

CITY OF MANHATTAN BEACH

BID DOCUMENTS

PROJECT NO. W-628

BLOCK 35 ELEVATED TANK PAINTING PROJECT
1431 6th Street
May 2020



CITY OF MANHATTAN BEACH
PUBLIC WORKS
ANASTASIA SEIMS
1400 HIGHLAND AVENUE
MANHATTAN BEACH, CA 90266

Prem Kumar, City Engineer C52463

Engineer/Architect of Record Approval

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**NOTICE INVITING BIDS
FOR**

BLOCK 35 ELEVATED TANK PAINTING PROJECT

Project number: W-628 Bid Number: 1244-20

NOTICE IS HEREBY GIVEN that the City of Manhattan Beach, California ("City") invites sealed Bids for the Project. The City will receive such Bids at the City Clerk's office, City Hall, 1400 Highland Avenue, Manhattan Beach, California 90266 up to 11:00 a.m. on June 18, 2020, at which time they will be publicly opened and read aloud.

All Bids must be made on the form furnished by the City. Each Bid must be submitted in a sealed envelope addressed to the City Clerk with the Project name and identification number typed or clearly printed on the lower left corner of the envelope. Bids must remain valid and shall not be subject to withdrawal for 90 calendar Days after the Bid opening date.

SCOPE OF WORK. The Project includes, without limitation, furnishing all necessary labor, materials, equipment and other incidental and appurtenant Work necessary to satisfactorily complete the Project, as more specifically described in the Contract Documents. This Work will be performed in strict conformance with the Contract Documents, permits from regulatory agencies with jurisdiction, and applicable regulations. The quantity of Work to be performed and materials to be furnished are approximations only, being given as a basis for the comparison of Bids. Actual quantities of Work to be performed may vary at the discretion of the City Engineer. Time for completion of the Work is 150 total Working Days from the date specified in the Notice to Proceed.

OBTAINING BID DOCUMENTS. Bidders may obtain free copies of the Plans, Specifications and other Contract Documents online by visiting <https://www.bidsync.com>.

OPTIONAL PRE-BID MEETING AND SITE VISIT. Two optional pre-bid meetings and site visits will be held on Tuesday, May 26, 2020 at 9:30 a.m. and on Wednesday, May 27, 2020 at 1:00 p.m. at the Block 35 Elevated Tank, 1431 6th Street, Manhattan Beach, California 90266. Potential bidders are required to observing all social distancing requirements and wearing face coverings that cover the mouth and nose. When potential bidders arrive to the site, Bidders shall check in with the City representative at the gate on 6th Street and provide the City representative with the Bidder's phone number. Potential Bidders shall then wait in their vehicles until they are called by the City representative when it is their turn to be escorted in and to tour the site. City representatives will conduct the site tours in small groups to ensure social distancing requirements can be adhered. These two dates and times are the only opportunities for potential bidders to physically enter this secured site. No other group or individual site visit requests will be entertained. No allowances for cost adjustments will be made if a Bidder fails to adequately examine the Project site before submitting a Bid.

DEADLINE FOR QUESTIONS. Bidder questions must be submitted before or by noon on June 5, 2020.

REGISTRATION WITH THE DEPARTMENT OF INDUSTRIAL RELATIONS. In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or subcontractor shall be qualified to bid

on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5 [with limited exceptions for bid purposes only under Labor Code Section 1771.1(a)].

PREVAILING WAGES. In accordance with Labor Code Section 1770 *et seq.*, the Project is a “public work.” The selected Bidder (Contractor) and any Subcontractors shall pay wages in accordance with the determination of the Director of the Department of Industrial Relations (“DIR”) regarding the prevailing rate of per diem wages. Copies of those rates are on file with the Director of Public Works and are available to any interested party upon request. The Contractor shall post a copy of the DIR’s determination of the prevailing rate of per diem wages at each job site. This Project is subject to compliance monitoring and enforcement by the DIR.

BONDS. Each Bid must be accompanied by a cash deposit, cashier’s check, certified check or Bidder’s Bond issued by a Surety insurer, made payable to the City and in an amount not less than ten percent of the total Bid submitted. Personal or company checks are not acceptable. Upon Contract award, the Contractor shall provide faithful performance and payment Bonds, each in a sum equal to the Contract Price, as well as a warranty or maintenance Bond that is valid for one year from Project acceptance in the amount of ten percent of the Contract Price. All Bonds must be issued by a California admitted Surety insurer using the forms set forth in the Contract Documents, or in any other form approved by the City Attorney. Failure to enter into the Contract with the City, including the submission of all required Bonds and insurance coverages, within ten calendar days after the date of the mailing of written notice of contract award to the Bidder, shall subject the Bid security to forfeiture to the extent provided by law.

LICENSES. Each Bidder shall possess a valid Class C-33 or Class A Contractor’s license issued by the California State Contractors License Board at the time of the Bid submission, unless this Project has any federal funding, in which case the successful Bidder must possess such a license at the time of Contract award. The successful Contractor must also possess a current City business license.

RETENTION SUBSTITUTION. Five percent of any progress payment will be withheld as retention. In accordance with Public Contract Code Section 22300 and at the request and expense of the Contractor, securities equivalent to the amount withheld may be deposited with the City or with a State or federally chartered bank as escrow agent, which shall then pay such moneys to the Contractor. Upon satisfactory completion of the Project, the securities shall be returned to the Contractor. Alternatively, the Contractor may request that the City make payments of earned retentions directly to an escrow agent at the Contractor’s expense. No such substitutions shall be accepted until all related documents are approved by the City Attorney.

BIDDING PROCESS. The City reserves the right to reject any Bid or all Bids, and to waive any irregularities or informalities in any Bid or in the bidding, as deemed to be in its best interest.

By: Prem Kumar
City Engineer

May 6, 2020
Date

INSTRUCTIONS TO BIDDERS

FORM OF BID. Bids shall be made on the Bid forms found herein. Bidders shall include all forms and fill in all blank spaces, including inserting "N/A" (for not applicable) where necessary. The Bid shall be enclosed in a sealed envelope bearing the Bidder's name and the Project name and identification number as described in the Notice Inviting Bids.

Any Bid not accompanied by a Contractor's Statement completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury may be deemed non-responsive and rejected. If the City determines that any information provided by a Bidder in the Contractor's Statement is false or misleading, or is so incomplete as to be false or misleading, the City may reject the Bid submitted by such Bidder as being non-responsive.

DELIVERY OF BIDS. The Bid shall be delivered by the time and date and to the place specified in the Notice Inviting Bids. No oral, faxed, emailed, or telephonic Bids or alternatives will be considered. Bidders are solely responsible for ensuring that their Bids are received in proper time, and Bidders assume all risks arising out of their chosen means of delivery. Any Bid received after the Bid submission deadline shall be returned unopened. Bidders are invited to be present for Bid opening. Accepted Bids shall become the property of the City.

AMENDED BIDS. Unauthorized conditions, limitations or provisions attached to a Bid may cause the Bid to be deemed incomplete and non-responsive.

WITHDRAWAL OF BID. A Bid may be withdrawn without prejudice upon written request by the Bidder filed with the City Clerk before the Bid submission deadline. Bids must remain valid and shall not be subject to withdrawal for 90 Days after the Bid opening date.

BIDDER'S SECURITY. Each Bid shall be accompanied by cash, a certified or cashier's check payable to the City, or a satisfactory Bid Bond in favor of the City executed by the Bidder as principal and an admitted surety insurer as Surety, in an amount not less than ten percent of the amount set forth in the Bid. The cash, check or Bid Bond shall be given as a guarantee that, if selected, the Bidder will execute the Contract in conformity with the Contract Documents, and will provide the evidence of insurance and furnish the specified Bonds, within ten calendar days after the date of delivery of the Contract Documents to the Bidder. In case of the Bidder's refusal or failure to do so, the City may award the Contract to the next lowest responsible bidder, and the cash, check, or Bond (as applicable) of the lowest Bidder shall be forfeited to the City to the extent permitted by law. No Bid Bond will be accepted unless it conforms substantially to the form provided in these Contract Documents.

QUANTITIES APPROXIMATE. Any quantities shown in the Bid form or elsewhere herein shall be considered as approximations listed to serve as a general indication of the amount of Work or materials to be performed or furnished, and as basis for the Bid comparison. The City does not guarantee that the actual amounts required will correspond with those shown. As deemed necessary or convenient, the City may increase or decrease the amount of any item or portion of Work or material to be performed or furnished or omit any such item or portion, in accordance with the Contract Documents.

ADDENDA. The City Engineer may, from time to time, issue Addenda to the Contract Documents. The City shall post all documents to the City's website at <https://www.citymb.info>. The Addenda may also be posted to BidSync at <https://www.bidsync.com>. Bidders are

responsible for ensuring that they have received any and all Addenda. It is the Bidder's responsibility to actively check BidSync and/or the City's website for Addenda or bulletin updates. Each Bidder is responsible for verifying that it has received all Addenda issued. Bidders must acknowledge receipt of all Addenda, if any, using the Addenda Acknowledgement Form included in these Bid Documents. Failure to acknowledge receipt of all Addenda may cause a Bid to be deemed incomplete and non-responsive.

DISCREPANCIES IN BIDS. Each Bidder shall set forth as to each item of Work, in clearly legible words and figures, a unit or line item Bid amount for the item in the respective spaces provided for this purpose.

In case of discrepancy between the unit price and the extended amount set forth for the item, the unit price shall prevail. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or if the unit price is the same amount as the entry in the "extended amount" column, then the amount set forth in the "extended amount" column for the item shall prevail in accordance with the following:

- (1) As to lump sum items, the amount set forth in the "extended amount" column shall be the unit price.
- (2) As to unit price items, the amount set forth in the "extended amount" column shall be divided by the estimated quantity for the item set forth in the Bid documents, and the price thus obtained shall be the unit price.

In case of discrepancy between words and figures, the words shall prevail.

COMPETENCY OF BIDDERS. In evaluating Bidder responsibility, consideration will be given not only to the financial standing, but also to the general competency of the Bidder for the performance of the Project. Each Bidder shall set forth in the designated area of the Bid form a statement of its experience. No Contract will be executed with a Bidder that is not licensed and registered with the DIR in accordance with State law, and with any applicable specific licensing requirements specified in these Contract Documents. These licensing and registration requirements for Contractors shall also apply to all Subcontractors.

BIDDER'S EXAMINATION OF SITE AND CONTRACT DOCUMENTS. The Bidder, at its sole cost and expense, is required to carefully examine the Contract Documents and the Project site to become fully acquainted with the conditions affecting the Work. The failure of a Bidder to receive or examine any of the Contract Documents or to inspect the site shall not relieve such Bidder from any obligation relating to the Bid, the Contract, or the Work required under the Contract Documents. The City assumes no responsibility or liability to any Bidder for, nor shall the City be bound by, any understandings, oral representations or oral agreements of the City's agents, employees or officers concerning the Contract Documents or the Work made prior to execution of the Contract. By submitting a Bid, Bidder represents: (1) that Bidder has read and understands the Contract Documents; (2) the Bid is made in compliance with the Contract Documents and is based upon the labor, materials, equipment, and systems required by the Contract Documents; (3) that Bidder understands that all labor, materials, equipment, and systems to be furnished for the Work shall be furnished for the prices bid; (4) that it has visited the Project site, familiarized itself with the local conditions under which the Work is to be performed; (5) that it is fully experienced, qualified and competent to perform the Work set forth in the Contract Documents; (6) that it shall not damage or endanger and shall preserve and protect adjacent properties; (7) that it is properly equipped, organized, and financed to perform the Work;

(8) that it is properly permitted and licensed by the California Contractors State Licensing Board to perform the Work; (9) that it has familiarized itself with all conditions bearing upon transportation, disposal, handling, and storage of materials; (10) that it has familiarized itself with the availability of labor, water, electric power, and roads; (11) that it has familiarized itself with uncertainties of weather, or similar physical conditions at the Project site; (12) that it has familiarized itself with the character of equipment and facilities needed preliminary to and during performance of the Work; (13) that it has familiarized itself with the staging and material storage constraints of the Project site and surrounding buildings and will confine its staging and storage operations to approved areas; and (14) that it will coordinate its construction activities with the other contractors performing work on the Project site, if any, including, but not limited to, any separate contractor retained by the City.

No information derived from an inspection of records or investigation will in any way relieve the Contractor from its obligations under the Contract Documents nor entitle the Contractor to any additional compensation. The Contractor shall not make any claim against the City based upon ignorance or misunderstanding of any condition of the Project site or of the requirements set forth in the Contract Documents. No claim for additional compensation will be allowed which is based on a lack of knowledge of the above items. Bidders assume all risks in connection with performance of the Work in accordance with the Contract Documents, regardless of actual conditions encountered, and waive and release the City with respect to any and all claims and liabilities in connection therewith, to the extent permitted by law.

The omission of any portion or item of Work from the Bid that is reasonably inferable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

DISQUALIFICATION OF BIDDERS. No Person shall be allowed to make, file or be interested in more than one Bid for the Project. A Person that has submitted a sub-bid to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from making a prime Bid. If there is a reason to believe that collusion exists among the Bidders, all affected Bids will be rejected.

RETURN OF BID SECURITY. The successful Bidder's Bid security shall be held until the Contract is executed. Bid security shall be returned to the unsuccessful Bidders within a reasonable time, which in any case shall not exceed 90 Days after the successful Bidder has signed the Contract.

AWARD OF CONTRACT. The City reserves the right to reject any or all Bids or any parts thereof or to waive any irregularities or informalities in any Bid or in the bidding. The Contract award, if made, will be to the lowest responsible, responsive Bidder and is anticipated to occur within 90 calendar Days after the Bid opening. The Contract award may be made after that period if the selected Bidder has not given the City written notice of the withdrawal of its Bid.

DETERMINATION OF LOWEST BIDDER IF ADDITIVE OR DEDUCTIVE ITEMS. In accordance with Public Contract Code Section 20103.8, the lowest Bid shall be determined by comparing the total Bid price of all Base Bid Items and Additive Alternate Bid Items, using the Engineer's estimate of quantities for the Work as set forth in the Bidder's Proposal. The amount of the contract award will be based on the available budget for the project. It may be only for the Base Bid or if the budget allows, include Additive Bid Items. In the event that any or all of the Alternate Bid Items are not awarded as part of the Contract, the City reserves the right to add any or all of the Alternate Bid Items by Change Order or Construction Change Directive at the prices set forth in the Bid.

TRENCHING. If the Project involves the construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet deep or more, then each Bidder must submit, as a Bid item, adequate sheeting, shoring, and bracing, or an equivalent method, for the protection of life or limb, which shall conform to applicable safety orders. This final submission must be accepted by the City in advance of excavation and must include a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from caving ground during the excavation Work. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

LISTING SUBCONTRACTORS. Each Bidder shall submit a list of the proposed Subcontractors on the Project, as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, *et seq.*).

WORK OF SUBCONTRACTORS. All Bidders are encouraged to disseminate all of the Specifications, Drawings, and other Contract Documents to all persons or entities submitting sub-bids to the Bidder.

INELIGIBLE SUBCONTRACTORS. The successful Bidder is prohibited from performing Work on the Project with any Subcontractor who is ineligible to perform work on a public works project pursuant to Sections 1777.1 or 1777.7 of the California Labor Code. By submitting a Bid, each Bidder certifies that it has investigated the eligibility of each and every listed Subcontractor and has determined that none is ineligible to perform Work pursuant to the Labor Code.

EXECUTION OF CONTRACT. The selected Bidder shall execute the Contract in the form included in these Contract Documents within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Additionally, the selected Bidder shall also secure all insurance and Bonds as herein specified, and provide copies to the City, within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Failure or refusal to execute the Contract or to conform to any of the stipulated requirements shall be just cause for the annulment of the award and forfeiture of the Bidder's security. In such event, the City may declare the Bidder's security forfeited to the extent permitted by law, and the City may award the Contract to the next lowest responsible Bidder or may reject all bids.

SIGNATURES. The Bidder shall execute all documents requiring signatures, and shall cause to be notarized all documents that indicate such a requirement. The Bidder shall provide evidence satisfactory to the City, such as an authenticated resolution of its board of directors or a power of attorney, indicating the capacity of the person(s) signing the Bid to bind the Bidder to the Bid and any Contract arising therefrom.

INSURANCE AND BONDS. The Contractor shall not begin Work until it has given the City evidence of all required insurance coverage (including all additional insured endorsements), a Bond guaranteeing the Contractor's faithful performance of the Contract, and a Bond securing the payment of claims for labor and materials. Where a Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO for review by the City.

TELEPHONES. Bidders are hereby notified that the City will not provide telephones for their use at the time of Bid submission.

INTERPRETATION OF CONTRACT DOCUMENTS. Any Bidder that is in doubt as to the intended meaning of any part of the Contract Documents, or that finds discrepancies in or omissions from the Contract Documents, may submit to the City Engineer a written request for an interpretation or correction not later than five Working Days before the Bid submission deadline. Requests for clarification received after this date will be disregarded. Please indicate the Project and identification number in the request for clarification. Telephonic requests will not be taken. Any interpretation or correction of the Contract Documents will be made only by a written Addendum. No oral interpretation of any provision in the Contract Documents shall be binding.

TRADE NAMES OR EQUALS. Requests to substitute an equivalent item for a brand or trade name item must be made by written request submitted no later than ten calendar days after the award of the Contract. Requests received after this time shall not be considered. Requests shall clearly describe the product for which approval is requested, including all data necessary to demonstrate acceptability.

TAXES. Except as may be otherwise specifically provided herein, all sales and/or use taxes assessed by federal, State or local authorities on materials used or furnished by the Contractor in performing the Work shall be paid by the Contractor. The Bidder shall calculate payment for all sales, unemployment, pension and other taxes imposed by federal, State, and local law and shall include these payments in computing the Bid.

CHECKLIST FOR BIDDERS

The following information is required of all Bidders at the time of Bid submission:

- _____ Completed and Signed Bid Schedule, including page B-1
- _____ Completed and Signed Contractor's Statement
- _____ Completed References Form
- _____ Completed Subcontractor Designation Form
- _____ Completed, Signed and Notarized Bid Bond or Other Security Form
- _____ Signed and Notarized Noncollusion Declaration Form
- _____ Completed and Signed Addenda Acknowledgement Form
- _____ Evidence satisfactory to the City indicating the capacity of the person(s) signing the Bid to bind the Bidder

Failure of the Bidder to provide all required information in a complete and accurate manner may cause the Bid to be considered non-responsive.

BID

CITY OF MANHATTAN BEACH

BLOCK 35 ELEVATED TANK PAINTING PROJECT

TO THE HONORABLE MAYOR AND CITY COUNCIL OF THE CITY OF MANHATTAN BEACH:

The undersigned, as Bidder, declares that: (1) this Bid is made without collusion with any other person and that the only persons or parties interested as principals are those named herein; (2) the undersigned has carefully examined the Contract Documents (including all Addenda) and the Project site; and (3) the undersigned has investigated and is satisfied as to the conditions to be encountered, the character, quality and quantities of Work to be performed, and the materials to be furnished. Furthermore, the undersigned agrees that submission of this Bid shall be conclusive evidence that such examination and investigation have been made and agrees, in the event the Contract be awarded to it, to execute the Contract with the City of Manhattan Beach to perform the Project in accordance with the Contract Documents in the time and manner therein prescribed, and to furnish or provide all materials, labor, tools, equipment, apparatus and other means necessary so to do, except as may otherwise be furnished or provided under the terms of the Contract Documents, for the following stated unit prices or lump-sum price as submitted on the Bid herein.

This Bid is made with the full knowledge of the kind, quantity, and quality of the materials and Work required and, if it is accepted by the City, the Bidder shall enter into a Contract and furnish the bonds, insurance, and other documents as required by the Contract Documents within ten calendar days after award of the Contract. The Bidder agrees that failure to execute and return the Contract or the required faithful performance bond, labor and materials payment bond, warranty bond, and insurance certificates to the City within the ten calendar day period shall be sufficient cause for the rescission of the award and forfeiture of the Bid Security to the City to the extent permitted by law.

Accompanying this Bid is cash, a cashier's check, a certified check or a Bid Bond in an amount equal to at least ten percent of the total aggregate Bid price based on the quantities shown and the unit prices quoted. The undersigned further agrees that, should it be awarded the Contract and thereafter fail or refuse to execute the Contract and provide the required evidence of insurance and Bonds within ten calendar days after delivery of the Contract to the undersigned, then the cash, check or Bid Bond shall be forfeited to the City to the extent permitted by law.

CITY OF MANHATTAN BEACH

BID SCHEDULE FOR

BLOCK 35 ELEVATED TANK PAINTING PROJECT

Bidder's Name: _____

Bidder's Address: _____

To the Honorable Mayor and Members of the City Council:

In compliance with the Notice Inviting Bids, the undersigned hereby agrees to execute the Contract to furnish all labor, materials, equipment and supplies for the Project in accordance with the Contract Documents to the satisfaction and under the direction of the City Engineer, at the following prices:

Base Bid Items as Follows:

BASE BID SCHEDULE:

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
1	%	Mobilization/Demobilization: Furnish all labor, materials, and equipment to mobilize and demobilize and provide cleanup of construction site, complete in place. (10% maximum of Total Bid Price)	LS	1	N/A	\$
2	%	Interior Coating: Furnish all labor, materials, and equipment to prepare interior tank surfaces and riser grating to SSPC-SP10 and coat interior tank surfaces and grating with a 100% solids epoxy coating system, in accordance with the specifications.	LS	1	N/A	\$
3	%	Interior Caulking: Furnish all labor, materials, and equipment to caulk all designated voids on the interior surfaces, in accordance with the specifications.	LS	1	N/A	\$

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
4	%	Disinfection: Furnish all labor, materials, and equipment to prepare surfaces, wash down, and disinfect complete interior of the tank.	LS	1	N/A	\$
5	%	Exterior Paint: Furnish all labor, materials, and equipment to contain tank and structure including provisions to properly test, handle, and dispose of hazardous materials, prepare surfaces to SSPC-SP10, and paint the exterior surfaces with an epoxy/urethane paint system, in accordance with the specifications.	LS	1	N/A	\$
6	%	Vent Screening: Remove and dispose of existing screening and furnish and install new screening on center vent, in accordance with the specifications.	LS	1	N/A	\$
7	%	Roof Fall Protection System: Remove existing safety anchor clips and furnish and install new tie-off anchors at designated locations, in accordance with the plans. Furnish specified safety equipment to the City.	LS	1	N/A	\$
8	%	Roof Hatch: Remove the existing roof hatch and install a new 36" x 36" hatch with hinged aluminum cover at existing location.	LS	1	N/A	\$
9	%	Interior Ladder Safety System: Furnish and install a fall prevention system on the existing interior ladder. Provide isolators at all ladder to brace connections.	LS	1	N/A	\$

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
10	%	Ladder Platform: Remove and dispose of existing ladder platform, structure, and guardrailing and furnish and install a completely new ladder platform, structure, safety chains, and guardrailing in like-kind at the existing location, in accordance with the plans.	LS	1	N/A	\$
11	%	Exterior Ladders: Remove and dispose of both existing exterior ladders from ground level to the tank catwalk. Furnish and install two new exterior ladders from the ground level to the tank catwalk and relocate existing vandal guard to new ladder, in accordance with the plans. Work includes modifying the guardrailing at the catwalk platform.	LS	1	N/A	\$
12	%	Ladder Fall Prevention System: Remove and dispose of the existing fall prevention cable system on all three exterior ladders. Furnish and install new fall prevention cable system on all three exterior ladders and provide two sets of safety harnesses and shuttles.	LS	1	N/A	\$
13	%	Catwalk Supports: Furnish and install additional catwalk support braces at the midpoint between each support leg and adjacent ladder, in accordance with the plans.	LS	1	N/A	\$
14	%	FAA Lighting: Remove and dispose of the existing FAA lighting system and furnish and install a new FAA lighting system with dual switches and back-up lighting, in accordance with the specifications.	LS	1	N/A	\$

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
15	%	Catwalk Lighting: Remove and dispose of the lighting system and conduit on the tank catwalk down to the breaker at ground level.	LS	1	N/A	\$
16	%	Riser Screening: Furnish and install screening and frames to cover the gap between the topside of lateral gusset plates and the bottom of the tank bowl.	LS	1	N/A	\$
17	%	Abandoned Conduit: Remove and dispose of abandoned conduit on the tank structure and top of the tank. Work shall include cleaning up and organizing existing conduit on top of the tank.	LS	1	N/A	\$
18		Bac-T and Voc Testing: Furnish all labor, materials, and equipment have a City approved lab collect samples and perform lab analysis. Testing shall include 1 VOC and 3 Bac-T tests.	EA	4	\$	\$
19	S	Soils Sampling Prior to Construction: Independent certified materials testing firm shall remove eight representative samples of soil from the site within the boundaries of the proposed scaffolding prior to the start of construction. Testing shall include lead, zinc, and chromium and be completed by a City approved lab.	EA	8	\$	\$

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
20	S	Soils Sampling After Construction: Independent certified materials testing firm shall remove eight representative samples of soil from the site from the same locations as the soils samples taken for Bid Item No. 21 after the completion of construction. Testing shall include lead, zinc, and chromium and be completed by a City approved lab.	EA	8	\$	\$
TOTAL BASE BID SCHEDULE:						\$ _____

ADDITIVE BID SCHEDULE A:

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
A1		Dehumidification: Furnish all labor, materials, and equipment to use dehumidification system for interior work, including curing of coatings, in accordance with the specifications.	COST PER WEEK	4	\$	\$
A2		Pit/Perforation Treatment: Furnish all labor, materials, and equipment to fill or weld plates over excessively pitted or corroded areas, as determined necessary by the Engineer.	CREW HOUR	16	\$	\$
A3		Inspection Spot Blasting: Furnish all labor, materials, and equipment to spot abrasively blast clean severely corroded surfaces, as designated by the Engineer.	CREW HOUR	16	\$	\$
A4		Grinding: Furnish all labor, materials, and equipment to grind smooth sharp edges of the structural members, as determined necessary by the Engineer.	CREW HOUR	16	\$	\$

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
A5	%	Logo: Furnish all labor, materials, and equipment to procure and install vinyl graphic wrap lettering and logo specified in Appendix IV and the Technical Provisions.	LS	1	N/A	\$
A6	%	Exterior Tank Bowl Ladder: Remove and dispose of the existing exterior tank bowl ladder. Furnish and install a new exterior ladder on the tank bowl, if determined necessary by the Engineer.	LS	1	N/A	\$
A7		Structural Support Members: Furnish all labor, materials, and equipment to replace severely corroded tension rods and/or overflow stand-off braces, as determined necessary by the Engineer.	EA	5	\$	\$
A8		Catwalk Floor Plates: Furnish all labor, materials, and equipment to replace severely corroded sections of the catwalk floor plates, as determined necessary by the Engineer.	EA	5	\$	\$
A9		Catwalk Drain Holes: Furnish all labor, materials, and equipment to drill additional drain holes in the existing catwalk floor plates, at locations determined necessary by the Engineer.	CREW HOUR	8	\$	\$
A10	%	Catwalk Guardrailing: Remove and dispose of the existing catwalk guardrailing and furnish and install all new guardrailing along the complete perimeter of the catwalk, as determined necessary by the Engineer	LS	1	N/A	\$
	TOTAL ADDITIVE BID SCHEDULE A:					\$ _____

NOTES:

1. In the CODE column (S) denotes a specialty item, (F) denotes a final pay item, (%) denotes a partial payment lump sum item, and (C) denotes payments will be made after the completion of the lump sum item. See Section 9 of the General Provisions for details.
2. In the UNIT column (LS) denotes a lump sum item. See Section 9 of the General Provisions for details.
3. Estimated quantities are for the purpose of Bid comparison only; payments will be made on the basis of actual measurement of Work completed, except for lump sum (LS) and final pay (F) quantities. The Bid Price shall include, but not limited to, sales tax and all other applicable taxes and fees.
4. Items may be adjusted or deleted. Therefore, regardless of total actual volume (percentage) compared to estimated quantities, the unit prices provided above by the Bidder shall be applied to the final quantity when payment is calculated for these items. No adjustment in the unit prices will be allowed. The City reserves the right to not use any of the estimated quantities; and if this right is exercised, the Contractor will not be entitled to any additional compensation. Cost of all export of material shall be included in the above unit costs; no additional compensation will be granted for such expenses.

Total Bid Price = Base Bid Schedule Amount Plus (+) All Additive Bid Schedule Amounts Minus
(-) All Deductive Bid Schedule Amounts

TOTAL BID PRICE IN DIGITS: \$ _____

TOTAL BID PRICE IN WORDS: _____

The undersigned certifies to have a minimum of three consecutive years of current experience in the type of Work related to the Project and that this experience is in actual operation of the firm with permanent employees performing a part of the Work as distinct from a firm operating entirely by subcontracting all phases of the Work. The undersigned also certifies to be properly licensed by the State as a contractor to perform this type of Work. The undersigned possesses California Contractor's License

Number _____, Class _____, which expires on _____.

Signature: _____ Title: _____ Date: _____

Signature: _____ Title: _____ Date: _____

BIDDER'S PROPOSAL – CONTRACTOR'S STATEMENT

BLOCK 35 ELEVATED TANK PAINTING PROJECT

Fill out all of the following information. Attach additional sheets if necessary.

- (1) Bidder's Name: _____
- (2) If the Bidder's name is a fictitious name, who or what is the full name of the registered owner? If the Bidder's name is not a fictitious name, write "N/A" in the response to this question. If you are doing business under a fictitious name, provide a copy of the filed valid Fictitious Business Name Statement.

- (3) Business Address: _____
- (4) Telephone: _____ Email: _____
- (5) Type of Firm – Individual, Partnership, LLC or Corporation: _____
- (6) Corporation organized under the laws of the State of: _____
- (7) California State Contractor's License Number and Class: _____
Original Date Issued: _____ Expiration Date: _____
- (8) DIR Contractor Registration Number: _____
- (9) List the name and title of the person(s) who inspected the Project site for your firm:

- (10) Number of years experience the company has as a contractor in construction work: _____
- (11) List the names, titles, addresses and telephone numbers of all individuals, firm members, partners, joint venturers, and company or corporate officers having a principal interest in this Bid:

- (12) List all current and prior D.B.A.'s, aliases, and fictitious business names for any principal having interest in this Bid:

- (13) List the dates of any voluntary or involuntary bankruptcy judgments against any principal having an interest in this Bid:

- (14) For all arbitrations, lawsuits, settlements and the like (in or out of court) that the company or any principal having an interest in this Bid has been involved with in the past five years:

- a. List the names, addresses and telephone numbers of contact persons for the parties:

- b. Briefly summarize the parties' claims and defenses:

- c. State the tribunal (e.g., Superior Court, American Arbitration Association, etc.), the matter number, and the outcome:

- (15) Has the company or any principal having an interest in this Bid ever had a contract terminated by the owner or agency? If yes, explain.

- (16) Has the company or any principal having an interest in this Bid ever failed to complete a project? If yes, explain.

- (17) Has the company or any principal having an interest in this Bid ever been terminated for cause, even if it was converted to a "termination of convenience"? If yes, explain.

- (18) For projects that the company or any principal having an interest in this Bid has been involved with in the last five years, did you have any claims or actions:

- a. By you against the owner? Circle one: Yes No
- b. By the owner against you? Circle one: Yes No
- c. By any outside agency or individual for labor compliance?
Circle one: Yes No
- d. By Subcontractors? Circle one: Yes No
- e. Are any of these claims or actions unresolved or outstanding?
Circle one: Yes No

If your answer is "yes" to any part or parts of this question, explain.

- (19) Has the company or any of its principals ever been debarred by any agencies? Is yes, please explain.

(21) For all public agency projects in excess of \$15,000.00 that you are currently working on or have worked on in the past two years, provide the following information:

Project 1 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 2 Name/Number _____

Project Description _____

Approximate Construction Date From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 3 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 4 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 5 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 6 Name/Number _____

Project Description _____

Approximate Construction Dates **From:** _____ **To:** _____

Agency Name: _____

Contact Person: _____ **Telephone:** _____

Address: _____

Original Contract Amount: \$_____ **Final Contract Amount: \$**_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

[Continue to Next Page]

Upon request of the City, the Bidder shall furnish evidence showing a notarized financial statement, financial data, construction experience, or other additional information.

Failure to provide truthful answers to the questions above or in the following References Form may result in the Bid being deemed non-responsive.

Urban Runoff Certification. The Bidder certifies to the City that he/she has trained his/her employees and Subcontractors, if any, for Urban Runoff management and has included sufficient sums in the Bid Price to cover such costs of training as stipulated in the most current Regional Water Quality Control Board requirements, including the Municipal Separate Storm Sewer System NPDES Permit. The Contractor is responsible for all clean up and payment of all fines levied as a result of any illegal discharge (as defined in NPDES permit) occurring as a result of the Contractor's Work and/or operations.

I, the undersigned, certify and declare that I have read all the foregoing answers to the Bidder's Proposal – Contractor's Statement and know their contents. The matters stated in the Bidder's Proposal – Contractor's Statement answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is correct.

Company

Signature: _____

Name: _____

Title: _____

Date: _____

Signature: _____

Name: _____

Title: _____

Date: _____

DESIGNATION OF SUBCONTRACTORS
[Public Contract Code Section 4104]

BLOCK 35 ELEVATED TANK PAINTING PROJECT

List all Subcontractors who will perform Work or labor or render service to the Contractor in or about the construction of the Work or improvement, or a Subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the Plans and Specifications, in an amount in excess of one-half percent of the Contractor's total Bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half percent of the Contractor's total Bid or \$10,000.00, whichever is greater. If all Subcontractors do not fit on this page, attach another page listing all information for all other Subcontractors.

Name under which Subcontractor is Licensed and Registered	CSLB License Number(s) and Class(es)	DIR Contractor Registration Number	Address and Phone Number	Type of Work (e.g., Electrical)	Percentage of Total Bid (e.g., 10%)*

*The percentage of the total Bid shall represent the "portion of the work" for the purposes of Public Contract Code Section 4104(b).

Bond No. _____

BID BOND

BLOCK 35 ELEVATED TANK PAINTING PROJECT

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), has issued an invitation for Bids for the Work described as follows: _____

WHEREAS _____
(Name and address of Bidder)

("Principal"), desires to submit a Bid to City for the Work.

WHEREAS, Bidders are required to furnish a form of Bidder's security with their Bids.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety"), a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$ _____), being not less than ten percent of the total Bid price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal is awarded the Contract for the Work by the City and, within the time and in the manner required by the bidding specifications, enters into the written form of Contract included with the bidding specifications, furnishes the required Bonds (one to guarantee faithful performance and the other to guarantee payment for labor and materials), and furnishes the required insurance coverage, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

In case suit is brought upon this instrument, Surety further agrees to pay all court costs incurred by the City in the suit and reasonable attorneys' fees in an amount fixed by the court. Surety hereby waives the provisions of Civil Code Section 2845.

IN WITNESS WHEREOF, this instrument has been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

Name: _____

Address: _____

Telephone No.: _____

Signature:

Print Name: _____

Title: _____

Date: _____

Signature:

Print Name: _____

Title: _____

Date: _____

“Surety”

Company Name: _____

Address: _____

Telephone No.: _____

Signature:

Print Name: _____

Title: _____

Date: _____

NOTE: *This Bond must be dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached.*

**NONCOLLUSION DECLARATION FORM
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
[Public Contract Code Section 7106]**

BLOCK 35 ELEVATED TANK PAINTING PROJECT

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, to effectuate a collusive or sham Bid, and has not paid, and will not pay, any Person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Date: _____

Date: _____

This form must be notarized.

ADDENDA ACKNOWLEDGMENT FORM

BLOCK 35 ELEVATED TANK PAINTING PROJECT

Bidder's Name: _____

The Bidder shall signify receipt of all Addenda here, if any:

Addendum Number	Date Received	Signature

If there are more Addenda than there is room in the chart above, attach another page acknowledging receipt of the Addenda.

CONTRACT

CITY OF MANHATTAN BEACH CONTRACT FOR BLOCK 35 ELEVATED TANK PAINTING PROJECT

THIS CONTRACT ("Contract") is made and entered this _____ day of _____, 20____ ("Effective Date"), by and between the CITY OF MANHATTAN BEACH, a California municipal corporation ("City") and _____, a _____ [Legal Form of Entity and state of formation, e.g., California corporation, limited partnership, limited liability company] ("Contractor"). The Contractor's California State Contractor's license number is _____.

In consideration of the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. Contract Documents. The Contract Documents consist of this Contract, the Notice Inviting Bids, Instructions to Bidders, Bid (including documentation accompanying the Bid and any post-Bid documentation submitted before the Notice of Award), the Bonds, permits from regulatory agencies with jurisdiction, General Provisions, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Addenda, Change Orders, and Supplemental Agreements. The Contract Documents are attached hereto and incorporated herein by reference.

2. Scope of Services. The Contractor shall perform and provide all materials, tools, equipment, labor, and services necessary to complete the Work in a good and workmanlike manner for the project identified as BLOCK 35 ELEVATED TANK PAINTING PROJECT ("Project"), as described in the Contract Documents.

3. Compensation.

3.1 Contract Price and Basis for Payment. In consideration for the Contractor's full, complete, and timely performance of the Work required by the Contract Documents, the City shall pay the Contractor for the actual quantity of Work required under the Bid Items awarded by the City performed in accordance with the lump sum prices and unit prices for Bid Items, set forth in the Bidder's Proposal submitted with the Bid. The sum of the unit prices and lump sum prices for the Bid Items, awarded by the City is \$_____ ("Contract Price"). It is understood and agreed that the quantities set forth in the Bidder's Proposal for which unit prices are fixed are estimates only and that the City will pay and the Contractor will accept, as full payment for these items of work, the unit prices set forth in the Bidder's Proposal multiplied by the actual number of units performed, constructed, or completed as directed by the Engineer.

3.2 Payment Procedures. Based upon applications for payment submitted by the Contractor to the City, the City shall make payments to the Contractor in accordance with Section 9 of the Standard Specifications, as modified by Section 9 of the General Provisions.

4. Contract Time.

4.1 Initial Notice to Proceed. The City shall issue the "Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials." The date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials constitutes the date of commencement of the Contract Time of **150 Working Days**. The Contract Time includes the time necessary to fulfill preconstruction requirements, place the order for materials, and to complete construction of the Project (except as adjusted by subsequent Change Orders).

The Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials shall further specify that the Contractor must complete the preconstruction requirements and order materials within **20 Working Days** after the date of commencement of the Contract Time; this duration is part of the Contract Time.

Preconstruction requirements include, but are not limited to, the following:

- Submitting and obtaining approval of Critical Path Baseline Schedule
- Submitting and obtaining approval of Traffic Control Plans
- Submitting and obtaining approval of the Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Plan (WPCP)
- Submitting and obtaining approval of critical required submittals, including but not limited to scaffolding design and associated structural calculations as outlined in the Contract Documents
- Installation of the approved Project Identification Signs
- Obtaining a approved Permits from all applicable agencies
- Obtaining a Temporary Use Permit for a construction yard, if applicable
- Notifying all agencies, utilities, residents, etc., as outlined in the Contract Documents
- Submitting and obtaining approval of a Project Staffing List with contact information and a Project Emergency Contact List

4.2 Notice to Proceed with Construction. After all preconstruction requirements are met and materials have been ordered in accordance with the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials, the City shall issue the “Notice to Proceed with Construction,” at which time the Contractor shall diligently prosecute the Work, including corrective items of Work, day to day thereafter, within the remaining Contract Time.

5. Liquidated Damages for Delay and Control of Work.

5.1 Liquidated Damages. The Contractor and the City have agreed to liquidate damages pursuant to Section 6-9 of the General Provisions.

6. Early Completion.

6.1 City Not Liable for Contractor Failure to Achieve Early Completion. While the Contractor may schedule completion of all of the Work, or portions thereof, earlier than the Contract Time, the City is exempt from liability for and the Contractor will not be entitled to an adjustment of the Contract Sum or to any additional costs, damages, including, but not limited to, claims for extended general conditions costs, home office overhead, jobsite overhead, and management or administrative costs, or compensation whatsoever, for use of float time or for the Contractor’s inability to complete the Work earlier than the Contract Time for any reason whatsoever.

7. Work after Stop Work Notice. Any work completed by the Contractor after the issuance of a Stop Work Notice by the City shall be rejected and/or removed and replaced as specified in the applicable Section of the Special Provisions.

8. Antitrust Claims. In entering into this Contract, the Contractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. § 15) or under the Cartwright Act (Business and Professions Code Section 16700 *et seq.*) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor without further acknowledgment by the parties.

9. Prevailing Wages. The City and the Contractor acknowledge that the Project is a public work to which prevailing wages apply.

10. Workers' Compensation. Labor Code Sections 1860 and 3700 provide that every contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of Labor Code Section 1861, by signing this Contract, the Contractor certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract.”

11. Titles. The titles used in this Contract are for convenience only and shall in no way define, limit or describe the scope or intent of this Contract or any part of it.

12. Authority. Any person executing this Contract on behalf of the Contractor warrants and represents that he or she has the authority to execute this Contract on behalf of the Contractor and has the authority to bind the Contractor to the performance of its obligations hereunder.

13. Entire Agreement. This Contract, including the Contract Documents and any other documents incorporated herein by specific reference, represents the entire and integrated Contract between the City and the Contractor. This Contract supersedes all prior oral or written negotiations, representations or agreements. This Contract may not be modified or amended, nor any provision or breach waived, except in a writing signed by both parties that expressly refers to this Contract.

14. Counterparts. This Contract may be executed in counterpart originals, duplicate originals, or both, each of which is deemed to be an original for all purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

CITY OF MANHATTAN BEACH

By: _____
City Manager

ATTEST:

APPROVED AS TO FORM:

By: _____
City Clerk

By: _____
City Attorney

Dated: _____

("CONTRACTOR")

By: _____
NAME TITLE

By: _____
NAME TITLE

PROOF OF AUTHORITY TO BIND
CONTRACTING PARTY REQUIRED

Bond No. _____

**PAYMENT BOND
(LABOR AND MATERIALS)**

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), State of California, has awarded to _____

(“Principal”)

(Name and address of Contractor)

a contract (the "Contract") for the Work described as follows:

BLOCK 35 ELEVATED TANK PAINTING PROJECT

(Project name)

WHEREAS, under the terms of the Contract, the Principal is required before entering upon the performance of the Work, to file a good and sufficient payment Bond with the City to secure the claims to which reference is made in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

(“Surety”) a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City and all contractors, subcontractors, laborers, material suppliers, and other persons employed in the performance of the Contract and referred to in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code in the penal sum of _____ Dollars

(\$ _____), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to this Work or labor, that the Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this Bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by City in successfully enforcing this obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this Bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this Bond.

Upon expiration of the time within which the California Labor Commissioner may serve a civil wage and penalty assessment against the principal, any of its subcontractors, or both the principal and its subcontractors pursuant to Labor Code Section 1741, and upon expiration of the time within which a joint labor management committee may commence an action against the principal, any of its subcontractors, or both the principal and its subcontractors pursuant to Labor Code Section 1771.2, if the condition of this Bond be fully performed, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or the Specifications accompanying the same shall in any manner affect its obligations on this Bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature:

Signature:

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature:

Print Name: _____

(Seal)

Title: _____

Date: _____

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

Bond No. _____

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), has awarded to _____

____ (“Principal”)

(Name and address of Contractor)

a contract (the "Contract") for the Work described as follows:

BLOCK 35 ELEVATED TANK PAINTING PROJECT

(Project name)

WHEREAS, Principal is required under the terms of the Contract to furnish a Bond for the faithful performance of the Contract.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

(“Surety”) a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$ _____), this amount being not less than the total Contract Price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors executors and administrators, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal, his, her or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the Contract and any alteration thereof made as therein provided, on the Principal's part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the City, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered. Surety hereby waives any statute of limitations as it applies to an action on this Bond.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or of the Work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the specifications. Surety hereby waives the provisions of California

Civil Code Sections 2845 and 2849. The City is the principal beneficiary of this Bond and has all rights of a party hereto.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature:

Signature:

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature:

Print Name: _____

Title: _____

Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

Bond No. _____

WARRANTY BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), State of California, has awarded to_____

(“Principal”)

(Name and address of Contractor)

a contract (the “Contract”) for the Work described as follows:

BLOCK 35 ELEVATED TANK PAINTING PROJECT

(Project name)

WHEREAS, under the terms of the Contract, the Principal is required before entering upon the performance of the Work to file a good and sufficient warranty Bond with the City.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

(“Surety”) a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$_____)

this amount being not less than 10% of the total Contract Price, lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal, his, her or its heirs, executors, administrators, successors or assigns, shall remedy, without cost to the City, any defects which may develop during a period of one year from the date of completion and acceptance of the work performed under the Contract, caused by defective or inferior materials or workmanship, and shall indemnify, defend and hold harmless the City, its officers, agents, and employees for any and all claims, demands, causes of action, damages, injuries, liabilities, losses, costs or expenses, including attorneys' fees and costs of defense, which arise out of, pertain to, or relate to such defects or to the Principal's actions or inactions in remedying such defects, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

In case suit is brought upon this bond, Surety further agrees to pay, in addition to the Penal Sum, all costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

FURTHER, Surety hereby waives the provisions of California Civil Code sections 2845 and 2849. The City is the principal beneficiary of this bond and has all rights of a party hereto.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications

accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature:

Signature:

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature:

Print Name: _____

(Seal)

Title: _____

Date: _____

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

CHECKLIST FOR EXECUTION OF CONTRACT

TO BE SUBMITTED BY SUCCESSFUL BIDDER:

- _____ Two executed copies of the Contract
- _____ Completed, signed and notarized Payment Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Performance Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Warranty Bond (original) in the amount of 10% of the Contract
- _____ Workers' Compensation Certificate with attached Certificate of Insurance
- _____ General Liability insurance certificate naming the City as a co-insured
- _____ Automobile insurance naming the City as a co-insured
- _____ Umbrella/Excess Liability (General aggregate) insurance certificate naming the City as a co-insured, if applicable
- _____ Copy of City business license, if applicable
- _____ Additional insured endorsement – comprehensive general liability
- _____ Additional insured endorsement – automobile liability
- _____ Additional insured endorsement – excess liability
- _____ Primary and Non-Contributory Endorsement- General Liability Policy
- _____ Waiver of Subrogation - general liability
- _____ Waiver of Subrogation - Worker's Compensation

ALL SUBMITTALS WILL BE RETAINED BY CITY, EXCEPT FOR ONE COPY OF THE FULLY EXECUTED CONTRACT

GENERAL PROVISIONS

SECTION 0. GENERAL PROVISIONS DEFINED

0-1 STANDARD SPECIFICATIONS

The 2015 edition of "Standard Specifications for Public Works Construction", including the 2016 Supplement ("Standard Specifications"), as amended by the Contract Documents, is incorporated into the Contract Documents by this reference. The Work described herein shall be done in accordance with the provisions of the Standard Specifications, as amended by the Contract Documents.

0-2 NUMBERING OF SECTIONS

The number of sections and subsections in these General Provisions are compatible with the numbering in the Standard Specifications. Subsections of architectural and/or other work may be numbered according to the Construction Specifications Institute (CSI) format.

0-3 SUPPLEMENTATION OF STANDARD SPECIFICATIONS

The Sections that follow supplement, but do not replace, the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these General Provisions, these General Provisions shall control.

SECTION 1. TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

The provisions below shall supplement, but not replace, those provisions in Section 1 of the Standard Specifications.

1-2 TERMS AND DEFINITIONS

Whenever in the Standard Specifications or in the Contract Documents the following terms are used, they shall be understood to mean the following:

Agency – The City of Manhattan Beach.

Applicable Law – All State, federal, and local laws, statutes, ordinances, codes, rules, and regulations governing the Work.

Bid Item – An item of Work listed on the Bid Schedule.

Board – The City Council of the City of Manhattan Beach.

City – The City of Manhattan Beach

City Council – The City Council of the City of Manhattan Beach

Contract Documents – As defined in Section 1 of the Contract.

Contract Time – The number of Working Days stated in the Contract for the completion of the Work.

County – County of Los Angeles, California

Detour – A temporary route for traffic (vehicular or pedestrian) around a closed portion of a road or travelway.

Engineer – The City Engineer, acting either directly or through properly authorized agents. Such agents shall act within the scope of the particular duties entrusted to them.

Estimated Quantities – The quantities of Work anticipated to be performed, as set forth in the Bid Schedule, designated as units or a lump sum.

Excavation – Any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way (Cal. Gov. Code § 4216).

Final Acceptance- acceptance of the Work by the City Council and direction to staff to cause recordation of the Notice of Completion, pursuant to Section 6-8.2 of these General Provisions.

Inspector – An authorized representative of the City, assigned by the City to make inspections of Work performed by or materials supplied by the Contractor.

Major Item of Work – A bid item amount that is at least 10% of the total contract award amount.

Minor Item of Work - A bid item amount that is less than 10% of the total contract award amount.

Notice of Completion – The notice authorized by Civil Code Section 9204.

Notice to Proceed or Notice to Proceed with Construction – A written notice issued by the City to the Contractor that authorizes the Contractor to perform the Work.

Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials – A written notice issued by the City to the Contractor that authorizes the Contractor to proceed with preconstruction requirements and the acquisition or purchase of materials that are to be incorporated into the Work and establishes the date of commencement of the Contract Time.

Owner – See Agency.

Project – See Work.

Punch List – A list of items of Work to be completed or corrected by the Contractor in order to complete the Work as specified in the Contract Documents.

Shop Drawings – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier,

or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

State – The State of California.

Submittal – Any drawing, calculation, specification, product data, samples, manuals, requests for substitutes, spare parts, photographs, survey data, traffic control plans, record drawings, Bonds or similar items required to be submitted to the City under the terms of the Contract.

Work – The construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, services provided or to be provided by the Contractor to fulfill the Contractor's obligations.

Working Day – See Subsection 6-7.2 of the General Provisions.

Work Directive – A unilateral written order issued by the City directing the Contractor to continue performance of the Work or a disputed item of Work pending resolution of a claim or dispute concerning the scope of Work.

1-3.3 Institutions

The institutions listed in Section 1-3.3 of the Standard Specifications shall be supplemented by the list below:

<u>Abbreviation</u>	<u>Word or Words</u>
AAN	American Association of Nurserymen
ACI	American Concrete Institute
AGCA	Associated General Contractors of America
APWA	American Public Works Association
ASME	American Society of Mechanical Engineers
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute
IEEE	Institute of Electric and Electronic Engineers
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
SSS	State of California Standard Specifications, Latest edition, Department of Transportation
SSP	State of California Standard Plans, Latest edition, Department of Transportation

SECTION 2. SCOPE AND CONTROL OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 2 of the Standard Specifications, unless specifically noted below.

2-2 *ASSIGNMENT*

Any purported assignment without written consent of the City shall be null, void, and of no effect, and the Contractor shall hold harmless, defend and indemnify the City and its officers, officials, employees, agents and representatives with respect to any claim, demand or action arising from or relating to any unauthorized assignment.

If the City opts to consent to assignment, the City's consent shall be contingent upon: (1) a letter from the Surety agreeing to the assignment and assigning all of the Bonds to the assignee without any reduction, or the assignee supplying all new Bonds in the amounts originally required under the Contract Documents; and (2) the assignee supplying all of the required insurance in the amounts required in the Contract Documents. Until the Surety assigns all of the Bonds or the assignee supplies all of the new Bonds, and until the assignee supplies all of the required insurance, an assignment otherwise consented to in writing by the City shall not be effective. Even if the City consents to assignment, no assignment shall relieve the Contractor of liability under the Contract.

2-3 *SUBCONTRACTORS*

2-3.1.1 Subcontractors. Add the following sections:

Subcontractors shall be listed by the Bidder in accordance with these specifications and must be properly licensed under the laws of the State of California for the type of work which they are to perform. Copies of all Subcontracts shall be made available to the Engineer, upon request.

2-3.1.2A Subcontractor whose prosecution of the work is not satisfactory shall be terminated immediately by the Contractor upon the receipt of a written notice by the Engineer. Subcontractors whose work was determined to be unsatisfactory shall not be allowed to perform any work on the job site.

2-3.2 Self Performance.

The following shall replace Section 2-3.2:

The Contractor shall perform, with its own organization, Contract work amounting to at least 30 percent of the Contract Price except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed will be deducted from the Contract Price before computing the amount required to be performed by the Contractor with its own organization. "Specialty Items" will be identified by the Agency in the Bid or in the Special Provisions. Where an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from informatio submitted by the Contractor, and subject to approval by the Engineer.

2-4 *CONTRACT BONDS*

The Faithful Performance Bond shall remain in force until the date of recordation of the Notice of Completion. The Labor and Materails Bond shall remain in force until expiration of the time within which the California Labor Commissioner may serve a civil wage and penalty assessment against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1741, and until the expiration of the time within which a joint labor

management committee may commence an action against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1771.2.

The warranty or maintenance Bond shall be valid for one year from the date of recordation of Notice of Completion by the County Recorder, in the amount of ten percent of the Contract Price. Other than the details listed herein, the warranty or maintenance Bond shall adhere to the requirements for Bonds in Section 2-4 of the Standard Specifications. Nothing herein shall abridge or amend Section 6-8.3 of the Standard Specifications or the related provisions in these Contract Documents.

All Bonds must be submitted using the required forms, which are in the Contract Documents, or on any other form approved by the City Attorney.

2-5 PLANS AND SPECIFICATIONS

2-5.1 General

In addition to the requirements under Section 2-5.1 in the Standard Specifications, the Contractor shall maintain a control set of Plans and Specifications on the Project site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on the control set to show the as-built conditions. This control set of Plans shall also be edited for all Addenda, Requests for Information, Change Orders, field changes not involving cost, and any other variation that occurred during construction. Upon completion of all Work, the Contractor shall return the control set to the Engineer. Final payment will not be made until this requirement is met.

Where a work feature is shown on the drawings or identified in the Specifications but is not specifically indicated as an item in the Bid Schedule, and there is no ambiguity regarding the requirement to construct, install, or construct and install that work feature, the Contractor is required to complete the work feature. All costs to the Contractor for constructing, installing, or both constructing and installing such a work feature shall be included in the Bid.

2-5.2 Precedence of the Contract Documents

The following shall replace Section 2-5.2:

With regard to Section 2-5.2 in the Standard Specifications, the General Provisions shall control over the Special Provisions, and the Notice Inviting Bids and Instructions to Bidders (in that order) shall control over the Bid, such that the order of precedence shall be as follows:

1. Requirements of law.
2. Permits issued by regulatory agencies with jurisdiction.
3. Change Orders and Supplemental Agreements, whichever occurs last.
4. Contract.
5. Addenda.
6. Notice Inviting Bids.
7. Instructions to Bidders.
8. Bid/Proposal.
9. General Provisions.
10. Special Provisions.

11. Plans.
12. Standard Plans.
13. Standard Specifications.
14. Reference Specifications.

2-5.2.1 Traffic Signal Work

Except as otherwise specified in the General Provisions or on the Plans, all Work relating to traffic signals and incidental illuminated street name signs and safety lighting, including all equipment, materials, components, and the installation thereof, shall be in accordance with the City's Technical Provisions for traffic signals, latest edition of the State Standard Plans (SSP) in effect and published at the Bid Deadline and Section 86 "Signals, Lighting and Electrical Systems" of the latest edition of the State Standard Specifications (SSS) in effect and published at the Bid Deadline, unless otherwise indicated in the Technical Provisions. With respect to traffic signal Work, the order of precedence, from highest to lowest, shall be: City Technical Provisions, Plans, Section 86 of the State Standard Specifications, State Standard Plans, Standard Plans, and Standard Specifications.

2-5.3 Submittals

2-5.3.1 General

The following paragraphs shall be added following the third paragraph:

The Contractor shall, at its own expense, transmit to the Engineer for review and acceptance, working drawings, shop drawings, supporting information, and/or other available instructive and descriptive information from the manufacturer, when and as required by the Plans or General Provisions or requested by the Engineer. Shop drawings will not be required for standard items in common use for which adequate manufacturers' literature is available unless otherwise required by the Engineer.

The Contractor shall consecutively number, thoroughly check, approve and sign each submittal and transmit the submittals to the Engineer for review. In the event that certain submittals are submitted without the Contractor's approval signature or are unacceptable to the City, they shall be rejected by the Engineer. The Contractor shall thereafter correct the submittals and resubmit.

In the event that in the process of development of the submittals it is discovered that there are defects and/or errors on the Plans that result in conflict between the Plans and the submittals, or if the submittals show variation from the Plans or other Contract Documents, the Contractor shall thoroughly describe and explain any defects and/or conflicts in its transmittal letter to the Engineer.

The Engineer's review of the submittals will be for general design and arrangement only, and shall not relieve the Contractor from responsibility for errors of any sort in the submittals or of the responsibility for executing the work in accordance with the Contract Documents. The Contractor shall allow a minimum of 20 Working Days for review of submittals. The Contractor shall be solely responsible for the correctness of the submittals, for shop fits and field connections, and for the results obtained by use of such submittals. The Contractor shall verify and be fully responsible for all dimensions and job-site conditions affecting the Work and shall be responsible for furnishing and installing the proper materials required by the Contract Documents.

The Contract Time will not be extended due to the failure of the Contractor to provide submittals as required by the Contract Documents in a timely manner.

2-6 *WORK TO BE DONE*

The following paragraphs shall be added following paragraph one:

All work which is defective in its construction or deficient in any of the requirements of the Plans and Specifications shall be remedied or removed and replaced by the Contractor in an acceptable manner at his own expense. No compensation will be allowed for any work done beyond the lines and grades shown on the Plans or established by the Engineer. Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer and the City may cause the defective work to be remedied or removed and replaced at the expense of the Contractor.

Any unauthorized or defective work, defective material or workmanship or any unfaithful or imperfect work that may be discovered before Final Acceptance of work by the Board shall be corrected immediately with no extra charge even though it may have been overlooked in previous inspections and estimates or may have been caused due to failure to inspect the work.

2-7 *SUBSURFACE DATA*

If the City or its consultants have made investigations of subsurface conditions in areas where the Work is to be performed, such investigations shall be deemed made only for the purpose of study and design. If a geotechnical or other report has been prepared for the Project, the Contractor may inspect the records pertaining to such investigations subject to and upon the conditions hereinafter set forth. The inspection of the records shall be made in the office of the Engineer. It is the Contractor's sole responsibility to determine whether such investigations exist, and the City makes no affirmative or negative representation concerning the existence of such investigations.

The records of any such investigations are made available solely for the convenience of the Contractor. It is expressly understood and agreed that the City, the Engineer, their agents, consultants or employees assume no responsibility whatsoever with respect to the sufficiency or accuracy of any investigations, the records thereof, and the interpretations set forth therein. No warranty or guarantee is expressed or implied that the conditions indicated by any such investigations or records are representative of those existing in the Project area. The Contractor agrees to make such independent investigations and examination as necessary to be satisfied of the conditions to be encountered in the performance of the Work.

The Contractor represents that it has studied the Plans, Specifications and other Contract Documents, and all surveys and investigation reports of subsurface and latent physical conditions, has made such additional surveys and investigations as necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents, and that it has correlated the results of all such data with the requirements of the Contract Documents. No claim of any kind shall be made or allowed for any error, omission or claimed error or omission, in whole or in part, of any geotechnical exploration or any other report or data furnished or not furnished by the City.

2-9 SURVEYING

The Contractor shall verify all dimensions on the drawings and shall report to the City any discrepancies before proceeding with related Work. The Contractor shall perform all survey and layout Work per the benchmark information on the Project Plans. All surveying Work must conform to the Professional Land Surveyors' Act (Business and Professions Code Section 8700 *et seq*). All Project surveying notes and "cut-sheets" are to be provided to the City after the completion of each surveying activity and all final surveying notes shall be provided before final payment to the Contractor.

The Contractor is responsible for hiring a Surveyor to set survey points to be used for re-establishments of disturbed monuments and submit Corner Records to the County Surveyor. Copy of the submitted Corner Records must be provided to the City prior to actual disturbance of the monuments. The Contractor shall also cause all disturbed survey monuments within the project work area to be re-established at the end of the project. This also includes filing Corner Records and Record of Survey with the County Surveyor within 7 days of substantial completion of the construction work and submitting a copy to the City of the filed paperwork receipt within 2 days of submission. The Contractor is required to provide a copy of the County Surveyor's acceptance within 2 days of receipt from the County Surveyor.

Construction stakes shall be set and stationed by the Contractor at its expense. Unless otherwise indicated in the Special Provisions, surveying costs shall be included in the price of items bid. No separate payment will be made. Re-staking and replacement of construction survey markers damaged as a result of the Work, vandalism, or accident shall be at the Contractor's expense.

2-11 INSPECTION

The Contractor shall arrange and pay for all off-site inspection of the Work required by any ordinance or governing authorities. The Contractor shall also arrange and pay for other inspections, including tests in connection therewith, as may be assigned or required.

Add the following paragraphs:

2-11.1 Inspection

An inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the Contractor's management of the Work. Any advice which an inspector may give the Contractor shall not be binding to the Engineer or to the City, or release the Contractor from fulfilling all the terms of the Contract.

No partial payment, inspection, taking possession of, or other act made or done by the Engineer or the City with respect to the work prior to final completion and acceptance thereof shall affect or prejudice the right of the Engineer or the City to reject any defective work or material or to require the complete fulfillment of all the provisions of the Contract.

If the Engineer deems it expedient and not in the best interest of the City to correct work injured or done not in accordance with the Contract, the defective work may be accepted subject to an equitable deduction from the Contract Price which may be made therefor by the City upon certification from the Engineer.

Reexamination of any work may be ordered by the Engineer at any time prior to Final Acceptance and, if so ordered, the work must be uncovered by the Contractor. If such work be found in accordance with the Contract, the City will pay the cost of reexamination and replacement. If such work be found defective or not in accordance with the Contract, the Contractor shall pay such costs.

SECTION 3. CHANGES IN WORK

3-1 CHANGES REQUESTED BY THE CONTRACTOR

3-1.1 General

Add the following paragraph to the end of Subsection 3-1.1:

If the Contractor alleges that instructions issued after the date of the Contract will result in increases to the Contract Price or Contract Time, if latent or unforeseen conditions require modification of the Contract Documents, or the Contractor otherwise becomes aware of the need for or desirability of a change in the Work, a Change Order Proposal ("COP") may be submitted to the City in writing, using the forms provided herein in Subsection 3-6.2 of the General Provisions, and must specify the reasons for such change, including relevant circumstances and impacts on the construction schedule. The Contractor may request additional compensation and/or time through a COP but not for instances that occurred more than ten calendar days prior to the COP. The Contractor's failure to initiate a COP within such period shall be deemed a waiver of the right to adjustment of the Contract Price or the Contract Time for the alleged change, unless such waiver is prohibited under state law. Any COP that is approved by the City will be incorporated in a Change Order or Construction Change Directive. If the City determines that the Work in question is not a change, the City shall issue a Work Directive, ordering the Contractor to proceed with the Work without delay. If the COP is denied but the Contractor believes that it does have merit, the Contractor may submit a claim to the City.

3-2 CHANGES INITIATED BY THE AGENCY

The City reserves the right, without notice to the Surety, to increase or decrease the quantity of any item or portion of the Work described in the Contract Documents or to alter or omit portions of the Work so described, as may be deemed necessary or expedient by the Engineer, without in any way making the Contract void. Such increases, alterations or decreases of Work shall be considered and treated as though originally contracted for, and shall be subject to all the terms, conditions and provisions of the original Contract. The Contractor shall not claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease, alteration or omission of any kind of Work to be done.

3-2.1 General

Add the following paragraphs at the end of Subsection 3-2.1:

The City reserves the right to make changes in the Work, including the elimination of any Bid Item, after execution of the Contract and without invalidating the Contract by:

A. Change Order approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy); or

B. Construction Change Directive approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy);

A change that causes the total value of all changes to exceed the Contract contingency amount established at the time of award of the Contract must be approved by the City Council. No payments in excess of the original Contract Price will be made until a Change Order is approved in the normal course of business. The City may, at any time, without notice to the Contractor's surety(ies), order changes in the Work within the general scope of the Contract. Such changes in the Work shall not relieve or release the surety(ies) of its(their) obligations under the Performance and Payment Bonds issued for the Project. Changes in the Work made pursuant to this Article 3 shall in no way release any guarantee or warranty provided by the Contractor.

The City may issue a Change Order Proposal Request ("COPR"), in writing, to the Contractor, describing a proposed change to the Work and requesting that the Contractor submit an itemized Change Order Proposal ("COP") to the City, using the forms provided herein in Subsection 3-6.2 of the General Provisions, within ten calendar days after the City's issuance of the COPR. If the Contractor fails to submit a COP within such period of time, it shall be presumed that the change described in the City's COPR will not result in an increase to the Contract Price or Contract Time and the change shall be performed by the Contractor without such increases. A COPR does not authorize the Contractor to commence performance of the changed work. The Contractor shall not perform any change until receipt of the City's written approval. If the City approves the Contractor's COP, City shall issue a Change Order.

Whenever a change is pending, the Contractor shall notify the City if it is necessary to halt other Work in the area of the change that would be affected thereby, until such time as the change is authorized.

Any change to the Contract Price shall be in a sum mutually agreed to by the Contractor and the City. When the cost for Extra Work cannot be agreed upon, the City will pay for Extra Work based on the accumulation of costs as provided for in Subsection 3-3, "Extra Work," of the Standard Specifications and the General Provisions.

3-2.1.1 Change Order

A Change Order is a written instrument prepared by the City and signed by the City and the Contractor, stating their agreement upon all of the following:

- A. The scope of the change in the Work;
- B. The amount of the adjustment, if any, in the Contract Price; and
- C. The extent of the adjustment, if any, in the Contract Time.

3-2.1.1.1 Accord and Satisfaction

The Contractor's agreement on any Change Order shall be a full compromise and settlement of all adjustments to the Contract Time and Contract Price, and compensation for any and all delay, extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences, and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of the Impacts on the overall Work under the Contract arising directly or indirectly

from the performance of Work described in the Change Order. By execution of any Change Order, the Contractor agrees that the Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of whatsoever nature, character or kind arising out of or incidental to the Change Order. No action, conduct, omission, product failure, or course of dealing by the City shall act to waive, modify, change, or alter the requirement that Change Orders must be in writing, signed by the City and the Contractor, and that such written Change Orders are the exclusive method for effectuating any change to the Contract Sum and/or Contract Time.

3-2.1.2 Construction Change Directive

A Construction Change Directive is a written order prepared and signed by the City, directing a change in the Work prior to the Contractor's agreement on adjustment, if any, in the Contract Price or Contract Time, or both. The City may, by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Price and Contract Time being adjusted accordingly. Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved. A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The City's form of Construction Change directive is provided in Subsection 3-6.2 of the General Provisions.

3-2.2.2 Increases of More than 25 Percent

Delete Subsection 3-2.2.2 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceed the Bid quantity by more than 25%, a Change Order will be issued and payment for the quantity in excess of 25% of the Bid quantity will be made on the basis of an adjustment to the Contract Unit price mutually agreed to by the City and the Contractor or pursuant to Subsection 3-2.4 "Agreed Prices."

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price exceeds the bid quantity by more than 25%.

3-2.2.3 Decreases of More than 25 Percent

Delete Subsection 3-2.2.3 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications be less than 75% of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, a Change Order shall be issued and payment shall be made on the basis of an adjustment to the Contract Unit Price mutually agreed to by the City and the Contractor, or pursuant to Subsection 3-2.4 "Agreed Prices"; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price.

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price is less than 75% of the Bid quantity.

3-2.2.4 Changes for Items Not Covered by Unit Prices

Payment for any change for an Item of Work not covered by a Contract Unit Price shall be made pursuant to Subsection 3-3 "Extra Work."

3-3 *EXTRA WORK*

New and unforeseen work will be classified as Extra Work only when the Work is not covered and cannot be paid for under any of the various items or combination of items for which a Bid price appears on the Bid. The Contractor shall not do any Extra Work except upon written order from the Engineer.

3-3.1 General

Add the following at the end of Subsection 3-3.1:

All Extra Work shall conform to the Plans and Specifications.

The Contractor shall furnish to the Engineer each Subcontractor's signed and detailed estimate of the cost for labor, materials, and equipment, including the markup by such Subcontractor for overhead and profit for Work added or deducted to a Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the sub-Subcontractor's signed detailed estimate of the cost for labor, materials, and equipment, including the markup by such sub-Subcontractor for overhead and profit for Work added or deducted to a sub-Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the vendor or supplier's signed detailed estimate or quotation of the cost to the Contractor for Work added or deducted from a vendor or suppliers scope of Work.

3-3.2.1 General

Add the following at the end of Subsection 3-3.2.1

Any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid on the basis of the net total cost. The cost of deleted Work not covered by a Contract Unit Price shall be determined by the Engineer based on the schedule of lump sum prices submitted by the Contractor in accordance with Subsection 9-2, "Lump Sum Work," of the Standard Specifications and the General Provisions.

3-3.2.2.1 Labor

Delete Subsection 3-3.2.2.1 in its entirety and substitute the following:

The cost of labor will be the actual cost for wages prevailing locally for each craft or type of worker (including foreman when authorized by the Engineer) performing the Extra Work at the time the Extra Work is done, plus liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, as well as assessments or benefits required by lawful collective bargaining agreements.

To the actual wages, as defined above, will be added a labor surcharge set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed. The labor

surcharge shall constitute full compensation for all payments imposed by State and federal laws and for all other payments made to, or on behalf of, the workers, other than actual wages, subsistence and travel paid to the workers. The labor surcharge includes Workers' Compensation, Social Security, Medicare, Federal Unemployment, State Unemployment, and State Training taxes.

Except when direct supervision is provided by working foremen whose time is included in accordance with Subsection 3-2.2.2, the cost of direct supervision of Extra Work, when such direct supervision is provided exclusively for the Extra Work and not in conjunction with or at the same time as supervision for other Work, and when approved in advance in writing by the Engineer, may be charged to the Extra Work. Such cost includes only the actual cost of supervision labor, plus payroll taxes, insurance, and pension costs. The cost of transportation, use of vehicle, and other costs incurred by supervision will not be allowed.

3-3.2.2.2 Materials

Add the following to Subsection 3-3.2.2.2:

If the Contractor does not furnish satisfactory evidence of the cost of the materials from the actual supplier thereof within 5 days following delivery of materials to the Work site, the Engineer reserves the right to establish the cost of the materials at the lowest current wholesale prices at which the materials were available, in the quantities concerned, delivered to the location of the Work site, less any discounts.

3-3.2.2.3 Tool and Equipment Rental

Delete Subsection 3-3.2.2.3 in its entirety and substitute the following:

No payment will be made for individual pieces of equipment or tools not listed in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed and that have a replacement value of \$200.00 or less, whether or not consumed by use. Such equipment or tools shall be considered to be small tools.

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

Move in and out, or minimum charges other than the hourly rate, shall not apply to equipment available from the force already on the Project site.

For equipment that is rented from a local equipment agency, the Contractor will be paid at the hourly rate shown on the rental agency invoice or agreement for the time the equipment is used on Extra Work. If a minimum equipment rental amount is required by the local equipment rental agency, the actual amount charged will be paid to the Contractor.

If it is deemed necessary by the Engineer to use equipment not listed in the Labor Surcharge and Equipment Rental Rates publication, a suitable rental rate for that equipment will be established by the Engineer. The Contractor may furnish any cost data that might assist the Engineer in the establishment of the rental rate. If the rental rate established by the Engineer is

\$10.00 per hour or less, the provisions above concerning rental of equipment from a local equipment agency shall apply.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

When owner operated equipment is used to perform Extra Work to be paid on a force account basis, the Contractor will be paid for the equipment and operator as follows:

1. Payment for the equipment will be made at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

2. Payment for the cost of labor will be made in conformance with the provisions in Subsection 3-3.2.2.1 "Labor" of the General Provisions.

3-3.2.3 Markup

Delete Subsection 3-3.2.3 in its entirety and substitute the following:

The markup for overhead and profit on Extra Work shall be in accordance with the following schedule.

3-3.2.3.1 Work by Contractor.

The following percentages shall be added to the Contractor's costs and shall constitute the markup for all overhead and profit:

1)	Labor	20
2)	Materials	15
3)	Equipment Rental	15
4)	Other Items and Expenditures.....	15

To the sum of the costs and markups provided for in this subsection, one percent shall be added as compensation for bonding.

3-3.2.3.2 Work by Subcontractor.

For Extra Work performed by a Subcontractor, the markup established in Subsection 3-3.2.3.1 of the General Provisions shall be applied to the Subcontractor's costs. An additional five percent shall be added to the Subcontractor's final cost, which shall reimburse the Contractor for administrative costs, including overhead and profit.

3-3.2.3.3 Work by Sub-Subcontractor.

For Extra Work performed by a sub-Subcontractor, the markup established in Subsection 3-3.2.3.1 of the General Provisions shall be applied to the sub-Subcontractor's costs. An additional ten percent shall be added to the sub-Subcontractor's final cost, five percent of which shall reimburse the Contractor for administrative costs, including overhead and profit, and five

percent of which shall reimburse the Subcontractor for administrative costs, including overhead and profit.

3-3.2.3.4 Work by Specialist.

If the Engineer and the Contractor agree that a service or an item of Extra Work cannot be performed by the forces of the Contractor or those of any of its Subcontractors or sub-Subcontractors, such service or Extra Work item may be performed by a specialist. Invoices for such services or items of Extra Work calculated on the basis of current market prices may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization.

If the Contractor is required to perform Extra Work that requires a fabrication or matching process in a fabrication or machine shop facilities away from the Project site, the charges for that portion of the Extra Work performed in such facility may, by agreement between the Contractor and Engineer, be accepted as a specialist billing.

For Extra Work performed by a specialist, 15% shall be added to the specialist's invoice price less a credit to the City for any cash or trade discount offered or available, whether or not such discount may have been taken; such percentage shall reimburse the Contractor for administrative costs, including overhead and profit.

3-3.2.3.5 Work not Covered by Unit Prices.

Markup for overhead and profit on any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid, in accordance with this Subsection 3-3.2.3 of the General Provisions, only if the net cost increases the Contract Price (i.e., if the cost for added Work exceeds the cost for deleted Work).

3-3.3 Daily Reports by Contractor

Delete the first sentence of Subsection 3-3.3 and substitute the following:

The Contractor shall submit daily reports for Extra Work showing all labor, material, and equipment costs incurred.

Add the following at the end of Subsection 3-3.3:

The daily reports shall describe in detail the Extra Work that was performed and the location (station, etc.). Separate daily reports shall be submitted for Extra Work that is performed for more than one location and for different tasks that are performed on the same day. Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily reports, or if not available, they shall be submitted with subsequent daily reports. The Contractor shall maintain the Contractor's records in such a manner as to provide a clear accounting of the costs.

Upon completion of the Extra Work, the Contractor shall submit a summary of costs, including markup for overhead and profit. All costs shall be in accordance with Subsection 3-3.2, "Payment," of the Standard Specifications and the General Provisions. The signature of the City's Inspector on a daily report shall indicate agreement with the information reflected therein, not that

the Contractor is entitled to payment of the costs in the report. The Engineer shall review the daily reports. The Engineer shall compare the Inspector's records with the completed daily reports furnished by the Contractor and make any necessary adjustments. When the daily reports are agreed upon and signed by both parties, these reports shall become the basis of payment for the Extra Work performed.

3-3.4 Extension of Time

Add the following as Subsection 3-3.4:

If the Contractor is delayed in completing the Extra Work due to a change ordered by the City, the time for completion of Work will be extended in accordance with Subsection 6-6.1 of these General Provisions.

3-5 *DISPUTED WORK*

Delete Subsection 3-5 in its entirety and substitute the following:

In the event of disputed Work, the City shall have the right to unilaterally issue a written Work Directive; and the Contractor shall continue performance pending resolution of the dispute and shall maintain cost data described in Subsection 3-3 of the Standard Specifications and the General Provisions. The City's form of Work Directive is provided in Subsection 3-6 of the General Provisions. Payment shall be made for such disputed Work as is later determined by negotiation between the parties or as is fixed by a court of law.

3-6 *FORMS*

Add Section 3-6 to incorporate the following forms, which appear in the succeeding pages.

3-6.1 Change Order Form

3-6.2 Change Order Proposal Forms

- (a) Change Order Proposal Summary Report
- (b) Labor Cost Report
- (c) Labor Rates Report
- (d) Material Cost Report
- (e) Equipment Cost Report
- (f) Special Forces/Services Cost Report

3-6.3 Construction Change Directive Form

3-6.4 Work Directive Form



**CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
Engineering Division**

CONTRACT CHANGE ORDER NO. 1 (Final)

PROJECT NO.:

DESCRIPTION:

TO: Construction Company, Inc.

You are hereby instructed to comply with the following changes from the Contract Plans and Specifications:

SUMMARY OF CHANGES			
Description (Detailed Explanation Attached)	Change in Contract Price ¹	Change in Working Days	
1.	\$0.00		
2. Adjustment in Final Bid Quantities	\$0.00		
Net Change in Contract Price and Working Days	\$0.00		

¹Deduction or decrease in Contract Price is denoted in parentheses.

The following change is hereby made a part of the Contract Documents and shall be performed under the same terms and conditions as required by the original Contract Documents. Except as modified herein, the original Contract Documents and all prior amendments shall remain in full force and effect and all of the terms of the Contract Documents are hereby incorporated in this Change Order.

SUMMARY OF ALL CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT.....\$000,000.00
CCO1 (FINAL)\$0.00
TOTAL.....\$000,000.00

SUMMARY OF WORKING DAYS

FIRST DAY OF WORK: Date
CONTRACT WORKING DAYS: X
TIME EXTENSION: CCO 1 (Final) Y
NEW TOTAL WORKING DAYS: X+Y
LAST DAY OF WORK:..... New Date



CHANGE ORDER DETAIL

Change Order No.: 1 (Final)

Project No.: Description:

The changes or interpretations described and noted herein are hereby authorized. The signed original of this order is on file in the Department of Public Works. Shown as separate paragraphs: (A) Reason for Change; (B) Description of Change; (C) Change in Contract Costs; and (D) Change in Completion Date.

Item No. 1:

A. Reason for Change:

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST ¹
New Item				0	0	0	0.00

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
Add Y Working Days

Item No. 2: Adjustment in Final Bid Quantities:

A. Reason for Change:
Due to conditions encountered during construction, modifications to the amount of Work were determined to be appropriate, and the changes were addressed by means of adjusting applicable contract quantities, as outlined below.



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST ¹
New Item				0	0	0	0.00

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
No Change.

SIGNATURE PAGE TO FOLLOW:



The original Contract Price was (\$0.00). Contract Change Order No. 1 (Final) increased the Contract Price by (\$0.00). The new Contract Price will be \$00/100, resulting in an increase of approximately 0.00% to the original Contract.

The original Contract Time of X Working Days was extended by Y Working Days per Change Order No. 1 (Final). The last contract Working Day is new Date.

Ordered: _____ Date: _____
Public Works Director

Concurred by: _____ Date: _____
City Engineer

Concurred by: _____ Date: _____
Project Manager

Acceptance by the Contractor:

This Change Order is in full compromise and settlement of all adjustments to Contract Time and Contract Price, and compensation for any and all delay, extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of these Impacts on the overall Work under the Contract arising directly or indirectly from the performance of Work described in this Change Order. By execution of this Change Order, the Contractor agrees that this Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of any nature, character or kind arising out of or incidental to this Change Order.

Name: _____ Date: _____

Title: _____



CHANGE ORDER PROPOSAL FORM

3-6.2(a) CONTRACT CHANGE ORDER PROPOSAL SUMMARY REPORT

CCO Proposal No. _____ Date _____
Contractor _____
Item No. _____ Location _____

AMOUNT

General Contractor

1. Labor Cost:.....\$ _____
2. Material Cost:\$ _____
3. Equipment Cost:.....\$ _____
4. Special Forces/Services:\$ _____
- Subtotal Contractor Cost•.....\$ _____

5. Subcontractor/Sub-Subcontractor Name _____
Labor Cost.....\$ _____
Material Cost\$ _____
Equipment Cost.....\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost

6. Subcontractor/Sub-Subcontractor Name _____
Labor Cost.....\$ _____
Material Cost\$ _____
Equipment Cost.....\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost\$ _____

TOTAL CONTRACT CHANGE ORDER COSTS.....\$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(b) LABOR COST REPORT Date

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

CLASSIFICATION AND NAME	HOURS	HOURLY RATE	EXTENDED AMOUNTS
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
TOTAL LABOR			\$

Overhead/profit 20% \$ _____

Total labor/overhead/profit \$ _____

Subcontractor's mark-up of total Sub-Subcontractor
labor/overhead/profit (if applicable) 5% \$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor labor/overhead/profit (if applicable) 5%..... \$ _____

Total..... \$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(c) LABOR RATES REPORT Date

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

CLASSIFICATION:		
TAXABLE BASE:		AMOUNT
Base Hourly Pay		\$
Vacation		\$
TOTAL TAXABLE BASE		\$
TAXES & INSURANCE	PERCENT	AMOUNT
Social Security Tax		\$
State Unemployment Tax		\$
Federal Unemployment Tax		\$
Workmen's Compensation		\$
Liability & Umbrella Insurance		\$
TOTAL TAXES & INSURANCE		\$
FRINGE BENEFITS	AMOUNT	
Pension	\$	
Health & Welfare	\$	
Training	\$	
Other Fringe Benefits	\$	
TOTAL FRINGE BENEFITS	\$	
AMOUNT	\$	



CHANGE ORDER PROPOSAL FORM

3-6.2(d) MATERIAL COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

INVOICE NO.	DESCRIPTION	AMOUNT
1.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
2.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
3.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
SUBTOTAL MATERIAL COST		\$

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent data shall be submitted along with the material cost report.

Overhead/profit 15% \$ _____

Total material/overhead/profit..... \$ _____

Subcontractor's mark-up of total Sub-Subcontractor
material/overhead/profit (if applicable) 5% \$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor labor/overhead/profit (if applicable) 5%..... \$ _____

Total..... \$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(e) EQUIPMENT COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

EQUIPMENT NO. (Description, Type, Size)	HOURS	HOURLY RATE	EXTENDED AMOUNTS
SUBTOTAL EQUIPMENT COST			\$

Overhead/profit 15% \$ _____

Total equipment/overhead/profit..... \$ _____

Subcontractor's mark-up of total Sub-Subcontractor
equipment/overhead/profit (if applicable) 5% \$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor equipment/overhead/profit (if applicable) 5%..... \$ _____

Total..... \$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2 (f) SPECIAL FORCES/SERVICES COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

INVOICE NO.	DESCRIPTION	AMOUNT
1.		\$
		\$
	Subtotal	\$
2.		\$
		\$
	Subtotal	\$
3.		\$
		\$
	Subtotal	\$
SUBTOTAL MATERIAL COST		\$

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent data shall be submitted along with the special forces/services cost report.

Overhead/profit 15%\$ _____

Total Special Forces/Services/Overhead/Profit\$ _____



3-6.3 CONSTRUCTION CHANGE DIRECTIVE

Distribution to: CITY ☐ CONTRACTOR ☐ OTHER ☐ PROJECT MANAGER ☐

PROJECT:	DIRECTIVE NO.:
	DATE:
	CONTRACT DATE:
TO CONTRACTOR:	CONTRACT FOR:

You are hereby directed to make the following change(s) to this Contract:

PROPOSED ADJUSTMENTS

1. The proposed basis of adjustment to the Contract Price is:
[] Lump Sum (increase) (decrease) of \$ _____
[] Unit Price of \$ _____ per _____
[] Daily time and materials records of actual costs plus a overhead and profit, as provided in Subsection 3-3, "Extra Work," the Standard Specifications and the General Provisions, [subject to a Not-To-Exceed Amount of \$ _____].\ as follows:
[] as follows:
2. The Contract Time is proposed to (be adjusted) (remain unchanged). The proposed adjustment, if any, is (an increase of ____ days) (a decrease of ____ days).

If the Contractor disagrees with the proposed adjustments, it must submit its own proposal within ten days of the date of this Construction Change Directive pursuant to Contract Documents or the proposed adjustment will become final and binding on the Contractor.

When signed by the City and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Ordered: _____ Public Works Director	Date: _____
Concurred by: _____ City Engineer	Date: _____
Concurred by: _____ Project Manager	Date: _____



3-6.4 WORK DIRECTIVE

Distribution to: CITY ☐ CONTRACTOR ☐ FIELD ☐ OTHER ☐ PROJECT MANAGER ☐

PROJECT:

WORK DIRECTIVE NO.:

DATE:

CONTRACT DATE:

TO CONTRACTOR:

CONTRACT FOR:

You are hereby directed to continue performance of the following Work, without delay, pending resolution of the dispute concerning such Work and maintain the cost data described in Subsection 3-3, "Extra Work," of the Standard Specifications and the **General Provisions** to the Contract for the performance of such Work:

Neither the issuance of this Work Directive nor the requirement for the Contractor to maintain cost data constitutes approval by the City of a change in the Work or modification of the Contract Documents.

Ordered: _____
Public Works Director

Date: _____

Concurred by: _____
City Engineer

Date: _____

Concurred by: _____
Project Manager

Date: _____

SECTION 4. CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

The provisions below shall supplement but not replace those provisions in Section 4-1 of the Standard Specifications, except that Subsection 4-1.4 shall be replaced in its entirety.

The first paragraph of Section 4-1 is replaced with the following:

Wherever applicable, materials shall conform to the latest Standards of the American Society for Testing Materials. All workmanship in the fabrication, assembly and construction of materials and equipment shall be neat and workmanlike in every respect. All equipment offered shall be of the manufacturer's latest design.

The Contractor and all Subcontractors, suppliers, and vendors shall guarantee that the Work will meet all requirements of this Contract as to the quality of materials, equipment, and workmanship.

4.1.1.1 Property Rights in Materials

Nothing in the Contract shall be construed as vesting in the Contractor any right, title, or interest in material used in the Work after it has been attached or affixed to the Work or the soil. All such material shall become the property of the City upon being so attached or affixed.

4-1.2 Protection of Work and Materials

Add the following at the end of Subsection 4-1.2:

Materials shall not be stored in the right-of-way unless written permission is given by the Engineer.

4-1.4 Test of Materials

Delete Subsection 4-1.4 in its entirety and substitute the following:

Unless otherwise called for in these General Provisions, all testing of materials will be performed by the City in such number and at such locations as deemed necessary by the Engineer to ensure compliance with the Contract Documents. The cost of all testing that can be performed within 50 miles of the Project will be borne by the City; the cost of all testing that must be performed 50 miles or more from the Project will be borne by the Contractor; the cost of all re-testing will be borne by the Contractor, and the amount due the City for the re-testing will be deducted from the Contract Price via Change Order.

The cost of rework material testing, overtime, travel and other related costs incurred by the City will be deducted from the Contract Price via Change Order.

4-1.6 Trade Names or Equals

If the Contractor requests to substitute an equivalent item for a brand or trade name item, the burden of proof as to the comparative quality and suitability of alternative equipment or articles or materials shall be upon the Contractor, and the Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Engineer. All requests for substitution shall be submitted, together with all documentation necessary for the Engineer to determine

equivalence, no later than ten calendar days after the award of the Contract, unless a different deadline is listed in the Special Provisions.

SECTION 5 UTILITIES

The provisions below shall supplement but not replace those provisions in Section 5 of the Standard Specifications.

5-1 LOCATION

The location and existence of any underground Utility or substructure has not been obtained. The methods used and costs involved to locate existing elements, points of connection and all construction methods are the Contractor's sole responsibility. Accuracy of information furnished, as to existing conditions, is not guaranteed by the City. The Contractor, at its sole expense, must make all investigations necessary to determine locations of existing elements, which may include contacting Underground Service Alert and other private underground locating firm(s), utilizing specialized locating equipment, hand trenching, or both. For every Dig Alert Identification Number issued by Underground Service Alert during the course of the Project, the Contractor must submit to the City the following form. The Contractor shall be responsible for preserving the integrity of the existing underground utilities at the site.

UNDERGROUND SERVICE ALERT IDENTIFICATION NUMBER FORM

BLOCK 35 ELEVATED TANK PAINTING PROJECT

No excavation will be permitted until this form is completed and returned to the City.

Government Code Section 4216 *et seq.* requires a Dig Alert Identification Number to be issued before a permit to excavate will be valid.

To obtain a Dig Alert Identification Number, call Underground Service Alert at **811** a minimum of three Working Days before scheduled excavation. For best response, provide as much notice as possible up to ten Working Days.

Dig Alert Identification Number: _____

Dated: _____

("CONTRACTOR")

By: _____

Printed Name: _____

Title: _____

By: _____

Printed Name: _____

Title: _____

NOTE: This form is required for every Dig Alert Identification Number issued by Underground Service during the course of the Work. Additional forms may be obtained from the City upon request.

5-1.3 Entry by Utility Owners

The right is reserved to the owners of public Utilities or franchises to enter the Project site for the purpose of making repairs or changes in their property that may be necessary as a result of the Work as well as any other reason authorized by the City. When the Contract Documents provide for the Utility owners to alter, relocate or reconstruct a Utility, or when the Contract Documents are silent in this regard and it is determined by the Engineer that the Utility owners must alter, relocate or reconstruct a Utility, the Contractor shall schedule and allow adequate time for those alterations, relocations or reconstructions by the respective Utility owners. City employees and agents shall likewise have the right to enter upon the Project site at any time and for any reason or no reason at all.

5-2 PROTECTION

If Contractor damages or breaks the Utilities, it will be the Contractor's responsibility to repair the Utility at no cost to the utility company or the City. If not fixed in a timely manner as deemed by the City Engineer, the utility company has the right to complete the repairs and assess the Contractor for all applicable costs.

Add the following paragraphs at the end of Subsection 5-2:

At least two Working Days prior to commencing work within the area, the Contractor shall request the utility owners to identify or otherwise indicate the location of their subsurface facilities. It shall be the Contractor's responsibility to determine the location and depth of all utilities including service connections which have been marked by the representative owners and which he believes may affect or be affected by the work. Full compensation for the ascertainment of utility locations and depths shall be considered included in the prices bid for the other items of work.

All utilities shall be notified by the Contractor in advance, according to their respective advance notice requirements, prior to excavating adjacent to, altering, or in any way modifying their facilities. The Contractor, at his expense, shall maintain in service all existing utilities. Should interruption of such utilities become necessary, the property owners and residents affected shall be notified 48 hours before the interruption.

The Contractor shall protect, support, or perform any other work necessary in order to maintain the operation of utilities in the proximity of the work area. The Contractor shall inform the Engineer in writing of all utilities omitted from or shown incorrectly on the contract plans. The Contractor shall not be entitled to damages or additional payment for delays attributable to utility relocations or alterations not shown or incorrectly delineated on the contract plans. The Contractor shall conduct his operations so as to permit access to the work site by any affected utility necessary for the relocation or modification to the utility system at no cost to the City.

Any interference by the Contractor with City-owned facilities such as, but not limited to, sewer, water, or storm drain that, in the opinion of the Engineer, creates a safety or health hazard and is not quickly repaired, the damaged facilities may be repaired by City forces and all costs of repairs will be deducted from contract payments.

5-3 REMOVAL

Facilities encountered during the prosecution of the Work that are determined to be abandoned shall be removed by the Contractor as required for the Work, unless directed otherwise by the

Engineer. The remaining portion of the existing Utility which is left in place shall be accurately recorded, in elevation and plan, on the control set of Contract drawings.

5-4 RELOCATION

The Contractor shall cooperate fully with all Utility forces of the City or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities that interfere with the progress of the Work. The Contractor shall schedule the Work so as to minimize interference with the relocation, altering, or other rearranging of facilities.

5-6 COOPERATION

The Contractor's attention is directed to the fact that Work may be conducted at or adjacent to the site by other contractors during the performance of the Work under the Contract. The Contractor shall conduct its operations so as to cause a minimum of interference with the work of such other contractors, and shall cooperate fully with such contractors to provide continued safe access to their respective portions of the site, as required to perform work under their respective contracts. Compensation for compliance shall be included in the various items of the Work, and no additional compensation shall be allowed therefor.

5-7 NOTIFICATION

The Contractor shall notify the Engineer and the owners of all Utilities and substructures not less than 48 hours before starting construction. The following list of names and telephone numbers is intended for the convenience of the Contractor and is not guaranteed to be complete or accurate:

Agency: _____
Phone Number: _____
Contact Person: _____

Agency: _____
Phone Number: _____
Contact Person: _____

Agency: _____
Phone Number: _____
Contact Person: _____

SECTION 6. PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 6 of the Standard Specifications.

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

6-1.1 Construction Schedule

In addition to the construction schedule required pursuant to Section 6-1.1 of the Standard Specifications after notification of the Contract award and before any start of the Project, as well as the revised construction schedule in advance of beginning revised operations, the Contractor

shall submit an updated construction schedule with its monthly invoice every month. Progress payments shall be contingent upon the receipt of monthly updated construction schedules.

One week before the scheduled pre-construction meeting, the Contractor must submit a construction schedule to the Engineer for review and approval. The Contractor shall make revisions as required by the Engineer. The schedule must account for all subcontract work, as well as the work of the Contractor, submittals, coordination with the other contractors performing concurrent work and the Traffic Control Plan. The Contractor shall update this Construction Schedule when directed by the Engineer, or when:

- a. A Change Order significantly affects the Contract completion date or the sequence of construction approach or activities; or
- b. The actual sequence of the Work, or the planned sequence of the Work, is changed and does not conform to the Contractor's current accepted Project construction schedule.

6-1.1.1 Pre-Construction Conference

Approximately five Days before the commencement of Work at the site, a pre-construction conference will be held at the City and shall be attended by the Contractor's Project manager, its on-site field superintendent, and any Subcontractors that the Contractor deems appropriate. Attendance by the Contractor and any Subcontractors designated is mandatory.

Contractor shall submit its 24-hour emergency telephone numbers to the Engineer for approval a minimum of two Working Days before the pre-construction conference. Unless previously submitted to the Engineer, the Contractor shall bring to the pre-construction conference copies of each of the following:

- 1) Construction Schedule.
- 2) Procurement schedule of major equipment and materials and items requiring long lead time.
- 3) Shop drawing/sample submittal schedule.
- 4) Preliminary schedule of values (lump sum price breakdown) for progress payment purposes.
- 5) Written designation of the on-site field superintendent and the Project manager. Both daytime and emergency telephone numbers shall be included in the written designation.

The purpose of the conference is to designate responsible personnel and establish a working relationship. The parties will discuss matters requiring coordination and establish procedures for handling such matters. The complete agenda will be furnished to the Contractor before the meeting date. The Contractor shall be prepared to discuss all of the items listed below.

- 1) The Contractor's construction schedule.
- 2) Notification of local residents before starting any Work and keeping them informed throughout the Project.
- 3) Procedures for transmittal, review, and distribution of the Contractor's submittals.
- 4) Processing applications for payment.
- 5) Maintaining record documents.
- 6) Critical Work sequencing.

- 7) Maintaining sewage service during construction, including proposed by-passes.
- 8) NPDES requirements, if any.
- 9) Field decisions and Change Orders.
- 10) Use of Project site, office and storage areas, security, housekeeping, and the City's needs.
- 11) Major equipment deliveries and priorities.
- 12) Traffic control.
- 13) Any other item that the City representative states is relevant to the meeting.

6-1.1.2 Weekly Progress Meetings

Progress meetings will be held each week during the course of the Project. The meeting location, day of the week and time of day will be mutually agreed to by the City and the Contractor. The Contractor shall provide a two-week "look ahead" schedule for each meeting. The construction manager will preside at these meetings and will prepare the meeting agenda, meeting minutes and will distribute minutes to all persons in attendance. As the Work progresses, if it is determined by agreement of the attendees, that weekly meetings are not necessary, the weekly progress meetings may be changed to bi-weekly progress meetings.

Add the following to section 6-2:

6-2.1 Excess Cost of City Personnel and Inspection Personnel

For any overtime or emergency work beyond a regular eight-hour day and for any work performed on Saturday, Sunday, or holidays, the charges for City personnel, including inspection, required on the job site shall be the responsibility of the Contractor and all costs therefor shall be deducted from the payments due the Contractor. The cost of City personnel shall be computed pursuant to adopted City salary schedules, overtime policies, fringe benefits, and overhead costs.

6-3.1 General

Add the following paragraph following paragraph one:

In the event a suspension of work is ordered because of failure on the part of the Contractor to carry out orders given or to perform any provisions of the Work, such suspension of work shall not relieve the Contractor of its responsibility to complete the work within the time limit set forth herein and shall not be considered cause for extension of the time for completion, and further, such suspension of work shall not entitle the Contractor to any additional compensation.

6-5 *TERMINATION OF THE CONTRACT FOR CONVENIENCE*

In addition to the reasons for termination listed in Section 6-5 of the Standard Specifications, which allow termination upon any written notice, the City may cancel the Contract for any other reason or for no reason upon 30 Days' written notice. The rest of the procedure outlined in Section 6-5 shall apply to such situation, including the Contractor's required immediate notification of Subcontractors and suppliers and the payment. In no event (including termination for impossibility or impracticability, due to conditions or events beyond the control of the City, for any other reason

or for no reason) shall the total amount of money to Contractor exceed the amount which would have been paid to the Contractor for the full performance of the services described in the Contract.

Furthermore, some of the City's projects are funded in whole or in part by funds other than the City's General Fund. If this Project is funded by such external funds in whole or in part, or if those external funds are terminated or reduced at any time and for any reason or for no reason at all, and the City determines at its discretion that no other funding is available for continuation of this Project, the City will not be obligated to continue funding for the services contained in these Contract Documents and may terminate the Project immediately. The City shall reimburse the Contractor for its work satisfactorily completed until the termination date. In no event shall the total amount of money to the Contractor exceed the amount which the City has received in funding from its external source. The Special Provisions may include further details in this regard.

6-6 DELAYS AND EXTENSIONS OF TIME

Unless otherwise agreed in writing, an adjustment to the Contract time by reason of a Change Order shall be agreed to at the time the Change Order is issued and accepted by the Contractor. If the Change Order does not reserve the right of the parties, or either of them, to seek an adjustment to the Contract time, then the parties forever relinquish and waive such right and there shall be no further adjustments to the Contract time.

6-6.1 Extensions of Time

In the event it is deemed appropriate by the City to extend the time for completion of the Work, any such extension shall not release any guarantee for the Work required by the Contract Documents, nor shall any such extension of time relieve or release the Sureties on the Bonds executed. In executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extensions of time. The amount of time allowed by an extension of time shall be limited to the period of the delay giving rise to the same as determined by the City. Notwithstanding any dispute which may arise in connection with a claim for adjustment of the Contract time, the Contractor shall promptly proceed with the Work.

6-6.2 Payment for Delays

Notwithstanding any other terms and conditions of the Contract Documents, the City shall have no obligation whatsoever to increase the Contract Price or extend the time for delays.

Unless compensation and/or mark up is agreed upon by the City, the Contractor agrees that no payment of compensation of any kind shall be made to the Contractor for damages or increased overhead costs caused by any delays in the progress of the Contract, whether such delays are avoidable or unavoidable or caused by any act or omission of the City or its agents. Any accepted delay claim shall be fully compensated for by an extension of time to complete the performance of the Work.

This Section shall not apply to compensable delays caused solely by the City. If a compensable delay is caused solely by the City, the Contractor shall be entitled to a Change Order that: (1) extends the time for completion of the Contract by the amount of delay caused by the City; and (2) provides equitable adjustment, as determined by the City, to the Contractor.

Add the following as section 6-7.2:

6-7.2 Working Day

The term "Working Day" shall mean any calendar day except Saturdays, Sundays, and the following holidays:

New Year's Day.....	January 1
Martin Luther King, Jr. Day	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1st Monday in September
Columbus Day	2nd Monday in October
Veterans' Day	November 11
Thanksgiving Week	November 23 through November 27
Christmas and New Years	December 21 through January 1

If a holiday falls upon a Sunday, the following Monday shall be the day the holiday is observed, and if a holiday falls upon a Saturday, the preceding Friday shall be the day the holiday is observed.

6-7.3 Contract Time Accounting

Add the following at the end of Subsection 6-7.3:

The Contract Time for completion of the Work, including corrective items of Work, shall be in accordance with Section 4 of the Contract. Contract Time extensions, when granted by the Engineer, will be in Working Days and in accordance with the Contract Documents, and will be set forth in writing via Change Order.

6-8 *COMPLETION, ACCEPTANCE AND WARRANTY*

The Contractor shall complete all Work under the Contract within the stipulated Working Days from the Notice to Proceed, as stated in the Contract. The Contractor shall not be allowed to begin any construction activity at the site before the issuance of the Notice to Proceed. Between the period of the Notice of Award and Notice to Proceed, the Contractor shall process Shop Drawings and begin procuring equipment and materials.

6-8.2 Acceptance

The Project will not be considered complete and ready for City Council direction to staff regarding recordation of the Notice of Completion until all Work required by the Contract Documents has

been fully completed in compliance with the Contract Documents and all Applicable Laws including, but not limited to, correction or completion of all punch list items, the Work site is cleaned up in accordance with Section 7-8 of the Standard Specifications, the General Provisions, and the Special Provisions, and all of the following items have been received by the Engineer:

1. A form of Notice of Completion, with all information required by the California Civil Code;
2. All written guarantees, warranties, and special warranties if applicable;
3. All "as-builts" and record drawings;
4. Duly completed and executed forms of Conditional Waiver and Release On Final Payment from the Contractor, Subcontractors of any tier, suppliers, and other person eligible to file stop notices in connection with the Work; and
5. Duplicate copies of all operating instructions and manufacturer's operating catalogs and data, together with such field instructions as necessary to fully instruct City personnel in correct operation and maintenance procedures for all equipment installed listed under the electrical, air conditioning, heating, ventilating and other trades. This data and instructions shall be furnished for all equipment requiring periodic adjustments, maintenance or other operation procedures.

The Contractor shall allow at least seven Working Days notice for final inspection. Such notice shall be submitted to the Engineer in writing.

6-8.3 Warranty

For the purposes of the calculation of the start of the warranty period, the Work shall be deemed to be completed upon the date of recordation of the Notice of Completion. If that direction is contingent on the completion of any items remaining on a punchlist, the Work shall be deemed to be completed upon the date of the Engineer's acceptance of the final item(s) on that punchlist.

The Contractor shall repair or replace defective materials and workmanship as required in Section 6-8.3 of the Standard Specification at its own expense. Additionally, the Contractor agrees to defend, indemnify and hold the City harmless from claims of any kind arising from damage, injury or death due to such defects.

The parties agree that no certificate given shall be conclusive evidence of the faithful performance of the Contract, either in whole or in part, and that no payment shall be construed to be in acceptance of any defective Work or improper materials. Further, the certificate or final payment shall not terminate the Contractor's obligations under the warranty herein. The Contractor agrees that payment of the amount due under the Contract and the adjustments and payments due for any Work done in accordance with any alterations of the same, shall release the City, the City Council and its officers and employees from any and all claims or liability on account of Work performed under the Contract or any alteration thereof.

6-9 LIQUIDATED DAMAGES

For the purposes of the calculation of the start of the liquidated damages, the Work shall be deemed to be completed when the same has been completed in accordance with the Plans and Specifications therefor and to the satisfaction of the Engineer, and the Engineer has certified such

completion in accordance with Section 6-8.1 of the Standard Specifications. The liquidated damages value is hereby amended to be \$900 per day.

SECTION 7. RESPONSIBILITIES OF THE CONTRACTOR

The first paragraph of Section 7-3.1 of the Standard Specifications shall not be incorporated and shall instead be replaced with the following:

The Contractor shall provide and maintain insurance naming the City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials as insureds or additional insureds regardless of any inconsistent statement in the policy or any subsequent endorsement whether liability is attributable to the Contractor or the City. The insurance provisions shall not be construed to limit the Contractor's indemnity obligations contained in the Contract. The City will not be liable for any accident, loss, or damage to the Work before completion, except as otherwise specified in Section 6-10.

The first sentence of Section 7-8.4.2 shall not be incorporated, and shall instead be replaced with the following:

Construction materials and equipment shall not be stored in Streets, roads, or highways unless otherwise specified in the Special Provisions or approved by the Engineer.

The first sentence of the second paragraph of Section 7-9 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

The Contractor shall relocate, repair, replace, or reestablish all existing improvements within the Project limits which are not designated for removal (e.g., curbs, sidewalks, driveways, signal loops, fences, walls, sprinkler systems, signs, Utility installations, pavements, structures, etc.) which are damaged or removed as a result of the Contractor's or the Subcontractors' operations or as required by the Plans and Specifications.

The last paragraph of Subsection 7-9 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

All costs to the Contractor for protecting, removing, restoring, relocating, repairing, replacing, or reestablishing existing improvements shall be included in the Bid.

Section 7-12 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

The names, addresses and specialties of the Contractor, Subcontractors, architects or engineers may not be displayed on any signage within the public right-of-way. This signage prohibition includes advertising banners hung from truck beds or other equipment.

Otherwise, the provisions below shall supplement but not replace those provisions in Section 7 of the Standard Specifications.

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES

The use of excessively loud equipment and warning signals shall be avoided, except in those cases required for the protection of personnel.

7-2 LABOR

7-2.2.1 Public Work

The Contractor acknowledges that the Project is a "public work" as defined in Labor Code Section 1720 *et seq.* ("Chapter 1"), and that this Project is subject to (a) Chapter 1, including without limitation Labor Code Section 1771 and (b) the rules and regulations established by the Director of Industrial Relations ("DIR") implementing such statutes. The Contractor shall perform all Work on the Project as a public work. The Contractor shall comply with and be bound by all the terms, rules and regulations described in (a) and (b) as though set forth in full herein.

7-2.2.2 Copies of Wage Rates

Pursuant to Labor Code Section 1773.2, copies of the prevailing rate of per diem wages for each craft, classification, or type of worker needed to perform the Project are on file at City Hall and will be made available to any interested party on request. By initiating any Work on this Project, the Contractor acknowledges receipt of a copy of the DIR determination of such prevailing rate of per diem wages, and the Contractor shall post such rates at each job site covered by these Contract Documents.

7-2.2.3 Failure to Pay Prevailing Rates

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty paid to the City, forfeit \$200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the DIR for the work or craft in which the worker is employed for any public work done pursuant to these Contract Documents by the Contractor or by any Subcontractor.

7-2.2.4 Apprentices

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1777.5, 1777.6 and 1777.7 and California Code of Regulations Title 8, Section 200 *et seq.* concerning the employment of apprentices on public works projects. The Contractor shall be responsible for compliance with these Sections for all apprenticeable occupations. Before commencing Work on this Project, the Contractor shall provide the City with a copy of the information submitted to any applicable apprenticeship program. Within 60 Days after concluding Work, Contractor and each of its Subcontractors shall submit to the City a verified statement of the journeyman and apprentice hours performed under this Contract.

7-2.2.5 Debarment or Suspension

The Contractor shall not perform Work with any Subcontractor that has been debarred or suspended pursuant to California Labor Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. The Contractor and Subcontractors shall not be debarred or suspended throughout the duration of the Contract pursuant to Labor

Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. If the Contractor or any Subcontractor becomes debarred or suspended during the duration of the Project, the Contractor shall immediately notify the City.

7-2.3 Payroll Records

The Contractor shall comply with and be bound by the provisions of Labor Code Section 1776, which requires the Contractor and each Subcontractor to (1) keep accurate payroll records and verify such records in writing under penalty of perjury, as specified in Section 1776, (2) certify and make such payroll records available for inspection as provided by Section 1776, and (3) inform the City of the location of the records. The Contractor has ten days in which to comply subsequent to receipt of a written notice requesting these records, or as a penalty to the City, the Contractor shall forfeit \$100.00 for each Day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

7-2.4 Hours of Labor

The Contractor acknowledges that eight hours labor constitutes a legal day's work. The Contractor shall comply with and be bound by Labor Code Section 1810. The Contractor shall comply with and be bound by the provisions of Labor Code Section 1813 concerning penalties for workers who work excess hours. The Contractor shall, as a penalty paid to the City, forfeit \$25.00 for each worker employed in the performance of this Project by the Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of Division 2, Part 7, Chapter 1, Article 3 of the Labor Code. Pursuant to Labor Code Section 1815, work performed by employees of the Contractor in excess of eight hours per day, and 40 hours during any one week shall be permitted upon public work upon compensation for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay.

7-2.5 Registration with the DIR

In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or Subcontractor shall be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5.

7-2.6 Compliance Monitoring and Posting Job Sites

This Project is subject to compliance monitoring and enforcement by the DIR. The Contractor shall post job site notices, as prescribed by regulation.

7-2.7 Subcontractors

For every Subcontractor who will perform Work on the Project, the Contractor shall be responsible for such Subcontractor's compliance with Chapter 1 and Labor Code Sections 1860 and 3700, and the Contractor shall include in the written Contract between it and each Subcontractor a copy of the provisions in this Section 7-2 of the General Provisions and a requirement that each Subcontractor shall comply with those provisions. The Contractor shall be required to take all actions necessary to enforce such contractual provisions and ensure Subcontractor's compliance,

including without limitation, conducting a periodic review of the certified payroll records of the Subcontractor and upon becoming aware of the failure of the Subcontractor to pay its workers the specified prevailing rate of wages. The Contractor shall diligently take corrective action to halt or rectify any failure.

7-2.9 Prevailing Wage Indemnity

To the maximum extent permitted by law, the Contractor shall indemnify, hold harmless and defend (at the Contractor's expense with counsel reasonably acceptable to the City) the City, its officials, officers, employees, agents and independent contractors serving in the role of City officials, and volunteers from and against any demand or claim for damages, compensation, fines, penalties or other amounts arising out of or incidental to any acts or omissions listed in Section 7-2 of the General Provisions by any Person (including the Contractor, its Subcontractors, and each of their officials, officers, employees and agents) in connection with any Work undertaken or in connection with the Contract Documents, including without limitation the payment of all consequential damages, attorneys' fees, and other related costs and expenses. All duties of the Contractor under this Section 7-2.9 shall survive expiration or termination of the Contract.

7-3 *INSURANCE*

The Contractor shall at all times during the term of the Contract carry, maintain, and keep in full force and effect the insurance referenced in Section 7-3 of the Standard Specifications, as modified below.

7-3.1.1 Acceptability of Insurers.

The insurance policies required under this Section 7-3 shall be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self insurance shall not be considered to comply with the insurance requirements under this Section 7-3.

7-3.1.2 Additional Insured.

The City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials shall be the insured or named as additional insureds covering the Work, regardless of any inconsistent statement in the policy or any subsequent endorsement, whether liability is attributable to the Contractor or the City. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds. This provision shall also apply to any excess/umbrella liability policies.

7-3.1.3 Primary and Non-Contributing.

The insurance policies required under this Section 7-3 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to the City. Any insurance or self-insurance maintained by the City, its officers, employees, agents or volunteers, shall be in excess of the Contractor's insurance and shall not contribute with it. This provision shall also apply to any excess/umbrella liability policies.

7-3.1.4 Contractor's Waiver of Subrogation.

The insurance policies required under this Section 7-3 shall not prohibit the Contractor and the Contractor's employees, agents or Subcontractors from waiving the right of subrogation prior to a loss. The Contractor hereby waives all rights of subrogation against the City.

7-3.1.5 Deductibles and Self-Insured Retentions.

Any deductibles or self-insured retentions must be declared to and approved by the City. At the City's option, the Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to the City, or the Contractor shall procure a bond guaranteeing payment of losses and expenses.

7-3.1.6 Cancellations or Modifications to Coverage.

The Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 7-3 during the term of the Contract. The commercial general and automobile liability policies required under the Contract shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to the City. If any insurance policy required under this Section 7-3 is canceled or reduced in coverage or limits, the Contractor shall, within two business days of notice from the insurer, phone, fax or notify the City via certified mail, return receipt requested, of the cancellation of or changes to the policy.

7-3.1.7 City Remedy for Noncompliance.

If the Contractor does not maintain the policies of insurance required under this Section 7-3 in full force and effect during the term of the Contract, or in the event any of the Contractor's policies do not comply with the requirements under this Section 7-3, the City may either immediately terminate the Contract or, if insurance is available at a reasonable cost, the City may, but has no duty to, take out the necessary insurance and pay, at the Contractor's expense, the premium thereon. The Contractor shall promptly reimburse the City for any premium paid by the City or the City may withhold amounts sufficient to pay the premiums from payments due to the Contractor.

7-3.1.8 Evidence of Insurance.

At least two Working Days prior to the performance of Services under the Contract, the Contractor shall furnish the City's Risk Manager with a certificate or certificates of insurance and all original endorsements (both of which must reference the same Policy number), evidencing and effecting the coverages required under Section 7-3 of the Standard Specifications, as modified by this Section 7-3. The endorsements are subject to approval by the City's Risk Manager. The Contractor may provide complete, certified copies of all required insurance policies to the City. The Contractor shall provide proof to the City's Risk Manager that insurance policies expiring during the term of the Contract have been renewed or replaced with other policies providing at least the same coverage. The Contractor shall furnish such proof at least two weeks prior to the expiration of the coverages.

The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements must specifically name the City of Manhattan Beach and its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and

independent contractors in the role of City officials as insureds or additional insureds. The Contractor shall maintain current insurance certificates and endorsements on file with the City's Risk Manager at all times during the term of this Contract. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

Where the Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO. If the evidence of insurance submitted by the Contractor pursuant to this Section 7-3 evidences that the insurance is provided by the PEO, all such PEO-provided insurance coverages and indemnities must comply with the requirements of these Contract Documents.

7-3.1.9 Indemnity Requirements not Limiting.

Procurement of insurance by the Contractor shall not be construed as a limitation of Contractor's liability or as full performance of the Contractor's duty to indemnify the City under Section 7-4 of the Contract.

7-3.1.10 Subcontractor Insurance Requirements.

The Contractor shall require each of its Subcontractors that perform Services under the Contract to maintain insurance coverage that meets all of the requirements of this Section 7-3.

7-3.1.11 Replacement Insurance

The Contractor agrees that it will not cancel, reduce or otherwise modify the insurance coverage. The Contractor agrees that if it does not keep the required insurance in full force and effect, and such insurance is available at a reasonable cost, the City may take out the necessary insurance and pay the premium thereon, and the repayment thereof shall be deemed an obligation of the Contractor and the cost of such insurance may be deducted, at the option of the City, from payments due the Contractor. This shall be in addition to all other legal options available to the City to enforce the insurance requirements.

7-3.1.12 Subcontractors

The Contractor shall ensure all Subcontractors and their employees are listed as additional insureds on all of the Contractor's insurance.

7-3.2 General Liability Insurance

Instead of the minimum limits listed in Section 7-3.2 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If the Contractor is a limited liability company, the commercial general liability coverage shall be amended so that the Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

7-3.3 Workers' Compensation Insurance

Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of \$1,000,000.00 per accident for bodily injury or disease. If the Contractor has no employees while performing the Work under the Contract, a Workers' Compensation policy is not required, but the Contractor shall execute a declaration that it has no employees.

7-3.4 Automobile Insurance

Instead of the minimum limits listed in Section 7-3.4 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of the Contract with a combined single limit of \$2,000,000.00 per accident for bodily injury and property damage. If the Contractor does not use any owned, non-owned or hired vehicles in the performance of the Work under this Contract, the Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required by Subsection 7-3.2.

7-3.5 Insurance Requirements not Limiting

If the Contractor maintains broader coverage and/or higher limits than the minimums required above, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

7-4 INDEMNIFICATION

The following indemnity provisions shall supersede the indemnity in Section 7-3.1 of the Standard Specifications.

7-4.1 Indemnities for Third Party Claims.

To the fullest extent permitted by law, the Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. The Contractor shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. The Contractor shall reimburse

the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

7-4.1.1 Taxes and Workers' Compensation

The Contractor shall pay all required taxes on amounts paid to the Contractor under the Contract, and indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract. The Contractor shall fully comply with the Workers' Compensation law regarding the Contractor and the Contractor's employees. The Contractor shall indemnify and hold the City harmless from any failure of the Contractor to comply with applicable Workers' Compensation laws. The City may offset against the amount of any fees due to the Contractor under the Contract any amount due to the City from the Contractor as a result of the Contractor's failure to promptly pay to the City any reimbursement or indemnification arising under this Subsection 7-4.1.1.

7-4.1.2 Subcontractor Indemnity Agreements

The Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 7-4 from each and every Subcontractor or any other person or entity involved by, for, with or on behalf of the Contractor in the performance of the Contract. If the Contractor fails to obtain such indemnity obligations, the Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Liabilities at law or in equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor's Subcontractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor's Subcontractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

7-4.2 Workers' Compensation Acts not Limiting.

The Contractor's indemnifications and obligations under this Section 7-4, or any other provision of the Contract, shall not be limited by the provisions of any Workers' Compensation act or similar act. The Contractor expressly waives its statutory immunity under such statutes or laws as to the City, its officers, agents, employees and volunteers.

7-4.3 Insurance Requirements not Limiting.

The City does not, and shall not, waive any rights that it may possess against the Contractor because of the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to the Contract. The indemnities in this Section 7-4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, tax, assessment, penalty or interest asserted against the City.

7-4.4 Survival of Terms.

The Contractor's indemnifications and obligations under this Section 7-4 shall survive the expiration or termination of the Contract.

7-4.5 Civil Code Exception.

Nothing in this Section 7-4 shall be construed to encompass Indemnitees' sole negligence or willful misconduct to the limited extent that the underlying Contract is subject to Civil Code Section 2782(a) or the City's active negligence to the limited extent that the underlying Contract Documents are subject to Civil Code Section 2782(b), provided such sole negligence, willful misconduct or active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction.

7-4.6 Nonwaiver of Rights.

Indemnitees do not and shall not waive any rights that they may possess against the Contractor because the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to these Contract Documents. This indemnity provision is effective regardless of any prior, concurrent, or subsequent active or passive negligence by Indemnitees and shall operate to fully indemnify Indemnitees against any such negligence.

7-4.7 Waiver of Right of Subrogation.

The Contractor, on behalf of itself and all parties claiming under or through it, hereby waives all rights of subrogation and contribution against the Indemnitees, while acting within the scope of their duties, from all Claims arising out of or incident to the activities or operations performed by or on behalf of the Contractor regardless of any prior, concurrent or subsequent active or passive negligence by Indemnitees.

7-5 *PERMITS*

Before starting any construction work, the Contractor will be required to obtain all necessary permits from the City, which may include obtaining a no fee Right-of-Way permit for Work within the public right-of-way, as well as all other permits required from all other agencies. Should this Project require construction of trenches or excavations which are five feet or deeper and into which a person is required to descend, the Contractor shall obtain a Cal/OSHA permit and furnish the City with a copy before Work can commence on this Project. The Contractor shall bear all cost for fees for all agencies except for the City's permit fees.

The Contractor shall procure all permits and licenses (including a City of Manhattan Beach business license), pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. All City of Manhattan Beach permits required for the performance of the Contract shall be issued on a "no fee" basis. Permits required by other agencies shall be obtained by the Contractor for all work within the City of Manhattan Beach.

7-7 *COOPERATION AND COLLATERAL WORK*

The Contractor shall be responsible for coordinating all Work with the City's street sweeping, trash pick-up, and street maintenance contractors, emergency services departments, utility companies' crews, and others when necessary. Payment for conforming to these requirements shall be included in other items of Work, and no additional payment shall be made thereof.

7-8 WORKSITE MAINTENANCE

Clean-up shall be done as Work progresses at the end of each day and thoroughly before weekends. The Contractor shall not allow the Work site to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction operation. Materials which need to be disposed shall not be stored at the Project site, but shall be removed by the end of each Working Day. If the job site is not cleaned to the satisfaction of the Engineer, the cleaning will be done or contracted by the City and shall be back-charged to the Contractor and deducted from the Contract Price.

The Contractor shall make arrangements for storing its equipment and materials. The Contractor shall make its own arrangements for any necessary off-site storage or shop areas necessary for the proper execution of the Work. Approved areas within Work site may be used for temporary storage; however, the Contractor shall be responsible for obtaining any necessary permits from the City. In any case, the Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the traveled way or on any section where traffic is restricted at any time.

The Contractor shall deliver, handle, and store products in accordance with the manufacturer's written recommendations and by methods and means that will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at the Project site and overcrowding of construction spaces. In particular, the Contractor shall provide delivery and installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.

Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to ensure products are undamaged and are maintained under required conditions.

The Contractor shall promptly remove from the vicinity of the completed Work, all rubbish, debris, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final Acceptance of the Work by the City will be withheld until the Contractor has satisfactorily complied with the foregoing requirements for final clean-up of the Project site.

All costs associated with the clean-up and storage required to complete the Project shall be the sole responsibility of the Contractor.

Pursuant to the provisions of Section 7-8 and Section 7-10 of the Standard Specifications and these General Provisions, the Contractor is responsible for Project site maintenance and for public convenience and safety. Payment for compliance with these provisions is considered as included in the prices bid for other contract items.

The City, however, to maintain good public relations, may deem it necessary to require special Project site maintenance and public convenience and safety actions and work to be performed by the Contractor that are over and above those required by the provisions of Section 7-8 and Section 7-10 of the Standard Specifications and these General Provisions.

7-10 SAFETY

The provisions below shall supplement but not replace those provisions in Subsection 7-10 of the Standard Specifications.

7-10.2 Haul Routes

Subsection 7-10.3 of the Standard Specifications shall be deleted and replaced as follows:

The Contractor must obtain the Engineer's approval before using any haul routes. Further detail requirements for haul traffic are delineated in the Special Provisions.

7-10.5.3 Steel Plate Covers

The Contractor shall cover all openings, trenches and excavations at the end of each Working Day with steel plate covers.

7-15 RECYCLING OF MATERIALS

Subsection 7-15 is hereby added to the Standard Specifications as follows:

7-15.1 Recycling of Asphalt Concrete, Portland Cement Concrete, Aggregate Base, and Green Waste are Required

The records of disposal, including scale tonnages, shall be furnished to the City on a monthly basis. Failure to comply with the requirements of this Section will result in delay of progress payment.

7-15.2 Contractor's Obligation

The City is committed to a recycling program. If available, it is the obligation of the Contractor, under the Contract, to recycle the waste material through an approved recycling plant. Records and reports of waste recycle will be submitted to the City on a regular monthly basis.

SECTION 8. FACILITIES FOR AGENCY PERSONNEL

The provisions of Section 8 of the Standard Specifications shall apply except as modified herein. No field offices for City personnel shall be required; however, City personnel shall have the right to enter upon the Project at all times and shall be admitted to the offices of the Contractor to use the telephone, desk and sanitary facilities provided by the Contractor for its own personnel.

SECTION 9. MEASUREMENT AND PAYMENT

The provisions below shall supplement but not replace those provisions in Section 9 of the Standard Specifications.

9-1.1 General

Add the following at the end of Subsection 9-1.1:

All items of Work which are not designated on the Bid Schedule by the letters "F" or "LS" or words "Final" or "Lump Sum" shall have final pay quantities measured and paid for in accordance with the Standard Specifications and these General Provisions.

9-1.2 Methods of Measurement

The Contract Price shall constitute full compensation for all labor, equipment, materials, tools and incidentals required to complete the Project as outlined in these Contract Documents and as directed by the Engineer.

9-2 *LUMP SUM WORK*

Delete the first sentence of Subsection 9-2 and substitute the following:

Items of Work which are designated by the letters "LS" or the words "Lump Sum" in the Unit column of the Bid Schedule shall be paid for at the price indicated in the Bid, unless the dimensions of the Work, as shown on the Plans, are revised by the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantity of such Work, the final payment for the lump sum item will be revised in proportion to the change in dimensions authorized by Change Order.

Add the following at the end of Subsection 9-2:

The Contractor shall submit a Work item breakdown of the Bid (Schedule of Values), described in the second paragraph of Subsection 9-2, "Lump Sum Work," of the Standard Specifications, within ten Working Days after award of the Contract and/or at any other time as required by the Engineer.

No guarantee is made regarding the amount of Work required to complete a lump sum item of Work.

9-2.1 Progress Payments for Lump Sum Items of Work

The letter "C" in the Code column of the Bid Schedule for a lump sum item of Work shall mean that payment for that item will only be made after all Work for that item has been completed. The "%" symbol in the Code column of the Bid Schedule for a lump sum item of Work shall mean that progress payments for that item will be allowed based on the percentage of completion as determined by the Engineer in each pay period, typically every 30 days. (See Subsection 9-3.2 of the Standard Specifications and these General Provisions.)

9-3 *PAYMENT*

9-3.1 General

In accordance with Public Contract Code Section 7107, if no claims have been filed and are still pending, the amount deducted from the final estimate and retained by the City will be paid to the

Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be withheld for any other lawful purposes.

Whenever the Contractor is required to perform work or furnish equipment, labor, tools, and materials of any class for which no price is fixed in the proposal, it shall be understood that such work, equipment, labor, tools, and materials shall be provided without extra charge, allowance, or direct payment of any kind. The cost of performing such work or furnishing such equipment, labor, tools, and materials shall be included in the unit bid prices in the proposal most closely related to the work and no additional compensation will be made thereof.

If any portion of the work done or materials furnished under the Contract shall prove defective or not in accordance with the Specifications and Contract drawings, and if the imperfection in the same is not of sufficient magnitude or importance to make the work dangerous or undesirable, the Engineer shall have the right and authority to retain the work instead of requiring it to be removed and reconstructed, but he shall make such deductions therefor in the payment due the Contractor as may be just and reasonable.

Delete the tenth paragraph of Subsection 9-3.1 and substitute the following:

Not later than 60 days from the date of Final Acceptance, the five percent deducted and retained from each progress estimate (see Subsection 9-3.2 of the Standard Specifications and these General Provisions) by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

9-3.2 Partial and Final Payment

9-3.2.1 Monthly Closure Date and Invoice Date

The Contractor shall prepare and submit the form attached herewith (see Appendix I), or its own form in an identical format, to the Engineer for all requests for progress payments for the work performed in accordance with the provisions of the Contract during the preceding month. The progress payment request shall be submitted monthly, and a maximum of one progress payment request may be submitted each month. The Contractor shall submit a Conditional Waiver and Release form (Civil Code Section 8132) with the applicable monthly progress payment request. Progress payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

9-3.2.2 Payments

The City shall make payments within 30 Days after receipt of the Contractor's undisputed and properly submitted payment request, including an updated construction schedule pursuant to Section 6-1.1 of the General Provisions. The City shall return to the Contractor any payment request determined not to be a proper payment request as soon as practicable, but not later than seven Days after receipt, and shall explain in writing the reasons why the payment request is not proper. Acceptance by the Contractor of the payment made in accordance with the final estimate shall be a release to the City, its officers, agents, and employees excepting only claims against the City for any amount withheld by it at the time of such payment.

9-3.2.3 Retention

The City shall withhold not less than five percent from each progress payment. The City shall withhold not less than five percent of the Contract Price from the Final Payment Amount (defined in Section 9-3.2.4) until at least 35 days after recordation of the Notice of Completion, or recordation of a notice of cessation, but not longer than the period permitted by Public Contract Code Section 7107.

In addition to retained percentage and liquidated damages, the City may withhold payments to the Contractor including for defective work not remedied and other valid claims against the Contractor.

9-3.2.4 Final Invoice and Payment

Whenever the Contractor shall have completely performed the Contract in the opinion of the Engineer, the Contractor shall submit to the Engineer a written statement of the final quantities of Contract items in the form of the final invoice, which must have an identical format to the progress payment request form attached herewith (see Appendix I). Upon receipt of the final payment request, the Engineer shall check the quantities included therein and shall authorize a payment amount, which in the Engineer's opinion shall be just and fair, covering the value of the total amount of Work done by the Contractor, less all previous payments and all amounts to be retained under the provisions of the Contract Documents ("Final Payment Amount"). The Contractor shall submit a Conditional Waiver and Release form (Civil Code Section 8136) with the Final Payment request. The Engineer shall then request that the City accept the Work and that the City Clerk be authorized to file, on behalf of the City in the office of the County Recorder, a Notice of Completion of the Work herein agreed to be done by the Contractor. In addition, the final payment will not be released until the Contractor returns the control set of Plans and Specifications showing the redlined as-built conditions.

Final payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

9-3.2.5 Substitute Security

In accordance with Public Contract Code Section 22300, the Contractor may request that it be permitted to substitute securities in lieu of having retention withheld by the City from progress payments when such payments become due or, in the alternative, the Contractor may request that the City make payments of earned retentions directly to an agreed upon designated escrow agent at the Contractor's expense. If the Contractor selects either one of these alternatives, the following shall control.

9-3.2.5.1 Substitution of Securities for Performance Retention

At some reasonable time before any progress payment would otherwise be due and payable to the Contractor in the performance of Work under these Contract Documents, the Contractor may submit a request to the City in writing to permit the substitution of retentions with securities equivalent to the amount estimated by the City ("estimated amount of retention") to be withheld. The Contractor shall deposit such securities with the City or may, in the alternative, deposit such securities in escrow with a State or federally chartered bank in California, as the escrow agent, at the Contractor's expense. Such securities will be the equivalent or greater in value of the estimated amount of retention. If the Contract is modified by written Modifications or Change

Orders or the Contractor otherwise becomes entitled to receive an amount more than the Contract Price at the time the securities are deposited, the Contractor shall, at the request of the City, deposit with the City or escrow agent, whichever is applicable, additional securities within a reasonable time so that the amount of securities on deposit with the City or escrow agent is equivalent or greater in value than the amount of retention the City would otherwise be entitled to withhold from progress payments due or to become due to the Contractor as the Work progresses. The City shall withhold any retention amount that exceeds the security amount until the additional securities are deposited and, if the deposit is with an escrow agent, the City has confirmation from that escrow agent of the new total value of securities. Upon satisfactory completion of the Contract, which shall mean, among other things, that the City is not otherwise entitled to retain proceeds from progress payments as elsewhere provided in the Contract or under applicable law, the securities shall be returned to the Contractor. The City shall, within its sole discretion, determine whether the amount of the securities on deposit with the City or escrow agent is equal to or greater than the amount of estimated retention of progress payments that could otherwise be held by the City if the Contractor had not elected to substitute same with securities.

9-3.2.5.2 Deposit of Retention Proceeds with an Escrow Agent

As an alternative to the substitution of securities, as provided above, or the City otherwise retaining and holding retention proceeds from progress payments, the Contractor may request the City to make payments of retentions earned directly to an escrow agent with the same qualifications as required in Section 9-3.2.5.1 above and at the expense of the Contractor. At its sole expense, the Contractor may direct the investment of such retention payments into only such securities as mentioned in Section 9-3.2.5.3 below and shall be entitled to interest earned on such investments on the same terms provided for securities deposited by the Contractor. Upon satisfactory completion of the Contract, which shall mean when the City would not otherwise be entitled to withhold retention proceeds from progress payments had the Contractor not elected to have such proceeds deposited into escrow, the Contractor shall be allowed to receive from the escrow agent all securities, interest and payments deposited into escrow pursuant to the terms of this Section. The Contractor shall pay to each Subcontractor, not later than ten Days of receipt of payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount withheld to ensure performance of the Contractor.

9-3.2.5.3 Subcontractor Entitlement to Interest

If the Contractor elects to receive interest on any moneys withheld in retention by the City, then the Subcontractor shall receive the identical rate of interest received by the Contractor on any retention moneys withheld from the Subcontractor by the Contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the Subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the Subcontractor. If the Contractor elects to substitute securities in lieu of retention, then, by mutual consent of the Contractor and the Subcontractor, the Subcontractor may substitute securities in exchange for the release of moneys held in retention by the Contractor. The Contractor shall pay each Subcontractor, not later than ten Days after receipt of escrow moneys, the amount owed to each Subcontractor from the moneys plus the respective amount of interest earned, net of costs attributed to the retention held from each Subcontractor, on the amount of retention withheld to ensure performance of the Subcontractor.

9-3.2.5.4 Securities Eligible for Investment

Securities eligible for investment shall include those listed in Government Code Section 16430, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed upon between the Contractor and the City. The Contractor shall be the beneficial owner of any securities substituted for any monies withheld and shall receive any interest thereon.

9-3.2.5.5 Escrow Agreement for Security Deposits in Lieu of Retention

The escrow agreement that shall be used for the deposit of securities in lieu of retention shall substantially conform to the form prescribed in Public Contract Code Section 22300(f).

9-3.2.5.6 Inconsistencies with Prevailing Statutory Requirements

If there is any inconsistency between or differences in Public Contract Code Section 22300 and the terms of this provision, or any future amendments thereto, Section 22300 shall control.

9-4 AUDIT

The City or its representative shall have the option of inspecting and/or auditing all records and other written materials used by the Contractor in preparing its billings to the City as a condition precedent to any payment to the Contractor or in response to a construction claim or a Public Records Act (Government Code Section 6250 *et seq.*) request. The Contractor will promptly furnish documents requested by the City at no cost. Additionally, the Contractor shall be subject to State Auditor examination and audit at the request of the City or as part of any audit of the City, for a period of three and one-half years after Final Acceptance under the Contract. The Contractor shall include a copy of this Section 9-4 in all contracts with its Subcontractors, and the Contractor shall be responsible for immediately obtaining those records or other written material from its Subcontractors upon a request by the State Auditor or the City. If the Project includes other auditing requirements, those additional requirements will be listed in the Special Provisions.

SECTION 10. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

10.1 GENERAL

To ensure that solid waste generated in the City is reduced, reused or recycled, the Contractor shall submit a "Waste Management Plan" (WMP) to the Engineer for review and approval, using the form found at the end of this Section 10. After the WMP has been reviewed by the Engineer, it will be returned to the Contractor in one of the following four status conditions:

- "Approved"
- "Further Explanation Required": The Engineer will return the WMP to the Contractor with questions about the WMP. The Contractor shall resubmit plan with each of the City's questions answered thoroughly.
- "Denied": The Engineer will indicate the reasons for denial. The Contractor shall then re-submit a new WMP that complies with the requirements of this Section or request an Infeasibility Exemption.
- "Infeasibility Exemption Approved"

The Contractor shall follow the WMP and document results during demolition and construction. Final documentation shall be submitted at the end of the project to the Engineer for review of compliance with the original WMP. The amount deducted from the final estimate and retained by the City in accordance with Section 9.3.1 and 9.3.2 shall be withheld until final WMP is submitted to the City and approved by the City.

10-2 DEFINITIONS

- a) “Construction” means the building of any facility or structure or any portion thereof including any tenant improvements to an existing facility or structure.
- b) “Construction and Demolition Debris” means used or discarded materials removed from premises during construction of the Project.
- c) “Conversion Rate” means the rate set forth in the standardized Conversion Rate Table approved by the City Council pursuant to this Section for use in estimating the volume or weight of materials identified in a Construction and Demolition Waste Reduction and Recycling Plan.
- d) “Divert” means to use material for any purpose other than disposal in a landfill. Diversion credit is given for source reduction (waste reduction), recycling, and composting.
- e) “Diversion Requirement” means the diversion of at least 65% of the total Construction and Demolition Debris generated by a Project via reduction (source reduction), reuse or recycling, unless the Contractor has been granted an Infeasibility Exemption, in which case the Diversion Requirement shall be the maximum feasible diversion rate established by the Engineer.
- f) “Recycling” means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- g) “Renovation” means any change, addition, or modification in an existing structure.
- h) “Reuse” means further or repeated use of Construction or Demolition Debris. An example is the reuse of crushed concrete as road base or as aggregate on the construction site.
- i) “Salvage” means the controlled removal of Construction or Demolition Debris from project for the purpose of recycling, reuse, or storage for later recycling or reuse.
- j) “Construction and Demolition Waste Management Plan” means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor/Contractor for any Covered or Noncovered Project that indicates the estimated diversion that the Contractor/Contractor anticipates in diverting from disposal.
- k) “Construction and Demolition Waste Management Report” means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor for any Project that documents the disposal and diversion tonnages and destinations.

10-3 INFEASIBILITY EXEMPTION

- a) Application. If the Contractor experiences unique circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement, the Contractor shall apply for an exemption at the time that it submits the WMP. The Contractor shall indicate on the WMP the maximum rate of diversion the Contractor believes is feasible for each material and the specific circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement.
- b) The Engineer shall review the information supplied by the Contractor and may meet with the Contractor to discuss possible ways of meeting the Diversion Requirement. Based on the information supplied by the Contractor, the Engineer shall determine whether it is possible for the Contractor to meet the Diversion Requirement.
- c) If the Engineer determines that it is infeasible for the Contractor to meet the Diversion Requirement due to unique circumstances, the Engineer shall determine the maximum feasible diversion rate for each material and shall indicate this rate on the WMP submitted by the Contractor. The Engineer shall return a copy of the WMP to the Contractor marked "Infeasibility Exemption Approved."
- d) Denial of Exemption. If the Engineer determines that it is possible for the Contractor to meet the Diversion Requirement, the Engineer shall so inform the Contractor in writing. The Contractor will have 15 days to resubmit a new WMP. If the Contractor fails to resubmit a new WMP, or if the resubmitted WMP does not comply with the requirements of the plan, the Engineer shall deny the WMP.

10-4 DIVERSION PROGRAM

The methodology used to calculate diversion is based on the Title 14, California Code of Regulations, Article 6.1 Solid Waste Generation Study, Section 18722 et seq, and is consistent with California Integrated Waste Management Board measurement protocols. The following equation defines the "Generation-Based Diversion Quantification Methodology":

$$\begin{aligned}\text{Generation} &= \text{Disposal} + \text{Diversion} \\ \text{Diversion Rate (\%)} &= \frac{\text{Diversion Tons}}{\text{Generation Tons}}\end{aligned}$$

10-5 ADDITIONAL INFORMATION

Other materials to assist the Contractor in completing the WMP can be found on the City's website at www.citymb.info.

- Construction and Demolition Debris Recycling Guide
- Construction and Demolition Recycling Brochure

The California Integrated Waste Management Board has also developed Technical Assistance Literature regarding construction and demolition waste reduction and recycling, which is available on-line at <http://www.ciwmb.ca.gov/ConDemo/>.

CITY OF MANHATTAN BEACH
Construction & Demolition Waste Management Plan

Manhattan Beach Municipal Code 5.26 requires construction projects to reuse or recycle 65% of all construction site waste (All Demo & Roof tear-off projects, and All construction with a total value of \$100,000+). All haulers and contractors MUST have a business license in the City of Manhattan Beach.

REQUIRED GOAL: REUSE OR RECYCLE A MINIMUM OF 65% OF ALL PROJECT WASTE

Instructions:

1. Complete entire WMP & submit to the Project Manager as a project submittal.
2. Reuse and/or recycle at least 65% of all construction site waste and keep good records of all facility waste tickets.
3. Submit a copy of this WMP and ALL recycling and landfill facility weight tickets before Final Inspection to the Project Manager as a new project submittal. **A COPY OF THIS WMP AND RECEIPTS OF ALL RECYCLING AND DISPOSAL SHALL BE SUBMITTED BEFORE FINAL PAYMENT WILL BE MADE BY THE CITY.**

Fines for Non-Compliance (MBMC 5.26.020): Demo projects up to \$5,000 and Construction projects up to \$10,000

Project Name: _____

Project Address: _____

Type of Project: ☐ Street Improvement ☐ Water Main ☐ Sewer Main
 ☐ Storm Drain ☐ Other

Total Bid Price: \$ _____

Requesting Infeasibility Exemption: ☐ Yes ☐ No

Contractor Name: _____ **Contact Name:** _____

Address: _____ **Contact Phone:** _____

Recycler: _____ **Recycler Contact:** _____

Recycler Address: _____ **Recycler Contact Phone:** _____

	CITY USE ONLY	
	Application (Date)	Final (Date)
Approved	_____	_____
Further explanation needed (see attached)	_____	_____
Denied	_____	_____
Infeasibility Exemption Approved	_____	_____
Reviewed By	_____	_____

Submit this form and the attached Waste Management Plan Table to:

**Engineering Division
City of Manhattan Beach
3621 Bell Avenue
Manhattan Beach, CA 90266**

CITY OF MANHATTAN BEACH
Construction & Demolition Waste Management Plan Table

Project Name: _____

Total Estimated Waste Generated by Project: _____ (**IN TONS**).
(Ask your hauler, recycler or site cleanup vendor to assist you. Use receipts from your previous jobs for estimates.)

Complete and return with Building Permit Application				Complete and return with receipts prior to final building approval		
Material Type	Estimated Reused/ Recycled	Estimated Disposed/ Landfilled	Vendor or Facility to be Used (Destination)	Actual Reused/ Recycled	Actual Disposed/ Landfilled	Vendor or Facility Used (Destination)
Asphalt & Concrete						
Bricks/Masonry/Tiles						
Building Materials (doors, windows, fixtures, etc.)						
Cardboard						
Concrete Pavement and Grindings						
Drywall (new, unpainted)						
Asphalt Pavement Grindings						
Landscape Debris (Plant & Tree Trimmings)						
Scrap Metal						
Unpainted Wood & Pallets						
Other (painted wood & drywall, roofing, etc.)						
Mixed C&D*						
Trash/Garbage						
TOTAL						

*Mixed C&D is defined as a mixture of three or more materials (e.g., wood, drywall, roofing, etc.) from construction or demolition sites that will be taken to a "qualified" facility for recycling. (See C&D Debris Recycling Guide.)

If you are requesting an infeasibility exemption and the estimated amount reused/recycled is less than 65%, please explain why (attach additional sheets if necessary):

If the actual amount reused/recycled is less than 65%, please explain why:

Prepared by (please print): _____

Date: _____

Contractor Signature: _____

Phone Number: _____

Conversion Rates

The following conversion rates are estimates. The ranges vary widely, depending on how the materials are handled (compacted, loose, chipped, etc.). Use the conversion factors and receipts from any previous projects to help you estimate the potential amount of materials and diversion. Take into consideration the type and load of vehicles that will be used to haul the materials. Ask your hauler or recycler to assist you in estimating these numbers.

Material	Lbs/cy	Tons/cy
Asphalt	1,400 lbs/cy	0.7 tons/cy
Brick	2,430 lbs/cy	1.21 tons/cy
Cardboard	100 lbs/cy	0.05 tons/cy
Concrete	2,600 lbs/cy (Sources range from 1,000 to 4,000)	1.3 tons/cy
Dirt/Soils	2,660 lbs/cy	1.33 tons/cy
Drywall	700 lbs/cy	0.35 tons/cy
Wood (chipped)	300 – 650 lbs/cy	0.15 – 0.3 tons/cy
Mixed C&D Debris	900 lbs/cy	0.45 tons/cy
Mixed Waste/Trash	100 – 350 lbs/cy	0.5 – 0.175 tons/cy

SECTION 11. ADDITIONAL TERMS

11-1 NONDISCRIMINATORY EMPLOYMENT

The Contractor shall not unlawfully discriminate against any individual based on race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation or military and veteran status. The Contractor understands and agrees that it is bound by and will comply with the nondiscrimination mandates of all statutes and local ordinances and regulations.

11-2 NOTICE TO PROCEED

Upon award of the Contract and signing the Contract Documents, the City shall issue the Contractor a Notice to Proceed. The City will not authorize any Work to be done under these Contract Documents before the Contract has been fully executed. Any Work that is done by the Contractor in advance of such time shall be considered as being done at the Contractor's own risk and responsibility, and as a consequence will be subject to rejection.

11-3 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the final acceptance of the Work by the City as defined in Section 6-8.2 of the General Provisions, by written action of the Engineer, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part of the Work by the action of the elements, criminal acts, or any other cause. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the Work occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries or damages arising from the sole negligence or willful misconduct of the City, its officers, agents or employees. In the case of suspension of Work from any cause whatever, the Contractor shall be responsible for all materials and the protection of Work already completed, shall properly store and protect them if necessary, and shall provide suitable drainage and erect temporary structures where necessary.

11-4 PROCEDURE IN CASE OF DAMAGE TO PUBLIC PROPERTY

Any portions of curb, gutter, sidewalk or any other City improvement damaged by the Contractor during the course of construction shall be replaced by the Contractor at its own cost. The cost of additional replacement of curb, gutter or sidewalk in excess of the estimated quantities shown in the Bid form and Specifications, and found necessary during the process of construction (but not due to damage resulting from carelessness on the part of the Contractor during its operation), shall be paid to the Contractor at the unit prices submitted in its Bid.

11-5 REMOVAL OF INTERFERING OBSTRUCTIONS

The Contractor shall remove and dispose of all debris, abandoned structures, tree roots and obstructions of any character encountered during the process of excavation. It is understood that the cost of any such removals are made a part of the unit price bid by the Contractor under the item for excavation or removal of existing Work.

11-6 SOILS ENGINEERING AND TESTING

An independent certified materials testing firm must be retained by the Contractor to perform materials tests and applicable special inspections during the Contractor's entire operation to ascertain compliance with the Contract requirements. . If the initial tests do not meet the Contract requirements, the Contractor shall bear the cost of all subsequent tests.

The Contractor shall provide a copy of the testing and inspection reports to the Engineer within 24 hours upon receipt.

If the City requires other tests or more specific requirements for testing regarding this Project, those details will be included in the Special Provisions.

11-7 ACCESS TO PRIVATE PROPERTY

Unless otherwise stated in the Special Provisions, the Contractor shall be responsible for all fees and costs associated with securing permission to access private property for any portion of the Project.

11-8 WORKING DAYS AND HOURS

The Contractor shall do all Work between the hours of 7:30 a.m. to 4:30 p.m., Monday through Friday. No Work will be allowed on Saturday, Sunday or City holidays listed on the City's website unless specifically mentioned in the Contract Documents or authorized by the City Engineer.

In addition, no Work will be allowed on any special election Day that may be declared. Should a special election Day be declared, a time extension of one Working Day will be granted for each such Day.

A permit may have other hours or Days for the Contractor to do the Work, and those hours and Days shall supersede any hours and Days written in this Section.

Whenever the Contractor is permitted or directed to perform night Work or to vary the period during which Work is performed during the Working Day, the Contractor shall give 24 hours' notice to the Engineer so that inspection may be provided. Also, a charge may be made to the Contractor for approved overtime or weekend inspections requested by the Contractor.

In the event that the Contractor exceeds the hours of work requirement without prior approval from the Engineer, only one verbal and one written warning will follow. Thereafter, any subsequent exceedance of authorized work hours will be assessed liquidated damage at \$200.00 per occurrence and will be deducted from the Contract amount.

11-9 CLAIM DISPUTE RESOLUTION

In the event of any dispute or controversy with the City over any matter whatsoever, the Contractor shall not cause any delay or cessation in or of Work, but shall proceed with the performance of the Work in dispute. The Contractor shall retain any and all rights provided that pertain to the resolution of disputes and protests between the parties. The Disputed Work will be categorized as an "unresolved dispute" and payment, if any, shall be as later determined by mutual agreement or a court of law. The Contractor shall keep accurate, detailed records of all Disputed Work, claims and other disputed matters.

All claims arising out of or related to the Contract Documents or the Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code Section 810 *et seq.*) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 *et seq.* (Article 1.5), where applicable. The Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and Article 1.5 (if applicable), and must then adhere to Article 1.5 and Section 9204, as applicable, pursuant to the definition of "claim" as individually defined therein.

11-10 THIRD PARTY CLAIMS

The City shall have full authority to compromise or otherwise settle any claim relating to the Project at any time. The City shall timely notify the Contractor of the receipt of any third-party claim relating to the Project. The City shall be entitled to recover its reasonable costs incurred in providing this notice.

11-11 COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable federal, State and local laws, ordinances, codes and regulations in force at the time the Contractor performs pursuant to the Contract Documents.

11-12 CONTRACTOR'S REPRESENTATIONS

By signing the Contract, the Contractor represents, covenants, agrees, and declares under penalty of perjury under the laws of the State of California that: (a) the Contractor is licensed, qualified, and capable of furnishing the labor, materials, and expertise necessary to perform the services in accordance with the terms and conditions set forth in the Contract Documents; (b) there are no obligations, commitments, or impediments of any kind that will limit or prevent its full performance under the Contract Documents; (c) there is no litigation pending against the Contractor that could adversely affect its performance of the Contract, and the Contractor is not the subject of any criminal investigation or proceeding; and (d) to the Contractor's actual knowledge, neither the Contractor nor its personnel have been convicted of a felony.

11-13 CONFLICTS OF INTEREST

The Contractor agrees not to accept any employment or representation during the term of the Contract or within 12 months after acceptance as defined in Section 6-8.2 of the General Provisions that is or may likely make the Contractor "financially interested," as provided in Government Code Sections 1090 and 87100, in any decisions made by the City on any matter in connection with which the Contractor has been retained pursuant to the Contract Documents.

11-14 APPLICABLE LAW

The validity, interpretation, and performance of these Contract Documents shall be controlled by and construed under the laws of the State of California, excluding California's choice of law rules. Venue for any such action relating to the Contract shall be in the Los Angeles County Superior Court.

11-15 TIME

Time is of the essence in these Contract Documents.

11-16 INDEPENDENT CONTRACTOR

The Contractor and Subcontractors shall at all times remain, as to the City, wholly independent contractors. Neither the City nor any of its officials, officers, employees or agents shall have control over the conduct of the Contractor, Subcontractors, or any of their officers, employees, or agents, except as herein set forth, and the Contractor and Subcontractors are free to dispose of all portions of their time and activities that they are not obligated to devote to the City in such a manner and to such Persons that the Contractor or Subcontractors wish except as expressly provided in these Contract Documents. The Contractor and Subcontractors shall have no power to incur any debt, obligation, or liability on behalf of the City, bind the City in any manner, or otherwise act on behalf of the City as agents. The Contractor and Subcontractors shall not, at any time or in any manner, represent that they or any of their agents, servants or employees, are in any manner agents, servants or employees of the City. The Contractor and Subcontractors agree to pay all required taxes on amounts paid to them under the Contract, and to indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract Documents. The Contractor shall include this provision in all contracts with all Subcontractors.

11-17 CONSTRUCTION

In the event of any asserted ambiguity in, or dispute regarding the interpretation of any matter herein, the interpretation of these Contract Documents shall not be resolved by any rules of interpretation providing for interpretation against the party who causes the uncertainty to exist or against the party who drafted the Contract Documents or who drafted that portion of the Contract Documents.

11-18 NON-WAIVER OF TERMS, RIGHTS AND REMEDIES

Waiver by either party of any one or more of the conditions of performance under these Contract Documents shall not be a waiver of any other condition of performance under these Contract Documents. In no event shall the making by the City of any payment to the Contractor constitute or be construed as a waiver by the City of any breach of covenant, or any default that may then exist on the part of the Contractor, and the making of any such payment by the City shall in no way impair or prejudice any right or remedy available to the City with regard to such breach or default.

11-19 TERM

The Contract is effective as of the Effective Date listed, and shall remain in full force and effect until the Contractor has fully rendered the services required by the Contract Documents or the Contract has been otherwise terminated by the City. However, some provisions may survive the term listed within this Section, as stated in those provisions.

11-20 NOTICE

Except as otherwise required by law, any notice or other communication authorized or required by these Contract Documents shall be in writing and shall be deemed received on (a) the day of

delivery if delivered by hand or overnight courier service during the City's regular business hours or (b) on the third business day following deposit in the United States mail, postage prepaid, to the addresses listed on the Contractor's Bid and City Hall, or at such other address as one party may notify the other.

11-21 SEVERABILITY

If any term or portion of these Contract Documents is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of these Contract Documents shall continue in full force and effect.

SPECIAL PROVISIONS

PART I: SPECIAL INSTRUCTIONS

A. SEQUENCE OF WORK

Contractor shall submit to the City for approval a Sequence of Work plan that minimizes impacts to traffic flow due to closures and minimizes impacts to business and residents. The City shall approve this Sequence of Work plan before work begins.

B. NOTIFICATION OF RESIDENTS

1. Contractor shall create a notification of work to be performed on this project and deliver these notifications to each resident within a 500-foot radius of the work a minimum of seven days prior to the start of construction. The notification shall include, at a minimum, the dates and times work shall be performed in the vicinity of the residence for the duration of the project. The Contractor must submit the draft notice that will be distributed to residents to the City for review and approval prior to distribution of the notice and a minimum of fifteen working days prior to the start of Work.
2. Contractor shall create a notification of work to be performed on this project and deliver these notifications to each resident impacted by the week's work on a weekly basis within a 500-foot radius of the work. The notification shall include, at a minimum, the dates and times work shall be performed in the vicinity of the residence. The Contractor must submit the draft notice that will be distributed to residents to the City for review and approval prior to distribution of the notice and a minimum of fifteen working days prior to the start of Work.

C. SOIL CONDITIONS

Contractor shall be aware that the soil conditions in the project area are very sandy and collapsible. Contractor shall use appropriate construction methods for this soil type when installing foundations, conduit, and any other below-ground equipment.

D. HOUSEKEEPING REQUIREMENTS

1. Do not store material or equipment at the job site(s). Maintain all job sites in neat and orderly condition at all times, with allowance for pedestrian access compliant with Americans with Disabilities Act and California Title 24 requirements.

E. TRAFFIC CONTROL

1. The Contractor shall maintain all existing pedestrian and vehicular access to all businesses and residences adjacent to the Project site at all times throughout the duration of the completion of the Work.
2. The Contractor shall obtain a City Permit for work performed in the right-of-way, and provide the City with evidence of insurance coverage in compliance with section 7-3 "Insurance" in the General Provisions of the Specifications for this project.
3. It is the responsibility of the Contractor performing work on a public street to install and maintain the traffic control devices according to "Work Area Traffic Control Handbook"

(WATCH), latest edition, to insure the safe movement of traffic and pedestrians through or around the work area and provide maximum protection and safety to construction workers. The Contractor shall submit a traffic control plan for approval prior to start of work.

4. For the duration of the onsite Work, two (2) electronic changeable message board shall be procured, placed, and maintained to notify oncoming traffic of the Work in each direction on Sepulveda Blvd. The Contractor must submit an exhibit with the proposed locations to the City for review and approval prior to the placement of the message boards. The Contractor must submit the message that will be displayed on the message boards to the City for review and approval prior to the placement of the message boards.
5. FLASHING ARROW BOARD(S) ARE MANDATORY FOR LANE CLOSURES ON MAJOR STREETS. They shall operate until traffic control is removed.
6. All travel lanes shall be open between 5:00 a.m. and 8:30 a.m. and between 3:30 p.m. and 9:00 p.m. One travel lane in each direction shall be open at all times between 8:30 a.m. and 3:30 p.m. unless otherwise indicated on plan. Flaggers may be used if one lane in each direction cannot be kept open with the approval of the Engineer. All traffic lanes shall be open before and after work hours.
7. All open trenches shall be covered with non-skid steel plates or temporary asphalt pavement before and after work hours.
8. All signs, delineators, barricades, etc., shall conform to the "California Manual of Uniform Traffic Control Devices" (MUTCD), latest edition, and the "WATCH", latest edition. All barricades shall be equipped with flashing/steady burn warning lamps at night. All cones, delineators, barricades, and "k" rail shall be reflectorized. All traffic control shall be kept in their proper position at all times, and shall be repaired, replaced, or cleaned as necessary to preserve their appearance and continuity. Any devices not part of the required traffic control or detours shall be removed from the view of the travelling public immediately.
9. The Contractor shall notify the MTA Bus Stops and Zones Dispatcher and any other affected transit services at least two working days prior to construction and any potential impacts to the execution of transit services, including transit stop locations and transit routes. Evidence of such notification shall be submitted to the City at least two working days prior to construction and any impacts. Submit evidence of this notification to the Engineer immediately.
10. Where necessary, properly post "TEMPORARY NO PARKING ANYTIME" signs at least 72 hours before start of work. The type of sign and information included on the sign shall conform to the requirements included in the Right-of-Way Permit issued by the City. The Contractor shall notify the Police Department immediately upon posting signs.
11. Vehicular and pedestrian access to adjacent properties shall be provided at all times. Closed sidewalks shall be posted with "SIDEWALK CLOSED" signs at each approach to the closure and an alternate route that is approved by the City provided.
12. Protect traffic signal detectors in place or replace within 5 calendar days of final paving. All detectors damaged by the work shall be replaced to the standards of the City Public

Works Department.

13. Notify the Public Works Inspector at (310) 802-5306, at least 48 hours prior to any construction in right-of-way. Notify Fire and Police Dispatch at (310) 545-4566 prior to starting work or closing lanes/streets every day.
14. Contractor shall coordinate all work in the vicinity of schools with the school administrators to minimize construction impacts on special dismissal and school event days.
15. Any revisions to the traffic control plans or requirements require approval by the Engineer.
16. The Contractor shall be responsible for the establishment, maintenance and decommission when considered appropriate by the Engineer of the following:
 - a. Protection and restoration of existing improvements: Contractor shall protect, relocate, repair, replace or re-establish all existing improvements within the project limits which are not designated for removal (i.e. signs, markings, striping, posts, curb, gutter, sidewalk, ADA detectable warning devices, asphalt, plants, grass, irrigation infrastructure, fences, walls, structures, survey control monumentation, etc.) which are damaged or removed as a result of its operations or as required by the Plans and Specifications. Relocations, repairs, replacements or re-establishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions at contractor's expense to the satisfaction of the Engineer.
 - b. Paths of travel: Contractor is required to provide a pedestrian management plan to show how pedestrians are detoured around each construction area

F. REQUESTS FOR TREE TRIMMING OR REMOVAL

The Contractor shall protect in place all existing trees. If there is a need to trim or remove a tree due to safety concerns associated with the installation of the scaffolding, requests to remove or trim a tree will be reviewed by the Engineer on a case by case basis. The Contractor must submit requests to remove or trim a tree at the time of the submission of the submittal for the scaffolding design; however, this request is not a submittal and must be submitted as a separate document.

G. CONTRACTOR'S DAILY REPORT

The Contractor shall submit a completed "Contractor's Daily Report to City" form to the Engineer every working day by 5:30 p.m. See the following page for the form to be submitted by Contractor.

CONTRACTOR'S DAILY REPORT TO CITY

(Only the Contractor's Foreman or Superintendent is authorized to complete this form)

Project Name: _____ Project Location: _____
Date: _____ Report No: _____ Start Time: _____ End Time: _____

Contractor's foreman / Superintendent: _____
Name _____ Signature _____

Work accomplished

Equipment on site

Hours

Equipment on site	Hours

Workers on site

Classification

Hours

Company

Workers on site	Classification	Hours	Company

Note: it is the responsibility of the Contractor to provide this completed form to the City every working day by 5:30 p.m. without fail. Failure to do so may result in the corresponding payment application processing to be delayed.

PART II: STANDARD AND SPECIAL TECHNICAL PROVISIONS

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SECTION 01 00 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 WORK UNDER THIS CONTRACT

- A. The Contractor shall furnish all labor, equipment and materials as required by these specifications for a 0.3 MG elevated steel tank located at 1431 6th Street, Manhattan Beach, CA 90266. The central pier is founded on a 20-foot square cone footing, whereas outer columns are founded on approximately 14-foot square footings. Bottom of the footings for the elevated tank are buried at approximately seven feet below existing finish grade. The tank was built in the 1950's. (The dimensions are approximate only and shall be field verified by the Contractor prior to bidding.)

	<u>Tank</u>	<u>Capacity</u>	<u>Elevation</u>
1.	Block 35 Elevated Tank	300,000 Gallons	128 ft. Ht.

- B. Work to be performed includes application of protective coatings to interior surfaces and paints to exterior surfaces, including containment, surface preparation, handling of hazardous and non-hazardous materials/wastes, disinfection of interior surfaces and additions, replacement and modification of miscellaneous structural items to bring the structure into compliance with current safety and health codes, standards and regulations and other work necessary to accomplish the approved end result of totally protected and usable structures, including attachments, accessories and appurtenances. The following items are required, except as otherwise noted, generally as follows:

1. Remove all interior coatings of the tank and riser grating by abrasive blast cleaning, excluding the interior of the tank riser.
2. Apply a 100% solids epoxy coating system to all interior surfaces.
3. Electrically detect epoxy coating system noted in 2. above and repair as required.
4. Cure interior epoxy coating as specified herein.
5. Test, handle, and dispose of hazardous and non-hazardous coating wastes in conformance to all regulations, including providing documentation of environmental compliance with regard to disposal of all waste streams.
6. Apply a flexible sealant to inaccessible voids as designated by the Engineer including, but not limited to, all roof lap seams.
7. Wash down and disinfect all interior surfaces. The washdown water shall be collected and disposed of off-site or may be disposed of in the local storm drain if a permit is obtained by the Contractor.
8. Contain the complete exterior of the tank and structure.
9. Remove all exterior paint from the complete exterior of the tank, riser, support

structure, piping, appurtenances, center vent cover, antenna supports, and exposed concrete footing pads and bolted connections by abrasive blast cleaning or other approved method.

10. Apply specified primer to complete exterior surfaces noted in 9. above.
11. Apply intermediate and finish coats of paint to complete exterior surfaces noted in 10. above.
12. Test, handle, and dispose of hazardous and non-hazardous wastes generated from exterior painting operations in conformance to all regulations, including providing documentation of environmental compliance with regard to disposal of all waste streams.
13. Remove and dispose of center vent screening prior to coating interior and install new screening after completion of interior coating and exterior painting.
14. Remove and dispose of existing clips for the fall protection system and install new tie-off anchors at designated locations and furnish designated safety equipment to the City.
15. Remove and dispose of the existing roof hatch and furnish and install a new 36" x 36" lockable roof hatch with aluminum cover at existing location. Hatch must be aligned with the interior ladder in a manner that allows a person safe access to the ladder.
16. Furnish and install a personal fall prevention system on the interior ladder and furnish and install isolators at all ladder to brace connections.
17. Remove and dispose of the existing ladder platform, structure, and guardrail below the tank bowl. Furnish and install a new platform, structure, guardrail, and safety chains at existing location and in accordance with the plans.
18. Remove and dispose of both existing exterior ladders from the ground level to the tank catwalk. Furnish and install new exterior ladder from the ground level to the ladder platform and from the ladder platform to the tank catwalk. Relocate the existing vandal guard to the new ladder. Work includes modifying the guardrail at the ladder entrance onto the catwalk.
19. Remove and dispose of existing fall prevention cable system on all three exterior ladders. Furnish and install new certified fall prevention cable system on all three exterior ladders. Provide two harnesses and two safety shuttles for accessing the safety cable systems.
20. Furnish and install additional catwalk supports at the midpoint of the catwalk between each support leg and adjacent ladder.
21. Remove and dispose of existing FAA lighting system and furnish and install a new FAA lighting system with dual switches and back-up lighting.
22. Remove and dispose of the existing lights and all abandoned conduit on the

exterior tank catwalk. All conduit associated with the lights shall be removed from the catwalk to the breaker at ground level.

23. Furnish and install screening and frames to cover the gap between the bottom of the tank bowl and the topside of the lateral gusset plates.
24. Remove and dispose of abandoned conduit on the tank structure and on top of the tank. Work shall include cleaning up and organizing the existing conduit on top of the tank.
25. Furnish all labor, materials, and equipment to have a City approved laboratory collect VOC and Bac-T water samples and perform lab analysis. The approved certified lab selected by the Contractor is responsible for sampling, analysis and providing analysis report to City for review.
26. Furnish all labor, materials, and equipment to have an independent certified materials testing firm remove eight representative samples of soil from the site within the boundaries of the proposed scaffolding prior to start of work. Testing shall include lead, zinc, and chromium to ensure soil does not contain excessive levels of noted heavy metals.
27. Furnish all labor, materials, and equipment to have an independent certified materials testing firm remove eight representative samples of soil from the site from the same locations as the soil samples taken for #26 after the completion of construction. Testing shall be accomplished by the same laboratory as the original testing under requirements of Title 22. Testing shall include lead, zinc, and chromium to ensure soil does not contain excessive levels of noted heavy metals.

SCHEDULE A - ADDITIVE ITEMS

Determination regarding whether Schedule A – Additive Items will be included in the Contract will be made at the time of award.

- A1. Furnish all labor, materials, and equipment to use dehumidification system for interior work, including curing of coatings, in accordance with the specifications.
- A2. Fill or weld plates over excessively pitted or perforated areas, as determined necessary by the Engineer.
- A3. Furnish all labor, materials, and equipment to abrasively blast clean severely corroded areas, as determined necessary by the Engineer.
- A4. Excessively corroded areas on the structural members that comprise of sharp edges from sandblasting shall be ground smooth and rounded, as determined necessary by the Engineer.
- A5. Apply specified City lettering and logo on the tank, per Appendix IV: City Logo and Lettering Requirements. The product specified for the logo and lettering is 3M IJ180, which is a self-adhesive pressure sensitive vinyl graphic wrap, or approved equal. This bid item shall include all labor, materials, and equipment

necessary to procure and install the specified lettering and logo on the tank after all required coatings have been applied. The lettering and logo shall be applied per the manufacturer's instructions and requirements. The Contractor must submit shop drawings, product data, and installation instructions to the Engineer for approval prior to installation. Proof of product warranty must be submitted upon installation.

- A6. Remove and dispose of the existing exterior tank bowl ladder and furnish and install a new exterior ladder on the tank bowl, if determined necessary by the Engineer.
 - A7. Replace severely corroded tension rods and/or overflow stand-off braces, as determined necessary by the Engineer.
 - A8. Replace severely corroded sections of the catwalk floor plates, as determined necessary by the Engineer.
 - A9. Drill additional drain holes in the tank catwalk floor plates at locations determined necessary by the Engineer.
 - A10. Remove and dispose of the existing catwalk guardrailing and furnish and install all new guardrailing, in accordance with the plans and as determined necessary by the Engineer.
- C. Surfaces not to be painted include fencing, liquid level indicator accessories, glass, plastic, nameplates, communication equipment and other surfaces on which coatings or paints would not adhere or would interfere with operation of specific item.
- D. If severely corroded or damaged areas are discovered during the course of abrasive blast cleaning operations, the Contractor shall notify the Engineer or authorized representative. Welding and repair of severely corroded areas of tank and other mechanical repairs may be required during project.
- 1. The Contractor shall allow the City access to make tank repairs. The City reserves the option to repair the tank structure with:
 - a. Change order to the contract.
 - b. City employees.
 - c. A separate Contractor.
 - d. Any combination of the above.
 - 2. A time extension will be issued should structural repairs preclude abrasive blast cleaning and/or coating or paint application. Preparation work shall continue while tank repairs are being made. The time extension will assume the Contractor will be able to re-mobilize and begin coating and painting within two weeks of notification. No additional time will be granted to permit the Contractor to complete other projects prior to this project.

1.2 REFERENCE SPECIFICATIONS AND STANDARDS

- A. Without limiting the general aspects or other requirements of this specification, work and equipment shall conform to applicable requirements of municipal, state and federal codes, laws and ordinances governing the work, manufacturer's printed instructions, subject to Engineer's approval.
- B. The Engineer's decision shall be final as to interpretation and/or conflict between any of the referenced codes, laws, ordinances, specifications and standards contained herein.
- C. Exterior and possibly interior coatings are known to contain California Title 22, Heavy Metals, in the dried film; the following regulatory requirements shall be applicable at a minimum:
 - 1. 29 CFR 1910 "OSHA General Industry Standards"
 - 2. 29 CFR 1910.134, "Respiratory Protection"
 - 3. 29 CFR 1910.1000, "Air Contaminants – Permissible Exposure Limits"
 - 4. 29 CFR 1910.1020, "Employee Access to Exposure and Medical Records"
 - 5. 20 CFR 1926, "OSHA Construction Industry Standards"
 - 6. 29 CFR 1926.59 "Hazard Communication"
 - 7. 29 CFR 1926.62, "Lead Exposure in Construction; Interim Final Rule"
 - 8. 40 CFR 261, "Identification and Listing of Hazardous Waste"
 - 9. 40 CFR 262, "Standards Applicable to Generators of Hazardous Waste"
 - 10. 40 CFR 263, "Standards Applicable to Transporters of Hazardous Waste"
 - 11. 40 CFR 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, Disposal Facilities"

Independent laboratory analysis of the existing exterior coatings has been performed by companies authorized to do so by the Engineer. The results of this analysis have identified approximately 100,000 mg/kg of lead in the dried film. This disclosure is to be used for informational purposes only and is not intended to be the basis for the Contractor's heavy metal work scope. Furthermore, this disclosure shall not preclude the Contractor from performing additional testing as deemed necessary by the Contractor to fully understand the exact constituency of heavy metals on all interior and exterior surfaces of the tank and structure. The Contractor's bid package will include the results of the Contractor's paint sampling.

1.3 DEFINITIONS

- A. The following pairs of words shall be considered identical in meaning and may be used interchangeably: "City" and "Owner"; "General Conditions" and "General Provisions"; "Drawings" and "Plans"; "Standard Drawings" and "Standard Plans".
- B. The City referred to in these specifications is City of Manhattan Beach. Engineer shall be person or persons as designated by the City.
- C. The definition of the word "Engineer" contained herein is: The person authorized by the City to oversee the execution of the contract, acting either directly or through his properly authorized agents, each agent acting only within the scope of authority delegated to him.

1.4 HOURS OF WORK

- A. The Contractor's activities shall be confined to an eight-hour shift between the hours of 7:30 a.m. and 4:30 p.m. Monday through Friday, excluding City-designated holidays. Deviation from these hours will not be permitted without the prior consent of the Engineer, except in emergencies involving immediate hazard to persons or property.
- B. In the event of either a requested or emergency deviation, inspection service fees for City personnel and any third-party inspector will be charged against the Contractor. The service fees will be calculated at full overtime rates including benefits, overhead, and travel time. The service fees will be deducted from any amounts due the Contractor. Charges will be made for any change to extraordinary work hours, including standby time due to late crew arrival or "no-show" by crew.
- C. Inspection hours made necessary as a result of the Contractor's crew working over forty hours per week must be scheduled and approved by City and paid for by Contractor at the prevailing rate for overtime. Inspections requested by or made necessary as a result of actions by the Contractor on Saturdays, Sundays or holidays must be scheduled and approved by City and paid for by Contractor at the prevailing rate for overtime or holiday work.
- D. Contractor shall perform all modifications, interior surface preparation and coating application utilizing a minimum of two (2) blast nozzles per shift, working a minimum of one (1) eight (8) hour shift per day, for duration of all interior work.

1.5 COMPLETION OF WORK

Contractor will commence work on date specified in the Notice to Proceed to be issued to said Contractor by the Public Works Department of City and will complete work on the Project within 150 (one hundred fifty) Working Days after the date of Notice to Proceed with Preconstruction Requirements.

1.6 EXTRA WORK

- A. The City may, as the need arises, order changes in work through additions, deletions, or modifications, without invalidating the Contract. Such changes will be affected through written change orders delivered to the Contractor describing the change required in the work, together with any adjustment in contract price or time of completion as hereinafter provided. No such change shall constitute the basis of claims for damages or anticipated profits; however, the Engineer will make reasonable allowance for the value of any work, materials, or equipment furnished and subsequently rendered useless because of such change. Any adjustment in Contract price resulting from a change order will be considered in computing subsequent monthly payments due the Contractor. Any work performed in accordance with a change order shall be subject to all provisions of the original Contract, and the Contractor's sureties shall be bound thereby to the same degree as under the original Contract. The Contractor will not receive payment for extra work performed unless said extra work is ordered in writing.
- B. Any adjustment in contract price shall be based on unit price bid items or additive and deductive bid items submitted by the Contractor in his original bid on the work where such bid items are applicable, or time and material rates established at the

Pre-Construction Conference.

1.7 QUALITY ASSURANCE

- A. General: Quality assurance procedures and practices shall be utilized to monitor all phases of surface preparation, application and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and acceptable professional standards and are approved by the Engineer.
- B. All materials furnished and all work accomplished under the Contract shall be subject to inspection by the Engineer. The Contractor shall be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship, and diligent execution of the Contract.
- C. Work accomplished in the absence of prescribed inspection may be required to be removed and replaced under the proper inspection, and the entire cost of removal and replacement, including the cost of all materials which may be furnished by the City and used in the work thus removed, shall be borne by the Contractor, regardless of whether the work removed is found to be defective or not. Work covered up without the authority of the Engineer or Inspector, shall, upon order of the Engineer, be uncovered to the extent required, and the Contractor shall similarly bear the entire cost of accomplishing all the work and furnishing all the materials necessary for the removal of the covering and its subsequent replacement, as directed and approved by the Engineer.
- D. Except as otherwise provided herein, the cost of inspection will be paid by the City.
- E. The Engineer will make, or have made, such tests as he deems necessary to assure the work is being accomplished in accordance with the requirements of the Contract. Unless otherwise specified in the Special Conditions, the cost of such testing will be borne by the City. In the event such tests reveal non-compliance with the requirements of the Contract, the Contractor shall bear the cost of such corrective measures deemed necessary by the Engineer, as well as the cost of subsequent retesting and re-inspection. It is understood and agreed the making of tests shall not constitute an acceptance of any portion of the work, nor relieve the Contractor from compliance with the terms of the Contract.
- F. The Contractor is responsible for minimizing any disruption to the local residents. Equipment placement shall be designed to minimize noise and all non-hazardous debris (including water mist) must be contained within the perimeter of the site. Equipment placement and containment efficiency must be pre-approved by the Engineer prior to full scale production.
- G. Containment: The Contractor shall conduct all operations so as to confine dust, debris, water mist, overspray, dry spray, roller spatter and all other fugitive emissions to within the bounds of the site. The Contractor shall take all precautions necessary to prevent adverse off-site consequences of the surface preparation and painting operations, and shall submit at the Pre-Job Conference a procedure for damage prevention.
 - 1. The containment/damage prevention plan devised by the Contractor must include the specific type and design of the physical containment structure that the

Contractor intends to employ. This containment structure must be designed and constructed to achieve 100% containment of dust, debris, water mist, overspray, dry spray, roller spatter and fugitive emissions. At a minimum, the containment system shall be designed to meet the requirements of a Class 3W System as defined per SSPC Technical Guide 6. Class 3W Containment Systems are permitted to have an open seamed entry and partially sealed joints. The Contractor is required to configure seams and entry points to achieve 100% containment.

- H. Warranty Inspection: Warranty inspection shall be conducted between the eleventh and sixteenth months following completion of all work and filing of the Notice of Acceptance. The draining of the tank will be accomplished when there will be minimum inconvenience to the City. All personnel present at the Pre-Construction Conference should be present at this inspection. All defective work shall be repaired in strict accordance with this specification and to the satisfaction of the Engineer.
1. Notification: The City shall establish the date for the inspection and shall notify the Contractor at least 30 days in advance. The City will drain the tank and Contractor shall provide, at his own expense, suitable lighting, scaffolding and ventilation for the inspection. At the City's option, warranty inspection for interior surfaces may be accomplished by diving operations with tank in service.
 2. Interior Inspection: The entire interior coating systems shall be visually inspected as specified in 1.7 QUALITY ASSURANCE. All defective coating as well as damaged or rusting spots of the tank shall be satisfactorily repaired by and at the sole expense of the Contractor. All repaired areas shall then be electrically tested as specified in the above-mentioned section and repair/electrical testing procedure repeated until surface is acceptable to the Engineer.
 3. Exterior Inspection: The entire exterior paint systems shall be visually inspected as specified in 1.7 QUALITY ASSURANCE. All defective paint as well as damaged or rusting spots of the tank and/or structural members shall be satisfactorily repaired by and at the sole expense of the Contractor. All repaired areas shall then be again inspected as specified in the above-mentioned section and repair procedure repeated until surface is acceptable to the Engineer.
 4. Structural Inspection: The entire work shall be visually inspected as specified. All defective work shall be satisfactorily repaired by and at the sole expense of the Contractor.
 5. Inspection Report: The Engineer shall prepare an inspection report covering the first anniversary inspection, setting forth the number and type of, defects observed, failures observed, the percentage of the surface area where failure has occurred, and the names of the persons making the inspection.
 6. Schedule: Upon completion of inspection and receipt of Inspection Report as noted herein, City shall notify Contractor of results of inspection and establish a date for Contractor to proceed with remedial work. Any delay on part of Contractor to meet schedule may cause City to proceed to have defects remedied by others as outlined under General Provisions.

7. Remedial Work: The Contractor shall make repairs at all points where defects are observed by removing the defective work and repairing or replacing it to bring the item into total conformance to the original specification. Any location where coating or paint has peeled, bubbled, or cracked and any location where rusting is evident shall be considered to be a failure of the system. The Contractor shall make repairs at all points where failures are observed by removing the deteriorated coating or paint, cleaning the surface, and reapplying the same system per original specification. If the area of failure exceeds 25 percent of a specific coated or painted surface, the entire applied system may be required to be removed and reapplied based on the City's sole judgment in accordance with the original specification.
 - a. Specific coated surfaces are defined as follows:
 - (1) Underside of Roof and Structural Members
 - (2) Shell
 - (3) Bottom
 - (4) Attachments, Accessories and Appurtenances
 - (5) Flexible Sealants
 - b. Specific painted surfaces are defined as follows:
 - (1) Roof
 - (2) Shell
 - (3) Structural Members
 - (4) Attachments, Accessories and Appurtenances
 - (5) Flexible Sealants
8. Upon completion of warranty remedial repairs, Contractor shall wash down and disinfect tank as originally specified.
9. Costs: All noted costs for Contractor's inspection and all costs for repair shall be borne by the Contractor and in figuring his bid, the Contractor shall include an appropriate amount for testing and repair as no additional allowance will be paid by the City for said inspection and repair.

1.8 SAFETY AND HEALTH REQUIREMENT

- A. Contractor shall submit a notarized letter signed by a principal officer of the Corporation or City certifying the Contractor fully complies with Federal and State Regulations pertaining to the work including, but not limited to, the following. Review of Contractor's safety plan by Engineer does not imply that City accepts responsibility for such plans or safety activities.

1.	Illness Injury Prevention Program	CSO/GISO	1508/3203
2.	Code of Safe Practice	CSO	1509(B)
3.	Confined Space Plan	GISO	5156/5159
4.	Heat Illness Prevention	GISO	3395
5.	Fall Protection Plan	CSO	1671.1
6.	Respiratory Protection	CSO/GISO	1531/5144
7.	Hazard Communication	GISO	5194
8.	Lead-Based Paint Compliance Plan	CSO	1532
9.	Rolling Scaffolds	CSO	1646
10.	Employee Safety Instruction	CSO	1510
11.	Emergency Medical Service	CSO	1512
12.	Dusts, Fumes, Mists, Vapors & Gases	CSO	1528

B. General: Contractor assumes the responsibility to accomplish all work in a safe and prudent manner, and to conform to all applicable safety requirements, regulations and guidelines of federal, state and local regulatory agencies, as well as applicable manufacturer's printed instructions and appropriate technical bulletins and manuals. Without in any way limiting that responsibility or assuming responsibility for safety, the City is particularly concerned that the following are strictly observed:

1. Life Saving Equipment: Contractor shall provide and require use of personal protective life saving equipment for all its personnel working in or about the project site.
2. Access Facilities: All ladders, scaffolding and rigging shall be designed for their intended uses and meet Cal/OSHA regulations. Ladders and scaffolding shall be supplied and erected as requested by Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer.
3. Ventilation: Contractor shall ensure there is proper ventilation, air eduction and exhausting of work space to reduce the concentration of lead-laden air contaminants to a level which poses no hazard to personnel at or near the job site. Air circulation and exhausting of solvent vapors shall be continued until coatings and paints have fully cured. If conventional blast cleaning is accomplished, total containment during blast cleaning and coating and paint application operations is mandatory. The exhaust blower or dehumidification equipment capacity shall be sufficient to maintain air changes within containment interior in accordance with Cal/OSHA, coating and paint manufacturer's recommendations and local Air Quality Management District regulations, subject to Engineer's review.
 - a. Exhaust blower shall exhaust into an Engineer-reviewed structure that

precludes the exhausting of lead-laden paint chips or particulate matter onto the site or into the atmosphere.

- b. Where ventilation is used to control hazardous exposure, all equipment shall be explosion proof, of industrial design and shall be approved by the Engineer. Household-type venting equipment will not be acceptable. Ventilation shall reduce the concentration of air contaminant to the degree a hazard does not exist by educting air, vapors, etc. from the confined space.
 - c. Ventilation system shall be furnished and installed by the Contractor in accordance with these specifications. The Contractor shall make modifications to the ventilation system as required by Cal/OSHA to ensure a safe working environment and complete removal of all contaminated vapors.
4. Head and Face Protection and Respiratory Devices: Equipment shall include protective helmets that shall be worn by all persons while in the vicinity of the work. During abrasive blasting operations, nozzle men shall wear U.S. Bureau of Mines approved positive pressure air-supplied helmets and all other persons who are exposed to blasting dust shall wear respiratory protection. If coatings are hazardous, additional protection will be worn as determined necessary by the exposure assessment of the Certified Industrial Hygienist.
- a. When and where required, positive pressure air-fed hoods and/or masks shall be supplied by an air source currently certified to produce "Class D Breathing Air". Contractor shall, at all times during the work, maintain on-site current documentation to substantiate the quality of the breathing air.
 - b. Barrier creams shall be used on any exposed areas of skin.
5. Grounding: Welding leads, all hoses and related equipment shall be grounded to prevent accumulation of charges of static electricity.
6. Illumination: Sparkproof artificial lighting shall be provided for all work in confined spaces. Light bulbs shall be guarded to prevent breakage. Lighting fixtures and flexible cords shall comply with the requirements of NFPA 70 "National Electric Code" for the atmosphere in which they will be used. Whenever required by the Engineer, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the Engineer.
7. Toxicity and Explosiveness: The maximum allowable concentration of vapor shall be kept below the maximum safe concentration for eight-hour exposure, plus lower explosive limit (LEL) must be strictly maintained. All regulations related to safety of personnel and handling of such materials shall be strictly followed. Cost of handling and disposing of such materials will be borne by the Contractor.
- a. Contractor's responsibility for meeting all regulations relating to toxic and hazardous materials includes, but is not limited to, obtaining all permits

and EPA numbers, processing paperwork, blood testing of personnel at start and finish of project, sampling and testing of wastes, paying fees, handling and packaging of wastes at site, and delivering materials to the selected Class I dumpsite using licensed hazardous materials transporters. All regulations relating to working with heavy metals or confined spaces shall be strictly enforced. Documentation of all hazardous or toxic waste disposal will be required and a copy supplied to the City.

8. Protective Clothing: During cutting, burning, welding operations and when handling and mixing coatings and paints, workmen shall wear gloves, eye shields and other protective clothing. If working with lead, zinc or other heavy metals, regulations regarding handling of exposed clothing shall be strictly enforced.
9. Fire: Contractor shall provide appropriate fire abatement devices on-site and be readily available at the job site during all operations. Prohibit any flames, welding and smoking during mixing and application of materials.
10. Sound Levels: Whenever the occupational noise exposure exceeds the maximum allowable sound levels, the Contractor shall provide and require the use of Cal/OSHA approved ear protective devices.
 - a. Noise suppression shall be practiced at all times to minimize disturbance to persons living or working nearby, and to the general public. Measures to be used in effecting noise suppression shall include (but not limited to) equipping all internal combustion engines with critical residential silencers (mufflers), shielding noise-producing equipment from nearest areas of human occupancy by location in such positions as to direct the greatest noise emissions away from such areas, and conducting operations in the most effective manner to minimize noise generation consistent with the prosecution of the Contract in a timely and economic manner. Whenever levels are above local ordinances, they shall be adjusted as directed by the Engineer.
11. Gas and Air Monitoring: Contractor shall furnish monitoring equipment to determine the presence of oxygen deficiency or dangerous air contamination. Continual monitoring will be required. Concentration levels will be as prescribed by Cal/OSHA.

- C. Power: The Contractor shall provide, at his own expense, all necessary power required for the sand blasting and painting operations under the contract.
- D. Contractor shall provide Health Department approved sanitary facilities for all Contractor personnel, as no existing facilities will be available to the Contractor. Facilities shall be maintained during the project to complete standards established by City and shall be removed prior to Contractor's departure from the site at completion of the project.

1.9 DEHUMIDIFICATION

- A. Scope: If dehumidification is required by the City's Additive Bid Item, the interior of the tank shall be dehumidified continuously, 24 hours per day, 7 days per week, during the

cleaning and coating operations including shifts during which no work is being accomplished and also during the final curing period, unless fewer hours or days are approved in writing by the Engineer.

1. The purpose of dehumidifying the interior of the tank during the cleaning and coating operations and during the final cure period is to nullify the adverse effects of cold and/or wet atmospheric conditions. Additionally, the dehumidification equipment will provide the necessary ventilation for the removal of solvent vapors during the coating and final cure phases.
2. Dust collectors and/or separators using approved filters are required. The contractor shall, at all times, maintain the concentration of solvent vapors in all parts of the structure 10% below the lower explosive limit (LEL).
3. Dehumidification may or may not be required and will be per the City's direction. If required, it will be per the rate listed in the bid. All bids will be tabulated with dehumidification included.
4. Cost for mobilization/demobilization for dehumidification equipment must be figured into the unit price of the bid item.
5. Any weeks of dehumidification in addition to the number listed in the bid schedule will be at the unit price noted in the bid schedule
6. The Contractor shall, at all times, maintain the concentration of solvent vapors in all parts of the structure 10% below the lower explosive limit (LEL).

B. Dehumidification equipment systems must be reviewed by the Engineer.

1. The exhaust blower for removal of dust, etc. from the interior containment shall exhaust into an Engineer-reviewed structure that precludes the exhausting of lead-laden paint chips or particulate matter onto the site or into the atmosphere.

C. Final Cure: Final cure of coating is specified in Section 09 97 14 Subsection 3.9 FINAL CURING OF EPOXY COATINGS.

D. General:

1. The structure shall be continuously dehumidified 24 hours per day, during blasting, coating, between coats of coating, and during the final cure period, unless fewer hours or days are approved in writing by the Engineer.
2. The Contractor shall maintain the dehumidification system at all times, including final cure period, and shall remove the ventilation and dehumidification system upon completion of the final cure period.
3. The Contractor shall make modifications to the dehumidification system as directed by the Engineer to ensure a safe working environment, complete removal of all solvent vapors, and maintenance of the proper relative humidity at the concrete and steel surfaces.

4. Ducting shall be airtight and reinforced with spirally-wound wire to prevent collapse. The Contractor shall furnish and install an appropriate airtight connecting device between the duct and designated opening. All bends in ductwork shall have a minimum radius of 2 x ID of the ducting (i.e. 18" ID = 36" minimum radius).
5. The Contractor shall design and submit for review a dehumidification and ventilation plan. If lead coating or paint is being removed, the ventilation plan shall provide for a minimum cross-draft velocity of 100 feet per minute in the vicinity of the work area. The cross-draft velocities may be obtained with use of a portable blower or fans. If lead coating or paint is being removed, air filtration is required with HEPA PM-10 filters.
6. The Contractor shall furnish, install and maintain three (3) 3,000 cubic foot per minute circulation fans inside the structure, or as modified by the Engineer.
7. The circulation fans may be moved as necessary but shall be placed in dead air space areas and directed toward the designated opening at all times.
8. The Contractor shall seal all structure openings, to prevent the entry of moist air detrimental to the blasting, coating, or curing process. An approved air lock entry shall be provided for ingress to and egress from the structure.
9. The area adjacent to the surface that is to be blasted and coated shall not be exposed to a relative humidity over thirty-five percent (35%) at anytime during blasting, cleaning, and coating operations.

E. Equipment:

1. The dehumidification equipment shall be a solid desiccant (not liquid, granular or loose lithium chloride) design having a single rotary desiccant bed capable of continuous operation, fully automatic, with drip-proof automatic electrical controller.
2. Dehumidification equipment operated on the structure must be capable of making two complete air changes every sixty minutes unless the 100 feet per minute cross-draft velocity requirement requires a larger volume.
3. The processed air from the dehumidification unit must maintain a relative humidity of eleven percent (11%) or less.
4. During the coating and cure phase, dehumidification units must have auxiliary heaters capable of maintaining an air temperature inside the tank of a minimum of 70 degrees F.
5. Air heaters are not acceptable as substitutes for dehumidification units.
6. Air chillers, heaters, or air conditioners may be used downstream of the dehumidifiers if they are approved for use by the manufacturer of the dehumidification equipment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 COORDINATION AND MEETINGS

A. PRE-BID CONFERENCE

1. A Pre-Bid Conference for the project will be conducted by the Engineer at City offices and site as noted in the Notice of Inviting Bids. The object of the Pre-Bid Conference is to acquaint bidders with existing facility and sites. The conditions and requirements of the plans and specifications shall govern over any information presented at the Pre-Bid Conference, unless amended in writing by the Engineer.

B. PRE-CONSTRUCTION CONFERENCE

1. A Pre-Construction Conference shall be scheduled prior to start of project. The City, Contractor and Engineer shall be present. The sequence of work will be discussed and will be mutually agreed upon to ensure that the work is accomplished and completed as stated in the Contract, and to allow for inspection and operations flexibility by City. A schedule of work to be accomplished and a list of labor, material and equipment rates for additional work will be established and maintained throughout the project. Contractor shall furnish resumes of all personnel assigned to project, and a complete set of approved submittal data for use by inspection personnel. Contractor shall have a designated representative for all projects.
2. The Contractor shall submit electronic copies in pdf format of manufacturer's literature and Safety Data Sheets (SDS) on all materials to be used in coating and painting operations including, but not limited to, coatings, paints, thinners, solvents and cleaning fluids. No materials will be allowed which have been stored over 60 days, or manufacturer's recommended shelf life, whichever is less. Contractor shall maintain copies of SDS at job site at all times. Copies of all invoices showing purchased dates and delivery for all material mentioned above will be required.

END OF SECTION

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SECTION 09 97 14 - COATING, PAINT AND DISINFECTION MATERIALS SPECIFICATION

PART 1 - GENERAL

1.1 PURPOSE

The purpose of this specification is to establish methods and procedures for coating, painting, disinfection, dehumidification and handling of hazardous and non-hazardous materials/wastes.

1.2 CONTRACTOR

- A. The Contractor shall be a licensed Painting and Decorating Contractor in the State of California (C-33 Classification). He shall have a minimum of five (5) years practical experience and successful history in the application of specified products to surfaces of steel water storage tank. Upon request, he shall substantiate this requirement by furnishing a written list of references.
- B. All on-site Contractor personnel shall possess and be prepared to exhibit proof of current certification in the following areas of safety training:
 - 1. OSHA Fall Prevention
 - 2. Competent Person Lead Abatement
 - 3. Confined Space Entry
 - 4. First Aid/CPR

1.3 DEFINITIONS

- A. "Coating" refers to protective materials used or applied on interior surfaces.
- B. "Paint" refers to protective materials used or applied on exterior surfaces.
- C. "Coat" refers to paint applied in a single or multiple pass application to form an evenly distributed film when dry. Designations for "coats" are primer or first coat, intermediate or second coat, and finish coat, and any coats applied beyond the designated coats.

1.4 QUALITY ASSURANCE

- A. Surface Preparation: Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces", SSPC-Vis 1, ASTM Designation D2200, and as described below. Anchor profile for prepared surfaces shall be measured by using a non-destructive instrument such as a K-T Surface Profile Comparator, Testex Press-O-Film System or digital surface profile gauge. Temperature and dewpoint requirements noted in 1.4 B. herein shall apply to all surface preparation operations, except low and high temperature limits and operation of dehumidification equipment shall be determined at the Pre-Construction Conference.
- B. Application: No coating shall be applied under the following conditions:
 - 1. When the surrounding air temperature or the temperature of the surface to be

coated or painted is below 55 degrees F for epoxy coatings, below 45 degrees F for epoxy low temperature cure coatings, or below 40 degrees F for urethane paint, or above 125 degrees F for all materials; or in accordance with the data sheets.

2. To wet or damp surfaces or in rain, fog or mist.
 3. When the surface temperature is less than 5 degrees F above the dewpoint.
 4. When it is expected the air temperature will drop below 55 degrees F for epoxy coating, below 45 degrees F for epoxy low temperature cure coatings, or 40 degrees F for urethane paints, or the surface temperature is expected to be less than 5 degrees F above the dewpoint within two hours after application of coatings or paints.
 - a. Dewpoint shall be measured by use of an instrument such as a sling psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables or equivalent. Dehumidification equipment must run continuously during all phases of contract, except disinfection phase.
 - b. If above conditions are prevalent, coating and paint application shall be delayed or postponed until conditions are favorable. The day's application shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.
- C. Overspray and Dust Control: The Contractor shall conduct all operations so as to confine abrasive blasting debris and coating and paint overspray to within the bounds of the site. The Contractor shall take all precautions necessary to prevent adverse off-site consequences of blast cleaning or application operations. Any complaints received by the City relating to any such potential off-site problems will be immediately delivered to the Contractor-assigned job site representative. The Contractor shall immediately halt blast cleaning or application work and shall take whatever corrective action is required to mitigate any such problems. All costs associated with protection of off-site properties and/or correction of damage to property as a result of blast cleaning or application operations shall be borne directly by the Contractor at no additional expense to the City.
1. City approval of Contractor's blast cleaning and overspray prevention procedures and Engineer's presence on project does not free Contractor from responsibility for compliance. Daily approval of procedures will be required prior to start of blast cleaning or spray operations.
- D. Inspection and Checking: The City will provide and utilize the services of an independent professional coating inspection agent who will be City's Coating Inspector. Contractor will furnish inspection devices in good working condition and equipment shall be operated by, or in the presence of the Inspector. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are acceptable to City's Coating Inspector. The City's Engineer's decisions shall be final as to interpretation and/or conflict between any of the reference specifications and standards contained herein.

1. The City's Coating Inspector will perform continuous inspection on all phases of the surface preparation, abrasive blast cleaning, and application of the coating systems. All surfaces will be inspected by City's Coating Inspector prior to each application of coating materials. Coating materials applied without the prior inspection of City's Coating Inspector shall be removed and reapplied at the expense of the Contractor.
 2. City's Coating Inspector will perform such tests as are required to ensure compliance with all phases of the surface preparation, abrasive blast cleaning, and application of the coating systems. Test equipment shall include, but not be limited to, the following: SSPC surface preparation standards; surface profile comparator; test tape; micrometer; abrasive sieve test; ultraviolet lamp; mirror; certified thickness calibration plates and magnetic type dry film thickness gauge. Accuracy of inspection equipment will be verified by City's Coating Inspector in the presence of the Contractor to verify its accuracy prior to use.
 3. Notify City's Coating Inspector 14 days in advance of shop and field-apply operations involving abrasive blast cleaning and coating applications.
 4. City's Coating Inspector will determine the degree of cleanliness and surface profile of the shop and field blast cleaned surfaces. Additional blast cleaning of non-conforming areas shall be accomplished until all areas conform to the cleanliness and profile specified.
 5. City's Coating Inspector will totally inspect each coat of primer, intermediate, and finish coating to determine the thickness and integrity. Each coat applied will be checked and deficiencies marked. After observing specified recoat time, apply additional coating materials over areas not having the specified minimum dry film thickness and areas having any holidays or pinholes. After correction of deficiencies, City's Coating Inspector will re-inspect those areas to determine the acceptability of the additional coating. Each coat applied must be 100% to the satisfaction of City's Coating Inspector prior to subsequent coats being applied.
- E. Inspection Facilities: The Contractor shall provide City's Coating Inspector with facilities for inspection including, but not limited to, the following:
1. Furnish as determined necessary by City's Coating Inspector all safety equipment and devices during abrasive blast cleaning and coating operations. Provide helmet with continuous fresh air supply for observation during cleaning operations.
 2. Furnish illumination and the manpower to move the lights, whenever required by the City's Coating Inspector. Provide additional lights and supports sufficient to illuminate all areas to be inspected. City's Coating Inspector will determine the level of illumination required for inspection purposes.
 3. Temporary ladders and scaffolding shall be erected and moved to the locations requested by City's Coating Inspector.
- F. Thickness Testing: Thickness of coatings and paints shall be tested with a non-destructive film thickness gauge. An instrument such as a Tooke Gage should be

used if a destructive tester is deemed necessary. Testing shall be accomplished in conformance to SSPC-PA 2, "Measurement of Dry Paint Thickness with Magnetic Gages" except as modified hereinafter.

1. Flat coated or painted surfaces shall be tested in conformance to SSPC-PA2.
 2. Structural members, piping and other irregular surfaces shall be tested with frequency and locations as directed by the Engineer.
- G. Holiday Testing: Coating integrity of ALL interior coated surfaces shall be tested with an approved inspection device. All pinholes shall be marked, repaired in accordance with the manufacturer's printed recommendations and retested. No pinholes or other irregularities will be permitted in the final coating.
- H. Inspection Devices: Contractor will furnish, until final acceptance of coatings and paints, inspection devices in good working condition for detection of holidays and measurement of dry film thickness. They shall also furnish U.S. Department of Commerce, National Bureau of Standards certified thickness calibration plates to test accuracy of thickness gauges. Dry film thickness gauge holiday detectors shall be available at all times until final acceptance of application. Inspection devices shall be operated by, or in the presence of the Engineer with location and frequency basis determined by the Engineer.
- I. Acceptable Inspection Devices: Acceptable devices for ferrous metal surfaces include, but are not limited to, Tinker and Razor Models AP and AP-W holiday detectors equipped with a wire brush electrode supplied by the manufacturer, and "Inspector", or "Positest", or "Positector" or "Quanix" units for dry film thickness gauging. Inspection devices shall be operated in accordance with these specifications and the manufacturer's instructions.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Materials specified are those which have been evaluated for the specific service. Products of International, Devoe Coatings and Tnemec Company, Inc. are listed to establish a standard of quality for the project. Standard products of manufacturers other than those specified, will be accepted when it is proved to the satisfaction of the Engineer they are equal in composition, durability, usefulness and convenience for the purpose intended. Substitutions will be considered provided the following minimum conditions are met:
1. The proposed coating or paint system shall have a dry film thickness equal to or greater than that of the specified system.
 2. The proposed coating or paint system shall employ an equal or greater number of separate coats.
 3. The proposed coating or paint system shall employ coatings or paints of the same generic type.
 4. All requests for substitution shall carry full descriptive literature and directions for

application, along with complete information on generic type, non-volatile content by volume and a list of 10 similar projects, all at least three years old, where the products have been applied to similar exposure.

5. The City requires that the Contractor provide certified laboratory data sheets showing the results of complete spectrographic and durability tests accomplished on the proposed substitute. Tests shall be accomplished by an independent testing laboratory satisfactory to the Engineer and all costs incurred in the testing program shall be borne by the Contractor. In any case, the Engineer shall be sole and final judge of the acceptability of any proposed substitution. Requests for substitution must be approved in writing prior to date of bid.
- B. The Contractor shall submit prior to start of project manufacturer's literature and Safety Data Sheets (SDS) on all materials to be used in coating and painting operations, including, but not limited to coatings, paints, thinners, solvents and cleaning fluids. No materials will be allowed which have been stored over 60 days, or manufacturer's recommended shelf life, whichever is less. Contractor shall maintain copies of SDS at job site at all times.
 1. An electronic submittal will be accepted in only the following format.
 - a. The file shall be in pdf format.
 - b. Each project submittal shall be a separate document file.
 - c. Each document file shall be labeled in the following sequence:
 - 1) Owner Name/Project Name
 - 2) Submittal No.
 - 3) Description
- C. All materials shall be brought to the job site in the original sealed containers. They shall not be opened or used until City's representative has physically inspected contents and obtained necessary data from information printed on containers or label. Materials exceeding storage life recommended by the manufacturer shall be rejected. Copy of invoice showing purchase and delivery dates will be required.
- D. Flammability, toxicity, allergenic properties, and any other characteristic requiring field precautions shall be identified and specific safety practices shall be stipulated.
- E. All coating and paint materials shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable materials must be stored to conform to City, County, State and Federal safety codes for flammable materials. At all times coatings and paints shall be protected from freezing.
- F. Contractor shall use products of same manufacturer for all coats.

2.2 SPECIFIC INTERIOR COATING MATERIALS

- A. Coating materials for interior surfaces of tanks must appear on the Standard 61 of the National Sanitation Foundation (NSF), or Standard 61 of Underwriters' Laboratory. Products containing perchloroethylene (PCE), trichloroethylene (TCE), lead, chromium or zinc will not be permitted. In addition, products containing Methyl Ethyl Ketone (MEK) or Methyl Isobutyl Ketone (MIBK) will not be allowed in amounts that will cause volatile

organic analysis to be above maximum contaminant levels or action levels.

1. The Contractor shall provide, prior to coating any surfaces of the tank, written certifications from the coating manufacturers stating that the coating materials, thinners, solvents, and equipment cleaning fluids provided by the manufacturers do not contain PCE or TCE. The Contractor shall also certify, in writing, that no material containing PCE, TCE, lead, chromium, or zinc in any form will be used for the interior coatings or exterior paints of the tank. This shall include all solvents, thinners, and cleaning fluids at the job site, regardless of where the materials were obtained.
 2. The Engineer may require all solvents, thinners and cleaning fluids be tested for TCE and PCE prior to being used at the job site. The Contractor shall provide the Engineer with samples of each material at no cost to the City. Unacceptable materials shall be removed from the job site.
- B. All coating materials shall comply with air pollution regulations, specifically the local air quality management district or air pollution control district rules, and rules for the City.
 - C. All coating materials shall also conform to regulations and applicable requirements of local, State and Federal health regulatory agencies.
 - D. Epoxy prime coat and stripe coat shall be similar or equal to products such as Devco Bar-Rust 233H LV Multi-Purpose Epoxy Primer or Tnemec Pota Pox Series L140 Low VOC Epoxy Primer. First or prime coat shall not be gray or white.
 - E. Epoxy coatings shall be International Interline 975P 100% Solids Epoxy Coating, or Tnemec Epoxoline Series FC22 100% Solids Epoxy Coating. Finish coat shall be white.
 - F. Joint sealant shall be a flexible polyurethane such as Sikaflex 1A or similar approved polysulfide product.

2.3 WASH DOWN AND DISINFECTION MATERIALS

- A. Cleaner for pre-disinfection cleaning of interior surfaces shall be Gre-Sa-Way or approved equal.
- B. Disinfection materials shall conform to all requirements of AWWA Standard C652, latest revision.
- C. Product to prevent flash rusting during wet abrasive blast cleaning shall be Hold Tight 102 or approved equal.

2.4 SPECIFIC EXTERIOR PAINT MATERIALS

- A. Paint materials for exterior surfaces of tank will consist of an epoxy primer, epoxy intermediate coat and urethane finish coat. Products containing lead, zinc or chromium compounds will not be permitted.
- B. All paint materials shall comply with air pollution regulations, specifically the local air quality management district or air pollution control district rules, and rules for the City.

- C. All paint materials shall also conform to regulations and applicable requirements of local, State and Federal health regulatory agencies.
- D. Prime coat shall be similar or equal to products such as ICI Devoe Bar-Rust 231H Multi-Purpose epoxy coating, or Tnemec L69 Epoxoline II epoxy coating.
- E. Intermediate coat shall be similar or equal to products such as ICI Devoe Bar-Rust 231H Multi-Purpose epoxy coating or Tnemec L69 Epoxoline II epoxy coating.
- F. Finish coat shall be similar or equal to products such as Devoe Bar-Ox Devthane 379H urethane coating or Tnemec Series 1095 urethane coating.
- G. Joint sealant shall be a flexible elastomeric sealant similar or equal to Sikaflex 2C-NS as manufactured by Sika Corporation.

PART 3 - EXECUTION

3.1 GENERAL

- A. All surface preparation, coating and paint application shall conform to applicable standards of the Society of Protective Coatings, NACE International, American Water Works Association (AWWA), City of Manhattan Beach and the manufacturer's printed instructions, as approved by the Engineer and per Section 01 00 00 1.2 B. The Coating manufacturer's application recommendations must be closely followed, except as modified in this specification, especially the curing ventilation and curing time. Material applied prior to approval of the surface, by the Engineer, shall be removed and reapplied to the satisfaction of the Engineer at the expense of the Contractor.
- B. All work shall be accomplished by skilled craftsmen qualified to accomplish the required work in a manner comparable with the best standards of practice. Only experienced and competent applicators should be employed to apply the coatings. Resumes of personnel proposed to be used on the project shall be submitted for approval upon Notice of Award. Continuity of personnel shall be maintained and transfers of key personnel shall be coordinated with the Engineer.
- C. The Contractor shall provide a supervisor to be at the work site during cleaning and application operations. The supervisor shall have the authority to sign any change orders, coordinate work and make other decisions pertaining to the fulfillment of their contract.
- D. Dust, dirt, oil, grease or any foreign matter which will affect the adhesion or durability of the finish must be removed by washing with clean rags dipped in an SCAQMD approved commercial cleaning solution, rinsed with clean water and wiped dry with clean rags.
- E. No rubber tire vehicles or equipment shall be permitted on the interior floor after the floor has been blasted.
- F. The Contractor's equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Compressors shall have suitable traps and filters to remove water and oils from the air. Blotter test shall be accomplished

at each start-up period and as deemed necessary by the Engineer. Contractor's equipment shall be subject to approval of the Engineer. This approval does not relieve the Contractor's responsibility for the safe operation of the equipment or its performance.

1. Cleanliness of compressed air supply shall be verified daily, and as deemed necessary by Engineer, by directing a stream of air, without abrasive, from the blast nozzle onto a white blotter or cloth for twenty seconds. If oil or water appears on the blotter or cloth, all traps and separators shall be blown down until two subsequent twenty-second tests show no further oil or water in accordance with ASTM 04285.
- G. Application of the first coat shall follow immediately after surface preparation and cleaning within an eight-hour period, for unseen weather conditions, as defined in 1.4 B. QUALITY ASSURANCE, shall be re-cleaned per the original specifications prior to application of the first coat. Brush-off blast cleaning SSPC-SP7 (sweep blast) will not be accepted in lieu of SSPC-SP10 (Near White Metal) blast.
1. If dehumidification equipment is required, cleaned areas may have first coat applied at last shift of the week, provided dehumidification equipment has run continuously during the complete week, and surfaces meet all requirements of the specification. Monitoring devices approved by the Engineer shall be used to ensure continuous operation.
- H. Because of presence of moisture and possible contaminants in atmosphere, care shall be taken to ensure previously coated or painted surfaces are protected or recleaned prior to application of subsequent coat(s). Methods of protection and recleaning shall be approved by the Engineer.
1. Project is subject to intermittent shutdown if, in the opinion of the Engineer, cleaning and application operations are creating a localized condition detrimental to ongoing facility activities, personnel or adjacent property.
 2. In the event of emergency shutdown by the Engineer, Contractor shall immediately correct deficiencies. All additional costs created by shutdown shall be borne by Contractor.
- I. The Contractor shall provide, at his own expense, all necessary power required for his operations under the contract.
- J. Contractor shall seal any tank vents, pumps, motors, and other open areas to prevent intrusion of coating or paint or other contaminants. The sealing system shall be designed to allow continuous operation of facilities or equipment, with no detrimental effects. If necessary, sealing system shall be removed daily at termination of work, or as directed by the Engineer.
- 3.2 SURFACE PREPARATION, GENERAL
- A. The latest revision of the following surface preparation specifications of the Society for Protective Coatings shall form a part of this specification. (Note: An element of surface area is defined as any given square inch of surface.)

1. Solvent Cleaning (SSPC-SP1): Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods, which involve a solvent or cleaning action.
 2. Hand Tool Cleaning (SSPC-SP2): Removal of loose rust, loose mill scale, coating and other detrimental foreign matter present to degree specified by hand chipping, scraping, sanding and wire brushing.
 3. Power Tool Cleaning (SSPC-SP3): Removal of loose rust, loose mill scale, coating and other detrimental foreign matter present to degree specified by power wire brushing, power impact tools or power sanders.
 4. Commercial Blast Cleaning (SSPC-SP6): Blast cleaning until at least two-thirds of each element of surface area is free of all visible rust, mill scale, coating and other detrimental foreign matter present.
 5. Brush-off Blast Cleaning (SSPC-SP7): Blast cleaning to remove loose rust, loose mill scale, coating and other detrimental foreign matter present to the degree specified.
 6. Near-White Blast Cleaning (SSPC-SP10): Blast cleaning to near-white metal cleanliness, until at least ninety-five percent of each element of surface area is free of all visible rust, mill scale, coating and other detrimental foreign matter present.
 7. Power Tool Cleaning to Bare Metal (SSPC-SP11): Power tool cleaning to remove visible rust, mill scale, coating and other detrimental foreign matter to produce a bare metal surface and to retain or produce a surface profile of at least 1.0 mil.
 8. High and Ultra High Pressure Water Jetting (SSPC-SP WJ 1 through 4): Water jet cleaning of metals to remove rust, mill scale, coating, paint, and other detrimental foreign matter present to varying degrees of cleanliness from light cleaning to clean to bare substrate.
- B. Any burrs, weld spatter, sharp edges, corners, or rough welds which would cause difficulty in achieving a defect-free paint system shall be chipped or ground smooth in conformance to NACE Standard SPO178-or latest edition. It is not the intent to have the welds or "scars" ground "flush". The object of the grinding is to eliminate sharp edges, corners, and overlaps to provide a surface for the application of a uniform thickness of coating or paint without voids or other defects.
- C. Abrasive blasting nozzles shall be equipped with "deadman" emergency shut-off nozzles. Blast nozzle pressure shall be a minimum of 95 P.S.I. and shall be verified by using an approved nozzle pressure gage at each start-up period or as directed by the Engineer. Number of nozzles used during all blast cleaning operations must be sufficient to ensure timely completion of project, subject to designation and approval by Engineer.
- D. All blast hose connections shall be tethered and secured to prevent separation during

blast cleaning operations and shall be taped with duct tape prior to pressurizing. All taped connections shall be visually inspected for leaks within five minutes after start of blast cleaning operations and at the end of blast cleaning operations. Leaking connections shall be immediately repaired to prevent further damage.

- E. Field blast cleaning for all interior surfaces shall be by dry method. Contractor is responsible for maintaining dust emissions within the legal level and that level which would not create a nuisance.
- F. Particle size of abrasives used in blast cleaning shall be that which will produce a 3.0 mil profile for all surfaces receiving 100% solids coating, in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied, subject to approval of Engineer.
- G. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants which would interfere with adhesion of coatings and paints and shall not be reused unless specifically approved by the Engineer. Abrasives shall be certified for unconfined dry blasting pursuant to the California Administrative Code, Section 92520 of Subchapter 6, Title 17 or subsequent revision, and shall appear on the current listing of approved abrasives. Invoices or load sheets confirming above shall be required.
- H. Recycled ferrous metallic abrasives must meet or exceed the cleanliness standards set forth in SSPC-AB2. The operating mix of abrasive media shall be such that a sharp angular not peened profile is produced. Any recycled abrasive shall be designed for the use (i.e. steel grit) and be free of grease, oil, or other debris or contaminants that could be detrimental to the service life of the applied coatings. If steel shot media is used it shall be limited to no more than 1/3 of the operating mix. Recycled abrasive shall be tested for contamination through the use of a vial test in accordance with the procedures outlined in SSPC's Publication 91-12 and ISO 8502-3.
- I. During blast cleaning operations, caution shall be exercised to ensure existing coatings and paints are not exposed to abrasion from blast cleaning.
- J. Blast cleaning from rolling scaffolds shall only be accomplished within confines of interior perimeter of scaffold. Reaching beyond limits of perimeter will be allowed only if blast nozzle is maintained in a position which will produce a profile acceptable to the Engineer.
- K. Accessible interior surfaces of the outlet nozzle and that portion of the inlet nozzle permanently attached to the tank shall be cleaned of all old coating and rust by blast cleaning or other approved methods. Precautions shall be taken so as to prevent any damage to the existing gate or butterfly valves at the inlet and outlet nozzles. All exposed surfaces of the valves shall be masked prior to blast cleaning the nozzles. The removable portions of the inlet nozzle shall be removed and blast cleaned as specified herein.
- L. During blast cleaning operations, inlet, outlet, overflow, and drain openings in bottom shall be covered with plywood bulkheads, or other approved barriers, to prevent entry of spent abrasive, removed coating or other foreign materials.
- M. The Contractor shall keep the area of his work in a clean condition and shall not permit

blasting materials to accumulate as to constitute a nuisance or hazard to the prosecution of the work or the operation of the existing facilities. Spent abrasives and other debris shall be removed at the Contractor's expense as directed by the Engineer.

- N. Blast cleaned and coated and painted surfaces shall be cleaned prior to application of specified coatings or paints via a combination of blowing with clean dry air, brushing/brooming and/or vacuuming as directed by the Engineer. Air hose for blowing shall be at least 1/2" in diameter and shall be equipped with a shut-off device.
- O. High and Ultra High Pressure Water Jetting (SSPC-SPWJ1 through 4) shall not be used on interior surfaces and shall only be used on exterior surfaces when and as directed by Engineer. Pressures shall be those determined by Engineer to effectively accomplish removal of loose, peeling/flaking coatings or paint or other detrimental surface contaminants.

3.3 HAZARDOUS MATERIALS, GENERAL

- A. Exterior surfaces have been determined to contain excessive levels of lead. Refer to Appendix A with the paint sample lab results. Contractor shall comply with Title 8, California Code of Regulations (CCR) Section 1532.1. The Contractor shall submit a written compliance program. The compliance program shall address data specified in subsections (e)(2)(B) and (e)(2)(C) of Section 1532.1. Copies of all air monitoring or job site inspection reports shall be furnished within 10 days of monitoring or inspection.
- B. Contractor shall comply with requirements of 40 CFR 261, (CCR) Title 22 Division 4.5, and HSC Division 20 Ch. 6.5 for handling and disposing of hazardous wastes resulting from surface contamination and removed coating and paint particles.
- C. All work must be accomplished in compliance to the following.
 - 1. On first day of any lead paint/coating removal, work environment must be tested by or under the supervision of a Certified Industrial Hygienist (CIH) to determine levels of protection required to protect workers and the environment from lead and other heavy metal contamination. All costs related to testing by the CIH shall be borne by the Contractor. Field testing may be accomplished by either an Industrial Hygienist or a CIH.
 - 2. Testing will include air sampling and testing of filters removed from the workers' respirators or personal air monitors to determine the level of lead or chromium exposure. Upon completion of testing, the CIH shall file a written report on the results of the testing. Level of exposure will then determine the type of respiratory protection, clothing, housekeeping, hygiene facilities, medical surveillance, medical removal protection, employee information and training, signs, record keeping, and observation of monitoring required for the project.
 - 3. No exterior painting work shall re-commence until the report from the CIH is filed and worker and environmental protection required is in place. Costs for the time delay shall be included in the Contractor's original bid.
 - 4. Based on the initial analysis, samples of exterior and interior spent abrasives should be sent to a certified laboratory for testing at the Contractor's expense.

TTLIC and TCLP analysis should be completed for CCR Title 22, heavy metals. Results of the analytical testing should be provided to the City prior to disposal.

- D. Contractor is responsible for maintaining dust emissions within the legal level and that level which would not create a nuisance. Dust emissions, abrasive deflection, and removed paint particles shall be contained where abrasive blasting is being accomplished, unless vacuum blasting or other means of cleaning are approved by Engineer. No water, abrasive deflection, or paint particles shall be allowed to land on the ground around the tank.
- E. All lead paint or coating removal work shall be governed by, but not necessarily limited to California Code of Regulations (29 CFR 1910 and 1926, applicable sections).
 - 1. Health and Safety Code, Division 20, Chapter 6.5 (California Hazardous Waste Control Act)
 - 2. Title 22 California Code of Regulations, Division 4.5 (Minimum Standard for Management of Hazardous and Extremely Hazardous Materials)
 - 3. Title 8, California Administrative Code
 - 4. Code of Federal Regulations (29 CFR 1910 and 1926, applicable sections)
- F. Transportation and Disposal of Debris: The Contractor shall arrange to have the debris transported from the site in accordance with the requirements of Title 40 CFR Part 263, and disposed of properly in accordance with Title 40 CFR Part 264 and Title 40 CFR Part 268 Protection of Environment. Signed manifests shall be returned to the Engineer to verify that all steps of the handling and disposal process have been completed properly. The Owner is considered the generator on this project; the Contractor will be named co-generator.
 - 1. Written confirmation that the debris will be treated and disposed of in accordance with requirements of Title 40 CFR Part 264 and Title 40 CFR Part 268, CCR Title 22 Division 4.5, and HSC Division 20 Ch. 6.5 shall be received by the Engineer prior to start of the work. The waste will be disposed of as approved by Engineer and City. The programs shall provide assurance that the debris is handled properly from cradle to grave, and include the necessary notifications and certifications on shipments, provide the name of the disposal facility, and include a schedule for the submittal of the completed manifests to the Engineer.
- G. The Contractor shall hire a City approved independent certified materials testing firm per General Provisions, Section 11-6, and this independent certified materials testing firm shall remove eight representative samples of soil from the site within the boundaries of the proposed scaffolding prior to start of work. Soil samples shall be taken in the presence of the City's representative. Samples shall be tested for determination of lead, zinc, and chromium to ensure soil does not contain excessive levels of noted heavy metals. Copies of laboratory analyses reports shall be forwarded to the City immediately upon receipt from the laboratory, prior to start of any work.

3.4 SURFACE PREPARATION, INTERIOR SPECIFIC

All interior tank surfaces and riser grating, excluding the interior of tank riser, shall be blast cleaned, in conformance to Society for Protective Coatings Specification SSPC-SP10 (Blast Cleaning to Near-White Metal). Field blast cleaning for all interior surfaces shall be by dry method.

1. The interior of the riser shall be protected from the blasting and painting operations. Any damage caused to the interior of the riser shall be repaired in accordance with Section 3.4.
2. Particle size of abrasives used in blast cleaning surfaces shall be that which will produce a minimum of a 3.0 mil surface profile.
3. The complete interior and exterior of all roof penetrations including, but not limited to, center vent structure, roof vents, roof hatches, auxiliary ports, etc., shall be abrasive blast cleaned to (SSPC-SP10) including one (1) foot past the structure onto the adjacent exterior roof surfaces simultaneously with interior surfaces of these penetrations. The perimeter of the blast cleaned surfaces shall be cut to straight lines and the edge of the existing paint system sufficiently feathered to create a smooth transition between the two paint systems.
4. Contractor shall be responsible for removal and replacement of center vent cover as needed to coat and paint all surfaces.
5. All intrusion alarms, antennas, conduit, equipment or other devices on the tank shall be protected in place or removed and reinstalled.

3.5 SURFACE PREPARATION, EXTERIOR SPECIFIC

All exterior surfaces, including riser, support structure, piping, appurtenances, center vent cover, antenna supports, and exposed concrete footing pads and bolted connections shall be blast cleaned in conformance to Society for Protective Coatings Specification SSPC-SP10 (Blast Cleaning to Near-White Metal).

3.6 APPLICATION, GENERAL

- A. Coating and paint application shall conform to the requirements of the Society for Protective Coatings Paint Application Specification SSPC-PA1, latest revision, for "Shop, Field and Maintenance Painting", the City, the manufacturer of the coating and paint materials printed literature and as specified herein and approved by the Engineer.
- B. Thinning shall only be permitted as recommended by the manufacturer and approved by the Engineer and shall not exceed limits set by applicable regulatory agencies.
 1. If Contractor applies any materials which have been modified or thinned to such a degree as to cause them to exceed established VOC levels, Contractor shall be responsible for any fines, costs, remedies, or legal action and costs that may result.
- C. Each application of coating and paint shall be applied evenly, free of brush marks, sags,

runs and no evidence of poor workmanship. Care should be exercised to avoid lapping on glass or hardware. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.

- D. Protective coverings or drop cloths shall be used to protect floors, fixtures, equipment, prepared surface and applied paints. Personnel walking on exterior roof of tank shall take precautions to prevent damage or contamination of painted surfaces. If required by Engineer, personnel shall wear soft-soled shoes, or shoe coverings approved by Engineer. Care shall be exercised to prevent coating or paint from being spattered onto surfaces which are not to be coated or painted. Surfaces from which such material cannot be removed satisfactorily shall be refinished as required to produce a finish satisfactory to the Engineer.
- E. All materials shall be applied as specified herein.
- F. All welds and irregular surfaces shall receive a separate brush coat of the specified product prior to application of the intermediate coat and a separate stripe coat prior to the application of the finish coat. Application of stripe coat shall not be accomplished simultaneously with spray coat and shall be allowed to dry a sufficient amount of time before application of subsequent spray coat. Coating and paint shall be brushed in multiple directions to ensure penetration and coverage, as approved by the Engineer. These areas include, but are not limited to, welds, nuts, bolts, etc. Care shall be exercised to ensure dry film thickness of coatings and paints does not exceed the maximum thickness allowed by the manufacturer of the specific product being applied.
- G. At conclusion of each day's blast cleaning and coating and paint operations, a 6" wide strip of blast cleaned substrate shall remain uncoated to facilitate locating point of origin for successive day's blast cleaning operations.
- H. Epoxy coated surfaces or other multi-component materials exposed to excessive sunlight or an excessive time element beyond manufacturer's recommended recoat cycle, shall be scarified by Brush-off Blast Cleaning (SSPC-SP7) or methods approved by Engineer, prior to application of additional coating. Scarified coating shall have sufficient depth to ensure a mechanical bond of subsequent coat, as recommended by the manufacturer.
- I. All attachments, accessories, and appurtenances shall be prepared and finished in the same manner as specified for adjoining tank sections, except as specifically designated by the Engineer.

3.7 APPLICATION, INTERIOR EPOXY COATING SYSTEM SPECIFIC

- A. After completion of surface preparation as specified, all prepared surfaces shall receive the primer specified under 2.2 D. SPECIFIC INTERIOR COATING MATERIALS. Dry film thickness shall not be less than 5.0 mils.
- B. After completion of prime coat and stripe coat, either one 22.0 mil coat or two 11.0 mil coats of coating specified under 2.2 E. SPECIFIC INTERIOR COATING MATERIALS shall be applied. Total dry film thickness of the system shall be not less than 25.0 mils at any point in the coated surface.

1. Prior to beginning the 100% solids coating application a 2 ft. x 2 ft. test patch on plastic outside the vessel shall be performed. The test patch shall be sprayed to the same thickness as will be applied to the vessel.
2. Ratio tests shall be performed at the beginning of each application process and performed every 4 hours thereafter until the application is completed for the day. The ratio test shall be a minimum of 12 ounces for the part requiring the least quantity.
3. Maximum dry film thickness allowed, if not specified in manufacturer's approved literature, will be as determined, in writing, by the coating manufacturer's headquarters technical representative.
4. If approved by the manufacturer, the stripe coat may be the same product as the prime coat noted on the product data sheet.
5. All roof penetrations prepared in accordance with 3.4 3. shall be coated concurrently on interior and exterior surfaces when interior roof surfaces are being coated, including all three coats and all stripe coats.

C. Shell/Roof Junction Void, Roof Lap Joints and Other Designated Void Areas

1. After completion of finish coat application of epoxy coating, holiday detection and touch-up, as specified, all void areas including, but not limited to, bolt holes and roof lap joints shall be primed, if required, and filled with joint sealant as specified under 2.2 F. SPECIFIC INTERIOR COATING MATERIALS. Prior to filling joints, area shall be blown down or wiped as necessary to clean area. Voids shall be filled flush at a 1:1 angle (45 degrees) out from outer edge of the plate.

3.8 QUALITY ASSURANCE, INTERIOR, EPOXY COATING SYSTEM

- A. All coating components shall be mixed in exact proportions specified by the manufacturer. Care shall be exercised to ensure all material is removed from containers during mixing and metering operations.
- B. All coatings shall be thoroughly mixed, utilizing an approved slow-speed power mixer until all components are thoroughly combined and are of a smooth consistency. Coatings shall not be applied beyond pot-life limits or recoat cycles specified by manufacturer.
- C. Thinners shall be added to coating materials only as required in accordance with manufacturer's printed literature and in the presence of the Engineer. Quantities of thinner shall not exceed limits set by applicable regulatory agencies.
- D. Application shall be by airless spray method, except as otherwise specified. Drying time between coats shall be strictly observed as stated in manufacturer's printed instructions, except there shall be a minimum of 12 hours between coats.
- E. Maximum time to recoat shall be strictly observed as stated in the manufacturer's printed instructions. Contractor shall be responsible for all cost associated with application of coating within the recoat window. If the maximum recoat window is violated, the

Contractor will be required to brush-off blast the surfaces as required by the manufacturer and the Engineer. The Contractor will be required to provide a fine abrasive that will not unnecessarily damage the coating to be scarified. If recoat violation is caused by the Contractor's schedule, all costs for brush-off blasting will be borne by the Contractor.

- F. When two or more coats are specified, where possible, each coat shall contain sufficient approved color additive to act as an indicator of coverage or the coats must be of contrasting color.
- G. Care shall be exercised during spray operations to hold the spray nozzle perpendicular and sufficiently close to surfaces being coated, to avoid excessive evaporation of volatile constituents and loss of material into the air or the bridging of cracks and crevices. Reaching beyond limits of scaffold perimeter will not be permitted. All overspray identified by Engineer shall be removed by hand or pole sanding prior to application of subsequent coat.
- H. Joint sealant may be applied by caulking gun, trowel or other approved method. Sealant shall be pressed firmly into voids to ensure 100% filling/sealing and applied at 1:1 ratio (45-degree angle) from the outer edge of the plate.
- I. Upon completion of coating operations and prior to caulking, after curing interval in accordance with manufacturer's recommendations, holiday detection shall be accomplished, with a wirebrush electrode, using the specified instrument at 2,500 volts for all surfaces with 100% epoxy coating. Repair and retesting shall be accomplished as specified under 1.4 QUALITY ASSURANCE. Engineer is not precluded from verifying adequacy of holiday testing by accomplishing holiday detection of selected areas, using his own holiday detector.
 - 1. Upon completion of coating application to bottom surfaces, lower shell surfaces of completed epoxy coating which may have been subjected to damage from abrasive blast cleaning of bottom surfaces shall be holiday detected again and repaired as noted above.
- J. All mixing, thinning, application and holiday detection of coatings shall be accomplished in the presence of the Engineer.
- K. A time element equivalent to 7 days curing time at 70 degrees F and 50% relative humidity shall be allowed before placing the epoxy coating into service, as determined in 3.9 FINAL CURING OF EPOXY COATINGS.

3.9 FINAL CURING OF EPOXY COATINGS

- A. Upon completion and acceptance of applied coating system, Contractor shall furnish an approved exhaust fan or blower of sufficient capacity to ensure removal of solvent vapors during curing process. The fan or blower, after approval by Engineer, shall be installed as approved by the Engineer and shall remain in continuous operation until coating is completely cured as determined by the manufacturer of the coating system. Operation and maintenance of blower during curing operations shall be the responsibility of the City if Contractor has completed all ongoing work and workers are not working at the site. In the event of blower malfunction, City will immediately notify Contractor, who

will be responsible for immediate repair of blower or furnishing of another operating blower until completion of curing operations.

1. Dehumidification equipment shall remain in-place and run continuously during all curing operations.
 - B. After completion of curing cycle as noted above, the Contractor shall test the applied coating with a solvent rub test performed in accordance with ASTM D5402 to verify, to the Engineer, adequate curing has been attained.
 1. If final cure has not been attained, based on above tests, ventilation shall be continued until applied coating passes the "acetone wipe-test" or "hardness test".
 - C. After final cure is approved by Engineer, Contractor shall remove fan or blower.
- 3.10 APPLICATION EXTERIOR PAINT AND QUALITY ASSURANCE FOR PAINT SYSTEMS
- A. After completion of surface preparation as specified, all prepared surfaces shall receive the primer specified under 2.4 D. SPECIFIC EXTERIOR PAINT MATERIALS. Dry film thickness shall not be less than 5.0 mils.
 1. Manufacturer shall provide recoat window guidelines for product based on temperature variations with minimum and maximum recoat windows.
 - B. After proper drying interval, primed areas shall be carefully inspected to determine if paint edges have lifted or if other defects exist. If necessary, repairs shall be accomplished, using procedures as specified herein to affect a smooth transition between primer and subsequent coats.
 1. Prior to accomplishing the intermediate coat, all welds and irregular surfaces shall receive a separate brush coat of the specified product. Application of stripe coat shall not be accomplished simultaneously with spray coat and shall be allowed to dry a sufficient amount of time before application of subsequent spray coat. Coating and paint shall be brushed in multiple directions to ensure penetration and coverage, as approved by the Engineer. These areas include, but are not limited to, welds, nuts, bolts, drilled holes, sharp edges, flanges, irregular surfaces, etc. Care shall be exercised to ensure dry film thickness of coatings and paint does not exceed the maximum thickness allowed by the manufacturer of the specific product being applied.
 - C. The primer and stripe coat shall be clean, dry and show no evidence of oxidation, after which all surfaces shall receive the intermediate coat specified under 2.4 E. SPECIFIC EXTERIOR PAINT MATERIALS, to a dry film thickness of 3.0 mils.
 1. Manufacturer shall provide recoat window guidelines for product based on temperature variations with minimum and maximum recoat windows.
 - D. After specified drying interval, all exterior surfaces above grade including concrete piers shall receive the finish coat specified under 2.4 F. SPECIFIC EXTERIOR PAINT MATERIALS, to a dry film thickness of 3.0 mils.

- E. Total dry film thickness of the completed three-coat system shall not be less than 11.0 mils at any point on the surfaces where bare metal was originally exposed, or less than 8.0 mils above the previous thickness where the two-coat system was applied over the existing paint system.
 - 1. Maximum dry film thickness allowed, if not specified in manufacturer's approved literature, will be as determined, in writing, by the paint manufacturer's headquarters technical representative.
 - 2. Paint shall not be applied when wind speed exceeds fifteen miles per hour.
- F. Upon completion of exterior painting operations, inspection shall be accomplished as specified under 1.4 QUALITY ASSURANCE. All applicable sections of 3.8 QUALITY ASSURANCE, INTERIOR, EPOXY COATING SYSTEM shall apply to exterior painting operations.
- G. All mixing, thinning, application and holiday detection of coatings and paints shall be accomplished in the presence of the City's Inspector.
- H. Color Scheme: The City shall select colors for the project. The Contractor shall submit a current chart of the manufacturer's available colors to the City's representative ten days prior to start of painting operations.
- I. The Contractor shall supply the City with five extra gallons of both the epoxy and urethane paints used for the exterior surfaces.
- J. Care should be exercised during exterior operation to achieve an irregularity free and aesthetically pleasing paint system. Runs, sags and drips will be required to be smoothed and over-coated.

3.11 DISINFECTION

- A. Disinfecting of interior surfaces of tank shall be accomplished in the presence of the Engineer, in conformance to AWWA Standard C652 Section 4.3 Chlorination Method 2 as modified herein:
 - 1. Disinfection shall be accomplished after completion and acceptance by Owner of all interior recoating and curing of coating as required in 3.9 FINAL CURING OF EPOXY COATINGS.
 - 2. Prior to disinfecting, Contractor shall coordinate with City to flush out all spent abrasive, debris and stagnant water from the tank piping. The complete interior shall be cleaned with an approved cleaner or detergent applied via high-pressure solution method. If deemed necessary by Engineer because of contaminants remaining on surfaces, immersed areas shall be scrubbed with a brush or similar implement that will apply force and pressure to the surface to completely remove residual solvents and other surface contaminants.
 - 3. Cleaned surfaces shall then be rinsed with clean water. Residual water and contamination removed during washing process shall be thoroughly flushed from

tank. Contractor shall contain all washdown water and properly dispose of the water offsite. The Contractor shall obtain permits to dispose of the water into the storm drain or follow the applicable permit conditions of controlled discharge into the sewer system. This operation shall be accomplished after completion of interior coating work as directed by the Engineer.

4. After completion of cleaning cycles as noted above, all interior surfaces shall be jet washed with a chlorine or chloramine solution having a content of 200 PPM. All chlorine or chloramine solutions used shall possess NSF 61 Certification. Disinfection shall be accomplished using a liquid chlorine compound. Granular chlorine shall not be used. Chlorine or chloramine solution which accumulates on the bottom shall remain in the bottom of the tank and the City will fill the tank.
 - a. Contractor shall provide new gasket for the riser manhole.
5. Once the tank has been completely filled, the tank will be isolated from the water system and the Contractor shall provide an approved laboratory to collect Bac-T water samples and perform lab analysis in accordance with AWWA C652. Should the Bac-T test fail, the Contractor will be responsible for reimbursing the City for the rejected and drained water and will be required to re-chlorinate the tank as described above until the Bac-T tests are negative.

3.12 TESTING FOR VOLATILE ORGANIC COMPOUNDS (VOC'S)

To monitor the presence of VOC's leached into the water from the coating process, the following procedure shall be utilized:

1. After satisfactory curing, the tank shall be filled by City in accordance with standard filling procedure. Water shall then be retained for a period of five days.
2. On the sixth day following completion of the filling of the tank, the City will perform a "sniff" test to determine if unacceptable chemical odor is present.
3. On the sixth day following completion of filling of tank and passing the "sniff test", samples the Contractor shall have an approved City laboratory collect a VOC sample, in accordance with latest SWRCB Division of Drinking Water memoranda. Samples shall then be tested by the laboratory to determine presence of VOC's. The laboratory shall provide analysis report to the City for review.
4. After testing of samples, results must show levels of leached organics to be in accordance with levels established by the SWRCB Division of Drinking Water for various VOC's. Results will be verified by SWRCB Division of Drinking Water.
5. If levels of leached organics exceed those acceptable to the SWRCB Division of Drinking Water, the tank shall be drained, flushed, refilled and retested at the Contractor's expense. Failure of the tank to attain levels acceptable to the SWRCB Division of Drinking Water shall be the responsibility of the Contractor and remedial measures to attain such levels shall be at his sole expense.
6. If leached organics produce any taste and odor objectionable to consumers of

the water from the tank, the tank shall be drained, re-cleaned, flushed, refilled and retested at the Contractor's expense. Failure of the tank to be taste and odor-free shall be the responsibility of the Contractor and remedial measures to attain such a condition shall be at his sole expense.

3.13 CLEANUP

- A. Upon completion of the work, all staging, scaffolding and containers shall be removed from the site or destroyed in a manner approved by the Engineer. Coating, paint and thinner containers, and excess coatings, paints and thinners, shall be disposed of in conformance to current regulations. Coating or paint spots upon adjacent surfaces shall be removed and the entire job site cleaned. All damage to surfaces resulting from the work of this section shall be cleaned, repaired or refinished to the complete satisfaction of the Engineer at no cost to the City.
- B. Upon completion and acceptance of all coating and painting operations, site soil shall be retested by the independent certified materials testing firm hired by the Contractor, in the same locations tested prior to the start of work, for the presence of lead or other heavy metals. Soil samples shall be taken in the presence of the City's representative. Testing shall be accomplished by the same laboratory as the original testing under requirements of Title 22. If soils contain excessive levels of lead or other heavy metals above those levels determined by testing at start of work and beyond acceptable levels of current regulations, Contractor shall be responsible for removal and disposal of contaminated soil, and returning the site to its original condition. Copies of laboratory analyses reports shall be forwarded to the City immediately upon receipt from the laboratory.

3.14 OMISSIONS

Care has been taken to delineate herein those surfaces to be coated or painted. However, if coating and painting requirements have been inadvertently omitted from this section or any other section of the specifications, it is intended that all metal surfaces, unless specifically exempted herein, shall receive a first-class protective system equal to that given the same type surface pursuant to these specifications.

END OF SECTION

SECTION 33 16 19 - MISCELLANEOUS STRUCTURAL MODIFICATIONS SPECIFICATION

PART 1 - GENERAL

1.1 PURPOSE

This specification establishes methods and procedures for miscellaneous structural and safety modifications.

1.2 APPLICABLE STANDARDS AND SPECIFICATIONS

- A. Welding and design shall be accomplished in conformance to the latest revision of AWWA D100 Standard for Welded Steel Reservoirs for Water Storage. Where tolerances and details are not defined by the AWWA Standard, the applicable sections of the American Petroleum Institute (API) Standard 650 shall apply. Welders shall be certified to the procedure and process called for in the work, and certification papers shall be on file with the Contractor at the job site, or in possession of welders at all times.
- B. Original plans and typical sketch drawings are included as specific references. Contractor is to submit shop drawings or sketches in detail of each item to be added, replaced or modified, as noted in 1.4.

1.3 CONTRACTOR

- A. The Contractor shall be licensed under the laws of the State of California in the classification of General Engineering "A". He shall have a minimum of five years practical experience and successful history of similar new steel tanks. Contractor shall substantiate this requirement by furnishing a written list of references. The Owner reserves the right to contact references not on the written list provided by the Contractor.
- B. The Contractor personnel shall possess and be prepared to exhibit proof of current certification in the following areas of safety training:
 - 1. OSHA Fall Prevention
 - 2. Competent Person Lead Abatement
 - 3. Confined Space Entry
 - 4. First Aid/CPR

1.4 SUBMITTALS

- A. Electronic submittals in pdf format of detailed shop drawings or sketches of field work and required calculations shall be submitted to the Engineer for review for all structural work. Drawings or sketches shall contain sufficient details to clearly define work to be accomplished. Submitted drawings and calculations shall be stamped and signed by a California licensed Structural or Civil Engineer. Fabrication or installation shall not be commenced prior to review and approval of shop drawings or sketches.
- B. An electronic submittal will be accepted in only the following format.
 - 1. The file shall be in pdf format.

2. Each project submittal shall be a separate file.
3. Each file shall be labeled in the following sequence:
 - a. Owner Name/Project Name
 - b. Submittal No.
 - c. Description

1.5 QUALITY ASSURANCE

- A. Welding procedures and welding operators shall have been qualified in accordance with AWWA D100 Standard. All butt joints shall be complete penetration and fusion of joints. All completed welds shall be free of slag and all finish steel surfaces free from weld spatters. Examination of the welded joints shall be made as the work progresses in accordance with API 653 Section 10 (Revised), herein included as part of this specification.
- B. Inspection and Checking: The City will provide and utilize the services of an independent professional inspection agent who will be City's Structural Inspector. Contractor will furnish inspection devices in good working condition and equipment shall be operated by, or in the presence of the inspector. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are acceptable to City's Inspector. The City's Engineer's decisions shall be final as to interpretation and/or conflict between any of the reference specifications and standards contained herein.
 1. The City's Inspector will perform inspection at key points throughout the structural modifications.
 2. All welding tests shall be performed in the presence of the City's Inspector.

PART 2 - MATERIALS OF CONSTRUCTION

2.1 GENERAL

- A. All materials specified are those, which have been evaluated for the specific use. Any proposed substitutions must be submitted to the Engineer prior to the bid opening.
- B. All steel plate components shall be fabricated from new ASTM A-36 material and all new carbon steel pipe shall be ASTM A-53 material. Contractor shall provide certified mill test reports for all steel plate and pipe.
- C. Materials of construction not specified as noted herein, shall be as noted in applicable sections of Standard Specifications for Public Works Construction, latest edition.

2.2 PRODUCTS

- A. Ladder Fall Prevention System:
 1. The fall prevention system shall be MSA Latchways Vertical Ladder System and components or a 3/8" 7 x 19 stainless steel flexible cable DBI Sala LAD-SAF Fall Arrest System with an LAD-SAF X3 Detachable Cable Sleeve.

2. The safety harness shall be DBI Sala ExoFit Tower Climber Harness Model No. 1108652, Evotech Lite Harness, Back, Hip & Front D-Ring, Quick-Connect leg straps X-Large Model No. 10163364 or approved equal.
3. All equipment and components for the ladder fall prevention system and roof fall protection system shall be from the same manufacturer.

B. Roof Fall Protection System:

1. Tie-off anchors shall be D-Ring Anchorage Connector with mounting plate from DBI Sala Model Number 2101634, MSA No. 506669 or approved equal.
2. Rope lifeline shall be an ANSI 25 ft. polyester vertical rope lifeline with snaphook from MSA, DBI Sala or approved equal.
3. Energy absorbing lanyard with rope adjuster shall be the DBI Sala, MSA rope grab or approved equal.
4. All equipment and components for the ladder fall prevention system and roof fall protection system shall be from the same manufacturer.

C. Nuts and Bolts: All bolts and nuts used on the interior of the tank shall be galvanized ASTM A307 for appurtenances and ASTM A563 or A325 for rafters and structural members.

D. FAA Lighting: FAA lighting shall be model FL-810LRAC1D10BPT dual head obstruction lighting with dual switches from Flight Light Inc. or approved equal.

E. Grounding Materials:

1. Rods: $\frac{3}{4}$ " diameter copper clad steel rods minimum 10 feet long with hardened steel points
2. Ground Clamps: Ground clamps for connection of ground wire to handrails, flanges, gateposts, etc., shall be high strength corrosion resistant copper alloy and UL 467 listed for direct burial.
3. Ground Conductors: Underground ground conductors not in conduit shall be annealed bare standard copper conforming to ASTM B8. Size shall be #4/O copper minimum unless noted otherwise on the plans. Ground conductors in conduit shall have green insulation.
4. Exothermic Connections: Weld connections together using an exothermic fusion type process. Provide connections equal or larger in size than the conductors joined and with the same current carrying capacity as the largest conductor. Connections shall be cadweld or equivalent. All buried or concealed ground connections, and ground wire to ground rod connections, shall be exothermic type connections.

PART 3 - EXECUTION

3.1 GENERAL

- A. All work shall be executed in accordance with the requirements of the American Water Works Association Standard D100, latest revision, the City of Manhattan Beach, and these specifications. Where the foregoing standards, recommendations, and specifications are conflicting, said conflicts shall be brought to the attention of the Engineer.
- B. All work shall be executed by skilled craftsmen qualified to accomplish the required work in a manner comparable with the best standards of practice. Only experienced and competent personnel should be employed to perform the work. Resumes of personnel to be used on the project shall be submitted upon Notice of Award. Continuity of personnel shall be maintained and transfers of key personnel shall be coordinated with the Engineer.
- C. The Contractor shall provide a Project Superintendent to be at the work site during all operations. The superintendent shall have the authority to sign any change orders, pay estimates coordinate work and make other decisions pertaining to the execution of their contract.
- D. The Contractor shall cooperate with the City who may be conducting other operations on or near the tank.
- E. All installation and repair work shall be accomplished in such a way as to minimize tank down-time. All repair operations shall be completed so as not to impair completion schedule for project, which includes subsequent recoating and repainting of tank by others.
- F. The Contractor shall coordinate with the City at least seven (7) days before starting work at the site.
- G. All equipment, piping, and surfaces of the tank shall be protected from all damage and dust or other deleterious material infiltration during the operations of the Contractor. Any items damaged by the operations of the Contractor shall be replaced in kind or acceptably repaired to the satisfaction of the Engineer by the Contractor at no cost to the City.
- H. All work shall be made accessible to the Engineer at all times. The City may use own forces, engage full-time independent inspection services, or perform inspections intermittently. The Contractor is to supervise the job properly between inspections.
- I. The Engineer shall inspect the cleaning of pitted areas prior to welding and following post-weld repair applications.
- J. Any burrs, weld spatter, sharp edges, corners, or rough welds that would cause difficulty in achieving a defect-free paint system shall be chipped or ground smooth in conformance to NACE Standard SP0178-89. It is not the intent to have the welds or "scars" ground "flush". The object of the grinding is to eliminate sharp edges, corners, and overlaps to provide a surface for the application of a uniform thickness of coating or paint without voids or other defects.

- K. Should vents, holes, rigging attachments, or any other modification, cutting or welding be required to meet safety standards, they may be accomplished at the expense of the Contractor upon submitting of details in writing to, and with subsequent approval by the Engineer.
- L. Where it is necessary to abrasively blast clean or chemically strip coated or painted areas prior to, and after, any welding operations, work will be coordinated with the Engineer.
- M. Any remedial cleaning, coating and painting application shall be accomplished in accordance with the requirements listed in Section 3.2.
- N. Contractor shall provide approved sanitary facilities for all Contractor personnel, as no existing facilities will be available to the Contractor. Facilities shall be maintained during duration of project to complete standards of the City and shall be removed prior to Contractor's departure from the site at completion of the project.
- O. The Contractor's equipment shall be designed for installation of materials specified and shall be maintained in first class working condition. Contractor's equipment shall be subject to approval of the Engineer.
- P. The Contractor shall provide, at his own expense, all necessary power and scaffolding required for his operations under the contract.
 - 1. The interior of the tank will be recoated and the exterior repainted upon completion and acceptance of the structural modifications. Contractor may privately arrange for the coating and painting contractor to furnish scaffolding for accomplishment of all structural work prior to use of scaffolding for his work.

3.2 HEAVY METAL COMPLIANCE AND TESTING

Contractor shall comply with requirements of the California Department of Public Health Title 22 and Cal/OSHA Title 8 for worker protection during removal of paint and handling of hazardous wastes resulting from surface contamination and any removed paint particles. Contractor will remove existing interior coating and exterior paint where cutting, burning and welding will be accomplished. If any additional exterior paint is to be removed, submittal of a written plan of action for the project shall be accomplished by Contractor prior to start of project.

3.3 MODIFICATIONS AND REPAIRS

- A. Preparation: Prior to removal, modification or installation of any materials or fittings, existing exterior paint within six inches of specified work will be removed by Contractor in conformance to regulations noted in Section 3.2. Contractor shall be responsible for removal of paint to a degree the existing paint will not interfere with any cutting, burning or welding operations.
- B. Welding: Welding shall be accomplished as specified herein and in conformance to referenced standards and industry practice.

- C. Drawings and Sketches: Available original site, piping and accessory drawings and miscellaneous typical sketch drawings are included as specific references. Contractor is to submit shop drawings or sketches in detail of each item to be added, replaced or modified, as noted in Section 1.4.
- D. Vent Screening: The existing screening on the center vent shall be removed prior to coating the interior of the tank. After completion of all interior coating and exterior painting of the center support plate and interior of the vent and cover, center vent cover and new screening shall be reinstalled. Contractor is responsible for removal and replacement of all nuts and bolts and welding as needed. Screening for center vent shall consist of galvanized steel 20 mesh with a .023 wire diameter on inside with 2 mesh galvanized steel backup on outside. Bolts and nuts for the vent shall be either coated carbon steel, galvanized or stainless steel. Install insulation sleeves and gaskets where dissimilar metals touch.
- E. Roof Fall Protection System: Remove and dispose of existing anchor clips on the roof. Furnish and install new tie-off anchors and personal fall protection system equipment, in accordance with Section 2.2 B.
1. The installation of the roof fall protection system and equipment shall be certified after installation. Certification shall be provided to the City.
 2. All equipment and components for the ladder fall prevention system and roof fall protection system shall be from the same manufacturer.
- F. Roof Hatch: Remove and dispose of existing roof hatch. Furnish and install an approved new 36" x 36" lockable hatch with hinged aluminum cover at existing hatch location. Hatch must be aligned with the interior ladder in a manner that allows a person safe access to the ladder. Place a seal weld at the roof to curb transition on the interior of the tank.
- G. Interior Ladder Safety System: Furnish and install a personal fall prevention safety system on the existing interior stainless steel ladder. Furnish and install insulation sleeves and gaskets where dissimilar metals touch and at all ladder to brace connections to separate the dissimilar metals.
- H. Ladder Platform: Remove and dispose of existing ladder platform, structure, and guardrailing below the tank bowl. Furnish and install a new platform, structure, support braces, guardrailing, and safety chains, in accordance with the plans. Protect existing conduit in place and transfer to the new platform.
- I. Exterior Ladders: Remove and dispose of both existing ladders from the ground level to the ladder platform and from the ladder platform to the tank catwalk. Existing braces shall be cut flush with the shell/leg and shall be ground smooth to provide an integrated surface with the shell/leg. Furnish and install new exterior ladders and stand-off brackets from the ground level to the ladder platform and from the ladder platform to the tank catwalk, in accordance with Cal/OSHA requirements. The new lower ladder shall commence at the same elevation as the existing ladder. Relocate the existing vandal guard door to the new exterior ladder. Protect existing conduit in place and transfer to the new ladder braces. Modify the guardrailing at the entrance of the ladder onto the catwalk to widen the opening, brace the ladder fall prevention system, and provide

safety chains at the entrance, in accordance with the plans.

- J. Ladder Fall Prevention System: Remove and dispose of the existing fall prevention system on all three exterior ladders. Furnish and install cable fall prevention systems on all exterior ladder sections, in accordance with Section 2.2 A. Provide two full body harnesses and two safety sleeves to the City.
 - 1. The installation of the ladder safety system shall be certified after installation. Certification shall be provided to the City.
 - 2. All equipment and components for the ladder fall prevention system and roof fall protection system shall be from the same manufacturer.
- K. Catwalk Supports: Furnish and install additional catwalk supports at the midpoint of the catwalk between each support leg and two additional supports adjacent to the exterior ladder, in accordance with the plans.
- L. FAA Lighting: Remove and dispose of existing FAA lighting system and mount. Furnish and install new double obstruction FAA lighting with photocell, dual switches and back-up lighting, in accordance with Section 2.2 D. Contractor shall field measure conduit fitting size prior to ordering lighting system. Work shall include connecting existing wires to new lighting system.
- M. Catwalk Lighting: Remove and dispose of existing lights, conduits, and support clips on the catwalk guardrail, platform, and ladders. The conduit shall be removed beginning at the lights until it terminates at the breaker at ground level.
- N. Riser Screening: Furnish and install 2 x 2 wire mesh expanded metal screening and frames to cover the gap between the bottom of the tank bowl and topside of the lateral gusset plates, in accordance with the plans. Weld clips with nuts attached to the tank bottom and top of the riser to support a screen frame. The screen shall be 1" flat bar cut to follow the contour of the tank to fully close off the gap to prevent birds from nesting at the top of the riser.
- O. Abandoned Conduit: Remove and dispose of abandoned conduit on the tank structure and top of the tank. Work shall include cleaning up and organizing the existing conduit on top of the tank.
- P. Pit/Perforation Treatment: Excessively pitted or perforated areas shall be either filled with weld metal and ground smooth or covered with a metal plate of the same plate thickness. Plate shall extend six inches beyond pit or perforation with a 100% fillet weld around perimeter of plate. This work will be accomplished on an hourly rate time and material basis.
- Q. Inspection Spot Blasting: Excessively corroded areas of the structural members shall be abrasive blast cleaned to remove severe corrosion, as determined necessary by the Engineer. Engineer shall inspect the blast cleaned areas using Contractor's scaffold following the blasting to determine whether optional bid items will be needed.
- R. Grinding: Excessively corroded areas on the structural members that comprise of sharp edges from sandblasting shall be ground smooth and rounded, as determined necessary

by the Engineer. This work will be accomplished on an hourly rate time and material basis.

- S. Exterior Tank Bowl Ladder: Remove and dispose of existing tank bowl ladder and furnish and install a new exterior ladder on the tank bowl, in accordance with Cal/OSHA requirements, as determined necessary by the Engineer.
- T. Structural Support Members: Remove existing severely corroded tension rods and/or overflow stand-off braces, as determined necessary by the Engineer, and replace with members in like-kind. The Contractor shall field verify the structural member size and length prior to fabricating.
- U. Catwalk Floor Plates: Remove and dispose of severely corroded catwalk floor plates, as determined necessary by the Engineer. Furnish and install new floor plates in like-kind. The Contractor shall field verify the plate size, thickness, and length prior to fabricating. New floor plates shall have ½" diameter holes.
- V. Catwalk Drain Holes: Drill ½" diameter holes in the catwalk floor plates in areas that exhibit staining from pooled water, as determined necessary by the Engineer.
- W. Catwalk Guardrailing: Remove and dispose of the complete catwalk guardrailing, as determined necessary by the Engineer. Furnish and install all new guardrailing, in accordance with the plans.

3.4 TESTING

- A. The Contractor shall furnish all materials, labor, and equipment necessary to test the modifications as specified herein. Testing shall be completed prior to acceptance of work as complete and meeting the requirements of the specification.
- B. Spot examination of the welded joints shall be made as the work progresses by magnetic particle, dye penetrant method, or by spot radiographic examination as applicable.
- C. All defects uncovered by testing process shall be corrected and retested until such defects are eliminated.
- D. Contractor shall provide a watertight installation. After flushing of the chlorinated water and upon filling of the tank, any leaks, which occur on the tank or appurtenant piping shall be repaired by the Contractor at his expense and to the satisfaction of the Engineer. All chlorinated water shall be de-chlorinated in accordance to the City's NPDES permit prior to disposal.

3.5 CLEANUP

Upon completion of the work, all staging, erection brackets, scaffolding and debris shall be removed from the tank and site and disposed in a manner approved by the Engineer. The entire job site shall be left in a clean condition.

END OF SECTION

**APPENDIX I
PROGRESS PAYMENT REQUEST FORM**

TO: CITY OF MANHATTAN BEACH
Engineering Division, 1400 Highland Avenue, Manhattan Beach, CA 90266

PROJECT TITLE _____

PROJECT NO. _____

FROM: CONTRACTOR _____

Date _____

Address _____

Telephone _____

Submitted by _____

Progress Estimate # _____

Contract Award Amount \$ _____

No.	Description	Contract Quantity	Previous Quantity	Quantity This Estimate	Unit Price	Amount This Estimate	Total Quantity to Date	Total Amount to Date
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
	Total							
	Less Retention							
	Less Previous Billing(s)							
	Total Amount Due							

City Approval: _____

Date: _____

NOTE: An updated Project Schedule must be provided with each monthly progress payment in accordance with Section 6-1 of the General Provisions in addition to a Conditional Waiver and Release form per Section 9 -3.2.1

**APPENDIX II
WATER TANK INSPECTION REPORT**



March 6, 2017

City of Manhattan Beach
3621 Bell Avenue
Manhattan Beach, CA 90266

Attention: John Haig

Reference: 15 Point Annual Water Tank Inspection
(1) – Elevated Tank

Dear Mr. Haig,

Corrpro Waterworks recently completed the 15-point annual tank review for the above referenced tank. A copy of the field report is included along with photographs from the site that illustrate any areas of concern described in the report. Areas of concern noted on the report should be investigated and appropriate action taken to make corrections. Any repairs and or replacements concerning the cathodic protection system will result in a quote forthcoming.

Corrpro Waterworks can provide competitive pricing on many of the common areas of concern found on water tank sites. Please call us for assistance on these repairs. Also, references can be provided for those repair items that do not fall within our area of expertise.

Coating Services: Contact Corrpro Waterworks for information on issues regarding recommended practices for Protective Coatings Engineering, Inspection, Specifications & Application.

We appreciate the opportunity to be of service. Should you have any questions or require additional information, please contact our Nationwide Customer Service toll free at 1-800-443-3516 or visit our web-site at www.corrpro.com.

Respectfully Submitted,
CORRPRO WATERWORKS

William Bearden
Operations Associate
Telephone: 770-761-5400

CORRPRO WATERWORKS
15 POINT WATER TANK REVIEW

300,000 GALLON ELEVATED
(6TH STREET TANK)

SYSTEM # 15552

Prepared For:
CITY OF MANHATTAN BEACH

MANHATTAN BEACH, CA.

MARCH 6, 2017

ANNUAL WATER TANK SERVICES

• HEALTH • SECURITY • SAFETY

15 POINT TANK REVIEW



Phone: 1-800-443-3516 • www.corrprowaterworks.com

ELEVATED TANK
C.P. SYSTEM NO. 15552

1. PHOTOGRAPH FULL VIEW OF TANK: THIS IS NOT AN OPTIONAL ITEM.	PHOTOS	AREAS OF CONCERN
2. FOUNDATION: OBSERVE FOR SETTLING, CRACKS, AND DETERIORATION.	<input checked="" type="checkbox"/> YES NO	<input checked="" type="checkbox"/> YES NO
3. EXTERIOR TANK COATING: OBSERVE FOR COATING FAILURE, CORROSION, AND LEAKS. <i>ONLY CONCERN IS COATING FAILURE AND RUST AREAS</i>	<input checked="" type="checkbox"/> YES NO	<input checked="" type="checkbox"/> YES NO
4. INTERIOR TANK COATING: OBSERVE AS ALLOWED FROM ACCESS HATCH. <i>MULTIPLE COATING FAILURES / RECOMMEND COATING INSPECTION</i>	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
5. WATER LEVEL INDICATOR: TYPE, STYLE, AND CONDITION.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
6. OVERFLOW PIPE: CHECK FLAP VALVE COVER OR SCREEN, FOR OPERATION AND SEAL.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
7. ACCESS LADDER: CHECK FOR LOOSE BOLTS AND RUNGS. <i>FEW SPOTS OF COATING FAILURE ON FIRST LADDER / RUST ON UPPER LADDER</i>	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
8. FALL PROTECTION DEVICES: CHECK OPERATION.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
9. TANK ROOF: CHECK FOR HOLES, RUST, AND PONDING WATER LOW SPOTS.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
10. AIR VENTS: CHECK SCREENS, SEALED EDGES, AND SEAMS.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
11. CATHODIC PROTECTION ANODE COVERS: CHECK FOR DETERIORATED GASKETS, AND SEAL.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
12. ALL ACCESS HATCHES: CHECK LOCKS, HINGES, BOLTS, AND GASKETS.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
13. VISUAL WATER QUALITY: OBSERVE FOR FOREIGN MATTER AS DISCERNABLE FROM ROOF HATCH.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO
14. TANK LIGHTING: CHECK CONDITION AND OPERATION. <i>NO AVIATION LIGHTS WORKING / ONE FOUND TOTALLY BROKEN OFF</i>	<input checked="" type="checkbox"/> YES NO	<input checked="" type="checkbox"/> YES NO
15. TANK SITE SECURITY: CHECK FENCES, GATES, AND ACCESS DOORS.	<input checked="" type="checkbox"/> YES NO	YES <input checked="" type="checkbox"/> NO

NOTE: The service provided is an annual visual evaluation for the purpose of noting possible areas which may require further investigation or possible corrective action in accordance with AWWA Manual M42 recommended annual maintenance practices. It is limited to areas of the tank visible from access points such as ladders and catwalks. The work performed is not a structural evaluation, detailed coatings integrity evaluation, nor does it take the place of a complete 3-5 year water tank inspection as recommended by AWWA standards.

WRITTEN RECOMMENDATIONS FOR CORRECTIVE ACTION IF REQUIRED:

RECOMMEND COATING INSPECTION, NEW AVIATION LIGHTS ON TOP OF BOWL (WHITE), REPAIR FIRST LANDING: CAN SEE DAYLIGHT ON BOTH SIDES OF FLOOR PLATE, PERMANENTLY FIX RED LIGHT CONDUIT BOX AND CLEAN UP RED LIGHT COVERS FROM OVERSPRAY

WE WERE ABLE TO FIX THE WIRING AND GET 4 RED LIGHTS WORKING, WIRES WERE BROKEN AND ALL 4 BULBS BURNED OUT.

CORRPRO WATERWORKS

SUBSCRIBER'S ACCEPTANCE

BY: KEVIN T. DATE: 2/23/17 BY: [Signature] DATE: 2-23-17

ORIGINAL

PHOTOGRAPH INDEX

1. FULL VIEW OF TANK
2. FOUNDATION
3. EXTERIOR TANK COATING
4. INTERIOR TANK COATING
5. WATER LEVEL INDICATOR
6. OVERFLOW PIPE
7. ACCESS LADDER
8. FALL PROTECTION DEVICES
9. TANK ROOF
10. AIR VENT(S)
11. CATHODIC PROTECTION ANODE COVERS
12. ALL ACCESS HATCHES
13. VISUAL WATER QUALITY
14. TANK LIGHTING
15. TANK SITE SECURITY
- * ADDITIONAL PICTURES

1.FULL VIEW OF TANK



2. FOUNDATION



2. FOUNDATION



3. EXTERIOR TANK COATING



3. EXTERIOR TANK COATING



3. EXTERIOR TANK COATING



3. EXTERIOR TANK COATING



3. EXTERIOR TANK COATING



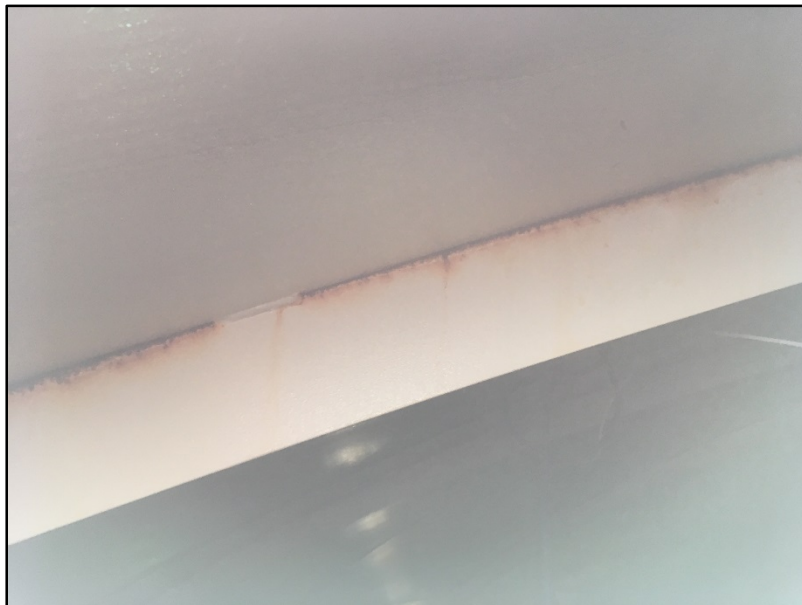
3. EXTERIOR TANK COATING



4. INTERIOR TANK COATING



4. INTERIOR TANK COATING



5. WATER LEVEL INDICATOR

N/A

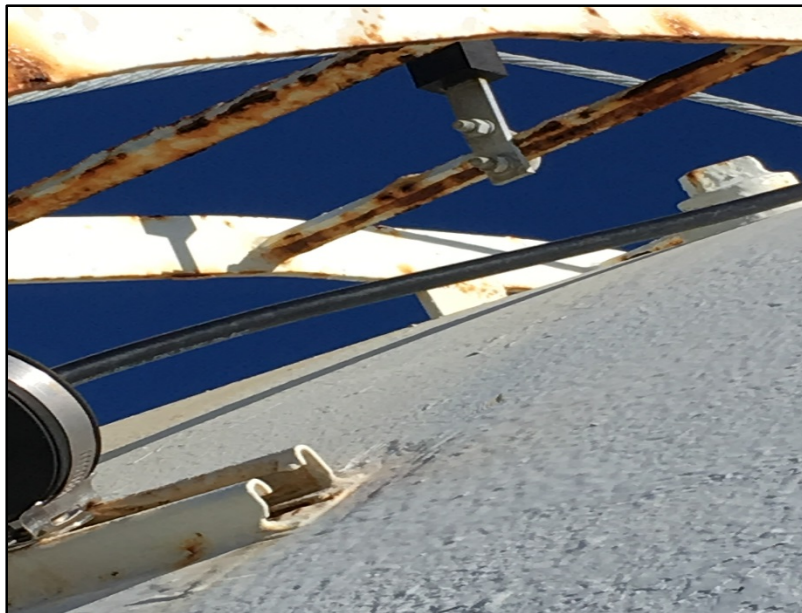
6. OVERFLOW PIPE



7. ACCESS LADDER



7. ACCESS LADDER



7. ACCESS LADDER



8. FALL PROTECTION DEVICE



9. TANK ROOF



9. TANK ROOF



10. AIR VENT



11. C.P. ANODE COVER



12. ACCESS HATCH



12. ACCESS HATCH



13. VISUAL WATER QUALITY



14. TANK LIGHTING



14. TANK LIGHTING



14. TANK LIGHTING



14. TANK LIGHTING



14. TANK LIGHTING



14. TANK LIGHTING



15. TANK SITE SECURITY



**APPENDIX III
LEAD PAINT SURVEY**



ALTA
ENVIRONMENTAL

REPORTED: May 15, 2015

PROJECT NO.: CIMB-15-5239

CLIENT: The City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, California 90266

ATTENTION: Mr. Ish Medrano

REF: Lead Paint Survey
Block 35 Water Tower
1431 6th Street
Manhattan Beach, California 90266

At the request of The City of Manhattan Beach, Alta Environmental performed **limited sampling** for the **presence of lead paint in the leg frames** of the Block 35 Water Tower located at 1431 6th Street Manhattan Beach, California 90266. The sampling was conducted on May 11, 2015 by Eric J. Fleming, a California Department of Public Health Certified Inspector Assessor.

LEAD PAINT CHIP SAMPLING

Paint chips were collected to determine the parts per million concentration of lead in the painted surfaces. Paint chip samples were collected for construction safety as defined by *Title 8 CCR Section 1532.1*. Paint chip sample analysis was conducted by EPA Method SW846/7420 at AQ Environmental located in Signal Hill, California, a laboratory are accredited by the Environmental Laboratory Accreditation Program

Lead-based paint (LBP), according to, the State of California, HUD and the USEPA is **defined as paint** or other surface coating with **lead content equal to or greater than 5,000 parts per million (ppm)** by paint chip analysis.

Lead-containing paints (LCP) according to *Cal/OSHA Title 8 CCR, Section 1532.1(d)* are defined as paints reported with any detectable levels of lead by paint chip analysis. When disturbed for construction purposes, these surfaces are subject to Cal/OSHA exposure assessment requirements. Amongst other things, this regulation requires initial employee exposure monitoring to evaluate work exposure during work that disturbs paint with any detectable level of lead. If airborne lead levels are above the established Cal/OSHA action limit or permissible exposure limit, additional monitoring and respiratory protection are required.

The following materials were sampled for lead:

Sample Number	Component	Substrate	Color	Material Location	Result (ppm)
1	Round support	Metal	White	Round legs of water tower	94,000
2	Flat support	Metal	White	Flat metal bracing of water tower	290,000

ASSUMPTIONS AND LIMITATIONS

This report was prepared exclusively for use by The City of Manhattan Beach, and may not be relied upon by any other person or entity without Alta Environmental's express written permission. The information, conclusions and recommendations described in this report apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames and project parameters indicated. Alta Environmental cannot be responsible for the impact of any changes in environmental standards, practices or regulations after performance of services.

In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the current standard of practice for similar types of studies.

As applicable, Alta Environmental has relied in good faith upon representations and information furnished by individuals with respect to operations and existing property conditions, to the extent that they have not been contradicted by data obtained from other sources. Accordingly, Alta Environmental accepts no responsibility for any deficiencies, omissions, misrepresentations, or fraudulent acts of persons interviewed.

Alta Environmental will not accept any liability for loss, injury claim, or damage arising directly or indirectly from any use or reliance on this report. Alta Environmental makes no warranty, expressed or implied

This report is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions, and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

If you have any questions, feel free to contact the undersigned at (562) 495-5777. We appreciate the opportunity to be of service to The City of Manhattan Beach.

Respectfully submitted by:

Alta Environmental



Eric Fleming
 Project Manager, Building Sciences
 Certified Asbestos Consultant
 Cal/OSHA Cert. #00-2816
 Lead Inspector/Assessor & Project Monitor, Supervisor
 CDPH Cert. #4187

Attachments A

Laboratory Report with Chain-of-Custody



1508 East 33rd Street
Signal Hill, CA 90755
Tel (562) 206-2770
Fax (562) 206-2773

Alta Environmental
3777 Long Beach Boulevard
Long Beach, CA 90807
Attention: Eric Fleming

Project Number: CIMB-15-5239
Project Name: Block 35 Water Tower
Location:

Report Number: 1520367

Date Received: 5/12/2015
Date Analyzed: 5/14/2015
Date Reported: 5/14/2015

Date Sampled:
Sampled By:
Total Samples: 2

Analytical Method: EPA 7420/3050
Reporting Limit: 5 ug Pb

Lead (Pb) in Paint by Flame AAS

Lab ID Client ID	Location/Description	Sample Weight (g)	Lead Concentration ppm (mg/kg)
1520367-001 1	Paint Chip - R	0.1044	94000
1520367-002 2	Paint Chip - F	0.1001	290000

Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. This report shall not be reproduced without the written approval of this laboratory. The client shall be solely responsible for interpreting analytical results. Samples have not been blank corrected. Samples shall be disposed according to local, state and federal laws, 30 days after reporting results.

CA ELAP Cert #2823

Approved Signatory- Cristina E. Tabatt



CHAIN OF CUSTODY

1508 E. 33rd Street
Signal Hill, CA 90755
562-206-2770 Tel
562-206-2773 Fax
services@AQenvlabs.com

(Lab) Order No. 1520367

CUSTOMER INFORMATION		Turnaround Time	Shipped By	Report Send Via:
Company	Alta Environmental	Same Day <input type="checkbox"/>	Fedex <input type="checkbox"/>	Web <input type="checkbox"/>
Address	3777 Long Beach Blvd., Annex Bldg.	1 Day <input type="checkbox"/>	UPS <input type="checkbox"/>	Email <input checked="" type="checkbox"/>
City/State/Zip	Long Beach, Ca 90807	2 Day <input type="checkbox"/>	USPS <input type="checkbox"/>	Fax <input type="checkbox"/>
Contact	Eric J. Fleming	3 Day <input checked="" type="checkbox"/>	Drop Off <input type="checkbox"/>	Verbal <input type="checkbox"/>
Office Phone	562-495-5777	5 Day <input type="checkbox"/>	Drop Box <input type="checkbox"/>	Mail <input type="checkbox"/>
Cell	310-951-9486	Weekend <input type="checkbox"/>	Other <input type="checkbox"/>	Pick up <input type="checkbox"/>
Fax	562-495-5877	Special Instructions:		
Email	eric.fleming@altaenviron.com			

PROJECT INFORMATION	
Project Name:	Block 35 Water Tower
Project Number:	CIMB-15-5239
Location:	

PLM	PCM	MOLD	LEAD (Pb)
PLM EPA 600/R-93/116 <input type="checkbox"/>	NIOSH 7400A <input type="checkbox"/>	Spore Trap <input type="checkbox"/>	Air <input type="checkbox"/> TTLC <input type="checkbox"/>
PLM 400 Pt. Count (<0.25%) <input type="checkbox"/>	NIOSH 7400B <input type="checkbox"/>	Tape Lift <input type="checkbox"/>	Paint <input checked="" type="checkbox"/>
PLM 1000 Pt. Count (<0.1%) <input type="checkbox"/>	w/ TWA <input type="checkbox"/>	Bulk Sample <input type="checkbox"/>	Wipe <input type="checkbox"/>
		Swab <input type="checkbox"/>	Soil <input type="checkbox"/>

SAMPLE ID	SAMPLE TYPE	LOCATION	Date Sampled	Start Time	Avg Flow Rate	Volume (L)
1	Paint Chip	R				
2	Paint Chip	R				

Relinquished By: <i>[Signature]</i>	Received By: <i>[Signature]</i>
Date/Time: 8-12-15 10:40	Date/Time: 8/12/15 10:50 am



Lab Forms
Ver 082411

Attachments B

Field Bulk Sample List



Paint Chip Sample List

Client: City of Manhattan Beach

Project No.: CIMB-15-5239

Project Name: Block 35 Water Tower

Technician: Eric J. Fleming

Date: 5-11-15

Page: 1 of 1

[illegible]

LEAD HAZARD EVALUATION REPORT**Section 1 — Date of Lead Hazard Evaluation** 5-11-15**Section 2 — Type of Lead Hazard Evaluation (Check one box only)**☐ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify) Client Specific sampling**Section 3 — Structure Where Lead Hazard Evaluation Was Conducted**

Address [number, street, apartment (if applicable)] 1431 6th Street		City Manhattan Beach	County LA	Zip Code 90266
Construction date (year) of structure	Type of structure <input type="checkbox"/> Multi-unit building <input type="checkbox"/> School or daycare <input type="checkbox"/> Single family dwelling <input checked="" type="checkbox"/> Other <u>Water Tower</u>		Children living in structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Don't Know	

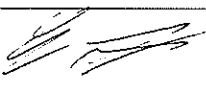
Section 4 — Owner of Structure (if business/agency, list contact person)

Name Ish Medrano		Telephone number 310-802-5357		
Address [number, street, apartment (if applicable)] 1400 Highland Avenue		City Manhattan Beach	State CA	Zip Code 90266

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☐ No lead-based paint detected ☒ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected
☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other _____

Section 6 — Individual Conducting Lead Hazard Evaluation

Name Eric J. Fleming		Telephone number 562-495-5777		
Address [number, street, apartment (if applicable)] 3777 Long Beach Blvd, Annex Bldg		City Long Beach	State Ca	Zip Code 90807
CDPH certification number 4187	Signature 			Date 5-11-15

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 — Attachments

- A. A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

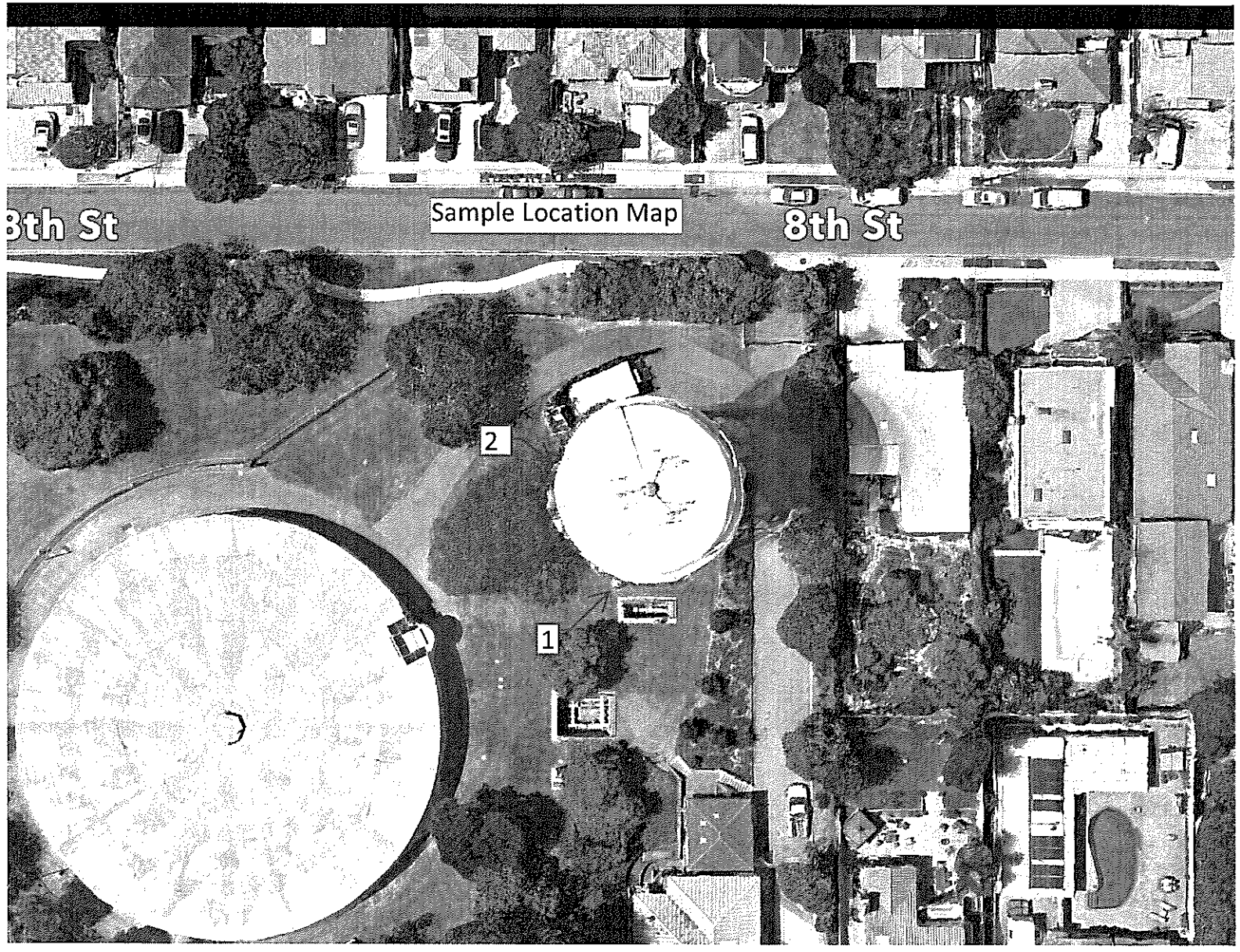
Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

Attachments C

Sample Location Map



Attachments D

Employee and Laboratory Certifications

Lead-Related
Construction
Certificate

Certificate
Type

Expiration
Date

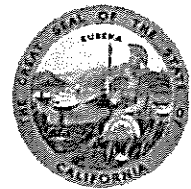
Inspector/Assessor	10/04/2015
Supervisor	10/04/2015
Project Monitor	10/04/2015



Eric J. Fleming

ID #: **4187**

Mr. Eric J. Fleming
Alta Environmental
3777 Long Beach Boulevard, Annex
Long Beach, California 90807



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

AQ Environmental Laboratories

1508 E. 33rd Street
Signal Hill, CA 90755

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.


This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2823**

Expiration Date: **8/31/2015**

Effective Date: **8/15/2013**

Richmond, California
subject to forfeiture or revocation


David Mazzer, Ph.D., Assistant Division Chief
Division of Drinking Water and Environmental Management



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing



AQ Environmental Laboratories

1508 E. 33rd Street
Signal Hill, CA 90755
Phone: 562-206-2770

Certificate No.: 2823
Renew Date: 8/31/2015

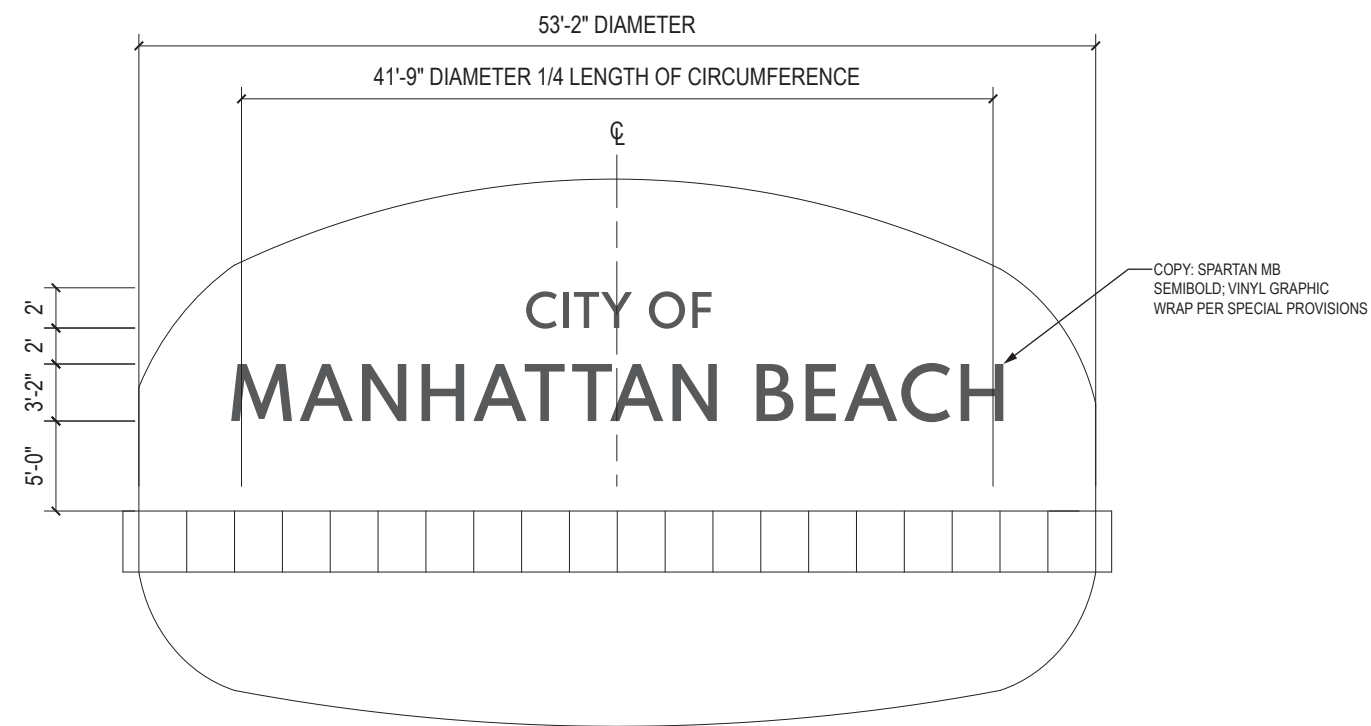
Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.130.001	Lead	EPA 7420
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Field of Testing: 121 - Bulk Asbestos Analysis of Hazardous Waste

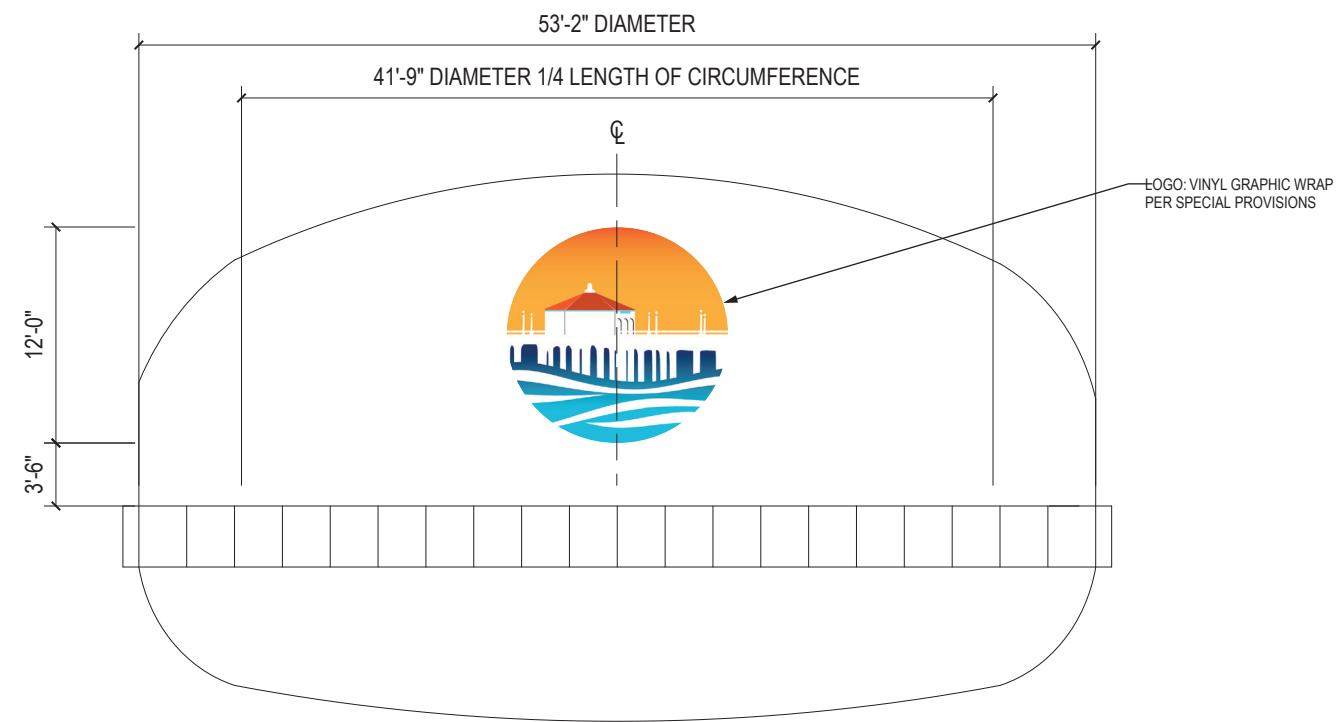
121.010.001	Bulk Asbestos	EPA 600/M4-82-020
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**APPENDIX IV
CITY LOGO AND LETTERING REQUIREMENTS**



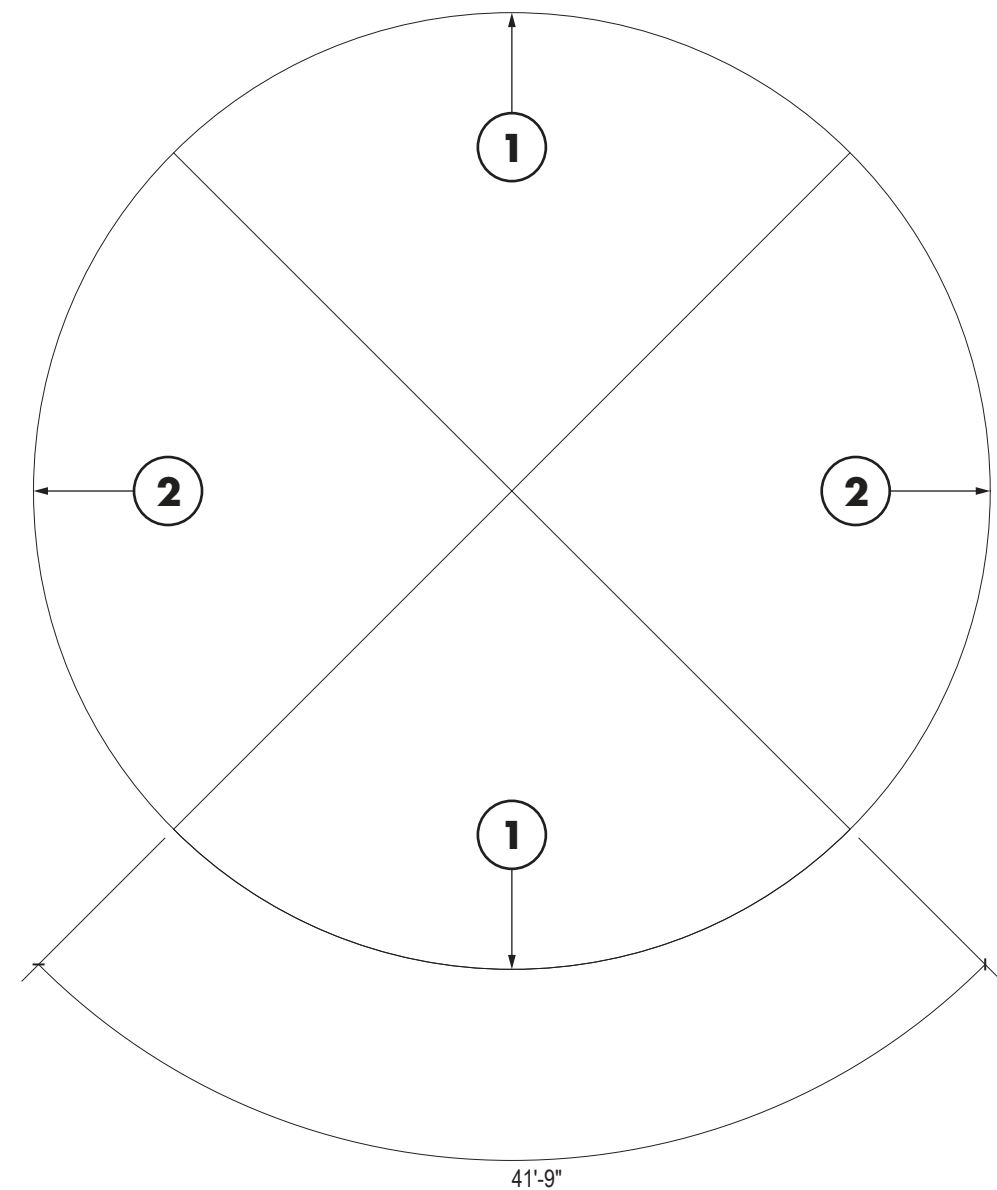
1 ELEVATION - "CITY OF MANHATTAN BEACH"
Scale: 3/32" = 1'-0"

Scale: $3/32" = 1'-0"$



2 ELEVATION - LOGO
Scale: 3/32" = 1'-0"

Scale: $3/32" = 1'-0"$



3 PLAN VIEW
Scale: 3/32"

Scale: $3/32" = 1'-0"$

APPENDIX V
PHOTOS AND VIDEOS OF THE BLOCK 35 ELEVATED TANK

Photographs and videos of the Block 35 Elevated Tank taken on January 15, 2020 are available at the following link:

<https://www.dropbox.com/sh/ppm0k30i0ip77bx/AAAJ9mcAzqKpovvpjEawkaNga?dl=0>



CITY OF MANHATTAN BEACH

ADDENDUM NO. 1

BID DOCUMENTS

Project No. W-628 Bid No. 1244-20

BLOCK 35 ELEVATED TANK PAINTING PROJECT 1431 6th Street

Issued on June 9, 2020

Please note the following revisions to the Request for Bid document for the Block 35 Elevated Tank Painting Project (Project No. W-628 and Bid Number 1244-20). *A signed copy of this addendum must be attached to the bid.*

Responses to Questions:

Q1. Do you have a bid walk sign in sheet for this project?

A1. The pre-bid meeting sign-in sheets are attached to this Addendum No. 1.

Q2. What is the anticipated start date?

A2. It is anticipated that the contract award occur by August and the Notice to Proceed will be issued upon full execution of the Contract.

Q3. Is the Urban Runoff Certification and the NPDES Permit qualification mandatory?

A3. By signing page B-16 of the Contract Documents, the Bidder certifies the statements included in the "Urban Runoff Certification" paragraph on page B-16. This signature and certification is required to be submitted with the contractor's Bid. Per the "Urban Runoff Certification," the Contractor is required to meet all Regional Water Quality Control Board and State Water Resources Control Board requirements, including the Municipal Separate Storm Sewer System NPDES Permit. The Contractor is also required to submit a Water Pollution Control Plan to the City for this Contract and to meet any additional applicable requirements included in the Contract Documents.

Q4. It is estimated that five sections of the catwalk need to be replaced. How long are the areas that will be replaced?

A4. Per the contract documents, the actual dimensions of the section of catwalks that need to be replaced are to be determined by the Engineer during construction. For bidding purposes, please assume a length of 8 ft. for the catwalk sections that are to be replaced.

Q5. Does any of the channel iron need to be replaced on the catwalk?

A5. The channel iron on the catwalk does not need to be replaced.

Revisions to the Bid Documents:

1. **Bid Opening Date, Time and Drop-off Procedure on the Notice Inviting Bids:** The first paragraph of the Notice Inviting Bids is hereby removed and replaced with the following:

“**NOTICE IS HEREBY GIVEN** that the City of Manhattan Beach (“City”) invites sealed Bids for the Project. The City will receive such Bids at the entrance of City Hall, 1400 Highland Avenue, Manhattan Beach, California 90266 from 10:30 a.m. to 11:00 a.m. on June 18, 2020.

In response to COVID19, City facilities, including City Hall, are closed to the public. Therefore, sealed Bids for this Project will only be accepted by City Staff present outside the main entrance door of City Hall during the period of time stated above. Bidders must make the necessary arrangements to physically deliver sealed Bids to City Staff. There will be no other opportunities or alternative methods considered to submit a Bid for this Project.

After 24 hours of contactless document isolation, the Bids will be publicly opened and read aloud by City Clerk staff via a Zoom meeting. The meeting web address and call-in information will be provided on a flyer to all Bidders when the sealed Bids are submitted. The Bid results will be posted on the City website two working days after the Bid Opening.”

This Addendum is approved by:



PREM KUMAR, PE, CITY ENGINEER

06/10/2020

DATE

A SIGNED COPY OF THIS ADDENDUM MUST BE ATTACHED TO THE BID.

I hereby acknowledge that the information contained in this addendum has been included in the bid submitted for this project.

COMPANY NAME

SIGNATURE

DATE



May 26, 2020 9:30 AM

Location: Block 35 Elevated Tank

1431 6th Street, Manhattan Beach, California 90266

[illegible]



BLOCK 35 ELEVATED TANK PAINTING PROJECT

Pre-Bid Meeting

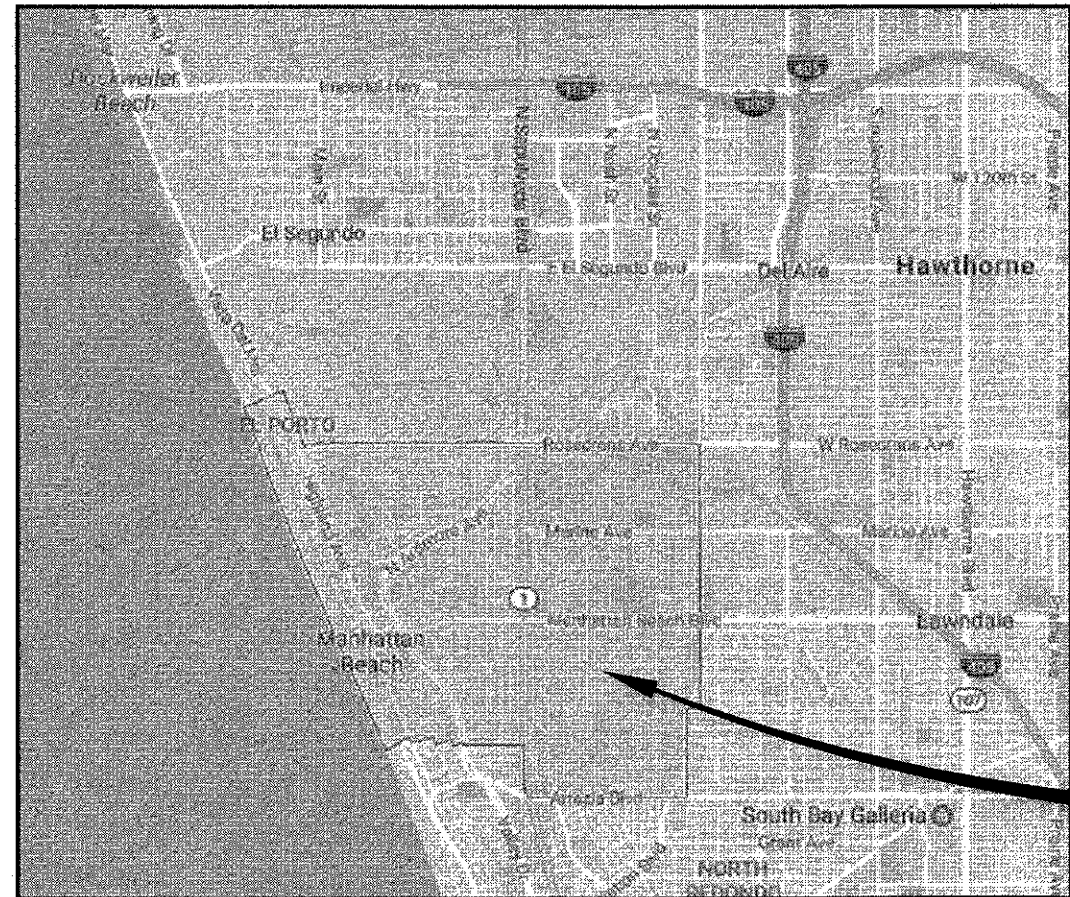
May 27, 2020 1:00 PM

Location: Block 35 Elevated Tank

1431 6th Street, Manhattan Beach, California 90266

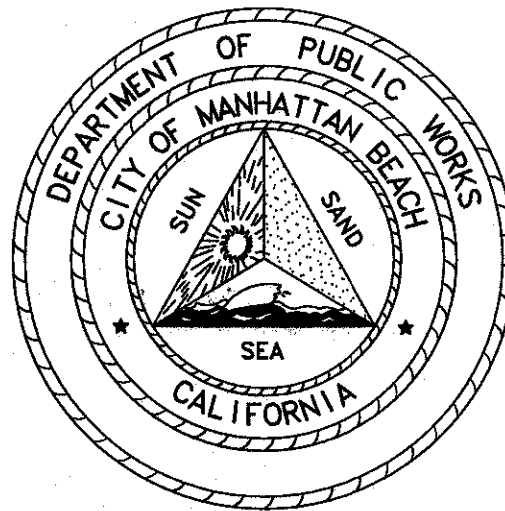
<u>Company Name</u>	<u>Print Name</u>	<u>Title</u>	<u>Email</u>	<u>Phone #</u>
<u>City of Manhattan Beach</u>	<u>Anastasia Seims</u>	<u>Sr. Civil Engineer</u>	<u>aseims@citymb.info</u>	<u>(310) 802-5361</u>
<u>Input</u>	<u>Jon Coley</u>	<u>Business Rep</u>	<u>Jon.Coley@DC36.org</u>	<u>(626) 265-9141</u>
<u>HCF (California Consulting)</u>	<u>Chad Simmons</u>		<u>marco@calsierra.net</u>	<u>(516) 416-7901</u>
<u>DI Industrial Coatings</u>	<u>Danny Ibarra</u>	<u>DWBL</u>	<u>IBARRA@DI56.COM</u>	<u>562-572-7760</u>
<u>Amp United</u>	<u>Raymond Alvarez</u>	<u>Super</u>	<u>RAAlvarez@AmpUnited.com</u>	<u>424 731-0705</u>
<u>Unified Field Serv. Corp.</u>	<u>Chad Johnson</u>		<u>Chad-Johnson@ufsc.us</u>	<u>(661) 858-8223</u>
<u>Unified Field Serv. Corp.</u>	<u>Clif Partain</u>		<u>Clif-Partain@ufsc.us</u>	<u>(661) 858-8223</u>
<u>DI Industrial Coatings</u>	<u>Danny Ibarra Jr.</u>	<u>CEO</u>	<u>ibarrarjr15@aol.com</u>	<u>(562) 572-9750</u>
<u>Arena Painting Contractors</u>	<u>Pablo Armenta-Parrinez</u>	<u>Estimator</u>	<u>pablo@arenapainting.biz</u>	<u>(310) 856-0120 ext. 142</u>
<u>Painters & Allied Trades District Council 36</u>	<u>Don McClain</u>	<u>Business Rep.</u>	<u>don.mcclain@dc36.org</u>	<u>(626) 296-8075</u>

CITY OF MANHATTAN BEACH
PLANS FOR
(REHABILITATION OF BLOCK 35 ELEVATED TANK)



VICINITY MAP
NOT TO SCALE

PROJECT SITE



PUBLIC WORKS DEPARTMENT
1431 6TH STREET
MANHATTAN BEACH, CALIFORNIA 90266

INDEX OF DRAWINGS	
DWG. NO.	DESCRIPTION
W-628	
1 OF 9	TITLE SHEET
2 OF 9	GENERAL NOTES
3 OF 9	SITE PLAN
4 OF 9	ROOF LAYOUT & FAA LIGHTING DETAILS
5 OF 9	ROOF HATCH, SCREENING, & INTERIOR LADDER ISOLATION DETAILS
6 OF 9	EXTERIOR LADDER DETAILS
7 OF 9	LADDER PLATFORM DETAILS
8 OF 9	PLATFORM & CATWALK DETAILS
9 OF 9	CITY LOGO
TOTAL SHEETS = 9	

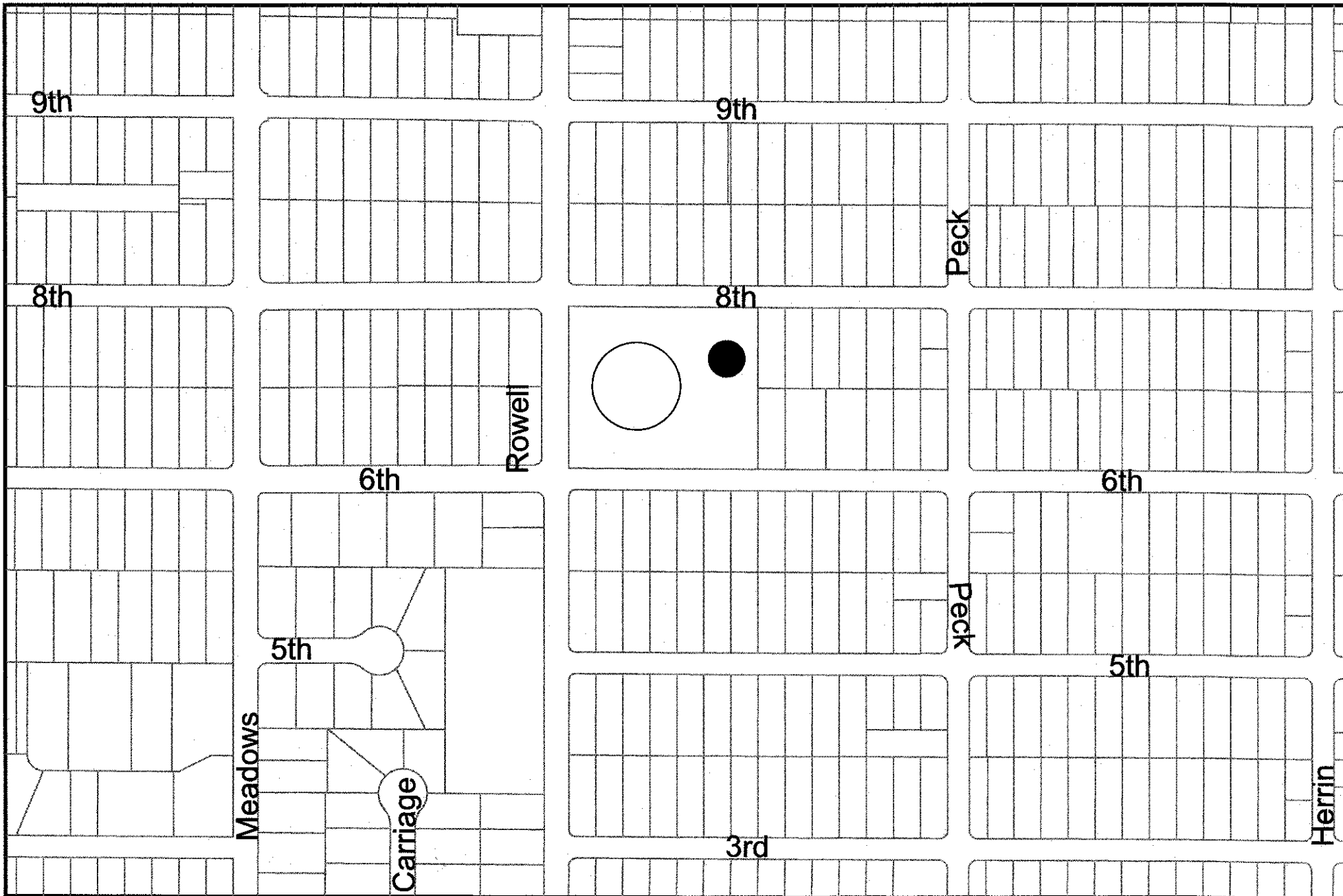
STANDARD PLANS:

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

2000-1	LEGEND FOR SANITARY SEWER PLANS AND PROFILES AND DISTRICT MAPS.
2002-1	PRECAST CONCRETE SHALLOW MANHOLE.
2003-2	REINFORCED PRECAST CONCRETE MANHOLE.
2004-1	RECTANGULAR SHALLOW MANHOLE.
2014-1	RECTANGULAR MANHOLE FRAME AND COVER.
2015-1	STANDARD MANHOLE STEP.
2021-1	BEDDING FOR SEWER PIPE.
2023-2	CRADLING AND ENCASEMENT.
2024-1	WYE OR TEE SUPPORT.
2026-1	EROSION PROTECTION IN STEEP SLOPES.
2027-1	ALLOWABLE TRENCH WIDTHS.
6008-1	MINIMUM PUBLIC SAFETY REQUIREMENTS.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

200-3	PRECAST CONCRETE SEWER MANHOLE
201-2	PRECAST CONCRETE SHALLOW MANHOLE
202-2	DROP SEWER MANHOLE
204-2	TERMINAL CLEANOUT STRUCTURE
207-2	PRECAST REINFORCED CONCRETE MANHOLE BASE
208-2	BREAKING INTO EXISTING MANHOLES
210-3	MANHOLE FRAME AND COVER LOCKING TYPE
220-3	CHIMNEYS
221-2	PIPE ANCHORS AND BACKFILL STABILIZERS
222-2	HOUSE CONNECTION SEWER
223-2	HOUSE CONNECTION REMODELING



LOCATION MAP
NOT TO SCALE

SITE LOCATION:
1431 6TH ST. MANHATTAN
BEACH 90266

WORK SITE LOCATION

DECLARATION OF DESIGN ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH CHECK DOES NOT, THEREFORE RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. I ALSO HEREBY DECLARE THAT I HAVE COMPARED THESE PLANS WITH ALL APPLICABLE ADA TITLE II REQUIREMENTS FOR DISABILITY ACCESS FOR THIS PROJECT AND THESE PLANS ARE IN FULL COMPLIANCE WITH THOSE REQUIREMENTS.

PROJECT UTILITY CONTACTS

CITY OF MANHATTAN BEACH (PUBLIC WORKS UTILITIES SECRETARY).....	(310) 802-5304
CITY OF MANHATTAN BEACH (PUBLIC WORKS DEPARTMENT)...STEPHANIE KATSIOULEAS.....	(310) 802-5303
CITY OF MANHATTAN BEACH (POLICE DEPARTMENT)...DERRICK ABELL.....	(310) 802-5103
CITY OF MANHATTAN BEACH (FIRE DEPARTMENT).....	(310) 802-5203
COUNTY SANITATION DISTRICT (COMPTON)...ENGINEERING COUNTER.....	(562) 908-4288 (Ext. 1204 or 1205)
AT&T DISTRIBUTION...SUBSTRUCTURE RECORDS REQUEST CONSTRUCTION & ENGINEERING.....	(510) 645-2929
CALIFORNIA WATER SERVICE...FRANK SCOTTY.....	(310) 257-1400
LA COUNTY PUBLIC WORKS - FLOOD MAINTENANCE...EDUARDO IVASAN or AHMET TATLIOVLO.....	(562) 861-0316
NEXTGLAVEN NETWORK...BRYANT LOWE.....	(724) 416-2193
SHELL OIL...CLARINDA MALDONADO.....	(310) 816-2063
SOUTHERN CALIFORNIA GAS COMPANY...GUILLERMO TEJEDA.....	(310) 687-2014
SOUTHERN CALIFORNIA EDISON...KRIS WALSH.....	(949) 533-6137
SPECTRUM (TIME WARNER CABLE)...ANTHONY XANPHIS.....	(310) 750-9185
T-MOBILE...SHAWN HENDERSON.....	(805) 279-3513
FRONTIER COMMUNICATION (PREVIOUSLY VERIZON)...DAN HAYES.....	(310) 793-4159
XO COMMUNICATIONS.....	(949) 417-7841

PROFESSIONAL ENGINEER'S NOTE:

THE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY THE ENGINEER OF RECORD USING AVAILABLE RECORD PLANS AND MAPS AND BASED ON FIELD RECONNAISSANCE OF EXISTING CONDITIONS. KNOWN UTILITIES AND OWNERS OF OTHER STRUCTURES HAVE BEEN GIVEN WRITTEN NOTICE OF THE PROJECT. HOWEVER, THE ENGINEER OF RECORD AND CITY OF MANHATTAN BEACH ARE NOT RESPONSIBLE FOR THE TOTAL ACCURACY AND/OR CORRECTNESS OF THE SHOWN INFORMATION. THE CONTRACTOR, BY SIGNING THE CONSTRUCTION CONTRACT FOR THIS PROJECT, ACCEPTS AND ASSUMES FULL RESPONSIBILITY FOR THE WORK AND ITS IMPACT ON THE EXISTING FACILITIES WHETHER SHOWN OR NOT ON THESE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE TO MAKE HIS OWN INVESTIGATION AND INSPECTION INCLUDING POTHOLING AND SUCH OTHER METHODS HE DEEMS NECESSARY TO ALLOW HIM TO PROCEED ON THE CONSTRUCTION OF THIS PROJECT IN COMPLIANCE WITH THE LAWS, ORDINANCES, REGULATIONS AND CITY STANDARDS APPLICABLE TO THE PROJECT, INCLUDING STATE SAFETY ORDERS AND PROCEDURES OF USA.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY SURVEYS REQUIRED TO ESTABLISH HORIZONTAL AND VERTICAL CONTROLS PRIOR TO AND DURING CONSTRUCTION, AND TO REPLACE DISTURBED OR COVERED EXISTING SURVEY MONUMENTS AT HIS EXPENSE. MONUMENT RESTORATION/REPLACEMENT TO BE RECORDED.

CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

REHABILITATION OF BLOCK 35 ELEVATED TANK

TITLE SHEET

RECOMMENDED BY CITY ENGINEER PREM-KUMAR DATE 11/26/18	APPROVED BY DIRECTOR OF PUBLIC WORKS STEPHANIE KATSIOULEAS DATE 11/26/18
DESIGNED BY JOANNA REMBIS DATE 10/14/19	SCALE NTS DATE 10/31/2019
REVISIONS	SHEET 1 OF 9

W-628

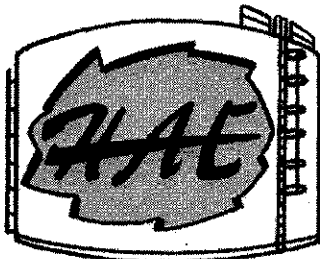


NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

SUPPLEMENTAL NOTES:

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS. EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

ENGINEER/ARCHITECT
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1. ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF MANHATTAN BEACH, LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND CALTRANS STANDARDS AS APPLICABLE. ALL WORK SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.
2. WORK NOT DONE IN THE PRESENCE OF THE CITY INSPECTOR IS SUBJECT TO REJECTION.
3. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH PROJECT CONSTRUCTION.
4. ANY WALLS, FENCE STRUCTURES AND/OR APPURTENANCE ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA.
6. THE CONTRACTOR IS RESPONSIBLE FOR OVERALL JOBSITE MAINTENANCE; INCLUDING, BUT NOT LIMITED TO: STREET/SITE SWEEPING, TRASH AND/OR CONSTRUCTION-RELATED DEBRIS/WASTE, STORMWATER POLLUTION PREVENTION BMP, ETC...
7. NO TRENCHES MAY BE LEFT OPEN OVERNIGHT UNLESS APPROVED IN WRITING BY THE CITY ENGINEER. SHOULD THE CONTRACTOR REQUEST TO LEAVE THE TRENCHES OPEN A PLAN FOR PROTECTING THE TRENCH AND THE PUBLIC SHALL BE SUBMITTED TO THE CITY ENGINEER IN WRITING FOR APPROVAL BEFORE BEING IMPLEMENTED. PLATING IS REQUIRED.
8. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AS REQUIRED PRIOR TO THE START OF THE WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY. IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
9. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE PRIOR TO BEGINNING OF EXCAVATION. TRAFFIC CONTROL SHALL BE APPROVED BY THE CITY ENGINEER. STREET STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.
10. CONSTRUCTION SITE SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PROJECTS. THE CONTRACTOR SHALL CAUTION THE PUBLIC TO AVOID CAUSING ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LINES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OIL, LUBRICANTS, ADHESIVES, FLAMMABLE FLUIDS, CERTIFIED VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER, AND CONCRETE WASH WATER, CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/ EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
11. DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
12. THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO THE PROJECT BETWEEN 4:30 P.M. AND 7:30 A.M. ON ANY WEEK DAY AND NOT ON SATURDAY, OR SUNDAY, OR HOLIDAYS AT ANY TIME EXCEPT AS APPROVED IN WRITING BY THE CITY ENGINEER.
13. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY/SUBSTRUCTURE CROSSINGS AND WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTING ANY UTILITIES. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING UTILITIES/SUBSTRUCTURES ON THESE PLANS AND THOSE FOUND DURING CONSTRUCTION (SEE GENERAL NOTE NO 32).
14. THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY FOR BACKFILL. SUBJECT TO APPROVAL OF SOILS ENGINEER AND ANY UNUSED MATERIAL SHALL BE REMOVED FROM THE JOB UNLESS INSTRUCTED BY THE CITY ENGINEER TO DO OTHERWISE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE DURING ALL PHASES OF THE WORK TO PROVIDE FOR PUBLIC SAFETY AND CONVENIENCE. THE CONTRACTOR SHALL ESTABLISH ACCESS TO ALL ENTRANCES, DRIVEWAYS, GARAGES AND PARKING LOTS DURING THE WORKING DAY TO THE SATISFACTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL GIVE COURTESY NOTICE (KNOCK ON DOOR) TO AN ADJACENT PROPERTY IMMEDIATELY PRIOR TO BLOCKING ENTRY/DRIVEWAY/GARAGE ACCESS. PEDESTRIAN ACCESS IS TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR.
16. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR THE COMPLETION OF THE PROPOSED IMPROVEMENTS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CALIFORNIA (LATEST EDITION) TO THE SATISFACTION OF THE CITY ENGINEER. ALL STREETS IN THE PROJECT HAVE AT LEAST 2 LANES (1 LANE IN EACH DIRECTION) WITH EITHER CURB SIDE OPEN PARKING OR CURB SIDE LIMITED PARKING OR NO PARKING.
17. THE CONTRACTOR CAN INCLUDE IN THE PLAN THE ELIMINATION OF PARKING ON ONE SIDE OF THE STREET DURING THE CONSTRUCTION DAY. CLOSURE OF THE ONE TRAFFIC LANE DURING THE CONSTRUCTION DAY ONE BLOCK AT A TIME. THE SIDE OF THE STREET WHERE PARKING IS ELIMINATED CAN BE USED DURING THE CONSTRUCTION TIME OF THE DAY FOR LOCAL ONE WAY TRAFFIC WITH THE ASSISTANCE OF CONTRACTOR PROVIDED POLICE PERSONNEL. ALL SUCH STREETS SHALL BE OPEN TO THE TRAFFIC AND CURB PARKING BETWEEN 5:00 PM AND 7:30 AM DAILY (MONDAY – FRIDAY, ALL STREETS SHALL BE OPEN ON HOLIDAYS AND SATURDAY & SUNDAY). IT IS THE CONTRACTOR'S RESPONSIBILITY TO POST "NO PARKING-TOW AWAY" SIGNS WITH SPECIFIC DATES/TIMES AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ACTUAL WORK.
18. THE CONTRACTOR SHALL PROVIDE A 72-HOUR WRITTEN NOTIFICATION TO AFFECTED PROPERTIES (IN A DOOR-HANGER FORMAT), POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A STREET CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES OR IMPLEMENTATION OF PARKING RESTRICTIONS. THE CONTRACTOR SHALL COORDINATE THE PROJECT WORK AND ASSOCIATED PICK-UP/ ROUTES WITH THE CITY REFUSE COLLECTION COMPANY (WASTE MANAGEMENT) PRIOR TO THE COMMENCEMENT OF WORK.
19. ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALT CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT, COLD JOINT, SCORE MARK OR EDGE OF PAVEMENT. NO "FLOATER" SLABS WILL BE PERMITTED. SAWCUT SLURRY SHALL BE REMOVED WITH A VACUUM MACHINE AND DISPOSED OF PROPERLY. NO SLURRY SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM.
20. A PERMIT IS REQUIRED FOR ALL WORK ON CITY STREETS. THE CITY WILL ISSUE A "NO FEE" PERMIT TO THE CONTRACTOR. SHOULD THE CONTRACTOR OPERATION INVOLVE ANOTHER AGENCY'S JURISDICTION OR INFRASTRUCTURE A PERMIT AND INSPECTION SHOULD BE OBTAINED THEREOF FROM THAT AGENCY. THERE MAY BE A FEE THEREOF PAYABLE BY CONTRACTOR.
21. IN SOME CASES MATCH LINES MAY OVERLAP FROM PLAN SHEET TO PLAN SHEET. CONTRACTOR SHOULD REVIEW PLANS THOROUGHLY.
22. CONTRACTOR AND ALL SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EARTHWORK AND OTHER CONSTRUCTION WORK AND THE PUBLIC IS PROTECTED. CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS". PRIOR TO COMMENCING THE EXCAVATION OF A TRENCH 5 FEET IN DEPTH OR GREATER AND INTO WHICH A PERSON WILL BE REQUIRED TO DESCEND, THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT TO DO SO FROM THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA (CAL OSHA) PURSUANT TO 7-10-4.1. CONTRACTOR SHALL SUBMIT A COPY OF THE SHORING PLAN SIGNED AS REQUIRED AND PERMIT TO THE CITY ENGINEER PRIOR TO EXCAVATION.
23. THE CITY ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTOR'S AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".
24. THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.05, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT EXISTING SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED. IF DAMAGED THEY ARE TO BE REPLACED AND A RECORD OF SURVEY IS TO BE PREPARED BY THE PROJECT SURVEYOR AND FILED WITH THE CITY ENGINEER AND THE COUNTY SURVEYOR.
25. CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.
26. THERE SHALL BE A MINIMUM OF 1 CERTIFIED EMPLOYEE ON SITE AT ALL TIMES OF CONSTRUCTION WITH RED CROSS FIRST AID TRAINING INCLUDING CPR TRAINING FOR THIS PROJECT. ALL EMPLOYEES ON THE PROJECT ARE TO HAVE CERTIFIED TRAINING FOR CONFINED SPACE WORK IN VICINITY OF A SEWER. OTHER THAN THE SEWER, ALL EQUIPMENT NEEDED TO ENTER CONFINED SPACE/SEWER MANHOLES SHALL BE STORED ON THE PROJECT SITE AND USED FOR ANY AND ALL SUCH INSTANCES.
27. BASED ON INFORMATION OBTAINED FROM UTILITY/SUBSTRUCTURE OWNERS POSSIBLE CONFLICT LOCATIONS HAVE BEEN SHOWN ON THE PLANS. HOWEVER, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITY/SUBSTRUCTURE OWNERS AT VARIOUS INSTANCES DOES NOT INDICATE DEPTHS TO THEIR FACILITIES. WHERE DEPTH INFORMATION WAS NOT AVAILABLE, ENGINEER HAS PLOTTED THE UTILITIES/SUBSTRUCTURES AT DEPTHS AT WHICH SUCH UTILITIES/SUBSTRUCTURES ARE COMMONLY FOUND. HOWEVER, ENGINEER CANNOT VERIFY SUCH LOCATION AND ENGINEER DID NOT PERFORM ANY POTHOLING. IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.
28. TREES, FOLIAGE, SIGNS, PARKING METERS AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS, PUBLIC OR PRIVATE, SHALL BE REPLACED IN KIND.
29. THE CONTRACTOR IS ADVISED TO POTHOLE WHERE HE BELIEVES NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.
30. IN SHOWING UTILITIES ENGINEER HAS PROVIDED INFORMATION RECEIVED FROM THE UTILITIES. IN SOME CASES SERVICE CONNECTIONS ARE SHOWN, HOWEVER PLANS FROM UTILITIES MAY NOT HAVE INCLUDED ALL SERVICE CONNECTIONS AND OTHER FEATURES SUCH AS FIRE HYDRANT LATERALS AND VAULTS AND BOXES. CONTRACTOR SHOULD BE PREPARED TO LOCATE SUCH AND TO PROTECT IN PLACE.
31. ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

- ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROTECTED AND THE PUBLIC REMAINS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.
2. CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE PUBLIC HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
3. UTILITIES: THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND BEST RECOLLECTION OF FACILITY STAFF. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATIONS OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR POTHOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND/OR BELOW GROUND UNLESS OTHERWISE NOTED. ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
5. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.
6. ALL JOIN LINES SHALL BE SAWCUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
7. ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENT INCLUDING, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, UTILITIES AND APPURTENANCES, TREES, SIGNS, AND STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS OTHERWISE INDICATED HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
9. THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL MATERIALS, AND ALL ASSOCIATED COSTS.
10. THE CONTRACTOR SHALL COORDINATE ALL SHUT DOWNS WITH THE CITY SO THAT ALL CUSTOMERS MAY BE NOTIFIED AT LEAST 48 HOURS PRIOR TO A SHUT DOWN. THE CONTRACTOR SHALL NOT OPERATE ANY VEHICLES UNLESS IN THE PRESENCE OF THE CITY REPRESENTATIVE.
11. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS.
12. ALL PAVEMENT REMOVAL NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE SAW CUT PRIOR TO REMOVAL. THE CITY SHALL BE REQUESTED BY CONTRACTOR TO APPROVE EXCESS OF PAVEMENT REMOVAL PRIOR TO STARTING WORK. DISPOSAL OF REMOVED PAVEMENT SHALL BE AT AN APPROVED DUMP SITE.
13. PAVEMENT REPLACEMENT SHALL BE PER CITY'S STD DWG. AC PAVEMENT AND AGGREGATE BASE SHALL BE REPLACED TO EXISTING THICKNESS PLUS 1-INCH (4" MIN AC, 6" MIN FOR AB).
14. THE CONTRACTOR SHALL UNCOVER LOCATION OF ALL CONNECTIONS AND CROSSINGS PRIOR TO BEGINNING INSTALLATION TO INSURE CONFORMANCE WITH LINES AND GRADES SHOWN ON THESE PLANS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING.
15. DURING CONSTRUCTION ALL SURFACES AS WELL AS TANK APPURTENANCES SHALL BE PROTECTED IN PLACE OR REMOVE AND REPLACE ANY CONDUITS, WIRING, BRACKETS, HARDWARE AND APPURTENANCES THAT MAY INTERFERE WITH PLACEMENT OF THE COATINGS.
16. CONSTRUCTION MATERIALS, TESTING, AND INSPECTION SHALL COMPLY WITH THE CITY'S STANDARD SPECIFICATIONS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE COUNTY, THE "GREEN BOOK", AND THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (A.S.T.M.) STANDARDS. FAILURE TO MEET ANY OF THE ABOVE REQUIREMENTS WILL BE CAUSE FOR REJECTION.
17. FAILURE TO MEET ANY OF THE REQUIREMENTS OF THE CITY, AWWA SPECIFICATIONS OR THE CONTRACT DOCUMENTS WILL BE CAUSE FOR REJECTION.
18. PIPE, VALVES AND FITTINGS SHALL BE HANDLED SO AS TO PROTECT PIPE JOINTS, LINING AND COATING, AND CAREFULLY BEDDED TO PROVIDE CONTINUOUS BEARING AND SIDE SUPPORT AND TO PREVENT SETTLEMENT. PIPE SHALL BE PROTECTED AGAINST FLOTATION AT ALL TIMES WHEN CONSTRUCTION IS IN PROCESS.
19. CONTRACTOR SHALL REMOVE ITEMS AND MATERIALS SHOWN ON THE PLANS AND DISPOSAL OF SAID ITEMS AND MATERIALS IN ACCORDANCE WITH ALL LEGAL REQUIREMENTS FOR DISPOSAL. ITEMS SALVAGED FROM DEMOLITION WORK, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF EXCESS MATERIAL NOT USED DURING CONSTRUCTION.
20. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE CITY STAFF TO AVOID ANY DELAYS OR INCONVENIENCE TO PROJECT.
21. CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF PRINTS OF ALL CONSTRUCTION DRAWINGS WHICH FORM A PART OF THE CONTRACT. ALL DEVIATIONS FROM THE ORIGINAL DESIGN SHALL BE PRE-APPROVED BY THE CITY AND SHALL BE INDICATED BY ADDITIONAL SKETCHES OR INK ON THE AS-BUILT DRAWINGS.
22. CONTRACTOR SHALL DELIVER TO THE CITY UPON COMPLETION OF THE JOB ONE SET OF AS-BUILT DRAWINGS.
23. ALL MATERIALS AND CONSTRUCTION SHALL BE TO THE SATISFACTION OF THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS.
24. CONTRACTOR SHALL FULLY COMPLY WITH THE SWPPP/WMECP IN ACCORDANCE WITH SPECIFICATIONS.
25. TRAFFIC AND ACCESS TO THE OTHER FACILITIES ON THE SITE SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE PROTECTED WITH ADEQUATE BARRICADES, LIGHTS, SIGNS AND WARNING DEVICES AS NECESSARY.
26. CONTRACTOR SHALL CONFINE ALL OF HIS ACTIVITIES TO BE WITHIN THE FENCED AREAS AROUND THE TANK.
27. DEMOLITION PLAN BY SEPARATE PERMIT.

1. FLOODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
3. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
4. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE. DESIGNATED TRUCK WASHOUT AREA REQUIRED.
5. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERSAL BY WIND.
6. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
7. THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR).

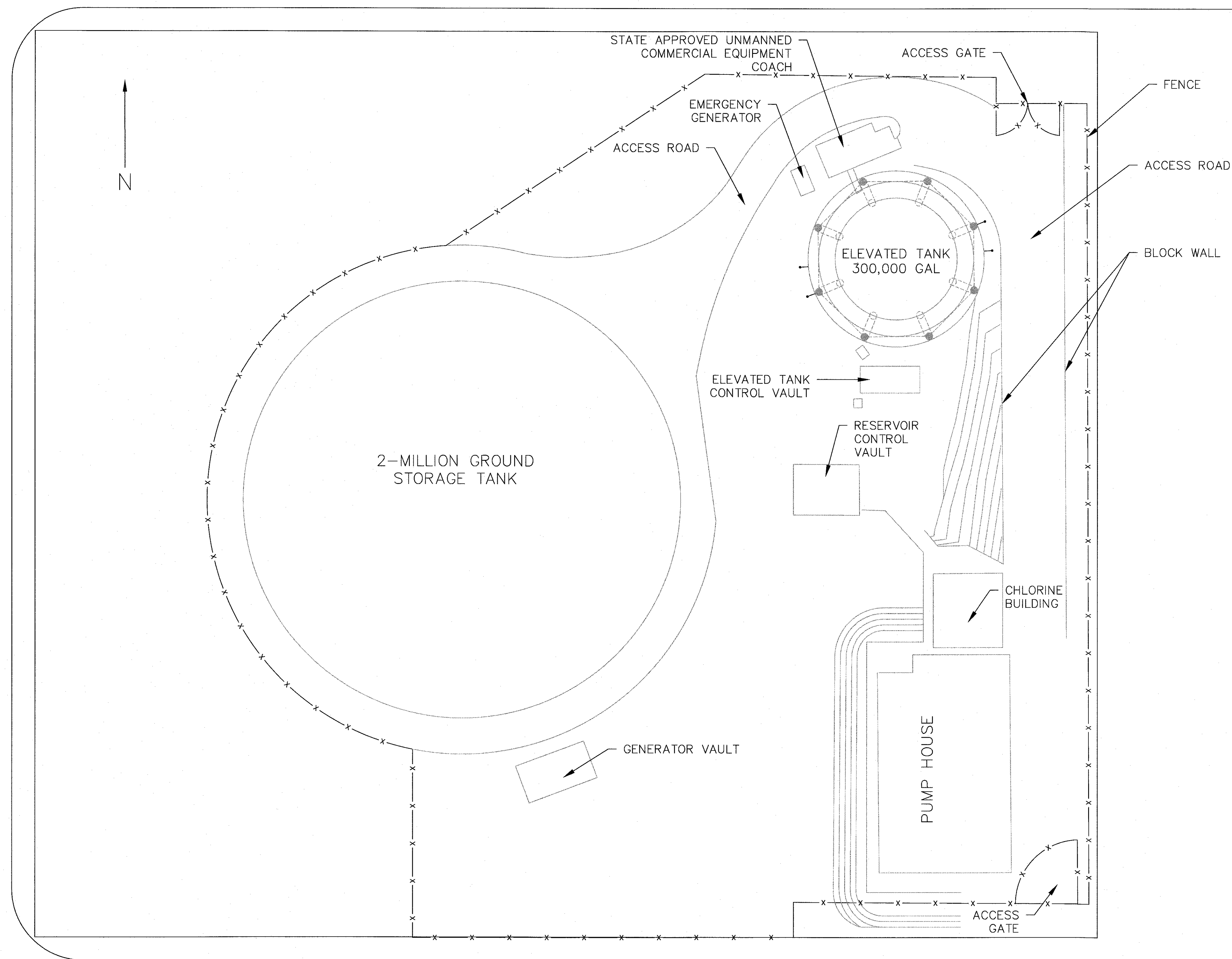
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1. ALL SLOPES IN DIRECTION OF TRAVEL, SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUM ALLOWED GRADES BY THE AMERICAS WITH DISABILITIES ACT ACCESS GUIDE (ADAAG), AND THE CALIFORNIA BUILDING CODE (CBC). IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO FAMILIARIZE THEMSELVES WITH THE ADAAG AND CBC AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD ACTION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE DESIGN ENGINEER SHALL BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
2. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO ADAAG AND CBC ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY ADAAG AND CBC ARE SUBJECT TO REJECTION BY THE INSPECTOR AND ANY MAY BE REQUIRED TO BE REMOVED AND REPLACED.
3. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING THE GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ADAAG OR CBC RELATED ITEMS OF THIS PROJECT BY THE INSPECTING AUTHORITY OR OTHER AFFECTED PARTIES.
4. COMPLIANCE WITH ADAAG AND CBC CONSTRUCTION REQUIREMENTS AND CALIFORNIA TITLE 24 WILL BE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS.

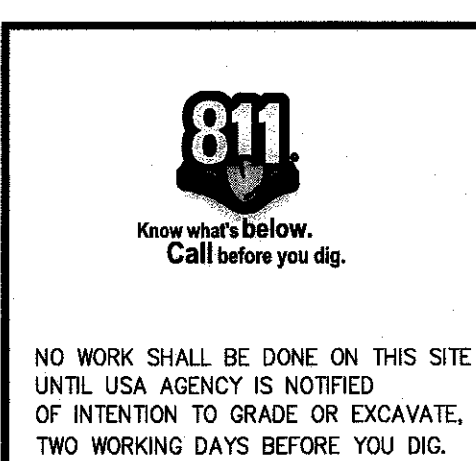
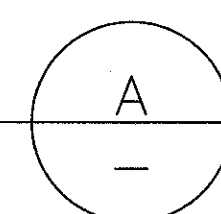
1. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CALL DIG ALERT TO IDENTIFY THE LOCATION OF ALL UTILITIES
2. NO DISCHARGE OF CONSTRUCTION WASTEWATER, BUILDING MATERIALS, DEBRIS, OR SEDIMENT FROM THE SITE IS PERMITTED. NO REFUSE OF ANY KIND GENERATED ON A CONSTRUCTION SITE MAY BE DEPOSITED IN RESIDENTIAL, COMMERCIAL, OR PUBLIC REFUSE CONTAINER AT ANY TIME. THE UTILIZATION OF WEEKLY REFUSE COLLECTION SERVICE BY THE CITY'S HAULER FOR ANY REFUSE GENERATED AT THE CONSTRUCTION SITE IS STRICTLY PROHIBITED. FULL DOCUMENTATION OF ALL MATERIALS/TRASH LANDFILLED AND RECYCLED MUST BE SUBMITTED TO THE PERMITS DIVISION IN COMPLIANCE OF THE CITY'S CONSTRUCTION AND DEMOLITION RECYCLING ORDINANCE.
3. IF ANY EXISTING SEWER LATERAL IS USED, IT MUST BE TELEVIEWED TO CHECK ITS STRUCTURAL INTEGRITY. THE TAPE MUST BE MADE AVAILABLE FOR REVIEW BY THE PUBLIC WORKS DEPARTMENT AND MUST SHOW PROOF OF THE LOCATION OF WHERE IT WAS SHOT. THE PUBLIC WORKS DEPARTMENT WILL REVIEW THE TAPE AND DETERMINE AT THAT TIME IF THE SANITARY LATERAL NEEDS REPAIRING, REPLACED, OR THAT IT IS STRUCTURALLY SOUND AND CAN BE USED IN ITS PRESENT CONDITION. VIDEOING OF LATERAL MUST BE IN ITS ORIGINAL STATE. NO CLEANING FLUSHING OR ALTERING PRIOR TO VIDEOING IS PERMITTED.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL THE STREET SIGNS, STREET LAMPS/LIGHTS, PARKING METERS, AND/OR TREES ALONG THE PROPERTY. IF THEY ARE DAMAGED, LOST OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY STREET MARKINGS THAT ARE DAMAGED OR REMOVED BY THE CONTRACTOR'S OPERATIONS. CONTACT THE PUBLIC WORKS INSPECTOR FOR SIGN SPECIFICATION AND SUPPLIERS.
5. WATER METERS MUST REMAIN ACCESSIBLE FOR METER READERS DURING CONSTRUCTION. WATER METERS SHALL BE PLACED NEAR THE PROPERTY LINE AND OUT OF THE DRIVEWAY APPROACH WHENEVER POSSIBLE. WATER METER PLACEMENT MUST BE SHOWN ON THE PLANS. SEE CITY STANDARD PLAN ST-15.
6. IF WATER METER BOX IS DAMAGED DURING CONSTRUCTION, OR THE CITY DETERMINES THAT IT IS IN NEED OF REPLACEMENT, A NEW WATER
7. METER BOX MUST BE PURCHASED FROM THE CITY. THE WATER METER BOX SHALL HAVE A TRAFFIC RATED LID.
8. PLAN HOLDER MUST HAVE THE PLANS RECHECKED AND STAMPED FOR APPROVAL BY THE PUBLIC WORKS DEPARTMENT BEFORE THE BUILDING PERMIT IS ISSUED.

DIA	DIAMETER	NTS	NOT TO SCALE
EW	EACHWAY	OC	ON CENTER
EX	EXISTING	REQ'D	REQUIRED
FT	FEET	SCH	SCHEDULE
FB	FLAT BAR	SQ	SQUARE
ID	INSIDE DIAMETER	STD	STANDARD
MAX	MAXIMUM	SS	STAINLESS
MIN	MINIMUM	TYP	TYPICAL
NO	NUMBER		

<h1 style="margin: 0;">CITY OF MANHATTAN BEACH</h1> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION</p>			
REFERENCES		<h2 style="margin: 0;">REHABILITATION OF BLOCK 35 ELEVATED TANK</h2> <p style="margin: 10px 0 0 0;">GENERAL NOTES</p>	
NO.	BY DATE		
REVISIONS		<p>RECOMMENDED BY <u><i>[Signature]</i></u> <u>11/26/17</u></p> <p>CITY ENGINEER <u>PREM KUMAR</u> DATE</p>	
		<p>APPROVED BY <u><i>[Signature]</i></u> <u>11/26/17</u></p> <p>DIRECTOR OF PUBLIC WORKS <u>STEPHANIE KATSIOULEAS</u> DATE</p>	
<p>REVIEWED BY <u><i>[Signature]</i></u> <u>11/26/17</u></p> <p>PROJECT MANAGER <u>JOANNA REMBIS</u> DATE</p>		<p>SCALE <u>N/A</u> DATE <u>10/31/2019</u></p>	
<p>DESIGNED BY <u>JOANNA REMBIS</u> <u>10/14/19</u></p> <p>DATE</p>		<p>DRAWING NO. W-628</p> <p>SHEET <u>2</u> OF <u>9</u></p>	



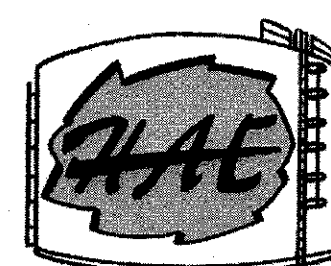
SITE PLAN
NTS



SUPPLEMENTAL NOTES:

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
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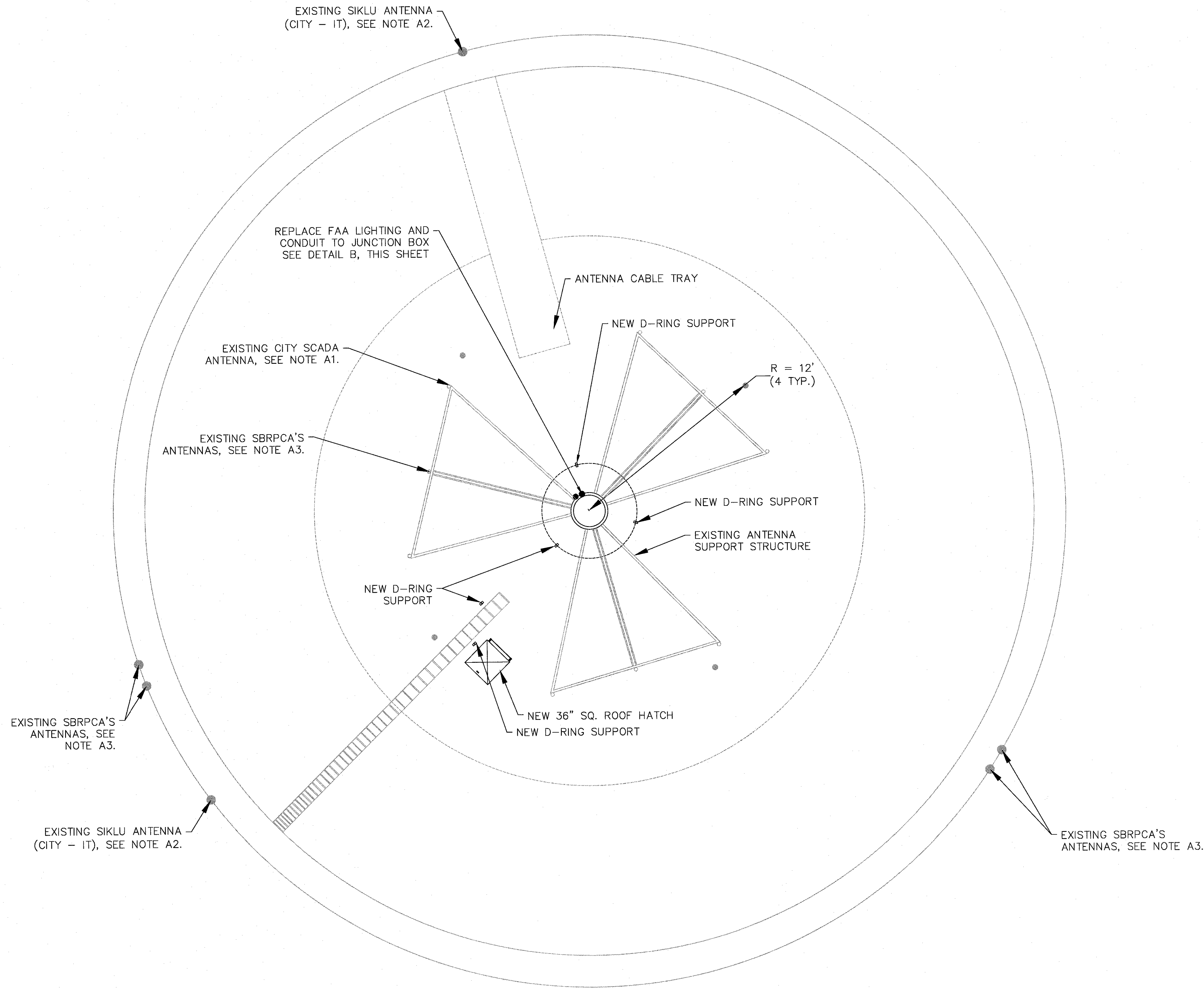
ENGINEER/ARCHITECT
OF RECORD STAMP



Harper & Associates Engineering, Inc.
Consulting Engineers
1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8671

REVIEWED	BY	DATE

CITY OF MANHATTAN BEACH			
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION			
REFERENCES			
NO.	BY	DATE	
REVISIONS			
RECOMMENDED BY		APPROVED BY	
CITY ENGINEER PREM KUMAR		DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS	
DESIGNED BY JOANNA REMBIS		DATE 10/31/2019	
DATE 10/14/19		SHEET 3 OF 9	
DRAWING NO. W-628			

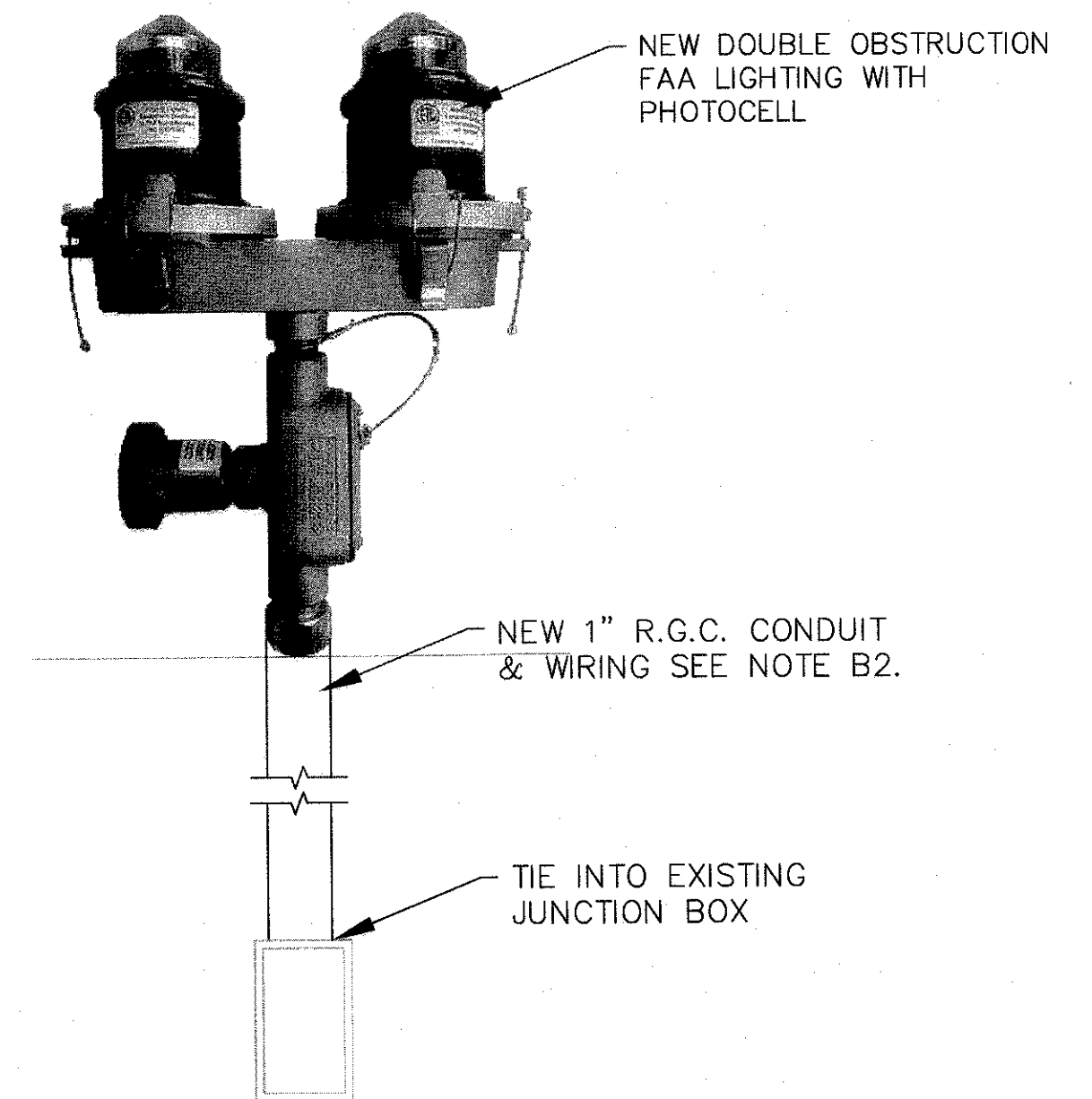


ROOF DIAGRAM
NTS

NOT APPLICABLE 5/5/20

NOTE:

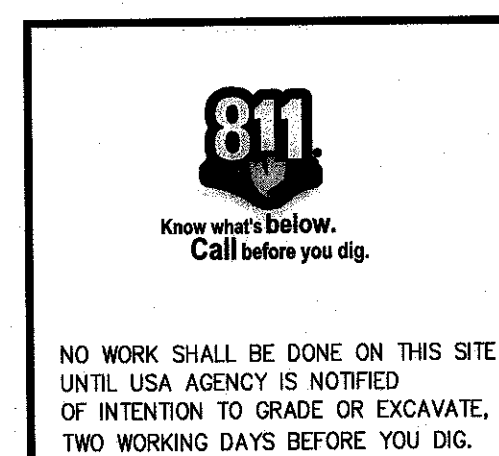
- A1. SCADA ANTENNA: PROVIDE TEMPORARY REMOVAL, STORAGE, REINSTALLATION, AND CALIBRATION OF OMNI DIRECTIONAL ANTENNA AND ANCILLARY EQUIPMENT ON THE ROOF.
- A2. IT ANTENNA: PROVIDE THE DESIGN, CALCULATIONS, DRAWINGS AND CONSTRUCTION FOR THE TEMPORARY RELOCATION, OPERATION AND MAINTENANCE, REINSTALLATION AND CALIBRATION OF TWO (2) SIKLU ANTENNAS AND ANCILLARY EQUIPMENT.
- A3. SBRPCA'S ANTENNAS: PROVIDE THE DESIGN, CALCULATIONS, DRAWINGS AND CONSTRUCTION FOR THE TEMPORARY RELOCATION, OPERATION AND MAINTENANCE, REINSTALLATION AND CALIBRATION OF SBRPCA'S ANTENNAS. REFER TO SOUTH BAY REGIONAL PUBLIC COMMUNICATIONS AUTHORITY PLAN SHEETS FOR ANTENNA AND EQUIPMENT LOCATIONS AND ELEVATIONS.



FAA LIGHTING
NTS

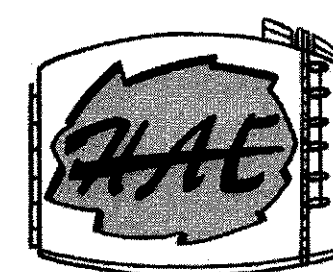
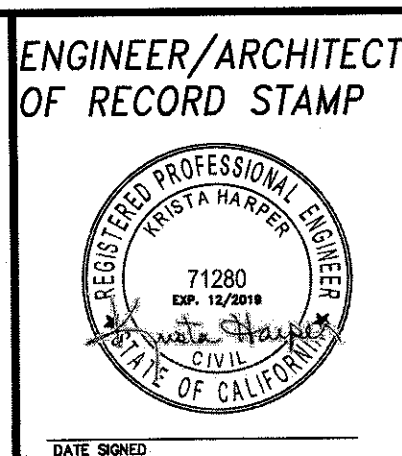
NOTE:

- B1. USE ORDER CODE FL-810LRAC1D10BPT.
- B2. REPLACE LIGHTING AND CONDUIT TO THE NEAREST JUNCTION BOX AT ROOF LEVEL.



SUPPLEMENTAL NOTES:

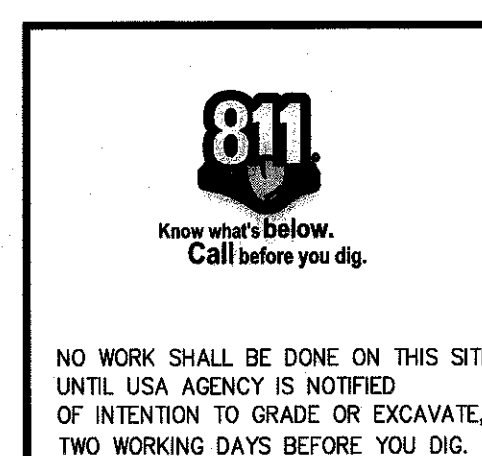
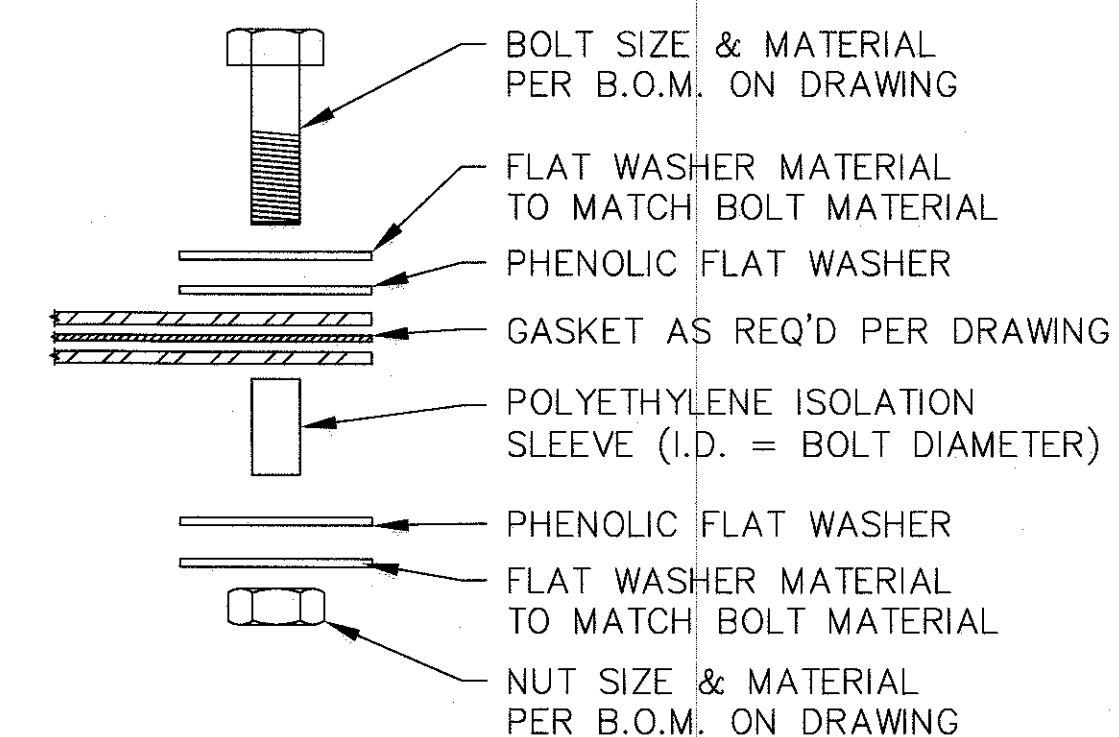
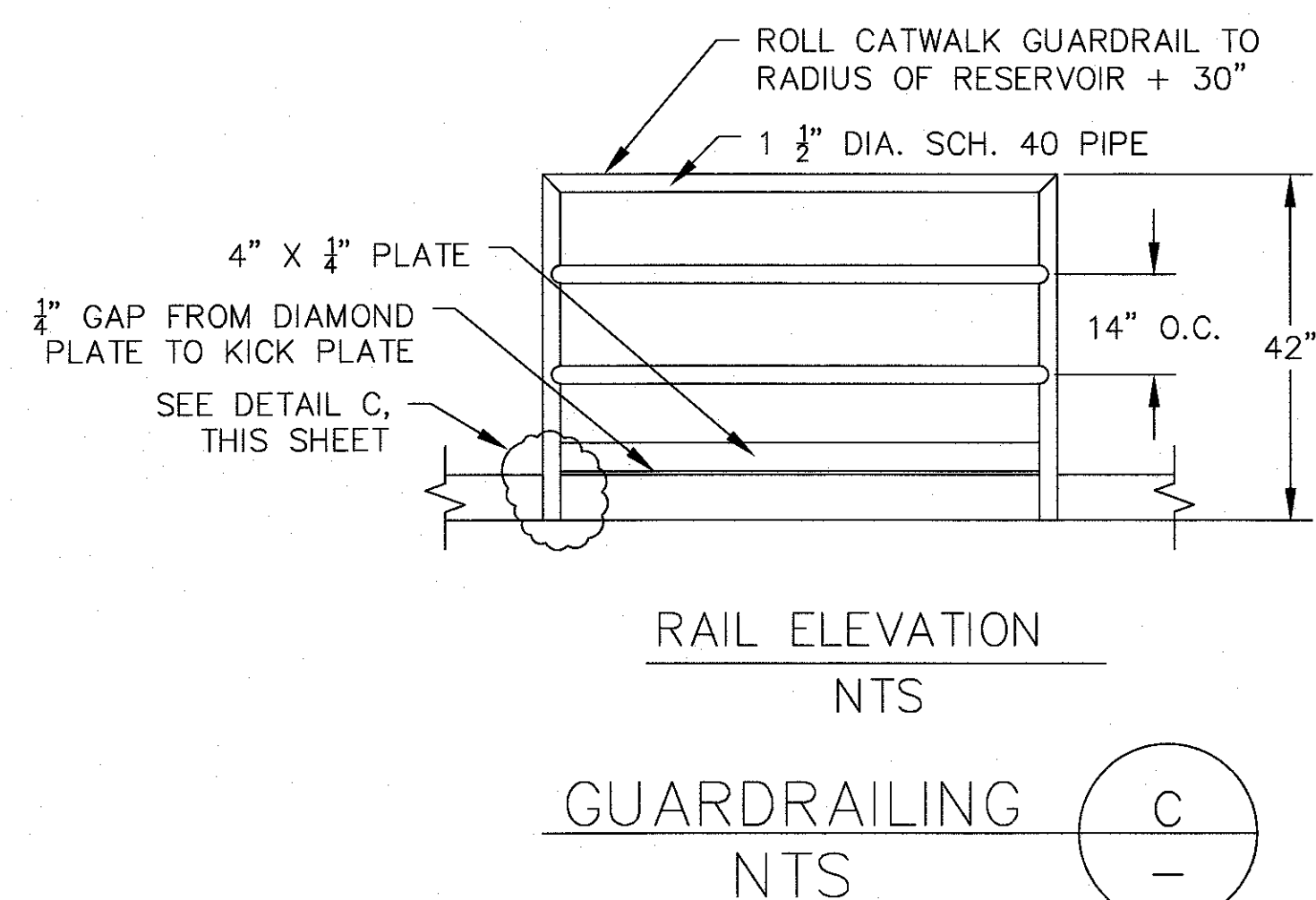
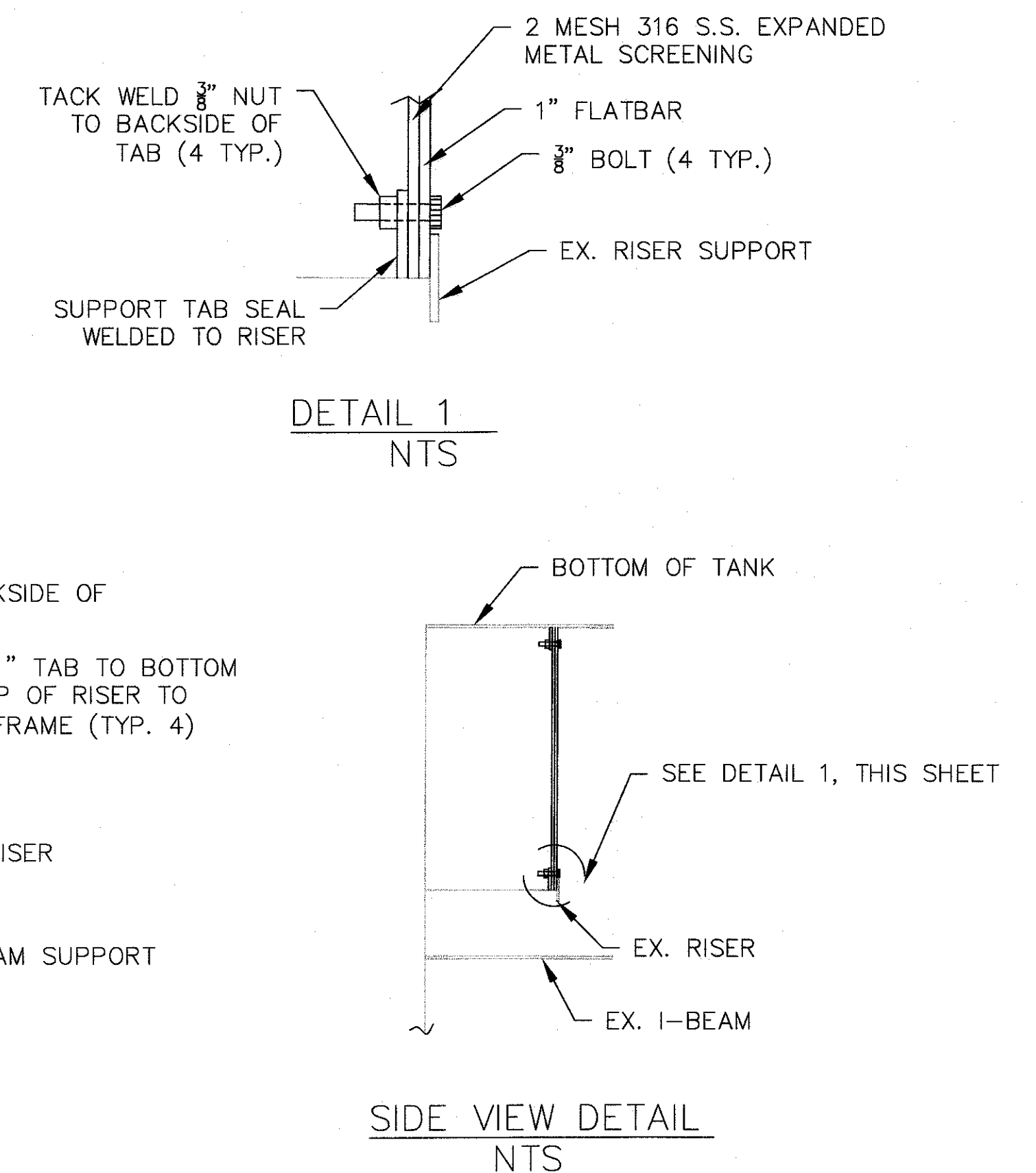
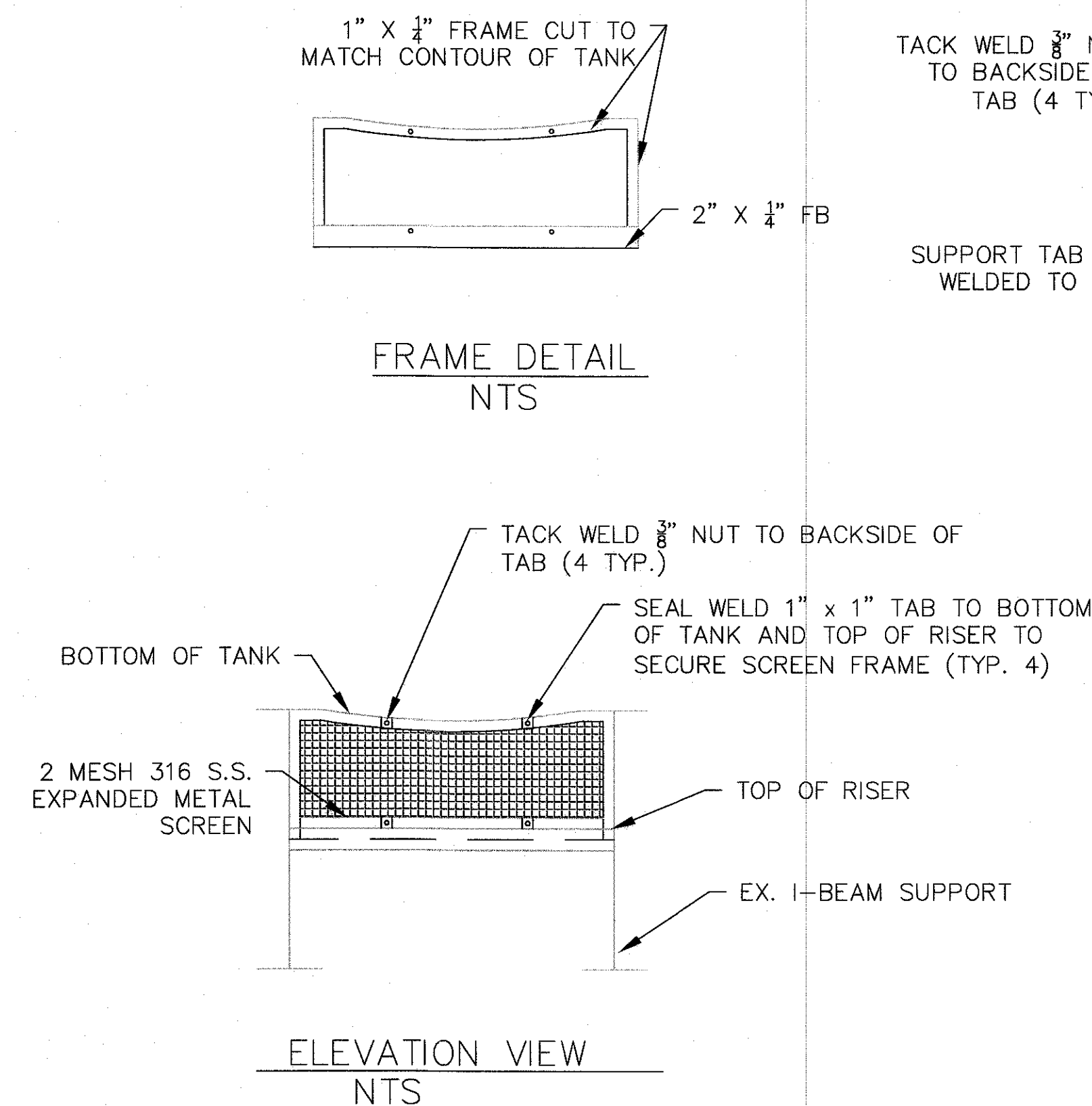
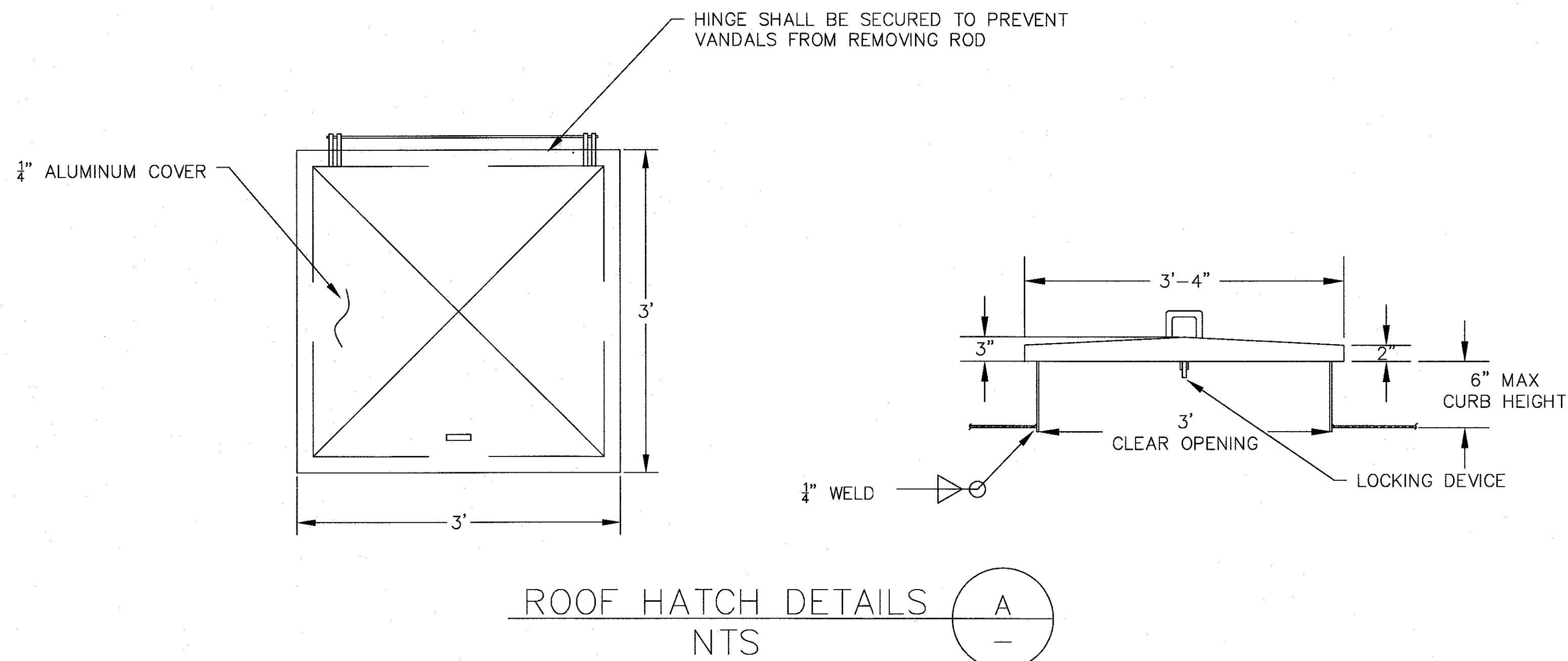
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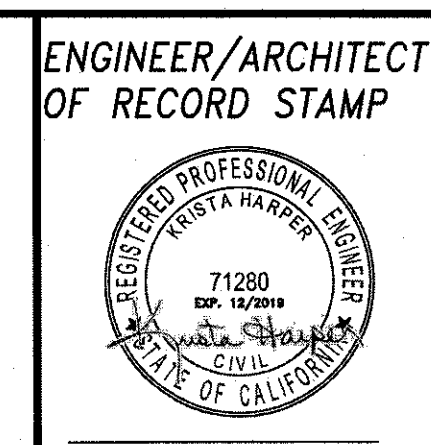
REVIEWED BY	DATE

CITY OF MANHATTAN BEACH			
PUBLIC WORKS DEPARTMENT — ENGINEERING DIVISION			
REFERENCES			
NO.	BY	DATE	
REVISIONS			
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CITY ENGINEER PREM KUMAR		11/26/19	
RECOMMENDED BY		DATE	
PROJECT MANAGER JOANNA REMBIS		10/14/19	
APPROVED BY		DATE	
DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS		11/26/19	
SCALE		DATE	
NTS		10/31/2019	
SHEET		4 OF 9	
DRAWING NO. W-628			



SUPPLEMENTAL NOTES:

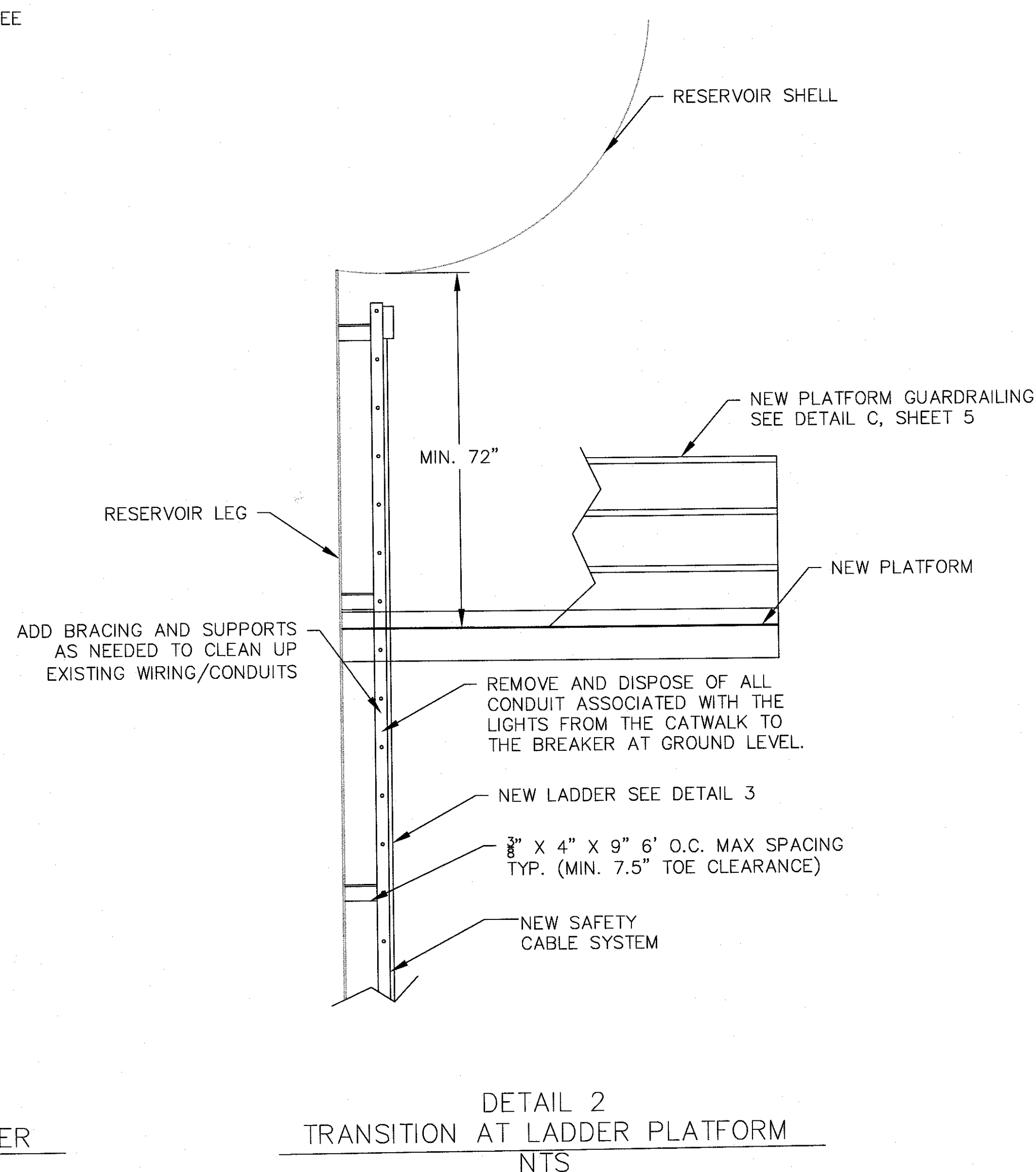
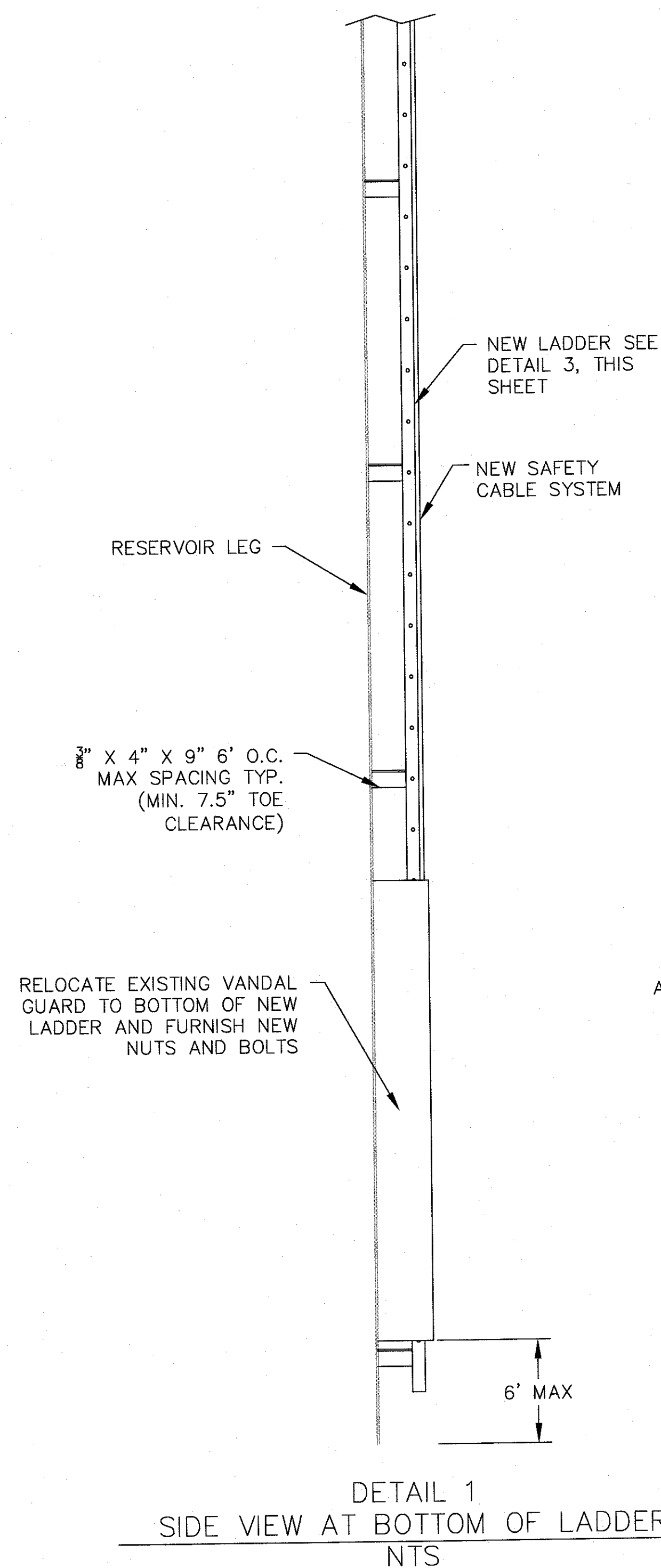
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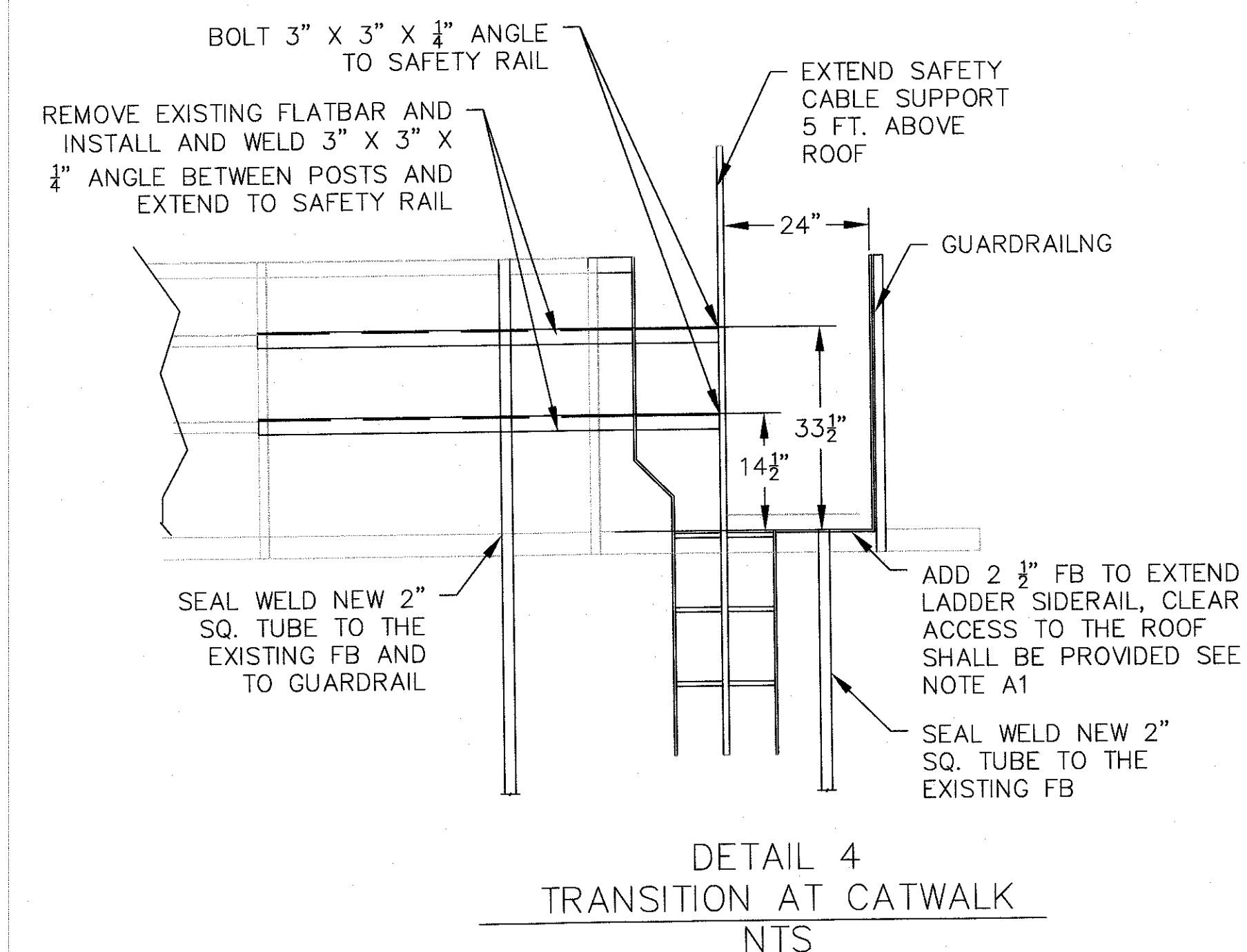
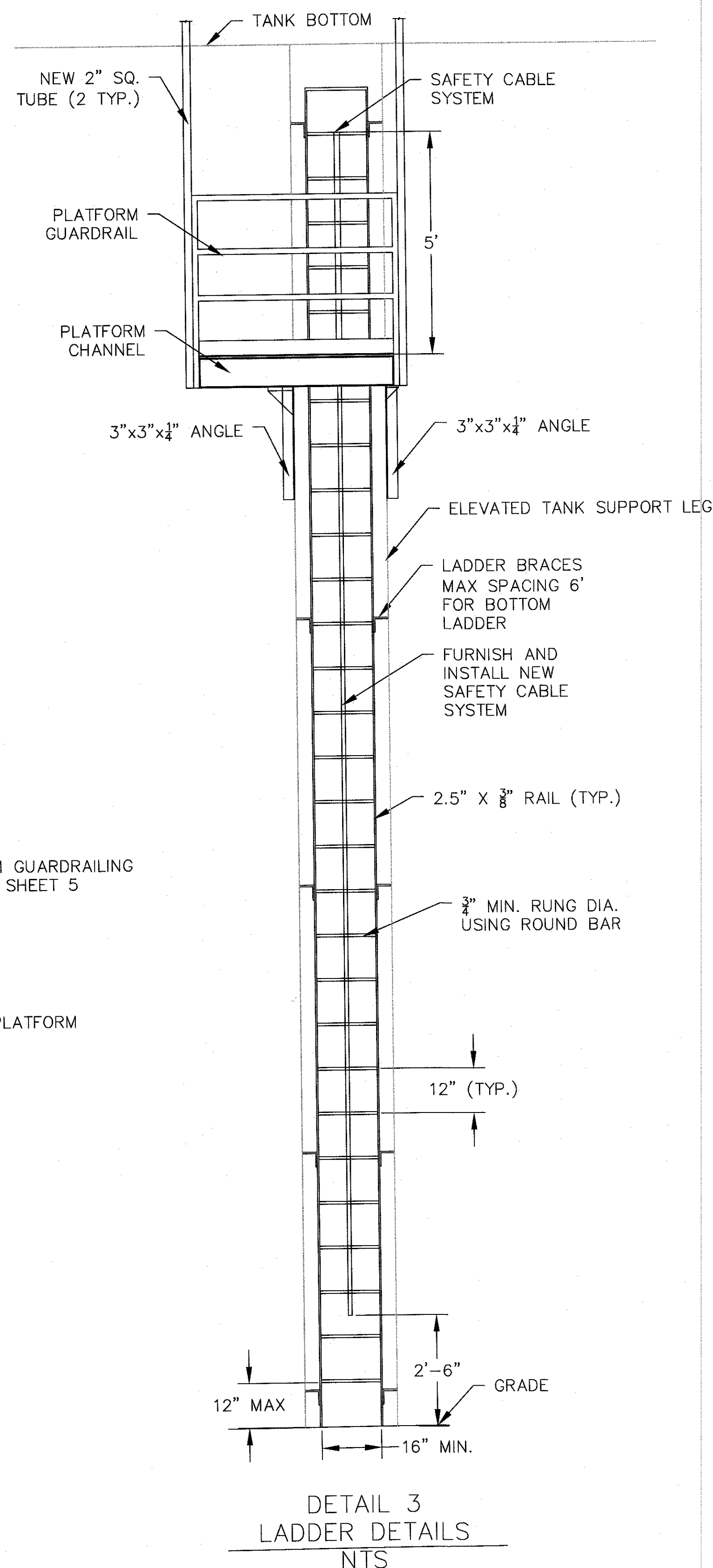
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1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8671

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CITY ENGINEER PREM KUMAR		DIRECTOR OF PUBLIC WORKS STEPHANIE KATSIOLEAS	
DESIGNED BY JOANNA REMBIS		DATE 10/14/19	
SCALE NTS		DATE 10/31/2019	
SHEET 5		OF 9	
DRAWING NO. W-628			

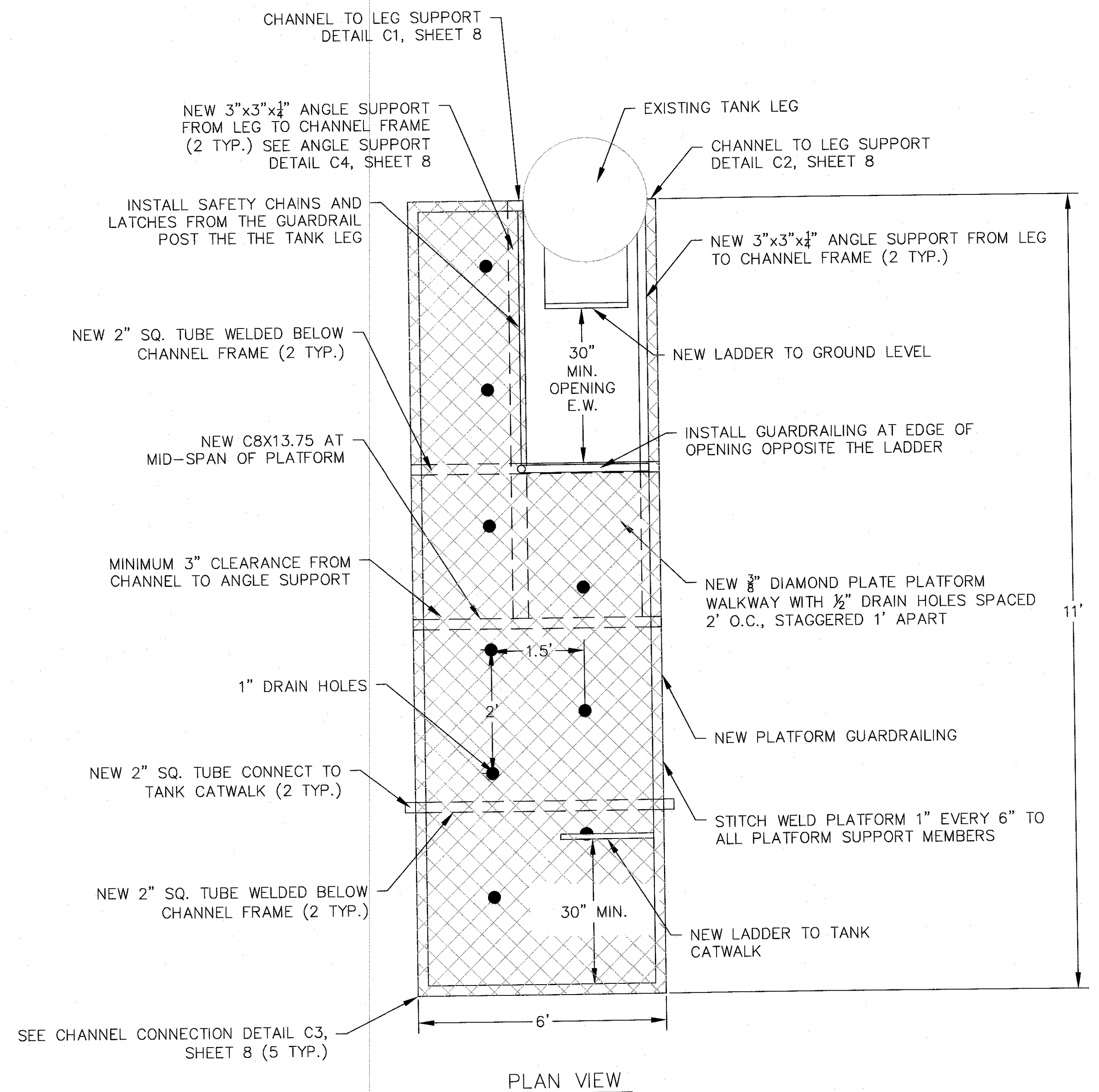
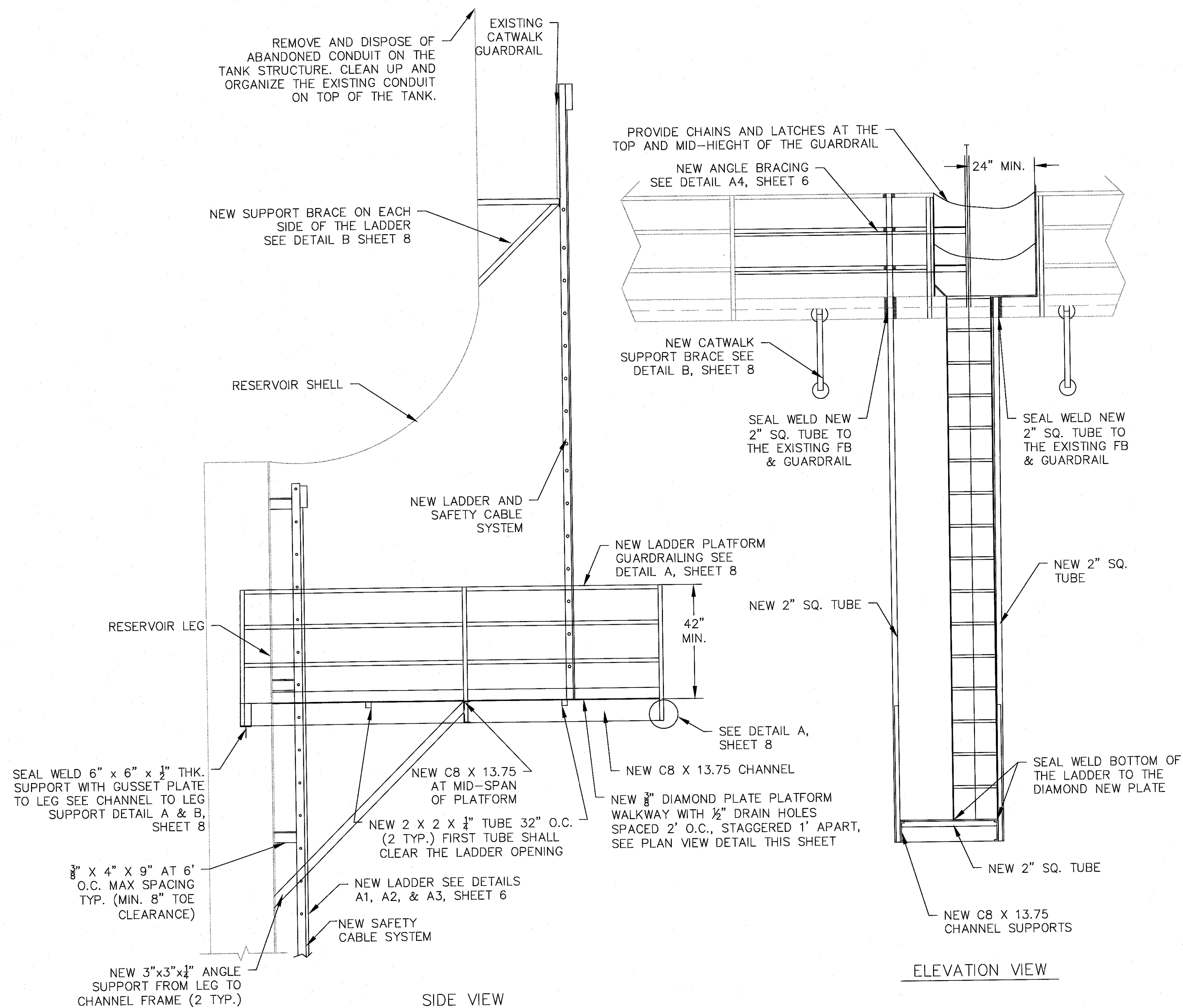


EXTERIOR LADDER DETAILS NTS

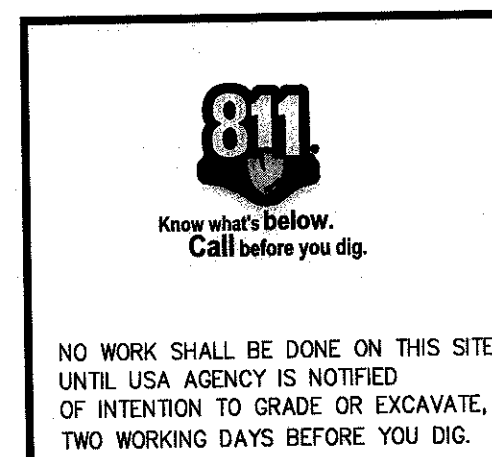


- NOTE:
- A1. PROVIDE CLEAR ACCESS FROM LADDER TO PLATFORM AND CATWALK. NO TRIPPING HAZARDS SHALL BE PRESENT.
 - A2. LADDER VANDAL GUARD SHALL PROVIDE A CLEAR OPENING FOR A PERSON TO SAFELY ACCESS THE LADDER AND SHALL NOT IMPEDE ON THE LADDER AREA.

<p>NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.</p>		<p>SUPPLEMENTAL NOTES:</p> <ol style="list-style-type: none"> THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS. 		<p>ENGINEER/ARCHITECT OF RECORD STAMP</p> <p>DATE SIGNED</p>		<p>Harper & Associates Engineering, Inc. Consulting Engineers 1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8571</p>		<p>REVIEWED BY</p> <p>DATE</p>		<p>REFERENCES</p> <table border="1"> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	BY	DATE				<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	BY	DATE				<p>CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION</p> <p>REHABILITATION OF BLOCK 35 ELEVATED TANK EXTERIOR LADDER DETAILS</p>		<p>RECOMMENDED BY</p> <p>DATE</p> <p>CITY ENGINEER PREM KUMAR</p>		<p>APPROVED BY</p> <p>DATE</p> <p>DIRECTOR OF PUBLIC WORKS STEPHANIE KATSIOULEAS</p>		<p>SCALE</p> <p>DATE</p> <p>10/31/2019</p>		<p>DRAWING NO.</p> <p>W-628</p>	
NO.	BY	DATE																																	
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<p>DESIGNED BY</p> <p>DATE</p> <p>10/14/19</p>		<p>PROJECT MANAGER</p> <p>DATE</p> <p>11/26/2019</p>		<p>JOANNA REMBIS</p> <p>DATE</p> <p>10/14/19</p>		<p>SHEET</p> <p>6 OF 9</p>		<p>DATE</p> <p>11/26/19</p>		<p>DATE</p> <p>11/26/19</p>																									



LADDER PLATFORM
NTS



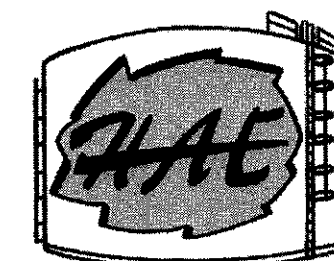
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ENGINEER/ARCHITECT
OF RECORD STAMP



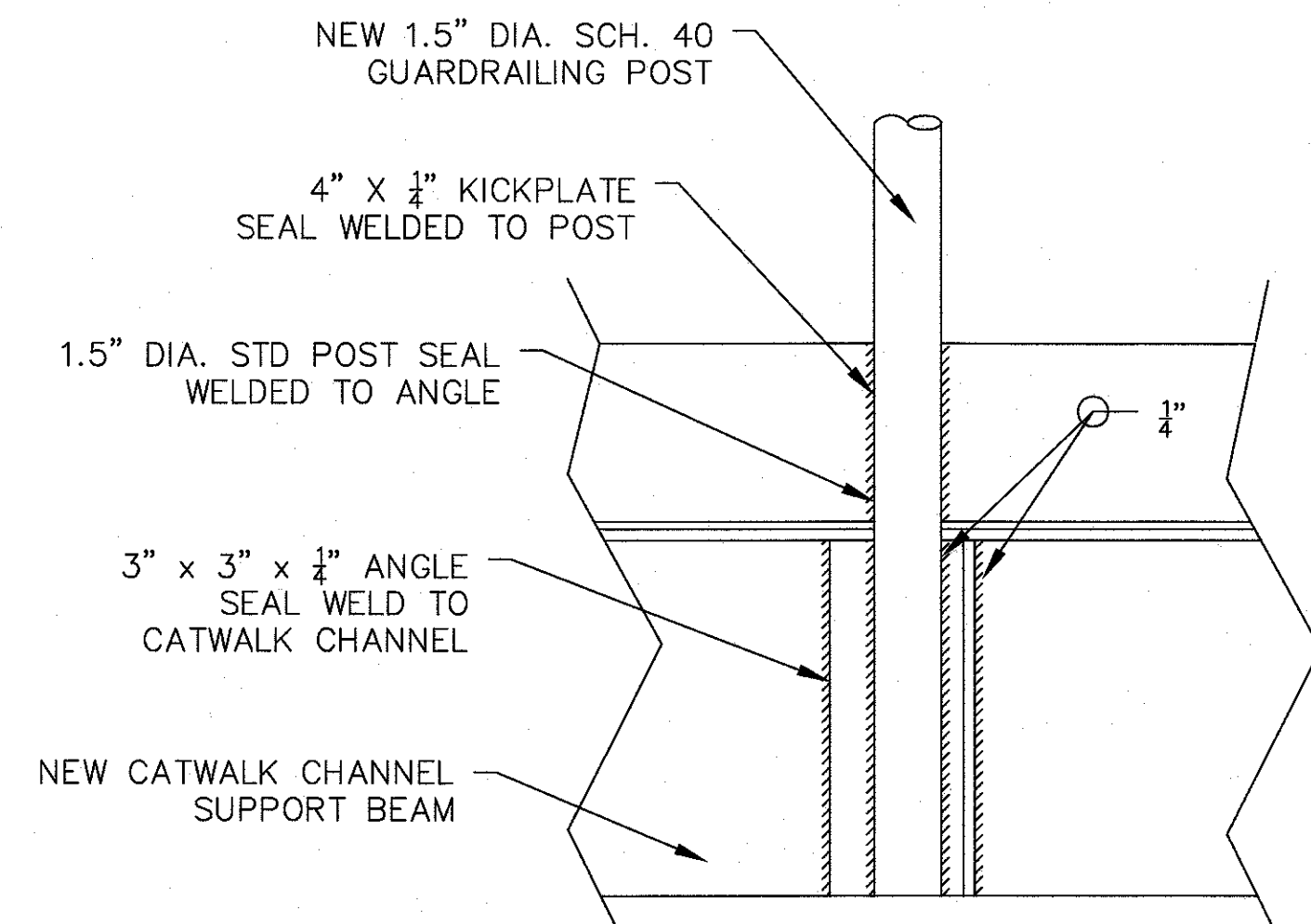
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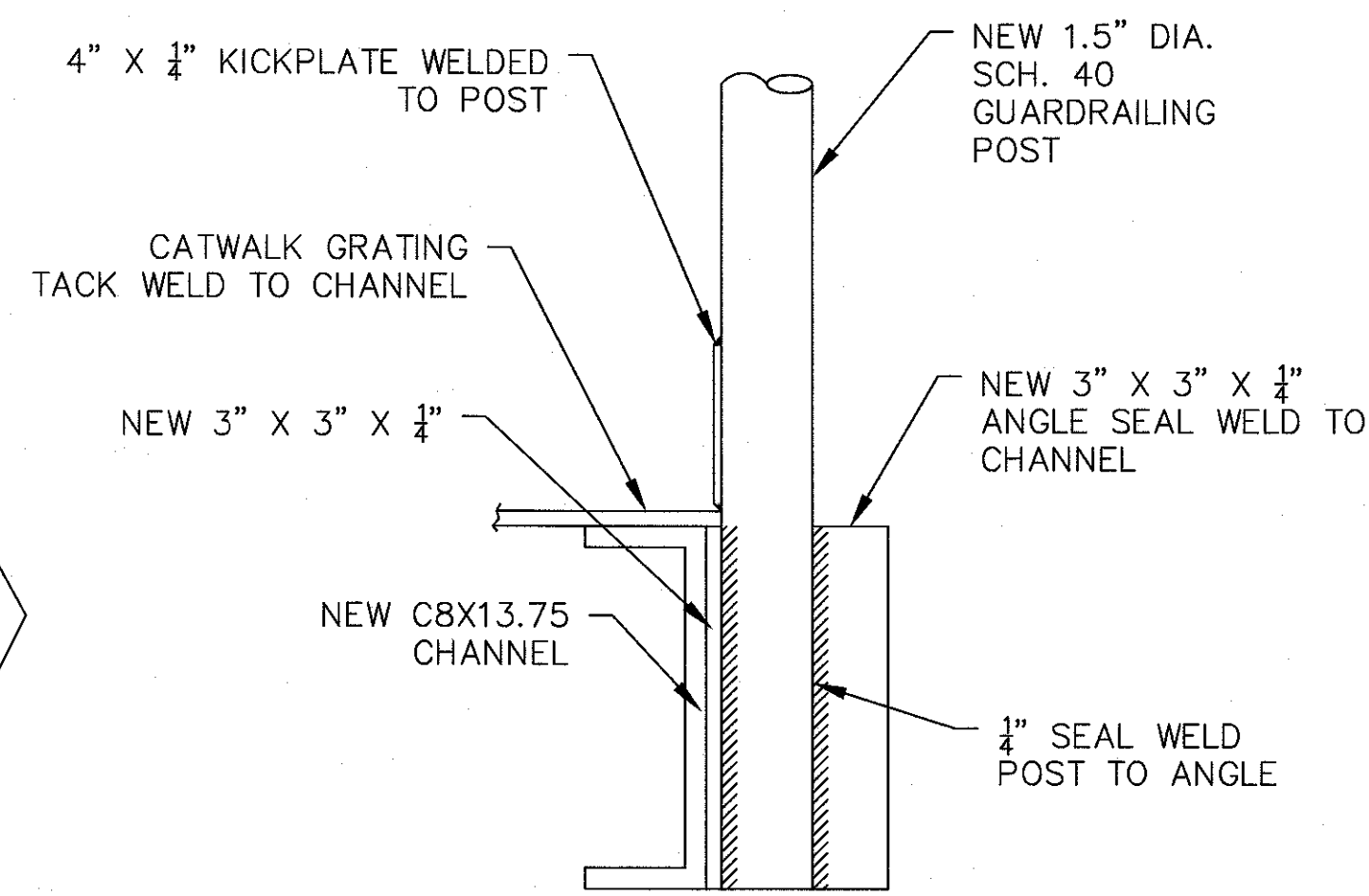
Harper & Associates Engineering, Inc.
Consulting Engineers
1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8671

REVIEWED BY	DATE

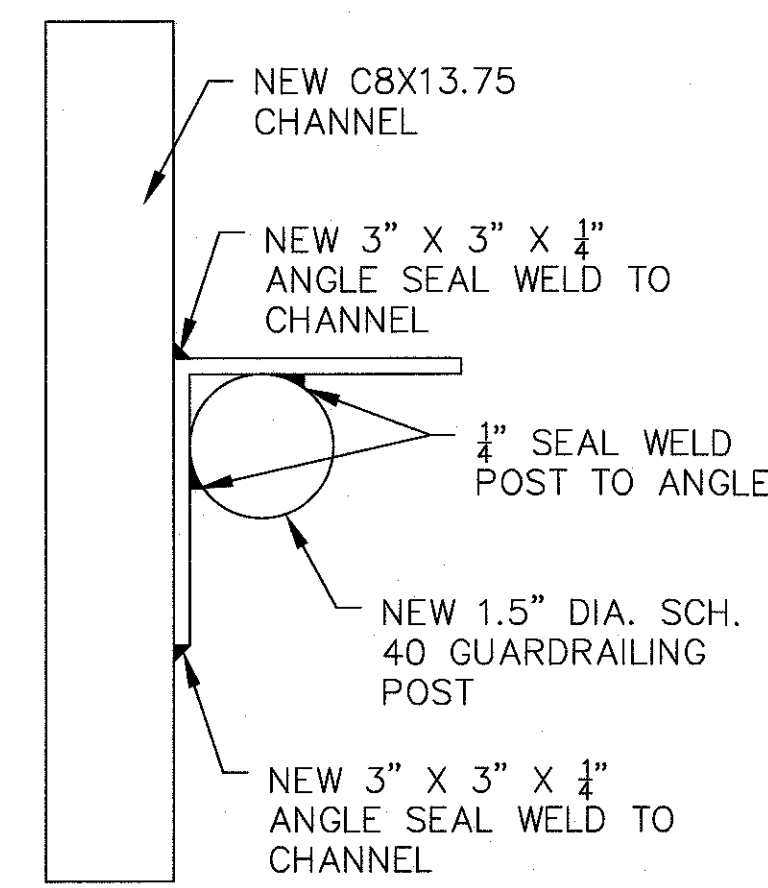
CITY OF MANHATTAN BEACH			
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION			
REHABILITATION OF BLOCK 35 ELEVATED TANK			
LADDER PLATFORM DETAILS			
RECOMMENDED BY <i>[Signature]</i> CITY ENGINEER PREM KUMAR	DATE 11/26/19	APPROVED BY <i>[Signature]</i> DIRECTOR OF PUBLIC WORKS STEPHANIE KATSIOULEAS	DATE 11/26/19
REVIEWED BY <i>[Signature]</i> PROJECT MANAGER	DATE 11/26/2019	SCALE NTS	DATE 10/31/2019
DESIGNED BY JOANNA REMBIS	DATE 10/14/19	SHEET 7 OF 9	DRAWING NO. W-628



ELEVATION VIEW

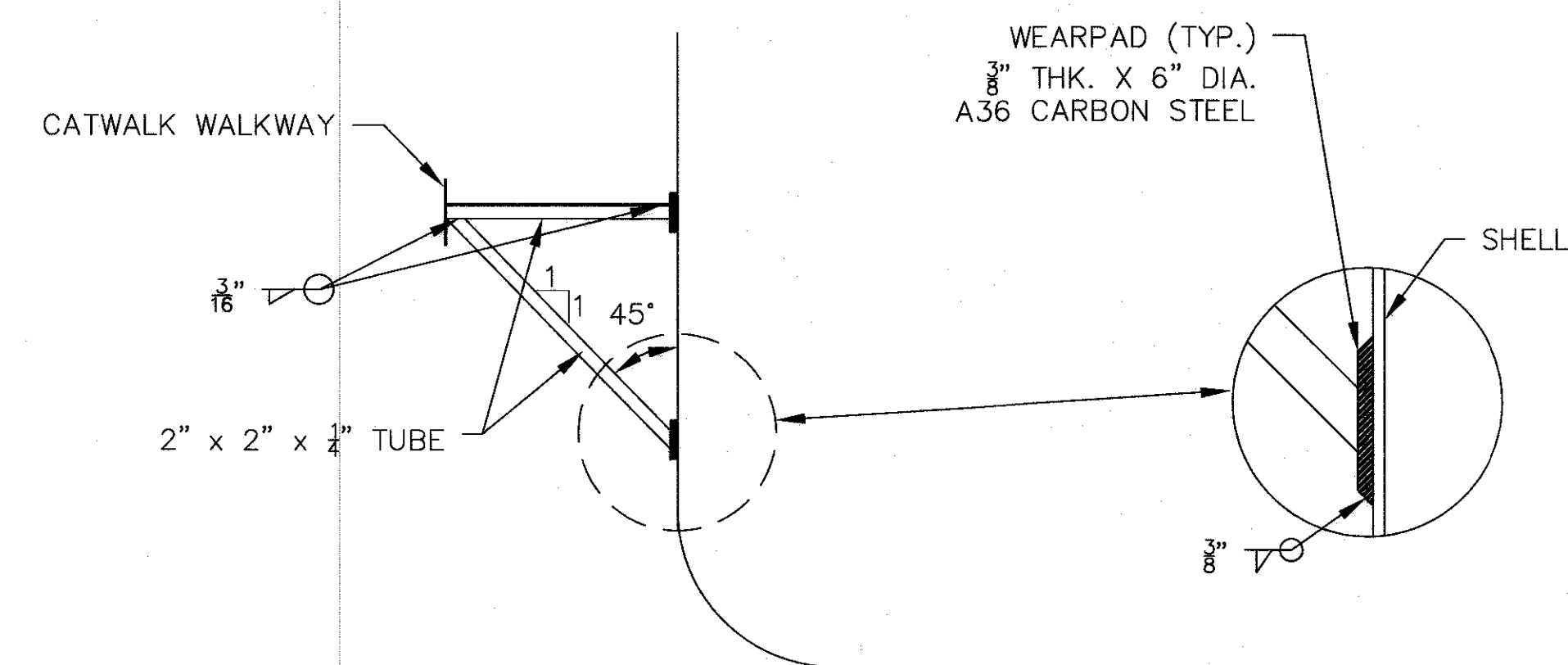
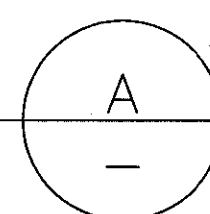


SIDE VIEW

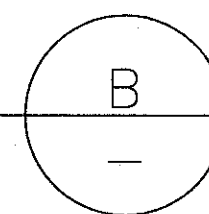


PLAN VIEW

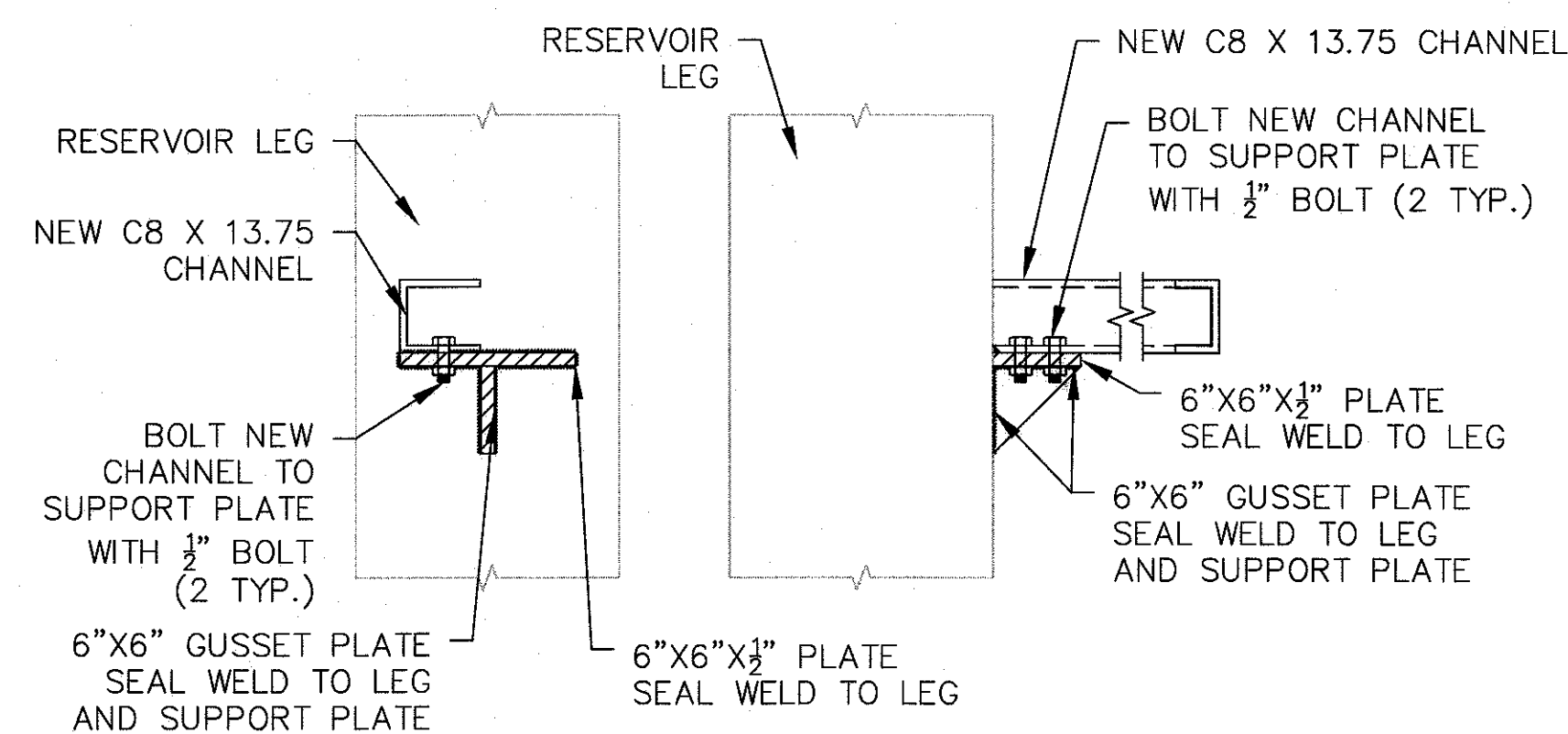
CHANNEL SUPPORT
PLATFORM GUARDRAILING CONNECTION
NTS



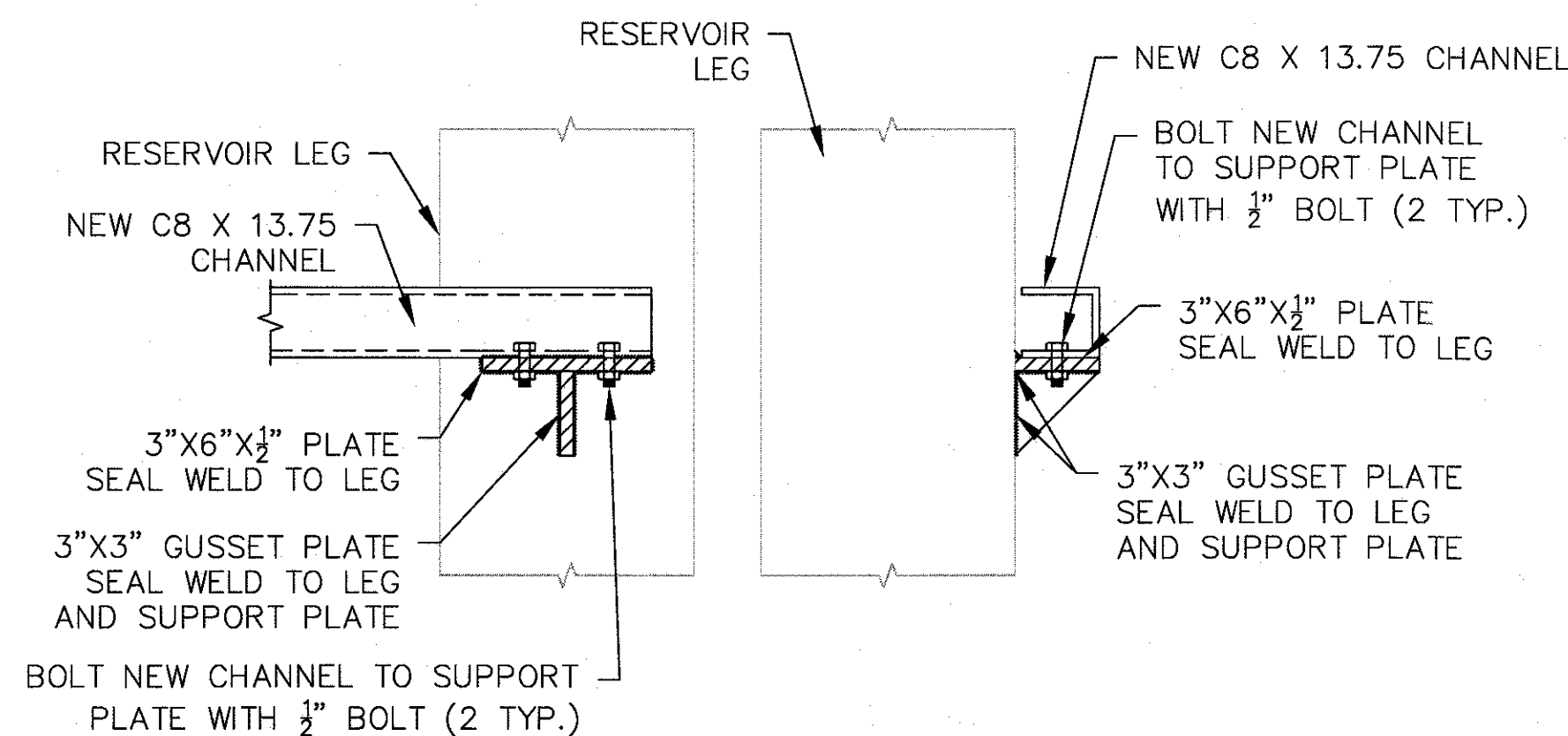
CATWALK SUPPORT BRACE
NTS



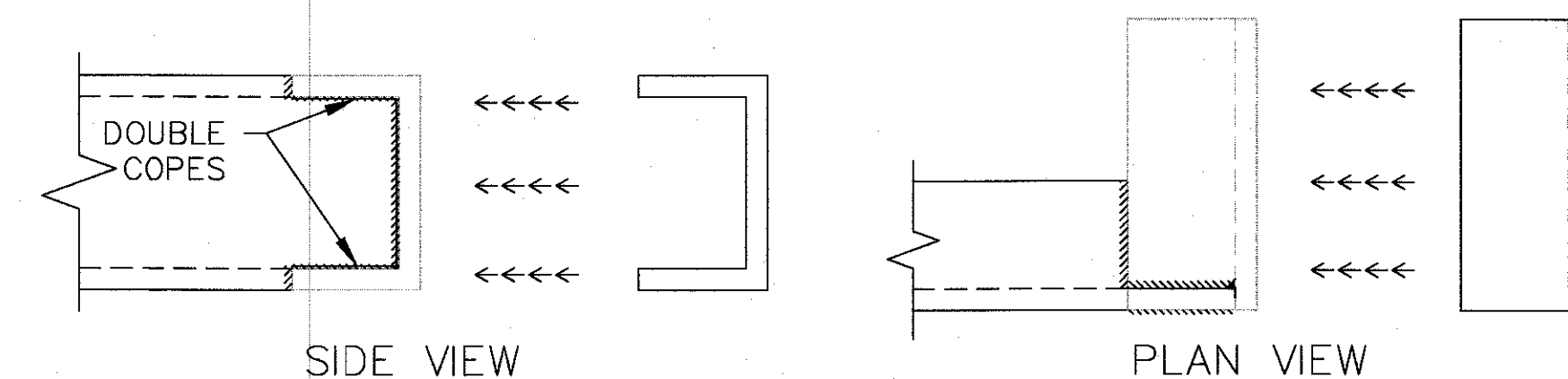
NOTES:
B1. FURNISH AND INSTALL SUPPORT BRACE ON CATWALK AT EACH MIDPOINT OF CATWALK BETWEEN EACH SET OF TANK LEGS AND EACH SIDE OF THE ACCESS LADDER



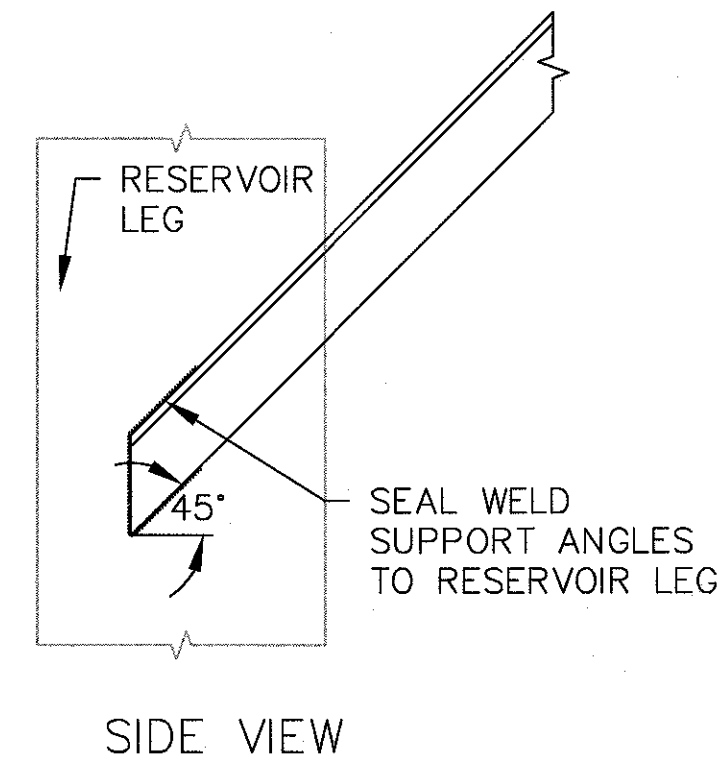
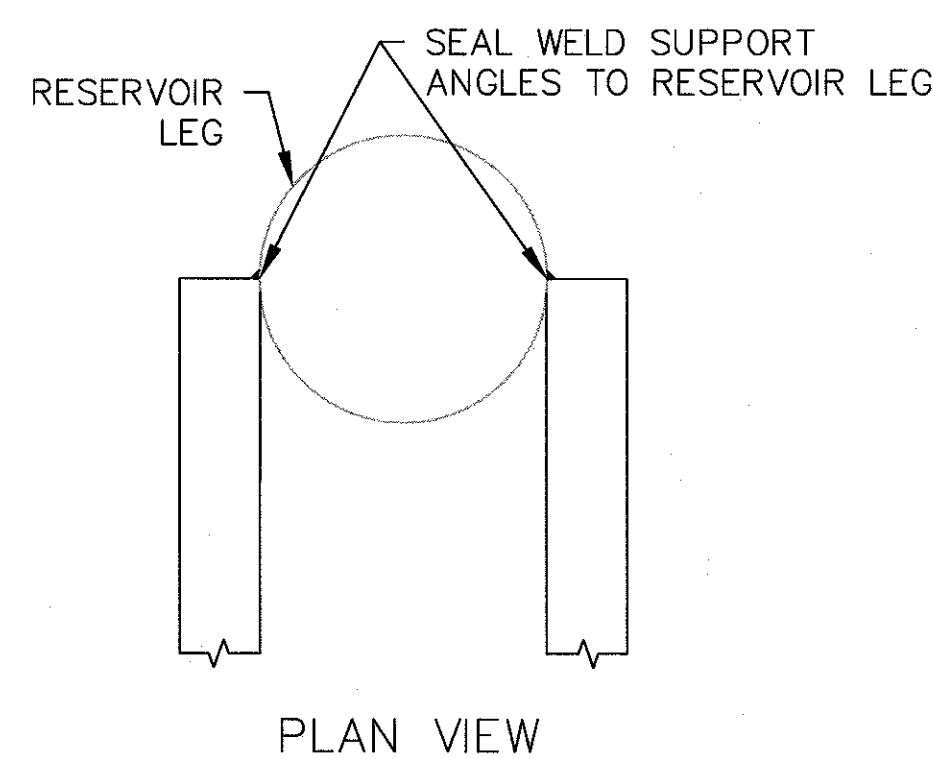
CHANNEL TO LEG SUPPORT
DETAIL 1



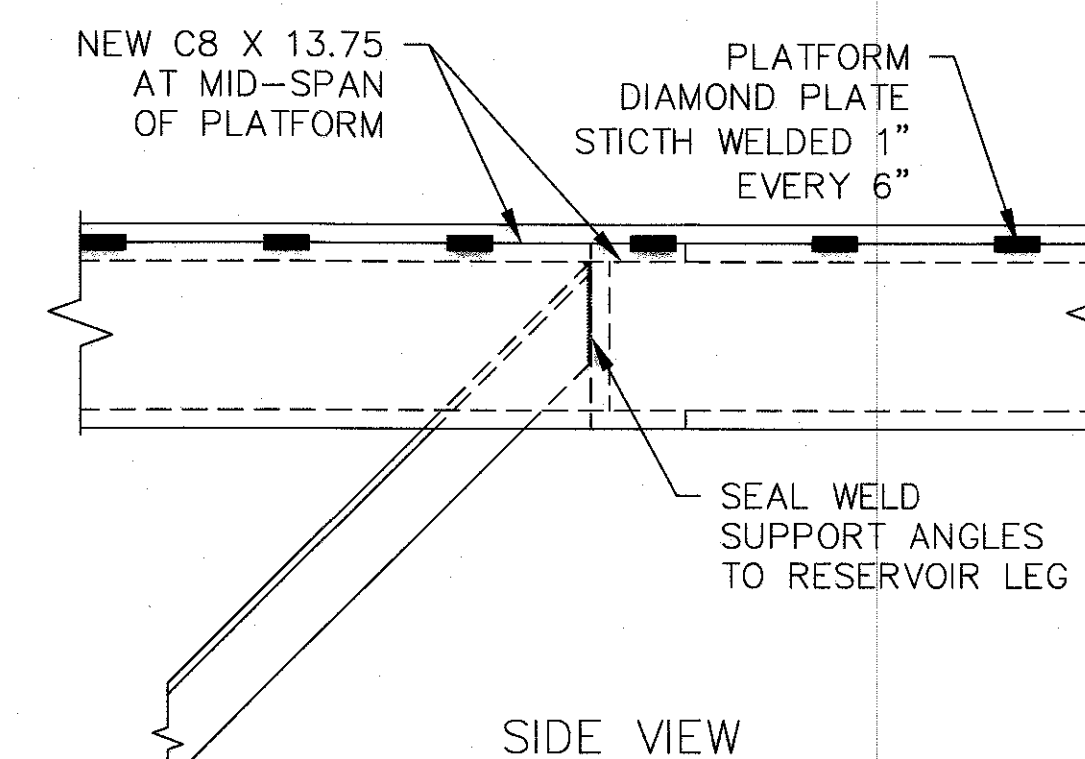
CHANNEL TO LEG SUPPORT
DETAIL 2



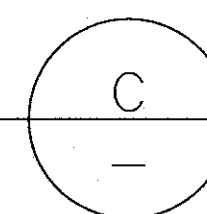
CHANNEL COPED CONNECTION
DETAIL 3



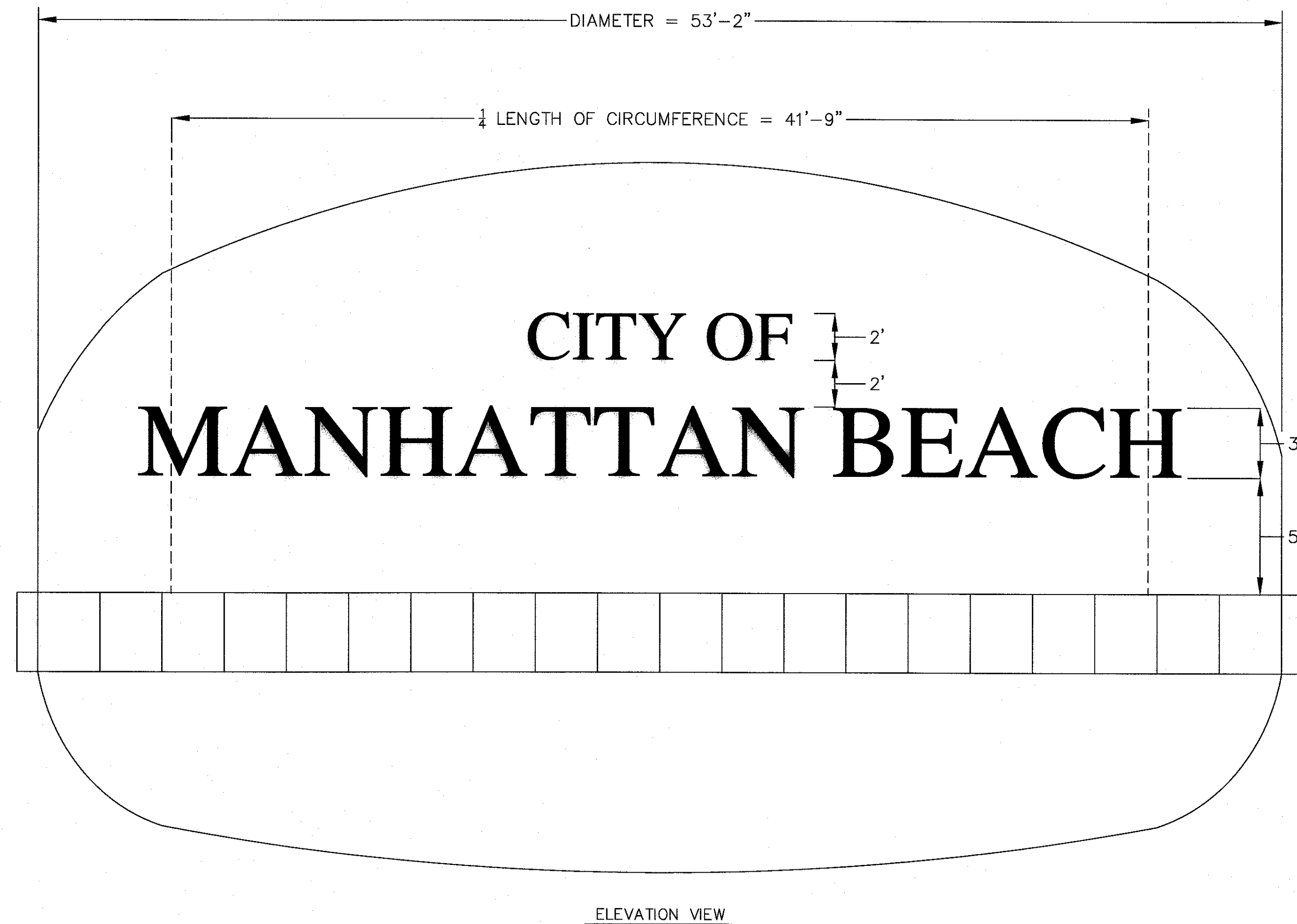
ANGLE SUPPORT
DETAIL 4



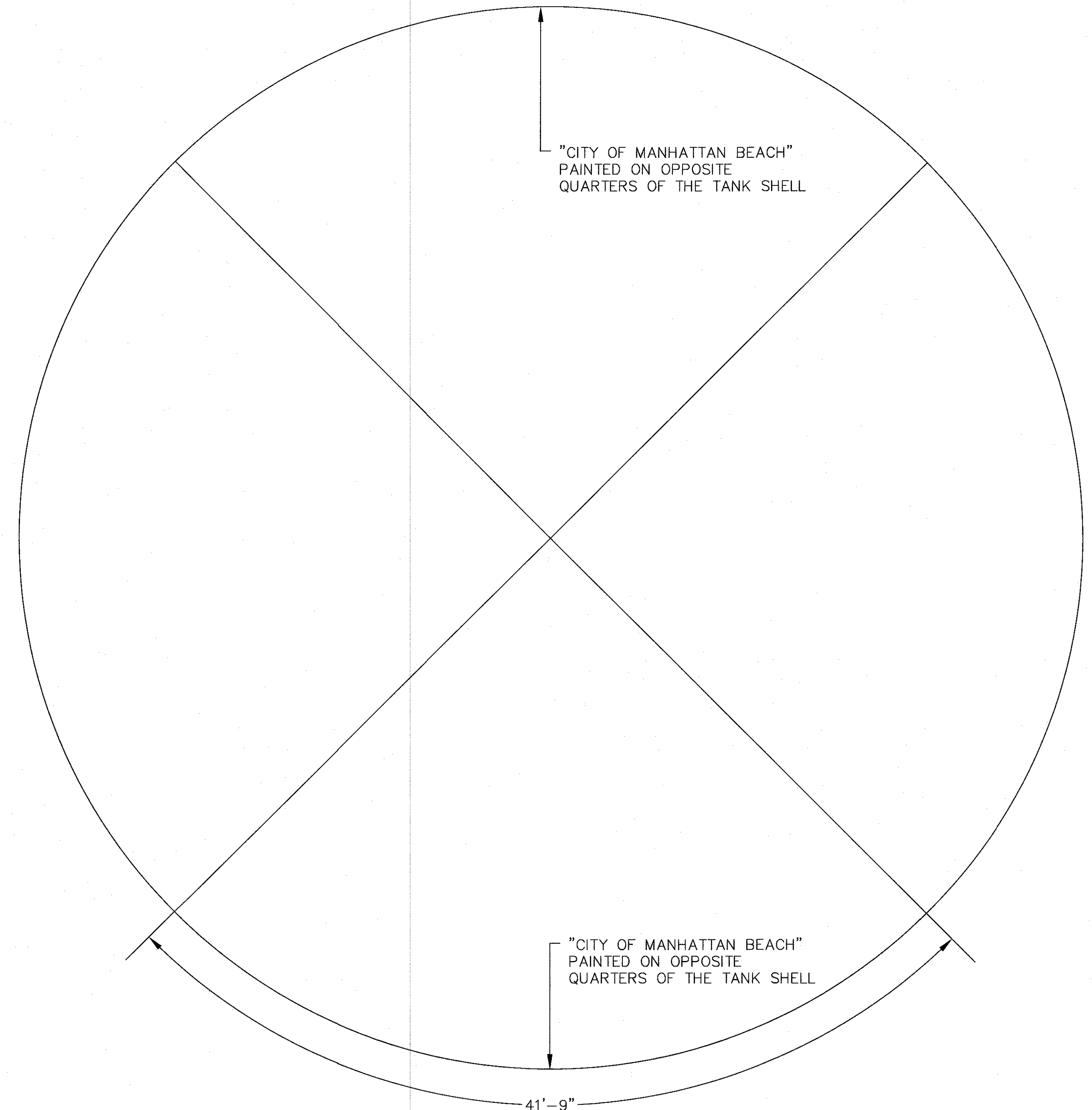
PLATFORM CONNECTION DETAILS
NTS



<p>NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.</p>		<p>SUPPLEMENTAL NOTES:</p> <ol style="list-style-type: none"> THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS. 		<p>ENGINEER/ARCHITECT OF RECORD STAMP</p>		<p>Harper & Associates Engineering, Inc. Consulting Engineers 1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8671</p>		<p>REVIEWED BY: _____ DATE: _____</p> <p>BY: _____ DATE: _____</p>		<p>CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION</p> <p>REHABILITATION OF BLOCK 35 ELEVATED TANK PLATFORM & CATWALK DETAILS</p> <p>RECOMMENDED BY: DATE: 1/26/19</p> <p>CITY ENGINEER: PREM KUMAR</p> <p>DESIGNED BY: DATE: 1/26/19</p> <p>PROJECT MANAGER: JOANNA REMBIS</p> <p>APPROVED BY: DATE: 1/26/19</p> <p>DIRECTOR OF PUBLIC WORKS: STEPHANIE KATSOULEAS</p> <p>SCALE: NTS DATE: 10/31/2019</p> <p>SHEET 8 OF 9</p> <p>DRAWING NO. W-628</p>	
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NOTE:
THE LETTERING IS SCHEMATIC ONLY, THE CITY RESERVES THE
RIGHT TO CHANGE BOTH THE FONT SIZE AND TYPE DURING
CONSTRUCTION.



FONT DESIGN DETAIL
NTS

CITY OF MANHATTAN BEACH PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION			
REHABILITATION OF BLOCK 35 ELEVATED TANK			
CITY LOGO			
REFERENCES		APPROVED BY	
NO.	BY	DATE	DATE
REVISIONS		RECOMMENDED BY	
NO.	BY	DATE	DATE
DESIGNED BY		CITY ENGINEER	
JOANNA REMBIS		PREM KUMAR	
10/14/19		11/26/19	
DATE		DATE	
SCALE		DIRECTOR OF PUBLIC WORKS	
NTS		STEPHANIE KATSIOULEAS	
SHEET		DATE	
9 OF 9		11/26/19	
DRAWING NO.		DATE	
W-628		11/26/19	

811
Know what's below.
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE
UNTIL USA AGENCY IS NOTIFIED
OF INTENTION TO GRADE OR EXCAVATE,
TWO WORKING DAYS BEFORE YOU DIG.

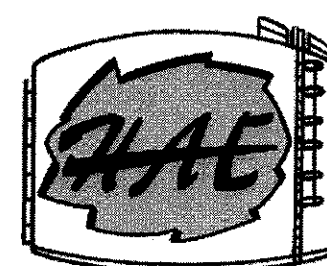
SUPPLEMENTAL NOTES:

1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

**ENGINEER/ARCHITECT
OF RECORD STAMP**

71290
EXP. 12/31/2024
STATE OF CALIFORNIA

DATE SIGNED



Harper & Associates Engineering, Inc.
Consulting Engineers
1240 East Ontario Ave., Ste 102-312, Corona, CA 92881-8671