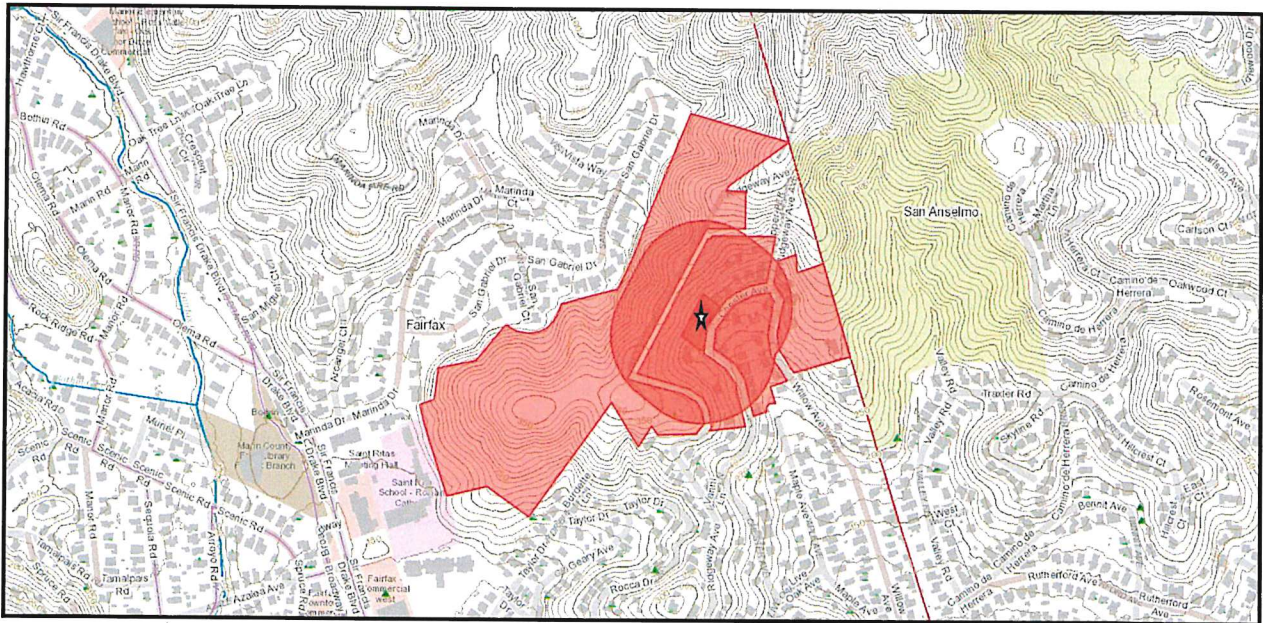


**TOWN OF FAIRFAX
STAFF REPORT**
Department of Planning and Building Services

TO: Planning Commission
DATE: October 21, 2021
FROM: Linda Neal, Principal Planner
LOCATION: 95 Chester Ave.; APN # 001-191-09
ZONING: Residential RD 5.5-7 Zone
PROJECT: Construction of a retaining wall and new entry stair
ACTION: Preferential Parking and Excavation Permits; Application # 21-21
APPLICANT: Helen Strodl and Michele Acosta
OWNER: Same
CEQA STATUS: Categorically exempt, § 15303(e)



95 CHESTER AVENUE

DESCRIPTION

The project encompasses the construction of an approximately 84 foot long, retaining wall that will vary from roughly two feet tall at the south end to roughly eight feet tall at the northern end adjacent to the proposed second access stairway. The wall is located to create two conforming 9-foot by 22-foot parking spaces which requires that the wall be constructed almost to the front property line (site plan indicates two eight foot by eighteen-foot parking spaces but the area can accommodate two conforming nine foot by 22-foot spaces required parallel to a wall or structure in accordance with Town Code

§ 17.052.040(B)(1) and (2)]. The second access stairway will provide direct access from the new parking spaces to the house above and creation of the parking spaces will include construction of a driveway connection from the edge of the paved portion of Chester Avenue to the parking spaces that will be roughly 60 feet in width.

BACKGROUND

The 5,000 square-foot site slopes up from Chester Avenue at an average rate of 43%.

The 2,269 square-foot, 4-bedroom, 3-bathroom, single-family residence was constructed in 1916 but was expanded in 1953 with a permitted addition for which there are no plans on file and again in 1992 with a third bathroom addition. There are notations in the file that the structure may have been divided into two units in the late 1970's, but records at the County Tax Assessor's and in the Town property file currently describe the structure as a single-family unit.

Also existing on the site is an approximately 530 square-foot deck and hot tub on the west side of the residence.

DISCUSSION

The project requires the approval of a Preferential Permit and an Excavation Permit by the Planning Commission.

The Preferential Parking Privileges for Newly Created Parking Spaces Chapter of the Town Code, Town Code Chapter 10.24, is contained in Title 10 of the Town Code, Vehicles and Traffic, not the Zoning Ordinance. The chapter was adopted in December of 1994 three years after the 1991 Oakland Hills fire when the Council determined that it would be in the public interest to reduce the planning fees and make going through the planning review process less onerous for projects to create new off-street parking. The hope was that the adoption of the ordinance would encourage property owners to create additional parking even if the creation of the parking would require the use of portion of the public right-of-way.

Prior to adoption of the Preferential Parking Permit ordinance approval of this project would have required the following discretionary permits from the Planning Commission in addition to the Excavation Permit:

1. A retaining wall height variance [Town Code § 17.044.080(A) and (B)1] because the wall to create the parking spaces will exceed the permitted four feet in height within the six-foot front setback area.
2. A driveway width variance because the driveway connecting the parking spaces with the edge of the paved portion of Chester Avenue will exceed the permitted 20 feet in width [Town Code § 12.12.030 and 12.12.090).

The planning application fees for the above along with engineering fees to cover the Town Engineer's review of the plans total \$3,696.00 while the Preferential Parking Permit application fee is \$550 with a \$1,000 deposit to cover the Town Engineer's consulting fees.

The Planning Department typically waives the requirement for a boundary survey when processing applications that entail only the creation of preferential parking because surveys typically cost anywhere from \$1,000 to \$8,000 or more. The assumption is that the parking encroaches into the right-of-way, but that the emphasis is ensuring that the parking location functions properly with respect to the paved roadway, not the exact extent of encroachment.

The findings incorporated into the Preferential Parking Ordinance, Town Code Chapter 10.24, Preferential Parking Privileges for Newly Created Parking Spaces, include the following:

Findings (Town Code § 10.24.010)

- (A) Parking spaces along the streets of the Town of Fairfax are at a premium due to the topography of the town and its many narrow, winding streets.
- (B) By the adoption of this Chapter 10.24, it is the intent of the town to contribute to the alleviation of crowded parking conditions by encouraging the owners and occupants of developed residential properties to create new and additional parking spaces where none now exist.
- (C) In furtherance of that purpose, the public interest requires that persons investing private funds in the creation of such parking spaces be given preferential parking privileges wherever such spaces require the use of the right-of-way of a town street or other town property.

Preferential Parking Permit applications are reviewed by the Planning Services Director who is charged with requiring adequate information to determine the location of the proposed parking and its impact upon public safety, vehicular and pedestrian conditions and the use and enjoyment of neighboring properties. In this case the Director assigned the review of this application to the Principal Planner.

The ordinance also requires that the applicant demonstrate that the construction of the parking will require the investment of \$10,000 or more of private funds (Attachment B - \$10,000 minimum amount was set by Town Council resolution No. 1863 adopted December 12, 1994). The proposed project has been estimated by the applicants to cost \$125,000 to \$150,000 and the Building Official has verified that that amount seems accurate for a wall of this length and size.

The Ordinance also exempts preferential parking applications from obtaining variance and encroachment permits from the Planning Commission and allows staff to require only that information necessary to determine the location, public benefit and impacts of

the parking [Town Code § 12.24.020(A)]. Preferential Parking applications are not exempt from excavation or building permit requirements and fees.

The Code requires that the application, once accepted by the staff and deemed complete, be submitted to the Planning Commission for them to make the determination that the creation of the proposed parking is in the public interest and to grant the preferential parking permit [Town Code § 10.24.020(B)(2)].

Town Code § 10.24.020(B)(3) allows that in granting the preferential parking permit, the Planning Commission may impose such conditions as it determines may be required by vehicular and pedestrian traffic conditions, the interests of public safety, the use and enjoyment of neighboring properties and the public welfare; and

Town Code § 10.24.020(B)(4) indicates that any decision of the Planning Commission to grant or revoke a preferential parking permit issued under **Chapter 10.24** shall be subject to appeal to the Town Council in the manner set forth in **Chapter 2.40** of this code.

Location, Design and Public Safety

Staff has performed a site visit and has determine that the construction of the new parking for 95 Chester Avenue will not eliminate any on-street parking spaces currently used on a first come first served basis by the neighborhood.

The Town Engineer has reviewed the project plans and the project engineer's calculations contained in Attachment C and has determined that the project can be built at the proposed location without creating any geotechnical or hydrologic problems for the project site, adjacent properties, or public roadway improvements. He noted that the existing wall in the area where the parking is proposed is currently showing signs of deterioration/movement including "cracks along mortar joints and localized zone of bowing and leaning". Replacement of the failing wall with a new wall and additional on-site parking would be a great benefit for the residents of 95 Chester Avenue, in a neighborhood where parking is scarce.

The Ross Valley Fire and the Fairfax Police Department have all reviewed the plans and have determined that the retaining wall, parking spaces, additional access stairway and driveway access can be constructed without compromising the safety of pedestrians or vehicles using the right-of-way beyond that which would normally occur between private parking/public right-of-way interfaces. Staff has included the standard indemnification condition in the attached Resolution 2021-24 approving the preferential parking and similar language is contained in the Revocable Encroachment Document that must recorded at the Marin County Recorder's Office by the applicant prior to issuance of the building permit for the project.

Excavation Permit

Town Code § 12.20.080 requires the approval of the Planning Commission for any application that will entail the excavation or fill of over 100 cubic yards of material and the findings for approving an excavation permit can be found in Town Code § 12.20.080(B)(1) through (7).

Excavating the area where the parking will be located, and the construction of the wall and new entry stairway will require the excavation and fill of approximately 139 cubic yards of material.

The Town Engineer has determined the construction can occur without negative effects on the project site, adjacent properties, or the public roadway and has verified that the amount is the minimum necessary to create the parking and new entryway [Town Code sections 12.20.080(B)(1), (2), (3) and (4), Excavation Findings].

The poured concrete wall will have an exposed aggregate surface treatment so that its visual impacts will be minimized. The proposed treatment can be viewed at the bottom right corner of page S1 of the project plans. Therefore, the visual and scenic enjoyment of the area by others will not be adversely affected more than is necessary [Town Code § 12.20.080(5), Excavation Finding].

Only one very small sapling with a trunk circumference too small to require it to be subject to the Town Tree Ordinance requiring a tree removal recommendation from the tree committee (Town Code § 8.36.020), and a portion of a hedge will need to be removed to construct the wall, parking, and stairs and the rest of the site will be retained in its current state. Therefore, the natural landscaping will not be removed by the project more than is necessary [Town Code § 12.20.080(B)(6), Excavation Finding].

The standard condition has been included in the resolution recommending approval of the project, Resolution No. 2021-24, that excavation not occur between October 1st through April 1st (Town Code § 12.20.080(B)(7), Excavation Finding).

Other Agency/Department Comments/Conditions

The Fairfax Building Department, Marin Municipal Water District and the Ross Valley Sanitary District did not comment on the project.

Recommendation

Move to approve application 21-21 by adopting Resolution No. 2021-24, approving the Preferential Parking Permit and Excavation Permit for the construction of the retaining wall, proposed parking, and second set of entry stairs at 95 Chester Avenue and setting forth the findings and the conditions for the project approval

ATTACHMENTS

Attachment A – Resolution No. 2021-24

Attachment B – Town Council Resolution No. 1863

Attachment C – Town Engineer's 9/22/21 letter and project engineer's engineering calcs.

RESOLUTION NO. 2021-24

A Resolution of the Fairfax Planning Commission Approving a Preferential Parking Permit and Excavation Permit for the Construction of a Retaining Wall, Entry Stairway, Paved Parking Spaces and Driveway for the Property at 95 Chester Avenue

WHEREAS, the Town of Fairfax has received an application on July 22, 2021, for a roughly 82 foot long, two to eight-foot-tall retaining wall, a 60-foot-wide driveway accessing two paved private parking spaces, and a new entry stairway for 95 Chester Avenue; and,

WHEREAS, based on the plans and other documentary evidence in the record, the Planning Commission has determined that the applicant has met the burden of proof required to support the findings necessary to approve the project with certain conditions of approval as listed below; and

WHEREAS, the Commission has determined, based on the recommendation of the Principal Planner at the direction of the Director of Planning and Building Services, that the creation of the proposed parking spaces is in the public interest as it will assist in decreasing the parking congestion within the Chester Avenue public right-of-way by providing two offstreet parking spaces for the residents of 95 Chester Avenue; and

WHEREAS, the cost to construct the parking has been determined to be well over the \$10,000 threshold warranting the granting of preferential parking privileges to the owners of 95 Chester Avenue for their exclusive use of the spaces once constructed; and

Whereas, the Town Engineer, after reviewing the project plans by Paul Pieri, the project engineer, dated received 9/1/21 and the associated calculations, recommends that the project can be constructed in compliance with both the preferential parking ordinance and the excavation ordinance without impacting neighboring residences, the public right-of-way and pedestrian and vehicular safety for those using the Chester Avenue right-of-way; and

Whereas, based on the Town Engineer's review and support of the project the Planning Commission finds the following with respect to the excavation permit:

Excavation Permit Findings [Town Code 12.20.080(B)(1) through (7)]

1. The project has been engineered and designed to protect the health, safety, and welfare of the public.
2. Adjacent properties are protected by the project investigation and design from geologic hazards.
3. Adjacent properties are protected by the project investigation and design from hydrologic (drainage and erosion) hazards.

4. The 139 cubic yards of material to be excavated/filled to construct the retaining wall and back fill it to create the parking spaces is not more than that which is necessary to provide two parking spaces for 95 Chester Avenue.
5. The 2- to 8-foot tall retaining wall creating the parking will have an exposed aggregate façade facing Chester Avenue, to minimize the visual impact of its mass on the visual and scenic enjoyment of Chester Avenue by others.
6. Only a portion of the front hedge and one tree too small to be subject to the Tree Ordinance will be removed to create the parking. Therefore, the natural landscaping will not be removed by the project more than is necessary.
7. The project conditions below include the standard excavation condition that prohibits site excavation and fill between October 1st and April 1st each year. Therefore, the time of year during which construction will take place is such that work will not result in excessive siltation from storm run-off nor prolonged exposure of unstable excavated slopes.

WHEREAS, the Commission has approved the project subject to the applicant's compliance with the following conditions:

Conditions of Approval

1. The Building Official shall review and approve the entire body of information for the project including engineering reports and the construction drawings prior to issuance of the project building permit referring them to the Town Engineer for a second review if he deems it necessary.
2. The owner shall record the Revocable Encroachment Permit for the parking prior to issuance of the building permit for the project and provide a copy of the recorded document to the Town Planning and Building Services Department prior to issuance of the building permit for the Preferential Parking spaces.
3. The applicant shall comply with any building permit conditions of the Fairfax Building Official, Public Works Director/Manager, Town Engineer, Ross Valley Fire Department, Marin Municipal Water District and Ross Valley Sanitary District.
4. This approval is limited to the development shown on the plans provided to the Planning Commission at their November 18, 2021, meeting and received by the Town on September 1, 2021, by Paul Pieri, Registered Professional Engineer, pages S1 and S2.
5. Prior to issuance of a building permit, the applicant or his assigns shall submit a bond, cash deposit or letter of credit to the Town in an amount that will cover the cost of grading, weatherization, and repair of possible roadway damage and the completion of the wall finish should it not occur as approved by the Planning Commission or as

6. modified with the approval of the Planning Director. The applicant shall submit contractor's estimates for any grading, site weatherization and improvement plan for approval by the Public Works Director. Upon approval of the contract costs, the applicant shall submit a cash deposit, letter of credit or bond equaling 100% of the estimated construction costs.
7. Prior to issuance of the building permit, the applicant shall provide the Public Works Department with a video of the access streets to be used during construction. The Public Works Director shall decide prior to the project final, regarding street resurfacing and repair that may be required as a result of damage and wear and tear from project vehicles.
8. Prior to issuance of the building permit, the applicant shall submit a Construction Management Plan subject to review and approval by the Building Official/Public Works Manager. The plan shall include:
 - a) Construction delivery routes approved by the Department of Public Works
 - b) Construction schedule (deliveries, worker hours, etc.)
 - c) Notification to area residents
 - d) Emergency access routes; and
 - a. Parking plan to minimize the impacts of contractor/employee vehicles and construction equipment on neighborhood parking
9. During the construction process the following shall be required:
 - a. The project engineer shall be on-site during the grading process and prior to installation of retaining forms shall submit written certification to the Town staff that the grading has been completed as designed and recommended.
 - b. All construction related vehicles including equipment delivery, cement trucks and construction materials shall be always situated off the travel lane of the adjacent public right(s)-of-way. This condition may be waived by the building official on a case-by-case basis with prior notification from the contractor.
 - c. Additionally, any proposed temporary closure of a public right-of-way shall require prior approval by the Fairfax Police Department and any necessary traffic control, signage or public notification shall be the responsibility of the applicant or his/her assigns. Any violation of this provision will result in a stop work order being placed on the property and issuance of a citation.
10. Prior to the project final inspection, the following shall be completed:
 - a. The project engineer shall field check the completed project and submit written certification to Town Staff stating that the retaining, grading and drainage elements have been installed in conformance with the approved building plans.

- b. The Building Official shall field check the completed project to verify that the work has been installed as per the approved plan.
 - c. The Planning Department shall field check the completed project to verify that all conditions of the Planning Commission have been complied with prior to the final inspection including the exposed
11. Excavation shall not occur between October 1st and April 1st of any year. The Town Engineer has the authority to waive this condition depending upon the weather.
 12. The applicant shall comply with the Town Noise Ordinance Chapter 8.16 of the Fairfax Town Code.
 13. Any changes, modifications, additions, or alterations made to the approved set of plans will require approval of the Planning Commission. Any construction based on plans that have been altered without the benefit of an approved modification will result in the job being immediately stopped and red tagged.
 14. The applicant and its heirs, successors, and assigns shall, at its sole cost and expense, defend with counsel selected by the Town, indemnify, protect, release, and hold harmless the Town of Fairfax and any agency or instrumentality thereof, including its agents, officers, commissions, and employees (the "Indemnitees") from any and all claims, actions, or proceedings arising out of or in any way relating to the processing and/or approval of the project as described herein, the purpose of which is to attack, set aside, void, or annul the approval of the project, and/or any environmental determination that accompanies it, by the Planning Commission, Town Council, Planning Director, or any other department or agency of the Town. This indemnification shall include, but not be limited to, suits, damages, judgments, costs, expenses, liens, levies, attorney fees or expert witness fees that may be asserted or incurred by any person or entity, including the applicant, third parties and the Indemnitees, arising out of or in connection with the approval of this project, whether or not there is concurrent, passive, or active negligence on the part of the Indemnitees. Nothing herein shall prohibit the Town from participating in the defense of any claim, action, or proceeding. The parties shall use best efforts, acting in good faith, to select mutually agreeable defense counsel.
 15. Excavation not occur between October 1st through April 1st unless this excavation prohibition is waived by the Town Engineer based on current weather conditions.

NOW, THEREFORE BE IT RESOLVED, the Planning Commission of the Town of Fairfax hereby finds and determines as follows:

The approval of the Excavation Permit, Preferential Parking Permit and granting exclusive parking rights for the use of the parking depicted in the plans dated March 2020, received by the Town of Fairfax September 1st, 2021, drawn by Paul Pieri, Registered Professional Engineering, pages S1 and S2, will not cause significant visual impacts on neighboring residences or obstruct the flow of

pedestrian or vehicular traffic along Chester Avenue and the proposed project is in compliance with the 2010 to 2013 Fairfax General Plan and Fairfax Zoning Ordinance and will benefit the property owners and the general public.

The foregoing resolution was adopted at a regular meeting of the Planning Commission held in said Town, on November 18, 2021, by the following vote:

AYES:
NOES:
ABSTAIN:

Chair, Mimi Newton

Attest:

Ben Berto, Director of Planning and Building Services

RESOLUTION NO. 1863

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FAIRFAX SETTING A FILING FEE AND ESTABLISHING A THRESHOLD FOR PRIVATE FUNDS EXPENDED TO QUALIFY FOR PREFERENTIAL PARKING PRIVILEGES

WHEREAS, The Fairfax Town Council has adopted Ordinance No. 636 establishing preferential parking privileges for persons creating new vehicle parking spaces; and

WHEREAS, the Ordinance allows the Town Council to determine the amount of a filing fee; and

WHEREAS, the Ordinance requires that an applicant demonstrate that the creation of the parking space will require the investment of private funds in an amount to be determined from time to time by the Town Council.

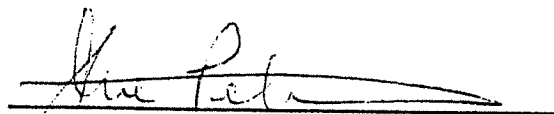
NOW, THEREFORE, BE IT RESOLVED, that the Fairfax Town Council set a filing fee of one hundred dollars (\$100.00) plus required signage at cost and establish a threshold for private funds expended on creating a new parking space in the amount of ten thousand dollars (\$10,000.00).

The Foregoing Resolution was duly and regularly adopted by the Town Council of the Town of Fairfax, County of Marin, State of California, at a regular meeting thereof, held on the 12th day of December, 1994, by the following vote, to wit:


AYES: Brandborg, Egger, Vanni, Mayor Peterson

NOES: None

ABSENT: Wilson


SUE PETERSON, MAYOR

ATTEST:


JUDITH ANDERSON, TOWN CLERK

ATTACHMENT B



September 22, 2021
File: 201.201altr.doc

Town of Fairfax
Planning and Building Services Department
142 Bolinas Avenue
Fairfax, California 94930

Attn: Ms. Linda Neal, Principal Planner

Re: First Building-Level Geologic, Geotechnical, and Civil Engineering Review
New Site Retaining Wall and Access Stairs
95 Chester Avenue (APN 001-191-09)
Fairfax, California

Introduction

In response to your request and in accordance with our agreement dated March 20, 2018, this letter summarizes our first building-level review of project plans¹ and supporting documentation for the planned new site retaining wall and access stairs at 95 Chester Avenue (APN 001-191-09) in Fairfax, California. The purpose of our services is to review the submitted documents, comment on the completeness and adequacy of the submittal in consideration of Town requirements, and to provide a recommendation to Town Building staff regarding project approval.

The scope of our services to date has included:

- A site reconnaissance to observe existing conditions and review proposed development features;
- Development of opinions regarding project compliance with applicable Town "Preferential Parking Ordinance" requirements; and
- Development of recommendations to Town staff as to whether the project may be safely constructed in consideration of any geologic, hydrologic, or geotechnical hazards.

The purpose of our current review is to determine whether all planning-level geotechnical comments and conditions of approval are appropriately reflected by the building plans. It should be noted that the scope of our review is limited solely to geologic, geotechnical, and civil portions of the project, and does not include review of structural, architectural, mechanical, or other items beyond the scope of our qualifications. We recommend that non-geotechnical aspects of the plans be reviewed by suitably qualified professionals.

Project Description

The project generally includes construction of a new 82-foot long, 6-foot high concrete retaining wall to accommodate a pair of new off-street parking spaces along the Chester Road frontage, on a site

¹ Marin Select Structural Consulting" (2021), "Parking Addition at Acosta-Strodl Residence, 95 Chester Avenue, Fairfax, California", Sheets S1 and S2, First Revision/Plan Check Set (undated; original plan date March 2021)

September 22, 2021

that is currently developed with an existing single-family residence. New wood-framed access stairs will be provided at one end of the wall and extend up to the residence above.

Project Review

We performed a brief site reconnaissance on August 3, 2021 to observe existing conditions at the site. Currently, the proposed development area is comprised of a natural slope, inclined at about 3:1 (H;V), which appears to expose relatively loose colluvial soils amidst relatively sparse vegetation. The toe of slope is currently retained by an existing grouted rock wall which is about 3-feet high and shows evidence of distress, including cracks along mortar joints and localized zones of bowing and leaning. During our reconnaissance, we noted that soils exposed on the slope are comprised generally of dry, medium-stiff sandy clay and sandy silt, and no bedrock outcrops were observed.

Additionally, we reviewed the following documents provided by the Town:

- Marin Select Structural Consulting (2021), "Structural Plans, Proposed Parking Addition @ Acosta/Strodl Residence, 95 Chester Avenue, Fairfax, CA 94995, AP No. 001-191-09", Sheets S1 and S2, dated March 2021.
- Marin Select Structural Consulting (2021), "Structural Calculations for New Parking/Off-Street Site Retaining Wall Design Addition @ Acosta/Strodl Residence, 95 Chester Avenue, Fairfax, CA 94995, AP No. 001-191-09", dated March 2021.

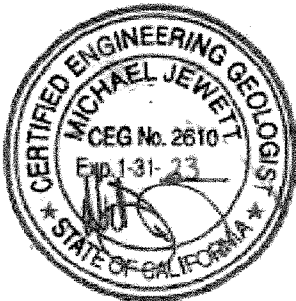
Conclusions and Recommendations

Based on our review and follow-up discussion with the design engineer, we judge that the plans and specifications are generally compliant with the Preferential Parking Ordinance and appropriate for the site conditions. As such, we recommend that the project be approved for construction.

We trust that this letter contains the information you require at this time. Please do not hesitate to contact us should there be any questions or concerns.

Yours very truly,
MILLER PACIFIC ENGINEERING GROUP

REVIEWED BY:



Mike Jewett
Town of Fairfax Contract Geologist
Engineering Geologist No. 2610
(Expires 1/31/23)



Scott Stephens
Town of Fairfax Contract Engineer
Geotechnical Engineer No. 2398
(Expires 6/30/21)

Paul Pieri

From: Paul Pieri [paulpieri@marinselectstructural.com]
Sent: Tuesday, August 24, 2021 5:23 PM
To: 'Michael Jewett'
Cc: 'Scott A. Stephens'
Subject: RE: 95 Chester Avenue Retaining Wall Design
Attachments: wall revised calcs..pdf

net end result for load change increase requested are:

2 more inches for the footing width and 3" more keyway depth in the detail.

Paul Pieri

From: Michael Jewett [mailto:MJewett@millerpac.com]
Sent: Tuesday, August 24, 2021 11:29 AM
To: paulpieri@marinselectstructural.com
Cc: Scott A. Stephens
Subject: 95 Chester Avenue Retaining Wall Design

Hi Paul,

Thanks for taking my call this morning. As discussed, I don't want to hold this up since its pretty straightforward and conceptually sound. Scott Stephens and I went through the calcs and were hoping you could revise a few inputs, such that we can justify approving this without a soils report.

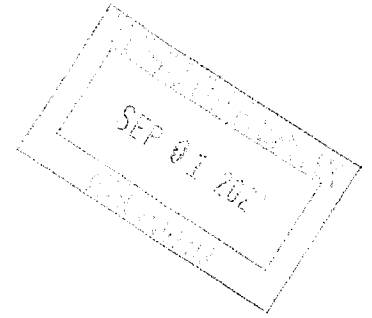
Specific adjustments are:

1. Please increase heel active pressure to 55pcf
2. Please use 300pcf for lateral passive resistance
3. Please use 125 pcf for soil density
4. Please use 0.30 for base friction.

I'm hoping this results in only minor changes to footing dimensions or reinforcement and allows your team to resubmit quickly and move ahead. If there are any questions or concerns, please let us know.

Thanks again,

Mike Jewett, Associate Geologist
mjewett@millerpac.com
415-382-3444 Office
415-577-8196 Mobile



MsSC services
 Paul J. Pieri / Ca. PE # 38638
 Use settings screen to create your
 company title block here.

info / load revise
x M-pacific group request

95 Chester Ave, Fairfax
 Title : new site retaining @ parking Page: F1
 Job # : ...New... Dsgnr: Date: MAR 18, 2021
 Description...
 7ft cut site retainer *info 3/24/21*

Retain Pro 9 © 1989 - 2011 Ver: 9.27 8171
 Registration #: RP-1182675 RP9.27

Cantilevered Retaining Wall Design

Code: CBC 2019

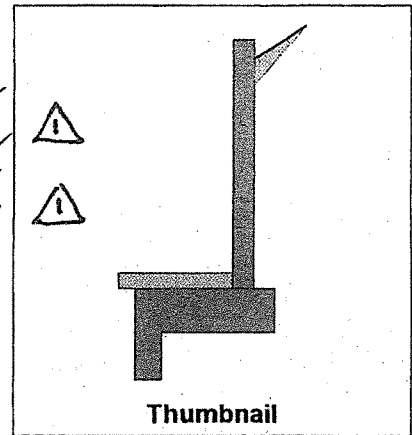
Criteria

Retained Height = 6.00 ft
 Wall height above soil = 0.50 ft
 Slope Behind Wall = 2.00 : 1
 Height of Soil over Toe = 5.00 in
 Water height over heel = 0.0 ft

Vertical component of active
 soil pressure used for Overturning Resistance.

Soil Data

Allow Soil Bearing = 2,000.0 psf
 Equivalent Fluid Pressure Method
 Heel Active Pressure = 55.0 psf/ft ✓
 Toe Active Pressure = 0.0 psf/ft ✓
 Passive Pressure = 300.0 psf/ft ✓
 Soil Density, Heel = 125.00 pcf ✓
 Soil Density, Toe = 125.00 pcf ✓
 Footing||Soil Friction = 0.300 ✓
 Soil height to ignore for passive pressure = 0.00 in ✓



Surcharge Loads

Surcharge Over Heel = 0.0 psf
 Used To Resist Sliding & Overturning
 Surcharge Over Toe = 50.0 psf
 Used for Sliding & Overturning

Axial Load Applied to Stem

Axial Dead Load = 0.0 lbs
 Axial Live Load = 0.0 lbs
 Axial Load Eccentricity = 0.0 in

Lateral Load Applied to Stem

Lateral Load = 0.0 #/ft
 ...Height to Top = 0.00 ft
 ...Height to Bottom = 0.00 ft
 The above lateral load has been increased by a factor of 1.00
 Wind on Exposed Stem = 0.0 psf

Adjacent Footing Load

Adjacent Footing Load = 0.0 lbs
 Footing Width = 0.00 ft
 Eccentricity = 0.00 in
 Wall to Ftg CL Dist = 0.00 ft
 Footing Type = Line Load
 Base Above/Below Soil at Back of Wall = 0.0 ft
 Poisson's Ratio = 0.300

Design Summary

Wall Stability Ratios
 Overturning = 1.96 OK ✓
 Sliding = 1.50 OK ✓
 Total Bearing Load = 2,504 lbs
 ...resultant ecc. = 8.29 in
 Soil Pressure @ Toe = 1,132 psf OK ✓
 Soil Pressure @ Heel = 25 psf OK
 Allowable = 2,000 psf
 Soil Pressure Less Than Allowable
 ACI Factored @ Toe = 1,095 psf
 ACI Factored @ Heel = 24 psf
 Footing Shear @ Toe = 7.2 psi OK
 Footing Shear @ Heel = 16.2 psi OK
 Allowable = 82.2 psi
 Sliding Calcs (Vertical Component Used)
 Lateral Sliding Force = 1,546.2 lbs
 less 100% Passive Force = - 1,568.2 lbs
 less 100% Friction Force = - 751.3 lbs
 Added Force Req'd = 0.0 lbs OK
for 1.5 : 1 Stability = 0.0 lbs OK

Stem Construction

| | Top Stem | 2nd |
|--------------------------|----------------|----------------|
| Design Height Above Ftg | ft = 6.50 | Shear NGI 0.00 |
| Wall Material Above "Ht" | = Concrete | 3 |
| Thickness | = 8.00 | 0.00 |
| Rebar Size | = # 5 | # 0 |
| Rebar Spacing | = 10.00 | 0.00 |
| Rebar Placed at | = Edge | Center |
| Design Data | | |
| fb/FB + fa/Fa | = 0.000 | 0.000 |
| Total Force @ Section | lbs = 0.0 | 0.0 |
| Moment....Actual | ft-# = 0.0 | 0.0 |
| Moment....Allowable | ft-# = 6,633.1 | 0.0 |
| Shear....Actual | psi = 0.0 | 0.0 |
| Shear....Allowable | psi = 82.2 | 0.0 |
| Wall Weight | psf = 100.0 | 0.0 |
| Rebar Depth 'd' | in = 6.19 | 0.00 |
| LAP SPLICE IF ABOVE | in = 23.73 | 0.00 |
| LAP SPLICE IF BELOW | in = 6.39 | |
| HOOK EMBED INTO FTG | in = | 0.00 |

Masonry Data

f_m psi = 0
 F_s psi = 0
 Solid Grouting = No
 Modular Ratio 'n' = 0.00
 Short Term Factor = 0.000
 Equiv. Solid Thick. = 0.00
 Masonry Block Type = Medium Weight
 Masonry Design Method = ASD

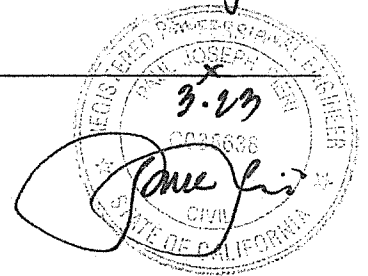
Concrete Data

f_c psi = 3,000.0 0.0
 F_y psi = 40,000.0 0.0

Load Factors

Building Code = CBC 2019
 Dead Load = 1.200
 Live Load = 1.600
 Earth, H = 1.600
 Wind, W = 1.600
 Seismic, E = 1.000

info.



MSSC services
 Paul J. Pieri / Ca. PE # 38638
 Use settings screen to create your
 company title block here.

Title : new site retaining @ parking
 Job # : ...New... Dsg...
 Description...
 7ft cut site retainer

Page: 12
 Date: MAR 18, 2021




This Wall in File: f:\users\paul\documents\retainpro9\new f

Retain Pro 9 © 1989 - 2011 Ver: 9.27 8171
 Registration #: RP-1182675 RP9.27

Cantilevered Retaining Wall Design

Code: CBC 2019

Footing Dimensions & Strengths

Toe Width = 3.00 ft
 Heel Width = 1.33 
 Total Footing Width = 4.33 
 Footing Thickness = 14.00 in
 Key Width = 10.00 in 
 Key Depth = 15.00 in
 Key Distance from Toe = 0.00 ft
 f_c = 3,000 psi F_y = 40,000 psi
 Footing Concrete Density = 150.00 pcf
 Min. As % = 0.0000
 Cover @ Top 3.00 @ Btm = 3.00 in

Footing Design Results

| | Toe | Heel |
|--------------------|------------------|------------|
| Factored Pressure | = 1,095 | 24 psf |
| Mu' : Upward | = 3,816 | 17 ft-# |
| Mu' : Downward | = 1,791 | 1,114 ft-# |
| Mu: Design | = 2,026 | 1,096 ft-# |
| Actual 1-Way Shear | = 7.16 | 16.23 psi |
| Allow 1-Way Shear | = 82.16 | 82.16 psi |
| Toe Reinforcing | = # 5 @ 10.00 in | |
| Heel Reinforcing | = # 4 @ 18.00 in | |
| Key Reinforcing | = None Spec'd | |

Other Acceptable Sizes & Spacings

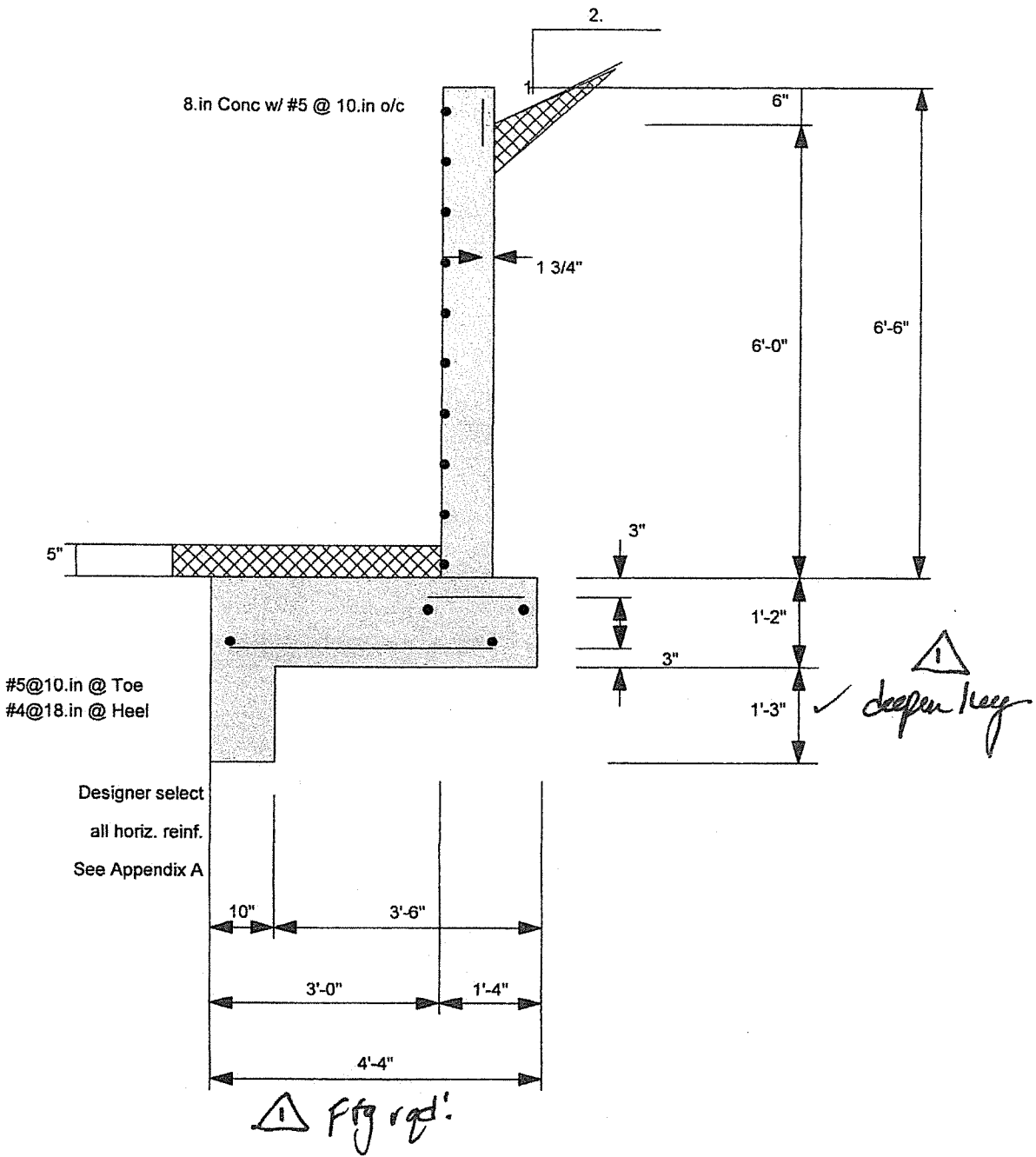
Toe: Not req'd, Mu < S * Fr
 Heel: Not req'd, Mu < S * Fr
 Key: Not req'd, Mu < S * Fr

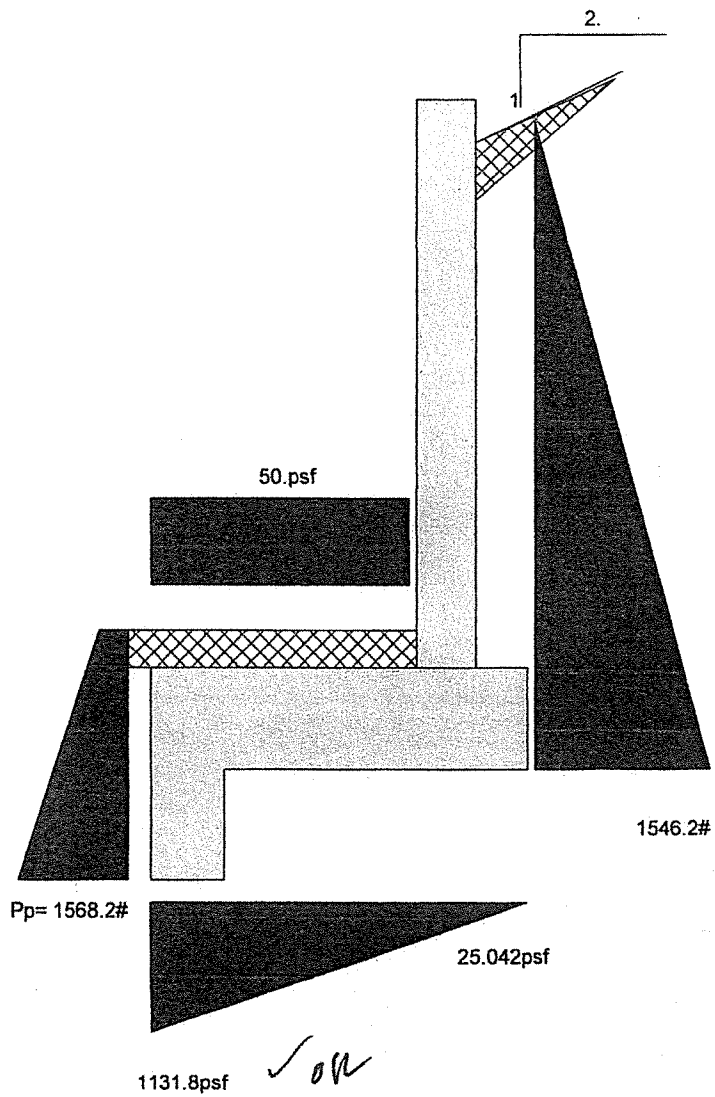
Summary of Overturning & Resisting Forces & Moments

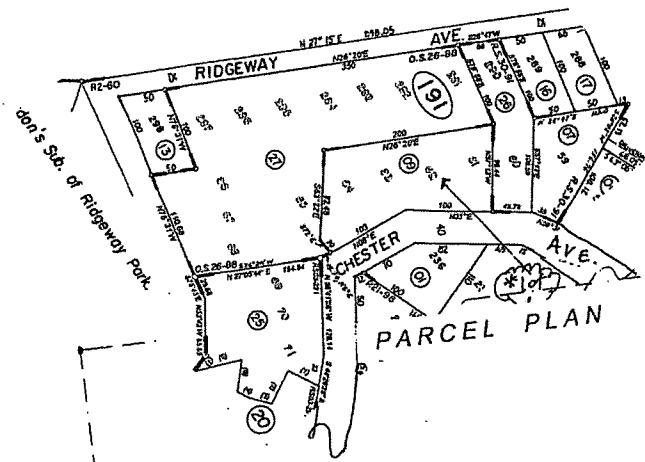
| Item |OVERTURNING..... | | |RESISTING..... | | | |
|--|-----------------------|-----------------|----------------|---------------------------|----------------------|--------------|----------------|
| | Force lbs | Distance ft | Moment ft-# | Force lbs | Distance ft | Moment ft-# | |
| Heel Active Pressure | = 1,546.2 | 2.50 | 3,864.6 | Soil Over Heel | = 497.5 | 4.00 | 1,989.2 |
| Surcharge over Heel | = | | | Sloped Soil Over Heel | = 13.8 | 4.11 | 56.5 |
| Toe Active Pressure | = | 0.53 | | Surcharge Over Heel | = | | |
| Surcharge Over Toe | = | 0.79 | | Adjacent Footing Load | = | | |
| Adjacent Footing Load | = | | | Axial Dead Load on Stem | = | | |
| Added Lateral Load | = | | | * Axial Live Load on Stem | = | | |
| Load @ Stem Above Soil | = | | | Soil Over Toe | = 156.3 | 1.50 | 234.4 |
| | | | | Surcharge Over Toe | = 150.0 | 1.50 | 225.0 |
| | | | | Stem Weight(s) | = | | |
| | | | | Earth @ Stem Transitions | = | | |
| Total | = 1,546.2 | O.T.M. = | 3,864.6 | Footing Weight | = 757.8 | 2.17 | 1,640.5 |
| Resisting/Overturning Ratio | = | 1.96 | | Key Weight | = 156.3 | 0.42 | 65.1 |
| Vertical Loads used for Soil Pressure | = | 2,504.5 lbs | | Vert. Component | = 773.0 | 4.33 | 3,347.0 |
| Vertical component of active pressure used for soil pressure | | | | Total | = 2,504.5 lbs | R.M.= | 7,557.7 |

* Axial live load NOT included in total displayed, or used for overturning resistance, but is included for soil pressure calculation.

DESIGNER NOTES:





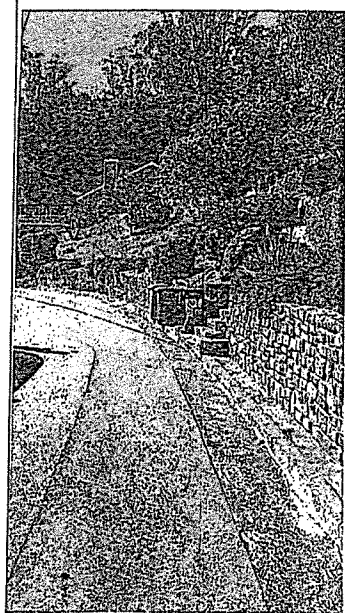


200' N 26°20' E

92.48' S 63°22' E

99.44' N 51°12' W

(E) NATURAL HILLSIDE

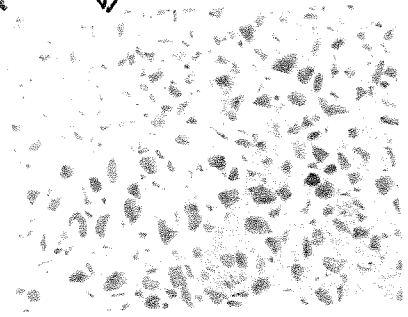


SITE PHOTO

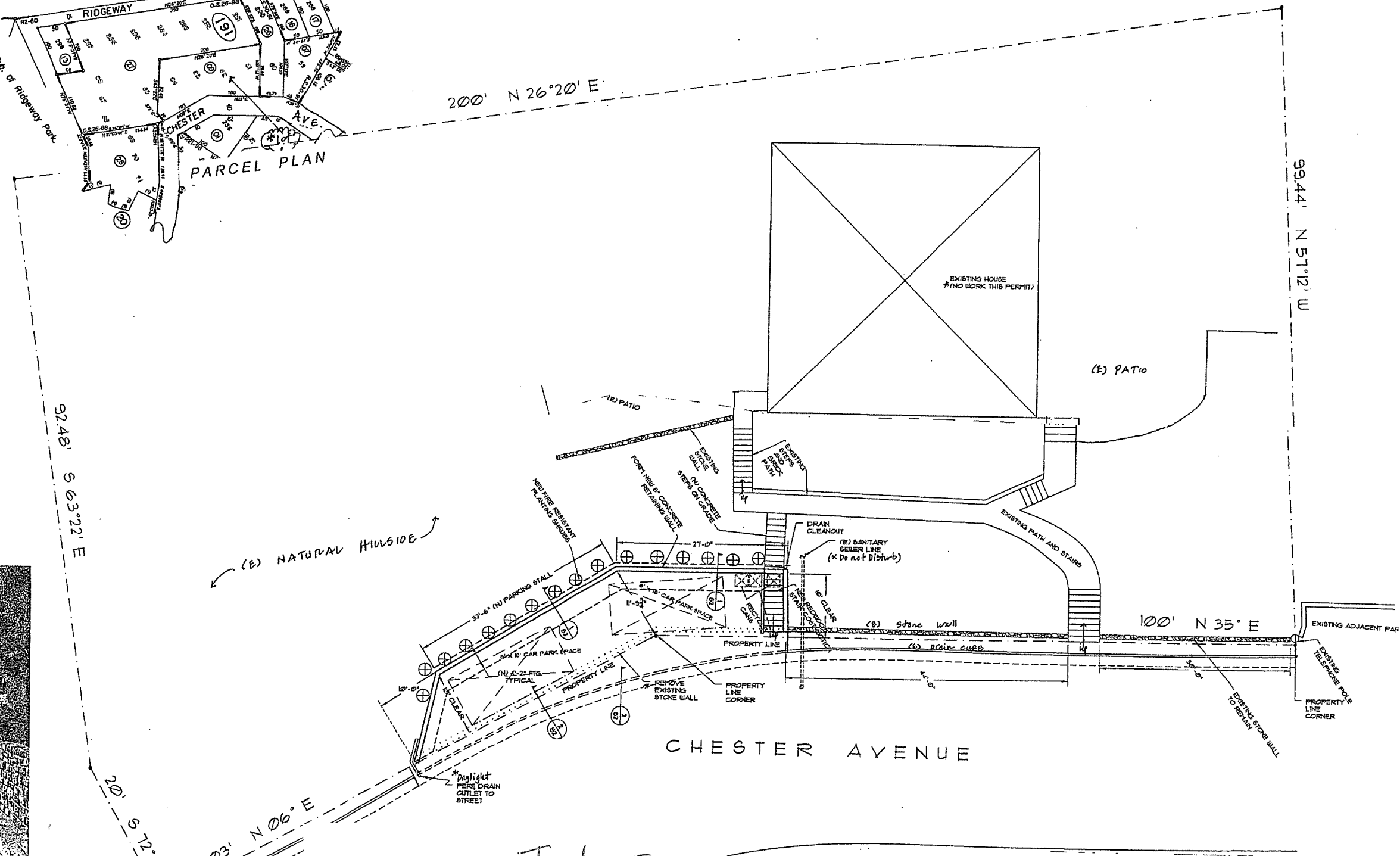
20' S 72° E

103' N 06° E

WALL FINISH TEXTURE



viewway or



CHESTER AVENUE

100' N 35° E

NOTES: GENERAL

- All work shall comply with the requirements of the California Building Code, latest 2019 edition, as adopted by the City of Fairfax jurisdiction.
- Verify all dimensions, construction, and utilities in the field. Report any discrepancies to Engineer before doing any work. *Contractor to have accurately marked underground utility lines for services to the building for exposure or accurate demarcation required during excavations for new footing work. Note: * Verify if existing sewer line runs may require line fall adjustments in field shall be approved by Ross Valley Sanitary District rules and regulations.
- Contractor shall carefully check the stability of all elements before removing any existing construction and provide shoring, bracing, and/or temporary support as required. All soil excavations shall be removed from site. * Volume estimate = 10 ft X 70 ft X 6 ft ave. / 27 = +/- 155 yards / off haul
- This plan proposal shall be used for new site retaining wall construction for off street parking improvement to the parcel and street use safety improvements. (No other interior or exterior house remodel work is required in this permit.)
- Jobsite: The Engineer is required to inspect all new soil footing bearing conditions, all footing rebar placement installs for areas shown on plans. *Engineer to supply final letter of conformance to the City when completed.

MATERIAL NOTES:

- CONCRETE/ WOOD
- Epoxy: Simpson SET XP or Hilti product.
- 1. Concrete 3000 psi w/ min. 3/4" + 3/8" / blend gravel mix.
- 2. Rebar: 40 ksi

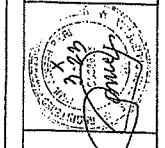
Lumber used for structural purposes shall be Douglas Fir conforming to the following minimum grades and be free of heart center (FOHC).
 a. Deck joist, plates, blocking, stair ledger FT. D.F. No. 1
 Fasteners referred to by Simpson Company designation for general characteristics. Substitute fasteners must have equal or better structural properties.
 *Note: Prime all galvanized contact Hangers, straps and anchors with black tar base undercoating spray to divorce galvanized contact with CCQ materials typical.

SITE PARKING ADDITION AND FOUNDATION PLAN

Scale: 1/8" = 1'-0"

| REVISIONS | BY |
|-----------|----|
| | |
| | |
| | |
| | |

MARIN Select STRUCTURAL CONSULTING
 Paul J. Platt / CA P.E. #30698
 333 Willow Avenue - #1
 Corte Madera, CA 94925
 Phone: 415-946-8807
 Email: paul.platt@marinselectstructural.com



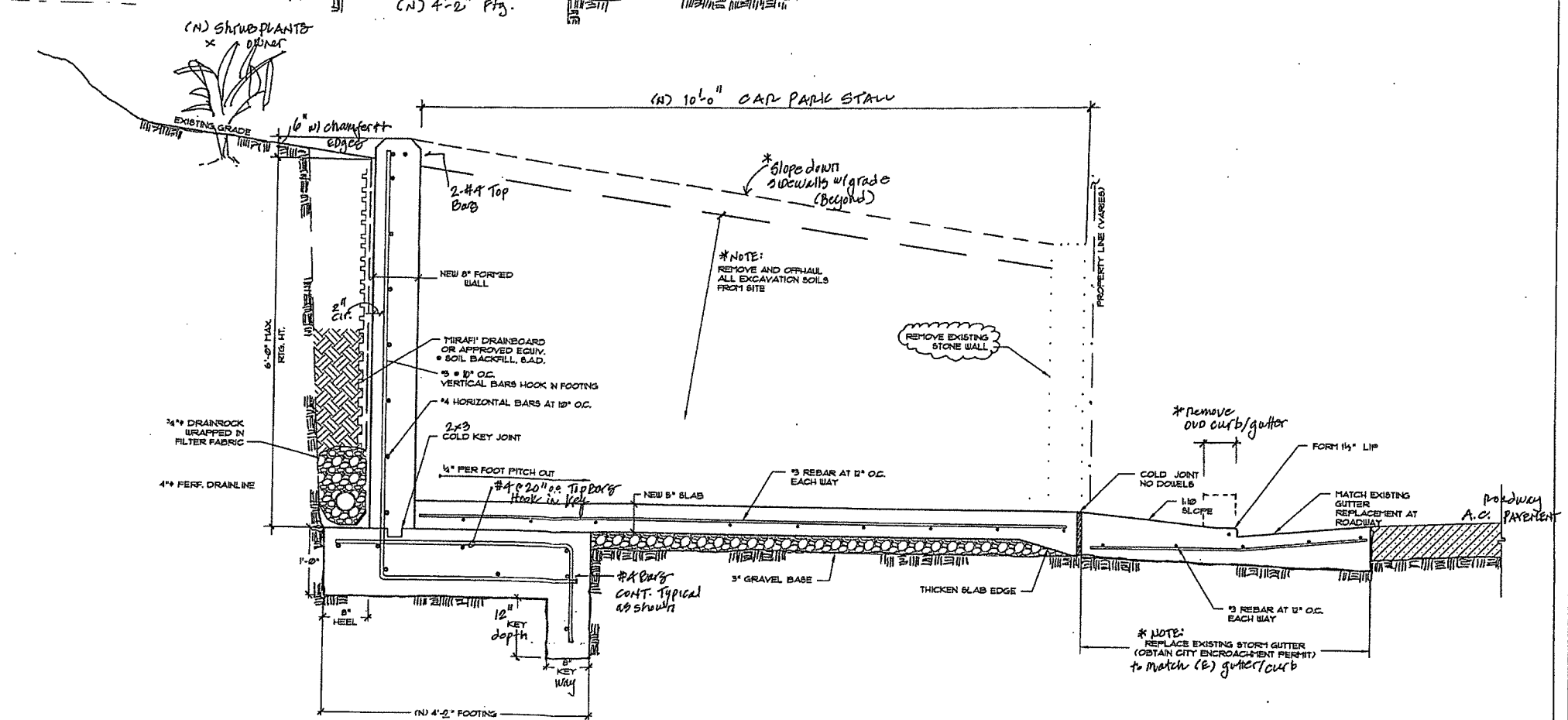
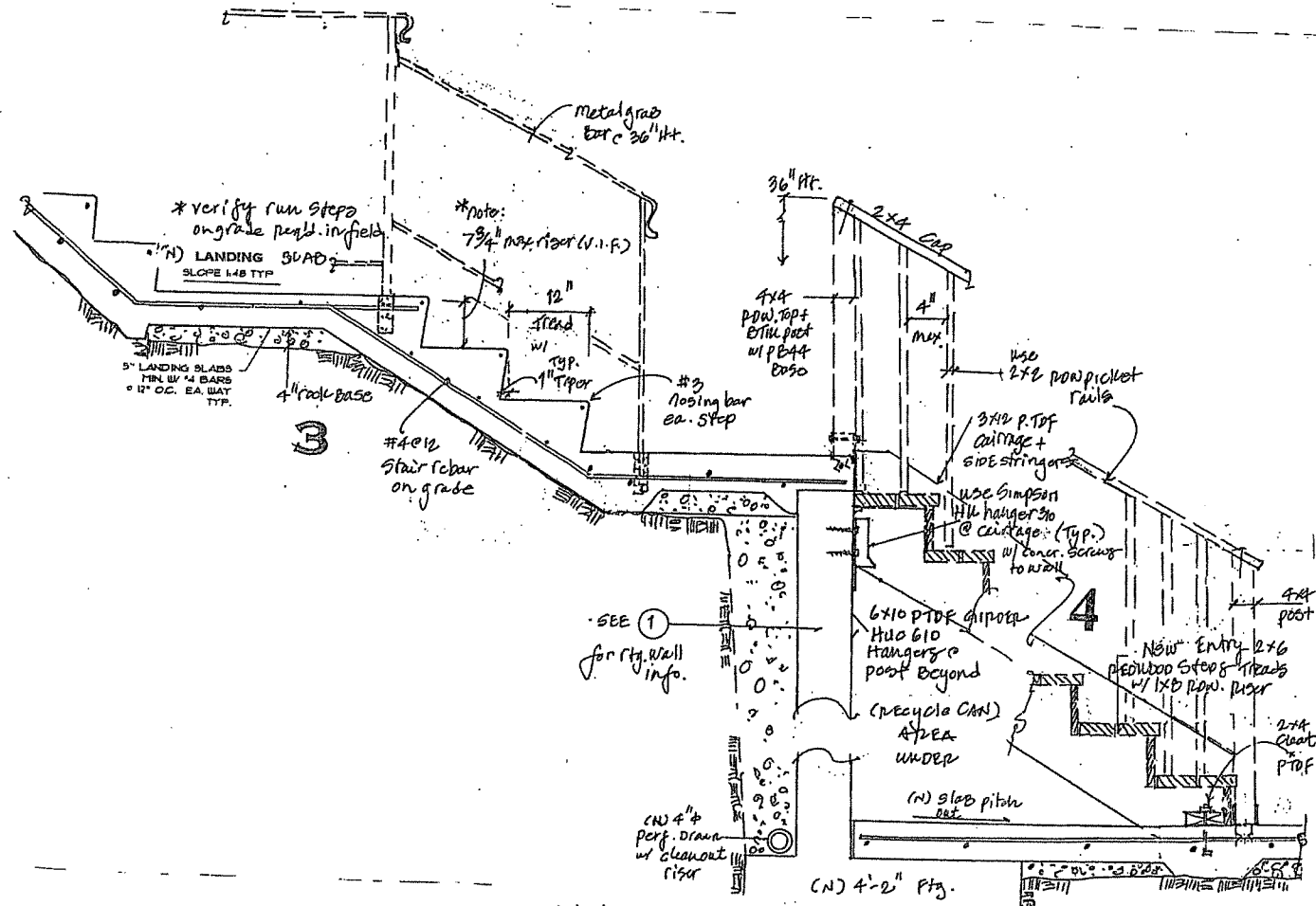
APN 001-191-09

PARKING ADDITION AT
 ACOSTA-STRODL RESIDENCE
 95 CHESTER AVENUE
 FAIRFAX, CALIFORNIA

STRUCTURAL PLANS OF FAIRFAX
 JUL 22 2021
 ED

DATE: MARCH 2021
 SCALE: 1/8" = 1'-0" W/LD
 DRAWN: HJ/JP
 SHEET: S1
 OF 2 SHEETS

ATTACHMENT D



EROSION-SEDIMENT CONTROL PLAN

MANAGEMENT PRACTICES TO BE EMPLOYED TO PREVENT CONTACT OF CONSTRUCTION MATERIAL, EQUIPMENT AND VEHICLES WITH STORM WATER AND DRAINAGE.

The owner and contractor are to initiate best practices to minimize the introduction of sediment and silt materials into the city's storm drain system and surrounding natural areas.

A. Construction Materials-

All construction materials shall be stored at higher elevations that are properly graded to minimize contact with surface runoff and standing water. Any material that can contaminate water runoff when exposed to rain shall be covered with plastic sheeting and bounded with hay bale dikes and silt fences during periods of rain and high winds.

B. Vegetation-

If areas are disturbed during the rainy season, the down slope limits of these areas shall be bounded with hay dikes and silt fences to screen the storm runoff sediment from entering the storm drain system and surrounding areas. All storm drain inlets that are in operation during construction shall be protected with gravel socks and hay bales. If the storm drain inlets are not in use they shall be sealed to prevent water from entering the storm drain. After each storm all storm covering provisions shall be inspected and repaired if necessary. If silt accumulation has occurred, the silt shall be removed and re-deposited on the site and covered again.

C. Construction Equipment-

Petroleum fuels and lubrication of equipment shall be properly maintained to prevent leakage. Equipment shall be serviced and maintained so petroleum and distillates do not come into contact with the ground and shall be properly disposed of. Soil or other exposed material accidentally contaminated shall be properly disposed of offsite. If removal is not immediately possible, the contaminated material shall be covered with plastic sheeting and six inch trench shall be excavated around the perimeter of the material until disposal can occur.

| REVISIONS | BY |
|-----------|----|
| | |
| | |
| | |
| | |

AMARIN SELECT STRUCTURAL CONSULTING
 Paul J. Flert / CA P.E. #36938
 888 Willow Avenue, #111
 Corte Madera, CA 94925
 Phone: 415-946-9887
 Email: pauljflert@amarinselectstructural.com



STRUCTURAL DETAILS AND NOTES
 PARKING ADDITION AT
 ACOSTA-STRODLI RESIDENCE
 95 CHESTER AVENUE
 FAIRFAX, CALIFORNIA
 APN 001-191-09

DATE: MARCH 2021
 SCALE: 1/2" = 1'-0" UNDO.
 DRAWN: JJP / JFP
 JOB:
 SHEET:
 S2
 OF 2 SHEETS