

City Council

Mayor Patrick Slayter
Vice Mayor Neysa Hinton
Michael Carnacchi
Sarah Glade Gurney
Una Glass



Assistant Planner

Dana Morrison
Administrative Assistant
Rebecca Mansour

City of Sebastopol Design Review Board Staff Report

Meeting Date: June 20, 2018
Agenda Item: 8C
To: Design Review Board
From: Dana Morrison, Assistant Planner
Subject: Major Design Review: Exchange Bank
Recommendation: Approval with Conditions
Applicant/Owner: Jeff Blechel (TLCD Architecture)/Exchange Bank
File Number: 2018-49
Address: 840/850 Gravenstein Highway North
CEQA Status: Categorical Exemption: Section 15332: Class 32
General Plan: Commercial Office
Zoning: CG: General Commercial

Introduction:

This is a Major Design Review application requesting approval to construct a new building for Exchange Bank at 840/850 Gravenstein Highway North. The site was formerly home to a gas station but the lot has sat vacant for a number of years.

Project Description:

The project involves the development of a 20 foot tall (single-story), 3,400 square foot banking facility with 26 allocated parking spaces and 4 bicycle parking spaces, to be located at the corner of Tocchini Street and Gravenstein Highway North. The building has been orientated to the northeast corner of the property, with the parking located behind the building. The building was designed to have a strong presence on both street frontages.

According to the application, the new bank building was designed to feel at home in Sebastopol. In the absence of a singular style, found after conducting an informal inventory of existing buildings in town, a design was chosen that reflects Sebastopol's agricultural past, and drew inspiration from the apple and wine industries, barns, apple dryers, and the Luther Burbank experimental farm.

A key component of the building exterior is the OkoSkin (rain screen) cladding, which is a high grade fiber-reinforced cementitious product available in three subtly differing surface colors and finishes. The panels are 6" wide x 72" long x 1/2" thick and would be installed with a 5/8" gap between each panel. These panels were selected to recall traditional agrarian materials such as weathered barn boards, apple crates and rural fencing. The panels would be installed in a random pattern. The fenestration, exterior wood poles, weather steel landscape materials, and plantings were all selected to support this design approach.

The east and west side of the proposed building will each have a canopy, supported by wood columnpoles with steel connectors at the roof and at grade. The canopy ceiling will consist of natural white oak soffit, with recessed strip lighting (lighting fixture brochure included at end of staff report). The storefront and entrance doors are proposed to be made of aluminum painted a natural brown color (Kynar).

Solar panels are proposed for the eastern sloped roof, along with a roof mounted mechanical unit to be place along the north-eastern side of building and set back from the parapet edge, colored to match the proposed OkoSkin cladding.

Landscaping:

The submittal includes a plant pallette. This includes various tree species, shrubs, perennials, grasses, ground cover and vines. Landscaping also includes: weathering steel low storm water planter, concrete block benches, metal fencing, abstracted vine crop art component, enhanced pavement (light unit pavers), bike racks and recycle/trash receptacles, a 6 foot high concrete masonry unit (CMU) wall covered with vines.

There are 5 trees located at the rear of the property which the applicant proposes to remove and replace with appropriate species. The City Arborist has reviewed the plans and is supportive of their removal and replacement. In addition, the applicant has proposed a grove of flowering cherry trees at the front of the development. However, the City Arborist notes that cherries do not survive long in this climate and location.

6/13/2018 Design Changes:

Exchange Bank expressed that they wanted to make two changes to the design as follows:

Replace the vertical Corten poles on the parking lot side of the building with a landscape solution (to soften the visual impact of that wall). They just felt that this is one too many things going on with this design. The projects landscape architect will come to the meeting prepared to discuss alternatives.

There are two granite stones or concrete blocks in the landscape, one near the corner, and the other by the building entry. Exchange Bank would like to reconsider these two items, possibly replacing the one near the entry with a bench. In other words, they'd like to ask the Board for a little flexibility on this item.

Environmental Review:

The project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA), pursuant to the following:

Section 15332: In-Fill Development Projects: Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

- (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.

The project is consistent with this categorical exemption in that it complies with the General Plan land use designation of Commercial Office and the applicable goals and policies of the Land Use Chapter and Community Design Chapter, as analyzed in the subsequent section of the staff report. The project is also consistent with the CG: General Commercial District and applicable development standards of the Zoning Ordinance in that a bank is a permitted use in the CG: District.

Furthermore, the lot is substantially less than five (5) acres; located within City limits; generally surrounded by urban uses; and does not have any identified endangered or rare species. Finally, the site is in an urbanized area, which can be served by required utilities and public service, and the project would not result in significant traffic, noise, air quality, or water quality impacts in that it only involves one modest-sized building.

General Plan Consistency:

The General Plan Land Use designation for this site is Commercial Office. The General Plan describes Commercial Office as the following: *“This designation provides areas for commercial and office uses with off-street parking and/or clusters of street-front stores. This designation allows primarily local-serving retail establishments, specialty shops, banks, professional offices, motels, professional, administrative, medical, dental, and business offices, bed and breakfast users, and business and personal services, along with ancillary commercial and service uses. This designation is typically assigned to parcels, located on a major arterial street, that can provide sufficient land for commercial establishments that do not benefit from high-volume pedestrian concentrations found Downtown. The following types of retail uses are discouraged in this land use designation: factory outlets; large regional-serving shopping centers; and other similar retail uses generating high traffic volumes. Maximum floor area ratio (FAR) shall not exceed 1.5. Residential uses are permitted as a secondary use to the primary commercial uses permitted in this land use designation if generally located above the ground floor at the High Density Residential density of 12.1 to 25 units per acre. The residential space will not be counted in calculating the FAR for a development.”*

The project is consistent with the General Plan in that it involves the development of a bank, a commercial use, which is a permitted use for this district.

The project is subject to the following General Plan goals and policies:

Land Use Chapter

- *Goal LU 1: Maintain Sebastopol as a Unique, Charming and Environmentally Sensitive Small Town that Provides Residents, Business, and Visitors with Opportunities to Enjoy a High Quality of Life.*
- *Goal LU 1-2: Avoid urban sprawl by concentrating development within the City limits; favor infill development over annexation.*
- *Goal LU 1-7: Encourage new development to be contiguous to existing development, whenever possible.*

- *Goal LU 7: Emphasize and advance Sebastopol's role as a market and service center for the West County by providing for a vibrant downtown, diversified uses, and community services and facilities.*

The project is consistent with the applicable goals and policies of the Land Use Chapter in that it is a new bank development, which will result in the development of an existing (vacant) lot on Gravenstein Highway North is contiguous with the city and does not require an annexation. The project will help to provide a needed service for Sebastopol residents, visitors and those in the West County.

Community Design Chapter

- *Goal CD 1: Preserve and Enhance Sebastopol's Unique Character, Design, and Sense of Place as a Small, Compact Town*
- *Policy CD 1-1: Ensure that new development is constructed in a manner consistent with the City's Design Guidelines, and any design guidelines for specific areas or types of development.*
- *Policy CD 1-2: Ensure that new residential and commercial development is sensitive to the surrounding architecture, topography, landscaping, character, scale, and ambiance of the surrounding neighborhood.*
- *Policy CD 1-3: Discourage repetitive designs in residential and commercial areas, while establishing a cohesive visual relationship between structures and their surroundings.*
- *Policy CD 1-6: Maintain and enforce Zoning Ordinance provisions and design guidelines that prohibit auto-centric strip development.*

The project is consistent with the applicable goals and policies of the Community Design Chapter of the General Plan in that it strengthens Sebastopol's sense of place through the cumulative development of Gravenstein Highway North, a key commercial corridor. The project also enhances the character of the surrounding neighborhood and demonstrates design excellence in that it involves a uniquely styled building pulling on design elements from Sebastopol's past, comparable to similar structures in the nearby Downtown Core, and will result in the redevelopment of a site in disrepair. Finally, the project has onsite parking located at the rear of the lot, which contributes to Sebastopol's move away from strip development on major thoroughfares, such as Gravenstein Highway North.

Zoning Ordinance Consistency:

The site is located in the CG: General Commercial District. The Zoning Ordinance describes General Commercial as the following: The Zoning Ordinance states the following: "*The CG District provides areas for commercial uses with off-street parking and/or clusters of street-front stores. This zone permits primarily local-serving retail establishments, specialty shops, banks, professional offices, motels, and business and personal services that are typically appropriate along major thoroughfares. The following types of retail uses are discouraged: factory outlets, large regional-serving shopping centers, and other similar retail uses generating high traffic volumes.*"

The project is consistent with the CG District in that it involves the commercial development of a bank, which is classified as an Office use and is a permitted-use in the CG District.

The project is subject to the following provisions of the Zoning Ordinance:

Development Standard	Project
Table 17.25-2 Building Height 32 Feet - 2 Stories	20 Feet - 1 Story
Table 17.25-2 Front Setback None Required	Approximately 8 Feet
Table 17.25-2 Side Setback None Required	15 Feet on North end 10 Feet on South end
Table 17.25-2 Rear Setback Main Building: 20 Feet (as it abuts a residential neighborhood) Parking: 6 Feet	Main Building: Approximately 132 Feet Parking: 6 Feet
Table 17.25-2 Floor Area Ratio 1.0 (Excludes Residential)	0.175
Table 17.25-2 Buffering-Screening Required Screening Trees, Vegetation or Solid Fence (6 Foot Height)	Condition of Approval

The project is consistent with the applicable development standards of the CG District as submitted and conditioned.

Parking: The project is subject to the following requirements as set forth in Chapter 17.220: Off-Street Parking Regulations of the Zoning Ordinance.

Required Off-Street Parking

Zoning Ordinance Section 17.220.030.B (1) Commercial Uses (such as banks): one space per 300 square feet
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The Zoning Ordinance would require a total of 12 parking spaces for the entire project.

The project provides a total of 26 parking spaces. As such, the application is consistent with this requirement.

Compact Car, Accessible, and Bicycle Parking Requirements

Section 17.220.020.C (4): Accessible Spaces. Parking spaces specifically reserved for vehicles licensed by the State for use by the disabled shall be provided in each parking facility according to the California Uniform Building Code
Section 17.220.050.A: Bicycle Parking. A minimum of 15 percent of the total required parking spaces for vehicles shall be provided.

The project provides 2 ADA spaces and 4 spaces for bicycle parking. The project is consistent with the Zoning Ordinance in this area.

Water Efficient Landscape: Chapter 15.36 of the Sebastopol Municipal Code requires new and rehabilitated landscape projects to comply with California State standards for water efficient landscaping. The applicant has submitted information regarding their Urban Storm Water

Mitigation plan and will be required to submit documentation to the Building Official, demonstrating compliance with the standards.

Public Comment:

The Planning Department has not received any comments from the public as of writing the staff report.

City Departmental Comment:

The Planning Department circulated the application to the following City departments for review: Building and Safety, City Arborist, City Manager/City Attorney, Engineering, Fire, Police and Public Works. Building and Safety, City Manager/City Attorney, Fire, and Police did not have any comments. Public works commented that utilities will be reviewed when driveways are submitted. Engineering added the following conditions, which have been added as conditions of approval to the end of this staff report:

1. The applicant shall submit a site grading and utilities plan to the Public Works Department for review and approval.
2. The existing sidewalk access ramp at Tocchini St shall be replaced to current Caltrans standards.
3. The applicant shall obtain a Caltrans encroachment permit for all work in the State right of way.
4. Water services to the site shall include domestic, a separate irrigation, and fire services. All backflow prevention shall meet current City standards, and be contained behind an architectural screen to match the building facade or as approved by the Planning Director.
5. The applicant shall video-inspect the existing sewer lateral and submit the video to Public Works. If necessary, a sewer cleanout shall be installed at the property line on the existing lateral.

The City Arborist made the following comments, as well:

“Regarding the proposed removal of the few existing trees in the rear of the lot, they are not high quality specimens and the project will be better with their removal and replacement with appropriate species. One of the proposed focal points of the landscape plan is a grove of flowering cherry trees in the front. With a few exceptions, cherries, both flowering and fruiting do not survive long in this climate and location. They are highly susceptible to several fungal and bacterial diseases after a few years, which are then usually followed by borers attacking the stressed trees.

One other concern is for traffic safety. It’s difficult to exit the access road between Mary’s Pizza and this lot now, turning north on Highway 116 because of the raised grade and low retaining wall on the east side. Though this will be removed, and the site lowered to match surrounding grade, a new concrete wall is proposed as a visual anchor on the southeast corner which may impede visibility to the north.”

Required Findings:

Section 17.310.030.B.2 of the Zoning Ordinance establishes the following Design Review Procedure: In considering an application for design review, the Design Review Board, or the Planning Director, as the case may be, shall determine whether:

- a) The design of the proposal would be compatible with the neighborhood and with the general visual character of Sebastopol.
- b) The design provides appropriate transitions and relationships to adjacent properties and the public right of way.
- c) It would not impair the desirability of investment or occupation in the neighborhood.
- d) The design is internally consistent and harmonious.
- e) The design is in conformity with any guidelines and standards adopted pursuant to this Chapter.

Analysis:

The project involves the development of a new commercial bank building which will replace a vacant lot, that was formerly home to a gas station. The project will contain a single 3,400 square foot bank building and establish a strong visual presence on Gravenstein Highway North. The project will result in the installation of new plantings and trees. Overall, the Board could find that this project is appropriate for the location and greater Sebastopol for several reasons.

The project complies with the General Plan in that is a commercial building, which will revitalize an existing commercial site, and facilitate the perpetual move towards an urban and pedestrian-friendly form of development in the northern part of Sebastopol. The Board could also find the project to be compatible with the neighborhood and greater Sebastopol in that the building, while having a relatively bold contemporary design, will have materials, colors, and architectural features, which are present throughout the City in general.

Furthermore, the project maximizes the development potential of the site through the provision of a commercial tenant space while siting the building in a manner that does not impair the public right-of-way or surrounding properties. The project will contain trees and plantings, which provides a natural aesthetic element to the overall urban character of the site. Finally, the project promotes the community desire for Sebastopol to remain a small town in that it increases the amount of commercial space in the community through urban infill development on a commercial corridor, renewing a previously-developed site.

Recommendation:

The Board should provide direction to the applicant regarding the corten poles and concrete blocks.

Staff recommends that the Board approve the application based on the facts, findings, and analysis set forth and subject to the conditions of approval contained in this staff report, if there is a consensus that the design of the project is compatible with the site.

Alternatively, the Board may find that revisions are necessary and a continuance is appropriate. Staff recommends that the Board provide specific direction for redesign to the applicant in the event of a continuance or rationale in the event of a denial.

DESIGN REVIEW PERMIT: 2018-49
Major Design Review: Exchange Bank
840/850 Gravenstein Highway North

Findings for Approval:

1. That the project is categorically exempt from the requirements of the California Environmental Quality Act, pursuant to Section 15332, Class 32, in that it complies with the General Plan land use designation of Commercial Office and the applicable goals and policies of the Land Use Element and Community Identity Element, as contained in the subsequent findings. The project is also consistent with the CG: General Commercial District and applicable development standards of the Zoning Ordinance, as conditioned and submitted, in that the commercial development of a bank is permitted in the CO: District. Furthermore, the lot is substantially less than five (5) acres; located within City limits; generally surrounded by urban uses; and does not have any identified endangered or rare species. Finally, the site is in an urbanized area, which can be served by required utilities and public services, and the project would not result in significant traffic, noise, air quality, or water quality impacts in that it only involves one modest-sized building; utility service can be readily provided; and the project is subject to standard requirements to protect water quality.
2. That the project is consistent with the Commercial Office land use designation of the General Plan in that it involves a commercial development, which will contain a bank.
3. That the project is consistent with the Zoning Ordinance in that it complies with the CG: General Commercial District and the applicable development standards as approved and conditioned.
4. That the design of the project will be compatible with the neighborhood and the general visual character of Sebastopol in that it involves the development of a single-story bank building of a modern architectural style. The building will have vertical (rain screen) cladding chosen to recall traditional agrarian materials such as apple crates and rural fencing, which is a style that can be found throughout Sebastopol.
5. That the project will not impair the desirability of investment or occupation in the neighborhood in that it will redevelop an existing commercial site, which has experienced decline, with a new building, site improvements, and landscaping. The redevelopment of this site will have a positive impact on the neighborhood in that the project will improve the visual character of the area and initiate a desired form of development. The project will also not impair investment or occupation in the neighborhood in that visually-undesirable improvements, such as surface parking spaces, mechanical equipment, and trash and recycle bins, are screened by the building, trees, and other plantings.
6. That the project provides appropriate transitions and relationships to adjacent properties and the public right-of-way in that the building will have a strong visual presence on the street but also has a modest setback from the abutting sidewalk, which will facilitate pedestrian access to and from the site. The site contains appropriate setbacks from abutting residential properties and will have a number of trees and plantings to screen building and parking improvements.

7. That the design is internally consistent and harmonious in that the project utilizes consistent materials and colors. The project will also provide a consistent species of trees and plantings.
8. That the design is in conformity with the adopted Design Guidelines in that the building is oriented parallel to the street. The building also contains a variety of architectural elements, such as large windows, canopies (shed roof style), and siding materials to break up the facade. Parking facilities are also treated as a secondary feature in that they are located behind the building, which is identified in the adopted Design Guidelines.

Recommended Conditions of Approval:

1. Approval is granted for the Design Review submittal described in the application and the plans date stamped May 14, 2018. This approval is valid for three (3) years, except that the applicant may request a one (1) year extension of this approval from the Planning Director, pursuant to Section 17.250.050 of the Zoning Ordinance.
2. All construction shall conform to the approved plans, unless the design is modified herein. The applicant shall obtain a Building Permit prior to the commencement of construction activities.
3. Prior to issuance of building permit, the applicant shall submit documentation to the Building Official, demonstrating compliance with the Water Efficient Landscape requirements per Chapter 15.36 of the Sebastopol Municipal Code.
4. The City of Sebastopol and its agents, officers and employees shall be defended, indemnified, and held harmless from any claim, action or proceedings against the City, or its agents, officers and employees to attach, set aside, void, or annul the approval of this application or the environmental determination which accompanies it, or which otherwise arises out of or in connection with the City's action on this application, including but not limited to, damages, costs, expenses, attorney's fees, or expert witness fees.
5. The Planning Director shall interpret applicable requirements in the event of any redundancy or conflict in conditions of approval.
6. Compliance with the Public Art Ordinance shall be demonstrated prior to issuance of a Building Permit, either by payment of an in-lieu fee, or by obtaining City approval for an on-site art work, or by demonstrating the requirement is not applicable. If on-site art is proposed, applicant is advised to initiate Public Arts Committee and Design Review Board consideration of such proposal well in advance of applying for a Building Permit.
7. Applicant is advised that under specified circumstances, the City of Sebastopol requires new commercial or residential buildings, and specific alterations, additions and remodels to the install a photovoltaic energy generation system. For specific requirements, see Municipal Code Chapter 15.72.
8. Rooftop equipment and backflow devices shall be screened. Any final screening shall be depicted in building permit plans and shall be to the satisfaction of the Planning Director.
9. No sound may emanate from the building which violates the Noise Ordinance or causes an undue disturbance to site neighbors.

- 10.** Any new signs that will identify the use of this property are subject to the prior approval of the Design Review Board or City staff, as appropriate.
- 11.** All applicable fees associated with processing this application and impact fees, including but not limited to school, park, traffic, housing linkage, inclusionary, art, water and sewer, shall be paid prior to issuance of a Certificate of Occupancy.
- 12.** The applicant may be required to obtain approval of improvement plans by the Engineering Department, and fulfill any requirements necessary for issuance of a Building Permit, prior to approval of any site improvements or Building Permits. The applicant may need to return to the Planning Commission and/or the Design Review Board for review at City staff's discretion, if any site changes are necessary, as a result of improvement plans.
- 13.** Occupancy limitations shall be established by the Building Official and clearly posted prior to issuance of a Certificate of Occupancy for any building, including a use requiring a Use Permit.
- 14.** Screening shall be required along the entire rear property line, which abuts residential lots, consisting of dense landscaping, including screen-type trees, or by a solid fence of six (6) feet in height.
- 15.** If archaeological materials are encountered during project activities, all work within 25 feet of the discovery shall be redirected until an archaeologist approved by the Planning Director assesses the finds, consults with the appropriate agencies, and makes recommendations. If avoidance of the archaeological deposit is not feasible, the archaeological deposit shall be evaluated for its eligibility for listing in the California Register of Historical Resources. If the deposit is determined not to be eligible for listing, mitigation will not be necessary. If the deposit is determined eligible for listing, adverse effects on the deposits shall be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and a technical data recovery report at a property curation facility. Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to the City of Sebastopol and the NWIC upon completion of the project. If archaeological materials are encountered during project activities, all work within 25 feet of the discovery shall be redirected until the archaeologist assesses the finds, consults with the appropriate agencies, and makes recommendations for the treatment of the discovery following procedures outlined in the Monitoring Plan. If avoidance of the archaeological deposit is not feasible, the archaeological deposit shall be evaluated for its eligibility for listing in the California Register of Historical Resources. If the deposit is determined not to be eligible for listing, mitigation will not be necessary. If the deposit is determined eligible for listing, adverse effects on the deposits shall be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and a technical data recovery report at a property

curation facility. Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to the City of Sebastopol and the NWIC upon completion of the project.

16. The applicant shall submit a site grading and utilities plan to the Public Works Department for review and approval.
17. The existing sidewalk access ramp at Tocchini St shall be replaced to current Caltrans standards.
18. The applicant shall obtain a Caltrans encroachment permit for all work in the State right of way.
19. Water services to the site shall include domestic, a separate irrigation, and fire services. All backflow prevention shall meet current City standards, and be contained behind an architectural screen to match the building facade or as approved by the Planning Director.
20. The applicant shall video-inspect the existing sewer lateral and submit the video to Public Works. If necessary, a sewer cleanout shall be installed at the property line on the existing lateral.

Attachments:

- Master Planning Application Form
- Environmental Information/Assessment Form
- Project Description Letter
- Site Photos and Photo Key
- Details sheets: pole connections, okoskin cement panels, window details, design inspiration photo (barn), elevations
- Reduced Set Design Review Submittal
- Lighting Fixture Brochure
- Preliminary Standard Urban Storm Water Mitigation Plan
- Initial Assessment of Biological Issues: Ted Winfield and Associates
- North Coast Regional Water Quality Control Board
- Archeological Survey Report
- Arborist Report
- Design Review Submittal Full Set
- Materials Board (will be at meeting)



City of Sebastopol

Planning Department
7120 Bodega Avenue
Sebastopol, CA 95472
(707) 823-6167 (Phone) or (707) 823-1135 (Fax)
www.ci.sebastopol.ca.us

MASTER PLANNING APPLICATION FORM

PROJECT INFORMATION:

ADDRESS:	840/850 Gravenstein Hwy. N.
PARCEL #:	060-270-085 & 060-270-077
PARCEL AREA:	19,465.75 SF

FOR CITY USE ONLY

PLANNING FILE #: 20181 49
DATE FILED: 05/14/18
TOTAL FEES PAID: \$ 1405
RECEIVED BY: [Signature]
DATE APPLICATION
DEEMED COMPLETE: _____

APPLICANT OR AGENT:

Name: Jeff Blechel (TLCD Architecture)
Email Address: jeff.blechel@tlcd.com
Mailing Address: 520 Third Street #250
City/State/Zip: Santa Rosa CA 95401
Phone: (707) 535-5232
Fax: NA
Business License #: _____
Signature: [Signature]
Date: 4/30/2018

OWNER OF PROPERTY

IF OTHER THAN APPLICANT:

Name: Exchange Bank (Contact: Sue Maddigan)
Email Address: sue.maddigan@exchangebank.com
Mailing Address: 545 Fourth Street
City/State/Zip: Santa Rosa CA 95401
Phone: (707) 524-3252
Fax: NA
Business License #: 980185
Signature: [Signature]
I certify that this application is being made with my consent.
Date: 4/30/2018

OTHER PERSONS TO BE NOTIFIED: (Include Agents, Architects, Engineers, etc.).

Name: Paul Bartholow (Brelje and Race, Civil Eng.)
Email Address: bartholow@brce.com
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Fax: _____

Name: _____
Email Address: _____
Mailing Address: _____
City/State/Zip: _____
Phone: _____
Fax: _____

MAY 14 2018
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PROJECT DESCRIPTION:

DESCRIBE IN DETAIL, the proposed project and permit request. (Attach additional pages, if needed):

See attached Project Description.

This application includes the checklist for the type of application requested: ☒ Yes ☐ No

Please indicate the type(s) of application that is being requested (example: Use Permit, Design Review, Variance, Planned Community Rezone, etc.):

Design Review

Please describe existing uses (businesses, residences, etc.) and other structures on the property:

The property has been a vacant lot for several years. There's various electrical equipment on the property such as an old transformer and switchgear.

DEVELOPMENT DATA:

SQUARE FEET BUILDING EXISTING:		☒ N / A
SQUARE FEET BUILDING DEMOLISHED:		☒ N / A
SQUARE FEET BUILDING NEW:	3,400 SF	☐ N / A
NET CHANGE IN BUILDING SQUARE FEET:		☒ N / A
NUMBER OF DWELLING UNITS EXISTING:	☐ 0 Bedrooms ☐ 2 Bedrooms ☐ 4+ Bedrooms	☐ 1 Bedrooms ☐ 3 Bedrooms ☒ N / A
NUMBER OF DWELLING UNITS PROPOSED:	☐ 0 Bedrooms ☐ 2 Bedrooms ☐ 4+ Bedrooms	☐ 1 Bedrooms ☐ 3 Bedrooms ☒ N / A
NET CHANGE IN DWELLING UNITS:		☒ N / A
SETBACKS: Assume Building Setbacks	Existing: ☐ Front Yard 0' ☐ Side Yard 0' ☐ Rear Yard 6' @ Parking ☐ N / A	Proposed: ☐ Front Yard Approx. 8' ☐ Side Yard Approx. 15' @ North, 10' @ South ☐ Rear Yard 6' @ Parking ☐ N / A

MAY 14 2018

DM

EXISTING LOT DIMENSIONS:	Front: <u>100.24'</u> Left: <u>210.96'</u>	Rear: <u>99.65'</u> Right: <u>181.76'</u>	☐ N / A
PROPOSED LOT DIMENSIONS:	Front: <u>100.24'</u> Left: <u>210.96'</u>	Rear: <u>99.65'</u> Right: <u>181.76'</u>	☐ N / A
EXISTING LOT AREA:	<u>19,465.75</u> Square Feet		☐ N / A
PROPOSED LOT AREA:	<u>19,465.75</u> Square Feet		☐ N / A
BUILDING HEIGHT:	Existing: <u>NA</u>	Proposed: <u>20'</u>	☐ N / A
NUMBER OF STORIES:	Existing: <u>NA</u>	Proposed: <u>1- Story</u>	☐ N / A
PARKING SPACE (S):	Existing: <u>NA</u>	Proposed: <u>26</u>	☐ N / A
ZONING	Existing: <u>GC- Gen. Comm.</u>	Proposed: <u>GC- Gen. Comm</u>	☐ N / A

Will the project involve a new curb cut or driveway?

☒ Yes

☐ No

Are there existing easements on the property?

☒ Yes

☐ No

Will Trees be removed?

☒ Yes

☐ No

If yes, please describe (**Example:** Type, Size, Location on property, etc.)

One 25' high conifer will be removed from the site. Said tree is at the rear of the property, approximately mid-point of the rear property line. It is being removed due to the fact it negatively impacts the parking lot design. Several other trees will be planted in its place.

Will Existing Landscaping be revised?

☒ Yes

☐ No

If yes, what is square footage of new or revised landscaping?

There's no existing landscaping/planting to speak of and new landscaping will be provided. See attached landscape architecture portion of the submittal.

Will Signs be Changed or Added? Building-mounted signs, See Exterior Elevations

☒ Yes

☐ No

Business: Hours of Operation

Mon-Thurs: 9am-5pm
Fri: 9am-6pm
Sat: 10am-2pm

Is alcohol service proposed?

☐ Yes

☒ No

If yes, what type of State alcohol license is proposed? NA

If yes, have you applied to the State Alcoholic Beverage Control for a license?

☐ Yes

☐ No

If this is a restaurant, café or other food service, bar, or nightclub, please indicate total number of seats: NA

Is any live entertainment proposed?

☐ Yes

☒ No

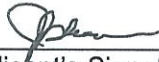
If yes, please describe: _____

14 2018
J/M

INDEMNIFICATION AGREEMENT

As part of this application, applicant agrees to defend, indemnify, release and hold harmless the City, its agents, officers, attorneys, employees, boards and commissions from any claim, action or proceeding brought against any of the foregoing individuals or entities, the purpose of which is to attack, set aside, void or annul the approval of this application or the adoption of the environmental document which accompanies it or otherwise arises out of or in connection with the City's action on this application. This indemnification shall include, but not be limited to, damages, costs, expenses, attorney fees or expert witness fees that may be asserted by any person or entity, including the applicant, arising out of or in connection with the City's action on this application, whether or not there is concurrent passive or active negligence on the part of the City.

If, for any reason any portion of this indemnification agreement is held to be void or unenforceable by a court of competent jurisdiction, the remainder of the agreement shall remain in full force and effect.

	4/30/2018	2018-49
Applicant's Signature	Date Signed	Planning File Number

NOTE: The purpose of the indemnification agreement is to allow the City to be held harmless in terms of potential legal costs and liabilities in conjunction with permit processing and approval.

NOTICE OF MAILING:

Email addresses or facsimiles will be used for sending out staff reports and agendas to applicants, their representatives, property owners, and others to be notified.

Please sign and acknowledge you have been notified of the Notice of Mailing for applications and have provided an email address or fax number.

	Jeff Blechel
Signature	Printed Name

NOTE: It is the responsibility of the applicant and their representative to be aware of and abide by City laws and policies. City staff, Boards, Commissions, and the City Council will review applications as required by law; however the applicant has responsibility for determining and following applicable regulations.

MAY 14 2018



NEIGHBOR NOTIFICATION

In the interest of being a good neighbor, it is highly recommended that you contact those homes or businesses directly adjacent to, or within the area of your project. Please inform them of the proposed project, including construction activity and possible impacts such as noise, traffic interruptions, dust, larger structures, tree removals, etc.

Many projects in Sebastopol are remodel projects which when initiated bring concern to neighboring property owners, resident and businesses. Construction activities can be disruptive, and additions or new buildings can affect privacy, sunlight or landscaping. Some of these concerns can be alleviated by neighbor-to-neighbor contacts early in the design and construction process.

It is a "good neighbor policy" to inform your neighbors so that they understand your project. This will enable you to begin your construction with the understanding of your neighbors and will help promote good neighborhood relationships.

Many times development projects can have an adverse effect on the tranquility of neighborhoods and tarnish relationships along the way. If you should have questions about who to contact or need property owner information in your immediate vicinity, please contact the Building and Safety Department for information at (707) 823-8597, or the Planning Department at (707) 823-6167.

I have informed site neighbors of my proposed project:

☐ Yes

☐ No

If yes, or if you will inform neighbors in the future, please describe outreach efforts:

Exchange Bank intends to inform homes and businesses that are directly adjacent to or within the area of the project. They will do this in parallel with the DRB process.

WEBSITE REQUIRED FOR MAJOR PROJECTS

Applicants for major development projects (which involves proposed development of 25,000 square feet of new floor area or greater, or 25 or more dwelling units), are required to create a project website in conjunction with submittal of an application for Planning approval (including but not limited to Subdivisions, Use Permits, Rezoning's, and Design Review). Required information may be provided on an existing applicant web site.

The website address shall be provided as part of the application. The website shall be maintained and updated, as needed until final discretionary approvals are obtained for the project.

Such website shall include, at a minimum, the following information:

- ✓ Project description
- ✓ Contact information for the applicant, including address, phone number, and email address
- ✓ Map showing project location
- ✓ Photographs of project site
- ✓ Project plans and drawings

MAY 14 2018
Dm

Exemption Questionnaire

STORM WATER LOW IMPACT DEVELOPMENT

PURPOSE: This questionnaire will determine *whether* or *not* you need to submit the 'Storm Water Low Impact Development Determination Worksheet' as part of this application. Any application that does not contain this questionnaire OR the Determination Worksheet will be deemed incomplete.

PROJECT ADDRESS:

TYPE OF APPLICATION

Your project is exempt from the 'Determination Worksheet' submittal requirement, if it falls under any of the below listed application categories. However, the City Staff may require the submittal of a 'Determination Worksheet', as determined on a case-by-case basis.

- ☐ Administrative Review (Interior Improvements or Use)
- ☐ Sign Review
- ☐ Temporary Use Permit
- ☐ Time Extension Request
- ☐ Tree Removal Permit
- ☐ Zoning Determination or Interpretation

The project is exempt from the 'Storm Water Low Impact Development Determination Worksheet' submittal requirement as determined by City Staff.

I certify this information:

APPLICANT SIGNATURE

PRINTED NAME

DATE

MAY 14 2018




City of Sebastopol

ENVIRONMENTAL INFORMATION/ASSESSMENT FORM

(To be completed by applicant)

The submittal information shall be provided to the Planning Department.

Date Filed: May 1, 2018

General Information:

1. Name of developer or project sponsor: Sue Maddigan (Exchange Bank)
Address of developer or project sponsor: Sue Maddigan (Exchange Bank)
2. Address of project: 840 Gravenstein Hwy. North
Assessor's Block and Lot Number: 060-270-085 & 060-270- 077
3. Name of person to be contacted concerning this project: Jeff Blechel (TLCD Architecture)
Address of person to be contacted concerning this project: 520 Third Street #250, Santa Rosa, CA 95401
Telephone Number of person to be contacted concerning this project: (707) 535-5232
4. Indicate number of the permit application for the project to which this form pertains:

5. List and describe any other related permits and other public approvals required for this project, including those required by City, Regional, State and Federal Agencies:

NA

6. Existing Zoning District: CG Existing General Plan Designation: CG

7. Propose Use of Site (Project for which this form is filed): _____
The proposed use is a Bank Branch providing walk-in banking services such as new accounts, check deposits and cash withdrawals. A night deposit and ATM's are also provided for customers.

PROJECT DESCRIPTION:

8. Site Size: 19,425.75 SF
9. Square Footage: 3,400 SF
10. Number of floors of construction: Single-Floor Structure
11. Amount of off-street parking: 26 Total Stalls
12. Attach plans Yes.
13. Proposed scheduling See project schedule.
14. Associated project No associated project.
15. Anticipated incremental development: Not at this time.
16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected. Not residential.
17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities. Commercial banking establishment with 1,500 SF retail area. All loading will occur through the front doors.
18. If industrial, indicate type, estimated employment per shift, and loading facilities. Not industrial.
19. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. Not institutional.
20. If the project involves a variance, conditional use or rezoning application, state this and indicate clearly why the application is required. Not required.

Are the following items applicable to the project or its effects? Discuss below all items checked yes (attach additional sheets as necessary).

21.	Change in existing features of any bays, tidelands, beaches or hills, or substantial alternation of ground contour.	Yes ☐	No ☒
22.	Change in scenic views or vistas from existing residential areas or public lands or roads.	Yes ☐	No ☒
23.	Change in pattern, scale or character of general area of project.	Yes ☐	No ☒
24.	Significant amounts of solid waste or litter.	Yes ☐	No ☒
25.	Change in dust, ash, smoke, fumes or odors in vicinity.	Yes ☐	No ☒
26.	Change in ocean, bay, lake, stream or ground water quality or	Yes	No

	quantity, or alteration of existing drainage patterns.	☐	☒
27.	Substantial change in existing noise or vibration levels in the vicinity.	Yes ☐	No ☒
28.	Site on filled land or on slope of 10 percent or more.	Yes ☐	No ☒
30.	Substantial change in demand for municipal services (police, fire, water, sewage, etc).	Yes ☐	No ☒
31.	Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc).	Yes ☐	No ☒
32.	Relationship to a larger project or series of projects.	Yes ☐	No ☒

Environmental Setting:

33. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or Polaroid photos will be accepted.
34. Describe the surrounding properties, including information on plant and animals and any cultural historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc), intensity of land use (one-family, apartment houses, shops, department stores, etc), and scale of development (height, frontage, set-back, rear yard, etc). Attach photographs of the site. Snapshots or Polaroid photos will be accepted.

	YES	NO
A. Does the Project involve any of the following?		
1. No change in the square footage to the existing structure?		X
2. An addition of more than 50% of square footage to the existing structure?		X
3. An addition of more than 2500 square feet to the existing structure?		X
4. An addition of more than 10,000 square feet to the existing structure?		X
5. Demolition of the existing structure?		X
	YES	NO
B. Does the Project involve the replacement or reconstruction of existing structures or facilities at the site which:		
1. Will have substantially the same purpose and capacity as existing structures at the site?		X
2. Will result in an increase in square footage or capacity as compared to the existing structure?		X

	YES	NO
C. Does the Project involve new construction of:		
1. 35 or more dwelling units?		X
2. More than 15,000 square feet of commercial, industrial, governmental, or institutional floor area?		X
3. Stores, motels, offices, restaurants, and similar structures designed for an occupant load of more than 30 persons?		X
	YES	NO
D. Does the Project involve division of property into more than four parcels or consolidation of more than four parcels?		X
	YES	NO
E. Will the Project require issuance of a Variance, Use Permit, Zoning Ordinance Amendment, Zoning Map Amendment, or General Plan Amendment?		X
	YES	NO
F. Will the Project result in a change in use at the site (for example: from residential to commercial or from office to restaurant?)		X
	YES	NO
G. Is this Project:		
1. Similar to the other projects for which you have received permits in the last two years in the City of Sebastopol?		X
2. Similar to other projects, which you are planning to develop within two years in the City of Sebastopol?		X
	YES	NO
H. Does the Project involve changes to an official City landmark?		X
	YES	NO
I. Does the Project involve use of disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives?		X
	YES	NO
J. If the Project is located within 500 feet of a residential zone or noise-sensitive land uses, will the construction of the project involve the use of pile driving, night time track hauling, blasting, 24 hour pumping, or other equipment that creates high noise levels and or vibrations?		X
	YES	NO
K. Does the Project involve the construction, substantial remodel, or 50% or more addition to the following types of uses?		
Mobile home, amphitheater, concert hall, auditorium, meeting hall, hospital, church, library, school classrooms, or day care?		X

I certify that the information in this form is correct to the best of my knowledge.


Applicant Signature

4/30/2018
Date

Certification:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information represented are true and correct to the best of my knowledge and belief.

Date: 4/30/2018

Signature: 

Printed Name: Jeff Blechel

For: Sue Maddigan (Exchange Bank)

MAY 1 2018


Project Description

Exchange Bank

Sebastopol Branch

TLCD Architecture

5/5/2018

General

The Exchange Bank will be relocating its Sebastopol Branch, currently operating in the adjacent Lucky Shopping Center, to a vacant lot at the corner of Gravenstein Highway North and Tocchini Street. The lot is approximately 19,450 SF. The parcel is zoned: CG- General Commercial. The site design consists of two main components: 1) the proposed one-story building which is 3,400sf in size and 2) a parking lot, which will provide 26 parking stalls for employees and customers. The bank will operate during normal banking hours, and will include 2 exterior ATM machines and a night deposit box.

The Site

The site has a slight grade difference from the front property line (498.4') to the rear property line (500.4') of about two feet (2') over an average distance of two-hundred feet (200'). There are five (5) trees located at the rear of the property that Exchange Bank and the design team feel are marginal at best. Four are stunted and generally unhealthy and one, an oak tree, is up against a tall redwood tree and is competing with it for space and light. Therefore, we propose that these trees be removed and six new healthy varieties replace them. See the Landscape Site Plan/Floor Plan in addition to civil documentation. The parking lot is located at the rear of the site. Circulation is designed so that access through the site for both pedestrians and vehicles is efficient and safe. The east and south edges of the site, areas along the sidewalks, promote pedestrian orientation. The proposed parking lot lighting is designed to minimize upward light and limit glare for vehicular traffic. See sheet E1.1 for site lighting design. A trash enclosure is located within the parking lot. It is positioned for easy access for the users of the facility and for waste haulers. It will be screened with concrete blocks walls (CMU) and will have double swing gates made of steel to match the metal fencing. Bike racks (4) are provided for bank staff and customers.

Architectural Design Inspiration

The Exchange Bank asked its architect for a project that would feel at home in Sebastopol, consistent with the Bank's longstanding presence in the Sebastopol community. An informal inventory of existing buildings in town demonstrated a diverse, eclectic range of architectural styles. In the absence of a singular style to guide the design, the design team elected to instead investigate Sebastopol's rich agricultural past, and considered influences as diverse as the apple and wine industries, barns, apple dryers, and even Luther Burbank's experimental farm. The design team drew from these attributes, the very fabric of Sebastopol itself, for design inspiration.

MAY 14 2018
DM

Site and Building Architecture

Without being overt or literal, building and landscape materials were selected to feel appropriate to Sebastopol's setting and consistent with the context. One key component of the building exterior is the OkoSkin (rain screen) cladding, a high grade fiber-reinforced cementitious product available in three (3) subtly differing surface colors and finishes. This provides a variegated texture and a soft, rich feel. See attached image of OkoSkin. OkoSkin panels are 6" wide x 72" long x 1/2" thick and will be installed with a 5/8" gap between each panel. The panels will be installed in a random pattern. OkoSkin panels were selected to recall traditional agrarian materials such as weathered barn boards, apple crates and rural fencing in a very abstract and subtle manner. Fenestration, exterior wood poles, weathered steel landscape materials, and plantings have all been selected to support the design approach. Japanese cherry trees are proposed on the site commemorating the Japanese culture and influence in Sebastopol. Parking lot and entry patio materials and finishes have also been carefully selected. Stormwater runoff will be managed by way of a rain garden/planter for roof water and bi-swales and permeable pavement at select areas of the parking lot. Sustainability best practices and current CalGreen requirements will be integrated throughout the project.

The building has been oriented to the northeast corner, with the parking tucked behind the building. The building has been designed to have a strong presence on both street frontages and parking lot, while deemphasizing the adjacent Taco Bell drive-through to the north. The main shed roof form faces southwest, the ideal orientation for future rooftop solar panels. A secondary and opposing shed roof form provides a roof canopy that shelters the ATM machines, but primarily serves to provide a gracious entry to the building. Substantial entry glazing reinforces the indoor/outdoor relationship, as does the clerestory at the highway side of the building which facilitates a view of the forested hill beyond while awaiting a teller while providing natural light to the interior.

We believe that this project will be an asset to the community, and will be a comfortable fit while enhancing the character of the neighborhood.

Note:

Signs will be building mounted. See exterior elevations and renderings. The owner has decided to submit the sign package later.

MAY 14 2018



VIEW 2.



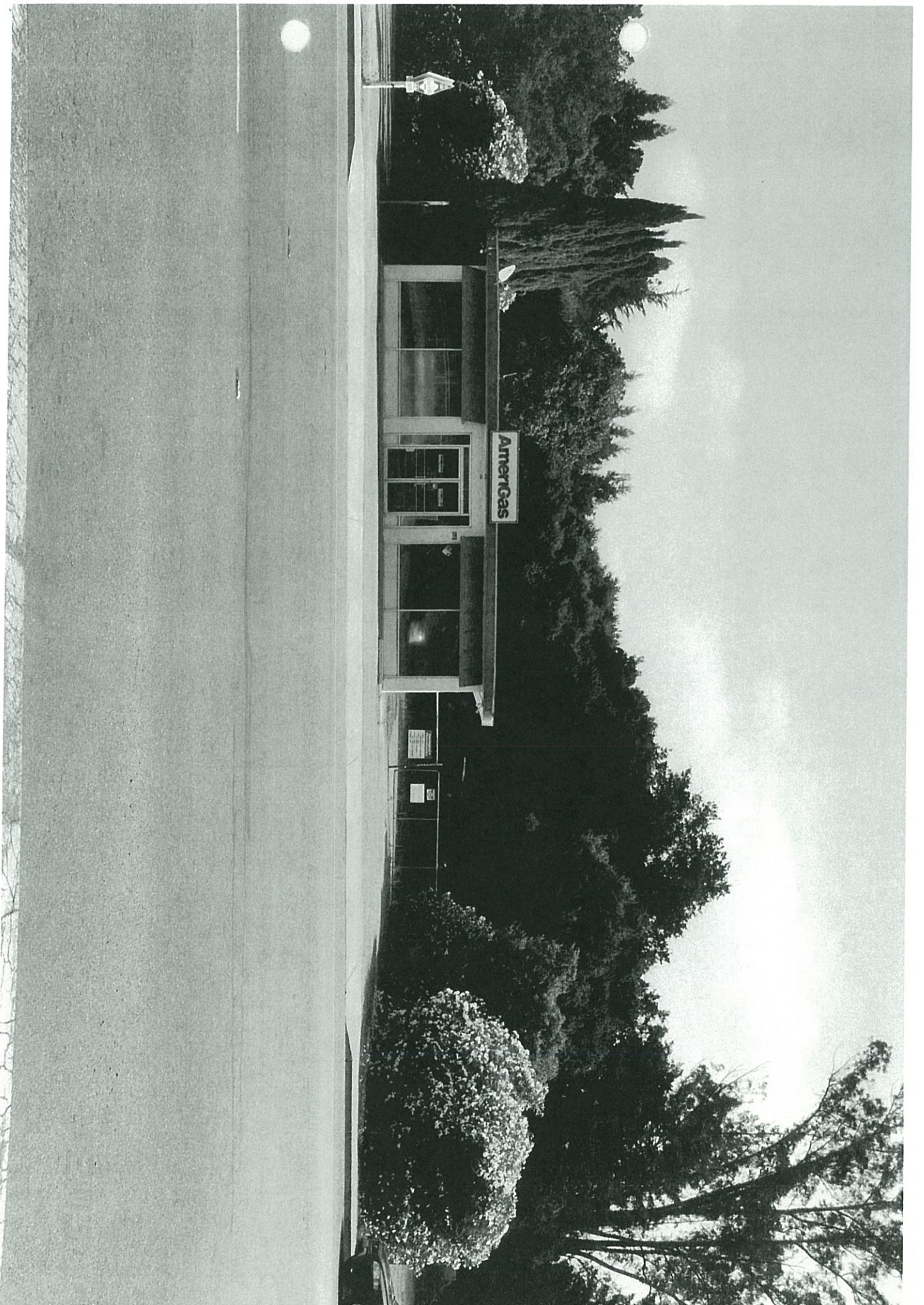
VIEW 3

MAY 14 2018

177A



MAX 14 2018



MAY 14 2018
11:11 AM

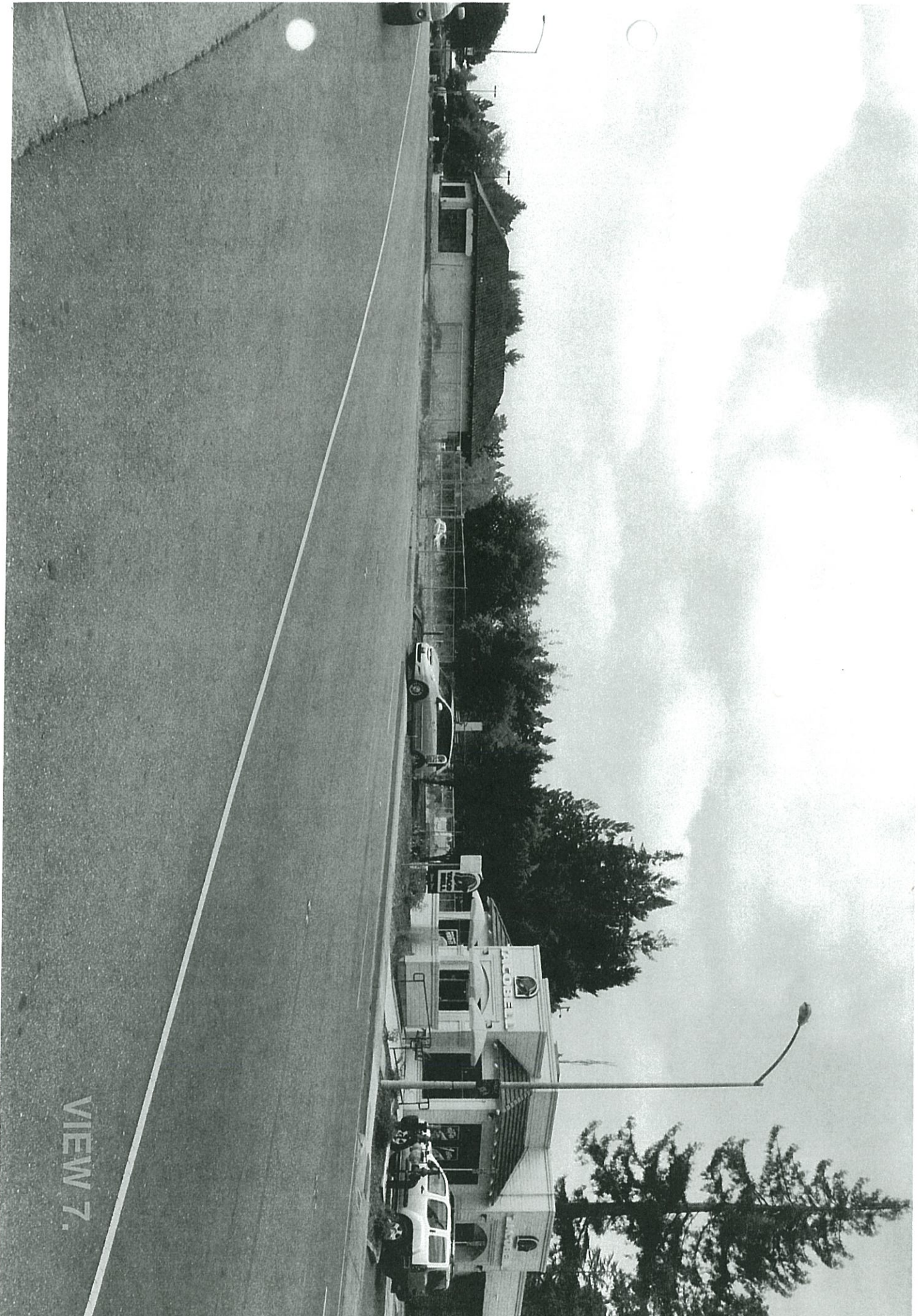


VIEW 6.

MAY 14 2018
DMM

VIEW 7.

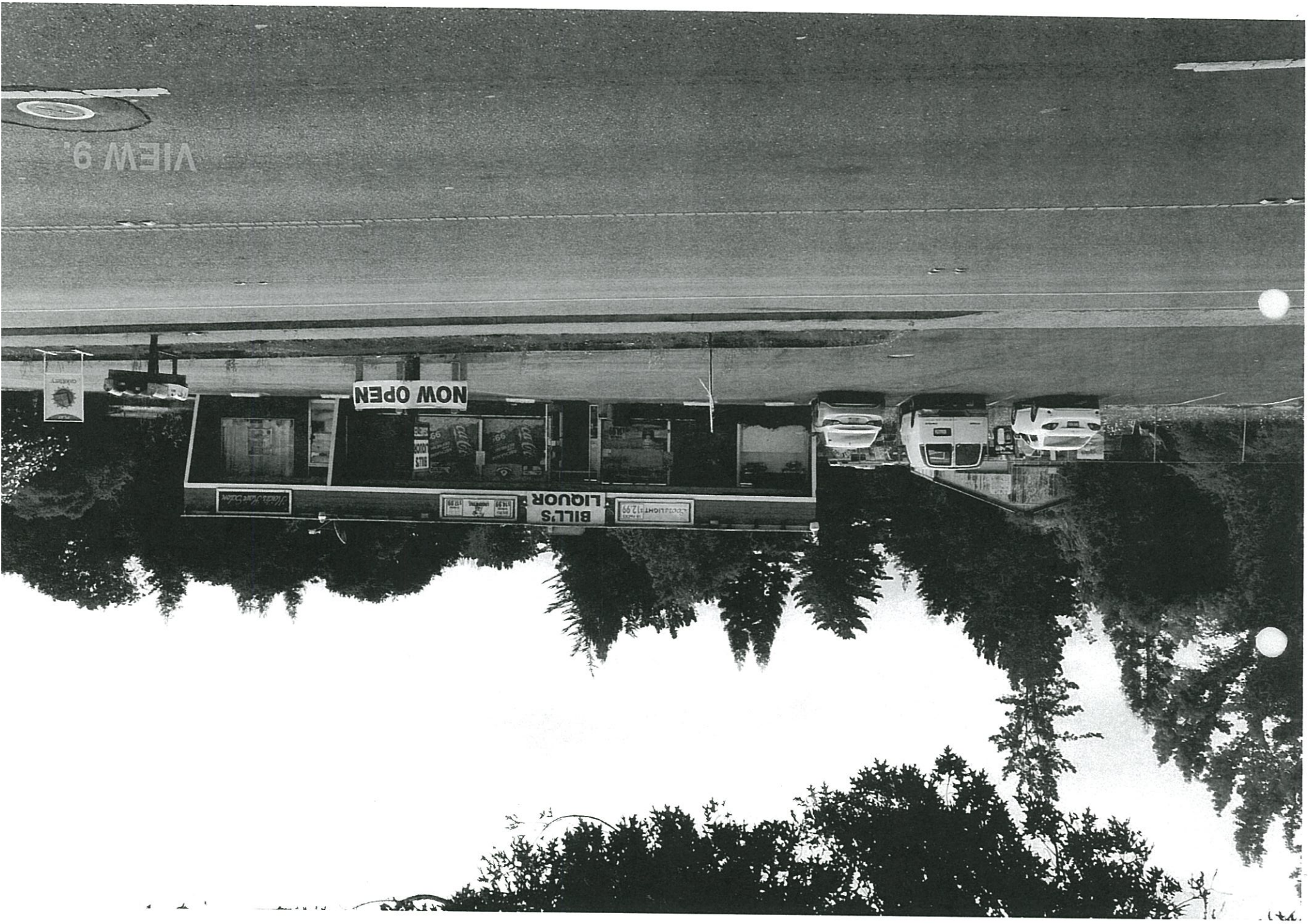
MAY 14 2018
GMA



WJ
MAY 14 2018

VIEW 8





VIEW 9.

MAX 14 2018

MAY 14 2018

VIEW 10:



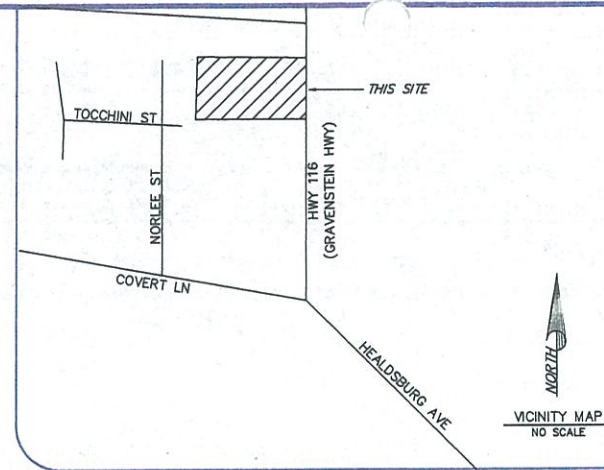


MAY 1 2 1988
N/A



EXCHANGE BANK, SEB.
VIEW KEY MAP
NO SCALE

MAY 14 2018
W



	RECORD BOUNDARY LINE
	FLOWLINE
	EDGE OF CONCRETE
	EDGE OF ASPHALT CONCRETE
	WOOD FENCE
	CHAINLINK FENCE
	YELLOW PAINT STRIPING
	WHITE PAINT STRIPING
	MINOR CONTOUR
	MAJOR CONTOUR
	STORM-DRAIN W/SIZE & TYPE
	ASPHALT CONCRETE SURFACE
	CONCRETE SURFACE
	DROP INLET

SYMBOLS	
	FIRE HYDRANT
	WATER VALVE
	POWER POLE W/ GUY ANCHOR
	WATER METER
	ELECTRICITY VAULT
	TELEPHONE VAULT
	CATCH BASIN
	BOLLARD
	SEWER MANHOLE
	COMMUNICATIONS MANHOLE
	AREA DRAIN
	SIGN
	ENVIRONMENTAL OBSERVATION WELL
	RANDOM CONTROL POINT W/ #
	FOUND IRON PIPE AS NOTED
	FOUND REBAR AS NOTED
x 143.2	SPOT ELEVATION
	TREE TYPE & DIA.

ABBREVIATIONS	
OAK	OAK TREE
LO	LIVE OAK TREE
RED	REDWOOD TREE
WN	WALNUT TREE
LDS	LANDSCAPE TREE
CLST	CLUSTER
DI	DROP INLET
TG	TOP GRADE
IG	INVERT GRADE

NOTES:

- 1) THE PURPOSE OF THIS MAP IS FOR A SITE PLAN AND TOPOGRAPHIC MAPPING. THE CONTENT IS RELATIVE TO THE INTENDED USE. UNAUTHORIZED CHANGES OR ADDITIONS TO THE EXISTING DATA SHOWN ON THIS MAP IS STRICTLY PROHIBITED. ANY USES OF THIS MAP BEYOND THE STATED PURPOSE REQUIRES THE AUTHORIZATION OF HOGAN LAND SERVICES.
- 2) THIS MAP DOES NOT CONSTITUTE A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN IS PER RECORD OF SURVEY RECORD IN BOOK 168 AT PAGE 29 SONOMA COUNTY RECORDS.
- 3) HORIZONTAL CONTROL:
IRON PIPES FOUND ON SOUTH WESTERLY BOUNDARY OF APN: 060-270-077 (S38°35'42"E).
- 4) VERTICAL CONTROL:
ELEVATION DATUM IS ASSUMED OVER CP 5000 (500.00 FEET).

TOPOGRAPHIC MAP



HOGAN LAND SERVICES
A CALIFORNIA CORPORATION

THIS MAP WAS PREPARED BY ME OR
UNDER MY DIRECTION AT THE REQUEST OF
CLIENT NAME IN MONTH, 2014

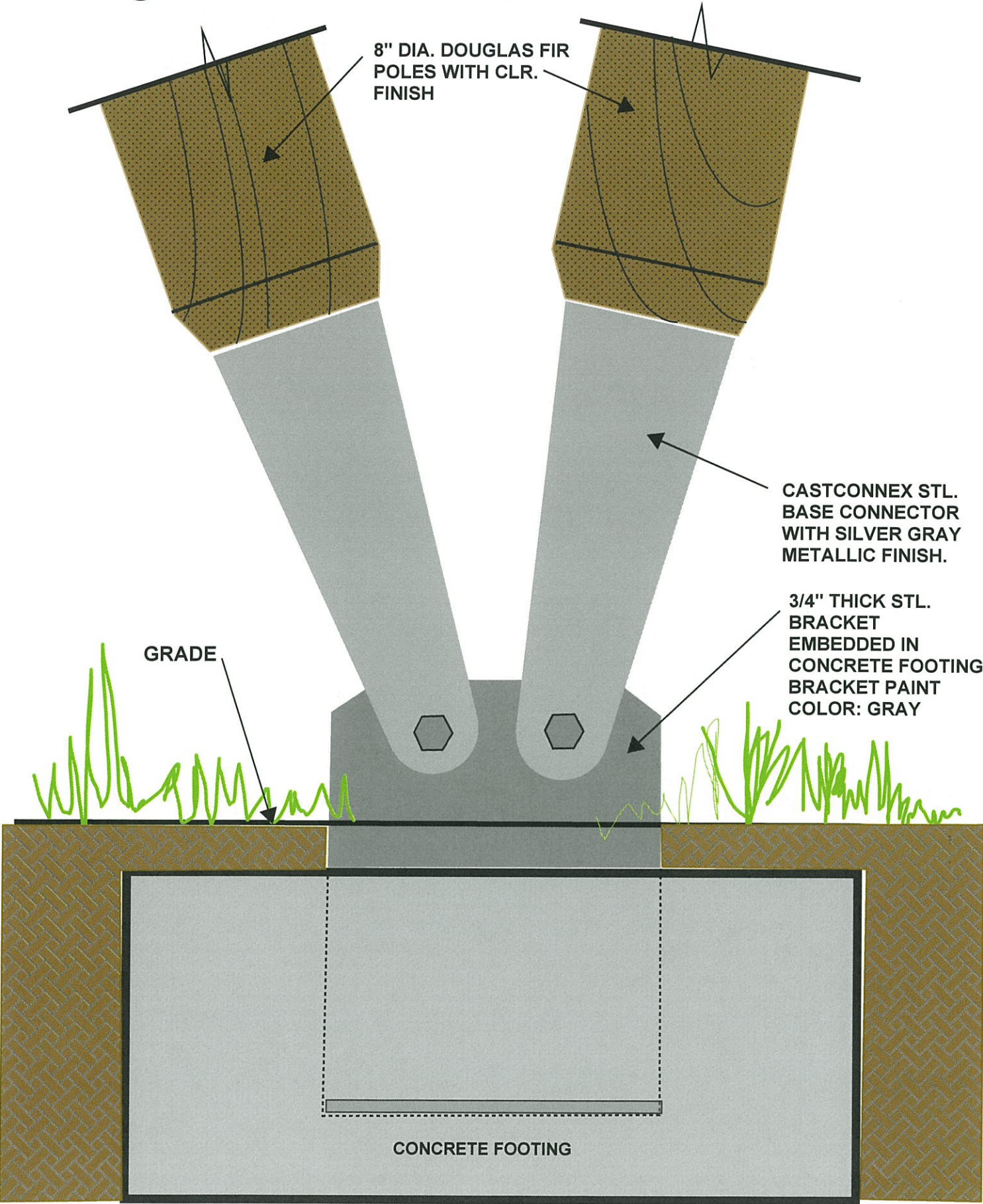
DRN:	RTT
CHK:	TWR
PM:	ASR
DATE:	8/12/15
JOB #:	2115

340 & 850 GRAVENSTEIN HWY N.
SEBASTOPOL, CALIFORNIA

1702 4TH STREET
SANTA ROSA, CA 95404
Tel (707) 544-2104
Fax (707) 522-2105
www.hoganls.com

ADAM S. RIVERA PLS 8451 EX. 12/31/16

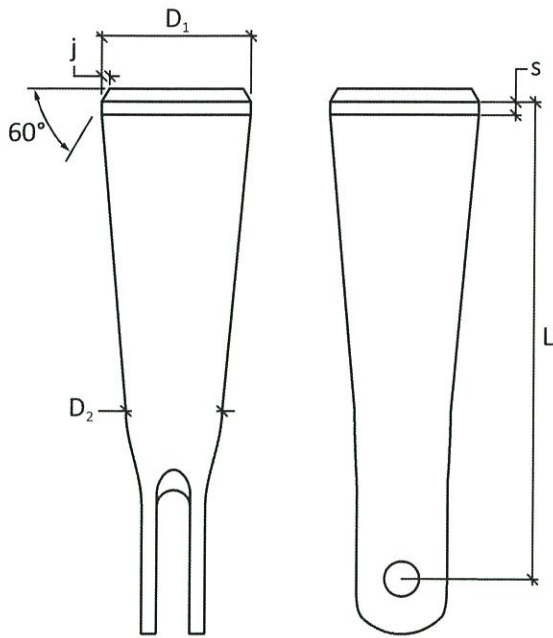
EXCHANGE BANK SEBASTOPOL
DETAIL @ POLE CONNECTION- BASE



CASTCONNEX[®]

Architectural Tapers[™] with Universal Pin Connectors[™]

Nominal Connector Dimensions



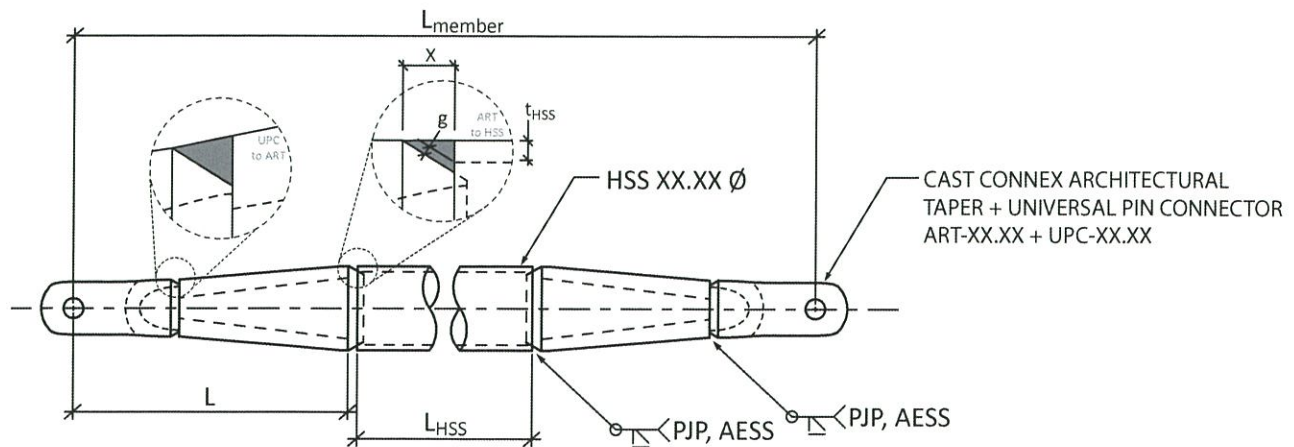
	D ₁ [in]	D ₂ [in]	L [in]	s [in]	j [in]
ART-6.625 + UPC-4.000L	6 5/8	4	21 5/8	3/4	5/8
ART-6.625 + UPC-4.000	6 5/8	4	22 23/32	3/4	5/8
ART-8.625 + UPC-5.563	8 5/8	5 9/16	29 1/32	3/4	3/4
ART-10.75 + UPC-6.625	10 3/4	6 5/8	35 13/16	1	3/4
ART-12.75 + UPC-8.625	12 3/4	8 5/8	42 9/16	1	3/4
ART-16.00 + UPC-10.75	16	10 3/4	52 15/16	1 1/2	3/4

Universal Pin Connector and Architectural Taper are supplied separately.
Fabricator must weld the two pieces together to form the connection assembly.

Available Axial Strength of Connectors

Strengths governed by associated Universal Pin Connector. Refer to the appropriate Universal Pin Connector data sheet.

Typical Assembly



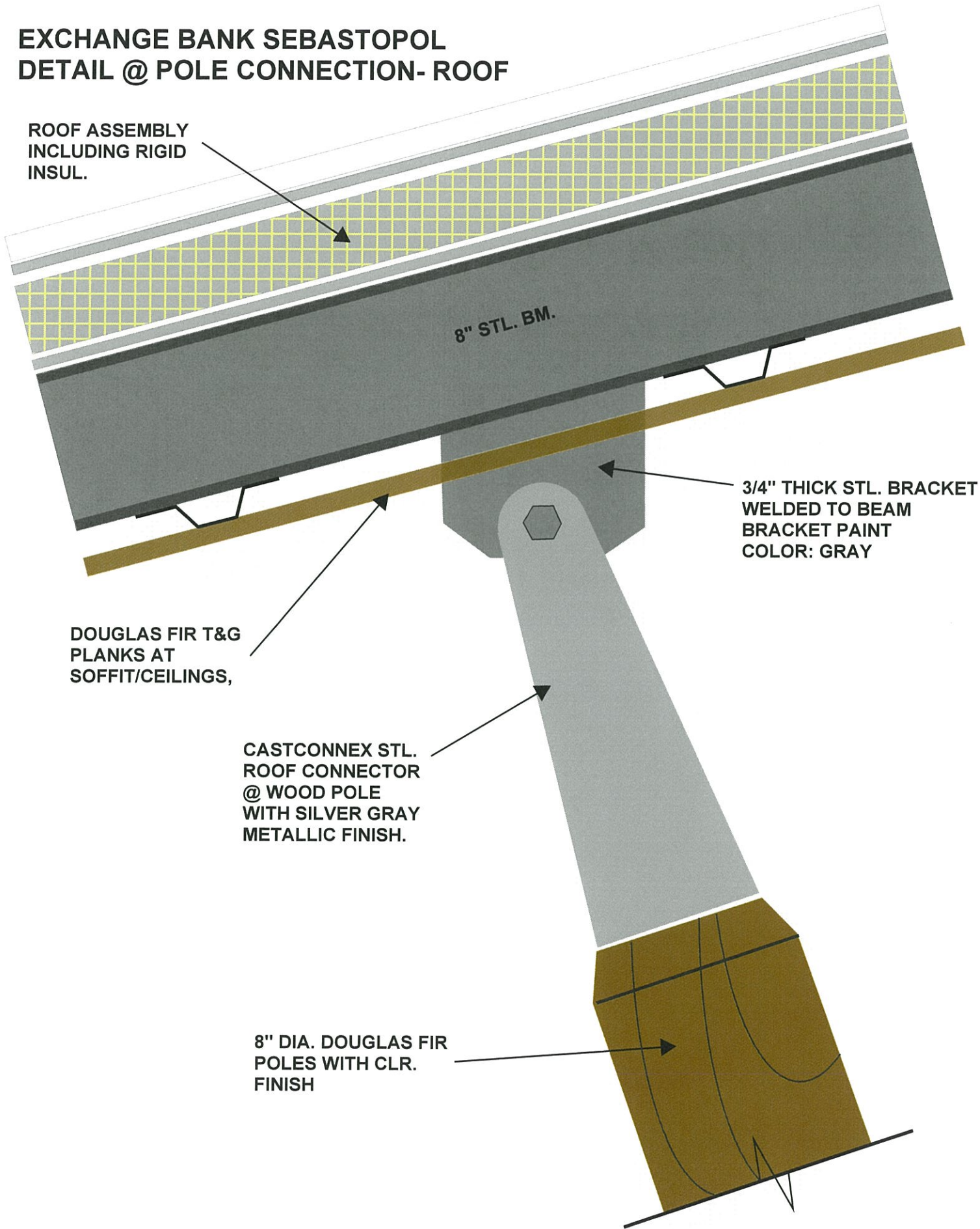
Estimating required length of HSS:

$$L_{HSS} = L_{member} - 2(L + X)$$

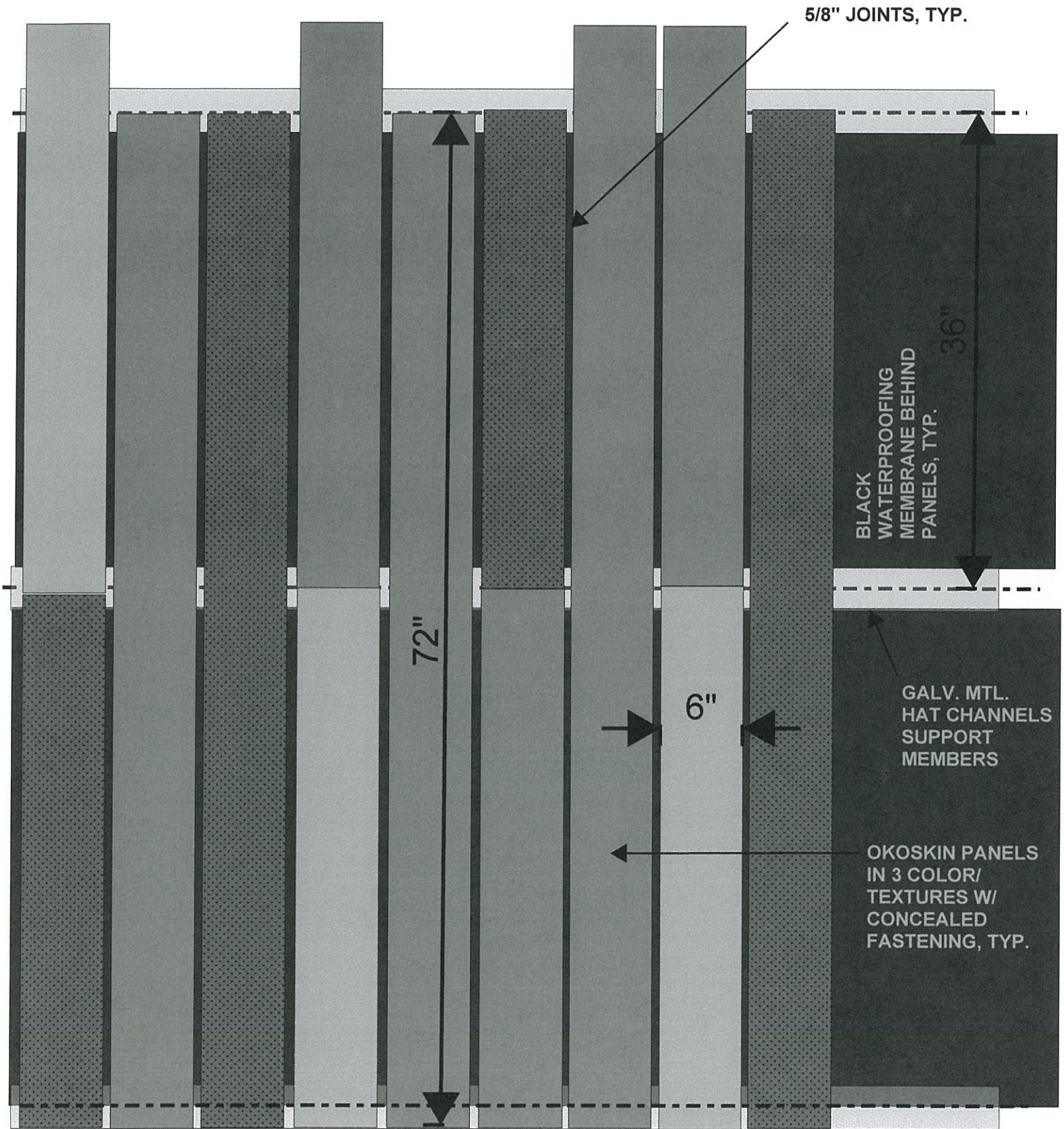
$$X = 2g + \sqrt{3}(t_{HSS})$$

When using these equations to estimate the length of the HSS or Pipe required (L_{HSS}) for a given element, note that the actual HSS or Pipe thickness (t_{HSS}) can be significantly thinner than the nominal value. Refer to the relevant HSS or Pipe specification.

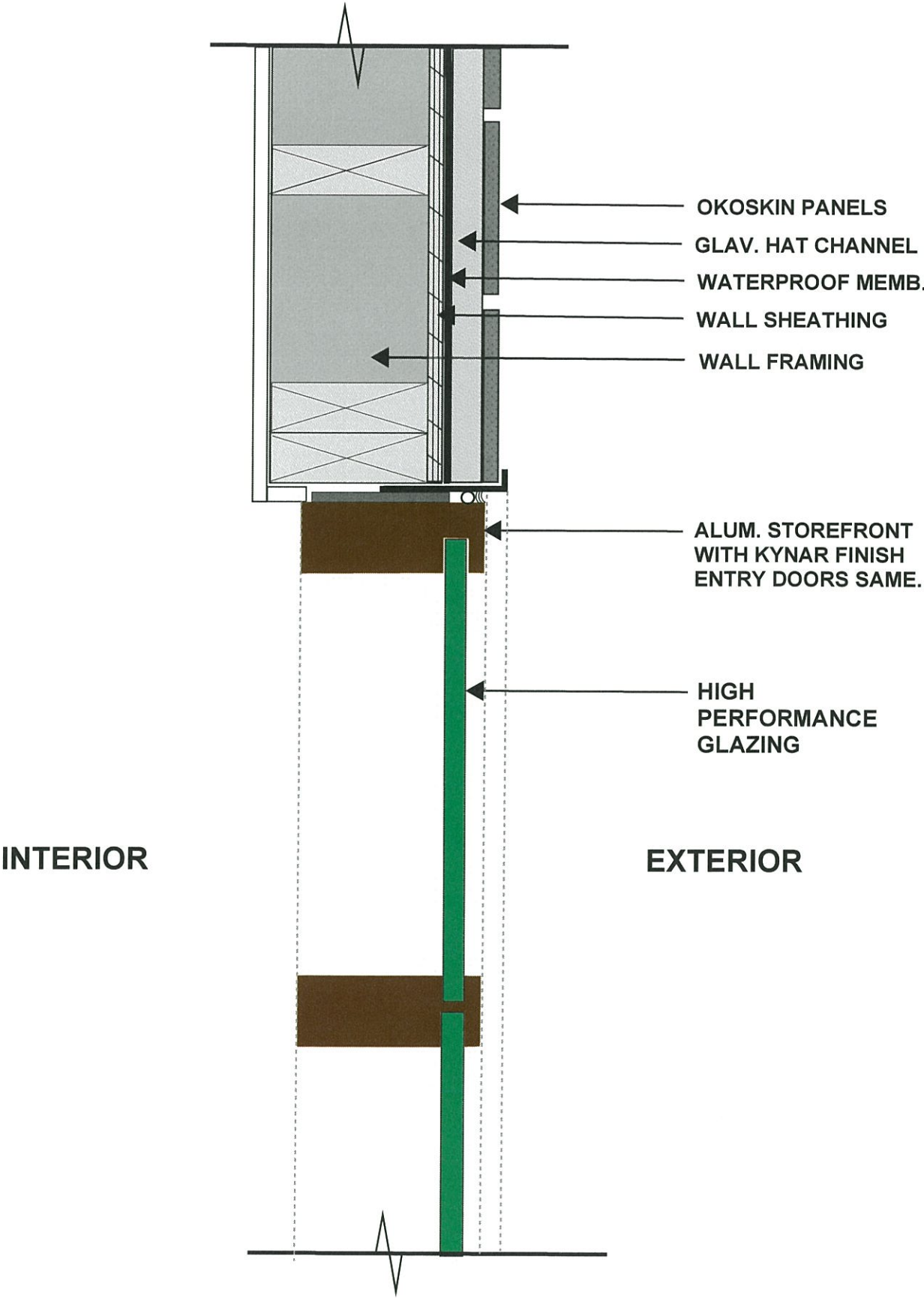
**EXCHANGE BANK SEBASTOPOL
DETAIL @ POLE CONNECTION- ROOF**



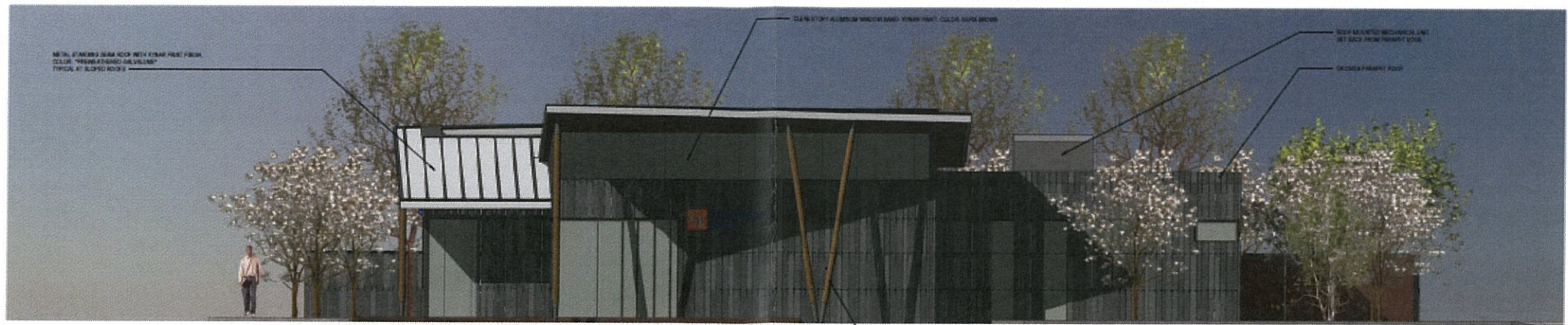
EXCHANGE BANK SEBASTOPOL
DETAIL- OKOSKIN CEMENT PANELS



EXCHANGE BANK SEBASTOPOL
DETAIL @ WINDOW JAMB







1 EAST ELEVATION
1/8" = 1'-0"



2 NORTH ELEVATION
1/8" = 1'-0"



3 SOUTH ELEVATION
1/8" = 1'-0"



4 WEST ELEVATION
1/8" = 1'-0"

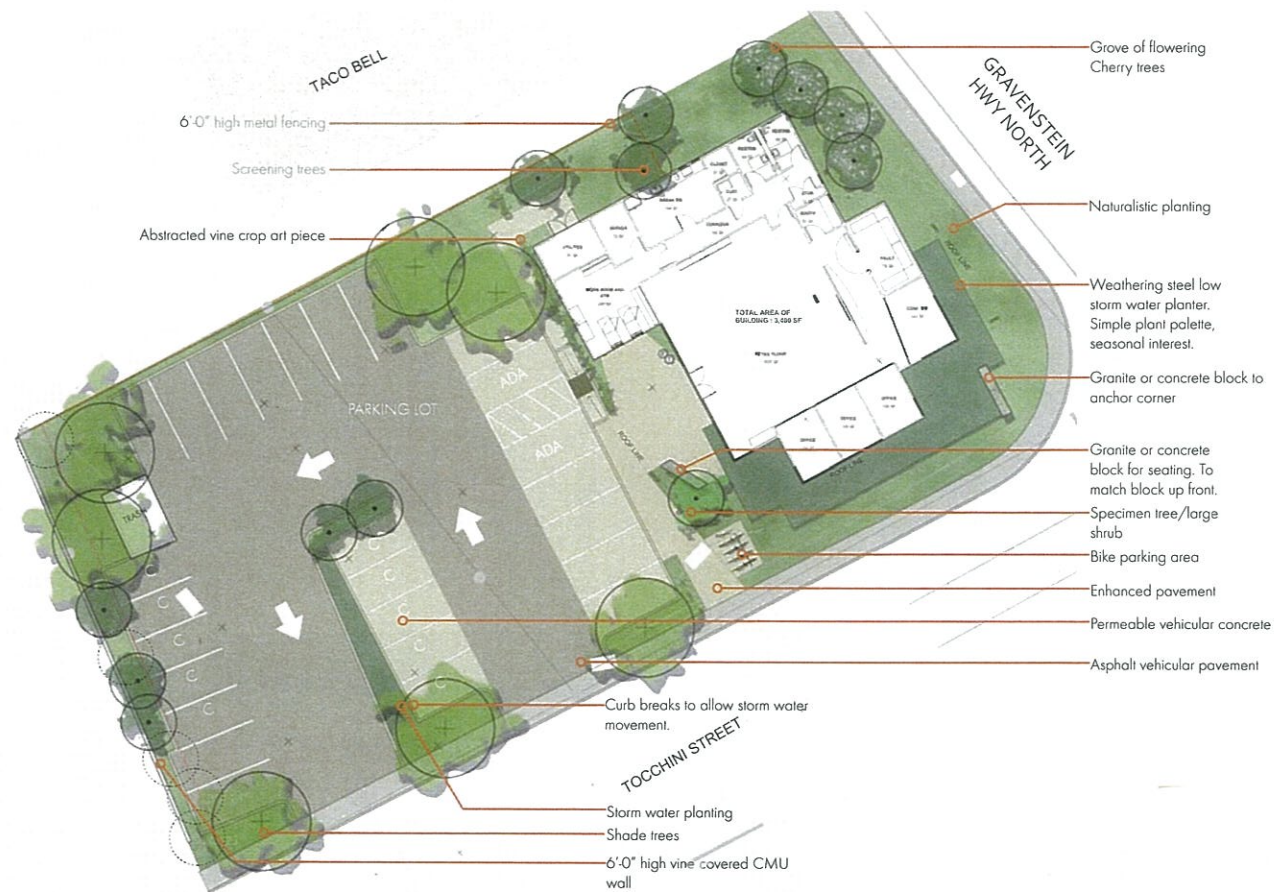
DESIGN REVIEW SUBMITTAL

SEBASTOPOL
BRANCH

EXCHANGE BANK

Project Number	17020
Date	10/1/2017
Author	TLCD
Checker	TLCD
Reviewer	TLCD

EXTERIOR ELEVATIONS
WITH DIMENSIONS
A-201



Grove of Flowering Cherries



Naturalistic planting



Weathering steel low planter



Concrete block/bench



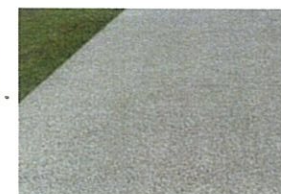
Bike parking racks: "Clip" by Streetlife America (4 racks total)



Recycle and trash receptacles: MultiCITY by Landscape Forms (1 total)



Enhanced pavement: light unit pavers



Permeable vehicular concrete



Metal Fencing



Vine covered CMU wall



Abstracted vine crop art component: Weathering steel poles set at random heights. Vine with seasonal interest growing through and around metal poles. (NTS)



EXCHANGE BANK PLANT PALETTE

10	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	3-5 YEAR SIZE	MATURE SIZE	WATER USE	NATIVE
TREES							
1	Arbutus 'Marina' (multi-stem)	Strawberry Tree	24" Box	10-15 Ft.	18-25 Ft.	Low	Native Hybrid
2	Celtis x 'Magnifica'	Magnifica Hackberry	24" Box or Larger	15-25 Ft.	35-50 Ft.	Low	
3	Parrotia persica	Persian Ironwood	24" Box or Larger	10-15 Ft.	15-20 Ft.	Moderate	
4	Ulmus parvifolia 'Athena'	Drake Elm	24" Box or Larger	15-25 Ft.	35-50 Ft.	Low	
5	Prunus 'Tai Haku'	Flowering Cherry	24" Box	10-15 Ft.	15-25 Ft.	Moderate	
SHRUBS							
6	Aralia californica	Elk Clover	5 Gallon	3-5 Ft.	4-8 Ft.	Moderate	Native
7	Arctostaphylos manzanita 'Dr. Hurd'	Dr. Hurd Manzanita	15 Gallon	5-8 Ft.	12-15 Ft.	Low	Native
8	Atriplex lentiformis breweri	Quailbush	5 Gallon	4-6 Ft.	4-6 Ft.	Low	Native
9	Carpenteria californica 'Elizabeth'	California Anemone	5 Gallon	4-6 Ft.	4-6 Ft.	Low	Native
10	Ceanothus 'Skylark'	Skylark Wild Lilac	5 Gallon	4-6 Ft.	4-6 Ft.	Low	Native
11	Garrya elliptica 'James Roof'	Coast Silkassel	15 Gallon	5-7 Ft.	8-12 Ft.	Low	Native
12	Mahonia 'Soft Caress'	Soft Caress Mahonia	2 Gallon	3-4 Ft.	3-4 Ft.	Low	Native
13	Myrsine africana	African Boxwood	5 Gallon	4-5 Ft.	4-5 Ft.	Low	
14	Myrtus communis Compacta	Compact Myrtle	5 Gallon	4-5 Ft.	4-5 Ft.	Low	
15	Rhus integrifolia	Lemonade Berry	5 Gallon	5-7 Ft.	8-12 Ft.	Low	Native
16	Ribes sanguineum 'White Icicle'	Flowering Currant	5 Gallon	5-7 Ft.	8-12 Ft.	Low	Native
17	Ribes viburnifolium	Evergreen Currant	5 Gallon	3-5 Ft.	3-5 Ft.	Low	Native
18	Rosa glauca	Blue Rose	5 Gallon	6-10 Ft.	6-10 Ft.	Moderate	Native
19	Rubus parviflorus	Thimbleberry	5 Gallon	3-6 Ft.	3-6 Ft.	Low	Native
20	Sarcococca hookerana 'Humilis'	Himalayan Sweet Box	5 Gallon	1-2 Ft.	1-2 Ft.	Low	
PERENNIALS							
21	Echinops bannaticus 'Star Frost'	Globe Thistle	1 Gallon	18"	18"	Low	
22	Echinacea 'Harvest Moon'	Cone Flower	1 Gallon	1-2 Ft.	1-2 Ft.	Moderate	
23	Sideritis cypria	Cyprian sideritis	1 Gallon	12"	12"	Low	
24	Achillea millefolium 'Sonoma Coast'	Yarrow	1 Gallon	12"	12"	Low	Native
25	Helleborus foetidus 'Wester Flisk'	Hellebore	1 Gallon	1-2 Ft.	1-2 Ft.	Low	
26	Woodwardia fimbriata	Pacific Chain Fern	5 Gallon	3-5 Ft.	3-5 Ft.	Moderate	Native
27	Polystichum munitum	Western Sword Fern	1 Gallon	3 Ft.	3 Ft.	Moderate	Native
28	Heuchera maxima	Island Alum Root	1 Gallon	1-2 Ft.	1-2 Ft.	Moderate	Native
GRASSES							
29	Carex divulsa	Berkeley Sedge	1 Gallon	1-2 Ft.	1-2 Ft.	Low	
30	Festuca californica 'Phil's Silver'	Phil's Silver California Fescue	1 Gallon	1-2 Ft.	1-2 Ft.	Low	Native
31	Lomandra 'Breeze'	Dwarf Mat Rush	1 Gallon	3 Ft.	3 Ft.	Low	
32	Sceleria autumnalis	Autumn Moor Grass	1 Gallon	1-2 Ft.	1-2 Ft.	Moderate	
33	Stipa gigantea	Giant Stipa Grass	1 Gallon	2-3 Ft.	2-3 Ft.	Low	
GROUND COVER							
34	Baccharis pilularis 'Pigeon Point'	Dwarf Coyote Bush	1 Gallon	1-2 Ft.	1-2 Ft.	Low	Native
35	Ceanothus 'Joyce Coulter'	Wild Lilac	1 Gallon	3-4 Ft.	3-4 Ft.	Low	Native
36	Cistus salviifolius	Sage Rock Rose	1 Gallon	1-2 Ft.	1-2 Ft.	Low	
37	Rubus pentalobus	Creeping Raspberry	1 Gallon	8"	8"	Low	
VINES							
38	Parthenocissus Tricuspidata 'Veitchii'	Boston Ivy	5 Gallon	N/A	N/A	Low	
39	Wisteria floribunda 'Alba'	White Wisteria	15 Gallon	N/A	N/A	Low	
40	Vitis californica 'Roger's Red'	Native California Grape	5 Gallon	N/A	N/A	Low	Native
STORM WATER PLANTING							
41	Chondropetalum tectorum 'El Campo'	Small Cape Rush	5 Gallon	3-4 Ft.	3-4 Ft.	Low	
42	Cornus stolonifera 'Aretic Fire'	Red Twig Dogwood	5 Gallon	3-5 Ft.	3-5 Ft.	Moderate	
43	Juncus effusus 'Elk Blue'	California Gray Rush	1 Gallon	1-2 Ft.	1-2 Ft.	Low	
44	Lomandra 'Breeze'	Dwarf Mat Rush	1 Gallon	3 Ft.	3 Ft.	Low	Native

MWEO PRELIMINARY WATER BUDGET

$$MAWA = (ET_o) (0.62) [(1.45 \cdot LA) + (.55 \cdot SLA)]$$

$$MAWA = 52,681 \text{ Gallons/Year}$$

$$ETWU = (ET_o) (0.62) (P_k H_a / E + SLA)$$

$$ETWU = 49,088 \text{ Gallons/Year}$$

The ETWU (49,088 Gallon/Year) is less than the MAWA (52,681 Gallon/Year), therefore the preliminary water budget complies with the maximum applied water allowance (MAWA)

IRRIGATION STATEMENT

All irrigation will be designed to meet Sonoma County Water Efficient Landscape Ordinance and will contain the following components:

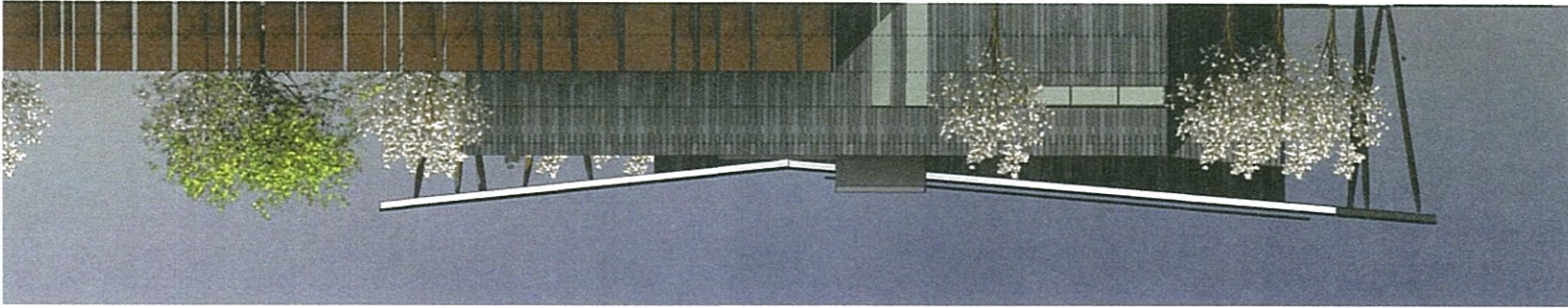
- The irrigation system will be designed and installed to meet irrigation efficiency described in the maximum applied water allowance.
- Weather based, self-adjusting irrigation controller.
- Emitters to include subsurface drip irrigation with tree and vine bubblers.
- No spray irrigation will be installed.
- Trees will be placed on separate valves.
- Isolation valves to be installed at point of connection and before each valve or manifold.
- Pressure regulation to be installed.
- Separate valves to be installed to irrigate zones of medium and low water use.
- Check valves to be installed to prevent low point drainage
- Site specific soil amendment to improve fertility of soil for landscape plants, including natives

MAY 14 2018

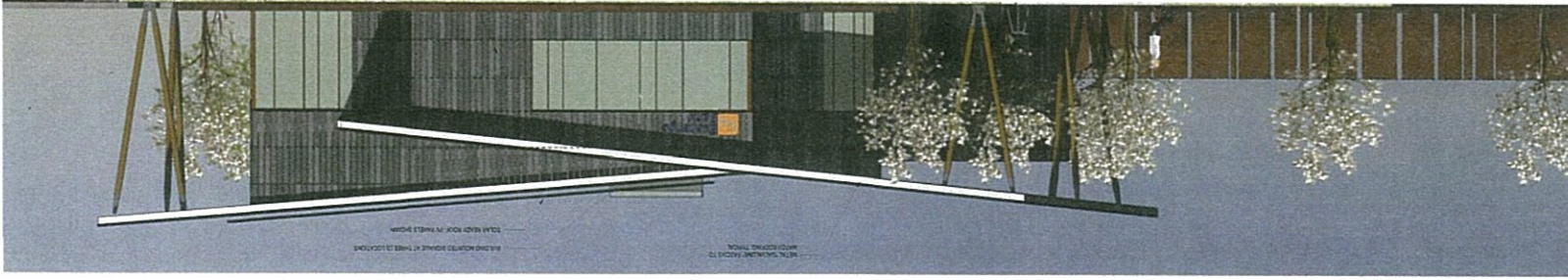
DM



1 EAST ELEVATION



2 NORTH ELEVATION



3 SOUTH ELEVATION



4 WEST ELEVATION

MAX 14 2018

EXTERIOR ELEVATIONS

EXCHANGE BANK

SEBASTOPOL
BRANCH

DESIGN REVIEW SUBMITTAL

TLCD ARCHITECTURE
520 Third St. #250
Santa Rosa, CA 95401
P 707.525.5400
F 707.525.5400
info@tlcd.com

DESIGN REVIEW SUBMITTAL

SEBASTOPOL
BRANCH

EXCHANGE BANK

Number	Date	Description
1	11/03	Initial Review
2	11/03	Final Review
3	11/03	Final Review
4	11/03	Final Review
5	11/03	Final Review
6	11/03	Final Review
7	11/03	Final Review
8	11/03	Final Review
9	11/03	Final Review
10	11/03	Final Review

RENDERINGS
A-202



① VIEW FROM PARKING LOT TOWARD BUILDING ENTRANCE
3' x 10'



③ INTERIOR VIEW OF MAIN RETAIL SPACE
7' x 10'



② VIEW OF ATM'S FROM PARKING LOT
3' x 10'

MAY 14 2018

DM

DESIGN REVIEW SUBMITTAL

SEBASTOPOL
 BRANCH

EXCHANGE BANK

PROJECT NUMBER
 17023

DATE
 05/04/18

DESIGNED BY
 JLM

CHECKED BY
 JLM

REVISIONS

RENDERINGS
 A-203



③ VIEW FROM CORNER TOCHINI AND HWY. 116
 8'x10'



① BIRD'S EYE VIEW FROM TOCHINI AND HWY. 116
 2'x10'



② VIEW FROM TOCHINI STREET
 7'x10'

MAY 14 2018

DM



2 VIEW HEADING SOUTH ON HWY. 116
 2" = 10'



3 VIEW FROM TOCHINI STREET LOOKING NORTH
 2" = 10'

DESIGN REVIEW SUBMITTAL

SEBASTOPOL
 BRANCH

EXCHANGE BANK

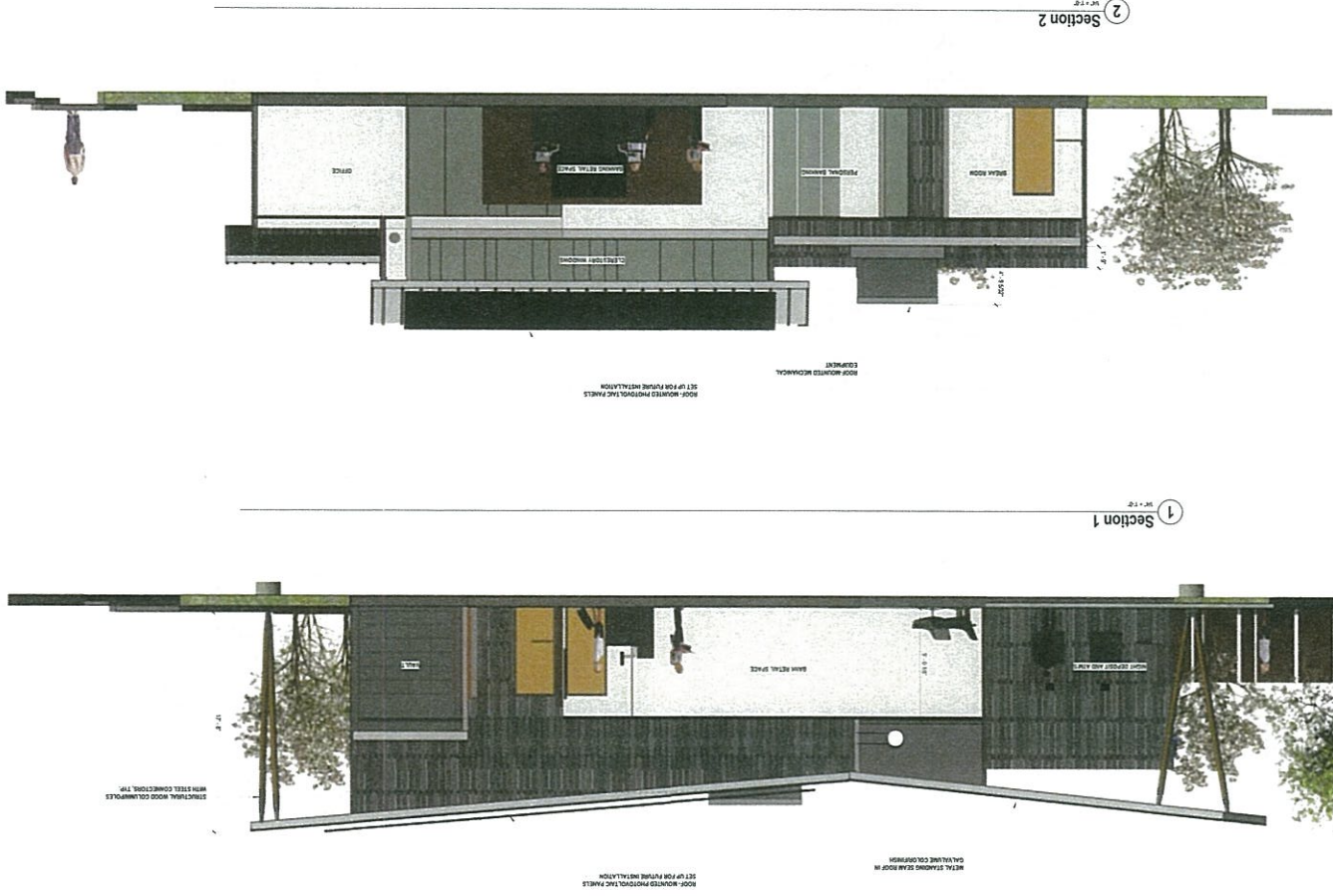
PROJECT NUMBER
 17023
 DATE
 05/14/18
 DRAWN BY
 AUTHOR
 CHECKED BY
 REVISION

Number	Date	Description

RENDERINGS
 A-204

MAY 14 2018

DM



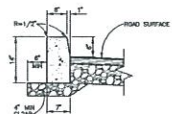
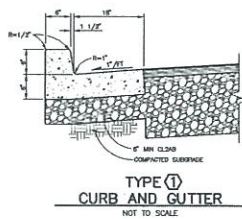
MAY 14 2018
BM

BUILDING SECTIONS
 A-301

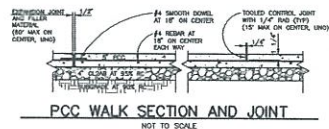
EXCHANGE BANK
 SEBASTOPOL
 BRANCH

DESIGN REVIEW SUBMITTAL

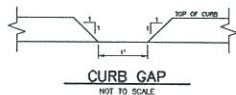
TLCDARCHITECTURE
520 Third St., #250
Santa Rosa, CA 95401
o: 707.525.5600
f: 707.525.5616
tlcd.com



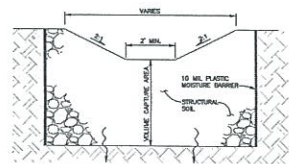
TYPE 2
STANDARD VERTICAL CURB
NOT TO SCALE



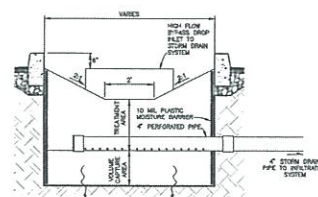
PCC WALK SECTION AND JOINT
NOT TO SCALE



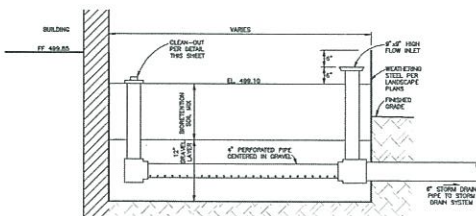
CURB GAIN
NOT TO SCALE



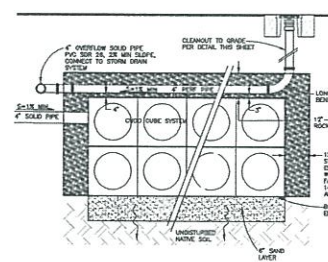
VEGETATED SWALE WITH BIORETENTION



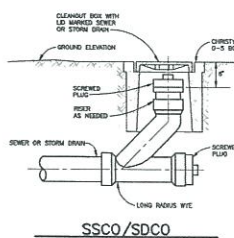
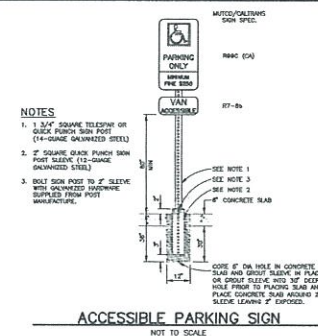
STORM WATER PLANTER (PARKING AREA)



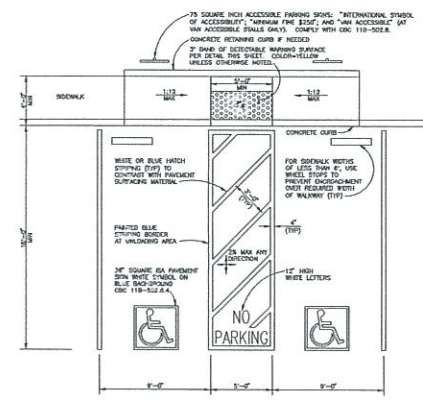
FLOW-THROUGH STORM WATER PLANTER



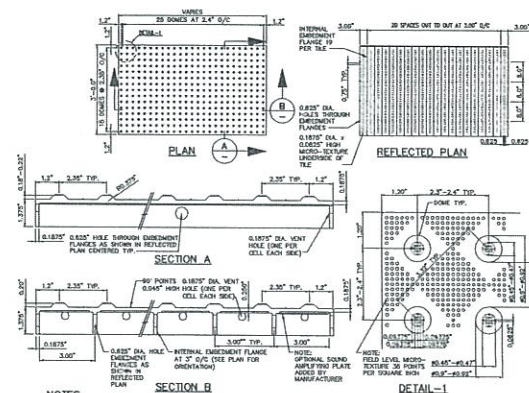
INFILTRATION SYSTEM
NOT TO SCALE

SSCO/SDCO
NOT TO SCALE

ACCESSIBLE PARKING SIGN
NOT TO SCALE



ACCESSIBLE PARKING STALLS



EMBEDDED
DETECTABLE WARNING SURFACE

TLCDARCHITECTURE
520 Third St. #250
Santa Rosa, CA 95401
o: 707.525.5600
f: 707.525.5616
tlcd.com

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Boulevard, Suite 120
Santa Rosa, CA 95403
v: 707-576-1322
f: 707-576-0469
www.brce.com

DESIGN
REVIEW

EXCHANGE BANK
SEBASTOPOL BRANCH

840 GRAVENSTEIN HWY
SEBASTOPOL, CA 95472

EXCHANGE BANK

NO.	DESCRIPTION	DATE
-----	-------------	------

DETAILS

C-105

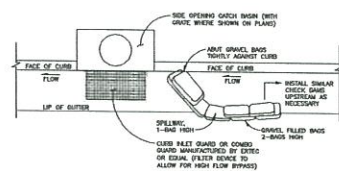


EXCHANGE BANK
SEBASTOPOL BRANCH
840 GRAVENSTEIN HWY
SEBASTOPOL, CA 95472

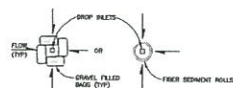
NO. 100-1000		
NO.	DESCRIPTION	DATE

PAVEMENT
STRUCTURAL
SECTION, LAYOUT
& EROSION
CONTROL PLAN

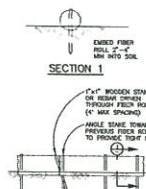
C-104



CATCH BASIN PROTECTION - ON GRADE
NOT TO SCALE



MINOR INLET PROTECTION
NOT TO SCALE



FIBER ROLL
NOT TO SCALE

- NOTES**
1. THE FIBER ROLLS SHALL BE PLACED ON SLOPE CONTOUR.
 2. FIBER ROLLS TO BE PLACED IN A ROW WITH THE ENDS TIGHTLY ADJUTING. USE STRAW, ROCKS, OR FILTER FABRIC TO FILL GAPS BETWEEN THE FIBER ROLLS AND TAMP THE BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND FIBER ROLLS.

LEGEND

- | | |
|---|---|
| FR | FIBER ROLL
PER DETAIL THIS SHEET |
|  | DROP INLET PROTECTION,
PER DETAIL THIS SHEET |
|  | CATCH BASIN PROTECTION
PER DETAIL THIS SHEET |

TREE LEGEND

- TRUE TO BE REMOVED

PAVEMENT STRUCTURAL SECTION

	LOCATION	AC*	CL2 AB**	PCC***
	DRIVE AISLE	0.25'	0.87'	—
	PARKING AISLE	0.25'	0.75'	—
	CONCRETE (PEDESTRIAN) PER DETAIL SHEET C-105, FOR STREET WALKWAY REFER TO TOWN OF DECATUR STANDARD SPEC. NOS. 8-2.1.	—	0.33'	0.42'
	CONCRETE (VEHICULAR) PER DETAIL SHEET C-105	—	0.67'	0.50'
	UNIT PAVEMENT—SEE ARCHITECTURAL DRAWINGS FOR DETAILS	—	—	—

* TYPE B 1/2 MAX MEDIAN ASPHALT
** COMPACTED TO 95% RELATIVE COMPACTION

* 5 SACS PER CY.

*** 5 BAGS PER CY



DESIGN
REVIEW

EXCHANGE BANK
SEBASTOPOL BRANCH

840 GRAVENSTEIN HWY
SEBASTOPOL, CA 95472

EXCHANGE BANK

PROJECT MANAGER
TLODARCHITECTURE

DATE
MAY 2018

DESIGNED BY
P.R.

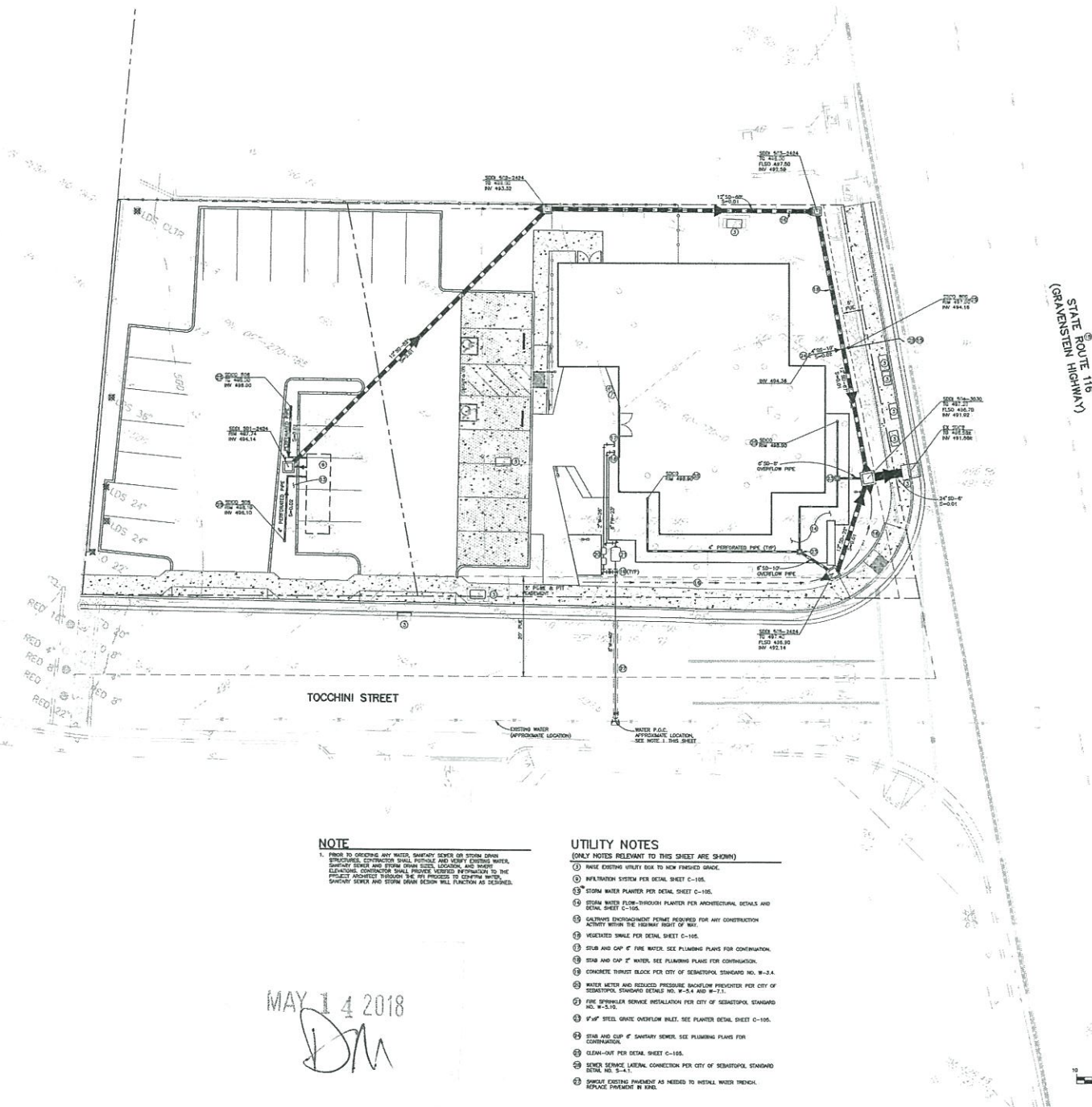
NO. 10

DESCRIPTION

DATE

PRELIMINARY
UTILITY
PLAN

C-103



NOTE

1. PRIOR TO OBTAINING ANY PERMITS, SHOWN LOCATIONS OF EXISTING UTILITIES SHALL BE VERIFIED AND NOTED ON THIS PLAN. ELEVATIONS, CONSTRUCTION SHALL PROVIDE VERIFIED INFORMATION TO THE PROJECT ARCHITECT THROUGH THE CITY PROCEED TO CONSTRUCTION. SHOWN LOCATIONS AND STORM DRAIN DESIGN WILL FUNCTION AS DESCRIBED.

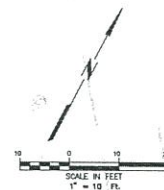
UTILITY NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

1. EXISTING WATER MAIN TO NEW TRUNKED SPACE.
2. WATER MAIN SYSTEM PER DETAIL SHEET C-105.
3. STORM WATER PLANTER PER DETAIL SHEET C-105.
4. STORM WATER PLANTER PER DETAIL SHEET C-105.
5. WATER MAIN PLANTER PER DETAIL SHEET C-105.
6. WATER MAIN PLANTER PER DETAIL SHEET C-105.
7. WATER MAIN PLANTER PER DETAIL SHEET C-105.
8. WATER MAIN PLANTER PER DETAIL SHEET C-105.
9. WATER MAIN PLANTER PER DETAIL SHEET C-105.
10. WATER MAIN PLANTER PER DETAIL SHEET C-105.
11. WATER MAIN PLANTER PER DETAIL SHEET C-105.
12. WATER MAIN PLANTER PER DETAIL SHEET C-105.
13. WATER MAIN PLANTER PER DETAIL SHEET C-105.
14. WATER MAIN PLANTER PER DETAIL SHEET C-105.
15. WATER MAIN PLANTER PER DETAIL SHEET C-105.
16. WATER MAIN PLANTER PER DETAIL SHEET C-105.
17. WATER MAIN PLANTER PER DETAIL SHEET C-105.
18. WATER MAIN PLANTER PER DETAIL SHEET C-105.
19. WATER MAIN PLANTER PER DETAIL SHEET C-105.
20. WATER MAIN PLANTER PER DETAIL SHEET C-105.

MAY 14 2018

DM





DESIGN
REVIEW

EXCHANGE BANK
SEBASTOPOL BRANCH
840 GRAVENSTEIN HWY
SEBASTOPOL, CA 95472

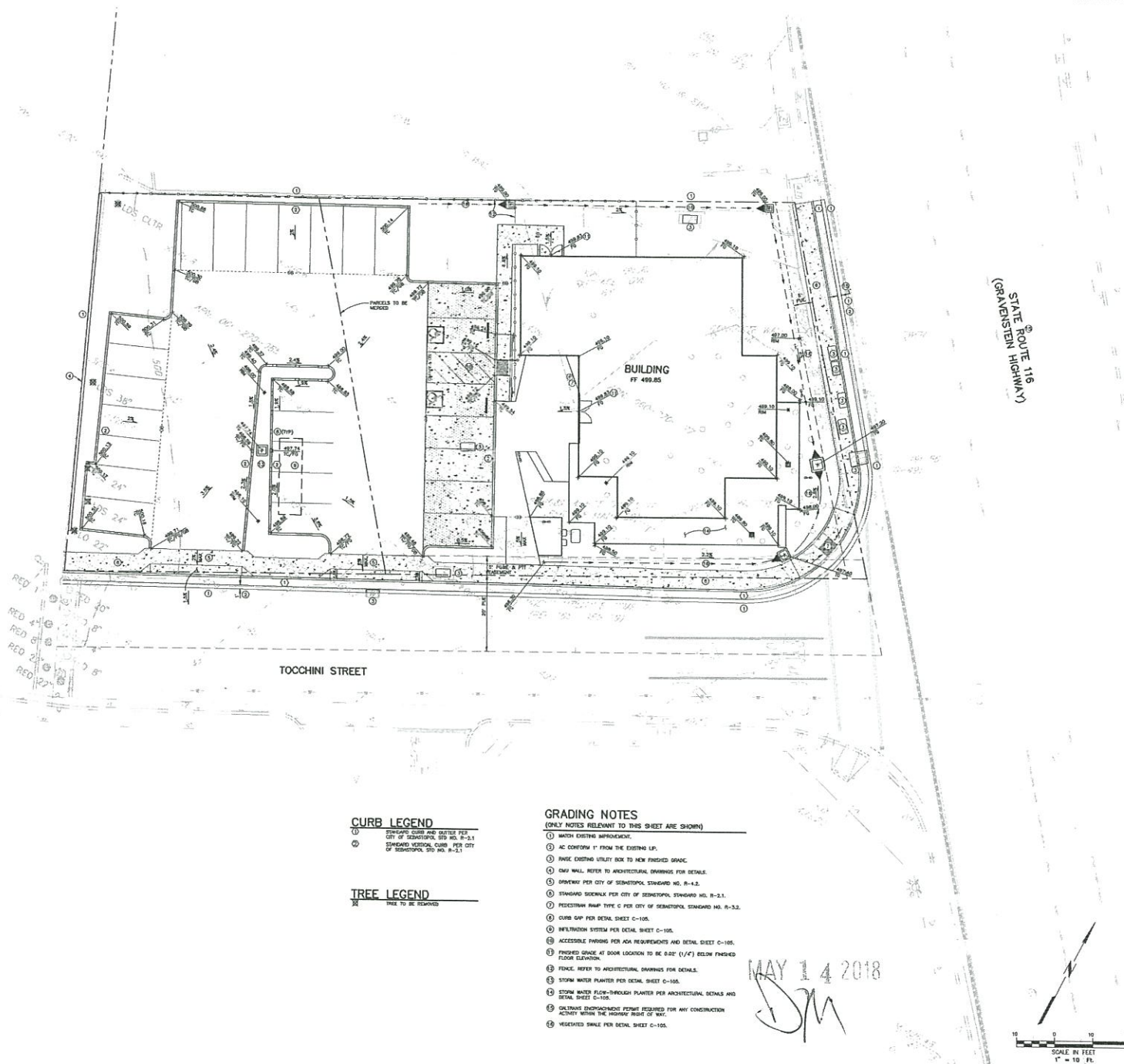
EXCHANGE BANK

PROJECT SHEET
TCD/ARCHITECTURE
DATE
MAY 2018
DRAWN BY
P11
CHECKED BY
P12
IN CHARGE
P13

1. THIS DRAWING IS A PRELIMINARY DESIGN AND NOT TO BE USED FOR CONSTRUCTION. THE CLIENT ACCEPTS THE RISK OF ANY ERRORS OR OMISSIONS.

PRELIMINARY
GRADING
PLAN

C-102



CURB LEGEND

- ① STANDARD CURB AND GUTTER PER CITY OF SEBASTOPOL STD NO. R-2.1
- ② STANDARD VERTICAL CURB PER CITY OF SEBASTOPOL STD NO. R-2.1

TREE LEGEND

- ③ TREE TO BE REMOVED

GRADING NOTES

(ONLY NOTES RELEVANT TO THIS SHEET ARE SHOWN)

- ① MATCH EXISTING IMPROVEMENTS.
- ② AC CONTOUR 1' FROM THE EXISTING L.P.
- ③ FENCE EXISTING UTILITY BOX TO NEW FINISHED GRADE.
- ④ C&G WALL REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
- ⑤ DRIVEWAY PER CITY OF SEBASTOPOL STANDARD NO. R-4.2.
- ⑥ STANDARD SIDEWALK PER CITY OF SEBASTOPOL STANDARD NO. R-2.1.
- ⑦ PEDESTRIAN RAMP TYPE C PER CITY OF SEBASTOPOL STANDARD NO. R-3.2.
- ⑧ CURB GAP PER DETAIL SHEET C-105.
- ⑨ INFILTRATION SYSTEM PER DETAIL SHEET C-105.
- ⑩ ACCESSIBLE PARKING PER ADA REQUIREMENTS AND DETAIL SHEET C-105.
- ⑪ FINISHED GRADE AT DOOR LOCATION TO BE 0.02' (1/4") BELOW FINISHED FLOOR ELEVATION.
- ⑫ FENCE REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
- ⑬ STORM WATER PLANTER PER DETAIL SHEET C-105.
- ⑭ STORM WATER FLOW-THROUGH PLANTER PER ARCHITECTURAL DETAILS AND DETAIL SHEET C-105.
- ⑮ CULTIVATING ENCLOSURES PERMIT REQUIRED FOR ANY CONSTRUCTION ACTIVITY WITHIN THE HIGHWAY RIGHT OF WAY.
- ⑯ RECEIVED SHIMULE PER DETAIL SHEET C-105.



C-101

[illegible]

FREE TO BE REMOVED

TO BE COMPLETED AS PART OF
CONSTRUCTION DOCUMENTS

MAY 14 2018

[Handwritten signature]

[illegible]

LINES			
BOUNDARY	_____		
PANEL	_____		
CENTER	_____		
EASEMENT	_____		
UTILITY LINES		EXISTING	PROPOSED
STORM DRAIN	_____	_____	_____
WATER	_____	_____	_____
SEWER	_____	_____	_____
GAS	_____	_____	_____
ELECTRICAL	_____	_____	_____
TELEPHONE	_____	_____	_____
TELEVISION	_____	_____	_____
JOINT TRENCH	_____	_____	_____
TOPOGRAPHY			
DROP INLET			
DROP INLET WITH SIDE OPENINGS			
WATER METER			
WATER VALVE			
BLIND			
PIPE HEADWATER			
THREAT BLOCK			
GAS METER			
STORM DRAIN MANHOLE			
STORM DRAIN GATE BOX			
SEWER MANHOLE			
SEWER CLEANOUT			
JOINT PILE			
LIGHT STANDOFF			
CLIP/ANCHOR			
CURB & GUTTER			
CLC FENCE			
FENCE			
CHAIN LINK FENCE			
DISY/STAKE			
WOLANDER			
TRAIL PROTECTION			
TREE TO BE SAVED			
THREE TO BE REMOVED			

[illegible]

2016 CA BUILDING STANDARDS ADMINISTRATIVE CODE= TITLE 24 PART 1
2016 CA BUILDING CODE TITLE 24 PART 2 VOLUME #1 AND #2
2016 CA ELECTRICAL CODE= TITLE 24 PART 3
2016 CA MECHANICAL CODE= TITLE 24 PART 4
2016 CA PLUMBING CODE = TITLE 24 PART 5
2016 CA ENERGY CODE= TITLE 24 PART 6
2016 CA FIRE CODE= TITLE 24 PART 8
2016 CA GREEN BUILDING STANDARDS CODE= TITLE 24 PART 11
2016 CA REFERENCED STANDARDS= TITLE 24 PART 12

CONTROL POINT #5000
 CP=5000
 TL 500.00
 N: 2041.67%; E: 7843.429
 CONTROL POINT #5001
 CP=5001
 N: 2911.787; E: 8194.277
 CONTROL POINT #5002
 CP=5002
 N: 3777.370; E: 7981.341
 CONTROL POINT #5377
 CP=5377
 N: 2734.851; E: 7903.882

1. CONTRACTOR SHALL KEEP ACCURATE RECORD DRAWINGS WHICH SHOW THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK. CONTRACTOR SHALL ALSO NOTE THE LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS ENCOUNTERED. RECORD DRAWINGS SHALL BE "REDLINED" ON A SET OF PRINTS. THE REDLINE PRINTS SHALL BE DELIVERED TO THE CONSTRUCTION MANAGER.

THE APPLICABLE FORM FOR THIS SITE IS PANEL NO. 715 OF 1150, DATED DECEMBER 02, 2006. THIS SITE IS LOCATED IN ZONE X.

[illegible][illegible][illegible][illegible]

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53	Q54	Q55	Q56	Q57	Q58	Q59	Q60	Q61	Q62	Q63	Q64	Q65	Q66	Q67	Q68	Q69	Q70	Q71	Q72	Q73	Q74	Q75	Q76	Q77	Q78	Q79	Q80	Q81	Q82	Q83	Q84	Q85	Q86	Q87	Q88	Q89	Q90	Q91	Q92	Q93	Q94	Q95	Q96	Q97	Q98	Q99	Q100
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53	Q54	Q55	Q56	Q57	Q58	Q59	Q60	Q61	Q62	Q63	Q64	Q65	Q66	Q67	Q68	Q69	Q70	Q71	Q72	Q73	Q74	Q75	Q76	Q77	Q78	Q79	Q80	Q81	Q82	Q83	Q84	Q85	Q86	Q87	Q88	Q89	Q90	Q91	Q92	Q93	Q94	Q95	Q96	Q97	Q98	Q99	Q100

[illegible]

SITE PLAN
SCALE: 1/8"=1'-0"

①

MAY 1 1968

SHOPPING CENTER

DRIVE THROUGH

TACO BELL

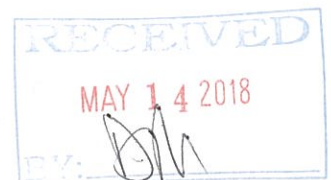
SUMMIT
Summit Engineering, Inc.
483 Aviation Blvd., Suite 200 • Santa
Rosa, CA 95403
707-527-0775
www.summit-se.com

7-11-1964

DESIGN REVIEW LIGHTING FIXTURE BROCHURE

EXCHANGE BANK – SEBASTOPOL BRANCH

April 30, 2018



LED pole top luminaires with symmetrical light distribution

Housing: Die-cast aluminum housing and slip fitter. Slip fits 3" O.D. pole top, secures to pole with three stainless steel set screws. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Faceplate is constructed of die-cast aluminum and is secured to housing with mechanically captive stainless steel fasteners. Tempered clear glass. Reflector of pure anodized aluminum. Fully shielded to comply with LEED zones 1 and higher. Fully gasketed for weather tight operation using molded silicone rubber „U-channel“ gasket.

Electrical: 21.8W LED luminaire, 26 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

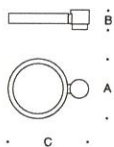
Weight: 8.6 lbs.

EPA: 0.3

Luminaire Lumens: 1571

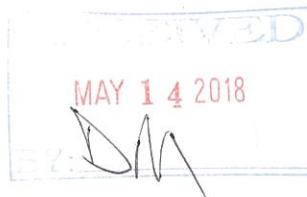
Tested in accordance with LM-79-08

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



Symmetrical

	Lamp	A	B	C
99401	21.8W LED	11 $\frac{7}{8}$	3 $\frac{7}{8}$	16



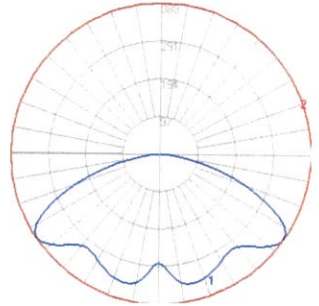
BEGA

Photometric Filename: 99401.ies

TEST: N.A.
TEST LAB: BEGA
DATE: 2/27/2013
LUMINAIRE: 99401
LAMP: 21.8W LED



LA1



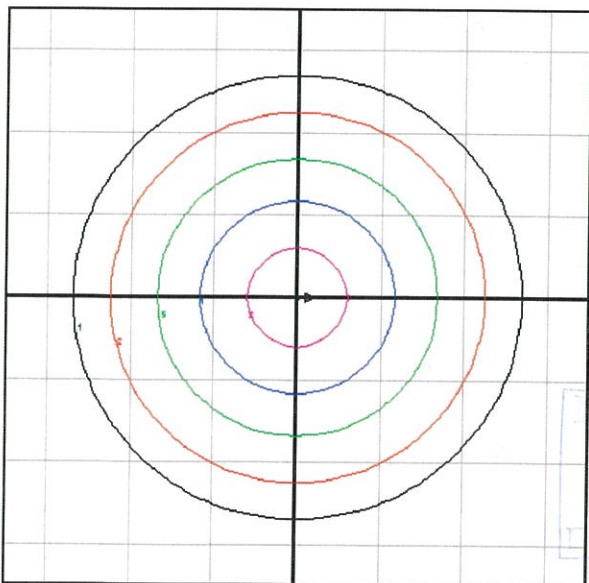
Characteristics

IES Classification	Type V
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1571
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	60
Total Luminaire Watts	26
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Max. Cd.	387.8 (360H, 55V)
Max. Cd. (<90 Vert.)	387.8 (360H, 55V)
Max. Cd. (At 90 Deg. Vert.)	0 (0.0%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	74 (4.7%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

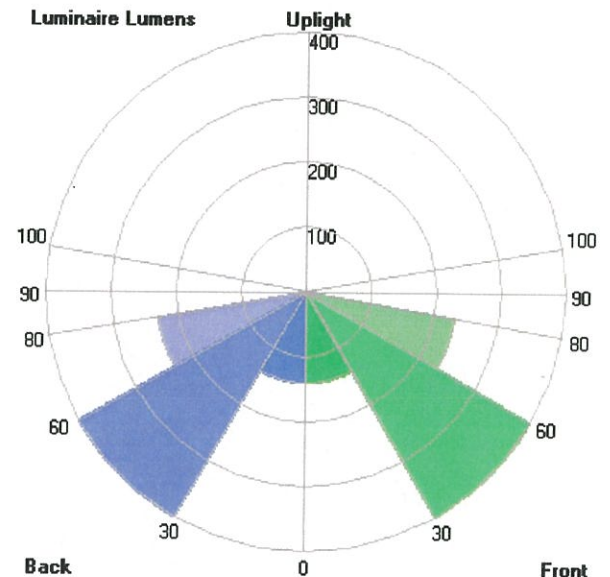
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	140.1	N.A.	8.9
FM (30-60)	399.6	N.A.	25.4
FH (60-80)	231.4	N.A.	14.7
FVH(80-90)	14.4	N.A.	0.9
BL (0-30)	140.1	N.A.	8.9
BM (30-60)	399.6	N.A.	25.4
BH (60-80)	231.4	N.A.	14.7
BVH(80-90)	14.4	N.A.	0.9
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	1571.0	N.A.	100.0

BUG Rating B1-U0-G1



Mounting Height = 10 ft. Grid Spacing = 10 ft.



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA 4000 Bega Way, Cambridge, CA 94612 (925) 231-8500 F (925) 231-8151

LED pole top luminaires with asymmetrical light distribution

Housing: Die-cast aluminum housing and slip fitter. Slip fits 3" O.D. pole top, secures to pole with three stainless steel set screws. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: Faceplate is constructed of die-cast aluminum and is secured to housing with mechanically captive stainless steel fasteners. Tempered clear class. Reflector of pure anodized aluminum. Fully shielded to comply with LEED zones 1 and higher. Fully gasketed for weather tight operation using molded silicone rubber "U-channel" gasket.

Electrical: 32.0W LED luminaire, 36.0 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 4000K with a >80 CRI. Available in 3000K (>80 CRI); add suffix K3 to order.

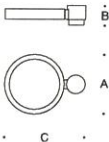
Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

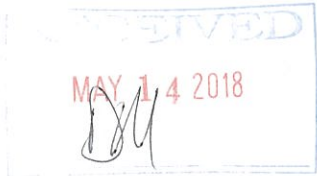
Weight: 20.0 lbs.

Luminaire Lumens: 2907



Pole-top luminaires - asymmetrical wide beam						
	Lamp		A	B	C	
99407	32.0W LED	Single	18 7/8	2 1/4	24	

Type:
 BEGA Product:
 Project:
 Voltage:
 Color:
 Options:
 Modified:

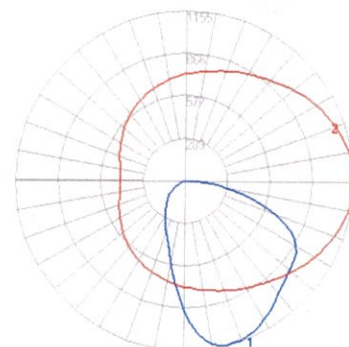


BEGA

LA2 80.A3

Photometric Filename: 99407.IES

TEST: NA
TEST LAB: BEGA
DATE: 08/01/2014
LUMINAIRE: 99 407
LAMP: 32W LED



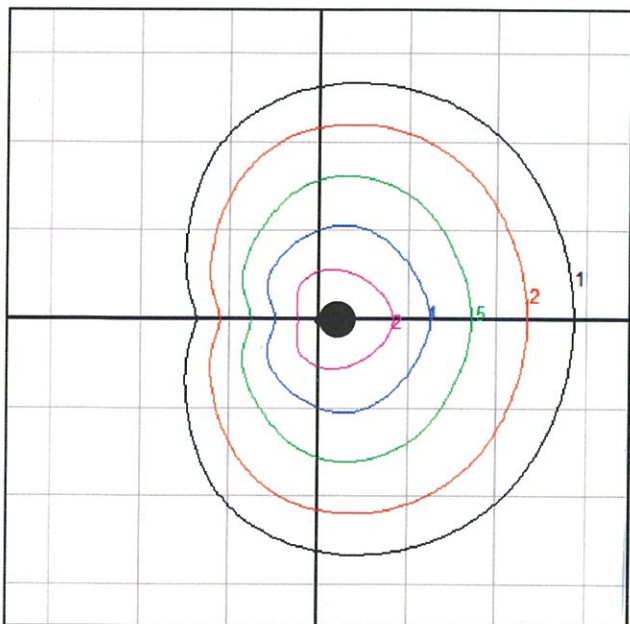
Characteristics

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2905
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	37
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Max. Cd.	1154.5 (360H, 15V)
Max. Cd. (<90 Vert.)	1154.5 (360H, 15V)
Max. Cd. (At 90 Deg. Vert.)	0 (0.0%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	309 (10.6%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

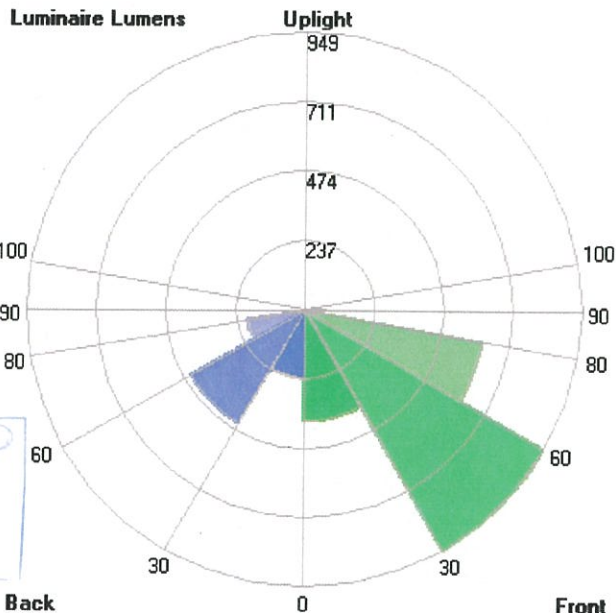
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	380.6	N.A.	13.1
FM (30-60)	948.6	N.A.	32.7
FH (60-80)	617.3	N.A.	21.2
FVH(80-90)	66.1	N.A.	2.3
BL (0-30)	232.2	N.A.	8.0
BM (30-60)	447.8	N.A.	15.4
BH (60-80)	200.6	N.A.	6.9
BVH(80-90)	12.1	N.A.	0.4
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	2905.3	N.A.	100.0

BUG Rating B1-U0-G1



Mounting Height = 15 ft. Grid Spacing = 15 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.



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Wall luminaires with directed light

Housing: One piece die-cast aluminum supplied with universal mounting bracket for direct attachment to 3½" or 4" octagonal wiring box. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: One piece die-cast aluminum cover frame secured by captive socket head, stainless steel screws threaded into stainless steel inserts. Semi-specular, anodized aluminum internal reflector. Stippled tempered clear glass. Fully gasketed for weather tight operation using a molded silicone rubber O-ring gasket.

Electrical: 29.8W LED luminaire, 35 total system watts, -20°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Options: Optional integral emergency battery pack available (please specify 3243LED/EMPK). Battery will operate the fixture at 62% of full light output for a minimum of 90 minutes. Ambient temperature must not go below -20°C and must not exceed 50°C. Specify EMPK and 120V or 277V operating voltage.

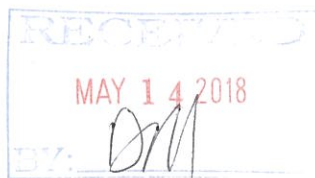
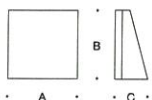
Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

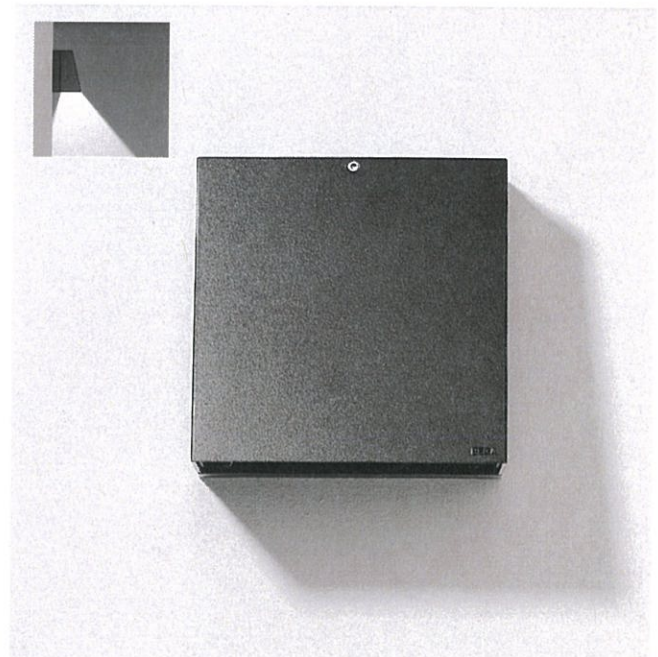
Weight: 8.4 lbs.

Luminaire Lumens: 4018

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



Lamp		A	B	C
33 243	29.8W LED	11	11	5%



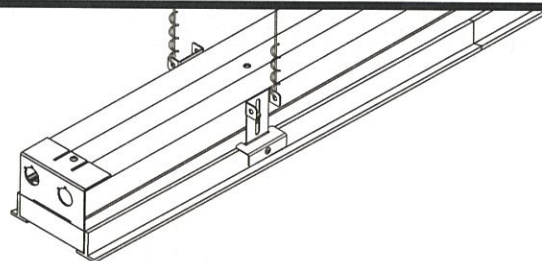
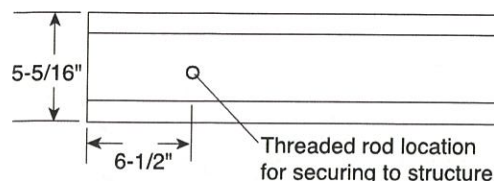
High Performance 6" Aperture (HP-6) - Recessed



Page 1

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High Performance 6" Aperture (HP-6) - Recessed



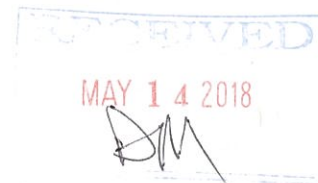
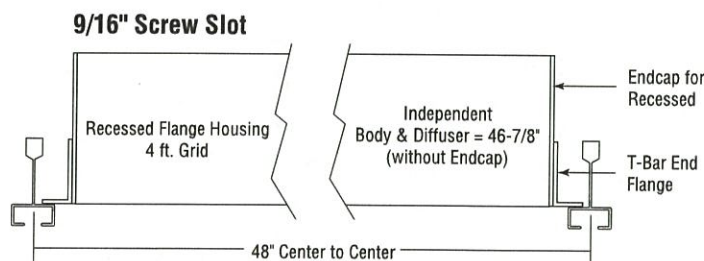
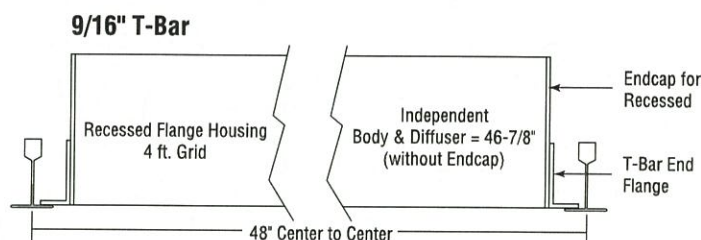
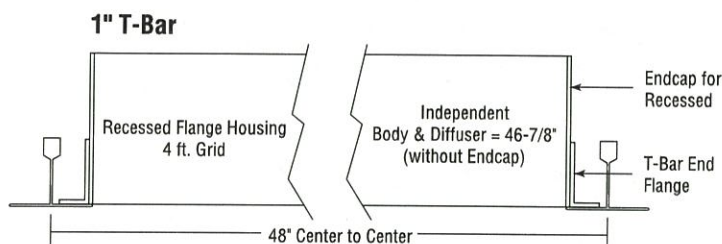
SHEET ROCK INSTALLATION:

Flex conduit is secured at the end cap. Support to structure using threaded rod. Threaded rod support holes are located on each end of the luminaire.

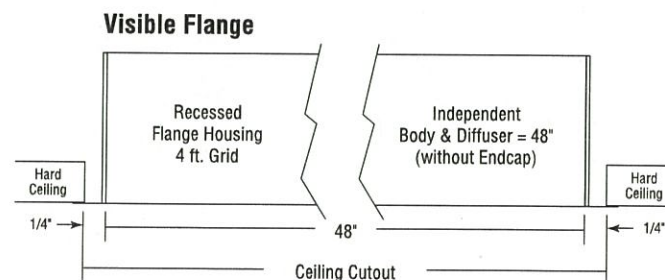
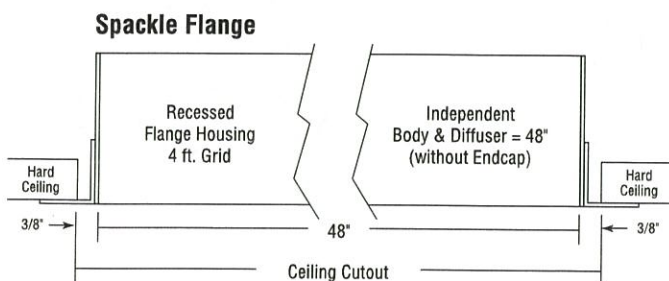
T-BAR INSTALLATION:

HP-6 R and HP-6 EO R T-Bar installations comes standard with a splice plate at the end of the luminaire. Mounting brackets (supplied) secure the luminaire to T-Bar and provide support to structure location. All even foot length (2, 4, 6, ...) luminaire runs are reduced in length by an appropriate amount to fit within typical 2x2 and 2x4 T-Bar grid systems. For uncommon T-Bar systems please consult factory.

GRID LENGTH DETAIL - 4' example



HARD CEILING LENGTH DETAIL - 4' example



Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732; D727,554 S; D727,550 S, D727,551 S

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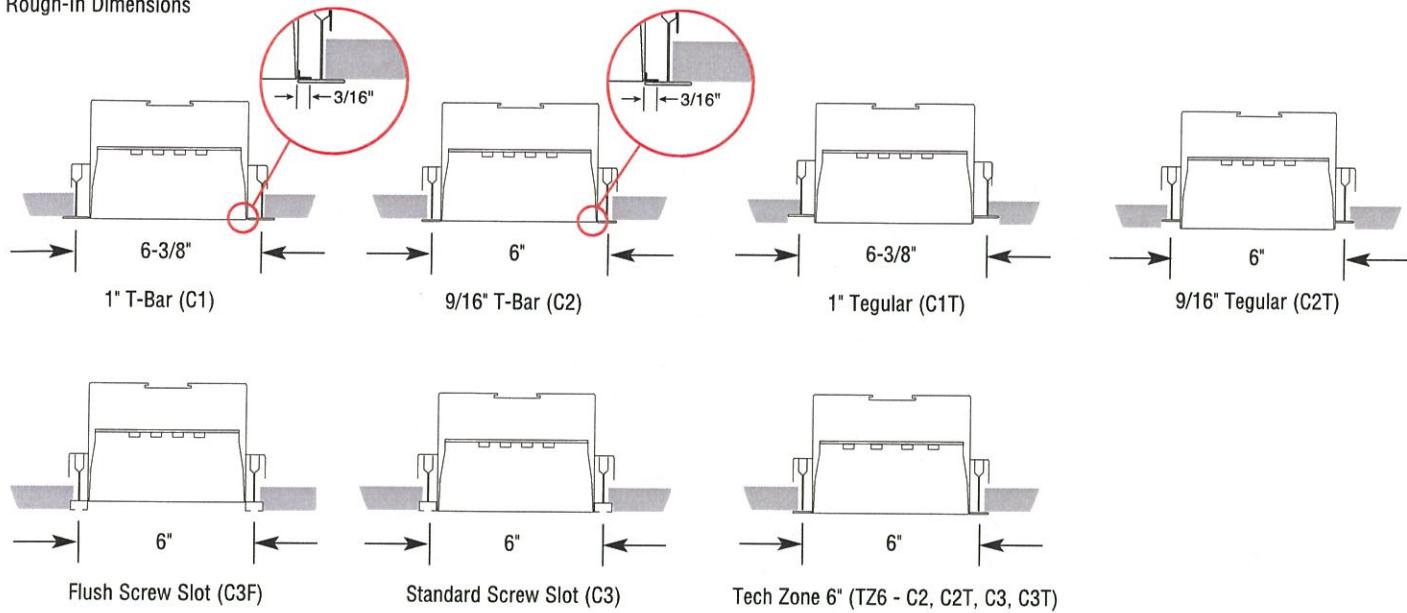
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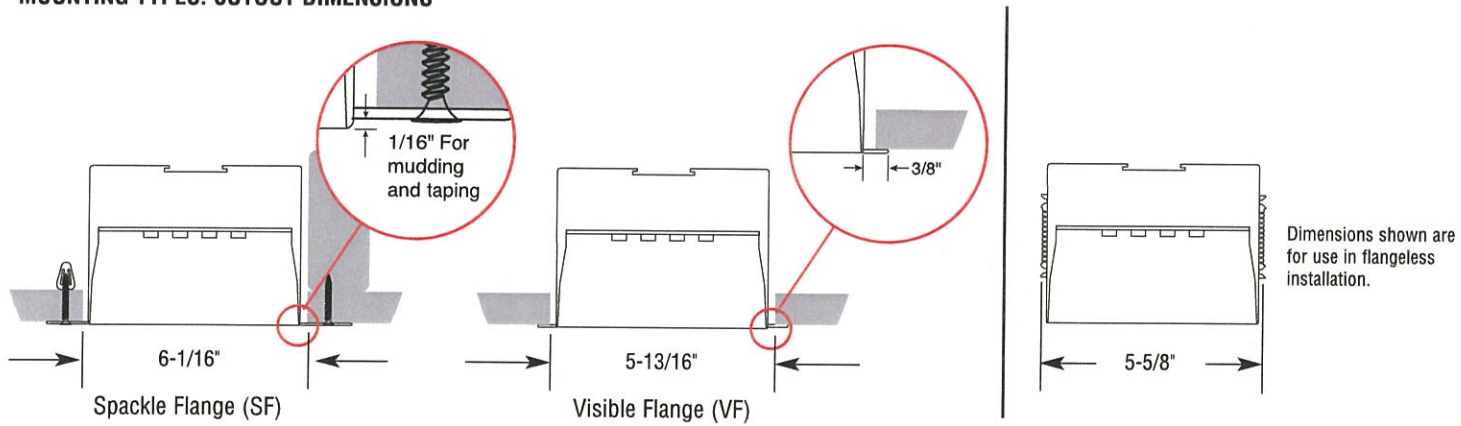
High Performance 6" Aperture (HP-6) - Recessed

MOUNTING TYPES: T-BAR

Rough-In Dimensions



MOUNTING TYPES: CUTOUT DIMENSIONS



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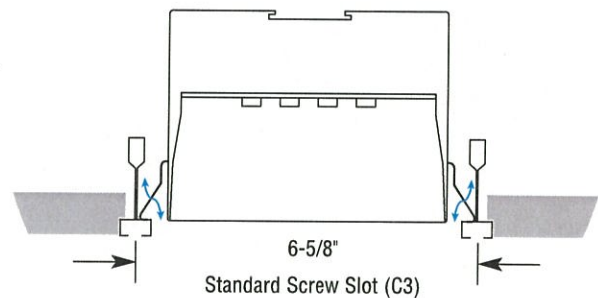
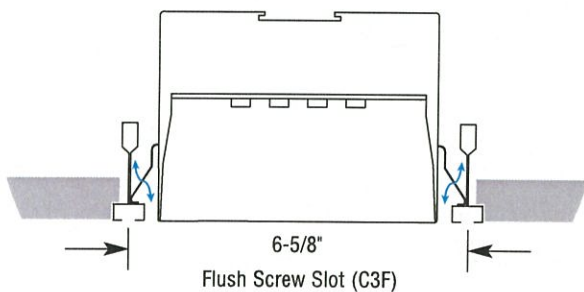
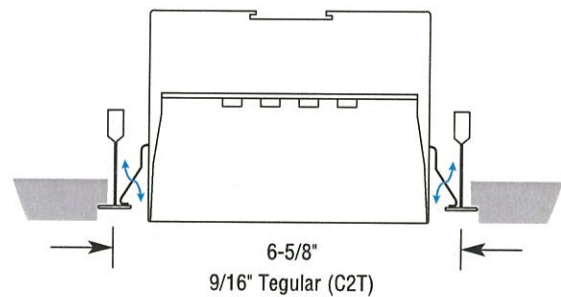
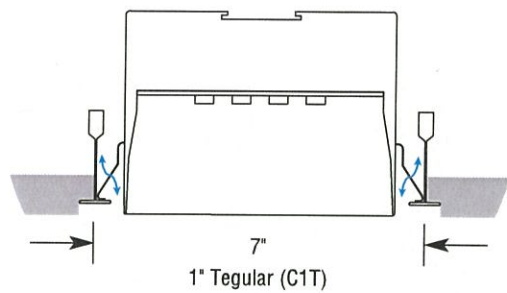
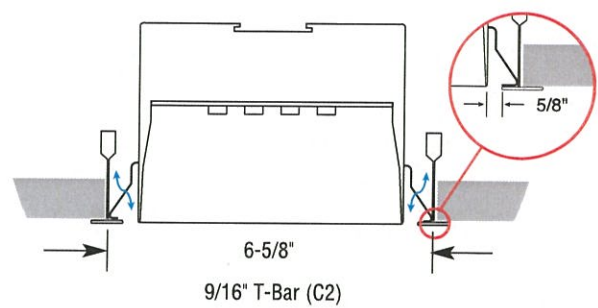
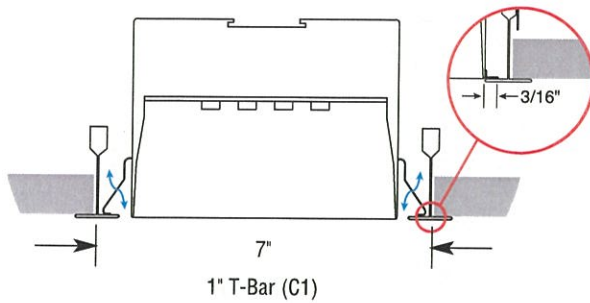
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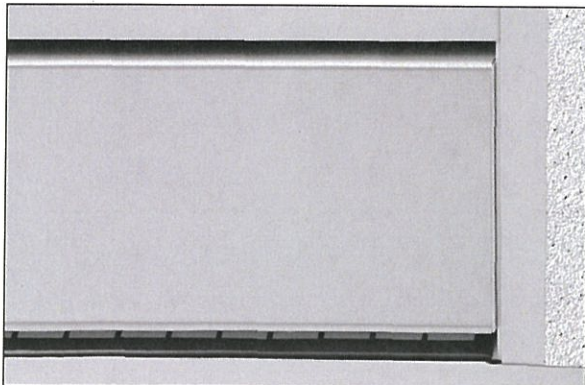
High Performance 6" Aperture (HP-6) - Recessed

AIR RETURN MOUNTING TYPES: T-BAR

Rough-In Dimensions



AIR RETURN



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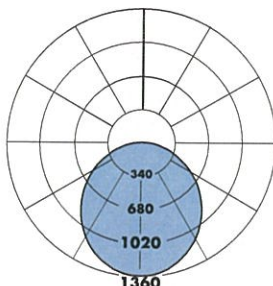
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High Performance 6" Aperture (HP-6) - Recessed

HP-6 R PHOTOMETRY

Very High Output - 4' Luminaire
Efficacy: 100 lumens per watt
Total luminaire output: 3769 lumens (942 lumens/foot)
37.6 watts (9.4 watts/foot)

CRI: 80
CCT: 3500K
ITL LM79 Report: 86098

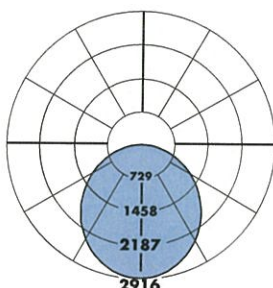


CANDELA DISTRIBUTION						
	0.0	22.5	45	67.5	90	Flux
0	1360	1360	1360	1360	1360	
5	1353	1353	1353	1354	1354	129
10	1334	1331	1332	1334	1331	
15	1301	1293	1299	1300	1294	366
20	1257	1245	1252	1250	1244	
25	1193	1183	1192	1189	1185	547
30	1123	1114	1120	1117	1114	
35	1043	1034	1039	1036	1034	649
40	955	949	954	950	949	
45	865	858	862	859	856	663
50	767	761	764	761	760	
55	668	662	665	661	662	593
60	567	561	563	561	561	
65	465	460	461	460	459	456
70	363	359	360	359	358	
75	263	261	261	260	261	277
80	170	168	169	169	170	
85	81	80	80	79	81	89
90	0	0	0	0	0	

HP-6 EO R PHOTOMETRY

Very High Output - 4' Luminaire
Efficacy: 110 lumens per watt
Total luminaire output: 8026 lumens (2007 lumens/foot)
73.2 watts (18.3 watts/foot)

CRI: 80
CCT: 3500K
ITL LM79 Report: 89078



CANDELA DISTRIBUTION						
	0.0	22.5	45	67.5	90	Flux
0	2915	2915	2915	2915	2915	
5	2092	2900	2900	2901	2900	276
10	2859	2853	2857	2857	2854	
15	2781	2765	2783	2784	2774	783
20	2676	2656	2675	2680	2667	
25	2542	2527	2544	2544	2535	1169
30	2387	2370	2389	2389	2382	
35	2218	2197	2217	2213	2208	1383
40	2030	2012	2031	2024	2023	
45	1833	1819	1832	1829	1825	1410
50	1628	1616	1627	1623	1624	
55	1414	1404	1413	1409	1408	1261
60	1197	1189	1195	1197	1193	
65	981	974	979	978	979	968
70	768	761	763	763	765	
75	559	555	554	553	556	589
80	365	357	357	360	359	
85	174	167	167	170	167	187
90	0	0	0	0	0	

Total Light Output, 3500K, 80 CRI (Lumens) - 4' Luminaire

HP-6 R*				HP-6 EO R**		
S	B	H	V	H	V	X
1543	1940	2931	3769	6242	8026	9082

Light Output, 3500K, 80 CRI (Lumens Per Foot)

HP-6 R*				HP-6 EO R**		
S	B	H	V	H	V	X
386	485	733	942	1561	2007	2271

Power (Watts Per Foot)

HP-6 R*				HP-6 EO R**		
S	B	H	V	H	V	X
3.7	4.7	7.2	9.4	14.0	18.3	21.1

Efficacy, 3500K, 80 CRI (Lumens Per Watt)

HP-6 R*				HP-6 EO R**		
S	B	H	V	H	V	X
105	104	102	100	111	110	108

* Family Correlation based on 4' luminaire 3500K, 80 CRI Very High Output (V) test - 120V. ITL report, 86098

** Family Correlation based on 4' luminaire 3500K, 80 CRI Very High Output (V) test - 120V. ITL report, 89078

S - Standard, B - Boosted Standard Output, H - High Output, V - Very High Output, X - Extremely High Output

Lumen Adjustment Factors - 80 CRI

3000K	0.985
3500K	1.000
4000K	1.032

Lumen Adjustment Factors - 90 CRI

3000K	0.746
3500K	0.760
4000K	0.789

Apply a lumen adjustment factor to calculate lumens for the desired CCT and CRI.

SAMPLE LUMEN ADJUSTMENT CALCULATION

HP-6 R High Output (H), 4000K, 90 CRI

Lumen Adjustment Factor = 0.789

Total Light Output =

2931 lm x 0.789 = 2313 lm

Total Light Output per Foot =

733 lm/ft x 0.789 = 578 lm/ft

watts/foot = 7.2 W/ft

$$\text{Efficacy} = \frac{578 \frac{\text{lm}}{\text{ft}}}{7.2 \frac{\text{W}}{\text{ft}}} = 80 \text{ lm/W}$$

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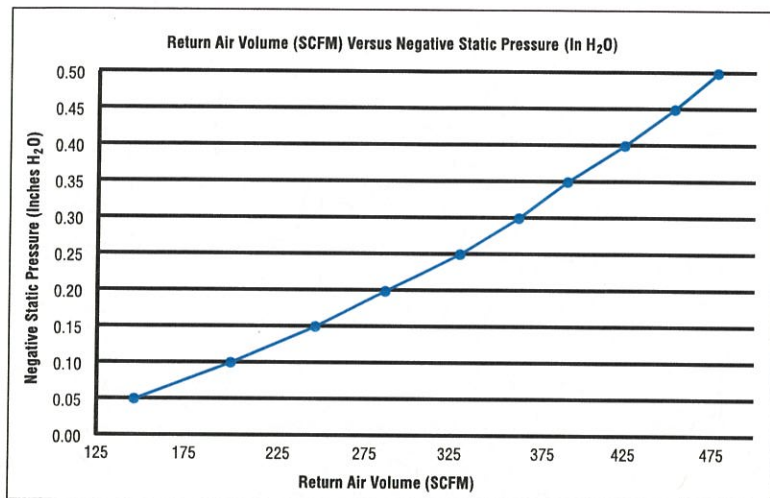
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High Performance 6" Aperture (HP-6) - Recessed

AIR HANDLING INFORMATION



SPECIFICATIONS

CONSTRUCTION: Precision-cut 6061-T6 extruded aluminum body. Internal joiner system, plug-together wiring, standard. Housing is powder coated.

ENDCAPS: Flat endcaps add 1/16" to each end of luminaire.

MITERED CORNERS: Fully illuminated 90° corners have double-diffusers to ensure against light leaks. Custom angles are available (90° minimum on inside corners). Contact Factory.

REFLECTORS: Die-formed 24-gauge cold-rolled steel reflectors are finished in 96 LG high reflectance matte white powder coat paint.

DOWNLIGHT DIFFUSER: 12" maximum diffuser length. Internal secondary diffusers at corners, joints and seams ensure visually seamless, uniform, continuous illumination. Flush frost white snap-in diffuser, 73% transmissive, 99% diffusion.

LIGHT OUTPUT: Lumen packages available for **HP-6 R:** Standard Output (S), Boosted Standard Output (B), High Output (H), and Very High Output (V). Lumen packages available for **HP-6 EO R:** High Output (H), Very High Output (V), and Extremely High Output (X). A separate chart summarizes lumen distribution and wattage.

LIGHT ENGINE: The replaceable light engines are made up of high performance mid-power LEDs and designed to distribute heat properly to maximize the life of the LEDs and the driver.

LUMEN MAINTENANCE: 90% of initial light output (L90) at 100,000+ hours; 70% of initial light output (L70) at 200,000+ hours.

DRIVER: Replaceable 120V/277V Constant Current Reduction dimming driver standard. Can be wired dimming or non-dimming. 0-10V dimming controls with a range of 10%- 100%. Dimming to 1% available; consult factory. Driver is fully accessible from below the ceiling. Power Factor: ≥0.9. Total Harmonic Distortion (THD): <20%. Expected driver lifetime: 100,000 hours.

LUTRON DRIVER OPTIONS: Lut3W-3-wire, LutES-EcoSystem, Lut2W-2-wire.

ELECTRICAL: Optional emergency to generator/inverter wiring, internal generator transfer switch, nightlight wiring, step-dimming driver, backup battery. Chicago Plenum Option. Factory-choice low-profile backup battery available. 8" minimum luminaire length for low profile battery pack. Bodine BSL722 battery pack also available; 4" minimum luminaire length. Backup battery delivers 1300 lumens. Half of a 4' section will be illuminated in emergency mode.

INTEGRATED SENSORS: Integrated PIR (Passive Infrared) occupancy and/or daylight sensors available. Refer to Occupancy Sensor and Daylight Sensor tech sheets for more information.

MOUNTING: Standard bracket design works with most lay-in ceiling types. Brackets secure luminaire to the ceiling grid from above. Tie-in T-Bar brackets connect the luminaire to the T-Bar for securing to structure. Consult local codes for tie-wire recommendations.

AIR RETURN: Luminaire tested in accordance with ADC1062 and ASHRAE 70. Air Return slots positioned along outside edge of luminaire. Contact factory for availability.

FEED: Standard with one 18-gauge/5-conductor single-circuit feed. 14-gauge feed used when luminaire current exceeds 5 amps. Optional 6' flex conduit whips available.

LENGTHS: Any length, 2-foot minimum, in increments down to 1/16" (± 1/32"). 12-foot maximum section length.

LABELS: Luminaire and electrical components are ETL-listed conforming to UL 1598 in the U.S.A. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.73 (G), this luminaire contains an internal driver disconnect. Damp Location. IC-Rated. Damp Location. Finelite products use electronic components that are RoHS compliant, and the mechanical components of the luminaire have been verified to not knowingly contain any restricted substances listed per RoHS Directive 2002/95/EC.

WEIGHT: HP-6 R: 3.7 lb/ft
HP-6 EO R: 3.85 lb/ft

WARRANTY: 10-year performance-based warranty on all standard components. Optional accessories such as emergency battery packs are covered by their individual manufacturer warranties.

Protected by one or more US Patents: 8915613; D702,391; D702,390; D700,732; D727,554 S; D727,550 S, D727,551 S

Finitelite, Inc. • 30500 Whipple Road • Union City, CA 94587-1530 • (510) 441-1100 • Fax: (510) 441-1510 • www.finitelite.com

Due to continuing product improvements, Finitelite reserves the right to change specifications without notice. Please visit www.finitelite.com for most current data.

**PRELIMINARY STANDARD
URBAN STORM WATER
MITIGATION PLAN**

**EXCHANGE BANK
SEBASTOPOL BRANCH**

**GRAVENSTEIN HWY,
SEBASTOPOL, CA 95472**

MAY 02, 2018

B&R 4370.00



PREPARED BY: PAUL BARTHOLOW, PE

Brelje & Race Consulting Engineers
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MAY 14 2018
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PROJECT DESCRIPTION

Existing Conditions

The Exchange Bank Sebastopol Branch project site is located on two vacant lots in the City limits of Sebastopol. The site is on a corner lot, bounded by State Route 116 (Gravenstein Hwy) to the east, Tocchini Street to the south, two private homes to the west, and Taco Bell Restaurant to the north. The existing site is currently divided into two lots: Lot 1 of 0.16 Ac and Lot 2 of 0.28 Ac. The site topography generally slopes from the northwest towards the southeast.

The existing storm drainage system is located along the north eastern limits of the site along State Route 116. Storm water runoff from the subject property sheet flows to the eastern corner of the site where it outflows to an existing catch basin located at intersection of State Route 116 and Tocchini Street.

Project soils report was not available at this stage of the project development.

The existing soils types according to project Geotech Report and USDA soil survey are as follows:

Description	Hydrologic Group Rating	Approx. % of site
GdC – Goldridge fine sandy loam, 2-9 percent slopes	C	5%
SbC – Sebastopol sandy loam, 2-9 percent slopes	C	95%

A soils map is included in Appendix C.

There are no existing sensitive features such as creeks, wetlands or trees on this site that we are aware of, and the project does not propose work in any off-site areas that are environmentally sensitive.

It is our understanding that all hazardous materials and soils previously on the site have been remediated and approved by all local, state and federal agencies and the site is cleared for the proposed site improvements.

Proposed Conditions

This 0.44 Ac (19,400 sf) site will consist of a Bank branch building, curbs and gutters, asphalt paving, concrete paving, brick pavers, parking, sidewalks and walkways, CMU wall, fencing and gates, site lighting, landscaping, underground utilities, storm water management facilities, LID features and related improvements. Prior to improvement plans approval, site owner will complete a lot merger form, requesting merger of Lot 1 and Lot 2. The proposed improvements will disturb an area of approximately 0.44 Ac. The size of the building will be approximately 3,460 sf. Site improvements will provide driveway access to the southwest side of the building, and will provide a total of 26 automobile parking spaces, including two accessible parking spaces. Two driveway accesses will be linked to Tocchini Street. The project construction activities will include earthworks, grading, paving, concrete flatwork, building construction and installation of underground utilities (including water, sewer, storm drainage, electrical and irrigational facilities).

Storm water run-on to this site is limited to southwest and northwest boundaries as southeast and northeast are already controlled by curb and gutter to the public storm drain. The proposed building's roof area is divided into tributary areas that are sloped to gutters and roof drains. The storm drainage collected from the building will be discharged into bioswales or storm water planter before entering the onsite drainage system. Drainage from the parking lot will be collected and distributed to combinations of storm water planter and Cudos units to accommodate the low flow conditions and allow for infiltration.

Per 2017 Storm Water Low Impact Development Calculator, ver. 8.7.1, design requirement for the site is Delta Volume Capture. Proposed storm water system will collect site runoff from roofs, walkways, other impervious surfaces and landscaped areas and will convey the storm water to vegetated bioswale, storm water planter or a combination of storm water planter and Cudo units. Once the Delta Volume is captured, all additional storm water will be diverted to the proposed storm drainage system and directed to the storm drain point of connection for the site.

Since the project will create more than 10,000 sq. ft. of impervious surface, it is a subject to the requirements of the County of Sonoma's storm water permit.

POTENTIAL POLLUTANT GENERATING ACTIVITIES

The project has the potential for the following storm water pollutant generating activities. These potential sources of pollution include:

- Nutrients, pesticides, pathogens and trash or debris entering the storm water;
- Sediments, metals, petroleum hydrocarbons and trash from driveway areas.
- Trash enclosure.
- Sediments from building roof structures or hardscapes;

SOURCE CONTROL BMP MEASURES PROPOSED

The project design has incorporated pollution source controls intended to prevent pollutants from entering the storm drain system. These source controls include:

- Minimizing irrigation overspray and runoff from site;
- Utilizing minimal amounts of pesticides;
- Proper maintenance and cleaning of landscaped areas;
- Using the minimum parking stall and driveway widths practical;
- Sweeping parking lots and driveways on a regular basis;
- Covering trash enclosures;
- Disconnecting of roof rain water leaders where practical and discharge with splash block outlets into landscaped areas to encourage infiltration and treatment;
- Clearly mark storm drain inlets with the words "No Dumping. Drains to Creek";
- Direct storm water by sheet flow through landscaped areas prior to entering storm drain;

TREATMENT CONTROL BMP MEASURES PROPOSED

The Low Impact Development Technical Design Manual encourages the use of Low Impact Development (LID) techniques to both retain and treat runoff water from impervious surfaces. The projects site hydrology has been divided to six sub-areas which include all tributary impervious and landscaped areas. See project site Hydrology Plan for areas delineation. Area A101 will utilize stormwater planter in combination with CUDO capture and infiltration system with open bottom infiltration. CUDO water storage system will be used for the capture infiltration system. The units have 95% water storage capacity and access manhole which will allow for periodic cleaning of the infiltration chamber. Areas A102 and A103 will utilize bioretention swale. Areas A104 and A105 will utilize stormwater planter and bioretention swale.

Storm water will be treated with proposed LID techniques and directed either to the bioretention areas, stormwater planters or to CUDO unit until the retention reaches volume capacity. Volume beyond the storage capacity shall be directed to the downstream storm drain system.

The followings Universal LID Features will be incorporated into the design of the site and storm drain system:

Kristar Cudo Retention/Infiltration Basins

Kristar Cudo retention/infiltration basins systems will be connected to onsite storm water planter to provide a storm water treatment and storm water retention. The Kristar Cudo retention/infiltration basin is a modular system of stackable 2'x2'x2' cubes that creates an underground retention storage area that contains 95% void space. The top sides of the modular cubes are not enclosed and have a grated cover that allows storm water to infiltrate into the surrounding soils all sides. The Kristar Cudo modular cubes will be wrapped with a filter fabric and backfilled with a 1' thick section of drain rock on the top and all four sides to prevent the surround sediment from entering the modular storm water retention area. Infiltration system will have open bottom to promote infiltration. Each Kristar Cudo retention/infiltration basin will have at least one manhole opening to allow inspection, access and cleaning the voids contained within the modular Cudo retention and infiltration basin. The Kristar Cudo retention/infiltration basins functions similar to the retention portion of a standard bio-retention planter but contain a greater quantity of voids. The Kristar Cudo basins will promote storm water infiltration and additional storm water treatment. The Kristar Cudo underground retention/infiltration basins that will be sized to capture the Delta Volume requirement of each area. At each storm drain outfall into the Kristar Cudo basins there will be a trash collection bucket and Flogard catch basin insert filter that will collect trash and sediment before storm water is discharged to the storm drain system. Storm water will be treated with proposed techniques and directed to the bioretention areas and further to Cudo units until the retention reaches volume capacity. At that point an alternate storm drain route shall direct additional drainage to the downstream storm drain system

Impervious Area Disconnection

Impervious area disconnection allow storm water from impervious areas, such as rooftops and pavement, to be directed to pervious natural or landscaped areas and infiltrate into the soil. All landscape areas where impervious area disconnections are proposed will be amended with compost (mixed into the soil with a rototiller) to a depth of 8 inches to allow for storm water treatment and infiltration before reaching a storm drain inlet. This BMP also slows the speed and amount of runoff from a site over conventional direct storm drain connections. All rooftop drainage for this project

shall be disconnected from direct connection to the storm drain system and will be directed to storm drain treatment areas utilizing splash blocks or curb drains to paved areas that allow sheet flow to bio-retention areas.

Vegetated Swale with Bioretention

Bioretention areas are to be designed in general accordance with the City of Santa Rosa LID Design Detail P1-06, Priority 1 Swale with bioretention. Bioretention areas will consist of excavated areas backfilled with permeable granular material. The retention volume will be located in a space beneath the vegetated swale. The permeable material will maximize storm water runoff retention and storm water infiltration. Continuous 10 mil plastic barriers will block seepage from migrating laterally.

Flow-Through Stormwater Planter

Stormwater Planters are to be designed in general accordance with the City of Santa Rosa LID Design Detail P3-05, Priority 3 Flow Throught Planter. Stormwater planters will consist of bioretention soil mix with 12-inch layer of gravel beneath. Perforated pipe is centered in gravel layer and connected to high flow bypass piping that will convey storm water to CUDO unit or discharge to storm drain system.

Stormwater Planter (Parking Area)

Stormwater Planter located in parking is to be designed in general accordance with the City of Santa Rosa LID Design Detail P2-05, Priority 2 Roadside Bioretention with curb cuts to promote flow from the adjacent parking area to stormwater planter. Stormwater planters treatment area will consist of bioretention soil. Perforated pipe will convey storm water to CUDO infiltration unit.

DESING REQUIREMENTS

Per the 2017 Storm Water Low Impact Development Calculator this project triggers Delta Volume Capture design requirement which means that increase in volume of storm water generated by the developed site for a 1.0" rain event over a 24-hour period due to development must be infiltrated and/or reused on site. This proposed storm water system will collect site runoff from roofs, walkways, other impervious surfaces and landscaped areas and will convey the storm water to specifically designed vegetated bioswale, combination of storm water planters and Cudo units, infiltration trench or filter media. Once the increase in volume is captured, all additional storm water will be diverted to the proposed storm drainage system.

MAINTENANCE ACTIVITIES

The routine inspection and upkeep of this facility will provided by the property ownership. Maintenance personnel under contract to the property owners will be responsible for routine clean-up and maintenance of the parking lots, driveways, sidewalks, plazas, and landscaped areas. They will also be responsible for incidental maintenance of the BMPs on an as required basis, such as driveway and parking lot sweeping, maintenance and care of landscaping, maintenance of the catch basin filters and removal of trash and debris from the gross pollutant filter of the CUDO inlet.

CUDO units will be inspected and maintained in accordance with the manufacturer's recommendations. A copy of the Operations and Maintenance Manual for the CUDO Stormwater Cube is included in Appendix C. Owner will contract with qualified companies to provide the

scheduled maintenance tasks recommended by the manufacturers. Tasks would include inspection and vacuum extraction of sediments from within the CUDO infiltration basin through the maintenance access riser on each infiltration unit.

Long-term funding for inspection, maintenance and repair of the BMP's shall be budgeted and carried out by the property owner, or its assigned successor(s).

BIORETENTION AREAS – COMMON MAINTENANCE CONCERNS:

The primary maintenance requirement for bioretention area is the regular inspection and repair or replacement of the treatment measure's components. Generally, the level of effort is similar to the routine, periodic maintenance of any landscaped area.

- Conduct monthly inspections as follows:
 - Inspect retention area for obstructions and trash
 - Inspect retention area for ponded water. If ponded water does not drain within five days, remove surface soils and replace. If mosquito larvae are observed, contact the Sonoma Mosquito & Vector Control District at 707 285-2200.
 - Inspect inlets for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment.
- Conduct a biannual (twice yearly) evaluation of the health of any plants, and remove and replace any dead or diseased vegetation.
- Treat diseased vegetation, as needed, using preventative and low-toxic measures to the extent possible, and replace any dead plants.
- The use of pesticides and quick-release synthetic fertilizers shall be minimized, and the principles of integrated pest management (IPM) followed. Check with the local jurisdiction for any local policies regarding the use of pesticides and fertilizers.
- Maintain vegetation and the irrigation system. Prune and weed as needed to keep the retention area neat and orderly in appearance.
- Inspect and if needed, replace mulch before the wet season begins. Mulch should be replaced when erosion is evident or when the retention area begins to look unattractive. The entire area may need mulch replacement every two to three years, although spot mulching may be sufficient when there are random void areas.

STORMWATER PLANTER – COMMON MAINTENANCE CONCERNS:

Maintenance objectives include maintaining units by removal of obstructions and trash.

- Conduct inspection twice annually for ponded water. If ponded water is observed, the perforated pipe shall be cleaned.
- If ponded water remains, further grading and replacement may be necessary to prevent mosquito breeding.
- The high flow inlet should be inspected and cleaned as necessary to remove any obstruction.
- Pesticides and fertilizers shall not be used in the rain garden area.
- Plants should be pruned, weeds pulled and dead plants replaced as needed.
- Check downspout splash blocks for proper location and fill/regard and washouts.
- Evaluate mulching around plants. Add/replace as needed.

VEGETATED SWALE – COMMON MAINTENANCE CONCERNS:

Maintenance objectives include maintaining units by removal of obstructions and trash.

- Conduct inspection monthly during the rainy season. If ponded water is observed, grading will be required to restore positive drainage.
- Mow and irrigate during dry weather to the extent necessary to keep vegetation alive. Where 6-inch high grasses are used, the grass height shall be at least 3 inches after mowing. Where mowed grasses are shown, the grass height shall be mowed when the height exceeds 3 inches.
- Remove any accumulated obstructions and/or trash.

CUDO INFILTRATION UNITS – COMMON MAINTENANCE CONCERNS:

Maintenance objectives include maintaining units by removal of trash and leaves; removal of sediments from the bottom of the Cudo infiltration unit to avoid clogging; and ensuring the proper functioning of inlets and the high-flow bypass.

- Conduct a yearly inspection of the Cudo units.
- Remove trash and debris from the gross pollutant filter.
- Periodic conduct vacuum cleaning of the Cudo units when sediments accumulate.

See Appendix D for the Cudo Maintenance plan, BMP checklist and Cudo Operations and Maintenance Manual.

RESTRICTIONS SECTION

I.D. Pesticide/Fertilizer Application

1) Landscaping shall be designed to minimize irrigation and runoff, promote surface infiltration where appropriate, and minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.

2) Structures shall be designed to discourage the occurrence and entry of pests into buildings, thus minimizing the need for pesticides. For example, dumpster areas should be located away from occupied buildings, and building foundation vents shall be covered with screens.

3) If a landscaping plan is required as part of a development project application, the plan shall meet the following conditions related to reduction of pesticide use on the project site:

a. Where feasible, landscaping shall be designed and operated to treat stormwater runoff by incorporating elements that collect, detain, and infiltrate runoff. In areas that provide detention of water, plants that are tolerant of saturated soil conditions and prolonged exposure to water shall be specified.

b. Plant materials selected shall be appropriate to site specific characteristics such as soil type, topography, climate, amount and timing of sunlight, prevailing winds, rainfall, air movement, patterns of land use, ecological consistency and plant interactions to ensure successful establishment.

c. Existing native trees, shrubs, and ground cover shall be retained and incorporated into the landscape plan to the maximum extent practicable.

d. Proper maintenance of landscaping, with minimal pesticide use, shall be the responsibility of the property owner.

e. Integrated pest management (IPM) principles and techniques shall be encouraged as part of the landscaping design.

Examples of IPM principles and techniques include:

1. Select plants that are well adapted to soil conditions at the site.
2. Select plants that are well adapted to sun and shade conditions at the site. Consider future conditions when plants reach maturity. Consider seasonal changes and time of day.
3. Provide irrigation appropriate to the water requirements of the selected plants.

4. Select pest- and disease-resistant plants.
5. Plant a diversity of species to prevent a potential pest infestation from affecting the entire landscaping plan.
6. Use “insectary” plants in the landscaping to attract and keep beneficial insects.

APPENDIX A

STORM WATER LID DETERMINATION WORKSHEET

FOR OFFICE USE ONLY:

Does this project require permanent storm water BMP's?

☐ Y ☐ N

Date Submitted: _____

**Print Form**

File No:	Quadrant
Related Files:	
Set:	
Department Use Only	

2017 Storm Water LID Determination Worksheet

PURPOSE AND APPLICABILITY: This determination worksheet is intended to satisfy the specific requirements of "ORDER NO. R1-2015-0030, NPDES NO. CA0025054 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS." Additional design requirements imposed by Governing Agencies, such as local grading ordinances, CAL Green, CEQA, 401 permitting, and hydraulic design for flood control still apply as appropriate. Additionally, coverage under another regulation may trigger the requirement to design in accordance with the Storm Water LID Technical Design Manual.

Part 1: Project Information

Exchange Bank Sebastopol Branch

Exchange Bank

Project Name

Applicant (owner or developer) Name

840 Gravenstein Hwy.

720 Gravenstein Highway North

Project Site Address

Applicant Mailing Address

Sebastopol, CA 95472

Sebastopol, CA 95472

Project City/State/Zip

Applicant City/State/Zip

707-823-3800

Permit Number(s) - (if applicable)

Applicant Phone/Email/Fax

Brelje & Race Consulting Engineers

475 Aviation Blvd., Santa Rosa, CA 95403

Designer Name

Designer Mailing Address

Santa Rosa, CA 95403

707-576-1322 / www.brce.com

Designer City/State/Zip

Designer Phone/Email

Type of Application/Project:

☐ Subdivision ☐ Grading Permit ☐ Building Permit ☐ Hillside Development
☒ Design Review ☐ Use Permit ☐ Encroachment ☐ Time Extensions ☐ Other : _____

PART 2: Project Exemptions

1. Is this a project that creates or replaces *less than* 10,000 square feet of impervious surface¹, including all project phases and off-site improvements?

☐ Yes ☒ No

¹ Impervious surface replacement, such as the reconstruction of parking lots or excavation to roadway subgrades, is not a routine maintenance activity. Reconstruction is defined as work that replaces surfaces down to the subgrade. Overlays, resurfacing, trenching and patching are defined as maintenance activities per section VI.D.2.b.

2. Is this project a routine maintenance activity² that is being conducted to maintain original line and grade, hydraulic capacity, and original purpose of facility such as resurfacing existing roads and parking lots?

☐ Yes ☒ No

3. Is this project a stand alone pedestrian pathway, trail or off-street bike lane?

☐ Yes ☒ No

4. Did you answer "YES" to any of the questions in Part 2?

☐ **YES:** This project will *not* need to incorporate permanent Storm Water BMP's as required by the NPDES MS4 Permit. **Please complete the "Exemption Signature Section" on Page 4.**

☒ **NO:** Please complete the remainder of this worksheet.

Part 3: Project Triggers

Projects that Trigger Requirements:

Please answer the following questions to determine whether this project requires permanent Storm Water BMP's and the submittal of a SW LIDs as required by the NPDES MS4 Permit order No. R1-2015-0030.

1. Does this project create or replace a combined total of 10,000 square feet or more of impervious surface¹ including all project phases and off-site improvements?

☒ Yes ☐ No

2. Does this project create or replace a combined total or 10,000 square feet or more of impervious streets, roads, highways, or freeway construction or reconstruction³? ☐ Yes ☒ No

3. Does this project create or replace a combined total of 1.0 acre or more of impervious surface¹ including all project phases and off-site improvements? ☐ Yes ☒ No

4. Did you answer "YES" to any of the above questions in Part 3?

☒ **YES:** This project will need to incorporate permanent Storm Water BMP's as required by the NPDES MS4 Permit. **Please complete remainder of worksheet and sign the "Acknowledgement Signature Section" on Page 4.**

☐ **NO:** This project will *not* need to incorporate permanent Storm Water BMP's as required by the NPDES MS4 permit. **Please complete the "Exemption Signature Section" on Page 4.**

¹ Impervious surface replacement, such as the reconstruction of parking lots or excavation to roadway subgrades, is not a routine maintenance activity. Reconstruction is defined as work that replaces surfaces down to the subgrade. Overlays, resurfacing, trenching and patching are defined as maintenance activities per section VI.D.2.b.

² "Routine Maintenance Activity" includes activities such as overlays and/or resurfacing of existing roads or parking lots as well as trenching and patching activities and reroofing activities per section VI.D.2.b.

³ "Reconstruction" is defined as work that extends into the subgrade of a pavement per section VI.D.2.b.

Part 4: Project Description

1. Total Project area: ☐ square feet

☒ acres

2. Existing land use(s): (check all that apply)

☒ Commercial ☐ Industrial ☐ Residential ☐ Public ☐ Other

Description of buildings, significant site features (creeks, wetlands, heritage trees), etc.:

3. Existing impervious surface area: ☐ square feet

☒ acres

4. Proposed Land Use(s): (check all that apply)

☒ Commercial ☐ Industrial ☐ Residential ☐ Public ☐ Other

Description of buildings, significant site features (creeks, wetlands, heritage trees), etc.:

Bank Branch building. Parking for customers and employees. Driveway and landscape areas.

5. Existing impervious surface area: ☐ square feet

☒ acres

Acknowledgment Signature Section:

As the property owner or developer, I understand that this project is required to implement permanent Storm Water Best Management Practices and provide a Storm Water Low Impact Development Submittal (SW LIDS) as required by the City's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit Order No. R1-2015-0030. *Any unknown responses must be resolved to determine if the project is subject to these requirements.

04/30/2018

Applicant Signature_____
Date**Exemption Signature Section:**

As the property owner or developer, I understand that this project as currently designed does not require permanent Storm Water BMP's nor the submittal of a Storm Water Low Impact Development Submittal (SW LIDS) as required by the City's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit*. I understand that redesign may require submittal of a new Determination Worksheet and may require permanent Storm Water BMP's.

Applicant Signature_____
Date

* This determination worksheet is intended to satisfy the specific requirements of "ORDER NO. R1-2015-0030, NPDES NO. CA0025054 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS." Additional design requirements imposed by Governing Agencies, such as local grading ordinances, CAL Green, CEQA, 401 permitting, and hydraulic design for flood control still apply as appropriate. Additionally, coverage under another regulation may trigger the requirement to design in accordance with the Storm Water LID Technical Design Manual.

Implementation Requirements: All calculations shall be completed using the "Storm Water Calculator" available at: www.srcity.org/stormwaterLID

Hydromodification Control/100% Volume Capture: Capture (infiltration and/or reuse) of 100% of the volume of runoff generated by a 1.0" 24-hour storm event, as calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual method. This is a retention requirement.

Treatment Requirement: Treatment of 100% of the flow calculated using the modified Rational Method and a known intensity of 0.20 inches per hour.

Delta Volume Capture Requirement: Capture (infiltration and/or reuse) of the increase in volume of storm water due to development generated by a 1.0" 24-hour storm event, as calculated using the "Urban Hydrology for Small Watersheds" TR-55 Manual method. This is a retention requirement.

APPENDIX B

BMP SELECTION TABLE

BMP SIZING CALCULATIONS

EXISTING TOPOGRAPHY PLAN

SITE PLAN

GRADING AND UTILITY PLAN

HYDROLOGY PLAN

Project Name: Exchange Bank Sebastopol Branch

Best Management Practice (BMP)	Detail Sheet	Detail Title	Can be used with...										BMP in priority selected?		Unique Identifier of BMP per plan	Explanation of selection	Other notes:
			High Ground Water	Contamination	Slope Constraints	Achieves...	Treatment	Volume Capture	Runoff Reduction Measure	Yes	No						
Universal BMP- to be considered on all projects.	Living Roof	N/A	N/A	X	X	X		X	X				X				
	Rainwater Harvesting	N/A	N/A	X	X	X			X				X				
Runoff Reduction Measures	Interceptor Trees	N/A	N/A	X	X	X				X			X				
	Bovine Terrace	RRM-01	Bovine Terrace	X						X			X				
	Vegetated Buffer Strip	RRM-02	Vegetated Buffer Strip							X			X				
	Impervious Area Disconnection	N/A	N/A	X	X	X				X			X				
Priority 1- to be installed with no underdrains or liners. Must drain all staging water within 72 hours.	Bioretention	P1-02	Roadside Bioretention - no C & G					X	X				X				
	Vegetated Swale with Bioretention	P1-06	Swale with Bioretention					X	X				X				
	Constructed Wetlands	N/A	N/A					X	X				X				
Priority 2 BMPs- with subsurface drains installed above the capture volume.	Bioretention	P2-02	Roadside Bioretention - Flush Design Roadside					X	X				X				
		P2-03	Roadside Bioretention- Contiguous SW					X	X				X				
		P2-04	Roadside Bioretention- Curb Opening					X	X				X				
		P2-05	Roadside Bioretention- No C & G					X	X				X				
	Constructed Wetlands	N/A	N/A					X	X				X				

Date: _____

Page ____ of ____

BMP Selection Table

Best Management Practice (BMP)	Detail Sheet	Detail Title	Can be used with										Slope Constraints		Achieves		Treatment		Volume Capture		Runoff Reduction Measure		BMP In priority selected?		Unique Identifier of BMP per plan		Explanation of selection	Other notes:
			High Ground	Water Contamination	Slope	Shading	Soil	Vegetation	Adjacent	Use	Adjacent	Use	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
Priority 3 BMPs- installed with subdrains and/or impermeable liner. Does not achieve volume capture and must be used as part of a treatment train.	Bioretention	P3-02	Roadside Bioretention - Flush Design Roadside	X	X	X									X									X				
		P3-03	Roadside Bioretention- Contiguous SW	X	X	X									X									X				
		P3-04	Roadside Bioretention- Curb Opening	X	X	X									X									X				
	Flow Through Planters	P3-05	Flow Through Planters	X	X	X									X								X					
	Vegetated Swale	P3-06	With Bioretention	X	X	X									X	X								X				
		P3-07	Vegetated Swale	X	X	X									X									X				
Priority 4 BMPs- does not achieve volume capture and must be used as part of a	Tree Filter Unit			X	X	X									X								X					
	Modular Bioretention			X	X	X									X								X					
Priority 5 BMPs- does not achieve volume capture and must be used as part of a treatment train.	Chambered Separator Units			X	X	X									X								X					
	Centrifugal Separator Units			X	X	X									X								X					
	Trash Excluders			X	X	X									X								X					
	Filter Inserts			X	X	X									X								X					
Priority 6 BMPs- see the "Offset Program" chapter for details.	Offset Program														N/A	N/A	N/A						X					
Other	Detention			X																			X					

Exchange Bank Sebastopol Branch - Runoff Coefficient and Curve Number Calculations

Tributary Area: E101

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>
AC Paving	0.70	7,245	5071.50
Concrete	0.80	3,920	3136.00
Landscaping	0.10	210	21.00
Total		11,375	8228.50
Composite C			0.72

Tributary Area: A101

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>	<u>CN Value</u>	<u>C*A</u>
AC Paving	0.70	7,088	4961.60	98.00	694624.00
Concrete	0.80	1,985	1588.00	98.00	194530.00
Landscaping	0.10	1,923	192.30	84.00	161532.00
Total		10,996	6741.90		1050686.00
Composite C			0.61	Composite CN	95.55

Tributary Area: A102

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>	<u>CN Value</u>	<u>C*A</u>
Concrete	0.80	25	20.00	98.00	2450.00
Landscaping	0.10	175	17.50	84.00	14700.00
Total		200	37.50		17150.00
Composite C			0.19	Composite CN	85.75

Tributary Area: A103

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>	<u>CN Value</u>	<u>C*A</u>
Roof	0.90	1,505	1354.50	98.00	147490.00
Concrete	0.80	87	69.60	98.00	8526.00
Landscaping	0.10	904	90.40	84.00	75936.00
Total		2,496	1514.50		231952.00
Composite C			0.61	Composite CN	92.93

Tributary Area: A104

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>	<u>CN Value</u>	<u>C*A</u>
Roof	0.90	951	855.90	98.00	93198.00
Landscaping	0.10	1,270	127.00	84.00	106680.00
Total		2,221	982.90		199878.00
Composite C			0.44	Composite CN	89.99

Tributary Area: A105

<u>Surface</u>	<u>C Value</u>	<u>Area</u>	<u>C*A</u>	<u>CN Value</u>	<u>C*A</u>
Concrete	0.80	56	44.80	98.00	5488.00

Roof	0.90	1,002	901.80		98.00	98196.00
Landscaping	0.10	1,081	108.10			
Total		2,139	1054.70	Total	84.00	90804.00
Composite C			0.49	Composite CN		194488.00
						90.92

LID BMP Summary Page & Site Global Values

Project Information:		Site Information:		Based upon the pre and post development impervious area, the post construction BMP requirement is:
Project Name: Exchange Bank Sebastopol Branch		Mean Seasonal Precipitation (MSP) of Project Site: 37.00 (inches)		
Address/Location: Gravenstein Hwy, Sebastopol, CA		K=MSP/3(K= 1.23		
Designer: Brelje & Race Consulting Engineers		Impervious area - pre development: 2,122.0 ft ²		Delta Volume & Treatment
Date: 4/30/2018		Impervious area - post development: 12,700.0 ft ²		

Summary of Saved BMP Results:

		Tributary Area		Requirements		BMP Design Results					
BMP ID:	Tributary Area (ft ²)	Runoff Reduction Measures (Y/N)	Type of Requirement Met	Type of BMP Design	Percent Achieved	Hydromodification Control		Flow Base Treatment		Delta Volume Capture	
						Required V _{Hydromod} (ft ³)	Achieved (ft ³)	Required Q Treatment (cfs)	Achieved (ft ³)	Required Vdelta (ft ³)	Achieved (ft ³)
1 A101 - Inf.	10,996	No	Delta Volume Capture	Priority 4: Modular Bioretention	67.8					637.1082	480.0000
2 A101 - Pit.	10,996	No	Delta Volume Capture	Priority 3: P3-05 Flow Through Planter	40.2					637.1082	640.0000
3 A102	200	No	Delta Volume Capture	Priority 3: P3-06 Swale with Bioretention	131.2					3.4300	11.2500
4 A103	2,496	No	Delta Volume Capture	Priority 3: P3-06 Swale with Bioretention	108.0					108.9254	294.0000
5 A104 - Swale	2,221	No	Delta Volume Capture	Priority 3: P3-06 Swale with Bioretention	59.5					68.6289	102.0000
6 A104 - Planter	2,221	No	Delta Volume Capture	Priority 3: P3-05 Flow Through Planter	54.6					68.6289	93.7500
7 A105 - Planter	2,139	No	Delta Volume Capture	Priority 3: P3-05 Flow Through Planter	72.9					73.7527	134.4000
8 A105 - Swale	2,139	No	Delta Volume Capture	Priority 3: P3-06 Swale with Bioretention	48.8					73.7527	90.0000

Area A101 combined
percent achieved
(67.8%+40.2%=107.8%)

Area A104 combined
percent achieved
(59.5%+54.6%=114.1%)

Area A105 combined
percent achieved
(72.9%+48.8%=121.7%)

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A101 - Inf.

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 4: Modular Bioretention

BMP's Physical Tributary Area: 10,996.0 ft²

Description/Notes: BMP designed in series. Storm water Planter combined with Kristar CUDO Infiltration System

Delta Volume Capture; V_{Delta}

V_{DELTA} = 637.11 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 95.6

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 67.81 %

BMP Volume Below Ground

Porosity: 0.90
Depth below perforated pipe if present: 4.00 ft
Width: 6.00 ft
Length: 20.00 ft
Area: 0.00 ft²

Ponded Water Above Ground

Depth: 0.00 ft
Width: 0.00 ft
Length: 0.00 ft
Area: 0.00 ft²

Combined with
A101-Planter:
67.81%+40.18%
=107.99%



STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A101 - Plt.

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-05 Flow Through Planter

BMP's Physical Tributary Area: 10,996.0 ft²

Description/Notes: BMP is designed in series. Storm water Planter combined with Kristar CUDO Infiltration System

Delta Volume Capture; V_{Δ}

V_{Δ} = 637.11 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 95.6

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 40.18 %

BMP Volume Below Ground

Porosity: 0.40

Depth below perforated pipe if present: 4.00 ft

Width: 4.00 ft

Length: 40.00 ft

Area: 0.00 ft²

Ponded Water Above Ground

Depth: 0.00 ft

Width: 0.00 ft

Length: 0.00 ft

Area: 0.00 ft²

Combined with
A101-Infiltration:
67.81%+40.18%
=107.99%

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A102

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-06 Swale with Bioretention

BMP's Physical Tributary Area: 200.0 ft²

Description/Notes:

Delta Volume Capture; V_{Δ}

V_{Δ} = 3.43 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 85.8

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 131.20 %

BMP Volume Below Ground

Porosity: 0.40

Depth below perforated pipe if present: 0.25 ft

Width: 3.00 ft

Length: 15.00 ft

Area: 0.00 ft²

Ponded Water Above Ground

Depth: 0.00 ft

Width: 0.00 ft

Length: 0.00 ft

Area: 0.00 ft²

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A103

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-06 Swale with Bioretention

BMP's Physical Tributary Area: 2,496.0 ft²

Description/Notes:

Delta Volume Capture; V_{Δ}

V_{Δ} = 108.93 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 92.9

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 107.96 %

BMP Volume Below Ground

Porosity: 0.40
Depth below perforated pipe if present: 1.40 ft
Width: 3.00 ft
Length: 70.00 ft
Area: 0.00 ft²

Ponded Water Above Ground

Depth: 0.00 ft
Width: 0.00 ft
Length: 0.00 ft
Area: 0.00 ft²

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A104-Swale

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-06 Swale with Bioretention

BMP's Physical Tributary Area: 2,221.0 ft²

Description/Notes: BMP designed in series. Storm water Planter combined with bioretention swale

Delta Volume Capture; V_{Δ}

V_{Δ} = 68.63 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 90.0

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 59.45 %

	BMP Volume Below Ground
Porosity:	0.40
Depth below perforated pipe if present:	0.40 ft
Width:	3.00 ft
Length:	85.00 ft
Area:	0.00 ft ²

	Ponded Water Above Ground
Depth:	0.00 ft
Width:	0.00 ft
Length:	0.00 ft
Area:	0.00 ft ²

Combined with
A104-Planter:
59.45%+54.64%
=114.09%

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A104-Planter

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-05 Flow Through Planter

BMP's Physical Tributary Area: 2,221.0 ft²

Description/Notes: BMP designed in series. Storm water Planter combined with bioretention swale

Delta Volume Capture; V_{Δ}

V_{Δ} = 68.63 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 90.0

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 54.64 %

	BMP Volume Below Ground	
Porosity:	0.40	
Depth below perforated pipe if present:	0.75	ft
Width:	5.00	ft
Length:	25.00	ft
Area:	0.00	ft ²

	Ponded Water Above Ground	
Depth:	0.00	ft
Width:	0.00	ft
Length:	0.00	ft
Area:	0.00	ft ²

Combined with
A104-Swale:
59.45%+54.64%
=114.09%

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A105-Planter

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-05 Flow Through Planter

BMP's Physical Tributary Area: 2,139.0 ft²

Description/Notes: BMP designed in series. Storm water Planter combined with bioretention swale

Delta Volume Capture; V_{Δ}

V_{Δ} = 73.75 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 90.9

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 72.89 %

BMP Volume Below Ground

Porosity: 0.40
Depth below perforated pipe if present: 0.40 ft
Width: 7.00 ft
Length: 48.00 ft
Area: 0.00 ft²

Ponded Water Above Ground

Depth: 0.00 ft
Width: 0.00 ft
Length: 0.00 ft
Area: 0.00 ft²

Combined with
A105-Swale:
72.89%+48.81%
=121.70%

STORM WATER CALCULATOR

BMP Tributary Parameters

Project Name: Exchange Bank Sebastopol Branch

BMP ID: A105-Swale

BMP Design Criteria: Delta Volume & Treatment

Type of BMP Design: Priority 3: P3-06 Swale with Bioretention

BMP's Physical Tributary Area: 2,139.0 ft²

Description/Notes: BMP designed in series. Storm water Planter combined with bioretention swale

Delta Volume Capture; V_{Δ}

V_{Δ} = 73.75 ft³

Hydrologic soil type within tributary area: C: 0.05 - 0.15 in/hr infiltration (transmission) rate

Predevelopment ground cover description: Brush: weed-grass mixture with brush major element - Poor (<50% ground cover)

Post development ground cover description: Urban districts - Commercial and business

CN_{PRE}: 77

CN_{POST}:

User Composite Predevelopment CN: 0.0

User Composite Post development CN: 90.9

BMP Sizing Tool Delta Volume Capture Requirement

Percent of Goal Achieved = 48.81 %

BMP Volume Below Ground

Porosity: 0.40

Depth below perforated pipe if present: 0.50 ft

Width: 3.00 ft

Length: 60.00 ft

Area: 0.00 ft²

Ponded Water Above Ground

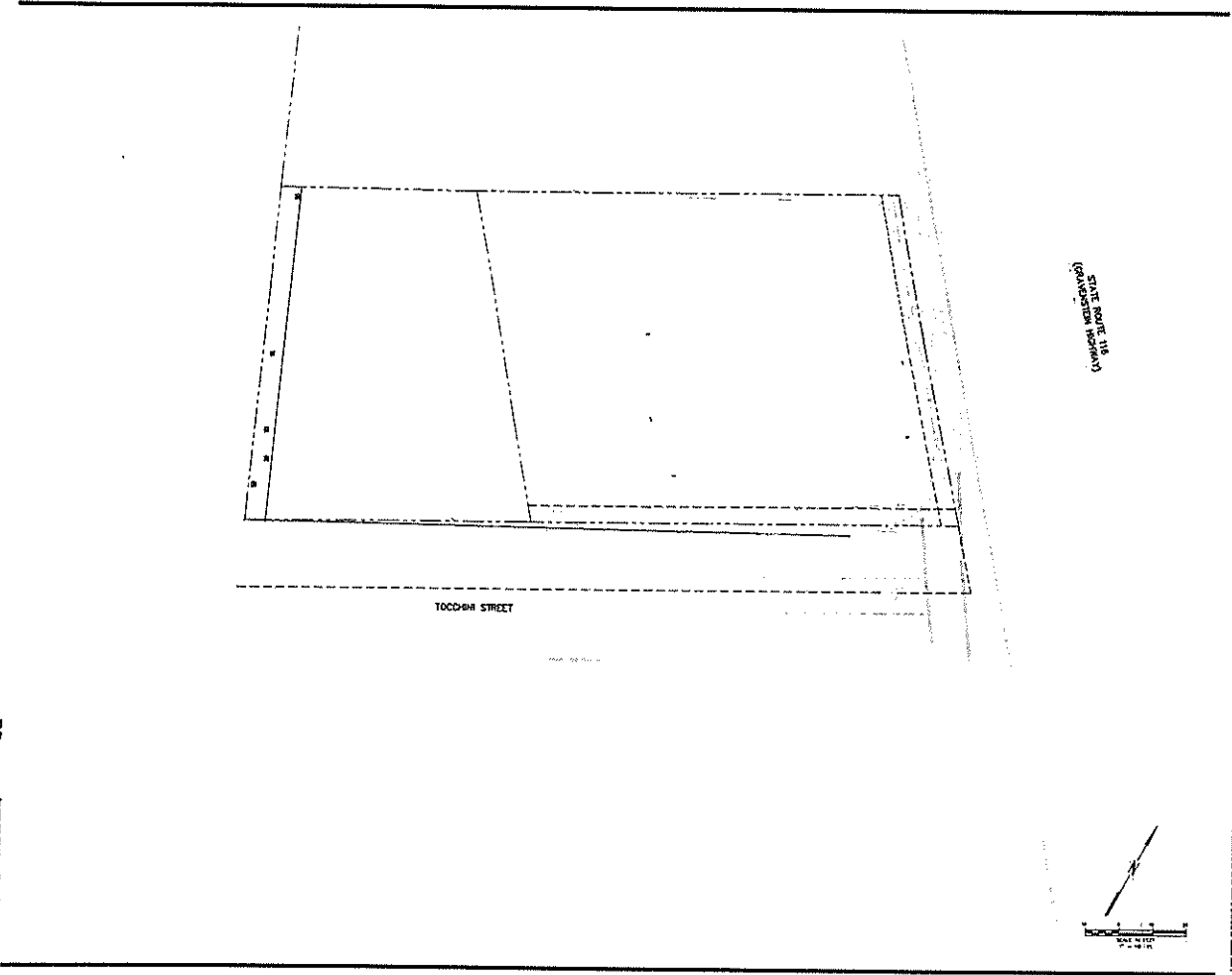
Depth: 0.00 ft

Width: 0.00 ft

Length: 0.00 ft

Area: 0.00 ft²

Combined with A105-Planter: 72.89%+48.81% =121.70%



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 tlc@tlc.com

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 1750 Highway 101, Suite 200
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 brelje@brelje.com

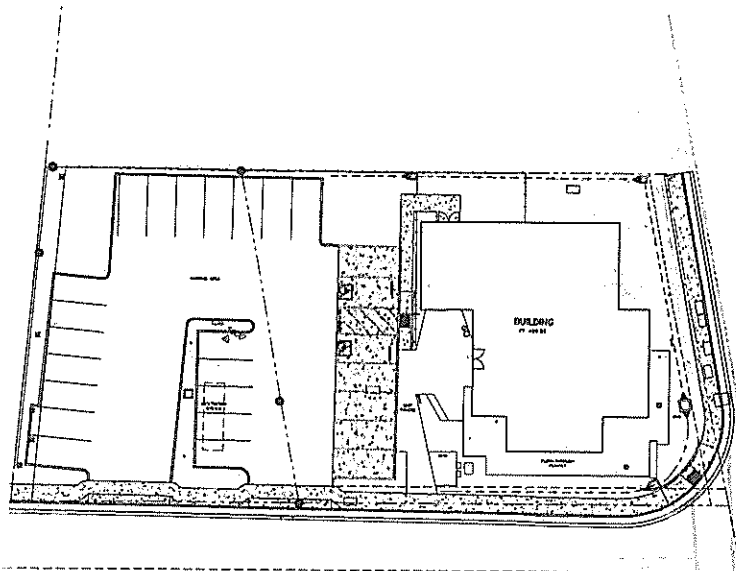


DESIGN
 REVIEW

EXCHANGE BANK
 SEBASTOPOL BRANCH
 840 GRAVENSTEIN HWY
 SEBASTOPOL, CA 94722

EXCHANGE BANK
 840 GRAVENSTEIN HWY
 SEBASTOPOL, CA 94722
 1/2" = 1' 0"

EXISTING
 TOPOGRAPHY
 PLAN



TOCCHIE STREET

STATE ROUTE 116
(ORANGEVIEW BLVD.)

TLC D'ARCHITECTURE
 320 E. 1st St. #200
 Santa Ana, CA 92701
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Bretie & Race
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 Santa Ana, CA 92701
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 www.bretie.com



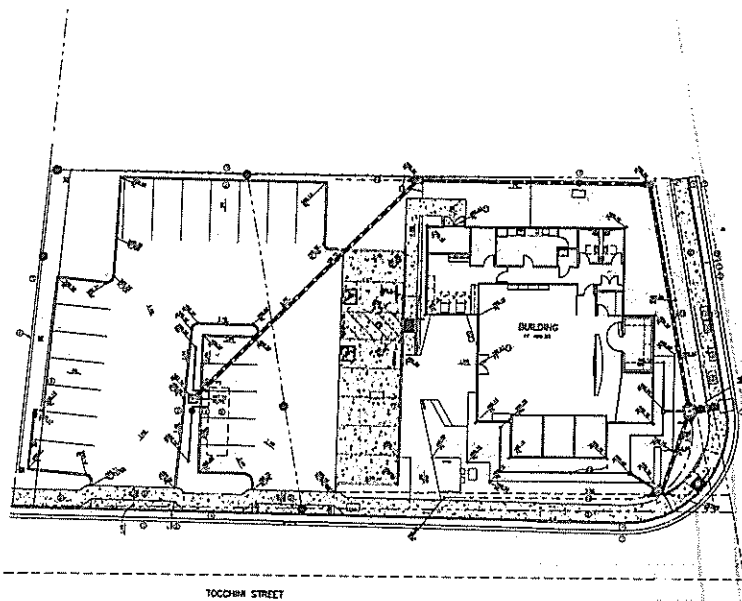
DESIGN
REVIEW

EXCHANGE BANK
 SEBASTOPOL BRANCH
 848 ORANGEVIEW HWY
 SEBASTOPOL, CA 91372

EXCHANGE BANK

DATE: 10/10/11
 BY: [Signature]
 CHECKED: [Signature]
 TITLE: [Signature]

SITE PLAN



LEGEND
 1. EXISTING GRADE
 2. PROPOSED GRADE
 3. EXISTING UTILITY
 4. PROPOSED UTILITY

- GRADING NOTES**
 1. EXISTING GRADE
 2. PROPOSED GRADE
 3. EXISTING UTILITY
 4. PROPOSED UTILITY
 5. EXISTING PAVEMENT
 6. PROPOSED PAVEMENT
 7. EXISTING CURB
 8. PROPOSED CURB
 9. EXISTING SIDEWALK
 10. PROPOSED SIDEWALK
 11. EXISTING DRIVEWAY
 12. PROPOSED DRIVEWAY
 13. EXISTING FENCE
 14. PROPOSED FENCE
 15. EXISTING WALL
 16. PROPOSED WALL
 17. EXISTING ROOF
 18. PROPOSED ROOF
 19. EXISTING FLOOR
 20. PROPOSED FLOOR
 21. EXISTING CEILING
 22. PROPOSED CEILING
 23. EXISTING DOOR
 24. PROPOSED DOOR
 25. EXISTING WINDOW
 26. PROPOSED WINDOW
 27. EXISTING STAIR
 28. PROPOSED STAIR
 29. EXISTING ELEVATOR
 30. PROPOSED ELEVATOR
 31. EXISTING HATCH
 32. PROPOSED HATCH
 33. EXISTING SLOPE
 34. PROPOSED SLOPE
 35. EXISTING CURVE
 36. PROPOSED CURVE
 37. EXISTING TANGENT
 38. PROPOSED TANGENT
 39. EXISTING INTERSECTION
 40. PROPOSED INTERSECTION
 41. EXISTING JUNCTION
 42. PROPOSED JUNCTION
 43. EXISTING BRANCH
 44. PROPOSED BRANCH
 45. EXISTING TRUNK
 46. PROPOSED TRUNK
 47. EXISTING MAIN
 48. PROPOSED MAIN
 49. EXISTING SUB
 50. PROPOSED SUB
 51. EXISTING FEEDER
 52. PROPOSED FEEDER
 53. EXISTING TIE
 54. PROPOSED TIE
 55. EXISTING CROSSING
 56. PROPOSED CROSSING
 57. EXISTING UNDERPASS
 58. PROPOSED UNDERPASS
 59. EXISTING OVERPASS
 60. PROPOSED OVERPASS
 61. EXISTING BRIDGE
 62. PROPOSED BRIDGE
 63. EXISTING TUNNEL
 64. PROPOSED TUNNEL
 65. EXISTING CAUSEWAY
 66. PROPOSED CAUSEWAY
 67. EXISTING EMBANKMENT
 68. PROPOSED EMBANKMENT
 69. EXISTING CUT
 70. PROPOSED CUT
 71. EXISTING FILL
 72. PROPOSED FILL
 73. EXISTING DITCH
 74. PROPOSED DITCH
 75. EXISTING CANAL
 76. PROPOSED CANAL
 77. EXISTING RIVER
 78. PROPOSED RIVER
 79. EXISTING LAKE
 80. PROPOSED LAKE
 81. EXISTING OCEAN
 82. PROPOSED OCEAN
 83. EXISTING MOUNTAIN
 84. PROPOSED MOUNTAIN
 85. EXISTING HILL
 86. PROPOSED HILL
 87. EXISTING VALLEY
 88. PROPOSED VALLEY
 89. EXISTING PLAIN
 90. PROPOSED PLAIN
 91. EXISTING DESERT
 92. PROPOSED DESERT
 93. EXISTING TUNDRA
 94. PROPOSED TUNDRA
 95. EXISTING SAVANNAH
 96. PROPOSED SAVANNAH
 97. EXISTING STEPPE
 98. PROPOSED STEPPE
 99. EXISTING PRairie
 100. PROPOSED PRAIRIE

STATE ROUTE 118
 (GRANDVIEW HIGHWAY)



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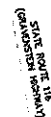
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DESIGN
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GRADING
 AND
 UTILITY
 PLAN
 3



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DESIGN
REVIEW

EXCHANGE BANK
SEBASTOPOL BRANCH
340 DRAVENSTEIN HWY
SEBASTOPOL, CA 95472

EXCHANGE BANK

1995-96

$$\frac{1}{2} \frac{d}{dt} \left(\frac{1}{2} \frac{d}{dt} \right)$$

11

4 de set

HYDROLOGY

PLAN

4

APPENDIX C

REFERENCE INFORMATION

**RUNOFF REDUCTION AREAS
USDA HYDROLOGIC SOILS GROUP SITE MAP**

6 Runoff Reduction Areas

6.1 Design Philosophy

Using alternative surfaces with a lower coefficient of runoff or "C-Factor" helps reduce runoff from developed areas. The C-Factor is a representation of a surface's ability to produce runoff. Surfaces that produce higher volumes of runoff are represented by higher C-Factors, such as impervious surfaces. Surfaces that produce smaller volumes of runoff are represented by lower C-Factors, such as more pervious surfaces. See Table 6-1 for typical C-Factor values for various surfaces during small storms.

Table 6-2 compares the C-Factors of conventional paving surfaces to alternative, lower C-Factor paving surfaces. By incorporating more pervious, lower C-Factor surfaces into a development, lower volumes of runoff are produced. Lower volumes and rates of runoff translate directly to lower treatment requirements.

Site design techniques may be used to reduce the C-Factor of a developed area, reducing the amount of runoff requiring treatment, including:

- ✂ Pervious Concrete
- ✂ Pervious Asphalt
- ✂ Turf Block
- ✂ Brick (un-grouted)
- ✂ Natural Stone
- ✂ Concrete Unit Pavers
- ✂ Crushed Aggregate
- ✂ Cobbles
- ✂ Wood Mulch

Other site design techniques such as disconnecting impervious areas, preservation of natural areas, and designing concave medians may be used to reduce the overall C-Factor of development areas.

Table 6-1
Estimated C-Factors for Various Surfaces During Small Storms

<i>Paving Surface</i>	<i>C-Factor</i>
Concrete	0.80
Asphalt	0.70
Pervious Concrete	0.60
Cobbles	0.60
Pervious Asphalt	0.55
Natural Stone without Grout	0.25
Turf Block	0.15
Brick without Grout	0.13
Unit Pavers on Sand	0.10
Crushed Aggregate	0.10
Grass	0.10
Grass Over Porous Plastic	0.05
Gravel Over Porous Plastic	0.05

Note: C-Factors for frequent small storms used to size water quality BMPs are likely to differ (be lower) than C-Factors developed for infrequent, large storms used to size flood control facilities. The above C-Factors were produced by selecting the lower end of the best available C-Factor range for each paving surface. These C-Factors are only appropriate for small storm treatment design, and should not be used for flood control sizing. Where available, locally developed small storm C-Factors for various surfaces should be utilized.



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Sonoma County, California**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDÁ, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

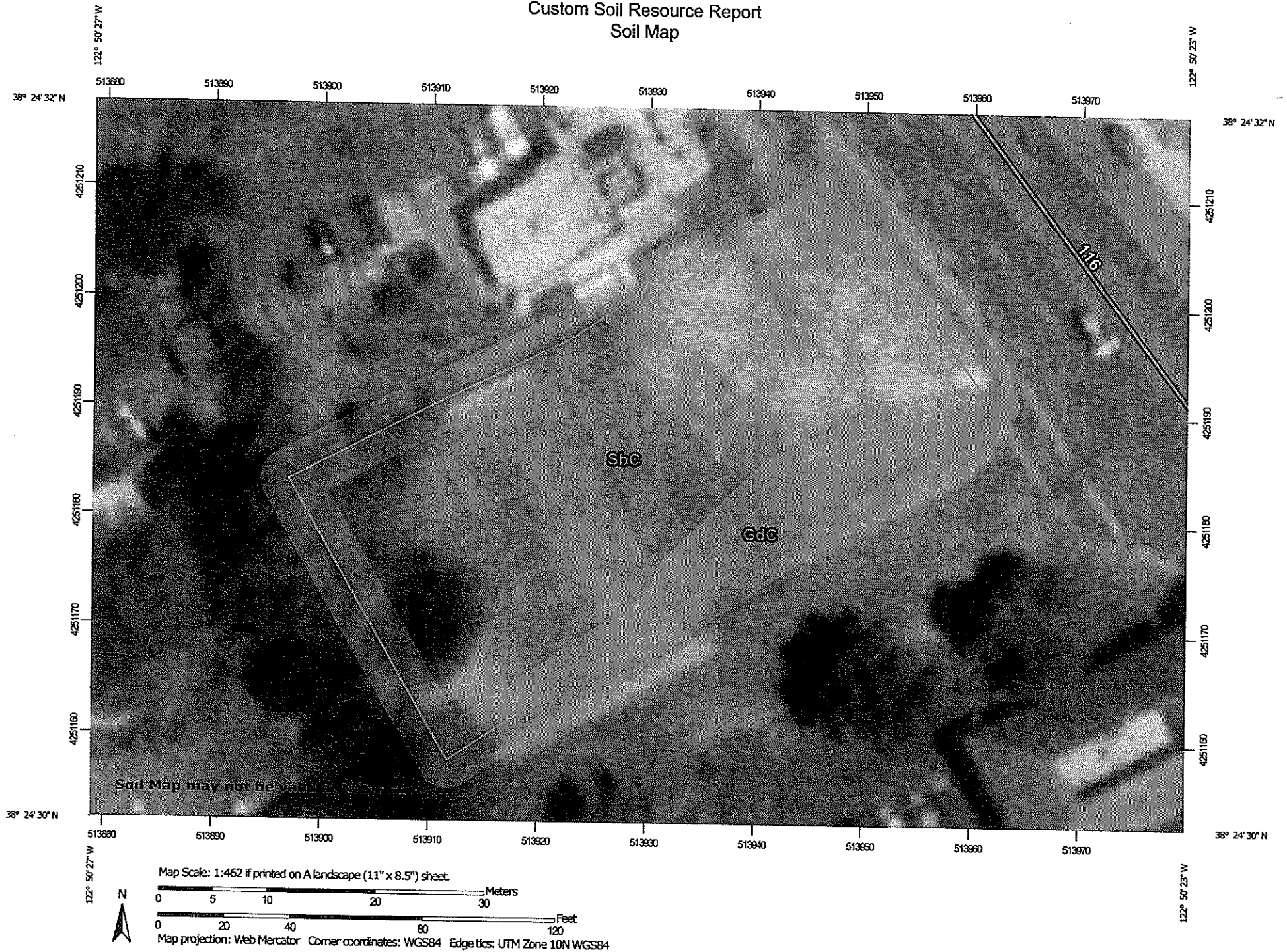
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 11, Sep 21, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Nov 22, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GdC	Goldridge fine sandy loam, 2 to 9 percent slopes	0.0	5.8%
SbC	Sebastopol sandy loam, 2 to 9 percent slopes	0.4	94.2%
Totals for Area of Interest		0.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sonoma County, California

GdC—Goldridge fine sandy loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hfcy
Elevation: 200 to 2,000 feet
Mean annual precipitation: 40 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 225 to 240 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Goldridge and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Goldridge

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from sandstone

Typical profile

H1 - 0 to 24 inches: fine sandy loam
H2 - 24 to 28 inches: sandy clay loam
H3 - 28 to 72 inches: sandy clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Blucher

Percent of map unit: 4 percent
Hydric soil rating: No

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Cotati

Percent of map unit: 4 percent

Hydric soil rating: No

Sebastopol

Percent of map unit: 3 percent

Hydric soil rating: No

Steinbeck

Percent of map unit: 3 percent

Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent

Landform: Swales

Hydric soil rating: Yes

SbC—Sebastopol sandy loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hfjc

Elevation: 100 to 1,000 feet

Mean annual precipitation: 40 inches

Mean annual air temperature: 55 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Sebastopol and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sebastopol

Setting

Landform: Terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 24 inches: sandy loam

H2 - 24 to 28 inches: sandy clay loam

H3 - 28 to 57 inches: clay

H4 - 57 to 62 inches: clay loam

H5 - 62 to 72 inches: sandy clay loam

Properties and qualities

Slope: 2 to 9 percent

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Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Blucher

Percent of map unit: 5 percent

Hydric soil rating: No

Cotati

Percent of map unit: 5 percent

Hydric soil rating: No

Goldridge

Percent of map unit: 5 percent

Hydric soil rating: No

APPENDIX D

MAINTENANCE PLAN AND BMP CHECKLISTS

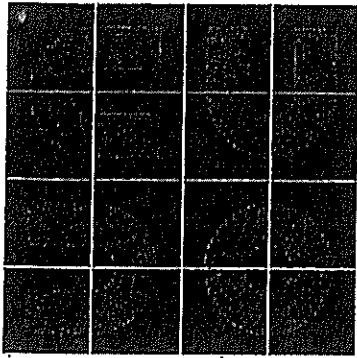
CUDO INFILTRATION ARRAYS

IMPERVIOUS AREA (RAIN WATER LEADER) DISCONNECTION

BIORETENTION (VEGETATED) SWALES

STORMWATER PLANTERS

DESIGN DETAILS



CUDOTM Stormwater Cube

(Underground Retention / Detention / Infiltration /
Water Reuse Systems)

Operations and Maintenance Manual

Maintenance Overview for CUDO

State and Local regulations require that stormwater storage systems be maintained and serviced on a recurring basis. The purpose of maintaining a clean and obstruction free CUDO™ system is to ensure the system performs the intended function of the primary design. Trash and debris, floatables, gross pollutants and sediment can build up in the CUDO™ leading to clogging of the native soil interface or blockage of the inlet or outlet pipes. This can cause the system to function improperly by limiting storage volume, limiting the design percolation rates or impeding flow in and out of the system. Downstream and upstream, areas could run the risk of flooding and deleterious environmental impact.

Recommended Frequency of Service

It is recommended that the CUDO™ stormwater systems be serviced on a regularly occurring basis. Ultimately the frequency depends on the amount of runoff, pollutant loading, and interference from trash, debris and gross pollutants as well as proper maintenance of upstream pretreatment devices. However, it is recommended that each installation be inspected at least two times per year to assess service needs.

Recommended Timing of Service

Guidelines for the timing of service are as follows:

1. For areas with a definite rainy season the system should be serviced prior to and following the rainy season.
2. For areas subject to year-round rainfall service should occur on a regularly occurring basis. (A minimum of two times per year.)
3. For areas with winter snow and summer rain the system should be serviced prior to and after the snow season.
4. For installed devices that are subject to dry weather flows only (i.e. wash racks, parking garages, etc...) the unit should be serviced on a regularly occurring basis. (A minimum of two times per year.)

Inspection

An inspection should be performed when the system is new. This allows the owner to establish a baseline condition for comparison to future inspections. Sediment build up can typically be monitored without entering the system. (No confined space entry.) Initial and subsequent inspection data should be recorded and filed for reference. Some regulatory agencies require that the results of the inspections be documented and reported. Inspection reports should comply with regulatory requirements and be submitted as required.

Inspection Procedures

1. Locate the inspection, cleanout and access ports. Inspection and cleanout ports are typically 18-inch diameter. Access ports are typically 24-inch or 30-inch diameter. Pictures should be taken to document the location or a site map should be generated to detail the as-built locations of the ports.
2. Unbolt and remove the access port lids.
3. Insert a measuring device into the opening making note of a point of reference to determine the quantity of sediment and other accumulated material. If access is required to measure, ensure only certified confined space entry personnel having appropriate equipment are allowed to enter the system.
4. In addition, for accessible concrete CUDO™ systems personnel should utilize appropriate confined space entry procedures to enter the system and photograph its condition.
5. Inspect inlet and outlet locations for obstructions. Obstructions should be removed at this time.
6. Inspect the structural components of the system.
7. Fill in the CUDO™ Inspection/Maintenance Data Sheet and send a copy to the regulatory agency if necessary.

Disinfection of Water Reuse System

Periodic disinfection of water held for reuse may be required to abate bacteria and algae growth. This may be done using calcium hypochlorite tablets or by the addition of an ozone generator in a small recirculation system.

Maintenance

Cleanout of the CUDO™ system should be considered if there is sediment buildup of two or more inches at over 50% of the inspection ports. Cleaning shall be performed if sediment buildup is two inches or more over 75% of the system floor. In the event of a spill of a foreign substance, cleanout of the system should be considered.

Maintenance Procedures

1. Locate the inspection, cleanout and access ports. Inspection and cleanout ports are typically 18-inch diameter. Access ports are typically 24-inch or 30-inch diameter. Pictures should be taken to document the location or a site map should be generated to detail the as-built locations of the ports.
2. Unbolt and remove the access port lids.
3. Measure the sediment buildup at each port. If access is required to measure ensure only certified confined space entry personnel having appropriate equipment are allowed to enter the system.
4. A thorough cleaning of the system (inlets, outlets, ports, and inlet bays) shall be performed by either a vacuum truck or by manual methods.
5. Inspect inlet and outlet locations for obstructions. Obstructions should be removed at this time.
6. Inspect the structural components of the system.
7. Fill in the CUDO™ Inspection/Maintenance Data Sheet and send a copy to the regulatory agency if necessary.

Inspection / Maintenance Requirements

Listed below are some recommendations for equipment and training for personnel to inspect and maintain a CUDO™ system.

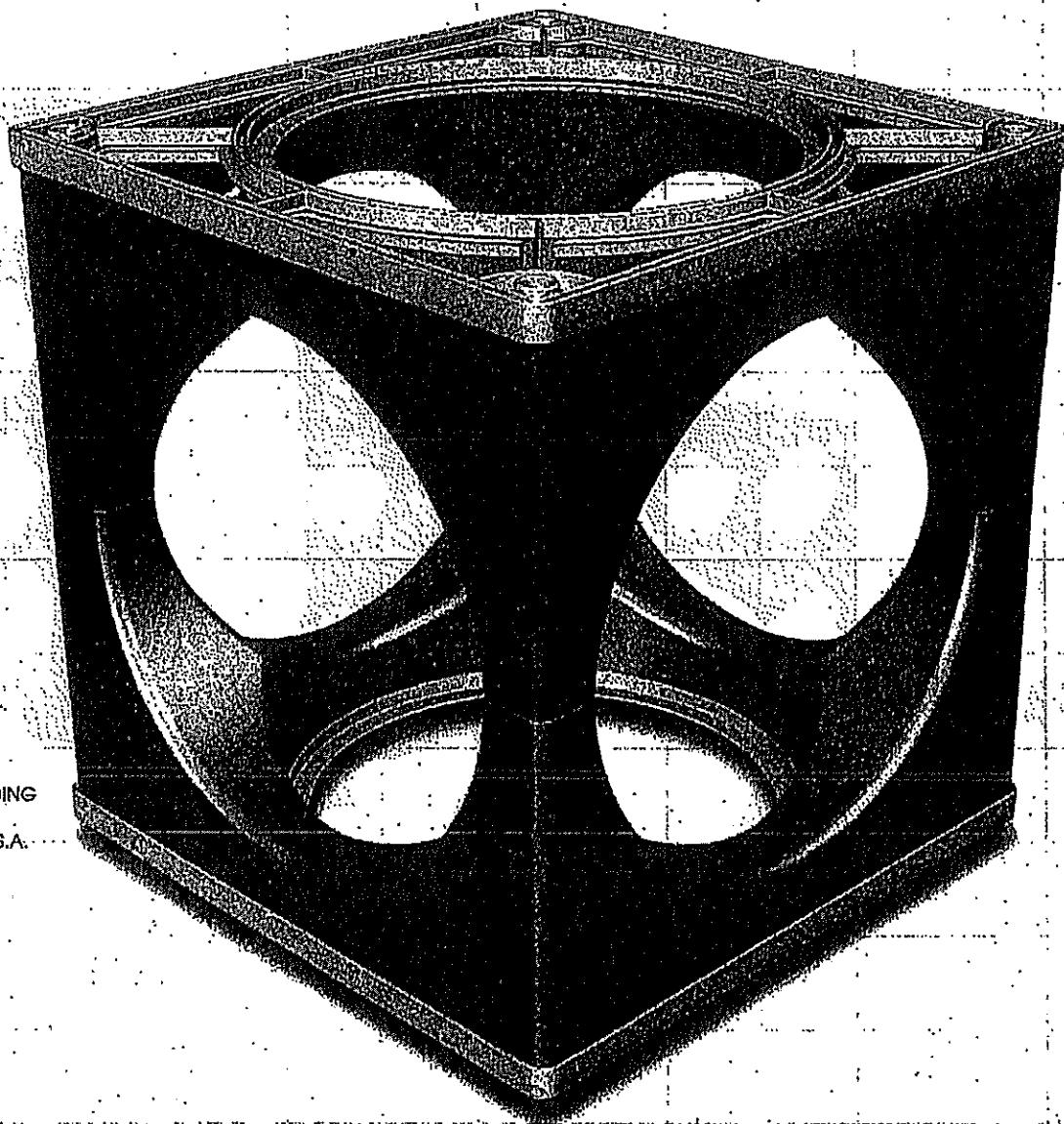
Personnel –	OSHA Confined Space Entry Training is a prerequisite for entrance into a system. In the state of California personnel should be CalOSHA certified.
Equipment –	Record Taking (pen, paper, voice recorder) Proper Clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.) Flashlight Tape Measure Measuring Stick Pry Bar Traffic Control (Flagging, barricades, signage, cones, etc.) First aid materials Debris and Contaminant collectors Debris and Contaminant containers Vacuum Truck

Disposal of Gross Pollutants, Hydrocarbons, and Sediment

The collected gross pollutants, hydrocarbons, and sediment shall be offloaded from the vacuum truck into DOT approved containers for disposal. Once in the container the maintenance contractor has possession and is responsible for disposal in accordance with local, state and federal agency requirements.

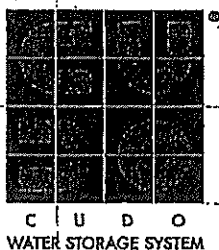
Note: As the generator, the landowner is ultimately responsible for the proper disposal of the collected materials. Because the material likely contains petroleum hydrocarbons, heavy metals, and other harmful pollutants, the materials must be treated as EPA class 2 Hazardous Waste. Proper disposal is required.

SHAPING THE FUTURE OF WATER QUALITY™

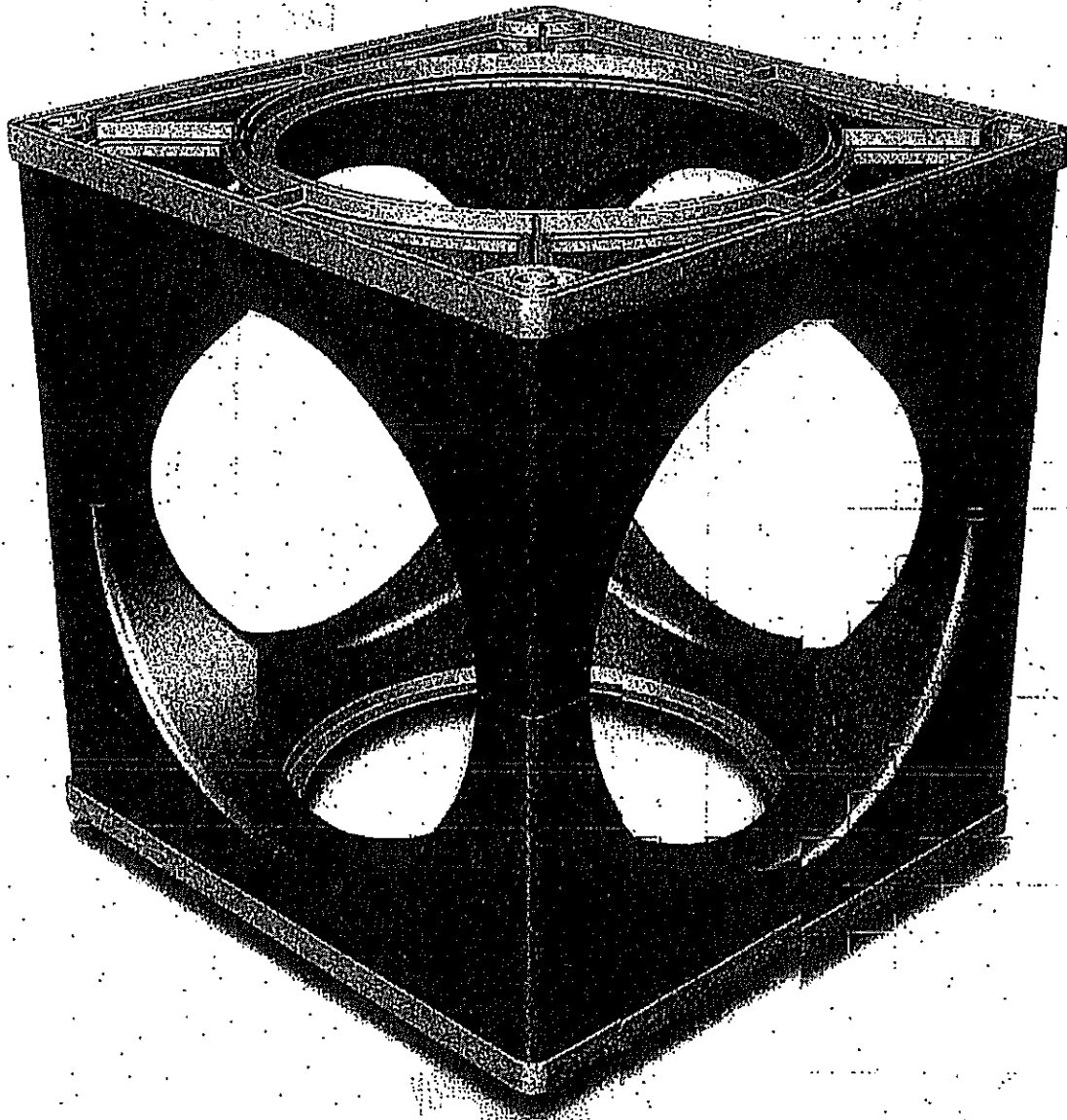


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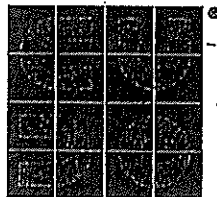
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SHAPING THE FUTURE OF WATER QUALITY™

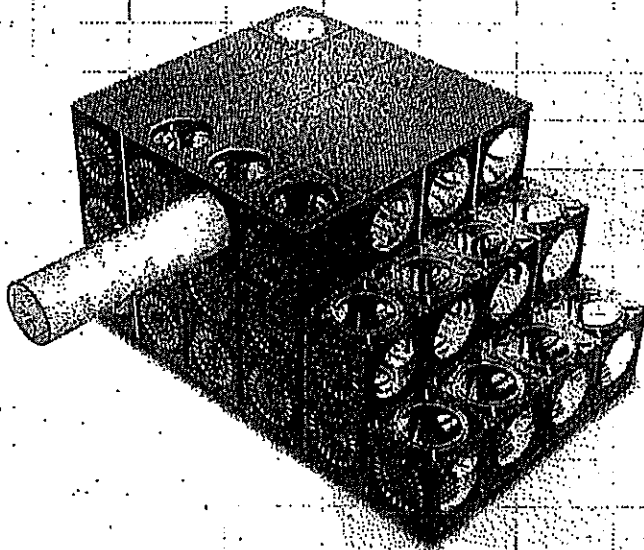


A new approach to underground stormwater storage, infiltration, treatment, rainwater harvesting, or other stormwater management needs.

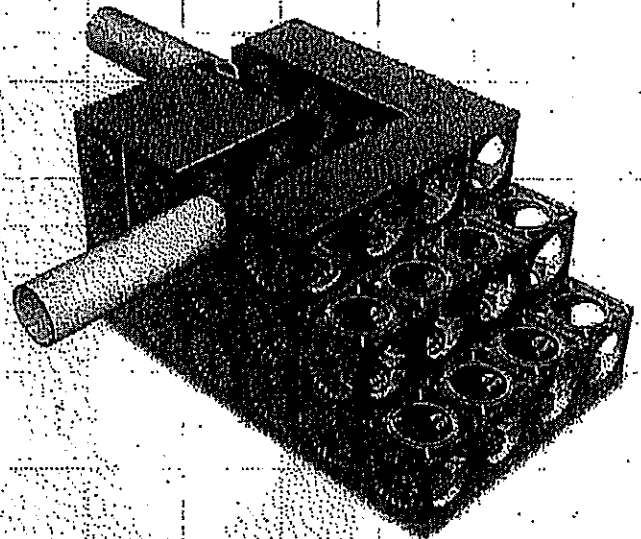


US PATENT PENDING

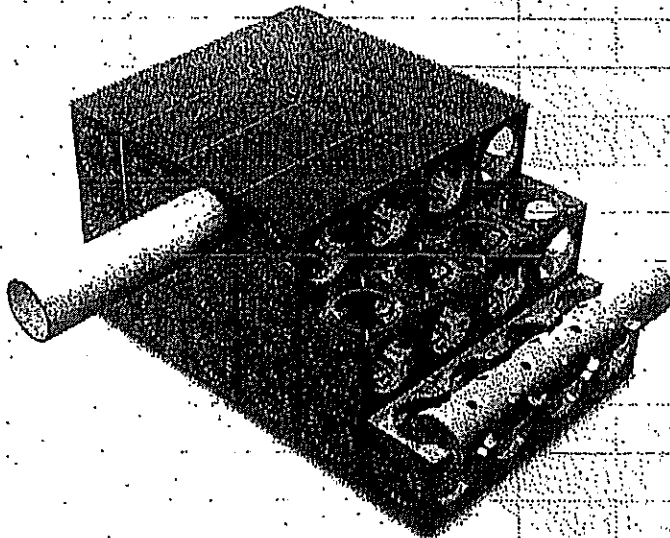
C U D O S Y S T E M S D E S I G N



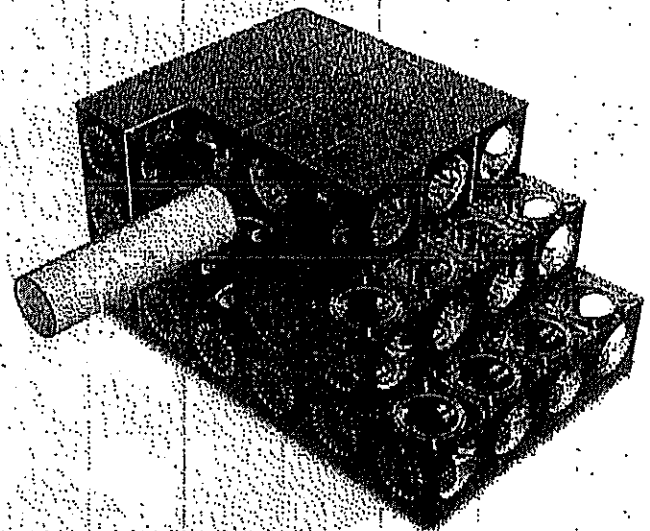
Maintenance Access



Flow-Through Bypass



Outlet Control



Media Filtration

Assemble CUDO® to build water storage systems with virtually unlimited sizes and shapes. CUDO dimensions (2 ft. x 2 ft.) offers ease of installation, while a high 95% void ratio allows for a reduced system footprint. Specialty CUDO components allow the construction of systems with features and benefits simply not possible with any other water management product.



GENERAL SPECIFICATIONS FOR MAINTENANCE OF FLO-GARD+PLUS® CATCH BASIN INSERT FILTERS

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed Flo-Gard+Plus® Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

DPS' guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (washracks, parking garages, etc.): On a recurring basis (no less than three times per years).

SERVICE PROCEDURES:

1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing Flo-Gard+Plus® catch basin inserts.)
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc. shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary and the pouch tethers re-attached to the liner's D-ring. See below.
5. The grate shall be replaced.

REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium pouch exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium pouches will be replaced with new pouches. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

DPS also has the capability of servicing all manner of catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined space trained and certified. Call us at (888) 950-8826 for further information and assistance.

SPECIFIER CHART

MODEL	INLET ID	GRATE OD	COMMENTS
FF-12D	12" X 12"	15" X 15"	GRATED INLET
FF-16D	16" X 16"	18" X 18"	GRATED INLET
FF-18D	18" X 18"	20" X 20"	GRATED INLET
FF-1836SD	18" X 36"	18" X 40"	GRATED INLET
FF-1836DGO	18" X 36"	18" X 40"	COMBINATION INLET
FF-24D	24" X 24"	26" X 26"	GRATED INLET
FF-2436D	24" X 36"	24" X 40"	GRATED INLET
FF-RF24D	24" DIA.	25" DIA.	CIRCULAR INLET
FF-24DGO	24" X 24"	18" X 26"	COMBINATION INLET
FF-2436DGO	24" X 36"	24" X 40"	COMBINATION INLET
FF-36D (2 PIECE)	36" X 36"	36" X 40"	GRATED INLET
FF-3648D (2 PIECE)	36" X 48"	40" X 48"	GRATED INLET

OPTIONAL FOSSIL ROCK ABSORBANT POUCHES
FOUR EACH.

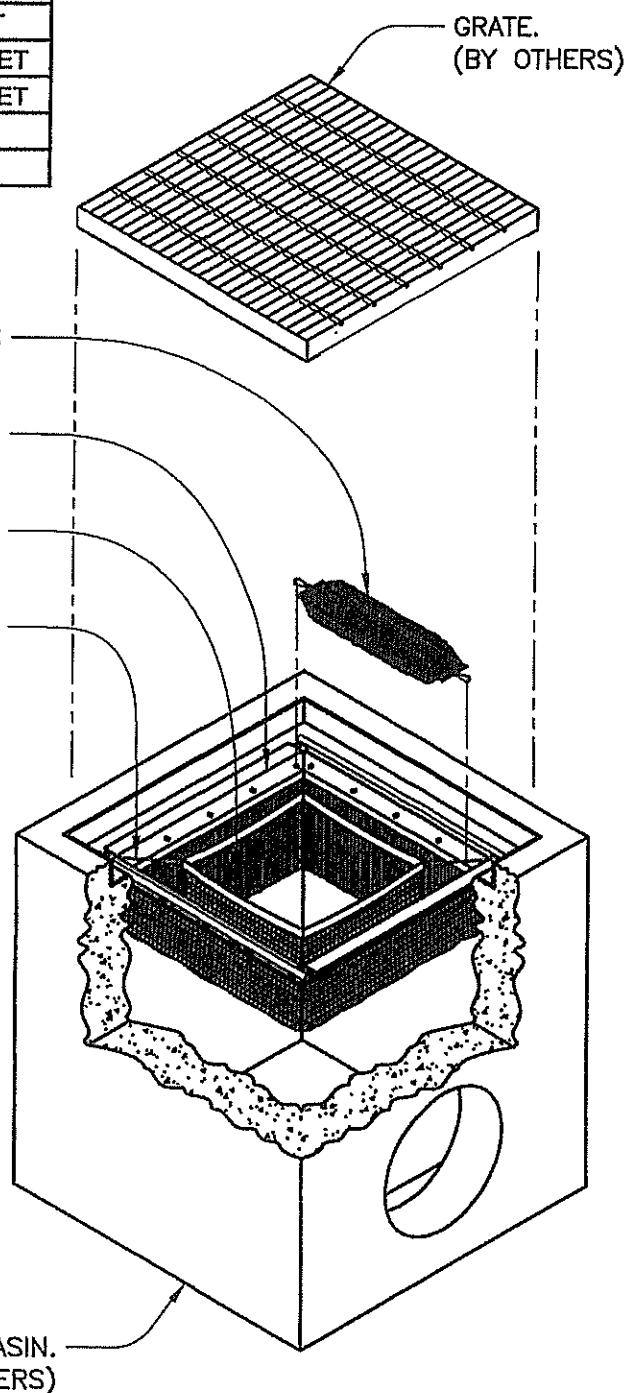
STAINLESS STEEL FILTER FRAME
WITH RUBBER GASKET.

POLYPROPYLENE GEOTEXTILE
FILTER ELEMENT.

STAINLESS STEEL SUPPORT HOOK.
FOUR EACH.

NOTES:

1. FloGard® filter body is prefabricated from polypropylene woven monofilament geotextile.
2. All metal components shall be constructed from stainless steel Type 304.
3. Refer to Specifier Chart for catch basin and filter sizing.
4. Filter inserts are supplied with optional "clip-in" filter pouches utilizing fossil rock™ filter medium for the collection and retention of petroleum hydrocarbons (oils & greases).
5. FloGard® filter inserts and fossil rock™ filter medium pouches must be maintained in accordance with manufacturer recommendations.
6. Catch basin depth must not allow filter body to obstruct outlet pipe. See sheet 2 of 2.



TITLE

FloGard®

CATCH BASIN FILTER INSERT



KriStar Enterprises, Inc.

360 Sutton Place, Santa Rosa, CA 95407
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

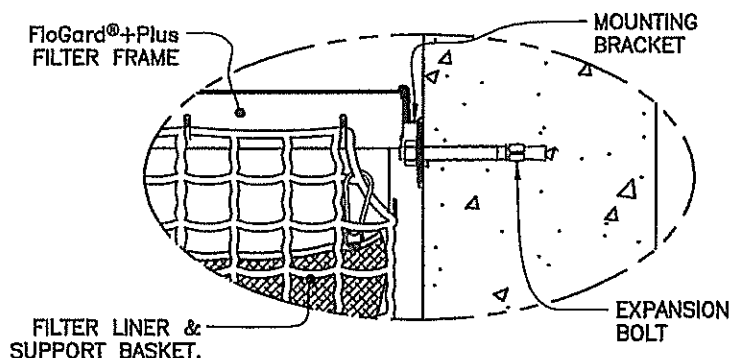
DRAWING NO. FG-0001 REV ECO 0109 JPR 12/4/12 DATE JPR 12/18/06 SHEET 1 OF 2

SPECIFIER CHART

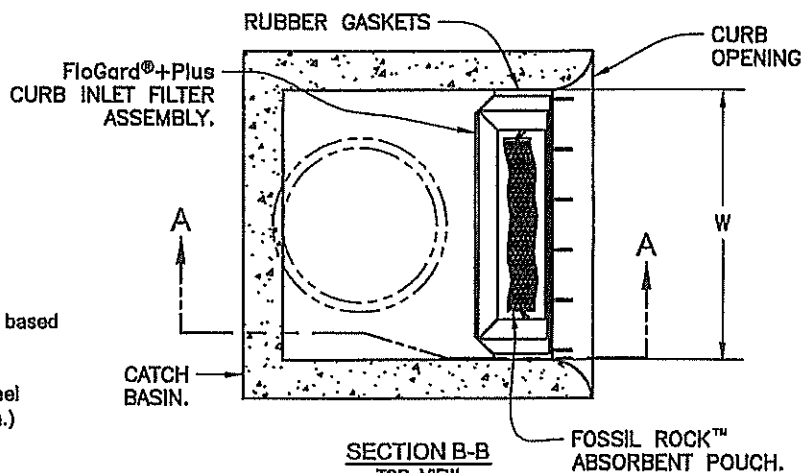
MODEL NO.	Curb Opening Width - W -	Storage Capacity - Cu. Ft. -	Filtered Flow Rate - GPM/CFS -	Bypass Flow Rate - GPM/CFS -
FGP-24CI	2.0' (24")	.95	338 / .75	2,513 / 5.6
FGP-30CI	2.5' (30")	1.20	450 / 1.00	3,008 / 6.7
FGP-36CI	3.0' (36")	1.50	583 / 1.25	3,547 / 7.9
FGP-42CI	3.5' (42")	1.80	675 / 1.50	3,951 / 8.8
FGP-48CI	4.0' (48")	2.10	768 / 1.76	4,445 / 9.9
FGP-5.0CI	5.0' (60")	2.40	900 / 2.00	5,208 / 11.6
FGP-6.0CI	6.0' (72")	3.05	1,126 / 2.51	6,196 / 13.8
FGP-7.0CI	7.0' (84")	3.65	1,350 / 3.01	7,139 / 15.9
FGP-8.0CI	8.0' (96")	4.25	1,576 / 3.51	8,082 / 18.0
FGP-10.0CI	10.0' (120")	4.85	1,800 / 4.01	9,833 / 21.9
FGP-12.0CI	12.0' (144")	6.10	2,252 / 5.02	11,784 / 26.2
FGP-14.0CI	14.0' (168")	7.30	2,700 / 6.02	13,515 / 30.1
FGP-16.0CI	16.0' (192")	8.55	3,152 / 7.02	15,446 / 34.4
FGP-18.0CI	18.0' (216")	9.45	3,490 / 7.78	17,152 / 38.2
FGP-21.0CI	21.0' (252")	10.95	4,050 / 9.02	19,891 / 44.3
FGP-28.0CI	28.0' (336")	14.60	5,400 / 12.03	26,311 / 58.6

NOTES:

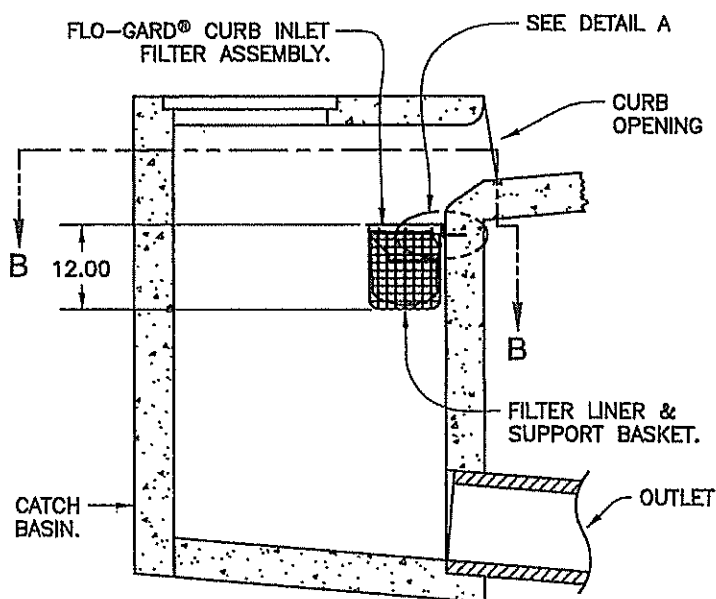
1. FloGard®+PLUS filter inserts shall be installed across the entire width of curb opening. Storage capacity and clean flow rates are based on full width installation.
2. Filter insert shall be attached to the catch basin with stainless steel expansion anchor bolts & washers (3/8" x 2-1/2" minimum length.) See detail A.
3. FloGard®+PLUS filter inserts are designed with a debris trap/energy dissipator for the retention of floatables and collected sediments.
4. Filter support frame shall be constructed from stainless steel Type 304.
5. Filter liner shall be constructed from durable polypropylene, woven, monofilament, geotextile. Filter liner shall not allow the retention of water between storm events.
6. Filter inserts are supplied with "clip-in" filter pouches utilizing FOSSIL ROCK™ filter medium for the collection and retention of petroleum hydrocarbons (oils & greases).
7. FloGard®+PLUS filter inserts and FOSSIL ROCK™ filter medium pouches must be maintained in accordance with manufacturer recommendations.
8. FloGard +PLUS filter inserts are available in standard lengths of 24", 30", 35", 42" & 48" and may be installed in various length combinations (end to end) to fit length of noted catch basin.
9. Clean flow rates are "calculated" based on liner flow rate of 140 gallons per minute per square foot of material, a factor of .50 has been applied to allow for anticipated sediment & debris loading. An additional safety factor of between .25 & .50 may be applied to allow for site specific sediment loading.
10. Storage capacity reflects maximum solids collection prior to impending "initial" filtering bypass. The "ultimate" high-flow bypass will not become impeded due to maximum solids loading.



DETAIL A
MOUNTING BRACKET & EXPANSION BOLTS
SEE NOTE 2
SCALE 6/1



SECTION B-B
TOP VIEW
SCALE 1/1



SECTION A-A
SIDE VIEW
SCALE 1/1

TITLE

FloGard® +PLUS
CATCH BASIN FILTER INSERT
(Curb Inlet Style)



KriStar Enterprises, Inc.

360 Sutton Place, Santa Rosa, CA 95407
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

CUDO® Water Storage System

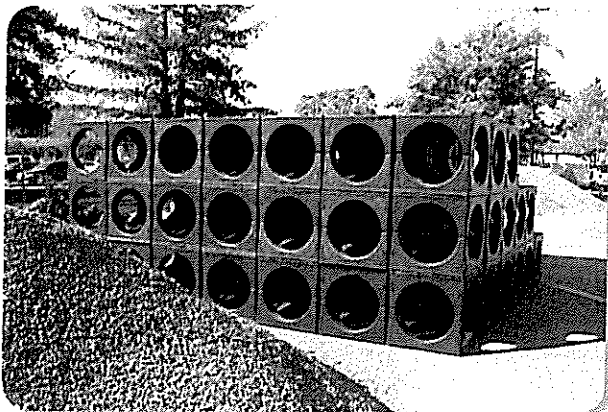
A modular plastic cube for underground water storage

Cubes incorporate an arched design that adds structural integrity, increased water storage and enhanced access for inspection and maintenance. Made in the USA of injection molded polypropylene plastic, a single CUDO assembly requires just two modules and two end caps.

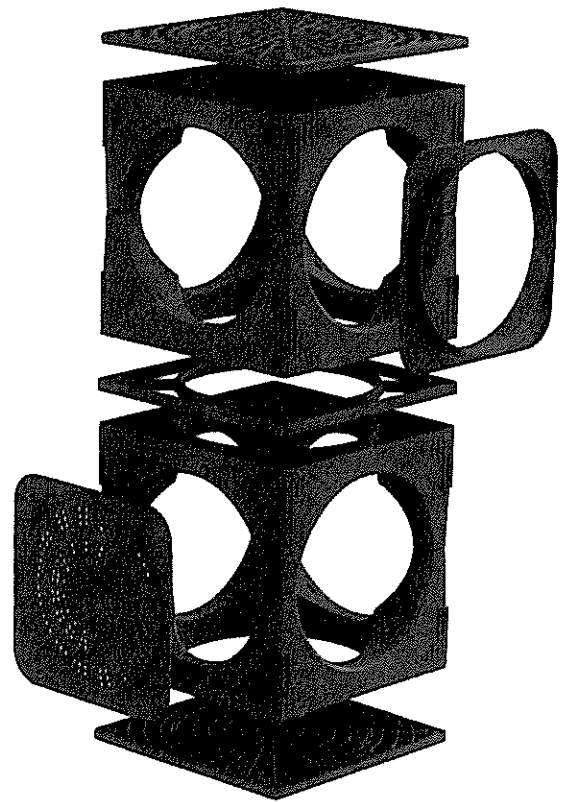
Per application, either a filter fabric or plastic liner is wrapped around the CUDO modules, encasing the entire system. Geo-grid or other structural enhancement may be incorporated into the CUDO installation, depending on the loading requirements.

FEATURES AND BENEFITS

- Large interior openings offer ease of access for inspection and maintenance
- High water storage capacity (95%)
- CUDO size (24" x 24" x 24") offers ease of handling and installation
- Unique shape offers superior strength, rated for traffic loading under parking lots or driveways
- Minimal number of components required for assembly
- May be integrated into bioretention systems



CUDO stacks ready for installation in San Rosa, California

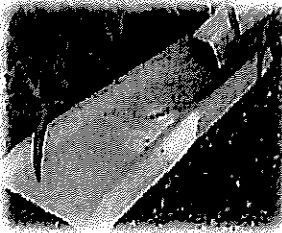
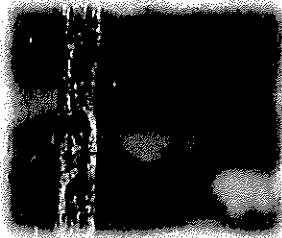


CUDO components snap together, forming a single or multiple stack. Assembled stacks are installed to form the desired system size and shape, with a maximum amount of footprint flexibility.

FACT SHEET- IMPERVIOUS AREA DISCONNECTION

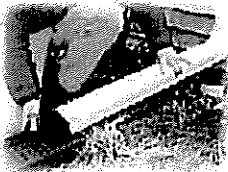
IMPERVIOUS AREA DISCONNECTION

Including: splash blocks, rain chains, bubble up emitters, and pavement disconnection.



OVERVIEW

Impervious area disconnection allows storm water from impervious areas, such as rooftops and pavement, to be directed to pervious natural or landscaped areas and infiltrate into the soil. Impervious surfaces that drain directly to catch basins or storm drains are a directly connected impervious area. These areas prevent storm water infiltration into the soil or filtering through vegetation and soil. Impervious areas also increase the speed and amount of runoff from a site, which may contribute to peak flows and scour in downstream creeks and waterways. This BMP addresses these issues by disconnecting direct discharges by using: splash blocks, bubble-up emitter, and paved area disconnection.



SPLASH BLOCK DESCRIPTION

Splash blocks are a low tech option to hard piped downspout systems. Existing downspouts can be retrofitted using splash blocks.

ADVANTAGES

- Can be used as part of a treatment train with volume capture BMPs.
- Can reduce the size of downstream water quality treatment and volume capture BMPs by increasing the potential for infiltration.



FACT SHEET- IMPERVIOUS AREA DISCONNECTION

- Can be used as a retrofit BMP.
- Can be used to direct storm water to other BMPs

LIMITATIONS

- Adjacent buildings and overflow requirements need to be considered in design.
- May not be appropriate on all sites due to space constraints.

KEY DESIGN FEATURES

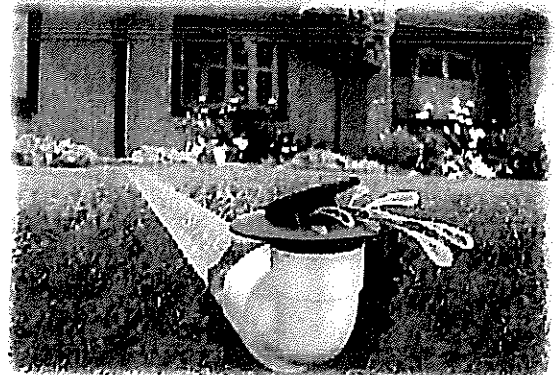
- Sites should be evaluated to ensure that splash blocks won't have negative impacts.
- Rain water must be directed away from foundations and footings.
- Downspouts should not be directed to paved areas or across sidewalks.
- Landscaped areas receiving roof water should be adequately sized to prevent runoff or erosion.

BUBBLE-UP EMITTER DESCRIPTION

Bubble-up emitters work very much like splash blocks, but allow for storm water to be released further from the building and even in landscape areas that are not directly adjacent to the building.

ADVANTAGES

- Can be used as part of a treatment train with volume capture BMPs.
- Can reduce the size of downstream water quality treatment and volume capture BMPs by increasing the potential for infiltration.
- Can be used as a retrofit BMP.
- Can be used to direct storm water to other BMPs



LIMITATIONS

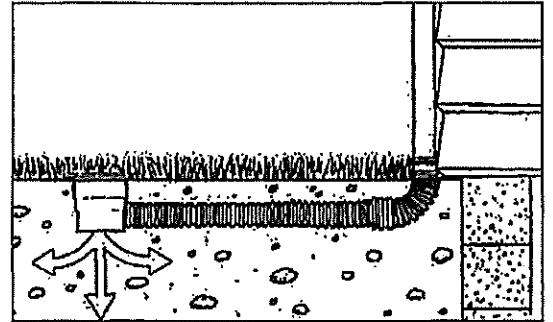
- Adjacent buildings and overflow requirements need to be considered in design.
- May not be appropriate on all sites due to space constraints.

KEY DESIGN FEATURES

- Rain water must be directed away from foundations and footings.
- Downspouts should not be directed to paved areas or across sidewalks.
- 4" diameter SDR-35 pipe required as a minimum.

FACT SHEET- IMPERVIOUS AREA DISCONNECTION

- Distance and location of emitter relative to the building must be approved by a Licensed Geotechnical Engineer.
- Landscaped areas receiving roof water should be adequately sized to prevent runoff or erosion.
- Landscaped areas receiving roof water need to be designed to ensure proper drainage and to prevent ponding water.
- May be installed with a bottomless emitter to allow for infiltration. Bottom of emitter should be placed over drain rock to prevent sedimentation of pipe.
- Emitter should be equipped with "pop up" cover to prevent mosquito breeding.

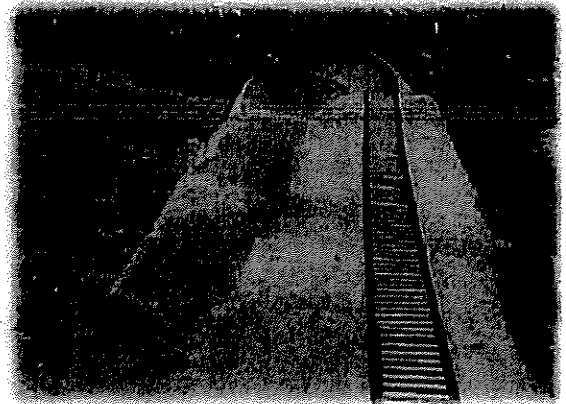


PAVED AREA DISCONNECTION DESCRIPTION

Paved areas that can be graded so that they drain onto pervious area, such as landscape or natural area can increase the opportunity for infiltration and minimize the size of downstream treatment.

ADVANTAGES

- Can be used as part of a treatment train with other BMPs.
- Can reduce the size of downstream treatment and volume capture BMPs by increasing the potential for infiltration.



LIMITATIONS

- Areas receiving flow need to be adequately sized and stabilized.
- May be limited by site slopes.
- Overflow drainage must be provided.
- May not be appropriate on all sites.

KEY DESIGN FEATURES

- Rain water must be directed away from foundations and footings.
- Landscaped areas receiving storm water should be adequately sized to prevent runoff or erosion.
- Landscaped areas receiving roof water need to be designed to ensure proper drainage and to prevent ponding water.

IMPERVIOUS AREA DISCONNECTION- CHECKLIST

Impervious Area Disconnection

Inspection and Maintenance Checklist

(aka: splash blocks, rain chains, bubble up emitters and pavement disconnection)

Date of Inspection: _____

Inspector(s): _____

BMP ID #: _____

Property Owner: _____

Location Description: _____

Type of Inspection: ☐ Pre-rainy Season (PRS) ☐ Rainy Season (RS) ☐ After-rainy Season (ARS)

This Inspection and Maintenance Checklist is to be used in conjunction with its corresponding LID Factsheet and Maintenance Plan. Please review these documents before performing the field inspection.

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Drainage	RS	Is there standing or pooling of water after 3 days of dry weather?		- Regrade drainage area. - Reposition splash block. - Clean inlets/outlets of obstructions.	
	RS	Is there excessive splashing/spray?		Reposition splash block or dissipater to reduce or eliminate splash/spray.	
	RS	Are the house/building gutters overflowing during a rain event?		- Flush bubble up pipe to remove any obstructions. - Check gutter down spout and gutter for obstructions. Clean if necessary.	

IMPERVIOUS AREA DISCONNECTION- CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Erosion	RS ARS	Is there evidence of under cutting or washouts around splash block/dissipater?		• Reposition the inlet splash block or dissipater. • Fill in eroded areas and regrade.	
	RS ARS	Is there channelization (gully) forming around the bubble ups?		• Fill in eroded areas and regrade.	
	RS ARS	Is there accumulation of sediment (sand, dirt, mud) in the inlets/outlets areas?		• Remove sediment and check the grading.	
	RS ARS	Are there voids or holes along the path of the bubble up pipe or excess sediment in and around the bubble up outlet?		• Flush and inspect pipe for damage. • Replace damage pipe, fill in voids, and regrade.	

IMPERVIOUS AREA DISCONNECTION- CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Vegetation	PRS RS ARS	Is the vegetation clogging the Inlet/outlet areas?		Trim and/or remove the excess vegetation around the inlet/outlet areas.	
	PRS RS ARS	Is the mulch spread evenly throughout the vegetation area?		- Redistribute and add additional mulch if needed. - Regrade vegetation area.	
	PRS RS ARS	Are there dead or dry plants/weeds?		- Remove dead and/or dry vegetation. Replace as needed. - Remove or trim any vegetation that is causing a visual barrier hazard.	

IMPERVIOUS AREA DISCONNECTION- CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
BMP General	PRS RS ARS	Is there debris/trash in the area?		Remove all trash and debris.	
	PRS RS ARS	Is the surrounding area marked with graffiti?		Remove all graffiti from the area.	
	PRS RS ARS	Are there missing or disturbed aesthetics features?		- Replace and/or reposition aesthetic features to original placement. - Placement should not disrupt flow characteristics/design.	
	PRS RS ARS	Check for broken or damage drain inlets/outlets, splash blocks, bubble ups, and grates.		Replace or repair all damaged features.	
	PRS RS ARS	Is the vegetation irrigation functional?		- Repaired broken missing spray/drip emitters. - Reposition to eliminate over spray and/or over watering.	
	PRS RS ARS	Are the aesthetic features firmly secured in placed?		Repair and/or replace loose or damaged features.	

FACT SHEET- VEGETATED SWALE

VEGETATED SWALE

Also known as: Bioretention Swale, Treatment Swale, and Grassy Swale



DESCRIPTION

The swale best management practice (BMP) functions as a soil and plant-based filtration and infiltration feature that removes pollutants through a variety of natural physical, biological, and chemical treatment processes. Vegetated swales are open, shallow channels with vegetation covering the side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. They are designed to treat runoff through filtering by the vegetation in the channel, filtering through a subsoil matrix, and/or infiltration into the underlying soils. They trap particulate pollutants (suspended solids and trace metals), promote infiltration, and reduce the flow velocity of storm water runoff. Vegetated swales can serve as part of a storm water drainage system and can replace curbs, gutters and storm sewer systems.

ADVANTAGES

- Can achieve both water quality and volume capture objectives.

FACT SHEET- VEGETATED SWALE

- Vegetated swales provide storm water treatment that enhances the quality of downstream water bodies by using natural processes.
- The vegetation reduces heat island effects and improves an area's landscape.
- Vegetated swales can be designed to convey high flow as well as water quality flow.

LIMITATIONS

- Can be difficult to avoid channelization, which may cause erosion and limit infiltration potential.
- May not be appropriate for industrial sites or locations where spills may occur.
- Grassed swales cannot treat a very large drainage area. Large areas may be divided and treated using multiple swales.
- A thick vegetative cover is needed for these practices to function properly.
- Not effective and may even erode when flow velocities are high, if the grass cover is not properly maintained.
- Swales are more susceptible to failure if not properly maintained than other treatment BMPs.
- Should not be used in areas of known contamination. If soil and/or groundwater contamination is present on the site or within a 100' radius of the proposed BMP location, the North Coast Regional Water Quality Control Board will need to be contacted and the site reviewed.
- Should not be used in areas of slope instability where infiltrated storm water may cause failure. Slope stability should be determined by a licensed geotechnical engineer.
- Do not use in locations that can negatively impact building foundation or footings. Location shall be approved by a licensed Geotechnical Engineer.

KEY DESIGN FEATURES

- The longest flow path for the swale shall have a minimum retention time of 12 minutes for conditions when the treatment flows enter the Vegetated Swale uniformly along the swale length. The longest flow path for the swale shall have a minimum retention time of 5 minutes if 90 percent or more of the treatment flow enters the swale at the upstream end.
- Swale should be designed so that the water level does not exceed 2/3rds the height of the grass or 4 inches, whichever is less, at the design treatment rate.
- Longitudinal slopes between 1% and 2.5% are recommended.
- Maximum allowable slope is 8% slope. In steep areas, check dams up to 24-inches high and at least 25 feet apart are allowed.
- Trapezoidal channels are normally recommended but other configurations, such as parabolic, can also provide substantial water quality improvement and may be easier to mow than designs with sharp breaks in slope.
- Swales constructed in cut are preferred, or in fill areas that are far enough from an adjacent slope to minimize the potential for gopher damage. Do not use side slopes constructed of fill, which are prone to structural damage by gophers and other burrowing animals.

FACT SHEET- VEGETATED SWALE

- A diverse selection of low growing, plants that thrive under the specific site, climatic, and watering conditions should be specified. Vegetation whose growing season corresponds to the wet season are preferred. Drought tolerant vegetation should be considered especially for swales that are not part of a regularly irrigated landscaped area.
- Vegetated swales shall have a maximum treatment width of 10 feet. The vegetated swale bed shall be at least 2-feet wide and no more than 7-feet wide. Parallel swales may be used if calculations show greater width is needed.
- The bed of the swale flow area shall slope at about 2% from toe of side slope to center of swale. Side slopes shall be no greater than a 2 to 1 slope.
- If vegetation is not established by October 1st, a 1-year biodegradable loose weave geofabric shall be placed on swale surface. If vegetation is not established by October 15th of the year, sod shall be placed over loose soils.
- Vegetated swale shall be sized using the spreadsheet provided by the local agency.
- The swale shall convey the 10-year storm event with flows contained within the swale. Adjacent to streets, the 100-year storm event shall be conveyed with flows below the top of curb elevation. (Include flow in the gutter in the calculation.)
- If the 10 or 100-year storm event flow velocity is greater than 4 feet per second, a permanent geofabric liner shall be used that is rated for the calculated flow velocity.
- If used, the perforated pipe trench shall be backfilled with $\frac{3}{4}$ " crushed rock with a 2-inch bed underneath and 6-inch cover.



SIZING DESIGN- GOAL AND REQUIREMENTS

- The **design goal** for vegetated swale is to capture (infiltration and/or reuse) 100% of the volume of runoff generated by the 85th percentile 24 hour storm event. This is a retention requirement. If 100% volume capture is achieved than no additional treatment is required.
- If the **design goal** is not achievable, then the vegetated swale **sizing requirement** is:
 - **Water Quality Treatment** of 100% of the flow generated by the 85th percentile 24 hour storm event, as calculated using the Rational Method and a known intensity of 0.20 inches per hour, **and**
 - **Volume Capture** (infiltration and/or reuse) of the increase in volume of storm water due to development generated by the 85th percentile 24 hour storm event. This is a retention requirement.
- All calculations shall be completed using the "Storm Water Calculator" available at www.srcity.org/stormwaterLID

FACT SHEET- VEGETATED SWALE

INSPECTION AND MAINTENANCE REQUIREMENTS

A maintenance plan shall be provided with the Final SUSMP. The maintenance plan shall include recommended maintenance practices, state the parties responsible for maintenance and upkeep, specify the funding source for ongoing maintenance with provisions for full replacement when necessary and provide site specific inspection checklist.

At a minimum maintenance shall include the following:

- Mow and irrigate during dry weather to the extent necessary to keep vegetation alive. Where 6-inch high grasses are used, the grass height shall be at least 3 inches after mowing. Where mowed grasses are shown, the grass height shall be mowed when the height exceeds 3 inches.
- Remove obstructions and trash from vegetated swale.
- Pesticides and fertilizers shall not be used in the swale.

Vegetated Swales shall be inspected and maintained monthly during the rainy season to review:

- Obstructions and trash.
- Pondered flow is drained within 72 hours after a rainfall event.
- Condition of grasses.
- If ponding is observed, grading will be required to restore positive drainage.

VEGETATED SWALE - CHECKLIST

Vegetated Swale

Inspection and Maintenance Checklist

(aka: Bioretention Swale, Treatment Swale, Grassy Swale)

Date of Inspection: _____

Inspector(s): _____

BMP ID #: _____

Property Owner: _____

Location Description: _____

Type of Inspection: ☒ Pre-rainy Season (PRS) ☐ Rainy Season (RS) ☐ After-rainy Season (ARS)

This Inspection and Maintenance Checklist is to be used in conjunction with its corresponding LID Factsheet and Maintenance Plan. Please review these documents before performing the field inspection.

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Drainage	RS	Is there standing or pooling of water after 3 days of dry weather?		Remove any obstruction in the swale and/or regrade to restore positive drainage.	
	RS	Is there poor drainage during a high intensity storm event?		- Clean the High Flow Bypass Inlet. - Check pipe for damage and/or blockage. Repair if required.	
	RS	Is the flow into the vegetative swale even and uniform?		Remove any obstruction preventing a uniform flow into the swale.	

VEGETATED SWALE - CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Erosion	RS ARS	Is there under cutting or washouts along the impervious surfaces abutting the Vegetative Swale?		• Fill in eroded areas and regrade.	
	RS ARS	Is there channelization (gully) forming along the length of the swale area?		• Fill in eroded areas and regrade.	
	RS ARS	Is there accumulation of sediment (sand, dirt, mud) in the swale?		• Remove sediment and check the grading. Add replacement soil and/or mulch.	
	PRS RS ARS	Is the mulch unevenly distributed in the Vegetative Swale area?		• Redistribute and add additional mulch if needed. • Regrade area.	
	PRS RS ARS	Are there voids and/or holes around the High Flow Bypass Inlet?		• Inspect the High Flow Bypass pipe and Inlet box for damage. Replace or repair as necessary.	
	PRS RS ARS	Is there evidence of animal activity such as holes or dirt mounds from digging or borrowing?		• Repair and fill in damaged areas. • Rodent control activities must be in accordance with applicable laws and do not affect any protected species.	

VEGETATED SWALE - CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
Vegetation	PRS RS ARS	Is the vegetation clogging or redirecting the inlet/outlet flow areas?		Trim and/or remove the excess vegetation.	
	PRS RS ARS	Is the mulch distributed evenly throughout the swale area?		- Redistribute and add additional mulch if needed. - Regrade planter area.	
	PRS RS ARS	Are there dead or dry plants/weeds? Is the vegetation over grown?		- Remove dead and/or dry vegetation. Replace as needed. - Remove or trim any vegetation that is causing a visual barrier, trip, and or obstruction hazards. - Mow grass as needed.	

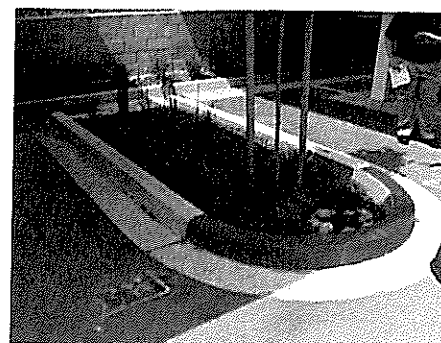
VEGETATED SWALE - CHECKLIST

Inspection Category	When to Inspect	Maintenance Issue	Is the Issue Present?	Require Maintenance	Comments (Describe maintenance completed and if needed maintenance was not conducted, note when it will be done)
BMP General	PRS RS ARS	Is there debris/trash in the planter/swale area?		Remove all trash and debris.	
	PRS RS ARS	Is Graffiti present?		Remove all graffiti from the area.	
	PRS RS ARS	Are there missing or disturbed aesthetics features?		- Replace and/or reposition aesthetics features to original placement. - Placement should not disrupt flow characteristics/design.	
	PRS RS ARS	Is the vegetation irrigation functional?		- Repaired broken missing spray/drip emitters. - Reposition and/or adjust to eliminate over spray and/or over watering.	
	PRS RS ARS	Are the aesthetic features firmly secured in placed?		Repair and/or replace loose or damaged features.	
	PRS RS ARS	Check for damaged sidewalk, curb, gutter, and catch basin. This includes uplift and settling.		Remove and replace damaged areas.	

FACT SHEET- BIORETENTION

BIORETENTION

Also known as: Rain garden, roadside bioretention, and bioretention cell



DESCRIPTION

The bioretention area best management practice (BMP) functions as a soil and plant-based filtration and infiltration feature that removes pollutants through a variety of natural physical, biological, and chemical treatment processes.

ADVANTAGES

- Can be designed to achieve Treatment, Delta Volume Capture, or Hydromodification requirements.
- Enhances water quality of downstream water bodies through natural processes.
- Aesthetically pleasing.
- The vegetation can provide shade and wind breaks, absorbs noise, reduces heat island effects and improves an area's landscape.
- Provides habitat for birds and attracts other pollinators like butterflies and bees.
- Does not interrupt utility installation.
- Does not interfere with tree planting.

FACT SHEET- BIORETENTION

LIMITATIONS

- Specialized design is required for areas where street slopes exceed 10%.
- Should not be used in areas of known contamination. If soil and/or groundwater contamination is present on the site or within a 100' radius of the proposed BMP location, the North Coast Regional Water Quality Control Board will need to be contacted and the site reviewed.
- Should not be used in areas of high groundwater. In general a minimum of 2' of clearance should be provided between the bottom of the bioretention cell and seasonal high groundwater.
- Should not be used in areas of slope instability where infiltrated storm water may cause failure. Slope stability should be determined by a licensed geotechnical engineer.
- Do not use in locations that can negatively impact building foundation or footings. Location shall be approved by a licensed Geotechnical Engineer.

KEY DESIGN FEATURES

ALL BIORETENTION

- Structural soil should be used within the bioretention area requiring load bearing capacity (adjacent to roadways and/or buildings).
- Structural soil, if used, shall be installed as described in Appendix E.
- Some BMPs may not require the use of structural soil and a more organic type planting soil and/or treatment media may be used in its place. It may be possible in some cases to use native soil or to amend the native soil so that it is suitable. Use of non-structural soil will depend on evaluation of the criteria in "Chapter 4-Site Assessment" as well as consideration of structural needs and may require evaluation by a licensed Geotechnical Engineer.
- Underlying native soil should remain un-compacted to preserve infiltration capacity. Fence off the area during construction to protect it from compaction.
- Bottom of bioretention should be un-lined to allow infiltration into native soil.
- Moisture barrier must be installed vertically to protect road sub-base and any trenches adjacent to the bioretention area.
- If used, pervious concrete shall be designed and installed as described in Appendix E and protected during construction to prevent sediment loading.
- If the porous gutter design option is used additional trash and sediment capture BMPs is required.
- A curb opening type design may be used in place of a porous gutter if appropriate for the project and does not require additional trash capture.
- Bioretention areas shall be planted with plants from the approved **Plant List** and **Tree List** included in Appendix F and shall be planted to achieve 51% cover.
- All bioretention areas shall be designed with a designated high flow bypass inlet for storms larger than the design storm.

FACT SHEET- BIORETENTION

- For designs that include perforated pipe, the 6" perforated pipe must be installed a minimum of 6" below the adjacent road structural section.
- Perforated pipe shall be installed in straight runs only.
- The volume below the perforated pipe must be sufficient to hold and infiltrate the design volume.

SIZING DESIGN- GOAL AND REQUIREMENTS

- **For all projects:** The treatment component requires that all of the runoff generated by this water quality design storm from impermeable surfaces must be treated on site for the pollutants of concern.
- ***For projects that increase the amount of impervious surface, but create or replace less than a total of one acre:*** The **Delta Volume Capture** component requires that any increase in volume due to development for the water quality design storm must be infiltrated and/or reused on site. Further discussion of the Treatment and Delta Volume Capture requirements and the accompanying formulas can be found in Chapter 6.
- ***For projects that create or replace one acre or more of impervious surface:*** These larger projects must mitigate their impacts by meeting the **Hydromodification Requirement** by capturing 100% of the post development volume generated by the water quality rain event.
- All calculations shall be completed using the "Storm Water Calculator" available at www.srcity.org/stormwaterLID.

INSPECTION AND MAINTENANCE REQUIREMENTS

A maintenance plan shall be provided with the Final SWLID Submittal. The maintenance plan shall include recommended maintenance practices, state the parties responsible for maintenance and upkeep, specify the funding source for ongoing maintenance with provisions for full replacement when necessary and provide site specific inspection checklist.

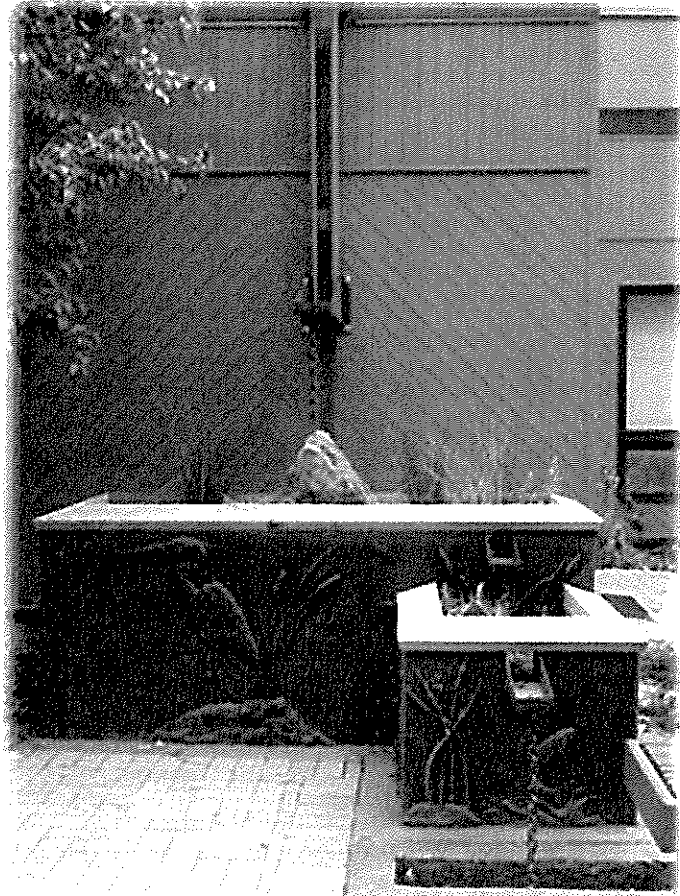
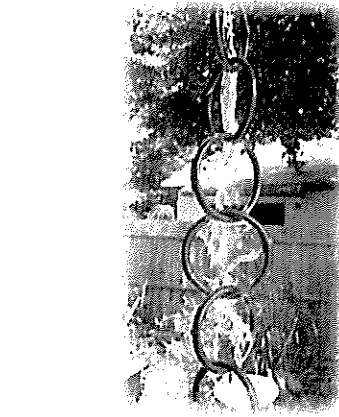
At a minimum maintenance shall include the following:

- Dry street sweeping upon completion of construction
- Dry street sweeping annually, and
 - When water is observed flowing in the gutter during a low intensity storm.
 - Algae is observed in the gutter.
 - Sediment/debris covers 1/3 of the gutter width or more.
- Inspect twice annually for sedimentation and trash accumulation in the gutter. Obstructions and trash shall be removed and properly disposed of.
- Inspect twice during the rainy season for ponded water.
- Pesticides and fertilizers shall not be used in the bioretention area.
- Plants should be pruned, weeds pulled and dead plants replaced as needed.

FACT SHEET- FLOW THROUGH PLANTER

FLOW THROUGH PLANTER

Also know as: Above Ground Bioretention, Filter Planter, and Water Quality Planter



DESCRIPTION

Flow Through Planters function as a soil and plant-based filtration feature that removes pollutants through a variety of natural physical, biological, and chemical treatment processes. Flow Through Planters are usually installed next to buildings or common open areas to treat storm water from rooftops.

ADVANTAGES

- Provides water quality treatment.
- Can be used as part of a treatment train with other BMPs.
- Used in urban areas where space is limited or infiltration is not acceptable.
- Used on sloped sites.
- Provides habitat for birds and attracts pollinators like butterflies and bees.

FACT SHEET- FLOW THROUGH PLANTER

LIMITATIONS

- Do not achieve Delta Volume Capture or Hydromodification Control requirements.
- Impacts to adjacent buildings and overflow requirements need to be considered in design.
- Plant selection needs to consider effects of fast draining soils.

KEY DESIGN FEATURES

- Bottom shall be impervious to protect adjacent structures and slope stability, unless otherwise approved by a licensed Geotechnical Engineer. If designed to allow infiltration, the underlying soil should not be compacted.
- Shall be planted with plants from the approved **Plant List** and **Tree List** included in Appendix F and shall be planted to achieve 51% cover.
- Install a designated high flow bypass inlet or route.
- Underdrain required.
- All surface water must drain within 72 hours to prevent mosquito breeding.
- Select non-floatable surface mulching material to prevent clogging of downstream inlets.
- Downspouts to incorporate splash blocks and/or other dissipation methods to prevent erosion.

SIZING DESIGN- GOAL AND REQUIREMENTS

- **For all projects:** The **treatment** component requires that all of the runoff generated by this water quality design storm from impermeable surfaces must be treated on site for the pollutants of concern.
- All calculations shall be completed using the “Storm Water Calculator” available at www.srcity.org/stormwaterLID.

INSPECTION AND MAINTENANCE REQUIREMENTS

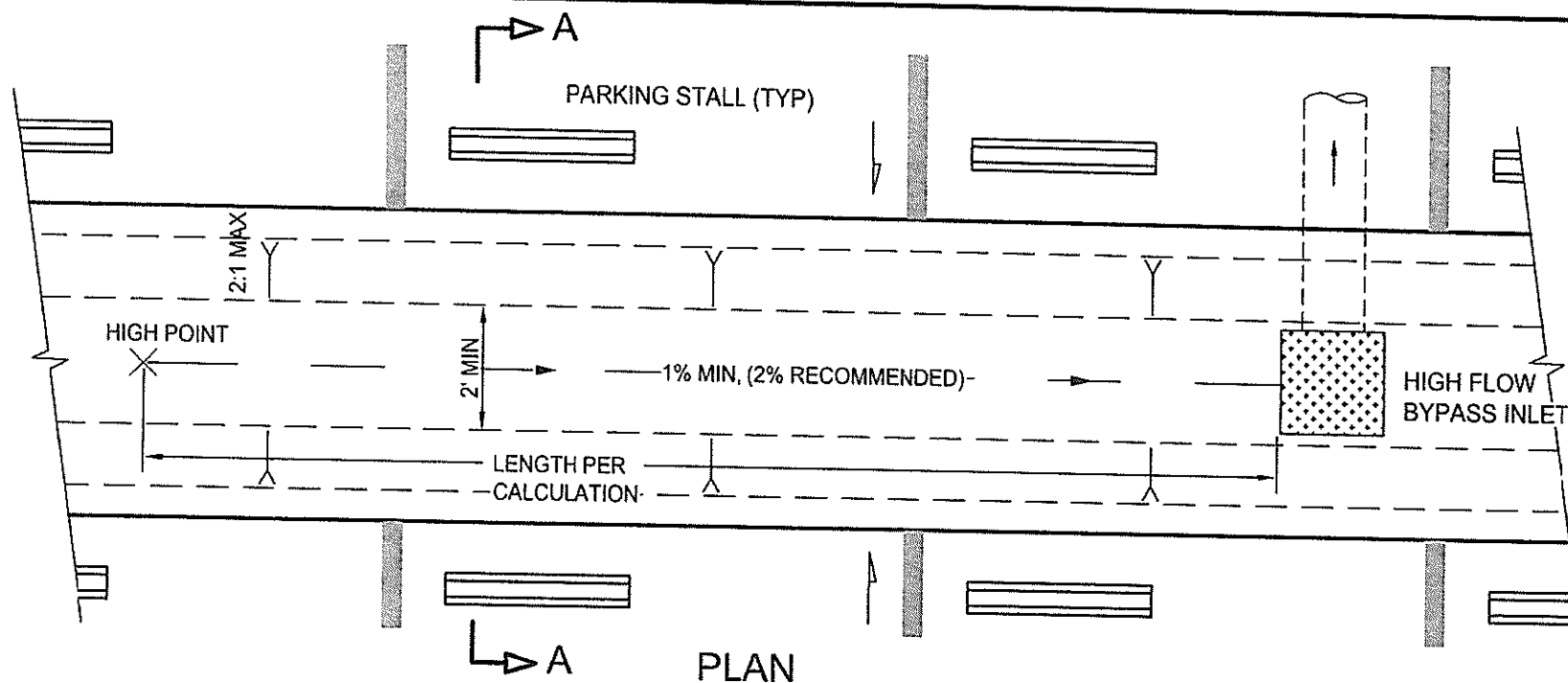
A maintenance plan shall be provided with the Final SWLID Submittal. The maintenance plan shall include recommended maintenance practices, identify the parties responsible for maintenance and upkeep, specify the funding source for ongoing maintenance with provisions for full replacement when necessary and provide site specific inspection checklist.

At a minimum inspection and maintenance shall include the following:

- Inspect twice annually for ponded water. If ponded water is observed, the perforated pipe shall be cleaned.
- If ponded water remains, further grading and replacement may be necessary to prevent mosquito breeding.

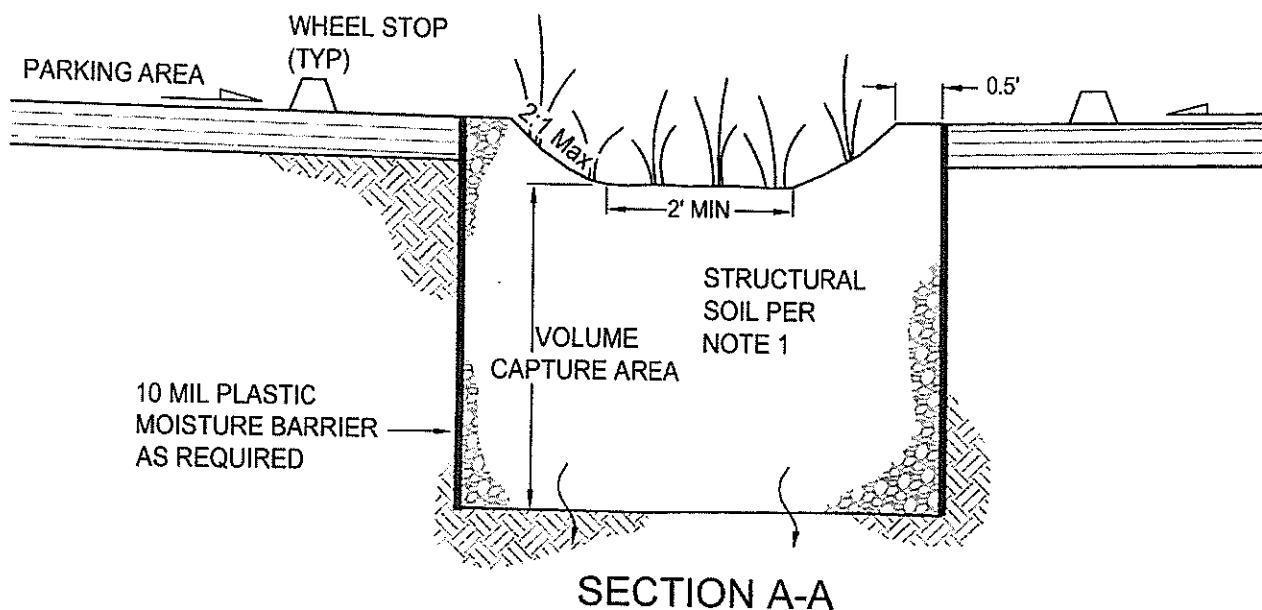
FACT SHEET- FLOW THROUGH PLANTER

- The high flow inlet should be inspected and cleaned as necessary to remove any obstructions.
- Pesticides and fertilizers shall not be used in the rain garden area.
- Plants should be pruned, weeds pulled and dead plants replaced as needed.
- Check downspout splash blocks for proper location and fill/regard any washouts.
- Evaluate mulching around plants. Add/replace as needed.



NOTES:

1. STRUCTURAL SOIL UNLESS OTHERWISE APPROVED BY GEOTECHNICAL ENGINEER AND ACCEPTED BY GOVERNING AGENCY.
2. SWALE MUST CONVEY FLOOD DESIGN FLOWS PER GOVERNING AGENCY DESIGN STANDARDS.
3. PARKING ISLAND WIDTH PER APPLICABLE GOVERNING AGENCY STANDARDS.



PRIORITY 1
SWALE WITH BIORETENTION

SCALE: NONE

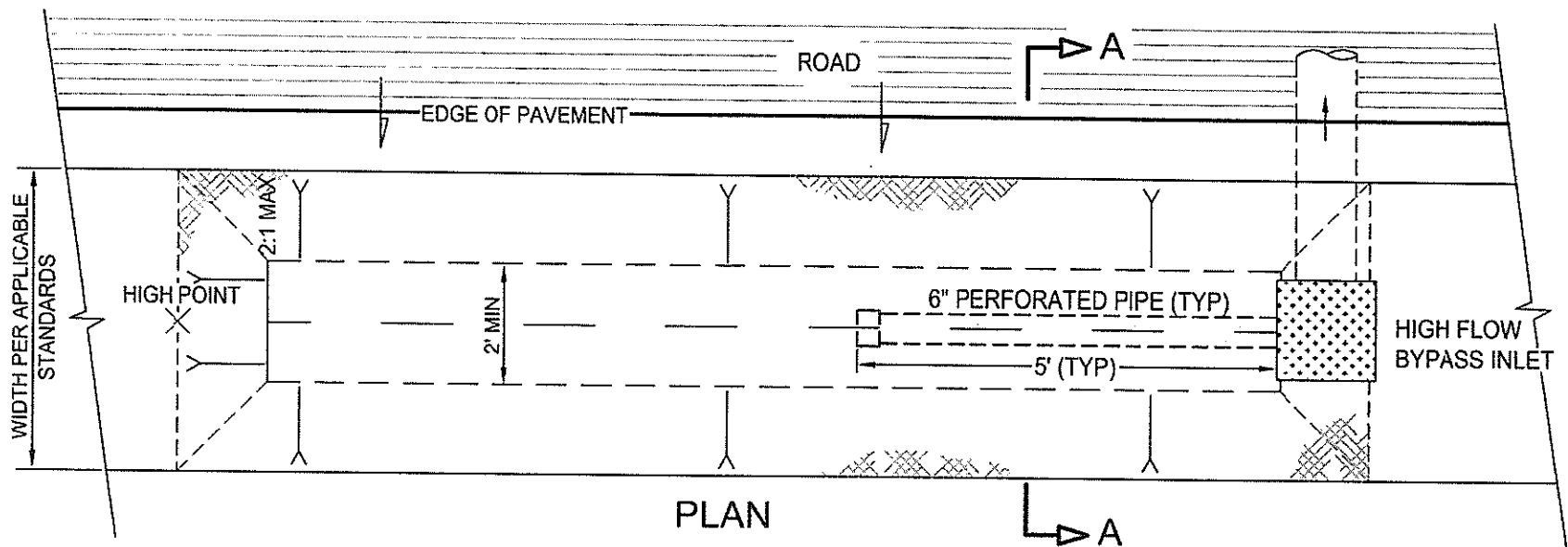
DATE: 04/06/17

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DWN. DIT
CHK. HM

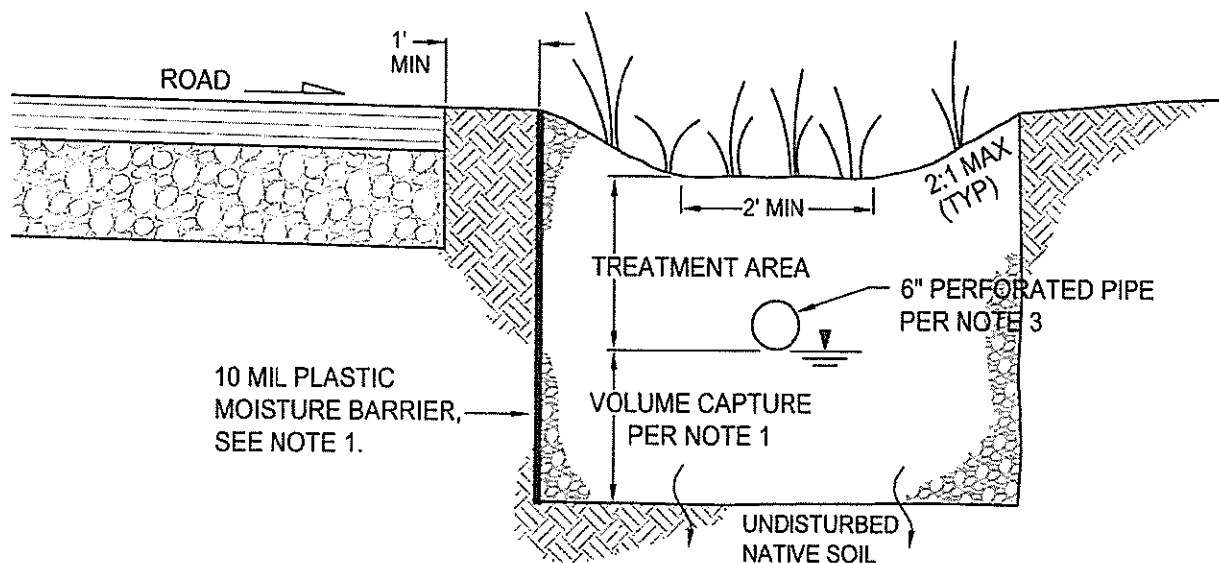
SHEET 1 of 1

P1-06



NOTES:

1. SOIL TO BE SPECIFIED BY DESIGN ENGINEER TO PROVIDE VOLUME CAPTURE AND MEET GOVERNING AGENCY REQUIREMENTS. IF NON STRUCTURAL SOIL IS SELECTED A CUTOFF WALL IS REQUIRED IN PLACE OF A MOISTURE BARRIER.
2. SWALE MUST CONVEY DESIGN FLOWS PER GOVERNING AGENCY DESIGN STANDARDS.
3. TOP OF 6" PERFORATED PIPE TO BE SET 6" BELOW BOTTOM OF ROAD STRUCTURAL SECTION.



SIMILAR TO P1-02
WITH A PERFORATED
DRAIN PIPE

PRIORITY 2
ROADSIDE BIORETENTION
- NO CURB AND GUTTER

SCALE: *NONE* DATE: *04/06/17*

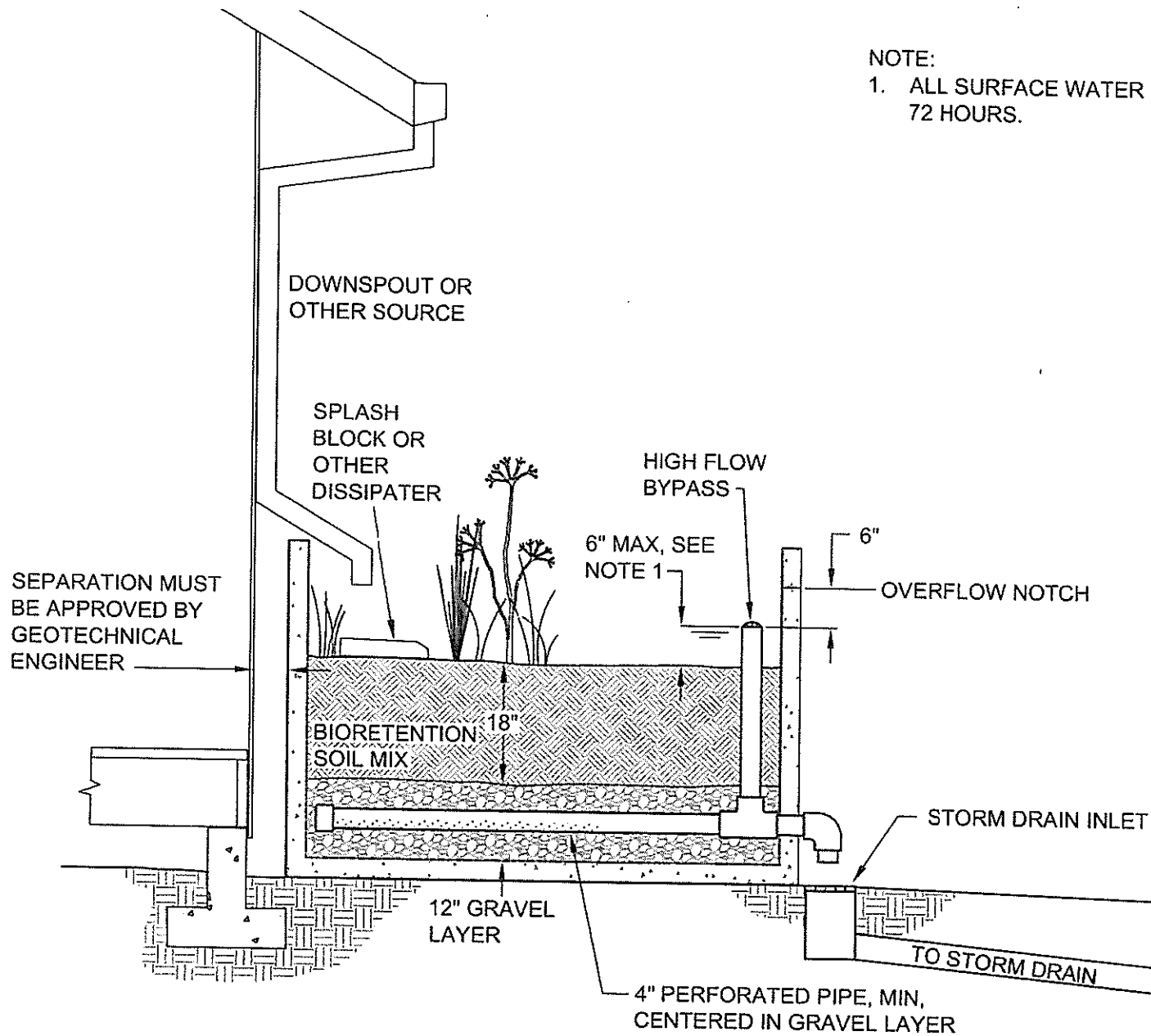
DWN. *D/T*
CHK. *HM*

P2-05

Not to Scale

NOTE:

1. ALL SURFACE WATER MUST DRAIN WITHIN 72 HOURS.



PRIORITY 3
FLOW THROUGH PLANTER

SCALE: NONE

DATE: 04/06/17

DWN. DIT
CHK. HM

SHEET 1 of 1

P3-05

Not to Scale

Ted Winfield & Associates

1455 Wagoner Drive, Livermore, CA 94550 • (925) 371-6379

October 7, 2015

Ms. Sue Maddigan, AVP, Facilities & Purchasing Manager
Exchange Bank, Andrew J. Shepard Building
444 Aviation Blvd.
Santa Rosa, CA 95403

Re: 840 & 850 Gravenstein Highway North (APNs: 060-270-077 and 060-270-085)

Dear Ms. Maddigan:

This letter presents the result on an initial assessment of possible biological issues that could affect development of the parcels located at 840 and 850 Gravenstein Highway North (APNs: 060-270-077 and 060-270-085) in Sebastopol, Sonoma County, CA.

The assess presented herein is based on a site reconnaissance visit, records on the occurrence of special-status species of plants and animals in the vicinity of the subject parcels contained in the California Natural Diversity Database (CNDDB), and personal experience addressing biological resource issues in Sonoma County. There were no long-term detailed studies or comprehensive surveys conducted at the subject parcels to provide information for this assessment.

SITE LOCATION

The subject parcels are located at 840 & 850 Gravenstein Highway North (site) in the City of Sebastopol (Figure 1). The subject parcels are surrounded by development, including retail business north and south of the parcels, residential development to the west and Gravenstein Highway North and retail business to the east (Figure 2).

Gravenstein Highway North occurs along the eastern border of the parcel at 840 Gravenstein Highway North (Figure 3), and the second parcel (850 Gravenstein Highway North; Figure 4) occurs to the west of this parcel (Figure 2).

SITE CONDITIONS

The site had been mowed prior to the site visit but there were still sufficient plant material present to identify the dominant plant species. The parcels were found to be dominated by a mix of non-native grasses and forbs characteristic of non-native annual grassland habitat, with some native coast live oak (*Quercus agrifolia*) and one redwood tree (*Sequoia sempervirens*) occurring along the western boundary of the parcel at 850 Gravenstein Highway North.

MAY 14 2016

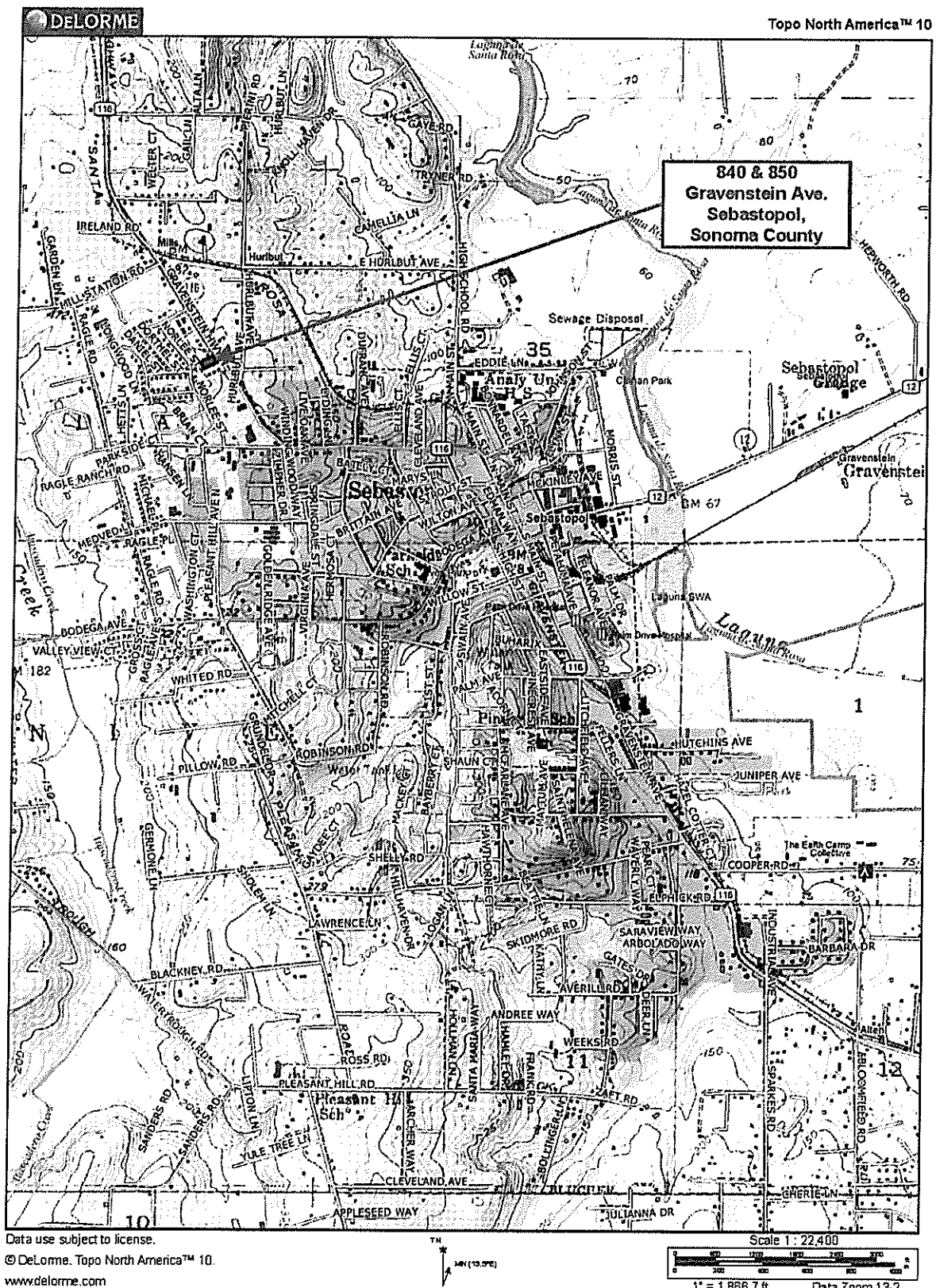



Figure 1. Location of subject parcels.

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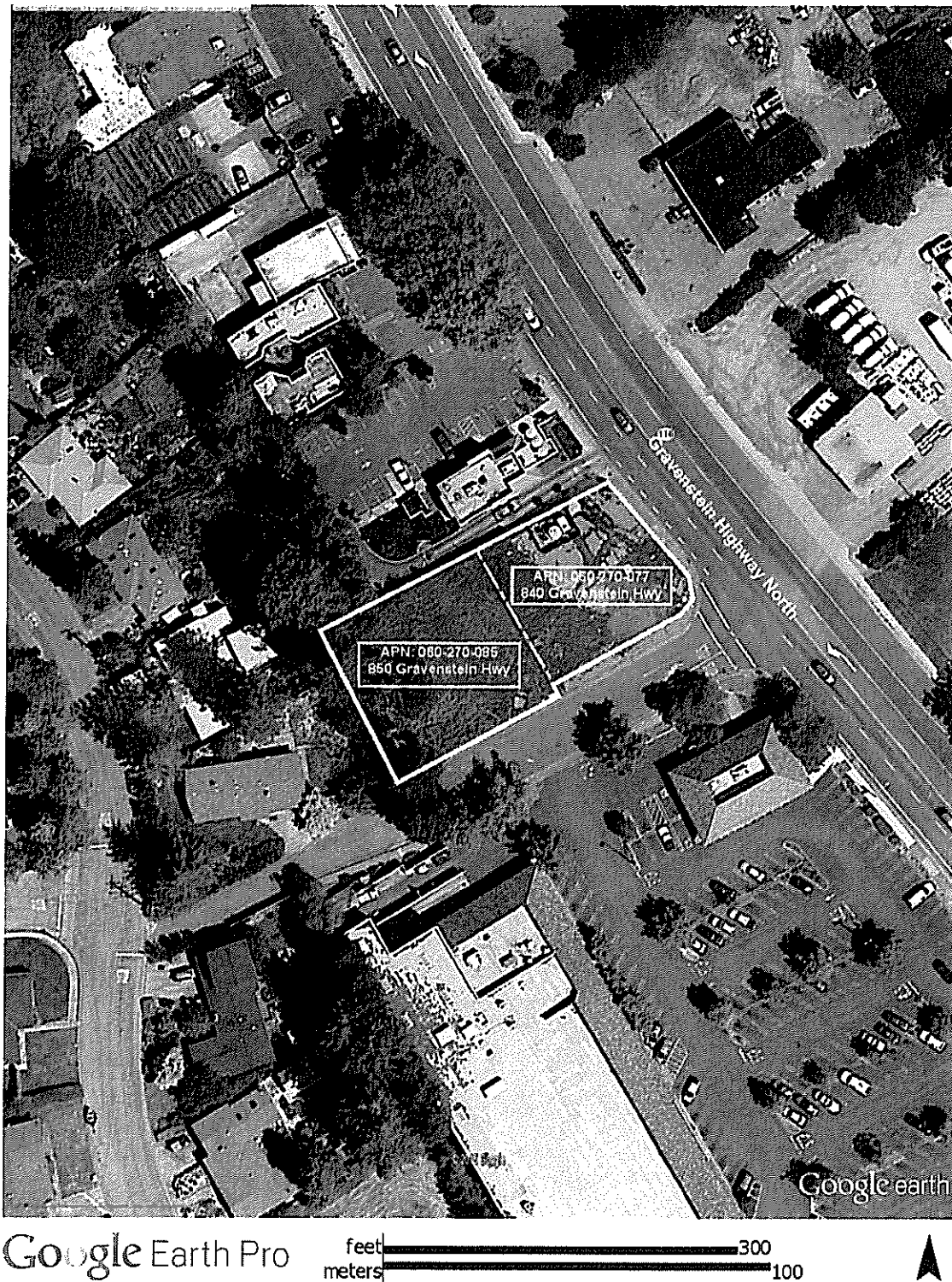


Figure 2. Aerial photograph of subject parcels.

MAY 14 2018



Figure 3. Street view photograph of 840 Gravenstein Highway North parcel.



Google Earth Pro

feet 10
meters 3



Figure 4. Street view photograph of 850 Gravenstein Highway North parcel.

MAY 14 2018

The dominant grasses and forbs included slender wild oats (*Avena barbata*), English plaitain (*Plantago lanceolata*), rough cats-tongue (*Hypochaeris radicata*), Queen Anne's lace (*Daucus carota*), and wild radish (*Raphanus sativa*). Other species observed included English ivy (*Hedera helix*) and Himalayan blackberry (*Rubus armeniacus*) associated with the trees along the western end of the site. Other species included soft chess (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum*), field bindweed (*Convolvulus arvensis*), spring vetch (*Vicia sativa*), prickly lettuce (*Lactuca serriola*), field mustard (*Hirschfeldia incana*), prostrate knotweed (*Polygonum aviculare* ssp. *depressum*), fiddle dock (*Rumex pulcher*), and telegraph weed (*Heterotheca grandiflora*). The native California poppy (*Eschscholzia californica*) was also observed at the site.

There were no features at the site that indicated the possible presence of wetland habitat, such as depressions that could pond water and/or plants commonly associated with wetland habitat. The mapped soil type over most of the site is Sebastopol sandy loam, 2 to 9% slopes, which is categorized as a well-drained soil and not one known to support seasonal wetlands. A small area of the site is mapped as having Goldridge fine sandy loam, 2 to 9% slopes, which is a catergorized as a moderately well drained soil and not commonly

A portion of the eastern parcel (APN: 060-270-077) consisted of concrete and other hardscape from prior use of the site for automotive services.

SPECIAL-STATUS SPECIES OCCURRING IN VICINITY

Special-status species generally include the following:

- Listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (FESA) (50 CFR §17.12) and/or the State of California as threatened or endangered under the California Endangered Species Act (CESA) (Fish and Game Code §2050 *et seq.*) or candidates for possible future listing as threatened or endangered under FESA or CESA.
- Wildlife species identified as fully protected species or species of special concern by the CDFW.
- Bird species protected through the Migratory Bird Treaty Act of 1918, which makes it unlawful to destroy active bird nests, eggs, and young. Section 3503.5 of the California Fish and Game Code also makes it unlawful to take, possess or destroy birds in the Falconiformes (birds of prey, vultures, eagles, falcons) and Strigiformes (owls) families, which can include nest disturbance from construction and other activities.

- Plants¹ listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 *et seq.*), or meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
 - ♦ Species considered by the CNPS to be “rare, threatened or endangered in California” (Lists 1A, 1B and 2);
 - ♦ Species that may warrant consideration on the basis of local significance or recent biological information;
 - ♦ Some species included on the CNDDDB *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008; now California Department of Fish and Wildlife – CDFW).
- Considered a **locally significant species**, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Special-status Plants

A total of forty-six special-status plants reportedly occur in the region based on information from the California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants². While marginally suitable habitat is present at the site for several of the species that occur in grassland habitat, suitable habitat for most of special-status species is not present at the site.

Although it is unlikely that any special-status plant species are present at the site, there are two special-status plant species found in the region that occur in habitat similar to that occurring at the site, including bent-flowered fiddleneck (*Amsinckia lunaris*), seaside tarplant (*Hemizonia congesta* ssp. *congesta*), but surveys would be needed during the spring to determine if these species are present at the site. Neither of these species are protected under FESA or CESA, but meet the CEQA definition of a special-status species based in its designation as *Species rare and endangered in California and elsewhere* by CNPS.

¹ Special-status plants are defined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, California Department of Fish and Game (CDFG). Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. November 24, 2009.

² Region defined as area covered by the following U.S. Geological Survey Quadrangle maps: Santa Rosa, Sebastopol, Healdsburg, Two Rocks, and Cotati.

Special-status Animals

The CNDDDB lists 21 special-status species of invertebrates, fish and wildlife as occurring in the region of the site. Most of these species are associated with aquatic habitat or seasonal wetlands and, therefore, would not be expected to occur at the site. The only special-status species that could occur at the site would be the pallid bat, a California species of concern. If present, it would roost in the trees along the western side of the site. Other species commonly associated with habitat similar to that present at the site, such as the burrowing owl and American badger, would not be expected to occur due to the close proximity of surrounding development and regular disturbance of the site by mowing.

The site is over one mile west of the Laguna de Santa Rosa, which is the western boundary of the Santa Rosa Plain and reported range of the California tiger salamander, and this species is not expected to occur at the site.

SUMMARY

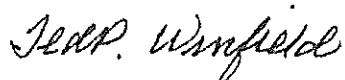
The site is surrounded by development and although some native trees are present, the habitat suitability of the site is limited due to the dominance by non-native annual grasses and forbs, the small size of the site, and regular disturbance of the site (annual mowing, human activity immediately adjacent to the site).

Suitable habitat for special-status species is extremely limited to possible nesting habitat for migratory song birds (trees, ground-nesting birds) and bats. The presence of human activity surrounding the site probably limits the suitability of the trees to provide nesting habitat for birds. The site is too small to provide quality foraging habitat for raptors.

The possible presence of nesting birds would likely have to be documented prior to development of the site. If the trees are to be removed, determination of possible presence of the pallid bat or other species of bats probably would be requested by CDFW. If either of these animals are present, measures to avoid impacts would likely be part of conditions of approval for development of the site.

Habitat for species of plants and animals protected by FESA and/or CESA, or considered fully protected by CDFW is absent at the site.

Sincerely,



Ted P. Winfield, Ph.D.



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

North Coast Regional Water Quality Control Board

October 9, 2015

Ms. Sandra Stone
5653 Mount Hood Court
Martinez, CA 94553
sand1216@yahoo.com

Dear Ms. Stone:

Subject: No Further Action

Site: Homan Tire, 840 North Gravenstein Highway, Sebastopol
Case No. 1TS0674

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

JOHN W. CORRELL, CHAIR | MATTHEW ST. JOHN, EXECUTIVE OFFICER

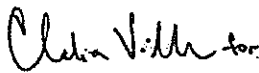
5550 Skyline Blvd., Suite A, Santa Rosa, CA 95403 | www.waterboards.ca.gov/northcoast

MATTHEW ST. JOHN
MSJ

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

Please contact Craig Hunt of my staff at (707) 570-3767 or Craig.Hunt@waterboards.ca.gov if you have any questions regarding this matter.

Sincerely,



Digitally signed by
Claudia Villacorta
Date: 2015.10.08
12:51:39 -07'00'

Matthias St. John
Executive Officer

151009_CSH_Homan_NFA.docx

cc: Mr. Bob Clark-Riddell, Pangea Environmental, briddell@pangeaenv.com
Mr. Roland Stone, roland-stone@att.net
Ms. Leslye Choate, Sonoma County Environmental Health Department,
leslye.choate@sonoma-county.org
Mr. Rich Emig, remig@cityofsebastopol.org
Mr. Ron Crocker, crocker@mmrecommercial.com

10/14/2015



ARCHAEOLOGICAL SURVEY REPORT FOR THE EXCHNAGE BANK PROJECT
(APN 060-270-085 AND -077), 840 AND 850 GRAVENSTEIN HIGHWAY,
SEBASTOPOL, SONOMA COUNTY, CALIFORNIA

Prepared for:

Sue Maddigan
Facilities and Purchasing Manager
Exchange Bank

Prepared by:

Robert Gleaton, M.A.
Alex DeGeorgey, M.A., RPA
Alta Archaeological Consulting
15 Third Street
Santa Rosa, CA 95401

MAY 14 2018

A handwritten signature in black ink, appearing to be "DM", located below the date stamp.

USGS 7.5' Sebastopol Quadrangle; Less than 0.5-acre Study Area; Township 7 North, Range 9 West, Unsectioned Portion of the Canada de Jovine Land Grant; Negative Survey

August 2015

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I. SUMMARY OF FINDINGS

The following Archaeological Survey Report (ASR) documents the adequacy of identification efforts and presents the results of investigations within the Study Area boundaries. The study was designed to identify any archaeological, historical, or cultural resources located within the Area of Potential Effect(s) (APE) for the proposed Exchange Bank Project. Fieldwork was conducted on July 31, 2015 by Robert Gleaton and entailed an intensive cultural resources inventory of the entire archaeological APE. The project area is on two vacant lots located in the City of Sebastopol. Ground surface visibility was poor due to vegetation and/or pavement associated with previous development. No prehistoric or historic cultural resources were identified within the project area as a result of this investigation.

II. INTRODUCTION

The proposed project entails construct an Exchange Bank building on two undeveloped parcels (APNs 060-270-085 and -077) located at 840 and 850 Gravenstein Highway within the city of Sebastopol (Maps 1 and 2). A cultural resources inventory was conducted to satisfy requirements of Section 106 of the National Historic Preservation Act (36 CFR 800), the California Environmental Quality Act (CEQA), the responsibilities codified in Public Resource Code sections 5097, and it's implementing guidelines 21082 and 21083.2. Fieldwork was completed by ALTA on July 31, 2015 for the purpose of identifying cultural resources within the APE. No cultural resources were identified within the project area.

III. PROJECT DESCRIPTION AND LOCATION

The project area is situated in the City of Sebastopol on two undeveloped parcels (APNs 060-270-085 and -077), in Sonoma County, California (Maps 1 & 2). The street address of the property is 840 and 850 Gravenstein Highway. The project area is bounded by Highway 116 to the east, Tocchini Street to the south, two residential properties to the west, and a Taco Bell restaurant to the north. The entire project area includes less than 0.5 acres of land.

The Bank Exchange Project is located on the USGS 7.5' Sebastopol Quadrangle map in Township 7 North, Range 9 West, in an unsectioned portion of the Canada de Jovine Land Grant; of the Mount Diablo Base and Meridian (MDBM).

IV. SOURCES CONSULTED

Records Search and Literature Review

On July 30, 2015, Mr. Robert Gleaton, Archaeologist with ALTA, conducted a records search (File number 15-0207) at the Northwest Information Center (NWIC) located on the campus of Sonoma State University. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historical records and reports for an 18-

county area that includes Sonoma County. The records search included a review of all site records and study reports on file within a one-half mile radius of the project area.

Table 1. Summary of Previous Cultural Resources Studies within Search Radius

NWIC No.	Author	Year	Title
S-387	Fredrickson, Dave	1976	Archaeological Survey Report for Group B EDA Public Works Capital Development and Investment Program P.L. 94-369.
S-986	Eisenman, Lynn	1978	A Cultural Resources Study of the Ragle Ranch Park, Sonoma County, California.
S-1653	Fredrickson, Dave et al.	1979	Archaeological Auger Investigations at CA-SON-1195, 7801 Covert Lane, Sebastopol, California (letter report).
S-2054	Chavez, David	1980	Cultural Resources Review of the Sebastopol General Plan Study Area, Sonoma County, California.
S-2458	Ramiller, Suzanne Marie, et al.	1981	Overview of Prehistoric archaeology for the Northwest Region, California Archaeological Sits Survey: Del Norte, Humbolt, Mendocino, Lake, Sonoma, Napa, Marin, Contra Costa, Alameda.
S-7889	Origer, Thomas M.	1982	Temporal Control in the Southern North Coast Ranges of California: The Application of Obsidian Hydration Analysis.
S-6737	Porter, Chris D.	1984	Archaeological Investigation of "Gravenstein North" a 4-acre Subdivision of Assessors' Parcel #5-013 at 699 Gravenstein Highway North, Sebastopol.
S-9456	Jordan, Leigh	1987	An Archaeological Study of the Proposed Townhouse Project on the Russell Schreiber Property at 7775 Healdsburg Avenue, Sebastopol, Sonoma County.
S-11039	Origer, Thomas M.	1989	An Archaeological Survey of the John Murray Property at 7205 East Hurlbut Avenue, Sebastopol, Sonoma County, California.
S-11978	Origer, Thomas M.	1990	An Archaeological Survey for the Riggs Annexation Project, Sebastopol, Sonoma County, California.
S-12433	Flynn, Katherine	1992	A Cultural Resources Evaluation of the Tentative Map for Sanford M. Dickey III, 7870 Brookside Avenue, Sebastopol, CA.
S-15386	Peron, Rene	1993	An Archaeological Investigation for a Use Permit of a 2.15 Acre Parcel at 1270 Gravenstein Hwy. North, Sonoma County, California, UP 93-419.
S-18215	Beard, Vicki R. and Thomas M. Origer	1996	A Cultural Resources Study for the O'reilly & Associates Office Park Project, Sebastopol, Sonoma County, California.
S-18750	Gerike, Christian et al.	1996	Cultural Resources Study for the Santa Rosa Subregional Long-Term Wastewater Project.
S-31631	Chattan, Cassandra	2009	A Cultural Resources Evaluation and Historic Structures Evaluation of the Property at 7991 Covert Lane, Ssebastopol, Sonoma County, California.
S-44548	Hanes, Erin	2013	Cultural Resources Constraints Report: Gravenstein Highway HPR Replacement, Sebastopol.

Table 2. Summary of Cultural Resources within Search Radius

Trinomial	Primary #	Site Type	Description
CA-SON-1101/H	P-49-001029	Multicomponent	Site of historic Ragle Homestead and prehistoric obsidian lithic scatter.
CA-SON-1195	P-49-001121	Prehistoric	Shell midden with lithic flakes, fire-cracked rock, bird and mammal bone.
CA-SON-429	P-49-000429	Prehistoric	Shell midden with obsidian flakes.
N/A	P-49-003338	Historic	House, barn, and water tower built in early twentieth century.
CA-SON-1781H	P-49-001514	Historic	Mill station and portions of Petaluma and Santa Rosa Railroad.
N/A	P-49-004217	Historic	19 th century home, barn, and orchard.

Sources consulted include archaeological site and survey base maps, survey reports, site records, historic General Land Office (GLO) maps, the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and the California Points of Historical Interest as updated by the Office of Historic Preservation History Property Directory (OHP 07-2012).

A review of archaeological site and survey maps revealed that a total of sixteen cultural resources studies have been previously performed within a one-half mile radius of the current project area (Table 1). No cultural resource studies have been conducted within the project area.

A total of six cultural resources are present within the records search radius. No cultural resources are documented within the APE. Cultural resources consist of three historic (P-49-001514, P-49-004217, and P-49-003338), two prehistoric (P-49-000429 and P-49-001121), and one multicomponent site (P-49-001029).

The nearest recorded site (P-49-003338) is located about 0.25 miles south-southeast of the current project area. The site consist of a historic barn, water tower, and house. The date of the water tower and barn could not be determine, but the house "likely replaced an older home on the property was built in 1922 based on the size and scaring on the boards and the square nails used in construction the barn appears to date to the later portion of the nineteenth century" (Chattan 2006).

Site (P-49-001514) is located about 0.3 miles north-northwest of the project area and consists of a historic mill station and railroad crossing that is part of the old Sebastopol to Petaluma electric railroad. The site is described as "two concrete perimeter foundations adjacent to the old Sebastopol to Petaluma electric Railroad crossing (now the beginning of the Sonoma County Regional Park Trail). One foundation is the remains of the Mill Station, other foundations unknown" (Gmoser and Alvarez 1993).

Site Historic site P-49-004217 is located about 0.58-miles to the north-northwest of the project area, near the edge of the records search radius. The site was originally recorded in 1981 and consist of a house, barn, and apple orchard that were in good condition (Peterson 1981). The site record was updated in 1992 (Hope 1992 by Caltrans, and again in July of 2008. and the house

was noted as suffering from "deferred maintenance" and the barn appeared to be in similar condition. However, the resources were recorded as retaining "sufficient integrity to convey their significance, although continued deferred maintenance will eventually take its toll" (Painter 2008). The site was last updated in 2013 and the resources at this time had been "razed" and the property was being prepped for new construction (Hanes 2013).

Prehistoric site CA-SON-1195 is located about 0.4-miles southeast of the project area. The site is known as the Covert Lane Site and consist of a shell midden with "Marine shell, bird and mammal bone, chert and obsidian waste flakes, small quantity of fire-cracked rock" (Quinn 1979). Test excavations of the site included over twenty auger borings and revealed that the entire site area has been disturbed due to heavy equipment activities.

The multicomponent site CA-SON-1101/H is situated about one-mile southwest of the project area. The site is described as containing "building foundations with related architectural debris from the George J. Ragle homestead and outbuildings" dating to 1849 and "a wide scatter of obsidian flake and tool fragments (100+ flakes mainly visible in badger back-dirt" (Thompson et al. 1978).

Prehistoric site CA-SON-461 consists of "an area of dark midden composed in part of shell, obsidian flaking waster, broken stones, charcoal and ash" (Upson 1969). The site is situated about 1100 feet north of E. Hurlbut Avenue.

The 1866 general land office (GLO) map of the area does not depict any developments within the project area. The 1867 Map of Sonoma County plots the project area within the Laguna School district and on lands owned by the "Ragles", located northwest of the town of Sebastopol (Bowers 1867). The 1900 and 1908 map of the project area shows the 1867 property has been divided into additional lots with no owners or acreage listed (Ricksecker and Walkup 1900; McIntyre and Lewis 1908).

The 1935 and 1942 USGS Sebastopol Quadrangle maps does not depict any buildings or structures within the project area. The project area is plotted within an orchard on the 1954 and 1968 maps. The 1954 (photorevised 1980) Sebastopol Quadrangle map depicts one building situated within the eastern boundary of the project area. Recent (2013) Google Earth aerial, satellite, and street view images of the project area indicate the building shown on the 1954 (photorevised 1980) USGS Sebastopol map is no longer present.

NATIVE AMERICAN CONSULTATION

The Native American Heritage Commission (NAHC) was contacted in writing on July 28, 2015 to review the Sacred Lands Files for any resources present within the project area and to request the contact information for the Native American groups in the area. A response letter from the NAHC dated August 4, 2015, stated that the Sacred Lands File indicated that no Native American resources are currently known in the vicinity of the project area. On August 6, 2015, contact letters were sent to both Native individuals listed by the NAHC to inform the Federated Indians of Graton Rancheria (FIGR) about the proposed project and to solicit any concerns. On August 11th, 2015, telephone calls were placed to FIGR concerning the project. ALTA was informed by FIGR to contact Buffy McQuillen, their Tribal Historic Preservation Officer (THPO), and a phone call was

placed. To date, ALTA has not received a reply from Native American consulted as part of this project. Appendix A provides copies of the Native American correspondences.

V. BACKGROUND

As the significance of cultural resources is best assessed with regard to environmental and cultural contexts, descriptions of the natural and cultural setting of the project region are presented below.

ENVIRONMENT

The project area is situated within the Coast Range geologic province. The North Coast Range is comprised of a geologic feature unique to California, the Franciscan Formation, which dictates the vegetative communities. The Franciscan Formation is comprised of serpentine, sandstone, and other sedimentary rocks. This area is characterized by a Mediterranean climate that averages about 40 inches of rainfall annually (World Climate 2013). The winters are cool and wet, and the summers are hot and dry. Annual temperatures for this region range from about 35 to 92 degrees Fahrenheit.

The project area is located on two vacant lots in an urban setting within the City of Sebastopol. The nearest natural stream to the project area is Atascadero Creek located 0.75 miles to the southeast. The project area is situated at about 202 feet above mean sea level on a slope less than 5%. Residential or commercial properties bound the project area to the north and west; paved roads bound it to the south and east. Vegetation communities within the project location includes native and non-native annual and perennial grasses and forbs. At least two species of oak trees are located along a wooden fence within the properties western boundary. Several redwood trees are located directly adjacent to project area, opposite the western boundary.

Local soil within the project location is classified as the Sebastopol series (hffc). This series consist of deep, well drained soils formed in material weathered from soft sandstone. The soils are found on old costal terraces at elevations of 100 to 1,000 feet, with slopes ranging from 2 to 30%. The typical soil profile ranges from a sandy loam that transitions into a clay at 28 to 57 inches below ground surface (UC Davis 2015; USDA 2015). The underlying geology of the project area consist of upper Pliocene (Miocene to Pleistocene) marine deposits (Koenig 1963).

ETHNOGRAPHY

Distributed over the lands of Mendocino, Lake, and Sonoma Counties are the many independent bands of Pomo Indians. The Pomo Indians are among the most widely studied and best-known groups in California. A vast amount of literature is available describing their culture, customs, and life ways (Barrett 1908, 1917, 1952; Bean and Theodoratus 1978; Fredrickson 1984; Gifford and Kroeber 1939; Kniffen 1939; Kroeber 1925; Loeb 1926; McLendon and Oswalt 1978; Peri et. al 1985; Stewart 1943). Seven distinct and mutually unintelligible languages are recognized under the rubric of Pomo (Barrett 1908). These languages are delineated by geographic divisions, which include: Northern, Central, Southern, Eastern, Southeastern, Northeastern, and Southwestern. The project area is located within the territory of the Northern Pomo.

Samuel Barrett's (1908) *The Ethnography of the Pomo and Neighboring Tribes* describes old villages, uninhabited modern village, and inhabited village sites. The nearest ethnographic site is an inhabited village named *Balíkletcawi*. The site is noted as being on the southern part of the town of Sebastopol. The site's name is derived from the Russian River division of Southern Pomo dialect for the words alder, tree, house, and elderberry. At the time the ethnography was written in 1908, the site consisted of a single house in which about seven people inhabited; however, Barrett notes it was once a populace village (1908: 213-214). The total number of Pomo who spoke this dialect, not including those residing in the town of Sebastopol, totaled 25 people at the time of the ethnography (Barrett 1908:212). The nearest old village site to the project area is named *masíkawánī*, situated near the western shore of the Laguna de Santa Rosa at a point about a mile and a half west-northwest of the town of Sebastopol, located on the Sebring ranch (Barrett 1908:223).

PREHISTORY

Over half a century of archaeological investigations in the North Coast Ranges has revealed a record of hunter-gatherer occupation spanning 12,000 years. The cultural chronology of this area is best described as part of the overall cultural chronology for the central North Coast Ranges. A number of cultural chronologies have been developed for this region (cf. Basgall 1982; Fredrickson 1974; Fredrickson and White 1988; Hildebrandt and Hayes 1984; Jones and Hayes 1993; Layton 1990; Meighan 1955; White and King 1993; White 2002).

In his 1974 doctoral dissertation David A. Fredrickson proposed five chronological periods and related cultural patterns. The Paleo-Indian Period (10,000 to 6000 BC) is represented as a hunting adaptation characterized by large fluted projectile points. The Lower Archaic Period (6000 to 2000 BC) is distinguished by an emphasis on plant exploitation as evidenced by high frequencies of milling tools. The Middle Archaic (3000-1000 BC) is characterized by the introduction of mortar and pestle technology and the assumed exploitation of acorns. The Upper Archaic Period (1000 BC to AD 100) is represented growing social complexity marked by status differentiation, complex trade networks, and the development of "group oriented religious activities" (Fredrickson 1974:48). The Emergent Period (AD 500 to Historic times) is marked by the use/introduction of bow and arrow technology, expansion of exchange relations, and the establishment of clearly defined territorial systems.

HISTORY

A review of historical literature and maps pertaining to this area of Sonoma County revealed that the study area is located within the Canada de Jonive, a 10,787-acre Mexican era land grant (Beck and Haase 1974). James black, a Scottish national, received the two square-league grant around 1845. The town of Sebastopol was founded by H.P. Morris in 1853, and was originally named Pine Grove. The name of the town was apparently changed at the time of the Crimean War because "of a local fight in which one party found its "Sebastopol" in the general store" (Gudde 1998: 354).

After the westward migration and the Gold Rush of the 1850s, an increased amount of settlers came to farm the area. In 1902, the apple industry "brought a steady rural prosperity to the town and Sebastopol" and was incorporated in 1902 with schools, churches, hotels, canneries, mills,

wineries, and an opera house. However, in the latter half of the Twentieth Century, the apple industry struggled to compete with other apple producing regions, and began to decline economically. The rise of larger shopping centers in other Sonoma County communities led Sebastopol to change from a "full-service town with a complete range of stores to one with a more limited range of goods and services" (City of Sebastopol 2015).

The 1867 Map of Sonoma County depicts the project area is located within the Laguna School district and on lands owned by the 'Ragles', located northwest of the town of Sebastopol (Bowers 1867). George J. Ragle is noted as a pioneer of Green Valley who was born in Tennessee in 1826 and arrived in California by Ox in 1849. In 1850 he purchased 80-acres of land in Sonoma County. By 1854 he had owned 325-acres that included his farm in the Spring Hill School District located one and one-half miles from the town of Sebastopol. His property is noted as containing an orchard that produced apples, peaches, timber, hay, and grain. The 132-acre western portion of the farm was cared for by his adopted son, Alexander Barnett Ragle, and was used for dairy and sheep stock. George Ragle's political affiliation changed from Democrat to Republican during 1860 amid the secessionist movement, as "he did not agree with the Union principles"; however, he rejoined his former party after a few years (Lewis Publishing Co. 1889: 338, 341).

VI. FIELD METHODS

Consulting archaeologist, Robert Gleaton, conducted a field survey of the project on July 31st, 2015. Survey reconnaissance consisted of an intensive survey of the entire area of potential effects (APNs 060-270-085, -077) that are to be impacted by the proposed project. The area that was surveyed using transect spacing no greater than 3 meters and conducted in a roughly north-south orientated transects. Photos were taken of the project area and surroundings. The ground surface was examined for evidence of cultural materials, changes in soil color, texture, or composition. Survey of the western parcel (APN 060-270-085) commenced along the western fence-line. The roughly north-south orientated wooden fence has two oak trees and various vines growing adjacent to it. Soil in this area is a medium to dark brown silty sand that contains an approximate 30-40% gravel content ranging from granules to pebbles, subrounded to subangular. About 35-feet east of the western fence the soil transitions to a light brown silty sand. Vegetation is dominated by perennial and annual grasses and forbs. Soil visibility was on average 5-10%. The disturbance of soil by rodents (bioturbation) provided much of the soil visibility. One fragment of a glass bottle body was observed on the surface about 50-feet west of the eastern fence and 40-feet north of Tocchini Street. The fragment has the white printing on it, "[Un]der Authority of [the Charles E. Hires CO.]", and is likely a fragment of a Hires Root Beer bottle circa 1950s or 1960s. One small fragment of a white ceramic sherd with no markings or decorations was observed on the surface about 10-feet south of the glass bottle fragment. Modern trash (plastics, food bags, etc.) were observed throughout the project area. These items do not represent cultural resources and were not formally recorded.

The western parcel (APN 060-270-077) was delineated by a locked chain-linked fence that prevented close field inspection. However, approximately three quarters of the ground surface appeared to be covered by pavement or asphalt that is likely the remains of a foundation for the previous building plotted on the 1954 (photorevised 1980) Sebastopol USGS Quadrangle map.

Two modern utility boxes were observed on the property, as well as a number of metal drums. A number of monitoring wells were observed on the parcel and have a triangle printed on the cover of a metal seal. Recent subsurface ground disturbance had exposed the native soil (light brown silty sand), leaving tractor/truck tire imprints (Appendix B).

VII. STUDY FINDINGS AND CONCLUSIONS

A cultural resources inventory was conducted to satisfy requirements of Section 106 the National Historic Preservation Act and the CEQA. An archaeological field survey was completed for the purpose of identifying cultural resources within the project area. The resulting document addresses these responsibilities of Section 106 of the National Historic Preservation Act (36 CFR 800), the California Environmental Quality Act (CEQA), the responsibilities codified in Public Resource Code sections 5097, and it's implementing guidelines 21082 and 21083.2.

A literature review and surface survey of the proposed project area revealed that no cultural resources are present within the project location. The project as presently designed is not expected to have an adverse effect on cultural resources.

If previously unidentified cultural resources are encountered during project implementation, avoid altering the materials and their context. A qualified professional archaeologist should be contacted to evaluate the situation. Project personnel should not collect cultural resources. Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.

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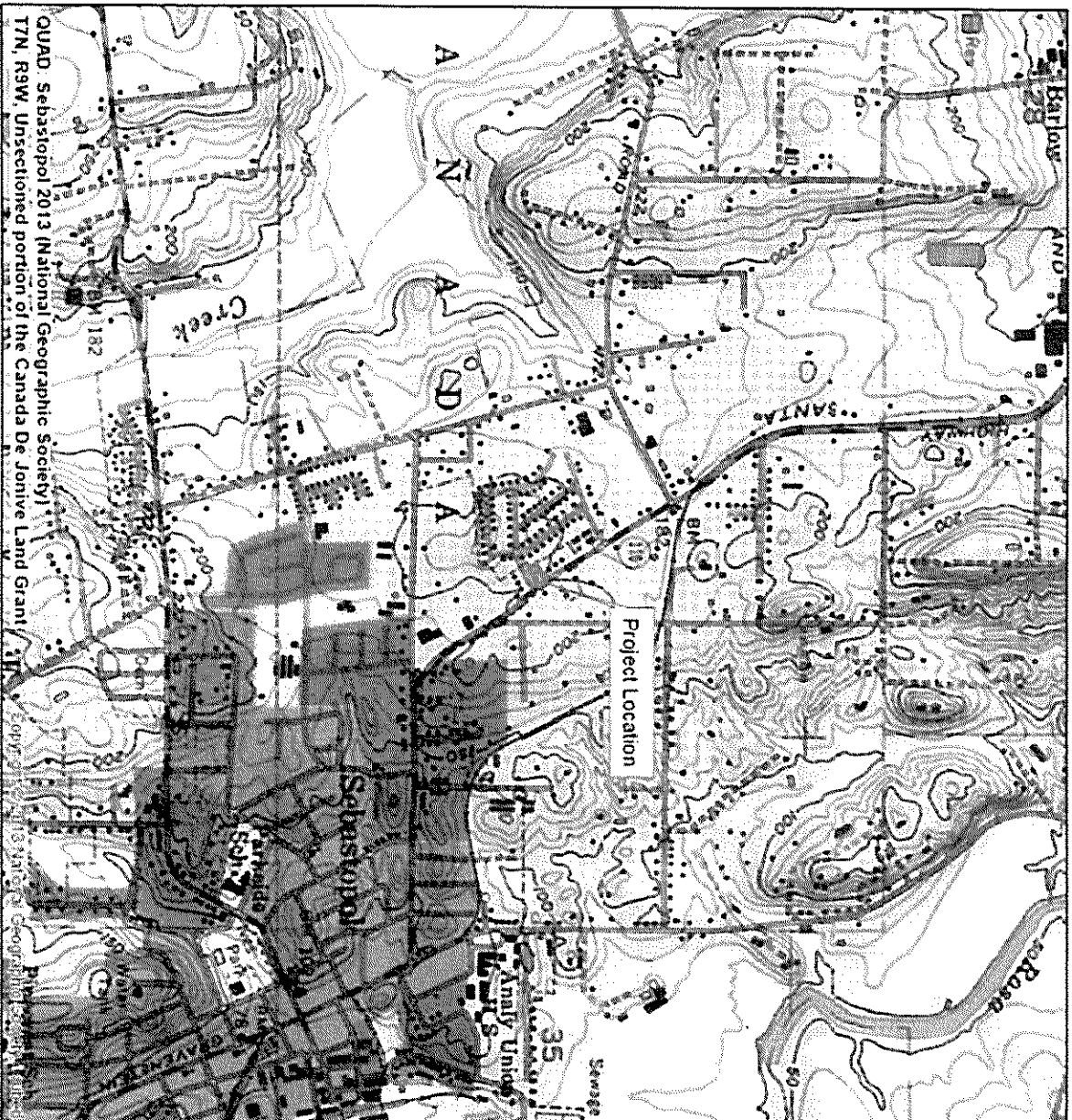
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IX. MAPS

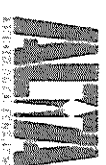
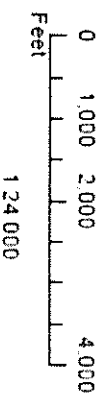
Map 1 Project Location



QUAD: Sebastopol 2013 (National Geographic Society)
 17N, 63W, Unsectioned portion of the Canada De Jure Land Grant

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 Projection: Mercator Auxiliary Sphere
 Datum: WGS 1984
 Units: Meter

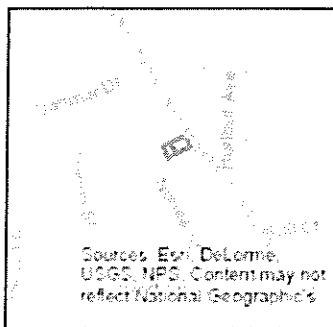
Guemerville	Headsburg	
QUAD	Sebastopol	
Valley Ford	Two Rock	Colat
Sources: Esri, USGS, NOAA		



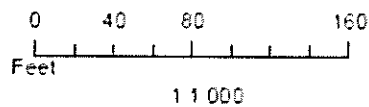
Map Date 7/28/2015

Map 1. Project Location

Map 2. Project Area



Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 Projection: Mercator Auxiliary Sphere
 Datum: WGS 1984
 Units: Meter



Map Date 7/28/2015

Map 2. Project Area

APPENDIX A- PUBLIC OUTREACH

Sacred Lands File and Native American Contact Information List

NATIVE AMERICAN HERITAGE COMMISSION

915 Capital Mall, RM 364
Sacramento, CA 95814
(916) 653-4082
(916) 657-5390 – Fax
naahc@pacbell.net

Date of Request: 7/28/2015

Project Name and Number: Exchange Bank Project

County: Sonoma

USGS 7.5' Quadrangle(s): Sebastopol

Legal Description: Township 6 North, Range 9 West, Unsectioned portion of the Canada de Jonive Land Grant. Mount Diablo Base Meridian

Project Description: Exchange bank proposes to construct a new bank at 840 Gravenstein Highway in Sebastopol, California. The property is currently a vacant lot.

Company/Firm/Agency: Alta Archaeological Consulting

Contact Person: Alex DeGeorgey **Email:** Alex@AltaAC.com

Street Address: 15 Third Street

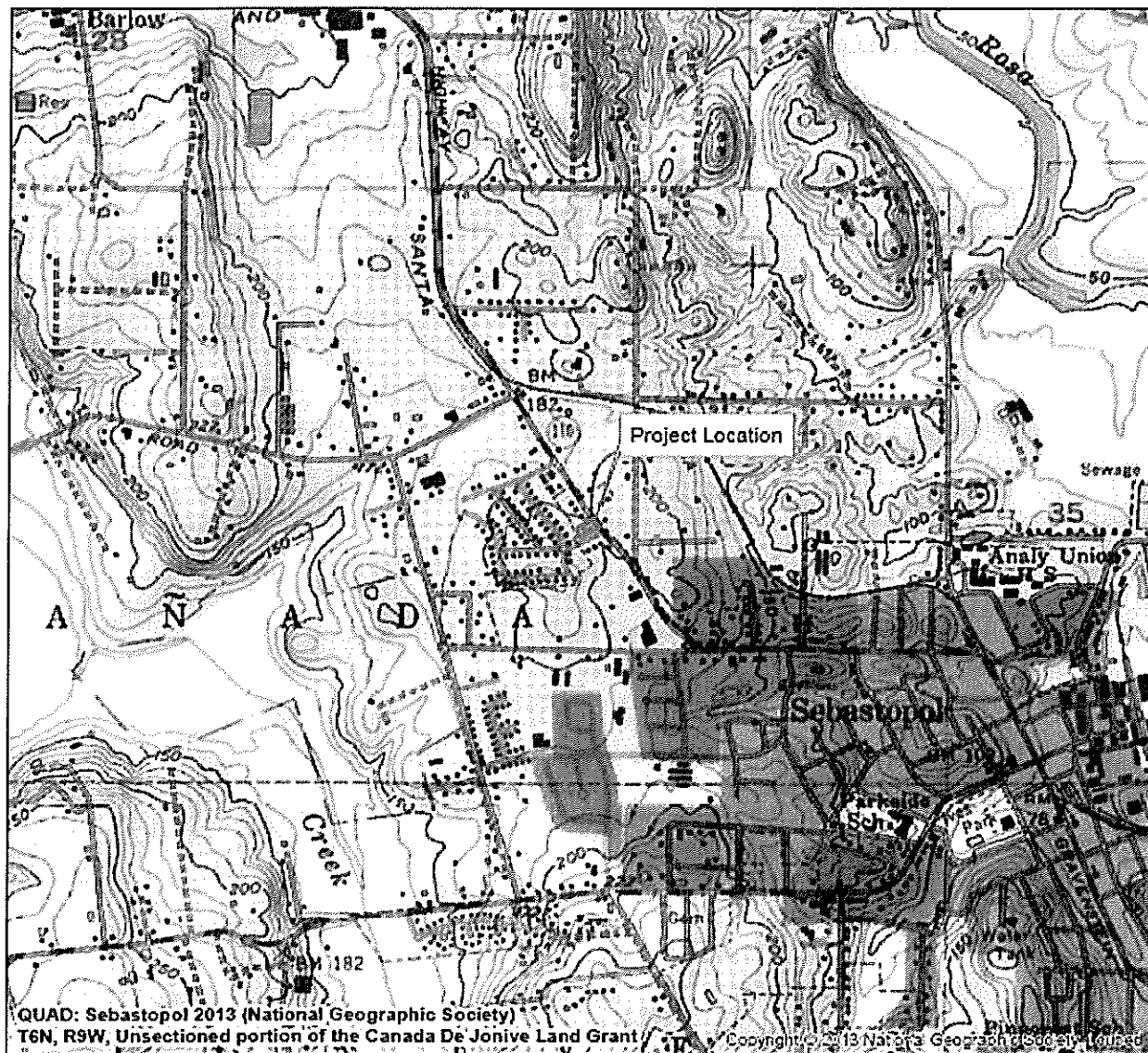
City/State: Santa Rosa, California **Zip:** 95401

Phone: (707) 544-4206 **Fax:** (707) 546-2135

Attachments:

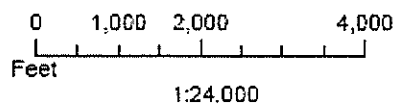
- Project Location Map

Map 1. Project Location



Guerneville	Healdsburg	
QUAD		
	Sebastopol	
Valley Ford	Two Rock	Cotati
Sources: Esri, USGS, NOAA		

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 Projection: Mercator Auxiliary Sphere
 Datum: WGS 1984
 Units: Meter



Map Date: 7/28/2015

NATIVE AMERICAN HERITAGE COMMISSION

1850 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95601
(916) 373-3710
Fax (916) 373-5471



August 4, 2015

Alex DeGeorgey
Alta Archaeological Consulting
15 Third Street
Santa Rosa, CA 95401

Email to: Alex@altaAC.com

Re: Exchange Bank Project, Sonoma County.

Dear Mr. DeGeorgey,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

A handwritten signature in cursive script that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

**Native American Contact List
Sonoma County
August 4, 2015**

The Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste Coast Miwok
Rohnert Park, CA 94928 Southern Pomo
coastmiwok@aol.com
(415) 279-4844 Cell
(707) 566-2288 ext 103

The Federated Indians of Graton Rancheria
Greg Sarris, Chairperson
6400 Redwood Drive, Ste Coast Miwok
Rohnert Park, CA 94928 Southern Pomo
coastmiwok@aol.com
(707) 566-2288 Office

(707) 566-2291 Fax

The Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park, CA 94928 Southern Pomo
coastmiwok@aol.com
(415) 279-4844 Cell
(707) 566-2288 ext 103

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5007.94 of the Public Resources Code and Section 5007.93 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Project Name and number: Exchange Bank Project, Sonoma County.

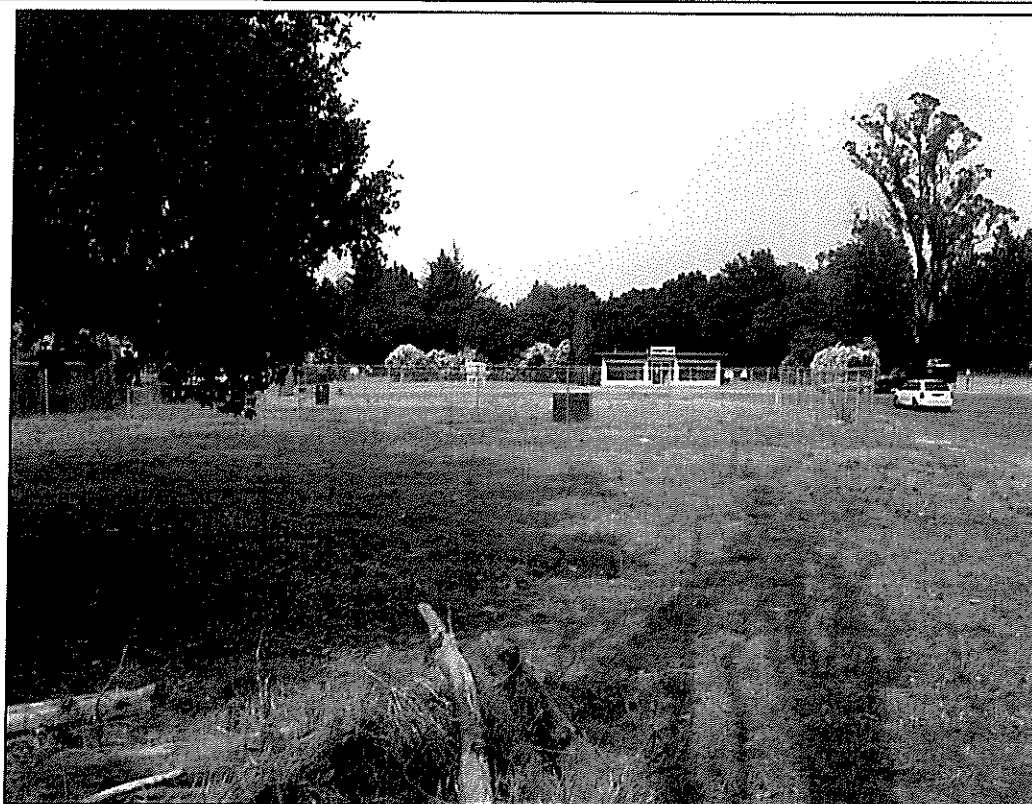


Figure 1: View of the project area looking east.

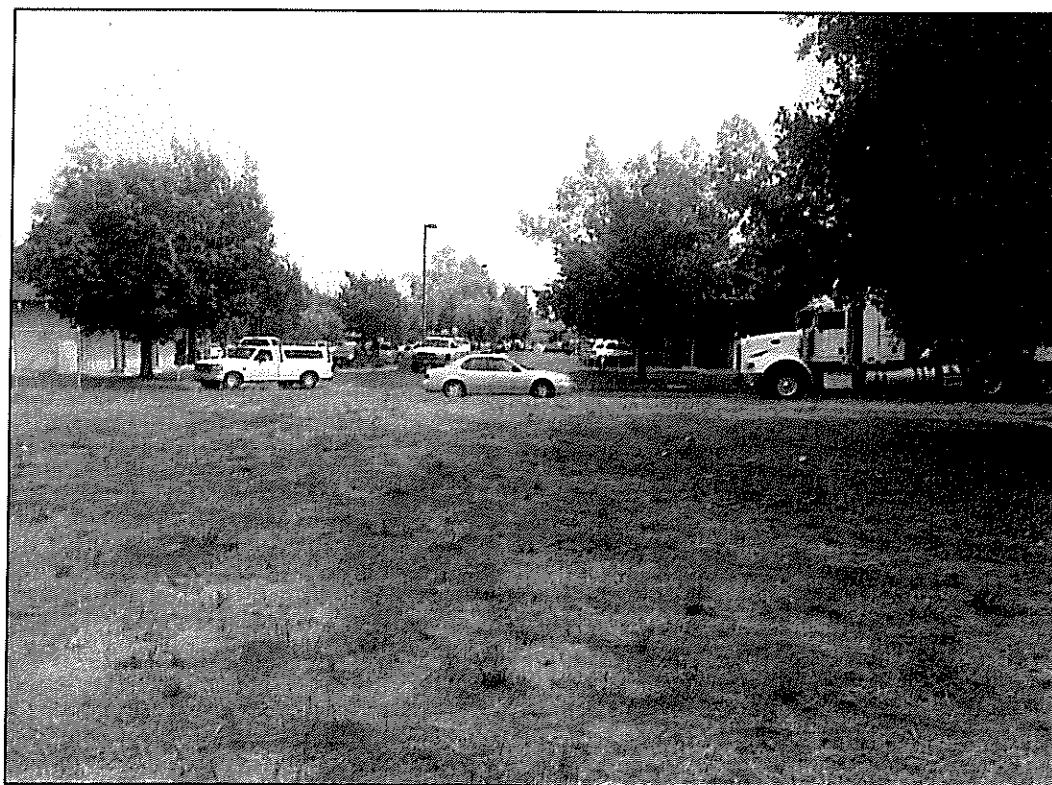


Figure 2: View of the project area looking south.



Figure 3: View of the project area looking west.

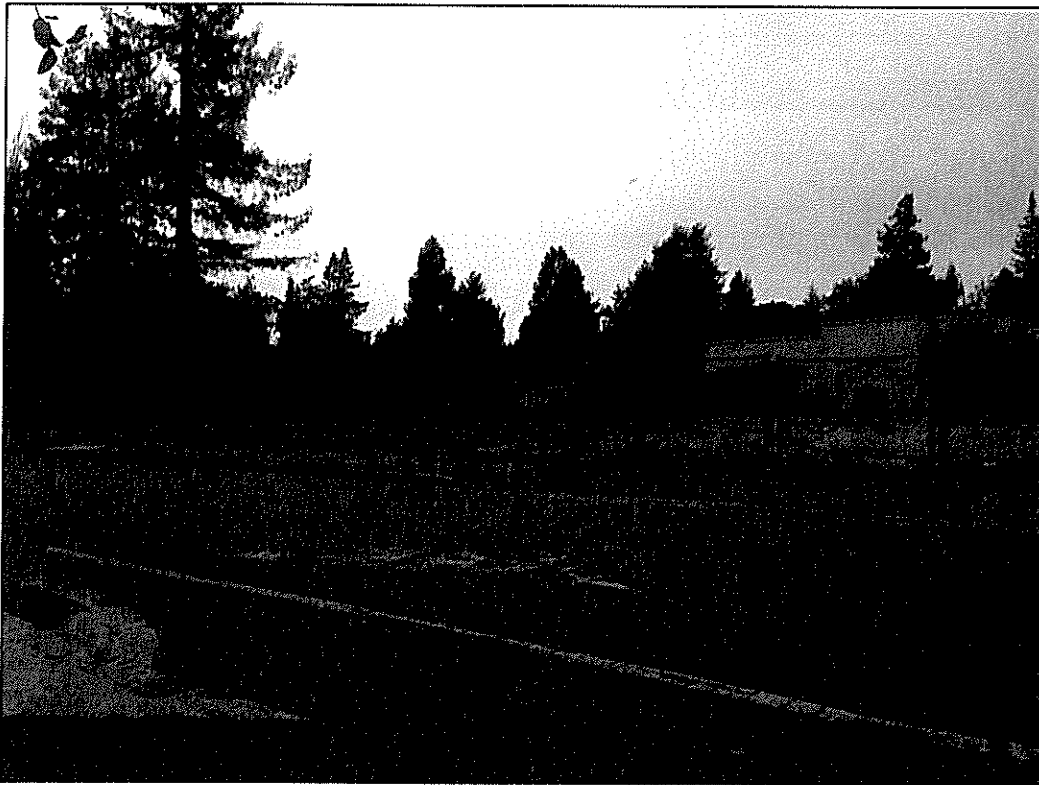


Figure 4: View of the project location looking northwest. Tocchini Street is in foreground –the Taco Bell restaurant building is in the background.

BECKY DUCKLES
LANDSCAPE CONSULTANT & ARBORIST
8876 OCCIDENTAL RD., SEBASTOPOL, CA., 95472
707.829.0555 PH 707.824.0516 FAX

EXCHANGE BANK
840/850 Gravenstein Highway North - Sebastopol

ARBORIST & LANDSCAPE REVIEW
June 5, 2018

After reviewing the site plan and landscape plans for this project, the following comments are offered regarding the proposed site development.

In regard to the proposed removal of the few existing trees in the rear of the lot, they are not high quality specimens and the project will be better with their removal and replacement with appropriate species. One of the proposed focal points of the landscape plan is a grove of flowering cherry trees in the front. With a few exceptions, cherries, both flowering and fruiting, do not survive long in this climate and location. They are highly susceptible to several fungal and bacterial diseases after a few years, which are then usually followed by borers attacking the stressed trees.

Respectfully submitted,

Becky Duckles

Becky Duckles, City Arborist & Landscape Consultant
ISA Certified Arborist #WE-0796A

