

CONTRACT RESULTING FROM REQUEST FOR PROPOSAL NUMBER 10090413-26-H Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center

This Contract (Contract) is entered into by and between the City of San Diego, a municipal corporation (City), and the successful proposer to Request for Proposal (RFP) # 10090413-26-H Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center (Contractor).

RECITALS

On or about 9/3/2025, City issued an RFP to prospective proposers on services to be provided to the City. The RFP and any addenda and exhibits thereto are collectively referred to as the "RFP." The RFP is attached hereto as Exhibit A.

City has determined that Contractor has the expertise, experience, and personnel necessary to provide the services.

City wishes to retain Contractor to provide design, fabrication, and installation services for the exhibits, displays, and signage at the Pure Water Discovery Center as further described in the Scope of Work, attached hereto as Exhibit B. (Services).

For good and valuable consideration, the sufficiency of which is acknowledged, City and Contractor agree as follows:

**ARTICLE I
CONTRACTOR SERVICES**

1.1 Scope of Work. Contractor shall provide the Services to City as described in Exhibit B which is incorporated herein by reference. Contractor will submit all required forms and information described in Exhibit A to the Purchasing Agent before providing Services.

1.2 General Contract Terms and Provisions. This Contract incorporates by reference the General Contract Terms and Provisions, attached hereto as Exhibit C.

1.3 Contract Administrator. The Public Utilities Department (Department) is the Contract Administrator for this Agreement. Contractor shall provide the Services under the direction of a designated representative of the Department as follows:

Michael Bolouri, Associate Engineer - Civil
9192 Topaz Way, San Diego, CA 92123
619-533-5495
MBolouri@sandiego.gov

**ARTICLE II
DURATION OF CONTRACT**

2.1 Term. This Contract shall be for a period of one (1) year and three (3) months beginning on the Effective Date. City may, in its sole discretion, extend this Contract for six (6) additional months. Unless otherwise terminated, this Contract shall be effective until

completion of the Scope of Services. The term of this Contract shall not exceed five years unless approved by the City Council by ordinance.

2.2 Effective Date. This Contract shall be effective on the date it is executed by the last Party to sign the Contract, and approved by the City Attorney in accordance with San Diego Charter Section 40.

ARTICLE III COMPENSATION

3.1 Amount of Compensation. City shall pay Contractor for performance of all Services rendered in accordance with this Contract in a lump sum amount of \$1,004,000.
(The amount will be added in this final Contract prior to the final execution of the Contract by the City, with the Contractor's initials indicating acceptance.)

ARTICLE IV WAGE REQUIREMENTS

4.1 By submitting a response to this RFP, Contractor certifies that he or she is aware of, and agrees to comply with, the wage provisions described in Exhibit D, Wage Requirements, which is incorporated herein by reference, before commencing Services.

ARTICLE V CONTRACT DOCUMENTS

5.1 Contract Documents. The following documents comprise the Contract between the City and Contractor: this Contract and all exhibits thereto, the RFP; the Notice to Proceed; and the City's written acceptance of exceptions or clarifications to the RFP, if any.

5.2 Contract Interpretation. The Contract Documents completely describe the Services to be provided. Contractor will provide any Services that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result whether or not specifically called for or identified in the Contract Documents. Words or phrases which have a well-known technical or construction industry or trade meaning and are used to describe Services will be interpreted in accordance with that meaning unless a definition has been provided in the Contract Documents.

5.3 Precedence. In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the Parties will use the order of precedence as set forth below. The 1st document has the highest priority. Inconsistent provisions in the Contract Documents that address the same subject, are consistent, and have different degrees of specificity, are not in conflict and the more specific language will control. The order of precedence from highest to lowest is as follows:

1st Any properly executed written amendment to the Contract

2nd The Contract

3rd The RFP and the City's written acceptance of any exceptions or clarifications to the RFP, if any

4th Contractor's Proposal

5.4 Counterparts. This Contract may be executed in counterparts which, when taken together, shall constitute a single signed original as though all Parties had executed the same page.

5.5 Public Agencies. Other public agencies, as defined by California Government Code section 6500, may choose to use the terms of this Contract, subject to Contractor's acceptance. The City is not liable or responsible for any obligations related to a subsequent Contract between Contractor and another public agency.

IN WITNESS WHEREOF, this Contract is executed by City and Contractor acting by and through their authorized officers.

CONTRACTOR

Formations Inc.

Proposer

621 SE 202nd Ave

Street Address

Portland, Oregon

City

503-665-7110

Telephone No.

fparis@formationsinc.com

E-Mail

CITY OF SAN DIEGO
A Municipal Corporation

BY: 

Print Name: **Claudia Abarca**

Director, Purchasing & Contracting

Title **04/27/2026**

Date Signed

BY:



Signature of
Proposer's Authorized
Representative

Fred Paris

Print Name

Principal

Title

4/27/26

Date

Approved as to form this ____ day of

_____, 20____.

HEATHER FERBERT, City Attorney



BY: Elizabeth Cason (Apr 27, 2026 16:17:04 PDT)

Deputy City Attorney

EXHIBIT A
PROPOSAL SUBMISSION AND REQUIREMENTS

A. PROPOSAL SUBMISSION

1. Timely Proposal Submittal. Proposals must be submitted as described herein to the Purchasing & Contracting Department (P&C).

1.1 Reserved.

1.2 Paper Proposals. The City will accept paper proposals in lieu of eProposals. Paper proposals must be submitted in a sealed envelope to the Purchasing & Contracting Department (P&C) located at 1200 Third Avenue, Suite 200, San Diego, CA 92101. The Solicitation Number and Closing Date must be referenced in the lower left-hand corner of the outside of the envelope. Faxed proposals will not be accepted.

1.3 Proposal Due Date. Proposals must be submitted prior to the Closing Date indicated on the eBidding System. E-mailed and/or faxed proposals will not be accepted.

1.4 Pre-Proposal Conference. No pre-proposal conference will be held for RFP.

1.4.1 Reserved.

1.5 Questions and Comments. Written questions and comments must be submitted electronically via the eBidding System no later than the date specified on the eBidding System. Only written communications relative to the procurement shall be considered. The City's eBidding System is the only acceptable method for submission of questions. All questions will be answered in writing. The City will distribute questions and answers without identification of the inquirer(s) to all proposers who are on record as having received this RFP, via its eBidding System. No oral communications can be relied upon for this RFP. Addenda will be issued addressing questions or comments that are determined by the City to cause a change to any part of this RFP.

1.6 Contact with City Staff. Unless otherwise authorized herein, proposers who are considering submitting a proposal in response to this RFP, or who submit a proposal in response to this RFP, are prohibited from communicating with City staff about this RFP from the date this RFP is issued until a contract is awarded.

2. Proposal Format and Organization. Unless electronically submitted, all proposals should be securely bound and must include the following completed and executed forms and information presented in the manner indicated below:

Tab A - Submission of Information and Forms.

2.1 Completed and signed Contract Signature Page. If any addenda are issued, the latest Addendum Contract Signature Page is required.

2.2 Exceptions requested by proposer, if any. The proposer must present written factual or legal justification for any exception requested to the Scope of Work, the Contract, or the Exhibits thereto. Any exceptions to the Contract that have not been accepted by the City in writing are deemed rejected. The City, in its sole discretion, may accept some or all of proposer's exceptions, reject proposer's exceptions, and deem the proposal non-responsive, or award the Contract without proposer's proposed exceptions. The City will not consider exceptions addressed elsewhere in the proposal.

2.3 The Contractor Standards Pledge of Compliance Form.

2.4 Equal Opportunity Contracting forms including the Work Force Report and Contractors Certification of Pending Actions.

2.5 Living Wage Ordinance Certification of Compliance.

2.6 Licenses as required in Exhibit B.

2.7 Reserved.

2.8 Additional Information as required in Exhibit B.

2.9 Reserved.

Tab B - Executive Summary and Responses to Specifications.

2.10 A title page.

2.11 A table of contents.

2.12 An executive summary, limited to one typewritten page, that provides a high-level description of the proposer's ability to meet the requirements of the RFP and the reasons the proposer believes itself to be best qualified to provide the identified services.

2.13 Proposer's response to the RFP.

Tab C - Cost/Price Proposal (if applicable). Proposers shall submit a cost proposal in the form and format described herein. Failure to provide cost(s) in the form and format requested may result in proposal being declared non-responsive and rejected.

3. Proposal Review. Proposers are responsible for carefully examining the RFP, the Specifications, this Contract, and all documents incorporated into the Contract by reference before submitting a proposal. If selected for award of contract, proposer shall be bound by same unless the City has accepted proposer's exceptions, if any, in writing.

4. Addenda. The City may issue addenda to this RFP as necessary. All addenda are incorporated into the Contract. The proposer is responsible for determining whether addenda were issued prior to a proposal submission. Failure to respond to or properly address addenda may result in rejection of a proposal.

5. Quantities. The estimated quantities provided by the City are not guaranteed. These quantities are listed for informational purposes only. Quantities vary depending on the

demands of the City. Any variations from the estimated quantities shall not entitle the proposer to an adjustment in the unit price or any additional compensation.

6. Quality. Unless otherwise required, all goods furnished shall be new and the best of their kind.

6.1 Items Offered. Proposer shall state the applicable trade name, brand, catalog, manufacturer, and/or product number of the required good, if any, in the proposal.

6.2 Brand Names. Any reference to a specific brand name in a solicitation is illustrative only and describes a component best meeting the specific operational, design, performance, maintenance, quality, or reliability standards and requirements of the City. Proposer may offer an equivalent or equal in response to a brand name referenced (Proposed Equivalent). The City may consider the Proposed Equivalent after it is subjected to testing and evaluation which must be completed prior to the award of contract. If the proposer offers an item of a manufacturer or vendor other than that specified, the proposer must identify the maker, brand, quality, manufacturer number, product number, catalog number, or other trade designation. The City has complete discretion in determining if a Proposed Equivalent will satisfy its requirements. It is the proposer's responsibility to provide, at their expense, any product information, test data, or other information or documents the City requests to properly evaluate or demonstrate the acceptability of the Proposed Equivalent, including independent testing, evaluation at qualified test facilities, or destructive testing.

7. Modifications, Withdrawals, or Mistakes. Proposer is responsible for verifying all prices and extensions before submitting a proposal.

7.1 Modification or Withdrawal of Proposal Before Proposal Opening. Prior to the Closing Date, the proposer or proposer's authorized representative may modify or withdraw the proposal by providing written notice of the proposal modification or withdrawal to the City Contact via the eBidding System. E-mail or telephonic withdrawals or modifications are not permissible.

7.2 Proposal Modification or Withdrawal of Proposal After Proposal Opening. Any proposer who seeks to modify or withdraw a proposal because of the proposer's inadvertent computational error affecting the proposal price shall notify the City Contact identified on the eBidding System no later than three working days following the Closing Date. The proposer shall provide worksheets and such other information as may be required by the City to substantiate the claim of inadvertent error. Failure to do so may bar relief and allow the City recourse from the bid surety. The burden is upon the proposer to prove the inadvertent error. If, as a result of a proposal modification, the proposer is no longer the apparent successful proposer, the City will award to the newly established apparent successful proposer. The City's decision is final.

8. Incurred Expenses. The City is not responsible for any expenses incurred by proposers in participating in this solicitation process.

9. Public Records. By submitting a proposal, the proposer acknowledges that any information submitted in response to this RFP is a public record subject to disclosure unless the City determines that a specific exemption in the California Public Records Act (CPRA) applies. If the proposer submits information clearly marked confidential or proprietary, the City may protect such information and treat it with confidentiality to the extent permitted by

law. However, it will be the responsibility of the proposer to provide to the City the specific legal grounds on which the City can rely in withholding information requested under the CPRA should the City choose to withhold such information. General references to sections of the CPRA will not suffice. Rather, the proposer must provide a specific and detailed legal basis, including applicable case law, that clearly establishes the requested information is exempt from the disclosure under the CPRA. If the proposer does not provide a specific and detailed legal basis for requesting the City to withhold proposer's confidential or proprietary information at the time of proposal submittal, City will release the information as required by the CPRA and proposer will hold the City, its elected officials, officers, and employees harmless for release of this information. It will be the proposer's obligation to defend, at proposer's expense, any legal actions or challenges seeking to obtain from the City any information requested under the CPRA withheld by the City at the proposer's request. Furthermore, the proposer shall indemnify and hold harmless the City, its elected officials, officers, and employees from and against any claim or liability, and defend any action brought against the City, resulting from the City's refusal to release information requested under the CPRA which was withheld at proposer's request. Nothing in the Contract resulting from this proposal creates any obligation on the part of the City to notify the proposer or obtain the proposer's approval or consent before releasing information subject to disclosure under the CPRA.

10. Right to Audit. The City Auditor may access proposer's records as described in San Diego Charter section 39.2 to confirm contract compliance.

B. PRICING

1. Fixed Price. All prices shall be firm, fixed, fully burdened, FOB destination, and include any applicable delivery or freight charges, and any other costs required to provide the requirements as specified in this RFP. The lowest total estimated contract price of all the proposals that meet the requirements of this RFP will receive the maximum assigned points to this category as set forth in this RFP. The other price schedules will be scored based on how much higher their total estimated contract prices compare with the lowest:

$$(1 - \frac{(\text{contract price} - \text{lowest price})}{\text{lowest price}}) \times \text{maximum points} = \text{points received}$$

For example, if the lowest total estimated contract price of all proposals is \$100, that proposal would receive the maximum allowable points for the price category. If the total estimated contract price of another proposal is \$105 and the maximum allowable points is 60 points, then that proposal would receive $(1 - ((105 - 100) / 100)) \times 60 = 57$ points, or 95% of the maximum points. The lowest score a proposal can receive for this category is zero points (the score cannot be a negative number). The City will perform this calculation for each Proposal.

2. Taxes and Fees. Taxes and applicable local, state, and federal regulatory fees should not be included in the price proposal. Applicable taxes and regulatory fees will be added to the net amount invoiced. The City is liable for state, city, and county sales taxes but is exempt from Federal Excise Tax and will furnish exemption certificates upon request. All or any portion of the City sales tax returned to the City will be considered in the evaluation of proposals.

3. Escalation. An escalation factor is not allowed unless called for in this RFP. If escalation is allowed, proposer must notify the City in writing in the event of a decline in market price(s) below the proposal price. At that time, the City will make an adjustment in the Contract or may elect to re-solicit.

4. Unit Price. Unless the proposer clearly indicates that the price is based on consideration of being awarded the entire lot and that an adjustment to the price was made based on receiving the entire proposal, any difference between the unit price correctly extended and the total price shown for all items shall be offered shall be resolved in favor of the unit price.

C. EVALUATION OF PROPOSALS

1. Award. The City shall evaluate each responsive proposal to determine which proposal offers the City the best value consistent with the evaluation criteria set forth herein. The proposer offering the lowest overall price will not necessarily be awarded a contract.

2. Sustainable Materials. Consistent with Council Policy 100-14, the City encourages use of readily recyclable submittal materials that contain post-consumer recycled content.

3. Evaluation Process.

3.1 Process for Award. A City-designated evaluation committee (Evaluation Committee) will evaluate and score all responsive proposals. The Evaluation Committee may require proposer to provide additional written or oral information to clarify responses. Upon completion of the evaluation process, the Evaluation Committee will recommend to the Purchasing Agent that award be made to the proposer with the highest scoring proposal.

3.2 Reserved.

3.3 Mandatory Interview/Oral Presentation. The City will require proposers to interview and/or make an oral presentation if one or more proposals score within ten (10) points or less of the proposal with the highest score. Only the proposer with the highest scoring proposal and those proposers scoring within ten (10) points or less of the highest scoring proposal will be asked to interview and/or make an oral presentation. Interviews and/or oral presentations will be made to the Evaluation Committee in order to clarify the proposals and to answer any questions. The interviews and/or oral presentations will be scored as part of the selection process. The City will complete all reference checks prior to any oral interview. Additionally, the Evaluation Committee may require proposer's key personnel to interview. Interviews may be by telephone and/or in person. Multiple interviews may be required. Proposers are required to complete their oral presentation and/or interviews within seven (7) workdays after the City's request. Proposers should be prepared to discuss and substantiate any of the areas of the proposal submitted, as well as proposer's qualifications to furnish the subject goods and services. Proposer is responsible for any costs incurred for the oral presentation and interview of the key personnel.

3.4 Discussions/Negotiations. The City has the right to accept the proposal that serves the best interest of the City, as submitted, without discussion or negotiation. Contractors should, therefore, not rely on having a chance to discuss, negotiate, and adjust their proposals. The City may negotiate the terms of a contract with the winning proposer

based on the RFP and the proposer's proposal, or award the contract without further negotiation.

3.5 Inspection. The City reserves the right to inspect the proposer's equipment and facilities to determine if the proposer is capable of fulfilling this Contract. Inspection will include, but not limited to, survey of proposer's physical assets and financial capability. Proposer, by signing the proposal agrees to the City's right of access to physical assets and financial records for the sole purpose of determining proposer's capability to perform the Contract. Should the City conduct this inspection, the City reserves the right to disqualify a proposer who does not, in the City's judgment, exhibit the sufficient physical and financial resources to perform this Contract.

3.6 Evaluation Criteria. The following elements represent the evaluation criteria that will be considered during the evaluation process:

	MAXIMUM EVALUATION POINTS
A. Responsiveness to the RFP.	20
1. Requested information included and thoroughness of response	
2. Understanding of the project and ability to deliver as exhibited in the Executive Summary	
3. Technical Aspects	
B. Staffing Plan.	20
1. Qualifications of personnel adequate for requirement	
2. Availability/Geographical location of personnel for required tasks	
3. Clearly defined Roles/Responsibilities of personnel	
C. Firm's Capability to provide the services and expertise and Past Performance.	35
1. Relevant experience of the Firm and subcontractors	
2. Previous relationship of firm and subcontractors on similar projects	
3. Other pertinent experience	
4. Knowledge of the locality (regulations, policies, laws, ordinances, requirements, permitting) of the Project	
5. Past/Prior Performance	
6. Capacity/Capability to meet The City of San Diego needs in a timely manner	
7. Reference checks	
D. Price.	10
E. Interview/Oral Presentation (see Section 3.3, above).	15
1. Thoroughness and Clarity of Presentation	
SUB TOTAL MAXIMUM EVALUATION POINTS:	100

	MAXIMUM EVALUATION POINTS
F. Participation by Small Local Business Enterprise (SLBE) or Emerging Local Business Enterprise (ELBE) Firms*	12
FINAL MAXIMUM EVALUATION POINTS INCLUDING SLBE/ELBE:	112

*The City shall apply a maximum of an additional 12 percentage points to the proposer's final score for SLBE OR ELBE participation. Refer to Equal Opportunity Contracting Form, Section V.

4. Rejection of All Proposals. The City may reject any and all proposals when to do so is in the City's best interests.

D. ANNOUNCEMENT OF AWARD

1. Award of Contract. The City will inform all proposers of its intent to award a Contract in writing.

2. Obtaining Proposal Results. No solicitation results can be obtained until the City announces the proposal or proposals best meeting the City's requirements. Proposal results may be obtained by: (1) e-mailing a request to the City Contact identified on the eBidding System or (2) visiting the P&C eBidding System to review the proposal results. To ensure an accurate response, requests should reference the Solicitation Number. Proposal results will not be released over the phone.

3. Multiple Awards. City may award more than one contract by awarding separate items or groups of items to various proposers. Awards will be made for items, or combinations of items, which result in the lowest aggregate price and/or best meet the City's requirements. The additional administrative costs associated with awarding more than one Contract will be considered in the determination.

E. PROTESTS. The City's protest procedures are codified in Chapter 2, Article 2, Division 30 of the San Diego Municipal Code (SDMC). These procedures provide unsuccessful proposers with the opportunity to challenge the City's determination on legal and factual grounds. The City will not consider or otherwise act upon an untimely protest.

F. SUBMITTALS REQUIRED UPON NOTICE OF INTENT TO AWARD. The successful proposer is required to submit the following documents to P&C **within ten (10) business days** from the date on the Notice of Intent to Award letter:

1. Insurance Documents. Evidence of all required insurance, including all required endorsements, as specified in Article VII of the General Contract Terms and Provisions.

2. Taxpayer Identification Number. Internal Revenue Service (IRS) regulations require the City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide goods or services to the City. This information is necessary to complete Form 1099 at the end of each tax year. To comply with IRS regulations, the City requires each Contractor to provide a Form W-9 prior to the award of a Contract.

3. Business Tax Certificate. Unless the City Treasurer determines a business is exempt, all businesses that contract with the City must have a current business tax certificate.

4. Bond. A bond as described in Exhibit B.

5. Reserved.

The City may find the proposer to be non-responsive and award the Contract to the next highest scoring responsible and responsive proposer if the apparent successful proposer fails to timely provide the required information or documents.

EXHIBIT B SCOPE OF WORK

BACKGROUND

The City of San Diego (City) is building a new North City Pure Water Facility (Pure Water Facility), located at 4940 Eastgate Mall, San Diego, CA 92121. The Pure Water Facility will provide an additional source of water to the area through potable reuse. The Pure Water Facility's Operations Building and Process Facility will include educational exhibits, displays, and signage, which collectively, shall be referred to as the Pure Water San Diego Discovery Center (Discovery Center or Center). The City seeks proposals for design, fabrication, and installation services for the exhibits, displays, and signage at the Discovery Center.

The Discovery Center, through its modern design, interactive exhibits, process facility tours, and programming, will educate visitors about the advanced water purification process, define the Pure Water recycling concept, share historical highlights of the City's water treatment system, and encourage public cooperation in protection of water as a precious resource. The Discovery Center will also be a science education resource and field trip destination for area schools.

SCOPE

Respondents to this RFP, herein referred to as "Vendor," must be able to provide a full range of professional exhibit design, fabrication, and other specialty services to design, fabricate and install the signage, exhibits, and all other components required to create a cohesive experience. Respondents shall furnish all labor, materials and equipment required to perform the work indicated as follows:

- Design of signage, exhibits, and all related components.
- Fabrication of signage, exhibits, and all related components.
- Installation of signage, exhibits, and all related components.
- Exhibit and signage design fabrication and installation documents, including but not limited to technical specifications, shop drawings, and instructions.
- Website content development, including graphic, digital, and video production.

Refer to **SCOPE REQUIREMENTS**, below, for detailed scope requirements.

Signage

Outline content, standards, text, and imagery for all signage. Provide draft and final design of exterior interpretive signage, Discovery Center interior interpretive and wayfinding signage, facility tour route exterior signage, and facility tour interior signage as outlined in the Visitor Experience Plan (Attachment 1). Vendor will prepare drawings, specifications, text, and imagery for all signage types and quantities for City review and approval prior to fabrication. Signage will be delivered and installed on site following a pre-installation walk through with City representatives.

Exhibits

Determine content, information, data, text, layout, design, and materials for all exhibits, both physical and digital as outlined in the Visitor Experience Plan (Attachment 1). Vendor shall develop a design schedule and meeting schedule to take the conceptual designs to a detailed design with all content identified, the look-and-feel of design confirmed, and final designs approved.

Website

Develop website content dedicated to the Discovery Center visitor experience. Website content shall include exhibit overviews, a virtual tour of the Process Facility, news and events, scheduling resources, and links to learning materials. Vendor shall ensure content formatting is consistent with that of the City's existing Pure Water website so that it is compatible, easy to add to the existing City website, and ready to upload. Website content must be modifiable so that it can be updated and maintained by the City upon project completion. Further information relating the vision for the Discovery Center website is available in the Visitor Experience Plan (Attachment 1).

The Vendor is neither to create a new website nor modify in any way the existing Pure Water website. The Vendor will be creating website content only. For Vendor's reference, the Pure Water website may be accessed at: <https://www.sandiego.gov/public-utilities/sustainability/pure-water-sd>.

SCOPE REQUIREMENTS

1. Design

- 1.1 Prepare and submit for review final shop drawings detailing fabrication. Shop drawings are required for each typical component type and include specially-prepared technical data for this project, drawings, diagrams, schedules, templates, patterns, instructions, measurements, and similar information not in standard print form.

The completeness and technical merit of the design concept will be evaluated. The following elements shall be incorporated:

- 1.1.1 Creativity: Provide memorable experiences with creative themes and imaginative spaces, which integrate well with one another. Incorporate the innovative concept of the closed distribution and treatment cycle in how it relates to finite water resource management for long-term resilience and reliability.
- 1.1.2 Learning Value: All exhibits and signage shall entertain visitors while providing intellectual and social value.
- 1.1.3 Access: Maximize accessible components for visitors with disabilities.
- 1.1.4 Materials: Provide sustainably sourced, easily replaceable, durable materials (industrial grade) to provide a minimum of 15

years of use without need for extensive maintenance, repair, and replacement. Provide draft and final design in the form of construction documents, drawings, and specifications in PDF format sufficient for review, approval, and construction of interior exhibits in the Center and the process facility as outlined in the attachments. The Vendor will coordinate with Pure Water Facility's architects, contractors, and City staff for design input to fit in with the facility's power/data/lighting design and the City's sustainability initiatives. City representatives will review and approve design and design cost estimates prior to exhibit fabrication.

1.2 Exhibit Fabrication

Services shall include fabrication of approved exhibit designs. Exhibit fabrication shall include the following:

- 1.2.1 Vendor shall oversee subcontractors during fabrication, and coordinate components among various subcontractors as to provide a complete, finished product for each item. Vendor to respond to field requests for information and submittals from subcontractors and work with the City representatives to resolve as needed for an on-time installation.

Fabrication shall be to museum quality with particular attention paid to high quality fit and finish, durability, and ease of maintenance. For the purpose of this RFP, "museum quality" shall be defined to be in accordance with the American Alliance of Museums' Core Standards and with no defects discernible to the human eye. The American Alliance of Museums' Core Standards may be accessed at: <https://www.aam-us.org/programs/ethics-standards-and-professional-practices/core-standards-for-museums/>

- 1.2.1.1 All individual freestanding units are to withstand 100 pounds of lateral force, without tipping, at five-foot height from the finished floor.
 - 1.2.1.2 Interactives must survive use and abuse by visitors without failure and without danger to visitors.
- 1.2.2 Exhibit structures: Fabricate exhibit components including, but not limited to, cabinetry, displays, panels, platforms, vitrines, and all other elements which constitute the structural elements of the space. All components must be easily serviced and repaired (particularly for easy access to lighting and audio/video equipment). All components shall be relatively easy to disassemble and replace, in that proprietary or specialized equipment will not be required. Components shall be provided so that disassembly and replacement may be performed using tools and equipment available from a standard hardware supplier, such as Grainger Industrial Supply, HD Supply, or similar.

- 1.2.3 Internal components: design, fabricate, assemble, and install into exhibit structures, and thoroughly test.
- 1.2.4 Graphics: Determine final placement of text and graphics, adjustments to graphic layouts, and conversion of digital files for specified imaging system output. Text and graphics shall be developed in adherence to the City of San Diego's Visual Style Guide, accessible at <https://www.sandiego.gov/sites/default/files/visual-style-guide.pdf>. Following City review, Vendor shall refine, re-format, and upgrade as necessary to provide museum-quality deliverables.
- 1.2.5 Displays: Prepare and arrange displays.
- 1.2.6 Graphic production: Includes, but is not limited to, digital images, screen printing, label copy plaques, frisketed and spray-painted shapes, vinyl graphics, photo-etched or sandblasted images, porcelain enamel panels, fiberglass-embedded panels, and cut-out graphic images of letters.
- 1.2.7 Building modifications: None. No structural, electrical, tele-communication, audio/video, HVAC, or plumbing modifications shall be performed by the Vendor; nor shall they be required. All rough-in and interior finishes have been completed by others or are nearing completion.
- 1.2.8 Submit control samples: Samples include both fabricated and unfabricated physical examples of materials, products, and units of work. Samples may be both complete units and smaller portions of units of work, either for limited visual inspection or, where indicated, for more detailed review and assessment.
- 1.2.9 Mockups or prototypes are required for interactive exhibits with moving parts or digital features. Each interactive display shall be tested thoroughly before installation. Work cannot proceed without acceptance by the City.
- 1.2.10 Protection from loss and physical damage of all deliverables shall be the responsibility of the Vendor until acceptance of the Project.
- 1.2.11 Information in Multiple Languages: The City requires that signage and exhibits be available in multiple languages. During design, the City will clarify how many and which languages it requires. The Vendor shall work with the City to recommend and implement the proper mode of any needed translation for each

component (i.e., written translations, audio translations, application translations, etc.).

1.3 Exhibit Installation and Commissioning

Provide delivery, installation, and testing or commissioning of all exhibit components and features, so that a fully functional Discovery Center experience is completed within 15 months following Proposal acceptance. Respondents shall develop a commissioning protocol for all assemblies and interactive exhibits, including media elements. Training on operation, maintenance and upkeep of the installed components shall be included in the project scope. Training shall be provided to designated City staff during installation and testing and shall include video recordings, as well as written instructions on how to perform operations and maintenance. Vendor will coordinate with Pure Water Facility architects, contractors, and City staff while scheduling installation activities and sequencing.

- 1.3.1 Describe the proposed design, fabrication and installation plan, including the following, at a minimum: approach and methods; plan for phasing of fabrication, procurement, and installation activities; functional testing and start-up; safety program; and schedule.

1.4 Discovery Center Website Content

Develop website content dedicated to the Discovery Center visitor experience. Where applicable, website content shall follow the City of San Diego's Visual Style Guide while capturing elements unique to the Discovery Center and Pure Water. The City of San Diego Visual Style Guide (dated July 2017), may be accessed at <https://www.sandiego.gov/sites/default/files/visual-style-guide.pdf>.

- 1.4.1 The Vendor shall provide periodic check-in sessions with the City to present progress and when needing to collaborate on key decisions. The submittal and revision timeline shall align with the overall Project delivery schedule.
- 1.4.2 All content, including but not limited to videos, graphics, and interactive features.

1.5 Project Closeout

The Vendor is responsible for the preparation of all closeout components including, but not limited to, assembly manual, maintenance manual and closeout package (including electronic and hard copies of all drawings). All product data are to be provided to the City at the completion of the project.

1.5.1 Project Management

The Vendor shall provide project management, including creation and maintenance of the project schedule and coordinating, managing, and overseeing the work produced.

1.5.2 The Vendor's Project Manager will establish a work plan and schedule to ensure timely completion. The schedule will show start and completion of stages, critical path items, and check points for review and decisions. Regular meetings will be required in-person or remotely to track progress through project completion.

2 WHAT SAN DIEGO PURE WATER STAFF WILL PROVIDE

2.1 Discovery Center Stakeholder Team

The City will designate representatives to serve on the Discovery Center Stakeholder Team to assist the Vendor in final concepts, information gathering, content creation, design review and approval, and other collaboration as needed.

2.2 Building Components

Exhibit design and installation must conform to the constraints of the design of the Pure Water Facility Operations Building and Process Facility. No structural, electrical, telecommunication, audio/video, HVAC, or plumbing modifications shall be performed by the Vendor; nor shall they be required. All rough-in and interior finishes have been completed by others or are nearing completion. It is estimated that at the time of exhibit design that the Pure Water Facility Operations Building will be fully complete, and the Process Facility will near completion. Early site visits during design will be permitted to assist with design and planning. See supplemental attachments for additional details.

2.3 Images

The City may identify and provide digital photos, historical imagery, and objects for consideration in exhibits, as well as any water treatment-specific images. The Vendor will provide additional image research and collection, as needed, to meet the needs of final exhibit design.

2.4 Data and Treatment Process Content

Information and data related to the historic or present-day treatment process, equipment, technology, or facilities will be provided by the City. Should additional information be needed, the City will review and provide available information.

2.5 Design Input, Review, and Approvals

The City will provide design input to move the concepts to final design. The City will review design progress at milestones identified by design deliverable dates or as recommended by the Vendor. At the 60% design phase all deliverables shall be submitted for compliance with the Americans with Disabilities Act (ADA), California State Title 24, and any applicable City regulations and accessibility criteria. The City will review and provide acceptance of final design and exhibit mockups prior to work proceeding to final installation. See attached Visitor Experience Plan for Discovery Center background information and preliminary design details. Architectural Plans for the Pure Water Facility Operations Building and Process Facility are both included for Vendor reference and to advise proposal development; however, dimensions, room layouts, utility locations, and all other constraints and assumptions relied upon during design shall be verified by the Vendor during early design stages.

2.6 Architectural Support and Contractor Coordination

Throughout the exhibit design process, the building architects will support the Vendor by providing Pure Water Facility construction progress and as-built information, interior color

scheme and materiality coordination, installation guidance, and help City representatives in review and approval of work quality and deliverables.

2.7 Supplemental Attachments

The below listed documents are included as supplemental attachments to this Scope of Work. They are intended to advise Vendors while developing proposals and through all phases of the Project thereafter.

Attachment 1: Discovery Center Visitor Experience Plan

Attachment 2: Plans for the Pure Water Facility Process Facility

Attachment 3: Plans for the Pure Water Facility Operations Building

Attachment 4: Plans for the Pure Water Facility Process Facility - Tasting Stations

3 ADDITIONAL REQUIREMENTS

3.1 Project Schedule

Vendor shall provide a schedule for services based on their proposed approach.

- 3.1.1 Tasting Station Prioritization: Vendor shall prioritize design, fabrication, and installation of the tasting sinks, also referred to as 'Tasting Stations.'
Schedules that do not include acknowledgement of this requirement shall not be accepted. Refer to Attachment 1, Discovery Center Visitor Experience Plan for further details related to the Tasting Stations.

3.2 Project Budget

Vendor shall provide budget and cost breakdown by Task. Budget and cost breakdown shall align with PRICING, below.

3.3 Experience

Describe experience in providing design, fabrication, and installation services to complete projects similar to that outlined by this Scope of Work. If having already completed projects of a similar nature, provide name of Owner's Project Manager, phone numbers, project type and total value of project.

- 3.3.1 Describe experience working in the local "environment" and proposed local presence for interfacing with the City's project management staff. The "environment" includes but is not limited to: City and other local agencies regulations and policies; local environmental documentation requirements; local building codes; and other local design criteria.
- 3.3.2 Describe proposed project organization, including identification and responsibilities of key personnel. Indicate role and responsibilities of Vendor and all subconsultants. Indicate how local firms are being utilized to ensure a strong understanding of local laws, ordinances, regulations, policies, requirements, permitting, etc. Indicate extent of commitment of key personnel for duration of project (through startup) and furnish résumés of key personnel. Provide indication of staffing level for the project. Consultant's Vendor evaluation will consider its entire team, therefore changes in team composition will require prior written approval from the City.

- 3.3.3 Provide detailed discussion of the experience of Vendor's Project Manager, Principal-in-Charge, and other key managers on projects of similar size, capacity, and dollar value. For each similar project, include Owner's name, Owner's Project Manager and phone number.

4 PRICING

The Vendor's pricing shall be submitted as a lump sum for the performance of all requirements in this RFP and shall include all costs to complete the Tasks specified in this RFP. The City shall evaluate pricing for this RFP solely based upon Vendor's submitted lump sum.

Any variations in the labor hours necessary to complete the work during the Contract period shall not entitle the Vendor to any adjustment in compensation.

Description	Lump Sum
Task 1: Design	\$ 265,000
Task 2: Fabrication	\$ 600,000
Task 3: Installation & Commissioning	\$ 100,000
Task 4: Website Development	\$ 10,000
Performance Bond	\$ 29,000
Total (Tasks 1-4+ Bond):	\$ 1,004,000

5 LICENSE REQUIREMENT

To be eligible for award of this contract, Vendor must possess the following licensing classification: **B or C-61/D-34**. **Should the Vendor not possess either license, Vendor's subcontractor performing installation services must possess a "B" or a "C-61/D-34" license classification.**

6 PERFORMANCE BOND

Vendor must include with their proposal a Bondability Letter with proof of Bonding Capacity for a sum equal to the aggregate amount of Task 2 through Task 4 of the Contract. Proposals submitted without a Bondability Letter and proof of Bonding Capacity shall be deemed non-responsive.

Prior to beginning Task 2 of the Contract, Vendor shall be required to furnish the City of San Diego with a surety bond (Exhibit E) executed by a surety company authorized to do business in the State of California, and approved by the City of San Diego, in a sum equal to the amount of Task 2 through Task 4, conditional for the performance of Task 2 through Task 4 of the Contract. The performance bond shall be submitted to Purchasing & Contracting within 10 days of the request. Failure to provide the bond within the time frame specified by the City shall be cause for the bid to be rejected as non-responsive.

The bond shall be maintained by the Vendor in full force and effect during the entire period of performance of Task 2 through Task 4 of the Contract. Failure to do so shall be cause for termination of the Contract. Refer to Article VIII of the City's Contracting Term's and Provisions for additional information.

7. ADDITIONAL PROFESSIONAL CONSULTANT INSURANCE LIMIT REQUIREMENTS

- Commercial General Liability: \$2 Million Per Occurrence / \$4 Million Aggregate.
- Employer Liability: \$1 Million.
- Professional Liability (Errors and Omissions): \$3 Million Per Occurrence / \$3 Million Aggregate.
- Pollution Liability: \$1 Million Per Occurrence / \$2 Million Aggregate.
- Hazardous Transporters Pollution Liability Insurance: \$1 Million Per Occurrence / \$2 Million Aggregate.



North City Pure Water Facility Discovery Center and Tour Visitor Experience Plan

SUBMITTED BY LENNOX INSITES • OCTOBER 2018

REVISED FOR REQUEST FOR PROPOSAL

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~ Col. Ed Fletcher, San Diego developer

Acknowledgements

The development of this Visitor Experience Plan would not have been possible without the support of the following people.

City of San Diego

Amy Dorman, Program Manager,
Public Utilities Department (PUD)
Amer Barhoumi, Senior Civil Engineer, PUD
Anthony Van, Associate Engineer–Civil, PUD
Rey Novencido, Assistant Engineer–Civil, PUD
J. Brent Eidson, Program Manager, PUD
Megan Drummy, Consultant
Sarah Lemons, Consultant
Juan Guerreiro, Deputy Director, PUD
Peter Vroom, Deputy Director, PUD

Consulting Team

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Casey Hagerman, MWA Architects, Inc.
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Marian Marum, Marum Partnership



Pure Water San Diego
Demonstration Facility 2017

Executive Summary

The City of San Diego (City) is building a new North City Pure Water Facility (Facility) which will provide an additional source of water to the area. As part of the construction of this major facility, a 3,116 square-foot interpretive and education center is included in the design of the Operations and Maintenance Facility, whose main entrance will face Eastgate Mall.

The Pure Water San Diego Discovery Center (Discovery Center), through its exhibits, tours and programming, will educate visitors about the water purification process, define the Pure Water recycling concept, share historical highlights of the City's water system and encourage public cooperation in protection of water as a precious resource. The Discovery Center will also be a science education resource and field trip destination for area schools.

From 2011 to present, the City has operated the Pure Water Demonstration Facility at the North City Water Reclamation Plant (NCWRP) that includes public tours. Lesson learned from this experience and many community outreach activities over the last few years have been incorporated into this Visitor Experience Plan (Plan).

A VISITOR EXPERIENCE PLAN CONSIDERS ALL THE FACTORS THAT ENHANCE OR IMPACT A VISITOR'S EXPERIENCE—THE MOTIVATION TO VISIT, THE DECISION TO VISIT, WAYFINDING, ARRIVAL, THE VISIT ITSELF, DEPARTURE AND HOW THE VISITOR IS ENGAGED IN THE FUTURE FOR TAKING ACTIONS SHARED AT THE SITE.

The planning process for the Discovery Center involved a team of City employees, contractors and consultants including a visitor experience consultant who, as a group, wrote a set of goals for its initial development of exhibits and operation. An overarching theme was crafted (below) to focus the stories told in the Discovery Center and the steps the City has taken to ensure safe, reliable drinking water.

IN ITS MANY FORMS, WATER SHAPES, SUSTAINS AND IMPACTS THE LIVES AND HABITS OF PEOPLE LIVING IN SAN DIEGO.

This Plan walks through the Discovery Center describing each exhibit and how the visitor would interact, what they might learn and what actions they can take. Exhibits focus on water and Facility operations, but also include panels on the history of the area, water quality testing, careers in water and tracing the route of water and wastewater. The Discovery Center features a small meeting room that provides a location for videos that can enhance a visit, a location for surveys and water pledges made by visitors following a tour and rotating display

space for photographs or artwork with connections to themes of water. Openings for this gallery space will draw additional audiences to the Discovery Center.

Tours of the Process Building behind the Discovery Center will be a highlight of a visitor experience. This Plan maps out and describes what the tour might be like, what components of the Discovery Center visitors will see and what they might learn.

As a next step, this Plan will be used by an exhibit design and fabrication firm to design, build and install the exhibits to make the Discovery Center come alive and open to visitors. With thoughtful management, the Discovery Center will become a place to learn about the City's commitment to clean water, how to use it more efficiently, the safety and reliability of the water purification process and how to partner with the City to protect this precious commodity.

Background

The City of San Diego (City) relies on importing 85 percent of its water supply from the Colorado River and Northern California Bay Delta. The cost of this imported water has tripled in the last 15 years and continues to rise. Without increased local control over its water supply, the City is vulnerable to droughts, climate change and natural disasters.

Currently, only a small percentage of the City's wastewater leaving homes and businesses is recycled; the rest is treated and discharged into the ocean. The City's local water resource strategy includes conservation, recycled water, groundwater, water reuse and watershed and resource protection to help meet future water needs. The Pure Water Program transforms the City's water system into a complete water cycle which will maximize its use of the world's most precious resource—water.

Pure Water San Diego is a phased, multi-year program that will provide one-third of the City's water supply locally by 2035. The Pure Water Program will use proven technology to clean recycled water to produce safe, high-quality drinking water, provide a reliable and sustainable, water supply and offer a cost-effective investment for the City's water needs.

The Pure Water facilities will be located throughout the City, situated within up to three geographical areas to facilitate implementation: North City, Central Area and (if needed) South Bay. Construction on the Phase 1—North City projects will begin in 2019.

Since June 2011, the City has produced one million gallons of purified water every day at its Pure Water Demonstration Facility. More than 50,000 water quality tests have confirmed the water is safe and meets all federal and state drinking water standards. Public tours of this facility, including schools, have given residents and visitors a closer look at the process and a greater understanding of the program's goals.

In Fall 2017, a team of city employees, contractors and consultants first met to begin planning an education and interpretive center that will be located at the North City Pure Water Facility. Named the Pure Water

The Northern California Bay Delta (pictured here) is a major water source for the City of San Diego.



San Diego Discovery Center, this 3,000+ square-foot facility will interpret the history of the City's water supply, explain how the water purification process works, provide engaging experiences for school groups and orient visitors before their tours. This document represents the vision the team has for the Discovery Center.

Opportunities and Challenges

The development of a visitor experience plan presents opportunities and challenges. The success of implementing the Plan will rest with optimizing the opportunities and mitigating the challenges.

Opportunities	Challenges
Catalyst The Discovery Center can be a catalyst for public discussion and focus on water, the issues around water and the role water plays in the lives of San Diego residents. One Set Location One location now will provide a gathering and engagement point for groups, individuals, schools and others to learn more about the Pure Water San Diego program and the City of San Diego's water system. Event Space If feasible, the Discovery Center can be converted into an event space attracting groups and events that might not typically have a connection to water quality. Social Media Visitors will be able to share their experiences on social media at the exhibit area and on the tour. Ensuring visuals/photo points are apparent for use in images will be important. Mark with appropriate hashtags. Media Coverage A media plan will initially need to be developed to accompany the opening of the exhibits (interview locations with good branding and visuals) to build momentum with this new attraction.	Entrance Experience Visitors will need to go through a secured entrance and have identification for entry. Potential visitors and groups will need to be aware of the requirements for entry. Sound There are possible challenges during tours with loud sounds and noise. For guides leading a tour, it may be an issue—plan for use of a sound system (speaker) or headphones with a wireless connection to the tour leader. Safety/Sound Sound levels on the tour might be in the hazard range. Sound testing before tours are initiated will be important – providing ear buds or personal headphones will be a solution. Visitor Parking As visitation grows, will there be enough parking for individuals/family groups? Visitors may need to be encouraged to carpool or a shuttle system developed for busier days.

Regional Interpretive Providers

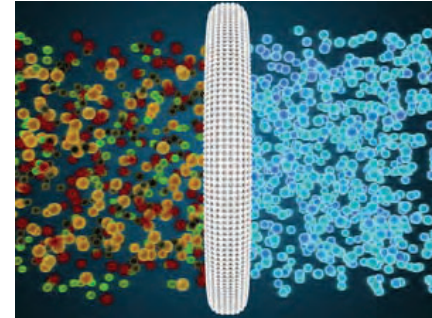
When the Discovery Center is operational, it will be helpful to “know your neighbors” and develop working relationships with other educational centers to coordinate programming, teacher training and other visitor experiences. Staff connections with other professionals and their facilities can help to understand the audiences (visitors) in the region. Exhibits at the different centers can complement each other. And the visitor experience is richer when connections are made between centers.

CENTERS THAT PROVIDE RELATED INTERPRETIVE EXPERIENCES IN THE SAN DIEGO REGION INCLUDE:

- [The Living Coast Discovery Center](#)
- [Kumeyaay Ipai Interpretive Center](#)
- [Mission Trails Regional Park Visitor Center](#)
- [Fleet Science Center](#)

FURTHER AFIELD (NORTH) IN THE LOS ANGELES BASIN INCLUDE:

- [Los Angeles Environmental Learning Center at Hyperion](#)
- [Orange County Water District H2O Learning Center](#)
- [West Basin Municipal Water District Water Education Center](#)



Membrane filtration

Discovery Center Goals

The following goals were developed to guide the implementation of the Visitor Experience Plan.

Each major goal (**bold**) is then followed by sub-goals:

- **Know** (Cognitive) – information to be shared
- **Feel** (Emotional) – feelings we want guests to evoke
- **Do** (Behavioral) – actions we want guests or audience and community to take

At the end of a visit to the Facility including the exhibit area and a facility tour, visitors will:



Know

I know that San Diego has a long history of providing its residents with the precious commodity of safe, clean drinking water. Using the most advanced technology, the North City Pure Water Facility is the next generation for water treatment in our city.



Feel

I feel safe, secure and comfortable about the water from my tap knowing that it has been treated and monitored to protect my personal health and safety.

I am proud of my city investing in the future of water that provides me with a better quality of life at a substantial value.



Do

I will take steps to be efficient with water use and to protect water quality in my daily life.

I will share my experience about visiting the Pure Water Facility and Discovery Center and its related program with my family, friends and community.

Interpretive Themes, Stories and Messages

The following themes will be used to develop messages and stories for the overall visitor experience at the Discovery Center—website, entry, exhibits, engagement and tours. Themes help to organize information in the exhibits and programming and are used as a filter to determine what information should be included.

Overarching Theme

In its many forms, water shapes, sustains and impacts the lives of San Diegans and is essential to maintain San Diego’s economy and stature as a world class city.

Water Source Theme

The City of San Diego has invested in a diverse portfolio of water supply sources that include imported water from the Colorado River and Northern California, desalination, groundwater development, recycled water and Pure Water (potable reuse).

Water System Theme

Water, essential to daily lives, is provided to San Diego via one of the most sophisticated and multi-faceted water delivery systems in the world.*

Economic and Livelihood Theme

A reliable source of clean water is critical to the economic health of the region including industries such as tourism, craft brewing, biotechnology and the military.

Personal Action/Practices Theme

Every person who uses water in San Diego plays a role in protecting and using that water responsibly and efficiently

*BACKGROUND

Eighty-five percent of San Diego’s water supply is transported from Northern California and the Colorado River and stored within nine reservoirs, long pipelines (the 440-mile-long California Aqueduct and from the Colorado River within the 242-mile-long California Aqueduct). The City of San Diego treats a blend of this imported water with our local water sources within three water treatment plants. After water is treated to drinking water standards, it is conveyed through over 3,300 miles of distribution piping, having multiple storage reservoirs and pump stations which are monitored and maintained daily.

Audiences

Knowing your audience is critical to developing quality personal and non-personal interpretation for the Discovery Center. Using information about the audience, interpretive programming and media can be designed to meet the needs of specific audiences. One of the key pieces of information is why visitors come to a facility—what is their motivation?



Explorers

- Curiosity-driven
- Visit satisfaction tied to quality of learning experience
- Want to find something to fuel their learning
- A small segment of visitors but we tend to design for them
- Visit for personal interests
- Provide new or surprising offerings—special or in-depth programs



Facilitators

- Socially motivated
- First and foremost a social experience
- Enable the experience and learning
- Provide opportunities for social interaction at programs—talking with staff and among each other
- Social experience/social interaction



Professionals/Hobbyists

- Close tie between their profession or hobby
- Target for premium programs—behind the scene tours
- Motivated by the desire to learn at workshops, themed events, behind the scenes specific content objective
- Great source of volunteers
- Interest in premium experiences



Experience Seekers

- Destination important to visit—"the place to be"
- A unique program or offering that surpasses other local experiences or attractions will draw visitors
- Possess least knowledge and lowest expectations
- Tourists in this category—the check-off motivation



Rechargers

- Seek spiritual or contemplative experience
- Balance their needs with other visitors (e.g., Facilitators)
- Views the experience as a refuge from everyday world
- Create time or areas for reflection
- Offer programs at quieter times of day or year
- Great source for volunteers



John Falk and Lynn Dierking

VISITOR MOTIVATION

Dr. John Falk, Sea Grant Professor of Free-Choice Learning and Director, Center for Research on Lifelong STEM Learning at Oregon State University, along with his wife Dr. Lynn Dierking, have been pioneers in the study of visitor identity motivations initially with zoos and aquariums* and then other informal education settings (gardens, science centers and museums). In their books, *Identify* and *The Museum Experience and Learning from Museums: Visitor Experiences and the Making of Meaning*, they have described profiles of five prototype visitor groups — Explorer, Facilitator, Professional Hobbyist, Experience Seeker and Recharger. Characteristics of these categories and the implications we should consider in planning interpretation on-site can be seen in the chart on the next page.

* [Why Zoos & Aquariums Matter: Assessing the Impact of a Visit to a Zoo or Aquarium](#), Falk, John H. et al 2007 AZA

Anticipated Visitor Motivations and Descriptions—Discovery Center

FALK VISITOR CATEGORIES*	VISITOR GROUP	NEEDS	NOTES
Explorers	Seniors (ages 65+)	Accessibility to make connections to the content—history is important	Organized Groups, less trusting of technology, skeptical
Facilitators	Families; parents with children; teachers with students	Visibility of children, safety, things for children to “do”— occupy time, offer a means to be an informal guide, focus for student groups— scavenger hunt or classroom worksheet	Develop an informal “tour guide handout”
Experience Seekers	Tourists with an interest	Good directional signage and information on “why visit?”; use technology more with this group	Connect this experience with other activities in the area through convention and visitor centers
Professionals/ Hobbyists	Study tours, conferences, engineers	Credibility of content, knowledgeable guides on tours able to answer their questions	Accuracy critical in narrative of guide tours
Rechargers	Limited interest here		

** Five Visitor Motivation Categories—Dr. John Falk (described earlier)*

Visitor Profiles

The following visitor profiles have been developed to describe what three sample visitor groups might experience on a visit to the Discovery Center after the Plan has been implemented.

What is it About Our Water?

Ken Vuong, a San Diego resident, had heard about a new project in the city that would increase the amount of water to the system. He was active on his condo board's sustainability committee and wanted to know more about his drinking water and why the rates seemed so high. He checked the website of the new Pure Water San Diego Discovery Center to get their hours and driving directions. Taking his brother along, he also wanted to scope out the Discovery Center for a future family outing. It's always fun to visit something new with his kids on a weekend.



Ken and his brother Binh drove out to the Discovery Center, passed through the security gate, parked their car and headed towards the Center. They noticed the wonderful moving water on the entry ramps that showed them the sources for San Diego's water. Ken had not realized that San Diego didn't get most of its water locally.

Inside the Discovery Center, the two walked among the exhibits that showed them how the facility works, methods for saving water which Ken was taking back to his condo group and watched a video of the history of the system while waiting for their 2 p.m. tour. On the tour, Ken and Binh were enthralled with the level of technology since both had engineering backgrounds. They had never realized the efforts the City went to clean and protect their drinking water. As they returned to the Discovery Center, Ken wrote his water pledge about sharing the information he learned with his condo group and to bring his family back. Binh wrote "Keep up the good work!"



Let's Learn About Water!

Mrs. Hernandez thinks it's important to take her 4th grade students at Doyle Elementary School on field trips to learn more about their community especially if it's tied to her curriculum. She had been struggling to develop a unit for the Next Generation Science Standards engineering section. A new education center had opened at the Pure Water Facility and she thought that might be a good way to launch her unit. She reviewed the Discovery Center's website and found that the visit helps to meet some of the engineering units. And there's a tour of the actual facility! After making reservations on the website for the field trip and guided tour, Mrs. Hernandez prepared a list of tasks—reserving a bus, recruiting chaperones and developing a lesson plan aligned with the Discovery Center visit. The teacher also received pre-trip materials for use with the students in the classroom before their visit.

Visitor Profiles

The field trip day came and the students were excited to see this new water plant for the first time. As they ran up the entrance ramp, the student noticed the sound of water and the images about the sources of San Diego's water. Upon entering the Discovery Center, they were organized in small groups for an activity before the tour. Groups of students were handed a list of questions to answer in the Discovery Center and wandered about viewing exhibits to find the answers. Students had the opportunity to talk with a real scientist in a laboratory! Soon students were called to the Discovery Center's overlook balcony and organized into groups to tour the water plant. The tour leader issued safety vests and hard hats along with individual sound systems to hear the tour.

Mrs. Hernandez and her chaperones were amazed to see how attentive the students were in learning how the plant worked. Many students commented about wanting to bring their family back sometime to taste the water.

Back in the classroom, Mrs. Hernandez could tell how valuable the field trip was based on the students' attention to detail when they got to design and engineer solutions for cleaning water during her new classroom lessons.



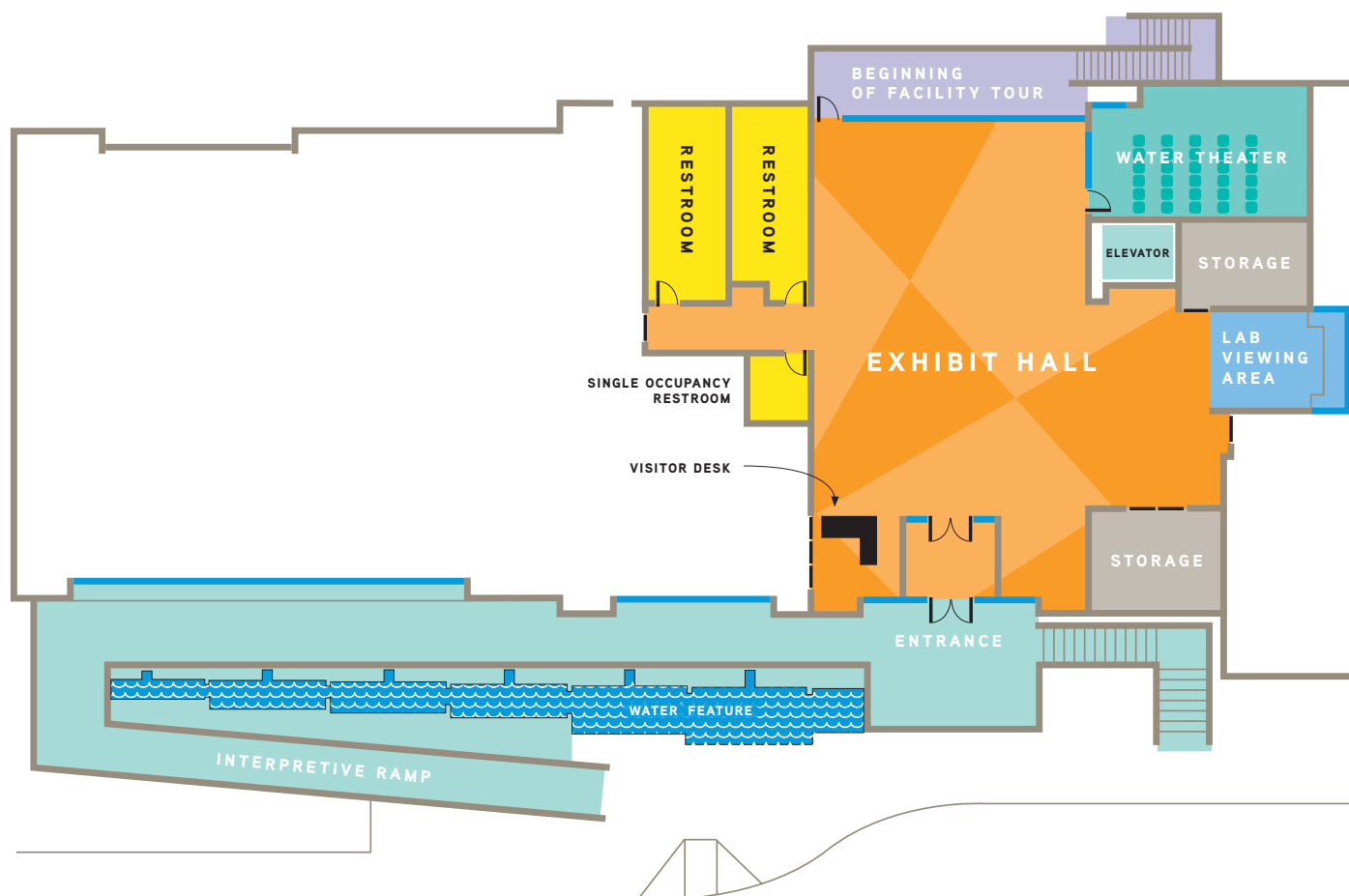
I Remember When

Sue Hadley, the Program Director at the Mira Mesa Senior Center in San Diego, was looking for an activity that takes her seniors on an excursion to break up their routine. She had heard about tours at the new Pure Water San Diego Discovery Center nearby and thought that would be just the ticket. Calling up the Discovery Center to make a reservation for the two vans of seniors, she asked about what to expect for a visit. There was an entrance ramp. Elevators were available if stairs were an issue. A tour of the facility was possible although it did take some extra walking.

On the designated day, the vans dropped off the group in front of the Discovery Center where they could take a leisurely walk up the ramp to admire the artwork showing where San Diego got their water as well as drought-tolerant vegetation. Walking into the Discovery Center at the top of the ramp, the group was taken

aback by the beautiful historical mural at the top of the exhibit room. Several of the seniors could remember some of the events and dates mentioned in the exhibit. They admired some of the objects on exhibit. The group took their time examining the different exhibits around the room learning more about San Diego's water than they previously knew. Several seniors watched short videos in a side room while the entire group were organized into smaller groups for the facility tour. Some of the group took the elevator down to the ground floor joined by the rest of the group outside coming down the stairs.

After being issued safety equipment and individual sound systems, the group was lead through the water purification process observing the detailed steps that are taken to make drinking water safe and pure. The group even tasted the water produced from the Facility! Sue was pleased with the reaction she got from the group as they walked back to the Discovery Center—this outing was more than just a drive around town. The group was impressed and talked about bringing others on a future visit. San Diego really protects our water!



Pure Water Discovery Center Building Layout

Visitors enter into the building via the Interpretive Ramp or a set of stairs to the Entrance. To the left of the Entrance, is the Visitor Desk for check-in and information on tours, meetings or special events. Restrooms are straight ahead and to the left. The Exhibit Hall features a variety of exhibits and displays about water, recycled water and the connection to San Diego. Visitors have a view into the Water Quality Lab to watch scientists at work. The Water Theater provides a venue for related videos and meeting space. The back balcony, overlooking the Pure Water Facility is the beginning of the visitor tour.

Recommendations/Ideas

The following recommendations have been developed for the entire Discovery Center and the subsequent Public Tour of the Process Building behind the Discovery Center. Each recommendation below has a general description followed by the needs to accomplish that feature.

Discovery Center Website*

The visitor experience for the Discovery Center begins at the website. The casual visitor will decide to visit based on the information and visual images presented on the landing page. Content—especially hours, directions, security requirements and events—should be easy to find and read. The website for the Discovery Center is a key tool to build an audience especially for a new facility. It will also be a place to market special events and ongoing activities.

ITS OWN WEBSITE

Consider developing a separate, stand-alone website with its own URL separate from the City's website but still identifiable as a City function and linked to the City's website.

* See Social Media section on page 42 for a discussion of the use of social media in attracting and engaging visitors.

WEB DESIGN BEST PRACTICES

Use best practices for website usability and design to ensure a good user experience to meet their needs for information.

WATER EFFICIENCY BEST PRACTICES

Use the website for posting best practices for water use and wastewater, resource conservation, yard and landscaping practices and other water-related information. Links to other City sustainability recommendations could be added.

LINK TO EXHIBIT CONTENT

Link pages on the website to existing Discovery Center exhibits and videos to provide more in-depth information on the main Center themes and a preview for visiting groups. Activities in the Discovery Center (International Water Day) should be promoted on the website. Links for teachers and other group leaders should be provided here along with pre and post activities.

CAPTURE EMAIL ADDRESSES

Offer a means to capture email addresses and other contact information from website visitors to build a mailing list for event promotion.

HOW MUCH SPACE DO WE HAVE?

The Discovery Center—
3116 square-feet

The Entrance Ramp,
Water Feature and Landscaping—
2647 square-feet

Additional Entrance Plaza space
(gathering and seating areas)—
1148 square-feet



Graphic Design Standards

Graphic design standards compatible and complementary to the [City of San Diego's Visual Style Guide](#)* and any standards developed for the nearby Process Building and the overall grounds wayfinding should be developed for the production of interpretive exhibits and features to ensure a consistent look among all interpretive materials including the Discovery Center's website. When developing content for the exhibits, specific dates should be avoided as possible to ensure exhibits stay timeless.

Languages

Consideration should be given to accommodating visitor language needs (such as Spanish, Chinese and Vietnamese) either through translation of some interpretive panels and exhibits, a printed gallery guide to the exhibits or a texting/app system.

*<https://www.sandiego.gov/sites/default/files/visual-style-guide.pdf>

Entrance

Vehicle Entrance

Good wayfinding for visitors on Eastgate Mall is important to ensure drivers are aware of turns, the security gate to the grounds, entrance to the building and parking. Visitors will need to bring identifications to present to security guards. Buses stop at the gate where the security guard is present during normal business hours. Facility staff will come out to meet business visitors. Suppliers, vendors and business visitors need to coordinate with staff to identify specific location for delivery of goods and location for scheduled meetings. Tours coming from NCPWF can access NCPWF by either walking across Eastgate Mall or driving. Hours of operation are intended to be Monday through Friday, possibly Saturdays supplemented by special events in the evening or weekends. There are no drop-in visitors anticipated.

Pedestrian Entrance

Once vehicles or buses are parked, the building entrance should be clearly marked so visitors are able to locate it when walking from their vehicles.

Building Entrance/Ramp

Facing the building, visitors will have a choice of either a ramp to the left or stair on the right. Most visitors will enter the building using the ramp and will likely move quickly. (Children, despite our best efforts are likely to run up the ramp.) Visitors will be seeing a



vibrant palette of plants plus seeing and hearing the movement of water. Any messaging or interpretation on the ramp will need to be able to be viewed quickly. We want to plant seeds that “sprout” in the Discovery Center. An opportunity also exists at the ramp’s halfway turnaround landing, where there is space to include a bench for viewing the water feature, and signage mounted to the top of the concrete wall. Other visitors will use the stairs as that is a more direct path to the entrance. Interpretive elements are suggested below for that route of entry.

The Building Entrance (both stairs and ramp) becomes the entry point for visitors to the Discovery Center inspiring them to consider their relationship with water—experiences, memories, inspiration.

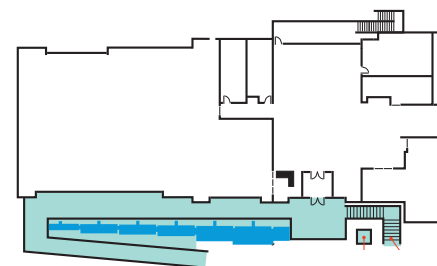
CONCRETE WATER FEATURE WALLS

Formed into the concrete walls are images that represent the sources for San Diego's drinking water (local rainwater captured in reservoirs, imported sources transported by aqueducts, reclaimed water purified at Pure Water facilities tied together with a mountainous background). Visitors should have a good idea of the of what efforts and processes it takes to supply the City. **PROVIDED BY OTHERS**

INTERPRETIVE PANELS

A limited number of interpretive panels are installed on the ramp retaining wall at the turnaround point and/or upper ramp walls (not the handrail) to explain the different sources for water and distances water travels to meet the needs of San Diego residents. An interpretive panel at the balcony by the main entrance describes the water reclamation plant across the street (visible from this point) and its pretreatment of the recycled water that then comes to Pure Water Facility for purification. Water used in the water feature will recirculate, so visitors should be informed of that in the panel messaging as well as its source (i.e. Pure Water from on-site).

Because construction of the Operations and Maintenance building, which includes the Discovery Center, will occur before the development of exhibits, the Interpretive Ramp will need to be the first interpretive element developed.



Color indicates entrance ramp, stairs, kiosk and interpretive water feature

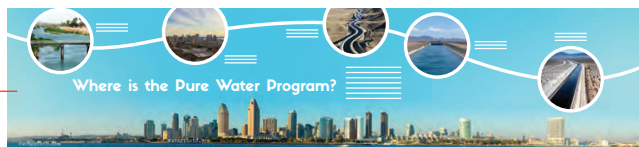
Pure Water Discovery Center Entrance

The entrance to the Discovery Center is the start of an adventure! Visitors have a choice of entering the building (located on the second floor of the Administration Building) via the Interpretive Ramp with a variety of features to explore on the way up the ramp or entering the building using a set of stairs with words for water in a variety of languages on the risers.



Water features and interpretive elements are interwoven. Illustrative concrete relief panels representing the sources and transport of San Diego's drinking water (reservoirs, aqueducts, reclaimed Pure Water) tied together with a mountainous background.

CONCRETE PANELS PROVIDED BY OTHERS



Interpretive panels installed along ramp walls.

WATER SOURCES



Water feature and interpretive elements overlap.

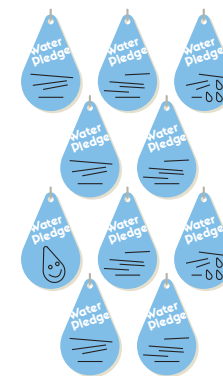


Etched water molecule motif decorates the top of benches located along the ramp.



Pure Water Discovery Center Exhibit Hall

Entering into the Exhibit Hall of the Discovery Center, the visitor notices exhibits, displays and a mural. Looking above to the atrium, a montage of images with text tells the history of the City of San Diego water supply. Artifacts of specific time periods are in the exhibit area that connect with the images above to make the story come alive. Visitors can choose from a variety of exhibits to learn more about Pure Water and how the City is acting to protect their drinking water. One exhibit in the forefront (Trace Your Water) helps visitors to trace the water they receive from the City's varied water sources.



Visitors have the opportunity to write-in ideas and their "water pledges" on droplet shaped cards and be put on display.

Discovery Center Entrance

Visitors arriving via the stairs or Interpretive Ramp meet at the entrance doors to the Discovery Center. They walk through an airlock into a double height space. This space is filled with colorful exhibits, banners with water messages and images hanging from the ceiling. The eye travels along the upper edges of the Discovery Center where a mural of historical images encircles the room. Natural light bathes the room from the skylights on the third-floor ceiling and north-facing curtain wall windows. Across from the Discovery Center Entrance are doors that lead to a Facility overlook balcony and the assembly point for tours.

Welcome Desk and Check-In

As the visitor opens the Discovery Center door, they notice the visitor reception desk to the left. Placed on the reception desk is the visitor check-in tablet on a pedestal where adult visitors in group tours are asked to voluntarily tell the City their zip code and their email address (possibly check-off age ranges in group). Visitors would also be asked if they wanted to opt-in to be added to a related mailing list. This information is then used to gather data on Discovery Center visitation and develop a mailing list to keep visitors in touch with the Center. (The table would automatically register the date and time.) Group/school reservation information would be logged into the same system by staff who take group and school reservations. If space permits, an electronic display with a connection to the check-in tablet would "pin" the location of the visitor based on their zip code.

VISITOR RECEPTION DESK

Design and install a customer service area and visitor reception desk to welcome and orient visitors.

PROVIDED BY OTHERS

SIGN-IN

Install a visitor sign-in system using a tablet on an adjustable pedestal anchored into the desk to avoid theft. The system should be linked into the City's IT system and be accessible for Discovery Center staff to review and analyze the data. This information is then used to gather data on Discovery Center visitation and develop a mailing list to keep visitors in touch with the Center. (The tablet would automatically register the date and time.) Consult the [WET Science Center at LOTT in Olympia WA*](https://www.wetsciencecenter.org/LOTT-in-Olympia-WA) for more details on their system. The desk should have an area for brochures, flyers and event announcements for the Discovery Center and other City functions serving as a literature and information distribution center.

LITERATURE

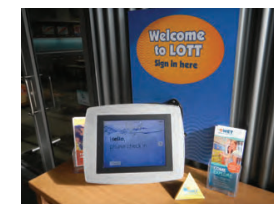
Install literature racks and acrylic stands for announcements in this area. The Reception Desk also serves as a work station for a city employee or volunteers.

WORK STATION

Install a desk, phone, computer, monitor for a security camera system and a microphone for the Discovery Center's sound system. Secure storage should also be provided for personal items such as purses and work files.

*<https://www.wetsciencecenter.org/>

The entrance sign-in station for the LOTT WET Science Center in Olympia, WA



Awards Vestibule

Between the two entrance doors to the Discovery Center in the vestibule awards and plaques given to the City for their work with this project and pioneering water engineering will be displayed on the wall in this space.

Alcove

To the right of the front entrance is a space that will serve as a visitor rest area with seating available and possibly as the location for the Water Pledge Tree—the end location for the tour of the Process Building. An alternative location for the Water Pledge Tree and the end of the tour is the Water Theater/Meeting Room. For more information on the Water Pledge Tree, please see page 32 of this plan.

Exhibits

The Discovery Center will be organized around questions that the typical visitor would have about water, how it is treated and transported, and the function of this new facility. The questions are posed as an organizing tool and not necessarily as exhibit section titles.

History of our Water System— How did we get here?

A visual historical timeline mural encircles the top of the Discovery Center (i.e. just below the 3rd floor glass railing) using historical photographs and images large enough to be viewed from below. Related large historical artifacts are interspersed in the timeline and mounted higher on the walls. Smaller related artifacts are mounted in display cases on the floor with labels interspersed around the Center visually connected to the timeline above. A video is developed using historical images in the style of public television documentaries and shown in the Meeting Room/The Water Theater. The emphasis is on how the City has continued to be innovative over the years when it comes to delivering water.

Another option would be to dedicate one area of the Discovery Center (i.e. stand-alone exhibit pod in center of the exhibit space) to history and select artifacts that represent a timeline/storyline in the exhibit. The exhibit should be designed to be able to rotate artifacts and exhibit labels without changing the storyline or theme of the exhibit.

EXHIBIT PODS

If exhibit pods are used, the pods would be stand-alone moveable lighted exhibit cases (3 or 4-sided) that stand 8' tall with interpretive panels and/or cases for the artifacts.

MONITOR

Install a small wall/exhibit-mounted monitor in this history exhibit area with videos available for viewing by visitors. Historical images from the archives recorded with a voice over can be developed as a video using the public television methods of photos fading in and out (ala Ken Burns-style) for viewing on this monitor.

Tracing Our Water

Visitors trace the path that their water takes to get to their home (or school, business, office) from the source **and back again**. Using a monitor and keyboard, visitors type their home addresses and the large screen shows on a city map where their water possibly comes from (reservoir, etc.). General details of the city (boundaries, major streets and arterials) and the underground water delivery pipes are shown on screen. The pathway of water to the home or school to the site is illustrated with solid or blinking lights – if feasible, the time taken for the water to reach the plant is also posted. A database would need to be developed using the City's existing data. Additionally, information and routing for the Renewable Energy Project and the Metro Biosolids Center might also be included.

DEVELOP DATABASE

Using existing City data, develop a database that for the option

EXHIBIT PANEL

Develop and design instructional panel with explanations for visitors. Add additional information as needed about distances, wastewater treatment plant locations, sources of water and actions visitors can take to maintain the system (call before you dig).

INSTALL MONITOR

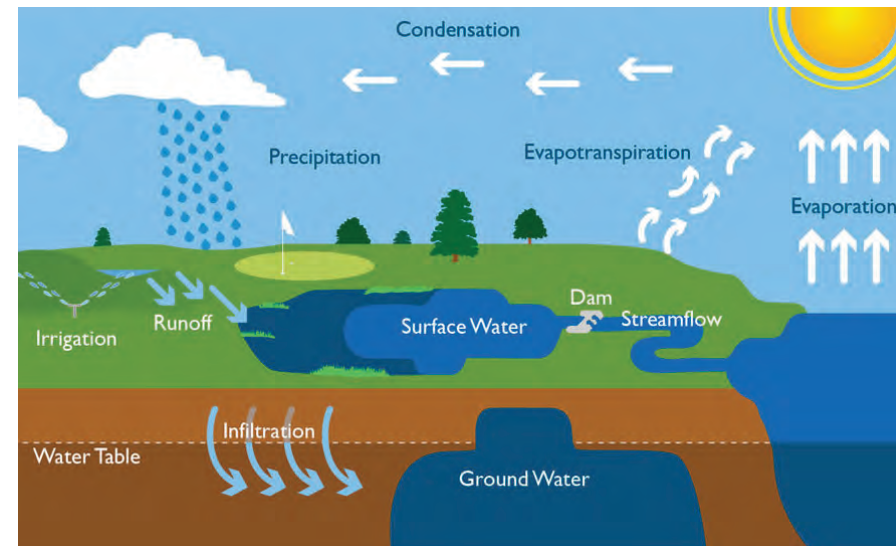
A large monitor is anchored to an exhibit wall or pod. A keyboard is available with a panel (above) that instructs how to input information (zip code, physical address, school name). When the visitor inputs their information, the monitor shows the route that water travels to the location (or where wastewater travels from) on the monitor including the pipe routes under roads, etc.



View of an exhibit at the LOTT WET Science Center in Olympia WA that illustrates tracing wastewater from a residence.

The Water Cycle

Design and install an interpretive panel that introduces and visually illustrates the water cycle. The cycle panel also includes the components of the City's water system as part of that explanation. The panel is a wall puzzle where visitors build the water cycle using magnets placed onto a metal exhibit backing. The puzzle can only be completed one way so the final exhibit puzzle tells the correct cycle. *Caution:* ensure that puzzle pieces are large to avoid losing them and each piece has a knob to be able to pull off each piece or place onto the metal backing. A small box is installed on the floor beneath the panel to hold the puzzle pieces.



Source: <http://nysgolfbmp.cals.cornell.edu/hydrologic-cycle/>

An example illustration that could be used to develop the Water Cycle puzzle with the addition of the Pure Water Facility features as part of the overall San Diego Water Cycle.

Exhibit Pods

In the center of the Discovery Center are three 4-sided exhibits pods that are anchored in place during normal business hours and then moved to use the space during off-hours as required for special events or gatherings. The pods will be constructed on wheels that can be locked with a lower flap “skirt” that hides these wheels from view. When the pods need to be moved, the magnet anchored bottom flaps are raised, wheels unlocked, electronics unplugged and the pod slowly pushed to another location in the room. One of the panels in the pod, would be hinged and could be opened to use for storage or to service any electronics inside. Each pod has an engaging exhibit label on top of the pod that visitors can see from anywhere in the room or into storage. Each pod interprets multiple facets of the same theme. Possible titles could be *USING THAT WATER, HOW DOES IT WORK?* and *HOW MUCH RAIN DO WE GET?*

All panels in these exhibits should be integrated and supplemented with existing outreach materials, marketing campaigns and website to ensure consistent messaging with residents.

Pod #1: Using that Water— Personal Practices Pod

The ways that individuals use water makes a big impact. Through this exhibit, visitors will be inspired to review their personal water practices by understanding the value of San Diego’s water. The four sides of this exhibit pod reveal how a person can use water more efficiently around their home and in their daily lives.

Panel 1—In Your House

The interior illustration of a home (generic enough to represent a variety of living arrangements such as an apartment, condominium or a single-family home) is the backdrop of this exhibit. Different rooms of the space show different practices or tools that help a person save water and money such as

- Faucet aerator
- Toilet tanks
- Turning off water when brushing teeth or shaving
- Using commercial car washes
- Full loads in dishwashers

Panel 2—Down the Drain

Many city residents are not aware of what does and does not go down the drain. Panel text might include the following messages. “Never flush non-soluble objects down your toilet—such as food, tampons, sanitary napkins, cleaning rags and diaper wipes. Never pour cooking grease down the drain—freeze it in a suitable non-recyclable container and dispose of it in the trash.”

Kitchen drains (both residential and commercial) have a similar problem. Visitors can be engaged with this topic through using the gross factor (actual photos of fat-burges in the San Diego system and the variety of inappropriate objects that have been removed at the wastewater treatment plant (sanitized and placed inside a case). Discussion with visuals of items that are commonly sent down the drain—flushable wipes for example—alert visitors to practices they need to change. Background information for kitchen drains developed by the City is at [this link*](#).

Panel 3—In Your Yard/Garden

A visual graphic of a typical San Diego yard shows different practices using pullouts and text. A short explanation of how the tool or practice works and what steps a homeowner takes would give visitors more information to use them at home. Depending on weight of the object, some of these tools (or cross halves) could be mounted on the panel to show their actual size. Photos or sketches of a homeowner doing some of the tasks would also be on the panel.

The tools and practices include:

- Checking for leaks
- Water pressure regulators
- Rain barrels
- Weather-based irrigation controllers
- Landscape irrigation calculator

*<https://www.sandiego.gov/public-utilities/sewer-spill-reduction/fewd>

Panel 4—During Your Day

This exhibit focuses on the use of disposable plastic water bottles – cost, environmental impact, water quality. Engaging visual images (a pile of water bottles next to a person) show the number of disposable water bottles a typical City resident might use in a year compared to someone who uses a refillable water bottle. The negative environmental impact of disposable water bottles is emphasized with images of errant bottles on beaches and as litter.

Cost is considered by comparing the use of tap water in a reusable water bottle vs. bottled water (1 gal. of tap water vs. 16-oz. of bottled water). Visitors are shown 4 choices of cost savings (*WHAT CAN YOU SAVE USING A REFILLABLE WATER BOTTLE?*) and can press a button to guess how much they might save in a year. When the correct answer is chosen, a lighted graphic appears on the panel with an arm and hand raising a refillable water bottle in a cheers salute! The Discovery Center might offer refillable water bottles as part of this exhibit.

The water quality of bottled water vs. tap water is compared emphasizing the known quality of tap water vs. *"YOU DON'T KNOW WHAT YOU ARE GETTING WITH BOTTLE WATER."* Background information on this issue is at [this link*](https://www.ewg.org/research/bottled-water-quality-investigation#.W5LUrMaZOV5).

*<https://www.ewg.org/research/bottled-water-quality-investigation#.W5LUrMaZOV5>

Pod #2: How Does it Work?— San Diego's Water System

This pod gives a broad and general overview of the City's water system so visitors understand what role the Pure Water Facility plays in the overall process.

The panels are all visual with minimal text and could be used as a simple orientation for some visit groups to understand the overall process. Visitors can trace the movement of water through the system. For those visitors not going on tour, this panel will be a good summary of the process.

Panel 1—Getting There to Here and Back Again

A colorful illustration shows the different sources of water for the City's water supply (local rainwater captured in reservoirs, nonlocal sources transported by aqueducts, reclaimed water purified at the Facility). Visitors can trace the various routes with their fingers—as they pass key points on the pathway (features, passes, infrastructure), short "Did you know?" pop up on a small exhibit screen. An option would be to use the images in the Interpretive Ramp outside to make a connection to the feature they may have seen on entry to the building.

Panel 2—Treating and Cleaning Your Water

An infographic-style panel is developed that visually walks visitors through the water treatment and the wastewater treatment processes. Key steps are listed under each category. When visitors press a step button, the appropriate area on the larger infographic is highlighted with a simple explanation.

Panel 3—Pure Water Facility

Although visitors will see the Pure Water Facility in greater detail during their visit, this panel gives a simple visual explanation of the process in the building tracing the route of the water from where it comes into the building to where it exits and answers the question – where does it go from here? A short history of how the concept of recycled water was developed and its significance is discussed.

Panel 4—Anatomy of a Water Main

The function of a water main in the water delivery system is shown through an underground cross-section type of graphic as if a street is cut through and we can see everything underground. The exhibit should give visitors a sense of what a water main does and where it's located in the system.

Pod #3: How Much Rain Do We Get?— The Story of Arid San Diego

Many visitors may not realize that water has always been a scarce commodity in the region for one key reason—it's an arid climate. The panels below help visitors to make that connection and the actions they might take along with their neighbors to make a difference.

Panel 1—San Diego's Arid Climate and Environment

Using a natural history-based illustration of topography and weather patterns, this panel helps the visitor to visually understand why the climate here is so arid and how animals and plants have adapted to live and flourish. Connections to how ten different species conserve and use water give visitors inspiration on they might to the same. In a "Where's Waldo?" moment, the species are listed at the bottom of the panel but visitors are left to find them in the illustration. An alternative approach to the species would be to have the panel backing be metal and the plant and animal images be magnetized. Young visitors would be encouraged to place the species in the logical location on the illustration based on information in the key.

Panel 2—Historical Rainfall Levels

Inspired by an exhibit at the Orange County Water District Visitor Center (*see, right*), this panel illustrates historical rainfall levels using a bar graph over 100 years to show the fluctuation of levels – including extreme highs and lows. Historical images are displayed that connect with extreme events from the past – flooding to drought. The bar graph is created to add future years to it. Visitors are encouraged to predict annual rainfall for the year using a lever device in current year column. Visitor "predictions" are tallied electronically and shown to date. The prediction average and actual rainfall amounts are shown on the column added for the past year.

Panel 3—San Diego and Climate Change

Emphasizing regional and local weather and climate trends, this panel sets the stage for a discussion of the impact that climate change has had in the recent past and will have in the future. A series of bar graphs and visuals of the region show different components of how climate change is measured in the region (rainfall, soil moisture, humidity, sea level rise, heat indexes). Background information is at [this link*](https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR073SanDiego_County2-23-17.pdf). The human connection to climate change is discussed and visitors are encouraged to take one action to reduce their carbon footprint (Do ONE Thing!).

*https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR073SanDiego_County2-23-17.pdf



Orange County H2O Learning Center's exhibit that shows rainfall levels over time.

Panel 4—San Diego and the World's Arid Cities

A comparison is made between San Diego and other cities in the world in similar climates—sources of drinking water, annual rainfall and temperatures, historical sources of water, quality of the infrastructure are discussed in an interpretive panel underlaid by a world map with different cities around the world (at least one per continent) marked that are similar in population, climate and temperatures. Images are included for visitors to compare and contract with San Diego. One aim of this panel would be for visitors to appreciate the efforts the City takes to ensure a clean and safe water supply.

Water Careers

Within the next few years, the water industry will begin to feel the effects of retirements opening many good-paying stable jobs. The industry will face a shortage if students in schools or training programs are unaware of these opportunities.

This exhibit area has life sized-cutouts of diverse water professionals (male/female; appearances—white collar/blue collar; cultural/racial diversity) representing 4-5 jobs with information on the cut-out about the training and education required for the job. The cut-outs are placed at the exhibit or cut-outs could be interspersed throughout the Discovery Center or in the Process Building on the tour route.

Full-sized people cutouts with anchor stands are placed in a semi-circle with job titles and some biographical information in front of an interpretive panel. The panel is magnetized and permits visitors to move around study subjects and skills (math, technology, biology, chemistry) that a job requires and matches them to a job title. When the correct set of skills are aligned a light on the job title glows illustrating the correct combination of skills.

A small video screen imbedded into the exhibit shows interviews with actual employees in the different jobs and what inspired them to work in water.

Cut-outs with an empty face are provided as a photo point at the exhibit or interspersed throughout the Discovery Center. A hashtag is promoted for tagging these photos #PW Discovery-Jobs.

CUT-OUTS

Determine the number of jobs/workers being featured in the Discovery Center. The workers could be fictional (use stock photo images) or current workers in the system (use actual photos in uniform if applicable). The cut out could also be used as an Employee of the Month award. There should be a mix of male/female, managerial/technical, labor/lab and diverse (race/culture) in nature.

Using answers to questions posed to the featured worker in a short survey form (job title, education and training needed for the job, what you like about your job, advice for someone who wanted a job like yours), draft a short description that can be read quickly (~30 - 60 sec.). Work with a photographer and a designer to craft a life size cut-out that is durable, light and easy to move and store, but also sturdy.

The cutouts also have a small brochure rack on them to distribute career-related literature. Extra cutouts should be created for use in community outreach events or career fairs and to rotate them within the Discovery Center for variety. Consider storage space for extras not being used in the Discovery Center.

VIDEO

Develop a script and shooting plan for the video using existing employee interviews. Match the interviews with the jobs chosen to highlight as cut-outs.

EXHIBIT

Design the exhibit for video and the matching game—use the same monitor for both. Visitors can switch between screens. A graphic element is added that highlights careers and the screen can be switched to play the matching skills game.



Pure Water Discovery Center Water Quality Lab Viewing Area

In a small alcove off the Exhibit Hall, visitors have an opportunity to view inside a real laboratory with scientists at work. An exhibit in the alcove will tell the story of how lab technicians test the water to ensure safe water. When time permits, visitors will have the opportunity to interact with lab technicians to learn more about how they work and what they do.

The Water Quality Lab Viewing Area

This area of the Discovery Center gives visitors an opportunity to view the actual work of water quality lab technicians during their visit. The exhibit area gives visitors an inside look of one of the many steps that are taken to ensure safe, clean drinking water. Focused on the Lab Viewing Area, this exhibit area tells the story of how water is tested for a variety of constituents. The exhibit would be an opportunity to show why a lab is used, demonstrate how a lab works, how important clean water is to human health, and explain the steps the City takes to make sure that this happens.

Visitors can see through windows into the Water Quality Lab in an exhibit nook off the main Discovery Center. Above these windows is an opportunity to show technicians at work in the lab doing various functions using a photo montage. On the lab side of the exhibit counter there is a small shelf for technicians to use for demonstrations in view of visitors. The exhibit nook is labeled separately (Water Quality Lab) so that visitors are drawn towards it to explore further. Shelves line the three sides of the nook on the visitor side and a monitor is mounted on one side. The exhibit consists of three components—

- *BE A SCIENTIST*
- *ASK A SCIENTIST* and
- *WHAT'S IN THE WATER?*

BE A SCIENTIST

Lab personnel have suggested designing an exhibit that is inspired by an outreach activity they use for students to help identify pollutants in the water sample using mass spectrometry. In a mass spectrometer, such as the ones in the current lab's Gas Chromatograph/Mass Spectrometer (GC/MS) instruments, all organic compounds have a unique mass spectrum fingerprint—upon application of energy a large molecule breaks into predictable and reproducible smaller pieces, and those smaller pieces are counted to produce a mass spectrum. The visitor is prompted by this direction—*A MYSTERY POLLUTANT HAS BEEN DISCOVERED IN UNTREATED WASTEWATER. USE ITS SPECTRUM FINGERPRINT TO IDENTIFY IT.* Using a simulated spectrometer, the visitor lines up with the different mass spectrums of pollutants on the monitor screen and eventually they will find one that matches. The screen then provides more information about the water reclamation process and connects it to the lab through the viewing window.

ASK A SCIENTIST

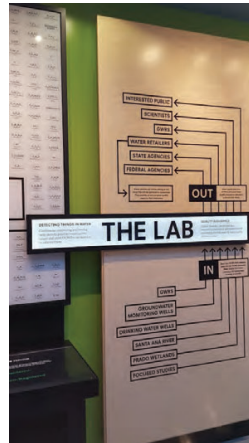
Depending on the lab work schedule, visitors would be able to communicate with a lab technician about the work they see happening in the lab and questions they may have about water testing. Headsets or microphones for lab staff and visitors are provided to communicate between the lab and visitors. A large panel, labeled "Ask a Scientist! What would you like to know?" with question prompts encourages participation and an exchange. Instructions would be given on how to ask a question—press a button, flip a switch, etc. Visitors would be able to leave questions.

When lab technicians are not available, the panel could be reversed and illustrate the functions of the lab as a visual map with text bubbles explaining the various tests and testing areas following the route that a sample of water would take after it enters the lab. A monitor would show a series of short videos narrated by lab techs about a typical day or how a testing process might work. This would be turned off when lab technicians were available and on for visitor viewing when technicians are busy.

A side panel placed in this alcove would have a series of tests typically done in a water quality lab (not to exceed 10-12) for a variety of contaminants in water on the left-hand side. Visitors would press the tab for each test and a corresponding test tube shaped image would light up that explains the purpose for that test. It's important to include a sampling of the key tests considering who the audience will be for the Discovery Center. The contaminants illustrated in this exhibit should make a direct connection to the visitor (removal of pharmaceuticals from drinking water). This exhibit, inspired by a similar exhibit at the Orange County Water District H₂O Learning Center, is an opportunity to tell people about the level of care the City takes to ensure water quality for all residents.

On one of the counters two simulated microscopes with prepared slides show visitors what “bugs”^{*}—good and bad (rotifers/water bears)—might be seen in a water sample from a drinking water reservoir. Each “bug” slide has more information and a larger sized image on a panel mounted on the wall above the display shelves. Because the lab will not be using microscopes, it will be important to explain that in the display.

*<https://listverse.com/2013/04/12/10-microorganisms-you-can-find-in-drinking-water/>



Example of the Orange County Water District's H2O Learning Center exhibits that illustrates what water quality testing is done at the District to ensure ratepayer's safety.

Meeting Room/ The Water Theater/Gallery

In the far-right corner of the Discovery Center, is a Meeting Room which will serve as a media center when meetings are not scheduled. The Water Theater serves as an additional interpretive area where visitors can choose between a variety of videos related to water – see list in the Appendix for possible titles. Choice of videos should include videos of interest to young children, students, young adults, adults and families and be visually coded for these groups. A panel will provide information and instructions on video viewing.

MEDIA CENTER

Install a large screen video and sound system in this space with a self-serve system of 6-8 videos. Make moveable seating available for comfortable viewing. See link on page 33 under Visitor Comfort for ideas and examples.

VIDEO PRODUCTION

Videos made available in this area should include a video tour of the Facility and be made available for those visitors who might find it challenging to tour the interior of the Process Building and/or as an orientation to the public tours of the Process Building.

VIDEO CONTEST

Once the Discovery Center is up and running, consider developing a teen video contest with a local art center, youth activity program or school. The contest might focus on messages about water conservation, water quality or how water impacts our lives. If funding was found for the project, outreach to teens and young adults would engage them in the working of the Discovery Center. The videos might be viewed at a local film festival and the winner shown at the Discovery Center (or vice versa).

GALLERY

The interior wall space in the Meeting Room will be available for exhibits and displays (art work, photography, posters) related to water in all its forms in the greater San Diego area. Public viewing will only be when the Meeting Room is not occupied for other functions. This “gallery” space will be a wonderful means to attract a different visitor group and provide a space for community involvement. Opening events at the Gallery can attract a new audience that might not be aware of the Discovery Center.

EXHIBIT POLICY

Develop an Exhibit Policy for the Meeting Room that answers the following questions—

- Who is responsible for the Exhibit Area?
- What can be displayed?
- Size of work, media, numbers
- Subject matter—how does it connect to the Discovery Center?
- Are items for sale? How does that work?
- How long is the display up?
- How do we let the public know when a new show is open?
- Who plans and staffs an opening?

EXHIBIT AREA

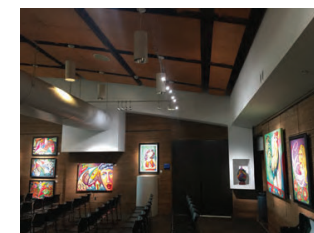
Install wall-mounted exhibit hanging hardware in the Meeting Room for use with exhibited works

EXHIBIT ANNOUNCEMENT PANEL

Purchase a stanchion and place at the entrance to the Meeting Room that can be changed (posters can slide in and out) based on the exhibit in the Gallery Space.

An exhibit summary panel would be installed here to invite visitors into the space. The seating area near the front entrance may be an additional location to highlight 1-2 exhibit pieces as a preview.

Images from a library meeting room in southern California that illustrate the use of wall space as a public gallery.



Water Pledge Tree

Within the Meeting Room/Water Theater/Gallery Space will be installed the Water Pledge Tree. Tour groups will return to this space following their tour of the Process Building and be encouraged to write and sign a written pledge of a personal action they will take in the next three months related to water that was inspired by their tours. The pledge would be written on a form shaped like a water drop with a pre-punched hole at its apex. Visitors would place their pledges on the tree and post a selfie or group photos on social media with the hashtag #MyWaterPledge. (Note: An alternative location would be the alcove at the Discovery Center entrance depending on the space available in the alcove and the size of the Water Pledge Tree.)

PLEDGE TREE

Design and fabricate a wire “tree” possibly in the tiered style of a holiday tree with metal arms and side arms to hold water pledges. An alternative design might be a large water droplet with prongs to hang pledges on. Consider the style of retail displays that hold sales items on “wire spokes”. Additional consideration should be given to offer a means to leave an electronic pledge. Visitors could see their pledge on an LCD monitor once they have typed it on-line at a computer terminal. Pledges made in this way could be linked to the Discovery Center website and broadcast to the world.

PANEL

Design and install an interpretive panel in the style of an infographic that explains personal actions people can take and how much water they can save (i.e. brushing teeth without the water running, catching and saving the cold water when running the tap for hot water, combining loads for laundry). These suggestions are prompts for visitors writing their water pledges.

Water Pledges on paper made following tours of the Pure Water Demonstration Facility.



Example of the concept of a Water Pledge Tree from the Gates Foundation Discovery Center, Seattle WA.



Visitor Comfort

SEATING

For visitor comfort in the Discovery Center and the Water Theater, informal seating should be provided that can be arranged by visitors themselves. Visitors can then determine their own needs and organize seating accordingly.



Modular furniture examples that could be used for the Water Theater.

PROVIDED BY OTHERS

RESTROOMS

The restrooms should not be overlooked as an exhibit space—most visitors to the Discovery Center may need to use the facilities. Determine the right balance of messages that are shared in the restroom to avoid information saturation and visitor apathy.

Develop messages (using a poster, label, cartoon or graphic) placed on the back of the stall door that explains what goes down a toilet and what does NOT!

Develop messages that focus on water conservation practices that can be practiced at home

- “Did you know?” Water efficiency at home—teeth brushing, shaving, showers
- Explain the type of toilets that are installed and their potential use in the home
- Show water savings using wall graphics of what can be saved
- Relate messages to practices at home
- Highlight any sustainable building features or materials that could be used in a residence.

PROVIDED BY OTHERS

DRINKING FOUNTAINS

Install a combination drinking fountain and water bottle refill station (see image below) to offer ease in filling water bottles. Note the feature that tallies the number of disposable water bottles eliminated from the waste stream. An interpretive label should refer visitors to the exhibit pod that compares bottled water to tap water and refillable water bottles.



Commercial water fountain that permits water bottle refill in addition to a drink. This model provides an option that counts the number of one-use plastic bottles saved from a landfill.

Back Balcony

The balcony off the back entrance to the Discovery Center will be accessible to all visitors. The expansive view from this point is explained in an interpretive panel anchored to the railing. Many of the buildings from this vantage will be labeled by their function (Process Building) but the panel will be used to explain the movement of water through the site and what functions occur in what building.

The balcony is used as the gathering and starting point for tours of the Process Building. All visitors from this point on will need to be accompanied by a staff member. Thus, the stairway to the ground level will be secured and available to Authorized Personnel Only. Tour groups will gather on the balcony and use the stairs accompanied by the tour leader/staff member to descend the stairs and be issued their safety vest and personal sound system (as needed) or hearing protection at the base of the stairs in storage under the stair landing.

PANEL

Using a clearly designed map with pull-outs, illustrate the function of each building within sight of the balcony. Emphasize the route water takes on the site and highlight the tour route that visitors will take. If feasible, install a monitor screen in the panel to show a drone-based video orientation to the site. Monitor screens should be tested before development to ensure outdoor light is not a factor in viewing. The video would be the same video used in the Water Theater for orientation.

Facility Tours

It's anticipated that most visitors who come to the Discovery Center will also tour the Facility following a visit to the Discovery Center. Currently, reservations are made online through the City's website. Public tours are scheduled for specific dates and times and promoted through the City's website and social media channels. School groups are also scheduled in advance for a tour at specific times.

The Tour Sequence

When visitors arrive at the Discovery Center, they are given instructions as to how long they have in the Center before a tour departs. Ten minutes before the tour start time, an announcement is made that directs visitors where to meet the tour guide (back balcony or The Water Theater—if using a video). Visitors on the balcony will have time to browse the interpretive panel on the railing or take in the view of the entire facility from this vantage point. The tour guide greets and chats with the group while waiting for the rest of the group to gather.

At the scheduled start time, the tour leader will give a formal greeting to the group, introduce themselves and summarize the tour experience (length, time, difficulty) along with a safety message and any specific policies (photography) critical to their visit. Consideration should be given to developing tours in languages other than English with trained guides in that language or using a translator.

The group is led down the stairs past the barrier that blocks access to the public. At the base of the stairs, visitors are issued safety vests and hard hats along with ear protection or a personal sound system for the tour. For those visitors who cannot use the stairs, they would meet the group here also after using the elevator to the ground floor from inside the Discovery Center. Safety messages are re-emphasized here along with any specific messages about moving as a group along the tour route.

TOUR GEAR

Storage and a system of inventory and maintenance will need to be developed under the stairs coming down from the balcony. The perimeter of this storage area will need to be designated as a safety zone with visitor being issued and returning tour gear.

Visitors will be led by a tour guide from this point across the Process Building perimeter parking areas on a designated marked pathway so visitors know where their limitations are and employees know where to expect tour groups.

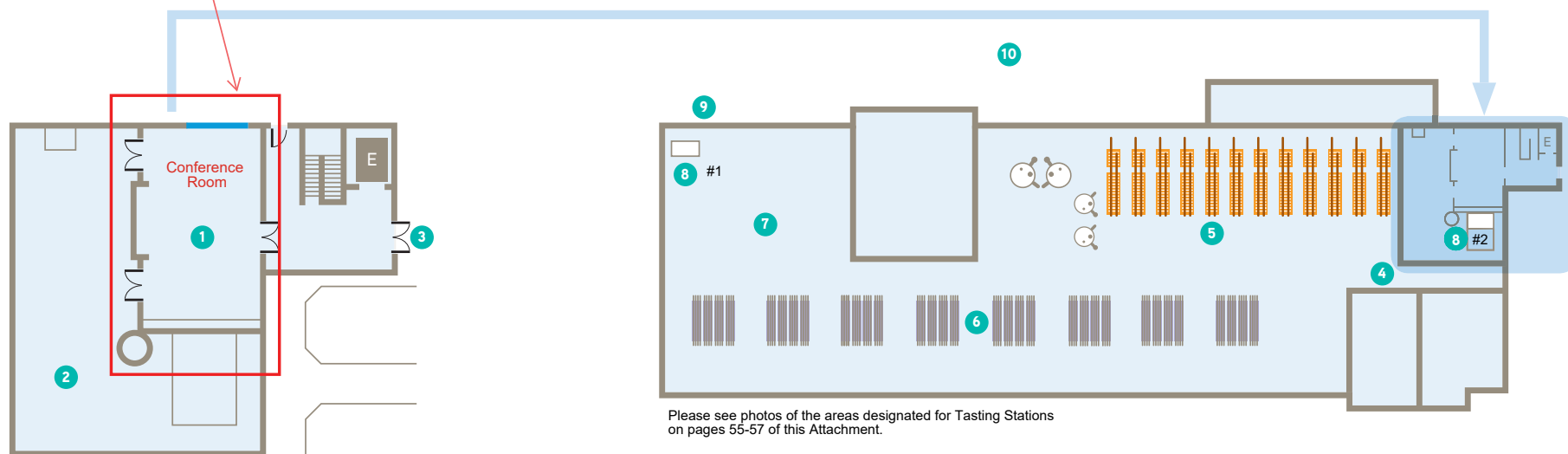
PATHWAY

The pathway that visitors are led from the Operations & Management Building to the Process Building will be flanked by a series of poles that hold banners with visual images, graphics, information and/or quotes about the Pure Water concept, water in San Diego or graphics connected to the process. They should be considered so that they tell a story when viewing and reading them along the pathway. The ground plane along the tour route, from the Discovery Center balcony, down the stairs, through the site, and through the Process Building should have painted images or graphics denoting the proper path of travel. This graphic can be a water drop or another related element.



Images of existing signs along the visitor pathway at the current Demonstration Facility that illustrates what should be planned for the new Process Building.

For updated configuration, see the Plans for the Pure Water Facility Process Facility.



- 1 Tour Orientation
- 2 View Deck
- 3 BAC Filters Deck

- 4 Control Room
- 5 Membrane Filtration
- 6 Reverse Osmosis
- 7 Ultraviolet Disinfection
- 8 Tasting Sink x 2
- 9 Large-scale Banner
- 10 Interpreters on Entrance Path

Pure Water Discovery Center Guided Tour Route

By reservation, visitors will be able to take a guided tour of the Process Building located behind the Discovery Center to better understand the Pure Water process. The sequence of the guide tour, illustrated by the numbers, shows the stops tour guides will take. For specific information (talking points) about each stop and anticipated interpretive elements, see pages 38-40 in the Plan.

Process Building Tour Route

An itinerary of specific stops, talking points and interpretive features for the **Process Building Tour** follows. Stops will be as interactive and visual as possible. Visitors will have choices to consider at several stops—interpretive media, panels or a cut-away of equipment to examine. The tour will consider how the water flows through the Process Building and use that to help visitors understand what they are seeing on their tour.

A highlight for many visitors at the end of the Process Building tour will be the opportunity to taste the water produced by the Pure Water Facility.

STOP #1 Process Building Conference Room

TALKING POINTS

- A short orientation to the tour and the process that is being observed.

INTERPRETIVE FEATURES

- Overview video of Pure Water Program and introduction to the water purification process.
- Sample video used with the Demonstration Plant: <https://www.youtube.com/watch?v=8TrffoO7UVE&t=87s>
- Orientation of room will depend on where the projector and screen are located. Some chairs or modular furniture will be made available for those who want to sit. Time spent in this room will be brief.

STOP #2 View Deck

TALKING POINTS

- The LCD monitor/screen (below) shows the main control screen for the North City Pure Water Facility.
- To date, the facility has produced X million/billion gallons of purified water that meets or exceeds all state and federal drinking water standards. X number of people have toured the facility.
- Total Organic Carbon (TOC) is a bulk measure of all the dissolved organic constituents (includes decomposed vegetation, pharmaceuticals, and hormones) in the water. We measure it in the water going into and out of the reverse osmosis.
- Conductivity is a bulk measure of the inorganic constituents such as, salts and minerals in the water.
- Together conductivity and TOC account for almost everything dissolved in the water. We have been seeing approximately 99% removal of TOC and 96% to 99% removal at conductivity through the reverse osmosis.

INTERPRETIVE FEATURES

- Interpretive panel identifying which technologies guests are viewing at from above and the order of the 5-step water purification process. Tour guide may pause here for photo opportunity.
- LCD monitor/screen that shows the plant operating in live time or shows the stats of how many gallons of purified water are being produced, number of tour participants to date, etc.

STOP#3 BAC Filters Deck

TALKING POINTS

- Inside the BAC filters are beneficial bacteria that thrive in a high oxygen environment and like to eat oxidized organics.
- The bacteria on the filters consume 30-50% of organic matter (anything that is living or was once living).
- The “helpful” bacteria are removed in the next treatment step.
- The water takes about 15-30 minutes to pass through the BAC filters.

INTERPRETIVE FEATURES

- Interpretive panel that explains what the BAC filters remove from the water. Have clear container of activate carbon on display for tour participants to view

STOP #4 Control Room (First Floor)

TALKING POINTS

- Tour participants are provided with an overview of how operators manage and monitor each element of the process.

STOP #5 Membrane Filtration

TALKING POINTS

- Membrane filtration contain hollow fibers and provide 99.99% removal of microscopic particles including suspended solids, bacteria, and protozoa.
- The hollow fibers are like straws with very fine pores along their walls. Water flows in from the bottom, into these pressure vessels, through the walls of the hollow fibers, up through the center of the hollow fibers, and out the top as filtered water.
- Protozoa, bacteria, and suspended particles are left on the outside surface of the fibers. Only water, salts, and other small molecules can pass through the membrane pores and down the center of the straws.
- To avoid a build-up of particles on the membrane fibers, a process we call “backwashing” occurs every 30 minutes. Backwashing reverses the flow of the water and uses air scouring to shake off any particles that have built up on the membranes.
- Pressure decay tests are performed daily and confirm that more than 99.99% of all protozoa are consistently removed by the membranes.
- Membrane filters have a lifespan of 7-10 years.

INTERPRETIVE FEATURES

- Interpretive panel that explains what the membrane filters remove from the water mounted to the pillars. Provide a monitor/LCD screen that shows animation of how the water flows through the membrane filters. A cut-out model is available here for guests to touch also.
- Install a vendor provided membrane filter in clear vessels so that tour participants can see what they look like on the inside.



Pure Water Discovery Center Guided Tour Stop #6

On the guided tour of the Process Building, visitors see the actual Pure Water process and learn more about the technology used. At this tour stop, visitors can listen to an guide explain what's in sight, read about how water is filtered on an interpretive panel and touch a sample membrane filter.

STOP #6 Reverse Osmosis (RO)*TALKING POINTS*

- Pumps pressurize the water going into the RO membranes to approximately 130 psi (about twice the pressure of your household tap).
- About 85% of the water going into the RO comes out as a filtered product water. The remaining 15% leaves as a concentrate waste to sewer and goes to the Point Loma Wastewater Treatment Plant.
- Reverse osmosis removes approximately 96-99% of salts, metals, dissolved organic molecules and other materials, many of which are more than 50,000 times smaller than the smallest bacteria or virus.
- Integrity verification monitors are set up to alert the plant when parameters go out of the normal operating range. If parameters get to the critical alert limit the equipment monitored would automatically drain into the sewer system and shut down for repair and testing.
- RO membranes have a lifespan of about 7-10 years

INTERPRETIVE FEATURES

- Interpretive panel that explains what the RO filters remove from the water.
- Install a monitor/LCD screen that shows animation of how the water flows through the RO membranes. A cut-out model is available here for guests to touch.

STOP#7 Ultraviolet Disinfection*TALKING POINTS*

- Inside the vessels is ultraviolet light, like extremely concentrated sunlight, which disinfects the water.
- At the same time, an additional safeguard called advanced oxidation is introduced. During advanced oxidation, a powerful disinfectant (sodium hypochlorite) is added. The disinfectant is used to break down any remaining organic molecules that may be present in the water.
- Each UV reactor contains 72 UV lamps just like this one on display.
- This advanced oxidation process will inactivate 99.9999% of protozoa, bacteria, and viruses present and takes approximately one second to do so.

INTERPRETIVE FEATURES

- Interpretive panel that explains what UV/Advanced Oxidation process removes from the water.
- Install a sample UV lamp on display for guests to see and a photo of what the inside of the UV reactor looks like.
- Visual of what the UV contactor looks like on the inside to help visitors understand how the bulbs are oriented.

STOP #8 Tasting Sinks **TALKING POINTS*

- Tour guide tastes the water and then offers samples to tour participants and takes group photo here. Guide asks for group questions and guides any discussion.

INTERPRETIVE FEATURES

- Sign behind tasting sink with key messages for photo opportunities: Safe, Reliable Sustainable.
- Large banner mounted to the outside of the building with key messaging for photo opportunities.

***Photos (taken 4/8/25) of the areas designated for Tasting Sinks taken are available on pages 55-57.**

NOTE: 'Tasting Sink' and 'Tasting Station' are interchanged throughout this document.

Return to Process Building

Install signs or banners along sidewalk or pathway that tour participants take back to the Discovery Center with quotes or facts about water (like what is installed at the Pure Water Demonstration Facility). Ensure the messaging is coordinated and tells a story.

TOUR STOPS

Inventory number of interpretive panels planned. Determine specific location and ensure the panels will not impede worker passage or safety. Determine themes and storylines – each panel should connect to the next panel. Ensure panel text and illustrations and graphics are clear to visitors. Emphasize visuals over text. Panels should be designed by same graphic designer.

Determine specific vendor sample equipment or models desired. Determine specific location and means to anchor it to ensure visitor safety and not to impede worker passage or safety. Contact manufacturer to determine ability to loan or give samples or models for public viewing. Determine policy for giving credit for loan or donation (logos, company name, etc.). Install equipment and test how visitors might interact with it during pilot tours.

TASTING STATIONS

Determine the final location for the tasting station. Design the station for easy access by anyone in the group (children, people in wheelchairs and seniors). How the station is used should be self-evident by its design. Interpretive graphics are designed and developed that give visitors a short summary of how the water they are tasting was cleaned and where it goes next. A photo spot with backdrop for use in social media is designated and designed for use by visitors—don't forget the hashtag!

The tour guide leads the group back through the Process Building along the outside path originally used and returns to the Discovery Center going up the set of stairs (or using the elevator). Colorful banners with interpretive graphics with messages or quotes about water would line the path similar in concept to the signage at the existing Demonstration Facility. The group gathers in the Water Theater where the guide concludes the tour and encourages them to make their Water Pledge (see description Water Pledge Tree page 32). Visitors also fill out an evaluation form and can then spend time in the Discovery Center before departing.

TASTING STATIONS MUST BE PROVIDED WITH TEMPERATURE CONTROL.



Water Tasting Station example

Post-Visitor Experience

The Visitor Experience can be extended beyond a facility visit using a variety of tools.

Social Media

Social media tools can develop a relationship with the visitor through engagement and continue the visitor experience beyond the initial visit. Pure Water San Diego currently has Facebook, YouTube, Twitter and Instagram accounts. These accounts should be used to build anticipation during the construction phases, at building opening and following a visit. Visitors can be encouraged to use their smartphones during a visit with designated photo points as described in the Discovery Center and on the Tour in this plan. Other photo point opportunities should be identified during the next phase of this process. Alternatively, areas where visitor photos are not permitted (control room) should be clearly noted, explained and enforced.

Tracking the impact of social media for the Discovery Center can be done using hash tags (#PWSDDiscoveryCenter) across all the City's social media accounts. A large LCD screen could be installed in the Discovery Center to capture all social media feed and hash tags mentions of the Discovery Center. Visitors could see their message/post on the screen and other visitors may be encouraged to participate.



A designated staff person (and alternate) should manage these accounts with close coordination of the Discovery Center staff. Social media is only effective when it truly engages the public and is not used to just post media releases. Successful efforts result when questions are asked, contests are run, theme days are scheduled (i.e. Wednesday History Days – historical photos are posted and users asked a question) and post from other users are reposted with comments. Analytics should be reviewed on a regular basis and practices revised to meet annual goals (numbers, engagement, actions).

Evaluation

Increasingly, education and cultural institutions are scrutinized by agencies to document their outcomes and be held accountable for the public trust. Evaluation can be a strategic tool for planning and directing a new program or product and assessing its impact. Building a culture of evaluation asks the question – how can we improve? But it is only effective when we close the loop and use the results of an evaluation to make changes and improve.

Social media tracking exhibit that shows all mentions of the Gates Foundation Discovery Center using their hashtag.

Visitor Evaluation

At the end of each tour, guides will pass out tour evaluation forms as is the current practice. The information collected in these surveys should be tallied and reviewed quarterly for use in revising tours or procedures or for any future exhibit changes.

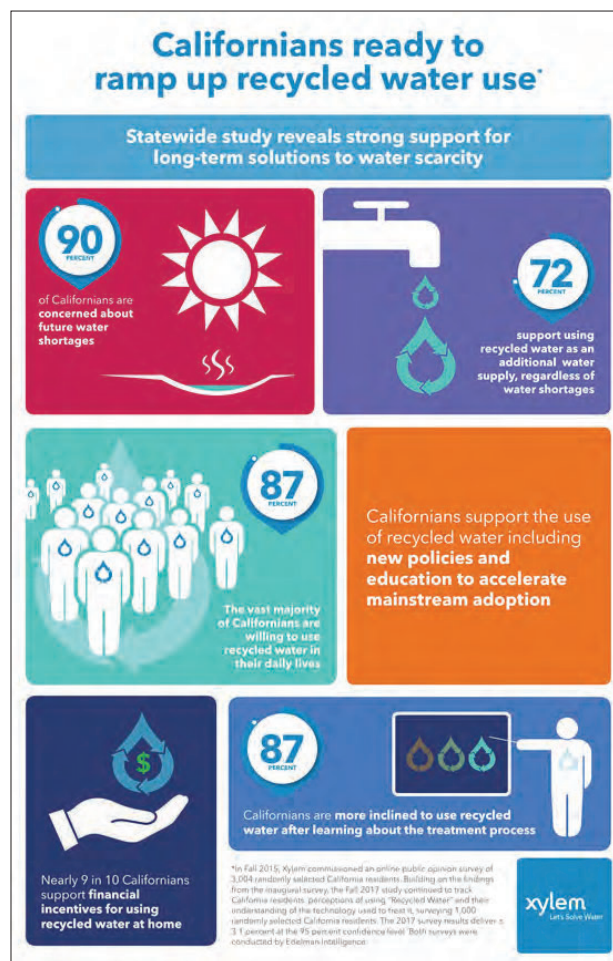
Informal Evaluation

Staff should be encouraged to develop and document informal measures of success for programming and the development of interpretive elements or media. Informal measures can be used to help design formal evaluation processes in the future. Evaluation should be considered when developing new programs (needs assessment and formative evaluation) and at the completion of programming (summative evaluation).

Formal Evaluation

Once the Discovery Center is open and operating, a visitor motivation study should be completed and the information used to inform future visitor experience initiatives such as programming, staff development, social media, and planning.

This infographic (right) illustrates the growing support for the use of recycled water in California.



(back cover) This Word Cloud was developed using text from the Discovery Center Visitor Experience Plan. The larger the words, the more often they are mentioned in the plan.

San Diego Pure Water Discovery Center

Example of Deliverables

The following is an example of deliverables to be developed by the Proposer. References to pages from the Visitor Experience Plan (Plan) are included for proposal purposes. Precedent images below are for material types, level of finish, and general quality of exhibit expected; they are not necessarily required for exhibit design or function. Assume all multi-media elements to be designed are the responsibility of the Proposer.

1. Signage

- a. *Exterior Entry Area: Plan p. 16-18*
 - i. *Entry Ramp landing*
 - 1. Size: 3'H x 6'L
 - 2. Information: native plantings; water feature relief wall explanation; fountain use of Pure Water
 - 3. Type: railing/wall mounted, aluminum/plastic
 - 4. Components: text, images, graphics
 - ii. *Entry / South balcony*
 - 1. Size: 3'H x 8'L
 - 2. Information: Wastewater treatment plant and pipeline to Pure Water
 - 3. Type: railing/wall mounted, aluminum/plastic
 - 4. Components: text, images, graphics
- b. *Interior Discovery Center Wayfinding: blade signs or wall/glass mounted signs for the main areas (12" x 12", metal or plastic)*
 - i. Reception / Check In
 - ii. Water Quality Lab
 - iii. Water Theater
 - iv. Restrooms
- c. *North balcony: Plan p. 34*
 - 1. Size: 3'H x 8'L
 - 2. Information: Pure water treatment plant and process overview
 - 3. Type: railing/wall mounted, aluminum/plastic
 - 4. Components: text, images, graphics
- d. *Tour Route Pathway: Plan p. 35*
 - i. Route wayfinding along ADA path
 - 1. Painted graphic on concrete indicating tour path route; Assume every 20'
 - ii. Along the route signs
 - 1. Allow for up to four (4) pole mounted signs @ 4'H x 3'W
 - a. Descriptions of adjacent process buildings and purposes

- i. Pump Station
 - ii. Chemicals
 - iii. 2 others as identified during design
- e. *Main Process Building Tour Stops: Plan pp. 36-41*
 - i. *Route wayfinding along ADA path*
 - 1. Painted graphic on concrete indicating tour path route; Assume every 20'
 - ii. *Conference Room*
 - 1. One overview video (to be confirmed during design), produced by designers
 - a. Treatment equipment information
 - b. Treatment of water statistics and facts (amounts treated, etc.)
 - iii. *View Deck*
 - 1. Size: 3'H x 6'L
 - 2. Information: Overview of various treatment processes
 - 3. Type: railing/wall mounted, aluminum/plastic
 - 4. Components: text, images, graphics
 - 5. Tour stop blade signs, noted below, should be visible from the View Deck
 - iv. *Control Room*
 - 1. Size: 3'H x 8'L
 - 2. Information: Control room overview, what is controlled or monitored?
 - 3. Type: Window, or under-window mounted
 - 4. Components: text, images, graphics
 - v. *Ozone*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: 4' x 4' floorspace with floor-mounted equipment model/cutaway
 - vi. *BAC Filters*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: 4' x 4' floorspace with floor-mounted equipment model/cutaway
 - vii. *Membrane Filtration*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: 4' x 4' floorspace with floor-mounted equipment model/cutaway
 - viii. *Reverse Osmosis*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: 4' x 4' floorspace with floor-mounted equipment model/cutaway

- ix. *Ultraviolet Disinfection*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: 4' x 4' floorspace with floor-mounted equipment model/cutaway
- x. *Tasting Stations*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. Demonstration/model area: tasking sink area (provide for sink and backdrop behind sink for group photos, etc.) and 4' long countertop/cabinet space for cups, etc.
- xi. *Remineralization (Reservoir)*
 - 1. Stop signage: 2' x 2' blade sign, numbered, aluminum or plastic
 - 2. Interpretive Panel: 8'H x 4'W, post mounted, aluminum or plastic
 - 3. May be inside or outside, allow for climate-resistant materials

2. Discovery Center Interior Exhibits

- a. *Reception Desk*: Plan p. 20, left of entry vestibule
 - i. Sign-in system: tablet or other, desk mounted (desk included in building design)
 - ii. Literature stand: 2'W x 4'H x 1'D; wood, floor mounted, adjacent to desk
- b. *Entry Alcove*: Plan p. 21, right of entry vestibule
 - i. Resting area to include: seating (included as FF&E, not Discovery Center); water fountain (included in building design); Awards or certifications (LEED, etc.)
 - ii. Sustainability dashboard: Monitor showing revolving static PDF info about building sustainability features (in relation to LEED, etc.); Solar power output dashboard (as part of PV array system design)
- c. *History of San Diego Water*: Plan p. 21, pp. 25-26
 - i. Concepts: local climate history, local native settlement history, San Diego city growth, water sources, water treatment processes over time
 - 1. Focus on water reuse strategies and methods employed, innovations
 - ii. Type: Mural, wall mounted photos, artifacts, historical timeline
 - iii. Materials: wood, plastic, metal, monitors/screens
 - iv. Technology: mostly low-tech, static, possibly small screens for digital information
 - v. Locations and available space:
 - 1. West Discovery Center wall: 2 wall sections @ 9'H x 18'L (324sf total)
 - 2. Upper Discovery Center gypsum and glass walls (West; North = 14'H x 24'L (336sf); East = 14'H x 34'L (476sf))

- vi. Components: physical artifacts, timeline graph, images and photos, written info
- vii. Precedents:



- d. **Tracing Our Water:** Plan p. 22
 - i. Concepts: Trace the path water takes from source to home/business and back to treatment and original sources.
 - 1. Visitors type in address or city zone, large screens show path water takes

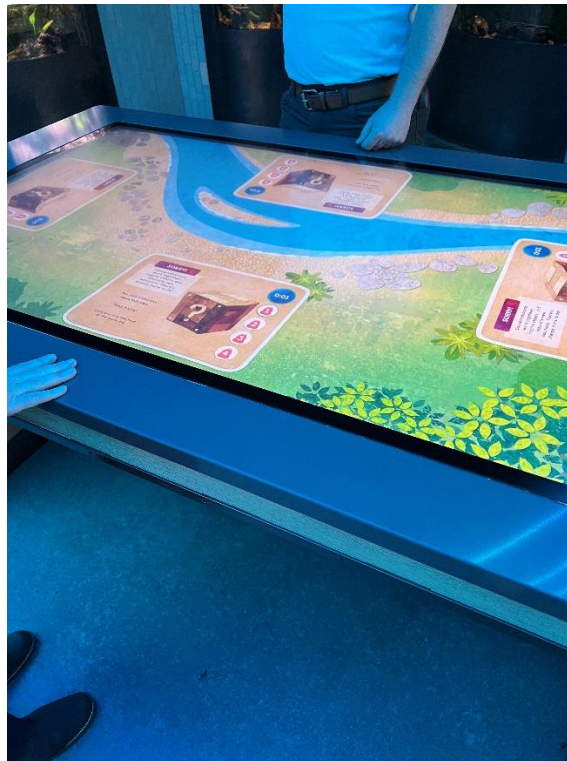
2. Show main sources of water, distribution system, treatment system
 3. Leverage info from History of San Diego Water exhibit
 4. Tie info into Using the Water exhibit (below)
- ii. Type: Interactive displays showing system and general city locations
 1. If feasible, show time it takes for water to reach treatment, treatment to faucet
 - iii. Materials: wood, plastic, metal, digital technology, data
 - iv. Location and available space: free standing on main floor, southern central area; maximum 18' L x 8' W, movable
 - v. Technology: Higher tech for interactive displays, multiple users at once, similar to table-mounted video game
 - vi. Components: database of system elements, how to break up city for selection by users, instructional panel, digital map of system and city
 - vii. Precedents:

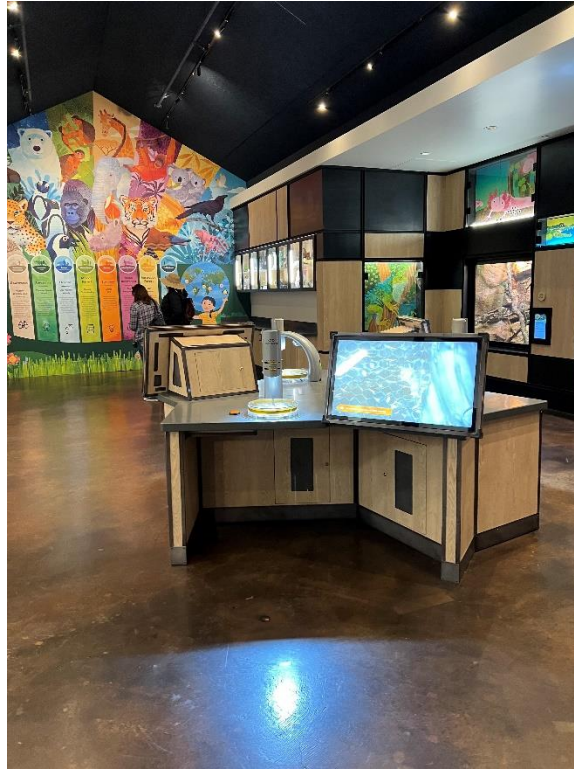


viii.

e. **Using Our Water:** Plan p. 24-25

- i. Concepts: How water gets used across the city, how to conserve water
 - 1. Info on domestic uses, commercial uses, industrial uses, and agricultural uses (24 hour period, vs other metrics)
 - 2. Why conserving water is important, even with recycled water systems
 - 3. Tips and questions on how to conserve water in daily life (how each strategy saves different amounts of water)
 - 4. Leverage info from prior exhibits and tie into Pledge Tree (below)
- ii. Type: Static displays and interactive game to quiz visitors on best practices for conservation
- iii. Materials: wood, plastic, metal, digital technology, data
- iv. Location and available space: free standing on main floor, southern central area; maximum 18' L x 8' W, movable
- v. Technology: Higher tech for interactive displays, multiple users at once, similar to table-mounted video game
- vi. Components: database of system and amount of water used, static displays of different types of users, digital info about individual's or group strategies and savings amounts
- vii. Other info: consider collaboration with schools for how exhibit info can work with curriculum; how to work in groups to conserve water
- viii. Precedents:





f. **Water Careers:** Plan p. 27

- i. Concepts: Who are the people who work in the water industry (wastewater and drinking water)
 1. Displays showing the various types of water careers: engineers, lab technicians, Field crew, Facility maintenance, etc.
 2. Paths to jobs
 3. Emerging technologies used in the careers
 4. Leverage info from prior exhibits and tie into Pledge Tree (below)
- ii. Type: Static displays and informational videos
 1. Cutouts with diverse peoples represented, with text descriptions of who they are, what they do, what they enjoy about the job
 2. Video screens with staff interviews playing
 3. Information on how to get involved in the water industry (requirements, volunteering, internships, technical schools, higher education, City job boards, etc.)
 4. Potential live Q&A interview with plant staff if available
- iii. Materials: wood, plastic, screens, people
- iv. Location and available space: wall-mounted displays, east wall between elevator and Water Theater; 12'H x 11'W; could also include glass wall area above
- v. Technology: Recorded interviews played on screens with push buttons to activate
- vi. Components: recorded interviews, career info, testimonials, featured staff

vii. Precedents:



g. **Lab Viewing/Activity Area:** Plan p. 28-30

- i. Concepts: View work within water quality lab, learn about what is tested and why, do activities with or without lab tech, talk to a lab tech
 1. Monitor with rotating information about San Diego labs (where), the lab activities, why they have to test, and what is tested. Learn about Pharmaceuticals, pollutants of concern, how the lab works (people and machines), how samples are taken, etc.
 2. Exhibit wall with info on “what is in the water”, with info on what tests treat what contaminants. Interactive: buttons light up various chemicals
 3. Activity table: do a test along with a lab tech, using ‘microscopes’ to find and identify various water elements (“Count the colonies” activity)
 4. Monitor video content: Mystery Pollutant activity support video. Pre-recording of how a Gas Chromatograph / Mass Spectrometer works, and instruction for how to do the hands-on activity at the activity table.
 5. Ask a scientist: Q&A interview with staff as available
- ii. Types:
 1. Informational videos on large monitor (north wall of area) cued up by push buttons
 2. Interactive display (south wall of area)
 3. Tabletop instruments (east wall of area), with speaker system
 4. Potential live Q&A interview with plant staff if available
- iii. Materials: plastic, screens, people, equipment, monitors
- iv. Location and available space: Dedicated area on east side of Discovery Center; North wall monitor = up to 96”; south wall display = up to 12’W x 11’H; activity counter = 11W x 2’-6”D
- v. Technology: lab equipment, monitors and data

- vi. Components: recorded information, chemical treatment information, lab activities how-tos, featured staff for Q&A
- vii. Precedents: exhibit at the Orange County Water District H2O Learning Center





- h. **Water Theater / Conference Room:** Plan p. 31-32
 - i. Concepts: Dedicated room for Discovery Center activities
 - 1. Virtual tour video for those not able to go on walking tour
 - 2. Meet up space before tours: instructions, PPE storage, overview
 - 3. Meet up space after tours: PPE return, Pledges, resting
 - 4. Art gallery for rotating water-related photos, paintings, etc. (public or private art)
 - 5. 3D printer for small souvenirs
 - ii. Types:
 - 1. Informational videos on large monitor (east wall of area)
 - 2. Undercounter storage (provided in building design)
 - 3. Tables and chairs as needed (provided in FF&E, storage available next to room)
 - 4. Rotating art, TBD
 - 5. Pledge Tree: wall display so visitors can write their pledges and pin up
 - iii. Materials: monitor, PPE (provided by City), plastic/wood (pledge tree), 3D printer materials and designs for souvenirs

- iv. Location and available space: Dedicated room 430sf. Seats about 30 people. 44 lf of wall space for art; up to 96" monitor, east wall
- v. Technology: virtual tour video, small 3D printer
- vi. Components: recorded information, pledge tree display, 3D print designs
- vii. Precedents:

3. Website: Plan p. 42

- a. Discovery Center website/social media presence: webpages with content about the Discovery Center, San Diego Pure Water, and the visitor experience, water conservation best practices, events calendar, etc.
- b. Visitor follow up: online engagement via website/social media/direct outreach; use visitor information to send thank yous, follow up information, and check in on pledge progress. Gather testimonials, feedback and user preferences information.



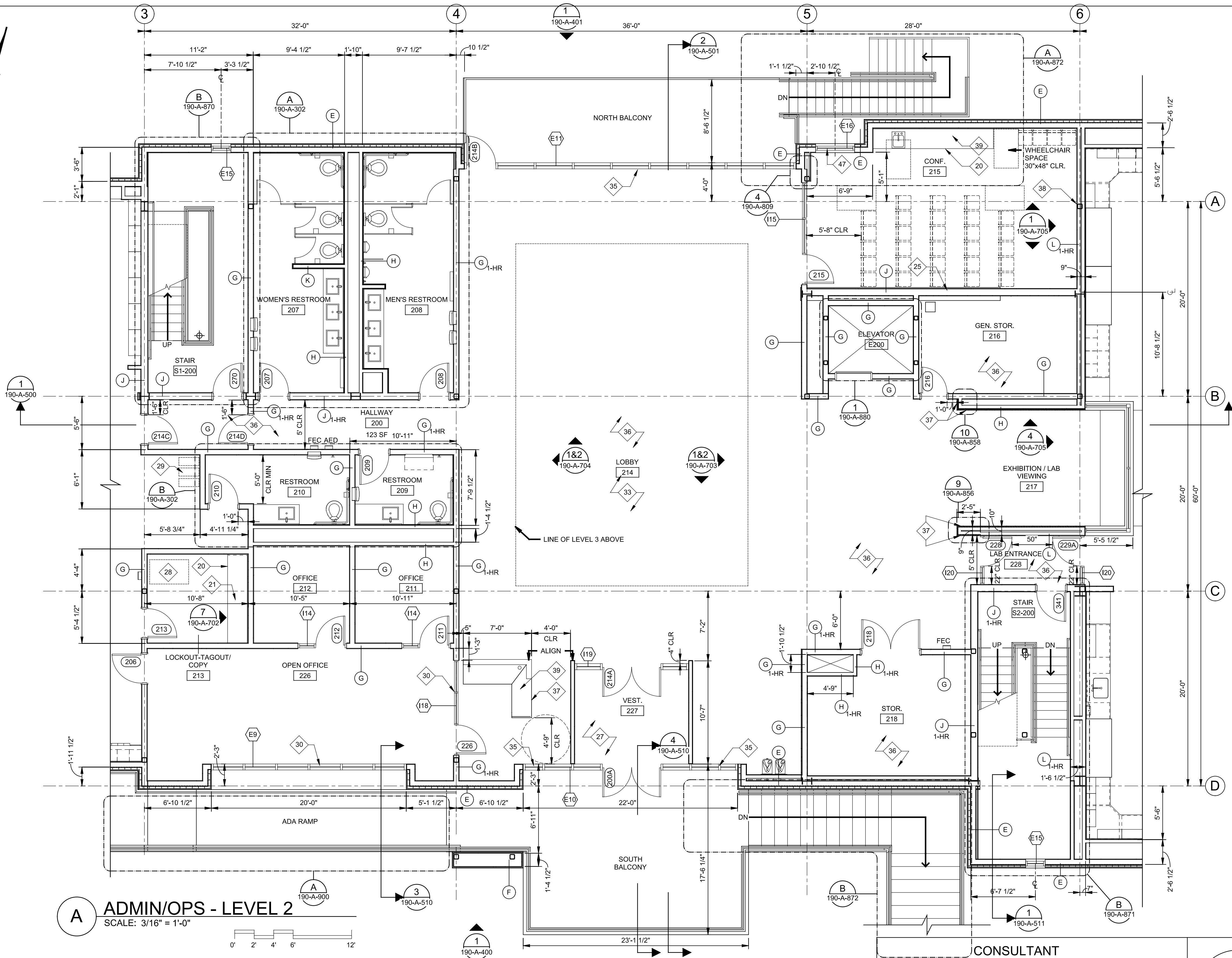
PHOTO #1: TASTING STATION 1 (UV TASTING STATION)
SEE ATTACHMENT 4 - TASTING STATION AS-BUILT NOTES.



PHOTO #2: TASTING STATION 2 (MEZZANINE TASTING STATION)



PHOTO #3: TASTING STATION 2



GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND CENTERLINE OF WALLS, COLUMNS, DOORS AND WINDOWS. UNO.
2. SEE CODE PLANS FOR LOCATIONS OF FIRE RATED WALL ASSEMBLIES.
3. THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
4. FIRE-STOP PENETRATIONS AT ALL RATED WALL ASSEMBLIES. SEE SPECIFICATIONS FOR INTERIOR SCHEDULE AND FINISH LEGEND.
5. ALL INTERIOR OPENING DIMENSIONS ARE ROUGH OPENINGS.
6. TYPICAL INTERIOR DOOR ROUGH OPENINGS ARE 6" FROM RETURN WALL FACE OF STUD, UNO.

CONSTRUCTION NOTES

- SEMI-RECESSED COMBINATION PAPER TOWEL DISPENSER/ WASTE RECEPTACLE
(CTDWR), EXTEND FROM WALL 4" MAX
- 2 TILED SHOWER W/ ROD (SCR) AND CURTAIN (SC), TYP. COORDINATE W/ PLUMBING
- 3 ACCESSIBLE TILED SHOWER W/ ROD, CURTAIN, GRAB BARS AND FOLDING SHOWER
SEAT (FSS), PROVIDE BLOCKING, COORDINATE W/ PLUMBING
- 4 STAINLESS STEEL CEILING HUNG RESTROOM PARTITION, TYP
- 5 DECK MOUNTED SOAP DISPENSER (SD-2)
- 6 LOCKER ROOM BENCH, TYP
- 7 TOILET TISSUE DISPENSER (TTD), TYP
- 8 SANITARY DISPOSAL UNIT (SND), TYP
- 9 TOILET SEAT COVER DISPENSER (SCD), TYP
- 10 CLEAN LINEN STORAGE, PROVIDE DOUBLE RODS AND SHELVES
- 11 DIRTY LINEN CONCIERGE UNIT, CFCI
- 12 ACCESSIBLE LOCKER BENCH W/ SUPPORTIVE BACK
- 13 LOCATION OF ACCESSIBLE LOCKER
- 14 DIRTY TOWEL STORAGE, OFOI
- 15 DISHWASHER (DW#1)
- 16 DROP-IN RANGE (RG#1), COORDINATE W/ ELEC
- 17 BUILT-IN MICROWAVE (MO#1), COORDINATE W/ ELEC
- 18 FULL HEIGHT REFRIGERATOR (REF#6)
- 19 FULL HEIGHT FREEZER (FRZ#3)
- 20 WOOD VENEER CASEWORK
- 21 SOLID SURFACE COUNTERTOP
- 22 ACCESSIBLE LOCKER BENCH
- 23 WALL HOOK (WH), TYP
- 24 HI/LO ACCESSIBLE DRINKING FOUNTAIN, COORDINATE W/ PLUMBING, SEE 1/190-A-850
- 25 GLASSBOARD MAGNETIC MARKERBOARD
- 26 DEPRESS SLAB IN THIS AREA 1-1/2". COORDINATE W/ STRUCTURAL
- 27 DEPRESS SLAB IN THIS AREA 3/4". COORDINATE W/ STRUCTURAL
- 28 COPY/ PRINT MACHINE, OFOI. COORDINATE W/ ELEC
- 29 DESIGNATED RECYCLING AREA, RECYCLE BINS, OFOI
- 30 PROVIDE INTERIOR RECESSED MANUAL WINDOW SHADE AT THIS WINDOW//
STOREFRONT LOCATION
- 31 STANDARD UNDERCOUNTER REFRIGERATOR (REF#7)
- 32 WOOD VENEER MAIL STATION
- 33 SEE LOBBY FINISH PLAN FOR LOCATIONS OF TERRAZZO DIVIDER STRIPS AND COLOR
PATTERN
- 34 MOTORIZED PROJECTION SCREEN ABOVE, OFCI, COORDINATE W/ ELEC
- 35 PROVIDE INTERIOR RECESSED MOTORIZED WINDOW SHADE AT THIS WINDOW//
STOREFRONT SERIES, COORDINATE W/ ELEC
- 36 DEPRESS SLAB IN THIS AREA 3/8". COORDINATE W/ STRUCTURAL
- 37 WOOD PLANK WALL CLADDING
- 38 WALL MOUNTED MONITOR, COORDINATE W/ ELEC
- 39 QUARTZ COUNTERTOP
- 40 LINE OF GYPSUM CEILING CAP ABOVE, SEE RCP FOR ADDITIONAL INFORMATION
- 41 GRAB BAR (GB), TYP
- 42 DEPRESS SLAB IN THIS AREA 1". COORDINATE W/ STRUCTURAL
- 43 MOP AND BROOM HOLDER (MBH)
- 44 BUILT-IN ICE MAKER (ICE#1), COORDINATE W/ PLUMBING AND CASEWORK
- 45 WELDED LOCKER, TYP. COORDINATE W/ BUILT-UP SUPPORT BASE AND TERRAZZO
COVED BASE FINISH
- 46 SLOPE TO DRAIN 1/8" PER 1'-0" FROM RADIUS AS INDICATED. TYPICAL AT ALL FLOOR
DRAINS NOT LOCATED WITHIN SHOWER PANS
- 47 PROVIDE INTERIOR SURFACE MOUNTED MANUAL WINDOW SHADE WITH FASCIA AT
THIS WINDOW/ STOREFRONT LOCATION
- 48 SLOPE TO DRAIN 1/4" PER 1'-0" AT ALL SHOWER PANS, TYP
- 49 BUILT-IN WOOD BENCH
- 50 PLASTIC LAMINATE CASEWORK
- 51 FURNITURE (OWNER PROVIDED/MOVABLE) NIC
- 52 WALL HUNG TOILET, TYP. 29" MAX DEPTH
- 53 CHANGING STATION
- 59 BABY CHANGING TABLE

LEGEND

- | | |
|---|-------------------|
|  | CONSTRUCTION NOTE |
|  | WALL TYPE |
|  | STOREFRONT TYPE |
|  | FLOOR DRAIN |

PK2-190-A-222

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
LEVEL 2 - ADMIN/OPS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1540 OF 1850 SHEETS

NBS B-15139

APPROVED:					SUBMITTED BY:	
FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME			DATE		AMER BARHOUMI	
			C53917		PROJECT MANAGER	
			RCE#		CHECKED BY:	
			ANTHONY VAN		PROJECT ENGINEER	
DESCRIPTION	BY		APPROVED	DATE	FILMED	
						260-1709
						CCS27 COORDINATE
						1900-6269
						CCS83 COORDINATE

39636-1558-D

PK2 - CONFORMED SET

FOR
SIGNATURES
AND SEALS REFER
TO ORIGINAL
DRAWINGS DATED
MARCH 2020

CONTRACTOR
INSPECTOR

DATE STARTED
DATE COMPLETED

WARNING

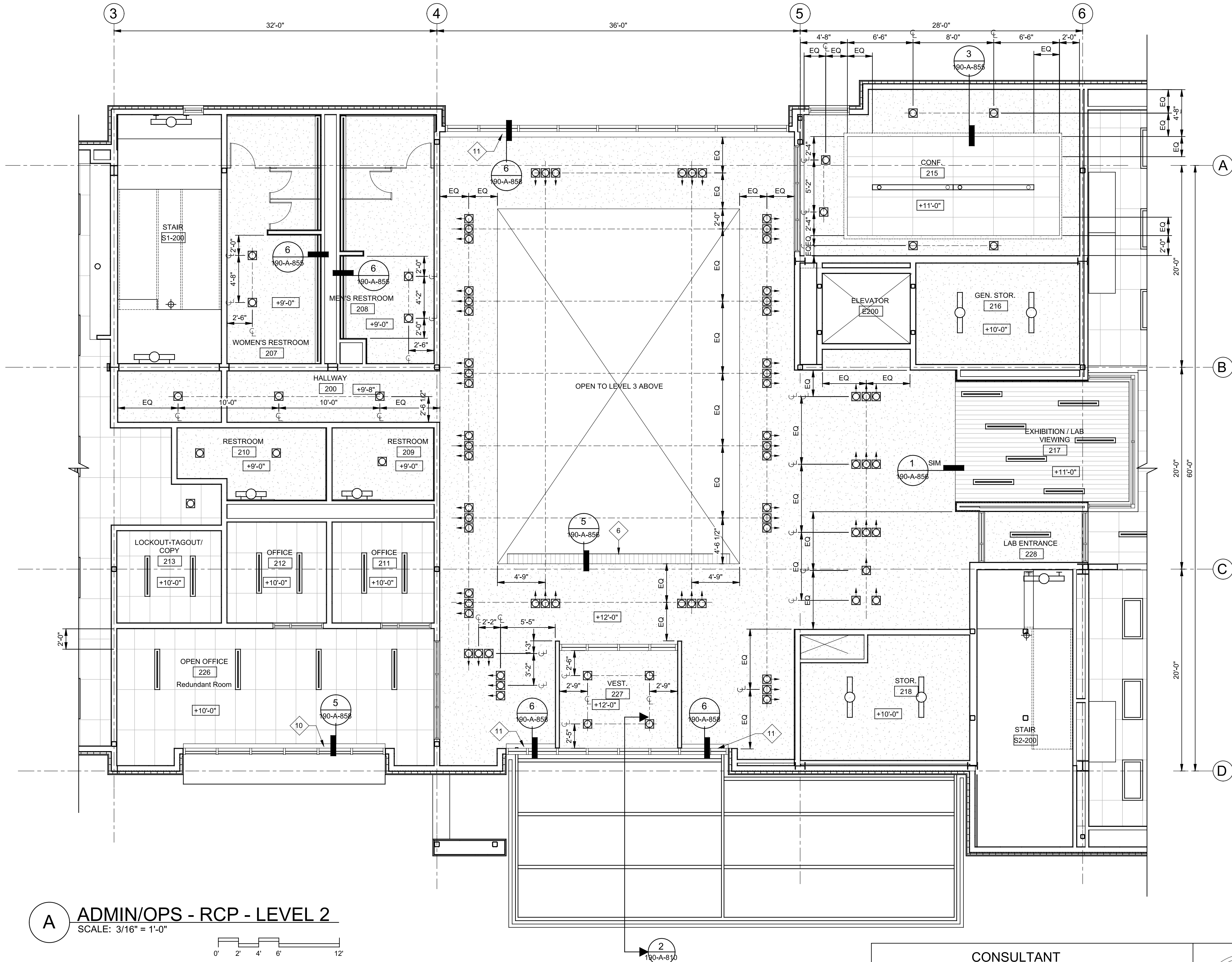
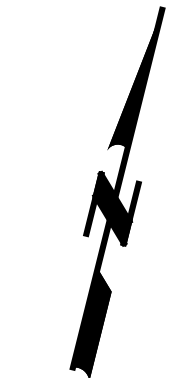


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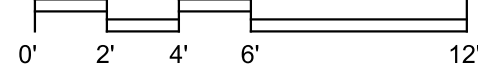


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CONSULTANT



A ADMIN/OPS - RCP - LEVEL 2
SCALE: 3/16" = 1'-0"



GENERAL NOTES

- DIMENSIONS ARE TO FACE OF FINISH, UNO.
- SEE CODE PLANS FOR LOCATIONS OF FIRE RATED WALL ASSEMBLIES.
- FIRE-STOP PENETRATIONS AT ALL RATED WALL ASSEMBLIES.
- SEE SPECIFICATION SECTION 090000 FOR INTERIOR SCHEDULE AND FINISH LEGEND.
- SEE MECHANICAL DRAWINGS FOR DIFFUSER SCHEDULE.
- THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
- SEE ELECTRICAL DRAWINGS FOR LUMINAIRE SCHEDULE.
- ACOUSTIC CEILING GRID AND PANELS ARE TO BE EQUALLY SPACED WITHIN A ROOM, U.N.O.

CONSTRUCTION NOTES

- OPEN TO STRUCTURE, PAINT FINISH
- FRAMED OPENING AT 9'-10" AFF
- ACOUSTIC PLASTER CEILING FINISH
- LINE OF FLOOR OVERHANG ABOVE
- OVERHEAD COILING DOOR
- METAL HOOD SURROUND
- FRAMED SOFFIT AT 10'-0" AFF
- PROVIDE RECESSED MANUAL WINDOW SHADE AND SHADE POCKET AT THIS WINDOW/ STOREFRONT LOCATION
- PROVIDE RECESSED MOTORIZED WINDOW SHADE AND SHADE POCKET AT THIS WINDOW/ STOREFRONT LOCATION. COORDINATE W/ ELECTRICAL
- CEILING MOUNTED PROJECTOR, OFCL. COORDINATE W/ ELEC.
- PROVIDE MOTORIZED SKYLIGHT SHADE AT ALL SKYLIGHT LOCATIONS. COORDINATE W/ ELECTRICAL
- MONORAIL CRANE AND TRACK
- SOFFIT LIGHTING
- OVERFLOW DRAIN OUTPUT
- CEILING RECESSED, MOTORIZED PROJECTION SCREEN, OFCL.
- FRAMED OPENING AT 9'-4" AFF

LEGEND

- 1 CONSTRUCTION NOTE
- GYPSUM BOARD
- 2' X 4' ACOUSTIC CEILING PANEL
- OPEN TO STRUCTURE
- WOOD PLANK
- COMPOSITE PANEL SOFFIT
- +0'-0"
- CEILING HEIGHT
- WALL MOUNTED LIGHT FIXTURE
- RECESSED LINEAR LIGHT FIXTURE
- RECESSED DIRECTIONAL MULTI-SPOT LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- SURFACE MOUNTED LINEAR LIGHT FIXTURES
- PENDANT MOUNTED LINEAR LIGHT FIXTURE
- RECESSED TROFFER LIGHT FIXTURE

PK2-190-A-262

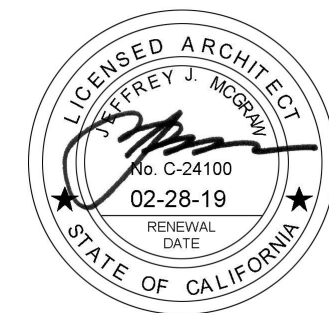
CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
LEVEL 2 - RCP - ADMIN/OPS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1550 OF 1850 SHEETS

WBS B-21058

APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME	3/26/2020 DATE CS3917 RCE#	SUBMITTED BY: ANTHONY VAN PROJECT MANAGER
DESCRIPTION	BY	APPROVED
ORIGINAL	AMER BARHOUMI	3/26/2020
DESIGN MOD. 31	MWA	6/6/2023
DATE	FILED	
		260-1709 CCS27 COORDINATE
		1900-6269 CCS83 COORDINATE
		39636-1568-D



3/19/2020

CONTRACTOR
INSPECTOR

DATE STARTED
DATE COMPLETED

CONSULTANT



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WARNING



IF THIS BAR DOES
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THEN DRAWING IS
NOT TO SCALE.

MISCELLANEOUS AREA 190 CHANGES, RFI 698

GENERAL NOTES

- DIMENSIONS ARE TO FACE OF FINISH, UNO.
- SEE CODE PLANS FOR LOCATIONS OF FIRE RATED WALL ASSEMBLIES.
- FIRE-STOP PENETRATIONS AT ALL RATED WALL ASSEMBLIES.
- SEE SPECIFICATION SECTION 090000 FOR INTERIOR SCHEDULE AND FINISH LEGEND.
- SEE MECHANICAL DRAWINGS FOR DIFFUSER SCHEDULE.
- THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
- SEE ELECTRICAL DRAWINGS FOR LUMINAIRE SCHEDULE.
- ACOUSTIC CEILING GRID AND PANELS ARE TO BE EQUALLY SPACED WITHIN A ROOM, U.N.O.

CONSTRUCTION NOTES

- OPEN TO STRUCTURE, PAINT FINISH
- SKYLIGHT
- FRAMED OPENING AT 9'-10" AFF COVE LIGHTING AT SOFFIT PERIMETER. COORDINATE W/ ELEC
- ACOUSTIC PLASTER CEILING FINISH
- LINE OF FLOOR OVERHANG ABOVE
- OVERHEAD COILING DOOR
- METAL HOOD SURROUND
- FRAMED SOFFIT AT 10'-0" AFF
- PROVIDE RECESSED MANUAL WINDOW SHADE AND SHADE POCKET AT THIS WINDOW/ STOREFRONT LOCATION
- PROVIDE RECESSED MOTORIZED WINDOW SHADE AND SHADE POCKET AT THIS WINDOW/ STOREFRONT LOCATION. COORDINATE W/ ELECTRICAL
- CEILING MOUNTED PROJECTOR, OFCL. COORDINATE W/ ELEC.
- PROVIDE MOTORIZED SKYLIGHT SHADE AT ALL SKYLIGHT LOCATIONS. COORDINATE W/ ELECTRICAL
- MONORAIL CRANE AND TRACK
- SOFFIT LIGHTING
- OVERFLOW DRAIN OUTPUT
- CEILING RECESSED, MOTORIZED PROJECTION SCREEN, OFCL. COORDINATE W/ ELEC
- FRAMED OPENING AT 9'-4" AFF

LEGEND

- 1 CONSTRUCTION NOTE
- GYPSUM BOARD
- 2' X 4' ACOUSTIC CEILING PANEL
- OPEN TO STRUCTURE
- WOOD PLANK
- COMPOSITE PANEL SOFFIT
- +0'-0" CEILING HEIGHT
- WALL MOUNTED LIGHT FIXTURE
- RECESSED LINEAR LIGHT FIXTURE
- RECESSED DIRECTIONAL MULTI-SPOT LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- SURFACE MOUNTED LINEAR LIGHT FIXTURES
- PENDANT MOUNTED LINEAR LIGHT FIXTURE
- RECESSED TROFFER LIGHT FIXTURE

PK2-190-A-272

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
LEVEL 3 - RCP - ADMIN/OPS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1552 OF 1850 SHEETS

WBS B-21058

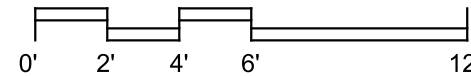
APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME	3/26/2020 DATE CS3917 RCE#	SUBMITTED BY: ANTHONY VAN PROJECT MANAGER
DESCRIPTION	BY	APPROVED
ORIGINAL	AMER BARHOUMI	3/26/2020
DESIGN MOD. 31	MWA	6/6/2023
CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER		260-1709 CCS27 COORDINATE
		1900-6269 CCS83 COORDINATE
CONTRACTOR		DATE STARTED
INSPECTOR		DATE COMPLETED

39636-1570-D

PK2 - ISSUED FOR CONSTRUCTION

A ADMIN/OPS - RCP - LEVEL 3

SCALE: 3/16" = 1'-0"



WARNING

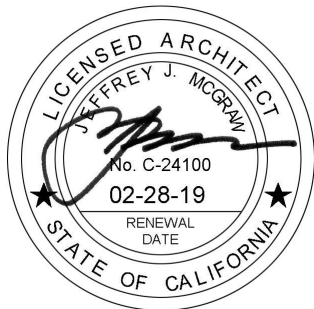


IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

CONSULTANT

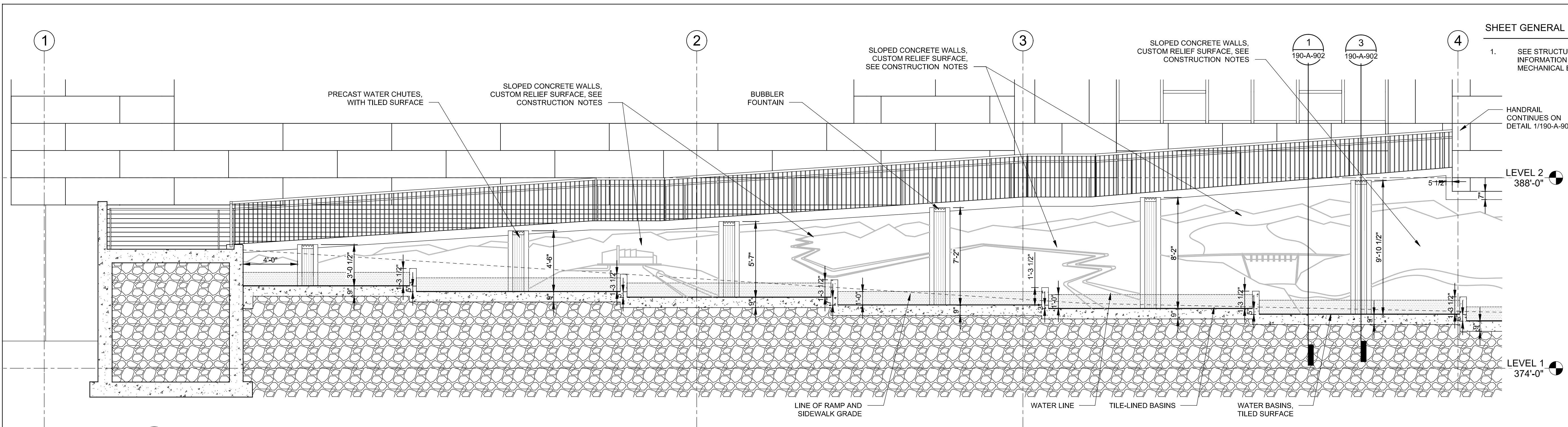


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3/19/2020

CONTRACTOR
INSPECTOR



1 ENTRY RAMP SECTION WEST

SCALE: 1/4" = 1'-0"

SHEET GENERAL NOTES

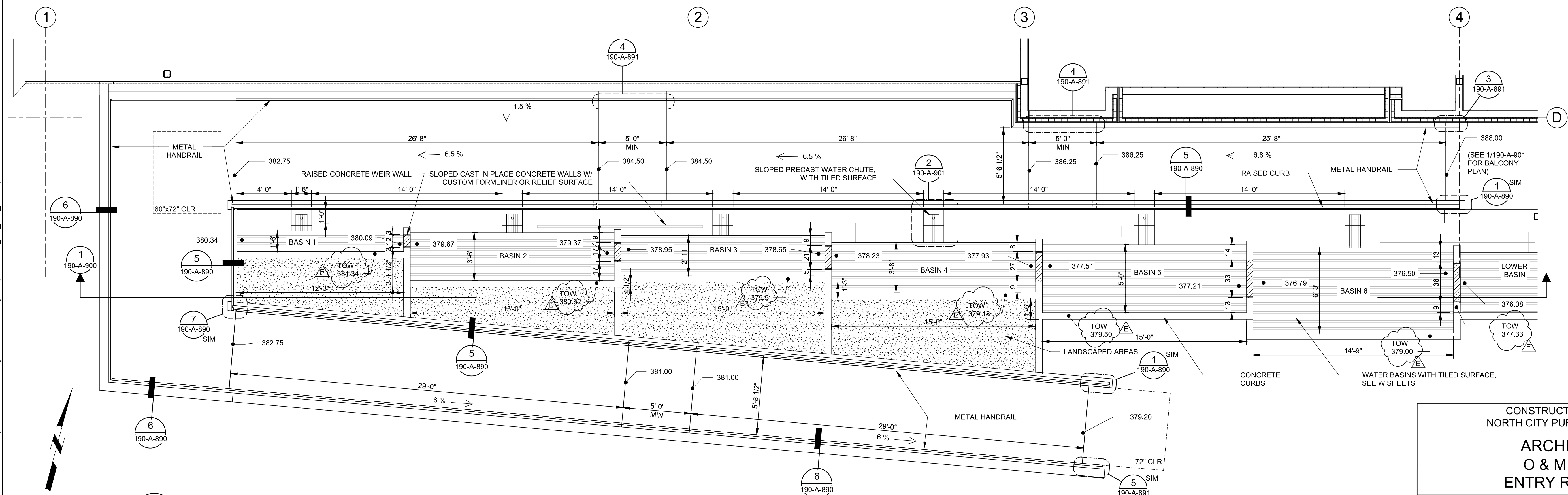
1. SEE STRUCTURAL AND "W" SHEETS FOR ADDITIONAL INFORMATION ON CONSTRUCTION, MECHANICAL EQUIPMENT, AND PLUMBING REQUIREMENTS.

901

LEVEL 2
388'-0" 

CONSTRUCTION NOTES

1. FOR THE CONCRETE WALLS
RELIEF PRECAST CHUTES WITH
RELIEF SURFACES, ALLOW FOR
CUSTOM SEMI-REALISTIC IMAGE BY
ARCHITECT WITH UP TO FIVE (5)
DEPTH CHANGES AT 1/2" OFFSET
BETWEEN LAYERS; ONE LAYER OF 1/4"
CUT ALUMINUM APPLIED TO
CONCRETE SURFACE UP TO 20% OF
RELIEF AREA. SANDBLASTED FINISH.



A ENTRY RAMP PLAN - WEST
SCALE: 1/4" = 1'-0"

PK2-190-A-900

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
ENTRY RAMP / STAIR

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1613 OF 1850 SHEETS

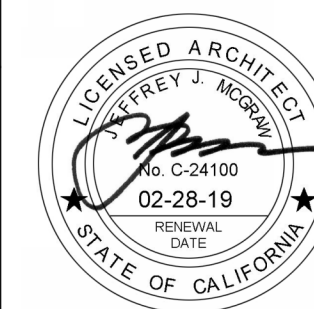
WBS B-15139

APPROVED <i>Romar Barhoum</i>		1/23/19		SUBMITTED BY:	
FOR CITY ENGINEER		DATE		AMER BARHOUMI	
AMER BARHOUMI		C53917		PROJECT MANAGER	
PRINT DCE NAME		RCE#		CHECKED BY:	
				ANTHONY VAN	
				PROJECT ENGINEER	
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL		MWA		1/14/2019	
	ADDENDUM E	MWA	<i>Romar Barhoum</i>	4/22/2019	
					260-1709
					CCS27 COORDINATE
					1900-6269
					CCS83 COORDINATE
		DATE STARTED			
		DATE COMPLETED			
				39363-1631	

CONSULTANT



mwa architects

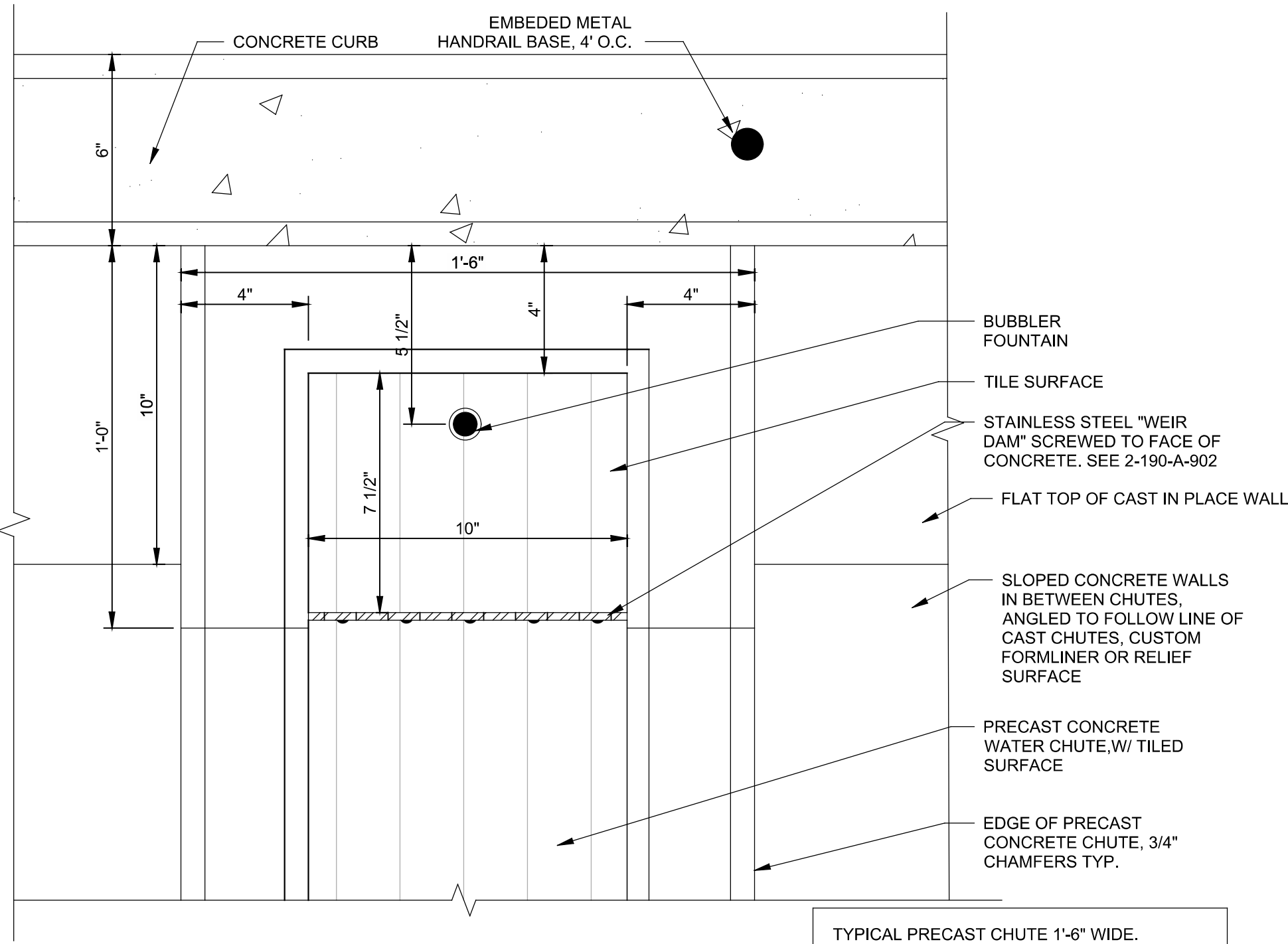


1/14/2019

CONTRACTOR	
INSPECTOR	

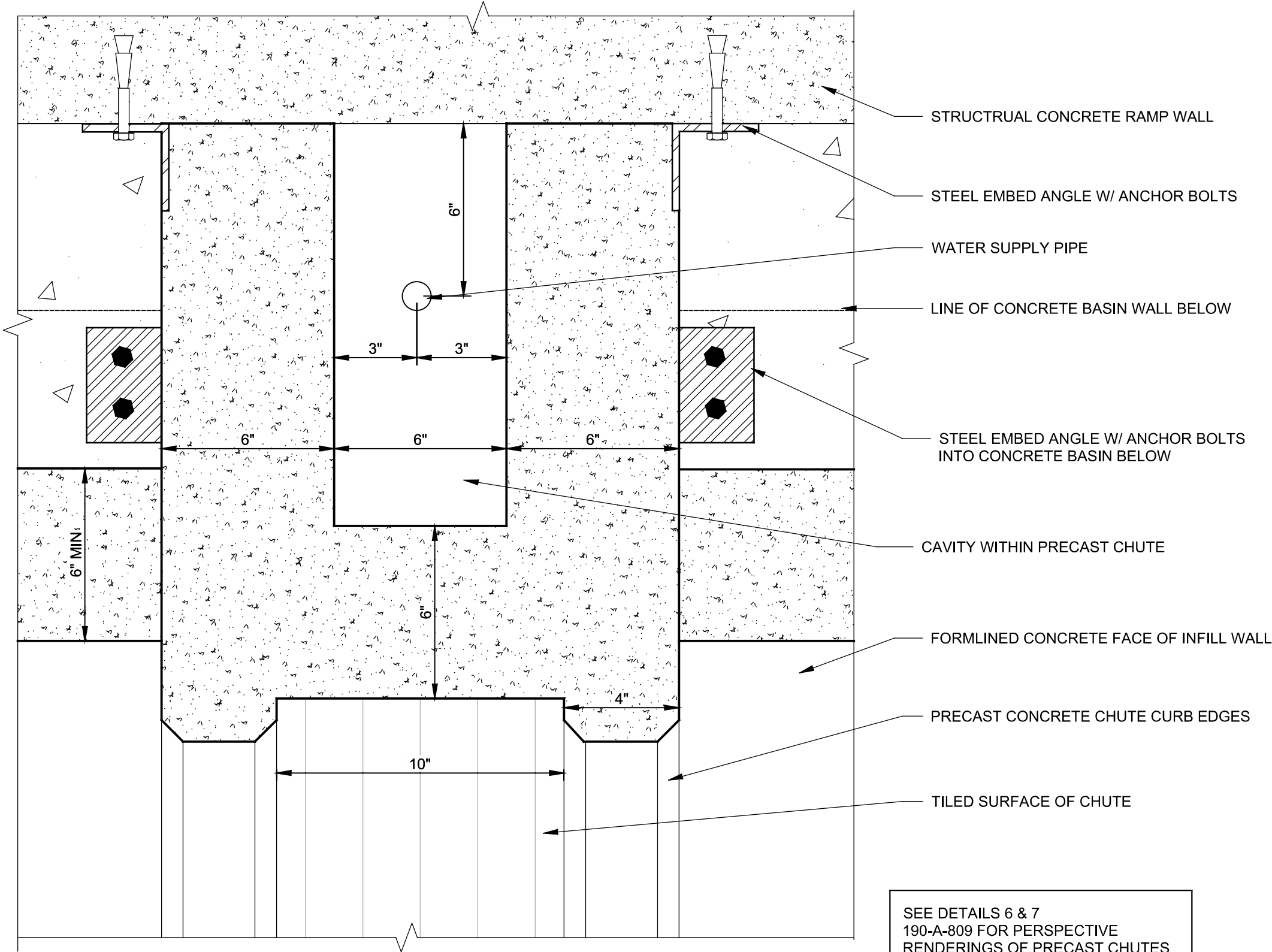
DATE STARTED _____
DATE COMPLETED _____

—	39636-1631-I
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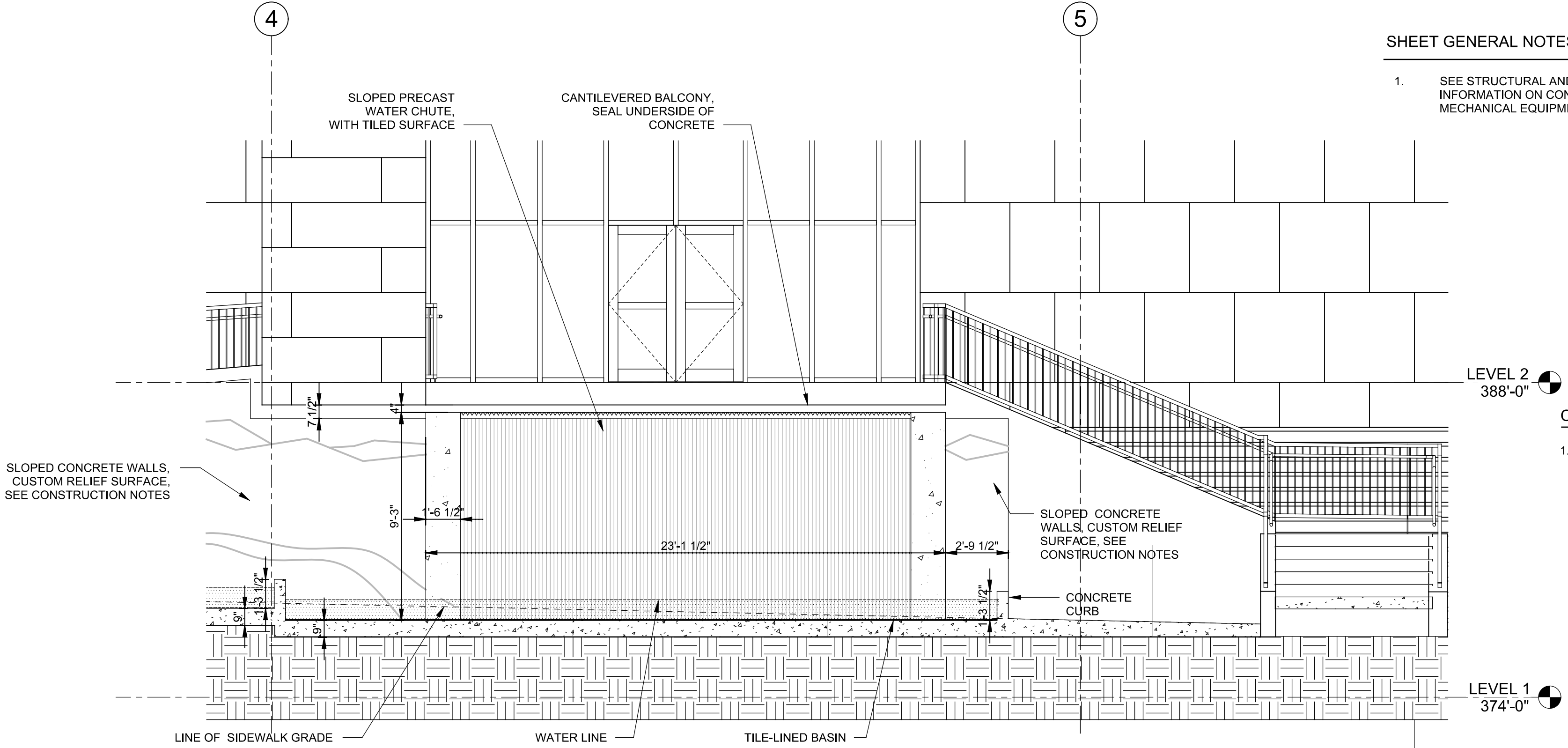
TYPICAL PRECAST CHUTE 1'-6" WIDE. 20' - 8 1/2" WIDE CHUTE UNDER BALCONY CONSTRUCTED IN SIMILAR METHOD. SEE "W" SHEETS FOR MORE INFORMATION.

2 WATER FEATURE CHUTE PLAN
SCALE: 3" = 1'-0"

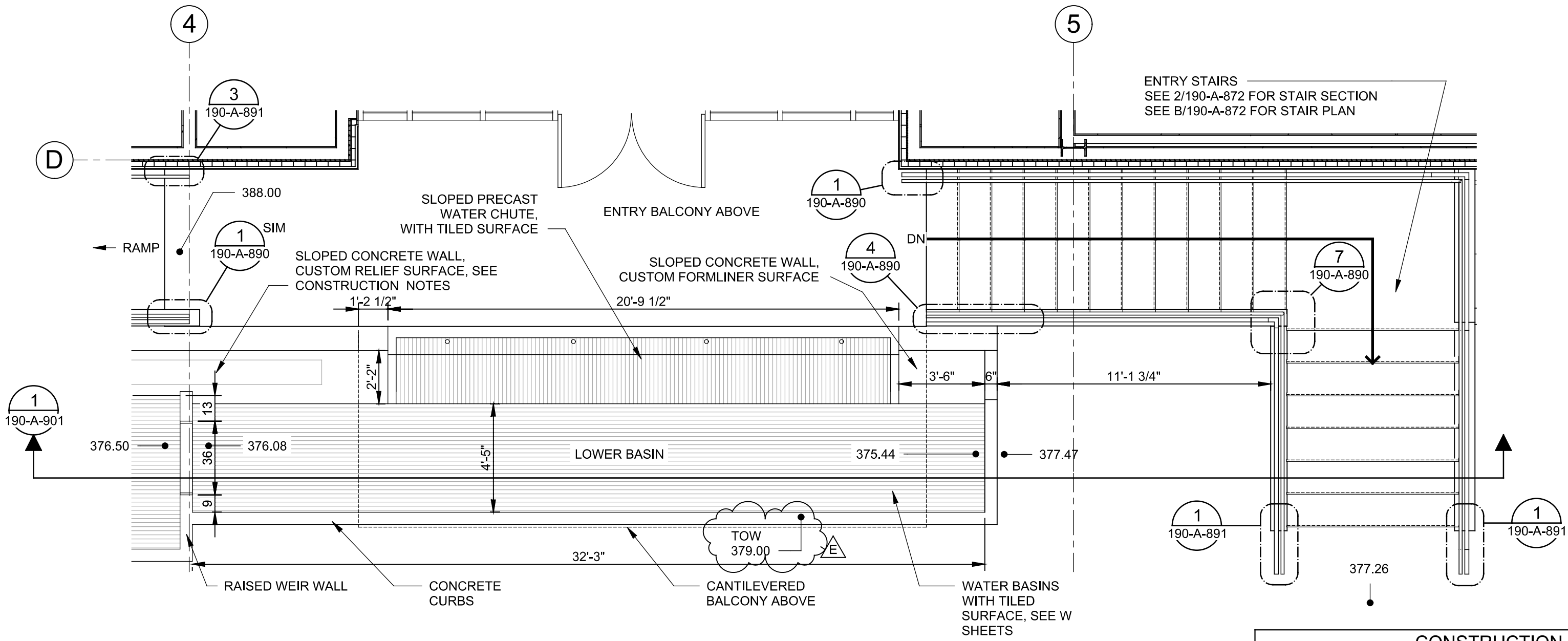


SEE DETAILS 6 & 7 190-A-809 FOR PERSPECTIVE RENDERINGS OF PRECAST CHUTES

3 WATER FEATURE CHUTE SECTION 1
SCALE: 3" = 1'-0"



1 ENTRY RAMP SECTION EAST
SCALE: 1/4" = 1'-0"



A ENTRY RAMP PLAN - EAST
SCALE: 1/4" = 1'-0"

SHEET GENERAL NOTES

1. SEE STRUCTURAL AND "W" SHEETS FOR ADDITIONAL INFORMATION ON CONSTRUCTION, MECHANICAL EQUIPMENT, AND PLUMBING REQUIREMENTS.

CONSTRUCTION NOTES

1. FOR THE CONCRETE WALLS BETWEEN PRECAST CHUTES FOR RELIEF SURFACES, ALLOW FOR CUSTOM SEMI-REALISTIC IMAGE BY ARCHITECT WITH UP TO FIVE (5) DEPTH CHANGES AT 1/2" OFFSET BETWEEN LAYERS; ONE LAYER OF 1/4" CUT ALUMINUM APPLIED TO CONCRETE SURFACE UP TO 20% OF RELIEF AREA. SANDBLASTED FINISH.

PK2-190-A-901

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
ENTRY RAMP / STAIR

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1614 OF 1850 SHEETS

WBS B-15139

APPROVED: *Amr Barhoum*
FOR CITY ENGINEER
AMR BARHOUM
PRINT DCE NAME

1/23/19
DATE
CS3917
ROE#

SUBMITTED BY:
AMR BARHOUM
PROJECT MANAGER

CHECKED BY:
ANTHONY VAN
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	MOA		1/14/2019	
ADDENDUM E	MOA	<i>Amr Barhoum</i>	4/22/2019	

260-1709
CCS27 COORDINATE

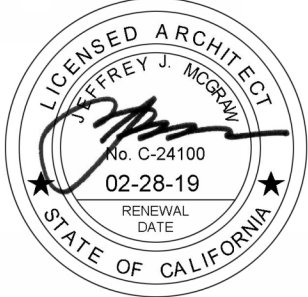
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39636-1632-D

CONSULTANT



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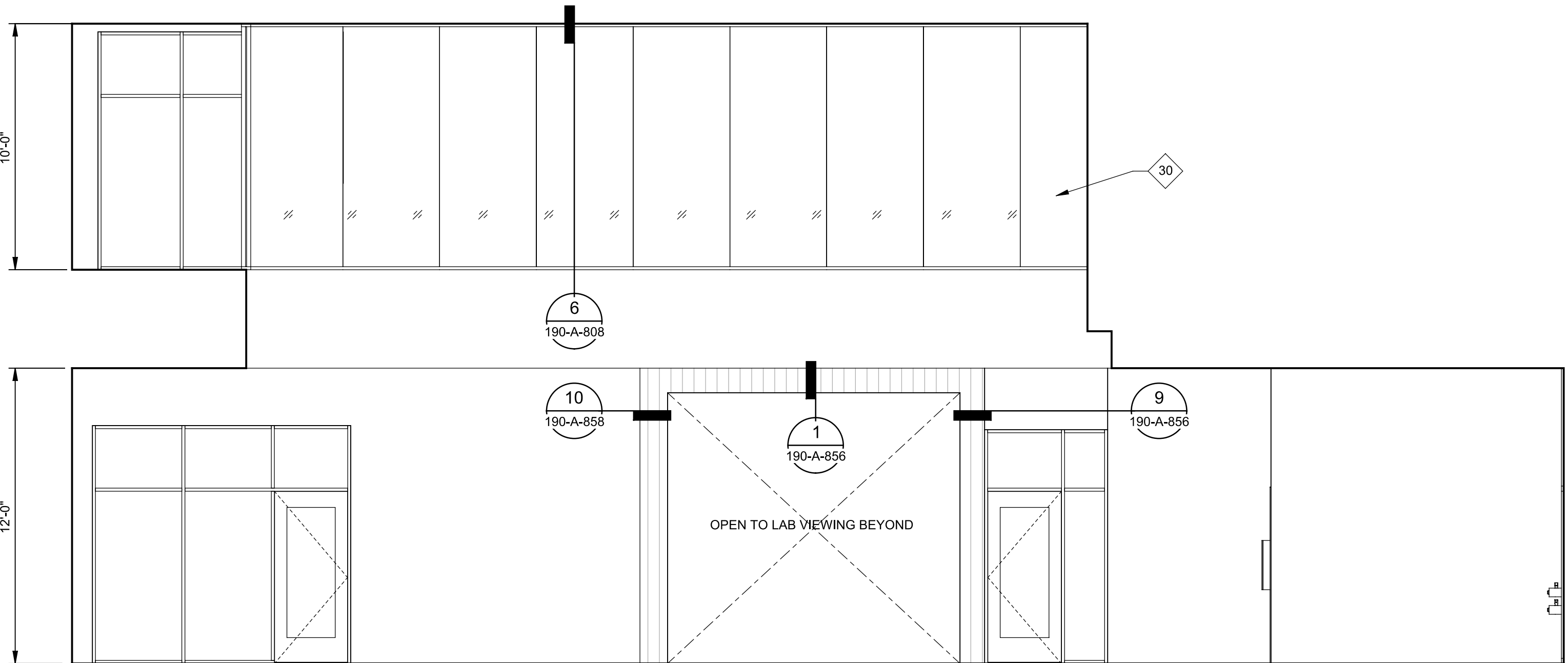
1/14/2019

CONTRACTOR
INSPECTOR

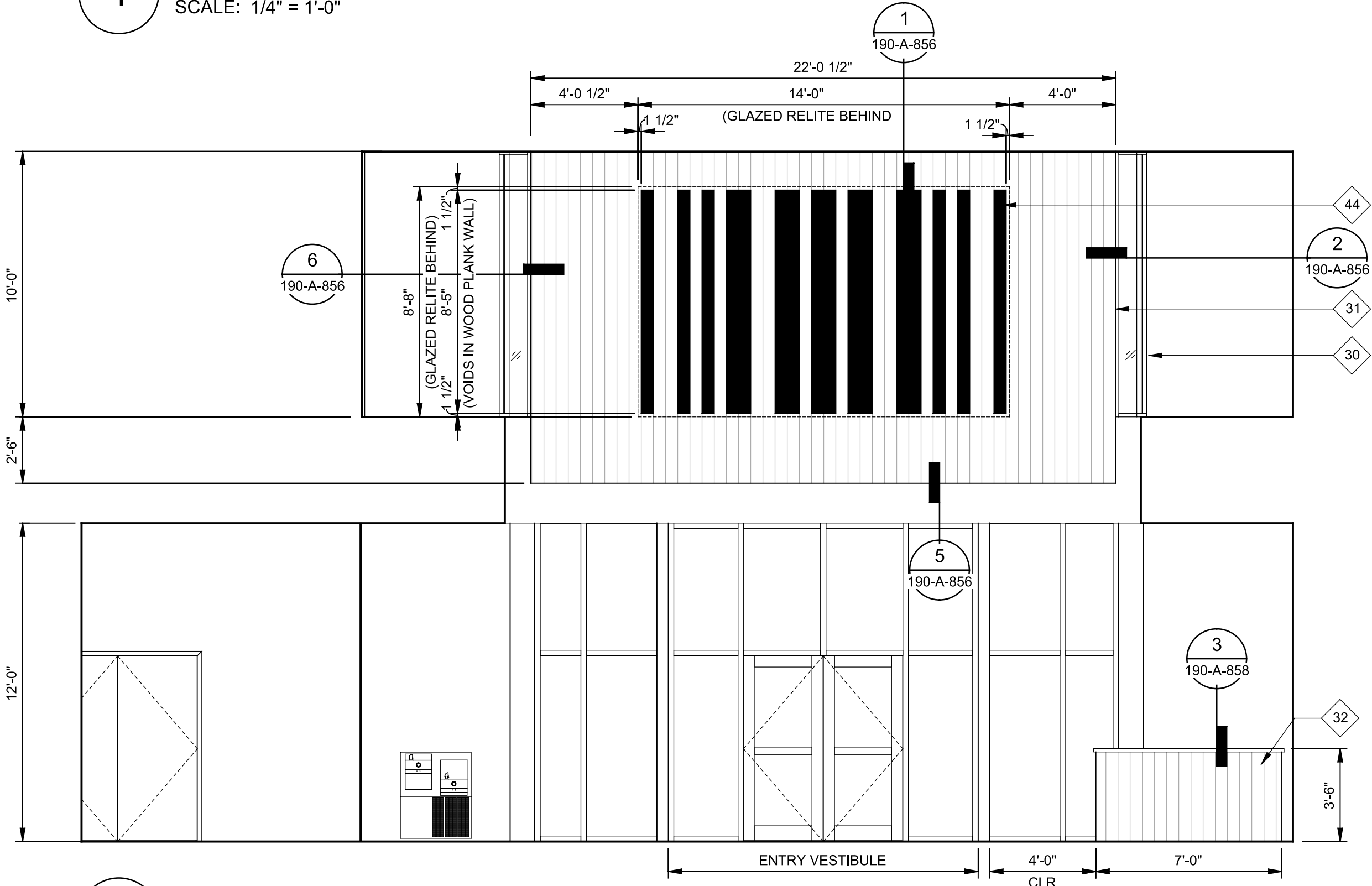
DATE STARTED
DATE COMPLETED

WATER FEATURE WALL CLARIFICATION

ADDENDUM E



1 LOBBY - EAST
SCALE: 1/4" = 1'-0"



2 LOBBY - SOUTH
SCALE: 1/4" = 1'-0"

SHEET GENERAL NOTES

1. THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
2. SEE SPECIFICATIONS FOR INTERIOR SCHEDULE AND FINISH LEGEND.
3. SEE FLOOR PLANS FOR OPENING DIMENSIONS.
4. INSULATE AT ALL HOT, COLD AND DRAIN LINES AT LAVATORIES, TYP.
5. FOR REQUIRED ACCESSIBLE CLEARANCES AND ACCESSORY MOUNTING HEIGHTS, SEE 1/190-A-850

CONSTRUCTION NOTES

1. WOOD VENEER CASEWORK, TYP.
2. WALL HOOK (WH), TYP
3. BUILT-IN WOOD BENCH
4. FULL HEIGHT REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
5. FULL HEIGHT FREEZER. SEE ENLARGED PLANS FOR ADD. INFO
6. BUILT-IN MICROWAVE, TYP OF 4. SEE ENLARGED PLANS FOR ADD. INFO
7. SOLID SURFACE COUNTERTOP
8. DOUBLE HEIGHT ROD AND SHELF
9. GLASSBOARD MAGNETIC MARKERBOARD
10. ACOUSTIC WALL PANELS (AWP-1)
11. CEILING RECESSED, MOTORIZED PROJECTION SCREEN, OFCI
12. DROP-IN RANGE. SEE ENLARGED PLANS FOR ADD. INFO
13. CLEAR KNEE SPACE
14. SEMI-RECESSED PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (CTDWR)
15. QUARTZ COUNTERTOP
16. TOILET TISSUE DISPENSESR (TTD), TYP.
17. DIRTY LINEN CONCIERGE, CFCI
18. FRAMED MIRROR UNIT (MU). PROVIDE CUSTOM FRAMED MIRROR WHERE SIZE EXCEEDS MANUFACTURER'S STANDARD
19. SEAT COVER DISPENSER (SCD), TYP.
20. STAINLESS STEEL PARTITION, TYP.
21. GRAB BAR (GB), TYP
22. SHOWER ROD (SCR) AND CURTAIN (SC), TYP.
23. CANOPY HOOD W/ MATCHING METAL SHROUD TO CEILING. COORD. W/ MECH.
24. ACCESSIBLE SHOWER SEAT (FSS)
25. TWO TIER METAL LOCKER, TYP.
26. LOCATION OF ACCESSIBLE LOCKER
27. ACCESSIBLE LOCKER BENCH
28. FULL HEIGHT TILE WALL
29. DECK MOUNTED SOAP DISPENSER (SD-2)
30. GLASS WALL ASSEMBLY
31. WOOD PLANK WALL CLADDING
32. WOOD PLANK RECEPTION DESK W/ QUARTZ COUNTERTOP
33. ADJUSTABLE STAINLESS STEEL SHELVES
34. COPY/ PRINT MACHINE, OFCI
35. WALL MOUNTED MONITOR, OFCI. COORD. W/ ELEC.
36. CHEMICAL RESISTANT P- LAM CASEWORK. TYP AT LAB
37. EPOXY RESIN COUNTERTOP, TYP AT LAB
38. FUME HOOD W/ MATCHING METAL SHROUD TO CEILING. COORD. W/ MECH.
39. BIO-SAFETY CABINET
41. FLOOR MODEL INCUBATOR. COORD. W/ ELEC. AND CASEWORK
42. BALANCE TABLE
43. RANGE HOOD (EX#1) W/ REMOTE FAN AND LIGHT SWITCHES. COORD. W/ ELEC AND MECH
44. VOID AREAS OF WOOD PLANK W/ GLAZING BEYOND, TYP.
45. ROLL CART STORAGE BELOW. CARTS 24"W X 36"D X 32"H, CFCI
46. DISWASHER. SEE ENLARGED PLANS FOR ADD. INFO
47. STANDARD UNDERCABINET REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
48. SURFACE MOUNTED SOAP DISPENSER (SD-1)
49. SURFACE MOUNTED PAPER TOWEL DISPENSER (PTD)
50. GLASSWARE WASHER
51. AUTOCLAVE
52. LAB UNDERCOUNTER REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
54. LAB FREEZER. SEE PLANS FOR ADD. INFO
55. LAB REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO.
56. FULL HEIGHT, CHEMICAL RESISTANT P-LAM GLASSWARE STORAGE
57. UNDERCOUNTER PASS THROUGH, COORD. W/ CASEWORK ON OPPOSING SIDE
58. FAN COIL AND METAL SHROUD BEYOND, COORD. W/ CASEWORK AND COUNTERTOP
59. CHANGING STATION (DCS), MOUNT 34" TO TOP OF UNFOLDED TABLE
60. GLASSBOARD MARKER TRAY
61. BUILT-IN ICE MAKER, SEE ENLARGED PLANS FOR ADD. INFO
62. TRASH/ RECYCLING
63. STANDARD P-LAM CASEWORK
64. WIREMOLD, TYP. COORD. W/ ELEC
65. DRAIN RACK
66. GAS CANISTER STORAGE, TYP. PROVIDE CHAIN RESTRAINTS AND DOOR W/ MAGNETIC CATCH
67. AREA FOR DI WATER POLISHING UNIT, NIC
68. ACCESIBLE LOCKER BOTTOM SHELF
69. BABY CHANGING TABLE

LEGEND

1	CONSTRUCTION NOTE	PK2-190-A-703
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CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY				
ARCHITECTURAL O & M BUILDING INTERIOR ELEVATIONS				
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 1575 OF 1850 SHEETS			WBS B-15139	
APPROVED: FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME			SUBMITTED BY: AMER BARHOUMI PROJECT MANAGER	
DATE CS3917 RCE#			CHECKED BY: ANTHONY VAN PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE	FILMED
DATE STARTED			39636-1593-D	
INSPECTOR			DATE COMPLETED	

CONSULTANT

WARNING

0 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

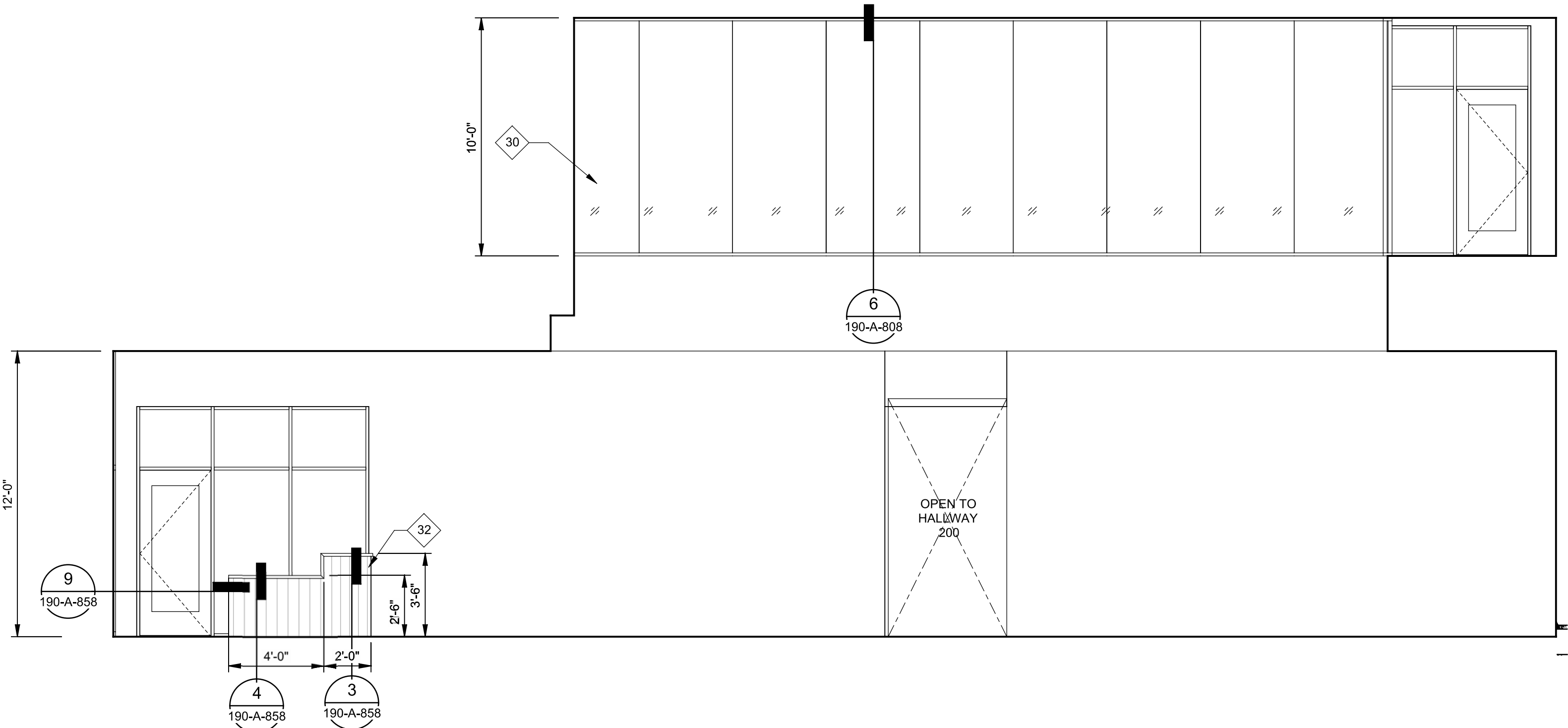
FOR SIGNATURES AND SEALS REFER TO ORIGINAL DRAWINGS DATED MARCH 2020

CONTRACTOR

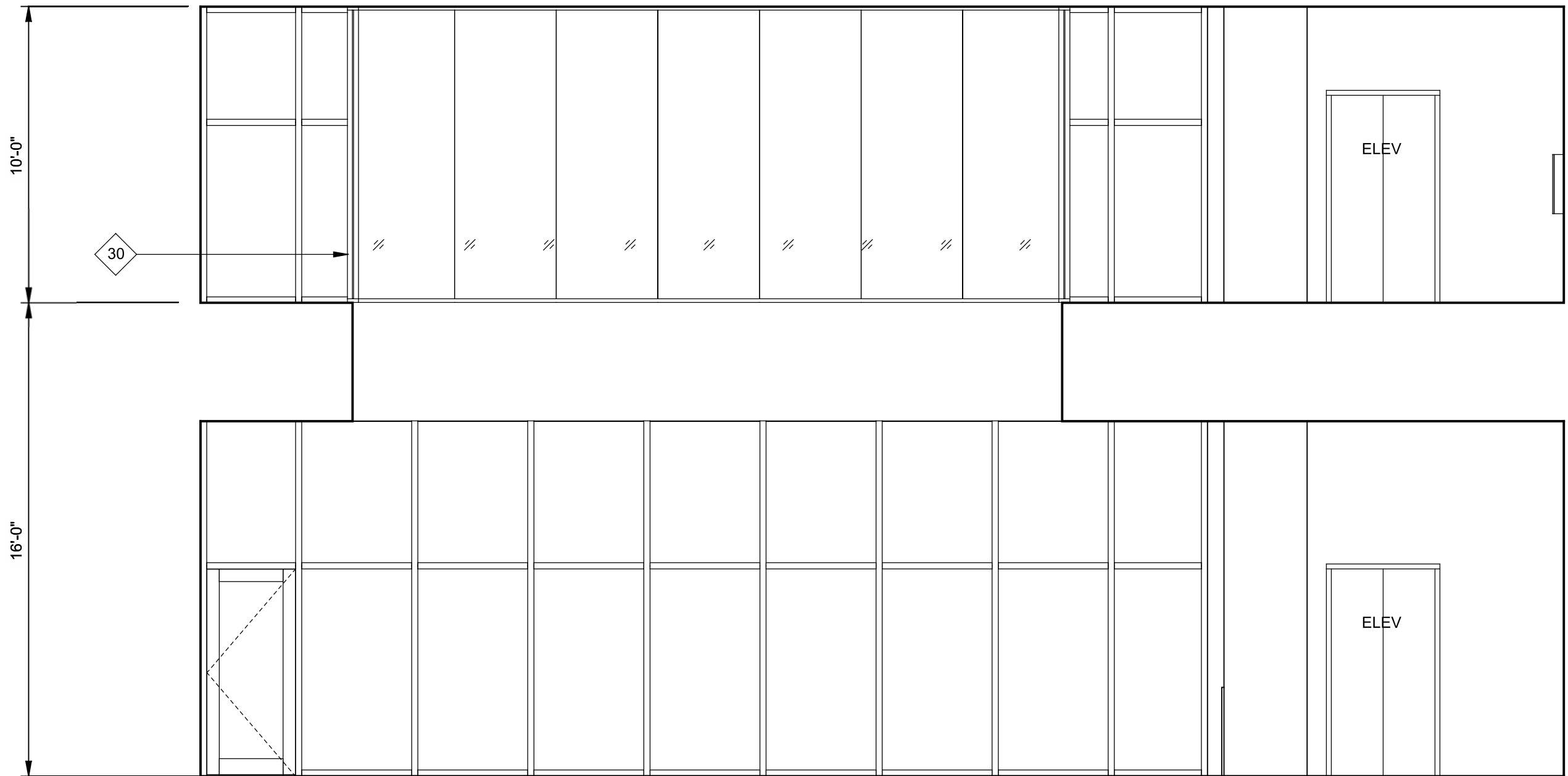
INSPECTOR

DATE STARTED

DATE COMPLETED



1 LOBBY - WEST
SCALE: 1/4" = 1'-0"



2 LOBBY - NORTH
SCALE: 1/4" = 1'-0"

- SHEET GENERAL NOTES
1.

THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
2.

SEE SPECIFICATIONS FOR INTERIOR SCHEDULE AND FINISH LEGEND.
3.

SEE FLOOR PLANS FOR OPENING DIMENSIONS.
4.

INSULATE AT ALL HOT, COLD AND DRAIN LINES AT LAVATORIES, TYP.
5.

FOR REQUIRED ACCESSIBLE CLEARANCES AND ACCESSORY MOUNTING HEIGHTS, SEE 1/190-A-850

- CONSTRUCTION NOTES
- 1

WOOD VENEER CASEWORK, TYP.
- 2

WALL HOOK (WH), TYP
- 3

BUILT-IN WOOD BENCH
- 4

FULL HEIGHT REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
- 5

FULL HEIGHT FREEZER. SEE ENLARGED PLANS FOR ADD. INFO
- 6

BUILT-IN MICROWAVE, TYP OF 4. SEE ENLARGED PLANS FOR ADD. INFO
- 7

SOLID SURFACE COUNTERTOP
- 8

DOUBLE HEIGHT ROD AND SHELF
- 9

GLASSBOARD MAGNETIC MARKERBOARD
- 10

ACOUSTIC WALL PANELS (AWP-1)
- 11

CEILING RECESSED, MOTORIZED PROJECTION SCREEN, OFCI
- 12

DROP-IN RANGE. SEE ENLARGED PLANS FOR ADD. INFO
- 13

CLEAR KNEE SPACE
- 14

SEMI-RECESSED PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (CTDWR)
- 15

QUARTZ COUNTERTOP
- 16

TOILET TISSUE DISPENSESR (TTD), TYP.
- 17

DIRTY LINEN CONCIERGE, CFCI
- 18

FRAMED MIRROR UNIT (MU), PROVIDE CUSTOM FRAMED MIRROR WHERE SIZE EXCEEDS MANUFACTURER'S STANDARD
- 19

SEAT COVER DISPENSER (SCD), TYP.
- 20

STAINLESS STEEL PARTITION, TYP.
- 21

GRAB BAR (GB), TYP
- 22

SHOWER ROD (SCR) AND CURTAIN (SC), TYP.
- 23

CANOPY HOOD W/ MATCHING METAL SHROUD TO CEILING. COORD. W/ MECH.
- 24

ACCESSIBLE SHOWER SEAT (FSS)
- 25

TWO TIER METAL LOCKER, TYP.
- 26

LOCATION OF ACCESSIBLE LOCKER
- 27

ACCESSIBLE LOCKER BENCH
- 28

FULL HEIGHT TILE WALL
- 29

DECK MOUNTED SOAP DISPENSER (SD-2)
- 30

GLASS WALL ASSEMBLY
- 31

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WOOD PLANK RECEPTION DESK W/ QUARTZ COUNTERTOP
- 33

ADJUSTABLE STAINLESS STEEL SHELVES
- 34

COPY/ PRINT MACHINE, OFCI
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WALL MOUNTED MONITOR, OFCI. COORD. W/ ELEC.
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CHEMICAL RESISTANT P- LAM CASEWORK. TYP AT LAB
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FUME HOOD W/ MATCHING METAL SHROUD TO CEILING. COORD. W/ MECH.
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- 41

FLOOR MODEL INCUBATOR. COORD. W/ ELEC. AND CASEWORK
- 42

BALANCE TABLE
- 43

RANGE HOOD (EX#1) W/ REMOTE FAN AND LIGHT SWITCHES. COORD. W/ ELEC AND MECH
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VOID AREAS OF WOOD PLANK W/ GLAZING BEYOND, TYP.
- 45

ROLL CART STORAGE BELOW. CARTS 24"W X 36"D X 32"H, CFCI
- 46

DISWASHER. SEE ENLARGED PLANS FOR ADD. INFO
- 47

STANDARD UNDERCABINET REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
- 48

SURFACE MOUNTED SOAP DISPENSER (SD-1)
- 49

SURFACE MOUNTED PAPER TOWEL DISPENSER (PTD)
- 50

GLASSWARE WASHER
- 51

AUTOCLAVE
- 52

LAB UNDERCOUNTER REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO
- 54

LAB FREEZER. SEE ENLARGED PLANS FOR ADD. INFO
- 55

LAB REFRIGERATOR. SEE ENLARGED PLANS FOR ADD. INFO.
- 56

FULL HEIGHT, CHEMICAL RESISTANT P-LAM GLASSWARE STORAGE
- 57

UNDERCOUNTER PASS THROUGH, COORD. W/ CASEWORK ON OPPOSING SIDE
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FAN COIL AND METAL SHROUD BEYOND, COORD. W/ CASEWORK AND COUNTERTOP
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CHANGING STATION (DCS), MOUNT 34" TO TOP OF UNFOLDED TABLE
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GLASSBOARD MARKER TRAY
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TRASH/ RECYCLING
- 63

STANDARD P-LAM CASEWORK
- 64

WIREMOLD, TYP. COORD. W/ ELEC
- 65

DRAIN RACK
- 66

GAS CANISTER STORAGE, TYP. PROVIDE CHAIN RESTRAINTS AND DOOR W/ MAGNETIC CATCH
- 67

AREA FOR DI WATER POLISHING UNIT, NIC

1 CONSTRUCTION NOTE

PK2-190-A-704

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
INTERIOR ELEVATIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1576 OF 1850 SHEETS

WBS B-15139

APPROVED: FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		DATE 03/30/17 RCE#			SUBMITTED BY: AMER BARHOUMI PROJECT MANAGER
DESCRIPTION	BY	APPROVED	DATE	FILMED	CHECKED BY: ANTHONY VAN PROJECT ENGINEER
					260-1709 CCS27 COORDINATE
					1900-6269 CCS83 COORDINATE

39636-1594-D

FOR
SIGNATURES
AND SEALS REFER
TO ORIGINAL
DRAWINGS DATED
MARCH 2020

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

CONSULTANT

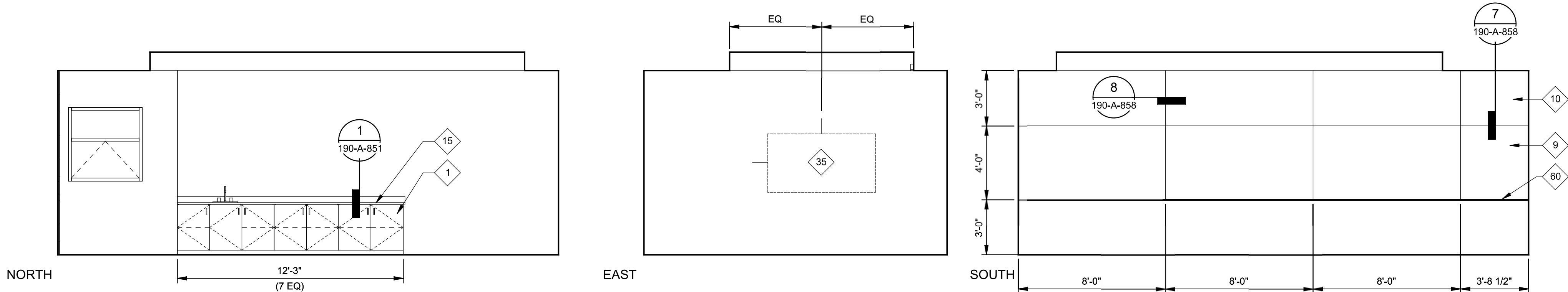
WARNING

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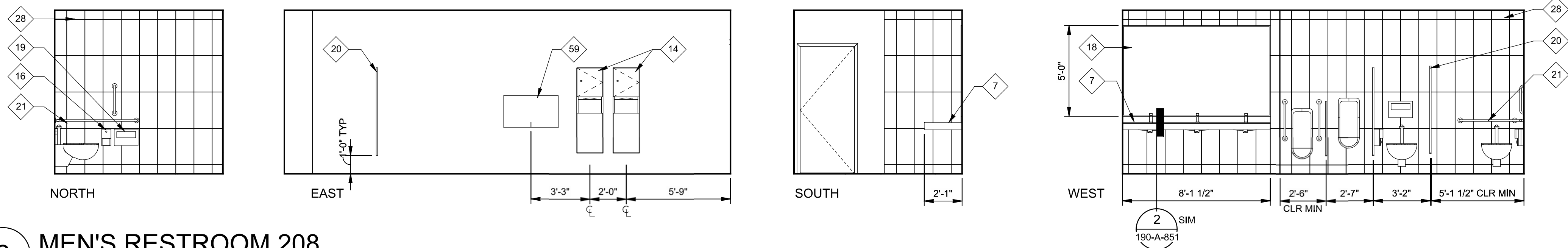
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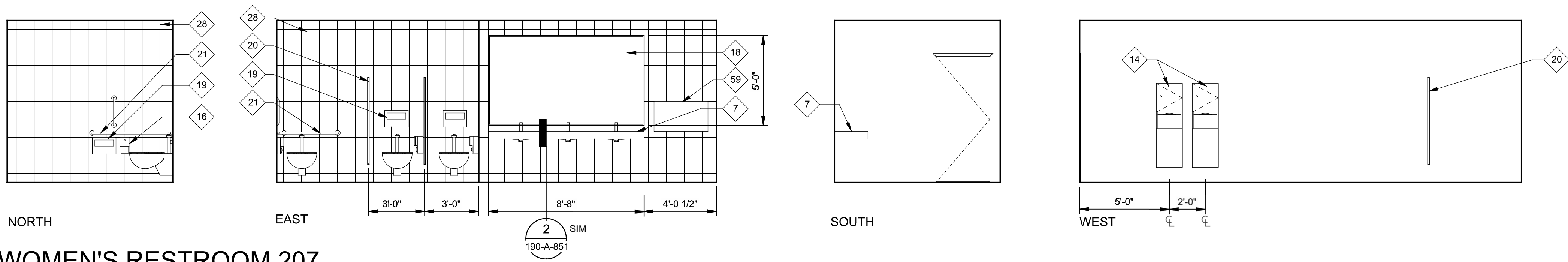
mwa architects



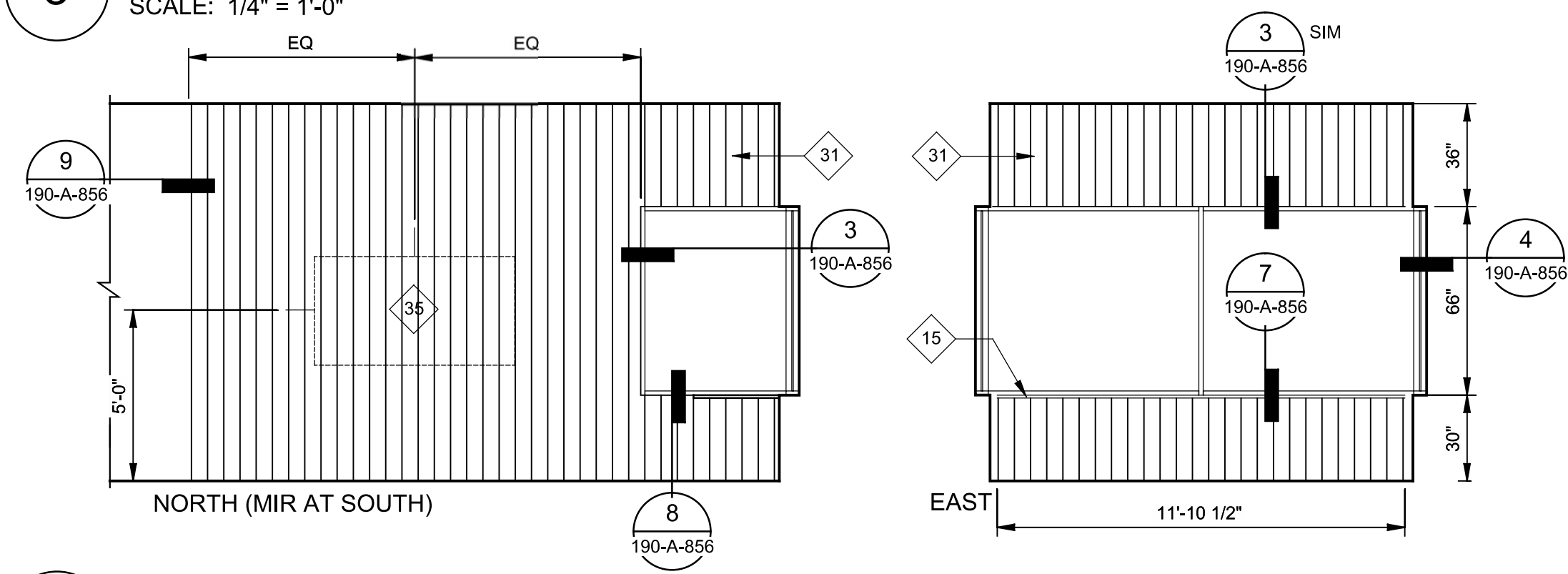
1 CONFERENCE ROOM 215
SCALE: 1/4" = 1'-0"



2 MEN'S RESTROOM 208
SCALE: 1/4" = 1'-0"



3 WOMEN'S RESTROOM 207
SCALE: 1/4" = 1'-0"



4 EXHIBITION/ LAB VIEWING
SCALE: 1/4" = 1'-0"

- SHEET GENERAL NOTES
1.

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5.

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- CONSTRUCTION NOTES
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FULL HEIGHT FREEZER. SEE ENLARGED PLANS FOR ADD. INFO
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BUILT-IN MICROWAVE, TYP OF 4. SEE ENLARGED PLANS FOR ADD. INFO
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WOOD PLANK RECEPTION DESK W/ QUARTZ COUNTERTOP
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- 34

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SURFACE MOUNTED SOAP DISPENSER (SD-1)
- 49

SURFACE MOUNTED PAPER TOWEL DISPENSER (PTD)
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GLASSWARE WASHER
- 51

AUTOCLAVE
- 52

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FULL HEIGHT, CHEMICAL RESISTANT P-LAM GLASSWARE STORAGE
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BUILT-IN ICE MAKER, SEE ENLARGED PLANS FOR ADD. INFO
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TRASH/ RECYCLING
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DRAIN RACK
- 66

GAS CANISTER STORAGE, TYP. PROVIDE CHAIN RESTRAINTS AND DOOR W/ MAGNETIC CATCH
- 67

AREA FOR DI WATER POLISHING UNIT, NIC
- LEGEND

1 CONSTRUCTION NOTE

PK2-190-A-705

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
O & M BUILDING
INTERIOR ELEVATIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1577 OF 1850 SHEETS

WBS B-15139

APPROVED: FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		DATE CS3917 RCE#			SUBMITTED BY: AMER BARHOUMI PROJECT MANAGER
DESCRIPTION	BY	APPROVED	DATE	FILMED	CHECKED BY: ANTHONY VAN PROJECT ENGINEER
					260-1709 CCS27 COORDINATE
					1900-6269 CCS83 COORDINATE

39636-1595-D

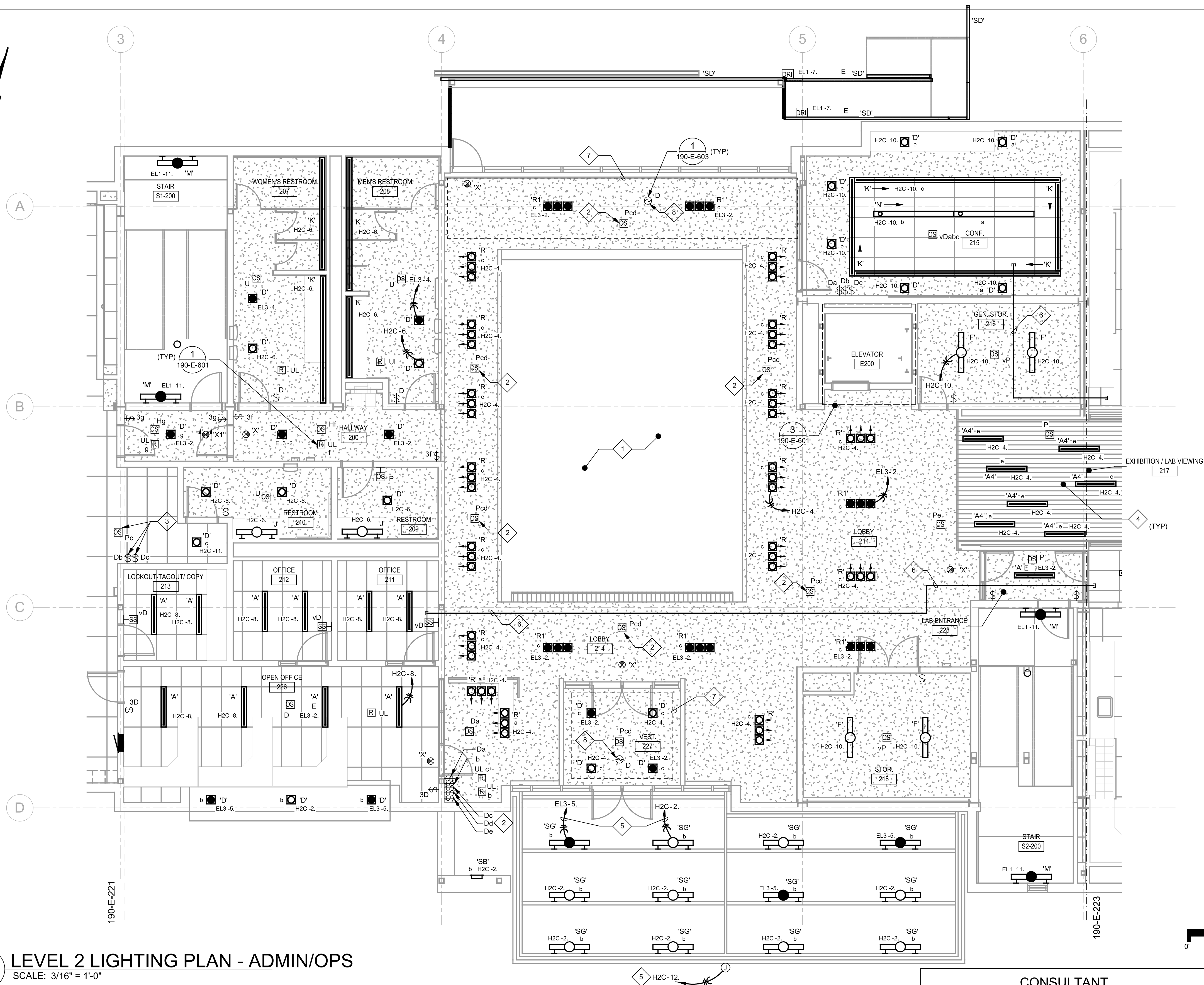
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.



mwa architects

FOR
SIGNATURES
AND SEALS REFER
TO ORIGINAL
DRAWINGS DATED
MARCH 2020



GENERAL NOTES

1. CIRCUIT ALL EXIT SIGNS TO EMERGENCY LIGHTING PANEL EL3-1.
2. COORDINATE ALL DAYLIGHT SENSOR LOCATIONS WITH MANUFACTURER'S RECOMMENDED INSTALL LOCATIONS PRIOR TO ROUGH-IN.
3. TRI-LEVEL CONTROL TASK LIGHTING TO BE OFOI IN OPEN OFFICES, PRIVATE OFFICES, AND ALL WORKSTATIONS.
4. ALL EXTERIOR MOUNTED DEVICES AND BOXES TO BE WEATHERPROOF.

CONSTRUCTION NOTES

1. OPEN TO ABOVE, REFER TO DRAWING E-232 FOR LIGHTING LAYOUT AND PHOTOSENSOR LOCATION.
2. EXTEND LIGHTING CONTROLS TO LUMINAIRES SHOWN ON 190-E-231.
3. EXTEND TO LUMINAIRES SHOWN ON 190-E-221.
4. MOUNT LUMINAIRE 'A4' IN RANDOM PATTERN. COORDINATE FINAL ORIENTATION WITH ARCHITECT.
5. ROUTE THROUGH LIGHTING CONTROL PANEL.
6. PROVIDE (2) 2" SLEEVES ABOVE HARD ID CEILINGS FOR FUTURE TECHNIQUE INSTALLATION.
7. PRIMARY DAYLIGHT HARVESTING ZONE.
8. CONTINUOUS DIMMING PHOTOCELL.

LEGEND

- Diagram illustrating the layout of a building footprint with a diamond-shaped window labeled '1' and two rectangular zones labeled 'PRIMARY DAYLIGHT ZONE' and 'SECONDARY DAYLIGHT ZONE'.

PK2-190-E-222

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ELECTRICAL
O & M BUILDING
LEVEL 2 - ADMIN/OPS LIGHTING

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1789 OF 1850 SHEETS

WBS B-15139[illegible]

-	39636-1807-I
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PK2 - CONFORMED SET

CONSULTANT



FOR
SIGNATURES
AND SEALS REFER
TO ORIGINAL
DRAWINGS DATED
MARCH 2020

CONTRACTOR	
INSPECTOR	

DATE STARTED _____
DATE COMPLETED _____

WARNING

A horizontal number line with endpoints labeled 0 and 1. There are two tick marks between 0 and 1, dividing the segment into three equal parts.

IF THIS BAR DOES
NOT MEASURE 1
THEN DRAWING IS
NOT TO SCALE.

1 LEVEL 2 LIGHTING PLAN - ADMIN/OPS

PROJECT NO. 10646A10

FILE NAME: C-190-E-222.dgn

1

LEVEL 2 POWER PLAN - ADMIN/OPS

SCALE: 3/16" = 1'-0"

GENERAL NOTES

- ACCESSIBLE CEILING SPACE IS NOT CONSIDERED OPEN TO STRUCTURE (O.T.S.) SPACES OR ABOVE HARD LID CEILINGS. DEVICE CONDUIT IN HARD LID CEILING AREAS NEED TO BE EXTENDED TO ACCESSIBLE CEILING SPACE CLOSEST TO THE NEAREST TELECOM ROOM.
- MOUNT ALL DISCONNECT SWITCHES FOR MECHANICAL AND PLUMBING EQUIPMENT AT SAME ELEVATION AS EQUIPMENT BEING SERVED. MOUNT SO THAT ALL N.E.C. REQUIRED CLEARANCES ARE MET.
- ALL EXTERIOR MOUNTED DEVICES AND BOXES TO BE WEATHERPROOF.

CONSTRUCTION NOTES

- PROVIDE SPLIT WIRED RECEPTACLES AS INDICATED IN SPACE. LOWER OUTLET TO BE CONTROLLED VIA OCCUPANCY SENSOR. PROVIDE ADDITIONAL COMPONENTS AS REQUIRED, INCLUDING POWER PACKS, FOR A FULLY OPERATIONAL SYSTEM. PER BASIS OF DESIGN MANUFACTURER, ROUTE LINE VOLTAGE TO CONTROLLED OUTLET THROUGH POWER PACK. COORDINATE EXACT WIRING REQUIREMENTS WITH FINAL MANUFACTURER. REFER TO LIGHTING CONTROL MATRIX ON DRAWING 190-E-003 AND DETAIL 1 ON DRAWING 190-E-602.
- MOUNT DEVICES IN CASEWORK. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
- NOT USED.
- PROVIDE CONNECTIONS TO MOTORIZED SHADE SYSTEM. COORDINATE WITH ARCHITECT FOR EXACT SWITCH LOCATION AND SPECIFICATION SECTION 12 24 14 - ROLLER WINDOW SHADES FOR FINAL MANUFACTURER AND EXACT MOTOR QUANTITY.
- COORDINATE CONDUIT PENETRATION WITH STRUCTURAL. PROVIDE (1) EMPTY 1" C WITH PULLSTRING IN SLAB.
- PROVIDE WIREMOLD RFB6 FLOOR BOX, OR APPROVED EQUAL. STUB CONDUIT FROM GATE CONTROLLERS UP UNDER RECEPTION DESK. COORDINATE EXACT STUB UP LOCATION WITH ARCHITECT.
- ROUTE (1) EMPTY 1-INCH CONDUIT WITH PULLSTRING FROM GATE CONTROLLER IN GUARD HOUSE TO RECEPTION DESK. PROVIDE EMPTY 1-INCH CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING SPACE.
- COORDINATE EXACT LOCATION OF OPENING FOR CONDUIT ROUTING WITH STRUCTURAL.
- PROVIDE (2) EMPTY 4-INCH CONDUIT WITH PULLSTRING TO 2ND FLOOR PLENUM SPACE.
- MOUNT CARD READER ON STOREFRONT. COORDINATE WITH ARCHITECT PRIOR TO INSTALL.
- PROVIDE CONNECTIONS FOR SOLAR PRODUCTION DISPLAY SCREEN PER SPECIFICATION SECTION 26 31 00-2.04-C-4. COORDINATE EXACT LOCATION WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- SANNET ETHERNET DEVICE.
- SANNET WIRELESS ACCESS POINT.
- PRESENTATION HUB: PROVIDE (1) EMPTY 1-1/4" C WITH PULLCORD TO ACCESSIBLE CEILING FOR AV CABLING TERMINATING IN AV BACKBOX AS SHOWN. PROVIDE (1) EMPTY 3-INCH CONDUIT TO ACCESSIBLE CEILING FOR FUTURE USE AS DETERMINED BY OWNER. TERMINATE IN JUNCTION BOX BY RECEPTACLE AND LABEL.
- PROVIDE EMPTY 1-1/4" C WITH PULLCORD BETWEEN CONFERENCE ROOM 215 PRESENTATION HUB AND AV DEVICES IN DISCOVERY CENTER.

LEGEND



CONSTRUCTION NOTE

PK2-190-E-322

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ELECTRICAL
O & M BUILDING
LEVEL 2 - ADMIN/OPS POWER

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1796 OF 1850 SHEETS

WBS B-21058

APPROVED: *Amr Barhoum*
FOR CITY ENGINEER
AMER BARHOUMI
PRINT DCE NAME

3/26/2020
DATE
C53917
RCE#

SUBMITTED BY:
ANTHONY VAN
PROJECT MANAGER
CHECKED BY:
REYNALDO NOVENCIDO
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILED
ORIGINAL	-	AMER BARHOUMI	3/26/2020	
DESIGN MOD. 26	IE	ALICE ALTES	9/12/2022	
DESIGN MOD. 31	IE	ALICE ALTES	4/4/2023	
DESIGN MOD. 34	IE	ALICE ALTES	5/22/2023	
DESIGN MOD. 38	IE	<i>Amr Barhoum</i>	11/27/2023	

260-1709
CCS27 COORDINATE
1900-6269
CCS83 COORDINATE

39636-1814-D

CONSULTANT



3/19/2020

CONTRACTOR
INSPECTOR

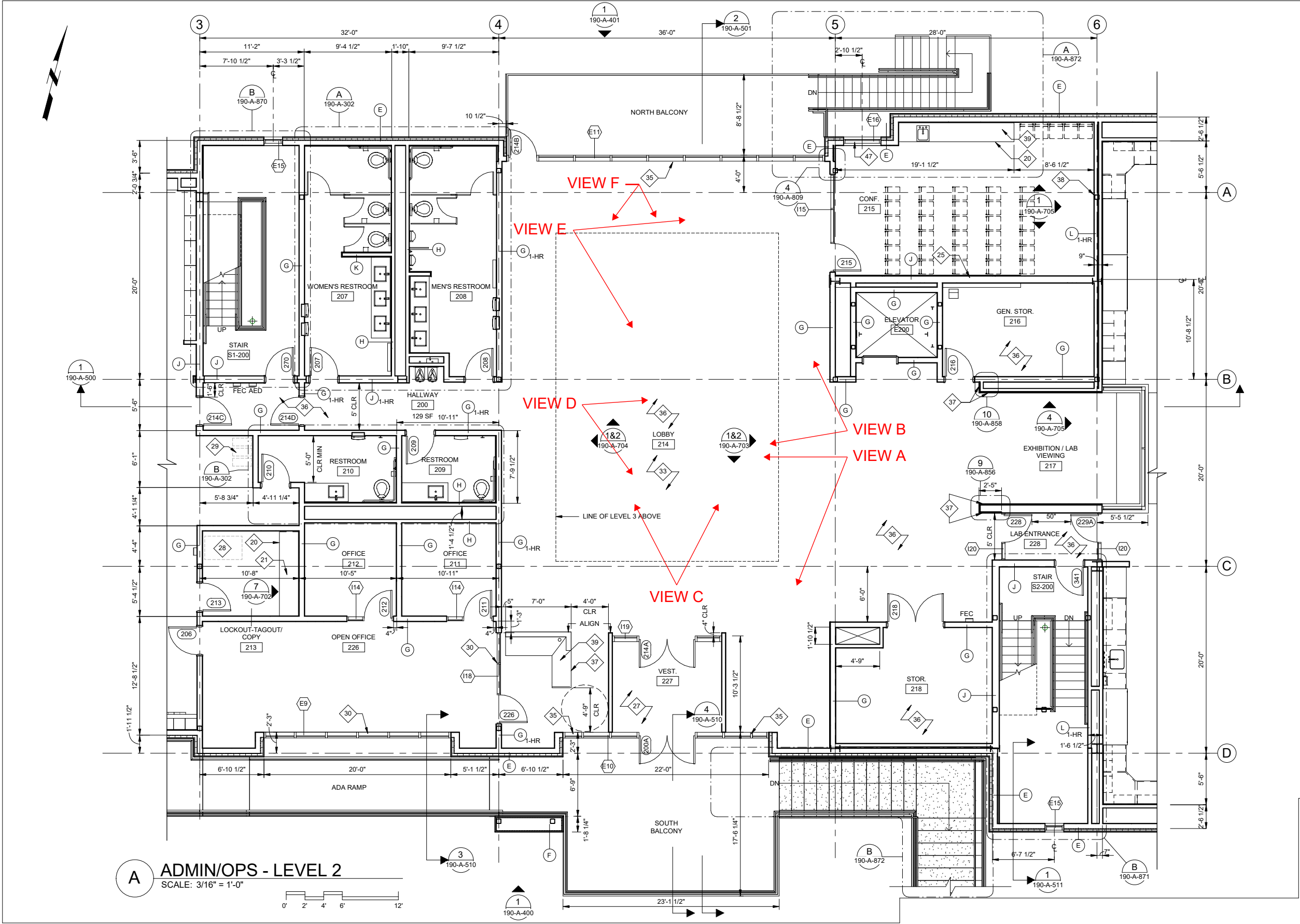
DATE STARTED
DATE COMPLETED

WARNING
0 1
IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

AREA 190 SECURITY CARD READERS
MISCELLANEOUS AREA 190 CHANGES
SANNET & DCS PORT LOCATIONS

DI SYSTEM AND RECEPTACLES, DATA, MONITORS

PK2 - ISSUED FOR CONSTRUCTION



GENERAL NOTES

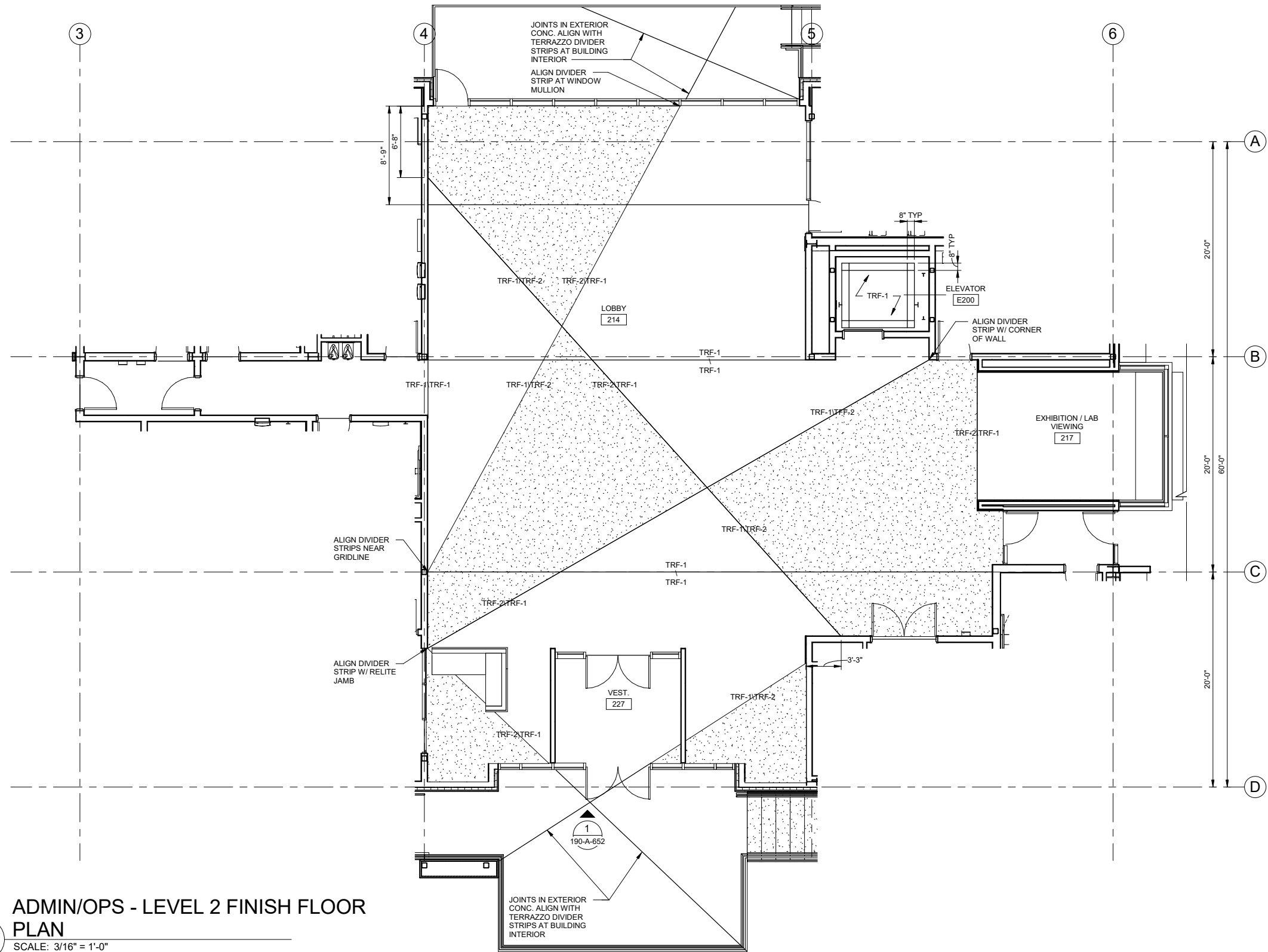
1. DIMENSIONS ARE TO FACE OF STUD, CONCRETE, AND CENTERLINE OF WALLS, COLUMNS, DOORS AND WINDOWS, UNO.
2. SEE CODE PLANS FOR LOCATIONS OF FIRE RATED WALL ASSEMBLIES.
3. THE DRAWINGS ON THIS SHEET MAY NOT USE ALL CONSTRUCTION NOTES LISTED BELOW.
4. FIRE-STOP PENETRATIONS AT ALL RATED WALL ASSEMBLIES.
5. SEE SPECIFICATIONS FOR INTERIOR SCHEDULE AND FINISH LEGEND.
6. ALL EXTERIOR OPENING DIMENSIONS ARE ROUGH OPENINGS.
7. TYPICAL INTERIOR DOOR ROUGH OPENINGS ARE 6" FROM RETURN WALL FACE OF STUD, UNO.

CONSTRUCTION NOTES

- 1 SEMI-RECESSED COMBINATION PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (CTDWR), EXTEND FROM WALL 4" MAX
- 2 TILED SHOWER W/ ROD (SCR) AND CURTAIN (SC), TYP. COORDINATE W/ PLUMBING
- 3 ACCESSIBLE TILED SHOWER W/ ROD, CURTAIN, GRAB BARS AND FOLDING SHOWER SEAT (FSS), PROVIDE BLOCKING. COORDINATE W/ PLUMBING
- 4 STAINLESS STEEL CEILING HUNG RESTROOM PARTITION, TYP
- 5 DECK MOUNTED SOAP DISPENSER (SD-2)
- 6 LOCKER ROOM BENCH, TYP
- 7 TOILET TISSUE DISPENSER (TTD), TYP
- 8 SANITARY DISPOSAL UNIT (SND), TYP
- 9 TOILET SEAT COVER DISPENSER (SCD), TYP
- 10 CLEAN LINEN STORAGE. PROVIDE DOUBLE RODS AND SHELVES
- 11 DIRTY LINEN CONCERGE UNIT, CFCI
- 12 ACCESSIBLE LOCKER BENCH W/ SUPPORTIVE BACK
- 13 LOCATION OF ACCESSIBLE LOCKER
- 14 DIRTY TOWEL STORAGE, OFOI
- 15 DISHWASHER (DW#1)
- 16 DROP-IN RANGE (RG#1), COORDINATE W/ ELEC
- 17 BUILT-IN MICROWAVE (MO#1), COORDINATE W/ ELEC
- 18 FULL HEIGHT REFRIGERATOR (REF#6)
- 19 FULL HEIGHT FREEZER (FRZ#3)
- 20 WOOD VENEER CASEWORK
- 21 SOLID SURFACE COUNTERTOP
- 22 ACCESSIBLE LOCKER BENCH
- 23 WALL HOOK (WH), TYP
- 24 HILO ACCESSIBLE DRINKING FOUNTAIN. COORDINATE W/ PLUMBING, SEE 1/190-A-850
- 25 GLASSBOARD MAGNETIC MARKERBOARD
- 26 DEPRESS SLAB IN THIS AREA 1-1/2". COORDINATE W/ STRUCTURAL
- 27 DEPRESS SLAB IN THIS AREA 3/4". COORDINATE W/ STRUCTURAL
- 28 COPY/ PRINT MACHINE. OFOI. COORDINATE W/ ELEC
- 29 DESIGNATED RECYCLING AREA. RECYCLE BINS, OFOI
- 30 PROVIDE INTERIOR RECESSED MANUAL WINDOW SHADE AT THIS WINDOW/ STOREFRONT LOCATION
- 31 STANDARD UNDERCOUNTER REFRIGERATOR (REF#7)
- 32 WOOD VENEER MAIL STATION
- 33 SEE LOBBY FINISH PLAN FOR LOCATIONS OF TERRAZZO DIVIDER STRIPS AND COLOR PATTERN
- 34 MOTORIZED PROJECTION SCREEN ABOVE, OFCI. COORDINATE W/ ELEC
- 35 PROVIDE INTERIOR RECESSED MOTORIZED WINDOW SHADE AT THIS WINDOW/ STOREFRONT SERIES. COORDINATE W/ ELEC
- 36 DEPRESS SLAB IN THIS AREA 3/8". COORDINATE W/ STRUCTURAL
- 37 WOOD PLANK WALL CLADDING
- 38 WALL MOUNTED MONITOR, COORDINATE W/ ELEC
- 39 QUARTZ COUNTERTOP
- 40 LINE OF GYPSUM CEILING CAP ABOVE, SEE RCP FOR ADDITIONAL INFORMATION
- 41 GRAB BAR (GB), TYP
- 42 DEPRESS SLAB IN THIS AREA 1". COORDINATE W/ STRUCTURAL
- 43 MOP AND BROOM HOLDER (MBH)
- 44 BUILT-IN ICE MAKER (ICE#1), COORDINATE W/ PLUMBING AND CASEWORK
- 45 WELDED LOCKER, TYP. COORDINATE W/ BUILT-UP SUPPORT BASE AND TERRAZZO COVED BASE FINISH
- 46 SLOPE TO DRAIN 1/8" PER 1'-0" FROM RADIUS AS INDICATED. TYPICAL AT ALL FLOOR DRAINS NOT LOCATED WITHIN SHOWER PANS
- 47 PROVIDE INTERIOR SURFACE MOUNTED MANUAL WINDOW SHADE WITH FASCIA AT THIS WINDOW/ STOREFRONT LOCATION
- 48 SLOPE TO DRAIN 1/4" PER 1'-0" AT ALL SHOWER PANS, TYP
- 49 BUILT-IN WOOD BENCH
- 50 PLASTIC LAMINATE CASEWORK
- 51 FURNITURE (OWNER PROVIDED/MOVABLE) NIC
- 52 WALL HUNG TOILET, TYP. 29" MAX DEPTH
- 53 CHANGING STATION

LEGEND

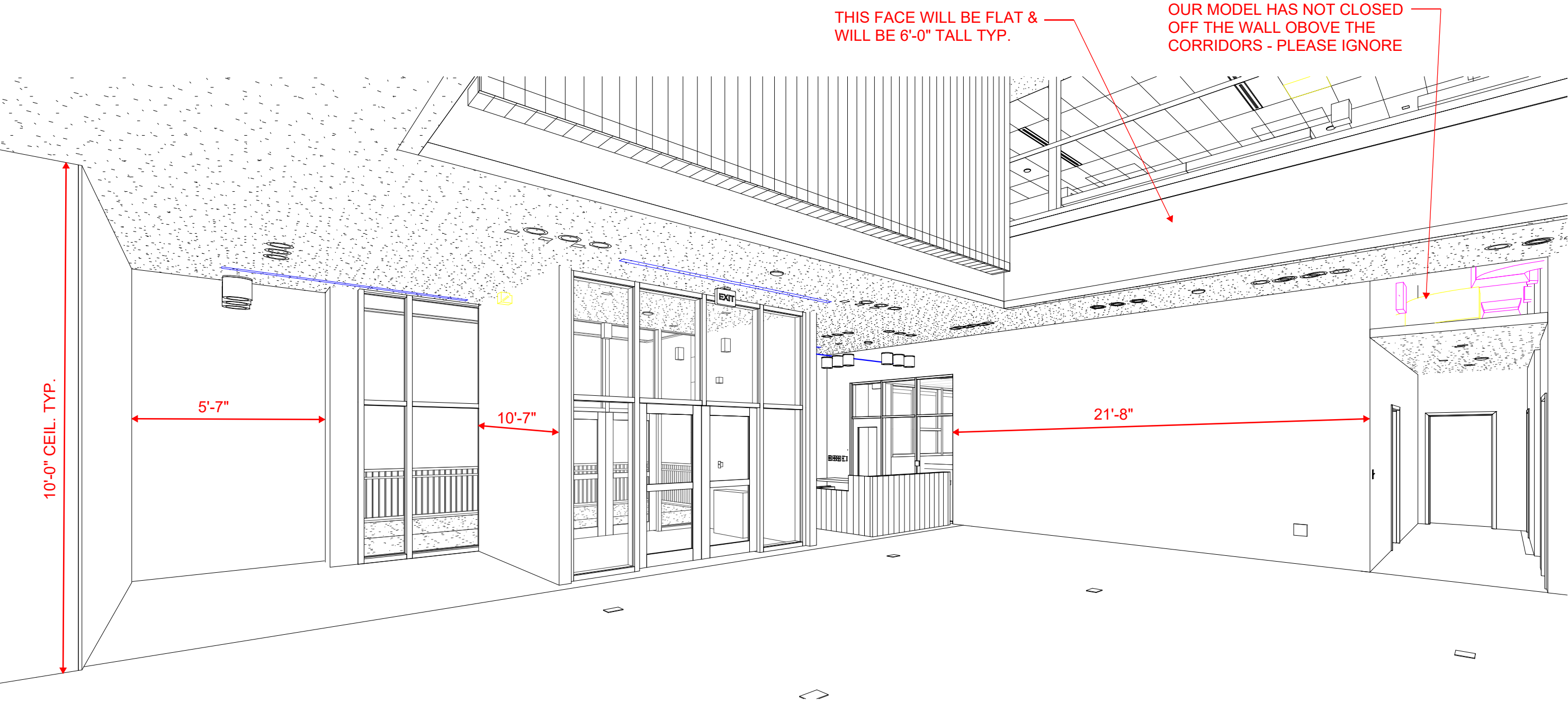
- 1 CONSTRUCTION NOTE
- A WALL TYPE
- 1 STOREFRONT TYPE
- FD FLOOR DRAIN



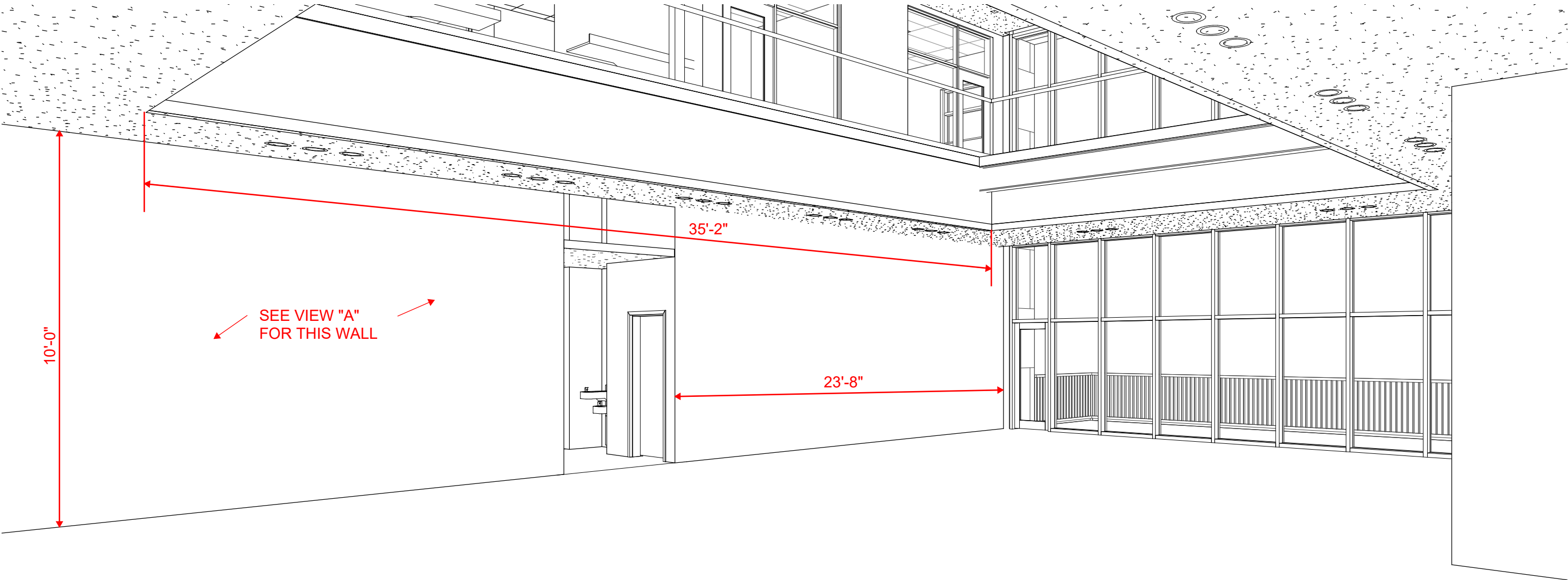
ADMIN/OPS - LEVEL 2 FINISH FLOOR
PLAN

SCALE: 3/16" = 1'-0"

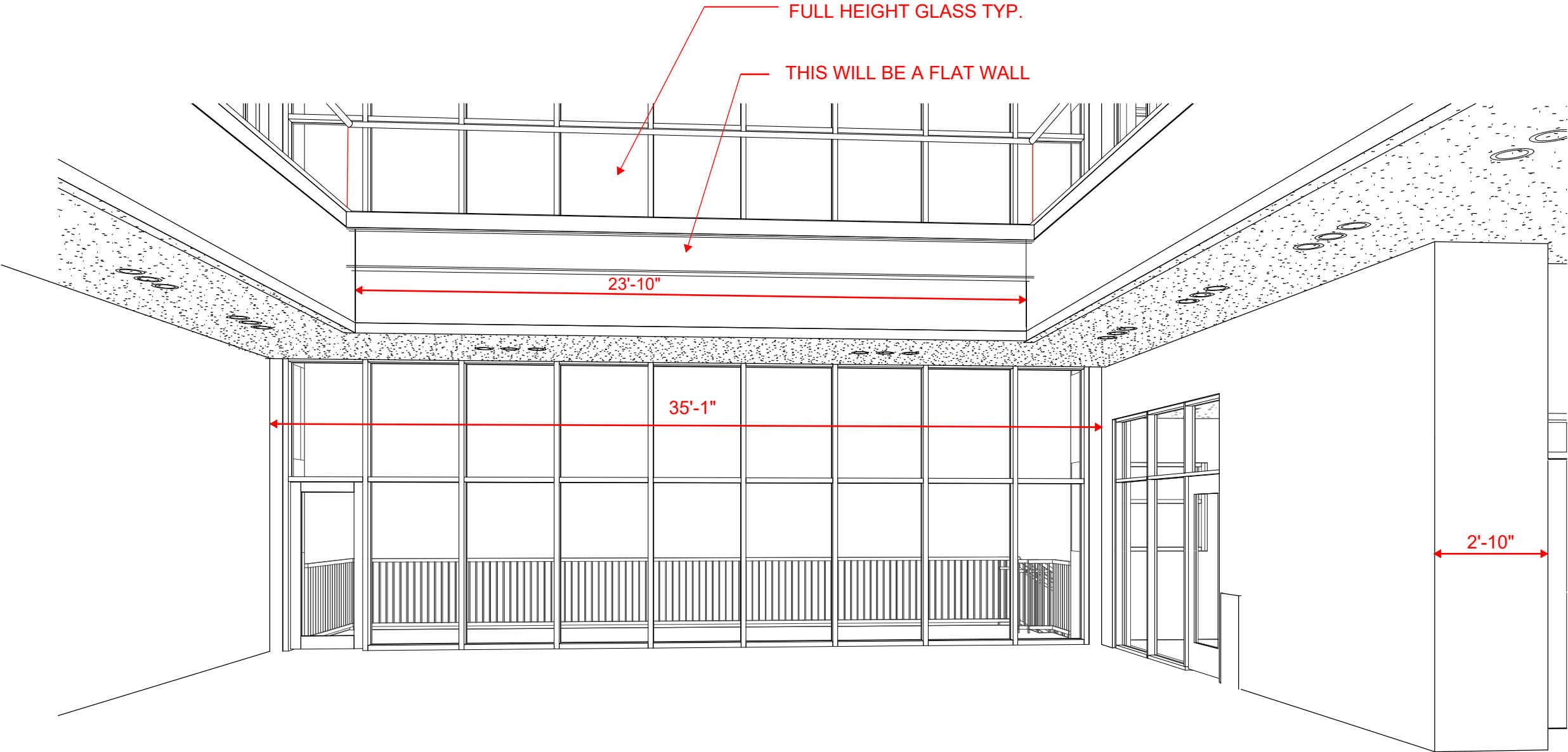
VIEW A



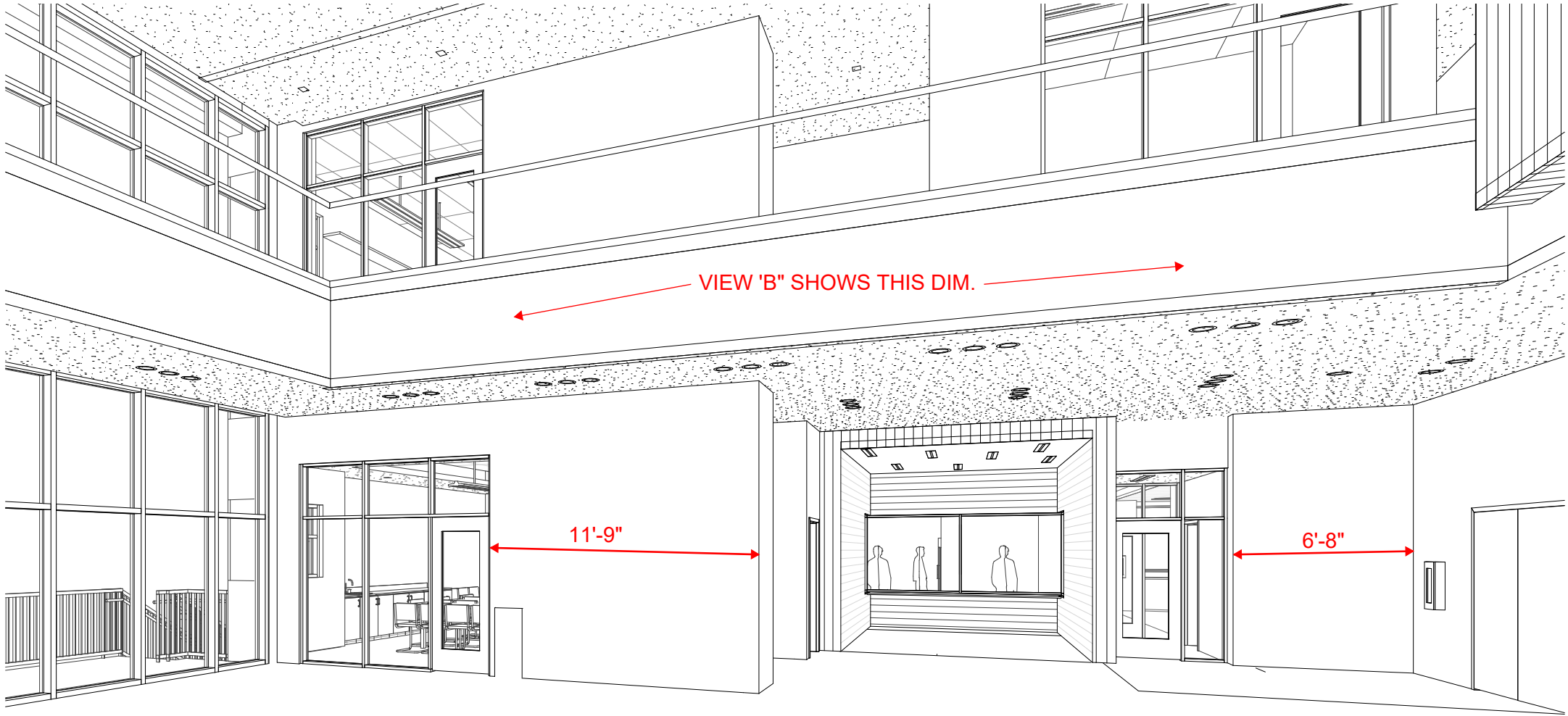
VIEW B



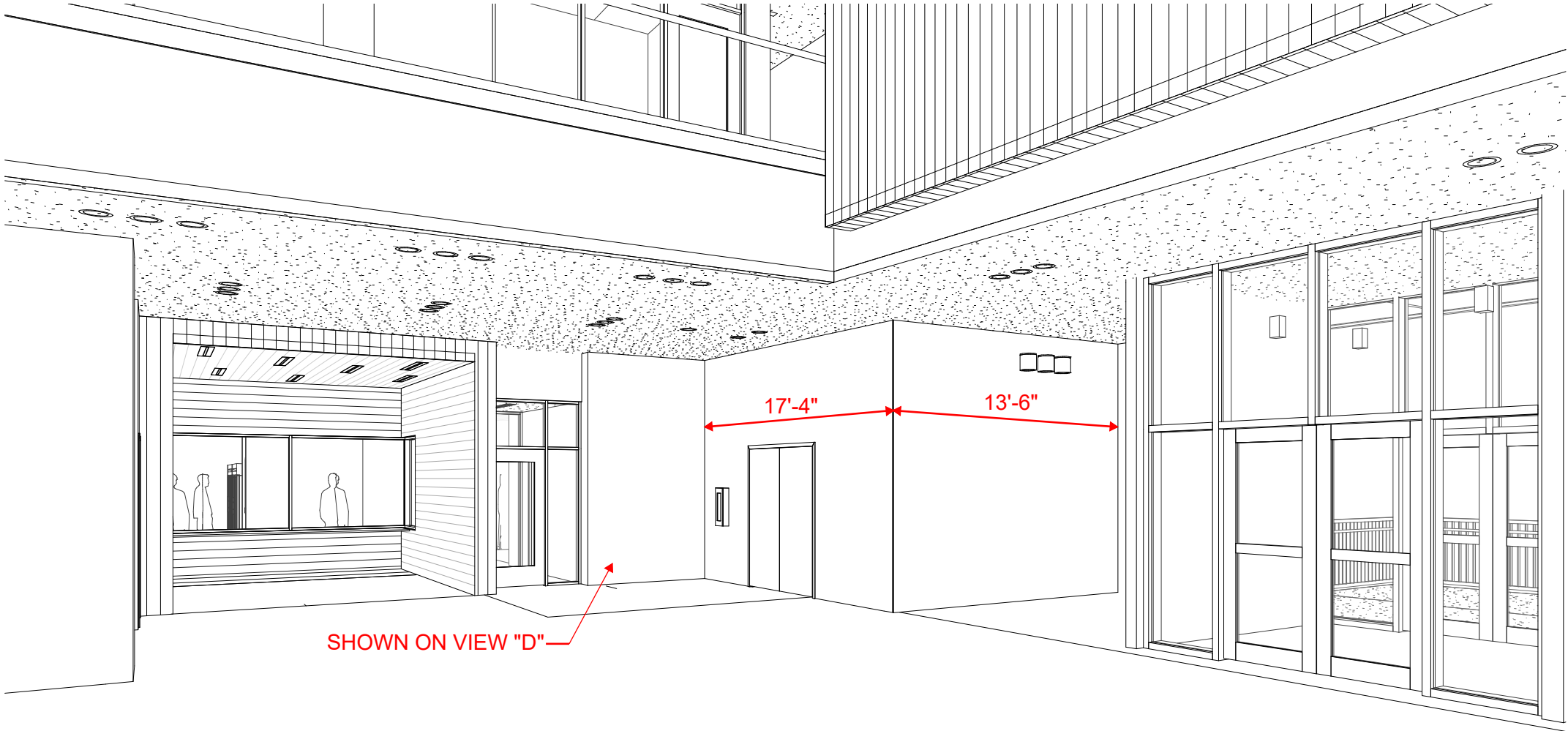
VIEW C



VIEW D

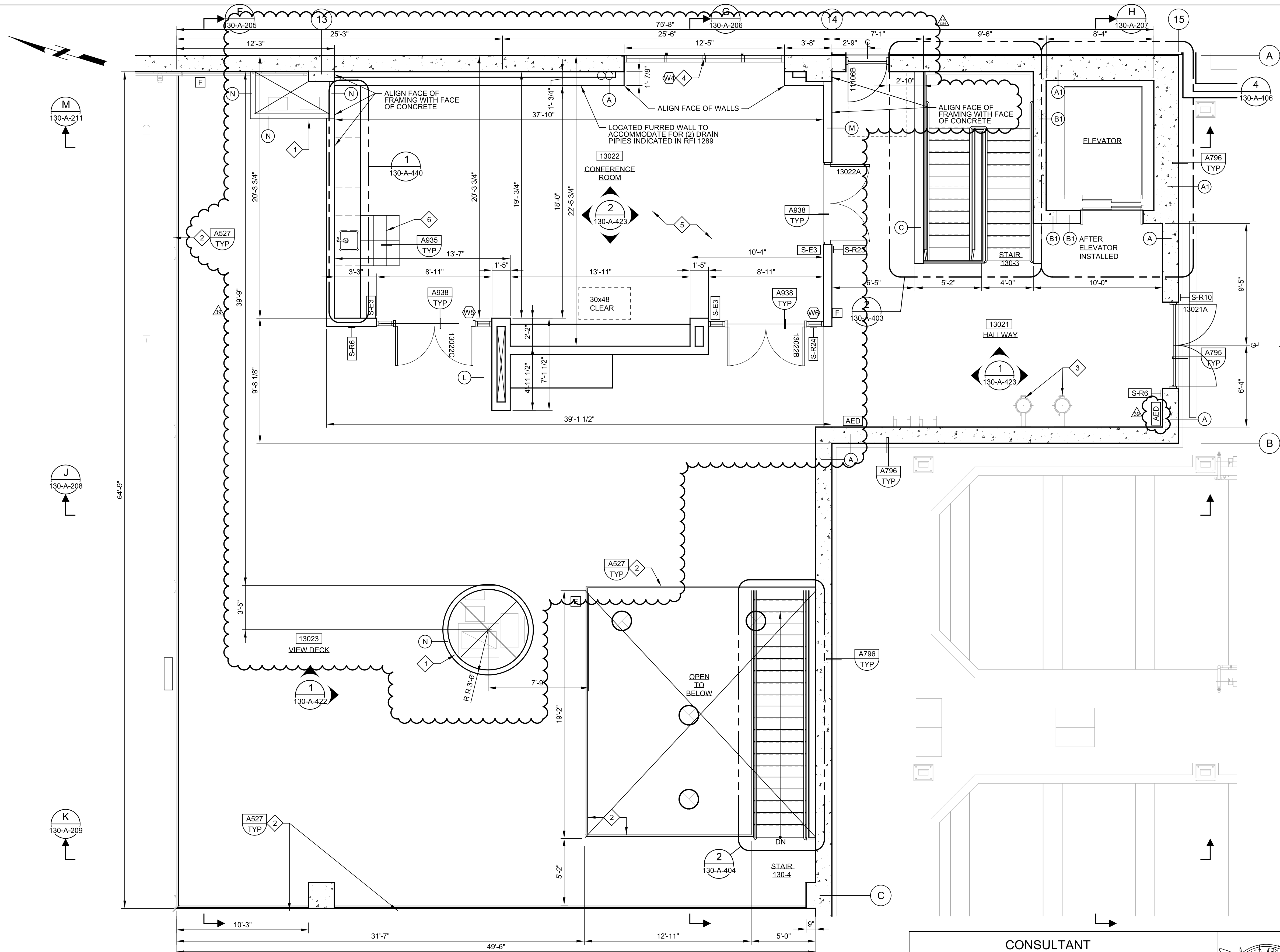


VIEW E



VIEW F





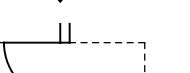
GENERAL NOTES:

1. REFER TO SHEET G-320 FOR WALL TYPES
2. REFER TO SHEET G-345 FOR RAILING TYPES
3. REFER TO SHEET G-390 FOR DOOR SCHEDULE
4. REFER TO SHEET G-391 FOR WINDOW SCHEDULE
5. REFER TO SECTION 10 14 23.16 FOR SIGNAGE SCHEDULE
6. REFER TO SECTION 09 06 00 FOR INTERIOR FINISH SCHEDULE

CONSTRUCTION NOTES:

- | | |
|---|--|
|  | 1-HR VERTICAL CHASE WALL |
|  | 2 DECORATIVE CABLE RAILING, PER SECTION 05 73 01 |
|  | 3 AIR SCOUR LINE, PER 130-M-111 |
|  | 4 STOREFRONT SYSTEM, PER PLAN, SCHEDULE AND SECTION 08 41 13 |
|  | 5 CARPET TILE, PER SCHEDULE AND SECTION 09 68 13 |
|  | 6 CERAMIC TILE, PER SCHEDULE AND SECTION 09 30 13 |

LEGEND:

- | | | | | | | | | | |
|---|---|------|------|------|------|-----|-----|-----|-----|
|  | ROOM OR AREA NUMBER | | | | | | | | |
|  | WALL TYPE, PER SHEET G-320 | | | | | | | | |
|  | WINDOW / STOREFRONT, PER SHEET G-391 | | | | | | | | |
|  | SIGN, PER SECTION
10 14 23.16 | | | | | | | | |
|  | FIRE EXTINGUISHER, PER SECTION 10 44 00 | | | | | | | | |
|  | AED, PER SECTION 10 44 00 | | | | | | | | |
|  | STAIR I.D.
(AREA#-STAIR NUMBER) | | | | | | | | |
|  | DOOR, PER SHEET G-390
LOCATION OF TAG
DEPENDENT ON SCALE | | | | | | | | |
|  | INTERIOR ELEVATION | | | | | | | | |
|  | DOOR MANEUVERING CLEARANCE
PER CBC 404.2.4, AND DETAILS | | | | | | | | |
| | <table border="1"> <tr> <td>A101</td> <td>A102</td> <td>A103</td> </tr> <tr> <td>TYP</td> <td>TYP</td> <td>TYP</td> </tr> </table> | A101 | A102 | A103 | TYP | TYP | TYP | | |
| A101 | A102 | A103 | | | | | | | |
| TYP | TYP | TYP | | | | | | | |
| | 30X48 CLEAR AREA, PER CBC 11B-404.2.4, REFER TO DETAILS | | | | | | | | |
| | <table border="1"> <tr> <td>A104</td> <td>A105</td> <td>A107</td> <td>A108</td> </tr> <tr> <td>TYP</td> <td>TYP</td> <td>TYP</td> <td>TYP</td> </tr> </table> | A104 | A105 | A107 | A108 | TYP | TYP | TYP | TYP |
| A104 | A105 | A107 | A108 | | | | | | |
| TYP | TYP | TYP | TYP | | | | | | |

KEY PLAN

PK2-130-A-122

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
PROCESS BUILDING
ENLARGED MEZZANINE PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 707 OF 1850 SHEETS

WBS B-21058

APPROVED: <i>Amer Barhoumi</i>		3/26/2020		SUBMITTED BY:	
FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		DATE: CS3917 RCE#		ANTHONY VAN PROJECT MANAGER	
				CHECKED BY: REYNALDO NOVENCIO PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE	FILMED	
ORIGINAL		AMER BARHOUMI	3/26/2020		
 DESIGN MOD. 39	MOA		12/5/2023		260-1709 CCS27 COORDINATOR
					1900-5269 CCS83 COORDINATOR
		DATE STARTED			
		DATE COMPLETED			
				3963-725-	

PK2 - ISSUED FOR CONSTRUCTION

CONSULTANT

MANUEL ONCINA
ARCHITECTS INC.
ARCHITECTURE
P L A N N I N G
I N T E R I O R S
5711 La Jolla Blvd
La Jolla, CA 92037
tel 858/ 459.1221
fax 858/ 459.1214
www.oncinaarc.com

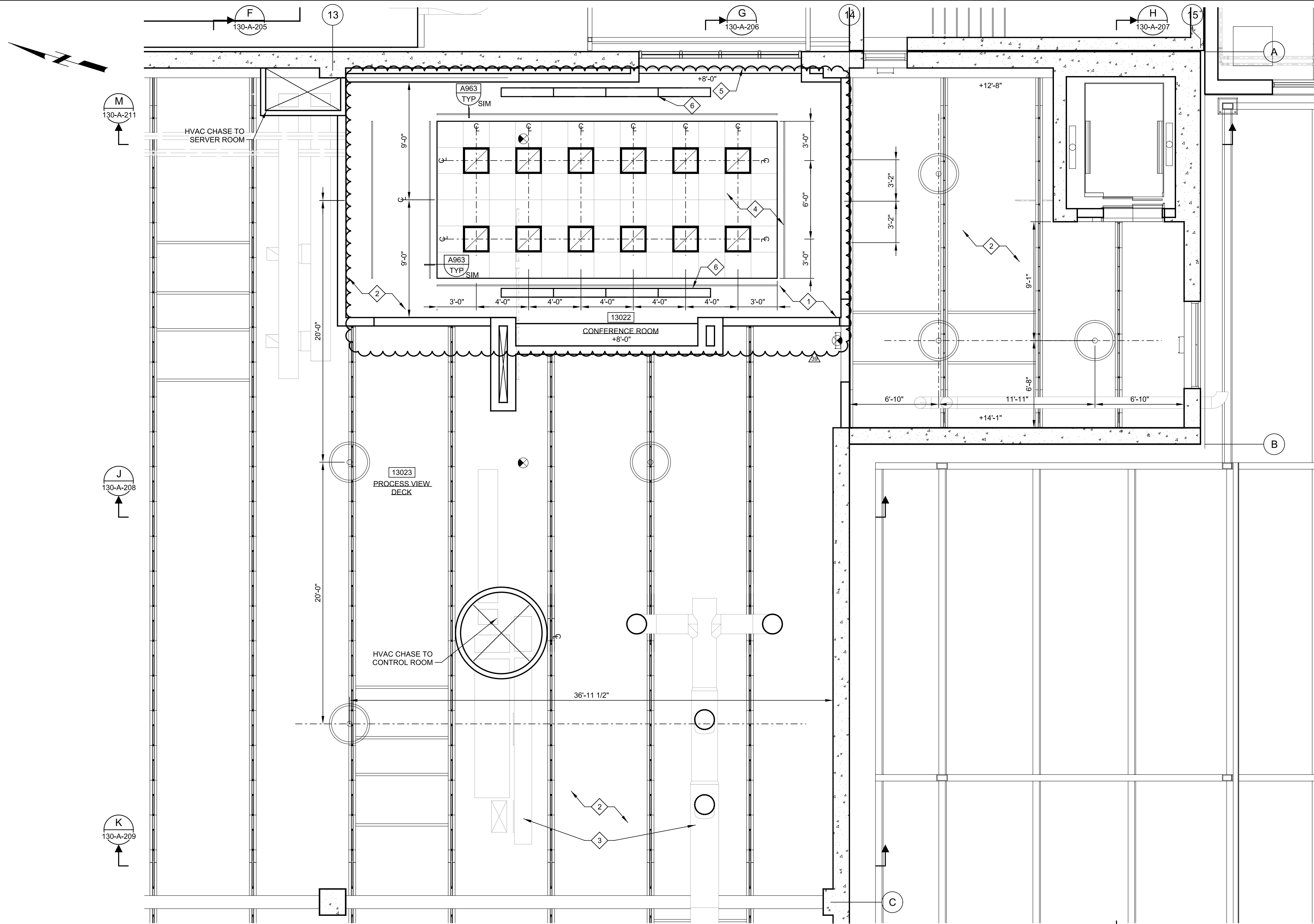
MOA

CONFERENCE ROOM ROTATION, RFI 1289

WARNING



IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.



GENERAL NOTES:

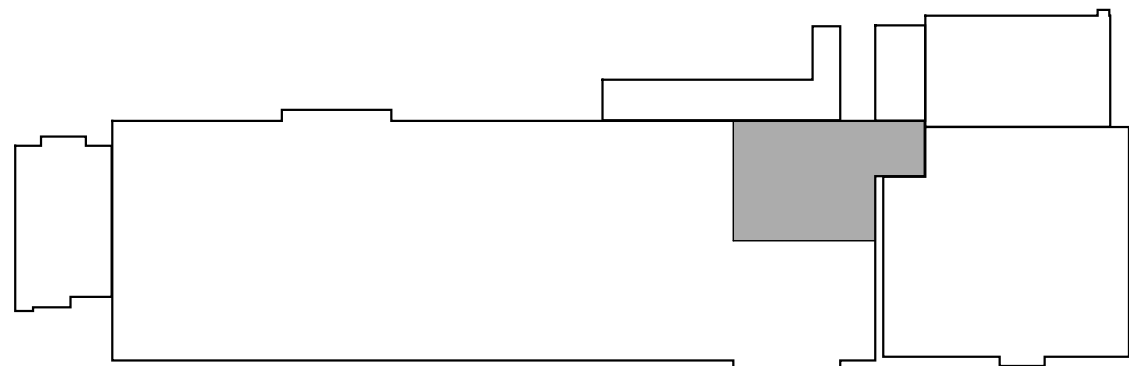
- REFER TO SHEET G-320 FOR WALL TYPES
- REFER TO SHEET G-345 FOR RAILING TYPES
- REFER TO SHEET G-390 FOR DOOR SCHEDULE
- REFER TO SHEET G-391 FOR WINDOW SCHEDULE
- REFER TO SECTION 10 14 32.16 FOR SIGNAGE SCHEDULE
- REFER TO SECTION 09 06 00 FOR INTERIOR FINISH SCHEDULE

CONSTRUCTION NOTES:

- GYPBOARD SOFFIT
- EXPOSED TO STRUCTURE
- EXHAUST DUCT, PER 130-H-111
- SUSPENDED ACOUSTICAL PANELS, PER SECTION 09 51 13
- POWER OPERATED ROLLER WINDOW SHADES, PER SECTION 12 24 13
- LINEAR VENT, PER 130-H-121

LEGEND:

- 4' LENSED LED STRIP LIGHT
- 4' LENSED LED STRIP LIGHT
- LED EXIT SIGN
- RECESSED TROFFER LIGHT FIXTURE
- CAN LIGHT FIXTURE



KEY PLAN

PK2-130-A-162

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
PROCESS BUILDING
ENLARGED REFLECTED CEILING PLAN

CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 713 OF 1850 SHEETS				WBS B-21058
APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		3/26/2020 DATE C33917 RCE#		SUBMITTED BY: ANTHONY VAN PROJECT MANAGER
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	MOA	AMER BARHOUMI	3/26/2020	
DESIGN MOD. 39		<i>Amer Barhoumi</i>	12/5/2023	
CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER				260-1709 CCS27 COORDINATE
				1900-6269 CCS83 COORDINATE
DATE STARTED DATE COMPLETED				39636-731-D

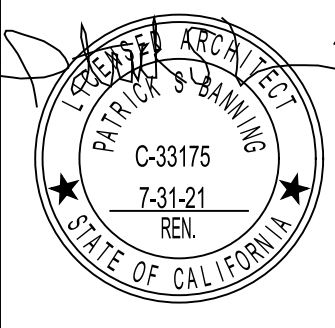
CONSULTANT

MANUEL ONCINA
ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
5711 La Jolla Blvd
La Jolla, CA 92037
tel 858/459.1221
fax 858/459.1214
www.oncinaarc.com

WARNING
0 1
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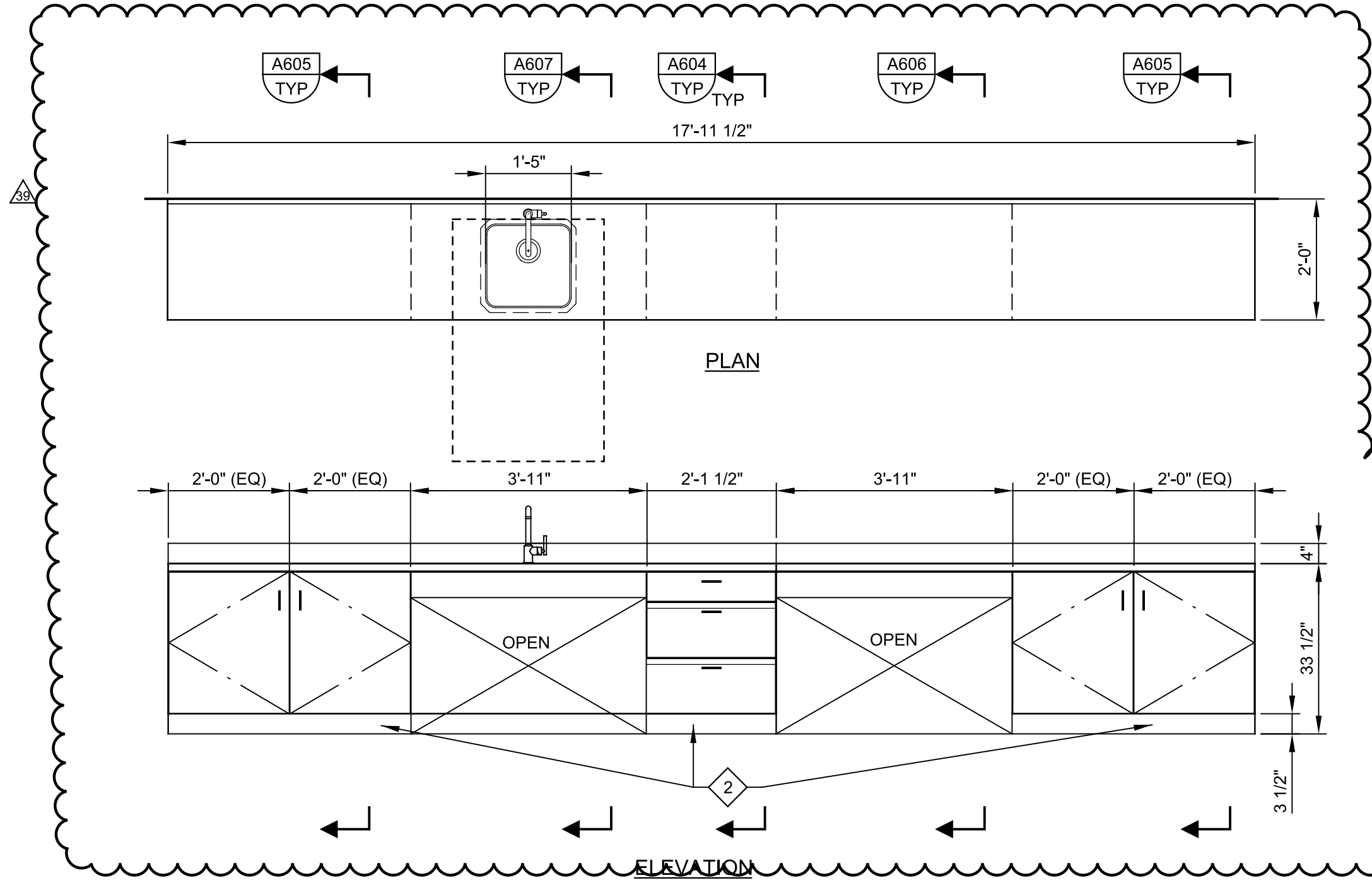
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CONFERENCE ROOM ROTATION

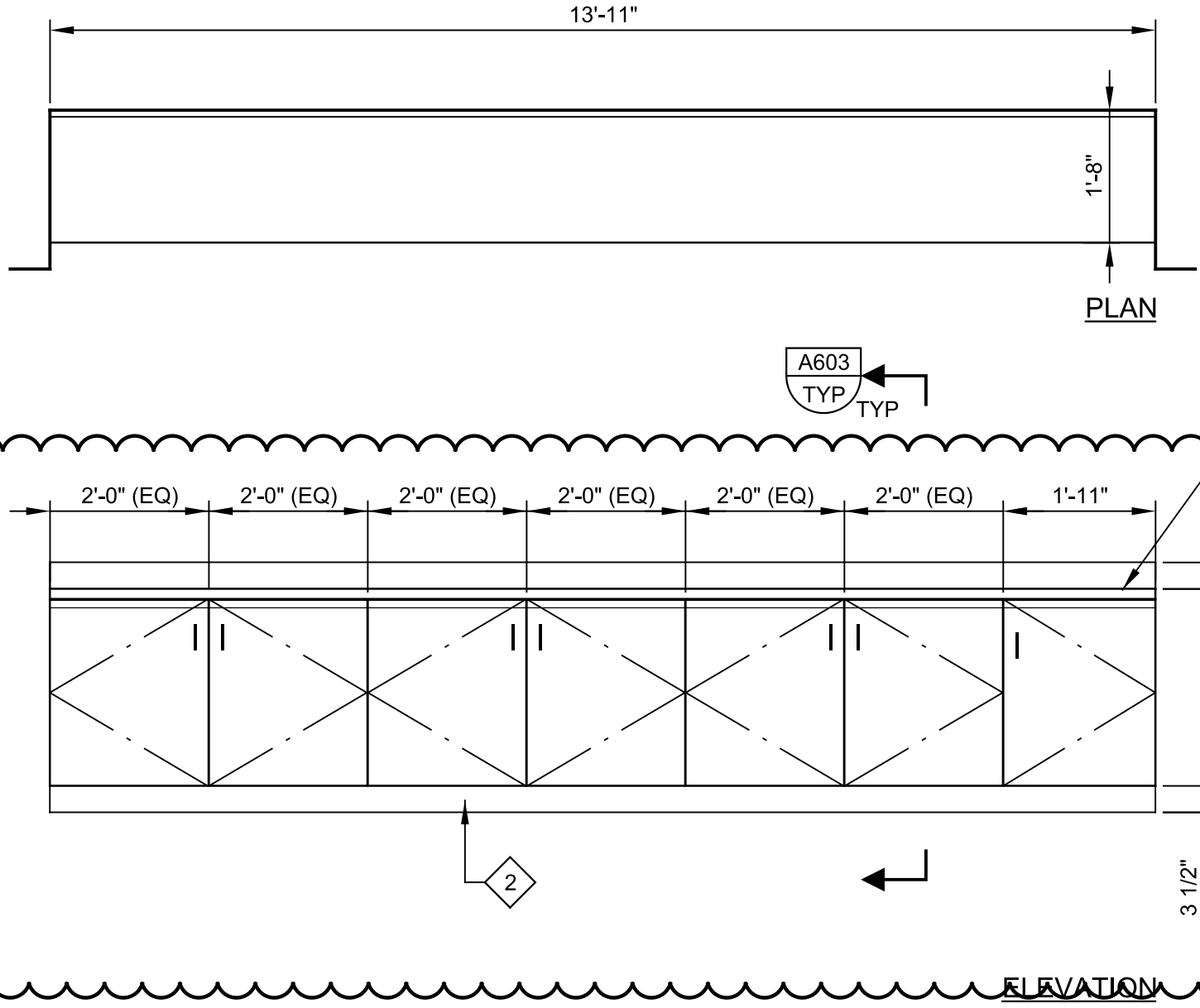


CONTRACTOR
INSPECTOR

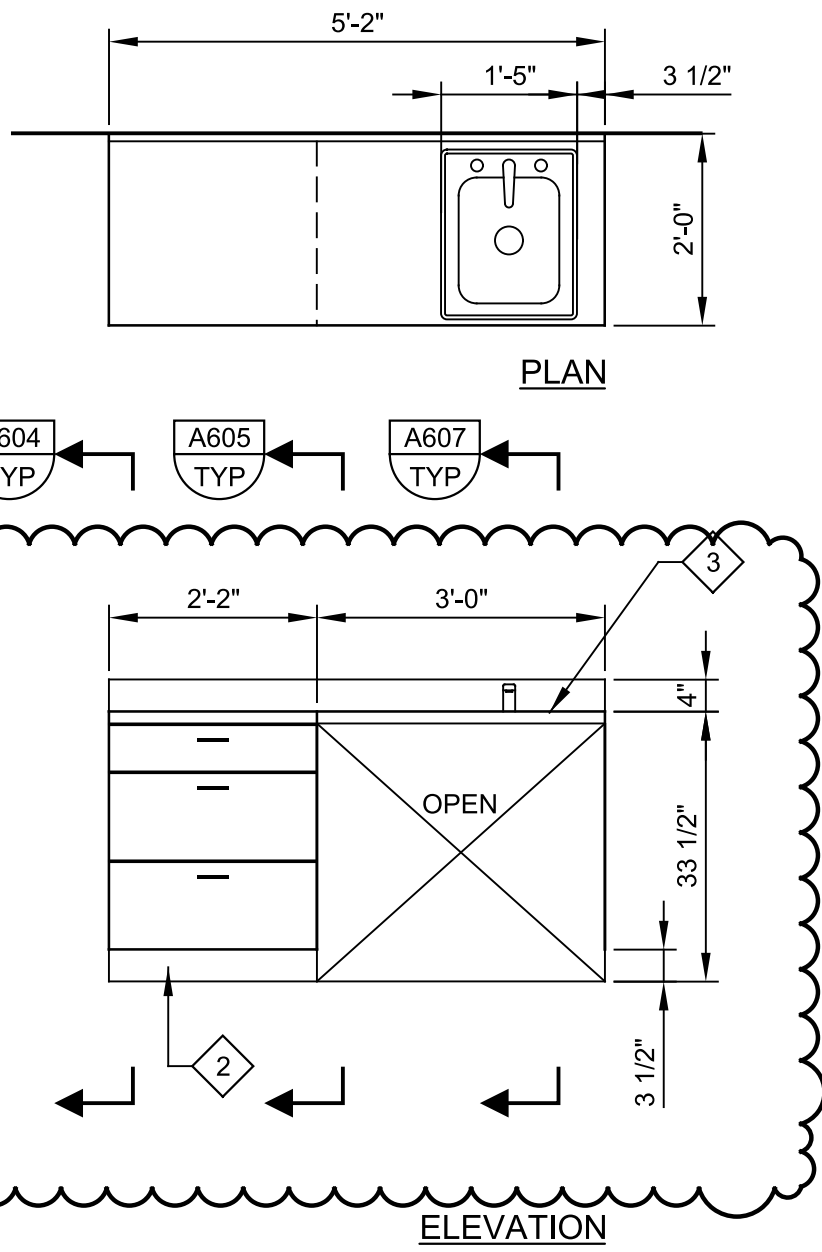
PK2 - ISSUED FOR CONSTRUCTION



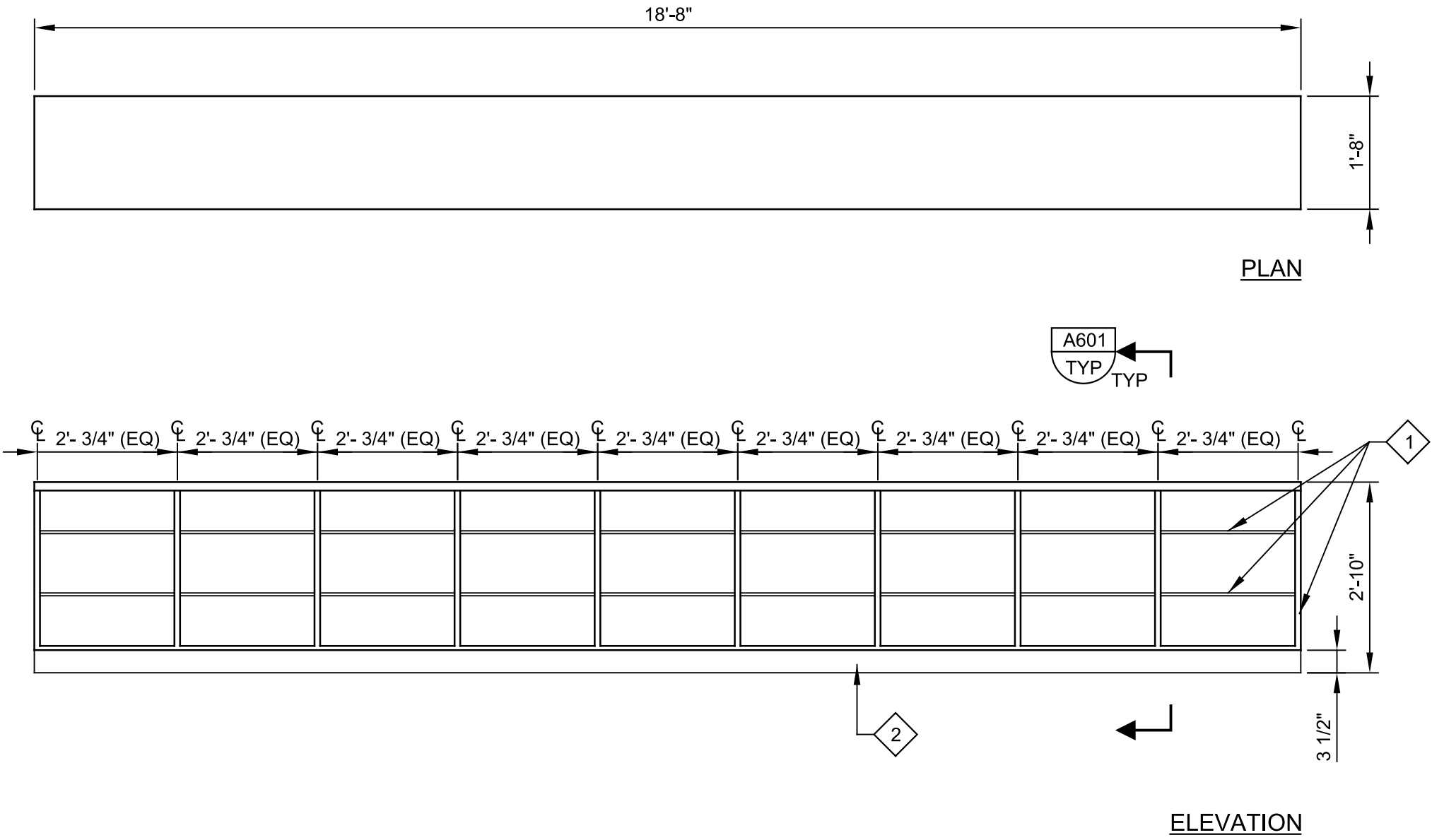
1 CONFERENCE ROOM CABINETRY WITH SINK
SCALE: SCALE: 1/2"=1'-0"
FILE: 130-A-440



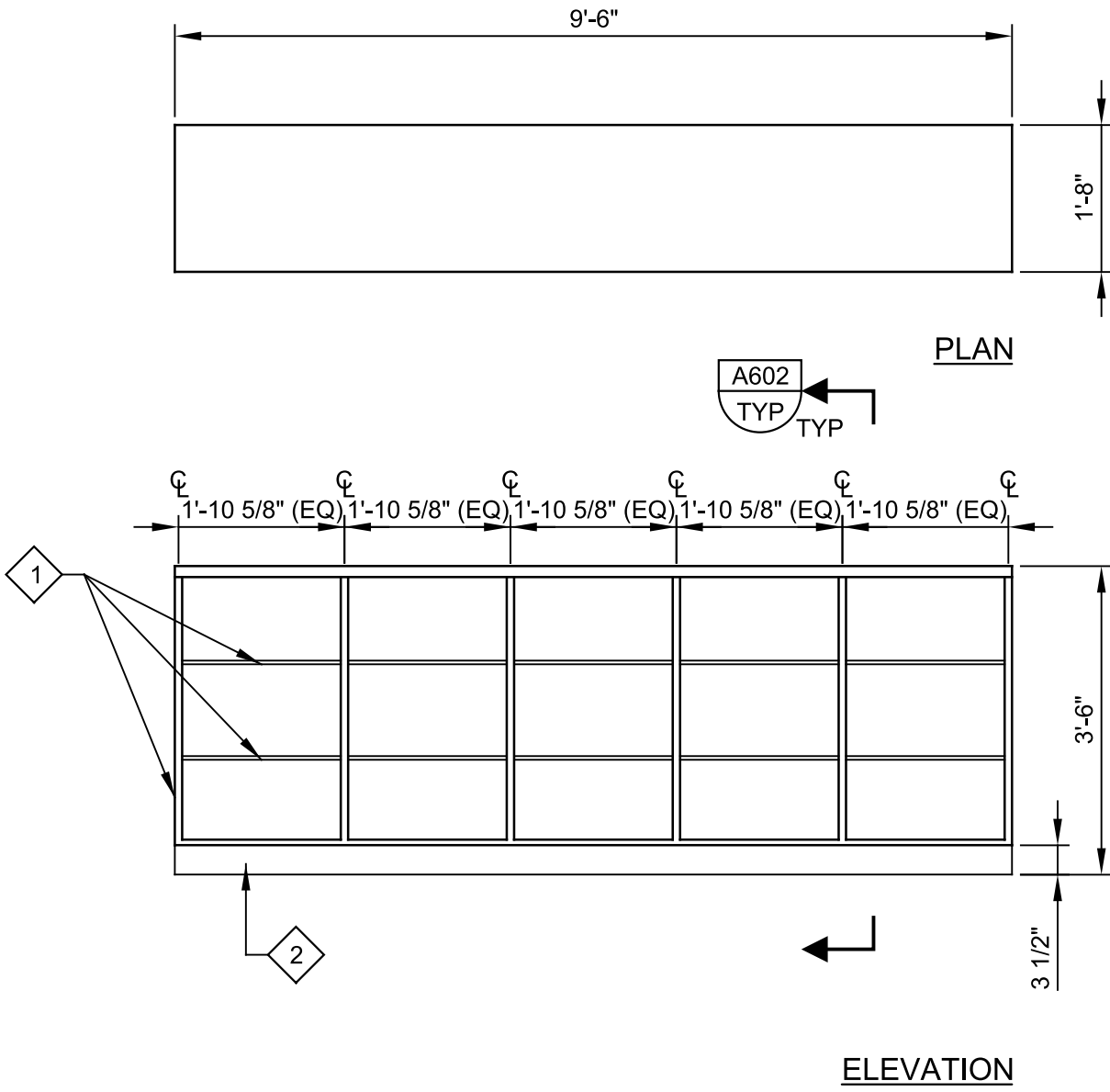
3 CONFERENCE ROOM CABINETRY
SCALE: SCALE: 1/2"=1'-0"
FILE: 130-A-440



5 UV AREA CABINETRY
SCALE: SCALE: 1/2"=1'-0"
FILE: 130-A-440



2 CONTROL ROOM CABINETRY
SCALE: SCALE: 1/2"=1'-0"
FILE: 130-A-440



5 CONTROL ROOM CABINETRY
SCALE: SCALE: 1/2"=1'-0"
FILE: 130-A-440

- GENERAL NOTES:**
- REFER TO SECTION 06 41 13 FOR CABINETRY REQUIREMENTS.
 - REFER TO SECTION 12 36 61.16 FOR COUNTERTOP REQUIREMENTS.

- CONSTRUCTION NOTES:**
- PLASTIC LAMINATE EDGE BANDING, TYP
 - BASE MATERIAL, TYP
 - SOLID SURFACE COUNTERTOP, PER SCHEDULE AND SECTION 12 36 61.16
 - PULL HARDWARE, HAFELE 126.36.900 OR EQUAL

PK2-130-A-440

WARNING

0 1

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CONSULTANT

MANUEL ONCINA ARCHITECTS INC.

ARCHITECTURE PLANNING INTERIORS

5711 La Jolla Blvd
La Jolla, CA 92037
tel 858/459.1221
fax 858/459.1214
www.oncinaarc.com

3/19/2020

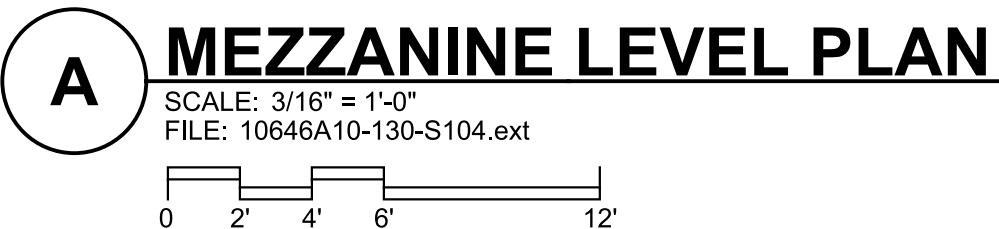
CONTRACTOR

INSPECTOR

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY			
ARCHITECTURAL PROCESS BUILDING CABINETRY			
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 750 OF 1850 SHEETS		WBS B-21058	
APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		3/26/2020 DATE CS3917 RCE#	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL	MOA	AMER BARHOUMI	3/26/2020
DESIGN MOD. 39	MOA	<i>Patricia S. Barhoumi</i>	12/5/2023
SUBMITTED BY: ANTHONY VAN PROJECT MANAGER		CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER	
260-1709 CCS27 COORDINATE		1900-6269 CCS83 COORDINATE	
39636-768-D		DATE COMPLETED	

PK2 - ISSUED FOR CONSTRUCTION

NORTH CITY PURE WATER FACILITY



THE STAIRS, INCLUDING STRUCTURAL FRAMING, HANDRAILS, GUARDRAILS, RISERS AND TREADS, SHALL BE DESIGNED BY CONTRACTOR.

B27 INDICATES CONCRETE BEAM, SEE SCHEDULE 

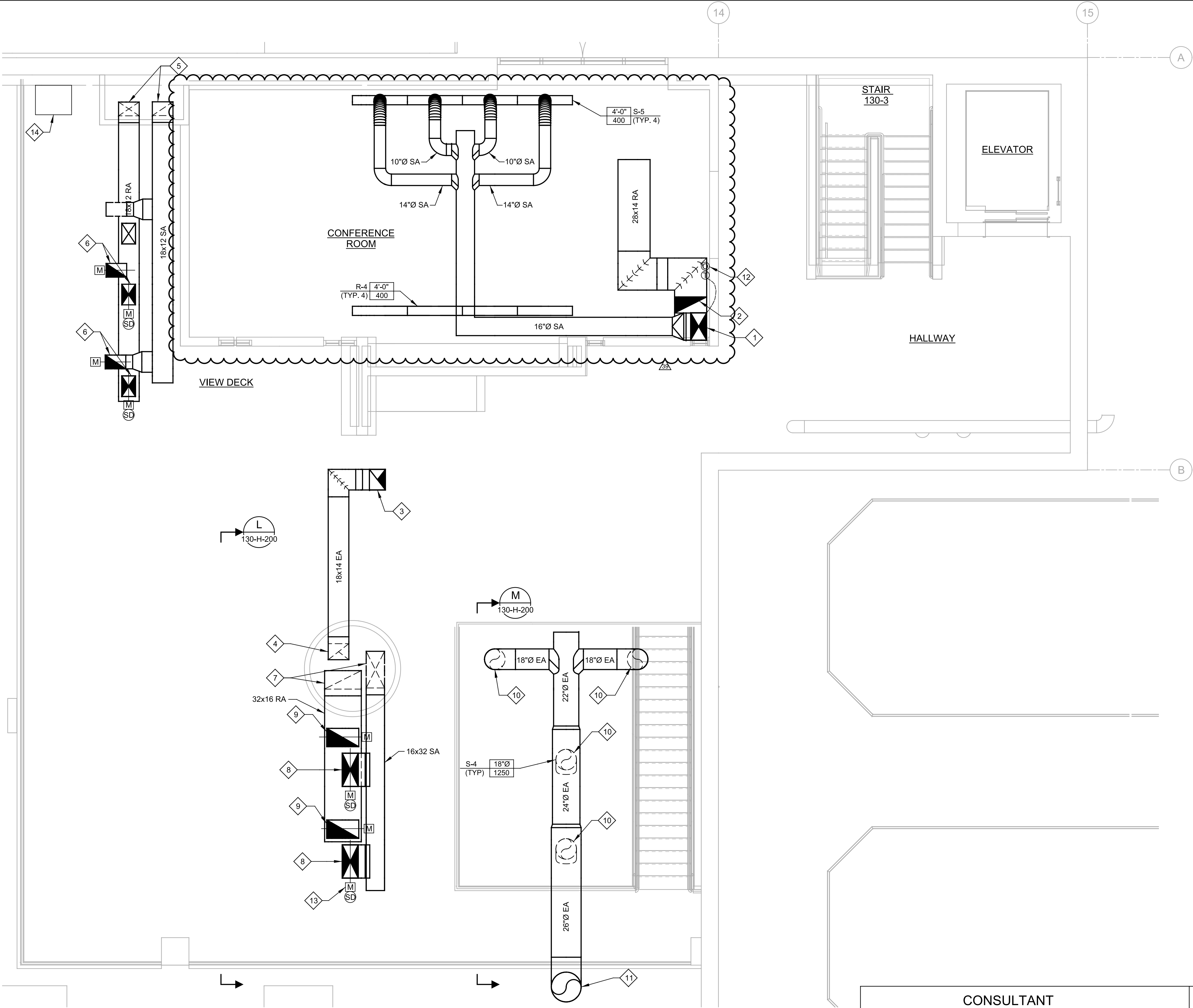
CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY					
STRUCTURAL PROCESS BUILDING MEZZANINE LEVEL PLAN					
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT					WBS <u>B-21058</u>
SHEET 764 OF 1850 SHEETS					
APPROVED: <u>Amr Barhoumi</u> 3/26/2020 FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME DATE CS3917 RCE#					
SUBMITTED BY: <u>ANTHONY VAN</u> <u>PROJECT MANAGER</u>					
CHECKED BY: <u>REYNALDO NOVENICHO</u> <u>PROJECT ENGINEER</u>					
DESCRIPTION	BY	APPROVED	DATE	FILMED	
ORIGINAL	AMER BARHOUMI	3/26/2020			
33 DESIGN MOD. 39	B&P	<u>Amr Barhoumi</u>	12/5/2023		
					260-1709 CCS27 COORDINATE
					1900-6289 CCS83 COORDINATE
DATE STARTED _____					39636-782-D
DATE COMPLETED _____					

NORTH CITY PURE WATER FACILITY

PROJECT NO. 10646A10 FILE NAME: -- DM 39-10646A10 130-S-121.dgn

39 CONFERENCE ROOM ROTATION

PK2 - ISSUED FOR CONSTRUCTION



- CONSTRUCTION NOTES:
- 1 24x14 SUPPLY AIR DUCT UP TO 130-HP-8001. TRANSITION AS REQUIRED.
 - 2 28x14 RETURN AIR DUCT UP TO 130-HP-8001. TRANSITION AS REQUIRED.
 - 3 18x14 EXHAUST AIR DUCT UP THRU ROOF TO 130-EF-8001.
 - 4 18x14 EXHAUST AIR DUCT DOWN TO GROUND LEVEL.
 - 5 18x12 SUPPLY AND RETURN AIR DUCT DOWN TO GROUND LEVEL.
 - 6 18x12 SUPPLY AND RETURN AIR DUCT UP TO 130-AC-8001 & 8002 ON ROOF. TRANSITION AS REQUIRED.
 - 7 32x16 SUPPLY AND RETURN AIR DUCT DOWN TO GROUND LEVEL.
 - 8 29x14 SUPPLY DUCT UP THRU ROOF TO 130-AC-8003 & 8004. TRANSITION AS REQUIRED.
 - 9 28x16 RETURN DUCT UP THRU ROOF TO 130-AC-8003 & 8004. TRANSITION AS REQUIRED.
 - 10 18"Ø DOWN TO EXHAUST AIR GRILLE @ 12'-0" A.F.F.
 - 11 26x26 EXHAUST AIR DUCT UP TO 130-EF-8002 ON ROOF. TRANSITION TO 28"Ø.
 - 12 OCCUPANCY SENSOR FOR DEMAND CONTROL VENTILATION (DCV) CONTROL PER CA TITLE 24 CONFERENCE ROOM REQUIREMENTS.
 - 13 120V MOTORIZED DAMPER (TYP.)
 - 14 LOCATION OF DDC SYSTEM OPERATOR WORK STATION.

H MEZZANINE LEVEL PLAN
SCALE: 1/4" = 1'-0"
FILE: 10646A10-130-H-121

WARNING

0 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CONSULTANT

TURPIN & RATTAN

ENGINEERING, Inc.
Consulting Engineers
5888 W. SUNSET ROAD, SUITE 201
LAS VEGAS, NEVADA 89118
702 / 834 / 3880

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
RADE KEOMAN
M27360
Exp. 6/30/19
MECHANICAL
3/19/2020

CONTRACTOR
INSPECTOR

DATE STARTED
DATE COMPLETED

CONFERENCE ROOM ROTATION

PK2-130-H-121

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

HVAC
PROCESS BUILDING
OVERALL MEZZANINE LEVEL PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 881 OF 1850 SHEETS

APPROVED: *Amer Barhoumi*
FOR CITY ENGINEER
AMER BARHOUMI
PRINT DCE NAME

3/26/2020
DATE
CS3917
RCE#

SUBMITTED BY:
ANTHONY VAN
PROJECT MANAGER

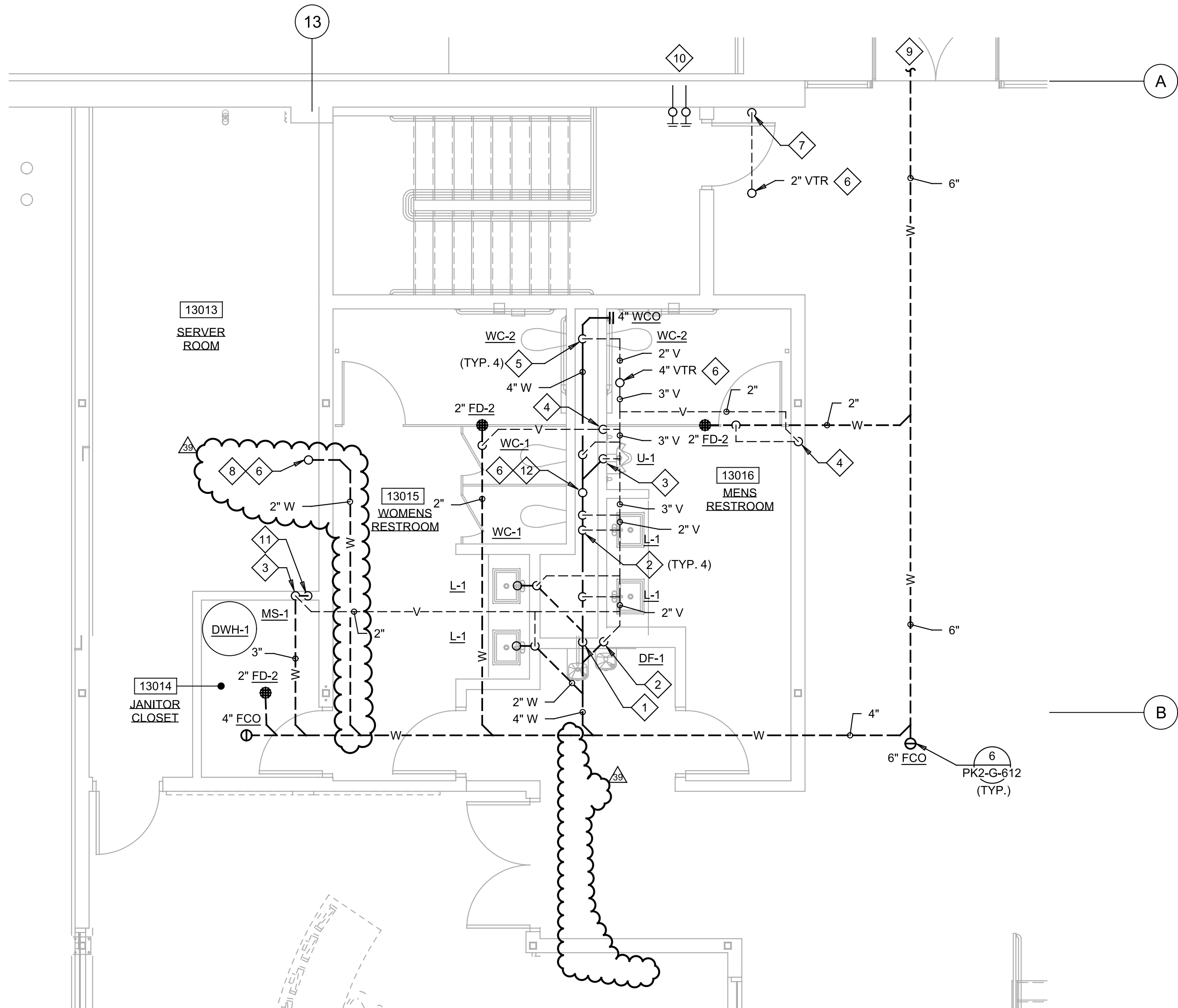
CHECKED BY:
REYNALDO NOVENCIDO
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL		AMER BARHOUMI	3/26/2020	
DESIGN MOD. 39	T & R	<i>[Signature]</i>	12/5/2023	

260-1709
CCS27 COORDINATE

1900-6269
CCS83 COORDINATE

39636-899-D



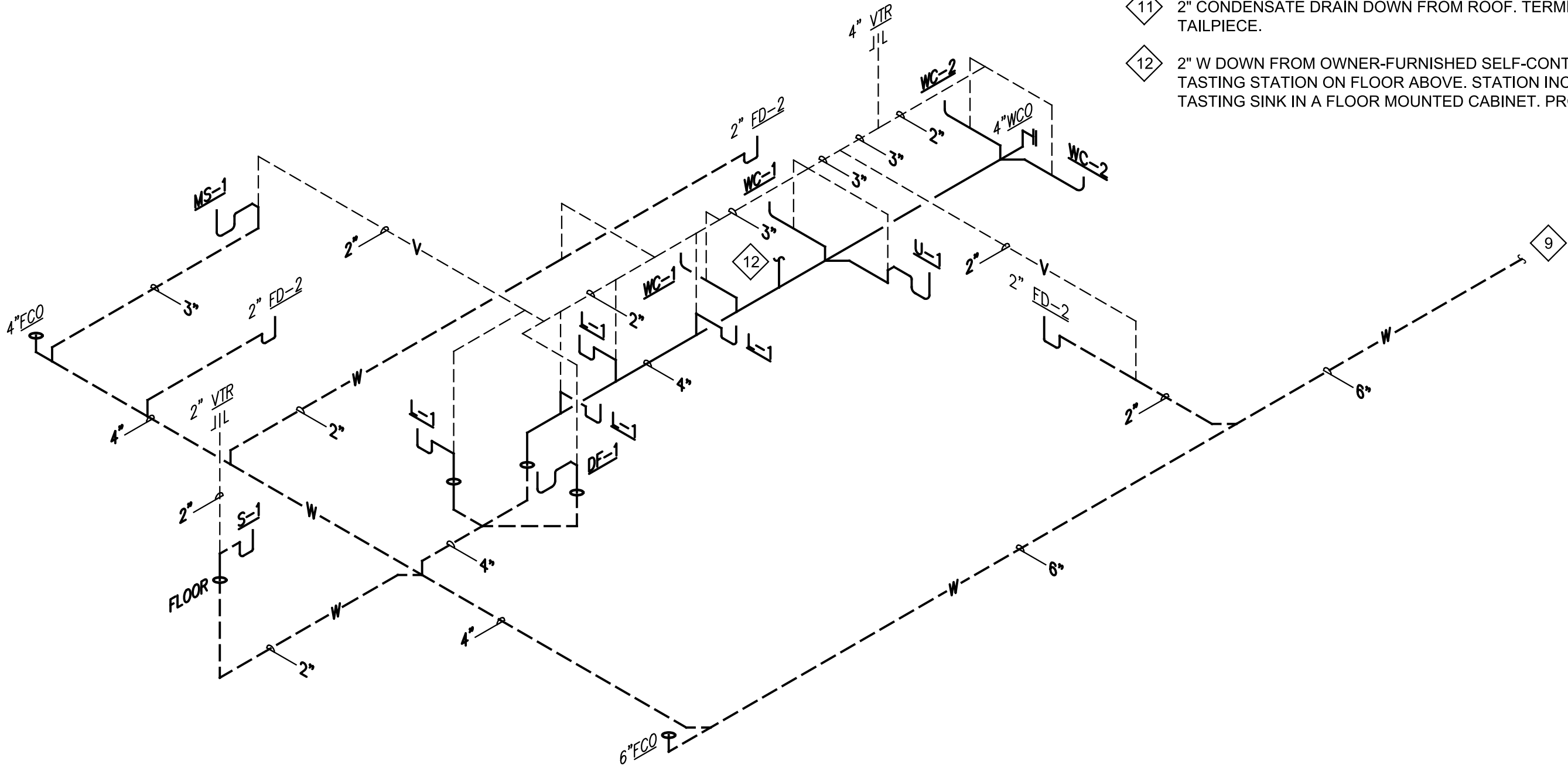
A ENLARGED GRADE FLOOR PLAN
SCALE: 1/4" = 1'-0"
FILE: 10646A10-130-P-401

GENERAL NOTES:

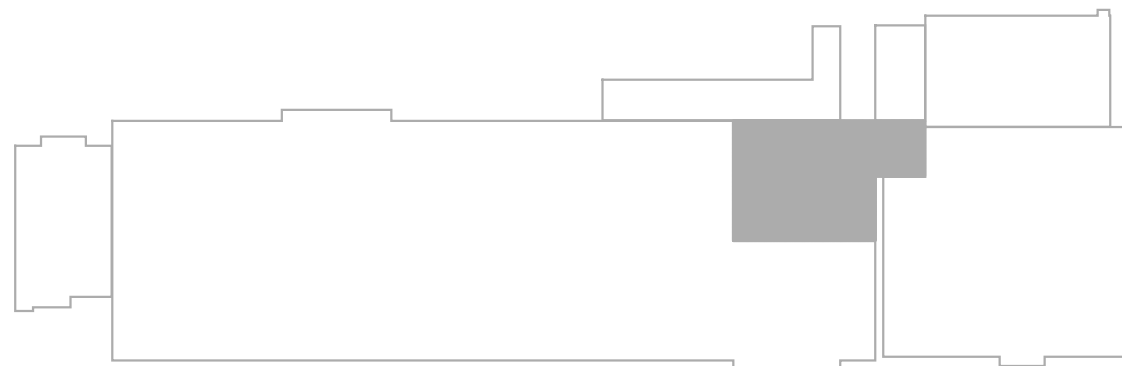
- ALL DRAIN PIPING BELOW THE BUILDING SHALL BE CONCRETE ENCASED AS NECESSARY PER DETAILS P040 AND/OR P041 ON SHEET G-517 - GENERAL MECHANICAL TYPICAL DETAILS 7.
- THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PARTICULAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. PLUMBING CONTRACTOR TO PROVIDE OFFSETTING PIPING AND FITTINGS TO AVOID CONFLICTS. COORDINATE WITH APPROPRIATE TRADES IF STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES, PIPE SUPPORTS OR ELECTRICAL CONDUIT SPECIFIED HAVE TO BE ALTERED.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF PIPING SYSTEMS. MAKE ALLOWANCES FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNER'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, AND CONFIGURATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEW.

CONSTRUCTION NOTES:

- 4" W DOWN TO BELOW SLAB.
- 2" W, 2" VENT UP.
- 3" W DOWN, 2" VENT UP.
- 2" VENT UP INTO CEILING SPACE.
- 4" W DOWN, 2" VENT UP.
- TERMINATE VENT THRU ROOF A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE AND 3'-0" FROM EDGE OF ROOF. OFFSET PIPING AS NECESSARY.
- 2" VENT FROM BELOW. CONTINUE UP TO ROOF.
- 2" W DOWN FROM FLOOR ABOVE. PROVIDE 2" VTR ON SINK S-2.
- 6" W CONNECT TO 10" SS AT 368.30 FT. INVERT ELEVATION. REFER TO PK2-CY-102 FOR CONTINUATION.
- 8" OSD DOWN WALL AND TERMINATE 12" ABOVE FINISHED GRADE WITH DOWNSPOUT NOZZLE. 8" SD DOWN IN WALL AND CONTINUE BELOW GRADE TO 8" STORM DRAIN PIPING. REFER TO SHEET PK2-CY-219 FOR CONTINUATION.
- 2" CONDENSATE DRAIN DOWN FROM ROOF. TERMINATE AT MS-1 TAILPIECE.
- 2" W DOWN FROM OWNER-FURNISHED SELF-CONTAINED WATER TASTING STATION ON FLOOR ABOVE. STATION INCLUDES A TASTING SINK IN A FLOOR MOUNTED CABINET. PROVIDE 2" VTR.



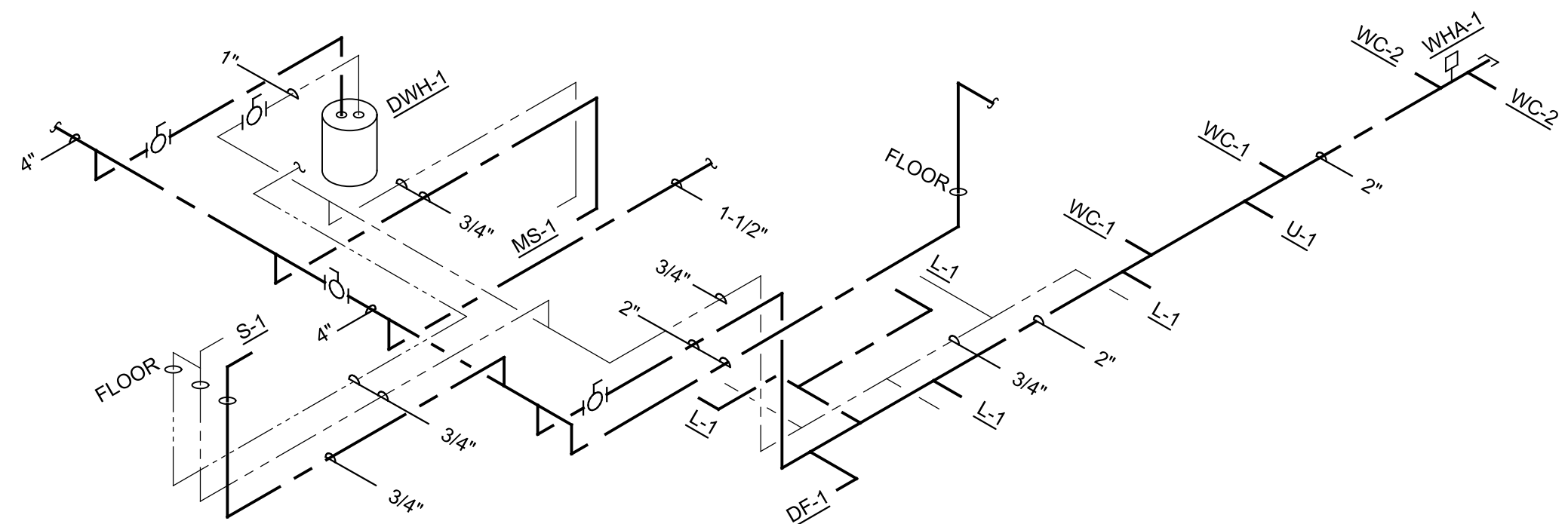
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SCALE: NONE
FILE: 10646A10_130-P-401



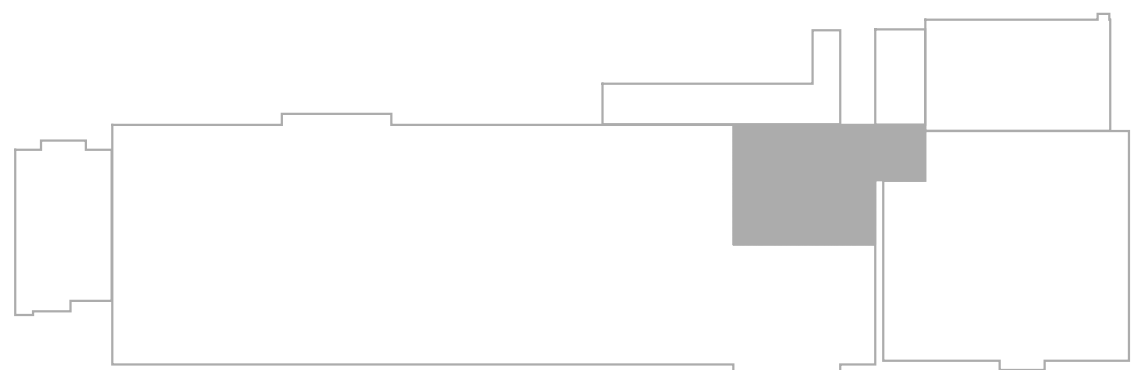
KEY PLAN

PK2-130-P-401

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY			
PLUMBING PROCESS BUILDING ENLARGED GRADE LEVEL PLAN			
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 896 OF 1850 SHEETS		WBS B-21058	
APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		3/26/2020 DATE CS3917 RCE#	
SUBMITTED BY: ANTHONY VAN PROJECT MANAGER		CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL		AMER BARHOUMI	3/26/2020
DESIGN MOD. 39	T & R	<i>Amer Barhoumi</i>	12/5/2023
DATE COMPLETED		DATE STARTED	
CONTRACTOR		INSPECTOR	
3/19/2020		DATE COMPLETED	
CONFERENCE ROOM ROTATION		39636-914-D	

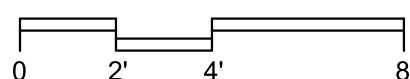


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FILE: 10646A10 130-H-130



PK2-130-P-402

SCALE: 1/4" = 1'-0"
FILE: 10646A10-130-P-402



IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

T U R P I N & R A T T A N
ENGINEERING, Inc.
Consulting Engineers
5888 W. SUNSET ROAD, SUITE 201
LAS VEGAS, NEVADA 89118
702 / 834 / 3880



3/19/2020

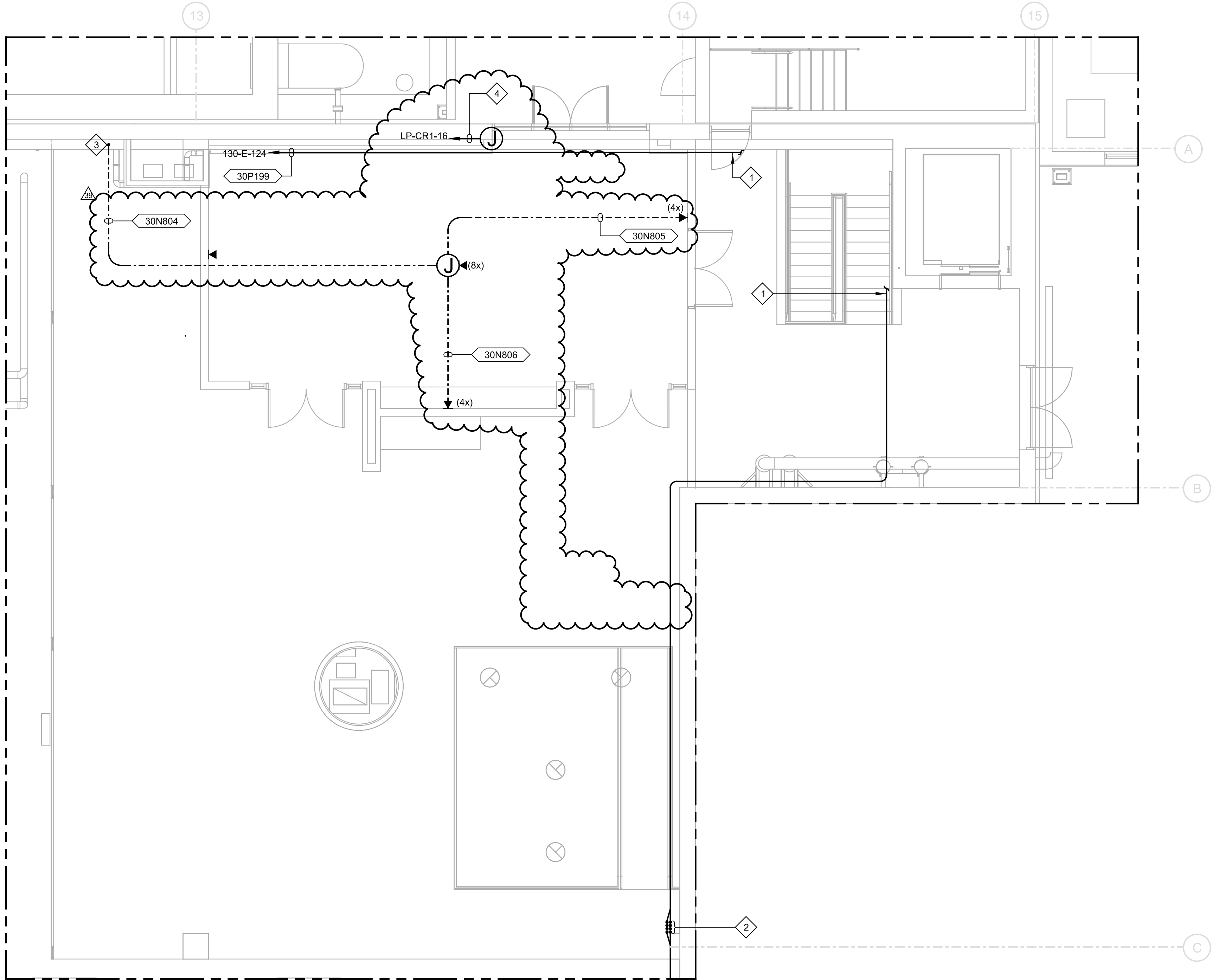
CONTRACTOR
INSPECTOR

CCS83 COORDINAT

FILE NAME: -- DM 39-10646A10 130-P-402.dqr

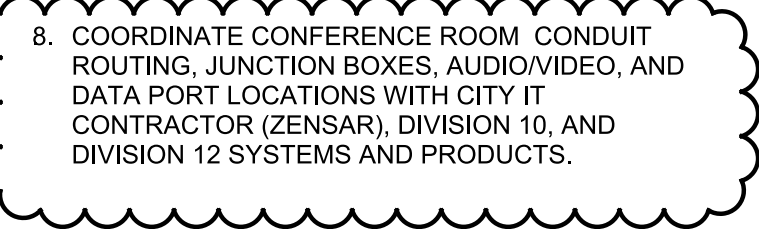
39 CONFERENCE ROOM ROTATION

PK2 - ISSUED FOR CONSTRUCTION



GENERAL NOTES

- FOR GENERAL NOTES, LEGEND AND SYMBOLS REFER TO PK2-G-015.
- FOR ELECTRICAL REQUIREMENTS AND GENERAL NOTES, REFER TO PK2-G-700.
- SOME CONDUIT AND CABLE TAGS MAY NOT BE SHOWN ON THE PLAN SHEETS FOR CLARITY. REFER TO CONDUIT & CABLE SCHEDULE DRAWINGS STARTING ON SHEET 130-E-411 FOR ADDITIONAL REQUIREMENTS.
- ALL LIGHTING AND RECEPTACLE CIRCUITS SHALL BE ROUTED IN SEPARATE DEDICATED 3/4" CONDUITS. THE USE OF WIREWAY IS NOT ALLOWED.
- ALL PATHS OF EGRESS SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOTCANDLE (FC) AT FLOOR LEVEL DURING A POWER FAILURE.
- INSTALL CONDUITS AND WIRING REQUIRED FOR SECURITY SYSTEM CARD READERS AND INTRUSION ALARMS. REFER TO SECURITY SYSTEM DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL DETAILS. TYPICAL FOR ALL ENTRANCES.
- PROVIDE ADDITIONAL UNSWITCHED WIRE FOR FIXTURES WITH BATTERY BACKUP.
- COORDINATE CONFERENCE ROOM, CONDUIT ROUTING, JUNCTION BOXES, AUDIO/VIDEO, AND DATA PORT LOCATIONS WITH CITY IT CONTRACTOR (ZENSAR), DIVISION 10, AND DIVISION 12 SYSTEMS AND PRODUCTS.



CONSTRUCTION NOTES:

- REFER TO PK2-111-E-131 FOR CONTINUATION.
- REFER TO PK2-130-E-128 FOR CONDUITS TURNING DOWN.
- REFER TO PK2-130-E-128 FOR CONTINUATION.
- 3/4"C(2#12, 1#12G). MOTORIZED ROLLER SHADES.



KEY PLAN

Q POWER AND CONTROL PLAN MEZZANINE LEVEL
SCALE: 3/16" = 1'-0"
FILE: 10646A10-130-E-632

WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CONSULTANT

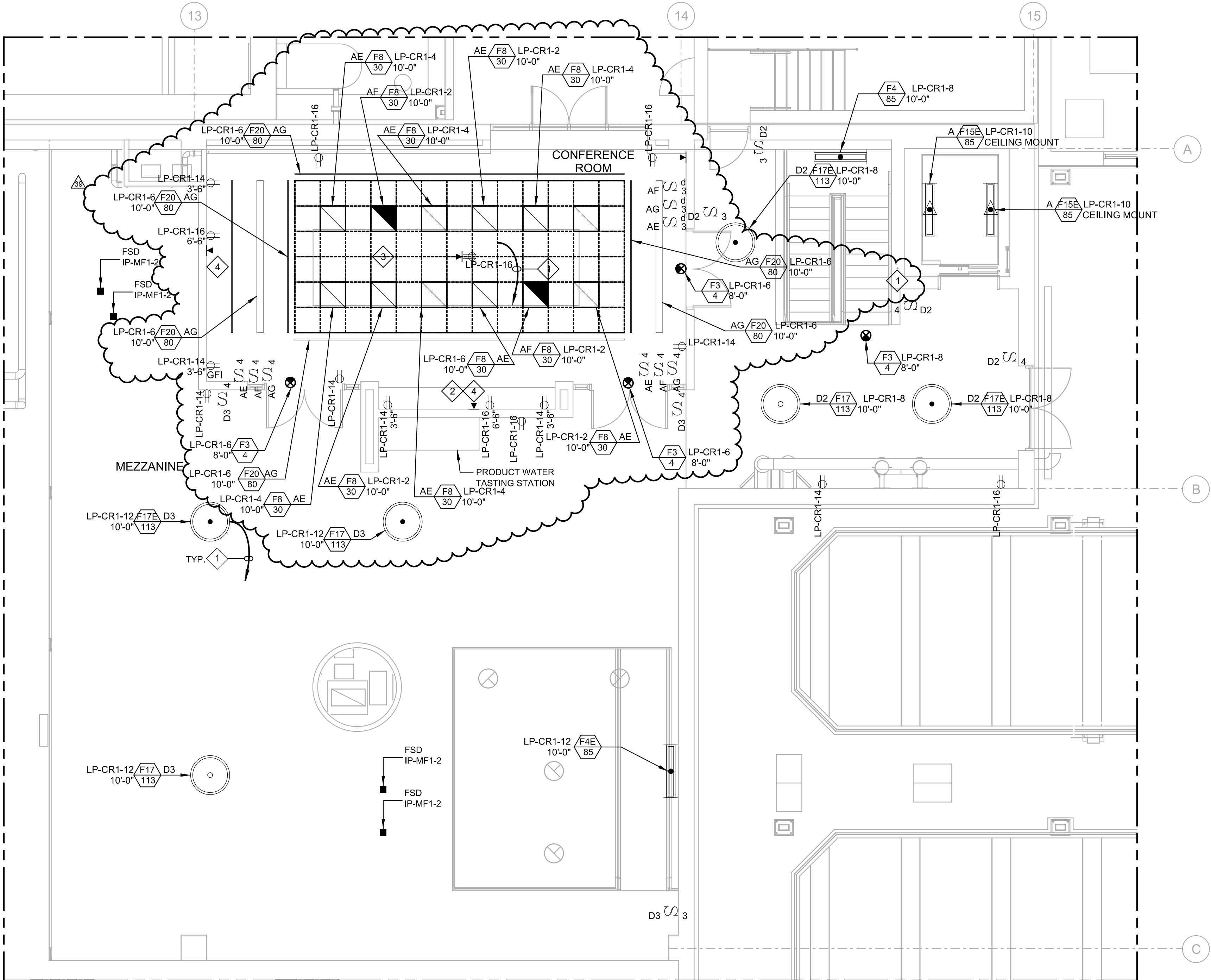
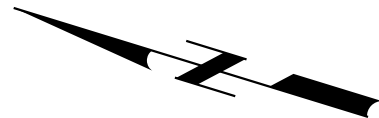
BRADY

2655 Camino del Rio North, Suite 100, San Diego, California 92108
Tel: (858) 496-0500 Fax: (858) 496-0505



CONTRACTOR
INSPECTOR

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY				PK2-130-E-134	
ELECTRICAL PROCESS BUILDING MEZZANINE POWER AND CONTROL PLAN					
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 940 OF 1850 SHEETS				WBS B-21058	
APPROVED: <i>Amer Barhoumi</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		3/26/2020 DATE CCS917 RCE#		SUBMITTED BY: ANTHONY VAN PROJECT MANAGER	
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL		AMER BARHOUMI		3/26/2020	
DESIGN MOD. 39	BRS	<i>[Signature]</i>		12/5/2023	
CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER				260-1709 CCS27 COORDINATE	
				1900-6269 CCS83 COORDINATE	
DATE STARTED				39636-958-D	
DATE COMPLETED					



- GENERAL NOTES**
- FOR GENERAL NOTES, LEGEND AND SYMBOLS REFER TO PK2-G-015.
 - FOR ELECTRICAL REQUIREMENTS AND GENERAL NOTES, REFER TO PK2-G-700.
 - SOME CONDUIT AND CABLE TAGS MAY NOT BE SHOWN ON THE PLAN SHEETS FOR CLARITY. REFER TO CONDUIT & CABLE SCHEDULE DRAWINGS STARTING ON SHEET 130-E-411 FOR ADDITIONAL REQUIREMENTS.
 - ALL LIGHTING AND RECEPTACLE CIRCUITS SHALL BE ROUTED IN SEPARATE DEDICATED 3/4" CONDUITS. THE USE OF WIREWAY IS NOT ALLOWED.
 - ALL PATHS OF EGRESS SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOTCANDLE (FC) AT FLOOR LEVEL DURING A POWER FAILURE.
 - INSTALL CONDUITS AND WIRING REQUIRED FOR SECURITY SYSTEM CARD READERS AND INTRUSION ALARMS. REFER TO SECURITY SYSTEM DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL DETAILS. TYPICAL FOR ALL ENTRANCES.
 - PROVIDE ADDITIONAL UNSWITCHED WIRE FOR FIXTURES WITH BATTERY BACKUP.
 - COORDINATE CONFERENCE ROOM CONDUIT ROUTING, JUNCTION BOXES, AUDIO/VIDEO, AND DATA PORT LOCATIONS WITH CITY IT CONTRACTOR (ZENSAR), DIVISION 10 AND DIVISION 12 SYSTEMS AND PRODUCTS.

- CONSTRUCTION NOTES:**
- PROVIDE 1" C - 2 #12, #12 GND ENTIRE LENGTH OF CIRCUIT TO PANEL 130-LP-CR1.
 - SANNET ETHERNET WALL PLATE WITH 4 PORTS. THE TOP 2 KEYSTONE JACKS: T568A WIRING PATTERN, CATEGORY 6, 110 TYPE. BLANK COVERS IN BOTTOM 2 PORTS. MOUNT 18" AFF.
 - SANNET WIRELESS ACCESS POINT CAT 6 CABLE IN CEILING COILED UP. COORDINATE ZENSAR TO PLACE AND INSTALL WIRELESS EQUIPMENT.
 - 2-CAT 6, 2-HDMI. COORDINATE INSTALLATION OF CONDUIT AND BOXES FOR INSTALLATION OF WALL-MOUNTED AUDIO/VIDEO AND IT EQUIPMENT AS REQUIRED.



KEY PLAN

V POWER AND CONTROL PLAN MEZZANINE LEVEL
SCALE: 3/16" = 1'-0"
FILE: 10646A10-130-E-632

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CONSULTANT

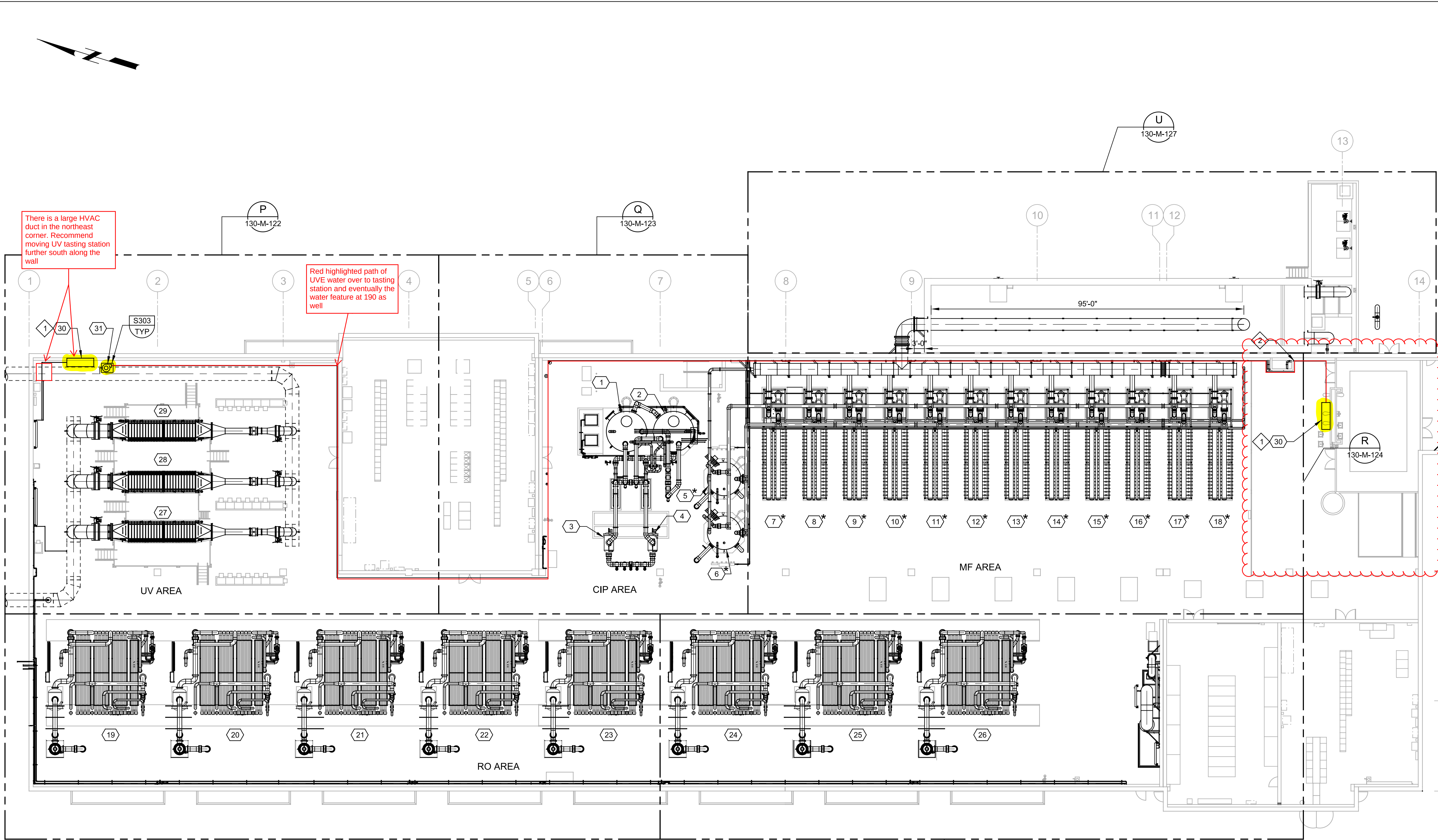
BRADY
2655 Camino del Rio North, Suite 100, San Diego, California 92108
Tel: (858) 496-0500 Fax: (858) 496-0505



CONTRACTOR
INSPECTOR

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY			
ELECTRICAL PROCESS BUILDING MEZZANINE LIGHTING AND RECEPTACLE PLAN			
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 1040 OF 1850 SHEETS		WBS B-21058	
APPROVED: <i>Amr Barhoumi</i> FOR CITY ENGINEER AMR BARHOUMI PRINT DCE NAME		3/26/2020 DATE CS3917 RCE#	
SUBMITTED BY: ANTHONY VAN PROJECT MANAGER		CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL		AMR BARHOUMI	3/26/2020
DESIGN MOD. 34	BRS	ALICE ALTES	5/22/2023
DESIGN MOD. 39	BRS	<i>Amr Barhoumi</i>	12/5/2023
DATE STARTED		DATE COMPLETED	
1900-6269 CCS83 COORDINATE		39636-1058-D	

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GENERAL NOTES

1. REFER TO STRUCTURAL DRAWING FOR DETAILS OF EQUIPMENT PADS AND ANCHORAGE.
2. REFER TO PLUMBING DRAWINGS FOR LOCATIONS OF ALL DRAINS.
3. REFER TO HVAC DRAWINGS FOR LOCATIONS OF DUCTWORK, FANS, AND LOUVERS.

CONSTRUCTION NOTES

1. INSTALL TASTING STATION SINK AND CONNECT TO 1/2" LINE, DRAIN AND POWER.
2. TRANSITION FROM 1/2" TO 1" PIPE. INSTALL TEE 1" AFTER TRANSITION WITH 1/2" RUNNING TO TASTING STATION ON MEZZANINE AND 1" CONTINUING DOWN THROUGH BASEMENT TO WATER FEATURE.

KEY TAGS

- | | | |
|----|--|------------|
| 1 | RO CIP TANK 2 | 130-T-2040 |
| 2 | RO CIP TANK 1 | 130-T-2030 |
| 3 | RO CIP CARTRIDGE FILTER 2 | |
| 4 | RO CIP CARTRIDGE FILTER 1 | |
| 5 | MF CIP TANK 1" | 130-T-1601 |
| 6 | MF CIP TANK 2" | 130-T-1651 |
| 7 | MF TRAIN 12" | |
| 8 | MF TRAIN 11" | |
| 9 | MF TRAIN 10" | |
| 10 | MF TRAIN 9" | |
| 11 | MF TRAIN 8" | |
| 12 | MF TRAIN 7" | |
| 13 | MF TRAIN 6" | |
| 14 | MF TRAIN 5" | |
| 15 | MF TRAIN 4" | |
| 16 | MF TRAIN 3" | |
| 17 | MF TRAIN 2" | |
| 18 | MF TRAIN 1" | |
| 19 | MF TRAIN 8 | |
| 20 | MF TRAIN 7 | |
| 21 | MF TRAIN 6 | |
| 22 | RO TRAIN 5 | |
| 23 | RO TRAIN 4 | |
| 24 | RO TRAIN 3 | |
| 25 | RO TRAIN 2 | |
| 26 | RO TRAIN 1 | |
| 27 | UV REACTOR NO. 1 | |
| 28 | UV REACTOR NO. 2 | |
| 29 | UV REACTOR NO. 3 | |
| 30 | TASTING STATION SINK (FURNISHED BY OTHERS) | |
| 31 | TASTING STATION PUMP, WALRUS HQ800H (120 VAC) OR EQUAL | |

Note that this drawing was not updated when the conference room was rotated 90 degrees during construction. See Attachment 3 - Plans for the NCPWF Process Building.

OVERALL PLAN

SCALE: 1/16" = 1'-0"
FILE: 10646A10_130-M-121.ext

0 8' 16' 32'

CONSULTANT

carollo®

WARNING



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

FOR SIGNATURES AND SEALS REFER TO ORIGINAL DRAWINGS DATED MARCH 2020

CONTRACTOR

INSPECTOR

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

MECHANICAL
PROCESS BUILDING
OVERALL UPPER PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 821 OF 1850 SHEETS

WBS B-15139

APPROVED:
FOR CITY ENGINEER
AMER BARHOUMI
PRINT DCE NAME

DATE

RCE#

SUBMITTED BY:
AMER BARHOUMI
PROJECT MANAGER

CHECKED BY:
ANTHONY VAN
PROJECT ENGINEER

260-1709
CCS27 COORDINATE

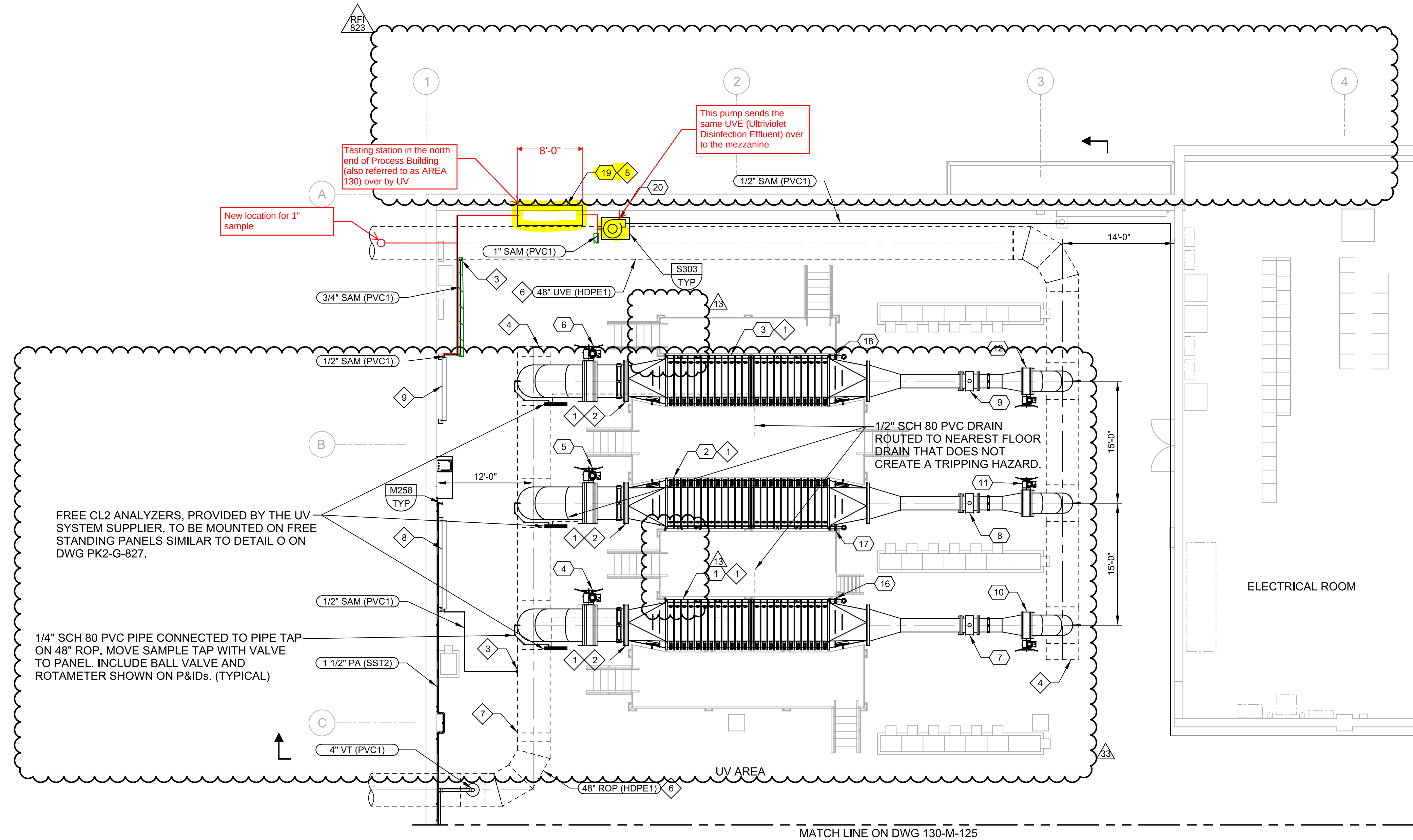
1900-6269
CCS83 COORDINATE

39636-839-D

DATE STARTED

DATE COMPLETED

PK2 - CONFORMED SET



PARTIAL PLAN

130-M-121 SCALE: 1/8"=1'-0"
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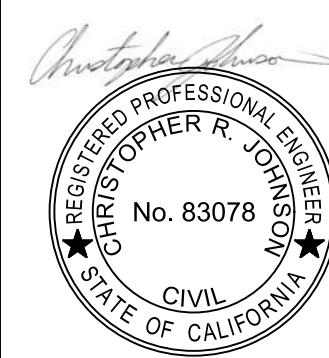
0 4' 8' 16'

WARNING



IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

CONSULTANT



3/19/2020

GENERAL NOTES

1. PROVIDE CONCRETE ENCASEMENT OF ALL PIPES BELOW SLABS UNLESS NOTED OTHERWISE.

CONSTRUCTION NOTES

- 1 PROVIDED BY UV EQUIPMENT SUPPLIER.
- 2 BAFFLE PLATE.
- 3 COORDINATE SAMPLE PIPE CONNECTIONS WITH HDPE PIPE MFR.
- 4 DISHED HEAD.
- 5 **INSTALL TASTING STATION SINK AND CONNECT TO 3/4" SAMPLE LINE, DRAIN, AND POWER.**
- 6 DO NOT CONCRETE ENCASE UNDER SLABS.
- 7 AIR DAM. INSTALL 1/4" THICK SOLID HDPE OR COATED 316 SS PLATE TO THE TOP INSIDE OF PIPE EXTENDING DOWN 6" FROM INSIDE OF CROWN.
- 8 UV INLET SAMPLE PANEL PER DETAIL M ON SHEET PK2-G-826.
- 9 UV OUTLET SAMPLE PANEL PER DETAIL N ON SHEET PK2-G-826.

KEY TAGS

- 1 UV REACTOR NO. 1
- 2 UV REACTOR NO. 2
- 3 UV REACTOR NO. 3

4	48" V514A	130-V-3110
5	48" V514A	130-V-3210
6	48" V514A	130-V-3310
7	20" MAGNETIC FLOW METER	130-FE-3105
8	20" MAGNETIC FLOW METER	130-FE-3205
9	20" MAGNETIC FLOW METER	130-FE-3305
10	30" V514A	130-FE-3120
11	30" V514A	130-FE-3220
12	30" V514A	130-FE-3320
13	NOT USED	
14	NOT USED	
15	NOT USED	
16	3" V514A	130-V-3140
17	3" V514A	130-V-3240
18	3" V514A	130-V-3340

- 19 TASTING STATION SINK (FURNISHED BY OTHERS)
- 20 TASTING STATION PUMP, WALRUS HQ800H (120VAC)
OR EQUAL

PK2-130-M-122

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

MECHANICAL
PROCESS BUILDING
PARTIAL PLAN 11

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 822 OF 1850 SHEETS

WBS B-21058

SHEET 022 OF 1000 SHEETS APPROVED: <u>Amar Barhoum</u> <u>3/26/2020</u> FOR CITY ENGINEER <u>DATE</u> <u>AMER BARHOUM</u> <u>C53917</u> <u>PRINT DCE NAME</u> <u>RCE#</u>						SUBMITTED BY: <u>ANTHONY VAN</u> <u>PROJECT MANAGER</u> CHECKED BY: <u>REYNALDO NOVENCIDO</u> <u>PROJECT ENGINEER</u>	
DESCRIPTION	BY	APPROVED	DATE	FILMED			

REYNALDO NOVENCENDO PROJECT ENGINEER				
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL		AMER BARHOUMI	3/26/2020	
13 DESIGN MOD. 13	CAROLLO		6/20/2022	
33 DESIGN MOD. 33	CAROLLO	<i>[Signature]</i>	5/22/2023	

39636-840-D

PK2 - ISSUED FOR CONSTRUCTION

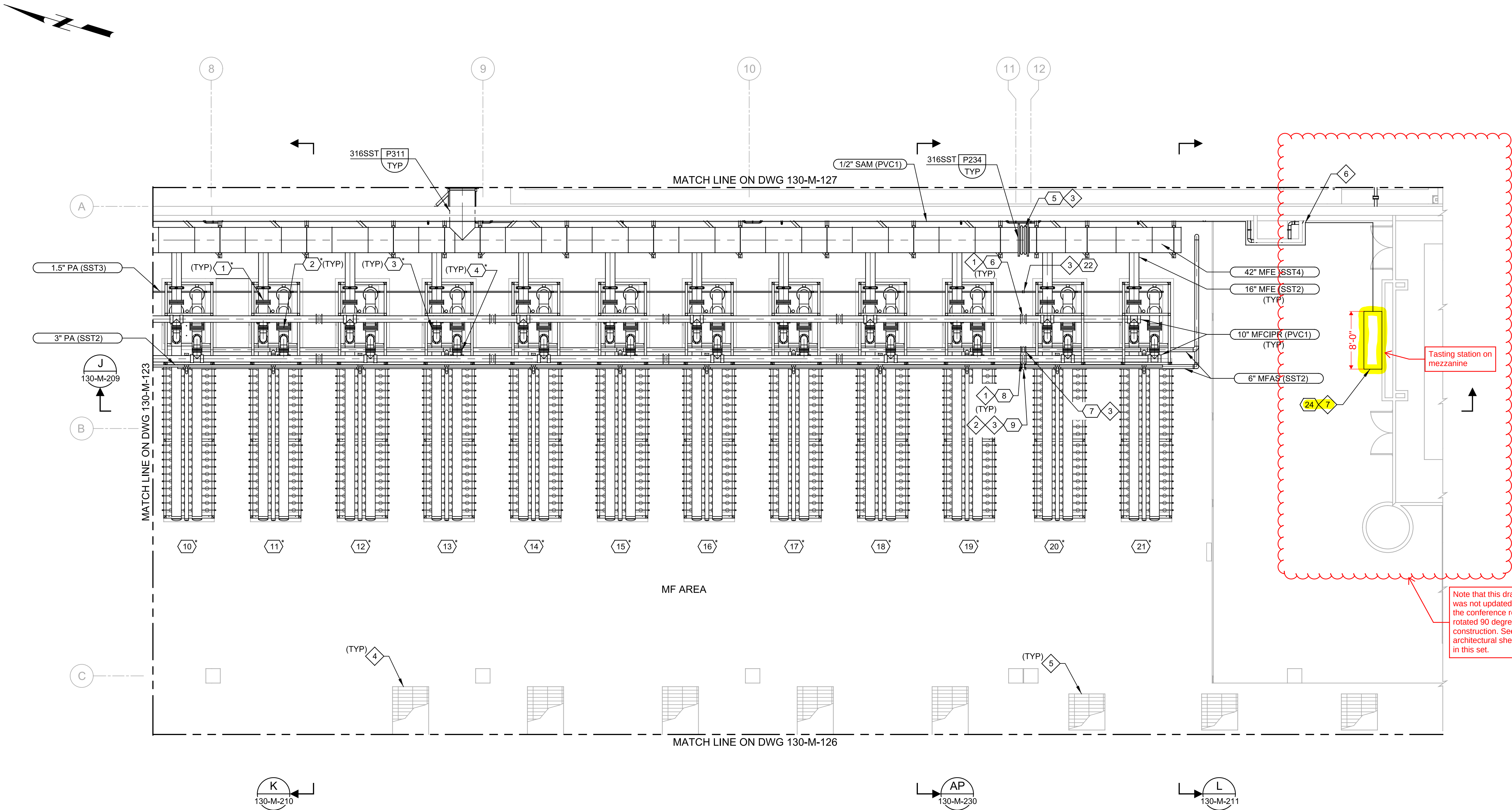
PROJECT NO. 10646A10

FILE NAME: -- DM 33-10646A10_130-M-122.dgn

13 RATED ENCLOSURE AT TOP OF STAIR 130-1

33 UV CI2 SAMPLE PANEL, RFI 823

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Stg_Pen_v0905.pen PlotScale: 1:1 Plot Date: 02-MAR-2021 11:27:37 AM User: svcPW LAST SAVED BY: jnewberry



- GENERAL NOTES**
- ALL STAINLESS STEEL PIPING AND FITTINGS SHALL BE ELECTROPOLISHED PER SECTION 40.05.23.01. FIELD WELDING OF STAINLESS STEEL PIPING IS PROHIBITED.
- CONSTRUCTION NOTES**
- INSTALL 10" TEFLON BELLOWS JOINT ON MFCIPR PIPE IMMEDIATELY BELOW CENTERED ON BUILDING EXPANSION JOINT (NOT VISIBLE).
 - INSTALL EB2 EXPANSION JOINTS ON ALL 3" PA AND 6" MFAS PIPING CROSSING THE BUILDING EXPANSION JOINT.
 - INSTALL WITH FLANGE INSULATING KIT PER SECTION 40.27.00.
 - 5' X 7' H2O LOADING ACCESS HATCH PER DETAIL 3 ON SHT PK2-130-M-302
 - 5' X 5' H2O LOADING ACCESS HATCH PER DETAIL 3 ON SHT PK2-130-M-302
 - TRANSITION FROM 1/2" TO 1" PIPE. INSTALL TEE 1" AFTER TRANSITION WITH 1/2" RUNNING TO TASTING STATION ON MEZZANINE AND 1" CONTINUING DOWN THROUGH BASEMENT TO WATER FEATURE.
 - INSTALL TASTING STATION SINK AND CONNECT TO 1/2" LINE, DRAIN AND POWER.
- KEY TAGS**
- | | | |
|----|--|------------|
| 1 | 16" BFV* | 130-V-OT10 |
| 2 | 16" BFV* | 130-V-OT03 |
| 3 | 10" BFV* | 130-V-OT13 |
| 4 | 10" BFV* | 130-V-OT16 |
| 5 | 42" EB1 EXPANSION JOINT | |
| 6 | 10" TB EXPANSION JOINT | |
| 7 | 6" EB2 EXPANSION JOINT | |
| 8 | 10" TB EXPANSION JOINT | |
| 9 | 6" EB2 EXPANSION JOINT | |
| 10 | MF TRAIN 12" | |
| 11 | MF TRAIN 11" | |
| 12 | MF TRAIN 10" | |
| 13 | MF TRAIN 9" | |
| 14 | MF TRAIN 8" | |
| 15 | MF TRAIN 7" | |
| 16 | MF TRAIN 6" | |
| 17 | MF TRAIN 5" | |
| 18 | MF TRAIN 4" | |
| 19 | MF TRAIN 3" | |
| 20 | MF TRAIN 2" | |
| 21 | MF TRAIN 1" | |
| 22 | 1.5" EB2 EXPANSION JOINT | |
| 23 | 1.5" EB2 EXPANSION JOINT | |
| 24 | TASTING STATION SINK (FURNISHED BY OTHERS) | |

R PARTIAL PLAN
130-M-121
SCALE: 1/8"=1'-0"
FILE: 10646A10_130-M-121.ext

WARNING

0 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.



FOR SIGNATURES AND SEALS REFER TO ORIGINAL DRAWINGS DATED MARCH 2020

CONTRACTOR INSPECTOR

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

**MECHANICAL
PROCESS BUILDING
PARTIAL PLAN 13**

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 824 OF 1850 SHEETS

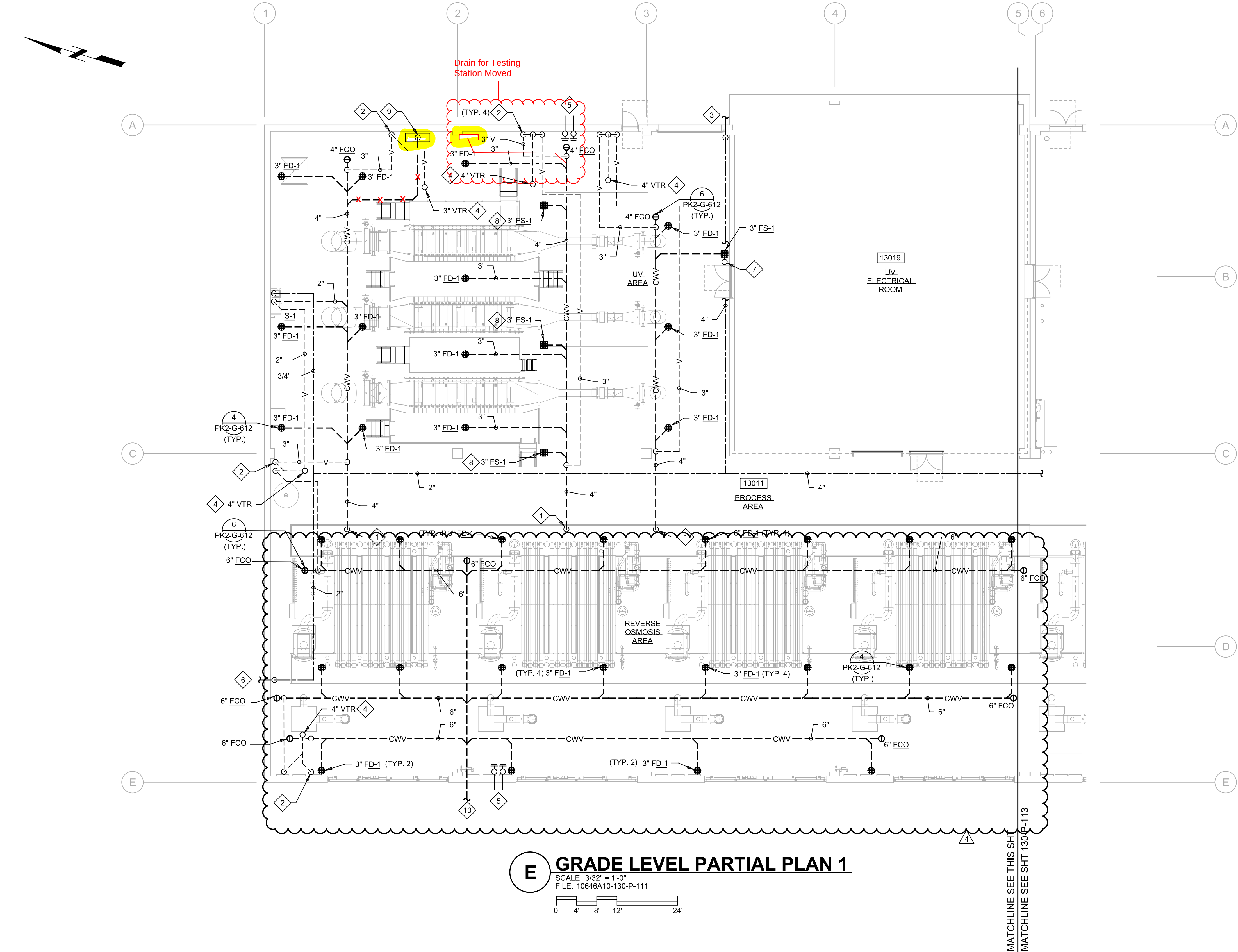
WBS B-15139

APPROVED: FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		DATE RCE#	
DESCRIPTION	BY	APPROVED	DATE

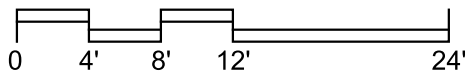
SUBMITTED BY: AMER BARHOUMI PROJECT MANAGER
CHECKED BY: ANTHONY VAN PROJECT ENGINEER
260-1709 CCS27 COORDINATE
1900-6269 CCS83 COORDINATE

DATE STARTED
DATE COMPLETED

39636-842-D



E GRADE LEVEL PARTIAL PLAN 1
SCALE: 3/32" = 1'-0"
FILE: 10646A10-130-P-111



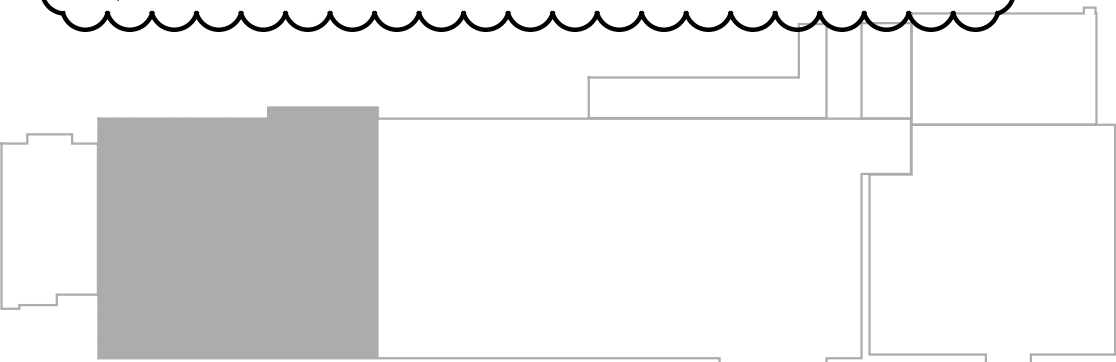
MATCHLINE SEE THIS SH
MATCHLINE SEE SHT 130-P-113

GENERAL NOTES:

- ALL DRAIN PIPING BELOW THE BUILDING SHALL BE CONCRETE ENCASED AS NECESSARY PER DETAILS P040 AND/OR P041 ON SHEET G-517 - GENERAL MECHANICAL TYPICAL DETAILS 7.
- THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PARTICULAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. PLUMBING CONTRACTOR TO PROVIDE OFFSETTING PIPING AND FITTINGS TO AVOID CONFLICTS. COORDINATE WITH APPROPRIATE TRADES IF STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES, PIPE SUPPORTS OR ELECTRICAL CONDUIT SPECIFIED HAVE TO BE ALTERED.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF PIPING SYSTEMS. MAKE ALLOWANCES FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNER'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, AND CONFIGURATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEW.

CONSTRUCTION NOTES:

- 3" WASTE DOWN TO TRENCH. PROVIDE TIDEFLEX.
- 3" VENT UP. PROVIDE CLEANOUT ON RISE.
- 4" CW TO BUILDING. REFER TO SHEET PK2-CY-102 FOR CONTINUATION.
- TERMINATE VENT THRU ROOF A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE AND 3'-0" FROM EDGE OF ROOF. OFFSET PIPING AS NECESSARY.
- 8" OSD DOWN WALL AND TERMINATE 12" ABOVE FINISHED GRADE WITH DOWNSPOUT NOZZLE. 8" SD DOWN WALL AND CONTINUE BELOW GRADE TO 8" STORM DRAIN PIPING. REFER TO SHEET PK2-CY-210 AND PK2-CY-213 FOR CONTINUATION.
- 2" CW BELOW GRADE. REFER TO SHEET 158-P-101 FOR CONTINUATION. ALL EXTERIOR AND UNDERGROUND CW PIPING SHALL BE HEAT TRACED WITH HT-1 (REFER TO PLUMBING EQUIPMENT SCHEDULE), INSULATED WITH ELASTOMERIC INSULATION, VAPOR BARRIER, AND ALUMINUM JACKET. UNDERGROUND PIPING SHALL BE BURIED A MINIMUM OF 2 FT. BELOW GRADE AND INSTALLED IN A PVC PIPE SLEEVE.
- 2" CONDENSATE DRAIN DOWN FROM ABOVE. TERMINATE AT NEAREST FLOOR SINK WITH 2" AIR GAP.
- ROUTE CONDENSATE FROM UV ELECTRICAL PANEL A/C UNITS AND TERMINATE AT THE NEAREST FLOOR SINK. FILED VERIFY CONDENSATE DRAIN CONNECTION LOCATIONS AND PROVIDE ALL REQUIRED PIPING AND TRANSITIONS PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DETAIL 2/G-613 FOR FLOOR DRAIN DETAIL.
- OWNER-FURNISHED SELF-CONTAINED WATER TASTING STATION. STATION INCLUDES A TASTING SINK IN A FLOOR MOUNTED CABINET. PROVIDE 2" DRAIN LINE.
- 6" WASTE. REFER TO SHEET PK2-CY-104 FOR CONTINUATION.



KEY PLAN

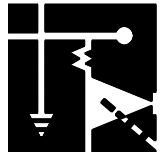
PK2-130-P-112

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

**PLUMBING
PROCESS BUILDING
GRADE LEVEL PARTIAL PLAN 1**

CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 892 OF 1850 SHEETS				WBS B-21058
APPROVED: <i>Amr Barhoum</i> FOR CITY ENGINEER AMER BARHOUMI PRINT DCE NAME		3/26/2020 DATE CS3917 RCE#		SUBMITTED BY: ANTHONY VAN PROJECT MANAGER
CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER		260-1709 CCS27 COORDINATE		1900-6269 CCS83 COORDINATE
DESCRIPTION	BY	APPROVED	DATE	FILED
ORIGINAL		AMER BARHOUMI	3/26/2020	
CONSTRUCTION CHANGE 4	T&R		07/11/2023	
CONTRACTOR		DATE STARTED		39636-910-D
INSPECTOR		DATE COMPLETED		

CONSULTANT



TURPIN & RATTAN
ENGINEERING, Inc.
Consulting Engineers
5888 W. SUNSET ROAD, SUITE 201
LAS VEGAS, NEVADA 89118
702 / 834 / 3880

WARNING

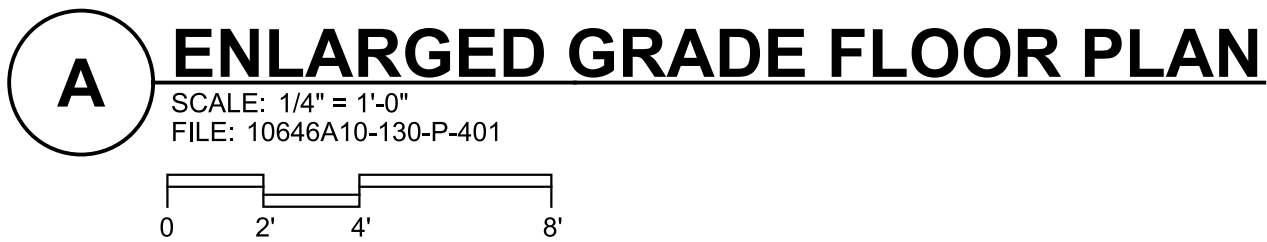


IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

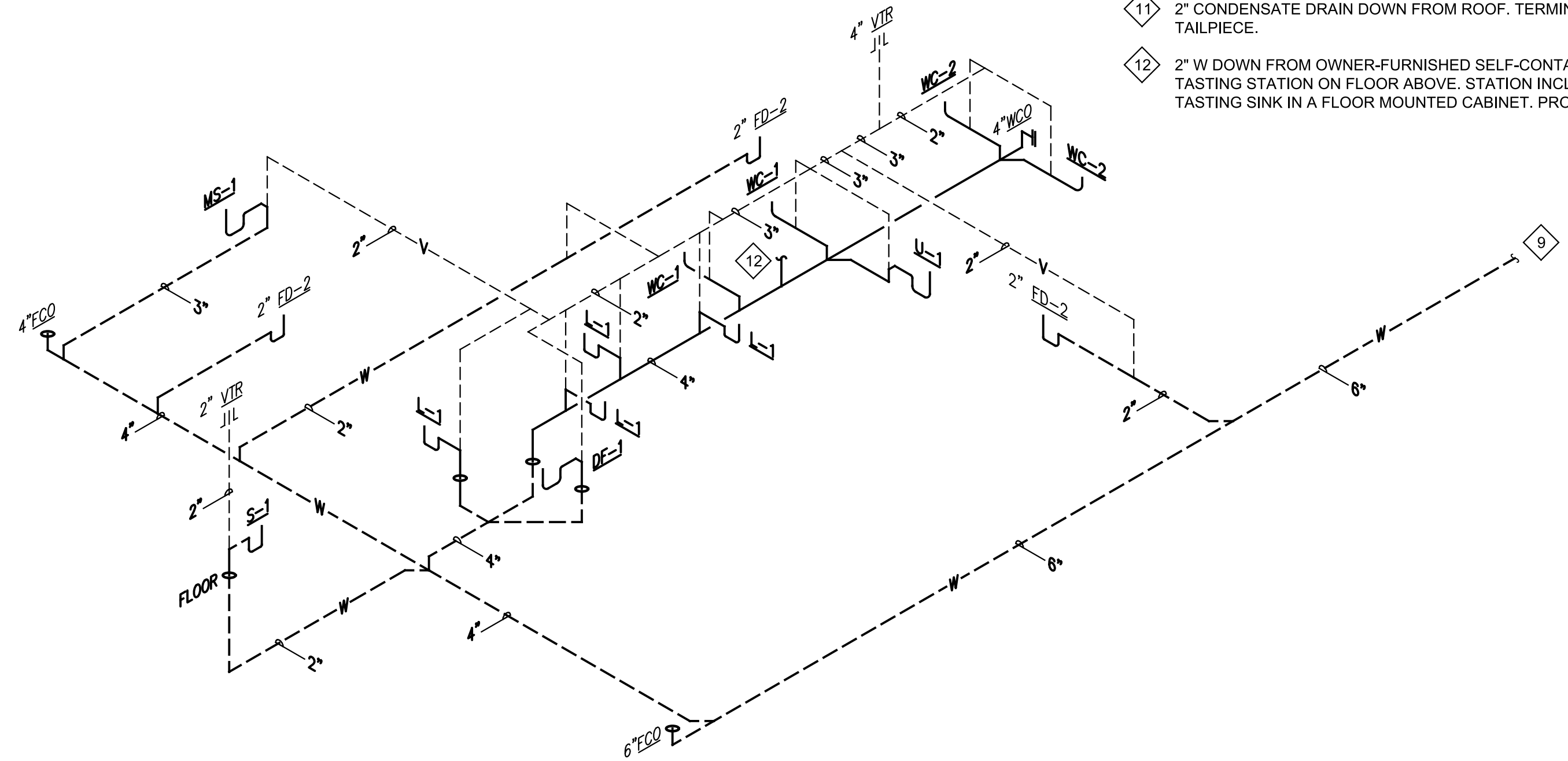


3/19/2020

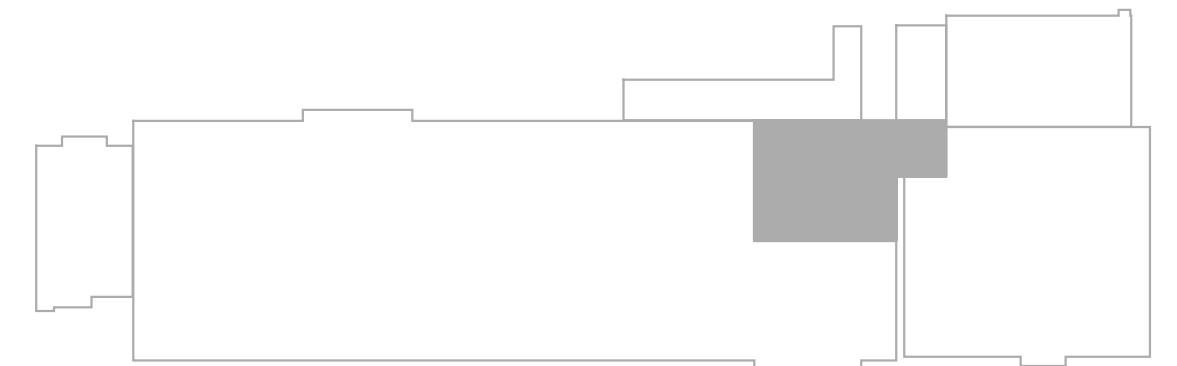
4 CONSTRUCTION CHANGE 4



- 1 4" W DOWN TO BELOW SLAB.
- 2 2" W, 2" VENT UP.
- 3 3" W DOWN, 2" VENT UP.
- 4 2" VENT UP INTO CEILING SPACE.
- 5 4" W DOWN, 2" VENT UP.
- 6 TERMINATE VENT THRU ROOF A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE AND 3'-0" FROM EDGE OF ROOF. OFFSET PIPING AS NECESSARY.
- 7 2" VENT FROM BELOW. CONTINUE UP TO ROOF.
- 8 2" W DOWN FROM FLOOR ABOVE. PROVIDE 2" VTR ON SINK S2.
- 9 6" W CONNECT TO 10" SS AT 368.30 FT. INVERT ELEVATION. REFER TO PK2-CY-102 FOR CONTINUATION.
- 10 8" OSD DOWN WALL AND TERMINATE 12" ABOVE FINISHED GRADE WITH DOWNSPOUT NOZZLE. 8" SD DOWN IN WALL AND CONTINUE BELOW GRADE TO 8" STORM DRAIN PIPING. REFER TO SHEET PK2-CY-219 FOR CONTINUATION.
- 11 2" CONDENSATE DRAIN DOWN FROM ROOF. TERMINATE AT MS-1 TAILPIECE.
- 12 2" W DOWN FROM OWNER-FURNISHED SELF-CONTAINED WATER TASTING STATION ON FLOOR ABOVE. STATION INCLUDES A TASTING SINK IN A FLOOR MOUNTED CABINET. PROVIDE 2" VTR.



SCALE: NONE
FILE: 10646A10_130-P-401



PK2-130-P-401

APPROVED: <i>Amer Barhoum</i>		3/26/2020		SUBMITTED BY:	
FOR CITY ENGINEER		DATE		ANTHONY VAN	
AMER BARHOUMI		CS3817		PROJECT MANAGER	
PRINT DCE NAME		RCE#		CHECKED BY:	
DESCRIPTION		BY	APPROVED	DATE	REYNALDO NOVENICIO PROJECT ENGINEER
ORIGINAL		AMER BARHOUMI	3/26/2020		260-1709
DESIGN MOD. 39	T & R	<i>[Signature]</i>	12/5/2023		CCS27 COORDINATE
					1900-5269
					CCS83 COORDINATE
DATE STARTED			39636-914-D		
DATE COMPLETED					

PK2 - ISSUED FOR CONSTRUCTION

T U R P I N & R A T T A N
ENGINEERING, Inc.
Consulting Engineers
5888 W. SUNSET ROAD, SUITE 201
LAS VEGAS, NEVADA 89118
702 / 834 / 3880

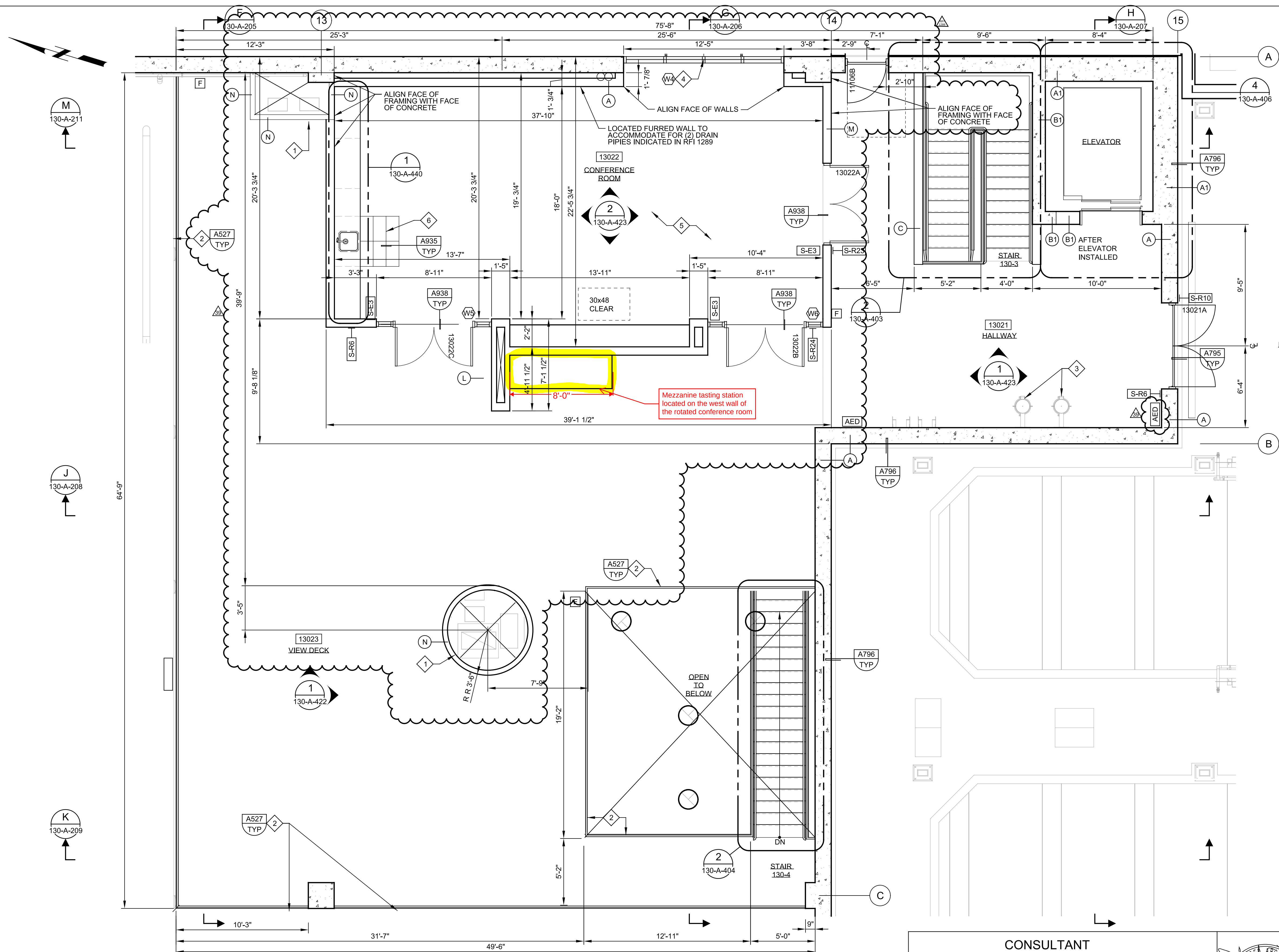


3/19/2020

CONTRACTOR _____
INSPECTOR _____

IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

39 CONFERENCE ROOM ROTATION



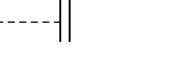
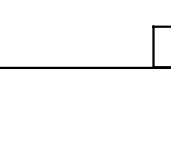
GENERAL NOTES:

1. REFER TO SHEET G-320 FOR WALL TYPES
2. REFER TO SHEET G-345 FOR RAILING TYPES
3. REFER TO SHEET G-390 FOR DOOR SCHEDULE
4. REFER TO SHEET G-391 FOR WINDOW SCHEDULE
5. REFER TO SECTION 10 14 23.16 FOR SIGNAGE SCHEDULE
6. REFER TO SECTION 09 06 00 FOR INTERIOR FINISH SCHEDULE

CONSTRUCTION NOTES:

- | | |
|-------------|---|
| 1 | 1-HR VERTICAL CHASE WALL |
| A527
TYP | 2 DECORATIVE CABLE RAILING, PER SECTION
05 73 01 |
| 3 | AIR SCOUR LINE, PER 130-M-111 |
| 4 | STOREFRONT SYSTEM, PER PLAN,
SCHEDULE AND SECTION 08 41 13 |
| 5 | CARPET TILE, PER SCHEDULE AND SECTION
09 68 13 |
| 6 | CERAMIC TILE, PER SCHEDULE AND
SECTION 09 30 13 |

LEGEND:

- | | | | | | | | | | |
|---|--|------|------|------|------|-----|-----|-----|-----|
|  | ROOM OR AREA NUMBER | | | | | | | | |
|  | WALL TYPE, PER SHEET G-320 | | | | | | | | |
|  | WINDOW / STOREFRONT,
PER SHEET G-391 | | | | | | | | |
|  | SIGN, PER SECTION
10 14 23.16 | | | | | | | | |
|  | FIRE EXTINGUISHER, PER
SECTION 10 44 00 | | | | | | | | |
|  | AED, PER SECTION 10 44 00 | | | | | | | | |
|  | STAIR I.D.
(AREA#-STAIR NUMBER) | | | | | | | | |
|  | DOOR, PER SHEET G-390
LOCATION OF TAG
DEPENDENT ON SCALE | | | | | | | | |
|  | INTERIOR ELEVATION | | | | | | | | |
|  | DOOR MANEUVERING CLEARANCE
PER CBC 404.2.4, AND DETAILS | | | | | | | | |
| | <table> <tr> <td>A101</td><td>A102</td><td>A103</td></tr> <tr> <td>TYP</td><td>TYP</td><td>TYP</td></tr> </table> | A101 | A102 | A103 | TYP | TYP | TYP | | |
| A101 | A102 | A103 | | | | | | | |
| TYP | TYP | TYP | | | | | | | |
| | 30X48 CLEAR AREA, PER CBC
11B-404.2.4, REFER TO DETAILS | | | | | | | | |
| | <table> <tr> <td>A104</td><td>A105</td><td>A107</td><td>A108</td></tr> <tr> <td>TYP</td><td>TYP</td><td>TYP</td><td>TYP</td></tr> </table> | A104 | A105 | A107 | A108 | TYP | TYP | TYP | TYP |
| A104 | A105 | A107 | A108 | | | | | | |
| TYP | TYP | TYP | TYP | | | | | | |

KEY PLAN

PK2-130-A-122

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

ARCHITECTURAL
PROCESS BUILDING
ENLARGED MEZZANINE PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 707 OF 1850 SHEETS

WBS B-21058

APPROVED: <u>Amr Barhoum</u>		3/26/2020		SUBMITTED BY:	
FOR CITY ENGINEER		DATE		ANTHONY VAN	
AMER BARHOUMI		CS3917		PROJECT MANAGER	
PRINT DCE NAME		RCE#		CHECKED BY:	
				REYNALDO NOVENICIO	
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL			AMER BARHOUMI	3/26/2020	
39	DESIGN MOD. 39	MOA		12/5/2023	
					260-1709
					CCS27 COORDINATOR
					1900-8269
					CCS83 COORDINATOR
DATE STARTED			DATE COMPLETED		
			39636-725-		

PK2 - ISSUED FOR CONSTRUCTION

CONSULTANT

MANUEL ONCINA
ARCHITECTS INC.
ARCHITECTURE
P L A N N I N G
I N T E R I O R S
5711 La Jolla Blvd
La Jolla, CA 92037
tel 858/ 459.1221
fax 858/ 459.1214
www.oncinaarc.com



39 CONFERENCE ROOM ROTATION, RFI 1289

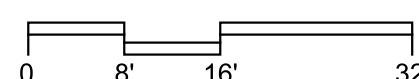
WARNING



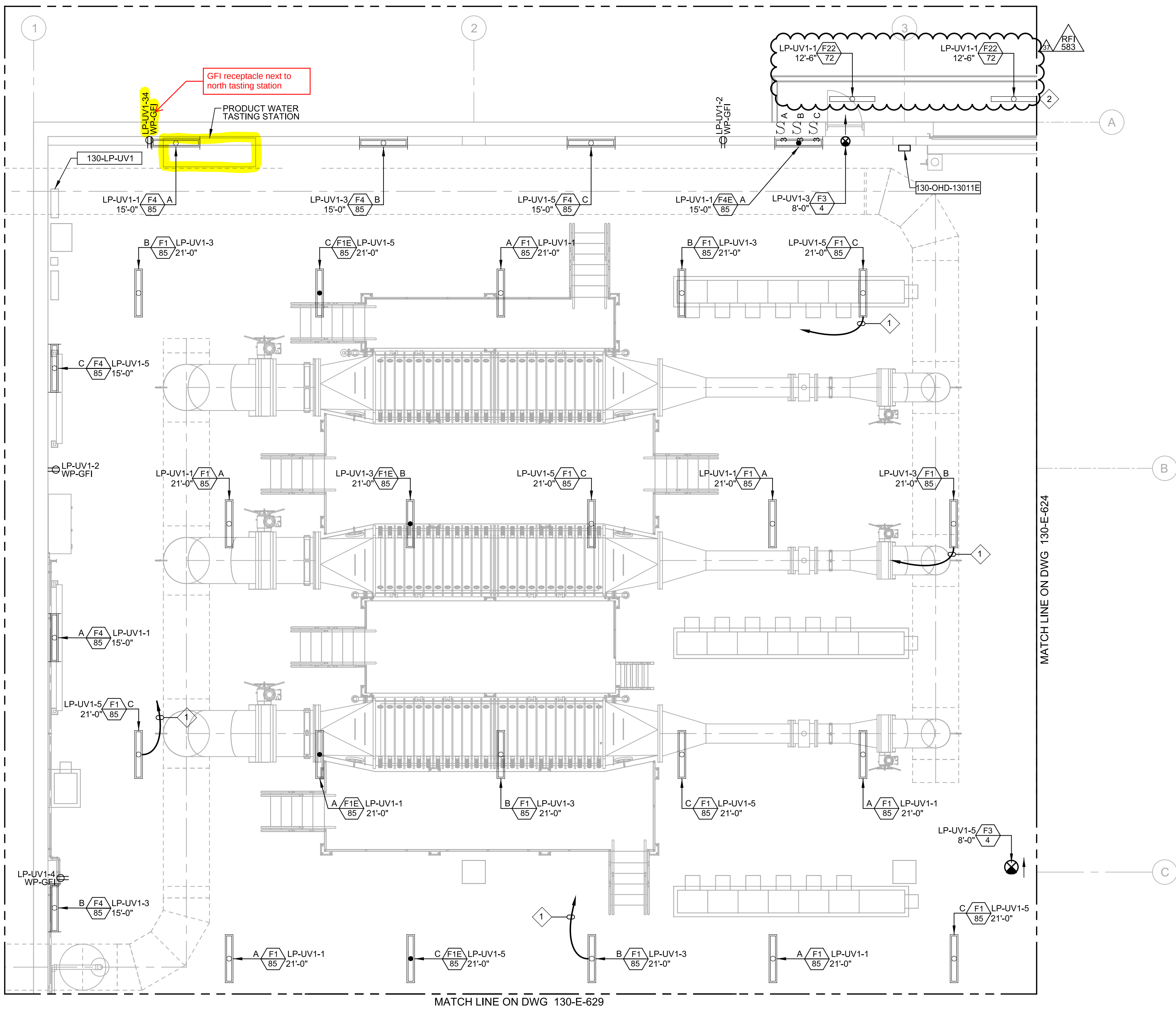
IF THIS BAR DOES
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THEN DRAWING IS
NOT TO SCALE.

MEZZANINE LEVEL - ENLARGED PLAN

SCALE: 1/4" = 1'-0"
FILE: 10646A10-130-A-150



Plot Date: 01-SEP-2023 6:16:57 AM
User: svcPW
Model: Layout1
DesignScript: Carollo_Std_Pen_v0905.pen
PlotScale: 12:1
ColorTable: gshade.ctb
LAST SAVED BY: SFields



K PARTIAL PLAN
SCALE: 3/16" = 1'-0"
FILE: 10646A10_130-E-623.dgn
0 2' 4' 6' 12'

WARNING
0 1
IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

BRADY
2655 Camino del Rio North, Suite 100, San Diego, California 92108
Tel: (858) 496-0500 Fax: (858) 496-0505

CONSULTANT



CONTRACTOR
INSPECTOR

- GENERAL NOTES**
- FOR GENERAL NOTES, LEGEND AND SYMBOLS REFER TO PK2-G-015.
 - FOR ELECTRICAL REQUIREMENTS AND GENERAL NOTES, REFER TO PK2-G-700.
 - SOME CONDUIT AND CABLE TAGS MAY NOT BE SHOWN ON THE PLAN SHEETS FOR CLARITY. REFER TO CONDUIT & CABLE SCHEDULE DRAWINGS STARTING ON SHEET 130-E-411 FOR ADDITIONAL REQUIREMENTS.
 - ALL LIGHTING AND RECEPTACLE CIRCUITS SHALL BE ROUTED IN SEPARATE DEDICATED 3/4" CONDUITS. THE USE OF WIREWAY IS NOT ALLOWED.
 - ALL PATHS OF EGRESS SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOTCANDLE (FC) AT FLOOR LEVEL DURING A POWER FAILURE.
 - INSTALL CONDUITS AND WIRING REQUIRED FOR SECURITY SYSTEM CARD READERS AND INTRUSION ALARMS. REFER TO SECURITY SYSTEM DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL DETAILS. TYPICAL FOR ALL ENTRANCES.
 - PROVIDE ADDITIONAL UNSWITCHED WIRE FOR FIXTURES WITH BATTERY BACKUP.

CONSTRUCTION NOTES:

- PROVIDE 1"C - 2 #10, #10 GND ENTIRE LENGTH OF CIRCUIT TO PANEL 130-LP-UV1.
- ALL OUTDOOR LIGHTS TO HAVE DAY/NIGHT SENSOR CONTROL.

PK2-130-E-623

CONSTRUCTION PACKAGE 2
NORTH CITY PURE WATER FACILITY

**ELECTRICAL
PROCESS BUILDING UPPER
LIGHTING AND RECEPTACLE PLAN 2**

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC UTILITIES DEPARTMENT
SHEET 1029 OF 1850 SHEETS

WBS B-21058

APPROVED: *Amer Barhoumi* 3/26/2020
FOR CITY ENGINEER
AMER BARHOUMI
PRINT DCE NAME
DATE
CS3917
RCE#

SUBMITTED BY:
ANTHONY VAN
PROJECT MANAGER

CHECKED BY:
REYNALDO NOVENCIDO
PROJECT ENGINEER

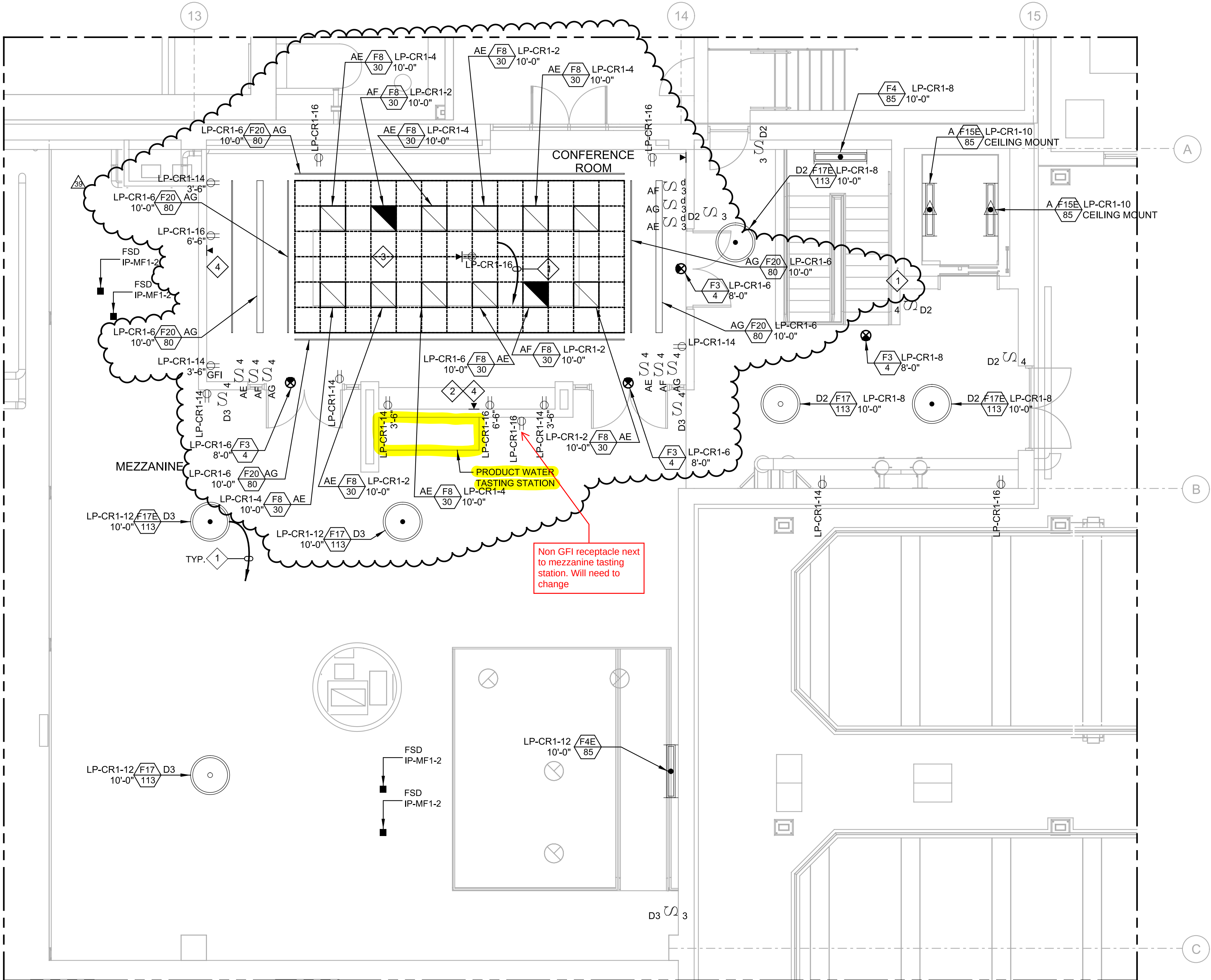
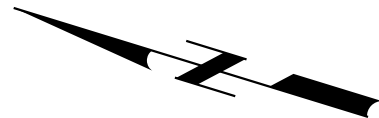
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL		AMER BARHOUMI	3/26/2020	
DESIGN MOD. 37	BRS	<i>[Signature]</i>	9/5/2023	

260-1709
CCS27 COORDINATE

1900-6269
CCS83 COORDINATE

39636-1047-D

Plot Date: 06-DEC-2023 6:51:53 AM User: svcPW Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Stg_Pen_v0905.pen PlotScale: 1:1 LAST SAVED BY: rbhatta



- GENERAL NOTES**
- FOR GENERAL NOTES, LEGEND AND SYMBOLS REFER TO PK2-G-015.
 - FOR ELECTRICAL REQUIREMENTS AND GENERAL NOTES, REFER TO PK2-G-700.
 - SOME CONDUIT AND CABLE TAGS MAY NOT BE SHOWN ON THE PLAN SHEETS FOR CLARITY. REFER TO CONDUIT & CABLE SCHEDULE DRAWINGS STARTING ON SHEET 130-E-411 FOR ADDITIONAL REQUIREMENTS.
 - ALL LIGHTING AND RECEPTACLE CIRCUITS SHALL BE ROUTED IN SEPARATE DEDICATED 3/4" CONDUITS. THE USE OF WIREWAY IS NOT ALLOWED.
 - ALL PATHS OF EGRESS SHALL BE ILLUMINATED TO A MINIMUM OF 1 FOOTCANDLE (FC) AT FLOOR LEVEL DURING A POWER FAILURE.
 - INSTALL CONDUITS AND WIRING REQUIRED FOR SECURITY SYSTEM CARD READERS AND INTRUSION ALARMS. REFER TO SECURITY SYSTEM DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL DETAILS. TYPICAL FOR ALL ENTRANCES.
 - PROVIDE ADDITIONAL UNSWITCHED WIRE FOR FIXTURES WITH BATTERY BACKUP.
 - COORDINATE CONFERENCE ROOM CONDUIT ROUTING, JUNCTION BOXES, AUDIO/VIDEO, AND DATA PORT LOCATIONS WITH CITY IT CONTRACTOR (ZENSAR), DIVISION 10 AND DIVISION 12 SYSTEMS AND PRODUCTS.

- CONSTRUCTION NOTES:**
- PROVIDE 1" C-2 #12, #12 GND ENTIRE LENGTH OF CIRCUIT TO PANEL 130-LP-CR1.
 - SANNET ETHERNET WALL PLATE WITH 4 PORTS. THE TOP 2 KEYSTONE JACKS: T568A WIRING PATTERN, CATEGORY 6, 110 TYPE. BLANK COVERS IN BOTTOM 2 PORTS. MOUNT 18" AFF.
 - SANNET WIRELESS ACCESS POINT CAT 6 CABLE IN CEILING COILED UP. COORDINATE ZENSAR TO PLACE AND INSTALL WIRELESS EQUIPMENT.
 - 2-CAT 6, 2-HDMI. COORDINATE INSTALLATION OF CONDUIT AND BOXES FOR INSTALLATION OF WALL-MOUNTED AUDIO/VIDEO AND IT EQUIPMENT AS REQUIRED.



KEY PLAN

V POWER AND CONTROL PLAN MEZZANINE LEVEL
SCALE: 3/16" = 1'-0"
FILE: 10646A10-130-E-632

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CONSULTANT

BRADY
2655 Camino del Rio North, Suite 100, San Diego, California 92108
Tel: (858) 496-0500 Fax: (858) 496-0505



CONTRACTOR
INSPECTOR

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY			
ELECTRICAL PROCESS BUILDING MEZZANINE LIGHTING AND RECEPTACLE PLAN			
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 1040 OF 1850 SHEETS		WBS B-21058	
APPROVED: <i>Amr Barhoumi</i> FOR CITY ENGINEER AMR BARHOUMI PRINT DCE NAME		3/26/2020 DATE CS3917 RCE#	
SUBMITTED BY: ANTHONY VAN PROJECT MANAGER		CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER	
DESCRIPTION	BY	APPROVED	DATE
ORIGINAL		AMR BARHOUMI	3/26/2020
DESIGN MOD. 34	BRS	ALICE ALTES	5/22/2023
DESIGN MOD. 39	BRS	<i>Amr Barhoumi</i>	12/5/2023
DATE STARTED		DATE COMPLETED	
1900-6269 CCS83 COORDINATE		39636-1058-D	

UV AREA 480V DISTRIBUTION PANEL NO. 1
130-DP-UV1

BUS RATING: 100 A
MAIN CB: 100 A
VOLTAGE: 480 V
PHASE: 3

10 kA SHORT CIRCUIT RATING

LOCATION: UV AREA
POLES: 42
MOUNTING: SURFACE
FED FROM: MCC-UV1/A

WIRE: 3

60 Hz

DESCRIPTION	LOAD VA			CB AMP	CB POLE	CKT #	CKT #	CB AMP	CB POLE	LOAD VA			DESCRIPTION
	A	B	C							A	B	C	
130-EDR-3110	558			15	3	1	2	15	3	0			SPARE
----		558		--	--	3	4	--	--		0		----
----			558	--	--	5	6	--	--			0	----
130-EAM-3120	558			15	3	7	8	15	3	558			130-EDR-3240
----		558		--	--	9	10	--	--		558		----
----			558	--	--	11	12	--	--			558	----
SPARE	0			15	3	13	14	15	3	558			130-EDR-3310
----		0		--	--	15	16	--	--		558		----
----			0	--	--	17	18	--	--			558	----
130-EDR-3140	558			15	3	19	20	15	3	558			130-EAM-3320
----		558		--	--	21	22	--	--		558		----
----			558	--	--	23	24	--	--			558	----
130-EDR-3210	558			15	3	25	26	15	3	0			SPARE
----		558		--	--	27	28	--	--		0		----
----			558	--	--	29	30	--	--			0	----
130-EAM-3220	558			15	3	31	32	15	3	558			130-EDR-3340
----		558		--	--	33	34	--	--		558		----
----			558	--	--	35	36	--	--			558	----
SPARE	0			15	3	37	38	15	3	0			SPARE
----		0		--	--	39	40	--	--		0		----
----			0	--	--	41	42	--	--			0	----
TOTAL VA	2790	2790	2790							2232	2232	2232	TOTAL VA

TOTAL PHASE kVA
A: 5.02
B: 5.02
C: 5.02

TOTAL CONNECTED LOAD : 15.07 kVA
15.066 kVA @ 480 V, 3PH, 3W = 18.1AMPS

UV AREA INSTRUMENTS PANEL NO. 1															
130-IP-UV1															
BUS RATING:		100 A		10 kA SHORT CIRCUIT RATING				LOCATION: UV AREA							
MAIN CB:		60 A						POLES: 42							
VOLTAGE:		208 / 120 V						MOUNTING: SURFACE							
PHASE:		3		WIRE:		4		60 Hz		FED FROM: 130-IP-PN1					

DESCRIPTION	LOAD VA			CB AMP	CB POLE	CKT #	CKT #	CB AMP	CB POLE	LOAD VA			DESCRIPTION
	A	B	C							A	B	C	
SPARE	0			20	1	1	2	20	1	0			SPARE
SPARE		0		20	1	3	4	15	1		0		SPARE
130-AIT-3004			60	15	1	5	6	15	1			60	130-AIT-3005
130-AIT-3006	60			15	1	7	8	15	1	60			130-AIT-3007
130-AIT-3008		60		15	1	9	10	15	1		60		130-AIT-3009
130-AIT-3010			60	15	1	11	12	15	1			60	130-AIT-3011
130-AIT-3012	60			15	1	13	14	15	1	60			130-AIT-3013
130-AIT-3014		60		15	1	15	16	15	1		60		130-AIT-3015
130-AIT-3016			60	15	1	17	18	15	1			60	130-AIT-3017
SPARE	0			15	1	19	20	15	1	60			158-AIT-0131
SPARE		0		15	1	21	22	15	1		60		158-FSH-7004
SPARE			0	15	1	23	24	15	1			60	158-AIT-0132
130-VCP-3000	600			15	1	25	26	15	1	120			130-FIT-3105
130-FIT-3205		120		15	1	27	28	15	1		120		130-FIT-3305
SPARE			0	15	1	29	30	15	1			0	SPARE
SPARE	0			20	1	31	32	15	1	0			SPARE
SPARE		0		20	1	33	34	15	1		0		SPARE
SPARE			0	20	1	35	36	15	1			0	SPARE
163-IP-1	540			60	3	37	38	20	1	0			SPARE
----		800		--	--	39	40	20	1		0		SPARE
----			620	--	--	41	42	20	1			0	SPARE
TOTAL VA	1260	1040	800							300	360	240	TOTAL VA

TOTAL PHASE kVA	TOTAL CONNECTED LOAD :	5.62 kVA
A: 2.10		
B: 1.94		
C: 1.58		
	5.62 kVA @ 208 / 120 V, 3PH, 4W =	15.6 AMPS

GENERAL NOTES

1. FOR GENERAL NOTES, LEGEND AND SYMBOLS REFER TO PK2-G-015.
2. FOR ELECTRICAL REQUIREMENTS AND GENERAL NOTES, REFER TO PK2-G-700.

PROCESS BUILDING LIGHTING PANEL NO. 3													
130-LP-UV1													
BUS RATING:		150 A		10 kA SHORT CIRCUIT RATING				LOCATION: UV AREA					
MAIN CB:		150 A						POLES: 42					
VOLTAGE:		208 / 120 V						MOUNTING: SURFACE					
PHASE:		3		WIRE:		4		60 HZ		FED FROM 130-T-UV1			
DESCRIPTION	LOAD VA			CB AMP	CB POLE	CKT #	CKT #	CB AMP	CB POLE	LOAD VA			DESCRIPTION
	A	B	C							A	B	C	
UP LVL UV/RO LTS	935			20	1	1	2	20	1	540			UP LVL UV/RO RCPT
UP LVL UV/RO LTS		831		20	1	3	4	20	1		540		UP LVL UV/RO RCPT
UP LVL UV/RO LTS			831	20	1	5	6	40	1			2000	158 CAUSTIC HEAT TRACE
UP LVL UV/RO LTS	1098			20	1	7	8	20	1	1150			MEZZ TASTING STA PMP
UP LVL UV/RO LTS		1013		20	1	9	10	20	1		220		158 PW TANK LTS
UP LVL UV/RO LTS			1183	20	1	11	12	20	1			220	158 PW TANK LTS
163-LP-1	2535			60	3	13	14	20	1	264			158 PW TANK LTS
		2860				15	16	20	1		0		SPARE
			2620			17	18	20	1			0	SPARE
SPARE 130-GH-8001	120			20	1	19	20	20	1	720			158 PW TANK RCPT
SPARE		0		20	1	21	22	20	2		0		SPARE
SPARE			0	20	1	23	24	20				0	SPARE
SPARE	0			20	1	25	26	20	2	0			SPARE
SPARE		0		20	1	27	28	20			0		SPARE
SPARE			0	20	1	29	30	20	2			0	SPARE
SPARE	0			20	1	31	32	20		0			SPARE
SPARE		0		20	1	33	34	20	1		180		TASTING STATION RCPT
SPARE			0	20	1	35	36	20	1			0	SPARE
OHD-13011E	100			20	3	37	38			0			
-----		100				39	40				0		
			100			41	42					0	
TOTAL VA	4668	4804	4734							2674	940	2220	TOTAL VA
TOTAL PHASE KVA				TOTAL CONNECTED LOAD : 20.04 KVA									
A: 7.34													
B: 5.74													
C: 6.95													
				20.04 kVA @ 208/120V, 3PH, 4W = 55.6 AMPS									

[illegible]

PK2-130-E-404

Tasting Station receptacle

* = GFI BREAKER
** = LOCKABLE BREAKER

CONSULTANT



IF THIS BAR DOES
NOT MEASURE 1"
THEN DRAWING IS
NOT TO SCALE.

BRADY

2655 Camino del Rio North, Suite 100, San Diego, California 92108
Tel: (858) 496-0500 Fax: (858) 496-0505



3/19/2020

CONTRACTOR
INSPECTOR

CONSTRUCTION PACKAGE 2 NORTH CITY PURE WATER FACILITY					
ELECTRICAL PROCESS BUILDING PANEL SCHEDULES SHEET 4 OF 8					
CITY OF SAN DIEGO, CALIFORNIA PUBLIC UTILITIES DEPARTMENT SHEET 955 OF 1850 SHEETS				WBS <u>B-21058</u>	
APPROVED: <u>Amr Barhoum</u>		3/26/2020		SUBMITTED BY:	
FOR CITY ENGINEER AMER BARHOUMI PRINT ICE NAME		DATE CS3917 RCF		ANTHONY VAN PROJECT MANAGER	
				CHECKED BY: REYNALDO NOVENCIDO PROJECT ENGINEER	
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL			AMER BARHOUMI	3/26/2020	
<u>A</u>	DESIGN MOD. 7	CAROLLO	ALICE ALTES	3/11/2022	260-1709 CCS27 COORDINATE
<u>13</u>	DESIGN MOD. 13	BRE	ALICE ALTES	6/20/2022	1800-6289 CCS83 COORDINATE
<u>3A</u>	DESIGN MOD. 37	BRS	<u>Amr Barhoum</u>	9/5/2023	
			DATE STARTED		
			DATE COMPLETED		
39636-973-D					

EXHIBIT C



THE CITY OF SAN DIEGO

GENERAL CONTRACT TERMS AND PROVISIONS

APPLICABLE TO GOODS, SERVICES, AND CONSULTANT CONTRACTS

ARTICLE I SCOPE AND TERM OF CONTRACT

1.1 Scope of Contract. The scope of contract between the City and a provider of goods and/or services (Contractor) is described in the Contract Documents. The Contract Documents are comprised of the Request for Proposal, Invitation to Bid, or other solicitation document (Solicitation); the successful bid or proposal; the letter awarding the contract to Contractor; the City's written acceptance of exceptions or clarifications to the Solicitation, if any; and these General Contract Terms and Provisions.

1.2 Effective Date. A contract between the City and Contractor (Contract) is effective on the last date that the contract is signed by the parties and approved by the City Attorney in accordance with Charter section 40. Unless otherwise terminated, this Contract is effective until it is completed or as otherwise agreed upon in writing by the parties, whichever is the earliest. A Contract term cannot exceed five (5) years unless approved by the City Council by ordinance.

1.3 Contract Extension. The City may, in its sole discretion, unilaterally exercise an option to extend the Contract as described in the Contract Documents. In addition, the City may, in its sole discretion, unilaterally extend the Contract on a month-to-month basis following contract expiration if authorized under Charter section 99 and the Contract Documents. Contractor shall not increase its pricing in excess of the percentage increase described in the Contract.

ARTICLE II CONTRACT ADMINISTRATOR

2.1 Contract Administrator. The Purchasing Agent or designee is the Contract Administrator for purposes of this Contract, and has the responsibilities described in this Contract, in the San Diego Charter, and in Chapter 2, Article 2, Divisions 5, 30, and 32.

2.1.1 Contractor Performance Evaluations. The Contract Administrator will evaluate Contractor's performance as often as the Contract Administrator deems necessary throughout the term of the contract. This evaluation will be based on criteria including the quality of goods or services, the timeliness of performance, and adherence to applicable laws, including prevailing wage and living wage. City will provide Contractors who receive an unsatisfactory rating with a copy of the evaluation and an opportunity to respond. City may consider final evaluations, including Contractor's response, in evaluating future proposals and bids for contract award.

2.2 Notices. Unless otherwise specified, in all cases where written notice is required under this Contract, service shall be deemed sufficient if the notice is personally delivered or deposited in the United States mail, with first class postage paid, attention to the Purchasing Agent. Proper notice is effective on the date of personal delivery or five (5) days after deposit in a United States postal mailbox unless provided otherwise in the Contract. Notices to the City shall be sent to:

Purchasing Agent
City of San Diego, Purchasing and Contracting Division
1200 3rd Avenue, Suite 200
San Diego, CA 92101-4195

ARTICLE III COMPENSATION

3.1 Manner of Payment. Contractor will be paid monthly, in arrears, for goods and/or services provided in accordance with the terms and provisions specified in the Contract.

3.2 Invoices.

3.2.1 Invoice Detail. Contractor's invoice must be on Contractor's stationary with Contractor's name, address, and remittance address if different. Contractor's invoice must have a date, an invoice number, a purchase order number, a description of the goods or services provided, and an amount due.

3.2.2 Service Contracts. Contractor must submit invoices for services to City by the 10th of the month following the month in which Contractor provided services. Invoices must include the address of the location where services were performed and the dates in which services were provided.

3.2.3 Goods Contracts. Contractor must submit invoices for goods to City within seven days of the shipment. Invoices must describe the goods provided.

3.2.4 Parts Contracts. Contractor must submit invoices for parts to City within seven calendar (7) days of the date the parts are shipped. Invoices must include the manufacturer of the part, manufacturer's published list price, percentage discount applied in accordance with Pricing Page(s), the net price to City, and an item description, quantity, and extension.

3.2.5 Extraordinary Work. City will not pay Contractor for extraordinary work unless Contractor receives prior written authorization from the Contract Administrator. Failure to do so will result in payment being withheld for services. If approved, Contractor will include an invoice that describes the work performed and the location where the work was performed, and a copy of the Contract Administrator's written authorization.

3.2.6 Reporting Requirements. Contractor must submit the following reports using the City's web-based contract compliance portal. Incomplete and/or delinquent reports may cause payment delays, non-payment of invoice, or both. For questions, please view the City's online tutorials on how to utilize the City's web-based contract compliance portal.

3.2.6.1 Monthly Employment Utilization Reports. Contractor and Contractor's subcontractors and suppliers must submit Monthly Employment Utilization Reports by the fifth (5th) day of the subsequent month.

3.2.6.2 Monthly Invoicing and Payments. Contractor and Contractor's subcontractors and suppliers must submit Monthly Invoicing and Payment Reports by the fifth (5th) day of the subsequent month.

3.3 Annual Appropriation of Funds. Contractor acknowledges that the Contract term may extend over multiple City fiscal years, and that work and compensation under this Contract is contingent on the City Council appropriating funding for and authorizing such work and compensation for those fiscal years. This Contract may be terminated at the end of the fiscal year for which sufficient funding is not appropriated and authorized. City is not obligated to pay Contractor for any amounts not duly appropriated and authorized by City Council.

3.4 Price Adjustments. Based on Contractor's written request and justification, the City may approve an increase in unit prices on Contractor's pricing pages consistent with the amount requested in the justification in an amount not to exceed the increase in the Consumer Price Index, San Diego Area, for All Urban Customers (CPI-U) as published by the Bureau of Labor Statistics, or 5.0%, whichever is less, during the preceding one year term. If the CPI-U is a negative number, then the unit prices shall not be adjusted for that option year (the unit prices will not be decreased). A negative CPI-U shall be counted against any subsequent increases in the CPI-U when calculating the unit prices for later option years. Contractor must provide such written request and justification no less than sixty days before the date in which City may exercise the option to renew the contract, or sixty days before the anniversary date of the Contract. Justification in support of the written request must include a description of the basis for the adjustment, the proposed effective date and reasons for said date, and the amount of the adjustment requested with documentation to support the requested change (e.g. CPI-U or 5.0%, whichever is less). City's approval of this request must be in writing.

ARTICLE IV SUSPENSION AND TERMINATION

4.1 City's Right to Suspend for Convenience. City may suspend all or any portion of Contractor's performance under this Contract at its sole option and for its convenience for a reasonable period of time not to exceed six (6) months. City must first give ten (10) days' written notice to Contractor of such suspension. City will pay to Contractor a sum equivalent to the reasonable value of the goods and/or services satisfactorily provided up to the date of suspension. City may rescind the suspension prior to or at six (6) months by providing Contractor with written notice of the rescission, at which time Contractor would be required to resume performance in compliance with the terms and provisions of this Contract. Contractor will be entitled to an extension of time to complete performance under the Contract equal to the length of the suspension unless otherwise agreed to in writing by the Parties.

4.2 City's Right to Terminate for Convenience. City may, at its sole option and for its convenience, terminate all or any portion of this Contract by giving thirty (30) days' written notice of such termination to Contractor. The termination of the Contract shall be effective upon receipt of the notice by Contractor. After termination of all or any portion of the Contract, Contractor shall: (1) immediately discontinue all affected performance (unless the notice directs otherwise); and (2) complete any and all additional work necessary for the orderly filing of

documents and closing of Contractor's affected performance under the Contract. After filing of documents and completion of performance, Contractor shall deliver to City all data, drawings, specifications, reports, estimates, summaries, and such other information and materials created or received by Contractor in performing this Contract, whether completed or in process. By accepting payment for completion, filing, and delivering documents as called for in this section, Contractor discharges City of all of City's payment obligations and liabilities under this Contract with regard to the affected performance.

4.3 City's Right to Terminate for Default. Contractor's failure to satisfactorily perform any obligation required by this Contract constitutes a default. Examples of default include a determination by City that Contractor has: (1) failed to deliver goods and/or perform the services of the required quality or within the time specified; (2) failed to perform any of the obligations of this Contract; and (3) failed to make sufficient progress in performance which may jeopardize full performance.

4.3.1 If Contractor fails to satisfactorily cure a default within ten (10) calendar days of receiving written notice from City specifying the nature of the default, City may immediately cancel and/or terminate this Contract, and terminate each and every right of Contractor, and any person claiming any rights by or through Contractor under this Contract.

4.3.2 If City terminates this Contract, in whole or in part, City may procure, upon such terms and in such manner as the Purchasing Agent may deem appropriate, equivalent goods or services and Contractor shall be liable to City for any excess costs. Contractor shall also continue performance to the extent not terminated.

4.4 Termination for Bankruptcy or Assignment for the Benefit of Creditors. If Contractor files a voluntary petition in bankruptcy, is adjudicated bankrupt, or makes a general assignment for the benefit of creditors, the City may at its option and without further notice to, or demand upon Contractor, terminate this Contract, and terminate each and every right of Contractor, and any person claiming rights by and through Contractor under this Contract.

4.5 Contractor's Right to Payment Following Contract Termination.

4.5.1 Termination for Convenience. If the termination is for the convenience of City an equitable adjustment in the Contract price shall be made. No amount shall be allowed for anticipated profit on unperformed services, and no amount shall be paid for an as needed contract beyond the Contract termination date.

4.5.2 Termination for Default. If, after City gives notice of termination for failure to fulfill Contract obligations to Contractor, it is determined that Contractor had not so failed, the termination shall be deemed to have been effected for the convenience of City. In such event, adjustment in the Contract price shall be made as provided in Section 4.3.2. City's rights and remedies are in addition to any other rights and remedies provided by law or under this Contract.

4.6 Remedies Cumulative. City's remedies are cumulative and are not intended to be exclusive of any other remedies or means of redress to which City may be lawfully entitled in case of any breach or threatened breach of any provision of this Contract.

ARTICLE V ADDITIONAL CONTRACTOR OBLIGATIONS

5.1 Inspection and Acceptance. The City will inspect and accept goods provided under this Contract at the shipment destination unless specified otherwise. Inspection will be made and acceptance will be determined by the City department shown in the shipping address of the Purchase Order or other duly authorized representative of City.

5.2 Responsibility for Lost or Damaged Shipments. Contractor bears the risk of loss or damage to goods prior to the time of their receipt and acceptance by City. City has no obligation to accept damaged shipments and reserves the right to return damaged goods, at Contractor's sole expense, even if the damage was not apparent or discovered until after receipt.

5.3 Responsibility for Damages. Contractor is responsible for all damage that occurs as a result of Contractor's fault or negligence or that of its' employees, agents, or representatives in connection with the performance of this Contract. Contractor shall immediately report any such damage to people and/or property to the Contract Administrator.

5.4 Delivery. Delivery shall be made on the delivery day specified in the Contract Documents. The City, in its sole discretion, may extend the time for delivery. The City may order, in writing, the suspension, delay or interruption of delivery of goods and/or services.

5.5 Delay. Unless otherwise specified herein, time is of the essence for each and every provision of the Contract. Contractor must immediately notify City in writing if there is, or it is anticipated that there will be, a delay in performance. The written notice must explain the cause for the delay and provide a reasonable estimate of the length of the delay. City may terminate this Contract as provided herein if City, in its sole discretion, determines the delay is material.

5.5.1 If a delay in performance is caused by any unforeseen event(s) beyond the control of the parties, City may allow Contractor to a reasonable extension of time to complete performance, but Contractor will not be entitled to damages or additional compensation. Any such extension of time must be approved in writing by City. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the performance; inability to obtain materials, equipment or labor; or other specific reasons agreed to between City and Contractor. This provision does not apply to a delay caused by Contractor's acts or omissions. Contractor is not entitled to an extension of time to perform if a delay is caused by Contractor's inability to obtain materials, equipment, or labor unless City has received, in a timely manner, documentary proof satisfactory to City of Contractor's inability to obtain materials, equipment, or labor, in which case City's approval must be in writing.

5.6 Restrictions and Regulations Requiring Contract Modification. Contractor shall immediately notify City in writing of any regulations or restrictions that may or will require Contractor to alter the material, quality, workmanship, or performance of the goods and/or services to be provided. City reserves the right to accept any such alteration, including any resulting reasonable price adjustments, or to cancel the Contract at no expense to the City.

5.7 Warranties. All goods and/or services provided under the Contract must be warranted by Contractor or manufacturer for at least twelve (12) months after acceptance by City, except automotive equipment. Automotive equipment must be warranted for a minimum of 12,000 miles or 12 months, whichever occurs first, unless otherwise stated in the Contract. Contractor is responsible to City for all warranty service, parts, and labor. Contractor is required to ensure that warranty work is performed at a facility acceptable to City and that services, parts, and labor are available and provided to meet City's schedules and deadlines. Contractor may establish a warranty service contract with an agency satisfactory to City instead of performing the warranty service itself. If Contractor is not an authorized service center and causes any damage to equipment being serviced, which results in the existing warranty being voided, Contractor will be liable for all costs of repairs to the equipment, or the costs of replacing the equipment with new equipment that meets City's operational needs.

5.8 Industry Standards. Contractor shall provide goods and/or services acceptable to City in strict conformance with the Contract. Contractor shall also provide goods and/or services in accordance with the standards customarily adhered to by an experienced and competent provider of the goods and/or services called for under this Contract using the degree of care and skill ordinarily exercised by reputable providers of such goods and/or services. Where approval by City, the Mayor, or other representative of City is required, it is understood to be general approval only and does not relieve Contractor of responsibility for complying with all applicable laws, codes, policies, regulations, and good business practices.

5.9 Records Retention and Examination. Contractor shall retain, protect, and maintain in an accessible location all records and documents, including paper, electronic, and computer records, relating to this Contract for five (5) years after receipt of final payment by City under this Contract. Contractor shall make all such records and documents available for inspection, copying, or other reproduction, and auditing by authorized representatives of City, including the Purchasing Agent or designee. Contractor shall make available all requested data and records at reasonable locations within City or County of San Diego at any time during normal business hours, and as often as City deems necessary. If records are not made available within the City or County of San Diego, Contractor shall pay City's travel costs to the location where the records are maintained and shall pay for all related travel expenses. Failure to make requested records available for inspection, copying, or other reproduction, or auditing by the date requested may result in termination of the Contract. Contractor must include this provision in all subcontracts made in connection with this Contract.

5.9.1 Contractor shall maintain records of all subcontracts entered into with all firms, all project invoices received from Subcontractors and Suppliers, all purchases of materials and services from Suppliers, and all joint venture participation. Records shall show name, telephone number including area code, and business address of each Subcontractor and Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.

5.10 Quality Assurance Meetings. Upon City's request, Contractor shall schedule one or more quality assurance meetings with City's Contract Administrator to discuss Contractor's performance. If requested, Contractor shall schedule the first quality assurance meeting no later than eight (8) weeks from the date of commencement of work under the Contract. At the quality assurance meeting(s), City's Contract Administrator will provide Contractor with feedback, will note any deficiencies in Contract performance, and provide Contractor with an opportunity to address and correct such deficiencies. The total number of quality assurance meetings that may be required by City will depend upon Contractor's performance.

5.11 Duty to Cooperate with Auditor. The City Auditor may, in his sole discretion, at no cost to the City, and for purposes of performing his responsibilities under Charter section 39.2, review Contractor's records to confirm contract compliance. Contractor shall make reasonable efforts to cooperate with Auditor's requests.

5.12 Safety Data Sheets. If specified by City in the solicitation or otherwise required by this Contract, Contractor must send with each shipment one (1) copy of the Safety Data Sheet (SDS) for each item shipped. Failure to comply with this procedure will be cause for immediate termination of the Contract for violation of safety procedures.

5.13 Project Personnel. Except as formally approved by the City, the key personnel identified in Contractor's bid or proposal shall be the individuals who will actually complete the work. Changes in staffing must be reported in writing and approved by the City.

5.13.1 Criminal Background Certification. Contractor certifies that all employees working on this Contract have had a criminal background check and that said employees are clear of any sexual and drug related convictions. Contractor further certifies that all employees hired by Contractor or a subcontractor shall be free from any felony convictions.

5.13.2 Photo Identification Badge. Contractor shall provide a company photo identification badge to any individual assigned by Contractor or subcontractor to perform services or deliver goods on City premises. Such badge must be worn at all times while on City premises. City reserves the right to require Contractor to pay fingerprinting fees for personnel assigned to work in sensitive areas. All employees shall turn in their photo identification badges to Contractor upon completion of services and prior to final payment of invoice.

5.14 Standards of Conduct. Contractor is responsible for maintaining standards of employee competence, conduct, courtesy, appearance, honesty, and integrity satisfactory to the City.

5.14.1 Supervision. Contractor shall provide adequate and competent supervision at all times during the Contract term. Contractor shall be readily available to meet with the City. Contractor shall provide the telephone numbers where its representative(s) can be reached.

5.14.2 City Premises. Contractor's employees and agents shall comply with all City rules and regulations while on City premises.

5.14.3 Removal of Employees. City may request Contractor immediately remove from assignment to the City any employee found unfit to perform duties at the City. Contractor shall comply with all such requests.

5.15 Licenses and Permits. Contractor shall, without additional expense to the City, be responsible for obtaining any necessary licenses, permits, certifications, accreditations, fees and approvals for complying with any federal, state, county, municipal, and other laws, codes, and regulations applicable to Contract performance. This includes, but is not limited to, any laws or regulations requiring the use of licensed contractors to perform parts of the work.

5.16 Contractor and Subcontractor Registration Requirements. Prior to the award of the Contract or Task Order, Contractor and Contractor's subcontractors and suppliers must register with the City's web-based vendor registration and bid management system. The City may not award the Contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified by the City, the City reserves the right to rescind the Contract award and to make the award to the next responsive and responsible proposer of bidder.

ARTICLE VI INTELLECTUAL PROPERTY RIGHTS

6.1 Rights in Data. If, in connection with the services performed under this Contract, Contractor or its employees, agents, or subcontractors, create artwork, audio recordings, blueprints, designs, diagrams, documentation, photographs, plans, reports, software, source code, specifications, surveys, system designs, video recordings, or any other original works of authorship, whether written or readable by machine (Deliverable Materials), all rights of Contractor or its subcontractors in the Deliverable Materials, including, but not limited to publication, and registration of copyrights, and trademarks in the Deliverable Materials, are the sole property of City. Contractor, including its employees, agents, and subcontractors, may not use any Deliverable Material for purposes unrelated to Contractor's work on behalf of the City without prior written consent of City. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City, without the prior written consent of the City.

6.2 Intellectual Property Rights Assignment. For no additional compensation, Contractor hereby assigns to City all of Contractor's rights, title, and interest in and to the content of the Deliverable Materials created by Contractor or its employees, agents, or subcontractors, including copyrights, in connection with the services performed under this Contract. Contractor

shall promptly execute and deliver, and shall cause its employees, agents, and subcontractors to promptly execute and deliver, upon request by the City or any of its successors or assigns at any time and without further compensation of any kind, any power of attorney, assignment, application for copyright, patent, trademark or other intellectual property right protection, or other papers or instruments which may be necessary or desirable to fully secure, perfect or otherwise protect to or for the City, its successors and assigns, all right, title and interest in and to the content of the Deliverable Materials. Contractor also shall cooperate and assist in the prosecution of any action or opposition proceeding involving such intellectual property rights and any adjudication of those rights.

6.3 Contractor Works. Contractor Works means tangible and intangible information and material that: (a) had already been conceived, invented, created, developed or acquired by Contractor prior to the effective date of this Contract; or (b) were conceived, invented, created, or developed by Contractor after the effective date of this Contract, but only to the extent such information and material do not constitute part or all of the Deliverable Materials called for in this Contract. All Contractor Works, and all modifications or derivatives of such Contractor Works, including all intellectual property rights in or pertaining to the same, shall be owned solely and exclusively by Contractor.

6.4 Subcontracting. In the event that Contractor utilizes a subcontractor(s) for any portion of the work that comprises the whole or part of the specified Deliverable Materials to the City, the agreement between Contractor and the subcontractor shall include a statement that identifies the Deliverable Materials as a “works for hire” as described in the United States Copyright Act of 1976, as amended, and that all intellectual property rights in the Deliverable Materials, whether arising in copyright, trademark, service mark or other forms of intellectual property rights, belong to and shall vest solely with the City. Further, the agreement between Contractor and its subcontractor shall require that the subcontractor, if necessary, shall grant, transfer, sell and assign, free of charge, exclusively to City, all titles, rights and interests in and to the Deliverable Materials, including all copyrights, trademarks and other intellectual property rights. City shall have the right to review any such agreement for compliance with this provision.

6.5 Intellectual Property Warranty and Indemnification. Contractor represents and warrants that any materials or deliverables, including all Deliverable Materials, provided under this Contract are either original, or not encumbered, and do not infringe upon the copyright, trademark, patent or other intellectual property rights of any third party, or are in the public domain. If Deliverable Materials provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, City shall have the right, in its sole discretion, to require Contractor to produce, at Contractor’s own expense, new non-infringing materials, deliverables or works as a means of remedying any claim of infringement in addition to any other remedy available to the City under law or equity. Contractor further agrees to indemnify, defend, and hold harmless the City, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages, of any type, alleging or threatening that any Deliverable Materials, supplies, equipment, services or works provided under this contract infringe the copyright, trademark, patent or other intellectual property or proprietary rights of any third party (Third Party Claim of Infringement). If a Third Party Claim

of Infringement is threatened or made before Contractor receives payment under this Contract, City shall be entitled, upon written notice to Contractor, to withhold some or all of such payment.

6.6 Software Licensing. Contractor represents and warrants that the software, if any, as delivered to City, does not contain any program code, virus, worm, trap door, back door, time or clock that would erase data or programming or otherwise cause the software to become inoperable, inaccessible, or incapable of being used in accordance with its user manuals, either automatically, upon the occurrence of licensor-selected conditions or manually on command. Contractor further represents and warrants that all third party software, delivered to City or used by Contractor in the performance of the Contract, is fully licensed by the appropriate licensor.

6.7 Publication. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City without prior written consent from the City.

6.8 Royalties, Licenses, and Patents. Unless otherwise specified, Contractor shall pay all royalties, license, and patent fees associated with the goods that are the subject of this solicitation. Contractor warrants that the goods, materials, supplies, and equipment to be supplied do not infringe upon any patent, trademark, or copyright, and further agrees to defend any and all suits, actions and claims for infringement that are brought against the City, and to defend, indemnify and hold harmless the City, its elected officials, officers, and employees from all liability, loss and damages, whether general, exemplary or punitive, suffered as a result of any actual or claimed infringement asserted against the City, Contractor, or those furnishing goods, materials, supplies, or equipment to Contractor under the Contract.

ARTICLE VII INDEMNIFICATION AND INSURANCE

7.1 Indemnification. To the fullest extent permitted by law, Contractor shall defend (with legal counsel reasonably acceptable to City), indemnify, protect, and hold harmless City and its elected officials, officers, employees, agents, and representatives (Indemnified Parties) from and against any and all claims, losses, costs, damages, injuries (including, without limitation, injury to or death of an employee of Contractor or its subcontractors), expense, and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, and litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, any goods provided or performance of services under this Contract by Contractor, any subcontractor, anyone directly or indirectly employed by either of them, or anyone that either of them control. Contractor's duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the sole negligence or willful misconduct of the Indemnified Parties.

7.2 Insurance. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or

in connection with the performance of the work hereunder and the results of that work by Contractor, his agents, representatives, employees or subcontractors.

Contractor shall provide, at a minimum, the following:

7.2.1 Commercial General Liability. Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury, and personal and advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

7.2.2 Commercial Automobile Liability. Insurance Services Office Form Number CA 0001 covering Code 1 (any auto) or, if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 per accident for bodily injury and property damage.

7.2.3 Workers' Compensation. Insurance as required by the State of California, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.

7.2.4 Professional Liability (Errors and Omissions). For consultant contracts, insurance appropriate to Consultant’s profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

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

7.2.5 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

7.2.5.1 Additional Insured Status. The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to Contractor’s insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later edition is used).

7.2.5.2 Primary Coverage. For any claims related to this contract, Contractor's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by City, its officers, officials, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it.

7.2.5.3 Notice of Cancellation. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to City.

7.2.5.4 Waiver of Subrogation. Contractor hereby grants to City a waiver of any right to subrogation which the Workers' Compensation insurer of said Contractor may acquire against City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

7.2.5.5 Claims Made Policies (applicable only to professional liability). The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Contractor must purchase "extended reporting" coverage for a minimum of five (5) years after completion of work.

7.3 Self Insured Retentions. Self-insured retentions must be declared to and approved by City. City may require Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

7.4 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VI, unless otherwise acceptable to City.

City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Approved Surplus Lines Insurers (LASLI list). All policies of insurance carried by non-admitted carriers are subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7.5 Verification of Coverage. Contractor shall furnish City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

7.6 Special Risks or Circumstances. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

7.7 Additional Insurance. Contractor may obtain additional insurance not required by this Contract.

7.8 Excess Insurance. All policies providing excess coverage to City shall follow the form of the primary policy or policies including but not limited to all endorsements.

7.9 Subcontractors. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage, subcontractors shall provide coverage with a format at least as broad as the CG 20 38 04 13 endorsement.

ARTICLE VIII BONDS

8.1 Payment and Performance Bond. Prior to the execution of this Contract, City may require Contractor to post a payment and performance bond (Bond). The Bond shall guarantee Contractor's faithful performance of this Contract and assure payment to contractors, subcontractors, and to persons furnishing goods and/or services under this Contract.

8.1.1 Bond Amount. The Bond shall be in a sum equal to twenty-five percent (25%) of the Contract amount, unless otherwise stated in the Specifications. City may file a claim against the Bond if Contractor fails or refuses to fulfill the terms and provisions of the Contract.

8.1.2 Bond Term. The Bond shall remain in full force and effect at least until complete performance of this Contract and payment of all claims for materials and labor, at which time it will convert to a ten percent (10%) warranty bond, which shall remain in place until the end of the warranty periods set forth in this Contract. The Bond shall be renewed annually, at least sixty (60) days in advance of its expiration, and Contractor shall provide timely proof of annual renewal to City.

8.1.3 Bond Surety. The Bond must be furnished by a company authorized by the State of California Department of Insurance to transact surety business in the State of California and which has a current A.M. Best rating of at least "A-, VIII."

8.1.4 Non-Renewal or Cancellation. The Bond must provide that City and Contractor shall be provided with sixty (60) days' advance written notice in the event of non-renewal, cancellation, or material change to its terms. In the event of non-renewal, cancellation, or material change to the Bond terms, Contractor shall provide City with evidence of the new source of surety within twenty-one (21) calendar days after the date of the notice of non-renewal, cancellation, or material change. Failure to maintain the Bond, as required herein, in full force

and effect as required under this Contract, will be a material breach of the Contract subject to termination of the Contract.

8.2 Alternate Security. City may, at its sole discretion, accept alternate security in the form of an endorsed certificate of deposit, a money order, a certified check drawn on a solvent bank, or other security acceptable to the Purchasing Agent in an amount equal to the required Bond.

ARTICLE IX CITY-MANDATED CLAUSES AND REQUIREMENTS

9.1 Contractor Certification of Compliance. By signing this Contract, Contractor certifies that Contractor is aware of, and will comply with, these City-mandated clauses throughout the duration of the Contract.

9.1.1 Drug-Free Workplace Certification. Contractor shall comply with City's Drug-Free Workplace requirements set forth in Council Policy 100-17, which is incorporated into the Contract by this reference.

9.1.2 Contractor Certification for Americans with Disabilities Act (ADA) and State Access Laws and Regulations: Contractor shall comply with all accessibility requirements under the ADA and under Title 24 of the California Code of Regulations (Title 24). When a conflict exists between the ADA and Title 24, Contractor shall comply with the most restrictive requirement (i.e., that which provides the most access). Contractor also shall comply with the City's ADA Compliance/City Contractors requirements as set forth in Council Policy 100-04, which is incorporated into this Contract by reference. Contractor warrants and certifies compliance with all federal and state access laws and regulations and further certifies that any subcontract agreement for this contract contains language which indicates the subcontractor's agreement to abide by the provisions of the City's Council Policy and any applicable access laws and regulations.

9.1.3 Non-Discrimination Requirements.

9.1.3.1 Compliance with City's Equal Opportunity Contracting Program (EOCP). Contractor shall comply with City's EOCP Requirements. Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Prime Contractors shall ensure that their subcontractors comply with this program. Nothing in this Section shall be interpreted to hold a Prime Contractor liable for any discriminatory practice of its subcontractors.

9.1.3.2 Non-Discrimination Ordinance. Contractor shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring or treatment of subcontractors, vendors or suppliers. Contractor shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result

in Contract termination, debarment, or other sanctions. Contractor shall ensure that this language is included in contracts between Contractor and any subcontractors, vendors and suppliers.

9.1.3.3 Compliance Investigations. Upon City's request, Contractor agrees to provide to City, within sixty calendar days, a truthful and complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past five years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by Contractor for each subcontract or supply contract. Contractor further agrees to fully cooperate in any investigation conducted by City pursuant to City's Nondiscrimination in Contracting Ordinance. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.4 Equal Benefits Ordinance Certification. Unless an exception applies, Contractor shall comply with the Equal Benefits Ordinance (EBO) codified in the San Diego Municipal Code (SDMC). Failure to maintain equal benefits is a material breach of the Contract.

9.1.5 Contractor Standards. Contractor shall comply with Contractor Standards provisions codified in the SDMC. Contractor understands and agrees that violation of Contractor Standards may be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.6 Noise Abatement. Contractor shall operate, conduct, or construct without violating the City's Noise Abatement Ordinance codified in the SDMC.

9.1.7 Storm Water Pollution Prevention Program. Contractor shall comply with the City's Storm Water Management and Discharge Control provisions codified in Division 3 of Chapter 4 of the SDMC, as may be amended, and any and all applicable Best Management Practice guidelines and pollution elimination requirements in performing or delivering services at City owned, leased, or managed property, or in performance of services and activities on behalf of City regardless of location.

Contractor shall comply with the City's Jurisdictional Urban Runoff Management Plan encompassing Citywide programs and activities designed to prevent and reduce storm water pollution within City boundaries as adopted by the City Council on January 22, 2008, via Resolution No. 303351, as may be amended.

Contractor shall comply with each City facility or work site's Storm Water Pollution Prevention Plan, as applicable, and institute all controls needed while completing the services to minimize any negative impact to the storm water collection system and environment.

9.1.8 Service Worker Retention Ordinance. If applicable, Contractor shall comply with the Service Worker Retention Ordinance (SWRO) codified in the SDMC.

9.1.9 Product Endorsement. Contractor shall comply with Council Policy 000-41 which requires that other than listing the City as a client and other limited endorsements, any advertisements, social media, promotions or other marketing referring to the City as a user of a product or service will require prior written approval of the Mayor or designee. Use of the City Seal or City logos is prohibited.

9.1.10 Business Tax Certificate. Unless the City Treasurer determines in writing that a contractor is exempt from the payment of business tax, any contractor doing business with the City of San Diego is required to obtain a Business Tax Certificate (BTC) and to provide a copy of its BTC to the City before a Contract is executed.

9.1.11 Equal Pay Ordinance. Unless an exception applies, Contractor shall comply with the Equal Pay Ordinance codified in San Diego Municipal Code sections 22.4801 through 22.4809. Contractor shall certify in writing that it will comply with the requirements of the EPO.

9.1.11.1 Contractor and Subcontract Requirement. The Equal Pay Ordinance applies to any subcontractor who performs work on behalf of a Contractor to the same extent as it would apply to that Contractor. Any Contractor subject to the Equal Pay Ordinance shall require all of its subcontractors to certify compliance with the Equal Pay Ordinance in its written subcontracts.

ARTICLE X CONFLICT OF INTEREST AND VIOLATIONS OF LAW

10.1 Conflict of Interest Laws. Contractor is subject to all federal, state and local conflict of interest laws, regulations, and policies applicable to public contracts and procurement practices including, but not limited to, California Government Code sections 1090, *et. seq.* and 81000, *et. seq.*, and the Ethics Ordinance, codified in the SDMC. City may determine that Contractor must complete one or more statements of economic interest disclosing relevant financial interests. Upon City's request, Contractor shall submit the necessary documents to City.

10.2 Contractor's Responsibility for Employees and Agents. Contractor is required to establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business or other relationships.

10.3 Contractor's Financial or Organizational Interests. In connection with any task, Contractor shall not recommend or specify any product, supplier, or contractor with whom Contractor has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

10.4 Certification of Non-Collusion. Contractor certifies that: (1) Contractor's bid or proposal was not made in the interest of or on behalf of any person, firm, or corporation not identified; (2) Contractor did not directly or indirectly induce or solicit any other bidder or proposer to put in a sham bid or proposal; (3) Contractor did not directly or indirectly induce or

solicit any other person, firm or corporation to refrain from bidding; and (4) Contractor did not seek by collusion to secure any advantage over the other bidders or proposers.

10.5 Hiring City Employees. This Contract shall be unilaterally and immediately terminated by City if Contractor employs an individual who within the twelve (12) months immediately preceding such employment did in his/her capacity as a City officer or employee participate in negotiations with or otherwise have an influence on the selection of Contractor.

ARTICLE XI DISPUTE RESOLUTION

11.1 Mediation. If a dispute arises out of or relates to this Contract and cannot be settled through normal contract negotiations, Contractor and City shall use mandatory non-binding mediation before having recourse in a court of law.

11.2 Selection of Mediator. A single mediator that is acceptable to both parties shall be used to mediate the dispute. The mediator will be knowledgeable in the subject matter of this Contract, if possible.

11.3 Expenses. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.

11.4 Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed. The discussions, statements, writings and admissions will be confidential to the proceedings (pursuant to California Evidence Code sections 1115 through 1128) and will not be used for any other purpose unless otherwise agreed by the parties in writing. The parties may agree to exchange any information they deem necessary. Both parties shall have a representative attend the mediation who is authorized to settle the dispute, though City's recommendation of settlement may be subject to the approval of the Mayor and City Council. Either party may have attorneys, witnesses or experts present.

11.5 Mediation Results. Any agreements resulting from mediation shall be memorialized in writing. The results of the mediation shall not be final or binding unless otherwise agreed to in writing by the parties. Mediators shall not be subject to any subpoena or liability, and their actions shall not be subject to discovery.

ARTICLE XII MANDATORY ASSISTANCE

12.1 Mandatory Assistance. If a third party dispute or litigation, or both, arises out of, or relates in any way to the services provided to the City under a Contract, Contractor, its agents, officers, and employees agree to assist in resolving the dispute or litigation upon City's request. Contractor's assistance includes, but is not limited to, providing professional consultations,

attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation.

12.2 Compensation for Mandatory Assistance. City will compensate Contractor for fees incurred for providing Mandatory Assistance. If, however, the fees incurred for the Mandatory Assistance are determined, through resolution of the third party dispute or litigation, or both, to be attributable in whole, or in part, to the acts or omissions of Contractor, its agents, officers, and employees, Contractor shall reimburse City for all fees paid to Contractor, its agents, officers, and employees for Mandatory Assistance.

12.3 Attorneys' Fees Related to Mandatory Assistance. In providing City with dispute or litigation assistance, Contractor or its agents, officers, and employees may incur expenses and/or costs. Contractor agrees that any attorney fees it may incur as a result of assistance provided under Section 12.2 are not reimbursable.

ARTICLE XIII MISCELLANEOUS

13.1 Headings. All headings are for convenience only and shall not affect the interpretation of this Contract.

13.2 Non-Assignment. Contractor may not assign the obligations under this Contract, whether by express assignment or by sale of the company, nor any monies due or to become due under this Contract, without City's prior written approval. Any assignment in violation of this paragraph shall constitute a default and is grounds for termination of this Contract at the City's sole discretion. In no event shall any putative assignment create a contractual relationship between City and any putative assignee.

13.3 Independent Contractors. Contractor and any subcontractors employed by Contractor are independent contractors and not agents of City. Any provisions of this Contract that may appear to give City any right to direct Contractor concerning the details of performing or providing the goods and/or services, or to exercise any control over performance of the Contract, shall mean only that Contractor shall follow the direction of City concerning the end results of the performance.

13.4 Subcontractors. All persons assigned to perform any work related to this Contract, including any subcontractors, are deemed to be employees of Contractor, and Contractor shall be directly responsible for their work.

13.5 Covenants and Conditions. All provisions of this Contract expressed as either covenants or conditions on the part of City or Contractor shall be deemed to be both covenants and conditions.

13.6 Compliance with Controlling Law. Contractor shall comply with all applicable local, state, and federal laws, regulations, and policies. Contractor's act or omission in violation of applicable local, state, and federal laws, regulations, and policies is grounds for contract

termination. In addition to all other remedies or damages allowed by law, Contractor is liable to City for all damages, including costs for substitute performance, sustained as a result of the violation. In addition, Contractor may be subject to suspension, debarment, or both.

13.7 Governing Law. The Contract shall be deemed to be made under, construed in accordance with, and governed by the laws of the State of California without regard to the conflicts or choice of law provisions thereof.

13.8 Venue. The venue for any suit concerning solicitations or the Contract, the interpretation of application of any of its terms and conditions, or any related disputes shall be in the County of San Diego, State of California.

13.9 Successors in Interest. This Contract and all rights and obligations created by this Contract shall be in force and effect whether or not any parties to the Contract have been succeeded by another entity, and all rights and obligations created by this Contract shall be vested and binding on any party's successor in interest.

13.10 No Waiver. No failure of either City or Contractor to insist upon the strict performance by the other of any covenant, term or condition of this Contract, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Contract, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Contract, and each and every covenant, condition, and term hereof shall continue in full force and effect without respect to any existing or subsequent breach.

13.11 Severability. The unenforceability, invalidity, or illegality of any provision of this Contract shall not render any other provision of this Contract unenforceable, invalid, or illegal.

13.12 Drafting Ambiguities. The parties acknowledge that they have the right to be advised by legal counsel with respect to the negotiations, terms and conditions of this Contract, and the decision of whether to seek advice of legal counsel with respect to this Contract is the sole responsibility of each party. This Contract shall not be construed in favor of or against either party by reason of the extent to which each party participated in the drafting of the Contract.

13.13 Amendments. Neither this Contract nor any provision hereof may be changed, modified, amended or waived except by a written agreement executed by duly authorized representatives of City and Contractor. Any alleged oral amendments have no force or effect. The Purchasing Agent must sign all Contract amendments.

13.14 Conflicts Between Terms. If this Contract conflicts with an applicable local, state, or federal law, regulation, or court order, applicable local, state, or federal law, regulation, or court order shall control. Varying degrees of stringency among the main body of this Contract, the exhibits or attachments, and laws, regulations, or orders are not deemed conflicts, and the most stringent requirement shall control. Each party shall notify the other immediately upon the identification of any apparent conflict or inconsistency concerning this Contract.

13.15 Survival of Obligations. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with this Contract, as well as all continuing obligations indicated in this Contract, shall survive, completion and acceptance of performance and termination, expiration or completion of the Contract.

13.16 Confidentiality of Services. All services performed by Contractor, and any sub-contractor(s) if applicable, including but not limited to all drafts, data, information, correspondence, proposals, reports of any nature, estimates compiled or composed by Contractor, are for the sole use of City, its agents, and employees. Neither the documents nor their contents shall be released by Contractor or any subcontractor to any third party without the prior written consent of City. This provision does not apply to information that: (1) was publicly known, or otherwise known to Contractor, at the time it was disclosed to Contractor by City; (2) subsequently becomes publicly known through no act or omission of Contractor; or (3) otherwise becomes known to Contractor other than through disclosure by City.

13.17 Insolvency. If Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the Contract, written notification of the bankruptcy to the Purchasing Agent and the Contract Administrator responsible for administering the Contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of City contract numbers and contracting offices for all City contracts against which final payment has not been made. This obligation remains in effect until final payment is made under this Contract.

13.18 No Third Party Beneficiaries. Except as may be specifically set forth in this Contract, none of the provisions of this Contract are intended to benefit any third party not specifically referenced herein. No party other than City and Contractor shall have the right to enforce any of the provisions of this Contract.

13.19 Actions of City in its Governmental Capacity. Nothing in this Contract shall be interpreted as limiting the rights and obligations of City in its governmental or regulatory capacity.

EXHIBIT D

WAGE REQUIREMENTS: SERVICE AND MAINTENANCE CONTRACTS EXECUTED ON OR AFTER JANUARY 1, 2015

By signing this Contract, Bidder certifies that he or she is aware of the wage provisions described herein and shall comply with such provisions before commencing services.

A. PREVAILING WAGES. Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, Bidder and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below. This requirement is in addition to the requirement to pay Living Wage pursuant to San Diego Municipal Code Chapter 2, Article 2, Division 42. Bidder must determine which per diem rate is highest for each classification of work (i.e. Prevailing Wage Rate or Living Wage Rate), and pay the highest of the two rates to their employees. Living Wage applies to workers who are not subject to Prevailing Wage Rates.

1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

1.1. Copies of such prevailing rate of per diem wages are on file at the City of San Diego's Equal Opportunity Contracting Department and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Bidder and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date

of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.

2. Penalties for Violations. Bidder and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.

3. Payroll Records. Bidder and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Bidder shall require its subcontractors to also comply with section 1776. Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City. Bidder and its subcontractors shall also furnish the records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required in Labor Code section 1771.4.

4. Apprentices. Bidder and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Bidder shall be held responsible for their compliance as well as the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.

5. Working Hours. Bidder and its subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.

6. Required Provisions for Subcontracts. Bidder shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

7. Labor Code Section 1861 Certification. Bidder in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Bidder certifies that "I am aware of the provisions of Section 3700 of the California 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."

8. Labor Compliance Program. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when

payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. A Bidder or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or enter into any contract for public work, as defined in this chapter of the Labor Code unless currently registered and qualified to perform the work pursuant to Section 1725.5. In accordance with Labor Code section 1771.1(a), "[i]t is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

9.1. A Bidder's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in a response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered contractor pursuant to Public Contract Code section 4107.

9.2. A Contract entered into with any Bidder or subcontractor in violation of Labor Code section 1771.1(a) shall be subject to cancellation, provided that a Contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, Bidder, or any subcontractor to comply with the requirements of section 1725.5 of this section.

9.3. By submitting a bid or proposal to the City, Bidder is certifying that he or she has verified that all subcontractors used on this public works project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Bidder shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.

10. Stop Order. For Bidder or its subcontractor(s) engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered Bidder or unregistered subcontractor(s) on ALL public works until the unregistered Bidder or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.

11. List of all Subcontractors. The City may ask Bidder for the most current list of subcontractors (regardless of tier), along with their DIR registration numbers,

utilized on this contract at any time during performance of this contract, and Bidder shall provide the list within ten (10) working days of the City's request. Additionally, Bidder shall provide the City with a complete list of all subcontractors utilized on this contract (regardless of tier), within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Bidder until at least 30 days after this information is provided to the City.

12. Exemptions for Small Projects. There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Bidder shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

12.1. Registration. The Bidder will not be required to register with the DIR for small projects. (Labor Code section 1771.1).

12.2. Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Bidder will need to keep those records for at least three years following the completion of the contract. (Labor Code section 1771.4).

12.3. List of all Subcontractors. The Bidder shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 11 above. (Labor Code section 1773.3).

B. Living Wages. This Contract is subject to the City's Living Wage Ordinance (LWO), codified in San Diego Municipal Code Chapter 2, Article 2, Division 42. Bidder agrees to require all of its subcontractors, sublessees, and concessionaires subject to the LWO to comply with the LWO and all applicable regulations and rules.

1. Payment of Living Wages. Pursuant to San Diego Municipal Code section 22.4220(a), Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the required minimum hourly wage rates and health benefits rate unless an exemption applies.

1.1 Copies of such living wage rates are available on the City website at <https://www.sandiego.gov/purchasing/programs/livingwage/>. Bidder and its subcontractors shall post a notice informing workers of their rights at each job site or a site frequently accessed by covered employees in a prominent and accessible place in accordance with San Diego Municipal Code section 22.4225(e).

1.2 LWO wage and health benefit rates are adjusted annually in accordance with San Diego Municipal Code section 22.4220(b) to reflect the Consumer Price Index. Service contracts, financial assistance agreements, and City facilities agreements must include this upward adjustment of wage rates to covered employees on July 1 of each year.

2. Compensated Leave. Pursuant to San Diego Municipal Code section 22.4220(c), Bidder and its subcontractors shall provide a minimum of eighty (80)

hours per year of compensated leave. Part-time employees must accrue compensated leave at a rate proportional to full-time employees.

3. Uncompensated Leave. Bidder and its subcontractors must also permit workers to take a minimum of eighty (80) hours of uncompensated leave per year to be used for the illness of the worker or a member of his or her immediate family when the worker has exhausted all accrued compensated leave.

4. Enforcement and Remedies. City will take any one or more of the actions listed in San Diego Municipal Code section 22.4230 should Bidder or its subcontractors are found to be in violation of any of the provisions of the LWO.

5. Payroll Records. Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City.

5.1 For contracts subject to both living wage and prevailing wage requirements, only one submittal will be required. Submittals by a Bidder and all subcontractors must comply with both ordinance requirements.

6. Certification of Compliance. San Diego Municipal Code section 22.4225 requires each Bidder to fill out and file a living wage certification with the Living Wage Program Manager within thirty (30) days of Award of the Contract.

7. Annual Compliance Report. Bidder and its subcontractors must file an annual report documenting compliance with the LWO pursuant to San Diego Municipal Code section 22.4225(d). Records documenting compliance must be maintained for a minimum of three (3) years after the City's final payment on the service contract or agreement.

8. Exemption from Living Wage Ordinance. Pursuant to San Diego Municipal Code section 22.4215, this Contract may be exempt from the LWO. For a determination on this exemption, Bidder must complete the Living Wage Ordinance Application for Exemption.

C. Highest Wage Rate Applies. Bidder is required to pay the highest applicable wage rate where more than one wage rate applies.

EXHIBIT E

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

_____, a corporation, as principal, and
_____, a corporation authorized to do
business in the State of California, as Surety, hereby obligate themselves, their successors and assigns,
jointly and severally, to The City of San Diego a municipal corporation in the sum of
_____ for the faithful performance of the
annexed contract, _____, and in the sum of _____ (\$_____) for the benefit of laborers and
materialmen designated below, effective for one (1) year, commencing on
_____ through _____. Bond shall be
renewed on an annual basis for the life of the contract unless otherwise instructed.

Conditions:

If the Principal shall faithfully perform the annexed contract with the City of San Diego, California, then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

The Surety expressly agrees that the City of San Diego may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal.

The Surety shall not utilize the Principal in completing the improvements and work specified in the Agreement in the event the City terminates the Principal for default.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

Heather Ferbert, City Attorney

By_____

By_____

Print Name: _____
Mayor or designee

Print Name: _____
Deputy City Attorney

Date: _____

Date: _____

CONTRACTOR:

SURETY:

By: _____

By: _____
Attorney-In-Fact

Print Name: _____

Print Name: _____

Date: _____

Date: _____

Local Address of Surety

Local Phone Number of Surety

Premium

Bond Number

PURE WATER

San Diego Discovery Center

Design, Fabrication & Installation

Solicitation Number 10090413-26-H

October 14, 2025



The City of
SAN DIEGO

FORMATIONS
EXHIBITS + GRAPHICS + TECHNOLOGY

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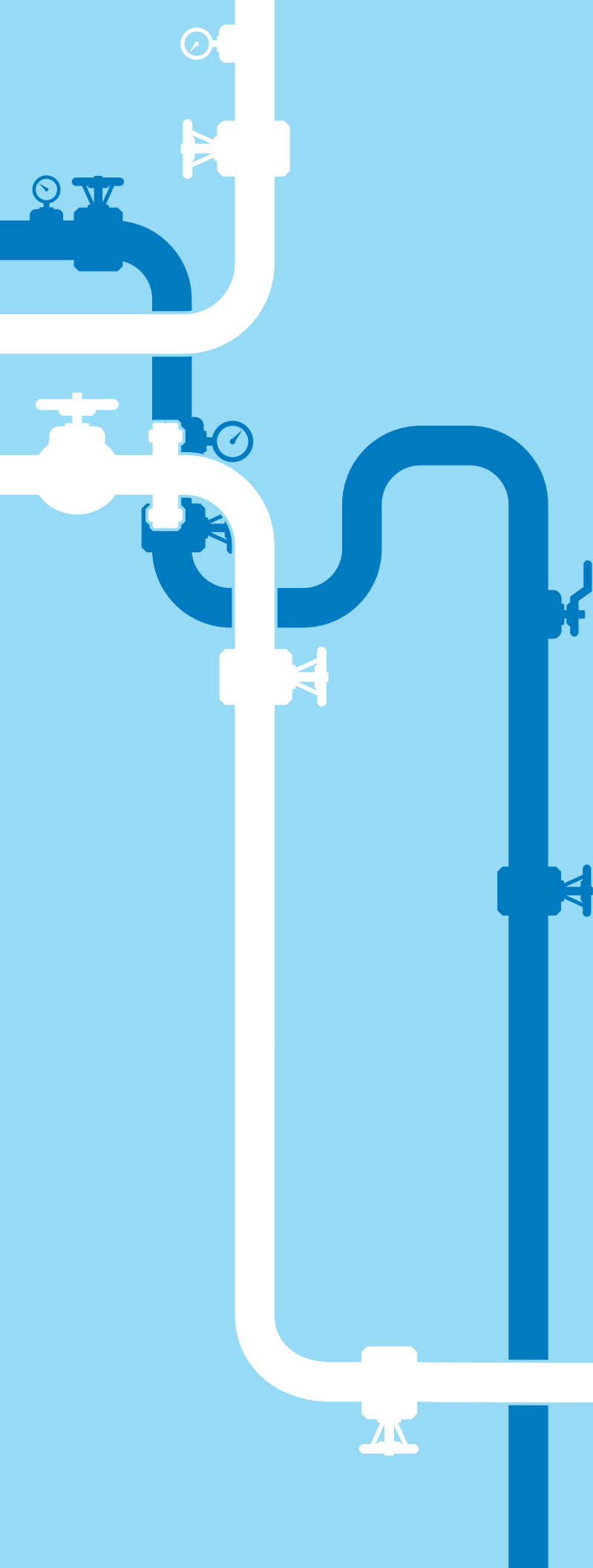
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TAB A

*Submission of
Information and Forms*



J.B. NIBLEY INSURANCE INC.

1800 SW 1ST AVENUE, SUITE 670, PORTLAND, OR 97201-5398

PHONE: (503) 221-5420 FAX: (503) 221-8732

October 8, 2025

Mr. Hugo Mora
Contracting Officer
San Diego, CA

**RE: RFP for Exhibits, Displays, Signage Design, Fabrication, and Installation for the Pure Water
Discovery Center**

Dear Mr. Mora,

JB Nibley Insurance, Inc. is pleased to advise you that we have enjoyed a bonding relationship with Formations for over 15 years and they have always performed exceptionally.

Please accept this letter that if Formations is awarded a contract and requests that a necessary bond could be provided, subject to review of contract terms and conditions, bond forms, project funding, and underwriting at time of the request.

Our consideration and issuance of bonds is a matter solely between Formations and ourselves and we assume no liability to third parties or recipient by the issuance of this letter.

We expect that Formations would execute in a superb manner with the tasks required for the Pure Water Discover Center.

Thank you.

Sincerely,

John Egan
Email: jeagan@nibleyinsurance.com
J.B. NIBLEY INSURANCE, INC.

2.1 Contract Signature Page

4th Contractor’s Proposal

5.4 Counterparts. This Contract may be executed in counterparts which, when taken together, shall constitute a single signed original as though all Parties had executed the same page.

5.5 Public Agencies. Other public agencies, as defined by California Government Code section 6500, may choose to use the terms of this Contract, subject to Contractor’s acceptance. The City is not liable or responsible for any obligations related to a subsequent Contract between Contractor and another public agency.

IN WITNESS WHEREOF, this Contract is executed by City and Contractor acting by and through their authorized officers.

CONTRACTOR	CITY OF SAN DIEGO A Municipal Corporation
Formations Inc. Proposer	BY:
621 SE 202nd Ave. Portland, OR 97233 Street Address	Print Name: _____
Portland City	Title _____
503 665 7110 Telephone No.	Date Signed _____
fparis@formationsinc.com E-Mail	

BY:	Approved as to form this ____ day of _____, 20____.
Signature of Proposer’s Authorized Representative	HEATHER FERBERT, City Attorney
Fred Paris Print Name	BY: _____ Deputy City Attorney
COO Title	
10/10/2025 Date	

2.2 Exceptions

Formations Inc. understands the requirements specified by the RFP and will meet the performance standards and requirements therein.

Formations Inc. does not take exception to any of the requirements of this RFP.

2.3 Pledge of Compliance Form

City of San Diego CONTRACTOR STANDARDS Pledge of Compliance

The City of San Diego has adopted a Contractor Standards Ordinance (CSO) codified in section 22.3004 of the San Diego Municipal Code (SDMC). The City of San Diego uses the criteria set forth in the CSO to determine whether a contractor (bidder or proposer) has the capacity to fully perform the contract requirements and the business integrity to justify the award of public funds. This completed Pledge of Compliance signed under penalty of perjury must be submitted with each bid and proposal. If an informal solicitation process is used, the bidder must submit this completed Pledge of Compliance to the City prior to execution of the contract. All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, Contractors must provide responses on Attachment A to the Pledge of Compliance and sign each page. Failure to submit a signed and completed Pledge of Compliance may render a bid or proposal non-responsive. In the case of an informal solicitation or cooperative procurement, the contract will not be awarded unless a signed and completed Pledge of Compliance is submitted. A submitted Pledge of Compliance is a public record and information contained within will be available for public review except to the extent that such information is exempt from disclosure pursuant to applicable law.

By signing and submitting this form, the contractor is certifying, to the best of their knowledge, that the contractor and any of its Principals have not within a five (5) year period – preceding this offer, been convicted of or had a civil judgement rendered against them for commission of a fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) contract or subcontract.

“Principal” means an officer, director, owner, partner or a person having primary management or supervisory responsibilities within the firm. The Contractor shall provide immediate written notice to the Procurement Contracting Officer handling the solicitation, at any time prior to award should they learn that this Representations and Certifications was inaccurate or incomplete.

This form contains 10 pages, additional information may be submitted as part of *Attachment A*.

A. BID/PROPOSAL/SOLICITATION TITLE:

10090413-26-H Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center
--

B. BIDDER/PROPOSER INFORMATION:

Formations Inc	1022741, Formations Museum Exhibits		
Legal Name		DBA	
621 SE 202nd Ave.	Portland	Oregon	97233
Street Address	City	State	Zip
Fred Paris, COO	(503) 665-7110	N/A	
Contact Person, Title	Phone	Fax	

Provide the name, identity, and precise nature of the interest* of all persons who are directly or indirectly involved** in this proposed transaction (SDMC § 21.0103). Use additional pages if necessary.

* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction,
- the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and
- any philanthropic, scientific, artistic, or property interest in the transaction.

** Directly or indirectly involved means pursuing the transaction by:

- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

Fred Paris C00

Name Title/Position

Portland, OR N/A

City and State of Residence Employer (if different than Bidder/Proposer)

Directly

Interest in the transaction

Jeffrey King Senior Project Manager

Name Title/Position

Portland, OR N/A

City and State of Residence Employer (if different than Bidder/Proposer)

Directly

Interest in the transaction

Chad Jacobsen Senior Exhibit Designer

Name Title/Position

Portland, OR N/A

City and State of Residence Employer (if different than Bidder/Proposer)

Directly

Interest in the transaction

N/A

Name Title/Position

City and State of Residence Employer (if different than Bidder/Proposer)

Interest in the transaction

N/A

Name Title/Position

City and State of Residence Employer (if different than Bidder/Proposer)

Interest in the transaction

N/A

Name Title/Position

City and State of Residence Employer (if different than Bidder/Proposer)

Interest in the transaction

N/A	Name	Title/Position
	City and State of Residence	Employer (if different than Bidder/Proposer)
	Interest in the transaction	

N/A	Name	Title/Position
	City and State of Residence	Employer (if different than Bidder/Proposer)
	Interest in the transaction	

N/A	Name	Title/Position
	City and State of Residence	Employer (if different than Bidder/Proposer)
	Interest in the transaction	

C. OWNERSHIP AND NAME CHANGES:

1. In the past five (5) years, has your firm changed its name?
☐ Yes ☒ No

If **Yes**, use Attachment A to list all prior legal and DBA names, addresses, and dates each firm name was used. Explain the specific reasons for each name change.

2. Is your firm a non-profit?
☐ Yes ☒ No

If **Yes**, attach proof of status to this submission.

3. In the past five (5) years, has a firm owner, partner, or officer operated a similar business?
☐ Yes ☒ No

If **Yes**, use Attachment A to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner, or officer of your firm holds or has held a similar position in another firm.

D. BUSINESS ORGANIZATION/STRUCTURE:

Indicate the organizational structure of your firm. Fill in only one section on this page. Use Attachment A if more space is required.

☒ **Corporation** Date incorporated: 1989 State of incorporation: Oregon

List corporation's current officers:

President:	<u>Russ McGillivray</u>
Vice Pres:	<u>Fred Paris</u>
Secretary:	<u>Crystal Beuttner</u>
Treasurer:	<u>Russ McGillivray</u>

Type of corporation: C ☒ Subchapter S ☐

Is the corporation authorized to do business in California: ☒ Yes ☐ No

If **Yes**, after what date: June 1, 2010

Is your firm a publicly traded corporation? ☐ Yes ☒ No

If **Yes**, how and where is the stock traded? _____

If **Yes**, list the name, title and address of those who own ten percent (10 %) or more of the corporation's stocks:

Do the President, Vice President, Secretary and/or Treasurer of your corporation have a third party interest or other financial interests in a business/enterprise that performs similar work, services or provides similar goods? ☐ Yes ☒ No

If **Yes**, please use Attachment A to disclose.

Please list the following:	Authorized	Issued	Outstanding
a. Number of voting shares:	_____	_____	_____
b. Number of nonvoting shares:	_____	_____	_____
c. Number of shareholders:			_____
d. Value per share of common stock:		Par	\$ _____
		Book	\$ _____
		Market	\$ _____

Limited Liability Company Date formed: _____ State of formation: _____

List the name, title and address of members who own ten percent (10%) or more of the company:

☐ **Partnership** Date formed: _____ State of formation: _____

List names of all firm partners:

☐ **Sole Proprietorship** Date started: _____

List all firms you have been an owner, partner or officer with during the past five (5) years. Do not include ownership of stock in a publicly traded company:

☐ **Joint Venture** Date formed: _____

List each firm in the joint venture and its percentage of ownership:

Note: To be responsive, each member of a Joint Venture or Partnership must complete a separate *Contractor Standards form*.

E. FINANCIAL RESOURCES AND RESPONSIBILITY:

1. Is your firm preparing to be sold, in the process of being sold, or in negotiations to be sold?

☐ **Yes** ☒ **No**

If **Yes**, use Attachment A to explain the circumstances, including the buyer's name and principal contact information.

2. In the past five (5) years, has your firm been denied bonding?

☐ **Yes** ☒ **No**

If **Yes**, use Attachment A to explain specific circumstances; include bonding company name.

3. In the past five (5) years, has a bonding company made any payments to satisfy claims made against a bond issued on your firm's behalf or a firm where you were the principal?

☐ **Yes** ☒ **No**

If **Yes**, use Attachment A to explain specific circumstances.

4. In the past five (5) years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm?

☐ **Yes** ☒ **No**

If **Yes**, use Attachment A to explain specific circumstances.

5. Within the last five years, has your firm filed a voluntary petition in bankruptcy, been adjudicated bankrupt, or made a general assignment for the benefit of creditors?

☐ **Yes** ☒ **No**

If **Yes**, use Attachment A to explain specific circumstances.

6. Are there any claims, liens or judgements that are outstanding against your firm?

☐ **Yes** ☒ **No**

If **Yes**, please use Attachment A to provide detailed information on the action.

7. Please provide the name of your principal financial institution for financial reference. By submitting a response to this Solicitation Contractor authorizes a release of credit information for verification of financial responsibility.

Name of Bank: Columbia Bank

Point of Contact: Mark Ellingson

Address: 473 NW Burnside Road , Gresham, Oregon 97030

Phone Number: 503-618-0939

8. By submitting a response to a City solicitation, Contractor certifies that he or she has sufficient operating capital and/or financial reserves to properly fund the requirements identified in the solicitation. At City's request, Contractor will promptly provide to City

a copy of Contractor's most recent balance sheet and/or other necessary financial statements to substantiate financial ability to perform.

9. In order to do business in the City of San Diego, a current Business Tax Certificate is required. Business Tax Certificates are issued by the City Treasurer's Office. If you do not have one at the time of submission, one must be obtained prior to award.

Business Tax Certificate No.: N/A Year Issued: N/A

If awarded this contract, Formations Inc. will obtain a Business Tax Certificate prior to the contract start date.

F. PERFORMANCE HISTORY:

1. In the past five (5) years, has your firm been found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for defaulting or breaching a contract with a government agency?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances.

2. In the past five (5) years, has a public entity terminated your firm's contract for cause prior to contract completion?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances and provide principal contact information.

3. In the past five (5) years, has your firm entered into any settlement agreement for any lawsuit that alleged contract default, breach of contract, or fraud with or against a public entity?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances.

4. Is your firm currently involved in any lawsuit with a government agency in which it is alleged that your firm has defaulted on a contract, breached a contract, or committed fraud?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances.

5. In the past five (5) years, has your firm, or any firm with which any of your firm's owners, partners, or officers is or was associated, been debarred, disqualified, removed, or otherwise prevented from bidding on or completing any government or public agency contract for any reason?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances.

6. In the past five (5) years, has your firm received a notice to cure or a notice of default on a contract with any public agency?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances and how the matter resolved.

7. Performance References:

Please provide a minimum of three (3) references familiar with work performed by your firm which was of a similar size and nature to the subject solicitation within the last five (5) years.

Please note that any references required as part of your bid/proposal submittal are in addition to those references required as part of this form.

Truckee Meadows Water Authority - Advanced Purified Water

Company Name: **Facility (APWF) Education Center**

Contact Name and Phone Number: Robert Charpentier, 775-834-8092

Contact Email: rcharpentier@tmwa.com

Address: Truckee Meadows Water Authority, 1355 Capital Blvd., Reno, NV 89502

Contract Date: December 10, 2024

Contract Amount: Design (Phase I): \$221,995 Fabrication (Phase II): \$790,000

Requirements of Contract: Interpretive planning, exhibit design, shop drawings, graphic proofs and output, audiovisual design/development

Company Name: **SAGE Center**

Contact Name and Phone Number: Torrie Griggs, 541-571-2394

Contact Email: torrieg@portofmorrow.com

Address: PO Box 200, 101 Olson Rd NE, Boardman, OR 97818

Contract Date: On-going since 2015

Contract Amount: \$ 5,000,000

Requirements of Contract: Interpretive planning, exhibit design, shop drawings, graphic proofs and output, audiovisual design/development, fabrication, installation

Company Name: **City of Seaside - Seaside Promenade Panels**

Contact Name and Phone Number: Joshua Heineman, 503-738-3097

Contact Email: jheineman@cityofseaside.us

Address: Seaside Visitors Bureau & Welcome Center, 7 N Roosevelt Dr, Seaside, OR 97138

Contract Date: June 2021

Contract Amount: \$15,516.65

Requirements of Contract: Interpretive planning, interpretive panel and stanchion design, shop drawings, graphic proofs and output, fabrication, installation

G. COMPLIANCE:

1. In the past five (5) years, has your firm or any firm owner, partner, officer, executive, or manager been criminally penalized or found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for violating any federal, state, or local law in performance of a contract, including but not limited to, laws regarding health and safety, labor and employment, permitting, and licensing laws?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances surrounding each instance. Include the name of the entity involved, the specific infraction(s) or violation(s), dates of instances, and outcome with current status.

2. In the past five (5) years, has your firm been determined to be non-responsible by a public entity?

☐ Yes ☒ No

If **Yes**, use Attachment A to explain specific circumstances of each instance. Include the name of the entity involved, the specific infraction, dates, and outcome.

H. BUSINESS INTEGRITY:

1. In the past five (5) years, has your firm been convicted of or found liable in a civil suit for making a false claim or material misrepresentation to a private or public entity?

☐Yes ☒No

If **Yes**, use Attachment A to explain specific circumstances of each instance. Include the entity involved, specific violation(s), dates, outcome and current status.

2. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a crime, including misdemeanors, or been found liable in a civil suit involving the bidding, awarding, or performance of a government contract?

☐Yes ☒No

If **Yes**, use Attachment A to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

3. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a federal, state, or local crime of fraud, theft, or any other act of dishonesty?

☐Yes ☒No

If **Yes**, use Attachment A to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

4. Do any of the Principals of your firm have relatives that are either currently employed by the City or were employed by the City in the past five (5) years?

☐Yes ☒No

If **Yes**, please disclose the names of those relatives in Attachment A.

I. BUSINESS REPRESENTATION:

1. Are you a local business with a physical address within the County of San Diego?

☐Yes ☒No

2. Are you a certified Small and Local Business Enterprise certified by the City of San Diego?

☐Yes ☒No

Certification # _____

3. Are you certified as any of the following:

- a. Disabled Veteran Business Enterprise Certification # _____
- b. Woman or Minority Owned Business Enterprise Certification # _____
- c. Disadvantaged Business Enterprise Certification # _____

J. WAGE COMPLIANCE:

In the past five (5) years, has your firm been required to pay back wages or penalties for failure to comply with the federal, state or local **prevailing, minimum, or living wage laws**? ☐Yes ☒No If **Yes**, use Attachment A to explain the specific circumstances of each instance. Include the entity involved, the specific infraction(s), dates, outcome, and current status.

By signing this Pledge of Compliance, your firm is certifying to the City that you will comply with the requirements of the Equal Pay Ordinance set forth in SDMC sections 22.4801 through 22.4809.

K. STATEMENT OF SUBCONTRACTORS & SUPPLIERS:

Please provide the names and information for all subcontractors and suppliers used in the performance of the proposed contract, and what portion of work will be assigned to each subcontractor. Subcontractors may not be substituted without the written consent of the City. Use Attachment A if additional pages are necessary. If no subcontractors or suppliers will be used, please write "Not Applicable."

N/A Company Name: _____
Address: _____
Contact Name: _____ Phone: _____ Email: _____
Contractor License No.: _____ DIR Registration No.: _____
Sub-Contract Dollar Amount: \$_____ (per year) \$_____ (total contract term)
Scope of work subcontractor will perform: _____
Identify whether company is a subcontractor or supplier: _____
Certification type (check all that apply): ☐DBE ☐DVBE ☐ELBE ☐MBE ☐SLBE ☐WBE ☐Not Certified
Contractor must provide valid proof of certification with the response to the bid or proposal to receive participation credit.

N/A Company Name: _____
Address: _____
Contact Name: _____ Phone: _____ Email: _____
Contractor License No.: _____ DIR Registration No.: _____
Sub-Contract Dollar Amount: \$_____ (per year) \$_____ (total contract term)
Scope of work subcontractor will perform: _____
Identify whether company is a subcontractor or supplier: _____
Certification type (check all that apply): ☐DBE ☐DVBE ☐ELBE ☐MBE ☐SLBE ☐WBE ☐Not Certified
Contractor must provide valid proof of certification with the response to the bid or proposal to receive participation credit.

L. STATEMENT OF AVAILABLE EQUIPMENT:

A full inventoried list of all necessary equipment to complete the work specified may be a requirement of the bid/proposal submission.

By signing and submitting this form, the Contractor certifies that all required equipment included in this bid or proposal will be made available one week (7 days) before work shall commence. In instances where the required equipment is not owned by the Contractor, Contractor shall explain how the equipment will be made available before the commencement of work. The City of San

Diego reserves the right to reject any response, in its opinion, if the Contractor has not demonstrated he or she will be properly equipped to perform the work in an efficient, effective matter for the duration of the contract period.

M. TYPE OF SUBMISSION: This document is submitted as:

- ☒ Initial submission of *Contractor Standards Pledge of Compliance*
- ☐ Initial submission of *Contractor Standards Pledge of Compliance* as part of a Cooperative agreement
- ☐ Initial submission of *Contractor Standards Pledge of Compliance* as part of a Sole Source agreement
- ☐ Update of prior *Contractor Standards Pledge of Compliance* dated _____.

Complete all questions and sign below.

Under penalty of perjury under the laws of the State of California, I certify that I have read and understand the questions contained in this Pledge of Compliance, that I am responsible for completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Purchasing Agent within five (5) business days if, at any time, I learn that any portion of this Pledge of Compliance is inaccurate. Failure to timely provide the Purchasing Agent with written notice is grounds for Contract termination.

I, on behalf of the firm, further certify that I and my firm will comply with the following provisions of SDMC section 22.3004:

- (a) I and my firm will comply with all applicable local, State and Federal laws, including health and safety, labor and employment, and licensing laws that affect the employees, worksite or performance of the contract.
- (b) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of receiving notice that a government agency has begun an investigation of me or my firm that may result in a finding that I or my firm is or was not in compliance with laws stated in paragraph (a).
- (c) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).
- (d) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of becoming aware of an investigation or finding by a government agency or court of competent jurisdiction of a violation by a subcontractor of laws stated in paragraph (a).
- (e) I and my firm will cooperate fully with the City during any investigation and to respond to a request for information within ten (10) working days.

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed *Pledge of Compliance* is submitted.

Fred Paris, COO

Name and Title

Signature

10/10/2025

Date

**City of San Diego
CONTRACTOR STANDARDS
Attachment "A"**

Provide additional information in space below. Use additional Attachment "A" pages as needed. Each page must be signed.
Print in ink or type responses and indicate question being answered.

N/A

I have read the matters and statements made in this Contractor Standards Pledge of Compliance and attachments thereto and I know the same to be true of my own knowledge, except as to those matters stated upon information or belief and as to such matters, I believe the same to be true. I certify under penalty of perjury that the foregoing is true and correct.

Fred Paris, COO

Print Name, Title

Signature

10/10/2025

Date

2.4 Equal Opportunity Contracting Forms

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

GOODS AND SERVICES CONTRACTOR REQUIREMENTS

I. City's Equal Opportunity Contracting Commitment.

The City of San Diego (City) promotes equal employment and subcontracting opportunities. The City is committed to ensuring that taxpayer dollars spent on public contracts are not paid to businesses that practice discrimination in employment or subcontracting. The City encourages all companies seeking to do business with the City to share this commitment. Contractors are encouraged to take positive steps to diversify and expand their subcontractor and supplier solicitation base and to offer opportunities to all eligible business firms.

Contractors must submit the required EOCP documentation indicated below with their bids. Contractors who fail to provide the required EOCP documentation are considered non-responsive.

II. Definitions.

Commercially Useful Function: a Small Local Business Enterprise or Emerging Local Business Enterprise (SLBE/ELBE) performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the SLBE/ELBE shall also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether a SLBE/ELBE is performing a commercially useful function, an evaluation will be performed of the amount of work subcontracted, normal industry practices, whether the amount the SLBE/ELBE firm is to be paid under the contract is commensurate with the work it is actually performing and the SLBE/ELBE credit claimed for its performance of the work, and other relevant factors. Specifically, a SLBE/ELBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of meaningful and useful SLBE/ELBE participation, when in similar transactions in which SLBE/ELBE firms do not participate, there is no such role performed.

Disadvantaged Business Enterprise (DBE): a certified business that is (1) at least fifty-one (51%) owned by socially and economically Disadvantaged Individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more socially and economically Disadvantaged Individuals; and (2) whose daily business operations are managed and directed by one or more socially and economically disadvantaged owners. Disadvantaged Individuals include Black Americans, Hispanic Americans, Asian Americans, and other minorities, or individual found to be disadvantaged by the Small Business Administration pursuant to Section 8 of the Small Business Reauthorization Act.

Disabled Veteran: Disabled Veteran Business Enterprise (DVBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more Disabled Veterans; and (2) business operations must be managed and controlled by one or more Disabled Veterans. A Disabled Veteran is a veteran of the U.S. military, naval, or air service who resides in California and has a service-connected disability of at least 10% or more. The firm shall be certified by the State of California's Department of General Services, Office of Small and Minority Business.

Emerging Business Enterprise (EBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and which meets all other criteria set forth in regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for EBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace.

Emerging Local Business Enterprise (ELBE): a Local Business Enterprise that is also an Emerging Business Enterprise.

Local Business Enterprise (LBE): a business that has both a principle place of business and a significant employment presence in the County of San Diego, and that has been in operation for twelve (12) consecutive months.

Minority Business Enterprise (MBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more minority individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more minorities owners. Minorities include the groups with the following ethnic origins: African, Asian Pacific, Asian Subcontinent, Hispanic, Native Alaskan, Native American, and Native Hawaiian.

Other Business Enterprise (OBE): any business which does not otherwise qualify as Minority, Woman, Disadvantaged, or Disabled Veteran Business Enterprise.

Principle Place of Business: a location wherein a business maintains a physical office and through which it obtains no less than fifty percent (50%) of its gross annual receipts.

Significant Employee Presence: no less than twenty-five percent (25%) of a business's total number of employees.

Small Business Enterprise (SBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and that meets all other criteria set forth in regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for SBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace. A business certified as a DVBE by the State of California, and that has provided proof of such certification to the City Manager, shall be deemed to be an SBE.

Small Local Business Enterprise (SLBE): a Local Business Enterprise that is also a Small Business Enterprise.

Women Business Enterprise (WBE): a certified business that is (1) at least fifty-one percent (51 %) owned by a woman or women, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more women; and (2) whose daily business operations are managed and directed by one or more women owners.

III. Disclosure of Discrimination Complaints.

As part of its bid, Contractor shall provide to the City a list of all instances within the past ten (10) years where a complaint was filed or pending against Contractor in a legal or administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken. (Attachment AA).

IV. Workforce Report and Equal Opportunity Outreach Plan.

- A. Work Force Report. Contractors shall submit with their bid a Work Force Report (WFR) for approval by the City. (Attachment BB). If the City determines that there are under representations when compared to County Labor Force Availability data, then the Contractor will also be required to submit an Equal Employment Opportunity Plan (EEOP) to the City for approval. Questions regarding the WFR should be directed to the Equal Opportunity Contracting Department.
- B. Duty to Comply with Equal Opportunity Outreach Plan. A Contractor for whom an EEOP has been approved by the City shall use best efforts to comply with that EEOP.

V. Small and Local Business Program Requirements.

The City has adopted a Small and Local Business Preference Program for goods and services contracts. The SLBE requirements are set forth in San Diego Municipal Code Division 36. For goods, services, and consultant contracts in which the Purchasing Agent is required to advertise for sealed bids in the City's official newspaper:

- A. The City shall apply a bid discount in the way of:
 - a. Five percent (5%) discount off the bid price for SLBE or ELBE prime contractors; or
 - b. Five percent (5%) discount off the bid price for prime contractors achieving the voluntary goal of twenty percent (20%) for SLBE or ELBE subcontractor participation set forth in Subsection B below.

The discount will not apply if an award to the discounted bidder would result in a total contract cost of \$50,000 in excess of the low, non-discounted bid. In the event of a tie between a discounted bidder and non-

discounted bidder, the discounted bidder will be awarded the contract. The discount shall be taken off the total contract value, including contract option years.

- B. Include a voluntary subcontractor participation requirement of 20% of the total bid price for SLBE or ELBEs.

VI. Maintaining Participation Levels.

- A. Bid discounts are based on the bidder's level of participation proposed prior to the award of the goods, services, or consultant contract. Bidders are required to achieve and maintain the SLBE or ELBE participation levels throughout the duration of the goods, services, or consultant contract.
- B. If the City modifies the original specifications, the bidder shall make reasonable efforts to maintain the SLBE or ELBE participation for which the bid discount was awarded. The City must approve in writing a reduction in SLBE or ELBE participation levels.
- C. Bidder shall notify and obtain written approval from the City in advance of any reduction in subcontract scope, termination, or substitution for a designated SLBE or ELBE subcontractor.
- D. Bidder's failure to maintain SLBE or ELBE participation levels as specified in the goods, services, or consultant contract shall constitute a default and grounds for debarment under Chapter 2, Article 2, Division 8, of the San Diego Municipal Code.
- E. The remedies available to the City under San Diego Municipal Code Division 36 are cumulative to all other rights and remedies available to the City.

VII. Certifications.

The City accepts certifications of MBE, WBE, DBE, or DVBE from the following certifying agencies:

- A. Current certification by the State of California Department of Transportation (CALTRANS) as DBE.
- B. Current MBE or WBE certification from the California Public Utilities Commission.
- C. DVBE certification is received from the State of California's Department of General Services, Office of Small and Minority Business.
- D. Current certification by the City of Los Angeles as DBE, WBE, or MBE.

Subcontractors' valid proof of certification status e.g., copy of MBE, WBE, DBE, or DVBE certification must be submitted with the ITB. MBE, WBE, DBE, or DVBE certifications are listed for informational purposes only.

VIII. List of Attachments.

- AA. Contractors Certification of Pending Actions
- BB. Work Force Report

AA. CONTRACTORS CERTIFICATION OF PENDING ACTIONS

As part of this Contract, the Contractor must provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Contractor in a legal or administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

- ☒ The undersigned certifies that within the past 10 years the Contractor has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers.
- ☐ The undersigned certifies that within the past 10 years the Contractor has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

N/A

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/ REMEDIAL ACTION TAKEN

Contractor Name: Formations Inc.

Certified By Fred Paris Title COO

Name

Date 10/10/25

Signature

EQUAL OPPORTUNITY CONTRACTING (EOC)

1200 Third Avenue, Suite 200 • San Diego, CA 92101

Phone: (619) 236-6000 • Fax: (619) 236-5904

BB. WORK FORCE REPORT

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

**NO OTHER FORMS WILL BE ACCEPTED
CONTRACTOR IDENTIFICATION**

Type of Contractor: ☐ Construction ☐ Vendor/Supplier ☐ Financial Institution ☐ Lessee/Lessor
☐ Consultant ☐ Grant Recipient ☐ Insurance Company ☒ Other

Name of Company: Formations Inc.

ADA/DBA: 1022741 - Formations Museum Exhibits

Address (Corporate Headquarters, where applicable): 621 SE 202nd Ave.

City: Portland County: Multnomah State: OR Zip: 97233

Telephone Number: 503-665-7110 Fax Number: N/A

Name of Company CEO: Russ McGillivray

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: N/A

City: N/A County: N/A State: N/A Zip: N/A

Telephone Number: N/A Fax Number: N/A Email: N/A

Type of Business: Corporation Type of License: C61/D34

The Company has appointed: Fred Paris

As its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: 621 SE 202nd Ave., Portland, OR 97233

Telephone Number: 503-665-7110 Fax Number: N/A Email: fparis@formationsinc.com

- ☐ One San Diego County (or Most Local County) Work Force – Mandatory
☐ Branch Work Force *
☒ Managing Office Work Force

Check the box above that applies to this WFR.

**Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.*

I, the undersigned representative of Formations Inc.

Multnomah, Oregon (Firm Name) (County) (State) hereby certify that information provided

herein is true and correct. This document was executed on this 10th day of October, 20. 25

Fred Paris
(Authorized Signature) (Print Authorized Signature Name)

WORK FORCE REPORT – Page 2NAME OF FIRM: Formations Inc.DATE: 10/07/2025OFFICE(S) or BRANCH(ES): OfficeCOUNTY: Multnomah

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- | | |
|--------------------------------------|---|
| (1) Black or African-American | (5) Native Hawaiian or Pacific Islander |
| (2) Hispanic or Latino | (6) White |
| (3) Asian | (7) Other race/ethnicity; not falling into other groups |
| (4) American Indian or Alaska Native | |

Definitions of the race and ethnicity categories can be found on Page 4

ADMINISTRATION OCCUPATIONAL CATEGORY	(1) Black or African American		(2) Hispanic or Latino		(3) Asian		(4) American Indian/ Nat. Alaskan		(5) Pacific Islander		(6) White		(7) Other Race/ Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Management & Financial											2	1		
Professional												2		1
A&E, Science, Computer													2	
Technical														
Sales														
Administrative Support														
Services														
Crafts														
Operative Workers											14	3		
Transportation														
Laborers*														

*Construction laborers and other field employees are not to be included on this page

Totals Each Column											16	6	2	1
--------------------	--	--	--	--	--	--	--	--	--	--	----	---	---	---

Grand Total All Employees

25

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled											0	0	0	0
----------	--	--	--	--	--	--	--	--	--	--	---	---	---	---

Non-Profit Organizations Only:

Board of Directors														
Volunteers														
Artists														

WORK FORCE REPORT – Page 3NAME OF FIRM: Formations Inc.DATE: 10/07/2025OFFICE(S) or BRANCH(ES): OfficeCOUNTY: Multnomah

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

(1) Black or African-American

(2) Hispanic or Latino

(3) Asian

(4) American Indian or Alaska Native

(5) Native Hawaiian or Pacific Islander

(6) White

(7) Other race/ethnicity; not falling into other groups

Definitions of the race and ethnicity categories can be found on Page 4

TRADE OCCUPATIONAL CATEGORY	(1) Black or African American		(2) Hispanic or Latino		(3) Asian		(4) American Indian/ Nat. Alaskan		(5) Pacific Islander		(6) White		(7) Other Race/ Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Brick, Block or Stone Masons														
Carpenters											10			
Carpet, Floor & Tile Installers Finishers														
Cement Masons, Concrete Finishers														
Construction Laborers														
Drywall Installers, Ceiling Tile Inst														
Electricians														
Elevator Installers														
First-Line Supervisors/Managers											4	1		
Glaziers														
Helpers; Construction Trade														
Millwrights														
Misc. Const. Equipment Operators														
Painters, Const. & Maintenance													1	
Pipelayers, Plumbers, Pipe & Steam Fitters														
Plasterers & Stucco Masons														
Roofers														
Security Guards & Surveillance Officers														
Sheet Metal Workers														
Structural Metal Fabricators & Fitters														
Welding, Soldering & Brazing Workers														
Workers, Extractive Crafts, Miners														

Totals Each Column														
--------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Grand Total All Employees**16**

Indicate By Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled											0	0	0	
----------	--	--	--	--	--	--	--	--	--	--	---	---	---	--

2.5 Living Wage Ordinance Certification



LIVING WAGE ORDINANCE CERTIFICATION OF COMPLIANCE REQUIRED BY SAN DIEGO MUNICIPAL CODE §22.4225(c)

COMPANY INFORMATION

Company Name: [Formations Inc.](#)

Company Address: [621 SE 202nd Ave., Portland, OR 97233](#)

Company Contact Name: [Fred Paris](#)

Contact Phone: [503.665.7110 x217](#)

CONTRACT INFORMATION

Contract Number (if no number, state location): [10090413-26-H](#)

Start Date: [10/14/2025](#)

Contract Title (or description): [Pure Water Discovery Center](#)

End Date: [01/14/2027](#)

Purpose/Service Provided: [Museum Exhibit Services, Displays, Signage Design, Fabrication, and Installation](#)

TERMS OF COMPLIANCE

A contractor or subcontractor working on or under the authority of an agreement subject to the Living Wage Ordinance [LWO] must comply with all applicable provisions unless specifically approved for an exemption. Basic requirements of the LWO are:

- (a) Pay covered employees the current fiscal year hourly wage rate;
- (b) If any lesser amount is applied toward the health benefits rate, add this difference to the hourly wage rate as cash;
- (c) Provide minimum of 80 compensated leave hours per year for illness, vacation, or personal need at the employee's request and permit 80 additional unpaid leave hours for personal or family illness when accrued compensated leave hours have been used;
- (d) Annually distribute a notice with the first paycheck after July 1 to inform all covered employees of LWO requirements, their possible right to Federal Earned Income Tax Credit, and possible availability of health insurance coverage under the Affordable Care Act;
- (e) Prohibit retaliation against any covered employee who alleges noncompliance with the requirements of the LWO;
- (f) Permit access for authorized City representatives to work sites and records to review compliance with the LWO; and
- (g) Maintain wage and benefit records for covered employees for 3 years after final payment.

If a subcontractor fails to submit this completed form, the prime contractor may be found in violation of the LWO for failure to ensure its subcontractor's compliance. This may result in a withholding of payments or termination of the agreement.

CONTRACTOR CERTIFICATION

By signing, the contractor certifies under penalty of perjury under laws of the State of California to the following:

- (a) comply with the requirements of the Living Wage Ordinance; and
- (b) will perform at least fifty percent (50%) of the work with its own employees.

[Fred Paris](#)

Name of Signatory

Signature

[COO](#)

Title of Signatory

[October 10, 2025](#)

Date

FOR OFFICIAL CITY USE ONLY

Date of Receipt:

LWO Analyst:

Contract Number:

2.6 Licenses as required in Exhibit B

 DEPARTMENT OF CONSUMER AFFAIRS	CONTRACTORS STATE LICENSE BOARD ACTIVE LICENSE	
License Number	1022741	Entity CORP
Business Name	FORMATIONS INC DBA FORMATIONS MUSEUM EXHIBITS	
Classification(s)	C61/D34	
Expiration Date	01/31/2027	www.cslb.ca.gov

Acknowledgement of Amendments

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT

1200 Third Avenue, Suite 200

San Diego, CA 92101-4195

Fax: (619) 236-5904

ADDENDUM A

Request for Proposal (RFP) 10090413-26-H

Revised Closing Date: October 14, 2025 @ 2:00 p.m.

City of San Diego Bid to provide Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center.

The following changes to the RFP are hereby made effective as though they were originally shown and/or written:

1. Remove the original cover sheet and replace with the attached Addendum A cover sheet (**NOTE: The RFP closing date has been extended from October 7, 2025, to October 14, 2025.**).
2. Remove the original RFP Contract Signature Page (page 3 of 11) and replace with the attached Addendum A, RFP Contract Signature Page (page 3 of 11).

CITY OF SAN DIEGO PURCHASING & CONTRACTING DEPARTMENT

Hugo Mora
Supervising Procurement Contracting Officer
(619) 236-6154

Formations Inc. acknowledges all amendments to Solicitation #10090413-26-H, including Addendum A issued on October 1, 2025.

Name: Fred Paris

Title: COO

Signature: _____

Date: October 10, 2025

Addendum A
October 1, 2025

Acknowledgement of Amendments

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195
Fax: (619) 236-5904

ADDENDUM B

Request for Proposal (RFP) 10090413-26-H Closing Date: October 14, 2025 @ 2:00 p.m.

City of San Diego Bid to provide Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center.

The following changes to the RFP are hereby made effective as though they were originally shown and/or written:

1. Remove the Addendum A RFP cover sheet and replace with the attached Addendum B RFP cover sheet.
2. Remove the Addendum A RFP Contract Signature Page (page 3 of 11) and replace with the attached Addendum B, RFP Contract Signature Page (page 3 of 11).
3. Remove the original Exhibit A and replace it with the attached Addendum B Exhibit A. Exhibit A has been revised to remove subsection number 4 under Criteria B, Staffing Plan, of Section 3.6, Evaluation Criteria.
4. Remove the original Exhibit B, Scope of Work, and replace it with the attached Addendum B Exhibit B, Scope of Work. The following sections of Exhibit B have been revised:
 - a. Section titled "Scope Requirements", Subsections 1.2.4, 1.2.5, and 1.2.6 have been revised, and Subsection 1.2.11 "Information in Multiple Languages", has been added.
 - b. Section titled "Scope Requirements", Subsection 1.4.3 "User Manuals", has been deleted in its entirety.
 - c. Section 3, "Additional Requirements", Subsection 3.1, "Information in Multiple Languages", has been deleted in its entirety and the subsequent sections and subsections have been renumbered.
 - d. Section 6, "Performance Bond", has been revised to modify the bonding requirements for this RFP.
5. Remove the original Attachment 1, "Visitor Experience Plan", and replace with the attached revised Addendum B Attachment 1, "Visitor Experience Plan". The attachment has been revised to clarify (a) whether proposals need to account for furniture and (b) the current state of the Operations Bldg.

Addendum B
October 4, 2025

Acknowledgement of Amendments

Formations Inc. acknowledges all amendments to Solicitation #10090413-26-H, including Addendum B issued on October 4, 2025.

Name: Fred Paris

Title: COO

Signature:

Date: October 10, 2025

Acknowledgement of Amendments

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195
Fax: (619) 236-5904

ADDENDUM C

Request for Proposal (RFP) 10090413-26-H Closing Date: October 14, 2025 @ 2:00 p.m.

City of San Diego Bid to provide Exhibits, Displays, and Signage Design, Fabrication, and Installation for the Pure Water Discovery Center.

The following changes to the RFP are hereby made effective as though they were originally shown and/or written:

1. Remove the Addendum B RFP cover sheet and replace with the attached Addendum C RFP cover sheet.
2. Remove the Addendum B RFP Contract Signature Page (page 3 of 11) and replace with the attached Addendum C, RFP Contract Signature Page (page 3 of 11).
3. Add fourteen (14) pages of "Questions and Answers". (NOTE: The questions and answers are being provided for informational purposes only, and are not part of any resulting contract from this RFP.)
 - a. Question 6 Answer has been revised for clarification.

CITY OF SAN DIEGO PURCHASING & CONTRACTING DEPARTMENT

Jeff Arciaga
Senior Procurement Contracting Officer
(619) 236-6051

Formations Inc. acknowledges all amendments to Solicitation
#10090413-26-H, including Addendum C issued on October 9, 2025.

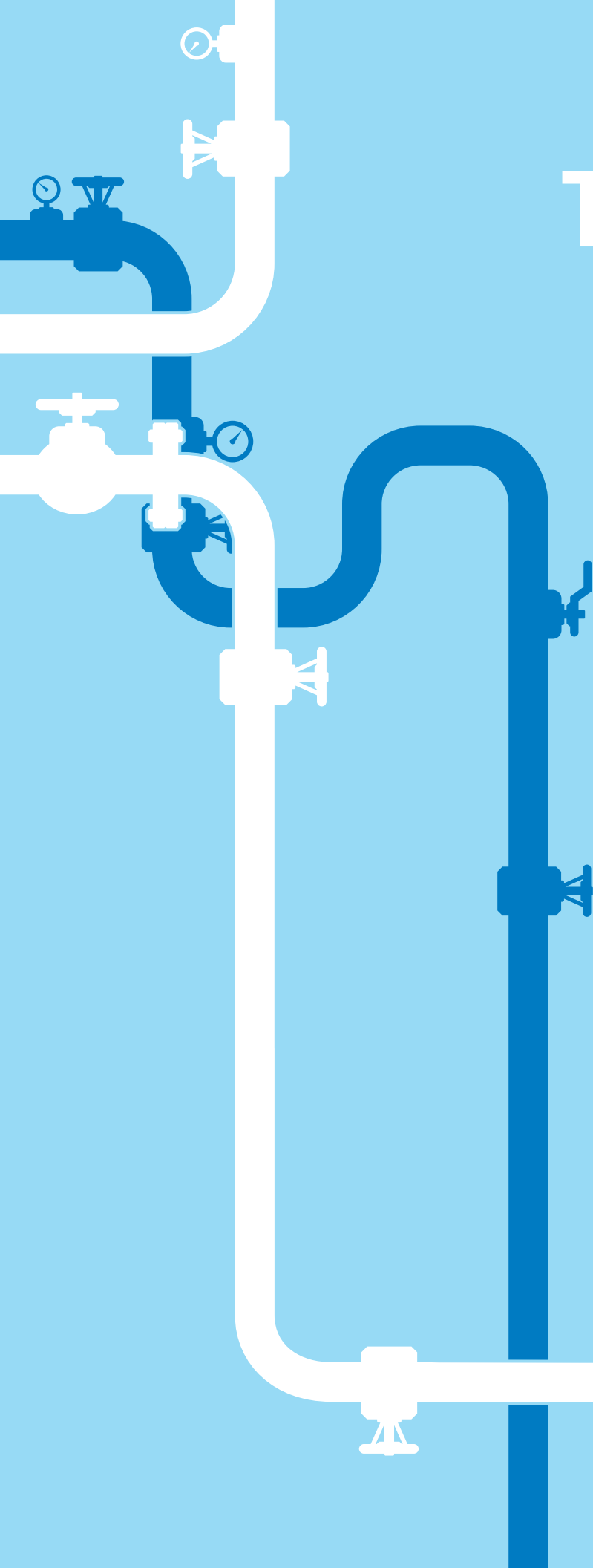
Name: Fred Paris

Title: COO

Signature: _____

Date: October 10, 2025

Addendum C
October 9, 2025



TAB B

*Executive Summary
and Responses to
Specifications*



FORMATIONS

EXHIBITS + GRAPHICS + TECHNOLOGY

October 7, 2025

Hugo Mora
Supervising Procurement Contracting Officer
hmora@sandiego.gov
(619) 236-6154

Dear Mr. Mora,

Thank you for the opportunity to submit our qualifications to provide design, fabrication and installation services for exhibits at the new Pure Water San Diego Discovery Center.

It is a rare opportunity to work on a project that has so much significance as yours does, and matches our mutually stated goals of education, innovation, outreach, and collaboration. We are both honored and excited to provide you with our qualifications.

Formations is an award-winning exhibit design-build firm that has designed, fabricated, and installed more than a thousand interpretative exhibits for public and private entities all over the United States, including Clark County Wetlands Visitor Center which has focus on education, outreach, and water within Las Vegas and surrounding Clark County. We are also currently designing the Advanced Purified Water Facility Educational Center in Reno, Nevada, which is strikingly similar in scope and message to the Pure Water Discovery Center.

To ensure continuity throughout the project, Fred Paris will be the Principal in Charge and Design Project Manager entering the fabrication phase. After Construction Drawings, Fred will collaborate and transition the project over to Senior Project Manager Jeffrey King to oversee the project through technical fabrication and installation phases. Fred can commit and employ company financial and employee resources to the project. He will be involved with the project right up to opening day ceremonies.

Fred Paris, Principal in Charge
503-665-7110
fparis@Formationsinc.com

Jeffrey King, Senior Project Manager
503-944-9051
jking@Formationsinc.com

Our senior exhibit designer/meeting facilitator Chad Jacobsen has strong cultural and science-based design experience having worked as a designer for the Oregon Museum of Science and Industry (OMSI). Chad believes that each project should be an enriching journey where creativity meets education, making it a joyful learning experience for visitors and stakeholders.

Thank you again for the opportunity to submit our qualifications. For additional information regarding relevant projects, please visit our website at www.formationsinc.com or call at your earliest convenience.

Kindest regards,

Fred Paris, COO, Formations, Inc.

Executive Summary

Formations Inc., founded in 1989 and based in Portland, Oregon, is uniquely positioned to deliver the comprehensive design, fabrication, and installation services required for the Pure Water San Diego Discovery Center. With over three decades of experience producing award-winning interpretive exhibits and thematic environments for museums, visitor centers, and public institutions nationwide, we bring a deep understanding of both the technical and narrative aspects of exhibit development. Our integrated 32,000-square-foot facility houses a team of 30 seasoned professionals who collaborate across disciplines to deliver high-quality, durable, and accessible exhibits.

We understand that the City of San Diego's Discovery Center will serve as a vital educational resource to inform the public about potable reuse, the advanced water purification process, and the broader context of water conservation. Formations Inc. is well-versed in translating complex scientific and environmental concepts into engaging, interactive, and inclusive visitor experiences. Our current work on the Advanced Purified Water Facility Educational Center in Nevada directly aligns with the Discovery Center's goals, demonstrating our current familiarity with the subject matter, audience engagement strategies, and regulatory requirements.

Our team excels in designing and building exhibits that are ADA-compliant, technologically current, and able to withstand both indoor and outdoor environmental challenges—as demonstrated by our hurricane-resilient outdoor exhibits at Castle Williams in New York. We also bring deep experience in artifact handling, interactive media, digital content development, and cohesive storytelling—ensuring the Discovery Center will be both educational and memorable for visitors of all ages.

With a track record of successful collaborations with Smithsonian Affiliate Museums and numerous public agencies, Formations Inc. is confident in our ability to meet—and exceed—the expectations of this RFP. Our comprehensive in-house capabilities, subject matter experience, and passion for delivering impactful educational environments make us the best-qualified partner to bring the Pure Water San Diego Discovery Center to life.



Formations fabricated and installed 7,500 square feet of exhibits for the Tillamook Creamery Visitor Center.

Concept Design Example

Our vision for the **Pure Water San Diego Discovery Center** centers on creating a **creative, educational, and sustainable public experience** that immerses visitors in the story of how San Diego transforms and conserves its most vital resource—water.

The 3,116-square-foot facility is designed as a sequence of **imaginative, interconnected spaces** that bring to life the city’s closed water distribution and treatment cycle through dynamic exhibits, interactive technology, and multisensory storytelling. From the interpretive entry ramp to the lab viewing gallery and Water Theater, every element emphasizes **creativity, accessibility, and environmental responsibility**. The experience is designed to inspire curiosity, promote understanding, and encourage action toward conservation—helping visitors gain confidence in the safety, innovation, and sustainability of San Diego’s water system. Through sustainably sourced materials, universal design, and cohesive aesthetics, the Discovery Center embodies San Diego’s leadership in water innovation, education, and community engagement.

Our current work on the **Advanced Purified Water Facility (APWF) Educational Center** in Nevada builds directly on this philosophy, evolving it to reflect the goals and context of the **OneWater Nevada** initiative. Like the San Diego project, the APWF Educational Center is envisioned as a **forward-thinking, integrated learning environment**, but it expands the narrative to trace the **entire “life of a water drop”**—from its source, through purification, to groundwater recharge and reuse. The center will serve as both an **educational and outreach hub**, fostering collaboration among

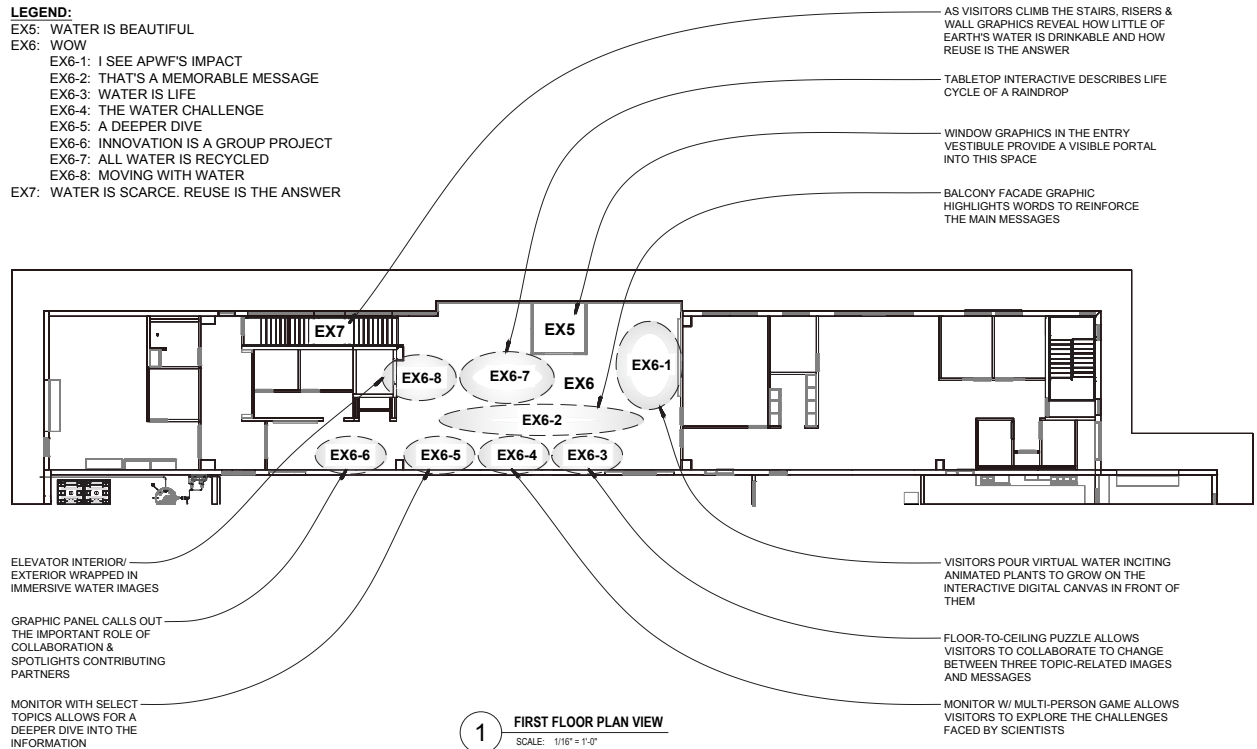
the public, professionals, and policymakers while showcasing Nevada’s innovative approach to inland water purification. Both projects share a commitment to **education, innovation, outreach, and sustainability**, using clear design language, interactive learning, and inclusivity to translate complex water processes into engaging, inspiring visitor experiences. Together, these two projects demonstrate our consistent vision: to design **memorable, trusted, and future-focused educational environments** that empower communities to understand, value, and protect their water resources.



We’ve provided examples of our concept design work for the Advanced Water Education Center to illustrate our creative process and capabilities. While each project is unique, these examples offer insight into the kind of work we could create for your project—tailored specifically to your story and needs.

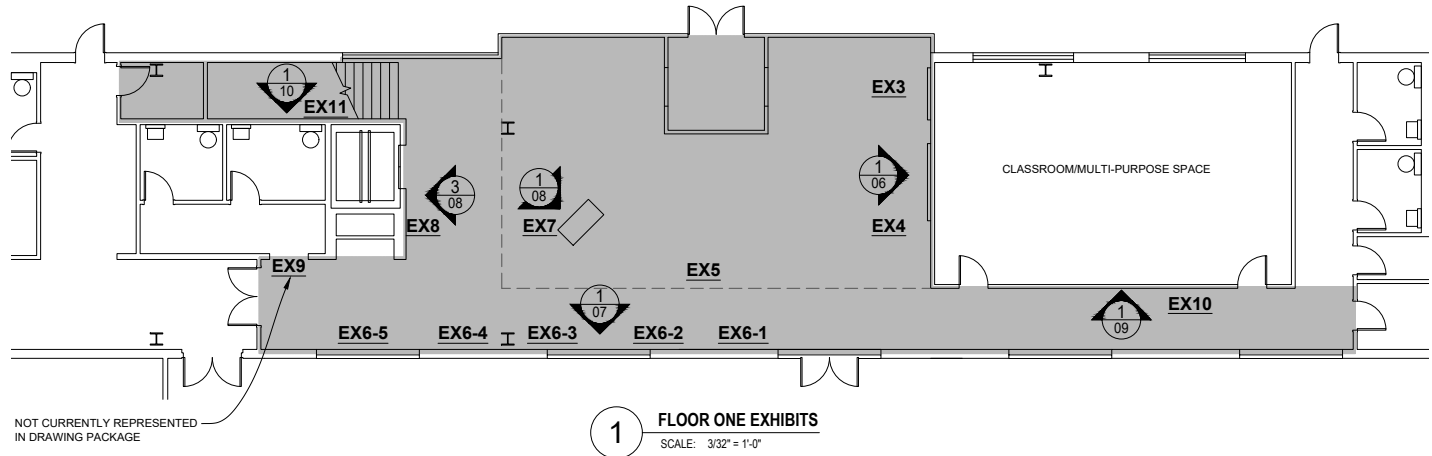
Concept Design Example

Concept & Initial Interpretive Planning



Concept Design Example

Planning and Programming 25%



LEGEND

EX3: ENTRY/WELCOME: WATER, REIMAGINED

EX4: VIDEO WALL

EX5: BALCONY FACADE

EX6: BACK WALL: ALL WATER IS RECYCLED WATER

EX6-1: INTERACTIVE ELEMENT: ONE WORLD, ONE WATER

EX6-2: GRAPHIC PANEL #1: SURFACE WATER

EX6-3: GRAPHIC PANEL #2: GROUNDWATER

EX6-4: GRAPHIC PANEL #3: RECYCLED WATER

EX6-5 GRAPHIC PANEL #4: A+ WATER

EX7: DIGITAL TOUCH TABLE

EX8: ELEVATOR EXTERIOR & INTERIOR : HOW MUCH OF YOU IS WATER?

EX9: 1ST FLOOR BATHROOM: GREAT HANDS/THE DAILY

EX10: FIRST FLOOR HALLWAY: WALL OF WATER VISIONARIES

EX11: STAIRCASE: WATER IN THE WORDS OF OUR COMMUNITY

FIRST-FLOOR EXHIBITS

EX3. ENTRY WELCOME: Water, Reimagined

GOAL/INTERPRETIVE OBJECTIVE

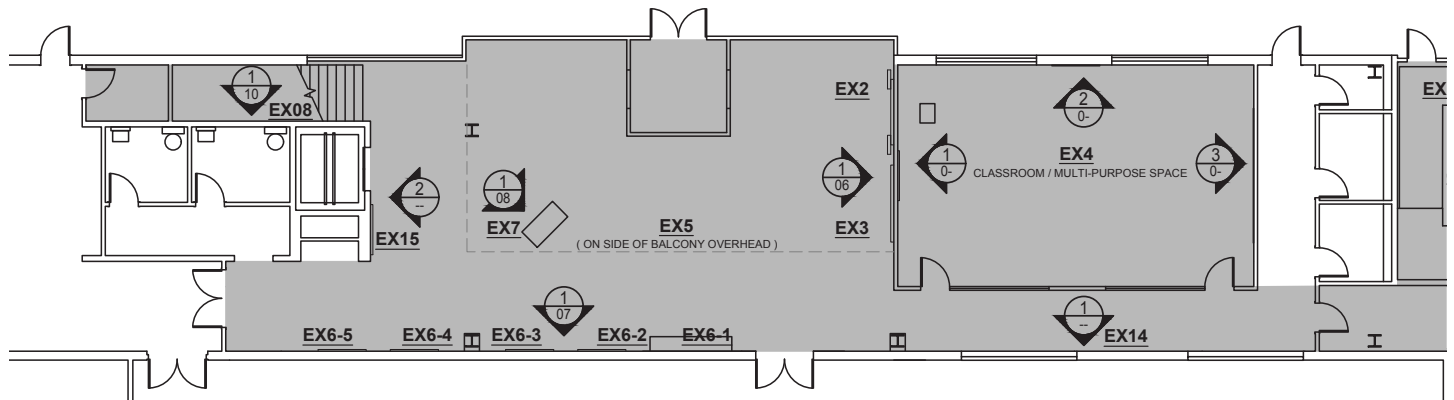
- Create a sense of welcome.
- Frame the challenges that APWF addresses.
- Convey the significance of this new drinking water resource for the region.
- Enforce the fact that it is reliable, safe, and pure.
- *For when APW is served, in the future: Create a full-circle moment that creates or heightens visitors' comfort level with potable recycled water with a water-tasting experience.*

MAIN MESSAGES (FOR PRIMARY TEXT)

- This facility meets two challenges: how to dispose of wastewater (in the present) and how to ensure the region has safe, adequate drinking water (in the future).
- Because of the region's geography—it is inland and in the high desert—the need for reliable water resources is heightened, and will only be intensified by the impact of rising population and weather-pattern variability.
- Advanced Purified Water is a forward-thinking solution: a new resource for water resource that lessens the existing dependence on surface and ground water; is safe, reliable, droughtresistant; and of the highest quality.
- The facility's groundbreaking use of established water-treatment technologies that are enhanced is providing the region with a chance to take the lead and reap the benefits of the growing water-reuse movement across the western United States.

Concept Design Example

Concept Design Development 50%



1 FLOOR ONE EXHIBITS
SCALE: 3/32" = 1'-0"

LEGEND

EX2: ENTRY/WELCOME
EX3: LED CUSTOM MEDIA WALL
EX4: CLASSROOM / MULTI-PURPOSE SPACE
EX5: BALCONY FACADE: OUR WATER. OUR FUTURE.
EX6: BACK WALL: ALL WATER IS RECYCLED WATER
EX6-1: GRAPHIC PANEL/FLIP PANELS: OUR CHALLENGE
EX6-2: OUR WATER IS: SURFACE WATER
EX6-3: OUR WATER IS: GROUNDWATER
EX6-4: OUR WATER IS: RECLAIMED WATER
EX6-5: OUR WATER FUTURE IS: A+ ADVANCED PURIFIED WATER

EX7: DIGITAL TOUCH TABLE
EX8: WATER IN THE WORDS OF OUR COMMUNITY

EX13: STAIRWELL EXIT EXPERIENCE
EX14: FIRST FLOOR HALLWAY: PARTNER RECOGNITION PANEL
EX15: FIRST FLOOR ELEVATOR EXTERIOR & INTERIOR



Implementation Plan

Our Approach...

Our team will collaborate with the City of San Diego to create engaging exhibits, displays, and signage for the Pure Water San Diego Discovery Center. Combining creativity with scientific storytelling, we will transform complex water purification concepts into clear, inspiring visitor experiences. Through thoughtfully designed interpretive elements, the Discovery Center will highlight the City's leadership in potable reuse, share the history of its water system, and promote stewardship of this vital resource—all in a visually compelling and educational way.

Design Process

Formations is strongly committed to the systematic processes of exhibit design, project management, and fabrication. These processes are fulfilled with an efficiently structured series of meetings between the City of San Diego and the Formations team.

We use a collaborative process of exhibit planning and programming, calling upon the Discovery Center team, with your expertise in subject matter and resources, to join forces with the exhibit design experience, know-how, and creativity of the Formations team. As the client, goal-setting and decision-making remain in your hands. We will collaborate with you to create a design that fulfills your vision for the new exhibits, solving any issues as they come up and striving always to meet and satisfy the needs of your visitors and of your experienced staff.

Our team approach ensures the participation and involvement of staff members and advisors throughout the exhibit process. It also provides the cohesiveness that is critical to producing interpretive exhibits that will attract, engage, and motivate visitors for years to come. Our shared goal is to develop a first-class visitor attraction—well attended, educationally effective, and memorable.

The primary design team on this project includes our Senior Exhibit Designer Chad Jacobsen and Senior Exhibit Planner/Writer. Throughout the design process, Chad will manage the project and be responsible for all design related issues, as well as act as the project leader. Our writer will be responsible for all content coordination of text, images, and object collection.

In preparation for our work with the City of San Diego, we will ask you to supply us with any recommended bibliography, and to share with us a complete set of documents concerning your visitor studies and all exhibit planning efforts to date.

Exhibit Committee

The Exhibit Committee is the client's review team during the exhibit design process. They are present at all exhibit committee meetings and must be able to review and comment on material submitted in the required review periods. It is preferable to have eight to ten diverse members that may include staff members, topic specialists, educators, outside representatives, key administration, and volunteers with special interest in and knowledge of the story. You may also want to include regional historians, advisors, community leaders, and even students. Formations will gladly assist you in building a diverse team for this important project.

Our Senior Planner/Writer and Senior Exhibit Designer will work closely with the Exhibit Committee at each meeting and in discussions via phone to capture their thoughts on relevant topics throughout the design process.

To facilitate the design process, we will also ask you to designate an in-house project leader who will coordinate meeting schedules, consolidate and transmit reviewers' comments, coordinate phone debriefing, and serve as liaison between the City and the Formations team.

Implementation Plan

ADA Accessible and Bilingual Exhibits

At Formations, **accessibility is fundamental to good design**. We meet—and often exceed—ADA standards to create inclusive, user-friendly exhibits for all visitors. Our designs feature thoughtful layouts, accessible heights, intuitive low-force interactives, and multi-sensory experiences that support a broad range of abilities.

We regularly consult the NPS and Smithsonian accessibility guidelines, both grounded in the Architectural Barriers Act. We also follow the latest *Programmatic Accessibility Guidelines for NPS Interpretive Media* and incorporate universal design principles recommended by the National Center on Accessibility.

With these standards in mind, we consistently provide physical and sensory access. This includes wheelchair clearance, interactives operable with a closed fist, open captioning on most audiovisual content, and Braille or tactile signage where approved.

Formations has extensive experience designing and producing **bilingual and multilingual exhibits** that are accessible, inclusive, and intuitive for all visitors. Our typography, text layout, and interpretive writing follow clear readability guidelines that support a wide range of literacy levels and language abilities. In keeping with Universal Design Principle 3, *Simple and*

Intuitive Use, we organize information by importance and use visual hierarchy and clear labeling to make bilingual content seamless and easy to navigate.

Many of our projects include bilingual panels tailored to the needs of the exhibit's audiences and location. We regularly produce Spanish translations and have collaborated with numerous Native American tribes to develop accurate and culturally appropriate language integrations. Early in the design process, we identify the primary and secondary audiences to determine which languages will be required, considering local demographics, community partnerships, and visitor data such as international tourism.

For the Pure Water San Diego Discovery Center, Formations will apply this same proven approach. We will collaborate with the City during design development to confirm the required languages and to recommend the most effective translation strategies—whether written, audio, or digital. Our design process ensures that all bilingual content is visually cohesive, contextually relevant, and consistent across signage, exhibits, and interactive elements, creating a welcoming and informative experience for every visitor.

We also apply Universal Design Principle 4, *Perceptible Information*, by presenting key content through multiple modes—visual, verbal, and tactile—so it can be understood by all visitors.



At Ankeny Hill Nature Center, we designed 10 bilingual (English and Spanish) Story Walk panels installed along a trail that guide visitors through a narrative about the site's unique ecology and cultural significance, with integrated QR codes linking to online activities and additional content.

Implementation Plan

Our Schedule calls for five collaborative work sessions to focus our design efforts. Below are the standard steps we follow for design-build projects, aligned with the accompanying Work Plan and Schedule. In accordance with project requirements, Formations will **prioritize the design, fabrication, and installation of the tasting sinks (“Tasting Stations”)** to ensure these elements are completed on schedule and integrated seamlessly into the overall exhibit experience.

Task 1: Design

Planning & Programming Phase

To initiate team alignment, a start-up meeting will be held to bring together the City’s project team and the Formations design team. Our Senior Exhibit Designer and Senior Exhibit Planner/Writer will lead this phase for Formations. The meeting will include one day of collaborative planning and one day of remote and/or site-adjacent fieldwork, tailored to the current status of the facility’s construction.

Day 1 – Planning and Collaboration

Together with key City staff, advisors, and stakeholders, we will review existing architectural plans, exhibit planning documents, and site logistics. Formations will lead the Exhibit Committee in a focused working session to review the core goals and values of the City of San Diego and the Pure Water Discovery Center and align them with the project’s mission.

We will evaluate target audiences—particularly local residents, students, and visitors—and discuss strategies for serving their diverse needs through bilingual and accessible exhibit design. Through guided discussion, we will assess preliminary plans and assumptions, develop consensus around exhibit priorities, and begin defining key interpretive themes and messages that will shape the visitor experience.

Day 2 – Research and Coordination

On the second day, our writer will continue content research in collaboration with City staff and project partners to identify potential images, artifacts, multimedia, and data visualizations suitable for inclusion in the exhibits. Meetings with subject matter experts and operations staff will focus on interpretive accuracy, story development, and the identification of resources that best illustrate the water purification process.

Our designer will coordinate with the architectural and construction teams to review current building plans, spatial layouts, and infrastructure requirements related to exhibits, ensuring that exhibit systems integrate seamlessly with the developing facility.

Deliverables Following the Start-Up Meeting

Following the meeting, Formations will provide a detailed summary of discussions and decisions. Using the information gathered, we will develop a **Narrative Walkthrough Document**, establishing the conceptual framework and interpretive direction for the exhibits. This document will serve as a foundation for subsequent phases of design once the building nears completion.

The narrative walkthrough document will include a vivid description of the proposed exhibits, with detailed explanations of interpretive methods and functional use bubble diagrams. This document will be submitted to the Exhibit Committee for review and comments. Once we receive your comments we will begin working on the Exhibit Outline document.

The Exhibit Outline document will be submitted for the **second meeting**. It will include several key components. A revised resource book contains graphic and artifact references and first draft exhibit outline with main messages and visitor experiences. Concept sketches will illustrate the look and feel of the exhibits. A schematic floor plan will show locations and interrelationships of thematic areas, as well as visitor pathways within the exhibit area. A project schedule and a target budget will also be included.

Formations will meet to review these materials with the Exhibit Committee. Team members will then have a review period followed by a detailed phone conference. Your consolidated comments and corrections will be incorporated and referenced as the Formations team begins work on the Concept Design.

Implementation Plan

Concept Design Phase

During this key phase, the exhibit outline becomes the basis for detailed exhibit design. This is where the creativity of our designers meshes with your subject matter expertise, resulting in a unique design that is a perfect expression of your story line.

We will create an engaging, entertaining, and innovative series of experiences that embody a timeless appeal and will provide many years of service. Exhibits will be designed for durability, easy access, low maintenance, and resistance to damage. Significant changeability and flexibility will be designed into the exhibits, so that your in-house staff can keep them fresh and up-to-date. Exhibits will exceed ADA standards, making them easy for visitors of all ages and abilities to access, understand, and operate.

During this step of Concept Design, the Formations team will develop a detailed floor plan and elevations of all exhibit elements, annotated with brief descriptions of exhibit content and visitor experience. We will specify signage design, artistic style, typography, audiovisual hardware, and computer requirements and sources. Formations' Senior Exhibit Planner/Writer, along with your in-house curator, will continue to gather information about images and artifacts. We will submit the final exhibit outline for your review.

The Concept Design package will be presented to the Exhibit Committee at **50% completion at a third meeting**. Following review and approval by the committee and community advisors, the design team will incorporate your consolidated comments into development of the Revised Concept Design package.

For the **Revised Concept Design at 75% complete**, an exhibit resource book will include first draft text, graphics and artifact lists, and reference images. The design team will revise the drawings, adding unit numbers keyed to the text and graphic/artifact lists. A preliminary colors and materials board illustrates colors, textures, and artistic style. A preliminary lighting plan will be prepared, as well as layout and reproduction methods for graphic panels. We will also provide an updated project schedule and cost estimate. The Revised Concept Design package will be presented to the Exhibit Committee for your review at the **fourth meeting**.

Final Design

After a period for review and comments by the Exhibit Committee, consultants, and advisors, the design team will refine the floor plans, elevations, and detailed exhibit drawings. The drawings will indicate exhibit dimensions, placement and size of text, graphic elements, artifacts, and other visual elements used in the exhibits. Detailed final specifications and samples for materials, finishes, and treatments, including audiovisual and computer specifications, electrical/lighting plan, and one-line diagrams, will be included. Our writer will incorporate the Exhibit Committee's comments into second draft text and first draft media scripts. A revised exhibit resource book will specify graphic elements for each exhibit and will include updated artifact and graphics lists.

Formations will present these materials at **95% completion at a fifth meeting**. After your review, the design team will incorporate any changes and complete the **100% Final Design package**, submitted for your final review. This will include text, scripts, graphic and artifact lists; color and materials, exhibit specifications and cut sheets; final graphic colors and materials; construction and graphic details; a final cost estimate, and fabrication schedule. After your review, any minor corrections will be made and the completed Final Design will be submitted.



Final design of a bilingual graphic panel and stanchion for Ankeny Hill Nature Center.

Implementation Plan

Tasks 2 & 3:

Fabrication & Installation

At our in-house production facility, we create custom interpretive exhibitry of the highest quality. Throughout this process, we work closely with you, ensuring that each step has your review and approval. Continuity of communication ensures that your interpretive messages, goals, and objectives are reflected at every stage of the project, culminating in fabrication, installation, and effectiveness with visitors.

We have the equipment and skilled staff to fabricate museum-quality exhibits to exacting standards. Formations' in-house fabrication capabilities include:

- **Construction:** custom cabinetry/fixtures, custom furniture, exhibit/display fabrication, prop fabrication, fabrication of stage sets, environments/dioramas, fine furnishings
- **Graphics and signage:** design, layout, and camera-ready art; computer-generated lettering; hand-painted design; large format printing
- **Scenic painting:** murals, scenery painting
- **Electronics, mechanics, and special effects:** special effects rigging, animation, motion control
- **Metal work:** engineering and design, welding, machining, fabrication
- **Plastics:** sculpting, fiberglass, laminate fabrication, acrylic fabrication, foam fabrication
- **Transportation and storage:** crating and handling, trucking and shipping, warehousing

Fabrication begins with a kickoff meeting between the Project Manager, Fabrication Shop Supervisor, and all staff involved in fabrication and graphic production. During this meeting, the Project Manager reviews final CAD drawings, graphic layouts, and outlines the fabrication and installation schedule. This schedule includes deadlines for material orders, graphic production, image acquisition, exhibit construction, packing, shipping, and installation. Coordination between fabrication and graphics ensures all elements are built to fit precisely and remain on schedule.

Following the meeting, the Fabrication Shop Supervisor mobilizes the shop team, assigns tasks to our Exhibit Specialists, and coordinates any contracted work. They are also responsible for ordering materials—ensuring they match samples approved during design—and inspecting them for quality upon arrival. Throughout the process, the Project Manager and Shop Supervisor monitor progress, confirm that exhibits meet Smithsonian and federal accessibility standards, and ensure that all safety protocols are followed. Weekly (or as-needed) progress reports are submitted electronically to keep stakeholders informed.

Exhibit Structures

All cabinetry and laminate work will meet the Architectural Woodwork Institute's Quality Standards and will be completed in Formations' shop. The Fabrication Shop Supervisor along with the Project Manager will inspect progress in the shop daily, enforcing the AWI's Quality Standards, ensuring that the schedule is being met, and identifying and correcting any inefficiencies prior to them becoming problematic.

Artifact cases will be built using only materials and construction methods that ensure the safe display of artifacts. Our Exhibit Specialists will create artifact cases that feature consistent temperature, humidity, and light exposure. Humidity will be controlled using a silica gel humidity ballast, according to NPS' Exhibit Conservation Guidelines.

The Fabrication Shop Supervisor will test all artifact cases prior to shipping to ensure that the conditions inside each case are within specified ranges. Formations will photograph all exhibit structures as they are being built every week, sending the photographs to the City for review and comments. As changes are requested, the Project Manager will communicate those changes to shop staff and ensure that they are incorporated into exhibits the next week, prior to new photos being submitted. The Project Manager will also work with the Exhibit Detailers to update shop drawings to reflect the exhibits as they are actually built, in case any changes are made.

When requested, **we build prototypes** before full fabrication begins. These are used to test functionality, durability, safety, and long-term performance.

Implementation Plan

Once the City confirms which elements require prototyping, the Shop Supervisor sources materials and our fabrication team constructs the prototypes according to approved shop drawings. Prototypes are submitted to the City for review and feedback.

For **graphic production**, our Art Director oversees output for both indoor and outdoor panels, reviewing for quality and flagging any issues or schedule changes to the Project Manager. Once printed, our Graphic Designers inspect, mount, and trim all graphics to ensure they are properly sized, free of defects, and securely affixed to their substrates. Final graphics undergo a thorough review to confirm they meet our high standards.

We regularly work with durable materials such as Dibond and Alucobond aluminum composites, HPL/phenolic resin (e.g., iZone), Direct Embed, HDO/MDO plywood, Sintra, Cortex, Ecoplast, Coroplast, acrylic enamel paints, and 3M vinyls (including reflective and anti-graffiti treatments). For banners, we use eco-friendly options like Bioflex, Ecotyvek, and dye-sublimated vinyl or mesh. Increasingly, we incorporate sustainable materials such as recycled plastic composite posts and panels.

Electrical/Electronic

As cabinetry and other exhibit elements are built, our Audiovisual Specialist will order all electrical and audiovisual equipment as specified in the design. Our Audiovisual Specialist has extensive experience developing and installing electrical and audiovisual components for museum exhibits and will ensure that all electrical elements are safe, meet or exceed required codes, and function properly. The Audiovisual Specialist will also check that all electrical and audiovisual components fit within built exhibit structures and that electrical components can be accessed easily. The Audiovisual Specialist will test all equipment thoroughly to ensure that it functions and that heat is ventilated away from equipment properly, surge protection is incorporated, and power demand does not exceed the power supply available at the site. All of this testing will be completed prior to shipping. The Audiovisual Specialist will install electrical and audiovisual components into the exhibits for the City's review during their (pre-installation) visit to Formations.



Our award-winning outdoor exhibits at Castle Williams (Governors Island, NY) withstood the fierce winds and rain of Hurricane Sandy, receiving little to no damage.



Formations built a life-sized "flying" Yum Bus for Tillamook's interactive playground at Portland International Airport.

Implementation Plan

Task 4:

Website Content Development

Formations will develop website content for the Discovery Center visitor experience through a phased process fully aligned with the existing Pure Water San Diego website. The content development and review timeline will be coordinated with the overall project schedule to ensure seamless integration and delivery.

Step 1: Content Framework & Design Alignment

Formations will establish the structure, organization, and visual alignment of new Discovery Center content within the current website. Deliverables include:

- A draft site map and page hierarchy (e.g., Exhibits, Virtual Tour, News & Events, Scheduling, Learning Resources).
- Layout mockups showing how text, images, and media will appear within the existing template.
- Recommendations for image styles, formatting, and typography consistent with the current site.

The City will review and approve the proposed content framework before development begins.

Step 2: Content Development & Formatting

Formations will create written and visual content compatible with the City's existing website format and CMS. Deliverables include:

- Draft content for all Discovery Center sections—exhibit overviews, virtual tour, news and events, visitor information, and learning resources.
- Optimized images, graphics, and multimedia elements prepared to site specifications.
- Fully formatted page content ready for upload.

The City will review draft content and provide consolidated feedback for final revisions.

Step 3: Final Content Delivery

Formations will deliver approved, upload-ready website content, including:

- Final text, images, and media organized by webpage.
- A complete content package for seamless integration into the Pure Water site.
- Documentation enabling the City to update and maintain the content post-installation.

After final approval, Formations will provide the complete, formatted package for upload to the existing Pure Water San Diego website.



Formations was proud to design, fabricate and install over 5,100 square feet of immersive exhibit space for the National Purple Heart Hall of Honor, which included touchscreen interfaces. Designed for long-term flexibility, the AV system allows museum staff to update content—adding new honorees and objects over time to keep the experience current and evolving.

Implementation Plan

Closeout & Warranty

O & M Manual and Training

After installation, we provide a detailed manual, train your staff in the use of all components, and warranty your interpretive exhibits for one year. Formations will provide one copy of a comprehensive Operations and Maintenance Manual for all interpretive components. This manual will be the basis of formal and informal training to be provided upon installation by Formations staff.

Warranty

We warrant our finished exhibitions for one year. Formations warrants to our clients that the materials and equipment furnished will be of good quality and free of defects in workmanship and materials and that the work will conform with the requirements of contract documents.

From concept to completion, our team will collaborate closely with the City of San Diego to design, fabricate, and install exhibits and signage that engage, educate, and inspire. The Discovery Center will invite visitors to explore the advanced water purification process, understand the importance of water recycling, and appreciate the City's rich history of water stewardship. Through modern design, interactive experiences, and clear interpretive storytelling, Formations will help create a cohesive, accessible, and memorable visitor experience that fosters public understanding and encourages shared responsibility for protecting this vital resource—today and for generations to come.



*Nature Trail at Weldon Spring Site
Interpretive Center, St. Charles, MO.*



*Marais des Cygnes National Wildlife
Refuge Visitor Center, Pleasanton, KS.*

PHASE I	PHASE II	PHASE III	PHASE IV
PROJECT START UP 1ST meeting pre-design • Theme development, resource and collections review • Preliminary story line, objectives • Target audiences • Analyze exhibit program • Document existing collection, conditions, colors, field measurements, electrical/mechanical systems • Photographic survey • Define programming needs and building constraints • Exhibit technologies • Write trip report, develop project agreement • <i>Client provides project information and identifies major themes, images, and artifacts</i> • <i>Client coordinates participation of experts</i> PLANNING SUBMITTAL • Narrative walkthrough of themes and topics with functional-use diagrams • <i>Client reviews and approves items above</i> PROGRAMMING 2ND meeting 25% complete • Prepare general research • Exhibit Outline • Organize exhibit data • Floor plan with exhibit layout, support areas, circulation • Concept sketches • Project budget and schedule • Building/exhibits coordination • <i>Client reviews and approves items above</i>	CONCEPT DESIGN 3RD meeting 50% complete • Develop design package for exhibits, other interiors, and signage: floor plan, elevations, with brief description of exhibit content and visitor experience • Define building modifications • Continue gathering image and artifact data • Revise exhibit outline • Cost estimate • <i>Client reviews and advises on Design and artifact information</i> • <i>Client provides 20–30% of images from collections</i> • <i>Client provides 20–30% of artifact information</i> 4TH meeting 75% complete • Secure graphic references and images • Revise Design package: revise drawings and add unit numbers • Provide exhibit resource book to include first draft text, A/V treatments, graphics and artifacts listings • Word count and unit numbering system • Preliminary colors and materials • Lighting, power/data drawings • Develop layout and reproduction methods for exhibit graphic panels • Advise parties of building modifications • <i>Client reviews and approves Revised Design package</i> • <i>Client provides remaining 70-80% images and artifacts</i>	FINAL DESIGN 5TH meeting 95% complete • Update exhibit resource book to include second draft text, A/V treatments, graphics and artifacts listings • Revise design package • Develop graphic look and feel • Dimensioned floor plan • Electrical/lighting plan • Dimensioned elevations & sections • Audiovisual, computer, and multimedia programs and hardware specs • Specialty equipment with 1-line diagrams • Construction details & specs • Final color and materials board • Cost estimate • Coordinate building details and exhibit structures • <i>Client reviews and approves Design package deliverables</i> SUBMITTAL 100% complete • Final design corrections • Provide revised Design materials listed above to client • Revise graphic look and feel • Provide final text, scripts, graphic and artifact listings • Assemble final exhibit resource book, graphic and artifact listings with facsimiles • Fabrication schedule • Final cost estimate • <i>Client reviews and approves</i> • <i>Client provides authorization to proceed to fabrication</i>	FABRICATION CHECKPOINT I 25% complete • Graphics developed and submitted to 50% • Graphics developed to 100% for production • Website content development • Report on fabrication expenses • Shop drawings if required • Finish samples • Prototypes if required • Final graphics revised to 100% for Production • <i>Client reviews progress on digital images, fabrication of furniture and casework, taxidermy, diorama, and other specialty items</i> CHECKPOINT II 50% complete • <i>Client reviews corrections to Checkpoint I and progress on elements above</i> • <i>Client will address any issues in writing for immediate correction</i> CHECKPOINT III 95% complete • <i>Client will review all finished exhibit elements at Formations</i> • <i>Client will address any final issues in writing for immediate correction</i> INSTALLATION Inspection <i>After shipment and before installation</i> • Damaged items will be repaired or replaced as required • <i>Client will inspect all exhibit elements for damage during shipping</i> INSTALLATION 100% complete • Installation of Tasting Stations • Work together with client on any items or issues on-site • Make all agreed-upon changes • <i>At substantial completion, client will share punchlist items to pick up elements for damage during shipping</i> CLOSEOUT • Deliver and train with O&M manuals including all warranties and equipment maintenance • Return all drawings, artwork, and final digital files to client

Pure Water San Diego Discovery Center

PROJECT SCHEDULE

October 10, 2025

	<u>Proposed Dates</u>
1. Contract Award	November 3, 2025
2. Project Start Up on Site / Kick Off Meeting	November 11, 2025
3. Task 1 – Design: Planning/Programming Submittal	December 11, 2025
4. Client review of materials	December 22, 2025
5. Task 1 – Design: - Submittal (Concept Design I)	January 21, 2026
6. Client review of materials	January 30, 2026
7. Submit & Present Concept Design II – Meeting on Site	March 5, 2026
8. Client review of materials	March 19, 2026
9. Task 1 – Design: Submit Concept Design II Materials	April 29, 2026
10. Client review of materials	May 13, 2026
11. Task 1 – Design: Submit/Meet to review Final Design	June 30, 2026
12. Client Review	July 10, 2026
13. Task 1 – Design: Submittal of Revised Final Design & Shop Drawings	August 1, 2026

Schedule

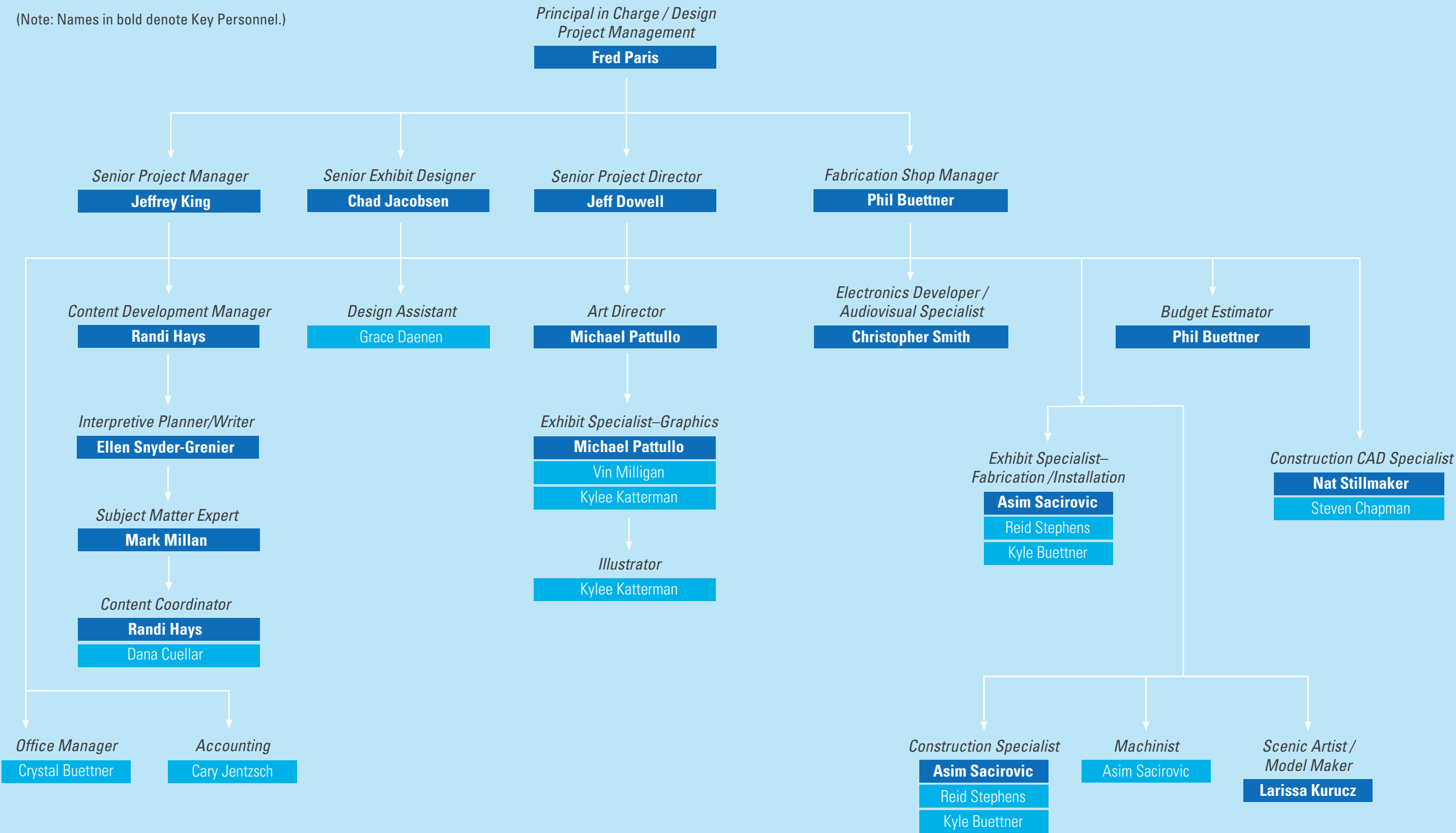
FORMATIONS

EXHIBITS + GRAPHICS + TECHNOLOGY

14.	Task 2 – NTP to Fabrication	August 14, 2026 (6 Months)
15.	Task 2 – Graphics 50% Submittal & Website Submittal I	September 30, 2026
16.	Client Review	October 10, 2026
17.	Task 2 – Graphics 100% Submittal & Website Submittal II	November 10, 2026
18.	Client Review	November 18, 2026
19.	Task 2 – Pre-installation shop visit	January 3, 2027
20.	Task 3 - Installation	January 10 – 28, 2027
20a.	Installation of Water Tasting Stations	January 12, 2026
21.	Closeout & Punch List	February 2, 2027
22.	Contract End	February 11, 2027

Organization Chart

(Note: Names in bold denote Key Personnel.)



Roles & Responsibilities

Principal in Charge / Design Project Management

(Fred Paris)
Provides executive oversight; leads strategic, financial, operations management, and contract administration. Serves as liaison between the client and design team.

Senior Project Manager

(Jeffrey King)
Ensures quality control and timely fulfillment of deliverables through a program of continuous value engineering; monitoring of work in progress and ongoing communication with the client, the Formations team, and Formations’ subcontractors. Maintains schedules, enforces budgets, and responds quickly to requests for information and assistance, facilitating a proactive, troubleshooting approach. Foresees and prevents most problems and devises and implements workable solutions as needed.

Senior Exhibit Designer

(Chad Jacobsen)
Designs accessible, museum-quality interpretive exhibits for an array of budgets and audiences. Provides redesign of existing exhibit elements or creates new ones, as needed. Designs dedicated exhibit lighting systems to optimize energy conservation and meet budget requirements.

Content Development Manager

(Randi Hays)
Organizes and manages graphics, artifacts, props, and text; Edits/writes text; communicates with clients and writers; updates database; proofreads deliverables; acquires and licenses images; project research.

Exhibit Planner / Text Writer

(Ellen Snyder-Grenier)
Facilitates meetings and client communications, content research, exhibit planning, graphic research, writes interpretive text including narrative walkthroughs, exhibit outlines, and labels.

Design Assistant

(Grace Daenen)
Supports the senior designer throughout the exhibit design process by helping develop concepts, conducting research, gathering inspiration, and contributing creative ideas. She assists with drafting sketches, floor plans, and elevations, prepares presentation materials for client meetings, and manages client assets. She also sources and orders material samples, maintains organized project files, and helps ensure smooth coordination across all phases of design.

Senior Project Director

(Jeff Dowell)
Specializing in new business procurement, project scheduling, and workflow management, keeping departments aligned and informed. He drives project tracking and leads meetings to maintain momentum, while coordinating design, production, and fabrication to streamline workflows and reduce inefficiencies. Strong in client relations, he keeps stakeholders engaged and projects moving forward, building trust and lasting partnerships.

Art Director

(Michael Pattullo)
Leads the creative vision for design projects, guiding the concept, look, and feel from start to finish. Manages and mentors design teams, ensures visual consistency, and translates strategic goals into compelling visual solutions with a strong eye for design and storytelling.

Exhibit Specialist - Graphics

(Michael Pattullo, Vin Milligan, Kylee Katterman)
Designs graphics that are attractive, easy-to-read, and consistent with our clients’ identity standards. Prepares materials for production; creates look and feel documents; and chooses color palettes, typography, and headlines. Creates graphic deliverables and verifies all layouts are complete and match design documents.

Prepares files for production. Prior to graphic production, works with Exhibit Specialists – Fabrication to ensure graphic and structure sizes correlate. Checks in graphics from vendors and quality controls them so that they match color tests. Mounts photos to substrates, ensuring that they are mounted securely, properly sized, entirely flat, and trimmed neatly.

Electronics Developer / Audiovisual Specialist

(Christopher Smith)
Provides technological solutions for audiovisual, computer, and specialty electronic components. Specifies hardware for audiovisual multimedia and computer programs, manages budgets for electronics, designs and details audiovisual systems, and installs electrical and electronic systems.

General Manager / Fabrication Shop Manager

(Phil Buettner)
Manages all aspects of construction, fabrication, personnel management, and product purchasing. Oversees all fabrication and installation operations while coordinating manpower needs. Works with Project Manager to ensure quality control of all exhibit elements that are fabricated in-house and out-of-house to make sure they meet Formations standards of quality. Works closely with the graphics department to ensure that all graphics produced match substrates produced in the shop. When projects are approved and ready for installation, leads the coordination needed to bring the project to completion.

Exhibit Specialist – Fabrication / Installation

(Asim Sacirovic, Reid Stephens, Kyle Buettner)
Performs all aspects of exhibit preparation. Follows protocols of conservation and museum standards for handling and mounting works on paper, as well as matting, framing, and installation techniques. Develops lists of needed fabrication materials and uses woodworking or other mechanical skills to prepare full-size or to-scale layouts, decides and executes the most appropriate method of joining various components, and applies required laminates or other finishes. Responsible for mounting objects for display in exhibits and the design and fabrication of custom mounts for valuable and non-valuable objects. Installs all finished exhibits.

Scenic Artist / Model Maker

(Larissa Kurucz)
Illustrates realistic and captivating scenes in a variety of media. Creates stunning, realistic environments and models.

Budget Estimator

(Phil Buettner)
Prepares project estimates and allocates budgets for each project, ensures every project stays on budget and on schedule, and works with clients to ensure Formations’ high standards of quality are being met. Assists with managing quality control plan, addresses cost inefficiencies and poor performance trends prior to them becoming problematic.

Construction CAD Specialist

(Nat Stillmaker)
Oversees and creates exhibit drawings, plans, and elevations, ensures that they are accurate, complete, and suitable for exhibit fabrication. Produces fabrication drawings, isometric drawings, and construction details. Compiles exhibit specifications and cut sheets and implements them into an operations and maintenance manual, which describes access, cleaning, and troubleshooting instructions for all exhibits.

Construction Specialist

(Asim Sacirovic, Reid Stephens, Kyle Buettner)
Supervises the preparation, installation, and fabrication of exhibit components and artifacts. Leads the team in the preparation of samples, materials, tests, and prototypes. Responsible for ordering materials and exhibit-related services and reviewing and understanding drawings in order to plan and assign work to others. Ensures that work flows from the shop to the installation site in an effective manner, installation deadlines are met, and quality is maintained at the exhibit site.

Machinist

(Asim Sacirovic)
Specializes in superlative ornamental metal projects and performs all aspects of exhibit preparation, fabrication, and installation. Prepares full-size or to-scale layouts, machines rough stock into necessary shapes and sizes, chooses and executes the most appropriate method of joining various components, and applies required techniques for preparation of final finishes.



Fred Paris

Principal in Charge / Design Project Management

Primary Duties:

Executive oversight; leads strategic, financial, operations management, and contract administration.

Roles and Responsibilities:

Fred ensures that schedule, coordination, oversight, and communication is effectively accomplished for all work produced under the contract.

Relevant Project Experience:

Santa Ynez Chumash Museum & Cultural Center – Santa Ynez, CA

Design/Fabrication/Installation; completed in 2025. Led strategic and financial operations and managed contract.

Completed the above responsibilities for the following projects:

Klondike Gold Rush Natl. Historical Park Mascot Saloon – Skagway, AK

Design/Fabrication/Installation; completed 2024.

Tillamook PDX Play Area – Portland, OR

Fabrication/Installation; completed 2023.

NPS Shiloh National Military Park – Shiloh, TN

Design/Fabrication/Installation; completed 2023.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022.

Columbia River Maritime Museum Shipwrecks – Astoria, OR

Design/Fabrication/Installation; completed 2021.

Pearson Air Museum, Fort Vancouver National Historic Site – Vancouver, WA

Design/Fabrication/Installation; completed 2021.

Pahranagat National Wildlife Refuge: Black Canyon Trail – Alamo, NV

Design/Fabrication/Installation; est. completed June 2021.

Mount St. Helens Forest Learning Center – Toutle, WA

Design/Fabrication/Installation; completed 2020.

Santa Ysabel Nature Museum – Julian, CA

Design/Fabrication/Installation; completed 2020.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022.

Umatilla Gold, Heritage Station Museum – Pendleton, OR

Design/Fabrication/Installation; completed 2019.

Wright Brothers National Memorial – Kill Devil Hills, NC

Design/Fabrication/Installation; completed 2018.

Carrie M. McLain Memorial Museum – Nome, AK

Design Consultation/Redesign/Fabrication/Installation; completed 2018.

John Heinz National Wildlife Refuge – Philadelphia, PA

Design/Fabrication/Installation; completed 2018.

Oregon Zoo Education Center – Portland, OR

Design/Fabrication/Installation; completed 2016.

Grant County PUD Visitor Center – Beverly, WA

Design/Fabrication/Installation; completed 2015.

SAGE Center – Boardman, OR

Design/Fabrication/Installation; Completed 2013.

Clark County Wetlands Park – Las Vegas, NV

Design/Fabrication/Installation; Completed 2013.

Employment History:

2010 –	Formations, Inc., Principal/Owner
2006–2010	Pavilion Properties, LLC, Portfolio Manager
2002–2006	Merrill Lynch/First Franklin Financial, VP of Sales
1998–2002	NBA Portland Trail Blazers, Sr. Corp. Sales Manager

Educational Background:

1990	Masters Candidate, Oregon State University, Post-secondary Education and Finance
1998	B.S., Oregon State University, Broadcast Media Communication and Business Administration



Jeffrey King

Senior Project Manager

Primary Duties:

Jeffrey serves as liaison between the client and Formations; conducts meeting facilitation, quality control, scheduling, fabrication and installation coordination.

Roles and Responsibilities:

Jeffrey clarifies work processes, promptly responding to inquiries and addressing any inconsistencies between client communications and Formations' team. He is also responsible for supplying project estimates, scheduling meetings and tasks, and providing regular written updates throughout fabrication and installation. He distributes comments, instructions, and materials to appropriate personnel and subcontractors, and has overall responsibility for quality control and timely fulfillment of all phases of deliverables, while maintaining schedules and enforcing budgets.

Relevant Project Experience:

Santa Ynez Chumash Museum & Cultural Center – Santa Ynez, CA

Design/Fabrication/Installation; completed in 2024. Ensured that schedule, coordination, oversight, and communication was effectively accomplished for all work produced. Provided direct management of all exhibits with administration of budgets, programming, and approval processes. Oversaw all vendors and subcontractors to ensure quality control and compliance with schedules. Coordinated the work between Formations and client fabrication teams.

Completed the above responsibilities for the following projects:

Klondike Gold Rush Natl. Historical Park Mascot Saloon – Skagway, AK

Design/Fabrication/Installation; completed 2024.

Tillamook PDX Play Area – Portland, OR

Fabrication/Installation; completed 2023.

Fort Riley 1st Infantry Division – Fort Riley, KS

Fabrication/Installation; completed 2023.

NPS Shiloh National Military Park – Shiloh, TN

Design/Fabrication/Installation; completed 2023.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022.

Weldon Spring Site Visitor Center – St. Charles, MO

Design/Fabrication/Installation; completed 2022.

Columbia River Maritime Museum Shipwrecks – Astoria, OR

Design/Fabrication/Installation; completed 2021.

Sunol-Alameda Creek Watershed Center – Sunol, CA

Design/Fabrication/Installation; in progress.

Mount St. Helens Visitor Center Seaquest State Park – Castle Rock, WA

Design/Fabrication/Installation.

Heritage Station Museum-Umatilla Gold: History of Wheat – Pendleton, OR

Design/Fabrication/Installation; completed 2019.

Employment History:

2019 –	Formations Inc., Project Manager
2018 – 2019	B&L Wood Creations, Senior Project Manager
2017 – 2018	Forge Graphic Works, Senior Project Manager
2015 – 2017	Boden Alexander, Senior Project Manager/3D Design
2012 – 2015	ZAGG Inc., Creative Director Product Development
2011 – 2012	McKenzie Exhibit, Creative Director 3D Design/Sr. Project Manager
2006 – 2011	FUSION Imaging, Creative Director

Educational Background:

1979 – 1982	B.A., Environmental Design, Eastern Washington University
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Chad Jacobsen

Senior Exhibit Designer

Primary Duties:

Designs accessible, museum-quality interpretive exhibits for an array of budgets and audiences. Provides redesign of existing exhibit elements or creates new ones, as needed. Designs dedicated exhibit lighting systems to optimize energy conservation and meet budget requirements.

Roles and Responsibilities:

As exhibit designer, Chad is responsible for the planning and design of interpretive projects. He facilitates meetings with clients and oversees project design staff, including workflow, budget and scheduling through completion to ensure client needs are met.

Selected Relevant Project Experience:

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022. As Senior Designer, designed interactive, accessible exhibits.

Pearson Air Museum, Fort Vancouver National Historic Site – Vancouver, WA

Design/Fabrication/Installation; completed 2021. As Senior Designer, designed interactive, accessible exhibits at Fort Vancouver operated by NPS.

Santa Ysabel Nature Museum – Julian, CA

Design/Fabrication/Installation; completed 2020. As Senior Designer, designed interactive, accessible exhibits for a 6,000 foot visitor center operated by San Diego County Department of Parks and recreation.

Heritage Station Museum-Umatilla Gold: History of Wheat – Pendleton, OR

Design/Fabrication/Installation; completed 2019. As Senior Designer, designed interactive, accessible exhibits.

200 Years Of Oregon Beer History –Portland, OR

Design/Fabrication, Installation; Completed 2018. As Senior Designer, designed 3,000 square feet of interactive, accessible exhibits for a temporary exhibit at the Oregon Historical Society.

History Center – Fort Wayne, IN

Design; Completed 2016; Schematic Design, Planning, Programming and concepts for a three-story museum featuring the artifacts and history of Fort Wayne.

Oregon Museum of Science and Industry – Portland, OR

Design; Completed 2014; Masterplan for OMSI's Turbine Hall Renewal Project. Redesign of OMSI's Historic 1920's power station building. New experiences focus around themes of design thinking and problem solving.

Reed College – Portland, OR

Design/Fabrication/Installation; Completed 2015; Interior and exterior hands on and full body experiences for Reed College and Growing Seeds daycare centers. Elements and environments designed to encourage experiential learning.

Indianapolis Children's Museum – Indianapolis, IN

Fabrication, Installation; Completed 2004: Immersive and multi-sensory exhibit featuring fossil specimens set in a realistic environment. Other elements of the exhibit include a fully functioning paleo lab and an extensive dinosaur art gallery.

Employment History:

2016 –	Formations, Inc. - Portland, Oregon, Exhibit Designer/Project Manager
2014 – 2016	ChadJDesign - Portland, Oregon, Owner, Designer, Fabricator
2013 – 2014	Oregon Museum of Science and Industry- Portland Oregon, Senior Creative/Strategic Planner
2010 – 2013	Oregon Museum of Science and Industry- Portland Oregon, Exhibit Design Manager
2007 – 2010	Oregon Museum of Science and Industry- Portland Oregon, Traveling Exhibits Technical Lead
2005 – 2007	Independent- Indianapolis Indiana, Exhibit Designer, Project Manager and Fabricator
2002 – 2005	The Children's Museum of Indiana- Indianapolis Indiana, Project Manager and Fabricator

Educational Background:

1986	Advertising and Illustration Art Studies – Columbus College of Art and Design- Columbus Ohio
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Phil Buettner

General Manager / Fabrication Shop Manager / Budget Estimator

Primary Duties:

Manages all fabrication and installation shop functions while maintaining and coordinating all person-hour needs. Oversees lighting designs and implementation. Advises and manages the mounting of irreplaceable objects.

Roles and Responsibilities:

Phil Buettner manages personnel and matches each project to the right crew. Works with other staff to quality control all exhibit elements that are fabricated to make sure they meet Formations' standards. Also works closely with the graphics department to ensure that all graphics produced match substrates produced in the shop. When projects are approved and ready for installation, Phil leads the coordination needed to bring the project to completion.

Relevant Project Experience:

Pearson Air Museum, Fort Vancouver National Historic Site – Vancouver, WA

Design/Fabrication/Installation; completed 2021. Provided progress reports to client during fabrication; reviewed design drawings and details; prepared cost estimates and schedules; ensured all exhibit elements were up to code.

Completed the above responsibilities for the following projects:

Pahranagat National Wildlife Refuge: Black Canyon Trail – Alamo, NV

Design/Fabrication/Installation; est. completed June 2021.

Mount St. Helens Forest Learning Center – Toutle, WA

Design/Fabrication/Installation; completed 2020.

Santa Ysabel Nature Museum – Julian, CA

Design/Fabrication/Installation; completed 2020.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022.

Umatilla Gold, Heritage Station Museum – Pendleton, OR

Design/Fabrication/Installation; completed 2019.

Wright Brothers National Memorial – Kill Devil Hills, NC

Design/Fabrication/Installation; completed 2018.

Carrie M. McLain Memorial Museum – Nome, AK

Design Consultation/Redesign/Fabrication/Installation; completed 2018.

John Heinz National Wildlife Refuge – Philadelphia, PA

Design/Fabrication/Installation; completed 2018.

Oregon Zoo Education Center – Portland, OR

Design/Fabrication/Installation; completed 2016.

Grant County PUD Visitor Center – Beverly, WA

Design/Fabrication/Installation; completed 2015.

SAGE Center – Boardman, OR

Design/Fabrication/Installation; Completed 2013.

Clark County Wetlands Park – Las Vegas, NV

Design/Fabrication/Installation; Completed 2013.

Employment History:

2005 – Formations, Inc. - Portland, Oregon, General Manager/Operations Manager/
Fabrication Shop Supervisor

1990 – 2005 Formations, Inc. - Portland, Oregon, Fabrication Manager

Educational Background:

1980 – 1983 Linn-Benton Community College - Corvallis, Oregon

Certificate of Journeyman Training in Carpentry from The Associated General
Contractors of America Oregon Chapter

Ellen Snyder-Grenier

Exhibit Planner / Text Writer

Primary Duties:

Facilitating meetings and client communications, content research, exhibit planning, graphic research, writing interpretive text including narrative walkthroughs, exhibit outlines, and labels.

Roles and Responsibilities:

Having worked with clients and design teams for over 20 years, Ellen combines her passion for research with her ability to craft engaging interpretive text that captivates visitors and entices them for more. Her extensive museum background, as well as her interpretive writing experience, combines with her exceptional communication skills to enrich the research and writing process with the Formations team.

Relevant Project Experience:

Gold Rush at the Klondike Gold Rush National Historical Park – Skagway, AK

Worked with the Formations Inc. team as an Exhibit Developer. Selected and researched objects and images; researched and wrote exhibition planning and interpretive text.

The Morris Museum – Morristown, NJ

Selected and researched objects and images; researched and wrote exhibition planning and interpretive text for permanent exhibition, *Musical Machines & Living Dolls*.

Historical Society of Princeton – Princeton, NJ

Selected and researched objects and images; researched and wrote exhibition planning and interpretive text for *Stand Up, Speak Out! Princeton Citizens Find Their Voice*.

The New Jersey Historical Society – Newark, NJ

Researched and obtained images and objects; researched and developed narrative and all exhibition text for a variety of exhibitions, including *Changed Lives: New Jersey Remembers September 11, 2001*; *What Exit? New Jersey and Its Turnpike*; *Dining In, Dining Out*; and *Teenage New Jersey, 1941-1975*.

The Brooklyn Historical Society – Brooklyn, NY

Researched objects and images; researched and developed narrative and all exhibition text for permanent exhibition, *Brooklyn's History Museum*.

Employment History:

2004 – Present	Rew & Co., Principal
2004 – 2010	Morris Museum, Morristown, New Jersey, Curator (Part-time)
1993 – 2004	New Jersey Historical Society, Newark, New Jersey, Deputy Director for Special Projects
1984 – 1992	The Brooklyn Historical Society, Brooklyn, New York, Chief Curator

Educational Background:

1990	Victorian Society Summer School, London, England
1984	M.A., Winterthur Program in American Material Culture - University of Delaware
1980	Historic Deerfield Summer Fellowship Program in American History and Material Culture
1980	B.A., English, concentration in Creative Writing and Early American Literature - University of Massachusetts/Amherst

Selected Publications:

Book review: Jennifer L. Eichstedt and Stephen Small, *Representations of Slavery: Race and Ideology in Southern Plantation Museums* (Smithsonian Institution Press, 2002), in Winterthur Portfolio 39, Summer/Autumn 2004.

"Joseph Stella's 'Brooklyn Bridge,'" in Beth Venn and Adam D. Weinberg, *Frames of Reference: Looking at American Art, 1900-1950/Works from the Whitney Museum of American Art*, Whitney Museum of American Art, 1999.

Brooklyn! An Illustrated History. Philadelphia: Temple University Press, 1996. (Winner of the New York Society Library 1996 New York City Book Award). Released in paperback Spring 2004.

Contributor, *Encyclopedia of New York City*, Kenneth T. Jackson, ed., New Haven: Yale University Press, 1995.





Randi Hays

Content Development Manager

Primary Duties:

Organizes and manages graphics, artifacts, props, and text; edits/writes text; communicates with client; updates database; proofreads deliverables; acquires and licenses images; project research

Roles and Responsibilities:

Randi will create an exhibit database and manage all graphics, artifacts, and content from design through installation. She will undertake photo and artifact research and obtain permissions for usage of these items. In addition to preparing deliverables and assuring quality control, she will refine text according to client standards and act as content liaison between the client and design/fabrication departments.

Relevant Project Experience:

Alaska State Libraries, Archives & Museums Children's Exploration Center, Juneau, AK

Planning/Design; In progress; writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, ensuring accuracy and consistency of deliverables.

National Fish Hatchery Museum, Spearfish, SD

Planning/Design; Completed 2023; writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, ensuring accuracy and consistency of deliverables.

Marais des Cygnes National Wildlife Refuge Visitor Center, Pleasanton, KS

Design/Fabrication; Completed 2022; Managing exhibit databases, proofreading and editing interpretive text, ensuring accuracy and consistency of deliverables. Image acquisition.

Santa Ysabel Nature Museum, Julian, CA

Design/Fabrication; Completed 2020; Managing exhibit databases, proofreading and editing interpretive text, ensuring accuracy and consistency of deliverables.

John Heinz National Wildlife Refuge – Philadelphia, PA

Design/Fabrication/Installation; completed 2018. Managing exhibit databases, proofreading and editing interpretive text, ensuring accuracy and consistency of deliverables. Image acquisition.

D.C. Booth HNFH Interpretive Panels, Spearfish, SD

Planning, Design/Fabrication; Completed 2018; writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, Proofreading all deliverables. Image acquisition.

Stillwater NWRC, Pelican Point Kiosk (Anaho Island NWR)

Planning, Design/Fabrication; Completed 2018; writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, Proofreading all deliverables. Image acquisition.

Oregon Zoo Education Center – Portland, OR

Design/Fabrication/Installation; completed 2016. writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, Proofreading all deliverables. Image acquisition.

Grant County PUD Visitor Center – Beverly, WA

Design/Fabrication/Installation; completed 2015; writing and editing interpretive text, programming images and objects; creating and managing exhibit databases, Proofreading all deliverables. Image acquisition.

Employment History:

2021-Present	Formations, Inc., Content Development Manager
2014-2021	Formations, Inc., Content Coordinator
2008-2014	Healthy Living Magazine, Assistant Managing Editor

Educational Background:

2003	B.A., English Writing Arts, Oswego State University – Oswego, NY
2003	Minor, Communications, Oswego State University – Oswego, NY



Mark Millan

Subject Matter Expert

Roles and Responsibilities:

Mark is the founder of Data Instincts, a professional consultancy specializing in public outreach for implementing recycled water projects. He has coordinated public outreach for dozens of recycled water projects throughout the western United States and has advised on reuse internationally. Mark co-authored the Water Research Foundation's Developing Model Communication Plans for Advancing Awareness and Fostering Acceptance of Direct Potable Reuse (WRF 13-02). And was a contributing writer to the World Health Organization's Guidelines for Potable Reuse published in 2017.

Select Project Experience

- Valley Water, Santa Clara, CA; Coordination with staff for Outreach and Communications
- PureWater Peninsula, South Bay Area, CA; Conduct In-depth Interviews, Develop Outreach Approach/Strategy, and Project Branding
- PureWater SF, San Francisco, CA; Project Branding and Demo Site Strategy
- Pure Water Monterey, Monterey, CA; Project Branding, Demo Site Strategy, and Outreach and Communications
- PureWater Soquel, Aptos, CA; Outreach and Communications, Project Branding/Demo Site, and Mobile Education Trailer
- OneWater Nevada Reno, NV; Outreach and Communications, Project Branding/Demonstration Trailer

Educational Background:

Marketing, Public Relations - West Valley College, Saratoga, CA

Studio Music & Audio Production - New College, Sausalito, CA

Affiliations

WaterReuse Association, International Desal & Reuse Association,
International Water Association



Jeff Dowell

Senior Project Director

Primary Duties:

Project scheduling, workflow management, project tracking.

Roles and Responsibilities:

Jeff specializes in new business procurement, project scheduling, and workflow management, keeping departments aligned and informed. He drives project tracking and leads meetings to maintain momentum, while coordinating design, production, and fabrication to streamline workflows and reduce inefficiencies. Jeff manages submittals, organizes client feedback, and ensures clear communication across teams. Strong in client relations, he keeps stakeholders engaged and projects moving forward, building trust and lasting partnerships.

Relevant Project Experience:

Klondike Gold Rush Natl. Historical Park Mascot Saloon – Skagway, AK

Design/Fabrication/Installation; completed 2024.

Columbia River Maritime Museum Shipwrecks – Astoria, OR

Design/Fabrication/Installation; completed 2022.

Pearson Air Museum, Fort Vancouver National Historic Site – Vancouver, WA

Design/Fabrication/Installation; completed 2021.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022.

Mount St. Helens Forest Learning Center – Toutle, WA

Design/Fabrication/Installation; completed 2020.

Santa Ysabel Nature Museum – Julian, CA

Design/Fabrication/Installation; completed 2020.

Umatilla Gold, Heritage Station Museum – Pendleton, OR

Design/Fabrication/Installation; completed 2019.

Wright Brothers National Memorial – Kill Devil Hills, NC

Design/Fabrication/Installation; completed 2018.

John Heinz National Wildlife Refuge – Philadelphia, PA

Design/Fabrication/Installation; completed 2018.

New Bedford Whaling National Historical Park – New Bedford, MA

Design/Fabrication/Installation; completed 2017.

Klondike Gold Rush National Historical Park – Skagway, AK

Design/Fabrication/Installation; completed 2017.

Grant County PUD Visitor Center – Beverly, WA

Design/Fabrication/Installation; completed 2015.

Oregon Zoo Education Center – Portland, OR

Design/Fabrication/Installation; completed 2016.

Donner Memorial State Park – Truckee, CA

Design/Fabrication/Installation; Completed 2015.

Frederick Law Olmsted National Historic Site – Brookline, MA

Design/Fabrication/Installation; Completed 2015.

Clark County Wetlands Park – Las Vegas, NV

Design/Fabrication/Installation; Completed 2013.

SAGE Center – Boardman, OR

Design/Fabrication/Installation; Completed 2013.

Employment History:

2017 – Formations Inc., Graphic Studio Supervisor

2004 – 2017 Formations, Inc., Senior Graphic Designer

2003 – 2004 Pacific Lamination, Graphic Designer

Educational Background:

2000 A.A.S. - Lower Columbia Community College

2003 B.S., Graphic Design, - Portland State University



Michael Pattullo

Art Director

Primary Duties:

Graphic design and production, graphic mounting, and quality control

Roles and Responsibilities:

Michael brings the graphic story to life—as a visual storyteller, he develops a creative vision and design style. Michael oversees the production of graphics, working with the designers to achieve the look and feel of each graphic layout. He’s also responsible for putting together a variety of graphic deliverables. Michael manages all design work at Formations ensuring that our standards of quality, educational effectiveness, and functionality are met.

Selected Relevant Project Experience:

Klondike Gold Rush National Historical Park, Mascot Saloon – Skagway, AK

Design/Fabrication, Installation; completed 2024. Developed graphic look and feel, designed interpretive panels, color palette, and performed color correction, photo manipulation, and typography specs.

Shiloh National Military Park – Shiloh, TN

Design/Fabrication, Installation; completed 2023. Designed interpretive panels, color palette, and performed color correction, photo manipulation, and typography specs.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication, Installation; completed 2022. Designed interpretive panels and created production-ready files.

Pahranagat National Wildlife Refuge: Black Canyon Trail – Alamo, NV

Design/Fabrication, Installation; completed 2021. Designed interpretive panels, color palette, and performed color correction, photo manipulation, and typography specs.

Wright Brothers National Memorial – Kill Devil Hills, NC

Design/Fabrication, Installation; completed 2018. Designed interpretive panels, and performed color correction, photo manipulation, and typography specs. Created production-ready files.

Carrie M. McLain Memorial Museum – Nome, AK

Design/Fabrication, Installation; completed 2018. Designed interpretive panels, and performed color correction, photo manipulation, and typography specs. Created production-ready files.

Employment History:

2024–	Formations Inc. - Portland, Oregon, Art Director
2010–2023	Formations Inc. - Portland, Oregon, Senior Graphic Designer
2000-2009	Classic Sign Systems, Production Manager/Sign Designer

Educational Background:

2008	A.A.S., Graphic Design, Portland Community College – Portland, Oregon
1998	Photography, Utah State University – Logan, Utah
2005	3M Seminars
2002	International Letterhead



Christopher Smith

Electronics Developer / Audiovisual Specialist

Primary Duties:

Specifies hardware for audiovisual and computer programs, ensuring optimal performance and compatibility. Manages budgets for electronics, maintaining cost-effectiveness and adhering to financial constraints. Designs and detailed audiovisual systems, incorporating client requirements and technical specifications. Installs electrical and electronic systems, ensuring proper functionality and compliance with safety standards. Purchases, installs, and adjusts lighting fixtures, enhancing visual ambiance and meeting project objectives.

Roles and Responsibilities:

Drawing from over a decade of experience in the museum industry, Christopher brings a proven track record of designing and seamlessly integrating more than 200 exhibits. His responsibilities span from initial design and estimating to procurement and integration, all executed with a commitment to upholding integrity as his foremost value.

Relevant Project Experience:

Columbia River Maritime Museum Shipwrecks – Astoria, OR

Design/Fabrication/Installation; completed 2022. Coordinated arrangement and oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration; communicated with client and subcontractors producing AV and digital interactive exhibits; created multimedia programs, including projection system.

Marais des Cygnes National Wildlife Refuge – Pleasanton, KS

Design/Fabrication/Installation; completed 2022. Coordinated arrangement and oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration; communicated with client and subcontractors producing AV and digital interactive exhibits; created multimedia programs.

Pahrnagat National Wildlife Refuge: Black Canyon Trail – Alamo, NV

Design/Fabrication/Installation; completed June 2021. Coordinated arrangement and oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration; communicated with client and subcontractors producing AV and digital interactive exhibits.

Mount St. Helens Forest Learning Center – Toutle, WA

Design/Fabrication/Installation; completed 2020. Coordinated arrangement and oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration. Created multimedia programs, including projection system.

Santa Ysabel Nature Museum – Julian, CA

Design/Fabrication/Installation; completed 2020. Coordinated arrangement and oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration; communicated with client and subcontractors producing AV and digital interactive exhibits; created multimedia programs, including projection system.

Arlington House, the Robert E. Lee Memorial – Arlington, VA

Fabrication/Installation; completed 2019. Design and integration of audiovisual hardware system.

Wright Brothers National Memorial – Kill Devil Hills, NC

Design/Fabrication/Installation; completed 2018. Design and integration of audiovisual hardware system.

John Heinz National Wildlife Refuge – Philadelphia, PA

Design/Fabrication/Installation; completed 2018. Oversaw installation for exhibit lighting, electricals, and AV and digital interactive systems integration; created multimedia programs.

Employment History:

2018 –	Formations, Inc., AV Specialist
2014 – 2018	Oregon Historical Society, Preparator/AV Specialist
2009 – 2014	Akron Art Museum, Museum Technician

Educational Background:

2014	University of Akron, B.F.A - Major: Sculpture; Minor: New Media
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Nathan Stillmaker

Construction CAD Specialist

Primary Duties:

Draft innovative detail drawings integrating project goals with inventive solutions.

Roles and Responsibilities:

As the lead drafter, Nathan is responsible for mechanical and architectural 3-D drawings and prototype renderings. He works with team leads to produce accurate, timely documents for fabrication and client deliverables.

Selected Relevant Project Experience:

NPS Shiloh National Military Park – Shiloh, TN

Design/Fabrication, Installation; Detailing exhibits and compiling operations and maintenance manual.

NPS Eisenhower National Historic Site – Gettysburg, PA

Design/Fabrication, Installation; Design currently in progress; Detailing exhibits

Oregon Korean War Memorial – Wilsonville, OR

Design/Fabrication, Installation; Fabrication currently in progress; Detailing exhibits

Santa Ynez Chumash Museum – Santa Ynez, CA

Design/Fabrication, Installation; Fabrication currently in progress; Detailing exhibits

Angel Mounds – Indiana State Museum – Evansville, IN

Design/Fabrication, Installation; completed 2024; Detailing exhibits

Waverley Women's USGA Exhibit – Portland, OR

Design/Fabrication, Installation; completed 2023. Detailing exhibits and compiling operations and maintenance manual.

Astoria Maritime Museum – Astoria, WA

Design/Fabrication, Installation; Detailing exhibits and compiling operations and maintenance manual.

Muhammad Ali Center – Louisville, KY

Design/Fabrication, Installation; Detailing exhibits and compiling operations and maintenance manual.

Meteor Crater Visitor Center – Winslow, AZ

Design/Fabrication, Installation; Detailing exhibits and compiling operations and maintenance manual.

Employment History:

2023 –	Formations, Inc., Senior Exhibit Detailer
2021 – 2022	Adair Custom Homes, Custom Home Drafter
2014 – 2015	Haleakala Solar, Kahului, Hawaii, Solar Designer
2008 –	Independent Contractor/Photographer
2011 – 2012	Evergreen EDC, Mechanical Designer
2009 – 2011	Formations, Inc., Drafter
2008 – 2009	Silicon Chemical Corp., Drafter/IT
2006 – 2007	Tom Nelson and Associates, Lead Drafter/Drafting Manager
2004 – 2006	BOC Edwards, Mechanical Designer/Drafter/IT
2002 – 2004	Formations, Inc., Job Captain/Lead Drafter/IT
2000 – 2001	P2RS – Intel (T.I.D., Assembly/Test), Mechanical Design/Drafter
1999 – 2000	Formations, Inc., Lead Drafter
1998 – 1999	Gaylord Industries, Layout Drafter/Designer
1997 – 1998	3-D Drafter (contract)

Educational Background:

B.S.I.T. degree – University of Phoenix

AutoLISP 1, AutoLISP 2 – Clackamas Community College

Associate degree, Computer Science – I.T.T. Technical Institute

Computer arts (animation) and Life figure drawing –

Portland Community College



Asim Sacirovic

Construction Specialist / Exhibit Specialist – Fabrication / Installation

Primary Duties:

Exhibit fabrication and installation.

Roles and Responsibilities:

Fabrication of metal projects for exhibits. Asim is a skilled and experienced fabricator, specializing in superlative ornamental metal projects.

Selected Relevant Project Experience:

Klondike Gold Rush National Park – Skagway, Alaska

Oregon Zoo Education Center – Portland, OR

Ulysses S. Grant Presidential Library – Starkville, MS

Carrie M. McLain Memorial Museum – Nome, AK

Oregon Zoo Elephant Habitat – Portland, OR

Donner Memorial State Park Visitor Center – Truckee, CA

Pahranagat NWR Visitor Center – Alamo, NV

Ash Meadows NWR Visitor Center – Amargosa Valley, NV

Wanapum Heritage Center – Beverly, WA

Sanford Lab Homestake Visitor Center – Lead, SD

Grant County PUD Visitor Center – Beverly, WA

Grand Canyon Skywalk Visitor Center – Peach Springs, AZ

Frederick Law Olmsted National Historic Site – Brookline, MA

Hanford Reach Interpretive Center – Richland, WA

Clark County Wetlands Park – Las Vegas, NV

SAGE Center – Boardman, OR

National Infantry Museum-Armor Gallery – Columbus, GA

U.S. Army Heritage and Education Center – Carlisle, PA

Great Smoky Mountains National Park – Gatlinburg, TN

Camp Withycombe Armed Forces Resource Center – Clackamas, OR

Castle Williams Exhibits, Governors Island NM – New York, NY

Arrowwood National Wildlife Refuge – Pingree, ND

Northwest Arctic Heritage Center – Kotzebue, AK

Employment History:

2012 – [Formations, Inc., Metal Fabricator](#)

2004 – 2011 [Alexander MFG, Metal Fabricator](#)

1996 – 2004 [Promotion Products, Inc., Metal Fabricator](#)



Larissa Kurucz

Scenic Artist / Model Maker

Primary Duties:

Custom models and dioramas. Exhibit fabrication and installation.

Roles and Responsibilities:

As a scenic artist and sculptor, Larissa creates captivating environments and stunningly realistic models working with a variety of materials including laminates, plastic, wood and other natural resources.

Selected Relevant Projects

USACE Bonneville Dam – Cascade Locks, OR

Design/Fabrication/Installation; to be completed 2025.

Created and detailed a variety of realistic life-size fish models and tactile sculptures.

National Fish Hatchery Museum – Spearfish, SD

Design/Fabrication/Installation; to be completed 2025.

Created realistic models including a variety of life-size fish species.

Aransas NWR – Aransas, TX

Design/Fabrication/Installation; 2025. Created and detailed a variety of realistic life-size wildlife models native to Texas.

Angel Mounds State Historic Site – Evansville, IN

Design/Fabrication/Installation; 2025.

Created accurate replicas of historical Native American objects and artifacts.

Santa Ynez Chumash Museum & Cultural Center – Santa Ynez, CA

Design/Fabrication/Installation; 2025.

Created realistic environments including rock forms and life-size animal models.

Employment History

2024 – Formations, Inc., Exhibit Specialist

2022 – Gallery/Art Install and Event Coordinator

2021 – Professional muralist

Education

2019 Capital University Columbus, OH. Major: Art

Past Performance Project:

Advanced Purified Water Facility Education Center

Exhibit Design & Build (Design Phase)

Our team is currently engaged in the design phase of a comprehensive exhibit design-build project for the Advanced Purified Water Facility (APWF) Education Center. The goal is to create a cohesive, immersive experience through a mix of interactive exhibits, interpretive signage, and thoughtfully designed interior and exterior elements that educate and engage a wide range of visitors.

The current scope of work includes conceptual design development across five key components:

- **Main Educational Exhibit Space:** Designing the central exhibit hub that will feature multimedia presentations and interactive elements to educate students, educators, professionals, and the public about advanced water purification technologies and processes.
- **Interior Process Area Identification Signs:** Developing large-scale signage to clearly identify major treatment processes—Ozone, Biological Activated Carbon Filters (BACF), Two-Stage Adsorption, Ultraviolet Treatment, and Aquifer Injection—from both upper and lower-level viewing galleries.
- **Exterior Gathering & Seating Area:** Planning an outdoor space for group organization and student lunches, supporting the facility's educational programming and tour logistics.
- **Interpretive Walking Trail Signs:** Designing educational signage along a proposed walking trail around the APWF, focusing on water treatment and conservation topics. Number, placement, and final content are being refined as part of the ongoing design process.
- **Exterior Monument Signage:** Conceptualizing large monument signs for up to two facility entrances. Final design details, including scale, content, and location, are being developed collaboratively during this phase.

This phase lays the foundation for a unified design language that will carry through to fabrication and installation, aligning all elements with the facility's educational mission and visitor experience goals.

Client Reference:

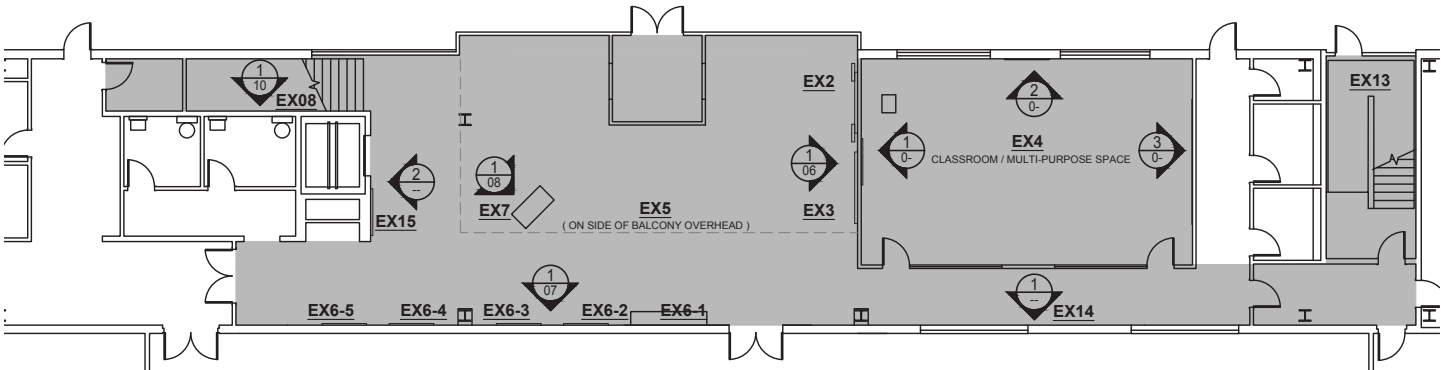
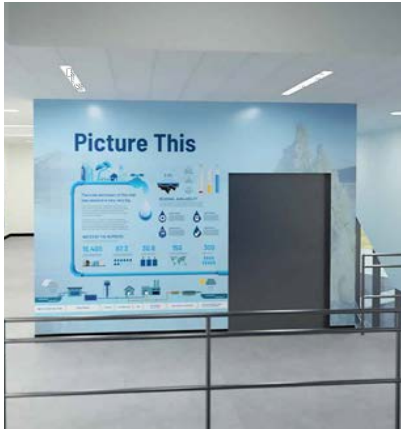
Robert Charpentier
Chief Communications Officer
rcharpentier@tmwa.com
775-834-8092

Truckee Meadows Water Authority,
1355 Capital Blvd.
Reno, NV 89502



Past Performance Project:

Advanced Purified Water Facility Education Center



1 FLOOR ONE EXHIBITS
SCALE: 3/32" = 1'-0"

Past Performance Project:

SAGE Center—Sustainable Agriculture & Energy

Scope of work:

Formations designed, fabricated, and installed over 10,000 square feet of educational exhibits for the SAGE Center in Boardman, Oregon where they host STEAM camps and tailored educational tours for schools.

Description & Outcomes:

At SAGE Center, visitors experience the region's agricultural, industrial, and transportation heritage and future through fun interactive exhibits—including a central kinetic sculpture whimsically illustrating a potato's journey to becoming a French fry!

A variety of multimedia, layered graphics, and interactives introduce the area's prehistory, the coming of settlers and dams, evolving irrigation technologies, the science of food, and today's efforts to encourage sustainable practices so that this region can continue to produce food, timber, hydropower, and wind power, in harmony with nature. A simulated hot-air balloon ride carries visitors over the mighty Columbia River, a vital source for all life and industry.

We have enjoyed an 11-year history with SAGE Center! Delighted with our work, they have contracted us to complete over \$5,000,000 in interpretive exhibits for the center, and we are working together on future projects.

Key Personnel:

** Indicates key personnel proposed for this project*

Phil Buettner* (Project Manager), Stephen State (Exhibit Designer), Michael Pattullo* (Graphic Designer), David Carlson (Exhibit Developer), Phil Buettner* (Fabrication Shop Supervisor), Jesus Mora, Yuriy Dorokhov, David Dillon, Dion West, Ryan Hostetter, John Higgins (Exhibit Specialist - Fabrication), Jeff Dowell* (Exhibit Specialist - Graphics)

Budget:

Initial Budget: \$5,000,000

Final Cost: \$5,000,000

Client Reference:

Torrie Griggs
SAGE Center Manager
torrieg@portofmorrow.com
541-571-2394

PO Box 200
101 Olson Rd NE
Boardman, OR 97818



Amazon Web Services Exhibit at the SAGE Center

Past Performance Project:

SAGE Center—Sustainable Agriculture & Energy



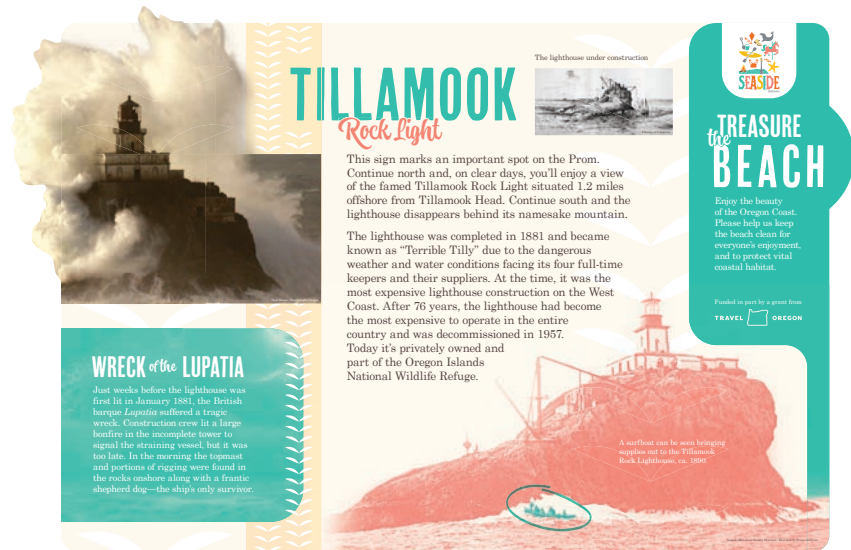
Past Performance Project:

SAGE Center—Sustainable Agriculture & Energy



Past Performance Project: Seaside Promenade Panels

Formations designed, fabricated, and installed six interpretive panels along the Seaside Promenade, one of Oregon's most-visited beachfronts. Covering local history, coastal ecology, and cultural landmarks, the panels enrich the visitor experience in this high-traffic area. Built with durable, long-lasting materials backed by a 10-year warranty and secured with theft-resistant stainless-steel hardware, they're designed to withstand coastal conditions. Featuring engaging graphics and ADA-accessible layouts, this project showcases Formations' turnkey approach—from research through installation—to creating interpretive experiences that inspire connection and stand the test of time.



Client Reference:

Joshua Heineman
jheineman@cityofseaside.us
503-738-3097

Seaside Visitors Bureau & Welcome Center,
7 N Roosevelt Dr,
Seaside, OR 97138

Custom-cut edge

Powder-coated Aluminum Graphic Panel

Stainless Steel Theft-resistant Hardware

Powder-coated Aluminum

Additional Past Performance:

Clark County Wetlands Park Nature Center

Scope of work:

Formations designed, fabricated, and installed 8,165 square feet of exhibits for the Clark County Wetlands Park Nature Center in Las Vegas, Nevada.

Description & Outcomes:

Exhibits showcase the oasis of water, wildlife, and vegetation known as the Las Vegas Wash. Visitors are met by oversized, solar-powered native pollinators flying overhead that encourage them to explore the multisensory experience that highlights the importance of wetlands and the LEED-certified building's sustainable features.

Visitors guess the identity of local plants based on their scent, touch pelts of native animals, and build their own food chain models. A play area lets young visitors get inside a wetland. On a stratified soil diorama, visitors slide a flat-screen monitor along an interactive timeline to learn about human presence in the area, while a computer station provides space for visitors to create a collage of illustrations to remember their visit.

Key Personnel:

**Indicates key personnel proposed for this project*

Phil Buettner* (Project Manager), Jeff Dowell* (Exhibit Specialist - Graphics), Michael Pattullo* (Graphic Designer), Phil Buettner* (Fabrication Shop Supervisor)

Budget:

Initial Budget: \$1,922,720.00

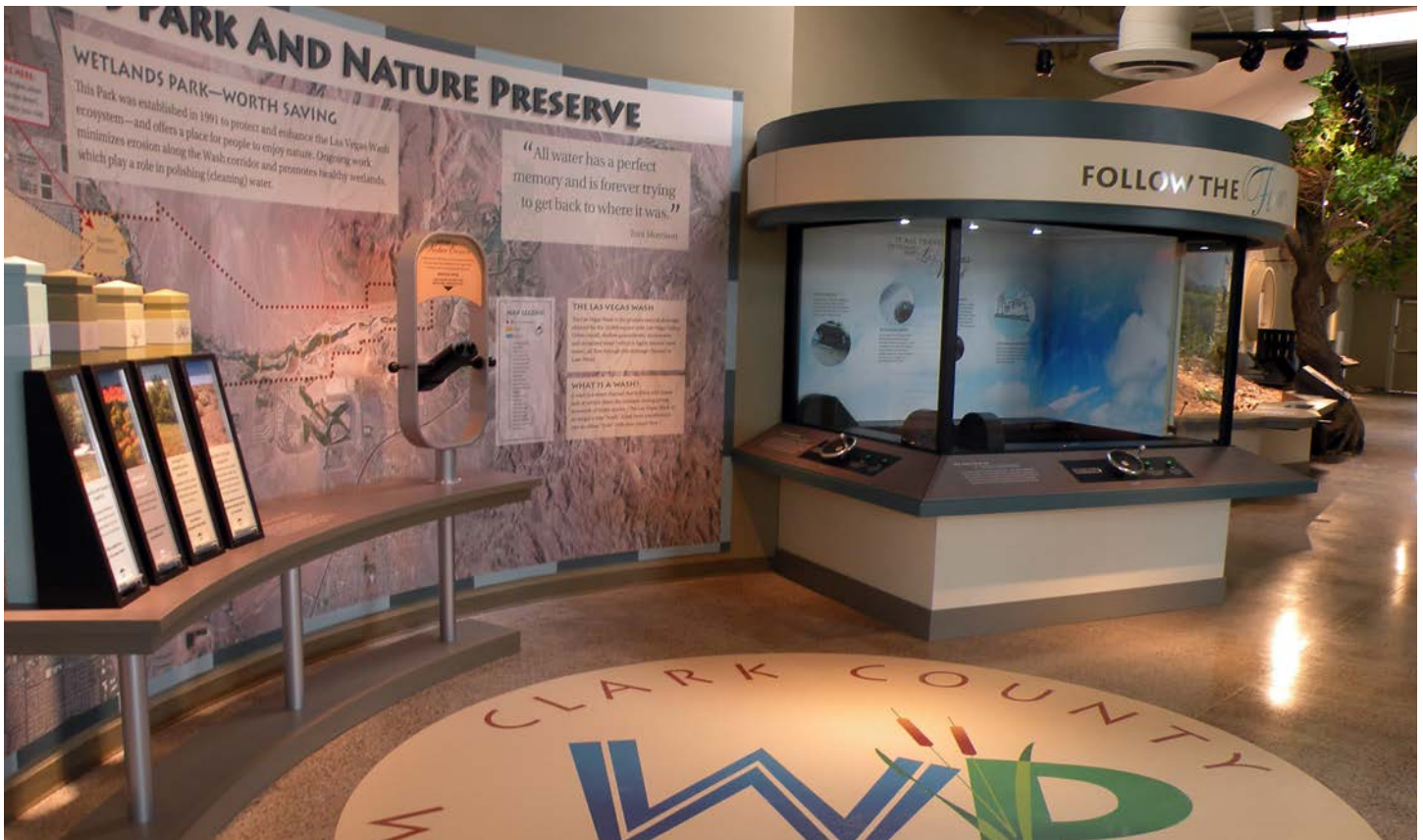
Final Cost: \$1,975,478.63

(Cost increase due to expanded scope, initiated by the client and negotiated through change orders.)



Additional Past Performance:

Clark County Wetlands Park Nature Center



Additional Past Performance:

Clark County Wetlands Park Nature Center



Additional Past Performance:

Grant County PUD Visitor Center

Scope of work:

Formations designed, fabricated, and installed 3,000 sq. ft. of exhibits in the Grant County Public Utility District (PUD) Visitor Center in Beverly, Washington.

Description & Outcomes:

Formations provided project management, exhibit planning, design and production, installation, and personnel training for exhibit elements, audiovisuals, interpretive signs, and related media. Visitors explore the region's connection with the Columbia River through large photographic murals, artifacts, props, and interactives, which highlight two interrelated subjects: hydropower and natural resource management.

A focus on hydro operations and fish enhancements provides opportunities for the public and the Grant County PUD employees to interface about hydro and fishery resources. Exhibits provide an inside look at the hydro and fish operations at Wanapum and Priest Rapids Dams to make up for a lack of public access to these facilities. Topics include hydropower history and Grant PUD operations; and salmon recovery efforts and technologies (for example, fish bypass, video viewing of fishery activities).

One hundred metal fish "swim" overhead and monitors show live video feeds of fish passing through fish ladders. A mock-up control room with interactive touchscreens puts visitors in control of the flow of water and power generation, enabling visitors to discover how these processes impact the environment and infrastructures throughout the state.

Budget:

Initial Budget: \$699,044

Final Cost: \$708,208

(Cost increase due to expanded scope, initiated by the client and negotiated through change orders.)

Additional Past Performance:
Grant County PUD Visitor Center



Additional Past Performance: Grant County PUD Visitor Center



Additional Past Performance:

Oregon Zoo Education Center



Scope of work:

Formations designed, fabricated, and installed 3,000 square feet of exhibits within the Oregon Zoo's LEED certified 20,000-square-foot Education Center.

Description & Outcomes:

Exhibits use colorful, layered graphics and mechanical and electronic interactives to educate visitors about their impact on their environment and the importance of conservation, recycling, and sustainability.

An insect zoo with specialized terrariums encourages visitors to discover their own backyard neighbors up close and a wildlife garden comes alive with sculptures of insects and other animals, while providing a better understanding of the plants and habitats found in one's backyard.

Budget:

Initial Budget: \$772,876.00

Final Cost: \$843,000.00

(Cost increase due to expanded scope, including 4 metal sculptures, initiated by the client and negotiated through change orders.)

Additional Past Performance:

Oregon Zoo Education Center



Additional Past Performance:

Project: Oregon Zoo Education Center



Additional Past Performance:

USFWS John Heinz National Wildlife Refuge



Scope of work:

Formations designed, fabricated, and installed 5,800 square feet of exhibits at America's First Urban Refuge—John Heinz National Wildlife Refuge in Philadelphia, Pennsylvania.

Description & Outcomes:

The project's design drew inspiration from the community it serves and the people that serve it—featuring AV programs that highlight some of the Refuge's volunteers, a tactile map of Philadelphia, and incorporating the city's skyline into design elements. Exhibits honored the unique relationship between nature and the sprawling metropolis visible from the Refuge, epitomized by the 12-foot-tall Great Blue Heron sculpture made of recyclable materials often found littered in the marsh—serving as a reminder that humans and wildlife are interconnected.

Budget:

Initial Budget: \$500,000

Final Cost: \$900,000

(Cost increase due to expanded scope, initiated by the client and negotiated through change orders.)

Additional Past Performance:

USFWS John Heinz National Wildlife Refuge



Formations constructed this original artwork using plastic water bottles reclaimed from the Refuge's waterways.



Additional Past Performance:

USFWS John Heinz National Wildlife Refuge



Relevant Project Experience

Data Instincts is unmatched in purified water outreach experience. We provide consulting services to provide communication, education, and public outreach guidance and assistance for regional collaborative efforts exploring innovative water supply options and technologies. These services are intended to support implementation of Advanced Purified Water Programs. They can include providing guidance and assistance in:

Strategic Outreach Plan

- Providing strategic planning for outreach approaches
- Developing outreach material, web content, and PowerPoint presentations
- Developing outreach messages and public awareness strategies for responding to and informing the public
- Providing assistance and guidance in best practices for public awareness, methods of disseminating information, and education strategies to minimize misinformation
- Establishing the lead agency as the reliable sources of information regarding the project or program
- Listening to stakeholders' concerns and assisting with appropriate responses
- Providing knowledge, researching pertinent data, drafting concepts, suggesting strategies, and outlining outreach mediums to respond to inquiries and concerns

We have been a part of several purified water projects from planning through implementation. Our projects include:

- Pure Water Monterey, Monterey, CA *operational*
- PureWater SF, San Francisco, CA *operational*
- PureWater Soquel, Aptos, CA *operational 2025*
- OneWater Nevada, Reno, NV *Groundbreaking 2025*
- Silicon Valley Advanced Water Purification Center (Valley Water), Santa Clara, CA *planning*
- PureWater Peninsula, SF Bay Area, CA *planning*
- Diablo Water District Potable Reuse Exploratory Project, Oakley, CA *planning*

This example shows how infographics can be used to explain a project.

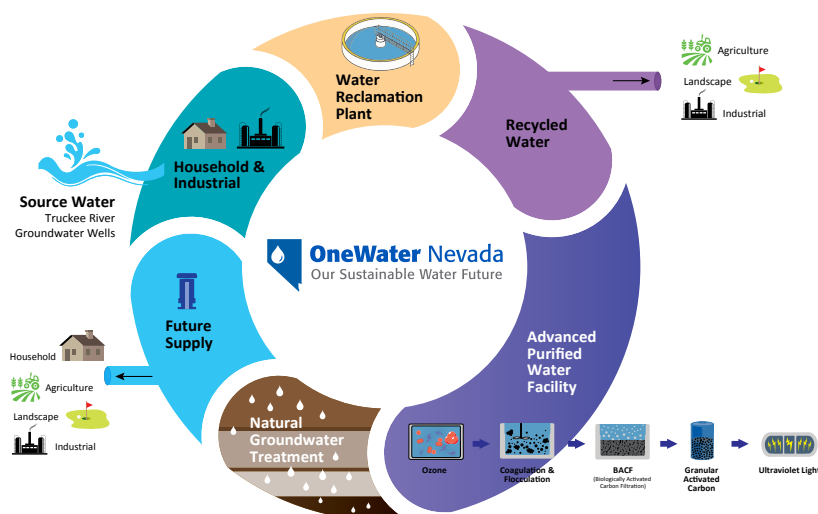
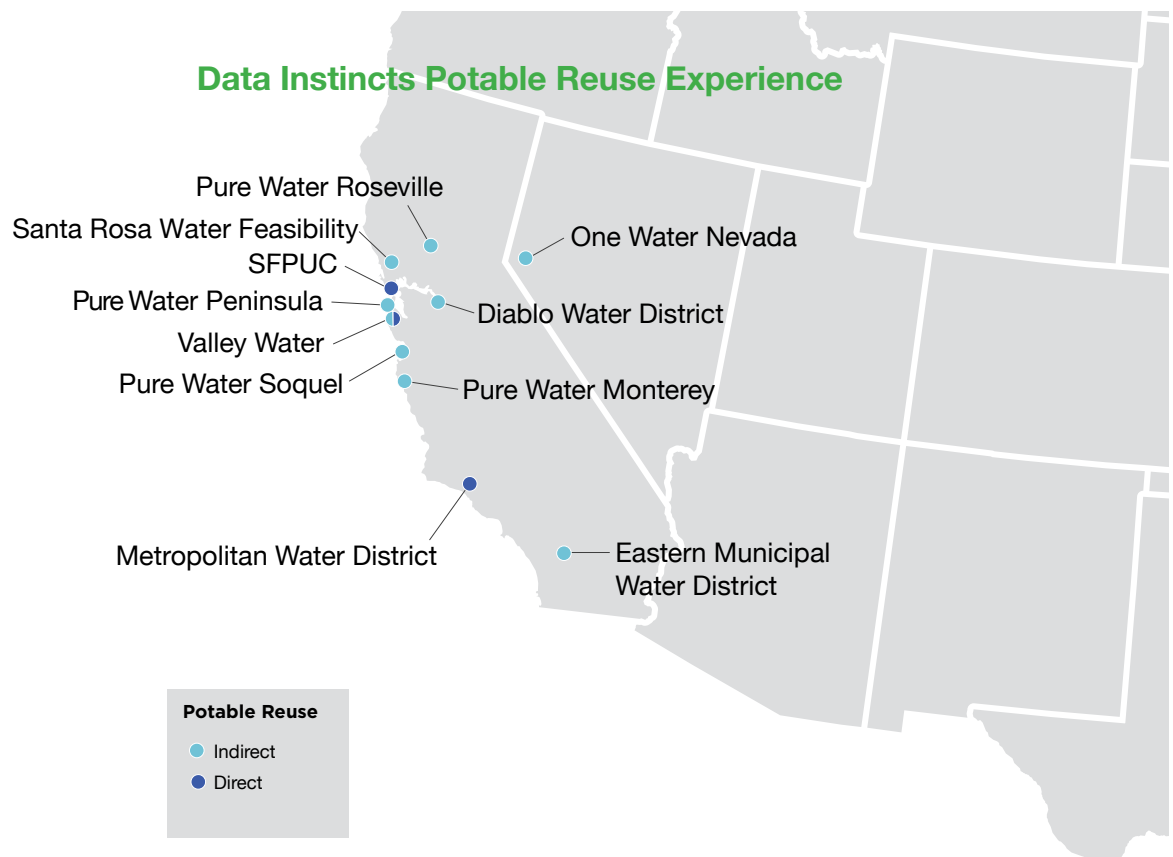


TABLE 1. RESEARCH PROJECTS

CLIENT	PROJECT	TITLE
Environmental Protection Agency	WRF - 5197	Unlocking the Nationwide Potential of Water Reuse (2022-Present)
Water Research Foundation	WRF - 4832	Evaluation of CEC Removal by Ozone/BAF Treatment in Potable Reuse (2023)
World Health Organization	WHO Guidelines for Potable Reuse	Chapter 7, The Art of Public Engagement (2016)
Water Research Foundation	WRF - 13-02	Model Communication Plans for Increasing Awareness and Fostering Acceptance of DPR (2015)
Water Research Foundation	WRF - 09-07	Risk Assessment Study of PPCPs in Recycled Water to Support Public Review (2011)
Water Research Foundation	WRF - 04-08	The Psychology of Water Reclamation and Reuse (2009)



The following case study is an example of how our Team is working with a Bay Area regional collaborative at a similar project status to ACWD's regional project.

Case Study:

PUREWATER PENINSULA

Collaborative Effort of Regional Agencies



PureWater Peninsula is a multi-agency collaborative effort to study potable reuse opportunities in the South San Francisco Bay peninsula region. Project partners involved in this effort are Bay Area Water Supply and Conservation Agency (BAWSCA), California Water Service (Cal Water), San Francisco Public Utilities Commission (SFPUC), the City of Redwood City, the City of San Mateo, Silicon Valley Clean Water (SVCW) and Mid-Peninsula Water District (MPWD). The Project partners have been working together since 2016 on a multi-phased approach to exploring opportunities for regional potable reuse along the San Francisco Bay Mid-Peninsula.

SFPUC actively pursues opportunities to diversify its water supply, and partners with others to explore and implement water supply projects. Additionally, project partners recognized that the continued discharge of wastewater effluent to the San Francisco Bay is not a sustainable practice. Instead, the wastewater effluent could be beneficially reused as a potable water supply and create a new sustainable water supply source for the region. The PureWater Peninsula Project is a potable reuse project that would create a new source of local sustainable water supply using state-of-the-art technology to purify tertiary effluent from SVCW and the San Mateo Wastewater Treatment Plant. The phased project includes up to 6 mgd indirect potable reuse for the first phase and up to 6 mgd direct potable reuse for the second phase. With the implementation of both Project Phases, the project would provide a maximum of 12 mgd of purified water for local use by 2043. A feasibility study for the project, and a basis of design report for the first phase, have been completed.

STRATEGY

The DI team was brought into the project in early 2023, to develop an outreach and communications strategy that the partners could use to move forward with the public and the project. With so many partners involved in the project, DI's approach was to begin by conducting in-depth interviews with elected officials, managers, and Public Information Officers (PIO) representing each of the partnering agencies to gather information from these key stakeholders and to develop an understanding of the outreach needs in the affected communities. Two key takeaways from those interviews align with concerns that we have heard from other water agencies considering potable reuse: 1) community members will want more information about the safety and taste of the water; 2) strong, consistent messaging around the need for the water and emphasizing the taste, quality, and safety of the water will be critical in the messaging. Information gathered from the interviews were used to inform the outreach and communications strategy and recommended next steps. The DI Team also worked with the partners to develop a new project name, brand, and logo that community members can recognize and connect with.

PROJECT TIMELINE

2023 – present

SERVICES

- In-Depth Interviews
- Strategic Guidance
- Participation
- Outreach Strategy
- Workshop Facilitation
- Branding and Logo



Map shows Multi-Agency Regional Partnership

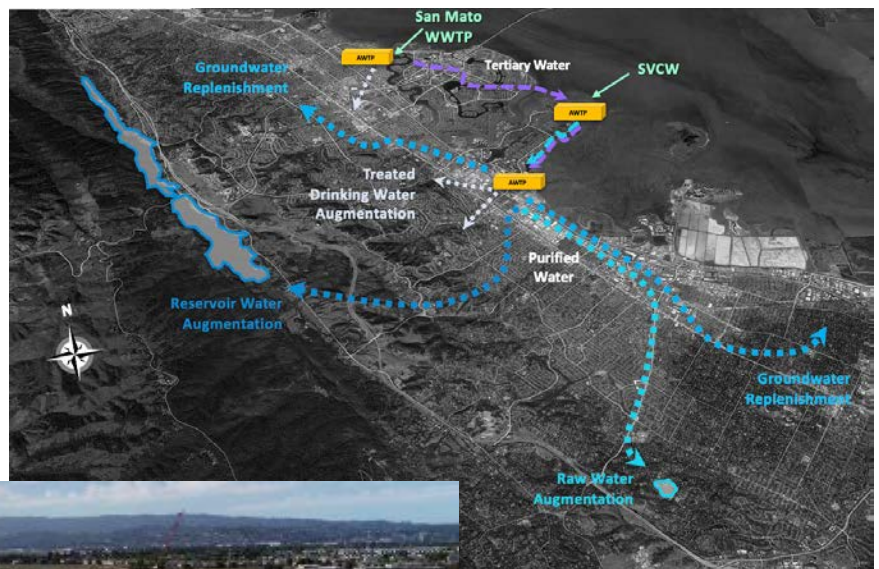
Case Study continued: PUREWATER PENINSULA

RESULTS

The DI team completed IDIs with managers and elected officials representing the various partner agencies. Information gathered from the IDIs were used to inform key outreach strategies and messages. These were incorporated into the Strategic Outreach Plan that DI prepared for the project to provide a framework for communications and outreach for the current project phase. The DI team also lead the partners to select a new project logo and tagline to brand the project. Through DI's creative process and workshop facilitation, the partners reached agreement on a logo and tagline within four meetings spanning over two months. The partners are implementing the Strategic Outreach Plan strategies and are in the process of developing a communications team and developing plans to host a water purification demonstration trailer at SVCW.

SFPUC is working with its partners and the Colorado School of Mines to showcase the University's water purification trailer at the SVCW site. The trailer houses an operational potable reuse treatment train. Students and operators will be able to train at the facility. Visitors will be able to see how treated wastewater from SVCW is further cleaned, purified, monitored, and tested to be transformed into a safe, high-quality drinking water source. Purified water samples will be available for tasting at the site. Having a demonstration and education facility in the community where purified water will be produced and used will be invaluable in engaging and educating community members on this valuable water supply source.

*Purified Water
Project Phases*



*Source Water
Facilities at Silicon
Valley Clean Water*

The following case study demonstrates how our Team successfully introduced potable reuse projects into communities looking to expand their water supply.

Case Study:

PURE WATER SOQUEL

SOQUEL CREEK WATER DISTRICT

The Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project (Project) was developed by the Soquel Creek Water District (District) to supplement the natural recharge of the Santa Cruz Mid-County Groundwater Basin with highly purified wastewater while also helping prevent saltwater intrusion from the Monterey Bay. The proposed project is one of four supplemental water supply options being considered by the District as part of its action-oriented, multi-faceted, long-range Community Water Plan focused on helping maintain the overall health of the only local freshwater supply for over 40,400 residents.

STRATEGY

Data Instincts (DI) has been actively involved with the District since 2008 as it evaluated options for expanding its water supply. Desal was seriously under consideration initially until shifting toward a potable reuse option through its Community Water Plan process. After extensive public engagement, the Community Water Plan led to strong support for the PureWater Soquel project. As part of initial efforts, DI conducted extensive public engagement to evaluate options to expand water supply, prepared collateral materials and web content, managed stakeholder contact information, and provided strategic guidance for developing and implementing an overall outreach program for communicating about the proposed project and creating adequate opportunities for public involvement.



PROJECT TIMELINE

2016-2018

SERVICES

- Strategic Communications
- Strategic Guidance
- Public Engagement
- EIR/CEQA Public Participation
- Collateral Material
- Web Content
- Stakeholder Database
- Public Meeting Logistics
- Construction Outreach



Case Study continued: PURE WATER SOQUEL

DI, together with K&A, assisted with outreach and communications for the EIR and CEQA process, working to go above and beyond the requirements to expand public understanding of the project's purpose, need, and characteristics, as well as to increase opportunities for people to provide meaningful and effective input.

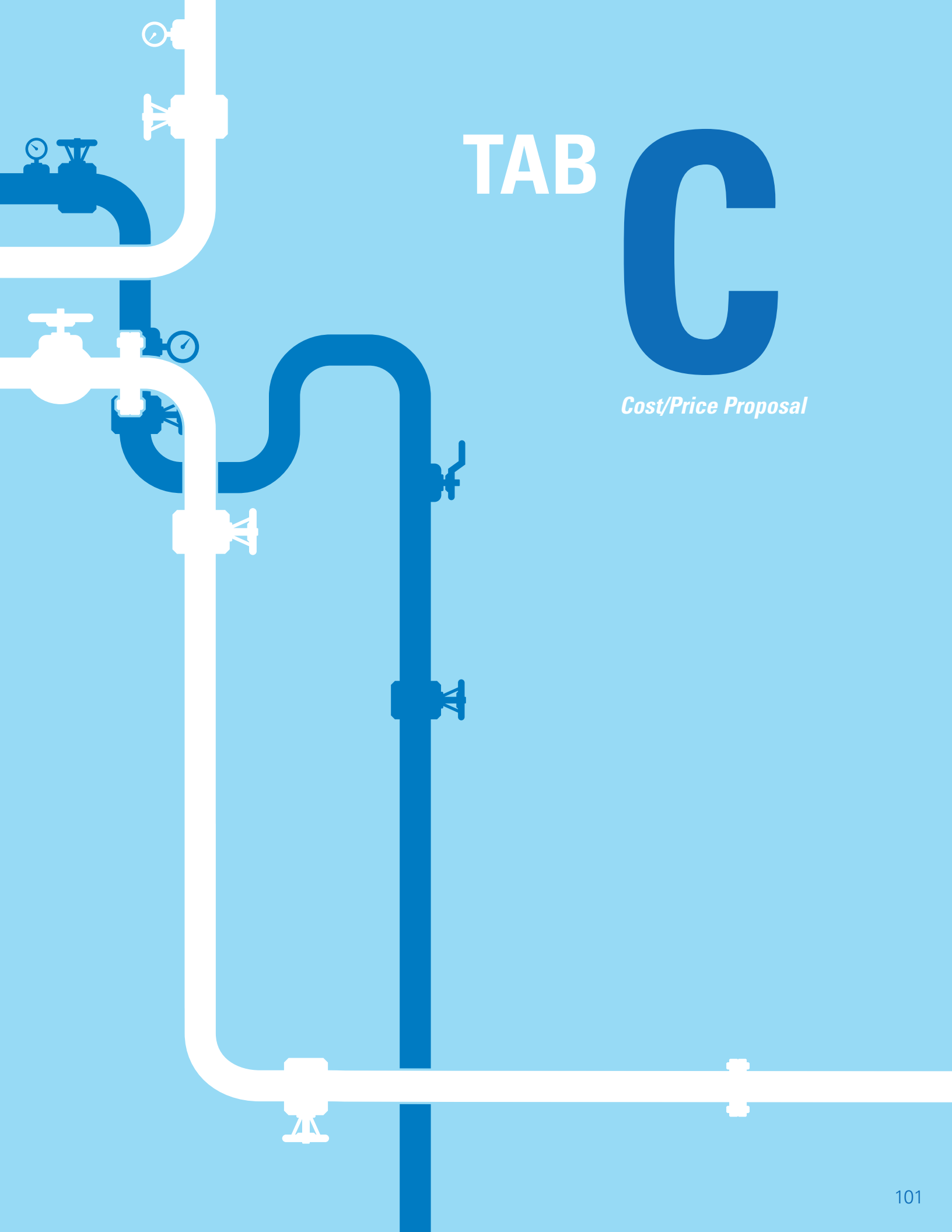
RESULTS

As a result of these activities and materials developed, the scoping and public review phases of the EIR development process resulted in robust level of engagement with significant participation in public meetings and the collection of meaningful comments and input.

Today, DI continues to support engagement and construction outreach as the project progresses.



The Pure Water Soquel Education mobile trailer won WateReuse's national award for Outreach and Education in 2018 for significant success in advancing public acceptance of recycled water.



TAB C

Cost/Price Proposal

Cost

Description	Lump Sum
Task 1: Design	\$ 265,000
Task 2: Fabrication	\$ 600,000
Task 3: Installation & Commissioning	\$ 100,000
Task 4: Website Development	\$ 10,000
Performance Bond	\$ 29,000
Total (Tasks 1-4+ Bond):	\$ 1,004,000



FORMATIONS

EXHIBITS + GRAPHICS + TECHNOLOGY

Formations Labor Rates

2025	Labor Rate
Project Manager	\$ <u>95.00</u>
Sr. Exhibit Designer	\$ <u>125.00</u>
Exhibit Planner	\$ <u>85.00</u>
Principal in Charge	\$ <u>130.00</u>
Exhibit Writer/Editor	\$ <u>90.00</u>
Exhibit Detailer	\$ <u>78.00</u>
Fabrication Shop Supervisor	\$ <u>98.00</u>
Graphics Shop Supervisor	\$ <u>85.00</u>
Exhibit Specialist (Fabrication)	\$ <u>71.00</u>
Exhibit Specialist (Graphics)	\$ <u>72.00</u>
Model Maker, Dioramas	\$ <u>75.00</u>
Artifact Mounter (Journeyman)	\$ <u>65.00</u>
Lighting Technician	\$ <u>64.00</u>
Audiovisual Technician	\$ <u>105.00</u>
Exhibit Evaluator	\$ <u>81.00</u>
Electrical Technician	\$ <u>87.00</u>
Exhibit Researcher	\$ <u>65.00</u>
Audio Description Producer	\$ <u>79.00</u>
Audio Tour Equipment Designer	\$ <u>88.00</u>

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