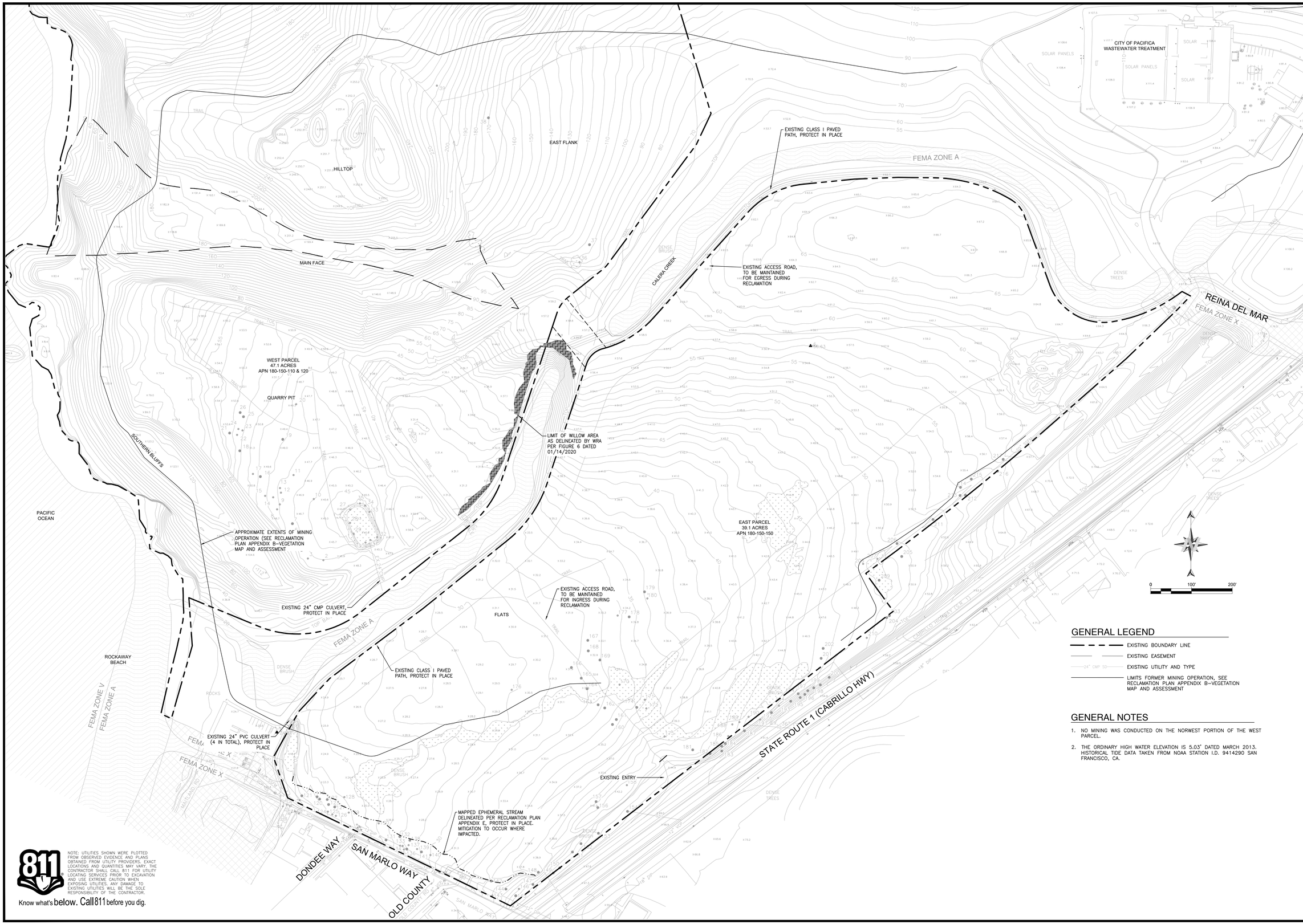
Appendix I

Grading and Drainage Plan



GENERAL LEGEND

- EXISTING BOUNDARY LINE
- EXISTING EASEMENT
- 24" CMP SD — EXISTING UTILITY AND TYPE
- LIMITS FORMER MINING OPERATION, SEE RECLAMATION PLAN APPENDIX B–VEGETATION MAP AND ASSESSMENT

GENERAL NOTES

1. NO MINING WAS CONDUCTED ON THE NORWEST PORTION OF THE WEST PARCEL.
2. THE ORDINARY HIGH WATER ELEVATION IS 5.03' DATED MARCH 2013. HISTORICAL TIDE DATA TAKEN FROM NOAA STATION I.D. 9414290 SAN FRANCISCO, CA.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call 811 before you dig.

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY
2		
3		
4		
5		
6		

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

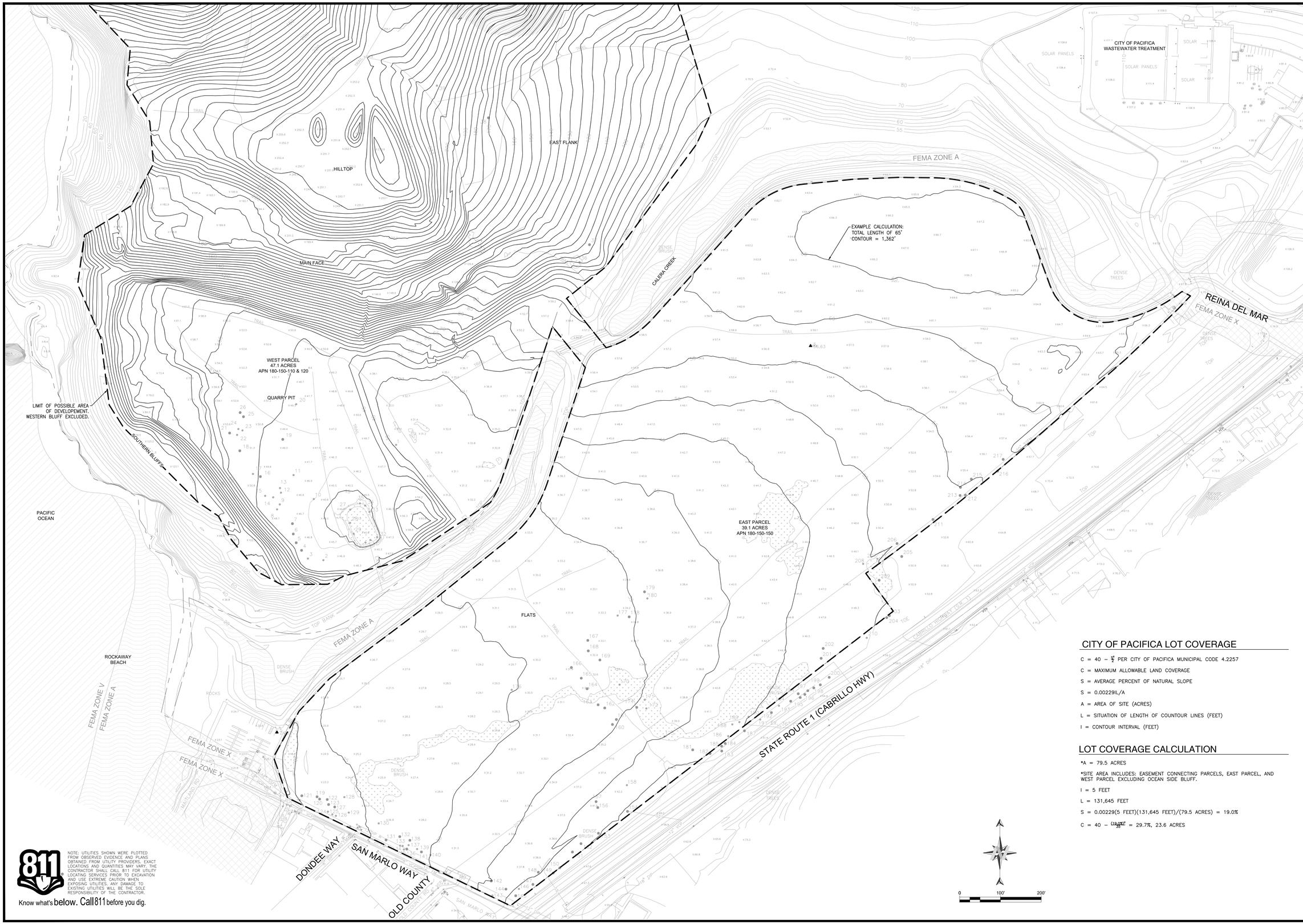
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY:	KKE
DRAFTED BY:	KKE
CHECKED BY:	MRW
DATE:	03/16/2020

EXISTING CONDITIONS PLAN

SHEET
C0.0

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\20160108_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\reclamation plan v03.dwg



NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call 811 before you dig.

CITY OF PACIFICA LOT COVERAGE

C = 40 − $\frac{S^2}{2}$ PER CITY OF PACIFICA MUNICIPAL CODE 4.2257

C = MAXIMUM ALLOWABLE LAND COVERAGE

S = AVERAGE PERCENT OF NATURAL SLOPE

S = 0.00229IL/A

A = AREA OF SITE (ACRES)

L = SITUATION OF LENGTH OF COUNTOUR LINES (FEET)

I = CONTOUR INTERVAL (FEET)

LOT COVERAGE CALCULATION

*A = 79.5 ACRES

*SITE AREA INCLUDES: EASEMENT CONNECTING PARCELS, EAST PARCEL, AND WEST PARCEL EXCLUDING OCEAN SIDE BLUFF.

I = 5 FEET

L = 131,645 FEET

S = 0.00229(5 FEET)(131,645 FEET)/(79.5 ACRES) = 19.0%

C = 40 − $\frac{(19.0\%)^2}{39}$ = 29.7%, 23.6 ACRES

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY
2		
3		
4		
5		
6		

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY RECLAMATION PLAN
PACIFICA, CA

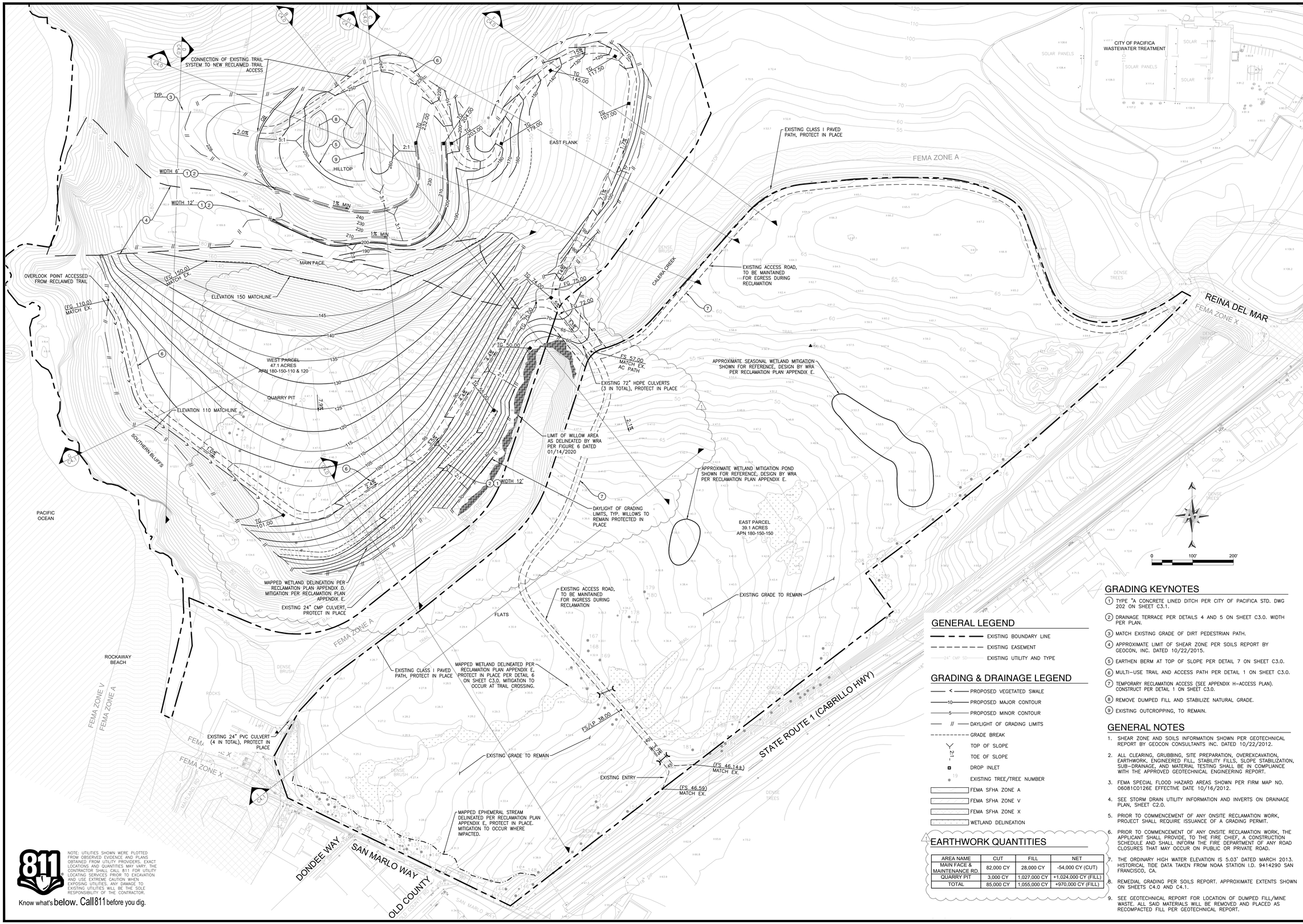
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

LOT COVERAGE EXHIBIT

SHEET
C0.1

saved: 2/27/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan_2018\c1 coverage.dwg



GENERAL LEGEND

- EXISTING BOUNDARY LINE
- EXISTING EASEMENT
- 24" CMP SD — EXISTING UTILITY AND TYPE

GRADING & DRAINAGE LEGEND

- PROPOSED VEGETATED SWALE
- 10 — PROPOSED MAJOR CONTOUR
- 5 — PROPOSED MINOR CONTOUR
- // — DAYLIGHT OF GRADING LIMITS
- GRADE BREAK
- TOP OF SLOPE
- 21 — TOE OF SLOPE
- DROP INLET
- 19 — EXISTING TREE/TREE NUMBER
- FEMA SFHA ZONE A
- FEMA SFHA ZONE V
- FEMA SFHA ZONE X
- WETLAND DELINEATION

EARTHWORK QUANTITIES

AREA NAME	CUT	FILL	NET
MAIN FACE & MAINTENANCE RD.	82,000 CY	28,000 CY	-54,000 CY (CUT)
QUARRY PIT	3,000 CY	1,027,000 CY	+1,024,000 CY (FILL)
TOTAL	85,000 CY	1,055,000 CY	+970,000 CY (FILL)

GRADING KEYNOTES

1. TYPE "A CONCRETE LINED DITCH PER CITY OF PACIFICA STD. DWG 202 ON SHEET C3.1.
2. DRAINAGE TERRACE PER DETAILS 4 AND 5 ON SHEET C3.0. WIDTH PER PLAN.
3. MATCH EXISTING GRADE OF DIRT PEDESTRIAN PATH.
4. APPROXIMATE LIMIT OF SHEAR ZONE PER SOILS REPORT BY GEOCON, INC. DATED 10/22/2015.
5. EARTHEN BERM AT TOP OF SLOPE PER DETAIL 7 ON SHEET C3.0.
6. MULTI-USE TRAIL AND ACCESS PATH PER DETAIL 1 ON SHEET C3.0.
7. TEMPORARY RECLAMATION ACCESS (SEE APPENDIX H-ACCESS PLAN). CONSTRUCT PER DETAIL 1 ON SHEET C3.0.
8. REMOVE DUMPED FILL AND STABILIZE NATURAL GRADE.
9. EXISTING OUTCROPPING, TO REMAIN.

GENERAL NOTES

1. SHEAR ZONE AND SOILS INFORMATION SHOWN PER GEOTECHNICAL REPORT BY GEOCON CONSULTANTS INC. DATED 10/22/2012.
2. ALL CLEARING, GRUBBING, SITE PREPARATION, OVEREXCAVATION, EARTHWORK, ENGINEERED FILL, STABILITY FILLS, SLOPE STABILIZATION, SUB-DRAINAGE, AND MATERIAL TESTING SHALL BE IN COMPLIANCE WITH THE APPROVED GEOTECHNICAL ENGINEERING REPORT.
3. FEMA SPECIAL FLOOD HAZARD AREAS SHOWN PER FIRM MAP NO. 06081C0126E EFFECTIVE DATE 10/16/2012.
4. SEE STORM DRAIN UTILITY INFORMATION AND INVERTS ON DRAINAGE PLAN, SHEET C2.0.
5. PRIOR TO COMMENCEMENT OF ANY ONSITE RECLAMATION WORK, PROJECT SHALL REQUIRE ISSUANCE OF A GRADING PERMIT.
6. PRIOR TO COMMENCEMENT OF ANY ONSITE RECLAMATION WORK, THE APPLICANT SHALL PROVIDE, TO THE FIRE CHIEF, A CONSTRUCTION SCHEDULE AND SHALL INFORM THE FIRE DEPARTMENT OF ANY ROAD CLOSURES THAT MAY OCCUR ON PUBLIC OR PRIVATE ROAD.
7. THE ORDINARY HIGH WATER ELEVATION IS 5.03' DATED MARCH 2013. HISTORICAL TIDE DATA TAKEN FROM NOAA STATION I.D. 9414290 SAN FRANCISCO, CA.
8. REMEDIAL GRADING PER SOILS REPORT. APPROXIMATE EXTENTS SHOWN ON SHEETS C4.0 AND C4.1.
9. SEE GEOTECHNICAL REPORT FOR LOCATION OF DUMPED FILL/MINE WASTE. ALL SAID MATERIALS WILL BE REMOVED AND PLACED AS RECOMPACTED FILL PER GEOTECHNICAL REPORT.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call 811 before you dig.

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY RECLAMATION PLAN
PACIFICA, CA

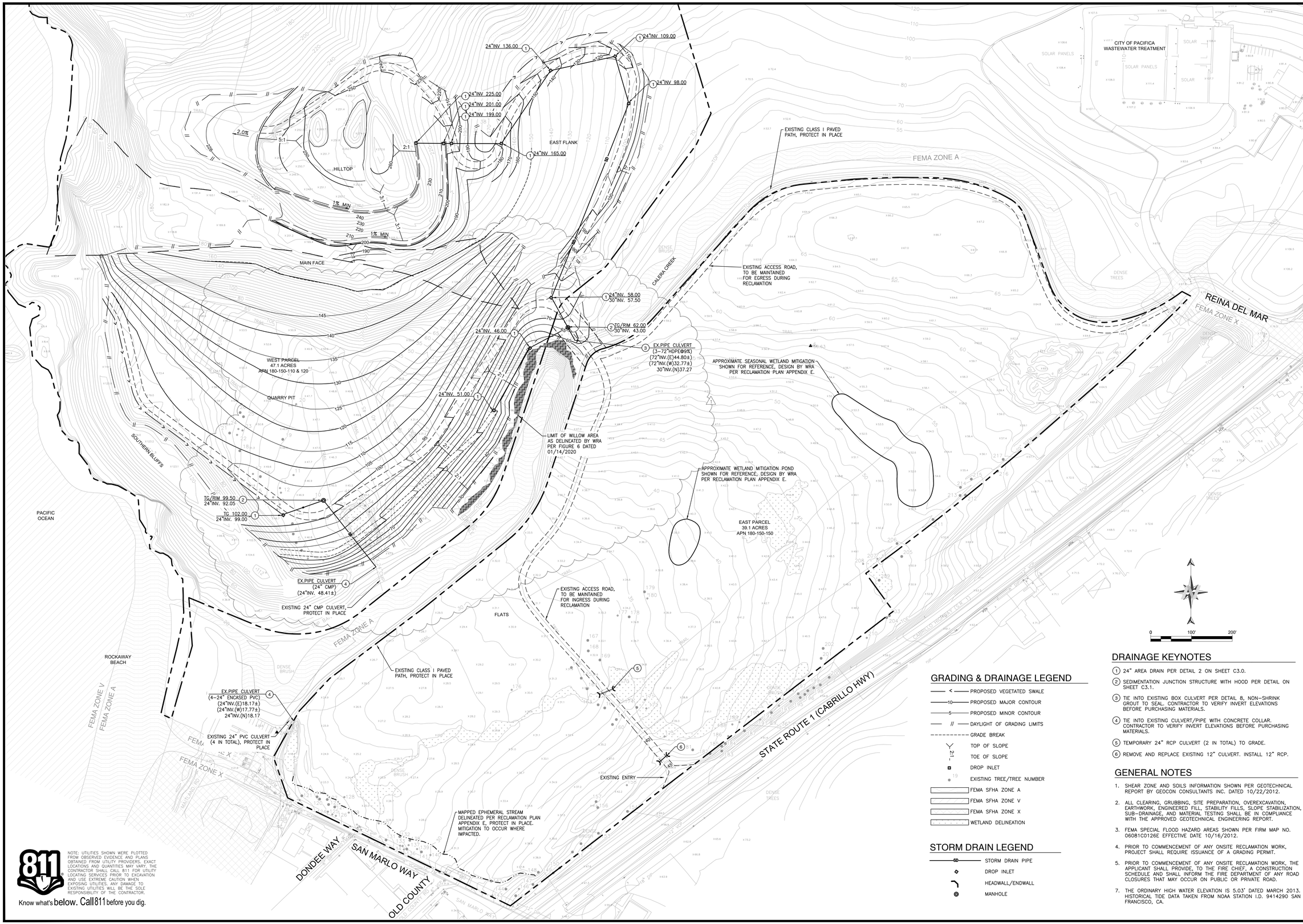
REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

GRADING PLAN

SHEET C1.0

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 2019\06101\reclamation plan v03.dwg



GRADING & DRAINAGE LEGEND

- PROPOSED VEGETATED SWALE
- 10 PROPOSED MAJOR CONTOUR
- 5 PROPOSED MINOR CONTOUR
- DAYLIGHT OF GRADING LIMITS
- GRADE BREAK
- TOP OF SLOPE
- 2:1 TOE OF SLOPE
- DROP INLET
- 19 EXISTING TREE/TREE NUMBER
- FEMA SFHA ZONE A
- FEMA SFHA ZONE V
- FEMA SFHA ZONE X
- WETLAND DELINEATION

STORM DRAIN LEGEND

- 50 STORM DRAIN PIPE
- DROP INLET
- HEADWALL/ENDWALL
- MANHOLE

DRAINAGE KEYNOTES

1. 24" AREA DRAIN PER DETAIL 2 ON SHEET C3.0.
2. SEDIMENTATION JUNCTION STRUCTURE WITH HOOD PER DETAIL ON SHEET C3.1.
3. TIE INTO EXISTING BOX CULVERT PER DETAIL 8, NON-SHRINK GROUT TO SEAL. CONTRACTOR TO VERIFY INVERT ELEVATIONS BEFORE PURCHASING MATERIALS.
4. TIE INTO EXISTING CULVERT/PIPE WITH CONCRETE COLLAR. CONTRACTOR TO VERIFY INVERT ELEVATIONS BEFORE PURCHASING MATERIALS.
5. TEMPORARY 24" RCP CULVERT (2 IN TOTAL) TO GRADE.
6. REMOVE AND REPLACE EXISTING 12" CULVERT. INSTALL 12" RCP.

GENERAL NOTES

1. SHEAR ZONE AND SOILS INFORMATION SHOWN PER GEOTECHNICAL REPORT BY GEOCON CONSULTANTS INC. DATED 10/22/2012.
2. ALL CLEARING, GRUBBING, SITE PREPARATION, OVEREXCAVATION, EARTHWORK, ENGINEERED FILL, STABILITY FILLS, SLOPE STABILIZATION, SUB-DRAINAGE, AND MATERIAL TESTING SHALL BE IN COMPLIANCE WITH THE APPROVED GEOTECHNICAL ENGINEERING REPORT.
3. FEMA SPECIAL FLOOD HAZARD AREAS SHOWN PER FIRM MAP NO. 06081C0126E EFFECTIVE DATE 10/16/2012.
4. PRIOR TO COMMENCEMENT OF ANY ONSITE RECLAMATION WORK, PROJECT SHALL REQUIRE ISSUANCE OF A GRADING PERMIT.
5. PRIOR TO COMMENCEMENT OF ANY ONSITE RECLAMATION WORK, THE APPLICANT SHALL PROVIDE, TO THE FIRE CHIEF, A CONSTRUCTION SCHEDULE AND SHALL INFORM THE FIRE DEPARTMENT OF ANY ROAD CLOSURES THAT MAY OCCUR ON PUBLIC OR PRIVATE ROAD.
7. THE ORDINARY HIGH WATER ELEVATION IS 5.03' DATED MARCH 2013. HISTORICAL TIDE DATA TAKEN FROM NOAA STATION I.D. 9414290 SAN FRANCISCO, CA.

811 Know what's below. Call811 before you dig.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY RECLAMATION PLAN
PACIFICA, CA

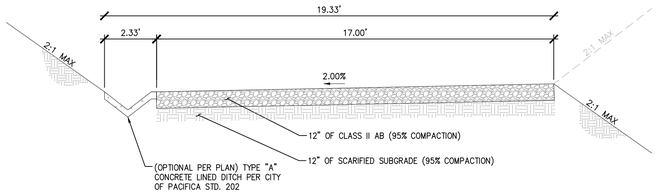
REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY:	KKE
DRAFTED BY:	KKE
CHECKED BY:	MRW
DATE:	03/16/2020

DRAINAGE PLAN

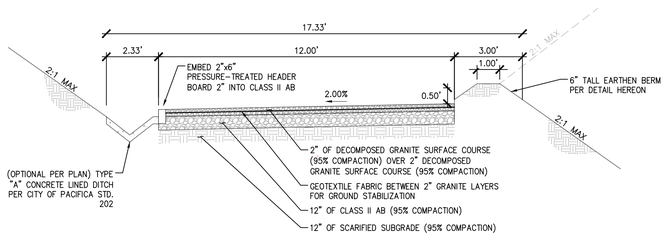
SHEET C2.0

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\20160108_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\reclamation plan v03.dwg



TEMPORARY CONDITION FOR RECLAMATION EQUIPMENT ACCESS

NOTES:
1. ACCESS PATH TO PROVIDE ALL WEATHER EQUIPMENT ACESS DURING RECLAMATION OPERATIONS. FINAL CONDITIONS TO BE STABILIZED PER MULTI-USE TRAIL DETAIL HEREON.
2. A VEGETATED SWALE SHALL BE USED WHERE APPROPRIATE. SWALE LOCATION PER PLAN.

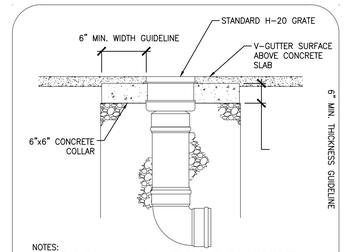


NOTES:
1. DESIGN BASED ON U.S. DEPARTMENT OF TRANSPORTATION SHARED USE TRAIL STANDARDS DATED 03/27/2018.
2. A VEGETATED SWALE SHALL BE USED WHERE APPROPRIATE. SWALE LOCATION PER PLAN.

FINAL CONDITION FOR MULTI-USE TRAIL

1 MULTI-USE TRAIL AND ACCESS PATH

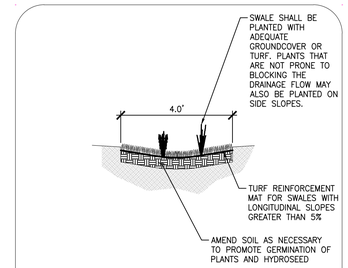
NTS



NOTES:
1. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II MATERIAL AS DEFINED IN ASTM D2321, OR AS DETERMINED BY LOCAL STANDARDS & SITE ENGINEER. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

2 NYLOPLAST INLINE DRAIN (HEAVY DUTY)

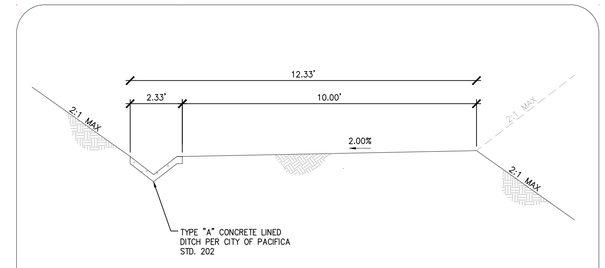
NTS



NOTES:
1. SWALES SHALL BE VEGETATED AND STABILIZED TO EFFECTIVELY MANAGE EROSION AND SEDIMENT CONTROL OF GRADED AREAS.
2. VEGETATED SWALES ON GRADES OF MORE THAN 5% FOR A LENGTH GREATER THAN 25 FEET MUST INSTALL CHECK DAMS TO LIMIT THE SLOPE OF THE SWALE UNLESS OTHERWISE APPROVED.

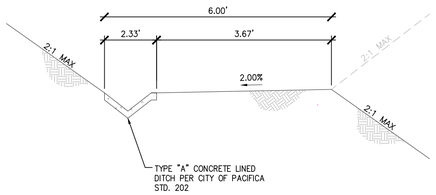
3 VEGETATED SWALE

NTS



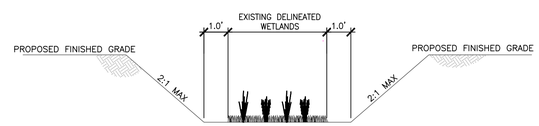
4 TYPICAL 12' TERRACE SECTION

NTS



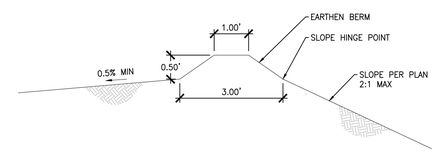
5 TYPICAL 6' TERRACE SECTION

NTS



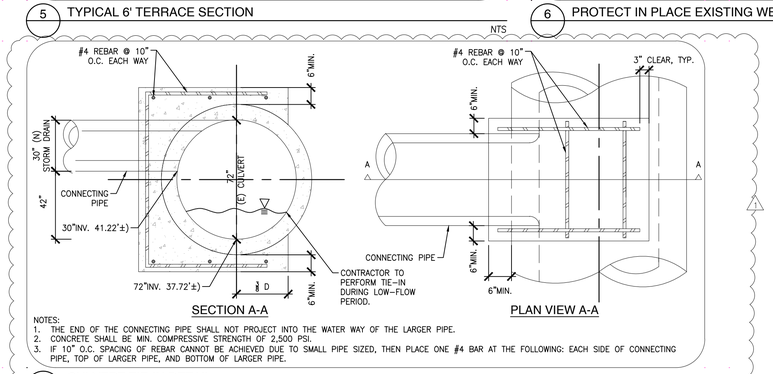
6 PROTECT IN PLACE EXISTING WETLANDS

NTS



7 EARTHEN BERM

NTS



NOTES:
1. THE END OF THE CONNECTING PIPE SHALL NOT PROJECT INTO THE WATER WAY OF THE LARGER PIPE.
2. CONCRETE SHALL BE MIN. COMPRESSIVE STRENGTH OF 2,500 PSI.
3. IF 10" O.C. SPACING OF REBAR CANNOT BE ACHIEVED DUE TO SMALL PIPE SIZED, THEN PLACE ONE #4 BAR AT THE FOLLOWING: EACH SIDE OF CONNECTING PIPE, TOP OF LARGER PIPE, AND BOTTOM OF LARGER PIPE.

8 CULVERT TIE-IN DETAIL

NTS

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

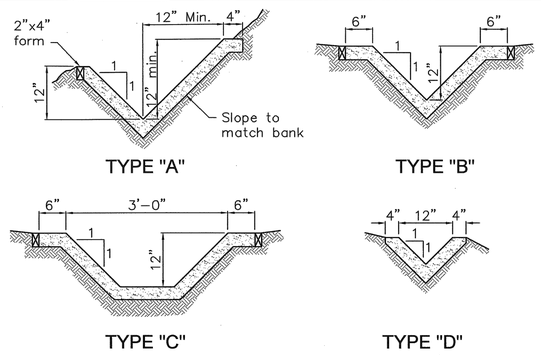
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

SECTIONS AND DETAILS

SHEET
C3.0

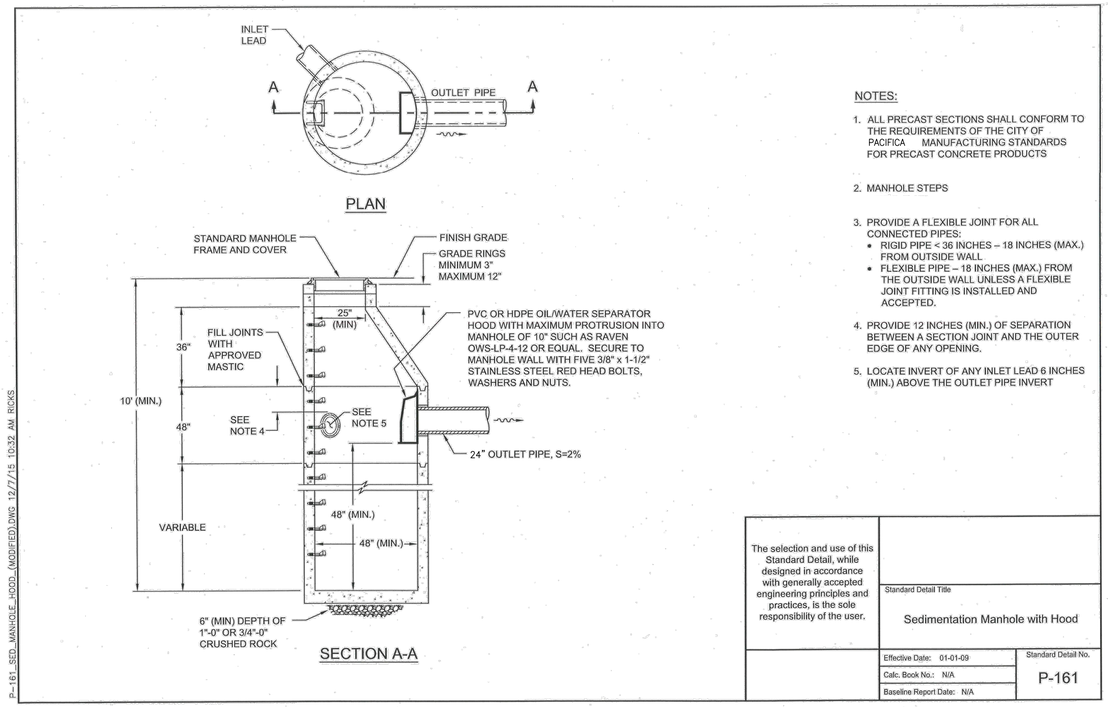
saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\20160108_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\reclamation plan v23.dwg



NOTE:

1. All sections shall be at least 4" thick.
2. Concrete shall be Class "B" (5 sack).
3. Both sides of the ditch shall be formed with 2"x4" lumber, WHERE SHOWN.
4. Concrete finish shall conform to Section 51–1.18A of the latest State Specification.
5. Ditch sides shall be back filled and compacted immediately after the removal of side forms.
6. No concrete shall be placed prior to form inspection by the Agency Engineer.
7. No ditch is to be constructed on filled ground prior to certification of the fill to the Agency by the Soil Engineer.
8. No expansion joints shall be required.

CITY OF PACIFICA DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	STANDARD CONCRETE LINED DITCHES	REV	DATE	BY:	SEPT. 1986 DWG. NO. 202
		3			
		2			
		1			



NOTES:

1. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PACIFICA MANUFACTURING STANDARDS FOR PRECAST CONCRETE PRODUCTS
2. MANHOLE STEPS
3. PROVIDE A FLEXIBLE JOINT FOR ALL CONNECTED PIPES:
   - RIGID PIPE < 36 INCHES – 18 INCHES (MAX.) FROM OUTSIDE WALL
   - FLEXIBLE PIPE – 18 INCHES (MAX.) FROM THE OUTSIDE WALL UNLESS A FLEXIBLE JOINT FITTING IS INSTALLED AND ACCEPTED.
4. PROVIDE 12 INCHES (MIN.) OF SEPARATION BETWEEN A SECTION JOINT AND THE OUTER EDGE OF ANY OPENING.
5. LOCATE INVERT OF ANY INLET LEAD 6 INCHES (MIN.) ABOVE THE OUTLET PIPE INVERT

The selection and use of this Standard Detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.	Standard Detail Title Sedimentation Manhole with Hood
	Effective Date: 01-01-09 Calc. Book No.: N/A Baseline Report Date: N/A Standard Detail No. P-161

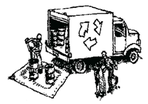
P-161_SED_MANHOLE_HOOD_(MODIFIED).DWG 12/7/15 10:32 AM RICKS

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control

Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving

- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

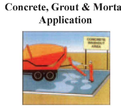
Paving/Asphalt Work

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent wastewater from entering storm drains. Block any inlets and vacuum gutters, hose wastewater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping

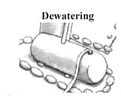
- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal

Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to $10,000 per day!

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY
2		
3		
4		
5		

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

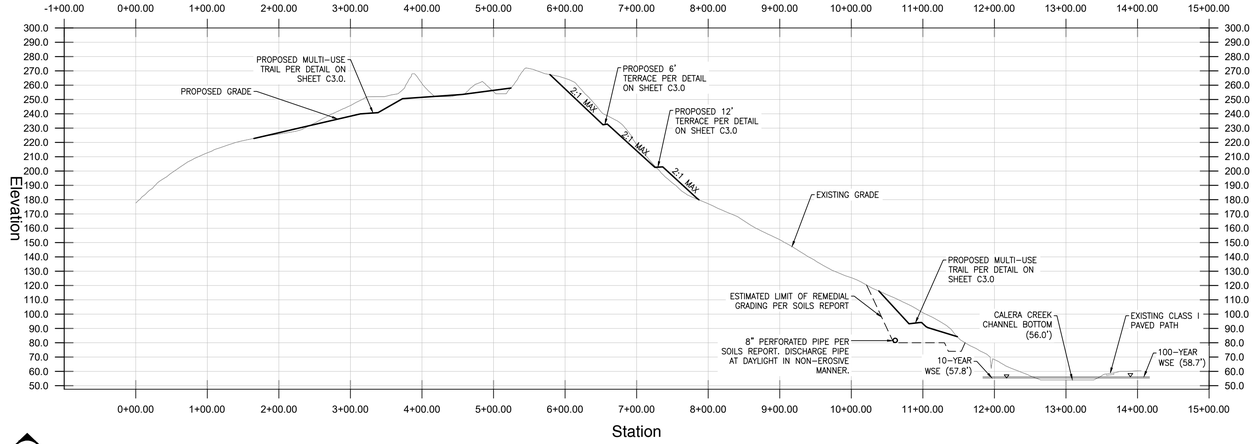
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

SECTIONS AND DETAILS

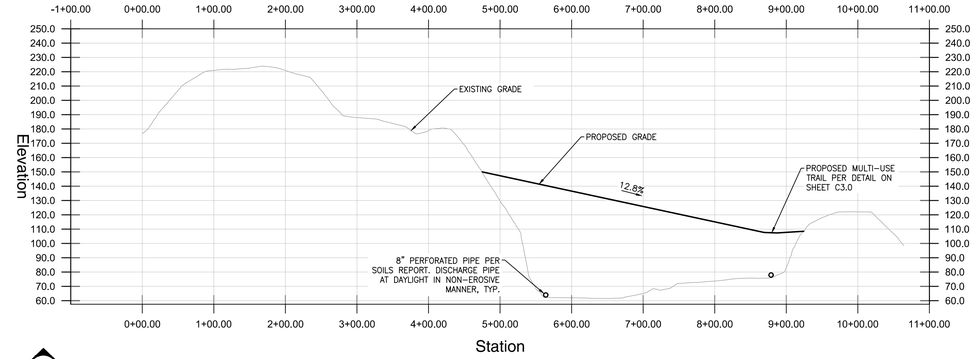
SHEET
C3.1

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 201906\01\reclamation plan v03.dwg



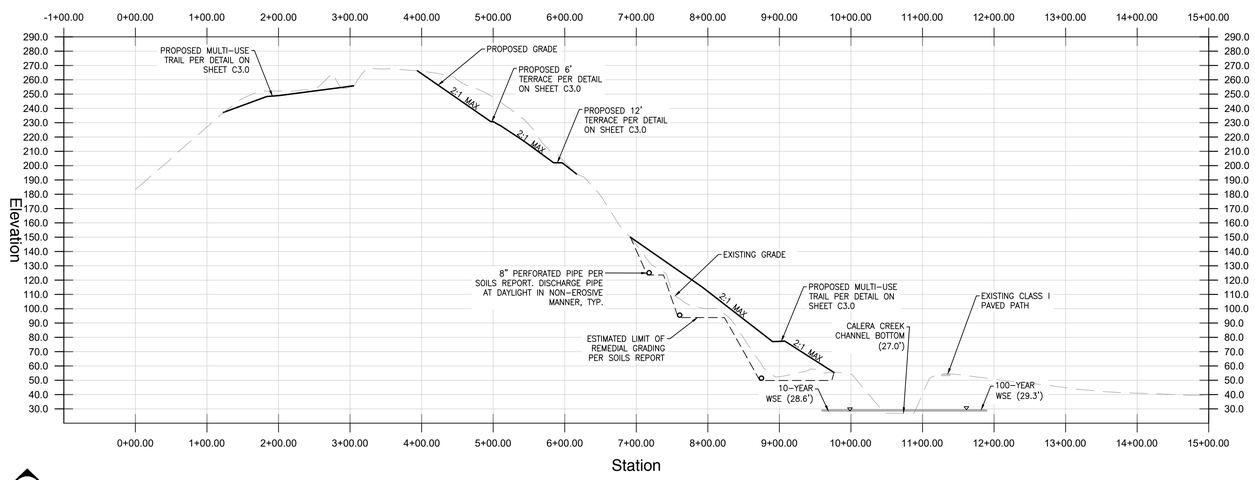
A C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'



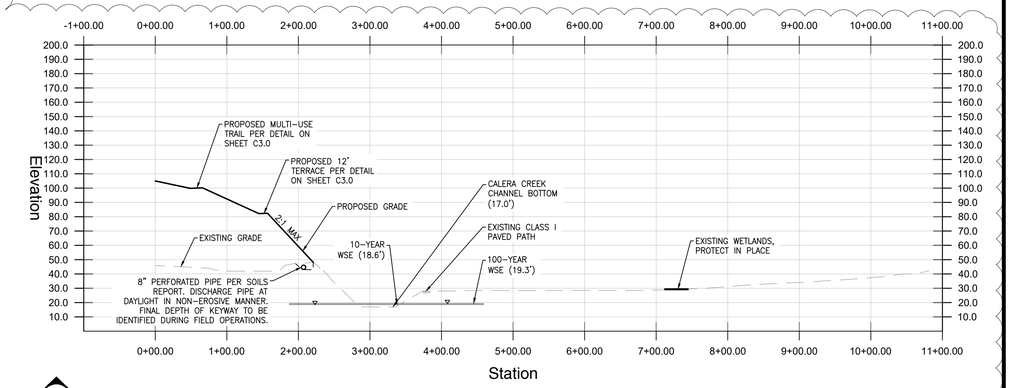
D C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'



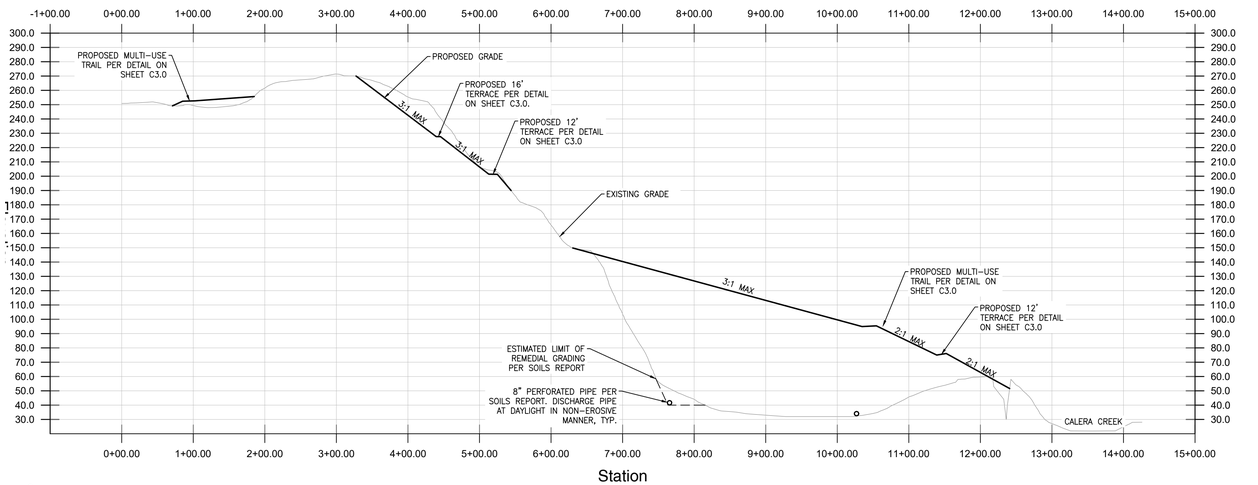
B C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'



E C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'

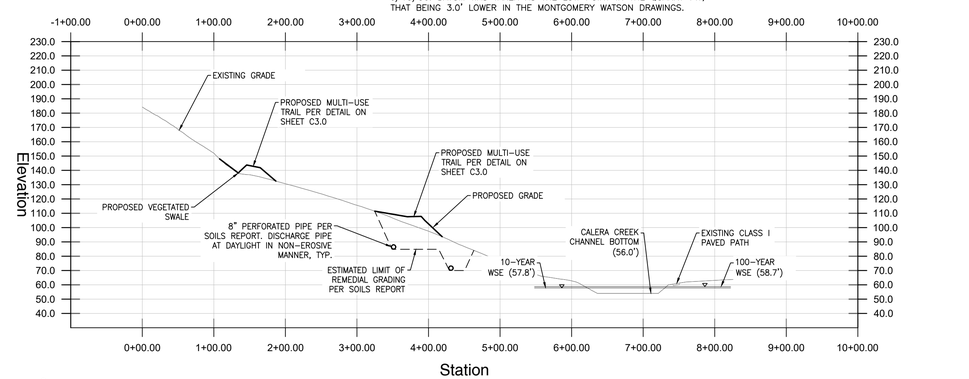


C C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'

GENERAL NOTES

1. THE ORDINARY HIGH WATER ELEVATION IS 5.03' DATED MARCH 2013. HISTORICAL TIDE DATA TAKEN FROM NOAA STATION I.D. 9414290 SAN FRANCISCO, CA.
2. 10-YEAR AND 100-YEAR WATER SURFACE ELEVATIONS BASED ON PEAK DISCHARGES OBTAINED FROM FEMA FLOOD INSURANCE STUDY DATED 2/19/1997.
3. FOR CHANNEL PROPERTIES, CALERA CREEK WATER RECYCLING PLANT DRAWINGS BY MONTGOMERY WATSON WERE REFERENCE DATED 6/10/96. DATUM WAS TAKEN AS THE LOW POINT IN THE QUARRY PIT, THAT BEING 3.0' LOWER IN THE MONTGOMERY WATSON DRAWINGS.



F C1.0

VERTICAL SCALE: 1"=50'
HORIZONTAL SCALE: 1"=100'

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY RECLAMATION PLAN

PACIFICA, CA

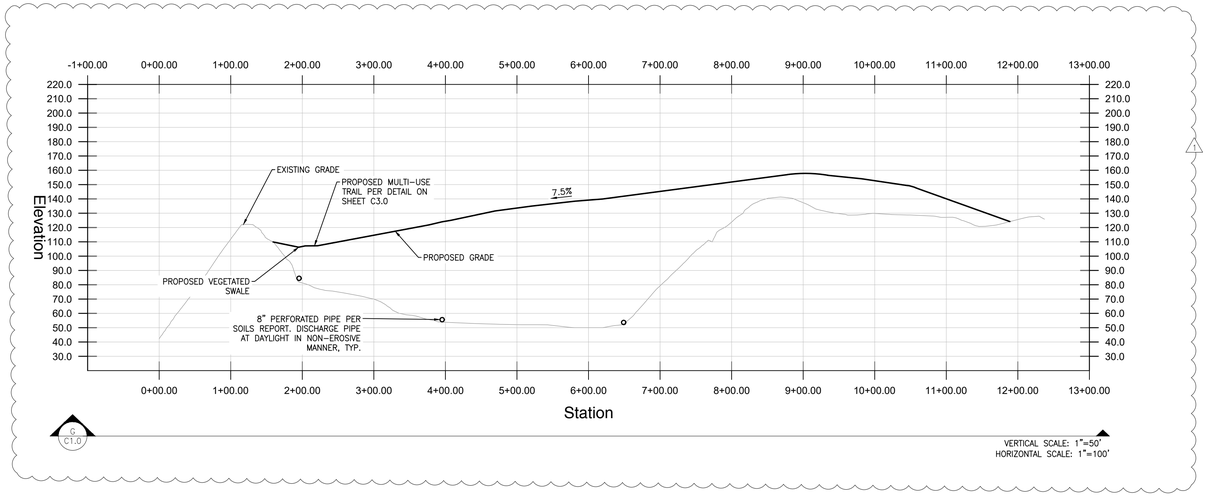
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

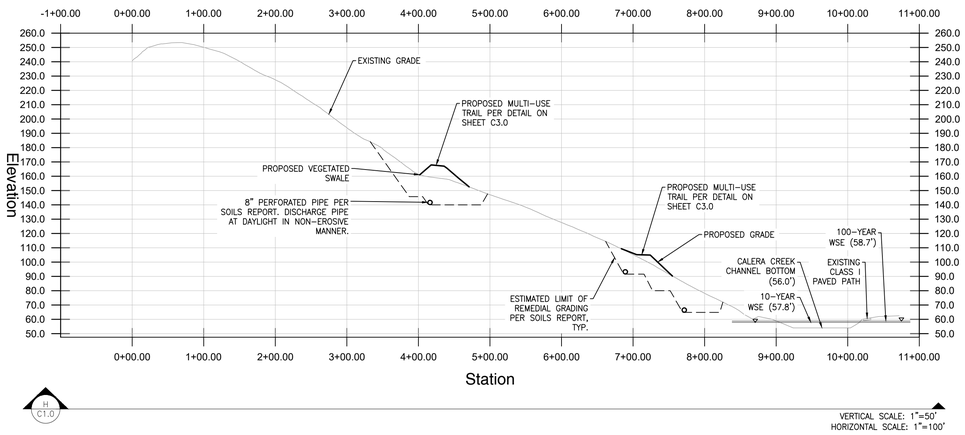
DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

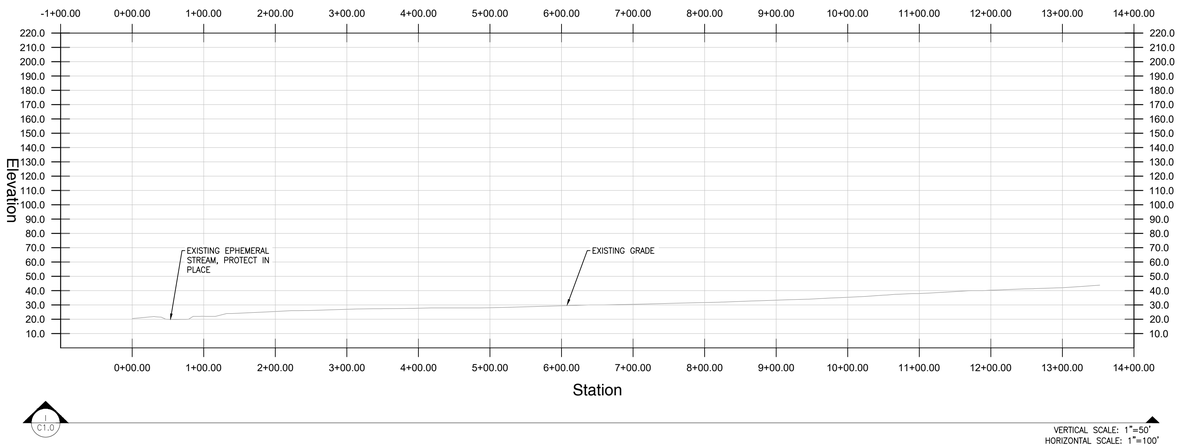
SITE CROSS SECTIONS

SHEET
1
C4.0

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\reclamation plan v03.dwg







GENERAL NOTES

1. THE ORDINARY HIGH WATER ELEVATION IS 5.03' DATED MARCH 2013. HISTORICAL TIDE DATA TAKEN FROM NOAA STATION I.D. 9414290 SAN FRANCISCO, CA.
2. 10-YEAR, AND 100-YEAR WATER SURFACE ELEVATIONS BASED ON PEAK DISCHARGES OBTAINED FROM FEMA FLOOD INSURANCE STUDY DATED 2/19/1997.
3. FOR CHANNEL PROPERTIES, CALERA CREEK WATER RECYCLING PLANT DRAWINGS BY MONTGOMERY WATSON WERE REFERENCE DATED 6/10/96. DATUM WAS TAKEN AS THE LOW POINT IN THE QUARRY PIT, THAT BEING 3.0' LOWER IN THE MONTGOMERY WATSON DRAWINGS.

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY
2		
3		
4		
5		
6		

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

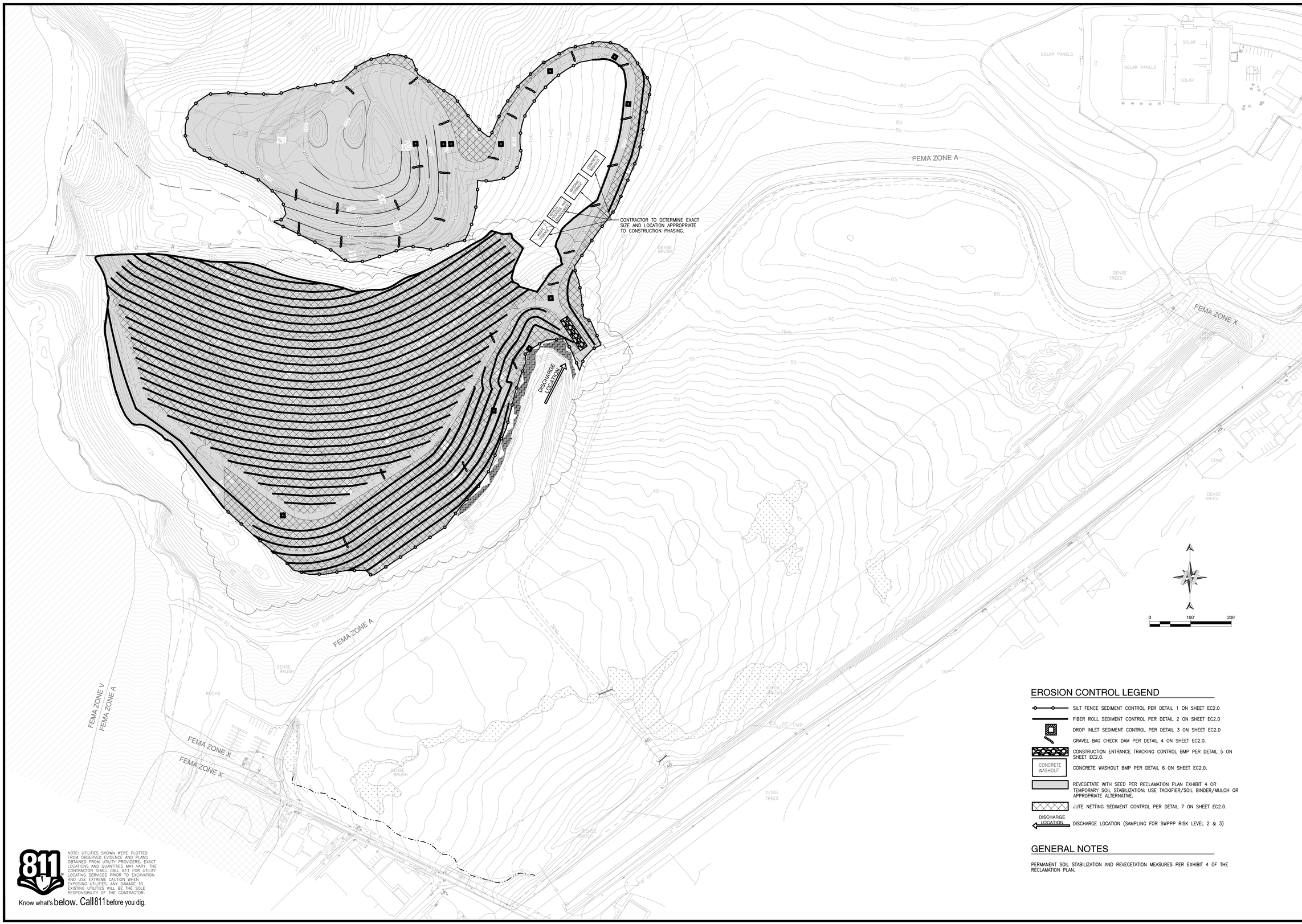
REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

SITE CROSS SECTIONS

SHEET
C4.1

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\reclamation plan v03.dwg



EROSION CONTROL LEGEND

- SILT FENCE SEDIMENT CONTROL PER DETAIL 1 ON SHEET EC2.0
- FIBER ROLL SEDIMENT CONTROL PER DETAIL 2 ON SHEET EC2.0
- DROP INLET SEDIMENT CONTROL PER DETAIL 3 ON SHEET EC2.0
- GRAVEL BAG CHECK DAM PER DETAIL 4 ON SHEET EC2.0.
- CONSTRUCTION ENTRANCE TRACKING CONTROL BMP PER DETAIL 5 ON SHEET EC2.0.
- CONCRETE WASHOUT — CONCRETE WASHOUT BMP PER DETAIL 6 ON SHEET EC2.0.
- REVEGETATE WITH SEED PER RECLAMATION PLAN EXHIBIT 4 OR TEMPORARY SOIL STABILIZATION: USE TACKIFIER/SOIL BINDER/MULCH OR APPROPRIATE ALTERNATIVE.
- JUTE NETTING SEDIMENT CONTROL PER DETAIL 7 ON SHEET EC2.0.
- DISCHARGE LOCATION — DISCHARGE LOCATION (SAMPLING FOR SWPPP RISK LEVEL 2 & 3)

GENERAL NOTES

PERMANENT SOIL STABILIZATION AND REVEGETATION MEASURES PER EXHIBIT 4 OF THE RECLAMATION PLAN.

811 Know what's below. Call811 before you dig.

NOTE: UTILITIES SHOWN WERE PLOTTED FROM OBSERVED EVIDENCE AND PLANS OBTAINED FROM UTILITY PROVIDERS. EXACT LOCATIONS AND QUANTITIES MAY VARY. THE CONTRACTOR SHALL CALL 811 FOR UTILITY LOCATING SERVICES PRIOR TO EXCAVATION AND USE EXTREME CAUTION WHEN EXPOSING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

saved: 3/17/2020, plotted: 3/17/2020, path: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 20190610\erosion control plan.dwg

NO.	DATE	REVISIONS
1	03/16/2020	GRADING SOUTH QUARRY
2		
3		
4		
5		

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

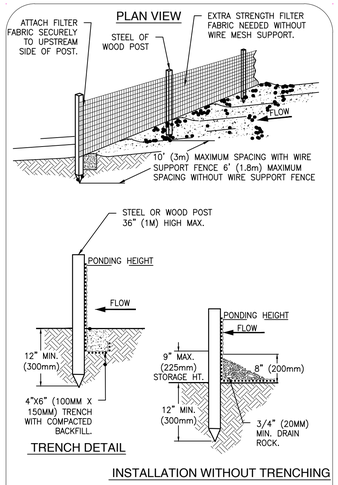
ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

REGISTERED PROFESSIONAL ENGINEER
MATTHEW R. WALSH
C 79026
CIVIL
STATE OF CALIFORNIA

DESIGNED BY:	KKE
DRAFTED BY:	KKE
CHECKED BY:	MRW
DATE:	03/16/2020

EROSION AND SEDIMENT CONTROL PLAN

SHEET
EC1.0

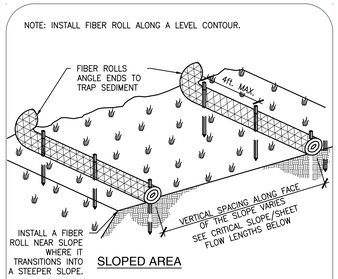


NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT TRANSPORT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

1 SILT FENCE

NTS

NOTE: INSTALL FIBER ROLL ALONG A LEVEL CONTOUR.



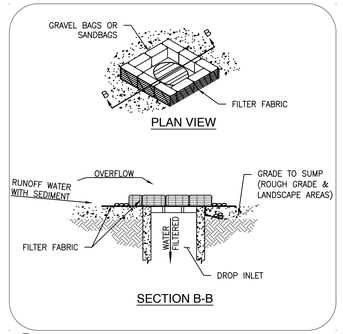
CRITICAL SLOPE /SHEET FLOW LENGTHS

(RISK LEVEL 2 AND 3 PROJECTS)

SLOPE PERCENTAGE	SHEET FLOW LENGTH NOT TO EXCEED
0–25%	20 FEET
25–50%	15 FEET
OVER 50%	10 FEET

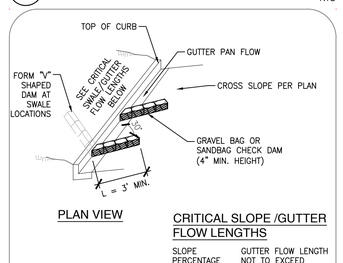
2 FIBER ROLL

NTS



3 DROP INLET PROTECTION

NTS



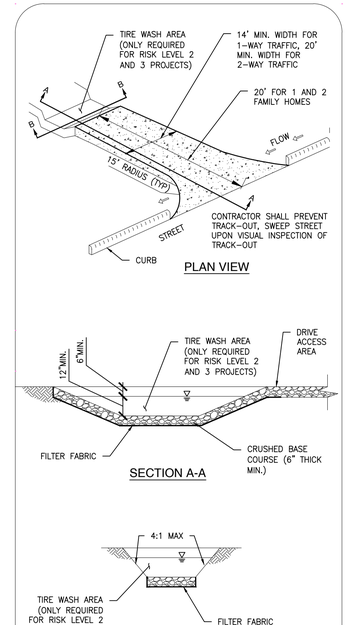
CRITICAL SLOPE /GUTTER FLOW LENGTHS

SLOPE PERCENTAGE	GUTTER FLOW LENGTH NOT TO EXCEED
0–2%	250 FEET
2–10%	150 FEET
OVER 10%	100 FEET

NOTES:
1. VISUALLY INSPECT SEDIMENT BUILD-UP. REMOVE/CLEAN WHEN SEDIMENT REACHES 3" MAX.

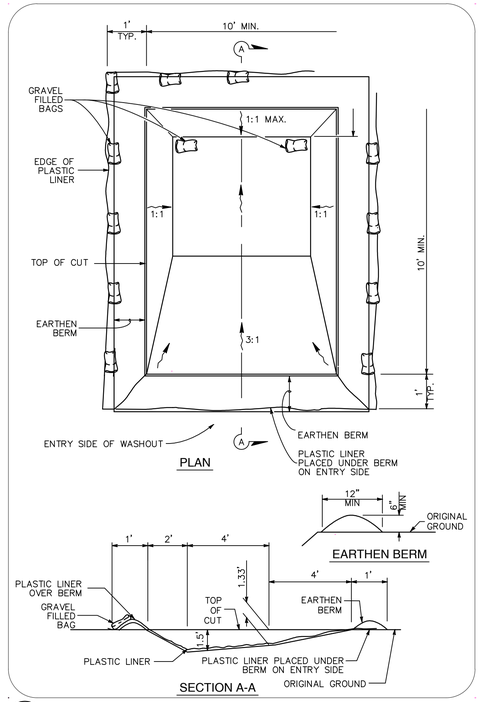
4 CHECK DAM

NTS



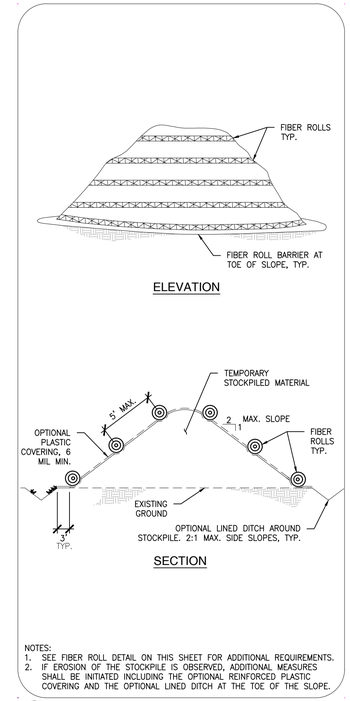
5 CONSTRUCTION ENTRANCE

NTS



6 CONCRETE WASHOUT

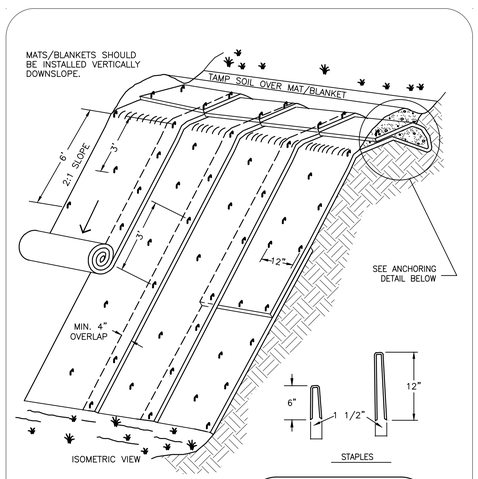
NTS



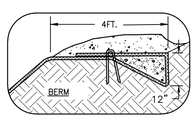
NOTES:
1. SEE FIBER ROLL DETAIL ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.
2. IF EROSION OF THE STOCKPILE IS OBSERVED, ADDITIONAL MEASURES SHALL BE INITIATED INCLUDING THE OPTIONAL REINFORCED PLASTIC COVERING AND THE OPTIONAL LINED DITCH AT THE TOE OF THE SLOPE.

7 STOCKPILE PROTECTION

NTS



TYPICAL SLOPE SOIL STABLIZATION



ANCHORING DETAIL

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS TO ENSURE MAT/BLANKET HAS GOOD SOIL CONTACT.
2. LAY BLANKETS AND STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH.
3. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
4. APPLY SEED, FERTILIZER, AND IRRIGATE UNTIL VEGETATION IS GERMINATED THROUGH MAT AND SOIL IS EFFECTIVELY STABILIZED WITH VEGETATION.

8 JUTE NETTING EROSION CONTROL MAT

NTS

EROSION & SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO ENSURE THAT WATER ENTERING THE STORM DRAIN SYSTEM BELOW THE CONSTRUCTION SITE IS EQUIVALENT QUALITY AND CHARACTER AS THE WATER ABOVE THE SITE.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED IN FRONT OF INCOMPLETE STORM DRAIN SYSTEMS TO PREVENT DEBRIS AND SEDIMENT-LADEN WATER FROM ENTERING INTO THE PUBLIC STORM DRAIN SYSTEM. BEST MANAGEMENT PRACTICES SHALL BE USED WHEN DESIGNING AND INSTALLING SUCH DEVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTANT MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER AND CITY AGENCY. EROSION AND SEDIMENT CONTROL MEASURES AND THEIR INSTALLATION SHALL BE ACCOMPLISHED USING BEST MANAGEMENT PRACTICES.
4. IF THE STORM DRAIN SYSTEM IS NOT IN PLACE BY OCTOBER 15, ADDITIONAL MEASURES SHALL BE TAKEN SUCH AS TEMPORARY SETTLING BASINS WHICH MEET THE SATISFACTION OF THE ENGINEER AND THE CITY AGENCY. SILT AND/OR CATCH BASINS MUST BE CLEANED OUT ON A REGULAR BASIS AFTER STORMS TO MAINTAIN DESIGN CAPACITY.
5. STORM WATER RUNOFF FROM THE CONSTRUCTION SITE SHALL BE DIRECTED TOWARD AN INLET WITH A SEDIMENT OR FILTRATION INTERCEPTOR PRIOR TO ENTERING THE STORM DRAIN SYSTEM.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING WATER THAT HAS BECOME POLLUTED DUE TO NOT TAKING NECESSARY EROSION AND SEDIMENT CONTROL ACTIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF MUD AND DEBRIS CARRIED ONTO SURROUNDING STREETS AND ROADS AS A RESULT OF CONSTRUCTION ACTIVITY ON THE SITE TO THE SATISFACTION OF THE CITY AGENCY.
8. ANY DENUDED OR DISTURBED SOILS SHALL BE PROTECTED USING BEST MANAGEMENT PRACTICES.
9. BETWEEN OCTOBER 15 AND APRIL 15, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED BY THE DEVELOPER, CONTRACTOR OR OWNER SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF LEAVES THE SITE.
10. THE CONTRACTOR IS TO INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE CONTROL MEASURES.
11. DURING THE RAINY SEASON (TYPICALLY OCTOBER 15 TO APRIL 15) ALL SEDIMENT BARRIERS ARE TO BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY AND, IN ADDITION, AFTER EACH STORM. CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL MEASURES AND INLETS AFTER EACH SIGNIFICANT RAINFALL AND DAILY DURING PROLONGED STORM EVENTS. REMOVE SEDIMENTS WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE BARRIER AND REPLACE FILTER DEVICES AS NECESSARY TO ENSURE PROPER FUNCTION.
12. UNSTABILIZED AREAS WILL BE REPAIRED AS SOON AS POSSIBLE AFTER BEING DAMAGED.
13. ALL GRADED OR DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.
14. ENTRANCE TO THE PROJECT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAY. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE OF PUBLIC RIGHTS-OF- WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED ROCK THAT DRAINS INTO A SEDIMENT TRAP.
15. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHTS- OF-WAY SHALL BE REMOVED IMMEDIATELY USING BEST MANAGEMENT PRACTICES.
16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
17. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER FUNCTIONING PER BEST MANAGEMENT PRACTICES.
18. THE CONTRACTOR SHALL HAVE EROSION AND SEDIMENT CONTROL MEASURES ON SITE ADEQUATE TO PROTECT THE ENTIRE SITE PRIOR TO THE OCTOBER 15 DATE SUCH THAT IT IS IMMEDIATELY AVAILABLE IN PREPARATION OF THE UPCOMING WINTER SEASON OR IN THE EVENT OF AN EARLY RAIN.
19. AFTER CONSTRUCTION IS COMPLETE ALL STORM DRAIN SYSTEMS ASSOCIATED WITH THIS PROJECT SHALL BE INSPECTED AND CLEARED OF ACCUMULATED SEDIMENTS AND DEBRIS.
20. GRADED AREAS TO BE SEEDED FOR EROSION CONTROL SHALL USE GRASS SEED AT THE RATE OF 75-100/LBS. PER ACRE. SEEDED AREAS SHALL BE IRRIGATED TO ENSURE COVER IS ROOTED PRIOR TO RAINY SEASON.
21. HYDROSEED SHALL BE EITHER APPLIED MECHANICALLY OR BY HYDROSEEDING. HYDROSEEDING REQUIRES THE APPLICATION OF FIBER AND STABILIZING EMULSION. MECHANICAL APPLICATION SHALL REQUIRE ROLLING, TAMPING, OR OTHERWISE WORKING THE SEED APPROXIMATELY 0.5 INCHES INTO THE TOPSOIL.
22. STABILIZATION OF EXPOSED GRADED AREAS WITH STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.
23. THIS PLAN PROVIDES EROSION CONTROL AND SEDIMENTATION INFORMATION AND DESIGN USING THE FOLLOWING ASSUMPTIONS:
    *GROUND HAS BEEN ROUGH GRADED.
    *STORM DRAIN UTILITIES AND INLETS HAVE BEEN INSTALLED.
24. CONTRACTOR SHALL ADJUST THE SEDIMENTATION AND EROSION CONTROL METHODS AS THE PROJECT DEVELOPS. IT SHALL BE THE QUALIFIED SWPPP PRACTITIONER'S (QSP) RESPONSIBILITY TO ENSURE THAT THE INSTALLED EROSION CONTROL AND SEDIMENTATION IMPROVEMENTS ARE IN CONFORMANCE WITH THE STATE OF CALIFORNIA STORM WATER POLLUTION PREVENTION PLAN GUIDELINES AND THE CALIFORNIA BEST MANAGEMENT PRACTICES.
25. TEMPORARY SILT AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE CITY ENGINEER AND IN PLACE PRIOR TO THE START OF GRADING.
26. THE CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR CONSTRUCTION AND ACTIVITIES AS PROMULGATED BY THE CALIFORNIA STATE WATER RESOURCE CONTROL BOARD OR ANY OF ITS REGIONAL WATER QUALITY CONTROL BOARDS.
27. ALL MATERIALS NECESSARY FOR WINTERIZATION SHALL BE AVAILABLE AT THE SITE BY OCTOBER 12, AND ALL WINTERIZATION MEASURES SHALL BE INSTALLED AND COMPLETED BY OCTOBER 15.
28. WINTERIZATION SHALL BE INSTALLED ACCORDING TO THIS PLAN AND AS DIRECTED BY THE QUALIFIED SWPPP PRACTITIONER (QSP), AND SHALL BE MAINTAINED BY THE CONTRACTOR THROUGH APRIL 1.
29. FILL SLOPES: AVOID LEAVING SHINY, SMOOTH GRADED SURFACES. THE LAST GRADING OPERATION SHALL BE TO WALK A TRACK-TYPE TRACTOR UP AND DOWN THE SLOPE, CREATING CLEAT MARKS ON THE SLOPE WITH CONTOURS. THESE WILL PROVIDE SEED AND FIBER COLLECTION POINTS.
30. CUT SLOPES: AVOID LEAVING SHINY, SMOOTH GRADED SURFACES. THE LAST GRADING OPERATION SHALL LEAVE THE SLOPE IN A ROUGHENED CONDITION WITH 2 INCHES OF LOOSENED MATERIAL FOR SEEDING.
31. EACH FIBER ROLL SHALL BE SECURELY HELD WITH 1"X1"X18" STAKES (MIN).
32. IF ANY GRAVEL BAGS ARE MOVED AND/OR RELOCATED IN GAINING ACCESS TO THE SITE DURING THE WINTER MONTHS, THEY SHALL BE REPLACED IF THEY ARE NO LONGER STABLE.
33. ONCE INSTALLED, ALL WINTERIZATION MATERIALS SHOULD BE CHECKED BEFORE EACH WEEKEND AND EACH STORM.
34. THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.
35. AFTER THE UNDERGROUND STORM DRAIN SYSTEM IS INSTALLED, THE CATCH BASINS WILL BE INSTALLED (AS SOON AS PRACTICAL) AND THE SEDIMENT CONTROL DEVICE WILL BE PLACED AROUND THOSE CATCH BASINS AS SHOWN ON THIS PLAN AND IN THE DETAIL ON THE SHEET UNTIL THE SITE IS PAVED.
36. CONTRACTOR TO PROVIDE TEMPORARY SEDIMENT CONTROL DEVICE AT CATCH BASINS AS SHOWN IN DETAIL. CONTRACTOR MAY SUBSTITUTE OTHER SEDIMENT CONTROL DEVICES (GRAVEL BAGS, SILT TRAPS, ETC.) UNDER THE DIRECTION OF THE QSP. ALL MODIFICATIONS NEED TO BE APPROVED BY QSD, AND LOGGED IN THE SWPPP AMENDMENT LOG.
37. ACCESS ROADS: AS NECESSARY, ANY SEDIMENT OR OTHER CONSTRUCTION RELATED MATERIALS DEPOSITED ON ACCESS ROADS SHALL BE REMOVED PRIOR TO ANY RAIN EVENT BY VACUUMING OR SWEEPING.
38. WIND EROSION CONTROL: STOCKPILED WASTE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND EROSION AT ALL TIMES WHEN NOT IN USE.
39. CONTRACTOR SHALL PROVIDE EFFECTIVE SOIL COVER FOR INACTIVE AREAS WHERE CONSTRUCTION ACTIVITY HAS DISTURBED SOIL BUT ARE NOT SCHEDULED TO RE-DISTURB SOIL FOR AT LEAST 14 DAYS.

NO.	DATE	REVISIONS
	03/16/2020	GRADING SOUTH QUARRY

WALSH ENGINEERING
WALSHENGINEERING.NET (805) 319-4948
979 OSOS ST, SUITE F-4 SAN LUIS OBISPO, CA 93401

ROCKAWAY QUARRY
RECLAMATION PLAN
PACIFICA, CA

REGISTERED PROFESSIONAL ENGINEER MATTHEW R. WALSH C 79026 CIVIL STATE OF CALIFORNIA

DESIGNED BY: KKE
DRAFTED BY: KKE
CHECKED BY: MRW
DATE: 03/16/2020

EROSION AND SEDIMENT CONTROL DETAILS

SHEET
EC2.0

saved: 3/17/2020, plotted: 3/17/2020, paths: s:\projects_eng\2016008_rockaway_quarry_pacifica\drawings\reclamation plan 2019\9010\erosion control plan.dwg