

# Exhibit A

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**EXHIBIT A  
DRAFT RESOLUTION**

**Before the Housing and Community Development Chief of Planning  
in and for the County of Monterey, State of California**

In the matter of the application of:

**PLN250155 - ESCARENO ANTONIO III & ERANDI  
RESOLUTION NO. 25-038**

Resolution by the Monterey County Chief of  
Planning:

- 1) Finding that the project qualifies for a Class 3 Categorical Exemption pursuant to CEQA Guidelines Section 15303 and there are no exceptions pursuant to section 15300.2; and
- 2) Approving an Administrative Permit and Design Approval to allow the construction of a 3,285 square foot two-story single-family dwelling with an attached 750 square foot garage with associated site improvements.

[2220 Silver Stone St, Royal Oaks, North County  
Inland Area Plan (APN: 117-191-015-000)]

**The ESCARENO ANTONIO III & ERANDI application (PLN250155) came on for an administrative decision before the Monterey County Chief of Planning on August 20, 2025. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, including the conditions of approval and project plans, the Monterey County Chief of Planning finds and decides as follows:**

**FINDINGS**

1. **FINDING:** **CONSISTENCY** – The Project as conditioned is consistent with the applicable plans and policies which designate this area as appropriate for development.  
**EVIDENCE:** a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
  - the 2010 Monterey County General Plan (General Plan);
  - North County Inland Plan (NCAP); and
  - Monterey County Zoning Ordinance (Title 21).No conflicts were found to exist. No communications were received during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.  
b) Allowed Use. The property is located at 2220 Silver Stone St, Royal Oaks, North County Inland Area Plan, (Assessor’s Parcel Number [APN]: 117-191-015-000). The parcel is zoned Medium Density Residential, with a density of 1.4 acres per unit with a Visual Sensitivity overlay, or “MDR/1.4-VS”, which allows for the establishment of a first

single-family dwelling as a principally allowed use as identified in Title 21 section 21.12.030. The Visual Sensitivity zoning district requires an Administrative Permit if, after flagging, staking and an on-site inspection, pursuant to Title 21 section 21.46.060, the development is determined to not have the potential to create a substantial adverse visual impact when viewed from a common public viewing area (see evidence “e”). The project involves the construction of a 3,285 square foot two-story single-family dwelling and a 750 square foot attached garage. Staff has verified that the proposed development would not have the potential to create a substantial adverse visual impact (see evidence “e”). Therefore, the project is an allowed land use for this site.

- c) Lot Legality. The subject property (26,072.85 square feet), APN: 117-191-015-000, is identified in its current configuration as Lot 2 on a Final Map entitled “Tract No 1361, Loma Linda Subdivision”, recorded in April 1951 (Book 21, Cities & Towns, Page 28). Therefore, the County recognizes the subject property as a legal lot of record.
- d) Development Standards. The property is subject to the site development standards for the MDR zoning district identified in Title 21 section 21.12.060. Required setbacks for main structures are 20 feet (front), 5 feet (side), and 10 feet (rear). The proposed residence will have a front setback of 47 feet 3 inches, side setbacks of approximately 14 feet 4 inches and 11 feet four inches, and a rear setback of 29 feet 2 inches. The allowed height for main structures is 30 feet; the proposed structure has a height of 29 feet 2 inches from average natural grade. Allowed maximum site coverage is 35%. The project will result in 3,285 square feet of coverage or 13.68%. Therefore, the proposed project meets the required site development standards for the MDR zoning district.
- e) Design and Visual Sensitivity. NC AP Figure 15, Scenic Highway Corridors 7 Visual Sensitivity map identifies the subject property as “sensitive.” Additionally, project site and surrounding area are designated as a Visually Sensitive “VS” zoning district overlay, which is intended to regulate development that could potentially create adverse visual impacts when viewed from a common public viewing area such as Highway 1 or San Miguel Canyon Road. A site visit was conducted on July 8<sup>th</sup>, 2025, confirming that the staking and flagging is not visible from Highway 1, Salinas Road, Trafton Road, and any other common public viewing area without aided vision as a result of the distance, topography, and existing vegetation. The Loma Linda Community in Stone Ridge Estates is gated off to the public with sandstone-tiled precast concrete fencing, surrounded by mature oaks and other vegetation. Additionally, due to the subdivision being surrounded by a dense oak tree canopy that is taller than the proposed development, the residence will not silhouette against the sky. Neighboring developed dwellings on the lots closer to the gate entrance on Salinas Road will block any visible portions of the building along with the foliage. The proposed development avoids general and visual impacts to the public viewshed through techniques including configuring the proposed lot development to be screened by the area’s vegetation and natural



topography of the subdivision. Therefore, an Administrative Permit can be granted in this case as the development does not have the potential to create a substantial adverse visual impact when viewed from a common public viewing area.

Subject properties within a VS zoning district overlay are also subject to design standards outlined in Title 21, Chapter 21.44, which is intended to regulate the location, size, configuration, materials, and colors of structures and fences to assure the protection of the public viewshed and neighborhood character. The proposed development consists of colors and materials with smooth finish cement plaster siding, tan stone veneer, Spanish clay roof tile, black fiberglass and steel framing, as well as a wrapping wood pergola and vines at the rear. The proposed colors and materials are compatible with the surrounding environment and are consistent with the surrounding neighborhood character. The proposed design is consistent with the neighboring developments within the subdivision and will not be visible from both Salinas Road and Trafton Road. Prior to issuance of building permit(s), the landscape plan and exterior lighting shall be approved by HCD Planning pursuant to Title 21 section 21.12.060. and will be controlled by use of the County's standard condition (Condition No. 4 and Condition No. 5). Exterior lighting shall be consistent with the Design Guidelines for Exterior Lighting adopted by the Board of Supervisors pursuant to Title 21 section 21.63.020.

- f) Cultural Resources. The Monterey County Geographic Information System (GIS) identifies the subject property to a high archaeological sensitivity. Pursuant to General Plan section OS-6.3 and Title 21 section 21.66.050.C.1.a, a Phase I Archaeological Survey (LIB250209) was prepared. The survey found no indicators of culturally significant materials on site. There is no evidence that any cultural resources would be disturbed by this project. The potential for inadvertent impacts on cultural resources is limited and will be controlled by the application of the County's standard project condition (Condition No. 3) which requires the contractor to stop work if previously unidentified resources are discovered during construction.
- g) Land Use Advisory Committee (LUAC) Review. Based on the LUAC guidelines, the project was not referred to the North County Advisory Committee (LUAC) for review because it does not involve a public hearing Design Approval, a Lot Line Adjustment, preparation of an Initial study, or a Variance.
- h) The project planner independently conducted a site visit on July 8<sup>th</sup>, 2025, to verify that the project on the subject parcel conforms to the plans listed above.
- i) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning found in Project File PLN250155.

**2. FINDING: SITE SUITABILITY** – The site is physically suitable for the proposed development and/or use.

**EVIDENCE:** a) The project has been reviewed for site suitability by the following departments and agencies: HCD-Planning, HCD-Engineering Services,

HCD-Environmental Services, Environmental Health Bureau, and Monterey County Regional FPD. County staff reviewed the application materials and plans verifying that the project conforms to the applicable plans and regulations. There has been no indication from the reviewing departments/agencies that the site is unsuitable for the development. Any reviewing departments and agencies' recommended Conditions of Approval have been incorporated into this Resolution.

- b) The following reports have been prepared:
  - "Geotechnical Report" (LIB240187) prepared by Christopher E. George, Watsonville, CA, January 28, 2025.
  - "Phase I Archaeological Assessment" (LIB250209) prepared by Ruben G. Mendoza, Salinas, CA, July 17<sup>th</sup>, 2025.County staff independently reviewed these reports and concur with their conclusions. There are no physical or environmental constraints to indicate the site is unsuitable for the proposed use. All development shall be in accordance with these reports.
- c) A Geotechnical Report (LIB240187) was prepared for this project, where the qualified civil engineer made multiple recommendations for the development including reinforced concrete pier and continuous foot spreading foundations, site drainage, and additional setbacks that the original proposed single-family dwelling already meets (see attached plans). The report concluded with the following recommendations; the site is suitable for the proposed project. Pursuant to Chapter 16.08 section 16.08.110 of the Monterey County Code, the recommendations included in geotechnical reports shall be incorporated in the grading plans and specifications. Therefore, as proposed and designed, the site is found to be suitable for the development.
- d) Staff independently conducted a site inspection on July 8<sup>th</sup>, 2025, to verify that the site is suitable for this use.
- e) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning found in Project File PLN250155.

**3. FINDING:** **HEALTH AND SAFETY** – The project's establishment, maintenance, or operation will not, under the circumstances of this project, be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.

- EVIDENCE:**
- a) The project was reviewed by HCD-Planning, HCD- Engineering Services, HCD-Environmental Services, Environmental Health Bureau, and North County Regional FPD. The respective agencies have recommended conditions, where appropriate, to ensure the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.
  - b) All necessary public facilities are currently available to the subject property. Pajaro/Sunny Mesa Community Services District (PSMCD) provides potable water, and the Pajaro County Sanitation District will be

the public sewer services for wastewater disposal, which was reviewed and approved by the Environmental Health Bureau.

- c) Staff independently conducted a site inspection on July 8<sup>th</sup>, 2025, to verify that the site is suitable for this use.
- d) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning found in Project File PLN250155.

**4. FINDING: NO VIOLATIONS** – The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County’s zoning ordinance. No violations exist on the property.

- EVIDENCE:**
- a) Staff reviewed County of Monterey HCD-Planning and HCD-Building Services records and is not aware of any violations existing on subject property.
  - b) Staff independently conducted a site inspection on July 8<sup>th</sup>, 2025, and researched county records to assess if any violation exists on the subject property.
  - c) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning found in Project File PLN250155.

**5. FINDING: CEQA (Exempt)** – The project is categorically exempt from environmental review and no unusual circumstances were identified to exist for the proposed project.

- EVIDENCE:**
- a) California Environmental Quality Act (CEQA) Guidelines section 15303 categorically exempts the construction of limited numbers of new structures.
  - b) An Archaeological Investigation (LIB250209) was prepared for this project and did not find any evidence of significant archaeological or cultural resources. Due to these findings, further investigation is not warranted. (see Finding 1, evidence “f”)
  - c) As proposed, the project involves the construction of a 3,285 square foot two-story single-family dwelling with a 750 square foot attached garage and associated site improvements on a vacant parcel.
  - d) None of the exceptions under CEQA Guidelines section 15300.2 apply to this project. There is no substantial evidence of an unusual circumstance because no feature or condition of the project distinguishes it from the exempt class. There is no significant effect on the environment due to unusual circumstances. No trees are proposed for removal and the proposed development is not visible from any scenic corridor or scenic highway. There is no cumulative impact without any prior successive projects of the same type in the same place, over time and no new land use is proposed. The site is not included on any list compiled pursuant to Section 65962.5 of the Government Code to be considered on a hazardous waste site. The Phase I archaeological report concludes no impact to archaeological resources with implementation of the project. There is no substantial evidence to support a fair argument that the project has a reasonable possibility of

having a significant effect on the environment or that it would result in a cumulative significant impact.

- e) Staff conducted a site visit on July 8<sup>th</sup>, 2025, to verify that the site and proposed project meet the criteria for an exemption.
- f) See supporting Finding Nos. 1 and 2. The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning found in Project File PLN250155.

**6. FINDING:** APPEALABILITY – The decision on this project may be appealed to the Planning Commission.

**EVIDENCE:** a) Planning Commission. Pursuant to Title 21 section 21.80.040.A, the Planning Commission is the appeal authority to consider appeals from the discretionary decisions of the Director of Planning.

### **DECISION**

**NOW, THEREFORE**, based on the above findings and evidence, the HCD Chief of Planning does hereby:

1. Find the project qualifies for a Class 3 Categorical Exemption pursuant to CEQA Guidelines Section 15303, and there are no exceptions pursuant to section 15300.2; and
2. Approve an Administrative Permit and Design approval to allow the construction of a 3,285 square foot two-story single-family dwelling with an attached 750 square foot garage with associated site improvements.

All of which are in general conformance with the attached sketch and subject to the attached conditions, all being attached hereto and incorporated herein by reference.

**PASSED AND ADOPTED** this 20<sup>th</sup> day of August 2025.

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Melanie Beretti, AICP  
HCD Chief of Planning

COPY OF THIS DECISION MAILED TO APPLICANT ON DATE

THIS APPLICATION IS APPEALABLE TO THE PLANNING COMMISSION.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE SECRETARY OF THE PLANNING ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE \_\_\_\_\_.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

## NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from County of Monterey HCD-Planning and HCD-Building Services Department office in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

# County of Monterey HCD Planning

## DRAFT Conditions of Approval/Implementation Plan/Mitigation Monitoring and Reporting Plan

PLN250155

### 1. PD001 - SPECIFIC USES ONLY

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** This Administrative Permit and Design Approval (PLN250155) to allow the construction of a 3,285 square foot two-story single family dwelling with a attached 750 square foot garage and associated site improvements. The property is located at 2220 Silver Stone, Royal Oaks (Assessor's Parcel Number 117-191-015-000), North County Area Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the terms and conditions described in the project file. Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of HCD - Planning. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled. (HCD - Planning)

**Compliance or Monitoring Action to be Performed:** The Owner/Applicant shall adhere to conditions and uses specified in the permit on an on-going basis unless otherwise stated.

### 2. PD002 - NOTICE PERMIT APPROVAL

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** The applicant shall record a Permit Approval Notice. This notice shall state:  
"An Administrative Permit and Design Approval (Resolution Number \_\_\_\_\_) was approved by the Chief of Planning for Assessor's Parcel Number 117-191-015-000 on August 20, 2025. The permit was granted subject to 7 conditions of approval which run with the land. A copy of the permit is on file with Monterey County HCD - Planning."

Proof of recordation of this notice shall be furnished to the Director of HCD - Planning prior to issuance of grading and building permits, Certificates of Compliance, or commencement of use, whichever occurs first and as applicable. (HCD - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of grading and building permits, certificates of compliance, or commencement of use, whichever occurs first and as applicable, the Owner/Applicant shall provide proof of recordation of this notice to the HCD - Planning.

### 3. PD003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. Monterey County HCD - Planning and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for recovery.  
(HCD - Planning)

**Compliance or Monitoring Action to be Performed:** The Owner/Applicant shall adhere to this condition on an on-going basis.

Prior to the issuance of grading or building permits, the Owner/Applicant shall include requirements of this condition as a note on all grading and building plans. The note shall state "Stop work within 50 meters (165 feet) of uncovered resource and contact Monterey County HCD - Planning and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered."

When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.

#### 4. PD012(F) - LANDSCAPE PLAN & MAINTENANCE (SFD ONLY)

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** The site shall be landscaped. Prior to the issuance of building permits, three (3) copies of a landscaping plan shall be submitted to the Director of HCD - Planning. A landscape plan review fee is required for this project. Fees shall be paid at the time of landscape plan submittal. The landscaping plan shall be in sufficient detail to identify the location, species, and size of the proposed landscaping materials and shall include an irrigation plan. The plan shall be accompanied by a nursery or contractor's estimate of the cost of installation of the plan. Before occupancy, landscaping shall be either installed or a certificate of deposit or other form of surety made payable to Monterey County for that cost estimate shall be submitted to the Monterey County HCD - Planning. All landscaped areas and fences shall be continuously maintained by the applicant; all plant material shall be continuously maintained in a litter-free, weed-free, healthy, growing condition. (HCD - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to issuance of building permits, the Owner/Applicant/Licensed Landscape Contractor/Licensed Landscape Architect shall submit landscape plans and contractor's estimate to the HCD - Planning for review and approval. Landscaping plans shall include the recommendations from the Forest Management Plan or Biological Survey as applicable. All landscape plans shall be signed and stamped by licensed professional under the following statement, "I certify that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive species; limited turf; and low-flow, water conserving irrigation fixtures."

Prior to occupancy, the Owner/Applicant/Licensed Landscape Contractor/Licensed Landscape Architect shall ensure that the landscaping shall be either installed or a certificate of deposit or other form of surety made payable to Monterey County for that cost estimate shall be submitted to the Monterey County HCD - Planning.

On an on-going basis, all landscaped areas and fences shall be continuously maintained by the Owner/Applicant; all plant material shall be continuously maintained in a litter-free, weed-free, healthy, growing condition.



## 5. PD014(A) - LIGHTING - EXTERIOR LIGHTING PLAN

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting source shall be shielded and recessed into the fixture. The applicant shall submit three (3) copies of an exterior lighting plan which shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations Title 24 Part 6. The exterior lighting plan shall be subject to approval by the Director of HCD - Planning, prior to the issuance of building permits.  
(HCD - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of building permits, the Owner/Applicant shall submit three copies of the lighting plans to HCD - Planning for review and approval. Approved lighting plans shall be incorporated into final building plans.

Prior to final/occupancy, the Owner/Applicant/Contractor shall submit written and photographic evidence demonstrating that the lighting has been installed according to the approved plan.

On an on-going basis, the Owner/Applicant shall ensure that the lighting is installed and maintained in accordance with the approved plan.

## 6. PW0043 - REGIONAL DEVELOPMENT IMPACT FEE

**Responsible Department:** Public Works

**Condition/Mitigation Monitoring Measure:** Prior to issuance of building permits, applicant shall pay the Regional Development Impact Fee (RDIF) pursuant to Monterey Code Chapter 12.90. The fee amount shall be determined based on the parameters adopted in the current fee schedule.

**Compliance or Monitoring Action to be Performed:** Prior to issuance of Building Permits Owner/Applicant shall pay Monterey County Building Services Department the traffic mitigation fee. Owner/Applicant shall submit proof of payment to the HCD-Engineering Services.

## 7. PW0045 – COUNTYWIDE TRAFFIC FEE

**Responsible Department:** Public Works

**Condition/Mitigation Monitoring Measure:** Prior to issuance of building permits, the Owner/Applicant shall pay the Countywide Traffic Fee or the ad hoc fee pursuant to General Plan Policy C-1.8. The fee amount shall be determined based on the parameters in the current fee schedule.

**Compliance or Monitoring Action to be Performed:** Prior to issuance of Building Permits, the Owner/Applicant shall pay Monterey County HCD-Building Services the traffic mitigation fee. The Owner/Applicant shall submit proof of payment to HCD-Engineering Services.



# CASA ESCAREÑO

2220 SILVER STONE ST.  
ROYAL OAKS, CA 95076

## NEW SINGLE-FAMILY RESIDENCE

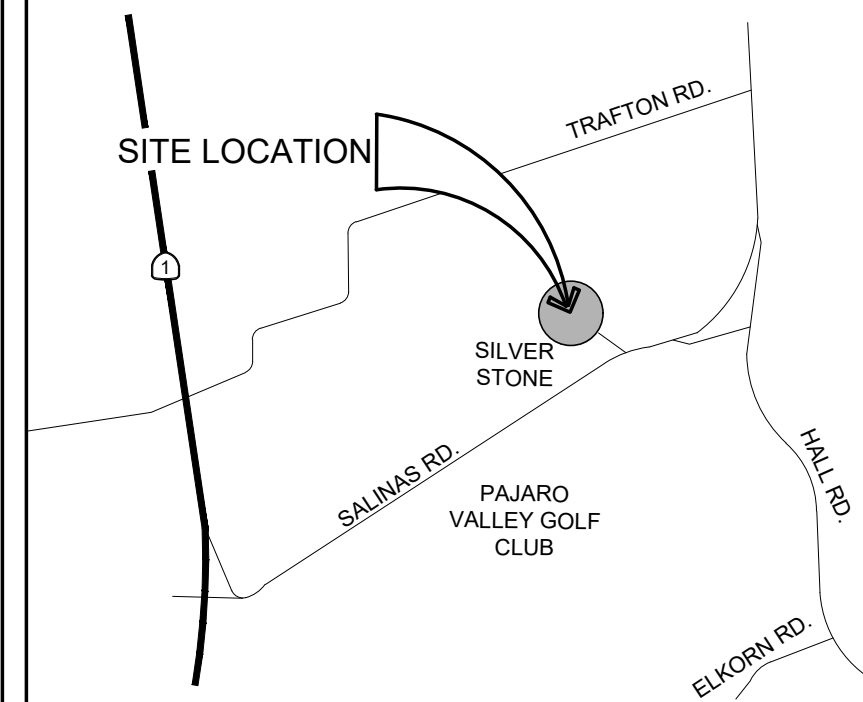
### PROJECT TEAM

OWNER ANTONIO & ERANDI ESCAREÑO CONTACT: TONY ERANDI ESCAREÑO PHONE: (831) 348-7571 EMAIL: tonyescareno@gmail.com	DESIGNER CONTACT: ISMAEL MAGAÑA JR. PHONE: (831) 261-9471 EMAIL: ismael_magana18@yahoo.com	GEOTECHNICAL ENGINEER HARO, KASUNICH AND ASSOCIATES, INC CONTACT: CHRISTOPHER A. GEORGE PHONE: (831) 722-4175 EMAIL: cgeorge@harokasunich.com	SURVEYOR MID COAST ENGINEERS CONTACT: ANDREA BELL PHONE: (831) 724-2580 EXT. 103 EMAIL: andrea@midcoastengineers.com
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FRONT PERSPECTIVE RENDERING: FOR REFERENCE ONLY

### VICINITY MAP



### PROJECT DATA

PROJECT ADDRESS: 2220 SILVER STONE RD., ROYAL OAKS, CA 95076  
ASSESSOR PARCEL NUMBER (APN): 117-191-015-000  
PROPERTY OWNER: ANTONIO Y ERANDI ESCARENO  
PROPERTY (LOT) SIZE: 0.55 ACRES (24,005 S.F.)  
PROPERTY ZONING: MDR1.4-VS  
PROPOSED OCCUPANCY: R3 | GARAGE: U  
CONSTRUCTION TYPE: TYPE V-B  
AUTOMATIC FIRE SPRINKLERS SYSTEM: YES | FIRE HAZARD ZONE: N/A  
- INSTALLED PER CRC NFPA 13D AND LOCAL FIRE DEPARTMENT REQ.  
PROPERTY (LOT) COVERAGE: ALLOWED 35% | PROVIDED 3.285 S.F. = 13.68%  
- FIRST FLOOR: 1,825 S.F.  
- GARAGE: 730 S.F.  
FAR: FLOOR AREA RATIO CALCULATION  
3,285 LIVING AREA + 730 GARAGE = 4,015 S.F.  
24,005 S.F. / 4,015 S.F. = 16.72% FAR (ALLOWED 25%)  
- SPACES REQUIRED 2  
- SPACES PROVIDED 2  
- COVERED PATIO: 700 S.F.  
SET BACKS: REQUIRED PROVIDED  
FRONT: 20'-0" ±47'-3"  
SIDES: 5'-0" ±14'-4" & ±11'-4"  
REAR: 10'-0" ±72'-0"  
PROPOSED BUILDING AREA:  
- LIVING AREA: 3,285 S.F.  
- 1<sup>st</sup> FLOOR: 1,825 S.F.  
- 2<sup>nd</sup> FLOOR: 1,460 S.F.  
- GARAGE: 730 S.F.  
BUILDING HEIGHT: MAX. ALLOWED PROVIDED  
RIDGE MAX: 30'-0" 29'-2"  
AVERAGE NATURAL GRADE

### SCOPE OF WORK

- NEW SINGLE-FAMILY RESIDENCE WITH ATTACHED GARAGE ON VACANT LOT

### SHEET INDEX

SHEET	DESCRIPTION	REVISION
T1.1	TITLE SHEET	
A1.0	EXISTING SITE PLAN - VACANT LOT (TOPOGRAPHY SURVEY)	
A1.1	SITE PLAN	
A2.1	FIRST FLOOR PLAN	
A2.2	SECOND FLOOR PLAN	
A4.1	EXTERIOR ELEVATIONS	

PLANS PREPARED BY:  
ISMAEL MAGAÑA JR.  
320 AROMAS RD.  
AROMAS, CA 95004

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITTAL

### CASA ESCAREÑO

2220 SILVER STONE ST.  
Royal Oaks, CA 95076

SHEET NAME:

TITLE SHEET

DATE:  
06/03/25

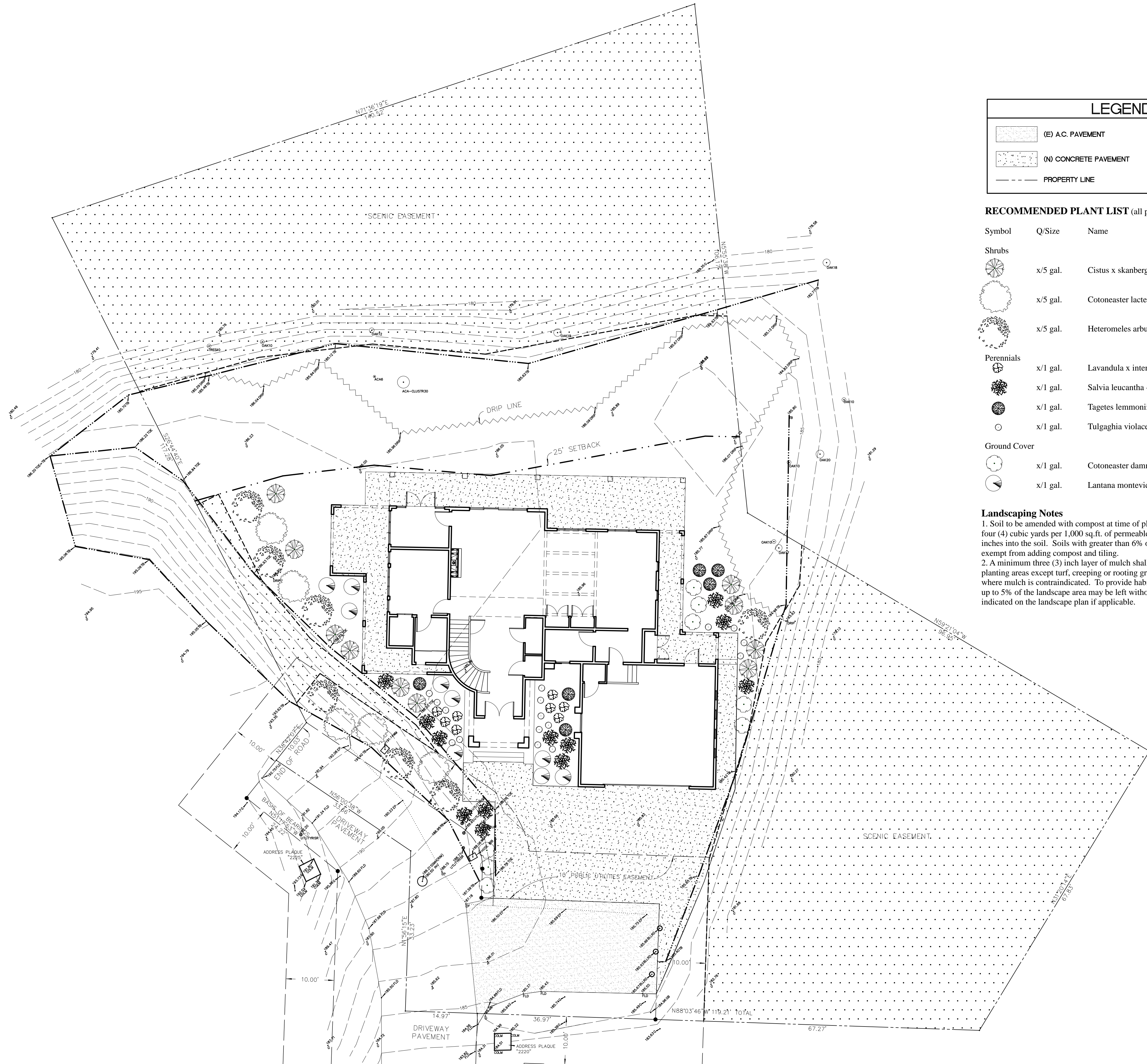
SCALE:  
AS NOTED

DRAWN BY:  
I.M.

SHEET:

T1.1





LEGEND		
	(E) A.C. PAVEMENT	
	(N) CONCRETE PAVEMENT	
	PROPERTY LINE	

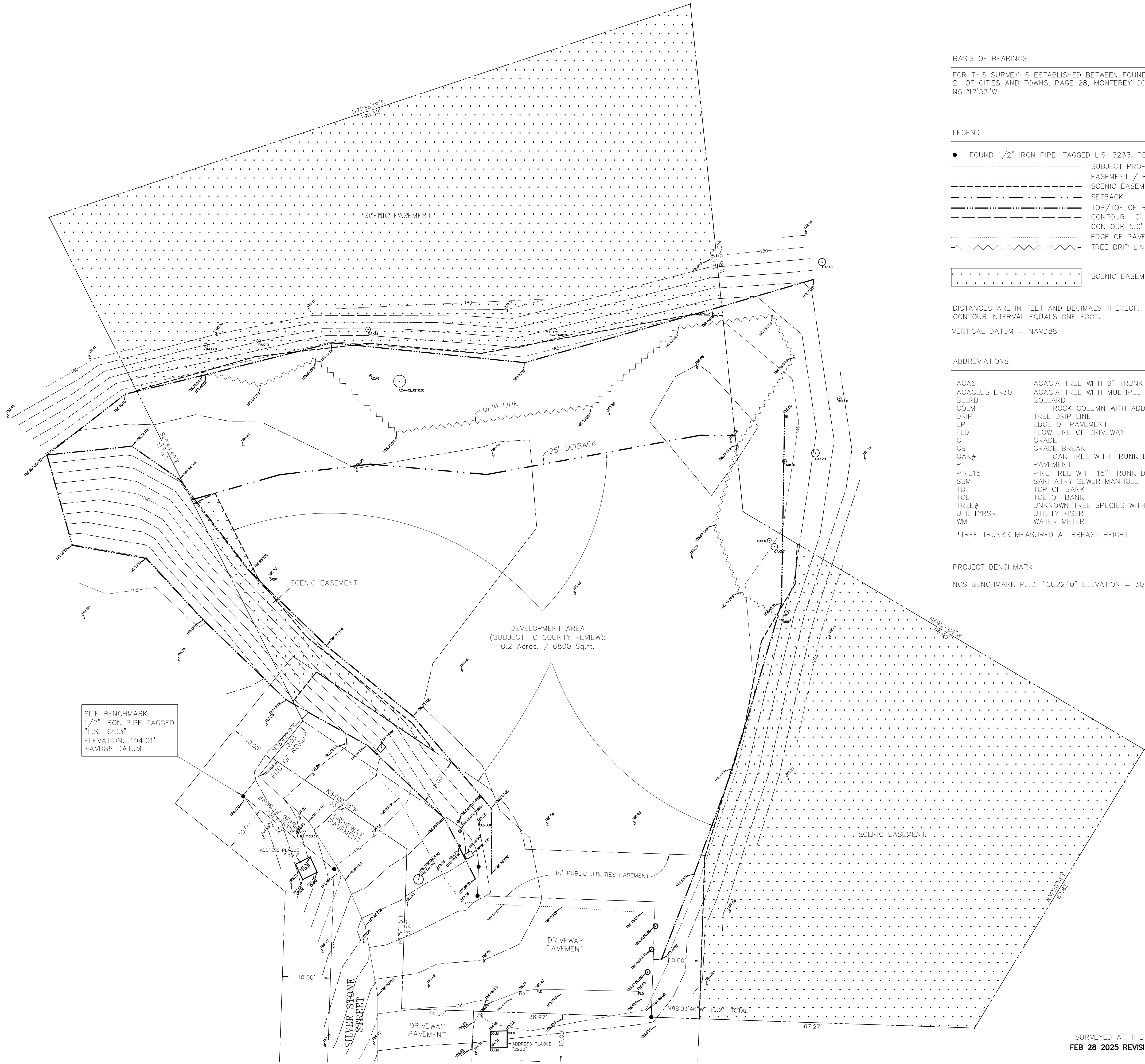
RECOMMENDED PLANT LIST (all plants are low hydrozone)

Symbol	Q/Size	Name
Shrubs		
	x/5 gal.	Cistus x skanbergii - Pink Rockrose
	x/5 gal.	Cotoneaster lacteus - Red Clusterberry
	x/5 gal.	Heteromeles arbutifolia - Toyon
Perennials		
	x/1 gal.	Lavandula x intermedia 'Provence' - Lavender
	x/1 gal.	Salvia leucantha - Mexican Sage
	x/1 gal.	Tagetes lemmonii - Copper Canyon Daisy
	x/1 gal.	Tulgaghia violacea - Society Garlic
Ground Cover		
	x/1 gal.	Cotoneaster dammeri 'Coral Beauty' - Bearberry Cotoneaster
	x/1 gal.	Lantana montevidensis - Purple Trailing Lantana

**Landscaping Notes**  
1. Soil to be amended with compost at time of planting. Compost at a rate of a minimum of four (4) cubic yards per 1,000 sq.ft. of permeable area, and incorporated to a depth of six (6) inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tiling.  
2. A minimum three (3) inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf, creeping or rooting ground covers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to 5% of the landscape area may be left without mulch. Designated insect habitat will be indicated on the landscape plan if applicable.







BASIS OF BEARINGS

FOR THIS SURVEY IS ESTABLISHED BETWEEN FOUND MONUMENTS AS SHOWN ON VOLUME 21 OF CITIES AND TOWNS, PAGE 28, MONTEREY COUNTY RECORDS AND EQUALS N51°17'53\"/>

LEGEND

- FOUND 1/2\"/>
- SUBJECT PROPERTY BOUNDARY
- - - EASEMENT / RIGHT OF WAY
- - - SCENIC EASEMENT LIMITS
- - - SETBACK
- - - TOP/TOE OF BANK
- - - CONTOUR 1.0'
- - - CONTOUR 5.0'
- - - EDGE OF PAVEMENT
- - - TREE DRIP LINE / RIPARIAN EDGE
- SCENIC EASEMENT

DISTANCES ARE IN FEET AND DECIMALS THEREOF.  
CONTOUR INTERVAL EQUALS ONE FOOT.

VERTICAL DATUM = NAVD88

ABBREVIATIONS

- ACA6 ACACIA TREE WITH 6\"/>
  - ACA-CLUSTER30 ACACIA TREE WITH MULTIPLE TRUNKS 30\"/>
  - BLRD BOLLARD
  - COLM ROCK COLUMN WITH ADDRESS PLAQUE
  - DRIP TREE DRIP LINE
  - EP EDGE OF PAVEMENT
  - FLD FLOW LINE OF DRIVEWAY
  - G GRADE
  - GB GRADE BREAK
  - OAK# OAK TREE WITH TRUNK DIAMETER IN INCHES
  - P PAVEMENT
  - PINE15 PINE TREE WITH 15\"/>
  - SSMH SANITARY SEWER MANHOLE
  - TB TOP OF BANK
  - TOE TOE OF BANK
  - TREE# UNKNOWN TREE SPECIES WITH TRUNK DIAMETER IN INCHES
  - UTILITYRSR UTILITY RISER
  - WM WATER METER
- \*TREE TRUNKS MEASURED AT BREAST HEIGHT

PROJECT BENCHMARK

NGS BENCHMARK P.I.D. "GU2240" ELEVATION = 30.93 FT NAVD88 DATUM.

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITAL

CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

SHEET NAME:  
EXISTING SITE PLAN - VACANT LOT  
TOPOGRAPHY SURVEY FOR REFERENCE ONLY

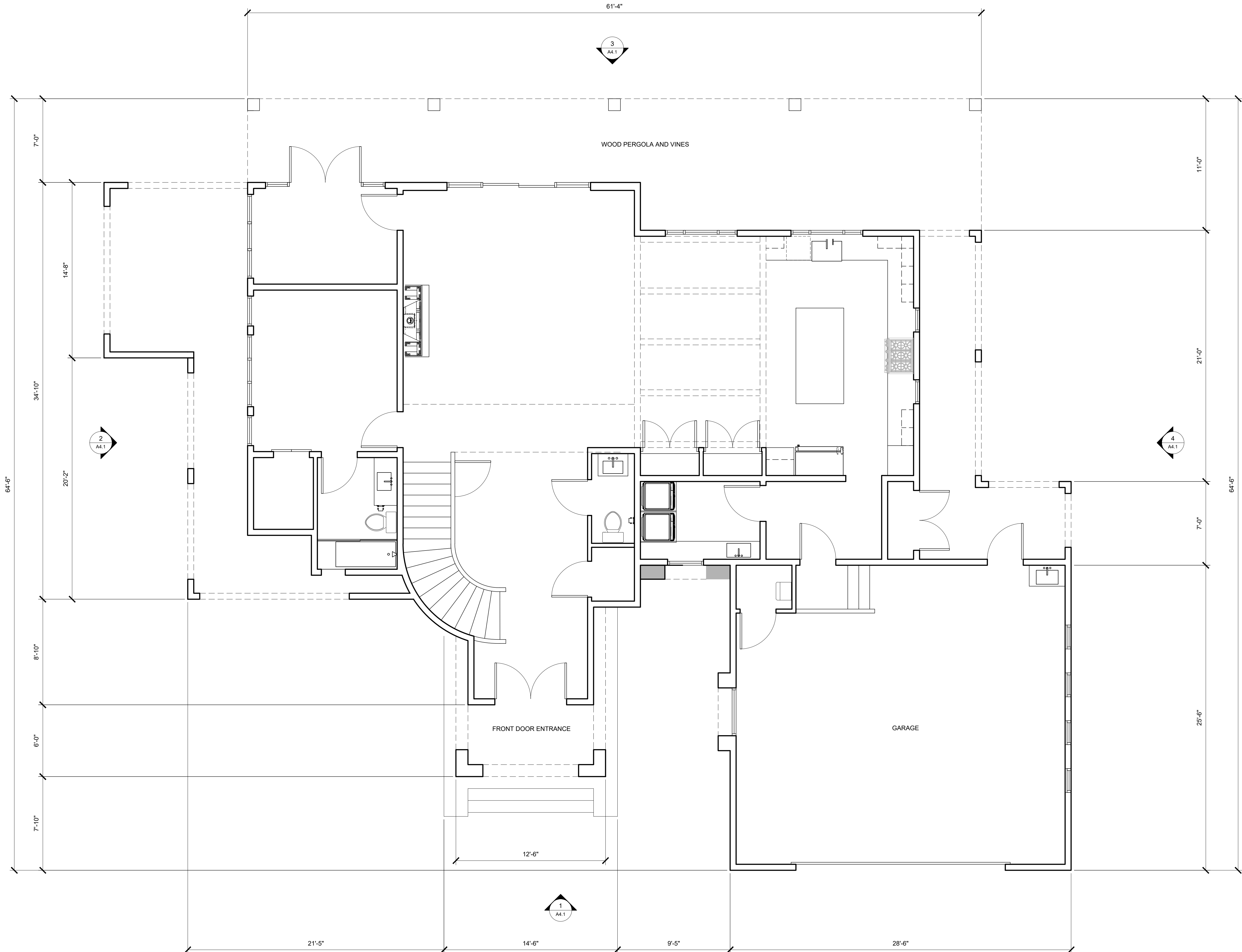
DATE:  
06/03/25

SCALE:  
AS NOTED

DRAWN BY:  
I.M.

SHEET:  
A1.0

SURVEYED AT THE REQUEST OF TONY ESCARENO ON MARCH. 19, 2024.  
FEB 28 2025 REVISION: ADDED INVERT ELEVATION FOR MANHOLE.



SHEET NAME:  
FIRST FLOOR PLAN

DATE:  
06/03/25

SCALE:  
AS NOTED

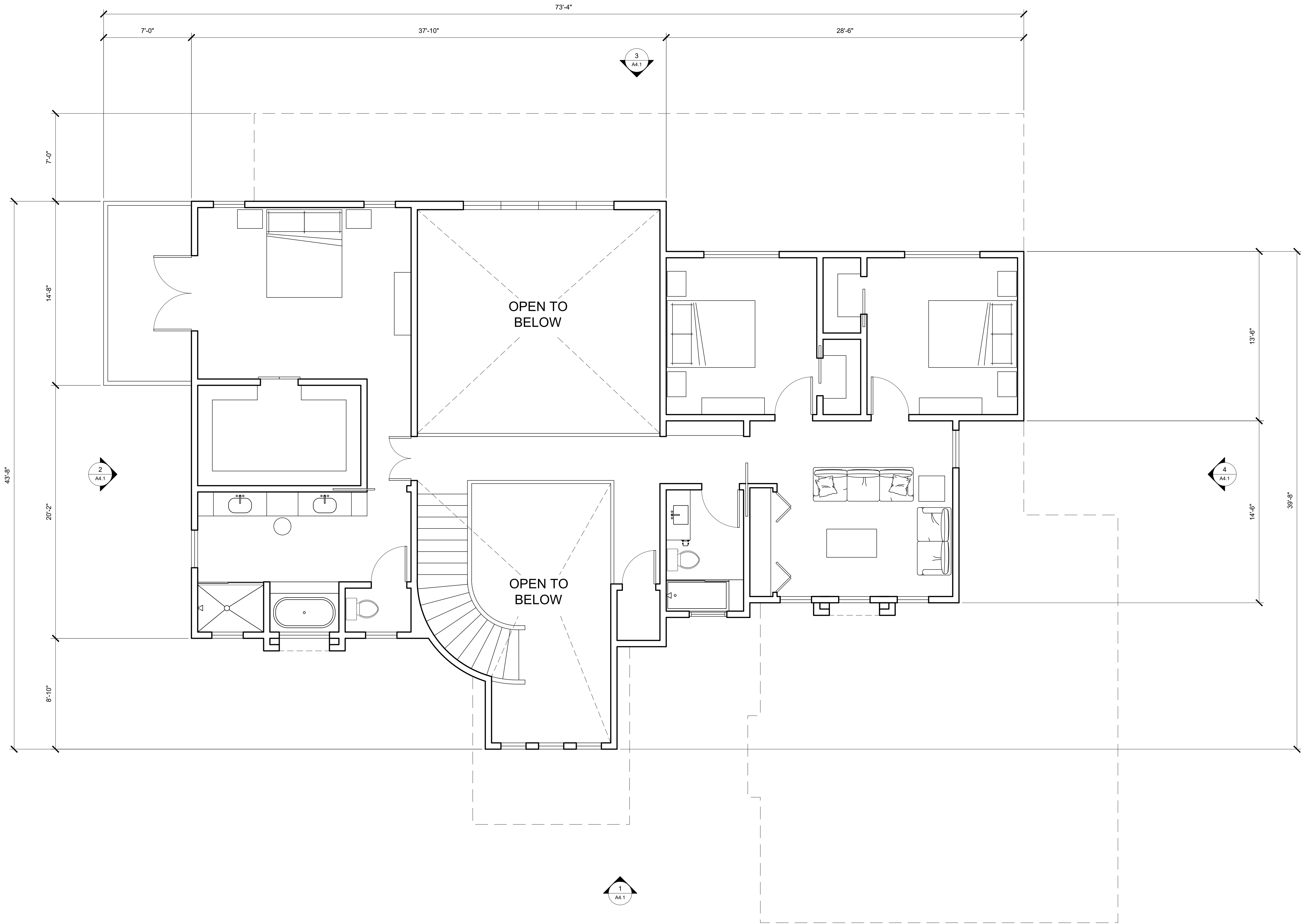
DRAWN BY:  
I.M.

SHEET:  
A2.1

CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITTAL

PLANS PREPARED BY:  
ISMAEL MAGAÑA, JR.  
320 AROMAS RD.  
AROMAS, CA 95004



SHEET NAME:  
SECOND FLOOR PLAN

DATE:  
06/03/25

SCALE:  
AS NOTED

DRAWN BY:  
I.M.

SHEET:

A2.2

CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITTAL

PLANS PREPARED BY:  
ISMAEL MAGAÑA, JR.  
320 AROMAS RD.  
AROMAS, CA 95004





1 SOUTH ELEVATION (FRONT)  
SCALE: 3/16" = 1'-0"



3 NORTH ELEVATION (REAR)  
SCALE: 3/16" = 1'-0"



2 WEST ELEVATION (SIDE)  
SCALE: 3/16" = 1'-0"



4 EAST ELEVATION (SIDE)  
SCALE: 3/16" = 1'-0"

PLANS PREPARED BY:  
ISMAEL MAGAÑA, JR.  
320 AROMAS RD.  
AROMAS, CA 95004

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITTAL

CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

SHEET NAME:  
EXTERIOR ELEVATIONS

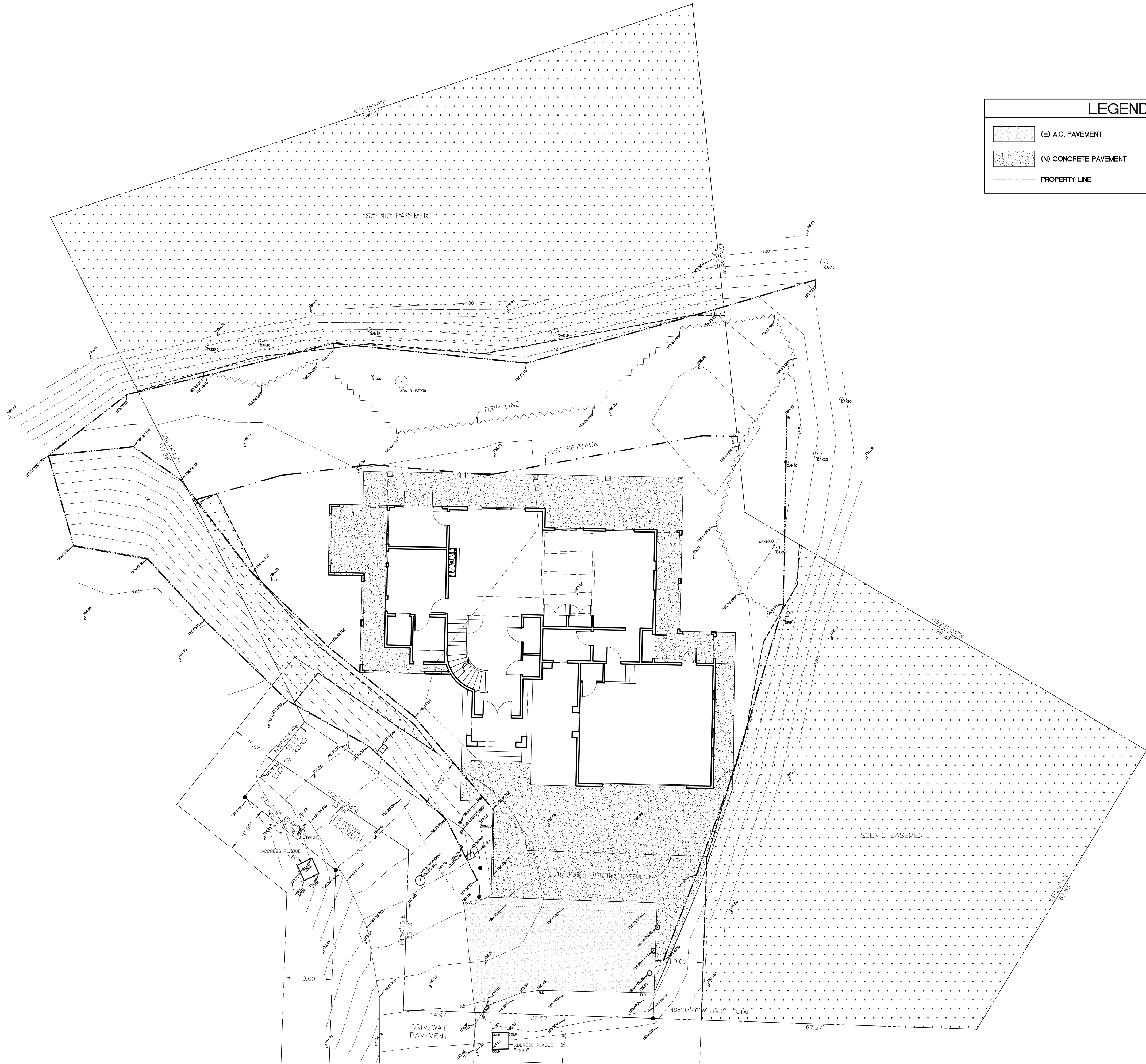
DATE:  
06/03/25

SCALE:  
AS NOTED

DRAWN BY:  
I.M.

SHEET:  
A4.1





LEGEND	
	(E) A.C. PAVEMENT
	(N) CONCRETE PAVEMENT
	PROPERTY LINE



CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

SHEET NAME:  
SITE PLAN

DATE: 06/03/25
SCALE: AS NOTED
DRAWN BY: I.M.
SHEET: A1.1

REVISION	DATE	DESCRIPTION
06/03/25	DESIGN REVIEW SUBMITTAL	

PLANS PREPARED BY:  
ISMAEL MAGAÑA, JR.  
320 AROMAS RD.  
AROMAS, CA 95004





SITE BENCHMARK  
1/2" IRON PIPE TAGGED  
"L.S. 3233"  
ELEVATION: 194.01'  
NAVD88 DATUM

NAIL w/ RIBBON 1/2" POINT #  
SET 7-3-25

24039SK1  
(NEW FILE)  
TRUE NORTH

S26°44'40"E  
117.28'

25' SETBACK

N38°42'07"E  
10.03'

N56°00'38"W  
33.66'

N38°42'07"E  
10.03'

N1°56'15"E  
33.23'

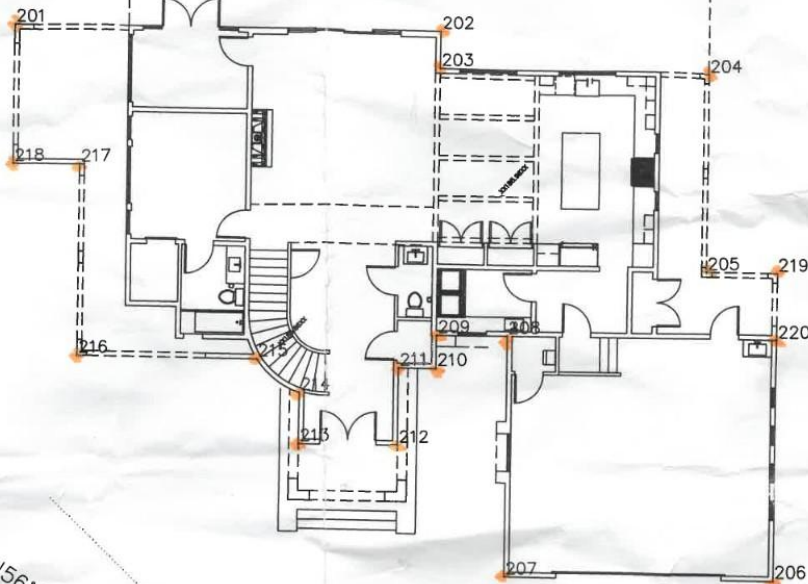
SILVER STONE  
STREET

14.97'  
DRIVEWAY  
PAVEMENT

DRIVEWAY  
PAVEMENT

N88°03'46"W  
67.27'

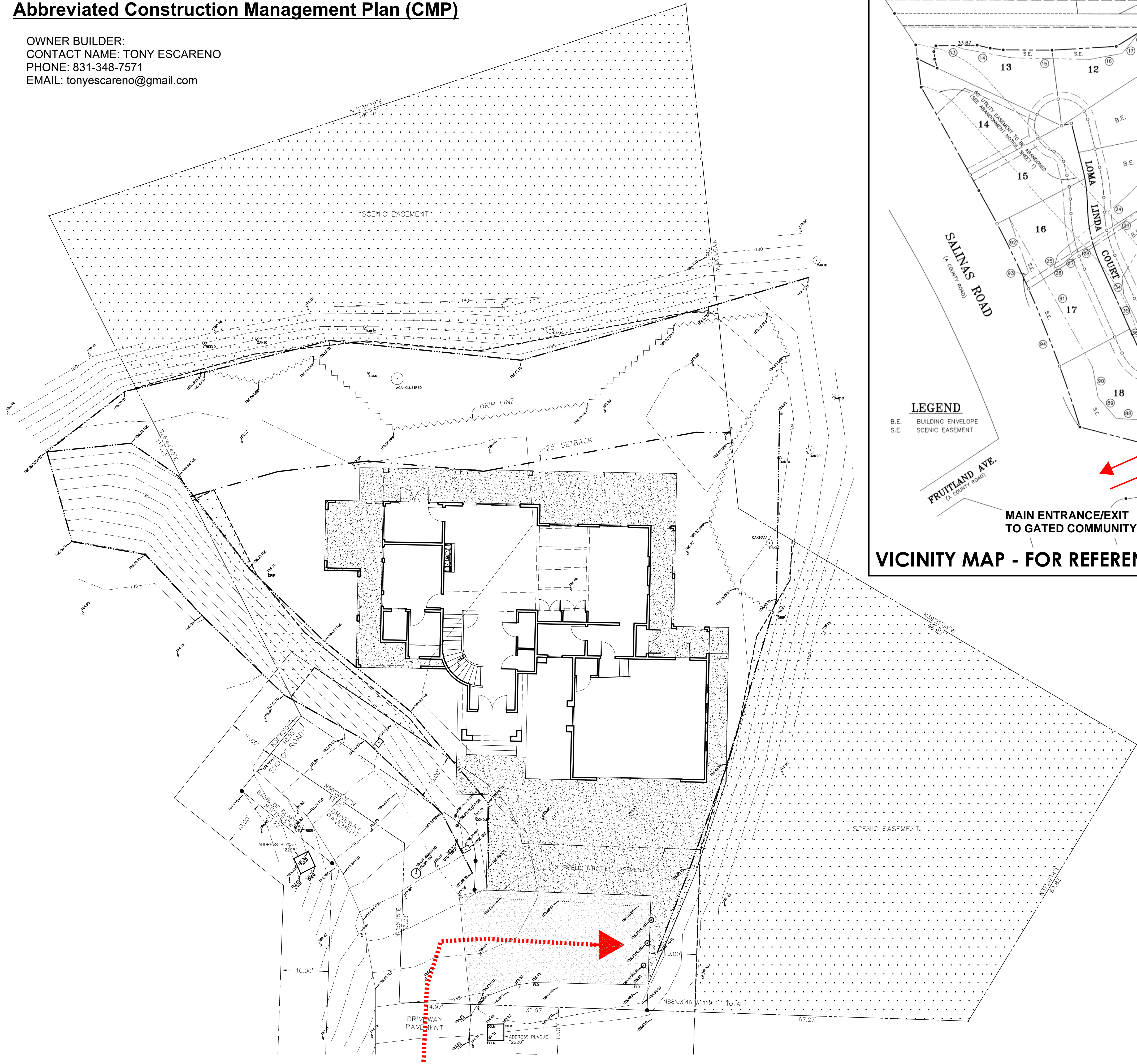
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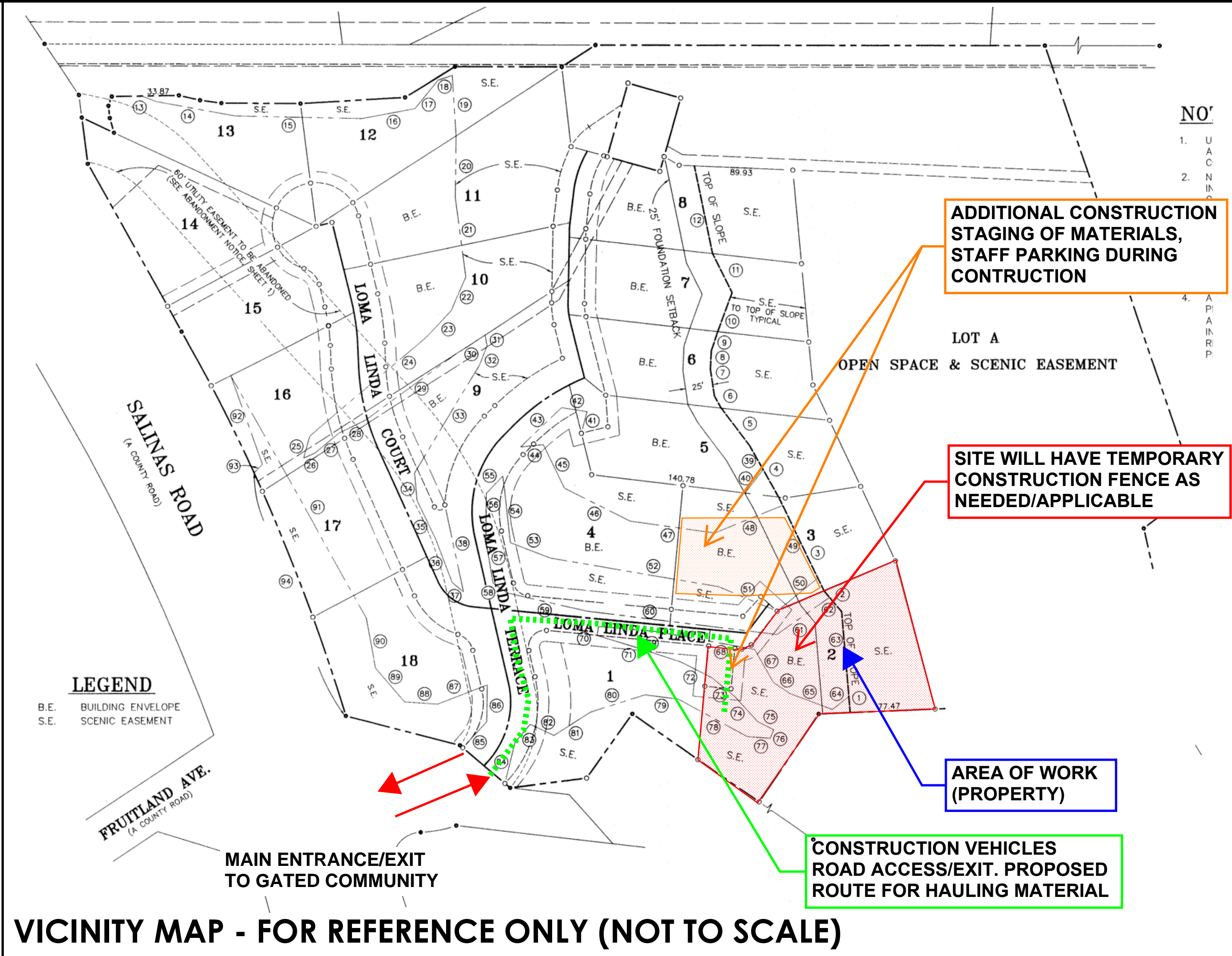


Abbreviated Construction Management Plan (CMP)

OWNER BUILDER:  
CONTACT NAME: TONY ESCARENO  
PHONE: 831-348-7571  
EMAIL: tonyescareno@gmail.com



VICINITY MAP - FOR REFERENCE ONLY (NOT TO SCALE)



GENERAL NOTES

1. Standard measures to reduce traffic impacts including but not limited to scheduling hauling and material deliveries off-peak hours and encouraging carpooling will be provided during construction.
2. No access roads or driveways will be blocked during construction.
3. Contractor shall avoid impacting access to private properties by not parking on neighboring properties or impinging on the travel lane of access roads. Construction vehicles shall be encouraged to not park directly in-front of neighboring properties.
4. If applicable, Contractor shall ensure pedestrian paths of travel are not impeded or that alternative paths of travel are provided.
5. Adequate storage and staging areas shall be provided. Staging and storage areas shall be on-site to maximum extent possible to reduce potential noise, dust, glare, and other impacts to neighboring property.

LEGEND	
	(E) A.C. PAVEMENT
	(N) CONCRETE PAVEMENT
	PROPERTY LINE



PLANS PREPARED BY:  
ISMAEL MAGAÑA, JR.  
320 AROMAS RD.  
AROMAS, CA 95004

REVISION	DATE	DESCRIPTION
	06/03/25	DESIGN REVIEW SUBMITAL

CASA ESCAREÑO  
2220 SILVER STONE ST.  
Royal Oaks, CA 95076

SHEET NAME:  
SITE PLAN

DATE: 06/03/25
SCALE: AS NOTED
DRAWN BY: I.M.
SHEET: A1.1

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. REUSE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ARCHITECT, AND VISUAL CONTACT WITH THEM CONSTITUTES PRIMA FACIE EVIDENCE OF THE VIOLATION OF THESE RESTRICTIONS.



Drawing file: Z:\Projects\125112 Casa Escareno.dwg\125112 Grading Plan.dwg  
Plotted: Jul 18, 2025 -- 1:07pm

THE USE OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE LIMITED TO THE PROJECT AND SITE SHOWN. ANY REUSE, REPRODUCTION OR PUBLICATION, IN WHOLE OR IN PART, IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF C3 ENGINEERING.

GENERAL NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND ACCOMPANYING SPECIFICATIONS. IN ADDITION ALL WORK SHALL ALSO CONFORM WITH THE FOLLOWING:
  - LATEST REVISION OF THE COUNTY OF MONTEREY DESIGN STANDARDS AND SPECIFICATIONS
  - THE LATEST REVISION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS (STATE SPECIFICATIONS)
  - THE 2025 EDITIONS OF THE CALIFORNIA BUILDING CODE (CBC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA ENERGY CODE (CEC), CALIFORNIA ELECTRICAL CODE (CEC).
2. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE PLANS, DETAILS, AND SPECIFICATIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION. IN THE EVENT THAT THE CONTRACTOR FINDS ANY DISCREPANCIES, OMISSIONS, OR DEFICIENCIES IN THE PLANS, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AND THE OWNER'S REPRESENTATIVE IMMEDIATELY.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO SECURE ALL REQUIRED PERMITS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE MONTEREY COUNTY BUILDING SERVICES DEPARTMENT (COUNTY) AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. THE TOPOGRAPHY, LOCATIONS AND SIZE OF UNDERGROUND UTILITIES AND OR OTHER STRUCTURES SHOWN HEREON WERE OBTAINED FROM A FIELD SURVEY (BY OTHERS) AND OR FROM RECORD INFORMATION. NEITHER THE ENGINEER NOR THE OWNER MAKES ANY REPRESENTATION TO THE ACCURACY OF TOPOGRAPHY, SIZE AND OR LOCATION OF ANY OF THE UTILITIES OR STRUCTURES SHOWN ON THESE PLANS NOR FOR THE EXISTENCE OF ANY OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED THAT ARE NOT SHOWN ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE SIZE AND LOCATION OF EXISTING UNDERGROUND UTILITIES, SURFACE IMPROVEMENTS, AND OTHER STRUCTURES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY COMPANIES AND REQUESTING VERIFICATION OF SERVICE POINTS, FIELD VERIFICATION OF LOCATION, SIZE, DEPTH, ETC. FOR ALL THEIR FACILITIES AND TO COORDINATE WORK SCHEDULES.
6. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT (800) 227-2600 AT LEAST 48 HOURS PRIOR TO EXCAVATION TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
7. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ANY CURRENTLY APPLICABLE SAFETY LAW OF ANY JURISDICTIONAL BODY. FOR INFORMATION REGARDING THIS PROVISION, THE CONTRACTOR IS DIRECTED TO CONTACT THE STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES, AND THE CONTROL OF TRAFFIC WITHIN THE CONSTRUCTION AREA. FOR ALL TRENCH EXCAVATION FIVE (5) FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH PRIOR TO BEGINNING ANY EXCAVATION. A COPY OF THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
8. EXISTING CURB, GUTTER, SIDEWALK, SURVEY MONUMENTS, AND OTHER IMPROVEMENTS WITHIN PROJECT SITE THAT ARE DAMAGED OR DISPLACED AS A RESULT OF THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS AND SAFETY OF ALL PERSONS AND PROPERTY DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE ENGINEER, AND ALL DESIGN CONSULTANTS FROM ANY AND ALL LIABILITY, CLAIMS, LOSSES OR DAMAGES ARISING FROM THE PERFORMANCE OF THE WORK DESCRIBED HEREIN EXCEPT THOSE ARISING FROM THE SOLE NEGLIGENCE OF ANY OF THE PREVIOUSLY MENTIONED PEOPLE OR ENTITIES. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL LEAVE A 24-HOUR EMERGENCY TELEPHONE NUMBER WITH THE POLICE, FIRE DEPARTMENTS AND PRIVATE SECURITY COMPANY (IF APPLICABLE), AND KEEP THEM INFORMED DAILY REGARDING ANY CONSTRUCTION RELATED ACTIVITY IN THE PUBLIC RIGHT OF WAY.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, OFF-HAUL, AND PROPER DISPOSAL OF ALL ITEMS TO BE REMOVED INCLUDING BUT NOT LIMITED TO: CONCRETE, ASPHALT CONCRETE, STRIPING, ANY AND ALL OTHER DEBRIS FROM THE SITE, EXCESS MATERIAL FROM TRENCHING AND PAVEMENT CONSTRUCTION, TREES AND ROOT BALLS, FENCING AND SPOILS FROM EXCAVATION AT THE CONTRACTOR'S EXPENSE AND SHALL BE DISPOSED OF IN A LAWFUL MANNER.
11. IF, DURING THE COURSE OF CONSTRUCTION, CULTURAL, ARCHAEOLOGICAL, HISTORICAL OR PALEONTOLOGICAL RESOURCES ARE UNCOVERED AT THE SITE (SURFACE OR SUBSURFACE RESOURCES) WORK SHALL BE HALTED IMMEDIATELY WITHIN 50 METERS (165 FEET) OF THE FIND UNTIL A QUALIFIED PROFESSIONAL ARCHAEOLOGIST CAN EVALUATE IT. MONTEREY COUNTY HCD - PLANNING AND A QUALIFIED ARCHAEOLOGIST (I.E., AN ARCHAEOLOGIST REGISTERED WITH THE REGISTER OF PROFESSIONAL ARCHAEOLOGISTS) SHALL BE IMMEDIATELY CONTACTED BY THE RESPONSIBLE INDIVIDUAL PRESENT ON-SITE. WHEN CONTACTED, THE PROJECT PLANNER AND THE ARCHAEOLOGIST SHALL IMMEDIATELY VISIT THE SITE TO DETERMINE THE EXTENT OF THE RESOURCES AND TO DEVELOP PROPER MITIGATION MEASURES REQUIRED FOR RECOVERY.
12. ALL REVISIONS TO THESE PLANS MUST BE APPROVED BY THE ENGINEER AS WELL AS THE OWNER PRIOR TO THEIR CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON RECORD DRAWINGS PRIOR TO THE ACCEPTANCE OF THE WORK. AS COMPLETE, ANY CHANGES TO OR DEVIATIONS FROM THE PLANS MADE WITHOUT AUTHORIZATION SHALL BE AT THE CONTRACTOR'S SOLE RISK AND SHALL ABSOLVE THE ENGINEER OF ANY AND ALL RESPONSIBILITY ASSOCIATED WITH THE THE CHANGE OR DEVIATION.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO KEEP THE SITE AND ADJACENT AREAS FREE FROM DIRT AND DEBRIS. SHOULD ANY DIRT OR DEBRIS BE DEPOSITED IN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL REMOVE IT IMMEDIATELY.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT AIRBORNE DUST FROM BECOMING A NUISANCE. DUST CONTROL MEASURES TO BE IMPLEMENTED INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
  - A) PROVIDE EQUIPMENT AND MANPOWER REQUIRED FOR WATERING ALL EXPOSED OR DISTURBED EARTH
  - B) COVER STOCKPILES OF DEBRIS, SOIL, OR OTHER MATERIALS WHICH MAY CONTRIBUTE TO AIRBORNE DUST.
  - C) KEEP CONSTRUCTION AREAS AND ADJACENT STREET FREE OF MUD AND DUST.
  - D) LANDSCAPE, SEED, OR COVER PORTIONS OF THE SITE AS SOON AS CONSTRUCTION IS COMPLETE.
15. A COPY OF ALL FIELD REPORTS/COMPACTIONS TESTS AND FINAL GRADING REPORT SHALL BE SUBMITTED TO THE COUNTY AT SCHEDULED INSPECTIONS.
16. PAD ELEVATION/S SHALL BE CERTIFIED TO 0.1 FEET, PRIOR TO DIGGING ANY FOOTINGS OR SCHEDULING ANY INSPECTIONS.

GRADING AND DRAINAGE

1. CONTRACTOR SHALL NOTIFY THE COUNTY 48 HOURS BEFORE STARTING ANY GRADING OPERATIONS.
2. ALL GRADING SHALL CONFORM TO THE COUNTY GRADING ORDINANCE [CHAPTER 16.08] AND THE EROSION CONTROL ORDINANCE [CHAPTER 16.12] AS APPLICABLE.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE REQUIRED PERMITS PRIOR TO THE COMMENCEMENT OF GRADING. RIGHT-OF-ENTRY, PERMISSION TO GRADE, AND ENCROACHMENT PERMIT(S) MAY BE REQUIRED PRIOR TO GRADING.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO PREPARE THE GROUND SURFACE TO RECEIVE THE FILLS AND TO PLACE, SPREAD, MIX, WATER, AND COMPACT THE FILL. THE CONTRACTOR SHALL ALSO REMOVE ALL MATERIAL CONSIDERED UNSATISFACTORY.
5. WHERE UNSTABLE OR UNSUITABLE MATERIALS ARE ENCOUNTERED DURING SUBGRADE PREPARATION, THE AREA IN QUESTION SHALL BE OVER EXCAVATED AND BACKFILLED WITH SELECT MATERIAL.
6. MAXIMUM CUT AND FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.
7. ALL CUT SLOPES SHALL BE ROUNDED TO MEET EXISTING GRADES AND BLEND WITH SURROUNDING TOPOGRAPHY. ALL GRADED SLOPES SHALL BE PLANTED WITH SUITABLE GROUND COVER.
8. TREE REMOVAL SHALL INCLUDE REMOVAL OF TRUNKS, STUMPS, AND ROOTBALLS. THE REMAINING CAVITY SHALL BE CLEARED OF ALL ROOTS LARGER THAN 1/2" TO A DEPTH OF NOT LESS THAN 18" AND BACKFILLED WITH SUITABLE MATERIAL THEN COMPACTED TO CONFORM WITH THE EXISTING GROUND.
9. CONTRACTOR SHALL USE CAUTION WHEN GRADING AROUND AND/OR OVER EXISTING UNDERGROUND UTILITIES.
10. ALL SURFACE DRAINAGE SHALL MAINTAIN 2% SLOPE MINIMUM UNLESS NOTED OTHERWISE.
11. PERVIOUS SURFACES IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN 5% FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5% SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF 2% WHERE LOCATED WITHIN 10 FEET OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING.
12. DURING WINTER OPERATIONS (BETWEEN OCTOBER 15 AND APRIL 15) THE FOLLOWING MEASURES MUST BE TAKEN:
  - A. DISTURBED SURFACES NOT INVOLVED IN IMMEDIATE OPERATIONS MUST BE PROTECTED BY MULCHING AND OR OTHER EFFECTIVE MEANS OF SOIL PROTECTION.
  - B. ALL ROADS AND DRIVEWAYS SHALL HAVE DRAINAGE FACILITIES SUFFICIENT TO PREVENT EROSION ON OR ADJACENT TO THE ROADWAY OR ON DOWNHILL PROPERTIES.
  - C. RUN-OFF FROM THE SITE SHALL BE DETAINED OR FILTERED BY BERMS, VEGETATED FILTER STRIPS, AND OR CATCH BASINS TO PREVENT THE ESCAPE OF SEDIMENT FROM THE SITE.
  - D. DRAINAGE CONTROL MEASURES SHALL BE MAINTAINED AND IN PLACE AT THE END OF EACH DAY AND CONTINUOUSLY THROUGH THE LIFE OF THE PROJECT DURING WINTER OPERATIONS
13. VEGETATION REMOVAL. ACTUAL GRADING SHALL BEGIN WITHIN 30 DAYS OF VEGETATION REMOVAL OR THAT AREA SHALL BE PLANTED.
14. NO VEGETATION REMOVAL OR GRADING WILL BE ALLOWED WHICH WILL RESULT IN SILTATION OF WATER COURSES OR UNCONTROLLABLE EROSION.

UNDERGROUND UTILITIES

1. CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES, INCLUDING STORM DRAINS, SANITARY SEWERS AND WATER

1. LINES, BEFORE ORDERING MATERIALS AND/OR CONSTRUCTING NEW FACILITIES.
2. ALL EXISTING MANHOLES AND UTILITY BOXES WITHIN THE PROJECT AREA ARE TO BE SET FLUSH WITH FINISHED GRADE, UNLESS OTHERWISE NOTED.
3. ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE SECTIONS OF CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION.
4. PIPE MATERIALS AND INSTALLATION PROCEDURE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE MANUFACTURER'S RECOMMENDATIONS.
5. DAMAGE SHALL BE REPAIRED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE COUNTY.

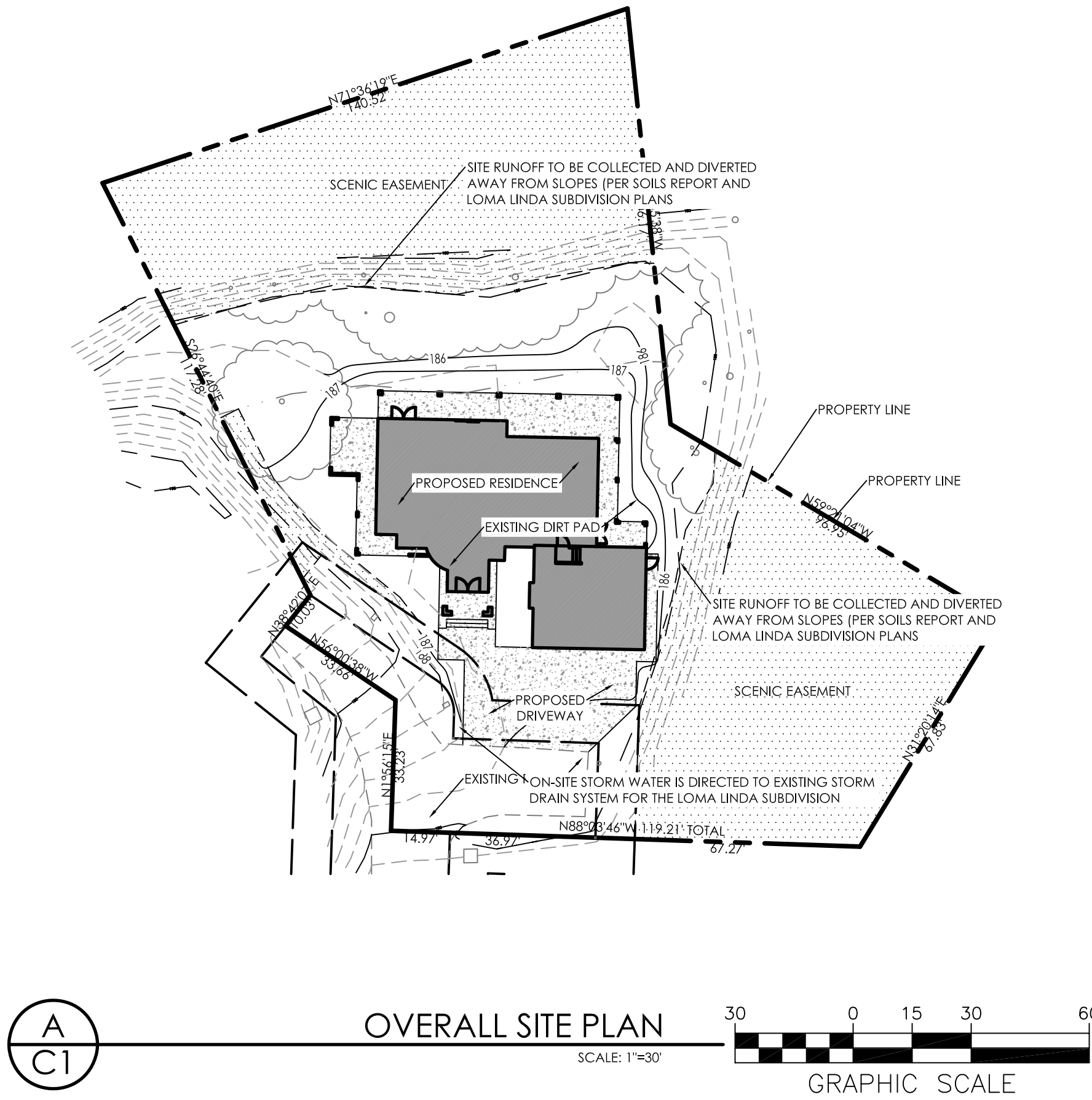
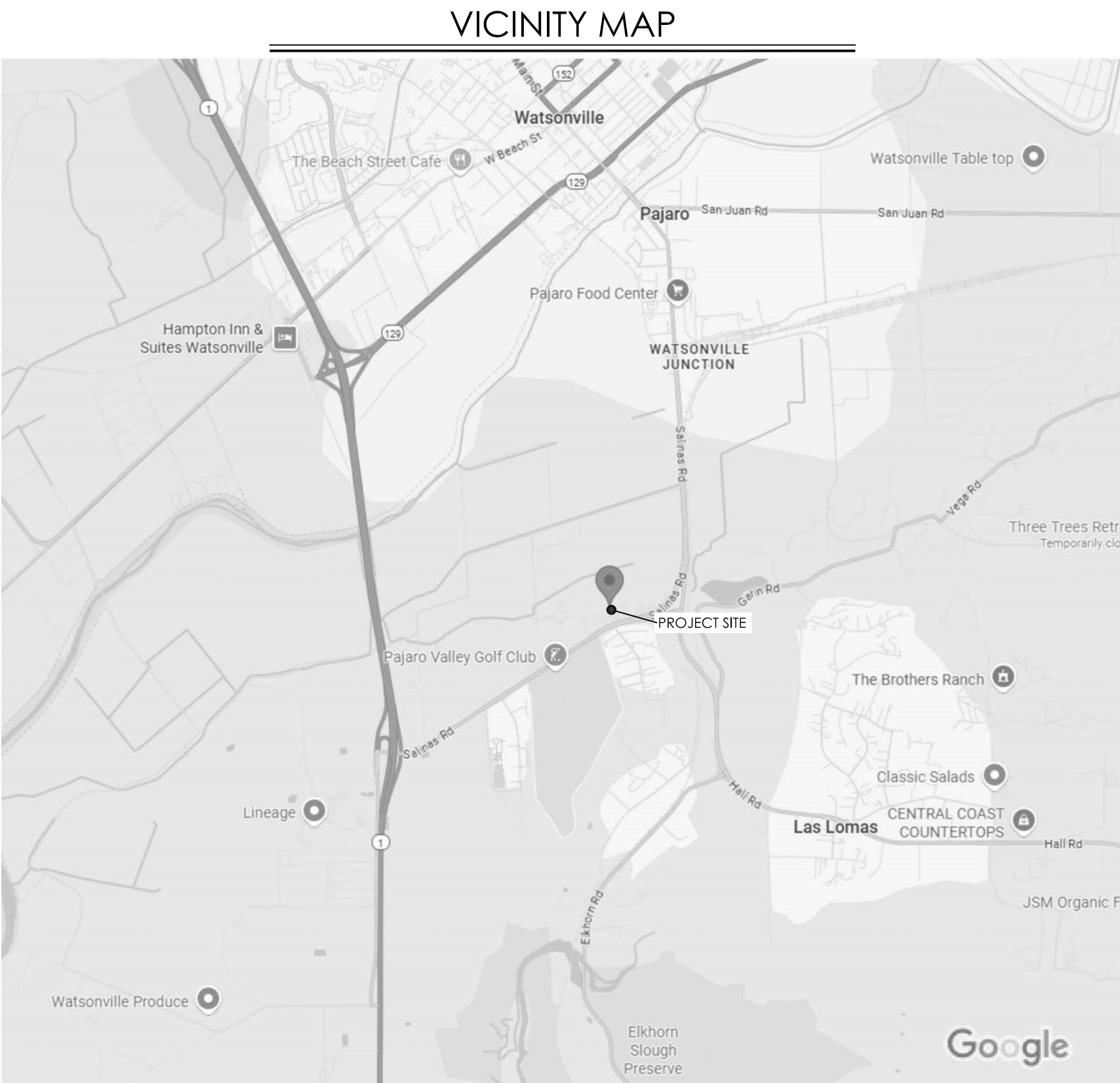
Inspection:	When:	Who:	Inspection By:	Date of Inspection:
Inspect and test Keyway/Subexcavation/overexcavation:	1)Prior to backfilling	Soils Engineer		
	2)During backfill placement – ongoing	Soils Engineer		
Inspect and Test Building Pad Subgrade:	Prior to excavation footings or placement of slab-on-grade materials	Soils Engineer		
Inspect Slab-on-grade installation:	Prior to concrete placement	Soils Engineer		
Inspect Foundation and/or retaining wall footing excavations:	Prior to reinforcement placement	Soils Engineer		
Inspect and Test Retaining wall backfill:	During backfill placement – ongoing	Soils Engineer		
Inspect and Test Driveway Fill, Subgrade and Baserock Placement:	1)During fill placement	Soils Engineer		
	2)Subgrade, prior to baserock placement	Soils Engineer		
	3)Baserock prior to AC, Concrete or Pavement	Soils Engineer		
Inspect and Test Drainage Installation:	1)After pipe placement, prior to backfill placement	Soils Engineer		
	2)During backfill placement – ongoing	Soils Engineer		
Inspect site stripping and clearing	After clearing complete	Soils Engineer		
Inspect utility trench compaction	After utility trench backfill	Soils Engineer		

ABBREVIATIONS

- (E) EXISTING
- FG FINISH GROUND GRADE
- FF FINISH FLOOR
- FL FLOW LINE
- FP FINISH PAVEMENT GRADE
- G GROUND
- M.E. MATCH EXISTING
- (N) NEW
- SD STORM DRAIN
- SS SANITARY SEWER
- TC TOP OF CURB GRADE
- (TYP) TYPICAL
- W WATER

SHEET INDEX

- C1 TITLE SHEET
- C2 GRADING AND UTILITY PLAN
- C3 CONSTRUCTION DETAILS
- C4 EROSION CONTROL PLAN



LAND DISTURBANCE

LAND DISTURBANCE AREA = 7,950 SF

GRADING QUANTITIES

EARTHWORK QUANTITIES:  
CUT = 2 CY  
FILL = 430 CY

EARTHWORK QUANTITIES ARE ESTIMATES TO FINISH GRADE ONLY AND ASSUMES NO FILL IN RAISED FOUNDATION AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL EARTHWORK QUANTITIES. NO ALLOWANCE HAS BEEN MADE TO ACCOUNT FOR QUANTITIES FROM PAVEMENT OR TRENCHING FOR FOUNDATION, FOOTINGS, PIERS AND/OR UTILITIES TRENCHES.

SITE COVERAGE AREA

EXISTING IMPERVIOUS AREA = 0 SF  
PROPOSED IMPERVIOUS AREA = 5,280 SF

LEGEND

- EXISTING
- PROPOSED
- BOUNDARY LINE
- DRAINAGE FLOW LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- RETAINING WALL (BY OTHERS)
- STORM DRAIN LINE
- AREA DRAIN
- POTABLE WATER
- SANITARY SEWER
- SPOT ELEVATION
- DRAINAGE FLOW
- BUILDING
- CONCRETE PAVEMENT

C3 ENGINEERING INCORPORATED

Civil Engineering Land Development Stormwater Control

124 Bonifacio Place, Suite C, Monterey, CA 93940  
Phone: (831) 647-1192 Fax: (831) 647-1194  
mail@C3Engineering.com

TITLE SHEET

CASA ESCAREÑO

2220 SILVER STONE STREET  
ROYAL OAKS, CA 95076

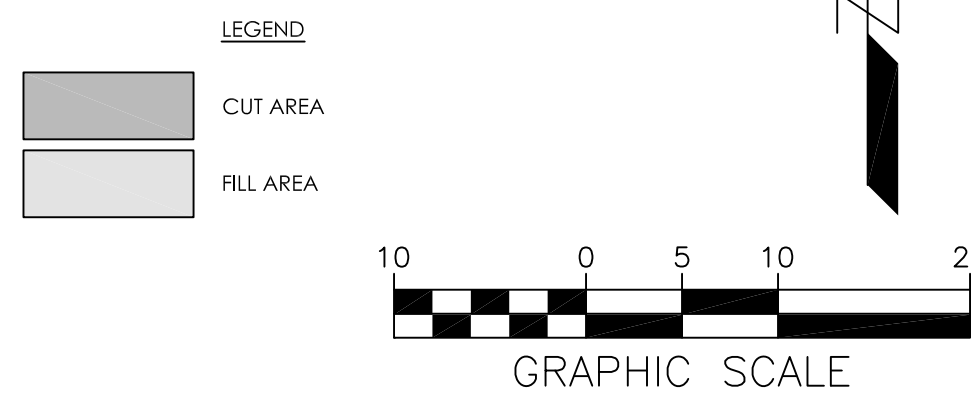
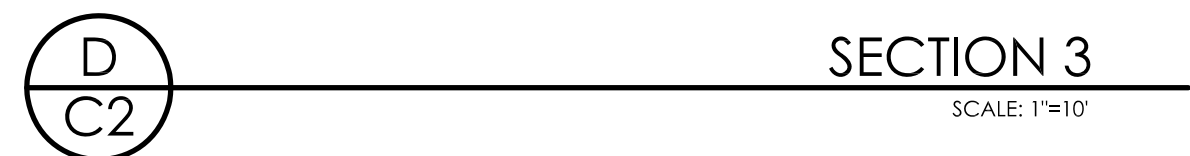
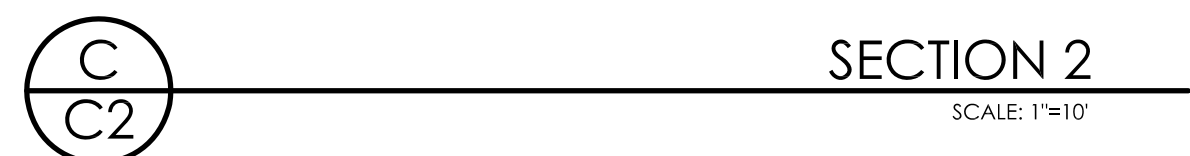
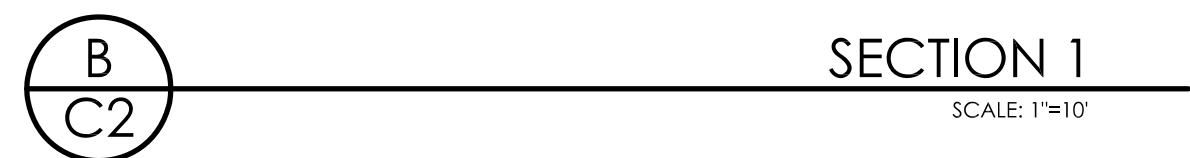
SCALE: AS NOTED  
DATE: 7/22/2025  
DESIGN BY: JPR  
DRAWN BY: JPR  
CHECKED BY:  
SHEET NUMBER:

C1

OF 4 SHEETS  
PROJECT# 125112



Drawing file: Z:\Projects\125112 Casa Escareno\dwg\125112 Grading Plan.dwg  
Plotted: Jul 18, 2025 - 1:07pm



1. PER THE LOMA LINDA SUBDIVISION IMPROVEMENT PLANS ALL ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM.
2. RETENTION POND ARE REQUIRED THROUGHOUT THE LOMA LINDA DEVELOPMENT TO MITIGATE STORM WATER FROM THE SUBDIVISION.
3. PER THE SOILS REPORT:
  - a. NORTH AND EAST FACINGS SLOPE. THE SITE SHOULD BE GRADED TO FLOW TOWARD EXISTING STORMWATER DRAINAGE SYSTEMS AND AWAY FROM SLOPES.
  - b. SOUTH AND WEST FACINGS SLOPE. THE SITE SHOULD BE GRADED TO FLOW TOWARD EXISTING STORMWATER DRAINAGE SYSTEMS AND AWAY FROM SLOPES.
  - c. BURIED CLOSED PIPES SHOULD BE CONNECTED TO GUTTER DOWNSPOUTS SHOULD CONVEY ROOF RUNOFF TO COLLECTION FACILITIES AND THE EXISTING SUBDIVISION STORMWATER DRAINAGE SYSTEM.
4. GIVEN ALL OF THE ABOVE, NO ADDITIONAL ON-SITE STORM WATER MITIGATION MEASURES ARE REQUIRED AS THE SUBDIVISION HAS ALREADY MITIGATED STORMWATER FOR THE PROPERTY.

1. AREA DRAIN-NDS LOW PROFILE HOUSING LOCATED WITHIN 12X12 ATRIUM GRADE 1 CONNECTED TO TRENCH @ 6" PVC SDR 35 (ASTM D3213) 12X12 ATRIUM GRADE 1

2. STORM DRAIN PIPE SHALL BE 6" PVC SDR 35 (ASTM D3213) @ 3X42" INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

3. POTABLE WATER PIPE SHALL BE 4" PVC CLASS 150 (MINIMUM SLOPE 2%)

4. SANITARY SEWER PIPE SHALL BE 4" PVC SDR 35 (MINIMUM SLOPE 2%)

5. SEE SHEET C3 FOR TRENCH BACKFILL.

6. CONTRACTOR SHALL MAINTAIN HORIZONTAL SEPARATION OF 5' BETWEEN JUNCTION TRENCH AND UTILITY LINES NOTED OTHERWISE.

7. CONTRACTOR SHALL MAINTAIN HORIZONTAL SEPARATION OF 4' BETWEEN POTABLE WATER AND SANITARY SEWER LINES.

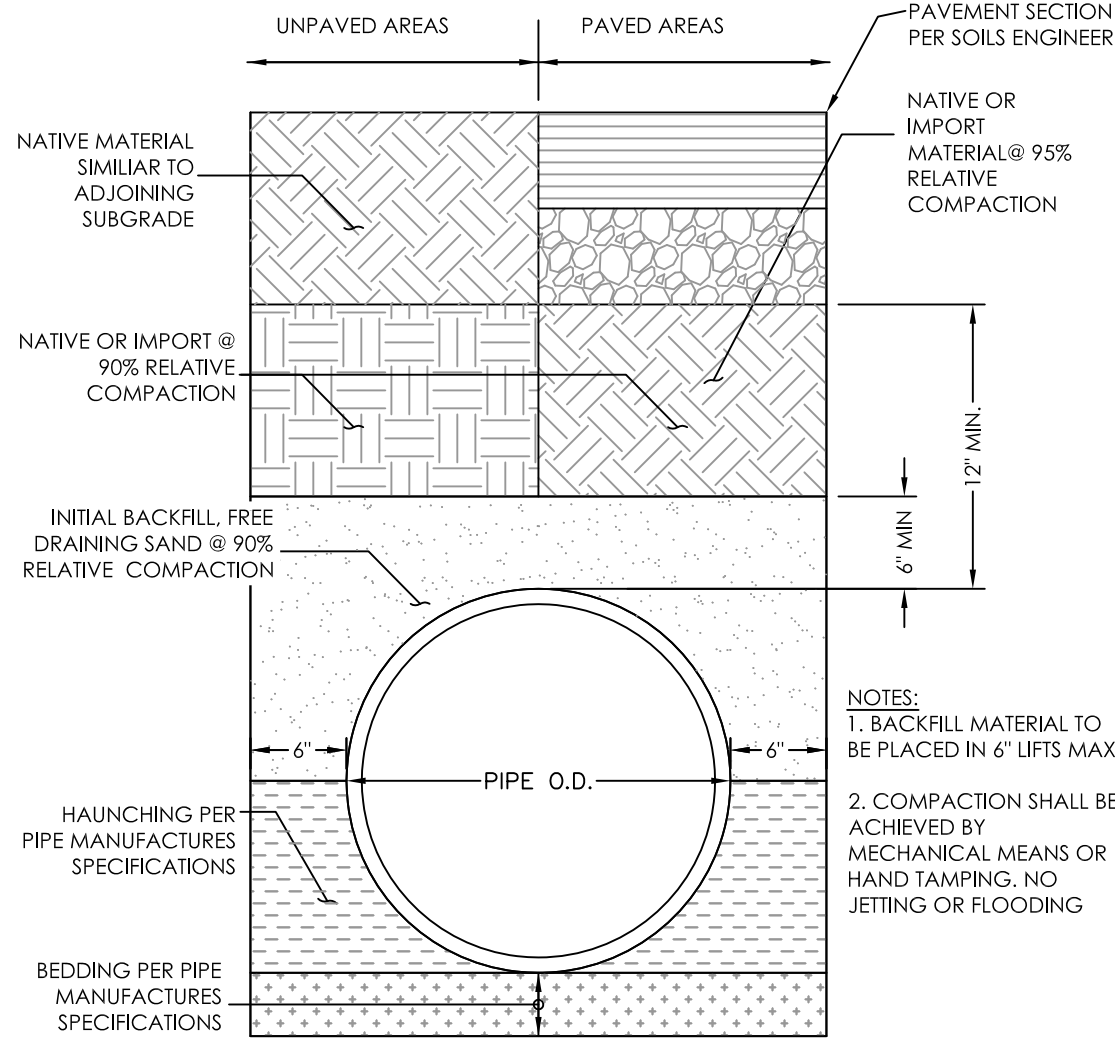
8. LOCATION OF EXISTING UTILITIES ARE PER SUBDIVISION IMPROVEMENT PLANS AND HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR SHALL LOCATE THE CONNECTIONS PRIOR TO COMMENCEMENT OF WORK AND NOTIFY OWNER IMMEDIATELY IF THERE IS A MISSING SERVICE.

SCALE: 1"=10'

[illegible]

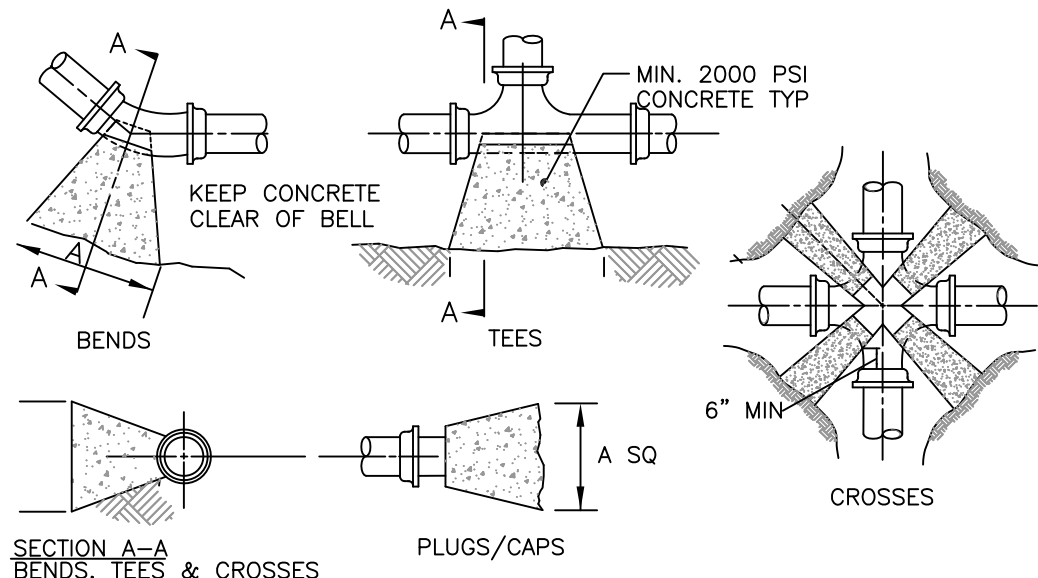
THE USE OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE PROJECT AND SITE SPECIFICALLY IDENTIFIED. REUSE, REPRODUCTION, OR PUBLICATION, IN WHOLE OR IN PART, IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF C3 ENGINEERING.

Drawing file: Z:\Projects\125112 Casa Escareno.dwg 125112 Grading Plan.dwg  
Plotted: Jul 18, 2025 -- 1:07pm



A  
C3 TRENCH BACKFILL  
NTS

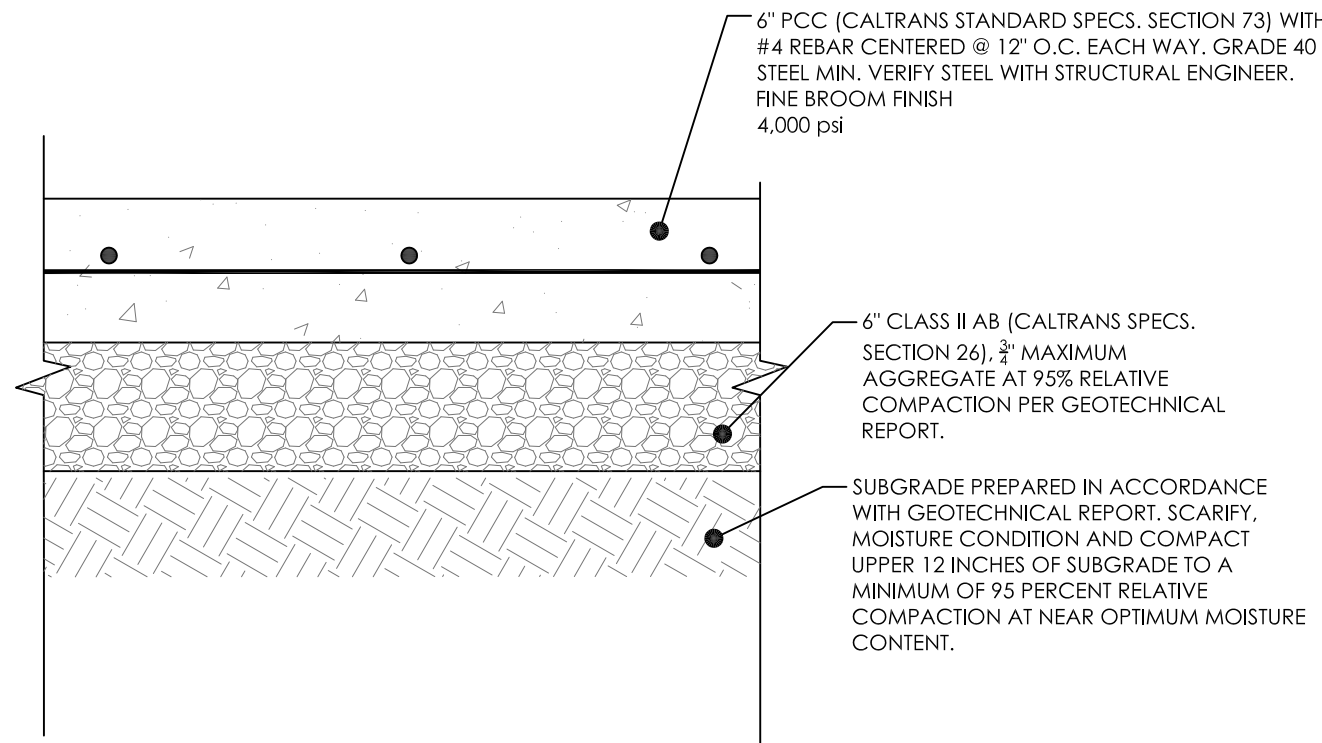
B  
C3 NOT USED  
NTS



SIZE	90° BENDS		45° BENDS		22.5° BENDS		TEES and PLUGS	
	SIZE SQ FT	"A" "B"	SIZE SQ FT	"A" "B"	SIZE SQ FT	"A" "B"	SIZE SQ FT	"A" "B"
4"	1.8	22" 12"	1.0	12" 12"	0.5	10" 7"	1.3	16" 12"
6"	4.0	36" 16"	2.2	20" 16"	1.1	16" 10"	2.8	29" 14"
8"	7.1	42" 24"	3.8	23" 24"	2.0	21" 14"	5.0	45" 16"
10"	11.1	53" 30"	6.1	30" 30"	3.1	22" 20"	7.9	48" 24"
12"	16.0	58" 40"	8.7	36" 36"	4.4	32" 20"	11.3	54" 30"
14"	21.6	74" 42"	11.9	43" 40"	6.0	36" 24"	15.4	62" 36"
16"	28.4	85" 48"	15.5	53" 42"	7.8	37" 30"	20.1	69" 42"

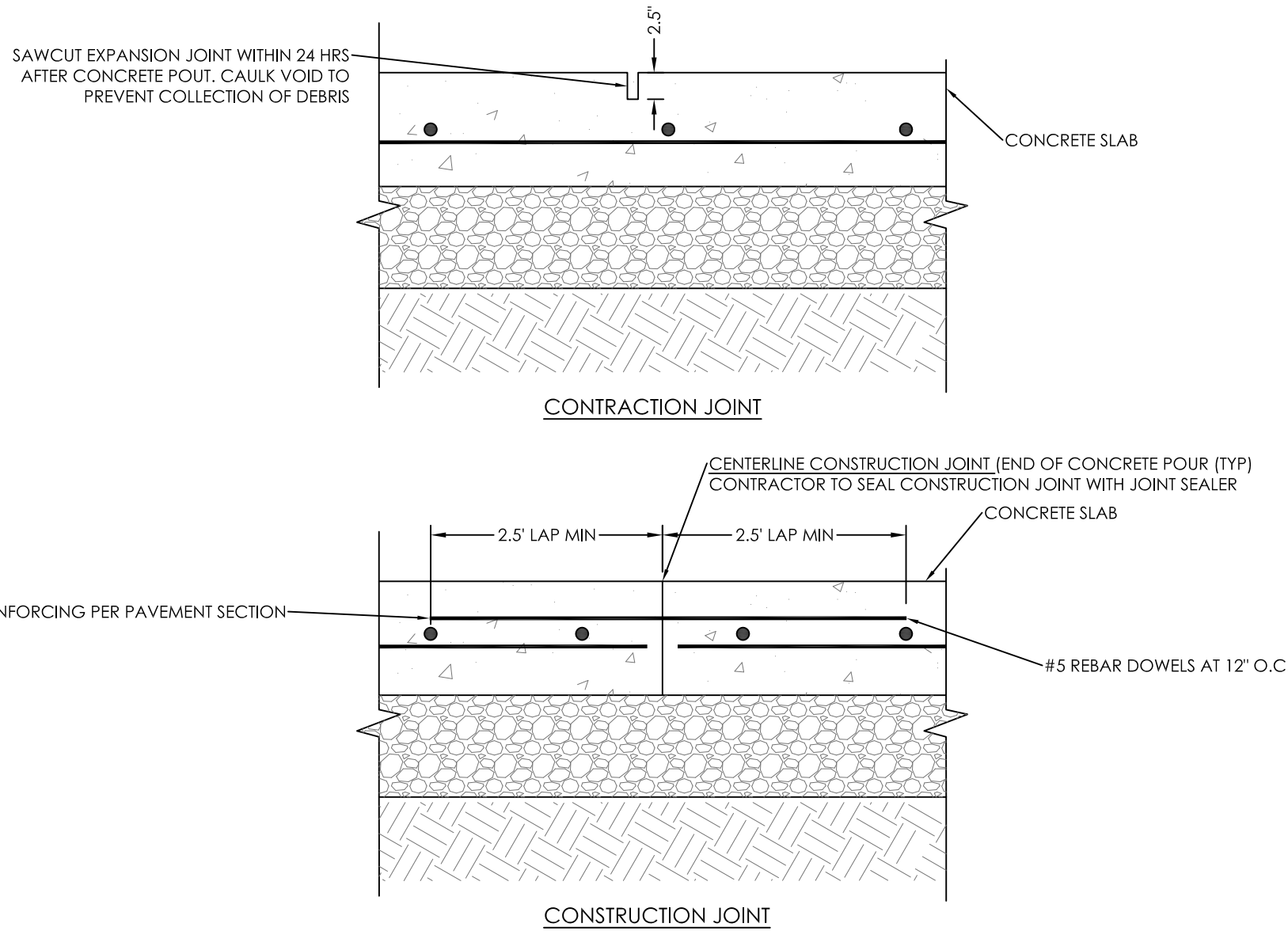
- NOTES:
1. BASED ON 150 PSI STATIC PRESSURE PLUS 100 PSI WATER HAMMER AND 2500 PSF SOIL BEARING
  2. FOR UNSTABLE SOIL CONDITIONS CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS FOR MAIN
  3. SIZES GREATER THAN 16" SEE ENGINEER FOR THRUST BLOCK DIMENSIONS

C  
C3 THRUST BLOCK  
NTS

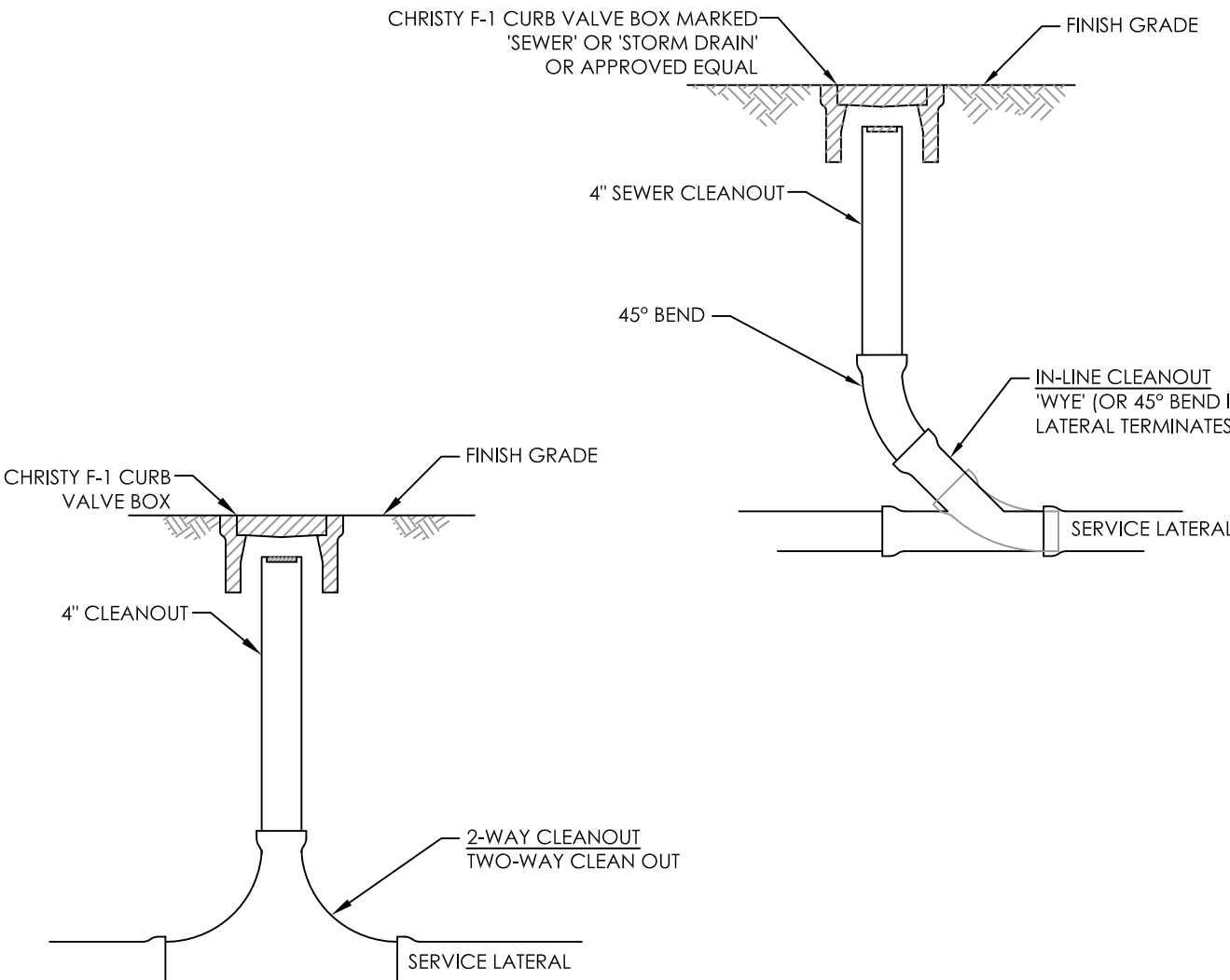


PLEASE NOTE: SECTION CAN BE ADJUSTED BY SOILS ENGINEER.

E  
C3 CONCRETE SECTION  
NTS



F  
C3 CONCRETE JOINTS  
NTS



H  
C3 CLEANOUTS  
NTS

G  
C3 NOT USED  
NTS

I  
C3 NOT USED  
NTS

C3ENGINEERING  
INCORPORATED

Civil Engineering Land Development Stormwater Control

126 Bonifacio Place, Suite C, Monterey, CA 93940  
Phone: (831) 647-1192 Fax: (831) 647-1194  
mailto:C3Engineering@net

CONSTRUCTION DETAILS

CASA ESCAREÑO

2220 SILVER STONE STREET  
ROYAL OAKS, CA 92076

SCALE: AS NOTED

DATE: 7/22/2025

DESIGN BY: JPR

DRAWN BY: JPR

CHECKED BY:

SHEET NUMBER:

C3

OF 4 SHEETS

PROJECT# 125112



1. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT AIRBORNE DUST FROM BECOMING A NUISANCE TO NEIGHBORING PROPERTIES. THE CONTRACTOR SHALL CONFORM TO THE STANDARDS FOR DUST-CONTROL AS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT. DUST CONTROL MEASURES TO BE IMPLEMENTED INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
  - A) PROVIDE EQUIPMENT AND MANPOWER REQUIRED FOR DUST-CONTROL, INCLUDING ALL EXPOSED OR DISTURBED AREAS, SUFFICIENT WATERING TO CONTROL DUST IS REQUIRED AT ALL TIMES.
  - B) COVER STOCKPILES OF DEBRIS, SOIL, OR OTHER MATERIALS WHICH MAY CONTRIBUTE TO AIRBORNE DUST.
  - C) KEEP CONSTRUCTION AREAS AND ADJACENT STREET FREE OF MUD AND DUST.
  - D) LANDSCAPE, SEED, OR COVER PORTIONS OF THE SITE AS SOON AS CONSTRUCTION IS COMPLETE.
2. THE CONTRACTOR SHALL ASSUME LIABILITY FOR CLAIMS RELATED TO WIND BLOWN MATERIAL. IF THE DUST CONTROL IS INADEQUATE AS DETERMINED BY THE COUNTY, THE CONSTRUCTION WORK SHALL BE TERMINATED UNTIL CORRECTIVE MEASURES ARE TAKEN.
3. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO KEEP STREETS AND ROADS FREE FROM DIRT AND DEBRIS. SHOULD ANY DIRT OR DEBRIS BE DEPOSITED IN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL REMOVE IT IMMEDIATELY.
4. ALL CUT AND FILL SLOPES EXPOSED DURING CONSTRUCTION SHALL BE COVERED, SEEDED OR OTHERWISE TREATED TO CONTROL EROSION WITHIN 48 HOURS AFTER GRADING. CONTRACTOR SHALL REVEGETATE SLOPES AND ALL DISTURBED AREAS THROUGH AN APPROVED PROCESS AS DETERMINED BY THE COUNTY. THIS MAY CONSIST OF EFFECTIVE PLANTING OF RYE GRASS, BARLEY OR SOME OTHER FAST GERMINATING SEED.
5. DURING WINTER OPERATIONS (BETWEEN OCTOBER 15 AND APRIL 15), THE FOLLOWING MEASURES MUST BE TAKEN:
  - A) ALL EXPOSED AREAS MUST BE COVERED WITHIN 48 HOURS OF EXPOSURE TO PREVENT EROSION FOR MORE THAN 15 DAYS. DURING THIS PERIOD, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE. DISTURBED SURFACES NOT INVOLVED IN THE IMMEDIATE OPERATIONS MUST BE PROTECTED BY MULCHING AND/OR OTHER EFFECTIVE MEANS OF SOIL PROTECTION.
  - B) ALL ROADS AND DRIVEWAYS SHALL HAVE DRAINAGE FACILITIES SUFFICIENT TO PREVENT EROSION ON OR ADJACENT TO THE ROADWAY OR THE DOWNHILL PROPERTIES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING DRAINAGE FACILITIES. SHOULD THERE BE A NEED TO EXPOSE OR CATCH BASINS TO PREVENT THE ESCAPE OF SEDIMENT FROM THE DISTURBED AREA OR SITE, THESE DRAINAGE CONTROL MEASURES MUST BE MAINTAINED BY THE CONTRACTOR AS NECESSARY TO ACHIEVE THEIR PURPOSE THROUGHOUT THE LIFE OF THE PROJECT.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND IN PLACE AT THE END OF EACH DAY AND CONTINUOUSLY CHECKED THROUGHOUT THE LIFE OF THE PROJECT DURING WINTER OPERATIONS.
8. THE GRADING INSPECTOR MAY STOP OPERATIONS DURING PERIODS OF INCLEMENT WEATHER IF EROSION PROBLEMS ARE NOT BEING CONTROLLED ADEQUATELY.
9. THE CONTRACTOR SHALL MAINTAIN VEGETATION IN PLACE PRIOR TO CONSTRUCTION. VEGETATION SHALL BE MAINTAINED AND PLANTED DURING THE CONSTRUCTION PERIOD, THAT AREA SHALL BE PLANTED UNDER THE PROVISION OF SECTION 16.08.30 TO CONTROL EROSION. NO VEGETATION REMOVAL OR GRADING WILL BE ALLOWED WHICH WILL RESULT IN SILTATION OF WATER COURSES OR UNCONTROLLABLE EROSION.
10. ALL POLLUTANTS AND THEIR SOURCES, INCLUDING SOURCES OF SEDIMENT ASSOCIATED WITH CONSTRUCTION, CONSTRUCTION SITE EROSION AND ALL OTHER ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY ARE CONTROLLED BY THE FOLLOWING MEASURES:
  - A) BMPs ARE TO BE EFFECTIVE AND RESULT IN THE REDUCTION OR ELIMINATION OF POLLUTANTS IN STORM WATER DISCHARGES AND AUTHORIZED NON-STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY.
  - B) STABILIZATION BMPs INSTALLED TO REDUCE OR ELIMINATE POLLUTANTS AFTER CONSTRUCTION IS COMPLETED.
11. BEST MANAGEMENT PRACTICES (BMPs) TO BE IMPLEMENTED BY THE PROJECT ARE LISTED BY CATEGORY. FACT SHEETS AND DETAILS FOR THE BMPs SELECTED FOR THIS PROJECT, CAN BE FOUND IN THE CASQA STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK.

1. PRIOR TO COMMENCEMENT OF LAND DISTURBANCE, THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH HCD-ENVIRONMENTAL SERVICES TO ENSURE ALL NECESSARY SEDIMENT CONTROLS ARE IN PLACE AND THE PROJECT IS COMPLIANT WITH MONTEREY COUNTY REGULATIONS.

2. DURING CONSTRUCTION, THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH HCD-ENVIRONMENTAL SERVICES TO INSPECT DRAINAGE DEVICE INSTALLATION, REVIEW THE MAINTENANCE AND EFFECTIVENESS OF BMPs INSTALLED, AND TO VERIFY THAT POLLUTANTS OF CONCERN ARE NOT DISCHARGED FROM THE SITE. AT THE TIME OF THE INSPECTION THE APPLICANT SHALL PROVIDE CERTIFICATION THAT ALL NECESSARY GEOTECHNICAL INSPECTIONS HAVE BEEN COMPLETED.

3. PRIOR TO FINAL INSPECTION, THE OWNER/APPLICANT SHALL SCHEDULE AN INSPECTION WITH HCD-ENVIRONMENTAL SERVICES TO ENSURE ALL DISTURBED AREAS HAVE BEEN STABILIZED AND ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES THAT ARE NO LONGER NEEDED HAVE BEEN REMOVED.

1. POLLUTANTS IN STORM WATER DISCHARGES FROM THE PROJECT DURING CONSTRUCTION MAY ORIGINATE FROM THE DAILY OPERATION OF EQUIPMENT, GRADING OPERATIONS, AND STOCKPILING OF MATERIALS.

1. THE DISCHARGER SHALL PREVENT DISPOSAL OF ANY RINSE OR WASH MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM.
2. THE DISCHARGER SHALL ENSURE THE CONTAINMENT OF SANITATION FACILITIES (E.G., PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER. THE SANITATION FACILITIES SHALL BE MAINTAINED, REPLACED, AND INSPECTED REGULARLY TO PREVENT LEAKS AND SPILLS.
3. WASTE DISPOSAL CONTAINERS SHALL BE COVERED AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT. NO DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER SHALL BE ALLOWED.
4. STOCKPILE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.
5. PROCEDURES SHALL BE DEVELOPED THAT EFFECTIVELY ADDRESS HAZARDOUS AND NONHAZARDOUS SPILLS. EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE. SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY.
6. CONCRETE WASHOUT AREAS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.
7. DISCHARGER SHALL MAINTAIN VEHICLES TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR SURFACE WATERS. ALL EQUIPMENT OR VEHICLES SHALL BE FUELED, MAINTAINED AND STORED IN A DESIGNATED AREA IMMEDIATELY AND DISPOSITONARILY REMOVED FROM THE PROJECT SITE.
8. IN ADDITION TO THE ABOVE, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE WASTE MANAGEMENT POLLUTION CONTROL WHERE APPLICABLE:

WM-3. STOCKPILE MANAGEMENT  
WM-4. SPILL PREVENTION AND CONTROL  
WM-5. SOLID WASTE MANAGEMENT  
WM-6. HAZARDOUS WASTE MANAGEMENT  
WM-7. CONTAMINATED SOIL MANAGEMENT  
WM-8. CONCRETE/SEPTIC WASTE MANAGEMENT  
WM-9. LIQUID WASTE MANAGEMENT  
WM-10. LEAD-CONTAMINATED SOIL  
WM-11. CONCRETE SAW-CUTTING LIQUIDS, WASTE CHEMICALS CONTAINERS, THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURERS STORAGE AND HANDLING RECOMMENDATIONS AND FOLLOW ALL FEDERAL, STATE, AND LOCAL REGULATIONS, WHERE POSSIBLE. CONTRACTOR SHALL USE SAFER AND LESS POLLUTING PRODUCTS.

1. SUFFICIENT EROSION CONTROL MATERIALS WILL BE MAINTAINED ON-SITE TO ALLOW FOR IMMEDIATE DEPLOYMENT BEFORE THE ONSET OF RAIN.

2. DISCHARGERS SHALL PROVIDE EFFECTIVE SOIL COVERS FOR INACTIVE AREAS (MORE THAN 14 DAYS UNDISTURBED) AND ALL FINISHED SLOPES, OPEN SPACE, UTILITY BACKFILL, AND COMPLETED SLOPES.

3. DISCHARGERS SHALL CONSIDER THE USE OF PLASTIC FILMS WHEN MORE SUSTAINABLE, ENVIRONMENTALLY FRIENDLY ALTERNATIVES EXIST, WHERE PLASTIC MATERIALS ARE DEEMED NECESSARY, THE DISCHARGER SHALL CONSIDER THE USE OF PLASTIC MATERIALS RESISTANT TO SOLAR DEGRADATION.

4. IN ADDITION TO THE ABOVE, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE TEMPORARY AND FINAL EROSION CONTROL DURING CONSTRUCTION WHERE APPLICABLE:

EC-3. HYDRAULIC MULCH  
EC-4. HYDROSEEDING  
EC-5. SOIL BINDERS  
EC-6. STRAW MULCH  
EC-7. GEOTEXTILES AND MATS  
EC-8. WOOD MULCHING  
EC-9. EARTH DIKES AND DRAINAGE SWALES  
EC-10. VELOCITY DISSIPATION DEVICES  
EC-11. SLOPE DRAINS  
EC-12. STREAMBANK STABILIZATION  
EC-13. POLYACRYLAMIDE  
(SOURCE: STORMWATER BEST MANAGEMENT HANDBOOK)  
5. SPECIAL CARE SHALL BE TAKEN SO THAT NO FILL MATERIALS SHALL BE PLACED, SPREAD, OR ROLLED DURING UNFAVORABLE WEATHER CONDITIONS.

1. SUFFICIENT QUANTITIES OF TEMPORARY SEDIMENT CONTROL MATERIALS WILL BE MAINTAINED ON-SITE THROUGHOUT THE DURATION OF THE PROJECT, TO ALLOW IMPLEMENTATION OF TEMPORARY SEDIMENT CONTROLS IN THE EVENT OF A RAINFALL EVENT.
2. DISCHARGERS SHALL ESTABLISH AND MAINTAIN EFFECTIVE PERMITTER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES FROM THE SITE.
3. DISCHARGERS SHALL EFFECTIVELY MANAGE ALL RUN-ON, ALL RUNOFF WITHIN THE SITE AND ALL RUNOFF THAT DISCHARGES OFF THE SITE. RUN-ON FROM OFF-SITE SHALL BE DIRECTED AWAY FROM ALL DISTURBED AREAS OR SHAFTS.
4. DISCHARGERS SHALL MAINTAIN EFFECTIVE PERMITTER CONTROLS TO PREVENT OFF-SITE TRACKING OF SEDIMENT.
5. DISCHARGERS SHALL EFFECTIVELY MANAGE ALL RUN-ON, ALL RUNOFF WITHIN THE SITE, FACE OF THE SLOPE, AND AT THE GRADE BREAKS OF EXPOSED SLOPES.
6. DISCHARGERS SHALL MAINTAIN EFFECTIVE PERMITTER CONTROLS TO PREVENT OFF-SITE TRACKING OF SEDIMENT.
7. DISCHARGERS SHALL ENSURE THAT ALL STORM DRAIN INLETS AND PERMITTER CONTROLS, RUNOFF CONTROL BMPs, AND POLLUTANT CONTROLS AT ENTRANCES AND EXITS (E.G. THE WASHFLO LOCATIONS) ARE MAINTAINED AND PROTECTED FROM ACTIVITIES THAT REDUCE THEIR EFFECTIVENESS.
8. DISCHARGERS SHALL INSPECT ON A DAILY BASIS ALL IMMEDIATE ACCESS ROADS DAILY.
9. AT A MINIMUM DAILY (WHEN NECESSARY) AND PRIOR TO ANY RAIN EVENT, THE DISCHARGER SHALL REMOVE ANY SEDIMENT OR OTHER CONSTRUCTION ACTIVITY RELATED MATERIALS THAT ARE DEPOSITED ON THE ROADS (BY ANY MEANS).
10. IN ADDITION TO THE ABOVE, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE TEMPORARY AND FINAL SEDIMENT CONTROL DURING CONSTRUCTION WHERE APPLICABLE:

SE-3, SEDIMENT TRAP  
SE-4, CHECK DAMS  
SE-5, FIBER ROLLS  
SE-6, GRAVEL BAG BERM  
SE-7, STREET SWEEPING AND VACUUMING  
SE-8, SANDBAG BARRIER  
SE-9, STRAW BALE BARRIER  
SE-10, STORM DRAIN INLET PROTECTION  
SE-11, CHEMICAL TREATMENT  
(SOURCE: STORMWATER BEST MANAGEMENT HANDBOOK)  
TO A CRYING CHILD

7. TRACKING CURTAINS SHALL BE IMPLEMENTED AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AT ALL ACCESS (IN/OUT/EGRESS) POINTS TO THE PROJECT SITE WHERE VEHICLES AND/OR EQUIPMENT MAY TRACK SEDIMENT FROM THE CONSTRUCTION SITE ONTO PUBLIC OR PRIVATE ROADWAYS.

IN GENERAL, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE TRACKING CONTROL DURING CONSTRUCTION WHERE APPLICABLE:

- TC-1. STABILIZED CONSTRUCTION ENTRANCE/EXIT
- TC-2. STABILIZED CONSTRUCTION ROADWAY
- TC-3. ENTRANCE/OUTLET TIRE WASH

[SOURCE: ... STORMWATER BEST MANAGEMENT HANDBOOK]

1. WIND EROSION CONTROL BMPs SHALL BE IMPLEMENTED AND MAINTAINED YEAR-ROUND AND THROUGHOUT THE DURATION OF THE PROJECT ON ALL DISTURBED SOILS ON THE PROJECT SITE THAT ARE SUBJECT TO WIND EROSION, AND WHEN SIGNIFICANT WIND AND DRY CONDITIONS ARE ANTICIPATED DURING PROJECT CONSTRUCTION. THE OBJECTIVE OF WIND CONTROLS IS TO PREVENT THE TRANSPORT OF SOIL FROM DISTURBED AREAS OF THE PROJECT SITE BY WIND.

2. IN GENERAL, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE WIND EROSION CONTROL DURING CONSTRUCTION WHERE APPLICABLE:

WE-1. WIND EROSION CONTROL

WE-1.1. BEST MANAGEMENT HANDBOOK

1. NON-STORM WATER DISCHARGES CONSIST OF ALL DISCHARGES TO/FROM A MUNICIPAL STORM WATER CONVEYANCE, WHICH DO NOT ORIGINATE FROM PRECIPITATION EVENTS (I.E. ALL DISCHARGES FROM A CONVEYANCE SYSTEM OTHER THAN STORM WATER).

2. DISCHARGERS SHALL IMPLEMENT MEASURES TO CONTROL ALL NON-STORM WATER DISCHARGES DURING CONSTRUCTION.

3. DISCHARGERS SHALL WASH VEHICLES IN SUCH A MANNER AS TO PREVENT NON-STORM WATER DISCHARGES.

4. DISCHARGERS SHALL CLEAN STREETS IN SUCH A MANNER AS TO PREVENT UNAUTHORIZED NON-STORM WATER DISCHARGES.

5. IN ADDITION TO THE ABOVE, THE PROJECT WILL IMPLEMENT THE FOLLOWING PRACTICES FOR EFFECTIVE NON-STORMWATER MANAGEMENT POLLUTION CONTROL WHERE APPLICABLE:

NS-1. WATER CONSERVATION PRACTICES

NS-2. DEWATERING OPERATIONS

NS-3. PAVING AND GRINDING OPERATIONS

NS-4. TEMPORARY STREAM CROSSING

NS-5. CLEAR WATER DIVERSION

NS-6. ILLICIT CONNECTION/ILLEGAL DISCHARGE DETECTION AND REPORTING

NS-7. POTABLE WATER / IRRIGATION

NS-8. VEHICLE AND EQUIPMENT CLEANING

NS-9. VEHICLE AND EQUIPMENT FUELING

NS-10. VEHICLE AND EQUIPMENT MAINTENANCE

NS-11. PILE DRIVING OPERATIONS

NS-12. CONCRETE CURING

NS-13. MATERIALS AND EQUIPMENT USE OVER WATER

NS-14. CONCRETE FINISHING

NS-15. STRUCTURE DEMOLITION/REMOVAL

NS-16. TEMPORARY BATCH PLANTS

(SOURCE: STORMWATER BEST MANAGEMENT HANDBOOK)

(SOURCE:

INSTALLATION

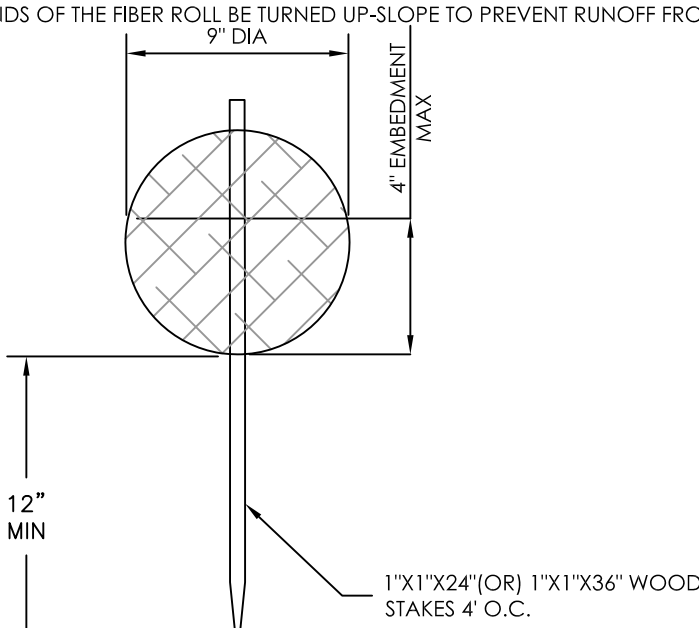
1. USE 1"X12" OR 1"X11 3/4" LOG STAKES, DEPENDING ON THE SOIL AND SLOPE CONDITIONS. USE LONGER STAKES IN LOOSE SOIL. SHORTER STAKES IN DENSE SOIL.

2. CASQA RECOMMENDS IF MORE THAN ONE FIBER ROLL IS PLACED IN A ROW, THE ROLLS SHOULD BE OVERLAPPED, NOT ABUTTED. IF CONTRACTOR DESIRES TO POSITION FIBER ROLLS END-TO-END, THEY SHALL TIE THE BUTTED ENDS TOGETHER WITH STRONG TWINE TO ENSURE A GOOD CONNECTION.

3. PLACE FIBER ROLLS SECURELY IN THE TRENCH SO THAT SILT LADEN RUNOFF PASSES OVER OR THROUGH, NOT UNDER THE FIBER ROLL.

4. CONTRACTOR SHALL REVIEW CASQA MANUAL FOR INSTALLATION GUIDANCE. (SE-5)

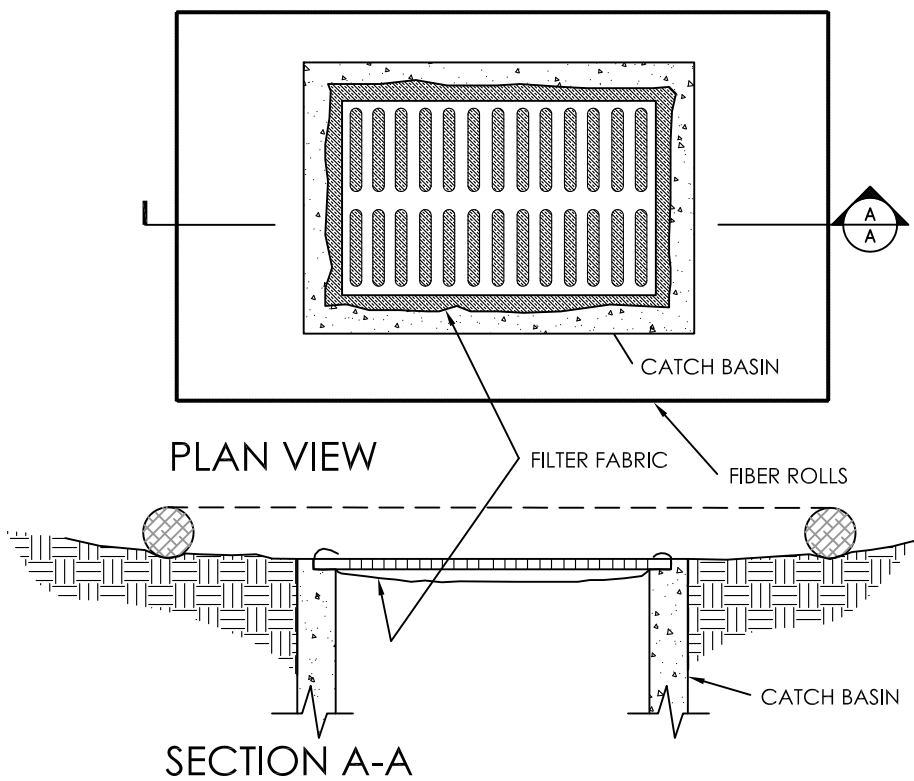
5. CASQA RECOMMENDS THE ENDS OF THE FIBER ROLL BE TURNED UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE ROLL.



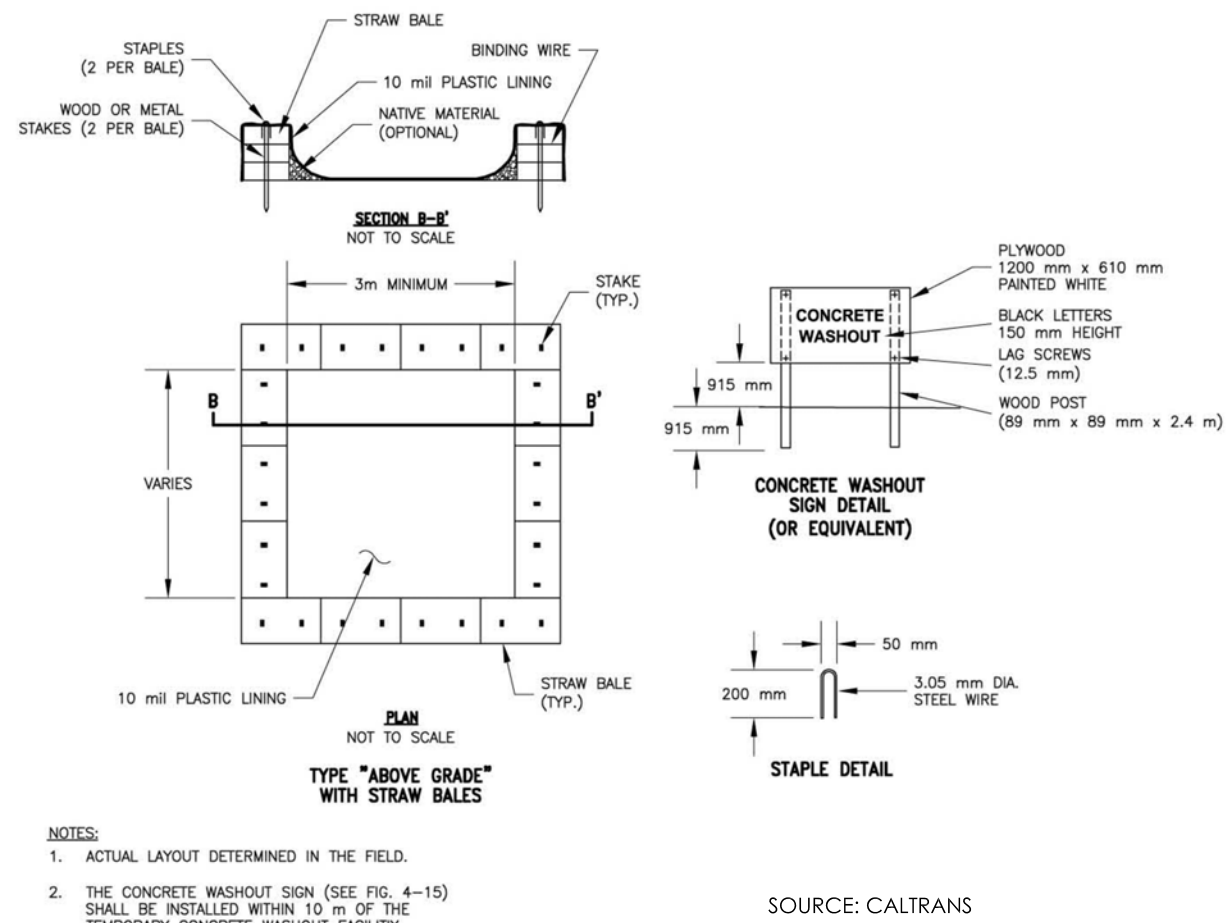
B  
C2
FIBER ROLL

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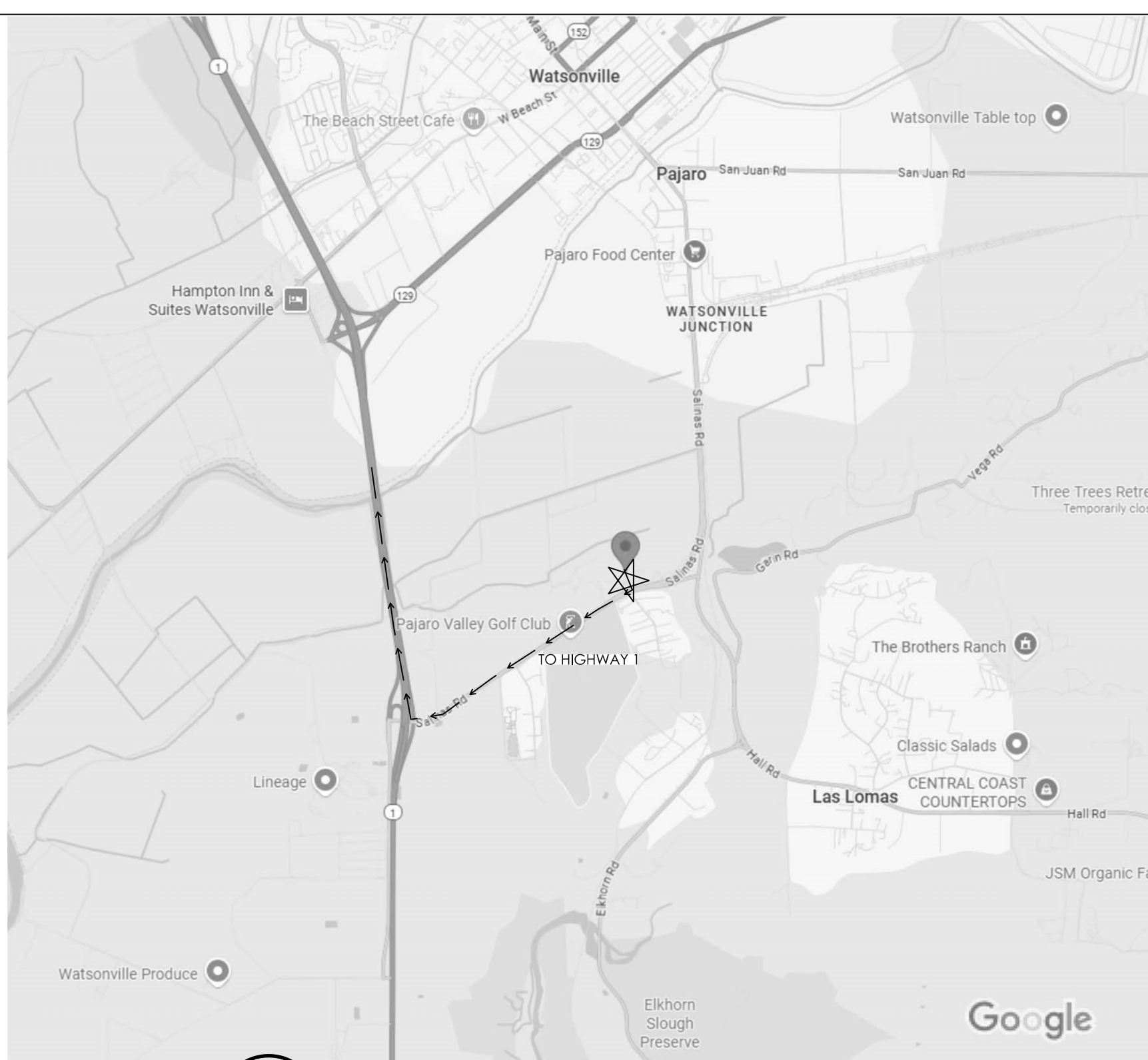
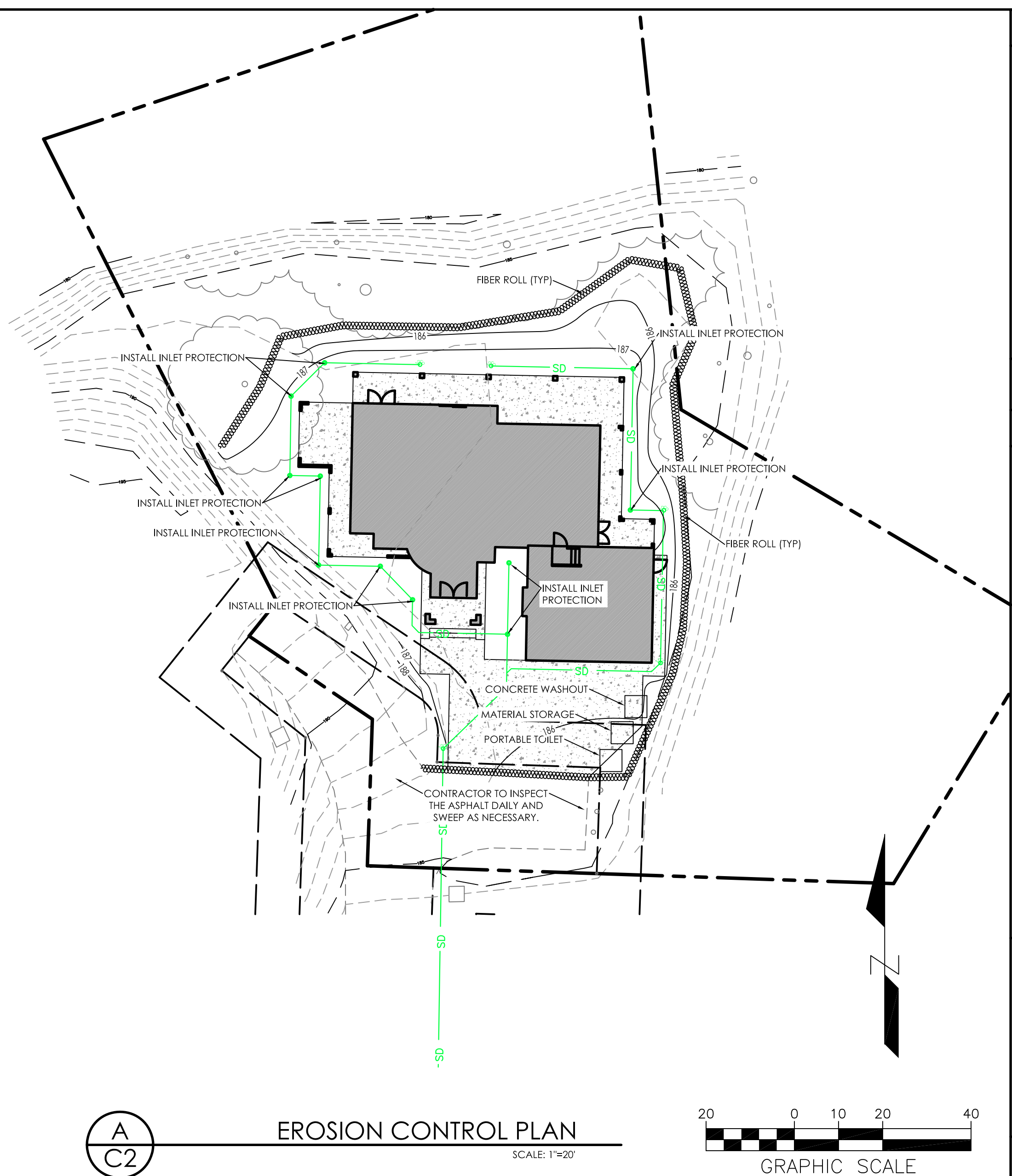
NTS



# C C2 INLET PROTECTION



# D C2 CONCRETE WASHOUT



F
C2

# CONSTRUCTION HAUL ROUTE

NTS

[illegible]

**AC3 ENGINEERING**  
INCORPORATED  
Civil Engineering Land Development Stormwater Control

Place, Suite C, Monterey, CA 93940  
(831) 647-1192 Fax (831) 647-1194  
mail@C3Engineering.net

# EROSION CONTROL PLAN

CASA ESCAREÑO

2220 SILVER STONE STREET  
ROYAL OAKS, CA 95076

SCALE:	AS NOTED
DATE:	7/22/2025
DESIGN BY:	JPR
DRAWN BY:	JPR
CHECKED BY:	
SHEET NUMBER:	

# C4

OF 4 SHEETS
PROJECT# 125112





STORMWATER CONTROL PLAN  
CASA ESCAREÑO  
TIER 1 LAND DEVELOPMENT PROJECT  
MONTEREY COUNTY

OWNER: TONY ESCAREÑO  
TONYESCARENO@GMAIL.COM

PREPARED BY: C3 ENGINEERING  
126 BONIFACIO PLACE, SUITE C  
MONTEREY, CA 93940  
(831)647-1192

JULY 2025

## Table of Contents

I.	Project Data .....	3
II.	Runoff Reduction Measure Checklists.....	4
III.	Certifications.....	4

## **Attachments**

- Attachment 1 Existing Conditions
- Attachment 2 Proposed Conditions
- Attachment 3 Stormwater Control Plan

## **Appendices**

- LOMA LINDA SUBDIVISION PLANS
- Soils Report prepared by: HARO, KASUNICH AND ASSOCIATES, INC

This Stormwater Control Plan was prepared using the Monterey Regional Stormwater Management Program template dated 18 February 2014.

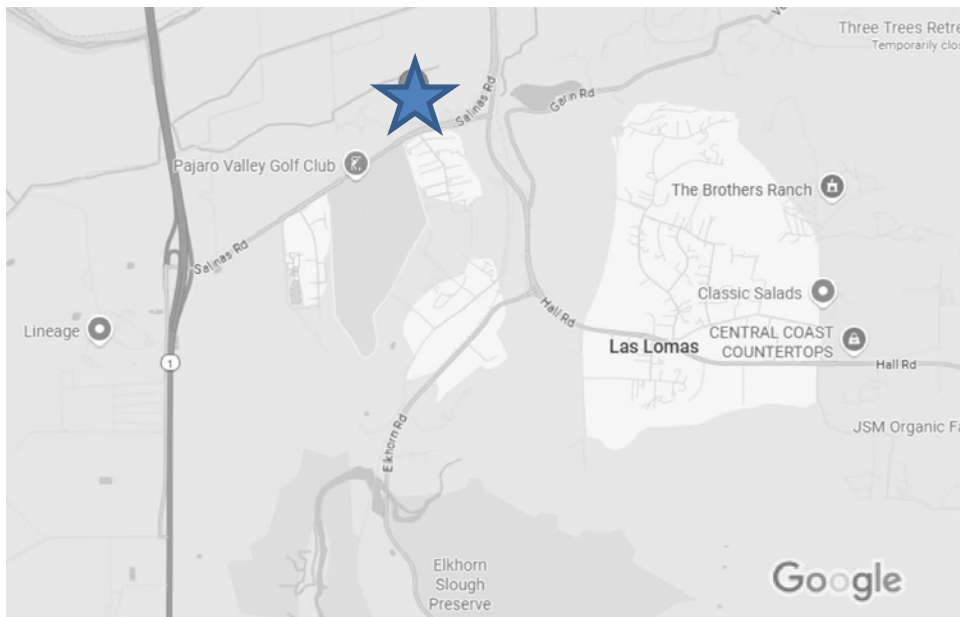


## I. Project Data

Table 1. Project Data

Project Name/Number	CASA ESCAREÑO
Project Location	2220 SILVER STONE STREET, ROYAL OAKS
Name of Owner or Developer	Tony Escareño
Project Type and Description	Single Family Residence
Total Project Site Area (acres)	0.55 acres
Total New Impervious Surface Area	5,280 SF
Total Replaced Impervious Surface Area	0 SF
Total Pre-Project Impervious Surface Area	0 SF
Total Post-Project Impervious Surface Area	5,280 SF
Regulated Project Requirements	Tier 1
Runoff Reduction Measures Selected	Loma Linda Subdivision provides overall storm water mitigation. No Site specific storm water mitigation proposed based on erosion and slope runoff concerns mentioned in the Soils Report and Loma Linda Subdivision Plans. See Appendices.

Vicinity Map (GOOGLE MAPS)



## II. Runoff Reduction Discussion

The proposed project has limited development to the building footprint, covered patio and driveway. The location of the building pad to steep slope conditions has been identified as an erosion concern and on-site storm water mitigation is not proposed to minimize this concern.

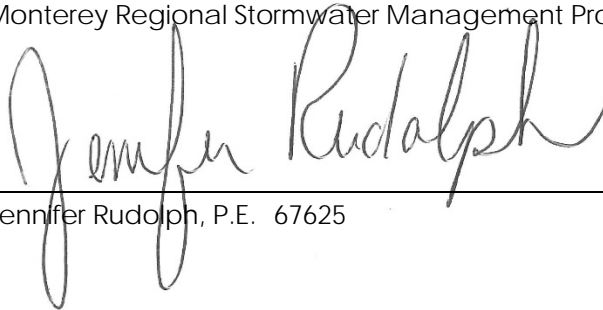
1. The following is from the soils report (See Appendices):
  - No roof and surface runoff should be allowed to flow on the adjacent north and east facing slopes. The site should be graded to flow toward existing stormwater drainage systems and away from slopes.
  - Roof eaves should have rain gutters and downspouts. Buried closed pipes connected to gutter downspouts should convey roof runoff to collection facilities and the existing subdivision stormwater drainage system.
2. The following note is from the Loma Linda Subdivision Plans (See Appendices):
  - All roof drainage shall be connected to the storm drain system

The overall Loma Linda Subdivision has provided overall storm water mitigation as follows (SOURCE: Loma Linda Subdivision Plans included in the Appendices)

DETENTION VOLUME		
DETENTION	WEST POND	6,000 CF
DETENTION PIPING	EST. 60" PIPE 375 LF	7,361 CF

## III. Certifications

The overall Loma Linda Subdivision has provided stormwater mitigation measures for the project. On-site mitigation is not proposed to reduce the slope erosion concern mentioned in both the soils report and the overall subdivision plans. Best effort was made to reduce the project footprint as much as possible in accordance with the current edition of the Monterey Regional Stormwater Management Program's Stormwater Technical Guide.



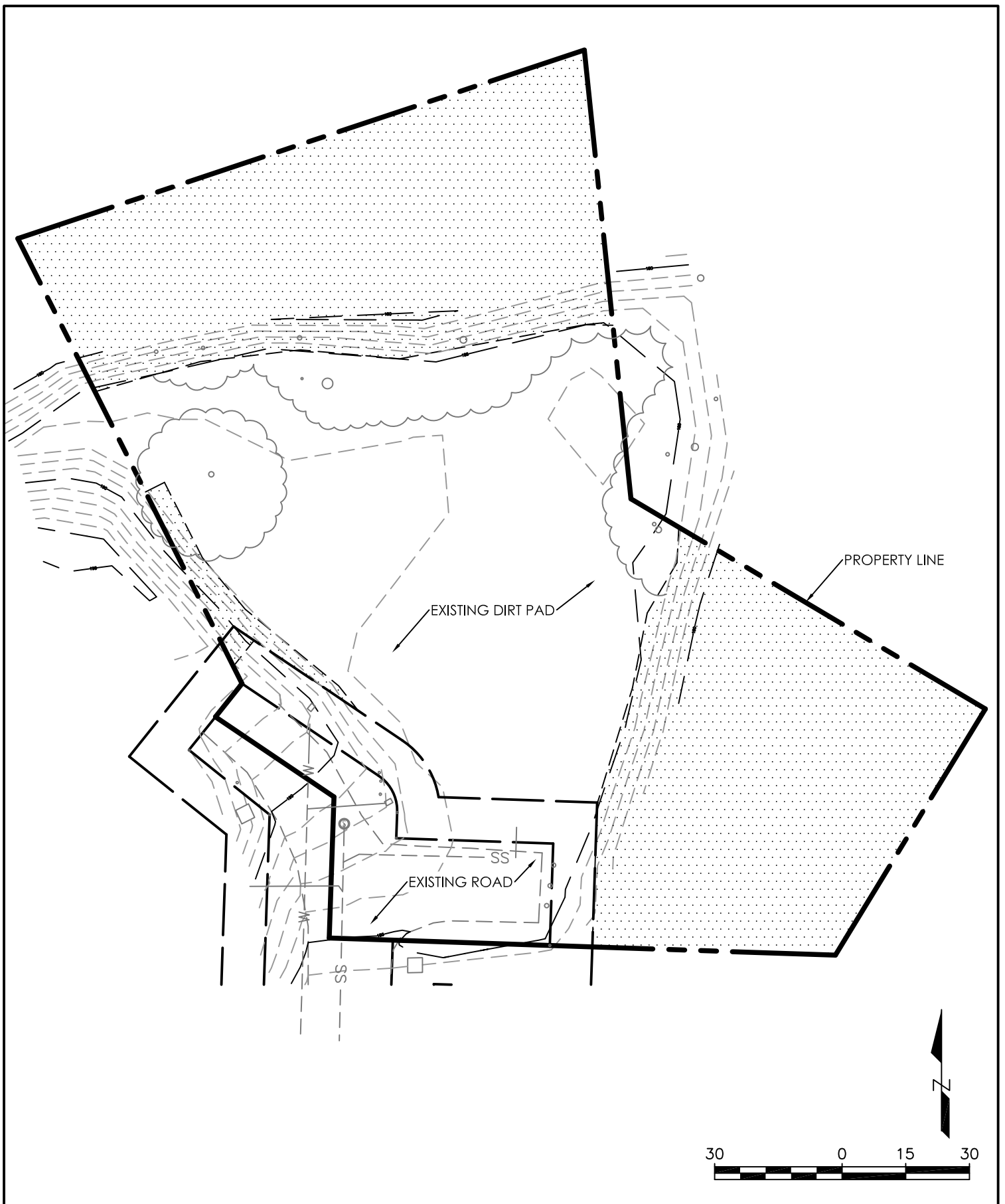
7/18/2025

Jennifer Rudolph, P.E. 67625

Date

# ATTACHMENT 1

## EXISTING CONDITIONS



EXISTING CONDITIONS

CASA ESCAREÑO

2220 SILVER STONE STREET  
ROYAL OAKS, CA 95076



126 Bonifacio Place, Suite C Monterey, CA 93940  
(831) 647-1192 (831) 647-1194 fax

SCALE: 1"=30'

DATE: 7/18/2025

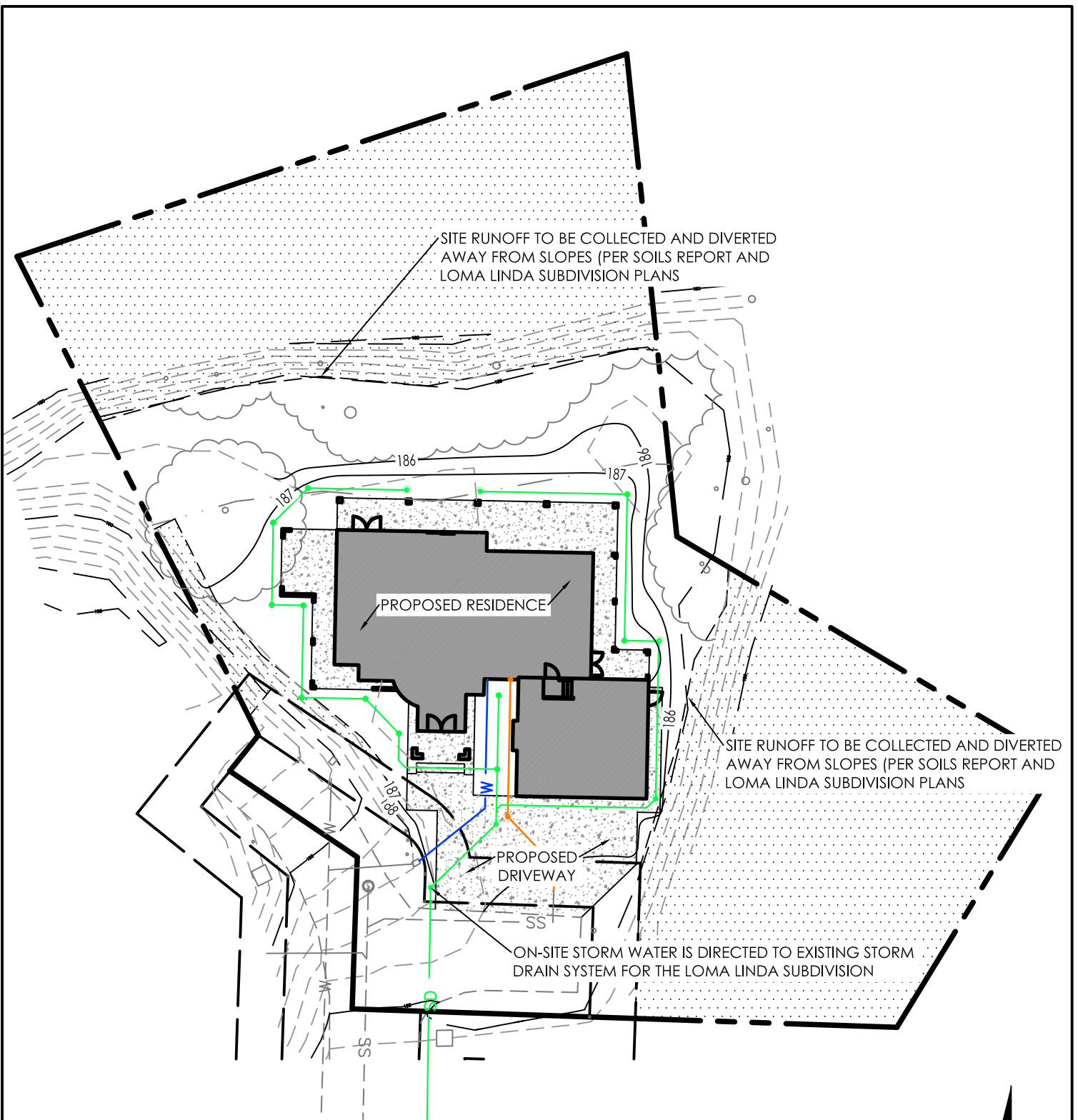
DRAWN BY: JPR

CHECKED BY:

PROJECT NO: 125112

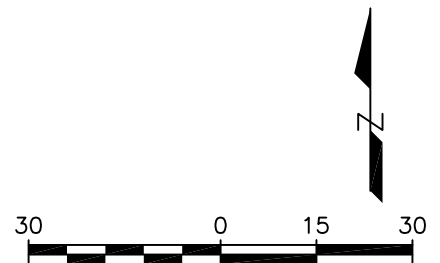
# ATTACHMENT 2

## PROPOSED CONDITIONS



#### STORM WATER MITIGATION DISCUSSION

1. THE LOMA LINDA SUBDIVISION PROVIDED STORM WATER MITIGATION FOR THE OVERALL PROJECT.
2. BOTH SUBDIVISION AND SITE SPECIFIC SOILS REPORT REQUIRE ROOF DRAINS BE DIRECTLY CONNECTED TO EXISTING STORM DRAIN SYSTEM.
3. BASED ON THE ABOVE, NO-ON SITE STORM WATER MITIGATION IS PROPOSED.



### PROPOSED CONDITIONS

#### CASA ESCAREÑO

2220 SILVER STONE STREET  
ROYAL OAKS, CA 95076



126 Bonifacio Place, Suite C Monterey, CA 93940  
(831) 647-1192 (831) 647-1194 fax

SCALE: 1"=30'

DATE: 7/18/2025

DRAWN BY: JPR

CHECKED BY:

PROJECT NO: 125112

# APPENDICES

# Loma Linda Subdivision

## Monterey County California

GENERAL NOTES

- All work shall be in conformance with the following:
  - Standard Details and Roadway Design Standards and Standard Property Development Specifications of the County of Monterey Public Works Department.
  - California Administrative Code, Title 22, Division 4, Environmental Health for Domestic Water Systems.
  - Specifications and requirements of the Pajaro/Sunny Mesa Community Services District.
  - Caltrans Standard Specifications and Standard Plans, latest edition.
  - Specifications and requirements of the North Monterey County Fire Protection District.
- The construction of structures, roadways, and improvements shall conform to the recommendations stated in Geologic Investigation report prepared by Haro, Kasunich and Associates, Project No. M5364, dated January 3, 1997.
- The construction and location of improvements shall be in accordance with the Geotechnical investigation report prepared by Haro, Kasunich and Associates, Project No. M5364, dated January 3, 1997.
- Contractor shall secure and comply with Monterey County and Pajaro/Sunny Mesa Community Services District permit requirements for grading, erosion control, encroachment, inspection, installation, etc.
- Contractor shall supply all equipment, labor and materials necessary to perform the work shown on this plan. Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the method needed for proper performance of the work.
- Contractor shall coordinate all work, including sub-contractors' work, so as to eliminate conflicts and work towards the general good and completion of the entire project.
- Contractor is responsible for compliance with any currently applicable safety law of any jurisdictional body. For information regarding this provision, the Contractor is directed to contact the State of California, Division of Occupational Safety and Health, San Francisco, CA Phone (415) 557-1677. The Contractor shall be responsible for all barricades, safety devices, and control of traffic within the construction area. For all trench excavation five (5) feet or more in depth, the Contractor shall obtain a permit from the Division of Occupational Safety and Health, 455 Golden Gate Avenue, San Francisco, CA 94102, Phone (415) 557-1677, prior to beginning any excavation. A copy of this permit shall be available at the construction site at all times.
- The Contractor shall be responsible for traffic control. All warning and traffic control signs and locations for the signs shall be in accordance with County requirements.
- Construction contractor agrees that in accordance with generally accepted construction practices, Construction Contractor will be required to assume sole and complete responsibility for the job site conditions during the course of construction of the project, including safety of all persons and property, that this requirement shall be made to apply continuously and not be limited to normal working hours, and Construction Contractor further agrees to defend, indemnify and hold Design Professional, and the Owner harmless from all liability, real and alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of the Design Professional or the Owner.
- The Construction Contractor shall be responsible for traffic control. All warning and traffic control signs and locations for the signs shall be in accordance with County requirements.
- No changes in the approved Improvement Plans shall be made without prior approval of the Engineer.
- Underground utility locations shown are compiled from information supplied by the appropriate utility agency. The Contractor shall verify location of affected utility lines and pothole those areas where potential conflicts are likely or data is otherwise incomplete.
- Between October 15 and April 15, exposed soil shall be protected from erosion at all times. During construction, such protection may consist of mulching and/or planting of native vegetation of adequate density. Before completion of the project, any exposed soil on disturbed slopes shall be permanently protected from erosion.

GRADING AND PAVING

- All work shall be in conformance with County Roadway Design Standards, and Standard Property Development Specifications, Caltrans Standard Specifications and the special Provisions.
- The Contractor shall notify the County 48 hours before starting grading work.
- All soil shall be compacted to a minimum of 90% relative compaction, as required by the ASTM test designations D1557, D1558, and D2992, except the pavement sub-grade. The upper layer of subgrade shall be compacted to 95 % relative compaction, the exact depth shall be determined by the soils engineer and/or as shown on these plans.
- At all times during construction and until final completion, the Contractor, when he or his subcontractors are operating equipment on the site, shall prevent the formation of an airborne dust nuisance by watering and/or treating the site of the work in such a manner that will confine dust particles to the immediate surface of the work. The contractor will be responsible for any damage done by the dust from his or her subcontractor's activities performing the work under this contract.
- Approval of the Owner or his authorized representative is required on completed work prior to:
  - placing of any concrete,
  - placing of aggregate base,
  - placing of asphaltic concrete,
  - back filling trenches for pipe.Work done without such approval shall be at the Contractor's risk. Such approval shall not relieve the Contractor from the responsibility of performing the work in an acceptable manner.
- Prior to performing the final grading and sub-grade compaction for the paved areas, the Contractor shall review the proposed grades with the Engineer and comply with his request for any minor grade changes.
- Earthwork: The grading quantities associated with the earthwork and construction of this project is less than 100 CY.
- Lots 1 and 2 are in a fill area. Contractor to key the toe of slope per the direction of the geotechnical engineer. Existing fill material is to be removed and recompacted as specified in the geotechnical report. All work to be done per the recommendations of the geotechnical engineer and inspected by the geotechnical engineer.
- Contractor to coordinate inspection with the geotechnical engineer, Haro, Kasunich & Associates, telephone number 831-722-4175.
- Drainage away from houses shall be 2% away from the house for a minimum of 3 feet.
- A copy of all compaction tests and the final grading report shall be submitted to the County prior to scheduling any inspections.

CONCRETE

- All concrete work shall be in accordance with standard practices as described in publications issued by American Concrete Institute (ACI).
- All concrete work shall be true to line and grade as indicated on drawings.
  - Coordinate items of other trades. Contractor shall be responsible for the proper installation of all accessories embedded in the concrete and for the provision of holes, openings, etc., as necessary to the execution of the work of the trades.
  - Concrete for retaining walls, gutters, curbs, and all concrete exposed to weather shall be provided as specified herein, 2,800 psi at 28 days.
  - Cement shall be Portland cement conforming to ASTM C150 Type I.
  - Sand shall be washed natural, well shaped, hard, durable grains, containing not more than 1% silt and clay by weight, free of detrimental amounts of alkali, organic matter, etc.
  - Water for mixing and curing and mixed with aggregates shall be fresh, clean, and potable.
  - Aggregates shall conform to specifications of ASTM C33.
  - Reinforcement steel shall conform to ASTM A615 grade 40.
  - Workmanship shall be of the highest standards. During finishing, cement shall not be applied to dry the concrete surface. Surfaces shall be consistently finished throughout the job. Scored joints shall be straight and level.
  - Curing shall begin as soon as free water has disappeared from concrete surfaces after placing and finishing. Curing materials shall be applied and maintained so to protect the concrete from moisture loss. Water shall be potable.

UNDERGROUND NOTES (GENERAL)

- Contractor shall expose and verify location and elevation of existing utilities, including storm drains, sanitary sewers and water lines before constructing new facilities.
- All manholes and valve boxes shall be set flush with finished grade, unless otherwise noted.
- All trenches and excavations shall be constructed in strict compliance with the applicable sections of California and Federal OSHA requirements and other applicable safety ordinances. The Contractor shall bear full responsibility for trench shoring, design, and installation. See General Notes, Note 7.
- Where unstable or unsuitable materials are encountered during subgrade preparation, the area in question shall be over-excavated and replaced with select backfill as directed in the field by the Soils Engineer.
- Magnetic marker tape, equal to Lineguard, Inc., shall be placed along the centerline of waterlines, between backfill and baserock in paved areas of 12" deep within easements and other unpaved areas.

WATER SYSTEM

- All materials installed for the facilities shall comply with the pajaro/sunny mesa community service District specifications and/or approved. The contractor shall submit shop drawings and/or catalog cuts of material to be furnished and installed for approval prior to start of construction.
- All PVC pipe shall be Class 150 unless otherwise specified on the drawings and shall comply with AWWA Standard C900.
  - All steel pipe shall be standard steel pipe Schedule 40 unless otherwise specified on the drawings.
  - All fittings shall be Cast Iron or Ductile Iron complying with AWWA Standard C110-87 including flange length, radii and metal thickness. They may have either Hub End or rubber ring type joints, except tees for connections to fire hydrants or fire services shall have flanged outlets. All fittings shall be cement lined in conformance with AWWA Standard C104-85.
  - All gate valves shall comply with AWWA Standard C500-86, or C509-87 for Resilient-Seated Gate Valves, and shall be provided with "O-ring" packing, left hand to open, C.I., bronze mounted, non-rising stem, nut operated with 2" square operating nuts. Main line valves shall be rubber ring type joints, and valves for connections to fire hydrants or fire services shall be Flanged by Mechanical Fitting Co., or Stockham Valves & Fittings. Kennedy Valve Co. is acceptable for Resilient-Seated Valves only.
  - All valves for tapping purposes shall be Resilient-Seat Type with Flanges by Mechanical Joint ends. They shall be Mueller Co. #A-2370-16, M. & H. Valve & Fitting Co. #3067-13, Stockham Valve & Fittings #G-702-0 or Kennedy Valve Co. #1572-X.
  - All valve boxes and covers shall be manufactured by Christy Concrete Company, Curb Valve Box No. F8, with lid.
  - All cement shall comply with ASTM Specification C150-59.
  - All copper tubing shall conform to ASTM Specification B88-66 and be Type K soft.
  - All plastic pipe shall conform to ASTM D2239 with a Standard Code Designation of PE 3408. Dimensions and tolerance of pipe shall be as specified for AWWA Standard C901 for SDR 7 I.D. This is a high-density polyethylene plastic tubing in iron pipe sizes having a 200 p.s.i. pressure rating and shall be approved by N.S.F. as suitable for potable water products.
  - All meter boxes shall be manufactured by Christy Concrete Company, box number B12 for 3/4" services and Christy Concrete Company, box number B16 with B16-61G cover for 1" services. Boxes for services larger than 1" will be specified on the drawings.
  - Service saddles shall be all Bronze No. J-996 manufactured by James Jones Company, No. S-90 manufactured by the Ford Meter Box Company, or H-13400 Series for Cast Iron OD dimension manufactured by Mueller Company.
  - The Contractor shall notify the District and customers to be effected by water shutdowns a minimum of twenty-four (24) hours in advance.
  - The Contractor is required to possess a valid "A" license with proof of insurance or bond, with a copy of each to be submitted to District prior to commencing work.
  - connection to existing water line per pajaro/sunny mesa community service district standards and direction, contact Joe Rosa Prior to connection.

STORM DRAIN

- Storm drain system shall be installed, backfilled, and compacted in accordance with special provisions and the Standard Specifications.
- Storm drain manholes shall be constructed to Plate No. 19 of the Standard Details. The manhole cone shall be concentric.
- Drop inlets (and/or catch basins) shall be constructed to Plate Nos. 15 TYPE I and 18 TYPE I of the Standard Details.
- All roof drainage shall be connected to the storm drain system.

TESTING

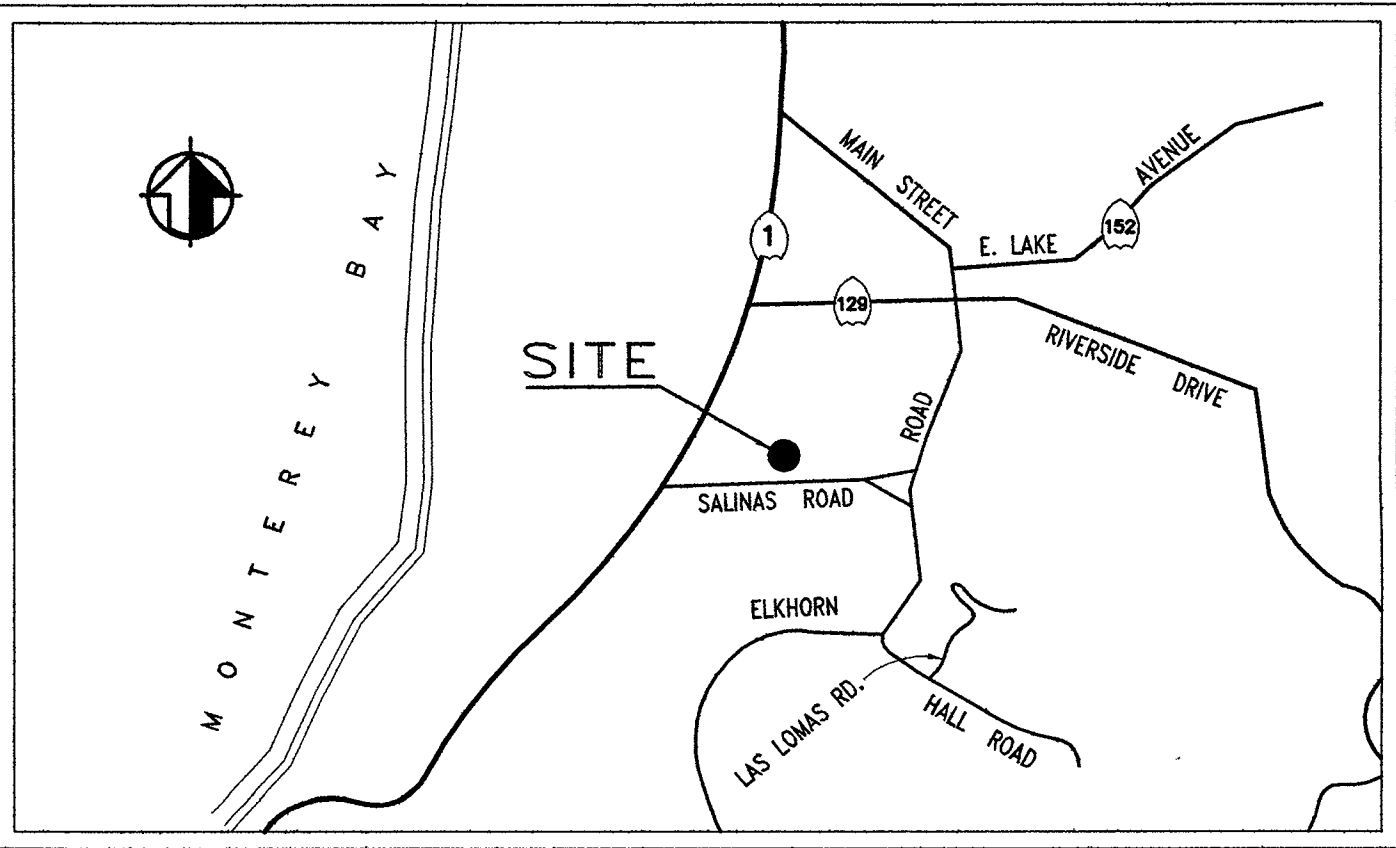
- All water pipe and appurtenances, after installation will be subjected to a hydrostatic pressure test and a leakage test in the presence of the District. The contractor shall coordinate the combined hydrostatic and leakage test and notify the District forty-eight (48) hours prior to the scheduling of such tests.
- The sterilization of the water mains, reservoirs, and all appurtenances shall be the responsibility of the Contractor and shall meet all requirements of the Monterey County Department of Public Health and the sterilization procedure shall be in accordance with AWWA Standard C-601. Sterilization shall be done under the District's supervision. Bacteriological testing shall be performed by a competent state certified laboratory. Costs of all required tests will be the responsibility of the Contractor.

BASIS OF BEARINGS

For this survey is the boundary line shown as S 3°26' E 2706.93 feet on the map recorded in Volume 24 of Surveys at page 6, Monterey County records and established from monuments found as shown = S 3°26' E (from recorded subdivision map).

BENCHMARK

USC&GS BM No. 739 10'± East of western entrance to Pajaro Valley Golf Course. Elev. = 169.31



VICINITY MAP  
PAJARO, CA.  
N.T.S.

LIST OF DRAWINGS

- |    |                           |
|----|---------------------------|
| C1 | COVER SHEET & NOTES       |
| C2 | SITE UTILITY PLAN         |
| C3 | SITE GRADING PLAN         |
| C4 | SITE EROSION CONTROL PLAN |
| C5 | PLAN & PROFILE            |
| C6 | PLAN & PROFILE            |
| C7 | DETAILS                   |
| C8 | SCENIC EASEMENT EXHIBIT   |

CONFORMS TO APPLICABLE ORDINANCES AND REQUIREMENTS

Any revisions to these plans subsequent to signing must be approved and authorized by the Department of Public Works

Public Works Director  
By \_\_\_\_\_ Date \_\_\_\_\_  
Deputy

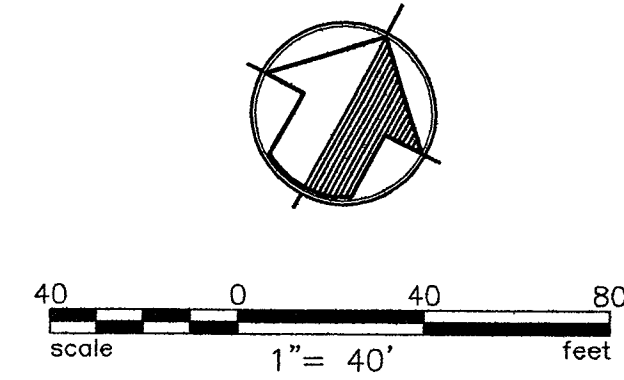


Consulting Civil and Structural Engineers  
1075 N. TENTH STREET SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234

FAIRFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA

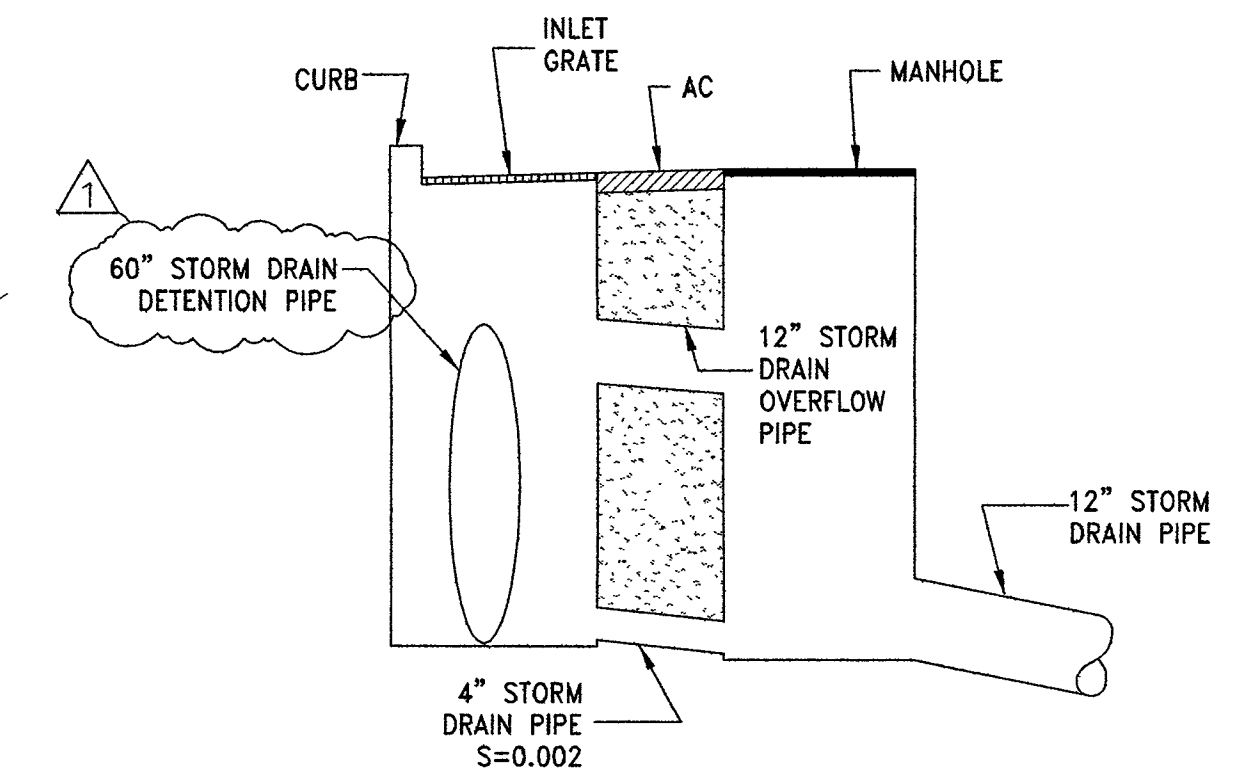
SHEET NUMBER  
**C1**  
OF 8 SHEETS  
PROJECT NO.  
101019



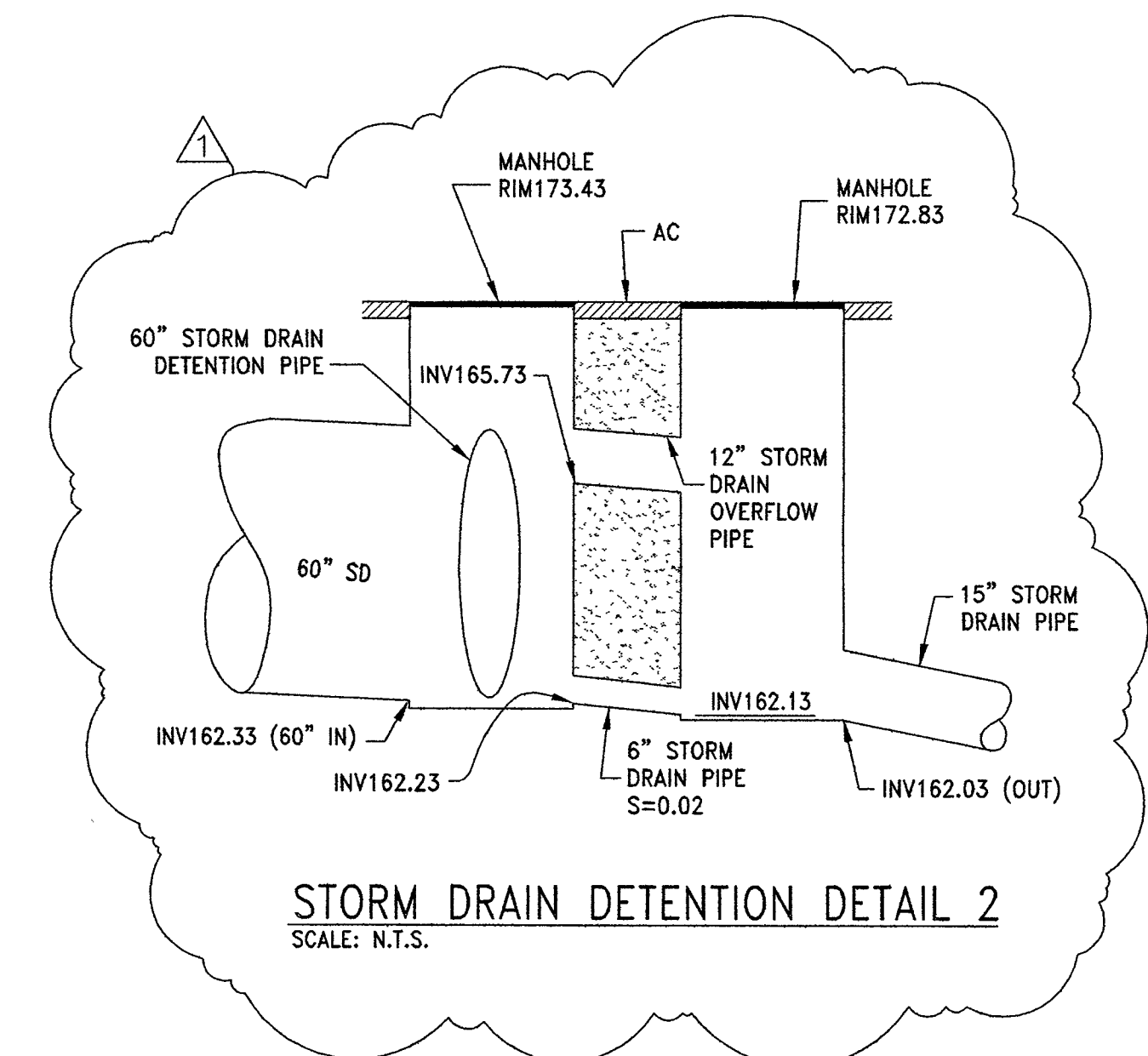


# NOTES:

1. ALL ROOF LEADERS TO BE CONNECTED TO STORM DRAIN SYSTEM.
2. CONTRACTOR TO VERIFY EX. UTILITY LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION.
3. ELECTROLIERS:  
  
POST: 14" STEEL POLE (SEE SHEET 4,  
DRAWING 029690, PG&E DETAILS)  
  
POST TOP: "MC-ED CO. STYLEKING" (SEE  
SHEET 2, DRAWING 029690,  
PG&E DETAILS)
4. ALL WATER AND SEWER CROSSINGS AND SEPARATIONS SHALL CORRESPOND TO  
THE CALIFORNIA DEPARTMENT OF HEALTH SERVICE STANDARDS.
5. ALL WATERLINE CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH THE  
PAJARO/SUNNY MESA CSD STANDARD SPECIFICATIONS AND DRAWINGS.



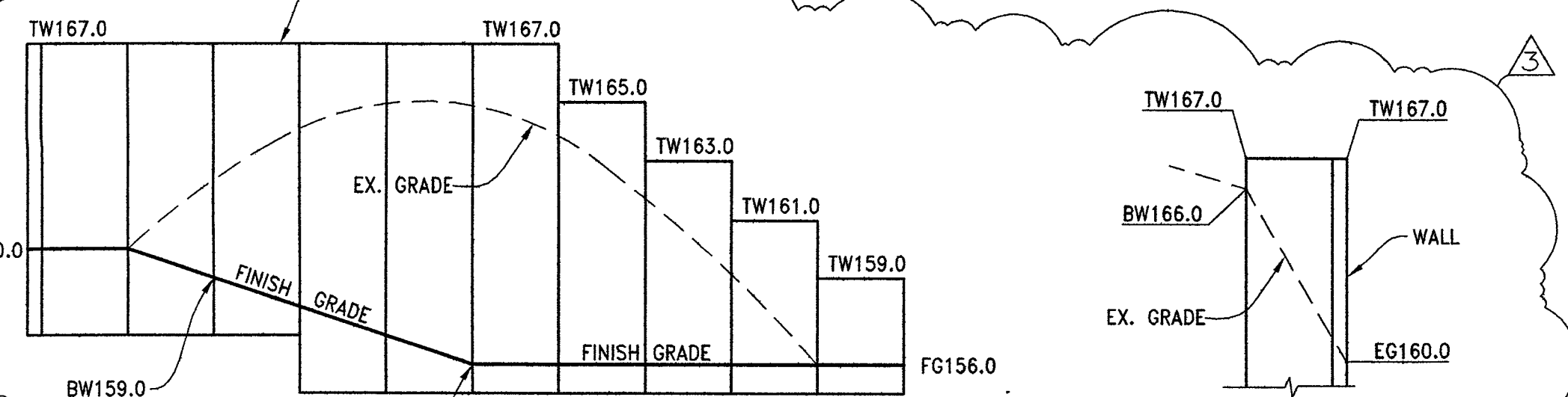
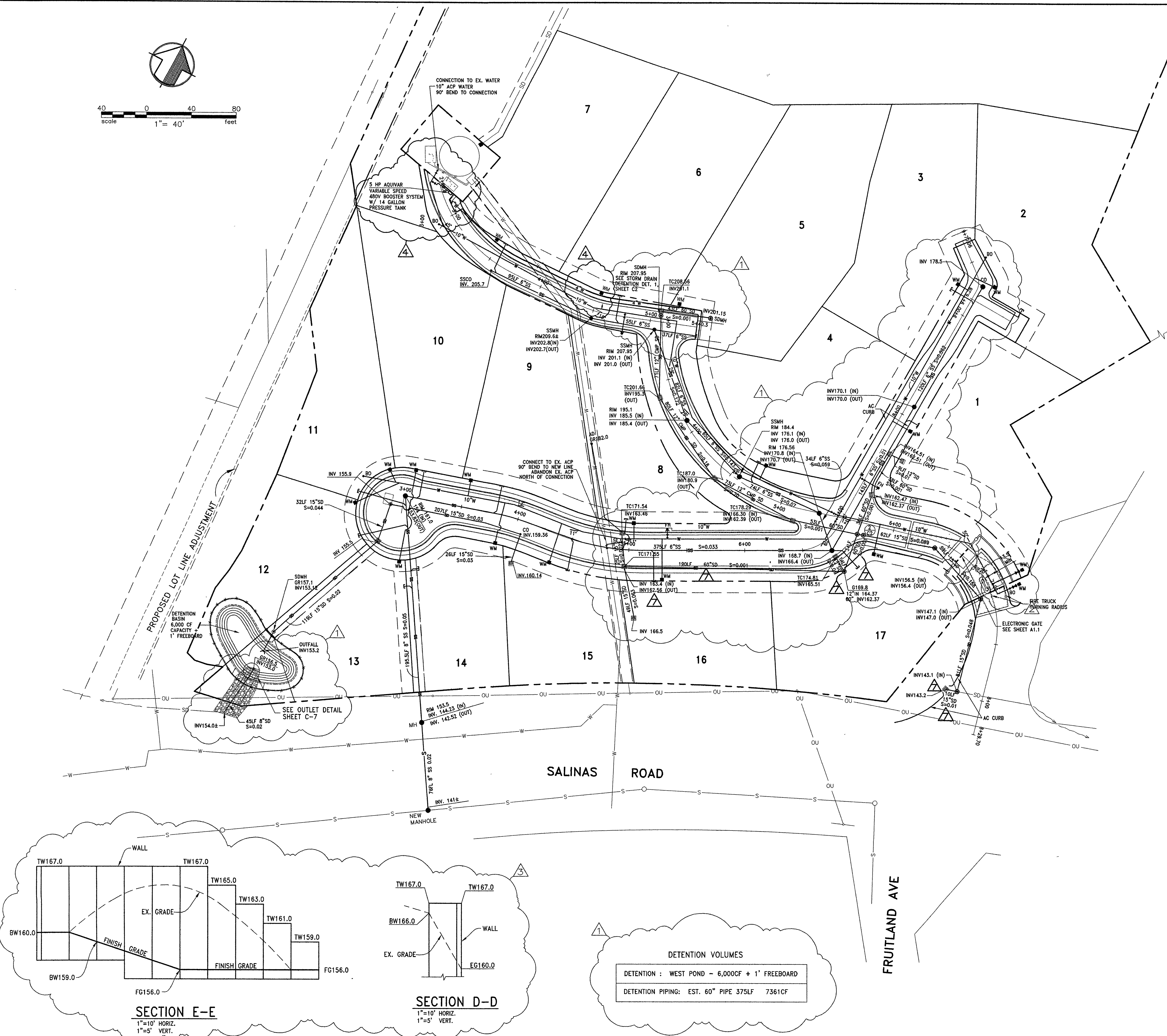
STORM DRAIN DETENTION DETAIL 1  
SCALE: N.T.S.



STORM DRAIN DETENTION DETAIL 2  
SCALE: N.T.S.

# LEGEND:

- |                   |        |
|-------------------|--------|
| NEW WATERLINE     | — W —  |
| SEWERLINE         | — SS — |
| STORMLINE         | — SD — |
| MANHOLE           | ●      |
| WATER METER       | ■      |
| NEW GATE VALVE    | ⊕      |
| NEW FIRE HYDRANT  | ⊕      |
| STORM CATCH BASIN | ■ CB   |
| ELECTROLIER       | ⊕      |

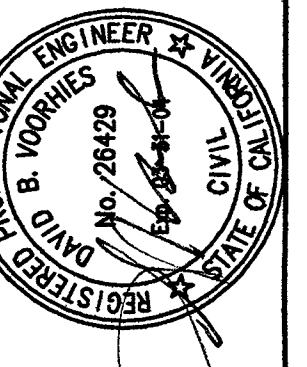


SECTION E-E  
1"=10' HORIZ.  
1"=5' VERT.

SECTION D-D  
1"=10' HORIZ.  
1"=5' VERT.

# DETENTION VOLUMES

DETENTION : WEST POND - 6,000CF + 1' FREEBOARD  
DETENTION PIPING: EST. 60" PIPE 375LF 7361CF



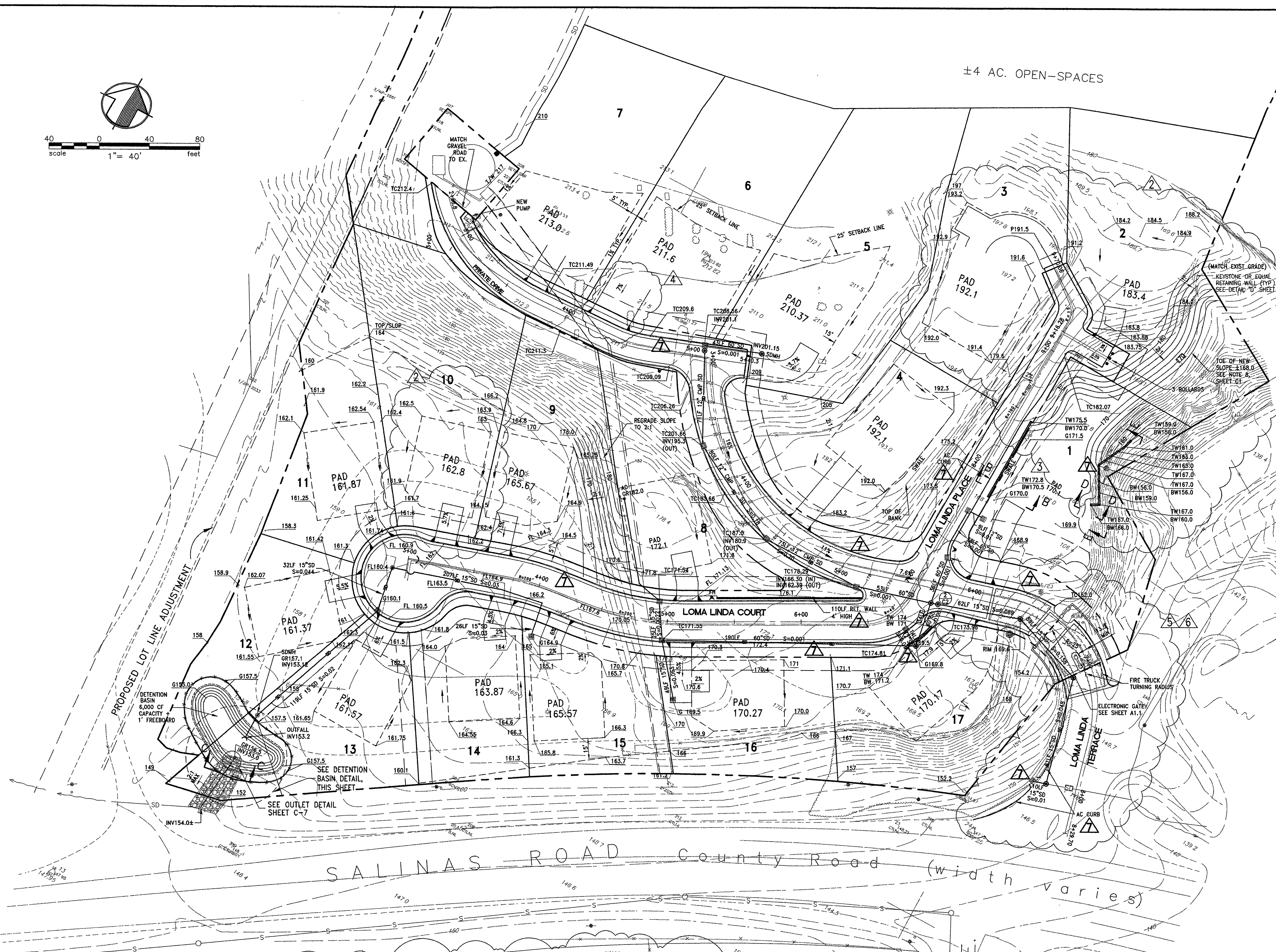
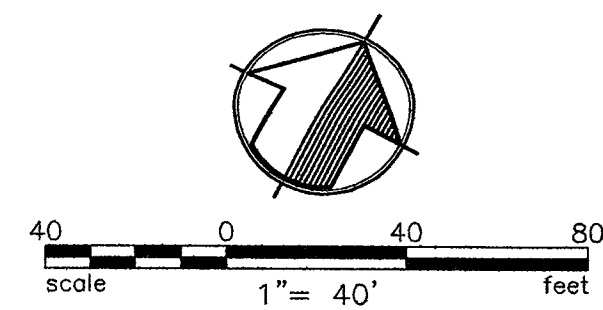
DESIGNED BY	DBV
DRAWN BY	ESB
CHECKED BY	DBV
SCALE	1"=40'
DATE	

Consulting Civil and Structural Engineers  
107E N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234  
FAIRFELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE-CALIFORNIA

SITE UTILITY PLAN  
LOMA LINDA SUBDIVISION  
MONTEREY COUNTY  
CALIFORNIA

SHEET NUMBER  
C2  
OF 8 SHEETS  
DRAWING NO.  
101019



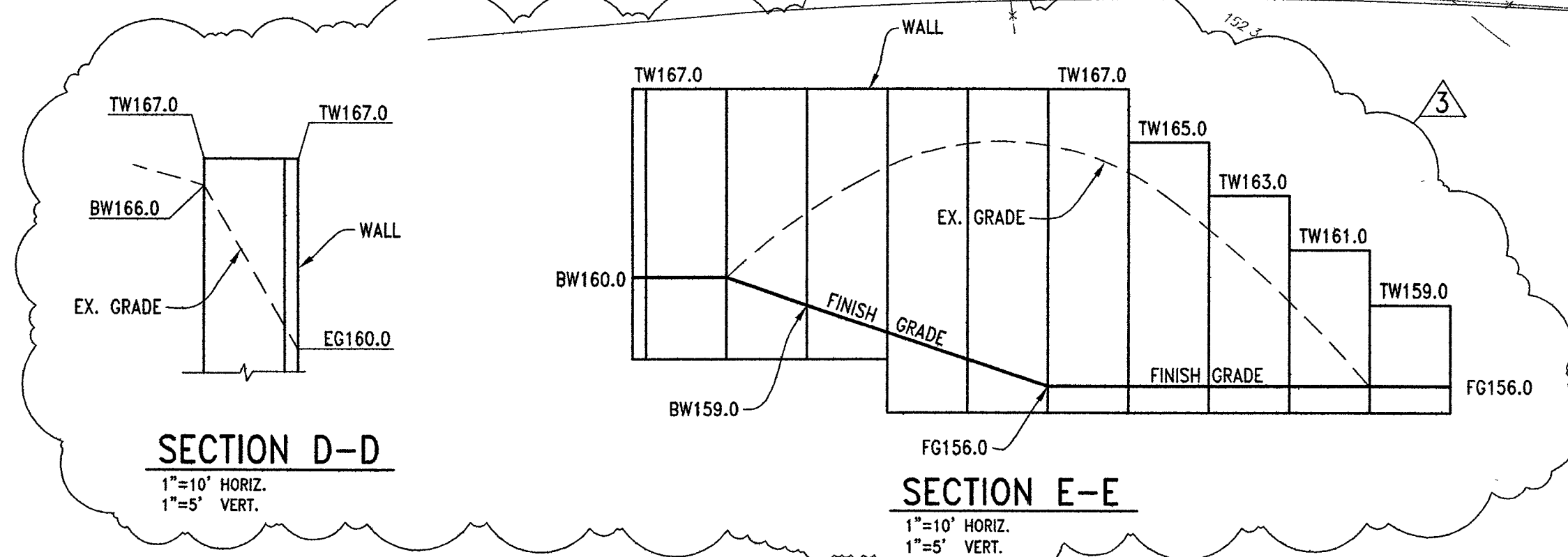


#### BASIS OF BEARINGS:

FOR THIS SURVEY IS THE BOUNDARY LINE SHOWN AS S 3°26' E 2706.93 FEET ON THE MAP RECORDED IN VOLUME 24 OF SURVEYS AT PAGE 6, MONTEREY COUNTY RECORDS AND ESTABLISHED FROM MONUMENTS FOUND AS SHOWN = S 3°26' E (FROM RECORDED SUBDIVISION MAP).

#### BENCHMARK:

USC&GS BM NO. 739 10'± EAST OF WESTERN ENTRANCE TO PAJARO VALLEY GOLF COURSE. ELEV. = 169.31



#### NOTES:

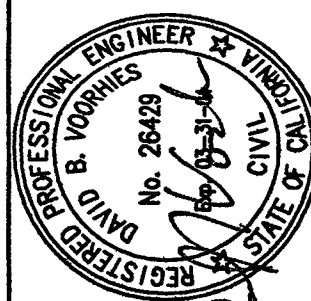
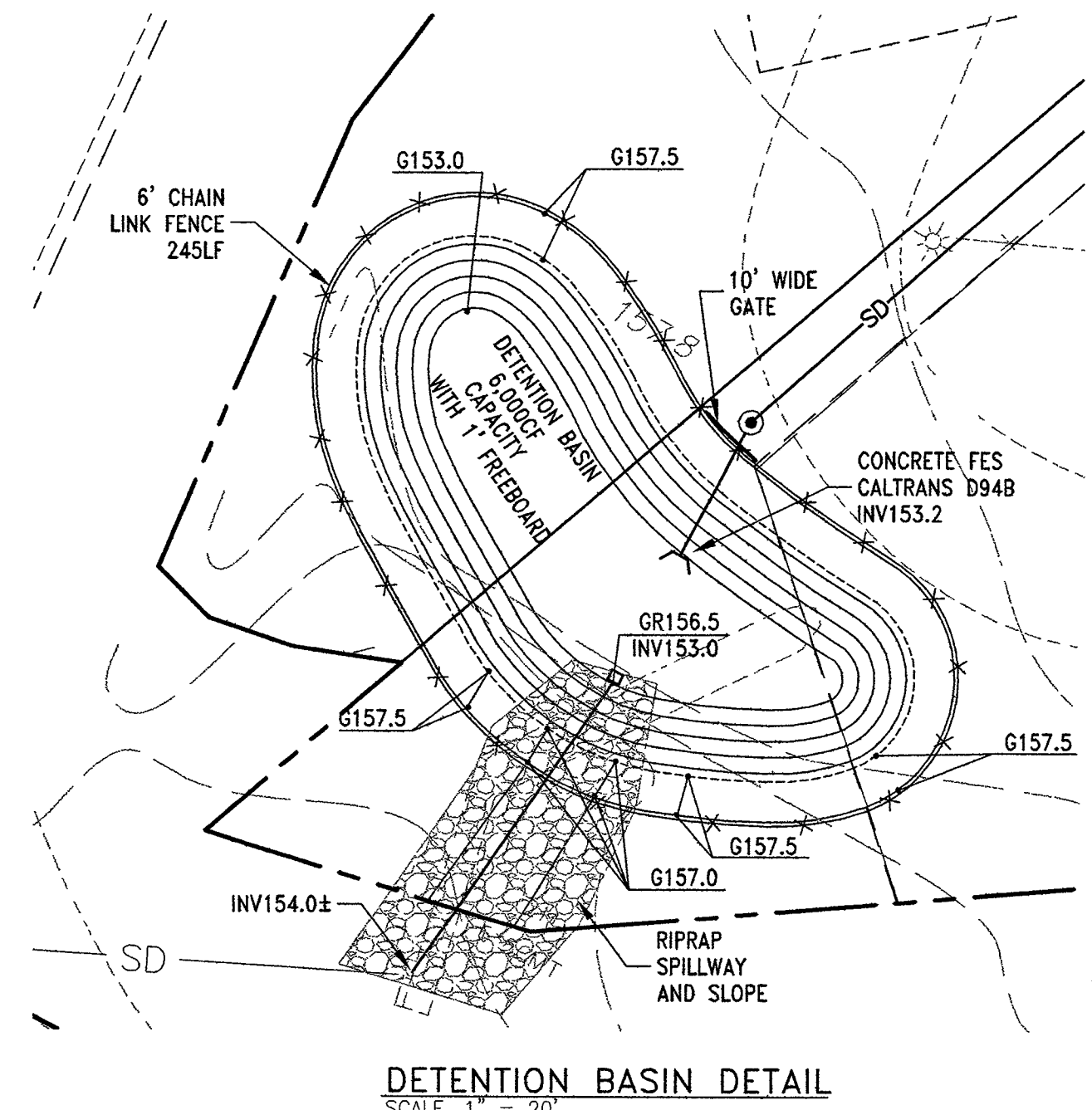
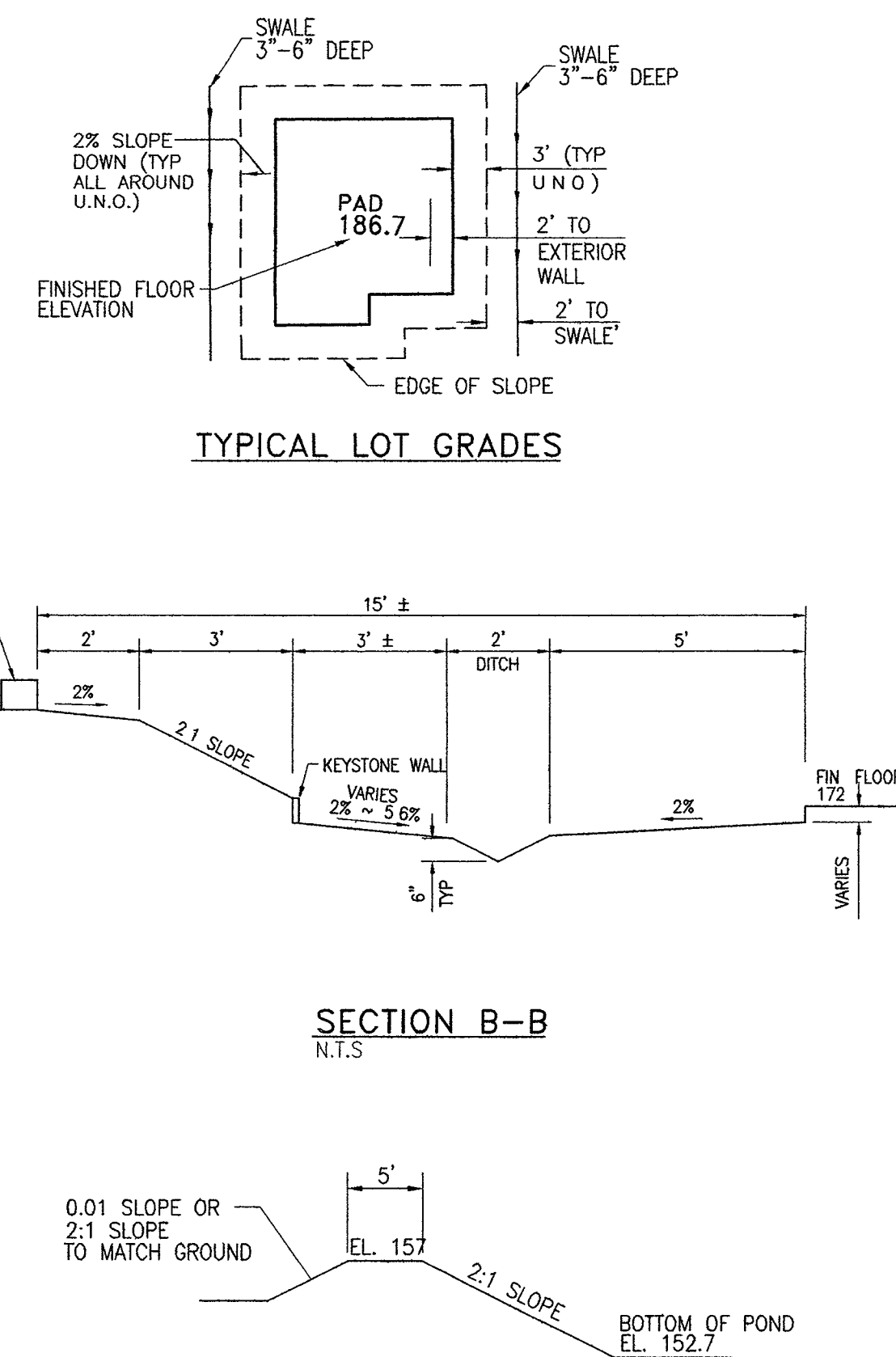
1. A copy of all compaction test and the final grading reports shall be submitted to the County prior to scheduling any inspections.
2. Pad elevation/s shall be certified to 0.1' prior to digging any footings or scheduling any inspections.
3. All roof leaders to be connected to storm drain system.

#### EARTHWORK:

CUT: 9400 CY  
FILL: 11500 CY (INCLUDES 10% SHRINKAGE)  
NET: 2100 CY (FILL)

#### LEGEND:

KEYSTONE OR EQUAL RETAINING WALL TYP. 0' TO 6'	
STORM CATCH BASIN	
TOP/TOE OF SLOPE	
SWALE	
GRADE	
TOP OF WALL	TW
BOTTOM OF WALL	BW
EDGE OF PAVEMENT	EP

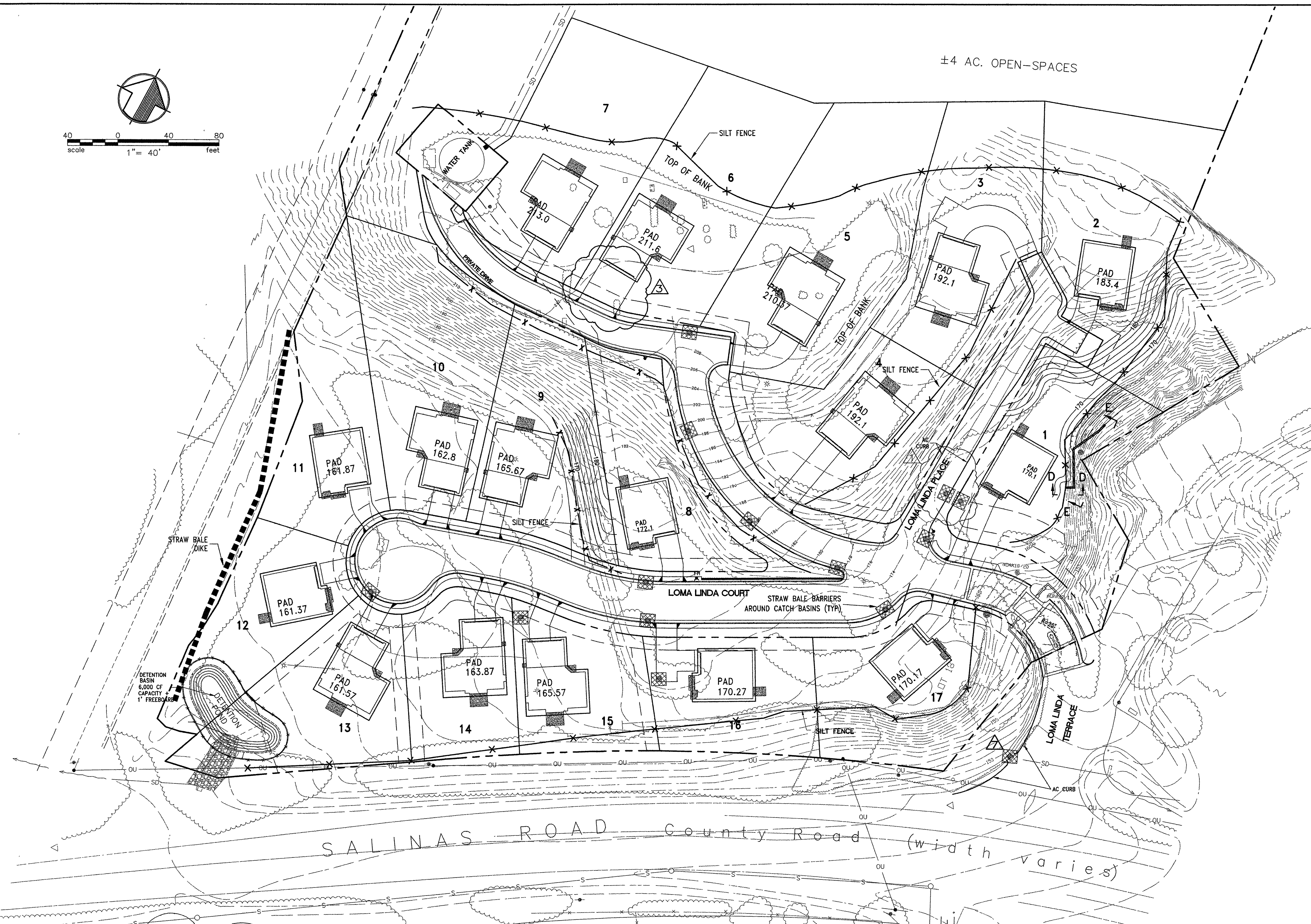
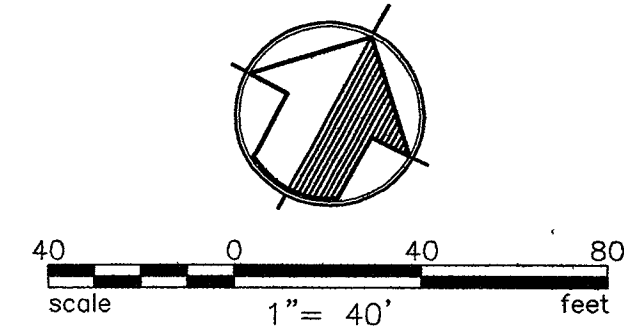


DESIGNED BY	CHECKED BY	DATE	DESCRIPTION
DBV	ESB	9-14-03	AS BUILT REVISION SWALE, OR RET. WALL, SIDEWALK & AC CURB
		9-14-03	REVISE ENTRY, ADD SIDEWALK
		9-14-03	RELOCATE DRIVEWAY & WIDEN FROM 10' TO 30'
		9-14-03	REVISED LOT GRADING
		9-14-03	REVISED SD LINE, SD INVERT & SS LINE SLOPE
		9-14-03	

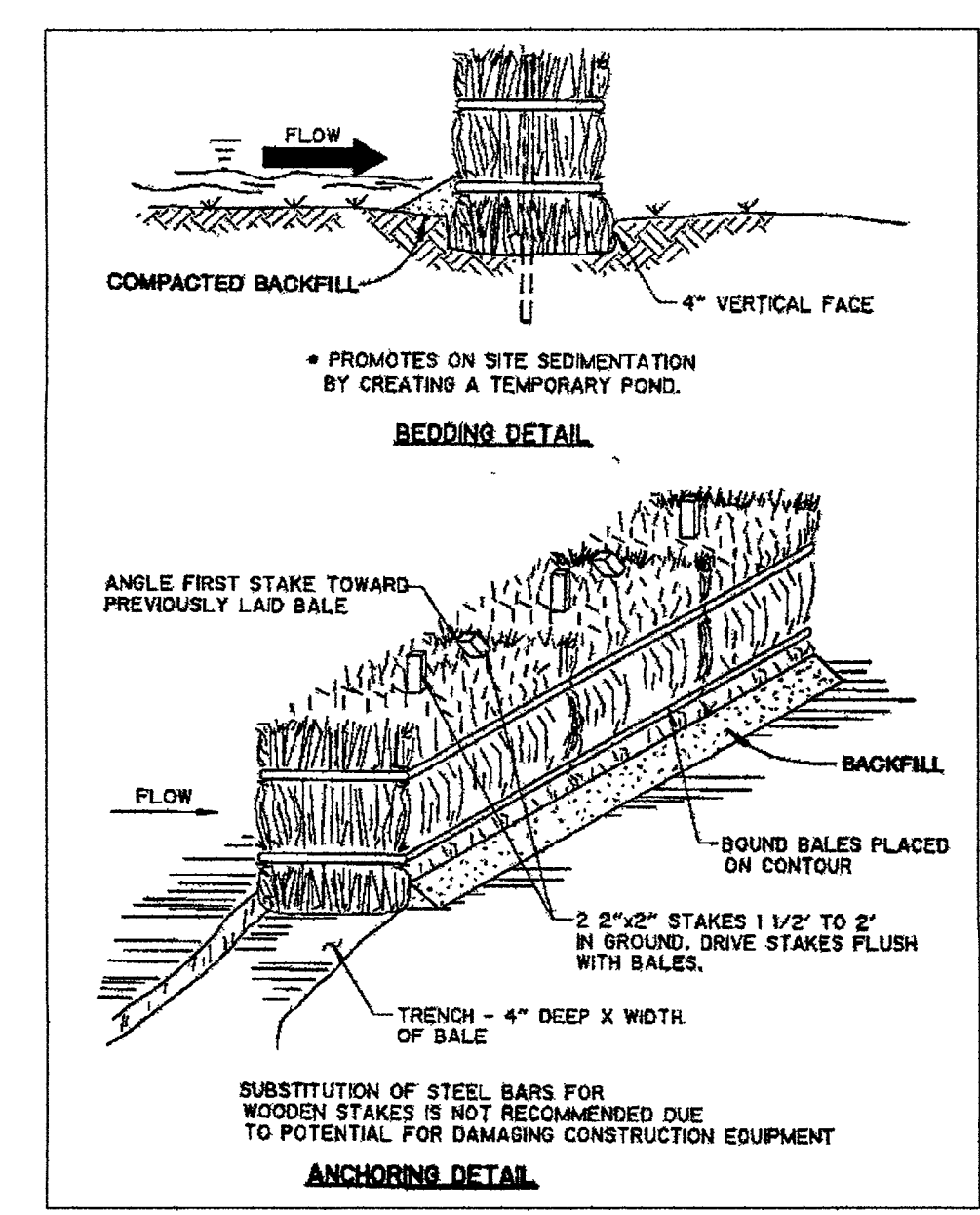
Consulting Civil and Structural Engineers  
1075 N TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 988-1234  
FARFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA

SITE GRADING PLAN  
LOMA LINDA SUBDIVISION  
MONTEREY COUNTY  
SHEET NUMBER  
C3  
OF 8 SHEETS  
DRAWING NO.  
101019

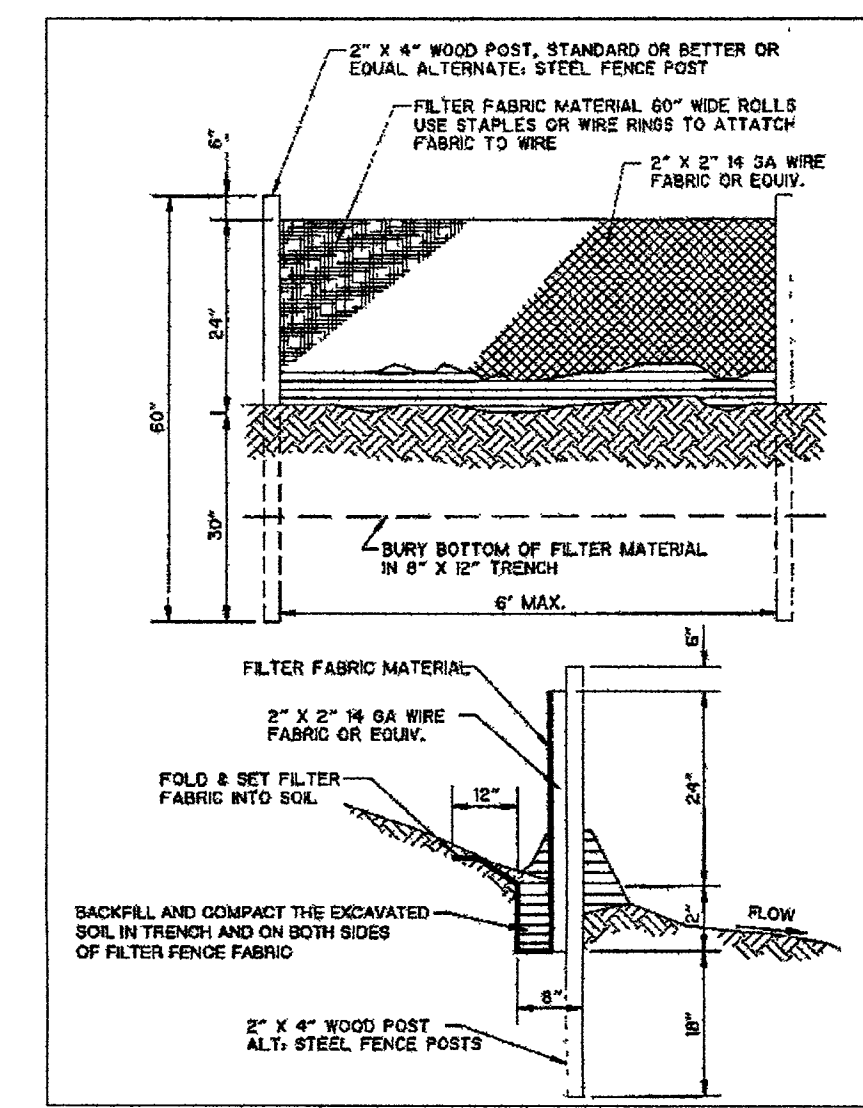




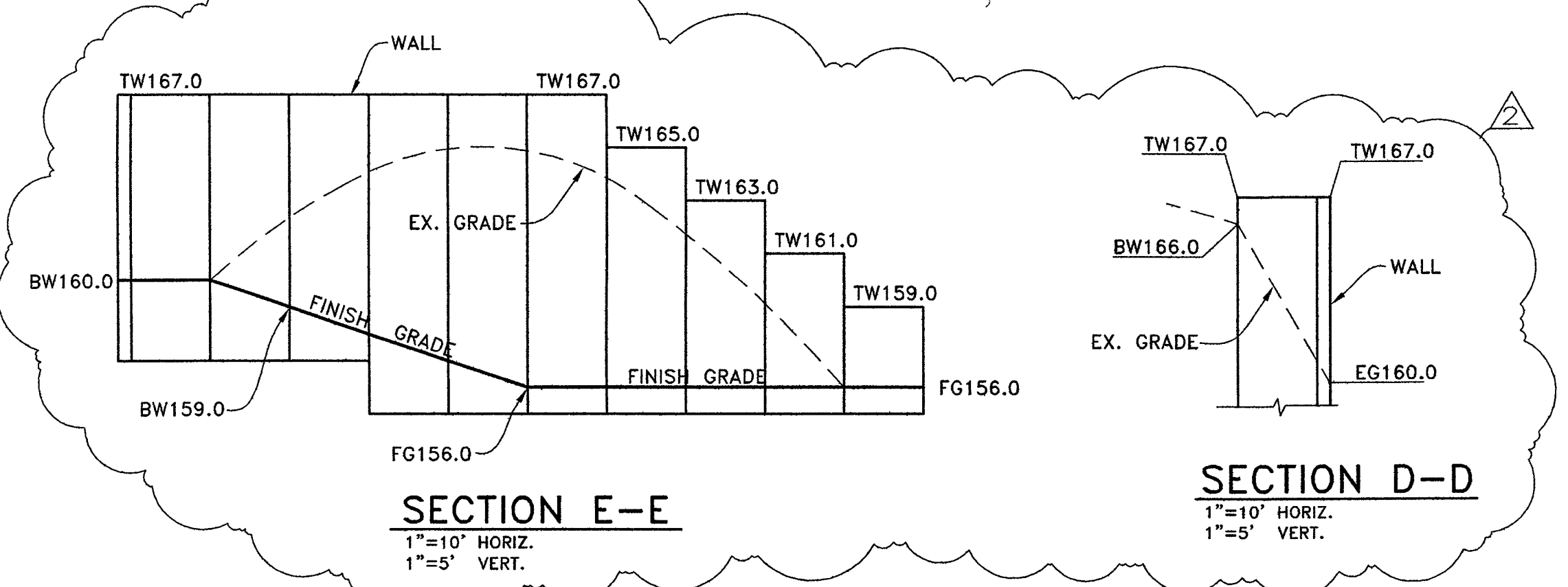
- LEGEND:**
- STRAW BALE DIKE AROUND CATCH BASINS
  - NEW SILT FENCE
  - NEW STRAW BALE DIKE
- NOTES:**
- EXISTING SITE UTILITIES NOT SHOWN FOR CLARITY, CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES. ALL EXISTING SERVICES ARE TO BE REMOVED.
  - CONTRACTOR IS RESPONSIBLE FOR OBTAINING A DEMOLITION PERMIT FROM MONTEREY COUNTY PRIOR TO DEMOLITION.
  - CONTRACTOR IS RESPONSIBLE FOR OBTAINING SEPTIC TANK REMOVAL PERMIT FROM MONTEREY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO REMOVAL OF THE SEPTIC TANKS.
  - VEGETATION ON SLOPES 3:1 OR STEEPER ARE TO REMAIN WHEREVER POSSIBLE. FINISH SLOPES 3:1 OR STEEPER, WHERE VEGETATION WAS REMOVED SHALL BE HYDROSEEDING.
  - SILT FENCES ARE TO BE INSTALLED AT THE TOP OF BANK.
  - EXISTING UTILITIES AND AC ARE TO BE REMOVED FROM THE SITE AND TO BE DISPOSED AT THE CONTRACTORS EXPENSE. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS TO PERFORM THIS WORK.
  - CONTRACTOR IS RESPONSIBLE FOR NOTIFYING AND COORDINATING WITH LOCAL UTILITIES PRIOR TO REMOVAL OF EXISTING FACILITIES THIS INCLUDES:
    - PG & E: AL TROIANO, TEL. (408) 479-3118 615 7TH AVE., SANTA CRUZ CA95062
    - PAJARO/SUNNY MESA COMMUNITY SERVICES DISTRICT: JOE ROSA, TEL. (408) 722-1389 136 SAN JUAN ROAD, WATSONVILLE, CA95076
    - MONTEREY COUNTY: BRYCE HORI, TEL. (831) 755-4920
    - FALCON CABLE TV: GILLROY, TEL. (408) 842-5653
    - PAC BELL: AL GUTIERREZ, TEL. (831) 754-8490



**STRAW BALE DIKE DETAIL**  
N.T.S.

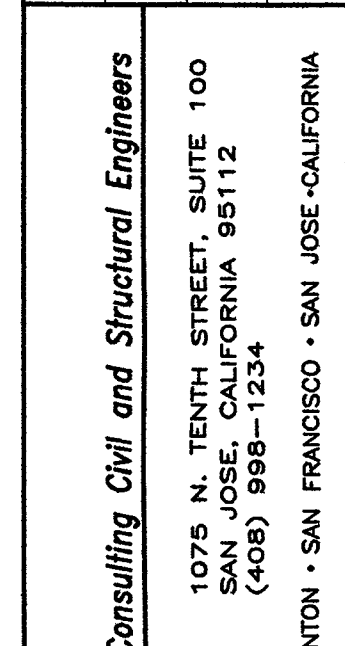
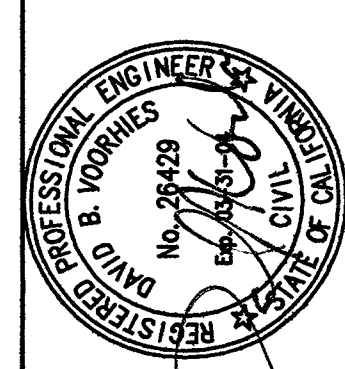


**SILT FENCE DETAIL**  
N.T.S.




DESIGNED BY	DBV	DRAWN BY	ESB	CHECKED BY	DBV	SCALE	1"=40'
Consulting Civil and Structural Engineers 1275 N. TENTH STREET, SUITE 100 SAN JOSE, CALIFORNIA 95112 (408) 998-1234							
CREAGAN, D'ANGELO FAIRFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA							
<b>DEMO. &amp; EROSION CONTROL PLAN</b> <b>LOMA LINDA SUBDIVISION</b> MONTEREY COUNTY CALIFORNIA							
SHEET NUMBER <b>C4</b> OF 8 SHEETS DRAWING NO. <b>101019</b>							





**FD**  
CREGAN+D'ANGELO  
FAIRFIELD • MONTEREY •

PLAN & PROFILE	LOMA LINDA SUBDIVISION NEW ROAD AND DRIVE "A"	MONTEREY COUNTY CALIFORNIA
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<div style="text-align: center;">  </div>	SHEET NUMBER	
	C5	
	OF 8 SHEETS	
	DRAWING NO.	
101019		

STORM CATCH BASIN  
FIRE HYDRANT  
STOP SIGN  
NO PARKING SIGN

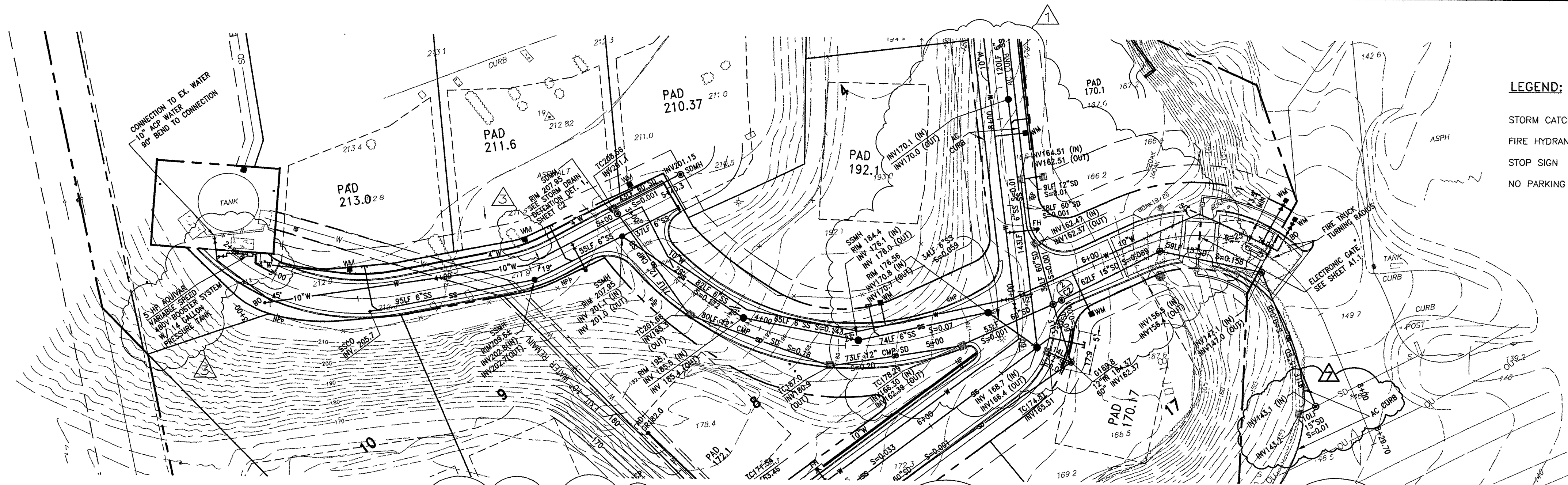
1"=10' HORIZ.  
1"=5' VERT.

1"=10' HORIZ.  
1"=5' VERT.

SCALE:  
HOR 1"=30'  
VERT 1"=6'

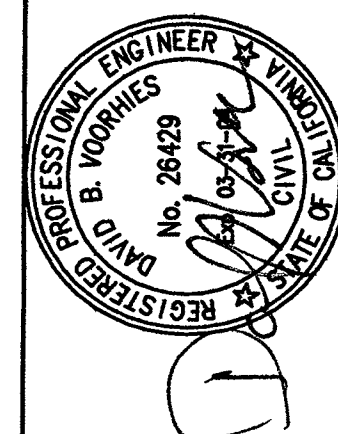
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STORM CATCH BASIN  
FIRE HYDRANT  
STOP SIGN  
NO PARKING SIGN

CB  
●  
ST  
NP



REV	DATE	DESCRIPTION	BY
8-21-02		ADDED BOOSTER SYSTEM W/ 14 GAL TANK & RELOCATE WM	C-HD
8-17-02		REVISED CURBS AND SIDEWALKS	C-HD
3-25-02		REVISED SD LINE, SD INVERT & SS LINE SLOPE	C-HD
8-8-03		AS BUILT REVISED SIGN, CB, RET WALL, SIDEWALK & AC CURB	C-HD

DESIGNED BY  
DBV

DRAWN BY  
ESB

CHECKED BY:  
DBV

SCALE.  
AS NOTED

**Consulting Civil and Structural Engineers**  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234  
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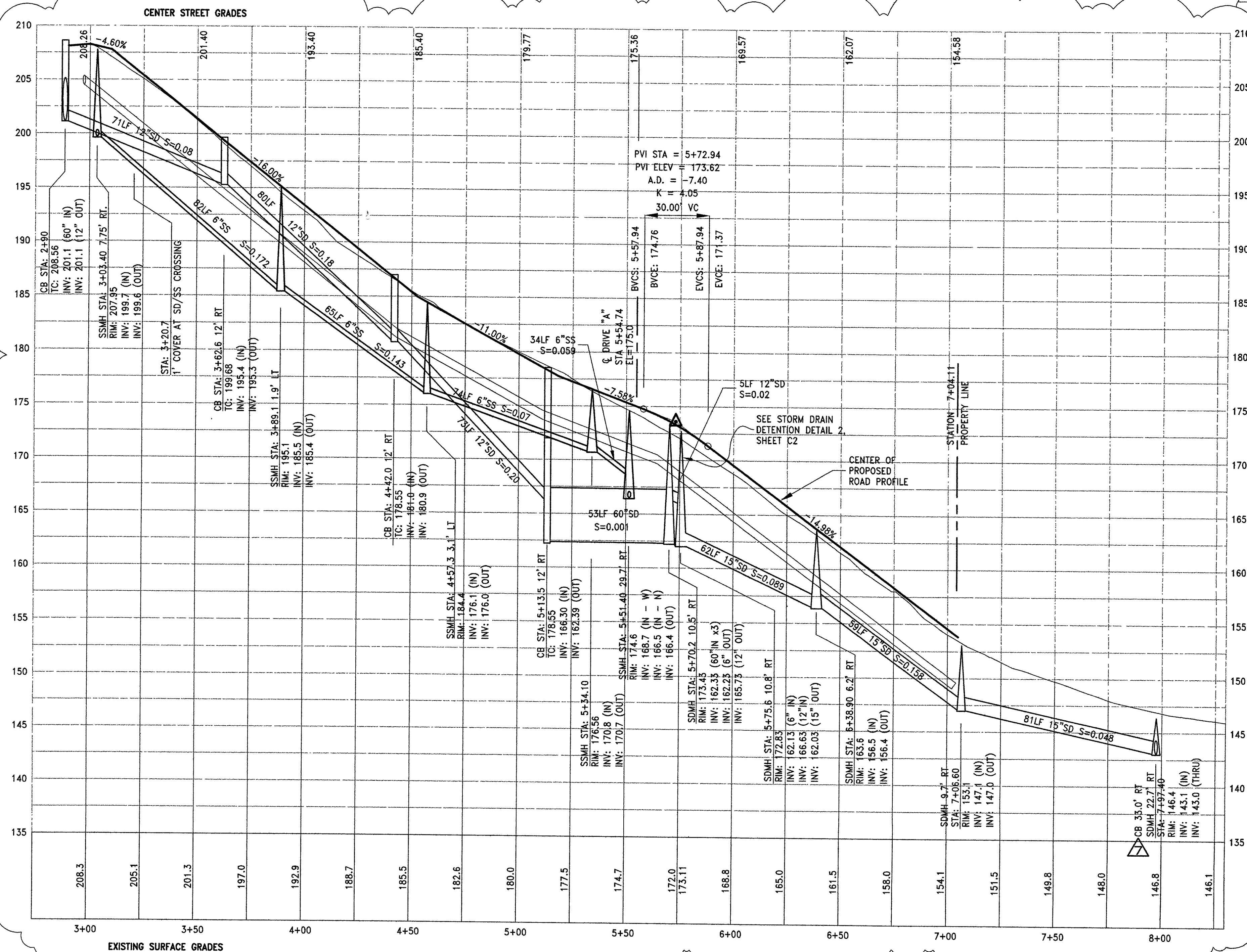
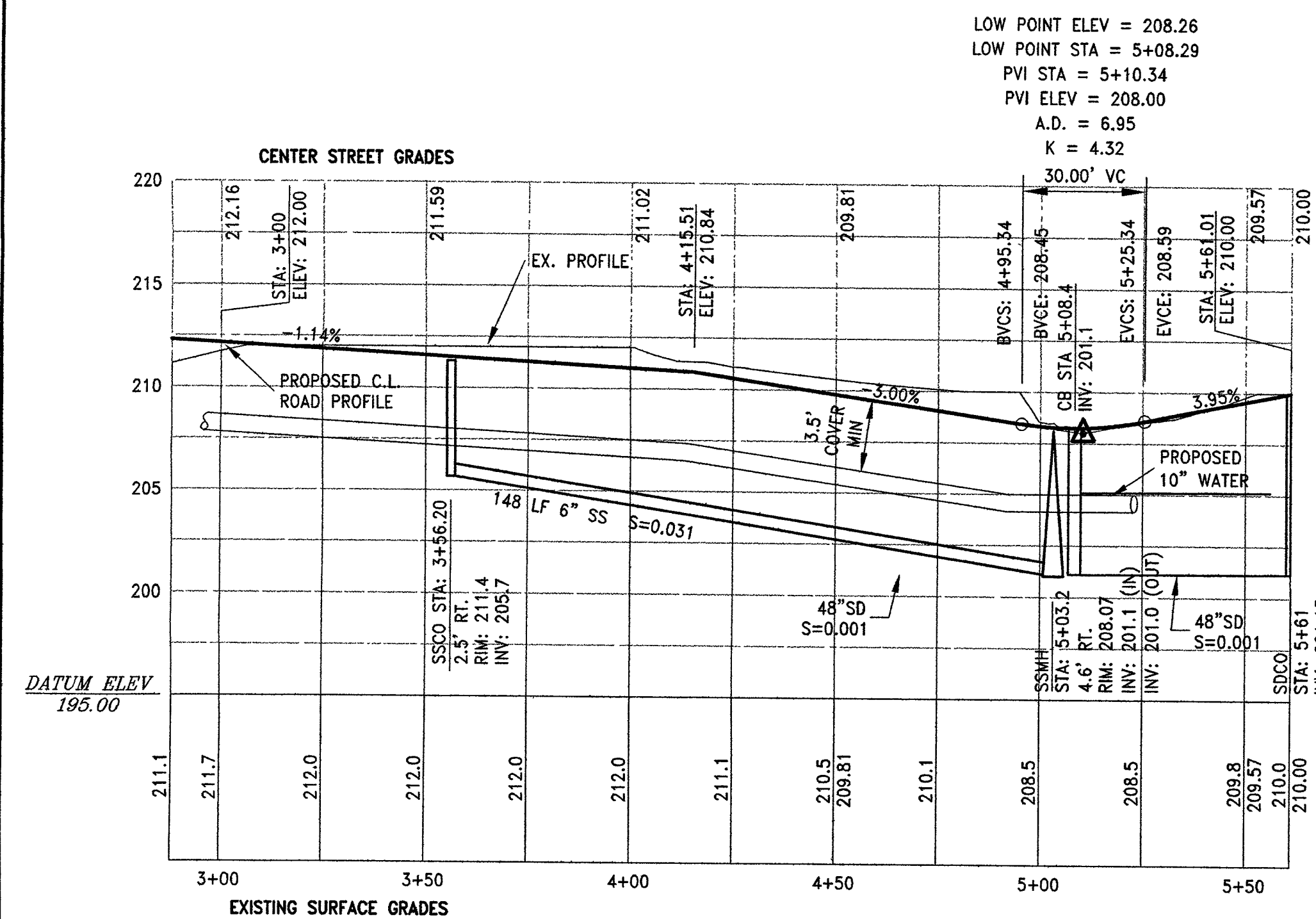


CREEGAN + D'ANGELO  
FAIRFIELD • MONTEREY •

PLAN & PROFILE
<p>LOMA LINDA SUBDIVISION  DRIVE "B" TO ENTRANCE DRIVEWAY  MONTEREY COUNTY CALIFORNIA</p>

SHEET NUMBER  
C6  
OF 8 SHEETS

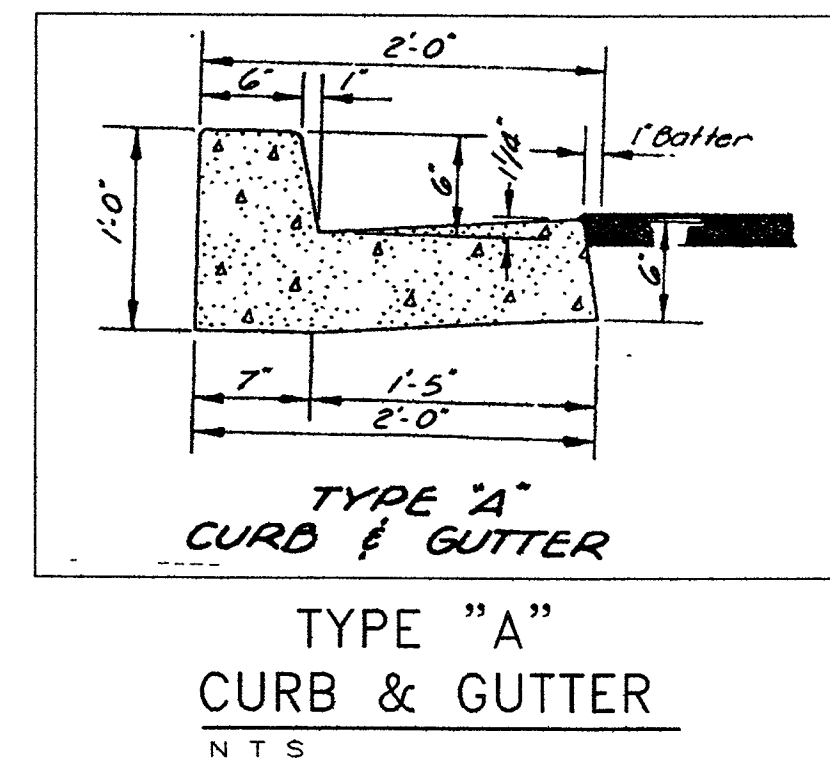
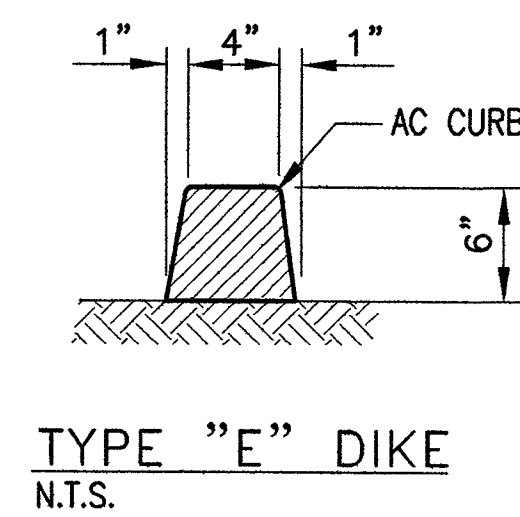
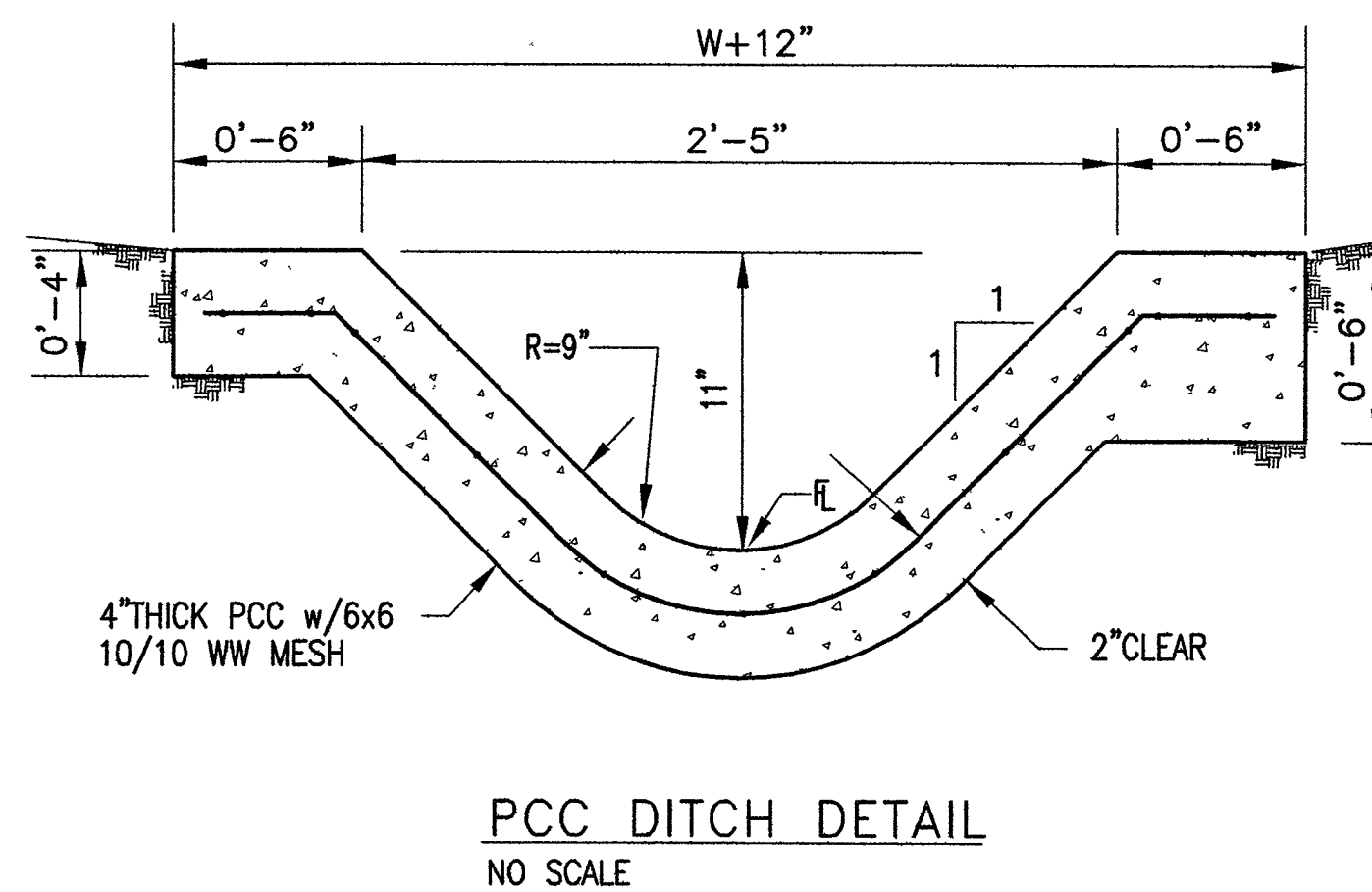
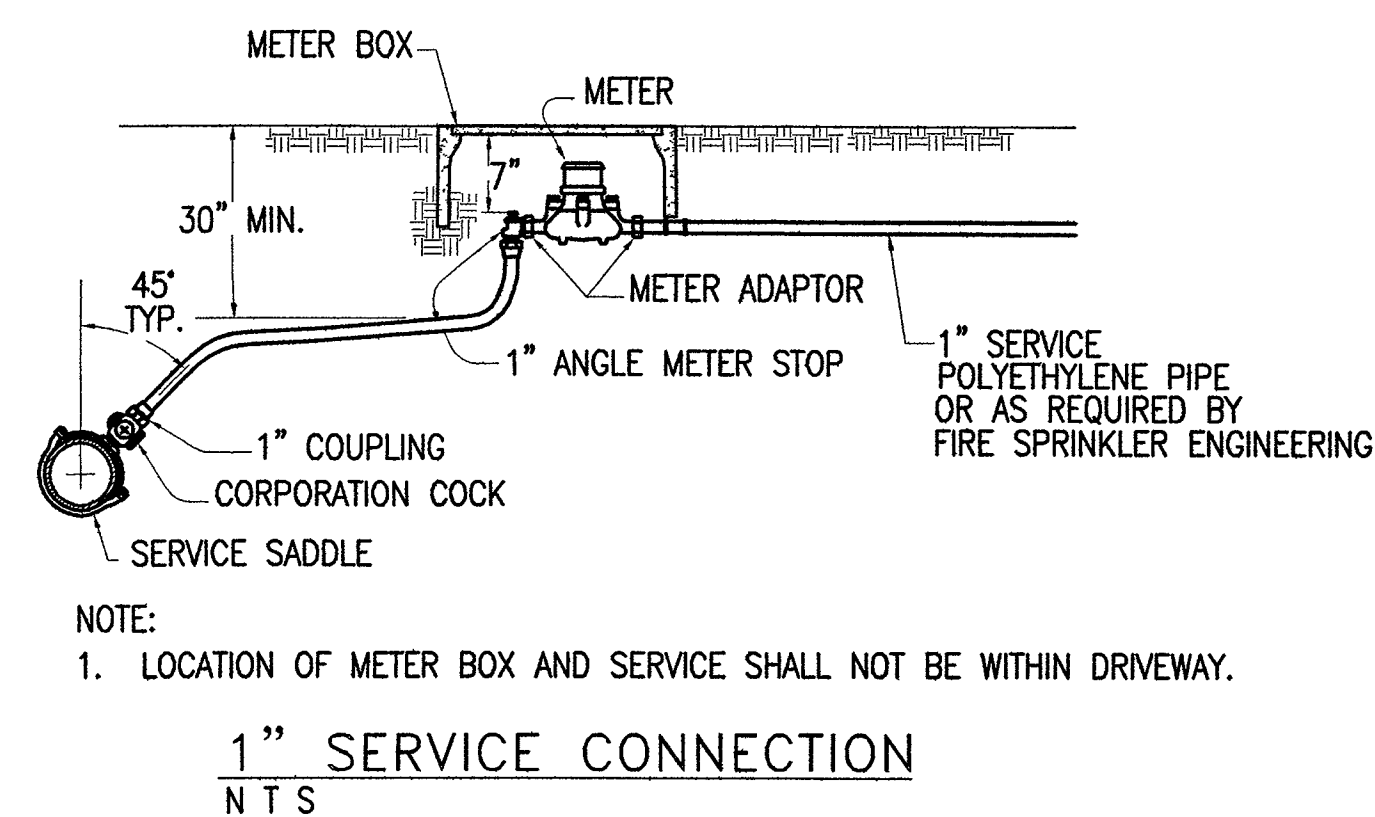
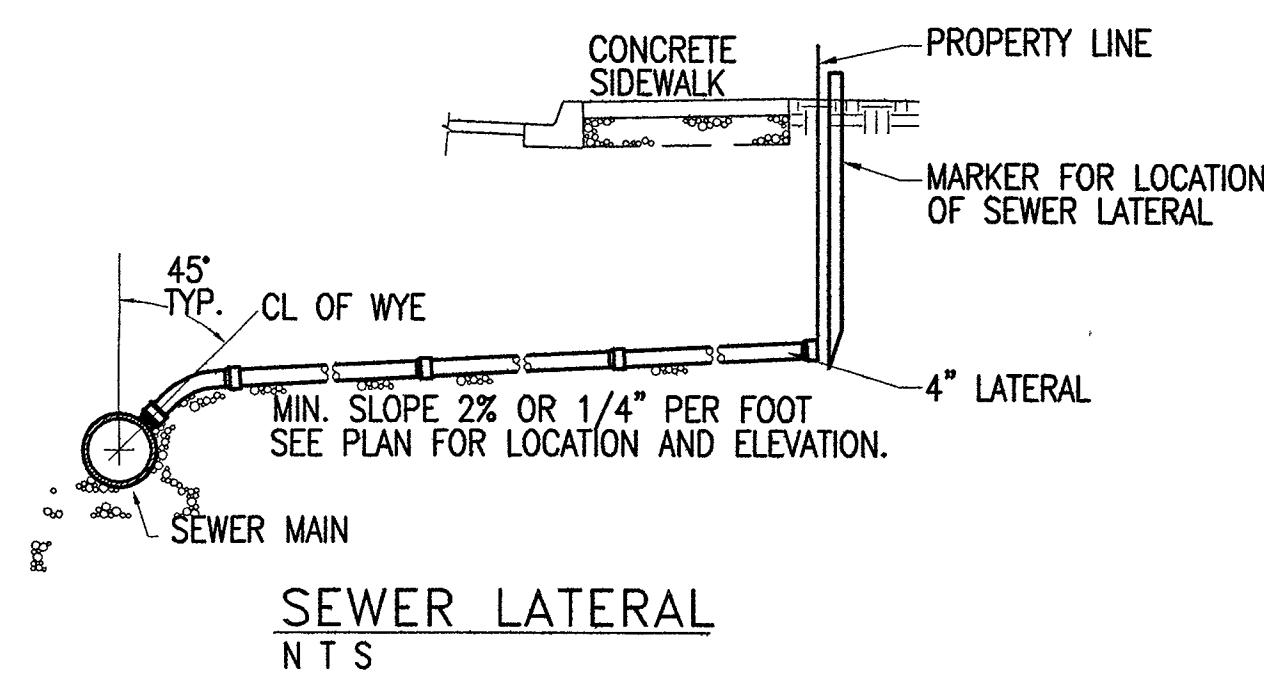
DRAWING NO.  
101019



SCALE:  
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VERT 1"=6'

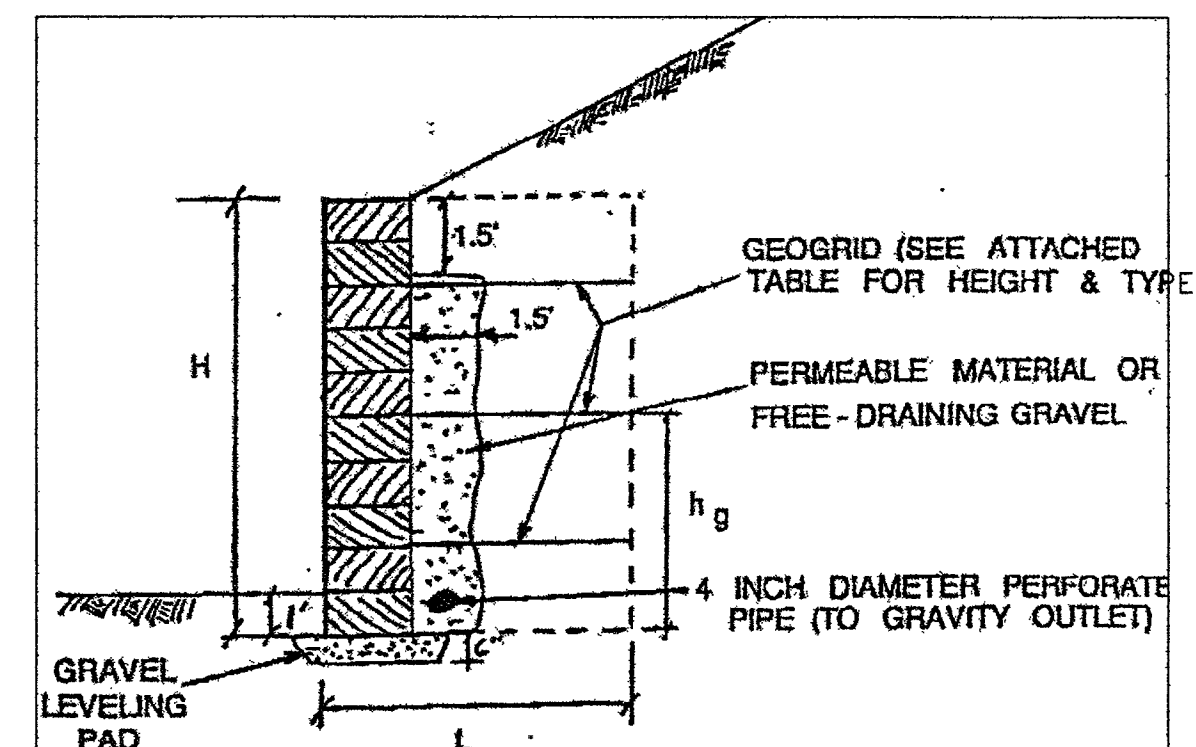
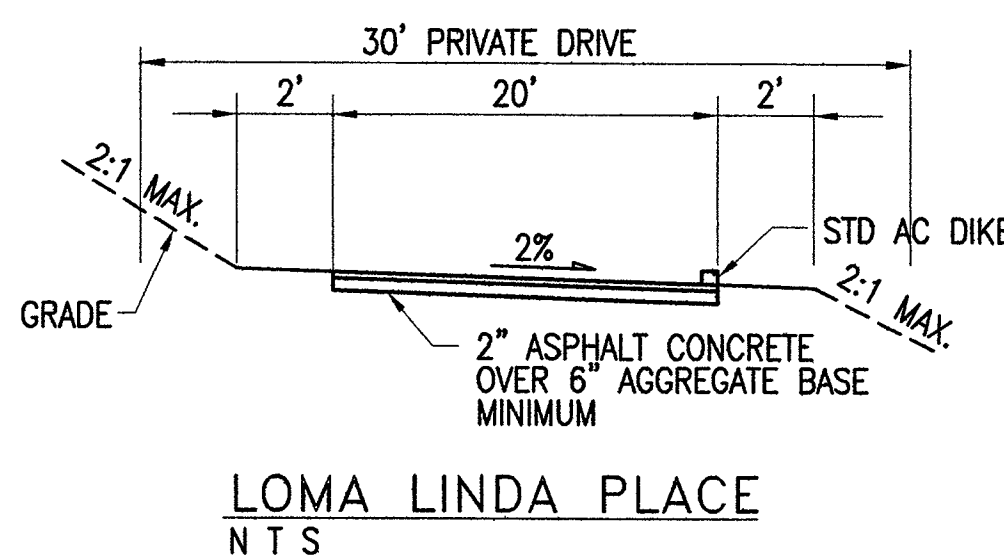
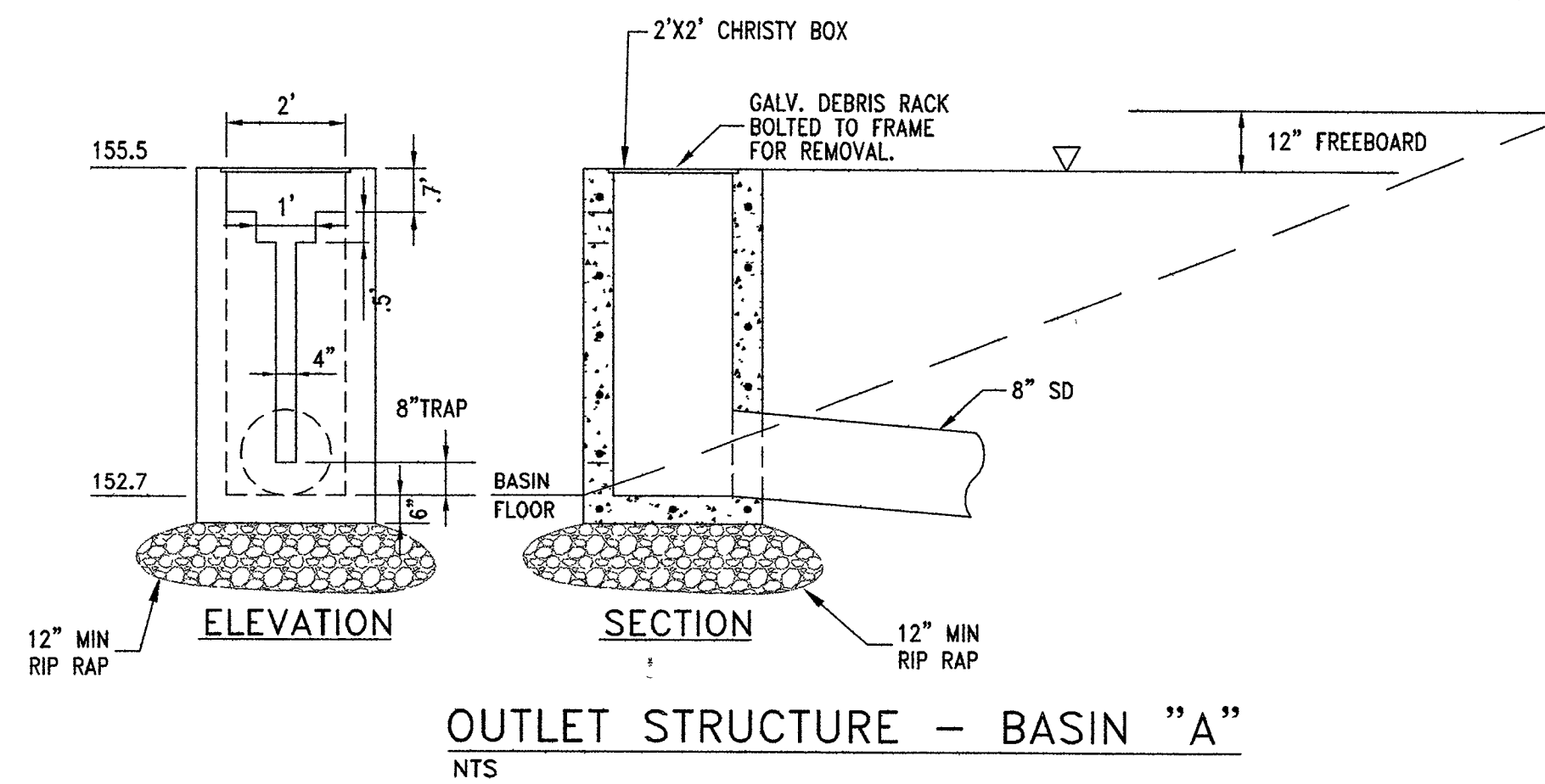
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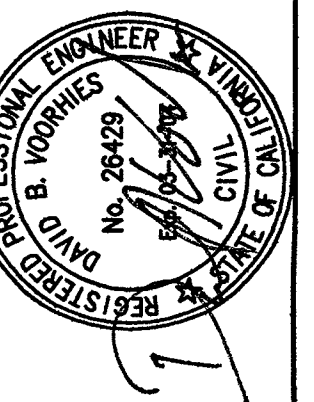
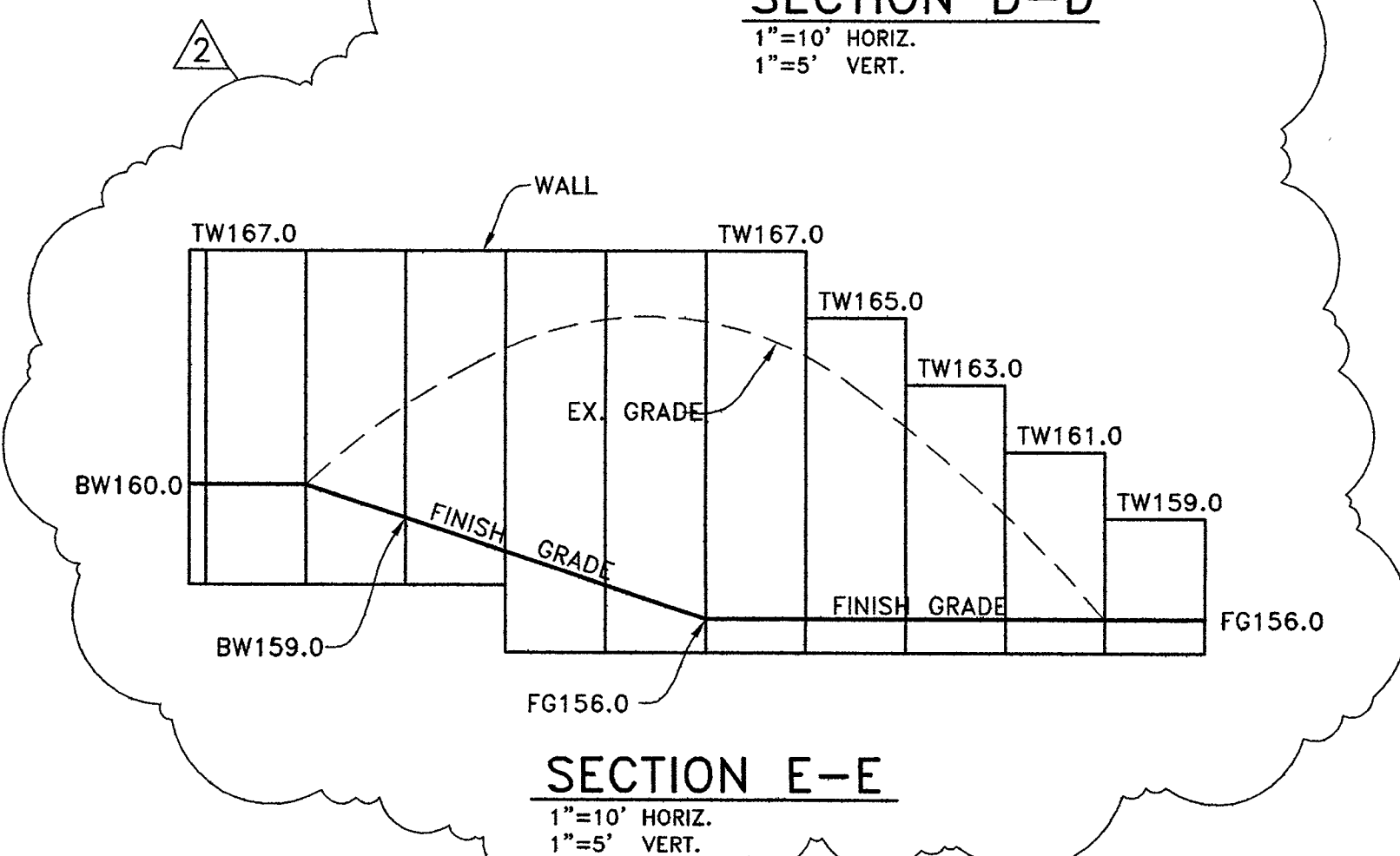
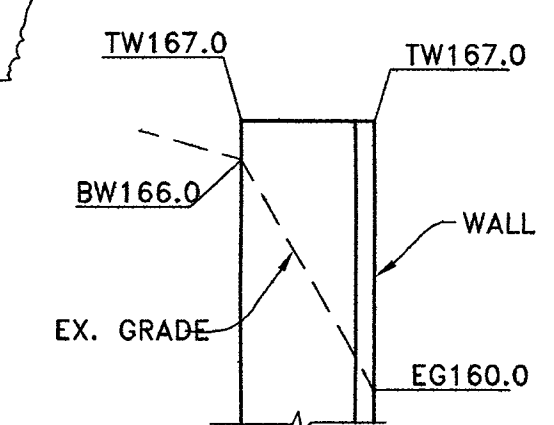
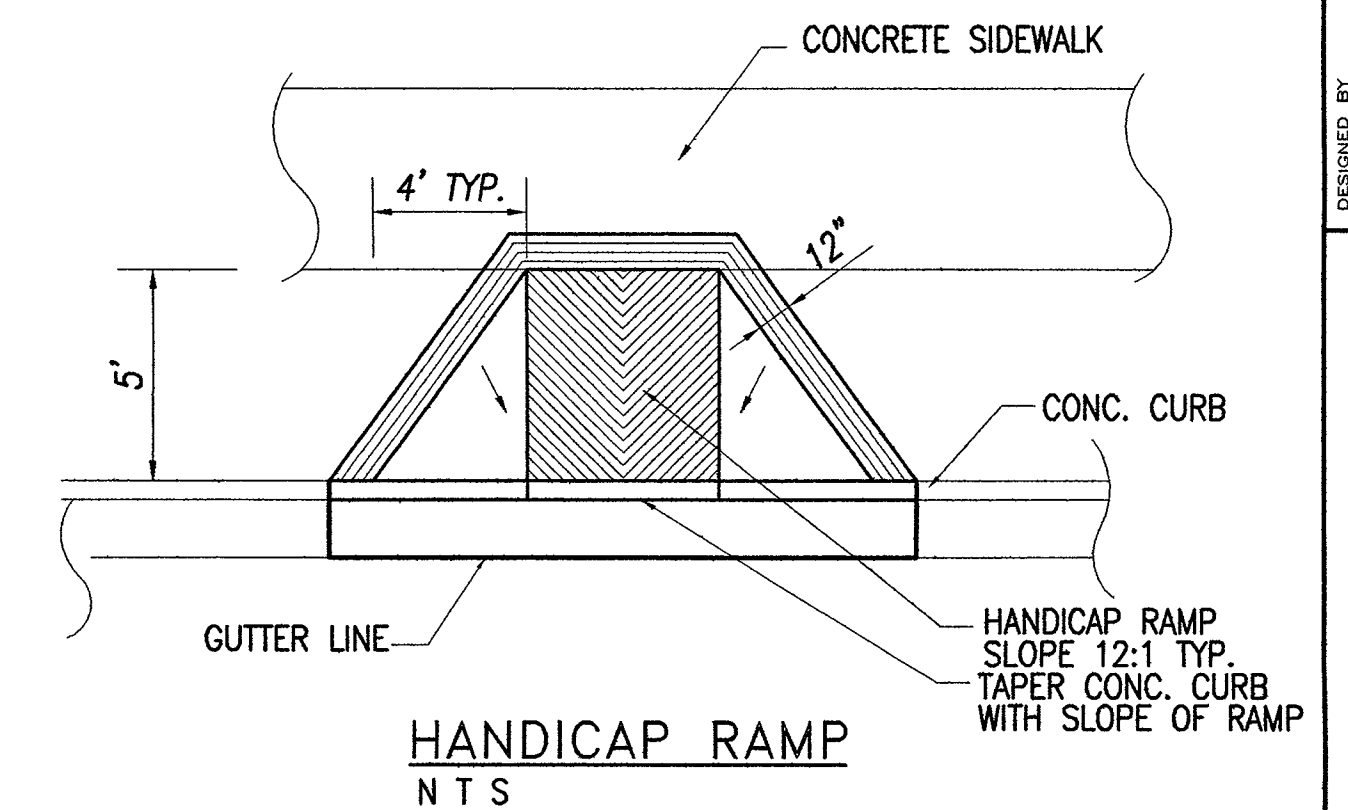
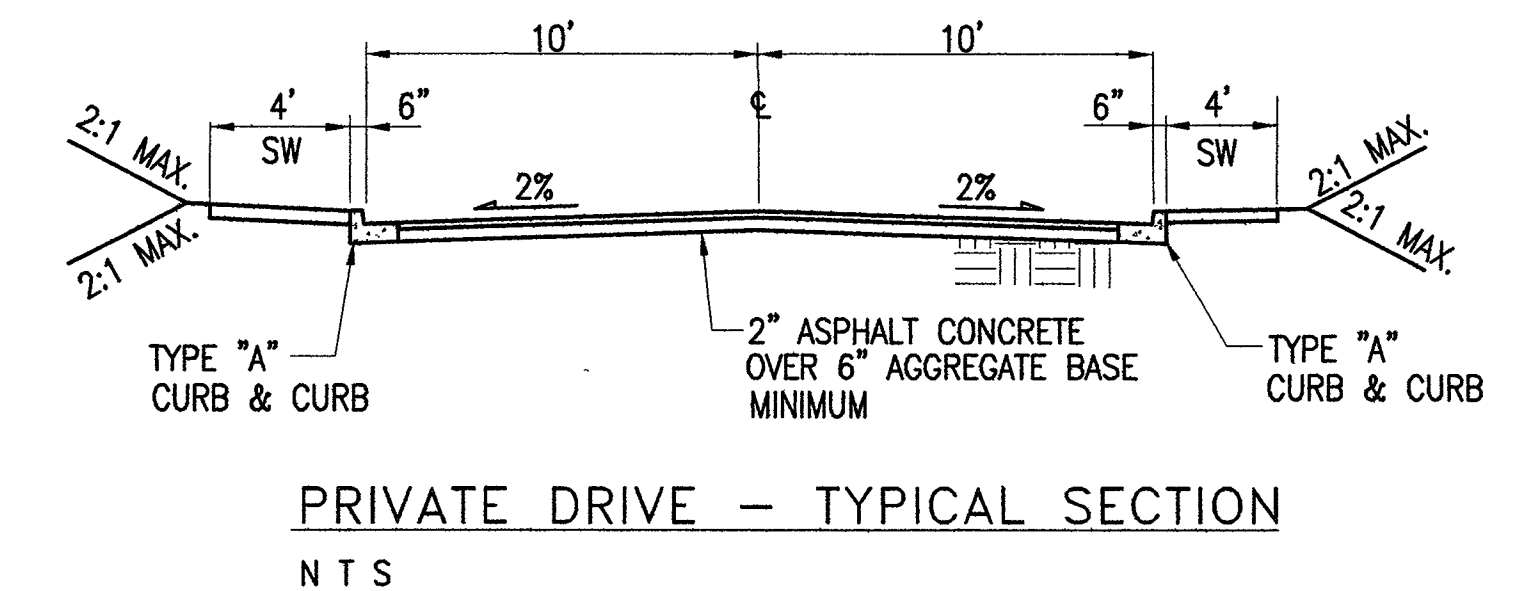
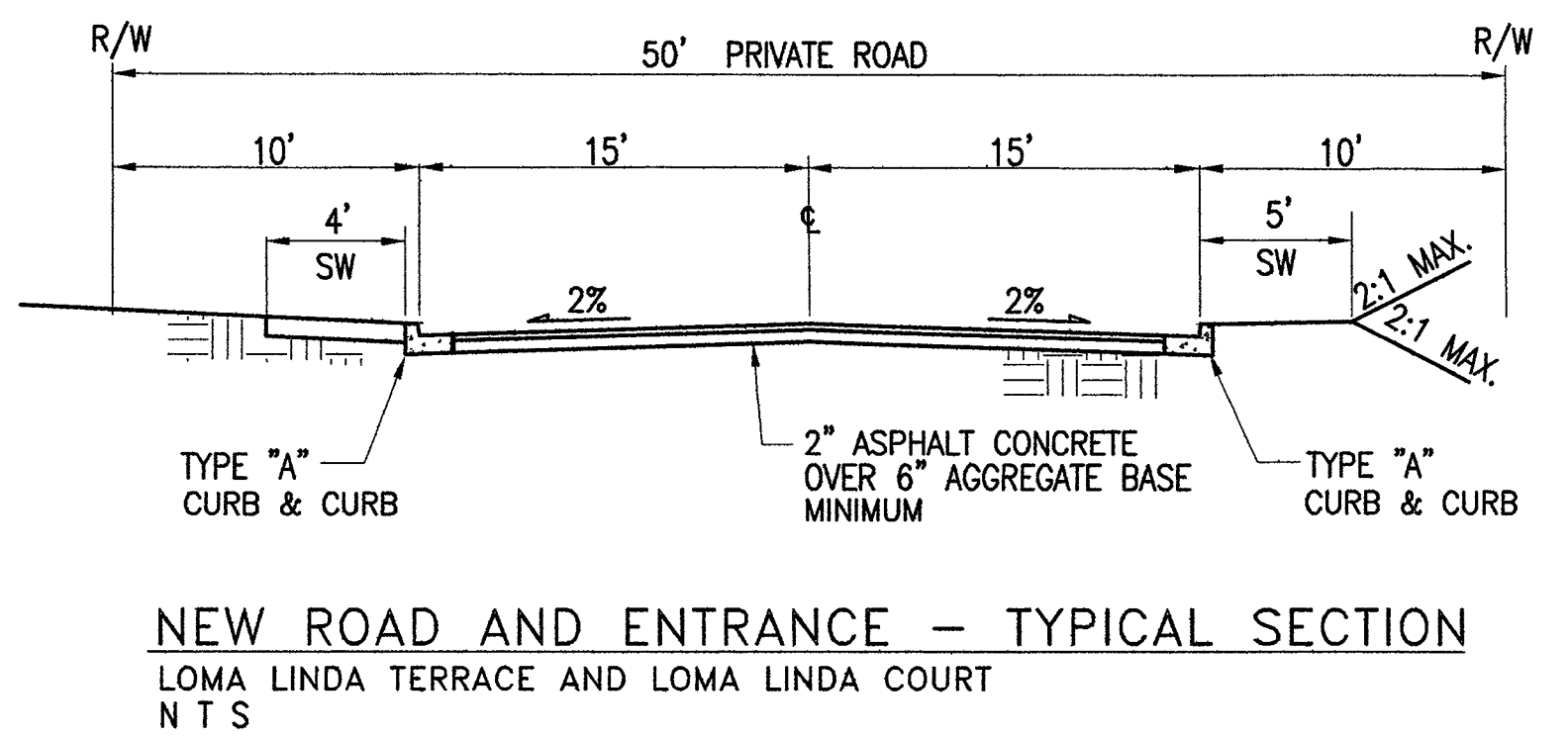


**GENERAL NOTES**


- TYPE A,B,C AND V CURB AND GUTTER ARE CONSTRUCTED OF CLASS "B" PORTLAND CEMENT CONCRETE.
- TYPE E DIKE IS CONSTRUCTED OF ASPHALT CONCRETE.
- PAVEMENT IS TO BE 1/4" HIGHER THAN THE KIP OF GUTTER.
- AGGREGATE BASE OR SUBBASE TO EXTEND UNDER CURB AND GUTTER WHEN PAVEMENT SECTION EXCEEDS 8'.



WALL HEIGHT H (FT.)	GEOGRID LENGTH L (FT.)	NO. OF GEOGRIDS	NO. OF GEOGRIDS $n_g$ (FT.)	GEOGRID TYPE
10	8	5	1'-4, 3'-4, 5'-4, 7'-4, 9'-4	TENSAR UX1400 "
8	7	4	1'-4, 3'-4, 5'-4, 7'-4	TENSAR UX1400 "
6	6	3	1'-4, 3'-4, 5'-4	TENSAR UX1400 "
4	4.5	2	1'-4, 2'-8	TENSAR UX1400 "
3'-4	--	--	--	--



DBV	9-8-03	AS BUILT REVISED SLOTH, CR. RET. WALL SIDEWALK & AC CURB	C-D
DBV	A		
ESB			
CHANGED BY:			
DBV	3	REV. CURB & GUTTER DETAIL	
SCALE	2	ADDED RETAINING WALL DETAIL	
SHOWN	1	REVISED KEYSTONE WALL DETAIL	
DATE	8-7-02		
DESCRIPTION	3-14-02		
BY	REY		



CREEGAN D'ANGELO

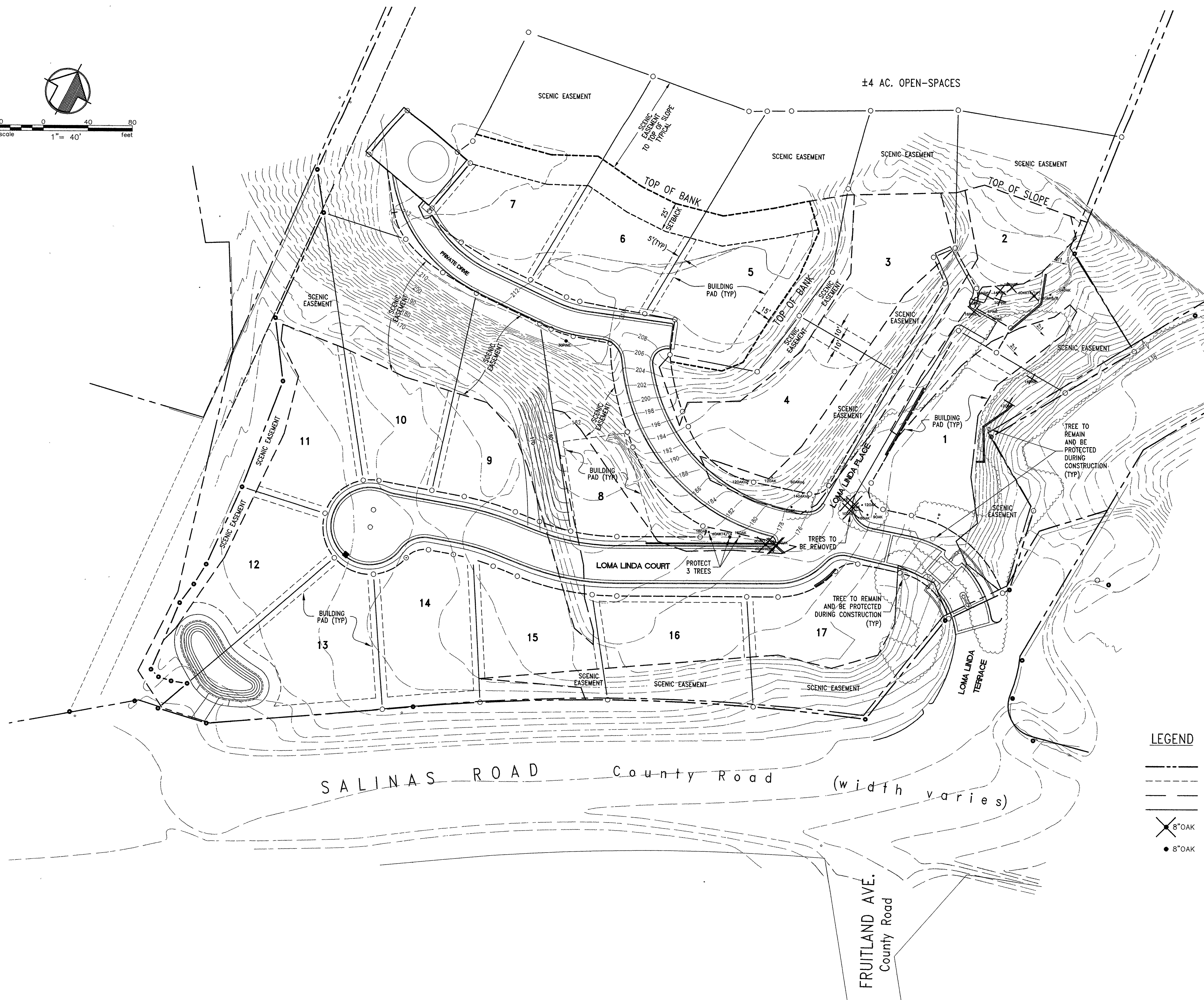
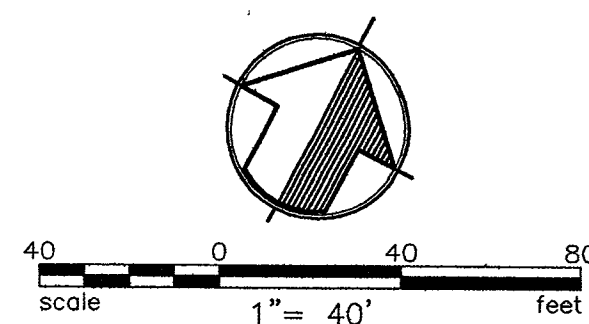
*Consulting Civil and Structural Engineers*

1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234

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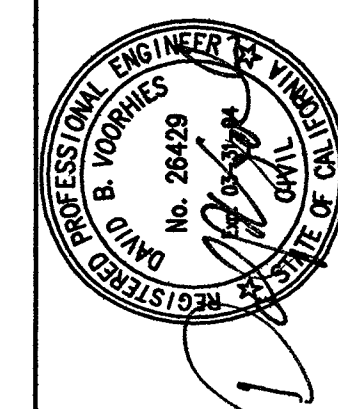
DETAILS  
LOMA LINDA SUBDIVISION  
MONTEREY COUNTY  
CALIFORNIA

SHEET NUMBER  
**C7**  
OF 8 SHEETS  
DRAWING NO.  
**101019**



LEGEND

- BOUNDARY LINE
- - - BUILDING PAD
- - - SCENIC EASEMENT
- - - LOT LINE
- ✕ 8" OAK  
● 8" OAK
- TREE AND DESCRIPTION  
(TO BE REMOVED)
- TREE AND DESCRIPTION  
(TO REMAIN AND BE PROTECTED)



DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	BY
DBV	NJH	DBV	1"=40'		
AS BUILT REVISED	SIMIL. CO. RET. WALL, SIDEWALK & AC CURB				

Consulting Civil and Structural Engineers  
1075 N TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 986-1234

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SCENIC EASEMENT EXHIBIT  
LOMA LINDA SUBDIVISION  
MONTEREY COUNTY CALIFORNIA

SHEET NUMBER  
C8  
OF 8 SHEETS  
DRAWING NO.  
101019



# Loma Linda Subdivision

## Monterey County California

### GENERAL NOTES

- All work shall be in conformance with the following:
  - Standard Details and Roadway Design Standards and Standard Property Development Specifications of the County of Monterey Public Works Department.
  - California Administrative Code, Title 22, Division 4, Environmental Health for Domestic Water Systems.
  - Specifications and requirements of the Pajaro/Sunny Mesa Community Services District.
  - Caltrans Standard Specifications and Standard Plans, latest edition.
  - Specifications and requirements of the North Monterey County Fire Protection District.
- The construction of structures, roadways, and improvements shall conform to the recommendations stated in Geologic Investigation report prepared by Haro, Kasunich and Associates, Project No. M5364, dated January 3, 1997.
- The construction and location of improvements shall be in accordance with the Geotechnical Investigation report prepared by Haro, Kasunich and Associates, Project No. M5364, dated January 3, 1997.
- Contractor shall secure and comply with Monterey County and Pajaro/Sunny Mesa Community Services District permit requirements for grading, erosion control, encroachment, inspection, installation, etc.
- Contractor shall supply all equipment, labor and materials necessary to perform the work shown on this plan. Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the method needed for proper performance of the work.
- Contractor shall coordinate all work, including sub-contractors' work, so as to eliminate conflicts and work towards the general good and completion of the entire project.
- Contractor is responsible for compliance with any currently applicable safety law of any jurisdictional body. For information regarding this provision, the Contractor is directed to contact the State of California, Division of Occupational Safety and Health, San Francisco, CA Phone (415) 557-1677. The Contractor shall be responsible for all barricades, safety devices, and control of traffic within the construction area. For all trench excavation five (5) feet or more in depth, the Contractor shall obtain a permit from the Division of Occupational Safety and Health, 455 Golden Gate Avenue, San Francisco, CA 94102, Phone (415) 557-1677, prior to beginning any excavation. A copy of this permit shall be available at the construction site at all times.
- The Contractor shall be responsible for traffic control. All warning and traffic control signs and locations for the signs shall be in accordance with County requirements.
- Construction contractor agrees that in accordance with generally accepted construction practices, Construction Contractor will be required to assume sole and complete responsibility for the job site conditions during the course of construction of the project, including safety of all persons and property, that this requirement shall be made to apply continuously and not be limited to normal working hours, and Construction Contractor further agrees to defend, indemnify and hold Design Professional, and the Owner harmless from all liability, real and alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of the Design Professional or the Owner.
- The Construction Contractor shall be responsible for traffic control. All warning and traffic control signs and locations for the signs shall be in accordance with County requirements.
- No changes in the approved Improvement Plans shall be made without prior approval of the Engineer.
- Underground utility locations shown are compiled from information supplied by the appropriate utility agency. The Contractor shall verify location of affected utility lines and pothole those areas where potential conflicts are likely or data is otherwise incomplete.
- Between October 15 and April 15, exposed soil shall be protected from erosion at all times. During construction, such protection may consist of mulching and/or planting of native vegetation of adequate density. Before completion of the project, any exposed soil on disturbed slopes shall be permanently protected from erosion.

### GRADING AND PAVING

- All work shall be in conformance with County Roadway Design Standards, and Standard Property Development Specifications, Caltrans Standard Specifications and the special Provisions.
- The Contractor shall notify the County 48 hours before starting grading work.
- All soil shall be compacted to a minimum of 90% relative compaction, as required by the ASTM test designations D1557, D1558, and D2992, except the pavement sub-grade. The upper layer of subgrade shall be compacted to 95% relative compaction, the exact depth shall be determined by the soils engineer and/or as shown on these plans.
- At all times during construction and until final completion, the Contractor, when he or his subcontractors are operating equipment on the site, shall prevent the formation of an airborne dust nuisance by watering and/or treating the site of the work in such a manner that will confine dust particles to the immediate surface of the work. The contractor will be responsible for any damage done by the dust from his or her subcontractor's activities performing the work under this contract.
- Approval of the Owner or his authorized representative is required on completed work prior to:
  - (a) placing of any concrete, (b) placing of aggregate base, (c) placing of asphaltic concrete, (d) back filling trenches for pipe. Work done without such approval shall be at the Contractor's risk. Such approval shall not relieve the Contractor from the responsibility of performing the work in an acceptable manner.
- Prior to performing the final grading and sub-grade compaction for the paved areas, the Contractor shall review the proposed grades with the Engineer and comply with his request for any minor grade changes.
- Earthwork: The grading quantities associated with the earthwork and construction of this project is less than 100 CY.
- Lots 1 and 2 are in a fill area. Contractor to key the toe of slope per the direction of the geotechnical engineer. Existing fill material is to be removed and recompacted as specified in the geotechnical report. All work to be done per the recommendations of the geotechnical engineer and inspected by the geotechnical engineer.
- Contractor to coordinate inspection with the geotechnical engineer, Haro, Kasunich & Associates, telephone number 831-722-4175.
- Drainage away from houses shall be 2% away from the house for a minimum of 3 feet.
- A copy of all compaction tests and the final grading report shall be submitted to the County prior to scheduling any inspections.

### CONCRETE

All concrete work shall be in accordance with standard practices as described in publications issued by American Concrete Institute (ACI).

- All concrete work shall be true to line and grade as indicated on drawings.
- Coordinate items of other trades. Contractor shall be responsible for the proper installation of all accessories embedded in the concrete and for the provision of holes, openings, etc., as necessary to the execution of the work of the trades.
- Concrete for retaining walls, gutters, curbs, and all concrete exposed to weather shall be provided as specified herein, 2,800 psi at 28 days.
- Cement shall be Portland cement conforming to ASTM C150 Type I.
- Sand shall be washed natural, well shaped, hard, durable grains, containing not more than 1% silt and clay by weight, free of detrimental amounts of alkali, organic matter, etc.
- Water for mixing and curing and mixed with aggregates shall be fresh, clean, and potable.
- Aggregates shall conform to specifications of ASTM C33.
- Reinforcement steel shall conform to ASTM A615 grade 40.
- Workmanship shall be of the highest standards. During finishing, cement shall not be applied to dry the concrete surface. Surfaces shall be consistently finished throughout the job. Scored joints shall be straight and level.
- Curing shall begin as soon as free water has disappeared from concrete surfaces after placing and finishing. Curing materials shall be applied and maintained so to protect the concrete from moisture loss. Water shall be potable.

### UNDERGROUND NOTES (GENERAL)

- Contractor shall expose and verify location and elevation of existing utilities, including storm drains, sanitary sewers and water lines before constructing new facilities.
- All manholes and valve boxes shall be set flush with finished grade, unless otherwise noted.
- All trenches and excavations shall be constructed in strict compliance with the applicable sections of California and Federal OSHA requirements and other applicable safety ordinances. The Contractor shall bear full responsibility for trench shoring, design, and installation. See General Notes, Note 7.
- Where unstable or unsuitable materials are encountered during subgrade preparation, the area in question shall be over-excavated and replaced with select backfill as directed in the field by the Soils Engineer.
- Magnetic marker tape, equal to Lineguard, Inc., shall be placed along the centerline of waterlines, between backfill and base rock in paved areas of 12" deep within easements and other unpaved areas.

### WATER SYSTEM

All materials installed for the facilities shall comply with the pajaro/sunny mesa community service District specifications and/or approval. The contractor shall submit shop drawings and/or catalog cuts of material to be furnished and installed for approval prior to start of construction.

- All PVC pipe shall be Class 150 unless otherwise specified on the drawings and shall comply with AWWA Standard C900.
- All steel pipe shall be standard steel pipe Schedule 40 unless otherwise specified on the drawings.
- All fittings shall be Cast Iron or Ductile Iron complying with AWWA Standard C110-87 including full laying length, radii and metal thickness. They may have either Hub End or rubber ring type joints, except tees for connections to fire hydrants or fire services shall have flanged outlets. All fittings shall be cement lined in conformance with AWWA Standard C104-85.
- All gate valves shall comply with AWWA Standard C500-86, or C509-87 for Resilient-Seated Gate Valves, and shall be provided with "O-ring" packing, left hand to open, C.I., bronze mounted, non-rising stem, nut operated with 2 square operating nuts. Main line valves shall be rubber ring type joints, and valves for connections to fire hydrants or fire services shall be Flanged by Mechanical Fitting Co., or Stockham Valves & Fittings. Kennedy Valve Co. is acceptable for Resilient-Seated Valves only.
- All valves for tapping purposes shall be Resilient-Seated Type with Flanges by Mechanical Joint ends. They shall be Mueller Co. #A-2370-16, M. & H. Valve & Fitting Co. #3067-13, Stockham Valve & Fittings #S-702-0 or Kennedy Valve Co. #1572-X.
- All valve boxes and covers shall be manufactured by Christy Concrete Company, Curb Valve Box No. F8, with lid.
- All cement shall comply with ASTM Specification C150-59.
- All copper tubing shall conform to ASTM Specification B88-66 and be Type K soft.
- All plastic pipe shall conform to ASTM D2239 with a Standard Code Designation of PE 3408. Dimensions and tolerance of pipe shall be as specified for AWWA Standard C901 for SDR 7.1 D. This is a high-density polyethylene plastic tubing in iron pipe sizes having a 200 p.s.i. pressure rating and shall be approved by N.S.F. as suitable for potable water products.
- All meter boxes shall be manufactured by Christy Concrete Company, box number B12 for 3/4" services and Christy Concrete Company, box number B16 with B16-61G cover for 1" services. Boxes for services larger than 1" will be specified on the drawings.
- Service saddles shall be all Bronze No. J-996 manufactured by James Jones Company, No. S-90 manufactured by the Ford Meter Box Company, or H-13400 Series for Cast Iron OD dimension manufactured by Mueller Company.
- The Contractor shall notify the District and customers to be effected by water shutdowns a minimum of twenty-four (24) hours in advance.
- The Contractor is required to possess a valid "A" license with proof of insurance or bond, with a copy of each to be submitted to District prior to commencing work.
- connection to existing water line per pajaro/sunny mesa community service district standards and direction. contact Joe Rosa Prior to connection.

### STORM DRAIN

- Storm drain system shall be installed, backfilled, and compacted in accordance with special provisions and the Standard Specifications.
- Storm drain manholes shall be constructed to Plate No. 19 of the Standard Details. The manhole cone shall be concentric.
- Drop inlets (and/or catch basins) shall be constructed to Plate Nos. 15 TYPE I and 18 TYPE I of the Standard Details.
- All roof drainage shall be connected to the storm drain system.

### TESTING

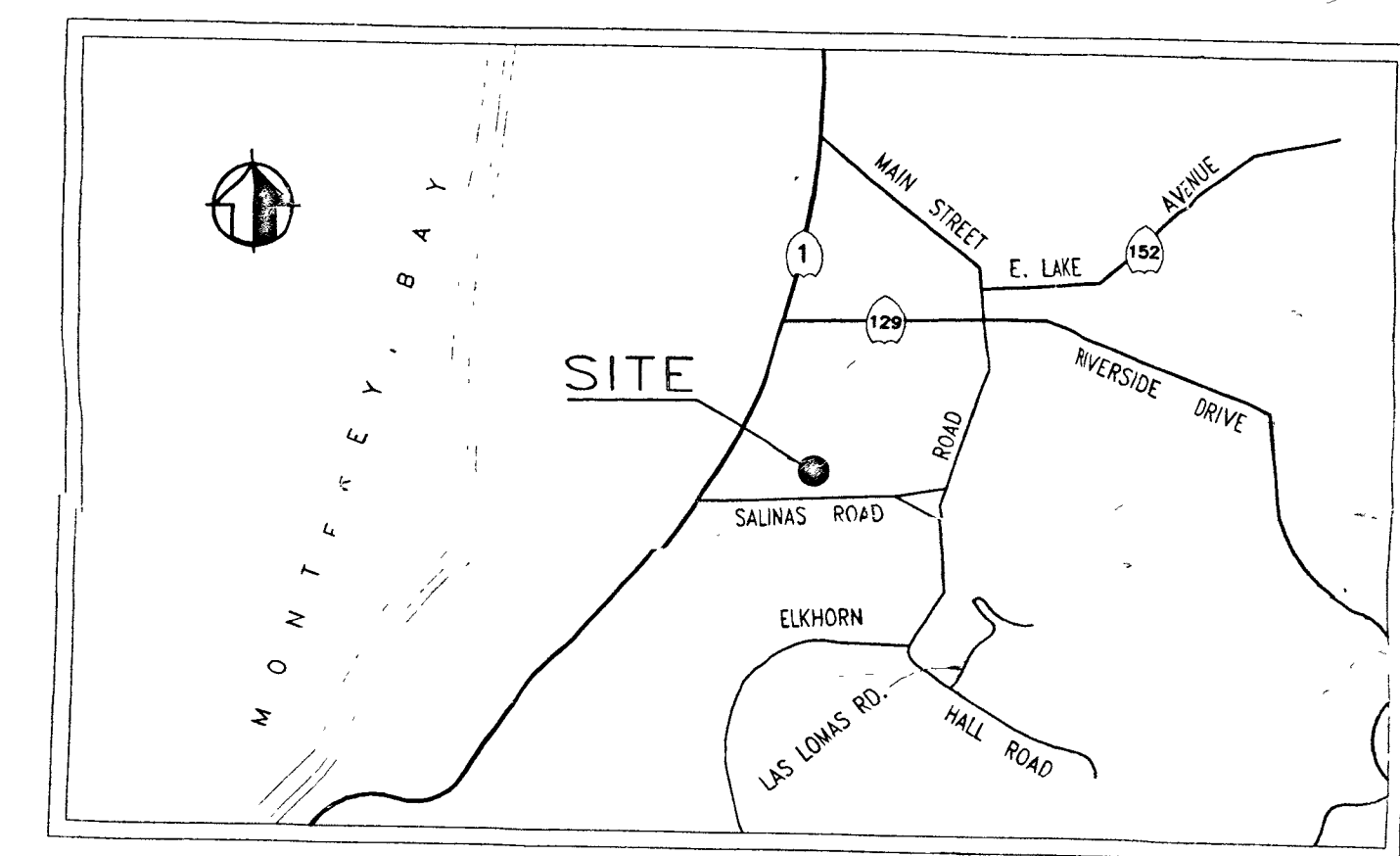
- All water pipe and appurtenances, after installation will be subjected to a hydrostatic pressure test and a leakage test in the presence of the District. The contractor shall coordinate the combined hydrostatic and leakage test and notify the District forty-eight (48) hours prior to the scheduling of such tests.
- The sterilization of the water mains, reservoirs, and all appurtenances shall be the responsibility of the Contractor and shall meet all requirements of the Monterey County Department of Public Health and the sterilization procedure shall be in accordance with AWWA Standard C-601. Sterilization shall be done under the District's supervision. Bacteriological testing shall be performed by a competent state certified laboratory. Costs of all required tests will be the responsibility of the Contractor.

### BASIS OF BEARINGS

For this survey is the boundary line shown as S 3°26' E 2706.93 feet on the map recorded in Volume 24 of Surveys at page 6, Monterey County records and established from monuments found as shown = S 3°26' E (from recorded subdivision map).

### BENCHMARK

USC&GS BM No. 739 10± Eas of western entrance to Pajaro Valley Golf Course. Elev. = 169.31



VICINITY MAP  
PAJARO, CA.  
N.T.S.

### LIST OF DRAWINGS

- |    |                           |
|----|---------------------------|
| C1 | COVER SHEET & NOTES       |
| C2 | SITE UTILITY PLAN         |
| C3 | SITE GRADING PLAN         |
| C4 | SITE EROSION CONTROL PLAN |
| C5 | PLAN & PROFILE            |
| C6 | PLAN & PROFILE            |
| C7 | DETAILS                   |
| C8 | SCENIC EASEMENT EXHIBIT   |

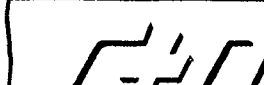
### CONFORMS TO APPLICABLE ORDINANCES AND REQUIREMENTS

Any revisions to these plans subsequent to signing must be approved and authorized by the Department of Public Works

LEW BAUMAN  
Public Works Director

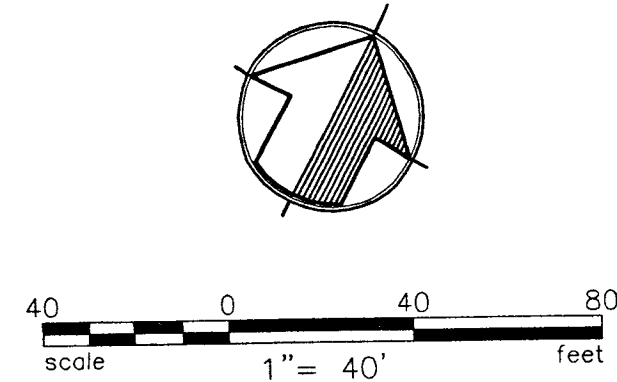
By  Deputy

Date 4/12/02

 Consulting Civil and Structural Engineers  
1075 N Tenth Street Suite 100  
San Jose, California 95112  
(408) 998-1234  
FAIRFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA

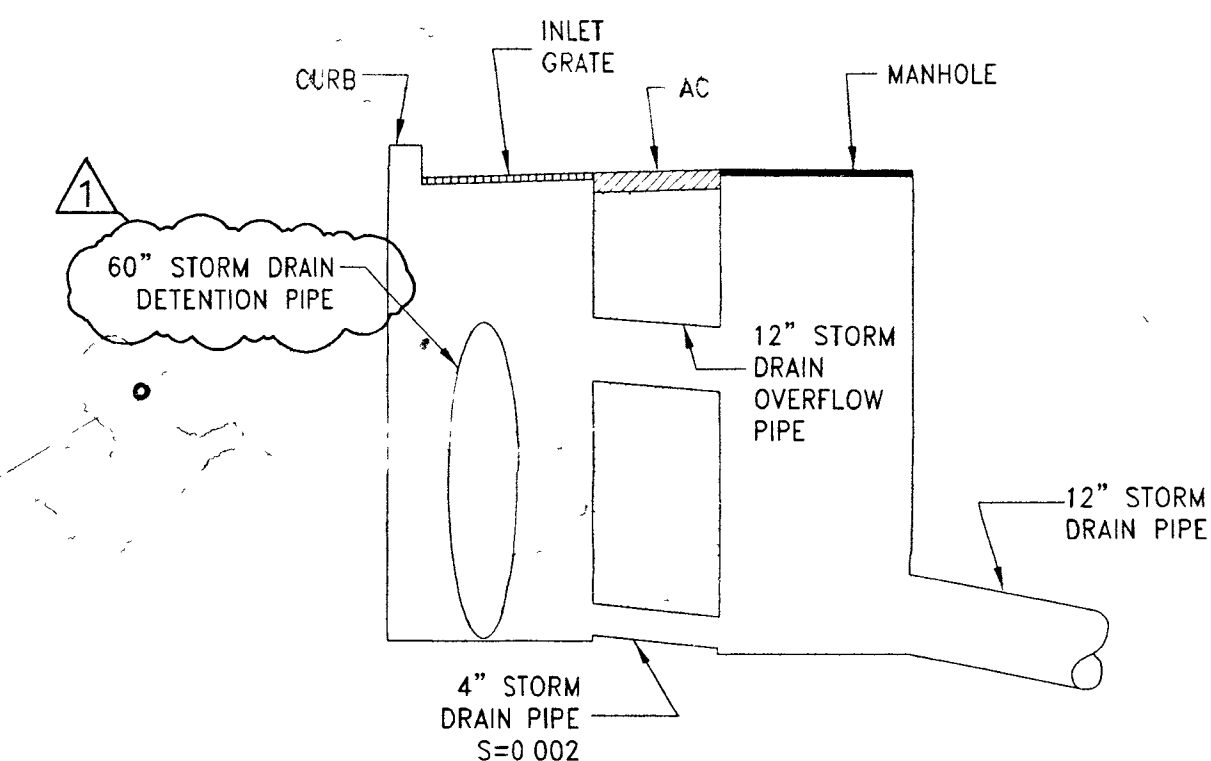
SHEET NUMBER  
C1  
OF 8 SHEETS  
PROJECT NO.  
101019



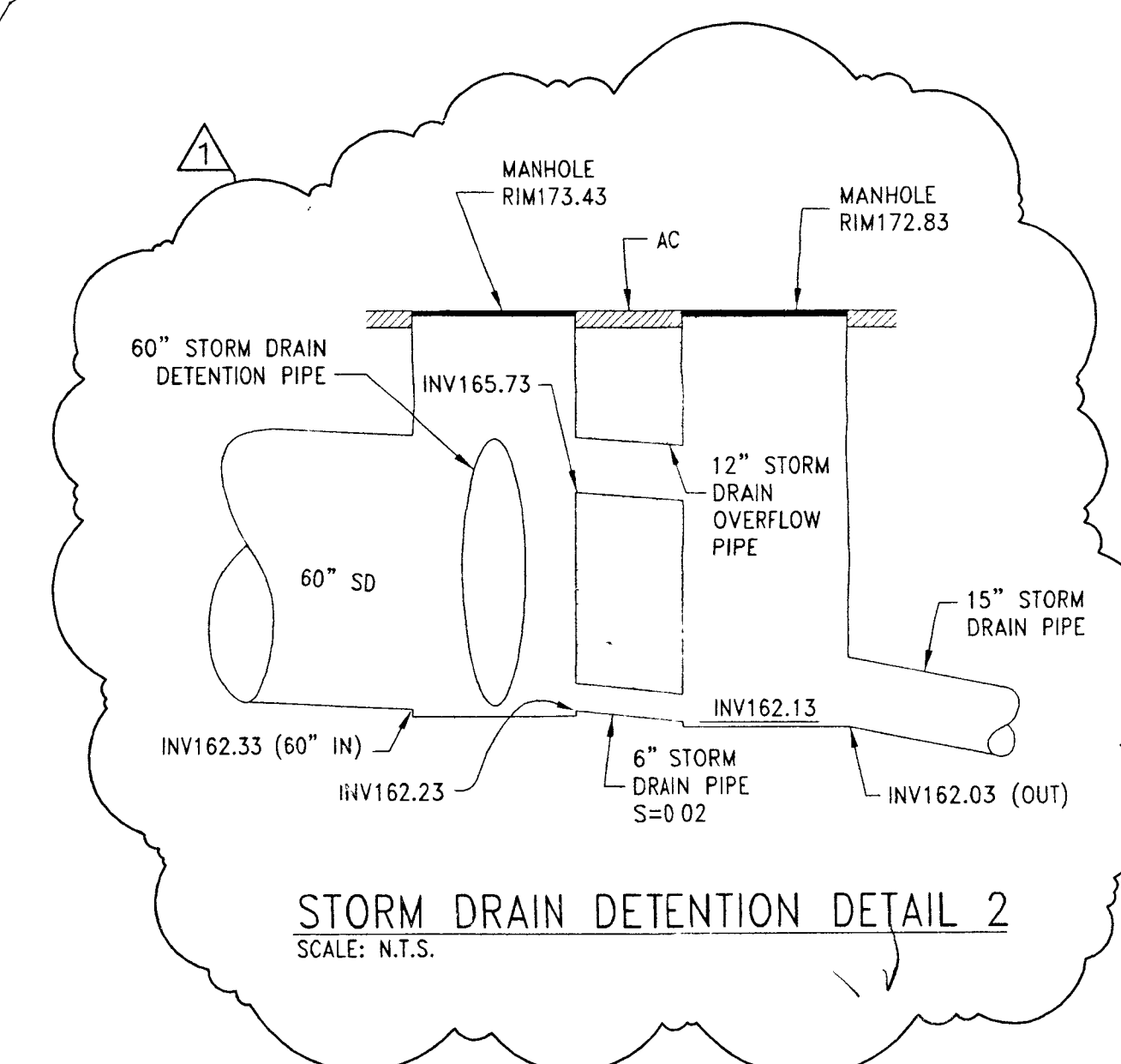


NOTES:

1. ALL ROOF LEADERS TO BE CONNECTED TO STORM DRAIN SYSTEM.
2. CONTRACTOR TO VERIFY EX. UTILITY LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION.
3. ELECTROLIERS.  
POST- 14" STEEL POLE (SEE SHEET 4, DRAWING 029690, PG&E DETAILS)  
POST TOP: "MC-ED EQ. STYLING" (SEE SHEET 2, DRAWING 029690, PG&E DETAILS)
4. ALL WATER AND SEWER CROSSINGS AND SEPARATIONS SHALL CORRESPOND TO THE CALIFORNIA DEPARTMENT OF HEALTH SERVICE STANDARDS.
5. ALL WATERLINE CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH THE PAJARO/SUNNY MESA CSD STANDARD SPECIFICATIONS AND DRAWINGS.



STORM DRAIN DETENTION DETAIL 1  
SCALE: N.T.S.



STORM DRAIN DETENTION DETAIL 2  
SCALE: N.T.S.

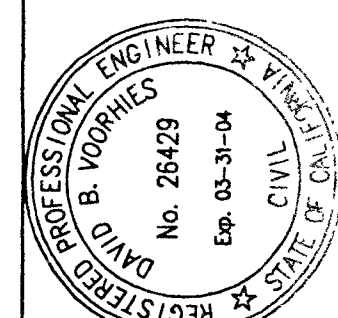
LEGEND:

- |                   |        |
|-------------------|--------|
| NEW WATERLINE     | — W —  |
| SEWERLINE         | — SS — |
| STORMLINE         | — SD — |
| MANHOLE           | ●      |
| WATER METER       | ⊕      |
| NEW GATE VALVE    | — X —  |
| NEW FIRE HYDRANT  | ●      |
| STORM CATCH BASIN | ■ CB   |
| ELECTROLIER       | ⊗      |

DETENTION VOLUMES	
DETENTION : WEST POND - 6,000CF + 1' FREEBOARD	
DETENTION PIPING: EST. 60" PIPE 375LF 7361CF	

ENVIRONMENTAL SERVICES

JOE COCHRAN DATE 4/11/02

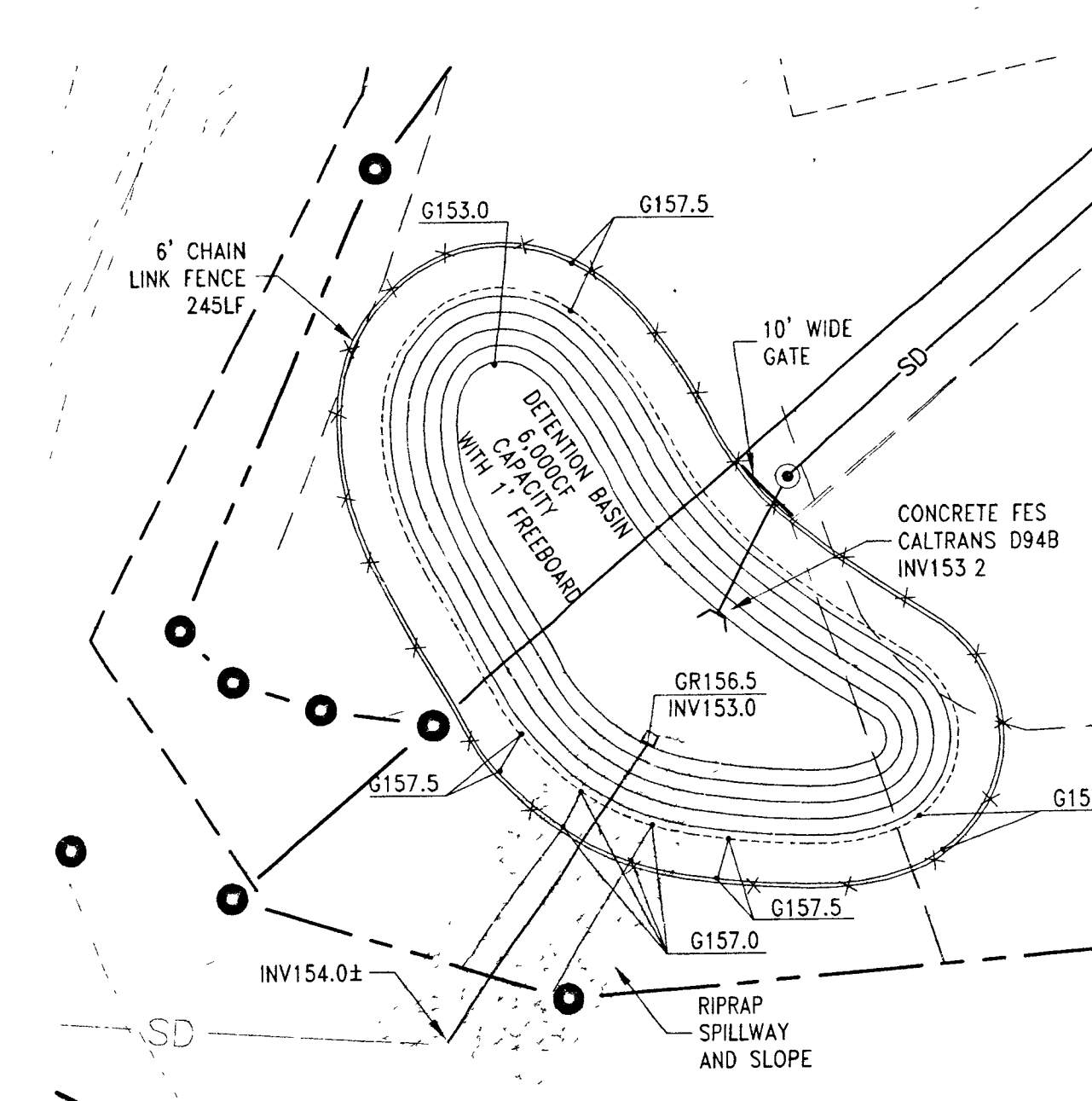
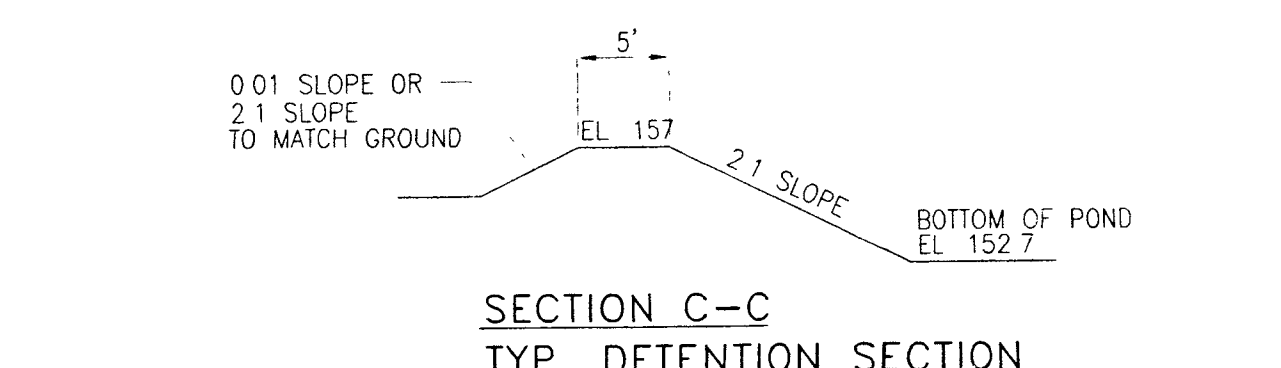
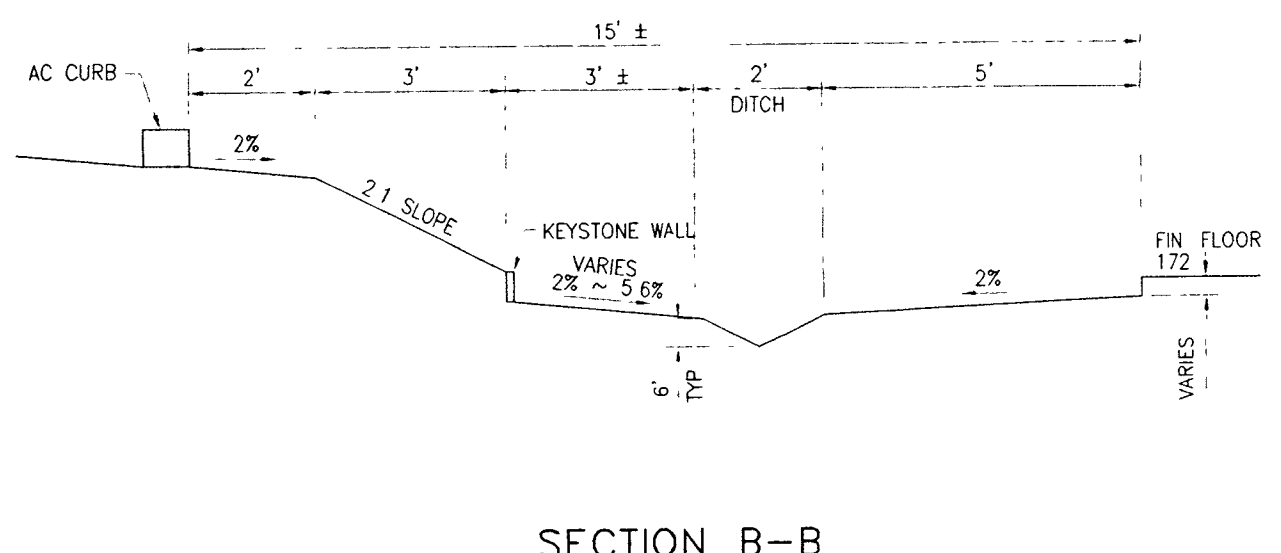
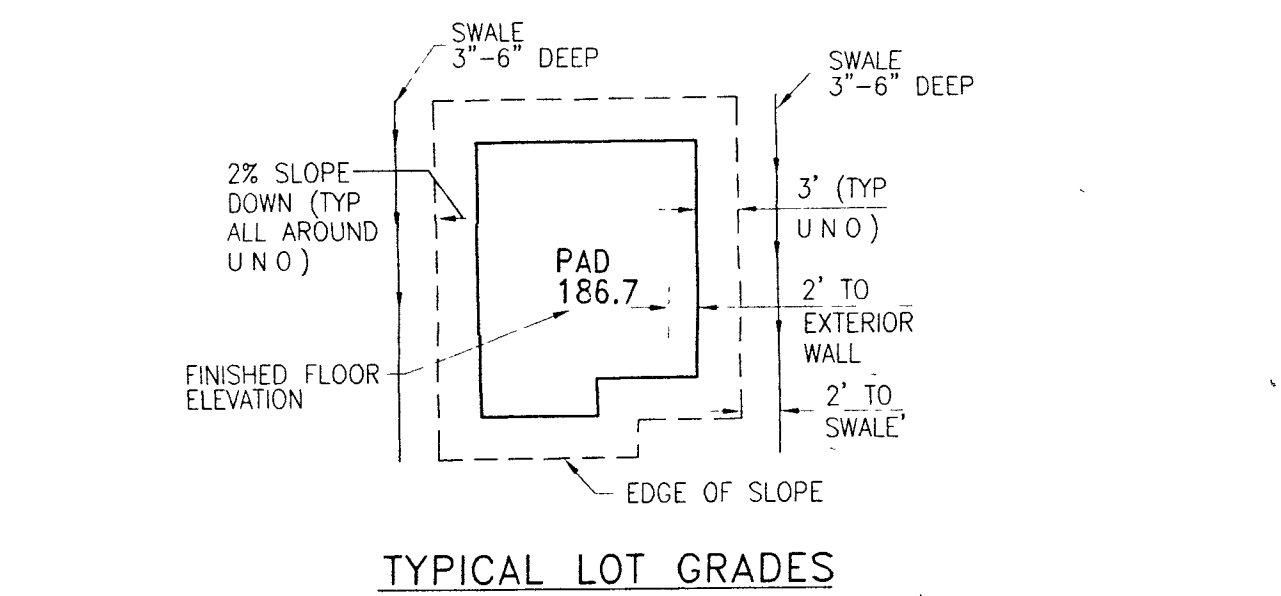
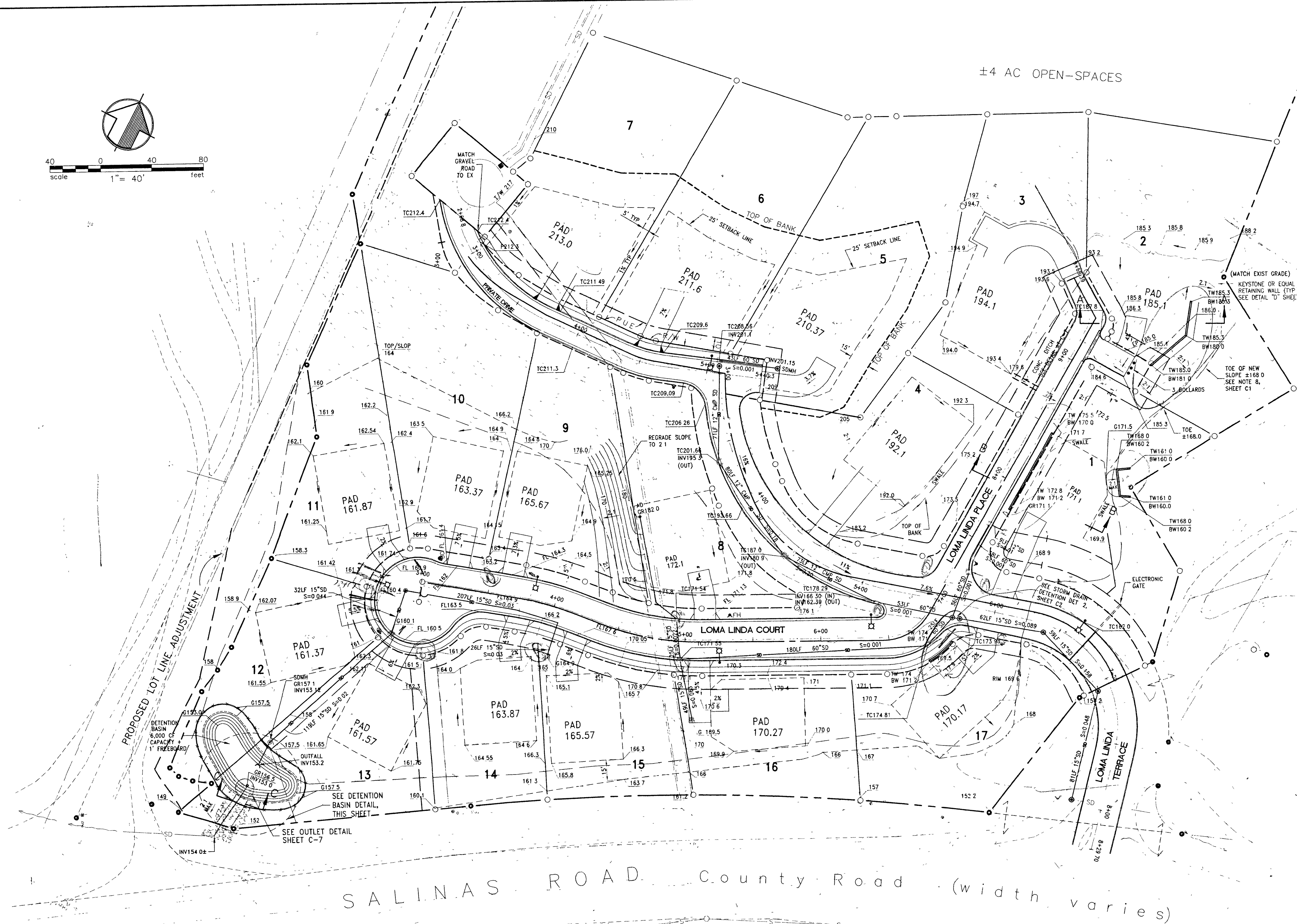
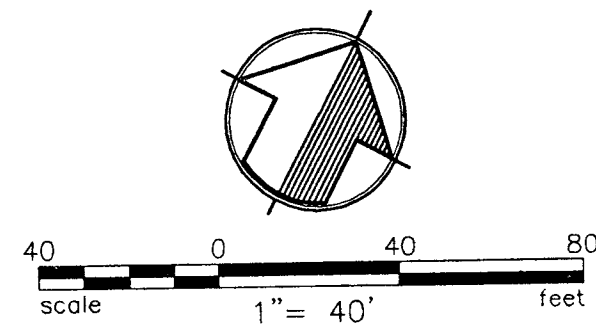


DESIGNED BY	DBV
DRAWN BY	ESB
CHECKED BY	DBV
SCALE	1" = 40'

Consulting Civil and Structural Engineers  
1075 N. TELLER STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95128  
(408) 998-1134  
FARMFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE-CALIFORNIA

SITE UTILITY PLAN  
LOMA LINDA SUBDIVISION  
CALIFORNIA  
MONTEREY COUNTY

SHEET NUMBER  
C2  
OF 6 SHEETS  
DRAWING NO.  
101019

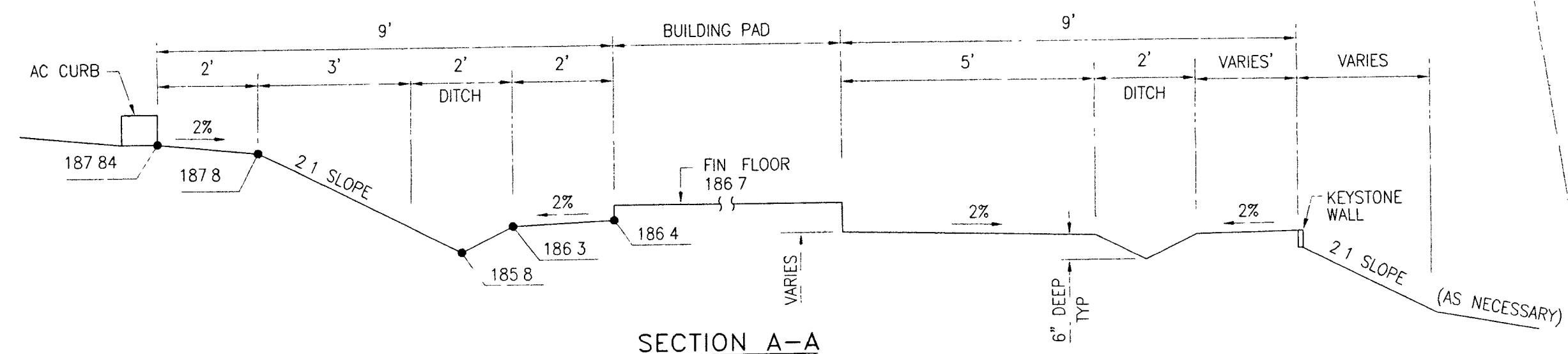


**BASIS OF BEARINGS:**

FOR THIS SURVEY IS THE BOUNDARY LINE SHOWN AS S 3°26' E 2706.93 FEET ON THE MAP RECORDED IN VOLUME 24 OF SURVEYS AT PAGE 6, MONTEREY COUNTY RECORDS AND ESTABLISHED FROM MONUMENTS FOUND AS SHOWN = S 3°26' E (FROM RECORDED SUBDIVISION MAP).

**BENCHMARK:**

USC&GS BM NO. 739 10'± EAST OF WESTERN ENTRANCE TO PAJARO VALLEY GOLF COURSE. ELEV. = 169.31



**NOTES:**

1. A copy of all compaction test and the final grading reports shall be submitted to the County prior to scheduling any inspections.
2. Pad elevation/s shall be certified to 0.1' prior to digging any footings or scheduling any inspections.
3. All roof leaders to be connected to storm drain system.

**EARTHWORK:**

CUT: 9400 CY  
FILL: 11500 CY (INCLUDES 10% SHRINKAGE)  
NET: 2100 CY (FILL)

**LEGEND:**

- KEYSTONE OR EQUAL RETAINING WALL TYP. 0' TO 6'
- STORM CATCH BASIN
- TOP/TOE OF SLOPE
- SWALE
- GRADE
- TOP OF WALL
- BOTTOM OF WALL
- EDGE OF PAVEMENT

REGISTERED PROFESSIONAL ENGINEER  
DAVID B. JOHNSON  
No. 26429  
Exp. 03-31-04  
CIVIL  
STATE OF CALIF.

REVISION	DATE	DESCRIPTION	BY
1	03-25-02	REVISED SD LINE, SD INVERT & SS LINE SLOPE	DBV
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100			

DESIGNED BY: DBV  
DRAWN BY: ESB  
CHECKED BY: DBV  
SCALE: 1"=40'  
REV: 1  
DATE: 03-25-02

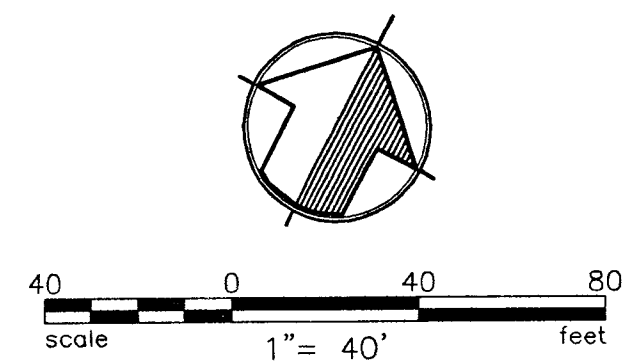
Consulting Civil and Structural Engineers  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 988-1234

CIRILCAV & D'ANGELO  
FAIRFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA

SITE GRADING PLAN  
LOMA LINDA SUBDIVISION  
CALIFORNIA  
MONTEREY COUNTY

SHEET NUMBER  
C3  
OF 8 SHEETS  
DRAWING NO.  
101019



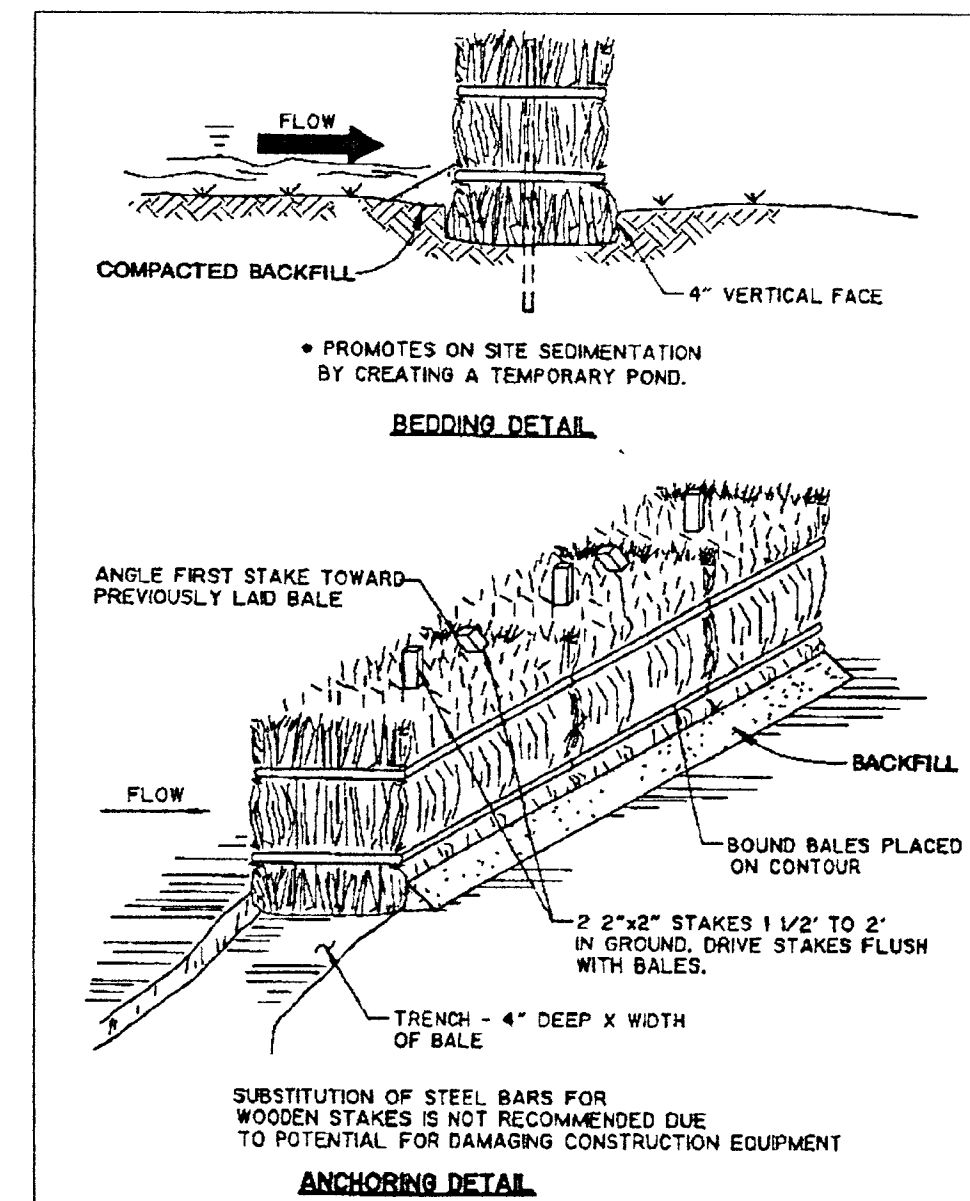


LEGEND:

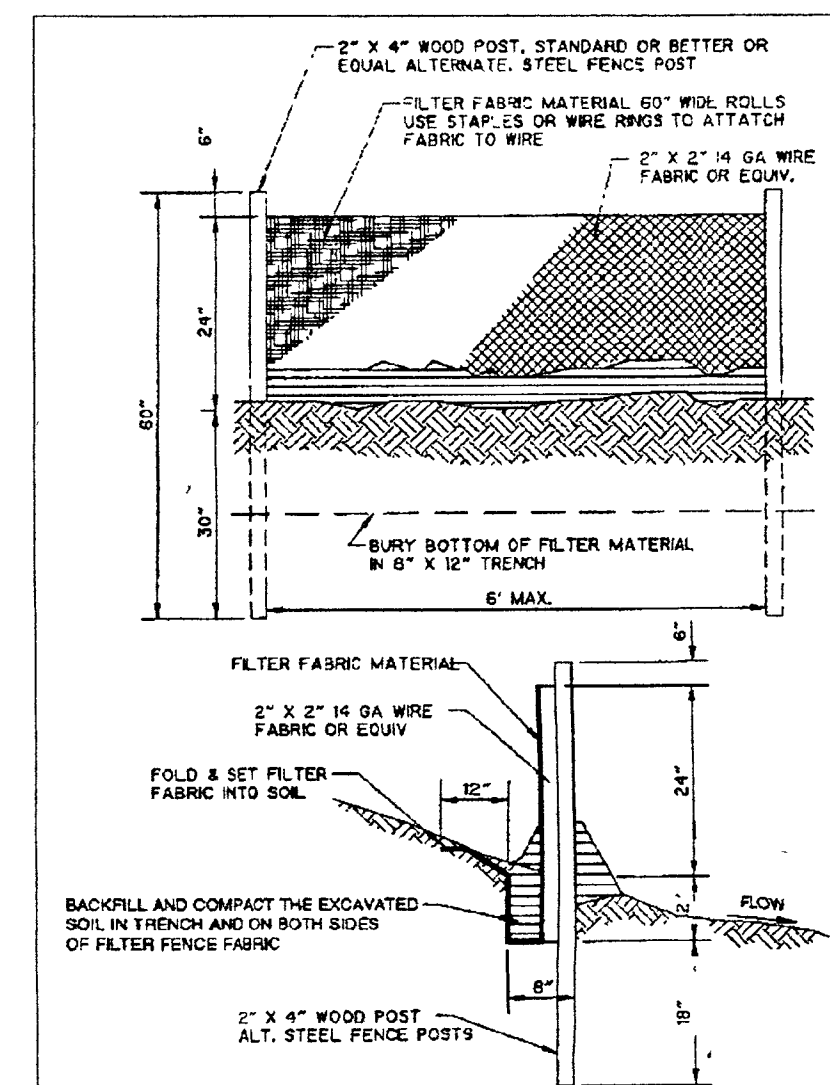
- STRAW BALE DIKE AROUND CATCH BASINS
- NEW SILT FENCE
- NEW STRAW BALE DIKE

NOTES:

1. EXISTING SITE UTILITIES NOT SHOWN FOR CLARITY. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES. ALL EXISTING SERVICES ARE TO BE REMOVED.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A DEMOLITION PERMIT FROM MONTEREY COUNTY PRIOR TO DEMOLITION.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING SEPTIC TANK REMOVAL PERMIT FROM MONTEREY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO REMOVAL OF THE SEPTIC TANKS.
4. VEGETATION ON SLOPES 3:1 OR STEEPER ARE TO REMAIN WHEREVER POSSIBLE. FINISH SLOPES 3:1 OR STEEPER, WHERE VEGETATION WAS REMOVED SHALL BE HYDROSEEDDED.
5. SILT FENCES ARE TO BE INSTALLED AT THE TOP OF BANK.
6. EXISTING UTILITIES AND AC ARE TO BE REMOVED FROM THE SITE AND TO BE DISPOSED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS TO PERFORM THIS WORK.
7. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING AND COORDINATING WITH LOCAL UTILITIES PRIOR TO REMOVAL OF EXISTING FACILITIES THIS INCLUDES:
  - A.) PG & E:  
AL TROIANO, TEL (408) 479-3118  
615 7TH AVE., SANTA CRUZ CA95062
  - B.) PAJARO/SUNNY MESA COMMUNITY SERVICES DISTRICT:  
JOE ROSA, TEL. (408) 722-1389  
136 SAN JUAN ROAD, WATSONVILLE, CA95076
  - C.) MONTEREY COUNTY:  
BRYCE HORI, TEL. (831) 755-4920
  - D.) FALCON CABLE TV:  
GILLROY, TEL. (408) 842-5653
  - E.) PAC BELL:  
AL GUTIERREZ, TEL. (831) 754-8490



STRAW BALE DIKE DETAIL  
N.T.S.



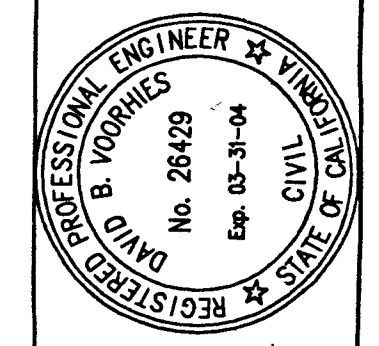
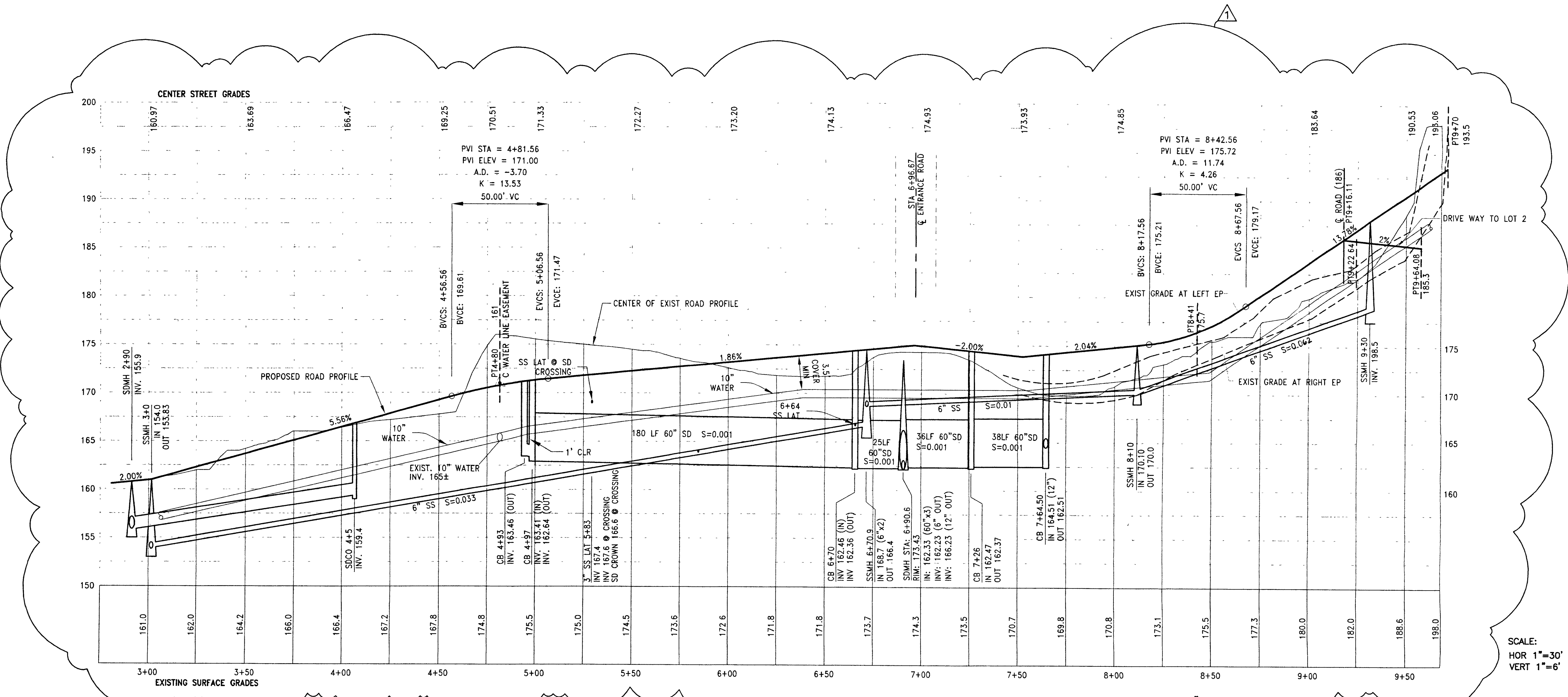
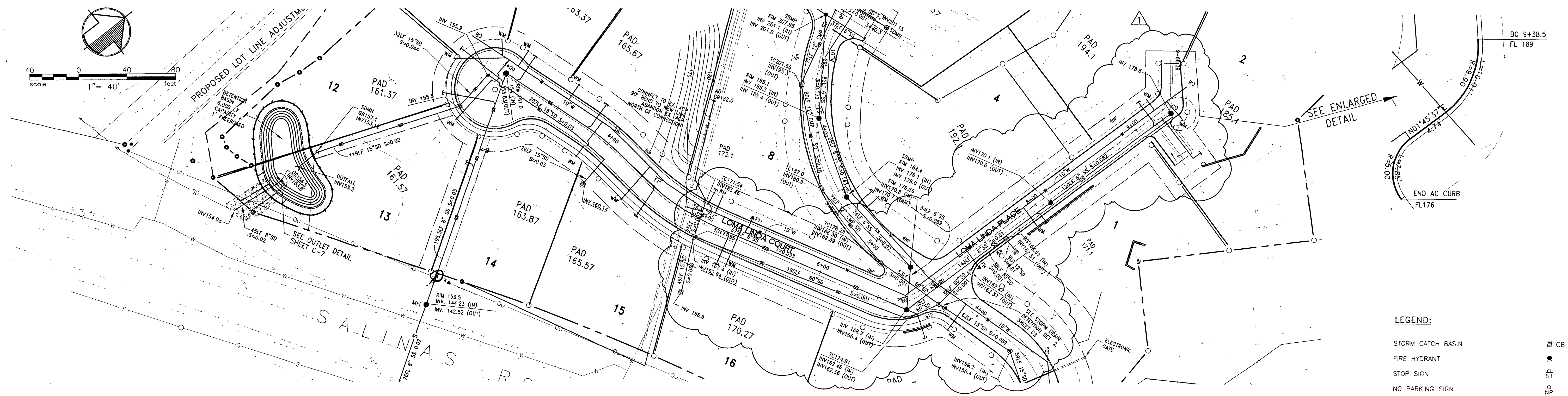
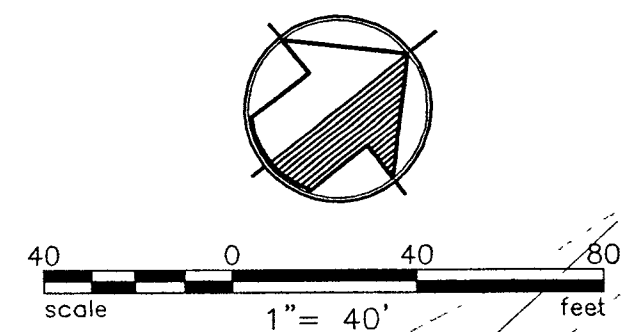
SILT FENCE DETAIL  
N.T.S.

DESIGNED BY DBV  
DRAWN BY ESB  
CHECKED BY DBV  
SCALE 1"=40'

Consulting Civil and Structural Engineers  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234  
FAIRFIELD • MONTEREY • PLEASANTON • SAN FRANCISCO • SAN JOSE • CALIFORNIA

DEMO. & EROSION CONTROL PLAN  
LOMA LINDA SUBDIVISION  
MONTEREY COUNTY  
CALIFORNIA

SHEET NUMBER  
C4  
OF 8 SHEETS  
DRAWING NO.  
101019



REV	DATE	DESCRIPTION
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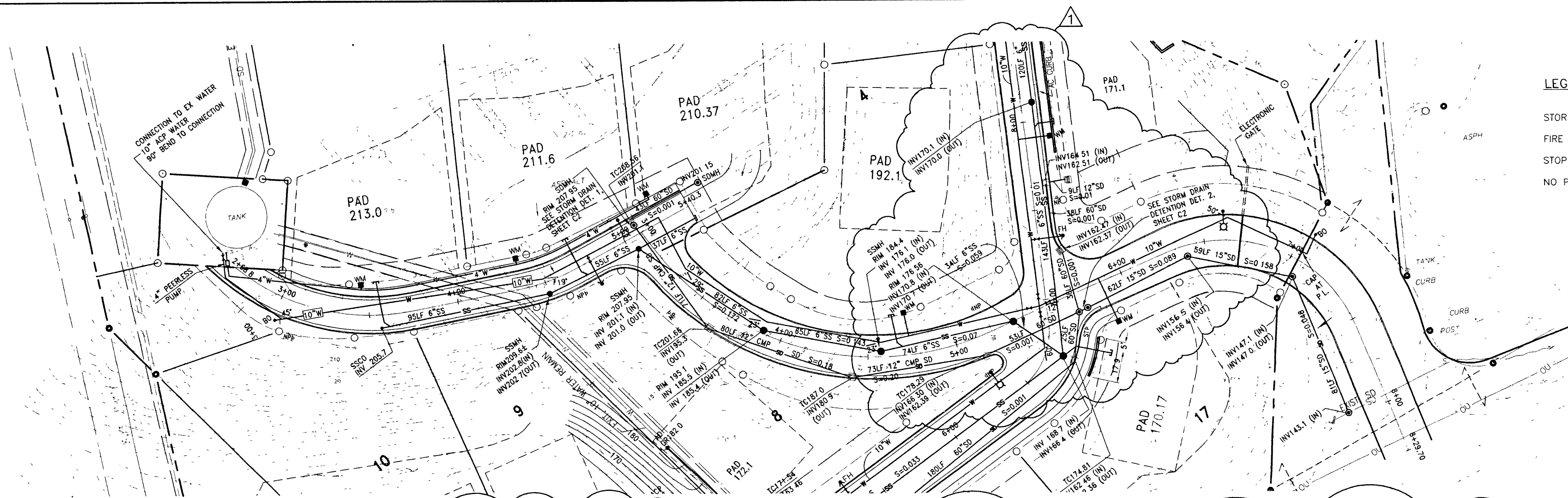
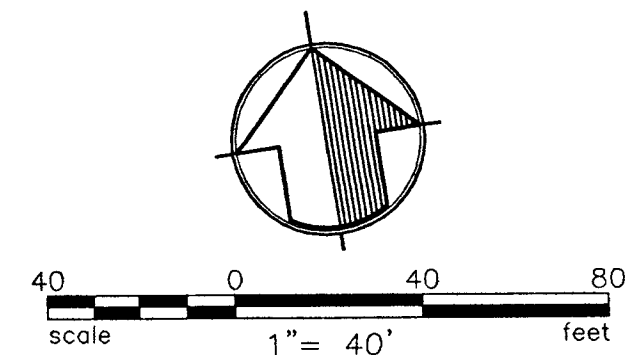
DESIGNED BY DBV  
DRAWN BY ESB  
CHECKED BY DBV  
SCALE 1"=40'

Consulting Civil and Structural Engineers  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
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PLAN & PROFILE  
LOMA LINDA SUBDIVISION  
NEW ROAD AND DRIVE "A"  
MONTEREY COUNTY CALIFORNIA

SHEET NUMBER  
C5  
OF 8 SHEETS  
DRAWING NO.  
101019

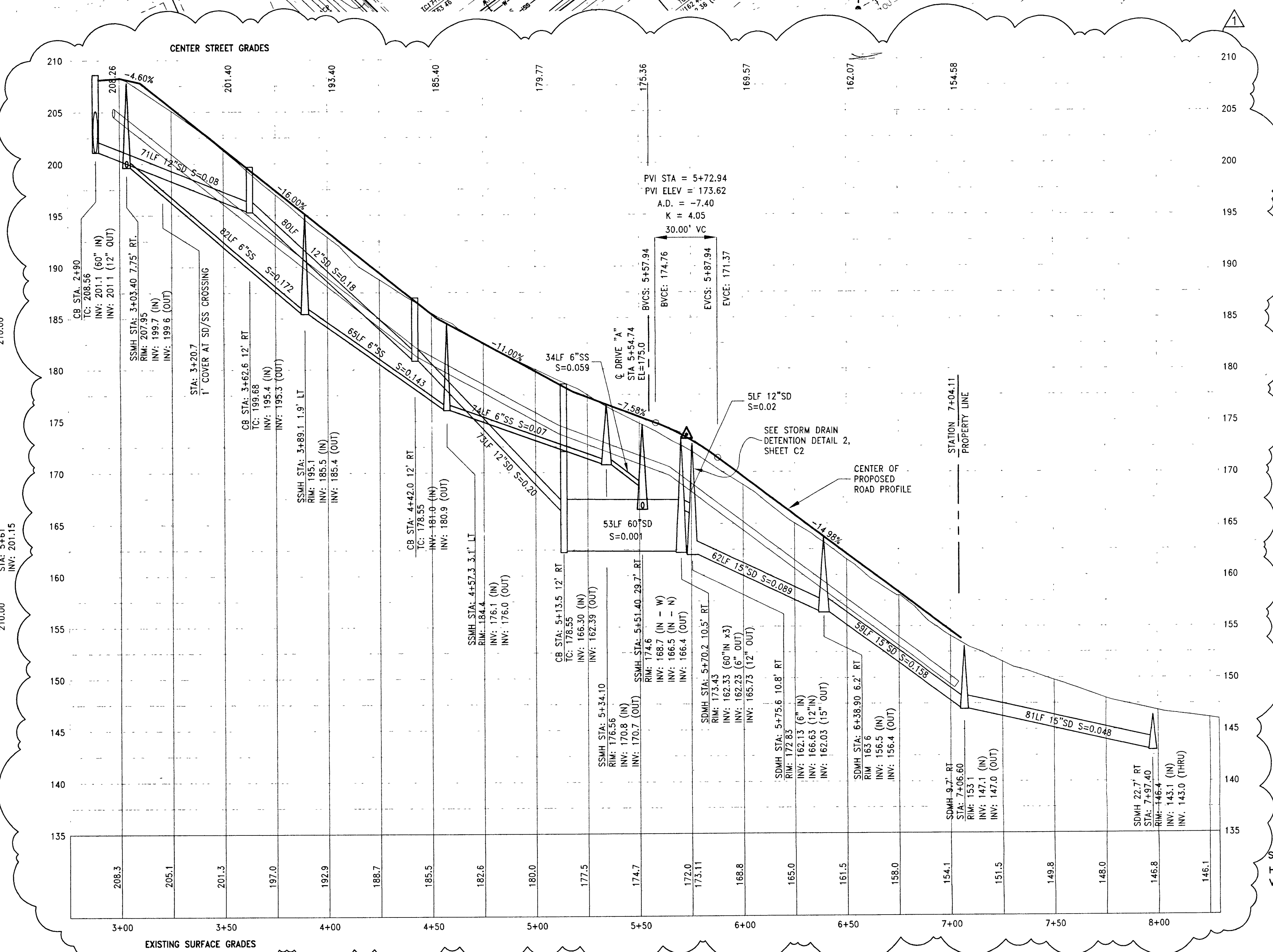
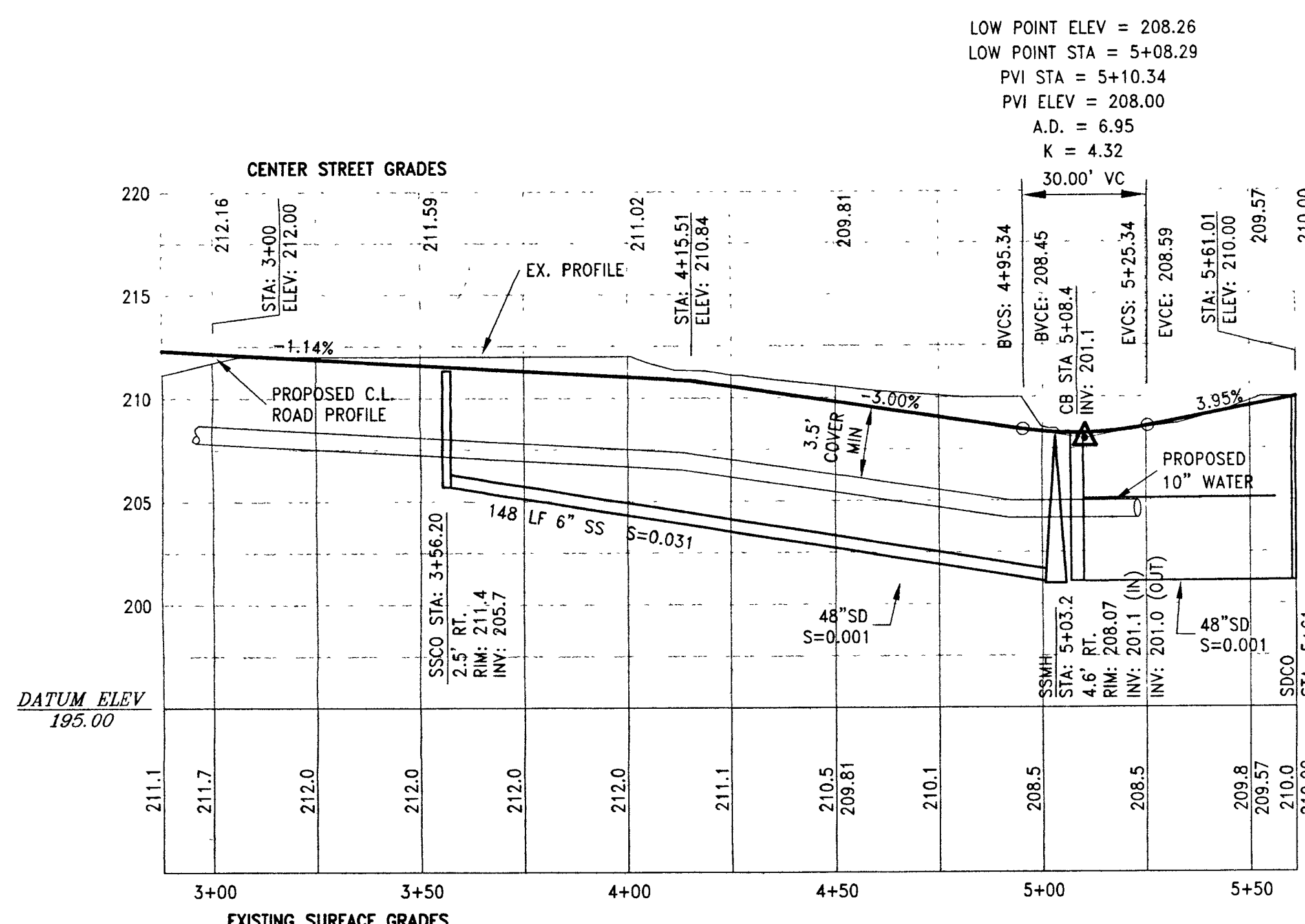
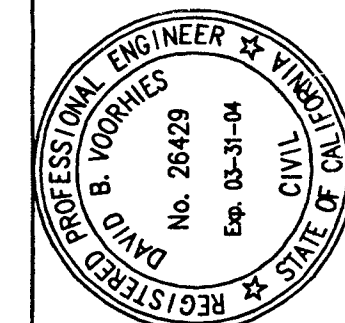




# LEGEND:

- STORM CATCH BASIN
- FIRE HYDRANT
- STOP SIGN
- NO PARKING SIGN

CB  
FH  
SS  
NP



REV	DATE	DESCRIPTION
1	12-15-00	REVISED SD LINE, SD INVERT & SS LINE, SLOPE

DESIGNED BY  
DBV

DRAWN BY  
ESB

CHECKED BY  
DBV

SCALE  
AS NOTED

Consulting Civil and Structural Engineers  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234

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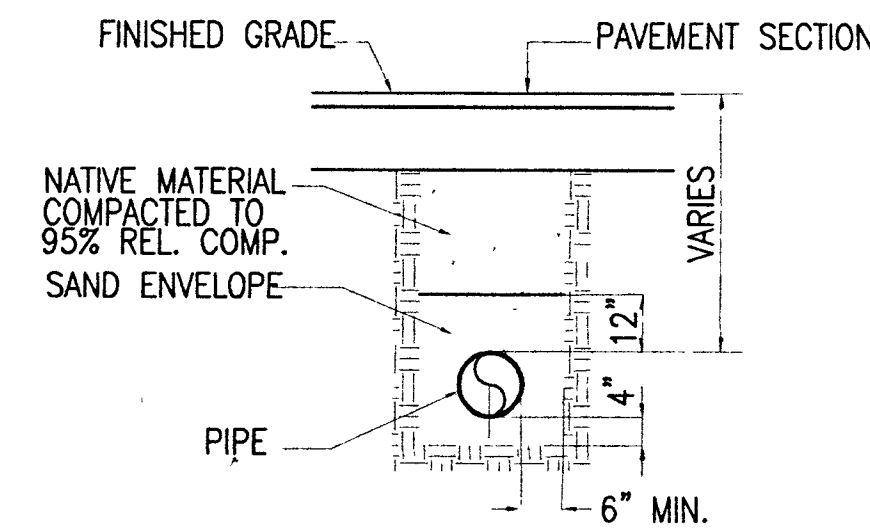
PLAN & PROFILE

LOMA LINDA SUBDIVISION  
DRIVE "B" TO ENTRANCE DRIVEWAY

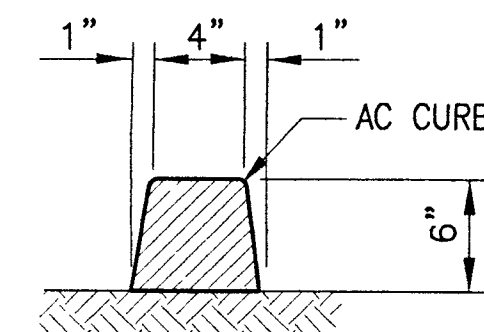
CALIFORNIA  
MONTEREY COUNTY

SHEET NUMBER  
C6  
OF 8 SHEETS

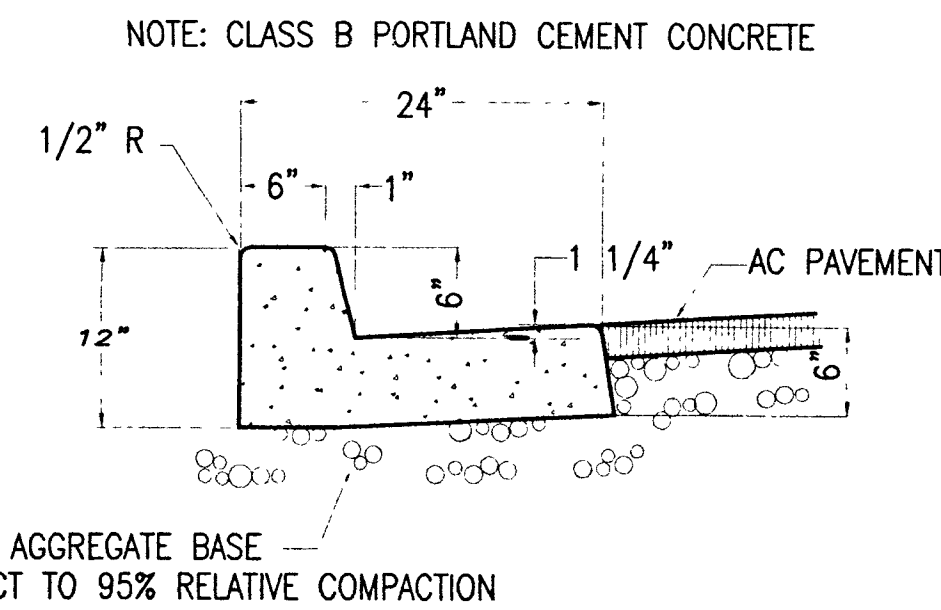
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101019



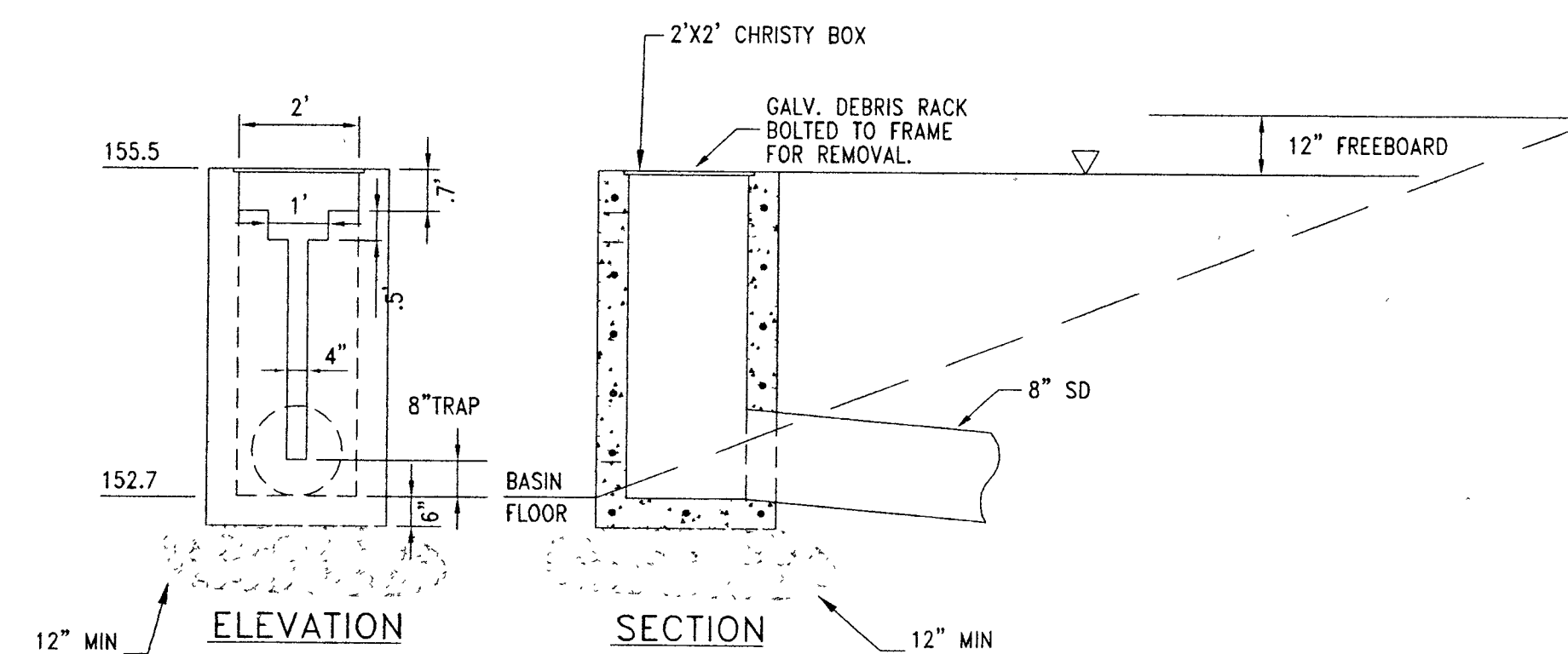
STANDARD TRENCH BACKFILL  
N T S



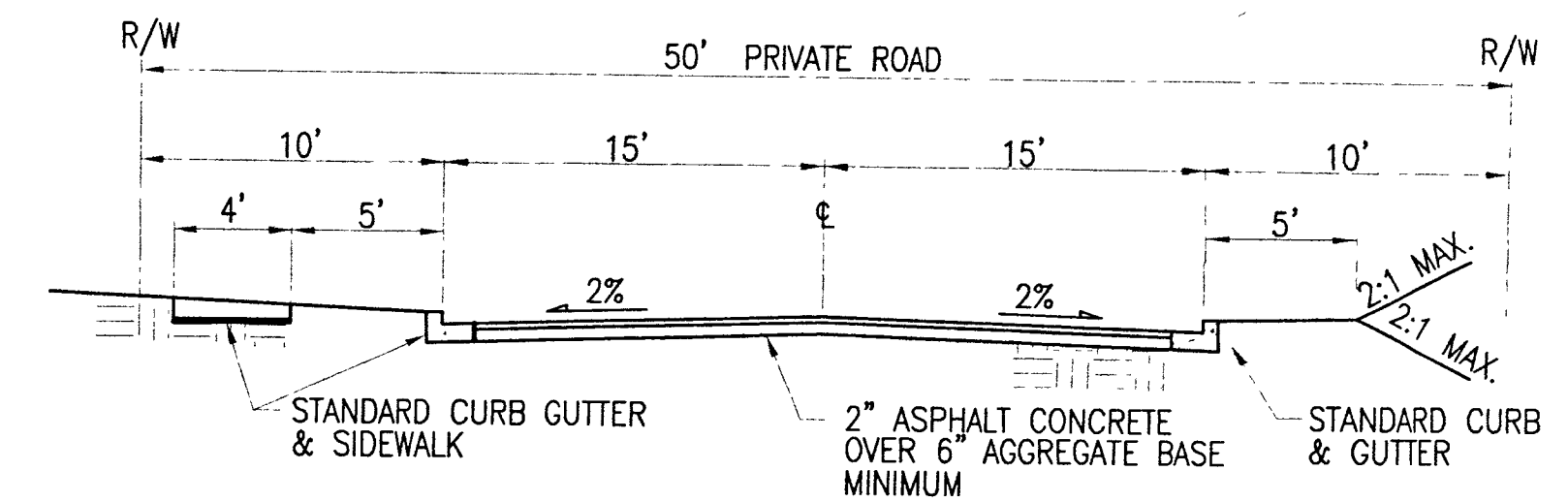
TYPE "E" DIKE  
N.T.S.



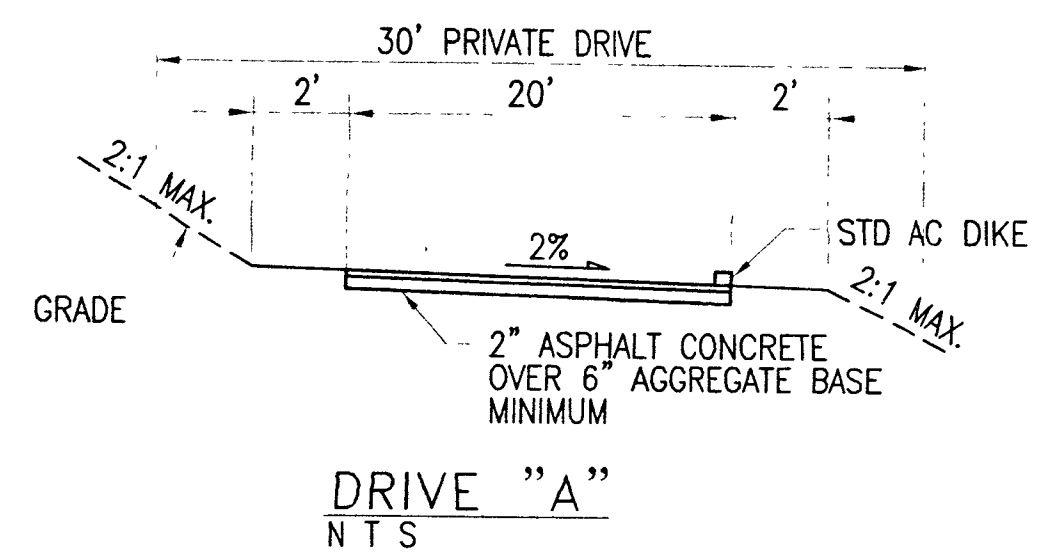
TYPE "A" CURB & GUTTER  
N T S



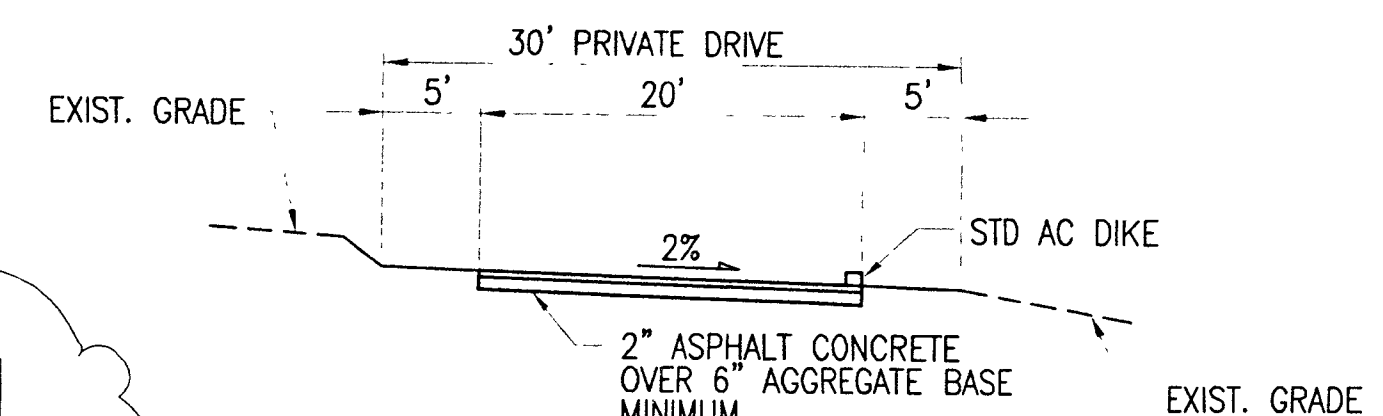
OUTLET STRUCTURE - BASIN "A"  
N T S



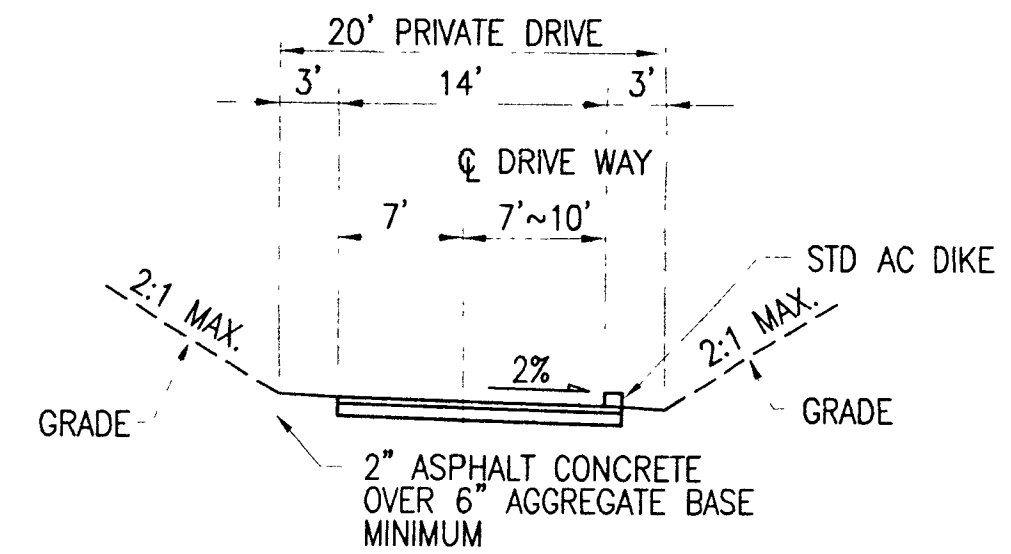
NEW ROAD AND ENTRANCE  
N T S



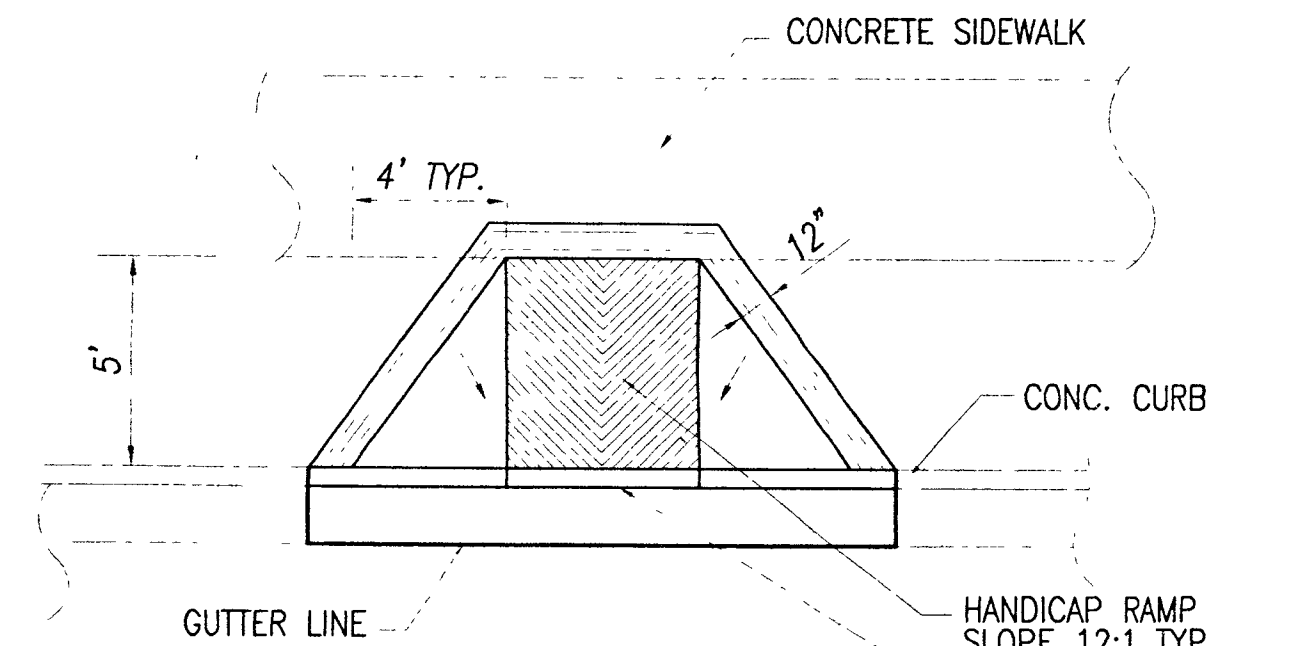
DRIVE "A"  
N T S



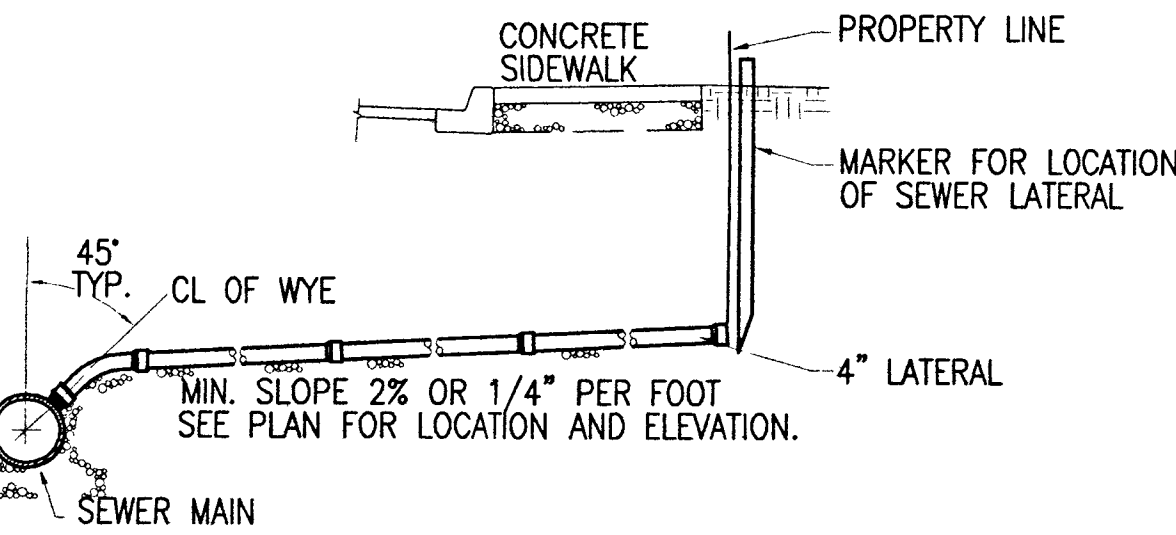
DRIVE "B"  
N T S



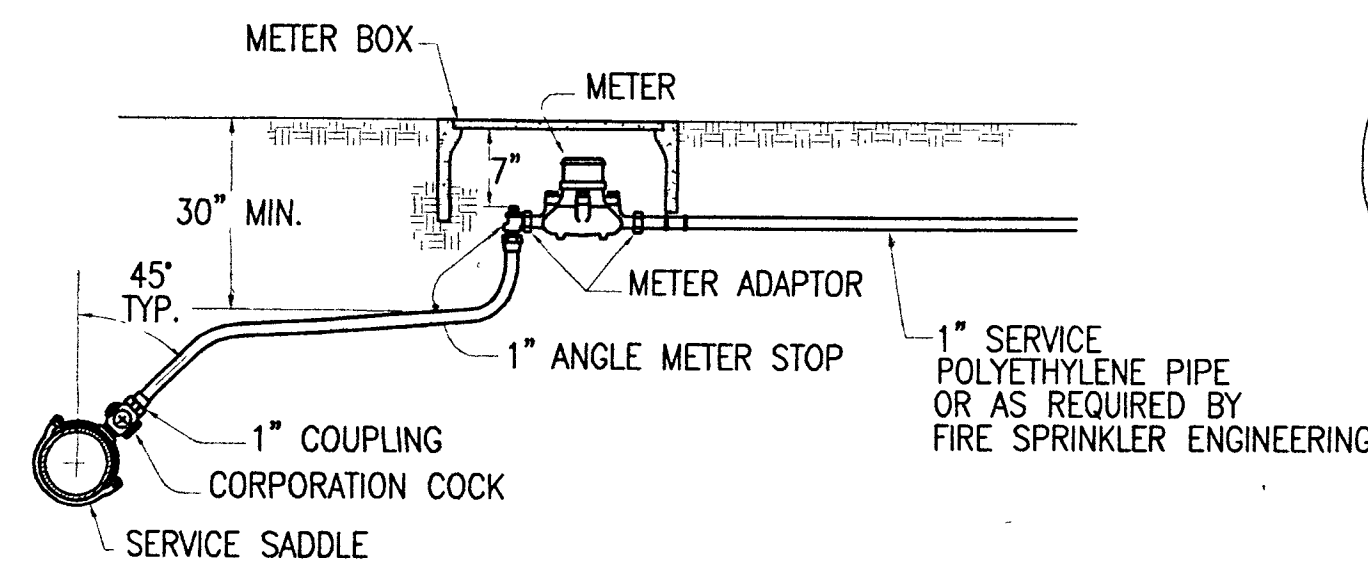
SECTION C-C  
N T S



HANDICAP RAMP  
N T S

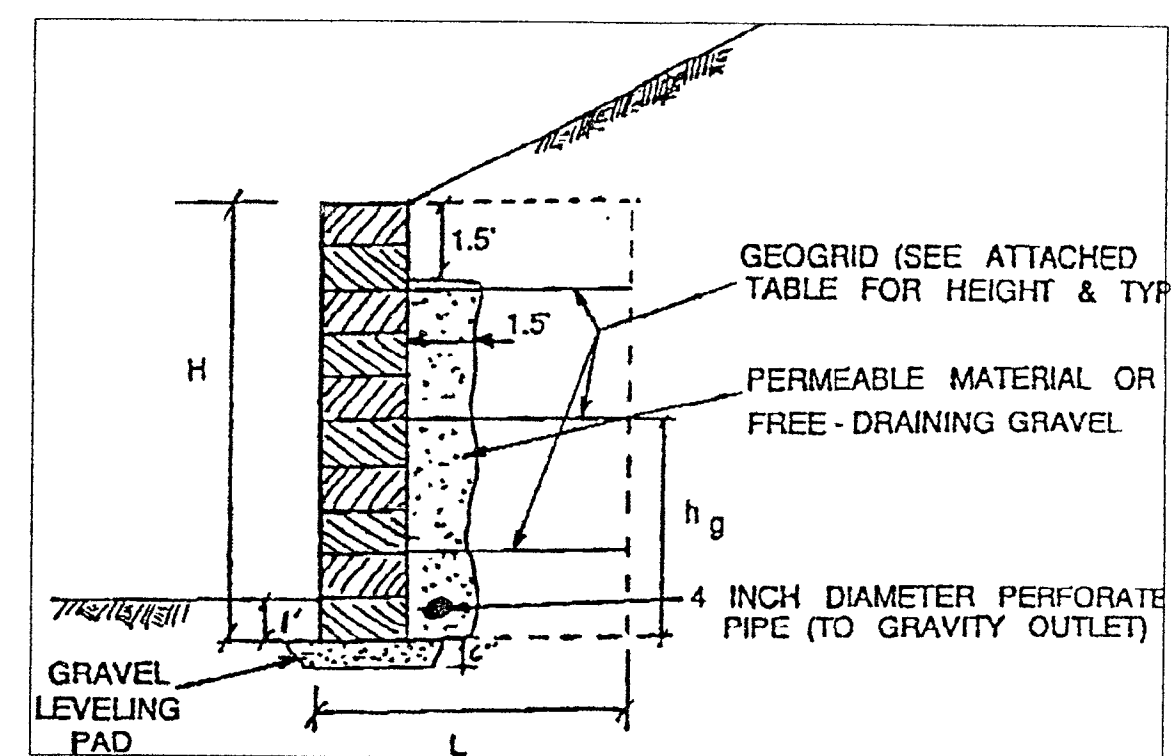


SEWER LATERAL  
N T S



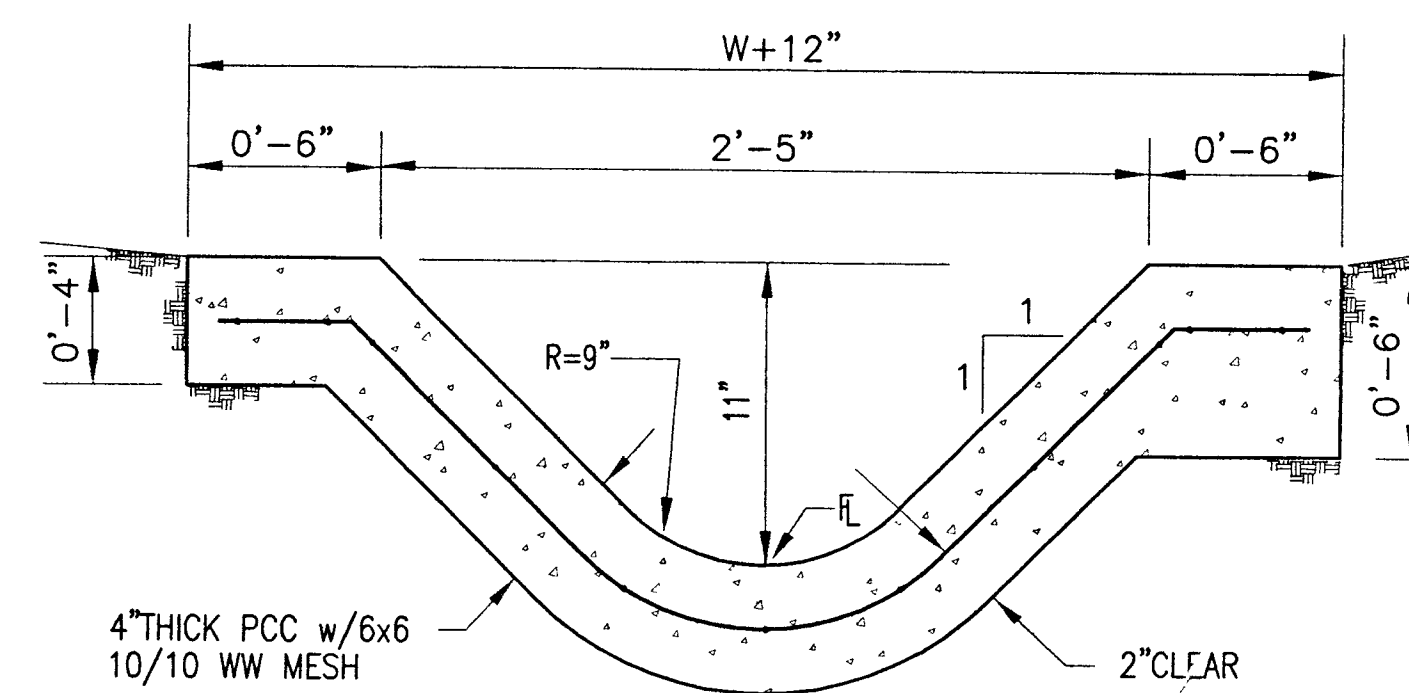
1" SERVICE CONNECTION  
N T S

- GENERAL NOTES**
1. ALL MODULAR BLOCK TO CONSIST OF KEYSTONE STANDARD UNITS. TOP 2 COURSES CAN CONSIST OF KEYSTONE COMPAC UNITS.
  2. ALL GEOGRID TO CONSIST OF TENSAR UX 1400 OR APPROVED EQUIVALENT.
  3. ALL RETAINING WALL BACKFILL TO BE COMPACTED TO A MINIMUM DEGREE OF COMPACTION OF 90 PER CENT BASED ON ASTM D1557.
  4. ALL SUBSURFACE DRAINAGE PIPE TO CONSIST OF SDR 35 OR APPROVED EQUIVALENT.
  5. ALL SUBSURFACE DRAINS TO BE PROVIDED WITH CLEAN OUTS AT REGULAR INTERVALS.
  6. THE RETAINING WALL DESIGNS HEREIN ARE BASED ON THE LOADING CONDITIONS ASSUMED HEREIN. ANY OTHER LOADING CONDITIONS COULD INVALIDATE THIS DESIGN.

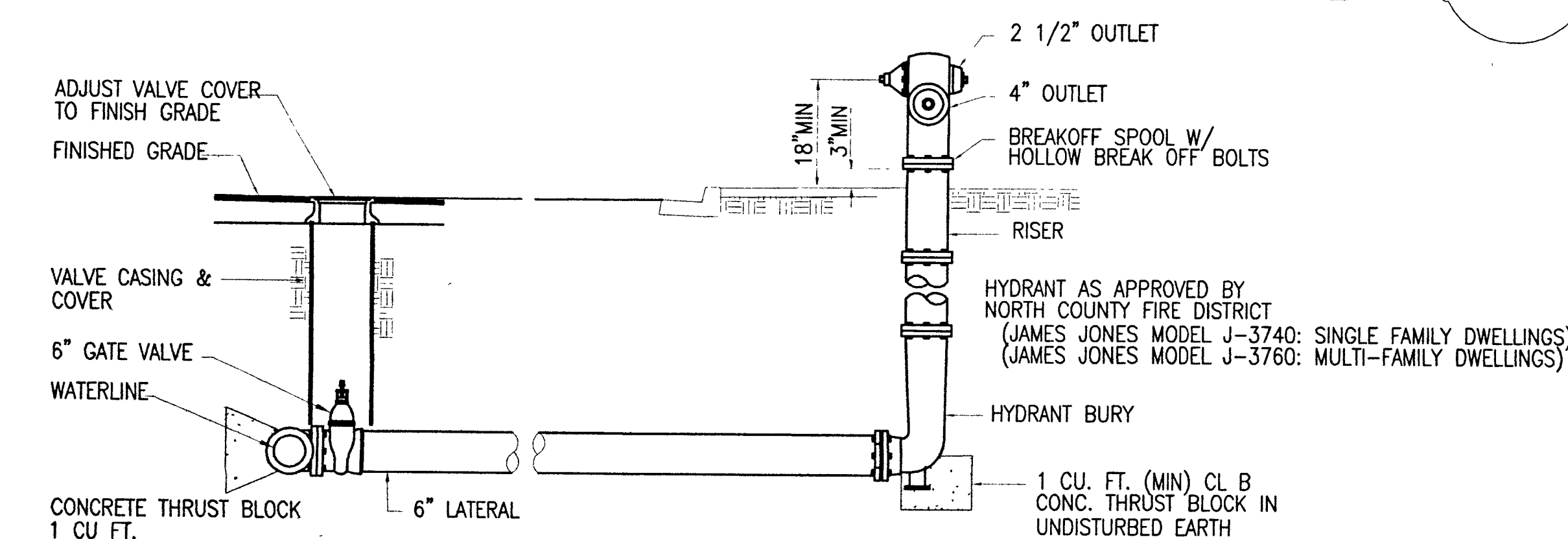


KEYSTONE WALL DETAIL "D"  
N.T.S.

WALL HEIGHT H (FT.)	GEOGRID LENGTH L (FT.)	NO. OF GEOGRIDS	NO. OF GEOGRIDS h <sub>g</sub> (FT.)	GEOGRID TYPE
10	8	5	1'-4, 3'-4, 5'-4, 7'-4, 9'-4	TENSAR UX1400
8	7	4	1'-4, 3'-4, 5'-4, 7'-4	TENSAR UX1400
6	6	3	1'-4, 3'-4, 5'-4	TENSAR UX1400
4	4.5	2	1'-4, 2'-8	TENSAR UX1400
3'-4	--	--	--	--

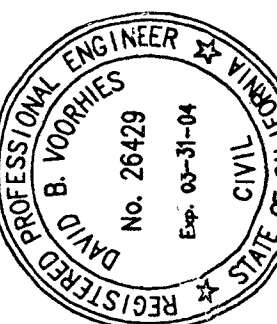


PCC DITCH DETAIL  
NO SCALE



HYDRANT INSTALLATION  
N T S

- NOTE:**
1. CAST IRON PIPE SHALL CONFORM TO THE AWWA SPECIFICATION C106, CLASS 150.
  2. CAST IRON FITTINGS SHALL CONFORM TO THE AWWA SPECIFICATION C110 71.
  3. FINAL INSPECTION BY NCFD AND CWS SHALL BE REQUIRED PRIOR TO BACKFILL.
  4. INSTALL BLUE REFLECTOR MARKER IN TRAVELWAY OPPOSITE FIRE HYDRANT.



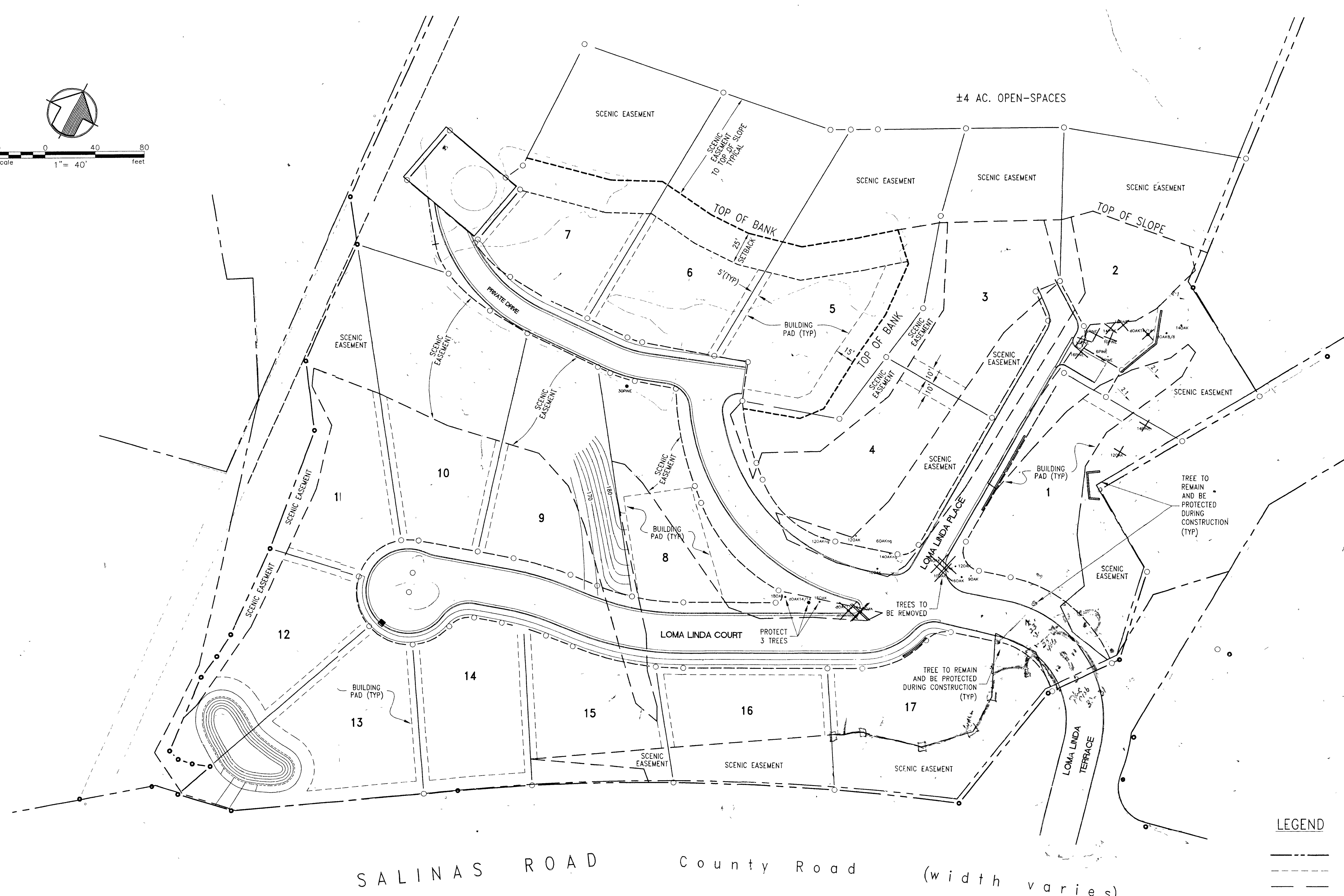
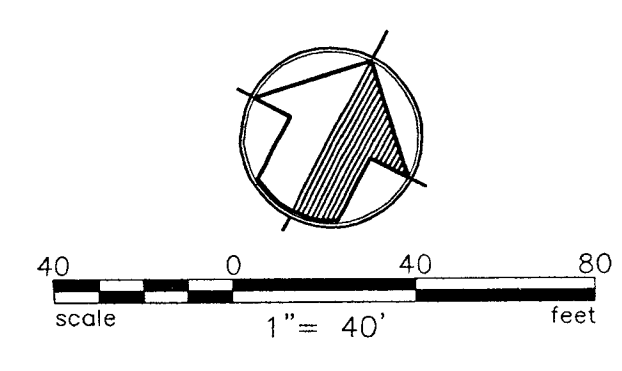
DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	SHOWN
DBV	ESB	DBV	1"=10'-0"	1

Consulting Civil and Structural Engineers  
1075 N. TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95112  
(408) 998-1234  
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LOMA LINDA SUBDIVISION  
TITLE 1st LINE  
MONTEREY COUNTY CALIFORNIA

SHEET NUMBER  
C7  
OF 8 SHEETS  
DRAWING NO.  
101019





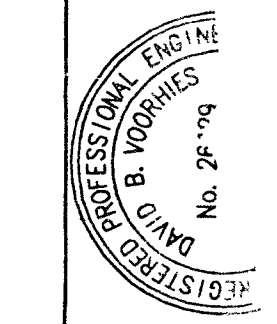
**LEGEND**

--- BOUNDARY LINE  
--- BUILDING PAD  
--- SCENIC EASEMENT  
--- LOT LINE

⊗ 8" OAK  
● 8" OAK

TREE AND DESCRIPTION  
(TO BE REMOVED)

TREE AND DESCRIPTION  
(TO REMAIN AND BE PROTECTED)



REV	DATE	DESCRIPTION
0	2-05-02	

DESIGNED BY: DBV  
DRAWN BY: NJH  
CHECKED BY: DBV  
SCALE: 1" = 40'

**Consulting Civil and Structural Engineers**  
1075 N TENTH STREET, SUITE 100  
SAN JOSE, CALIFORNIA 95128  
(408) 998-1234  
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**SCENIC EASEMENT EXHIBIT**  
**LOMA LINDA SUBDIVISION**  
MONTEREY COUNTY CALIFORNIA

SHEET NUMBER  
**C8**  
OF 8 SHEETS  
DRAWING NO.  
**101019**

Project No. M12489  
28 January 2025

MR. TONY ESCARENO  
tonyescareno@gmail.com

Subject: Update to Geotechnical Investigation

Reference: Proposed New Single-Family Dwelling (SFD)  
APN 117-191-015  
2220 Silver Stone Street., Lot No.2  
Royal Oaks, California

Dear Mr. Escareno:

As requested, we have prepared this Update to Geotechnical Investigation for a proposed SFD located at 2220 Silver Stone Street in Royal Oaks, California. Our original Geotechnical Investigation for the Loma Linda Subdivision is dated 3 January 1997 (HKA Project No. M5364). The report is included in Appendix A of this update report.

The mass grading for the subdivision was performed in 2003 and residences have been constructed on 15 of the 17 subdivided lots since that time. This update report concerns APN 117-191- 015, located at 2220 Silver Stone Street (Lot 2 of the original subdivision). We understand you have purchased the lot and intend to construct a new SFD. Preliminary Building plans prepared by Ismael Magana Jr. were provided for our review.

### **Purpose**

The purpose of this Update Geotechnical Investigation is to evaluate the current conditions at the new SFD site and determine if the conclusions and recommendations presented in the 3 January 1997 Geotechnical Investigation are still valid and sufficient for the proposed new SFD. As necessary, we provide supplemental geotechnical criteria and recommendations as well as updated (2022) CBC requirements.

### **Scope of Services**

Our scope of services included:

- A. Site visits and a meeting with the owner at the new building site to evaluate current conditions and discuss the proposed development.
- B. Review of the original reports for the subdivision:

- 1 1997 HKA Geotechnical Investigation



Mr. Tony Escareno  
Project No. M12489  
2220 Silver Stone Street, Royal Oaks  
28 January 2025  
Page 2

- 2 1996 FNA Geologic Report
- 3 2003 HKA Mass Grading Report (PR#1)

We also reviewed the Monterey County GIS Website regarding the site and vicinity and additional documents provided by the client.

- B. Development of updated geotechnical criteria and recommendations for the proposed new SFD and associated improvements.
- C. Preparation and submittal of this Update to Geotechnical Investigation report.

### **Site Conditions**

We visited the site on 4 December 2024 to evaluate current conditions. The building area on Lot 2 consists of a single level area on the east side of the driveway leading to the parcel. The pad is at the east end of a west-east descending ridgetop that was graded level many years in the past. In 2003, undocumented fill on the east portion of Lots 1 and 2 was removed and replaced as an engineered fill slope, keyed, benched and compacted in thin lifts to the current pad grade. In addition, the surface of the proposed building area was scarified, moisture conditioned and compacted as engineered fill. On the north side of the parcel, mapped undocumented fill noted in the original reports was not removed.

The lot is currently vegetated with low grass and weeds. The conditions are essentially unchanged from conditions at the time the mass grading for the subdivision was completed.

### **Project Description**

The proposed development on the parcel will consist of the construction of a new two-story SFD and attached garage on the south portion of the level area. The first floor of the SFD and garage will have a 2,523 square foot building footprint. An outdoor covered patio will be located on the north side of the SFD.

### **Conclusions and Recommendations**

Based on our observations and review of the noted reports and the Monterey County GIS website, the conditions at the project site are unchanged from conditions at the time our 2003 mass grading report was completed. Therefore, the conclusions and recommendations presented in the report are still valid and may be used for design and construction of the new SFD, except where superseded by the following geotechnical design criteria and supplemental recommendations:

**Building Setbacks**

1. The new SFD and improvements should be setback a minimum of 25 feet from the top edge of the north facing slope and a minimum of 10 feet from the east facing slope. Portions of the SFD and improvements setback 25 feet to 35 feet from the north facing slope should be founded on reinforced concrete piers. Portions of the SFD setback a minimum of 35 feet from north facing slope and a minimum of 10 feet from the east facing slope may be founded on continuous spread footing foundations

**Pier Foundations**

2. Reinforced concrete piers are required for portions of the foundation setback 25 to 35 feet from the top edge of the north facing slope. The piers should be designed to resist an active force of 75 pcf times two pier diameters acting in the top 10 feet of the piers. The drilled piers should be a minimum of 18-inch diameter and embedded a minimum of 5 feet below the active zone (15 feet minimum depth).
3. The piers may be designed for an allowable skin friction of 500 psf below a depth of 10 feet. The top 10 feet of the pier depth should be neglected when calculating skin friction.
4. For passive lateral resistance, an equivalent fluid pressure of 300 pcf may be assumed to act against two pier diameters below the top 10 feet of the piers (neglect the top 10 feet of soil acting on the piers).
5. The pier size and reinforcement should be determined by a structural engineer based on the actual loads. At a minimum, the piers should be vertically reinforced the full length with four No. 4 bars with steel cages. There should be a minimum of 3 inches clearance between soil and steel reinforcement.
6. The piers should have a maximum spacing of 8 feet and the vertical steel should be horizontally tied to reinforced concrete grade beams connecting the piers.

**Continuous Spread Footing Foundations**

7. Where foundations are set back a minimum of 35 feet from the top edge of the north facing slope and setback a minimum of 10 feet from the top edge of the east facing slope, the foundations may be designed as continuous spread footings. The building footings should be a minimum of 15 inches wide and 18 inches deep. The foundation may be designed for an allowable bearing capacity = 1,500 psf plus a one-third increase for wind and seismic loads.

8. The pier excavations should be observed prior to and during drilling to verify pier setbacks and anticipated soil conditions. All completed footing and pier excavations should be observed and approved by the geotechnical engineer prior to pouring concrete.
9. The geotechnical engineer or representative should be notified a minimum of **four (4) working days** prior to any site clearing, pier drilling, or foundation excavation so that the field work can be coordinated with the grading or foundation contractor, and arrangements can be made for testing and observation services. The recommendations presented in our reports presume that the geotechnical engineer will perform the required testing and observation services during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.
10. **Building Codes**  
Project design and construction should conform to the following building codes:
  - 2022 California Building Code (CBC)
  - 2022 Green Building Standards Code (CAL Green)
  -
11. **Geotechnical Related Seismicity**  
The project should be designed in conformance with the most current California Building Code (2022 CBC). For seismic design, the soil properties at the site are conservatively classified as **Site Class "D"** (per ASCE7-16 Section 11.4.3) based on definitions presented in Section 1613.2.2 in the 2022 CBC that refers to Chapter 20 of ASCE 7. The longitude and latitude were determined using a satellite image generated by Google Earth. These coordinates were taken from the approximate middle of the area of the proposed SFD:  
  
$$\text{Latitude} = 36.879235^{\circ}, \text{Longitude} = -121.752833^{\circ},$$
12. The coordinates listed were used as inputs in the OSHPD Seismic Design Maps created by California's Office of Statewide Health Planning and Development (OSHPD) to determine the ground motion associated with the maximum considered earthquake (MCE)  $S_M$  and the reduced ground motion for design  $S_D$ .

The results are as follows:



Site Class D

$S_s = 2.355g$

$S_1 = 0.881g$

$F_a = 1.0$

$F_v = 1.7$

refer to section 11.4.8 ASCE7-16 for site specific ground motions and exceptions<sup>1</sup>

$S_{MS} = 2.355g$

$S_{M1} = 1.498g$

refer to section 11.4.8 ASCE7-16 for site specific ground motions and exceptions<sup>2</sup>

$S_{DS} = 1.570g$

$S_{D1} = 0.998g$

refer to section 11.4.8 ASCE7-16 for site specific ground motions and exceptions<sup>2</sup>

13. A maximum considered earthquake geometric mean ( $MCE_G$ ) peak ground acceleration (PGA) was estimated using Figure 22-9 of the ASCE Standard 7-16. The mapped PGA was 0.976g and the site coefficient  $F_{PGA}$  for Site Class D is 1.1. The  $MCE_G$  peak ground acceleration adjusted for Site Class effects is  $PGA_M = F_{PGA} * PGA$

$PGA_M = 1.1 * 0.976g = 1.074g$
---------------------------------

Site Drainage

14. Runoff should not be allowed to pond adjacent to foundations and pavements. The grades around the SFD should slope away from foundations at a minimum gradient of 5% for a minimum horizontal distance of 10 feet.
15. No roof and surface runoff should be allowed to flow on the adjacent north and east facing slopes. The site should be graded to flow toward existing stormwater drainage systems and away from slopes.
16. Roof eaves should have rain gutters and downspouts. Buried closed pipes

---

1 "See requirements for site-specific ground motions in Section 11.4.8 of ASCE 7. [OSHPD 1R, 2 & 5] The values of  $F_v$  shall only be used for calculation of  $T_s$ , determination of Seismic Design Category, linear interpolation for intermediate values of  $S_1$ , and when taking the exceptions under Items 1 and 2 of Section 11.4.8 for the calculation of  $S_{D1}$ ." 2022 CBC, TABLE 1613.2.3(2)

"Where the simplified design procedure of ASCE 7, Section 12.14 is used, the value of  $F_a$  shall be determined in accordance with ASCE 7, Section 12.14.8.1, and the values of  $F_v$ ,  $S_{MS}$  and  $S_{M1}$  need not be determined." 2022 CBC 1613.2.3

2 "EXCEPTION: A ground motion hazard analysis is not required where the value of the parameter  $S_{M1}$  determined by Eq. (11.4-2) is increased by 50% for all applications of  $S_{M1}$  in this Standard. The resulting value of the parameter  $S_{D1}$  determined by Eq. (11.4-4) shall be used for all applications of  $S_{D1}$  in this Standard." ASCE7-16, Supplement 3, 11.4.8, Item 1. Note: The values of  $S_{M1}$  and  $S_{D1}$  above have not been increased. Item 2 does not apply to Site Class D, D (default).

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connected to gutter downspouts should convey roof runoff to collection facilities and the existing subdivision stormwater drainage system.

**Plan Review, Construction Observation and Testing**

16. HKA must be provided with an opportunity to review final project plans prior to construction to evaluate if our recommendations have been properly interpreted and implemented. We should also provide foundation excavation observations, and earthwork observations and testing during construction. This allows us to confirm anticipated soil conditions and evaluate conformance with our recommendations and project plans. If we do not review the plans or provide observation and testing services during the earthwork phase of the project, we assume no responsibility for misinterpretation of our recommendations.
17. Except where superseded by this Update report, the recommendations in the 3 January 1997 Geotechnical Investigation report should also be followed for design and construction of the new SFD and improvements.

If you have any questions concerning this report, please contact our office.

Respectfully Submitted,  
**HARO, KASUNICH, AND ASSOCIATES, INC.**

Christopher A. George, P.E.  
Senior Engineer

CAG/cag  
Copies:

1 to Addressee (tonyescareno@gmail.com)



## **LIMITATIONS AND UNIFORMITY OF CONDITIONS**

The recommendations presented in this report are based upon the assumption that the soil conditions do not deviate from those encountered in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.

This report is issued with the understanding that it is the responsibility of the owner or his representative to ensure that the information and recommendations contained herein are called to the attention of the architects and engineers for the project, that the information and recommendations are incorporated into the plans, and that the necessary steps are taken to ensure that the contractors and subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty, expressed or implied, is made.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or to human activity, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a geotechnical engineer.



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## **APPENDIX A**

**HKA Geotechnical Investigation for Proposed Subdivision 890 Salinas Road**  
**Dated 3 January 1997**

**GEOTECHNICAL INVESTIGATION  
for  
PROPOSED SUBDIVISION  
890 SALINAS ROAD  
APN 117-191-012 & 117-192-002  
Monterey County, California**

**Prepared For  
MR. GABE SAIA  
Capitola, California**

**Prepared By  
HARO, KASUNICH & ASSOCIATES, INC.  
Geotechnical & Coastal Engineers  
Project No. M5364  
January 1997**

Project No. M5364  
3 January 1997

MR. GABE SAIA  
4245 Capitola Road, Suite 206  
Capitola, California 95010

Subject: Geotechnical Investigation

Reference: Proposed Subdivision  
890 Salinas Road  
APN 117-191-012 & 117-192-002  
Monterey County, California

Dear Mr. Saia:

In accordance with your authorization, we have performed a Geotechnical Investigation for the referenced project in Monterey County, California.

A Geologic Report for the site, dated 30 September 1996, has been prepared by Foxx, Nielsen & Associates.

The primary geologic and geotechnical concerns for the proposed subdivision are the potential slope instability/landsliding on the steep slopes on the north, south and east sides of the highest elevation bench on the property and areas of loose fill materials, particularly on the west and south sides of the travel trailer park perimeter.

We have completed a quantitative slope stability analysis of the aforementioned slopes. In general, under wet or saturated conditions during a design earthquake (Richter Magnitude 7.0) the steep slopes are potentially unstable. We have worked closely with the project geologist to establish setbacks and specific foundation recommendations to accommodate the construction of residential structures on the upper elevation bench. We also recommend impact or debris deflection walls be installed between any residential structure and the base of the south facing slope below upper level bench.

Historic grading activities have placed loose/unengineered fill materials at several locations throughout the park. The most significant fill wedges are located near the park entrance along the south parcel perimeter, about 10 feet thick, and along the lower level, west park perimeter, about 14 feet thick.

The project Geologic Map by Hans Nielsen outlines the fill wedges, steep slope setbacks, and boring locations and is also included with this report.

The proposed lots situated upon the historic fill wedges may be founded upon a pier and grade beam system with piers penetrating the loose fill/active pressure zone. As an alternative, the loose fill may be removed and recompacted as engineered fill allowing the residential structures to be founded upon conventional spread footings.



Mr. Gabe Saia  
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890 Salinas Road  
3 January 1997  
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The accompanying report presents our conclusions and recommendations, as well as the results of the geotechnical investigation on which they are based.

If you have any questions concerning the data or conclusions presented in this report, please call our office.

Very truly yours,

**HARO, KASUNICH & ASSOCIATES, INC.**

Rick L. Parks  
C.E. 55980

John E. Kasunich  
C.E. 455

RLP/sq

Copies: 5 to Addressee  
1 to Foxx, Nielsen & Associates  
Attention: Mr. Hans Nielsen  
1 to Mid Coast Engineers  
Attention: Mr. Richard Wadsworth

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## **GEOTECHNICAL INVESTIGATION**

### **Introduction**

This report presents the results of our Geotechnical Investigation for a proposed subdivision. The project is located at 890 Salinas Road in North Monterey County, California. The project site is currently being utilized as a trailer and tent camping park. Project plans by Mid Coast Engineers, dated 3 December 1996, show the proposed site development. As shown on the plans, the project will include a subdivision of approximately 8 acres into 17 subdivided homesites.

A copy of the project Geologic Map has been included with this report showing the existing fill wedges, building setbacks and exploratory boring locations.

### **Purpose and Scope**

The purpose of our investigation was to explore and evaluate surface and subsurface soil conditions at the site, and to provide geotechnical criteria for design and construction of the project. The specific scope of our services was as follows:

1. Review the data in our files pertinent to the site.
2. Explore the subsurface conditions at the site with fourteen exploratory borings to depths of 6.5 to 36 feet.
3. Test selected soil samples to determine their pertinent engineering properties.
4. Quantitative slope stability analysis.



5. Analyze the field and laboratory data to develop recommendations for building envelope setbacks, site grading, building foundations, retaining walls, slabs-on-grade, and general site improvements.
6. Present the results of our investigation in a report.

### **Project Description**

The proposed project will include the subdivision of the existing park into 17 homesites. Grading will be minimal.

Foundations will generally consist of conventional spread footings embedded in either firm native materials or engineered fills, or drilled pier and grade beam systems penetrating the site fill materials and/or active earth pressure zones.

### **Site Description**

The subject parcels are located at 890 Salinas Road, about 1 mile east of Highway 1 in north Monterey County. The proposed subdivision will encompass the area containing the Loma Linda Travel Trailer Parks, about 8 acres. The steep north facing slope below the trailer park, about 4 acres in area will not be included in the subdivision.

As per the project geologist research, historic grading at the site started about 45 ± years ago and was completed between 1975 and 1985.

The existing structures on the site are the accessory buildings for the Loma Linda Travel Park, including two restroom/shower facilities and the managers residence.

### **Field Exploration**

Subsurface conditions were investigated on 15 August 1996 and 13 September 1996. The approximate location of the test borings are indicated on the Boring Site Plan, Figure 1. The borings were advanced with 6-inch diameter continuous flight-auger equipment mounted on a truck.

Representative soil samples were obtained from the exploratory borings at selected depths, or at major strata changes. These samples were recovered using the 3.0 inch O.D. Modified California Sampler (L) or the Standard Terzaghi Sampler (T).

The penetration resistance blow counts noted on the boring logs were obtained as the sampler was dynamically driven into the in situ soil. The process was performed by dropping a 140-pound hammer a 30-inch free fall distance and driving the sampler 6 to 18 inches and recording the number of blows for each 6-inch penetration interval. The blows recorded on the boring logs represent the accumulated number of blows that were required to drive the last 12 inches.

The soils encountered in the borings were continuously logged in the field and described in accordance with the Unified Soil Classification System (ASTM D2486). The Logs of Test Borings are included in Appendix A of this report. The Boring Logs denote subsurface conditions at the locations and time observed, and it is not warranted that they are representative of subsurface conditions at other locations or times.

### **Laboratory Testing**

The laboratory testing program was directed toward determining pertinent engineering and index soil properties.

The natural moisture contents and dry densities were determined on selected samples and are recorded on the boring logs at the appropriate depths. Since water has a significant influence on soil, the natural moisture content provides a rough indicator of the soil's compressibility, strength, and potential expansion characteristics.

The strength parameters of the underlying earth materials were determined from field test values derived from standard penetration resistance of the in situ soils and direct shear tests performed in the laboratory. The near surface direct shear samples were saturated prior to testing.

The results of the field and laboratory testing appear on the "Logs of Test Boring" opposite the sample tested.

### **Subsurface Conditions**

Based on our subsurface exploration, the general soil conditions within the project site range from near surface, medium dense, sandy native or undisturbed materials to fill wedges comprised of very loose sandy soil materials up to 14 feet thick.

### **Groundwater**

We did not observe stable groundwater levels in any of the borings.



It should be noted that groundwater levels may fluctuate due to variations in rainfall or other factors not evident during our investigation.

### **Seismicity**

The following is a general discussion of seismicity in the project area. Please refer to the Foxx, Nielsen & Associates Geologic Report for detailed studies of geologic hazards.

The proposed project lies about 7 miles southwest of the San Andreas Fault zone. This is a major fault zone of active displacement which extends from the Gulf of California to the vicinity of Point Arena, where the fault leaves the California coastline. Between these points, the fault is about 700 miles long. The fault zone is a break or series of breaks along the earth's crust, where shearing movement has taken place. This fault movement is primarily horizontal.

Historically, the San Andreas Fault has been the site of large earthquakes, and consequently large earthquakes can be expected in the future. The largest of the historic quakes in northern California occurred on 18 April 1906 (mag. 8.3+).

The Zayante-Vergeles Fault, about 3 miles northeast of the site, is considered to be associated with the San Andreas Fault, and potentially active. Hall et al. (1974) indicate that the San Andreas Fault has a high potential for surface rupture, with a recurrence interval of 50 to 1,000 years. More than 90 years have passed since the last great earthquake on the San Andreas Fault zone, and it is highly probable that the next major earthquake in Northern California will occur during the economic lifetime of this development. During a major earthquake in the vicinity of the site, ground shaking would probably be severe.

The likelihood of surface rupture of the site appears remote, as no known faults cross the project site.

### **Slope Stability Analysis**

Soil strength parameters for the slope stability computer models were obtained from three direct shear tests performed on samples retrieved within different strata of soils at Boring 5 and standard penetration testing during the field sampling of the upper elevation topographic benches. The slopes were modeled in conformance to the geologic cross-sections from the Foxx, Nielsen report and the subsurface soil profiles obtained in our exploratory borings. A seismic acceleration for the computer model was provided by the project geologist.

Calculations were performed using the computer program STABL, developed by Purdue University. STABL is a computer program for analysis of slope stability problems by two dimensional limiting equilibrium methods using Spencer's and Bishop's Simplified Method.

The program utilizes random techniques for generation of potential failure surfaces and is able to determine factors of safety against sliding for the design Repeatable Horizontal Ground Acceleration (RHGA) utilizing a pseudo-static seismic analysis.

A repeatable horizontal ground acceleration (RHGA) of 0.25g (2/3 Amax) was used in our analysis. Saturated surface soil conditions with a partial saturation of 20 percent for the deeper soil profile was utilized to model winter storm rainfall and landscape irrigation.

A 36.5 feet deep exploratory soil boring was drilled and sampled at the top of the north facing steep slope during our Geotechnical Investigation. Three direct shear samples were tested in our laboratory. Our laboratory results are as follows:

<b>SAMPLE NUMBER</b>	<b>DEPTH</b>	<b>SAMPLE SATURATION</b>	<b>PHI ANGLE</b>	<b>COHESION</b>
<b>5-1-1</b>	<b>6 FEET</b>	<b>SATURATED</b>	<b>26°</b>	<b>0 PSF</b>
<b>5-3-1</b>	<b>16 FEET</b>	<b>SATURATED</b>	<b>27°</b>	<b>500 PSF</b>
<b>5-4-1</b>	<b>26 FEET</b>	<b>IN-SITU</b>	<b>28°</b>	<b>450 PSF</b>

Figure 19 illustrates the slope stability analysis of the north facing 200 foot high, 26° to 34° slope. In general, our analysis of the north facing slope under 1989 Loma Prieta earthquake conditions, (i.e. the soil was dry and the epicenter was 12 miles away) showed the slope to be stable. Under saturated conditions with no seismic acceleration, the north facing slope was stable. However, under worst case conditions in which the site soils were saturated with an earthquake on the San Andreas fault segment closest to the project site, 6 miles away, the hillside was only marginally stable. Based upon our computer modeling, we recommend no structure should be placed closer then 25 feet from the top of the steep slope. We have also defined an active pressure zone, 10 feet deep extending from 25 to 35 feet from the top of the slope. Beyond 35 feet no active pressure zone is present and shallow, conventional spread footings can be utilized.

Figure 20 illustrates the 45 foot high, 30° south facing slope of the upper bench. Similar conditions also exist along the eastern perimeter of the upper bench and to a lesser extent along the outboard perimeter of the existing RV storage area. Based upon the slope stability analysis, we recommend no structure be placed closer then 15 feet from the top of the south facing and east facing slopes of the upper bench. An active zone, 5 feet deep

should be established 15 feet from the top of the slopes decreasing linearly to 3 feet deep at 25 feet from the top of the slopes.

We recommend any structures placed below the south facing slope be protected from a potential debris flow from above by means of an impact wall, a debris flow barrier, setbacks from the base of the slope, and/or constructing the back of the structures to withstand the forces of a debris flow.



### **DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of our investigation, the proposed project appears compatible with the site, provided the following recommendations are incorporated into the design and construction of the proposed project.

The following guidelines should be utilized to establish building envelopes for the proposed subdivision:

#### **Building Envelope Setback Criteria**

##### **A. Upper Bench - North Facing Slope**

1. No structures shall be built within 25 feet of the top break in slope.
2. From 25 to 35 feet of the top of the slope, structures should be supported by a pier and grade beam foundation system. An active pressure zone, 10 feet deep shall be utilized from 25 to 35 feet of the break in slope.
3. Conventional spread footings may be utilized beyond 35 feet from the top of the slope.

##### **B. Upper Bench - South Facing Slope**

1. No structures shall be built within 15 feet of the top break in slope.
2. Structures constructed within 15 to 25 feet from the top of the slope shall be supported by a drilled pier and grade beam system with an active pressure zone ranging in depth from 3 feet at 25 feet from the top of the slope to 5 feet deep at 15 feet from the slope break.

C. Upper Bench - East Facing Slope

1. Same criteria as Upper Bench - South Facing Slope.

D. Existing R.V. Storage Area

1. All structures should be setback at 10 feet from the top of the slope below the existing R.V. storage area.

E. Base of South Facing Slope - Upper Bench

1. To mitigate the potential debris flow from above, we recommend setting the houses at least 5 feet from the base of slope with a reinforced concrete wall extending at least 4 feet up the rear perimeter wall. No glass windows or doors are to be permitted within this 4 foot high reinforced area. As an alternative, a 4 foot high debris impact or deflection wall should be constructed no closer than 5 feet from the base of the slope.

Structures to be constructed upon existing fill wedges should be supported by either drilled piers penetrating the existing fill materials or the fill should be removed and replaced as engineered fill with the residences founded upon conventional spread footings.

Due to the loose, uncompacted nature of the fill wedges, we recommend an active lateral pressure within the fill wedge be utilized in the design of the pier and grade beam system.

Site drainage should be controlled and maintained such that no collected runoff be allowed to flow down or across the site slopes except in closed conduits. The collected runoff

should be directed onto paved surfaces or into engineered drainage systems.

It is likely the project site will experience strong seismic shaking during the design life of the proposed residence and improvements. We recommend the additions and garage be adequately braced for lateral shear and securely tied to the foundation. The structures should be designed in accordance with the latest (1991) Uniform Building Code Seismic design standards.

If all recommendations in the Geologic and Geotechnical Reports are closely followed and properly implemented during design and construction and maintained for the lifetime of the residences, then in our opinion, the occupants within the residences should not be subject to risks from geologic hazards beyond the "Ordinary Risk Level", in the "Scale of Acceptable Risks" contained in Appendix C.

The following recommendations should be used as guidelines for preparing project plans and specifications:

**Site Grading**

1. The soil engineer should be notified at least four (4) working days prior to any site clearing or grading so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation can be made. The recommendations of this report are based on the assumption that the soil engineer will perform the required testing and observation during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.



2. Where referenced in this report, Percent Relative Compaction and Optimum Moisture Content shall be based on ASTM Test Designation D1557-78.
3. Areas to be graded should be cleared of all obstructions including loose fill, building foundations, trees not designated to remain, or other unsuitable material. Existing depressions or voids created during site clearing should be backfilled with engineered fill.
4. Cleared areas should then be stripped of organic-laden topsoil. Stripping depth should be from 2 to 4 inches. Actual depth of stripping should be determined in the field by the soil engineer. Strippings should be wasted off-site or stockpiled for use in landscaped areas if desired.
5. Areas to receive engineered fill should be scarified to a depth of 6 inches, moisture conditioned, and compacted to at least 90 percent relative compaction. Portions of the site may need to be moisture conditioned to achieve a suitable moisture content for compaction. These areas may then be brought to design grade with engineered fill.
6. Engineered fill should be placed in thin lifts not exceeding 8 inches in loose thickness, moisture conditioned, and compacted to at least 90 percent relative compaction. The upper 6 inches of pavement and slab subgrades should be compacted to at least 95 percent relative compaction. The aggregate base below pavements should likewise be compacted to at least 95 percent relative compaction.
7. If grading is performed during or shortly after the rainy season, the grading contractor may encounter compaction difficulty, such as pumping or bringing free water

to the surface, in the upper surface clayey and silty sands. If compaction cannot be achieved after adjusting the soil moisture content, it may be necessary to overexcavate the subgrade soil and replace it with angular crushed rock to stabilize the subgrade. We estimate that the depth of overexcavation would be approximately 24 inches under these adverse conditions.

8. Fills should be keyed and benched into firm soil or bedrock in areas where existing slope gradients exceed 6:1 (horizontal to vertical). Subdrains will be required in areas where keyways or benches expose potential seepage zones.

9. The on-site soils generally appear suitable for use as engineered fill. Materials used for engineered fill should be free of organic material, and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than 4 inches.

10. We estimate shrinkage factors of about 15 percent for the on-site materials when used in engineered fills.

11. All permanent cut and fill slopes should be inclined no steeper than 2:1 (horizontal to vertical).

12. Following grading, all exposed slopes should be planted as soon as possible with erosion-resistant vegetation.

13. After the earthwork operations have been completed and the soil engineer has finished his observation of the work, no further earthwork operations shall be performed except with the approval of and under the observation of the soil engineer.

### **Foundations**

14. The proposed structures may be supported on either conventional spread footings embedded into undisturbed native soil/engineered fill materials or drilled piers penetrating the loose fill materials or active pressure zones.

### **Spread Footings**

15. For building envelopes underlain by undisturbed native soil, all footings should be founded at least 18 inches below the lowest adjacent grade. Perimeter footings should be at least 15 inches wide. Building envelopes supported entirely by engineered fill may be founded in accordance to current Unified Building Code (UBC) Standards, i.e., 12 inch minimum depth, 12 inch minimum width, and 1,500 psf bearing capacity. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.

16. The foundation trenches should be kept moist and be thoroughly cleaned of all slough or loose materials prior to pouring concrete. In addition, all footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 1.5:1 plane projected upward from the bottom edge of the adjacent footings or utility trenches.



17. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 2,000 psf for dead plus live loads. This value may be increased by one-third to include short-term seismic and wind loads.

18. Total and differential settlements under the proposed light building loads are anticipated to be less than 1 inch and ½ inch, respectively.

#### **Lateral Loads**

19. Lateral load resistance for structures supported on shallow spread footings may be developed by friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 is considered applicable. If the new foundations are poured neat against the soil, friction and passive resistance may be used in combination. For new foundations, the lateral load resistance for 24 inches below grade may be increased to 250 pcf.

#### **Drilled Piers**

20. Drilled piers should be designed to counteract active forces within the loose, uncompacted fill wedges and the slope stability setback active zones. An active pressure of 75 pcf acting upon two pier diameters should be utilized in design of the pier and grade beam system.

21. Drilled piers should be at least 18 inches in diameter and be embedded at least 5 feet below the bottom of the active pressure zones.

22. Piers constructed in accordance with the above may be designed for an allowable skin friction of 500 psf. The first 2 feet of pier length below the active pressure zones should be neglected when computing skin friction.

23. For passive lateral resistance, an equivalent fluid pressure of 300 pcf may be assumed to act against two pier diameters. The upper 2 feet of pier length below the active pressure zones should be neglected when computing passive resistance.

24. As a minimum, the piers should be vertically reinforced the full length with at least two Number 4 bars. The vertical reinforcement should be tied to the upper grade beam reinforcement. Actual reinforcement requirements should be determined by the structural designer.

25. Prior to placing concrete, all foundation excavations should be thoroughly cleaned. The foundation excavations must be observed by the soil engineer or his representative prior to placing concrete.

#### **Retaining Walls and Lateral Pressures**

26. Retaining walls should be designed to resist both lateral earth pressures and any additional surcharge loads. Walls up to 8 feet high should be designed to resist an active equivalent fluid pressure of 35 pcf for level backfills, and 50 pcf for sloping backfills inclined up to 2:1 (horizontal to vertical). Restrained walls should also be designed to resist uniformly applied wall pressure of  $10H$  psf. The walls should also be designed to resist one half of any surcharge loads imposed on the backfill behind the walls.

27. The above lateral pressures assume that the walls are fully drained to prevent hydrostatic pressure behind the walls. Drainage materials behind the wall should consist of Class 2 permeable material (Caltrans Specification 68-1.025) or an approved equivalent. The drainage material should be at least 12 inches thick. The drains should extend from the base of the walls to within 12 inches of the top of the backfill. A perforated pipe should be placed (holes down) about 4 inches above the bottom of the wall and be tied to a suitable drain outlet. Wall backdrains should be plugged at the surface with clayey material to prevent infiltration of surface runoff into the backdrains.

28. Lateral loads on spread footings may be designed for a passive resistance acting along the face of the footings. Where footings are poured neat against firm native soils, an equivalent fluid pressure of 250 pcf acting along the face of the footings is considered applicable. Topsoil or other loose materials should be neglected when computing passive resistance.

#### **Slabs-on-Grade**

29. We recommend that proposed slabs-on-grade be supported on at least 4 inches of non-expansive granular material bearing upon undisturbed native soil or engineered fill. Prior to construction of the slab, the subgrade surface should be proof-rolled to provide a smooth, firm, uniform surface for slab support. Slab reinforcing should be provided in accordance with the anticipated use and loading of the slab. We recommend, as a minimum reinforcement, 6 x 6 - 10 x 10 wire mesh.

30. In areas where floor wetness would be undesirable, a blanket of 6 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In



order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete.

31. Exterior concrete slabs-on-grade should be founded on firm, well-compacted ground. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. The reinforcement should not be tied to the building foundations. These exterior slabs can be expected to suffer some cracking and movement. However, thickened exterior edges, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

#### **Flexible Pavements**

32. Asphaltic concrete, aggregate base and subbase, and preparation of the subgrade should conform to and be placed in accordance with the Caltrans Standard Specifications, latest edition, except that the test method for compaction should be determined by ASTM D1557-78.

33. To have the selected sections perform to their greatest efficiency, it is important that the following items be considered:

- A. Moisture condition the subgrade and compact to a minimum relative compaction of at least 95 percent, at about 2 percent over optimum moisture content.
- B. Provide sufficient gradient to prevent ponding of water.

- C. Use only quality materials of the type and thickness (minimum) specified. Base rock should meet Caltrans Standard Specifications for Class II Aggregate Base, and be angular in shape.
- D. Compact the base rock to a relative dry density of 95 percent.
- E. Place the asphaltic concrete during periods of fair weather when the free air temperature is within prescribed limits per Caltrans specifications.
- F. Provide a routine maintenance program.

### **Site Drainage**

- 34. Thorough control of runoff is essential to the performance of the project.
- 35. Runoff must not be allowed to sheet flow over existing or graded slopes. Berms or lined V-ditches should be constructed at the top of slopes to divert water toward suitable collection facilities.
- 36. Surface drainage should include provisions for positive gradients so that surface runoff is not permitted to pond adjacent to foundations and pavements. Surface drainage should be directed away from the building foundations.
- 37. Full roof gutters should be placed around all eaves. Discharge from the roof gutters should be conveyed away from the downspouts by splash blocks or lined gutters.
- 38. The migration of water or spread of extensive root systems below foundations, slabs, or pavements may cause undesirable differential movements and subsequent damage to these structures. Landscaping should be planned accordingly.

**Plan Review, Construction Observation, and Testing**

39. Our firm should be provided the opportunity for a general review of the final project plans prior to construction so that our geotechnical recommendations may be properly interpreted and implemented. If our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. The recommendations presented in this report require our review of final plans and specifications prior to construction and upon our observation and, where necessary, testing of the earthwork and foundation excavations. Observation of grading and foundation excavations allows anticipated soil conditions to be correlated to those actually encountered in the field during construction.



### **LIMITATIONS AND UNIFORMITY OF CONDITIONS**

1. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.
2. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty expressed or implied is made.
3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a soil engineer.

Project No. M5364  
3 January 1997

## **APPENDIX A**

### **Vicinity Map**

### **Geologic Map**

### **Logs of Test Borings**



NOTES

1. ALL FACILITIES SHOWN ARE EXISTING EXCEPT WHEN NOTED AS "PROPOSED"
2. SERVICE PEDESTALS FURNISH WATER, ELECTRICITY, AND SEWAGE DISPOSAL CONNECTIONS

AP TILL: loose, red brown to drab brown, fine-grained sand, probably derived from in-situ grating

Qm SOILAN DEPOSITS OF MANHESHA BEACH: drab brown to light tan, very fine-grained sand, typically well-sorted, locally contains silt and clay content; sizes 1/3-1/4 inch is partially composed with stone outside and clay from weathering

Qc COASTAL TERRACE DEPOSITS: drab brown, hard with a dry thin, discontinuous layers of gravel, unconsolidated

Qs AROMAS FORMATION (contaminated): the edible fruits of the Arcomas Tree, probably codex for the property, it is a small round, drab brown, crisp sand

Boundary of Fill: approximately located from topographic projections or from boring information

Exploratory Boring: 14' long, see Appendix A for logs

Outcrop: number refers to approximate vertical height in feet

Line of Geologic Cross Section: 7 total, and Place 2 for incident

Minimum Boring Depth: 10' to 15' on structure or foundations shall be cut through. For the edge of the slope, the surface distances are 15 and 25 feet depending on location.

Definition of the Line: Structures and foundations extend beyond the line shown on the top of the slope walls or embankment. Structures on the slope are constructed below the minimum and optimum setback lines and topographic projection. Foundations are considered to be the pile and ground anchor required for this property.

SCALE

0 40 80 FEET

1" = 40'

REVISED DECEMBER 1, 1994 TO SHOW  
RESTROOMS & SHOWERS NEAR HANNAH'S  
MIDDLE HOME AND SIDES OF ROADWAYS

JANUARY 18, 1995 REVISED TO SHOW  
PARK ROADWIDENING TO CORRESPOND TO



LOGGED BY		RP	DATE DRILLED	8-15-96	BORING DIAMETER	6"SS	BORING NO.	1	
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	1-1	T	Light red brown slightly clayey SAND, damp, loose to medium dense		10			8	
2									
3									
4									
5	1-2	T	Light red brown slightly Clayey SAND, damp, loose		8			7	
6									
7									
8									
9			Driller dark soil horizon at 8 feet						
10	1-3	T	Red brown Clayey SAND, damp dense		39			8	
11									
12									
13									
14									
15	1-4	T	Reddish/grey brown Clayey fine to medium grain SAND, damp, medium dense		21			14	
16									
			BORING TERMINATED AT 16.5 FEET						

FIGURE NO. 3 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>8-15-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>2</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	2-1		Light red brown slightly Clay fine to medium grain SAND, damp, loose						
2	T				9			5	
3									
4			Driller darker soil horizon at 3.5 feet						
5	2-2		Dark red brown very Clayey SAND, damp, loose						
6	T				9			9	
7									
8									<i>Fill</i>
9									<i>Native</i>
10	2-3		Grey/red brown fine to medium grain SAND, damp, medium dense						
11	T				26			9	
12									
13									
14									
15	2-4		Light red brown Silty fine SAND, damp, medium dense						
16	T				12			11	
17									
22			Break in Log						
23									
24									
25	2-5		Brown SAND, damp, medium dense						
26	L				47				
			BORING TERMINATED AT 26.5 FEET						

FIGURE NO. 4 / LOG OF TEST BORING

LOGGED BY		RP	DATE DRILLED		8-15-96	BORING DIAMETER		6"SS	BORING NO.		3
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft.-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS		
1	3-1	T	Light red brown Silty fine SAND, slight binder or cementation, damp, dense		33			7			
2											
3											
4		T	Light red brown Silty fine SAND, damp, dense		39			9			
5	3-2										
6											
7		T	Light red brown Silty fine SAND, damp, dense		59			6			
8											
9											
10	3-3	T	Light red brown Silty fine SAND, damp, dense								
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22			Increase in moisture at 20 feet								
23											
24											
25			Break in Log Silty fine SAND to 25 feet								
26											
27											
			BORING TERMINATED AT 25 FEET								
				FIGURE NO. 5 LOG OF TEST BORING							

FIGURE NO. 5 LOG OF TEST BORING

LOGGED BY		RP	DATE DRILLED		8-15-96	BORING DIAMETER		6"SS	BORING NO.		4
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS		
1	4-1	□	Light reddish brown Silty SAND with slight binder or cementation, damp, dense		31			6			
2	T										
3											
4											
5	4-2	□	Light grey brown very Silty fine SAND, dry to damp, medium dense		24			3			
6	T										
7											
8											
9		□									
10	4-3										
11	T										
			BORING TERMINATED AT 11.5 FEET								
FIGURE NO. 6 LOG OF TEST BORING											

FIGURE NO. 6 LOG OF TEST BORING



LOGGED BY		RP	DATE DRILLED	8-15-96	BORING DIAMETER	6"SS	BORING NO.	5	
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1			Asphalt red brown SAND, loose						F, 11 Native
2									
3									
4									
5	5-1	T	Red brown fine to medium grain SAND, damp						DIRECT SHEAR C = 0 psf φ = 26° Ms = 26% = 124pcf
6					35		99	10	
7									
8									
9									DIRECT SHEAR C = 500 psf φ = 27° Ms = 22% = 124pcf
10	5-2	T	Red brown slightly Clayey fine to medium grain SAND, damp, medium dense						
11					22		11		
12									
13									
14									DIRECT SHEAR C = 500 psf φ = 27° Ms = 22% = 124pcf
15	5-3	L	Red brown coarse grain SAND, slight binder, damp, medium dense						
16					55		102	12	
17									
18									
19									
20									
21									
22			Color change						
23									

FIGURE NO. 7 LOG OF TEST BORING

FIGURE NO. 7 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>8-15-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>5 Con't</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
24									
25	5-4		Brown fine grain SAND, damp, medium dense						
26									
27	L				54		99	11	DIRECT SHEAR C = 450 psf $\phi$ = 28°
28									
29									
30									
31									
32									
33									
34									
35	5-5		Brown fine SAND, damp, dense						
36	T				40			9	
			BORING TERMINATED AT 36 FEET						

FIGURE NO. 8 LOG OF TEST BORING

LOGGED BY		RP	DATE DRILLED	8-15-96	BORING DIAMETER	6"SS	BORING NO.	6	
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	6-1	[ ]	Red brown slightly Clay SAND, damp loose to medium dense		10			12	Fill Native
2	T								
3									
4			Red brown Clayey fine to medium grain medium dense SAND, damp		22			6	
5	6-2								
6	T								
7			Dark brown fine to medium SAND, damp, very loose to loose		4			9	
8									
9									
10	6-3	[ ]	Fill to 14 feet						
11	T								
12									
13			Light brown Silty fine SAND, damp, loose		8			11	
14	6-4								
15	T								
16			Brown medium grain SAND, moist, dense		35			14	
17									
18									
19									
20	6-5	[ ]							
21	T								
22									
23									

FIGURE NO. 9 LOG OF TEST BORING

FIGURE NO. 9 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>8-15-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>6 Con't</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft.-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
24	6-6	T	Brown medium grain SAND, wet, dense		41			15	
25									
26			BORING TERMINATED AT 26.5 FEET						

FIGURE NO. 10 LOG OF TEST BORING



LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>7</u>		
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs. Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
			Space 20 SE Corner					
1	7-1		Asphalt					
2	T		Baseroack to 2.5 feet		43		2	<i>Fill Native</i>
3								
4								
5	7-2		Red brown sightly Silty SAND, damp, medium dense					
6	T				21		8	
7								
8								
9								
10	7-3		Red brown slightly Clayey SAND, damp, medium dense					
11	T				42		7	
			BORING TERMINATED AT 11.5 FEET					

FIGURE NO. // LOG OF TEST BORING

LOGGED BY		RP	DATE DRILLED	9-13-96	BORING DIAMETER	6"SS	BORING NO.	8	
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION Space 32 S. Side	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	8-1	[ ]	Light red brown Silty SAND, slight binder, dry to damp		8			4	
2	T								
3									
4									Fill Notive
5	8-2	[ ]	Brown Silty SAND, slight binder, damp medium dense  Driller denser at 7 feet increase in Clay content		12			6	
6	T								
7									
8									
9									
10	8-3	[ ]	Light red brown slightly Clayey SAND, damp, medium dense		25			12	
11	T								
			BORING TERMINATED AT 11.5 FEET						

FIGURE NO. 12 LOG OF TEST BORING

FIGURE NO. 12 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>9</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION Space 35 - pines (east)	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	9-1	[ ]	Brown Silty SAND, damp, medium dense		14			3	
2	T								
3									
4			Driller much tighter at 4 feet						<i>Fill Native</i>
5	9-2	[ ]	Light red brown slightly Clayey SAND, damp, medium dense						
6	T								
			BORING TERMINATED AT 6.5 FEET						

FIGURE NO. 13 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>10</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	10-1	T	Dark brown slightly Clayey SAND, damp		23			9	
2									
3									
4									
5	10-2	T	Red brown slightly Clayey SAND, moist, medium dense/dense		30			15	
6									
			BORING TERMINATED AT 6.5 FEET						

FIGURE NO. 14 LOG OF TEST BORING



LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>11</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	11-1	T	Brown slightly Clayey SAND, damp, medium dense						
2									
3			Driller very Clayey		15			8	
4									
5	11-2	T	Red brown/grey brown slightly Clayey SAND, damp to moist, medium dense						
6						16		14	
			BORING TERMINATED AT 6.5 FEET						

FIGURE NO. 15 LOG OF TEST BORING

LOGGED BY		RP	DATE DRILLED	9-13-96	BORING DIAMETER	6"SS	BORING NO.	12		
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION Space 34-front	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS	
1	12-1	T	Red brown Clayey SAND, moist, loose		7			14		
2										
3										
4										
5	12-2	T	Grey brown slightly Clayey SAND, moist, loose		9			10		
6										
7										
8										
9										
10	12-3	T	Light red brown slightly Clayey SAND, moist, loose		8			11		
11										
12										
13										
14										
15	12-4	T	Dark red brown Clayey SAND, moist, medium dense		23			15		
16										
			BORING TERMINATED AT 16.5 FEET							
FIGURE NO. /6 LOG OF TEST BORING										

LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>13</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION Space 45/41 front	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	13-1	T	Red brown slightly Clayey SAND, damp to moist, loose		8			11	
2									
3									
4									
5	13-2	T	Grey brown slightly Clayey SAND, moist, medium dense		11			9	
6									
7									
8									
9									
10	13-3	T	Dark brown Silty SAND, damp, very loose		3			8	
11									
12									
13									<i>Fill</i>
14			Driller very Clayey, lighter at 14 feet						<i>Native</i>
15	13-4	T	Dark red brown Clayey SAND, medium dense		21			14	
16									
			BORING TERMINATED AT 16.5 FEET						

FIGURE NO. / 7 LOG OF TEST BORING

LOGGED BY <u>RP</u>		DATE DRILLED <u>9-13-96</u>		BORING DIAMETER <u>6"SS</u>		BORING NO. <u>14</u>			
Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION Space 41 front	Unified Soil Classification	Blows/foot 350 ft.-lbs.	Qu - t. s. f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
1	14-1	T	Light red brown slightly Clayey SAND, damp, medium dense		12			11	Fill
2									
3									
4			Driller native at 4 feet						Native
5	14-2	T	Dark red brown Clayey SAND, damp medium dense		13				
6									
			BORING TERMINATED AT 6.5 FEET						

FIGURE NO. 18 LOG OF TEST BORING

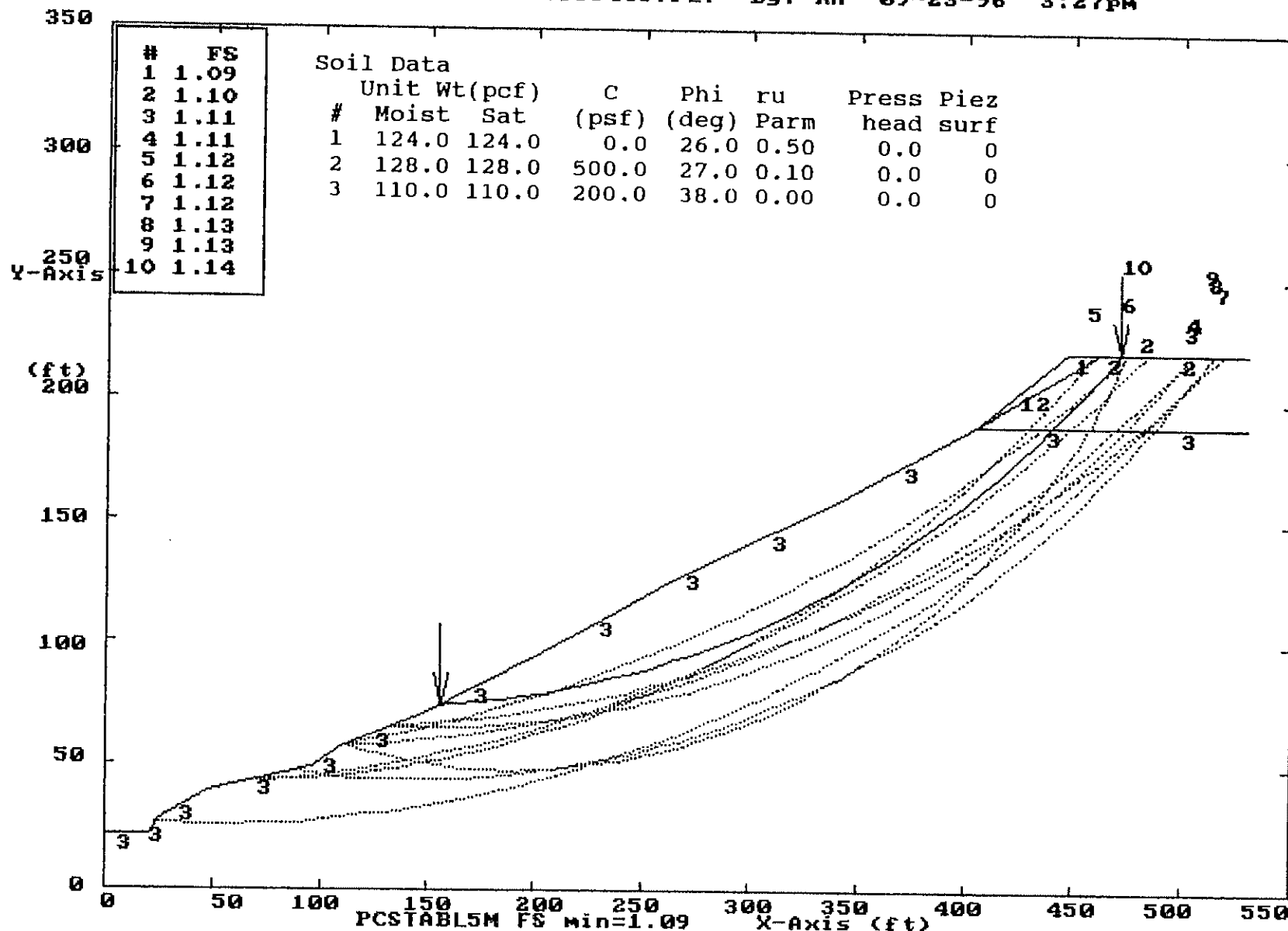


Project No. M5364  
3 January 1997

## **APPENDIX B**

### **Slope Stability Figures**

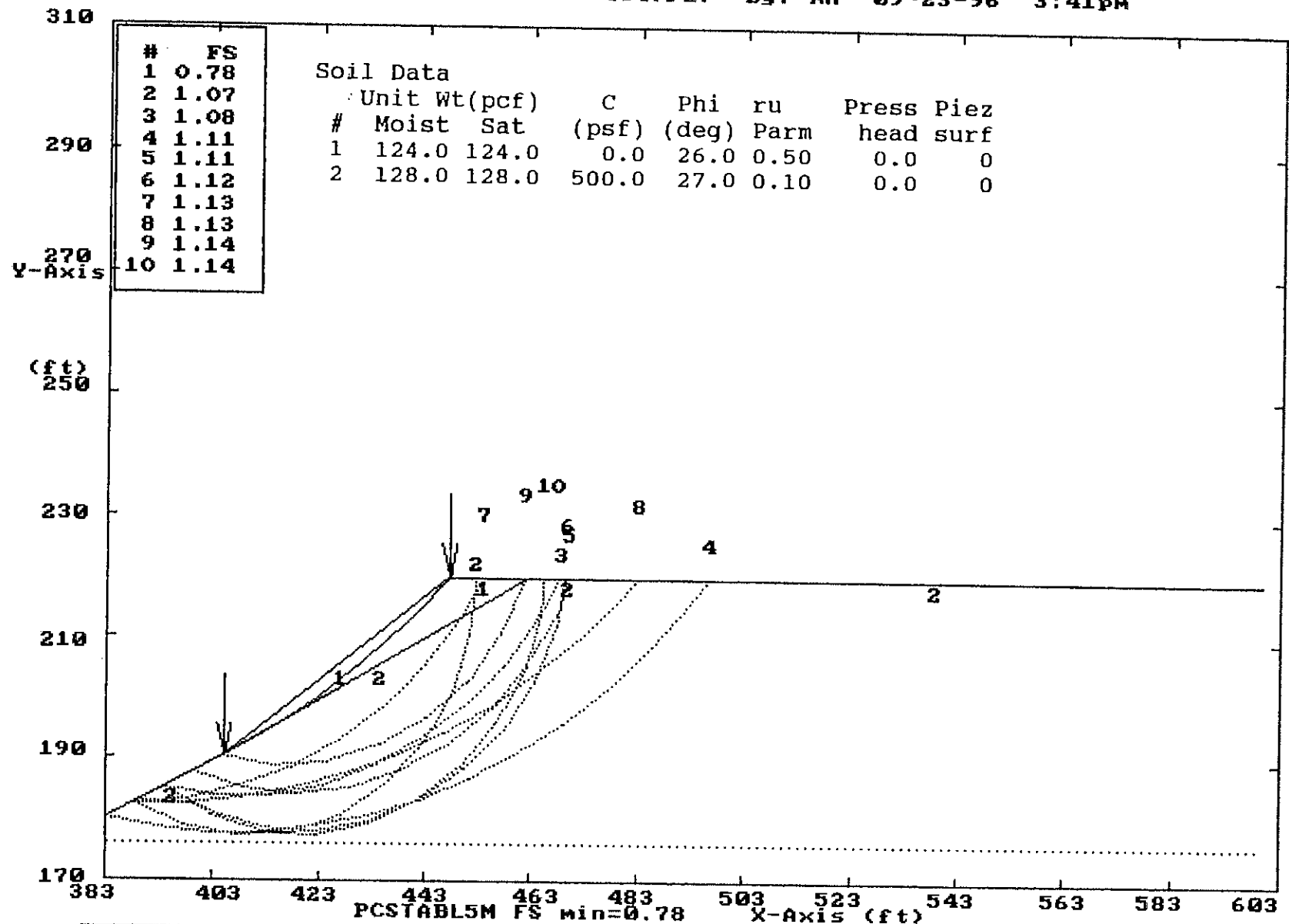
M 5364, Loma Linda Travel Park, X-Sect #1, Sat #1 Ru=0.1 #2, RHGA=0.25g  
 Ten Most Critical. D:PC5364C3.PLT By: RH 09-23-96 3:27pm



Job No: M 5364  
 Date: September 1996  
 Scale: As Shown  
 Drawn By: RH

SLOPE STABILITY ANALYSIS  
 LOMA LINDA TRAVEL PARK MONTEREY COUNTY, CA  
**HARO, KASUNICH & ASSOCIATES, INC.**  
 Figure 19

M 5364, Loma Linda Travel Park, X-Sect #1, Sat #1 Ru=0.1 #2, RHGA=0.25g  
 Ten Most Critical. D:PC5364C4.PLT By: RH 09-23-96 3:41pm



Job No: M 5364  
 Date: September 1996  
 Scale: As Shown  
 Drawn By: RH

SLOPE STABILITY ANALYSIS  
 LOMA LINDA TRAVEL PARK MONTEREY COUNTY, CA *Figure 20*

**HARO, KASUNICH & ASSOCIATES, INC.**

**APPENDIX C**

**Scales of Acceptable Risks**  
**From Seismic & Non-Seismic**  
**Geologic Hazards**



**APPENDIX C**  
**SCALE OF ACCEPTABLE RISKS FROM**  
**SEISMIC GEOLOGIC HAZARDS**

Level of Acceptable Risk	Kinds of Structures	Extra Project Cost Probably Required To Reduce Risk An Acceptable Level
Extremely Low	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intertie systems, plants manufacturing or storing explosives or toxic materials.	No set percentage (whatever is required for maximum attainable safety).
Slightly higher than under level 1 <sup>1</sup>	Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police, and emergency communication facilities; fire station; and critical transportation elements such as bridges and overpasses; also smaller dams.	5 to 25 percent of project cost.
Lowest possible risk to occupants of the structure <sup>3</sup>	Structures of high occupancy or whose use after a disaster would be particularly convenient; schools, churches, theaters, large hotels, and other high-rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.	5 to 15 percent of project cost.
An "ordinary" level or risk to occupants of the structure <sup>3.5</sup>	The vast majority of structures; most commercial and industrial buildings, small hotels and apartment buildings and single-family residences.	1 to 2 percent of project cost in most cases (2 to 10 percent of project cost in a minority of cases) <sup>4</sup>

1. Failure of a single structure may affect substantial populations.
2. These additional percentages are based on the assumption that the base cost is the total cost of the building or other facility when ready for occupancy. In addition, it is assumed that the structure would have been designed and built in accordance with current California practice. Moreover, the estimated additional cost presumes that structures in this acceptable-risk category are to embody sufficient safety to remain functional following an earthquake.
3. Failure of single structure would affect primarily only the occupants.
4. These additional percentages are based on the assumption that the base cost is the total cost of the building or facility when ready for occupancy. In addition, it is assumed that the structures would have been designed and built in accordance with current California Practice. Moreover, the estimated additional cost presumes that structures in this acceptable-risk category are to be sufficiently safe to give reasonable assurance of preventing injury or loss of life during and following an earthquake, but otherwise not necessarily to remain functional.
5. "Ordinary Risk": Resist minor earthquakes without damage; resist moderate earthquakes without structural damage but with some non-structural damage; resist major earthquakes of the intensity or severity of the strongest experienced in California, without collapse, but with some structural, as well as non-structural damage. In most structures, it is expected that structural damage, even in a major earthquake, could be limited to repairable damage. (Structural Engineers Association of California).

**Source: Meeting the Earthquake Challenge, Joint Committee on Seismic Safety of the California Legislature, January 1974, p.9.**

**APPENDIX C**  
**SCALE OF ACCEPTABLE RISKS FROM**  
**NON-SEISMIC GEOLOGIC HAZARDS\***

<b>Risk Level</b>	<b>Structure Type</b>	<b>Risk Characteristics</b>
<b>Extremely Low Risks</b>	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intertie systems, plants manufacturing or storing explosives or toxic materials.	Failure affects substantial populations risk equals nearly zero.
<b>Very Low Risks</b>	Structures whose use is critically needed after a disaster: important utility centers; hospitals; fire, police, and emergency communication facilities; fire stations; and critical transportation elements such as bridges and overpasses; also smaller dams.	Failure affects substantial populations
<b>Low Risks</b>	Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high-rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings, such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses.	Failure of a single structure would affect primarily only the occupants.

<b>"Ordinary Risks"</b>	The vast majority of structures: most commercial and industrial buildings; small hotels and apartment buildings, and single-family residences.	<p>Failure only affects owners/occupants of a structure rather than a substantial population.</p> <p>No significant potential for loss of life or serious physical injury.</p> <p>Risk level is similar or comparable to other ordinary risks (including seismic risks) to citizens of coastal California.</p> <p>No collapse of structures; structural damage limited to repairable damage in most cases. This degree of damage is unlikely as a result of storms with a repeat time of 50 years or less.</p>
<b>Moderate Risks</b>	Fences, Driveways, non-habitable structures, detached retaining walls, sanitary landfills, recreation areas and open space.	<p>Structure is not occupied or occupied infrequently.</p> <p>Low probability of physical injury.</p> <p>Moderate probability of collapse.</p>

**\* Non-seismic geologic hazards included flooding, landslides, erosion, wave run-up and sinkhole collapse.**