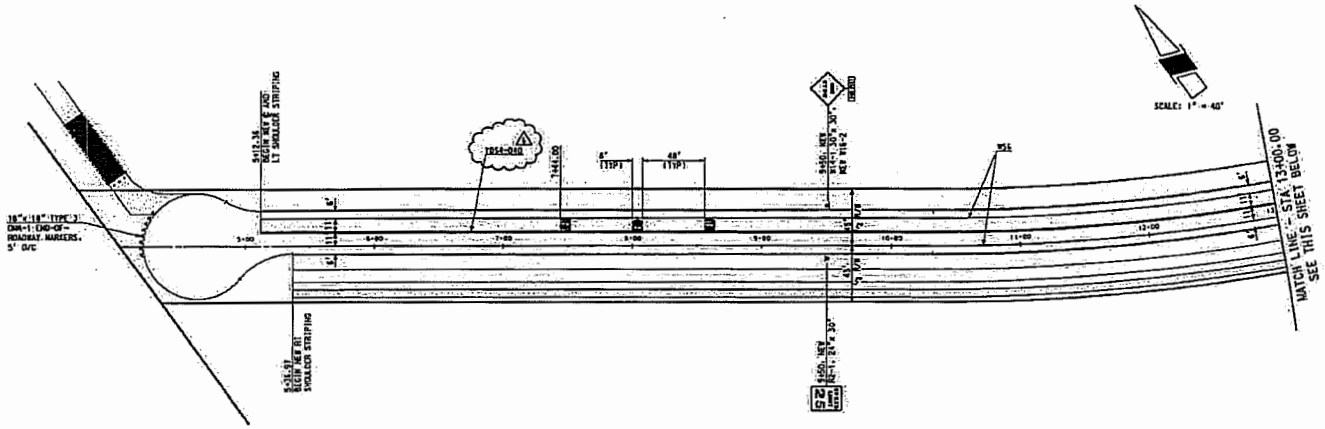
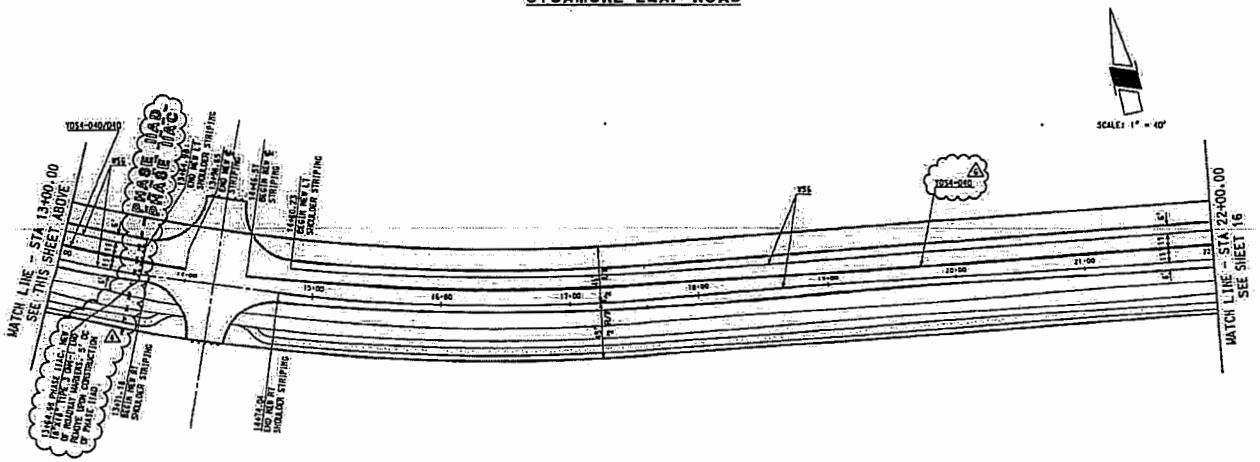
P15SB0005
Approved 05/08/2015



SYCAMORE LEAF ROAD



SYCAMORE LEAF ROAD

P1205-125

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: BMC 11/05	ENGINEER: PJI 11/05		SHEET:
DRAFTER: PAD 11/05	CHECKED:		15 OF 28

NO.	BY	DATE	REVISION
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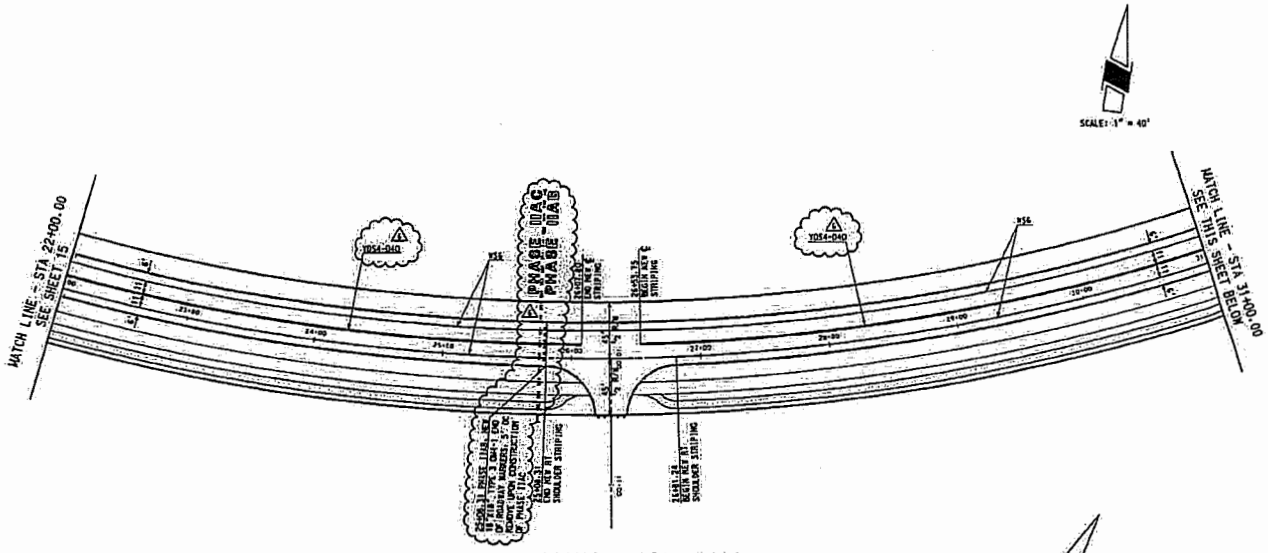
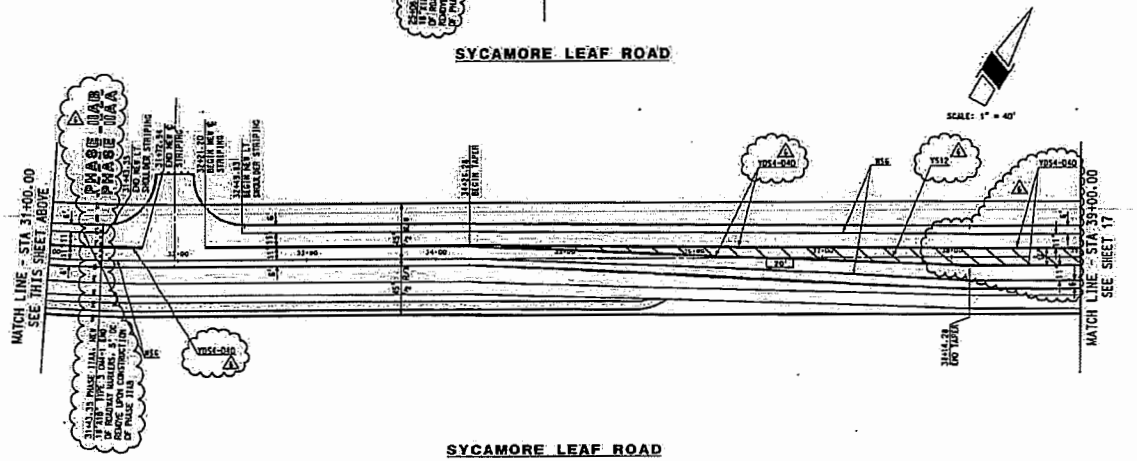


SYCAMORE LEAF ROAD



SYCAMORE LEAF ROAD

PI205-125

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: BMC 11/05	ENGINEER: PJT 11/05		SHEET: 16 OF 28
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Approved 05/05/2015

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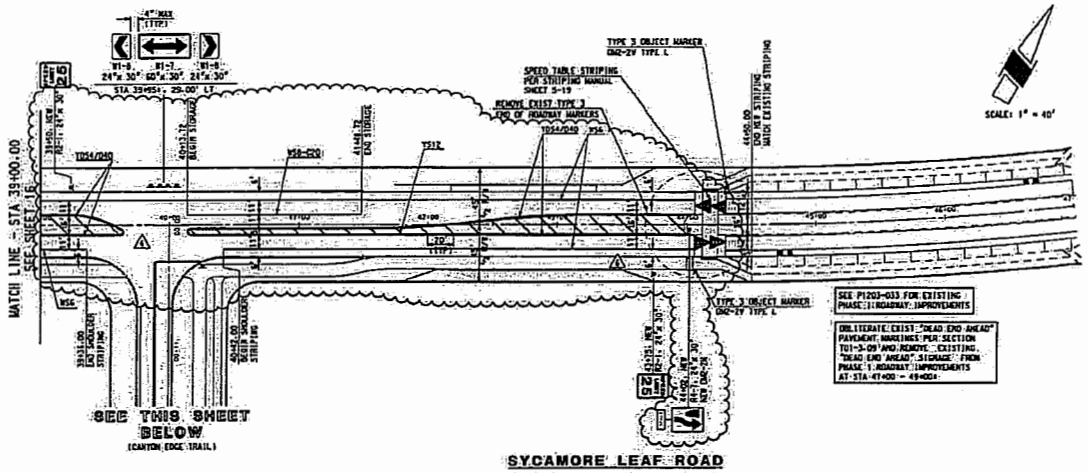

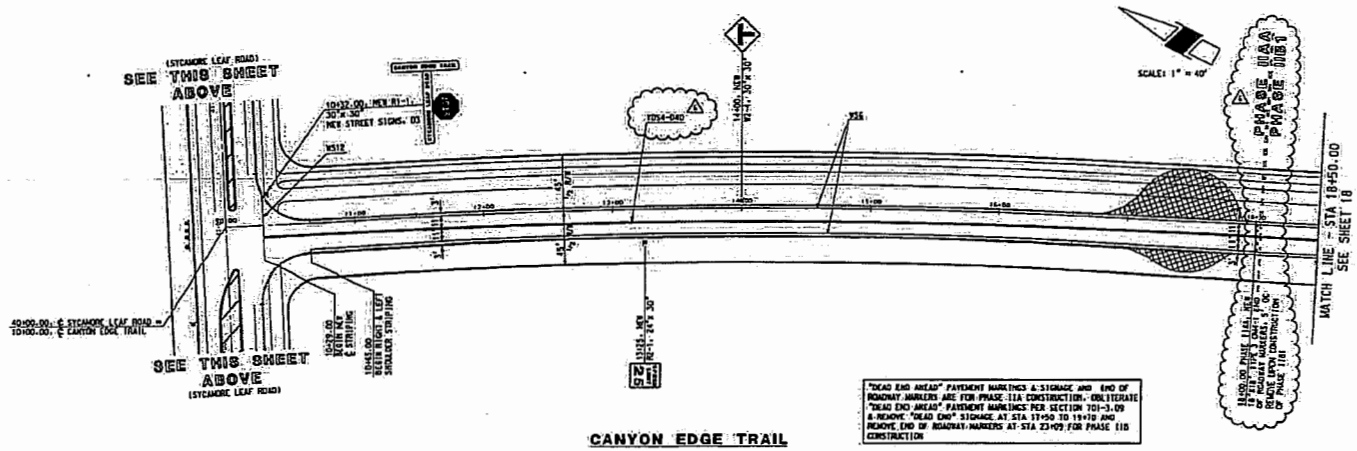

P1205-125

PUBLIC ROADWAY IMPROVEMENT ~~AND PUBLIC SEWER~~ PLANS
PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: BIC 11/05	ENGINEER: PJI	11/05	SHEET: 17 OF 28
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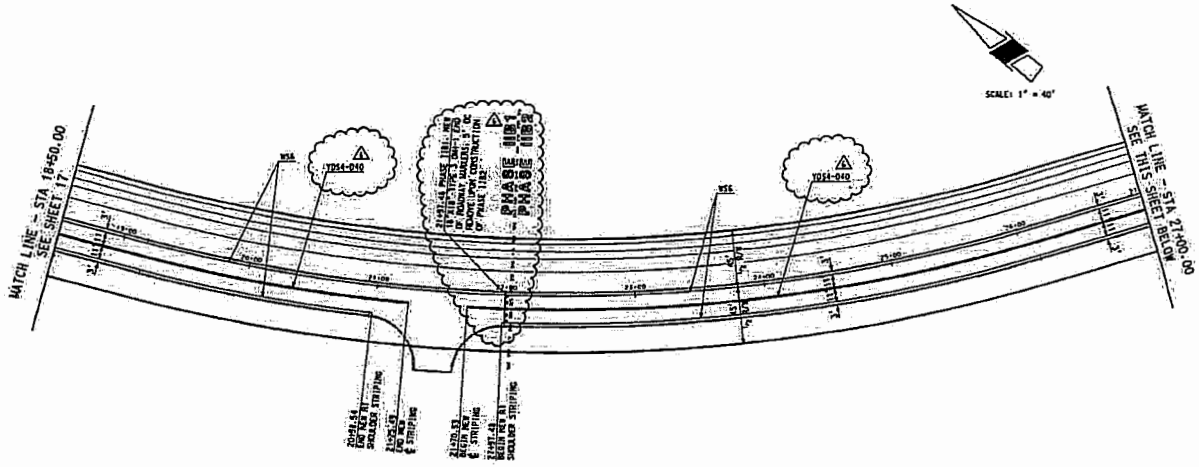
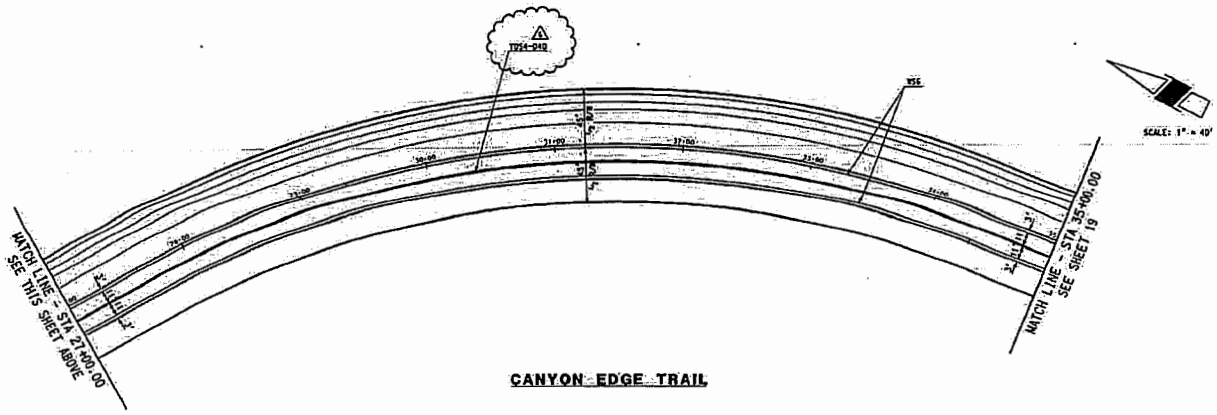


CANYON EDGE TRAIL



CANYON EDGE TRAIL

P1205-125

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON
PHASE IIA, B, C
SYCAMORE LEAF ROAD
AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: MRC 11/05	ENGINEER: PJJ 11/05		SHEET: 18 OF 28
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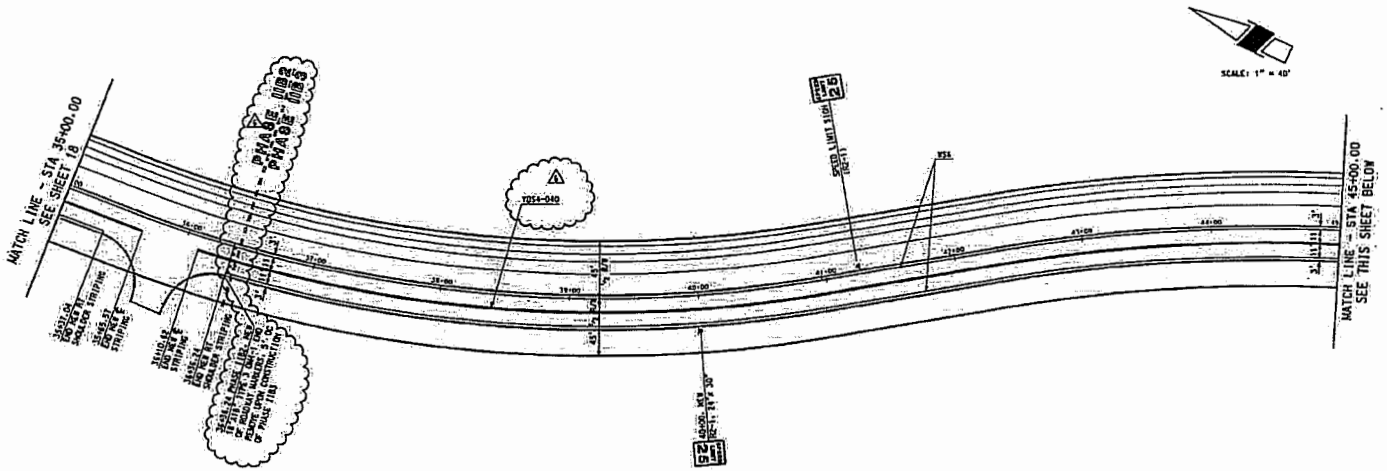

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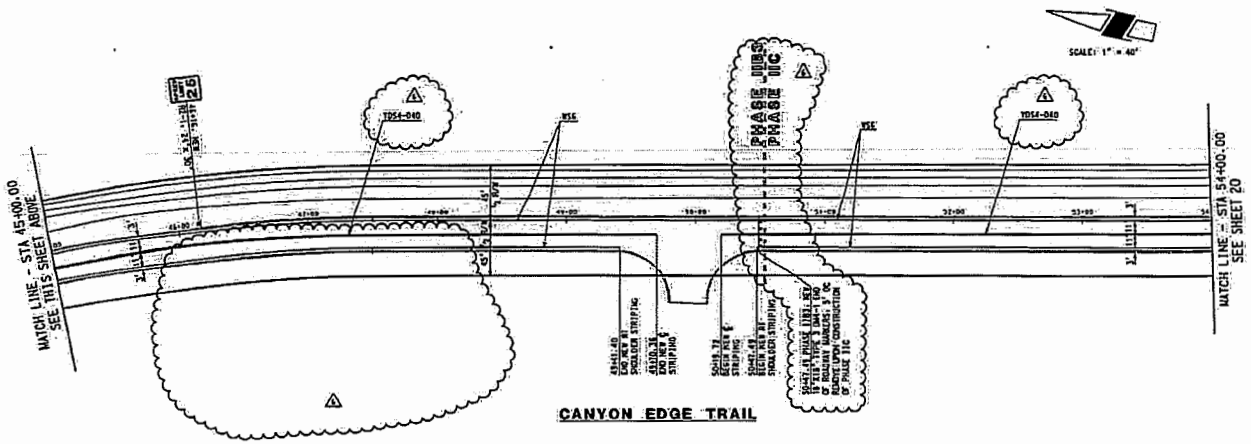

CANYON EDGE TRAIL

P1205-125

PUBLIC ROADWAY IMPROVEMENT ~~AND PUBLIC SEWER~~ PLANS PREPARED FOR:

SYCAMORE CANYON

PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: RMC 11/09	ENGINEER: PJI 11/09		SHEET: 19 OF 28
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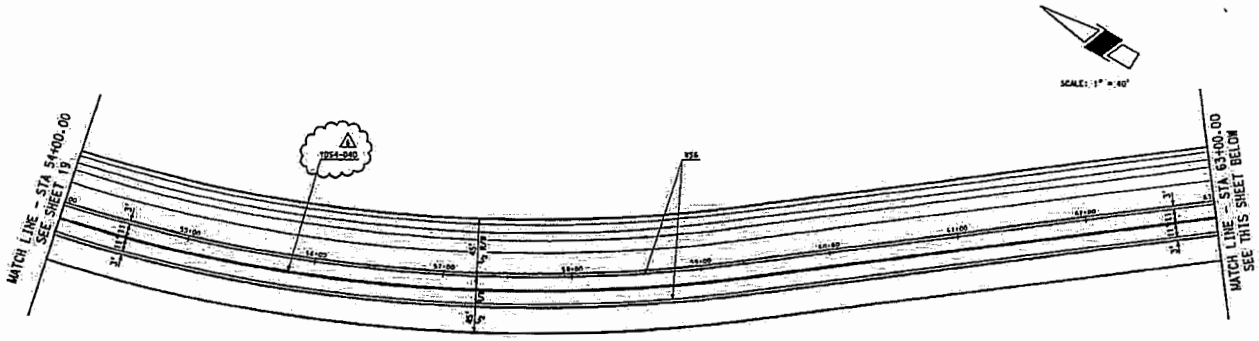
Bryan Ott Expires January



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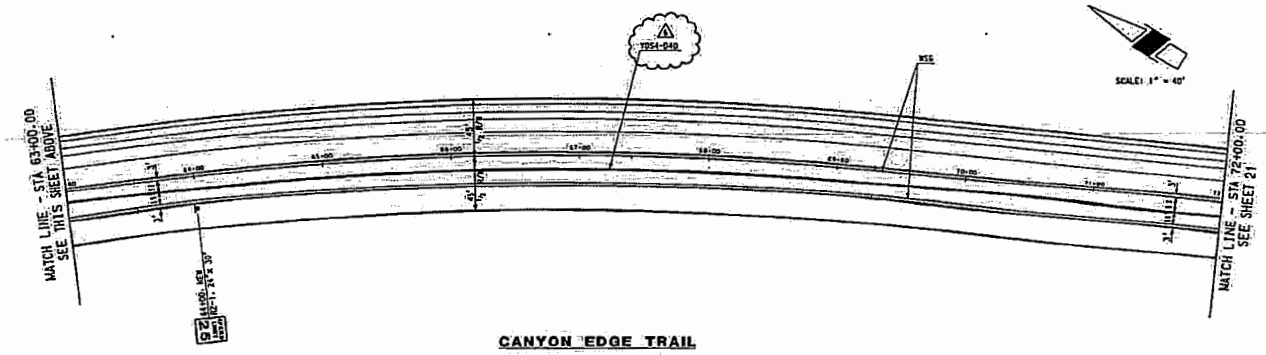

CANYON EDGE TRAIL

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PUBLIC ROADWAY IMPROVEMENT ~~AND PUBLIC SEWER~~ PLANS
PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD
AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: N/A		PROJ#: 3424
DESIGNER: BNC 11/09	ENGINEER: PJS 11/09		SHEET:
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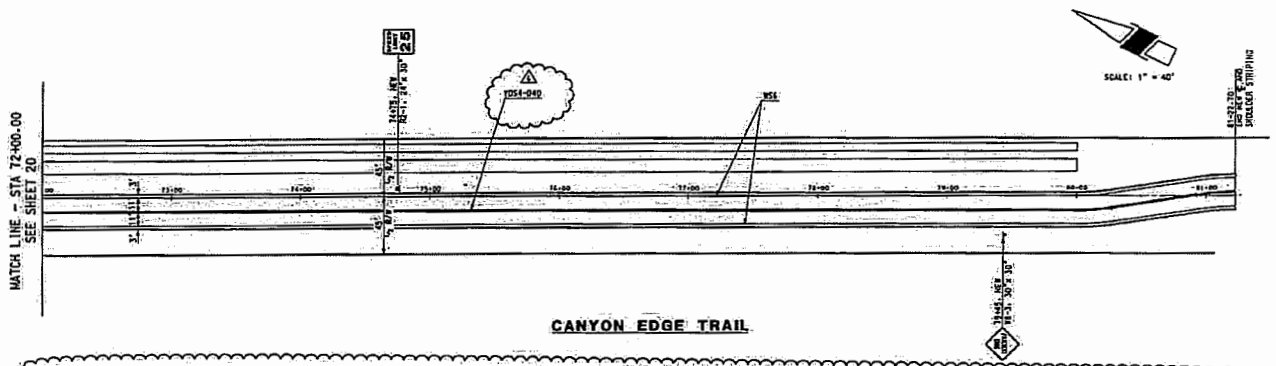

STRIPING NOTES

1. ALL EQUIPMENT/MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT CITY OF TUCSON / PIMA COUNTY (COT/PC) STANDARD SPECIFICATIONS AND THE STANDARD DETAILS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS AND THE APPROVED PLANS. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE PC/COT PAVEMENT MARKING DESIGN MANUAL AND APPLICABLE AMENDMENTS.
2. THE STRIPING CONTRACTOR SHALL CONTACT THE PIMA COUNTY PAVEMENT MARKING SUPERVISOR (520-724-2324) AT LEAST THREE WORKING DAYS IN ADVANCE OF ANY PAVEMENT MARKING LAYOUT BEING INSTALLED TO SCHEDULE INSPECTION AND APPROVAL OF PAVEMENT MARKINGS DURING NORMAL BUSINESS HOURS MONDAY THRU FRIDAY. STATE HOLIDAYS EXCLUDED.
3. UPON APPROVAL OF THE PAVEMENT MARKING LAYOUT, THE PIMA COUNTY PAVEMENT MARKING SUPERVISOR WILL ISSUE WRITTEN AUTHORIZATION TO CONTRACTOR TO PROCEED WITH INSTALLING ALL PAVEMENT MARKINGS AND ASSOCIATED REFLECTIVE RAISED PAVEMENT MARKINGS.
4. THE PERMANENT PAVEMENT MARKINGS MAY BE MODIFIED AS DIRECTED AND APPROVED BY THE TRAFFIC ENGINEER OR THEIR DESIGNEE.
5. THE DESIGN SPEED FOR SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL IS 35 MPH. THE DESIGN VEHICLE IS WB-50. THE POSTED SPEED LIMIT FOR SYCAMORE CANYON ROAD AND CANYON EDGE TRAIL IS 25 MPH.
6. ALL LANE DIMENSIONS ARE MEASURED FROM THE CENTER OF LANE LINE TO CENTER OF DOUBLE LANE LINE, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
7. THE PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY. THE CONTRACTOR SHALL FOLLOW ALL DIMENSIONS, APPLICABLE MARKING DETAILS AND SPECIFIED PIMA COUNTY STANDARDS WHEN INSTALLING PAVEMENT STRIPING, SYMBOLS, LEGENDS AND MARKERS.
8. PAINTED LAYOUT STRIPING SHALL BE 15 MILS (0.015") THICK WATER BASED PAINT PLACED ON THE FINAL PAVEMENT SURFACE WITH 8 POUNDS PER GALLON OF AASHTO M 247-13 TYPE I GLASS BEADS WITH ADHESION/MOISTURE PROOF COATING. PAINTED LAYOUT STRIPING SHALL BE INSTALLED WITHIN FIVE WORKING DAYS OF THE FINAL PAVEMENT SURFACE BEING COMPLETED.
9. PAINTED SYMBOLS AND LEGENDS SHALL BE APPLIED AT THE SAME TIME AS THE PAINTED STRIPING, WITH THE EXCEPTION OF BIKE LANE SYMBOLS AND WORDS (SUCH AS STOP, AHEAD, ONLY ETC.).
10. THE FINAL LONGITUDINAL STRIPING SHALL BE 90 MIL (0.090") RIBBON EXTRUDED THERMOPLASTIC REFLECTORIZED STRIPING PLACED OVER THE PAINTED LAYOUT STRIPING WITH A SINGLE DROP OF 10 POUNDS PER 100 SQUARE FOOT OF AASHTO M 247-13 TYPE I GLASS BEADS. THE FINAL LONGITUDINAL STRIPING SHALL BE PLACED WITHIN 21 TO 30 CALENDAR DAYS OF THE FINAL PAVEMENT SURFACE BEING COMPLETED. ALL PREVIOUSLY EXEMPTED LONG LINE MARKINGS SHALL BE APPLIED DURING THE FINAL LONGITUDINAL STRIPING.
11. ALL FINAL TRANSVERSE STRIPING, INCLUDING SYMBOLS AND LEGENDS, SHALL BE 90 MIL (0.090") ALKYD HAND CART EXTRUDED THERMOPLASTIC WITH 10 POUNDS PER 100 SQUARE FOOT OF AASHTO M 247-13 TYPE I GLASS BEADS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF PAVEMENT MARKINGS ON THE FINAL SURFACE COURSE FOLLOWING ONE CONTROL LINE PER DIRECTION OF TRAVEL CONSISTING OF CONTROL POINTS THAT HAVE BEEN SET TO NO MORE THAN 50 FEET APART ON CURVE SECTIONS AND 200 FEET IN TANGENT SECTIONS WHERE THE PAVEMENT MARKING PATTERN DOES NOT CHANGE.

STRIPING NOTES - CONTINUED

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINAL SURFACE COURSE IS PLACED SO THAT THE CONSTRUCTION JOINT IS NO MORE THAN ONE FOOT OFFSET FROM THE FINAL STRIPING.
14. ALL RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPMs or RPMs) SHALL BE INSTALLED SO THAT THE REFLECTIVE FACE OF EACH MARKER IS FACING THE DIRECTION OF TRAFFIC AND IS PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW. TYPE "C" OR "B" PAVEMENT MARKERS SHALL BE INSTALLED SO THAT THE CLEAR (OR WHITE) REFLECTIVE FACE OF EACH MARKER IS FACING APPROACHING TRAFFIC AND PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW TO WHICH IT APPLIES.
15. ALL RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPMs or RPMs) SHALL BE INSTALLED PER THE CURRENT EDITION OF THE PC/COT PAVEMENT MARKING MANUAL AND APPLICABLE AMENDMENTS.
16. ALL REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTION 701 OF THE PC/COT STANDARD SPECIFICATIONS. PAINTING OVER EXISTING STRIPING DOES NOT CONSTITUTE APPROVED STRIPING OBLITERATION.
17. FOR PRIVATE DEVELOPMENT PROJECTS: THE DESIGN CONSULTANT/PROJECT MANAGER SHALL BE REQUIRED TO PRODUCE AS-BUILT STRIPING PLANS WITHIN 90 DAYS OF STRIPING COMPLETION.
18. UNLESS OTHERWISE NOTED, ALL PAVEMENT MARKINGS SHALL BE INSTALLED BY THE CONTRACTOR.
19. UPON FINAL INSPECTION A WRITTEN ACCEPTANCE OR ITEMIZED PUNCHLIST OF MISSING OR UNACCEPTABLE PAVEMENT MARKINGS SHALL BE SUBMITTED TO THE CONTRACTOR AND PIMA COUNTY BY THE TRAFFIC ENGINEER OR DESIGNATED REPRESENTATIVE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL STRIPING UNTIL PROJECT IS APPROVED FOR "CONSTRUCTION ACCEPTANCE" BY PIMA COUNTY, FULLY OPEN TO TRAFFIC, ALL PUNCH LIST ITEMS ARE COMPLETED, AND THE ONE-YEAR MINIMUM WARRANTY BEGINS. IF THE PAVEMENT MARKING MATERIAL MANUFACTURER OFFERS A LONGER WARRANTY THE CONTRACTOR SHALL TRANSFER THAT WARRANTY TO PIMA COUNTY.
21. THE PC/COT PAVEMENT MARKING MANUAL IS AVAILABLE ONLINE.

SIGNING NOTES

1. ALL EQUIPMENT/MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT CITY OF TUCSON / PIMA COUNTY (COT/PC) "STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS" AND THE "STANDARD DETAILS FOR PUBLIC IMPROVEMENTS", THE SPECIAL PROVISIONS AND THE PLANS.
2. ALL SIGNS SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE LATEST EDITION OF THE PIMA COUNTY/CITY OF TUCSON TRAFFIC SIGNING DESIGN MANUAL, THESE PLANS AND THE SPECIAL PROVISIONS.
3. SIGNS MAY BE MODIFIED AND LOCATIONS ADJUSTED TO FIT CONDITIONS AT THE DISCRETION OF THE TRAFFIC ENGINEER.
4. THE DESIGN SPEED FOR SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL IS 35 MPH. THE POSTED SPEED LIMIT IS 25 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.
5. POST LENGTHS INDICATED ON SIGN SUMMARY SHEETS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL POST LENGTHS.
6. ALL PERFORATED POSTS SHALL BE INSTALLED IN A CONCRETE FOUNDATION, UNLESS OTHERWISE DIRECTED BY THE TRAFFIC ENGINEER.
7. ALL SIGN STATION LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL SIGN LOCATIONS WITH THE TRAFFIC ENGINEER PRIOR TO THE INSTALLATION OF ALL SIGNS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH BLUE STAKE, FOR INSTALLING ALL TRAFFIC SIGNS IN THE FIELD AND FOR MAINTAINING ALL SIGNING UNTIL PROJECT IS APPROVED FOR "CONSTRUCTION ACCEPTANCE" BY PIMA COUNTY, FULLY OPEN TO TRAFFIC, ALL PUNCH LIST ITEMS ARE COMPLETED, AND ONE YEAR WARRANTIES BEGIN.
9. ALL OVERHEAD MOUNTED SIGNS SHALL BE DIAMOND GRADE SHEETING, TYPE XI. ALL SCHOOL SIGNS SHALL BE FLUORESCENT YELLOW/GREEN, DIAMOND GRADE SHEETING, TYPE XI. ALL OTHER SIGNS SHALL BE HIGH INTENSITY PRISMATIC SHEETING, TYPE IV. ALL GROUND MOUNTED SIGNS SHALL HAVE AN ANTI-GRAFFITI COATING APPLIED TO SIGN FACE, 3M #1160 FILM OR EQUIVALENT.
10. ALL NEW SIGNS SHALL HAVE 0.080 GAUGE, RADIUS CORNER, ALUMINUM BACKING UNLESS OTHERWISE NOTED.
11. PRIOR TO DISTURBING ANY TRAFFIC SIGNS, A SIGN CONDITION INVENTORY OF ALL EXISTING SIGNING SHALL BE CONDUCTED BY THE CONTRACTOR AND PROVIDED TO THE SIGN SHOP SUPERVISOR (520-724-2611). INVENTORY SHALL INDICATE CURRENT SIGN LOCATION AND CONDITION, INCLUDING ANY EXISTING DAMAGE OR DEFICIENCIES.
12. ANY SIGNS AND POSTS BEING RE-USED ON THIS PROJECT SHALL BE STOCKPILED IN A MANNER TO AVOID DAMAGE AND MAINTAIN THE INTEGRITY OF THE SIGNS. SAFE STORAGE OF STOCKPILE AND PAYMENT FOR DAMAGE TO STOCKPILE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
13. ALL SIGNS AND POSTS NOT BEING RE-USED ON THE PROJECT SHALL BE DISMANTLED, STACKED AND DELIVERED TO THE OWNER (CITY OR COUNTY) BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFE STORAGE AT THE CONSTRUCTION SITE UNTIL DELIVERY AND THE SAFE UNLOADING OF THE SALVAGED MATERIAL. NOTIFICATION OF DELIVERY SHALL BE MADE AT LEAST TWO WORKING DAYS PRIOR TO DELIVERY (48 HOURS). PIMA COUNTY SIGN SHOP 1313 S. MISSION ROAD (520-724-2367). NO FRIDAY DELIVERIES.

P1205-125

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON
PHASE IIA, B, C
SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

NO.	BY	DATE	REVISION
1	REC	7/15	STRIPING LABEL AND NOTES

HORIZ: 1" = 40'	VERT: N/A	PROJ#: 13424	
DESIGNER: BAC 11/09	ENGINEER: PJI -11/09	SHEET: 21 OF 28	
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GENERAL NOTES - CONTINUED

25. NATIVE PLANTS MUST BE FLAGGED AND PROTECTIVE FENCING MUST BE INSTALLED AS REQUIRED BY THE NATIVE PLANT PRESERVATION PLAN PRIOR TO ANY GRADING.

26. A RIGHT-OF-WAY USE PERMIT IS REQUIRED FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY AND/OR PUBLIC DRAINAGE WAYS.

27. THE STRIPING CONTRACTOR MUST CONTACT THE TRAFFIC STRIPING SUPERVISOR (740-2624) AT LEAST 48 HOURS PRIOR TO ANY STRIPING BEING APPLIED.

28. THE GENERAL CONTRACTOR SHALL COORDINATE ALL RIP RAP SLOPE TREATMENT REQUIREMENTS WITH THE LANDSCAPE CONTRACTOR. LANDSCAPE PLANTINGS AND IRRIGATION LINES WITHIN AREAS TO BE RIP RAPPED SHALL BE COORDINATED TO FACILITATE THE WORK OF THE LANDSCAPE CONTRACTOR BEFORE THE RIP RAP IS PLACED. SEE LANDSCAPE PLANS FOR PLANTINGS AND IRRIGATION LINES WITH AREAS TO BE RIP RAPPED.

29. THE GRADING CONTRACTOR SHALL EXCAVATE AND REMOVE THE SOIL BENEATH ALL PROPOSED RIP RAP AREAS SUCH THAT THE FINISHED SURFACE OF THE RIP RAP WILL MATCH THE FINISHED SURFACE ELEVATION AND SLOPE AS CALLED OUT ON THESE PLANS.

GENERAL NOTES

1. CURB RADII ARE MEASURED TO FRONT FACE OF CURB.

2. THE CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UTILITIES BY CALLING BLUE-STAKE CENTER AT 1-800-782-5348 TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. THE PLAN LOCATIONS OF EXISTING UTILITIES BEING SHOWN ARE APPROXIMATE.

3. THE CONTRACTOR AGREES TO PROTECT ALL ADJACENT PROPERTY AND EXISTING IMPROVEMENTS, INCLUDING POSITIVE CONTROL OF EARTH SPILLAGE, CONSTRUCTION WATER, AND RUNOFF WATERS.

4. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

5. THE SOILS ENGINEER SHALL OBSERVE, INSPECT, AND TEST ALL EARTHWORK OPERATIONS, INCLUDING, BUT NOT LIMITED TO, CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACKFILL, AND PLACEMENT AND COMPACTION OF FILL, IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE SOILS REPORT.

6. THE EXISTENCE AND LOCATION OF ANY EXISTING UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS TO PROTECT ANY UTILITY NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION.

7. IF THERE ARE ANY QUESTIONS REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT 795-1000.

8. RETAINING WALLS AND/OR SCREEN WALLS REFERENCED ON THIS PLAN ARE TO BE DESIGNED BY OTHERS. ELEVATIONS SHOWN HEREON ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL CONFIRM EXACT ELEVATIONS. ALL RETAINING WALLS AND/OR SCREEN WALLS REQUIRE A SEPARATE BUILDING PERMIT, AND ARE NOT COVERED UNDER THE GRADING PERMIT FOR THIS PROJECT.

9. ALL NOTES SHALL CROSS-APPLY TO ALL CONSTRUCTION DISCIPLINES INVOLVED WITH THIS PROJECT.

10. FACE OF CURB REVEAL IS 6 INCHES UNLESS OTHERWISE SHOWN.

11. ALL ELEVATIONS ARE SHORTENED FOR CLARITY, REMOVING THE THOUSAND AND HUNDRED UNIT VALUES. SEE BASIS OF ELEVATION FOR FULL ELEVATION REFERENCE.

12. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE NATIVE VEGETATION WITHIN ALL OPEN SPACE AREAS AND CONFINE HIS OPERATIONS TO THE GRADING LIMITS SHOWN.

13. WRITTEN PERMISSION SHALL BE OBTAINED IN ADVANCE FOR ANY OFF-SITE GRADING.

14. THE CONTRACTOR SHALL FACILITATE THE WORK OF THE SOILS ENGINEER DURING HIS OBSERVATIONS AND COMPACTION TESTS DURING THE FILLING AND COMPACTING OPERATIONS.

15. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH SURFACE AND UNIFORM CROSS-SECTION. THE SLOPE OF THE EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS SHOWN ON THE PLANS AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPES SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.

16. THE CONTRACTOR SHALL PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEERS. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE CHARGED TO THE CONTRACTOR.

17. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.

18. ALL EARTHWORK OPERATIONS SHALL BE DONE UNDER THE OBSERVATION OF A SOILS ENGINEER AND IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE SOILS REPORT.

19. PRIOR TO THE START OF GRADING, ALL VEGETATION AND OBSTRUCTIONS, AS WELL AS TRASH, SHALL BE REMOVED FROM CUT AND FILL AREAS AND LEGALLY DISPOSED OF OFF-SITE. ANY EXISTING IRRIGATION, DRAINAGE OR UTILITY LINES OR OTHER ABANDONED SUBSURFACE STRUCTURES SHALL BE REMOVED, DESTROYED OR ABANDONED IN COMPLIANCE WITH SPECIFICATIONS OF THE APPROPRIATE BUILDING OFFICE OR THE SOILS ENGINEER. BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED.

20. THE FINAL TEST RESULTS AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED AND SUBMITTED TO THE OWNER. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, DRIVE RING, OR NUCLEAR DENSITY GAUGE.

21. EXISTING MANHOLE RIMS, VALVE COVERS, ETC. TO REMAIN IN PLACE, SHALL BE ADJUSTED TO PROPOSED FINISHED GRADE AND/OR FINISHED SURFACE ELEVATIONS.

22. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COMPLY WITH THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN PREPARED FOR THIS PROJECT.

23. IRRIGATION/ELECTRICAL SLEEVES SHALL BE 3" PVC SCHEDULE 40. SLEEVES SHALL BE PLACED 18" DEEP AND SHALL EXTEND 2' MINIMUM BEYOND THE BACK OF CURB OR HEADER. SLEEVE ENDS SHALL BE MARKED UPON AS-BUILT AND SHALL BE COVERED WITH HEAVY DUTY TAPE TO PREVENT SOIL FROM ENTERING SLEEVES UP BACK FILLING.

24. REFER TO THE FINAL PLAT FOR THIS PROJECT FOR ADDITIONAL HORIZONTAL CONTROL AND RECORDING INFORMATION.

CURB ANNOTATION

No.	DIRECTION	DISTANCE
CB1	S 63°06'54" E	28.00
CB2	N 81°31'37" E	24.00
CB3	S 62°45'13" W	388.46
CB4	N 81°06'40" E	21.81
CB5	S 37°25'14" W	21.27
CB6	N 59°58'01" E	28.00
CB7	N 63°06'54" W	30.00
~~CB8~~	~~S 59°58'01" W~~	~~135.90~~
~~CB9~~	~~N 59°58'01" E~~	~~101.14~~
~~CB10~~	~~S 59°58'01" W~~	~~375.00~~
CB11	S 59°58'01" W	6.00
CB12	N 59°58'01" E	6.00
CB13	S 30°01'59" E	16.00
CB14	N 30°01'59" W	16.00
CB15	S 34°36'02" E	28.00
CB16	S 1°45'05" E	24.00
CB17	N 88°10'55" E	7.79
CB18	S 8°44'01" E	28.00
CB19	S 33°46'43" E	65.57
CB20	N 64°40'55" E	26.00
CB21	N 33°46'43" W	65.57
CB22	N 60°24'35" W	388.01
CB23	S 24°02'49" E	12.84
CB24	N 65°57'11" E	26.00
~~CB25~~	~~N [illegible] W~~	~~0.79~~
CB26	N 30°01'59" W	1.02

No.	DELTA	TANGENT	ARC	RADIUS	CHORD	CHORD BRG
CC1	31°40'21"	14.75	28.74	52.00	28.38	N 38°24'41" W
CC2	263°34'25"	#########	193.21	42.00	62.63	S 25°38'17" W
CC3	51°54'04"	25.31	47.10	52.00	45.51	S 80°11'53" E
CC4	87°55'54"	38.63	61.43	40.00	55.57	S 23°08'51" E
CC5	87°59'54"	38.63	61.43	40.00	55.57	N 69°51'03" E
CC6	88°04'21"	38.68	61.45	40.00	55.61	S 52°24'34" E
CC7	88°04'21"	38.68	61.45	40.00	55.61	N 35°39'47" E
CC8	90°00'00"	40.00	62.83	40.00	56.57	S 75°01'59" E
CC9	90°00'00"	40.00	62.83	40.00	56.57	N 14°58'01" E
CC10	90°00'08"	40.00	62.83	40.00	56.57	S 75°01'59" E
CC11	92°09'40"	41.54	64.34	40.00	57.63	N 06°02'51" E
CC12	92°12'04"	41.57	64.37	40.00	57.64	N 25°14'56" W
CC13	92°12'04"	41.57	64.37	40.00	57.64	S 66°57'06" W
~~CC14~~	~~180°00'00"~~	~~#########~~	~~25.13~~	~~8.00~~	~~16.00~~	~~N 30°01'59" W~~
~~CC15~~	~~31°58'31"~~	~~21.49~~	~~41.86~~	~~75.00~~	~~41.31~~	~~N 75°57'16" E~~
~~CC16~~	~~148°01'29"~~	~~8.73~~	~~6.46~~	~~2.50~~	~~4.81~~	~~S 44°02'44" E~~
~~CC17~~	~~180°00'00"~~	~~#########~~	~~6.28~~	~~2.00~~	~~4.00~~	~~N 30°01'59" W~~
~~CC18~~	~~7°37'41"~~	~~45.20~~	~~90.27~~	~~678.00~~	~~90.20~~	~~N 56°09'10" E~~
CC19	180°00'00"	#########	25.13	8.00	16.00	N 30°01'59" W
CC20	0°35'45"	13.04	26.08	2508.00	26.08	S 59°39'53" W
CC21	0°35'45"	12.96	25.92	2492.00	25.92	N 59°39'52" E
CC22	87°38'01"	38.38	61.18	40.00	55.39	S 11°34'53" W
CC23	87°38'01"	38.38	61.18	40.00	55.39	S 80°46'58" E
CC24	92°24'44"	41.72	64.52	40.00	57.75	S 41°58'33" W
CC25	83°00'11"	35.39	57.95	40.00	53.01	S 50°19'00" E
CC26	92°47'41"	42.00	64.78	40.00	57.93	S 34°52'42" W
CC27	0°44'51"	2.37	4.75	364.00	4.75	S 80°54'07" W
CC28	87°57'10"	38.60	61.40	40.00	55.55	S 55°28'43" E
CC29	8°27'38"	14.79	29.53	200.00	29.51	S 29°32'54" E
CC30	8°10'27"	14.29	28.53	200.00	28.51	S 29°41'30" E
CC31	8°12'26"	16.21	32.37	226.00	32.35	N 29°40'31" W
CC32	8°22'38"	12.87	25.68	174.00	25.67	N 29°32'54" W
CC33	36°27'10"	16.46	31.81	50.00	31.28	S 05°49'14" E
CC34	83°16'45"	37.34	61.05	42.00	55.81	S 29°14'02" E
CC35	46°49'35"	6.50	12.26	15.00	11.92	S 41°27'37" E
CC36	72°38'52"	11.03	19.02	15.00	17.77	N 12°16'37" E
CC37	128°13'49"	86.55	94.00	42.00	75.57	N 15°30'52" W
CC38	55°34'57"	26.35	48.50	50.00	46.63	N 51°50'18" W

STORM DRAIN NOTES

1. SUBSTITUTION OF ANY MATERIALS FOR CONSTRUCTION OF STORM DRAIN WILL NOT BE ALLOWED UNLESS FIRST APPROVED BY THE ENGINEER OF WORK.

2. STORM DRAINS ARE TO BE CONSTRUCTED IN COMPLIANCE WITH PIMA COUNTY/CITY OF TUCSON STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, DIVISION 500. THESE MAY BE MODIFIED AND/OR SUPPLEMENTED BY THE REQUIREMENTS OF THESE PLANS.

3. SRP STORM DRAIN SHALL BE CONTECH ULTRA-FLO PIPE ¾" X ¾" X 7½" CORRUGATIONS OR EQUIVALENT, 12 GAGE THICKNESS. PIPE AND BEDDING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND STANDARD DETAIL NO. 108.

Call for Blue Stakes 1-800-782-5348 Blue Stake Center

P1205-125

NO.	BY	DATE	REVISION
6	REC	2/15	CURB ANNOTATION/REMOVE SEWER NOTES

PUBLIC ROADWAY IMPROVEMENT ~~AND PUBLIC SEWER~~ PLANS PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: N/A	VERT: N/A	PROJ# 3424
DESIGNER: BNC 11/05	ENGINEER: PJI 11/05	SHEET:
DRAFTER: PAD 11/05	CHECKED:	22 OF 28

RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD · SUITE 111
TUCSON, AZ 85712
520.795.1000
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rickengineering.com

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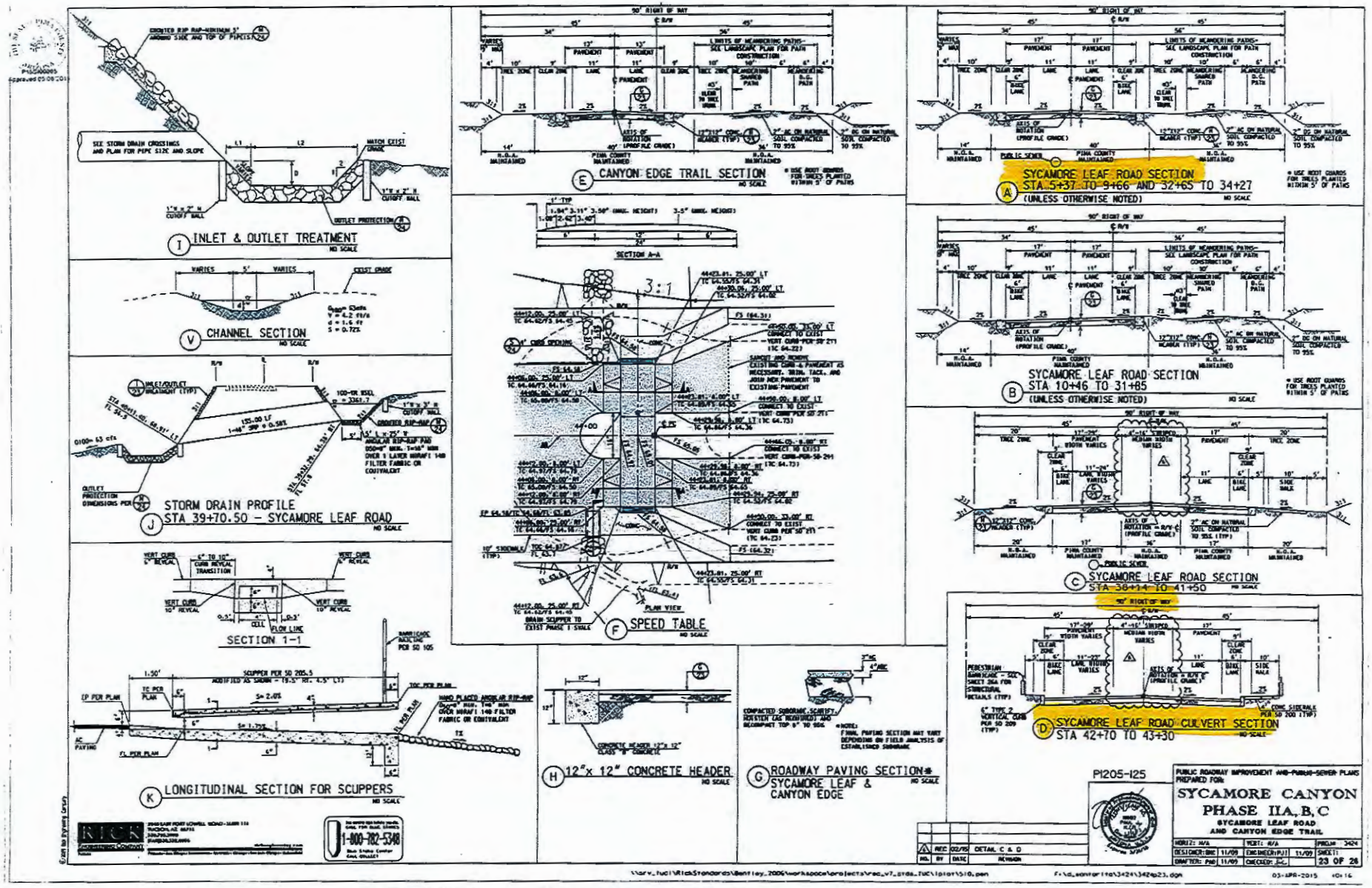
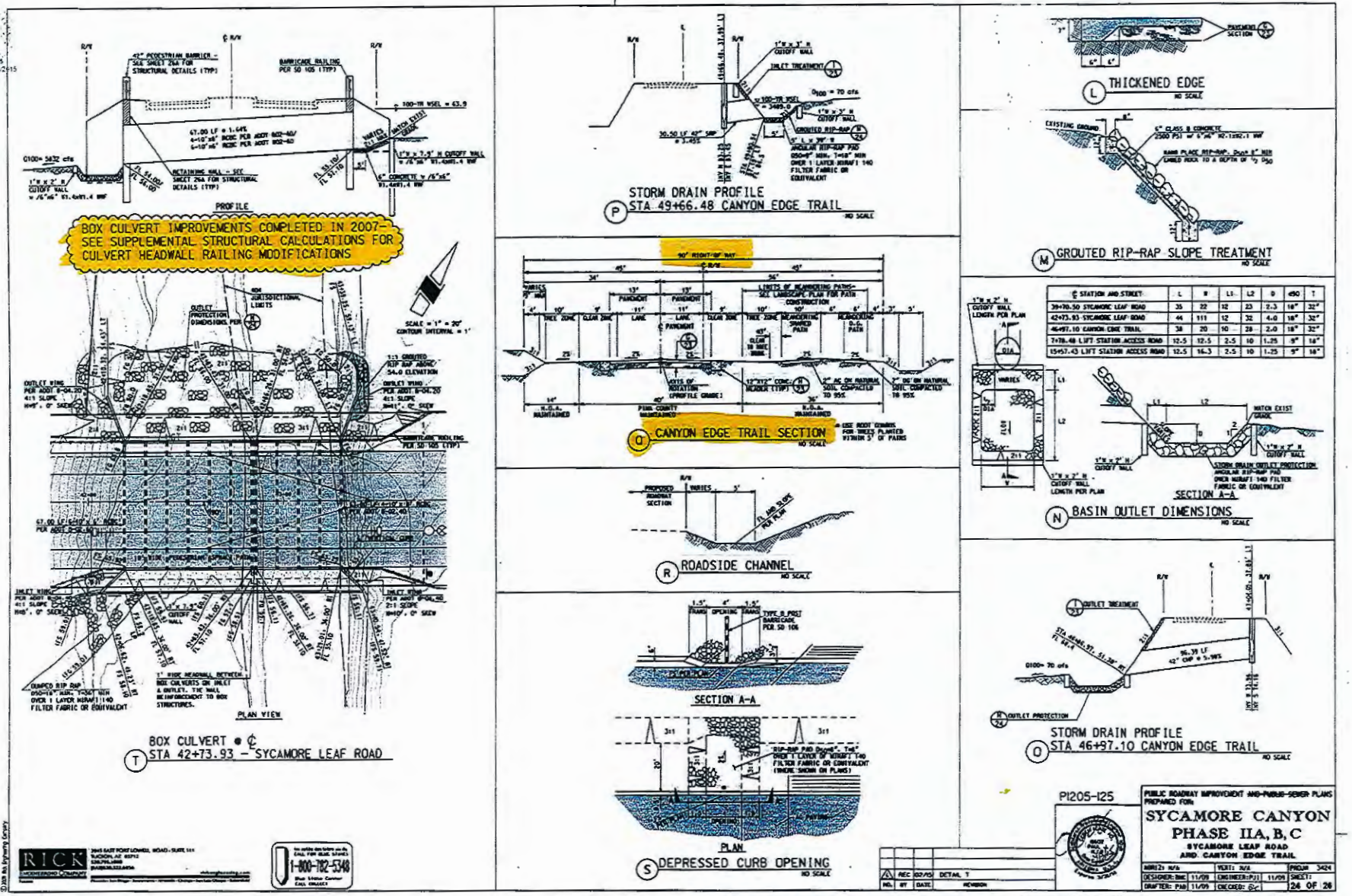
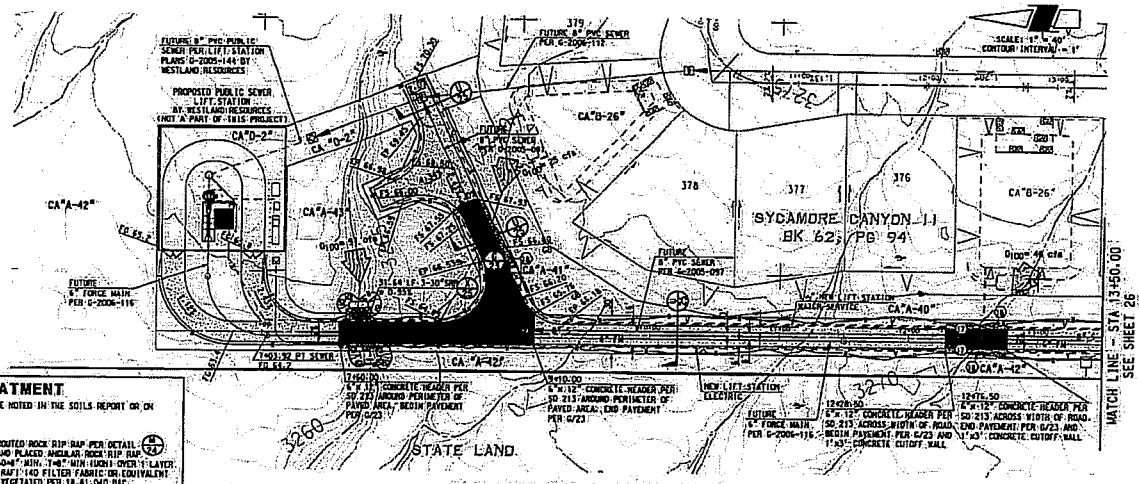

I INLET & OUTLET TREATMENT
NO SCALE
V CHANNEL SECTION
NO SCALE
J STORM DRAIN PROFILE
STA 39+70.50 – SYCAMORE LEAF ROAD
NO SCALE
SECTION 1-1
K LONGITUDINAL SECTION FOR SCUPPERS
NO SCALE
E CANYON EDGE TRAIL SECTION
NO SCALE
SECTION A-A
F SPEED TABLE
NO SCALE
PLAN VIEW
H 12"x 12" CONCRETE HEADER
NO SCALE
G ROADWAY PAVING SECTION
SYCAMORE LEAF & CANYON EDGE
NO SCALE
A SYCAMORE LEAF ROAD SECTION
STA 5+37 TO 9+66 AND 32+65 TO 34+27
(UNLESS OTHERWISE NOTED)
NO SCALE
B SYCAMORE LEAF ROAD SECTION
STA 10+46 TO 31+85
(UNLESS OTHERWISE NOTED)
NO SCALE
C SYCAMORE LEAF ROAD SECTION
STA 38+14 TO 41+50
NO SCALE
D SYCAMORE LEAF ROAD CULVERT SECTION
STA 42+70 TO 43+30
NO SCALE
P1205-125
PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS
PREPARED FOR:
SYCAMORE CANYON
PHASE IIA,B,C
SYCAMORE LEAF ROAD
AND CANYON EDGE TRAIL
23 OF 26
1-800-782-5348


BOX CULVERT IMPROVEMENTS COMPLETED IN 2007– SEE SUPPLEMENTAL STRUCTURAL CALCULATIONS FOR CULVERT HEADWALL RAILING MODIFICATIONS
PROFILE
PLAN VIEW
BOX CULVERT @ ℄ STA 42+73.93 – SYCAMORE LEAF ROAD
STORM DRAIN PROFILE STA 49+66.48 CANYON EDGE TRAIL
CANYON EDGE TRAIL SECTION
ROADSIDE CHANNEL
SECTION A-A
PLAN
DEPRESSED CURB OPENING
THICKENED EDGE
GROUTED RIP-RAP SLOPE TREATMENT
BASIN OUTLET DIMENSIONS
STORM DRAIN PROFILE STA 46+97.10 CANYON EDGE TRAIL
RICK ENGINEERING COMPANY
1-800-782-5348
PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR
SYCAMORE CANYON PHASE IIA, B, C
SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL
P1205-125
SHEET 24 OF 26



KEYNOTES

1. 6" TYPE 2 VERTICAL CURB PER SD 209
2. 12" X 12" CONCRETE HEADER
3. CONNECT TO EXISTING CURB PER SD 211. MATCH EXISTING TOP OF CURB
4. END CONCRETE HEADER
5. BEGIN VERTICAL CURB WITH 3" TERMINAL SECTION PER SD 212
6. SAWCUT AT 1' MINIMUM AND REMOVE EXISTING CURB AND PAVEMENT AS NECESSARY. TRIM, TACK, AND JOIN NEW PAVEMENT TO EXISTING PAVEMENT
7. THICKENED PAVEMENT EDGE PER DETAIL
8. MEANDERING AC PATH
9. MEANDERING DG PATH
10. ~~CONNECT TO FUTURE SEWER~~
11. ~~FUTURE PRESSURE MAIN CONNECTION PER SD WW 305~~
12. ~~ADJUST MANHOLE RIM TO NEW ELEVATION PER SD WW 305~~
13. ~~COATED MANHOLE PER COATING SPECS SHEET 22~~
14. ~~SEE SD 195 FOR SURFACE MATERIALS PER SD WW 101~~
15. CONCRETE SIDEWALK PER SD 200
16. 6"X12" CONCRETE HEADER PER SD 213 W/5 TYPE "A" POST BARRICADES PER SD 106, SPACED 5' OC
17. 1'X3' CONCRETE CUTOFF WALL
18. GROUTED RIP RAP PER

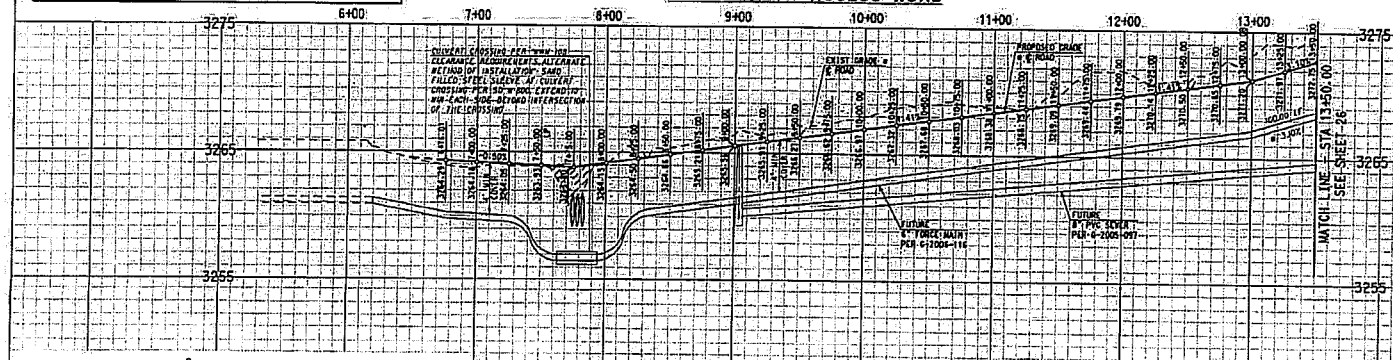
NOTE: ALL STATIONING IS ALONG ℄ OF ACCESS ROAD

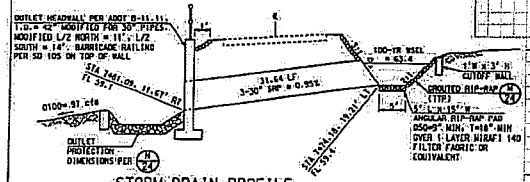
TYPICAL SLOPE TREATMENT

FINAL SLOPE TREATMENT UNLESS OTHERWISE NOTED IN THE SOILS REPORT OR ON THIS PLAN SHALL BE AS FOLLOWS:

1:1 TO 1.99:1 OVER 2' IN HEIGHT 2:1 TO 2.99:1 OVER 2' IN HEIGHT	- GROUTED ROCK RIP RAP PER DETAIL - HAND PLACED ANGULAR ROCK RIP RAP D50=8" MIN. T=8" MIN OVER 1 LAYER MIRAFI 140 FILTER FABRIC OR EQUIVALENT - REVEGETATED PER 18.81.040 BAC
3:1 OR FLATTER	

LIFT STATION ACCESS ROAD



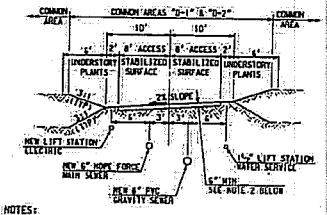


STORM DRAIN PROFILE
STA 7+78.48 – LIFT STATION ACCESS ROAD

NO SCALE

LIFT STATION ACCESS ROAD

SCALE: HORIZ 1" = 40' VERT 1" = 4'



NOTES:

1. TYPICAL PUBLIC SEWER EASEMENT CROSS-SECTION. THE NORMAL 20 FOOT PERMANENT EASEMENT SHALL BE DESIGNATED ZONE A. THE FIRST 8 FEET OUT FROM EITHER SIDE OF THE CENTER LINE OF THE SEWER PIPE WILL BE A CLEAR STABILIZED SURFACE. THE REMAINING 2 FEET ON EITHER SIDE OF THE EASEMENT WILL BE REPLANTED WITH UNDERSTORY PLANTS. THE FIRST 6 FEET OF THE TEMPORARY CONSTRUCTION EASEMENT WILL BE PLANTED WITH UNDERSTORY PLANTS; SHRUBS AND BUSHES, BUT NO TREES. ALL SHRUBS, BUSHES AND UNDERSTORY PLANTS ARE TO MATCH THE NATIVE VEGETATION OF THE SURROUNDING HABITAT. IF ANY TREES ARE TO BE PLANTED BEYOND THE FIRST 6 FEET OF TEMPORARY CONSTRUCTION, THE TREE TYPE AND LOCATION MUST BE APPROVED BY THE ENGINEER.
2. THE STABILIZED SURFACE SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING MATERIALS AFTER A MIX DESIGN HAS BEEN APPROVED BY THE ENGINEER:
   - A- HYDRATED LIME SLURRY
   - B- HYDRATED LIME SLURRY AND FLY ASH
   - C- PORTLAND CEMENT

   THE SOIL USED IN THE 6 INCH THICK STABILIZED SURFACE SHALL NOT CONTAIN ANY MATERIAL RETAINED ON THE 3 INCH SIEVE, NOR CONTAIN ANY DELTERIOUS MATERIAL. A CLEAR CURING COMPOUND THAT IS APPROVED BY THE ENGINEER SHALL BE APPLIED TO THE TOP OF THE STABILIZED SURFACE AFTER IT HAS BEEN COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY.
3. IF THE SEWER EASEMENT IS LOCATED IN AN ENVIRONMENTALLY SENSITIVE AREA, THEN THE SPECIFICATIONS AND DETAILS FOR ENVIRONMENTALLY SENSITIVE SEWER DESIGN APPLY INSTEAD OF THIS DETAIL.

LIFT STATION ACCESS ROAD

NO SCALE

NO.	BY	DATE	REVISION
4	REC	2/15	REMOVE SEWER
3	REC	9/06	SHOW FORCE MAIN PROFILE FOR REFERENCE
2	REC	5/06	ADDED SEWER, ENTIRE SHEET

P1205-125

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'	VERT: 1" = 4'	PROJN: 13424	
DESIGNER: BNC 11/09	ENGINEER: PJI 11/09	SHEET: 25 OF 28	
DRAFTER: PAD 11/09	CHECKED: TC		

RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD, SUITE 111
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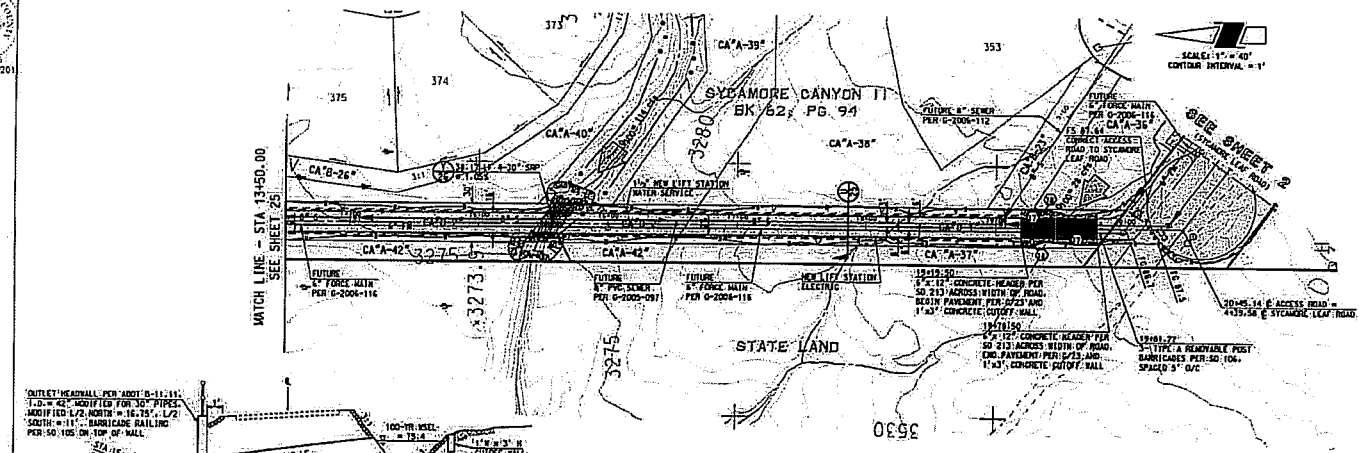
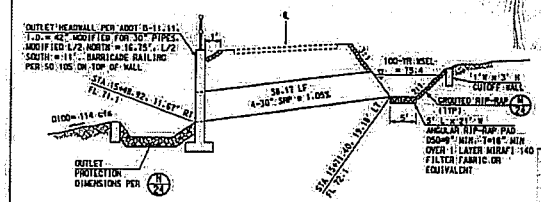
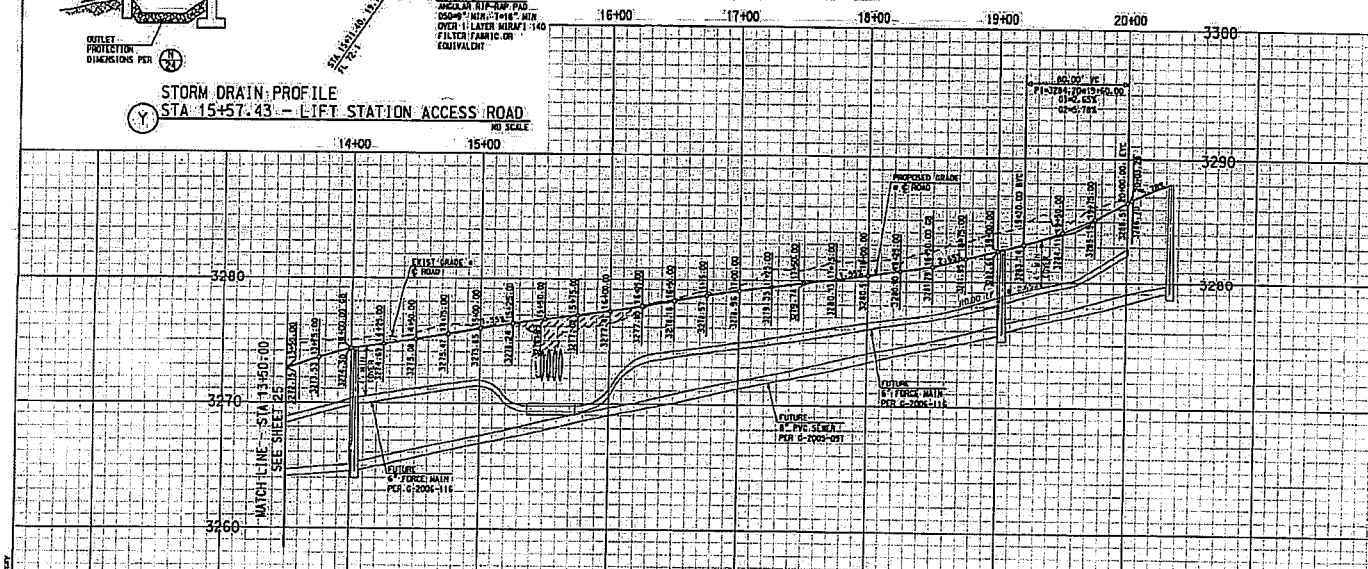




STORM DRAIN PROFILE
STA 15+57.43 - LIFT STATION ACCESS ROAD
NO SCALE



KEYNOTES

1. 6" TYPE 2 VERTICAL CURB PER SD 203
2. 12" X 12" CONCRETE HEADER
3. CONNECT TO EXISTING CURB PER SD 211. MATCH EXISTING TOP OF CURB
4. END CONCRETE HEADER
5. BEGIN VERTICAL CURB WITH 3' TERMINAL SECTION PER SD 212
6. SAWCUT AT 1' MINIMUM AND REMOVE EXISTING CURB AND PAVEMENT AS NECESSARY. TRIM, TACK, AND JOIN NEW PAVEMENT TO EXISTING PAVEMENT
7. THICKENED PAVEMENT EDGE PER DETAIL
8. MEANDERING AC PATH
9. MEANDERING DG PATH
10. ~~CONCRETE CURB PER SD 212~~
11. ~~FUTURE PRESSURE MAIN CONNECTION PER SD WW 505~~
12. ~~ADJUST MANHOLE RIM TO NEW ELEVATION PER SD WW 305~~
13. ~~COATED MANHOLE PER COATING SPECS SHEET 22~~
14. ~~SOLDIER OR SCHEDULE WATERLINE PER SD WW 100~~
15. CONCRETE SIDEWALK PER SD 220
16. 6"X12" CONCRETE HEADER PER SD 213 W/5 TYPE "A" POST BARRICADES PER SD 106, SPACED 5' OC
17. 1'X3' CONCRETE CUTOFF WALL
18. GROUTED RIP RAP PER

NOTE: ALL STATIONING IS ALONG ℄ OF ACCESS ROAD

TYPICAL SLOPE TREATMENT

FINAL SLOPE TREATMENT (UNLESS OTHERWISE NOTED IN THE SOILS REPORT OR ON THIS PLAN) SHALL BE AS FOLLOWS:

1:1 TO 1.99:1 OVER 2' IN HEIGHT = GROUTED DOCK RIP RAP PER DETAIL
2:1 TO 2.99:1 OVER 2' IN HEIGHT = HAND PLACED ANGULAR ROCK RIP RAP D50=6" MIN., T=8" MIN. (UON) OVER 1 LAYER MIRAFI 140 FILTER FABRIC OR EQUIVALENT REVEGETATED PER 16.01.040 B&C
3:1 OR FLATTER

3	REC 2/15	REMOVE SEWER
2	REC 3/06	SHOW FORCE MAIN PROFILE FOR REFERENCE
1	REC 3/06	ADDED SEWER ENTIRE SHEET
NO.	BY	DATE REVISION

PUBLIC ROADWAY IMPROVEMENT AND PUBLIC SEWER PLANS PREPARED FOR:

SYCAMORE CANYON PHASE IIA, B, C

SYCAMORE LEAF ROAD AND CANYON EDGE TRAIL

HORIZ: 1" = 40'		VERT: 1" = 4'	PROJ # 3424
DESIGNER: BNC	11/09	ENGINEER: PJJ 11/09	SHEET: 28 OF 28
DRAFTER: PAD	11/09	CHECKED:	

RICK ENGINEERING COMPANY
9965 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85749
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GENERAL STRUCTURAL NOTES
(TYPICAL UNLESS NOTED OTHERWISE)

GENERAL

1. ALL WORK SHALL CONFORM TO THE CITY OF TUCSON / PIMA COUNTY STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, 2003 EDITION.

CONCRETE

1. ALL CONCRETE SHALL BE READY MIXED CONFORMING TO ASTM C-94. - TYPE II PORTLAND CEMENT SHALL BE USED FOR ALL CONCRETE. THE FOLLOWING MINIMUM STRENGTH AT 28 DAYS SHALL BE ATTAINED:

   HEAD WALLS — 3000 PSI

2. THE FOLLOWING LATEST EDITIONS OF ACI STANDARDS OF RECOGNIZED PRACTICE SHALL APPLY TO ALL CONCRETE WORK.
   I. ACI 318 - CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   II. ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
3. CONCRETE SHALL NOT BE DROPPED MORE THAN FOUR FEET VERTICALLY.
4. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED.
5. ALL REINFORCING BARS, DOWELS, ANCHOR BOLTS, AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
6. PROVIDE 3/4" INCH CHAMFER ON ALL EXPOSED EDGES OF WALLS, ETC. UNLESS NOTED OTHERWISE IN DRAWINGS.
7. CONCRETE CURING AND CURING SHALL BE DONE IN CONFORMANCE WITH SECTION 601 OF THE STANDARD SPECIFICATION.
8. NO CONSTRUCTION JOINTS (OTHER THAN THOSE SHOWN ON DRAWINGS) SHALL BE INSTALLED WITHOUT APPROVAL OF THE ENGINEER.
9. CONTRACTOR SHALL SUBMIT MIX DESIGNS WITH CORRESPONDING PRIOR TEST RESULTS FOR EACH MIX DESIGN. THE USE/LOCATIONS FOR EACH CONCRETE MIX DESIGN SHALL BE CLEARLY IDENTIFIED.

REINFORCING BARS

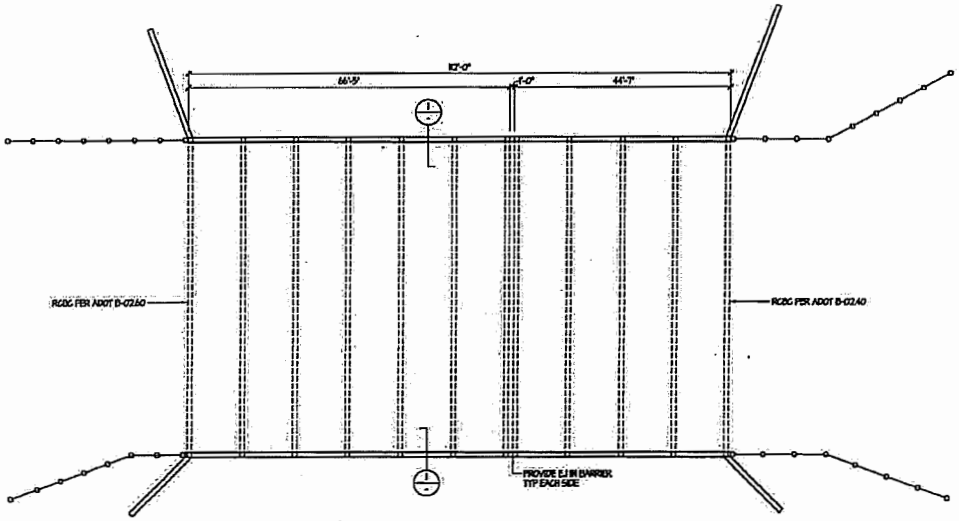
1. REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615, GRADE 60 FOR #3 BARS AND SMALLER AND GRADE 60 FOR #4 BARS AND LARGER UNLESS NOTED OTHERWISE.
2. ALL REINFORCING STEEL SHALL BE ACCURATELY PLACED, ANCHORED, AND SUPPORTED BY CHAIRS, SPACERS, POSTSIONERS OR BANDERS.
3. ALL REINFORCING IN CONCRETE SHALL BE CONTINUOUS OR LAPTED AS PER ACI 318. IF SPLICING OF THE BARS IS REQUIRED, NO MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE LOCATION. ALL BAR SPLICE LOCATIONS AND DETAILS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.
4. UNLESS NOTED OTHERWISE, LAP SPLICES SHALL BE CLASS "B". TUCSON LAP SPLICES PER LATEST EDITION OF ACI 318. STAGGER ALTERNATE SPLICES A MINIMUM OF ONE LAP LENGTH.

SPECIAL INSPECTION PROGRAM

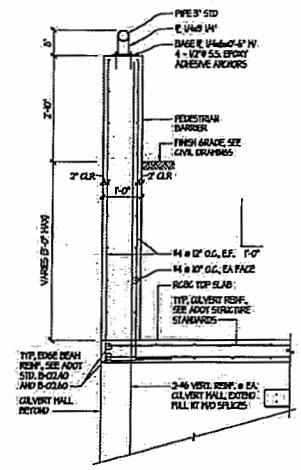
THIS SPECIAL INSPECTION PROGRAM IS PROVIDED IN CONFORMANCE WITH IBC SECTION 1704. SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE DEPARTMENT OF BUILDING SAFETY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR CONTRACTOR FROM REQUESTING THE INSPECTIONS REQUIRED BY IBC SECTION 109.

THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER, THE ENGINEER OF ARCHITECT OF RECORD, OR AN AGENT OF THE OWNER, BUT NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK.

1. SPECIAL INSPECTION SHALL BE PROVIDED FOR THE FOLLOWING WORK:
   A. CONCRETE AND REINFORCING STEEL.
2. NAME OF SPECIAL INSPECTOR:
   FOR STRUCTURAL ITEMS ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF, THE STRUCTURAL ENGINEER OF RECORD — STRUCTURAL CONCEPTS INC., PHONE NO. (520) 721-7241. THE OWNER, AT HIS OPTION, MAY DESIGNATE AN ALTERNATE SPECIAL INSPECTOR, OBTAIN THE REQUIRED CERTIFICATION, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. ALTERNATE SPECIAL INSPECTOR SHALL BE A LICENSED STRUCTURAL ENGINEER OR ICBO CERTIFIED SPECIAL INSPECTOR.
3. DUTIES OF SPECIAL INSPECTOR:
   OBSERVE FIELD CONDITIONS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AND THE BUILDING OFFICIAL. PREPARE FIELD REPORTS DAILY. FIELD REPORTS SHALL INDICATE, AS A MINIMUM, THE DATE, THE PORTION OF THE WORK THAT WAS INSPECTED, AND ANY UNCORRECTED DISCREPANCIES. UPON COMPLETION OF THE WORK, THE SPECIAL INSPECTION CERTIFICATE SHALL BE COMPLETED AND SEALED BY THE SUPERVISING ENGINEER AND SUBMITTED TO THE BUILDING OFFICIAL ALONG WITH COPIES OF THE FIELD REPORTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE WORKING DAY IN ADVANCE TO SCHEDULE ANY SPECIAL INSPECTION.

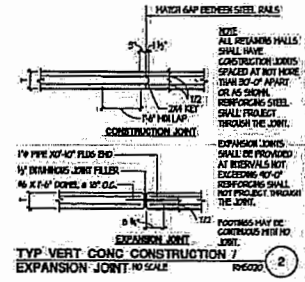


BOX CULVERT KEY PLAN @ ℄ STA 42+73.93 - SYCAMORE LEAF ROAD
SCALE: 3/32" = 1'-0"



NOTE:
AT SM CONDITION, OMIT STEEL HANDRAIL & EXTEND CONC FULL HT

MODIFIED HEADWALL SECTION (1)
NO SCALE — 06174S1

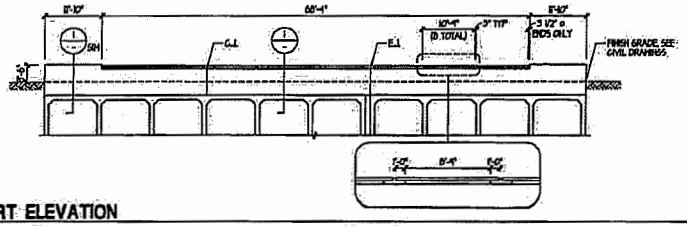


NOTE:
ALL RETAINING WALLS SHALL HAVE CONSTRUCTION JOINTS SPACED AT NOT MORE THAN 30'-0" APART OR AS SHOWN. REINFORCING STEEL SHALL PROJECT THROUGH THE JOINT.

EXPANSION JOINTS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 40'-0" REINFORCING SHALL NOT PROJECT THROUGH THE JOINT.

FOOTINGS MAY BE CONTINUOUS WITH NO JOINT.

TYP VERT CONC CONSTRUCTION / EXPANSION JOINT NO SCALE (2)
RHS020



NOTE:
WING WALLS NOT SHOWN

BOX CULVERT ELEVATION
SCALE: 3/32" = 1'-0"

Approved 05/08/2015
P15S00005

Key Plan, General Structural Notes & Modified Headwalls

Sycamore Canyon Phase II

STRUCTURAL CONCEPTS INC.
CONSULTING ENGINEERS
(520) 721-7241
FAX (520) 721-7242
5330 E. BROADWAY SUITE 147
TUCSON, ARIZONA 85710

Designed by: DRL
Drafted by: RCS
Checked by: DRL

Date: 9/5/06
Project No.: 06-174
Sheet No. S1
Sheet 26A of 26

SCI No. 06174S1 - 128

P15SI00005
Approved 05/08/2015

BASIS OF BEARING

THE TANGENT LINE BETWEEN A ½" REBAR RLS 17479 AND A ½" REBAR RLS 17479 ON THE RIGHT OF WAY LINE OF CANYON EDGE TRAIL. SAID BEARING BEING S27°02'24"E

BASIS OF ELEVATION

A SET ½" REBAR AT THE APPROXIMATE EAST INTERSECTION OF THE SOUTH PROPERTY LINE OF LOT 139 AND THE SOUTH PROPERTY LINE OF LOT 140 OF BLOCK 18. SAID BENCHMARK HAS AN ELEVATION OF 3362.40(GPS)(NAVD88)

SEWER NOTES

1. ALL DESIGN STANDARDS, MATERIALS AND WORKMANSHIP FOR PUBLIC SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWRD) ENGINEERING DESIGN STANDARDS 2012 AND THE STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012. SAID DOCUMENT IS AVAILABLE THROUGH THE PCRWRD WEBSITE (www.pima.gov/wwm/eng/des std.htm).
2. THE CONTRACTOR SHALL CALL "BLUE STAKE" (1-800-782-5348) A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL KEEP ALL "BLUE STAKE" REQUESTS UP-TO-DATE AND COMPLY WITH APPLICABLE ARIZONA REVISED STATUTES (A.R.S.)-TITLE 40, CHAPTER 1, ARTICLE 6.3, SECTION 40-360.22 PERTAINING TO "BLUE STAKE". ERRORS IN "BLUE STAKE" SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. CALL "BLUE STAKE" (1-800-782-5348) A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO EXCAVATING.
4. THE CONTRACTOR SHALL FIELD VERIFY EXISTING SEWER ELEVATIONS AND ALIGNMENTS PRIOR TO CONSTRUCTION AND IMPLEMENTATION; VERIFICATION MAY REQUIRE POT-HOLING.
5. HOUSE OR BUSINESS CONNECTION SEWERS (HCS OR BCS) ARE NOT PART OF THE PUBLIC SANITARY SEWER CONVEYANCE SYSTEM. PRIVATE CONNECTION SEWERS CONSTRUCTED PRIOR TO JANUARY 2006 ARE NOT REQUIRED TO BE BLUE STAKED. ANY HCS/BCS ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED, REPAIRED, OR REROUTED, AS THE SITUATION DICTATES PER PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 MANUAL, DETAIL RWRD 400 AND AT NO EXPENSE TO THE PROPERTY OWNER OR PCRWRD.
6. NO PRIVATE BACKWATER VALVES ARE REQUIRED FOR THIS PROJECT.
7. ANY ACTIVITY THAT MIGHT AFFECT THE SANITARY SEWER SYSTEM (MATERIALS ENTERING THE SYSTEM, CONVEYANCE AND TREATMENT) REQUIRES APPROVAL AND/OR PERMIT BY PCRWRD PRIOR TO THAT ACTIVITY.
8. SEWER CONSTRUCTION SHALL NOT COMMENCE UNTIL: (A) PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY (PCDEQ) HAS ISSUED A CERTIFICATE OF "CONSTRUCTION AUTHORIZATION" FOR THIS PROJECT, (B) THE CONTRACTOR HAS OBTAINED A PUBLIC SEWER CONSTRUCTION PERMIT FROM THE PCRWRD (520-724-6369), AND (C) A PRE-CONSTRUCTION MEETING WITH THE ASSIGNED PIMA COUNTY PROJECT FIELD INSPECTOR IS SCHEDULED AT LEAST THREE (3) FULL WORKING DAYS PRIOR TO THE START OF SEWER CONSTRUCTION. FLOW MANAGEMENT PLANS SHALL BE SUBMITTED TO FIELD ENGINEERING THIRTY (30) DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.
9. THE CONTRACTOR SHALL MAKE FULL PAYMENT OF THE INSPECTION FEES AND OBTAIN A PCRWRD SEWER CONSTRUCTION PERMIT FROM THE PIMA COUNTY SEWER CONSTRUCTION PERMIT SECTION A MINIMUM OF THREE (3) FULL BUSINESS DAYS PRIOR TO COMMENCING ANY SEWER CONSTRUCTION ACTIVITIES. FIVE (5) SETS OF THE CONSTRUCTION PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS (IF APPLICABLE) SHALL BE SUBMITTED WITH THE SANITARY SEWER CONSTRUCTION PERMIT APPLICATION. FIELD ENGINEERING REQUIRES A MINIMUM OF THREE (3) BUSINESS DAYS NOTIFICATION (520-740-2651). NO WORK SHALL BE PERFORMED IN ANY CASE WITHOUT A PCRWRD CONSTRUCTION PERMIT.
10. IMMEDIATELY REPORT ANY RELEASE OF SEWAGE AND/OR ANY DAMAGE TO OR THE DROPPING OF DEBRIS INTO THE PUBLIC SANITARY SEWAGE CONVEYANCE SYSTEM TO EITHER PCRWRD FIELD ENGINEERING (520-740-2651) OR PCRWRD CONVEYANCE DIVISION (520-724-3400). ON WEEKENDS, HOLIDAYS, OR BETWEEN 5:00 P.M. AND 7:00 A.M., CALL PCRWRD CENTRAL CONTROL ROOM (520-443-6048) AND REQUEST A PCRWRD REPRESENTATIVE TO BE DISPATCHED TO THE SITE. CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CONTAIN THE SANITARY SEWAGE OVERFLOW (SSO) FROM THE SEWER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE SYSTEM, FOR ALL EXPENSES TO MITIGATE THE RELEASE AND TO DISINFECT THE RELEASE AREAS AND FOR ANY REGULATORY PENALTIES LEVIED ON PCRWRD BECAUSE THE SSO ENTERED A NATURAL DRAINAGE WAY OR STORM WATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL REPAIR ALL DAMAGE AS DIRECTED AND APPROVED BY PCRWRD.
11. THE INSPECTION OF THE CONTRACTOR'S WORK BY AN AGENCY AND/OR PCRWRD STAFF SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONSTRUCTION PLANS AND/OR SPECIFICATIONS. IF THE ENGINEER OF RECORD OR PCRWRD STAFF FAIL TO POINT OUT A DEFECT, DEFICIENCY, OR ERROR IN THE WORK FROM LACK OF DISCOVERY OR FOR ANY OTHER REASON, IT SHALL IN NO WAY PREVENT LATER REJECTION OR RELIEVE THE CONTRACTOR OF PERFORMING CORRECTIONS TO THE UNSATISFACTORY WORK WHEN DISCOVERED. THE CONTRACTOR SHALL NOT FILE A CLAIM FOR LOSSES SUFFERED DUE TO ANY NECESSARY REMOVALS OR REPAIRS RESULTING FROM THE UNSATISFACTORY WORK.
12. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AT ALL TIMES AND PCRWRD MANHOLE ENTRY GUIDELINES.
13. ALL ROUGH GRADING, INCLUDING FILL, SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF SANITARY SEWERS TO A MINIMUM OF 4 FEET OVER THE TOP OF THE SEWER PIPE AND COMPACTION AS INDICATED ON THE PLANS OR AS OTHERWISE DIRECTED BY PCRWRD.
14. BEDDING, SHADING, AND TRENCH BACKFILL COMPACTION SHALL BE IN ACCORDANCE WITH DETAIL RWRD 104, OR AS SHOWN ON THE PLANS. SHOULD GROUNDWATER OR UNANTICIPATED SOIL CONDITIONS BE ENCOUNTERED, THE BEDDING SHALL BE MODIFIED BY THE ENGINEER OF RECORD AND APPROVED BY PCRWRD.
15. SANITARY SEWER CONSTRUCTION SHALL START AT THE LOWEST DOWNSTREAM POINT AND PROGRESS UPSTREAM, REGARDLESS OF THE STATIONING SHOWN ON THE PLANS. IF NOT, THE CONTRACTOR SHALL PROVIDE AN OUT OF SEQUENCE LETTER FOR APPROVAL BY PCRWRD.
16. THE HORIZONTAL AND VERTICAL SEPARATION BETWEEN PUBLIC WATER MAINS AND PUBLIC SEWER LINES SHALL COMPLY WITH A.A.C. R18-5-502 AND DETAIL RWRD 106.
17. NEW PUBLIC SEWER FACILITIES MUST BE TESTED, INSPECTED, AND AUTHORIZED FOR DISCHARGE BY PCRWRD AND PCDEQ PRIOR TO DISCHARGING INTO THE EXISTING PUBLIC SANITARY SEWER.
18. AS-BUILT SEWER PLANS ARE REQUIRED FOR FINAL ACCEPTANCE OF SEWER CONSTRUCTION BY PCRWRD AND SHALL CONFORM TO SUBSECTION 1.4.7 OF THE PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012. SUBMIT THREE BLACK LINE COPIES AND AN ELECTRONIC VERSION TO THE PCRWRD FIELD ENGINEER.

RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
J-34327

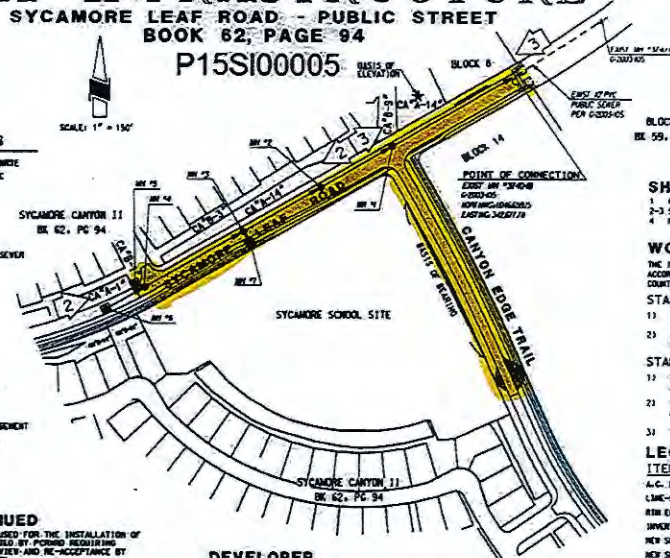
© 2015 Rick Engineering Company

CALL FOR BLUE STAKES
1-800-782-5348
Blue Stake Center
CALL COLLECT

PUBLIC SEWER IMPROVEMENT PLANS FOR
SYCAMORE CANYON II PHASE IIAA INFRASTRUCTURE

SYCAMORE LEAF ROAD - PUBLIC STREET
BOOK 62, PAGE 94

P15SI00005



LIST OF ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
AC	ASPHALTIC CONCRETE
BWV	BACK WATER VALVE
DKT	DOCKET
FL	FLOW LINE
FND	FOUND
G	GAS MAIN
HCS	HOUSE CONNECTION SEWER
IE	INVERT
LAT	LATITUDE
LF	LINEAR FOOT
LONG	LONGITUDE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
N/A	NOT APPLICABLE
OHE	OVERHEAD ELECTRIC
PG	PAGE
PL	PROPERTY LINE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
RT	RIGHT

SEWER NOTES - CONTINUED

19. ONLY PLANS ACCEPTED BY PCRWRD SHALL BE USED FOR THE INSTALLATION OF SANITARY SEWER FACILITIES. PLANS ACCEPTED BY PCRWRD REQUIRING REVISION SHALL BE RESUBMITTED FOR RE-REVIEW AND RE-ACCEPTANCE BY PCRWRD PRIOR TO START OF THE REVISED WORK.
20. SEWER CONSTRUCTION WILL NOT BE ACCEPTED BY PCRWRD IF IT INCLUDES ADDITIONAL WORK NOT PROVIDED IN THE APPROVED SET OF PLANS. SEE SUBSECTION 1.4.5 OF THE PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 REGARDING THE APPROVAL OF FIELD CHANGES.
21. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SANITARY SEWER MANHOLE STRUCTURES AT ALL TIMES.
22. ALL LANDSCAPING LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF THE PUBLIC SANITARY SEWER AND MANHOLES AND/OR WITHIN THE PUBLIC SEWER EASEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH THE PLANTING GUIDELINES CONTAINED WITHIN PCRWRD ENGINEERING DESIGN STANDARDS 2012 MANUAL, SECTION 7.7.
23. ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES SHALL BE INSTALLED SO AS TO PREVENT ALL STORM WATER, CONSTRUCTION WATER, FUELS, CHEMICALS, OR LIQUIDS TO BE DIRECTED INTO OR ONTO ANY SANITARY SEWER FACILITIES. PROTECTION OF SANITARY SEWER FACILITIES SHALL BE A PART OF THE APPROVED CONSTRUCTION SWPPP AND BEST MANAGEMENT PRACTICES. PROTECTION DEVICES SHALL BE INSTALLED AND MAINTAINED AROUND ALL POTENTIALLY AFFECTED SANITARY SEWER FACILITIES WITHIN THE PROJECT LIMITS. ADDITIONAL MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO THE USE OF RAIN STOPPERS AND MANHOLE COVERS AS DEEMED NECESSARY BY PCRWRD.
24. ALL PROJECT ACTIVITIES MUST BE KEPT WITHIN THE PROJECT AREAS. CAUTION MUST BE NOTED CONCERNING HUMAN BURIALS. ARCHAEOLOGICAL CLEARANCE RECOMMENDATIONS DO NOT EXEMPT THE DEVELOPMENT FROM COMPLIANCE WITH STATE BURIAL PROTECTION LAWS. IN THE EVENT THAT HUMAN REMAINS, INCLUDING HUMAN SKELETAL REMAINS, CREMATIONS, AND/OR CEREMONIAL OBJECTS AND FUNERARY OBJECTS ARE FOUND DURING EXCAVATION OR CONSTRUCTION, GROUND DISTURBING ACTIVITIES MUST CEASE IN THE IMMEDIATE VICINITY OF THE DISCOVERY. STATE LAWS ARS 41-865 AND ARS 41-844 REQUIRE THAT THE ARIZONA STATE MUSEUM BE NOTIFIED OF THE DISCOVERY AT (520-621-4795) SO THAT CULTURAL GROUPS WHO CLAIM CULTURAL OR RELIGIOUS AFFINITY TO THEM CAN MAKE APPROPRIATE ARRANGEMENTS FOR THE REPATRIATION AND REBURIAL OF THE REMAINS. THE HUMAN REMAINS WILL BE REMOVED FROM THE SITE BY A PROFESSIONAL ARCHAEOLOGIST PENDING CONSULTATION AND REVIEW BY THE ARIZONA STATE MUSEUM AND THE CONCERNED CULTURAL GROUPS.
25. SURVEY CUT SHEETS SHALL BE DEVELOPED IN ACCORDANCE WITH SUBSECTION 3.2.3(A)(I) OF THE PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012. CERTIFIED CUT SHEETS SHALL BE SUBMITTED TO THE PCRWRD FIELD ENGINEER PRIOR TO COMMENCEMENT OF SEWER CONSTRUCTION. THE CUT SHEETS ARE FOR THE PROJECT FILE AND COMMENCEMENT OF SEWER CONSTRUCTION WILL NOT BE DELAYED DUE TO REVIEW OF THE DELIVERABLE. ANY ERRORS OR OMISSIONS RESULTING IN IMPROPER SEWER CONSTRUCTION SHALL NOT BE THE RESPONSIBILITY OF PCRWRD. REFER TO THE PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 SUBSECTION 3.2.3(A)(II) FOR ALIGNMENT VERIFICATION REQUIREMENTS INCLUDING THE SPACING REQUIREMENTS FOR GRADE STAKES.

SEWER NOTES - CONTINUED ON SHEET 4

DEVELOPER

VAIL SCHOOL DISTRICT No. 20
13801 EAST BENSON HIGHWAY
VAIL, ARIZONA 85641
(520) 879-2000
CONTACT: AL FLORES

OWNER

FIDELITY NATIONAL TITLE AGENCY, INC.
AN ARIZONA CORPORATION
TRUST NO. 60636
6245 EAST BROADWAY BLVD., SUITE 180
TUCSON, ARIZONA 85711
CONTACT: MARTHA L. HILL
PHONE: (520) 290-6227

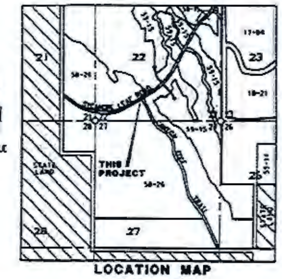
AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT ANNOTATIONS" PROVIDED ON THIS DRAWING WERE BASED ON AN AS-BUILT SURVEY CONDUCTED UNDER MY SUPERVISION AND ACCURATELY DEPICTS EXISTING FIELD CONDITIONS TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR ____________ DATE

REGISTRATION NUMBER ____________ EXPIRES ____________

NO.	BY	DATE	REVISION



SCALE: 1" = 2 MILE

LOCATION MAP

SECTIONS 21, 22, 27 & 28
T 17 S, R 15 E
G & SRM
PIMA COUNTY, ARIZONA

SHEET INDEX

1 COVER SHEET
2-3 SEWER PLAN & PROFILE
4 NOTES & DETAILS

WORK TO BE DONE

THE IMPROVEMENTS AND GRADING CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND SPECIFICATIONS AND STANDARD DETAILS OF PIMA COUNTY AND THE CITY OF TUCSON.

STANDARD SPECIFICATIONS

1) STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (2003 EDITION), PIMA COUNTY AND CITY OF TUCSON.
2) STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (2012) EDITION) PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT.

STANDARD DETAILS/DRAWINGS

1) STANDARD DETAILS FOR PUBLIC IMPROVEMENTS (2003 EDITION), PIMA COUNTY AND CITY OF TUCSON.
2) STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (2012 EDITION), PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT.
3) THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION.

LEGEND

ITEM	STANDARD DETAIL	SYMBOL
A.C. PAVING	(FOR REFERENCE ONLY)	
LIME-STABILIZED SURFACE	RWRD 111	
RIM ELEVATION		RIM 45.00
INVERT ELEVATION		IE 40.00
NEW SEWER	TRENCHING PER RWRD 104	
NEW SEWER MANHOLE	RWRD 205	
NEW MH W/CONC COLLAR	RWRD 205, RWRD 212	
STORM DRAIN	(FOR REFERENCE ONLY)	
STORM DRAIN W/MH	(FOR REFERENCE ONLY)	
NEW WATERLINE W/VALVE	(FOR REFERENCE ONLY)	
NEW ELECTRIC LINE	(FOR REFERENCE ONLY)	
DETAIL REFERENCE	A = DETAIL IDENTIFICATION 1 = SHEET SHOWING DETAIL	
NEW SURVEY MONUMENT	(FOR REFERENCE ONLY)	
EXIST SEWER AND MANHOLE		
EXIST WATERLINE W/VALVE		
EXIST CURB & PAVEMENT		
PROJECT BOUNDARY		
EXIST ROW LINE		
ROW CENTERLINE		
TRICO TRANSFORMER	(FOR REFERENCE ONLY)	
TRICO PEDESTAL	(FOR REFERENCE ONLY)	
PHASE LINE		
SHEET INDEX		3

G-2015-022

G-2015-022
Ref: G-2005-097 (expired)

P15SI00005

PUBLIC SEWER IMPROVEMENT PLANS PREPARED FOR:

SYCAMORE CANYON II PHASE IIAA INFRASTRUCTURE

SYCAMORE LEAF ROAD

HORIZ: 1" = 150'	VERT: N/A	PROJ# 34327
DESIGNER: BMC 2/15	ENGINEER: PJ1 2/15	SHEET:
DRAFTER: PAD 2/15	CHECKED:	1 OF 4

\\srv_tuc\Rick\Standards\Bentley_2006\workspace\projects\rec_v7_stds_TUC\iplot\SIO.pen
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16-APR-2015 15:23

SYCAMORE CANYON II
BK 62; PG 94

CA "B-1"
CA "A-1"
CA "A-14"
CA "B-14"
CA "B-14"
214
215
BLOCK 1
ELEMENTARY SCHOOL SITE

MATCH LINE - STA 39+00.00
SEE SHEET 3

SCALE: 1" = 40'
CONTOUR INTERVAL = 1'

KEYNOTES

1. CONCRETE COLLAR PER SD RWD 212
2. FUTURE FORCE MAIN CONNECTION PER SD RWD 502
3. ADJUST MANHOLE RIM TO NEW ELEVATION PER SD RWD 305
4. COATED MANHOLE PER COATING SPECS SHEET 4
5. COUPLING FOR MANHOLE MATERIALS PER SD RWD 103

SCALE: 1" = 40'
CONTOUR INTERVAL = 1'

NOTE: ALL STATIONING IS ALONG ℄ OF RIGHT-OF-WAY.

NOTE: SEE SHEET 4 FOR MANHOLE AS-BUILT DATA.

SYCAMORE LEAF ROAD
(PUBLIC STREET)

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

3370 3360 3360 3350 3350

MATCH LINE - STA 31+00.00
SEE SHEET 3

SEWER PROFILE

G-2015-022
Ref: G-2005-097 (expired)

PUBLIC SEWER IMPROVEMENT PLANS PREPARED FOR:

SYCAMORE CANYON II PHASE IIAA INFRASTRUCTURE

SYCAMORE LEAF ROAD

P1205-125

RICK ENGINEERING COMPANY

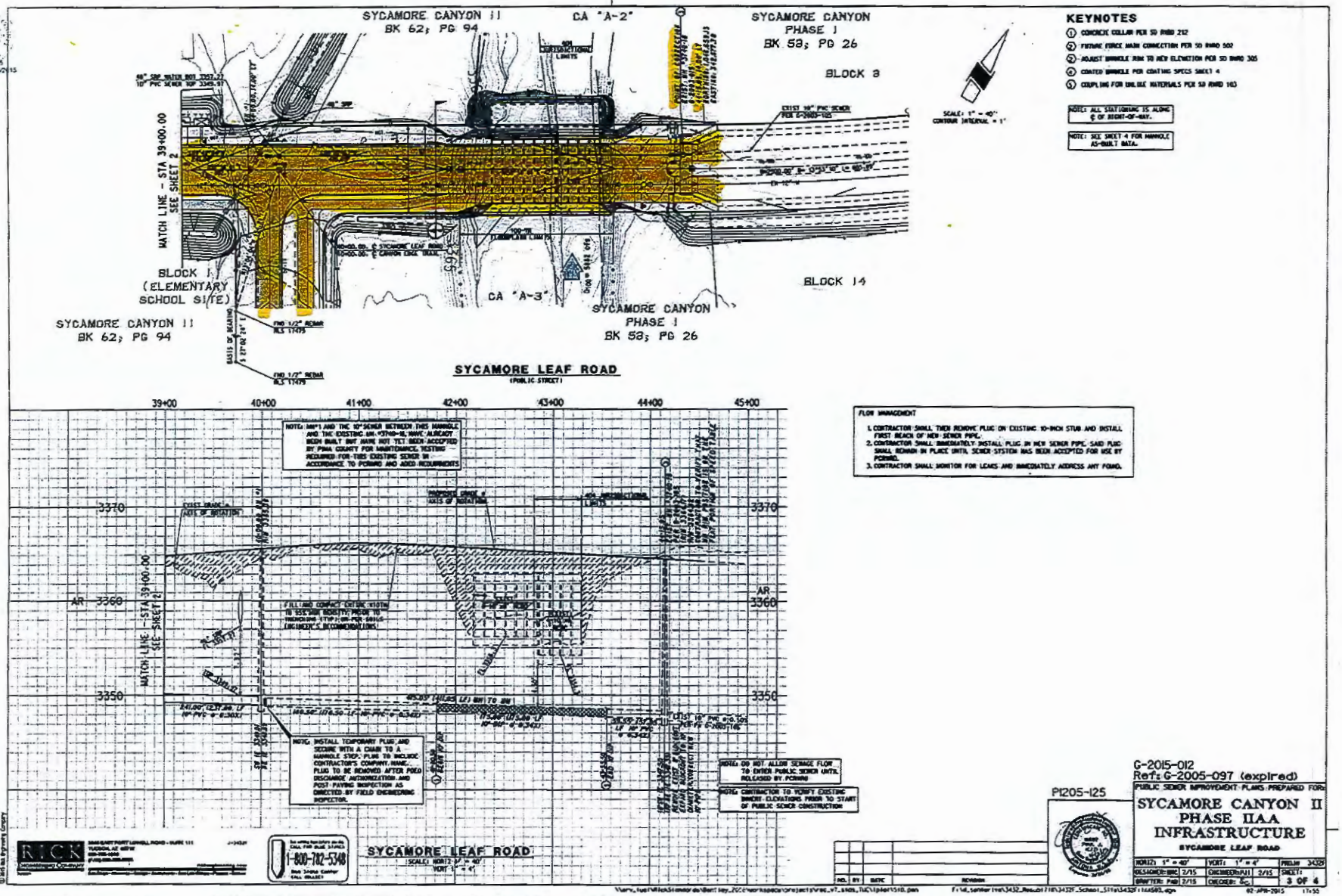
1-800-782-5348

SYCAMORE LEAF ROAD
SCALE: HORIZ.: 1" = 40'
VERT.: 1" = 4'

NO.	BY	DATE	REVISION

HORIZ: 1"=40'	VERT: 1"=4'	PROJ#: 3432F	
DESIGNER: BMC 2/15	ENGINEER: PJI 2/15	SHEET: 2 OF 4	
DRAFTER: PHD 2/15	CHECKED:		

16-APR-2015 15:27



KEYNOTES

1. CONCRETE COLLAR PER SD RWD 212
2. FUTURE FORCE MAIN CONNECTION PER SD RWD 502
3. ADJUST MANHOLE RIM TO NEW ELEVATION PER SD RWD 305
4. COATED MANHOLE PER COATING SPECS SHEET 4
5. COUPLING FOR UNLIKE MATERIALS PER SD RWD 103

NOTE: ALL STATIONING IS ALONG ℄ OF RIGHT-OF-WAY.

NOTE: SEE SHEET 4 FOR MANHOLE AS-BUILT DATA.

NOTE: MH#1 AND THE 10" SEWER BETWEEN THIS MANHOLE AND THE EXISTING MH #37940-01 HAVE ALREADY BEEN BUILT BUT HAVE NOT YET BEEN ACCEPTED BY PIMA COUNTY FOR MAINTENANCE. TESTING REQUIRED FOR THIS EXISTING SEWER IN ACCORDANCE TO PCRWRD AND ADEQ REQUIREMENTS

FILL AND COMPACT EXTERIOR TRENCH TO 95% OF MODIFIED PROCTOR INCLUDING TYPICAL ON-SITE SOILS (GEOTECH'S RECOMMENDATIONS)

NOTE: INSTALL TEMPORARY PLUG AND SECURE WITH A CHAIN TO A MANHOLE STEP. PLUG TO INCLUDE CONTRACTOR'S COMPANY NAME. PLUG TO BE REMOVED AFTER POTABLE DISCHARGE AUTHORIZATION AND POST-PAVING INSPECTION AS DIRECTED BY FIELD ENGINEERING INSPECTOR.

NOTE: DO NOT ALLOW SEWAGE FLOW TO ENTER PUBLIC SEWER UNTIL RELEASED BY PCRWRD

NOTE: CONTRACTOR TO VERIFY EXISTING SEWER ELEVATIONS PRIOR TO START OF PUBLIC SEWER CONSTRUCTION

FLOW MANAGEMENT

1. CONTRACTOR SHALL THEN REMOVE PLUG ON EXISTING 10-INCH STUB AND INSTALL FIRST REACH OF NEW SEWER PIPE.
2. CONTRACTOR SHALL IMMEDIATELY INSTALL PLUG IN NEW SEWER PIPE. SAID PLUG SHALL REMAIN IN PLACE UNTIL SEWER SYSTEM HAS BEEN ACCEPTED FOR USE BY PCRWRD.
3. CONTRACTOR SHALL MONITOR FOR LEAKS AND IMMEDIATELY ADDRESS ANY FOUND.

G-2015-012
Ref: G-2005-097 (expired)

P1205-125

PUBLIC SEWER IMPROVEMENT PLANS PREPARED FOR:

SYCAMORE CANYON II PHASE IIAA INFRASTRUCTURE

SYCAMORE LEAF ROAD

HORIZ: 1" = 40'	VERT: 1" = 4'	PRELIM 34329	
DESIGNED: BRC 2/15	ENGINEER: PJU 2/15	SHEET: 3 OF 4	
DRAFTER: PMD 2/15	CHECKER:		

02-APR-2015 17:55

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P15SI00005
Approved 05/08/2015

SEWER NOTES - CONTINUED

26. SURVEY LAYOUT AND SURVEY CONTROL SHALL BE PERFORMED BY, OR UNDER THE DIRECT SUPERVISION OF, A REGISTERED LAND SURVEYOR (RLS) REGISTERED IN THE STATE OF ARIZONA. PRIOR TO THE START OF SURVEY ACTIVITIES, THE INDIVIDUAL OR COMPANY RESPONSIBLE FOR SURVEY LAYOUT AND CONTROL SHALL CONTACT THE PIMA COUNTY DEPARTMENT OF TRANSPORTATION, SURVEY SECTION, DANIEL TREMBLAY, RLS, SURVEY MANAGER (520-740-2629) TO ARRANGE A MEETING TO REVIEW SURVEY CONTROL (HORIZONTAL AND VERTICAL) TO BE UTILIZED ON THE PROJECT.

27. MANHOLE SURFACES THAT REQUIRE INTERIOR CORROSION PROTECTION SHALL BE CAULKED, SEALED AND COATED PER PCRWRD ENGINEERING DESIGN STANDARDS 2012 MANUAL, SECTION 5.2.16, AND STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 MANUAL, SECTION 3.3.3(viii).

28. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADJUST OR RECONSTRUCT ALL SANITARY SEWER MANHOLES TO FINISHED GRADE. ALL FRAMES AND COVER ADJUSTMENTS ARE TO BE IN ACCORDANCE WITH PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 MANUAL, DETAILS RWRD 211, 212, 304 OR RWRD 305 (AS APPLICABLE) AND DETAIL RWRD 306. WHILE ADJUSTING THE MANHOLE TO FINISHED GRADE IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT FRAMES AND COVERS ARE CLEANED OF ANY AND ALL ATTACHED MATERIALS (ASPHALT, CONCRETE, ETC.) AND THAT ANY VENT HOLES ARE OPEN AND CLEAR OF OBSTRUCTIONS. IF THE FRAME AND COVER ARE DAMAGED OR CANNOT BE COMPLETELY CLEANED A NEW FRAME AND COVER ARE TO BE PUT INTO PLACE. COSTS ASSOCIATED WITH THESE ACTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR. REFER TO PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 MANUAL, DETAILS RWRD 213 - 218 FOR FRAME AND COVER REQUIREMENTS.

29. THIS PUBLIC SEWER SYSTEM IS DESIGNED AT MINIMUM ALLOWABLE PIPE SLOPE. SPECIAL CARE SHOULD BE TAKEN TO ASSURE DESIGN SLOPE IS MAINTAINED. SEWERS FOUND TO BE CONSTRUCTED AT INSUFFICIENT SLOPES WILL NOT BE ACCEPTED BY PCRWRD AND/OR PCDEQ. CORRECTIVE ACTION, INCLUDING RE-CONSTRUCTION OF THE SEWER(S) AT THE SOLE EXPENSE OF THE PROJECT OWNER/CONTRACTOR WILL BE REQUIRED. AS-BUILT PLANS SHALL BE REQUIRED FOR ALL NEW PUBLIC SEWERS PRIOR TO FINAL ACCEPTANCE.

MANHOLE COATING NOTES

MANHOLE BENCH, CHANNEL AND COVER COATING SPECIFICATIONS
(ASSUMING THAT PVC LINING WILL BE USED ON THE MANHOLE WALLS)

1. ALL EXPOSED METAL ON THE EXISTING MANHOLES (EXCEPT THE TOP OF THE MANHOLE COVER) SHALL RECEIVE AN SSPC-SP5 WHITE METAL BLAST CLEANING AND THE FOLLOWING COATINGS:

   A. ONE OR MORE COATS OF SUPERIOR ENVIRONMENTAL PRODUCTS SP2000R, ENVIRO-COTE 120, SEWER SHIELD 101A, OR OTHER APPROVED COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE TOTAL DRY FILM COATING THICKNESS SHALL BE 16 TO 20 MILS IN DRY FILM THICKNESS. THE COLOR OF THE FINAL COAT SHALL BE CHARCOAL GRAY, WHITE OR OTHER APPROVED COLOR. AFTER ALL COATS HAVE BEEN APPLIED, THE AREA WHERE THE SP2000R, ENVIRO-COTE 120, SEWER SHIELD 101A OR OTHER APPROVED COATING WAS APPLIED SHALL BE CHECKED FOR HOLIDAYS UTILIZING A TESTING VOLTAGE OF 67 ½ VOLTS WITH A WET SPONGE AND A CERTIFICATION ISSUED STATING THAT THERE ARE NONE.

2. THE SP2000R, ENVIRO-COTE 120, SEWER SHIELD 101A, SEWER SHIELD 1015, SL100 OR OTHER APPROVED COATINGS SHALL BE APPLIED BY A COATING APPLICATOR WHO SPECIALIZES IN APPLYING COATINGS AND IS QUALIFIED TO APPLY THE NOTED COATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

   A. THE COATING APPLICATOR MUST HAVE A MINIMUM OF THREE (3) YEARS EXPERIENCE IN APPLYING EITHER THE SPECIFIED COATING OR AN EQUIVALENT COATING. THEY SHALL SUBMIT A SUCCESSFUL PERFORMANCE HISTORY FOR THE APPLICATION OF EITHER THE SPECIFIED COATING OR A SIMILAR COATING IN THE WASTEWATER INDUSTRY OR EQUIVALENT FOR THE PREVIOUS THREE (3) YEARS.

   B. THE COATING APPLICATOR SHALL BE AN ARIZONA LICENSED CONTRACTOR WITH AN AE LICENSE OR EQUIVALENT.

   C. THE COATING APPLICATOR SHALL SUBMIT A MANUFACTURER'S CERTIFICATION TO APPLY THE COATING SPECIFIED HEREIN.

   D. THE COATING APPLICATOR SHALL SUBMIT THREE (3) REFERENCES RELATING TO THE QUALITY OF WORKMANSHIP PERFORMED ON OTHER PROJECTS USING THE SAME COATING BEING PROPOSED OR AN EQUIVALENT COATING.

   E. THE COATING APPLICATOR SHALL SUPPLY THREE (3) YEAR'S WORTH OF BONDING OR APPROVED ALTERNATE, PAYABLE TO THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWRD), FOR THE COATING THAT IS APPROVED BY PCRWRD AND IS APPLIED TO ANY PART OF THE MANHOLE EXCEPT FOR THE MANHOLE COVER AND FRAME. NO BOND OR WARRANTY WILL BE REQUIRED FOR THE COATING THAT IS TO BE APPLIED TO THE MANHOLE FRAME AND COVER. THE 3-YEAR BONDING OR APPROVED ALTERNATE SHALL COVER BOTH THE MATERIAL COSTS AND THE LABOR COSTS ASSOCIATED WITH INSTALLING THE APPROVED COATING. THE BOND SHALL ALSO BE UNCONDITIONAL IN NATURE COVERING ANY TYPE OF FAILURE IN THE COATING AND AGREEING TO REPAIR OR REPLACE IT AT NO COST TO PCRWRD AT ANY POINT DURING THIS THREE YEAR PERIOD. THE COATING APPLICATOR SHALL ALSO SUPPLY A WARRANTY FROM THE COATING MANUFACTURER ADDRESSED TO THE BONDING COMPANY AND PCRWRD. THIS WARRANTY SHALL STATE, AT A MINIMUM, THAT IF THE COATING IS APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, THAT THE COATING WILL NOT FAIL FOR A PERIOD OF THREE YEARS WHILE THE COATING IS IMMERSED IN EITHER AN ACIDIC OR AN ALKALINE SOLUTION THAT IS MAINTAINED AT A TEMPERATURE OF 85 DEGREES FAHRENHEIT. THE ACIDIC SOLUTION IS A 10% BY WEIGHT CONCENTRATION OF SULFURIC ACID AND THE ALKALINE SOLUTION IS A 25% BY WEIGHT CONCENTRATION OF SODIUM HYDROXIDE. THE DEFINITION OF A COATING FAILURE IS THAT BLISTERING, CRACKING, EMBRITTLEMENT OR SOFTENING OF THE COATING IS STARTING TO OCCUR.

3. THE JOINT BETWEEN THE MANHOLE FRAME AND THE MANHOLE WALLS AND THE JOINT BETWEEN THE MANHOLE WALLS AND THE BENCH SHALL BE CAULKED USING SUPERIOR ENVIRONMENTAL PRODUCTS ER-1500R, SEWER SHIELD CAULK OR OTHER APPROVED CAULKING MATERIAL. ALL APPLICATIONS SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4. ALL MANHOLE STEPS SHALL BE CAULKED TO SEAL THE CRACK THAT EXISTS BETWEEN THE MANHOLE STEP AND THE MANHOLE WALL. THE CAULKING SHALL BE APPROVED BY THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT PRIOR TO BEING USED BY THE CONTRACTOR.

5. ALL WET ABRASIVE BLASTING, ALL DRY ABRASIVE BRUSH-OFF BLASTING AND ALL DRY ABRASIVE BLASTING OF METAL PARTS THAT WILL BE USED ON THIS CONSTRUCTION PROJECT WILL BE DONE IN THE PRESENCE OF A PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT INSPECTOR. ALL DRY ABRASIVE BLASTING SHALL BE DONE WITH ONLY COPPER SLAG.

MANHOLE COATING NOTES - CONTINUED

6. ALL NEW MANHOLE CHANNELS AND BENCH AREAS THAT HAVE BEEN CONSTRUCTED OVER A NEW OR EXISTING SEWER LINE SHALL BE CLEANED AND COATED TO RESIST CORROSION. THIS SHALL BE ACCOMPLISHED BY COATING THE MANHOLE CHANNELS AND MANHOLE BENCH AREAS WITH A ¼ OF AN INCH MINIMUM DRY FILM THICKNESS COATING OF SEWER SHIELD 100, SEWER SHIELD 101A, SEWER SHIELD 1015, SL100 OR OTHER APPROVED COATING AFTER ENVIRONMENTAL COATINGS C-120 OR OTHER APPROVED UNDERLAYMENT, CONTAINING CALCIUM ALUMINATE, HAS BEEN USED TO FILL ALL CRACKS OR VOIDS AND TO PROVIDE A SMOOTH CONCRETE SURFACE. THE SEWER SHIELD 100, SEWER SHIELD 101A, SEWER SHIELD 1015, SL100 ENVIRONMENTAL COATINGS C-120, OR OTHER APPROVED COATINGS AND UNDERLAYMENTS ARE TO BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS USING A TROWEL. THE FINAL COATING THAT WILL BE APPLIED TO THE BENCH SHALL NOT BE BACKROLLED TO RETAIN THE ROUGHER SURFACE. THE TROWEL MARKS AND OTHER MINOR SURFACE IRREGULARITIES SHALL BE REMOVED (EXCEPT FOR THE BENCH AREA) BY USING A SHORT NAP MOHAIR PAINT ROLLER. THE SHORT NAP MOHAIR ROLLER SHOULD BE DAMPENED WITH WATER AND THE EXCESS WATER SHAKEN OFF PRIOR TO USE. AFTER THE SEWER SHIELD 100, SEWER SHIELD 101A, SEWER SHIELD 1015, SL100 OR OTHER APPROVED COATING HAS BEEN APPLIED ON ALL SPECIFIED AREAS, ALL AREAS SHALL BE CHECKED FOR HOLIDAYS UTILIZING A MINIMUM TESTING VOLTAGE OF 17,000 VOLTS WITH A DRY CONDUCTIVE PROBE AND A CERTIFICATION ISSUED STATING THAT THERE ARE NONE. HOWEVER, ALL CONCRETE SURFACES THAT HAVE BEEN CURED WITH CONVENTIONAL CURING COMPOUNDS OR COULD BE CONTAMINATED WITH FORM OILS, GREASE, OR OTHER SUBSTANCES MUST BE SCARIFIED (AND IF NEEDED, CHEMICALLY CLEANED) TO REMOVE THE CONTAMINANTS PRIOR TO BEGINNING THE SPECIFIED SURFACE PREPARATION. ALL NEW CONCRETE IN THE MANHOLE BENCH AREA AND CHANNEL SHALL RECEIVE A DRY ABRASIVE BRUSH-OFF BLASTING USING A MINIMUM PRESSURE OF 90 P.S.I. TO LIGHTLY ABRADE THE SURFACE AND OPEN UP SUBSURFACE HOLES AND VOIDS AND ETCH THE SURFACE SUFFICIENTLY (TO APPROXIMATELY A 60 GRIT SANDPAPER TEXTURE) TO ALLOW THE COATING TO BOND SATISFACTORILY. FINALLY, SPRAY APPLICATION OF COATINGS WILL ALSO BE ALLOWED IF THE SPRAY EQUIPMENT BEING PROPOSED COMPLIES WITH THE COATING MANUFACTURER'S RECOMMENDATIONS.

7. THE PVC T-RIB LINING OR OTHER APPROVED LINING SHALL BE INSTALLED BY A LINING INSTALLER WHO SPECIALIZES IN INSTALLING LININGS AND IS QUALIFIED TO INSTALL THE NOTED LINING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

   A. THE LINING INSTALLER MUST HAVE A MINIMUM OF THREE (3) YEARS EXPERIENCE IN INSTALLING EITHER THE SPECIFIED LINING OR AN EQUIVALENT LINING. THEY SHALL SUBMIT A SUCCESSFUL PERFORMANCE HISTORY FOR THE INSTALLATION OF EITHER THE SPECIFIED LINING OR A SIMILAR LINING IN THE WASTEWATER INDUSTRY OR EQUIVALENT FOR THE PREVIOUS THREE (3) YEARS.

   B. THE LINING INSTALLER SHALL BE AN ARIZONA LICENSED CONTRACTOR WITH AN AE LICENSE OR EQUIVALENT.

   C. THE LINING INSTALLER SHALL SUBMIT A MANUFACTURER'S CERTIFICATION TO INSTALL THE LINING SPECIFIED HEREIN.

   D. THE LINING INSTALLER SHALL SUBMIT THREE (3) REFERENCES RELATING TO THE QUALITY OF WORKMANSHIP PERFORMED ON OTHER PROJECTS USING THE SAME LINING BEING PROPOSED OR AN EQUIVALENT LINING.

   E. THE LINING INSTALLER SHALL SUPPLY THREE YEAR'S WORTH OF BONDING OR APPROVED ALTERNATE, PAYABLE TO THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWRD), FOR THE LINING THAT IS APPROVED BY PCRWRD. THIS BONDING OR APPROVED ALTERNATE SHALL COVER BOTH THE MATERIAL COSTS AND THE LABOR COSTS ASSOCIATED WITH INSTALLING THE APPROVED LINING. THE BONDING OR APPROVED ALTERNATE SHALL ALSO BE UNCONDITIONAL IN NATURE COVERING ANY TYPE OF FAILURE IN THE LINING AND AGREEING TO REPAIR OR REPLACE IT AT NO COST TO PCRWRD AT ANY POINT DURING THIS THREE YEAR PERIOD. THE DEFINITION OF A LINING FAILURE IS THAT DISBONDMENT OF WELD STRIPS, DISBONDMENT OF PATCHES, BLISTERING, CRACKING, EMBRITTLEMENTS, SIGNIFICANT COLOR CHANGE OR SOFTENING OF THE LINING IS STARTING TO OCCUR.

8. ALL NEW MANHOLES OR EXTENSIONS TO MANHOLES WITH EXISTING PVC T-RIB LINING, SHALL HAVE PVC T-RIB LINING OR APPROVED EQUAL INSTALLED ON THE NEW MANHOLE'S WALLS OR THE EXTENSION'S WALLS. FOR THE PURPOSE OF THIS NOTE, A DIVERSION STRUCTURE WILL BE CONSIDERED A MANHOLE.

9. AN EPOXY PRIMER/SEALER COAT SHALL BE APPLIED TO ALL NEW AND SOME EXISTING CONCRETE SURFACES BEFORE ANY OTHER COATING IS APPLIED. THE EXISTING CONCRETE SURFACES THAT SHALL RECEIVE THE EPOXY PRIMER/SEALER ARE THOSE WHICH HAVE A DIFFERENCE IN TEMPERATURE OF 15 DEGREES FAHRENHEIT OR MORE BETWEEN THE CONCRETE SURFACE AT THE TOP OF THE MANHOLE AND THE CONCRETE SURFACE AT THE BOTTOM OF THE MANHOLE. THE EPOXY PRIMER/SEALER SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

10. ALL EXISTING MANHOLES THAT MUST BE EXTENDED AND DO NOT HAVE EXISTING PVC T-RIB LINING SHALL HAVE ONE OF THE PREVIOUSLY SPECIFIED COATINGS APPLIED TO BOTH THE CONCRETE AND THE STEEL SURFACES. THE EXISTING CONCRETE SURFACE SHALL RECEIVE THE FOLLOWING SURFACE PREPARATION BEFORE A COATING IS APPLIED: ALL EXISTING CONCRETE SURFACES ON THE WALLS, ON THE MANHOLE BENCH AREA AND IN THE CHANNEL SHALL FIRST RECEIVE A WET ABRASIVE BLASTING USING A MINIMUM WATER PRESSURE OF 5000 P.S.I. UNTIL ALL LOOSE AND DETERIORATED CONCRETE HAS BEEN REMOVED. WHEN THE WET ABRASIVE BLASTING HAS BEEN COMPLETED, ALL CONCRETE SURFACES IN THE AREA WHERE THIS BLASTING HAS OCCURRED SHALL BE FLUSHED WITH WATER AT A MINIMUM WATER PRESSURE OF 5000 P.S.I. TO REMOVE ANY RESIDUAL SAND FROM THE ABRASIVE BLASTING OPERATION. IN ADDITION, ONLY SILICA SAND AND WATER MAY BE USED IN THE WET ABRASIVE BRUSH-OFF BLASTING. NEXT, A DRY ABRASIVE BLASTING USING ONLY COPPER SLAG AT A MINIMUM PRESSURE OF 90 P.S.I. SHALL BE DONE TO REMOVE ANY REMAINING DETERIORATED CONCRETE.

11. THE SP2000R, ENVIRO-COTE 120, SEWER SHIELD 100, SEWER SHIELD 101A, SEWER SHIELD 1015 AND SL 100 ARE ALL HYBRID NOVOLAC EPOXY COATINGS. THE ER-1500R AND SEWER SHIELD CAULK ARE BOTH NOVOLAC EPOXY BASED CAULKING MATERIALS.

SEWER GENERAL NOTES

1. ALL NEW PUBLIC SEWER MANHOLES SHALL BE 4'-DIAMETER PER STANDARD DETAIL RWRD 205 UNLESS OTHERWISE NOTED.

GENERAL NOTES

1. CURB RADII ARE MEASURED TO FRONT FACE OF CURB.

2. THE CONTRACTOR AGREES TO PROTECT ALL ADJACENT PROPERTY AND EXISTING IMPROVEMENTS, INCLUDING POSITIVE CONTROL OF EARTH SPILLAGE, CONSTRUCTION WATER, AND RUNOFF WATERS.

3. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

GENERAL NOTES - CONTINUED

4. THE SOILS ENGINEER SHALL OBSERVE, INSPECT, AND TEST ALL EARTHWORK OPERATIONS, INCLUDING, BUT NOT LIMITED TO, CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION AND BACKFILL, AND PLACEMENT AND COMPACTION OF FILL, IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE SOILS REPORT.

5. THE EXISTENCE AND LOCATION OF ANY EXISTING UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS TO PROTECT ANY UTILITY NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COSTS INCURRED AS A RESULT OF DAMAGE TO UTILITIES CAUSED BY HIS OPERATIONS.

6. IF THERE ARE ANY QUESTIONS REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT 795-1000.

7. ALL NOTES SHALL CROSS-APPLY TO ALL CONSTRUCTION DISCIPLINES INVOLVED WITH THIS PROJECT.

8. FACE OF CURB REVEAL IS 6 INCHES UNLESS OTHERWISE SHOWN.

9. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO CONFINE HIS OPERATIONS TO THE GRADING LIMITS SHOWN.

10. WRITTEN PERMISSION SHALL BE OBTAINED IN ADVANCE FOR ANY OFF-SITE GRADING.

11. THE CONTRACTOR SHALL FACILITATE THE WORK OF THE SOILS ENGINEER DURING HIS OBSERVATIONS AND COMPACTION TESTS DURING THE FILLING AND COMPACTING OPERATIONS.

12. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH SURFACE AND UNIFORM CROSS-SECTION. THE SLOPE OF THE EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS SHOWN ON THE PLANS AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPES SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.

13. THE CONTRACTOR SHALL PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEERS. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE, SHALL BE CHARGED TO THE CONTRACTOR.

14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.

15. PRIOR TO THE START OF GRADING, ALL VEGETATION AND OBSTRUCTIONS, AS WELL AS TRASH, SHALL BE REMOVED FROM CUT AND FILL AREAS AND LEGALLY DISPOSED OF OFF-SITE. ANY EXISTING IRRIGATION, DRAINAGE OR UTILITY LINES OR OTHER ABANDONED SUBSURFACE STRUCTURES SHALL BE REMOVED, DESTROYED OR ABANDONED IN COMPLIANCE WITH SPECIFICATIONS OF THE APPROPRIATE BUILDING OFFICE OR THE SOILS ENGINEER. BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED.

16. THE FINAL TEST RESULTS AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED AND SUBMITTED TO THE OWNER. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, DRIVE RING, OR NUCLEAR DENSITY GAUGE.

17. EXISTING MANHOLE RIMS, VALVE COVERS, ETC., TO REMAIN IN PLACE, SHALL BE ADJUSTED TO PROPOSED FINISHED GRADE AND/OR FINISHED SURFACE ELEVATIONS.

18. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COMPLY WITH THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN PREPARED FOR THIS PROJECT.

19. ALL STATIONING IS MEASURED ALONG THE RIGHT-OF-WAY CENTERLINE, UNLESS OTHERWISE NOTED.

20. ALL REMAINING DISTURBED AREAS, EXCEPT RETENTION AND/OR DETENTION BASIN BOTTOMS, NOT OTHERWISE ALREADY TREATED, SHALL BE STABILIZED IN A FINAL MANNER IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT. A NOTICE OF TERMINATION TO CLOSE OUT THE SWPPP'S NOTICE OF INTENT CANNOT BE FILED WITH ADEQ UNTIL THESE FINAL STABILIZATION MEASURES ARE IN PLACE.

21. PER SECTION 404 OF THE CLEAN WATER ACT, DREDGED OR FILL MATERIAL SHALL NOT BE PERMANENTLY OR TEMPORARILY PLACED IN ANY JURISDICTIONAL WATERS.

22. AGGREGATE BASE COURSE SHALL CONFORM TO PIMA COUNTY/CITY OF TUCSON STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, SECTION 303.

23. ASPHALTIC CONCRETE SHALL CONFORM TO PIMA COUNTY/CITY OF TUCSON STANDARD SPECIFICATIONS OF PUBLIC IMPROVEMENTS, SECTION 406, MIX #2.

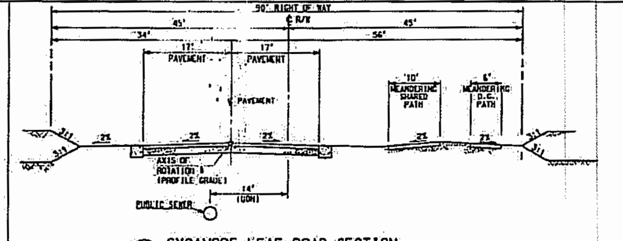
24. ALL CONCRETE SHALL COMPLY WITH PIMA COUNTY/CITY OF TUCSON STANDARD SPECIFICATIONS OF PUBLIC IMPROVEMENTS, SECTION 1006, CLASS S, 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED.

25. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.

26. AN APPROVED COPY OF THIS PLAN SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION AT THE JOBSITE AT ALL TIMES DURING CONSTRUCTION.

27. IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND HE SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE PCRWRD.

28. UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.



(A) SYCAMORE LEAF ROAD SECTION
NO SCALE

MANHOLE AS-BUILT INFORMATION		
	State Plane Coordinates (Arizona Central) NAD83 International ft.	
MH No.	Northing	Easting
1		
2		
3		
4		
5		
6		
7		

RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
J-34327

Two working days before you dig CALL FOR BLUE STAKES
1-800-782-5348
Blue Stake Center CALL COLLECT

G-2015-012
Ref: G-2005-097 (expired)

P1205-125

PUBLIC SEWER IMPROVEMENT PLANS PREPARED FOR:
SYCAMORE CANYON II
PHASE IIAA
INFRASTRUCTURE
SYCAMORE LEAF ROAD

NO.	BY	DATE	REVISION

HORIZ: N/A	VERT: N/A	PROJ# 34327
DESIGNER: BMC 2/15	ENGINEER: PJI 2/15	SHEET:
DRAFTER: PAD 2/15	CHECKED:	4 OF 4

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