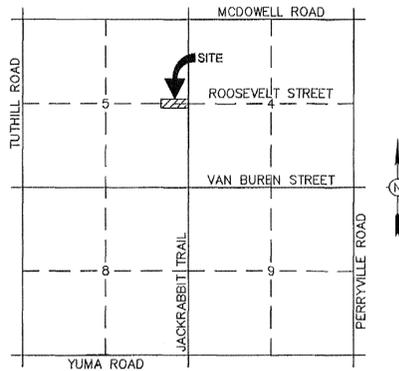


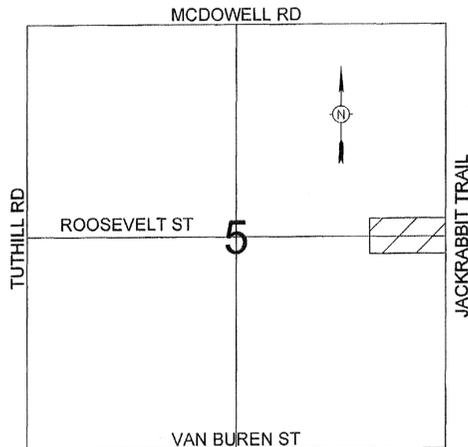
VICINITY MAP  
NOT TO SCALE



LOCATION MAP  
NOT TO SCALE

# ROOSEVELT STREET SEWER

LOCATED IN  
A PORTION OF THE EAST HALF OF SECTION 5, TOWNSHIP 1 NORTH,  
RANGE 2 WEST OF THE GILA AND SALT RIVER BASE AND  
MERIDIAN, MARICOPA COUNTY, ARIZONA.



OVERALL DEVELOPMENT  
NOT TO SCALE

## FEMA FLOOD ZONE INFORMATION

COMMUNITY NUMBER	PANEL #	SUFFIX	DATE OF FIRM (INDEX DATE)	FIRM ZONE	BASE FLOOD ELEV. (IN AO ZONE, USE DEPTH)
040039	2130	L	10/16/2013	AE*	1053.5

ALL FLOOD ZONES ARE SHOWN IN THIS PLAN SET.  
\*THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.

## GENERAL PERMITTING NOTES

- ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF BUCKEYE DESIGN STANDARDS. IF THERE IS A CONFLICT, THE CITY OF BUCKEYE STANDARDS WILL GOVERN.
- THE APPROVAL OF THE PLANS IS VALID FOR ONE (1) YEAR FROM THE DATE OF THE CITY ENGINEER'S SIGNATURE. IF AN ENCROACHMENT PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN ONE (1) YEAR, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
- A CITY OF BUCKEYE INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF BUCKEYE RIGHTS-OF-WAY AND IN EASEMENTS. NOTIFY THE CITY 24 HOURS PRIOR TO THE INSPECTION BY CALLING (623) 349-6248.
- CITY PERMITS ARE REQUIRED FOR ALL WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. A CITY PERMIT WILL BE ISSUED BY THE CITY ONLY AFTER ALL FEES HAVE BEEN PAID AND THE PERMIT HAS AN APPROVED MARICOPA COUNTY ENVIRONMENTAL SERVICES DUST PERMIT AND AN APPROVED STORM WATER POLLUTION PREVENTION PLAN ATTACHED. THE SWPPP SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- COPIES OF ALL PERMITS AND MOST RECENT APPROVED PLANS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS AND PLANS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL PROPER PERMIT DOCUMENTATION AND/OR PLANS ARE OBTAINED. ALL OF THESE REQUIREMENTS APPLY TO ONSITE GRADING AND IMPROVEMENT PLANS.

## UTILITY COMPANIES DATE APPROVED

UTILITY COMPANIES	DATE APPROVED
ELECTRIC	ARIZONA PUBLIC SERVICE 05/21/2014
TELEPHONE	CENTURYLINK 04/25/2014
CATV	COX COMMUNICATIONS 05/20/2014
GAS	SOUTHWEST GAS 12/06/2013

## SHEET INDEX

- G1 COVER
- G2 GENERAL NOTES
- G3 GENERAL NOTES & DETAIL
- G4 LEGEND, ABBREVIATIONS & DETAILS
- C1 PLAN & PROFILE

## SUMMARY OF QUANTITIES

ITEM	UNIT	AMOUNT
SEWER:		
15" VCP SEWER PIPE	LF	301
15" VCP JACKING SEWER PIPE	LF	278
5' DIA MANHOLE, FRAME & COVER	EA	2
15" SEWER PLUG	EA	1
30" X 15" CASING END SEAL	EA	2
AC REPLACEMENT	SY	45
CONCRETE CHANNEL REPAIR	CY	92
1 SACK CLSM	CY	24
PIPE BEDDING 1/2" AGGREGATE	CY	31

## OWNER

CITY OF BUCKEYE, AZ  
530 E. MONROE AVE.  
BUCKEYE, AZ 85326  
(623) 349-6200  
CONTACT: SCOTT ZIPPRICH, P.E.

## DEVELOPER

SUNBELT INVESTMENT HOLDINGS, INC  
8095 OTHELLO AVE.  
SAN DIEGO, CA 92111  
(858) 495-4900  
CONTACT: DENNIS O'NEIL

## ENGINEER

COE & VAN LOO CONSULTANTS, INC.  
4550 NORTH 12TH STREET  
PHOENIX, ARIZONA 85014  
(602) 264-6831  
(602) 264-0928 (FAX)  
CONTACT: ERIC LAURIN, P.E.

## BASIS OF BEARING

THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 1 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN, HAVING A BEARING OF N00°21'14"E PER BOOK 638 OF MAPS, PAGE 33, RECORDS OF MARICOPA COUNTY, ARIZONA.

## BENCH MARK

3" MCDOT BRASS CAP ON EXISTING IRON PIPE BEING THE EAST QUARTER CORNER OF SECTION 5, TOWNSHIP 1 NORTH, RANGE 2 WEST OF THE GILA AND SALT RIVER MERIDIAN. ELEV. 1055.15 NAVD-88

## APPROVAL

### DISCLAIMER:

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS AND OMISSIONS.

BY: *Scott Zipprich* 3-5-15  
CITY OF BUCKEYE ENGINEER DATE

BY: \_\_\_\_\_ DATE  
FLOOD CONTROL DISTRICT MARICOPA COUNTY

BY: APPROVED PER LETTER DATED 23 APRIL 2014  
MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION DATE

BY: *Eric Laurin* 12/08/2014  
MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT DATE

RECEIVED

FEB 19 2015  
CITY OF BUCKEYE by: \_\_\_\_\_  
ENGINEERING

## AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS - BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ARIZONA REGISTERED LAND SURVEYOR

DATE

ARIZONA REGISTRATION NUMBER

TELEPHONE NUMBER

MANAGING ENGINEER / SURVEYOR RYAN WEED	PROJECT COORDINATOR BARBARA RUST	DESIGN LAYOUT	FR	FIELD SURVEY	CVL	DRAWING SCALES 1"=40'
		DRAFTED	MA	DRAFTED		
COVER		 COE & VAN LOO CONSULTANTS, INC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE 4550 NORTH 12TH STREET PHOENIX, ARIZONA 85014 TELEPHONE (602) 264-6831 WWW.CVL.CI.COM				
ROOSEVELT STREET SEWER		 ENG-13-00433 Roosevelt Street Sewer Sewer Plans Sheets: 6/4 5R - FOR SIGNATURE				
REVISIONS:		1 2 3				
COB PERMITTING APPROVED STAMP		COB ENGINEERING APPROVED STAMP APPROVED MAR 05 2015 CITY OF BUCKEYE ENGINEERING 				
ORIGINAL PLAN DATE		LATEST REVISION DATE 11/20/2013 12/08/2014				
PROJECT NUMBER		SHEET NUMBER 01-0119406 G1				

NOT FOR PERMITTING,  
AS-BUILTS OR OTHER PURPOSES

ENGINEER COPY

**CITY OF BUCKEYE GENERAL NOTES**

- CITY OF BUCKEYE BUILDING DEPARTMENT SHALL; BE NOTIFIED 24 HOURS IN ADVANCE OF ANY ON-SITE OR OFF-SITE CONSTRUCTION. PHONE 623.349.6248 FOR THE HOTLINE. ALL OTHER FAX THE INSPECTION REQUEST FORM TO 623.349.6221, OR USE THE WEB BASED PERMIT PORTHOLE ACCESS TO SCHEDULE AN INSPECTION ([WWW.BUCKEYEAZ.GOV](http://WWW.BUCKEYEAZ.GOV)).
- ALL WORK AND MATERIALS MUST CONFORM TO THESE SPECIFICATIONS, THE CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AND AS AMENDED BY THE CITY OF BUCKEYE (COB).
- A PERMIT IS REQUIRED FROM THE COB FOR ALL CONSTRUCTION WITHIN THE RIGHTS-OF-WAY (ROW).
- THE CONTRACTOR WILL EXPOSE ALL EXISTING UTILITY LINES BEING TIED IN TO VERIFY THEIR LOCATION.
- THE CONTRACTOR WILL LOCATE, OR HAVE LOCATED, ALL EXISTING UNDERGROUND UTILITIES (ELECTRIC, TELEPHONE, PIPELINES, ETC.) AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND WILL ELIMINATE ALL CONFLICTS PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE TO CALL BLUE STAKE PRIOR TO STARTING ANY CONSTRUCTION. NO WORK SHALL BEGIN UNTIL BLUE STAKE IS COMPLETED. BLUE STAKE TELEPHONE NUMBER 602.263.110 OR 1.800.STAKE-IT.
- A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO STARTING ANY WORK OR NEW PHASE OF WORK. THE CONTRACTOR, KEY SUBCONTRACTORS, COB INSPECTOR AND REPRESENTATIVE OF THE CITY ENGINEER SHALL ATTEND THIS MEETING.
- ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE COB AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- DISPOSAL OF EXCESS MATERIAL WITHOUT A PERMIT WITHIN THE COB LIMITS IS PROHIBITED. A USE PERMIT IS REQUIRED FOR DISPOSAL OR STOCKPILING OF MATERIALS WITHIN A RESIDENTIAL AREA. STOCKPILING OF EXCAVATED MATERIAL SHALL NOT EXCEED A HEIGHT OF 6 FEET ABOVE THE NATURAL GROUND ELEVATION. THE SLOPES ON ALL SIDES OF THE STOCKPILED EXCAVATED MATERIAL SHALL NOT EXCEED A 4:1 RATIO OF LENGTH TO HEIGHT.
- EXCAVATION CONTRACTORS MUST IDENTIFY LOCATION FOR DISPOSING OF EXCESS EXCAVATION MATERIAL ALONG WITH A LETTER FROM THE LANDOWNER, GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ANY CONSTRUCTION.
- TRAFFIC CONTROL SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE CITY OR PHOENIX BARRICADING MANUAL, MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION, MAG UNIFORM STANDARD DETAIL 401, AND COB REQUIREMENTS. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN AND BARRICADE PLAN TO THE COB FOR APPROVAL WHERE THE CONSTRUCTION OF THE NEW IMPROVEMENTS ARE ADJACENT TO OR CONNECTING TO ANY EXISTING ROADWAY OR PEDESTRIAN FACILITIES. THE TRAFFIC CONTROL PLAN AND BARRICADE PLAN SHALL BE APPROVED BEFORE A PERMIT FOR THE WORK WILL BE ISSUED. THE CONTRACTOR SHALL INSTALL APPROVED BARRICADING AND TRAFFIC CONTROL, AS APPROVED BY THE COB, BEFORE WORK CAN TAKE PLACE. ALL OVERNIGHT BARRICADES SHALL BE LIT AND FUNCTIONING.
- A HAUL PLAN FOR MATERIAL IMPORT OR EXPORT SHALL BE REQUIRED FOR COB REVIEW AND APPROVED PRIOR TO THE START OF HAULING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY AND FINAL CLEAN-UP OPERATIONS OF ADJACENT, EXISTING PAVED STREETS USED BY CONSTRUCTION TRAFFIC. THIS WORK INCLUDES STREET SWEEPING, POWER BROOM AND WATER AS NEEDED OR DIRECTED BY THE COB.
- ENVIRONMENTAL REQUIREMENTS
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL RELATED TO THE PROJECT CONSTRUCTION AND SHALL TAKE WHATEVER MEANS NECESSARY TO CONTROL ANY ABNORMAL CONDITIONS.
  - THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS FOR CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING PUBLIC STREETS, AND TAKE WHATEVER MEASURES ARE NECESSARY TO INSURE THAT ALL ROADS ARE MAINTAINED IN A CLEAN, MUD, AND DUST FREE CONDITION AT ALL TIME.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY AND FINAL CLEAN-UP OPERATIONS OF ADJACENT, EXISTING PAVED STREETS USED BY CONSTRUCTION TRAFFIC.
  - TEMPORARY DRAINAGE CONTROL MEASURES MAY BE REQUIRED DURING AND AFTER CONSTRUCTION UNTIL FINAL PROJECT BUILDOUT IN ACCORDANCE WITH THE APPROVED PLANS AND IN ACCORDANCE WITH ANY ESTABLISHED OR REQUIRED BEST MANAGEMENT PRACTICES (BMP) AS PART OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NDPES) PERMIT REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MEET ALL REQUIREMENTS.
  - THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL AIR QUALITY PERMITS.
  - THE CONTRACTOR SHALL SUBMIT TO THE COB A COPY OF THEIR APPROVED COUNT (AIR QUALITY) DUST CONTROL PLAN, EROSION CONTROL PLAN (SWPPP), AND PERMIT PRIOR TO THE START OF WORK.
- STREET CUTS:** APPLICATIONS FOR STREET CUT PERMITS MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO APPROVAL OF IMPROVEMENT PLANS. THE PAVEMENT REPLACEMENT SECTION FOR ALL LONGITUDINAL AND TRANSVERSE TRENCHES LOCATED IN AN EXISTING PAVED STREET SHALL BE CONSTRUCTED IN ACCORDANCE WITH MAG UNIFORM STANDARD DETAIL NO. 200 "T"-TOP, BACKFILL, PAVEMENT SURFACE REPLACEMENT, MODIFIED AS FOLLOWS: THE WIDTH OF THE REPLACED PAVEMENT SECTION EXTEND 1-FOOT BEYOND THE TRENCH SIDE EDGE LINE, ON EITHER SIDE OF THE TRENCH. THE DEPTH OF THE PERMANENT SURFACE REPLACEMENT SHALL BE A MINIMUM OF 3 INCHES OR MATCH THE EXISTING THICKNESS OF THE PAVEMENT, WHICHEVER IS GREATER. SAWCUT OR CONSTRUCTION JOINTS SHALL BE ADEQUATELY TACK OILED WITH A MINIMUM OF 95 PERCENT COVERAGE. ASPHALT MATERIAL SHALL BE A COB APPROVED MIX DESIGN WITH COMPACTED LIFTS NO GREATER THAN 3 INCHES. SLURRY BACKFILLED OR OPEN TRENCHES IN EXISTING ROADWAYS MUST BE PROPERLY STEEL PLATED AND BARRICADED OVERNIGHT. STEEL PLATES TO BE MILLED FLUSH WITH ROADWAY SURFACE PER NOTE 24. "COLD MIX" TEMPORARY ASPHALT PATCHES MUST BE REPLACED AS SOON AS POSSIBLE AND CANNOT REMAIN FOR MORE THAN 5-DAYS' TIME OR AS REQUIRED BY THE COB. DURING THE 5-DAY PERIOD THE CONTRACTOR IS REQUIRED TO MAINTAIN THE PATCH TO WITHIN MAG STD SPEC 321.5.3. ASPHALT IN PLACE FOR LESS THAN 5 YEARS SHALL BE MILLED AND OVERLAID A MINIMUM OF 20-FEET PAST TRENCH WALLS, AND IN THE CASE OF MULTIPLE STREET CUTS, THE CONTINUOUS MILL AND OVERLAY SHALL EXTEND A MINIMUM OF 20-FEET PAST END OF THE FURTHEST TRENCH WALLS.
- POTHOLING:** NO POTHOLING SHALL BE DONE ON ANY STREET NEWER THAN 2-YEARS OLD. ALL POTHOLING IN EXISTING STREETS SHALL BE DONE USING WATER/AIR/VACUUM TYPE METHOD. POTHOLE SIZE SHALL BE LIMITED TO A 12-INCH BY 12-INCH SQUARE HOLE. REMOVAL MATERIAL CANNOT BE USED FOR BACKFILL. THE CONTRACTOR SHALL USE SLURRY PER MAG SEC. 728. PAVEMENT REPLACEMENT SHALL BE BY APPROVED HOT MIX ASPHALT ONLY. A 3-FOOT BY 3-FOOT PAVEMENT SLURRY SEAL SHALL BE APPLIED AFTER THE ASPHALT IS PLACED.
- AN APPROVED, UP-TO-DATE SET OF PLANS AND RIGHT-OF-WAY PERMIT SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES WHILE WORK IS IN PROGRESS. IF THE PLANS AND PERMITS ARE NOT ON-SITE, THE WORK SHALL BE STOPPED UNTIL THE APPROVED PLANS ARE PROVIDED. DEVIATION

FROM THE PLANS SHALL NOT BE ALLOWED WITHOUT THE COB'S APPROVAL.

- DAMAGE TO ANY AND ALL ITEMS CAUSED BY CONSTRUCTION OR CONSTRUCTION RELATED WORK SHALL BE REPLACED OR REPAIRED TO THE SAME OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
- ALL PARCEL CONSTRUCTION ACCESS LOCATIONS ARE SUBJECT TO THE CITY ENGINEER'S APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER AND ADEQUATE ACCESS ROADS INSIDE AND THROUGHOUT THE PARCEL ALLOWING FOR INSPECTION ACCESSIBILITY. THIS INCLUDES GRADING, GRAVEL FILL, AND/OR TRENCH PLATES, AS REQUIRED.
- THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS 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 COB AND THE COB CONSULTANTS 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 COB.
- THE COB SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES UTILIZED IN CONNECTION WITH THE WORK. THE COB WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS COMPLYING WITH MAG OR COB REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CERTIFIED AS-BUILT RECORD DOCUMENTS TO THE COB FOR REVIEW AND APPROVAL. NO FINAL ACCEPTANCE SHALL BE ISSUED UNTIL "AS-BUILT" PLANS CERTIFIED BY THE PROJECT ENGINEER/LAND SURVEYOR HAVE BEEN SUBMITTED AND ACCEPTED BY THE COB. FINAL CONSTRUCTION ACCEPTANCE OR THE RELEASE OF CERTIFICATE OF OCCUPANCIES SHALL NOT BE ISSUED UNTIL ALL AS-BUILT DRAWINGS AND OTHER REQUIRED DOCUMENTS PER THE COB'S FINAL PROJECT SUBMITTAL CHECKLIST, HAVE BEEN REVIEWED AND APPROVED BY THE CITY ENGINEER.
- ARRANGEMENTS FOR CONSTRUCTION WATER CAN BE MADE BY CALLING THE WATER RESOURCE DEPARTMENT AT 623.349.6800 AND/OR ARIZONA WATER COMPANT AT 602.240.6860.
- THE COB IS NOT RESPONSIBLE FOR LIABILITY ACCRUED DUE TO DELAYS AND/OR DAMAGES TO UTILITIES IN CONJUNCTION WITH THE CONSTRUCTION. ALSO, THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR RELOCATION OF UTILITIES.
- ALL CONTRACTORS SHALL CONTRACT FOR TRASH PICKUOP THROUGH A LICENSED CITY OF BUCKEYE SOLID WATER HAULER (602.237.2078) AND DISPOSED OF AT THE SOUTHWEST REGIONAL LANDFILL IN BUCKEYE.
- OPEN TRENCHES ACROSS DRIVEWAYS, STREETS, AND CROSS-STREETS SHALL BE PLATED FOR OVERNIGHT, WEEKEND, OR EXTENDED PERIODS, PER MAG UNIFORM STANDARD DETAIL 211.
- ALL ABC SHALL BE FROM AN ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) APPROVED SOURCE LIST.
- LONGITUDINAL TRENCH BACKFILL IN EXISTING ARTERIAL, COLLECTOR, OR LOCAL ROADWAYS OR ADJACENT TO EXISTING ROADWAY (WHEN THE TRENCH EXCAVATION FALLS WITHIN 2 FEET OF EDGE OF PAVEMENT) SHALL REQUIRE ½-SACK CLSM PER MAG SPEC 728 FULL DEPTH OR ABC FULL DEPTH AS DIRECTED BY THE COB. ABC BACKFILL COMPACTION SHALL BE BY AN APPROVED MECHANICAL METHOD (NO WATER SETTLING) WITH BACKFILL MATERIAL LIFTS AS FOLLOWS:
  - 12-INCH LIFTS (LOOSE) TO BE USED IN THE TOP 4 FEET OF THE TRENCH.
  - 24-INCH LIFTS (LOOSE) TO BE USED FROM 1 FOOT OVER THE PIPE TO 4 FEET FROM THE TOP OF THE TRENCH PER MAG SEC 601.4
- ALL BACKFILL WITHIN OR ADJACENT TO EXISTING ROADWAYS SHALL BE MECHANICALLY COMPACTED.
- TRANSVERSE TRENCH BACKFILL IN ALL EXISTING ROADWAYS SHALL REQUIRE 100 PERCENT FULL DEPTH HALF SACK CLSM PER MAG SPEC 728.
- ALL MATERIAL SUBMITTALS INCORPORATED IN THE PROJECT SHALL BE SUBMITTED AT OR BEFORE THE PRECONSTRUCTION MEETING FOR REVIEW AND APPROVAL BY THE CITY ENGINEER.

**FCDMC GENERAL NOTES**

- ALL CONSTRUCTION WITHIN FLOOD CONTROL DISTRICT (DISTRICT) RIGHTS-OF-WAY JURISDICTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) SPECIFICATIONS, UNLESS THE STRUCTURE INVOLVED IS A DAM. IF THE STRUCTURE IS A DAM, SPECIAL PERMIT REQUIREMENTS WILL APPLY. DAM SHALL MEAN A STRUCTURE THAT IS UNDER THE JURISDICTION OF THE ARIZONA DEPARTMENT OF WATER RESOURCES AND IS DEFINED IN ARIZONA REVISED STATUES 45-1201.
- CONTRACTOR MUST OBTAIN NECESSARY DISTRICT PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION WITHIN DISTRICT RIGHT-OF-WAY AND MAINTAIN A COPY OF THE PERMIT ON THE PROJECT SITE AT ALL TIMES.
- NOTIFY THE DISTRICT'S PERMITS INSPECTOR AT 602-506-4727 OR 602-506-4723 AT LEAST 48 HOURS PRIOR TO ANY WORK BEING PERFORMED IN THE DISTRICT'S RIGHT-OF-WAY.
- CONTRACTOR PERFORMING EXCAVATION OPERATIONS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES.
- ALL COMPACTION AND BACKFILL WITHIN THE DISTRICT'S RIGHT-OF-WAY SHALL CONFORM TO THE LATEST MAG SPECIFICATIONS UNLESS STIPULATED OTHERWISE IN THE DISTRICT'S PERMIT.
- ANY DAMAGE TO DISTRICT'S STRUCTURES, EQUIPMENT, MATERIALS, VEGETATION, AND/OR PROPERTY SHALL BE REPLACED AND/OR REPAIRED IN-KIND TO THE SATISFACTION OF THE DISTRICT.

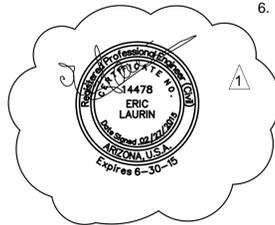
**MCDOT GENERAL NOTES FOR RIGHT-OF-WAY PERMITS**

- ALL WORK SHALL CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), TOGETHER WITH THE MCDOT SUPPLEMENT TO THE MAG STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL PROVISIONS. ALL WORK MUST ALSO COMPLY WITH RESOLUTION 2001-01 – MARICOPA COUNTY RESOLUTION FOR PERMITS TO WORK IN DEDICATED RIGHT-OF-WAY AND RESOLUTION 2001-02 MARICOPA COUNTY RESOLUTION FOR STREET IMPROVEMENTS, INSTALLATION OF UTILITIES AND TRAFFIC CONTROL. ANY EXCEPTIONS MUST RECEIVE EXPLICIT APPROVAL FROM MCDOT AND SHALL BE IDENTIFIED ON THE PLANS AS HAVING EXPLICIT APPROVAL FROM MCDOT.
- THE ENGINEERING DESIGNS ON THESE PLANS ARE ONLY APPROVED BY MCDOT IN CONCEPT AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY MCDOT. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT MCDOT FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, MCDOT ROADWAY DESIGN MANUAL, OR OTHER DESIGN ISSUES.
- AN APPROVED SET OF PLANS SHALL BE ON THE SITE DURING CONSTRUCTION AND AVAILABLE TO MCDOT AND OTHER INSPECTORS.
- ALL BOX CULVERTS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) LATEST DESIGN SPECIFICATIONS AND STANDARDS. MINIMUM CLEAR HEIGHT OF BOX CULVERT SHALL BE 4 FEET.
- CONTRACTOR TO OBTAIN NECESSARY MCDOT PERMITS PRIOR TO CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY, AND ALL NECESSARY PERMITS FROM LOCAL GOVERNMENTS FOR WORK WITHIN THEIR JURISDICTION.
- CONTRACTOR SHALL NOTIFY THE MCDOT INSPECTION DEPT. AT LEAST 24 HOURS IN ADVANCE OF ANY CONSTRUCTION AT (602) 506-8606.
- CONTRACTOR PERFORMING CONSTRUCTION OR EXCAVATING OPERATIONS IS RESPONSIBLE FOR LOCATING AND RELOCATING ALL UTILITIES IN CONFLICT OR WITHIN THE CLEAR ZONE, AT NO EXPENSE TO MARICOPA COUNTY. THE CONTRACTOR SHALL CONTACT "BLUE STAKE" AT (602) 263-1100 PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS FOR EARTH MOVING FROM MARICOPA COUNTY AIR QUALITY DEPARTMENT'S DUST COMPLIANCE DIVISION (602) 506-6010 PRIOR TO CONDUCTING EXCAVATION OPERATIONS. A COPY OF THE PERMIT AND DUST CONTROL PLAN SHALL BE SUBMITTED TO THE COUNTY ENGINEER PRIOR TO COMMENCEMENT OF ANY EARTHMOVING ACTIVITIES.
- PRIOR TO CONDUCTING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL OBTAIN FROM THE ARIZONA STATE HISTORICAL PRESERVATION OFFICER (602) 542-4009, RECOMMENDATIONS REGARDING THE NEED FOR CULTURAL RESOURCES (ARCHAEOLOGICAL) CLEARANCE. ALL DISCOVERIES OF HUMAN REMAINS, CULTURAL ARTIFACTS, OR PALEONTOLOGICAL REMAINS SHALL BE REPORTED TO THE ARIZONA STATE MUSEUM AND MCDOT. UPON DISCOVERY, CONTRACTOR SHALL CEASE OPERATIONS IN THE VICINITY OF THE FIND AND PROTECT THE DISCOVERY AREA FROM FURTHER DISTURBANCE UNTIL THE FIND CAN BE PROFESSIONALLY INVESTIGATED BY THE ARIZONA STATE MUSEUM AND MCDOT.
- EXCEPT UNDER EMERGENCY CONDITIONS, ROADS SHALL NOT BE CLOSED FOR CONSTRUCTION ACTIVITY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE MCDOT TRANSPORTATION DIRECTOR OR HIS REPRESENTATIVE.
- PRIOR TO MOVING OR DESTROYING PROTECTED NATIVE PLANT SPECIES, THE CONTRACTOR SHALL FILE A FORMAL NOTICE OF INTENT WITH THE ARIZONA DEPARTMENT OF AGRICULTURE NATIVE PLANTS (602) 542-6408.
- PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, BASE COURSE AND WEARING SURFACE, SUBMIT SOIL TEST(S) OF SUB-GRADE AND REVISED PAVEMENT DESIGN/CALCULATIONS TO MCDOT FOR REVIEW AND APPROVAL. IF SUB-GRADE STABILIZATION IS REQUIRED, THE AREA STABILIZED SHALL BE FROM BACK OF SIDEWALK TO BACK OF SIDEWALK AND MATCH THE STABILIZATION DEPTH OF THE PAVEMENT STRUCTURE.
- ASPHALT MIX DESIGN SHALL BE SUBMITTED TO MCDOT A MINIMUM OF 48 HOURS PRIOR TO PLACING ANY ASPHALT COURSES. (TRENCH WORK EXCLUDED.) ALL PAVED TURNOUTS SHALL HAVE THE SAME ASPHALT AND BASE REQUIREMENTS AS THE ADJACENT ROADWAY UNLESS NOTED OTHERWISE.
- ALL COMPACTION AND BACKFILL WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE MCDOT SUPPLEMENT TO MAG SPECIFICATIONS. BACKFILL UNDER EXISTING PAVEMENT, CURB AND GUTTER OR WITHIN FIVE FEET (5') OR LESS FROM THE EDGE OF PAVEMENT SHALL CONSIST OF ONE-HALF (1/2) SACK CLSM.
- ALL STRUCTURES, SUCH AS MANHOLES, VALVE BOX & COVERS, AND MONITORING WELLS MUST BE MARKED WITH AT LEAST TWO REFLECTIVE YELLOW FLEX POSTS WHEN STRUCTURES ARE LOCATED OUTSIDE THE TRAVELED WAY AND WITHIN THE RIGHT-OF-WAY. (APPLIES ONLY WHEN THERE IS NO CURB.)
- ANY SAW CUT ALONG EXISTING ROADWAY EDGE WHICH REMOVES THE EDGE OF THE ROADWAY SHALL BE A MINIMUM OF 1' FROM THE EDGE OF THE EXISTING ROADWAY. THE CUT DISTANCE MAY BE GREATER, BASED ON PAVEMENT CONDITIONS OR ROADWAY ELEVATIONS BUT SHALL NOT BE LOCATED WITHIN A LANE WHEEL PATH, AND IF NEEDED SHALL BE IN HALF LANE INCREMENTS.
- ALL EXISTING PAVEMENT MARKING, TRAFFIC SIGNS AND SIGNAL EQUIPMENT THAT NEEDS TO BE REMOVED, REPLACED, RELOCATED OR REPAIRED BECAUSE OF CONTRACTOR'S WORK WILL BE DONE BY THE CONTRACTOR AT HIS EXPENSE. ALL SALVAGED SIGNS SHALL BE DELIVERED TO THE TRAFFIC OPS BUILDING AT 2909 W. DURANGO ST. ARRANGEMENTS CAN BE MADE FOR DELIVERY BY CALLING (602) 506-8662. ALL NEW STREET NAME SIGNS SHALL BE PROVIDED AND INSTALLED BY PERMITTEE AT NO EXPENSE TO MARICOPA COUNTY.
- PAVEMENT MARKING, SIGNING AND SIGNAL WORK WILL BE INSPECTED AND SHALL MEET COUNTY STANDARDS BEFORE RELEASE OF BOND.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY TO A CONDITION EQUAL TO OR BETTER THAN EXISTING IMPROVEMENTS PER MAG 107.9. DISPOSAL OF ALL WASTE MATERIAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

MANAGING ENGINEER / SURVEYOR <b>RYAN WEED</b>	PROJECT COORDINATOR <b>BARBARA RUST</b>	DESIGN LAYOUT	DESIGNED	EL	CHECKED
		FR	MA	CVL	CHECKED
DESIGNED		FIELD SURVEY	CVL	DRAWING SCALES 1"=40'	
<b>GENERAL NOTES</b>					
 COE & VAN LOO CONSULTANTS, INC PLANNING ENGINEERING LANDSCAPE ARCHITECTURE 4550 NORTH 12TH STREET PHOENIX, ARIZONA 85014 TELEPHONE (602) 264-6631 WWW.CVL.CI.COM					
<b>ROOSEVELT STREET SEWER</b>					
REVISIONS: 1 2 3					
COB PERMITTING APPROVED STAMP		COB ENGINEERING APPROVED STAMP			
POSSIBLE AS-BUILT SEAL		DESIGN SEAL			
					
ORIGINAL PLAN DATE		LATEST REVISION DATE			
11/20/2013		02/27/2015			
PROJECT NUMBER		SHEET NUMBER			
01-0119406		G2			
ENG - 13 00433 					

**CITY OF BUCKEYE SEWER NOTES**

- BACKFILLING SHALL NOT BE STARTED UNTIL ALL PIPING IS INSPECTED AND APPROVED BY THE COB INSPECTOR.
- ALL SEWER MAINS SHALL BE PRESSURE TESTED AND MANDREL TESTED (FOR FLEXIBLE PIPE) PER MAG SPECIFICATIONS. CONTRACTOR SHALL NOT COMMENCE TESTING WITHIN 30-DAYS OF INSTALLATION.
- UPON COMPLETION OF TESTING AND FLUSHING, ALL SEWER LINE SHALL BE VIDEO INSPECTED NOT SOONER THAN 30 DAYS FOLLOWING BACKFILL WITH THE CD/DVD PROVIDED TO THE CITY ENGINEER.
- STEPS SHALL NOT BE ALLOWED IN MANHOLES.
- ALL MANHOLE RINGS AND COVERS TO BE CAST IRON PER MAG. MANHOLE LIDS SHALL HAVE THE COB LOGO IMPRINTED ON IT.
- ALL NEW SERVICE CAPS SHALL BE A WYE TYPE. TAPS TO EXISTING MAINS SHALL BE WYE OR "I" TYPE.
- ALL TAPS TO EXISTING MAINS SHALL BE CORE DRILLED OR HOLE SAWED WITH A COB APPROVED BIT. NO CHOP SAWING OR BREAKING OUT OF THE MAIN IS ALLOWED. A COB REPRESENTATIVE FROM THE WATER RESOURCES DEPARTMENT SHALL BE ON SITE DURING ANY TAPPING OF EXISTING MAINS. A COB APPROVED SADDLE SHALL BE USED FOR THE TAP CONNECTION.
- ALL SEWER LINE COMPACTION SHALL BE MAG BACKFILL TYPE 1 PER MAG SECTION 601. BACKFILL AROUND MANHOLES SHALL BE MAG BACKFILL TYPE 3 BACKFILL PER MAG SECTION 601.
- ALL SEWER SERVICE CONNECTIONS SHALL BE EXTENDED A SUFFICIENT DISTANCE BEYOND THE PUE LINES TO CLEAR ALL FACILITIES TO BE INSTALLED IN PUBLIC UTILITY EASEMENTS WHICH PARALLEL THE STREET RIGHT-OF-WAY.
- APPROVED COB COATING SHALL BE USED IN THE FOLLOWING LOCATIONS: ALL MANHOLES IN ARTERIAL STREETS, ALL 5 FOOT DIAMETER OR LARGER MANHOLES, ALL MANHOLES ON SEWERS 18 INCHES AND LARGER, ALL MANHOLES WITH A FLOW LINE DIFFERENCE GREATER THAN 8 INCHES.
- ALL MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE. VACUUM TESTING SHALL ONLY COMMENCE AFTER FINAL PAVING AND FINAL ADJUSTMENT OF THE RING AND COVER.
- WHERE MANHOLES ARE LOCATED OUTSIDE OF THE STREET OR SIDEWALK THERE SHALL BE A CLASS "B" CONCRETE RING 6 INCHES THICK AND 12 INCHES WIDE WITH FIBER MESH PLACED AROUND THE MANHOLE FRAME AND COVER FLUSH WITH THE TOP OF THE FRAME. THE MANHOLE FRAME SHALL BE SET 6 TO 12 INCHES ABOVE FINISH GRADE. THERE SHALL BE A NO. 4 REINFORCING BAR CENTERED IN THE CONCRETE. A GREEN CARSONITE MARKER SHALL BE INSTALLED.
- ALL MANHOLES GREATER THAN 10 FEET DEEP FROM RIM TO THE LOWEST INVERT SHALL BE 5 FEET IN DIAMETER.
- ALL MATERIALS SHALL BE NEW AND UNDAMAGED. ANY PIPE SHOWING EVIDENCE OF DEGRADATION SHALL NOT BE ACCEPTED. ALL REJECTED MATERIAL SHALL BE REMOVED FROM THE SITE IMMEDIATELY, OR A CEASE WORK ORDER WILL BE ISSUED.
- ALL UNDERGROUND UTILITIES SHALL BE INSTALLED AND COMPLETELY BACKFILLED PRIOR TO THE TESTING OF THE COB INFRASTRUCTURE. IN THE EVENT PRIVATE AND/OR PUBLIC UTILITIES NEED TO BE RE-EXCAVATED THE PRIOR TEST OF THE COB FACILITIES WILL BE CONSIDERED NULL AND VOID AND RETESTING WILL BE AT THE CONTRACTOR'S EXPENSE.
- NO UPSTREAM SEWER CONSTRUCTION SHALL START UNTIL THE DOWNSTREAM SEWER MAIN IS COMPLETED AND APPROVED BY THE COB INSPECTOR. PIPE LAYING SHALL COMMENCE AT THE PROPOSED PROJECT OUTFALL ON THE EXISTING COB SEWER AND PROCEED UP STREAM. ANY EXCEPTIONS TO THIS SPECIFICATION SHALL BE APPROVED IN WRITING BY THE CITY ENGINEER.
- A MAG STANDARD DETAIL 427 PLUG SHALL BE INSTALLED IN THE FURTHEST DOWNSTREAM MANHOLE AND REMAIN IN PLACE UNTIL ALL SEWER TESTING AND CLEANING IS COMPLETED. REMOVAL OF THE PLUG SHALL ONLY BE DONE WITH THE SUPERVISION OF THE COB INSPECTOR. UNDER NO CIRCUMSTANCES SHALL THE PLUG BE REMOVED PRIOR TO COB INSPECTION. IN THE EVENT THAT THE PLUG IS REMOVED, THE CONTRACTOR SHALL AT HIS EXPENSE, CLEAN WITH A HYDRO-VAC THE SEWER MAIN DOWNSTREAM TO A LOCATION APPROVED BY THE COB INSPECTOR TO ADEQUATELY REMOVE ALL DEBRIS CARRIED INTO THE COB MAIN. SHOULD THE SEWER PLUG FAIL PRIOR TO THE COB INSPECTION THE CONTRACTOR SHALL AT HIS EXPENSE, CLEAN WITH A HYDRO-VAC THE SEWER MAIN DOWNSTREAM TO A LOCATION APPROVED BY THE COB INSPECTOR TO ADEQUATELY REMOVE ALL DEBRIS CARRIED INTO THE COB MAIN. A VIDEO INSPECTION AFTER CLEANING WILL ALSO BE REQUIRED OF THE EXISTING MAIN AND ALL EXPENSES WILL BE PAID BY THE CONTRACTOR. ANY DAMAGES OR CLEANING EXPENSES AT AFFECTED LIFT STATIONS AND LEVIED FINES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO PRIVATE PROPERTY AND/OR ENVIRONMENTAL DAMAGE/CLEAN UP.
- COB APPROVED MANHOLE COATING/LINING SYSTEMS SHALL BE SPRAY-ON SUCH AS RAVEN, SPECTRASHIELD, ETC. ALL COATINGS SHALL BE APPROVED BY COB.
- ALL MANHOLE BASES SHALL BE PRECAST PER COB DETAILS. CAST-IN-PLACE MANHOLE BASES WILL ONLY BE ALLOWED WITH APPROVAL BY THE CITY ENGINEER.
- NO FERROUS MATERIAL SHALL BE USED ON THE INTERIOR OF THE MANHOLE UNLESS COMPLETELY COATED WITH A COB APPROVED COATING.
- ANY CURB AND GUTTER REMOVED WITH UTILITY MARKINGS SHALL BE REPLACED AND THE UTILITY MARKING SHALL BE RESTAMPED IN THE CURB.
- MATERIAL SHALL BE SUBMITTED AT OR BEFORE THE PRECONSTRUCTION MEETING AND ARE REQUIRED TO INCLUDE:
  - 24" AND 30" FRAME AND COVER
  - 48" 60", AND 72" MANHOLE SHAFT AND CONE
  - 48", 60", AND 72" MANHOLE PRECAST BASE
  - MANHOLE ADJUSTING RINGS
  - MANHOLE LINING SYSTEM
  - MAG SPEC. ABC
  - PRECAST MANHOLE BASE GASKET SYSTEM
  - MANHOLE JOINT SEALANT
  - CAST-IN-PLACE MANHOLE BASE CONCRETE
  - WATER STOP GASKETS
  - SEWER PIPE FITTINGS
  - COUPLINGS
  - PIPE ZONE MATERIAL ABC, #57 ROCK, 1/2 SACK SLURRY, 1 SACK SLURRY
  - ADJUSTING RING CONCRETE
  - MARKER BALLS
  - STEEL CASING
  - CASING SPACERS
  - CASTING END SEAL
  - PIPE MATERIAL



**ENGINEER'S NOTES**

THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS THE APPROVAL BLOCK HAS BEEN SIGNED BY THE APPROPRIATE AGENCIES. ALL WORK SHALL CONFORM TO THE CURRENT M.A.G. SPECIFICATIONS AND STANDARD DETAILS TOGETHER WITH THE SUPPLEMENT OF THE APPROPRIATE AGENCY.

THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE ENGINEER UNLESS ALL SURVEY STAKES SET BY THE ENGINEER ARE MAINTAINED INTACT AND CAN BE VERIFIED AS TO THEIR ORIGIN. IF, IN THE OPINION OF THE ENGINEER, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, ANY REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OR IMPROPER CONSTRUCTION WORK IN THIS DEVELOPMENT SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.

NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.

THE ENGINEER AND/OR OWNER ARE NOT RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK. THE ENGINEER AND/OR OWNER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS NOR ANY COSTS INCURRED, WHETHER INITIAL OR ADDITIONAL, TO CORRECT, MODIFY, OR ALTER ANY CONSTRUCTION COMPLETED CONTRARY TO THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL, IN ALL CASES, BEGIN SEWERLINE CONSTRUCTION FROM THE DOWNSTREAM MANHOLE OR SEWER STUB, WHETHER EXISTING OR PROPOSED. PRIOR TO INSTALLATION OF ANY SEWER LINE, THE CONTRACTOR SHALL EXCAVATE AND EXPOSE THE POINT OF CONNECTION OF NEW SEWERLINE TO THE EXISTING STUB OR MANHOLE AND VERIFY THE ELEVATION AND LOCATION. SHOULD THE EXISTING CONDITION VARY FROM THE DESIGN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.

THE ENGINEER WILL MAKE FIELD RECORD DRAWING MEASUREMENTS OF THE WORK UPON NOTIFICATION BY THE WATER/SEWER CONTRACTOR THAT THE PIPE WORK IS COMPLETE AND READY FOR RECORD DRAWING SURVEY. IF THE CONTRACTOR DOES NOT LEAVE THE TRENCHES OPEN SO THAT THE ACTUAL PIPE LINE AND SERVICES CAN BE OBSERVED, THE RECORD DRAWING MEASUREMENTS WILL REFLECT THE TRENCH LOCATION ONLY. IF THE TRENCHES ARE BACKFILLED AND OBSCURED TO THE POINT THAT RECORD DRAWING MEASUREMENTS CANNOT BE PERFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ACCURATE RECORD DRAWING MEASUREMENTS AND SECURING THE ACCEPTANCE OF THE RECORD DRAWING BY THE JURISDICTIONAL AGENCY.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE THE FITTINGS ARE COVERED SO RECORD DRAWING MEASUREMENTS MAY BE TAKEN. FITTINGS SHALL NOT BE COVERED UNTIL SURVEYS HAVE BEEN COMPLETED.

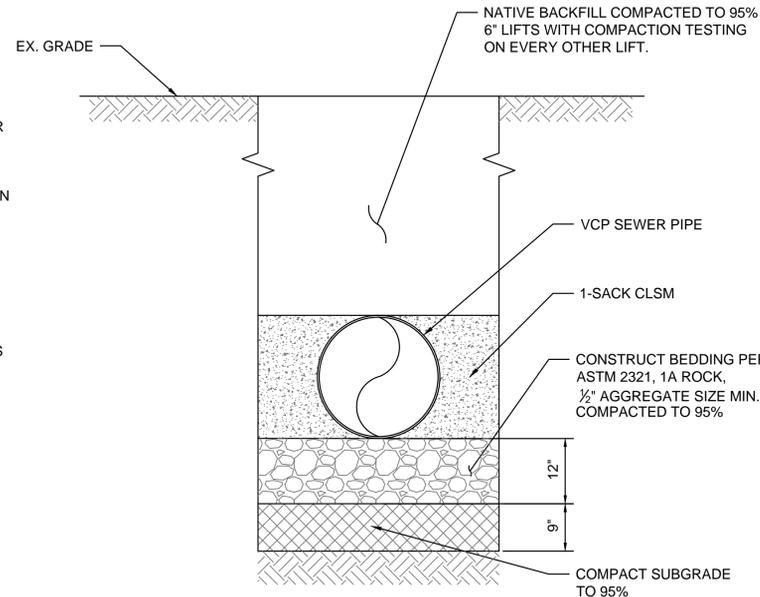
A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA, HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF UTILITIES IN THE AREA.

ALL EARTHWORK CONSTRUCTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAILS AND/OR SPECIFICATIONS INCLUDING ANY SUPPLEMENTS THERETO AND THE SOILS REPORT PREPARED BY:

- NINYO AND MOORE PROJECT No. 62257001
- WHITE TANKS FLOOD RETARDING STRUCTURE No. 4 DATED 12/17/14;
- APPENDIX B NORTHWEST DAM EXTENSION; AND ADDENDUM 1 ISSUED 12/17/14

**FCDMC GENERAL NOTES**

- ALL CONSTRUCTION WITHIN FLOOD CONTROL DISTRICT (DISTRICT) RIGHTS-OF-WAY JURISDICTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) SPECIFICATIONS, UNLESS THE STRUCTURE INVOLVED IS A DAM. IF THE STRUCTURE IS A DAM, SPECIAL PERMIT REQUIREMENTS WILL APPLY. DAM SHALL MEAN A STRUCTURE THAT IS UNDER THE JURISDICTION OF THE ARIZONA DEPARTMENT OF WATER RESOURCES AND IS DEFINED IN ARIZONA REVISED STATUTES 45-1201.
- CONTRACTOR MUST OBTAIN NECESSARY DISTRICT PERMIT PRIOR TO COMMENCEMENT OF CONSTRUCTION WITHIN DISTRICT RIGHT-OF-WAY AND MAINTAIN A COPY OF THE PERMIT ON THE PROJECT SITE AT ALL TIMES.
- NOTIFY THE DISTRICT'S PERMITS INSPECTOR AT 602-506-4727 OR 602-506-4723 AT LEAST 48 HOURS PRIOR TO ANY WORK BEING PERFORMED IN THE DISTRICT'S RIGHT-OF-WAY.
- CONTRACTOR PERFORMING EXCAVATION OPERATIONS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES.
- ALL COMPACTION AND BACKFILL WITHIN THE DISTRICT'S RIGHT-OF-WAY SHALL CONFORM TO THE LATEST MAG SPECIFICATIONS UNLESS STIPULATED OTHERWISE IN THE DISTRICT'S PERMIT.
- ANY DAMAGE TO DISTRICT'S STRUCTURES, EQUIPMENT, MATERIALS, VEGETATION, AND/OR PROPERTY SHALL BE REPLACED AND/OR REPAIRED IN-KIND TO THE SATISFACTION OF THE DISTRICT.



**SEWER TRENCH DETAIL** NTS 1

**CONSTRUCTION NOTES**

- TRENCHING, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH MAG SPECIFICATION SECTION 601 AND COB REQUIREMENTS. BACKFILLED SOIL SHALL BE CONSTRUCTED IN COMPACTED LAYERS OF UNIFORM THICKNESS AND EACH LAYER SHALL BE COMPACTED TO A UNIFORM DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 AND WITH A MOISTURE RANGE OF TWO (2) PERCENT BELOW OPTIMUM TO TWO (2) PERCENT ABOVE OPTIMUM.
- NATIVE MATERIAL SHALL BE BACKFILLED IN LOOSE LIFTS OF NO GREATER THAN 8 INCHES WITH COMPACTION TESTING PERFORMED ON EVERY OTHER LIFT UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. MAXIMUM COMPACTED LIFT SHALL BE 6 INCHES.
- NINE (9) INCHES OF TRENCH SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT STANDARD PROCTOR DENSITY PRIOR TO INSTALLING THE SEWER.
- CLSM SHALL BE 1 SACK CEMENT TO BE PRODUCED AND TESTED IN ACCORDANCE WITH MAG SPECIFICATION SECTION 728.
- THE OPEN SEWER TRENCH SHALL BE COVERED AT THE END OF EACH WORKING DAY OR SHALL BE SECURED WITH MINIMUM 6 FOOT HIGH CHAIN LINK FENCING, LOCKABLE GATES AND WARNING TAPE. LADDERS SHALL BE PLACED WITHIN THE OPEN TRENCH IN ACCORDANCE WITH OSHA REQUIREMENTS.
- CONTRACTOR SHALL ALLOW FCDMC AND COB PERSONNEL ACCESS TO THE SITE AT ALL TIMES FOR OPERATIONS AND MAINTENANCE ACTIVITIES.

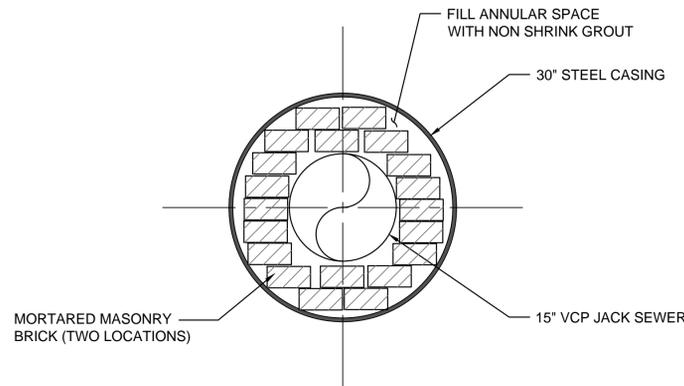
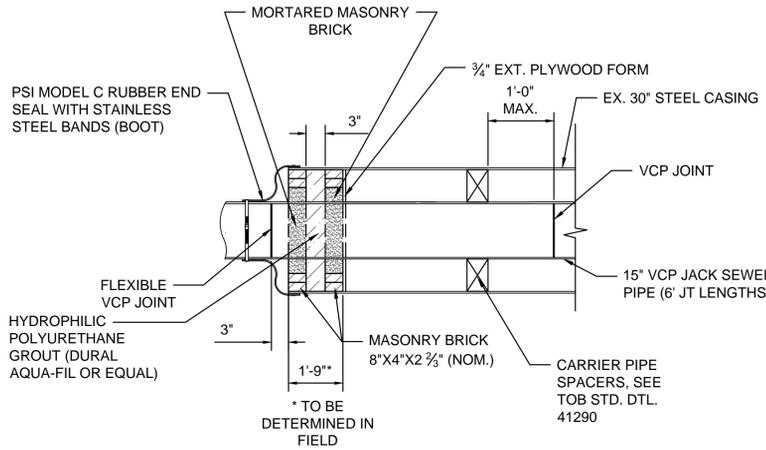
**MARICOPA COUNTY HEALTH NOTES**

"IN ACCORDANCE WITH AAC R18-9-213B, ALL MATERIALS ADDED AFTER JANUARY 1, 1993 WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61."

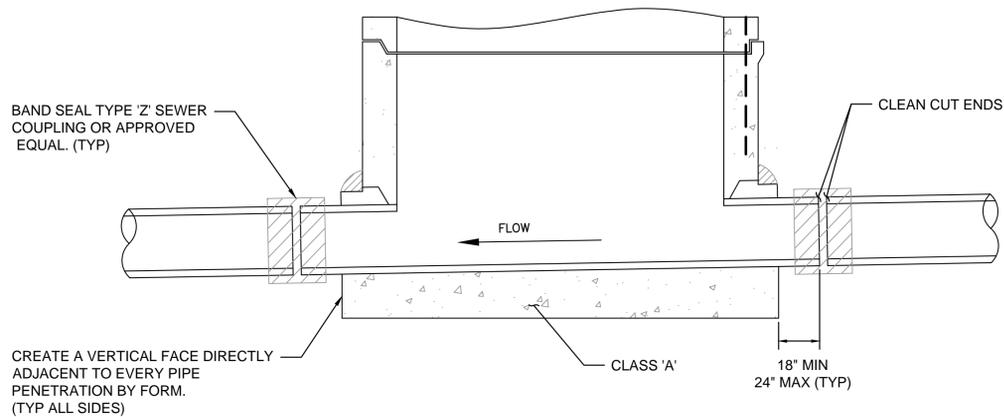
THE AAC R18-9-213B CAN BE OBTAINED FROM THE OFFICE OF THE ARIZONA SECRETARY OF STATE (602) 542-4086. THE NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61 LISTINGS CAN BE OBTAINED FROM NSF INTERNATIONAL (313) 769-8010.



MARKING ENGINEER / SURVEYOR RYAN WEED PROJECT COORDINATOR BARBARA RUST	DESIGNED / CHECKED EL CHECKED	1"=40' DRAWING SCALES
	BRACKETED / CHECKED MA BRACKETED / CHECKED FR FIELD SURVEY / CHECKED CVL	
<b>GENERAL NOTES &amp; DETAIL</b>		
COE & VAN LOO CONSULTANTS, INC. PLANNING ENGINEERING LANDSCAPE ARCHITECTURE 4550 NORTH 12TH STREET PHOENIX, ARIZONA 85014 TELEPHONE (602) 264-6831 WWW.CVLCI.COM		
<b>ROOSEVELT STREET SEWER</b>		
1 GEOTECH REPORT - 02/27/15		
2		
3		
COB PERMITTING APPROVED STAMP	COB ENGINEERING APPROVED STAMP	ORIGINAL PLAN DATE 11/20/2013
POSSIBLE AS-BUILT SEAL	DESIGN SEAL 	LATEST REVIEW DATE 02/27/2015
PROJECT NUMBER 01-0119406	SHEET NUMBER G3	ENG - 13 00433 SHEET #



**CASING END SEAL DETAIL** 1  
NTS



- ① MAINTAIN CONSISTENT SLOPE THRU MANHOLE.
- ② SEWER COUPLING BY BAND SEAL TYPE 'Z' OR APPROVED EQUAL.
- ③ EVERY CONNECTION SHALL BE INSPECTED BY THE CITY.
- ④ STANDARD MANHOLE PER M.A.G. STD. DET. 420

**COB CAST IN PLACE MANHOLE BASE DETAIL 41253** 2  
NTS

**ABBREVIATIONS**

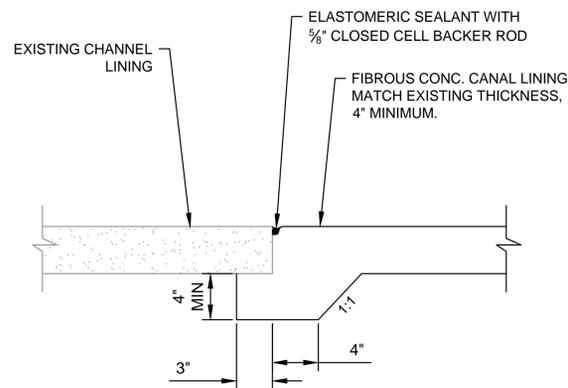
ABC ASTM B/C B.V.C. BC CATV C COB CLR. CONC. CP CONST. CLSM DET/DTL DIP DIP E.F. E.W. E EOP EL/ELEV EVC EX/EXIST. F.O. FLG FCDMC FD/FND. FUT. G.B. INV LE ESMT LT LF M.H./MH MAG MCDOT	AGGREGATE BASE COURSE AMERICAN SOCIETY FOR TESTING AND MATERIALS BACK OF CURB BEGIN VERTICAL CURVE BRASS CAP CABLE TELEVISION CENTERLINE CITY OF BUCKEYE CLEAR CONCRETE CONCRETE PIPE CONSTRUCTION CONTROLLED LOW-STRENGTH MATERIAL DETAIL DUCTILE IRON PIPE EACH FACE EACH WAY EASTING EDGE OF PAVEMENT ELEVATION END VERTICAL CURVE EXISTING FIBER OPTIC LINE FLANGE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY FOUND FUTURE GRADE BREAK INVERT LANDSCAPE ESMT LEFT LINEAR FEET MANHOLE MARICOPA ASSOCIATION OF GOVERNMENTS MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION	M G NG N NTS OHE/OE P PE PC/P.C. PI/P.I. P.R.C. PT/P.T. PVC PROP PUE RW R & R RT ROW / R/W SCH SWR SW SW ESMT STD SDR STA STL SD T / TEL TCE TC TN TYP. UE VCP VCP JACK WTR WSEL	MONUMENT LINE NATURAL GAS NATURAL GROUND NORTHING NOT TO SCALE OVERHEAD ELECTRIC PAVEMENT PLAIN END POINT OF CURVE POINT OF INTERSECTION POINT OF REVERSE CURVE POINT OF TANGENCY POLYVINYL CHLORIDE PROPOSED PUBLIC UTILITY EASEMENT RAW WATER REMOVE & REPLACE RIGHT RIGHT OF WAY SCHEDULE SEWER SIDEWALK SIDEWALK EASEMENT STANDARD STANDARD DIMENSION RATIO STATION STEEL STORM DRAIN TELEPHONE TEMPORARY CONSTRUCTION EASEMENT TOP OF CURB TOP OF WATER VALVE TYPICAL UNDERGROUND ELECTRIC VITRIFIED CLAY PIPE EXTRA STRENGTH VCP WATER WATER SURFACE ELEVATION
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**LEGEND**

	EXIST POWER POLE
	GRADE BREAK
	SURVEY MONUMENT
	EXIST STREET LIGHT
	EXIST. FIRE HYDRANT
	PROP. CATCH BASIN
	PROP. STORM DRAIN & MANHOLE
	EXIST. CATCH BASIN
	EXIST. STORM DRAIN & MANHOLE
	PAVEMENT SAWCUT & REPLACE
	CONCRETE LINING REPAIR LIMITS
	EXIST. GROUND SURFACE
	EX. BARB WIRE FENCE
	MANHOLE NUMBER
	CLEANOUT
	CLEANOUT NUMBER
	24" W WATERLINE AND SIZE
	WATER VALVE
	TAPPED CAP
	ITEM NUMBER
	OVERHEAD POWER POLE
	TBM
	GRADE BREAK
	EX. STORM DRAIN
	EX. NATURAL GAS
	EX. SEWER
	EX. WATER
	EX. CABLE TELEVISION
	EX. TELEPHONE
	EX. SEWER LINE & MANHOLE

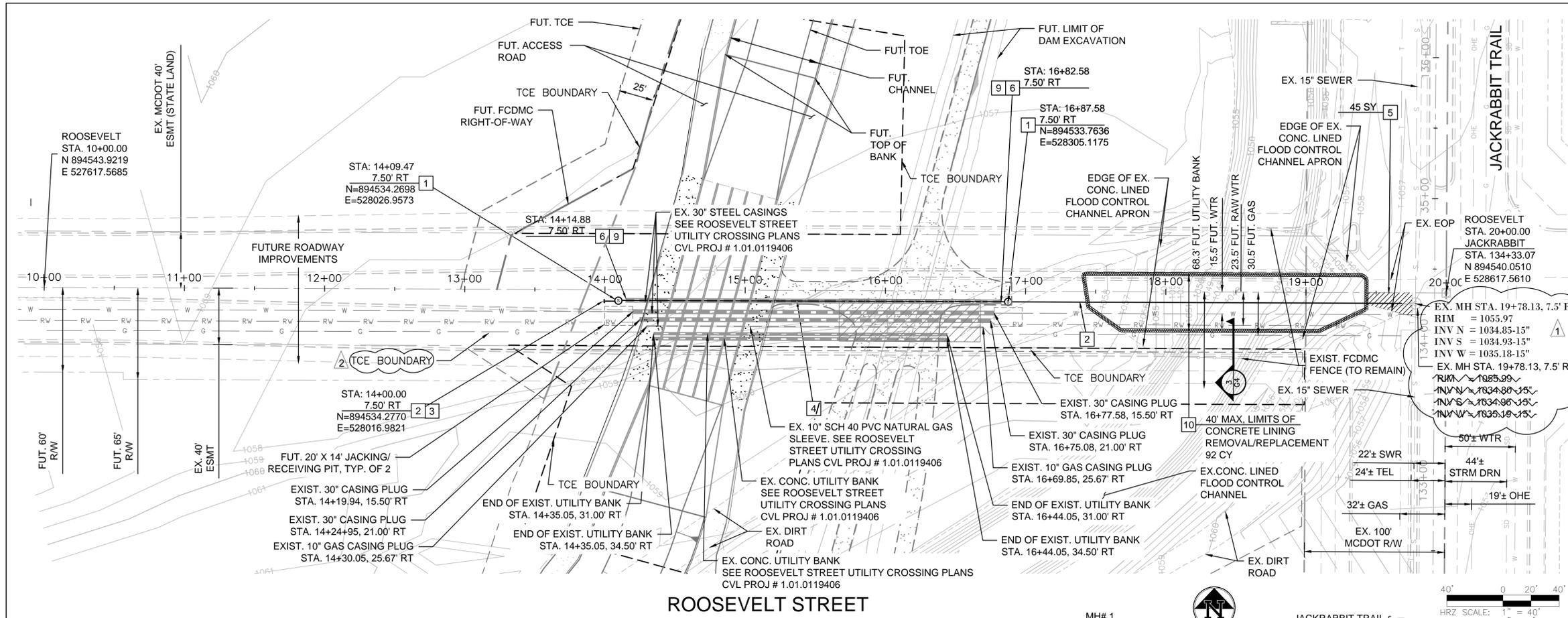
**NOTES:**

1. CONSTRUCTION JOINTS IN CONCRETE LINING SHALL BE CONSTRUCTED TRANSVERSELY AT 10-FOOT INTERVALS.
2. FIBROUS REINFORCEMENT SHALL HAVE THE FOLLOWING CHARACTERISTICS:  
A. SPECIFIC GRAVITY 0.91  
B. TENSILE STRENGTH 55 KSI  
C. FIBER LENGTH GRADED 3/4" TO 3/2"  
THE APPLICATION RATE FOR THE FIBERS IS 1.5 POUNDS PER CUBIC YARD
3. THE ELASTOMERIC SEALANT SHALL BE SIKA FLEX 1-A OR AN APPROVED EQUIVALENT.
4. BACKER ROD SHALL BE HIGHWAY BACKER ROD BY NAMCO, ZEBULON, NORTH CAROLINA OR APPROVED EQUIVALENT. INSTALL BACKER ROD IN JOINT PER MANUFACTURER'S INSTRUCTIONS.
5. NEW CANAL LINING SHALL BE 4" THICK SHOTCRETE (MAG CLASS "A" CONCRETE) WITH FIBROUS REINFORCEMENT AND 4X4 W1.4XW1.4 WELDED WIRE FABRIC.
6. USE OF EXPANSION JOINTS IS REQUIRED AT LINING LOCATION ABUTTING EXISTING STRUCTURES.



**CONSTRUCTION JOINT DETAIL** 3  
NTS

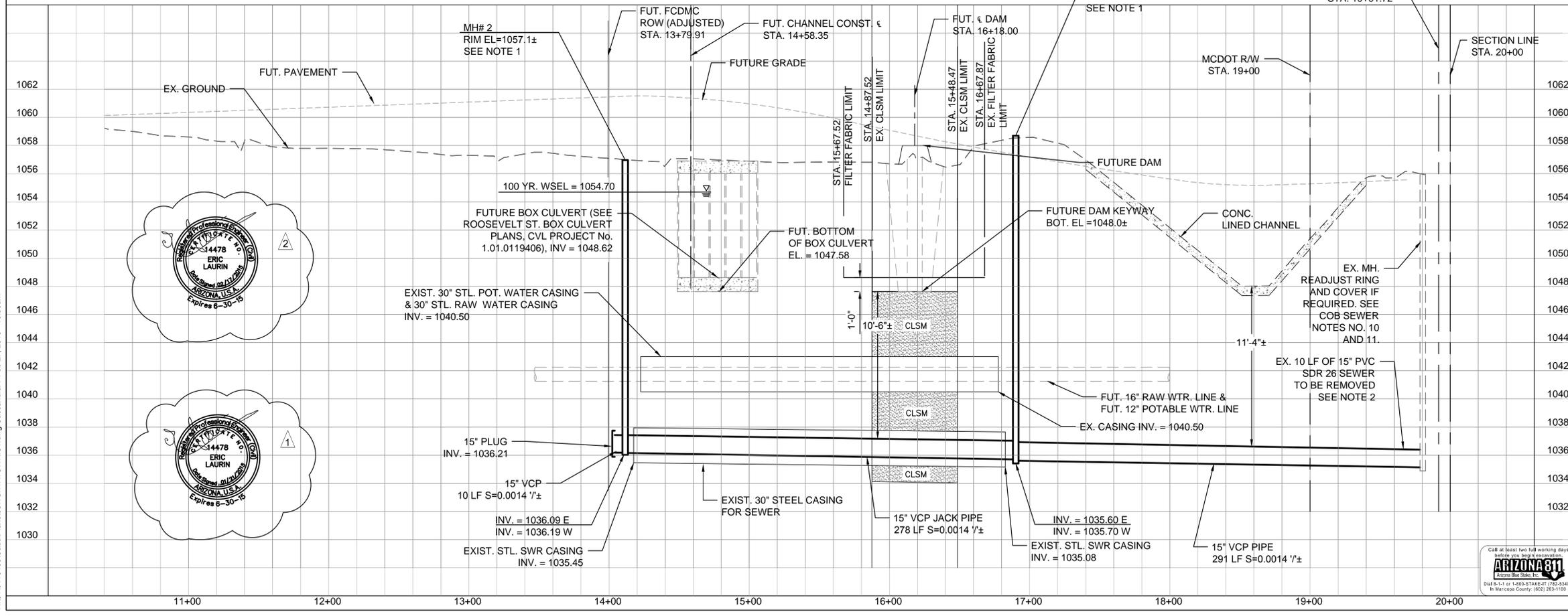
MANAGING ENGINEER / SURVEYOR <b>RYAN WEED</b>	PROJECT COORDINATOR <b>BARBARA RUST</b>	DESIGN LAYOUT CHECKED <b>EL</b>	DRAWN <b>MA</b>	FIELD SURVEY CHECKED <b>CVL</b>	SCALE <b>1"=40'</b>
<b>LEGEND, ABBREVIATIONS &amp; DETAILS</b>		 COE & VAN LOO CONSULTANTS, INC. PLANNING ENGINEERING LANDSCAPE ARCHITECTURE 4550 NORTH 12TH STREET PHOENIX, ARIZONA 85014 TELEPHONE (602) 264-6831 WWW.CVL.CI.COM			
<b>ROOSEVELT STREET SEWER</b>					
REVISIONS: 1 2 3					
DESIGNER'S SEAL					
ORIGINAL PLAN DATE 11/20/2013		LATEST REVISION DATE 02/27/2015			
PROJECT NUMBER 01-0119406		SHEET NUMBER G4			
Call at least two full working days before any field work.  Dial 811 or 1-800-STAKE-IT (782-5341) in Maricopa County. (922) 263-1100					



**ROOSEVELT STREET**

**CONSTRUCTION NOTES**

- SEWER**
- INSTALL 5' DIA PRECAST CONCRETE MANHOLE W/ 30" FRAME & COVER PER COB STD. DET. 41260 AND PRECAST CONCRETE BASE PER COB STD. DET 41253 DET 2/G4. COAT MANHOLE PER COB SEWER NOTE NO. 10
  - INSTALL 15" VCP SEWER (ASTM C700) SEE DETAIL 1 SHEET G3
  - PLUG SEWER PER COB STD. DET. 41270
  - INSTALL VCP JACK PIPE (ASTM C1208) SEWER IN CASING PIPE PER C.O.B. STD. DET. 41290
  - SAWCUT, REMOVE AND REPLACE EX. PVMT. PER MAG SPECIFICATION 336 AND DET 200. TYPE B WITH 1/2 SACK CLSM, MIN. THE NEW PVMT. REPLACEMENT SHALL BE 2" AC OVER 6" ABC OR MATCH EXIST. WHICHEVER IS GREATER
  - REMOVE EXISTING CASING PLUG, IF CASING IS INSTALLED PRIOR TO SEWER. IF SEWER AND CASING ARE INSTALLED CONCURRENTLY, REMOVAL OF THE CASING PLUG WILL NOT BE REQUIRED.
  - RESERVED
  - RESERVED
  - INSTALL VCP JACK SEWER PIPE END SEAL. SEE DET. 1/G4
  - CONTRACTOR TO PROVIDE PERPENDICULAR SAWCUT OF THE EXISTING CONCRETE LINED CHANNEL. THE APPROXIMATE LIMITS SHOWN ON THIS PLAN REPRESENT THE MAXIMUM LIMITS OF REMOVAL. THE FINAL LIMITS OF SAWCUTS SHALL BE DETERMINED BY THE CONTRACTORS CHOSEN MEANS AND METHODS OF TRENCH SHORING AND EXCAVATION, AS DETAILED IN A WORK PLAN TO BE REVIEWED AND APPROVED BY FCDMC. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING CONCRETE AND LINING MATERIALS IN AN ACCEPTABLE AND LEGAL MANNER. REPLACE CONC. TO MATCH EXISTING. SEE DTL. 3/G4. WORK SHALL BE PERFORMED WITHIN 5 CALENDAR DAYS. SEE BIDDING INSTRUCTIONS FOR SCHEDULE REQUIREMENTS.



- NOTES:**
- CONTRACTOR TO NOTE THAT PROPOSED RIM ELEVATIONS ARE BASED ON EXIST GRADE. MANHOLES TO BE BUILT WITH ABILITY TO ADJUST TO FUTURE GRADE OF FUTURE ROADWAY. SEE COB SEWER NOTE NO. 12.
  - REMOVE EXISTING PVC SEWER PIPE AND REPLACE WITH EXTRA STRENGTH VCP JACK PIPE. HYDRAULICALLY SEAL MANHOLE. MANHOLE SHALL BE VACUUM TESTED, COATED AND SPARK TESTED IN ACCORDANCE WITH COB REQUIREMENTS.

**REVISIONS:**

1	INVERT INFORMATION CHANGED BASED ON FIELD DATA OBTAINED BY CVL SURVEY TEAM. 01/21/15
2	TCE BOUNDARY AND NOTE MODIFIED. 2/17/15
3	

**ENGINEER INFORMATION**

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**ROOSEVELT STREET SEWER PLAN & PROFILE**

COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL
PROBABLE AS-BUILT SEAL	DESIGNER SEAL
ORIGINAL PLAN DATE	LATEST REVISION DATE
10/31/2013	2/27/2015
PROJECT NUMBER	SHEET NUMBER
01-0119406	C1

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