

PLANNING COMMISSION STAFF REPORT



Mahogany Carwash

September 7, 2022

2410 Mahogany Way/APN: 074-370-024
UP-21-13, AR-21-12



Quick Facts

Applicant: Hardeep Sidhu

Zoning: C-3
(Service/Regional
Commercial District)

GP Land Use:

Land Area: 0.81 Acres

Prop. Building Area: 3,628
square feet

Project Description

The applicant is seeking Use Permit, and Design Review approval for a new automated car wash at 2410 Mahogany Way. The subject site is 0.81 acres and partially developed with a parking lot and building pad. The site was previously a restaurant use. The building was demolished in 2019. The project scope includes construction of an automated 3,628 sq. ft. car wash, with development of the parking lot to include vacuum stalls. The building will be comprised of painted stucco in, "Mindful Gray" color, "sealskin" trim, brick veneer, and a prefab metal roof. Hours of operation are proposed to be 7 AM to 9 PM, 7 days a week. There will be 2 shifts and 2 employees per shift during business hours.

Requested Approvals

USE PERMIT & DESIGN REVIEW FOR A NEW CARWASH

STAFF RECOMMENDATION: APPROVE

Project Planner: JOSE CORTEZ

BACKGROUND

Subject Site

The subject site is 0.81 acres in size, and is bounded by Mahogany Way to the north, Auto Center Drive to the West, and Highway 4 to the south. The site was previously developed as a restaurant (KFC) with drive-through and parking lot. The restaurant sustained a fire and was demolished in 2019. The building foundation and parking remain on-site. Surrounding land uses include a commercial center (Lowe's) to the north, restaurants to the east and west, and Highway 4 to the south.



Site History

The site has been previously developed as a restaurant. The restaurant was built in 1978 and functioned as a restaurant (KFC) until it was demolished in 2019 due to a fire which rendered the building unusable. Prior to being demolished, the restaurant was remodeled in 2005 and 2017. The site has not received any other entitlements and has remained vacant since 2019.

Project Timeline

- Project Submitted to City: July 14, 2021
- Project Deemed Complete: January 14, 2022
- Revised Plans with Elective Changes Submitted: July 11, 2022
- Planning Commission Consideration: September 7, 2022



Image 1. Existing Site

Analysis

Overview

The applicant is seeking Use Permit and Design Review approval for a new 3,628 square foot automatic carwash at 2410 Mahogany Way. The business' proposed hours of operation are 7 AM to 9 PM, seven days a week. The applicant proposes two shifts with a maximum of two employees per shift during business hours. Additional project components include site landscaping, vacuum stalls, one dog wash station located by vacuum stalls closest to the building, and a trash enclosure.

General Plan, Zoning, and Land Use

The General Plan designation is designation of the site Western Antioch Commercial Focus Area: Regional Commercial. The zoning of the site is C-3 (Service/Regional Commercial District) which allows for retail and service commercial uses of a regional nature, including those in and adjacent to large centers with one or more full-time department stores. A carwash is allowed on site subject to Use Permit and Design Review approval the Planning Commission.

Comparison of Adjacent Properties			
Vicinity	GP Land Use	Zoning	Current Use
North	Regional Commercial	C-3 (Service/Regional Commercial District)	Commercial Center
South	N/A	N/A	Freeway
East	Regional Commercial	C-3 (Service/Regional Commercial District)	Restaurant
West	Regional Commercial	C-3 (Service/Regional Commercial District)	Restaurant

Site Plan, Circulation, and Parking

The proposed project includes a 3,628 square foot carwash. In addition to the building, the applicant proposes to improve the site with updated landscaping, parking, and canopy installation covering on-site parking.

Two driveways are located on Mahogany Way to serve the site, one for entering and one for exiting the site. Customers will enter the site through the western driveway, then proceed south on the site into the carwash queue where the cars will be led north, exit the carwash and have the option to exit the carwash via the eastern driveway onto Mahogany Way, or park in the vacuum stalls.

Antioch Municipal Code (AMC) § 9-5.1703.1 establishes an off-street parking requirement of seven (7) on-site parking spaces outside of the washing area for fully automated automobile washing. The applicant is proposing twenty-four (24) off-street parking spaces as part of the project. The project also provides sufficient parking for each employee on the largest shift, The applicant states there will be 2 shifts and 2 employees per shift during business hours.

Automobile washing:	
Fully automated	7 spaces outside washing area
Coin-operated	1 queuing space per bay

Image 2. Parking Requirements pursuant to Section 9-5.1703.1

Architecture

Pursuant to Section 9-5.2607 of the Antioch Municipal Code (AMC), all new development within the City is subject to Design Review approval. The purpose of the Design Review process is to promote the orderly development of the City, encourage high quality site design and planning, protect the stability of land values and investments, and ensure consistency with the Citywide Design Guidelines.

The building design includes of painted stucco in, "Mindful Gray" color, "sealskin" trim, brick veneer, wood paneling, and a prefab metal roof. The proposed building adequately avoids blank facades by breaking up the walls with different materials and altering the depth of the walls, in addition to the awnings. Tower elements, and varying roof heights aide in creating varied rooflines as required by the Citywide Design Guidelines. Furthermore, the proposed trash enclosure is constructed of masonry walls with heavy metal doors as required by the guidelines. In general, the project complied with the Citywide Design Guidelines and staff is satisfied with the proposed design of the project.

Signage and Landscaping

Business signage is not proposed as part of this application. Conceptual sign locations are shown on the elevations in the preliminary plans. An operator has not been selected for the carwash. Once an operator is selected, signage will be reviewed as a separate submittal to the Planning Division.

The conceptual landscaping plan includes landscaping for the project frontage and the internal site. Chinese Pistache are the focal point along the front property line. Additionally, a mix of brush and ground cover including Dwarf Coyote Brush, Purple Trailing Lantana, Dwarf Bottlebrush, Fortnight Lily, and other plantings are proposed for the front. The applicant proposes to continue the same plant pallette of perimeter shrubs, and ground covers for the remainder of the site. The applicant proposes to plant Chinese Pistache, and Western Redbud as the larger plantings for the rear of the site. The proposed plant pallet will offer a variety of contrasting colors.

Environmental Analysis

This proposed project is Categorically Exempt from the California Environmental Quality Act (CEQA) under Article 19, Section 15332 Infill Development. Class 32 consists of projects characterized as in-fill development meeting the following conditions:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value, as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

Development Engineering Review

The Development Engineering Division reviewed the proposed plans for compliance with Code and local requirements. Conditions of Approval were provided to staff and are included as Exhibit A to the Resolution. Proposed Conditions include potential trash enclosure relocation and retaining wall alignment.

46. **Trash Enclosure.** The applicant shall work with the Engineering Services Division to relocate the trash enclosure to the southwest corner of the project site.

48. **Retaining Wall.** The alignment of the retaining wall shall be located outside of Caltrans right of way and any restricted easement for the Highway 4 embankment along the southern property line. If the proposed wall is determined to be in a restricted embankment, the applicant shall obtain approval for the wall alignment and design from Caltrans Design, District 4 before building the retaining wall.

Contra Costa Fire Department Review

The Contra Costa Fire Department reviewed the proposed plans for compliance with Code and local requirements. Conditions of Approval were provided to staff and are included as Attachment E.

ATTACHMENTS

- A. Resolution approving Use Permit and Design Review with Exhibit A Conditions of Approval
- B. Project Description
- C. Project Application
- D. Project Plans
- E. Contra Costa Fire Comments
- F. Site Photos

ATTACHMENT A
RESOLUTION APPROVING A USE PERMIT AND DESIGN REVIEW FOR AN AUTOMATED
CARWASH
(UP-21-13, AR-21-12)
WITH EXHIBIT A CONDITIONS OF APPROVAL
(SEPARATE PAGE)

**PLANNING COMMISSION
RESOLUTION # 2022-xx**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH APPROVING
A USE PERMIT AND DESIGN REVIEW FOR A NEW AUTOMATED CARWASH AT 2410
MAHOGANY WAY, (APN: 074-370-024), (UP-21-13, AR-21-12)**

WHEREAS, the City of Antioch (“City”) received an application from Hardeep Sidhu for approval of a Use Permit, and Design Review for a new automated car wash located at 2410 Mahogany Way (APN: 074-370-024) on July 14, 2021; and

WHEREAS, the application was deemed complete on January 14, 2022; and

WHEREAS, the site zoning is C-3 (Service/Regional Commercial District) which allows for a carwash use subject to approval and issuance of a Use Permit through the Planning Commission; and

WHEREAS, the proposed project is Categorically Exempt from the California Environmental Quality Act (CEQA) under Article 19, Section 15332 Infill Development. Class 32 consists of projects characterized as in-fill development; and

WHEREAS, a public hearing notice was published in the East County Times and posted in three public places pursuant to California Government Code Section 65090 on August 26, 2022 for the public hearing held on September 7, 2022.

WHEREAS, the Planning Commission held a public hearing and 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 AND DETERMINED, that the Planning Commission hereby make the following findings for approval of the requested Use Permit pursuant to Section 9-5.2703 “Required Findings” (B) (1) of the Antioch Municipal Code:

- a. 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.

Finding: The project has been designed to comply with the City of Antioch Municipal Code requirements. The new automated carwash use adheres to the standards outlined in the City of Antioch Zoning Ordinance and will not be detrimental to the public health or welfare or injurious to the property or improvements.

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

Finding: The property is designated Western Antioch Commercial Focus Area: Regional Commercial; the automated carwash use is appropriate for the location. It is located in the C-3 Service/Regional Commercial District commercial with Auto Center Drive to the west serving as the major roadway to the site. Pursuant to Section 9-5.3803, of the Antioch Zoning Ordinance, a use permit through the Planning Commission is required for new a carwash use.

- c. 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.

Finding: The project has been designed to adequately provide space for the use and related improvements. The site was previously developed as a restaurant and is surrounded by commercial uses. The proposed improvements will not create adverse impacts for other uses, and traffic in the neighborhood.

- 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.

Finding: The project site is located on a designated “local” street that is adequate in width and pavement type to accommodate trip generation for a carwash use. Potential impacts from the carwash queue could be mitigated onsite without impacting traffic flow on Mahogany Way.

- e. The granting of such use permit will not adversely affect the comprehensive General Plan because the proposed uses and design are consistent with the General Plan.

Finding: The General Plan designation for project site is Western Antioch Commercial Focus Area: Regional Commercial which allows for a carwash use. The proposed use does not adversely affect the General Plan. Additionally, scope specific Conditions of Approval have been prepared to ensure the project is consistent with City standards.

NOW THEREFORE BE IT FURTHER RESOLVED that the Planning Commission hereby adopts the Use Permit, and Design Review application (UP-21-13, AR-21-12) for a new automated carwash located at 2410 Mahogany Way (APN: 074-370-024) subject to Exhibit A Conditions of Approval.

I HEREBY CERTIFY that the foregoing resolution was adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 7th day of September 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

FORREST EBBS
Secretary to the Planning Commission

EXHIBIT A
CONDITIONS OF APPROVAL
(SEPARATE PAGE)

EXHIBIT A: CONDITIONS OF APPROVAL “MAHOGANY CARWASH”

General Conditions		<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
1.	Project Approval. This Use Permit and Design Review approval is for 2410 Mahogany Way (APN: 074-370-024), as substantially shown and described on the project plans, except as required to be modified by conditions herein. Plans date received July 11, 2022, as presented to the Planning Commission on September 7, 2022 (“Approval Date.”). For any condition herein that requires preparation of a Final Plan where the project applicant has submitted a conceptual plan, the project applicant shall submit final plan(s) in substantial conformance with the conceptual plan, but incorporate the modifications required by the conditions herein for approval by the City.	City of Antioch	On-Going	Planning Department	
2.	Project Approval Expiration. This Use Permit and Design Review approval expires on September 7, 2024 (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. The approval may be renewed by the Community Development Director for a period up to an additional two (2) years, provided that, at least ten (10) days before expiration of one (1) year from the date when the approval becomes effective, an application for renewal of the approval is filed with the Community Development Department. The Community Development Director may grant a renewal of an approval where there is no change in the original application, or there is no request to change any condition of approval for up to two additional years from the expiration date.	City of Antioch	On-Going	Planning Department	

EXHIBIT A: CONDITIONS OF APPROVAL

3.	<p>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 costs of planning; building and engineering plan check and inspection, as mutually agreed between the City and applicant.</p> <p><i>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.</i></p>	City of Antioch	On-Going	Community Development Department	
4.	<p>Pass-Through Fees. The developer shall pay all pass-through fees. Fees include but are not limited to:</p> <p>East Contra Costa Regional Fee and Financing Authority (ECCRFFA) Fee in effect at the time of building permit issuance.</p> <p>Contra Costa County Fire Protection District Fire Development Fee in place at the time of building permit issuance.</p> <p>Contra Costa County Map Maintenance Fee in affect at the time of recordation of the final map(s).</p> <p>Contra Costa County Flood Control District Drainage Area fee.</p> <p>School Impact Fees.</p> <p>Delta Diablo Sanitation Sewer Fees.</p> <p>Contra Costa Water District Fees.</p>	City of Antioch	On-Going	Community Development Department	
5.	<p>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 appeal 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.</p>	City of Antioch	Within 5 Days of Planning Commission Action	Planning Department	

EXHIBIT A: CONDITIONS OF APPROVAL

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 an existing 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.	City of Antioch	On-Going	Community Development Department	

EXHIBIT A: CONDITIONS OF APPROVAL

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 approval concerning 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	<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
10.	City Standards. All proposed improvements shall be constructed to City standards or as otherwise approved by the City Engineer in writing.	City of Antioch	On-Going	Public Works Department	
11.	Utility Construction. Public utilities shall be constructed to their ultimate size and configuration with the road construction in which they are to be located.	City of Antioch	On-Going	Public Works Department	
12.	Sewer. All sewage shall flow by gravity to the intersecting street sewer main.	City of Antioch	On-Going	Public Works Department	
13.	Storm Drain Design/Construction. The developer shall design and construct storm drain facilities to adequately collect and convey stormwater entering or originating within the development to the nearest adequate man-made drainage facility or natural watercourse, without diversion of the watershed. a. All public utilities, including storm drain pipes and ditches,	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	

EXHIBIT A: CONDITIONS OF APPROVAL

	<p>shall be installed in streets avoiding between lot locations. All proposed drainage facilities, including open ditches, shall be constructed of Portland Concrete Cement or as approved by the City Engineer.</p> <p>b. Storm drain system shall flow to the Detention Basins shown within the study and on the tentative map with no diversion out of existing watershed(s).</p> <p>c. The detention basin and associated improvements shall be constructed and operational prior to issuance of first residential building permit.</p> <p>d. Detention basins shall be designed to the satisfaction of the City Engineer with an emergency spillway to provide controlled overflow relief for large storm events. An Operations and Maintenance Manual (for each basin) shall be submitted for basins prior to the issuance of the first building permit.</p>				
14.	<p>Water Pressure. The developer shall provide adequate water pressure and volume to serve this development. This will include a minimum residual pressure of 20 psi with all losses included at the highest point of water service and a minimum static pressure of 50 psi or as approved by the City Engineer. See Fire Requirements for additional water flow conditions.</p>	City of Antioch	On-Going	Public Works Department	
15.	<p>Requirement for Looped System. Water systems shall be designed as a looped distribution system, if not already connecting as a looped system, developer shall be responsible for installing any water mains off site to create a looped system at no cost to the City.</p>	City of Antioch	On-Going	Public Works Department	

EXHIBIT A: CONDITIONS OF APPROVAL

16.	Retaining Walls <ol style="list-style-type: none"> Public Right of Way. Retaining walls shall not be constructed in City right-of-way or other City maintained parcels unless otherwise approved by the City Engineer. Materials. All retaining walls shall be of concrete masonry unit construction. Height. All retaining walls shall be reduced in height to the maximum extent practicable and the walls shall meet the height requirements in the front yard setback and sight distance triangles as required by the City Engineer. 	City of Antioch	On-Going	Public Works Department	
	Conservation/NPDES	<u>Regulation Source</u>	<u>Timing/Implementation</u>	<u>Enforcement/Monitoring</u>	<u>Verification</u> (date and Signature)
17.	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	
18.	<p>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 Discretionary Approval.)</p> <p>Under NPDES regulations, the project is subject to provision C.3: "New development and redevelopment regulations for storm water treatment."</p> <p>a. Requirements. Provision C.3 requires that the project</p>	Federal Government	At the Time of Building Permit Submittal	Public Works	

EXHIBIT A: CONDITIONS OF APPROVAL

	<p>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.</p> <p>b. Storm Water Control Plan. C.3 regulations require the submittal of a Storm Water Control Plan (SWCP) that demonstrate plan compliance. The SWCP shall be submitted concurrently with site improvement plans.</p> <p>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.</p> <p>d. CCRs. Both the approved SWCP and O&M plans shall be included in the project CC&Rs. Prior to building permit final and issuance of a Certificate of Occupancy, the developer shall execute any agreements identified in the Storm Water Control Plan that pertain to the transfer of ownership and/or long-term maintenance of storm water treatment or hydrograph modification BMPs. Already stated in COAs below, 5.c and 5.h.w.</p>				
19.	<p>NPDES Plan Submittal Requirements. The following requirements of the federally mandated NPDES program (National Pollutant Discharge Elimination System) shall be complied with as appropriate, or as required by the City Engineer:</p> <p>a. Application. Prior to issuance of permits for building, 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</p>	Federal Government	At the Time of Building Permit Submittal	Public Works	

EXHIBIT A: CONDITIONS OF APPROVAL

	<p>that control storm water flow and potential storm water pollutants.</p> <p>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).</p> <p>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. The O&M plan shall be incorporated into the CC&Rs for the Project.</p> <p>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</p>				
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EXHIBIT A: CONDITIONS OF APPROVAL

	<p>hydrograph modification BMPs.</p> <p>e. Design Details.</p> <p>i. Prevent site drainage from draining across sidewalks and driveways in a concentrated manner.</p> <p>ii. Install on all catch basins “No Dumping, Drains to River” decal buttons.</p> <p>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.</p> <p>g. 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.</p> <p>h. 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.</p> <p>i. Erosion Control. Include erosion control/storm water quality measures in the final grading plan that specifically address</p>				
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EXHIBIT A: CONDITIONS OF APPROVAL

	<p>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.</p> <p>j. On-Going Maintenance.</p> <p>i. 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.</p> <p>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.</p> <p>iii. 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. 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.</p> <p>iv. Clean all on-site storm drain facilities a minimum of twice a</p>				
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EXHIBIT A: CONDITIONS OF APPROVAL

	<p>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.</p> <p><i>Additional information regarding the project SWCP is necessary and modifications to the SWCP shown on the proposed Vesting Tentative Map may be required in order to comply with C.3 regulations.</i></p>				
	Fire Standards	<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
20.	The applicant shall comply with the Contra Costa County Fire Protection District in the letter dated January 28, 2022.	Contra Costa Fire Protection District	On-Going	Contra Costa Fire Protection District	
	Building Permit Submittal	<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
21.	Requirement for Phasing Plan. 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	
22.	Final Landscape Plans. The applicant shall submit final 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	

EXHIBIT A: CONDITIONS OF APPROVAL

23.	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 (MWEL0). The applicant shall demonstrate compliance with the applicable requirements of the MWEL0 in the landscape and irrigation plans submitted to the City.	City of Antioch	At the time of Building Permit Submittal	Community Development Department	
24.	Common Area Landscaping. Landscaping on all slopes, medians, C.3 basins 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	
25.	Property Drainage. The houses shall contain rain gutters and downspouts that direct water away from the foundation as approved by the City Engineer.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	
26.	Utility Location on Private Property. All improvements for each lot (water meters, sewer cleanouts, etc.) shall be contained outside of the driveway and within the lot and the projection of its sidelines or as approved by the City Engineer.	City of Antioch	At the Time of Building Permit Submittal	Public Works Department	

EXHIBIT A: CONDITIONS OF APPROVAL

Grading Improvements		<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
27.	Requirement for Grading Permit. A grading permit shall be required prior to commencement of any grading operations. The permit shall be obtained through the City's Building Department subject to review and approval by the City Engineer. The submitted plans shall incorporate any modifications required by the Conditions of Approval.	City of Antioch	At the time of Building Permit Submittal	Public Works	
28.	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	
29.	Off-Site Grading. All off-site grading is subject to the coordination and approval of the affected property owners and 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	
30.	Grading Easements. Any sale of a portion (or portions) of this project to multiple developers shall include the necessary agreement and/or grading easements to assure that project-wide grading conforms to the approved map and conditions of approval.	City of Antioch	At the time of Building Permit Submittal	Public Works	

EXHIBIT A: CONDITIONS OF APPROVAL

At the Time of Building Permit Issuance		<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
31.	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 City and Bay Area Air Quality Management District (BAAQMD).	City of Antioch	At the time of Building Permit Issuance	Community Development Department	
32.	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	

EXHIBIT A: CONDITIONS OF APPROVAL

At the Time of Construction		<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
33.	Collection of Construction Debris. 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 to collect fallen debris or splatters that could contribute to stormwater pollution.	City of Antioch	On-Going	Building Department	
34.	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. days/times restricted to the hours of 8:00 a.m. to 6:00 p.m.	City of Antioch	On-Going	Building Department/ Public Works Department	
35.	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	
36.	Filter Materials at Storm Drain Inlet. 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 storm drain system. Filter materials shall be maintained and/or replaced as	City of Antioch	On-Going	Building Department	

EXHIBIT A: CONDITIONS OF APPROVAL

	necessary to ensure effectiveness and prevent street flooding. Dispose of filter particles in the trash.				
37.	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	
38.	Erosion Control Measures. The grading operation shall take place at a time, and in a manner, so as not to allow erosion and sedimentation. 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	On-Going	Building Department/ Public Works Department	
39.	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	On-Going	Building Department/ Public Works Department	
40.	Debris Removal. The site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times.	City of Antioch	On-Going	Building Department/ Public Works Department	

EXHIBIT A: CONDITIONS OF APPROVAL

	Prior to Issuance of Occupancy Permit	<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
41.	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	
42.	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	
43.	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.	Contra Costa County Fire District	Prior to Occupancy Permit	Fire Department	
44.	Damage to Street Improvements. Any damage to street improvements now existing or done during construction on or adjacent to the subject property, shall be repaired to the satisfaction of the City Engineer at the full expense of the applicant. This shall include sidewalk repair, slurry seal, street reconstruction or others, as may be required by the City Engineer.	City of Antioch	Prior to Occupancy Permit	Building Department	
45.	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 Engineer.	City of Antioch	Prior to Occupancy Permit	Public Works	

EXHIBIT A: CONDITIONS OF APPROVAL

	Project Specific Conditions	<u>Regulation Source</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date and Signature)</u>
46.	Trash Enclosure. The applicant shall work with the Engineering Services Division to relocate the trash enclosure to the southwest corner of the project site.	City of Antioch	On-Going	Public Works	
47.	Hours of Operation. Hours of operation shall be 7 AM – 9 PM, seven (7) days a week. Any request to modify the hours of operation shall be submitted for to the Community Development Department for review by the Community Development Director.	City of Antioch	On-Going	Planning Division	
48.	Retaining Wall. The alignment of the retaining wall shall be located outside of Caltrans right of way and any restricted easement for the Highway 4 embankment along the southern property line. If the proposed wall is determined to be in a restricted embankment, the applicant shall obtain approval for the wall alignment and design from Caltrans Design, District 4 before building the retaining wall.	City of Antioch	On-Going	Public Works	
49.	Overnight Parking Prohibited. Overnight vehicle parking is prohibited on-site.	City of Antioch	On-Going	Community Development Department	
50.	Storage Prohibited. Outdoor storage of materials, and equipment shall not be allowed	City of Antioch	On-Going	Community Development Department	
51.	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"x18" and satisfy City requirements for no	City of Antioch	At the Time of Building Permit Submittal	Community Development Department	

EXHIBIT A: CONDITIONS OF APPROVAL

	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.				
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**ATTACHMENT B
PROJECT DESCRIPTION
(SEPARATE PAGE)**

CVEAS, INC

LAND SURVEYORS * CIVIL ENGINEERS * ARCHITECTS

2511 Logan Street Selma, CA 93662 Phone: (559) 891-8811 Fax: (559) 891-8815 info@cveas.com www.cveas.com

September 8, 2021

Community Development Department
Planning Division
200 H St.
PO Box 5007
Antioch, CA 94531

Project Location
2410 Mahogany Way
Antioch, CA 94509

APN: 074-370-024

PROJECT DESCRIPTION:

The construction of a new Carwash on a 0.81AC lot is being proposed at 2410 Mahogany way in the city of Antioch.

Hours of operations will be seven days a week from 7AM to 9PM. There will be 2 shifts and 2 employees per shift during business hours.

Structure will be approximately 3,628 square feet and 13' feet to top of plate and 30' to top of tower. The parking lot will consist of 23 standard parking and 1 accessible parking stalls totaling 24 parking stalls.

Materials to use will be painted stucco, mindful gray from Sherwin Williams for building walls, Sealskin color for trims also from Sherwin Williams. The building will also have brick veneer detail names Castle Creek from Brick it company. Roof material will be a metal prefab to be determined by owner at a later time.

New landscaping will be installed in the areas created by the new parking layout. The new facility meets all set back requirements from property lines and streets. All curb ramps, driveways, sidewalks, curb and gutter are per City of Antioch standards.

Any further questions feel free to reach out to me for clarification.


Sincerely,
Hardeep Sidhu



**ATTACHMENT C
PROJECT APPLICATION
(SEPARATE PAGE)**

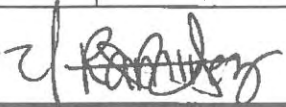
CITY OF ANTIOCH
DEVELOPMENT APPLICATION

Site Location	2410 Mahogany Way, Antioch, CA 94509
Assessor's Parcel No. (s)	074-370-024
Total Acreage	0.81 AC
Brief Description of Request:	Construction of new 3,628 SF. car wash.

PROPERTY OWNER OF RECORD	
Name	HARDEEP SIDHU
Company Name	JDJ Developing
Address	3506 W Nielsen Ave Fresno, CA 93706
Phone #	559-217 5986
Email	DEEP@JFSINCO.US
Signature	

APPLICANT	
Name	Same as owner
Company Name	
Address	
Phone #	
Email	
Signature	

CITY OF ANTIOCH
DEVELOPMENT APPLICATION

AGENT/DESIGNER	
Name	Brenda Ramirez
Company Name	CVEAS, INC.
Address	2511 Logan St. Gulma, CA 93662
Phone #	559 891 8811
Email	bramirez@cveas.com
Signature	

ANY OTHER PERSON THAT YOU WOULD LIKE THE CITY TO NOTIFY OF THE PUBLIC HEARING	
Name	
Company Name	
Address	
Phone #	
Email	
Signature	

FOR OFFICE USE ONLY	
Date Received:	File No.:
Title:	Account No.:
Type of Application:	Notes:

PLEASE SIGN AND RETURN WITH YOUR APPLICATION

STATEMENT OF UNDERSTANDING

In signing this Statement of Understanding in conjunction with the attached application to the City of Antioch, Department of Community Development for Project:

I understand that charges for materials and staff time spent processing this application will be billed monthly and is based on an hourly rate as identified in the current fiscal year fee schedule. Application processing includes but is not limited to plan checking and processing, meetings, phone calls, research, email, and staff report preparation. Further, I understand that my initial deposit is not a fee and actual charges may be in excess of the deposit. The deposit will be returned to me at the conclusion of the process after all invoices have been paid. If invoices are not paid on a monthly basis, processing will be terminated until all past due amounts have been paid. Failure to pay invoices on a monthly basis may also result in an application being deemed incomplete; postponement of hearings or meetings; and/or inability to obtain a building permit.

I assume full responsibility for all costs incurred by the City in processing this application.

Further, I understand that approval of my project is NOT guaranteed and may be denied. In the case of a denial, I understand that I am still responsible for all costs incurred by the City in processing this application.

I hereby authorize employees, officials and agents of the City of Antioch to enter upon the subject property, as necessary, to inspect the premises and process this application.

DATE: 06-14-21

NAME: HARDEEP SIDHU

SIGNATURE: 

.....
Property owner signature for authorization to enter property and process the application. This is required only if the applicant is not the property owner.

DATE: _____

NAME: _____

SIGNATURE: _____

**ATTACHMENT D
PROJECT PLANS
(SEPARATE PAGE)**



PROJECT
Car Wash
2410 Mahogany Way
Antioch, CA
074-370-024



Revisions:	Date:
△	
1	
△	
△	
△	

COVER
SHEET

CNEAS JOB #:	20205
DATE	08-21-2021
PLANNING SUBMITTAL #	
PLAN CHECK SUBMITTAL #	
DRAWN BY:	JAS
CHECKED BY:	RL
SCALE	AS NOTED

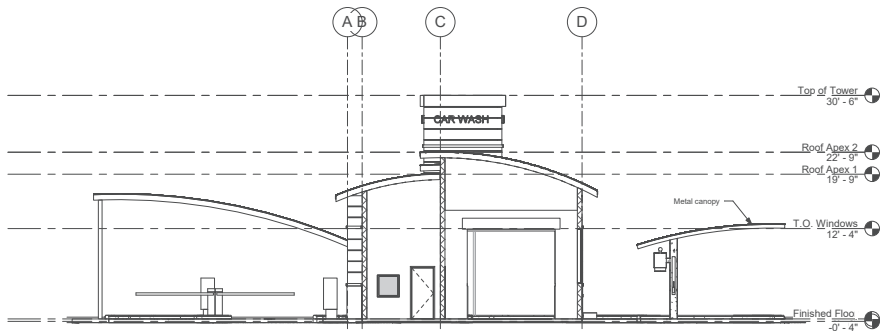
A0.0

[illegible]

SCALE: 1:20



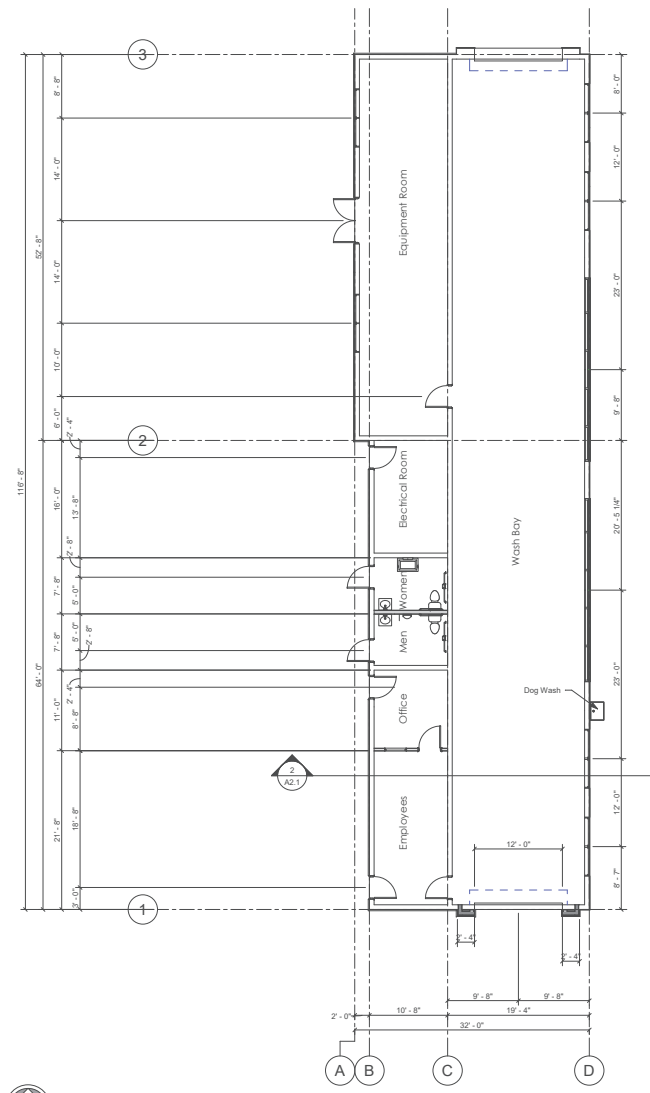
CIVIL ENGINEERING = LAND SURVEYING • CONSULTING = STRUCTURAL DESIGN = ARCHITECTURAL DRAFTING = COMMERCIAL & RESIDENTIAL BUILDING DESIGN = PLANNING & PROJECT MANAGEMENT



2 Section 1
1/8" = 1'-0"



Dog Wash



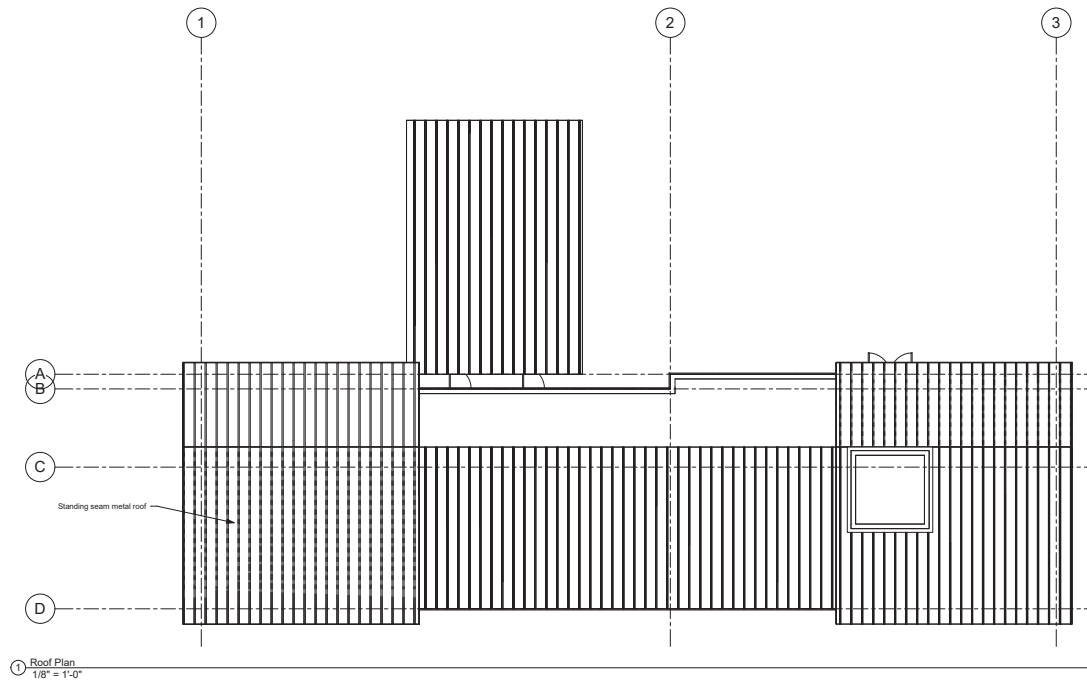
1 Floor Plan
1/8" = 1'-0"

Revisions:	Date:
△	
△	
△	
△	

Floor Plan

CVEAS Job #:	2012SDX
Current Release Date:	9-9-21
Planning Submittal No.	N/A
Plan Check Submittal No.	N/A
Drawn By:	PNM
Checked By:	PNM
Scale:	1/8" = 1'-0"

A2.1



① Roof Plan
1/8" = 1'-0"

Revisions:	Date:
△	
△	
△	
△	
△	

Roof Plan	
CVEAS Job # :	20125DX
Current Release Date :	Issue Date
Planning Submittal No.	N/A
Plan Check Submittal No.	N/A
Drawn By:	PNM
Checked By:	PNM
Scale:	1/8" = 1'-0"



581 Ottawa Ave.
Holland, MI 49423
616 494 0771
tommycarwash.com

Customer:
Hardeep Sidhu

Location:
Ripon, CA

Project #P2966

Quote #18592v1

Date: 06/28/21

Completed By: MM

DISCLAIMER:
ALTHOUGH BUILDING CODES
HAVE BEEN CONSIDERED IN
DEVELOPING THIS DRAWING,
VERIFICATION OF SITE
SPECIFIC CONDITIONS AND
COMPLIANCE WITH FEDERAL,
STATE AND LOCAL BUILDING
CODES IS THE EXCLUSIVE
RESPONSIBILITY OF THE
CUSTOMER AND/OR
ARCHITECT AND ENGINEER

CONFIDENTIAL WARNING:
THIS SHEET CONTAINS AND
CONSTITUTES CONFIDENTIAL
INFORMATION, IMAGES AND
TRADE SECRETS OF TOMMY
CAR WASH SYSTEMS. ANY
UNAUTHORIZED USE OR
DISCLOSURE OF ANY OR
PORTION THEREOF, IS
STRICTLY PROHIBITED. THIS
WORK IS THE EXCLUSIVE
PROPERTY OF TOMMY CAR
WASH SYSTEMS. ALL RIGHTS
RESERVED.

NOTES

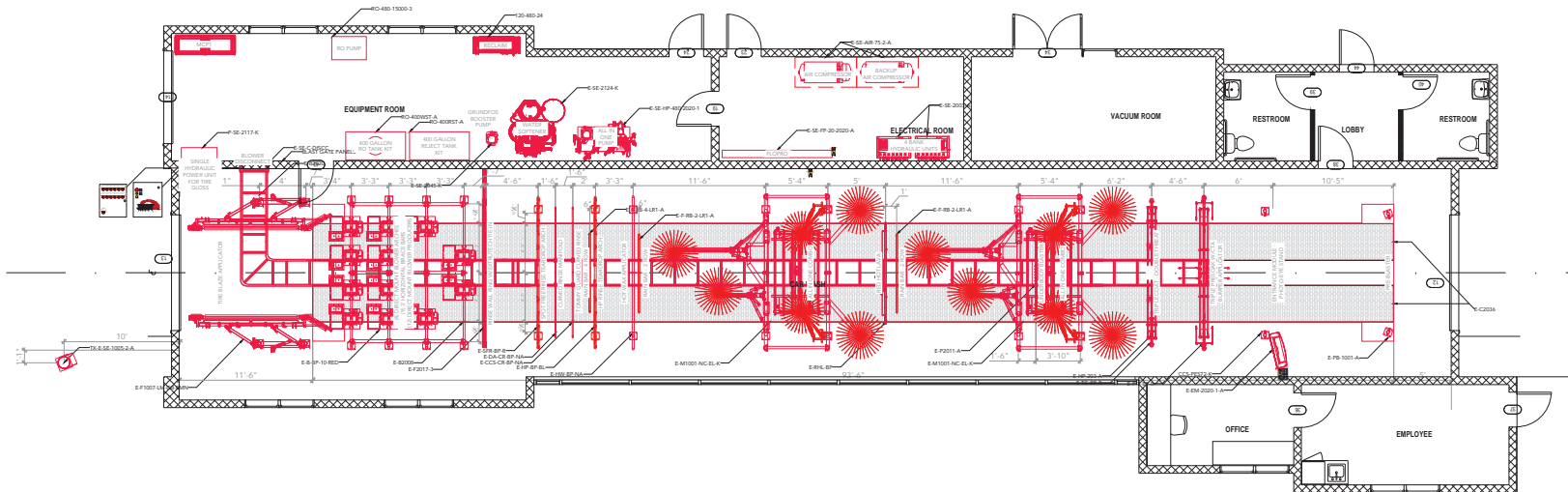
Not for Construction
Until Approved

Approved by:

Date: / /

Page/Drawing #TCW1

110' 100' 90' 80' 70' 60' 50' 40' 30' 20' 10' 0'





2410 MAHOGANY WAY

ANTIOCH CAR WASH

WALLS

MATERIAL: 1

FINISH: Blue metal panels

MANUFACTURER:

MATERIAL: 2

FINISH: Gray metal panels

MANUFACTURER:

MATERIAL: 3

FINISH: Brick Series- Canyon Brick -Shale Brown

MANUFACTURER: Nichiha Fiber Cement

MATERIAL: 4

FINISH: Wood panels

MANUFACTURER:



ROOF

MATERIAL: 5

FINISH: Pre-fab Metal

MANUFACTURER: TBD by owner





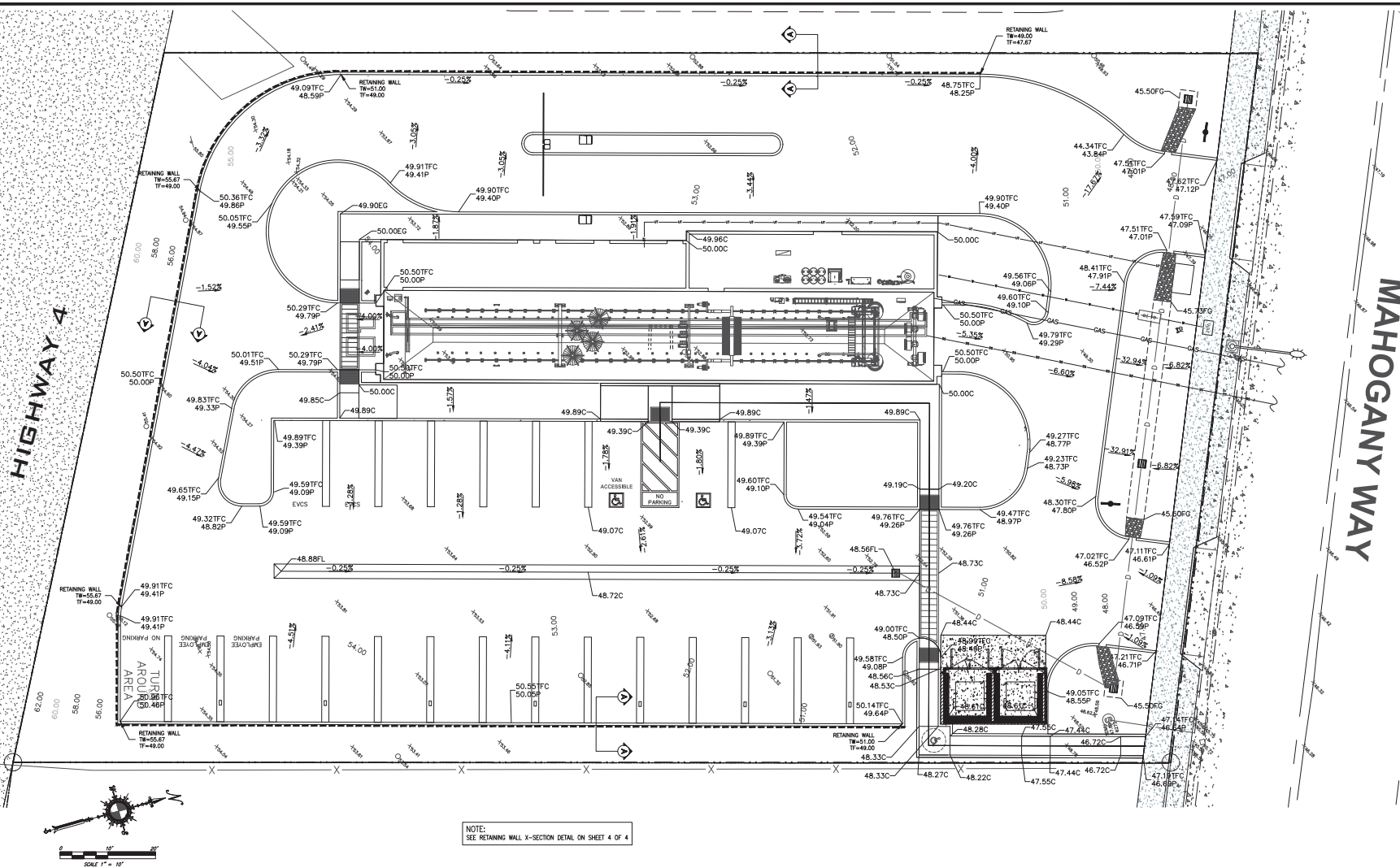


The image is a detailed site plan for a proposed development, likely a parking lot or road improvement project. The plan shows a central area labeled "Proposed Car Wash" and "Proposed Car Wash" with a "Dishwashing approach" indicated. The plan is bounded by "MANGOHAY WAY" to the north and "STATE HWY 4" to the south. The plan includes numerous numerical data points (e.g., 01.01, 01.02, 01.03, etc.) and labels for "Landscape area on adjacent lot", "Building on adjacent lot (B&C Center)", and "Building on adjacent lot". The plan also shows "Existing drive approach" and "Proposed Car Wash".

E-1

1 of 1

ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED BY THIS DRAWING ARE OWNED BY AND THE PROPERTY OF CIESA OR ITS CONSULTANTS, AND ARE CREATED, EVOLVED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE REPRODUCED, COPIED, TRANSMITTED, EITHER ELECTRONICALLY OR MECHANICALLY, IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF CIESA OR ITS CONSULTANTS.

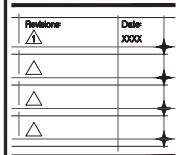


ENGINEER'S CERTIFICATION:
THIS PLAN WILL NOT IMPOSE A DRAINAGE, GRADING OR
FLOODING HAZARD TO SURROUNDING PROPERTIES.

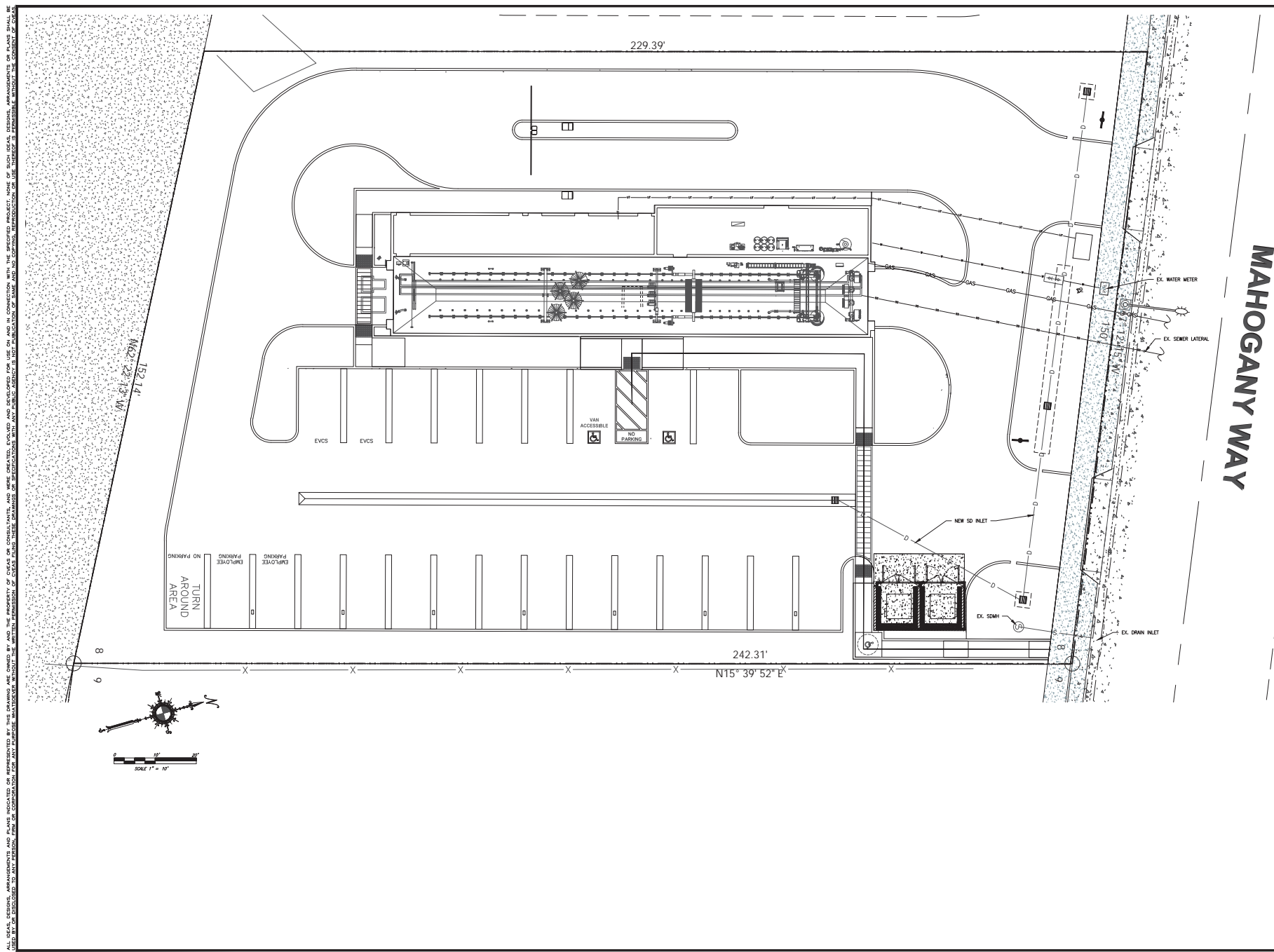
PETER PAO MOUA, P.E.
LIC. NO. C61918

6/15/2022
DATE

**CALL UNDERGROUND
SERVICE ALERT(U.S.A.)
TOLL FREE(800) 227-2600
48 HOURS
BEFORE EXCAVATING**

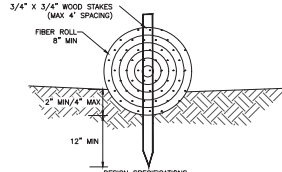


SHEET NO.
3 OF 5



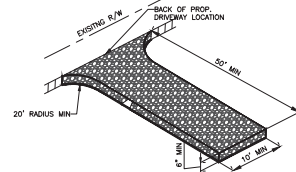
NOTES:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL BMP'S NECESSARY ARE IMPLEMENTED INCLUDING, BUT NOT LIMITED TO THE METHODS SHOWN ON THE EROSION CONTROL PLAN.
- STORM WATER DISCHARGES AND AUTHORIZED NON-STORM WATER DISCHARGES SHALL NOT CONTAIN A HAZARDOUS SUBSTANCE EQUAL TO OR IN EXCESS OF REPORTABLE QUANTITIES ESTABLISHED IN 40 C.F.R. 117.3 AND 302.4, UNLESS A SEPARATE NPDES PERMIT HAS BEEN ISSUED TO REGULATE THOSE DISCHARGES.
- MINIMIZE OR PREVENT POLLUTANTS IN STORM WATER DISCHARGES AND AUTHORIZED NON-STORM WATER DISCHARGES THROUGH THE USE OF CONTROLS, STRUCTURES, AND MANAGEMENT PRACTICES THAT ACHIEVE BAT FOR TOXIC AND NON-CONVENTIONAL POLLUTANTS AND BAT FOR CONVENTIONAL POLLUTANTS.
- CONDUCT AN INVENTORY OF THE PRODUCTS USED AND/OR EXPECTED TO BE USED AND THE END PRODUCTS THAT ARE PRODUCED AND/OR EXPECTED TO BE PRODUCED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS (I.E. POLES, EQUIPMENT PAOS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC).
- COVER AND BERM LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPILLS, AGGREGATE, FLY-ASH, STUCCO, HYDRAULIC ETC.)
- STORE CHEMICALS IN WATER-TIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) IN A STORAGE USED CONFORMING TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER.
- MINIMIZE EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS.
- IMPLEMENT BMP'S TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS.
- PREVENT DISPOSAL OF ANY RISE OR HIGH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM.
- ENSURE THE CONTAINMENT OF SANITATION FACILITIES (I.E. PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER.
- COVER OR REPLACE SANITATION FACILITIES AND INSPECT.
- COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.
- PREVENT DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER.
- CONTAIN AND SECURELY STOCKPILE WASTE MATERIAL FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.
- IMPLEMENT PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS.
- DEVELOP A SPILL RESPONSE AND IMPLEMENTATION ELEMENT OF THE SWPPP PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY. APPROPRIATE SPILL RESPONSE PERSONNEL SHOULD BE ASSIGNED AND TRAINED.
- ENSURE THE CONTAINMENT OF CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.
- PREVENT OIL, GREASE, OR FUEL FROM VEHICLE STORAGE OR MAINTENANCE FROM LEAKING INTO THE GROUND, STORM DRAINS OR SURFACE WATERS.
- PLACE ALL EQUIPMENT OR VEHICLES, WHICH ARE TO BE FUELED, MAINTAINED AND STORED IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMP'S.
- CLEAN LEAKS IMMEDIATELY AND DISPOSE OF LEAKED MATERIALS PROPERLY.
- CONTAIN FERTILIZERS AND OTHER STOCKPILED LANDSCAPE MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED.
- DISCONTINUE THE APPLICATION OF ANY ERODIBLE LANDSCAPE MATERIAL WITHIN TWO DAYS BEFORE A FORECASTED RAIN EVENT OR DURING PERIODS OF PRECIPITATION.
- APPLY ERODIBLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURER RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATION BY KNOWLEDGEABLE AND EXPERIENCED FIELD PERSONNEL.
- STACK ERODIBLE LANDSCAPE MATERIAL ON PALLETS AND COVER OR STORE SUCH MATERIALS WHEN NOT BEING USED OR APPLIED.
- CONDUCT AN ASSESSMENT AND CREATE A LIST OF POTENTIAL POLLUTANT SOURCES AND IDENTIFY ANY AREAS OF THE SITE WHERE ADDITIONAL BMP'S ARE NECESSARY TO REDUCE OR PREVENT POLLUTANTS IN STORM WATER DISCHARGES AND AUTHORIZED NON-STORM WATER DISCHARGES. KEEP THIS LIST WITH THE SWPPP AND IDENTIFY ALL NON-MOBILE POLLUTANTS WHICH ARE KNOWN, OR SHOULD BE KNOWN, TO OCCUR ON THE CONSTRUCTION SITE.
- IMPLEMENT GOOD HOUSEKEEPING MEASURES ON THE CONSTRUCTION SITE TO CONTROL THE AIR DEPOSITION OF SITE MATERIALS AND FROM SITE OPERATIONS. SUCH PARTICULATES CAN INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT, NUTRIENTS, TRASH, METALS, BACTERIA, OIL SPILLS, AND ORGANICS.
- WASH VEHICLES IN SUCH A MANNER AS TO PREVENT NON-STORM WATER DISCHARGES TO SURFACE WATERS OR DRAINAGE SYSTEMS.
- CLEAN STREETS IN SUCH A MANNER AS TO PREVENT UNAUTHORIZED NON-STORM WATER DISCHARGES FROM REACHING SURFACE WATER OR DRAINAGE SYSTEMS.
- PROVIDE EFFECTIVE SOIL COVER FOR INACTIVE AREAS AND ALL FINISHED SLOPES, OPEN SPACE, UTILITY BACKFILL, AND COMPLETED LOTS.
- LIMIT THE USE OF PLASTIC MATERIALS WHEN MORE SUSTAINABLE, ENVIRONMENTALLY FRIENDLY ALTERNATIVES EXIST. WHEN PLASTIC MATERIALS ARE DEMAND NECESSARY, THE DISCHARGER SHALL CONSIDER THE USE OF PLASTIC MATERIALS RESISTANT TO SOLAR DEGRADATION.
- ESTABLISH AND MAINTAIN EFFECTIVE PERIMETER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES FROM THE SITE.
- EFFECTIVELY MANAGE ALL RUN-ON, ALL RUNOFF WITHIN THE SITE AND ALL RUNOFF THAT DISCHARGES OFF THE SITE. RUN-ON FROM OFF SITE SHALL BE DIRECTED AWAY FROM ALL DISTURBED AREAS OR SHALL COLLECTIVELY BE IN COMPLIANCE WITH THE EFFLUENT LIMITATIONS.
- ALL INSPECTION, MAINTENANCE REPAIR AND SHAPING ACTIVITIES AT THE PROJECT LOCATION SHALL BE PERFORMED OR SUPERVISED BY A QUALIFIED SWPPP PRACTITIONER. THE OSP MAY DELEGATE ANY OR ALL OF THESE ACTIVITIES TO AN EMPLOYEE TRAINED TO DO THE TASKS APPROPRIATELY, BUT SHALL ENSURE ADEQUATE SUPERVISION.
- PERFORM WEEKLY INSPECTIONS AND OBSERVATIONS, AND AT LEAST ONCE EACH 24-HOUR PERIOD DURING EXTENDED STORM EVENTS TO IDENTIFY AND RECORD BMP'S THAT NEED MAINTENANCE TO OPERATE EFFECTIVELY. BMP'S THAT COULD FAIL TO OPERATE AS INTENDED. INSPECTORS SHALL BE THE OSP OR TRAINED BY THE OSP. COMPLETE AN INSPECTION CHECKLIST INCLUDING REQUIRED INFORMATION FOR EACH INSPECTION.
- IMPLEMENT REPAIRS OR DESIGN CHANGES TO BMP'S WITHIN 72 HOURS OF IDENTIFICATION AND COMPLETE THE CHANGES AS SOON AS POSSIBLE.
- REFER TO STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL INFORMATION ON BMP'S USED FOR SITE.
- 100 PERCENT OF TREES, STUMPS, ROCKS AND ASSOCIATED VEGETATION AND SOILS RESULTING PRIMARILY FROM LAND CLEARING SHALL BE REUSED OR RECYCLED.



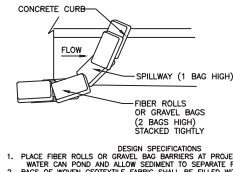
- DESIGN SPECIFICATIONS**
- STRAW WATTLES (FIBER ROLLS) WILL BE EITHER PREFABRICATED ROLLS OR ROLLED TUBES OF GEOTEXTILE FABRIC.
 - FIELD ROLLED FIBER ROLL IS ASSEMBLED BY ROLLING THE LENGTH OF GEOTEXTILE FABRIC INTO A TUBE OF MINIMUM 8-INCH DIAMETER AND ENDING THE ROLL AT EACH END AND EVERY 4 FEET ALONG THE LENGTH OF THE ROLL WITH JUTE-TYPE TWINE.
 - BASE FREE ANY DIRT CLOSOS OR STANDING VEGETATION IN AREAS TO RECEIVE FIBER ROLLS.
 - PLACE FIBER ROLLS INTO A 2 TO 4 INCH DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE FIBER ROLL.
 - WALK ON TOP OF THE ROLL TO SEAT TIGHTLY AGAINST THE SOIL.
 - STATE FIBER ROLLS INTO A 2 TO 4 INCH DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE FIBER ROLL.
 - USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 X 0.75 INCH AND MINIMUM LENGTH OF 24 INCHES.
 - DRIVE STAKES AT THE END OF EACH FIBER ROLL AND SPACED 4 FEET MAXIMUM ON CENTER.
 - BERM THE BACKSIDE OF THE FIBER ROLL WITH SOIL TO ENSURE SEDIMENT ENTRAPMENT.

STRAW WATTLE
NOT TO SCALE



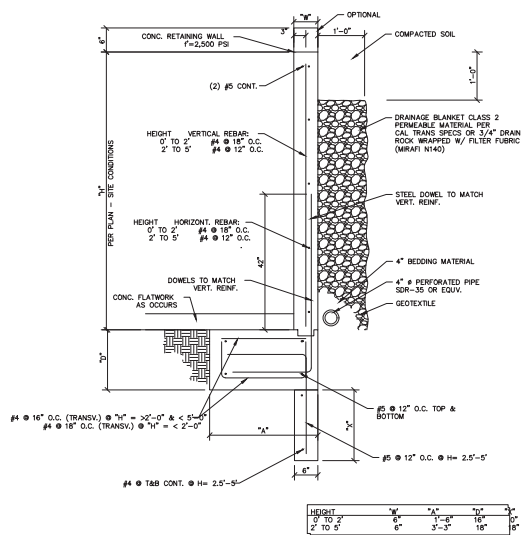
- DESIGN SPECIFICATIONS**
- STONE APPLIED TO THE PAD WILL BE 2-INCH STONE.
 - THE LENGTH OF THE PAD WILL NOT BE LESS THAN 50 FEET.
 - THE THICKNESS OF THE PAD WILL A MINIMUM OF 6 INCHES.
 - THE WIDTH OF THE PAD WILL BE A MINIMUM OF 10 FEET.
 - FIBER FABRIC WILL BE PLACED OVER THE ENTIRE AREA BEFORE PLACING STONE.

CONSTRUCTION EXIT/ENTRANCE DETAIL
NOT TO SCALE

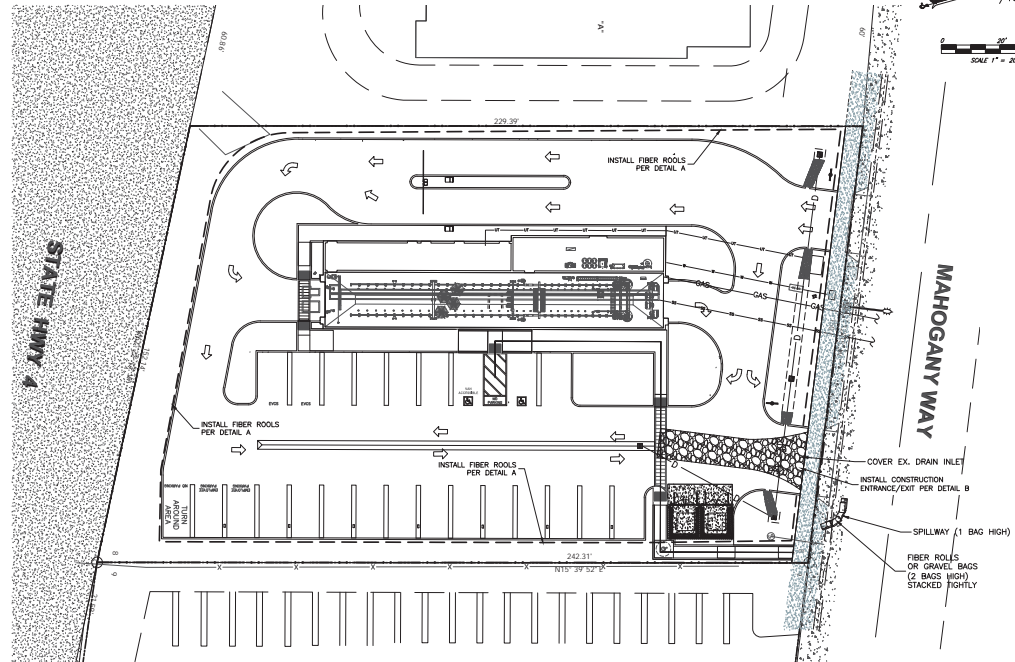


- DESIGN SPECIFICATIONS**
- PLACE FIBER ROLLS OR GRAVEL BAG BARRIERS AT PROJECT LIMITS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
 - BAGS OF WOVEN GEOTEXTILE FABRIC SHALL BE FILLED WITH GRAVEL, LAYERED, AND PACKED TIGHTLY. FIBER ROLLS SHALL BE USED.
 - LEAVE ONE GRAVEL BAG OR FIBER ROLL GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.

CURB LIMITS/INLET PROTECTION
NOT TO SCALE



RETAINING WALL DETAIL
NOT TO SCALE



Revisions	Date
1	XXXX
2	
3	
4	
5	

CVEAS Job #: 20090
Drawn By: PM

EROSION CONTROL PLAN

TREES

SYMBOL	SIZE	QUANTITY	DESCRIPTION
	15"	4	INDIANA CHAMPAE 'TENTACLED' 300. SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	15"	3	LARGE SPREADER 'TENTACLED' 300. SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	15"	3	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3

SHRUBS

SYMBOL	SIZE	QUANTITY	DESCRIPTION
	5"	50	INDIANA CHAMPAE 'TENTACLED' 300. SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	28	LANTANA 'MILWAUKEE' 300. SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	24	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	17	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	26	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	70	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	13	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	22	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	7	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3
	5"	13	SHADE TREES CROWN 10' DIA. W/ 30" WOODS WATER RATING - LOW-3

LANDSCAPE NOTES

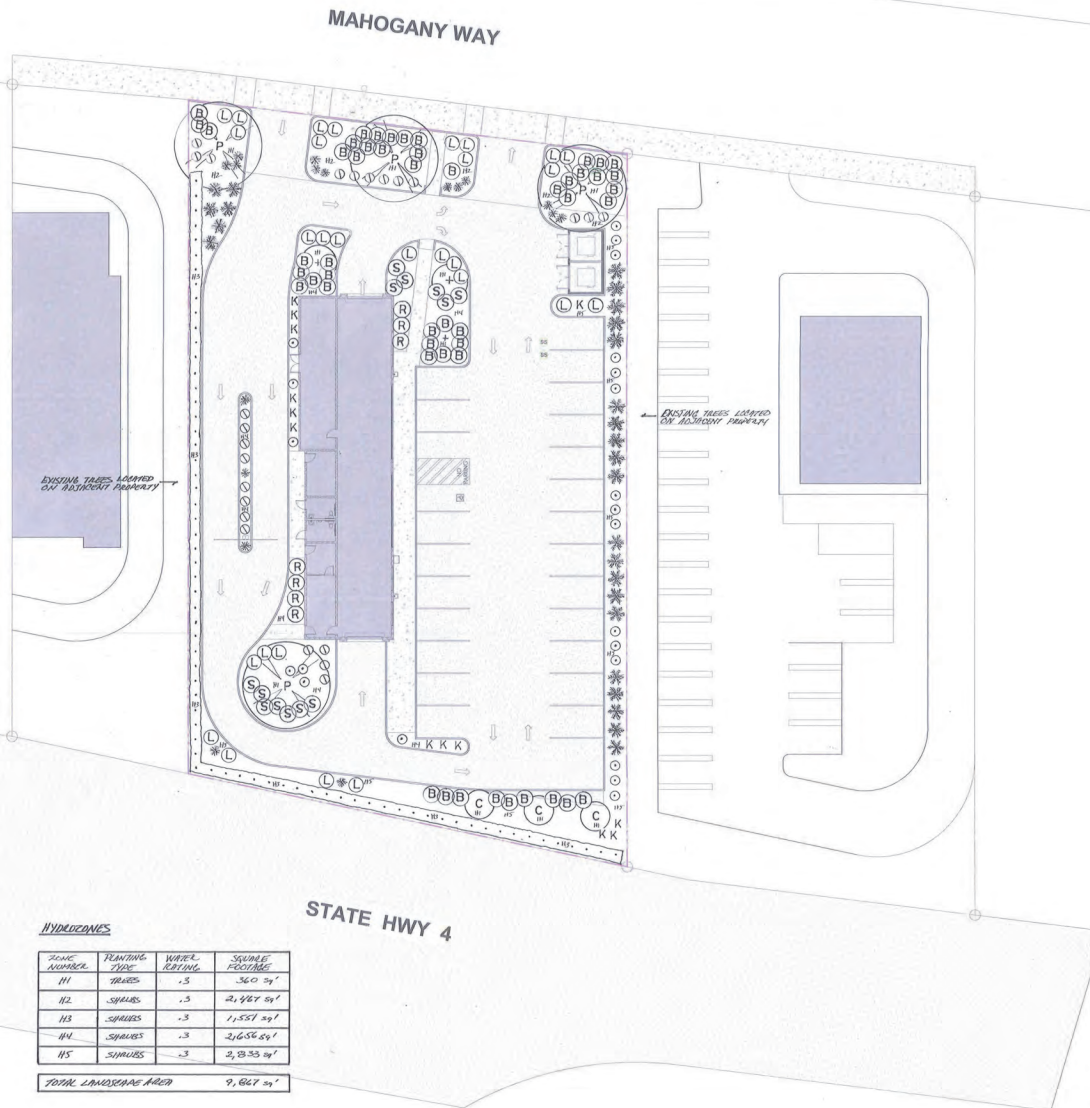
- 1) AS SHOWN, ALL PLANTING IS TO BE DONE BY THE LANDSCAPE CONTRACTOR.
- 2) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 3) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 4) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 5) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 6) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
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- 11) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 12) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 13) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 14) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 15) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 16) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 17) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 18) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 19) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.
- 20) ALL PLANTING SHALL BE DONE BY THE LANDSCAPE CONTRACTOR.

MAXIMUM ALLOWED WATER ALLOWANCE = 124,991.34 GPM
(100%
ESTIMATED TOTAL WATER USE = 102,762.43 GPM
(ETWU)
ESTIMATED TOTAL WATER USE FROM IRRIGATION SYSTEMS = 25,826.00 GPM
TOTAL LANDSCAPE AREA = 9,867.59'
CLIMATE ZONE = 14

* FOR CONTRAST WATER EFFICIENT CALCULATIONS
SEE LANDSCAPE DOCUMENTATION PACKAGE.

HYDROLOGIES

ZONE NUMBER	PLANTING TYPE	WATER RATING	SCUPE FOOTAGE
H1	TREES	.3	360 sq'
H2	SHRUBS	.3	2,147 sq'
H3	SHRUBS	.3	1,551 sq'
H4	SHRUBS	.3	2,165 sq'
H5	SHRUBS	.3	2,133 sq'
TOTAL LANDSCAPE AREA 9,867.59'			



DESIGN OVERLAYS

I HAVE COMPLETED THE DESIGN OF THE LANDSCAPE AND IRRIGATION SYSTEMS FOR THE PROJECT. I HAVE ALSO COMPLETED THE DESIGN OF THE LANDSCAPE AND IRRIGATION SYSTEMS FOR THE PROJECT.

Revisions:	Date:

Landscape and Irrigation

CVEAS Job # :	20125DX
Current Release Date :	
Planning Submittal No.	N/A
Plan Check Submittal No.	N/A
Drawn By:	
Checked By:	
Scale:	1" = 20'-0"

MAHOGANY WAY

IRRIGATION

[illegible]

IRRIGATION NOTES

- (1) DUE TO THE SEVERE IRRADIATION DOSEIN PLANTS ARE BEING
DIFFERENTIATED. ACCORDING TO THE DOSE PLANTS BEING TESTED
WILL BE EITHER DEAD OR ALIVE.
- (2) DUE TO THE RELATIVELY HIGH DOSE PLANTS DO NOT BE BEHAVIORING
NORMALLY. ESTABLISHING A PLANT IN A DOSE OF 1000000 RADS
REQUIRES 1000000 RADS OF DOSE TO BE APPLIED AND OBSERVED
A LANDFILL IRRADIATION AREA MUST BE DEVELOPED.
- (3) ALL LANDFILLS, FEDERAL, STATE AND PRIVATE MUST HAVE ADOPTED
THE FOLLOWING STANDARDS:
- (4) A DEDICATED WASTE AREA FOR LANDFILL WASTE IS REQUIRED.
(UNPAVED 100' X 100')
- (5) 300 LANDFILL IRRADIATION AREAS.
- (6) USE IRRADIATION DOSE.
- (7) USE IRRADIATION SPECIFICATIONS.

STATE HWY 4

MAXIMUM APPLIED WATER ALLOWANCE 124,981.34 GPM
(MAWA) 167.08 HCF/AY

ESTIMATED TOTAL WATER USE 102,462,43 CFW
(ETWU) 137.38 MAF

ESTIMATED TOTAL WATER USE FROM IRRIGATION SCHEDULE

* FOR COMPLETE WATER EFFICIENT CALCULATIONS
SEE LANDSCAPE DOCUMENTATION PAGE.

FLOW RATES

VALUE NUMBER	CALCULUS PER MIN	CALCULUS PER HOUR	PLANT TYPE	WATER RATING
H1	1.53	80	TREES	.3
H2	4.05	243	SHRUBS	.3
H3	5.25	315	SHRUBS	.3
H4	4.5	270	SHRUBS	.3
H5	5.25	315	SHRUBS	.3

DESIGN COMPLIANCE

I HAVE COMPARED WITH THE CRITERIA OF THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM ABSOLUTELY, FOR THE EFFICIENT USE OF WATER IN THIS IRRIGATION DESIGN PLAN.

189-

L3.0

ANTI-DRAIN VALVE - ANTI-DRAIN VALVE OR CHECK VALVE, MEANS A VALVE LOCATED UNDER A SPRINKLER HEAD TO HOLD WATER IN THE SYSTEM SO IT MINIMIZES DRAINAGE FROM THE LOWER ELEVATION SPRINKLER HEADS.

APPLICATION RATE - APPLICATION RATE MEANS THE DEPTH OF WATER APPLIED TO A GIVEN AREA, USUALLY MEASURED IN INCHES PER HOUR.

APPLIED WATER - APPLIED WATER MEANS THE PORTION OF WATER SUPPLIED BY THE IRRIGATION SYSTEM TO THE LANDSCAPE.

AUTOMATIC IRRIGATION CONTROLLER - AN AUTOMATIC THING DEVICE USED TO AUTOMATICALLY OPERATE AN IRRIGATION SYSTEM CAPABLE OF OPERATING VALVE STATIONS TO THE DAYS, HOURS AND LENGTH OF THE WATER APPLICATION.

BACK-FLOW PREVENTION DEVICE - A SAFETY DEVICE USED TO PREVENT POLLUTION OR CONTAMINATION OF THE WATER SUPPLY DUE TO THE REVERSE FLOW OF WATER FROM THE IRRIGATION SYSTEM.

CERTIFICATE OF COMPLETION - DOCUMENT CERTIFYING COMPLETION OF LANDSCAPE / IRRIGATION INSTALLATION AS ACCORDING TO APPROVED LANDSCAPE DOCUMENTATION PACKAGE, SIGNED BY DESIGNER OR INSTALLER.

CERTIFIED LANDSCAPE IRRIGATION AUDITOR - PERSON CERTIFIED TO PERFORM LANDSCAPE IRRIGATION AUDITS BY AN ACCREDITED ACADEMIC INSTITUTION, A PROFESSIONAL TRADE ORGANIZATION OR OTHER PROGRAM.

CHECK VALVE - A VALVE LOCATED UNDER A SPRINKLER HEAD, OR OTHER LOCATION IN THE IRRIGATION SYSTEM TO HOLD WATER IN THE SYSTEM TO PREVENT DRAINAGE FROM SPRINKLER HEADS WHEN THE IRRIGATION SYSTEM IS OFF.

CONVERSION FACTOR - NUMBER THAT CONVERTS ACRE-INCHES PER YEAR TO GALLONS PER FOOT PER YEAR. (0.62)

DRIP IRRIGATION - NONSPRAY LOW VOLUME IRRIGATION SYSTEM UTILIZING EMISSION DEVICES WITH A FLOW RATE MEASURED IN GALLONS PER HOUR. LOW-VOLUME IRRIGATION SYSTEMS ARE SPECIFICALLY DESIGNED TO APPLY SMALL VOLUMES OF WATER SLOWLY AT OR NEAR THE ROOT ZONE OF PLANTS.

EMITTER - DRIP IRRIGATION EMISSION DEVICE THAT DELIVERS WATER SLOWLY FROM THE IRRIGATION SYSTEM TO THE SOIL.

ESTABLISHED LANDSCAPE - THE POINT AT WHICH PLANTS, FROM SEEDLINGS OR POTTED PLANTS, HAVE DEVELOPED SIGNIFICANT ROOT GROWTH INTO SOIL.

ESTABLISHMENT PERIOD - THE FIRST YEAR AFTER INSTALLING THE PLANT IN THE LANDSCAPE.

ESTIMATED TOTAL WATER USE - ESTIMATED TOTAL WATER USE FOR THE LANDSCAPE FOR A PERIOD OF ONE YEAR (ETU).

ET ADJUSTMENT FACTOR - FACTOR APPLIED TO REFERENCE EVAPOTRANSPIRATION THAT MAKES ADJUSTMENTS FOR PLANT FACTORS AND IRRIGATION EFFICIENCY. (0.8)

EVAPOTRANSPIRATION RATE - THE QUANTITY OF WATER EVAPORATED FROM ADJACENT SOIL SURFACES AND TRANSPIRED BY PLANTS DURING A SPECIFIC TIME.

FLOW RATE - RATE AT WHICH WATER FLOWS THROUGH PIPES AND VALVES, MEASURED IN GALLONS PER MINUTE, GALLONS PER HOUR, OR CUBIC FEET PER SECOND.

HARDSCAPES - ANY DURABLE MATERIAL (PERVIOUS AND NON-PERVIOUS)

HYDROZONE - A PORTION OF THE LANDSCAPED AREA HAVING PLANTS WITH SIMILAR WATER NEEDS. A HYDRO-ZONE MAYBE IRRIGATED OR NON-IRRIGATED.

INFILTRATION RATE - THE RATE OF WATER ENTRY INTO THE SOIL EXPRESSED AS A DEPTH OF WATER PER UNIT OF TIME.

IRRIGATION AUDIT - AN IN-DEPTH EVALUATION OF THE PERFORMANCE OF AN IRRIGATION SYSTEM CONDUCTED BY A CERTIFIED LANDSCAPE IRRIGATION AUDITOR. AN IRRIGATION AUDIT INCLUDES, BUT IS NOT LIMITED TO, INSPECTION SYSTEM TEST, SYSTEM TEST WITH DISTRIBUTION UNIFORMITY OR EMISSION UNIFORMITY, REPORTING OVERSPRAY OR OFF THAT CAUSES OVERLAY FLOW, AND PREPARATION OF AN IRRIGATION SCHEDULE.

IRRIGATION EFFICIENCY - THE MEASUREMENT OF THE AMOUNT OF THE AMOUNT OF WATER BENEFICIALLY USED, DIVIDED BY THE AMOUNT OF WATER APPLIED. IRRIGATION EFFICIENCY IS DETERMINED BY MEASUREMENTS AND ESTIMATES OF IRRIGATION SYSTEM CHARACTERISTICS AND MANAGEMENT PRACTICES. (IE) IRRIGATION EFFICIENCY FOR DRIP IRRIGATION IS 0.81. IRRIGATION EFFICIENCY FOR OVERHEAD SPRAY IRRIGATION IS 0.78.

IRRIGATION SURVEY - AN EVALUATION OF AN IRRIGATION SYSTEM THAT IS LESS DETAILED THAN AN IRRIGATION AUDIT. AN IRRIGATION SURVEY INCLUDES, BUT IS NOT LIMITED TO, INSPECTION SYSTEM TEST, AND WRITTEN RECOMMENDATIONS TO IMPROVE PERFORMANCE OF THE IRRIGATION SYSTEM.

LANDSCAPE AREA - ALL PLANTING AREAS, TURF AREAS, AND WATER FEATURES IN A LANDSCAPE DESIGN PLAN SUBJECT TO THE MAXIMUM APPLIED WATER ALLOWANCE CALCULATION. THE LANDSCAPE AREA DOES NOT INCLUDE FOOTPRINTS OF BUILDINGS OR STRUCTURES, SIDEWALKS, DRIVEWAYS, PARKING LOTS, DECKS, PATIOS, GRAVEL, OR STONE WALKS, OTHER PERVIOUS OR NON-PERVIOUS HARDSCAPES, AND OTHER NON-IRRIGATED AREAS DESIGNATED FOR NON-DEVELOPMENT.

LANDSCAPE CONTRACTOR - A PERSON LICENSED BY THE STATE OF CALIFORNIA, TO CONSTRUCT, MAINTAIN, REPAIR, INSTALL, OR SUBCONTRACT THE DEVELOPMENT OF LANDSCAPE SYSTEMS.

LANDSCAPE DOCUMENTATION PACKAGE - SHALL INCLUDE THE FOLLOWING:

- (1) PROJECT INFORMATION
- (2) WATER-EFFICIENCY LANDSCAPE WORKSHEET
- (3) SOIL MANAGEMENT REPORT
- (4) LANDSCAPE DESIGN PLAN
- (5) IRRIGATION DESIGN PLAN
- (6) GRADING DESIGN PLAN

LANDSCAPE PROJECT - TOTAL AREA OF LANDSCAPE IN A PROJECT AS DEFINED IN 'LANDSCAPE AREA' FOR THE PURPOSE OF LANDSCAPE, IRRIGATION INSTALLATION.

LATERAL LINE - THE WATER DELIVERY PIPELINE THAT SUPPLIES WATER TO THE EMITTERS OR SPRINKLERS FROM THE VALVE. THIS PIPELINE IS TYPICALLY DOWN STREAM OF THE ZONE CONTROL VALVE AND IS NOT PRESSURIZED WHEN IRRIGATION IS NOT OCCURRING.

LOW-VOLUME IRRIGATION - THE APPLICATION OF IRRIGATION WATER AT LOW PRESSURE THROUGH A SYSTEM OF LINES OR LATERAL LINES AND LOW-VOLUME EMITTERS SUCH AS DRIP, DRIP LINES, OR BUBBLERS. LOW-VOLUME IRRIGATION SYSTEMS ARE SPECIFICALLY DESIGNED TO APPLY SMALL VOLUMES OF WATER SLOWLY AT OR NEAR THE ROOT ZONE OF PLANTS.

MAINLINE - THE PRESSURIZED PIPELINE THE DELIVERS WATER FROM THE WATER SOURCE TO THE VALVE OR OUTLET.

MAXIMUM APPLIED WATER ALLOWANCE - FOR DESIGN PURPOSES, THE UPPER LIMIT OF ANNUAL WATER USE FOR THE ESTABLISHED LANDSCAPE AREA, BASED UPON THE AREA'S REFERENCE EVAPOTRANSPIRATION, THE ET ADJUSTMENT FACTOR, AND THE SIZE OF THE LANDSCAPE AREA. THE ESTIMATE TOTAL WATER USE (ETU) SHALL NOT EXCEED THE MAXIMUM APPLIED WATER ALLOWANCE (MAWA).

MULCH - ANY MATERIAL, SUCH AS LEAVES, BARK, STRAW, OR OTHER MATERIALS LEFT LOOSE AND APPLIED TO THE SOIL SURFACE TO REDUCE EVAPORATION.

NEW CONSTRUCTION - A NEW BUILDING WITH A LANDSCAPE OR OTHER NEW LANDSCAPE.

OPERATING PRESSURE - THE PRESSURE AT WHICH A SYSTEM OF SPRINKLERS IS DESIGNED TO OPERATE, USUALLY INDICATED AT THE BASE OF A SPRINKLER.

OVERHEAD SPRINKLER IRRIGATION SYSTEMS - SYSTEMS THAT DELIVER WATER THROUGH THE AIR, SPRAY HEADS, ROTORS.

OVER-SPRAY - THE WATER WHICH IS DELIVERED BEYOND THE TARGETED LANDSCAPED AREA, KETTING PAVEMENTS, WALKS, STRUCTURES, OR OTHER NON-LANDSCAPED AREAS.

PERMIT - AN AUTHORIZING DOCUMENT ISSUED BY THE CITY, COUNTY, OR STATE FOR NEW CONSTRUCTION OR REHABILITATED LANDSCAPE.

PERVIOUS - ANY SURFACE MATERIAL THAT ALLOWS PASSAGE OF WATER THROUGH THE MATERIAL AND INTO THE UNDERLYING SOIL.

PLANT FACTOR - A FACTOR THAT, WHEN MULTIPLIED BY THE REFERENCE EVAPOTRANSPIRATION (ET), ESTIMATES THE AMOUNT OF THE WATER NEEDED BY PLANTS. THE PLANT FACTOR FOR LOW WATER USE PLANTS IS 0.0 TO 0.5, THE PLANT FACTOR FOR AVERAGE WATER USING PLANTS IS 0.4 TO 0.6, AND THE PLANT FACTOR FOR HIGH WATER USE PLANTS IS 0.7 TO 1.0. PLANT FACTORS CITED ARE DERIVED FROM WATER USE CLASSIFICATIONS OF LANDSCAPE SPECIES. (MAGOL)

PRECIPITATION RATE - THE RATE OF APPLICATION OF WATER MEASURED IN INCHES PER HOUR.

PROJECT APPLICANT - THE INDIVIDUAL OR ENTITY SUBMITTING A LANDSCAPE DOCUMENTATION PACKAGE, REQUIRED TO REQUEST A PERMIT, PLAN CHECK OR DESIGN REVIEW. A PROJECT APPLICANT MAY BE THE PROPERTY OWNER OR HIS OR HER DESIGNER.

RAIN SENSOR - A COMPONENT WHICH AUTOMATICALLY SUSPENDS AN IRRIGATION EVENT WHEN IT DETECTS RAINFALL.

RECORD DRAWING OR AS-BUILT DRAWINGS - A SET OF REPRODUCIBLE DRAWINGS WHICH SHOW SIGNIFICANT CHANGES IN THE WORK MADE DURING CONSTRUCTION AND WHICH ARE USUALLY BASED ON DRAWINGS PROVIDED BY THE FIELD AND OTHER DATA FURNISHED BY THE CONTRACTOR.

RECREATIONAL AREA - AREAS DEDICATED TO ACTIVE PLAY, SUCH AS PARKS, SPORTS FIELDS, AND GOLF COURSES WHERE TURF PROVIDES A PLAYING SURFACE.

RECYCLED WATER - TREATED OR RECYCLED WASTE WATER OF A QUALITY SUITABLE FOR NON-PORTABLE USES SUCH AS LANDSCAPE IRRIGATION AND WATER FEATURES. THIS WATER IS NOT INTENDED FOR HUMAN CONSUMPTION.

REFERENCE EVAPOTRANSPIRATION - A STANDARD MEASUREMENT OF ENVIRONMENTAL PARAMETERS WHICH AFFECT THE WATER USE OF PLANTS. ETU IS EXPRESSED IN INCHES PER DAY, MONTH OR YEAR AND IS AN ESTIMATE OF THE EVAPOTRANSPIRATION OF A LARGE FIELD OF FOUR TO SEVEN INCH TALL, COOL-SEASON GRASS THAT IS WELL WATERED. REFERENCE EVAPOTRANSPIRATION IS USED AS THE BASIS OF DETERMINING THE MAXIMUM APPLIED WATER ALLOWANCE SO THAT REGIONAL DIFFERENCES IN CLIMATE CAN BE ACCOMMODATED.

REHABILITATED LANDSCAPE - ANY RE-LANDSCAPING PROJECT THAT REQUIRES A PERMIT, PLAN CHECK, OR DESIGN REVIEW.

RUN OFF - WATER WHICH IS NOT ABSORBED BY THE SOIL OR LANDSCAPE TO WHICH IT IS APPLIED AND FLOWS FROM THE LANDSCAPE AREA. RUN OFF MAY RESULT FROM WATER THAT IS APPLIED AT TOO A GREAT RATE (APPLICATION RATE EXCEEDS INFILTRATION RATE) OR WHEN THERE IS A SLOPE.

SOIL MOISTURE SENSING DEVICE - A DEVICE THAT MEASURES THE AMOUNT OF WATER IN THE SOIL. THE DEVICE MAY ALSO SUSPEND OR INITIATE AN IRRIGATION EVENT.

SOIL TEXTURE - THE CLASSIFICATION OF A SOIL BASED ON THE PERCENTAGE OF SAND, SILT, AND CLAY IN THE SOIL.

SPECIAL LANDSCAPE AREA - AN AREA OF THE LANDSCAPE DEDICATED SOLELY TO EDIBLE PLANTS, AREAS IRRIGATED WITH RECYCLED WATER, WATER FEATURES USING RECYCLED WATER AND AREAS DEDICATED TO ACTIVE PLAY SUCH AS PARKS, SPORT FIELDS, GOLF COURSES, AND WHERE TURF PROVIDES A PLAYING SURFACE.

SPRINKLER HEAD - A DEVICE THAT DELIVERS WATER THROUGH A NOZZLE.

STATIC WATER PRESSURE - THE PIPELINE OR MANICUAL WATER SUPPLY PRESSURE WHEN WATER IS NOT FLOWING.

STATION - AN AREA SERVED BY ONE VALVE OR BY A SET OF VALVES THAT OPERATE SIMULTANEOUSLY.

SWING JOINT - AN IRRIGATION COMPONENT THAT PROVIDES A FLEXIBLE LEAK FREE CONNECTION BETWEEN THE EMISSION DEVICE AND LATERAL PIPELINE TO ALLOW MOVEMENT IN ANY DIRECTION AND TO PREVENT EQUIPMENT DAMAGE.

TURF - A SURFACE LAYER OF EARTH CONTAINING MOVED GRASS AND ITS ROOTS.

VALVE - A DEVICE USED TO CONTROL THE FLOW OF WATER IN THE IRRIGATION SYSTEM.

WATER FEATURE - A DESIGN ELEMENT WHERE OPEN WATER PERFORMS AN AESTHETIC OR RECREATIONAL FUNCTION ONLY. THE SURFACE AREA OF WATER FEATURES IS INCLUDED IN THE HIGH WATER USE HYDROZONE OF THE LANDSCAPE AREA.

WATERING WINDOW - THE TIME OF DAY IRRIGATION IS ALLOWED.

IRRIGATION SPECIFICATIONS

1. INSTALLATION OF COMPLETE AUTOMATIC IRRIGATION SYSTEM AS ACCORDING TO DESIGN PLANS, DESIGN DETAILS, AND IRRIGATION SPECIFICATIONS.
2. LAYOUT OF ALL IRRIGATION HEADS, VALVES, CONTROLLERS, WIRING, QUICK COUPLERS, BACK-FLOW PREVENTERS, POINTS OF CONNECTIONS, LOCATIONS, AS SPECIFIED ON DESIGN PLANS, DESIGN DETAILS, AND IRRIGATION SPECIFICATIONS.
3. POINT OF CONNECTION FOR IRRIGATION SYSTEM SHALL BE VERIFIED WITH PLUMBING CONTRACTOR. ALL ELECTRICAL CONNECTIONS, CONDUIT INSTALLATION SHALL BE COORDINATED WITH ELECTRICAL CONTRACTOR.
4. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS SHOWN, AND ADJUST SAID DIMENSIONS TO FIT EXISTING SITE CONDITIONS.
5. DUE TO SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, ETC., WHICH MAY BE REQUIRED. CONTRACTOR SHALL CAREFULLY INVESTIGATE CONDITIONS AFFECTING HIS WORK, AND PLAN HIS WORK ACCORDINGLY, FURNISHING ALL FITTING, ETC., AS MAY BE REQUIRED TO INSTALL THE PROPOSED IRRIGATION SYSTEM.
6. CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM, AS INDICATED ON DESIGN PLANS, WHEN UNKNOWN FIELD CONDITIONS ARISE.
7. CONTRACTOR TO CONSULT WITH LANDSCAPE ENGINEER, WHERE REVISIONS MAY BE ADVISABLE OR A DISCREPANCY ARISES.
8. CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT, AS NECESSARY TO MEET ALL CODE REQUIREMENTS, (CITY, COUNTY, STATE, FEDERAL, BOI).
9. CONTRACTOR TO PROVIDE ADEQUATE SAFETY MEASURES TO PROTECT THE PUBLIC AND ALL WORKERS INVOLVED IN THE PROJECT FROM INJURY. DUE TO CONSTRUCTION OR EQUIPMENT OPERATIONS, CONTRACTOR TO POST AT SIGNS, BARRICADES, BANNERS ETC., AS DEEMED NECESSARY TO WARN PUBLIC OF ANY HAZARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SAFETY OF THE PUBLIC AND ALL WORKERS AT ALL TIMES.
10. CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL EXISTING UTILITY LOCATIONS UNDER GROUND SERVICE ALERT. (USA (811) IS TO BE NOTIFIED BEFORE ANY EXCAVATION IS COMMANDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY ANY OTHER UTILITIES NOT COVERED BY GROUND SERVICE ALERT. CONTRACTOR TO TAKE GREAT CARE AS NOT TO DAMAGE ANY EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY / LIABILITY FOR ANY AND ALL REPAIRS, AT HIS EXPENSE, TO ANY UTILITY DAMAGE INCURRED BY HIM WHILE COMPLETING HIS SCOPE OF WORK.
11. CONTRACTOR TO VERIFY FOR PROPER ROUGH GRADE COMPLETION, BEFORE COMMENCEMENT OF IRRIGATION INSTALLATION.

SUBMITTALS

1. CONTRACTOR TO SUBMIT, PRODUCT SUBMITTALS, PROMPTLY UPON AWARDING OF CONTRACT.
2. CONTRACTOR TO PROVIDE TWO (2) SETS OF OPERATION AND MAINTENANCE MANUALS. THESE MANUALS SHALL CONTAIN THE FOLLOWING INFORMATION:
 - 2.1. CONTRACTOR'S NAME, ADDRESS AND TELEPHONE NUMBER.
 - 2.2. WRITTEN ONE YEAR WARRANTY / GUARANTEE.
 - 2.3. NAMES AND ADDRESSES OF ALL MANUFACTURERS AND SUPPLIERS.
 - 2.4. COMPLETE SET OF MANUFACTURER'S LITERATURE INFORMATION AND SPECIFICATIONS ON ALL MATERIAL / EQUIPMENT INSTALLED.
 - 2.5. COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT INSTALLED.
 - 2.6. CERTIFICATE OF CONSTRUCTION COMPLIANCE STATING ALL WORK PERFORMED IS IN CONFORMANCE WITH APPROVED DESIGN PLANS, DESIGN DETAILS, SPECIFICATIONS AND ALL AUTHORIZED REVISIONS.
3. CONTRACTOR TO MAINTAIN A SET OF "AS BUILT" DRAWINGS, DETAILING ANY CHANGES OR DEVIATIONS MADE DURING CONSTRUCTION. INDICATE ANY DEVIATION FROM DESIGN PLANS BY REFERENCING TWO (2) PERMANENT POINTS OF REFERENCE. "AS BUILT" DRAWINGS ARE TO BE SUBMITTED, UPON COMPLETION OF PROJECT TO OWNER.
4. A CONTROLLER CHART SHALL BE PROVIDED FOR EACH INDIVIDUAL CONTROLLER. A REDUCED DRAWING OF ACTUAL DESIGN PLANS, MAY BE UTILIZED. ALL VALVES AND LATERAL LINES CONTROLLED ARE TO BE COLOR CODED FOR EASY ACCESS / LOCATION RECOGNITION.

IRRIGATION MATERIALS

1. PVC PIPING, FITTINGS, AND CONNECTIONS
 - 1.1. ALL PVC PIPING TWO INCHES IN DIAMETER AND UNDER TO BE SCHEDULE 40 PIPING.
 - 1.2. ALL PVC PIPING OVER TWO INCHES IN DIAMETER TO BE CLASS 315 PIPING.
 - 1.3. PIPING EXPOSED AT BACK-FLOW PREVENTER AND PUMP ASSEMBLIES TO BE GALVANIZED PIPING UNLESS CITY, COUNTY, FEDERAL CODES/ DIFFER.
 - 1.4. ALL PVC FITTINGS TO BE SCHEDULE 40 MINIMUM.
 - 1.5. ALL PIPING AND FITTINGS TO MEET ALL CITY, COUNTY, STATE, AND FEDERAL CODES.
2. IRRIGATION HEADS
 - 2.1. IRRIGATION HEADS ARE TO BE THOSE SPECIFIED ON DESIGN PLANS, DESIGN DETAILS, AND SPECIFICATIONS OR AN APPROVED EQUAL, PRE-APPROVED BY LANDSCAPE ENGINEER.
 - 2.2. IRRIGATION RISER ASSEMBLIES ARE TO BE THOSE SPECIFIED ON DESIGN PLANS, DESIGN DETAILS, AND SPECIFICATIONS OR AN APPROVED EQUAL, PRE-APPROVED BY LANDSCAPE ENGINEER.

9. AUTOMATIC CONTROL VALVES

- 9.1. AUTOMATIC CONTROL VALVES ARE TO BE MAKE, MODEL, AND SIZE SPECIFIED ON DESIGN PLANS, DESIGN DETAILS, AND SPECIFICATIONS OR AN APPROVED EQUAL, MAY BE UTILIZED ONLY ON APPROVAL OF THE LANDSCAPE ENGINEER.
- 9.2. IF THE OPERATING PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES, THE INSTALLATION OF A PRESSURE REGULATING DEVICE IS REQUIRED TO ENSURE THAT THE DYNAMIC PRESSURE AT EACH EMISSION DEVICE IS WITHIN THE MANUFACTURER'S RECOMMENDED PRESSURE RANGE FOR OPTIMAL PERFORMANCE.
- 9.3. ALL IRRIGATION SYSTEMS ARE TO HAVE A MASTER VALVE INSTALLED AS ACCORDING TO DESIGN PLANS, DESIGN DETAILS, AND SPECIFICATIONS.
- 9.4. AUTOMATIC CONTROL VALVE ASSEMBLIES ARE TO BE AS SPECIFIED ON DESIGN PLANS, DESIGN DETAILS AND SPECIFICATIONS.
- 9.5. ALL LANDSCAPES OVER 5,000 SQ.FT. ARE TO HAVE FLOW SENSORS INSTALLED.
4. AUTOMATIC CONTROLLERS
 - 4.1. AUTOMATIC CONTROLLERS ARE TO BE THOSE SPECIFIED ON DESIGN PLANS, DESIGN DETAILS AND SPECIFICATIONS.
 - 4.2. AUTOMATIC CONTROLLERS TO BE MULTI-PROGRAMMABLE WITH WEATHER SENSOR, FLOW SENSOR AND MASTER VALVE CAPABILITIES.
 - 4.3. ELECTRICAL POWER SERVICE (110 V) TO BE PROVIDED BY OTHERS.
5. BACKFLOW PREVENTER
 - 5.1. BACKFLOW PREVENTER IS TO BE AS SPECIFIED ON DESIGN PLANS, DESIGN DETAILS, AND SPECIFICATION.
 - 5.2. BACKFLOW PREVENTER ALL CITY, COUNTY, STATE, FEDERAL CODE REQUIREMENTS.
6. PVC SLEEVING
 - 6.1. SLEEVING MATERIAL SHALL BE CLASS 200 PVC PIPING MINIMUM. SLEEVING MATERIAL UNDER PAVEMENT AREAS TO SCHEDULE 40 PVC PIPING.
 - 6.2. SLEEVE SIZING TO BE LARGE ENOUGH TO ALLOW EASY REMOVAL AND REPLACEMENT OF PIPE BEING SLEEVED.
 - 6.3. ALL WIRING TO BE SLEEVED IN SEPARATE ELECTRICAL CONDUIT.
 - 6.4. ALL PIPING UNDER WALKS, CURBS, PAVEMENT, CONCRETE OR ANY OTHER SOLID SURFACE TO BE SLEEVED. ALL SLEEVES ARE TO EXTEND TWELVE INCHES PAST SOLID SURFACE ON BOTH ENDS.
7. CONTROL WIRING
 - 7.1. CONTROL WIRE TO VALVES, SHALL BE UF TYPE, WITH SOLID COPPER CONDUCTOR.
 - 7.2. CONTROL WIRE TO BE DESIGNED FOR DIRECT BURIAL USE.
 - 7.3. SIZING FOR CONTROL WIRE TO BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, NUMBER 14 SOLID CORE COPPER CONTROL WIRE MINIMUM SIZING. ANY SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ENGINEER.
8. VALVE BOXES
 - 8.1. VALVE BOXES ARE TO BE THOSE AS SPECIFIED ON DESIGN PLANS, DESIGN DETAILS OR SPECIFICATIONS. APPROVED MANUFACTURERS ARE ARJETER, CARGON, OR AN APPROVED EQUAL, APPROVED BY LANDSCAPE ENGINEER.
 - 8.2. ALL VALVE BOXES TO HAVE BOLT LOCK LIDS.
 - 8.3. MAXIMUM ONE (1) VALVE PER STANDARD RECTANGULAR VALVE BOX.
 - 8.4. MINIMUM TEN INCH ROUND VALVE BOX, UTILIZED FOR A SINGLE GATE VALVE.
 - 8.5. ALL NECESSARY VALVE BOX EXTENSIONS MUST BE PROVIDED AND INSTALLED TO OBTAIN PROPER GRADE HEIGHT.
4. QUICK COUPLERS
 - 4.1. QUICK COUPLERS ARE TO BE AS SPECIFIED ON DESIGN PLAN, DESIGN DETAILS AND SPECIFICATIONS.
 - 4.2. QUICK COUPLERS ARE TO BE INSTALLED IN TEN INCH ROUND VALVE BOX WITH BOLTABLE LID.
 - 4.3. TWO QUICK COUPLER KEYS WITH HOSE SWIVELS, ARE TO BE PROVIDED BY CONTRACTOR, AND TURNED OVER TO OWNER, UPON COMPLETION OF INSTALLATION / MAINTENANCE PERIOD.

CVEAS
CENTRAL VALLEY
ENGINEERING & SURVEYING, INC.
2132 HIGH STREET Tel: (924) 941-0011
SELMA, CA 95662 Fax: (924) 941-0015
WWW.CVEAS.COM Email: info@cveas.com

PROJECT
Car Wash
2410 Mahogany Way
Antioch, CA
074-370-024



Revisions	Date
△	
□	
△	
△	
△	

LANDSCAPE SPECIFICATIONS

CVEAS JOB #	20225
DATE	08-28-2021
PLANNING SUBMITTAL #	
PLAN CHECK SUBMITTAL #	
DRAWN BY	JAS
CHECKED BY	PL
SCALE	AS NOTED

L3.1

9 IRRIGATION INSTALLATION

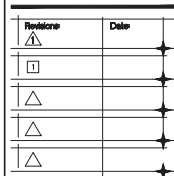
10	LANDSCAPE SPECIFICATIONS
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11	LANDSCAPE MATERIALS	12	PROJECT
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ADDITIONAL INFORMATION

L3.2

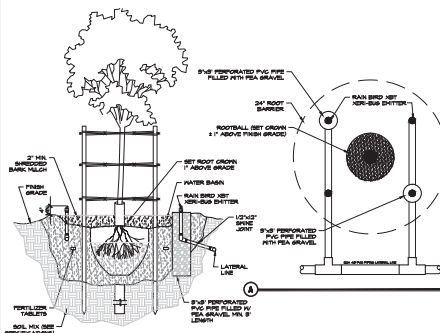


LANDSCAPE
IRRIGATION
DETAILS

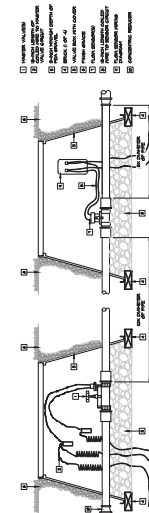
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DATE:	08-21-2021
PLANNING SUBMITTAL #:	
PLAN CHECK SUBMITTAL #:	
DRAWN BY:	JAS
CHECKED BY:	RL
SCALE:	AS NOTED

L4.0

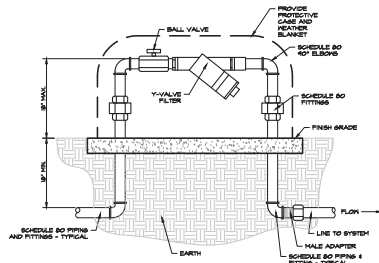
ID13	BACKFLOW PREVENTER ASSEMBLY N.T.S.
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ID20	PC XERI-BUG EMITTER ELEV. DTL.
	N.T.S.



ID21	MASTER VALVE AND FLOW SENSOR
	N.T.S.








ID22	SYSTEM FILTER DETAIL
	N.T.S.



PROJECT
WATSONVILLE CARWASH BLDG.
1455 FREEDOM BLVD.
AND ALTA VISTA AVE.
WATSONVILLE, CA 95078
APN - 018-061-06



Revisions:	Date:
 RPN REVISION #1	9-19-2020
 RPN REVISION #2	09-29-2021
	
	
	

IRRIGATION DETAILS

CVEAS JOB #:	19030
DATE:	08-12-2020
PLANNING SUBMITTAL #:	
APPLICATION #627	
PLAN CHECK SUBMITTAL #:	
XX-XXXX	
DRAWN BY:	
CVEAS INC	
CHECKED BY:	
FL	
SCALE:	
AS NOTED	

L5.0

CIVIL ENGINEERING • LAND SURVEYING • CONSULTING • STRUCTURAL DESIGN • ARCHITECTURAL DRAFTING • COMMERCIAL & RESIDENTIAL BUILDING DESIGN • PLANNING & PROJECT MANAGEMENT

**ATTACHMENT E
CONTRA COSTA FIRE COMMENTS
(SEPARATE PAGE)**

Contra Costa County



Fire Protection District

January 28, 2022

Mr. Jose Cortez
200 H Street
Antioch, CA 94509

Subject: New car wash
2410 Mahogany Way, Antioch
Planning #: UP-21-13, AR-21-12
CCCFPD Project No.: P-2022-016030

Dear Mr. Cortez,

We have reviewed the plans to establish a car wash at the subject location. The following is required for Fire District approval in accordance with the 2019 California Fire Code (CFC), the 2019 California Building Code (CBC), and Local and County Ordinances and adopted standards:

The proposed project appears to meet Code and Fire District requirements.

Additional information:

1. 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

2. 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
Elevations of building,
Size of building and type of construction,
Gates, fences, retaining walls, bio-retention basins, any obstructions to access.
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

3. 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
4. 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 / tenant improvement plans are approved, plans and specifications for all deferred submittals shall be submitted, including, but not limited to the following.
 - Photovoltaic, if proposed
 - Carbon Dioxide 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.

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

cc: JDJ Developing
deep@jfsinc.us

File: 2410 MAHOGANY WAY-PLN-P2022-016030-LTR

**ATTACHMENT F
SITE PICTURES
(SEPARATE PAGE)**

2410 Mahogany Way, Antioch, CA 94509



Looking South/West



Looking South/West



Looking North/West



Looking North/East



Looking South/East