CITY OF ANTIOCH CALIFORNIA
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STAFF REPORT TO THE PLANNING COMMISSION

DATE: Regular Meeting of January 17, 2024

SUBMITTED BY: Zoe Merideth, Acting Planning Manager

APPROVED BY: Kevin Scudero, Acting Community Development Director

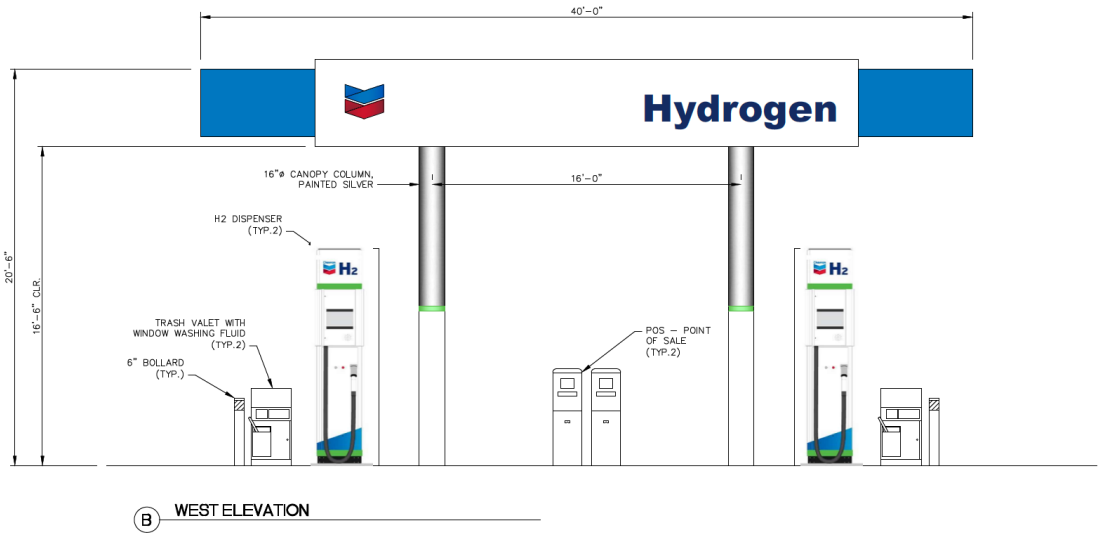
SUBJECT: Chevron Hydrogen Fuel Dispensing Facility (DR2023-0006, UP-2023-0003, VAR2023-0008)

RECOMMENDED ACTION

It is recommended that the Planning Commission adopt a resolution approving the Use Permit, Variance, and Design Review application subject to the attached conditions of approval (DR2023-0006, UP-2023-0003, VAR2023-0008).

REQUESTED APPROVALS

The applicant, Stantec, requests a Use Permit, Variance, and Design Review approval for a hydrogen fuel dispensing facility at an existing gas station. The project consists of hydrogen storage, associated equipment, two hydrogen dispensers located under a canopy and new landscaping. A variance is requested to reduce the minimum setback requirements from 20 feet to 10 feet. The project is located at 2413 A Street (APNs: 068-132-038, 046, 052, and 053).



ENVIRONMENTAL

The project is Categorically Exempt under California Environmental Quality Act Guidelines Section 15303, New Construction or Conversion of Small Structures. Class 3 consists of construction and location of limited numbers of new, small facilities or structures. In urbanized areas, the exemption applies to commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use, if not involving the use of significant amounts of hazardous substances where all necessary public services and facilities are available and the surrounding area is not environmentally sensitive.

The proposed hydrogen fuel dispensing facility is located on the site of an existing gasoline station. The hydrogen fuel dispensing facility does not involve the use of hazardous substances and is not in an environmentally sensitive area.

BACKGROUND

The .967+/- acre project site has an existing gas station, food mart, and smog check station and is bounded to the north, east, south, and west by Sunset Drive, Bryan Avenue, and A Street, respectively. Based on available records, the gas station was constructed in 1968. The parcel was located at the corner of A Street and Bryan Avenue and was surrounded by residential and other uses to the north and east. During the Highway 4 construction project, Sunset Drive was extended around the north and eastern sides of the project, causing the site to be surrounded on all four sides by street frontages.

The applicant is now requesting to add a hydrogen fuel dispensing facility to the eastern portion of the property.

ANALYSIS

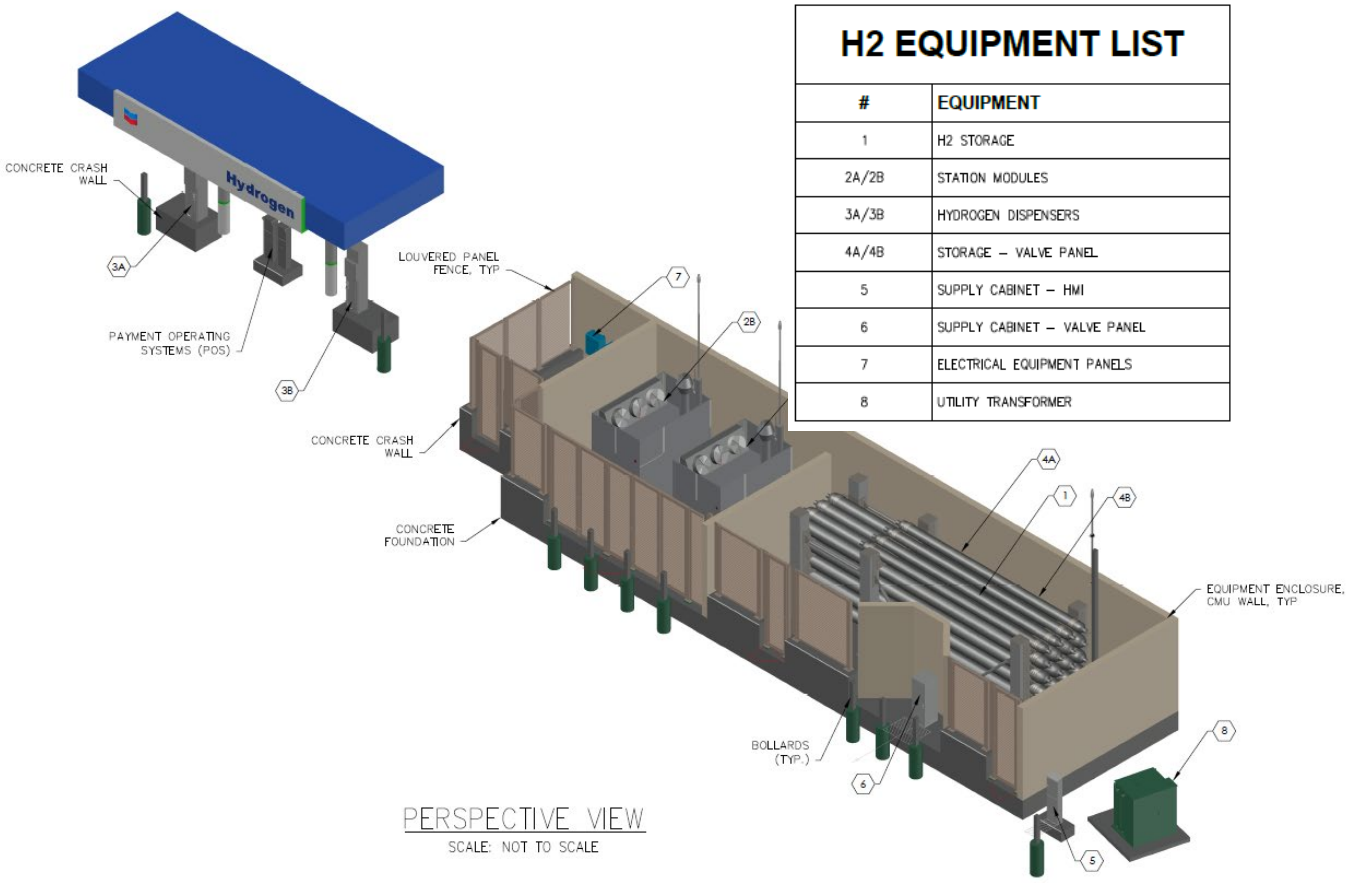
Project Overview

The proposed project consists of the construction of a hydrogen fueling station at the eastern portion of the existing Chevron gas station. The project will provide two hydrogen dispensers under a new canopy, hydrogen storage and compression compound, a hydrogen offload panel and new electrical service. The compound will be enclosed by a combination of concrete masonry block wall and louvered metal fencing. The new enclosed area will cover approximately 1,750 square feet. Additionally, the project includes paving areas that are currently gravel, and installing new frontage landscaping. The applicant's project description is included as Attachment B.

The hydrogen fueling station would operate during the hours of the existing convenience store and gas station. Cars that use hydrogen to operate are called fuel-cell electric vehicles (FCEVs). FCEVs are similar to electric vehicles except that they get their power from hydrogen. Like electric vehicles, they use an electric motor instead of an internal combustion engine like gasoline powered vehicles. While electric vehicles run on batteries that need to be plugged in for recharging FCEVs generate their own electricity onboard in their fuel cells. Within a fuel cell, hydrogen is combined with oxygen (O2) from ambient air. The process generates electricity, heat, and water as its byproducts. As a result, it can power the electric motor without any greenhouse gas emissions. The only emissions released from the vehicle are water and heat. (U.S. Department of Energy https://www.energy.gov/energysaver/hydrogen-fuel-cell-vehicles)

Fueling an FCEV is similar to fueling a gasoline powered vehicle. First, tanker trucks designed to deliver gaseous hydrogen arrive at the site. At first, it is anticipated that this would occur approximately once a week but would increase as FCEVs become more common. At most, vehicles would make one delivery a day. Gaseous hydrogen is delivered from the truck through a connection to the supply cabinet. The system then transfers the gas to the storage tubes. When a vehicle arrives, the station module transfers the hydrogen from the storage tubes to the dispenser.

The storage module is connected to and controlled by the station module via valve panels. The valve panel has a built-in jet fire protection panel, double block and bleed valves and other safety features. The equipment required for fueling is integrated into the station module, which is also connected to the dispenser. The dispenser looks similar to a standard gasoline dispenser but is about one third the footprint because only type of hydrogen is dispensed, as opposed to various grades of gasoline. The dispenser includes safety features that detect physical problems and would automatically shut off.



H2 EQUIPMENT LIST

#	EQUIPMENT
1	H2 STORAGE
2A/2B	STATION MODULES
3A/3B	HYDROGEN DISPENSERS
4A/4B	STORAGE – VALVE PANEL
5	SUPPLY CABINET – HMI
6	SUPPLY CABINET – VALVE PANEL
7	ELECTRICAL EQUIPMENT PANELS
8	UTILITY TRANSFORMER

General Plan and Zoning

The General Plan Designation for the site is A Street Interchange Focus Area. Within the Focus Area the area is designated Commercial/Office. The General Plan allows a variety of uses, including automobile uses within the designation. The majority of the site is zoned C-2, Neighborhood Community Commercial, while a small portion of the southeast corner is zoned R-6, single family residential, a holdover from before the Highway 4 project. In cases where there is

a mismatch between the General Plan and zoning, the General Plan takes precedence, and the automobile service station use is allowed in the General Plan.

Site Plan and Variance

The facility will occupy the eastern portion of the already developed site. Currently, the convenience store and smog check station occupy a building near the middle of the site. The gas station canopy occupies the area of the site closest to A Street. The northern portion of the site is vacant and largely unpaved and has one driveway. The A street frontage of the site includes two driveways – one at the northern end and one at the southern end. The southern, Bryan Avenue frontage, also includes two driveways – one at the eastern end and one at the southern end. The eastern property line along Sunset Drive does not have any driveways. The northeastern corner of the property and most of the eastern property line feature an existing retaining wall topped with a cyclone fence.

The project is proposing to maintain a ten-foot setback from the eastern property line for all the hydrogen equipment. The proposed hydrogen gas storage will be located at the southeast corner of the site. The station module and electrical equipment is proposed to be located to the north of the storage area. These components will be surrounded by a concrete masonry block wall and louvered fencing. The hydrogen off-load panel, where the truck will hook up to the facility is in the interior of the site at the storage module.

To the north of these features will be the canopy and two fuel dispensers. The canopy is proposed to be approximately 15 feet wide by 40 feet long. Unlike at many conventional gas stations, the proposed fuel dispensers do not feature a hose on each side of the dispenser. At most, two cars could be fueled at once.

The applicant provided a turning analysis and vehicle access path on sheet SP1.3 in the project plans (Attachment C), which shows that the hydrogen delivery trucks can access the site to deliver hydrogen.

Currently, the northern portion of the site includes unpaved areas covered in dirt and gravel. As part of the project, the applicant will be adding landscaping along the northwest corner of the parcel at Sunset Drive and A Street, along the northern and eastern sides of the property, and at the southeastern corner of the parcel at Bryan Avenue and Sunset Drive.

The site is currently composed of four different parcels, partially a result of the Highway 4 project. Property lines currently pass through the existing convenience store and the new improvements would also span property lines. The applicant is currently working with Contra Costa County on a record of survey and will process a lot merger as well. To ensure the applicant completes these items, a condition of approval regarding the record of survey has been added to the project.

As discussed above, the project site is currently surrounded on all four sides by public streets, due to Highway 4 construction. Antioch Municipal Code section 9-5.601 classifies street side setbacks based upon the type of street and use. An arterial, such as A Street is required to have a 30 foot setback for a non-residential use. Similarly, a local street, such as the other streets fronting the site, require 20 foot setbacks for non-residential uses. An interior lot, not fronting onto a street, would be required to have a zero foot side setback and a 10 foot rear setback in the C-2 zoning district. The addition of Sunset Drive to the two sides of the property increased the required setbacks by 20 feet and 10 feet, respectively and provided a unique hardship to the

property. In addition, the Service Station requirements of the Antioch Municipal Code places specific setbacks on canopies. Section 9-5.3815 of the Antioch Municipal Code requires any service station canopy to be located at least five feet from any interior property line and 20 feet from any street property line. As discussed, this property does not have an interior property line and would have to maintain a 20 foot canopy setback, when a similar property could maintain a five foot setback. In instances where a property has a unique circumstance or condition not found at other, similar properties, a variance can allow the project to "vary" from the requirements.

To approve a variance, four findings must be made per Antioch Municipal Code § 9-5.2703. If an application can meet all four of the findings, then the variance can be granted. Conversely, if any one of the findings cannot be made, the variance should be denied. The four findings and their applicability to this project are as follows:

a. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved, or to the intended use of the property, that do not apply generally to the property or class of use in the same zone or vicinity.

   The subject parcel is an existing gas station at a developed site that is bounded on all four sides by public roadway frontages. Two of these frontages resulted from Highway 4 widening, which is an exceptional circumstance not found elsewhere in the City. The parcel is fronting onto an arterial street, which requires a 30 foot setback, and three local streets, which each require 20 foot setbacks. The 20 foot setbacks on the three local street frontages exceeds the setbacks that would have been required for an interior side and rear yard lot. Section 9-5.3815 of the Antioch Municipal Code requires any service station canopy to be located at least five feet from any interior property line and 20 feet from any street property line. This property is unique because it does not have any interior property lines.

b. That the granting of such variance will not be materially detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity.

   The granting of the variance will have little or no effect on the surrounding properties because the property is surrounded by public streets on all four sides and located in a commercial area. The project would meet all applicable regulations regarding hydrogen safety.

c. That because of special circumstances applicable to the subject property, including size, shape, topography, location, or surroundings, the strict application of the zoning provisions is found to deprive the subject property of privileges enjoyed by other properties in the vicinity under the identical zone classifications.

   There are special circumstances that are applicable to the subject property that make application of the zoning provisions for the canopy setback difficult to meet. Specifically, as discussed above, the constrained site and large setback requirements leave limited space for the proposed improvements, including the fuel canopy, which requires a 20 foot setback from all street property lines. Therefore, the surroundings of the property limit the property from enjoying the privilege of providing a typical service of gas stations.

d. That the granting of such variance will not adversely affect the comprehensive General Plan.

   The applicant's request would not adversely affect the comprehensive General Plan because the existing use of the property, a gas station and convenience store and smog check station, are consistent with the General Plan and this proposal will not change that by adding an additional type of fueling use.

Design, Signage, and Landscaping

The proposed installation will feature the hydrogen storage area and the hydrogen dispensing area. The hydrogen storage area will feature 12 foot tall concrete block masonry walls in a light tan "Café Au Lait" color. These walls will be primarily seen from the eastern and southern elevations and will be most visible from Sunset Drive. On the western and northern elevations metal, louvered, horizonal panel fencing will be installed and will be largely visible from within the site. This fencing will be a light brown color called "Nutmeg". The louvered fencing will sit on a low, concrete crash wall. The hydrogen storage tank area will also contain a concrete block wall at the supply cabinet valve panel. Interior to the site, bollards will be placed in front of the louvered fencing as an extra safety measure.

The hydrogen dispensers and canopy will feature a design like a typical gas station dispenser and canopy. The canopy will feature the blue and white Chevron colors while featuring a green striping on the outside of the northern and southern elevations. The columns will be painted silver and white. The dispensers will be white with Chevron branding and green accents.

The applicant is proposing to install two signs stating "Chevron", one on the northern elevation and one on the southern elevation; two signs featuring the Chevron logo, one on the eastern elevation and one on the western elevation; and two signs stating "Hydrogen" one on the eastern elevation and one on the southern elevation. To minimize the impact of signage illumination on the nearby residences, the following condition of approval was added to the project, "Only the Chevron logo and Chevron wordmark may be illuminated on the north, south and western elevations. No other portion of the canopy shall be illuminated. No part of the eastern elevation canopy, logo, or signage shall not be illuminated."

The proposed project includes new landscaping along the eastern and northern property frontages that will serve as screening for the new hydrogen facility. Pacific Wax myrtles and gold cone junipers will be used in these planting areas to screen the equipment. Trailing rosemary will be used as a ground cover.

In addition to providing screening, the landscaping plan considers the City's site obstruction requirements. Antioch Municipal Code section 9-5.1101 - Site Obstructions at Intersections requires that plants over three feet tall be kept out of a clear vision zone of intersections and driveways. "Clear vision zones at uncontrolled, non-signalized intersections shall be located within a triangular area bounded by the curb lines and a diagonal line joining points on the curblines located 50 feet back from what would be the point of these curblines' intersection. At controlled signalized intersections a triangle having 25 foot tangents at the curblines shall apply. For driveways a similar clear vision triangle shall be utilized featuring 25 foot tangents at the outside line of the driveway and the curbline." Given the number of intersections and driveways at the site, the remaining landscaping was selected to be under three feet tall. These plants include the New Zealand Flax, dwarf bottlebrush, and baby sun rose. Existing landscaping planters along A

Street and Bryan Avenue are being refreshed with some new plants, and new mulch. A crape myrtle tree is being planted along Bryan Avenue. The landscaping plan takes advantage of the existing landscaping at the site and integrates new landscaping that screens the hydrogen equipment.

ATTACHMENTS

A. Resolution Approving the Use Permit, Variance and Design Review Application
   Exhibit A: Conditions of Approval
B. Project Description
C. Project Plans
D. Colors and Materials Board
E. Contra Costa County Fire Protection District Letter

ATTACHMENT "A"

PLANNING COMMISSION
RESOLUTION # 2024-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH APPROVING A USE PERMIT, VARIANCE, AND DESIGN REVIEW FOR THE CHEVRON HYDROGEN FUEL DISPENSING FACILITY AT 2413 A STREET (UP-2023-0003, VAR2023-0008, DR2023-0006) (APNs 068-132-038, 046, 052, and 053)

WHEREAS, the City of Antioch received an application from Stantec for a Use Permit, Variance, and Design Review for a hydrogen fuel dispensing facility at an existing gas station, consisting of hydrogen storage, associated equipment, two hydrogen dispensers located under a canopy, new landscaping, and stormwater control facilities. The application includes a variance to reduce the minimum setback requirements of the canopy from 20 feet to 10 feet. The project is located at 2413 A Street (APNs 068-132-038, 046, 052, and 053);

WHEREAS, the proposed project is Section 15303, New Construction or Conversion of Small Structures. Class 3 consists of construction and location of limited numbers of new, small facilities or structures.;

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law;

WHEREAS, on January 17, 2024, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary and documentary; and

WHEREAS, the Planning Commission considered all public comments received, the presentation by City staff, the staff report, and all other pertinent documents regarding the proposed request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby makes the following findings for approval of the requested Use Permit pursuant to Section 9-5.2703 “Required Findings” (B) (1) (a-e) of the Antioch Municipal Code:

a. That the granting of such use permit will not be detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity.

   The project has been designed and conditioned to comply with the City of Antioch Municipal Code requirements, except where a variance is granted. The project has been designed to limit signage illumination near residents and would therefore not be detrimental to the public health or welfare and not be injurious to other properties.

b. That the use applied at the location indicated is properly one for which a use permit is authorized.

   Most of the sites are Zoned C-2, Neighborhood/Community Commercial, with a small portion zoned R-6, Single Family Residential. The General Plan designation for the site is A Street Interchange Focus Area with a designation of Commercial/Office within the Focus Area. Per State law, when a General Plan and zoning district are not in

conformance, the General Plan would rule. As such, the C-2 zoning district and the Commercial/Office General Plan designation both allow vehicle service stations.

c. That the site for the proposed use is adequate in size and shape to accommodate such use, and all yards, fences, parking, loading, landscaping, and other features required.

The project has been designed to be located to the eastern side of the project site, and with the granting of a variance, is able to accommodate the use, landscaping, stormwater control, and other features required for the project.

d. That the site abuts streets and highways adequate in width and pavement type to carry the kind of traffic generated by the proposed use.

The project site is on A Street, Bryan Avenue, and Sunset Drive. A Street is a major arterial and is adequate in width and pavement type to carry the traffic generated by the use. The Engineering Division has analyzed the turning movements of delivery trucks coming to the site from Bryan Avenue and leaving onto Sunset Drive and found the design to be adequate.

e. That the granting of such use permit will not adversely affect the comprehensive General Plan.

The General Plan designation for the site is A Street Interchange Focus Area with a designation of Commercial/Office within the Focus Area. The project is consistent with the General Plan land use designation and its allowed uses.

BE IT FURTHER RESOLVED that the Planning Commission hereby makes the following findings for approval of the requested Variance for a reduction in the setback from 20 feet to 10 feet pursuant to Section 9-5.2703 “Required Findings” (B) (2) (a-d) of the Antioch Municipal Code:

a. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved, or to the intended use of the property, that do not apply generally to the property or class of use in the same zone or vicinity.

The subject parcel is an existing gas station at a developed site that is bounded on all four sides by public roadway frontages. Two of these frontages resulted from Highway 4 widening, which is an exceptional circumstance not found elsewhere in the City. The parcel is fronting onto an arterial street, which requires a 30 foot setback, and three local streets, which each require 20 foot setbacks. The 20 foot setbacks on the three local street frontages exceeds the setbacks that would have been required for an interior side and rear yard lot. Section 9-5.3815 of the Antioch Municipal Code requires any service station canopy to be located at least five feet from any interior property line and 20 feet from any street property line. This property is unique because it does not have any interior property lines.

b. That the granting of such variance will not be materially detrimental to the public health or welfare or injurious to the property or improvements in such zone or vicinity.

The granting of the variance will have little or no effect on the surrounding properties because the property is surrounded by public streets on all four sides and located in a commercial area. The project would meet all applicable regulations regarding hydrogen safety.

c. That because of special circumstances applicable to the subject property, including size, shape, topography, location, or surroundings, the strict application of the zoning provisions is found to deprive the subject property of privileges enjoyed by other properties in the vicinity under the identical zone classifications.

There are special circumstances that are applicable to the subject property that make application of the zoning provisions for the canopy setback difficult to meet. Specifically, as discussed above, the constrained site and large setback requirements leave limited space for the proposed improvements, including the fuel canopy, which requires a 20 foot setback from all street property lines. Therefore, the surroundings of the property limit the property from enjoying the privilege of providing a typical service of gas stations.

d. That the granting of such variance will not adversely affect the comprehensive General Plan.

The applicant's request would not adversely affect the comprehensive General Plan because the existing use of the property, a gas station and convenience store and smog check station, are consistent with the General Plan and this proposal will not change that by adding an additional type of fueling use.

BE IT FURTHER RESOLVED that the Planning Commission of the City of Antioch does hereby APPROVE a Use Permit, Variance, and Design Review application for a hydrogen fuel dispensing facility at an existing gas station, consisting of hydrogen storage, associated equipment, two hydrogen dispensers located under a canopy, new landscaping, and stormwater control facilities. The application includes a variance to reduce the minimum setback requirements of the canopy from 20 feet to 10 feet. The project is located at 2413 A Street (UP-2023-0003, VAR2023-0008, DR2023-0006)) (APNs 068-132-038, 046, 052, and 053), subject to the following conditions in Exhibit A, attached hereto.

* * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the Planning Commission of the City of Antioch, at a regular meeting thereof, held on the 17th day of January 2024 by following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Kevin Scudero
Secretary to the Planning Commission

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EXHIBIT A: CONDITIONS OF APPROVAL Chevron Hydrogen Fuel Dispensing Facility

General Conditions		Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and signature)
1.	**Project Approval**. This Use Permit, Design Review and Variance approval is for 2413 A Street /APNs: 068-132-038, 046, 052, and 053, as substantially shown and described on the project plans, except as required to be modified by conditions herein. Plans date received September 27, 2023, as presented to the Planning Commission on January 17, 2024. For any condition herein that requires preparation of a Final Plan where the project applicanthas submitted a conceptual plan, the project applicant shall submit final plan(s) in substantial conformance with the conceptual plan, but incorporate the modifications required bythe conditions herein for approval by the City.	City of Antioch	On-Going	Planning Department	
2.	**Project Approval Expiration**. **Project Approval Expiration**. This approval expires on January 17, 2026 (two years from the date on which this approval becomes effective) or at an alternate time specified as a condition of approval, unless a building permit has been issued and construction diligently pursued. All approval extensions shall be processed as stated in the Antioch Municipal Code.	City of Antioch	On-Going	Planning Department	

EXHIBIT A: CONDITIONS OF APPROVAL Chevron Hydrogen Fuel Dispensing Facility

3.	**City Fees**. The applicant shall pay any and all City and other related fees applicable to the property, as may be modified by conditions herein. Fees shall be based on the current fee structure in effect at the time the relevant permits are secured and shall be paid before issuance of said permit or before any City Council final action approval. Notice shall be taken specifically of Plan Check, Engineering, Fire and Inspection Fees.The project applicant shall also reimburse the City for direct costsof planning; building and engineering plan check and inspection, as mutually agreed between the City and applicant. *Discretionary or ministerial permits/approvals will not be considered if the developer is not current on fees, balances, and reimbursement that are outstanding and owed to the City.*	City of Antioch	On-Going	Community Development Department	
4.	**Pass-Through Fees.** The developer shall pay all pass-through fees. Fees include but are not limited to: **a.** East Contra Costa Regional Fee and Financing Authority (ECCRFFA) Fee in effect at the time of building permit issuance. **b.** Contra Costa County Fire Protection District Fire Development Fee in place at the time of building permit issuance. **c.** Contra Costa County Map Maintenance Fee in affect at the time of recordation of the final map(s). **d.** Contra Costa County Flood Control District Drainage Area fee. **e.** School Impact Fees. **f.** Delta Diablo Sanitation Sewer Fees. **g.** Contra Costa Water District Fees.	City of Antioch	On-Going	Community Development Department	

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EXHIBIT A: CONDITIONS OF APPROVAL Chevron Hydrogen Fuel Dispensing Facility

5.	**Appeals**. Pursuant to Section 9-5.2509 of the Antioch Municipal Code, any decision made by the Planning Commission which would otherwise constitute final approval or denial may be appealed to the City Council. Such appeals shall be in writing and shall be filed with the City Clerk within five (5) working days after the decision. All appeals to the City Council from the Planning Commission shall be accompanied by a filing fee established by a resolution of the City Clerk.	City of Antioch	Within 5 Working Days of Planning Commission Action	Planning Department	
6.	**Requirement for Building Permit**. Approval granted by the Planning Commission does not constitute a building permit or authorization to begin any construction or demolish anexisting structure. An appropriate permit issued by the Community Development Department must be obtained before constructing, enlarging, moving, converting, or demolishing any building or structure within the City.	City of Antioch	On-Going	Building Department	
7.	**Modifications to Approved Plans**. The project shall be constructed as approved and with any additional changes required pursuant to the Zoning Administrator or Planning Commission Conditions of Approval. Planning staff may approve minor modifications in the project design, but not the permitted land uses. A change requiring discretionary approval and any other changes deemed appropriate by the Planning staff shall require further Planning Commission approval through the discretionary review process.	City of Antioch	On-Going	Planning Department	
8.	**Compliance Matrix.** With the submittal of all grading plans, improvement plans, and building permit plans, the applicant shall submit to the Community Development Department a Conditions and Mitigation Measures Compliance Matrix that lists: each Condition of Approval and Mitigation Measure, the City division responsible for review, and how the applicant meets the Condition of Approval or Mitigation Measure. The applicant shall update the compliance matrix and provide it with each submittal.				

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9.	**Hold Harmless Agreement/Indemnification**. The applicant (including any agent thereof) shall defend, indemnify, and hold harmless, the City of Antioch and its agents, officers and employees, from any claim, action, or proceeding against the City or its agents, officers or employees to attack, set aside, void, or annul the City's approvalconcerning this application. The City will promptly notify the applicant of any such claim action or proceeding and cooperate fully in the defense.	City of Antioch	On-Going	Planning Department	
	Public Works Standard Conditions	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
10.	**Encroachment Permit and Preconstruction Meeting.** The developer shall file an encroachment permit with the City of Antioch public works department for construction of all public improvements being constructed both inside the public right of way and within the site. After the improvement plans are approved and the necessary permit fees are paid a preconstruction meeting with public work inspection shall be scheduled. The developer will provide the City a draft schedule of construction so City staff can anticipate the project in their workload. The developer shall also inform the adjacent property owners to the developing parcel that construction activity is about to begin and will extend to approximate finish date of the project.	City of Antioch	At Building Permit	Public Works Department	
11.	**City Standards**. All proposed improvements shall be constructed to City standard plans and specifications or as otherwise approved by the City Engineer in writing.	City of Antioch	On-Going	Public Works Department	
12.	**Utility Construction.** All public and private utilities shown on the site shown on the submitted utility plans shall be constructed to their ultimate size, location and configuration as shown on the approved plans.	City of Antioch	On-Going	Public Works Department	
13.	**Utility Undergrounding.** All proposed electrical lines to be underground per City of Antioch Municipal code section 7.3	City of Antioch	On-Going	Public Works Department	

	"Underground utility Districts". PMH boxes and similar electrical equipment shall be installed below grade or screened from public view by landscaping or other acceptable means as approved by the Engineering Director of Public works.				
14.	**Utility Mapping.** Prior to acceptance of any public utilities within the site, the developer shall provide CAD as-built drawings of all public utilities located within the site in AutoCAD. This includes all public Water Utility lines and features, sewer collection lines, storm drainage lines, and inverts associated with these utilities. Developer shall also include locations of water meters, light poles, and irrigation controllers. These coordinates must be provided in GIS shapefile format using the NAVD 88 (with conversion information).	City of Antioch	Prior to Acceptance of Public Utilities	Public Works Department	
15.	**Sewer.** If a new sewage connection is needed, the applicant shall connect to the existing sewer line from the existing building to the manhole by southeast driveway that flows to the sewer line in Bryan street. The proposed fueling facility shall flow by gravity to the intersecting sewer service lateral or manhole located on site.	City of Antioch	On-Going	Public Works Department	
16.	**Storm Drain Design/Construction**. The developer shall design and construct all storm drain facilities to adequately collect and convey stormwater entering or originating within the site to the nearest man-made drainage facility for a 10 year storm, without diversion of the watershed as modeled by a site drainage study that is reviewed approved by the City Engineer. Drainage flows from the 50 year and 100 year storms shall be handled by overland release off the site at designated location points at the south east corner of the site. **a.** The private drainage system, including, catch basins, curb and gutters and valley gutters, trench drains shall be constructed of concrete or city approved pipe. Pipes may	City of Antioch	At the Time of Building occupancy	Public Works Department	

	be constructed of concrete, or other materials, subject to review and approval by Staff. All proposed open ditches in landscape areas, shall be earth lined ditches or as approved by the City Engineer. Drainage from adjacent right of way properties that naturally drain through the project site shall be captured and routed through the site and discharged to the public drainage system. This drainage from neighboring uphill topographies shall be included in the drainage study and analysis. **b.** All site drainage shall flow by gravity to stormwater treatment facilities as shown on the site grading plan to treat runoff in accordance with provision C.3 of the San Francisco Bay Region NPDES permit. Catch basins shall be installed in each bioretention basin to act as overflow weir to handle larger flows than the basin can filter. These peak 10 year flows shall also flow to the to the closest public drainage system located in the public street. **c.** Due the impervious surfaces on the site, the developer shall detain or retain drainage of the site to discharge at a flow rate that does not exceed capacity of the public storm drain infrastructure. **d.** The detention and bioretention basins shall be designed to provide controlled overland release for the 100 year storm event. An Operations and Maintenance Manual (for each basin) shall be submitted for all basins prior to the issuance of the first building permit stating the capacity of each basin and location of over flow of the 100 year flow event release.				
17.	**Hydrology Report**. The developer shall submit hydrology and hydraulic calculations, and drainage report as part of the storm water pollution control plan. The analysis shall demonstrate adequacy of the on-site drainage system and with no impacts to the offsite downstream drainage system. The analysis shall be reviewed and approved by Contra Costa County Flood	City of Antioch	Prior to Building Permit	Public Works Department	

	Control and the City of Antioch. This storm water report shall document the facility and follow the manufacture recommendations in construction and maintenance of the facility. The developer shall prepare an O&M plan for approval of each basin by the city prior to building permit.				
18.	**Retaining Walls** 1. **All proposed retaining Walls shall not be in the Public Right of Way.** All retaining walls shall not be constructed in City right-of-way or other City maintained parcels unless otherwise approved by the City Engineer. 2. **2:1 Max Grade transition.** Due to difference in grades with adjacent parcels, The developer shall transition grades at a 2:1 max grade slope, and start 1 foot back from the from existing grade to the proposed grade. If this maximum slope grade cannot be maintained, then the developer may need to install gravity retaining walls along the parcel lot lines 1 feet inside the property line to adequately transition grades to the proposed grades of the site. 3. **Materials.** All retaining walls shall be of concrete masonry unit construction. 4. **Height**. All retaining walls shall be reduced in height to the maximum extent practicable and the walls shall meet the height requirements in the frontage and side slope requirements and standard sight distance triangles at intersections as required by the City Engineer.	City of Antioch	On-Going	Public Works Department	
	Conservation/NPDES	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**

19.	**C.3 Compliance**. Per State Regulations, all impervious surfaces including off-site roadways to be constructed as part of the project are subject to C.3 requirements.	State of California	On-Going	Public Works Department	
20.	**NPDES.** The project shall comply with all Federal, State, and City regulations for the National Pollution Discharge Elimination System (NPDES) (AMC§6-9). (Note: Per State Regulations, NPDES Requirements are those in affect at the time of the Final Discretional Approval.) Under NPDES regulations, the project is subject to provision C.3: "New development and redevelopment regulations for storm water treatment." **a. Requirements.** Provision C.3 requires that the project include storm water treatment and source control measures, as well run-off flow controls so that post-project runoff does not exceed estimated pre-project runoff. **b. Storm Water Control Plan**. C.3 regulations require the submittal of a Storm Water Control Plan (SWCP) that demonstrates plan compliance. The SWCP shall be submitted concurrently with the site improvement plans. **c. Operation and Maintenance Plan**. For the treatment and flow-controls identified in the approved SWCP, a separate Operation and Maintenance Plan (O&M) shall be submitted to the Building Department at the time of permit submittal. **d. Maintenance Agreement.** Based on the O&M Plan, a maintenance agreement shall be executed with the City and recorded to the property. The SWCP and O&M plans shall be included as Exhibits.	Federal Government	At the Time of Building Permit Submittal	Public Works	
21.	**NPDES Plan Submittal Requirements**. As applicable, the following requirements of the federally mandated NPDES program (National Pollutant Discharge Elimination System) shall	Federal Government	At the Time of Building Permit Submittal	Public Works	

	be complied with as appropriate, or as required by the City Engineer: **a. Application.** Prior to issuance of building permits, site improvements, or landscaping, the developer shall submit a permit application consistent with the developer's approved Storm Water Control Plan, and include drawings and specifications necessary for construction of site design features, measures to limit directly connected impervious area, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control storm water flow and potential storm water pollutants. **b. Certified Professional.** The Storm Water Control Plan shall be certified by a registered civil engineer, and by a registered architect or landscape architect as applicable. Professionals certifying the Storm Water Control Plan shall be registered in the State of California and submit verification of training, on design of treatment measures for water quality, not more than three years prior to the signature date by an organization with storm water treatment measure design expertise (e.g., a university, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association), and verify understanding of groundwater protection principles applicable to the project site (see Provision C.3.i of Regional Water Quality Control Board Order R2 2003 0022). **c. Final Operation & Maintenance Plan.** Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall submit, for review and approval by				

	the City, a final Storm Water BMP Operation and Maintenance Plan in accordance with City of Antioch guidelines. This O&M plan shall incorporate City comments on the draft O&M plan and any revisions resulting from changes made during construction. **d. Long Term Management.** Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall execute and record any agreements identified in the Storm Water Control Plan which pertain to the transfer of ownership and/or long-term maintenance of storm water treatment or hydrograph modification BMPs. **e. Design Details.** **i.** To prevent site or roof drainage from draining across sidewalks and driveways close to the building in a concentrated manner, roof drains shall be piped under/or through the sidewalk/or curb and gutter. **ii.** Install on all catch basins "No Dumping, Drains to River" decal buttons on the top of curb or paving next to the drainage grate. **f. Hydrology Calculations.** Collect and convey all storm water entering, and/or originating from, the site to an adequate downstream drainage facility without diversion of the watershed. Submit hydrologic and hydraulic calculations with the Improvement Plans to Engineering Services for review and approval. **g. Regional Water Quality Control.** Prior to issuance of the grading permit, submit proof of filing of a Notice of Intent (NOI) by providing the unique Waste Discharge				

	Identification Number (WDID#) issued from the Regional Water Quality Control Board. **h.** **SWPP**. Submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) for review to the Engineering Department prior to issuance of a building and/or grading permit. The general contractor and all subcontractors and suppliers of materials and equipment shall implement these BMP's. Construction site cleanup and control of construction debris shall also be addressed in this program. Failure to comply with the approved construction BMP may result in the issuance of correction notices, citations, or a project stop work order. **i.** **BMP.** Install appropriate clean water devices at all private storm drain locations immediately prior to entering the public storm drain system. Implement Best Management Practices (BMP's) at all times. **j.** **Erosion Control.** Include erosion control/storm water quality measures in the final grading plan that specifically address measures to prevent soil, dirt, and debris from entering the storm drain system. Such measures may include, but are not limited to, hydro seeding, gravel bags and siltation fences and are subject to review and approval of the City Engineer. If no grading plan is required, necessary erosion control/storm water quality measures shall be shown on the site plan submitted for an on-site permit, subject to review and approval of the City Engineer. The developer shall be responsible for ensuring that all contractors and subcontractors are aware of and implement such measures. **k.** **On-Going Maintenance.**				

	i. The developer or owner shall sweep or vacuum the parking lot(s) a minimum of once a month and prevent the accumulation of litter and debris on the site. Corners and hard to reach areas shall be swept manually. **ii.** If sidewalks are pressure washed, debris shall be trapped and collected to prevent entry into the storm drain system. No cleaning agent may be discharged into the storm drain. If any cleaning agent or degreaser is used, wash water shall be collected and discharged to the sanitary sewer, subject to the approval of the sanitary sewer District. **iii.** To ensure that the area surrounding the project such as the streets stay free and clear of construction debris such as silt, dirt, dust, and tracked mud coming in from or in any way related to project construction, the areas that are exposed for extended periods shall be watered regularly to reduce wind erosion. Paved areas and access roads shall be swept on a regular basis. All trucks shall be covered. **iv.** Clean all on-site storm drain facilities a minimum of twice a year, once immediately prior to October 15 and once in January. Additional cleaning may be required if found necessary by City Inspectors and/or City Engineer.				
	Fire Standards	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
22.	The applicant shall comply with the conditions provided by the Contra Costa County Fire Protection District in the letter dated November 14, 2023:	Contra Costa Fire Protection District	On-Going	Contra Costa Fire Protection District	

EXHIBIT A: CONDITIONS OF APPROVAL Chevron Hydrogen Fuel Dispensing Facility

	Building Permit Submittal	Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification(date and Signature)
23.	**Requirement for One Phase.** The project shall be built continuously in one phase. If the project will become a phased project, then the developer shall provide a phasing plan to the Community Development Department.	City of Antioch	At the time of Building Permit Submittal	Community Development Department	
24.	**Final Landscape Plans.** The applicant shall submit landscape plans that identify specific plant materials to be used, including all shrubs and groundcover, providing both common and botanical names, sizes and quantities at the time of building permit submittal. The project shall emphasize local and native species of plants in the final landscape plans.	City of Antioch	At the time of Building Permit Submittal	Building Department	
25.	**Water Efficient Landscape Ordinance**. Landscaping for the project shall be designed to comply with the applicable requirements of City of Antioch Ordinance No. 2162-C-S The State Model Water Efficient Landscape Ordinance (MWELO). The applicant shall demonstrate compliance with the applicable requirements of the MWELO in the landscape and irrigation plans submitted to the City.	City of Antioch	At the time of Building Permit Submittal	Community Development Department	
26.	**Landscaping.** All Landscaping along the project frontage, parking areas, on all slopes, medians, and open space areas shall be approved by the City Engineer and shall be installed at the applicant's expense.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	
27.	**Site Storm Drainage system.** The new fuel handling facility shall install a storm drain system that directs water away from the fueling area as approved by the City Engineer. All curb and gutters, valley gutters shall drain south to drench drain located along the southeast entrance to the site and piped under or through the sidewalk so not make for concentrated slippery	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	

	surface hazardous condition in the public right of way to the satisfaction of the City Engineer.				
28.	**Utility Location on Private Property**. All domestic and irrigation water meters, sanitary sewer clean outs for the site (water meters, sewer cleanouts, etc.) shall be located along the street frontage just inside the site property line as approved by the City Engineer.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	
Grading Improvements		**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
29.	**Requirement for Grading Permit.** A grading permit shall be required prior to commencement of any grading operations. The permit shall be obtained for rough and final grading of the site through the City's Building Department subject to review and approval by the City Engineer. The grading plans shall show in detail how the site will be graded and all low spots will have adequate drainage devices installed to drain the site. The submitted plans shall incorporate any modifications required by the Conditions of Approval of the handling the natural drainage.	City of Antioch	At the time of Building Permit Submittal	Public Works	
30.	**Soils.** Prior to the approval of the grading plan(s), the City Engineer shall determine if a soils or structural engineer, are required to review the building permit plan set submitted for this project. If deemed necessary by the City Engineer, field inspections by such professionals will be required to verify compliance with the approved plans. Costs for these consulting services shall be incurred by the developer.	City of Antioch	At the time of Building Permit Submittal	Public Works	
31.	**Off-Site Grading**. All off-site grading is subject to the coordination and approval of the City Engineer. The developer shall submit written authorization to "access, enter, and/or grade" adjacent properties prior to issuance of permit and performing any work.	City of Antioch	At the time of Building Permit Submittal	Public Works	

EXHIBIT A: CONDITIONS OF APPROVAL Chevron Hydrogen Fuel Dispensing Facility

At the Time of Building Permit Issuance		Regulation Source	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and signature)
32.	**Demolition Permit**. Site demolition shall not occur until construction permits are issued for the development project. All demolition shall be in accordance with permits issued by the Cityand Bay Area Air Quality Management District (BAAQMD).	City of Antioch	At the time of Building Permit Issuance	Community Development Department	
33.	**Encroachment Permit**. The applicant shall obtain an encroachment permit from the Engineering Division before commencing any construction activities within any public right-of-way or easement.	City of Antioch	At the time of Building Permit Issuance	Community Development Department	
At the Time of Construction		**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
34.	**Collection of Construction Debris**. The developer shall gather all construction debris on a regular basis and place them in a Waste Management dumpster or other container that is emptied or removed on a weekly basis consistent with the Construction and Demolition Debris Ordinance. When appropriate, use tarps on the ground tocollect fallen debris or splatters that could contribute to stormwater pollution.	City of Antioch	On-Going	Building Department	
35.	**Construction Hours**. Construction activity shall be as outlined in in the Antioch Municipal Code. Construction activity is limited to 8:00 AM to 5:00 PM Monday-Friday or as approved in writing by the City Manager. Requests for alternative construction hours shall be submitted in writing to the City Engineer.	City of Antioch	On-Going	Building Department/ Public Works Department	

36.	**Demolition, Debris, Recycling.** The project shall be in compliance with and supply all the necessary documentation for Antioch Municipal Code § 6-3.2: Construction and Demolition Debris Recycling.	City of Antioch	On-Going	Building Department/ Public Works Department	
37.	**Filter Materials at Storm Drain Inlet**. During construction developer to Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: **a)** start of the rainy season (October 1); **b)** site dewatering activities; **c)** street washing activities; **d)** saw cutting asphalt or concrete; and **e)** order to retain any debris or dirt flowing into the City stormdrain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding. Dispose of filter particles in the trash.	City of Antioch	On-Going	Building Department	
38.	**Archeological Remains**. In the event subsurface archeological remains are discovered during any construction or preconstruction activities on the site, all land alteration work within 100 feet of the find shall be halted, the Community Development Department notified, and a professional archeologist, certified by the Society of California Archeology and/or the Society of Professional Archeology, shall be notified. Site work in this area shall not occur until the archeologist has had an opportunity to evaluate the significance of the find and to outline appropriate mitigation measures, if deemed necessary. If prehistoric archeological deposits are discovered during development of the site, local Native American organizations shall be consulted and involved in making resource management decisions.	City of Antioch	On-Going	Community Development Department	

39.	**Erosion Control Measures.** The grading operation shall take place in one time period, and in a manner, so as not to allow erosion and sedimentation into the public drainage system or publicly maintained surfaces or adjacent properties. The slopes shall be landscaped and reseeded as soon as possible after the grading operation ceases. Erosion measures shall be implemented during all construction phases in accordance with an approved erosion and sedimentation control plan.	City of Antioch	Plans Approved Prior to Building Permit, Monitored During Construction	Public Works	
40.	**Dust Control.** Standard dust control methods and designs shall be used to stabilize the dust generated by construction activities. The developer shall post dust control signage with a contact number of the developer, City staff, and the air quality control board.	City of Antioch	Prior to Occupancy Permit	Public Works	
41.	**Debris Removal.** The site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times. Truck routes of city streets to the site shall be monitored and periodically cleaned of debris so not to cause a burden of cleaning city streets on city maintenance crews.	City of Antioch	During Construction	Public Works	
	Security/Bonding requirements	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
42.	**Security / Bonding Requirements.** The property owner or developer of the parcel shall include all the required security for public improvements described in Title 9, Chapter 4, Article 5: Final Maps, of the Antioch Municipal Code, including, but not limited to: **a.** Improvement security in one of the following forms: **i.** Bond or bonds issued by one or more duly authorized corporate securities in an amount equal to 100% of the total estimated costs of the public improvements for faithful performance, and in an amount	City of Antioch	Prior to Encroachment Permit	Public Works	

	equal to 100% of the total estimated costs of the improvements for labor and materials. **ii.** A deposit, in an amount equal to 100% of the total estimated costs of the public improvements, either with the city or a responsible escrow agent or trust company, at the option of the City Engineer, of money or negotiable bonds of the kind approved for securing deposits of public moneys, in the amounts and for security as specified above, to be released in the same manner as described above for bonds. **b.** An original, signed subdivision agreement, to be executed by the subdivider or his agent, guaranteeing the completion of the construction of the public improvements required by the governing body within a specified time and payment therefore, satisfactory to the City Attorney as to legality and satisfactory to the City Engineer as to amount. **c.** A letter from the Tax Collector showing that all payable taxes have been paid and a bond for the payment of taxes then a lien but not yet payable, as required by the Subdivision Map Act. **d.** A cash payment, or receipt therefore, of all the fees required for the checking and filing of the maps and the inspections of the construction; payment for the street signs to be furnished and installed by the city, if required by the subdivider; a cash deposit for the payment of such fire hydrant rental fees as may be established by the respective fire districts or water company or district having jurisdiction; and any other applicable fees or deposits. **e.** Deeds for the easements or rights-of-way for road purposes map.				

	f. Written evidence acceptable to the city, in the form of rights of entry or permanent easements across private property outside the subdivision, permitting or granting access to perform the necessary construction work and permitting the maintenance of the facility. **g.** Agreements acceptable to the city, executed by the owners of existing utility easements within the proposed roads rights-of-way, consenting to the dedication of roads or consenting to the joint use of the rights-of-way as may be required by the city for the purpose use and convenience of the roads. **h.** A surety bond acceptable to the city, guaranteeing the payment of the taxes and assessments which will be a lien on the property, as set forth in the Subdivision Map Act, when applicable. **i.** Payment of map maintenance fee. **j.** Payment of the assessment district apportionment fee, if applicable. **k.** Evidence of annexation into Police Services Fee CFD **l.** Evidence of payment of Contra Costa County Flood Control District fees. **m.** A final soil report, prepared by a civil engineer who is registered by the state, based upon adequate test borings or excavations of every subdivision, as defined in Cal. Gov't Code §§ 66490 and 66491. The final soil report may be waived if the City Engineer shall determine that, due to the knowledge of such department as to the soil qualities of the subdivision, no preliminary analysis is necessary.				

43.	**Required Easements**. All required access and utility easements over existing and underground public utilities, sidewalks and other installed public improvements shall be granted by the developer at no cost to the City prior to occupancy	City of Antioch	Prior to Occupancy Permit	Public Works	
	Prior to Issuance of Occupancy Permit	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**
44.	**Planning Inspection**. Planning staff shall conduct a site visit to review exterior building elevations for architectural consistency with the approved plans and landscape installation (if required). All exterior finishing details including window trim, paint, gutters, downspouts, decking, guardrails, and driveway installation shall be in place prior to scheduling the final inspection.	City of Antioch	Prior to Occupancy Permit	Planning Department	
45.	**Debris Removal.** All mud, dirt or construction debris carried off the construction site and shall be removed prior to scheduling the final Planning inspection. No materials shall be discharged onto a sidewalk, street, gutter, storm drain or creek.	City of Antioch	Prior to Occupancy Permit	Building Department	
46.	**Fire Prevention**. A final Fire inspection shall occur to inspect all fire prevention systems constructed as part of the project. Inspections shall occur prior to final occupancy permit issuance.	City of Antioch	Prior to Occupancy Permit	Fire Department	
47.	**Damage to Existing Street Improvements**. Any damaged existing street improvements along the project frontage before and during construction on or adjacent to the project property, shall be repaired or replaced to the satisfaction of the City Engineer at the full expense of the Developer. This shall include any broken sidewalk, curb and gutter, landscaping, street pavement, landscaping or other existing frontage improvements, as may be required by the City Engineer, shall be improved to city standards. At driveway entrances the pavement conforms shall be designed and constructed to match existing grade and transition as smooth as possible at 1% minimum grade.	City of Antioch	Prior to Occupancy Permit	Public Works	

48.	**Right-of-Way Construction Standards**. All improvements within the public right-of-way, including curb, gutter, sidewalks, driveways, paving and utilities, shall be constructed in accordance with approved standards and/or plans and shall comply with the standard plans and specification of the City Antioch to the satisfaction of the City Engineer.	City of Antioch	Prior to Occupancy Permit	Public Works	
49.	**Removal of Existing Monitoring Wells.** If disturbed, the developer shall remove and abandon any existing monitoring wells in areas of the hydrogen refueling area in the project property in accordance with County of Contra Costa well abandonment standards and construct a new one. This includes the removal of the pumps, pipes, concrete structures, and all existing equipment used to operate the wells and former irrigation system.	City of Antioch	Prior to building permit	Public Works	
50.	**Idle Free Signage.** Consistent with the City's adopted 2010 Climate Action Plan, the applicant shall install at least one "Idle Free" sign encouraging drivers to refrain from idling in their vehicle, reducing air pollution and greenhouse gas emissions. The sign shall be placed in an area with high visibility where drivers are queued to access the drive through or pick up area. The sign location shall be shown on the construction plans at the time of building permit submittal for review and approval by Planning staff. The sign shall be 12"x 18" and satisfy City requirements for no parking signage, traffic sign mounting, and signage in the right of way. The applicant shall use the Idle Free Bay Area website https://idlefreebayarea.org/resources/ as a resource to view a sample bilingual Idle Free sign. The applicant may use this template when designing and printing signage.	City of Antioch	Prior to Occupancy Permit	Planning Division	
	Special Conditions	**Regulation Source**	**Timing/ Implementation**	**Enforcement/ Monitoring**	**Verification (date and signature)**

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51.	**Slurry Seal.** The Applicant shall recondition the lease area's existing asphalt pavement by installation of asphalt slurry seal in accordance with approved plans to the satisfaction of the City Engineer.	City of Antioch	Prior to Occupancy Permit	Public Works	
52.	**CMU Wall.** All block CMU walls shall be split faced or decorative color and shown on the building permit plans for review and approval by the Planning Division	City of Antioch	Design Prior to Building Permit, Constructed Prior to Occupancy	Public Works	
53.	**Clear Vision Zones at Driveway Entrances.** The developer shall comply with clear vision zones with AMC 9-5.1101 that are minimum of 25 feet long at each 30 feet curb returns of all driveway entrances to the site from public streets. All trees shown on the landscape plans shall be clear of these vision zones for adequate sight distance.	City of Antioch	Prior to Occupancy Permit	Public Works	
54.	**Geotechnical investigation**. The applicant shall prepare a site-specific technical investigation and report to be reviewed and approved by the City prior to building permit. The site-specific Geotechnical report of the proposed project shall Include a pavement analysis of the existing parking lots, commercial driveways at the commercial entrance, recommending pavement sections of all proposed roadways and parking within the site. The soils engineer needs to take core samples of the existing driveway to check the stability of the existing road base of the commercial driveway. Geotechnical (Soils) report and existing ground water monitoring wells. This soils report shall identify and locate the existing soil and ground water monitoring wells. What wells will be abandoned and what additional monitoring wells will be constructed. The submitted geotechnical report will identify the investigation of any toxic chemical spills or contaminated soils that need to be cleaned up and mitigated.	City of Antioch	Prior to Building Permit	Public Works	

55.	**Record of Survey.** The applicant shall file a record of survey of the existing developed station and all adjacent street right of ways surrounding the project in accordance with state law and signed by registered surveyor. Submitted with the record the record of survey shall be a recent title report of the subject project and the surrounding roadways. If needed the applicant shall file lot line adjustment of existing record boundary to make sure all the existing lot lines are in sufficient detail that the existing lot closes with limits of state surveyors act requirements.	City of Antioch	Prior to Building Permit	Public Works	
56.	**Removal of Vacated Easements.** All existing easements of record that are no longer required and will affect parcels within this project shall be removed prior to or concurrently with the recordation of the final map or subsequent final maps or separate recorded documents as approved by City Engineer.				
57.	**Class 2 Hazardous Material Site Assessment**. The project shall undergo a Class 2 site assessment for hazardous materials to be completed on the existing gas station site. Those areas of exiting soil have hazardous materials or contaminated soils shall be cleaned up or removed from the site in accordance with state law to the satisfaction of the City Engineer prior to grading or any site improvements the site. This condition may also be satisfied by providing previously prepared reports, to the satisfaction of the City Engineer.	City of Antioch	Prior to Grading	Public Works	
58.	**Signage Illumination.** Only the Chevron logo and Chevron wordmark may be illuminated on the north, south and western elevations. No other portion of the canopy shall be illuminated. No part of the eastern elevation canopy, logo, or signage shall be illuminated.				

ATTACHMENT "B"

Project Description

2413 A Street, Antioch CA

Chevron U.S.A. Inc. (Chevron) proposes to construct a hydrogen fueling station at the existing Chevron service station at 2413 A Street, Antioch, California (project). The proposed project is modification of the existing subject facility to incorporate Hydrogen (H2) fueling stations. The improvements include a new electrical service, a H2 storage and compression compound, H2 offload panel and two (2) hydrogen dispensers. The H2 compound will be enclosed by a combination of concrete masonry block wall and louvered fencing. The new enclosed areas would cover approximately 1,750 square feet. Chevron intends to install two new H2 dispensers under a new hydrogen fueling canopy.

Site Location

The approximately 0.967 acre project site is located off A Street. The project site is bounded to the north, east, south, and west by Rossi Avenue, Sunset Drive, Bryan Avenue and A Street, respectively. The surrounding area is comprised of residential and commercial buildings.

The project site is currently zoned as Neighborhood/Community Commercial District (C-2) and Single-Family Residential District (6 du/acre) (R-6). The project site is designated as Contra Costa County Assessor's Parcel Number are 068-132-038-8, 068-132-046-1, 068-132-053-7, 068-132-054-5.

Project Construction

Construction activities would begin soon after entitlements are granted and would be completed in approximately 6 to 8 months, pending equipment lead time and utility construction schedule. Construction activities would include installation of the equipment enclosure and excavation as part of installation of fuel pumps and related infrastructure. The maximum excavation depth would be 4.5 feet; however, most of the excavation would be in the 2- foot to 3-foot range. Soil excavated would be stored onsite during construction and used to backfill excavation. However, as hydrogen fueling infrastructure would occupy space in the excavation, not all soil would be reused. Excess soil would be exported from the site if needed.

The project would be constructed within an area that is comprised of existing pavement and landscape area. Stormwater runoff from new and modified impervious areas will be treated to meet and or exceed current requirements. Pavement that is damaged or demolished during construction, such as the required excavation, would be restored.

Project Operation

The proposed hydrogen fueling station would operate during hours consistent with the operational hours of the existing convenience store and gasoline fueling facilities on-site. Cars that operate using hydrogen are known as fuel-cell electric vehicles (FCEV). As FCEVs become more popular and common, the number of daily trips to the hydrogen fueling station could increase.

Hydrogen gas would be delivered to the site, as needed, based on supply and demand. Tractor trailer trucks designed to transport liquid and gaseous substances, commonly known as tanker trucks, would deliver fuel to the site. Initially, delivery would occur approximately once per week. Delivery frequency could increase as FCEVs become more common and the demand for hydrogen fuel increases. Maximum delivery frequency, based on maximum possible demand, would be once per day. The proposed hydrogen fueling facilities would not change current operations of the existing convenience store and gasoline fueling station. The project site will have a total of four (4) standard parking spaces and one

ADA spaces following construction of the project. No additional employees would be added with the addition of hydrogen fueling at the project site.

Below is a more detailed description of the H2 facility and processes.

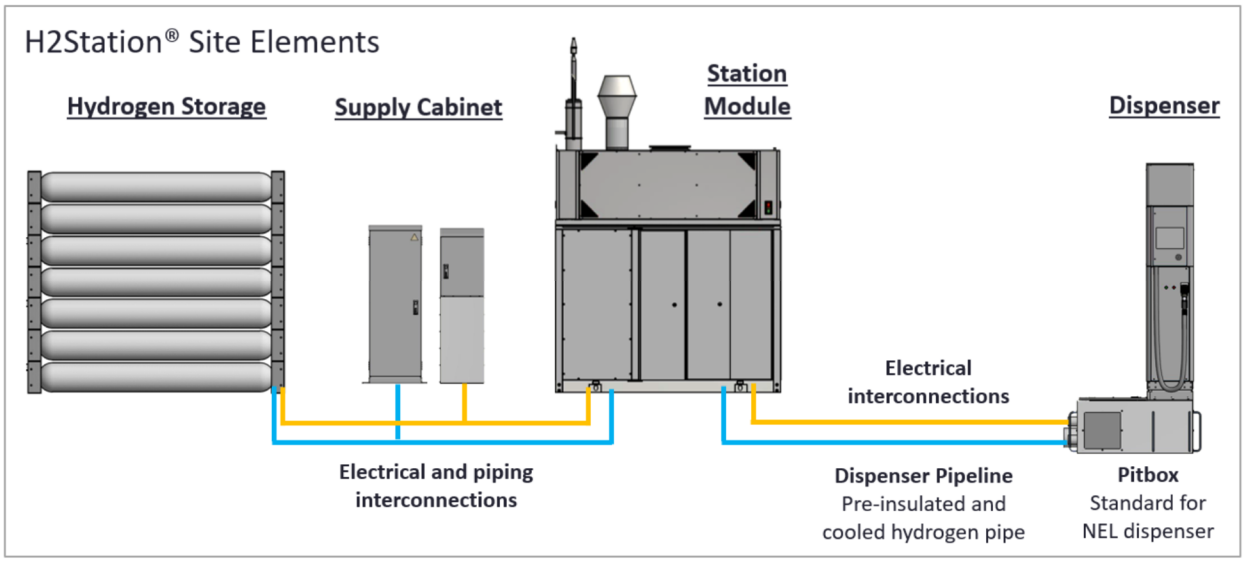
Why is Chevron developing H2 Stations?

To meet the California Air Resource Board Low Carbon Fuel Standards and to support Advanced Clean Fleets. Through its AB 8 program, the State of California co-funds the deployment of at least 100 hydrogen fueling stations to enable the launch of a consumer FCEV market. CARB provides annual evaluations of the status of deployment of fueling stations and FCEVs and analysis of needs for further development. CARB also coordinates with the California Energy Commission to annually report on the progress metrics of the Commission-led station funding program. In order to develop its recommendations for areas that require further hydrogen station development, CARB developed the California Hydrogen Infrastructure Tool (CHIT), a geospatial analysis tool built on publicly vetted data and methodologies.

"California is leading the nation in building hydrogen fueling stations for FCEVs. As of mid-2021, 47 retail hydrogen stations were open to the public in California, as well as one in Hawaii, and 55 more were in various stages of construction or planning in California. These stations are serving over 8,000 FCEVs. California continues to provide funding toward building hydrogen infrastructure through its Clean Transportation Program. The California Energy Commission is authorized to allocate up to $20 million per year through 2023 and is investing in an initial 100 public stations to support and encourage these zero-emission vehicles. In addition, 14 retail stations are planned for the northeastern states, with some of those already serving fleet customers." ...*U.S. Department of Energy*

System overview

Fuel is delivered in Gaseous form by truck through a connection to the Supply cabinet. The system then safely transfers the gas to the Storage tubes until it reaches capacity. The station module will then transfer the H2 from the storage tubes to the dispensing unit when a vehicle is ready to fill up.



Storage

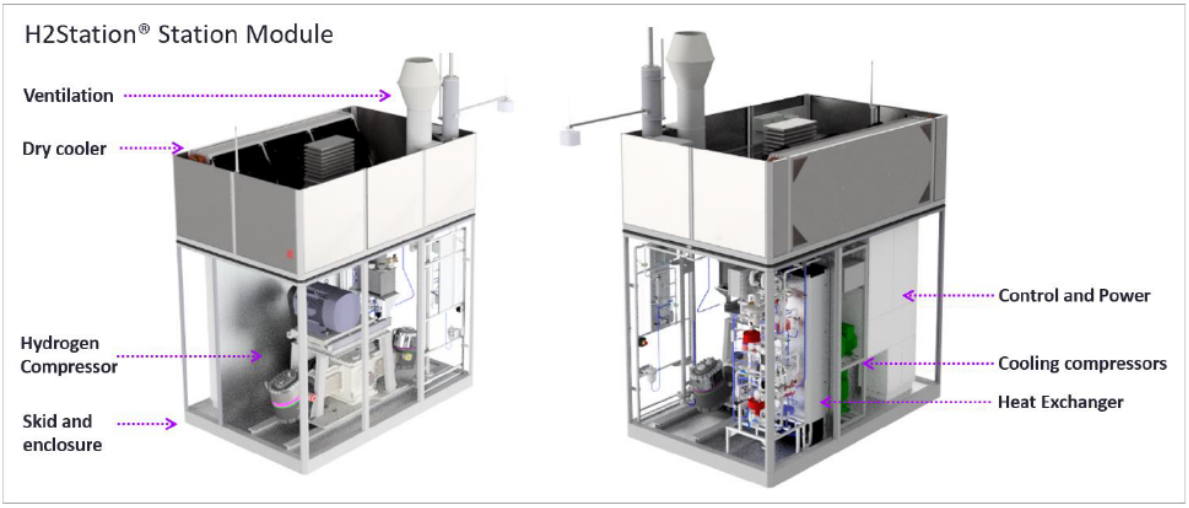
The Storage is a compact module with valve panel that connects with and is controlled by the Station Module. The Storage has an operating pressure of 45 MPa with flexible dimensioning of capacity and vessels to allow optimal integration on available space at sites.

The storage modules are connected to the Station Module which controls the storage via valve panels. The valve panel has built in jet fire protection panel, double block and bleed valves on each bank and other safety features.

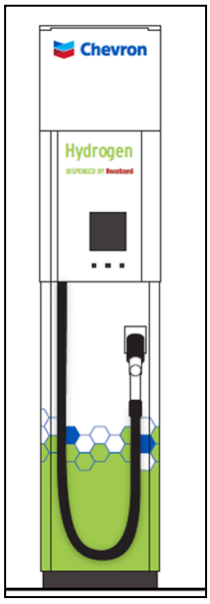
Station Module

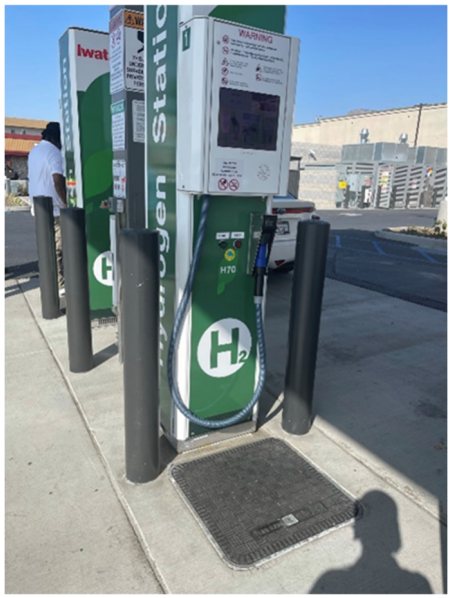
All equipment required for fueling is integrated into the Station Module, which is connected to and controls the Storage and Dispenser modules.

The noise level of the Station Module is very low and the primary noise sources from the operation are hydrogen compressor and dry cooler condensation for the cooling system. The enclosure reduces the noise from the compressor.



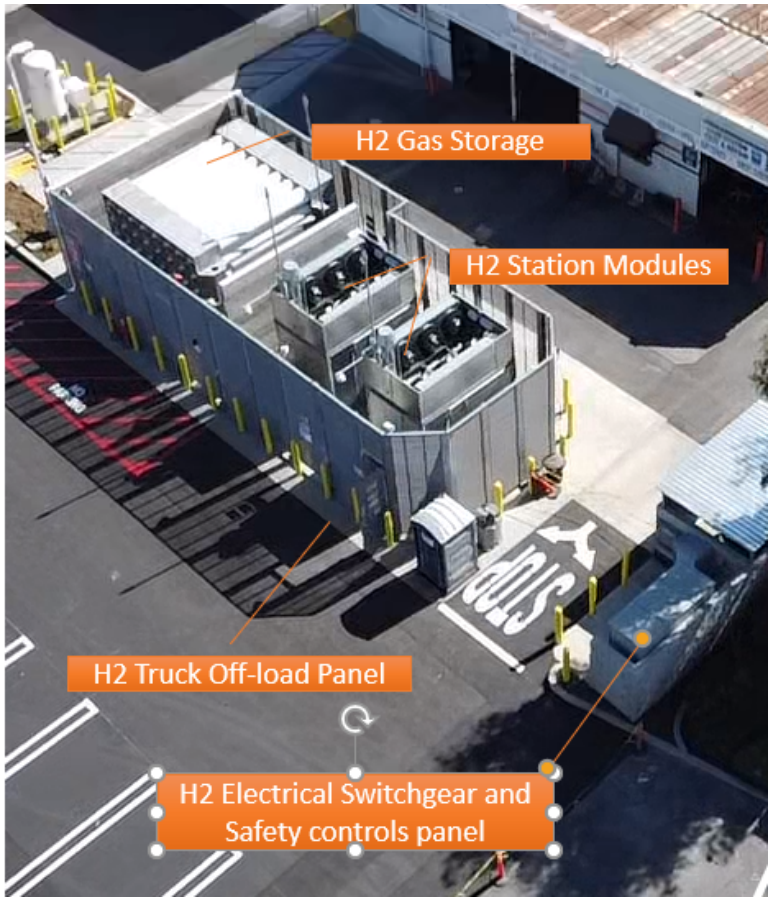
Dispenser





The Dispenser is designed solely for hydrogen allowing for a size that is only one third of a conventional gasoline Dispenser. This provides a very compact footprint, fast installation at site and a flexible placement. The Dispenser contains multiple safety features that detect physical problems and prevent its operation

H2 Compound site reference


H2 Gas Storage
H2 Station Modules
H2 Truck Off-load Panel
H2 Electrical Switchgear and Safety controls panel

Codes and standards:

The work shall conform to all relevant and most recent editions of the appropriate codes and standards as supplemented, amended or otherwise modified by local requirements

- California Codes
    - California Fire Code (International Fire Code and Uniform Fire Code)
    - California Electric Code
    - California Building Code (International Building Code)
    - California Mechanical Code (International Mechanical Code)
    - California Unified Program Agency (Cal/EPA certified CUPA)
    - International Fuel Gas Code
- National Hydrogen Specific Codes
    - NFPA1 Fire Code
    - NFPA 2 Hydrogen Technologies Code
    - NFPA 30A Motor Fuel-Dispensing Facilities and Repair Garages

- NFPA 55 Compressed Gases and Cryogenic Fluids Code

- **Federal Regulations**
  - OSHA Regulations 29 CFR 1920 Subpart H
  - DOT Regulations including 40 CFR Part 68 Risk Management Plan (as applicable)

Set-back distances

In some cases, a CMU wall will be used to reduce exposure limits and Hazardous areas. Site plan indicates exposure limits and setback distances. Hydrogen station designs need to comply with the California Building Code (Part 2) and the California Fire Code (Part 9) of the California Building Standards Code (Title 24), the California Code of Regulations and/or the local amendment of the California Building and Fire Code. The code ensures proper setback distances, equipment, and mitigation measures for fueling, infrastructure and storage.

ABBREVIATIONS

& = AND
L = ANGLE
@ = AT
℄ = CENTERLINE
ø = DIAMETER OF ROUND
= POUND OR NUMBER
(E) = EXISTING
(R) = RELOCATED
(N) = NEW

A.B. = ANCHOR BOLT
A.F.F. = ABOVE FINISH FLOOR
AGGR. = AGGREGATE
AL. = ALUMINUM
APPROX. = APPROXIMATE
ARCH. = ARCHITECTURAL
ASPH. = ASPHALT

BD. = BOARD
BITUM. = BITUMINOUS
BLDG. = BUILDING
BLKG. = BLOCKING
BM. = BEAM
B.O. = BOTTOM OF
BOT. = BOTTOM
BW = BACK OF WALK

CAB. = CABINET
CEM. = CEMENT
CER. = CERAMIC
C.I. = CAST IRON
CLG. = CEILING
CLR. = CLEAR
CMU = CONCRETE MASONRY UNIT
COL. = COLUMN
CONC. = CONCRETE
CONSTR. = CONSTRUCTION
CONT. = CONTINUOUS
CTSK. = COUNTERSUNK
CNTR. = COUNTER
CTR. = CENTER

DEPT. = DEPARTMENT
DET. = DETAIL
DIA. = DIAMETER
DIM. = DIMENSION
DISP. = DISPENSER
DN. = DOWN
DR. = DOOR
D.S. = DOWNSPOUT
DWG. = DRAWING

E = EAST
EA. = EACH
EL. = ELEVATION
ELEC. = ELECTRICAL
EQ. = EQUAL
EXP. = EXPANSION
EXT. = EXTERIOR

FE = FIRE EXTINGUISHER
F.F = FLOOR FINISH
FDN. = FOUNDATION
FG = FINISH GRADE
FIN. = FINISH
FL. = FLOOR
FLASH'G = FLASHING
FLUOR. = FLUORESCENT
F.O. = FACE OF
F.O.C. = FACE OF CONCRETE
F.O.F. = FACE OF FINISH
F.O.S. = FACE OF STUDS
F.R.P. = FIBERGLASS REINFORCED PANEL
F.S. = FLOOR SINK
FT. = FOOT OR FEET
FTG. = FOOTING
FURR. = FURRING
FUT. = FUTURE

G.A. = GAUGE
GALV. = GALVANIZED
GL. = GLASS
GR. = GRADE
GB = GRADE BREAK
GSM = GALVANIZED SHEET METAL
GYP. = GYPSUM
GYP.BD. = GYPSUM BOARD

H.B. = HOSE BIBB
HDWE. = HARDWARE
H.M. = HOLLOW METAL
HORIZ. = HORIZONTAL
HR. = HOUR
HGT. = HEIGHT

IE = INVERT ELEVATION
I.D. = INSIDE DIAMETER
INSUL. = INSULATION
INT. = INTERIOR

JT. = JOINT

LAM. = LAMINATE
LAV. = LAVATORY
LIP = EDGE OF SWALE OR GUTTER

MAX. = MAXIMUM
MECH. = MECHANICAL
MEMB. = MEMBRANE
MFR. = MANUFACTURER
MIN. = MINIMUM
MISC. = MISCELANEOUS
M.O. = MASONRY OPENING
MTD. = MOUNTED
MUL. = MULLION

N. = NORTH
N.I.C. = NOT IN CONTRACT
NO. OR # = NUMBER
NOM. = NOMINAL
N.T.S. = NOT TO SCALE

O.C. = ON CENTER
O.D. = OUTSIDE DIAMETER
OPNG. = OPENING
OPP. = OPPOSITE

PB = LEVEL PAVEMENT AT DISPENSER PIT BOX
PL. = PLATE
P.LAM. = PLASTIC LAMINATE
PLYWD. = PLYWOOD
P.O.C. = POINT OF CURVATURE
P.O.S. = POINT OF SALE

R OR RAD. = RADIUS
R.D. = ROOF DRAIN
REF. = REFERENCE
REINF. = REINFORCED
REQ'D = REQUIRED
RM. = ROOM
R.O. = ROUGH OPENING
R.O.W. = RIGHT OF WAY

SAD = SEE ARCHITECTURAL DRAWINGS
SCHED. = SCHEDULE
SECT. = SECTION
SHT. = SHEET
SIM. = SIMILAR
SPEC. = SPECIFICATION
SQ. = SQUARE
SSD = SEE STRUCTURAL DRAWINGS
S.ST. = STAINLESS STEEL
STD. = STANDARD
ST.L. = STEEL
STOR. = STORAGE
STRL. = STRUCTURAL
SYM. = SYMMETRICAL

T.C. = TOP OF CURB
T.F.S. = TOP OF FINISHED SLAB
TG = TOP OF GRATE
T.& G. = TONGUE & GROOVE
THK. = THICK
TI = TOP OF ISLAND
T.O. = TOP OF
TOW = TOP OF WALL
TP = TOP OF PAVEMENT
TS = TOP OF SLAB
TW = TOP OF WALK
TYP. = TYPICAL

UNF. = UNFINISHED
U.O.N. = UNLESS OTHERWISE NOTED

VERT = VERTICAL

W. = WEST
W/ = WITH
W.C. = WATER CLOSET
WD. = WOOD
W/O = WITHOUT
W.P. = WORKING POINT
WSCT. = WAINSCOT
WT. = WEIGHT

Chevron

GENERAL NOTES

1. IN THE EVENT OF DISCREPANCIES BETWEEN THE DRAWINGS, SPECIFICATIONS, OR SCOPE OF WORK SUMMARY IN THIS PACKAGE, NOTIFY CHEVRON REP. IMMEDIATELY.
2. THE CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK IN FIELD IS DONE IN ACCORDANCE WITH ALL CURRENT APPLICABLE NATIONAL, STATE & LOCAL CODES, ORDINANCES & REQUIREMENTS BY GOVERNING AGENCIES. WHETHER OR NOT SAID CODES, ORDINANCES, REQUIREMENTS, ETC. ARE SPECIFICALLY SHOWN ON DRAWINGS AND/OR CALLED FOR IN SPECIFICATIONS.
3. THE CONTRACTOR SHALL PROTECT ALL EXISTING ITEMS AND FACILITIES TO REMAIN THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL REPAIR AND/OR REPLACE, AT CONTRACTOR'S EXPENSE, ANY EXISTING ITEMS AND FACILITIES TO REMAIN THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, TO THE SATISFACTION OF THE CHEVRON REP.
4. UNLESS DELIVERY IS BY CHEVRON TO THE JOB SITE, CONTRACTOR SHALL DELIVER SUCH EQUIPMENT, DAMAGE-FREE TO THE JOB SITE.
5. PRIOR TO EXCAVATION, DETERMINE AND VERIFY LOCATION OF UTILITY SERVICES IN ALL AREAS TO BE EXCAVATED.
6. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT LAWS, CODES, REGULATIONS, BUILDING CODES, GOVERNING AGENCIES & MANUFACTURER SPECIFICATIONS, UNLESS GREATER REQUIREMENTS ARE INDICATED, AND/OR ARE NECESSARY FOR THE SAFETY OF THE PROJECT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING JURISDICTIONS AS REQUIRED FOR INSPECTIONS.
8. THE CONTRACTOR SHALL PROVIDE THE CHEVRON REPRESENTATIVE WITH A CONSTRUCTION SCHEDULE PRIOR TO STARTING THE WORK, A QUALIFIED JOB SUPERINTENDENT THROUGHOUT THE WORK, PHOTOS SHOWING PIPING AND ELECTRICAL TRENCHES PRIOR TO BACKFILL, AND RECORD DRAWINGS OF ALL UNDERGROUND CONSTRUCTION.
9. THE CONTRACTOR SHALL PROVIDE BARRICADES AND SAFETY SIGNS PER OSHA REQUIREMENTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR OVERALL CONSTRUCTION SITE CLEANLINESS, INCLUDING PROVISION OF A DEBRIS BOX WITH WEEKLY SERVICING, REMOVAL OF ALL CONTRACTOR/SUBCONTRACTOR REFUSE AND DEBRIS, AND SWEEPING OF THE ENTIRE YARD AREA AT THE COMPLETION OF THE WORK
11. UNLESS STATED OTHERWISE IN THE SCOPE OF WORK SUMMARY, ALL OTHER PROCEDURES, TESTING, MATERIALS AND EQUIPMENT SHOWN ON THE PLANS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
12. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE TO THE WORK OF OTHER TRADES CAUSED BY HIS OPERATIONS. THE NATURE OF SUCH REPAIR WORK MUST RECEIVE THE PRIOR APPROVAL OF THE CHEVRON REP.
13. CONSTRUCTION MATERIAL, ASSEMBLIES AND PROCEDURES ARE TO LOCALLY ADOPTED BUILDING CODES AND SUPPLEMENTARY ORDINANCES. WHEN A CONFLICT OCCURS BETWEEN SUCH LOCAL CODE AND INFORMATION SHOWN ON THE PLANS, CONSULT CHEVRON REP. FOR RESOLUTION PRIOR TO COMMENCING WORK.
14. THE CONTRACTOR SHALL NOTIFY CHEVRON REP. IF SITE CONDITIONS OR DIMENSIONS DISAGREE WITH INFORMATION SHOWN ON THE DRAWINGS. WORK IS NOT TO PROCEED UNTIL SUCH DIFFERENCES ARE RESOLVED.
15. ALL EXISTING STRUCTURES, WALLS, TRIM, FASCIA, DOORS, DOWNSPOUTS, ETC., ARE TO BE REPAIRED AND REPAINTED AS NOTED.
16. SEPARATE CONTRACTS FOR SUCH WORK AS PAVING, LANDSCAPING, STEEL FABRICATOR, SHOP FABRICATED COMPONENTS, AND SIGN INSTALLATION MAY BE AWARDED BY CHEVRON. IN ADDITION CERTAIN SPECIALTY ITEMS SUCH AS LIGHTING FIXTURES, SWITCHGEAR, HYDROGEN STATION & STORAGE MODULES AND DISPENSERS, ETC. ARE PURCHASED DIRECTLY BY CHEVRON FOR DELIVERY TO THE CONTRACTOR, WHO WILL BE RESPONSIBLE FOR THEIR INSTALLATION. REFER TO THE SCOPE OF WORK FOR A LISTING OF SUCH CONTRACTS AND EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH AND COORDINATE THE WORK OF SEPARATE CONTRACTORS.
17. DO NOT USE THE BUILDING PERMIT SET FOR CONSTRUCTION OR FIELD REFERENCE. THE PERMIT SET GENERALLY LACKS CERTAIN DRAWINGS AND SPECIFICATIONS, WHICH ARE IN THE BID AND CONSTRUCTION SETS IN ADDITION TO REVISIONS MADE AFTER THE PERMIT PROCESS. FOR CONSTRUCTION AND FIELD REFERENCE, CONTRACTOR SHALL USE ONLY THE SET, WHICH IS CLEARLY SIGNED AND DATED "ISSUED FOR CONSTRUCTION". THE APPROVED PERMIT SET SHALL BE KEPT ON SITE AND REFERENCED FOR PROJECT SPECIFIC MARK-UPS AND/ OR REQUIREMENTS WHICH MAY HAVE BEEN NOTED BY LOCAL AGENCIES DURING PLAN CHECK.
18. GENERAL CONTRACTOR TO SUBMIT FIRE SPRINKLER DRAWINGS, CALCULATIONS AND CUTSHEETS CONCURRENTLY TO THE COUNTY – DEPARTMENT OF BUILDING AND SAFETY AND THE COUNTY FIRE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.

PROJECT DATA

PROJECT ADDRESS:	2401 AND 2413 A STREET ANTIOCH, CA 94509
OWNER'S NAME:	GURSHARNJEET CHEEMA
OWNER'S ADDRESS:	1060 SAINT RAPHAEL DRIVE BAY POINT, CA 94565
SITE GROSS SQUARE FOOTAGE:	43,560 SQ. FT. 0.967 ACRES)
BUILDING SQUARE FOOTAGE:	2,305 SQ. FT.
ZONING DISTRICT:	C-2/R-6
NATURE OF BUSINESS:	SELF SERVE GASOLINE SALES & CONVENIENCE STORE
ASSESSOR'S PARCEL NO.:	068-132-038-8, 068-132-046-1, 068-132-053-7, 068-132-054-5

CODES & STANDARDS:

CALIFORNIA CODES

- 2022 CALIFORNIA FIRE CODE (INTERNATIONAL FIRE CODE AND UNIFORM FIRE CODE)
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA BUILDING CODE (INTERNATIONAL BUILDING CODE)
- 2022 CALIFORNIA MECHANICAL CODE (INTERNATIONAL MECHANICAL CODE)
- CALIFORNIA UNIFIED PROGRAM AGENCY (CAL/EPA CERTIFIED CUPA)
- 2021 INTERNATIONAL FUEL GAS CODE

NATIONAL HYDROGEN SPECFIC CODES

- 2018 NFPA 1 FIRE CODE
- 2020 NFPA 2 HYDROGEN TECHNOLOGIES CODE
- 2018 NFPA 30A MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES
- 2020 NFPA 55 COMPRESSED GASES AND CRYOGENIC FLUIDS CODE
- ASME B31.3 PROCESS PIPING CODE
- ASME 31.12 HYDROGEN PIPING & PIPELINES
- ASME BOILER AND PRESSURE VESSEL CODE SEC VIII
- CGA G-5 HYDROGEN
- CGA G-5.4 STANDARD FOR HYDROGEN PIPING SYSTEMS AT CONSUMER LOCATIONS
- CGA G-5.5 HYDROGEN VENT SYSTEM
- CGA G-5.6 HYDROGEN PIPELINE SYSTEMS
- CGA G-5.8 HIGH PRESSURE HYDROGEN PIPING SYSTEMS AT CONSUMER LOCATIONS

FEDERAL REGULATIONS

- OSHA REGULATIONS 29 CFR 1920 SUBPART H
- DOT REGULATIONS INCLUDING 40 CFR PART 68 RISK MANAGEMENT PLAN (AS APPLICABLE)

THIS PROJECT HAS BEEN DESIGNED IN SUBSTANTIAL CONFORMANCE WITH THE ACCESSIBILITY PROVISIONS OF CHAPTER 11B OF THE CALIFORNIA BUILDING CODE, LOCAL JURISDICTION, AND THE AMERICANS WITH DISABILITIES ACT (ADA).

PROJECT TEAM

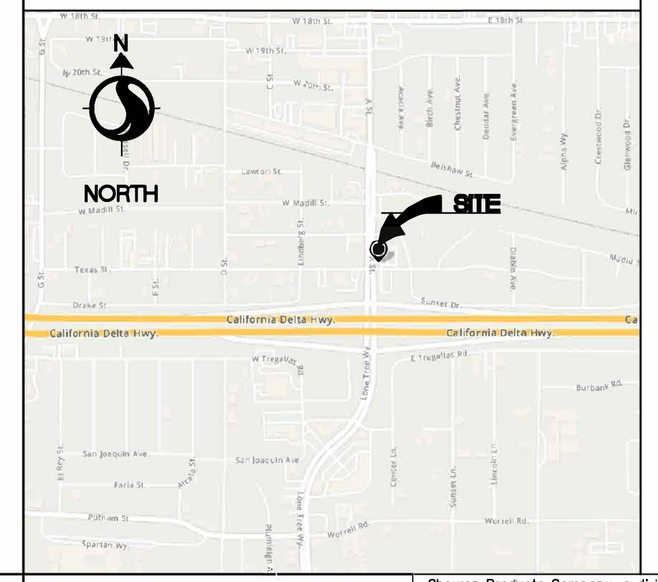
PROJECT MANAGER:	WICUS POSTMA STANTEC SARASOTA, FL	(661) 333-3731
H2 FUEL DESIGN:	JOSEPH VELASCO STANTEC LOS ANGELES, CA	(949) 572-8928
ELECTRICAL ENGINEER:	ALINA NOVIKOVA STANTEC WEST WALL TOWNSHIP, NJ	(858) 622-2762
CIVIL ENGINEER:	KEVAN McLAUGHLAN STANTEC IRVINE, CA	(949) 923-6141
LANDSCAPE ARCHITECT:	MAISHA RUTH STANTEC PETALUMA, CA	(707) 658-4707
CHEVRON PROJECT MANAGER:	SCOTT NOVAK 1500 LOUISIANA STREET HOUSTON, TX 77002	(510) 512-0182
PLANNING CONSULTANT:	ERIC SNELLING STANTEC SANTA MARIA, CA	(805) 250-2857

PROJECT DESCRIPTION

CHEVRON IS PROPOSING THE FOLLOWING:

- NEW H2 EQUIPMENT COMPOUND WITH METAL LOUVERED FENCING AND CONCRETE BLOCK WALL FOR SECURITY AND EQUIPMENT SPACING.
- INSTALL NEW FUELING CANOPY WITH TWO H2 DISPENSERS, POINT OF SALE AND TRASH VALETS ON PAVED AREA AT THE NORTH EAST SIDE OF EXISTING LOT.
- INSTALL NEW ELECTRICAL SERVICE REQUIRED FOR PROPOSED HYDROGEN FUELING EQUIPMENT.
- INSTALL NEW PAVING AND LANDSCAPING AS SHOWN IN PLANS.

VICINITY MAP

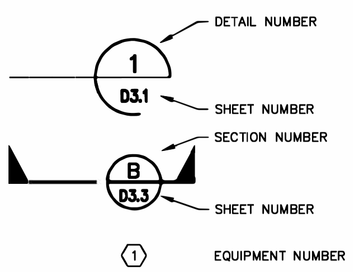


DRAWING INDEX

SHT. #	TITLE
CS	COVER SHEET
SP1	SITE PLAN
SP1.1	PRELIMINARY CROSS SECTIONS
SP1.2	EXISTING SITE PHOTOS
SP1.3	VEHICLE ACCESS PLAN
GP1	PRELIMINARY GRADING PLAN
UP1	PRELIMINARY UTILITY PLAN
L1	PRELIMINARY LANDSCAPE PLAN
SD1	H2 ENCLOSURE PERSPECTIVE
SD2	H2 ENCLOSURE ELEVATIONS
CA1.1	H2 CANOPY ELEVATIONS
E5.0	LIGHTING FIXTURE SCHEDULE AND PHOTOMETRICS CALCS

ATTACHMENT "C"

LEGEND



C1

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MARK	DATE	REVISIONS	INITIAL	MARK	DATE	REVISIONS	INITIAL
1		IS THE CURRENT DRAWING SET REVISION NUMBER					
2							
3							
4							
5	09/15/23	ISSUED FOR PLANNING REVIEW	CM				

Chevron

2413 A STREET
ANTIOCH, CA 94509
SERVICE STATION #356521

Stantec
Stantec Consulting Services Inc.
3300 Mining Ave, Suite 400
Bakersfield, CA 93309
TEL. 661.216.5170
www.stantec.com

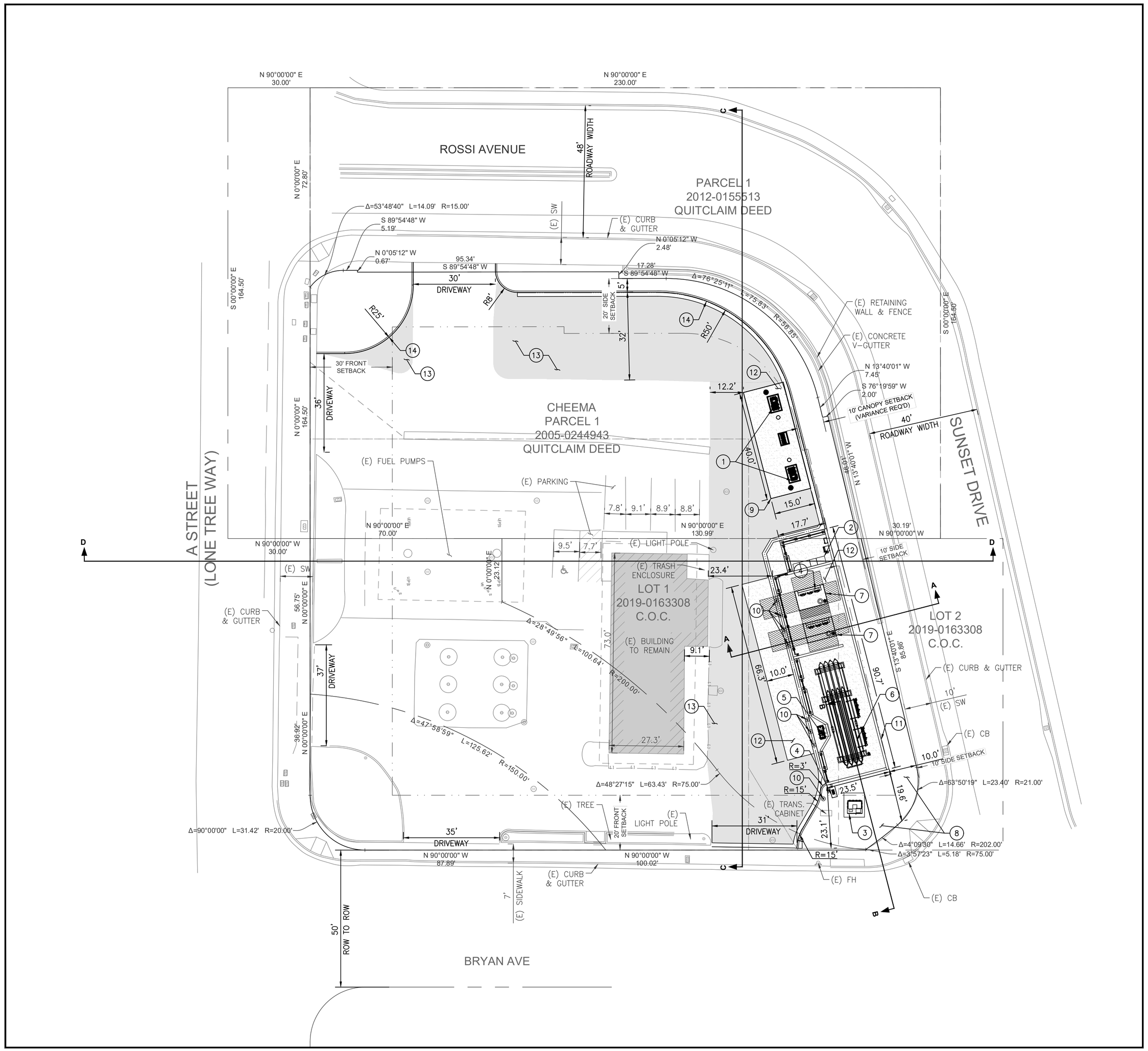
COVER SHEET

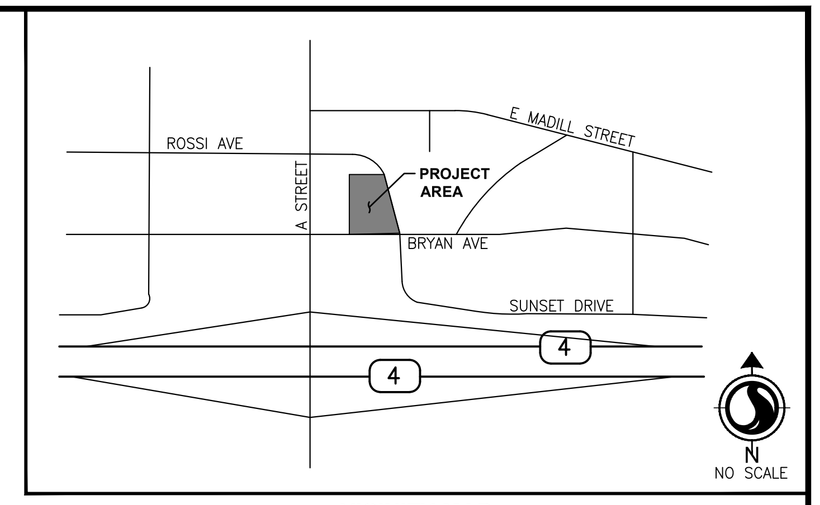
MILESTONES

PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	09/15/23	LGH
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SSI# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET
CS





VICINITY MAP

ABBREVIATIONS

CB	CATCH BASIN
CO	CLEAN OUT
CONC	CONCRETE
(E)	EXISTING
FH	FIRE HYDRANT
DG	DECOMPOSED GRANITE
(P)	PROPOSED
RET	RETAINING
ROW	RIGHT-OF-WAY
SS	SANITARY SEWER
SW	SIDEWALK
TRANS.	TRANSFORMER
WM	WATER METER

SITE CONSTRUCTION NOTES

1. PROPOSED H2 DISPENSERS
2. PROPOSED ELECTRICAL EQUIPMENT
3. PROPOSED TRANSFORMER
4. PROPOSED HMI
5. PROPOSED H2 OFFLOAD PANEL
6. PROPOSED GAS STORAGE
7. PROPOSED STATION MODULE
8. LANDSCAPE ADJUSTMENT AS NEEDED
9. PROPOSED CANOPY
10. PROPOSED BOLLARD
11. EXTENDED PAD FOOTING / CONC. RET. WALL
12. PROPOSED CONCRETE PAD
13. PROPOSED AC PAVEMENT
14. PROPOSED CURB OR CURB & GUTTER

CROSS-SECTIONS

SEE SHEET SP1.1

SITE INFORMATION

ZONING	C-2/R-6	
EXISTING BUILDING SIZE	2,188 SF (APPROX.)	5.2% OF LOT
POWER UTILITY PROVIDED	TBD	
LOT AREA	41,709 SF (0.96 AC.)	
FEMA FLOODZONE	06013C0143G: ZONE X, AREA OF MINIMAL FLOOD HAZARD	

IMPERVIOUS AND PERVIOUS AREA

	PERVIOUS	IMPERVIOUS
EXISTING	9,920 SF (24%)	31,790 SF (76%)
PROPOSED	6,052 SF (15%)	35,658 SF (85%)

FUEL DISPENSING

	GASOLINE	DIESEL	H2
EXISTING	8	2	0
PROPOSED	+0	+0	+2

PARKING

	REGULAR	ADA		
EXISTING	8	1		
PROPOSED	4	1		

HYDROGEN

HRI POTENTIAL	800 kG
H2 STORAGE CAPACITY	22.041 m^3, 778.37 ft^3
# OF STATION MODULES	2

N

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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⚠ IS THE CURRENT DRAWING SET REVISION NUMBER

MARK	DATE	REVISIONS	INITIAL	MARK	DATE	REVISIONS	INITIAL
A	09/15/23	ISSUED FOR PLANNING REVIEW	CC				

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2413 A STREET
ANTIOCH, CA 94509
SERVICE STATION #356521

Stantec
5500 MING AVE., SUITE 400
BAKERSFIELD, CA 93309
661.396.3770 stantec.com

PRELIMINARY SITE PLAN

MILESTONES	DATE	INITIALS
PROJECT PHASE		
ISSUED FOR PLANNING	9/15/23	–
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET: SP1

C2

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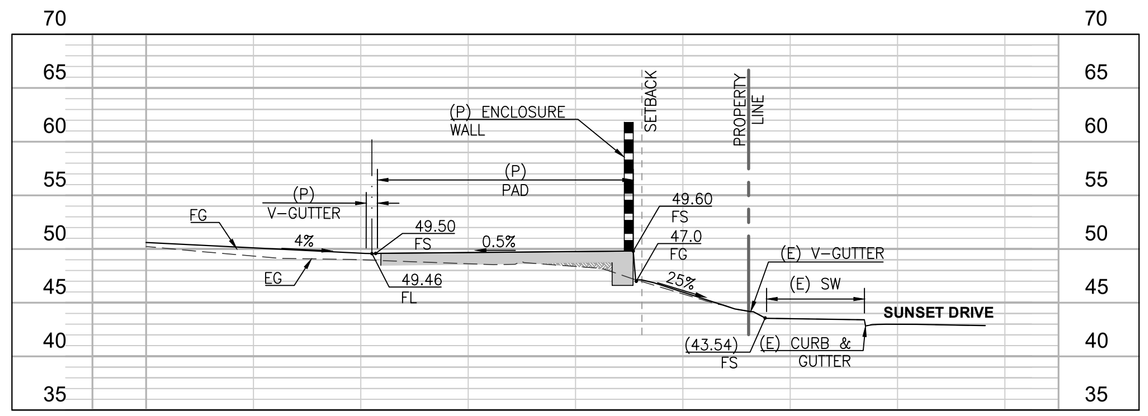
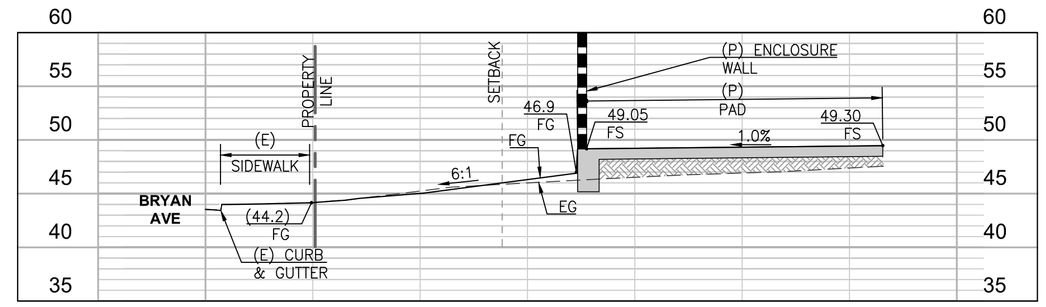
BY: Martinez, Chris



CROSS SECTION A-A

HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'

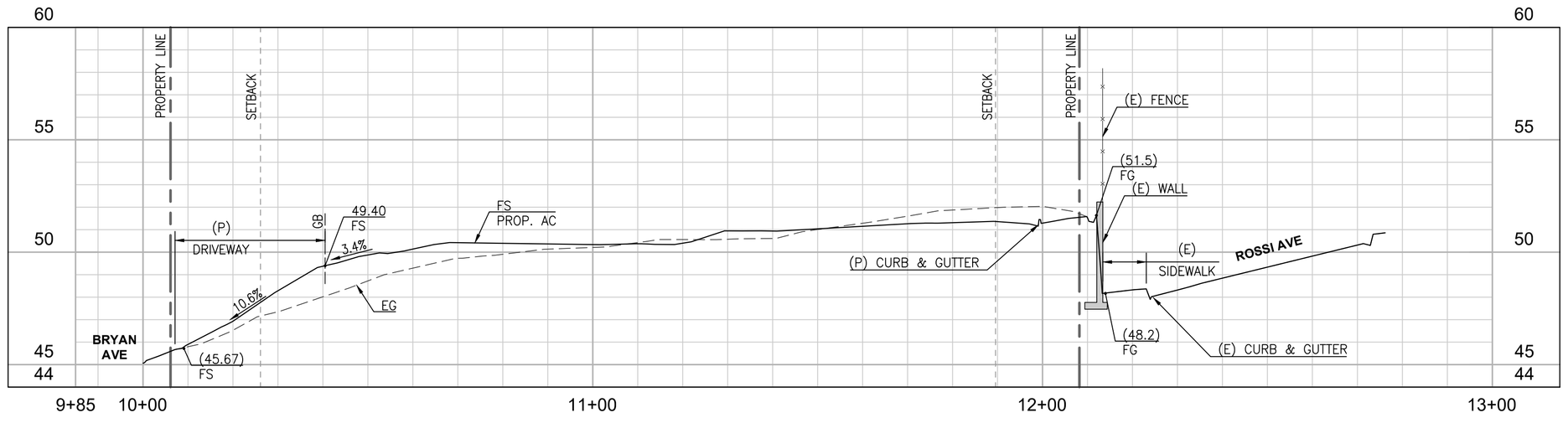
A-A
SP1.1



CROSS SECTION B-B

HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'

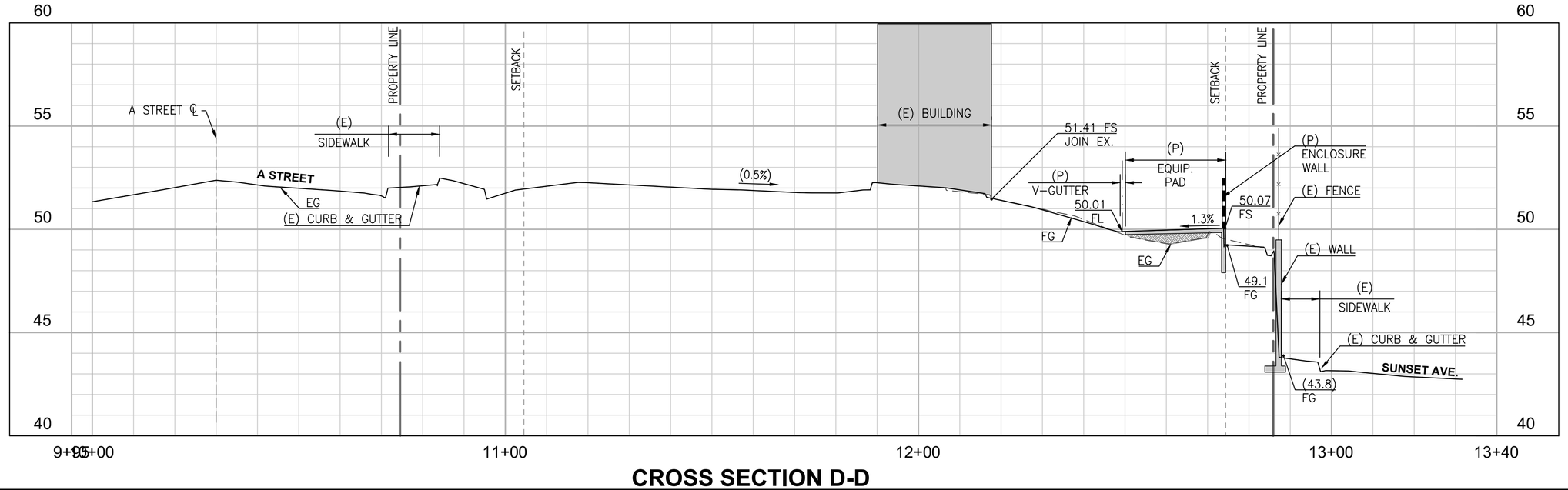
B-B
SP1.1



CROSS SECTION C-C

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=20'

C-C
SP1.1



CROSS SECTION D-D

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=20'

D-D
SP1.1

ABBREVIATIONS

CB	CATCH BASIN
CO	CLEAN OUT
(E)	EXISTING
EG	EXISTING GRADE
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FS	FINISHED SURFACE
DG	DECOMPOSED GRANITE
(P)	PROPOSED
ROW	RIGHT-OF-WAY
SS	SANITARY SEWER
SW	SIDEWALK
TRANS.	TRANSFORMER
WM	WATER METER

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PRELIMINARY CROSS SECTIONS

MILESTONES	DATE	INITIALS
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JOB# 2057297532
SCALE: AS NOTED

SHEET: SP1.1

C3

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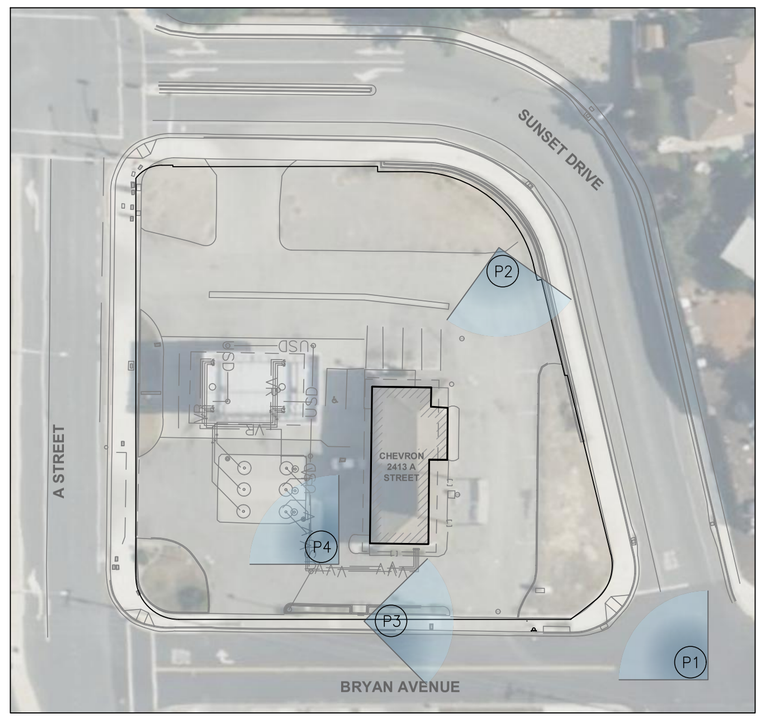
BY: Martinez, Dana

EX. LANDSCAPE SLOPE P1

EX. ASPHALT PAVEMENT P2



VICINITY MAP

EX. SOUTHEAST DRIVEWAY P3

EX. FUELING CANOPY P4

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EXISTING SITE PHOTOS

MILESTONES		
PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	9/15/23	–
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED
SHEET: SP1.2

C4

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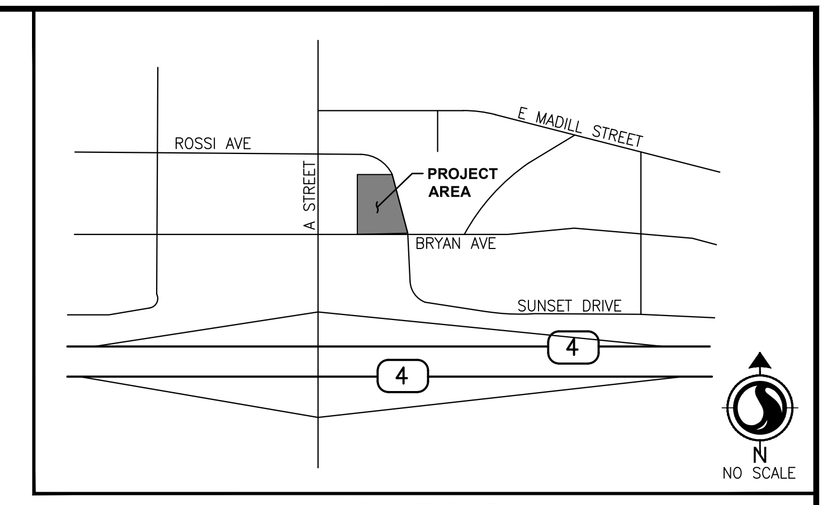
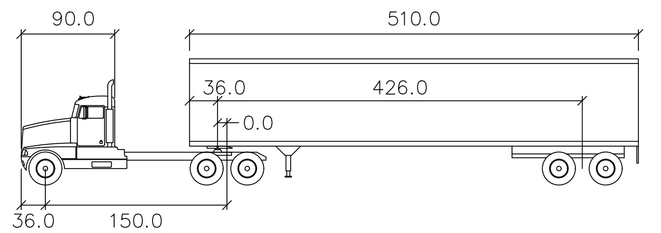
BY: Martinez, Chris



VICINITY MAP

LEGEND

- (P) WB-50 INTERMEDIATE SEMI-TRAILER
- (P) PASSENGER CAR



WB-50

inches

Tractor Width	: 96.0	Lock to Lock Time	: 6.0
Trailer Width	: 102.0	Steering Angle	: 17.8
Tractor Track	: 96.0	Articulating Angle	: 70.0
Trailer Track	: 102.0		

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VEHICLE ACCESS PLAN

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ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET: SP1.3

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

C5

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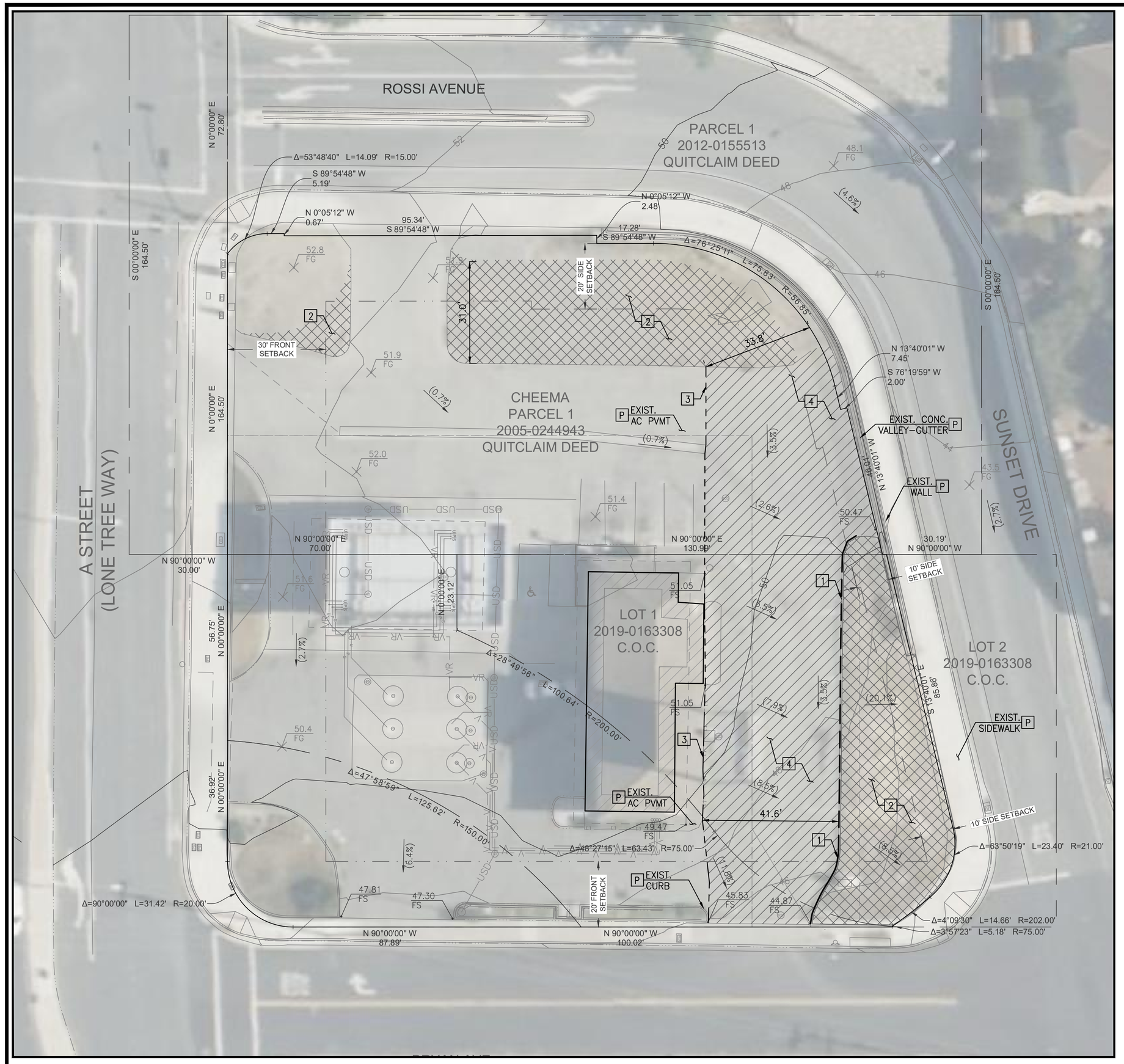
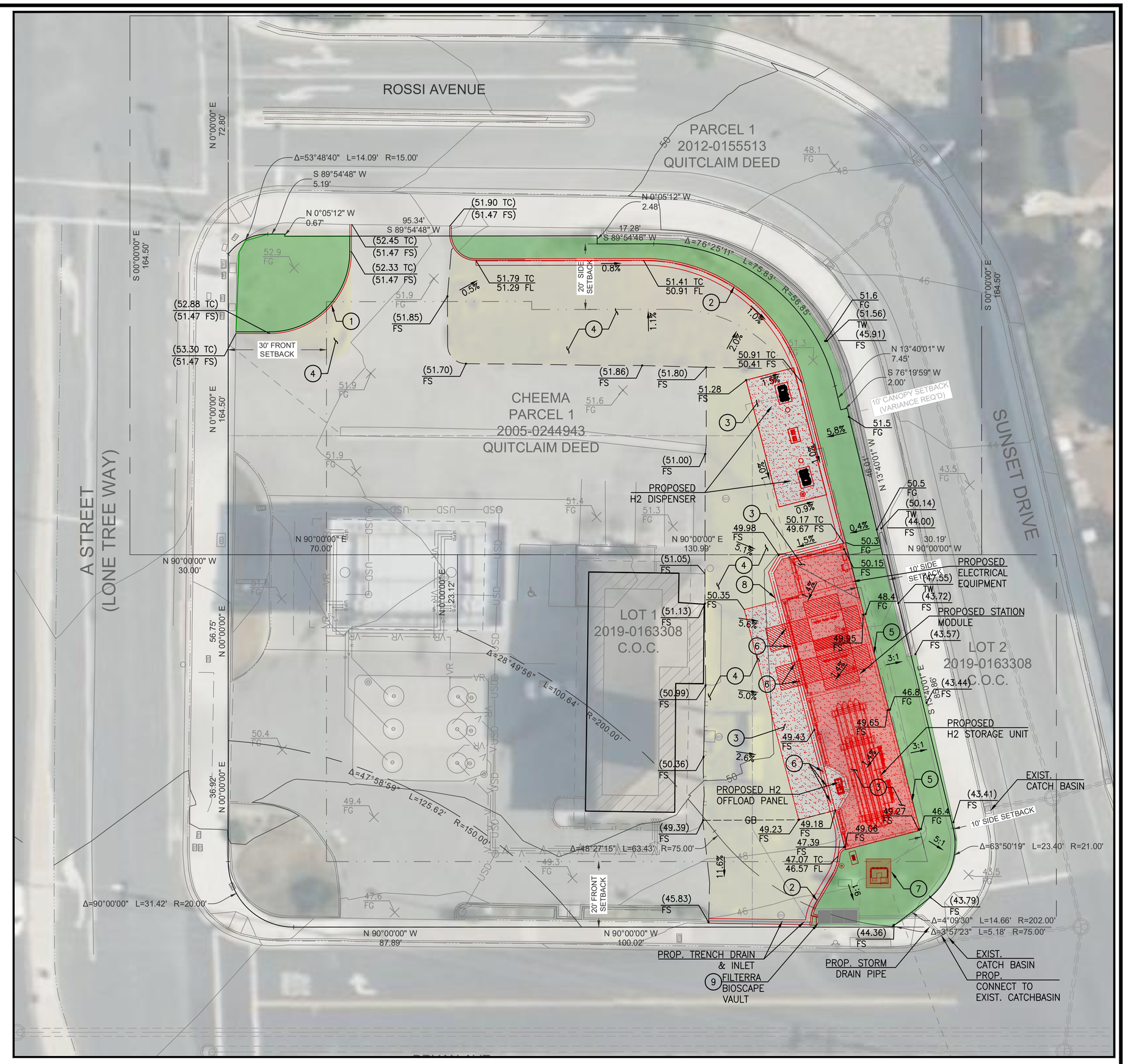
BY: Martinez, Chris



DEMOLITION PLAN

1"=20'



GRADING PLAN

1"=20'

LEGEND

- (X.XX FS) DESIGNED FINISHED SURFACE ELEVATIONS
- (X.XX TC) TOP OF CURB ELEVATION
- PLANT REMOVAL AND DEMOLITION AREA
- AC REMOVAL AND DEMOLITION AREA
- CURB REMOVAL
- CONCRETE PAVEMENT
- PROPOSED STRUCTURES
- ADJUST PLANTER AREA (AS NEEDED PER LANDSCAPE PLAN)
- PROPOSED WORK

DEMOLITION ITEMS

1. REMOVE EXISTING CURB
2. REMOVE EXISTING PLANTS/TREES/DG
3. SAWCUT EXISTING PAVEMENT
4. DEMOLISH EXISTING AC PAVEMENT

GRADING CONSTRUCTION ITEMS

1. CONSTRUCT CURB
2. CONSTRUCT CURB AND GUTTER
3. CONSTRUCT CONCRETE PAVEMENT SECTION
4. CONSTRUCT AC PAVEMENT SECTION
5. CONSTRUCT ENCLOSURE WALL
6. INSTALL BOLLARDS
7. CONSTRUCT PAD FOR TRANSFORMER
8. CONSTRUCT CONCRETE V-GUTTER
9. PROPOSED STORM DRAIN IMPROVEMENTS – SEE UTILITY SHEET

EARTHWORK

CUT: 60 CY
FILL: 240 CY

NET: 180 CY (FILL)

N

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

C6

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PRELIMINARY GRADING PLAN

MILESTONES	DATE	INITIALS
PROJECT PHASE		
ISSUED FOR PLANNING	9/15/23	–
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED
SHEET: GP1

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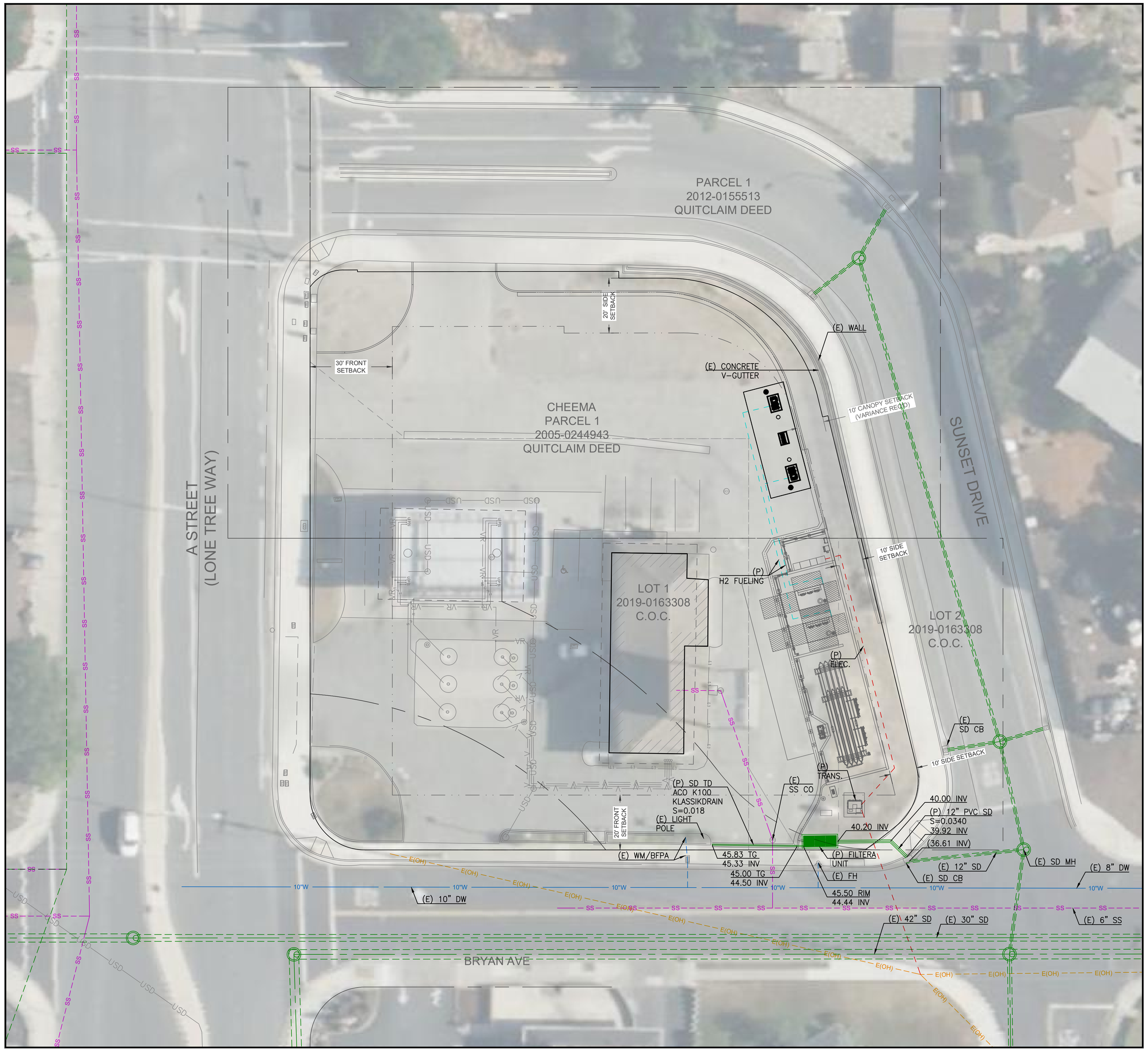

ABBREVIATIONS

BFPA	BACKFLOW PREVENTOR
CB	CATCH BASIN
CO	CLEAN OUT
DW	DOMESTIC WATER
(E)	EXISTING
FH	FIRE HYDRANT
INV	INVERT ELEVATION
MH	MANHOLE
MWS	MODULAR WETLANDS SYSTEM
(P)	PROPOSED
ROW	RIGHT-OF-WAY
SD	STORM DRAIN
SS	SANITARY SEWER
TG	TOP OF GRATE ELEVATION
TRANS.	TRANSFORMER
TD	TRENCH DRAIN
WM	WATER METER

LEGEND

- (E) DOMESTIC WATER
- SS (E) SANITARY SEWER
- (E) STORM DRAIN
- E(OH) (E) OVERHEAD ELECTRIC
- (P) STORM DRAIN
- (P) H2 FUELING LINE
- (P) UNDERGROUND ELECTRIC

N

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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PRELIMINARY UTILITY PLAN

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ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET: UP1

C7

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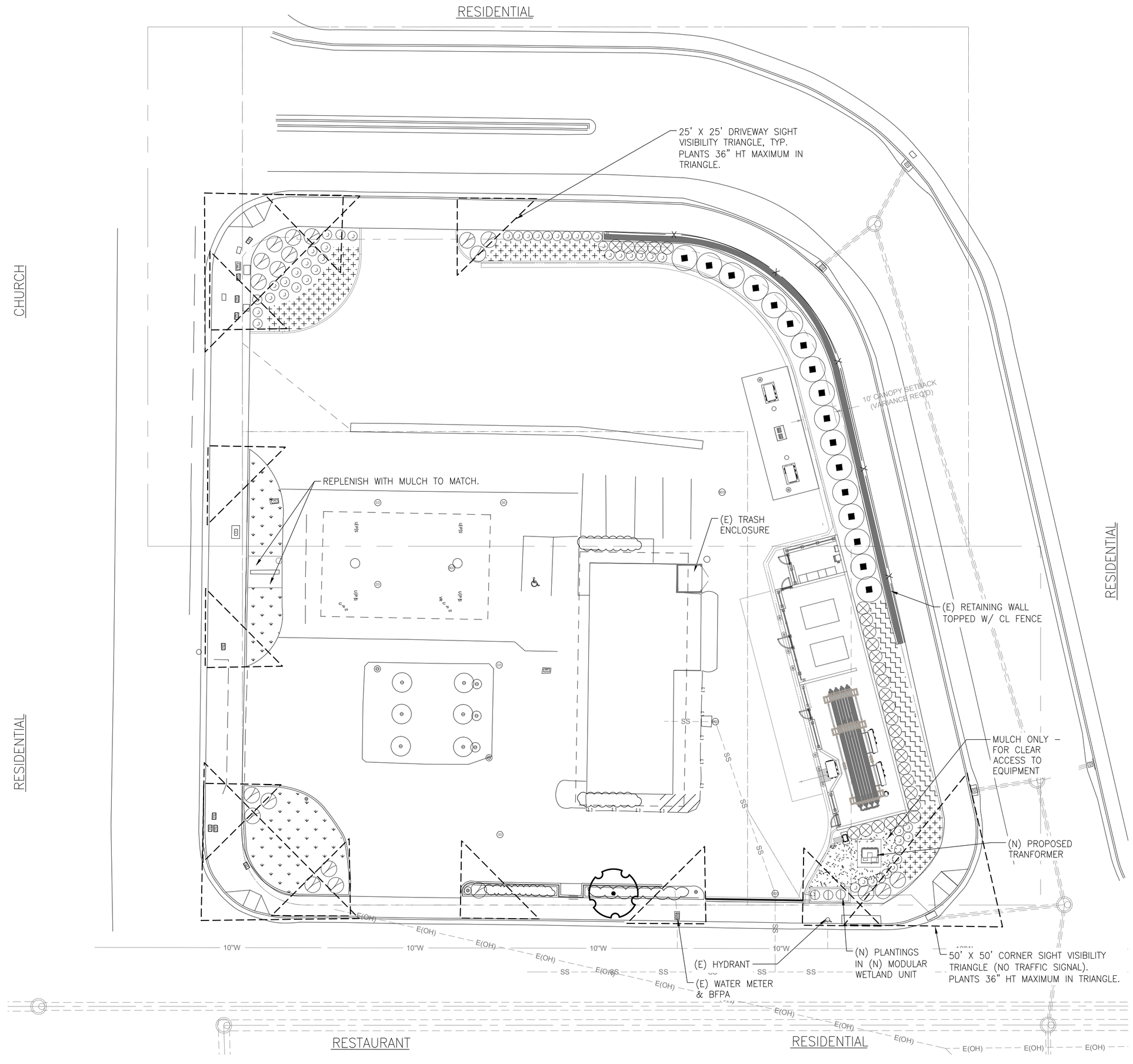


GOLD CONE JUNIPER

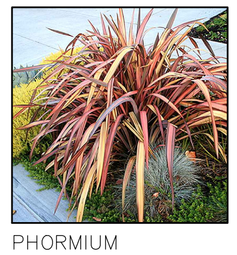
LAGERSTREMIA

ROSMARINUS

APTENIA (LAWN ALTERNATIVE)

CALLISTEMON

MYRICA CALIFORNICA



PHORMIUM

C8

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GENERAL NOTES

1. ALL NEW AND REPAIR PLANTING AREAS SHALL HAVE A 2" LAYER OF ORGANIC COMPOST ROTOTILLED TO A DEPTH OF 4" AND TOPDRESSED WITH A 3" (MINIMUM) DEEP LAYER OF MULCH – MATCH EXISTING SIZE AND COLOR.
2. REFER TO ARCHITECTURAL AND CIVIL PLANS FOR DESCRIPTIONS OF ELEMENTS NOT IDENTIFIED ON THIS PLAN.
3. OBSERVE THE FOLLOWING MINIMUM SETBACK DISTANCES FOR TREE PLANTING :

   BETWEEN STREET TREES = 30 FT.

   DRIVEWAY CUTS AND FIRE HYDRANTS = 7 FT.

   UTILITY BOXES, MANHOLE AND OTHER UTILITY VAULTS, TELEPHONE AND OTHER UTILITY POLES, GAS AND WATER METER, AND MAINS = 5 FT.
4. ALL SURFACE AND SUB–SURFACE SWALES, DRAINAGE STRUCTURES AND PATTERNS SHALL BE MAINTAINED.
5. A LICENSED LANDSCAPE MAINTENANCE CONTRACTOR WILL BE RETAINED TO PERFORM ROUTINE MAINTENANCE DUTIES.
6. LOCATIONS AND QUANTITIES OF EXISTING LANDSCAPE MATERIALS ARE APPROXIMATE.
7. PLANTER SOIL SHALL BE AMENDED AS DESCRIBED BY A LABORATORY SOIL ANALYSIS. ORGANIC COMPOST AND AMENDMENT TO BE USED.
8. LANDSCAPE CONSTRUCTION WASTE TO BE RECYCLED PER LOCAL CODES AND REQUIREMENTS.
9. NO PLANTS SELECTED REQUIRE SHEARING
10. OBTAIN ALL MATERIALS LOCALLY (WITHIN 50 MILES) AS POSSIBLE.

CITY REQUIREMENTS MET

- ☑ 3' CLEARANCE AT HYDRANTS
- ☑ NEW PLANTINGS ARE LOW WATER USE (DROUGHT TOLERANT)
- ☑ FULLY AUTOMATIC IRRIGATION PROVIDED.

MAXIMUM APPLIED WATER ALLOWANCE	PROJECT #: Antioch Chevron	
MAWA = (ETo) x (0.62) x [(0.45 x LA)+(0.55 x SLA)]		
ETo**	45.40	ETo (inches/year)
Enter total project Landscaped Area	4,820.00	LA (square feet)
Enter Special Landscaped Area	0.00	SLA (square feet)
RESULTS:		
	61,053	MAWA (gallons/year)
	81.62	MAWA (100 CF/year)

** Eto Values derived from Appendix A of the CA Model Water Efficient Landscape Ordinance, CA Dept. of Water

MAWA Maximum applied water allowance (gallons per year)
Eto Reference Evapotranspiration (inches per year)
0.45 ET Adjustment Factor (ETAF) per AB1881
LA Planted landscaped area including SLA and not including hardscapes. Also include surface area of water features not
0.62 Conversion Factor (to gallons per square foot)
SLA Portion of the Landscaped Area identified as Special Landscaped Area. Also include surface area of water features using recycled
0.55 The additional ET Adjustment Factor for SLA (1.0 - 0.45 = 0.55)

ESTIMATED TOTAL WATER USE	PROJECT: Antioch Chevron

ETWU = (ETo) x (0.62) x [(PF x HA)/IE + SLA]

Irrigation Efficiency	Value =
Bubblers	0.81
Laser Tube (Drip)	0.81
Rotary / Rotor	0.75
Spray	0.75

Plant Water Use Type	Plant Factor		
Low	0.10	0.20	0.30
Moderate	0.40	0.50	0.60
High	0.70	0.80	0.90
SLA	1.00		

MAWA= 61,053.01 Maximum Allowable Water Use
ETWU = 50,249 Estimated total water use per year
ETo = 45.40 Reference Evapotranspiration (inches per year)
PF = See Table at Left Plant Factor from WUCOLS* or equivalent reference
HA = See Table Below Hydrozone Area (square feet)
SLA = 0 Special Landscaped Area (square feet)
0.62 = Conversion Factor (to gallons per square foot)
IE = See Table at Left Irrigation Efficiency (minimum 0.75)

HYDROZONE TABLE

Hydrozone	Plant Water Use Type(s) (low, moderate, high)	Plant Factor (PF)	Irrigation Type	Hydrozone Area (HA) (sq ft)	PF x HA (sq ft)	ETWU 100 CF/ Year	ETWU Gallons / Year
1	Low	0.10	Bubblers	0	0	0.00	0
2	Low	0.30	Laser Tube (Drip)	4,820	1,446	67.18	50,249
3	Low	0.20	Rotary / Rotor	0	0	0.00	0
4	Moderate	0.50	Spray	0	0	0.00	0
5	High	0.80	Bubblers	0	0	0.00	0
6	High	0.80	Laser Tube (Drip)	0	0	0.00	0
7	High	0.80	Rotary / Rotor	0	0	0.00	0
8	High	0.90	Spray	0	0	0.00	0
	SLA	1			0		
		Sum		4,820	1,446	67.18	50,249

RESULTS				ETWU =	(ETo) x (0.62) x [(PF x HA)/IE + SLA]	100 CF/Year	Gal./year
MAWA =		61,053		ETWU =		67	50,249

ETWU must be less than or equal to MAWA ETWU complies with MAWA

PLANTING LEGEND

SYMBOL	SIZE	QTY.	MATURE HEIGHT	BOTANICAL NAME	WUCOLS* WATER RATING (* H, L, M HIGH, LOW, MODERATE)	COMMON NAME
TREES						
	-	1	25'	LAGERSTROEMIA INDICA 'NATCHEZ', STD	L	CRAPE MYRTLE
SHRUBS AND ORNAMENTAL GRASSES						
	5 GAL.	17	8'	MYRICA CALIFORNICA 'BUXIFOLIA'	L	PACIFIC WAX MYRTLE
	5 GAL.	20	3'	PHORMIUM 'JESTER'	L	NEW ZEALAND FLAX
	5 GAL.	28	6'	JUNIPERUS 'GOLD CONE'	L	GOLD CONE JUNIPER
	5 GAL.	47	3'	CALLISTEMON 'BETTER JOHN'	L	DWARF BOTTLEBRUSH
	5 GAL.	3	3' MAX	T.B.D. PLANTING FOR STORMWATER UNIT	L	-
GROUNDCOVERS						
	1 GAL. 36"O.C.	416 SF	12"	ROSMARINUS 'PROSTRATUS'	L	TRAILING ROSEMARY
	-	1,150 SF	-	(E) LAWN TO REMAIN	H	LAWN
	-	330 SF	-	(E) LANDSCAPE TO REMAIN	-	-
	1 GAL. 30"O.C.	775 SF	3"-4"	APTENIA CORDIFOLIA (LAWN ALTERNATIVE)	L	BABY SUN ROSE
SITE FEATURES - TYPICAL						
		97 S.F.	-	ONSITE REPAIR AREA - REMOVE WEEDS IN EXISTING PLANTER AND REPLENISH WITH GRAVEL TO TOP OF PLANTER CURB. GRAVEL TO MATCH EXISTING IN SIZE AND COLOR.		

NEW LANDSCAPE PLANTINGS: 4,820 S.F.
EXISTING TO REMAIN: 1,480 S.F.
TOTAL LANDSCAPE: 6,300 S.F.

WATER CONSERVATION CONCEPT

A COMBINATION OF SUB–SURFACE LOW FLOW DRIP, BUBBLERS, AND/OR LOW VOLUME HUNTER MP ROTATOR SPRAYS SHALL BE INSTALLED IN ALL NEW PLANTERS.

NEW PLANTS ARE GROUPED INTO "HYDROZONES" AND IRRIGATED SEPARATELY FROM THOSE WITH DIFFERENT WATER REQUIREMENTS.

NEW OR RETROFITTED IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A WEATHER TRACK CONTROLLER CAPABLE OF DUAL PROGRAMMING.

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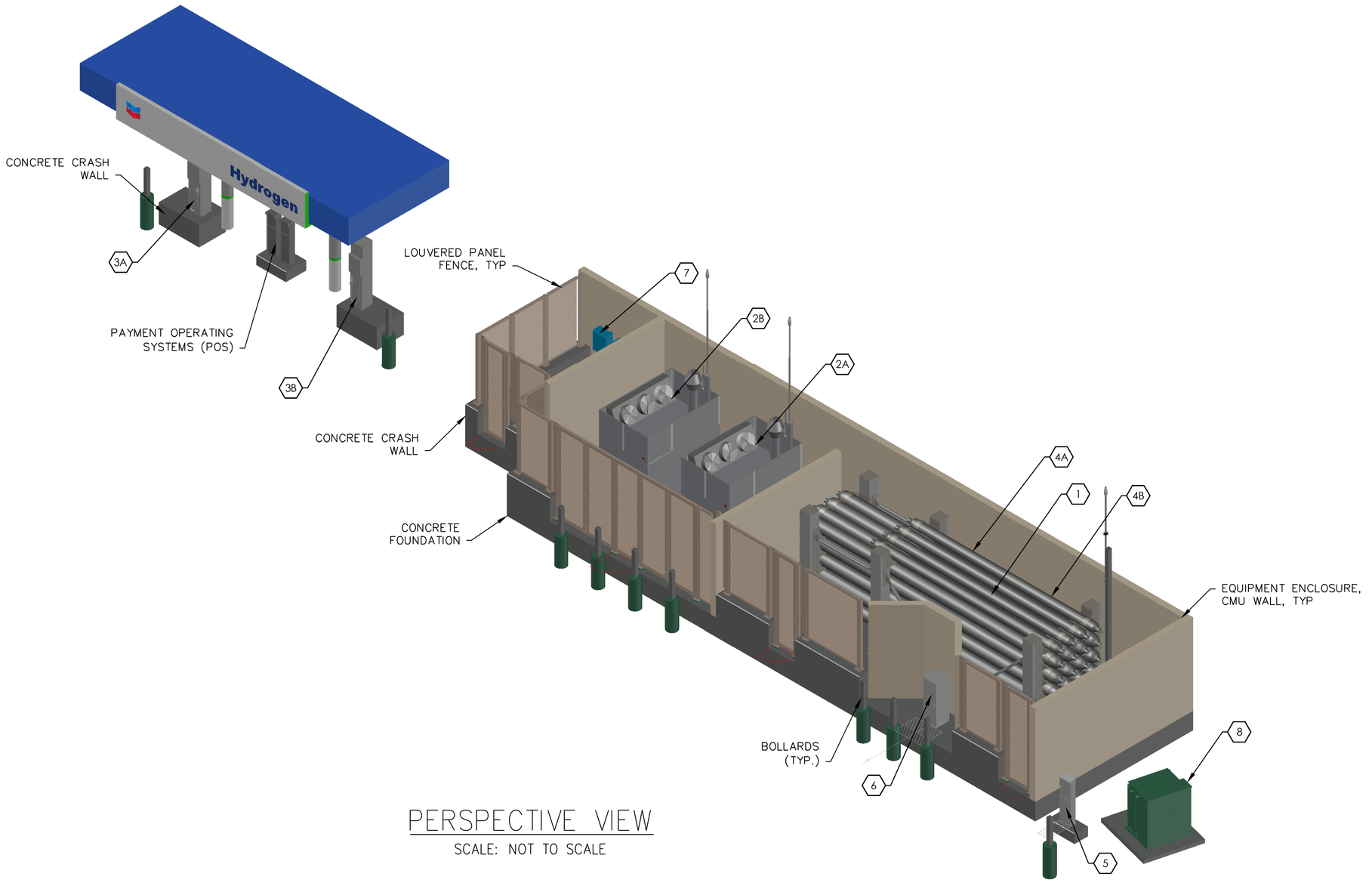
PRELIMINARY LANDSCAPE PLAN

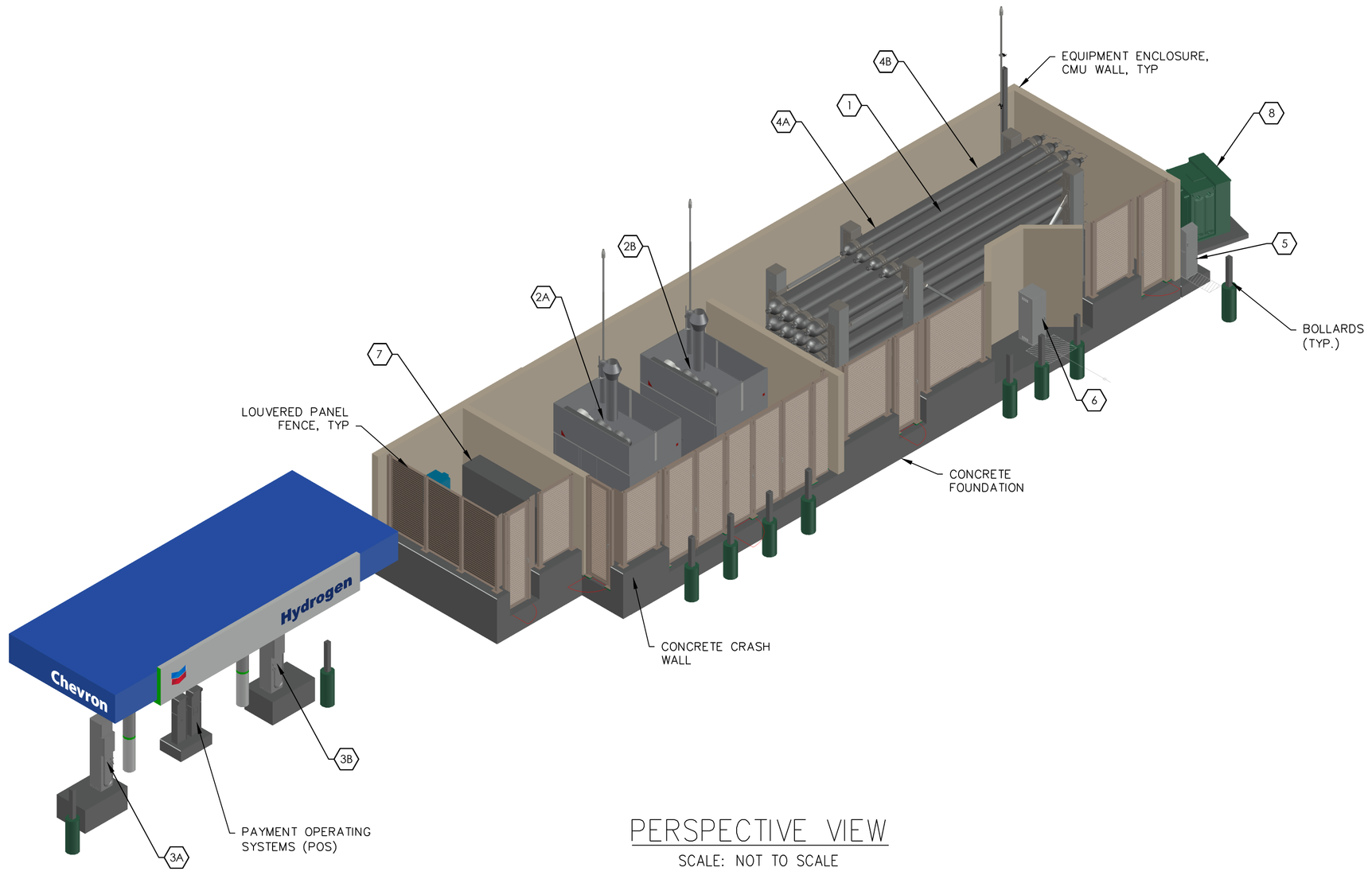
MILESTONES		
PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	9/15/23	JB
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521
JOB# 2057297532
SCALE: AS NOTED
SHEET: L1



PERSPECTIVE VIEW

SCALE: NOT TO SCALE



PERSPECTIVE VIEW

SCALE: NOT TO SCALE

H2 EQUIPMENT LIST

#	EQUIPMENT
1	H2 STORAGE
2A/2B	STATION MODULES
3A/3B	HYDROGEN DISPENSERS
4A/4B	STORAGE – VALVE PANEL
5	SUPPLY CABINET – HMI
6	SUPPLY CABINET – VALVE PANEL
7	ELECTRICAL EQUIPMENT PANELS
8	UTILITY TRANSFORMER

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1	09/15/23	ISSUED FOR PLANNING REVIEW	CC				

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2413 A STREET

ANTIOCH, CA 94509

SERVICE STATION #356521

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Bakersfield, CA 93309
TEL. 661.396.3770
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ENCLOSURE PERSPECTIVE

MILESTONES

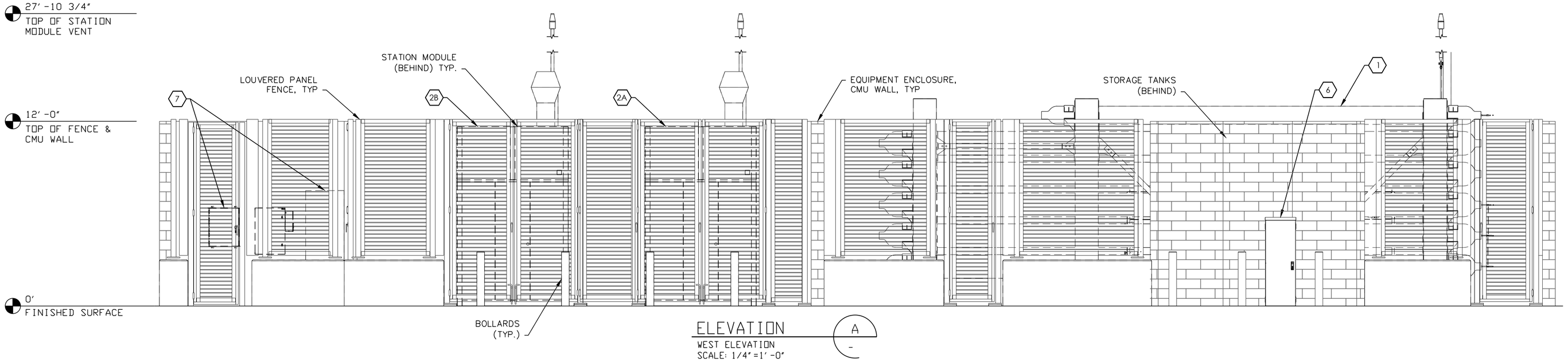
PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	09/15/23	LGH
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

SS# 356521

JOB# 2057297532

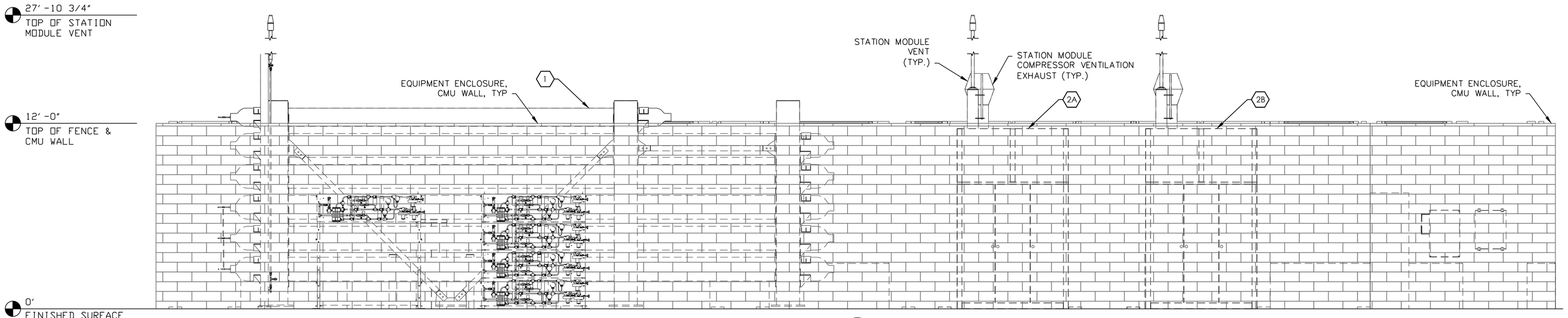
SCALE: AS NOTED

SHEET SD1



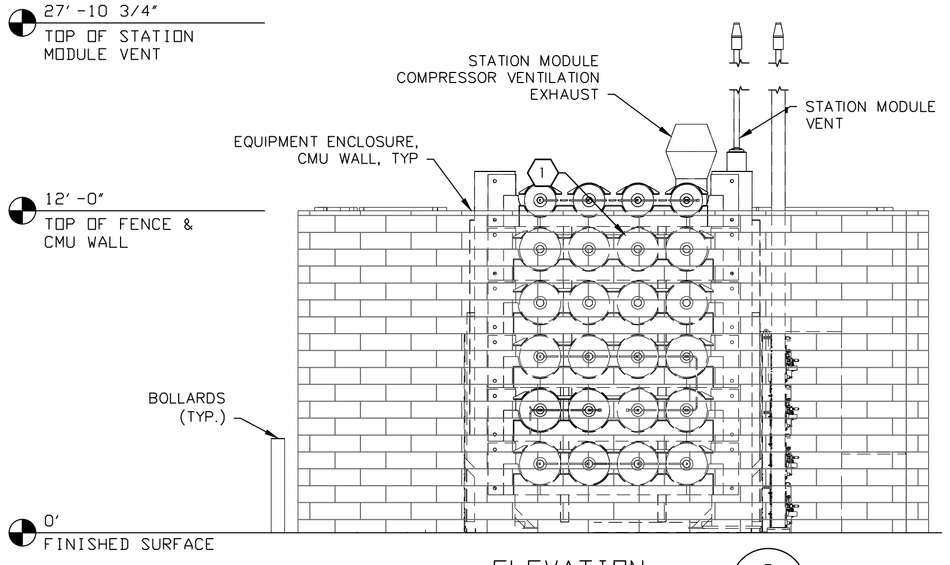
ELEVATION A

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



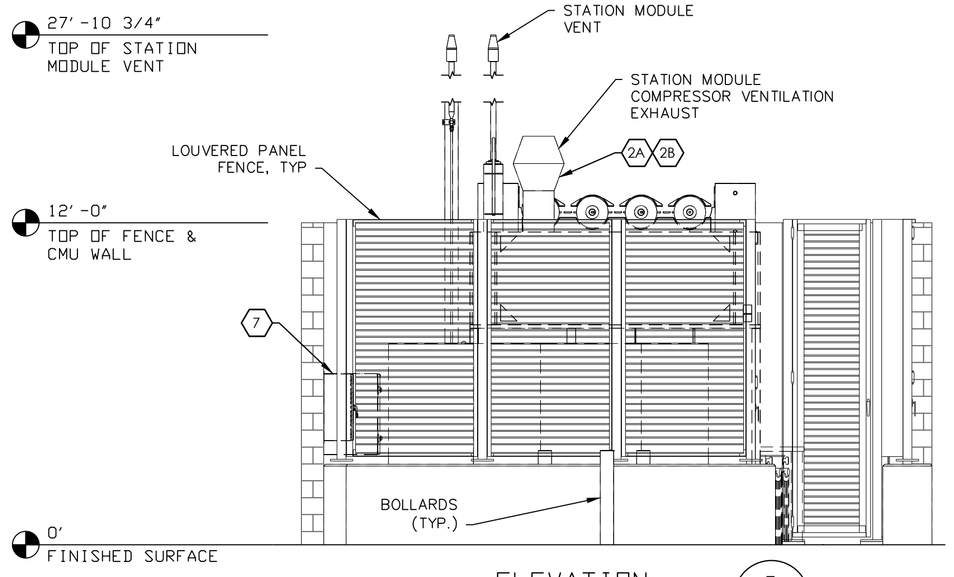
ELEVATION B

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



ELEVATION C

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



ELEVATION D

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

H2 EQUIPMENT LIST

#	EQUIPMENT
1	H2 STORAGE
2A/2B	STATION MODULES
3A/3B	HYDROGEN DISPENSERS
4A/4B	STORAGE – VALVE PANEL
5	SUPPLY CABINET – HMI
6	SUPPLY CABINET – VALVE PANEL
7	ELECTRICAL EQUIPMENT PANELS
8	UTILITY TRANSFORMER

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EQUIPMENT ELEVATIONS

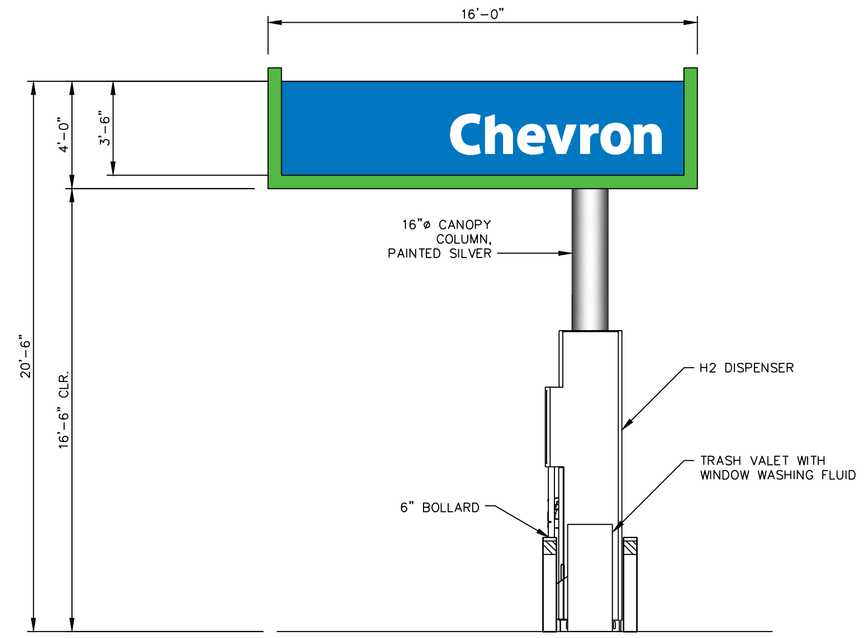
MILESTONES

PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	09/15/23	LGH
ISSUED FOR PERMIT	–	–
ISSUED FOR BID	–	–
ISSUED FOR CONSTRUCTION	–	–

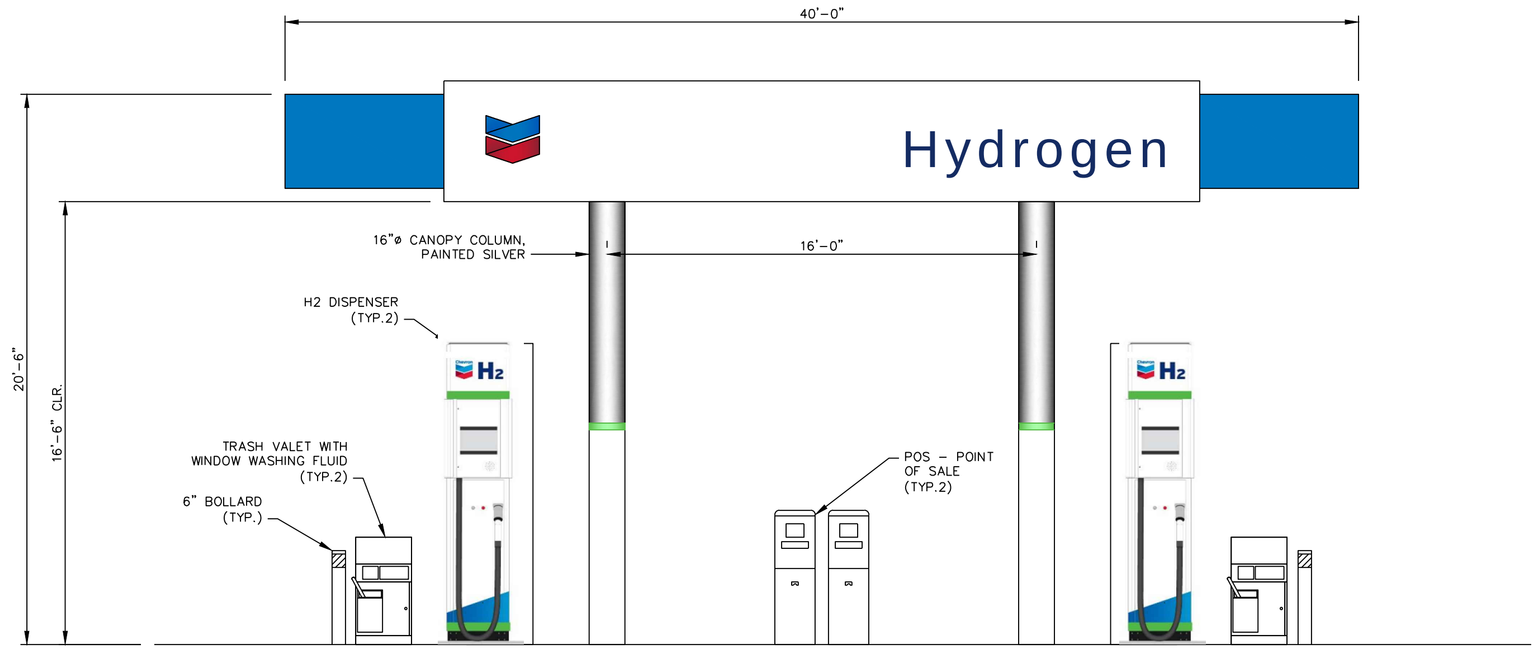
SS# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET
SD2

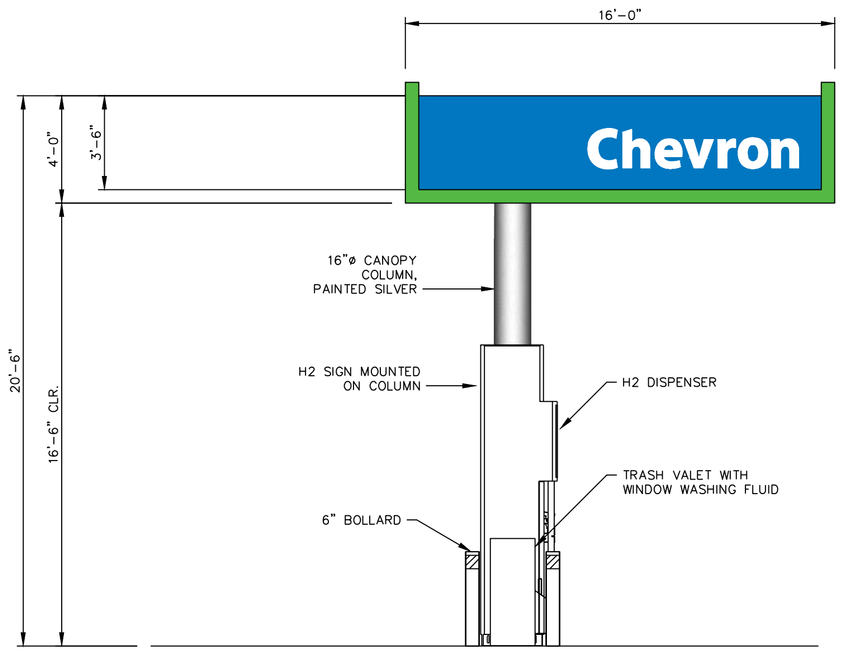
C10



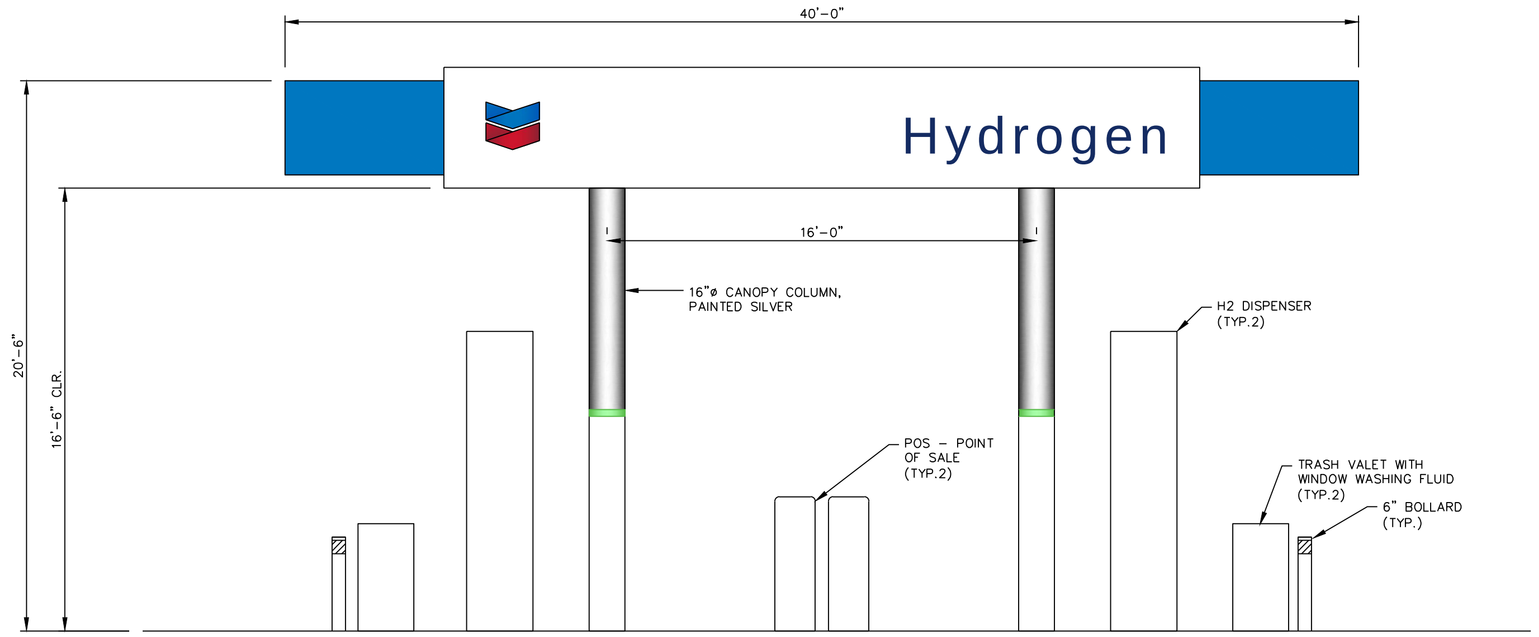
A SOUTH ELEVATION



B WEST ELEVATION



C NORTH ELEVATION



D EAST ELEVATION

1 H2 CANOPY ELEVATIONS

1/4" = 1'-0"

A H2 - DISPENSER

2 DISPENSERS

C11

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H2 CANOPY ELEVATIONS

MILESTONES

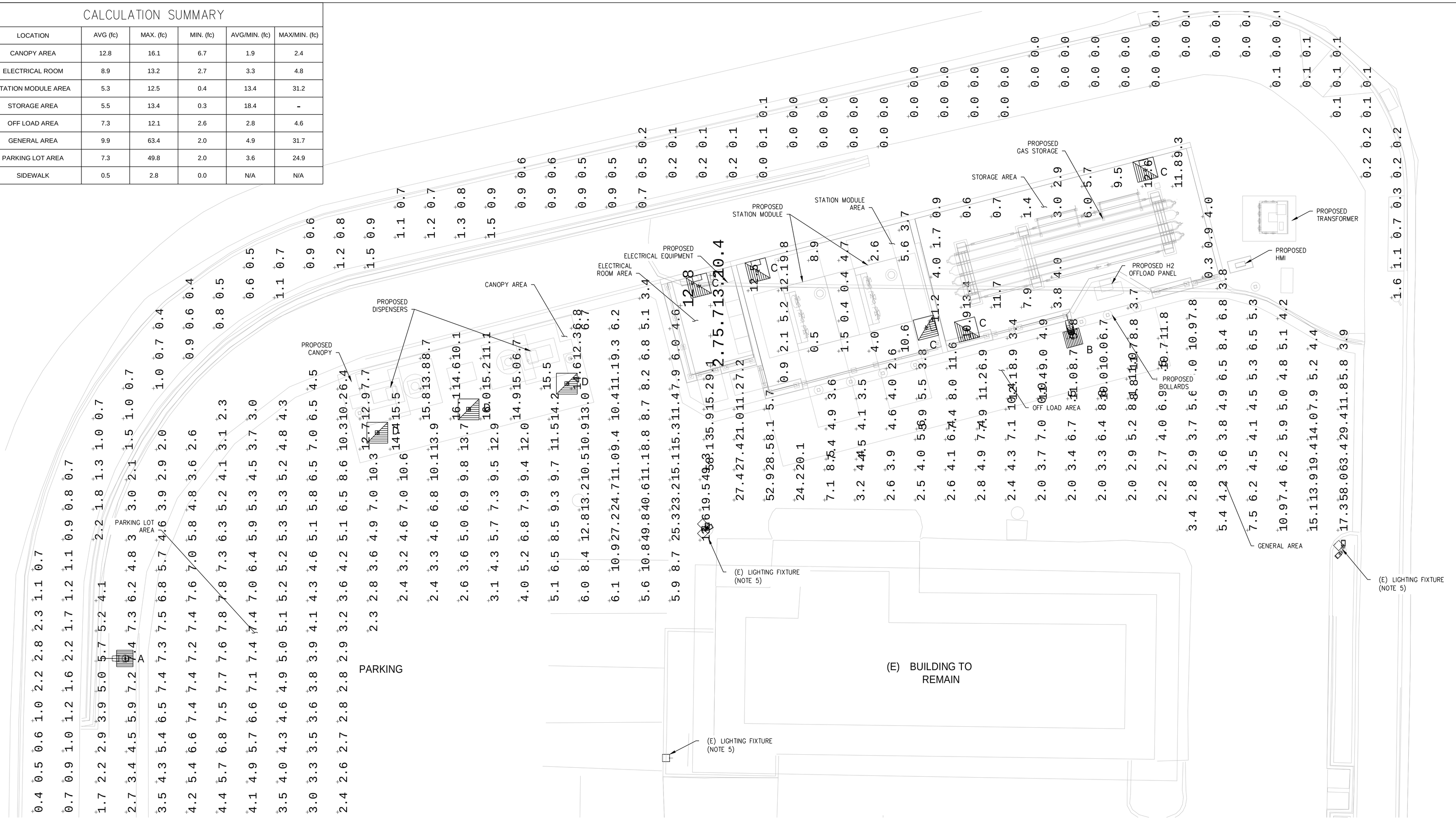
PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	09/15/23	LGH
ISSUED FOR PERMIT	--	--
ISSUED FOR BID	--	--
ISSUED FOR CONSTRUCTION	--	--

SS# 356521
JOB# 2057297532
SCALE: AS NOTED

SHEET
CA1.1

CALCULATION SUMMARY

LOCATION	AVG (fc)	MAX. (fc)	MIN. (fc)	AVG/MIN. (fc)	MAX/MIN. (fc)
CANOPY AREA	12.8	16.1	6.7	1.9	2.4
ELECTRICAL ROOM	8.9	13.2	2.7	3.3	4.8
STATION MODULE AREA	5.3	12.5	0.4	13.4	31.2
STORAGE AREA	5.5	13.4	0.3	18.4	-
OFF LOAD AREA	7.3	12.1	2.6	2.8	4.6
GENERAL AREA	9.9	63.4	2.0	4.9	31.7
PARKING LOT AREA	7.3	49.8	2.0	3.6	24.9
SIDEWALK	0.5	2.8	0.0	N/A	N/A



LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	WATTAGE	VOLT	MOUNTING	FINISH	FIXTURE DESCRIPTION	REMARKS
A	LSI INDUSTRIES INC	SLM_LED_24L_SIL_FT_UNV_DIM_50_70CRI_ALBCS1_GMG_IL	176	UNIVERSAL VOLTAGE (120-277V)	POLE	GUN-METAL GRAY (GMG) FINISH	CHEVRON STANDARD OUTDOOR LED AREA LIGHTING FIXTURE, LSI SLICE MEDIUM (SLM) POLE MOUNTED FIXTURE WITH RUGGED DIE-CAST ALUMINUM HOUSING, ONE PIECE SILICONE OPTIC SHEET WITH ZERO UPLIGHT, FORWARD THROW (FT) DISTRIBUTION, 5,000K CCT COLOR TEMPERATURE, AND 70 CRI. PROVIDE WITH CHEVRON STANDARD GUN-METAL GRAY (GMG) FINISH. 0-10V DIMMING (10% - 100%) DRIVER. PROVIDE WITH OPTIONAL INTEGRAL LOUVER (IL) AND HOUSE-SIDE SHIELD (IH) FOR IMPROVED BACKLIGHT CONTROL. UL LISTED FOR WET LOCATIONS, IP66 RATED, AND CA TITLE 24 COMPLIANT. PROVIDE WITH LSI AIRLINK BLUE MOTION AND PHOTO SENSOR MODULE (CAT NO. ALBCS1) AND AIRLINK BLUE CONTROL MODULE (CAT NO. ALBC).	NOTES 1 AND 2
B		SLM_LED_24L_SIL_2_UNV_DIM_50_70CRI_ALBCS1_GMG_IL	176	UNIVERSAL VOLTAGE (120-277V)	POLE	GUN-METAL GRAY (GMG) FINISH	CHEVRON STANDARD OUTDOOR LED AREA LIGHTING FIXTURE, LSI SLICE MEDIUM (SLM) POLE MOUNTED FIXTURE WITH RUGGED DIE-CAST ALUMINUM HOUSING, ONE PIECE SILICONE OPTIC SHEET WITH ZERO UPLIGHT, TYPE 2 DISTRIBUTION, 5,000K CCT COLOR TEMPERATURE, AND 70 CRI. PROVIDE WITH CHEVRON STANDARD GUN-METAL GRAY (GMG) FINISH. 0-10V DIMMING (10% - 100%) DRIVER. PROVIDE WITH OPTIONAL INTEGRAL LOUVER (IL) AND HOUSE-SIDE SHIELD (IH) FOR IMPROVED BACKLIGHT CONTROL. UL LISTED FOR WET LOCATIONS, IP66 RATED, AND CA TITLE 24 COMPLIANT. PROVIDE WITH LSI AIRLINK BLUE MOTION AND PHOTO SENSOR MODULE (CAT NO. ALBCS1) AND AIRLINK BLUE CONTROL MODULE (CAT NO. ALBC).	NOTES 1 AND 2
C		XPWS3_WT_LED_48_350_NW-UE_BRZ_IMS_HL	55	UNIVERSAL VOLTAGE (120-277V)	WALL SURFACE	BRONZE FINISH	LED PATRIOT WALL SCONCE (XPWS3) WALL SURFACE MOUNTED FIXTURE WITH OPTIONAL INTEGRAL MOTION SENSOR (IMS OPTION) AND MULTIPLE LEVEL LIGHT OUTPUT. ULTRA-HIGH EFFICIENCY REFLECTORS WITH WIDE THROW (WT) DISTRIBUTION. PROVIDE WITH ONE-PIECE DIE-CAST ALUMINUM HOUSING AND CLEAR TEMPERED OPTICAL-GRADE FLAT GLASS LENS. GALVANIZED-STEEL UNIVERSAL WALL MOUNTING PLATE WITH RPDM GASKET FOR WALL INSTALLATION. UL LISTED FOR WET LOCATION. PROVIDE OPTIONAL CLASS 1, DIVISION 2 (GROUPS A,B,C,& D) HAZARDOUS LOCATION RATING ("HL" OPTION).	NOTES 3 AND 4
D		SCM-DM-LED-08L-SC-UNV-DIM-50-WHT-HL	56	UNIVERSAL VOLTAGE (120-277V)	CEILING	WHITE	PETROLEUM CANOPY LED.	

NOTES:
1.- PROVIDE 18' TALL 4"X4" SQUARE STRAIGHT STEEL POLE WITH CHEVRON STANDARD GUN-METAL GRAY (GMG) FINISH, LSI CAT NO. 4SQ_B3_S11G_18'_S_GMG_BLK.
2.- SEE DETAILS SHEET FOR POLE BASE AND POLE MOUNTED FIXTURE DETAIL.
3.- CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTION TO ENSURE THE APPROVED CLASSIFIED HAZARDOUS APPLICATION.
4.- PROVIDE ALL REQUIRED MOUNTING ACCESSORIES FOR WALL SURFACE MOUNT INSTALLATION.
5.- LIGHTING CONTRIBUTION FROM EXISTING FIXTURES WAS CONSIDERED ON PHOTOMETRIC CALC, SIMILAR LED LIGHTING FIXTURES WERE USED, (LIGHTING FIXTURES CHARACTERISTICS NEED TO BE CONFIRMED) .

C12

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ANTIOCH, CA 94509
SERVICE STATION #356521

Stantec

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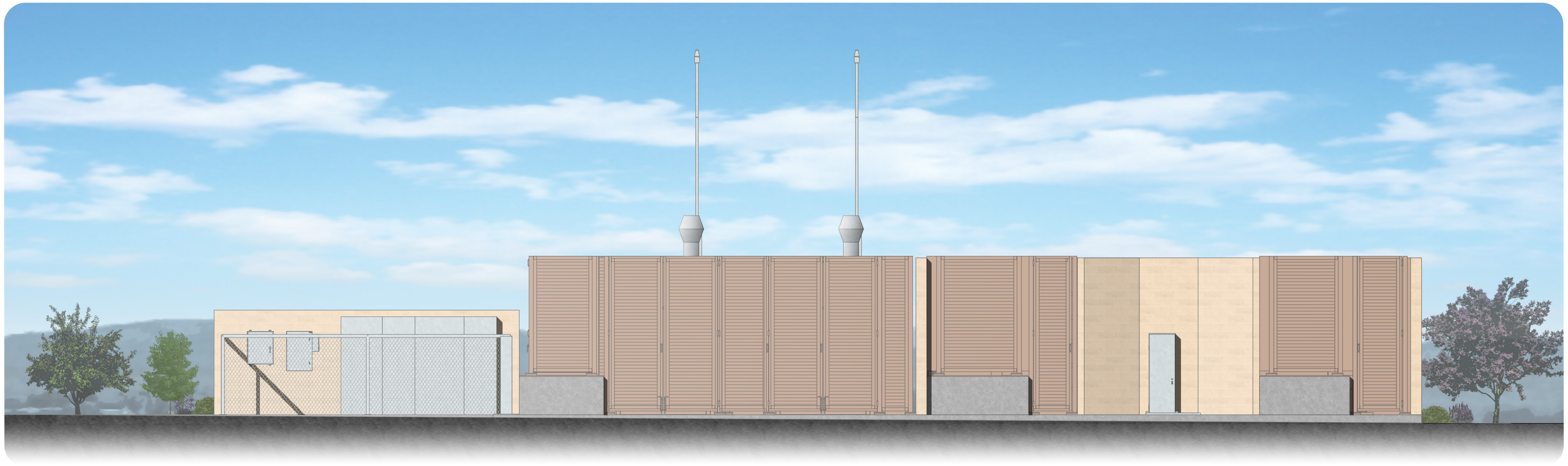
LIGHTING FIXTURE SCHEDULE AND PHOTOMETRICS CALCS

MILESTONES

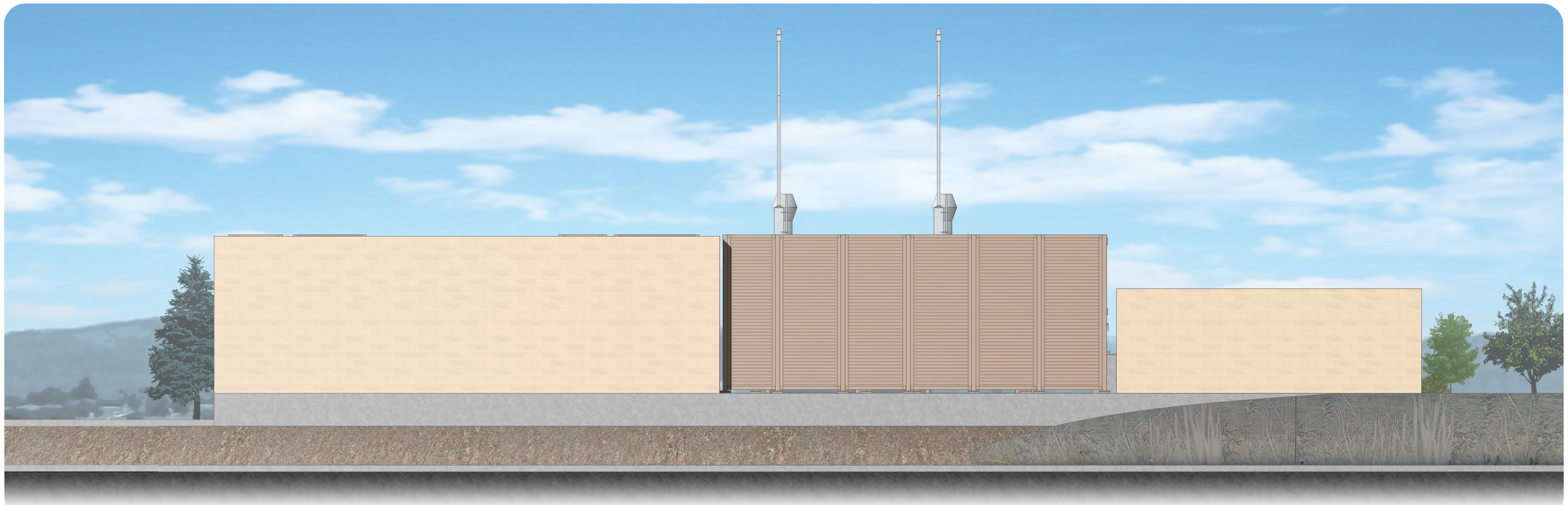
PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	9/15/23	JME
ISSUED FOR PERMIT	–	–
ISSUED FOR BID		
ISSUED FOR CONSTRUCTION	–	–

SS#: 356521
JOB#: 2057297532
SCALE: AS NOTED

SHEET
E5.0



West Elevation



East Elevation

Color Legend:

Jones Blair #A4W-D80069
"Cafe Au Lait"

Jones Blair #A4W-D80070
"Nutmeg"

Design Visualization
Version 7-17-23

ATTACHMENT "D"

Chevron

D1

Chevron
SS#356521
2413 A Street
Antioch, CA

Stantec

ATTACHMENT "E"

CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT

4005 PORT CHICAGO HWY, STE 250, CONCORD, CA 94520 • (925) 941-3300 • CCCFPD.ORG

November 14, 2023

Ms. Zoe Merideth
Planning
City of Antioch

Subject: Chevron Hydrogen Fueling Station
2413 A Street, Antioch

CCCFPD Project No.: P-2023-004831

Dear Ms. Merideth:

We have reviewed the design review application to establish a new Hydrogen fueling station at existing Chevron service station including H2 storage and compression compound, offload panel and two (2) hydrogen dispensers at the subject location. The following is required for Fire District approval in accordance with the 2022 California Fire Code (CFC), the 2022 California Building Code (CBC), the 2022 California Residential Code (CRC), and Local and County Ordinances and adopted standards:

1. Access as shown on plans complies with Fire District requirements.

   Provide emergency apparatus access roadways with all-weather (paved) driving surfaces of not less than 20-feet unobstructed width, and not less than 13 feet 6 inches of vertical clearance, to within 150 feet of travel distance to all portions of the exterior walls of every building. Access shall have a minimum outside turning radius of 45 feet, and must be capable of supporting the imposed fire apparatus loading of 37 tons. (503) CFC

2. Access roadways of **less than 28-feet** unobstructed width shall have signs posted or curbs painted red with the words: ***NO PARKING – FIRE LANE*** clearly marked. (22500.1) CVC, (503.3) CFC

   Access roadways of **28 feet or greater, but less than 36-feet** unobstructed width shall have ***NO PARKING – FIRE LANE*** signs posted, allowing for parking on one side only or curbs painted red with the words ***NO PARKING – FIRE LANE*** clearly marked. (22500.1) CVC, (503.3) CFC

3. The developer shall provide an adequate and reliable water supply for fire protection as set forth in the California Fire Code. (507.1) CFC

4. The Hydrogen storage, offload panel, and dispenser shall meet all requirements of California Fire Code including Chapter 23 (Motor Fuel-Dispensing Facilities), Chapter 55 (Cryogenic), and Chapter 58 (Flammable Gases).

5. Additionally, the project shall meet requirements of Chapter 50 (Hazardous Materials) and corresponding requirements in CCCFPD Ordinance 2022-34 (5001.5.3 and 5003.9.1.2)

6. A land development permit is required for access and water supply review and approval prior to submitting building construction plans.

   The developer shall submit a minimum of two (2) copies of full size, scaled site improvement plans indicating:

   All existing or proposed hydrant locations,
   Fire apparatus access to include slope and road surface
   Aerial fire apparatus access,
   Elevations of building,
   Size of building and type of construction,
   Gates, fences, retaining walls, bio-retention basins, any obstructions to access.
   Detail showing the lowest level of fire department vehicle access and the floor level of the highest occupied floor,
   Striping and signage plan to include "NO PARKING-FIRE LANE" markings

   This is a separate submittal from the building construction plans. These plans shall be approved prior to submitting building plans for review. (501.3) CFC

7. ***Emergency apparatus access roadway and hydrant shall be installed, in service, and inspected by the Fire District prior to construction or combustible storage on site.*** (501.4) CFC

   Note: A temporary aggregate base or asphalt grindings roadway is not considered an all-weather surface for emergency apparatus access. The first lift of asphalt concrete paving shall be installed as the minimum roadway material and must be engineered to support the designated gross vehicle weight of 37 tons.

8. Flammable or combustible liquid storage tanks shall ***not*** be located on the site without obtaining approval and necessary permits from the Fire District. (3401.4) CFC

9. The owner shall cut down and remove all weeds, grass, vines, or other growth that is capable of being ignited and endangering property. (304.1.2) CFC

10. The developer shall submit a minimum of two (2) complete sets of building construction plans and specifications for the subject project to the Fire District. After the new construction plans are approved, plans and specifications for all deferred submittals which may include the following.

    - Fire alarm
    - Energy systems
    - Emergency generator if required
    - Aboveground/underground flammable/combustible liquid storage tanks
    - Special suppression systems

    Plans shall be submitted to the Fire District for review and approval ***prior to*** construction of the building or installation of the systems to ensure compliance with minimum requirements related to fire and life safety. Plan review and inspection fees shall be submitted at the time of plan review submittal. (105.4.1) CFC, (901.2) CFC, (107) CBC

CONTACT THE FIRE DISTRICT (MINIMUM 2 WORKING DAYS IN ADVANCE) AT 925-941-3300 EXT 3902 TO SCHEDULE AN INSPECTION OF THE ACCESS AND HYDRANT INSTALLATION PRIOR TO CONSTRUCTION OR THE STORAGE OF COMBUSTIBLE MATERIALS ON THE JOB SITE.

4005 Port Chicago Hwy, Ste. 250 | Concord, CA 94520 | Phone: 925-941-3300 | Fax: 925-3309 | www.cccfpd.org

Our preliminary review comments shall not be construed to encompass the complete project. Additional plans and specifications may be required after further review.

If you have any questions regarding this matter, please contact this office at (925) 941-3300.

Sincerely,

Michael Cameron
Fire Inspector

File: 2413 A STREET-PLN-P-2023-004831

4005 Port Chicago Hwy, Ste. 250 | Concord, CA 94520 | Phone: 925-941-3300 | Fax: 925-3309 | www.cccfpd.org

E3