

Agenda Item No. 7g.

Date:	April 4, 2024
To:	Mayor Brekhus and Council Members
From:	Richard Simonitch, Public Works Director
Subject:	Laurel Grove Safe Pathways Phase IIB Project

### Recommendation

It is recommended that the Town Council approve the Laurel Grove Safe Pathways Phase IIB Project (the "Project") and authorize staff to advertise for construction bids.

#### **Background & Discussion**

The Project will extend the recently completed Laurel Grove Safe Pathways Phase IIA roadway improvements and pedestrian pathway from the intersection of Monte Alegra up to and including the intersection of Canyon Road. The project consists of 12,250 square feet of pavement grind and asphalt overlay, a new concrete retaining wall with decorative façade, new lane striping, signage, and patterned, colorized pavement markings. 360 feet of 5-foot to six-foot wide pedestrian pathway will be constructed from the terminus of the existing pathway across from Monte Alegra to a location just opposite the Canyon Road intersection. A set of Construction Drawings are attached with this staff report.

#### Fiscal, resource and timeline impacts

The engineer's estimate is \$496,900 for the base bid. Because of the estimated cost of the project, the formal bidding procedure will be used. If approved to advertise for construction bids, staff expects to recommend award of the project to the lowest responsive and responsible bidder at the June 2024 Town Council meeting and begin construction shortly thereafter.

#### **Environmental review**

The project is categorically exempt under the California Environmental Quality Act (CEQA) Article 19, Section 15301 existing facilities (existing highways and streets).

### Attachments

• Project Plans





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CONSTRUCTION DRAWINGS FOR LAUREL GROVE AVENUE SAFE PATHWAY TO SCHOOL PHASE II-B TOWN OF ROSS, CALIFORNIA

MARCH 2024



# INDEX OF DRAWINGS

#### NUMBER SHEET TITLE CV-1 COVER SHEET GN-1 GENERAL NOTES TS-1 TYPICAL ROADWAY SECTIONS OP-1 HORIZONTAL CONTROL PLAN AND KEY MAP DM-1 DEMOLITION PLAN & SEDIMENT CONTROL PLAN GR-1 GRADING & PAVING PLAN PD-1 PAVEMENT DELINEATION PLAN PD-2 PAVEMENT DELINEATION PLAN (DETAILS) S-1 SIGNAGE PLAN 0 DT-1 INTERSECTION DETAIL 10 RW-1 RETAINING PLAN, PROFILE & DETAILS 11 CD-1 CONSTRUCTION DETAILS 12



## ABBREVIATIONS

±	MORE OR LESS (CONFORM TO EG
AB	AGGREGATE BASE
AC	ASPHALI CONCRETE
APN	ASSESSOR'S PARCEL NUMBER
BFP	BACKFLOW PREVENTER
BLRD	BOLLARD
BM	BENCHMARK
СВ	CATCH BASIN
CL	CENTERLINE
CL2	CLASS II
CO	CLEAN OUT
CONC	CONCRETE
CY	CUBIC YARD
DDC	DOUBLE DETECTOR CHECK
DI	DROP INLET
DIA	DIAMETER
DN	DOCUMENT NUMBER
DW	DRIVEWAY
E	ELECTRIC
EG	EXISTING GROUND
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	SURFACE FLOWLINE
FT	FOOT
G	GAS
GB	GRADE BREAK
GI	GRATE INLET
GM	GAS METER
HORZ	HORIZONTAL
HT	HEIGHT
IN	INSTRUMENT NUMBER
INV	BOTTOM INSIDE OF PIPE
L	LENGTH
MAX	MAXIMUM

ЛH	MANHOLE
/IN	MINIMUM
10	NUMBER
ITS	NOT TO SCALE
ЭН	OVERHEAD UTILITY LINE
۲L	PROPERTY LINE
PUE	PUBLIC UTILITY EASEMENT
νvτ	PRIVATE
{	RADIUS
RCP	REINFORCED CONCRETE PIPE
RSPR	RIPRAP ROCK SLOPE PROTECTION
RTWL	RETAINING WALL
₹/W	RIGHT OF WAY
S=	SLOPE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SF	SQUARE FEET
SL	STREETLIGHT
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
ГВ	TOP OF BOX
ГС	TOP FACE OF CURB
FEL	TELECOMMUNICATION LINE
ΓF	TRANSFORMER
ſĠ	TOP OF GRATE
ΓW	TOP OF WALL
ГҮР	TYPICAL
JB	UTILITY BOX
JP JT	
) I	UNDERGROUND UTILITY LINE
/C	VERTICAL CURVE
/EKI	
V MAA	WAIEK WATED METED
VIVI	WAIEN WEIEK

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### GENERAL NOTES

SPECIFICATIONS OF THE CITIES AND COUNTY OF MARIN DATED JUNE CONSTRUCTION OF IMPROVEMENTS. 1992, THE UNIFORM CONSTRUCTION STANDARDS OF THE CITIES AND COUNTY OF MARIN DATED MAY 2008 AND THE CALTRANS STANDARD PLANS PROTECT EXISTING DRAINAGE FACILITIES FROM SEDIMENTATION DURING (CURRENT EDITION) AND CALTRANS STANDARD DRAWINGS AND ALL PHASES OF CONSTRUCTION. SPECIFICATIONS (CURRENT EDITION).

OBTAIN AND PAY FOR ALL CONSTRUCTION PERMITS REQUIRED BY THE TOWN OF ROSS DEPARTMENT OF PUBLIC WORKS, COUNTY OF MARIN DEPARTMENT OF PUBLIC WORKS (SUCH AS ENCROACHMENT, GRADING, DEMOLITION ETC.) PRIOR TO COMMENCEMENT OF WORK. A TRAFFIC CONTROL PLAN MUST BE SUBMITTED FOR APPROVAL PRIOR TO BEGINNING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN CREEK SETBACK AREAS, PROTECTED VEGETATION/TREE AREAS OR WITHIN 10-FEET OF AN ADJACÉNT RESIDENTIAL PROPERTY LINE. STOCKPILES TALLER THAN ALL STORM DRAIN SHOWN "S.D." SHALL BE R.C.P. UNLESS OTHERWISE 2.5-FEET SHALL NOT BE WITHIN 50-FEET OF AN ADJACENT RESIDENTIAL NOTED. RCP STORM DRAIN SHALL BE CLASS IV UNLESS OTHERWISE SHOWN PROPERTY LINE.

IF CONTAMINATED MATERIAL IS ENCOUNTERED DURING CONSTRUCTION WORK MUST STOP UNTIL A WORK PLAN HAS BEEN APPROVED IN WRITING BY THE TOWN OF ROSS, COUNTY OF MARIN AND THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD. HAZARDOUS MATERIAL SHALL BE REMOVED AND DISPOSED OF ACCORDING TO THE REQUIREMENTS OF THE TOWN OF ROSS AND COUNTY OF MARIN.

SPOILS SHALL BE REMOVED AS THEY ARE GENERATED OR DISPOSED OF ON SITE. EXCESS/UNSUITABLE MATERIAL DISPOSED OF OFFSITE SHALL BE SECURELY PROTECT STOCKPILED BACKFILL AND WASTE MATERIAL FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED. DO NOT BLOCK STORM WATER FLOWS.

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND REPLACE STRIPING THAT IS REMOVED TO FACILITATE THE PROPOSED COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONSTRUCTION CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY AND DEFEND THE DESIGN PROFESSIONAL, THE OWNER AND CONTRACTOR. THEIR CONSULTANTS, THE TOWN OF ROSS, THE COUNTY OF MARIN, AND EACH OF THEIR OFFICERS, EMPLOYEES, AND AGENTS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

THE LOCATIONS OF UNDERGROUND OBSTRUCTIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS FINAL OR ALL INCLUSIVE. THE CONTRACTOR IS CAUTIONED THAT THESE DRAWINGS MAY NOT INCLUDE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS, AND THAT THE OWNER, THE TOWN OF ROSS, THE COUNTY OF MARIN AND THE DESIGN PROFESSIONAL ASSUME NO RESPONSIBILITY FOR OBSTRUCTIONS WHICH MAY BE ENCOUNTERED.

EXPOSE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS PRIOR TO ANY TRENCHING TO ALLOW THE DESIGN PROFESSIONAL TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATIONS. EXISTING INSTALL SIGNING AND STRIPING CONCURRENTLY. UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENTS MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS.

PROPERLY MUFFLE EQUIPMENT AND LIMIT CONSTRUCTION HOURS TO 7:00 AM TO 6:00 PM MONDAY THROUGH FRIDAY, AND 9:00 AM TO 6:00 PM ON SATURDAY, EXCLUDING HOLIDAYS. THIS RESTRICTION INCLUDES THE STARTUP OF MOTOR VEHICLES AND OTHER HEAVY EQUIPMENT.

REPAIR DAMAGE OR DETERIORATION OCCURRING TO EXISTING PUBLIC IMPROVEMENTS AS A DIRECT RESULT OF CONSTRUCTION ACTIVITY (GRADING, ROAD CONSTRUCTION, UTILITY INSTALLATION, ETC.). REPAIR MAY REQUIRE PATCHING, SEALING OR OVERLAYING AFFECTED AREAS AS APPROPRIATE TO RETURN THE ROADS TO AT LEAST AS GOOD A CONDITION AS THEY WERE PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACT IN A TIMELY MANNER, THE CITY MAY, AT ITS DISCRETION PERFORM THE CORRECTION AND CHARGE THE CONTRACTOR FOR ALL COSTS AND OVERHEAD INCURRED.

PROVIDE AS-BUILT DRAWINGS TO THE TOWN OF ROSS UPON COMPLETION PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8771, WITH OF PROJECT AND PRIOR TO FINAL ACCEPTANCE.

ADA COMPLIANCE: COMPLY WITH THE REQUIREMENTS OF THE AMERICAN WITH DISABILITIES ACT (ADA) WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY. IF CONSTRUCTION CONTRACTOR'S WORK IN THE PUBLIC RIGHT-OF-WAY WILL AFFECT PEDESTRIAN ACCESS, THE CONSTRUCTION CONTRACTOR IS REQUIRED TO PROVIDE A PROPERLY SIGNED ACCESSIBLE ROUTE OF TRAVEL. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND ALL MEASURED DISTANCES ARE IN GRID FEET AND DECIMALS THEREOF NOT BE LIMITED TO NORMAL WORKING HOURS.

ACTIVITIES ARE ENCOUNTERED DURING PROJECT-RELATED ACTIVITIES, "LA STEVENS CONTROL", LOCATION SHOWN HEREON. WORK IN THE IMMEDIATE VICINITY OF THE FINDS SHALL HALT AND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT SUPERINTENDENT AND THE PROJECT INSPECTOR. WORK SHALL NOT RESUME UNTIL A QUALIFIED ARCHAEOLOGIST OR HISTORIC ARCHAEOLOGIST, AS BENCHMARK: ELEVATION ESTABLISHED BY GPS RELATIVE POSITIONING APPROPRIATE, APPROVED BY THE TOWN OF ROSS AND/OR COUNTY OF FROM NATIONAL GEODETIC SURVEY (NGS) CONTINUOUSLY OPERATING MARIN, HAS EVALUATED THE SITUATION AND MADE RECOMMENDATIONS FOR REFERENCE STATIONS (CORS). STATIONS USED WERE OHLN, P181, P198, TREATMENT OF THE RESOURCE, AND WHOSE RECOMMENDATIONS ARE P261, AND TIBB. CARRIED OUT. IF HUMAN BURIAL REMAINS ARE ENCOUNTERED, THE CONTRACTOR MUST ALSO CONTACT THE MARIN COUNTY CORONER.

### GRADING NOTES

NO GRADING. CLEARING OR GRUBBING SHALL BE PERFORMED PRIOR TO ISSUANCE OF AN ENCROACHMENT PERMIT BY THE TOWN OF ROSS DEPARTMENT OF PUBLIC WORKS, COUNTY OF MARIN DEPARTMENT OF PUBLIC WORKS AND CALTRANS.

PROVIDE DUST CONTROL THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT TO MINIMIZE AIRBORNE POLLUTANTS.

PERFORM GRADING IN ACCORDANCE WITH CHAPTER 18 AND APPENDIX J OF THE CALIFORNIA BUILDING CODE (THE VERSION IN EFFECT AS ADOPTED BY CITY AT THE TIME OF PERMIT ISSUANCE), UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT, PREPARED BY MILLER PACIFIC GROUP, INC. DATED SEPTEMBER 2, 2021.

FURNISH AND INSTALL MATERIALS IN ACCORDANCE WITH THE STANDARD DO NOT BLOCK DRAINAGE FROM UPSTREAM PROPERTIES WITH GRADING OR

REMOVE AND DISPOSE OF HAZARDOUS MATERIAL ACCORDING TO THE REQUIREMENTS OF THE TOWN OF ROSS FIRE DEPARTMENT.

DRIP LINES OF TREES OVERHANGING THE PROPERTY LINE SHALL BE AFFORDED THE SAME LEVEL OF PROTECTION AS TREES THAT ARE TO REMAIN

## UTILITY NOTES

MAINTAIN A CLEAN CONSTRUCTION SITE TO PREVENT THE INTRODUCTION OF FOREIGN MATERIALS INTO THE STORM WATER CONVEYANCE SYSTEM. ACTIVITY DURING CONSTRUCTION WHICH RESULTS IN THE DISCHARGE OF POLLUTANTS TO THE STORM WATER CONVEYANCE SYSTEM IS IN VIOLATION OF THE TOWN OF ROSS CODE OF ORDINANCES AND THE SAN FRANCISCO ON THE DRAWINGS. IF PIPE MATERIAL IS CHANGED, THEN, DRAWING BAY REGIONAL WATER QUALITY CONTROL BOARD'S REGULATIONS. REVISIONS MAY BE REQUIRED.

UTILITY TRENCHING SHALL BE IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARD 330.

ALL STORM DRAIN PIPE LENGTHS SHOWN ARE MEASURED HORIZONTALLY FROM CENTER OF STRUCTURES.

STORM DRAIN SYSTEM SHALL BE KEPT FREE OF DIRT AND DEBRIS DURING AT A LOCATION APPROVED BY THE TOWN OF ROSS. CONTAIN AND ALL PHASES OF CONSTRUCTION. IT IS NOT ALLOWED TO WASH DIRT/DEBRIS DOWNSTREAM IN PIPES.

STRIPING AND SIGNING NOTES

IMPROVEMENTS.

INSTALL STRIPING AND SIGNING IN ACCORDANCE WITH CALIFORNIA MUTCD REQUIREMENTS. MATERIALS SHALL BE FURNISHED BY THE

STRIPING, PAVEMENT MARKING AND SIGNING SHALL CONFORM TO THE CALTRANS STANDARD PLANS AND THE CALIFORNIA MUTCD (CURRENT EDITIONS)

NOTIFY THE CITY ENGINEER A MINIMUM OF 48-HOURS PRIOR TO THE DAY OF LAYOUT OF THE PROPOSED SIGNING AND STRIPING.

ACCEPT RESPONSIBILITY FOR LAYOUT AND CAT TRACKING OF ALL PROPOSED STRIPING AND MARKING. PERFORM CAT TRACKING A MINIMUM OF 48-HOURS PRIOR TO PROPOSED STRIPING AND MARKING TO ALLOW THE CITY ENGINEER TIME FOR REVIEW AND APPROVAL.

REMOVE EXISTING STRIPING AND MARKING BY GRINDING.

### SURVEY NOTES

TREE TRUNK DIAMETERS ARE REFLECTED GRAPHICALLY AND WERE MEASURED AT CHEST HEIGHT (±48 INCHES). DRIPLINE DIAMETERS AND TREE SPECIES ARE APPROXIMATE ONLY. CONSULT A CERTIFIED TREE ARBORIST WHEN IT IS NECESSARY TO ACCURATELY DETERMINE PERTINENT TREE INFORMATION.

PRESERVE AND PERPETUATE EXISTING SURVEY MONUMENTATION WHICH WILL BE DISTURBED OR REMOVED TO FACILITATE THE PROPOSED IMPROVEMENTS. IF WORK WILL BE CONDUCTED IN AN AREA WHICH RESULTS IN THE DISTURBANCE OF MONUMENTATION, RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO LOCATE SAID MONUMENTATION PRIOR TO DISTURBANCE. ADDITIONALLY. RETAIN THE SERVICES OF A LICENSED LAND SURVEYOR TO RE-ESTABLISH MONUMENTATION WHICH HAS BEEN DISTURBED AS A RESULT OF PROJECT CONSTRUCTION AND TO FILE THE APPROPRIATE DOCUMENTATION, THE MARIN COUNTY RECORDER ONCE CONSTRUCTION IS COMPLETE.

TOPOGRAPHIC INFORMATION SHOWN HEREON WAS MAPPED BY FOLLOWING FIELD SURVEYS BY L.A. STEVENS & ASSOCIATES, INC. FROM MAY 2020 THROUGH NOVEMBER 2020 PROVIDED TO BKF BY THE TOWN OF ROSS.

MULTIPLY BY 1.00003020 TO APPROXIMATE GROUND DISTANCES.

IN THE EVENT THAT ANY REMAINS OF PREHISTORIC OR HISTORIC HUMAN TEMPORARY BENCHMARK: MAG NAIL AND WASHER IN SIDEWALK STAMPED ELEVATION (NAVD88): 32.64

BASIS OF BEARING: THE BASIS OF BEARINGS OF THIS SURVEY IS S31°46'44"W, ROTATED CLOCKWISE 01°38'25" FROM 2008 RS 150 BETWEEN FOUND 2"X2" HUB AND FOUND 2" BRASS DISK STAMPED "RC-1".

## EROSION AND SEDIMENT CONTROL NOTES

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO ENSURE THAT WATER ENTERING THE STORM DRAIN SYSTEM FROM THE CONSTRUCTION SITE IS OF EQUIVALENT QUALITY AND CHARACTER AS THE WATER ABOVE THE SITE.



KEEP THE WORK SITE, STAGING AREAS AND OTHER AREAS USED BY THE CONTRACTOR IN A NEAT AND CLEAN CONDITION, AND FREE FROM ANY ACCUMULATION OF TRASH. DISPOSE OF ALL TRASH, RUBBISH AND WASTE MATERIALS OF ANY KIND GENERATED BY THE CONTRACTOR, SUBCONTRACTOR OR ANY COMPANY HIRED BY THE CONTRACTOR ON A DAILY BASIS. KEEP HAUL ROADS FREE FROM DIRT, RUBBISH, AND UNNECESSARY OBSTRUCTIONS RESULTING FROM SITE OPERATION. DISPOSE OF ALL TRASH, RUBBISH AND DEBRIS MATERIALS IN A COVERED WASTE RECEPTACLE OR HAUL OFF SITE, IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES GOVERNING LOCATIONS AND METHODS OF DISPOSAL, AND IN CONFORMANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. COVER WASTE RECEPTACLES AT THE END OF EVERY DAY AND DURING RAIN EVENTS.

PROVIDE CONTAINMENT FOR SANITATION FACILITIES (E.G., PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM, ROADS OR RECEIVING WATERS. SANITATION FACILITIES MUST BE MAINTAINED PERIODICALLY BY A LICENSED SERVICE COMPANY TO KEEP THEM IN GOOD WORKING ORDER AND PREVENT OVERFLOWS. PORTABLE TOILETS ARE REQUIRED TO HAVE SECONDARY CONTAINMENT.

EQUIPMENT AND MATERIALS NECESSARY FOR CONTROL OF SPILLS SHALL BE AVAILABLE ON SITE AT ALL TIMES. SPILLS AND LEAKS SHALL BE STOPPED AND THE MATERIAL CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY. USE PROPER BEST MANAGEMENT PRACTICES (BMPS) TO PREVENT OIL, GREASE, OR FUEL FROM LEAKING ON THE GROUND, INTO THE STORM DRAINS OR SURFACE WATERS.

CONTAIN CONCRETE WASHOUT AREAS AND SIMILAR AREAS THAT MAY CONTAIN POLLUTANTS TO PREVENT DISCHARGE INTO THE UNDERLYING SOIL OR ONTO THE SURROUNDING AREAS.

ESTABLISH AND MAINTAIN EFFECTIVE SITE PERIMETER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES AND TRACKED MATERIALS FROM LEAVING THE SITE. AT A MINIMUM DAILY AND PRIOR TO ANY RAIN EVENT, THE CONTRACTOR SHALL REMOVE ANY SEDIMENT OR OTHER CONSTRUCTION ACTIVITY RELATED MATERIALS THAT ARE DEPOSITED ON THE ROADS (BY VACUUMING OR SWEEPING).

PLACE EQUIPMENT OR VEHICLES WHICH ARE BEING FUELED, MAINTAINED AND STORED, IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPS.

AT A MINIMUM, ALL BMPS SHALL BE INSPECTED EACH WORKING DAY AND BEFORE ALL RAIN EVENTS. BMPS THAT REQUIRE MAINTENANCE OR REPLACEMENT TO FUNCTION PROPERLY SHALL BE COMPLETED BEFORE THE NEXT FORECASTED RAIN, OR WITHIN THE NEXT THREE (3) WORKING DAYS IF NO RAIN IS PREDICTED. MAINTENANCE INCLUDES REMOVAL OF ACCUMULATED SEDIMENT AND TRASH.











ot Mar 11, 2024 at 4:19r















XX	CALTRANS	STRIPI
2'W		

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RETAINING WALL DESIGN CRITERIA

- GEOTECHNICAL REPORT: MILLER PACIFIC ENGINEERING GROUP
- GEOTECHNICAL INVESTIGATION TOWN OF ROSS - SAFE ROUTES TO SCHOOL
- LAUREL GROVE AVENUE PATHWAY ROSS, CALIFORNIA
- DATED SEPTEMBER 2, 2021

ALLOWABLE BEARING CAPACITY: 3,000 PSF

ACTIVE EARTH PRESSURE: 60 PCF (EQUIVALENT FLUID PRESSURE)

PASSIVE EARTH PRESSURE: 350 PCF (EQUIVALENT FLUID PRESSURE) SEISMIC PRESSURE: 10 X WALL HEIGHT (UNIFORM, IN POUNDS PER SQUARE FOOT) BASE FRICTION COEFFICIENT: 0.35

PSI

REINFORCING STEEL

. PROVIDE 3 IN MINIMUM COVER.

SPECIAL INSPECTIONS

CRITERIA.

CONCRETE.

- CONCRETE ALL WORK SHALL BE IN ACCORDANCE WITH COUNTY OF MARIN STANDARD SPECIFICATIONS AND THE LATEST EDITION OF ACI 301: SPECIFICATION FOR
- STRUCTURAL CONCRETE FOR BUILDINGS. ALL STRUCTURAL CONCRETE SHALL COMPLY WITH THE PROVISIONS OF ACI 318-14.
- ALL CONCRETE SHALL BE NORMAL WEIGHT AND READY-MIXED WITH A MAXIMUM
- WATER TO CEMENT RATIO 0.45 AND A MAXIMUM MEASURED SLUMP OF 4 INCHES.
- 3. ALL AGGREGATE SHALL CONCORM TO ASTM C33. 4. ALL WATER SHALL BE CLEAN, POTABLE AND NOT DETRIMENTAL TO THE
- CONCRETE.

REINFORCING STEEL SHALL CONFORM TO ASTM A615, GR 60.

SHALL BE IN ACCORDANCE WITH DETAIL 5/SHEET RW1.

MINIMUM OF 3 CYLINDERS SHALL BE TESTED AT 28 DAYS

MATERIALS DURING PLACEMENT AND COMPACTION.

(N) PAVEMENT SECTION, SEE CIVIL DWGS

V-DITCH

WALL STEM

(E) 12 IN RCP

- CLSM AROUND

& ABOVE PIPE

**5** 

CULVERT

BOTTOM OF WALL

FOOTING

KEY

WALL FOOTING AT (E) RCP CULVERT (SCALE: 1" = 10'-0")

- . . A

< <

3 IN 🗕





OBKF ENGINEERS