UTILITY INFORMATION

COMPANY	CONTACT	TELEPHONE
ARIZONA PUBLIC SERVICE CO. 6672 CORSAIR AVENUE PRESCOTT, ARIZONA 86301	SHERYL McCRACKEN	(928) 443-6621
CENTURYLINK 1445 MASONRY WAY PRESCOTT, AZ 86301	DAVID LYNCH	(928) 649-9318
UNISOURCE ENERGY SERVICES 6405 WILKINSON DRIVE PRESCOTT, ARIZONA 86301	MALI ROSS	(928) 771-7227
CABLE ONE 3201 TOWER ROAD PRESCOTT, ARIZONA 86305	DOUG HAMILTON	(928) 713-8382
CITY OF PRESCOTT WATER & SEWER DEPT. P.O. BOX 2059 PRESCOTT, ARIZONA 86301	ERIC BAY, PE	(928) 777-1130

BENCHMARK

YAVAPAI COUNTY, COUNTY COURTHOUSE GROUNDS AT THE BUCKY O'NEIL STATUE IN THE REAR CONCRETE BASE, A UNITED STATES GEOLOGICAL SURVEY STANDARD CAP STAMPED "5346 PRSCT" AND RIVETED ON THE TOP OF A 3.5 IRON PIPE. ELEV=5357.359

NOTES

ADEQ APPROVAL TO CONSTRUCT AND CITY OF PRESCOTT PERMIT REQUIRED PRIOR TO CONSTRUCTION.

CONTRACTOR IS TO USE EXTREME CAUTION WHEN WORKING NEAR HIGH VOLTAGE OVERHEAD POWER LINES AND HIGH PRESSURE GAS MAINS.

CONTRACTOR TO LOCATE AND DELINEATE TEMPORARY CONSTRUCTION EASEMENTS. NO ACTIVITY SHALL OCCUR OUTSIDE OF TEMPORARY CONSTRUCTION EASEMENTS.

ALL EASEMENTS CALLED OUT IN THESE CONSTRUCTION DRAWINGS SHALL BE DEDICATED BY A RECORDED LEGAL DESCRIPTION UNLESS OTHERWISE NOTED AS "EXISTING" WITH BOOK & PAGE LOCATION OF RECORDING.

NO PORTION OF THIS PROJECT IS LOCATED WITHIN A FEMA DESIGNATED 100-YEAR FLOODPLAIN PER FEMA FIRM MAP#'S: 04025C2060G & 04025C2054H EFFECTIVE: MARCH 6, 2018

REFER TO THE FOLLOWING LINK TO DOWNLOAD THE QUAD CITY STANDARD DETAILS WHICH ARE AVAILABLE FROM THE CITY OF PRESCOTT WEBSITE: http://www.prescott-az.gov/wp-content/uploads/2017/09/quad_city_standard_details.zip

MAYOR
GREG L. MENGARELLI

CITY COUNCIL

BILLIE ORR	CATHEY RUSING	STEVE BLAIR
STEVE SISCHKA	PHIL GOODE	ALEXA SCHOLL

SUBMITTED BY

Richard G. Poynor, P.E.	MARCH 2020
NAME	DATE
Vice President	33450
TITLE	ARIZONA REGISTRATION NO.

APPROVED BY

	3/30/2020
CITY ENGINEER	DATE
	3/30/2020
UTILITIES MANAGER	DATE

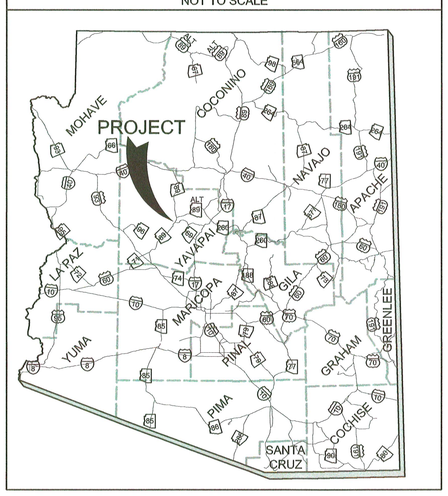
CITY OF PRESCOTT ARIZONA

CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT

SUNDOG RANCH ROAD WATER LINE UPSIZING COP CIP#17-014

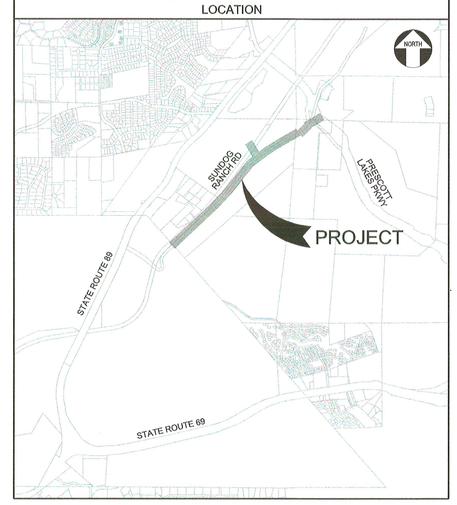
VICINITY MAP

NOT TO SCALE



VICINITY MAP

LOCATION



Contact Arizona 811 at least two full working days before you begin excavation

ARIZONA811 BLUE STAKE, INC.

Call 811 or click Arizona811.com

NOTE:
CONTRACTOR TO POTHOLE AND VERIFY ALL EX.UTILITY LOCATIONS, DEPTHS, DIMENSIONS, AND MATERIAL TYPES PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS, NOTIFY PROJECT ENGINEER IF REDESIGN IS NECESSARY

WARNING!
OVERHEAD POWER AND UNDERGROUND POWER AND GAS
CONTRACTOR TO USE EXTREME CAUTION

SHEET INDEX

SHEET NO.	DWG NO.	DESCRIPTION
		GENERAL
1	G.01	COVER SHEET
2	G.02	LIST OF STANDARD DETAILS, ABBREVIATION AND SYMBOL LEGEND
3	G.03	GENERAL NOTES
		SURVEY
4	SVY.01	COMPOSITE SHEET MAP, PROJECT GEOMETRICS AND SURVEY CONTROL
		CIVIL
5	C.01	SUNDOG RANCH ROAD STA. 10+00.00 TO 15+00.00
6	C.02	SUNDOG RANCH ROAD STA. 15+00.00 TO 20+00.00
7	C.03	SUNDOG RANCH ROAD STA. 20+00.00 TO 25+00.00
8	C.04	SUNDOG RANCH ROAD STA. 25+00.00 TO 30+00.00
9	C.05	SUNDOG RANCH ROAD STA. 30+00.00 TO 35+00.00
10	C.06	SUNDOG RANCH ROAD STA. 35+00.00 TO 40+00.00
11	C.07	SUNDOG RANCH ROAD STA. 40+00.00 TO 45+00.00
12	C.08	SUNDOG RANCH ROAD STA. 45+00.00 TO 50+00.00
13	C.09	SUNDOG RANCH ROAD STA. 50+00.00 TO 55+00.00
14	C.10	SUNDOG RANCH ROAD STA. 55+00.00 TO 56+80.00
	C.11	WATER LINE EXTENSION STA. 10+00.00 TO 12+80.00
15	C.12	WATER LINE EXTENSION STA. 12+80.00 TO 16+75.00
16	C.13	WATER LINE BRANCH STA. 10+00.00 TO 15+00.00
		DETAILS
17	D.01	DETAILS 1

DRAFT

PRELIMINARY - NOT FOR CONSTRUCTION

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CONSTRUCTION INFORMATION

NAME OF CONTRACTOR

PERMIT # & PHASE (IF APPLICABLE)

DATE OF PROJECT COMPLETION

CITY OF PRESCOTT INSPECTOR(S)

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PROJECT HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND REFERENCED STANDARDS, EXCEPT AS SHOWN HEREON; THAT THESE AS-BUILT PLANS REFLECT THE POSITION OF CONSTRUCTED IMPROVEMENTS BASED ON FIELD MEASUREMENTS; AND THAT THE MATERIALS USED IN CONSTRUCTION ARE AS SHOWN BASED ON FIELD OBSERVATION AND TEST RESULTS.

THIS CERTIFICATION DOES NOT WARRANT MATERIALS, WORKMANSHIP, METHODS OF CONSTRUCTION, OR OTHER ITEMS AFFECTING THE WARRANTY OF THIS PROJECT, TO THE CITY OF PRESCOTT. USERS OF THIS INFORMATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ACTUAL CONDITIONS.

REGISTERED PROFESSIONAL ENGINEER (CIVIL) — DATE

0 20
DRAWING SCALE
1" = 20 ft, Horizontal
(This scale is valid for 22"x34" sheets only)

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DESIGN	DRAWN	CHECKED	APV'D
RGP	RGP		

NO.	DATE	DESCRIPTION	BY

REVISIONS

LYON ENGINEERING & SURVEYING, INC. EST. 1995
1650 Willow Creek Road
Prescott, AZ 86301
(928) 776-1750
www.lyonengineering.com

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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD WATER LINE UPSIZING COP CIP#17-014

GENERAL

COVER SHEET

MILITARY CERTIFICATE NO. 33450 RICHARD G. POYNOR Date 3-23-2020 Signature ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
G.01
SHEET 1 OF 17

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FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn

LIST OF STANDARD DETAILS

STANDARD	ISSUE OR REVISION DATE	STANDARD NO.	TITLE
QUAD CITY	07/16	100	INDEX
QUAD CITY	07/16	101P	GENERAL NOTES
QUAD CITY	07/16	103P	WATER PLAN NOTES
QUAD CITY	07/16	104P	SEWER PLAN NOTES
QUAD CITY	07/16	105P-1	GRADING AND DRAINAGE NOTES
QUAD CITY	07/16	105P-2	EROSION AND SEDIMENTATION CONTROL NOTES
QUAD CITY	07/16	106P-1	SIGNING AND STRIPING NOTES
QUAD CITY	07/16	106P-2	TRAFFIC SIGNAL NOTES
QUAD CITY	07/16	120Q	SURVEY MARKER
QUAD CITY	07/16	131Q	SIGN POST INSTALLATION
QUAD CITY	07/16	132P	STREET NAME SIGN
QUAD CITY	07/16	134Q	MAILBOX
QUAD CITY	07/16	134Q	MAILBOX
QUAD CITY	07/16	140Q	BOLLARD
QUAD CITY	07/16	144P	SANITATION DUMPSTER
QUAD CITY	07/16	145Q	SAFETY RAIL
QUAD CITY	07/16	170P	BASE MOUNTED LUMINAIRE
QUAD CITY	07/16	173P	ANTIQUE STREETLIGHT FOUNDATION
QUAD CITY	07/16	200P-2	PVC PRESSURE PIPE INSTALLATION
QUAD CITY	07/16	200Q-1	TRENCH BACKFILL AND SURFACE REPLACEMENT
QUAD CITY	07/16	201Q	THICKENED EDGE PAVEMENT SECTION
QUAD CITY	07/16	210Q	RESIDENTIAL SPEED HUMP
QUAD CITY	07/16	212Q	SOFT DIG POTHOLE REPAIR
QUAD CITY	07/16	220Q-1	CURB AND GUTTER TYPES A,B,C, AND D
QUAD CITY	07/16	220Q-2	3' ROLL CURB
QUAD CITY	07/16	221Q	CURB AND GUTTER TRANSITIONS
QUAD CITY	07/16	230Q	SIDEWALKS
QUAD CITY	07/16	231Q	LOCAL STREET SIDEWALK RAMP
QUAD CITY	07/16	232Q	DIRECTIONAL SIDEWALK RAMPS
QUAD CITY	07/16	233Q-1	MIDBLOCK DETACHED SIDEWALK RAMP
QUAD CITY	07/16	233Q-2	MIDBLOCK ATTACHED SIDEWALK RAMP
QUAD CITY	07/16	240Q-1	6' VALLEY GUTTER AND SPANDRELS
QUAD CITY	07/16	240Q-2	12' VALLEY GUTTER AND SPANDRELS
QUAD CITY	07/16	250Q-1	DRIVEWAY ENTRANCE W/DETACHED SIDEWALK
QUAD CITY	07/16	250Q-2	DRIVEWAY ENTRANCE W/ATTACHED SIDEWALK
QUAD CITY	07/16	251Q	RETURN TYPE DRIVEWAY
QUAD CITY	07/16	255P	RESIDENTIAL DRIVEWAY SECTION
QUAD CITY	07/16	270Q	8" FRAME AND COVER ADJUSTMENT
QUAD CITY	07/16	275Q	UTILITY CASING
QUAD CITY	07/16	301Q	VALVE BLOCKING
QUAD CITY	07/16	303Q-1	JOINT RESTRAINT FOR DIP WATER PIPES (DRAWING)
QUAD CITY	07/16	303Q-2	JOINT RESTRAINT FOR DIP WATER PIPES (TABLES)
QUAD CITY	07/16	303Q-3	REVERSE THRUST BLOCKING ACP
QUAD CITY	07/16	303Q-4	REVERSE THRUST BLOCKING PVC-DIP
QUAD CITY	07/16	316P	1" TO 2" WATER SERVICE CONNECTIONS
QUAD CITY	07/16	317Q-1	1" AIR VACUUM RELEASE VALVE ASSEMBLY
QUAD CITY	07/16	317Q-2	2" TO 4" AIR RELEASE VALVE
QUAD CITY	07/16	318P	BLOW OFF
QUAD CITY	07/16	319Q-1	TRACER WIRE
QUAD CITY	07/16	319Q-2	TRACER WIRE STATION
QUAD CITY	07/16	321Q	LARGE METER AND VAULT
QUAD CITY	07/16	323Q	PRESSURE REDUCING VALVE STATION
QUAD CITY	07/16	324Q-1	BACKFLOW PREVENTION ASSEMBLY 3" AND UNDER
QUAD CITY	07/16	324Q-2	BACKFLOW PREVENTION ASSEMBLY 4" OR LARGER
QUAD CITY	07/16	340Q-1	TAPPING SLEEVES AND VALVES
QUAD CITY	07/16	340Q-2	EXPOSING WATER MAIN FOR HOT TAP
QUAD CITY	07/16	360Q	FIRE HYDRANT INSTALLATION
QUAD CITY	07/16	362Q	LOCATIONS FOR NEW FIRE HYDRANTS
QUAD CITY	07/16	363Q	FIRE HYDRANT VERTICAL DEFLECTION
QUAD CITY	07/16	364P	FIRE HYDRANT PROTECTION POLES
QUAD CITY	07/16	370Q	VERTICAL REALIGNMENT OF WATER MAINS
QUAD CITY	07/16	390Q	BLOW OFF
QUAD CITY	07/16	391Q	VALVE BOX INSTALLATION
QUAD CITY	07/16	396P	UTILITY ABANDONMENT IN PLACE
QUAD CITY	07/16	402P	DRY UTILITY SEPARATION
QUAD CITY	07/16	404P-1	WATER AND SANITARY SEWER SEPARATION/PROTECTION
QUAD CITY	07/16	404P-2	WATER AND SANITARY SEWER SEPARATION/PROTECTION
QUAD CITY	07/16	405Q	BROKEN SEWER LINE REPLACEMENT
QUAD CITY	07/16	412Q	MANHOLE/VAULT STEPS
QUAD CITY	07/16	414P	UTILITY MAIN EXPOSURE
QUAD CITY	07/16	416Q	SANITARY FORCE MAIN AIR/VACUUM RELEASE VALVE
QUAD CITY	07/16	420Q-1	PRECAST CONCRETE SEWER MANHOLE
QUAD CITY	07/16	420Q-2	MANHOLE IN DRAINAGEWAYS
QUAD CITY	07/16	421Q	OFFSET MANHOLE 8" TO 30" PIPE
QUAD CITY	07/16	422Q	MANHOLE FRAME ADJUSTMENT
QUAD CITY	07/16	423P-1	24" CAST IRON FRAME AND COVER
QUAD CITY	07/16	423P-2	30" CAST IRON FRAME AND COVER
QUAD CITY	07/16	426Q-1	INSIDE DROP MANHOLE
QUAD CITY	07/16	426Q-2	BEAVER SLIDE MANHOLE
QUAD CITY	07/16	427Q	SEWER STUB-OUT AND PLUGS
QUAD CITY	07/16	440P-1	SEWER SERVICE LATERAL GREATER THAN 2' DEEP
QUAD CITY	07/16	440P-2	SEWER SERVICE LATERAL LESS THAN 2' DEEP
QUAD CITY	07/16	440P-3	BACKWATER VALVE
QUAD CITY	07/16	440Q-4	WATER/SEWER SERVICE CURB CROSSING STAMP
QUAD CITY	07/16	441Q	SEWER MAIN CLEANOUT
QUAD CITY	07/16	523PV-6	INLET DROP STRUCTURE
QUAD CITY	07/16	600Q	INTERSECTION APPROACH TYPICAL SECTION
QUAD CITY	07/16	601P	RURAL LOCAL RESIDENTIAL X-SECTION
QUAD CITY	07/16	602P	LOCAL RESIDENTIAL X-SECTION
QUAD CITY	07/16	603P	RESIDENTIAL COLLECTOR
QUAD CITY	07/16	604P	COMMERCIAL/INDUSTRIAL COLLECTOR
QUAD CITY	07/16	605P	MINOR ARTERIAL
QUAD CITY	07/16	606P	MAJOR ARTERIAL
QUAD CITY	07/16	610Q	PRIVATE GATED ACCESS AT PUBLIC ROADWAY
QUAD CITY	07/16	611P	INTERSECTION SIGHT VISIBILITY TRIANGLES
QUAD CITY	07/16	612P	UTILITY EASEMENT ACCESS ROAD
QUAD CITY	07/16	614P	FIRE LANE ACCESS
QUAD CITY	07/16	620P-1	CUL-DE-SAC 50' R/W
QUAD CITY	07/16	620P-2	CUL-DE-SAC 60' R/W
QUAD CITY	07/16	621P-1	OFFSET CUL-DE-SAC 50' R/W
QUAD CITY	07/16	621P-2	OFFSET CUL-DE-SAC 60' R/W
QUAD CITY	07/16	622P-1	KNUCKLE 50' R/W
QUAD CITY	07/16	622P-2	KNUCKLE 60' R/W
QUAD CITY	07/16	630P	PAINTED CROSSWALK AT INTERSECTION
QUAD CITY	07/16	631Q	STANDARD CROSSWALK MARKINGS
QUAD CITY	07/16	632Q	STOP MARKINGS
QUAD CITY	07/16	634P	PAVEMENT MARKINGS
QUAD CITY	07/16	640Q	TRAFFIC SIGNAL INTERCONNECT CONDUIT
QUAD CITY	07/16	650Q-1	RESIDENTIAL RIGHT IN/RIGHT OUT DRIVEWAY
QUAD CITY	07/16	650Q-2	COMMERCIAL RIGHT IN/RIGHT OUT DRIVEWAY
MAG	01-01-1998	501-4	HEADWALL IRRIGATION 18" TO 60"

PLANS SYMBOL LEGEND

WATER & SEWER

- SEWER MANHOLE
- EXISTING SEWER MANHOLE
- FM — EXISTING SEWER FORCE MAIN
- 8" SS (PVC) — EXISTING 8" PVC SEWER
- 4" SS (PVC) — EXISTING 4" PVC SEWER SERVICE
- 12" W (DIP) — EXISTING 12" DIP WATER MAIN
- 8" W (DIP) — EXISTING 8" DIP WATER MAIN
- 6" W (DIP) — EXISTING 6" DIP WATER MAIN
- W — EXISTING WATER SERVICE
- FIRE HYDRANT
- AIR RELEASE
- BLOW OFF
- VALVE
- BEND
- 4 — UTILITY POTHOLE LOCATION
- FIRE HYDRANT PROTECTION POLE
- TRACER WIRE STATION

ROAD & DRAINAGE

- DRAINAGE CULVERT
- HEADWALL
- DROP INLET HEADWALL
- EX.EDGE OF PAVEMENT
- GUARD RAIL
- RIP-RAP
- x — x — x — EXISTING OR NEW FENCE
- TRAFFIC SIGN
- LYON ENGINEERING PROJECT BENCHMARK
- C — TOP OF CUT
- F — TOE OF FILL

DRY UTILITIES

- OHE — EXISTING OVERHEAD POWER
- E — EXISTING UNDERGROUND POWER
- EXISTING POWER POLE
- EXISTING POWER POLE GUY WIRE
- EXISTING LIGHT POLE
- EXISTING TRAFFIC LIGHT POLE
- FOT — EXISTING UNDERGROUND FIBER OPTIC
- T — EXISTING TELEPHONE
- G — EXISTING GAS MAIN (SIZE UNKNOWN)
- 6" G (STL) — EXISTING 6" STEEL GAS MAIN
- 4" G (PE) — EXISTING 4" POLY GAS MAIN
- CATV — EXISTING CABLE TELEVISION

ABBREVIATION LEGEND

±	APPROXIMATE LOCATION AND/OR ELEVATION,
A.B.C.	AGGREGATE BASE COURSE
AC	ACRE
ADOT	ARIZONA DEPARTMENT OF TRANSPORTATION
APPROX.	APPROXIMATELY
APS	ARIZONA PUBLIC SERVICE
ARACFC	ASPHALT-RUBBER ASPHALTIC CONCRETE FRICTION COURSE
ARV	AIR RELEASE VALVE ASSEMBLY
BFV.B.&C.	BUTTERFLY VALVE BOX & COVER
BK.	BOOK
BO	BLOW OFF
BOC	BACK OF CURB
BOP	BEGINNING OF PROJECT
C	CONCRETE ELEVATION
C/L	CENTERLINE
CCFRPMP	CENTRIFUGALLY CAST FIBERGLASS REINFORCED POLYMER MORTAR PIPE
CCW	COUNTER CLOCKWISE
CONST.	CONSTRUCTION
COP	CITY OF PRESCOTT
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC.	CONCRETE
CW	CLOCKWISE
CY	CUBIC YARDS
DBL	DOUBLE
DET.	DETAIL
DMH	DRAINAGE MANHOLE
DIAM.	DIAMETER
DIP	DUCTILE IRON PIPE
DVWY	DRIVEWAY
DWG	DRAWING
EFF	EFFLUENT
EL	ELEVATION
ELEC.	ELECTRIC
ENG.	ENGINEERED
EOC	EDGE OF CONCRETE
EOG	EDGE OF GRAVEL
EOP	EDGE OF PAVEMENT
EOPS	EDGE OF PAVED SHOULDER
EOS	EDGE OF SHOULDER
EOSW	EDGE OF SHOULDER WEDGE
ESMT	EASEMENT
EX.	EXISTING
EX-GRD	EXISTING GROUND ELEVATION
FG	FINISH GRADE ELEVATION
FH	FIRE HYDRANT
FIBER	FIBER OPTIC
FIN.	FINISH
FL	FLOW LINE ELEVATION
FLG	FLANGE
FM	FORCE MAIN
FOC	FACE OF CURB
FOT	FIBER OPTIC TELEPHONE
FP(100)	100-YEAR FLOODPLAIN
FW(100)	100-YEAR FLOODWAY
FUT	FUTURE
G.V.B.&C.	GATE VALVE BOX & COVER
GE	TOP OF GRATE ELEVATION
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
HORIZ.	HORIZONTAL
HW	HEADWALL
IE	INVERT ELEVATION
IRR	IRRIGATION MAIN
L	LENGTH
LEN	LENGTH
LF	LINEAR FEET
LPS	LOW PRESSURE SEWER
LR	LENGTH OF RESTRAIN
LS	LUMP SUM
LT	LEFT
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
MAX.	MAXIMUM
MFR	MANUFACTURER
MH	MANHOLE
MIN.	MINIMUM
MJ	MECHANICAL JOINT
MPH	MILES PER HOUR
NO.	NUMBER
O.C.	ON CENTER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PCCP	PRE-STRESSED CONCRETE CYLINDER PIPE
PG.	PAGE
PI	POINT OF INTERSECTION
POLY	POLYETHYLENE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVT	PAVEMENT GRADE
PRC	POINT OF REVERSE CURVE
PROP.	PROPERTY
PRV	PRESSURE REDUCING VALVE
RGB	ROADWAY GRADE BREAK
RGRCP	RUBBER GASKETED REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
RIM	RIM GRADE
ROW	RIGHT-OF-WAY
RP	RADIUS POINT
RT	RIGHT
S	SEWER
S=	SLOPE
SD	STORM DRAIN
SF	SQUARE FOOT
SHLDR	SHOULDER
SI	STREET INTERSECTION
SPEC	SPECIFICATIONS
SS	SEWER SERVICE
SSD	STOPPING SIGHT DISTANCE
STA.	STATION
STD	STANDARD
SVC	SERVICE
SQ	SQUARE
SW	SIDEWALK
SY	SQUARE YARDS
TB	THRUST BLOCKING
TBD	TO BE DETERMINED
TCE	TEMPORARY CONSTRUCTION ESMT.
TOC EL	TOP OF CURB ELEVATION
TOC	TOC OF CURB
TOS	TOE OF SLOPE
TRANS	TRANSITION
TWB	TOP OF WALL BACK
TWF	TOP OF WALL FACE
TYP	TYPICAL
UNS	UNISOURCE GAS
VA	VETERANS ADMINISTRATION
VERT.	VERTICAL
VG	VALLEY GUTTER
VLF	VERTICAL LINEAR FEET
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	POTABLE WATER
W/	WITH
XING	CROSSING
YDS	YARDS
YPIT	YAVAPAI PRESCOTT INDIAN TRIBE

0 20

DRAWING SCALE
1" = 20 ft, Horizontal
(This scale is valid for 22"x34" sheets only)

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DESIGN	DRAWN	CHECKED	APVD	APPROVED
RGP	RGP	-	-	----

NO.	DATE	DESCRIPTION	BY
-	-	-	-

REVISIONS

LYON ENGINEERING & SURVEYING, INC. EST. 1995
1650 Willow Creek Road
Prescott, AZ 86301
(928) 776-1750
www.lyonengineering.com

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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD
WATER LINE UPSIZING
COP CIP#17-014

GENERAL

LIST OF STANDARD DETAILS, ABBREVIATION AND SYMBOL LEGEND

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date Signed 3-23-2020
ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
G.02
SHEET 2 OF 17

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FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn

GENERAL NOTES (101P)

1. ALL CONSTRUCTION SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS. LATEST REVISIONS, UNLESS SPECIFICALLY APPROVED BY THE CITY AND MODIFIED ON THE PLANS, IN CONJUNCTION WITH THE LATEST REVISIONS OF THE MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS AND DETAILS (MAG STANDARDS), UNLESS SPECIFICALLY MODIFIED ON THE PLANS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF MAG AND CITY OF PRESCOTT STANDARDS AND SPECIFICATIONS AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS NECESSARY TO COMPLETELY AND ACCURATELY INTERPRET THESE PLANS.
3. ALL PLANS SIGNED BY THE CITY ENGINEER ARE NULL AND VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED. RESUBMITTAL AND REVIEW SHALL BE REQUIRED, AFTER ONE YEAR.
4. ALL QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE, ARE NOT VERIFIED BY THE PUBLIC WORKS DIRECTOR, AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT SHALL BE BASED ON BID SCHEDULE ITEMS FOR ACTUAL QUANTITIES PROVIDED AND INSTALLED. THE CONTRACTOR SHALL NOT BE RELIEVED OF HIS RESPONSIBILITY FOR INDEPENDENTLYESTIMATING WORK QUANTITIES PRIOR TO BIDDING.
5. CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT PERMIT(S) WILL BE REQUIRED FOR ALL OFF-SITE CONSTRUCTION AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY.
6. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AT HIS OWN EXPENSE, SUCH PERMITS AS ARE REQUIRED FROM THE APPROPRIATE AGENCIES.
7. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION IN THE PUBLIC RIGHT OF WAY.
8. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE PUBLIC WORKS DIRECTOR AND/OR ALL WORK MATERIALS NOT IN CONFORMATION WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
9. A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATION OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. THE ENGINEER AND THE CITY OF PRESCOTT WILL NOT GUARANTEE ANY LOCATIONS OR ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR MAKING A COMPLETE AND ACCURATE ON-SITE DETERMINATION OF THE LOCATIONS, MATERIAL, AND SIZE OF ALL UTILITIES, STRUCTURES, AND FIELD CONDITIONS WHICH MAY AFFECT THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES AND UTILITIES ENCOUNTERED DURING CONSTRUCTION AND SHALL FIELD EXPOSE EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING IN THEIR VICINITY.
10. THE CONTRACTOR IS REQUIRED TO CONTACT BLUE STAKE (1-800-STAKEIT) A MINIMUM OF TWO WORKING DAYS (48) HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR SUPPORT OF ALL UTILITIES, POWER POLES, ETC., THAT MAY BE NECESSARY.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE PUBLIC WORKS DEPARTMENT FOR APPROVAL, TRAFFIC CONTROL PLANS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL DETERMINE AND SUBMIT FOR APPROVAL THE EXACT SIGNING/TRAFFIC CONTROL DEVICES NECESSARY AND ALL TRAFFIC CONTROL WORK SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS THEREOF. NO STREET IS TO BE CLOSED, RESTRICTED,OR CONSTRUCTED UPON UNTIL A TRAFFIC CONTROL PLAN IS PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE PUBLIC WORKS DIRECTOR ONE WEEK IN ADVANCE FOR REVIEW AND APPROVAL.
13. APPROPRIATE EMERGENCY AGENCIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO ANY CLOSING OF STREETS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SURVEYING AND LAYOUT WITH CONTROL PROVIDED BY THE DESIGN ENGINEER OR HIS DESIGNEE.
15. THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL MEASURES SUFFICIENT TO PRODUCE MATERIALS AND WORKMANSHIP OF ACCEPTABLE QUALITY. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A QUALITY CONTROL PLAN. THE CONTRACTOR AT HIS OWN EXPENSE SHALL PROVIDE AN INDEPENDENT GEOTECHNICAL FIRM TO PERFORM QUALITY CONTROL TESTING SUCH AS SOILS AND CONCRETE TESTING, AND FULL TIME ASPHALTIC CONCRETE LAYDOWN COMPACTION TESTING AND ADEQUATE PLANT CONTROL FOR EACH PAVING DAY. THE CITY, BY SEPARATE CONTRACT, WILL BE RESPONSIBLE FOR QUALITY ASSURANCE TESTING AS IT MAY DEEM NECESSARY.
16. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS OF TESTING AND INSPECTION, INCLUDING THE PRESENCE OF CITY INSPECTORS, REQUIRED AT NIGHT OR ON WEEKENDS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RE-WORK AND/OR REMOVAL AND REPLACEMENT OF ALL MATERIALS REPRESENTED BY FAILING TESTS OR SUBSTANDARD WORKMANSHIP.
18. THE CONTRACTOR SHALL IMPLEMENT BEST-HOUSE-KEEPING MEASURES, AND EROSION AND SEDIMENT CONTROL MEASURES, TO PREVENT THE TRANSPORT OF CONSTRUCTION MATERIALS INTO DRAINAGE INLETS, STORM DRAIN MANHOLES, UTILITY STRUCTURES, OR ONTO ADJACENT STREETS AND PROPERTIES.
19. APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL THE WRITTEN FINAL ACCEPTANCE OF A COMPLETE AND WORKABLE UNIT.
20. THE CITY OF PRESCOTT MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN ITS JUDGEMENT, PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSTABLE, OR THERE IS A DANGER TO THE PUBLIC HEALTH AND SAFETY.
21. ALL OBSTRUCTIONS IN THE RIGHT OF WAY SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS PERMITTED.
22. REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS NECESSARY TO COMPLETE THE WORK, OTHER THAN SPECIFICALLY SCHEDULED IN THE BID, IS INCIDENTAL TO THE CONTRACT. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR UNSCHEDULED REMOVAL ITEMS WILL BE MADE.
23. CLEARING AND GRUBBING IS CONSIDERED INCIDENTAL TO THE WORK UNLESS SPECIFICALLY IDENTIFIED IN THE BID SCHEDULE. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR CLEARING AND GRUBBING, AND TREE REMOVAL, WILL BE MADE. THE SITE OF ALL EXCAVATION, EMBANKMENTS, AND FILLS SHALL FIRST BE CLEARED OF STUMPS, TRASH, WEEDS, RUBBISH, TOPSOIL, AND LOOSE BOULDERS WHICH SHALL BE REMOVED AND DISPOSED OF. PRIOR TO BIDDING THE CONTRACTOR MUST SATISFY HIMSELF REGARDING THE CHARACTER OF THE SUBSOILS TO INCLUDE THE AMOUNT OF LOAM, CLAY, SAND, QUICKSAND, HARDPAN, GRAVEL, ROCK, WATER, AND ALL OTHER MATERIAL TO BE ENCOUNTERED AND WORK TO BE PERFORMED.
24. THE CONTRACTOR SHALL GUARD AGAINST DAMAGE DURING CONSTRUCTION TO EXISTING PROPERTIES AND IMPROVEMENTS. ANY ITEMS DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.
25. THE CONTRACTOR SHALL KEEP SUITABLE EQUIPMENT ON HAND AT THE JOBSITE FOR MAINTENANCE DUST CONTROL, AND SHALL CONTROL DUST AS DIRECTED BY THE APPROPRIATE AGENCY.
26. STREET AND TRAFFIC SIGNS SHALL BE RELOCATED BY THE CONTRACTOR IF NECESSARY, AT THE DIRECTION OF THE PUBLIC WORKS DIRECTOR.
27. BACKFILL COMPACTION SHALL BE TYPE 1 (MAG, SECTION 601) UNLESS OTHERWISE NOTED.

GENERAL NOTES, CONTINUED

28. AGGREGATE BASE COURSE SHALL NOT BE PLACED ON SUBGRADE UNTIL SUBGRADE REQUIREMENTS HAVE BEEN ACHIEVED.
29. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE ROADWAY PRISM ARE VERIFIED FOR DETAIL CONFORMANCE, COMPLETED AND TESTED (TO INCLUDE BUT NOT LIMITED TO) SEWER TESTING, LOW AIR TESTING OF MAIN LINE AND SERVICES, TRACE WIRE TESTING, DEFLECTION TESTING AND VERIFICATION OF MANHOLES CONFORMING TO COP DETAIL 420P. WATER TESTING CHLORINATION/DISINFECTING OF MAINLINE AND SERVICES, PRESSURE TESTING, TRACE WIRE TESTING AND VERIFICATION OF VALVE BOXES CONFORMING TO COP DETAIL 391P.
30. ALL ASPHALT CONCRETE PAVEMENT SHALL BE PER APPLICABLE MAG SPECIFICATIONS AS AMENDED BY THE CITY OF PRESCOTT. ASPHALT CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
31. ALL UTILITY FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. SHALL BE ADJUSTED TO FINISH ASPHALT GRADE AFTER PLACEMENT OF SURFACE COURSE BY THE CONTRACTOR PER COP STANDARD DETAILS.
32. ACCEPTANCE OF THE COMPLETED PAVING STRUCTURES WILL NOT BE GIVEN UNTIL REPRODUCIBLE "AS-BUILT" PLANS HAVE BEEN SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE CITY.
33. ALL CONCRETE TO BE AT LEAST 3000 PSI CLASS "A" PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SPECIFICATIONS, OR IN STANDARD DETAILS.
34. EDGES OF CONCRETE STRUCTURES TO HAVE A 3/4" CHAMFER, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
35. CONCRETE SURFACES TO HAVE A BROOM FINISH UNLESS OTHERWISE NOTED ON THE PLANS.
36. ALL EXPANSION JOINTS TO BE SEALED WITH 1/2" EXPANSION JOINT, PRE-FORMED JOINT FILLER AND SEALER, IN ACCORDANCE WITH MAG SECTION 729.
37. DRIVEWAY ENTRANCES WILL BE LOCATED AS SPECIFIED ON THE PLANS UNLESS MODIFIED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAY ENTRANCES SHALL BE CONSTRUCTED OVER 6" THICK AGGREGATE BASE COURSE PER MAG SPECIFICATION 702 AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY, UNLESS OTHERWISE NOTED.
38. ALL DISTURBED FENCES SHALL BE REPLACED IN KIND. CONTRACTOR SHALL EXTEND FENCE REPLACEMENT TO THE CLOSEST UPRIGHT SUPPORT NECESSARY FOR STABILITY.
39. MAILBOXES SHALL BE REMOVED AND REINSTALLED AS DIRECTED BY THE U.S. POSTAL SERVICE AND THE CITY OF PRESCOTT TEMPORARY LOCATIONS SHALL BE PER U.S.P.S.
40. NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEPT CLEAN OF ALL DIRT AND DEBRIS.
41. THE CONTRACTOR SHALL WARRANT ALL WORK FOR A MINIMUM TWO YEAR PERIOD AFTER FORMAL ACCEPTANCE OF THE WORK BY THE CITY.

WASTEWATER NOTES (104P)

1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL EXISTING FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE EITHER REPLACED OR ADJUSTED TO FINISH GRADE DEPENDING ON PLAN CALL OUT UPON COMPLETION OF PAVING, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MIL MYLAR & CAD FORMAT DIGITAL 'AS-BUILT' PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE CITY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN, EQUIPMENT, & MATERIAL ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. CIP INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE. PRIVATE DEVELOPMENTS SHALL PROVIDE FOR INDEPENDENT 3RD PARTY INSPECTIONS.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION CONTROL STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES, MATERIAL, SIZE & ELEVATIONS BEFORE COMMENCING CONSTRUCTION & ORDERING MATERIALS.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION & OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO SUCH. THE ENGINEER &/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS, OR THOSE OMITTED FROM SAME.
13. CONTRACTOR SHALL NOTIFY 'BLUE STAKE' AT 1-800-STAKEIT (1-800-782-5348) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE HIS BID BASED UPON THOSE VERIFICATIONS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SUCH.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS MUST BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHEN MORE STRINGENT THAN THE MAG OR CITY OF PRESCOTT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION; MORE SPECIFICALLY WHERE THEY PERTAIN TO MAXIMUM ALLOWABLE SEWER LINE/PRESSURE SEWER LINE EXFILTRATION-INFILTRATION RATES.
17. ALL PLANS SIGNED BY THE CITY ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED AND/OR IS NOT ACTIVELY PROGRESSING.
18. PROJECT CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
20. ALL TRENCHES & BEDDING SHALL BE PER COP DETAIL 200P & TECHNICAL SPECIFICATIONS.
21. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVISIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT CONTRACTOR'S EXPENSE.
22. SEWER FORCE MAIN LINES SHALL BE DESIGNED AND CONSTRUCTED OF A MATERIAL SUITABLE FOR SANITARY SEWER PRESSURE PIPE AS APPROVED BY THE CITY ENGINEER. SEWER LINES SHALL BE PRESSURE TESTED TO A MINIMUM OF 50 PSI ABOVE DESIGN WORKING PRESSURE AT THE LOWEST POINT IN THE SYSTEM FOR A MINIMUM OF 4 HOURS IN ACCORDANCE WITH AAC R18-9.

WASTEWATER NOTES, CONTINUED

23. SEWER LINE LOW PRESSURE AIR TESTS SHALL BE DONE ON 100% OF ALL LINES AFTER PLACEMENT OF BACKFILL TO PAVEMENT SUBGRADE. TEST EACH SEGMENT OF THE SEWER LINE FOR LEAKAGE USING THE APPLICABLE METHOD BELOW AND RECORD THE RESULTS:
    - 23A. "STANDARD TEST METHOD FOR INSTALLATION OF ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR, F1417-92(1998)" PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
24. SEWER MANHOLES EXFILTRATION TESTS SHALL BE DONE ON 100% OF ALL MANHOLES. VACUUM TESTING IN ACCORDANCE WITH CITY STANDARDS MAY BE USED IN LIEU OF EXFILTRATION TEST. THE CONTRACTOR SHALL TEST EACH MANHOLE USING ONE OF THE FOLLOWING TEST PROTOCOLS:
    - 24A. WATERTIGHTNESS TESTING BY FILLING THE MANHOLE WITH WATER. THE CONTRACTOR SHALL ENSURE THAT THE DROP IN WATER LEVEL FOLLOWING PRESOAKING DOES NOT EXCEED 0.00034 OF THE TOTAL MANHOLE VOLUME PER HOUR.
    - 24B. NEGATIVE AIR PRESSURE TESTING USING THE "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE" (VACUUM) TEST, C1244-02e1(2002), PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS. THIS MATERIAL IS INCORPORATED BY REFERENCE & DOES NOT INCLUDE ANY LATER AMENDMENTS OR EDITIONS OF THE INCORPORATED MATERIAL, & MAY BE VIEWED AT THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, 1110 W. WASHINGTON, PHOENIX, AZ. 85007, OR OBTAINED FROM THE AMERICAN SOCIETY FOR TESTING & MATERIALS INTERNATIONAL, 100 BAR HARBOR DRIVE, WEST CONSHOHOCKEN, PA. 19428-2959.
25. SEWER LINE DEFLECTION TESTS WITH AN APPROPRIATELY SIZED MANDREL SHALL BE DONE ON 100% OF ALL NON-RIGID PIPE LINES.
26. THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL SEWER MAINS AND LATERALS INSTALLED WITHIN THE CITY'S COLLECTION SYSTEM UTILIZING A SEWER CCTV SYSTEM AFTER COMPLETE BACKFILL AND COMPACTION BUT BEFORE INSTALLING ANY PORTION OF THE PAVEMENT STRUCTURAL SECTION. THE INSPECTION SHALL COMPLY WITH THE CITY'S VIDEO ACCEPTANCE PROCEDURE. THE CONTRACTOR SHALL PROVIDE 72 HOURS ADVANCE NOTICE FOR CITY STAFF TO BE PRESENT DURING THE VIDEO OPERATION AND SHALL PROVIDE THE CITY A VIDEO DVD AND HARD COPY OF THE INSPECTION REPORT UPON COMPLETION.
27. COVER EACH SEWER LINE WITH AT LEAST 3 FEET OF EARTH COVER MEETING THE REQUIREMENTS "TRENCH EXCAVATION, BACKFILLING, & COMPACTION" (SECTION 601) REVISED 2004, PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS; & "RIGID PIPE BEDDING FOR SANITARY SEWERS" (WWM 104) REVISED JULY 2002, PUBLISHED BY PIMA COUNTY WASTEWATER MANAGEMENT.
28. PRESSURE SEWER MAINS AND SERVICE LATERALS (LPS) SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA-C-600 STANDARD. TEST PRESSURE SHALL BE A MINIMUM OF 100 PSI, OR 50 PSI OVER WORKING PRESSURE, WHICHEVER IS GREATER. TESTING SHALL BE DONE AFTER BACKFILL TO SUBGRADE.

GRADING AND DRAINAGE NOTES (105P-1)

1. ALL GRADING SHALL CONFORM TO THE CURRENT CITY ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE, AND CITY OF PRESCOTT LAND DEVELOPMENT CODE (REFERENCE CITY OF PRESCOTT STANDARD SECTIONS).
2. ALL PROVISIONS OF THE PRELIMINARY SOILS REPORT PREPARED BY ETC INC., DATED AUGUST 3, 2016 SHALL BE COMPLIED WITH DURING OPERATIONS.
3. THIS PLAN IS FOR GRADING PURPOSES ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF DRIVEWAY LOCATIONS OR SIZES, PARKING LOT LAYOUT, SEWER AND WATER FACILITIES, BUILDING LOCATIONS, OFF-SITE DRAINAGE FACILITIES OR OTHER ITEMS NOT RELATED DIRECTLY TO THE BASIC GRADING OPERATION.
4. CERTIFICATION FROM THE REGISTERED CIVIL ENGINEER AND SOILS/GEOLOGICAL ENGINEER STATING THAT THE ROUGH GRADING HAS BEEN COMPLETED PER THE APPROVED PLAN, AND A COMPACTION REPORT FROM THE SOILS ENGINEER ON ANY FILL AREAS THAT ARE REQUIRED SHALL BE PROVIDED PRIOR TO BUILDING PERMITS BEING ISSUED.
5. PARTIES NAMED ON ADEQ'S NOTICE OF INTENT (N.O.I.) ARE RESPONSIBLE FOR EROSION, DUST, MUD, SILT, DEBRIS, AND TEMPORARY DRAINAGE CONTROL DURING GRADING OPERATIONS AND MAY BE REQUIRED TO PROVIDE A SWPPP.
6. ANY ON-SITE RETAINING WALLS WILL REQUIRE APPROVAL AS PART OF THESE PLANS. ANY NECESSARY RETAINING WALLS ON THE PERIMETER OF THIS SITE MAY BE REQUIRED TO BE IN PLACE AND APPROVED BY THE CITY BUILDING DEPARTMENT PRIOR TO THE START OF GRADING. A SEPARATE PLAN WITH REQUIRED STRUCTURAL CALCULATIONS MAY BE REQUESTED FOR RETAINING WALLS.
7. ANY INFRASTRUCTURE CONSTRUCTED IN THE PUBLIC RIGHT OF WAY WILL REQUIRE SEPARATE PLAN APPROVAL AND INSPECTION FROM THE CITY ENGINEER.
8. ANY WALLS, FENCES, STRUCTURES AND/OR APPURTENANCES ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF GRADING OPERATIONS DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
9. THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR ENSURING THAT RETAINING WALLS DO NOT INTERFERE WITH PROVISION OF UTILITIES. WALLS MUST BE CONSTRUCTED ON SITE AND OUTSIDE OF THE RIGHT OF WAY. THIS SHALL INCLUDE THE FOOTINGS.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE IN ACCORDANCE WITH THE GENERAL ENGINEERING PLAN, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES, AND SHALL BE CERTIFIED BY THE SOIL'S ENGINEER.
11. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM THE RESPONSIBILITY FOR CORRECTION OR ERROR OR OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL THE CITY ENGINEER'S OFFICE AT (928) 777-1140 FOR ANY REQUIRED CIVIL INSPECTION 24 HOURS PRIOR TO PERFORMING ANY WORK. WORK PERFORMED WITHOUT CALLING FOR INSPECTION MAY BE REJECTED AND, IF REJECTED, SHALL BE REMOVED SOLELY AT THE CONTRACTOR'S EXPENSE.
13. NO GRADING SHALL COMMENCE WITHOUT OBTAINING A GRADING PERMIT AND NOTIFYING THE CITY OF PRESCOTT OR DEVELOPER'S GRADING INSPECTOR TO SCHEDULE A PREGRADING MEETING TWO WORKING DAYS PRIOR TO THE START OF WORK.
14. PRIOR TO THE START OF GRADING ALL SWPPP MEASURES SHALL BE IN PLACE, ALL DEBRIS, INCLUDING EXISTING STRUCTURES, FOOTINGS, FOUNDATIONS AND RUBBLE SHALL BE REMOVED FROM THE SITE TO THE SATISFACTION OF THE SOILS ENGINEER.
15. AFTER REMOVAL OF DEBRIS, ANY EXISTING FILL OR DISTURBED NATURAL SOILS SHALL BE EXCAVATED TO THE SATISFACTION OF THE SOILS ENGINEER.
16. THE EXPOSED SOILS SHALL THEN BE INSPECTED BY THE SOILS ENGINEER, AND ANY ADDITIONAL OVER-EXCAVATION SHALL THEN BE MADE IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS AND AS CONTAINED IN THE SOIL'S REPORT.
17. THE EXPOSED SOILS SHALL THEN BE SCARIFIED TO PROVIDE A BOND WITH NEW FILL, BROUGHT TO PROPER MOISTURE CONTENT AND COMPACTED TO AT LEAST 90% OF THE MAXIMUM DENSITY, AS DETERMINED BY ASTM D1557-78 OR EQUIVALENT COMPACTION SHALL BE OBTAINED BY METHODS SPECIFIED BY THE SOILS ENGINEER. ROAD PRISM SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% STANDARD OR MODIFIED PER SOILS ENGINEER'S RECOMMENDATIONS.
18. THE SOILS AND DESIGN ENGINEER OF RECORD SHALL ALSO BE RESPONSIBLE TO INSPECT, VERIFY AND REPORT THAT PROPER COMPACTION HAS BEEN OBTAINED BY EARTHWORK CONTRACTOR OR SUBCONTRACTOR AND PRIVATE UTILITY FRANCHISES CONCERNING UTILITY LINE BACKFILL, TO INCLUDE ELECTRICAL, GAS, CABLE, FIBEROPTIC AND LANDSCAPE IRRIGATION LINES. ADDITIONALLY, WATER AND SEWER LINES TO BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH GENERAL ENGINEERING REQUIREMENTS SECTION AND DETAIL.

GRADING AND DRAINAGE NOTES, CONTINUED

19. AN AS-GRADED GRADING PLAN AND THE CERTIFICATION OF COMPLIANCE FORMS FOR SAID GRADING PLAN WITH THE PROPER STAMPS AND SIGNATURES ARE TO BE SUBMITTED TO THE CITY ENGINEER PRIOR TO RELEASE OF GRADING BOND AND PRIOR TO FINAL GRADING INSPECTION. BUILDING PAD CERTIFICATION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT WHEN REQUESTED.
20. NO FILL SHALL BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND INSTALLATION OF SUBDRAINS (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOILS ENGINEER.
21. ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION BEFORE POURING.
22. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING CITY PUBLIC WORKS INSPECTION DEPARTMENT. A PRE-GRADING MEETING ON THE SITE IS REQUIRED BEFORE BEGINNING GRADING ACTIVITIES BY THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOIL ENGINEER/GEOLOGIST, PUBLIC WORKS INSPECTOR, AND WHEN REQUIRED, THE ARCHAEOLOGIST AND PALEONTOLOGIST. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THE PRE-CONSTRUCTION MEETING.
23. ALL EXISTING FILLS SHALL BE APPROVED AND CERTIFIED BY THE SOILS ENGINEER OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
24. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER.
25. THE COMPACTION REPORT AND APPROVAL FROM THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR NUCLEAR GAUGE, AND SHALL BE SO NOTED FOR EACH TEST.
26. EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE SHOWN CLEARLY ON APPROVED PLANS.
27. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL; HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.

WATER NOTES (103P)

1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL EXISTING FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE EITHER REPLACED OR ADJUSTED TO FINISH GRADE DEPENDING ON PLAN CALL OUT UPON COMPLETION OF PAVING, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MIL MYLAR & CAD FORMAT DIGITAL 'AS-BUILT' PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE CITY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN, EQUIPMENT, & MATERIAL ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. CIP INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE. PRIVATE DEVELOPMENTS SHALL PROVIDE FOR INDEPENDENT 3RD PARTY INSPECTIONS.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION CONTROL STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES, MATERIAL, SIZE & ELEVATIONS BEFORE COMMENCING CONSTRUCTION & ORDERING MATERIALS.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION & OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO SUCH. THE ENGINEER &/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS, OR THOSE OMITTED FROM SAME.
13. CONTRACTOR SHALL NOTIFY 'BLUE STAKE' AT 1-800-STAKEIT (1-800-782-5348) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE HIS BID BASED UPON THOSE VERIFICATIONS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SUCH.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS MUST BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHEN MORE STRINGENT THAN THE MAG OR CITY OF PRESCOTT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
17. ALL PLANS SIGNED BY THE CITY ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED AND/OR IS NOT ACTIVELY PROGRESSING.
18. PROJECT CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. ALL WATER LINES & APPURTENANCES SHALL BE PROVIDED WITH TRACE WIRE PER CITY STANDARD DETAIL. TRACE WIRE SHALL BE SUBJECT TO A TRACEABILITY TEST, EASILY ACCESSIBLE, & ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO PAVING. THE TRACE WIRE SHOULD BE TESTED AND SUBMITTED AS A PACKAGE WITH THE TESTING PACKET.
20. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
21. WATER MAINS SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-600 STANDARD.
22. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN NO. 8 'DISINFECTION OF WATER SYSTEMS'.
23. OPERATION OF VALVES TO BE DONE BY CITY PERSONNEL ONLY.
24. DUCTILE IRON PIPE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL MATERIALS USED IN THE INSTALLATION OF DUCTILE IRON PIPE SHALL BE PURSUANT TO AAC R-18-4.
25. ALL MATERIALS & PRODUCTS THAT COME INTO CONTACT WITH DRINKING WATER OR DRINKING WATER TREATMENT CHEMICALS MUST COMPLY WITH NSF STANDARD 61. ANY 'OR EQUAL' SUBSTITUTION SHALL ALSO MEET NSF STANDARD 61.
26. ALL TRENCHES & BEDDING SHALL BE PER COP DETAIL 200P & TECHNICAL SPECIFICATIONS.
27. ALL MATERIALS USED IN THE INSTALLATION OF WATER MAINS SHALL BE PURSUANT TO AAC R-18-4 & SHALL BE NSF APPROVED FOR POTABLE WATER.
28. ALL REVISIONS TO ORIGINAL PLANS MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION.

WATER NOTES

29. ALL DUCTILE IRON, COPPER, & BRASS FITTINGS SHALL BE ENCASED IN POLYETHYLENE PROTECTIVE WRAPPING IN ACCORDANCE WITH MAG SECTION 610.5 UNLESS COUNTERINDICATED BY GEOTECHNICAL CORROSIVITY TESTING OF BEDDING AND SHADING MATERIALS & APPROVED BY THE PUBLIC WORKS DIRECTOR.
30. WATER LINES SHALL BE INSTALLED WITH MECHANICAL RESTRAINTS WHERE JOINT RESTRAINTS IS REQUIRED.
31. WATER SERVICE INTERRUPTION NOTICES SHALL BE GIVEN TO AFFECTED RESIDENTS BY THE CONTRACTOR AT HIS EXPENSE. ADVANCE NOTIFICATION REQUIREMENTS MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO SCHEDULING A SHUTDOWN.
32. WATER MAIN TAPS, SERVICE TAPS, SHUTDOWN REQUESTS, AND METER REQUESTS MUST BE INITIATED WITH THE CITY INSPECTOR A MINIMUM OF 5 WORKING DAYS IN ADVANCE.

EROSION AND SEDIMENTATION CONTROL NOTES (105P-2)

1. A COPY OF THE APPROVED GRADING AND DRAINAGE PLAN FOR THIS PROJECT AND EROSION AND SEDIMENTATION PLAN (SWPPP) SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW. THOSE ELEMENTS OF THE GRADING AND DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE SWPPP SHALL BE CONSIDERED A PART OF THE SWPPP.
2. THE ESC/SWPPP AND RELATED RECORDS MUST BE MADE AVAILABLE UPON REQUEST. TO ADEQ AND THE CITY OF PRESCOTT
3. THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRICTION IS APPROVED AND NOTICE OF TERMINATION HAS BEEN SUBMITTED.
4. THE SCHEMATIC EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE A MINIMUM. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEANS TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM NOISE, DUST, AND STORM WATER RUNOFF THOUGHOUT CONSTRUCTION OF THE PROJECT AND BUILDINGS ON LOTS, AND SHALL CONDUCT HIS OPERATION IN SUCH A MANNER THAT STORM WATER WILL BE CONTAINED ON SITE OR CHANNELED INTO A STORM DRAIN SYSTEM, PROVIDED THAT IT IS FREE FROM POLLUTANTS AND DEBRIS.
5. CONTRACTOR SHALL PERMANENTLY STABILIZE ALL DISTURBED SLOPES AS STATED ON APPROVED CONSTRICTION PLANS. ALL EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL EXPOSED SLOPES HAVE BEEN PERMANENTLY STABILIZED.
6. CONTRACTOR SHALL TAKE MEASURES TO PREVENT OR MINIMIZE THE GENERATION, EMISSION AND/OR TRANSPORT OF FUGITIVE DUST FROM CONSTRUCTION ACTIVITIES.
7. THIS PLAN SHALL BE IN EFFECT UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED, TRANSFERRED TO NEW OWNERSHIP, OR DEVELOPED UNDER FUTURE PLANS WITH A NEW NOTICE OF INTENT (NOI), SWPPP, AND PERMIT. ONCE THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS MET THE FINAL STABILIZATION REQUIREMENTS OF THE PERMIT, THE AUTHORIZED SITE REPRESENTATIVE MAY FILE A NOTICE OF TERMINATION (NOT) WITH ADEQ, WITH A COPY SUBMITTED TO THE CITY OF PRESCOTT ENGINEERING DIVISION TO TERMINATE COVERAGE UNDER THE PERMIT.
8 A CONCRETE WASHOUT SHALL BE INSTALLED FOR ALL PROJECT THAT PROPOSE CONCRETE TO BE MIXED ON SITE OR BE DELIVERED FROM A BATCH PLANT. THE CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET FROM ANY DRAINAGE INFRASTRUCTURE OR NATURAL DRAINAGE FEATURES OR WATER BODIES AND INCORPORATE AN IMPERMEABLE LINER TO CONTAIN THE REQUIRED VOLUME. ALL DRIED CONCRETE WASTE SHALL BE BROKEN INTO MANAGEABLE PIECES AND DISPOSED OF OFF-SITE AT AN APPROVED FACILITY.

EARTHWORK NOTES

1. ALL VOLUMES ARE RAW AND DO NOT INCLUDE SPOILS FROM UTILITY TRENCHES
2. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
3.. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, EARTHWORK QUANTITIES, AND REQUIREMENTS OF WORK AND EXCESS OR DEFICIENCY IN EARTHWORK QUANTITIES, IF ANY. NO CLAIM SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.

ADDITIONAL CITY OF PRESCOTT NOTES

A. THE ISSUANCE OF A PERMIT OR APPROVAL OF CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, NOR AN APPROVAL OF ANY VIOLATION OF OR DEVIATION FROM THE PROVISIONS OF THIS ARTICLE OR ANY OTHER ORDINANCE, LAW, RULE OR REGULATION.

B. IF MATERIALS ARE WASHED OR DEPOSITED UPON DEDICATED STREETS OR ALLEYS OR OTHER PUBLIC PROPERTY AS A RESULT OF IMPROPERLY CONTROLLED GRADING OF HIGHER OR ADJACENT LANDS, THE CITY ENGINEER SHALL NOTIFY THE OWNER OR HIS AUTHORIZED AGENT, IF KNOWN, TO REMOVE MATERIALS AND RESTORE THE STREET OR ALLEY OR OTHER PUBLIC PROPERTY TO THEIR ORIGINAL CONDITION IN ACCORDANCE WITH THE CONDITIONS SET FORTH BY THE CITY ENGINEER BUT IN NO CASE SHALL COMPLIANCE WITH SAID CONDITION EXCEED 10 DAYS FROM RECEIPT OF THE NOTICE TO COMPLY.

C. NO CLEARING AND/OR GRUBBING OF A SITE SHALL OCCUR WITHOUT FIRST RECEIVING A GRADING PERMIT. WHEN CLEARING AND/OR GRUBBING HAS COMMENCED, THE SITE SHALL BE CONTINUOUSLY WORKED UNTIL ALL INFRASTRUCTURE IS COMPLETED AND ALL EROSION CONTROL MEASURES AND SLOPE STABILIZATION HAVE BEEN COMPLETED.

D. PORTIONS OF THE SITE OR LOT TO BE DISTURBED SHALL BE CLEARLY IDENTIFIED ON THE GRADING PLAN AS THE "DISTURBED AREA(S)"OR "DISTURBED AREA ENVELOPE". GRUBBING, GRADING, AND CLEARING MAY ONLY OCCUR WITHIN THE DISTURBED AREA(S) IDENTIFIED ON THE APPROVED GRADING PLAN. PORTIONS OF THE SITE OR LOT NOT IDENTIFIED AS DISTURBED AREA(S) MAY NOT BE USED FOR STOCKPILING MATERIALS.

E. ALL CORNERS OF THE PROPOSED SITE SHALL BE CLEARLY STAKED BY A REGISTERED LAND SURVEYOR BEFORE ANY CLEARING, GRUBBING OR GRADING BEGINS.

F. ALL FILLS SHALL BE COMPACTED PER GES TABLE 2-1. COMPACTION TESTING FREQUENCY SHALL BE EVERY 2 FEET IN ELEVATION (VERTICALLY) AND EVERY 200 FEET LINEARLY (HORIZONTALLY). AT THE TIME OF THE BUILDING PERMIT, A GEOTECHNICAL ENGINEER CERTIFICATION MAY BE REQUIRED FOR STRUCTURES.

G. THE AREA OVER WHICH FILLS ARE TO BE MADE SHALL BE CLEARED OF ALL TRASH, TREES, STUMPS, TIMBER, DEBRIS OR OTHER MATERIAL NOT SUITABLE AS A FOUNDATION FOR FILL.

H. EDGES OF CUTS AND FILLS SHALL CONFORM TO THE NATURAL TOPOGRAPHY OF THE LAND BY RESHAPING.

I. EXCESS MATERIAL SHALL BE HANDLED PER THE CITY APPROVED GRADING PLAN, OR REMOVED TO A CITY APPROVED OFF-SITE DISPOSAL AREA.

J. ALL SITE RE-VEGETATION SHALL BE COMPLETED WITHIN 90 DAYS OF GRADING WORK COMPLETION, OR PRIOR TO RELEASE OF FINANCIAL ASSURANCES OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY, WHICHEVER OCCURS FIRST.

K. WHERE NATURAL AREAS OR PRESERVED VEGETATION IS DESIGNATED ON A SITE OR LOT, TEMPORARY FENCING SHALL BE INSTALLED WHERE THEY ABUT CONSTRUCTION AREAS TO PREVENT SITE DISTURBANCE OF NATURAL AREAS.

0 — 20
DRAWING SCALE
1" = 20 ft, Horizontal
(This scale is valid for 22"x34" sheets only)

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 — 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DESIGN	DRAWN	CHECKED	APPROVED
RGP	RGP	--	----

REVISIONS

NO.	DATE	DESCRIPTION	BY	APVD
-	-	-	-	-

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EST. 1995
1650 Willow Creek Road
Prescott, AZ 86301
(928) 776-1750
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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD
WATER LINE UPSIZING
COP CIP#17-014

GENERAL

GENERAL NOTES

Registered Professional Engineer (Civil)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date Signed 3-23-2020
ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
G.03

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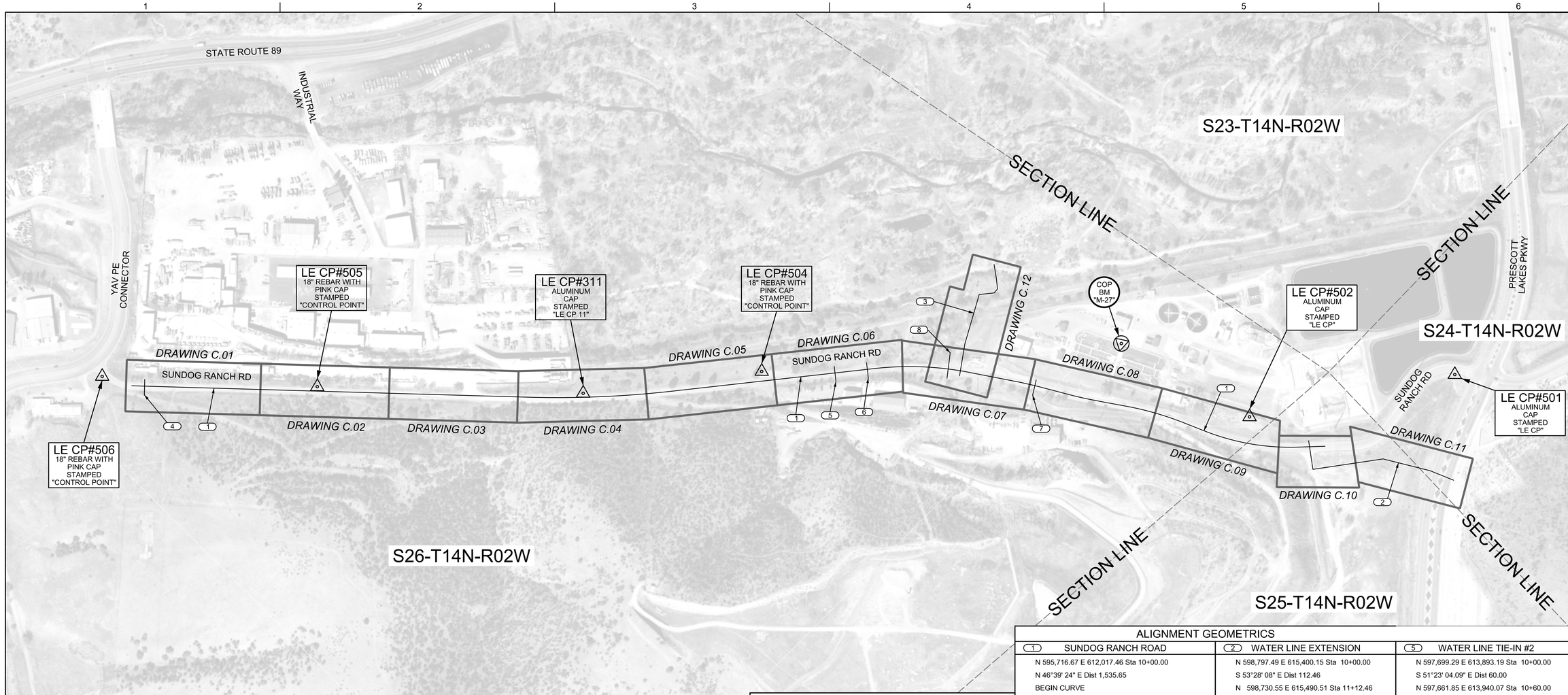
FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn



PROJECT CONTROL POINTS

CONTROL POINTS PLACED BY LYON ENGINEERING SURVEY CREWS UTILIZING CITY OF PRESCOTT COORDINATE SYSTEM AND BENCHMARK CONTACT: JASON O'BRIEN, RLS 928-776-1750

CONTROL POINT #	NORTHING	EASTING	ELEVATION
311	596935.6562	613277.8779	5260.238
501	599380.4920	615619.8380	5209.291
502	598700.7100	615172.4990	5206.822
504	597485.9880	613708.1440	5249.742
505	596223.5180	612529.6050	5271.355
506	595661.1920	611910.7830	5273.413

CITY OF PRESCOTT & STATE PLANE COORDINATE SYSTEM DATA & CONVERSIONS

COP SURVEY DATUM REQUIREMENTS:
COORDINATE UNITS: INTERNATIONAL FEET
DISTANCE UNITS: INTERNATIONAL FEET
HEIGHT UNITS: INTERNATIONAL FEET
VERTICAL DATUM: NAVD 88

STATE PLANE:
COORDINATE SYSTEM: US STATE PLANE 1983
DATUM: WGS 84
ZONE: ARIZONA CENTRAL 0202
GEOID MODEL: GEOID99 (CONUS)

CITY OF PRESCOTT - CONVERSION FROM STATE PLANE
NORTHING: (STATE PLANE x 1.000329975) - 701,456.0090
EASTING: (STATE PLANE x 1.000329975) + 69,457.2499

STATE PLANE - CONVERSION FROM CITY OF PRESCOTT
NORTHING: (CITY OF PRESCOTT + 701,456.0090) x 0.999670134
EASTING: (CITY OF PRESCOTT - 69,457.2499) x 0.999670134

CITY BENCHMARKS

COP BM "M-27"

COP BENCHMARK DESIGNATION "NGS M-27", IN PRESCOTT, YAVAPAI COUNTY, AT MAIN WASTEWATER TREATMENT PLANT ON SUNDOG RANCH ROAD, BRASS CAP AT THE NORTHERLY MOST CORNER OF WEST AERATION BED
NAVD 88: 5208.842

ALIGNMENT GEOMETRICS

1 SUNDOG RANCH ROAD

N 595,716.67 E 612,017.46 Sta 10+00.00

N 46°39' 24" E Dist 1,535.65

BEGIN CURVE

Length = 563.07
Radius = 4,012.00
P.C. Station25+35.65 N 596,770.68 E 613,134.26
P.T. Station30+98.71 N 597,184.57 E 613,515.34

N 38°36' 56" E Dist 792.65

BEGIN CURVE

Length = 367.81
Radius = 1,212.00
P.C. Station38+91.36 N 597,803.91 E 614,010.02
P.T. Station42+59.17 N 598,052.34 E 614,279.33

BEGIN CURVE

N 56°00' 11" E Dist 183.15

BEGIN CURVE

Length = 97.19
Radius = 1,512.00
P.C. Station44+42.31 N 598,154.75 E 614,431.17
P.T. Station45+39.50 N 598,206.46 E 614,513.44

N 59°41' 09" E Dist 116.07

BEGIN CURVE

Length = 106.94
Radius = 1,488.00
P.C. Station46+55.57 N 598,265.05 E 614,613.64
P.T. Station47+62.51 N 598,322.30 E 614,703.94

N 55°34' 06" E Dist 124.34

BEGIN CURVE

N 598,458.22 E 614,902.21

Length = 231.38
Radius = 1,200.00
P.C. Station48+86.85 N 598,392.60 E 614,806.49
P.T. Station51+18.23 N 598,504.28 E 615,008.73

N 66°36' 57" E Dist 83.37

BEGIN CURVE

Length = 375.02
Radius = 912.00
P.C. Station52+01.59 N 598,537.36 E 615,085.25
P.T. Station55+76.61 N 598,751.83 E 615,389.67

N 43°03' 20" E Dist 103.39

N 598,827.37 E 615,460.26 Sta 56+80.00

2 WATER LINE EXTENSION

N 598,797.49 E 615,400.15 Sta 10+00.00

S 53°28' 08" E Dist 112.46

N 598,730.55 E 615,490.51 Sta 11+12.46

N 36°31' 52" E Dist 275.44

N 598,951.87 E 615,654.47 Sta 13+87.90

N 59°01' 52" E Dist 188.46

N 599,048.85 E 615,816.07 Sta 15+76.36

N 66°59' 31" E Dist 98.63

N 599,087.40 E 615,906.86 Sta 16+75.00

3 WATER LINE BRANCH

N 598,016.99 E 614,263.50 Sta 10+00.00

N 35°34' 41.71" W Dist 126.19

N 598,119.62 E 614,190.08 Sta 11+26.19

N 28°44' 58.47" W Dist 199.32

N 598,294.37 E 614,094.21 Sta 13+25.51

N 38°45' 01.53" E Dist 58.79

N 598,340.22 E 614,131.01 Sta 13+84.30

N 6°14' 58.47" W Dist 20.00

N 598,360.10 E 614,128.83 Sta 14+04.30

N 51°14' 58.47" W Dist 40.32

N 598,385.34 E 614,097.38 Sta 14+44.62

N 54°22' 08.39" W Dist 55.38

N 598,417.60 E 614,052.37 Sta 15+00.00

4 WATER LINE TIE-IN #1

N 595,769.89 E 612,035.97 Sta 10+00.00

S 43°20' 35.73" E Dist 60.00

N 595,726.26 E 612,077.16 Sta 10+60.00

5 WATER LINE TIE-IN #2

N 597,699.29 E 613,893.19 Sta 10+00.00

S 51°23' 04.09" E Dist 60.00

N 597,661.85 E 613,940.07 Sta 10+60.00

6 WATER LINE TIE-IN #3

N 597,797.96 E 613,971.99 Sta 10+00.00

S 51°23' 04.09" E Dist 60.00

N 597,760.51 E 614,018.87 Sta 10+60.00

7 WATER LINE TIE-IN #4

N 598,216.34 E 614,485.37 Sta 10+00.00

S 31°28' 31.71" E Dist 60.00

N 598,165.17 E 614,516.69 Sta 10+60.00

8 DRAINAGE PROFILE D1

N 598,054.77 E 614,174.54 Sta 10+00.00

S 37°50' 30.19" E Dist 100.00

N 597,975.80 E 614,235.89 Sta 11+00.00

NORTH

0 200

DRAWING SCALE
1" = 200 ft, Horizontal
(This scale is valid for 22"x34" sheets only)

VERIFY SCALE

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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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CITY OF PRESCOTT

SUNDOG RANCH ROAD WATER LINE UPSIZING
COP CIP#17-014

CIVIL

COMPOSITE SHEET MAP, PROJECT GEOMETRICS AND SURVEY CONTROL

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
ARIZONA, U.S.A.

DATE
MARCH 2020

LYON PROJECT #
274-40

DRAWING NUMBER
SVY.01

SHEET 4 OF 17

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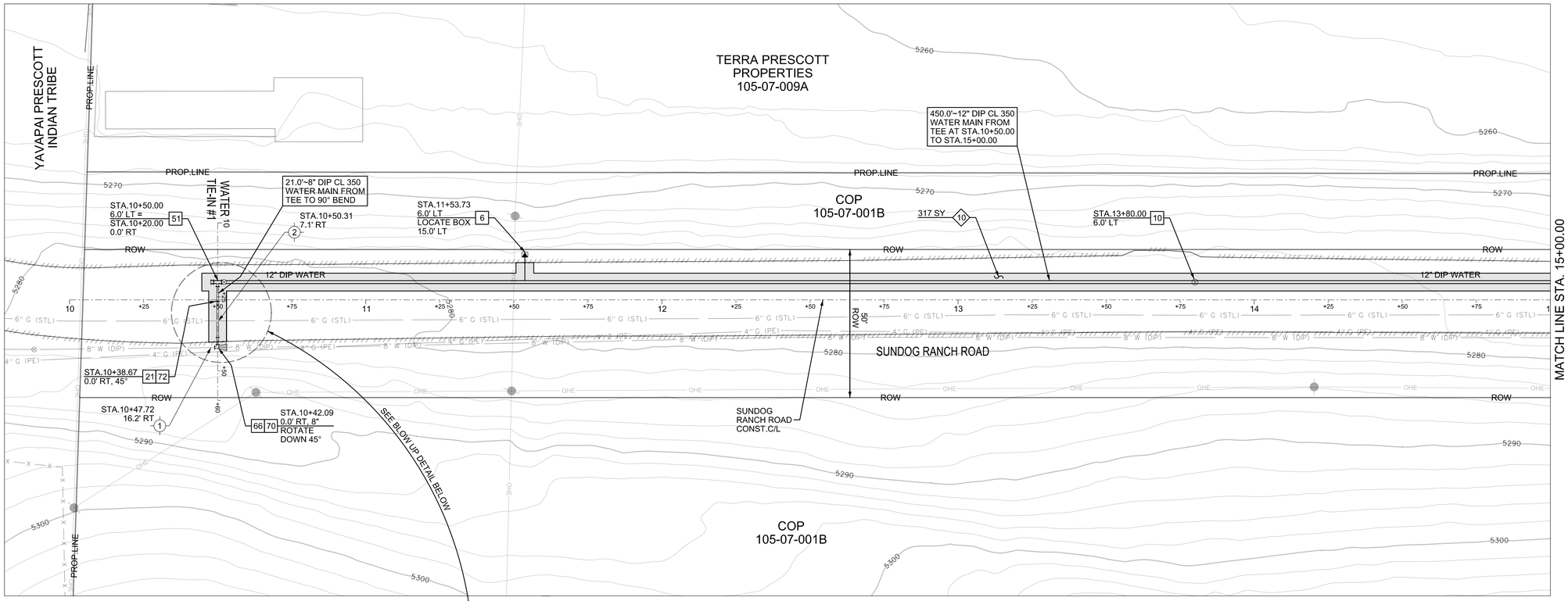
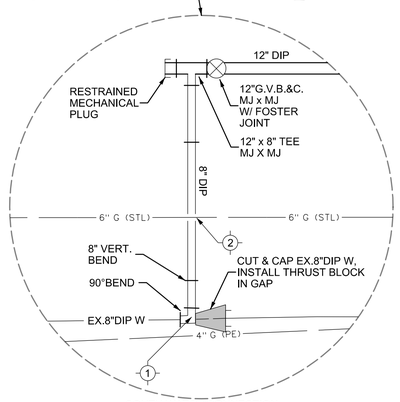
FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn



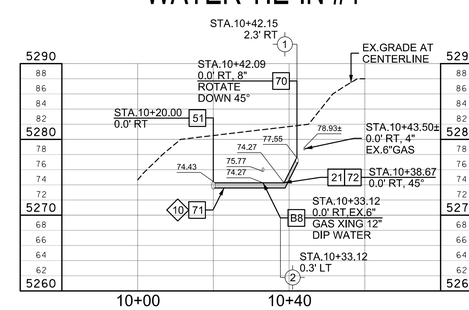


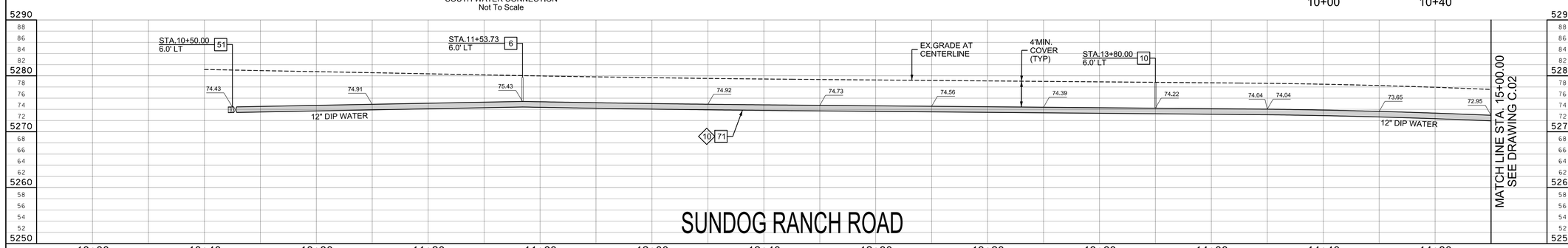
SOUTH WATER CONNECTION
Not To Scale

POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
1	TOP OF EX.8" DIP WATER MAIN	5277.55
2	TOP OF EX.6" STEEL GAS MAIN	5276.27

WATER TIE-IN #1





WATER KEY NOTES

- 6 — INSTALL 1" AIR VACUUM RELEASE VALVE ASSEMBLY PER QUAD CITY STD. DET. 317Q-1
- 10 — INSTALL TRACER WIRE STATION PER QUAD CITY STD. DET. 319Q-2
- 21 — INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q
- 51 — INSTALL: ~12" x 8" TEE, MJ x MJ ~RESTRAINED MECHANICAL PLUG ~12" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q, MJ x MJ W/FOSTER JOINT
- 66 — CUT & CAP 5'± EX. 8" DIP WATER MAIN 4' NORTHEAST OF 90° BEND, INSTALL THRUST BLOCK SPANNING GAP BETWEEN BEND AND 8" CAP PER MAG STD. DET.380
- 70 — INSTALL HORIZONTAL BEND WITH MEGALUG RESTRAINT
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- 72 — DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q

SEPARATION KEY NOTES

- B8 — 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
DRAWING SCALE
1" = 20 ft, Horizontal
1" = 10 ft, Vertical
(This scale is valid for 22"x34" sheets only)

VERIFY SCALE
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DESIGN	DRAWN	CHECKED	APVD	APPROVED
RGP	RGP	-	-	----

NO.	DATE	DESCRIPTION	BY
-	-	-	-

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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD WATER LINE UPSIZING COP CIP#17-014

CIVIL

SUNDOG RANCH ROAD STA. 10+00.00 TO 15+00.00

KEY PLAN

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
ARIZONA, U.S.A.

DATE MARCH 2020
LYON PROJECT # 274-40
DRAWING NUMBER C.01
SHEET 5 OF 17

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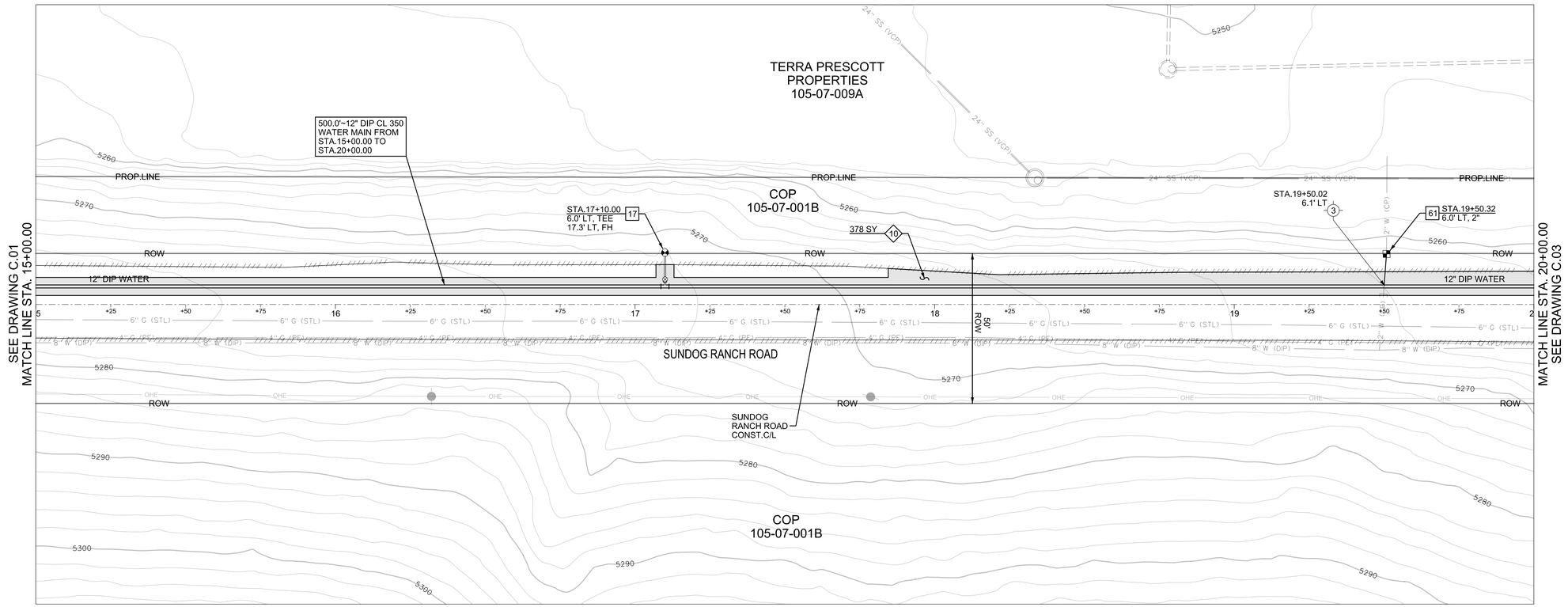

WATER KEY NOTES

17	INSTALL FIRE HYDRANT PER QUAD CITY STD. DET. 360Q
61	CUT & CAP EX.2"COPPER ON SOUTHEAST SIDE OF CUT. REMOVE EX.METER & INSTALL 2" WATER SERVICE CONNECTION PER QUAD CITY STD. DET. 316P
71	RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS

ROAD & DRAINAGE KEY NOTES

10	INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
DRAWING SCALE
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1" = 10 ft, Vertical
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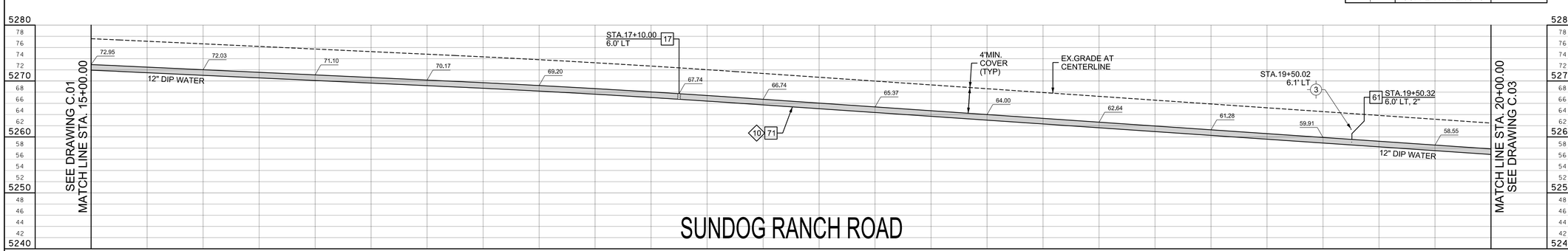
SUNDOG RANCH ROAD
WATER LINE UPSIZING
COP CIP#17-014

CIVIL

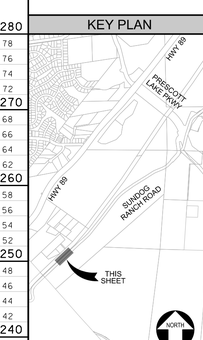
SUNDOG RANCH ROAD
STA. 15+00.00 TO 20+00.00

POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
3	TOP OF EX.2" COPPER WATER SVC	5261.45



KEY PLAN



REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
C.02
SHEET 6 OF 17

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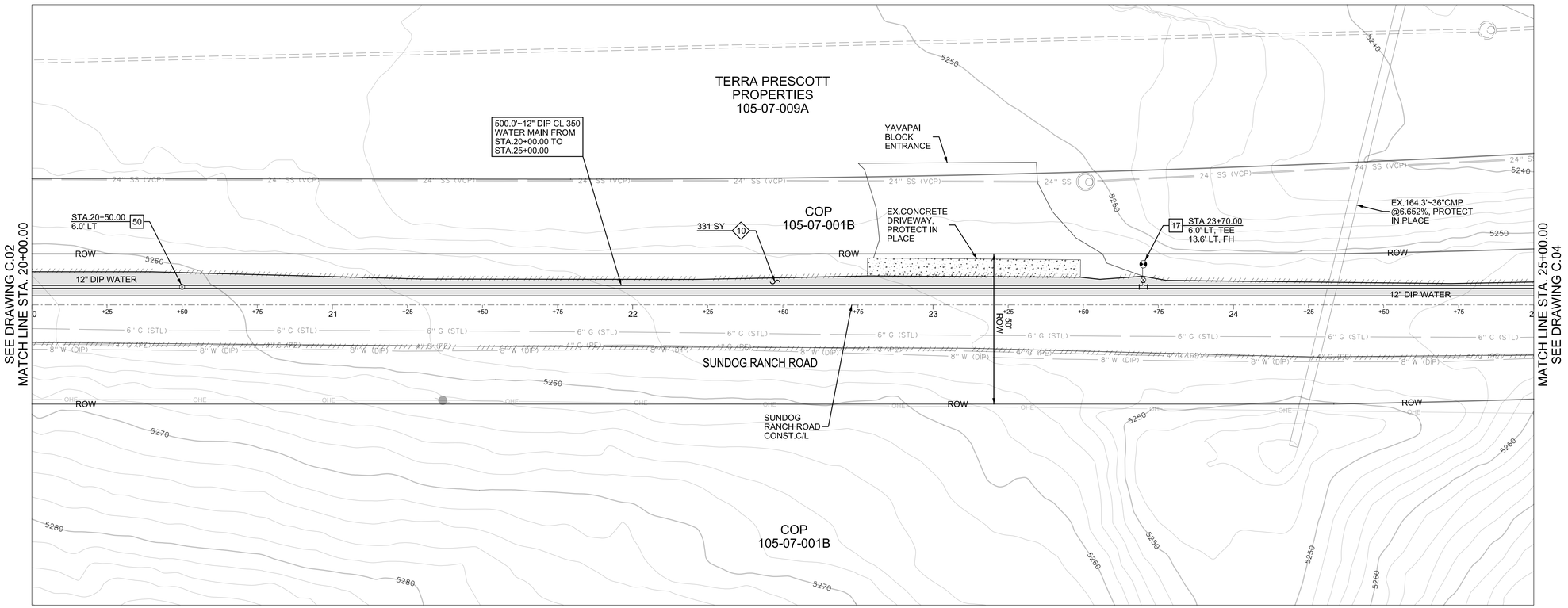

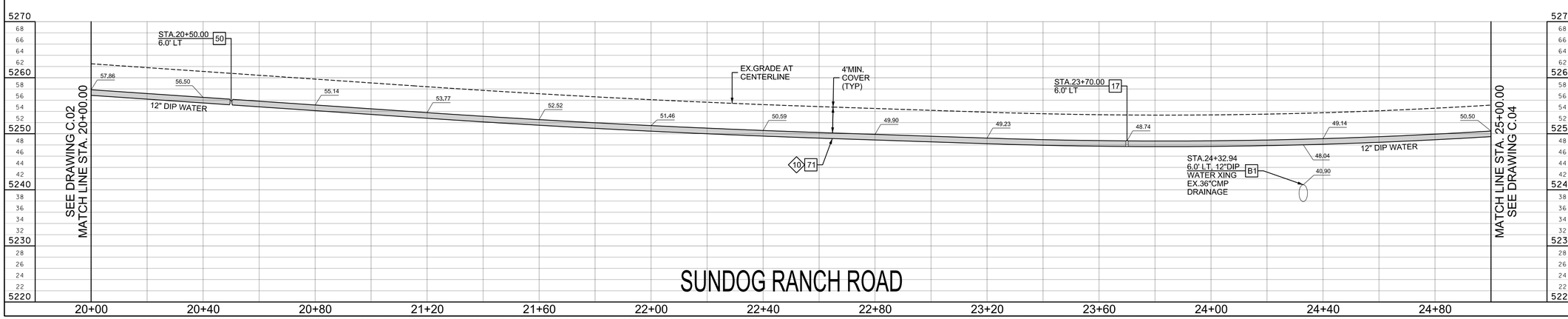

WATER KEY NOTES

- 17 — INSTALL FIRE HYDRANT PER QUAD CITY STD. DET. 360Q
- 50 — INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS

SEPARATION KEY NOTES

- B1 — 2' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF DRAINAGE PIPE

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20

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SUNDOG RANCH ROAD
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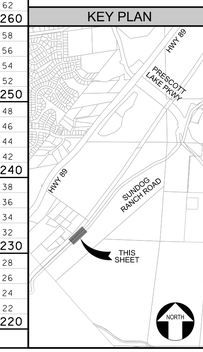
KEY PLAN



REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
ARIZONA, U.S.A.

DATE	MARCH 2020
LYON PROJECT #	274-40
DRAWING NUMBER	C.03
SHEET	7 OF 17

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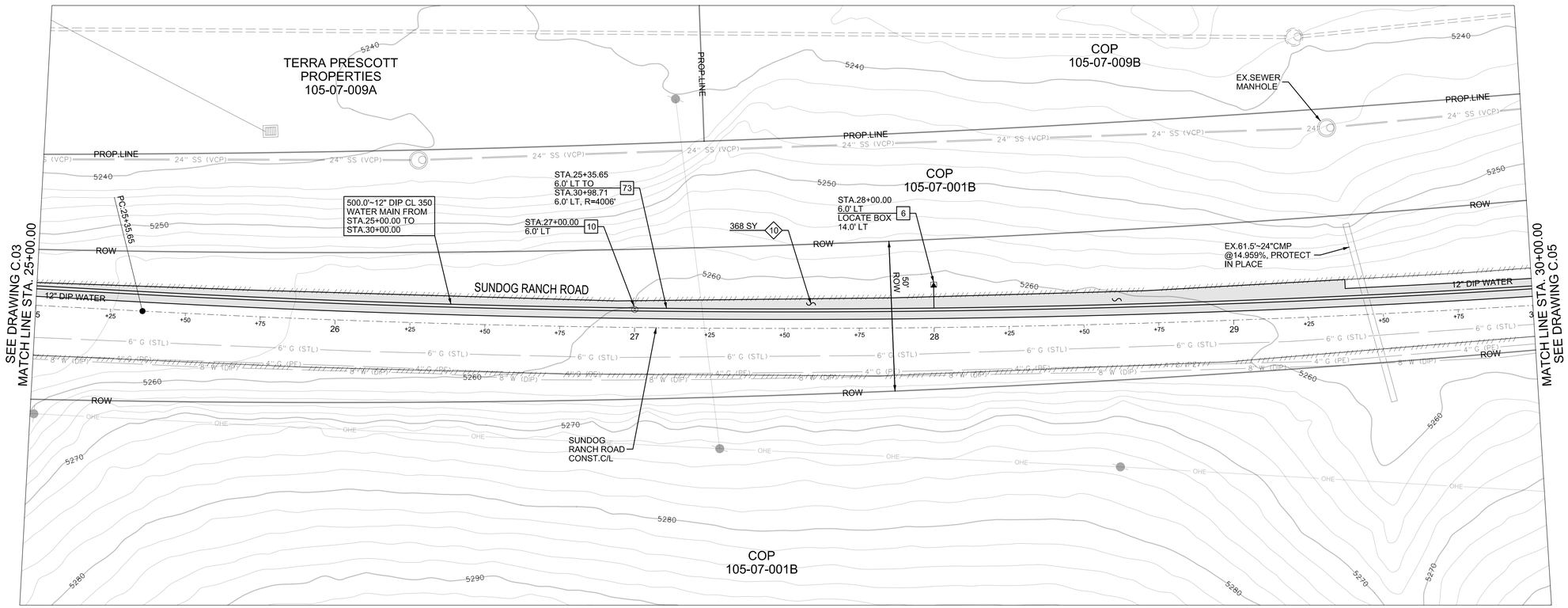

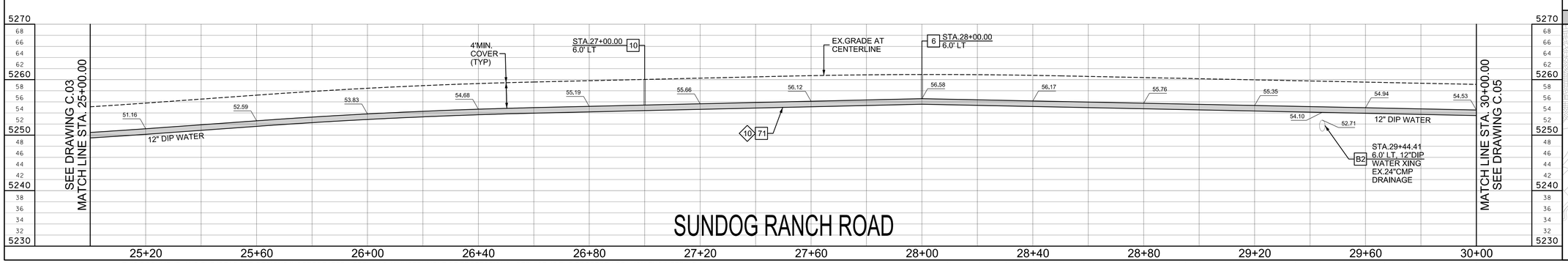

WATER KEY NOTES

6	INSTALL 1" AIR VACUUM RELEASE VALVE ASSEMBLY PER QUAD CITY STD. DET. 317Q-1
10	INSTALL TRACER WIRE STATION PER QUAD CITY STD. DET. 319Q-2
71	RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
73	HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS

SEPARATION KEY NOTES

B2	1' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF DRAINAGE PIPE

ROAD & DRAINAGE KEY NOTES

10	INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

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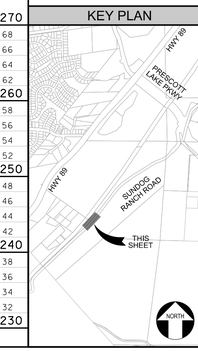

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DRAWING NUMBER	C.04
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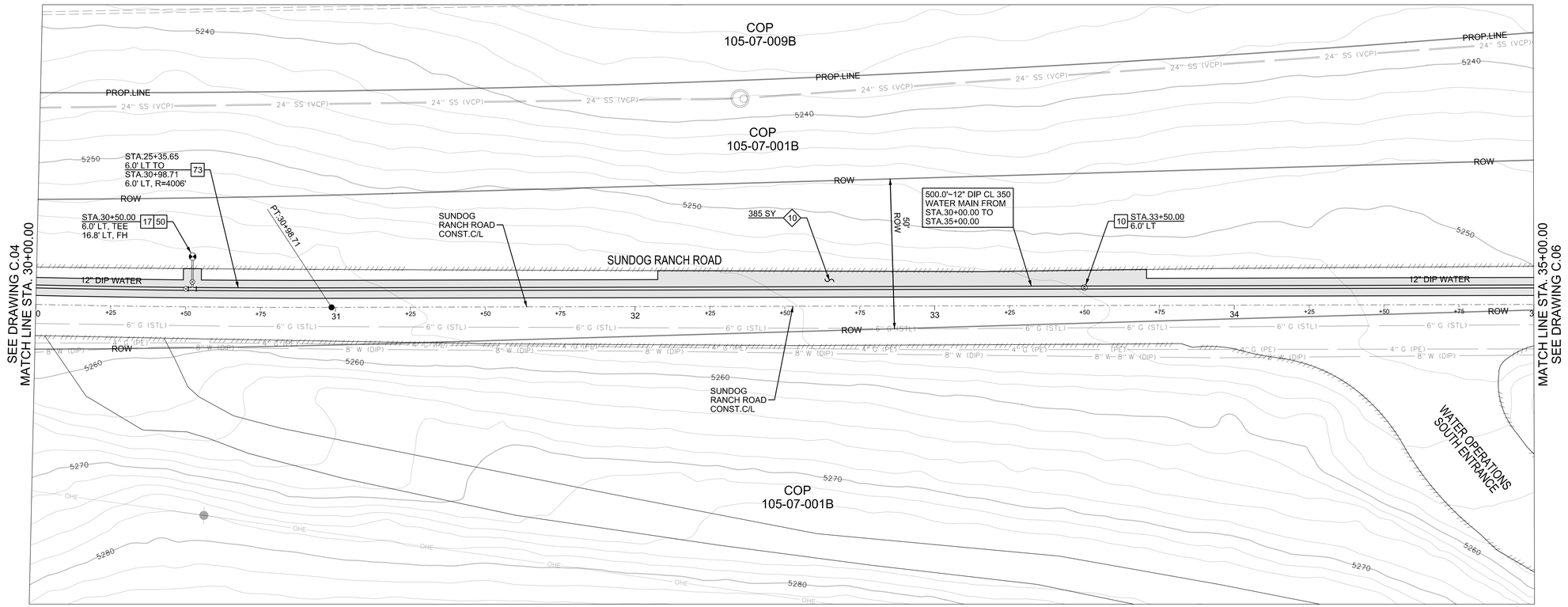

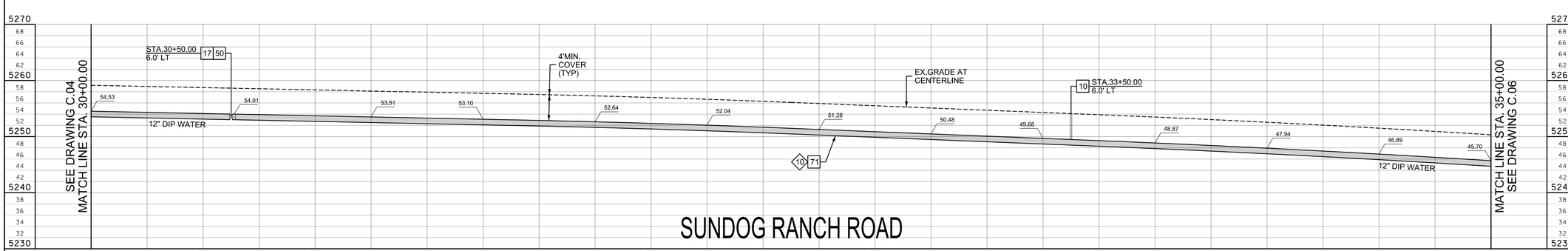

WATER KEY NOTES

10	INSTALL TRACER WIRE STATION PER QUAD CITY STD. DET. 319Q-2
17	INSTALL FIRE HYDRANT PER QUAD CITY STD. DET. 360Q
50	INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q
71	RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
73	HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS

ROAD & DRAINAGE KEY NOTES

10	INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
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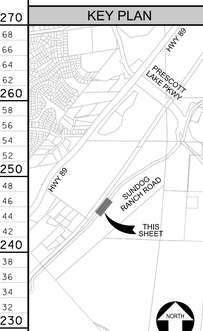
VALID CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
Registered
ARIZONA, U.S.A.

KEY PLAN



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MARCH 2020
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DRAWING NUMBER
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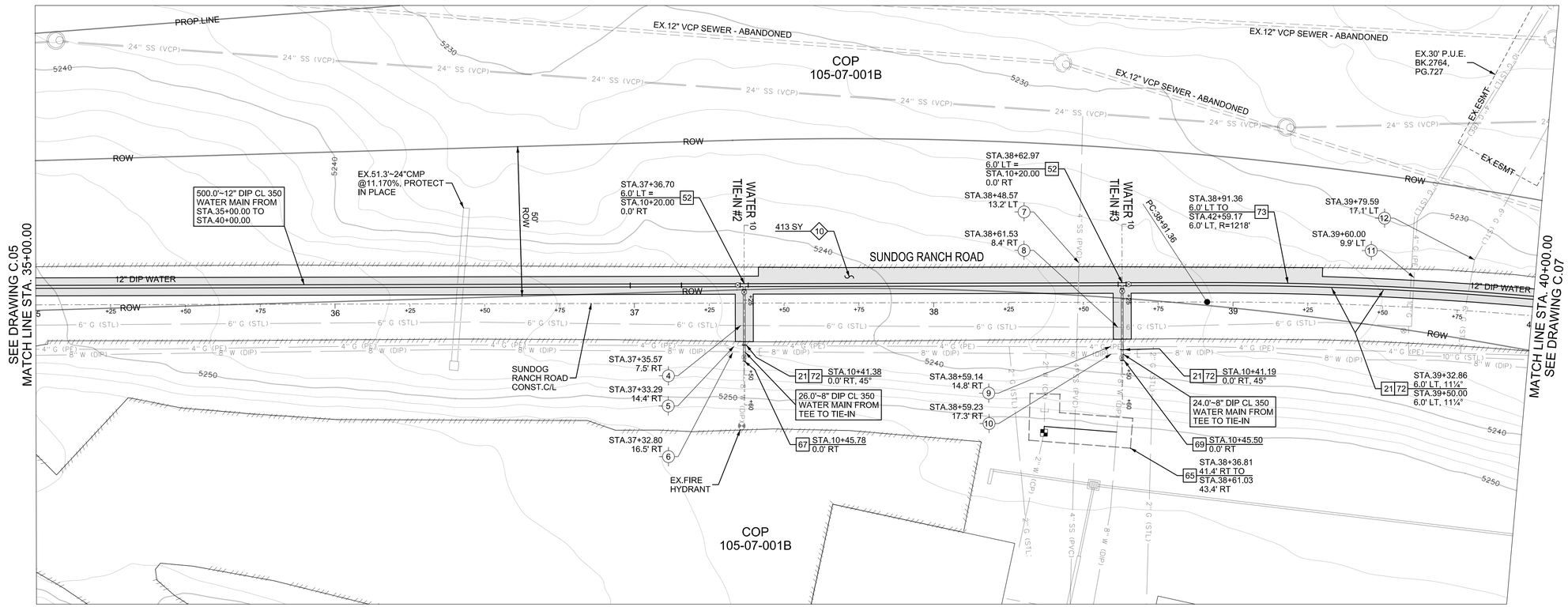
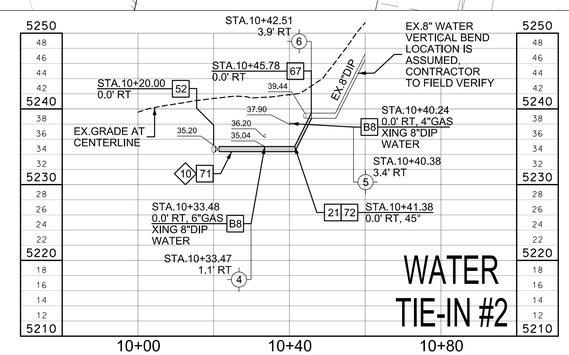
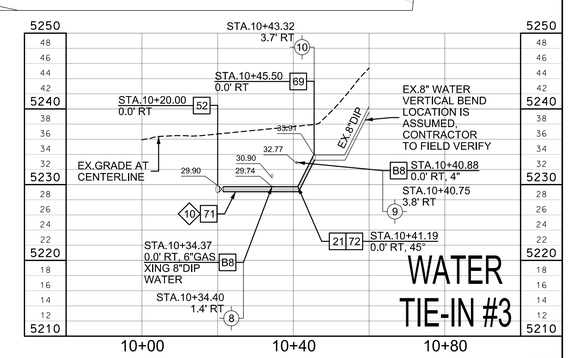
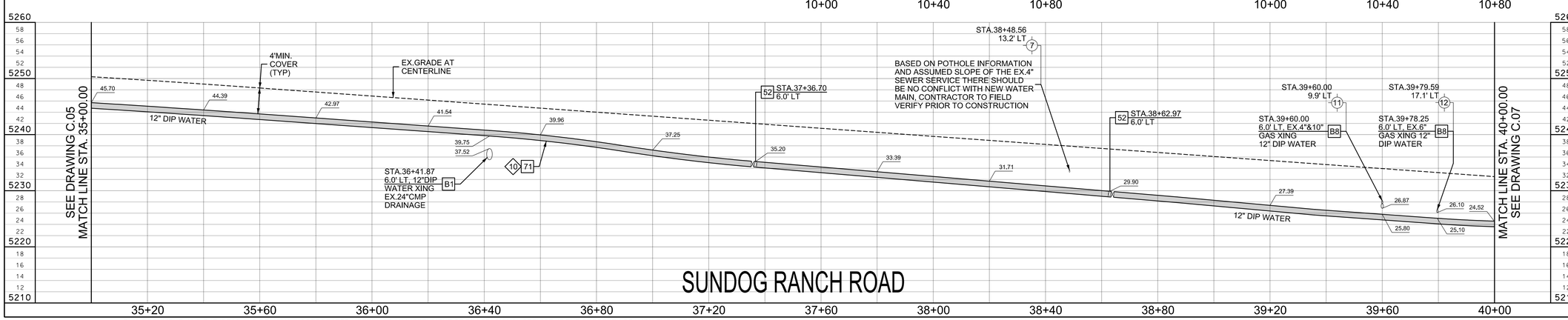


POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
4	TOP OF EX.6" STEEL GAS MAIN	5236.70
5	TOP OF EX.4" POLY GAS MAIN	5238.24
6	TOP OF EX.8" DIP WATER MAIN	5239.58
7	TOP OF EX.4" PVC SEWER SERVICE	5233.63
8	TOP OF EX.6" STEEL GAS MAIN	5231.40
9	TOP OF EX.4" POLY GAS MAIN	5233.11
10	TOP OF EX.8" DIP WATER MAIN	5234.04
11	TOP OF EX.4" POLY & 10" STEEL GAS MAIN	5228.20
12	TOP OF EX.6" STEEL GAS MAIN	5226.60







WATER KEY NOTES

- 21 — INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q
- 52 — INSTALL: ~12" x 8" TEE ~8" & 12" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391
- 65 — CUT AND CAP 5'± OF EX.2" COPPER & REMOVE EX.METER, INSTALL 2" WATER SERVICE ON EX.8" DIP WATER PER QUAD CITY STD. DET. 316P
- 67 — CUT & CAP 5' OF EX.8"DIP ON BOTH SIDES OF EX.8" TEE, 10' TOTAL REMOVE EX.8"G.V.B.&C. AND CONNECT TO EX.8" DIP WATER MAIN WITH 8" DIP RESTRAINED MECHANICAL COUPLING
- 69 — CUT & CAP 5' OF EX.8"DIP ON BOTH SIDES OF EX.8" TEE, 10' TOTAL REMOVE EX.8"G.V.B.&C. AND CONNECT TO EX.8" DIP WATER MAIN 45°VERTICAL BEND WITH RESTRAINED MECHANICAL COUPLING
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- 72 — DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q
- 73 — HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS

SEPARATION KEY NOTES

- B1 — 2' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF DRAINAGE PIPE
- B8 — 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
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1" = 10 ft, Vertical
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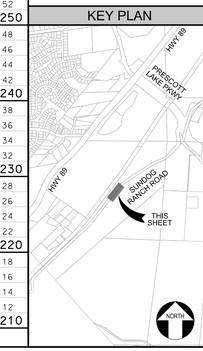
SUNDOG RANCH ROAD STA. 35+00.00 TO 40+00.00

KEY PLAN



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CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
Expires
ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
C.06
SHEET 10 OF 17

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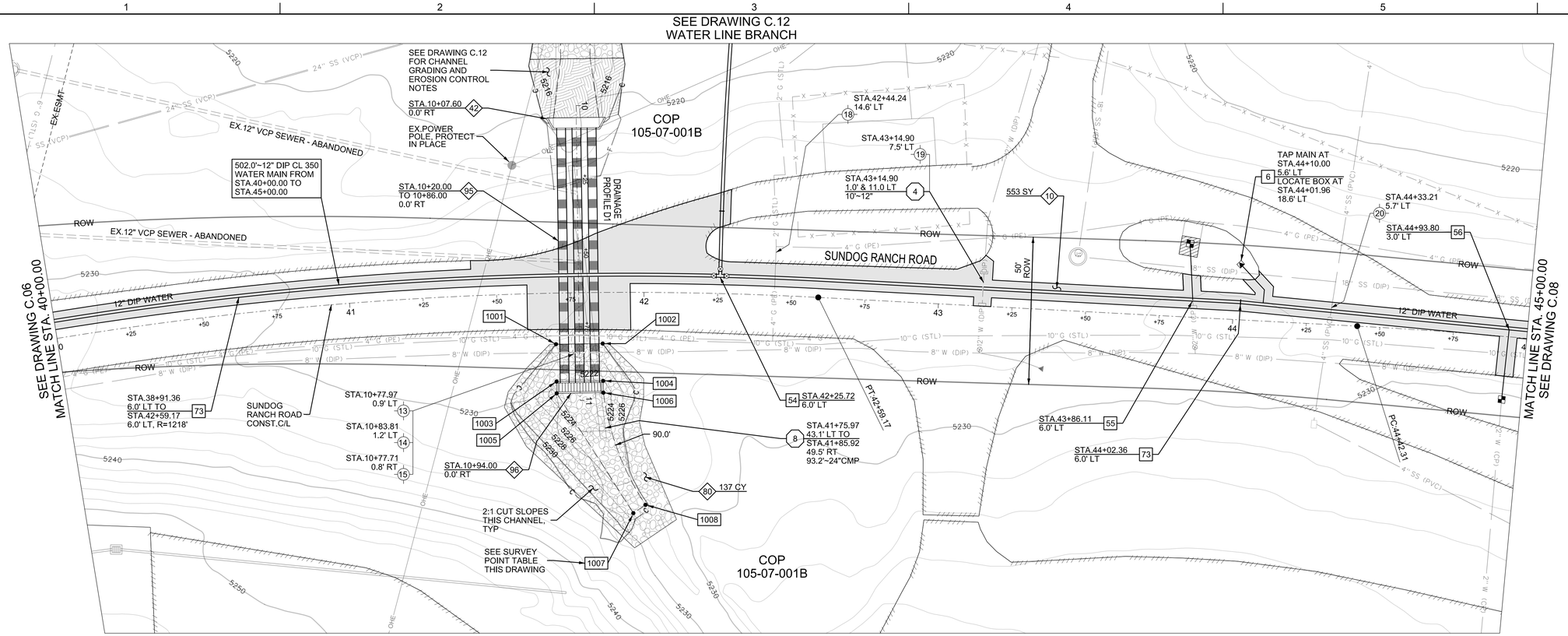
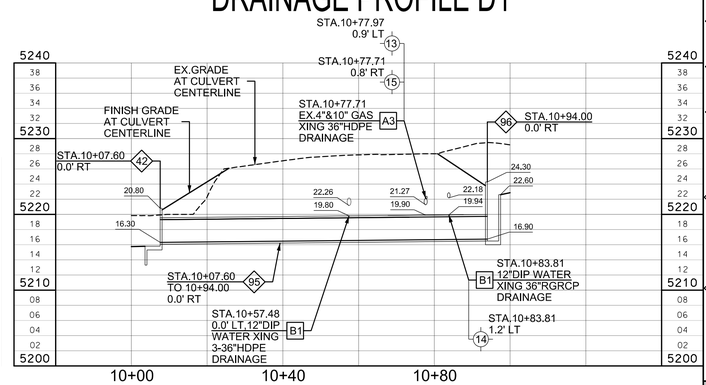


DRAINAGE PROFILE D1

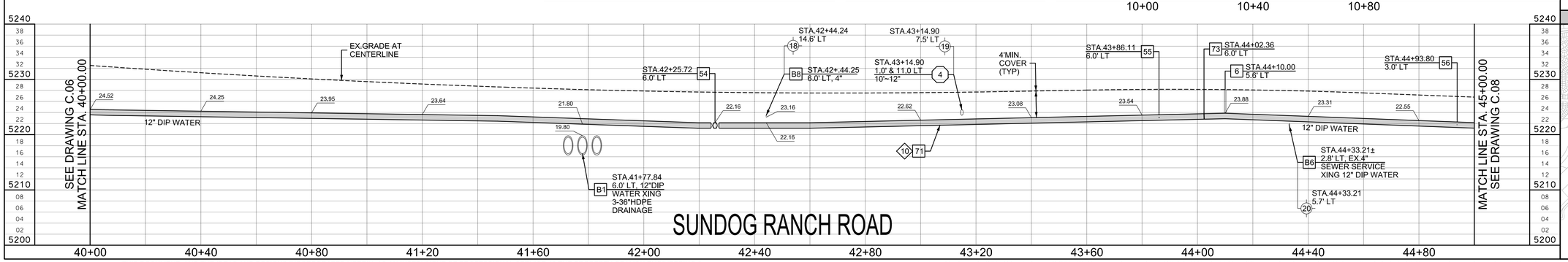


POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1001	597986.07	614217.88	MATCH EX.	EX-GRD
1002	597995.79	614230.39	MATCH EX.	EX-GRD
1003	597976.07	614225.64	5223.80	FG
1004	597985.79	614238.15	5223.80	FG
1005	597972.91	614228.10	5222.60	FG
1006	597982.63	614240.61	5222.60	FG
1007	597956.15	614273.33	MATCH EX.	EX-GRD
1008	597960.88	614274.95	MATCH EX.	EX-GRD

POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
13	TOP OF EX.4" POLY GAS MAIN	5222.40
14	TOP OF EX.8" DIP WATER MAIN	5222.86
15	TOP OF EX.10" STEEL GAS MAIN	5222.10
18	TOP OF EX.4" POLY GAS MAIN	5223.50
19	TOP OF EX.12" DIP WATER MAIN	5224.51
20	TOP OF EX.4" SEWER SERVICE	NOT FOUND



REMOVAL KEY NOTES

- 4 — CUT, REMOVE & CAP EX.DIP WATER LINE
- 8 — REMOVE EX. CULVERT

WATER KEY NOTES

- 6 — INSTALL 1" AIR VACUUM RELEASE VALVE ASSEMBLY PER QUAD CITY STD. DET. 317Q-1
- 54 — INSTALL: ~12" x 8" TEE ~3-12" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q RESTRAIN ALL JOINTS
- 55 — CUT & CAP EX.2"COPPER ON SOUTHEAST SIDE OF CUT ~SAWCUT, REMOVE & REPLACE 39 SF OF EX. CONCRETE PAD ~REMOVE EX.METER & INSTALL 2" WATER SERVICE CONNECTION PER QUAD CITY STD. DET. 316P
- 56 — REMOVE EX.2" COPPER AND METER & INSTALL NEW 2" WATER SERVICE CONNECTION PER QUAD CITY STD. DET. 316P
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- 73 — HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS

SEPARATION KEY NOTES

- A3 — 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF DRAINAGE PIPE
- B1 — 2' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF DRAINAGE PIPE
- B6 — 6" MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF SEWER SERVICE
- B8 — 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1
- 42 — INSTALL HEADWALL PER MAG STD. DET. 501-4
- 80 — INSTALL RIP-RAP PER GRADATION TABLE & RIP-RAP INSTALLATION DETAIL ON DRAWING D.01
- 95 — -REMOVE 93.2'~EX.24"CMP INSTALL 3-36" HDPE DRAINAGE CULVERT L=86.4' IE IN=5216.90 IE OUT=5216.30 S=0.694% SEE DRAINAGE PROFILE D1 ON THIS DRAWING
- 96 — INSTALL INLET DROP STRUCTURE PER QUAD CITY STD. DET. 523PV-6 WITH MODIFICATION AS SHOWN ON DRAWING D.01

NORTH

0 20
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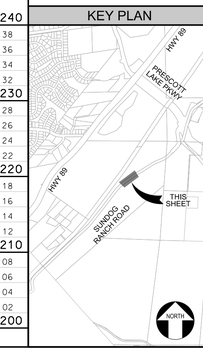
CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD WATER LINE UPSIZING COP CIP#17-014

CIVIL

SUNDOG RANCH ROAD STA. 40+00.00 TO 45+00.00

KEY PLAN



REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 33450 RICHARD G. POYNOR Date 3-23-2020 ARIZONA, U.S.A.

DATE	MARCH 2020
LYON PROJECT #	274-40
DRAWING NUMBER	C.07
SHEET	11 OF 17

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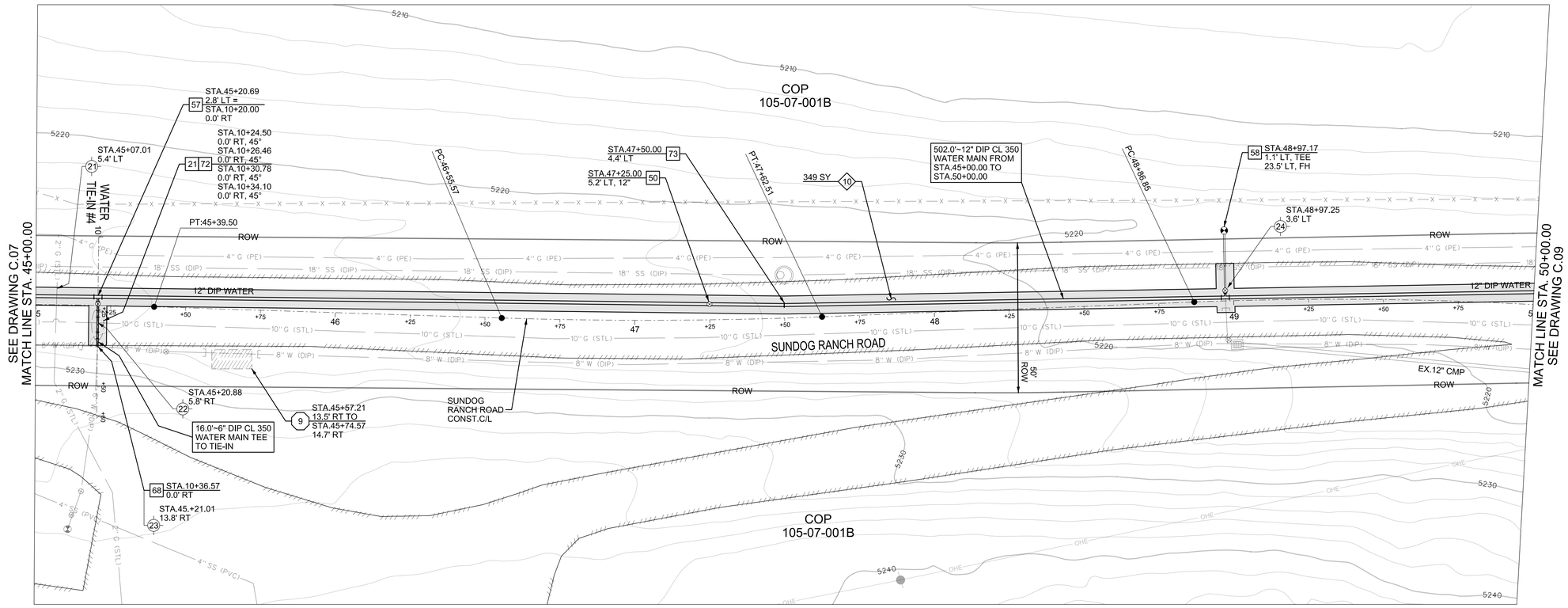
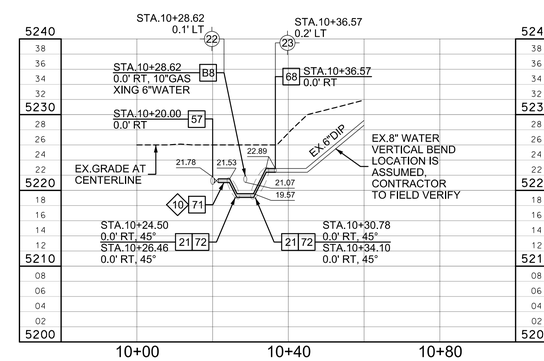
FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn

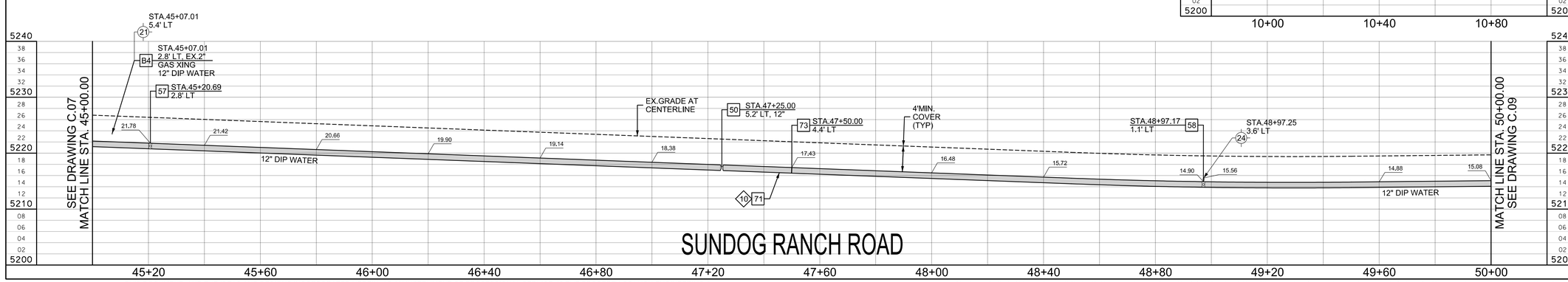


POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
21	TOP OF EX.2" POLY GAS MAIN	5223.50
22	TOP OF EX.10" STEEL GAS MAIN	5221.90
23	TOP OF EX.8" DIP WATER MAIN	5222.89
24	TOP OF EX.6" DIP WATER MAIN	5215.56

WATER TIE-IN #4





REMOVAL KEY NOTES

9 — CUT & CAP 18'± EX.8"DIP WATER A MIN. OF 2' OUTSIDE OF EX.WATER VAULT, REMOVE EX.CONC. VAULT LID AND WALLS AND BACKFILL WITH NATIVE MATERIAL TO 95% COMPACTION, BOTTOM OF VAULT TO REMAIN IN PLACE

WATER KEY NOTES

21 — INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q

50 — INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q

57 — INSTALL:
~12" x 6" TEE
~6" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q

58 — CUT & CAP EX.6"DIP 5' SOUTHEAST OF NEW TEE AND REMOVE EX. FIRE HYDRANT ASSEMBLY
INSTALL:
FIRE HYDRANT PER QUAD CITY STD. DET. 360Q

68 — CUT & CAP 5' OF EX.6"DIP ON BOTH SIDES OF EX.8"x6" TEE, 10' TOTAL AND CONNECT TO EX.6" DIP WATER MAIN WITH 6" DIP RESTRAINED MECHANICAL COUPLING

71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS

72 — DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q

73 — HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS

SEPARATION KEY NOTES

B4 — 1' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF GAS MAIN

B8 — 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
DRAWING SCALE
1" = 20 ft, Horizontal
1" = 10 ft, Vertical
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WATER LINE UPSIZING
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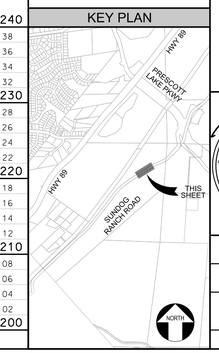
CIVIL
SUNDOG RANCH ROAD
STA. 45+00.00 TO 50+00.00

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date Signed 3-23-2020
ARIZONA, U.S.A.

KEY PLAN



DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
C.08
SHEET 12 OF 17

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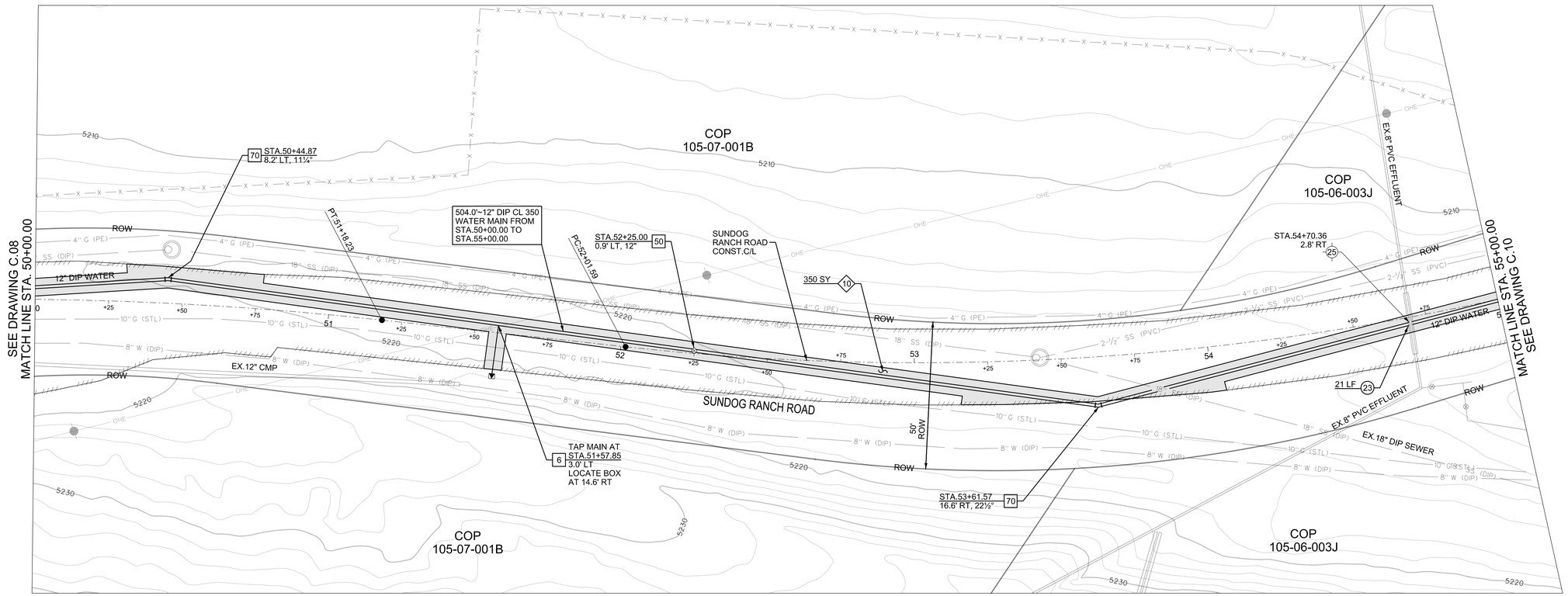

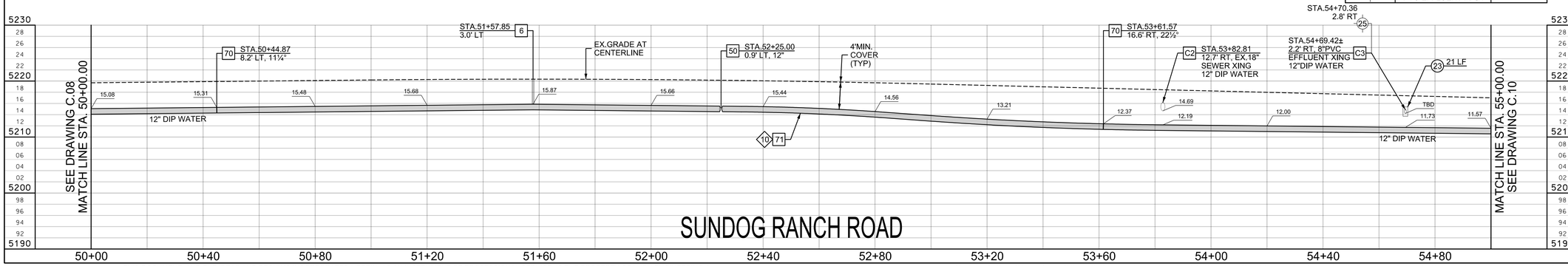

POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
25	TOP OF EX.8" PVC EFFLUENT MAIN	NOT FOUND

WATER KEY NOTES

- 6 — INSTALL 1" AIR VACUUM RELEASE VALVE ASSEMBLY PER QUAD CITY STD. DET. 317Q-1
- 50 — INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q
- 70 — INSTALL HORIZONTAL BEND WITH MEGALUG RESTRAINT
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS

SEWER KEY NOTES

- 23 — IF LOCATED, CONCRETE ENCASE 8" PVC EFFLUENT MAIN PER MAG STD. DET. 404-3

SEPARATION KEY NOTES

- C2 — 2' MIN. SEPARATION BETWEEN BOTTOM OF SEWER MAIN AND TOP OF WATER MAIN
- C3 — 2' MIN. SEPARATION BETWEEN BOTTOM OF EFFLUENT MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1

NORTH

0 20
DRAWING SCALE
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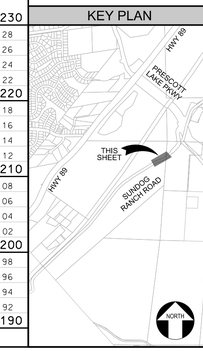
CIVIL

SUNDOG RANCH ROAD
STA. 50+00.00 TO 55+00.00

KEY PLAN



REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date 3-23-2020
ARIZONA, U.S.A.

DATE
MARCH 2020
LYON PROJECT #
274-40
DRAWING NUMBER
C.09
SHEET 13 OF 17

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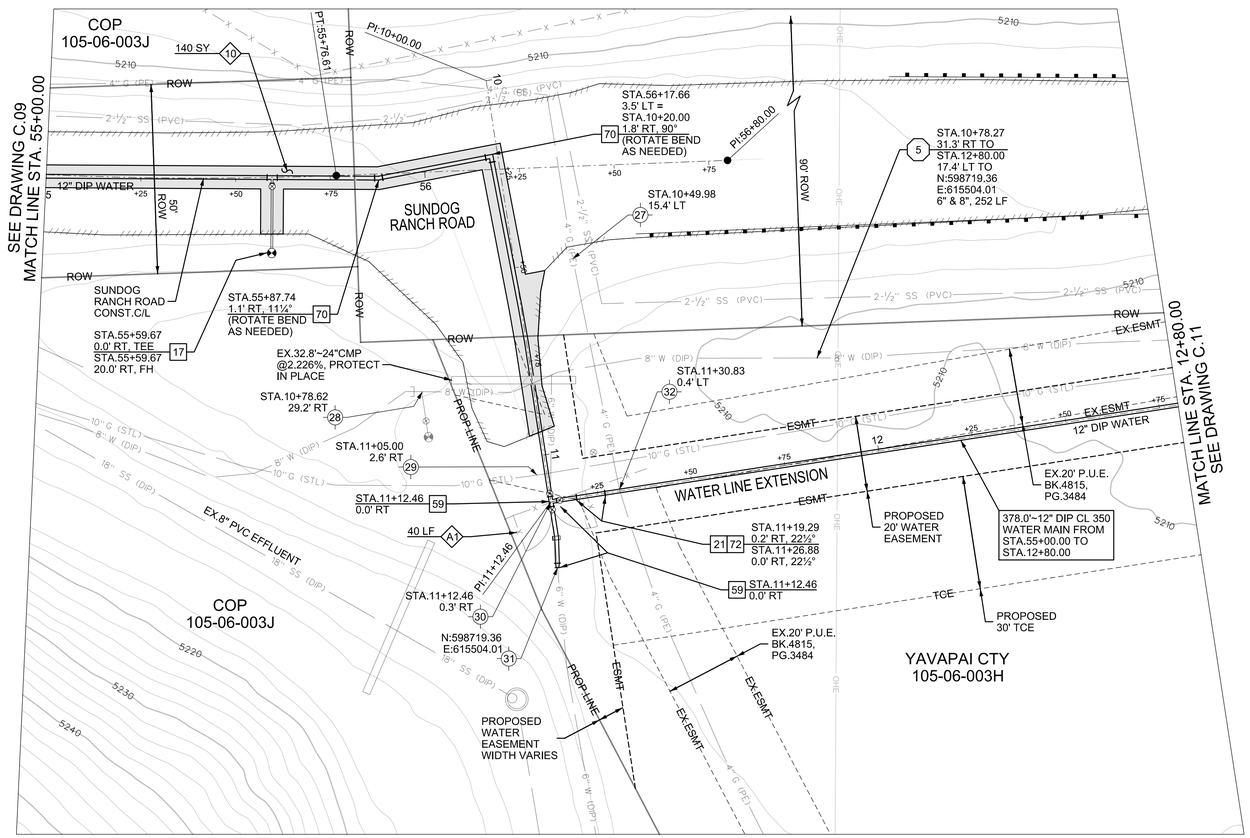
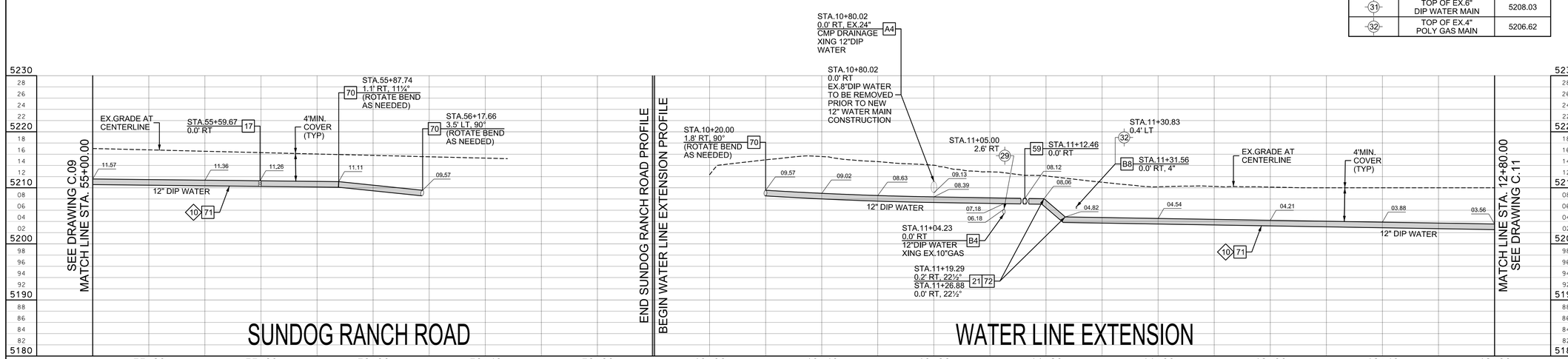


POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
27	TOP OF EX.4" POLY GAS MAIN	5211.16
28	TOP OF EX.8" DIP WATER MAIN	5207.64
29	TOP OF EX.10" STEEL GAS MAIN	5206.18
30	TOP OF EX.6" DIP WATER MAIN	5209.21
31	TOP OF EX.6" DIP WATER MAIN	5208.03
32	TOP OF EX.4" POLY GAS MAIN	5206.62



REMOVAL KEY NOTES

- (5) CUT, REMOVE & CAP EX.DIP WATER LINE AND FIRE HYDRANT

WATER KEY NOTES

- (17) INSTALL FIRE HYDRANT PER QUAD CITY STD. DET. 360Q
- (21) INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q
- (59) CUT EX.6"DIP 20' EAST OF NEW TEE INSTALL: ~12" TEE ~3-12" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q ~20' OF 12" DIP WATER ~12" FLEXIBLE COUPLING ~12" x 6" REDUCER ~CONNECT EX.6"DIP TO NEW 12" X 6" REDUCER RESTRAIN ALL JOINTS
- (70) INSTALL HORIZONTAL BEND WITH MEGALUG RESTRAINT
- (71) RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- (72) DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q

SEPARATION KEY NOTES

- (A4) 0.5' MIN. SEPARATION BETWEEN BOTTOM OF DRAINAGE PIPE AND TOP OF WATER MAIN
- (B4) 1' MIN. SEPARATION BETWEEN BOTTOM OF WATER MAIN AND TOP OF GAS MAIN
- (B8) 1' MIN. SEPARATION BETWEEN BOTTOM OF GAS MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- (10) INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1
- (A1) REMOVE, SALVAGE AND RE-INSTALL CHAIN LINK FENCE IN NEW LOCATION SHOWN

NORTH

0 20
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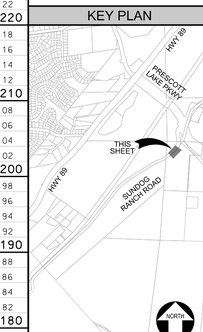
WATER LINE EXTENSION
STA. 10+00.00 TO 13+00.00

KEY PLAN



REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO. 33450
RICHARD G. POYNOR
Date Signed 3-23-2021
ARIZONA, U.S.A.

DATE	MARCH 2020
LYON PROJECT #	274-40
DRAWING NUMBER	C.10
SHEET	14 OF 17

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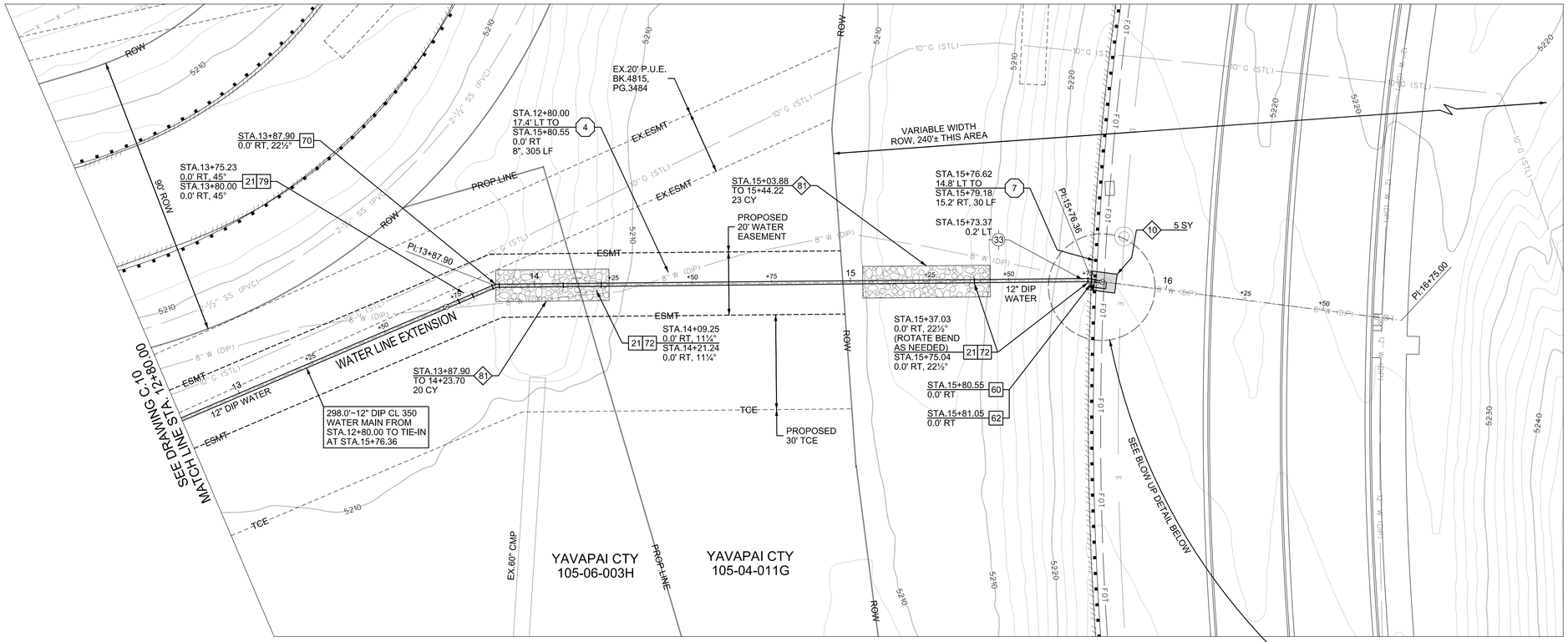
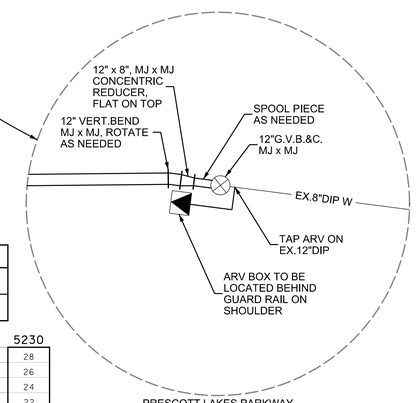
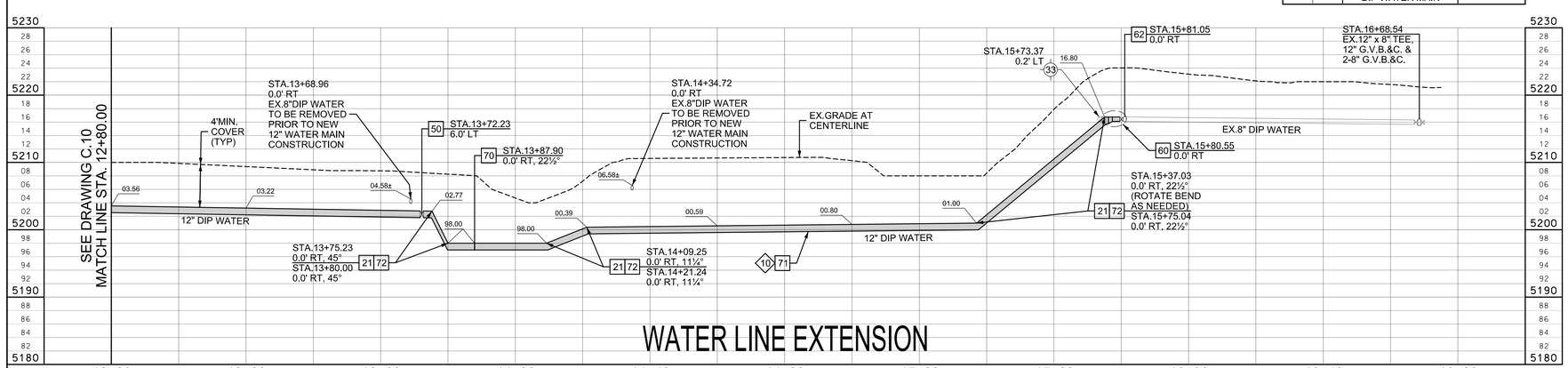




PRESCOTT LAKES PARKWAY
WATER CONNECTION
Not To Scale

POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
33	TOP OF EX.8" DIP WATER MAIN	5216.80



REMOVAL KEY NOTES

- 4 — CUT, REMOVE & CAP EX.DIP WATER LINE
- 7 — TEMPORARILY REMOVE, SALVAGE & REINSTALL EX.GUARD RAIL

WATER KEY NOTES

- 21 — INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q
- 50 — INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q
- 60 — REMOVE CAP AND EX. AIR RELEASE VALVE INSTALL ON CUT 8"DIP: ~8"G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q ~8" SPOOL PIECE AS NEEDED ~12" x 8" CONCENTRIC REDUCER, FLAT ON TOP RESTRAIN ALL JOINTS
- 62 — INSTALL 1" AIR VACUUM RELEASE VALVE ASSEMBLY PER QUAD CITY STD. DET. 317Q-1 -LOCATE SADDLE ON EX.8" DIP ADJACENT TO NEW 8" G.V.B.&C. -LOCATE ARV VALVE AND BOX BEHIND 2' BEHIND GUARD RAIL AND BETWEEN WOODEN POSTS
- 70 — INSTALL HORIZONTAL BEND WITH MEGALUG RESTRAINT
- 71 — RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- 72 — DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q
- 79 — INSTALL VALVE SHOWN IN QUAD CITY STD. DET. 370Q ON SOUTHWEST SIDE OF VERTICAL BEND ONLY

ROAD & DRAINAGE KEY NOTES

- 10 — INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1
- 81 — INSTALL RIP-RAP PER GRADATION TABLE & RIP-RAP INSTALLATION DETAIL ON DRAWING D.01, CENTER RIP-RAP 5' ON EITHER SIDE OF NEW WATER MAIN ALIGNMENT

NORTH

0 20
DRAWING SCALE
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1" = 10 ft, Vertical
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WATER LINE EXTENSION
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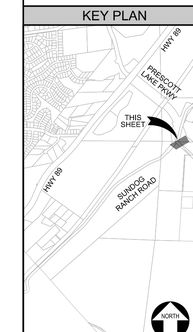
KEY PLAN



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RICHARD G. POYNOR
Date 3-23-2020
Expires
ARIZONA, U.S.A.

DATE	MARCH 2020
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DRAWING NUMBER	C.11
SHEET	15 OF 17

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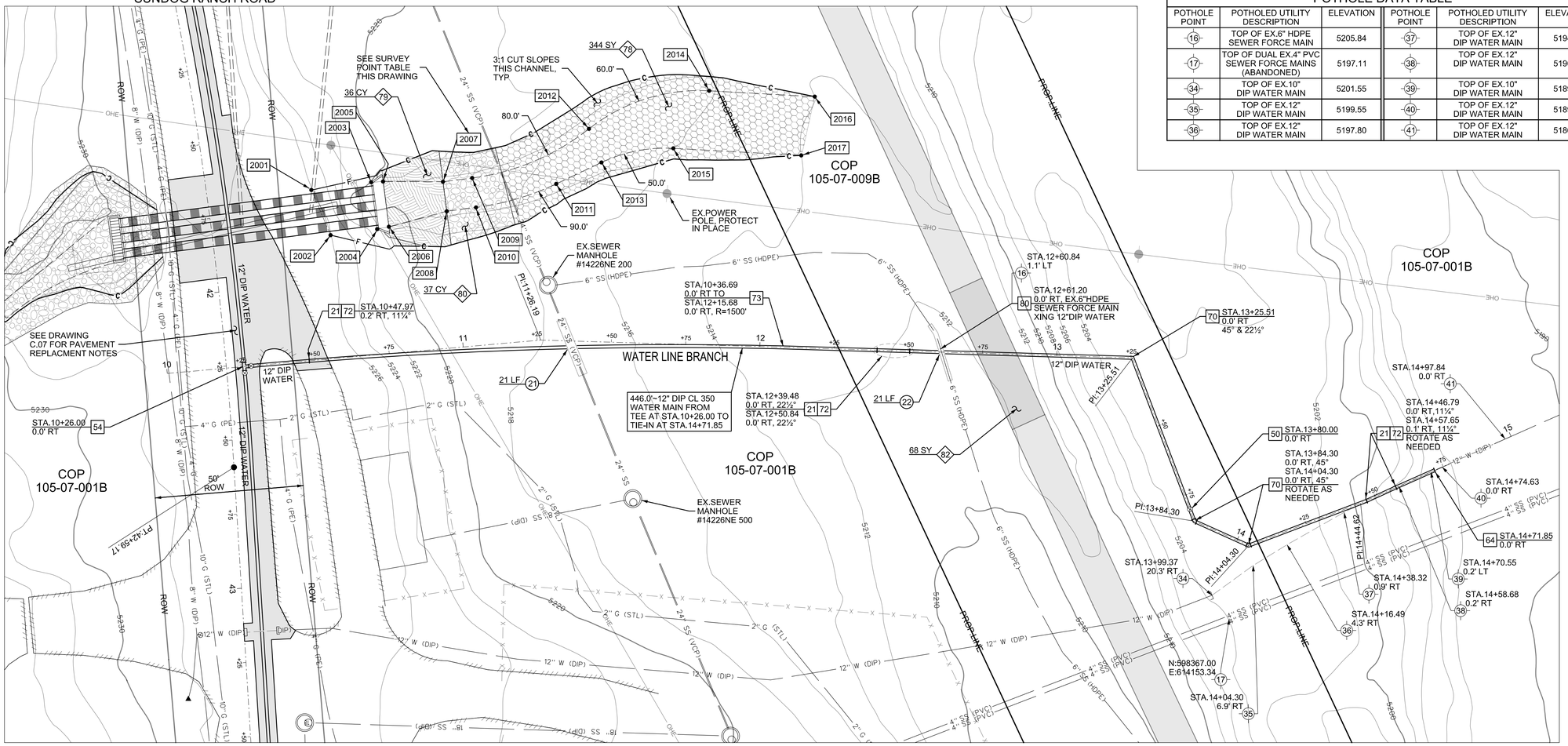
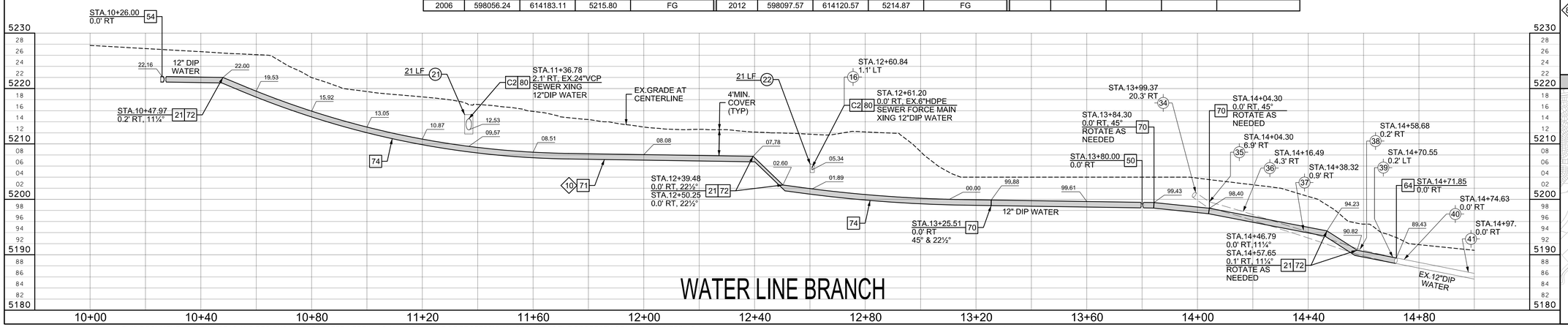


POTHOLE DATA TABLE

POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION	POTHOLE POINT	POTHOLED UTILITY DESCRIPTION	ELEVATION
16	TOP OF EX.6" HDPE SEWER FORCE MAIN	5205.84	37	TOP OF EX.12" DIP WATER MAIN	5194.36
17	TOP OF DUAL EX.4" PVC SEWER FORCE MAINS (ABANDONED)	5197.11	38	TOP OF EX.12" DIP WATER MAIN	5190.96
34	TOP OF EX.10" DIP WATER MAIN	5201.55	39	TOP OF EX.10" DIP WATER MAIN	5189.55
35	TOP OF EX.12" DIP WATER MAIN	5199.55	40	TOP OF EX.12" DIP WATER MAIN	5189.15
36	TOP OF EX.12" DIP WATER MAIN	5197.80	41	TOP OF EX.12" DIP WATER MAIN	5186.85

POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2001	598027.45	614185.68	MATCH EX.	EX-GRD	2007	598064.26	614160.83	5215.55	FG	2013	598106.94	614128.17	5214.90	FG
2002	598040.75	614195.51	MATCH EX.	EX-GRD	2008	598070.39	614168.73	5215.55	FG	2014	598125.96	614089.01	5214.40	FG
2003	598043.49	614173.22	5220.60	FG	2009	598072.08	614154.75	5215.43	FG	2015	598125.38	614111.81	5214.55	FG
2004	598053.26	614185.79	5220.60	FG	2010	598078.22	614162.65	5215.43	FG	2016	598157.59	614072.68	MATCH EX.	EX-GRD
2005	598046.83	614171.00	5215.80	FG	2011	598097.48	614142.12	5215.10	FG	2017	598163.71	614092.02	MATCH EX.	EX-GRD
2006	598056.24	614183.11	5215.80	FG	2012	598097.57	614120.57	5214.87	FG					



WATER KEY NOTES

- 21 INSTALL VERTICAL REALIGNMENT OF WATER MAIN PER QUAD CITY STD. DET. 370Q
- 50 INSTALL G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q
- 54 INSTALL: ~12" x 8" TEE ~3-12" G.V.B.&C. PER QUAD CITY STD. DET. 301Q & 391Q RESTRAIN ALL JOINTS
- 64 CUT 86' OF EX.12"DIP AND CAP SOUTHEAST PORTION, INSTALL ON NORTHWEST CUT END EBAA SERIES 3800 RESTRAINED COUPLING FOR 12" DIP
- 70 INSTALL HORIZONTAL BEND WITH MEGALUG RESTRAINT
- 71 RESTRAIN ALL MECHANICAL JOINTS WITH MEGALUG AND ALL BELL JOINTS WITH FIELD-LOK GASKETS
- 72 DO NOT INSTALL VALVES SHOWN IN QUAD CITY STD. DET. 370Q
- 73 HORIZONTALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS
- 74 VERTICALLY DEFLECT WATER MAIN PER HALF OF MFR RECOMMENDATIONS
- 80 CONTRACTOR TO CENTER UNCUT, STANDARD LENGTH 12" DIP AT SEWER MAIN CROSSING POINT

SEWER KEY NOTES

- 21 CONCRETE ENCASE 24" VCP SEWER MAIN PER MAG STD. DET. 404-3
- 22 CONCRETE ENCASE 6" HDPE FORCE MAIN PER MAG STD. DET. 404-3

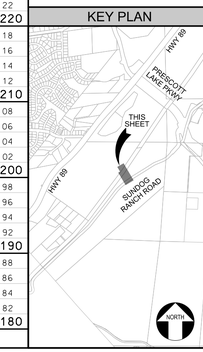
SEPARATION KEY NOTES

- C2 2' MIN. SEPARATION BETWEEN BOTTOM OF SEWER MAIN AND TOP OF WATER MAIN

ROAD & DRAINAGE KEY NOTES

- 10 INSTALL TRENCH BACKFILL AND SURFACE REPLACEMENT PER QUAD CITY STD. DET. 200Q-1
- 82 AFTER INSTALLATION OF WATER MAIN, INSTALL 12' WIDE, 4" THICK A.B.C. PATH COMPACTED TO 95% TO RE-ESTABLISH PEAVINE TRAIL -COORDINATE WITH COP RECREATION SERVICES DEPARTMENT FOR TRAIL SHUTDOWN 1 WEEK PRIOR TO START OF WORK, CONTACT SAM RICE AT (928) 777-1588
- 78 INSTALL EROSION MATTRESS PER DET. D-1 ON DRAWING D.01
- 79 INSTALL GROUTED RIP-RAP PER GRADATION TABLE & RIP-RAP INSTALLATION DETAIL ON DRAWING D.01
- 80 INSTALL RIP-RAP PER GRADATION TABLE & RIP-RAP INSTALLATION DETAIL ON DRAWING D.01

KEY PLAN



NORTH

0 20
DRAWING SCALE 1" = 20 ft, Horizontal 1" = 10 ft, Vertical (This scale is valid for 22"x34" sheets only)

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
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DESIGN	DRAWN	CHECKED	APVD	APPROVED
DRGP	RGP	-	-	----

NO.	DATE	DESCRIPTION	BY
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(928) 776-1750
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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD WATER LINE UPSIZING COP CIP#17-014

CIVIL

WATER LINE BRANCH STA. 10+00.00 TO 15+00.00

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 33450 RICHARD G. POYNOR 3-25-2020 Date Signed ARIZONA U.S.A.

DATE MARCH 2020
LYON PROJECT # 274-40
DRAWING NUMBER C.12
SHEET 16 OF 17

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FILENAME: G:\Projects\274_City of Prescott\274-40_Sundog Ranch Road\CADD\DGN\PLANSET\05 Final Bid Ready Plan Set\FINAL BID READY Sundog Ranch Road Plan & Sheets.dgn

DETAIL
D-1

CHANNEL INSTALLATION
APLICACIONES PARA CANALES

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS
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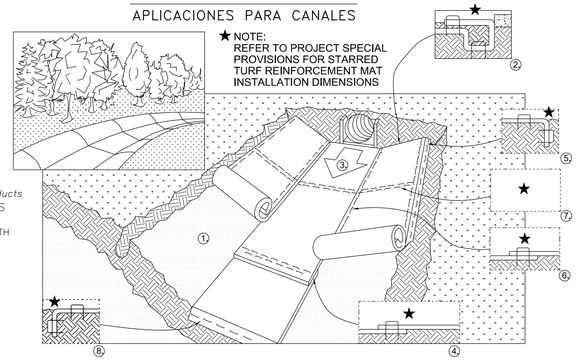
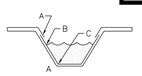


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 24" DEEP X 24" WIDE TRENCH WITH APPROXIMATELY 30" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMAPCT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 30" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 36" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's AT TOP END.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 12" DEEP X 12" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 6" – 12" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 12" DEEP X 12" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

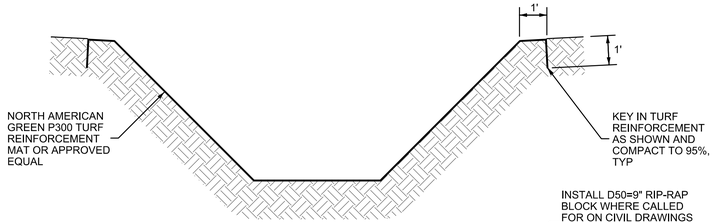
STAPLE SIZE AND PATTERN NOTES:
1. STANDARD 12" 'U-TYPE' STAPLES ARE TO BE USED TO ANCHOR RECPs.
2. STAPLE PATTERN 'E' (3.75 STAPLES PER SQ. YD.) SHALL BE USED FOR ALL RECPs.

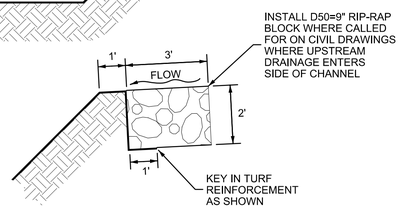


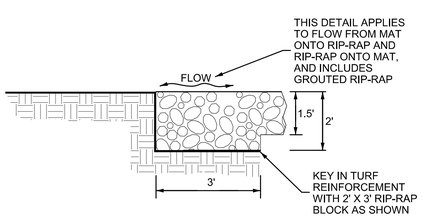
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

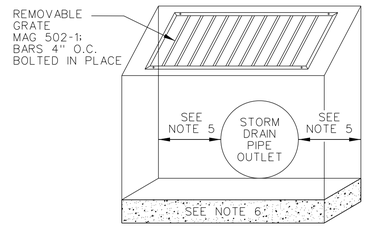
REV. 01/05



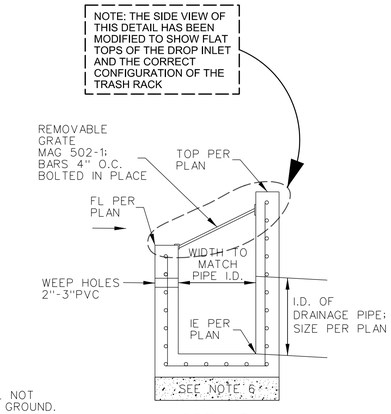




TURF REINFORCEMENT MAT EROSION PROTECTION DETAIL
NOT TO SCALE



FRONT VIEW



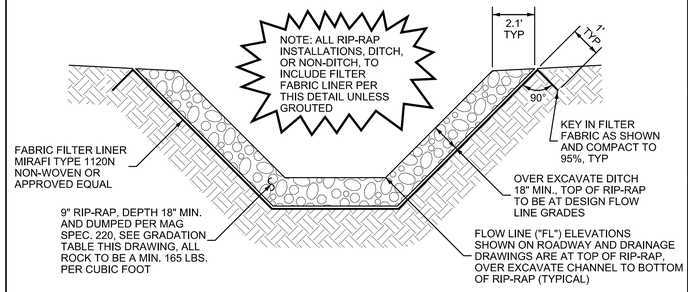
SIDE VIEW

NOTES:

1. HIGH POINT OF HEADWALL SHALL NOT PROJECT MORE THAN 3" ABOVE GROUND.
2. ALL CONCRETE SHALL BE CLASS A.
3. ALL REBAR SHALL BE NO. 4, 12" O.C. AND 3" CLEAR TO INSIDE OF WALLS AND FLOOR.
4. ALL CONCRETE THICKNESS SHALL BE 6".
5. 12" FROM OUTSIDE OF PIPE TO OUTSIDE OF CONCRETE.
6. MINIMUM 6" A.B. UNDER CONCRETE, COMPACTED TO 95%.

MODIFIED

PV STANDARD DETAIL	INLET DROP STRUCTURE	TOWN ENGINEER	REVISED: 07/16	DETAIL No. 523PV-6



THE RATIO OF THE LARGEST SIZE ROCK TO D50 SHOULD BE ABOUT TWO (2). THE RIP-RAP BLANKET SHALL HAVE A MINIMUM THICKNESS OF 2.0 D50 OR 1.5', WHICHEVER IS GREATER.

THE SHAPE OF THE ROCK SHOULD BE "BLOCKY" RATHER THAN ELONGATED. ROCKS SHALL BE CLEAN WITH SHARP EDGES AND FLAT FACES - ROUND STONES WILL NOT BE ACCEPTABLE FOR BANK PROTECTION.

ALL RIP-RAP AREAS TO BE OVER EXCAVATED 2.0 D50 OR 1.5' MIN. BEFORE PLACEMENT SO THAT THE TOP OF THE ROCKS IS AT THE FINISH FLOW LINE ELEVATION AND/OR THE FINISH GRADE ELEVATION. INSTALL FILTER FABRIC LINER UNDER ALL RIP-RAP, MIRAFI TYPE 1120N NON-WOVEN OR APPROVED EQUAL.

ALL RIP-RAP TO BE DUMPED PER MAG STD. 220

GROUTED RIP-RAP GRADATION CHART

STONE SIZE RANGE	STONE WEIGHT RANGE	% OF GRADATION SMALLER THAN
1.5 D50 TO 1.7 D50	3.0 W50 TO 5.0 W50	100
1.2 D50 TO 1.4 D50	2.0 W50 TO 2.75 W50	85
1.0 D50 TO 1.15 D50	1.0 W50 TO 1.5 W50	50
0.4 D50 TO 0.6 D50	0.1 W50 TO 0.2 W50	0

DUMPED OR HAND PLACED RIP-RAP GRADATION CHART
(USDOT, FHWA, HEC-11)

STONE SIZE RANGE	STONE WEIGHT RANGE	% OF GRADATION SMALLER THAN
1.5 D50 TO 1.7 D50	3.0 W50 TO 5.0 W50	100
1.2 D50 TO 1.4 D50	2.0 W50 TO 2.75 W50	85
1.0 D50 TO 1.15 D50	1.0 W50 TO 1.5 W50	50
0.4 D50 TO 0.6 D50	0.1 W50 TO 0.2 W50	15

RIP-RAP DRAINAGE INSTALLATION DETAIL
NOT TO SCALE

DETAILS ON THIS DRAWING ARE NOT TO SCALE

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

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CITY OF PRESCOTT ARIZONA
SUNDOG RANCH ROAD WATER LINE UPSIZING
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DETAILS 1

33450 RICHARD G. POYNOR 3-23-2020 ARIZONA, U.S.A.

DATE MARCH 2020
LYON PROJECT # 274-40
DRAWING NUMBER D.01
SHEET 17 OF 17

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