

CEQA ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Atria Lafayette – Repair of Existing Roadway Retaining Wall
County File #CDDP20-03005 / CDTP19-00057
2. **Lead Agency Name and Address:** Contra Costa County
Department of Conservation and Development
30 Muir Rd.
Martinez, CA 94553
3. **Contact Person and Phone Number:** Syd Sotoodeh, Planner II
(925) 674-7815
4. **Project Location:** 1545 Pleasant Hill Road in the unincorporated Lafayette area
(Assessor's Parcel Number: 169-090-002)
5. **Project Sponsor's Name and Address:** Rich Francis
c/o The Olympus Group, Inc.
8850 Greenback Ln., Suite C
Orangevale, CA 95662
6. **General Plan Designation:** OS – Open Space / CC – Congregate Care
7. **Zoning:** P-1 – Planned Unit District
8. **Description of Project:** The applicant is seeking approval to modify Development Plan County File #DP88-3007 to allow repairs of the existing driveway structure for the Atria Park Lafayette assisted living facility. The project consists of the following elements:
 - a) Installation of two new soldier pile retaining walls with concrete cribbing and tie rods (maximum height of 30 feet), within a maximum 19-feet of the existing “block” retaining walls that support either side of the existing 250-linear-foot driveway;
 - b) Replacement of approximately 650 cubic yards of non-engineered fill below the existing roadway with new engineered fill to reduce soil expansion;
 - c) Placement of approximately 1,450 cubic yards of granular backfill between the existing block retaining walls and the new soldier pile retaining walls;
 - d) Enlargement of the existing box culvert beneath the driveway to a maximum height and width of 19-feet and length of 64-feet;
 - e) Replacement of the existing roadway surface;
 - f) Request for approval of a tree permit to allow removal of up to 29 code-protected trees for heavy equipment access, and work within the dripline of up to 21 trees for required construction activities.

The Development Plan (County File #DP88-3077) to allow construction and operation of a congregate care assisted living facility was approved in 1991 and the facility was constructed in the year 2003. The purpose of this project is for life safety repairs of the existing driveway structure. The access driveway is a two-lane, approximately 250-foot-long private road

approximately 20 feet wide with an additional 5-foot-wide sidewalk. The road traverses a ravine corridor and tributary to “Murderers Creek” which flows through the existing box culvert as part of the two-unit, block type retaining walls which support the driveway. The entire structure is sinking and there is evidence of major rutting on the roadway due to the failure of the retaining walls which show evidence of differential displacement. The project does not propose to regrade or change the geometry of the “Murderers Creek” channel in any way. To construct the project, approximately 30 feet of the bottom of the wash on each side of the retaining walls will need to be cleared to provide access for heavy equipment to work in the area. In addition to renovating the cleared area, the area between the existing retaining walls and the new walls will be available for landscaping.

Approximately 3 acres of the ravine corridor is protected as open space through a recorded scenic easement/restricted development area pursuant to the conditions of approval (COA) for County File #DP88-3007. Approximately 13,000 square feet of the approximately 27,275 square-foot project area is located within the restricted development area. Therefore, the project also seeks approval of the County to perform work within the restricted development area.

The COA for County File #DP88-3007 prohibit access via Diablo View Road to the Atria Park Lafayette facility. Thus, the driveway as accessed from Pleasant Hill Road is the primary means of ingress and egress to the facility for residents, employees, visitors, and health and safety responders. At least one lane of traffic on the private access driveway is to remain open during construction to allow for vehicle access. If approved, the retrofitted retaining walls will allow the driveway to be repaved for continued, safe access to the facility.

- 9. Surrounding Land Uses and Setting:** The subject property is an approximately 6.4-acre site located east of Taylor Boulevard and north of Pleasant Hill Boulevard within a predominantly residential area in an unincorporated area of Lafayette in Contra Costa County.

The subject property is located within two General Plan Land Use Designations. The existing access driveway to the Atria Park Lafayette Facility is located within an Open Space (OS) land use designation, while the existing buildings and grounds for use by residents, visitors, and staff are located on a portion of the property with a Congregate Care (CC) land use designation. Properties to the north, northwest, and east of the subject property are within Single-Family Residential land use designations for very low, low, and medium density housing (SV, SL, and SM). While the subject property is zoned as a Planned-Unit District (P-1), the surrounding properties are zoned for residential uses (R-10, R-15, and R-20). A primarily residential area of the City of Lafayette lies west and southwest of the subject property.

The subject property contains a congregate care facility known as Atria Park of Lafayette, which provides assisted living and memory care for older adults. The facility, which is staffed to provide 24/7 care and amenities for independent living in a home-like setting, has been in operation for over 15 years. Supportive, block type retaining walls across the heavily wooded ravine corridor and a box culvert to sustain the flow of an intermittent stream known as “Murderers Creek” were constructed in lieu of a bridge for primary access from Pleasant Hill Road.

10. Other public agencies whose approval is required (e.g., permits, financing, approval, or participation agreement):

- California Department of Fish & Wildlife
- Contra Costa County Building Inspection Division
- Contra Costa County Grading Inspection Division
- Contra Costa County Public Works Department
- Contra Costa County Consolidated Fire Protection District
- Contra Costa County Environmental Health
- Contra Costa County Central Sanitary

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

A Notice of Opportunity to Request Consultation was sent on September 18, 2020, to Wilton Rancheria. Wilton Rancheria responded in correspondence dated September 29, 2020 that they have no concern on this project and did not request a consultation. As a courtesy, the County will provide a copy of this environmental document for the Tribe's comments.

Environmental Factors Potentially Affected

The environmental factors checked below would have been potentially affected by this project, but have been mitigated in a manner as to not result in a significant effect on the environment:

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Services Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Environmental Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Syd Sotoodeh
Project Planner
Contra Costa County
Department of Conservation & Development

February 10, 2021

Date

ENVIRONMENTAL CHECKLIST

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project have a substantial adverse effect on a scenic vista?*

Less Than Significant Impact: Figure 9-1, Scenic Ridges & Waterways, of the Contra Costa County General Plan Open Space Element identifies the major scenic resources in the County. Views of these identified scenic resources are considered scenic vistas. The subject property is not located near a scenic ridge, nor is it visible from a scenic ridge, as shown on Figure 9-1. However, the subject property is located adjacent to Taylor Boulevard which has been designated by the County as a Scenic Route (Figure 5-4 of the County's General Plan). Thus, Scenic Route Policies 5-47 through 5-56 are applicable to this project and the potential impacts of future development on this resource must be considered. Specifically, policies 5-47, 5-49, 5-50, 5-55, and 5-56 apply directly to this project.

Approximately 3 acres of the subject property, primarily the ravine corridor and intermittent stream area, has been preserved as a natural, open space through a restricted development area (scenic easement). The majority of the area to be disturbed during construction activities is located within this scenic/open space area, which contains fairly heavy cover of mature Coast Live Oak, California Bay, eucalyptus, and other trees, and other vegetation such as grasses, ivy, and low shrubs. The subject property is located in an area that is fairly hilly with substantial tree cover and native grasses, and that is otherwise developed for residential and congregate care uses. Although the subject property is located adjacent to the Taylor Boulevard scenic route, the project site is more than 320 feet away from the route. As existing, the access driveway is not visible from Taylor Boulevard due to the fairly heavy cover of mature trees along the boulevard and on the subject property. Although the project proposes removing up to 29 trees for construction activities, the trees along Taylor Boulevard and the majority of trees, shrubs, and grasses located in the

western portion of the ravine/scenic easement will remain. In addition, even with the proposed renovations, the appearance (e.g., size, height) of the wall will remain substantially the same, and thus potential aesthetic impacts are low. Thus, the potential for the proposed project to retrofit the retaining walls and repair the access driveway to affect views of and from the Taylor Boulevard scenic route is less than significant.

- b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?*

No Impact: The subject property is not located adjacent to or near a state scenic highway. Thus, the retaining wall and driveway is not and will not be visible from any state designated scenic highway. Therefore, the proposed project to retrofit the retaining walls and repair the access driveway will have no impact on scenic resources within a state scenic highway.

- c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact With Mitigation: The subject property is a developed lot in an urbanized area of the County. The property has been developed with retaining walls to support the access driveway, an assisted living/memory care facility for older adults, parking areas, landscaped patios with outdoor seating and amenities for residents and staff, and wooden and metal fences for the property. The project site is located in the southern portion of the property and crossing a heavily wooded ravine corridor and “Murderers Creek”. As discussed above, Taylor Boulevard is a scenic route as shown in Figure 5-4 in the County’s General Plan, however, neither the existing retaining walls and driveway, nor the proposed expanded retaining walls, are visible from or to Taylor Boulevard due to many existing mature trees and shrubs on the western portion of the subject property and along the boulevard. However, the retrofitted retaining walls would be visible from Pleasant Hill Road. As mitigated, the new walls will be constructed of materials that blend in with their natural surroundings and reduce glare, which will in turn reduce any visual impacts. Additionally, staff recommends that the project be conditioned to require the planting of trees as restitution for those that are required to be removed, and to require landscaping to be planted on top of the walls between the existing retaining walls and the inside edges of the new walls to further retain the “natural” appearance and aesthetic of the wooded ravine. Therefore, the proposed walls will have a less than significant impact or potential for conflicts due to applicable zoning and other regulations governing scenic quality.

Potential Impact: The project has the potential to conflict with applicable regulations governing scenic quality of Taylor Boulevard and public views from the Pleasant Hill Road right-of way.

Implementation of the following mitigation measures would bring potential project-related impacts on public views of the site and regulations governing the quality of scenic routes to less than significant levels:

AES-1: **At least 15 days prior to Community Development Division (CDD) stamp-approval of plans for building permit**, a materials and color board shall be submitted to the CDD for review and approval. Materials used for the retaining wall are required to have a non-reflective, natural finish to minimize contrast with the natural landscape features

of the site. Those portions of the wall that are metal shall be painted to match the adjacent portions of the wall.

AES-2: Disturbance or removal of vegetation shall not exceed the minimum necessary to complete construction of the retrofitted retaining walls as is shown on the approved project plans. Restoration shall include the revegetation of stripped or exposed areas. **At least 15 days prior to Community Development Division (CDD) stamp-approval of plans for building permit**, a revegetation plan for all disturbed areas which incorporates native grasses and shrubs, or which otherwise complies with the State's Model Water Efficient Landscape Ordinance or the County's Water Efficient Landscape Ordinance, if the County's ordinance has been adopted, shall be submitted to the CDD for review and approval.

- d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

No Impact: The proposed project consists of retrofitting an existing retaining wall which supports an existing driveway to the Atria Lafayette assisted living facility which has been in operation since the year 2003. No additional lighting for the roadway or pedestrian access is proposed as part of the project. In addition, materials and finishes in a non-reflective natural finish will be used which reduces the potential for the retrofitted wall to be a significant source of glare due to reflection. Thus, the proposed retaining wall will have no impact for new sources of substantial light or glare which would adversely affect day or nighttime views in the area.

Sources of Information

Contra Costa County Code. "Title 8 – Zoning." Accessed in 2020.

https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT8ZO.

Contra Costa County General Plan. "Chapter 5: Transportation and Circulation Element." 2005-2020.

<http://www.co.contra-costa.ca.us/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=>.

Contra Costa County General Plan. "Chapter 9: Open Space Element." 2005-2020.

<http://www.co.contra-costa.ca.us/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId=>.

Revised Project Plans, received on 10 July 2020.

Staff Site Visit, 18 December 2019.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURAL AND FOREST RESOURCES – Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

a - e) No Impact: The project site, located in the P-1 Planned Unit zoning district and the Congregate Care (CC) General Plan Land use designation, is within an “Urban and Built-Up Land” area as shown on the California Department of Conservation’s *Contra Costa County Important Farmland 2016* map. Neither the subject property, nor those in the vicinity, are zoned for agricultural use. The site is not under a Williamson Act contract with the County. Additionally, although the project site is heavily wooded, the project site is not considered forest land as defined by California Public Resources Code Section 12220(g) or timberland as defined by California Public Resources Code Section 4526. Development of the proposed retaining wall retrofit project would not involve substantial changes to the existing urban environment. Therefore, the project will have no impact on agricultural or forest resources.

Sources of Information

Contra Costa County Code. “Title 8 – Zoning.” Accessed in 2020.

https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT8ZO.

California Department of Conservation. “California Important Farmland Finder.” Accessed in 2020.

<https://maps.conservation.ca.gov/DLRP/CIFF/>.

California Public Resources Code. Accessed in 2020

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY – Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant Impact: Contra Costa County is within the San Francisco Bay air basin, which is regulated by the Bay Area Air Quality Management District (BAAQMD) pursuant to the *Spare the Air, Cool the Climate Final 2017 Clean Air Plan*. The purpose of the *Clean Air Plan* is to bring the air basin into compliance with the requirements of Federal and State air quality standards. BAAQMD has prepared CEQA Guidelines to assist lead agencies in air quality analysis, as well as to promote sustainable development in the region. The CEQA Guidelines support lead agencies in analyzing air quality impacts. If, after analysis, the project's air quality impacts are found to be below the significance thresholds, then the air quality impacts may be considered less than significant.

The proposed project consists of retrofitting existing retaining walls which support an existing driveway. The two-lane driveway would then be resurfaced and would continue to be used as the primary means of ingress and egress to the Atria Park Lafayette assisted living facility which has been in operation since 2003. The retrofitting project is necessary to slow the failure of the existing retaining walls due to the poor design and construction of the original walls. Potential impacts of the project to air quality would be related to the construction portion of the project (e.g., the running of internal combustion engines) would be temporary in nature. In addition, implementation of mitigation measures **AIR-1** through **AIR-9** as identified in paragraph (c) of this section would ensure that potential construction-related impacts have a less than significant impact. Once constructed, there is no element of the proposed project that has the potential for impacting air quality any more than the current, everyday use of the existing driveway. Thus, the proposed project would not conflict with the Clean Air Plan or obstruct its implementation.

- b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Less Than Significant Impact: As mentioned in the response to question (a), the only element of the proposed project that has the potential for impacting air quality is the temporary running of, e.g., internal combustion engines of the construction equipment. The emissions generated from the construction activities is negligible, and therefore there will be a less than significant impact on the air quality in the area. In addition, these temporary construction impacts will be lessened by the implementation of typical best management practices that will be required as conditions of the entitlement should it be approved. Therefore, the project would not cause a violation of any air quality standard and would not result in a considerable net increase of any criteria pollutant and would have a less than significant impact upon existing or projected air quality standards.

- c) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant With Mitigation Incorporated: The assisted living Facility which utilizes the existing driveway is approximately 80 feet from the nearest location of the wall to be repaired. Additionally, the nearest single-family residences are approximately 160 feet to the east and 220 feet to the west of the retaining walls and driveway. Although the existing two-lane driveway will be resurfaced once the supporting retaining walls are retrofitted, no part of the project will increase the width of the roadway for additional vehicle access. Thus, operation of the driveway is not expected to expose sensitive receptors to substantial pollutant concentrations beyond the current, everyday use of the driveway.

However, construction activities would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to sensitive receptors (e.g., nearby residences, schools) from the project site. Construction and grading activities would produce combustion emissions from various sources, including heavy equipment engines and motor vehicles used by the construction workers. The main portion of the project would occur within an approximately 15,000 square-foot area of the subject property. Dust would be generated during site clearing, grading, and construction activities. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed, amount of activity, soil conditions, and meteorological conditions.

Potential Impact: Grading and construction activities could have a potentially significant adverse, if temporary, environmental impact on sensitive receptors during project construction. Consequently, the applicant is required to implement the following BAAQMD, Basic Construction Mitigation Measures during construction, which the BAAQMD recommends in order to reduce construction dust and exhaust impacts. In addition, staff recommends implementing a mitigation measure which would restrict trucks to utilizing main roads to the best extent possible to reduce impacts on residential neighborhoods.

The following mitigations shall be included on all construction plans:

- AIR-1:** All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- AIR-2:** All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- AIR-3:** All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- AIR-4:** All vehicle speeds on unpaved roads shall be limited to 15 mph.
- AIR-5:** All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- AIR-6:** Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- AIR-7:** All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- AIR-8:** The property owner or site contractor shall post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
- AIR-9:** All haul trucks transporting soil, sand, or other loose materials shall be limited to travel on main routes to the best extent possible to avoid residential neighborhoods. The project applicant shall submit a proposed haul route **prior to the issuance of a grading permit**.

Implementation of these mitigation measures would reduce the impact on the sensitive receptors during project construction to a less than significant level.

- d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less Than Significant Impact: The proposed project consists of the retrofitting existing retaining walls for the continued support of an existing access driveway to an assisted living facility that has been in operation for more than 15 years. There is no aspect of the project that has the potential to result in other emissions, including those leading to odors, that impact air quality beyond the existing, everyday use of the driveway as the primary means of ingress and egress for the Facility. Therefore, the project will have a less than significant impact on adversely affecting a substantial number of people.

Sources of Information

Bay Area Air Quality Management District. "California Environmental Quality Act, Air Quality Guidelines." May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

Bay Area Air Quality Management District. "Spare the Air, Cool the Climate Final, 2017 Clean Air Plan." Adopted 19 April 2017. http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES – <i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant Impact With Mitigation Incorporated: A Biological Resources Assessment (Assessment) was prepared by Bargas Environmental Consulting (Bargas, dated November 2000) for the project site. Preparation of this report included a review of pertinent data sources and literature on relevant background information and habitat characteristics of the project area. In addition, a field survey was conducted to assess the current site conditions, to characterize and document plant and wildlife species observed on the site, and to identify the presence of pre-existing bird or raptor nests and habitat that could potentially support special-status species.

The Assessment found that four species of special status plants potentially occur in the project area, including Diablo helianthella, Bent-flowered fiddleneck, Western leatherwood, and Mt. Diablo fairy lantern. The presence of these plant species could not be definitively determined in the time period in which the biological field survey was conducted, therefore, although the probability of one or more of the species to occur in the project area is low, there is a potential for special status plants to be adversely impacted by implementation of the project. In addition to special species plants, animal species of special concern are known to occur in the vicinity of the site and for which suitable nesting habitat may be present, including the Hoary Bat and the Pallid Bat. Although neither were observed during the biological field survey, there is a potential for the Hoary Bat to utilize the foliage of trees for its preferred day roost, and for the Pallid Bat to utilize the existing culvert as its habitat. Finally, trees and shrubs on and adjacent to the project site could provide nesting habitat for native and/or migratory birds. As birds are present in nearly all natural and anthropogenic environments, the proposed project has the potential to adversely affect nesting birds that are protected by the Migratory Bird Treaty Act and Fish and Game Code.

In order to rule out potential presence of special status or rare plants, Bargas recommends that a preconstruction survey be performed within 100 feet of all project work by a qualified biologist during the appropriate period of time when such plants may occur, likely in early- to -mid-spring. Bargas further recommends conducting a visual and acoustic preconstruction survey within and immediately adjacent to the construction footprint, including the pre-cast cement box culvert, for roosting bats by a qualified, agency-approved bat biologist. Finally, to comply with the Migratory Bird Treaty Act, Bargas recommends that preconstruction surveys for nesting birds by a qualified biologist be conducted within 300 feet of all project work areas no more than one week before construction activities begin.

Potential Impact: According to the Assessment prepared by Bargas, the potential for the proposed project to have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or US Fish and Wildlife Service is unlikely or of low probability. However, in the case of potentially occurring special status plants, bats, and nesting birds, any potential effects would be minimized through the implementation of proposed mitigation measures.

Thus, implementation of the following mitigation measures would bring potential project-related impacts on biological resources to less than significant levels:

BIO-1: If project construction-related activities take place during blooming periods (generally, early- to mid-spring), preconstruction surveys for special status plants within 100 feet of the project site work areas shall be conducted by a qualified biologist **no more than 14 days prior to the commencement of site grading or construction activities**. If special status plants are found and located in area where potential impacts may occur, the survey report shall identify the plant or plants, the potential impacts that could occur to those plants, and measures (such as avoidance, relocation, etc.) to minimize potential impacts as agreed upon by the California Department of Fish and Wildlife. Once the blooming season for the special status plant(s) has ended, the project can proceed without further regard to the plant site(s).

BIO-2: If project construction-related activities take place during the nesting season (February 1 through September 30), preconstruction surveys for nesting passerine birds and

raptors (birds of prey) shall be conducted by a qualified biologist **no more than 7 days prior to the commencement of tree removal, site grading, or construction activities, whichever occurs first**. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within 300 feet of the project work site (area of influence), an adequate protective buffer zone shall be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 200 feet for raptors. The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is in a line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).

- BIO-3:** To avoid potential impacts to special status bats, **no more than 14 days prior to the commencement of tree removal, site grading, or construction activities, whichever occurs first**, a visual and acoustic preconstruction survey for roosting bats shall be conducted by a qualified, agency-approved bat biologist within and immediately adjacent to the construction footprint, including the pre-cast cement box culvert. A minimum of one day and one evening shall be included in the visual preconstruction survey. The biologist shall contact CDFW if any occupied day roosts or maternity colonies / nurseries are identified within or immediately adjacent to the construction footprint, as appropriate. The biologist shall submit a memorandum, on a weekly basis or at other appropriate intervals, to CDFW to document compliance with this measure.
- BIO-4:** During ground-disturbing activities, if active non-maternity (bat) colony / nursery roosts are found, the Contractor will avoid them, if feasible, for the period of activity. If avoidance of the active day roost is not feasible, the agency approved bat biologist shall prepare a relocation plan and coordinate the construction of an alternative bat roost with CDFW. The agency-approved bat biologist shall implement the Bat Roost Relocation Plan before the commencement of construction activities. The agency-approved bat biologist shall remove roosts with approval from CDFW before bats may be triggered to go into torpor by night-time low temperatures dipping below 50°F (October 15), or after young are flying (September 1), using exclusion and deterrence techniques described below. The timeline to remove roosts is between September 1 and October 15. All efforts to avoid disturbance to maternity roosts shall be made during construction activities. The biologist shall submit a memorandum, on a weekly basis or at other appropriate intervals, to CDFW to document compliance with this measure.
- BIO-5:** During ground-disturbing activities, if non-maternity or non-torpor/hibernating individuals or groups of bats are found within the construction footprint, the agency-approved bat biologist shall work with CDFW and direct the Contractor to safely exclude the bats by either opening the roosting area to change the lighting and air-flow conditions or installing one-way doors or other appropriate methods specified by CDFW. The Contractor shall leave the roost undisturbed by project activities for a minimum of one (1) week after implementing exclusion and/or eviction activities. The Contractor shall not implement exclusion measures to evict bats from established maternity roosts or occupied torpor/hibernation roosts. The biologist shall submit a

memorandum, on a weekly basis or at other appropriate intervals, to CDFW to document compliance with this measure.

BIO-6: If bats are found to be present, pruning or removal of living trees / large shrubs or snags shall NOT occur during the maternity season between April 1 and September 1 to minimize the disturbance of young that may be present and unable to fly. The pruning or removal of living trees or snags must occur between the hours of 12:00 pm and sunset on days after nights when low temperatures were 50°F or warmer to minimize impacting bats that may be present in deep torpor. Sunset times shall be obtained from <https://www.timeanddate.com/sun/@7174212> and temperatures for prior-work nights shall be obtained from <http://www.wunderground.com/history/>. When it is necessary to perform crown reduction on trees over 12" diameter breast height or remove entire trees or branches over six inches in diameter, there shall be preliminary pruning of small branches less than 2" in diameter performed the day before in order to minimize the probability that bats would choose to roost in those trees the night before the work is performed. The trees/large shrubs or snags that are to be removed shall then be left on-site for a minimum of 24 hours to allow for any remaining bats to escape prior to breaking down, chipping, or removing the remains of the trees or snags.

- b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant Impact With Mitigation Incorporated: Pursuant to Figure 8-1 (Significant Ecological Area and Selected Locations of Protected Wildlife and Plans Species Areas) of the County General Plan, the subject property is located approximately 1.25 miles east of the Briones Hills significant resource area. This significant resource area consists of grasslands, oak woodlands, riparian areas, and creeks which may contain habitat for newts, western pond turtle, northern brown skink, ornate shrew, prairie falcon, mountain lion, and possibly Alameda whipsnake, grasshopper sparrow, golden eagle, badger, ringtail and bobcat. The Mount Diablo fairy lantern and Diablo helianthella (both discussed above) are also known and suspected to occur here, respectively. Additionally, the subject retaining walls and driveway crosses a ravine and tributary of "Murderers Creek" located on the property, which is an intermittent/seasonal stream.

Per the proposed project design plans, although the existing box culvert is to remain in-place, the project proposes to extend the culvert on both sides of the crossing and install cutoff walls. There would be direct effects and potential indirect effects to the seasonal stream from this work with the current project design plan. According to the Assessment, if the current design plan is to be utilized, the project proponent may be required to obtain a permit from the USACE San Francisco District, a water quality certification from the San Francisco Regional Water Quality Control Board, and a Streambed Alteration Agreement with the California Department of Fish & Wildlife prior to commencing with construction activities, including preparing the project site by removing trees or other riparian vegetation. Bargas recommends either modifying the project design to avoid impacting the seasonal stream or implementing mitigation measures to avoid conducting construction activities during wet or high-flow conditions. Bargas further recommends ensuring that construction personnel, equipment, and materials remain outside of the stream channel, and installing the appropriate erosion and sediment control in relation to best management practices.

Potential Impacts: According to the Assessment prepared by Bargas, the proposed Project is not expected to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service. However, as discussed above in paragraph (a), in the case of potentially occurring special status plants, or any species which may be found in a riparian habitat or other sensitive community, any potential effects would be minimized through the implementation of proposed mitigation measures.

In addition to the implementation of mitigation measures **BIO-1** through **BIO-6**, implementation of the following mitigation measures would bring potential project-related impacts on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service to less than significant levels:

BIO-7: Prior to issuance of grading or building permits or the removal of trees, whichever occurs first, the applicant shall submit proof that any permits required by the following agencies for work in the Murderers Creek tributary have been applied for or obtained, or show verification that no permits are required:

- Streambed Alteration Agreement from the Bay Delta Region (3) of CDFW
- 1010 Flood Permit from the Contra Costa County Department of Public Works, Flood Control District.
- CWA Section 404 Permit from the USACE San Francisco District
- CWA Section 401 Water Quality Certification from the San Francisco Regional Water Quality Control Board

BIO-8: During site preparation and construction activities, the following shall be implemented for avoidance and minimizations of direct effects to the seasonal stream, including but not limited to, those listed below:

- Construction activities near the seasonal stream and within the box culvert shall only occur during low flow or dry conditions.
- The contractor shall ensure that construction personnel, equipment, and materials avoid entering the stream channel.
- Prior to any ground disturbance, the appropriate best management practices for erosion and sediment control including, but not limited to, a silt construction fence and/or straw bales, shall be installed around the construction site in strategic locations.

- c) *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Less Than Significant Impact: The U.S. Army Corp of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) are two of the primary Federal agencies which enforce the Clean Water Act and administer the associated permitting program. As such, these agencies define wetland as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A single intermittent/seasonal

stream was observed and mapped within the Biological Study Area (BSA), with 0.011 acres and 132 linear feet located within the Project boundary and area of direct impacts. However, the project biologist found no obvious wetland indicators relating to seasonal ponding and no obvious ponding areas where seasonal waters had historically been present on the subject property.

Although there is no obvious state or federally protected wetland on the subject property, as an intermittent stream “Murderer’s Creek” may seasonally support flora and fauna that may be found in a wetland. However, implementation of mitigation measures **BIO-1** through **BIO-8** would reduce potential project-related impacts on state or federally protected wetlands to less than significant levels.

- d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?*

Less Than Significant Impact With Mitigation Incorporated: Pursuant to the biological Assessment prepared by Bargas, and as discussed above in sections a) and c), given the existing and significant anthropogenic development present in the Project area, there is not expected to be significant wildlife movement in the project area’s present state except, potentially, through the box culvert present under the existing roadway. While the overall length of the culvert from end-to-end will be increased as part of the proposed project, this should not have a significant adverse effect on any wildlife movement through it. Therefore, the proposed development is expected to have a less than significant impact on the movement of any native resident, migratory fish, or wildlife species, or with established native resident or migratory wildlife corridors, or the use of nursery sites. Furthermore, implementation of mitigation measures **BIO-1** through **BIO-8** would further reduce potential project-related impacts on wildlife movement to less than significant levels.

- e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact: The Contra Costa County Tree Protection and Preservation Ordinance provides for the protection of certain trees by regulating tree removal while allowing for reasonable development of private property. On any property proposed for development approval, the Ordinance requires tree alteration or removal to be considered as part of the project application. Due to the anticipated construction activities as part of the proposed project and the poor health and structure of trees near the project site, a request for a tree permit for the removal of approximately twenty-nine (29) code-protected trees and for the alteration of approximately seventeen (17) code-protected trees from potential ground disturbance is included with this proposed project (County File #TP19-0057). As such, approval of the proposed project would include conditions of approval for the restitution of any tree approved for removal, protection of remaining trees where work may occur within the drip lines of the trees, and all of the tree protection measures from the project's arborist report. As a result of CDD staff applying the Tree Protection and Preservation Ordinance to the proposed project, there would be no conflict with the Ordinance.

- f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact: There is one adopted habitat conservation plan in Contra Costa County, the East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan (HCP/NCCP), which was approved in May 2007 by the East Contra Costa County Habitat Conservancy, comprised of the cities of Brentwood, Clayton, Oakley, and Pittsburg, and Contra Costa County. The HCP/NCCP establishes a coordinated process for permitting and mitigating the incidental take of endangered species in eastern Contra Costa County. The Lafayette area is outside of the covered area for the HCP/NCCP, and therefore, the proposed project would not conflict with the provisions of the adopted HCP/NCCP. In addition, according to the Assessment prepared by Bargas, no other approved local, regional, or state habitat conservation plans are in effect for the project area.

Sources of Information

Bargas Environmental Consulting. "Biological Resources Assessment – Atria Park of Lafayette Main Road Retrofit." Dated November 2020.

Contra Costa County General Plan. "Chapter 8: Conservation Element." 2005-2020. <http://www.co.contra-costa.ca.us/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=>.

East Contra Costa County Habitat Conservancy. "East Contra Costa County Habitat Conservancy Website." Accessed in 2020. <https://www.contracosta.ca.gov/depart/cd/water/HCP/>

National Wetlands Inventory, U.S. Fish and Wildlife Service (FWS). Website. Accessed in 2020. <https://www.fws.gov/wetlands/>.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?*

No Impact: The California Public Resources code defines a historical resource as a resource that has been listed or is eligible for listing on the California Historical Register of Historical

Resources, a resource included in a local register of historical resources or identified as significant in a historical survey meeting the requirements of the Public Resources Code. Neither the subject property nor any of the existing structures on the subject property are listed on Contra Costa County's Historic Resources Inventory (updated through 2019).

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act Guidelines Section 15064.5?*

Less Than Significant With Mitigation Incorporated: Pursuant to Figure 9-2 (Archaeological Sensitivity Map) of the Contra Costa County General Plan Open Space Element, the project vicinity is within a largely urbanized area that was excluded from the archeological sensitivity survey, but it is noted that there are also significant archeological resources within this area.

Potential Impact: Subsurface construction activities have the potential to damage or destroy previously undiscovered historic and prehistoric resources.

Implementation of the following mitigation measures would reduce the potential impacts on archeological resources to less than significant levels:

CUL-1: If deposits of prehistoric or historical archaeological materials are encountered during ground disturbance activities, all work within 50 feet of the discovery shall be redirected. A qualified archaeologist certified by the Society for California Archaeology (SCA) and/or the Society of Professional Archaeology (SOPA), and the Native American Tribe that has requested consultation and/or demonstrated interest in the project shall be contacted to evaluate the significance of the finds and suggest appropriate mitigation(s) if deemed necessary.

CUL-2: If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, they will need to be avoided by impacts or such impacts must be mitigated. Upon completion of the archaeological assessment, a report should be prepared documenting the methods, results, and recommendations. The report should be submitted to the Northwest Information Center and appropriate Contra Costa County agencies.

Prehistoric materials can include flake-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite tool-making debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass ceramics, and other refuse.

- c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant With Mitigation Incorporated: The project record does not have any prior cultural resource studies being conducted at the subject property which indicates that human remains exist at the subject property.

Potential Impact: Nevertheless, there is a possibility that human remains could be present, and that accidental discovery could occur.

Implementation of the following mitigation measure would reduce the potential to disturb any human remains, including those outside of formal cemeteries, to a less than significant level:

CUL-3: Should human remains be uncovered during grading, trenching, or other on-site excavation(s), earthwork within 30 yards of these materials shall be stopped until the County coroner has had an opportunity to evaluate the significance of the human remains and determine the proper treatment and disposition of the remains. Pursuant to California Health and Safety Code Section 7050.5, if the coroner determines the remains may be those of a Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, the NAHC will then determine a Most Likely Descendant (MLD) tribe and contact them. The MLD tribe has 48 hours from the time they are given access to the site to make recommendations to the land owner for treatment and disposition of the ancestor's remains. The land owner shall follow the requirements of Public Resources Code Section 5097.98 for the remains.

Sources of Information

Contra Costa County General Plan. "Chapter 9: Open Space Element." 2005-2020. <http://www.co.contra-costa.ca.us/DocumentCenter/View/30919/Ch9-Open-Space-Element?bidId=>.

Contra Costa County. "Historic Resources Inventory." Revised 2019. Accessed in 2020. <https://www.contracosta.ca.gov/DocumentCenter/View/1116/Historic-Resources-Inventory-HRI?bidId=>.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less Than Significant Impact: The project involves the retrofitting of existing retaining walls and stabilization of the primary access roadway for the Atria Park Lafayette assisted living facility which has been in operation for over 15 years. Retrofitting the existing retaining walls involves the installation of soldier piles along the edges of both flanks of the road, installation of permanent concrete cribbing behind the soldier piles, and placing compacted backfill between the edge of

the existing road and the new concrete cribbing. Health and safety projects such as this generally do not involve the unnecessary consumption of energy resources. Diesel engines will be the primary source of energy as part of the construction phase and no part of the project is expected to lead to an increased use or capacity of the existing, two-lane driveway. In addition, the project will have no impact on the type or quantity of energy required to operate the facility. Thus, the project would have a less than significant impact on the consumption of energy resources.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

No Impact: The County has adopted a Climate Action Plan (CAP) which generally focuses on countywide policies rather than individual projects. There is no part of the proposed retaining wall retrofit project that would increase the use of energy by the existing assisted living facility. In general, the proposed project to retrofit an existing retaining wall which supports an access driveway would not be associated with high energy use or the production of energy. Therefore, the project will not conflict with a state or local plan for renewable energy or energy efficiency.

Sources of Information

Contra Costa County. "Climate Action Plan." Adopted by the Contra Costa County Board of Supervisors on 15 December 2015. <http://www.co.contra-costa.ca.us/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

a) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:*

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

Less Than Significant Impact: There are no active faults on the subject property. The nearest active fault is the Concord-Green Valley fault, which passes approximately 4 miles northeast of the project site. Consequently, the risk of surface fault rupture within the project area can be considered “low” and a less than significant impact. Further evaluation of fault hazards is not warranted.

ii) *Strong seismic ground shaking?*

Less Than Significant Impact: Due to the location of the project site with respect to the active San Francisco Bay Region faults, and the proximity of the active Concord-Green Valley fault, strong to violent ground shaking poses a potential hazard to improvements. The vulnerability of structures to damage from earthquake and ground shaking is dependent on the earthquake magnitude, distance to seismic source, and ground conditions of the site. The County has adopted the 2019 California Building Code (CBC), which requires use of seismic parameter that are based on soil profile types and proximity of faults deemed capable of generating strong/violent earthquake shaking. If the CBC is updated prior to issuance of construction permits, the design of the project shall be updated to ensure code compliance (i.e., compliance with the adopted CBC standards is required for all structures requiring building permits). There may be some ground shaking associated with the use of heavy equipment for the construction phase of the proposed project. However, the potential for exposing people or structures to substantial adverse effects because of ground shaking during construction activities is less than significant. Thus, further evaluation of ground shaking hazards is not warranted.

iii) *Seismic-related ground failure, including liquefaction?*

Less Than Significant Impact: Figure 10-5, Liquefaction Potential Map, of the Contra Costa County General Plan Safety Element, divides the County into three categories: “generally high”, “generally moderate to low”, and “generally low”. According to the Liquefaction Potential Map, the subject property is in the “generally low” category. For project sites classified “generally low” liquefaction potential, the expectation for geotechnical evaluation of this hazard is minimal. The soils investigation performed on behalf of the project applicant by Geotecnia (report dated June 8, 2018 and supplemental report dated April 16, 2019) included logging of two boreholes that were approximately 20 feet deep. The soils penetrated by the borings are too cohesive to liquefy. Consequently, the risk of liquification and associated ground failure can be considered less than significant, and further evaluation of liquefaction is not warranted.

iv) *Landslides?*

Less Than Significant Impact: Review of published geologic mapping issued by the U.S. Geological Survey (Nilsen, 1975) indicates no evidence of landslides on the project site. The nearest USGS landslide is located on the west side of Taylor Blvd, 250 ft. from the site and does not present a risk to the proposed road improvement project. Moreover, during their investigation, Geotecnia reported that no evidence of landslides was found. The investigation of the project geotechnical engineer indicates there is an on-going ground failure in the project area, involving "slope creep" of expansive soils. Slope creep typically occurs on slopes underlain by expansive clays and can damage structures on shallow foundations that are constructed too near the slope. The downslope movement includes both lateral and vertical components. It is a slow process, involving displacements of a small fraction of an inch per year; however, this movement accumulates and can result in several inches of lateral and vertical movement over the life of a structure.

Geotecnia’s reports provide recommendations to the applicant for design and reconstruction of the road segment through the area of the creek crossing. As proposed, the slope creep hazard will be mitigated by construction of the roadway behind a soldier pile wall having steel I-beams or H-beams that extend 10 feet into bedrock. Although there are no known landslides that will impact construction of the improvements, the earthwork and wall installation will be performed within a creek corridor. Thus, there is potential for a substantial increase in erosion, particularly during the construction period. Over the long term, it is anticipated that erosion will be reduced below the prevailing condition of the creek banks. The issue of erosion control is addressed in the following section of this CEQA Checklist.

b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact: According to the Soil Survey of Contra Costa County, the soils on the site are characterized by medium runoff, and the hazard of erosion is considered moderate on the flatter portions of the Atria Park property. However, the over-steepened creek banks within the project area pose a very high erosion hazard in its existing condition, and during the approximately 20 years since the congregate care facility project was developed, the Geotecnia report indicates that the flowline of the creek has been lowered by an estimated 3 feet at the road crossing.

A routine provision for grading permits in Contra Costa County is a requirement for submittal of an Erosion Control Plan. In this case, plans prepared by the Olympus Group include an Erosion Control Plan (see sheet C10, included with attached project plans). This plan is subject to technical review by inspectors of the County Grading Section. Normally there are refinements to erosion control plans as the winter rainy season approaches. This occurs during the late summer, when it is known what the status of the project will be on October 1st. Additional detail is provided to the Erosion Control Plan, including such items as provisions for (a) storage of extra erosion control materials on site and (b) monitoring of the performance of disturbed areas on the site during/immediately following significant rainstorms. If erosion control facilities are damaged or failing to perform as intended, the erosion control measures being implemented on the site are refined to correct the deficiency. Implementation of the Erosion Control Plan is expected to keep erosion to less than significant. No further mitigation is deemed to be necessary.

- c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact: As discussed in (a)(iii) above, the risk of liquefaction can be considered less than significant. Additionally, as discussed in (a)(iv) above, no landslides have been identified on the proposed site. The investigation of Geotecnia confirms that the native soils on the site overlying the bedrock are too cohesive to liquefy. In addition, structures can be safely constructed at the facility in a manner that is compliant with the applicable building code. The structures associated with the proposed project will be reviewed and permitted by the County Building Inspection Division (BID) and are not likely to cause any significant impacts that would lead to soil instability. Thus, the project's location would not impact these concerns at a significant level.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Less Than Significant Impact With Mitigation Incorporated: Laboratory testing presented in the Geotecnia report confirms that soils on the site are moderately expansive. Geotecnia also states that, based on their experience from similar projects in the site vicinity, there is potential for lateral and vertical variations in expansion. To mitigate the potential problems caused by expansive soils, the geotechnical report recommends that foundations for the retaining walls extend 10 ft. into bedrock and be designed to resist static and seismic loading of the retaining walls. Additionally, criteria are provided for the pavement section and subgrade materials that will effectively mitigate the adverse effects of expansive soils.

With regard to the potential for corrosive soils, the Survey of Contra Costa County considered the soil on the project site to be highly corrosive. Excessive sulfate in the soil (or groundwater) has potential to result in a reaction between cement in concrete and the soil. Criteria have been developed for evaluation of sulfate levels, and how they relate to cement reactivity with soils and/or groundwater. Testing of soil samples obtained from the project site indicate that water soluble sulfate concentrations are below the standard established for moderately corrosive soil. Similarly, the chloride ion concentrations were below the standard established for iron/steel that is in contact with the ground. To date no testing has been performed to evaluate the potential corrosion hazard. Therefore, no special mitigation of the corrosion potential mitigation was identified by Geotecnia report.

Potential Impact: The presence of moderately expansive soils and the potential presence of highly corrosive soils which may cause an adverse reaction between the cement elements of the project and the soil may cause significant problems for the retaining walls to withstand lateral and vertical variations in expansion. Therefore, there is a potentially substantial impact on the ability of the proposed project to create a direct or indirect risk to life or property.

Thus, the following Mitigation Measures shall be implemented:

GEO-1: Expansive Soils. To ensure implementation of the measures proposed by Geotecnia to mitigate the hazard posed by expansive soils, the geotechnical engineer shall provide observation and testing services **during demolition of existing improvements, earthwork and wall construction**, and to include monitoring of implementing of their recommendations for design of the road section, and approval of any imported granular fill.

GEO-2: Corrosive Soils. **Prior to CDD stamp-approval of plans for issuance of a building or grading permit, whichever is first**, the project proponent shall submit the results of corrosion hazard testing to the CDD for peer review by the County geologist. If the preliminary test results indicate a corrosion hazard, the project proponent shall submit a report prepared by a California Licensed Corrosion Engineer. The Corrosion Engineer shall (a) review the preliminary corrosion hazard test data, (b) determine if additional testing is necessary to complete evaluation of the corrosion potential, (c) perform any additional testing deemed necessary, (d) provide any specific long-term corrosion control design recommendations that are recommended, and (e) document the investigation and findings of the Corrosion Engineer in a letter report that is wet signed and stamped.

GEO-3: Geotechnical Monitoring. Geotechnical observation and testing services are critical to the success of the project. Commencing with clearing and demolition, and extending through foundation-related work on the retaining walls and inspection of the road subgrade and preparation for paving, the project geotechnical engineer or his representative shall provide adequate monitoring to verify implementation of the geotechnical recommendations. Furthermore, the "General Notes" on all construction plans shall identify the geotechnical reports of Geotecnia as providing geotechnical standards and criteria to be implemented during project construction. Furthermore, General Notes on all construction plans shall identify the features to be inspected by the representative of the geotechnical engineer. If there is a significant difference between the actual field conditions and those that were the basis for the geotechnical design recommendations, supplemental recommendations may be required. Any changes to the approved plans shall require review and written approval by the County BID and CDD staff.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact: The project site is within the area served by the Central Contra Costa Sanitary District (CCCSD). In addition, no part of the proposed project to retrofit existing retaining walls involves

the expansion of sanitary services or development of septic tanks/alternative wastewater disposal systems. Therefore, no mitigation measures are warranted.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact: The project site is located within an area underlain by Quaternary deposits of inferred Holocene age (i.e., estimated to be the last 11,700 years). These deposits are inferred to be alluvial fan and fluvial deposits. In Contra Costa County there have been relatively few, if any, fossils of significance recovered from these upland sediments. Possible fossils include woody material (e.g., tree limbs) or any bones of the mammals that historically occurred in the California Coast Range prior to the arrival of man (e.g., deer or possibly black bear). Such fossils are very rare and unlikely to be encountered during earthwork. Regardless, mitigation measures **CUL-1**, **CUL-2**, and **CUL-3** are included under the cultural resources section that would mitigate the potential discovery of paleontological resources during the project's construction period.

Unique geologic features are not ordinary rock outcrops. Examples of unique features might include erosional features in sedimentary rock (i.e., natural arches, spires, and balanced rocks). In volcanic terrain, natural curiosities or wonders might include caldera, lava tubes, or exposures of beautifully colored volcanic tuff, or columnar jointed basalt. In desert terrain features that would warrant protection include desert armor, desert crust, desert varnish, etc. It is the opinion of the County Peer Review Geologist that there are no unique paleontological resources or unique geologic features on the project site that warrant protection. Consequently, no mitigation measures are warranted.

Sources of Information

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Geotecnia, Consulting Geotechnical Engineers. "Report, Geotechnical Study, Distressed Entrance Access Road at Atria Park." Prepared for The Olympus Group. 8 June 2018

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Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

a - b) Less Than Significant Impact: As discussed in the Air Quality section of this study, the Bay Area Air Quality Management District (BAAQMD) adopted the Bay Area 2017 Clean Air Plan that, in addition to various criteria air pollutants, addresses greenhouse gas (GHG) emissions at a regional scale. In addition to concerns about overall air quality, the proposed project would potentially impact the environment in regards to greenhouse gas emissions during the construction phase. Because no part of the project is expected to lead to an increased use or capacity of the existing, two-lane driveway, the project is expected to have no additional impact on operational greenhouse gas emissions. The retrofitting project is necessary for life safety due to the slow failure of the existing retaining wall which has led to the roadway sinking and created deep ruts in the roadway.

Anticipated construction activities involve preparing the project site (clearing), grading (cut/fill earth movement), installing soldier piers and concrete ribbing to the existing walls, and resurfacing the asphalt roadway. Although these activities would be temporary in duration, they result in the generation of criteria air pollutants and GHGs such as carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}), and precursor emissions such as reactive organic gases (ROG) and oxides of nitrogen (NO_x). Sources of these GHGs include exhaust, fugitive dust, and off-gas emissions from on-road (e.g., dump trucks, delivery trucks, worker commute vehicles) and heavy-duty off-road equipment (e.g., bore/drill rigs). Depending on the amount of site preparation and grading needed, these activities could result in a significant amount of truck trips that may increase the CO₂ emissions and increase GHG impacts.

The project anticipates 2,100 cubic yards of total grading, which includes cutting approximately 650 cubic yards of non-engineered fill from beneath the road and existing retaining walls and backfilling the existing and new retaining walls with approximately 1,450 of engineered fill. The CalEEMod modeling tool was utilized for the analysis of anticipated project-related impacts to determine the significance of construction-related criteria air pollutants and precursors. The anticipated daily average emissions reported through the CalEEMod tool was then compared to the Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors as shown below:

Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors			
BAAQMD Table 2-4 CEQA Guidelines, May 2017		CalEEMod Project-Related Analysis (Unmitigated Construction)	
<i>Pollutant/Precursor</i>	<i>Daily Average Emissions (lb/day)</i>	<i>Anticipated Daily Average Emissions (summer) (lb/day)</i>	<i>Anticipated Daily Average Emissions (winter) (lb/day)</i>
ROG	54	1.849	1.8786
NOX	54	41.9343	42.7493
PM ₁₀	82*	3.7589*	3.7608*
PM _{2.5}	54*	1.5738*	1.5757*

*Applies to construction exhaust emissions only.

As shown in the table above, the construction-related activities of the proposed retaining wall and roadway repairs project are below the thresholds of significance, and therefore would have a less than significant impact from criteria air pollutant and precursor emissions. The BAAQMD has not adopted thresholds of significance for construction related GHG emissions and encourages Lead Agencies to incorporate best management practices to reduce GHG emissions during construction. In addition, given that the project does not meet or exceed any of the criteria air pollutant and precursor emissions thresholds, it is assumed that the project would not have a significant impact due to the temporary construction related GHG emissions.

Whether or not construction-related emissions exceed the applicable thresholds of significance, BAAQMD recommends that projects implement basic best management practices for construction to reduce environmental impacts especially due to exhaust from diesel and other fossil-fuel burning engines, the release of dust from the project, and improperly operating equipment. Implementation of mitigation measures **AIR-1** through **AIR-9** would ensure that these construction-related best management practices are followed. Thus, there may be some increase in greenhouse gases due to the construction phase of the project, but they would be considered less than significant due to the temporary nature of construction activities. Therefore, upon implementation of the best practice mitigation measures, the proposed facility will have a less than significant impact on the generation of greenhouse gas emissions, and the proposed project would not conflict with any applicable plan, policy, or regulation pertaining to the reduction of GHG.

Sources of Information

California Emission Estimator Model (CalEEMod). 2016

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Bay Area Air Quality Management District. "Spare the Air, Cool the Climate Final, 2017 Clean Air Plan." Adopted 19 April 2017. <http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a-proposed-final-cap-vol-1-pdf.pdf?la=en>.

Contra Costa County. "Climate Action Plan." Adopted by the Contra Costa County Board of Supervisors on 15 December 2015. <http://www.co.contra-costa.ca.us/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact: Temporary transportation of fueling and other construction-related materials may cause less than significant impacts to the environment during construction of the proposed project, which involves retrofitting the existing retaining walls and repairing the access driveway. Although small quantities of commercially available hazardous materials may potentially be used for landscape maintenance once construction is completed and the landscape has been restored, these materials would not be used in sufficient quantities to pose a threat to human or environmental health. Therefore, the potential for impacts associated with handling, storing, and dispensing of hazardous materials from project operation would be less than significant.

- b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?*

Less Than Significant Impact: The existing and proposed retaining walls and driveway themselves do not consist of the generation or use of hazardous materials. Although the driveway may be used for the routine transport or disposal of hazardous materials used during the operation of the existing assisted living facility, the materials would not be in sufficient quantities to pose a threat to human or environmental health. The temporary transportation of fueling and other construction-related materials during the construction phase has a less than significant impact for the accidental release of hazardous materials into the environment.

- c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

No Impact: There are no schools located within a quarter mile of the project site. The nearest schools are Pleasant Hill Elementary, located approximately 0.8-mile northeast of the project site and Contra Costa Christian Schools, located approximately 0.8-mile southeast of the site. Additionally, there is no anticipated use of significant quantities of hazardous materials for either the construction or operation of the project. Therefore, the project will have no impact in this respect.

- d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact: According to the Hazardous Waste and Substances Site List (Cortese List) maintained by the California Environmental Protection Agency, the subject property is not identified as a hazardous materials site.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

No Impact: The subject property is not located within two miles of any airport and the project will not conflict with any airport land use plan. The nearest airport facility to the project site is the Buchanan Field Airport, which is approximately 4.25 miles northeast of the project site. Thus, the proposed project would not present any safety hazard to airports or excessive noise for people residing or working in the project area.

- f) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact: The proposed project will be located completely within the boundaries of the subject property and will not interfere with transport or access along any roadways or waterways that may be part of an emergency response or evacuation plan. In addition, the proposed project which would retrofit the existing retaining walls and repair the existing two-lane driveway would provide for significantly improved life safety access for residents of the Atria Park Lafayette assisted living facility. Thus, the project potentially benefits existing emergency response and/or evacuation plans by improving evacuation access in the area. Furthermore, project construction would occur onsite and would not require closures of public roads, nor would it change the alignment of existing roads. Finally, staff will recommend that the permit be conditioned to require that at least one lane of traffic on the private access driveway is to remain

open at all times to allow for emergency vehicle access. Accordingly, the project would have a less than significant impact on emergency response and emergency evacuation plans.

- g) *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant Impact: According to the California Fire Hazard Severity Zone map, the subject property is located outside, but approximately 250 feet east, of lands classified as very high fire hazard severity zone. In addition, the project site is located within the service area of the Contra Costa County Fire Protection District. The Department of Conservation and Development, Community Development Division (CDD) generally refers requests for new discretionary permits to the respective fire district for review and comment to ensure that the proposed project meets applicable fire codes. Such was done for the proposed project, and there was no indication from the Fire District that the proposed project would pose a significant fire risk. The Fire District advised that at least one lane of traffic on the private roadway is to remain open at all times during construction to allow for emergency vehicle access, and that the project proponent is to notify the Fire District Dispatch Center prior to lane closures and when the project is complete. Additionally, the project plans submitted for building permit would need to comply with the minimum code requirements related to fire and life safety. Thus, by complying with the requirements of the Fire District, any potential for exposure of people or structures to a significant risk of loss, injury or death involving wildland fires is reduced to a less than significant level.

Sources of Information

California Department of Toxic Substances Control. “Hazardous Waste and Substances Site List (Cortese).” Accessed in 2020.

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California State Geoportal. “California Fire Hazard Severity Zone Viewer.” Accessed in 2020.
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Contra Costa County. “Airport Land Use Compatibility Plan.” 13 December 2000.
<http://www.cccounty.us/DocumentCenter/View/851/Cover-Introduction-and-County-wide-Policies?bidId=>

Contra Costa County Fire Protection District. “Atria Bridge Repair, 1545 Pleasant Hill Road, Lafayette, DP20-3005, CCCFPD Project No.: P-2020-000927” Dated 26 February 2020. Agency Comment Response Letter.

Contra Costa County General Plan. “Chapter 5: “Transportation and Circulation Element.” 2005-2020.
<http://www.co.contra-costa.ca.us/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less Than Significant Impact: Once repaired, the daily operation of the existing access driveway will not involve commercial, manufacturing, or processing activities which would have the potential for generating byproducts or other waste which would pose a significant risk for violating waste discharge requirements or impacting water quality at the property if not disposed of correctly.

During construction, the proposed project to retrofit the existing retaining walls which support the existing access driveway and the subsequent repairs to the road could contribute sediment, oils and greases, nutrients, and pesticides into the storm drain. These pollutants have the potential to degrade the receiving waters. Staff will recommend conditions of approval addressing the pouring

of fuels, paints, etc. in soils during construction to address any potential soil pollution from the construction phase. In addition, the proposed project must comply with applicable Contra Costa County C.3 requirements. In November 2015, the Regional Water Quality Control Board for the San Francisco Bay Region (RWQCB) reissued the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit, which regulates discharges from municipal storm drains. Provision C.3 of the Municipal Regional Permit places requirements for site design to minimize the creation of impervious surfaces and control storm water runoff. The County has the authority to enforce compliance with its Municipal Regional Permit authority in its adopted C.3 requirements. This project will not create/replace more than 10,000 square feet of impervious surface area; therefore, a Stormwater Control Plan (SWCP) will not be required at this time. However, the applicant may be required to submit a SWCP for a Small Land Development Project with the building permit application. With implementation of the recommended conditions of approval during the construction phase and practicable storm water controls, the project would have a less than significant impact on water quality.

- b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

No Impact: The subject property is located in the service area of the East Bay Municipal Utility District (water service provider). There is no part of the project which will increase the water demand of the existing assisted living facility. Thus, there is no potential for the proposed project to substantially deplete groundwater supplies or interfere with groundwater recharge is less than significant.

- c) *Would the project substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

- i) *Result in substantial erosion or siltation on- or off-site?*
- ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- iv) *Impede or redirect flood flows?*

Less Than Significant Impact With Mitigation Incorporated: Division 914 of the County Ordinance Code requires that all storm water entering and/or originating on this property to be collected and conveyed, without diversion and within an adequate storm drainage system, to an adequate natural watercourse having a definable bed and banks or to an existing adequate public storm drainage system which conveys the storm water to an adequate natural watercourse.

The proposed project to retrofit an existing retaining wall will be built on an already disturbed area of the property. According to the plans, the access driveway has a sag vertical curve, and the stormwater flows to the lowest part of the road which is located approximately at the center span of the road. Since the existing retaining walls are beginning to show signs of differential displacement, the project proposes to construct new soldier pile retaining walls on both sides of the roadway. In addition, the project proposes to extend the existing box culvert through which

the intermittent “Murderers Creek” flows during wet conditions, however, no part of the project proposes to change the flow or geometry of the intermittent stream.

Potential Impact:

Although the project will not create/replace more than 10,000 square feet of impervious surface area and a Stormwater Control Plan (SWCP) will not be required at this time, any activities associated with grading or construction of the proposed project occurring within the ravine and streambed may have a substantial impact on drainage. Approval from the Contra Costa County Department of Public Works, Flood Control and Water Conservation District prior to performing any construction related to the proposed project would ensure that significant impacts on drainage patterns of the area are reduced to less than significant levels. Other jurisdictional agencies such as the California Department of Fish and Wildlife may have requirements for approval to work within the streambed, which may restrict equipment operation within the streambed and ensure restoration of any disturbed ravine areas. In addition to the implementation of mitigations measures BIO-7 through BIO-8, implementation of the following mitigation measure would reduce the potential impacts on drainage and drainage patterns of the area to less than significant levels:

HYD-1: Prior to issuance of grading or building permits or the removal of trees, whichever is first, the applicant shall apply for and obtain a drainage 1010 permit from the Contra Costa County Flood Control and Water Conservation District. As part of this permit, the applicant shall provide a hydraulic analysis of the culvert extension and include the 10-year and 100-year water surface elevation on plan submittals. A geotechnical report for the culvert extension, including scour analysis, shall also be provided.

- d) *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

Less Than Significant Impact: Seiche, tsunami, and mudflow events are generally associated with large bodies or large flows of water. The subject property is not located near any of the County’s large water bodies or natural water courses which would increase the potential for a seiche, tsunami, or mudflow event. There is also no proposal to remove or modify any existing dam, levee, or other infrastructure used to divert or otherwise control large volumes of water as part of the project. Although no part of the project proposes to change the geometry or flow of the intermittent stream, increasing the size of the culvert may increase the amount of water flow underneath the roadway resulting in a greater potential for flooding. However, the subject property is not located in a known flood hazard zone and implementation of mitigation measure HYD-1, would reduce impacts of the larger culvert to less than significant levels. Therefore, there is a less than significant impact on the exposure of people or structures to a significant risk of loss, injury, or death involving flooding, seiche, tsunami, or mudflow.

- e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less Than Significant Impact: The proposed project is for the retrofitting of existing retaining walls which supports the access driveway across a ravine and tributary known as “Murderers Creek.” As part of the proposed project, the existing box culvert will be expanded and lengthened, however, no part of the project proposes to change the flow or geometry of the intermittent stream.

As discussed above, prior to performing any construction activities, the project proponent will be required to obtain a drainage 1010 permit from the County Flood Control and Water Conservation District, in addition to showing compliance with and approval of any other jurisdictional agencies as necessary for work within a watercourse. Therefore, based on the mitigations and permit conditions of approval to be recommended by staff, the project has a less than substantial impact on drainage in the area, and there will be a less than significant conflict with or obstruction of the implementation of a water quality control plan or sustainable groundwater management plan.

Sources of Information

California Department of Conservation. "Contra Costa County Tsunami Inundation Maps." Accessed in 2020. <https://www.conservation.ca.gov/cgs/Pages/Tsunami/Maps/ContraCosta.aspx>

Contra Costa County Public Works Department. "Development Plan Permit DP20-3005 Staff Report & Conditions of Approval." Dated 22 September 2020

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project physically divide an established community?*

No Impact: The proposed project to retrofit existing retaining walls and repair an existing access driveway will be located entirely within the boundaries of the subject property. Therefore, the project will not physically divide any established communities.

- b) *Would the project cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant Impact: The subject property is located within an area with General Plan Land Use designations for Congregate Care (CC) and Open Space (OS). The purpose of the CC designation is to allow for the development of clustered residential units for senior citizens and assisted living facilities. In general, this specific County General Plan designation is adopted with unique criteria for each site to which it is applied. The OS designation includes privately-owned properties upon which future development rights have been deeded to a public or private agency, including, for example, significant open space areas within planned unit developments or steep, unbuildable portions of subdivisions. The common activities taking place in areas designated for Open Space land uses are, for example, resource management, maintenance of critical habitats, or private recreation for nearby residents.

The proposed project is to perform retrofitting of retaining walls on the subject property which have supported the primary access driveway since the Atria Park assisted living facility was

constructed in 2003. When County File #DP88-3007 was approved to allow the facility, the General Plan land use designation for the parcel was Single-Family Residential-Low Density (SL). Thus, a General Plan Amendment was adopted consecutively with the approval of County File #DP88-3007 which changed the parcel's land use designation from SL to Congregate Care (CC) (County File #GPA 1-88-CO). Additionally, as part of the conditions of approval for County File #DP88-3007, most of the ravine area was recorded as a Restricted Development Area (RDA). Subsequently, a General Plan Amendment adopted in May of 1991 changed the CC land use designation to two new land use designations for the subject property: Congregate Care (CC) and Open Space (OS) (County File #GPA 1991-2A). Thus, the northern portion of the subject property where the residential units, parking, and outdoor amenities for residents of the assisted living facility are located is designated for CC land uses, while the ravine area, including the extent of the retaining walls and access roadway over the ravine, is designated for OS land uses.

The Conservation Element of the General Plan lists three overall conservation goals:

- *Conservation Goal 8A: To preserve and protect the ecological resources of the County.*
- *Conservation Goal 8B: To conserve the natural resources of the County through control of the direction, extent, and timing of urban growth.*
- *Conservation Goal 8C: To achieve a balance of uses of the County's natural and developed resources to meet the social and economic needs of the County's residents.*

The project site is located within a ravine and the existing retaining walls and roadway traverse an intermittent stream known as "Murderer's Creek". As discussed above in the Biological Resources section, although the area is not known to be ecological sensitive and much of the project site has previously been disturbed, there is a potential for special-status species (e.g., plants, animals, birds) to exist temporarily or seasonally within the project area. However, implementation of mitigation measures **BIO-1** through **BIO-8** would bring potential project-related impacts on the ecological resources of the County to less than significant levels. In addition, the proposed project is consistent with Goal 8B by utilizing existing infrastructure, with existing capacity to accommodate the project, and does not require the extension of public infrastructure. Additionally, mitigation measures to reduce impacts on aesthetics (**AES-1** through **AES-3**), and proposed conditions requiring restoration of any natural areas within the scenic easement area disturbed during construction, would further ensure that the life safety project to retrofit and repair the existing retaining walls and driveway is consistent with Goal 8C. Thus, the project is consistent with the County's overall conservation goals.

While the project is substantially consistent with the General Plan CC land use designation and the Planned Unit Development (P-1) zoning for the subject property, the construction of permanent structures such as new retaining walls are not expressly identified as development allowed within the General Plan OS land use designation. Given that the project is to retrofit the existing, primary access driveway to the Atria Park assisted living facility and is necessary to maintain the safe ingress and egress of residents, employees, visitors, and health and safety responders, staff believes that upon implementation of the mitigation measures within this document, any potential impacts due to conflicts with the General Plan OS land use designation will be less than significant. In addition, upon implementation of the mitigation measures within this document, the proposed project would be consistent with the policies within the County's General Plan Conservation Element, and the policies of the P-1 zoning district. Therefore, the project has a less than significant potential for conflict with any applicable land use, policy,

General Plan, Specific Plan, or zoning ordinance adopted for the purpose of avoiding or mitigating an environmental effect.

Sources of Information

Contra Costa County General Plan. “Chapter 3: Land Use Element.” 2005 – 2020. <http://www.co.contra-costa.ca.us/DocumentCenter/View/30913/Ch3-Land-Use-Element?bidId=>

Contra Costa County General Plan. “Chapter 8: Conservation Element.” 2005-2020. <http://www.co.contra-costa.ca.us/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=>

Contra Costa County Code. “Title 8 – Zoning.” Accessed in 2020. https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT8ZO

Revised Project Plans, received on 10 July 2020.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

No Impact: According to Figure 8-4 (Mineral Resource Areas) of the Contra Costa County General Plan, the subject property is not located within an area identified as a significant mineral resource area. Furthermore, the earth materials findings of the soils investigation by Geotecnia (report dated June 8, 2018 and supplemental report dated April 16, 2019) do not indicate the presence of minerals. Additionally, staff is unaware of any prior studies done at the subject property that indicate the presence of mineral resources.

- b) *Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact: The project site is not within an area of known mineral importance according to the Conservation Element of the General Plan, and therefore, the project would not impact any mineral resource recovery site.

Sources of Information

Contra Costa County General Plan. "Chapter 8: Conservation Element." 2005-2020.
<http://www.co.contra-costa.ca.us/DocumentCenter/View/30918/Ch8-Conservation-Element?bidId=>.

Geotecnia, Consulting Geotechnical Engineers. "Report, Geotechnical Study, Distressed Entrance Access Road at Atria Park." Prepared for The Olympus Group. 8 June 2018

Geotecnia, Consulting Geotechnical Engineers. "Report, Supplemental Geotechnical Study" Prepared for The Olympus Group. 16 April 2019

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

a - b) Less Than Significant With Mitigation Incorporated: The subject property is located approximately 400 feet east of Taylor Boulevard and adjacent to Pleasant Hill Road and is generally surrounded by hilly terrain with lands designated for residential uses. The driveway to be repaired is located approximately 75 feet from the nearest residential building of the assisted living facility on the subject property, and approximately 175 to 300 feet from the nearest single-family residences in the area.

According to Figure 11-5I of the County General Plan's Noise Element, the subject property is within an area of the County where 2005 DNL and CNEL Noise Levels range between 60 and 65 decibels (dB). Additionally, Table 11-2 of the Noise Element indicates that the typical DNL noise level within 100 feet of Taylor Boulevard is 78dB. Figure 11-6 (Land Use Compatibility for Community Noise Environments) of the County General Plan's Noise Element indicates that noise exposure levels at or below 60 decibels are considered as "Normally Acceptable" for land uses that fall within the "Nursing Homes" and "Residential – Single Family" land use categories.

Any noise exposures above 60 decibels are generally considered as “Conditionally Acceptable”. Thus, the County’s threshold for residential uses is a DNL of 60dB.

The purpose of the project is to repair the existing, failing retaining walls that support the existing roadway for the main access driveway for the Atria Park Lafayette assisted living facility. Retrofitting the existing retaining walls involves the installation of soldier piles along the edges of both flanks of the road, installation of permanent concrete cribbing behind the soldier piles, and placing compacted backfill between the edge of the existing road and the new concrete cribbing. Although temporary in nature, the use of heavy equipment and installation of the soldier piles during construction has the potential for a substantial temporary increase in noise levels. According to the applicant, the method for installing the soldier piles involves the use of a drill rig with a large auger that will drill the holes for the piles. This method will cause substantially less noise and vibration than methods which use impact to drive piles. Additionally, it can be expected that due to the hilly topography, the soil type at the construction site, and the presence of substantial vegetation (e.g., shrubs, trees) and ground cover (e.g., grasses) present between the project site and nearby single-family residences, there is potential for the ground to absorb noise energy and lessen the impacts of temporary construction noise.

The proposed retaining wall retrofitting project is a static improvement of an existing driveway and has very little chance for resulting in excessive ground borne vibration as a result of the daily use and operation of the driveway. Any ground borne vibration or ground borne noise that may be created as part of the project would be produced during the construction phase. Therefore, any possible ground borne vibrations or noise would be temporary in nature and would be limited to the restricted construction hours as typically conditioned for development permits approved by the County.

Potential Impact: Any production of noise levels or ground borne vibrations in excess of established standards would be associated with the construction phase of the proposed project. However, the noise and ground borne vibrations produced during these aspects of the proposed project would be temporary in nature and mitigations exist to reduce these temporary impacts on area residents.

Therefore, implementation of the following mitigation measures would reduce the impact of temporary noise levels and ground borne vibrations to a less than significant level:

- NOI-1:** **Prior to CDD stamp-approval of plans for issuance of building or grading permits or any ground disturbance, whichever occurs first,** the applicant shall submit a noise assessment by a licensed, qualified acoustician or other certified professional, for review by the CDD. The report shall at minimum identify anticipated construction noise and ground borne vibration levels based on proposed equipment and methods of construction, and provide any necessary mitigation measures (e.g., noise shrouds, curtains, alternative equipment) to reduce the impacts of noise and vibration on nearby sensitive receptors (i.e., nearby residences, facility residents) as much as possible.
- NOI-2:** The applicant shall notify neighbors within 300 feet of the subject property at least one week in advance of grading and construction activities.
- NOI-3:** The applicant shall designate a construction noise coordinator who will be responsible for implementing the noise control measures and responding to complaints. This

person's name and contact information shall be posted clearly on a sign at the project site and shall also be included in the notification to properties within 300 feet of the project site. The construction noise coordinator shall be available during all construction activities and shall maintain a log of complaints, which shall be available for review by County staff upon request.

NOI-4: The following construction restrictions shall be implemented during project construction and shall be included on all construction plans.

1. The applicant shall make a good faith effort to minimize project-related disruptions to adjacent properties, and to other uses on the site. This shall be communicated to project-related contractors.
2. The applicant shall require their contractors and subcontractors to fit all internal combustion engines with mufflers which are in good condition and shall locate stationary noise-generating equipment such as air compressors as far away from existing residences as possible.
3. Large trucks and heavy equipment are subject to the same restrictions that are imposed on construction activities, except the hours for transportation to and from the site are limited to 9:00 am to 4:00 pm.
4. All construction activities shall be limited to the hours of 8:00 am to 5:00 pm, Monday through Friday, and are prohibited on state and federal holidays on the calendar dates that these holidays are observed by the state or federal government as listed below:
 - New Year's Day (State and Federal)
 - Birthday of Martin Luther King, Jr. (State and Federal)
 - Washington's Birthday (Federal)
 - Lincoln's Birthday (State)
 - President's Day (State and Federal)
 - Cesar Chavez Day (State)
 - Memorial Day (State and Federal)
 - Independence Day (State and Federal)
 - Labor Day (State and Federal)
 - Columbus Day (State and Federal)
 - Veterans Day (State and Federal)
 - Thanksgiving Day (State and Federal)
 - Day after Thanksgiving (State)
 - Christmas Day (State and Federal)

- c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact: The project site is not located within two miles of a public airport or private airstrip, nor is it located within an area covered by the County's Airport Land Use Compatibility Plan. The nearest airport facility is the Buchanan Field Airport, approximately 4.25 miles northeast of the

project site. Thus, the proposed project would not expose people to excessive noise levels from either Buchanan Field or a private airstrip and there is no impact.

Sources of Information

Contra Costa County General Plan. "Chapter 11: Noise Element." 2005-2020. <http://www.co.contra-costa.ca.us/DocumentCenter/View/30921/Ch11-Noise-Element?bidId=>.

Correspondence from Applicant. Received 6 January 2021

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

No Impact: The proposed project consists of retrofitting existing retaining walls which support the primary access driveway, and repairs to that driveway, for the Atria Park Lafayette assisted living facility, which has been in operation since approximately 2003. Once resurfaced, the existing two-lane driveway will remain the primary ingress and egress for residents, staff, delivery, and emergency personnel to the assisted living facility. Pursuant to the drawings submitted with the Development Plan application, there is no planned expansion of the driveway or other associated infrastructure. Thus, the proposed project will not directly or indirectly cause a substantial increase in population.

- b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact: The proposed project consists of retrofitting existing retaining walls which support the primary access driveway, and repairs to that driveway, on a parcel of land that is developed for congregate care residential uses. Additionally, the proposed project is not an improvement of a nature that will directly or indirectly displace any existing housing, nor necessitate the construction of replacement housing elsewhere.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES – <i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) *Fire Protection?*

No Impact: The proposed project consists of retrofitting existing retaining walls which support the primary driveway for an existing assisted living facility on a congregate care property. Compliance with the applicable Building and Fire Codes implies that any construction or operation of the retaining walls and primary driveway would result in no impact related to increased fire protection needs and no impact on the size or level of fire protection needed to protect the existing facility. In addition, the project would provide for improved fire emergency response in the event of a fire or other emergency at the subject property.

b) *Police Protection?*

No Impact: The project related to an existing assisted living facility does not include the establishment of any additional uses that require the additional services of any police facility. Therefore, there is no potential for the need to add new police facilities or to modify any existing police facilities.

c) *Schools?*

No Impact: The project related to an existing assisted living facility does not include the establishment of any additional uses that require the additional services of any school facility. Therefore, there is no potential for the need to add new school facilities or to modify any existing school facilities.

d) *Parks?*

No Impact: The project related to an existing assisted living facility does not include the establishment of additional uses that require the additional services of any park facility. Therefore, there is no potential for the need to add new park facilities or to modify any existing park facilities.

e) *Other public facilities?*

No Impact: The project is related to an existing assisted living facility and does not include the establishment of additional uses that require the other additional services such as libraries or health facilities. Therefore, there is no potential for the need to add other new public facilities, or to modify any other existing public facilities.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY:

- a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No Impact: The deterioration, daily use, and demand for neighborhood parks and other recreational resources is largely dependent on the number of people in the surrounding area and the frequency in which they utilize those resources. As discussed in the Population and Housing Section of this study, the proposed project will not result in a population increase in the County. In addition, the project to retrofit retaining walls which support an existing driveway for an assisted living facility that has been in operation since 2003 is not of the type that would otherwise result in the increased use of recreational areas within the County. Therefore, there is no potential for the proposed project causing substantial physical deterioration to recreational facilities in a manner that would have an adverse physical effect on the environment.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*

No Impact: The proposed project consists of retrofitting retaining walls which support an existing driveway across a ravine on a parcel that is designated for congregate care. The project does not include the construction or the expansion of recreational facilities. Thus, there is no potential for the proposed project causing an adverse physical effect on the environment through the construction or expansion of recreational facilities.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

No Impact: The proposed project is for the modification and retrofitting of the existing retaining walls that support the driveway across a ravine corridor to the Atria Park Lafayette assisted living facility, which has been in operation for more than 15 years as allowed pursuant to County File #DP88-3007. The driveway as accessed from Pleasant Hill Road is the primary means of ingress and egress to the assisted living facility for residents, employees, visitors, and health and safety responders. As shown on the project plans, the project does not propose expanding the two-lane driveway nor will it alter the capacity or type of services provided at the existing facility; thus, any increase in trips to and from the property would not be as a result of the project. Therefore, the proposed project has no potential for exceeding the capacity of the existing circulation system or conflicting with an applicable congestion management program.

- b) *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?*

No Impact: CEQA provides guidelines for analyzing transportation impacts relating to vehicle miles travelled (VMT) resulting from the project. The proposed project is for the modification and retrofitting of the existing retaining walls that support the primary access driveway from Pleasant Hill Road to an assisted living facility that has been in operation for more than 15 years. The retaining walls are failing and retrofitting them with new soldier piles, cribbing, and engineered fill would allow for repairs to the driveway, and in turn, would allow the continued, safe access to the facility. As shown on project plans, the project does not propose expanding the two-lane driveway nor will it alter the capacity or type of services provided at the existing facility; thus, because the amount in which the driveway is used is based upon the activities and residential capacity provided at the facility, the proposed project has no potential for increasing vehicle miles travelled as a result of the driveway repairs. In addition, no part of the proposed project involves the expansion of the congregate care uses on the subject property as allowed. Thus, the project can be expected to have no impact on traffic and would not require further VMT analysis. Therefore, the project does not conflict with CEQA guidelines section 15064.3(b).

- c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact: The existing private road (driveway) gains vehicular access from Pleasant Hill Road, a County maintained road. Once the retaining walls have been retrofitted, the project involves reconstructing the existing roadway pavement section of the entire length of the driveway from Pleasant Hill Road to brick pavers on the subject property. This development will not change the roadway dimensions or geometric design features. The project would utilize the existing public roadway and utility improvements and does not require alteration or right of way for Pleasant Hill Road. However, as conditioned, the project proponent will be required to obtain an encroachment permit from the County Public Works Department, if necessary, for the construction of driveways or other improvements within the right-of-way of Pleasant Hill Road. Approval from Public Works to make these improvements would ensure that the project will have a less than significant impact regarding increased hazards due to potential geometric design features.

- d) *Would the project result in inadequate emergency access?*

Less Than Significant Impact: The project was referred to the Contra Costa County Fire Protection District for agency comments. In their response dated February 26, 2020, the Fire District advised that at least one lane of traffic on the private roadway is to remain open during construction to allow for emergency vehicle access, and that the project proponent is to notify the Fire District Dispatch Center prior to lane closures and when the project is complete. Additionally, all construction plans will be subject to the applicable Fire Code that is in effect at the time when the application for a building permit is submitted. The routine review of construction plans will ensure that the proposed project has a for adversely impacting existing emergency access to the subject property or other properties within the County. Furthermore, although the Conditions of Approval for County File #DP88-3007 restrict residents, staff, and visitors from accessing the facility through Diablo View Road, emergency access is allowed. Therefore, with the limited emergency access at Diablo View Road, and as conditioned, the project will result in a less than significant impact on emergency access.

Sources of Information

California Office of Planning and Research. "Technical Advisory on Evaluating Transportation Impacts in CEQA". Accessed in 2020. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Contra Costa County Conservation and Development Department and Public Works Department. "Transportation Analysis Guidelines." 23 June 2020. <https://www.contracosta.ca.gov/DocumentCenter/View/69374/FINAL-CCC-Transportation-Analysis-Guidelines-v2-12-15-20?bidId=>

Contra Costa County Fire Protection District. "Atria Bridge Repair, 1545 Pleasant Hill Road, Lafayette, DP20-3005, CCCFPD Project No.: P-2020-000927" Dated 26 February 2020. Agency Comment Response Letter.

Contra Costa County Public Works Department. "Development Plan Permit DP20-3005 Staff Report & Conditions of Approval." Dated 22 September 2020.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a-b) **Less Than Significant Impact:** As discussed in Section 5 (Cultural Resources), neither the subject property nor any of the existing buildings or structures at the project site are listed on Contra Costa County's Historic Resources Inventory, on California's Register of Historical Resources, or the National Register of Historic places. Nor is there any building or structure that qualifies to be listed. Additionally, there is no indication that this property holds any cultural value to a California Native American tribe. Representatives of Native American tribes known to have historically occupied the area (Wilton Rancheria) were contacted for an opportunity to request consultation. In correspondence dated September 29, 2020, Wilton Rancheria indicated that they have no concern on this project and did not request any consultation with our department. Regardless, there is a possibility of cultural resources to be found within the vicinity of the project and upon implementing mitigation measures **CUL-1** through **CUL-3**, impacts to tribal cultural resources will be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

No Impact: The proposed project consists of retrofitting existing retaining walls which support an existing driveway across a ravine on a parcel that is designated for congregate care. The project also proposes to increase the size of the culvert, which is not expected to adversely impact, and may improve, drainage through the ravine. No part of the project proposes to expand the number of residential units, residents, or employees at the existing assisted living facility; thus, the project will not require the establishment, relocation, or expansion of any water, wastewater, electric power, natural gas, or any other utility. Therefore, there will be no need for new or expanded water, wastewater treatment, storm water drainage, or other utility services.

- b) *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

No Impact: The proposed project consists of retrofitting existing retaining walls which support an existing driveway across a ravine on a parcel that is designated for congregate care. The project is of a nature that would not require additional water supplies for operation of the roadway. As an assisted living facility that has been in operation for over fifteen years, there are existing and sufficient water supplies to service the facility. No part of the project proposes to expand the number of residential units, residents, or employees at the existing assisted living facility; therefore, there will be no need for new or expanded water services.

- c) *Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

No Impact: As the proposed project consists of retrofitting existing retaining walls which support an existing driveway across a ravine for an assisted living facility that has been in operation for over fifteen years, there remains adequate wastewater treatment capacity. No part of the project proposes to expand the number of residential units, residents, or employees at the existing assisted living facility; therefore, there will be no need for new or expanded wastewater services.

- d) *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Less Than Significant Impact: As the proposed project consists of retrofitting existing retaining walls which support an existing driveway across a ravine for an assisted living facility that has been in operation for over fifteen years, there is existing solid waste infrastructure to service the facility. No part of the project proposes to expand the number of residential units, residents, or employees at the existing assisted living facility; therefore, it will not require the construction or expansion of solid waste infrastructure.

The proposed project would generate construction solid waste. Construction at the project site would be subject to the CalGreen Construction and Demolition Debris Recovery Program administered by the Department of Conservation and Development. The Debris Recovery Program requires that at least 65% of construction job site debris (by weight) for most construction types, that would otherwise be sent to landfills, be recycled, reused, or otherwise diverted to appropriate recycling facilities. Thus, although construction activities would incrementally increase construction waste in Contra Costa County, the administration of the CalGreen program ensures that the project-related impact would be less than significant.

- e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact: As mentioned above, construction at the project site would be subject to the CalGreen Construction and Demolition Debris Recovery Program administered by the Department of Conservation and Development. The Debris Recovery Program requires that at least 65% of construction job site debris (by weight) for most construction types, that would otherwise be sent to landfills, be recycled, reused, or otherwise diverted to appropriate recycling facilities. The project as proposed is to retrofit existing retaining walls which support the primary access driveway to the existing assisted living facility. There is no part of the project which proposes to expand the existing congregate care use on the subject property, nor result in the generation of unique types of solid waste that would conflict with existing regulations applicable to solid waste. Thus, the project would comply with applicable federal, state, and local laws related to solid waste.

Sources of Information

Contra Costa County. "CalGreen / Construction & Demolition (C&D) Debris Recovery Program." Accessed in 2020. <https://www.contracosta.ca.gov/4746/CalGreen-Construction-Demolition-Debris->

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRE – <i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact: Retaining walls and primary access driveways are not typically associated with an elevated risk of fire. There is no proposal to alter infrastructure, including fire hydrants, or communications as part of this project. As discussed in section (f) of the Hazards and Hazardous Materials section of this study, the project was routed to the Contra Costa County Fire Protection District, who did not indicate any concerns with an elevated fire risk for the site. The Fire District advised that at least one lane of traffic on the private roadway is to remain open at all times during construction to allow for emergency vehicle access, and that prior to lane closures the project proponent is to notify the Fire District Dispatch Center. Thus, by complying with the requirements of the Fire District, the implementation of an emergency response or evacuation plan will not be affected by the construction of the new retaining walls and repairs to the driveway, and any impacts of the project would be less than significant.

- b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Less Than Significant Impact:

According to the California Fire Hazard Severity Zone map, the subject property is located outside of, but approximately 250 feet east of and adjacent to lands classified as very high fire hazard

severity zone. The proposed project involves retrofitting existing retaining walls which support the existing, primary driveway across a wooded ravine to the Atria Park Lafayette assisted living facility. Although the project area is wooded, two areas approximately 30 feet wide on each side of the retaining walls will be cleared of vegetation prior to construction. Clearing the site includes the removal of up to seven blue gum eucalyptus (*Eucalyptus globulus*) trees. According to the U.S. Department of Agriculture, the *Eucalyptus globulus* is highly flammable due to the stringy bark that readily catches fire, and bark streamers which can carry fire into the canopy or elsewhere. In addition, heavy litter fall and flammable oils within the foliage contribute to a highly flammable condition. Removal of these and other flammable trees and foliage may contribute to a reduction in wildfire risks for existing and future residents of the surrounding area. Approval of the project will be conditioned to restore the cleared areas which will include planting trees as restitution for those removed. Any restoration of the site with landscaping and trees would be subject to the requirements of the California State Model Water Efficient Landscaping policies. Thus, it is unlikely that eucalyptus would be replanted as part of any restoration.

Retaining walls and primary access driveways are not typically associated with an elevated risk of fire. The purpose of the project is to repair the existing retaining walls which are failing. The structures will undergo a structural review as part of obtaining a building permit and will be periodically inspected throughout the building permit process. The retrofit of the retaining walls will be designed and constructed to avoid exacerbating wildfire risks and are unlikely to fall due to high winds and slope. Therefore, the impact of the facility to exacerbate wildfire risks and expose occupants to pollutant concentrations from a wildfire is less than significant.

- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less Than Significant Impact: The proposed project involves the retrofitting of an existing retaining wall which supports the existing primary access driveway for the Atria Park Lafayette assisted living facility. The private roadway will then be repaved, but no realignment, reduction, or expansion of the roadway is proposed. The Fire District advised that at least one lane of traffic on the private roadway is to remain open at all times during construction to allow for emergency vehicle access, and that prior to lane closures the project proponent is to notify the Fire District Dispatch Center. All other infrastructure (such as power lines) for the site and emergency services are existing, and no new extensions are required to support the project. Therefore, the proposed project will have a less than significant impact on associated infrastructure and the exacerbation of fire risk.

- d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Less Than Significant Impact: The proposed project to retrofit existing retaining walls will be built on an already disturbed area of the property. Since the existing retaining walls are beginning to show signs of differential displacement, the project proposes to construct new soldier pile retaining walls on both sides of the roadway and extend the existing box culvert through which the intermittent “Murderers Creek” flows during wet conditions. The project is not expected to result in significant additional impacts on the drainage system. However, as discussed above in the section on Hydrology and Water Quality, the project proponent will be required to apply for and obtain a drainage 1010 permit from the Contra Costa County Department of Public Works,

Flood Control and Water Conservation District prior to performing any construction. A hydraulic analysis and geotechnical report including scour analysis for the culvert extension must be provided as part of the application for a 1010 permit. Therefore, as mitigated, the project will have a less than significant impact on downstream flooding, or landslides due to post-fire downslope instability, runoff, or drainage changes.

Sources of Information

California State Geoportal. “California Fire Hazard Severity Zone Viewer.” Accessed in 2020. <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>.

Contra Costa County Fire Protection District. “Atria Bridge Repair, 1545 Pleasant Hill Road, Lafayette, DP20-3005, CCCFPD Project No.: P-2020-000927” Dated 26 February 2020. Agency Comment Response Letter.

Contra Costa County Public Works Department. “Development Plan Permit DP20-3005 Staff Report & Conditions of Approval.” Dated 22 September 2020.

United States Department of Agriculture. “Species: *Eucalyptus globulus*” Accessed January 3, 2021. <https://www.fs.fed.us/database/feis/plants/tree/eucglo/all.html#FIRE%20ECOLOGY>

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY:

- a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant Impact: To construct the project, approximately 30 feet of the bottom of the wash on each side of the retaining walls will need to be cleared to allow heavy equipment (e.g., utility trucks, backhoe, an auger attached to a boom, and truck with outriggers) access to work in the area. The project involves removing approximately twenty-nine (29) code-protected trees and preserving approximately seventeen (17) code-protected trees that may be altered during construction. Thus, the project has the potential to substantially impact the habitat of fish, wildlife, and plant species or communities in the construction area. Where mitigation measures are implemented as proposed in this Initial Study, the measures will be conditions of approval of the proposed project and the applicant will be responsible for implementation of the measures. Therefore, the potential for substantial impacts on aesthetics, air quality, biological resources, cultural resources, and noise as a result of the proposed project are reduced to a less than significant level and the project would not substantially degrade the quality of the natural environment.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

Less Than Significant Impact: As described above, potential temporary impacts that would occur as a result of construction activities would be mitigated at the project level. No long-term adverse impacts are anticipated to occur, and as such, the incremental effects of the project would not be considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. At the time this initial study was drafted, there were no concurrent project proposals for the subject property that would have a cumulative considerable impact in connection with this proposed retaining wall retrofit and repair of the existing access driveway. With the implementation of the mitigations described in the sections above, the proposed project would not result in cumulatively considerable impacts on the environment.

- c) *Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant Impact: This Initial Study has disclosed potential impacts on human beings that would be less than significant with the implementation of mitigation measures. All identified mitigation measures will be included as conditions of approval for the proposed project, and the applicant will be responsible for implementation of the measures. As a result, there would not be any environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

REFERENCES

In the process of preparing the Initial Study Checklist and conduction of the evaluation, the above cited references were consulted. Reference materials are available for review by contacting Syd Sotoodeh, Contra Costa County Department of Conservation and Development, by email at syd.sotoodeh@dcd.cccounty.us or by phone at (925) 674-7815.

ATTACHMENTS

- 1) Maps and Aerial View of the Subject Property/Project Site
- 2) Photos of the Project Site
- 3) Project Plans

GENERAL PLAN: OS, OPEN SPACE; CC, CONGREGATE CARE



Legend

City Limits

Unincorporated

Highways

Highways Bay Area

Streets

General Plan

SV (Single Family Residential - Ver

SL (Single Family Residential - Low

SM (Single Family Residential - Me

SH (Single Family Residential - Hig

ML (Multiple Family Residential - Lc

MM (Multiple Family Residential - M

MH (Multiple Family Residential - H

MV (Multiple Family Residential - V

MS (Multiple Family Residential - V

CC (Congregate Care/Senior Housi

MO (Mobile Home)

M-1 (Parker Avenue Mixed Use)

M-2 (Downtown/Waterfront Rodeo I

M-3 (Pleasant Hill BART Mixed Use

M-4 (Willow Pass Road Mixed Use)

M-5 (Willow Pass Road Commercia

M-6 (Bay Point Residential Mixed U

M-7 (Pittsburg/Bay Point BART Sta

M-8 (Dougherty Valley Village Cent

M-9 (Montalvin Manor Mixed Use)

M-10 (Willow Pass Business Park M

M-11 (Appian Way Mixed Use)

M-12 (Triangle Area Mixed Use)

M-13 (San Pablo Dam Road Mixed

M-14 (Heritage Mixed Use)

CO (Commercial)

OF (Office)

BP (Business Park)

LI (Light Industry)

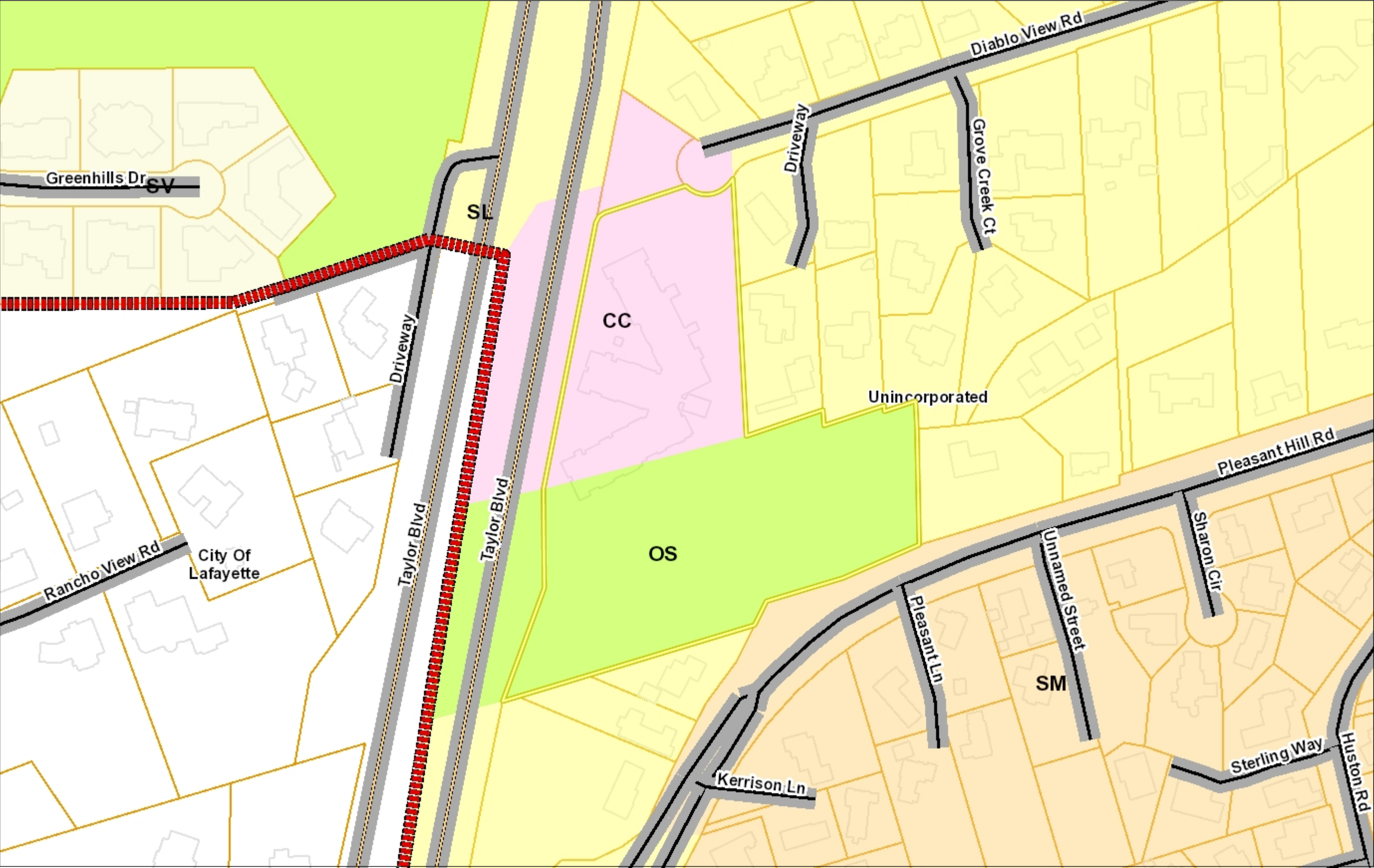
HI (Heavy Industry)

AL, OIBA (Agricultural Lands & Off

CR (Commercial Recreation)

ACO (Airport Commercial)

1: 2,257



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Notes

Contra Costa County -DOIT GIS



Legend

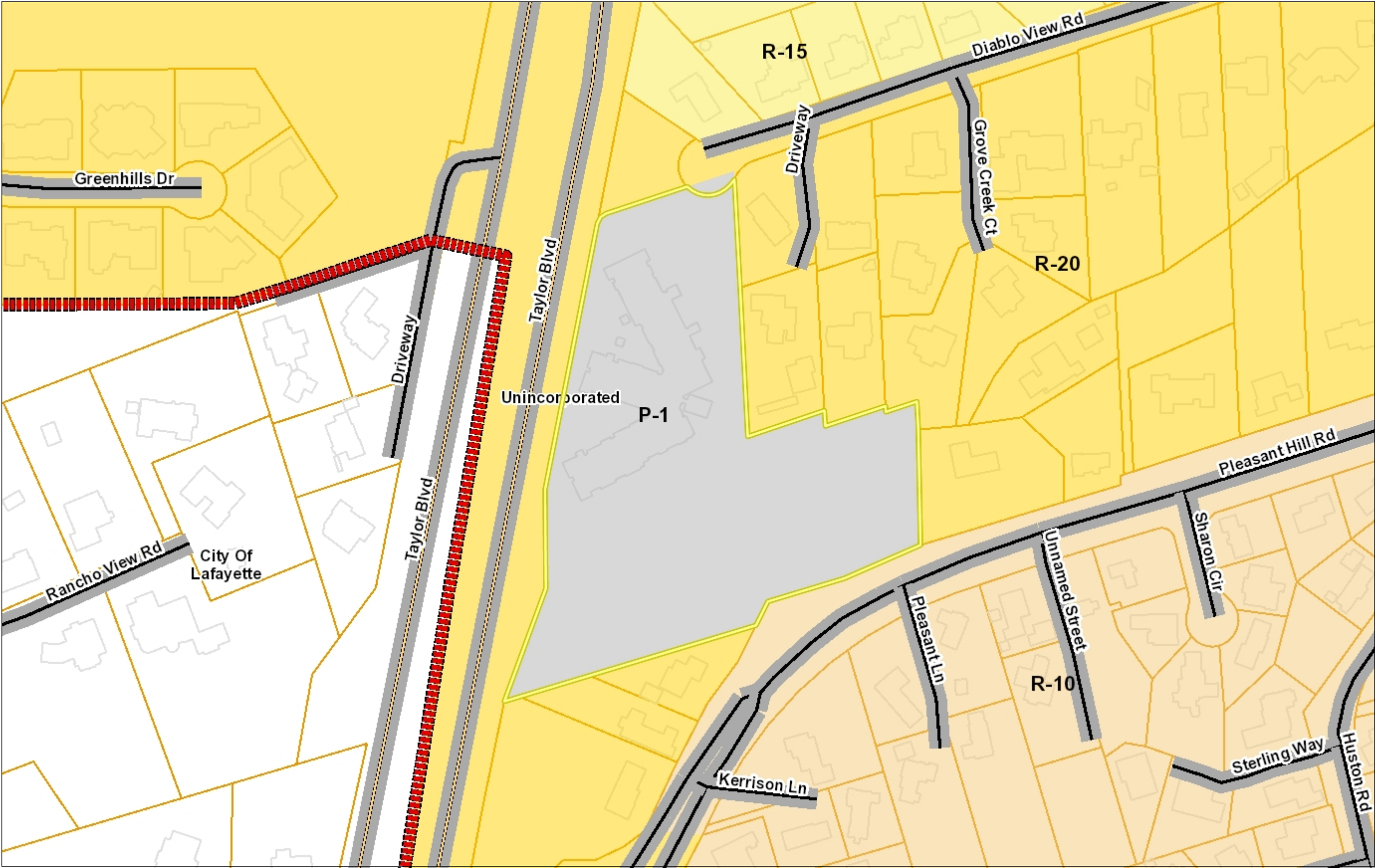
- City Limits
- Unincorporated
- Highways
- Highways Bay Area
- Streets
- Zoning
 - R-6 (Single Family Residential)
 - R-6 -FH (Single Family Residential Combining District)
 - R-6, -FH -UE (Single Family Resid: Urban Farm Animal Exclusion Com
 - R-6 -SD-1 (Single Family Resident Hillside Development Combining Di
 - R-6 -TOV -K (Single Family Reside View Ordinance and Kensington Cc
 - R-6, -UE (Single Family Residential Exclusion Combining District)
 - R-6 -X (Single Family Residential - Combining District)
 - R-7 (Single Family Residential)
 - R-7 -X (Single Family Residential - Combining District)
 - R-10 (Single Family Residential)
 - R-10, -UE (Single Family Resident: Exclusion Combining District)
 - R-12 (Single Family Residential)
 - R-15 (Single Family Residential)
 - R-20 (Single Family Residential)
 - R-20, -UE (Single Family Resident: Exclusion Combining District)
 - R-40 (Single Family Residential)
 - R-40 -FH (Single Family Resident: Combining District)
 - R-40, -FH -UE (Single Family Resic Urban Farm Animal Exclusion Com
 - R-40, -UE (Single Family Resident: Exclusion Combining District)
 - R-65 (Single Family Residential)
 - R-100 (Single Family Residential)
 - D-1 (Two Family Residential)
 - D-1 -T (Two Family Residential - Tr District)
 - D-1, -UE (Planned Unit - Urban Far Combining District)
 - M-12 (Multiple Family Residential)
 - M-12 -FH (Multiple Family Resident Combining District)
 - M-17 (Multiple Family Residential)

1: 2,257



Notes

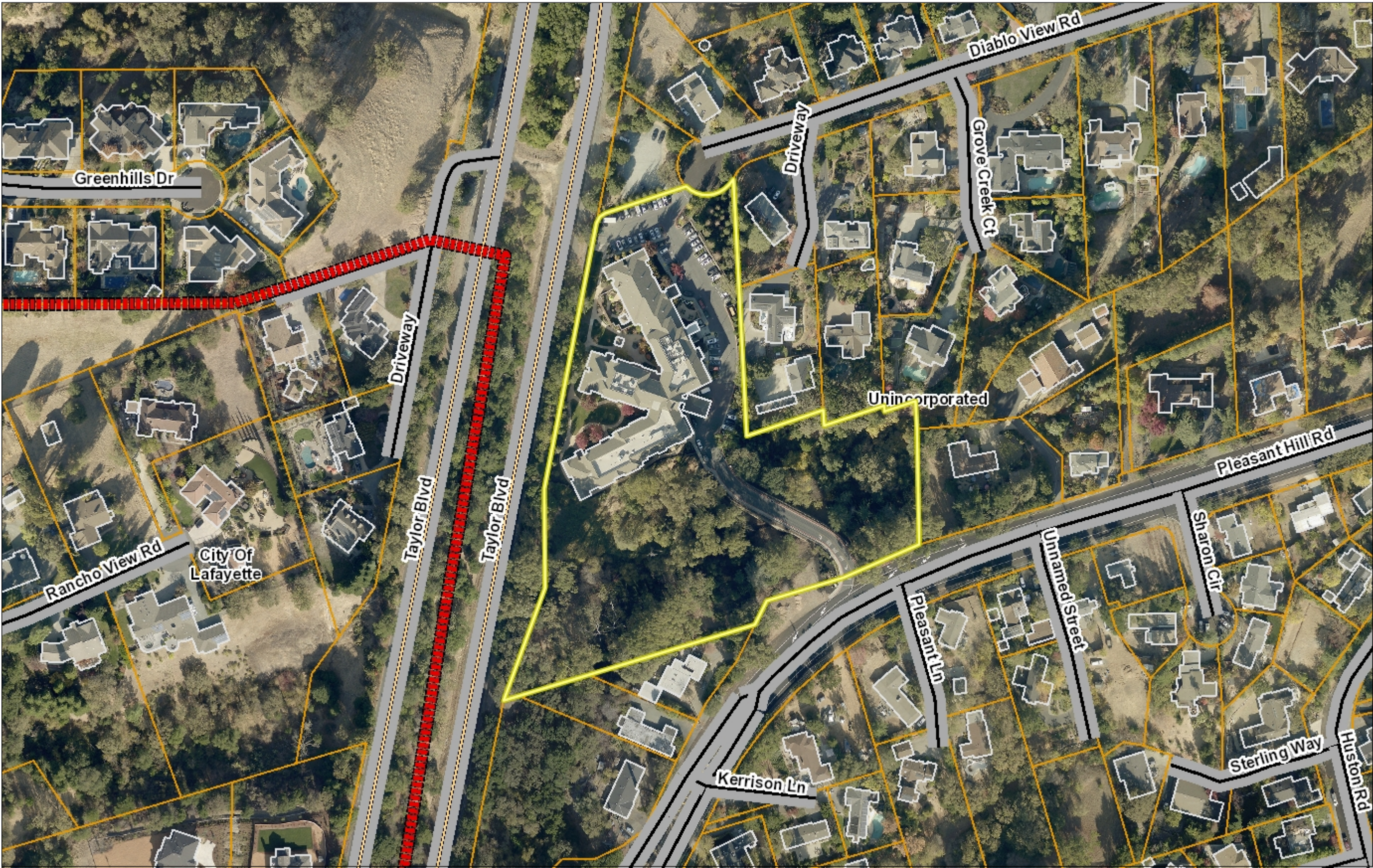
Contra Costa County -DOIT GIS



0.1 0 0.04 0.1 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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Legend

- City Limits
- Unincorporated
- Highways
- Highways Bay Area
- Streets
- County Boundary
- Bay Area Counties
- Building Outlines
- Assessor Parcels

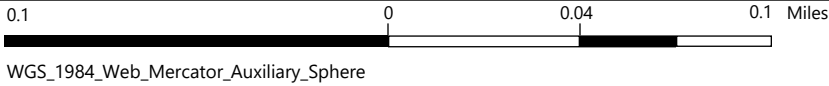
Aerials 2019

- Red: Band_1
- Green: Band_2
- Blue: Band_3

World Imagery

- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

1: 2,257



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Notes
Contra Costa County -DOIT GIS

Site Visit Photos (12/18/2019)



Retaining wall on east side of driveway and culvert, and assisted living facility, viewed from Pleasant Hill Road



Retaining wall on east side of driveway and culvert, viewed from Pleasant Hill Road

Site Visit Photos (12/18/2019)



Private roadway (driveway) with visible rutting



View of Intermittent Stream "Murderers Creek"
(photo taken after rain in December 2019)



View of retaining wall on west side of driveway

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LEGEND

DESCRIPTION	EXISTING	PROPOSED
LOT LINES	---	---
EASEMENT	---	---
PROPERTY LINE	---	---
CENTERLINE	---	---
CURB & GUTTER	=====	=====
DITCH	----->-----	----->-----
STORM DRAIN	---XX"SD---	[SD]
SANITARY SEWER	---XX"SS---	[SS]
WATER	---XX"W---	[W]
GAS LINE	---G---	[G]
FIRE SERVICE	---	[FS]
CULVERT	---	---
SDMH	○	●
AREA DRAIN	●	●
DROP INLET	□	■
DIRECTION OF SURFACE FLOW	→	→
SSMH	○	●
SSCO	○	●
SEWER SERVICE	○	●
BLOW OFF	□BO	■
FIRE HYDRANT	□	■
WATER VALVE	□WM	■
WATER METER	□	■
MONUMENT	○	●
UTILITY POLE	○	●
UTILITY POLE WITH LIGHT	○	●
STREET LIGHT	○	●
POST TOP STREET LIGHT	○	●
FENCE	-X-X-	-X-X-
INDEX CONTOUR	-25-	-25-
INTERMEDIATE CONTOUR	-25-	-25-
HEDGE	☁	☁
JUNCTION/PULL BOX	□PB	■PB
SIGN	□	■
GRADE BREAK LINE	---	---
FINISH GRADE ELEVATION	+114.55	57.20
TREE & DRIPLINE	☁	☁

ABBREVIATIONS

AC	ASPHALT CONCRETE
AD	AREA DRAIN
A.E.	APPROVED EQUAL
AP	ANGLE POINT
ARV	AIR RELEASE VALVE
BK	BOOK
BOC	BACK OF CURB
BOV	BLOW-OFF VALVE
BOW	BACK OF WALK
BW	BOTTOM OF WALL
CG	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CP	CAR POOL
DETL	DETAIL
DI	DROP INLET
DIP	DUCTILE IRON PIPE
DIST	DISTRICT
DWG	DRAWING
(E)	EXISTING OR EAST
EG	EXISTING GRADE
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EXIST	EXISTING
EXIST	EXISTING
EV	ELECTRIC VEHICLE
FF	FINISH FLOOR
FG	FINISH GRADE
FS	FIRE SERVICE
FDC	FIRE DEPARTMENT CONNECTION
FES	FLARED END SECTION
FL	FIRE HYDRANT
FL	FLOW LINE
FP	FINISH PAVEMENT
GB	GRADE BREAK
GR	GRATE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
INTX	INTERSECTION
INV	INVERT
IRR	IRRIGATION
LF	LINEAR FEET
LT	LEFT
NFPA	NATIONAL FIRE PREVENTION ACT
NO	NUMBER
NG	NATIVE GROUND
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
OMP	OPEN METAL PIPE
P	PAVERS
PIV	POST INDICATOR VALVE
(P)	PROPOSED
PROP	PROPOSED
PCC	PORTLAND CEMENT CONCRETE
POC	POINT OF CONNECTION
PL	PROPERTY LINE
PG	PAGE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
RPC	REINFORCED CONCRETE PIPE
RT	RIGHT
ROW	RIGHT-OF-WAY
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDWK	SIDEWALK
SO	SIDE OPENING
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MANHOLE
STD	STANDARD
SVC	SERVICE
SW	SIDEWALK
TBW	TOP BACK OF WALK
TC	TOP OF CURB
TOE	TOP OF BOTTOM SLOPE
TOE	TOP OF BOTTOM WALL
TYP	TYPICAL
TS	TOP OF SLOPE
TW	TOP OF WALL
W	WATER
WV	WATER VALVE
WM	WATER METER

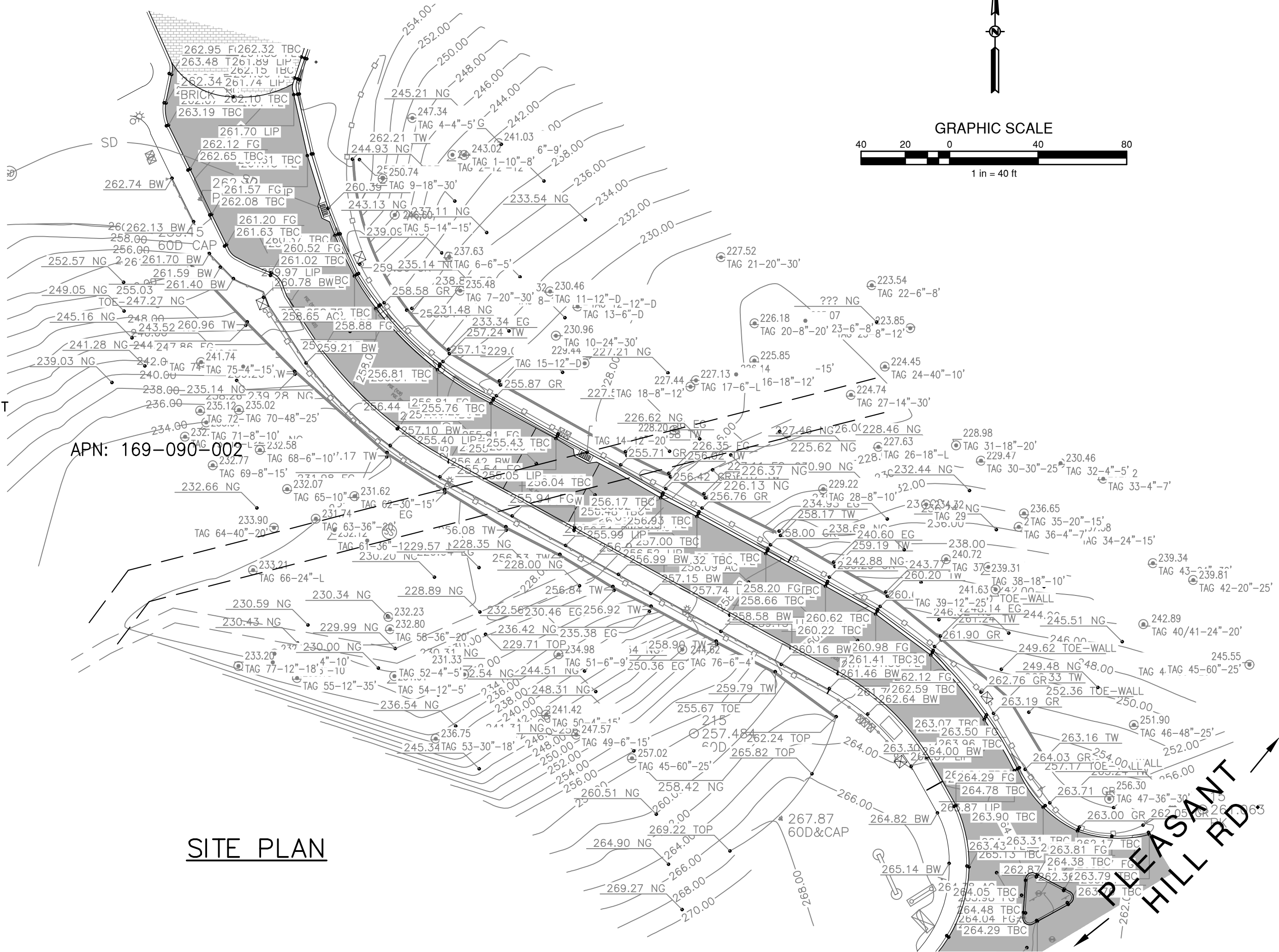
IMPROVEMENT PLANS FOR

ATRIA PARK OF LAFAYETTE - MAIN ROAD RETROFIT

CITY OF LAFAYETTE, CONTRA COSTA COUNTY, STATE OF CALIFORNIA

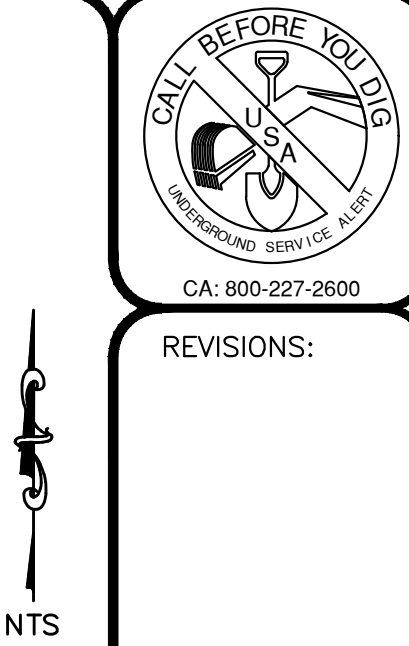
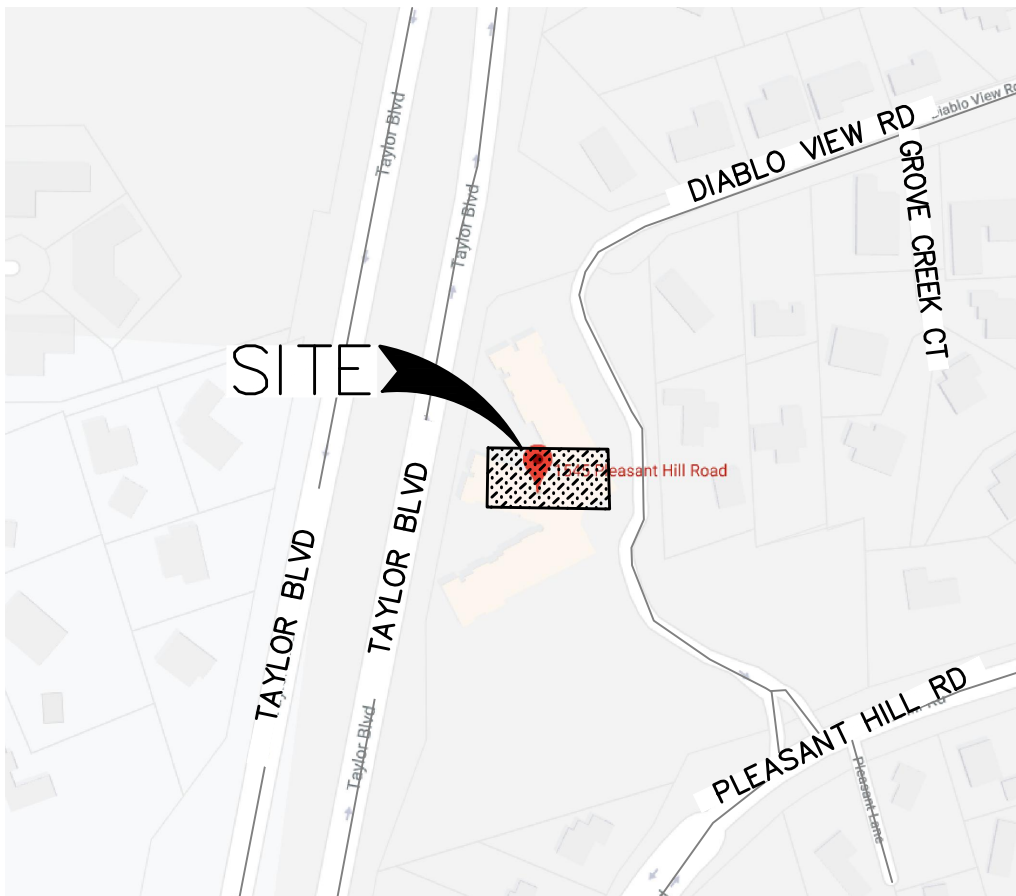
1545 PLEASANT HILL ROAD, LAFAYETTE, CA 95816

APN: 169-090-002



SITE PLAN

VICINITY MAP



SHEET INDEX

1	C1	TITLE SHEET
2	C2	GENERAL NOTES
3	C3	OVERALL SITE PLAN
4	C4	TOPOGRAPHIC SURVEY
5	C5	DEMOLITION PLAN
6	C6	TREES REMOVAL PLAN
7	C7	SECTIONS & DETAILS
8	C8	ASPHALT REPLACEMENT PLAN
9	C9	PROFILE PLAN
10	C10	EROSION CONTROL PLAN
11	S1	STRUCTURAL PLAN – GENERAL PLAN 1
12	S2	STRUCTURAL PLAN – GENERAL PLAN 2
13	S3	STRUCTURAL PLAN – SOLDIER PILE
14	S4	STRUCTURAL PLAN – SOLDIER PILE
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16	S6	STRUCTURAL PLAN – EXCAVATION AND BACKFILL DETAILS
17	S7	STRUCTURAL PLAN – RETAINING WALL DETAILS
18	S8	STRUCTURAL PLAN – WALL DETAILS
19	S9	STRUCTURAL PLAN – SUBHORIZONTAL GROUND ANCHOR DETAILS
20	S10	STRUCTURAL PLAN – HORIZONTAL GROUND ANCHOR DETAILS
21	S11	STRUCTURAL PLAN – LAGGING PANEL DETAILS
22	S12	STRUCTURAL PLAN – BOX CULVERT DETAILS
23	S13	STRUCTURAL PLAN – EXCAVATION AND BACKFILL CAST-IN-PLACE



SURVEY NOTE

- TOPOGRAPHIC SURVEY FOR THIS PROJECT WAS PREPARED BY:

GEO-LEGAL
8850 GREENBACK LANE, STE C
ORANGEVALE, CA 95662
P: (916) 871-4789
- CONSTRUCTION STAKING FOR THIS PROJECT SHALL NOT OCCUR UNTIL AFTER THE PARTY CHIEF FOR THE FIRM PERFORMING THE CONSTRUCTION STAKING HAS NOTIFIED THE ENGINEER OF RECORD, IN WRITING, THAT HE HAS PERFORMED A TOPOGRAPHIC CHECK OF THE SITE AND THAT THE ELEVATION FOR THE REFERENCED BENCH MARK MATCHES THE SITE TOPOGRAPHY. IF IT IS DETERMINED THAT THE SITE TOPOGRAPHY IDENTIFIED ON THE PLANS DOES NOT MATCH THE IDENTIFIED BENCH MARK FOR THE SITE, THEN THE ENGINEER, CONTRACTOR AND CONSTRUCTION STAKER SHALL MEET AND DETERMINE HOW TO RESOLVE THE DISCREPANCY. UNDER NO CIRCUMSTANCES SHALL THE SITE BE STAKED UNTIL THE ENGINEER OF RECORD ISSUES A LETTER TO THE CONTRACTOR, CONSTRUCTION STAKER AND TO THE OWNER THAT THE SITE TOPO AND BENCH MARK MATCH.

BENCH MARK

BASIS OF ELEVATION: CONTRA COSTA COUNTY BENCHMARK #978 – CONTRA COSTA COUNTY BRONZE DISK SET IN THE NORTHEAST CORNER OF BRIDGE ON PLEASANT HILL ROAD OVER PLEASANT HILL OVERPASS.
ELEV: 342.839

GEOTECHNICAL REPORT

- A GEOTECHNICAL REPORT FOR THE EXISTING ROAD WAS PREPARED BY GEOTECHNICA ON 06/08/18 PROJECT #172370.
- AN ADDENDUM TO THE REPORT USED ABOVE WAS PREPARED ON 04/16/19.

UTILITY REPRESENTATIVES

UTILITY	COMPANY	CONTACT	PHONE
GAS	PG&E		800-743-5000
ELECTRICITY	LAFAYETTE UTILITIES SYSTEM	DARLINE HOBACK	337-291-8972
TELEPHONE	AT&T		800-750-2355
WATER	LAFAYETTE UTILITIES SYSTEM	STEVE DRONET	337-291-5865
SEWER	CENTRAL CONTRA COSTA SANITARY DISTRICT	CHRIS CARPENTER	925-229-7200
DRAINAGE	CONTRA COSTA COUNTY	BRIAN M.BALBAS	925-313-2315
FIRE	CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT	LEWIS BROSCHARD	925-941-3300
CABLE T.V.	COMCAST		800-945-2288

OWNER:

ATRIA PARK OF LAFAYETTE
1545 PLEASANT HILL RD
LAFAYETTE CA 95816
CONTACT: JAYMES DELGADO
650-226-6515

STRUCTURAL ENGINEER:

MOORADIAN & ASSOCIATES
4578 N.FIRST STREET #140
TUCSON AZ 85718
520-408-8117

EARTHWORK

SITE EARTHWORK CALCULATED PER FOLLOWING CRITERIA AND NOT ADJUSTED FOR COMPACTION OR EXPANSION.

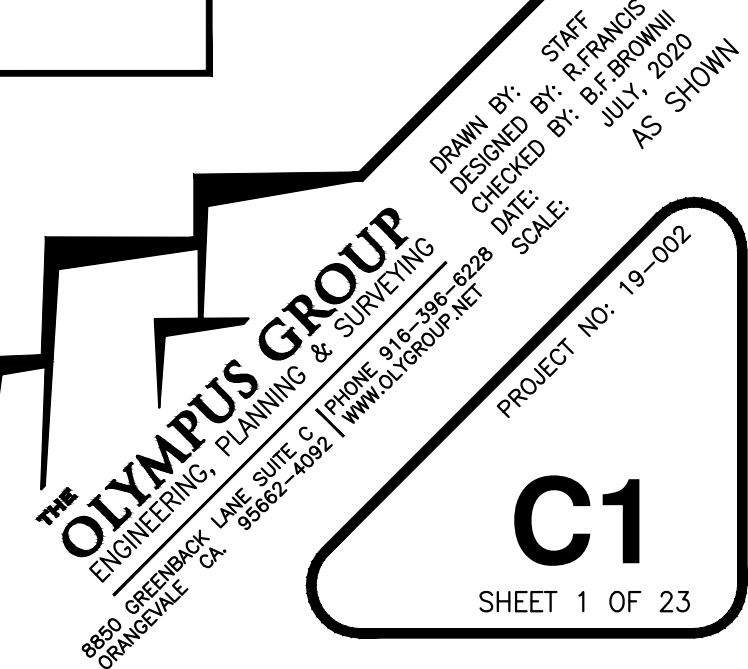
FILL – 660	CU YD APPROX.– GRANULAR BACKFILL
CUT – 75	CU YD APPROX.– SOLDIER PILES

APPROVED BY:	EXPIRES IN 1 YEAR	APPROVED BY:	EXPIRES IN 1 YEAR
CONTRA COSTA COUNTY FIRE DISTRICT	DATE	CONTRA COSTA COUNTY – COUNTY ENGINEER	DATE
CONTRA COSTA COUNTY MUNICIPAL SERVICES			
PROJECT NAME: 1545 PLEASANT HILL ROAD			
APN'S: 169-090-002			
COUNTY FILE: #TP19-0057 & #DP88-3007			
APPROVED:			
ORDER No. N/A	DRAINAGE FEE: N/A		
CHECKED BY:	DRAINAGE APPROVAL:		

WDID:	N/A		
CONSTRUCTION START DATE:	N/A		
FINAL STABILIZATION DATE:	N/A		
AREA OF DISTURBANCE (AC.):	N/A		
VOL. OF CUT (CY):	N/A	VOL. OF FILL (CY):	N/A
POST-CONST. STORMWATER BMP'S REQ'D (Y/N):			

TRAFFIC NOTE:

NOTE: THE CONTRACTOR SHALL PREPARE, SUBMIT & OBTAIN APPROVAL ON A TRAFFIC/TRANSPORTATION MANAGEMENT PLAN. THE PLAN SHALL DESCRIBE ANTICIPATED IMPACTS TO TRAFFIC ON PLEASANT HILL RD. AND POTENTIAL CLOSURE/DETOUR FOR THE MAIN ENTRY ROAD.



C1

SHEET 1 OF 23

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PL19-002(2016) CALIFORNIA IMPROVEMENT PLANS-00021P-002-ENCL.DWG

JUL 13, 2024 09:04 AM - OLYMPUS GROUP

GENERAL NOTES:

1. FIELD CONFLICTS: THESE PLANS SHOW EXISTING FEATURES INCLUDING BUT NOT LIMITED TO TREES, UTILITIES, AND STRUCTURES THAT MAY BE AFFECTED BY THE CONSTRUCTION OR PLACEMENT OF THE PROPOSED ENGINEERED IMPROVEMENTS. THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE ENGINEER IF THERE ARE ANY EXISTING FEATURES, WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, THAT COULD IN ANY WAY BE IN POTENTIAL CONFLICT WITH THE DESIGN OF THESE PLANS. ALL WORK WITHIN THE VICINITY OF A POTENTIAL CONFLICT SHALL CEASE UNTIL AN ADEQUATE AND APPROPRIATE SOLUTION IS DETERMINED BY THE ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.

2. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT (NAME OF PROJECT ENGINEER), FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.

3. BASIS OF ELEVATION DATUM: CONTRA COSTA COUNTY BENCHMARK #978-- CONTRA COSTA COUNTY BRONZE DISK SET IN THE NORTHEAST CORNER OF BRIDGE ON PLEASANT HILL ROAD OVER PLEASANT HILL ROAD OVER PLEASANT HILL OVERPASS.

ELEV: 342.839

4. ALL STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF TITLE 9 OF THE CURRENT COUNTY ORDINANCE CODE, COUNTY STANDARD SPECIFICATIONS AND STANDARD PLANS. ALL PEDESTRIAN IMPROVEMENTS SHALL CONFORM WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS AND THE AMERICANS WITH DISABILITIES ACT. THE IMPROVEMENTS ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT. CONTACT THE PUBLIC WORKS DESIGN / CONSTRUCTION DIVISION AT 313-2320, AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK, TO ARRANGE FOR INSPECTION. ANY WORK PERFORMED WITHOUT PROVIDING THIS ADVANCED NOTICE WILL BE REJECTED AND THE DEVELOPER/CONTRACTOR MAY BE REQUIRED TO REMOVE THE IMPROVEMENTS AND MAY BE SUBJECT TO PAYMENT OF FINES AS DETERMINED BY THE PUBLIC WORKS DIRECTOR.

5. QUALITY CONTROL PLAN: THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING THE QUALITY OF MATERIAL ENTERING THE WORK AND THE WORK PERFORMED, AND SHALL PERFORM TESTING TO ENSURE CONTROL. PRIOR TO START OF WORK THE CONTRACTOR SHALL SUBMIT A QUALITY CONTROL PLAN THAT MUST DESCRIBE THE METHODS AND FREQUENCY OF TESTING, IMPLEMENTATION OF CORRECTIVE ACTIONS AS NECESSARY, AND REPORTING OF TEST RESULTS, SPECIFIC TO EACH MATERIAL TO BE USED.

6. PLAN REVISIONS: ALL REVISIONS TO THIS PLAN MUST BE REVIEWED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON REVISED PLANS, STAMPED AND DISTRIBUTED BY THE ENGINEERING SERVICES DIVISION, PRIOR TO ACCEPTANCE OF THE WORK AS COMPLETE.

7. 7. EXCAVATION: THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 811OR (800) 227-2600 TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. THE USA AUTHORIZATION NUMBER SHALL BE KEPT AT THE JOB SITE.

8. ALL UTILITY DISTRIBUTION SERVICES SHALL BE PLACED UNDERGROUND.

9. UTILITY CLEARANCE: PRIOR TO PLACING CURB, SIDEWALK, ASPHALT CONCRETE, SUBBASE OR BASE MATERIAL, ALL UNDERGROUND UTILITIES WITHIN THE RIGHT OF WAY SHALL BE INSTALLED, BACKFILL COMPLETED AND THE PUBLIC WORKS DEPARTMENT'S CONSTRUCTION DIVISION NOTIFIED. BY EACH OF THE UTILITY COMPANIES HAVING FACILITIES WITHIN THE WORK AREA, THAT THE UTILITY INSTALLATION HAS SATISFACTORILY PASSED ACCEPTANCE TESTS.

10. ALL MANHOLES OR INLETS OVER 4 FEET IN DEPTH SHALL BE PROVIDED WITH LADDER STEPS. LADDER STEPS SHALL BE INTEGRALLY CAST INTO THE WALLS OF THE MANHOLE OR INLET WHETHER PRECAST OR FIELD CAST IN ACCORDANCE WITH COUNTY SPECIFICATIONS. LADDER STEPS SHALL BE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC OR EQUIVALENT.

11. PAVEMENT WIDENING: WHEN WIDENING THE PAVEMENT ON AN EXISTING ROAD, THE EXISTING PAVEMENT SHALL BE CUT TO A NEAT LINE AND REMOVED TO AN EXISTING ADEQUATE STRUCTURAL SECTION. AN EXPLORATORY TRENCH, OR POTHOLING, MAY BE REQUIRED TO DETERMINE THE LIMITS OF PAVEMENT REMOVAL.

12. RETAINING WALLS: RETAINING WALLS WITHIN PUBLIC ROAD RIGHTS OF WAY WILL BE INSPECTED BY THE PUBLIC WORKS DEPARTMENT.

A. A BUILDING PERMIT WILL BE REQUIRED FOR RETAINING WALLS, OUTSIDE PUBLIC ROAD RIGHTS OF WAY, THAT ARE 4 FEET OR HIGHER, OR THAT ARE 3 FEET OR HIGHER WITH SURCHARGE. PRIOR TO ACCEPTANCE OF THE IMPROVEMENTS AS COMPLETE, VERIFICATION THAT THE BUILDING INSPECTION DEPARTMENT HAS SIGNED OFF ON THE PERMIT SHALL BE PROVIDED TO THE CONSTRUCTION INSPECTOR.

13. RETAINING WALLS UNDER 4 FEET HIGH (3 FEET HIGH WITH SURCHARGE) SHOWN ON THE IMPROVEMENT PLAN TO BE OUTSIDE OF PUBLIC ROAD RIGHT OF WAY, WILL BE INSPECTED BY (NAME OF ENGINEERING FIRM), A LETTER STATING THAT ALL WALLS WERE CONSTRUCTED IN ACCORDANCE WITH THE STRUCTURAL AND/OR GEOTECHNICAL ENGINEERS' RECOMMENDATIONS MUST BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT, PRIOR TO ACCEPTANCE OF IMPROVEMENTS AS COMPLETE.

14. REPRODUCIBLE 610MM X 920MM (24 X 36) MYLAR AS BUILT RECORD DRAWINGS ARE REQUIRED FOR ENGINEERED STRUCTURES WITHIN PUBLIC RIGHTS OF WAY OR EASEMENTS. STRUCTURES INCLUDE: BRIDGES, RETAINING WALLS, TIE BACKS, SUBDRAINS, ETC.

15. TREES: NO TREES SHALL BE REMOVED UNLESS THEY ARE SHOWN AND NOTED TO BE REMOVED ON THE IMPROVEMENT PLANS. IF ANY TREES ARE TO BE REMOVED, THE IMPROVEMENT PLANS MUST BE REVIEWED AND ACKNOWLEDGED BY THE COMMUNITY DEVELOPMENT DEPARTMENT. ALL TREES CONFLICTING WITH GRADING, UTILITIES, OR OTHER IMPROVEMENTS, OR OVERHANGING THE SIDEWALK OR PAVEMENT SO AS TO FORM A NUISANCE OR HAZARD, SHALL BE TRIMMED, PROPERLY TREATED AND SEALED. A TREE PERMIT MAY BE NECESSARY AND CAN BE OBTAINED FROM THE COMMUNITY DEVELOPMENT DEPARTMENT.

16. GRADES LESS THAN 1 PERCENT: WATER TESTING IS REQUIRED FOR ALL CURB GRADES LESS THAN ONE PERCENT.

17. ALL ASPHALT CONCRETE PAVING OF PUBLIC ROADS IS SUBJECT TO TESTS REQUIRED BY AMENDMENT 38--HOT MIX ASPHALT OF THE CONTRA COSTA COUNTY STANDARD SPECIFICATIONS DATED OCTOBER 16, 2014. BASED ON THESE TESTS, ADDITIONAL PAVEMENT TREATMENT MAY BE NECESSARY.

18. EXISTING CURB AND SIDEWALK WITHIN THE PROJECT LIMITS THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH NOT PROPOSED TO BE REMOVED, SHALL BE REPAIRED OR REPLACED, EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.

18. EROSION CONTROL: IF PAVING AND STORM DRAIN IMPROVEMENTS ARE NOT COMPLETED BY OCTOBER 1ST, TEMPORARY SILT AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION--CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE BUILDING INSPECTION DEPARTMENT.

19. PAVEMENT STRUCTURAL SECTION: THE THICKNESS OF SUB--BASE, BASE AND SURFACING WILL BE DETERMINED BY THE COUNTY PUBLIC WORKS DEPARTMENT BASED ON THE TRAFFIC INDEX AND SOILS TESTS FOR "R" VALUE.

20. PAVEMENT STRIPING: ALL TRAFFIC STRIPING AND MARKINGS SHALL BE THERMOPLASTIC UNLESS THESE PLANS DESIGNATE THE USE OF TRAFFIC PAINT.

21. ALL STRIPING ON MAJOR ROADS SHALL BE CAT TRACKED PRIOR TO FINAL INSTALLATION. FINAL INSTALLATION OF STRIPING WILL BE ALLOWED ONLY AFTER APPROVAL OF THE STRIPING LAYOUT BY THE CONSTRUCTION INSPECTOR.

22. ALL SUBDIVISION STREETS THAT ARE STUBBED OUT FOR FUTURE USE SHALL HAVE A SIGN POSTED AT THE END OF THE DEAD END STREET THAT READS: THIS STREET PLANNED TO BE EXTENDED. THE SIGN SHALL BE REFLECTORIZED WITH BLACK 2-INCH CAPITAL SERIES "E" LETTERS ON A WHITE BACKGROUND, MEASURING 18 INCHES HIGH BY 36 INCHES WIDE. INSTALL WITH W31 (END) SIGN BEHIND STANDARD END OF STREET BARRICADE. SEE COUNTY STANDARD PLAN CA 30.

23. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR MUNICIPAL CONSTRUCTION AND INDUSTRIAL ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCE CONTROL BOARD OR ANY OF ITS REGIONAL WATER QUALITY CONTROL BOARDS.

24. THE CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND/OR PERPETUATION OF ALL EXISTING MONUMENTS (THAT CONTROL SUBDIVISIONS, TRACTS, STREETS OR HIGHWAYS, OR PROVIDE SURVEY CONTROL) WHICH WILL BE DISTURBED OR REMOVED DUE TO CONTRACTOR'S WORK. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE, TO PROJECT ENGINEER/SURVEYOR, PRIOR TO DISTURBANCE OR REMOVAL OF FACILITY MONUMENTS. PROJECT ENGINEER/SURVEYOR SHALL COORDINATE WITH THE CONTRACTOR TO RESET MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE COUNTY SURVEYOR, PER BUSINESS AND PROFESSIONS CODE SECTION 8771.

25. ANY MATERIAL IMPORTED FOR THE CONSTRUCTION OF EMBANKMENTS OR AS BACKFILL FOR STRUCTURES, CULVERTS AND OTHER FACILITIES SHALL MEET THE FOLLOWING REQUIREMENTS:

PH* >5.5 (>7.3**)

WATER SOLUBLE SULFATE*** <0.2%

RESISTIVITY (R)* >3000 OHM/CM**

* PER CALIFORNIA TEST 532 & 643. ** FOR BACKFILL AROUND METAL PIPE/CONDUIT.

*** REPORTED AS SO4

26. ENCROACHMENT PERMIT: THE CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT FOR ALL WORK WITHIN EXISTING COUNTY ROAD RIGHTS OF WAY. APPLICATIONS FOR ENCROACHMENT PERMIT, SUBMITTED MORE THAN 120 DAYS PAST THE PUBLIC WORKS REVIEWED DATE STAMP, MAY REQUIRE UP TO FOUR WEEKS TO PROCESS. FOR FURTHER PERMIT INFORMATION, CONTACT THE APPLICATION AND PERMIT CENTER AT (925) 674-7744.

27. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- EROSION AND SEDIMENT CONTROL NOTES:
1. THE CONTRACTOR SHALL FOLLOW CONTRA COSTA COUNTY GUIDELINES FOR GRADING AND EROSION AND SEDIMENT CONTROL" FOR THE MEASURES SHOWN OR STATED ON THESE PLANS.

2. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM. CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE FOR THE WINTER MONTHS PRIOR TO OCTOBER 1.

3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE DEPARTMENT OF UTILITIES.

4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE DEPARTMENT OF UTILITIES.

5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

6. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMPS, AS WELL, ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.

7. IN AREAS WHERE SOIL IS EXPOSED, PROMPT REPLANTING WITH NATIVE COMPATIBLE, DROUGHT-RESITANT VEGETATION SHALL BE PERFORMED. NO AREAS WILL BE LEFT EXPOSED OVER THE WINTER SEASON.

8. THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE. THE STABILIZED CONSTRUCTION ENTRANCE SHALL REMAIN IN PLACE UNTIL THE ROAD BASE ROCK COURSE IS COMPLETED.

9. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY OR AS NECESSARY.

10. CONTRACTOR SHALL PLACE GRAVEL BAGS AROUND ALL NEW DRAINAGE STRUCTURE OPENINGS IMMEDIATELY AFTER THE STRUCTURE OPENING IS CONSTRUCTED. THESE GRAVEL BAGS SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.

11. CONTRACTOR SHALL IMPLEMENT HOUSEKEEPING PRACTICES AS FOLLOWS:
A. SOLID WASTE MANAGEMENT: PROVIDE DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS. ARRANGE FOR REGULAR REMOVAL AND DISPOSAL. CLEAR SITE OF TRASH INCLUDING ORGANIC DEBRIS, PACKAGING MATERIALS, SCRAP OR SURPLUS BUILDING MATERIALS AND DOMESTIC WASTE DAILY.
B. MATERIAL DELIVERY AND STORAGE: PROVIDE A DESIGNATED MATERIAL STORAGE AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. STORE MATERIAL ON PALLETS AND PROVIDE COVERING FOR SOLUBLE MATERIALS. RELOCATE STORAGE AREA INTO BUILDING SHELL WHEN POSSIBLE. INSPECT AREA WEEKLY.
C. CONCRETE WASTE: PROVIDE A DESIGNATED AREA FOR A TEMPORARY PIT TO BE USED FOR CONCRETE TRUCK WASH--OUT. DISPOSE OF HARDENED CONCRETE OFFSITE. AT NO TIME SHALL A CONCRETE TRUCK DUMP ITS WASTE AND CLEAN ITS TRUCK INTO THE CITY STORM DRAINS VIA CURB AND GUTTER. INSPECT DAILY TO CONTROL RUNOFF, AND WEEKLY FOR REMOVAL OF HARDENED CONCRETE.
D. PAINT AND PAINTING SUPPLIES: PROVIDE INSTRUCTION TO EMPLOYEES AND SUBCONTRACTORS REGARDING REDUCTION OF POLLUTANTS INCLUDING MATERIAL STORAGE, USE, AND CLEAN UP. INSPECT SITE WEEKLY FOR EVIDENCE OF IMPROPER DISPOSAL.
E. VEHICLE FUELING, MAINTENANCE AND CLEANING: PROVIDE A DESIGNATED FUELING AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. DO NOT ALLOW MOBILE FUELING OF EQUIPMENT. PROVIDE EQUIPMENT WITH DRIP PANS. RESTRICT ONSITE MAINTENANCE AND CLEANING OF EQUIPMENT TO A MINIMUM. INSPECT AREA WEEKLY.
F. HAZARDOUS WASTE MANAGEMENT: PREVENT THE DISCHARGE OF POLLUTANTS FROM HAZARDOUS WASTES TO THE DRAINAGE SYSTEM THROUGH PROPER MATERIAL USE, WASTE DISPOSAL AND TRAINING OF EMPLOYEES. HAZARDOUS WASTE PRODUCTS COMMONLY FOUND ON--SITE INCLUDE BUT ARE NOT LIMITED TO PAINTS & SOLVENTS, PETROLEUM PRODUCTS, FERTILIZERS, HERBICIDES & PESTICIDES, SOIL STABILIZATION PRODUCTS, ASPHALT PRODUCTS AND CONCRETE CURING PRODUCTS.

12. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REPAIR/RESTORE THE CHANNEL BOTTOM AND SIDE BANKS TO PRE--PROJECT CONDITION. ANY EXPOSED SOILS SHALL BE HYDROSEEDED WITH GRASSES NATIVE TO THE AREA.
- PRECONSTRUCTION & STAKING NOTES:
1. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE A PRE--CONSTRUCTION MEETING AT THE PROJECT SITE WITH THE CIVIL AND ARCHITECTURAL CONSULTANT. IN ORDER TO WALK THE SITE AND FIELD VERIFY OR CLARIFY ANY CONSTRUCTION OR DESIGN RELATED ISSUES PRIOR TO WORK BEGINNING.

2. WHEN REQUESTING CONSTRUCTION STAKES, THE CONTRACTOR IS REQUIRED TO NOTIFY THE PROJECT ENGINEER 48 HOURS IN ADVANCE. THE OLYMPUS GROUP, INC. ASSUMES NO RESPONSIBILITY FOR ANY COSTS INCURRED FOR CONSTRUCTION SHUTDOWNS OR DELAYS WHEN NOT GIVEN THIS ADVANCE NOTICE.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS OR MARKERS DESTROYED OR LOST DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED OR LOST DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE AND WILL REQUIRE 48 HOURS NOTICE FROM THE CONTRACTOR TO REPLACE SAID MONUMENTS.

4. THE CONTRACTOR WILL NOT PERFORM ANY CORRECTIVE WORK DUE TO STAKING ERRORS WITHOUT FIRST CONSULTING WITH THE PROJECT ENGINEER. IN THE EVENT THE COST OF ANY ITEM OF CORRECTIVE WORK EXCEEDS \$500.00, PERMISSION TO PROCEED MUST BE RECEIVED IN WRITING FROM THE PROJECT ENGINEER. NO LIABILITY WILL BE ASSUMED BY THE PROJECT ENGINEER FOR THE COSTS OF WORK PERFORMED IN VIOLATION OF THIS PROVISION.

5. THE OLYMPUS GROUP, INC. ASSUMES NO LIABILITY FOR ANY WORK CONSTRUCTED IF STAKED BY OTHERS.

6. WHENEVER THE NOTE "VERIFY" IS INDICATED ON THESE PLANS, THE CONTRACTOR SHALL EXPOSE THESE FACILITIES PRIOR TO THE START OF ANY CONSTRUCTION. AFTER THE CONTRACTOR HAS COMPLETED EXPOSING SAID FACILITIES, HE SHALL NOTIFY THE PROJECT ENGINEER AND REQUEST THEY VERIFY THAT THE HORIZONTAL, VERTICAL ALIGNMENTS, MEASUREMENT, ETC., ARE IN SUBSTANTIAL CONFORMANCE WITH THESE PLANS TO THE PROJECT ENGINEERS SATISFACTION. IN THE EVENT THAT SAID FACILITIES ARE DETERMINED NOT TO BE IN SUBSTANTIAL CONFORMANCE, THE PROJECT ENGINEER RESERVES THE RIGHT TO REVISE THESE PLANS TO REFLECT THE FOUND CONDITIONS.

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH FHA STANDARDS.

2. CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CONTRA COSTA COUNTY & CALTRANS STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND USE ALL APPLICABLE ADDENDUMS.

3. ALL GRADING SHALL COMPLY WITH THE RECOMMENDATIONS OF THE SOIL AND GEOLOGICAL INVESTIGATION.

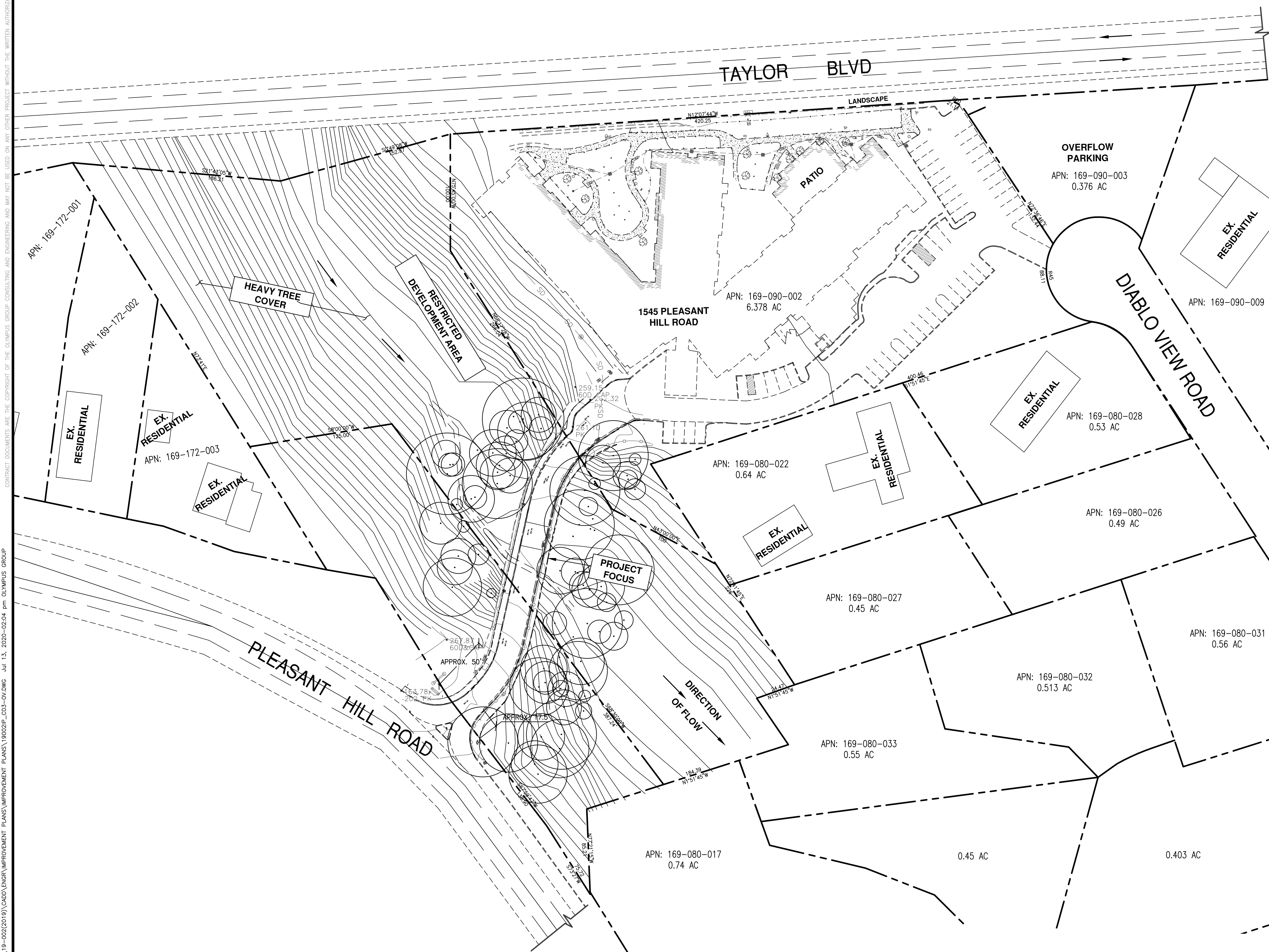
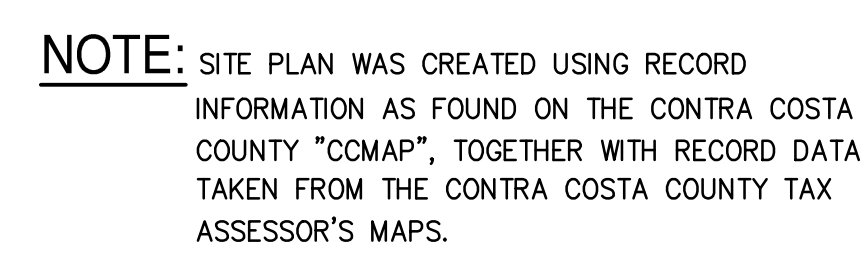
4. ALL SLOPE BANKS ARE 2:1 MAXIMUM UNLESS OTHERWISE NOTED.

5. ALL GRADING SHALL BE IN CONFORMANCE WITH THE CONTRA COSTA COUNTY GRADING, EROSION, AND SEDIMENT CONTROL SPECIFICATIONS.

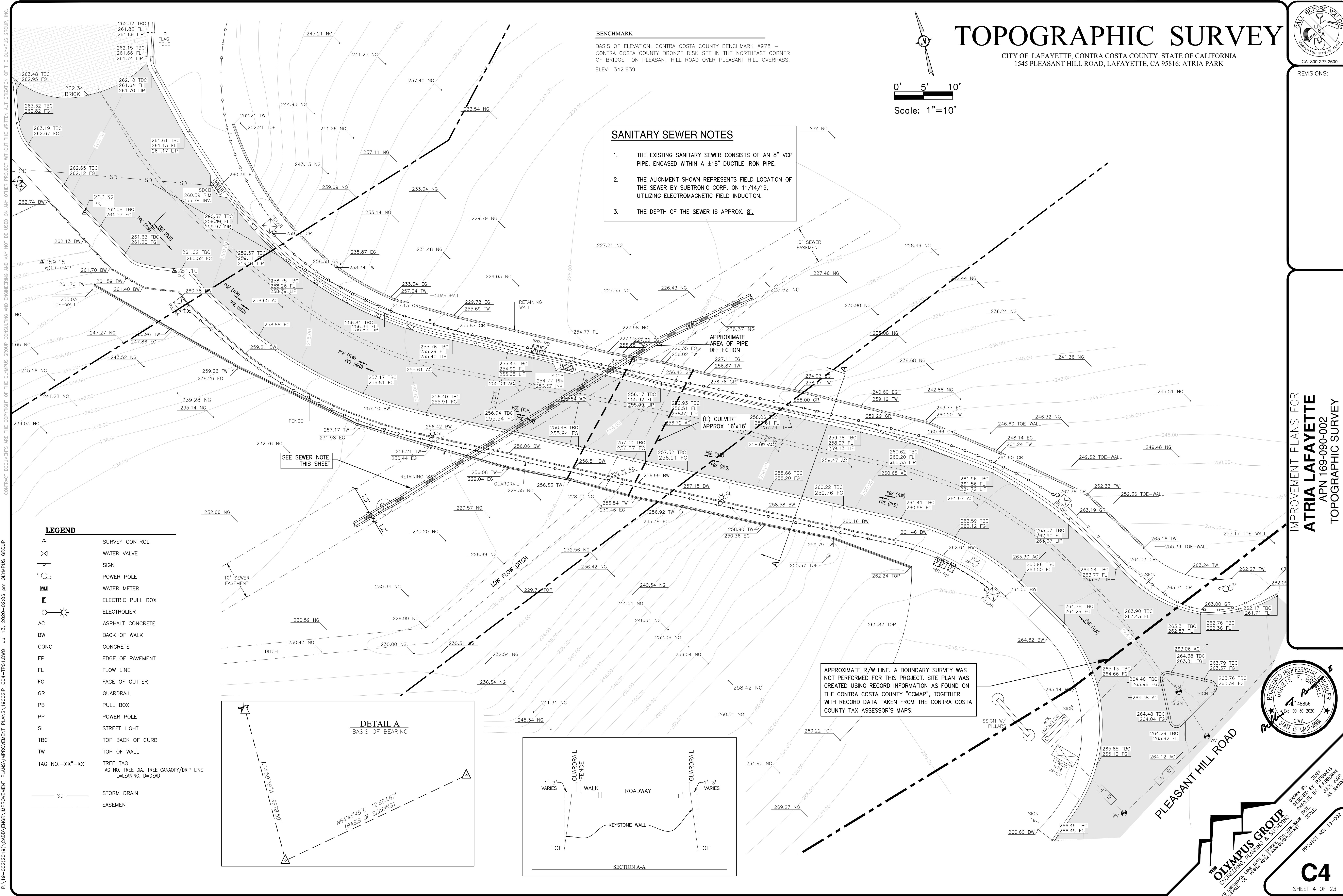
6. GRADING, TRENCHING, CUTTING AND/OR FILLING WITHIN THE DRIP LINE OF THOSE TREES, DESIGNATED ON THE SITE PLAN FOR PRESERVATION, SHALL NOT OCCUR. NO ACTIONS SHALL BE TAKEN THAT WILL HARM THE HEALTH, VITALITY OR LONGEVITY OF THOSE TREES IDENTIFIED ON THE SITE PLAN FOR PRESERVATION.
-
- REVISIONS:
- IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
GENERAL NOTES
CONTRA COSTA COUNTY, CALIFORNIA
- 1st SUBMITTAL
-
- THE OLYMPUS GROUP**
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DESIGNED BY: R. FRANKS
CHECKED BY: R. FRANKS
DATE: JULY, 2024
SCALE: AS SHOWN
PROJECT NO: 19-002

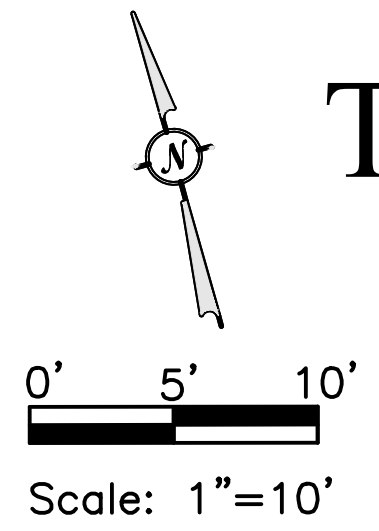
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SHEET 2 OF 23



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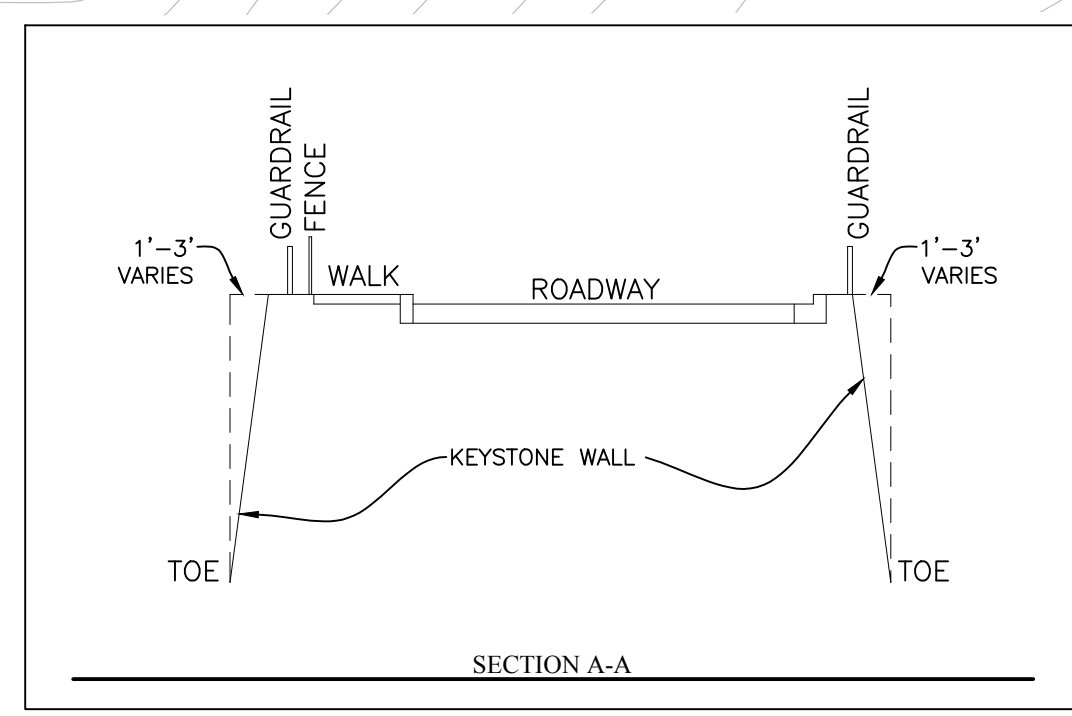
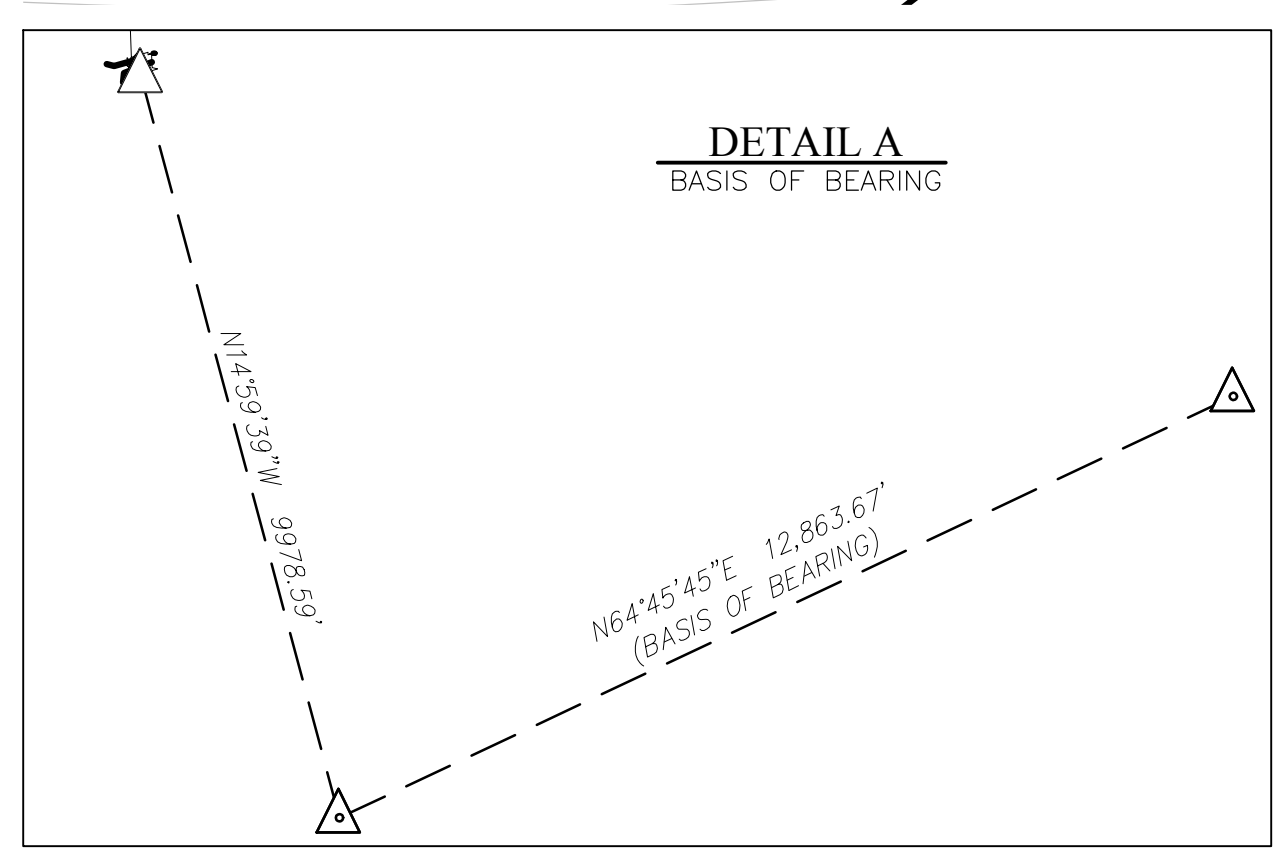
BENCHMARK
BASIS OF ELEVATION: CONTRA COSTA COUNTY BENCHMARK #978 -
CONTRA COSTA COUNTY BRONZE DISK SET IN THE NORTHEAST CORNER
OF BRIDGE ON PLEASANT HILL ROAD OVER PLEASANT HILL OVERPASS.
ELEV: 342.839



SANITARY SEWER NOTES

- THE EXISTING SANITARY SEWER CONSISTS OF AN 8" VCP PIPE, ENCASED WITHIN A ±18" DUCTILE IRON PIPE.
- THE ALIGNMENT SHOWN REPRESENTS FIELD LOCATION OF THE SEWER BY SUBTRONIC CORP. ON 11/14/19, UTILIZING ELECTROMAGNETIC FIELD INDUCTION.
- THE DEPTH OF THE SEWER IS APPROX. 8'.

LEGEND	
	SURVEY CONTROL
	WATER VALVE
	SIGN
	POWER POLE
	WATER METER
	ELECTRIC PULL BOX
	ELECTROLINER
AC	ASPHALT CONCRETE
BW	BACK OF WALK
CONC	CONCRETE
EP	EDGE OF PAVEMENT
FL	FLOW LINE
FG	FACE OF GUTTER
GR	GUARDRAIL
PB	PULL BOX
PP	POWER POLE
SL	STREET LIGHT
TBC	TOP BACK OF CURB
TW	TOP OF WALL
TAG NO. -XX"-XX'	TREE TAG TAG NO. -TREE DIA -TREE CANOPY/DRIP LINE L=LEADING, D=DEAD
SD	STORM DRAIN
---	EASEMENT



APPROXIMATE R/W LINE. A BOUNDARY SURVEY WAS NOT PERFORMED FOR THIS PROJECT. SITE PLAN WAS CREATED USING RECORD INFORMATION AS FOUND ON THE CONTRA COSTA COUNTY "COMAP", TOGETHER WITH RECORD DATA TAKEN FROM THE CONTRA COSTA COUNTY TAX ASSESSOR'S MAPS.

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DESIGNED BY: R. FRANKS
CHECKED BY: B. BRATT
DATE: JULY, 2020
SCALE: AS SHOWN

PROJECT NO: 19-002

C4
SHEET 4 OF 23

IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
TOPOGRAPHIC SURVEY
CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL

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CONSTRUCTION NOTES:

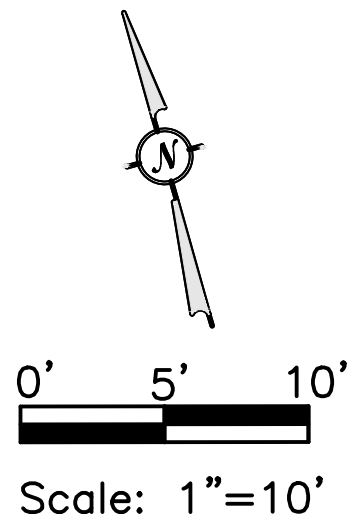
- EXISTING LOW FLOW DITCH TO REMAIN. CONTRACTOR SHALL PROTECT THE FLOW CHARACTERISTICS AS BEST AS POSSIBLE DURING CONSTRUCTION TO ENSURE POSITIVE DRAINAGE.
- EXISTING SEWER TO REMAIN, SEE NOTE THIS SHEET.
- EXISTING CULVERT TO REMAIN. SEE STRUCTURAL PLAN FOR PROPOSED CUTOFF WALL & EXTENSION.
- EXISTING UNIT BLOCK RETAINING WALL TO REMAIN. CONTRACTOR SHALL ENSURE WALL IS COMPLETELY FREE OF ORGANIC MATERIAL, SHRUBS, WEEDS ETC.
- EXISTING CURB INLETS TO REMAIN. CONTRACTOR SHALL PROTECT FROM DAMAGE. CONTRACTOR SHALL TV INSPECT THE EXISTING SD CONDUIT FOR DAMAGE AND REPORT RESULTS TO THE ENGINEER.
- REMOVE EXISTING AC/AB SECTION WITHIN LIMITS SHOWN. EXISTING DRY UTILITIES & WATER MAIN TO REMAIN AND SHALL BE POTHOLED TO DETERMINE VERTICAL HORIZONTAL PLACEMENT. REPORT FINDINGS TO ENGINEER.
- EXISTING UTILITIES TO REMAIN. CONTRACTOR SHALL PROTECT FROM DAMAGE.

SANITARY SEWER NOTES

- THE EXISTING SANITARY SEWER CONSISTS OF AN 8" VCP PIPE, ENCASED WITHIN A $\pm 18"$ DUCTILE IRON PIPE.
- THE ALIGNMENT SHOWN REPRESENTS FIELD LOCATION OF THE SEWER BY SUBTRONIC CORP. ON 11/14/19, UTILIZING ELECTROMAGNETIC FIELD INDUCTION.
- THE DEPTH OF THE SEWER IS APPROX. 8'.

TREE REMOVAL NOTE

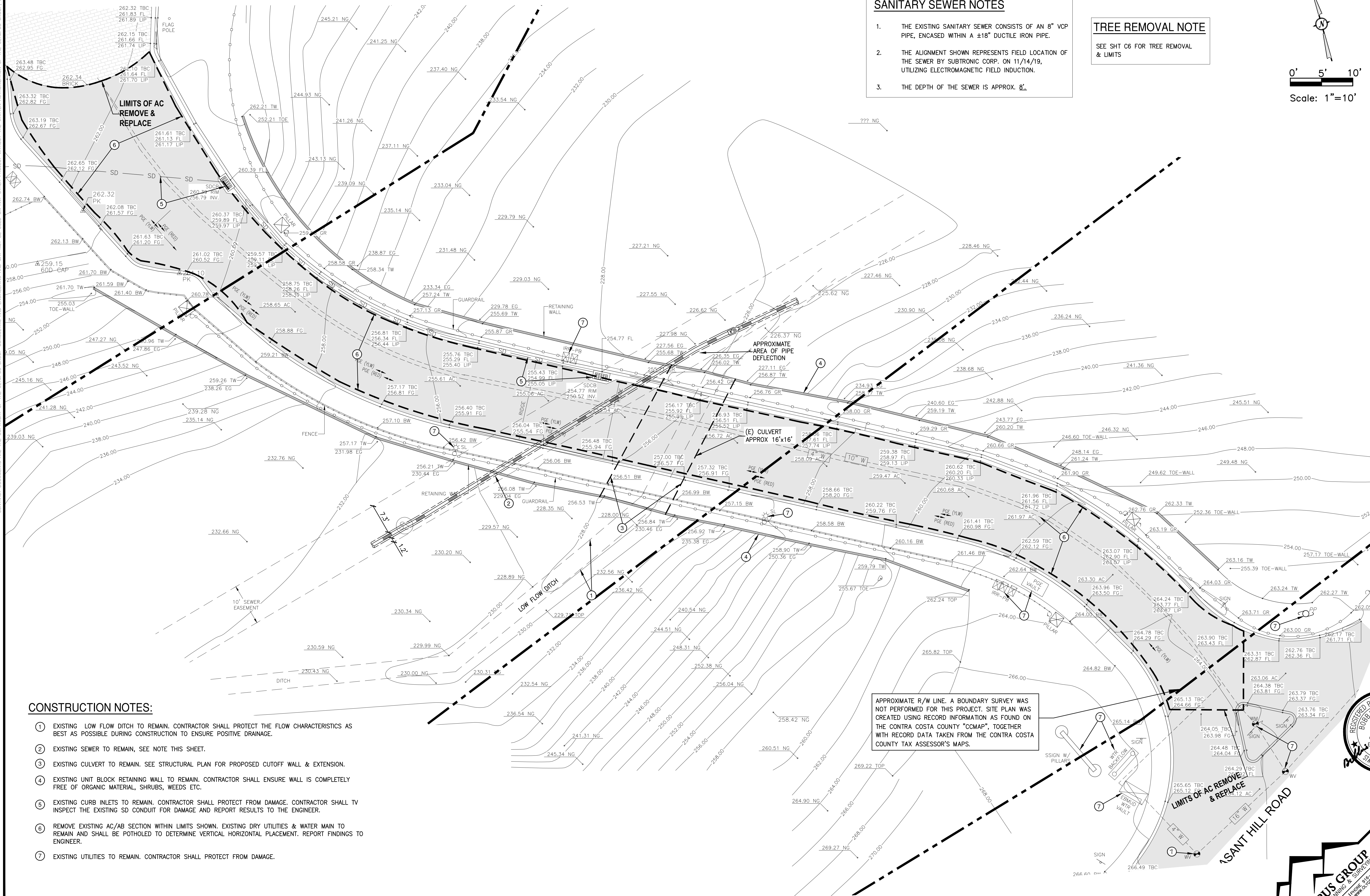
SEE SHT C6 FOR TREE REMOVAL & LIMITS



REVISIONS:

IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
DEMOLITION PLAN
CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL

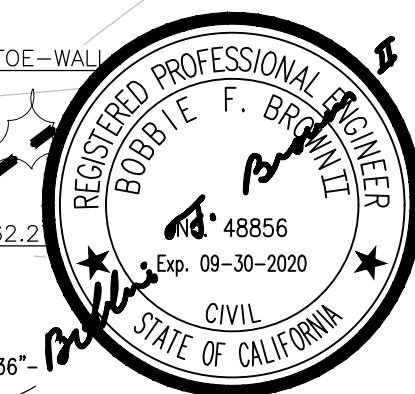


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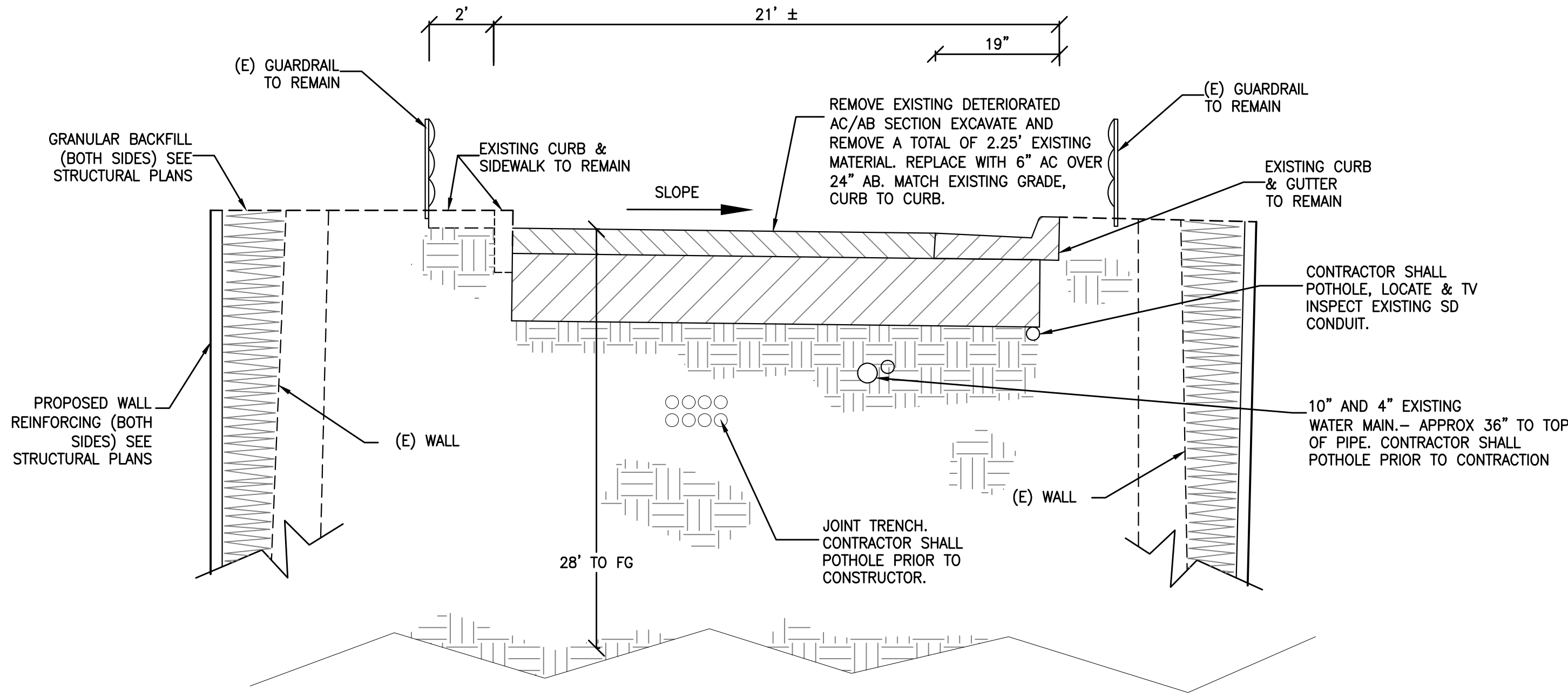
DESIGNED BY: R. BRATT
CHECKED BY: B. BRATT
DATE: JULY, 2020
SCALE: AS SHOWN

PROJECT NO: 19-002

C5
SHEET 5 OF 23



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P:\10_002\2016\10\CA\RD\ENR\IMPROVEMENT PLANS\160021P_C07_DET1.DWG - Jul 11, 2020 - 02:08 - THE OLYMPUS GROUP



A ROADWAY SECTION REPLACEMENT

NTS

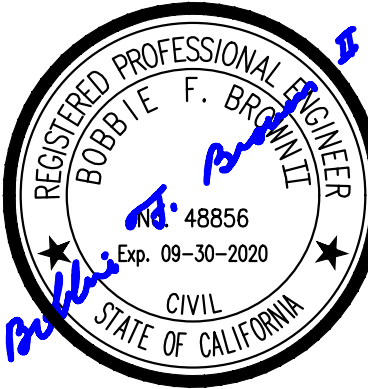


CA: 800-227-2600

REVISIONS:

IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
SECTIONS & DETAILS
CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL



THE OLYMPUS GROUP
ENGINEERING, PLANNING & SURVEYING
8885 GREENBROOK LANE, SUITE C | IRVINE, CA 92618-2622 | PHONE 949-266-6728
WWW.OLYMPUSGRP.COM

DRAWN BY: STAFF
DESIGNED BY: R. J. FRANKS
CHECKED BY: R. J. FRANKS
DATE: JUL 11, 2020
AS SHOWN

PROJECT NO: 19-002

C7

SHEET 7 OF 23

P:\19-002(2019)\CADD\ENR\IMPROVEMENT PLANS\IMPROVEMENT PLANS\19002P_C08-AP01.DWG Ju 13, 2020-02:11 pm OLYMPUS GROUP

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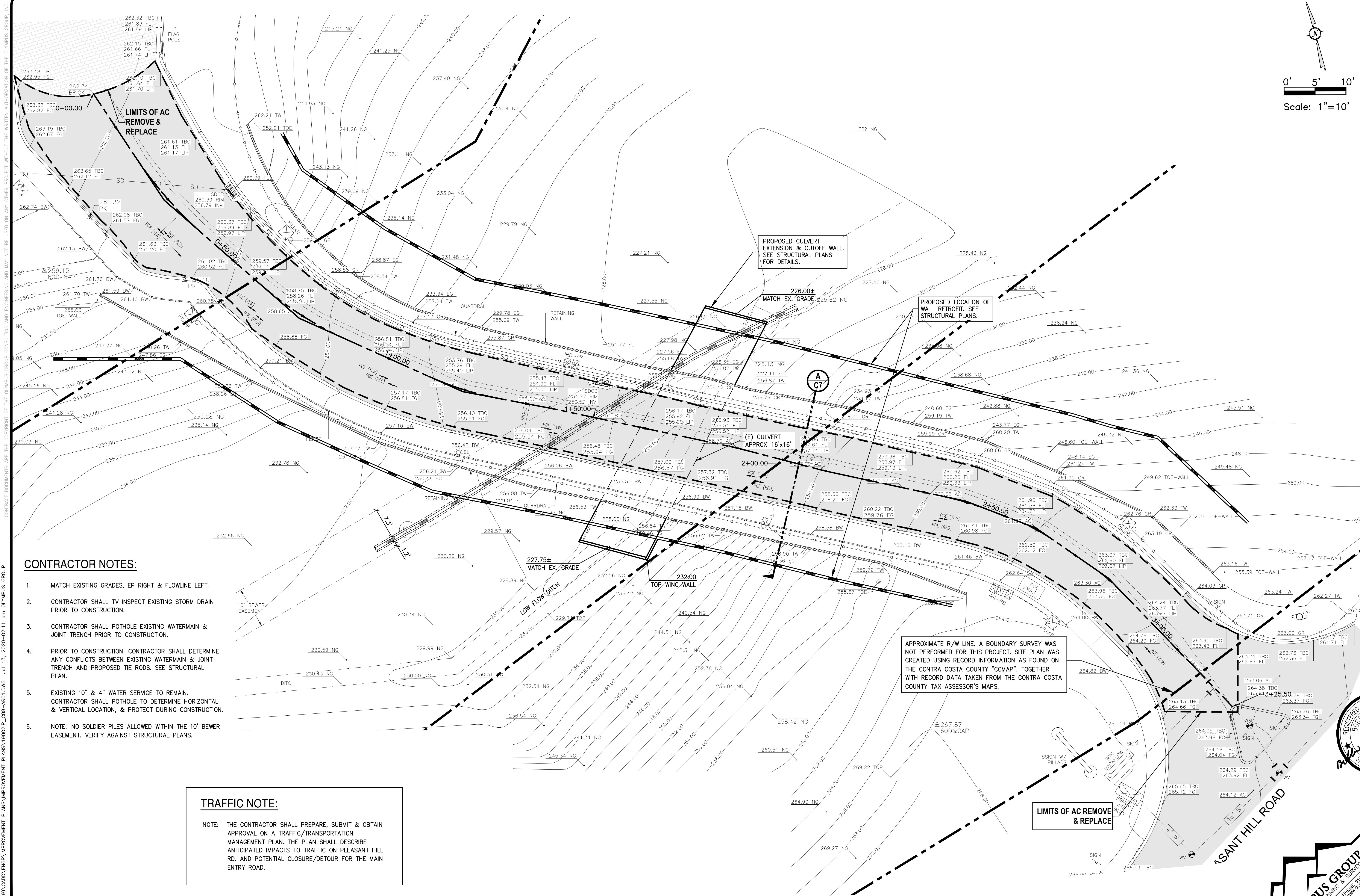
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CONTRACTOR NOTES:

1. MATCH EXISTING GRADES, EP RIGHT & FLOWLINE LEFT.
2. CONTRACTOR SHALL TV INSPECT EXISTING STORM DRAIN PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL POTHOLE EXISTING WATERMAIN & JOINT TRENCH PRIOR TO CONSTRUCTION.
4. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL DETERMINE ANY CONFLICTS BETWEEN EXISTING WATERMAIN & JOINT TRENCH AND PROPOSED TIE RODS. SEE STRUCTURAL PLAN.
5. EXISTING 10" & 4" WATER SERVICE TO REMAIN. CONTRACTOR SHALL POTHOLE TO DETERMINE HORIZONTAL & VERTICAL LOCATION, & PROTECT DURING CONSTRUCTION.
6. NOTE: NO SOLDIER PILES ALLOWED WITHIN THE 10' BEWER EASEMENT. VERIFY AGAINST STRUCTURAL PLANS.

TRAFFIC NOTE:

NOTE: THE CONTRACTOR SHALL PREPARE, SUBMIT & OBTAIN APPROVAL ON A TRAFFIC/TRANSPORTATION MANAGEMENT PLAN. THE PLAN SHALL DESCRIBE ANTICIPATED IMPACTS TO TRAFFIC ON PLEASANT HILL RD. AND POTENTIAL CLOSURE/DETOUR FOR THE MAIN ENTRY ROAD.



PROPOSED CULVERT
EXTENSION & CUTOFF WALL.
SEE STRUCTURAL PLANS
FOR DETAILS.

PROPOSED LOCATION OF
WALL RETROFIT. SEE
STRUCTURAL PLANS.

APPROXIMATE R/W LINE. A BOUNDARY SURVEY WAS
NOT PERFORMED FOR THIS PROJECT. SITE PLAN WAS
CREATED USING RECORD INFORMATION AS FOUND ON
THE CONTRA COSTA COUNTY "CCMAP", TOGETHER
WITH RECORD DATA TAKEN FROM THE CONTRA COSTA
COUNTY TAX ASSESSOR'S MAPS.

LIMITS OF AC REMOVE
& REPLACE



CA: 800-227-2600

REVISIONS:

IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
ASPHALT REPLACEMENT PLAN
CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL



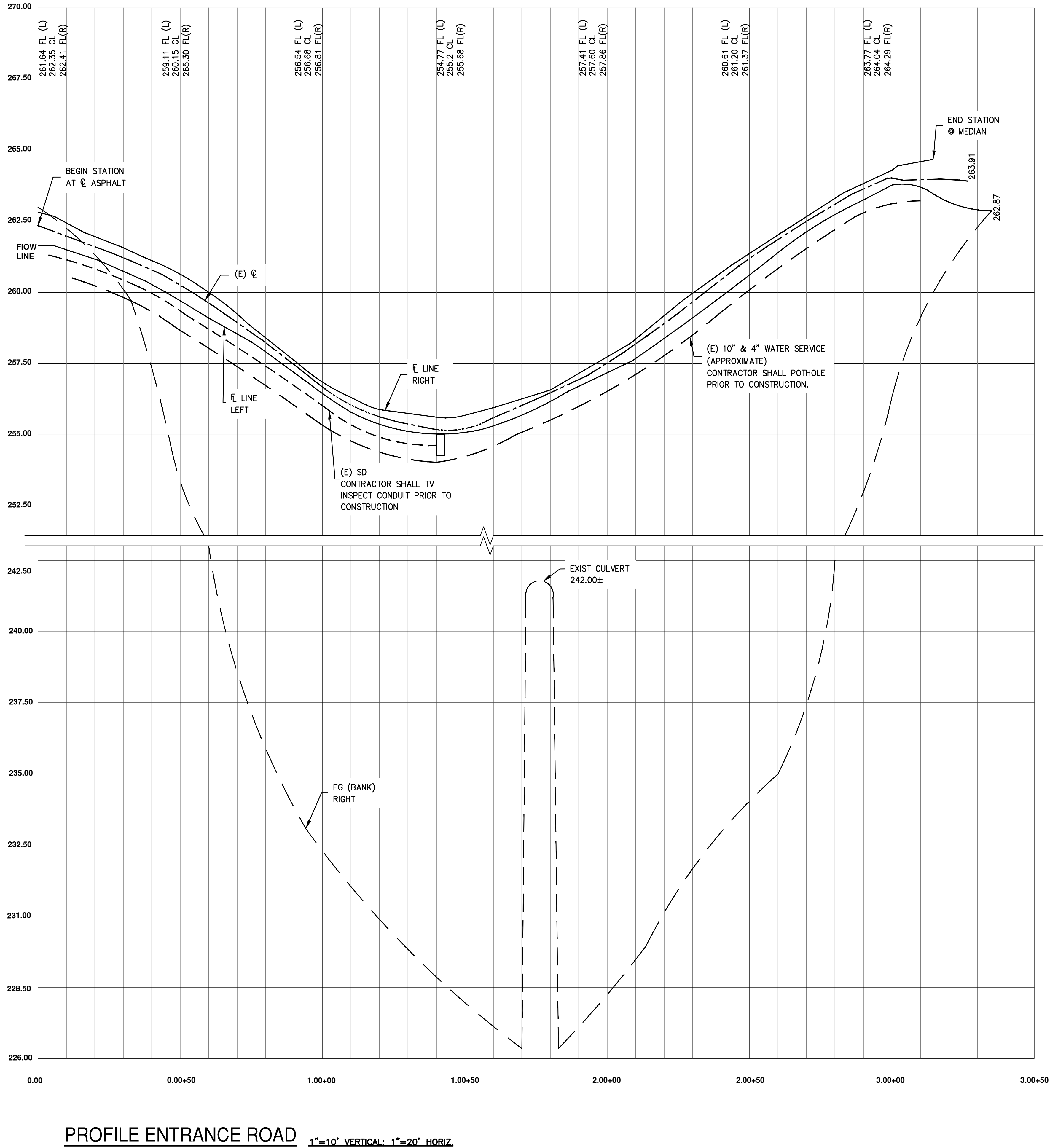
THE OLYMPUS GROUP
ENGINEERING, PLANNING & SURVEYING
1888 GREENBROOK LANE SUITE 511
PACIFIC PALISADES, CA 94963-7662
PHONE 949-286-6268
WWW.OLYMPUSGRP.COM

DRAWN BY: J. STANT
DESIGNED BY: R. FRANKS
CHECKED BY: B. J. BRANT
DATE: JULY, 2020
SCALE: AS SHOWN
PROJECT NO: 19-002

C8

SHEET 8 OF 23

P:\19-002(2019)\CADD\ENGR\IMPROVEMENT PLANS\IMPROVEMENT PLANS\19002IF_C09-PP01.DWG Jul 13, 2020--02:12 pm OLYMPUS GROUP CONTRACT DOCUMENTS ARE THE COPYRIGHT OF THE OLYMPUS GROUP CONSULTING AND ENGINEERING AND MAY NOT BE USED ON ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE OLYMPUS GROUP, INC.



CONTRACTOR NOTES:

- SEE STRUCTURAL PLAN FOR CULVERT EXTENSION & NEW CUT OFF WALL.

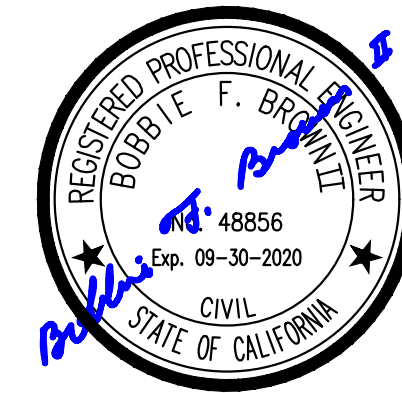


CA: 800-227-2600

REVISIONS:

IMPROVEMENT PLANS FOR
ATRIA LAFAYETTE
APN 169-090-002
PRELIMINARY PROFILE
CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL



THE OLYMPUS GROUP
ENGINEERING, PLANNING & SURVEYING
8885 GREENBROOK LANE SUITE C1
GRANDBLAZE, CA 94622-7692 | WWW.OLYMPUS-GRP.COM

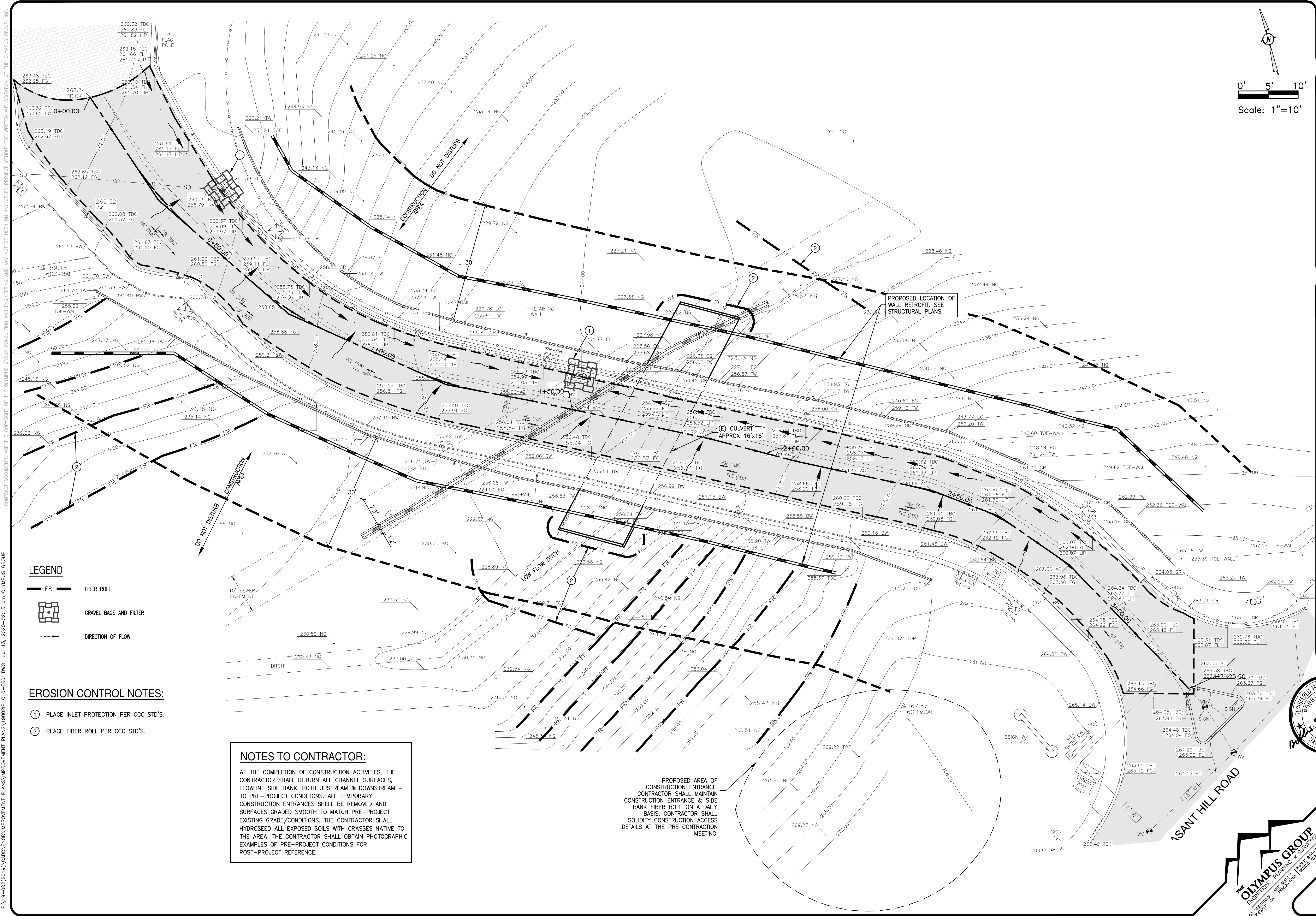
DESIGNED BY: R. J. BRANDS
CHECKED BY: R. J. BRANDS
DATE: JULY, 2020
SCALE: AS SHOWN

PROJECT NO: 19-002

C9

SHEET 9 OF 23

P:\19-002(2019)\CADD\ENR\IMPROVEMENT PLANS\19002P_C10-ER01.DWG Jul 13, 2020-02:15 pm OLYMPUS GROUP



LEGEND

- FR FIBER ROLL
- GRAVEL BAGS AND FILTER
- DIRECTION OF FLOW

- EROSION CONTROL NOTES:**
- ① PLACE INLET PROTECTION PER CCC STD'S.
 - ② PLACE FIBER ROLL PER CCC STD'S.

NOTES TO CONTRACTOR:

AT THE COMPLETION OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL RETURN ALL CHANNEL SURFACES, FLOWLINE SIDE BANK, BOTH UPSTREAM & DOWNSTREAM – TO PRE-PROJECT CONDITIONS. ALL TEMPORARY CONSTRUCTION ENTRANCES SHALL BE REMOVED AND SURFACES GRADED SMOOTH TO MATCH PRE-PROJECT EXISTING GRADE/CONDITIONS. THE CONTRACTOR SHALL HYDROSEED ALL EXPOSED SOILS WITH GRASSES NATIVE TO THE AREA. THE CONTRACTOR SHALL OBTAIN PHOTOGRAPHIC EXAMPLES OF PRE-PROJECT CONDITIONS FOR POST-PROJECT REFERENCE.

PROPOSED AREA OF CONSTRUCTION ENTRANCE. CONTRACTOR SHALL MAINTAIN CONSTRUCTION ENTRANCE & SIDE BANK FIBER ROLL ON A DAILY BASIS. CONTRACTOR SHALL SOLIDIFY CONSTRUCTION ACCESS DETAILS AT THE PRE CONTRACTION MEETING.

0' 5' 10'

Scale: 1"=10'

CALL BEFORE YOU DIG

CA: 800-227-2600

REVISIONS:

IMPROVEMENT PLANS FOR

ATRIA LAFAYETTE

APN 169-090-002

EROSION CONTROL PLAN

CONTRA COSTA COUNTY, CALIFORNIA

1st SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER

BOBBY E. F. BRADY

Exp. 09-30-2020

CIVIL

STATE OF CALIFORNIA

THE OLYMPUS GROUP

ENGINEERING, PLANNING & SURVEYING

1888 GREENBROOK LANE SUITE 511 WAKARUSA, CA 95682-7682

PHONE 916-286-6200 FAX 916-286-6201

WWW.OLYMPUSGRP.COM

SCALE: AS SHOWN

DESIGNED BY: R. BRADY

CHECKED BY: B. BRADY

DATE: JULY, 2020

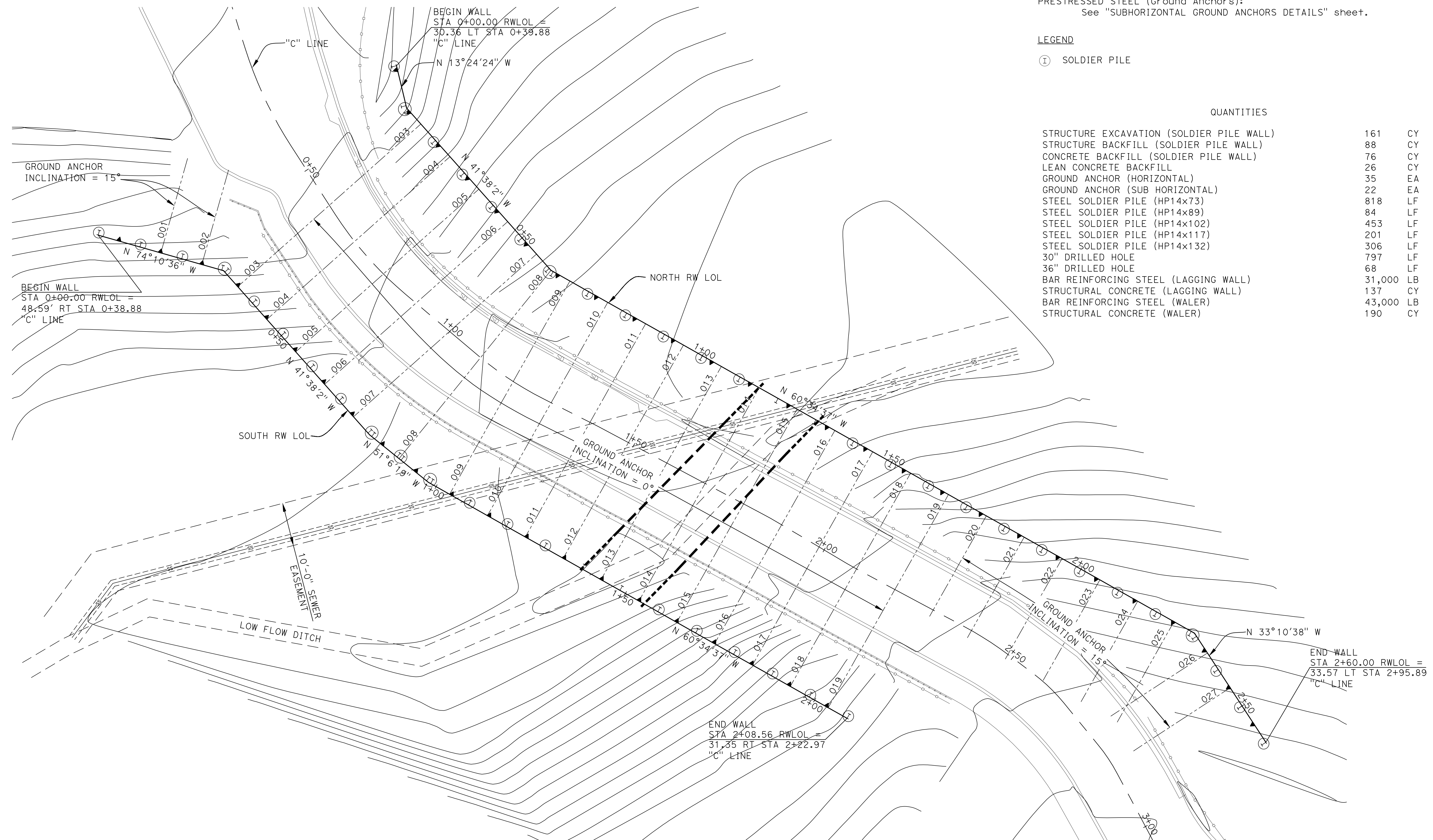
PROJECT NO: 19-002

C10

SHEET 10 OF 23

<u>SHEET NO.</u>	<u>TITLE</u>
S-1	GENERAL PLAN 1
S-2	GENERAL PLAN 2
S-3	SOLDIER PILE DATA TABLE NO.1
S-4	SOLDIER PILE DATA TABLE NO.2
S-5	FOUNDATION PLAN
S-6	EXCAVATION AND BACKFILL DETAILS
S-7	RETAINING WALL DETAILS NO. 1
S-8	WALL DETAILS
S-9	SUBHORIZONTAL GROUND ANCHOR DETAILS
S-10	HORIZONTAL GROUND ANCHOR DETAILS
S-11	LAGGING PANEL DETAILS
S-12	BOX CULVERT DETAILS

A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LINES AND SYMBOLS (SHEET 5 OF 5)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62E	EXCAVATION AND BACKFILL PRECAST REINFORCED CONCRETE BOX CULVERT
D83A	PRECAST REINFORCED CONCRETE BOX CULVERT
D83B	PRECAST REINFORCED CONCRETE BOX CULVERT
	MISCELLANEOUS DETAILS



NOTE:
THE CONTRACTOR MUST VERIFY ALL
CONTROLLING FIELD DIMENSIONS AND
CONFLICTS WITH EXISTING UTILITIES
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

DESIGN: AASHTO LRFD Bridge Design Specifications, Sixth Edition and the California Amendments, dated January 2014

LIVE LOADING:
240 psf equivalent to 2 feet level earth surcharge

SOIL
PARAMETERS:
(For determination of Design Lateral Earth Pressures)
Backfill soil weight (γ) = 120 lb/ft³
Active Pressure coefficient, K_a = 0.45
Slope Angle = 0°

STRUCTURAL SHAPE STEEL PILES,
(Including Support Plates, Closure Plates and Bearing Plates):
 $f_y = 50 \text{ ksi}$

REINFORCED CONCRETE:
 $f_y = 60$ psi
 $f'_c = 4.0$ ksi
 $n = 8$

PRESTRESSED STEEL (Ground Anchors):
See "SUBHORIZONTAL GROUND ANCHORS DETAILS" sheet.

LEGEND

(I) SOLDIER PILE

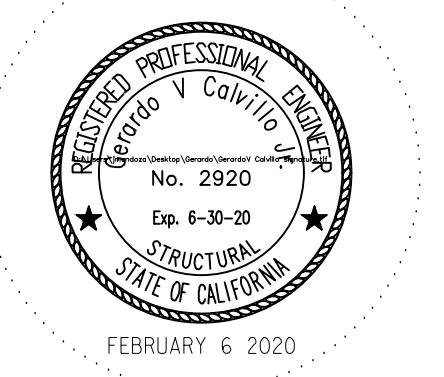
QUANTITIES

STRUCTURE EXCAVATION (SOLDIER PILE WALL)	161	CY
STRUCTURE BACKFILL (SOLDIER PILE WALL)	88	CY
CONCRETE BACKFILL (SOLDIER PILE WALL)	76	CY
LEAN CONCRETE BACKFILL	26	CY
GROUND ANCHOR (HORIZONTAL)	35	EA
GROUND ANCHOR (SUB HORIZONTAL)	22	EA
STEEL SOLDIER PILE (HP14x73)	818	LF
STEEL SOLDIER PILE (HP14x89)	84	LF
STEEL SOLDIER PILE (HP14x102)	453	LF
STEEL SOLDIER PILE (HP14x117)	201	LF
STEEL SOLDIER PILE (HP14x132)	306	LF
30" DRILLED HOLE	797	LF
36" DRILLED HOLE	68	LF
BAR REINFORCING STEEL (LAGGING WALL)	31,000	LB
STRUCTURAL CONCRETE (LAGGING WALL)	137	CY
BAR REINFORCING STEEL (WALER)	43,000	LB
STRUCTURAL CONCRETE (WALER)	190	CY

Atria Park of Lafayette
Retaining Wall Repair
1545 Pleasant Hill Road
Lafayette, California 94549

MOORADIAN ASSOCIATES
78 N. First Avenue, Suite 140 Tucson, AZ 85718
(520) 408-8117 F: (520) 408-8028

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NOTES

PROGRESS SET	01/2020
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TITLE
GENERAL PLAN 1

DRAWING NO.

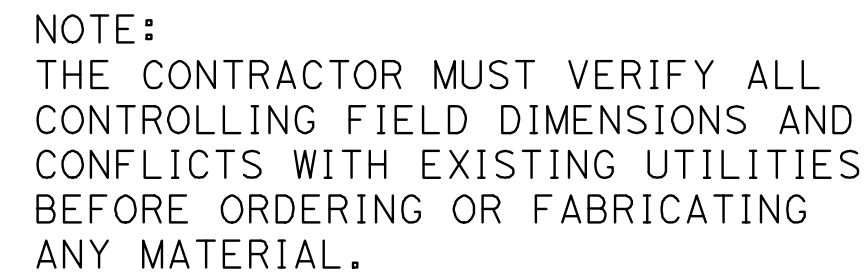
S-1

SOLDIER PILE DATA TABLE														
HP14x PILES											7x11½ CONC LAGGING 9.50' EA		HDPE SHIM	
PILE NO.	STATION ALONG "C" LINE	OFFSET	TOP OF PILE ELEV	PILE SIZE	PILE LENGTH	24" Ø DRILLED HOLE				QUANTITY	LENGTH	QUANTITY		
						BOTTOM ELEV	TOP OF CONC ELEV		LENGTH OF CONC BF				LENGTH OF HOLE	
							* (FT)	** (FT)						
26	0+39.88	30.36	LT	259.00	HP14x73	22.3	236.20	248.00	253.20	11.80	17.00			
27	0+50.44	27.08	LT	261.00	HP14x73	27.5	233.00	242.00	250.00	9.00	17.00	11	104.5	22
28	0+60.32	28.61	LT	261.00	HP14x132	33.0	227.50	237.00	244.50	9.50	17.00	19	180.5	38
29	0+74.75	29.51	LT	260.00	HP14x132	37.0	222.50	234.00	239.50	11.50	17.00	23	218.5	46
30	0+88.92	28.64	LT	259.00	HP14x132	39.2	219.30	231.00	236.30	11.70	17.00	25	237.5	50
31	0+98.82	27.22	LT	258.00	HP14x73	40.9	216.60	229.00	233.60	12.40	17.00	27	256.5	54
												28	266.0	56
32	1+08.72	25.79	LT	257.00	HP14x73	42.3	214.20	227.00	231.20	12.80	17.00	-	-	-
33	1+23.90	26.68	LT	257.00	HP14x73	43.8	212.70	227.00	229.70	14.30	17.00	30	285.0	60
34	1+34.85	26.25	LT	257.00	HP14x102	44.6	211.90	226.00	228.90	14.10	17.00	30	285.0	60
35	1+44.25	25.88	LT	257.00	HP14x102	45.3	211.20	225.00	228.20	13.80	17.00	31	294.5	62
36	1+54.25	25.64	LT	257.00	HP14x102	46.0	210.50	224.00	227.50	13.50	17.00	32	304.0	64
37	1+64.25	25.40	LT	257.00	HP14x102	46.6	209.90	224.00	226.90	14.10	17.00	33	313.5	66
38	1+74.25	25.16	LT	257.00	HP14x102	47.2	209.30	224.00	226.30	14.70	17.00	33	313.5	66
39	1+84.16	24.92	LT	258.00	HP14x102	47.8	209.70	224.00	226.70	14.30	17.00	34	323.0	68
40	1+93.12	25.04	LT	258.00	HP14x117	54.9	202.60	224.00	227.60	21.40	25.00	33	313.5	66
41	2+03.11	25.25	LT	259.00	HP14x117	53.9	204.60	225.00	229.60	20.40	25.00	32	304.0	64
42	2+14.19	25.21	LT	259.00	HP14x117	43.1	215.40	227.00	232.40	11.60	17.00	29	275.5	58
43	2+24.19	24.99	LT	260.00	HP14x117	49.5	210.00	230.00	235.00	20.00	25.00	27	256.5	54
44	2+34.24	24.76	LT	261.00	HP14x89	46.5	213.60	233.00	238.60	19.40	25.00	25	237.5	50
45	2+42.39	24.80	LT	261.00	HP14x89	36.9	223.60	236.00	240.60	12.40	17.00	23	218.5	46
46	2+50.29	25.79	LT	262.00	HP14x73	35.5	226.00	238.00	243.00	12.00	17.00	21	199.5	42
47	2+58.52	27.24	LT	263.00	HP14x73	35.5	227.00	241.00	244.00	14.00	17.00	21	199.5	42
48	2+64.21	29.85	LT	263.00	HP14x73	34.4	228.10	242.00	245.10	13.90	17.00	20	190.0	40
49	2+72.39	33.43	LT	264.00	HP14x73	34.2	229.30	243.00	246.30	13.70	17.00	20	190.0	40
50	2+80.49	32.49	LT	264.00	HP14x73	31.9	231.60	244.00	248.60	12.40	17.00	18	171.0	36
51	2+86.06	32.67	LT	264.00	HP14x73	2								

** LEAN CONCRETE BACKFILL

[illegible]

*** VERIFY WITH UPDATED GEOTECHNICAL REPORT



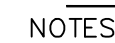
NO SCALE

FTL: Factored Test Load on ground anchor (kip)
LL: Lock-Off Load (kip)



MOORADIAN
& ASSOCIATES
 4578 N. First Avenue, Suite 140 Tucson, AZ 85718
 T: (520) 408-8117 F: (520) 408-8028

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TITLE
SOLDIER PILE
DATA TABLE NO.1

S-3

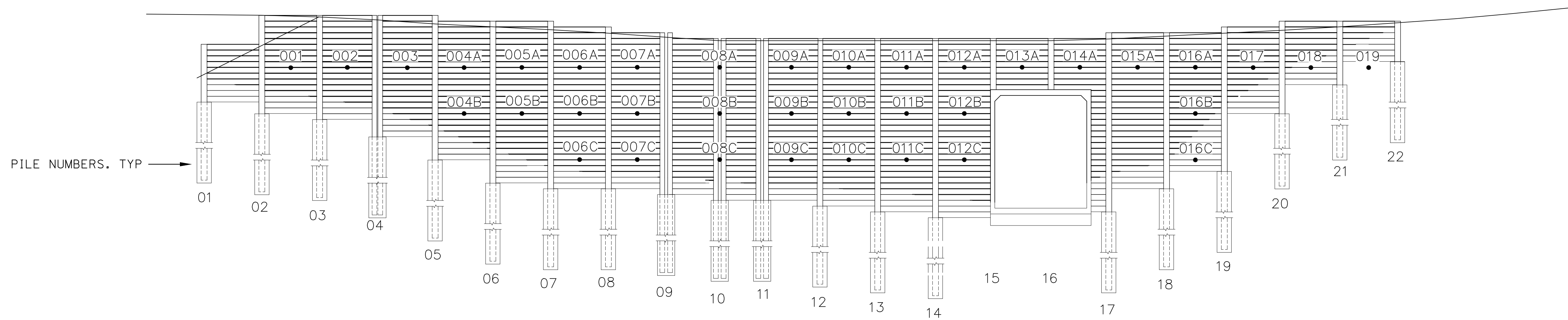
SOLDIER PILE DATA TABLE 1												
HP14x PILES										7x11½ CONC LAGGING 5.61' EA		HDPE SHIM QUANTITY
PILE NO.	STATION ALONG "C" LINE	OFFSET	TOP OF PILE ELEV (FT)	PILE SIZE	PILE LENGTH (FT)	30" Ø DRILLED HOLE				QUANTITY	LENGTH (FT)	
						BOTTOM ELEV (FT)	TOP OF CONC ELEV		LENGTH OF CONC BF			
							*	**				
							(FT)	(FT)				
1	0+38.88	48.59 RT	255.36	HP14x73	22.6	232.30	245.36	249.30	13.06	17.0		
2	0+44.06	41.82 RT	260.36	HP14x73	29.3	230.60	243.36	247.60	12.76	17.0	10	95.0
3	0+51.57	35.21 RT	260.36	HP14x73	30.8	229.10	242.36	246.10	13.26	17.0	17	161.5
4	0+59.07	28.61 RT	260.36	HP14x73	32.5	227.40	239.36	244.40	11.96	17.0	18	171.0
5	0+67.25	27.29 RT	260.36	HP14x132	35.9	224.00	235.36	241.00	11.36	17.0	21	199.5
6	0+74.79	26.84 RT	259.36	HP14x132	38.9	220.00	231.36	237.00	11.36	17.0	24	228.0
7	0+82.33	27.28 RT	259.36	HP14x132	42.1	216.80	230.36	233.80	13.56	17.0	28	266.0
8	0+90.79	28.56 RT	258.36	HP14x73	41.9	216.00	230.36	233.00	14.36	17.0	28	266.0
9	1+01.26	30.07 RT	257.36	HP14x73	41.6	215.30	229.36	232.30	14.06	17.0	27	256.5
10	1+09.62	29.88 RT	256.36	HP14x73	41.2	214.70	228.36	231.70	13.66	17.0	27	256.5
11	1+15.86	30.14 RT	256.36	HP14x73	41.8	214.10	228.36	231.10	14.26	17.0	28	266.0
12	1+23.46	29.66 RT	256.36	HP14x73	42.3	213.60	227.36	230.60	13.76	17.0	28	266.0
13	1+32.22	30.04 RT	256.36	HP14x102	42.9	213.00	226.36	230.00	13.36	17.0	29	275.5
14	1+42.89	30.45 RT	256.36	HP14x102	43.9	212.00	225.36	229.00	13.36	17.0	30	285.0
15	1+52.89	30.69 RT	256.36	HP14x102	44.9	211.00	225.36	228.00	14.36	17.0	31	294.5
16	1+62.89	30.93 RT	256.36	HP14x102	43.9	212.00	225.36	229.00	13.36	17.0	31	294.5
17	1+72.89	31.17 RT	257.36	HP14x132	40.9	216.00	226.36	233.00	10.36	17.0	30	285.0
18	1+82.88	31.41 RT	257.36	HP14x132	39.0	217.90	230.36	234.90	12.46	17.0	27	256.5
19	1+94.30	31.30 RT	258.36	HP14x73	29.9	228.00	233.36	245.00	5.36	17.0	24	228.0
20	2+04.30	31.09 RT	259.36	HP14x73	25.1	233.80	243.36	250.80	9.56	17.0	15	142.5
21	2+12.97	31.13 RT	259.36	HP14x73	21.7	237.20	248.36	254.20	11.16	17.0	11	104.5
22	2+22.97	31.35 RT	259.36	HP14x73	17.5	241.40	252.36	258.40	10.96	17.0	7	66.5

XX LEAN CONCRETE BACKFILL

SOLDIER PILE DATA TABLE 2													
ANCHOR NO.	NUMBERS OF ANCHORS	GROUND ANCHORS (SUBHORIZONTAL)									GROUND ANCHORS (HORIZONTAL)		
		LEVEL A			LEVEL B			LEVEL C			LEVEL A DESIGN LOAD (KIP)	LEVEL A DESIGN LOAD (KIP)	LEVEL A DESIGN LOAD (KIP)
		UL *** (FT)	FTL (KIP)	LL (KIP)	UL (FT)	FTL (KIP)	LL (KIP)	UL (FT)	FTL (KIP)	LL (KIP)			
-	-												
001	1	15	250	150	-	-	-	-	-	-	-	-	-
002	1	15	250	150	-	-	-	-	-	-	-	-	-
003	1	-	-	-	-	-	-	-	-	-	300	-	-
004	2	-	-	-	-	-	-	-	-	-	230	350	-
005	2	-	-	-	-	-	-	-	-	-	230	350	-
006	2	-	-	-	-	-	-	-	-	-	200	220	230
007	2	-	-	-	-	-	-	-	-	-	200	220	230
008	2	-	-	-	-	-	-	-	-	-	200	220	230
009	3	-	-	-	-	-	-	-	-	-	200	220	230
010	3	-	-	-	-	-	-	-	-	-	200	220	230
011	3	-	-	-	-	-	-	-	-	-	280	250	310
012	3	-	-	-	-	-	-	-	-	-	280	250	310
013	1	-	-	-	-	-	-	-	-	-	280	-	-
014	1	-	-	-	-	-	-	-	-	-	300	-	-
015	1	-	-	-	-	-	-	-	-	-	230	-	-
016	2	-	-	-	-	-	-	-	-	-	280	250	310
017	1	-	-	-	-	-	-	-	-	-	280	-	-
018	1	-	-	-	-	-	-	-	-	-	280	-	-
019	1	-	-	-	-	-	-	-	-	-	280	-	-

*** VERIFY WITH UPDATED GEOTECHNICAL REPORT

FTL: Factored Test Load on ground anchor (kip)
LL: Lock-Off Load (kip)



NOTE:
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CONTROLLING FIELD DIMENSIONS AND
CONFLICTS WITH EXISTING UTILITIES
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

LAGGING LAYOUT DEVELOPED MIRRORED ELEVATION (SOUTH WALL)

NO SCALE

Atria Park of Lafayette
Retaining Wall Repair
1545 Pleasant Hill Road
Lafayette, California 94549

MOORADIAN
ASSOCIATES

78 N. First Avenue, Suite 140 Tucson, AZ 85718
(520) 408-8117 F: (520) 408-8028



NOTES

[illegible]

TITLE
SOLDIER PILE DATA TABLE NO.2

DRAWING NO.

S-4

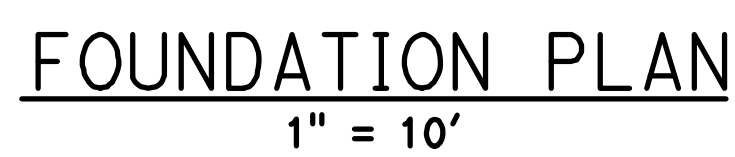
94549

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[illegible]

DRAWING NO.

S-5



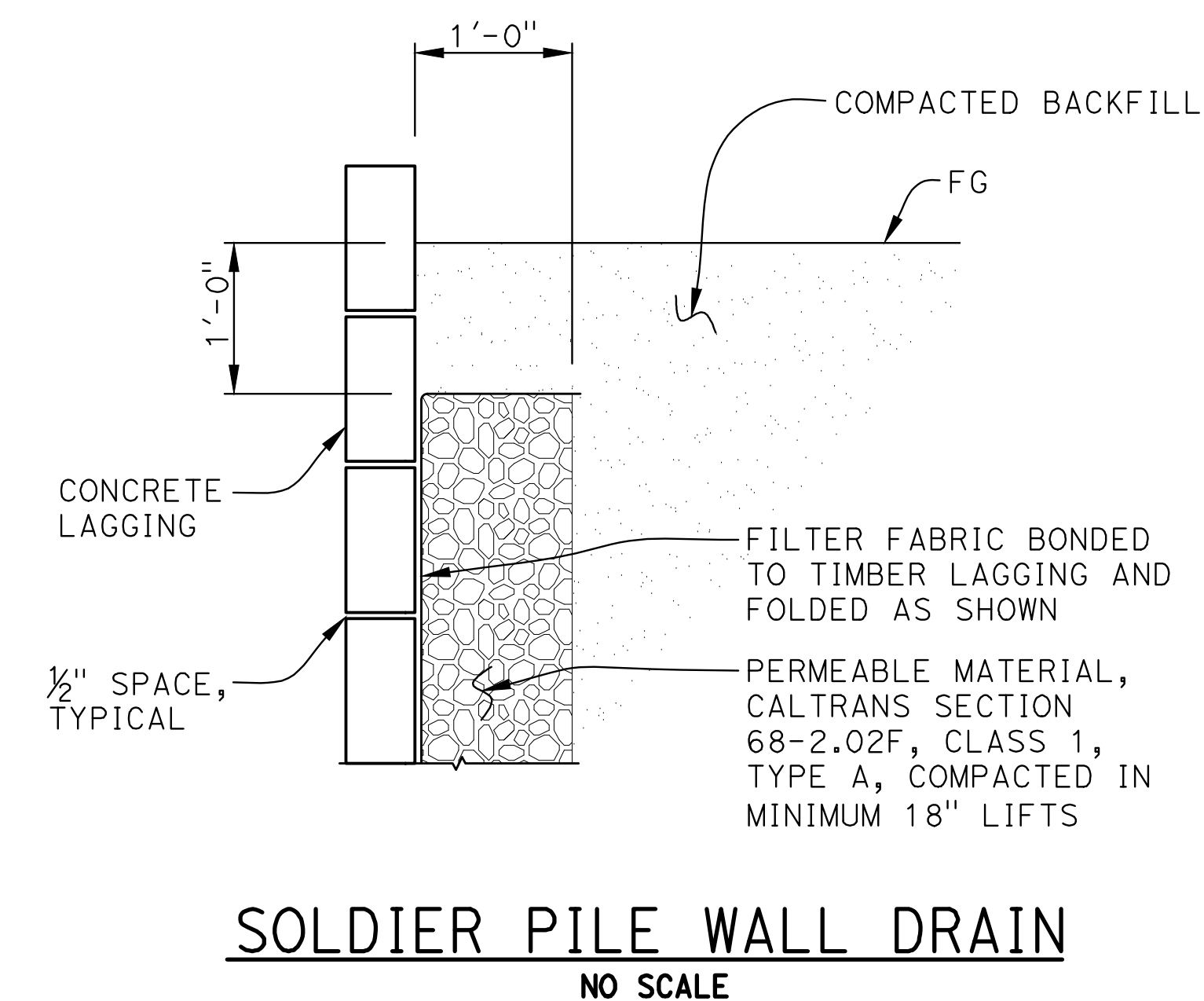
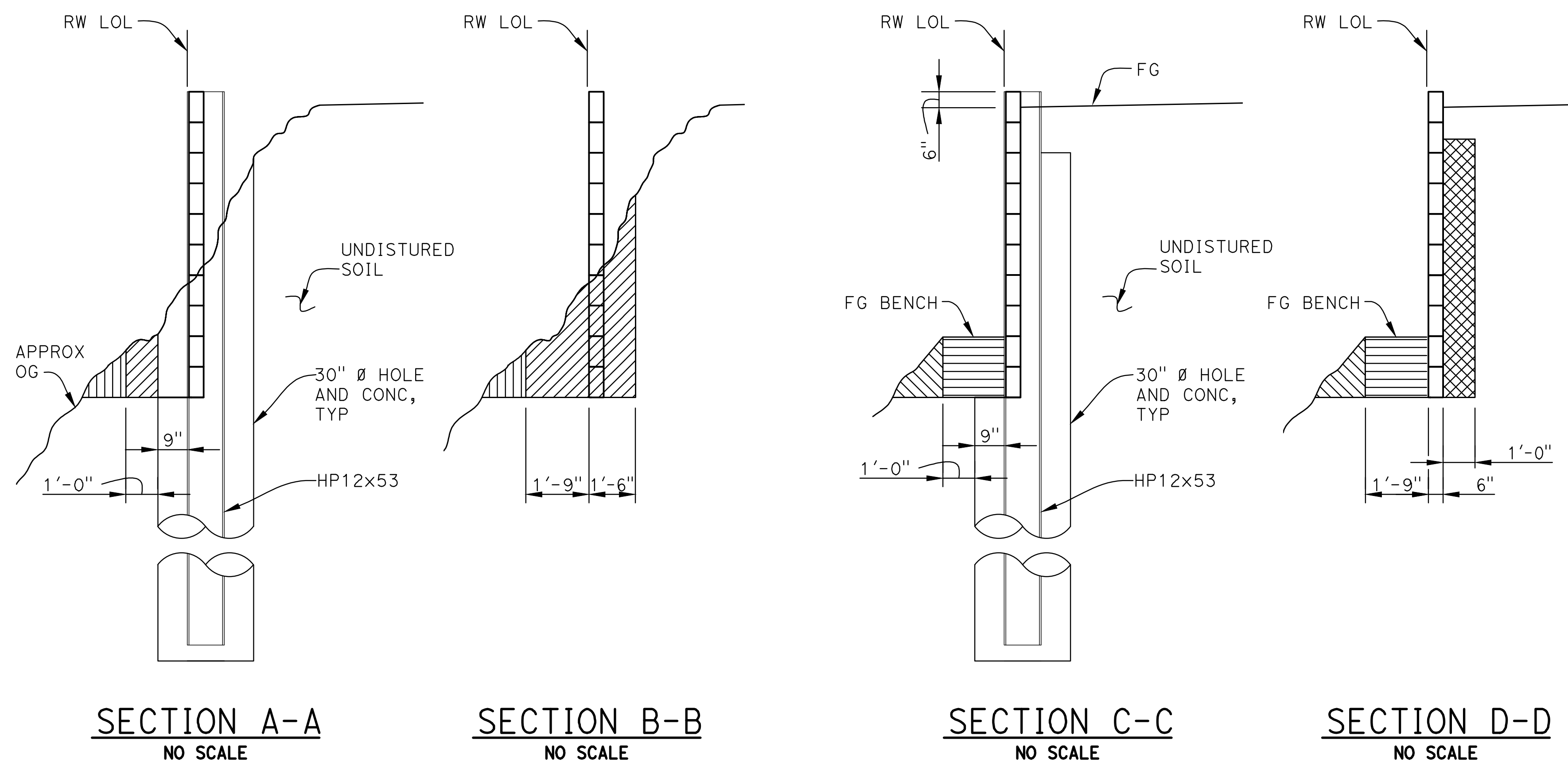
NOTE:
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CONTROLLING FIELD DIMENSIONS AND
CONFLICTS WITH EXISTING UTILITIES
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

Plot date: 2/7/2020 2:17 PM User: jmendoza
File: p:\tria-lafayette access\project drawings\current dwgs\s-5
layout: structural

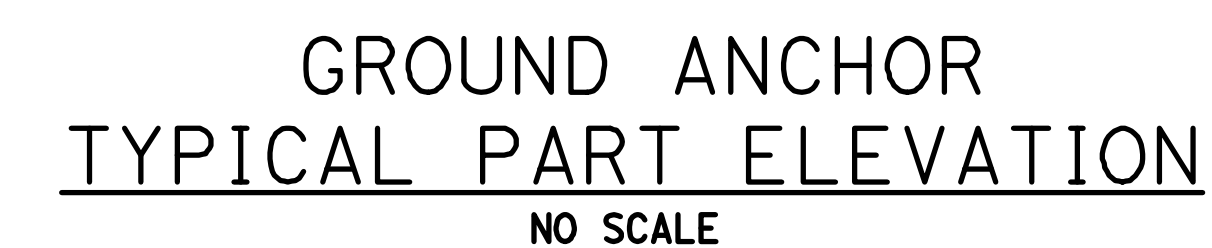
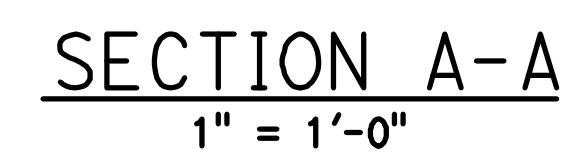
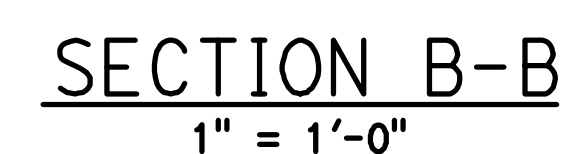
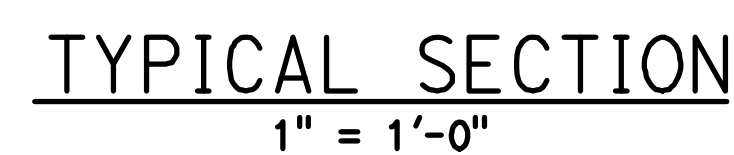


TITLE
EXCAVATION AND
BACKFILL DETAILS

S-6



NOTE:
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CONTROLLING FIELD DIMENSIONS AND
CONFLICTS WITH EXISTING UTILITIES
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Retaining Wall Repair**
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Lafayette, California 94549

**MOORADIAN
& ASSOCIATES**
4578 N. First Avenue, Suite 140 Tucson, AZ 85718
T: (520) 408-8117 F: (520) 408-8028

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NOTES

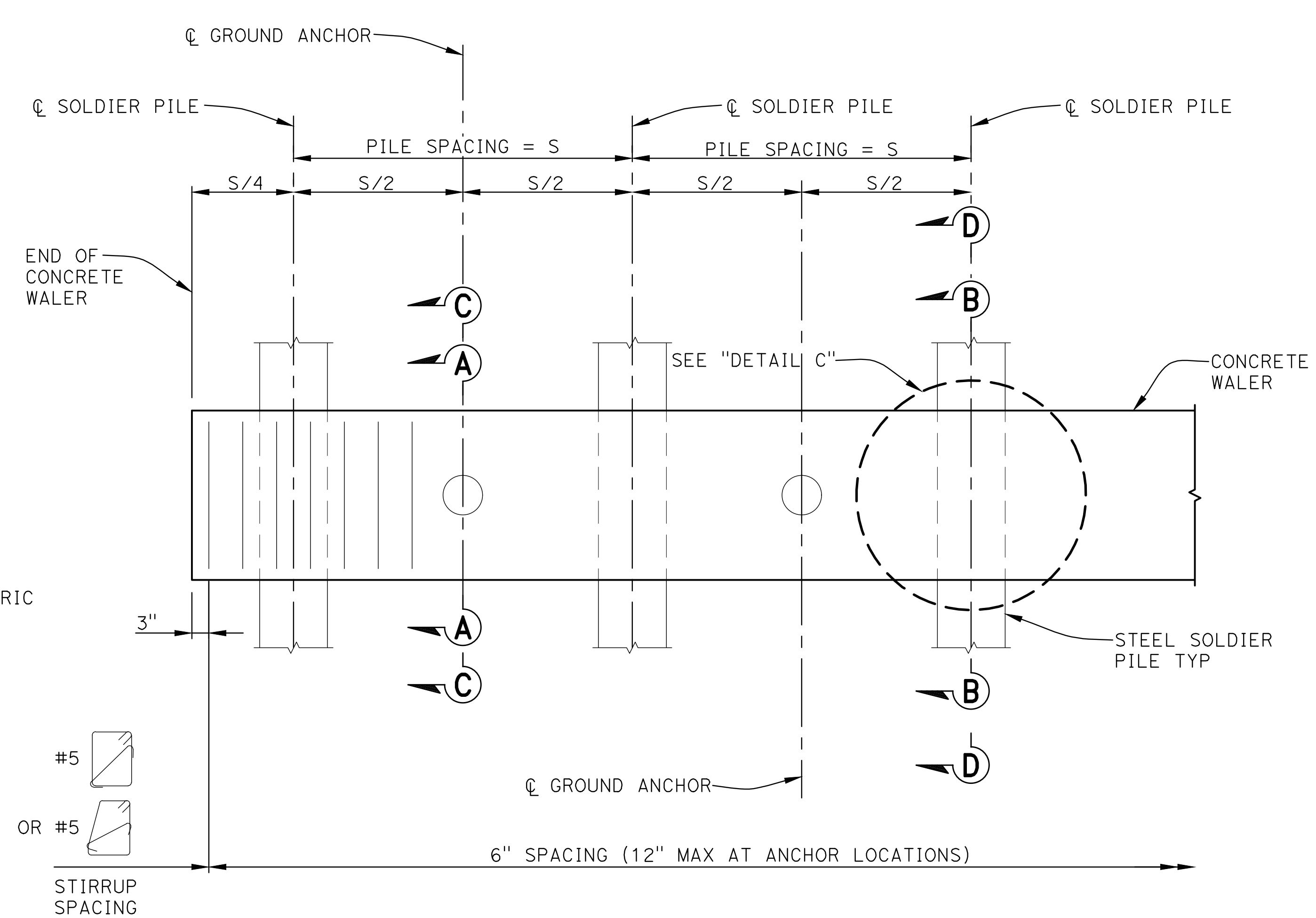
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TITLE
RETAINING WALL
DETAILS NO. 1

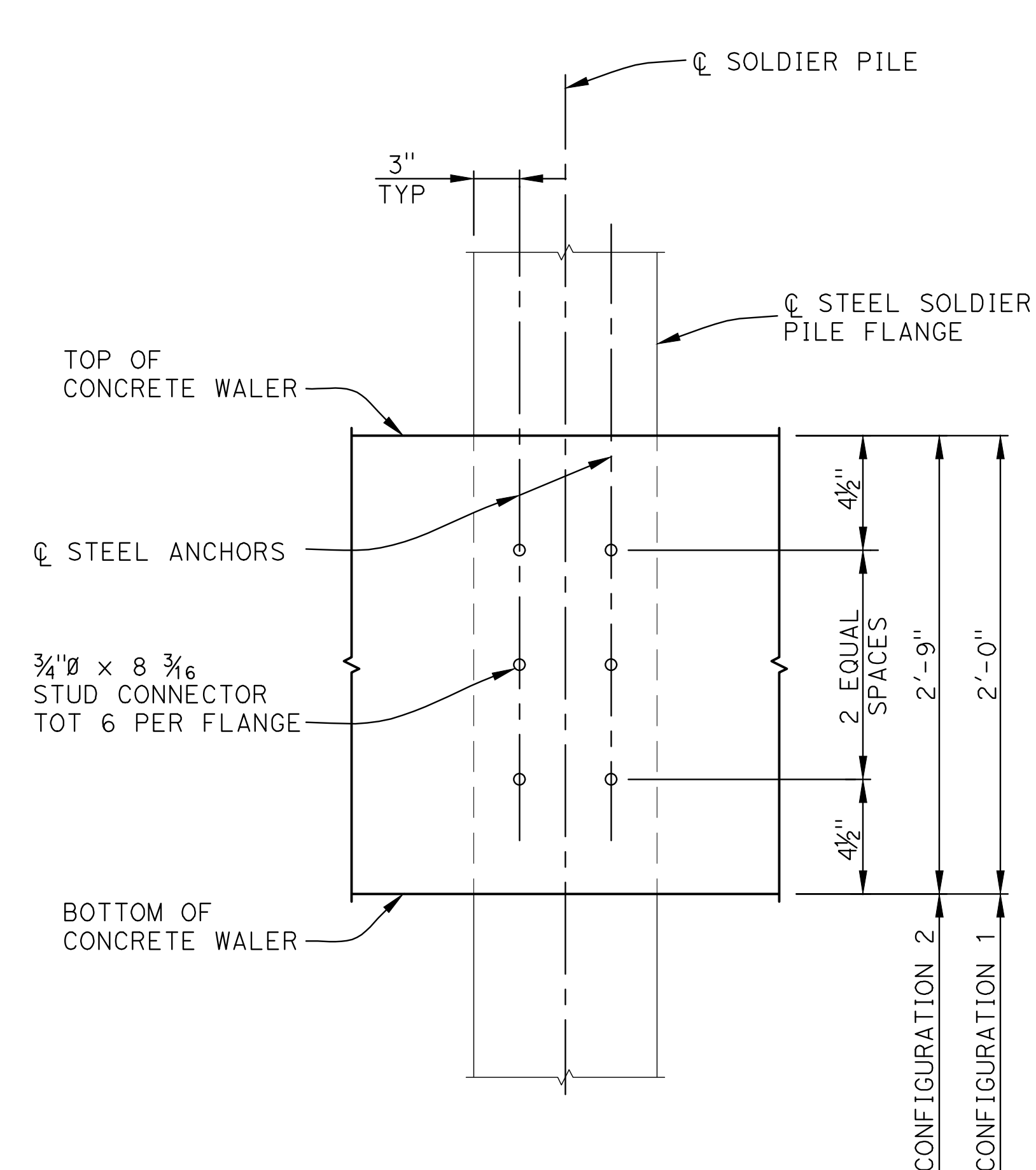
DRAWING NO.

S-7

Plot date: 2/6/2020 2:15 PM User: jmendoza
File: p:\atricia-lafayette access\project drawings\current dwgs\5-7
layout: structural



WALER AT SOLDIER PILE
(WALER TYPE 1)
SECTION B-B
1 1/2" = 1'-0"



WALER AT SOLDIER PILE
(WALER TYPE 2)
SECTION D-D
1 1/2" = 1'-0"

DETAIL C
NO SCALE

**MOORADIAN
& ASSOCIATES**
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NOTES

[illegible]

TITLE
WALL DETAILS

DRAWING NO.

S-8

NOTE:
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CONFLICTS WITH EXISTING UTILITIES
BEFORE ORDERING OR FABRICATING
ANY MATERIAL.

Plot date: 2/6/2020 2:15 PM User: jnendozo
File: p:\atric-lafayette access\project drawings\current dwgs\s-8
layout: structural

DESIGN:
AASHTO LRFD Bridge Design Specifications,
4th Edition with California Amendments.

PRESTRESSING STEEL:

Strand Tendons-ASTM Designation: A416
(270 Ksi Low Relaxation steel)

As = Minimum cross sectional area of prestressing steel in ground anchor (square inch)

$$A_s(\text{Min}) = \frac{1.0 \text{ FTL}}{0.75 f_{pu}} \quad (\text{Strands})$$

$$A_s(\text{Min}) = \frac{1.0 \text{ FTL}}{0.80 f_{pu}} \text{ (Bars)}$$

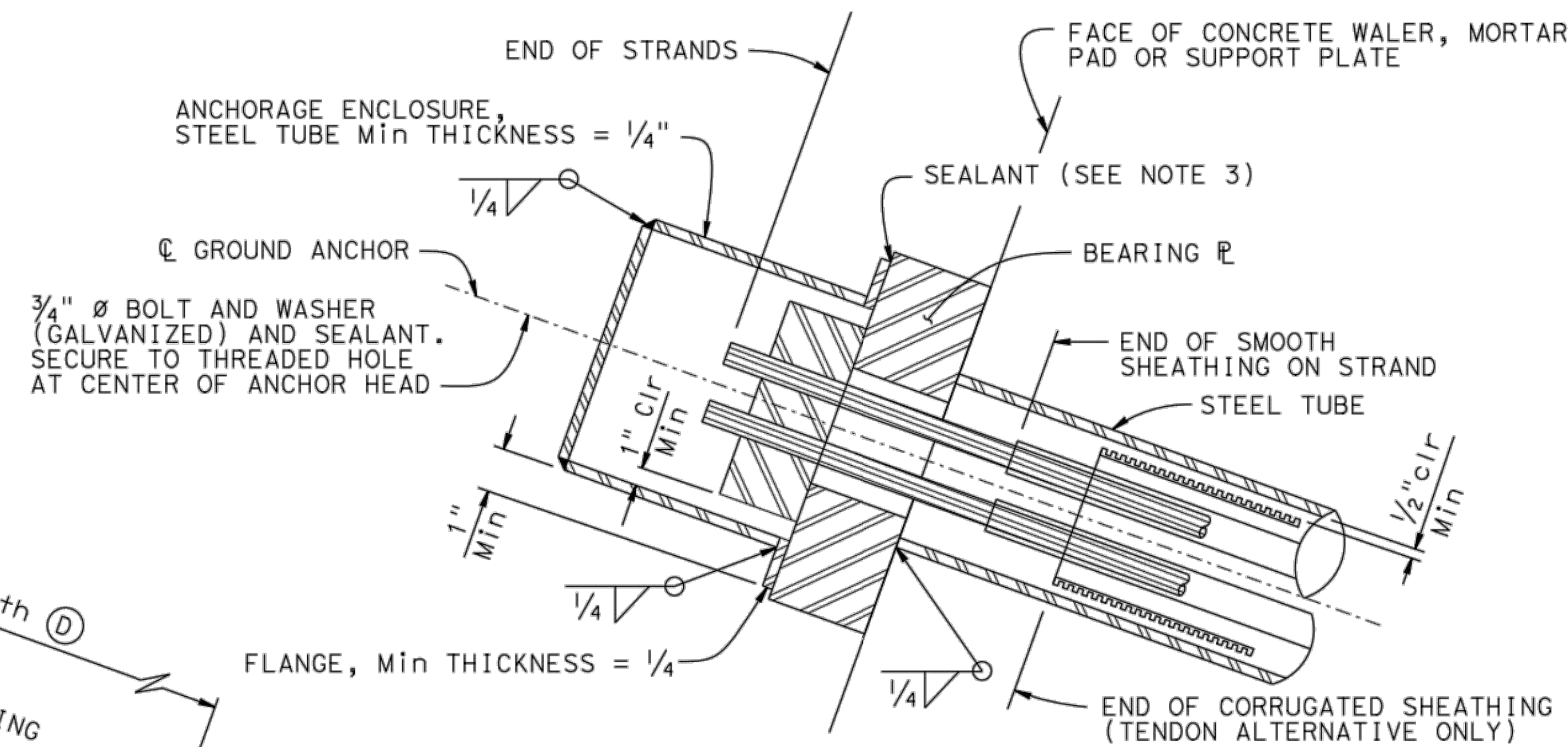
[illegible]

NOTES:

- (A) Level of initial grouting for drilled hole 6" in diameter or smaller
- (B) Level of secondary grouting
- (C) Level of initial grouting inside corrugated sheathing
- (D) Bonded length shall be determined by the contractor
- (E) For unbonded length, see PROJECT PLANS
- (F) For inclination, see PROJECT PLANS
- (G) Face of Wall Excavation

NOTES:

1. Anchorage enclosure shall only be used when anchor head assembly is not enclosed in concrete.
2. Anchorage enclosure shall have provisions to allow injecting grout at low end and venting at high end. Galvanize after fabrication.
3. Silicone sealant to cover full width of flange.
4. Steel tube (Min thickness = $\frac{1}{4}$ ") welded to bearing plate. Galvanize assembly after fabrication
5. Steel tube welded to bearing plate. Inside diameter of steel tube (Min thickness = $\frac{1}{4}$ ") to be 1" greater than outside diameter of smooth sheathing.
6. Galvanize assembly after fabrication.
7. For other wall details, see PROJECT PLANS.



ALTERNATIVE X

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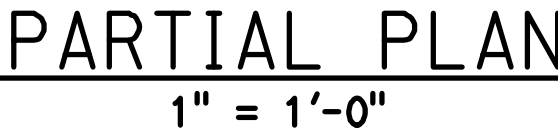
NOTES

PROGRESS SET	01 / 2020
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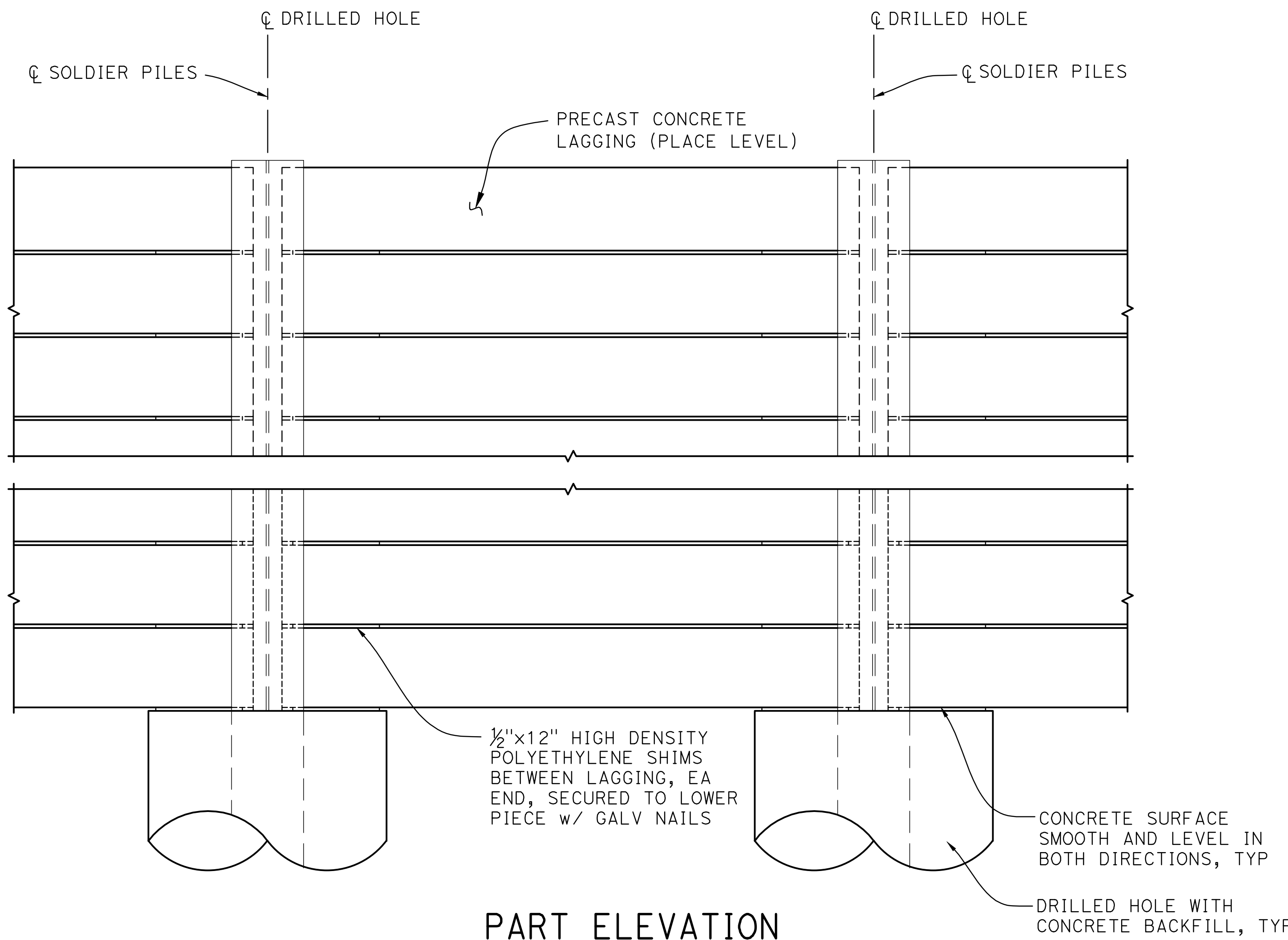
TITLE
SUBHORIZONTAL
GROUND
ANCHOR DETAILS

DRAWING NO.

S-9



1. Cast the letter "B" on back face of panel. Place inprint such, that it does not decrease clearances to the rebar.
2. Glue Filter Fabric to back face of panels.
3. Glue shims to one of the lagging panels.
4. Each lifting insert must have the capacity of 1.5 times the weight of the lagging panel.
5. All Rief in lagging panels to be Epoxy Coated Prefabricated Reinforcement.



PART ELEVATION
1" = 1'-0"



1. All reinf in lagging panels to be Epoxy Coated Prefabricated Reinforcement



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NOTES

[illegible]

TITLE
LAGGING PANEL
DETAILS

DRAWING NO. _____

S-11


Dist

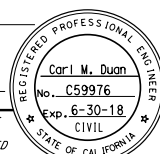
COUNTY

ROUTE

POST MILES
TOTAL PROJECT

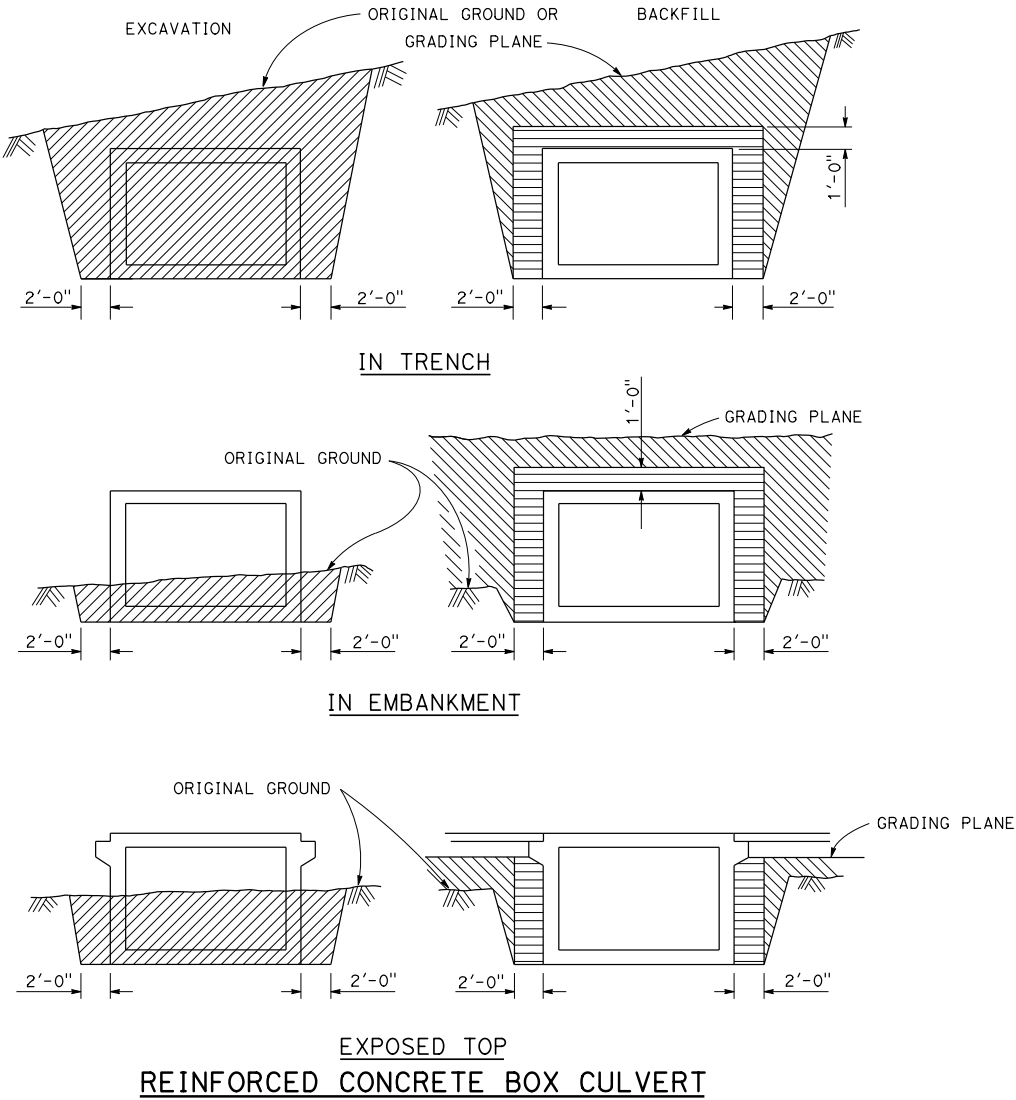
SHEET TOTAL
No. SHEETS


REGISTERED CIVIL ENGINEER



May 31, 2018
PLANS APPROVAL DATE




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OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

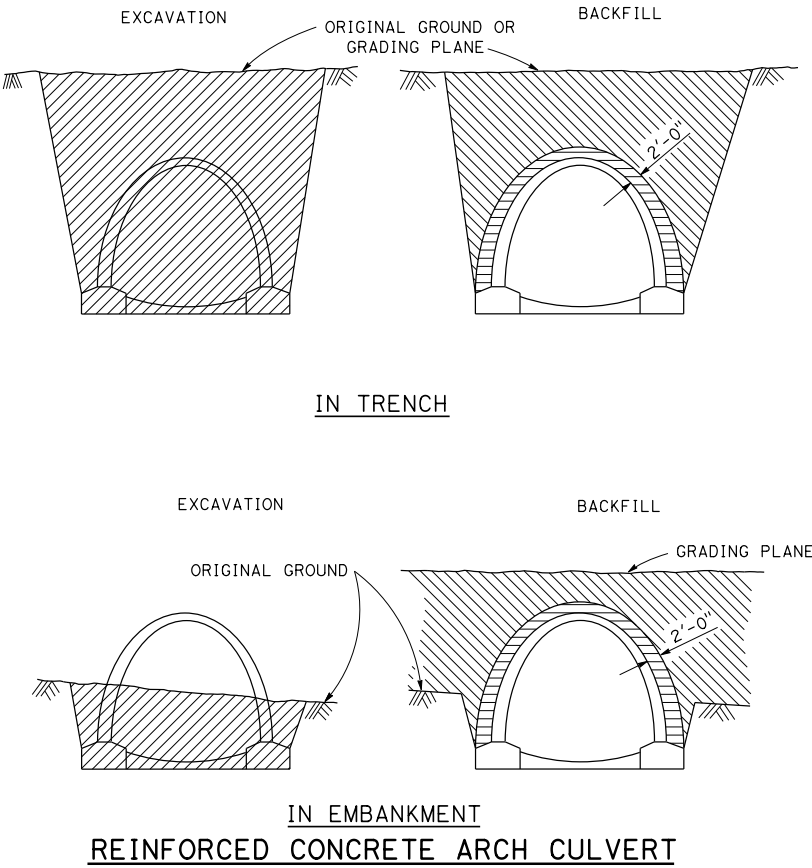


NOTES:

1. Slope or shore excavation sides as necessary.
2. Dimensions shown are minimum.

LEGEND

-  STRUCTURE EXCAVATION (CULVERT)
-  STRUCTURE BACKFILL (CULVERT)
-  ROADWAY EMBANKMENT



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**EXCAVATION AND BACKFILL
CAST-IN-PLACE
REINFORCED CONCRETE BOX
AND ARCH CULVERTS**

NO SCALE

A62E