied with, the undersigned submits herewith a proposal guaranty for an amount equal to at least Ten Percent (10%) of his total bid.

All subcontractors who will perform work for the bidder on this project in the amount in excess of one-half of one percent (0.5%) of the total bid, including labor, materials and equipment, or work specifically fabricated off the job site according to detailed drawings contained in the plans, shall be listed, pursuant to Sections 4100 to 4113, inclusive of the California Government Code.

BIDDER'S PROPOSAL
(continued)

Name of Subcontractor and address	Subcontractor License No.	Type of Work	\$ Amount

Contractors California License Number: _____

License Expiration Date: _____

I declare that representations made in this bid are under penalty of perjury.

Signature

Title

**THIS FORM SHALL BE COMPLETED AND SUBMITTED
WITH BID PROPOSAL**

BIDDER'S PROPOSAL**BID PACKAGE A: BASE BID**

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
1.	Mobilization/Demobilization	1	LS	\$	\$
2.	Traffic Control Plan	1	LS	\$	\$
3.	Lighted Message board	4	EA	\$	\$
4.	Pre-construction audio/video survey and distribution of public notices	1	LS	\$	\$
5.	Pre-construction closed circuit television inspection and location of active house laterals	7,231	LF	\$	\$
6.	Construction staking and cutsheets	1	LS	\$	\$
7.	Rehabilitate existing maintenance hole or junction box	42	EA	\$	\$
8a.	Construct std. MH and drop MH, including lining, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
8b.	Construct trunk MH and drop MH, including lining, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
9a.	Remove existing structures and construct std. MH, drop MH, shallow MH, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
9b.	Remove existing structures and construct trunk MH, drop MH, shallow MH, eccentric cones, all depths (revocable)	1	EA	\$	\$

BIDDER'S PROPOSAL
(continued)

BID PACKAGE A: BASE BID (continued)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
1.	Mobilization/Demobilization	1	LS	\$	\$
2.	Traffic Control Plan	1	LS	\$	\$
3.	Lighted Message board	4	EA	\$	\$
4.	Pre-construction audio/video survey and distribution of public notices	1	LS	\$	\$
5.	Pre-construction closed circuit television inspection and location of active house laterals	7,231	LF	\$	\$
6.	Construction staking and cutsheets	1	LS	\$	\$
7.	Rehabilitate existing maintenance hole or junction box	42	EA	\$	\$
8a.	Construct std. MH and drop MH, including lining, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
8b.	Construct trunk MH and drop MH, including lining, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
9a.	Remove existing structures and construct std. MH, drop MH, shallow MH, eccentric cones, all depths (revocable)	Not Used	EA	\$	\$
9b.	Remove existing structures and construct trunk MH, drop MH, shallow MH, eccentric cones, all depths (revocable)	1	EA	\$	\$

PACKAGE A: BASE BID (continued)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
10a.	Rehabilitation by method "A" CIPP for 20-inch pipe size; Includes point repair to correct sags (replace in-kind)	977	LF	\$	\$
10b.	Rehabilitation by method "A" CIPP for 27-inch pipe size; Includes point repair to correct sags (replace in-kind)	2,274	LF	\$	\$
10c.	Rehabilitation by method "A" CIPP for 33-inch pipe size; Includes point repair to correct sags (replace in-kind)	800	LF	\$	\$
10d	Rehabilitation by method "A" CIPP for 36-inch pipe size; Includes point repair to correct sags (replace in-kind)	717	LF	\$	\$
10e	Rehabilitation by method "A" CIPP for 45-inch pipe size; Includes point repair to correct sags (replace in-kind)	1,606	LF	\$	\$

BIDDER'S PROPOSAL
(continued)

BID PACKAGE A: BASE BID (continued)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
11a.	Sewer main replacement of 8-inch pipe size using the following methods at the Contractor's option: B) Pipe Splitting C) Traditional Open Trench No upsize is proposed; Includes point repair to correct sags (replace in-kind)	230	LF	\$	\$
11b.	Sewer main replacement of 15 to 18-inch pipe sizes using the following methods at the Contractor's option: B) Pipe Splitting C) Traditional Open Trench No upsize is proposed (inner diameter to remain the same); Includes point repair to correct sags (replace in-kind)	27	LF	\$	\$
11c.	Sewer main replacement of 18 to 20-inch pipe sizes using the following methods at the Contractor's option: B) Pipe Splitting C) Traditional Open Trench No upsize is proposed (inner diameter to remain the same); Includes point repair to correct sags (replace in-kind)	28	LF	\$	\$
12.	Sewer construction and main replacement by method "C" Traditional Open Trench for pipe sizes from 21 to 24-inch pipe; No upsize is proposed (inner diameter to remain the same)	572	LF	\$	\$

BIDDER'S PROPOSAL
(continued)

BID PACKAGE A: BASE BID (continued)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
13.	Lower lateral reconstruction (typically 4-inch and 6-inch laterals)	387	LF	\$	\$
14.	Installation of new two-way cleanouts and lateral risers	18	EA	\$	\$
15.	Connection of active laterals to new or rehabilitated sewer main or MH	Not Used	EA	\$ ---	\$ ---
16.	Post-construction closed circuit television inspection and construction As-Built Drawings	7,231	LF	\$	\$
17.	Remove existing and construct standard curb and gutter (revocable)	200	LF	\$	\$
18.	Remove existing, and construct standard sidewalk and driveway (revocable)	200	SF	\$	\$
19.	Utility x-ings not shown and/or identified on the plans and not marked on street, length of x-ing <25 feet, 1/2-6 inch diameter.	50	EA	\$	\$
20.	Utility x-ings not shown and/or identified on the plans and not marked on street, length of x-ing <25 feet, 6-24 inch diameter.	50	EA	\$	\$
21.	Rock excavation	Not Used	CY	\$ ---	\$ ---
22.	Reconstruction/Replacement of City monuments (revocable)	11	EA	\$	\$
23.	Supplemental Work	1	LS	\$ 500,000	\$ 500,000

BIDDER'S PROPOSAL
(continued)

BID PACKAGE A: BASE BID (continued)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
24.	Bay Area Rapid Transit (BART) District Permit Application/Plan Review Fees (revocable)	1	LS	\$	\$
25.	Caltrans Encroachment Permit/Authorization to work (revocable)	1	LS	\$ ---	\$ ---
26.	Stormwater Pollution Control and Sewage Spill Prevention and Response Requirements	1	LS	\$	\$
27.	Sewer Bypass (for Sewer Mains 15" and Larger)	1	LS	\$	\$
28.	Investigate other existing sewer mains, structures, and laterals.	Not Used	LS	\$	\$
29.	California Department of Fish and Wildlife, Creek Permit	Not Used	LS	\$ ---	\$ ---
30.	Point (Spot) Repair	327	LF	\$ ---	\$ ---
31.	Plug and abandon existing sewer mains, sewer structure and laterals	Not Used	LF	\$ ---	\$ ---
32.	Cold Plane - 2 1/2"	22,935	SF	\$	\$
33.	HMA (Type A) PG-64-16	359	Tons	\$	\$

TOTAL COST OF BID PACKAGE A (BASE BID) PRICE IN WORDS AND IN FIGURES:

DOLLARS AND _____ CENTS/(\$ _____)

BIDDER'S PROPOSAL
(continued)

BID PACKAGE B: BID ALTERNATE 1 (REVOCABLE)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
34	At Oxford Street near University Avenue: remove existing sanitary sewer maintenance hole, construct a new 60-inch inside diameter trunk sewer maintenance hole, and reconnect force main and lateral connections to the new trunk sewer maintenance hole including construction of a new outside drop connection (revocable)	1	LS	\$	\$

TOTAL COST OF BID PACKAGE B IN WORDS AND IN FIGURES:

DOLLARS AND CENTS/(\$)

BID PACKAGE C: BID ALTERNATE 2 (REVOCABLE)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
35	At Oxford Street between University Avenue and Addison Street: Construct a new 60-inch inside diameter eccentric trunk sewer maintenance hole with lateral stub-out (revocable)	1	LS	\$	\$

TOTAL COST OF BID PACKAGE C IN WORDS AND IN FIGURES:

DOLLARS AND CENTS/(\$)

BIDDER'S PROPOSAL
(continued)

BID PACKAGE D: BID ALTERNATE 3: ALONG OXFORD STREET BETWEEN ADDISON AND CENTER STREET

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
36A	Point (Spot) Repairs of 27-inch diameter trunk sewer	1	LS	\$	\$
36B	Rehabilitation of 27-inch diameter trunk sewer by Method "A" CIPP	260	LF	\$	\$

TOTAL COST OF BID PACKAGE D (ITEM NO. 36A + ITEM NO. 36B) IN WORDS AND IN FIGURES:

DOLLARS AND CENTS/(\$)

BID PACKAGE E: BID ALTERNATE 4 (REVOCABLE)

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
37	At Oxford Street Station 33+75 between Center Street and Allston Way: Construct new 60-inch inside diameter eccentric trunk sewer maintenance hole (revocable)	1	LS	\$	\$

TOTAL COST OF BID PACKAGE E IN WORDS AND IN FIGURES:

DOLLARS AND CENTS/(\$)

BIDDER'S PROPOSAL
(continued)

TOTAL COST OF BID PACKAGE A “BASE BID” PLUS BID PACKAGE D “BID ALTERNATE 3” IN WORDS AND IN FIGURES:

DOLLARS AND CENTS/(\$)

BASIS OF AWARD OF CONTRACT:

Determination of the lowest responsible bidder will be based on the combined total for BID PACKAGE A “BASE BID” plus BID PACKAGE D “BID ALTERNATE 3”.

BID PACAKGES B, C, and E totals WILL NOT be used as basis of award but are still required in order to submit a responsible bid.

The City reserve the right to award all, none, or any combination of the various bid items.

Note:

*** Refer to Project Plans and/or Description of Bid Items section in Technical Provisions section of specifications for description of work included in bid items.**

**** Bid Item 23 of BID PACKAGE A - Supplemental Work is in addition to the Project’s scope of work. This additional work may or may not be authorized to be performed by the Contractor as part of this Contract.**

BIDDER'S PROPOSAL
(continued)

The undersigned bidder agrees to accept payment in full for the work at the price set forth above in accordance with provisions of the specifications and agrees to start within Fifteen (15) WORKING days following issuance of the Notice to Proceed and to complete all work specified in the contract documents in accordance with the plans and specifications within **Seventy (70) WORKING days**. The Notice to Proceed will be issued when the contract is fully executed. The contract construction time is inclusive of the time for delivery of materials. By execution of this contract the City and the Bidder do hereby agree that the value of damage associated with the delay of the work is difficult to ascertain. Therefore, the Bidder agrees further to the assessment of **liquidated damages in the amount of Two Thousand Dollars (\$2,000) for each working day** that the construction work remains incomplete beyond the expiration of the above construction time. The term of the contract is **Error! Reference source not found.** which include an additional Forty-Five (45) WORKING days for project closeout beyond the above construction time.

Company: _____ Address: _____
 Name: _____
 Signature: _____ Phone: _____
 Title: _____ Date: _____
 Taxpayer I.D. No.: _____ Corporation: Yes [] No []

(The following spaces to be used by the City)

Pursuant to City of Berkeley Council Resolution No. _____ N.S. adopted on _____, the City of Berkeley agrees to pay _____ the prices set forth above for the Total Bid Items in the amount of _____ (\$_____), in accordance with the terms and conditions set forth in Specification No. 25-11688-C. The Contractor shall complete all work specified in the contract documents in accordance with the plans and specifications within **Seventy (70) WORKING days** from the date established in the Notice-to-Proceed.

CITY OF BERKELEY

Dated: _____ By: _____
 City Manager
 Registered By: _____
 Auditor
 Attested By: _____
 City Clerk

EXPERIENCE AND FINANCIAL QUALIFICATIONS

The bidder has been engaged in the contracting business under State License Number _____ for a period of _____ years.

The bidder's three most recently completed contracts are:

	I	II	III
Title of Project			
Owner			
Address			
Telephone No.			
Engineer in Charge			
Date Accepted			

Reference is hereby made to the following Bank or Banks as to the financial responsibility of the bidder:

Name of Bank _____ Address _____

Reference is hereby made to the following Surety Companies as to the financial responsibility and general reliability of the bidder:

Company _____ Address _____

 Signature of Bidder

TAXPAYER IDENTIFICATION REPORT

COMPANY NAME _____

MAILING ADDRESS _____

SOCIAL SECURITY NUMBER: _____

OR

EMPLOYER IDENTIFICATION NUMBER: _____

My Company is a Corporation

My Company is not a Corporation

I certify that the above information is true and correct:

Name

Title

The Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248) requires the above reporting information be furnished to the City.

Persons who do not furnish their tax information numbers become subject to backup withholding by the City at a rate of 20% from each disbursement made to the recipient.

CITY OF BERKELEY
MEMORANDUM OF UNDERSTANDING
(MOU)

1. In the performance of this contract the Contractor (and all Subcontractors) agrees not to discriminate pursuant to Section 13.26 of the Berkeley Municipal Code.
2. In the performance of this contract the Contractor agrees that he/she is also responsible for his/her Subcontractor's compliance with Section 13.26 of the Berkeley Municipal Code.
3. For contracts that are not governed by a Community Workforce Agreement, the Contractor agrees to comply with Section 13.26 of the Municipal Code as applied to the First Source Program (see section 13.26.080).

The Contractor agrees to submit periodic employment and wage reports to the City's Contract Compliance Officer upon reasonable request.

Contractor

City Engineer or designee

Date

Date

WORKFORCE COMPOSITION OCCUPATIONAL CATEGORIES

Officials and Administrators - Occupations in which employees set broad policies, exercise overall responsibility for execution of these policies, or provide specialized consultation on a regional, district or area basis. Includes: department heads, bureau chiefs, division chiefs, directors, deputy superintendents, unit supervisors and kindred workers.

Professionals - Occupations that require specialized and theoretical knowledge that is usually acquired through college training or through work experience and other training that provides comparable knowledge. Includes: personnel and labor relations workers, social workers, doctors, psychologists, registered nurses, economists, dietitians, lawyers, systems analysts, accountants, engineers, employment and vocational rehabilitation counselors, teachers or instructors, and kindred workers.

Technicians - Occupations that require a combination of basic scientific or technical knowledge and manual skill that can be obtained through specialized post-secondary school education or through equivalent on-the-job training. Includes: computer programmers and operators, technical illustrators, highway technicians, technicians (medical, dental, electronic, physical sciences) and kindred workers.

Protective Service Workers - Occupations in which workers are entrusted with public safety, security and protection from destructive forces. Includes: police officers, fire fighters, guards, sheriffs, bailiffs, correctional officers, detectives, marshals, harbor patrol officers, and kindred workers.

Para-Professionals - Occupations in which workers perform some of the duties of a professional or technician in a supportive role, which usually requires less formal training and/or experience normally required for professional or technical status. Such positions may fall within an identified pattern of a staff development and promotion under a "New Transporters" concept. Includes: library assistants, research assistants, medical aides, child support workers, police auxiliary, welfare service aides, recreation assistants, homemaker aides, home health aides, and kindred workers.

Office and Clerical - Occupations in which workers are responsible for internal and external communication, recording and retrieval of data and/or information and other paperwork required in an office. Includes: bookkeepers, messengers, office machine operators, clerk-typists, stenographers, court transcribers, hearings reporters, statistical clerks, dispatchers, license distributors, payroll clerks, and kindred workers.

Skilled Craft Workers - Occupations in which workers perform jobs which require special manual skill and a thorough and comprehensive knowledge of the processes involved in the work which is acquired through on-the-job training and experience or through apprenticeship or other formal training programs. Includes: mechanics and repairpersons, electricians, heavy equipment operators, stationary engineers, skilled machining occupations, carpenters, compositors and typesetters, and kindred workers.

Service/Maintenance - Occupations in which workers perform duties which result in or contribute to the comfort, convenience, hygiene or safety of the general public or which contribute to the upkeep and care of buildings, facilities or grounds of public property. Workers in this group may operate machinery. Includes: chauffeurs, laundry and dry cleaning operatives, truck drivers, bus drivers, garage laborers, custodial personnel, gardeners and groundskeepers, refuse collectors, and construction laborers.

WORKFORCE COMPOSITION FORM FOR ALL CONSTRUCTION CONTRACTS

This form is to be completed and submitted prior to the Non-Discrimination Contract Compliance Conference with the City of Berkeley Contract Compliance Officer. The Contractor and all Subcontractors who will do work valued at \$3,000 or more are required to submit this form. Weekly payroll reports will be compared to this listing to monitor compliance with the City of Berkeley Municipal Code Section 13.26. A payroll printout or other listing of employees providing the same information will be accepted.

Name of Contractor/Subcontractor: _____

Project: SANITARY SEWER REHABILITATION – ADELINE STREET, SHATTUCK AVENUE SEWER REHABILITATION

Name	Race*	Sex**	Trade/Craft	Hourly Base Rate	Hire Date	Employees to be used on this project

- * A=Asian or Pacific Islander
- AI=American Indian
- B=Afro American
- C=Caucasian
- H=Hispanic (Mexican, Puerto Rican, Spanish, Cuban, Chicano, Central or South American)
- ** M = Male
- F = Female

Signature of Contractor/Subcontractor: _____ Date: _____

Verified By: _____ City Engineer or designee

AGREEMENT FOR CHANGE IN SUB-CONTRACTORS

I agree to use the Subcontractor(s) listed in the signed contract with the City of Berkeley. If it should become necessary to change Subcontractors, I will notify the Public Works Engineering Division by completing the following information:

Current Subcontractor(s)	Alternate Subcontractors	Reason for Change	Date

Signed by: _____

Verified by: _____

Prime Contractor _____

Subcontractor _____

City Engineer or designee _____

Date: _____

Date: _____

Date: _____

CITY OF BERKELEY
NUCLEAR FREE ZONE DISCLOSURE FORM

I (we) certify that:

1. I am (we are) fully cognizant of any and all contracts held, products made or otherwise handled by this business entity, and of any such that are anticipated to be entered into, produced or handled for the duration of its contract(s) with the City of Berkeley. (To this end, this disclosure form may be signed by more than one individual, if a description of which type of contracts each individual is cognizant is attached.)
2. I (we) understand that Section 12.90.070 of the Nuclear Free Berkeley Act (Berkeley Municipal Code Ch. 12.90; Ordinance No. 5784-N.S.) prohibits the City of Berkeley from contracting with any person or business that knowingly engages in work for nuclear weapons.
3. I (we) understand the meaning of the following terms as set forth in Berkeley Municipal Code Section 12.90.130:

"Work for nuclear weapons" is any work the purpose of which is the development, testing, production, maintenance or storage of nuclear weapons or the components of nuclear weapons; or any secret or classified research or evaluation of nuclear weapons; or any operation, management or administration of such work.

"Nuclear weapon" is any device, the intended explosion of which results from the energy released by reactions involving atomic nuclei, either fission or fusion or both. This definition of nuclear weapons includes the means of transporting, guiding, propelling or triggering the weapon if and only if such means is destroyed or rendered useless in the normal propelling, triggering, or detonation of the weapon.

"Component of a nuclear weapon" is any device, radioactive or non-radioactive, the primary intended function of which is to contribute to the operation of a nuclear weapon (or be a part of a nuclear weapon).

4. Neither this business entity nor its parent nor any of its subsidiaries engages in work for nuclear weapons or anticipates entering into such work for the duration of its contract(s) with the City of Berkeley.

Based on the foregoing, the undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity:

Specification Name & No.:

SANITARY SEWER REHABILITATION

ADELINE STREET, SHATTUCK AVENUE SEWER REHABILITATION

Revised A25

Addendum 2 – Attachment 1

SPECIFICATION NO. 25-11688-C

CITY OF BERKELEY
OPPRESSIVE STATES COMPLIANCE STATEMENT FOR COMMODITIES

The undersigned, an authorized agent of _____ (hereafter "Vendor"), has had an opportunity to review the requirements of Berkeley City Council Resolution No. 59,853-N.S., 60,382-N.S., and 70,606-N.S. (hereafter "Resolution"). Vendor understands and agrees that the City may choose with whom it will maintain business relations and may refrain from contracting with those Business Entities which maintain business relationships with morally repugnant regimes. Vendor understands the meaning of the following terms used in the Resolution:

"Business Entity" means "any individual, firm, partnership, corporation, association or any other commercial organization, including parent-entities and wholly-owned subsidiaries" (to the extent that their operations are related to the purpose of the contract with the City).

"Oppressive State" means: **Tibet Autonomous Region and the Provinces of Aho, Kham and U-Tsang; and Burma (Myanmar)**

"Personal Services" means "the performance of any work or labor and shall also include acting as an independent contractor or providing any consulting advice or assistance, or otherwise acting as an agent pursuant to a contractual relationship."

Contractor understands that it is not eligible to receive or retain a City contract if at the time the contract is executed, or at any time during the term of the contract, it provides Personal Services to:

- a. The governing regime in any Oppressive State.
- b. Any business or corporation organized under the authority of the governing regime of any Oppressive State.
- c. Any person for the express purpose of assisting in business operations or trading with any public or private entity located in any Oppressive State.

Vendor further understands and agrees that Vendor's failure to comply with the Resolution shall constitute a default of the contract and the City Manager may terminate the contract and bar Vendor from bidding on future contracts with the City for five (5) years from the effective date of the contract termination.

CITY OF BERKELEY
OPPRESSIVE STATES COMPLIANCE STATEMENT FOR COMMODITIES
(continued)

The undersigned is familiar with, or has made a reasonable effort to become familiar with, Vendor's business structure and the geographic extent of its operations. By executing the Statement, Vendor certifies that it complies with the requirements of the Resolution and that if any time during the term of the contract it ceases to comply, Vendor will promptly notify the City Manager in writing.

Based on the foregoing, the undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity: _____

Specification Name & No.:
SANITARY SEWER REHABILITATION
ADELINE STREET, SHATTUCK AVENUE SEWER REHABILITATION
SPECIFICATION NO. 25-11688-C

I am unable to execute this Statement; however, Vendor is exempt under Section VII of the Resolution. I have attached a separate statement explaining the reason(s) Vendor cannot comply and the basis for any requested exemption.

Signature: _____ Date: _____

CITY OF BERKELEY
Sanctuary City Compliance Statement

The undersigned, an authorized agent of _____ (hereafter "Contractor"), has had an opportunity to review the requirements of Berkeley Code Chapter 13.105 (hereafter "Sanctuary City Contracting Ordinance" or "SCCO"). Contractor understands and agrees that the City may choose with whom it will maintain business relations and may refrain from contracting with any person or entity that provides Data Broker or Extreme Vetting services to the U.S. Immigration and Customs Enforcement Division of the United States Department of Homeland Security ("ICE"). Contractor understands the meaning of the following terms used in the SCCO:

- a. "Data Broker" means either of the following:
 - i. The collection of information, including personal information about consumers, from a wide variety of sources for the purposes of reselling such information to their customers, which include both private-sector business and government agencies;
 - ii. The aggregation of data that was collected for another purpose from that for which it is ultimately used.
- b. "Extreme Vetting" means data mining, threat modeling, predictive risk analysis, or other similar services." Extreme Vetting does not include:
 - i. The City's computer-network health and performance tools;
 - ii. Cybersecurity capabilities, technologies and systems used by the City of Berkeley Department of Information Technology to predict, monitor for, prevent, and protect technology infrastructure and systems owned and operated by the City of Berkeley from potential cybersecurity events and cyber-forensic based investigations and prosecutions of illegal computer based activity.

Contractor understands that it is not eligible to receive or retain a City contract if at the time the Contract is executed, or at any time during the term of the Contract, it provides Data Broker or Extreme Vetting services to ICE.

Contractor further understands and agrees that Contractor's failure to comply with the SCCO shall constitute a material default of the Contract and the City Manager may terminate the Contract and bar Contractor from bidding on future contracts with the City for five (5) years from the effective date of the contract termination.

By executing this Statement, Contractor certifies that it complies with the requirements of the SCCO and that if any time during the term of the Contract it ceases to comply, Contractor will promptly notify the City Manager in writing. Any person or entity who knowingly or willingly supplies false information in violation of the SCCO shall be guilty of a misdemeanor and up to a \$1,000 fine.

Based on the foregoing, the undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this _____ day of _____, 20__, at ____, California.

Printed Name: _____ Title: _____

Signed: _____ Date: _____

Business Entity: _____

CITY OF BERKELEY
RIGHT TO AUDIT FORM

The contractor agrees that pursuant to Section 61 of the Berkeley City Charter, the City Auditor's office may conduct an audit of Contractor's financial, performance and compliance records maintained in connection with the operations and services performed under this contract.

In the event of such audit, Contractor agrees to provide the Auditor with reasonable access to Contractor's employees and make all such financial, performance and compliance records available to the Auditor's office. City agrees to provide Contractor an opportunity to discuss and respond to/any findings before a final audit report is filed.

Signed: _____ Date: _____

Print Name & Title: _____

Company: _____

**City Auditor's Office Telephone No. (510) 981-6750

CITY OF BERKELEY
NOTICE REGARDING THE EQUAL BENEFITS ORDINANCE

As a condition of being awarded a contract with the City of Berkeley, the selected Contractor shall be required, during the performance of the agreement, to comply with the City's non-discrimination provisions of the Equal Benefits Ordinance (EBO) as set forth in Berkeley Municipal Code, Chapter 13.29.

The EBO requires that during the performance of a contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners.

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$25,000 or more
- Non-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$100,000 or more
- Lessees of public property, licensees, concessionaires, and franchises that generate \$350,000 or more in annual gross receipts
- Entities which receive a grant agreement of \$100,000 or more

Contractors who are subject to the EBO must certify to the City that they are in compliance with the EBO and post this notice in a conspicuous place where all employees can see it. Subject contractors must also allow authorized City representatives access to records so the City can verify compliance with the Ordinance.

Compliance with the EBO

If a Contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the City agreement. In such cases, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of five years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor, and pursue any other remedies available at law or in equity.

Violations

Any suspected violations of the EBO should be reported to:

EBO Compliance Officer,
City Manager's Office
2180 Milvia Street, Berkeley, CA 94704
510-981-7000

CITY OF BERKELEY
EQUAL BENEFITS ORDINANCE DISCLOSURE FORM

As a condition of being awarded a contract with the City of Berkeley, the selected Contractor/Vendor (“Contractor”) may be required, during the performance of the contract, to comply with the City’s non-discrimination provisions of the Equal Benefits Ordinance (“EBO”) as set forth in Berkeley Municipal Code, Chapter 13.29. The EBO requires that during the performance of a contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include, but are not limited to, health benefits, bereavement leave, family medical leaves, membership and membership discounts, moving expenses, retirement benefits, and travel benefits. A cash equivalent payment is permitted if an employer has taken all reasonable efforts to provide domestic partner’s with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used is if the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$25,000 or more
- Non-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$100,000 or more
- Lessees of public property, licensees, concessionaires, and franchises that generate \$350,000 or more in annual gross receipts
- Entities which receive a grant agreement of \$100,000 or more

Contractors who are subject to the EBO must certify to the City before execution of the contract by completing form EBO-1 that they are in compliance with the EBO or have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the Ordinance.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following situations:

- (1) until the first effective date after the first open enrollment process following the contract execution date, not to exceed two years if the Contractor submits evidence of engaging in reasonable efforts to comply with the EBO;
- (2) until administrative steps can be taken to incorporate nondiscrimination in benefits in the contractor’s infrastructure, not to exceed three months, unless extended at the discretion of the City Manager; and
- (3) until the expiration of a Contractor’s current collective bargaining agreement(s)

CITY OF BERKELEY
EQUAL BENEFITS ORDINANCE DISCLOSURE FORM
(continued)

Compliance with the EBO

If a Contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the City agreement. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of five years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor, and pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of B.M.C. Chapter 13.29, the Contractor shall comply with this provision.

Printed Name:

_____ Title: _____

Signature:

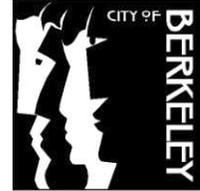
_____ Date: _____

Business Entity:

Specification Name & No.:

SANITARY SEWER REHABILITATION
ADELINE STREET, SHATTUCK AVENUE SEWER REHABILITATION
SPECIFICATION NO. 25-11688-C

To be completed by
Contractor/Vendor



**Form EBO-1
CITY OF BERKELEY**

CERTIFICATION OF COMPLIANCE WITH EQUAL BENEFITS ORDINANCE

If you are a **contractor**, return this form to the originating department/project manager. If you are a **vendor** (supplier of goods), return this form to the Purchasing Division of the Finance Dept.

SECTION 1. CONTRACTOR/VENDOR INFORMATION

Name:		Vendor No.:	
Address:	City:	State:	ZIP:
Contact Person:		Telephone:	
E-mail Address:		Fax No.:	

SECTION 2. COMPLIANCE QUESTIONS

- A. The EBO is inapplicable to this contract because the contractor/vendor has no employees.
 Yes No (If "Yes," proceed to Section 5; if "No", continue to the next question.)
- B. Does your company provide (or make available at the employees' expense) any employee benefits?
 Yes No
 If "Yes," continue to Question C.
 If "No," proceed to Section 5. (The EBO is not applicable to you.)
- C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee? Yes No
- D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee? Yes No
If you answered "No" to both Questions C and D, proceed to Section 5. (The EBO is not applicable to this contract.)
If you answered "Yes" to both Questions C and D, please continue to Question E.
If you answered "Yes" to Question C and "No" to Question D, please continue to Section 3.
- E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of the employee? Yes No
If you answered "Yes," proceed to Section 4. (You are in compliance with the EBO.)
If you answered "No," continue to Section 3.

SECTION 3. PROVISIONAL COMPLIANCE

- A. Contractor/vendor is not in compliance with the EBO now but will comply by the following date:
 - By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor submits evidence of taking reasonable measures to comply with the EBO; or
 - At such time that administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor's infrastructure, not to exceed three months; or

Upon expiration of the contractor’s current collective bargaining agreement(s).

B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent? * Yes No

* The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.

SECTION 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statements, etc.) to verify that you do not discriminate in the provision of benefits.

SECTION 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Berkeley Municipal Code and in the terms of the contract or purchase order with the City.

Executed this ____ day of _____, in the year _____, at _____, _____
(City) (State)

Name (please print)

Signature

Title

Federal ID or Social Security Number

FOR CITY OF BERKELEY USE ONLY

- Non-Compliant (The City may not do business with this contractor/vendor)
 - One-Person Contractor/Vendor Full Compliance Reasonable Measures
 - Provisional Compliance Category, Full Compliance by Date: _____
- Staff Name(*Sign and Print*): _____ Date: _____

COMMERCIAL GENERAL AND AUTOMOBILE LIABILITY ENDORSEMENT

The attached Certificates of Insurance are hereby certified to be a part of the following policies having the following expiration dates:

Policy No.	Company Providing Policy	Exp. Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The scope of the insurance afforded by the policies designated in the attached certificates is not less than that which is afforded by the Insurance Service Organization's or other "Standard Provisions" forms in use by the insurance company in the territory in which coverage is afforded.

Such Policies provide for or are hereby amended to provide for the following:

1. The named insured is _____.
2. CITY OF BERKELEY ("City") is hereby included as an additional insured with respect to liability arising out of the hazards or operations under or in connection with the following agreement:

The insurance provided applies as though separate policies are in effect for both the named insured and City, but does not increase the limits of liability set forth in said policies.
3. The limits of liability under the policies are not less than those shown on the certificate to which this endorsement is attached.
4. Cancellation or material reduction of this coverage will not be effective until thirty (30) days following written notice to Felix Meneau, P.E., Department of Public Works, 1947 Center Street, 4th Floor, Berkeley, CA. 94704.
5. This insurance is primary and insurer is not entitled to any contribution from insurance in effect for City.

The term "City" includes successors and assigns of City and the officers, agents, employees, and volunteers.

Insurance Company

Date: _____

By: _____
Signature of Underwriter's
Authorized Representative

PERFORMANCE BOND
CALIFORNIA PUBLIC WORKS

KNOW ALL MEN BY THESE PRESENTS,

That we, _____
as Principal, and _____,
a Corporation organized and existing under the laws of the State of _____ and authorized to transact surety business in the State of California, as Surety, are held and firmly bound unto the City of Berkeley (hereinafter called Obligee), in the sum of _____ Dollars (\$ _____), for the payment whereof well and truly to be made and we each of us bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION of the above obligation is such that, Whereas, the above named bounden principal entered into a contract dated _____, 20____ with the said Obligee to do and perform the following work, to-wit:

Which contract is hereby referred to, incorporated by reference, and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, That if the above bounden Principal shall well and truly keep, do, pay and perform, each and every, all and singular, all the matters, provisions, undertakings, covenants, terms, conditions, agreements and things in said contract set forth and specified to be by the said principal kept, done, paid and performed at the time and in the manner in said contract specified, and shall pay over, make good and reimburse

to the above-named Obligee, all loss and damages which said Obligee may sustain by reason of failure or default, or breach on the part of said Principal, then this obligation shall be void; otherwise to be and remain in full force and effect.

Whenever Principal shall be, and is declared by Obligee to be in default under the Contract, the Obligee having performed Obligee's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

1) Complete the Contract in accordance with its terms, provisions, undertakings, covenants, agreements, clauses, and conditions, or

2) Obtain a bid or bids for completing the Contract in accordance with its terms, provisions, undertakings, covenants, agreements, clauses, and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Obligee elects, upon determination by the Obligee and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Obligee, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price, but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the amount payable by Obligee to principal under the contract and amendments, thereto, less the amount properly paid by Obligee to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or Corporation other than the Obligee named herein or the heirs, executors, administrators or successors of Obligee.

If any action or law or in equity is brought to enforce or interpret the provisions of this bond, the prevailing party shall be entitled to reasonable attorney's fees in addition to any other relief to which it may be entitled.

SIGNED AND SEALED THIS _____ day of _____
_____, 20_____.

Principal

Surety Attorney In Fact

CITY OF BERKELEY
FIRST SOURCE/LOCAL HIRING POLICY

First Source (B.M.C. 13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

In general, the following responsibilities are assumed by the City and general Contractors/Subcontractors.

CITY RESPONSIBILITIES:

1. Coordinate with Unions and CITY-funded employment/training agencies to ensure referral of applicants and training in accordance with CITY commitments.
2. Work with the local workforce development programs to ensure that they thoroughly screen applicants' experience/qualifications for jobs.
3. Follow up with workforce development agencies and employers on outcome of applicants referred for employment and will initiate corrective actions necessary for an effective employment/training delivery system.
4. At its discretion, be responsible for monitoring and, where necessary, enforcing compliance with this Agreement. This will be accomplished through periodic reviews, investigations of grievances and dispute resolution through administrative hearings. Pending conclusion of the hearings, the CONTRACTOR can continue normal operations and hiring.
5. At its discretion, review certified payroll or other relevant reports to determine whether the CONTRACTOR has maintained good faith efforts to hire and provide opportunities for Berkeley residents.
6. Ensure that local workforce development programs and Berkeley Housing Authority (for HUD Section 3 compliance where applicable) are notified that the First Source Agreement is in place.

GENERAL CONTRACTOR/SUBCONTRACTOR RESPONSIBILITIES:

Compliance with the City of Berkeley Non-Discrimination policy and employment goal as it relates to the First Source Program:

1. Meeting employment goals contained in the City construction component.
2. Notifying City or City's designee of project labor needs.
3. Interviewing qualified Berkeley residents before others are interviewed.
4. Providing information to City of application-for-work procedures.

CITY OF BERKELEY
FIRST SOURCE AGREEMENT

I certify that:

- I I am authorized to enter into this agreement on behalf of the company whose name appears below ("Contractor").**

- II Contractor understands and agrees to comply with the First Source Program as described in Berkeley Municipal Code Section 13.26.080.**

- III Contractor understands that agreement with Berkeley Municipal Code Section 13.26.080 means that Contractor agrees as follows:**
 - A. To interview and consider qualified Berkeley applicants before interviewing others.
 - B. To notify the applicable Union Hall(s) as to the local hiring requirement for this project and to request qualified Berkeley residents first.
 - C. That the Contractor has the sole discretion to make all final hiring decisions.

- IV Contractor also agrees:**
 - A. To ensure that workers employed through this agreement are treated in a manner that is equal to all other employees.
 - B. To fully document the reason(s) for not hiring persons referred by Union Halls or workforce development agencies.
 - C. To ensure that job specifications/requirements accurately reflect job functions.
 - D. To designate a qualified representative of the Contractor and each Subcontractor who will be the responsible party for implementation and compliance with the goals, objectives and responsibilities specified in this agreement. Contractor will inform the City of the designated representative(s) at the Non-Discrimination Conference.
 - E. To provide to the City, upon request, information on the employment status of First Source placements, and reason for separation if employee is terminated.

CITY OF BERKELEY
FIRST SOURCE AGREEMENT
(continued)

The above First Source Agreement provisions shall apply for the duration of covered contracts. Covered contracts are all construction projects over \$100,000, and shall include all subcontracts.

I declare the foregoing to be true and correct under penalty of perjury.

Signed: _____ Date: _____

Title: _____

Company: _____

City Engineer or designee Date: _____

CITY OF BERKELEY
AGREEMENT TO BE BOUND FORM

The undersigned, as a Contractor or Subcontractor (“Contractor”) on a City Project (“Project”), for and in consideration of the award to it of a contract to perform work on said Project, and in further consideration of the mutual promises made in the Project’s Community Workforce Agreement (“Agreement”), a copy of which was received and is acknowledged, hereby:

1. Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made to said Agreement.
2. Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of said Agreement;
3. Agrees to secure from any Contractor (as defined in said Agreement) which is or becomes a subcontractor (of any tier to it, and from any successors, a duly executed Agreement to be bound in form identical to this document.
4. Contractor agrees that it shall be bound by all applicable trust agreements and plans for the provision of such fringe benefits as accrue to the direct benefit of the construction persons, including Health and Welfare, Pension, Training, Vacation, and/or other direct benefits provided pursuant to the appropriate craft agreement contained in Schedule “A” of Agreement.

Date: _____

Company Name: _____

Name of Prime contractor or Higher Level Subcontractor:

Name of Project: _____

Signature: _____

Print Name: _____

Title: _____

Contractor’s License #: _____

Motor Carrier Permit (CA) #: _____

DESCRIPTION OF BID ITEMS

Description of Bid Items including their respective measurement for payment are listed below:

BID ITEM NO. 1: MOBILIZATION AND DEMOBILIZATION

Mobilization shall include obtaining insurance and bonds, moving all materials and equipment onto the site, obtaining and paying for all permits by other agencies if applicable, furnishing temporary construction utilities, installing construction signs (see Special Conditions of the Special Provisions for details), and installing any temporary buildings, spaces and facilities for the Resident, Project Representative and inspectors, and other construction facilities all as required for the proper performance and completion of the work.

Demobilization shall include final cleaning and restoration of the job site, removal of all temporary facilities and equipment from the work area, disconnection of the temporary construction utilities and turnover of project to the City.

Measurement for payment shall be as Lump Sum (LS). For the purpose of payment, mobilization will be assumed to be 60 percent of the total amount bid for this item. Payment for mobilization will be according to the following schedule.

- A. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more the original contract amount, 50 percent of the contract item price for mobilization will be included in said estimate for payment.
- B. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the original contract amount, the total amount earned for mobilization shall be 75 percent of the contract item price for mobilization, and said amount will be included in said estimate for payment.
- C. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the original contract amount, the total amount earned for mobilization shall be 100 percent of the contract item price for mobilization, and said amount will be included in said estimate for payment.

BID ITEM NO. 2: TRAFFIC CONTROL PLAN AND PROVISIONS

This item shall include all labor, materials, and equipment as needed to provide traffic control as described under Special Condition No. 24 of the specifications. Contractor shall submit a proposed traffic control plan, no later than two (2) weeks after the award of the project by the Berkeley City Council, for review and approval by the City's traffic engineer. The plan shall be prepared under the direction of a licensed traffic engineer or civil engineer, who must stamp and sign the plan.

Contractor shall be aware that bicycle and pedestrian convenience and safety takes precedence over motor vehicle convenience. Contractor shall prepare traffic control plans such that closures or detours have little to no impact to pedestrian and bicyclist path of travel.

This item shall include, but not limited to, traffic control for sewer rehabilitation, sewer point (spot) repairs, sewer bypass, and pavement restoration in project work zones.

Measurement for payment shall be as Lump Sum (LS). The contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 3: LIGHTED MESSAGE BOARD

This item is to provide compensation for additional notification near the work area. The Contractor shall provide portable changeable message boards for use on the project at the City's request. Each portable message sign unit shall consist of a controller unit, a power supply, and a structural support system, all mounted on a trailer, per Caltrans Standard Specification Section 12-3.32. Message boards shall be installed as directed by the Engineer at least one (1) week prior to start of construction and shall be relocated to the next street location as job progresses or as directed by the Engineer. Board shall be maintained to the satisfaction of the Engineer.

Measurement for payment shall be as Each (EA).

BID ITEM NO. 4: PRE-CONSTRUCTION AUDIO/VIDEO SURVEY, AND DISTRIBUTION OF PUBLIC NOTICES

This item shall include all labor, materials, and equipment, including, but not limited to, recording devices, video cameras, cameras, and other equipment as required to perform a pre-construction survey to document existing conditions at the project site, staging areas, and other areas affected by the work. The contractor shall submit written records, photographs, and videos to the City prior to commencing work. The documentation of pre-construction conditions for the areas affected by the work is to facilitate restoration of the areas to existing conditions or better.

This item shall also include all labor and materials associated with the distribution of Public Notices to residences, businesses, and other properties affected by the work. The first Public Notice will be prepared and distributed by the City. The second Public Notice (Door Hanger) shall be distributed by the Contractor at least 72 hours prior to construction. The Contractor shall submit the "Door Hanger" for approval by the City prior to distribution to the residences, businesses, and other properties affected by the work.

Measurement for payment shall be as Lump Sum (LS). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 5: PRE-CONSTRUCTION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION AND LOCATION OF ACTIVE SEWER LATERALS

This item shall include coordination with and notification of the public; locating, identifying, marking and recording all active laterals; and documenting the pre-construction condition of existing sewer mains. This item shall include labor, materials, utility marking devices, CCTV equipment, videos devices, and other CCTV related materials for clear documentation of deficiencies in the existing sewer pipes and location of laterals. Flow control, diversion and/or bypass pumping required in order to facilitate the pre-construction CCTV shall be included.

Documentation shall follow the National Association of Sewer Service Companies (NASSCO) pipeline assessment certification program (PACP) coding standards for all defects and consist of a color, DVD-format video, log sheets, and a written report detailing the pre-construction condition of the pipeline and lateral connection/openings. The report shall note the time and date of video inspection, street name, upstream and downstream maintenance hole, direction of view, direction of flow, surface material, pipe size, pipe material, lateral connections, video tape number, counter number, and a detailed logging of defects encountered. The report shall be prepared by an operator or worker who holds current PACP certification and shall be done using POSM format.

The camera shall be lowered into the upstream maintenance hole (or access point) and placed into the pipe. The camera cable shall be retracted to remove slack to ensure an accurate distance reading. The cable distance-counter shall be reset to the distance between the centerline of the maintenance hole and the front lens of the camera. The camera shall provide a view of the inside of the insertion maintenance hole, then move through the pipeline in a downstream direction whenever possible, stopping at the center of the next maintenance hole and provide a view of the inside of the end structure. The cable distance counter shall measure the distance between each inspection segment – centerline to centerline. The camera shall stop at all significant observations to ensure a clear and focused view of the pipe condition. Observations shall include, but not be limited to: Laterals – Standard, Laterals – Protruding, Cracks, Offset Joints. Open Joints, Sags, Line Deviations, Siphons, Missing Sections, Mortar, Infiltration, Debris, Grease, and Roots. If the quality of the video is deemed unacceptable by the Engineer, the pipeline shall be re-televised at no additional cost to the City.

Contractor shall identify all defects in the existing pipe requiring corrective action prior to pipe rehabilitation and identify any areas that require additional corrective actions that are above and beyond allowance for point repairs included in the bid items for pipe rehabilitation. Any areas that may require additional corrective actions shall be documented and provided to the Engineer for immediate review and direction. CCTV shall be provided to the City's Engineer within 2 weeks of notice to proceed.

Measurement for payment shall be in Linear Foot (LF) of pre-construction video inspection of pipe inspected (regardless of pipe size) and submittal of video and report to the City. Any time or materials expended on investigating inactive laterals shall be included in the unit cost of locating active laterals. Work on this bid item shall be in accordance with Sub-section 500-1 of the Technical Provisions.

BID ITEM NO. 6: CONSTRUCTION STAKING AND CUT SHEETS

This item shall include all labor, materials, and equipment for the setting of construction stakes or markers as necessary to establish the lines and grade required for the execution and completion of the work specified in the plans and specifications. Included in this bid item is the preparation of cut/fill sheets to be submitted to the Engineer for approval prior to staking. The Contractor shall be responsible for any errors made in the sewer flow line and grade of the finished work and shall remedy the defective work with no extra cost to the City.

Measurement for payment shall be as Lump Sum (LS). For additional information, see Special Conditions of the specifications.

BID ITEM NO. 7: REHABILITATE EXISTING MAINTENANCE HOLE OR JUNCTION BOX, ALL DEPTHS

Contractor shall verify that the maintenance hole or precast concrete junction box identified to be rehabilitated is a precast concrete maintenance hole or precast concrete junction box. Brick maintenance holes shall not be rehabilitated except where specifically noted. If the structure is not a precast concrete maintenance hole or junction box, Contractor shall notify the Engineer for further direction and prior to any further work on the structure. If the structure is a precast concrete maintenance hole, work shall proceed as described below.

This item shall include all labor, materials and equipment as needed for rehabilitation of existing structure. Work includes but is not limited to removal of existing concrete as required, removal of existing coating, removal of existing steps, removal and replacement of the rim, frame and cover, delivery of discarded frame and cover to the City's Corporation Yard, repair of damaged connections to structures, construction of new concrete flow channel as indicated in the plans and specifications, installation of new drop connection when elevation difference between the inlet and outlet is at least the distance for the required fittings and the drop is 18-inches or greater, cleaning using hydraulically propelled, high-velocity jet, or mechanically powered equipment, lining with Mainstay ML-72, Parson Environmental PARSON MH LINER, or other approved equal within interior bed of maintenance hole and to interior wall, coating of maintenance hole base and interior wall with Mainstay DS-5, Parson Environmental PARSONPOXY SEL-80, or other approved equal, vacuum testing, removal and disposal of debris, sediment and grease, flow control, diversion or bypass pumping, dewatering, furnishing of concrete to raise the maintenance hole invert to the elevation shown in the Plans, and forming and reconstructing channels and base. The existing structure channel shall be removed prior to placing new pipe and concrete. If plastic pipe is laid through maintenance holes, cement water stop maintenance hole coupling shall be used at the pipe entry and exit point for all pipes, and shall be in accordance with the plans and specifications.

Listed below are the names of concrete repair and liner material for maintenance hole rehabilitation and their local distributor:

- a) Mainstay by Madewell Products Corporation
Steve Hallam, Sales Manager
Telephone: (770) 856-4470

Fax: (866) 859-2961

b) Parson Environmental Products, Inc.

Telephone: (800) 356-9023

Fax: (610) 582-6064

Any similar methods submitted by the Contractor that will produce the same result of eliminating water infiltration shall be reviewed and approved by the Engineer. Rehabilitation of the maintenance hole interior surface by means of grouting only will not be accepted. Maintenance hole rehabilitation shall include the installation of an approved lining and coating material. Refer to Section 500-2.5 of Part D – Technical Provisions for lining material and epoxy coating requirements.

Measurement for payment shall be as Each (EA). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment and after the delivery of the discarded frame and cover to the City's Corporation Yard. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

BID ITEM NO. 8: CONSTRUCT MAINTENANCE HOLE AND DROP
MAINTENANCE HOLE, ECCENTRIC CONES, ALL DEPTHS
(REVOCABLE)

This item shall include all labor, materials, and equipment necessary for the excavation and construction of a new standard maintenance hole or drop maintenance hole as shown in the plans and specifications, the connection to pipe, drop connection, concrete encasement, bedding, backfill, including imported backfill, aggregate base material, compaction, coating of the interior wall of the maintenance hole (see Bid Item No.7 for a list of liner and coating requirements), vacuum testing, flow control, diversion or bypass pumping, dewatering, temporary and permanent resurfacing, including asphalt or concrete pavement reconstruction to restore the existing improvements. Standard maintenance holes located in the street areas shall be TYPE A frame and cover in accordance with I/I Standard Detail, Drawing No. 14 and; maintenance hole located in the backline areas shall be TYPE B frame and cover in accordance with I/I Standard Detail, Drawing No. 15. Trunk maintenance holes shall be as shown on Project Plans, Detail 12 Sheet 26, and trunk maintenance holes frame and cover shall be as shown on Project Plans, Detail 13, Sheet 27. Item shall also include temporary shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications.

Measurement for payment shall be as Each (EA) regardless of depth. Payment shall be per type of maintenance hole as follows:

Bid Item No. 8a: Construct standard maintenance hole, including standard frame and cover

Bid Item No. 8b: Construct trunk maintenance hole, including trunk maintenance hole frame and cover

Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

BID ITEM NO. 9: REMOVE EXISTING STRUCTURE AND CONSTRUCT MAINTENANCE HOLE, DROP MAINTENANCE HOLE, JUNCTION BOX, OR LAMPHOLE, ECCENTRIC CONES, ALL DEPTHS (REVOCABLE)

Contractor shall verify that the structure identified to be removed is a brick maintenance hole. If the maintenance hole is not a brick maintenance hole, Contractor shall notify the Engineer for further direction and prior to any further work on the maintenance hole. If the structure called out to be removed is an existing lamphole, cleanout, or junction box, contractor shall verify that the structure called out on the plans accurately reflects field conditions. If the maintenance hole is a brick maintenance hole or other structure as called out on the plans, work shall proceed as described below.

This item shall include all labor, materials, and equipment necessary for the excavation and complete removal of existing maintenance hole, lamphole, cleanout, or junction structure, removal and replacement of the maintenance hole rim, frame and cover, delivery of discarded frame and cover to the City's Corporation Yard, removal and disposal of debris, the construction of a new standard maintenance hole, mini- maintenance hole, drop maintenance hole, or junction box as shown in the plans and specifications, the connection to pipe, drop connection, concrete encasement, bedding, backfill, including imported backfill, aggregate base material, compaction, coating of the interior wall of the maintenance hole (see Bid Item No.7 for a list of liner and coating requirements), vacuum testing, flow control, diversion or bypass pumping, dewatering, temporary and permanent resurfacing, including asphalt or concrete pavement reconstruction to restore the existing improvements. Standard maintenance holes located in the street areas shall be TYPE A frame and cover in accordance with I/I Standard Detail, Drawing No. 14 and; structures located in the backline areas shall be TYPE B frame and cover in accordance with I/I Standard Detail, Drawing No. 15. Trunk maintenance holes shall be as shown on Project Plans, Detail 12 Sheet 26, and trunk maintenance holes frame and cover shall be as shown on Project Plans, Detail 13, Sheet 27. Item shall also include temporary shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications.

Measurement for payment shall be as Each (EA) regardless of depth. Pavement shall be per type of maintenance hole as follows:

- Bid Item No. 9a:** Remove existing structure and construct standard maintenance hole, including standard maintenance hole frame and cover
- Bid Item No. 9b:** Remove existing structure and construct trunk maintenance hole, including trunk maintenance hole frame and cover

The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment and after the delivery of the discarded frame and cover to the

City's Corporation Yard. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

BID ITEM NO. 10: REHABILITATION BY METHOD "A" CURED-IN-PLACE-PIPE (CIPP) LINER, INCLUDES POINT REPAIR TO CORRECT SAGS

This method of sewer rehabilitation involves the insertion of an approved polyester, epoxy, or epoxy-vinyl ester-resin-impregnated flexible fabric tube. The material shall be compatible with and capable of carrying epoxy or epoxy-vinyl-ester resin, be able to withstand installation pressures and curing temperatures. The approved epoxy shall be compatible with the application and be able to cure in the presence of hot water or steam. Refer to Section 500-1.4 of the "Greenbook" 2015 Edition and Part D – Technical Provisions for material composition, testing and other requirements for the installation of CIPP liner. Refer to Section 500-1.2 of the "Greenbook" 2015 Edition and Part D – Technical Provisions for Pipeline Point Repair/Replacement. PVC Pipe Liner is not allowed for this project.

If specified on the plans, this method can also include the use of an approved ultraviolet (UV) light-cured resin-impregnated fiberglass tube liner (See Special Condition No. 30). The Project Engineer reserves the right to change the design from UV CIPP to flexible fabric (felt) CIPP.

The following applies to CIPP installations in plastic host pipe:

CIPP in plastic host pipe is more time-consuming and challenging than conventional CIPP, in part because the heating process required to cure the liner can warp the host pipe, meaning the curing process has to be slower and cooler. As such, the liner and curing method selected need to be chosen with care. Approved methods for CIPP in plastic pipe are listed below.

- An approved epoxy-impregnated flexible fabric tube with steam or hot water-cure. If epoxy liners are proposed, Contractor shall submit verification that they have adequate experience with using epoxy liners successfully on comparable plastic host pipe projects, which might include listing of three comparable completed projects or other acceptable documentation that the contractor is skilled in this work.
- Polyester fabric liners with styrene-free vinyl ester resin may be used in conjunction with hot water cure. Steam cure may be acceptable at Engineer's sole discretion if Contractor submits verification that they have adequate experience with using the combination of styrene-free vinyl ester resin and steam cure on comparable plastic-host pipe projects. Such documentation might include listing of three comparable completed projects or other acceptable documentation that the contractor is skilled in this work.
- Alternates to the options listed above may be submitted to Engineer for approval. Submittal shall include detailed documentation that the methodology chosen is

suitable for lining a plastic host pipe. Documentation shall include that that liner type/cure type has been used successfully on at least three different comparable plastic host pipe projects, and written documentation from the manufacturer that the submitted materials and methods are an appropriate choice, or other method of demonstrating expertise that is acceptable to the Engineer. Approval of any alternate is at the sole discretion of the Engineer.

The following applies to all CIPP installations, regardless of host pipe material:

The cured-in-place liner thickness shall be a minimum of 0.24 inches (6.0 mm) or as calculated by the Contractor, whichever is greater. Liner design calculations shall be supported by field analysis, technical assumptions, requirements of these Specifications and ASTM F 1216 X1.2.1. Calculations and product information shall be submitted in accordance with Part C, Subsection 401.12 of the Specifications prior to ordering liner.

The CIPP liner shall fit sufficiently tight within the existing pipe so as to not leak at the manholes, at the service connections or through the wall of the installed pipe. If leakage occurs at the manholes or the service connections, the Contractor shall seal these areas to stop all leakage using a material compatible with the CIPP and host pipe, resistant to sulfuric acid, and suitable for contact with sewage, as approved by the Engineer.

Contractor responsible to obtain all EBMUD permits, including but not limited to disposal or discharge into an EBMUD wastewater treatment plant, as required by applicable regulations as part of the contract scope (See Appendix 8). Contractor is responsible for repair of host pipe should it become damaged during the construction process.

This item shall include all labor, materials, and equipment necessary for the execution and completion of this rehabilitation method, including, but not limited to surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (See Special Condition No. 18), dewatering, flow control, diversion or bypass pumping (See Special Condition No. 40; Note that bypass pumping for sewer mains 15" and larger, shall be included in Bid Item No. 27), point repairs, removal of protruding laterals, removal of root intrusion (See Special Condition No. 42 and Appendix 8), excavation, backfill including imported backfill, sewer cleaning, insertion and curing of fabric tube, reinstatement of lateral connections, and testing.

Item shall also include the performance of point repairs needed to correct the alignment (sags, offset joints, protruding laterals, etc.) and shall be replaced in-kind, with the new pipe's dimensions and material matching the existing pipe, if such repairs are not identified in the drawings and encountered during pre-construction closed-circuit television inspections or construction. This item includes an allowance for one additional point repair (25 contiguous feet, or less) per 600 feet of total existing pipe being rehabilitated in the unit price bid. See Special Condition No. 15. Point repairs identified in the drawings are included in Bid Item No. 30.

Any damage to existing maintenance hole lining caused by the Contractor during performance of work under this bid item shall be repaired to the satisfaction of the Engineer at no cost to the City.

Unless otherwise noted on the Plans, lower laterals connected to mains rehabilitated by Method “A”, shall be rehabilitated and paid for per Bid Item No. 13.

Obtaining construction access from property owners for work on private property shall be included in the unit bid price, see Special Condition No. 20.

The Contractor shall verify the actual dimensions and sizes of existing pipes prior to procuring CIPP materials. If the actual dimensions and sizes are outside of acceptable tolerances provided by the CIPP manufacturer and require a larger CIPP than described in the contract bid documents, a change order will be issued to adjust the cost, and the Contractor will be compensated for any increase based on the unit cost difference between the bid unit price and the actual unit price for labor and materials. If the actual dimensions and sizes are outside of acceptable tolerances provided by the CIPP manufacturer and require a smaller CIPP than described in the contract bid documents, a change order will be issued to adjust the cost, and the City will be credited for any decrease based on the unit cost difference between the bid unit price and the actual unit price for labor and materials.

Payment for traffic control plans required for work under this bid item are included in Bid Item No. 2.

Additional pavement restoration required for CIPP due to paving moratorium streets shall be paid under this bid item. Pavement restoration for moratorium streets shall conform to the City of Berkeley Standard Detail, Plan No. 8136. Moratorium streets and limits affected by this bid item are as follows:

Adeline Street	Shattuck Avenue	to	Ashby Avenue
Kala Bagai Way	University Street	to	Center Street
Shattuck Avenue	Center Street	to	Allston Way
Shattuck Avenue	Derby Street	to	Adeline Street

Measurement for payment shall be in Linear Foot (LF). Payment shall be per host pipe diameter and material as follows:

Bid Item No. 10a: Method “A”, CIPP, 20-inch diameter, non-plastic host pipe

Bid Item No. 10b: Method “A”, CIPP, 27-inch diameter, non-plastic host pipe

Bid Item No. 10c: Method “A”, CIPP, 33-inch diameter, non-plastic host pipe

Bid Item No. 10d: Method “A”, CIPP, 36-inch diameter, non-plastic host pipe

Bid Item No. 10e: Method “A”, CIPP, 45-inch diameter, non-plastic host pipe

Payment includes as-built submittals to the City. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

BID ITEM NO. 11: REHABILITATION BY METHOD "B" PIPE SPLITTING OR OTHER COMPARABLE METHOD, INCLUDES POINT REPAIR

TO CORRECT SAGS

This method involves the use of a hydraulically powered system to install a new pipe through, and in the place of, an existing pipe. This method includes the operation known as pipe splitting or bursting whereby the hydraulic powered system is used to expand and break away existing pipe and at the same time pull a new pipe into the resulting pipe space.

This method also includes the operation known as sliplining whereby a new pipe is inserted into and pulled through an existing pipe of larger diameter, and the existing pipe generally remains intact.

There are several types of pipe breaking and/or sliplining equipment now available and the Contractor shall submit to the City for review and approval the method to be used, procedures, equipment and diagrammatic sketches showing the pipe installation.

EBMUD's zone of influence for ground movement caused by pipe splitting shall be determined by the inside diameter of the existing pipe subtracted from the outside diameter of the expander head and multiplying by ten (Pipe Bursting Good Practices Guidelines, NASTT). These findings shall be provided to the City and reviewed by EBMUD prior to the start of construction.

This item shall include all labor, materials, and equipment necessary for the execution and completion of this rehabilitation method, including, but not limited to potholing of utilities, surface removal and restoration including temporary and permanent resurfacing, but not limited to surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (See Special Condition No. 18), excavation of pits, dewatering, flow control, diversion or bypass pumping (See Special Condition No. 40), point repairs, excavation backfill including concrete grout where noted on the drawings and at lateral connections and other openings, imported backfill, compaction of bedding material beneath and around the location of active lateral connections and at excavation pits, pipe cleaning, pipe installation, and testing.

Pipe bursting method shall be in accordance with Section 500-1.6 of Part E -“Regional Standards” June 30, 2016 Edition. Refer to Section 500-1.2 of the “Greenbook” 2015 Edition and Part D – Technical Provisions for Pipeline Point Repair/Replacement.

At no extra cost to the City, Contractor shall repair to original condition any surface damaged as a result of ground heave from method “B” rehabilitation. This includes restoration of grading, paving, sidewalks, driveways, curb, gutter, striping, landscaping, or of any other surface feature damaged by method “B” rehabilitation.

Item shall also include the performance of point repairs needed to correct the alignment (sags, offset joints, protruding laterals, etc.) and shall be replaced in-kind, with the new pipe's dimensions and material matching the existing pipe, if such repairs are not identified in the

drawings and encountered during pre-construction closed-circuit television inspections or construction. This item includes an allowance for one additional point repair (25 contiguous feet, or less) per 600 feet of total existing pipe being rehabilitated in the unit price bid. See Special Condition No. 15. Point repairs identified in the drawings are included in Bid Item No. 30.

Obtaining construction access from property owners for work on private property shall be included in the unit bid price, see Special Condition No. 20).

Item shall also include temporary shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications. See Special Condition No. 19 for approximation of ground elevation and depth of excavation for backline sewers.

The Contractor shall verify the actual dimensions and sizes of existing pipes. If the actual dimensions and sizes require a larger pipe than described in the contract bid documents, a change order will be issued to adjust the cost, and the Contractor will be compensated for any increase based on the unit cost difference between the bid unit price and the actual unit price for labor and materials. If the actual dimensions and sizes require a smaller pipe than described in the contract bid documents, a change order will be issued to adjust the cost, and the City will be credited for any decrease based on the unit cost difference between the bid unit price and the actual unit price for labor and materials.

Payment for traffic control plans required for work under this bid item are included in Bid Item No. 2.

Additional pavement restoration required for pipe splitting due to paving moratorium streets shall be paid under this bid item. Pavement restoration for moratorium streets shall conform to the City of Berkeley Standard Detail, Plan No. 8136.

Measurement for payment shall be in Linear Foot (LF). Payment shall be per new pipe diameter as follows:

Bid Item No. 11a: Sewer main replacement maintaining pipe size at 8-inch diameter using Method “B” Pipe Splitting or Method “C” Traditional Open Trench

Bid Item No. 11b: Sewer main replacement maintaining pipe size from 15 to 18-inch diameter using Method “B” Pipe Splitting or Method “C” Traditional Open Trench

Where no upsize is specified, the inner diameter of the new pipe shall match that of the existing pipe or be an approved equivalent.

Where shown on the Contract Plans as an option, the Contractor may select Method “C” Traditional Open Trench as a construction method substitution to Method “B” Pipe Splitting.

The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment. Payment includes As-Built submittals to the City. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

**BID ITEM NO. 12: SEWER CONSTRUCTION AND REPLACEMENT BY METHOD
“C” TRADITIONAL OPEN TRENCH METHOD, INCLUDES
REPAIR OF SAGS**

This item shall include all labor, materials, and equipment necessary for the execution and completion of this work including, but not limited to saw cutting of existing surface, excavation, hand excavation including potholing to determine the location of existing sewer and adjacent main and service utilities before trenching, correction of conflict between new sewer and utilities, removal and disposal of abandoned utilities as required, surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18), flow control, diversion or bypass pumping (Note: Bypass Pumping for sewer mains 15” and larger, shall be included in Bid Item No. ~~28~~ 27), locating wire, connection to existing structures, dewatering, bypass pumping, pipe provision and installation, bedding, backfill, including imported backfill, aggregate base material, compaction of bedding material beneath and around the main and at the locations of active lateral connections, pipe cleaning, pipe installation, temporary resurfacing, permanent resurfacing including concrete pavement reconstruction, testing of new sewer line, and all other work (excluding maintenance holes) necessary to install the pipe complete and in place.

This method includes the excavation of trenches large enough to remove the existing pipe and accommodate the installation of new HDPE pipe. HDPE pipe length shall be assembled in the field with butt-fused joints in accordance with ASTM D 2657 and Section 500-1.3.5 of the Technical Provisions.

Obtaining construction access from property owners for work on private property shall be included in the unit bid price (see Special Condition No. 20).

Item shall also include temporary shoring, hydraulic shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications. See Special Condition No. 19 for approximation of ground elevation and depth of excavation for backline sewers.

Item shall also include the performance of point repairs needed to correct the alignment (sags, offset joints, protruding laterals, etc.) and shall be replaced in-kind, with the new pipe's dimensions and material matching the existing pipe, if such repairs are not identified in the drawings and encountered during pre-construction closed-circuit television inspections or construction. This item includes an allowance for one additional point repair (25 contiguous feet, or less) per 600 feet of total existing pipe being rehabilitated in the unit price bid. See Special Condition No. 15. Point repairs identified in the drawings are included in Bid Item

No. 30.

Payment for traffic control plans required for work under this bid item are included in Bid Item No. 2.

Additional pavement restoration required for traditional open trench due to paving moratorium streets shall be paid under Bid Items No. 32 and 33. Pavement restoration for moratorium streets shall conform to the City of Berkeley Standard Detail, Plan No. 8136. Moratorium streets and limits affected by this bid item is as follows:

Woolsey Street Adeline Street to Tremont Street

Measurement for payment shall be in Linear Foot (LF). Payment shall be per new pipe diameter as follows:

Bid Item No. 12: Sewer construction and main replacement maintaining pipe size from 21 to 24-inch diameter using Method “C” Traditional Open Trench

Where no upsize is specified, the inner diameter of the new pipe shall match that of the existing pipe or be an approved equivalent.

The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment. Payment includes As-Built submittals to the City. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

BID ITEM NO. 13: LOWER LATERAL RECONSTRUCTION (TYPICALLY 4-INCH AND 6-INCH LATERALS)

This item shall include all labor, materials, and equipment necessary for notification and coordination with the public and for installation of lower lateral reconstruction, including but not limited to saw cutting of existing surfacing including concrete pavement; surface removal and restoration; excavation; dewatering; removal and disposal of existing pipe; locating wire; flow control, diversion or bypass pumping; provision and installation of high density polyethylene pipe (HDPE SDR-17) and fittings (the new lateral pipe and two-way cleanout shall match the existing size); connection to sewer main; bedding; backfill including imported backfill; compaction; mortar cement for plugging abandoned sewer main at point of disconnections; mortar cement for plugging abandoned sewer laterals at point of disconnection; demolition and removal of existing tee, lateral riser, and cleanout frame and cover for abandoned sewer laterals; testing; temporary and permanent resurfacing including asphalt or concrete pavement reconstruction to match existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18); temporary sheeting, plywood, or equivalent type of cover to protect newly-poured concrete from vandalism; sidewalk and driveway repair; and all other necessary work to install the pipe complete and in place.

Item shall also include temporary shoring, sheeting, and bracing as necessary for the execution and completion of the work specified in the plans and specifications. See Special Condition No. 19 for approximation of ground elevation and depth of excavation for backline sewers.

The Contractor shall verify the actual dimensions and sizes of existing pipes. If the actual dimensions and sizes require a larger pipe than described in the contract bid documents, a change order will be issued to adjust the cost, and the Contractor will be compensated for any increase based on the unit cost difference between the bid unit price and the actual unit price for labor and materials. If the actual dimensions and sizes require a smaller pipe than described in the contract bid documents, a change order will be issued to adjust the cost, and the City will be credited for any decrease based on the unit cost difference between the bid unit price and the actual unit price for labor and materials.

Additional pavement restoration required for lower lateral reconstruction due to paving moratorium streets shall be paid under this bid item. Pavement restoration for moratorium streets shall conform to the City of Berkeley Standard Detail, Plan No. 8136. Moratorium streets and limits affected by this bid item are as follows:

Adeline Street	Shattuck Avenue	to	Ashby Avenue
Woolsey Street	Adeline Street	to	Tremont Street

Measurement for payment shall be Linear Foot (LF). Pipe shall be measured along the centerline of the pipe from downstream side of the two-way cleanout near the curb or sidewalk to the connection of the fitting at the sewer main, per Plan Detail 3 of Sheet 25. Unit prices for this bid item are for all depths. Payment includes all As-Built drawings and completion of "Sewer lateral As- Built Record" Forms. **The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.**

OPTION- Lower lateral reconstruction using pipe rehabilitation method "B" instead of open trench method shall conform to the description of bid item – "SEWER REHABILITATION BY METHOD "B" – PIPE SPLITTING OR OTHER COMPARABLE METHOD" and Special Condition No. 15. Replacement of Concrete encased lower lateral encountered when using this method shall be removed at the Contractor's expense.

OPTION- Lower lateral reconstruction using pipe rehabilitation Method "A" instead of open trench method shall conform to the description of bid item – "SEWER REHABILITATION BY METHOD "A" – CURED IN PLACE PIPE (CIPP) LINER" and Special Condition No. 15. **This method for lateral rehabilitation is only acceptable where indicated on the plans.**

BID ITEM NO. 14: INSTALLATION OF TWO-WAY CLEANOUT AND LATERAL RISER

This item shall include all labor, materials, and equipment necessary for notification and coordination with the public and for installation of a two-way cleanout and lateral riser, including but not limited to, excavation, surface removal and restoration of any existing

improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18); pipe cutting, cleanout fitting, couplings, riser, connection to the lateral and/or existing building sewer, concrete collar, frame, cover, backfill including imported backfill, compaction, flow control, and dewatering as required. Where a two-way cleanout is installed three feet or less from sewer main, contractor shall replace and re-connect the lateral from the cleanout to the sewer main (See Bid Item No. 13).

Measurement for payment shall be as Each (EA). Payment includes all As-Built drawings and completion of "Sewer lateral As- Built Record" Forms.

BID ITEM NO. 15: CONNECTION OF ACTIVE LATERALS TO NEW OR REHABILITATED SANITARY SEWER MAIN OR MAINTENANCE HOLE (NOT USED)

BID ITEM NO. 16: POST-CONSTRUCTION CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION AND CONSTRUCTION AS-BUILT DRAWINGS

Post-construction CCTV inspection shall be performed to determine if the construction of the new pipe is in compliance with the plans and specifications. This item shall include labor, CCTV equipment, videos and other CCTV related materials for proper documentation of the newly installed sewer pipes. Flow control, diversion and/or bypass pumping required in order to facilitate the post-construction CCTV of the large diameter sewer pipe shall be included in Bid Item No. ~~27~~ **28**.

The camera shall be lowered into the upstream maintenance hole (or access point) and placed into the pipe. The camera cable shall be retracted to remove slack to ensure an accurate distance reading. The cable distance-counter shall be reset to the distance between the centerline of the maintenance hole and the front lens of the camera. The camera shall provide a view of the inside of the insertion maintenance hole, then move through the pipeline in a downstream direction whenever possible, stopping at the center of the next maintenance hole and provide a view of the inside of the end structure. The cable distance counter shall measure the distance between each inspection segment – centerline to centerline. The camera shall stop at all significant observations to ensure a clear and focused view of the pipe condition. Observations shall include, but not be limited to: Laterals – Standard, Laterals – Protruding, Cracks, Offset Joints, Open Joints, Sags, Line Deviations, Siphons, Missing Sections, Mortar, Infiltration, Debris, Grease, and Roots. Defects encountered during the video inspection and any rejected work shall be repaired and re-televised at the Contractor's expense.

Post-construction CCTV inspection shall be documented with written reports that include a NASSCO Pipeline Assessment Certification Program (PACP) coding of all defects. The PACP coding shall be accomplished by an operator or worker who holds current PACP certification. Inspection report shall be done using POSM format. Documentation shall consist of a color, DVD-format video, log sheets, and a written report detailing the post-construction condition of the pipeline and lateral connection/openings. The report shall note the time and

date of video inspection, street name, upstream and downstream maintenance hole, direction of view, direction of flow, surface material, pipe size, pipe material, lateral connections, video tape number, counter number, and a detailed logging of defects encountered. If the quality of the video is deemed unacceptable by the Engineer, the pipeline shall be re-televised at no additional cost to the City.

Measurement for payment shall be in Linear Foot (LF) of post-construction video inspection of pipe inspected (regardless of pipe size) and submittal of two (2) copies of the final video and report to the City. Payment includes all As-Built submittals to the City.

BID ITEM NO. 17: REMOVE EXISTING AND CONSTRUCT STANDARD CURB AND GUTTER (REVOCABLE)

This item is an allowance for replacement of deteriorated curb and gutter that is adjacent and outside the limit of trench excavation. Estimated cost for the restoration of curb and gutter directly under the sewer trench excavation shall be included under sewer construction. The exact location of work of this bid item will be determined and marked in the field by the Engineer. The curb and gutter damaged during the construction shall be restored at the Contractor's expense. Work shall include saw cutting, excavation, provision of temporary curb ramps for access, removal and disposal of discarded concrete, backfill material, compaction test, Portland Cement Concrete, formwork and all other work necessary to construct the curb and gutter in place.

Measurement for payment shall be in Linear Feet (LF). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 18: REMOVE EXISTING AND CONSTRUCT STANDARD SIDEWALK AND DRIVEWAY (REVOCABLE)

This item is an allowance for all labor, materials, and equipment necessary for the replacement of deteriorated sidewalk and driveways that are adjacent and outside the limit of trench excavation. Estimated cost for the restoration of the sidewalk and driveways directly over the sewer trench excavation and full width of sidewalk to be removed and replaced shall be included under sewer construction. The exact location of work of this bid item will be determined and marked in the field by the Engineer. The sidewalk damaged during the construction shall be restored at the Contractor's expense. Work shall include saw cutting, excavating, provision of temporary curb ramps for access, removal and disposal of discarded concrete, backfill material, aggregate base material, compaction, Portland Cement Concrete, form work and all other work necessary to construct standard sidewalk and driveways complete and in place.

Measurement for payment shall be in Square Foot (SF). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 19-20: UTILITY CROSSINGS NOT SHOWN AND/OR IDENTIFIED ON THE PLANS AND NOT MARKED ON THE STREET

(REVOCABLE)

This item is to provide an allowance for all labor, materials, and equipment necessary for potholing unforeseen utility company pipes or ducts not shown and/or identified on the Plans. This excludes existing sewer laterals encountered during open excavation and construction of the sanitary sewer. Included in this item are field investigations, hand excavation, removal and disposal of abandoned utility pipes and ducts 24-inches or smaller, field investigations, hand excavation, removal and disposal of abandoned pipes in conflict where required.

The Contractor shall notify the Engineer upon encountering this unforeseen utility crossing and before continuing the trench excavation.

Measurement for payment shall be made as Each (EA) and by the actual number of potholing performed. This item is revocable if not potholing is required.

BID ITEM NO. 21: ROCK EXCAVATION (NOT USED)**BID ITEM NO. 22: RECONSTRUCTION/REPLACEMENT OF CITY MONUMENT
(REVOCABLE)**

The Contractor shall be responsible for the preservation of existing survey monuments, benchmarks, reference points, and stakes. The Contractor shall replace City Monuments and reference marks removed during the performance of the work. Whenever a City Monument is designated to be removed during the performance of the work, the Contractor shall replace the monument in accordance with Standard Plan 7940, 8090, 8091 or 8179, as applicable. Monument casings (boxes and lids) shall be provided by the contractor, and dome brass markers shall be supplied by the City.

Monument replacement must be done in a neat, workman-like manner. Pavement cuts shall be accurate, with vertical cuts to exact dimensions as shown on the Standard Plan. Each replacement monument shall be constructed such that the center of the dome brass marker is set within 0.04 foot of the referenced position. Monument boxes and lids shall be placed at the proper finished grade and as detailed by Standard Plan 7940, 8090, 8091 or 8179 as applicable. Existing monument lids shall be salvaged by the Contractor and delivered to the City Survey Staff or Project Inspector.

Monument referencing shall be done by a Professional Land Surveyor licensed in the State of California hired by the contractor, and copies of the corner records for the referenced monuments shall be provided to the City prior to the start of construction. For each monument that has been removed, the replacement monument location(s) will be established by the referencing surveyor after final pavement is completed. The new dome brass marker shall not receive final punching prior to seven (7) days after completion of the monument construction.

In the event that any non-referenced monuments or monument reference points become in danger of being disturbed due to construction, the Contractor shall cease the

threatening activity and notify the Project Manager and City Survey Staff immediately. Response to endangered monuments or reference points is a priority and they shall be referenced in accordance with the City of Berkeley Monument Reference Guidelines (see Appendix 4). In no case may an unreferenced monument or monument reference point be damaged during construction.

Should any monument not designated for replacement be disturbed or sustain damage during construction, the Contractor shall bear the expense for rebuilding it as well as for the survey work that a Professional Land Surveyor licensed in the State of California hired by the contractor must perform in the process. In any instance where the City deems a damaged monument to be irreplaceable, whether designated or not designated for replacement, the Contractor shall be fined \$20,000 per monument.

Measurement for payment will be as Each (EA) for each monument installed. Work under this bid item shall include all labor, material, and incidentals necessary to install the monument complete in place. The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment and after the delivery of the salvaged lids to the City Survey Staff or Project Inspector.

BID ITEM NO. 23: SUPPLEMENTAL WORK

This item is an allowance for all labor, materials, and equipment for standby construction services as the need may arise by the City for responding to urgent or emergency sanitary sewer related projects located within the City. When the standby services are necessary, the City will define the location, limits and scope of work for the project and will request a cost proposal from the Contractor. The City has the option to accept, negotiate, approve or reject at its sole discretion any cost proposals for additional work requested. The additional work may include sanitary sewer replacement/rehabilitation and related work in either backline sewer easements on private property or within street and public right of way.

The scope will be defined, and shall include all labor, material, and equipment as needed to complete the work such as mobilization, demobilization, traffic control, construction signage, public notification, and construction staking, and may include, but is not limited to, flow control, diversion and/or bypass pumping, maintenance hole rehabilitation, construction of new maintenance hole, pipe rehabilitation, locating active laterals, lower lateral reconstruction, installation of two-way cleanouts, connection of active laterals to rehabilitated sewer main, pre- and post-construction CCTV, and preparation and submission of As-Builts. The City does not have an obligation to provide or approve of any additional work under this bid item allowance.

Measurement for payment shall be as Lump Sum (LS). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 24: BAY AREA RAPID TRANSIT (BART) DISTRICT PERMIT TO ENTER (REVOCABLE)

Contractor shall work with the City's Representative to obtain a Permit to Enter from Bay Area Rapid Transit (BART) District prior to starting work in the BART Right-Of-Way/Easement located on the project Plans.

The City of Berkeley has begun the application and review process with BART. Contractor shall obtain additional insurance coverage as required, adhere to BART's general guidelines for construction, and agree to the general terms of the permit as illustrated in Appendix 6 of the project Specifications. Contractor shall submit one (1) wet-signed original of the required insurance certificates and endorsements no later than five (5) days after award by City Council.

A minimum of 2 weeks prior to start of work under the Permit, the Contractor shall give notice to the City's Representative and Bart Representatives. Additional time beyond the required two week minimum advance notice may be required for obtaining all approvals.

Full compensation for conforming to the requirements in the Permit, including any required fees, shall be considered as included in the bid price.

Measurement for payment shall be as Lump Sum (LS). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

**BID ITEM NO. 25: CALTRANS ENCROACHMENT PERMIT/WORK
AUTHORIZATION (REVOCABLE)**

The City has obtained an encroachment permit for project work within Ashby Avenue (Highway 13). The Contractor shall apply for and obtain a double encroachment permit from Caltrans prior to start of work.

A minimum of one week prior to start of work under the Encroachment Permit, Contractor shall give notice to, and approval of construction details, operations, public safety, and traffic control shall be obtained from State Representative listed in the Encroachment Permit. Additional time beyond the required one week minimum advanced notice may be required for obtaining traffic control approval.

The contractor shall perform work in accordance with the provisions as stated in the Caltrans Double Permit, refer to Appendix 7 for in the permit issued to the City.

Full compensation for conforming to the requirements in the encroachment permit, and work authorization, including any required fees, shall be considered as included in the bid price.

Measurement for payment shall be as Lump Sum (LS).

**BID ITEM NO. 26: STORMWATER POLLUTION CONTROL AND SEWAGE SPILL
PREVENTION AND RESPONSE REQUIREMENTS**

Stormwater Pollution Control shall be per Specifications, Special Condition No. 22, STORMWATER POLLUTION CONTROL.

The Contractor shall be fully responsible for preventing sewage spills, containing any sewage spillage, recovery and legal disposal of any spilled sewage, any and all fines, penalties, claims, and liability arising from negligently causing a sewage spill and any violation of any law, ordinance, code, order, or regulation as a result of a sewage spill.

Prior to the start of construction, the Contractor shall develop and submit to the City's Representative, for review and approval, a written Spill Response Plan, developed to respond to any construction related sewage spill. This shall include, but is not limited to, all labor, materials and equipment necessary for the items below:

- a. Identification of all nearby waterways, channels, catch basins and entrances to underground storm drains and furnishing all of the necessary materials, supplies, tools, equipment, labor and other services.
- b. Means and methods of monitoring the flow in the sewer bypass system.
- c. Arrangements for an emergency response unit comprised of emergency response equipment and trained personnel to be immediately dispatched to the job site in the event of sewage spill(s).
- d. An emergency notification procedure, which includes an emergency response roster with telephone numbers and arrangements for backup personnel and equipment and an emergency notification roster. The Contractor shall designate a primary and secondary representative and include their respective phone numbers, pager numbers, and cellular phone numbers. The Contractor's representatives shall be accessible and available at all times to respond immediately to any construction related emergency.

In case of sewage spill, the Contractor shall act immediately without instructions from the City's representative, to control the spill and take all appropriate steps to contain it in accordance with their Spill Response Plan. The Contractor shall immediately notify the City's representative of the spill and all actions taken. The Contractor shall, within three working days from the occurrence of the spill, submit to the City's representative a written confirmation describing the following information related to the spill:

- a. the nature and volume
- b. the specific location, date and time
- c. the duration
- d. the cause
- e. the type of remedial and/or clean up measures taken and the date and time of implementation
- f. the corrective and/or preventive actions taken
- g. the water body impacted and results of any necessary monitoring

It shall be the Contractor's responsibility to assure that all field forces, including subcontractors, know and obey all safety and emergency procedures, including the Spill

Response Plan.

Measurement for payment shall be as Lump Sum (LS).

BID ITEM NO. 27: SEWER BYPASS (FOR SEWER MAINS 15" AND LARGER)

The Contractor shall provide temporary means to maintain and handle the sewage flow in the existing sanitary sewer system as required to complete the necessary construction and rehabilitation requirements, including but not limited to pre-construction and postconstruction CCTV, rehabilitation of maintenance hole, and lateral connections. The Contractor shall prepare and submit a detailed bypass plan to the City's Representative for approval before the bypass is installed. The Contractor shall size the bypass system to handle the peak flow of the system.

The Contractor shall provide a one-hundred percent (100%) back-up in the bypass system. The Contractor shall utilize the backup system to mitigate any additional wet weather flows, perform the necessary maintenance and repairs on the bypass system, and exercise and ensure the operability of the backup system.

Any pump, including backup pumps, shall be appropriate for sanitary sewer effluent containing solids and fibers, and be a complete unit with its own suction and discharging pumping. The backup bypass system shall be fully installed, operational, and ready for immediate use. Prior to the full operation of the bypass system, the Contractor shall demonstrate that both the primary and backup bypass systems are fully functional and adequate, and shall certify the same, in writing.

The Contractor shall provide one dedicated fuel tank for every pump/generator, if fuel/generator pumps are used. The Contractor shall provide a fuel level indicator outside each fuel tank. The Contractor shall continuously (while in use) monitor the fuel level in the tanks and ensure that the fuel level does not drop below a level equivalent to two (2) hours of continuous bypass system operation. The Contractor shall take the necessary measures to ensure the fuel supply is protected against contamination. This includes, but is not limited to fuel line water traps, fuel line filters, and protecting fuel stores from precipitation. If electric power driven pumps are used, the Contractor shall provide an emergency standby power generator.

The Contractor shall continuously (while in use) monitor the operation of the bypass system and all impacted facilities, and shall continuously monitor the flow levels downstream and upstream of the bypass to detect any possible failure that may cause a sewage backup and/or spill. The Contractor shall include the means and methods of monitoring the flow in their Spill Response Plan. The Contractor shall routinely inspect and maintain the bypass system, including the backup system. The Contractor shall maintain a log of all pertinent inspection, maintenance and repair records.

This item shall include all labor, materials, and equipment necessary for the execution and completion of this work including, but not limited to saw cutting of existing surface,

excavation, hand excavation including potholing to determine the location of existing sewer and adjacent main and service utilities before trenching, correction of conflict between sewer bypass and utilities as required, removal and disposal of abandoned utilities as required, surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk, curb ramp, valley gutter and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, speed tables, fences, all concrete joint to joint, etc. (see Special Condition No. 18), bypass plan, flow control, diversion or bypass pumping, dewatering, pump setup, plugging, pipe provision and installation, fuel/electricity, maintenance, monitoring water levels, bedding, backfill, including imported backfill, aggregate base material, compaction of bedding material beneath and around the bypass, temporary resurfacing, pipe removal, permanent resurfacing including concrete pavement reconstruction, restoring all existing striping and pavement markings affected by sewer replacement, testing of sewer bypass line, and all other work (excluding maintenance holes) necessary to install the sewer bypass complete and in place.

All labor, materials, and equipment associated with these sewer bypass requirements for sewer mains 15" and larger shall be included in this bid item. Typical flow control, diversion, and bypass pumping required to complete the necessary construction of smaller sewer mains shall be included in subsequent bid items. See bid item descriptions.

All permits and fees necessary for the sewer bypass are the responsibility of the Contractor and shall be included in this pay item at the Contractor's expense.

The Contractor shall perform all work associated with bypass pumping without causing damage to existing improvements to remain, and without causing a spill of sewage outside the sewer system. Any damage resulting from the Contractor's work shall be repaired or replaced to the satisfaction of and at no cost to the City, at the Contractor's expense. All fines, and cost associated with the cleanup of spills, shall be the responsibility of the Contractor.

Measurement for payment shall be as Lump Sum (LS). A payment of 15% will be made upon complete installation and startup of the bypass pumping system and a 10% payment will be made upon disassembly of the bypass pumping system and restoration of all disturbed areas. The remaining 75% will be paid on the basis of work completed as noted on the monthly submission of progress payment.

Sanitary sewer flow data and flow hydrograph is provided in Appendix 10. Additional data, including sewer network maps, if available, may be requested by the Contractor via email to fmeneau@berkeleyca.gov. Allow three working days in advance for a response.

BID ITEM NO. 28: INVESTIGATE OTHER EXISTING SEWER MAINS, SEWER STRUCTURES AND LATERALS

This item shall include all labor, CCTV equipment, utility locating equipment, pressure testing, and all other equipment and materials required for investigation, testing, and/or field location work identified on the drawings. This item does not include investigation and location

work included under Bid Item No. 5.

CCTV investigation shall be in accordance with Section 312-3 of the Technical Specifications. The Contractor shall notify the City's Representative upon completion of the investigation and submit the video(s) and report(s).

Measurement for payment shall be as Lump Sum (LS). The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment.

BID ITEM NO. 29: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, CREEK PERMIT – ADDITIONAL REQUIREMENTS FOR WORK ADJACENT TO CITY'S CREEK (NOT USED)

BID ITEM NO. 30: POINT (SPOT) REPAIRS

This item shall apply to point (spot) repairs as shown on the drawings, regardless of pipeline or maintenance hole material. This item shall include all labor, materials, and equipment necessary for the execution and completion of this work as described on the drawings and these specifications, including excavation of trenches large enough to repair the identified defect and expose 5ft of pipe.

Obtaining construction access from property owners for work on private property shall be included in the unit bid price (see Special Condition No. 20).

Items shall include all labor, materials, and equipment necessary for the execution and completion of this work including, but not limited to saw cutting of existing surface, excavation, hand excavation including potholing to determine the location of existing sewer and adjacent main and service utilities before trenching, correction of conflict between new sewer and utilities, removal and disposal of abandoned utilities as required, surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18), flow control, diversion or bypass pumping (Note: Bypass Pumping for sewer mains 15" and larger, shall be included in Bid Item No. 28), removal of protruding laterals, removal of root intrusion (See Special Condition No. 42), locating wire, connection to existing structures, dewatering, bypass pumping, pipe provision and installation, bedding, backfill, including imported backfill, aggregate base material, compaction of bedding material beneath and around the main and at the locations of active lateral connections, pipe cleaning, pipe installation, temporary resurfacing, permanent resurfacing including concrete pavement reconstruction, testing of new sewer line, and all other work (excluding maintenance holes) necessary to install the pipe complete and in place.

The pipe repaired under this bid item shall be replaced in-kind, with the new pipe's dimensions and material matching the existing pipe, unless otherwise specified by the City or directed by the Engineer.

Traffic control plans required for work under this bid item are included in Bid Item No. 2.

Measurement for payment shall be in Linear Feet (LF) and paid on the basis of work completed as noted on the monthly submission of progress payment. Payment includes As-Built submittals to the City for those repaired defects.

BID ITEM NO. 31: PLUG AND ABANDON EXISTING SEWER MAINS, SEWER STRUCTURES AND LATERALS (NOT USED)

BID ITEM NO. 32: COLD PLANE 2 ½”

General

Cold planing shall include all work necessary to remove existing asphalt and/or concrete pavement to a predetermined depth as indicated on the drawings. The work includes, but is not limited to, removal of the existing pavement adjacent to or on top of gutters, cross gutters, ends of overlays, equipment crossings, railroad crossings, and bridge approaches.

Existing pavement surface on roadways to be milled prior to pavement inlay shall be cold planed as specified herein.

Equipment

The machine used for planing shall have performed satisfactorily on similar work and shall meet the following requirements:

The planing machine shall be specifically designed and built for the planing of bituminous pavements without the addition of heat. It shall have the ability to plane portland cement concrete patches in the bituminous pavement, or portland cement concrete pavements. The cutting drum shall be a minimum of 48 inches wide and shall be equipped with carbide tipped cutting teeth placed in a variable lacing pattern to produce the desired finish.

The machine shall be capable of being operated at speeds of zero to forty feet per minute, it shall be self-propelled, and have the capability of spraying water at the cutting drum to minimize dust. The machine shall be operated in such a way so that no fumes or smoke will be produced. The machine shall be capable of removing the paving material next to curbs or gutters and be designed such that the operator thereof can at all times observe the planing operation without leaving the controls. The machine shall be adjustable for slope and depth and shall be equipped with sonic sensing devices for controlling depth.

Construction

Limits of cold planing will be marked in the field by the Engineer prior to construction. The depths and dimensions of the cold planing are designated on the plans.

Cold planing may require removal of existing asphalt concrete above gutter lips, in

addition to the required depth below the gutter lip, due to prior overlays.

Pavement to be cold planed may contain pavement fabric.

Cold planing operation will not commence until a sweeper is on site.

Lowering Utility Covers

Prior to cold planing on streets to have a uniform depth of the existing surface removed, all utility covers shall be lowered such that the cutting teeth of the planing machine passes over the adjusted lid without causing damage to the lid or frame. Contractor shall be responsible for maintaining any temporary asphalt fill material over these facilities until the final paving surface is installed. The Contractor shall clearly mark or reference lowered sanitary sewer and water valves in case emergency access is required by the agency responsible for operation of the sewer and water system.

Pavement Removal

All pavement areas called out for removal and replacement shall be cold planed to the dimensions indicated on the plans, or as directed by the Engineer. Pavement against curb faces shall be removed to the full depth designated for that particular section of roadway. If pavement against curb faces cannot be removed by the planing machine, the Contractor shall use other means to remove this material.

Schedule

The Contractor shall schedule the work such that the leveling course, base course, and intermediate course paving is completed the same day as the cold planing. Milled pavement surface shall not be opened to traffic and all traffic lanes shall be open for traffic outside the approved working hours, unless authorized otherwise in writing by the Engineer.

Failure to comply with these provisions shall subject the Contractor to \$1,500 per street per calendar day in liquidated damages. Multiple occurrences of liquidated damages per calendar day are not restricted.

Temporary Striping

Streets to be milled shall be temporarily striped after completion of cold planing prior to pavement resurfacing work. Temporary striping shall consist of temporary tab markers and reflective traffic striping tape by 3M (or equal) and shall be continuously maintained by the Contractor until resurfacing work is performed. Temporary striping will be placed to delineate lane lines, center lines, crosswalks, and other traffic striping legends.

Tolerances

The pavement surface after cold planing shall be uniformly rough. The grade shall not deviate

from a suitable straight edge more than 1/4 inch at any point. When multiple passes are required to create the cold planed surface, the maximum variation from a stringline or straight edge shall be 1/4 inch high to 1/2 inch low. High points out of tolerance shall be replaned to fall within tolerance. Low areas shall be filled with asphalt concrete as specified herein to meet tolerances. The cost of such correction of low areas shall be entirely borne by the Contractor.

Removal and Disposal of Material

During the cold planing operation, the Contractor shall sweep the roadway with mechanical equipment and remove all loosened material from the project site until completion of the removal work.

All material removed shall be considered the property of the Contractor and shall be removed and disposed of at the Contractor's expense.

In addition to removing the cold planed asphalt concrete, the Contractor shall remove any asphalt concrete which is adhered to the top of the adjacent gutter, cross gutter, or apron.

Temporary Transitions

The Contractor shall construct temporary pavement transitions prior to allowing traffic onto cold planed pavement areas. Such transitions shall have a maximum slope of 20:1 and be constructed on kraft paper or other suitable bond breaker such that upon removal of the transition a clean notch remains. Temporary transitions are required along all planed edges at existing or new handicap access ramps. Temporary transitions shall also be provided along all planed edges with a drop off greater than 2" in depth at all paving conforms, cross gutters, and commercial and residential driveways.

Correction of Tear Out Areas

If tear-out to the remaining, underlying layers occurs during the cold planing operation, the Contractor shall adjust his operation to minimize tear-out. Corrections shall include changing operation speed and replacing cutting teeth. Changes in cold planing depth shall only be made with approval of the Engineer.

Areas torn out by lack of diligence on the Contractors part shall be corrected by placement of asphalt concrete conforming to the requirements of these Technical Provisions. Areas torn out due to pre-existing adhesion problems in the existing asphalt concrete shall be corrected at the City's expense as directed by the Engineer.

Measurement and Payment

The contract price paid per Square Foot (SF) for "**Cold Plane 2 ½"**" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in Cold Planing, complete in place, including cold planing,

removal, off haul, and disposal of existing asphalt concrete above the lip of gutter to the depths required, restoring all existing striping and pavement markings affected by sewer replacement, as shown on the plans, as specified in the Standard Specifications and in these special provisions, and as directed by the Engineer. This item shall be paid by the actual square footage of work performed at moratorium sites. Pavement restoration in the non-moratorium sites resulted from sewer rehabilitation will be covered under Bid Item No. 12 and Bid Item No. 31.

BID ITEM NO. 33: HMA (TYPE A) PG-64-10

General

This work includes producing and placing hot mix asphalt (HMA) surface course using modified Standard Process and placing Minor Hot Mix Asphalt using the Method Process as indicated herein.

Comply with Section 39, "Hot Mix Asphalt," of the State Standard Specifications (Non-revised Edition) except as modified in these special provisions.

HMA associated with surface restoration of trenching and excavations for sewer main, maintenance hole, and sewer lateral restoration and spot repairs is not included in this bid item. Said restoration is understood to be included as part of each sanitary sewer rehabilitation item.

Submittals

Submit JMF information on Form CEM-3511 and Form CEM-3512. Submit Form CEM-3513 or CEM-3514 for mixes that have been verified within last 12 months. Provide most recent CEM-3513 if mix has not been verified within the last 12 months. For unverified mixes or out of date mix tests, final acceptance will be based on production startup tests and Contractor will be paving at their own risk.

Submit Quality Control Plan that conforms to the current Caltrans Quality Control Plan Review Checklist for Hot Mix Asphalt. Allow 20 calendar days for review.

Materials

Asphalt Binder

The grade of asphalt binder mixed with aggregate for HMA Type A must be PG 64-16.

Aggregate

Generally, the hot mix asphalt to be used will be as follows unless modified by the Engineer:

Base Courses: 3/4 inch Type A, hot mix asphalt

Intermediate Course: 1/2 inch Type A, hot mix asphalt
Surface Courses: 1/2 inch Type A, hot mix asphalt

Mix voids shall be targeted at 3.5%.

The allowable production range for mix voids shall be 2.0% to 5.0%.

The mix shall include 0.5% of liquid anti-strip. No Warm Mix Additive shall be allowed.

Construction

Surface Preparation

The work shall consist of preparing the existing street surfaces prior to the commencement of paving. Such work shall include removing raised pavement markers, removing thermoplastic traffic markings and legends, controlling nuisance water, sweeping, watering, and removing loose and broken pavement and foreign material as specified in the State Standard Specifications and these Technical Provisions, and as directed by the Engineer.

All vertical edges to be paved shall be tack coated. These include, but are not limited to, curb faces, gutter lips, swale edges, cross gutter edges, and pavement edges.

Tack coat shall be utilized and shall be either emulsified asphalt Grade RS-1, RS-1h, SS-1, or SS-1h conforming to Section 94, "Asphaltic Emulsions," or paving grade asphalt conforming to Section 92, "Asphalts Binder."

All cold joints, both longitudinal and transverse, shall be heated with a torch immediately prior to paving. Cold joints include previous passes placed more than three hours prior. All cold joints shall be tack coated. Rolling shall be performed as indicated in the referenced Caltrans specifications. The roller water shall contain a soap type compound to prevent sticking of the HMA material to the rollers.

Leveling, Transitions, and Hot Mix Asphalt Fills

A leveling course of variable thickness shall be placed and compacted prior to placing the surface course at locations where directed by the Engineer. The leveling course will be used to correct pavement irregularities such as rutting, variable cross slope, or variable longitudinal slope. Where two overlays of different thickness abut at a longitudinal joint, the Contractor shall add to the thinner section to match the thicker lift and provide a smooth transition and uniform cross-fall. Cold planing ridges or other rises in the pavement surface may be required by the Engineer. The Engineer will determine the exact limits and thickness of the leveling courses, hot mix asphalt fills, and transitions.

The Contractor shall construct temporary pavement transitions at all transverse paving joints greater than 1 inch prior to allowing traffic onto the paved surface. Temporary pavement transitions shall have a maximum slope of 20:1 or as approved by the engineer and be

constructed on Kraft paper or other suitable bond breaker such that upon removal of the temporary pavement transition, a clean notch remains. The temporary transitions may be constructed of either cold mix or hot mix. Temporary transition shall be required at driveways where drop off is more than 1 inch.

The Contractor shall continuously maintain the temporary pavement until final paving. Each temporary transition shall be inspected by the Contractor and repaired as necessary to comply with these provisions at the end of each day including weekends and holidays.

Failure to comply with these provisions will result in a liquidated damage of \$250 per day per transition and/or the cost of City crews making the repairs if necessary to correct for public safety.

Layout

The Contractor shall layout and mark the location of the edges of the paving passes of the surface course to match the new layout of the lane lines. The layout shall be made at least 24 hours prior to paving. The layout shall be approved by the Engineer prior to paving.

If the striping is to remain unchanged, the edges of the paving passes shall conform to existing lane edges.

In all cases where practical, each lane shall be paved in a single pass. In tapered transition areas, the shoulder areas shall be paved first, then the through lane shall be paved immediately after the shoulder paving.

For paving which incorporates new quarterpoints or gradebreaks due to keycuts or other conditions, the Contractor shall provide equipment capable of adjusting to the new surface profile at the appropriate locations. The profile adjustments shall be within twelve inches of the actual gradebreak or quarterpoint.

The Contractor shall take sufficient measurements during laydown to ensure that the full design hot mix asphalt layer depth is provided at each quarterpoint, gradebreak, or transition. Failure to provide the design depth at these areas will result in rejection of the work. Correction of this rejected work will include milling out the new hot mix asphalt from the road edge to the centerline or nearest inside lane line and repaving. The minimum length of the milled and corrected area shall be fifty feet.

Tolerances

The finished hot mix asphalt surface shall be flush with, to 1/4 inch (0.20 feet or 6 mm) above, the gutter lips. The finished pavement surface shall not be lower than the gutter lips.

The average pavement thickness shall be equal to the specified thickness for the project.

For total pavement thicknesses of less than four inches, the minimum allowable thickness will be 1/4 inch less than that specified.

Compacting

The number of rollers required for each paving operation shall be such that all rolling for density can be completed before the temperature of the hot mix asphalt mixture drops below 240 degrees Fahrenheit.

Breakdown rolling shall commence when the hot mix asphalt is placed. Rolling shall be accomplished with the drive wheel forward and with the advance and return passes in the same line.

The Contractor shall have hand-compaction equipment immediately available for compacting all areas inaccessible to rollers. Hand-compaction shall be performed concurrently with breakdown rolling. If for any reason hand-compaction falls behind breakdown rolling, further placement of hot mix asphalt shall be suspended until hand-compaction is caught up. Hand-compaction includes vibraplates and hand tampers. Hand torches shall be available for rework of areas which have cooled.

After compaction, the surface texture of all hand work areas shall match the surface texture of the machine placed mat. Any coarse or segregated areas shall be corrected immediately upon discovery. Failure to immediately address these areas shall cause suspension of hot mix asphalt placement until the areas are satisfactorily addressed, unless otherwise allowed by the Engineer.

Contractor Quality Control

The HMA shall be verified by the engineer prior to placement on the jobsite. If agreed to by the Contractor and the Engineer, the production start-up may be used for verification. If the production start-up is used for verification the Engineer may require removal and replacement of the HMA, at his discretion, in the event of verification failure.

Contractor quality control testing is optional. However, if the contractor fails to submit quality control results to the engineer within 72 hours of HMA placement, the contractor waives all rights to dispute the Engineer's results. In the event of asphalt binder or Hamburg wheel track testing by the Engineer, the contractor has 5 days to submit their test results from the time the Engineer informs the contractor that he is performing testing or the contractor waives the right to dispute the Engineer's results.

The Engineer may test for conformance with aggregate quality characteristics at the beginning of the project.

The Engineer may sample the hot mix asphalt from truck beds at the plant, from the hopper of the paving machine, or from the mat behind the paver at the discretion of the Engineer. The Contractor shall facilitate the sampling process.

Engineer's Acceptance

Sublots to determine compaction testing shall be based on the following:

Each 750 tons, or part thereof, placed on an individual street in a paving day. If over 750 tons are placed in a single paving day on an individual street, up to 150 tons over 750 tons can be moved in to the previous 750 ton subplot.

If multiple streets are paved in a day, each street will be considered its own subplot with multiple sublots on streets where greater than 750 tons are placed.

The in-place density shall be between 92.0 percent and 97.0 percent of maximum theoretical unit weight using a nuclear gauge. Gauge compaction testing shall be performed in accordance with CTM 375. Final compaction is based on the average nuclear gauge results for the subplot. The nuclear gauge will be core correlated the first day of paving.

If nuclear gauge compaction testing results are failing, the contractor can request coring to verify the results. Three cores will be sampled for each subplot and the average of the three cores for each subplot will determine the in-place density. The core locations will be determined using random sampling charts in CTM 375. The engineer will mark the core locations.

Cores may be taken up to 5 calendar days after placement and may be 4 or 6 inches in diameter. The engineer will provide results within 3 working days of receiving the cores.

Passing cores shall be paid for by the owner. Failing cores will be paid for by the contractor. If the core testing produces both passing and failing cores, the cost will be prorated between the contractor and the owner.

Measurement & Payment

The contract price paid per Ton for **HMA (Type A) PG 64-10** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in Hot Mix Asphalt (HMA), complete in place, including surface preparation; tack coat; furnishing, placing and compacting HMA; constructing and removing temporary transitions; JMF preparation, testing and production cost for verification and quality control testing; Contractor's Quality Control Plan; and costs of coring to verify density by cores, if requested; and cleanup, as shown on the plans, as specified in the Specification and these special provisions, and as directed by the Engineer. This item shall be paid by the actual tonnage of HMA used on the moratorium sites.

BID ITEM NO. 34 PACKAGE B - BID ALTERNATE 1 AT OXFORD STREET NEAR UNIVERSITY AVENUE: REMOVE EXISTING SANITARY SEWER MAINTENANCE HOLE, CONSTRUCT A NEW 60-INCH INSIDE DIAMETER TRUNK SEWER MAINTENANCE HOLE, AND RECONNECT FORCE MAIN AND LATERAL CONNECTIONS TO THE NEW TRUNK SEWER MAINTENANCE HOLE INCLUDING CONSTRUCTION OF A NEW OUTSIDE DROP CONNECTION (REVOCABLE)

The work to be done for Bid Package B “Bid Alternate 1” consists of, but is not limited to the removal of an existing Sanitary Sewer Maintenance Hole (SSMH) at Oxford Street Station 25+86.94, construction of a new 60-inch inside diameter Trunk SSMH located along Oxford Street near University Avenue fronting Hellen Diller Anchor House, per Sheet 18B. The location of this work is shown on Sheet 18A, at existing sanitary sewer maintenance hole No. 17-050-021, and includes temporarily supporting a University of California owned 12KV concrete encased electrical duct bank and other utilities using required shoring, in addition to but not limited to traffic control, sanitary sewer bypass, testing, and surface restoration. The temporary shoring and support plan shall be stamped by a licensed professional Civil Engineer. Note: The 12KV concrete duct bank was poured against the southwest side of SSMH 17-050-021 and this condition may require select use of hand tools and careful chipping to remove the SSMH at this interface. It is not permissible to chip into the existing 12KV concrete duct bank.

This item shall include all labor, materials, and equipment necessary for additional coordination with University of California staff and consultants, additional coordination with adjacent utility owners, the excavation and complete removal of existing maintenance hole, lamphole, cleanout, or junction structure, removal and replacement of the maintenance hole rim, frame and cover, delivery of old frame and cover to the City's Corporation Yard, removal and disposal of debris, the construction of a new Trunk sanitary sewer maintenance hole as shown in the plans and specifications, the connection to pipes, drop connections, concrete encasement, bedding, backfill, including imported backfill, aggregate base material, compaction, coating of the interior wall of the maintenance hole (see Bid Item No.7 for a list of liner and coating requirements), vacuum testing, flow control, diversion or bypass pumping, dewatering, temporary and permanent resurfacing, including asphalt or concrete pavement reconstruction to restore the existing improvements. Trunk maintenance holes shall be as shown on Project Plans, Detail on Sheet 19B, and trunk maintenance holes frame and cover shall be as shown on Project Plans, Detail 13, Sheet 27. Item shall also include temporary shoring, sheeting, bracing, and supporting utilities (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications.

Mobilization, demobilization, traffic control plans and traffic operations, shoring and bracing plans, as well as bypass plans and bypass operations for sewer flow

control required for work under this bid item are included as part of bid item 34 payment and no additional compensation will be made.

Measurement for payment shall be as Lump Sum (LS) regardless of depth. Payment shall be as follows for Bid Item No. 34: Remove existing structure, disconnect existing sewer connections including force mains, construct per Detail on Sheet 18B a new 60-inch inside diameter trunk sewer maintenance hole including trunk maintenance hole frame and cover, reconnect force mains and lateral connections including construction of a new drop inlet, apply standard maintenance hole coating, and perform and pass a pressure test.

The Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment and after the delivery of the discarded frame and cover to the City's Corporation Yard. The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.

Working Day Increase for Award of Bid Package B: Bid Alternate 1 Working days to be increased by 10 additional Working Days for award of one, any, or all combinations of Bid Packages B, C, and E (Bid Alternates 1, 2 and 4 respectively), for a new total of 80 Working Days ("Base Bid" Package A + Bid Package B, C, D, or E). All construction work on Oxford Street including bid addendum work is limited to between May 18, 2025 and August 18, 2025 per Special Condition 41. Bid Alternate work to be completed prior to CIPP installation under Bid Package A, Base Bid Item Number 10.

BID ITEM NO. 35 PACKAGE C - BID ALTERNATE 2 AT OXFORD STREET BETWEEN UNIVERSITY AVENUE AND ADDISON STREET: CONSTRUCT A NEW 60-INCH INSIDE DIAMETER ECCENTRIC TRUNK SEWER MAINTENANCE HOLE WITH LATERAL STUB-OUT (REVOCABLE)

The work to be done for Bid Package C "Bid Alternate 2" consists of, but is not limited to the new construction of a Sanitary Sewer Maintenance Hole on the existing 27-inch sanitary sewer Trunk main on Oxford Street between University Avenue and Addison Street and a new 8-in diameter HDPE SDR 17 sanitary sewer lower lateral stub-out, approximately 5-feet long and to be capped for future connection, fronting 2199 Oxford Street.

This item shall include all labor, materials, and equipment necessary for the additional coordination with University of California staff and consultants, additional coordination with adjacent utility owners, excavation and construction of a new trunk maintenance hole as shown in the plans and specifications, the connection to pipe, drop connection, concrete encasement, bedding, backfill, including imported backfill, aggregate base material, compaction, coating of the

interior wall of the maintenance hole (see Bid Item No.7 for a list of liner and coating requirements), vacuum testing, flow control, diversion or bypass pumping, dewatering, temporary and permanent resurfacing, including asphalt or concrete pavement reconstruction to restore the existing improvements. Standard maintenance holes located in the street areas shall be TYPE A frame and cover with trunk size frame and covers per Detail 13 no Plan Sheet 27 and; maintenance hole located in the backline areas shall be TYPE B frame and cover in accordance with I/I Standard Detail, Drawing No. 15. Trunk maintenance holes shall be as shown on Project Plans, Detail 12 Sheet 26, and trunk maintenance holes frame and cover shall be as shown on Project Plans, Detail 13, Sheet 27. Item shall also include temporary shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications.

Mobilization, demobilization, traffic control plans and traffic operations, shoring and bracing plans, as well as bypass plans and bypass operations for sewer flows required for work under this bid item are included as part of bid item 34 payment and no additional compensation will be made.

Measurement for payment shall be as Lump Sum (LS) regardless of depth. Payment shall be as follows for Bid Item No. 35: Construct trunk maintenance hole, including trunk maintenance hole frame and cover, including all layout and additional excavation and materials required to install 8-inch diameter lower lateral stub out approximately 5-feet in length and capped at the end for future lower lateral sewer connection by others.

Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment. The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.

Working Day Increase for Award of Bid Package C: Bid Alternate 2 Working days to be increased by 10 additional Working Days for award of one, any, or all combinations of Bid Packages B, C, and E (Bid Alternates 1, 2 and 4 respectively), for a new total of 80 Working Days (“Base Bid” Package A + Bid Package B, C, D, or E). All construction work on Oxford Street including bid addendum work is limited to between May 18, 2025 and August 18, 2025 per Special Condition 41. Bid Alternate work to be completed prior to CIPP installation under Bid Package A, Base Bid Item Number 10.

**BID ITEM NO. 36A PACKAGE D - BID ALTERNATE 3 ALONG OXFORD ST
BETWEEN ADDISON AND CENTER STREET: POINT (SPOT)
REPAIRS OF 27-INCH DIAMETER TRUNK SEWER**

The work to be done for Bid Package D “Bid Alternate 3” consists of, but is not limited to the removal of objects penetrating the existing 27-inch sanitary sewer main, and completion of approximately 54 linear feet of point (spot) repairs of 27-

inch sanitary sewer main located approximately 15-feet to 20-feet below existing grade on Oxford Street between Addison Street and Center Street.

This item shall apply to point (spot) repairs as shown on the drawings, regardless of pipeline or maintenance hole material. This item shall include all labor, materials, and equipment necessary for the execution and completion of this work as described on the drawings and these specifications, including excavation of trenches large enough to repair the identified defect and expose damaged pipe.

Obtaining construction access from property owners for work on private property shall be included in the unit bid price (see Special Condition No. 20).

Mobilization, demobilization, traffic control plans and traffic operations, shoring and bracing plans, as well as bypass plans and bypass operations for sewer flows required for work under this bid item are included as part of bid item 34A payment and no additional compensation will be made.

Items shall include all labor, materials, and equipment necessary for the execution and completion of this work including, but not limited additional coordination with University of California staff and consultants, additional coordination with adjacent utility owners, saw cutting of existing surface, excavation, hand excavation including potholing to determine the location of existing sewer and adjacent main and service utilities before trenching, correction of conflict between new sewer and utilities, cutting and removal of any illegal pipe penetrations caused by objects such as abandoned tie-backs or other non-operational components or utilities, removal and disposal of abandoned utilities as required, surface removal and restoration of any existing improvements disturbed by construction including restoration of curb, gutter, sidewalk and asphalt, restoration of existing improvements such as landscaping, lawn, brick walkways, retaining walls, driveways, fences, all concrete joint to joint, etc. (see Special Condition No. 18), flow control, diversion or bypass pumping (Note: Bypass Pumping for sewer mains shall be included as part of this pay item and no additional payment will be made Bid Item No. 28), removal of protruding laterals, removal of root intrusion (See Special Condition No. 42), installation of locating wire, connection to existing structures, dewatering, bypass plans, bypass pumping, pipe provision and installation, bedding, backfill, including imported backfill, aggregate base material, compaction of bedding material beneath and around the main and at the locations of active lateral connections, pipe cleaning, pipe installation, temporary resurfacing, permanent resurfacing including concrete pavement reconstruction, testing of new sewer line, and all other work (excluding maintenance holes) necessary to install the pipe complete and in place.

The pipe repaired under this bid item shall be replaced in-kind, with the new pipe's dimensions and material matching the existing pipe, unless otherwise specified by the City or directed by the Engineer.

Measurement for payment shall be as follows:

Bid Item 36A Spot Repairs: lump sum (LS)

Include 27” Sanitary Sewer main repair at 4 individual pipe penetration locations shown on Plan Sheet 19A plus allowance for repair of one (1) additional pipe penetration (for total repair of 5 pipe penetrations) and paid on the basis of work completed as noted on the monthly submission of progress payment. Payment includes As-Built submittals to the City for those repaired defects.

Working Day WILL NOT be increased for Bid Package D: Bid Alternate 3

All construction work on Oxford Street including bid addendum work is limited to between May 18, 2025 and August 18, 2025 per Special Condition 41. Bid Item 36A to be completed prior to CIPP installation as Bid Alternate Bid Item 36B.

BID ITEM NO. 36B PACKAGE D - BID ALTERNATE 3 ALONG OXFORD ST**BETWEEN ADDISON AND CENTER STREET:****REHABILITATION OF 27-INCH DIAMETER TRUNK SEWER BY METHOD “A” CIPP**

The work to be done for Bid Package D “Bid Alternate 3” consists of, but is not limited to installation of 260 linear feet of Cured-In-Place Pipe Liner (Method "A") within the 27-inch diameter sanitary sewer pipe (following completion of spot repairs within Bid Item 36A).

Obtaining construction access from property owners for work on private property shall be included in the unit bid price (see Special Condition No. 20).

Mobilization, demobilization, traffic control plans and traffic operations, shoring and bracing plans, as well as bypass plans and bypass operations for sewer flows required for work under this bid item are included as part of bid item 34B payment and no additional compensation will be made.

Following completion of spot repairs under Bid Item 36A, proceed per Bid Item Number 10b work and payment description to rehabilitate the Oxford Street 27-inch diameter trunk sewer by Method “A” CIPP, with the exception that all mobilization, demobilization, traffic control, bypass, and other work required to complete installation of CIPP Method “A” installation is included within Bid Item 36B unit cost.

Measurement for payment shall be as follows:

Bid Item 36B Cured-In-Place-Pipe Method “A” Liner measurement for payment shall be in Linear Foot (LF): Method “A”, CIPP, 27-inch diameter, non-plastic host pipe.

Working Days WILL NOT be increased for Bid Package D: Bid Alternate 3

All construction work on Oxford Street including bid addendum work is limited to between May 18, 2025 and August 18, 2025 per Special Condition 41

**BID ITEM NO. 37 PACKAGE E - BID ALTERNATE 4 AT OXFORD STREET
STATION 33+75 BETWEEN CENTER STREET AND ALLSTON
WAY: CONSTRUCT NEW 60-INCH ECCENTRIC TRUNK SEWER
MAINTENANCE HOLE, (REVOCABLE)**

The work to be done for Bid Package E “Bid Alternate 4” consists of, but is not limited to the new construction of a Sanitary Sewer Maintenance Hole above the existing 33-inch sanitary sewer Trunk main on Oxford Street between Center Street and Allston way and a new 15-inch diameter HDPE SDR 17 sanitary sewer lower lateral stub-out, approximately 5-feet long and to be capped for future connection, fronting 2128 Oxford Street.

This item shall include all labor, materials, and equipment necessary for the additional coordination with private owner and private owner consultants, additional coordination with adjacent utility owners, excavation and construction of a new trunk maintenance hole as shown in the plans and specifications, the connection to pipe, drop connection, concrete encasement, bedding, backfill, including imported backfill, aggregate base material, compaction, coating of the interior wall of the maintenance hole (see Bid Item No.7 for a list of liner and coating requirements), vacuum testing, flow control, diversion or bypass pumping, dewatering, temporary and permanent resurfacing, including asphalt or concrete pavement reconstruction to restore the existing improvements. Trunk maintenance holes shall be as shown on Project Plans, Detail 12 Sheet 26, and trunk maintenance holes frame and cover shall be as shown on Project Plans, Detail 13, Sheet 27. Item shall also include temporary shoring, sheeting, and bracing (which may include sheet piling) as necessary for the execution and completion of the work specified in the plans and specifications.

Mobilization, demobilization, traffic control plans and traffic operations, shoring and bracing plans, as well as bypass plans and bypass operations for sewer flows required for work under this bid item are included as part of bid item 34 payment and no additional compensation will be made.

Measurement for payment shall be as Lump Sum (LS) regardless of depth. Payment shall be as follows for Bid Item No. 37: Construct trunk maintenance hole, including trunk maintenance hole frame and cover, including all layout and additional excavation and materials required to install 15-inch diameter lower lateral stub out approximately 5-feet in length and capped at the end for future lower lateral sewer connection by others.

Contractor shall be paid on the basis of work completed as noted on the monthly submission of progress payment. The City reserves the right to withhold payment for work under this bid item until successful completion of required testing.

Working Day Increase for Award of Bid Package C: Bid Alternate 2

Working days to be increased by 10 additional Working Days for award of one, any, or all combinations of Bid Packages B, C, and E (Bid Alternates 1, 2 and 4), for a new total of 80 Working Days (“Base Bid” Package A + Bid Package B, C, D, or E respectively). All construction work on Oxford Street including bid addendum work is limited to between May 18, 2025 and August 18, 2025 per Special Condition 41. Bid Alternate work to be completed prior to CIPP installation under Bid Package A, Base Bid Item Number 10.

PLANS

The following are Plans showing the sheet numbers and their corresponding drawing title:

SHEET	DRAWING TITLE
1	TITLE SHEET
2	VICINITY MAPS
3	GENERAL NOTES, LEGEND, & ABBREVIATIONS
4	ADELINE STREET 1 – PLAN & PROFILE
5	ADELINE STREET 1 – PLAN & PROFILE
6	ADELINE STREET 1 – PLAN & PROFILE
7	ADELINE STREET 1 – PLAN & PROFILE
8	ADELINE STREET 1 – PLAN & PROFILE
9	ADELINE STREET 1 – PLAN & PROFILE
10	ADELINE STREET 2 – PLAN & PROFILE
11	KALA BAGAI WAY – PLAN & PROFILE
12	KALA BAGAI WAY – PLAN & PROFILE
13	KALA BAGAI WAY – PLAN & PROFILE
14	SHATTUCK AVE – PLAN & PROFILE
15	OXFORD STREET – PLAN & PROFILE
16	OXFORD STREET – PLAN & PROFILE
17	OXFORD STREET – PLAN & PROFILE
18	OXFORD STREET – PLAN & PROFILE
<u>18A</u>	<u>BID PACKAGE B (BID ALT 1) AT OXFORD STREET NEAR UNIVERSITY AVE – PLAN AND PROFILE</u>
<u>18B</u>	<u>BID PACKAGE B (BID ALT 1)</u>

SHEET	DRAWING TITLE
	<u>AT OXFORD STREET NEAR UNIVERSITY AVE - DETAILS</u>
19	OXFORD STREET –PLAN & PROFILE
<u>19A</u>	<u>BID PACKAGE C & D (BID ALT 2 & 3) ALONG OXFORD STREET SBETWEEN UNIVERSITY AVE AND CENTER ST - PLAN AND PROFILE</u>
20	OXFORD STREET – PLAN & PROFILE
<u>20A</u>	<u>BID PACKAGE D & E, BID ALT 3 & 4: ALONG OXFORD ST BETWEEN CENTER ST AND ALLSTON WAY</u>
21	OXFORD STREET – PLAN & PROFILE
22	OXFORD STREET – PLAN & PROFILE
23	WOOLSEY STREET – PLAN & PROFILE
24	WOOLSEY STREET – PLAN & PROFILE
25	DETAILS
26	DETAILS
27	DETAILS
28	DETAILS
29	DETAILS

DESCRIPTION OF GENERAL CONDITIONS

General Condition No. 1: Pre-Construction Meeting

1.01 Prior to commencement of work at the site, a preconstruction meeting will be held at Engineering Division conference room, 4th Floor, 1947 Center Street, Berkeley. Date and time of the meeting will be as agreed upon by the Contractor and the Engineer. The meeting shall be attended by:

- a. Contractor and his superintendent
- b. Contractor's principal subcontractors and representatives of major material suppliers and manufacturers as appropriate
- c. City Engineer, Inspectors, and/or his representatives
- d. City's Surveyor, Traffic Engineer, Police and/or Fire Departments
- e. City's Contract Compliance Officer
- f. City's Employment Programs Administrator
- g. City's Parks/Waterfront Department
- h. Representatives of EBMUD, PG&E, Telephone Co., Cable TV and AC Transit

1.02 The purpose of the meeting is to discuss and establish construction procedures such as field coordination, inspection, and anticipated problems to be encountered during the performance of the work. The agenda of the meeting will include the following:

- a. Contractor's tentative schedules
- b. Contractor's submittals
- c. Project layout and project staging
- d. Traffic control
- e. Housekeeping
- f. Payment
- g. Coordination with other utility companies
- h. Change orders
- i. Notification to the property owner
- j. Public Relation Policy

1.03 The Engineer will preside, note, and distribute the minutes of the meeting to all persons in attendance.

General Condition No. 2: Audio-Video Survey

Where the preconstruction and audio-video survey does not, in the judgment of the Engineer, adequately document the condition of existing improvements, the Contractor shall supplement the audio-video tapes with such still photographs as the Engineer may direct. The costs of such still photographs shall be deemed to be included in the lump sum bid amount for the audio-video survey. If a separate bid item is otherwise not provided, the preconstruction audio-video survey shall be included in prices paid for the various contract items of work involved and no additional compensation will be allowed. It shall be the responsibility of the Contractor to adequately document the condition of existing improvements, and the Contractor may be held liable for any damage whose pre-existence he/she is unable to document.

General Condition No. 3: Holidays

3.01 The full width of the street's traveled way shall be opened for use by public traffic on designated legal holidays and Reduced Service Days.

3.02 Designated legal holidays are January 1, the third Monday in February, the last Monday in May, July 4, the first Monday in September, November 11, Thanksgiving Day, and December 25. When a designated legal holiday falls on a Sunday, the following Monday shall be observed as a designated legal holiday. When November 11 falls on a Saturday, the preceding Friday shall be observed as a designated legal holiday.

3.03 The following are recognized City Holidays. No work shall be performed on these days unless previously authorized by the Engineer.

- Third Monday in January (Martin Luther King's Birthday)
- Lincoln's Birthday

• Monday or Friday nearest March 31 (Cesar Chavez Day)

- Monday or Friday nearest May 19 (Malcom X Day)
- Monday or Friday nearest June 19 (Juneteenth)
- Second Monday in October (Indigenous People’s Day)
- Day After Thanksgiving Day

3.04 No work shall be performed during the Christmas holiday season from November 21 through January 3 within the designated City streets in the business districts and all designated highway routes.

3.05 Designated streets and their limits are listed below:

Telegraph Ave.	Bancroft Ave.	to	South City Limits
Bancroft Ave.	Piedmont Ave.	to	Shattuck Ave.
Durant Ave.	Shattuck Ave.	to	Bowditch Street
College Ave.	Webster St.	to	Russell St.
Sacramento Ave.	University Ave.	to	South City Limits
Shattuck Ave.	Rose Ave.	to	Ashby Ave.
Adeline St.	Shattuck Ave.	to	Alcatraz Ave.
University Ave.	Sixth St.	to	Oxford St.
Hearst Ave.	Frontage Rd.	to	Sixth St.
Gilman St.	Frontage Rd.	to	Hopkins St.
Center St.	Fulton Ave.	to	Martin Luther King, Jr.
Kittredge St.	Fulton Ave.	to	Milvia St.
Vine St.	Walnut St.	to	Shattuck Ave.
Solano Ave.	The Alameda	to	West City Limits
Allston Way	Fulton Ave.	to	Milvia St.
Addison St.	Fulton Ave.	to	Milvia St.
Fourth St.	Addison St.	to	Virginia St.
Euclid Ave.	Hearst Ave.	to	Ridge Rd.
Fulton Ave.	Hearst Ave.	to	Dwight Way

3.06 Designated highway routes are:

- Ashby Avenue
- Tunnel Road
- San Pablo Avenue

3.07 Due to budgetary constraints, City of Berkeley offices will be closed approximately one day every month (Typically 2nd Fridays) for “Reduced Service Days”. When a holiday falls on that day, the previous day shall be a Reduced Service Day. Despite the City’s reduced level of service, the contractor shall plan to perform work during such days. Reduced Service Days will be included in the Engineer’s accounting of working and calendar days. Following are the planned future closure dates which are subject to change. Dates extending past the end of June 2024 are to be confirmed and will be provided to the Contractor as necessary.

~~December 8th, 2023~~
~~December 26th, 2023~~

~~December 27th, 2023~~

~~December 28th, 2023~~

~~December 29th, 2023~~

~~January 12th, 2024~~

~~February 9th, 2024~~

~~March 8th, 2024~~

~~April 12th, 2024~~

~~May 10th, 2024~~

~~June 14th, 2024~~

March 14, 2025

April 11, 2025

May 9, 2025

June 13, 2025

DESCRIPTION OF SPECIAL CONDITIONS

Special Condition No. 1: TECHNICAL SPECIFICATIONS

Part D of the specifications contains standard technical specifications for new sewer construction and sewer rehabilitation. Not all types of work described in Part D are required for this project.

Special Condition No. 2: OPEN TRENCH

The maximum open trench length described in Subsection 306-3.5 shall be changed to 300 feet.

Special Condition No. 3: UPPER LATERALS

Rehabilitation of upper laterals are not included in the scope of work. Limit of work is noted in the miscellaneous details sheet of the Plans.

Special Condition No. 4: PERFORMANCE OF THE CONTRACT

Performance of the contract shall begin within fifteen (15) working days from the date of award of the contract instead of thirty (30) calendar days or 14 calendar days as stated in Subsection 301.6 and 801.2 of Part C - General Provisions. Prior to the commencement of construction, the Contractor shall submit all submittals, traffic plans and construction schedules with sufficient time for their review and approval by the Engineer.

Special Condition No. 5: IMPORTED TRENCH BACKFILL

Imported trench backfill material shall be crushed aggregate base consisting entirely of crushed rock and rock dust conforming to the requirements of Section 200-1.1 and 200-1.2 of the Standard Specification for Public Works Construction, 2015 Edition. The aggregate shall be uniformly graded, such that the percentage composition of the material by weight, as determined by laboratory sieves conform to the following gradation:

<u>Sieve Size</u>	<u>Percentage Passing</u>
1 - 1/2"	100
3/4"	60 - 100
3/8"	50 - 65
No. 4	30 - 55
No. 30	10 - 30
No. 200	3 - 9

Trench backfill material shall not contain roots, sods, brush, wood, vegetable matter, other organic and deleterious materials.

Approved recycled materials maybe used in the pipe trench backfill zone. Recycled

materials shall be well-graded, cleaned and free of any toxic and harmful contaminants. Broken and crushed asphalt concrete shall be limited to a maximum of 25% of the total mixtures of recycled materials. The Contractor shall include test results of these materials in the submittals.

Special Condition No. 6: TEMPORARY BITUMINOUS SURFACING

Temporary Bituminous Surfacing (cutback) shall be placed immediately following final compaction of the trench backfill and aggregate base and with the approval of the Engineer. Minimum depth of cutback shall be 2 inches to the top of grade, compacted with vibratory compactor or roller and as approved by the Engineer. Temporary cutback shall be inspected and maintained by the Contractor on a daily basis and temporary surfacing shall be maintained including correction of ridges and depressions to a condition where the surface shall not vary to more than 1/2 inch from the edge of the 10-foot straight edge.

Upon notification from the Engineer, the Contractor shall correct the surface deficiencies within 24 hours. The City may request the City crews or contract another contractor to perform the necessary work and repairs if the deficiencies have not been corrected after the 24-hour notification.

The cost of the work performed by City crews or another contractor plus an additional 70 percent surcharge shall be paid by the Contractor by deduction from payment due on the contract.

Special Condition No. 7: CLEANUP WORK

Cleanup of work areas shall be in accordance with Subsections 401.6, Cleaning up; 401.7, Dust and Debris Control; 401.7-1, Emergency Cleanup Work; and 401.13, Final Cleaning Up of Part C - General Provisions. Street cleaning equipment shall include an approved self-propelled or walk-behind mechanical street sweeping and vacuuming device to remove sediment, dirt, and debris from the project site during construction activities and for final clean-up.

Underground Service Alert and other utility paint markings shall be eradicated and removed at the end of construction at the request of the City's Representative.

In the event the Contractor fails to satisfactorily comply to the requirements stated on the noted subsections and the Engineer determines that an emergency exists, the Contractor will be notified by the Engineer to correct the violation immediately.

Cleanup, debris and dust control shall be a daily maintenance requirement. After a 24-hour notification to the Contractor for non-compliance or deficiencies, the City may request City crews or contract another contractor to perform the necessary clean-up work.

The cost of the work performed by City crews or another contractor plus an additional

70 percent surcharge shall be paid by the Contractor by deduction from payment due on the Contract.

Special Condition No. 8: AS-BUILT RECORDS

In accordance with Subsection 401.15 of the General Provisions, the Contractor shall maintain at the jobsite one (1) set of marked Plans for review by the Engineer at all times, and shall submit as-built records of the project to the Engineer upon completion of the work. As-builts shall be legibly written and in printed style on a full-size set of plans. The following are changes and additions that shall be incorporated in the as-builts:

- a) Location of lateral connections to the main sewer measuring from the downstream maintenance hole. Locations shall be recorded within 2 feet of the actual location of the connection. The Contractor shall write every station for each location/connection.
- b) Location of each sewer clean-out and location of sewer lateral from clean-out to sewer main. Location shall be recorded within 2 feet of the actual location and address of property served shall be verified.
- c) Demolition and removal of non-active sewer laterals, tee, riser, and clean-outs.
- d) Sewer Alignment changes made during construction for the sewer main and sewer laterals.
- e) Identify on as-built where sewer replacement was installed by trenchless method.
- f) Maintenance hole depth and location changes. The Contractor shall indicate the final inverts, maintenance hole rim elevation, and station.
- g) Location of unforeseen structures in conflict with sewer alignment encountered during trench excavation. Contractor shall also indicate the type of structure, sizes, and bottom elevation with respect to the project elevation.
- h) Identify pipe material that was installed for all reaches of new and replaced and rehabilitated piping.

The Contractor shall complete and submit "SEWER LATERAL AS-BUILT RECORD" FORMS (attached) upon completion of work. Lateral As-Built information required shall be logged as the work progresses.

Special Condition No. 9: GUARANTEE OF WORK

The Contractor shall guarantee the entire work constructed by him/her under the contract in accordance with Subsection 801.13 of the General Provisions. The guarantee shall be for a period of one year after completion and acceptance by the City.

The Contractor shall agree to make, at his/her own expense, any repairs or replacements made necessary by defects in materials and workmanship which becomes evident within the said guarantee period. The Contractor shall make all repairs and replacements within 10 Working Days after receipt of verbal/written notification for repair/replacement from the Engineer. However, the Contractor shall respond within 24 Hours after notification to repair or replace nonfunctional sanitary sewer lateral and main that is causing inconvenience and a health hazard to the public.

The City may request the City crews or contract another contractor to perform the necessary repair/replacement work if the deficiencies have not been corrected after the prescribed length of time. Payment for this work plus administrative cost shall be reimbursed from the Surety Bond submitted by the Contractor.

Special Condition No. 10: CONSTRUCTION SIGNAGE

The Contractor shall provide four (4) construction signs for this project and shall be placed on locations designated by the Engineer. The size of construction signs is 2'-7" x 6'-0", white background color and in black uniform lettering. Construction signs shall be installed on both ends of the street scheduled for rehabilitation two days prior to start of construction and shall be relocated to the next street location as job progresses or as directed by the Engineer. Construction signs are included under Bid Item "Mobilization and demobilization" and shall conform to the detail noted in the Standard Details Section. Signs shall be maintained to the satisfaction of the Engineer.

The Contractor shall provide two (2) portable changeable message boards for use on the project at the City's request. Each portable message sign unit shall consist of a controller unit, a power supply, and a structural support system, all mounted on a trailer, per Caltrans Standard Specification Section 12-3.32. Message board shall be installed as directed by the Engineer two days prior to start of construction and shall be relocated to the next street location as job progresses or as directed by the Engineer. Construction signs are included under Bid Item "Mobilization and demobilization". Board shall be maintained to the satisfaction of the Engineer.

Special Condition No. 11: PARKING SIGN AND PERMIT FEES

The City will provide "NO PARKING" signs to the contractor upon request for this project at no cost. Permit fees for city work under this city construction will be waived.

Special Condition No. 12: PUBLIC RELATION REQUIREMENTS

Public Relation Policy. In the course of serving its citizens, it is the policy of the City of Berkeley to be responsive, helpful and courteous to its resident at all times. Any City's employee or City's Contractor that will be in contact with residents, in person or by telephone, will adhere to this policy.

The Contractor is required to prepare a Public Relations Plan to implement the above policy. The Plan shall be submitted for approval before commencing the work under this contract. The Contractor shall certify that he understands and will adhere to the City's Public Relation Policy, and that all Contractor employees will be briefed on proper relations with the public in accordance with above policy statement.

Contractor's employees without specific public relations responsibilities shall be informed of the name of the Contractor's and the City's Public Relation Coordinators for referral purposes.

Any Contractor's employee who does not adhere to the above public relations policy by displaying rude, offensive and uncooperative behavior shall be discharged immediately on written request of the engineer per subsection 801.4

Public Relation Plan: The Public Relations Plan shall include but is not limited to the following:

- a. Name of the contractor's Public Relations Coordinator and his/her experience with interfacing with the public.
- b. Plans for conducting public impact assessments prior to commencing the total project, each stage of the project, as necessary to execute the provisions of this contract without undue impact on the public.
- c. Techniques or plans for interfacing with the public and agencies at various stages of the project, especially during work on upper laterals located on private property.
- d. Method of notifying and informing the public and agencies prior to construction stages, providing ample time to address their concerns.
- e. Plans for coordinating public relations matters with the City during the preconstruction conference, weekly meetings and during review of the construction schedule.
- f. Provisions for and frequency of briefing employees on the details of executing the Public Relations Plan.

Poor performance and non-adherence to the City's public relations policy are grounds for being declared a non-responsive contractor that may result in the city rejecting bids on future contracts.

No additional compensation will be paid by the City for implementing Public Relations Policy requirements. All such related effort is a mandatory requirement of the contract.

Special Condition No. 13: UTILITIES IN CONFLICT WITH SANITARY SEWER AND STORM DRAIN

The Contractor shall determine the unknown location of main and service utilities in advance of work in order not to delay the schedule of construction. Advance potholing shall be included in the planning and execution of the work. No additional compensation will be paid by the City for the performance of this work. At the direction of the Engineer, it is Contractor's responsibilities to make correction if conflict arises among utilities. If conflict arises, the Contractor shall inform the Engineer in advance before any correction is made.

Special Condition No. 14: NON-DISCRIMINATION AND CONTRACT COMPLIANCE CONFERENCE

At the Non-Discrimination and Contract compliance conference, the apparent lowest responsive bidder shall submit the proposed staffing resources in order to start and complete the project within the contract time frame. This should account for other Berkeley contracts that the Contractor may be working on concurrently or within the same time frame.

Special Condition No. 15: PIPE REHABILITATION AND REPLACEMENT USING TRENCHLESS METHOD

Rehabilitation of existing sewer pipes using the trenchless method will be used in this project; locations and methods are shown on the Plans. The two trenchless methods are as follows: Method "A" - Cured-In-Placed-Pipe liner (CIPP), Folded and Reformed PVC pipe liner, Deformed/reformed HDPE pipe liner; Method "B" – Pipe breaking, pipe splitting or bursting, sliplining, or other comparable method. These two methods of pipe rehabilitation ("A" & "B") do not apply where the new sewer is to be installed at a different slope and flowline elevations (open-cut method) from the existing sewer that is to be removed and replaced.

The Contractor shall be responsible for determining the condition and alignment of the existing pipes to be rehabilitated through closed circuit television inspection (CCTV). Cleaning of the pipeline and removal of debris such as sludge, grease, roots, rocks and any foreign materials shall be performed prior to pipe rehabilitation. All costs incurred with this work shall be included in the bidder's proposal.

Existing sags and/or vertical offsets that would affect the alignment of the new pipe installed using these methods are to be corrected by the Contractor prior to start of pipe placement. Sags in the new replacement sewer that appears in the post construction video inspection tapes are to be removed and corrected by open trench, and shall be at the expense of the Contractor with no additional compensation or cost to the City.

For Method "B", the Contractor shall furnish and install HDPE SDR – 17. Approved color

for inside wall are white, gray and other approved light-colored pipe. Both the inside and outside may be of the same color. For pipe rehabilitation work involving sliplining (i.e. new pipe O.D. is of a smaller diameter than existing host pipe I.D.), the new pipe shall be installed such that it rests permanently at the invert of the host pipe throughout its entire length. Refer to Section 500-3 of the "Greenbook" 2015 Edition for annular space grouting requirements for the installation of sliplining systems.

Prior to construction, the Contractor shall submit to the City for review and approval the materials, procedures, equipment, shop drawings and other submittals as required by the Plans and Specifications.

Special Condition No. 16: PAVEMENT STRIPING AND LANE MARKING RESTORATION TIME LIMIT

Restriping and pavement marking to restore those deleted, or damaged shall be completed within ten (10) working days after finish paving or asphalt resurfacing is completed.

Special Condition No. 17: CONSTRUCTION STAKING AND CUT SHEETS

This section hereby revises section 501.7 of the General Provisions of these specifications.

Construction surveys and stakes to establish the lines and grades and to establish the replacement position for Survey Monuments will be the responsibility of the Contractor and not provided by the City.

The Contractor will be responsible for setting lines and grades for the execution and completion of the work in accordance with the Plans and Specifications. The Contractor will be held responsible for all errors in staking discovered during the performance of the work and no additional compensation shall be charged to the City for correction of such deficiency.

Stakes or marks will be set by the Contractor, utilizing a qualified land surveyor in conformance with the requirements in Chapter 12, "Construction Surveys," of the California Department of Transportation's Surveys Manual.

In all other respects, Section 501.7 and the General Provisions of these specifications remain in full force and effect.

Special Condition No. 18: PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements and street pavements which are not designated for removal (e.g., street sections, curbs, gutters, driveways, fences, walls,

structures, landscaping, etc.) which are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements, and shall match them in finish and dimensions.

Prior to initiating work in the public right of way and in the easements, the Contractor shall make an audio/video recording of the affected areas showing all existing improvements, and their conditions. The recordings shall be turned over to the Engineer in DVD-format and shall serve as historical documentation of the preconstruction conditions.

Damages within the public right of way including street pavement will be restored to the satisfaction of the Engineer after work on that particular block is completed.

Any damages to the private properties will be restored to the satisfaction of the property owner/engineer within seven (7) days of the damage(s), and prior to mobilizing pipe installation and rehabilitation in another project area. Non-conformance and delays by the contractor in restoration on private property can cause and generates highly publicized complaints from the property owners.

The Engineer will have the authority to stop or curtail pipe construction/rehabilitation work in another location or vicinity of the project in order to complete the required restoration work.

Special Condition No. 19: APPROXIMATION OF EXISTING GROUND GRADES FOR BACKLINE SEWER PROFILES

Existing ground elevations shown on the plans for the Sewer Profiles for backline sewers are approximate.

Actual ground elevation may be higher or lower at specific locations than shown on the drawings.

No additional compensation will be provided where some actual depths are deeper than shown on the plans; but are offset by other areas that are shallower than shown over the sewer centerline, and where it does not exceed the overall average depth of backline sewer where excavation is required.

Special Condition No. 20: CONSTRUCTION ACCESS AGREEMENTS

Construction access agreements are required for work in private property on backline sewers and where access across private property is required for completion of work. Contractor shall not perform any work in private property until access agreements have been acquired. The City is in the process of acquiring access agreements from owners of private property anticipated to be affected by performance of the work. When needed, the Contractor shall meet with owner(s)/tenant(s) of those properties requiring access agreements to discuss means and methods of construction. The Contractor may be required to reschedule or change the planned sequence of sewer work in private property as needed to accommodate property owner scheduling requests.

A typical access agreement form is included as Appendix 9.

Special Condition No. 21: TEMPORARY SHEETING, SHORING, AND BRACING

Temporary sheeting, shoring and bracing shall be installed in accordance with requirements of OSHA and the Construction Safety Orders of the State of California, pursuant to the provisions of Section 6707 of the California Labor Code. Sheeting, shoring and bracing plans shall be signed and sealed by a California registered engineer and submitted to the City prior to start of this work.

Payment for temporary sheeting, shoring, and bracing or equivalent method shall be included in the bid items for the construction of temporary bypass operations, maintenance holes, and sewer pipes rehabilitation or construction.

Special Condition No. 22: STORMWATER POLLUTION CONTROL

Standard Specifications referred under Special Condition No. 22 is the State of California, Department of Transportation (Caltrans) Standard Specifications, 2015 Edition.

22.01 Stormwater Pollution Control. The intent of these requirements is compliance with Federal, State, City, and other local agencies' regulations that prohibit non-stormwater discharges from construction sites. Pollutants (any substance, material, or waste other than rainfall-derived stormwater) discharged to storm drains is strictly prohibited. Further, the Contractor is informed that Federally Endangered species have been identified in creeks within the City limits. Point source, pollutants, stormwater, and other relevant information are defined in Berkeley Municipal Code (BMC) Chapter 17.20 – DISCHARGE OF NON-STORMWATER INTO CITY'S STORM DRAIN SYSTEM – REDUCTION OF STORMWATER POLLUTION, and the City's stormwater NPDES (National Pollutant Discharge Elimination System) Permit No. CAS612008. These documents are available upon request.

22.02 Best Management Practices (BMP) and Source Control. The Contractor shall use appropriate BMPs and source control techniques on the site(s) at all times, regardless of time of year or rainfall conditions, in order to prevent non-stormwater discharges from construction sites. BMPs shall be in conformance with the California Stormwater Quality Association's "Stormwater Best Management Practice Handbook", current edition.

22.03 Stormwater Pollution Prevention Plan (SWPPP) and Coordinator. The Contractor shall prepare, submit for favorable review by the City, and implement a SWPPP which shall contain at a minimum the items included in this section. The SWPPP shall show the locations of all storm drains, storm drain pipes, creeks, creek culverts, points of entry (catch basins, inlets, outlets), and other features through which stormwater flows. The SWPPP shall identify each point of entry and show how each entry point will be protected. The SWPPP shall include a protocol for allowing drainage to flow properly during rainfall events WHILE STILL PREVENTING non-stormwater discharges from

entering the storm drains, creeks, and Bay. The Contractor shall designate an individual (to be approved by the City) available at all times of sufficient authority to halt work and implement BMPs and source control measures for the Contractor and all sub-contractors, suppliers, and other personnel that may be at the construction site(s), to prevent non-stormwater discharges from the construction site(s). This individual shall be the contact person for all matters of the project regarding non-stormwater discharges. The SWPPP shall include descriptions and sketches of all BMPs, show locations and describe protocols for implementing and maintaining the following BMPs for but not limited to material storage, dewatering operations, bypass pumping, saw-cutting operations, pavement operations, concrete operations, grading and excavation operations, spill prevention and control, vehicle and equipment cleaning, vehicle and equipment operation and maintenance, litter control, dust control, pavement cleaning, and construction waste management. All employees, subcontractors, suppliers, and any others involved with the construction site(s) shall be trained in implementing, the importance of, and purpose of the SWPPP. Training records shall be submitted to the City along with requests for progress payment. Where BMPs affect traffic or parking, they shall be shown on the traffic control plans for the construction site(s). The SWPPP shall be updated to meet changing stages of the construction site(s). Work shall not begin without the City completing its review and finding no exceptions taken on the SWPPP and finding at City's sole discretion that the SWPPP meets the intent and goals of the project.

In addition, the Contractor shall observe the following guidelines:

- a) Paving during wet weather:
 - 1) No paving while it is raining.
 - 2) No paving of the top lift of asphalt concrete (AC) on any day that experiences $\frac{1}{4}$ " of rain in a twenty-four period
 - 3) No paving of bottom lift if previous seventy-two (72) hour period experienced more than $\frac{1}{2}$ " of rain, unless directed by the City Engineer or his designee.
- b) Store materials in accordance with Section 13-4.03C, "Material Management" of the Standard Specifications.
- c) Cover inlets and maintenance holes when applying asphalt, seal coat, tack coat, slurry seal, fog seal, etc. in conformance with the provisions in Section 13-4.03E (7), "Paving, Sealing, Sawcutting, Grooving, and Grinding Activities," of the Standard Specifications
- d) Place drip pans or absorbent materials under paving equipment when not in use.
- e) During wet weather store paving equipment indoors or cover with tarp or other waterproof covering.
- f) Sweep site daily to prevent sand, gravel or excess asphalt from entering or being transported by rain into the storm drain system.
- g) Keep ample supplies of drip pans or absorbent materials on-site.
- h) If paving involves Portland cement concrete, refer to Section 13-4.03D (3) Concrete Waste of the Standard Specifications.

Do not wash out concrete trucks into storm drains, open ditches, streets, streams, etc. The Contractor shall prevent the discharge of pollutants from concrete operations by

using measures to prevent run-on and run-off pollution, properly disposing of wastes, and by implementing the following BMPs:

- a) Store all materials in waterproof containers or under cover away from drain inlets or drainage areas.
- b) Avoid mixing excess amounts of Portland cement materials. Dispose of any excess materials properly.
- c) Whenever possible, perform washout of concrete trucks off-site where discharge is controlled and not permitted to discharge to the storm drain system. For on-site washout:
 - 1) Locate washout area at least fifty (50) feet from storm drains, open ditches or other water bodies, preferably in a dirt area.
 - 2) Confine run-off from this area by constructing a temporary pit or bermed area large enough for the liquid and solid waste.
- d) Wash out concrete wastes into the temporary pit where the concrete can set, be broken up and then disposed of properly. If the volume of water is greater than what will allow concrete to set, allow the wash water to infiltrate and/or evaporate, if possible. Remove or vacuum the remaining silt and debris from the ponding or bermed area and dispose of it properly.
- e) Dispose of waste water from washing of exposed aggregate to dirt area. The dirt area shall be adequate to contain all the waste water and once the waste water has infiltrated, any remaining residue must be removed.
- f) Collect and return sweepings from exposed aggregate concrete to a stockpile or dispose of the waste in trash container.

22.04 Training. The Contractor is responsible for ensuring all personnel, laborers, sub-contractors, suppliers, and any other personnel that are involved with the construction site(s) are trained in the importance of preventing non-stormwater discharges. Each worker shall be certified as being trained before being allowed to work. Before any work begins, the Contractor shall submit and certify under penalty of perjury a list of all workers who have been trained on the importance of pollution prevention, BMP and source control operation and maintenance, and recognize the authority of the City to stop the work in the event of a non-stormwater discharge. The training shall include as a minimum, review of the BMP and SWPPP, and all BMPs (including BMP operation and maintenance) that are planned for the construction site(s).

22.05 Enforcement. The City has the authority through this contract and appropriate sections of the BMC to enforce any portions of this section. City enforcement may include but is not limited to: citations, orders to abate, bills for City cleanup costs and administration, civil suits, and criminal charges and enforcement. Enforcement action by the City does not void or suspend any enforcement actions by other agencies and actions by the City and other agencies shall be cumulative.

22.06 Submittals and Contract Time. Contractor is cautioned and advised to have appropriately trained staff with any applicable certifications prepare all submittals for Storm Water Pollution Controls including the SWPPP, and have appropriately trained

staff available to meet with City staff to review the submittals. It is considered reasonable that the Contractor shall make a complete and acceptable submittal at least by the second submission. The City reserves the right to deduct monies from payments due to Contractor to cover additional costs of project manager's and Architect/Engineer's review beyond the second submission. Illegible submittals will be rejected and returned to the Contractor.

Special Condition No. 23: CREEK PROTECTION

The Contractor shall be responsible for and conduct all aspects of the work within the requirements of BMC Chapter 17.08 – PRESERVATION AND RESTORATION OF NATURAL WATERCOURSES (Creek Ordinance), and any other creek protection requirements by other agencies. Portions of the Work involving a creek channel may not be permitted between October 15 through April 15, or other dates as may be stipulated in applicable permits. Any work between the creek banks shall be conducted to not create conditions which will allow erosion, and shall be fully restored to equal or better than the erosion resistant condition as before the work undertaken. Complying with the requirements of creek protection shall include but not be limited to scheduling the Work around any time periods prohibiting work within creek limits, installing erosion control measures and employing appropriate BMPs for controlling erosion, monitoring, updating and modifying BMPs to meet the requirements for changing site conditions to comply with erosion control and creek protection, and replanting creek banks to reestablish erosion resistance and bank stability.

Special Condition No. 24: TRAFFIC CONTROL

Traffic Control Plans (TCP) must be prepared to avoid and minimize construction impacts on pedestrian, bicycle, and bus facilities in Berkeley consistent with the City's policies. TCPs must follow the guidance and intent provided in APPENDIX 9 -- CITY OF BERKELEY PEDESTRIAN, BYCYCLE, AND BUS FACILITY ACCOMODATION IN CONSTRUCTION ZONES. This document specifies when and where pedestrian, bicycle, and bus facilities may be relocated, detoured, diverted, modified, and closed for this project. In case of conflicts with the requirements of APPENDIX 9, the Caltrans Permit, and Special Conditions, the more stringent shall prevail.

Contractor shall provide traffic control within the work zone throughout the project as needed for the various traffic situations and street configurations in full conformance with the Federal Highway Administration's (FHWA) latest edition of the "California Manual on Uniform Traffic Control Devices 2014" (MUTCD), as amended for use in California" herein after referred to as Traffic Control Manual. The Traffic Control Manual may be obtained online at <https://dot.ca.gov/programs/safety-programs/camutcd>

Construction area signs shall be furnished, installed, maintained and removed by the Contractor when no longer required. **Extensive traffic signage, e.g., warning signs and detour signs, may be required for this project.** Contractor shall be responsible for placing all barricades for perimeter street closures as required. Per Section 501.10 –

Traffic Control of the General Provisions, at main entry and exit points of each work location, the Contractor shall provide a 30" x 30" sign advising the public of the anticipated period of time that traffic delays may be anticipated. This sign will also include name and telephone number of the Contractor along with starting and completion dates of the contract. Sign will be erected 7 days in advance of any work.

Placement of traffic control on San Pablo Avenue (State Route 123) or Ashby Avenue (State Route 13) will require an encroachment permit from the State of California. Contractor shall apply and pay for such permit from the State of California, the cost of which shall be included in the cost bid for this item. Contractor shall be responsible for providing traffic control plan for encroachment permit to and obtaining approval of said traffic control plan from State of California. Contractor shall be responsible for all notification of work to, application for and obtaining work authorization number from State of California. Any damages arising from work related to encroachment permit shall be the responsibility of the Contractor.

The Contractor shall be responsible for posting "No Parking" signs a minimum of four days in advance of concrete work, paving operations, failed area, and planning work so as to comply with the City's construction notification requirement of 72 hours. Cones shall not be used as barricades. "No Parking" signs may be obtained from the City at no cost to the Contractor. The "No Parking" signs shall be updated as necessary. The Contractor shall check and maintain (e.g., re-install missing signs, reposition displaced barricades, etc.) postings on a regular basis prior to start of work.

If traffic is to be detoured over a centerline or detoured in advance of the work, detour plans must be submitted to and approved by the Engineer prior to starting work. Police, Fire and Public Works Department shall be notified at least two days in advance of any work which will interfere with the normal flow of vehicular or pedestrian traffic. Intersection closure may only occur if the two adjacent intersections remain open, unless otherwise approved by the Engineer. The Contractor shall coordinate his traffic control/diversion plan with City personnel, a minimum of 3 weeks prior to starting work, to assure that traffic is diverted in a safe and convenient manner.

Truck routes shall be approved by the City's Traffic Engineer prior to start of work. Truck traffic is not allowed on Marin Avenue within the City of Albany.

Personal vehicles of the Contractor's employees shall not be parked within the area of work.

A minimum of one (paved) traffic lane, not less than 12 ft. wide, shall remain open for use by public traffic during construction operations. When construction operations are not actively in progress, not less than two such lanes shall be open to public traffic. The Contractor may be allowed to close residential streets if approved in writing in advance by the Engineer. No work that interferes with public traffic shall be performed between 6:00 p.m. and 7:00 a.m.

Start of work shall be no earlier than 7:30 a.m. No work process, including starting, warm up, and delivery of equipment, shall be done outside of work hours. The use of vehicle horns to alert residents to move their vehicles out of the construction zone is not permitted. The Contractor should attempt to locate vehicle owners by knocking on doors.

The full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays and designated legal holidays, and when construction operations are not actively in progress, unless specified otherwise.

Minor deviations from the requirements of this section concerning hours of work may be permitted upon the written request of the Contractor if in the opinion of the Engineer, public traffic will be better served and the work expedited. Such deviations shall not be adopted until the Engineer provides written approval.

The traffic control system shall consist of closing traffic lanes in accordance with the Traffic Control Manual. Signs and other devices for the traffic control system shall conform to the Traffic Control Manual.

If any component in the traffic control system is damaged, displaced or ceases to operate or function as specified, from any cause during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said component and shall restore the component to its original location.

Lane closures may be made for work periods only. At the end of each work period, all components of the traffic control system shall be removed from the traveled way, shoulder and auxiliary lanes. If the Contractor so elects, said components may be stored at selected central locations approved by the Engineer within the limits of the public right-of-way.

Sufficient barricades and flashing lights shall also be placed to supplement all traffic signs used to divert and control traffic. Signs and barricades shall be checked periodically every day and replaced or repaired as necessary. Any hazardous conditions shall be immediately eliminated.

The Contractor, at the end of each day, shall provide pedestrian and vehicle crossings at all street intersections. If the project is left open overnight, it shall be graded in such a way that pedestrians and vehicles can safely pass through the project. Temporary concrete, asphalt, or wood ramps shall be installed and maintained at all locations where existing ramps have been temporarily removed.

In accordance with Section 1603.1 of the Detail Specification, where a tack coat has been spread, pedestrian crossing areas shall be covered with sand so that the asphalt does not adhere to shoes.

No vehicular traffic shall be allowed on a tack coat.

Cleanliness is extremely important. Dust producing conditions shall be eliminated as soon as they are created.

If Contractor violates any of these provisions, a fine of \$1,000 will be assessed for the first violation, \$5,000 for the second and \$10,000 for the third and further subsequent violations.

24.01 ACCESS AND EGRESS

The Contractor shall cooperate with all business owners and residents occupying properties fronting on the streets in the matter of access and egress. **Contractor shall maintain a clear and accessible pedestrian corridor per the Pedestrian Access during Construction Projects Detail included herein.**

Where a business property has more than two vehicular paths of access, one path, 10 feet in width, shall remain open during all business hours, unless approved by the Engineer.

24.02 LANE CLOSURES

No lane closures shall be permitted on the following streets Monday through Friday between 7:00 A.M. – 9:00 A.M. and 4:00 P.M. – 6:00 P.M., and Saturdays between 10:00 A.M. – 2:00 P.M., unless approved in advance by the City Traffic Engineer if it can be explained why such closure cannot reasonably be avoided. On Saturdays when UC football games are scheduled all construction-related lane closures along these corridors must be reopened at least 4 hours before the start of the game.

Major Streets:

- University Avenue
- San Pablo Avenue
- Shattuck Avenue
- Telegraph Avenue
- Sacramento Street
- Martin Luther King Jr. Way
- Ashby Avenue
- College Avenue
- Gilman Avenue
- Adeline Street

Notwithstanding the above, the Traffic Engineer reserves the right to review and comment on each individual traffic control plan based on its own merits.

Note: Routine maintenance, inconvenience to construction method or schedule, or adverse impacts on cost of work will generally not be accepted as grounds for exceptions.

Special Condition No. 25: CURED-IN-PLACE-PIPE LINER

This amendment modifies the Standard Specifications for Public Works Construction, 2015 Edition, Part 5 regarding materials, minimum physical properties and chemical resistance of felt or equivalent nonwoven liner material.

A. Materials

The sewn tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216 or ASTM F1743, Section 5.

Resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured within the tube composite meets the requirements of ASTM F1216 and ASTM F1243.

B. Minimum Physical Properties

The cured pipe material (CIPP) shall conform to the structural properties listed as follows:

Modulus of Elasticity (ASTM D-790) – 250,000 psi.

Flexural Stress (ASTM D-790) – 4,500 psi.

C. Chemical Resistance

The CIPP liner shall meet the chemical resistance requirement of ASTM D5813.

CIPP samples for testing shall be of tube and resin system similar to that proposed for actual construction.

Special Condition No. 26: DIRECTIONAL DRILLING (NO DIG METHOD)

Directional drilling is an alternate method to the traditional open cut method in installing gravity sewers on new alignment or grade without causing any major damage to existing improvements or disruption in the backyard easement and busy streets. The three steps involved in the installation of pipeline by directional drilling are as follows:

1. Drilling of pilot hole -the pilot is constructed by a rotary drilling head using pressurized mud to excavate and remove the soil. The drill rods are typically 10 feet long and hollow to transport drilling fluid and locating sensor wires. Tracking and locating the drilling operation is monitored by a surface-tracking device, which receives an electronic signal from the drilling head.
2. Reaming operation - This is to enlarge the pilot hole to a diameter large enough to accept the pipe. Reaming is accomplished by a rotating mechanical cutting tool and pressurized drilling mud that cuts and mixes the soil into the drilling mud slurry. Reaming may be done in one or more steps depending on the size of the pipeline and the nature of the soil.
3. Pipe insertion - Pipe insertion is accomplished by pulling the pipe into the reamed

hole by the drill rod usually immediately behind the rotating mechanical reaming tool to ensure clearance of the hole. The reaming and pipe insertion may be accomplished by the same step. As the pipe is inserted, drilling mud is displaced and removed by a vacuum truck or pump. The drilling mud also acts as a lubricant to reduce friction on the pipe and fill the annular space between the outer wall of the pipe and the undisturbed soil.

Special Condition No. 27: BOND RIDERS FOR ADDITIONAL WORK DURING CONSTRUCTION

During construction, the City may request or authorize additional work as part of the contract. Prior to commencement of any Contract Change Order (CCO) or Contract Amendment (CA), the Contractor shall submit Surety Company Bond Riders for the new contract amount. The new contract amount is the contractor's bid amount or authorized contract amount plus the CCO or CA. The Riders for any additional work shall be provided at no cost to the City. Typically, the maximum authorized contract amount requiring a Rider is the contractor's bid amount plus 10%.

Special Condition No. 28: RETAINED FUNDS

Pursuant to California Assembly Bill 2173 (AB 2173), the City shall retain five percent (5%) of such estimated value of work done as part security for the fulfillment of the Contract by the Contractor. Section 901.4.1 Retained Funds of the General Provisions of these specifications is hereby revised, decreasing the amount of retained funds from ten percent (10%) to five percent (5%). In all other respects, Section 901.4.1 and the General Provisions of these specifications remain in full force and effect.

Special Condition No. 29: COMMERCIAL POLLUTION LIABILITY INSURANCE

Contractor shall procure and maintain at its expense or cause its subcontractor to procure and maintain, a broad form Contractors Commercial Pollution Liability Insurance including contractual liability coverage for losses caused by pollution conditions (including sudden and non-sudden pollution conditions) arising from the services and operations of the Contractor or any subcontractor, and the cleanup, removal, transportation, storage, disposal, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants or pollution conditions, in an amount not less than \$1,000,000 Per Occurrence and \$2,000,000 General Aggregate limit for bodily injury property damage (including loss of use of damaged property or of property which has not been physically injured or destroyed). All costs of defense shall be outside the limits of the policy.

Any such insurance provided by a subcontractor must be approved separately in writing by the City. Approval of a substitution of a subcontractor's insurance shall require a certification by the Contractor that all activities for which Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury, property damage (including loss of

use of damaged property or of property which has not been physically injured or destroyed), or environmental damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this Contract, and shall include a 12 month extended Claims Discovery Period applicable to this Contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Work under the Contract without advancing the retroactive date. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

Special Condition No. 30: PIPE REHABILITATION AND REPLACEMENT USING UV – CURED RESIN IMPREGNATED FIBERGLASS TUBE

The Engineer may, at his or her discretion, exercise the option to direct the Contractor to rehabilitate the structurally and/or functionally deteriorated sanitary sewer pipelines using the trenchless method of cured-in-place pipe (CIPP) with a resin impregnated fiberglass tube that is cured by ultraviolet light.

The CIPP material shall consist of a resin-impregnated fiberglass material tube (“Liner”) which when cured shall extend the full length of the original pipe and provide a structurally sound, smooth, joint-less and watertight pipe. Refer to Part D, Section 500.1.14.

Special Condition No. 31: LIQUIDATED DAMAGES

The Contractor shall pay the City of Berkeley the sum stated in the Bidder’s Proposal for each and every working days delay in finishing the work in excess of the number of working days prescribed in the specifications. The City will strictly enforce liquidated damages on this contract. Contractor shall carefully assess their capacity to complete the work within the designated working days prior to submitting a bid for the work.

Special Condition No. 32: SB 854 – PUBLIC WORKS REFORM

No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

Special Condition No. 33: PAVEMENT THICKNESS

Concrete pavement and asphaltic concrete pavement thickness vary throughout the City. Contractor is required to match during pavement restoration the thickness of the existing pavement. Contractor shall assume that concrete pavement is up to 7-inches thick and asphaltic concrete pavement is up to 15-inches thick for the basis of bid. These values do not include any base or subbase material as required elsewhere in these Contract Documents.

Special Condition No. 34: TERMINATION OF CONTRACT FOR CONVENIENCE

- a. Owner may terminate performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever Owner shall determine that termination is in Owner's best interest. Termination shall be effected by Owner delivering to the Contractor notice of termination specifying the extent to which performance of the Work under the Contract Documents is terminated, and the effective date of the termination.
- b. Contractor shall comply strictly with Owner's direction regarding the effective date of the termination, the extent of the termination, and shall stop work on the date and to the extent specified.
- c. Contractor shall be entitled to a total payment on account of the Contract work so terminated measured by (i.) the actual cost to Contractor of Work actually performed, up to the date of the termination, with profit and overhead limited to twelve percent (12%) of actual cost of work performed, up to but not exceeding the actual contract value of the work completed as measured by the Schedule of Values and Progress Schedule, (ii.) offset by payments made and other contract credits. In connection with any such calculation, however, Owner shall retain all rights under the Contract Documents, including but not limited to claims, indemnities, or setoffs.
- d. Under no circumstances may Contractor recover legal costs of any nature, nor may Contractor recover costs incurred after the date of the termination.

Special Condition No. 35: SUBMITTAL REVIEW PROCEDURE

Unless otherwise specified, the Engineer shall review the submittal and return to the Contractor within ten (10) working days after receipt of the submittal instead of ten (10) calendar days as stated in Subsection 401.12-3 of Part C – General Provisions.

Special Condition No. 36: POST-CONSTRUCTION CCTV

If the Contractor fails to complete and submit all post-construction CCTV videos and

reports to the City prior to the end of the term of the contract, as defined in the Bidder's Proposal and as amended by the Engineer, the City may assess a fine of \$4.00 per linear foot of new sewer main and lower lateral not inspected.

Special Condition No. 37: ORDINANCE NO. 7,670-N.S. GENDER

In accordance with Ordinance No. 7,670-N.S. the term manhole shall be replaced by the term maintenance hole throughout the contract documents.

Special Condition No. 38: PRECEDENCE OF CONTRACT DOCUMENTS

Section 501.4 of the General Provisions is completely revised to the following:

In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:

1. Federal and State requirements
2. Permits from other agencies as may be required by law
3. Signed Agreements and terms and conditions referenced therein.
4. Special Provisions
5. General Provisions
6. Technical Provisions
7. Regional Standard for Sanitary Sewer System Installation, Rehabilitation and Repair (June 30, 2016)
8. Standard Specifications for Public Works Construction, Parts 2,3, and 5
9. Contract Plans, including General Notes
10. Standard Details and Detail Specifications
11. State Standard Plans as referenced in the Contract Documents

Furthermore, in the case of discrepancy or ambiguity within any Contract Document listed above, the following precedence criteria shall be observed as applicable:

1. Modifications in inverse chronological order (i.e., most recent prevail)
2. Written numbers over figures, unless obviously incorrect
3. Figured dimensions over scaled dimensions
4. Large-scale (detail) Plans over small-scale (general) Plans.

In any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete the Work required by the Contract Documents, then the actual quantities shall take precedence.

Notwithstanding anything to the contrary above, should any provisions or requirement of any Contract Document conflict with another provision or requirement in the Contract Documents on subject matters of hazardous waste abatement, clean up, disposal, or

required safety standard or methods, then the most stringent provision or requirement shall control.

Special Condition No. 39: PROGRESS PAYMENT REQUIREMENT

- a) In addition to the requirement in Section 901.3 of the General Provisions, Application for Payment shall be accompanied by an as-built submittal identifying the work completed as of the date of the Application.
- b) The United States Environmental Protection Agency (EPA) and Regional Water Quality Control Board Consent Decree requires the City to complete an Annual Report for work completed during the fiscal year. Contractor shall submit to the City an Application for Payment for the total amount of work done and acceptable materials furnished and delivered by Contractor on the ground for the period ending on the 30th of June. The Application for Payment shall be submitted no later than 10 days from June 30th.

Special Condition No. 40: FLOW BAYPASS SYSTEM

PART 1 - GENERAL

1.1. Flow Bypass System Requirements

A. Performance Requirements:

- i. It is essential to the operation of the City's sewage system that there be no service interruption for the customers and that the flow of sewage throughout the duration of the Project be done in a manner that does not endanger public health or the environment. Provide, maintain, and operate all temporary facilities such as dams, plugs, flow-through plugs, pumping equipment (both primary and backup units as required), conduits, and all necessary power to intercept the sewage flow before it reaches the point where it would interfere with The Work, carry it past the Work, and return it to the existing sewer downstream of the Work.
- ii. Design, install, and operate temporary flow bypass and pumping systems where required.
- iii. Convey the sewage safely past the Work area. Do not stop or impede the main flows under any circumstances.
- iv. Maintain sewage flow around and within The Work area in a manner that will not cause surcharging of sewers, damage to sewers, and that will protect public and private property from damage and flooding, including the routing of sewage overflow in the event of failure of any bypass system.
- v. Protect water resources, wetlands, and other natural resources.
- vi. Qualified personnel responsible for bypass pumping operations 24 hours per day, 7 days per week, including holidays.

B. Design Requirements:

- i. Provide flow through plugs, pumps of adequate size to handle peak flow, and/or temporary discharge piping, to ensure that the total flow of the various pipelines and service connections can be safely diverted around the sections to be rehabilitated.
- ii. Install a minimum of two pumps where pumping is required, each of which shall be capable of pumping the total contributing flows (100 percent redundancy). All pumps shall be online, isolated by individual valves, and be ready for use within five minutes in the event of an emergency or breakdown of an on-line pump.
- iii. Provide onsite portable lights for emergency use only.
- iv. Provide standby power facilities for emergency use if pumps are equipped with electric motors.
- v. All joints of pipe used shall be restrained.
- vi. Contractor shall provide pipeline plugs as necessary for all shutdowns, temporary bypass operations, or where handling of upstream flows is proposed in lieu of or in addition to bypass pumping.
- vii. Method of work and layout of equipment for bypass system conveyance across streets and intersections shall be included with and approved by the governing encroachment permit for the jurisdiction. Allowed at-grade conveyance scheme shall include adequate traffic control devices and personnel, as per governing encroachment permit. Buried conveyance scheme shall also include adequate traffic control devices and personnel as per governing encroachment permit. All trenching will be restored per governing encroachment permit.

1.2. SUBMITTALS

- A. Detailed plans and descriptions outlining complete flow bypass pumping system for flow rerouting. Bypass system plan shall include an emergency response plan to be followed in the event of a failure of the bypass system, and shall outline in detail the proposed sequencing for all proposed system outages, system startup and switchovers, including time of day and amount of time required, and emergency response details regarding personnel involved and cleanup procedures as applicable. All plans shall be submitted to the Engineer at least 8 weeks prior to required operation of bypass system. Sewer system outages are not permitted.
- B. Where pumping is required, submit complete information on pumping system. Location for temporary pumps, pipe routing, manhole tie in locations, and pumping and flow handling methods shall be submitted with bypass system plan. If flow handling without a bypass system (i.e., plugging upstream pipelines and utilizing a combo truck to capture upstream flows) is proposed, Contractor shall provide sufficient detail in the bypass system plan for the complete operation of the flow handling scheme.
- C. Where standby generators are required, submit complete information on

generation system.

- D. All bypass pumping equipment shall be rated for low noise rate compliance. Decibels of the entire operation shall not exceed 86 dBA at 50 feet for work during normal working hours. If pumping is required outside normal working hours, generators shall be "Whisper Quiet" and rated for low noise rate compliance in residential neighborhoods and per governing jurisdiction. Generators shall not produce noise such that a reasonable person of normal sensitiveness residing in the work area is caused discomfort or annoyance. The Contractor shall submit proposed equipment, inclusive of dBA ratings to the Engineer for approval prior to use.
- E. Provide emergency contact names and phone numbers of Contractor's supervisor and personnel qualified to remediate any disruption in bypass pumping operations.
- F. The Contractor shall provide all necessary means to safely convey the sewage past the work area.
- G. The Contractor shall immediately notify the District should a sanitary sewer overflow (SSO) occur and take all necessary actions to control, to contain, and to clean up and disinfect the spillage to the satisfaction of the District and/or other governmental agency. If sewage is spilled into public or private property, the Contractor shall wash down, clean up, and disinfect the spillage to the satisfaction of the property owner, District, and/or other governmental agency.

1.3. QUALITY ASSURANCE

- A. Contractor to be completely responsible for any overflow or spillage of any material due to failure of any portion of the flow bypass system.
- B. Contractor shall pay all fines or costs associated with such spillages, this condition is in addition to indemnification and insurance provisions defined elsewhere for The Work.
- C. Contractor to be responsible for any cleanup or restoration resulting from such spillages.
- D. Contractor shall demonstrate that flow bypass system performs in conformance with these requirements prior to putting into use. Demonstration shall require Engineer's concurrence for proper operations.
- E. Contractor shall provide flow bypass around the section of pipe designated for rehabilitation. The bypass system shall be made by plugging the line at an existing upstream manhole(s) and pumping the flow into a downstream manhole or adjacent system. The pump and bypass lines shall be of adequate capacity and

size to handle the flow.

1.4. FLOWS

- A. Considerations for project area flow bypass / handling setup are provided below. It is the Contractor's responsibility to review the various considerations for project setup and execution for the preparation of the bypass system plan/submittal.

Bypass pumping system shall be in accordance to the flow data provided in Appendix 10.

1.5. CONTINGENCY

- A. During the startup of and/or switchover from a flow bypass system, Contractor shall have tanker trucks available onsite, as a contingency for collection of flows. Size and number of trucks shall be adequate to contain and dispose of all material in the case of flow bypass system failure. Tanker trucks may be emptied at an approved location. Tanker trucks may also be used as part of the flow handling approach. Use of tanker trucks, and contingency equipment and approach shall be specifically addressed in the Bypass System Plan submittal.

PART 2 - PRODUCTS

2.1. PUMP SYSTEMSPUMPS MAY BE GAS, ELECTRIC, OR DIESEL POWERED.

- A. Pumps may be end suction or submersible.
- B. Bypass piping shall be rubber gasketed, with a minimum pressure rating of 50 psi and no visible leaks under operating conditions. Pipe supports, thrust restraints and valves shall be provided, including an air valve at the high point. Piping shall be sufficiently restrained and supported to prevent movement during pump cycling. Lay flat rubber hose shall not be used.
- C. Temporary fencing, gates, locks and screening shall be provided to protect and screen the equipment from the public, and maintain security for all properties whose security is affected by the bypass flow system. Contractor shall provide the City with keys to all locks.

PART 3 - EXECUTION

3.1. GENERAL

- A. For any flow bypass system equipment located in a street, sidewalk, or other vehicle or pedestrian travel-way that is not allowed to be closed, the equipment shall be:
 - a. Temporarily buried, backfilled, and paved.

- b. Ramps adequate to allow crossing by traffic may be used only during work hours when the Contractor is on the project site. Collapsible conduit shall not be allowed.
- B. At least 1 week prior to bypass work in a particular area, the Contractor shall notify the affected residents in writing of the intended work, the starting date and duration, and any coordination requirements to facilitate work progress. The Contractor shall be required to adequately notify affected residents of schedule changes.
- C. Bypass pumping and flow diversion shall be monitored at all times by a competent person familiar with the pumping equipment and the flow bypass system including pedestrian and vehicle traffic control.
- D. Rehabilitated pipelines may be utilized to convey sewage prior to final acceptance, provided all pipe and structures downstream have been tested, cleaned, inspected, and accepted.
- E. Contractor shall conform to all safety provisions pertaining to confined space entry when entering any confined space including but not limited to pipes, MHs, and tanks.
- F. All bypassing will require coordination with City staff at least 48 hours in advance. System outages are not permitted.
- G. City of Berkeley does not allow sewer blockage or bypassing 36 hours before a forecasted rain event and 36 hours after a rain event.

Special Condition No. 41: CONSTRUCTION PHASING AND COORDINATION

Pre-construction closed circuit television inspection of existing sanitary sewer mains, maintenance holes, and laterals shall be the first order of business.

Work on Oxford Street is only allowed between the end of University of California graduation ceremonies for the 2025 Spring Semester (after May 18, 2025) and the move-in period for the 2025 Fall Semester (August 18, 2025).

https://registrar.berkeley.edu/wp-content/uploads/UCB_AcademicCalendar_2024-25.pdf
https://registrar.berkeley.edu/wp-content/uploads/UCB_AcademicCalendar_2025-26.pdf

All construction work schedules and traffic control plans shall be submitted for review prior to construction and coordinated with the University of California.

The Contractor shall provide CIPP material submittal at least three weeks prior to the planned CIPP installation to allow for City review and to obtain prior approval from EBMUD.

The Contractor shall submit a bypass plan at least three weeks in advance to allow for City review and approval.

Point (spot) repairs including, but not limited to, all root removal shall be completed prior to CIPP installation.

Special Condition No. 42: TREE AND ROOT PROTECTION AND ROOT PRUNING

Care shall be taken when working near trees, public or private. For all phases of the work, the Contractor is responsible for protecting trees and Contractor will replace any trees judged damaged at the sole discretion of the City.

Underground Service Alert (USA) of Northern/Central California and Nevada

- a) The Contractor will contact USA North 811 Call Before You Dig in accordance with all applicable requirements.
- b) The Contractor will notify USA North that there will be root grinding and root removal in addition to the sidewalk removal.
- c) The Contractor will ensure that the utility location marks are offset so that they are placed on a permanent surface that will not be removed. Offset marks locate the utility by showing the orientation of the utility and the distance from the marks to the utility.

Limb and Trunk Protection

This applies when trees are not surrounded by protective fencing. Trees situated in a tree well or sidewalk planting strip shall have the trunk protected by wrapping it with straw tubes (wattle) or vertical wood slats (*ex.* 2x4), up to a minimum of 8 feet from grade. Wooden slats shall be angled to protect the root flare at the base of the tree and bound securely on the outside. Closed cell foam or an equivalent material shall be used to protect the trunk of the tree where it contacts the slats. Lateral branches below 8 feet shall also be protected. Contractor shall keep deleterious materials associated with project construction from contacting any part of the trees, or being placed or stored in the tree well or planting strip.

Root Protection and Preparation for Root Pruning

- a) Existing surface shall be removed in a manner that prevents any machinery, such as a backhoe, Bobcat®, or mini-excavator, from traveling over the exposed root zone.
- b) Contractor shall make every attempt to not scrape, skin, or pull on roots. Hand excavation around roots may be required.
- c) Where roots must be pruned, the area shall be excavated down to the depth required for the improvements prior to the City Representative inspecting the site; and all rock, concrete or other loose material shall be removed.
- d) No roots shall be torn or pulled using any other tools or machinery unless already severed on each end by one of the approved pruning tools.
- e) Exposed roots shall be covered with soil, mulch, or wet burlap if they will be exposed for more than 48 hours without measurable precipitation.

Root Pruning Requirements

- a) All pruning of roots shall be performed using a stump/root cutting machine, saw, axe, or any other sharp blade tool; resulting in a flat surface with the adjacent bark firmly attached.
- b) Roots 2 inches in diameter or greater shall be pruned by the Contractor in accordance with these provisions.
- c) Roots smaller than 2 inches in diameter shall be pruned by the Contractor in accordance with

these provisions, with the exception of contacting the City Representative.

- d) Large roots may be shaved to a depth of no more than one-third of their thickness or as approved by the City.
- e) At no time will any root pruning cut into the root flare as defined by the City Representative.

All debris resulting from root pruning shall be removed by the Contractor.

Herbicide Application and Treatment Requirements

- a) The application of herbicide to the roots shall be done in accordance with the manufacturer's recommendations and specifications in such a manner to preclude damage to surrounding vegetation. Any damaged vegetation so designated by the City Representative shall be replaced by the Contractor at no additional cost to the City. All safety precautions as recommended by the manufacturer shall be adhered to concerning handling and applications of the herbicide. Herbicide shall be handled by only qualified persons if required by law.
- b) The herbicide and the application method shall be submitted in accordance with Part C, Section 4, Subsection 401.12 of the Specifications.

Should tree, root, bush pruning, herbicide treatment, and/or chemical root control be required to construct the improvements shown on the plans, specified in these Special Provisions, and as directed by the Engineer, the Contractor will inform the City Representative of the schedule for when the roots are expected to be exposed. The Contractor shall notify the Engineer at least 3 business days in advance of tree or root pruning. See Appendix 8 for EBMUD chemical root control notification procedures. The City Representative will inspect each site to approve the necessary root pruning, or work with the Engineer to modify the work to accommodate the tree roots. The City Representative will indicate which roots may be pruned and where root pruning is prohibited. Root pruning must adhere to the directions of the City.

Special Condition No. 43: PEDESTRIAN ACCESS DURING CONSTRUCTION PROJECTS

The purpose of the following standards for construction in the public right-of-way is to ensure pedestrian safety and access. The standards apply to City of Berkeley crews, contractors with the City and all other persons working in the public right-of-way. With the unique nature of each project, situations may arise which have not been covered in these standards; each project requires review on a case-by-case basis to ensure that complete, safe, usable and accessible paths of travel are maintained during construction.

All construction activities involving work affecting pedestrian access or safety within the public right-of-way shall comply with the following requirements for disability access during construction:

1. Maintenance of a clear and accessible pedestrian corridor

- a. The pedestrian corridor shall be a nominal width of 6' where feasible and not less than 4' wide at single points of contact. The corridor shall conform to the most recent

Americans with Disabilities Act Accessibility Guidelines (ADAAG) for slope, cross-slope, surface characteristics, and projections from the side, to the maximum extent feasible.

- b. The accessible pedestrian corridor, to the maximum extent feasible, shall coincide with the corridor for the general public and shall connect with facilities throughout and adjacent to the project area.
- c. Equipment, debris, construction materials, or vehicles shall not obstruct the pedestrian corridor, existing ramps, temporary ramps, private entrances, or adjoining walkways. The Contractor shall clean public walkways adjoining the construction site of accumulated trash and debris.
- d. The Contractor or permittee shall not park vehicles in or otherwise obstruct blue curb parking spaces, except as permitted by the City Traffic Engineer as a component of an approved traffic plan.

2. Installation of temporary ramps that conform to accessibility standards

The Contractor or permittee shall maintain temporary concrete, asphalt, or wood ramps to provide a safe path of travel for mobility-impaired pedestrians at all locations where permanent ramps have been temporarily removed during construction and where needed by pedestrians being routed into and out of the parking lane, a crosswalk, or the street area.

- a. Temporary ramps shall be constructed so that their removal will not damage the existing pavement, curb and gutter. After the project, the Contractor shall restore any damaged surfaces to their original condition.
- b. Ramps shall have a minimum 4' wide walking surface and a slope not to exceed 8%. The walking surface of any ramp shall be non-slip during all weather conditions and shall be even and smooth. Curb ramps shall be kept free of debris, staging material, equipment, etc.
- c. Asphalt or concrete ramps shall be constructed to snugly meet the existing adjacent surfaces without gaps. Where drainage may be impaired by an asphalt or concrete ramp, a schedule 40 PVC pipe, minimum 2" in diameter, shall be installed through the ramp.
- d. Wood ramps shall be constructed with ¾" or thicker plywood platform, supported at the curbside with a suitable wood framing, and anchored to the street on the street side with 16d nails. Ramps shall have a smooth transition without vertical or horizontal gaps larger than ¼" between the wood and the concrete curb.

- e. Transitions between temporary ramps and the street surface shall be smooth such that no lip exists at the base of the ramp. For a wood ramp, this may be achieved by installing a minimum of 3" of cutback asphalt tamped evenly and securely in place.
- f. The sides of a ramp shall be protected where there is any drop-off. Protection may consist of barricades or guardrails, or, for asphalt or concrete ramps, flared sides with slope not exceeding 8%. For a short time period and as long as continuous supervision of pedestrians is provided on-site, when approved by the City's Engineer, edge protection at the side of ramps may consist of closely spaced traffic cones.

3. Construction of signposts, barricades and fencing

Impenetrable barricades shall be used to separate pedestrians from hazards. Such barricades shall be installed and maintained on all sides of excavations that may be exposed to pedestrians, particularly pedestrians who are blind. Barricades shall be constructed using materials and methods that are suitable to the site conditions. Signs and fencing material shall not protrude into the clear pathway.

- a. A-frames used for defining a path of travel, not barricading trenches from vehicular travel, shall be placed end-to-end without spacing between adjacent barricades, and they all shall be connected, set up, and maintained to ensure that individual A-frames do not move out of place or separate throughout the duration of the hazardous condition. As an example of an acceptable connection, A-frames may be connected by 2 X 4's that are attached along the base of the barricade system. (This will help a person who is blind negotiate a safe path of travel. Openings between A-frames would give confusing signals to a person who is blind and using a "long cane," "walking cane" or "white cane.")
- b. Caution tape does not provide an adequate barricade and shall not be used by itself to delineate the path of travel. However, it may be used in addition to other protections to highlight danger, and it may be used in conjunction with true barricades, such as A-frames.
- c. Where fencing material, such as chain link or plastic mesh, is used alongside a pedestrian corridor, there shall be a minimum 3" height, solid, uninterrupted toe-board at the bottom of the fence. This baseboard will act as a guide-strip for blind pedestrians using canes. A safe design can be achieved by attaching a solid material, e.g., wood, bender board, sheet metal or other solid rail to the fencing material or supports between 1" and 5" above grade, allowing drainage beneath, if necessary. The material should have a high visual contrast to the street/sidewalk surface. (Walking canes used by blind pedestrians and wheelchair foot pedals could get caught in fencing or A-frames unless there is a solid bottom "shoreline.")
- d. Signposts, scaffolding and fencing supports shall be placed entirely outside the pedestrian path of travel so the path is a minimum 4' wide and 80" high without obstruction. Scaffolding wing nuts, fence-post footings and support braces shall not

protrude into the walkway. Signs shall not protrude into the pathway below 80" height.

- e. The Contractor shall maintain the construction barriers in sound, neat and clean condition during construction. Whenever a barricade erected by the Contractor is removed or breached, the Contractor shall immediately replace the barricade and take appropriate measures to ensure it remains in place. Hazards identified by the Inspector shall be abated within an hour of notification to the crew.

4. Identification of the safe path of travel

If a portion of the public pedestrian way is rerouted due to construction, the path of travel shall be clearly defined. Where the Traffic Engineer determines a pedestrian access corridor cannot be provided or for a brief duration cannot be utilized, notification shall be provided for pedestrians who have mobility or vision impairments.

- a. Paths of travel that do not continue to the next corner or to a safe crosswalk shall be closed to through pedestrian traffic. Signs, a minimum of 36" x 36", containing lettering stating that the sidewalk is closed and directing pedestrians to use the other sidewalk must be posted and maintained at the corners of each block or at the crosswalk affected. Alternatively, flaggers may be posted at each closed corner or at the crosswalks to direct and assist pedestrians.
- b. Pedestrian access corridors necessitated by the closure of the sidewalk shall be clearly delineated with closely-spaced cones or barricades, fences and/or other methods as deemed necessary and as approved by the City's Engineer. When a walkway extends into the roadway, the delineation shall separate pedestrians safely from traffic. A safe design can be achieved by protecting pedestrian traffic with a fence or railing 42" in height on the street side of the walkway.
- c. Curb ramp alignment can help direct blind pedestrians to and through the temporary path of travel. If a crosswalk is closed due to construction then curb ramps leading into that crosswalk also should be barricaded in such a manner that walkways that are not closed remain accessible to use. (Curb ramps are not used solely by persons in wheelchairs. They are also an indicator to persons who are blind that there is a crosswalk and a safe path of travel to cross the street.)

5. Surfacing of pedestrian corridors

During construction, tripping hazards and barriers for people with mobility impairments must be removed to maintain an accessible pedestrian corridor.

- a. Any change of level in a path of travel which exceed ¼" height must be beveled at 45° to provide a smooth, non-tripping transition. No change in level in the path of travel shall exceed ½" unless it is ramped.

- b. Trenches, temporary paving or walking surfaces, wooden platforms or steel plates, grates, utility covers, and conduit or raceways in the pedestrian corridor, shall have a smoothly finished, firm walking surface made even with the surrounding walkways.
- c. The aisle or loading area adjacent to an accessible parking space is part of the pedestrian corridor. To the maximum extent feasible, construction work adjacent to an accessible parking zone shall not block the sidewalk area that serves the blue painted curb.

6. Restoration of pedestrian routes

- a. The Contractor or permittee shall remove temporary ramps as soon as construction of the permanent access ramp is completed and usable.
- b. As construction work is completed, the surface of the pedestrian path of travel shall be restored free from all ridges, gaps, bumps and rough edges.
- c. Construction that affects an existing curb ramp shall include replacement or repair of the curb ramp to meet current City standards to the satisfaction of the City's Engineer.

7. Telephonic Notification to Disability Community When Construction Occurring

The Contractor or Subcontractor shall telephonically notify the East Bay Center for the Blind and the Ed Roberts Campus when there is to be a construction project on Adeline Street, between Russell and Fairview Streets. The telephonic notice should be provided 72 hours in advance and should provide the date, time and purpose of the project, as well as a contact person at the City that can be reached with questions or comments.

East Bay Center for the Blind: 1-510-843-6935

Ed Roberts Campus: 1-510-225-6300

8. Liquidated Damages

The Contractor shall be assessed liquidated damages in the amount stated in the Bidder's Proposal.

Special Condition No. 44: REVOCABLE BID ITEMS

Bid items noted as "revocable items" may be deleted entirely or in part from the Work at the option of the City. The provisions in Section 401.2, "Alterations and Increased or Decreased Quantities," of the Standard Provisions shall not apply to such omission, and no compensation will be allowed the Contractor by reason of such omission.

Special Condition No. 45: MORATORIUM STREETS

A street designated as a “Moratorium Street” restricts saw cutting and trenching for a minimum of five years. If construction operations require saw cutting and trenching on a moratorium street, the pavement repair parameters are specified in the plans. Repairs must include a minimum of a 2 ½-inch cold plane and hot mix asphalt for the area indicated in the contract plans.

Draft BART Permit Conditions: Permit R-04.4-BK2497-CNST (CNST-24-97)

City of Berkeley: Adeline Street, Shattuck Avenue, et al Sewer Rehabilitation Project (City Specification Number 11688-C)

1. Permittee shall submit a Detailed Site-Specific Work Plan (SSWP) for BART's review and written approval prior to any use of the Premises and before commencing with construction of any work related to any part of the permanent improvements. See enclosed sample SSWPs with instructions from the District's Resident Engineer Brendan Dolan at (510-882-4245 (Brendan.dolan@bart.gov). Track allocation shall be scheduled with Mr. Dolan at least 14 calendar days prior to the work, following the approval of the SSWP. A construction schedule shall be submitted to BART before construction.
2. Manhole rehabilitation work shall be limited to applying an inner lining to the existing manhole and shall not include any excavation or chipping at the bottom of the manhole.
3. Coordination of work and inspection with a BART representative is required for spot repairs, as well as for any excavation and trenching near any BART structure. Manhole reconstruction of SS MH 17-010-15 and MH 17-010-05, shown on the plan Sheet 11 and plan Sheet 13 of Bid Addendum 2, requires coordination of work and inspection by a BART representative.
4. Permittee shall have Underground Service Alert and an independent utility locator service mark out the trench locations prior to digging.
5. Permittee shall take extreme care not to damage any BART facilities. Permittee shall immediately notify BART of any damage.
6. Any change in the scope of this permit shall be subject to a separate amendment.
7. Permittee is responsible for obtaining permits from all other local jurisdictions having authority.
8. BART shall not be responsible for any impact to the Permittee's work due to BART operations, acts of God, or the acts of third parties.

Contractor: *[Contractor Name]*
Contract Number: *[XXXX-XXX]*

BAY AREA RAPID TRANSIT

[Contract Name]

CONTRACT # *[XXXX-XXX]*

Company Logo or Name

Date Submitted

SITE SPECIFIC WORK PLAN (SSWP) #*[X.X]*:

ADDENDUM LETTER (IF APPLICABLE)

[Submittal number]

BART Station/Facility Location Designation

and/or Milepost (MP) location of work

Submitted By:

Contractor *[Requester]*

Date

* As applicable

SITE SPECIFIC WORK PLAN # *[X.X]* ADDENDUM LETTER (IF APPLICABLE)
Sanitary Sewer Rehabilitation – Adeline Street, Shattuck Avenue, et al (25-11688-C)

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Addendum 2 – Attachment 1

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Contractor: [Contractor Name]
Contract Number: [XXXX-XXX]

Project: [project name]
Contract No.: [XXXX-XXX]
Contractor: [Contractor Name]
Site Specific Work Plan: # [X.X]
Addendum Letter: [X]

Work Location: [Specify by facility location designation, nearest cross streets and milepost]

Work Hours (Military Time):

- Weekday: Monday thru Friday from XXXX hrs to XXXX hrs
- Saturday: XXXX hrs to XXXX hrs (if applicable)
- Sunday: XXXX hrs to XXXX hrs (if applicable)

I. DESCRIPTION OF WORK

{Define the general scope of work covered in this SSWP}

II. BART SYSTEM IMPACT

a. WILL THE WORK IN THIS SSWP BE LOCATED?

i. IN AN AREA OPEN TO THE PUBLIC?

YES NO

ii. WITHIN THE BART RIGHT-OF-WAY (ROW)?

YES NO

iii. WITHIN SIX FEET FROM THE NEAREST RUNNING RAIL (TRACK ZONE)?

YES NO

iv. IN AN AREA IN CLOSE PROXIMITY TO UTILITIES TIED TO THE SYSTEM?

YES NO

v. IN PROXIMITY TO THE BART ROW WHERE ACTIVITIES MAY POTENTIALLY IMPACT OR ENTER THE BART ROW?

YES NO

b. Other BART Operating Facilities Potentially Affected by this Work

{List facilities and brief description of impact or potential impact}

* As applicable

III. SAFETY

- a. Shift will start with a Safety Meeting for a minimum of 15 minutes, which must include the assigned EIC(s). All Safety Meetings shall include (at a minimum):
 - i. All personnel must attend and discuss the Job Hazard Analysis (JHA) in order to identify all possible dangers or hazards in the work zone or job site.
 - ii. Explanation of emergency evacuation procedures and egress points.
 - iii. If work is in the ROW, or may affect the ROW, personnel must also be advised to be diligent when working in the near vicinity of the third rail and its cover board, to prevent injury, death, damage and delay to revenue service. Personnel shall not step, stand, sit or recline on the third rail cover board. Personnel shall not stand, sit or step on the running rail.
 - iv. BART Employee in Charge (EIC) will conduct a Site Specific Safety Briefing prior to starting any work activity. All individuals that enter the worksite during the shift shall receive a Safety Briefing by the EIC.
 - v. All personnel are required to sign the EIC Safety Briefing Roster.
 - vi. The EIC will notify the crew when it is safe to begin work.
- b. The approved Health and Safety Representative (HSR) or Assistant Health and Safety Representative (AHSR) will be onsite throughout the work shift.
- c. If the BART EIC or District Representative sees any unsafe condition, he/she will stop the work and work will not re-start until the EIC gives the clear signal. Contractor shall assist with restoring safe conditions as required.
- d. All employees will wear required personal protective equipment. Mandatory PPE includes
 - i. BART approved safety vest
 - ii. BART approved hard hats
 - iii. Eye protection
 - iv. Work boots
 - v. Other PPE
- e. BART Operations Rules & Procedures (OR&P)
 - i. Rule 1101: The rules contained in this book apply to all District employees, Contractors and others working on BART property.
- f. Types of Work Clearance (Work Orders) that may be Requested in Work Area (**select only those that apply to this SSWP**):
 - i. **Category A: Non Track Zone Access: Defined as Access to mainline right-of-way where work does not encroach in the Track Zone (within six feet of outside rail on both sides of track).**

* As applicable

Contractor: [Contractor Name]
Contract Number: [XXXX-XXX]

- ii. **Category B: Access to Track Zone:** Defined as Access to the mainline right-of-way where work will encroach in the Track Zone (within six feet of outside rail on both sides of track).
 - iii. **Category C: Access to Yard Tracks:** Defined as authorization to work a designated section of track(s) with specific limits in which protection from train movement has been provided.
 - iv. **Category F: Equipment/Facilities Clearance:** Defined as an authorization to work on remotely controlled and monitored equipment, or work that may affect the operation of trains.
 - v. **Category P: Physical Barrier Clearance:** Defined as authorization to access and work within the Right-of-Way in an area when the Roadway Workers are separated from the Track Zone by a District-approved physical barrier.
 - vi. **Category BL: Blanket Work Area:** Defined as mainline track areas between specified interlocking gates or between interlocking gates and end of line stations where train movement is prohibited on all tracks and access is controlled by a Blanket Area Supervisor.
 - vii. **Advisory Work:** Work conducted in the Operating System that does not require the issuance of formal Work Orders. The control center having jurisdiction must be contacted by phone or radio before advisory work may commence.
- g. Work Area Protection (OR&P Rule 6328)*: All Work Areas shall be restricted to a maximum speed of 27 MPH to include all adjacent tracks not separated by a District approved physical barrier. **Determine whether the work to be conducted is Category A, B or C.** The work area is protected from train movement by one or more of the following (**select only those that apply to this SSWP**):
- i. Route prohibits
 - ii. Forced track occupancies or zero speed codes
 - iii. By operating trains in the area in manual mode and issuing movement instructions, restrictions and holds for train movement or Confirmed Hold
 - iv. Restricted speed
 - v. The insertion of switch machine cranks or flags
 - vi. Notification of reverse running trains shall be provided to Roadway Workers
 - vii. Blue Lights
- h. Type of Electrical Protection Needed (Safe Clearance)*
- i. Roadway Worker Protection
- i. All Roadway Worker Protection rules will be strictly enforced. A Roadway Worker must have completed the BART Roadway Worker Protection Training (40 hours) and must have BART ID badge displaying “orange sticker” to validate that worker has completed training. Employee in Charge (EIC) will be on site at all times and shall lead and conduct job briefing.
 - ii. When escorting non-RWP Trained personnel in the trackway under work orders, one (1) Roadway Worker shall be responsible for a party of not more than five (5) non-RWP Trained individuals. Additional Roadway Workers are required for larger groups with a maximum of five (5) non-RWP Trained individuals per Roadway Worker. The responsible Roadway Worker shall stay with all non-RWP

* As applicable

SITE SPECIFIC WORK PLAN # [X.X] ADDENDUM LETTER (IF APPLICABLE)
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Trained personnel and possess a District-approved working radio at all times. The responsible Roadway Worker(s) shall not cancel the work orders until all personnel are physically clear of the work area. (OR&P Rule 6335).

- iii. A minimum of one Watchperson will be required for each work area within the Track Zone. Additional Watchpersons will be necessary if one Watchperson is unable to provide effective warning in compliance with the 15-second rule for all personnel. All Watchpersons shall have a District-supplied working radio in their possession. The Watchperson shall not transmit on the radio except when acknowledging an EIC's instruction or during an emergency. The Contractor shall provide Watchpersons as required by this specification and by SSWP requirements. Watchpersons must remain in place at all times when personnel are in the Track Zone and shall not leave the area unless directed by the EIC. A Watchperson may not perform or assist in any other work aside from the Watchperson duty, and remains Clear of Track of all active track(s).
- iv. Red and Blue Lights shall be placed at work site according to OR&P Section V, Subsection 5700, Rule 5701 & 5702.
- v. {Contractor shall specify the number of Watchpersons that will be assigned to each shift, including their approximate location and the area where red and blue lights will be placed to protect the work area}.

IV. REQUESTED BART SUPPORT (examples)

Request for Maintenance #: [X]
Request for Engineering #: [X]
Work Order #: [X]

- a. Employee-in-Charge (EIC): required for work in the BART Operating Envelope or SSI Locations.
- b. Certified Track Inspector
- c. Electricians, Communications, Grounds, Facilities etc.
- d. Test trains (4 cars minimum)
- e. District Equipment

V. WORK DETAILS

- a. **Governing Codes and References**
 - i. [BFS x.x]
 - ii. [other associated with this work]
- b. **Work Scope** {Define the scope of Work, schedule, cut-in requirements including requirements to restore or return facility and/or appliance to revenue service and any modifications to the Operating System between the start and finish of such work. Provide a step-by-step procedure on how the work is to be accomplished. This should be detailed enough to allow a non-engineer individual to understand the work that is being done. Include a general description of all activities necessary to perform any work within, or in close proximity to the Operating Envelope, or interfacing with remotely controlled or monitored systems. Detailed (structural, electrical, mechanical, etc.) calculations are not required – they should be approved

* As applicable

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beforehand and noted in the SSWP that they were reviewed and approved by the appropriate engineer.}

- c. Work Schedule Breakdown** *{Provide times associated with the steps, as appropriate. Depending on the complexity of the Work, the work schedule may be required to be broken down into 15-minute increments through the period covered by the SSWP. Indicate critical decision points milestones where the work must be completed or points of no-return. Indicate which steps are to be conducted during non-revenue hours. Indicate if an “Electrical Safe Clearance” is required. Indicate if and when train service will be affected.}*
- d. Equipment and Manpower** *{List the equipment and man power associated with completing the work described, (e.g. back hoes, cranes, drills, Operators, Carpenters)}*

VI. SECURITY/CONTINGENCY PLANS

- Should any unauthorized person enter the site, they will be escorted out of the site and the BART Representative and BART Police notified.
- Upon request by proper authority the Operations Control Center (OCC), BART Police Department, and/or the BART Safety Department, etc. the Contractor will stop work immediately. The Contractor will return the site to a safe condition expeditiously and vacate the area as quickly and as safely as possible, lending all reasonable support to the restoration of revenue service if so requested.
- The Contractor will immediately notify the BART Representative of any fires or other emergencies, who will then notify BART OCC. If the BART Representative is incapacitated, the HSR will notify BART OCC and 911 or BART Police. The work will be stopped and work area will be secured from any unauthorized individuals until emergency services arrive.
- These procedures may be amended, with concurrence from the Resident Engineer who will notify Operations Liaisons and the assigned BART Engineer, as needed to further the work and additionally safety requirements may be considered and implemented. The goal is to complete the work while ensuring the safety of BART patrons and employees and the integrity of the BART System.
- If patrons or pedestrians ask any questions, they will be referred to BART Community Relations. *{Contractor}* will not have any unauthorized communication with residents or patrons.

{Contractor to identify what could go wrong. Identify all likely hazards. What actions will be taken in the rare, extreme and or unlikely event something does go wrong. What outside assistance might be necessary? Will this assistance be available if this situation occurs in the middle of the night?}

Examples include –

* As applicable

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- *Should a Contractor notice any damage to the third-rail cover board, immediately notify the EIC who will inform the proper authorities.*
- *Contractor working in the Train Control Room noticing an unusual condition (e.g.: water, excessive heat, objects, etc.) shall immediately notify the EIC, who will notify OCC.*
- *Ensure that any items, including barriers, that have a potential to accidentally foul the trackway are secured prior to leaving the Jobsite each day. Should any items foul the trackway during the work shift, Contractor shall immediately notify the BART Representative.*
- *Man-Lift could tip over into the BART security fence. Solution – Before booming up to assist the crane with the column form, have machine pointed as shown on the drawings to prevent entering the BART security fence.*

* As applicable

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VII. OWNER AND GENERAL CONTRACTOR INFORMATION

[OFFICE, 24-HOUR CONTACT, RESPONSE TIME]

Contractor:
Project Manager: 510-XXX-XXXX
Project Superintendent: 510-XXX-XXXX
Health and Safety Representative: 510-XXX-XXXX

BART:
Project Manager:
Resident Engineer:
Operations Liaisons: 510-464-4945
Operations Control Center 510-834-1297
BART Police 510-464-7000
BART Police Watch Commander 510-464-7020
BART Project Duty Officer 510-910-5164

EMERGENCY SERVICES

BART Police	24-HR Emergency 510.464.7000
California Highway Patrol	24-Hr Emergency 911
<i>[Local] Police</i>	Non-Emergency XXX.XXX.XXXX
<i>[Local] Police</i>	Emergency XXX.XXX.XXXX
<i>[Local] Fire Department</i>	24-HR Emergency XXX.XXX.XXXX or 911
Medical Clinic – <i>[Site Specific]:</i>	XXX.XXX.XXXX
Medical Hospital – <i>[Site Specific]:</i>	XXX.XXX.XXXX
BART Operations Control Center (OCC)	510.834.1297

* As applicable

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VIII. DRAWINGS/ATTACHMENTS/CUT-SHEETS/PHOTOGRAPHS

[Emergency Flow Chart, pertinent drawings, attachments, cut-sheets and/or photographs that more fully explain the work that is to be accomplished or equipment that will be used. Drawings, attachments etc. should be referenced in document via number and/or page.]

IX. RETURN TO SERVICE PROTOCOL*

Fixed objects installed or altered within the Track Zone must be confirmed to be clear of the Dynamic Envelope and not in a proximity that they could be struck by a moving train or on-rail equipment and or a threat to life/safety. The following Protocol is to be implemented to ensure clearance of the Dynamic Envelope when a fixed object is installed or modified.

1. The Resident Engineer (RE), BART Engineer or BART Project Manager will be immediately on site and available to supervise the Contractor for all installations of, or alterations to fixed objects within the Track Zone. The RE will remain on site immediately available until all inspections and or clearance checks are reported complete and there is no detected or suspected threat to automatic train operations (ATO) and the integrity of revenue service is protected. In the rare, extreme or unlikely event there is a detected or suspected threat to automatic train operations and or the integrity of revenue service, the fixed and or altered item must be immediately removed or restored to its original condition, and the clearance protocol must be implemented.
2. The contractor will take measurements and confirm clearance of the Dynamic Envelope.
3. The RE will observe, duplicate and confirm the contractor's measurements and clearance of the "Dynamic Envelope."
4. The RE will implement the use of the BART Principal Track Engineer certified template to confirm the installed or altered fixed object is clear of the Dynamic Envelope.
5. The RE will call the Operations Control Center (OCC) and advise the Central Manager that a fixed object has been installed or altered, measurements have been taken and the area is clear and available for Automatic Train Operations (ATO). This does not release the RE or the Project from the responsibility of remaining on site, immediately available, until clearance has been validated and the Project is released by the OCC.
6. The EIC is to call the OCC and advise the Central Manager of the installation and or alteration of a fixed object and its exact location and request a train inspection to validate clearance of the Dynamic Envelope
7. The EIC, RE, Contractor, and Project Inspector are to remain on site immediately available until clearance is validated by train inspection and all are released by the OCC.

* As applicable

Contractor: [Contractor Name]
Contract Number: [XXXX-XXX]

RETURN TO SERVICE CHECKLIST

(This form is to be completed for any type of work that may impact or cause intrusion in the Track Zone.)

At completion of work or portion of work identified within this SSWP, and prior to releasing the work area, the following list of activities and inspection points shall be performed by the Employee in Charge (EIC) to ensure a safe state of readiness for revenue operations. Enter time inspection activity is performed. Any planned or unplanned physical alteration to the existing infrastructure or variation to design shall be documented. The completed checklist shall be signed by the EIC that performed the inspection and forwarded to the Operations Control Center (Fax: 510-464-6751), at the earliest opportunity, before the end of the work shift.

Contract No. & Project Description: _____

Person in Charge & Contact No: _____

(As indicated on approved Track Allocation Request form)

SSWP/IOP No.: _____

Inspection Date: _____

Inspected by (Print Name and Emp. ID No.): _____ **Title:** _____

Verification and/or activity:

Time:

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1. Wayside/platform installation(s) secure from movement. | _____ |
| 2. Wayside/platform installation(s) clearance verified. | _____ |
| 3. Pre-inspection for restoration of Work Area for revenue service. | _____ |
| 4. Tools/materials removed from Work Area or properly secured. | _____ |
| 5. Final inspection of Work Area for return to service. | _____ |
| 6. Release Safe Clearance/Prohibit tags. | _____ |
| 7. All personnel clear of track. | _____ |
| 8. All access doors/gates secured. | _____ |
| 9. Release Work Area to proper jurisdiction. | _____ |
| 10. Contact OCC for Clearance Verification/Track Inspection (first train). | _____ |
| 11. All personnel released by OCC. | _____ |
| 12. Briefly describe any planned or unplanned physical alteration to infrastructure, work variations and/or any contingency plans implemented (use additional sheets as needed): | |

* As applicable

SITE SPECIFIC WORK PLAN # [X.X] ADDENDUM LETTER (IF APPLICABLE)
Sanitary Sewer Rehabilitation – Adeline Street, Shattuck Avenue, et al (25-11688-C)

APPENDIX 6

Addendum 2 – Attachment 1

Page 11 of 12

Contractor: *[Contractor Name]*
Contract Number: *[XXXX-XXX]*

Signature: _____

Date: _____

* As applicable

SITE SPECIFIC WORK PLAN # *[X.X]* ADDENDUM LETTER (IF APPLICABLE)
Sanitary Sewer Rehabilitation – Adeline Street, Shattuck Avenue, et al (25-11688-C)

APPENDIX 6

Addendum 2 – Attachment 1

Page 12 of 12

EXHIBIT "C"

Permit No. R-04.4-BK2497-CNST (CNST-24-97)

Permittee: City of Berkeley

Description of Work: Sanitary sewer rehabilitation (sewer main and manhole). The method for sewer rehabilitation will be pipe splitting or open trench at the discretion of the contractor and trenchless CIPP liner. In addition, the pavement and striping affected by the proposed sewer rehabilitation will be restored.

Location: Shattuck Ave and University Ave, northeast corner; Shattuck Ave between Center St and Allston Way, east side; Shattuck Ave/Adeline St between Derby St and Emerson St, east side; and Adeline St between Woolsey St and Fairview St, west side in Berkeley, CA.

INSURANCE

At all times during the life of this Permit, or as may further be required by this Permit, Permittee at its own cost and expense, shall provide the insurance specified as follows:

1. Evidence Required

At or before execution of this Permit, Permittee shall provide District with a certificate of insurance executed by an authorized representative of the insurer(s) evidencing that Permittee's insurance complies with this Exhibit, including a copy of all required endorsements. Permit number R-04.4-BK2497-CNST (CNST-24-97) shall be included in the space provided on the standard Certificate of Insurance form provided.

The Certificate Holder should be addressed to the following:

San Francisco Bay Area Rapid Transit District
Risk Management and Insurance - BHQ09
P.O. Box 12688
Oakland, California 94604-2688

2. Notice of Cancellation, Renewal, Reduction or Material Change in Coverage.

All policies shall be endorsed to provide District with thirty (30) days prior written notice of any cancellation, reduction or material change in coverage. Notices shall be sent to the Director of Risk Management & Insurance, San Francisco Bay Area Rapid Transit District, P. O. Box 12688, Oakland, California 94604-2688. If requested, the Permittee shall annually submit to the Risk Management and Insurance Department, certifications confirming that the insurance required has been renewed and continues in place.

3. Qualifying Insurers

All policies shall be issued by Insurers authorized to write business in California which hold a current policy holders alphabetic and financial size category rating of not less than A:VIII according to Best's Insurance Reports.

4. Insurance Required

A. Commercial General Liability Insurance for bodily injury (including death) and property damage which provides limits of not less than Five Million Dollars (\$5,000,000) per occurrence and Five Million Dollars (\$5,000,000) annual aggregate as applicable.

- 1) Coverage shall include:
 - a) Premises and Operations;
 - b) Products/Completed Operations;
 - c) Broad Form Property Damage;
 - d) Blanket contractual liability coverage;
 - e) Personal Injury liability; and
 - f) Cross-Liability and Severability of Interests.
 - g) Independent Contractors Liability; and
 - h) Explosion, Collapse and Underground (XCU) *
- 2) Such insurance shall include the following endorsements:
 - a) Inclusion of District, its directors, officers, representatives, agents and employees as additional insured as respects to Permittee's ongoing and completed operations in connection with this Permit;
 - b) Stipulation that the insurance is primary insurance and that no insurance or self-insurance of District will be called upon to contribute to a loss.
 - c) Waiver of Subrogation Endorsement in favor of the District, its directors, officers, representatives, agents and employees.
- 3) For all applications involving construction or demolition work within 50 feet, vertically or horizontally, of the BART trackway and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, the General Liability Insurance must not exclude coverage therein.

B. Automobile Liability for bodily injury (including death) and property damage which provides a coverage limit of at least One Million Dollars (\$1,000,000) combined single limit per occurrence applicable for all owned, non-owned and hired vehicles.

- 1) Coverage shall be endorsed to include the following:
 - a) Inclusion of the District, its directors, officers, representatives, agents and employees as additional insureds as respects services or operations in connection with this Agreement.

- C. Statutory Workers' Compensation and Employer's Liability Insurance for not less than One Million Dollars (\$1,000,000) per accident applicable to Employer's Liability coverage for all employees engaged in services or operations under this Permit. The policy shall include broad form all-states/other states coverage. Coverage shall be specifically endorsed to include the insurer's waiver of subrogation in favor of the District, its directors, officers, representatives, agents and employees. Should any such work be subcontracted, Permittee shall require each subcontractor of any tier to similarly comply with this Exhibit, all in strict compliance with federal and state law.

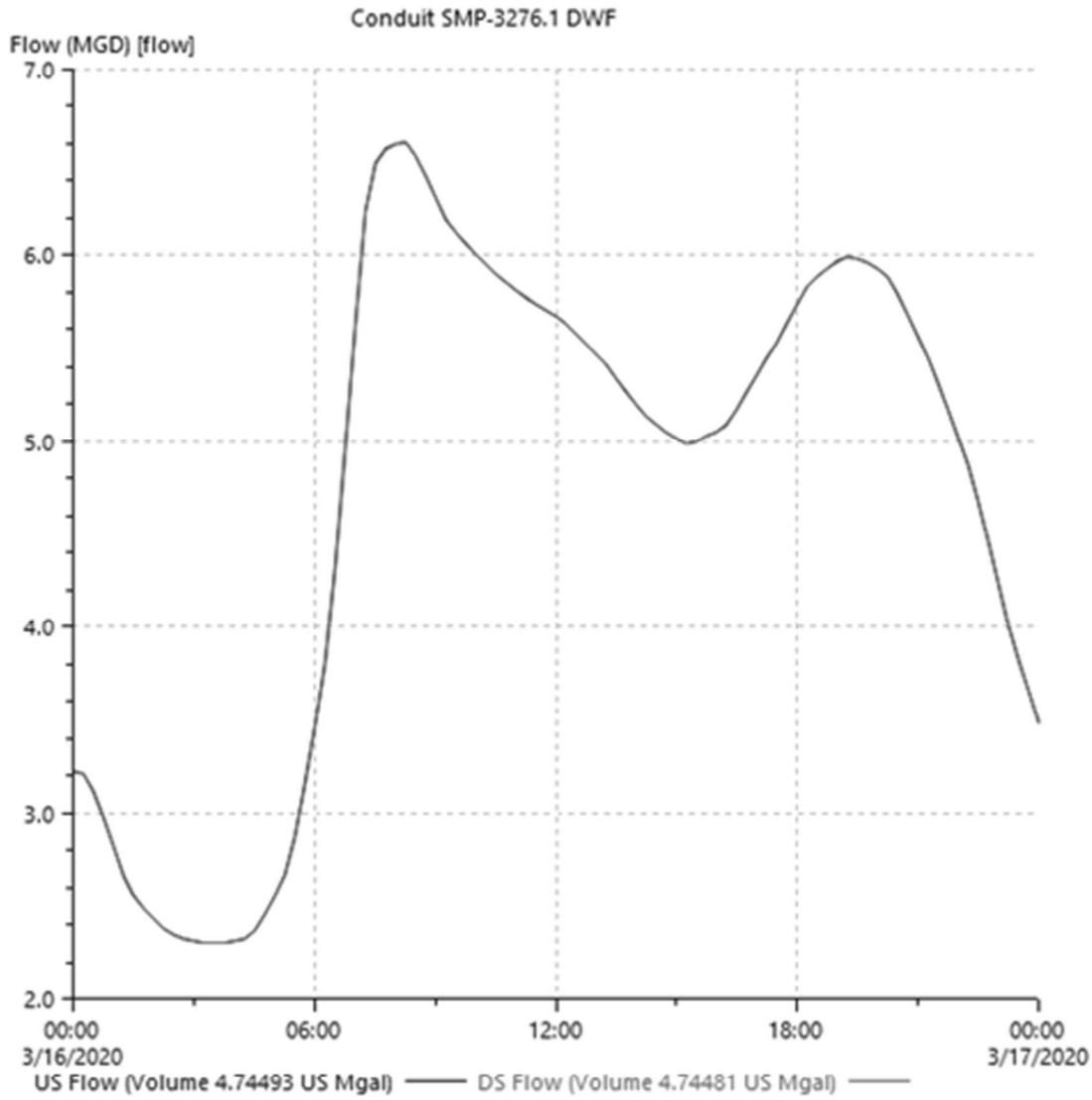
- D. Railroad Protective Liability for bodily injury (including death), property damage, and physical damage, including loss of use thereof, to railroad property with limits of not less than Two Million Dollars (\$2,000,000) per occurrence and Six Million Dollars (\$6,000,000) in the aggregate annually applicable to all operations of Permittee and its contractors or subcontractor(s) within 50 feet vertically or horizontally of BART's trackway. BART shall have the right to approve of the policy wording. The named insured shall be San Francisco Bay Area Rapid Transit District. Prior to commencing work or entering BART property, Permittee or its contractor shall file the original copy of the policy with BART's Department Manager, Insurance. This coverage shall be maintained for the term of this Agreement (Permit).

- E. Contractors Pollution Liability (CPL) Insurance for bodily injury (including death), property damage and remediation which provides limits of not less than Two Million Dollars (\$2,000,000) per occurrence. Such insurance shall cover liability arising from the actual or alleged release, discharge, escape, dispersal or emission of hazardous waste and/or pollutants (including lead and asbestos), whether gradual or sudden, and include coverage for the costs and expenses associated with voluntary clean-up, testing, monitoring and treatment of pollutants in compliance with governmental mandate or requests.

5. Special Provisions

- A. The foregoing requirements as to the types and limits of insurance coverage to be maintained by Permittee, and any approval of said insurance by District is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Permittee pursuant to this Permit, including but not limited to the provisions concerning indemnification.
- B. The District acknowledges that some insurance requirements contained in this Exhibit may be fulfilled by a funded self-insurance program of the Permittee. However, this shall not in any way limit liabilities assumed by the Permittee under this Permit. Any self-insurance program must be approved by the District.
- C. Should any of the work be contracted, Permittee shall require each of its contractors or subcontractors of any tier to provide the aforementioned coverage or Permittee may insure Contractor or Subcontractor(s) under its own policies.
- D. District reserves the right to terminate or suspend the Permit in the event of non-compliance with the insurance requirements of this Exhibit. In no event shall any suspension entitle Permittee to an extension of the term of the Permit specified in this Exhibit.

* (Note: XCU coverage (Section 4.A.1.h); Transport of hazardous material or hazard-containing material (Section 4.B.1.2); and Pollution Liability Insurance are only required when applicable (excavation, borings, etc.). Coverage limits may be increased, at the discretion of the District's Risk Manager, relative to risk involved).



All data to be certified and checked. Data specific to information collected and shown in graph on 2020-016-2020 located at Adeline Street near Ashby Avenue.

CONTRACTOR SHALL VERIFY FLOW

APPENDIX 11 (Addendum 2 - Attachment 1)

RECORDING REQUESTED BY:

4

And

WHEN RECORDED MAIL TO:

Public Works Dept.
Engineering Division
1947 Center Street, 4th Floor
Berkeley, CA 94704



2013299202

09/05/2013 10:17 AM

OFFICIAL RECORDS OF ALAMEDA COUNTY
PATRICK O'CONNELL
RECORDING FEE: 45.00



11 PGS

B52
11
PM

THIS SPACE FOR RECORDER'S USE ONLY

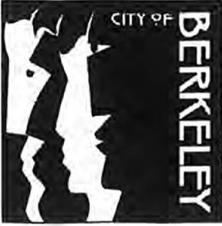
MINOR ENCROACHMENT PERMIT 13-11

TITLE OF DOCUMENT

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION

(Govt. Code 27361.6)

(Additional recording fee applies)



Public Works Department
Engineering Division

MINOR ENCROACHMENT PERMIT 13-11

The University of California (“Permittee”), owner of real property located at 2150 Addison Street, is hereby granted permission by the City of Berkeley (“City”) pursuant to Berkeley Municipal Code Chapter 16.18 to encroach upon the public right of way for the purpose of installing ninety six (96) subterranean tiebacks and sixty (60) steel soldier beams with concrete caissons under the public right-of-ways of Addison Street, Oxford Street and Center Street, per attached plans. Once construction is completed the tiebacks and soldier beams with concrete caissons will be abandoned in place. This permit shall take effect when all conditions set forth herein and in Berkeley Municipal Code, Chapter 16.18, are complied with.

1. Permittee shall pay the encroachment permit final fee of \$1228, said permit constituting Permittee’s acceptance of the conditions stated herein.
2. Permittee shall also pay a mitigation fee of \$148,575 for the tiebacks and soldier beams with caissons under the public right-of-way. Said fee is to be used to offset anticipated future expenses incurred during excavation by the City for existing or new sanitary and storm drain lines, utility lines, soil borings, and for record keeping purposes necessary to locate said tiebacks and soldier beams with caissons.
3. No other structure of any kind shall be built upon the right-of-way.
4. Permittee shall maintain the encroachment in a good and safe condition to the satisfaction of the Public Works Director and all expenses relating thereto shall be borne by the Permittee.
5. Permittee shall remain owner of the encroachment for which this Encroachment Permit is granted as long as Permittee owns the real property.
6. In the event that the property is sold or transferred, the new owner shall take over the responsibility for meeting all the conditions listed in this Encroachment Permit and Berkeley Municipal Code, Chapter 16.18.
7. Permittee shall be held responsible for any and all losses, accidents, negligence, injuries, or damage to the persons or property that may be the result of the issuance of this permit and for which the City of Berkeley is or may be held liable. Permittee shall protect and indemnify the City of Berkeley and save it harmless in every way from all liability, claims, suits, or actions for injury or death of persons or damage of the Permittee’s installation, operation, maintenance, or removal of the encroachment, or the failure of Permittee to comply with any of the terms and conditions of this permit.

APPENDIX 11 (Addendum 2 - Attachment 1)

Minor Encroachment for 2150 Addison Street (Berkeley Art Museum / Pacific Film Archives)

8. Permittee shall obey and enforce all safety orders, rules, regulations, and recommendations of the Department of Industrial Relations of the State of California (CAL-OSHA), applicable to work, and shall comply with all other applicable laws, ordinances, codes, and regulations.
9. Permittee shall not store, use, transport, or dispose of any hazardous or toxic materials on property for which this Encroachment Permit is issued. Permittee shall be held liable for any cleanup costs associated with any such materials.
10. Tiebacks and soldier beams with concrete caissons shall be installed at the locations and depths as shown on the attached plans.
11. After shoring is no longer needed, the Contractor shall remove the top of steel soldier beams and concrete caissons to a minimum depth of 3' below finish grade.

Approved:

City of Berkeley



Jeffrey L. Egeberg, Manager of Engineering
Jeffrey L. Egeberg.
AKA Jeffrey Egeberg

8/7/13
Date

Attachments:

1. Notary Statement
2. Site Plan
3. Shoring Wall 'E' - East Wall of PFA
4. Shoring Wall 'N' - North Wall of PFA
5. Shoring Wall 'S' - South Wall of Press Building
6. East Elevation Admin. Building
7. Soldier Beam Schedule
8. Tie-back Schedule

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

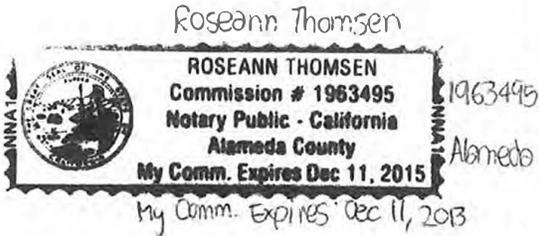
State of California

County of Alameda

On 8/7/13 before me, Roseann Thomsen, Notary Public

personally appeared Jeffrey Egeberg

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Roseann Thomsen

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Minor Encroachment Permit 13-11

Document Date: 8/7/13 Number of Pages:

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer(s)

Signer's Name:

Corporate Officer - Title(s):

- Individual
Partner - Limited General
Attorney in Fact
Trustee
Guardian or Conservator
Other:

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing:

Signer's Name:

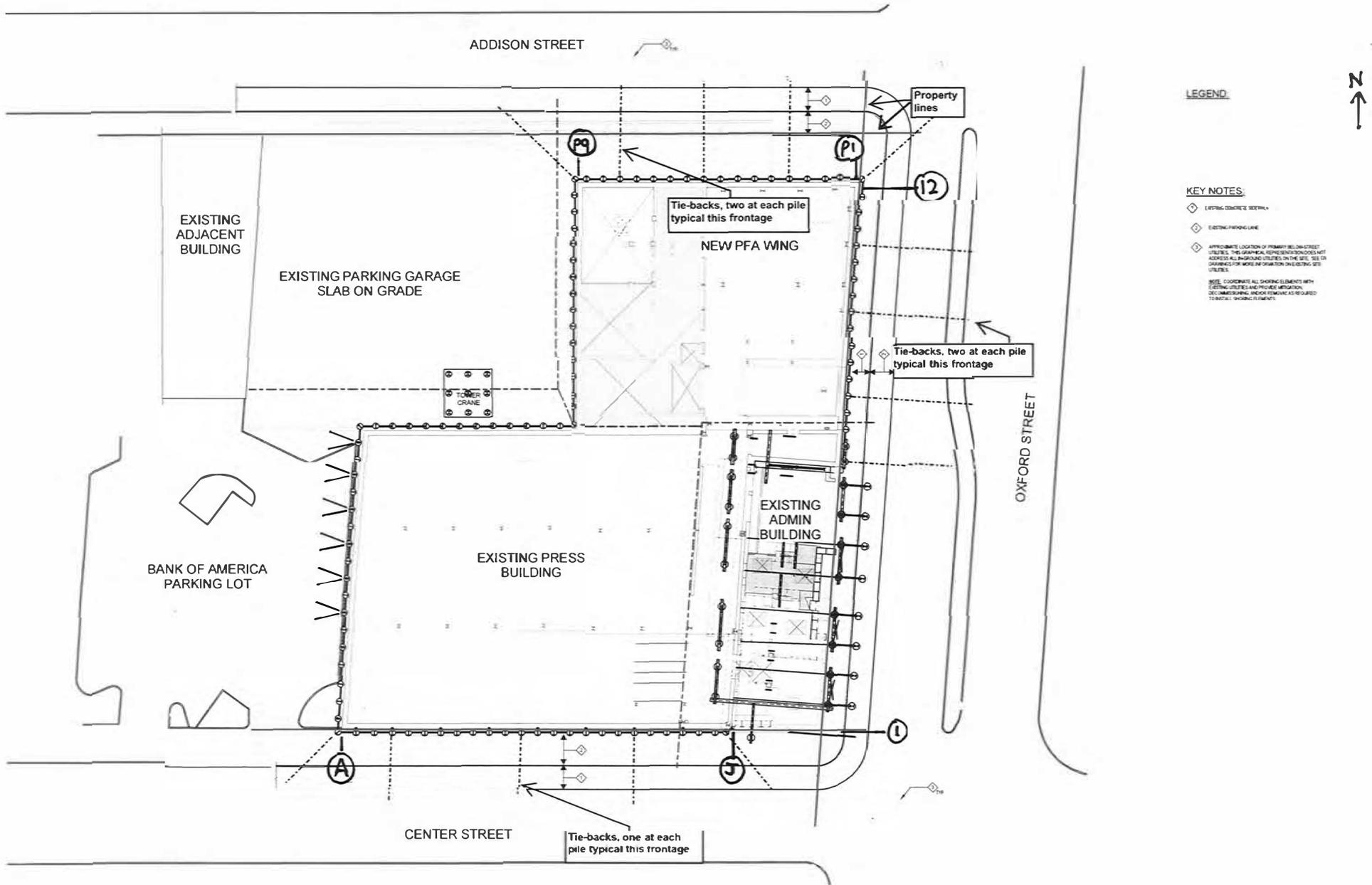
Corporate Officer - Title(s):

- Individual
Partner - Limited General
Attorney in Fact
Trustee
Guardian or Conservator
Other:

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

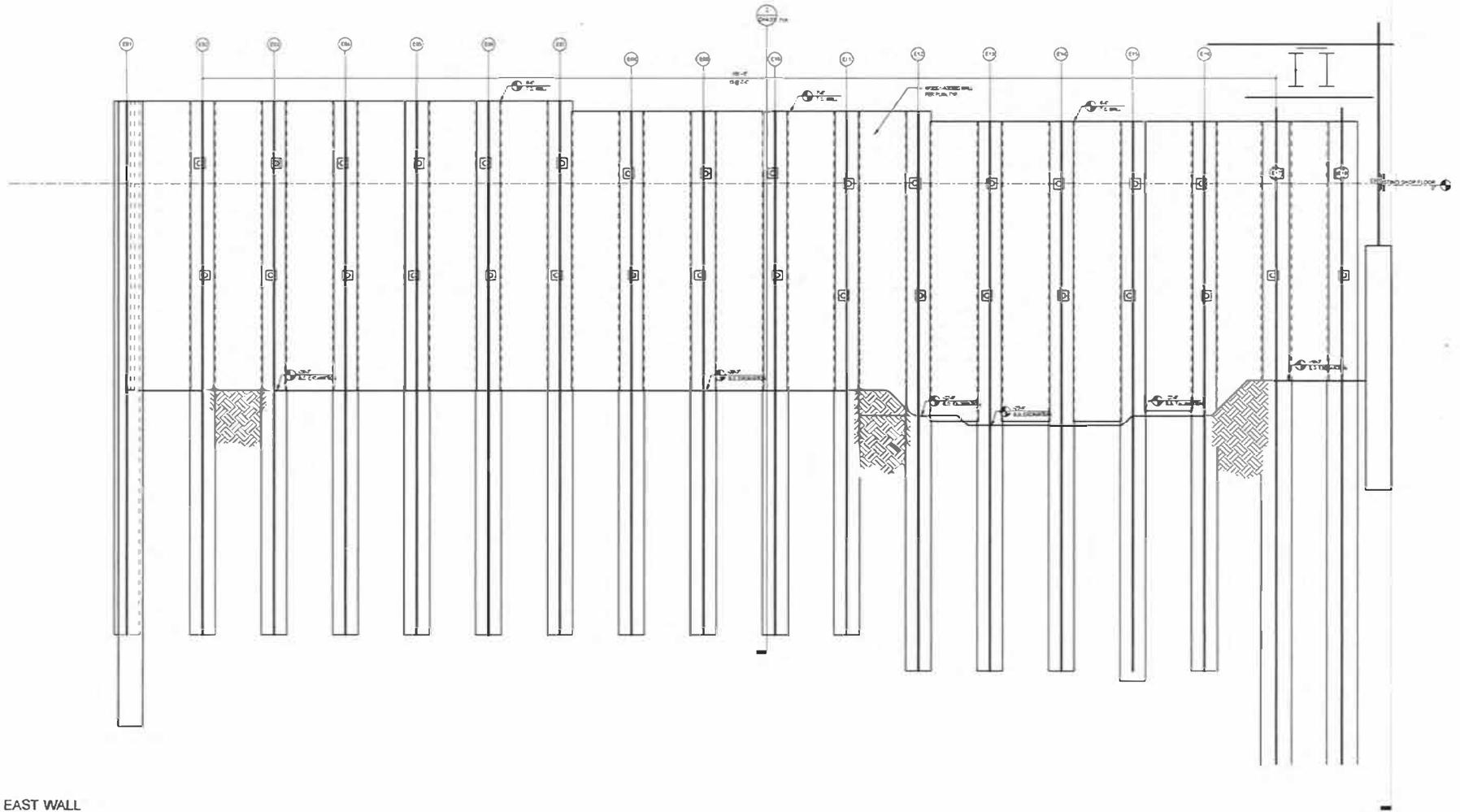
Signer Is Representing:

APPENDIX 11 (Addendum 2 - Attachment 1)



* Original map can be viewed at City of Berkeley
 1947 Center St. Berkeley, CA 94704
 Page 5 of 26

APPENDIX 11 (Addendum 2 - Attachment 1)

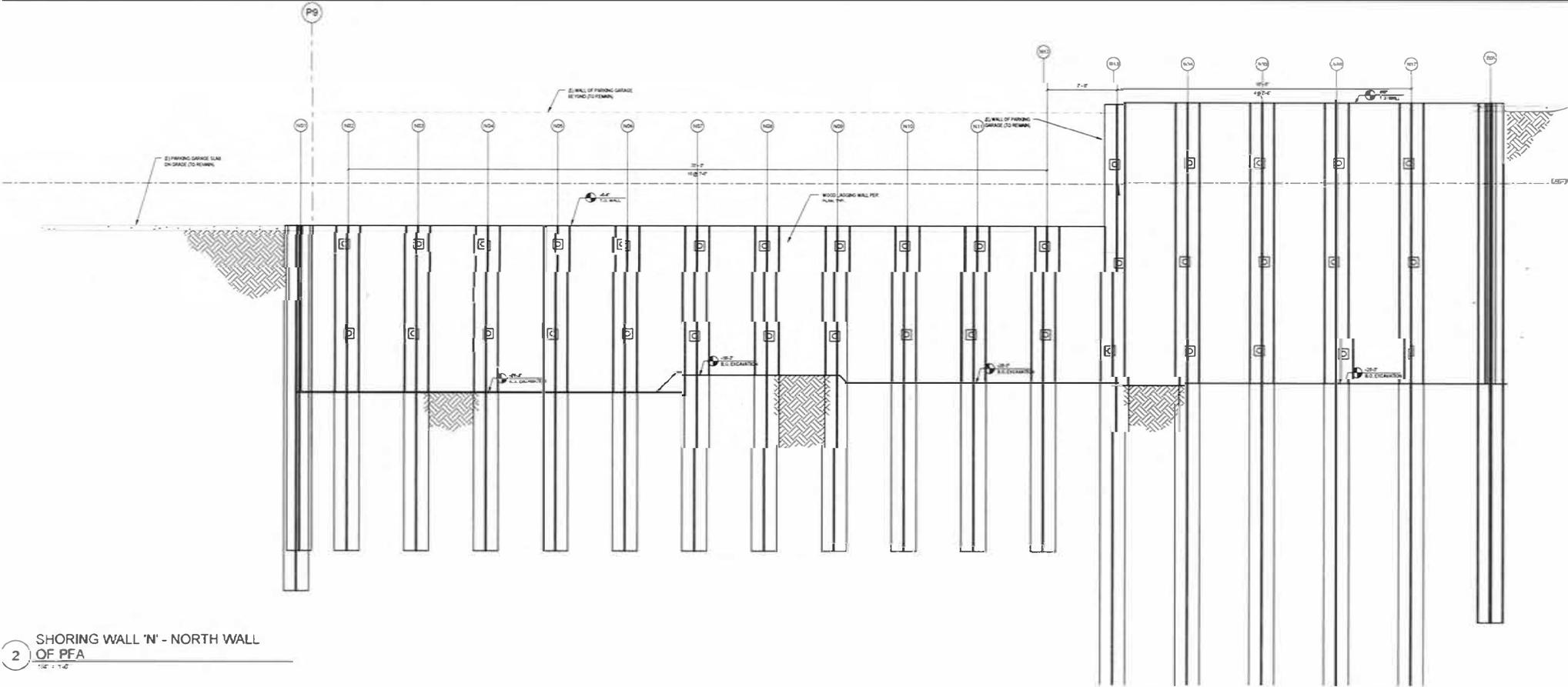


1 SHORING WALL 'E' - EAST WALL
OF PFA

SH 3.02

* Original map can be viewed at City of Berkeley
1227 Center St. Berkeley, CA 94704

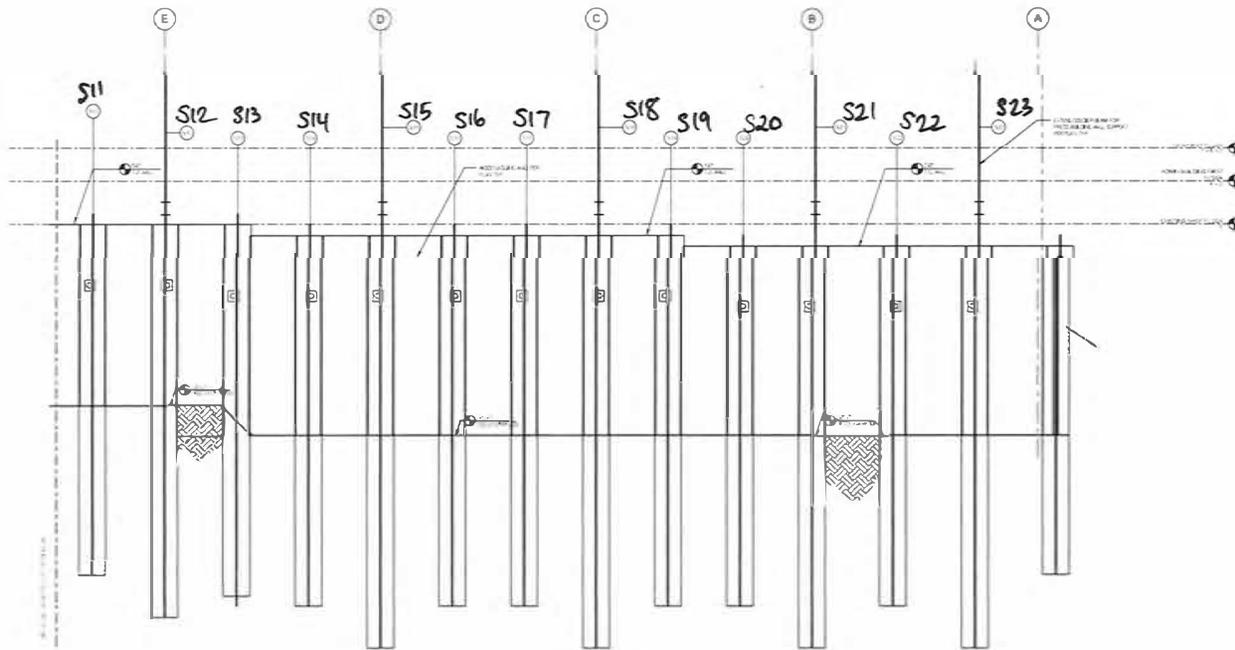
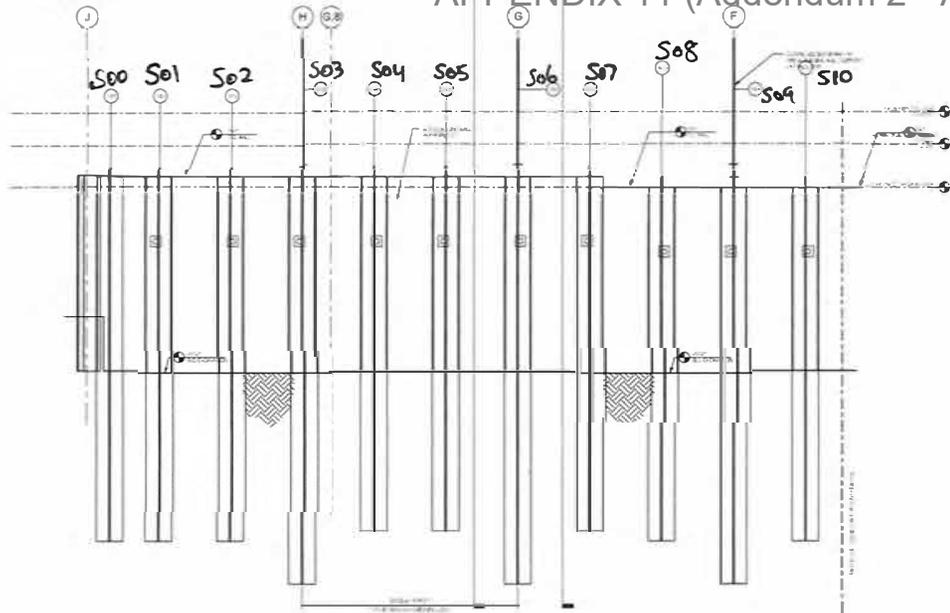
APPENDIX 11 (Addendum 2 - Attachment 1)



2 SHORING WALL 'N' - NORTH WALL OF PFA
1/8" = 1'-0"

503.01

APPENDIX 11 (Addendum 2 - Attachment 1)



1 SHORING WALL 'S' - SOUTH WALL OF PRESS BUILDING

SH 3.11

BAMPFA
 University of California
 Berkeley

UNIVERSITY OF CALIFORNIA, BERKELEY

DS+R

1801 Wood Street, Suite 101
 Berkeley, CA 94702
 Tel: 415.863.7870
 Fax: 415.863.7871

EHDD

1000 Van Ness
 San Francisco, CA 94109
 Tel: 415.774.3100
 Fax: 415.774.3100

Decenkolb

1000 Van Ness
 San Francisco, CA 94109
 Tel: 415.774.3100
 Fax: 415.774.3100



NOT FOR CONSTRUCTION

BAMPFA SHORING AND CONSTRUCTION MEANS & METHODS

ISSUE FOR BID
 4/16/2013

DATE	DESCRIPTION

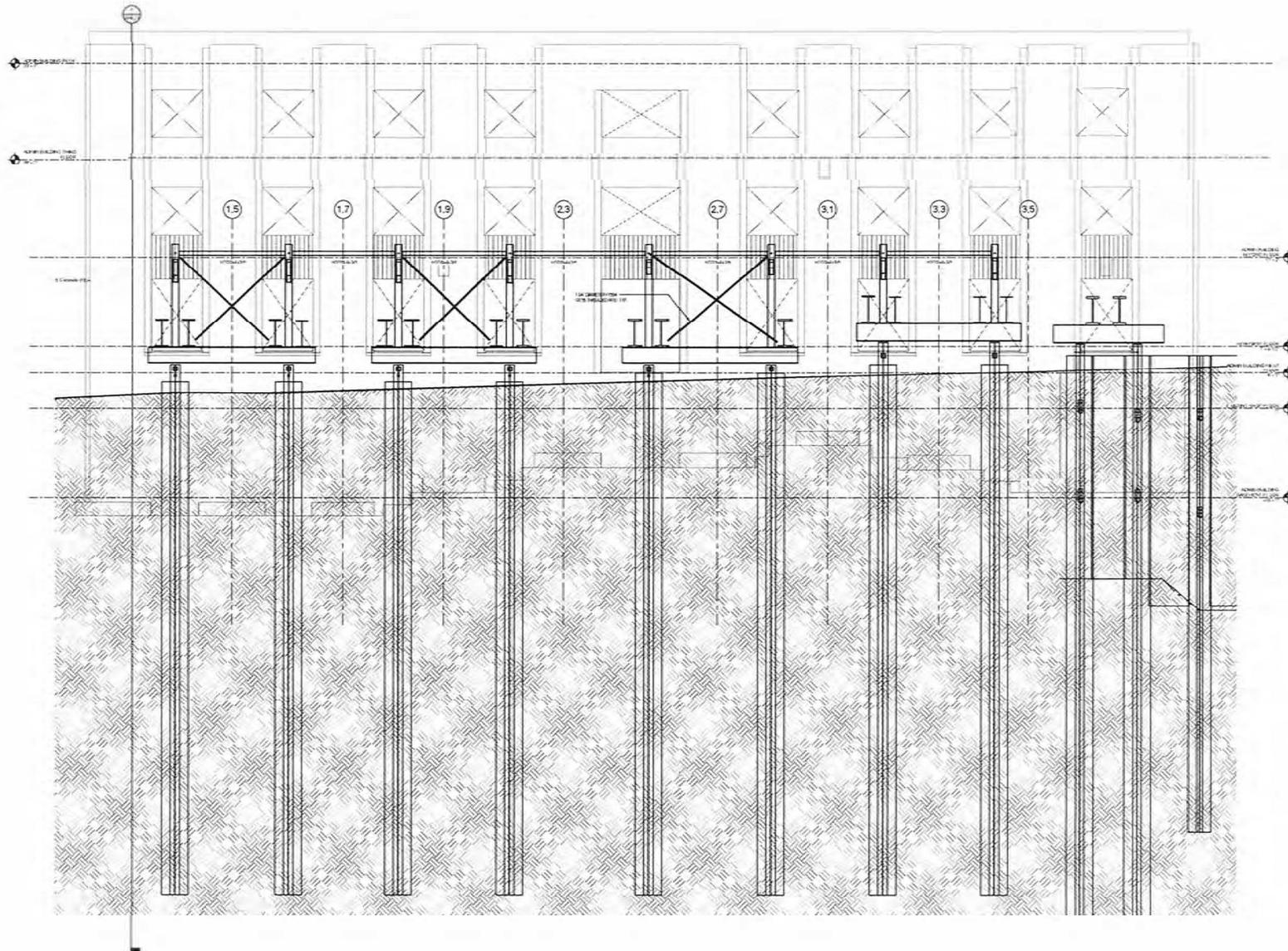
DATE	DESCRIPTION

DATE	DESCRIPTION

ELEVATIONS - PRESS BUILDING

SH3.11

APPENDIX 11 (Addendum 2 - Attachment 1)



1 EAST ELEVATION ADMIN BUILDING

Original map can be viewed at City of Berkeley

BAM/PFA
Secretary of Planning &
Public Works

UNIVERSITY OF
CALIFORNIA,
BERKELEY

DS+R

Structural Engineering LLC
485 Piedmont Blvd., Suite 1171
Berkeley, CA 94704
Tel: 415.848.7800
Fax: 415.848.7801

EHDD

Environmental Design & Design
380 Third Street
Oakland, California 94612
Tel: 415.291.3492
Fax: 415.291.3493

Degenkolb

Professional Engineer
Civil Engineering, No. 100
1015 12th Street
Berkeley, CA 94710
Tel: 415.848.7800
Fax: 415.848.7801
www.degenkolb.com



NOT FOR
CONSTRUCTION

BAM/PFA
SHORING AND
CONSTRUCTION
MEANS & METHODS

ISSUE FOR BID
4/16/2013

Revised: 4/16/2013
Revised: 4/16/2013
Revised: 4/16/2013
Revised: 4/16/2013

Revised: 4/16/2013
Revised: 4/16/2013
Revised: 4/16/2013
Revised: 4/16/2013

Scale:
1/8" = 1'-0"
Checked by:
Reviewed by:
Date:
Title:
Author:
Date:
Title:

ELEVATIONS -
ADMIN BUILDING

SH3.21

APPENDIX 11 (Addendum 2 - Attachment 1)

SOLDIER BEAM SCHEDULE

MARK	SECTION SIZE	CAISSON Ø	T.O. BEAM	B.O. BEAM	LENGTH	Top Tieback Mark	2nd Tieback Mark	3rd Tieback Mark
E01	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E02	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E03	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E04	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E05	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E06	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E07	W18X65	2'-6"	+8'-0"	-44'-3"	52'-3"	011	012	
E08	W18X65	2'-6"	+7'-0"	-44'-3"	51'-3"	013	014	
E09	W18X65	2'-6"	+7'-0"	-44'-3"	51'-3"	013	014	
E10	W18X65	2'-6"	+7'-0"	-44'-3"	51'-3"	013	014	
E11	W18X65	2'-6"	+7'-0"	-44'-3"	51'-3"	013	014	
E12	W18X65	2'-6"	+7'-0"	-47'-5"	54'-9"	015	016	
E13	W18X65	2'-6"	+6'-0"	-47'-9"	53'-9"	015	016	
E14	W18X65	2'-6"	+6'-0"	-47'-9"	53'-9"	015	016	
E15	W18X65	2'-6"	+6'-0"	-47'-9"	53'-9"	015	016	
E16	W18X65	2'-6"	+6'-0"	-47'-9"	53'-9"	015	016	
E17	W18X37	2'-6"	+7'-3 1/4"	-70'-3"	77'-6 1/4"	017	018	
E18	W18X37	2'-6"	+7'-3 1/4"	-70'-3"	77'-6 1/4"	019	020	
E19	W24X176	3'-0"	+7'-5 3/4"	-55'-0"	62'-5 3/4"			
E20	W18X158	3'-0"	+8'-6"	-50'-0"	56'-6"			
E21	W24X176	3'-0"	+7'-5 3/4"	-55'-0"	62'-5 3/4"			
E22	W18X158	3'-0"	+8'-6"	-50'-0"	56'-6"			
E23	W24X176	3'-0"	+5'-0"	-50'-0"	57'-0"			
E24	W18X158	3'-0"	+7'-0"	-50'-0"	57'-0"			
E25	W24X176	3'-0"	+5'-0"	-55'-0"	60'-0"			
E26	W18X158	3'-0"	+7'-0"	-50'-0"	57'-0"			
E27	W24X176	3'-0"	+5'-0"	-55'-0"	60'-0"			
E28	W18X138	3'-0"	+7'-0"	-50'-0"	57'-0"			
E29	W18X158	3'-0"	+5'-0"	-55'-0"	60'-0"			
E30	W18X158	3'-0"	+7'-0"	-50'-0"	57'-0"			
E31	W18X158	3'-0"	+5'-0"	-55'-0"	60'-0"			
E32	W18X158	3'-0"	+7'-0"	-50'-0"	57'-0"			
E33	W18X158	3'-0"	+5'-0"	-55'-0"	60'-0"			
E34	W18X138	3'-0"	+7'-0"	-50'-0"	57'-0"			
E35	W18X158	3'-0"	+10'-0 1/2"	-50'-0"	60'-0 1/2"			
G01	W16X50	2'-6"	-1'-6"	-33'-2"	31'-8"	051		
G02	W16X50	2'-6"	-4'-5"	-33'-2"	28'-10"	051		
G03	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G04	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G05	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G06	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G07	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G08	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G09	W16X50	2'-6"	-4'-4"	-33'-2"	28'-10"	051		
G10	W16X57	2'-6"	-4'-4"	-35'-7"	31'-3"	062		
G11	W16X57	2'-6"	-4'-4"	-35'-7"	31'-3"	069		
G12	W16X57	2'-6"	-4'-4"	-35'-7"	31'-3"	070		
G13	W16X57	2'-6"	-4'-4"	-35'-7"	31'-3"	069		
G14	W16X57	2'-6"	-4'-4"	-35'-7"	31'-3"	063		
G15	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	064		
G16	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	065		
G17	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	066		
G18	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	067		
G19	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	067		
G20	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	067		
G21	W16X57	2'-6"	-4'-4"	-32'-3"	27'-11"	067		
G22	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G23	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G24	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G25	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G26	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G27	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
G28	W16X76	2'-6"	-4'-4"	-41'-3"	35'-11"	068		
J01	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J02	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J03	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J04	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J05	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J06	W14X145	3'-0"	+4'-11 3/4"	-70'-0"	74'-11 3/4"			
J07	W14X145	3'-0"	+7'-7 3/4"	-70'-0"	77'-7 3/4"			
J08	W14X145	3'-0"	+7'-7 3/4"	-70'-0"	77'-7 3/4"			

SOLDIER BEAM SCHEDULE

MARK	SECTION SIZE	CAISSON Ø	T.O. BEAM	B.O. BEAM	LENGTH	Top Tieback Mark	2nd Tieback Mark	3rd Tieback Mark
J09	W18X119	3'-0"	+7'-5 1/4"	-70'-0"	77'-5 1/4"			
J10	W18X119	3'-0"	+7'-5 1/4"	-70'-0"	77'-5 1/4"			
ND1	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND2	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND3	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND4	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND5	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND6	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND7	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND8	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND9	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	001	002	
ND10	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	006	002	
ND11	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	006	002	
ND12	W18X76	2'-6"	-4'-4"	-37'-3"	32'-11"	006	002	
ND13	W18X76	2'-6"	-8'-3"	-53'-3"	61'-3"	003	005	
ND14	W18X76	2'-6"	-8'-0"	-53'-3"	61'-3"	004	005	
ND15	W18X76	2'-6"	-8'-0"	-53'-3"	61'-3"	004	005	
ND16	W18X76	2'-6"	-8'-0"	-53'-3"	61'-3"	004	005	
ND17	W18X76	2'-6"	-8'-0"	-53'-3"	61'-3"	004	005	
S00	W18X65	2'-6"	+2'-0"	-33'-3"	35'-3"	031		
S01	W18X65	2'-6"	+2'-0"	-33'-3"	35'-3"	031		
S02	W18X65	2'-6"	+2'-0"	-33'-3"	35'-3"	031		
S03	W24X93	2'-6"	+15'-0"	-37'-3"	36'-3"	032		
S04	W18X65	2'-6"	+2'-0"	-32'-3"	34'-3"	033		
S05	W18X65	2'-6"	+2'-0"	-32'-3"	34'-3"	033		
S06	W24X93	2'-6"	+15'-0"	-37'-3"	36'-3"	032		
S07	W18X65	2'-6"	+2'-0"	-32'-3"	34'-3"	033		
S08	W18X65	2'-6"	+1'-0"	-33'-3"	34'-3"	034		
S09	W24X93	2'-6"	+15'-0"	-37'-3"	36'-3"	035		
S10	W18X65	2'-6"	+1'-0"	-33'-3"	34'-3"	034		
S11	W18X65	2'-6"	+1'-0"	-33'-3"	34'-3"	034		
S12	W24X93	2'-6"	+15'-0"	-37'-3"	36'-3"	035		
S13	W18X65	2'-6"	+1'-0"	-36'-2"	37'-2"	036		
S14	W18X65	2'-6"	+0"	-36'-2"	36'-2"	036		
S15	W24X93	2'-6"	+15'-0"	-40'-2"	55'-2"	037		
S16	W18X65	2'-6"	+0"	-36'-2"	36'-2"	036		
S17	W18X65	2'-6"	+0"	-36'-2"	36'-2"	036		
S18	W24X93	2'-6"	+15'-0"	-40'-2"	55'-2"	037		
S19	W18X65	2'-6"	+0"	-36'-2"	36'-2"	036		
S20	W18X65	2'-6"	+1'-0"	-36'-2"	35'-2"	038		
S21	W24X111	2'-6"	+15'-0"	-40'-2"	55'-2"	039		
S22	W18X65	2'-6"	+1'-0"	-36'-2"	35'-2"	038		
S23	W24X111	2'-6"	+15'-0"	-40'-2"	55'-2"	039		
TC01	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC02	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC03	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC04	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC05	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC06	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC07	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC08	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
TC09	W14X132	2'-6"	+1'-2"	-34'-10"	36'-0"			
W01	W15X57	2'-6"	-1'-0"	-33'-2"	32'-2"	051		
W02	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	052		
W03	W15X57	2'-6"	-3'-0"	-33'-2"	30'-2"	051		
W04	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	052		
W05	W16X57	2'-6"	-3'-0"	-33'-2"	30'-2"	051		
W06	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	052		
W07	W16X57	2'-6"	-2'-0"	-33'-2"	31'-2"	053		
W08	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	054		
W09	W16X57	2'-6"	-2'-0"	-33'-2"	31'-2"	053		
W10	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	054		
W11	W16X57	2'-6"	-2'-0"	-33'-2"	31'-2"	053		
W12	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	054		
W13	W16X57	2'-6"	-1'-6"	-33'-2"	31'-8"	055		
W14	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	056		
W15	W16X57	2'-6"	-1'-6"	-33'-2"	31'-8"	055		
W16	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	056		
W17	W16X57	2'-6"	-1'-6"	-33'-2"	31'-8"	055		
W18	W15X57	2'-6"	+1'-0"	-37'-8"	38'-8"	056		

NOTES:
1. SEE DET. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297,

APPENDIX 11 (Addendum 2 - Attachment 1)

TIE-BACK SCHEDULE

MARK	ELEVATION	VERT. ANGLE	HORIZ. ANGLE	ROD Ø (SEE NOTE 2)	LOCK LOAD (DESIGN LOAD)	PROOF TEST LOAD	LENGTH UNBONDED	LENGTH BONDED	LENGTH TOTAL	ANGLE TOLERANCE	COUNT
001	-6' - 4"	20.00°	0.00°	1'-3"	84	111.72	20' - 0"	41' - 0"	61' - 0"	3.00°	9
002	-15' - 4"	20.00°	0.00°	1'-0"	55	73.15	10' - 0"	29' - 0"	39' - 0"	3.00°	12
003	1' - 0"	25.00°	0.00°	1 5/8"	144	191.52	19' - 0"	69' - 0"	88' - 0"	2.00°	1
004	1' - 0"	25.00°	0.00°	1 5/8"	144	191.52	19' - 0"	69' - 0"	88' - 0"	3.00°	4
005	-8' - 0"	25.00°	0.00°	1 1/4"	72	95.76	14' - 0"	35' - 0"	49' - 0"	3.00°	5
006	-8' - 4"	20.00°	0.00°	1 3/8"	102	135.66	20' - 0"	52' - 0"	72' - 0"	3.00°	3
011	2' - 0"	20.00°	0.00°	1 5/8"	125	166.25	27' - 0"	60' - 0"	87' - 0"	2.00°	7
012	-9' - 0"	20.00°	0.00°	1 1/4"	83	110.39	14' - 0"	40' - 0"	54' - 0"	2.00°	7
013	1' - 0"	20.00°	0.00°	1 3/8"	118	156.94	27' - 0"	57' - 0"	84' - 0"	2.00°	4
014	-9' - 0"	20.00°	0.00°	1 1/4"	79	105.07	14' - 0"	38' - 0"	52' - 0"	2.00°	4
015	0"	20.00°	0.00°	1 5/8"	130	172.9	27' - 0"	63' - 0"	90' - 0"	2.00°	5
016	-11' - 0"	20.00°	0.00°	1 1/4"	87	115.71	15' - 0"	42' - 0"	57' - 0"	2.00°	5
017	0"	20.00°	0.00°	1 3/8"	108	143.64	27' - 0"	52' - 0"	79' - 0"	2.00°	1
018	-9' - 0"	20.00°	0.00°	1"	63	83.79	13' - 0"	31' - 0"	44' - 0"	2.00°	1
019	1' - 0"	20.00°	0.00°	1 3/8"	108	143.64	27' - 0"	52' - 0"	79' - 0"	2.00°	1
020	-9' - 0"	20.00°	0.00°	1"	63	83.79	13' - 0"	31' - 0"	44' - 0"	2.00°	1
031	-5' - 0"	30.00°	0.00°	1 1/4"	89	118.37	18' - 0"	43' - 0"	61' - 0"	3.00°	3
032	-5' - 0"	30.00°	0.00°	1 3/8"	108	143.64	18' - 0"	52' - 0"	70' - 0"	3.00°	2
033	-5' - 0"	30.00°	0.00°	1 1/4"	89	118.37	18' - 0"	43' - 0"	61' - 0"	3.00°	3
034	-6' - 0"	30.00°	0.00°	1 1/4"	88	117.04	18' - 0"	44' - 0"	62' - 0"	3.00°	3
035	-6' - 0"	30.00°	0.00°	1 3/8"	108	143.64	18' - 0"	52' - 0"	70' - 0"	3.00°	2
036	-7' - 0"	30.00°	0.00°	1 1/4"	91	121.03	18' - 0"	45' - 0"	63' - 0"	3.00°	4
037	-7' - 0"	30.00°	0.00°	1 3/8"	100	133	18' - 0"	55' - 0"	73' - 0"	3.00°	2
038	-8' - 0"	30.00°	0.00°	1 1/4"	90	119.7	18' - 0"	44' - 0"	62' - 0"	3.00°	2
039	-8' - 0"	30.00°	0.00°	1 3/8"	108	143.64	18' - 0"	52' - 0"	70' - 0"	3.00°	2
050	-9' - 0"	25.00°	0.00°	1 1/4"	76	101.08	27' - 0"	37' - 0"	64' - 0"	3.00°	1
051	-9' - 0"	20.00°	0.00°	1 1/4"	76	101.08	27' - 0"	37' - 0"	64' - 0"	3.00°	2
052	-9' - 0"	20.00°	0.00°	1 3/8"	101	134.33	27' - 0"	49' - 0"	76' - 0"	3.00°	3
053	-8' - 0"	20.00°	0.00°	1 1/4"	76	101.08	27' - 0"	37' - 0"	64' - 0"	3.00°	3
054	-8' - 0"	20.00°	0.00°	1 3/8"	100	133	27' - 0"	48' - 0"	75' - 0"	3.00°	3
055	-7' - 6"	20.00°	0.00°	1 1/4"	79	105.07	27' - 0"	38' - 0"	65' - 0"	3.00°	3
056	-7' - 6"	20.00°	0.00°	1 3/8"	101	134.33	27' - 0"	49' - 0"	76' - 0"	3.00°	3
061	-9' - 0"	25.00°	0.00°	1 1/4"	68	90.44	25' - 0"	33' - 0"	58' - 0"	2.00°	9
062	-9' - 0"	40.00°	0.00°	1 5/8"	100	133	17' - 0"	48' - 0"	65' - 0"	2.00°	1
063	-10' - 0"	25.00°	0.00°	1"	66	87.78	23' - 0"	32' - 0"	55' - 0"	2.00°	1
064	-9' - 0"	20.00°	0.00°	1"	61	81.13	31' - 0"	30' - 0"	61' - 0"	2.00°	1
065	-9' - 9"	25.00°	0.00°	1"	65	86.45	23' - 0"	32' - 0"	55' - 0"	2.00°	1
066	-7' - 6"	25.00°	0.00°	1"	59	78.47	24' - 0"	29' - 0"	53' - 0"	2.00°	2
067	-7' - 0"	40.00°	0.00°	1 1/4"	68	90.44	20' - 0"	33' - 0"	53' - 0"	2.00°	3
068	-9' - 0"	40.00°	0.00°	1 1/4"	89	118.37	17' - 0"	43' - 0"	60' - 0"	2.00°	5
069	-9' - 0"	30.00°	0.00°	1 1/4"	85	113.05	21' - 0"	41' - 0"	62' - 0"	2.00°	2
070	-9' - 0"	20.00°	0.00°	1 1/4"	78	103.74	31' - 0"	38' - 0"	69' - 0"	2.00°	1
081	-11' - 5"	25.00°	0.00°	1"	24	31.92	30' - 0"	15' - 0"	45' - 0"	2.00°	1
082	-17' - 3"	25.00°	0.00°	1"	39	51.87	30' - 0"	20' - 0"	50' - 0"	2.00°	1
083	-12' - 6"	25.00°	0.00°	1"	20	26.6	40' - 0"	15' - 0"	55' - 0"	2.00°	1
084	-17' - 3"	25.00°	0.00°	1"	33	43.89	30' - 0"	20' - 0"	50' - 0"	2.00°	1
085	-14' - 0"	25.00°	0.00°	1"	16	21.28	45' - 0"	15' - 0"	60' - 0"	2.00°	1
086	-17' - 3"	25.00°	0.00°	1"	27	35.91	35' - 0"	15' - 0"	50' - 0"	2.00°	1
087	-15' - 5"	25.00°	0.00°	1"	25	33.25	45' - 0"	15' - 0"	60' - 0"	2.00°	1
088	-17' - 0"	35.00°	0.00°	1"	23	30.59	35' - 0"	15' - 0"	50' - 0"	2.00°	1
089	-19' - 9"	29.50°	0.00°	1"	10	13.3	34' - 9"	15' - 0"	49' - 9"	2.00°	1
090	-13' - 0"	20.00°	0.00°	1 1/4"	60	79.8	15' - 0"	40' - 0"	55' - 0"	3.00°	1

NOTES:

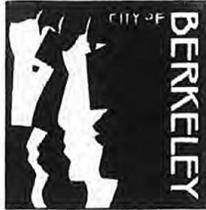
1. SEE DETAIL 5/SH6 11, 6/SH6 11, AND 7/SH6 11 FOR TIEBACK DETAILS.

2. SUBSTITUTION OF STRAND FOR ROD IS ACCEPTABLE FOR TIEBACKS. CONTRACTOR SHALL SELECT STRAND APPROPRIATE TO ACHIEVE THE DESIGN LOADS AND TEST LOADS REQUIRED. SEE GENERAL NOTES FOR MORE INFORMATION.

TIEBACK BONDED LENGTH AND TOTAL LENGTH VALUES ARE BASED ON ESTIMATED GEOTECHNICAL PARAMETERS. THESE LENGTHS REPRESENT THE MAXIMUM LENGTHS TO WHICH THE TIEBACKS HAVE BEEN COORDINATED FOR CONFLICTS WITH OTHER TIEBACKS AND EXISTING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TIEBACKS LENGTHS THAT WILL ACHIEVE THE REQUIRED DESIGN AND TEST LOADS. SEE GENERAL NOTES SECTION XVIII, PART 1.

Original map can be viewed at the
1047 Center St. Berkeley City of Berkeley
CA 94704

TIEBACK SCHEDULE



Department of Public Works
Engineering Division

Subdivision and Encroachment Permit Fees Transmittal Form

To Applicant: RETAIN THIS FORM. IT MUST BE RETURNED FOR ANY REFUND

NAME OF REMITTOR: Plant Construction DATE: 6/13/13

LOCATION OF JOB: 2150 ~~Delwood~~ St.
Addison

- Parcel Map \$ 4,820.00
- Lot Line Adjustment 1,743.00
- Tentative Map 5,453.00
- Minor Amendment to Approved Tentative Map 373.00
- Major Amendment to Approved Tentative Map 1,686.00
- Final Map filing fee 376.00
- Final Map unit based fee (per unit)..... \$181.00 X _____ (No. Units) = \$ _____
- Certificate of Compliance 1,743.00
- Minor Encroachment Permit application fee..... 454.00
- Minor Encroachment final fee..... 1,228.00
- Major Encroachment Permit application fee 454.00
- Major Encroachment final fee 1,774.00
- Creek Permit \$ _____
- Other General Engineering fees (specify)..... \$ _____

TOTAL FEES \$ 1,682

Other Special Deposit (Map deposit – separate check) \$ _____

Permit Specialist: All fees are to be entered into payment type 07 except, Other Special deposits, which are entered into OS. Note, these codes instead of BP. On the description line, please enter the property address and remitter's name. Return original receipt and copies of all checks as applicable along with original transmittal form to the AOSIII in Planning Administration, via daily cash receipts. A copy will be submitted to the AOSIII for posting in the file. See document entitled "Procedure for processing check and credit card receipts and deposits for subdivision: for more detailed instructions.

THIS IS TO CERTIFY THAT _____ IS ENTITLED TO A REFUND

REFUND AMOUNT _____ RECEIPT# _____

ADDRESS TO FORWARD REFUND _____

APPROVED FOR REFUND BY _____ DATE _____

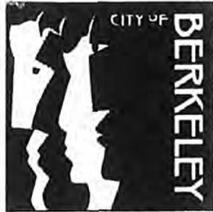
City of Berkeley
REPRINT
*** CUSTOMER RECEIPT ***
Oper: REGISTER1 Type: OC Drawer: 1
Date: 6/19/13 01 Receipt no: 222872

Description	Quantity	Amount
07 PLANNING: ENG FEES	1.00	\$148575.00

Trans number: 2837445
G/L account number:
83383023416100
8330001010000

Tender detail		
CR CREDIT CA	9202	\$75000.00
CR CREDIT CA	9434	\$39000.00
CK CHECK, RE	3159	\$34575.00
Total tendered		\$148575.00
Total payment		\$148575.00

Trans date: 6/19/13 Time: 11:15:54
*** THANK YOU FOR YOUR PAYMENT ***



Department of Public Works
Engineering Division

Subdivision and Encroachment Permit Fees Transmittal Form

To Applicant: RETAIN THIS FORM. IT MUST BE RETURNED FOR ANY REFUND

NAME OF REMITTOR: Plant Construction DATE: _____

LOCATION OF JOB: 2150 ~~Street~~ Addison (BERKELEY ART MUSEUM)

- Parcel Map \$ 4,820.00
- Lot Line Adjustment 1,743.00
- Tentative Map 5,453.00
- Minor Amendment to Approved Tentative Map 373.00
- Major Amendment to Approved Tentative Map 1,686.00
- Final Map filing fee 376.00
- Final Map unit based fee (per unit)..... \$181.00 X _____ (No. Units) = \$ _____
- Certificate of Compliance 1,743.00
- Minor Encroachment Permit application fee..... 454.00
- Minor Encroachment final fee 1,228.00
- Major Encroachment Permit application fee 454.00
- Major Encroachment final fee 1,774.00
- Creek Permit..... \$ _____

Other General Engineering fees (specify)..... \$ 148,576.00

Tieback Mitigation Fees
TOTAL FEES \$ 148,576.00

Other Special Deposit (Map deposit – separate check) \$ _____

To Permit Specialist: All fees are to be entered into payment type 07 except, Other Special deposits, which are entered into OS. Note, these codes instead of BP. On the description line, please enter the property address and remitter’s name. Return original receipt and copies of all checks as applicable along with original transmittal form to the AOSIII in Planning Administration, via daily cash receipts. A copy will be submitted to Engineer for posting in the file. See document entitled “Procedure for processing check and credit cards for fees and deposits for subdivision: for more detailed instructions.

For Office Use Only	
THIS IS TO CERTIFY THAT _____	IS ENTITLED TO A REFUND
REFUND AMOUNT _____	RECEIPT# _____
ADDRESS TO FORWARD REFUND _____	
APPROVED FOR REFUND BY _____	DATE _____

Oper: REGISTER
Date: 6/19/13 01 Receipt no: 228872
Total tendered \$148576.00
Total payment \$148576.00



PLANT CONSTRUCTION COMPANY, L.P.
 300 NEW HALL STREET
 SAN FRANCISCO, CA 94124-1426
 TEL. 415.285.0500 FAX 415.550.1357
 LICENSE NUMBER 830764
 www.plantconstructioncompany.com

June 14, 2013

Mr. Jeffrey L. Egeberg, City Engineer
 City of Berkeley, Department of Public Works
 2180 Milvia Street
 Berkeley, CA 94704

Re: **Soldier Pile and Tie Back Encroachment Permit (rev 1)**
 Berkeley Art Museum and Pacific Film Archive
 (BAM/PFA - UCB #12259A)
 2120 Oxford Street, Berkeley, California
 PCCLP Project #2012161

Dear Mr. Egeberg:

We are writing you to request a minor encroachment permit on behalf of the University of California for the placement of earth and building shoring piles and tiebacks in the public right of way along Oxford, Center and Addison Streets at the perimeter of the UC Berkeley Art Museum and Pacific Film Archive construction site. The piles are planned to be placed at the face of the building line along most of the length of Oxford Street, between Center and Addison, and along Center Street from the corner of Oxford Street west to the Bank of America parking lot and tie backs are planned to cross the property line at Addison Street. These piles and associated tiebacks and above ground shoring elements will be placed within the currently permitted construction site so we believe their placement will cause no additional impact to the public right of way during the duration of the construction project. The above ground portion of the piles and shoring elements and required first three feet of below ground piles will be removed before returning the site back to public use at the end of construction in the summer of 2015. The enclosed shoring drawings detail the extents and details of the shoring systems and their encroachment into the sidewalks and parking area.

We believe these encroachments meet all the requirements for issuance of a minor encroachment per section 16.18.080 of the City rules:

A. The applicant will be substantially damaged by the refusal to grant the permit as requested.

Yes, the Berkeley Art Museum and Pacific Film Archive project cannot be built without the installation of the temporary building and earth shoring systems in question and refusal to grant the encroachment would effectively stop the project.

B. No other reasonable method of obtaining the desired results is available except as proposed by the applicant.

In order to build the Museum, the site needs to be excavated below the existing grades and portions of the existing UC Press building at 2150 Oxford need to be shored in place to allow for these excavations to take place. Both the building shoring and excavations require the use of temporary shoring or these tasks simply cannot be performed. It is the assessment of the University, architectural team, structural engineers and Plant Construction that there are no reasonable and/or cost effective alternatives to performing these tasks other than the plans presented under this cover.

C. The granting of this permit will not be materially detrimental to the public interest, safety, health and welfare or injurious to the other property.

The encroachments proposed under this application are temporary in nature and will not be detrimental to the public interest; they will not pose a safety or health concern and will not affect the welfare or be injurious to any other property.

APPENDIX 11 (Addendum 2 - Attachment 1)

Mr. Jeffrey L. Egeberg, City Engineer
City of Berkeley, Department of Public Works
June 6, 2013
Page 2

D. The applicant has complied with the City of Berkeley's public work specifications.

Yes, the applicant has complied with said specifications and will comply with any future specifications as requested.

E. No major or minor encroachment into a sidewalk may be granted unless a minimum clear space of six feet remains open for public use in the sidewalk area. For the purpose of determining the clear space, poles, parking meters, fire hydrants, regulatory signs and other such objects (street hardware) may not be considered as part of the minimum horizontal clear space reserved for public use. Except for subsurface encroachments of tiebacks and soil nails, in no event may a minor encroachment extend farther than two feet from the property line into the public right-of-way.

The sidewalks and parking around the construction site will be closed for the entire duration of these operations. These closures are permitted under a temporary right-of-way use permit (App #13-0921), which will be maintained and kept in effect for the entire duration of the project. At the end of the project, there will be only subsurface remnants of the shoring system left in place.

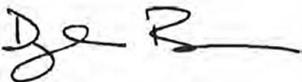
F. All encroachments, except for structures below the walkway such as basement vaults and sidewalk elevators, shall have a minimum height of twelve inches and no portion shall project beyond the base projection of the encroachment unless at a height of eight feet or more above the sidewalk.

None of the proposed encroachments will have an above grade projection of any kind at the end of the construction period so this criterion is not applicable.

G. There should be clear color differentiation between the sidewalk paving and objects placed or installed in the sidewalk area (Ord. 5514-NS § 1, 1983).

None of the proposed encroachments will have an above grade projection of any kind at the end of the construction period so this criterion is not applicable. Sidewalks will be restored to City standards as outlined in the main construction drawings for the project.

Sincerely,



Dylan Berry
Senior Project Manager
Plant Construction Company, L.P.

DB:mbm

Enclosure

cc: Brian Main, UC Capital Projects
Shannon Holloway, UC Capital Projects
Alicia Van Riggs, UC Capital Projects
Lisa Laidlaw, UC Capital Projects
Diana Aikenhead, City of Berkeley
Nick Morisco, EHDD Architecture
Andrew Scott, Degenkolb Engineers
Tim Nelson, Degenkolb Engineers
John Wilson, Plant Construction Company
Steve Holguin, Plant Construction Company

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APPENDIX 11 (Addendum 2 - Attachment 1)

SOLDIER BEAM SCHEDULE										
MARK	SECTION SIZE	CAISSON Ø	T.O. STEEL	B.O. STEEL	STEEL LENGTH	CAISSON EXTENSION	B.O. CAISSON	Top Tieback Mark	2nd Tieback Mark	3rd Tieback Mark
E01	W18X65	2' - 6"	+8'-0"	- 30'- 3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E02	W18X65	2' - 6"	+8'-0"	-30'-3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E03	W18X65	2' - 6"	+8'-0"	- 30'- 3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E04	W18X65	2' - 6"	+8'-0"	- 30'- 3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E05	W18X65	2' - 6"	+8'-0"	- 30'-3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E06	W18X65	2' - 6"	+8'-0"	- 30'- 3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E07	W18X65	2' - 6"	+8'-0"	-30'- 3"	38' - 3"	14' - 0"	-44' - 3"	11	12	
E08	W18X65	2' - 6"	+7'-0"	-30'-3"	37' - 3"	14' - 0"	-44' - 3"	13	14	
E09	W18X65	2' - 6"	+7'-0"	-30'- 3"	37' - 3"	14' - 0"	-44' - 3"	13	14	
E10	W18X65	2' - 6"	+7'-0"	- 30'- 3"	37' - 3"	14' - 0"	-44' - 3"	13	14	
E11	W18X65	2' - 6"	+7'-0"	- 30'- 3"	37' - 3"	14' - 0"	-44' - 3"	13	14	
E12	W18X65	2' - 6"	+7'-0"	-33'-9"	40' - 9"	14' - 0"	-47' - 9"	15	16	
E13	W18X65	2' - 6"	+6'-0"	- 33'- 9"	39' - 9"	14' - 0"	-47' - 9"	15	16	
E14	W18X65	2' - 6"	+6'-0"	- 33'9"	39' - 9"	14' - 0"	-47' - 9"	15	16	
E15	W18X65	2' - 6"	+6'-0"	- 33'- 9"	39' - 9"	14' - 0"	-47' - 9"	15	16	
E16	W18X65	2' - 6"	+6'-0"	- 33'9"	39' - 9"	14' - 0"	-47' - 9"	15	16	
E17	W18X97	2' - 6"	+7'- 31/4"	-61'-8 3/4"	69' - 0"	0"	-61' - 8 3/4"	17	18	
E18	W18X97	2' - 6"	+7'- 31/4"	-61'-8 3/4"	69' - 0"	0"	-61' - 8 3/4"	19	20	
E19	W24X176	3' - 0"	+7'- 53/4"	-55'-0"	62' - 53/4"	0"	-55' - 0"			
E20	W18X158	3' - 0"	+8'-6"	-50'-0"	58' - 6"	0"	-50' - 0"			
E21	W24X176	3' - 0"	+7'- 53/4"	-55'-0"	62' - 5 3/4"	0"	-55' - 0"			
E22	W18X158	3' - 0"	+8'-6"	- 50'-0"	58' - 6"	0"	-50' - 0"			
E23	W24X176	3' - 0"	+5'-0"	- 55'-0"	60' - 0"	0"	-55' - 0"			
E24	W18X158	3' - 0"	+7'-0"	- 50'-0"	57' - 0"	0"	-50' - 0"			
E25	W24X176	3' - 0"	+5'-0"	- 55'-0"	60' - 0"	6' - 0"	-61' - 0"			
E26	W18X158	3' - 0"	+7'-0"	- 50'-0"	57' - 0"	0"	-50' - 0"			
E27	W24X176	3' - 0"	+5'-0"	- 55'-0"	60' - 0"	6' - 0"	-61' - 0"			
E28	W18X158	3' - 0"	+7'-0"	- 50'- 0"	57' - 0"	0"	-50' - 0"			
E29*	W27X194	3' - 0"	+5'-0"	- 55'	60' - 0"	0"	-55' - 0"			
E30	W18X158	3' - 0"	+7'-0"	- 50'	57' - 0"	0"	-50' - 0"			
E31*	W27X194	3' - 0"	+5'-0"	- 55'-0	60' - 0"	0"	-55' - 0"			
E32	W18X158	3' - 0"	+7'-0"	- 50'- 0"	57' - 0"	0"	-50' - 0"			
E33*	W27X194	3' - 0"	+5'-0"	- 55'0"	60' - 0"	0"	-55' - 0"			
E34	W18X158	3' - 0"	+7'-0"	- 50'-0"	57' - 0"	0"	-50' - 0"			
E35	W18X158	3' - 0"	+10'-0 1/2"	- 50'-0"	60' - 0 1/2"	0"	-50' - 0"			
J01	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	0"	-61' - 8 3/4"			
J02	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	0"	-61' - 8 3/4"			
J03	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	0"	-61' - 8 3/4"			
J04	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	0"	-61' - 8 3/4"			

APPENDIX 11 (Addendum 2 - Attachment 1)

SOLDIER BEAM SCHEDULE										
MARK	SECTION SIZE	CAISSON Ø	T.O. STEEL	B.O. STEEL	STEEL LENGTH	CAISSON EXTENSION	B.O. CAISSON	Top Tieback Mark	2nd Tieback Mark	3rd Tieback Mark
J05	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	3' - 0"	-64' - 8 3/4"			
J06	W14X145	3' - 0"	+4'-11 3/4"	-61'-8 3/4"	66' - 8 1/2"	0"	-61' - 8 3/4"			
J07	W14X145	3' - 0"	+7'-7 3/4"	-61'-8 3/4"	69' - 4 1/2"	0"	-61' - 8 3/4"			
J08	W14X145	3' - 0"	+7'-7 3/4"	-61'-8 3/4"	69' - 4 1/2"	0"	-61' - 8 3/4"			
J09	W18X119	3' - 0"	+7'-5 1/4"	-61'-8 3/4"	69' - 2"	0"	-61' - 8 3/4"			
J10	W18X119	3' - 0"	+7'-5 1/4"	-61'-8 3/4"	69' - 2"	0"	-61' - 8 3/4"			
J11	W14X99	3' - 0"	+9'-7 1/4"	-61'-8 3/4"	71' - 4"	0"	-61' - 8 3/4"			
J12	W14X99	3' - 0"	+9'-7 1/4"	-61'-8 3/4"	71' - 4"	0"	-61' - 8 3/4"			
N01	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N02	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N03	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N04	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N05	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N06	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N07	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N08	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N09	W18X76	2' - 6"	-4'-4"	-31'-3"	26' - 11"	6' - 0"	-37' - 3"	1		2
N10	W18X76	2' - 6"	-4'-4"	-30'-3"	25' - 11"	7' - 0"	-37' - 3"	6		2
N11	W18X76	2' - 6"	-4'-4"	-30'-3"	25' - 11"	7' - 0"	-37' - 3"	6		2
N12	W18X76	2' - 6"	-4'-4"	-30'-3"	25' - 11"	7' - 0"	-37' - 3"	6		2
N13	W18X76	2' - 6"	+8'-0"	-30'-3"	38' - 3"	23' - 0"	-53' - 3"	3		5
N14	W18X76	2' - 6"	+8'-0"	-30'-3"	38' - 3"	23' - 0"	-53' - 3"	4		5
N15	W18X76	2' - 6"	+8'-0"	-30'-3"	38' - 3"	23' - 0"	-53' - 3"	4		5
N16	W18X76	2' - 6"	+8'-0"	-30'-3"	38' - 3"	23' - 0"	-53' - 3"	4		5
N17	W18X76	2' - 6"	+8'-0"	-30'-3"	38' - 3"	23' - 0"	-53' - 3"	4		5
S00	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	6' - 0"	-33' - 3"	31		
S01	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	6' - 0"	-33' - 3"	31		
S02	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	6' - 0"	-33' - 3"	31		
S03	W21X93	2' - 6"	+15'-0"	-27'-3"	42' - 3"	10' - 0"	-37' - 3"	32		
S04	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	5' - 0"	-32' - 3"	33		
S05	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	5' - 0"	-32' - 3"	33		
S06	W21X93	2' - 6"	+15'-0"	-27'-3"	42' - 3"	10' - 0"	-37' - 3"	32		
S07	W18X65	2' - 6"	+2'-0"	-27'-3"	29' - 3"	5' - 0"	-32' - 3"	33		
S08	W18X65	2' - 6"	+1'-0"	-27'-3"	28' - 3"	6' - 0"	-33' - 3"	34		
S09	W21X93	2' - 6"	+15'-0"	-27'-3"	42' - 3"	10' - 0"	-37' - 3"	35		
S10	W18X65	2' - 6"	+1'-0"	-27'-3"	28' - 3"	6' - 0"	-33' - 3"	34		
S11	W18X65	2' - 6"	+1'-0"	-27'-3"	28' - 3"	6' - 0"	-33' - 3"	34		
S12	W21X93	2' - 6"	+15'-0"	-27'-3"	42' - 3"	10' - 0"	-37' - 3"	35		
S13	W18X65	2' - 6"	+1'-0"	-30'-0"	31' - 0"	6' - 2"	-36' - 2"	36		
S14	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	36		

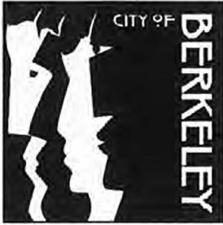
APPENDIX 11 (Addendum 2 - Attachment 1)

SOLDIER BEAM SCHEDULE										
MARK	SECTION SIZE	CAISSON Ø	T.O. STEEL	B.O. STEEL	STEEL LENGTH	CAISSON EXTENSION	B.O. CAISSON	Top Tieback Mark	2nd Tieback Mark	3rd Tieback Mark
S15	W21X93	2' - 6"	+15'-0"	-30'-0"	45' - 0"	10' - 2"	-40' - 2"	37		
S16	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	36		
S17	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	36		
S18	W21X93	2' - 6"	+15'-0"	-30'-0"	45' - 0"	10' - 2"	-40' - 2"	37		
S19	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	36		
S20	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	38		
S21	W21X111	2' - 6"	+15'-0"	-30'-0"	45' - 0"	10' - 2"	-40' - 2"	39		
S22	W18X65	2' - 6"	+0"	-30'-0"	30' - 0"	6' - 2"	-36' - 2"	40		
S23	W21X111	2' - 6"	+15'-0"	-30'-0"	45' - 0"	10' - 2"	-40' - 2"	39		
TC01	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC02	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC03	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC04	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC05	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC06	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC07	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC08	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
TC09	W14X132	2' - 6"	+1'-2"	-44'-10"	46' - 0"	5' - 0"	-49' - 10"			
W01	W16X57	2' - 6"	-1'-0"	-30'-2"	29' - 2"	3' - 0"	-33' - 2"	51		

APPENDIX 11 (Addendum 2 - Attachment 1)

TIE-BACK SCHEDULE

MARK	ELEVATION	VERT. ANGLE	HORIZ. ANGLE	ROD Ø (SEE NOTE 2)	LOCK LOAD (DESIGN LOAD)	PROOF TEST LOAD	LENGTH UNBONDED	LENGTH BONDED**	LENGTH TOTAL**	ANGLE TOLERANCE	COUNT
1	-6' - 4"	20.00°	0.00°	1'-3"	84	111.72	20' - 0"	41' - 0"	61' - 0"	3.00°	9
2	-15' - 4"	20.00°	0.00°	1'-0"	55	73.15	10' - 0"	29' - 0"	39' - 0"	3.00°	12
3	1' - 0"	25.00°	0.00°	1 5/8"	144	191.52	19' - 0"	69' - 0"	88' - 0"	2.00°	1
4	1' - 0"	25.00°	0.00°	1 5/8"	144	191.52	19' - 0"	69' - 0"	88' - 0"	3.00°	4
5	-8' - 0"	25.00°	0.00°	1 1/4"	72	95.76	14' - 0"	35' - 0"	49' - 0"	3.00°	5
6	-8' - 4"	20.00°	0.00°	1 3/8"	102	135.66	20' - 0"	52' - 0"	72' - 0"	3.00°	3
11	2' - 0"	20.00°	0.00°	1 5/8"	125	166.25	27' - 0"	60' - 0"	87' - 0"	2.00°	7
12	-9' - 0"	20.00°	0.00°	1 1/4"	83	110.39	14' - 0"	40' - 0"	54' - 0"	2.00°	7
13	1' - 0"	20.00°	0.00°	1 3/8"	118	156.94	27' - 0"	57' - 0"	84' - 0"	2.00°	4
14	-9' - 0"	20.00°	0.00°	1 1/4"	79	105.07	14' - 0"	38' - 0"	52' - 0"	2.00°	4
15	0"	20.00°	0.00°	1 5/8"	130	172.9	27' - 0"	63' - 0"	90' - 0"	2.00°	5
16	-11' - 0"	20.00°	0.00°	1 1/4"	87	115.71	15' - 0"	42' - 0"	57' - 0"	2.00°	5
17	0"	20.00°	0.00°	1 3/8"	108	143.64	27' - 0"	52' - 0"	79' - 0"	2.00°	1
18	-9' - 0"	20.00°	0.00°	1"	63	83.79	13' - 0"	31' - 0"	44' - 0"	2.00°	1
19	1' - 0"	20.00°	0.00°	1 3/8"	108	143.64	27' - 0"	52' - 0"	79' - 0"	2.00°	1
20	-9' - 0"	20.00°	0.00°	1"	63	83.79	13' - 0"	31' - 0"	44' - 0"	2.00°	1
31	-5' - 0"	30.00°	0.00°	1 1/4"	89	118.37	18' - 0"	43' - 0"	61' - 0"	3.00°	3
32	-5' - 0"	30.00°	0.00°	1 3/8"	108	143.64	18' - 0"	52' - 0"	70' - 0"	3.00°	2
33	-5' - 0"	30.00°	0.00°	1 1/4"	89	118.37	18' - 0"	43' - 0"	61' - 0"	3.00°	3
34	-6' - 0"	30.00°	0.00°	1 1/4"	88	117.04	18' - 0"	44' - 0"	62' - 0"	3.00°	3
35	-6' - 0"	30.00°	0.00°	1 3/8"	108	143.64	18' - 0"	52' - 0"	70' - 0"	3.00°	2
36	-7' - 0"	30.00°	0.00°	1 1/4"	91	121.03	18' - 0"	45' - 0"	63' - 0"	3.00°	4
37	-7' - 0"	30.00°	0.00°	1 3/8"	100	133	18' - 0"	55' - 0"	73' - 0"	3.00°	2
38	-8' - 0"	30.00°	0.00°	1 1/4"	90	119.7	18' - 0"	44' - 0"	62' - 0"	3.00°	1
39	-8' - 0"	30.00°	0.00°	1 3/8"	116	154.28	22' - 0"	52' - 0"	74' - 0"	3.00°	2
40	-8' - 0"	30.00°	0.00°	1 3/8"	108	143.64	26' - 0"	44' - 0"	70' - 0"	3.00°	1
50	-9' - 0"	25.00°	0.00°	1 1/4"	76	101.08	27' - 0"	37' - 0"	64' - 0"	3.00°	1



Public Works Department
Engineering Division

June 14, 2013

To Whom It May Concern:

Subject: **NOTICE – MINOR ENCROACHMENT PERMIT APPLICATION**

The University of California, property owner of 2150 Addison Street, is requesting permission to encroach into the public right-of-ways of Addison Street, Oxford Street and Center Street to install ninety five (95) subterranean tiebacks and sixty (60) shoring piles. The tiebacks and piles are needed to support the street during excavation for Berkeley Art Museum / Pacific Film Archives Project. After construction the tie backs and piles will be abandoned in place under the sidewalk and street. See attached plans.

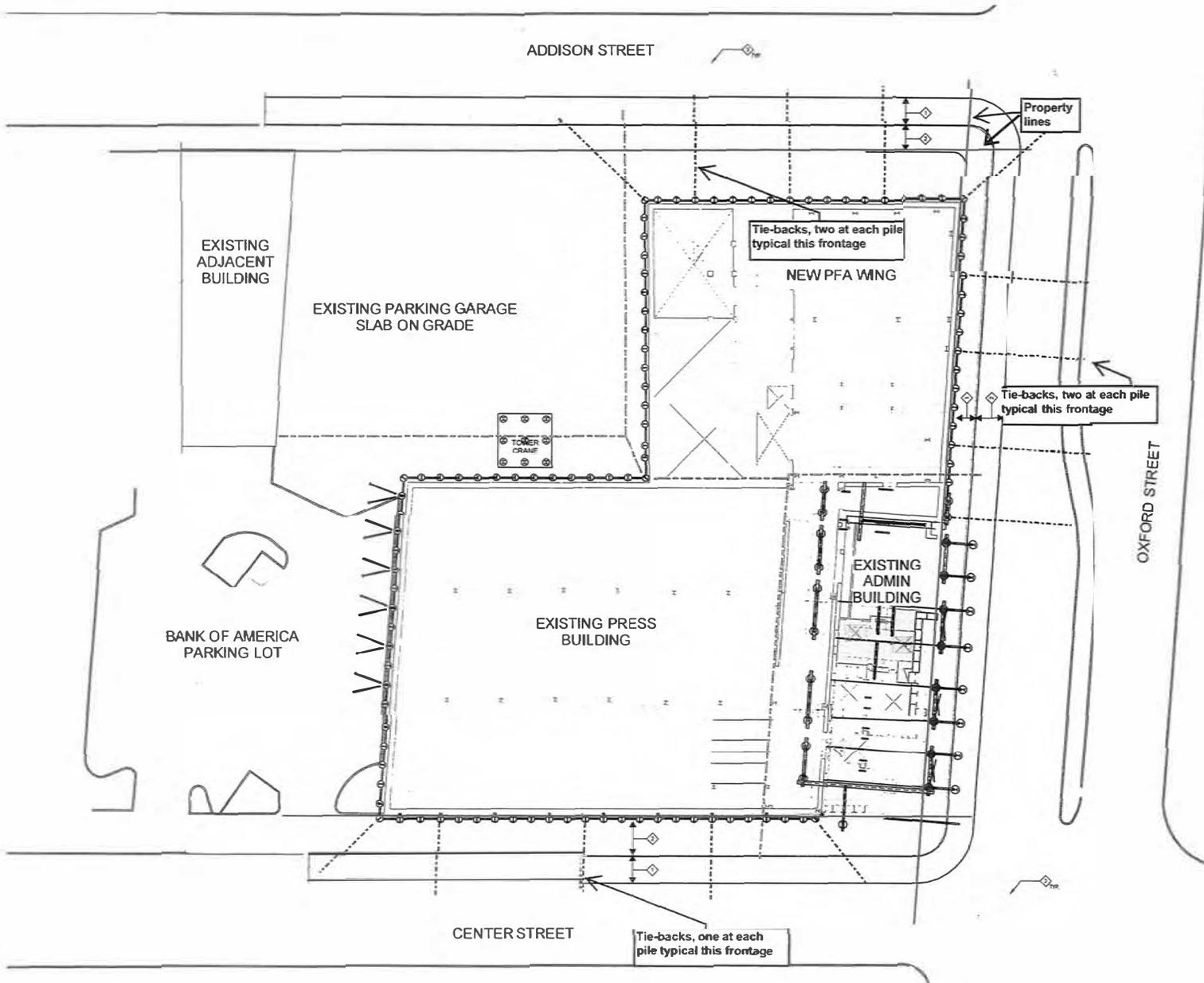
Please make known any comments, questions and objections concerning this proposed encroachment in writing and address your responses to: Vincent Chen, Engineering Division, 1947 Center Street, 4th Floor, Berkeley, CA 94704 post marked on or before June 28, 2013.

Sincerely,

A handwritten signature in black ink, appearing to read "Vincent Chen". The signature is written in a cursive, flowing style.

Vincent Chen
Associate Civil Engineer

APPENDIX 11 (Addendum 2 - Attachment 1)

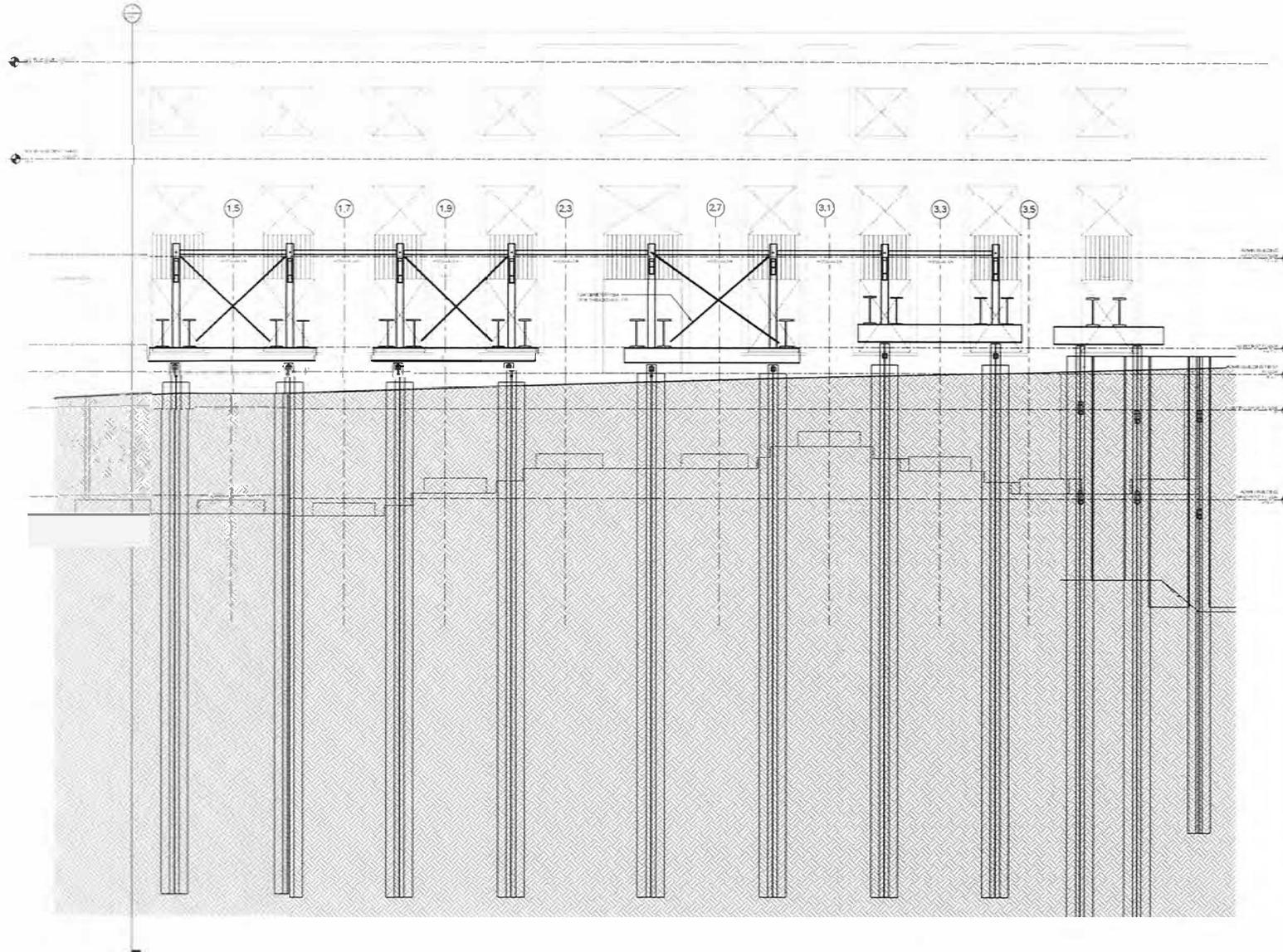


LEGEND:

KEY NOTES:

- ◇ EXISTING CONCRETE FLOOR SLAB
 - ◇ EXISTING PARKING LINE
 - ◇ APPROXIMATE LOCATION OF PREFERRED SUB-SURFACE UTILITIES. THIS GRAPHICAL REPRESENTATION DOES NOT ADDRESS ALL SUB-GROUND UTILITIES ON THE SITE. SEE CITY OF CHICAGO RECORDS FOR MORE INFORMATION ON EXISTING SITE UTILITIES.
- NOTE: COORDINATE ALL SHORING ELEMENTS WITH EXISTING UTILITIES AND PROVIDE ADEQUATE OCCUPANCY AND/OR FLOORING AS REQUIRED TO MAINTAIN EXISTING BUSINESS.

APPENDIX 11 (Addendum 2 - Attachment 1)



BAM/PFA
Bamberg & Pfaender
Pacific Film Archive

UNIVERSITY OF CALIFORNIA, BERKELEY

DS+R
Dolan, Shook & Riechert, L.L.C.
400 West 20th Street, Suite 1000
Berkeley, CA 94710
P: 925.842.7424

EHDD
Engineering & Design
500 Third Avenue
San Francisco, California 94119
T: 415.763.9797
F: 415.763.9448

Degenkolb

220 Montgomery Street, Suite 200
San Francisco, CA 94104
415.398.0100 Fax
415.398.0100
www.degenkolb.com



NOT FOR CONSTRUCTION

BAM/PFA SHORING AND CONSTRUCTION MEANS & METHODS

ISSUE FOR BID
4/16/2013

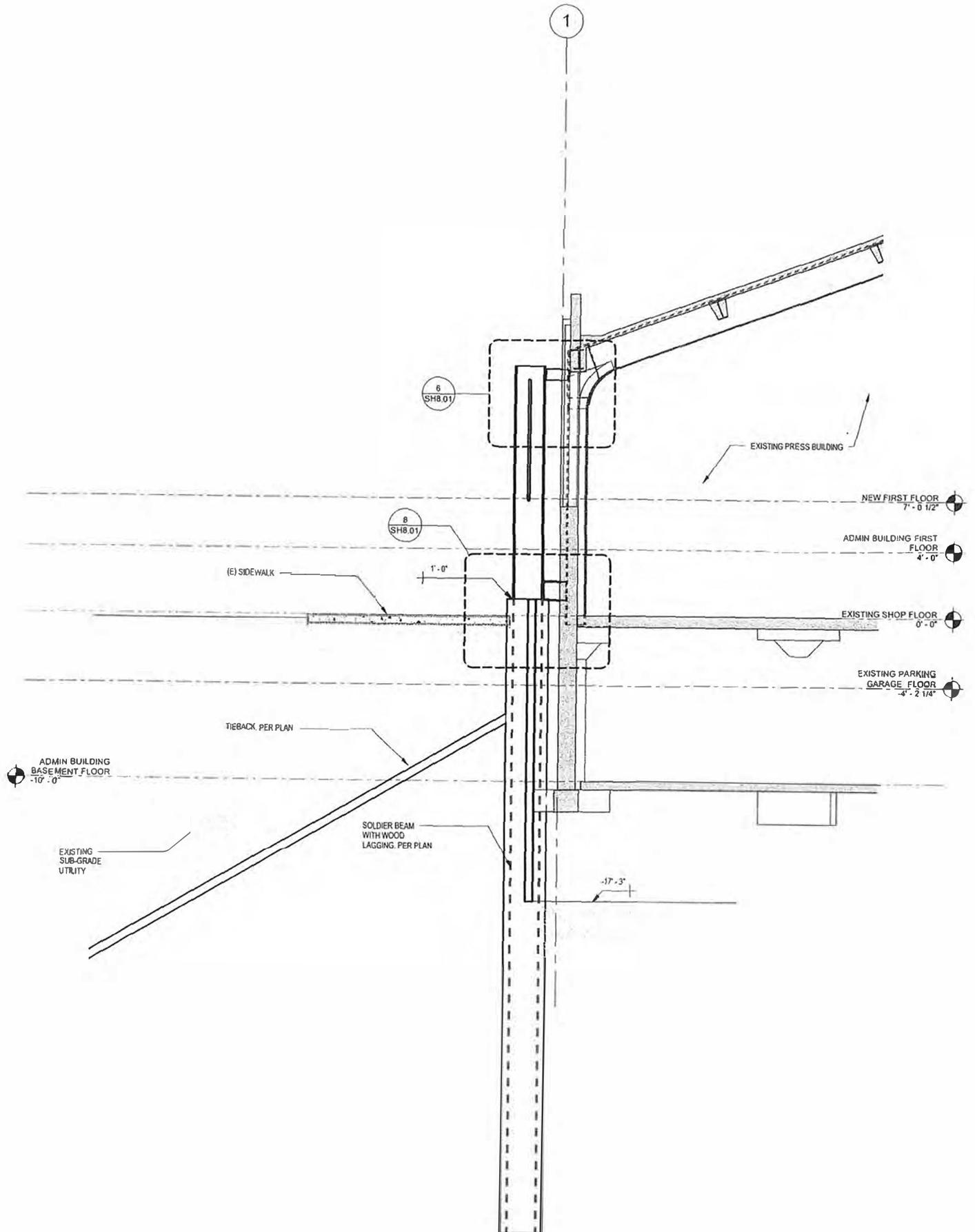
NO.	DESCRIPTION	DATE
1	ISSUE FOR BID	4/16/2013
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	

Scale: 3/4" = 1'-0"
Author: HANITAN
10015
10016
10018
10020

ELEVATIONS - ADMIN BUILDING

SH3.21

APPENDIX 11 (Addendum 2 - Attachment 1)



APPENDIX 11 (Addendum 2 - Attachment 1)

Building Area	Street Frontage	Soldier Pile Number	Pile Fee	Top Tieback Fee	2nd Tieback Fee
PFA Building	Addison St	N01	n/a	\$525.00	\$525.00
		N02	n/a	\$525.00	\$525.00
		N03	n/a	\$525.00	\$525.00
		N04	n/a	\$525.00	\$525.00
		N05	n/a	\$525.00	\$525.00
		N06	n/a	\$525.00	\$525.00
		N07	n/a	\$525.00	\$525.00
		N08	n/a	\$525.00	\$525.00
		N09	n/a	\$525.00	\$525.00
		N10	n/a	\$525.00	\$525.00
		N11	n/a	\$525.00	\$525.00
		N12	n/a	\$525.00	\$525.00
		N13	n/a	\$1,050.00	\$525.00
		N14	n/a	\$1,050.00	\$525.00
		N15	n/a	\$1,050.00	\$525.00
		N16	n/a	\$1,050.00	\$525.00
		N17	n/a	\$1,050.00	\$525.00
Admin Building	Oxford Street	E01	n/a	\$2,100.00	\$1,050.00
		E02	n/a	\$2,100.00	\$1,050.00
		E03	n/a	\$2,100.00	\$1,050.00
		E04	n/a	\$2,100.00	\$1,050.00
		E05	n/a	\$2,100.00	\$1,050.00
		E06	n/a	\$2,100.00	\$1,050.00
		E07	n/a	\$2,100.00	\$1,050.00
		E08	n/a	\$2,100.00	\$1,050.00
		E09	n/a	\$2,100.00	\$1,050.00
		E10	n/a	\$2,100.00	\$1,050.00
		E11	n/a	\$2,100.00	\$1,050.00
		E12	n/a	\$2,100.00	\$1,050.00
		E13	n/a	\$2,100.00	\$1,050.00
		E14	n/a	\$2,100.00	\$1,050.00
		E15	n/a	\$2,100.00	\$1,050.00
		E16	n/a	\$2,100.00	\$1,050.00
		E17	n/a	\$2,100.00	\$1,050.00
		E18	n/a	\$2,100.00	\$1,050.00
		E19	n/a	n/a	n/a
		E20	\$2,100.00	n/a	n/a
		E21	n/a	n/a	n/a
		E22	\$2,100.00	n/a	n/a
		E23	n/a	n/a	n/a
		E24	\$2,100.00	n/a	n/a

APPENDIX 11 (Addendum 2 - Attachment 1)

		E25	n/a	n/a	n/a
		E26	\$2,100.00	n/a	n/a
		E27	n/a	n/a	n/a
		E28	\$2,100.00	n/a	n/a
		E29	n/a	n/a	n/a
		E30	\$2,100.00	n/a	n/a
		E31	n/a	n/a	n/a
		E32	\$2,100.00	n/a	n/a
		E33	n/a	n/a	n/a
		E34	\$2,100.00	n/a	n/a
Press Building	Center Street	S00	n/a	\$2,100.00	n/a
		S01	n/a	\$2,100.00	n/a
		S02	n/a	\$2,100.00	n/a
		S03	n/a	\$2,100.00	n/a
		S04	n/a	\$2,100.00	n/a
		S05	n/a	\$2,100.00	n/a
		S06	n/a	\$2,100.00	n/a
		S07	n/a	\$2,100.00	n/a
		S08	n/a	\$2,100.00	n/a
		S09	n/a	\$2,100.00	n/a
		S10	n/a	\$2,100.00	n/a
		S11	n/a	\$2,100.00	n/a
		S12	n/a	\$2,100.00	n/a
		S13	n/a	\$2,100.00	n/a
		S14	n/a	\$2,100.00	n/a
		S15	n/a	\$2,100.00	n/a
		S16	n/a	\$2,100.00	n/a
		S17	n/a	\$2,100.00	n/a
		S18	n/a	\$2,100.00	n/a
		S19	n/a	\$2,100.00	n/a
		S20	n/a	\$2,100.00	n/a
		S21	n/a	\$2,100.00	n/a
		S22	n/a	\$2,100.00	n/a
		S23	n/a	\$2,100.00	n/a
				E35	\$2,100.00
		W1	n/a	\$2,100.00	n/a
Sub totals			\$18,900	\$101,850	\$27,825
Pile Mitigation Fees			\$18,900		
Tieback Mitigation Fees			\$129,675.00		
Total Pile & Tieback Mitigation Fees			\$148,575.00		

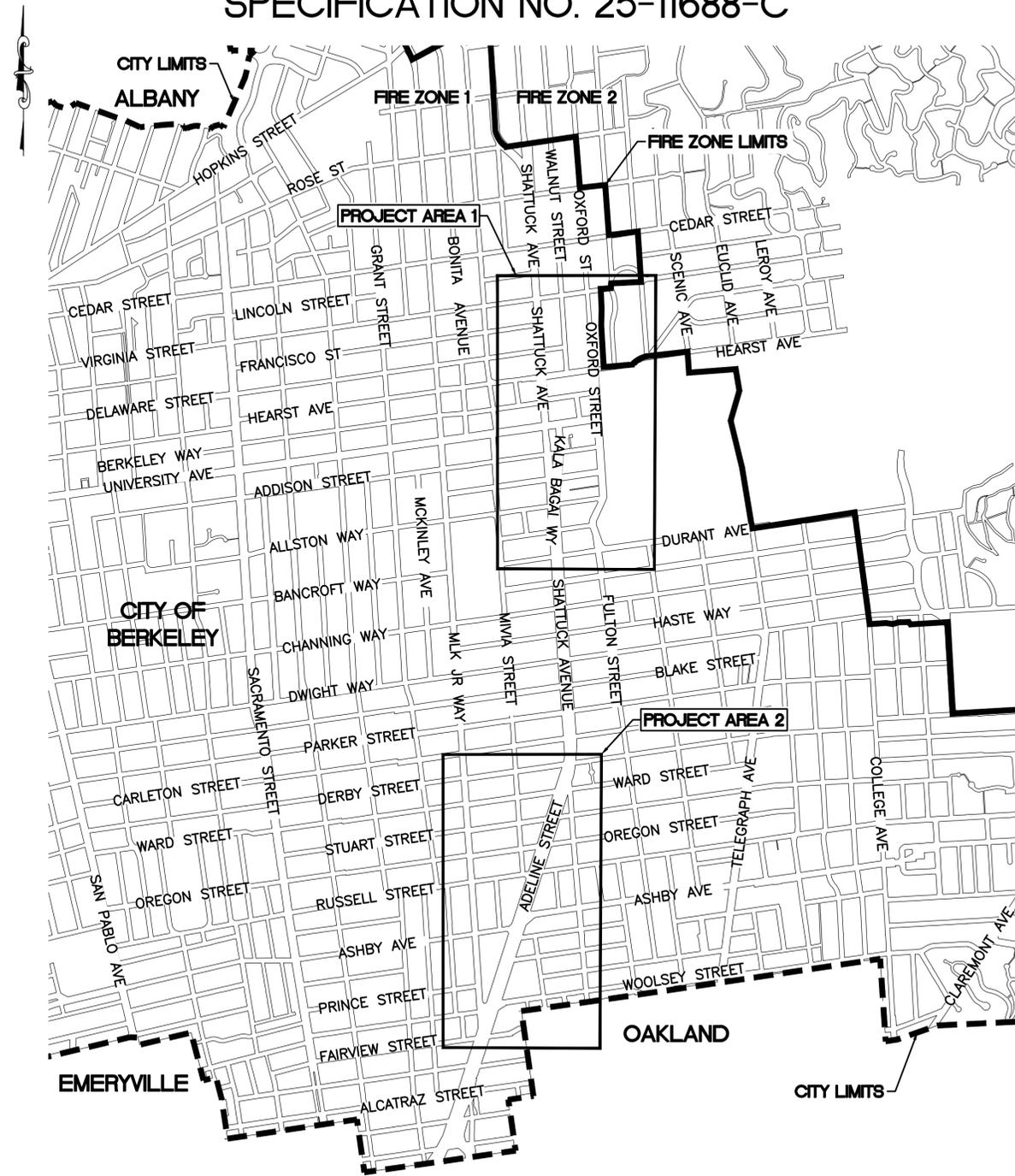
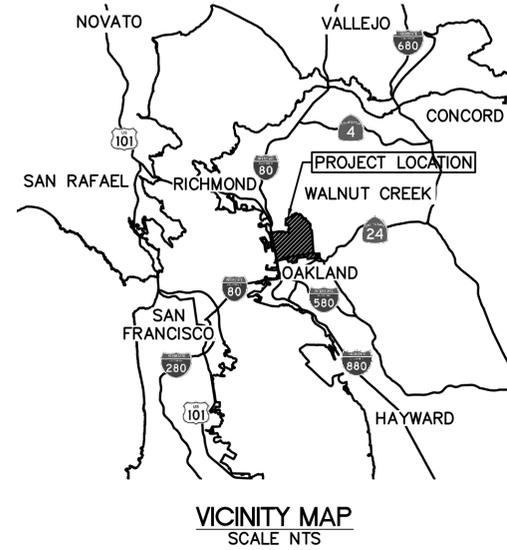
ATTACHMENT 2: Plans (Select Sheets)
BID ADDENDUM 2
SANITARY SEWER REHABILITATION:
ADELINE ST, SHATTUCK AVE, ET AL
SPECIFICATION 25-11688-C

CITY OF BERKELEY, CALIFORNIA

SANITARY SEWER REHABILITATION

ADELINE STREET, SHATTUCK AVENUE, ET AL

SPECIFICATION NO. 25-11688-C



INDEX OF DRAWINGS

SHEET NO.	PROJECT AREA	DRAWING TITLE
01	---	TITLE SHEET
02	---	VICINITY MAPS
03	---	GENERAL NOTES, LEGEND & ABBREVIATIONS
04	PROJECT AREA 2	ADELINE STREET 1 STA 10+00 TO 13+80
05	PROJECT AREA 2	ADELINE STREET 1 STA 13+80 TO 18+50
06	PROJECT AREA 2	ADELINE STREET 1 STA 18+50 TO 22+80
07	PROJECT AREA 2	ADELINE STREET 1 STA 22+80 TO 27+50
08	PROJECT AREA 2	ADELINE STREET 1 STA 27+50 TO 31+15
09	PROJECT AREA 2	ADELINE STREET 1 STA 31+15 TO END
10	PROJECT AREA 2	ADELINE STREET 2 STA 10+00 TO 12+30
11	PROJECT AREA 1	KALA BAGAI WAY STA 10+00 TO 12+10
12	PROJECT AREA 1	KALA BAGAI WAY STA 12+10 TO 16+50
13	PROJECT AREA 1	KALA BAGAI WAY STA 16+50 TO 20+80
14	PROJECT AREA 1	SHATTUCK AVENUE STA 20+80 TO END
15	PROJECT AREA 1	OXFORD STREET STA 10+00 TO 13+80
16	PROJECT AREA 1	OXFORD STREET STA 13+80 TO 18+50
17	PROJECT AREA 1	OXFORD STREET STA 18+50 TO 22+80
18	PROJECT AREA 1	OXFORD STREET STA 22+80 TO 27+50
18A	PROJECT AREA 1	OXFORD STREET STA 22+80 TO 27+50
18B	---	DETAILS
19	PROJECT AREA 1	OXFORD STREET STA 27+50 TO 31+80
19A	PROJECT AREA 1	OXFORD STREET STA 27+50 TO 31+80
20	PROJECT AREA 1	OXFORD STREET STA 31+80 TO 35+25
20A	PROJECT AREA 1	OXFORD STREET STA 31+80 TO 35+25
21	PROJECT AREA 1	OXFORD STREET STA 35+25 TO 39+50
22	PROJECT AREA 1	OXFORD STREET STA 39+50 TO END
23	PROJECT AREA 2	WOOLSEY STREET STA 10+00 TO 13+80
24	PROJECT AREA 2	WOOLSEY STREET STA 13+80 TO END
25	---	DETAILS
26	---	DETAILS
27	---	DETAILS
28	---	DETAILS
29	---	DETAILS

CONTACT INFORMATION

CITY OF BERKELEY: FELIX MENEAU
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FMENEAU@BERKELEYCA.GOV

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510-287-1005
OSCAR.HERRERA@EBMUD.COM

BART: MARCUS WILLIAMS
510-987-5298
MWILLI5@BART.GOV

PG&E: KEVIN LIM (GAS)
915-808-8309
KWL7@PGE.COM

CEDRICKE DENNIS (ELECTRIC)
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CMD5@PGE.COM

CALTRANS: GEORGE LEE
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GEORGE.LEE@DOT.CA.GOV

UC BERKELEY: DON IRBY
510-207-4210
DIRBY@BERKELEY.EDU

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\03 - Plan Sheets\01 TITLE SHEET.dwg [01: C1.0] 1-09-25 02:00:55 PM dchoy

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAU, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DRAWN: DC
CHECK: TH
AS BUILT: _____

DESIGN: MA
DRAWN: DC
CHECK: TH
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
TITLE SHEET
LOCATION MAP & INDEX OF DRAWINGS

FILE NO.: 8292
502-822
SHEET 01 OF 29

NO.	DATE	DESCRIPTION	APPROVAL
1	01/09/25	BID ADDENDUM 2 - BART P/W, UTILITY INFORMATION, & BID PACKAGES B, C, D, & E	

SURVEY CONTROL POINTS

CONTROL DATA (U.S. SURVEY FOOT)

-HORIZONTAL CONTROL IN GROUND VALUES
-VERTICAL CONTROL IN CITY OF BERKELEY DATUM.

DESIGNATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
CITY BENCHMARKS USED				
7	2144644.443	6051946.744	204.04	FND BM B1552
74	2137546.918	6051271.239	122.62	FND BM B4328
CONTROL SET				
2	2145401.308	6051897.311	214.28	SET CUT X
3	2138376.148	6050869.095	119.59	SET CUT X
4	2139201.829	6051155.581	132.00	SET CUT X
5	2144919.854	6051976.986	203.14	SET CUT X
9	2144576.209	6052009.460	204.77	SET MAG
10	2143975.533	6051994.767	197.70	SET CUT X
27	2143626.872	6051897.911	193.49	SET MAG
28	2144466.832	6051471.251	185.47	SET CUT X
29	2144218.117	6051414.635	182.97	SET CUT X
30	2143841.044	6051415.173	180.91	SET CUT X
32	2138051.458	6050757.991	117.30	SET CUT X
33	2137476.371	6050620.716	112.12	SET CUT X
34	2139885.845	6051369.623	141.98	SET CUT X
54	2137040.262	6050507.394	106.29	SET CUT X
72	2143943.376	6051914.041	194.66	SET MAG
76	2144262.288	6051718.410	190.06	SET 60D NAIL
77	2144198.345	6051692.443	189.07	SET CUT X

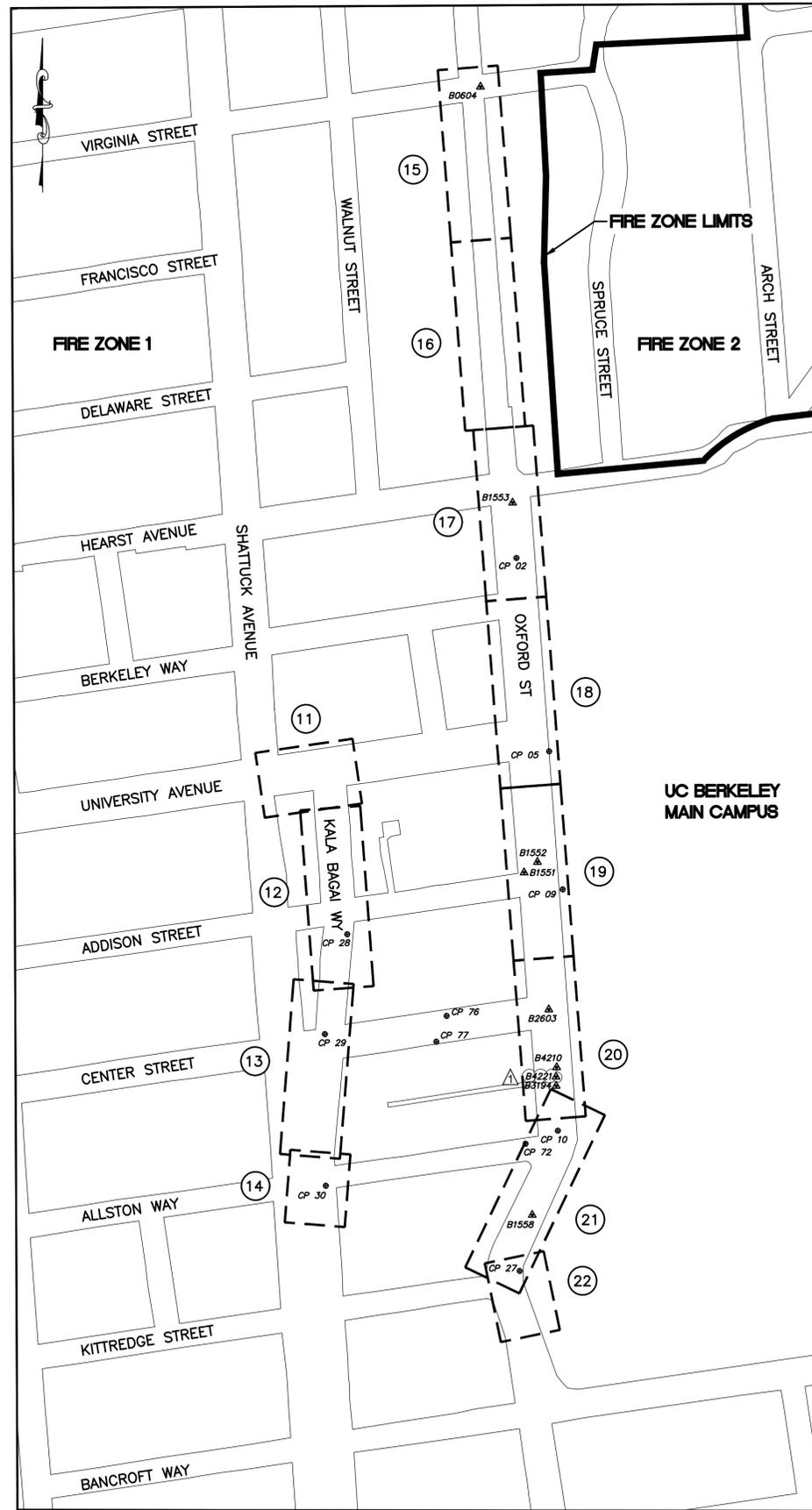
THE CONTROL TABLE VALUES CONTAINED HEREIN HAVE BEEN REVIEWED BY A CITY OF BERKELEY SURVEY CHIEF OF PARTY FOR CONFORMITY WITH RECORD INFORMATION ONLY. NO FIELD VERIFICATION OF THIS DATA HAS BEEN PERFORMED BY THE CITY OF BERKELEY SURVEY CREWS.

CONTROL POINTS 32, 33, 54, 76 & 77 ARE OUTSIDE OF THE LIMITS SHOWN ON PLANS

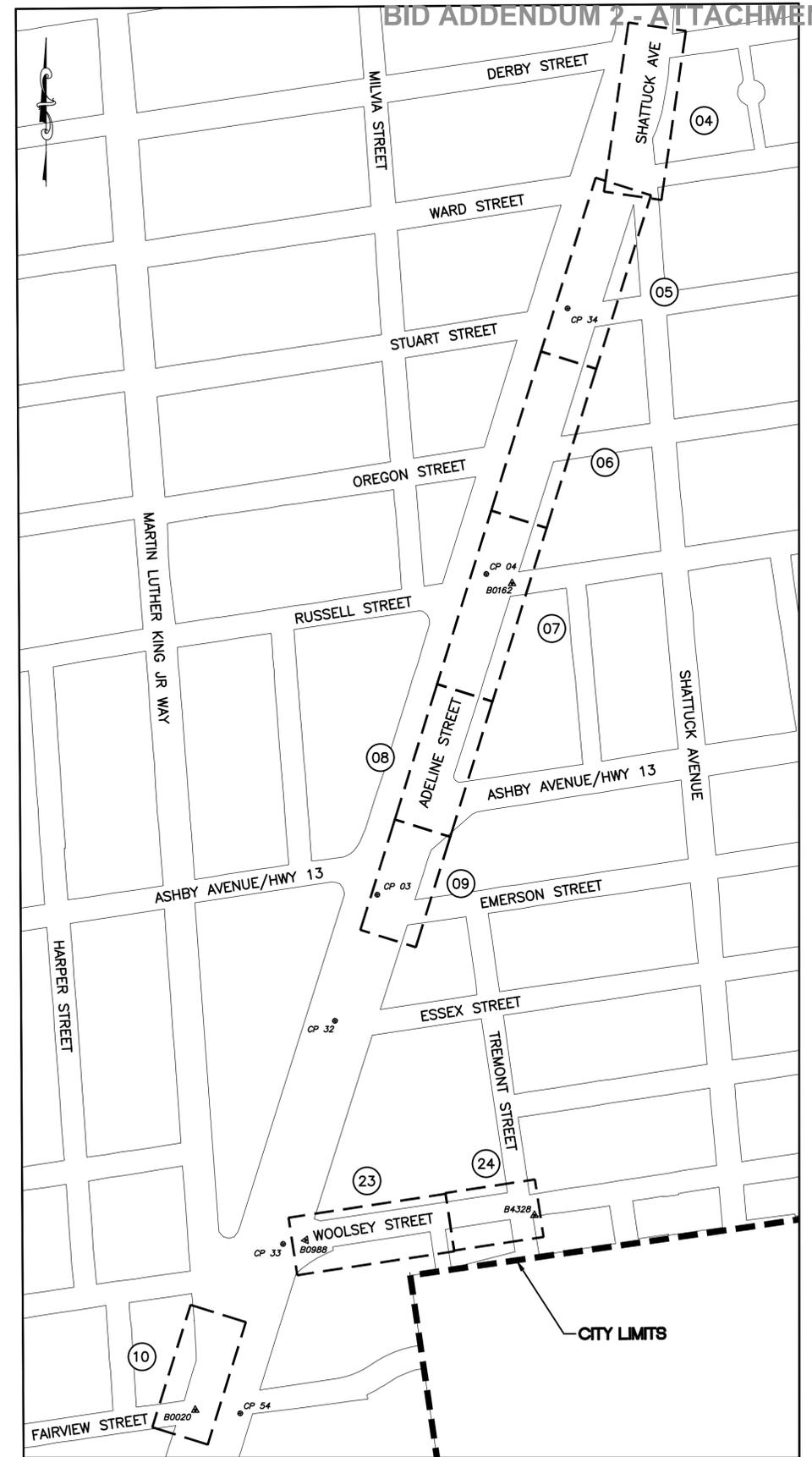
THE TOPOGRAPHIC MAPPING OF THE SITES SHOWN HEREON WAS SURVEYED USING A COMBINATION OF TRIMBLE R12 GPS AND TSC7 TOTAL STATION EQUIPMENT.

SURVEY CONTROL SHOWN HEREON BASED ON NAD83, ZONE III EPOCH 2010.00 DATUM. ELEVATIONS SHOWN HEREON ARE BASED ON CITY OF BERKELEY DATUM.

RIGHT OF WAY (R/W) SHOWN HEREON IS BEST FIT AND WAS OBTAINED FROM AVAILABLE PUBLIC RECORDS AND FOUND MONUMENTS IN THE FIELD. NO ATTEMPT WAS MADE TO RETRACE THE R/W.



PROJECT AREA 1
SCALE 1"=200'



PROJECT AREA 2
SCALE 1"=200'

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FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
R.C.E. 37829
EXP. 04/2025

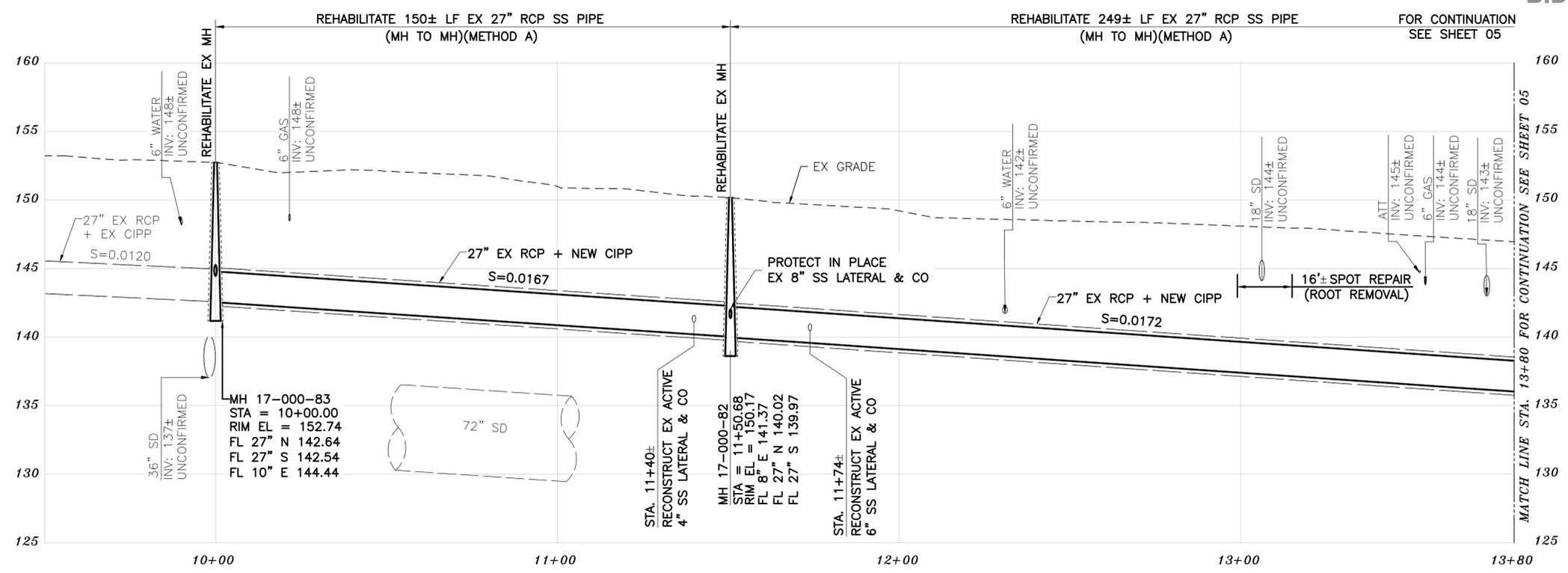
DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: DATE 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
VICINITY MAPS
AND SHEET KEY

REVISION	MARK	DATE	DESCRIPTION	APPROVAL
1	Δ	01/06/25	BID ADDENDUM 2 - ADDED SURVEY BENCHMARK	

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 02 OF 29



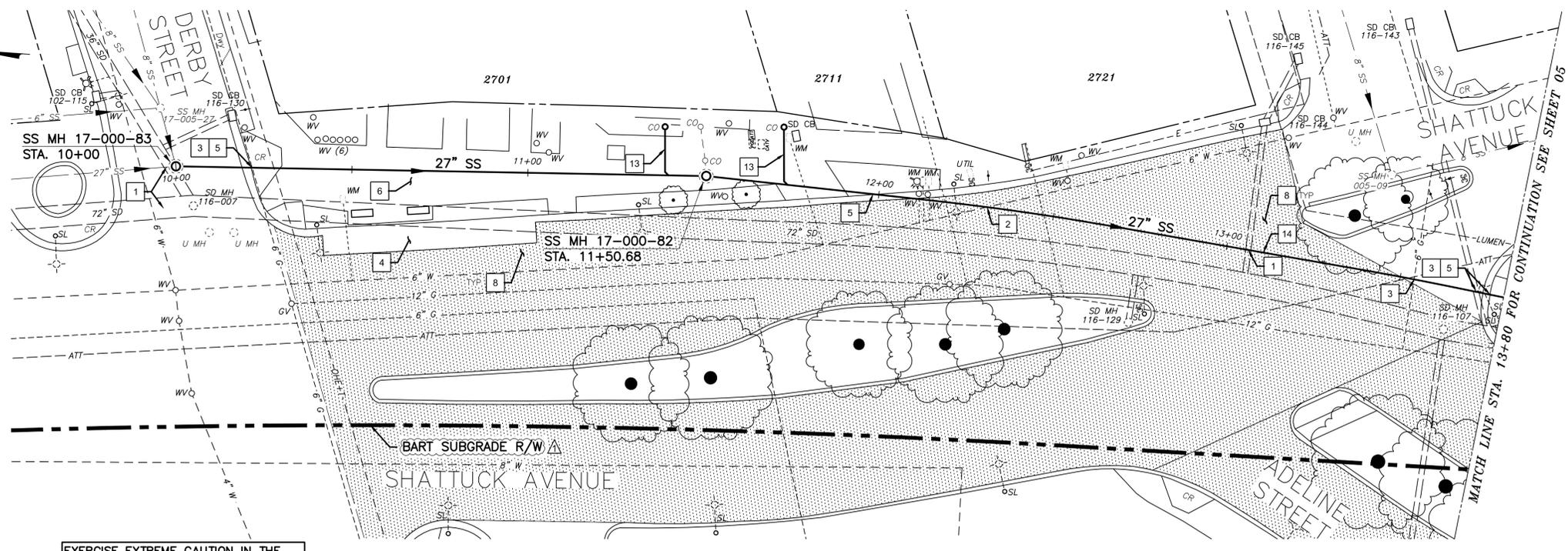
PROFILE

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 4 RECONSTRUCT PORTIONS OF EX CONCRETE BUS PAD IF REMOVED/DAMAGED BY SEWER INSTALLATION.
- 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
- 6 RECONSTRUCT PORTIONS OF EX SIDEWALK IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8153.
- 8 REPLACE EX BIKE LANE STRIPING, SIGNING, AND TRAFFIC DEVICES IF REMOVED/DAMAGED BY SEWER INSTALLATION. FOR CROSSWALK AND OTHER TRAFFIC MARKINGS, REPLACE/RESTORE ENTIRE WIDTH OF CROSSWALK AND TRAFFIC MARKINGS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.
- 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.

- LEGEND**
- PAVEMENT MORATORIUM AREA SHATTUCK AVENUE (DERBY STREET - ADELINE STREET) 6/30/2020 THROUGH 6/30/2025
 - PAVEMENT MORATORIUM AREA ADELINE STREET (SHATTUCK AVENUE - ASHBY AVENUE) 6/30/2020 THROUGH 6/30/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PLAN

EXERCISE EXTREME CAUTION IN THE INTERSECTION OF ADELINE AND DERBY - MANY UTILITY CROSSINGS

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
10+00.00	2140560.26	6051628.87	S9°38'48.70"W	150.68	MH 17-000-83
11+50.68	2140411.71	6051603.62	S14°44'57.79"W	299.26	MH 17-000-82
13+80.00	2140192.85	6051535.77	---	---	MATCH LINE

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\04 ADELINE STREET 1.dwg [04 C2.0] 1-09-25 02:01:58 PM dchoy



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF

DEPICTION OF MONUMENTS: DATE 01/09/25
 WATERSHED REVIEW: DATE 01/09/25

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
 APPROVED: DATE 01/09/25
 R.C.E. 62524
 EXP. 10/2025
 RONALD NEVELS, CITY ENGINEER

DESIGN MA
 HORIZ. 1"=20'
 VERT. 1"=5'
 DRAWN DC
 CHECK TH
 AS BUILT
 DATE 01/09/25

CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
 ADELINE STREET 1
 27" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 04 OF 29

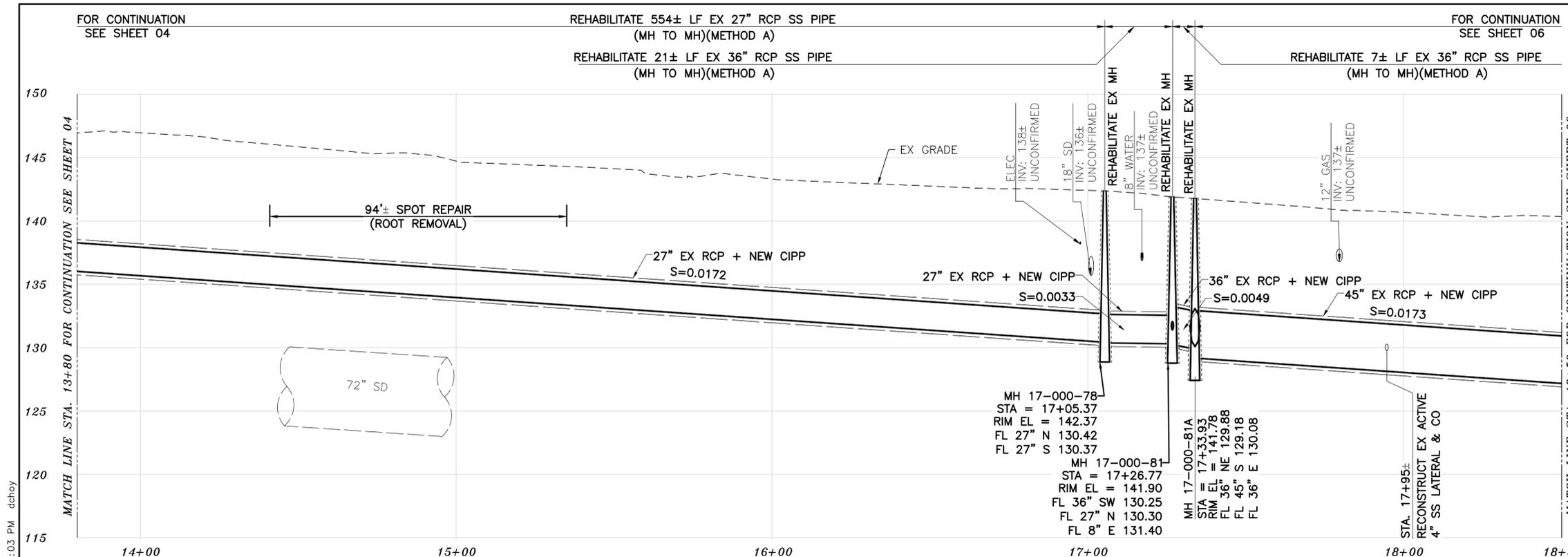
FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
 - 6 RECONSTRUCT PORTIONS OF EX SIDEWALK IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8153.
 - 8 REPLACE EX BIKE LANE STRIPING, SIGNING, AND TRAFFIC DEVICES IF REMOVED/DAMAGED BY SEWER INSTALLATION. FOR CROSSWALK AND OTHER TRAFFIC MARKINGS, REPLACE/RESTORE ENTIRE WIDTH OF CROSSWALK AND TRAFFIC MARKINGS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
 - 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.
 - 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.

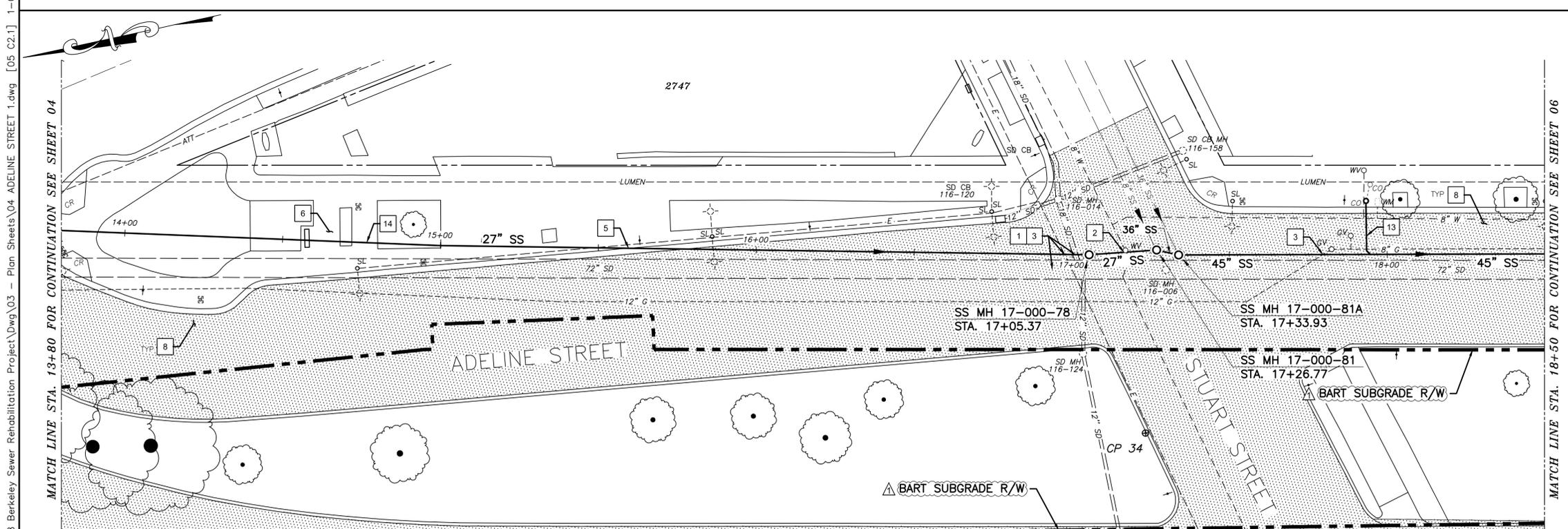
- LEGEND**
- [Symbol] PAVEMENT MORATORIUM AREA
 - [Symbol] ADELINE STREET (SHATTUCK AVENUE - ASHBY AVENUE) 6/30/2020 THROUGH 6/30/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PROFILE



PLAN

EXERCISE EXTREME CAUTION IN THE INTERSECTION OF ADELINE AND STUART - MANY UTILITY CROSSINGS

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
13+80.00	2140192.85	6051535.77	S20°07'25.59"W	325.43	MATCH LINE
17+05.37	2139885.55	6051428.75	S13°48'55.93"W	21.41	MH 17-000-82A
17+26.77	2139864.76	6051423.64	S30°33'30.75"W	7.15	MH 17-000-81
17+33.93	2139858.60	6051420.01	S17°41'19.55"W	114.71	MH 17-000-81A
18+50.00	2139748.17	6051384.79	---	---	MATCH LINE

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.

Bellecci
Intelligent Infrastructure

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

WATERSHED REVIEW: DATE 01/09/25

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: _____

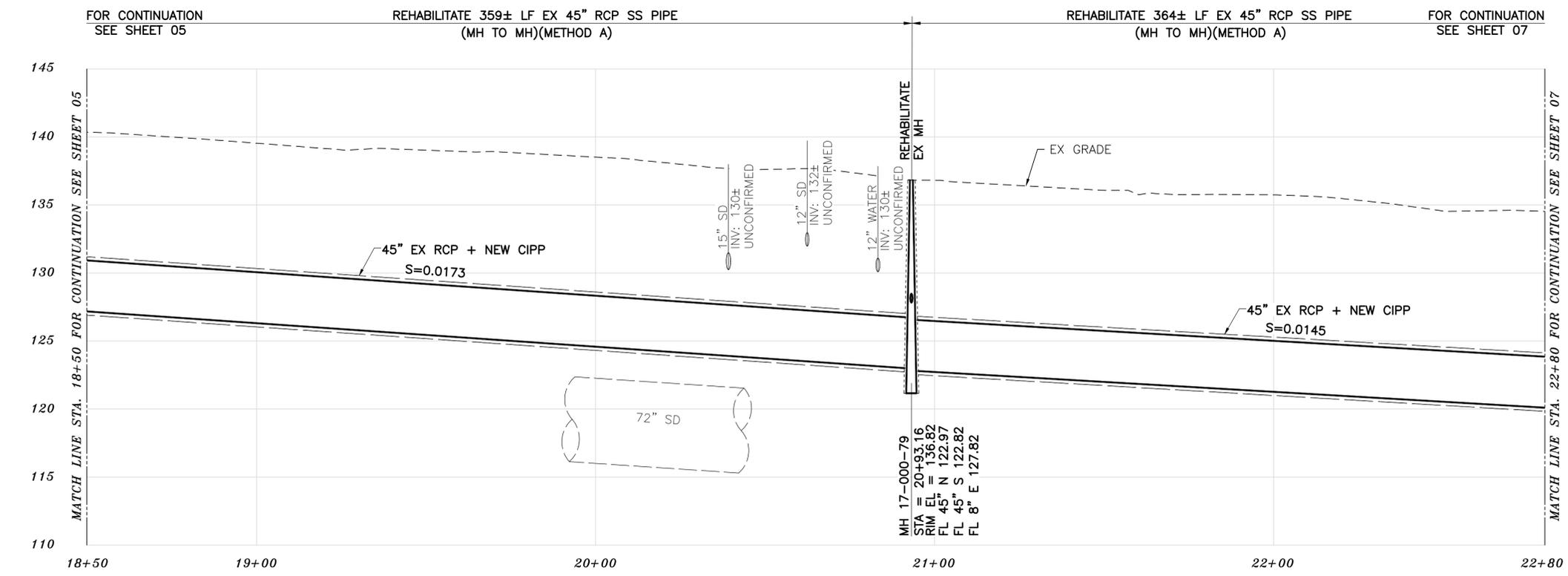
HORIZ. 1"=20'
VERT. 1"=5'
BOOK _____
DATE 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
ADELINE STREET 1
27"-36"-45" SS
PLAN AND PROFILE

PLAT NO.: 8292
FILE NO.: 502-822
SHEET 05 OF 29

BID ADDENDUM 2 - ATTACHMENT 2



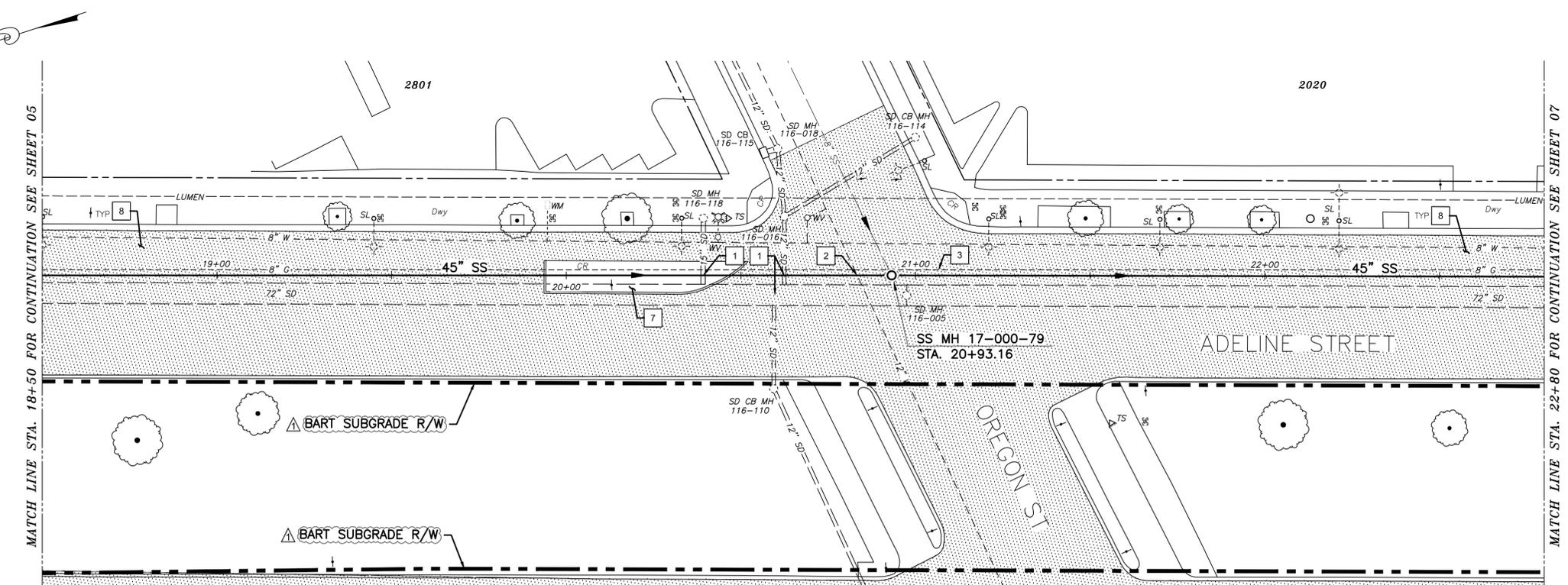
PROFILE

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 7 RECONSTRUCT PORTIONS OF EX BUS BOARDING ISLANDS AND RAMPS IF REMOVED/DAMAGED BY SEWER INSTALLATION.
 - 8 REPLACE EX BIKE LANE STRIPING, SIGNING, AND TRAFFIC DEVICES IF REMOVED/DAMAGED BY SEWER INSTALLATION. FOR CROSSWALK AND OTHER TRAFFIC MARKINGS, REPLACE/RESTORE ENTIRE WIDTH OF CROSSWALK AND TRAFFIC MARKINGS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

- LEGEND**
- PAVEMENT MORATORIUM AREA
 - ADELINE STREET (SHATTUCK AVENUE - ASHBY AVENUE) 6/30/2020 THROUGH 6/30/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PLAN

EXERCISE EXTREME CAUTION IN THE INTERSECTION OF ADELINE AND OREGON - MANY UTILITY CROSSINGS

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
18+50.00	2139748.17	6051384.79	S17°41'19.55"W	243.33	MATCH LINE
20+93.16	2139516.35	6051310.85	S17°48'12.49"W	186.81	MH 17-000-79
22+80.00	2139338.49	6051253.74	---	---	MATCH LINE

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\03 - Plan Sheets\04 ADELINE STREET 1.dwg [06 C2.2] 1-09-25 02:02:13 PM dchoy



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAU, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF

DEPICTION OF MONUMENTS: DATE 01/09/25
 WATERSHED REVIEW: DATE 01/09/25

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DREW: MA
 DRAWN: DC
 CHECK: TH
 AS BUILT: DATE 01/09/25

APPROVED: DATE 01/09/25
 R.C.E. 62524
 EXP. 10/2025
 RONALD NEVELS, CITY ENGINEER

CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
ADELINE STREET 1
45" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 06 OF 29

FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 8 REPLACE EX BIKE LANE STRIPING, SIGNING, AND TRAFFIC DEVICES IF REMOVED/DAMAGED BY SEWER INSTALLATION. FOR CROSSWALK AND OTHER TRAFFIC MARKINGS, REPLACE/RESTORE ENTIRE WIDTH OF CROSSWALK AND TRAFFIC MARKINGS UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NOS. 8090 & 8091.

LEGEND

- PAVEMENT MORATORIUM AREA
- ADELINE STREET (SHATTUCK AVENUE - ASHBY AVENUE) 6/30/2020 THROUGH 6/30/2025

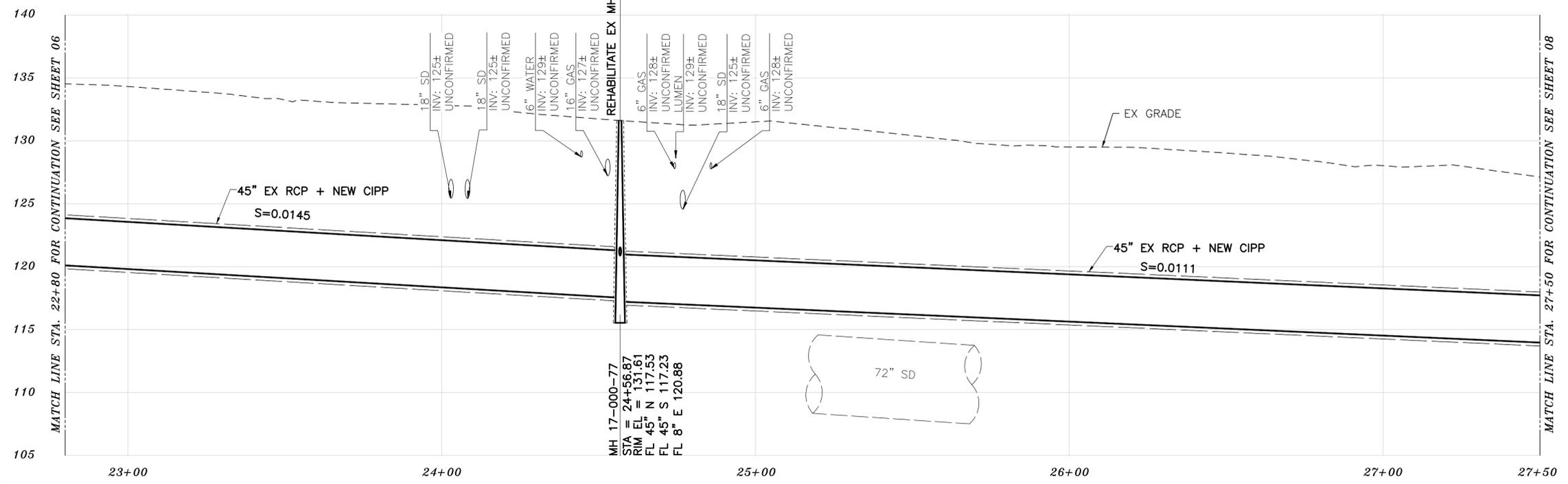
PAVEMENT MORATORIUM NOTES

1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

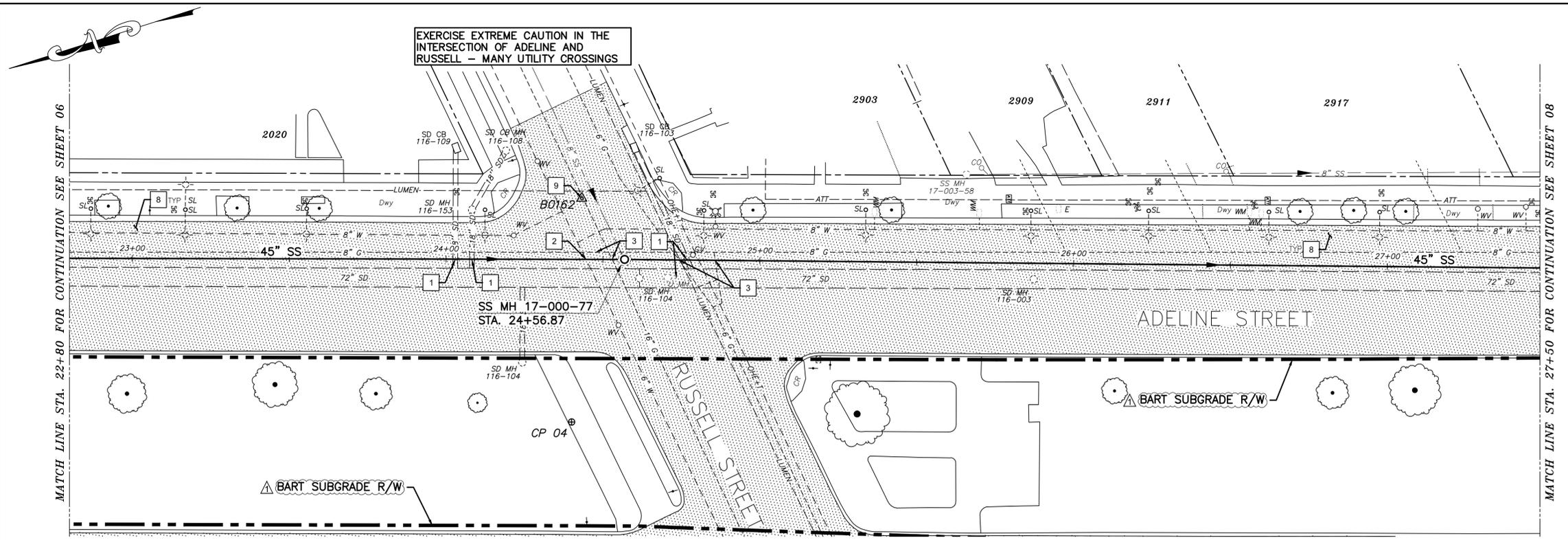
NOTES:

1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
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8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

FOR CONTINUATION SEE SHEET 06 REHABILITATE 346± LF EX 45" RCP SS PIPE (MH TO MH)(METHOD A) FOR CONTINUATION SEE SHEET 08



PROFILE



PLAN

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
22+80.00	2139338.49	6051253.74	S17°48'12.49"W	176.90	MATCH LINE
24+56.87	2139170.06	6051199.65	S18°13'14.70"W	293.03	MH 17-000-77
27+50.00	2138891.73	6051108.02	---	---	MATCH LINE

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\03 - Plan Sheets\04 ADELINE STREET 1.dwg [07 C2.3] 1-09-25 02:02:18 PM dchoy



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25

DEPICTION OF MONUMENTS: DATE 01/09/25
 DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
 APPROVED: DATE 01/09/25
 RONALD NEVELS, CITY ENGINEER
 EXP. 10/2025

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DESIGN MA
 DRAWN DC
 CHECK TH
 AS BUILT
 DATE 01/09/25

HORIZ. 1"=20'
 VERT. 1"=5'
 BOOK
 DATE 01/09/25

CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
 ADELINE STREET 1
 45" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 07 OF 29

FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

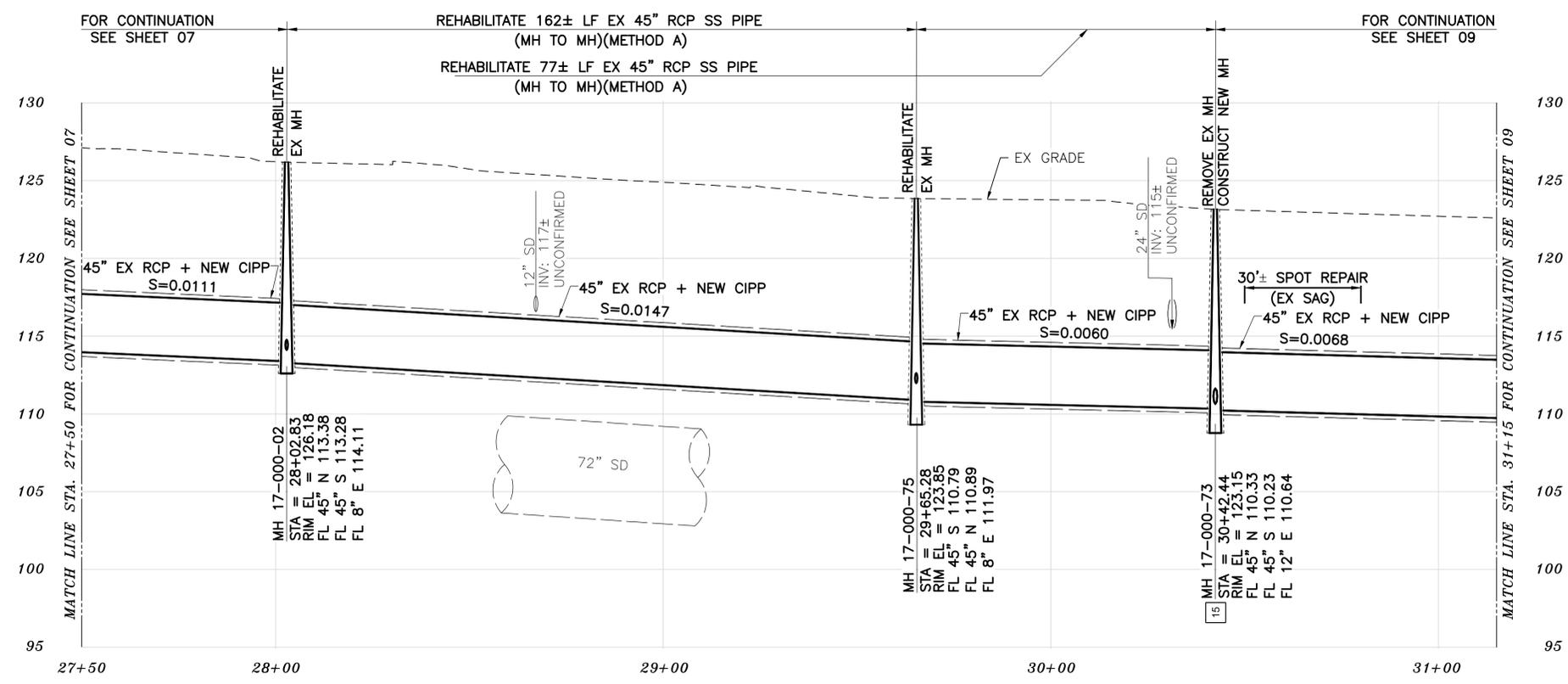
CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
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- 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.
- 15 REMOVE EX MH. CONSTRUCT NEW MH PER DETAIL 12 ON SHEET 26. CONSTRUCT NEW FRAME AND COVER PER DETAIL 13 ON SHEET 27. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.

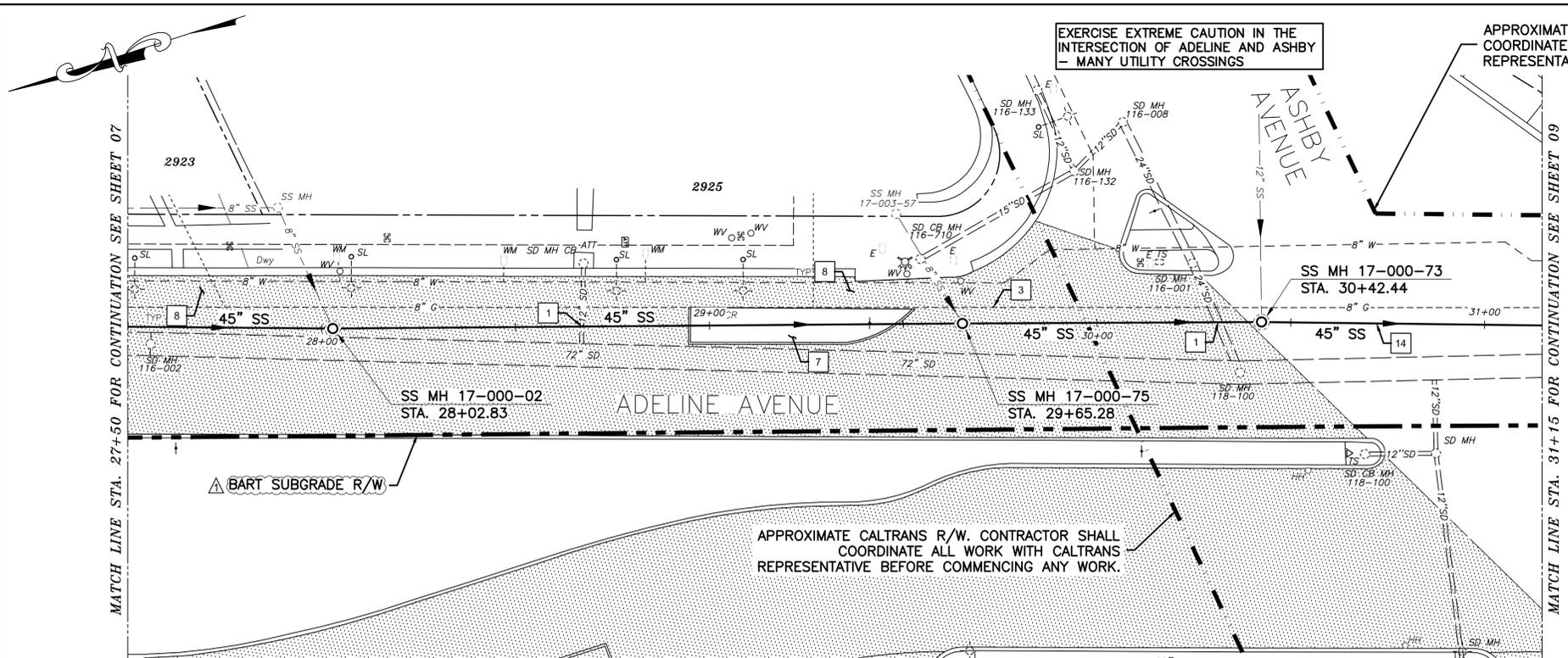
- LEGEND
- [Pattern] PAVEMENT MORATORIUM AREA
 - [Pattern] ADELINE STREET (SHATTUCK AVENUE - ASHBY AVENUE) 6/30/2020 THROUGH 6/30/2025

- PAVEMENT MORATORIUM NOTES
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

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PROFILE



PLAN

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
27+50.00	2138891.73	6051108.02	S18°13'14.70"W	52.93	MATCH LINE
28+02.83	2138841.45	6051091.47	S17°13'36.98"W	162.45	MH 17-000-76
29+65.28	2138686.29	6051043.36	S17°27'40.19"W	77.17	MH 17-000-75
30+42.44	2138612.66	6051020.27	S18°23'01.99"W	72.39	MH 17-000-73
31+15.00	2138543.96	6050997.44	---	---	MATCH LINE

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\03 - Plan Sheets\04 ADELINE STREET 1.dwg [08 C2.4] 1-09-25 02:02:28 PM dchoy

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: _____
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
ADELINE STREET 1
45" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 08 OF 29

REVISION	DATE	DESCRIPTION	APPROVAL
1	01/06/25	BID ADDENDUM 2 - BART R/W	

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\04 ADELINE STREET 1.dwg [09 C2.5] 1-09-25 02:02:33 PM dchoy

FOR CONTINUATION
SEE SHEET 08

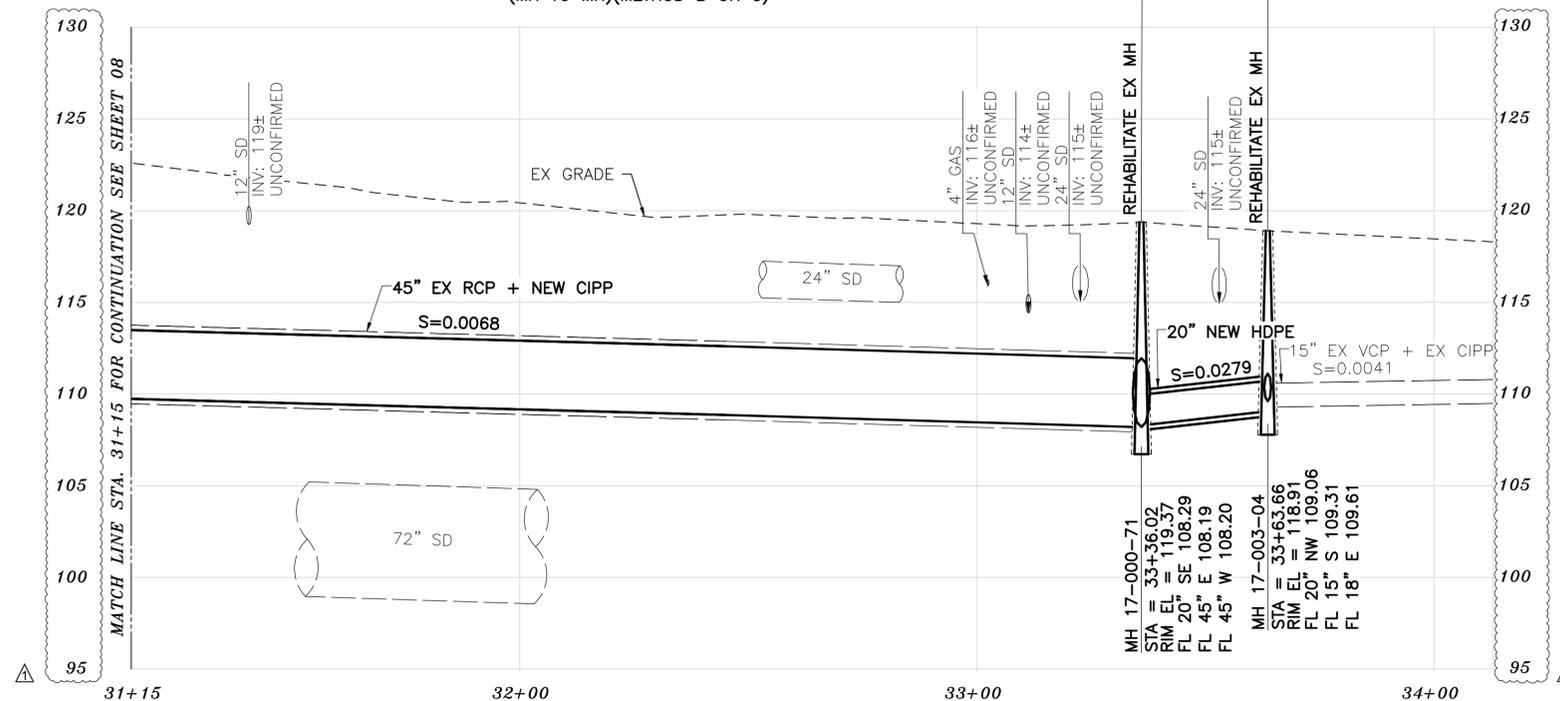
REHABILITATE 293± LF EX 45" RCP SS PIPE
(MH TO MH)(METHOD A)

REPLACE 28± LF EX 18" RCP SS PIPE
(MH TO MH)(METHOD B OR C)

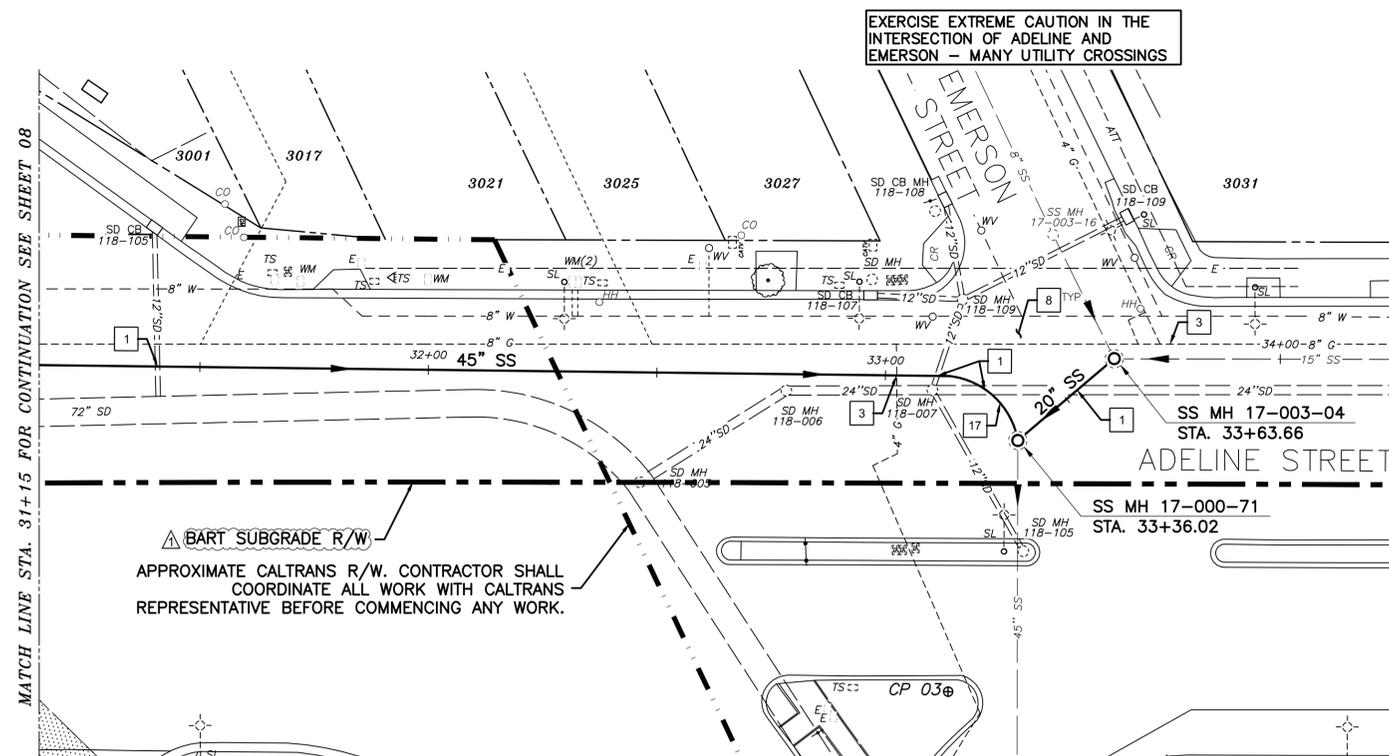
BID ADDENDUM 2 - ATTACHMENT 2

CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
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- 17 EXERCISE EXTREME CAUTION WHEN INSTALLING CIPP LINING ALONG RADIAL BENDS TO MINIMIZE CREASING.



PROFILE



PLAN

NOTES:

1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
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5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
31+15.00	2138543.96	6050997.44	S18°23'01.90"W	221.19	MATCH LINE
33+36.02	2138344.97	6050916.69	S22°34'17.96"E	27.63	MH 17-000-71
33+63.66	2138319.45	6050927.30	---	---	MH 17-003-04

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



Bellecci
Intelligent Infrastructure
925-685-4569
bellecci.com

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAU, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
R.C.E. 37829
EXP. 04/2025

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: _____
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

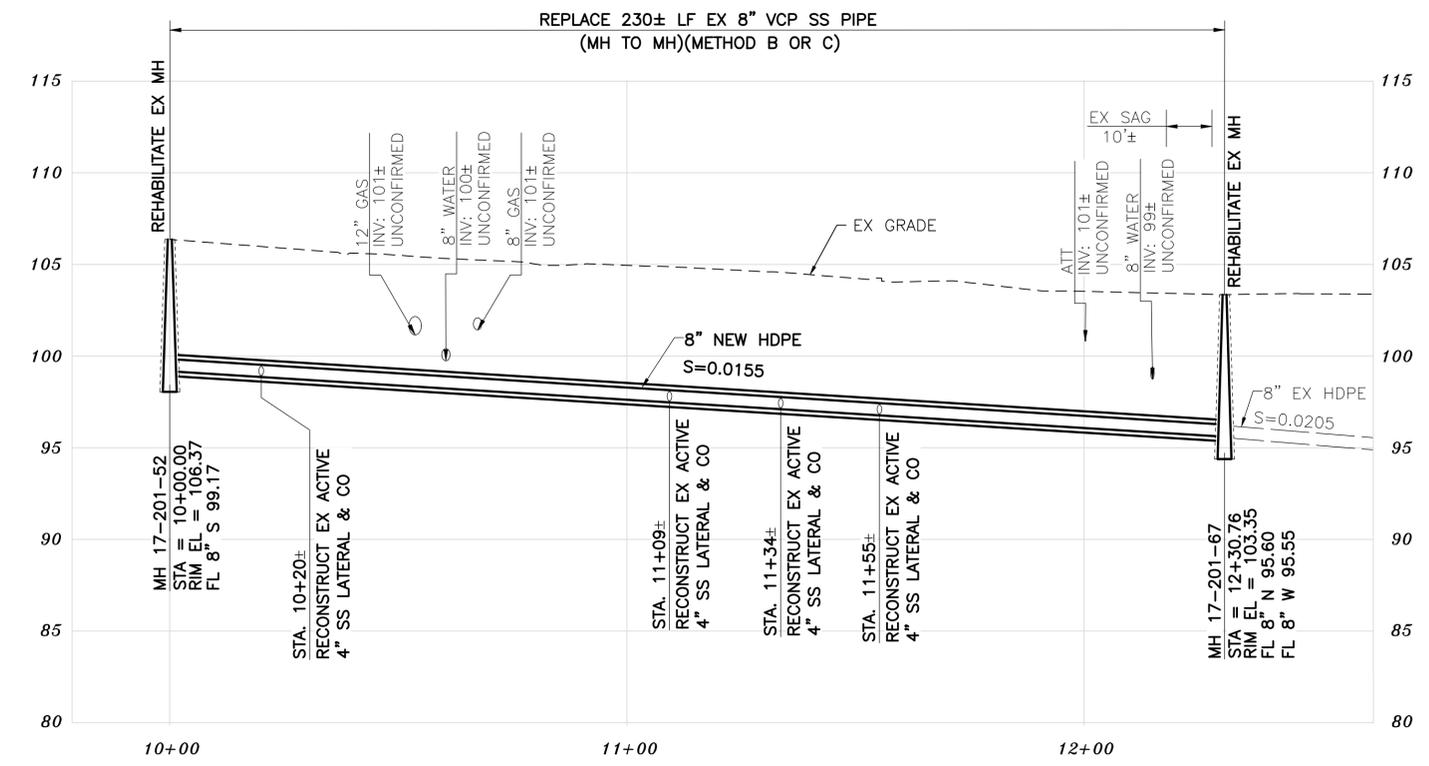
SANITARY SEWER REHABILITATION
ADELINE STREET 1
45"-48"-18" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 09 OF 29

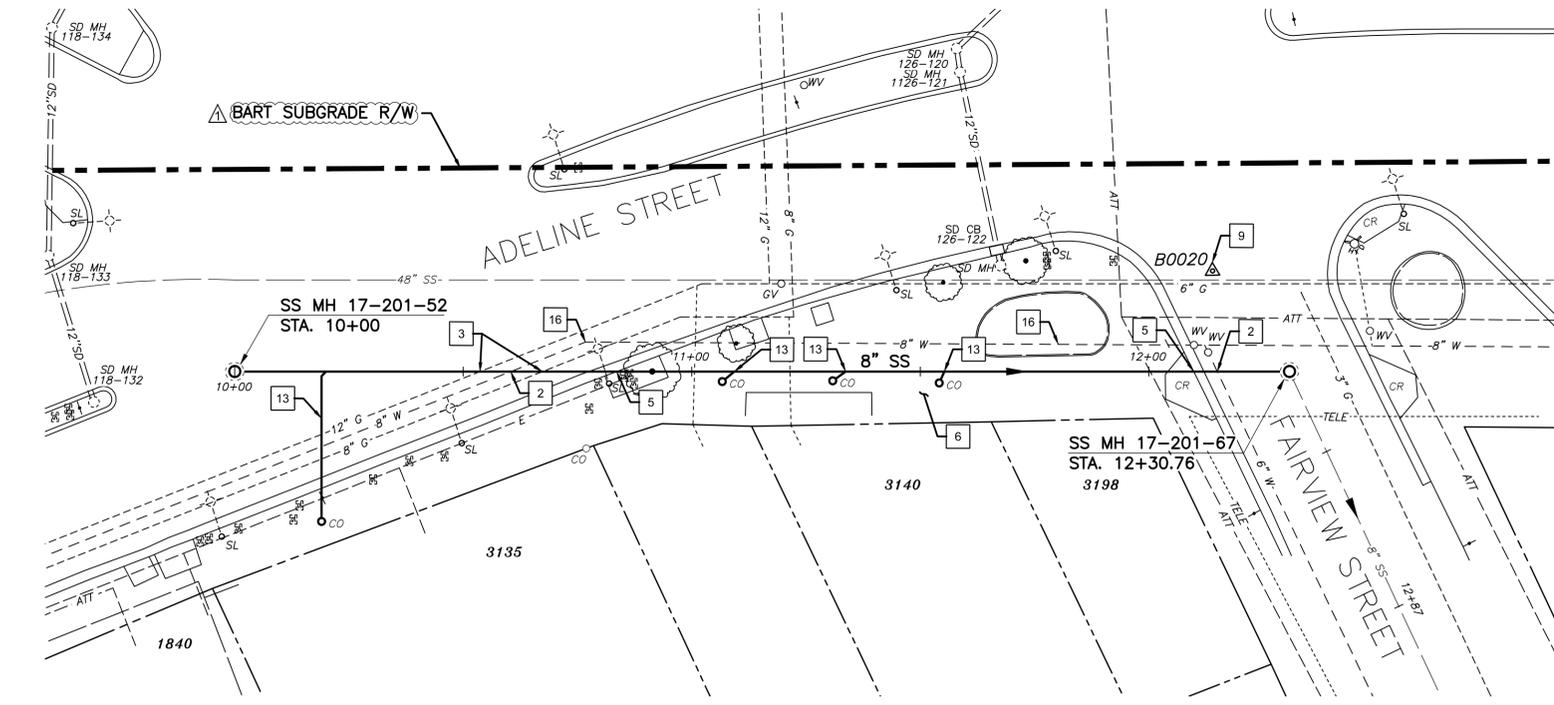
REVISION	MARK	DATE	DESCRIPTION	APPROVAL
1		01/06/25	BID ADDENDUM 2 - BART R/W & PROFILE ELEVATION LABEL	

CONSTRUCTION KEY NOTES

- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES AND COORDINATE ALL CONSTRUCTION ACTIVITIES WITH EBMUD. AT ALL CROSSINGS LESS THAN 3'-FEET SEPARATION, THE CONTRACTOR SHALL EXPOSE EX EBMUD WATER FACILITIES AS DIRECTED BY EBMUD TO ENSURE PIPE SPLITTING IS NOT AFFECTING THE PIPE ALIGNMENT OR CREATING LEAKS AT JOINTS.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
- 6 RECONSTRUCT PORTIONS OF EX SIDEWALK IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8153.
- 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NOS. 8090 & 8091.
- 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.
- 16 THE CONTRACTOR SHALL POTHOLE EXISTING WATER FACILITIES AND DEMONSTRATE THAT EXISTING EBMUD WATER FACILITIES ARE OUTSIDE THE ZONE OF INFLUENCE FOR GROUND MOVEMENT CAUSED BY PIPE SPLITTING. THE ZONE OF INFLUENCE FOR GROUND MOVEMENT CAUSED BY PIPE SPLITTING SHALL BE DETERMINED BY SUBTRACTING THE INSIDE DIAMETER OF THE EX PIPE FROM THE OUTSIDE DIAMETER OF THE EXPANDER HEAD AND MULTIPLYING BY TEN (PIPE BURSTING GOOD PRACTICES GUIDELINES, NASTT). THESE FINDINGS SHALL BE PROVIDED TO THE CITY AND REVIEWED BY EBMUD PRIOR TO THE START OF CONSTRUCTION.



PROFILE



PLAN

NOTES:

- 1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
- 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
- 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
- 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
- 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
- 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
- 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
- 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

SANITARY SEWER LAYOUT - ADELINE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
10+00.00	2137259.76	6050435.47	S17°41'26.17"W	230.77	MH 17-201-52
12+30.76	2137039.91	6050365.35	---	---	MH 17-201-67

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\05 ADELINE STREET 2.dwg [10 C3.0] 1-09-25 02:02:52 PM dchoy

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
BAIRD BARTON, SURVEY PARTY CHIEF

DEPICTION OF MONUMENTS: DATE 01/09/25
WATERSHED REVIEW: DATE 01/09/25

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
APPROVED: DATE 01/09/25
R.C.E. 62524
EXP. 10/2025
RONALD NEVELS, CITY ENGINEER

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: _____
HORIZ: 1"=20'
VERT: 1"=5'
BOOK: _____
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

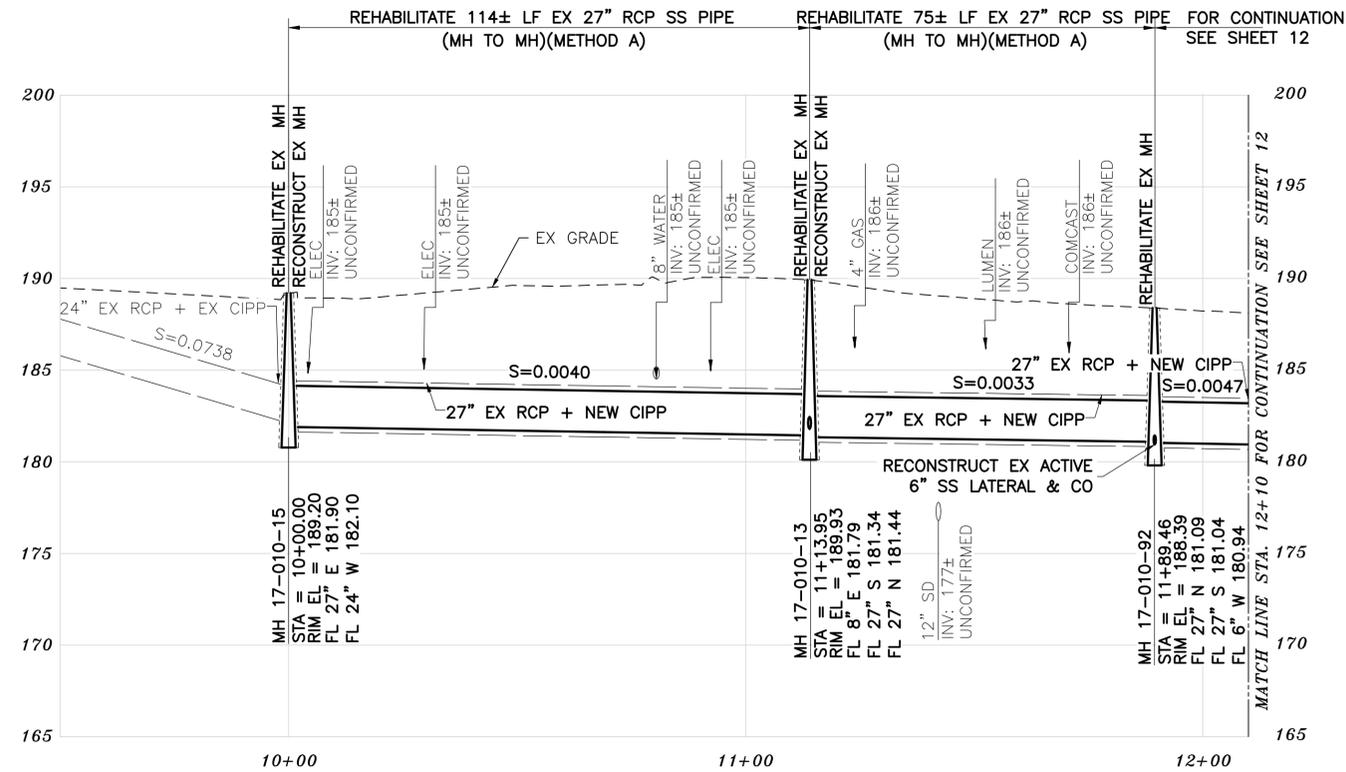
SANITARY SEWER REHABILITATION
ADELINE STREET 2
8" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 10 OF 29

REVISION	MARK	DATE	DESCRIPTION	APPROVAL
1		01/06/25	BID ADDENDUM 2 - BART R/W	

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\09 KALA BAGAI WAY.dwg [11 C4.0] 1-09-25 02:03:18 PM dchoy

BID ADDENDUM 2 - ATTACHMENT 2



PROFILE

CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
- 6 RECONSTRUCT PORTIONS OF EX SIDEWALK IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8153.
- 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.
- 17 EXERCISE EXTREME CAUTION WHEN INSTALLING CIPP LINING ALONG RADIAL BENDS TO MINIMIZE CREASING.

LEGEND

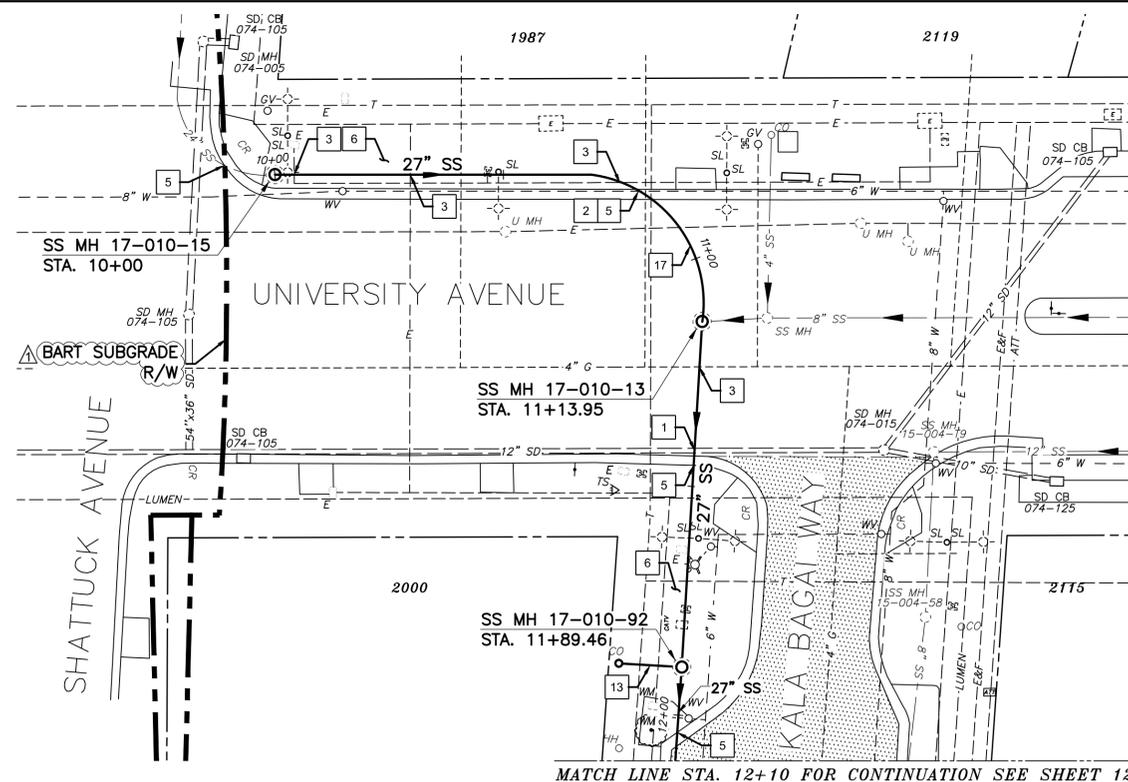
- PAVEMENT MORATORIUM AREA
- KALA BAGAI WAY (UNIVERSITY AVENUE - CENTER STREET) 6/30/2020 THROUGH 6/30/2025

PAVEMENT MORATORIUM NOTES

1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
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8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PLAN

SANITARY SEWER LAYOUT - KALA BAGAI WAY

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
10+00.00	2144892.43	6051304.94	N81°58'15.88"E	98.80	MH 17-010-15
11+13.95	2144873.67	6051401.99	S4°37'52.72"E	75.47	MH 17-010-13
11+89.46	2144798.44	6051408.08	S4°03'37.00"E	35.65	MH 17-010-12
12+10.00	2144762.88	6051410.61	---	---	MATCH LINE

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



Bellecci
Intelligent Infrastructure
925-685-4569
bellecci.com

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAU, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT: _____
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
KALA BAGAI WAY
27" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 11 OF 29

REVISION	MARK	DATE	DESCRIPTION	APPROVAL
1		01/06/25	BID ADDENDUM 2 - BART R/W	

CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 4 RECONSTRUCT PORTIONS OF EX CONCRETE BUS PAD IF REMOVED/DAMAGED BY SEWER INSTALLATION.
- 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
- 6 RECONSTRUCT PORTIONS OF EX SIDEWALK IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8153.
- 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.

LEGEND

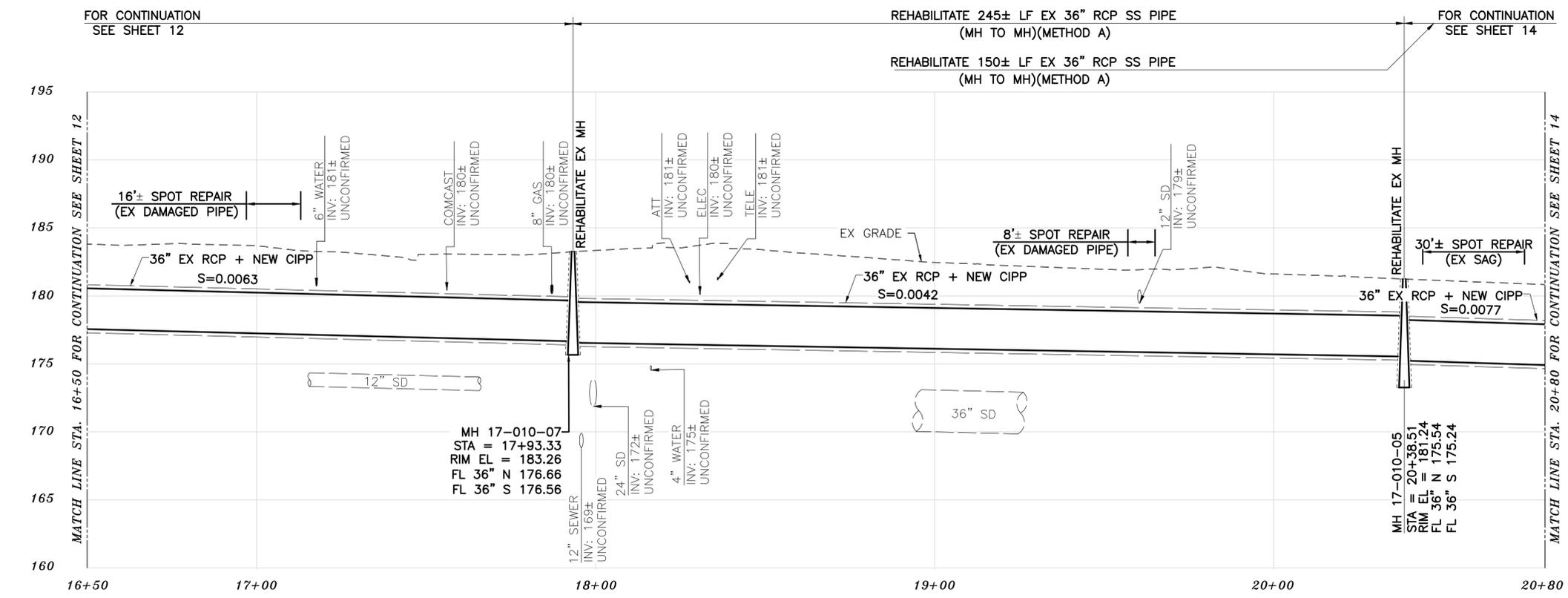
- PAVEMENT MORATORIUM AREA
KALA BAGAI WAY (UNIVERSITY AVENUE - CENTER STREET)
6/30/2020 THROUGH 6/30/2025
- PAVEMENT MORATORIUM AREA
SHATTUCK AVENUE (CENTER STREET - ALLSTON WAY)
6/30/2020 THROUGH 6/30/2025

PAVEMENT MORATORIUM NOTES

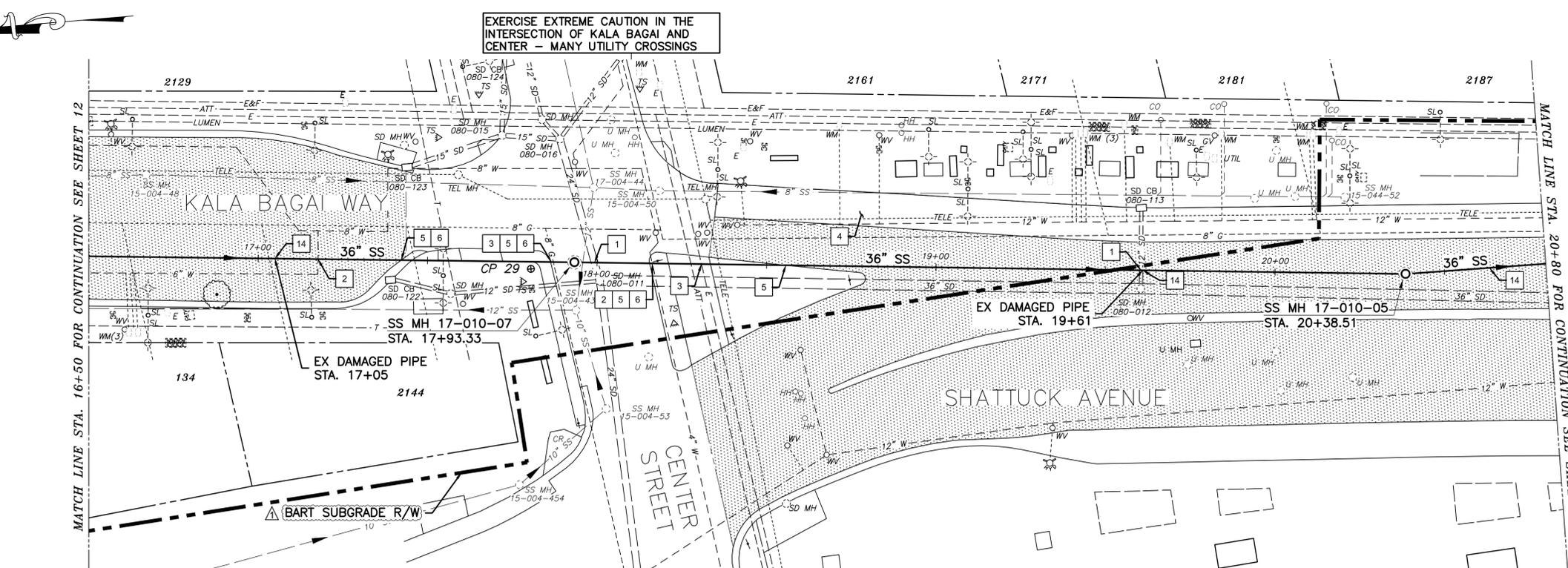
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

NOTES:

1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
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6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
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8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PROFILE



PLAN

SANITARY SEWER LAYOUT - KALA BAGAI WAY

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
16+50.00	2144347.92	6051429.14	S5°26'59.21"W	143.41	MATCH LINE
17+93.33	2144205.16	6051415.52	S5°32'21.26"W	245.17	MH 17-010-07
20+38.51	2143961.13	6051391.85	S0°38'49.08"W	41.50	MH 17-010-05
20+80.00	2143919.64	6051391.39	---	---	MATCH LINE

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\09 KALA BAGAI WAY.dwg [13 C4.2] 1-09-25 02:03:28 PM dchoy



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25

DEPICTION OF MONUMENTS: DATE 01/09/25
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
 APPROVED: DATE 01/09/25
 R.C.E. 62524
 EXP. 10/2025
 RONALD NEVELS, CITY ENGINEER

DESIGN: MA
 DRAWN: DC
 CHECK: TH
 AS BUILT: _____
 HORIZ. 1"=20'
 VERT. 1"=5'
 BOOK: _____
 DATE: 01/09/25

CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
 KALA BAGAI WAY
 36" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 13 OF 29

FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

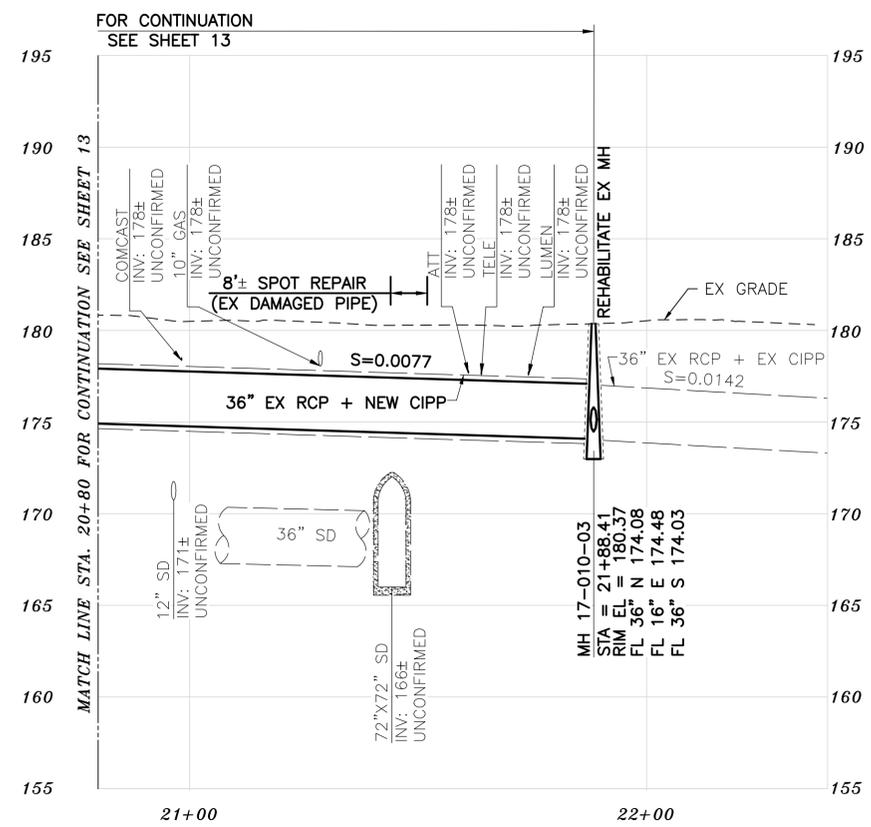
BID ADDENDUM 2 - ATTACHMENT 2

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 4 RECONSTRUCT PORTIONS OF EX CONCRETE BUS PAD IF REMOVED/DAMAGED BY SEWER INSTALLATION.
 - 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.

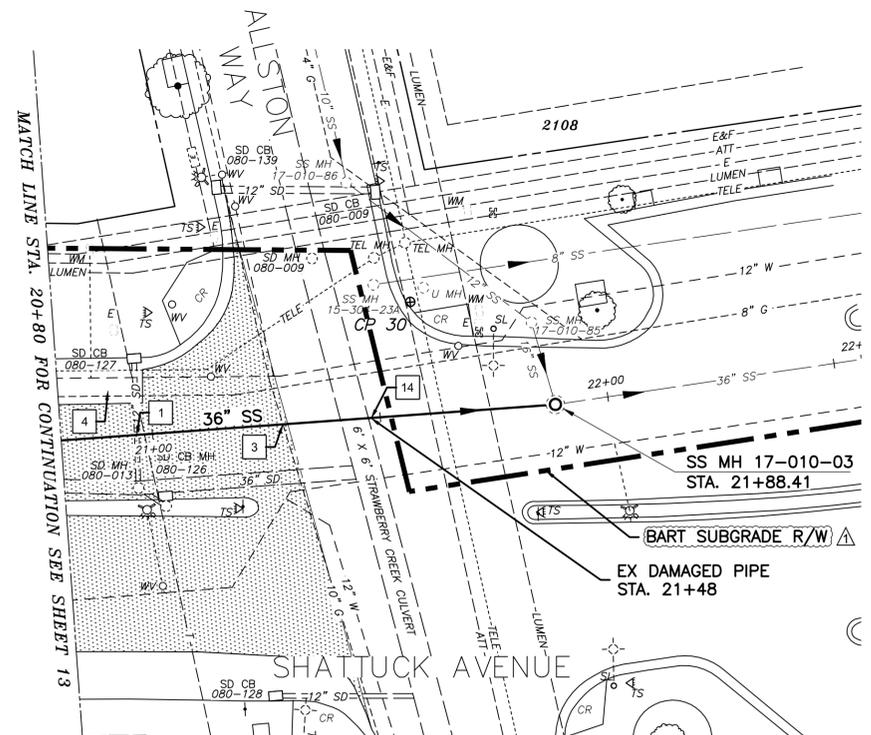
- LEGEND**
- [Pattern] PAVEMENT MORATORIUM AREA
 - [Pattern] KALA BAGAI WAY (UNIVERSITY AVENUE - CENTER STREET) 6/30/2020 THROUGH 6/30/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
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 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PROFILE



PLAN

SANITARY SEWER LAYOUT - SHATTUCK AVENUE

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
20+80.00	2143919.64	6051391.39	S0°35'45.29"W	108.27	MATCH LINE
21+88.41	2143811.37	6051390.16	---	---	MH 17-010-03

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawg\03 - Plan Sheets\09 KALA BAGAI WAY.dwg [14 C4.3] 1-09-25 02:03:33 PM dchoy



Bellecci
Intelligent Infrastructure
925 • 665 • 4569
bellecci.com

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

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EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER

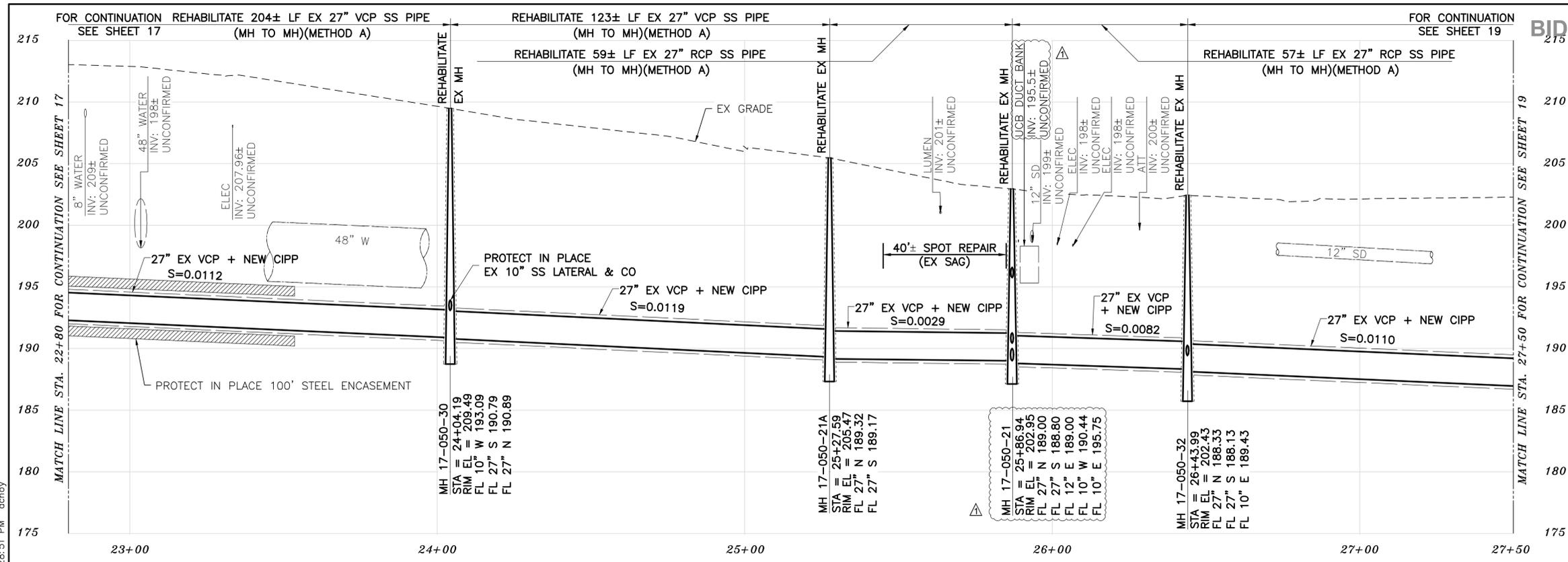
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DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
SHATTUCK AVENUE
36" SS
PLAN AND PROFILE

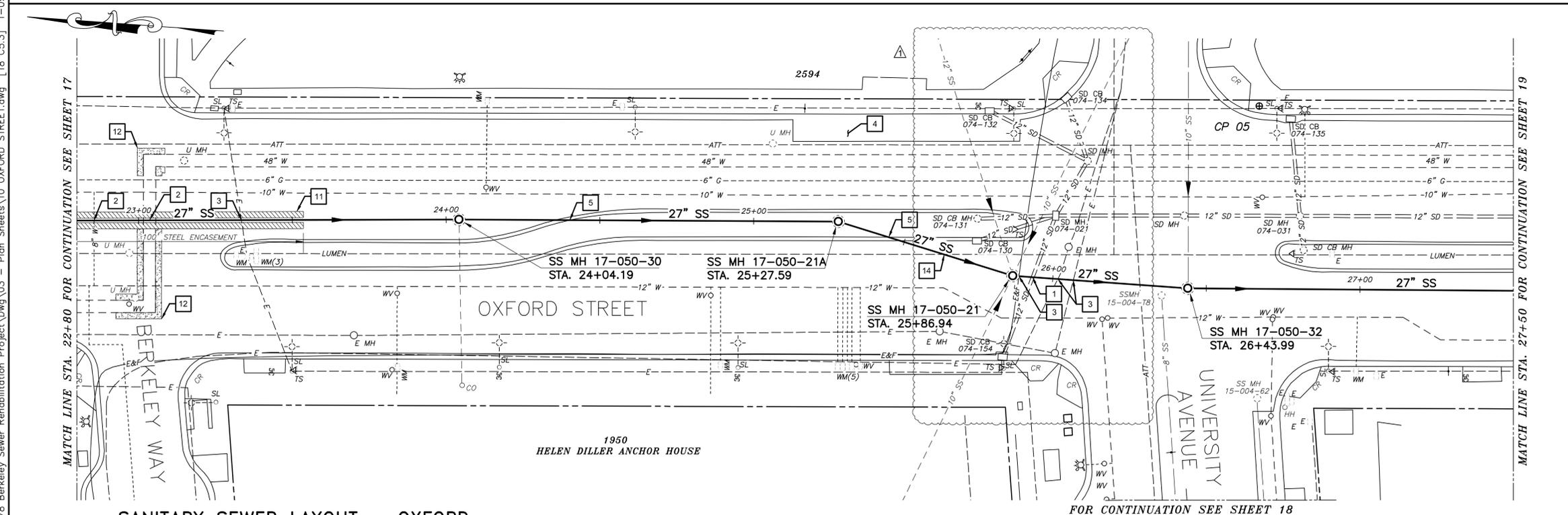
PLAN NO.: 8292
FILE NO.: 502-822
SHEET 14 OF 29

REVISION	MARK	DATE	DESCRIPTION	APPROVAL
1		01/06/25	BID ADDENDUM 2 - BART R/W	



PROFILE

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 4 RECONSTRUCT PORTIONS OF EX CONCRETE BUS PAD IF REMOVED/DAMAGED BY SEWER INSTALLATION.
 - 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
 - 11 PROTECT IN PLACE EX STEEL ENCASUREMENT. REPLACE AS REQUIRED PER DETAIL 6 ON SHEET 25.
 - 12 PROTECT IN PLACE EX CONCRETE THRUST BLOCKING.
 - 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.



PLAN

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
22+80.00	2145300.70	6051912.29	S4°15'.36.98"E	124.25	MATCH LINE
24+04.19	2145176.78	6051921.52	S3°49'.50.82"E	123.38	MH XX-XXX-XX
25+27.59	2145053.68	6051929.77	S13°06'.41.26"W	59.36	MH 17-050-21A
25+86.94	2144995.87	6051916.30	S0°00'.57.85"E	57.05	MH 17-050-21
26+43.99	2144938.82	6051916.32	S3°41'.04.50"E	108.88	MH 17-050-20A
27+50.00	2144833.16	6051923.12	---	---	MATCH LINE

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.

Bellecci
Intelligent Infrastructure
925.686.4569
bellecci.com

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

WATERSHED REVIEW: DATE 01/09/25
RONALD NEVELS, CITY ENGINEER

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER

APPROVED: DATE 01/09/25
R.C.E. 62524
EXP. 10/2025

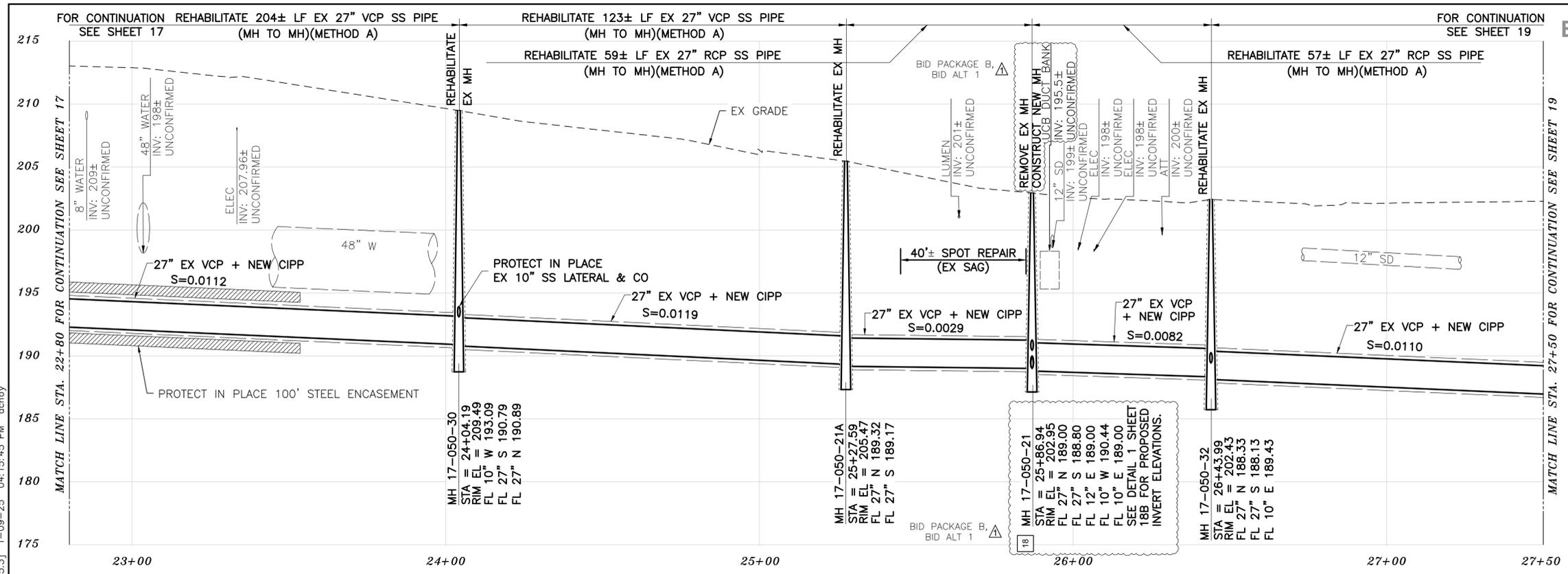
DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT

HORIZ. 1"=20'
VERT. 1"=5'
BOOK
DATE 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

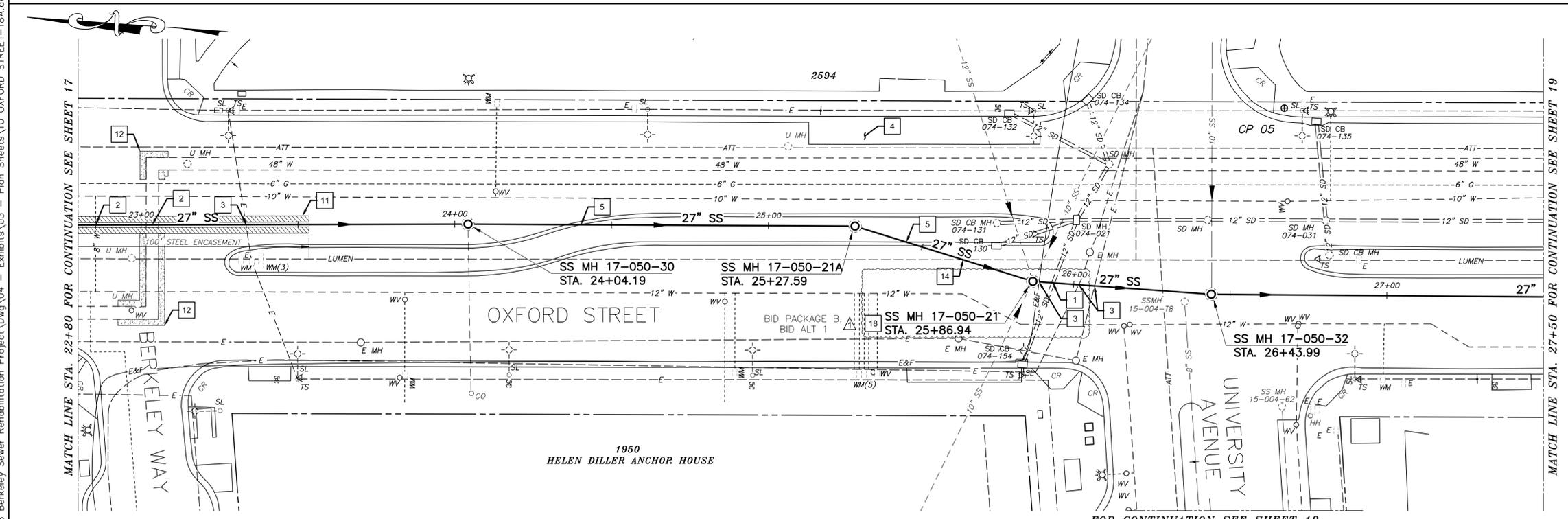
SANITARY SEWER REHABILITATION
OXFORD STREET
27" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 18 OF 29



PROFILE

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 4 RECONSTRUCT PORTIONS OF EX CONCRETE BUS PAD IF REMOVED/DAMAGED BY SEWER INSTALLATION.
 - 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
 - 11 PROTECT IN PLACE EX STEEL ENCASUREMENT. REPLACE AS REQUIRED PER DETAIL 6 ON SHEET 25.
 - 12 PROTECT IN PLACE EX CONCRETE THRUST BLOCKING.
 - 14 CONTRACTOR SHALL PERFORM SPOT REPAIR TO CORRECT EX SAG, REPAIR DAMAGED PIPE, OR REMOVE ROOT INTRUSION PRIOR TO CIPP INSTALLATION.
 - 18 REMOVE EX MH. CONSTRUCT NEW MH WITH 36-INCH DIAMETER FRAME AND COVER PER DETAILS 1 AND 2 ON SHEET 18B AND PER DETAIL 13 ON SHEET 27. COORDINATE WITH ENGINEER AND UC BERKELEY PRIOR TO CONSTRUCTION.



PLAN

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
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 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
22+80.00	2145300.70	6051912.29	S4°15' 36.98"E	124.25	MATCH LINE
24+04.19	2145176.78	6051921.52	S3°49' 50.82"E	123.38	MH XX-XXX-XX
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26+43.99	2144938.82	6051916.32	S3°41' 04.50"E	108.88	MH 17-050-20A
27+50.00	2144833.16	6051923.12	---	---	MATCH LINE

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.

Bellecci
Intelligent Infrastructure
925-685-4569

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

WATERSHED REVIEW: DATE 01/09/25

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R.C.E. 37829
EXP. 04/2025
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER

APPROVED: DATE 01/09/25
R.C.E. 62524
EXP. 10/2025
RONALD NEVELS, CITY ENGINEER

DESIGN: MA
DRAWN: DC
CHECK: TH
AS BUILT

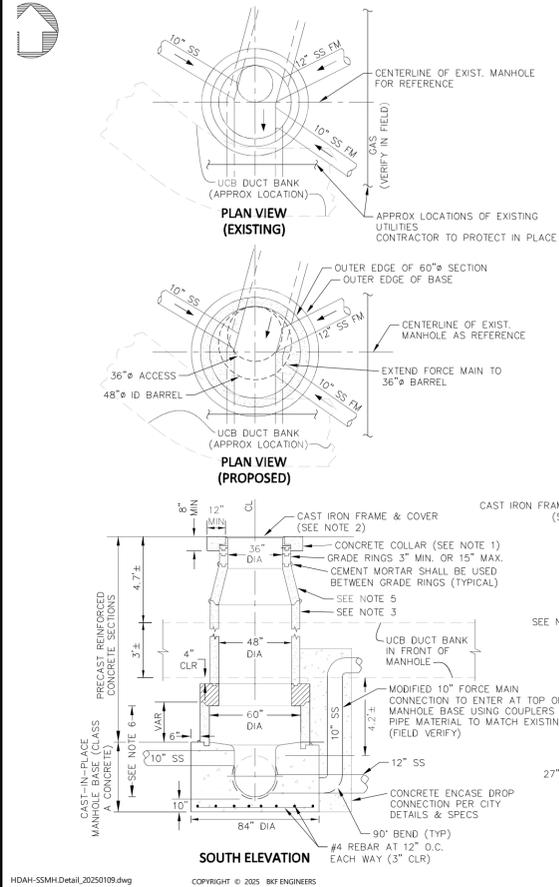
HORIZ. 1"=20'
VERT. 1"=5'
BOOK
DATE 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
BID PACKAGE B (BID ALT 1)
AT OXFORD STREET NEAR
UNIVERSITY AVE
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 18A OF 29

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\13 DETAILS.dwg [18B C5.3] 1--09--25 02:36:15 PM dchoy



- NOTES:
- FOR DETAILS NOT SHOWN INCLUDING COATING OF NEW MH SIDES AND BASE, SEE DETAIL 12 OF SHEET 26, OF THE 'SEWER REHABILITATION PROJECT' #8292
 - SEE DETAIL 13 OF SHEET 27, PLAN 8272 OF THE 'SEWER REHABILITATION PROJECT' #8292
 - 48" PRECAST BARREL
 - MODIFIED JENSEN FLAT TOP 60" WITH 48" ECCENTRIC OPENING, OR APPROVED EQUAL
 - JENSEN D4858 ECCENTRIC MANHOLE CONE 36" OPENING FROM 48" BARREL, OR APPROVED EQUAL
 - 60" MIN INTERIOR FLAT TOP TO INVERT OF 27" PIPE
 - FOR FLEXIBLE PIPE CONNECTION TO MANHOLE, PROVIDE WATERSTOP SEAL (SUCH AS 2 O-RINGS OR BANDED RUBBER COUPLING)
 - CONTRACTOR TO FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION
 - FOR RFIs AND CONSTRUCTION-RELATED QUESTIONS SPECIFIC TO THIS WORK, CONTACT CITY ENGINEER
 - CONTRACTOR SHALL NOTIFY UCB 14 DAYS IN ADVANCE PRIOR TO STARTING CONSTRUCTION

BENCHMARK
CITY OF BERKELEY MONUMENT NO. B0490
BRASS DISK WITH PUNCH IN MONUMENT WELL AT THE INTERSECTION OF UNIVERSITY AVE AND SHATTUCK AVE

ELEV = 187.07 FEET (CITY OF BERKELEY DATUM)

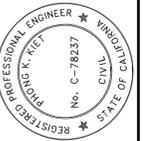
EXISTING INVERT ELEVATIONS AT MANHOLE
INV 195.75± 10" IN-E (FM)
INV 190.44± 10" IN-W
INV 189.00± 12" IN-E (FM)
INV 189.00± 27" IN-N
INV 188.80± 27" OUT-S

PROPOSED INVERT ELEVATIONS AT MANHOLE
INV 189.00± 10" IN-E (FM) CHANGED
INV 190.44± 10" IN-W NO CHANGE
INV 189.00± 12" IN-E (FM) NO CHANGE
INV 189.00 27" IN-N NO CHANGE
INV 188.80 27" OUT-S NO CHANGE

BKF ENGINEERS
1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
(408) 467-9100
www.bkf.com

BID PACKAGE B,
BID ALT 2

BKF ENGINEERS



PHONG KIET
C 78237

SSMH REPLACEMENT
60" DIA ECCENTRIC MANHOLE
AT OXFORD ST/UNIVERSITY AVE

Date: 1/09/2025
Scale: N.T.S.
Design: PK
Drawn: --
Approved: PK
Job No: C20181890-16

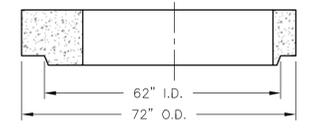
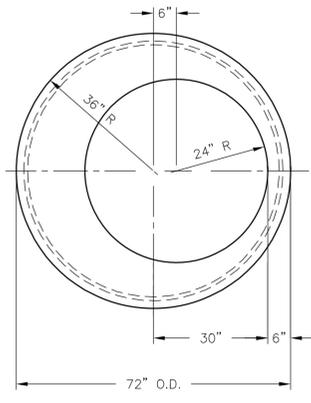
60" DIA ECCENTRIC MAINTENANCE HOLE
SCALE: NTS

1

BID PACKAGE B,
BID ALT 2

BID ADDENDUM 2 - ATTACHMENT 2

(MODIFIED)
60" I.D. x 6" WALL
FLAT TOP WITH
48" ECCENTRIC ACCESS
OPENING
MAG 420 SPECIFICATIONS

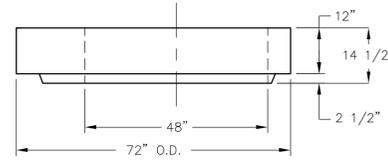


TOP VIEW

SECTION

APPROX. WT.
6072FT=30 ECC MAG FLAT TOP 2990 LBS.

CONFORMS TO ASTM SPECS C-478
AND AASHTO No. M199.



SIDE VIEW

FLAT TOPS AND BASE SLABS
ARE DESIGNED FOR AASHTO
HS-20 WHEEL LOADING
FOR COMPLETE DESIGN,
AND PRODUCT INFORMATION
CONTACT JENSEN PRECAST.

FLAT TOP WITH ECCENTRIC ACCESS OPENING
SCALE: NTS

2

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

SUBMITTED: DATE 01/09/25
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
R.C.E. 37829
EXP. 04/2025

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DRAWN DC
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AS BUILT

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

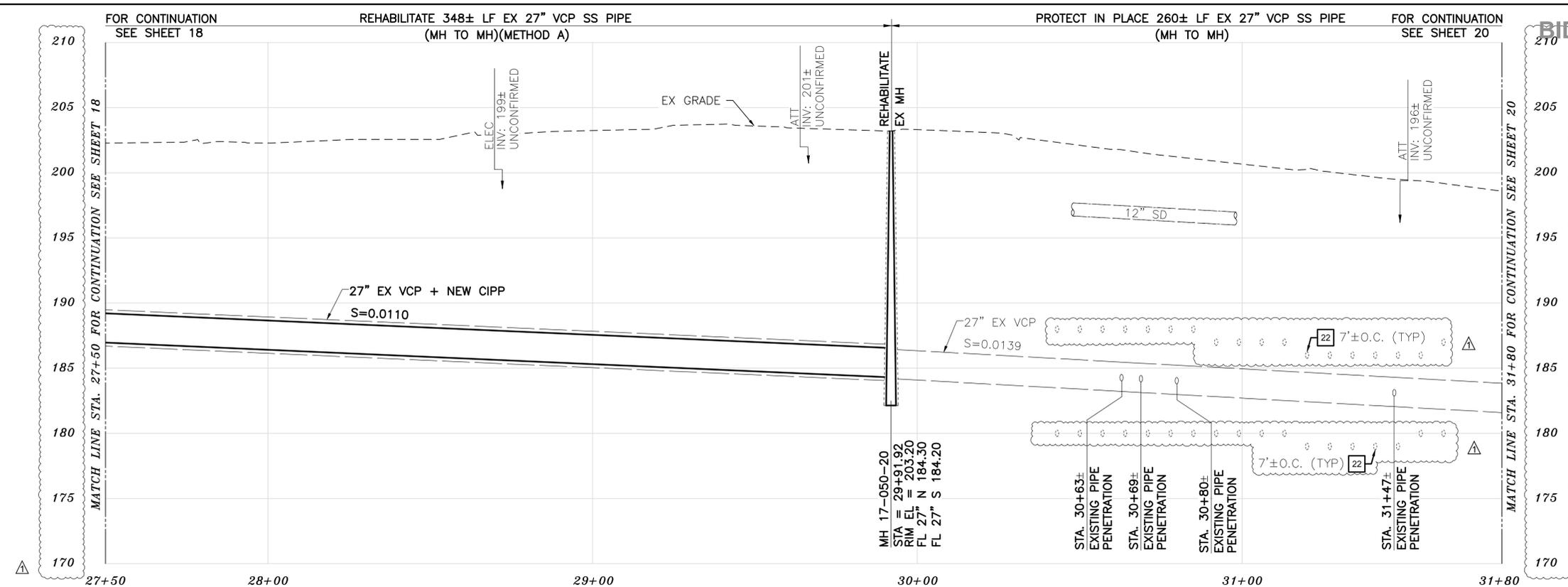
SANITARY SEWER REHABILITATION
BID PACKAGE B (BID ALT 1)
AT OXFORD STREET NEAR
UNIVERSITY AVE
DETAILS

PLAN NO.: 8292
FILE NO.: 502-822
REVISION MARK DATE DESCRIPTION APPROVAL

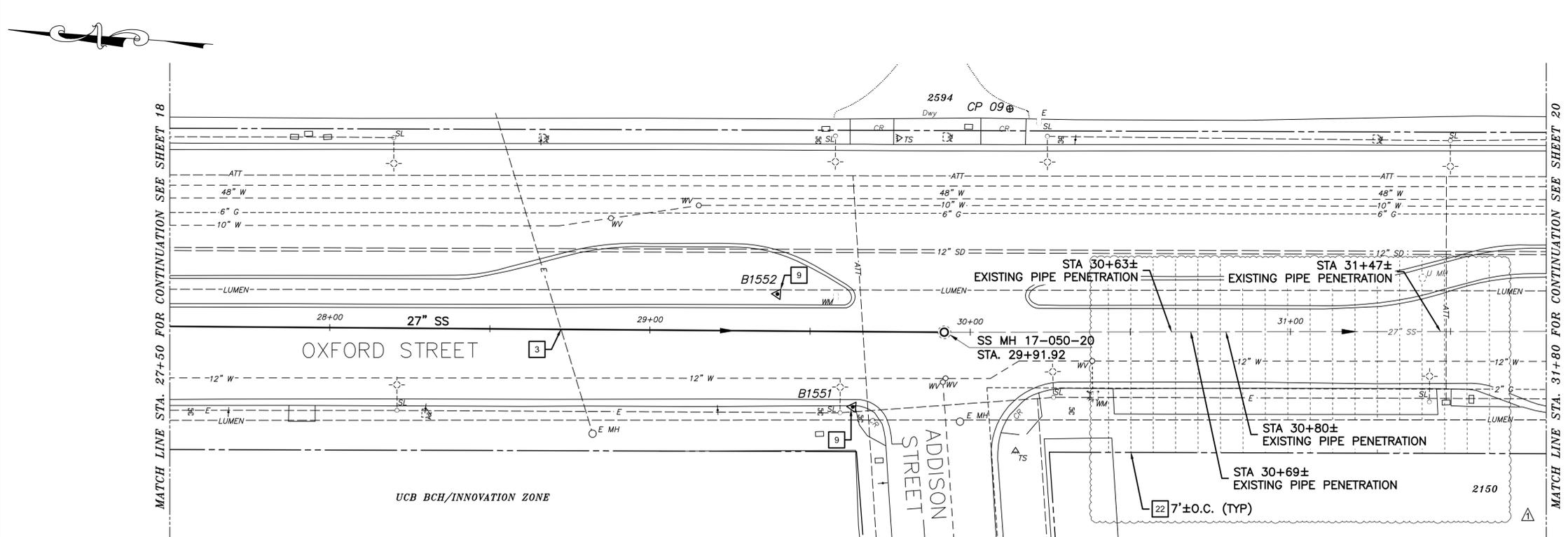
K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\10 OXFORD STREET.dwg [19:05:4] 1-09-25 02:05:12 PM dchoy

BID ADDENDUM 2 - ATTACHMENT 2

- CONSTRUCTION KEY NOTES**
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NOS. 8090 & 8091.
 - 22 APPROXIMATE LOCATION OF ABANDONED SHORING TIE RODS. ACTUAL LOCATIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY AND CONFIRM EXISTING PIPE PENETRATIONS ARE FROM ABANDONED TIE RODS. REFER TO MINOR ENCROACHMENT PERMIT 13-11 DATED 9/5/13 ON FILE WITH THE CITY OF BERKELEY PUBLIC WORKS DEPARTMENT. CONTRACTOR SHALL EXCAVATE WITH CAUTION AS TIE RODS MAY BE UNDER TENSION. IF ABANDONED TIE RODS ARE ENCOUNTERED DURING EXCAVATION, CONTRACTOR SHALL REMOVE PORTIONS OF THE ABANDONED TIE RODS WITHIN THE EXCAVATED SEWER TRENCH. COORDINATE REMOVAL WITH UC BERKELEY REPRESENTATIVE AND CITY OF BERKELEY ENGINEER.



PROFILE



PLAN

EXERCISE EXTREME CAUTION IN THE INTERSECTION OF OXFORD AND ADDISON - MANY UTILITY CROSSINGS

- NOTES:**
- FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 - LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
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 - IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
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SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
27+50.00	2144833.16	6051923.12	S3°41'04.50"E	242.04	MATCH LINE
29+91.92	2144591.61	6051938.68	S4°12'38.55"E	187.96	MH 17-050-20
31+80.00	2144404.16	6051952.48	---	---	MATCH LINE



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAU, ASSOCIATE CIVIL ENGINEER
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 RONALD NEVELS, CITY ENGINEER

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 DESIGN: MA
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HORIZ. 1"=20'
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CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

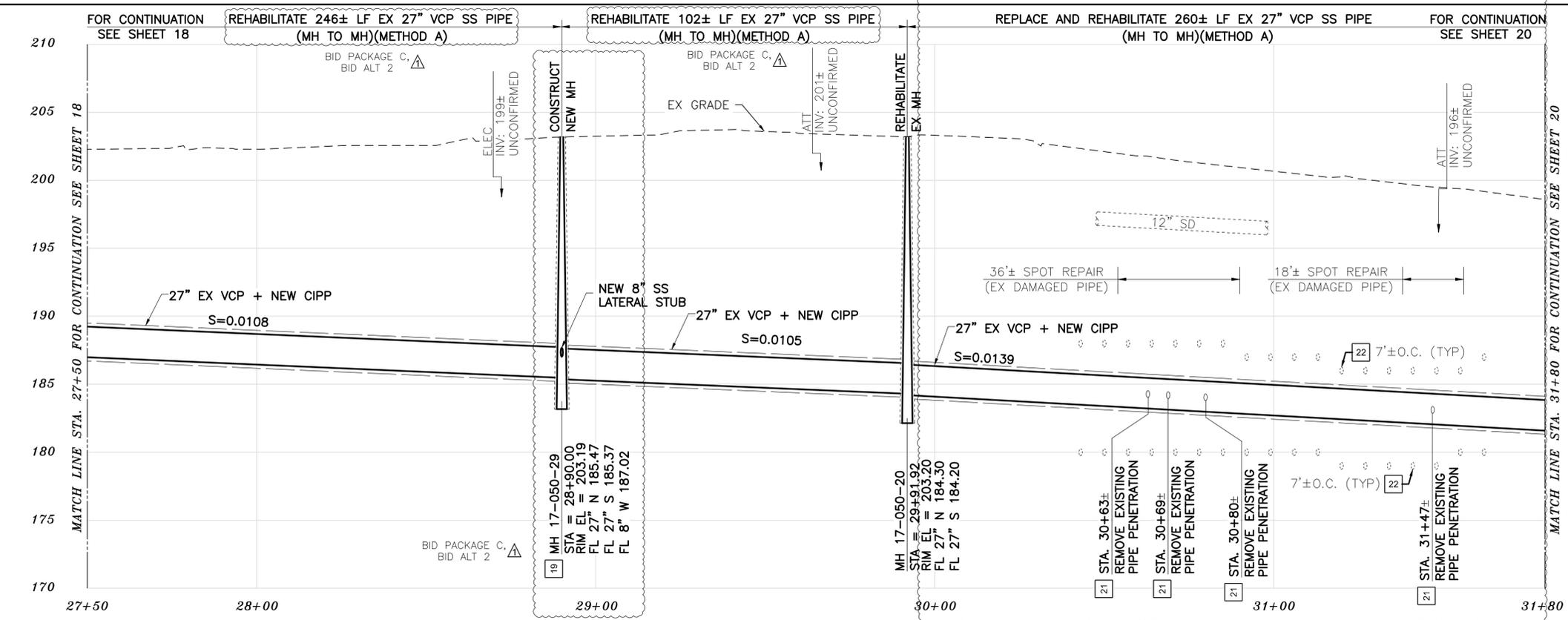
SANITARY SEWER REHABILITATION
OXFORD STREET
27" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 19 OF 29

FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

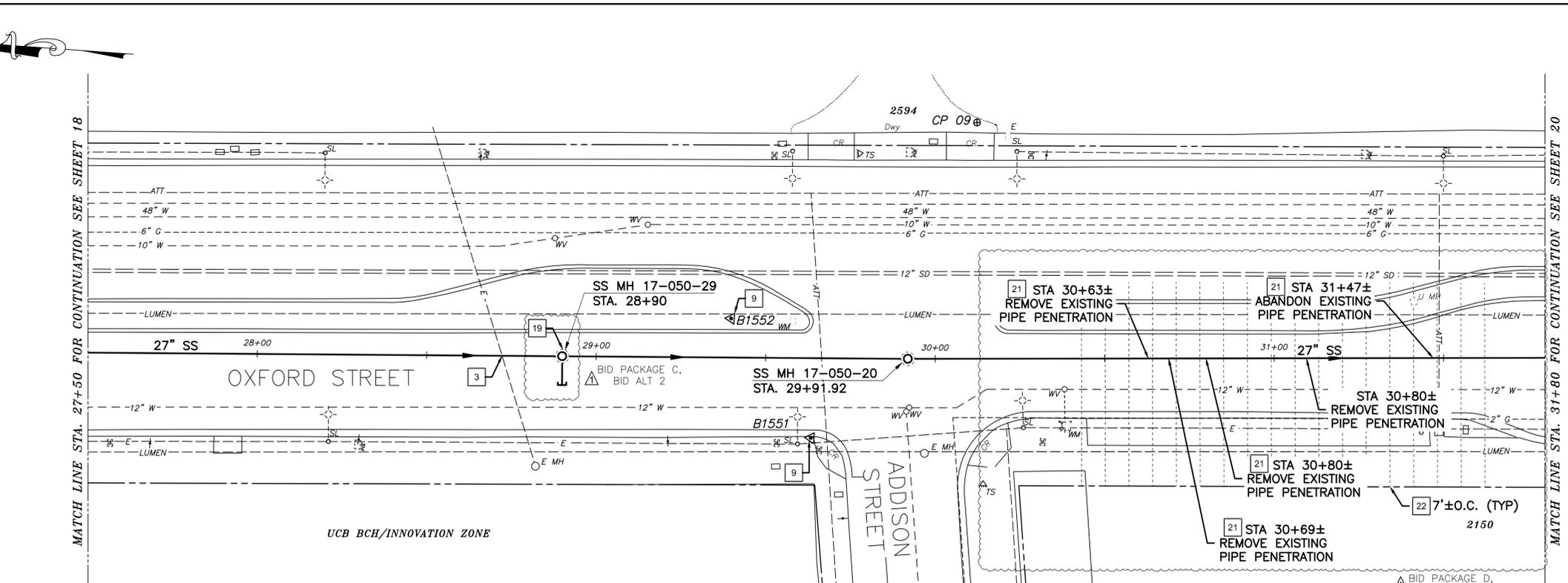
K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawings\03 - Plan Sheets\10 OXFORD STREET 19A-20A.dwg [19A_C5.4] 1-09-25 02:05:38 PM dchoy

BID ADDENDUM 2 - ATTACHMENT 2



PROFILE

- CONSTRUCTION KEY NOTES**
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STAND PLAN NOS. 8090 & 8091.
 - 19 CONSTRUCT NEW MH PER DETAIL 12 ON SHEET 26 WITH 5' LONG 8" SS LATERAL STUB. CONSTRUCT NEW FRAME AND COVER PER DETAIL 13 ON SHEET 27. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.
 - 21 REMOVE OBJECTS PENETRATING EXISTING PIPE AND REPAIR DAMAGE CAUSED BY PIPE PENETRATIONS. CONTRACTOR SHALL IDENTIFY OBJECTS PENETRATING THE EXISTING PIPE AND VERIFY FINDINGS WITH THE UC BERKELEY REPRESENTATIVE AND CITY OF BERKELEY ENGINEER. PER RECORD DRAWINGS AND AS-BUILT INFORMATION, PENETRATING OBJECTS ARE BELIEVED TO BE ABANDONED SHORING TIE RODS FROM A PREVIOUSLY COMPLETED UC BERKELEY PROJECT. PERFORM REMOVAL AND REPAIR PRIOR TO CIPP INSTALLATION.
 - 22 APPROXIMATE LOCATION OF ABANDONED SHORING TIE RODS. ACTUAL LOCATIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY AND CONFIRM EXISTING PIPE PENETRATIONS ARE FROM ABANDONED TIE RODS. REFER TO MINOR ENCROACHMENT PERMIT 13-11 DATED 9/5/13 ON FILE WITH THE CITY OF BERKELEY PUBLIC WORKS DEPARTMENT. CONTRACTOR SHALL EXCAVATE WITH CAUTION AS THE RODS MAY BE UNDER TENSION. IF ABANDONED TIE RODS ARE ENCOUNTERED DURING EXCAVATION, CONTRACTOR SHALL REMOVE PORTIONS OF THE ABANDONED TIE RODS WITHIN THE EXCAVATED SEWER TRENCH. COORDINATE REMOVAL WITH UC BERKELEY REPRESENTATIVE AND CITY OF BERKELEY ENGINEER.



PLAN

SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
27+50.00	2144833.16	6051923.12	S3°41'04.50"E	140.12	MATCH LINE
28+90.00	2144693.32	6051932.13	S3°41'04.50"E	101.92	MH XX-XXX-XX
29+91.92	2144591.61	6051938.68	S4°12'38.55"E	187.96	MH 17-050-20
31+80.00	2144404.16	6051952.48	---	---	MATCH LINE

- NOTES:**
- FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 - LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 - RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 - IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 - ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 - SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 - SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.
 - SEWER PIPE STUBS OR OTHER OPEN ENDS, WHICH ARE NOT TO BE IMMEDIATELY CONNECTED, SHALL BE PLUGGED OR CAPPED WITH A STANDARD WATERTIGHT PLUG OR CAP AS APPROVED BY THE ENGINEER FOR USE IN THE PARTICULAR INSTALLATION. THE PLUGS OR CAPS MAY ONLY BE REMOVED WHEN SO AUTHORIZED BY, AND IN THE PRESENCE OF, THE ENGINEER.

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



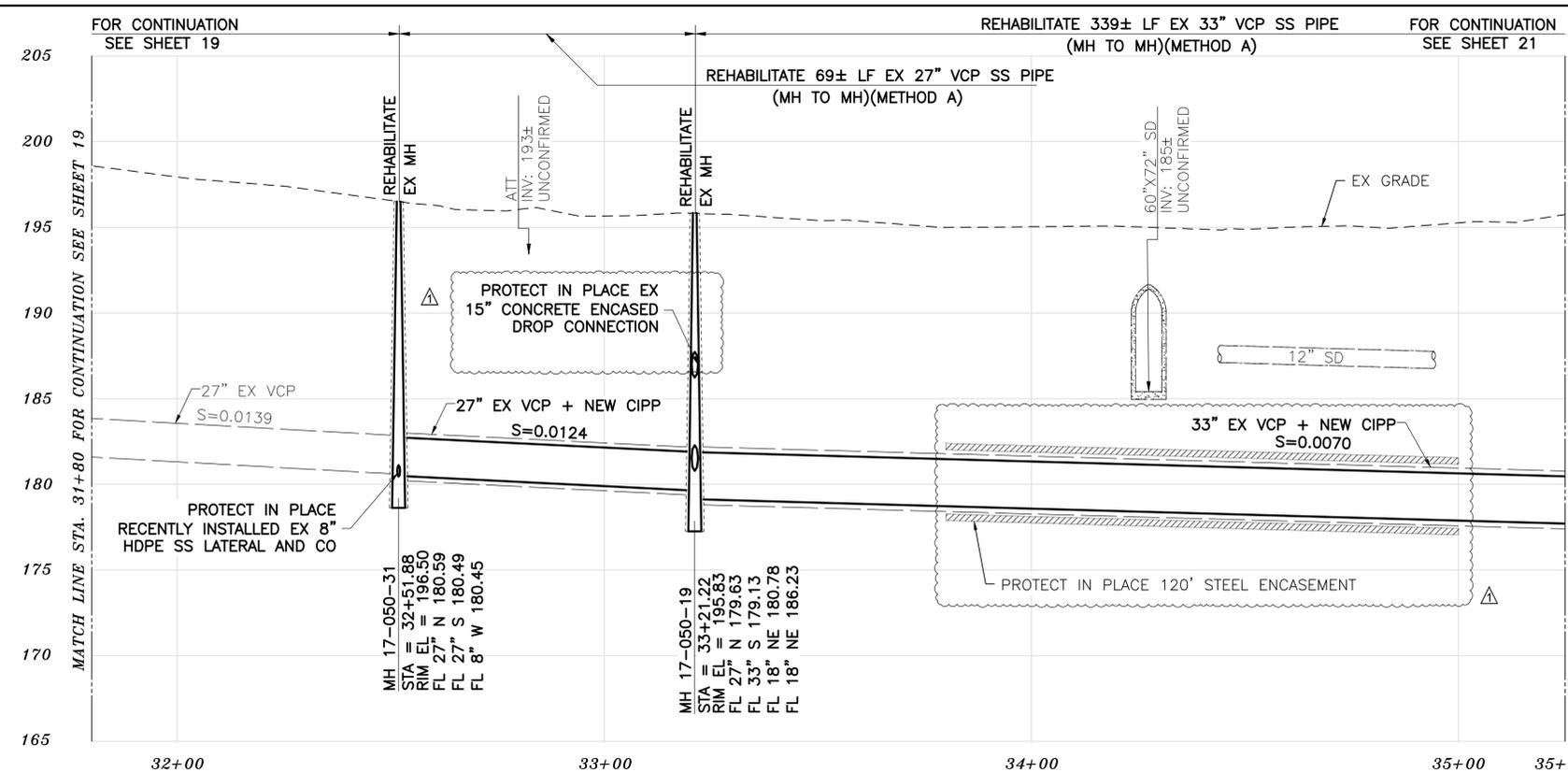
PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25
 RONALD NEVELS, CITY ENGINEER

DESIGN: MA
 DRAWN: DC
 CHECK: TH
 AS BUILT: DATE 01/09/25

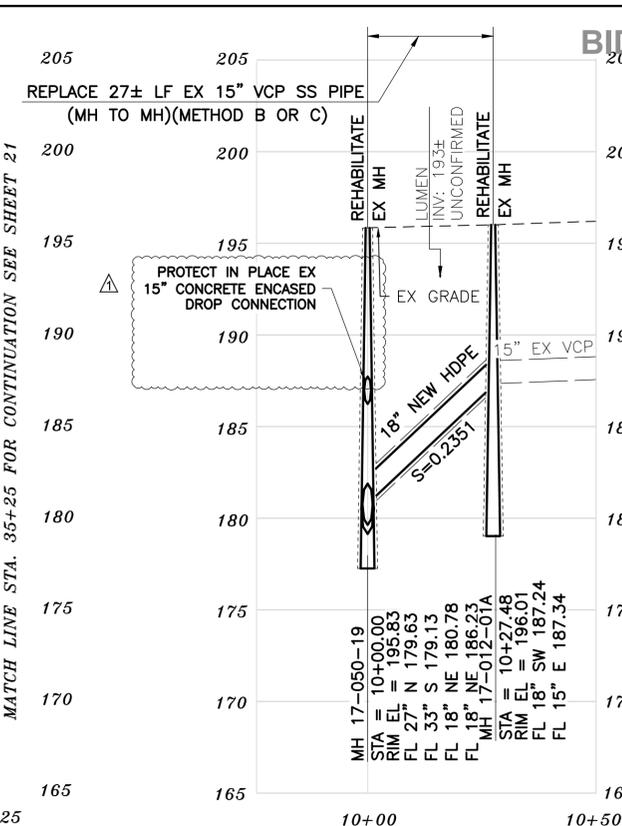
CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS
 SANITARY SEWER REHABILITATION
 BID PACKAGE C & D (BID ALT 2 & 3)
 ALONG OXFORD STREET BETWEEN
 UNIVERSITY AVE AND CENTER ST
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 19A OF 29

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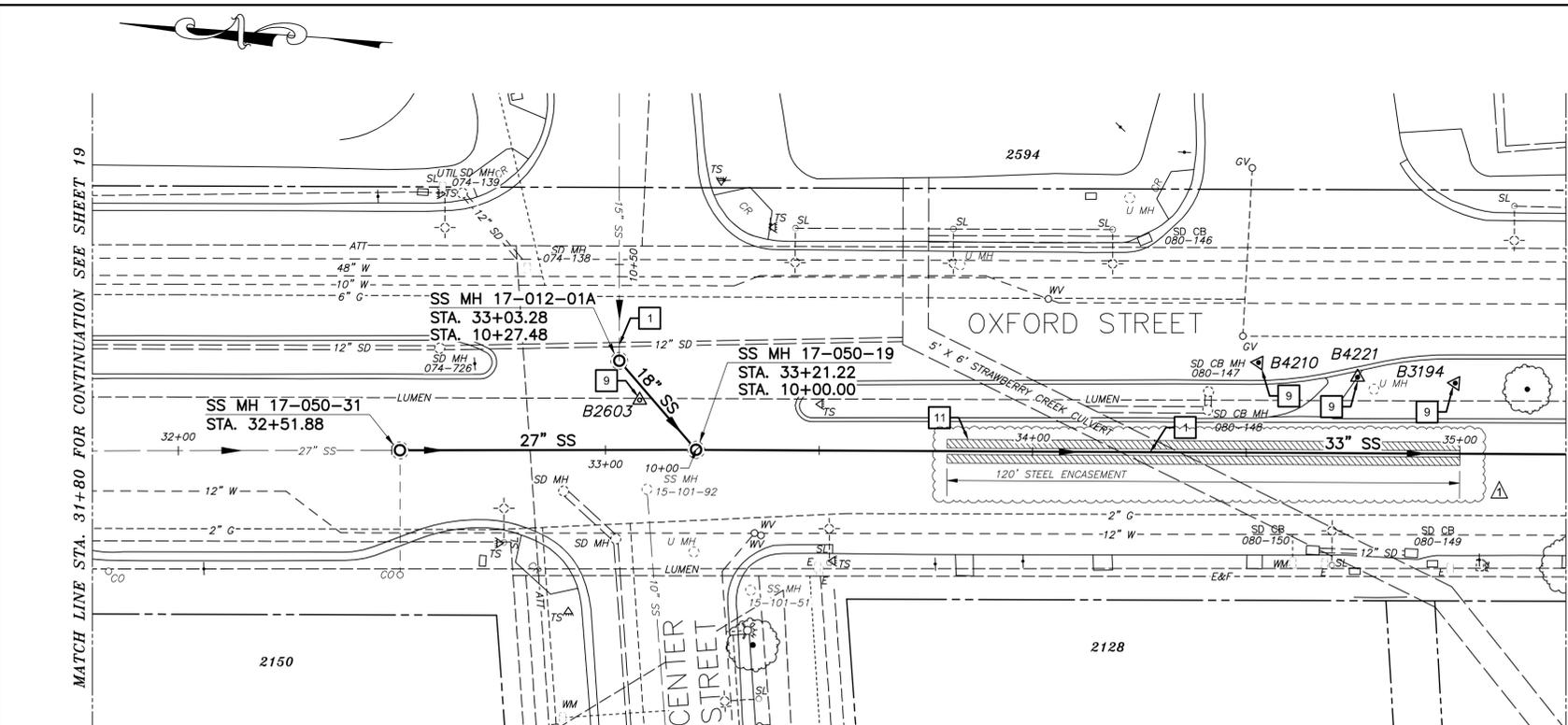
PROFILE



PROFILE

BID ADDENDUM 2 - ATTACHMENT 2

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NOS. 8090 & 8091.
 - 11 PROTECT IN PLACE EX STEEL ENCASMENT. REPLACE AS REQUIRED PER DETAIL 6 ON SHEET 25.



PLAN

- NOTES:**
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 - SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.

SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
31+80.00	2144404.16	6051952.48	S4°12'38.55"E	72.00	MATCH LINE
32+51.88	2144332.36	6051957.76	S4°12'38.55"E	69.35	MH 17-050-19A
33+21.22	2144263.20	6051962.86	S3°49'30.64"E	203.65	MH 17-050-19
35+25.00	2144060.00	6051976.44	---	---	MATCH LINE

EXERCISE EXTREME CAUTION IN THE INTERSECTION OF OXFORD AND CENTER - MANY UTILITY CROSSINGS



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25

DEPICTION OF MONUMENTS: DATE 01/09/25
 DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
 APPROVED: DATE 01/09/25
 RONALD NEVELS, CITY ENGINEER

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DESIGN MA
 DRAWN DC
 CHECK TH
 AS BUILT

HORIZ. 1"=20'
 VERT. 1"=5'
 BOOK
 DATE 01/09/25

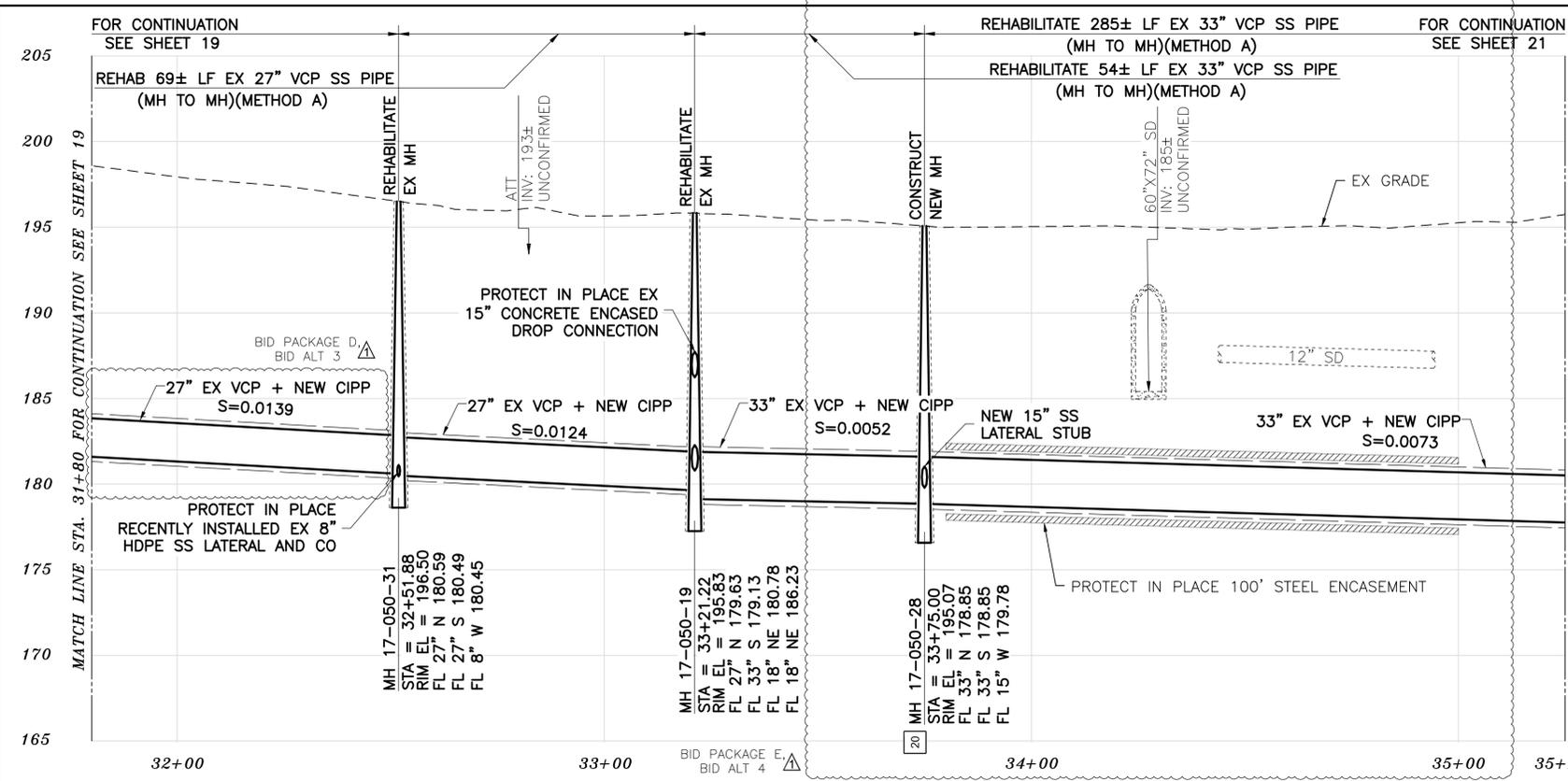
CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
OXFORD STREET
27"-33" SS
 PLAN AND PROFILE

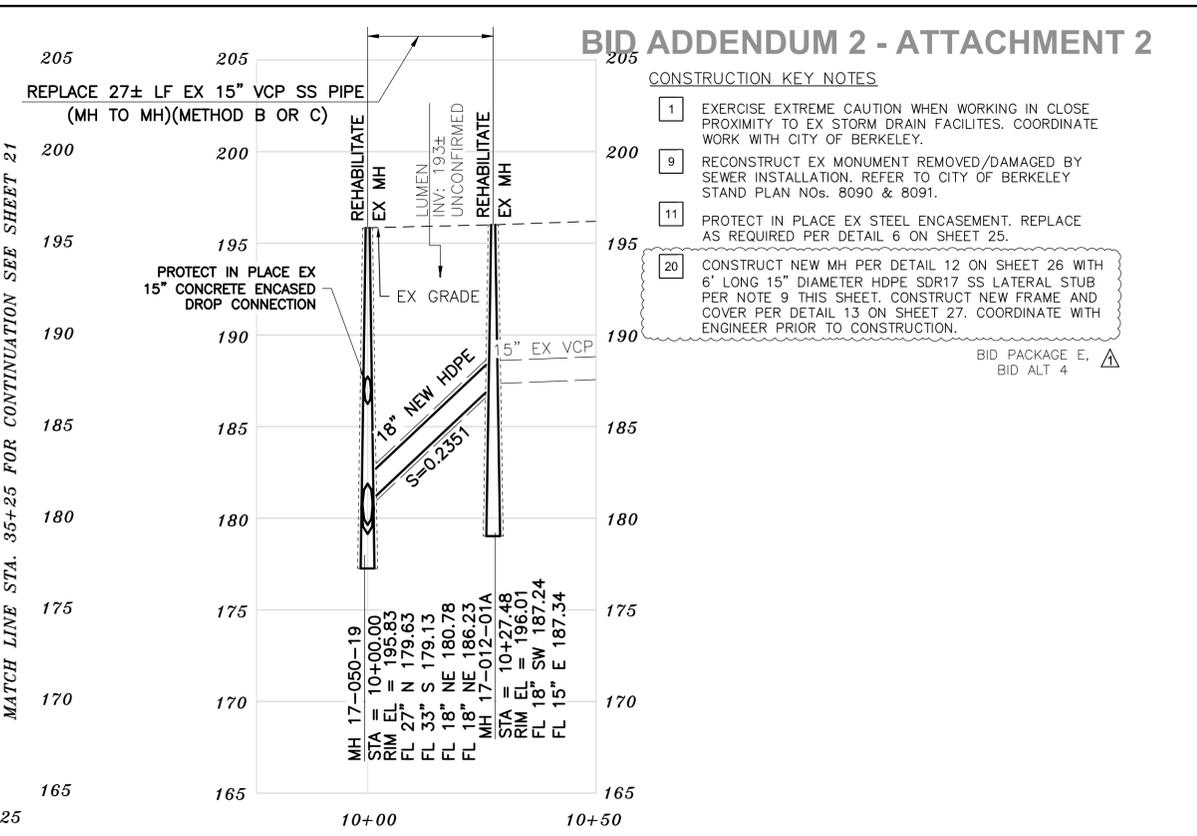
PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 20 OF 29

FOR CITY USE ONLY
 REFERENCE SEWER MAP NO.

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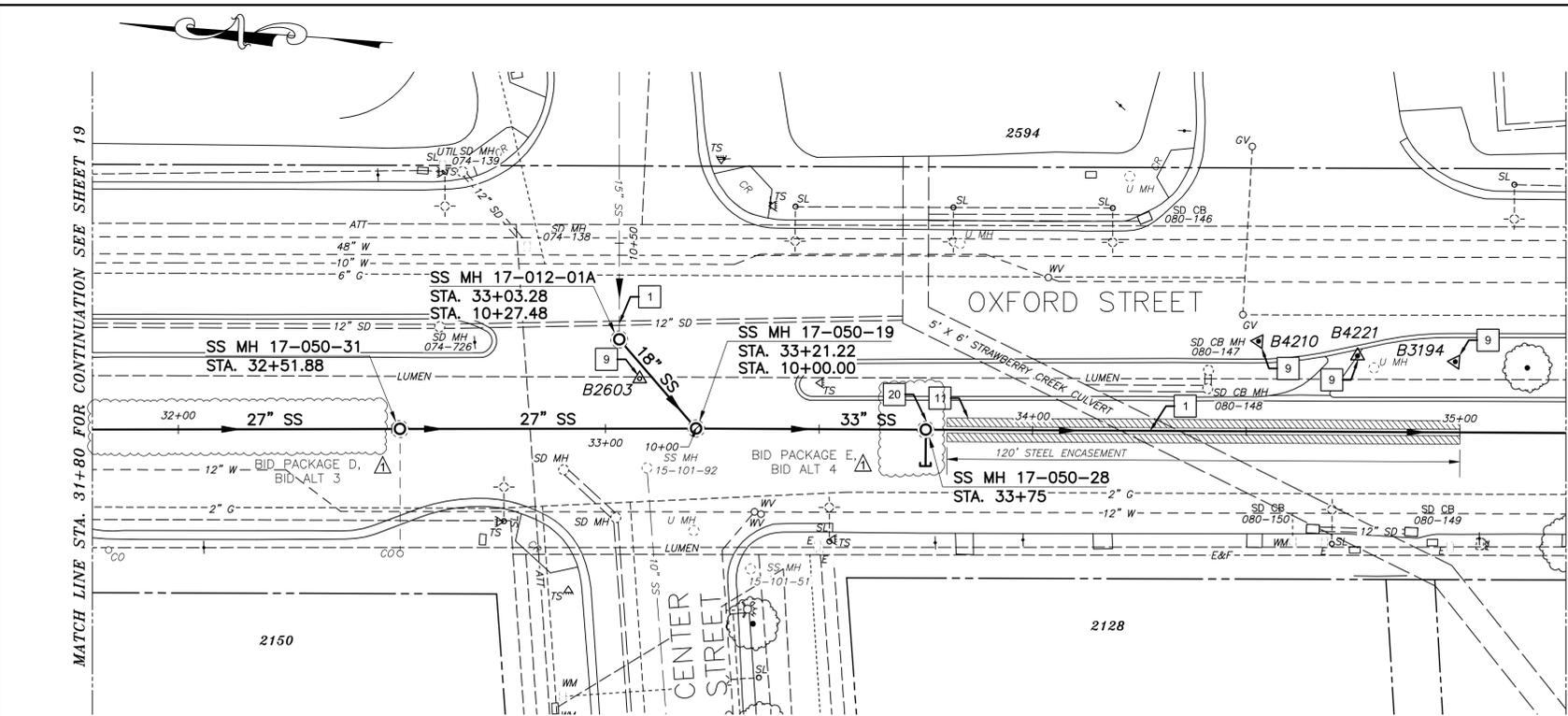
PROFILE



PROFILE

BID ADDENDUM 2 - ATTACHMENT 2

- CONSTRUCTION KEY NOTES**
- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
 - 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STAND PLAN NOS. 8090 & 8091.
 - 11 PROTECT IN PLACE EX STEEL ENCASUREMENT. REPLACE AS REQUIRED PER DETAIL 6 ON SHEET 25.
 - 20 CONSTRUCT NEW MH PER DETAIL 12 ON SHEET 26 WITH 6' LONG 15" DIAMETER HDPE SDR17 SS LATERAL STUB PER NOTE 9 THIS SHEET. CONSTRUCT NEW FRAME AND COVER PER DETAIL 13 ON SHEET 27. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.



PLAN

SANITARY SEWER LAYOUT - OXFORD

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
31+80.00	2144404.16	6051952.48	S4°12'38.55"E	72.00	MATCH LINE
32+51.88	2144332.36	6051957.76	S4°12'38.55"E	69.35	MH 17-050-19A
33+21.22	2144263.20	6051962.86	S3°49'30.64"E	53.78	MH 17-050-19
33+75.00	2144209.54	6051966.44	S3°49'30.64"E	150.00	MH XX-XXX-XX
35+25.00	2144060.00	6051976.44	---	---	MATCH LINE

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FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
BAIRD BARTON, SURVEY PARTY CHIEF

DEPICTION OF MONUMENTS: DATE 01/09/25
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
APPROVED: DATE 01/09/25
RONALD NEVELS, CITY ENGINEER

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025
DRAWN: DC
CHECK: TH
AS BUILT

DESIGN: MA
HORIZ. 1"=20'
VERT. 1"=5'
BOOK
DATE 01/09/25

CITY OF BERKELEY DEPARTMENT OF PUBLIC WORKS
SANITARY SEWER REHABILITATION
 BID PACKAGE D & E (BID ALT 3 & 4)
 ALONG OXFORD STREET BETWEEN
 CENTER ST AND ALLSTON WAY
 PLAN AND PROFILE
 PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 20A OF 29

BID ADDENDUM 2 - ATTACHMENT 2

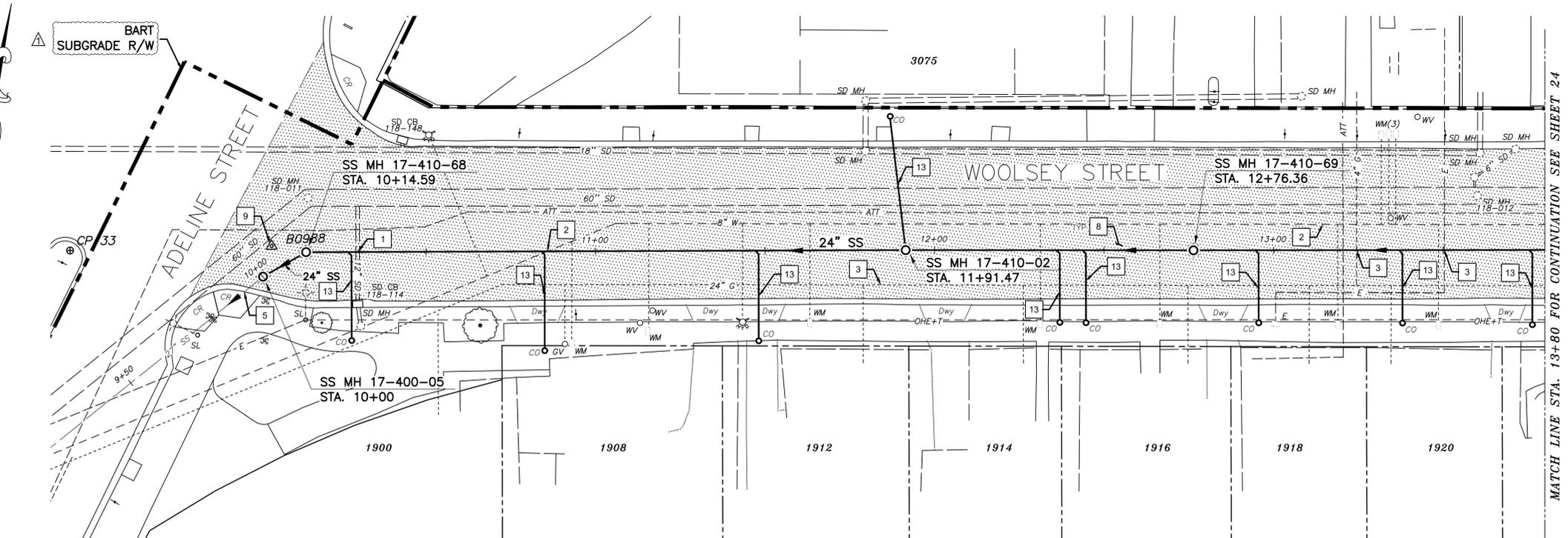
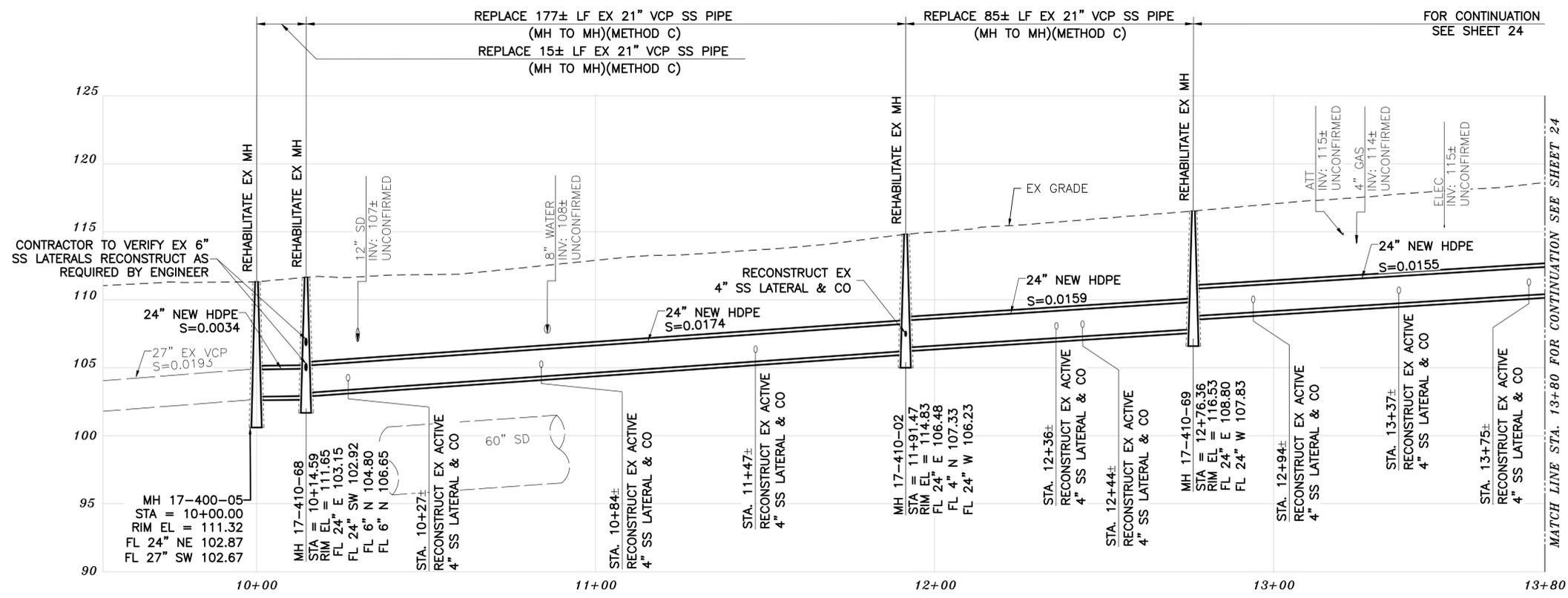
CONSTRUCTION KEY NOTES

- 1 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX STORM DRAIN FACILITIES. COORDINATE WORK WITH CITY OF BERKELEY.
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
- 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
- 5 RECONSTRUCT PORTIONS OF EX CURB AND GUTTER IF REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NO. 8145
- 9 RECONSTRUCT EX MONUMENT REMOVED/DAMAGED BY SEWER INSTALLATION. REFER TO CITY OF BERKELEY STANDARD PLAN NOS. 8090 & 8091.
- 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.

- LEGEND**
- [Symbol] PAVEMENT MORATORIUM AREA
 - [Symbol] WOOLSEY STREET (ADELINE STREET - TREMONT STREET) 8/10/2020 THROUGH 8/10/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

- NOTES:**
1. FOR GENERAL NOTES SEE SHEET 3 OF THE PLANS.
 2. LOWER LATERALS ARE SHOWN BASED ON CCTV, SURVEY DATA, AND RECORD INFORMATION. LOWER LATERALS ARE SHOWN IN DASHED LINE WHERE UNCONFIRMED BY CCTV OR SURVEY DATA. LOWER LATERALS COULD NOT BE DETERMINED AS ACTIVE OR ABANDONED DURING THE PREPARATION OF THESE PLANS. PRIOR TO SEWER MAIN REHABILITATION AND ANY LATERAL RECONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY ALL LATERALS AS ACTIVE OR ABANDONED AND COORDINATE FINDINGS WITH THE ENGINEER.
 3. RECONSTRUCT CITY MONUMENTS DISTURBED BY SEWER INSTALLATION. REFER TO STANDARD DETAIL PLAN NOS. 8090 & 8091 OF THE SPECIFICATIONS.
 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
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 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



SANITARY SEWER LAYOUT - WOOLSEY

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
10+00.00	2137476.97	6050678.13	N52°04'40.23"E	14.59	MH 17-400-05
10+14.59	2137485.94	6050689.64	N81°29'52.98"E	176.88	MH 17-410-68
11+91.47	2137512.09	6050864.57	N81°44'46.30"E	84.90	MH 17-410-68A
12+76.36	2137524.28	6050948.59	N81°38'55.15"E	103.63	MH 17-410-69
13+80.00	2137539.33	6051051.12	---	---	MATCH LINE

PLAN

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\03 - Plan Sheets\12 WOOLSEY STREET.dwg [23 06:0] 1-09-25 02:07:23 PM dchey

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
 FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
 BAIRD BARTON, SURVEY PARTY CHIEF

DEPICTION OF MONUMENTS: DATE 01/09/25
 BAIRD BARTON, SURVEY PARTY CHIEF
 WATERSHED REVIEW: DATE 01/09/25

SUBMITTED: DATE 01/09/25
 R.C.E. 37829
 EXP. 04/2025
 DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
 APPROVED: DATE 01/09/25
 R.C.E. 62524
 EXP. 10/2025
 RONALD NEVELS, CITY ENGINEER

DESIGN MA
 DRAWN DC
 CHECK TH
 AS BUILT
 HORIZ. 1"=20'
 VERT. 1"=5'
 BOOK
 DATE 01/09/25

CITY OF BERKELEY
 DEPARTMENT OF PUBLIC WORKS

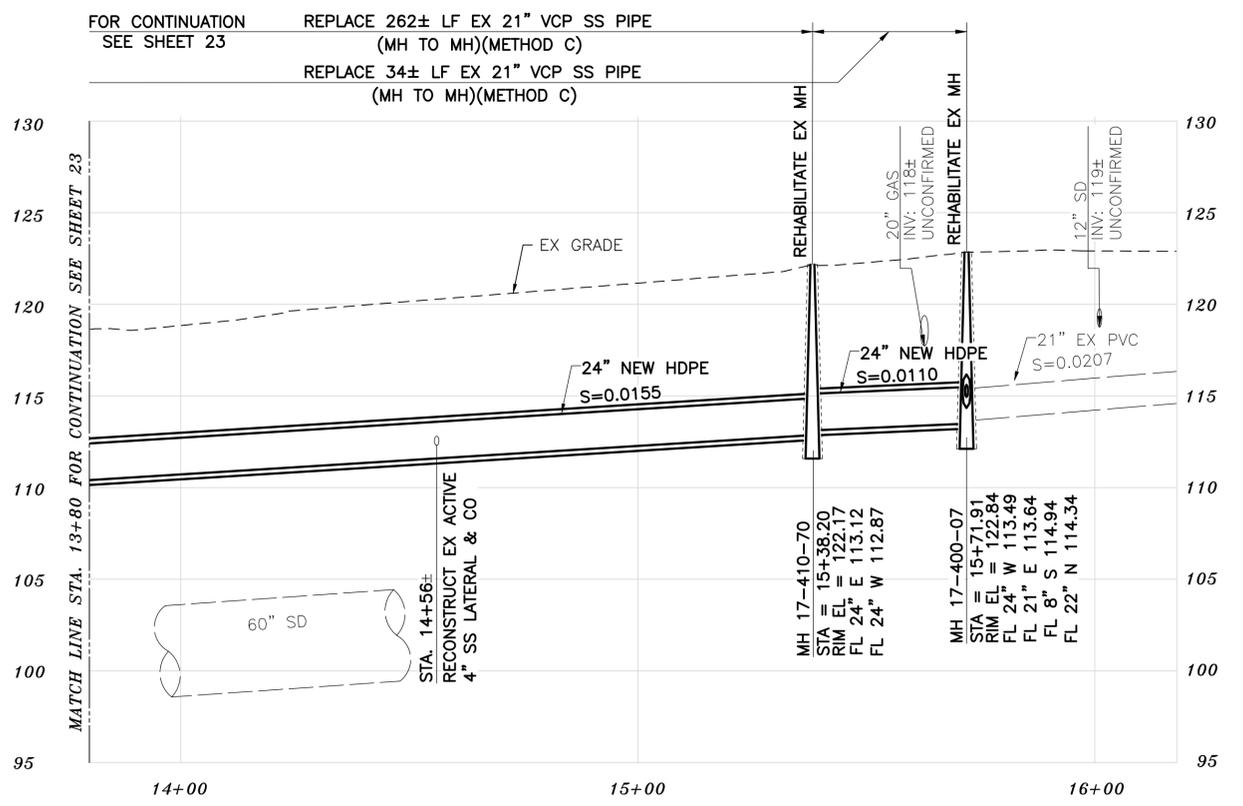
SANITARY SEWER REHABILITATION
WOOLSEY STREET
24" SS
 PLAN AND PROFILE

PLAN NO.: 8292
 FILE NO.: 502-822
 SHEET 23 OF 29

REVISION	DATE	DESCRIPTION	APPROVAL
1	01/06/25	BID ADDENDUM 2 - BART R/W	

BID ADDENDUM 2 - ATTACHMENT 2

- CONSTRUCTION KEY NOTES**
- 2 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX WATER FACILITIES. COORDINATE WORK WITH EBMUD.
 - 3 EXERCISE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY TO EX GAS/ELECTRIC FACILITIES. COORDINATE WORK WITH PG&E.
 - 13 CONTRACTOR SHALL VERIFY STATUS OF EX SANITARY SEWER LOWER LATERAL. RECONSTRUCT ACTIVE LATERAL OR PROPERLY ABANDON IF INACTIVE.

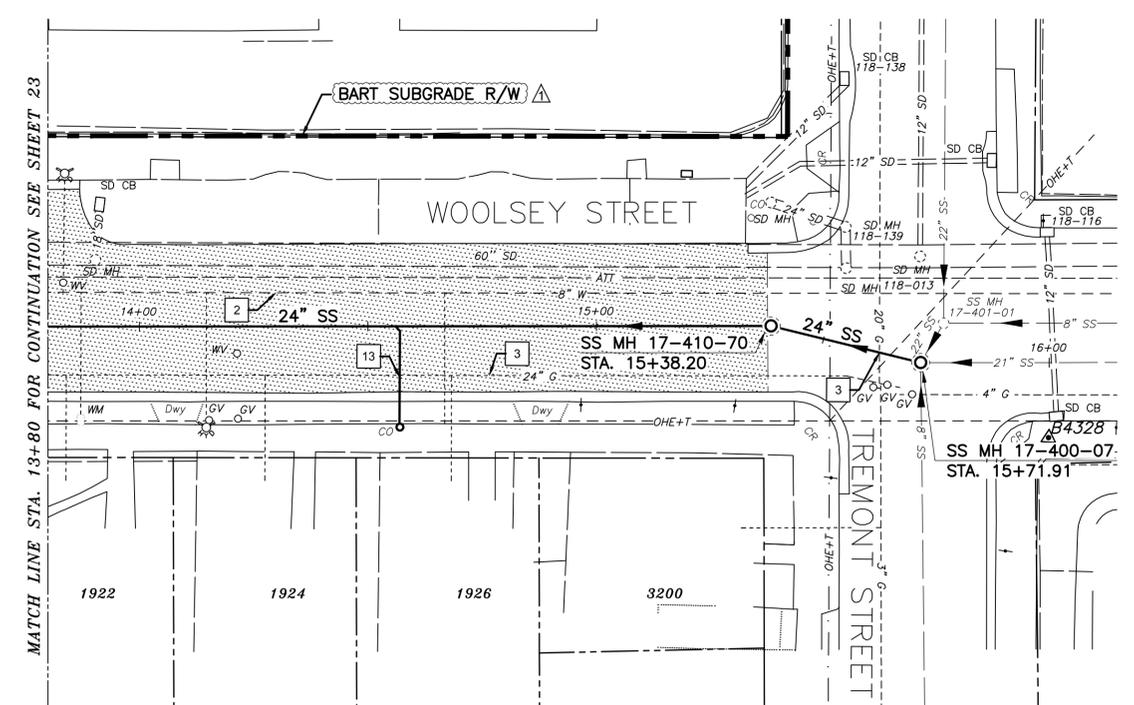


PROFILE

- LEGEND**
- PAVEMENT MORATORIUM AREA
 - WOOLSEY STREET (ADELINE STREET - TREMONT STREET)
8/10/2020 THROUGH 8/10/2025

- PAVEMENT MORATORIUM NOTES**
1. EXCAVATION OR PAVEMENT CUTS WITHIN A DESIGNATED PAVEMENT MORATORIUM AREA SHALL BE RESTORED PER CITY OF BERKELEY STANDARD DETAIL 8136 AS SHOWN IN THE PLANS AND SPECIFICATIONS.

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 4. IN ACCORDANCE WITH SPECIAL CONDITION NO. 13 IN THE SPECIAL PROVISIONS, PRIOR TO EXCAVATION, CONTRACTOR SHALL POTHOLE AND VERIFY THE LOCATION AND DEPTH OF EXISTING STORM DRAINS, SANITARY SEWER MAINS, SEWER LATERALS, AND OTHER UTILITIES OR CONDUITS TO CONFIRM CLEARANCE TO THE WORK BEING PERFORMED. EXISTING UTILITY INFORMATION SHOWN HEREIN IS FOR INFORMATION PURPOSES ONLY. IF CLEARANCE IS LESS THAN 12 INCHES OR IF THERE IS AN EXISTING CONCRETE SADDLE AT THE CROSSING, NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONTINUING WORK.
 5. ALL EXISTING TREES SHALL BE PROTECTED AGAINST INJURY FROM CONSTRUCTION OPERATIONS UNLESS OTHERWISE NOTED.
 6. CONTRACTOR SHALL COORDINATE WITH BOTH PG&E AND EBMUD TO LOCATE FACILITIES. AT THE DISCRETION OF PG&E AND EBMUD, A SPECIAL INSPECTOR MAY BE REQUIRED TO OBSERVE WORK ADJACENT TO AN EXISTING PG&E OR EBMUD FACILITY. CONTRACTOR SHALL SCHEDULE WORK ACCORDINGLY.
 7. SANITARY SEWER PIPES ARE SHOWN BASED ON RECORD INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. ACTUAL DIMENSIONS AND PIPE SIZES MAY VARY. CONTRACTOR TO VERIFY ALL SANITARY SEWER DIMENSIONS AND PIPE SIZES PRIOR TO COMMENCING WORK AND PROCURING MATERIALS.
 8. SPOT REPAIRS ARE SHOWN BASED ON CCTV. PRIOR TO SEWER MAIN REHABILITATION, THE CONTRACTOR SHALL VERIFY LOCATIONS OF SPOT REPAIRS AND PERFORM SPOT REPAIRS AS NEEDED.



PLAN

SANITARY SEWER LAYOUT - WOOLSEY

STATION	NORTHING	EASTING	BEARING	DISTANCE	DESCRIPTION
13+80.00	2137539.33	6051051.12	N81°38'52.09"E	158.20	MATCH LINE
15+38.20	2137562.31	6051207.65	S84°33'35.67"E	33.70	MH 17-410-70
15+71.91	2137559.11	6051241.20	---	---	MH 17-400-07

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\Drawg\03 - Plan Sheets\12 WOOLSEY STREET.dwg [24.06.1] 1-09-25 02:07:28 PM dchoy



Bellecci
Intelligent Infrastructure
925 • 685 • 4569
bellecci.com

PROJECT MANAGER: DATE 01/09/25
FELIX MENEAU, ASSOCIATE CIVIL ENGINEER

DEPICTION OF MONUMENTS: DATE 01/09/25
BAIRD BARTON, SURVEY PARTY CHIEF

WATERSHED REVIEW: DATE 01/09/25

FOR REDUCED PLANS - ORIGINAL SCALE IS IN INCHES

SUBMITTED: DATE 01/09/25
R.C.E. 37829
EXP. 04/2025

APPROVED: DATE 01/09/25
R.C.E. 62524
EXP. 10/2025

RONALD NEVELS, CITY ENGINEER

DESIGN MA
DRAWN DC
CHECK TH
AS BUILT

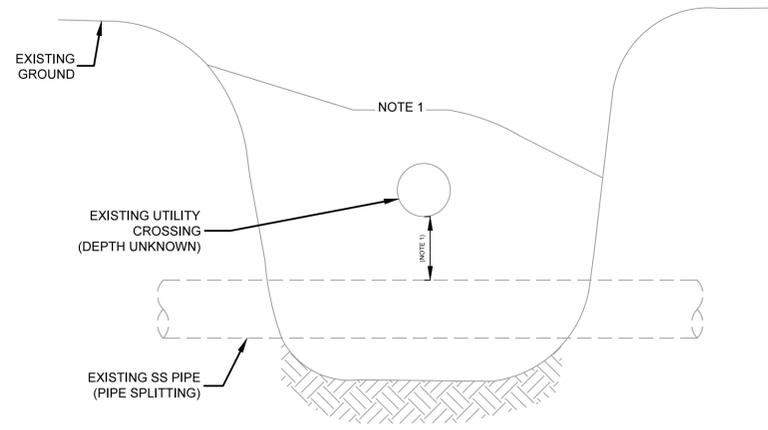
HORIZ. 1"=20'
VERT. 1"=5'
BOOK
DATE 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
WOOLSEY STREET
24" SS
PLAN AND PROFILE

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 24 OF 29

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.

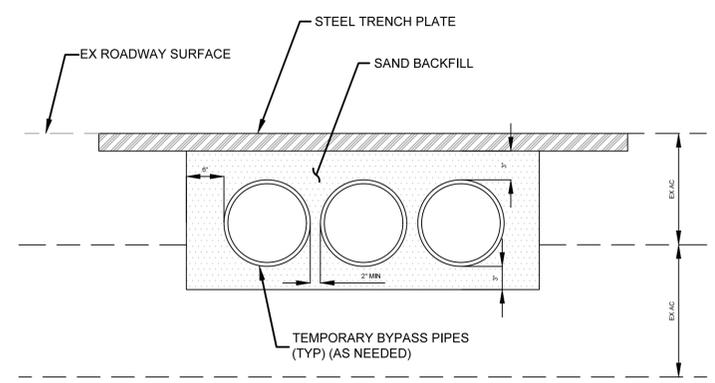


EXPOSE UTILITY CROSSING DETAIL NOTES:

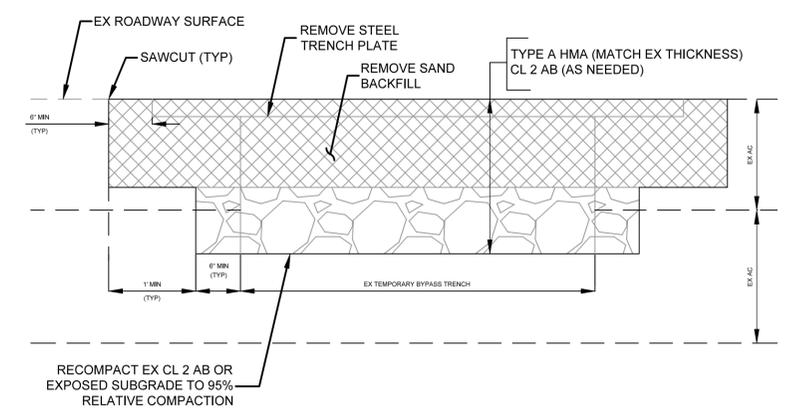
SLOPING, BENCHING, AND SHORING OF EXCAVATION SHALL BE IN CONFORMANCE WITH THE OSHA EXCAVATION STANDARD BASED ON THE OSHA CLASSIFICATION OF THE SOIL, WHICH SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

- UTILITY CROSSINGS WITH LESS THAN 3 FEET (OR AS NOTED) OF CLEARANCE TO THE NEW SANITARYSEWER PIPE SHALL BE EXPOSED DURING PIPE SPLITTING.
- BACKFILL IN ACCORDANCE WITH CITY OF BERKELEY STANDARD PLAN 8136, AND AS DIRECTED BY THE ENGINEER.
- IN AREAS WHERE PIPE SPLITTING DISTURBS SURFACE FEATURES, RESTORE TO MATCH EXISTING CONDITIONS, AND AS DIRECTED BY THE ENGINEER.

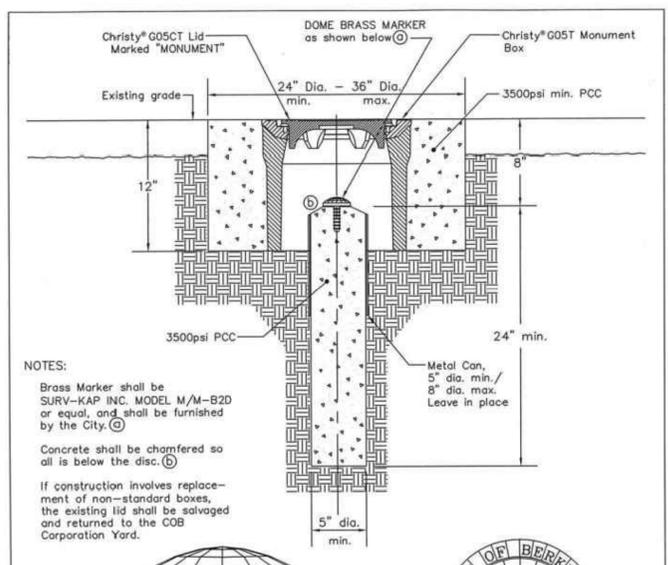
EXPOSE UTILITY CROSSING DETAIL 7
SCALE: NTS



TEMPORARY BYPASS CROSSING TRAVELED WAY DETAIL 8
SCALE: NTS



PAVEMENT RESTORATION OF TEMPORARY BYPASS CROSSING 9
SCALE: NTS



NOTES:

Brass Marker shall be SURV-KAP INC. MODEL M/M-B20 or equal, and shall be furnished by the City.

Concrete shall be chamfered so all is below the disc.

If construction involves replacement of non-standard boxes, the existing lid shall be salvaged and returned to the COB Corporation Yard.

NOTE: This Drawing Supersedes COB Plan 7063, File: 20-B-120 MCT-12/2013

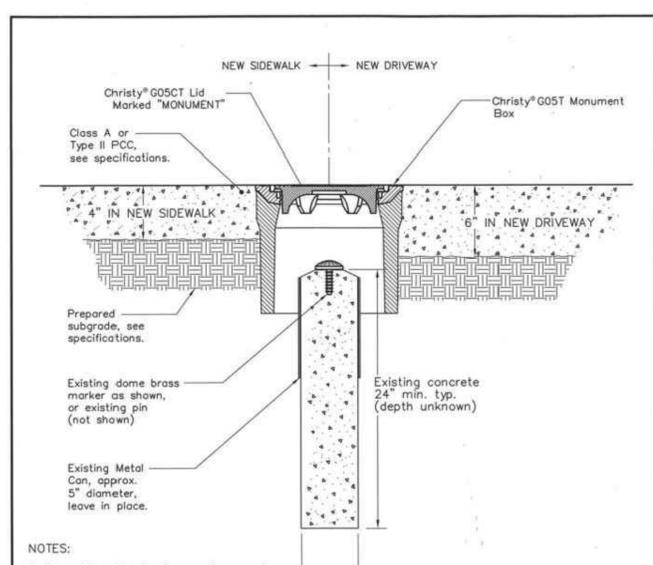
REVISIONS:

DOMED BRASS MARKER TO BE FURNISHED BY THE CITY	DATE: 11/2010
REVISED DETAIL TO INCLUDE NEW STANDARD CHRISTY®G05T BOX & LID	DATE: 12/2013
UPDATE STANDARD SETTING AND REVISED TITLE BLOCK	DATE: 12/2015
REVISED STANDARD SETTING TO FULL CONCRETE COLLAR FLUSH w/EX. GRADE	DATE: 11/2017

DESIGN: MCT DATE: 11/2017 PLAN: 8090
DRAWN: MCT SCALE: N.T.S. FILE: 20-B-153
CHECK: NAP
APPROVED: [Signature] DATE: 11-17-17
CITY ENGINEER

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL
STANDARD CITY MONUMENT

STANDARD CITY MONUMENT 10
SCALE: NTS



NOTES:

1. If construction involves replacement of non-standard casings, the existing lid shall be salvaged and returned to the COB Corporation Yard.

NOTE: This Drawing Supersedes COB Plan 7987, File: 20-B-150 MCT-12/2013

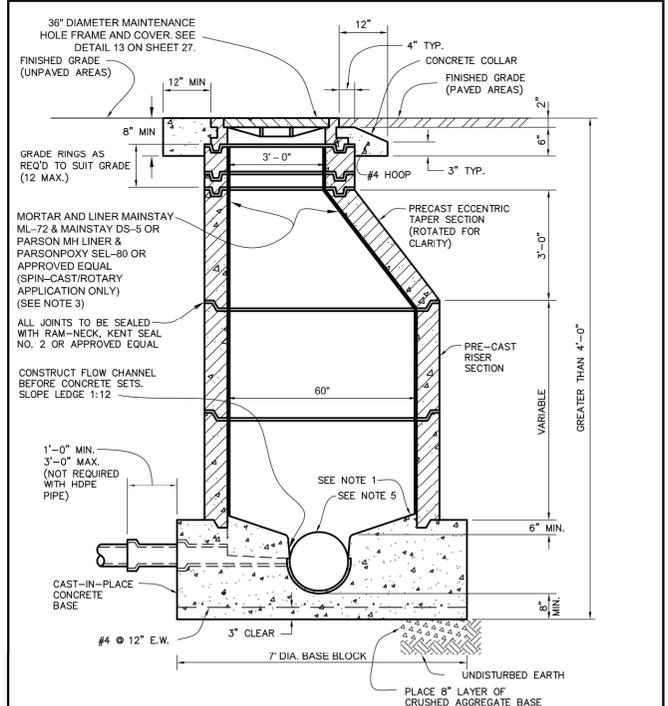
REVISIONS:

DOMED BRASS MARKER TO BE FURNISHED BY THE CITY	DATE: 11/2010
REVISED DETAIL TO INCLUDE NEW STANDARD CHRISTY®G05T BOX & LID	DATE: 12/2013
UPDATE STANDARD SETTING AND REVISED TITLE BLOCK	DATE: 12/2015

DESIGN: EC/MCT DATE: 12/2015 PLAN: 8091
DRAWN: EC/MCT SCALE: N.T.S. FILE: 20-B-154
CHECK: SBR
APPROVED: [Signature] DATE: 12/23/15
CITY ENGINEER

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL
CITY MONUMENT REHAB
IN NEW SIDEWALK OR DRIVEWAY

CITY MONUMENT REHAB IN NEW SIDEWALK OR DRIVEWAY 11
SCALE: NTS



NOTES:

- SET RISER SECTION IN 1:3 MORTAR MIX AND IN GROOVE FORMED IN BASE, OR POUR MONOLITHICALLY WITH BASE
- CAST-IN-PLACE CONCRETE FOR MANHOLE BASES AND CONCRETE COLLARS SHALL CONFORM TO SPEC. SECTION 201-1.1.2 AND BE CLASS 500-B-3250
- MH LINER AND COATINGS ONLY APPLY TO SANITARY SEWER MAINTENANCE HOLE.
- COATING TO INCLUDE THE BASE OF MAINTENANCE HOLE IN ADDITION TO THE SIDES.
- REMOVE UNOBSTRUCTED TOP PORTION OF TRUNK SEWER WITHIN BASE OF SSMH.

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

STANDARD DETAIL
TRUNK MAINTENANCE HOLE
ECCENTRIC CONE

SUBMITTED: DATE: _____
SUPERVISING CIVIL ENGINEER R.C.E. _____
APPROVED: DATE: _____
MANAGER OF ENGINEERING R.C.E. _____

DESIGN: _____ DATE: _____
DRAWN: DC R.C.E. _____
CHECK: TH R.C.E. _____
AS BUILT _____

HORIZ. _____
VERT. _____
BOOK _____
DATE: 01/09/25

TRUNK MAINTENANCE HOLE 12
SCALE: NTS

K:\Projects\2024\240078 Berkeley Sewer Rehabilitation Project\DWG\03 - Plan Sheets\13 DETAILS.dwg [26 C7.1] 1-09-25 04:28:10 PM dchoy

FOR CITY USE ONLY
REFERENCE SEWER MAP NO.



PROJECT MANAGER: DATE 01/09/25
FELIX MENEAL, ASSOCIATE CIVIL ENGINEER
BAIRD BARTON, SURVEY PARTY CHIEF
WATERSHED REVIEW: DATE 01/09/25

DEPICTION OF MONUMENTS: DATE 01/09/25
SUBMITTED: DATE 01/09/25
DANIEL AKAGI, SUPERVISING CIVIL ENGINEER
APPROVED: DATE 01/09/25
RONALD NEVELS, CITY ENGINEER

DESIGN: MA DATE 01/09/25
DRAWN: DC R.C.E. 37829
CHECK: TH R.C.E. 62524
AS BUILT _____

HORIZ. _____
VERT. _____
BOOK _____
DATE: 01/09/25

CITY OF BERKELEY
DEPARTMENT OF PUBLIC WORKS

SANITARY SEWER REHABILITATION
DETAILS
LOCATION MAP & INDEX OF DRAWINGS

PLAN NO.: 8292
FILE NO.: 502-822
SHEET 26 OF 29