

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOC.	FS	FINISHED SURFACE	SHT	SHEET
ABDN	ABANDONED	GB	GRADE BREAK	S'LY	SOUTHERLY
CFS	CUBIC FEET PER SECOND	LG	LIP OF GUTTER	SQ	SQUARE
CONC	CONCRETE	N'LY	NORTHERLY	SS	SANITARY SEWER
CONST	CONSTRUCT	N.T.S.	NOT TO SCALE	SSMH	SANITARY SEWER MANHOLE
CB	CATCH BASIN	OD	OUTSIDE DIAMETER	ST	STREET
CL	CENTERLINE	PVC	POLYVINYL CHLORIDE	STD	STANDARD
CL	CHAIN LINK	RCB	REINFORCED CONCRETE BOX	TC	TOP OF CURB
CN	CONSTRUCTION NOTE	RCP	REINFORCED CONCRETE PIPE	TYP	TYPICAL
DG	DECOMPOSED GRANITE	R/W	RIGHT-OF-WAY	VCP	VITRIFIED CLAY PIPE
DWY	DRIVEWAY	SD	STORM DRAIN	WV	WATER VALVE
EP	EDGE OF PAVEMENT	SE	SAND EQUIVALENT	WSP	WELDED STEEL PIPE
EX	EXISTING				

SYMBOL LEGEND

	WATER METER		DRAIN INLET
	GAS METER		DRAIN OUTLET
	WATER VALVE		TREE
	GAS VALVE		BENCH
	IRRIGATION VALVE		IRRIGATION
	POWER POLE		FLAGPOLE
	CATCH BASIN		TELEPHONE
	SEWER MANHOLE		SURVEY MONUMENT/MARKER
	STORM DRAIN MANHOLE		CHAIN LINK FENCE 6' TYP.
	TELEPHONE MANHOLE		WOOD FENCE 3'± TYP.
	WATER MANHOLE		ELECTRIC VAULT
	FIRE HYDRANT		TELEPHONE VAULT
	WATER VAULT		CABLE TV VAULT
	UTILITY ENCLOSURE		DRAINAGE FLOW DIRECTION
	EXISTING GROUND CONTOUR		

BEFORE EXCAVATION CALL THE FOLLOWING NUMBERS

UNDERGROUND SERVICE ALERT (USA)	(800)-227-2600
SANITATION DISTRICT OF LOS ANGELES COUNTY (TOMMY SUNG)	(562) 699-7411
SOUTHERN CALIFORNIA EDISON CO. (SCE PLANNING SUPERVISOR)	(310) 783-9350
SOUTHERN CALIFORNIA GAS CO. (GALE ETHERLY)	(310) 687-2020
CAL WATER SERVICE (PETER AKHOTNIKOFF)	(310) 257-1400
COX COMMUNICATIONS/CATV (RYAN VALERA) (RICARDO JORDAN)	(949) 546-2757 (949) 546-2753
SPRINT / NEXTEL (MANUEL ZAMORA)	(949) 225-2930
VERIZON (DAN HAYES)	(800) 483-1000 (24 HR) (310) 793-4159

UTILITY NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL, PRIOR TO STARTING CONSTRUCTION, UNCOVER ALL UTILITIES THAT HE MAY BE CROSSING OR PARALLELING TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION, OTHERWISE THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR ANY COST OF REPLACEMENT, RELOCATION, DELAYS OR ADDITIONAL COST OF CONSTRUCTION RELATED TO UTILITY CONFLICTS.

UNAUTHORIZED CHANGES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED BY THE PREPARER OF THESE PLANS, AND THE CITY ENGINEER.

BASIS OF BEARINGS

CCS-83, ZONE 5 AS DETERMINED LOCALLY BETWEEN STATIONS PVE3 AND PVRS, BEING N 66°34'57.4" E

COORDINATES ARE LOCAL, DISTANCES INVERSED FROM COORDINATES ARE GROUND. COORDINATES WERE DETERMINED BY APPLYING A COMBINATION FACTOR OF 1.0000638982 AT THE CCS-83(NSRS2007), ZONE 5 GRID COORDINATES OF AERIAL TARGET 9 (N 1729944.69545, E 6444067.63413)

BENCHMARK

VERTICAL DATUM: NAVD-88
BENCH MARK: LA CO Y 11264
ELEVATION: 220.114 US FT
DESCRIPTION: DPW BM TAG IN S CB 1M W/O BCR @ SW COR PALOS VERDES DR S & SEACOVE DR 17M W & 24M S/O C/L INT

NOTE

CENTERLINES, AND PARCEL LINES SHOWN HEREON ARE A RECORD COMPILATION ONLY, FIT TO LOCAL EXISTING CENTERLINE MONUMENTATION. THIS IS NOT A BOUNDARY SURVEY. NO BOUNDARY DETERMINATIONS ARE PRESENTED HEREON OR IMPLIED.

GEO TECHNICAL ENGINEER

GMU (PROJECT # 10-036-00) NINYO & MOORE (PROJECT #)
23241 ARROYO VISTA 475 GODDARD, SUITE 200
RANCHO SANTA MARGARITA, CA 92688 IRVINE, CA 92618
(949) 888-6513 (949) 753-7070
LISA BATES-SEABOLD, PG, CEG JIM J. BARTON, PG, CEG
GREGORY P. SILVER, M.S.C, PE, GE

ENVIRONMENTAL STUDY

SFC CONSULTING (PROJECT # SFC07-101) 26012 MARGUERITE PARKWAY, SUITE H424 MISSION VIEJO, CA 92692
(949) 348-1233 SAUNDRA JACOBS, R.E.A.

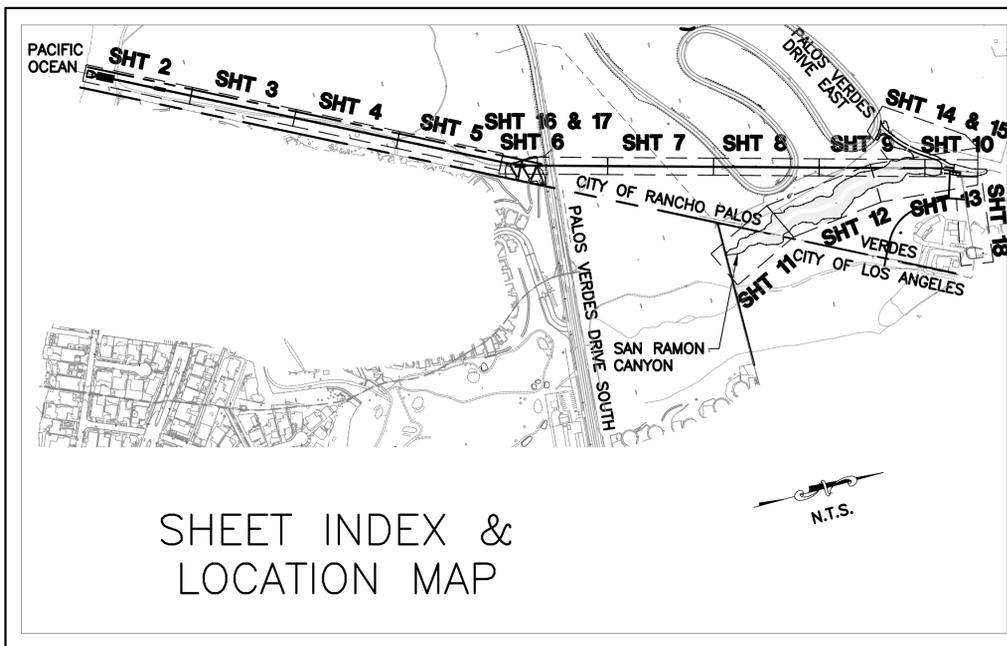
DESIGN SURVEYOR

KDM MERIDIAN, INC. 22541 ASPAN STREET, SUITE C LAKE FOREST, CA 92630
PHONE: (949) 768-0731 FAX: (949) 768-3731

CITY OF RANCHO PALOS VERDES

LOS ANGELES COUNTY, CALIFORNIA

SAN RAMON CANYON STORM DRAIN CONSTRUCTION



GENERAL NOTES

- ALL WORK TO CONFORM TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 2006 EDITION WITH SUPPLEMENTS (A.P.W.A. SPECIFICATIONS).
- ESTIMATE OF QUANTITIES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING QUANTITIES AND SITE CONDITIONS.
- ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE, OR RUNNING OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT, AND ANY OTHER ASSOCIATED EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 8:00 AM AND 5:00 PM EACH DAY, MONDAY THROUGH FRIDAY, EXCLUDING CITY HOLIDAYS.
- ALL EXISTING IMPROVEMENTS INCLUDING A.C. BERM, A.C. OR P.C.C. PAVING, WHICH ARE BEING JOINED OR MATCHED IN CONNECTION WITH THIS PROJECT SHALL BE JOINED OR MATCHED IN A MANNER SATISFACTORY TO THE ENGINEER, INCLUDING NECESSARY SAWCUTTING, REMOVAL, REPLACEMENT AND CAPPING.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT BEFORE START OF CONSTRUCTION AT (800) 227-2600.
- INFORMATION ON THE DRAWINGS RELATING TO EXISTING UTILITY LINES AND SERVICES IS FROM THE BEST SOURCES PRESENTLY AVAILABLE. ALL SUCH INFORMATION IS FURNISHED ONLY FOR INFORMATION AND IS NOT GUARANTEED. THE CONTRACTOR IS REQUIRED TO UNCOVER ALL UTILITIES HE MAY BE CROSSING, OR PARALLELING TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS IN A MANNER SUFFICIENTLY AHEAD OF CONSTRUCTION OPERATIONS SO AS TO ALLOW THE ENGINEER AT LEAST 2 WORKING DAYS TO PROVIDE AN ALTERNATIVE DESIGN, WHEN NECESSARY.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL PHASES OF CONSTRUCTION WITH VARIOUS PERMITTING AGENCIES AND UTILITY COMPANIES INVOLVED.
- TRAFFIC CONTROL DURING CONSTRUCTION SHALL CONFORM TO THE STATE OF CALIFORNIA MANUAL OF TRAFFIC CONTROLS, PROJECT SPECIAL PROVISIONS, AND THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH).
- DUST CONTROL MEASURES SHALL BE CONTINUOUSLY MAINTAINED THROUGHOUT THE PROJECT LIMITS WITH DAILY POWER BROOM STREET SWEEPING OR MORE FREQUENTLY AS NECESSARY.
- CONTRACTOR SHALL NOTIFY THE CITY PRIOR TO DISTURBING ANY SURVEY MONUMENTS, PROPERTY MARKERS, ETC., WHICH SHALL BE TIED OUT IN ADVANCE AND SUBSEQUENTLY RESET BY THE CONTRACTOR.
- INSPECTION SERVICES: NOTIFY THE CITY'S ENGINEERING DEPARTMENT ALAN BRAATVEDT (310) 525-0684 A MINIMUM OF 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.
- WORK NOT DONE IN THE PRESENCE OF THE CITY'S INSPECTOR IS SUBJECT TO REJECTION UNLESS DIRECTED OTHERWISE IN ADVANCE.
- CERTIFIED COMPACTION TESTS OF SUB-GRADE WILL BE PERFORMED BY THE CITY PRIOR TO AC PAVING AND OTHER CONSTRUCTION, SUCH AS DRAINAGE STRUCTURES.
- THE CONTRACTOR TO WHICH THE CONTRACT IS AWARDED SHALL POSSESS A CURRENT STATE OF CALIFORNIA CLASS "A" CONTRACTOR'S LICENSE AND A CITY OF RANCHO PALOS VERDES BUSINESS LICENSE AT THE TIME OF CONTRACT AWARD.
- ALL OPEN TRENCHES WITHIN TRAFFIC AREAS ARE TO BE COVERED AT ALL TIMES OUTSIDE WORKING HOURS USING "NON-SKID PLATING".
- EXCAVATED MATERIALS AND CONSTRUCTION MATERIALS SHALL BE REMOVED FROM ALL ROADWAYS AND OPENED TO TRAFFIC AT THE COMPLETION OF ALL SHIFTS.

BMP GENERAL NOTES

- SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
- STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO THE STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
- APPROPRIATE BMPs FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF. NO WASTE OR SPILLS SHALL BE ALLOWED ONTO BEACH.
- RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES.
- ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS. NO STAGING WILL BE PERMITTED ON PRIVATE PROPERTY WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER.
- AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE AUTHORIZED UNDER CALIFORNIA'S GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY ONLY WHERE THEY DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD AND ARE CONTROLLED THROUGH IMPLEMENTATION OF APPROPRIATE BMPs FOR ELIMINATION OR REDUCTION OF POLLUTANTS. NON-STORMWATER DISCHARGES MUST BE ELIMINATED. POTENTIAL POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE, STEEL AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES, WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING AND TESTING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA IN APPROVED CONTAINERS ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING OF NON-CONTAMINATED GROUND WATER PRODUCED BY DEWATERING ACTIVITIES REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD.
- ANY SPILLAGE OF FUEL, OIL OR HAZARDOUS MATERIALS FROM CONSTRUCTION EQUIPMENT OR VEHICLES OR SIGNIFICANT RELEASES OF SEDIMENT DUE TO CONSTRUCTION ACTIVITIES OR BMP FAILURES THAT IMPACT DOWNSTREAM STORM DRAIN AREAS MUST BE IMMEDIATELY AND PROPERLY CLEANED UP AND REMOVED. FOR SPILLS OF SIGNIFICANT VOLUME, NOTIFICATIONS MUST BE IMMEDIATELY MADE TO THE CITY OF RANCHO PALOS VERDES FOR ASSESSMENT OF BEST CORRECTIVE ACTION. CONTAMINATED WATER, SOIL, SAND OR OTHER MATERIAL AND HAZARDOUS WASTES GENERATED FROM THE CLEANUP MUST BE DISPOSED BY PRE-APPROVED METHODS. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR COSTS TO INVESTIGATE EXTENT OF CONTAMINATION, CLEANUP, WASTE REMOVAL AND IMPLEMENTATION OF A PRE-APPROVED REMEDIAL ACTION PLAN FOR THE RELEASE OF ANY WASTES OR HAZARDOUS MATERIALS THAT RESULT IN SOIL AND GROUNDWATER CONTAMINATION.
- NOTIFICATIONS OF SPILLS AND SIGNIFICANT RELEASES OF SEDIMENT DUE TO CONSTRUCTION ACTIVITIES BMP FAILURES IMPACTING DOWNSTREAM AREAS OR STORM DRAINS MUST BE IMMEDIATELY MADE TO THE CITY OF RANCHO PALOS VERDES, ATTENTION: ALAN BRAATVEDT (310)525-0684, AFTER-HOURS SPILL NOTIFICATION SHOULD BE MADE THROUGH LOS ANGELES COUNTY SHERIFF'S BY DIALING 911.
- EXISTING STORM DRAIN MUST REMAIN FUNCTIONAL, OR A TEMPORARY STORM DRAIN SUBSTITUTED, TO ENSURE ALL SURFACE WATER IS SAFELY CONVEYED AT ALL TIMES.

DRAWING INDEX

SHEET	DESCRIPTION
1	TITLE SHEET
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11-13	SAN RAMON CANYON GRADING
14-15	PERMANENT ACCESS ROAD IMPROVEMENTS
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18	TARAPACA ROAD STORM DRAIN
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28-31	LANDSCAPING PLANS

**60% DESIGN PLANS
NOT FOR CONSTRUCTION
NOVEMBER 1, 2011**

NO WORK SHALL BE DONE ON THIS SITE UNTIL BELOW AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE.

Underground Service Alert



Call: TOLL FREE

1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG



PLAN PREPARED BY:

Harris & Associates
34 Executive Park, Suite 200
Irvine, CA 92614 (949) 655-3900

RANDALL G. BERRY RCE #44642 DATE

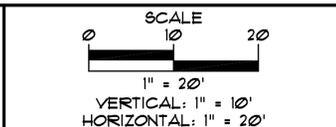
CITY OF RANCHO PALOS VERDES

RON DRAGOO SENIOR ENGINEER DATE

RCE: 54924

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED	RGB/EGR/PL
DRAWN	EGR/PL
CHECKED	RGB
DATE	OCT 11



CITY OF RANCHO PALOS VERDES

SAN RAMON STORM DRAIN
TITLE SHEET