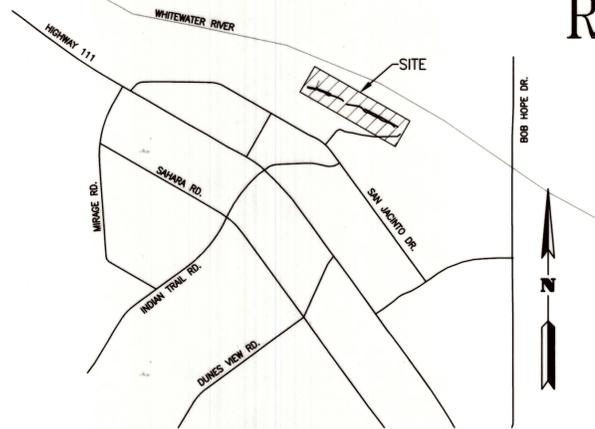


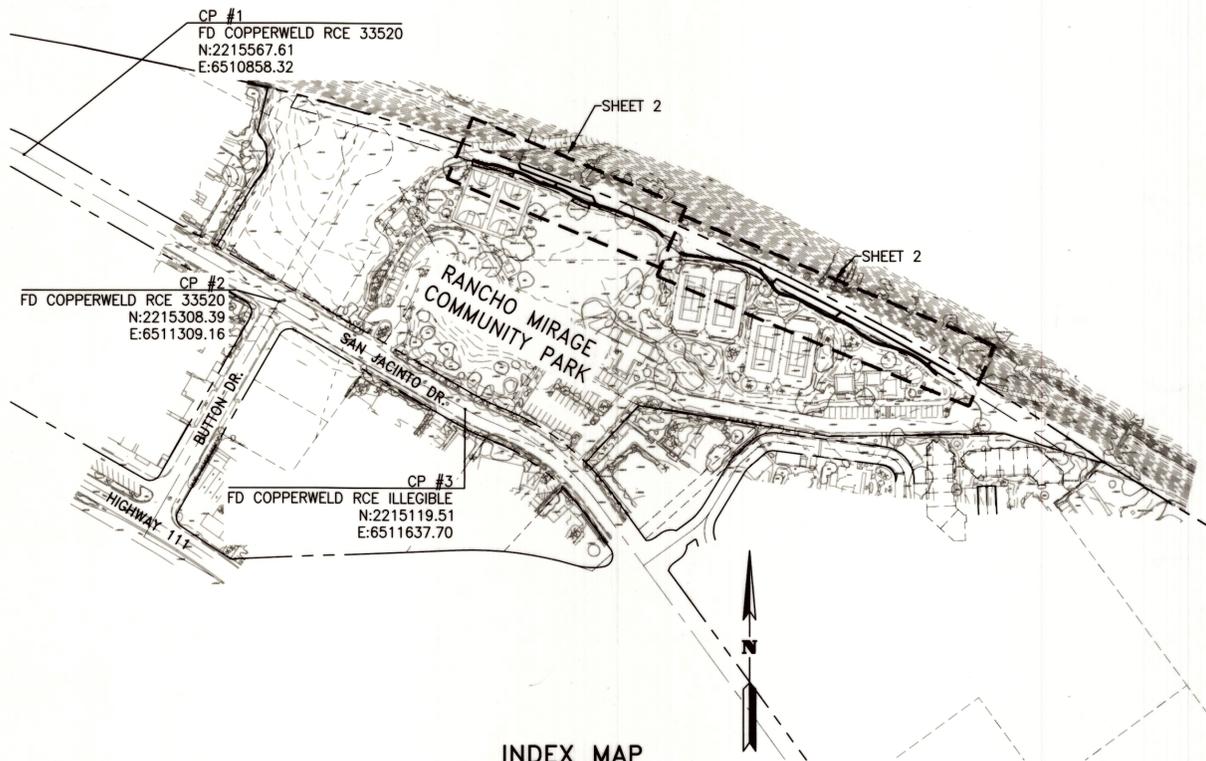
CITY OF RANCHO MIRAGE RANCHO MIRAGE COMMUNITY PARK DRAINAGE RETROFIT PLANS CITY PROJECT 16-322



VICINITY MAP
NTS

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PLANS OF THE CITY OF RANCHO MIRAGE AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND OTHER STANDARD PLANS AS SPECIFIED IN THE PLANS.
2. NOTHING IN THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM OBTAINING PERMITS AS REQUIRED BY THE CITY OF RANCHO MIRAGE MUNICIPAL CODE.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
4. ALL UNDERGROUND FACILITIES, WITH LATERALS, SHALL BE IN PLACE AND INSPECTED PRIOR TO PAVING, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING: SEWER, WATER, ELECTRIC, GAS, TELEPHONE AND DRAINAGE.
5. THE DESIGN CIVIL ENGINEER SHALL EXERCISE SUFFICIENT CONTROL OF THE CONSTRUCTION TO ENSURE COMPLIANCE WITH PLANS, SPECIFICATIONS AND CITY CODES.
6. ANY CHANGES CONTEMPLATED IN: DRAINAGE, ELEVATIONS OR STRUCTURES SHOWN ON THESE PLANS MUST BE REVIEWED BY THE CITY TO DETERMINE IF REVISED PLANS SHOULD BE SUBMITTED. NONCOMPLYING CONSTRUCTION MAY BE SUBJECT TO PENALTIES AND/OR REMOVAL. 'AS-BUILT' PLANS MUST BE SUBMITTED PRIOR TO ANY RELEASE OF SECURITIES AND/OR ISSUANCE OF A CERTIFICATE OF USE.
7. ALL ELEVATIONS SHOWN ARE IN FEET AND DECIMALS THEREOF BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
8. ALL EXISTING OR NEW IMPROVEMENTS, INCLUDING CURB AND GUTTERS, SIDEWALKS, ASPHALT CONCRETE 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 CITY ENGINEER, INCLUDING NECESSARY SAWCUTTING, REMOVAL, REPLACEMENT AND CAPPING.
9. NEW CURB AND GUTTER SHALL BE MARKED AT EVERY 10 FEET WITH A SCORE LINE AND EXPANSION JOINTS AS REQUIRED.
10. NEW OR EXISTING CURB AND GUTTER SHALL BE JOINED, MATCHED, OR REPLACED IF DAMAGED, TO A SAWCUT LINE SUCH THAT A MINIMUM LENGTH OF 7 FEET OF CURB AND GUTTER REMAINS IN PLACE AT ALL LOCATIONS.



INDEX MAP
NTS

SHEET INDEX

TITLE SHEET	SHEET NO.
DRAINAGE PLAN	1
DETAILS	2
	3

GRADING NOTES

1. ALL WORK SHALL CONFORM TO CITY OF RANCHO MIRAGE GRADING ORDINANCE NO. 398, THE CITY ENGINEER, AND ANY SPECIAL PROVISIONS OF THE PERMIT.
2. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS INSPECTION UNE (760-324-8271) 24 HOURS PRIOR TO ANY GRADING, BRUSHING OR CLEARING, EACH PHASE OF CONSTRUCTION, AND ANY OTHER WORK REQUIRING INSPECTION.
3. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURE, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER, EROSION, AND DAMAGE TO ADJACENT PROPERTY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN EFFECTIVE MEANS OF DUST CONTROL WHICH SHALL INCLUDE PROVISIONS FOR ADEQUATE WATERING DURING THE GRADING PROCESS AND PROVISIONS FOR CONTINUANCE OF DUST CONTROL AFTER THE GRADING. DUST CONTROL SHALL CONTINUE UNTIL SUCH TIME THAT THE GRADED SURFACE PRESENTS SUFFICIENT PROTECTIVE COVER AGAINST WIND OR WATER EROSION /IS DETERMINED BY THE CITY ENGINEER.
5. GRADING OPERATIONS AND MAINTENANCE OF EQUIPMENT WITHIN ONE HALF MILE OF HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 5:00 P.M. AND 8:00 AM., OR ANYTIME ON A SUNDAY OR FEDERAL HOLIDAY PER CITY CODE 15.04.020 (A).
6. ALL FILLS SHALL BE COMPACTED TO A MINIMUM OF 90% RELATIVE DENSITY IN ACCORDANCE WITH CITY ORDINANCE NO. 398. FIELD DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH CITY GRADING ORDINANCE NO. 398.
7. THE CITY OF RANCHO MIRAGE IS IN A QUARANTINE AREA FOR THE THE RED IMPORTED FIRE ANT. PRIOR TO ANY MOVEMENT OF SOIL WITHIN THE SITE, OR FROM THE SITE, YOU MUST SCHEDULE AN INSPECTION AT 760-776-8208 WITH THE R.I.FA INSPECTOR AT LEAST 24 HOURS IN ADVANCE, AND SUBMIT CERTIFICATION OF CLEARANCE TO THE CITY.

ENGINEER'S NOTE:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND, SHOWN OR NOT SHOWN ON THESE PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN THE ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES OR STRUCTURES SHOWN, AND ANY OTHER LINES NOT OF RECORD, AND/OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.

#	REVISIONS	DATE	APP.

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PREPARED UNDER THE DIRECT SUPERVISION OF:
Eric T. Hays 7/26/16
ERIC T. HAYS
R.C.E. 73614 EXP. 12/31/2016
DATE DATE
GEOTECHNICAL CERTIFICATION, IF REQUIRED, BY:
DATE DATE

RECOMMENDED FOR APPROVAL BY:
Leland E. Cole 7/27/16
LELAND E. COLE
R.C.E. 42152 EXP. 12/31/17
DATE DATE
APPROVED BY CITY OF RANCHO MIRAGE:
William A. Enos 7/27/16
WILLIAM A. ENOS, CITY ENGINEER
R.C.E. 43910, EXP. 6/30/2017
DATE DATE

CITY OF RANCHO MIRAGE
RANCHO MIRAGE COMMUNITY PARK
DRAINAGE RETROFIT PLANS
CP 16-322
TITLE SHEET
SE 1/4, SEC 12, T5S, R5E, SBB&M

SHEET	1
OF	3
PRIVATE REFERENCE #	
CITY REFERENCE #	E1600092



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CONSTRUCTION NOTES:

- 1 CONSTRUCT JUNCTION STRUCTURE NO. 4 PER R.C.F.C. & W.C.D. STD. DWG. NO. JS229.
- 2 CONSTRUCT 18" HDPE PIPE (ADS N-12 OR EQUAL)
- 3 CONSTRUCT RESIDENTIAL "WEDGE" CURB PER CITY OF RANCHO MIRAGE STD. DWG. NO. 222 AND PER DETAILS ON SHEET 3. W/ 24" X 24"
- 4 CONSTRUCT JENSEN 24" X 24" DRAIN INLET, MODEL D1242 OR EQUAL AND CONCRETE APRON PER DETAIL ON SHEET 3. W/ 24" X 24" GALVANIZED PEDESTRIAN GRATE.
- 5 CONSTRUCT MODIFIED WEDGE CURB PER DETAILS ON SHEET 3.
- 6 REMOVE, REINSTALL, AND REGRADE SIDEWALK. LOW POINT SHALL BE REMOVED TO ALLOW POSITIVE DRAINAGE.
- 7 INSTALL 18" HDPE TO RCP CONNECTION PER ADS STD. DWG. NO. 604 OR EQUAL.
- 8 CONSTRUCT 18" RCP (1800 D-LOAD)
- 9 CONTRACTOR TO FINE GRADE, ROLL AREA, AND TREAT SOIL WITH DUST PALLIATIVE. (GORILLA SNOT BY SOILWORKS LLC, OR EQUAL)

NOTE:
REMOVE AND RELOCATE INTERFERING PORTIONS OF EXISTING IRRIGATION LINE.
REMOVE INTERFERING PORTIONS OF ABANDONED ELECTRIC CONDUIT AND FENCE.

MATCHLINE - SEE ABOVE RIGHT

MATCHLINE - SEE BELOW LEFT

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IMPORTANT NOTICE:
CALL BEFORE YOU DIG
SECTION 0116 OF THE GOVERNMENT CODE
REQUIRES AN INDUSTRY IDENTIFICATION NUMBER BE ISSUED BEFORE A PERMIT FOR EXCAVATION WILL BE HELD FROM YOUR PRE-EXCAVATION ID NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG

#	REVISIONS	DATE	APP.

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ENGINEERING CONSULTANTS
3788 MCCRAY STREET
RIVERSIDE CA. 92506
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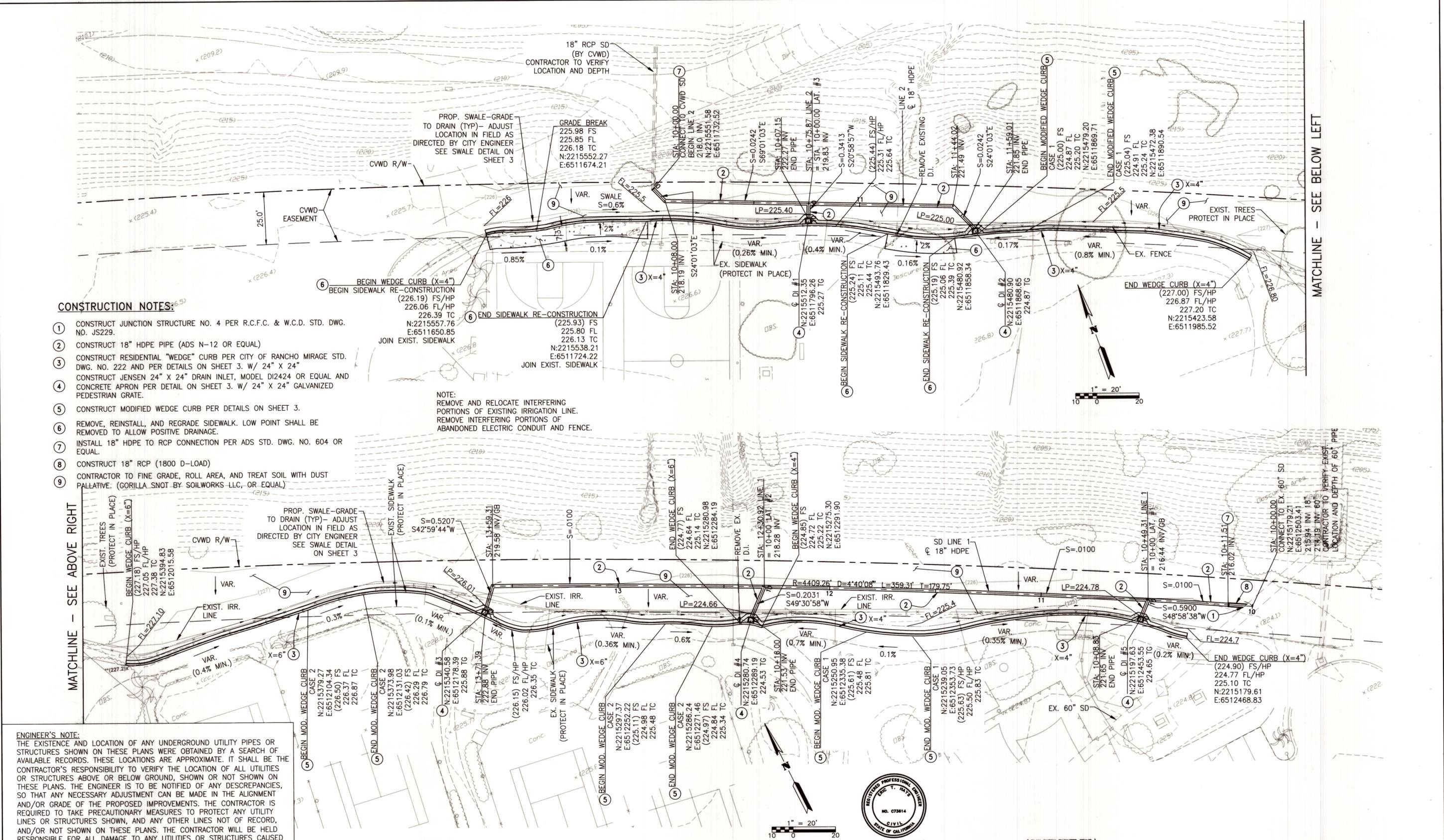
PREPARED UNDER THE DIRECT SUPERVISION OF:
Eric Wang
DATE: 7/27/16
R.C.E. 43914
EXP. 12/31/2016

RECOMMENDED FOR APPROVAL BY:
Leland E. Cole
DATE: 7/27/16
R.C.E. 47159
EXP. 12/31/17

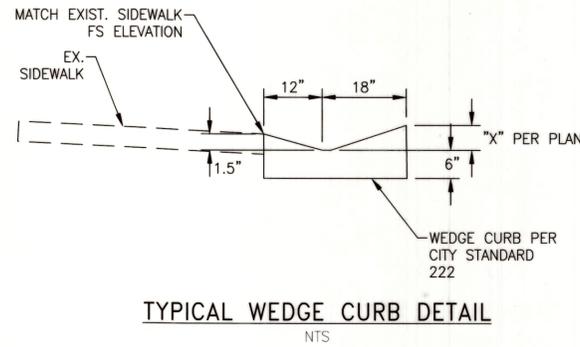
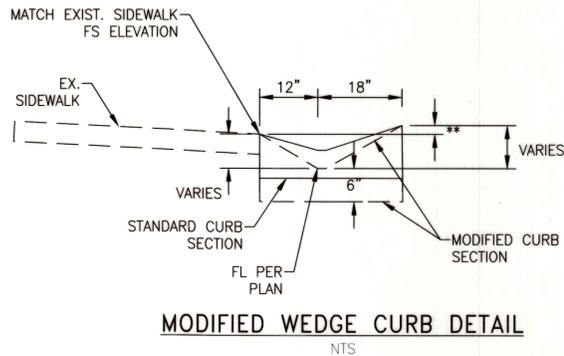
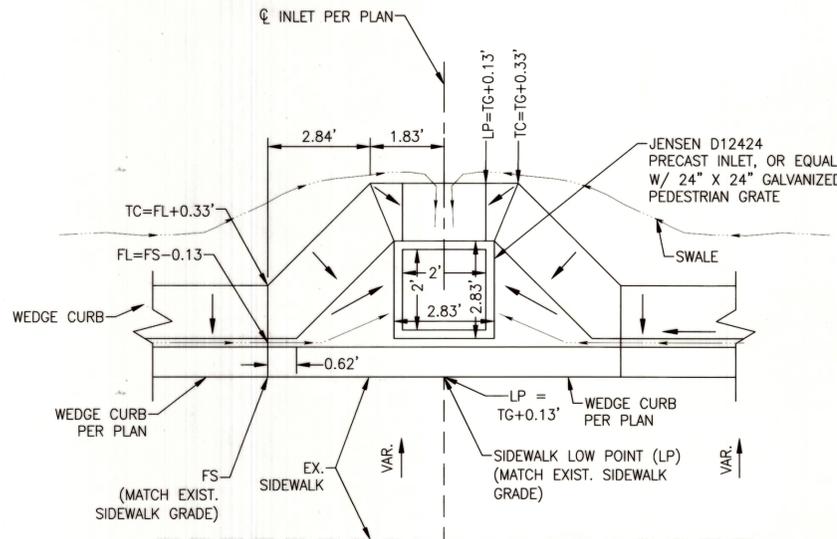
APPROVED BY CITY OF RANCHO MIRAGE:
William A. Enos
DATE: 7/27/16
WILLIAM A. ENOS, CITY ENGINEER
R.C.E. 43910, EXP. 6/30/2017

CITY OF RANCHO MIRAGE
RANCHO MIRAGE COMMUNITY PARK
DRAINAGE RETROFIT PLANS
CP 16-322
DRAINAGE PLAN
SE 1/4, SEC 12, T5S, R5E, S8B&M

SHEET 2
OF 3
PRIVATE REFERENCE #
CITY REFERENCE # E1600092



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NOTE:
HOLD TO ELEVATIONS.
VARY FL ELEVATIONS
FOR POSITIVE DRAINAGE
ALONG MODIFIED WEDGE
CURB REACH.

** CASE 1 = 0.21"
** CASE 2 = 0.38"

PLAN or REINFORCED CONCRETE PIPE or C.M.P.
ELEVATION "s" See Note Below
BEDDING OF INLET PIPE
UNDISTURBED EARTH
SECTION B-B
CASE-1

BURN or CUT PIPE TO SURFACE OF CONCRETE AND ROUND EDGES
CATCH BASIN FLOOR
1:1.5 MIX CONC. ENCASEMENT
CASE-2
CATCH BASIN ABOVE STORM DRAIN
NOTE
ALL CONNECTOR PIPES (within the angles specified for Case 2) shall be encased when laid within the main line encased trench, or when laid on fill which has not been denuded.

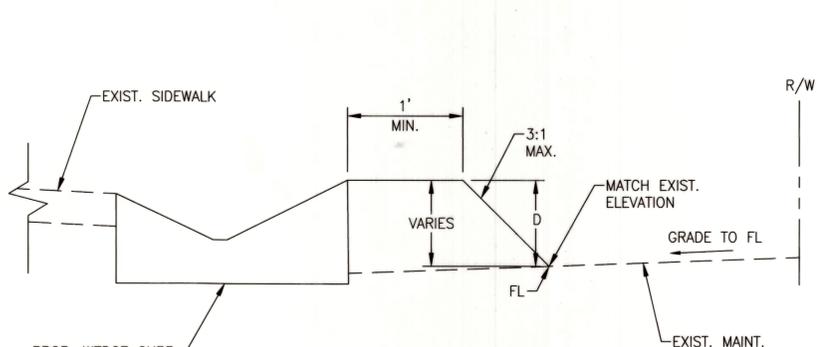
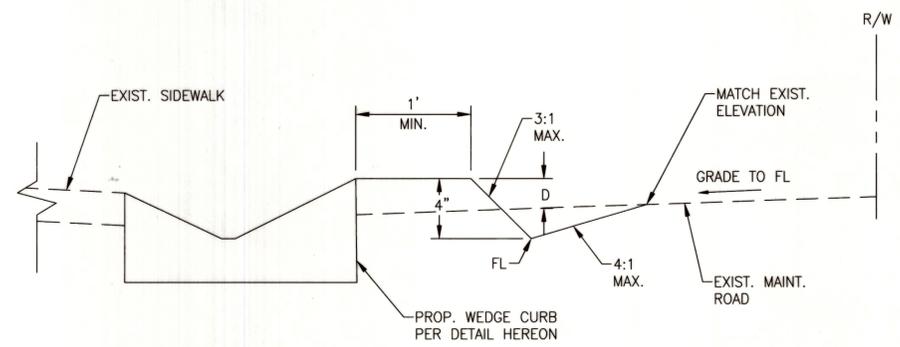
Minimum bearing surface equals 1/2 O.D.
1:2 Mix mortar
Pipe Bedding
SECTION C-C
CASE-1-SIDE INLET

PLAN
SECTION A-A
CASE-3-SADDLE CONNECTION

NOTES CASES 1 & 2
1. D shall be 24" or less, and in no case shall the outside diameter of the inlet pipe exceed one-half the inside diameter of the main line. If 4" to 48" or less, use Case 1. If 4" to greater than 48", use Case 2.
2. C of inlet shall be on radius of main storm drain except when elevation "s" is shown on project drawing PROFILE.
3. The minimum opening into the existing storm drain shall be the outside diameter of the connecting pipe plus 1 inch.
4. All corrugated metal pipe and fittings shall be galvanized.
5. Slo. of R.L. B center of pipe, shown on project drawing PROFILE.

NOTES CASE-3-SADDLE CONNECTION
1. Connections to pipes 21" or less in diameter without junction structures or precast Y branches shall be made with saddles.
2. Trim or cut saddle to fit snugly over the outside of the main pipe and so its axis will be on the line and grade of the connecting pipe.
3. The opening into the pipe shall be cut and trimmed to fit the saddle so that no part will project within the bore of the saddle pipe.
4. The connecting pipe shall be supported as shown in Case 1 and 2.

INVERDE COUNTY FLOOD CONTROL DISTRICT
BASIN CONSERVATION DISTRICT
APPROVED BY: [Signature]
DATE: 04/15/2016
R.C.E. NO. 2004
JUNCTION STRUCTURE NO. 4
STANDARD DRAWING NUMBER JS229



ENGINEER'S NOTE:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND, SHOWN OR NOT SHOWN ON THESE PLANS. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN THE ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES OR STRUCTURES SHOWN, AND ANY OTHER LINES NOT OF RECORD, AND/OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION.

IMPORTANT NOTICE CALL BEFORE YOU DIG
SECTION 4216 OF THE GOVERNMENT CODE REQUIRES AN INQUIRY IDENTIFICATION NUMBER BE ISSUED BEFORE A PERMIT TO EXCAVATE WILL BE MAILED FOR YOUR PRE-EXCAVATION ID NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARED OF THESE PLANS.

ENGINEER'S NOTE TO CONTRACTOR: CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR 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 OBTAIN INQUIRY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR STRUCTURES SHOWN IN THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGES TO, THESE LINES OR STRUCTURES.

#	REVISIONS	DATE	APP.

BENCH MARK:
CITY OF RANCHO MIRAGE "TM 31", A 2-1/2" BRASS DISC FLUSH IN THE TOP OF A STORM DRAIN INLET SOUTHERLY OF THE B.C.R., SOUTHEAST CORNER OF HIGHWAY 111 AND INDIAN TRAIL ROAD.
ELEV.: 247.454 (NAVD88-ON PLAN) (245.204 NAVD29)
BASIS OF BEARING:
CENTERLINE OF SAN JACINTO AS SHOWN AS N80°13'00"W ON PARCEL MAP NO. 38054 FILED IN BOOK 231, PAGES 17 THROUGH 14, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE RECORDER OF RIVERSIDE COUNTY, CALIFORNIA.

ALBERT A. WEBB ASSOCIATES
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3788 McCRAE STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

PREPARED UNDER THE DIRECT SUPERVISION OF:
Eric T. Hays
ERIC T. HAYS
R.C.E. 73614
EXP. 12/31/2016
DATE: 7/2/16

RECOMMENDED FOR APPROVAL BY:
Leland E. Cole
LELAND E. COLE
R.C.E. 47159
EXP. 12/31/17
DATE: 7/2/16

APPROVED BY CITY OF RANCHO MIRAGE:
William A. Enos
WILLIAM A. ENOS, CITY ENGINEER
R.C.E. 43910, EXP. 6/30/2017
DATE: 7/2/16

NOTES:
1. CONNECTION AND PIPE TO BE BACKFILLED PER ASTM D2321, LATEST EDITION.
2. IN LIEU OF AN INTERNAL CYLINDER, AN HDPE WATER-TIGHT REPAIR COUPLER CAN BE USED.
3. INTERNAL CYLINDER ADAPTER IS NOT RECOMMENDED FOR DOWNSTREAM CONNECTIONS.

INTERNAL COUPLER SPIGOT ADAPTER
EXISTING GRADE
EXISTING RCP PIPE
EXCAVATE EXISTING GRADE TO AVOID SOIL INTRUSION & TO CREATE SAFE WORK AREA

FINISH GRADE
VARIES
DOUBLE WIDE MARMAC COUPLER TO BE WRAPPED AROUND CONNECTION
EXISTING RCP PIPE
CLASS I BEDDING TO SUPPORT CONNECTION

DOUBLE WIDE MARMAC COUPLER TO BE WRAPPED AROUND CONNECTION

SECTION "A-A"

NO.	DESCRIPTION	DATE	BY	CHECK
1	UPDATED DRAWING	TAR	DISNEY	OKS

HOPE TO REINFORCED CONCRETE PIPE CONNECTION DETAIL (MARMAC)
DRAWING NUMBER: STD-604
DESIGNED BY: ERIC T. HAYS
CHECKED BY: LELAND E. COLE