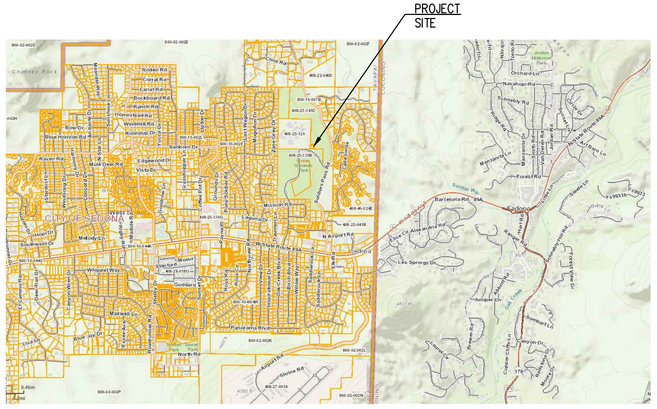
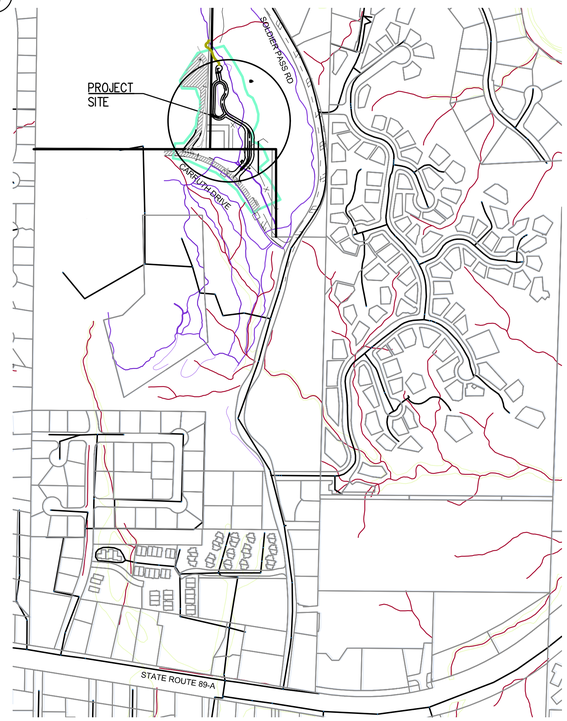
CITY OF SEDONA
POSSE GROUNDS PARK
SIM-11B PARKING LOT
IMPROVEMENT PLANS

LOCATED IN A PORTION OF SECTION 12, TOWNSHIP 17
NORTH RANGE 5 EAST, GILA AND SALT RIVER MERIDIAN,
YAVAPAI COUNTY, ARIZONA



VICINITY MAP

NTS



LOCATION MAP

1:300

PROJECT COORDINATE SYSTEM DETAILS:

HRC GPS RTK POINT: 10492
CITY OF SEDONA POINT: CP Y 492 BM 82 (2007)
LDP NORTHING: 47068.67700
LDP EASTING: 55577.40609
LDP ELEVATION: 4439.59752
LATITUDE: 34°51'45.45669" N
LONGITUDE: 111°46'53.08526" W
ELLIPSOID HEIGHT: 4359.55664
HRC HORIZONTAL RESIDUALS: 0.035'
HRC VERTICAL RESIDUALS: −0.045'

HRC GPS RTK POINT: 153
CITY OF SEDONA POINT: BM 53
LDP NORTHING: 51986.02476
LDP EASTING: 61656.94581
LDP ELEVATION: 4373.18352
LATITUDE: 34°52'34.06650" N
LONGITUDE: 111°45'40.12332" W
ELLIPSOID HEIGHT: 4293.64835
HRC HORIZONTAL RESIDUALS: 0.047'
HRC VERTICAL RESIDUALS: 0.041'

HRC GPS RTK POINT: 179
CITY OF SEDONA POINT: BM 79
LDP NORTHING: 49318.03662
LDP EASTING: 51345.98569
LDP ELEVATION: 4477.67234
LATITUDE: 34°52'07.70516" N
LONGITUDE: 111°47'43.85037" W
ELLIPSOID HEIGHT: 4397.56394
HRC HORIZONTAL RESIDUALS: −0.082'
HRC VERTICAL RESIDUALS: 0.004'

PROJECT DATUM:
LINEAR UNIT: INTERNATIONAL FEET
GEODETIC DATUM: NAD83 (2011)
VERTICAL DATUM: NAVD 88

UTILITY COORDINATION BLOCK

☐	ARIZONA PUBLIC SERVICE	SANDY FINLEY (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:
☐	ARIZONA WATER COMPANY	KEITH SELF (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:
☐	SUDDEN LINK	SANFORD YAZZIE (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:
☐	UNISOURCE	IRENE FREEMAN (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:
☐	CENTURY LINK	ARMEN McNERLIN (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:
☐	CITY OF SEDONA SEWER	CHARLES MOSLEY (COMPANY REPRESENTATIVE CONTACTED)	RECEIVED:

SHEET INDEX

ENGINEER

HOSKIN RYAN CONSULTANTS, INC.
(A HUITT–ZOLLARS COMPANY)
5050 N. 40TH ST, SUITE 100
PHOENIX, ARIZONA 85018
TEL (602) 252–8384
FAX (602) 252–8385
CONTACT: RYAN H. RAAB, P.E.
EMAIL: RRAAB@HUITT–ZOLLARS.COM

APPROVED BY:

CITY ENGINEER _____ DATE _____

RECORD DRAWING STATEMENT

I _____, HEREBY STATE, BASED ON MY FIELD OBSERVATION AND INFORMATION PROVIDED BY THE GENERAL CONTRACTOR AND OTHERS. THAT THE WORK ON SHEETS 1 THROUGH 7, MARKED AS "RECORD DRAWING" HAS BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THESE CONSTRUCTION PLANS, SPECIFICATIONS, INCLUDING CHANGES AND REVISIONS

REGISTERED LAND SURVEYOR/ENGINEER DATE

REGISTRATION NUMBER EXPIRATION DATE

BENCHMARK

LINEAR UNIT: INTERNATIONAL FEET
GEODETIC DATUM: NAD83 (2011), VERTICAL DATUM: NAVD 88

BASIS OF BEARING

SOUTH 00°43'28" WEST, 908.07' MEASURED ALONG THE WESTERNMOST LINE OF APN 408–25–341D, BETWEEN THE FOUND GLO BRASS CAPPED IRON POST MONUMENTING THE NORTH ¼ CORNER OF SECTION 12 AND THE FOUND REBAR MONUMENTING AN ANGLE POINT ON THE WEST LINE OF APN 408–25–341D

OWNER

CITY OF SEDONA
102 ROADRUNNER DRIVE
SEDONA, ARIZONA 86336
CITY ENGINEER – J. ANDY DICKEY, PE
CITY MANAGER – JUSTIN CLIFTON

MAYOR

SANDY MORIARTY

CITY COUNCIL

HOLLI PLOOG
BILL CHISHOLM
TOM LAMKIN
KATHY KINSELLA
SCOTT JABLOW
JESSICA WILLIAMSON

Call at least two full working days before you begin excavation
ARIZONA 811 Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

100% SUBMITTAL

Registered Professional Engineer
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT
IMPROVEMENT PLANS

COVER SHEET

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a Huitt-Zollars Company
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Phoenix, AZ 85018
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DATE	PROJECT NO.	SHEET NUMBER
3/19/2021	R311624.01	1 OF 18

HUITT–ZOLLARS
INTERIM REVIEW ____ % CORRECTED BY ____ DATE ____
FINAL REVIEW ____ % VERIFIED BY ____ DATE ____

CITY OF SEDONA - GENERAL NOTES

1. ALL QUANTITIES SHOWN ARE APPROXIMATE AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL QUANTITIES OF WORK REQUIRED AND BASE HIS BID ON HIS OWN INDEPENDENT ESTIMATE OF THE WORK SCOPE AND QUANTITIES OF MATERIALS REQUIRED. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT WILL BE BASED ON BID SCHEDULE ITEMS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR INDEPENDENTLY ESTIMATING QUANTITIES PRIOR TO BIDDING. THE CONTRACTOR REPRESENTS THAT THE TOTAL CONTRACT SUM IS ADEQUATE COMPENSATION FOR COMPLETING THE ENTIRE PROJECT AS SHOWN ON THE PLANS. THE LOCATION OF EXISTING FEATURES INDICATED ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR MAKING COMPLETE AND ACCURATE ON-SITE DETERMINATIONS OF THE LOCATIONS OF ALL UTILITIES, STRUCTURES AND FIELD CONDITIONS, WHICH MAY AFFECT THE PROGRESS OF THE WORK.
2. ALL THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE DIRECTED TO THE ENGINEER. ANY INTERPRETATION OF THE PLANS BY ANYONE OTHER THAN THE ENGINEER SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES THEREOF.
3. ADEQUATE DRAINAGE OF THE CONSTRUCTION AREA SHALL BE PROVIDED AT ALL TIMES. CONSTRUCTION DRAINS SHALL BE PROVIDED AS NEEDED TO ENABLE WATER TO DRAIN FROM THE CONSTRUCTION AREA RAPIDLY AND WITHOUT DAMAGING THE WORK IN PROGRESS. TO FURTHER PROMOTE GOOD DRAINAGE OF THE SITE, DRAINAGE CHANNELS, CULVERTS, AND STRUCTURES, SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM IN SUCH A WAY THAT, DURING CONSTRUCTION, THEY DO NOT IMPEDE THE FLOW OF WATER FROM THE CONSTRUCTION AREA. DAMAGE TO ADJACENT PROPERTIES OR TO ANY PORTION OF THE WORK CAUSED BY THE CONTRACTOR'S FAILURE TO PROVIDE ADEQUATE DRAINAGE OF THE CONSTRUCTION SITE OR TO ORDER THE WORK SO AS TO MINIMIZE THE POSSIBLE EXTENT OF SUCH DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE
4. ALL WORK SHALL CONFORM TO MAG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND CURRENT REVISIONS THERETO AS MODIFIED BY THE CITY OF SEDONA CITY CODE SECTION 7.
5. EXACT POINT OF MATCHING & TERMINATION OF IMPROVEMENTS MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER IF NECESSARY.
6. ELEVATIONS SHOWN ON PLAN ARE TO FINISHED GRADE, UNLESS OTHERWISE NOTED OR SPECIFIED.
7. A SET OF SIGNED AND APPROVED CONSTRUCTION DOCUMENTS WILL BE KEPT AT ALL TIMES AT THE JOB SITE ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL EXISTING UTILITIES, ARE TO BE RECORDED AND/OR CORRECTED DAILY AND SUBMITTED TO THE CITY ENGINEER WHEN THE WORK TO BE DONE IS COMPLETED.
8. CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT BARRICADES TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR.
9. ALL MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS AT ALL TIMES TO ADJACENT PROPERTY.
11. ALL EXPOSED CONCRETE SHALL BE SEDONA RED.
12. PRIOR TO COMMENCEMENT OF CONSTRUCTION CONTRACTOR TO COORDINATE WORK WITH ALL UTILITY COMPANIES.
13. THE DISTURBANCE FOR THIS PROJECT SITE IS GREATER THAN 1 ACRE AND COMPLIANCE WITH PROVISIONS OF AZPDES STORMWATER PERMIT REQUIRE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) WHICH HAS BEEN PREPARED AND INCLUDED AS A PART OF THESE PLANS. THE CONTRACTOR SHALL MINIMIZE POLLUTANTS IN STORM WATER DISCHARGES IN ADDITION TO THE SWPPP WITH THE FOLLOWING REOSION AND SEDIMENT CONTROLS:
    - THE DISTURBED AREA SHALL BE MINIMIZED. IN PARTICULAR, CONSTRUCTION ACTIVITIES INCLUDING TEMPORARY ACCESS, MATERIAL STORAGE AREA, AND CONSTRUCTION YARD(S) SHALL BE WITHIN THE DESIGNATED AREA ON THE PLANS.
    - THE UNCOVERED DISTURBED AREA SHALL BE COVERED WITH CRUSHED RED ROCK GRAVEL OR SEEDED.
    - NATURAL VEGETATION SHALL BE PRESERVED. IN PARTICULAR, THE VEGETATION IN PROTECTED AREAS SHALL NOT BE DAMAGED.
    - THE CONSTRUCTION SITE INCLUDING YARD AREAS SHALL BE KEPT IN GOOD ORDER. CONSTRUCTION MATERIALS, CONSTRUCTION WASTE, GARBAGE, SANITARY WASTES SHALL BE PROPERLY CONTAINED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF. ACCIDENTAL SPILLS SHALL BE PROMPTLY CLEANED UP.

WATERLESS RESTROOM GRADING NOTES:

1. ROCK FORMATIONS BUT DUE TO LOCAL TOPOGRAPHY AND CONDITIONS THE CONTRACTOR SHOULD EXPECT TO ENCOUNTER ROCK DURING EXCAVATION. NO ADDITIONAL TIME OR PAYMENT SHALL BE MADE IF ROCK IS ENCOUNTERED.
2. EMBANKMENT DIMENSIONS FOR TOILET VAULTS ARE INCREASED BY 2 FEET HORIZONTALLY IN EVERY DIRECTION TO ALLOW FOR PROPER PLACEMENT.
3. THE BOTTOM OF THE EXCAVATED HOLE OR BUILT UP PAD AND THEN A 4" COMPACTED LEVELING COURSE OF COMMERCIAL AGGREGATE PER SPECIFICATION 02232.
4. SLOPE NO MORE THAN ¾" PER FOOT TOWARDS THE DOOR OF THE NEW BUILDING AND BE LEVEL FROM SIDE TO SIDE.
5. THE BUILDING TO THE NATIVE SURFACE SUCH THAT ALL WATER SHALL DRAIN AWAY FROM THE BUILDING IN ALL DIRECTIONS.
6. FIELD AND APPROVED BY THE CITY OF SEDONA.

ITEM	LINE ITEM DESCRIPTION	QUANTITIES	UNITS
1	PROTECT IN PLACE – TREES	1	LS
2	CLEAR AND GRUB	1	LS
3	EARTHWORK AND SUBGRADE PREPARATION	1	LS
4	RIP-RAP D_{50} = 6"	45	CY
5	RIBBON CURB, MAG STD DET 220-B MOD (18" WIDE)	2,127	LF
6	4-INCH VERTICAL CURB, MAG STD DET 220-A MOD (18" WIDE)	218	LF
7	6-INCH VERTICAL CURB, MAG STD DET 220-A MOD (18" WIDE)	206	LF
8	ASPHALT PAVEMENT, PAVING SECTION NO. 1	2,372	SY
9	STABILIZED DECOMPOSED GRANITE, PAVING SECTION NO. 2	7,865	SF
10	4-INCH THICK CONCRETE SIDEWALK, MAG STD DET 230	2,252	SF
11	8-INCH THICK CONCRETE PAVEMENT, PAVING SECTION NO. 3	615	SF
12	STEEL EDGING ¼" x 5" x 16'	863	LF
13	I-BEAM WHEEL STOPS 4" (W) x 8" (H) x ½" – 72-INCHES LONG	38	EA
14	PARKING DOT DELINIATION	52	EA
15	CATCH BASIN & GRATE, MAG STD DET 535, TYPE F	1	EA
16	CONCRETE APRON (CATCH BASIN) 4' WIDE	1	EA
17	18" RGRCP CL III	50	LF
18	FLARED END SECTION 18" RGRCP	1	EA
19	TRAIL CROSSING PAVED ROADWAY – CONCRETE PAVERS	2	EA
20	NEW TRAIL GRADING & SURFACING – 8' TRAIL	2000	SF
21	ROCK RETAINING WALL – 30 INCH MAXIMUM WALL HEIGHT	67	LF
22	CONCRETE STAIRS – ADA	1	LS
23	DOUBLE VAULT WATERLESS RESTROOM	1	LS
24	ADA SIGNAGE	1	LS
25	MOBILIZATION	1	LS
26	TRAFFIC CONTROL	1	LS
27	QUALITY ASSURANCE AND QUALITY CONTROL TESTING	1	LS
28	CONSTRUCTION STAKING	1	LS
29	AS-BUILT PREPARATION	1	LS
30	EROSION CONTROL/STORMWATER POLLUTION PREVENTION PLAN	1	LS
31	REMOVE, SALVAGE & RELOCATE CHAIN LINK FENCE	1	LS
32	SIGNAGE (SIGNS & SIGN BASES)	1	LS

WATERLESS RESTROOM INSTALLATION NOTES:

1. SITE WILL BE CLOSED DURING CONSTRUCTION.
2. WATER FOR CONSTRUCTION IS NOT AVAILABLE AT THE PROJECT SITE AND WILL NEED TO BE OBTAINED FROM A COMMERCIAL SOURCE.
3. THE CONTRACTOR SHOULD EXPECT TO HIT ROCK DURING ALL EXCAVATION.
4. THE CONTRACTOR SHOULD ENSURE THAT POSITIVE DRAINAGE IS PROVIDED AROUND THE NEW TOILET LOCATION.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING WITH CXT AND THE CITY OF SEDONA SERVICE FOR DELIVERY AND SETTING OF THE NEW VAULT TOILET.
6. THE CONTRACTOR WILL ENSURE EXCAVATION OR EMBANKMENT DIMENSIONS FOR TOILET VAULTS ARE INCREASED BY 2 FEET HORIZONTALLY IN EVERY DIRECTION TO ALLOW FOR PROPER PLACEMENT. THE NATIVE OR BORROW MATERIAL SHALL BE COMPACTED IN THE BOTTOM OF THE EXCAVATED HOLE OR BUILT UP PAD AND THEN A 4" COMPACTED LEVELING COURSE OF COMMERCIAL SOURCED AGGGREGATE BASE COURSE (02232) APPLIED.
7. THE EXCAVATED FLOOR SHALL SLOPE NO MORE THAN 1/4" PER FOOT TOWARDS THE DOOR OF THE NEW BUILDING AND BE LEVEL FROM SIDE TO SIDE. IN ADDITION, THE EXTENDED EXCAVATION SECTIONS MAY BE USED TO BACKFILL AROUND THE TOILET AT A SLOPE OF NO LESS THAN 1% AWAY FROM THE TOILET STRUCTURE. IF EXCAVATED MATERIAL IS SUITABLE IT MAY BE USED AS BACKFILL AROUND THE TOILET VAULT.
8. EXCESS EXCAVATION FROM CONSTRUCTION SHALL BE PLACED ONSITE WHERE DESIGNATED BY THE COR AND SHOWN ON THE PLANS.
9. ADDITIONAL BORROW MATERIAL, IF NEEDED FOR THE PROJECT WILL NEED TO BE OBTAINED FROM A COMMERCIAL SOURCE.
10. ALL COMMERCIAL SOURCES SHALL BE CERTIFIED WEED FREE MATERIAL.
11. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COR FOR APPROVAL PRIOR TO THE TOILET DELIVERY.

LEGEND & ABBREVIATIONS

	RIGHT-OF-WAY LINE	B/C	BACK OF CURB
	EASEMENT LINE	BRW	BOTTOM OF ROCK RETAINING WALL – FINISHED GRADE
	BOUNDARY LINE	TRW	TOP OF ROCK RETAINING WALL – FINISHED GRADE
	LOT LINE	℄	CENTER LINE
	MATCH LINE	C&G	CURB & GUTTER
	EXISTING STORM DRAIN	CMP	CORRUGATED METAL PIPE
	EXISTING CATCH BASIN	CY	CUBIC YARDS
	EXISTING EDGE OF PAVEMENT	E/P	EDGE OF PAVEMENT
	EXISTING FENCE	ESMT	EASEMENT
	RELOCATED FENCE	EX	EXISTING
	PROPOSED RETAINING WALL	F/C	FACE OF CURB
	PROPOSED CENTERLINE	LF	LINEAL FEET
	CONCRETE SURFACE	PUE	PUBLIC UTILITY EASEMENT
	ASPHALT SURFACE	PVM'T	PAVEMENT
	DECOMPOSED GRANITE SURFACE	R/W	RIGHT-OF-WAY
	RIP-RAP	S/W	SIDEWALK
	EXISTING PARKING LOT & ROAD	SUP	SHARED USE PATH
	DRIVEWAY PAVERS	TYP	TYPICAL
	PROPOSED RIBBON CURB		
	SAWCUT & REMOVE EXISTING PVM'T		

HUITT-ZOLLARS
INTERIM REVIEW ____ % DATE ____
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CORRECTED BY ____ DATE ____
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In Maricopa County: (602) 263-1100

100% SUBMITTAL

Registered Professional Engineer, State of Arizona, Council
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT
IMPROVEMENT PLANS

GENERAL NOTES, QUANTITIES & LEGEND

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a Huitt-Zollars Company
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Office (602) 252-8384 | Fax (602) 252-8385 | www.hoskinryan.com

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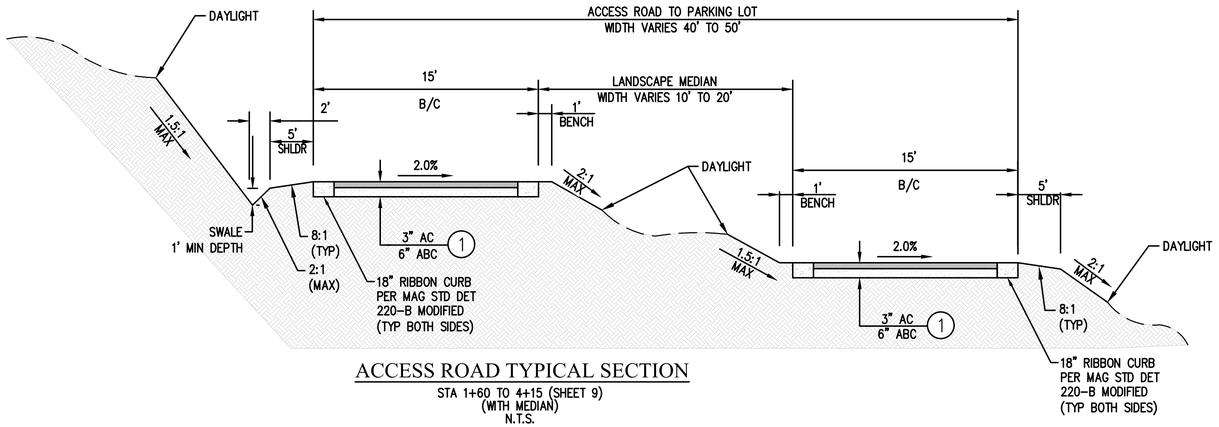
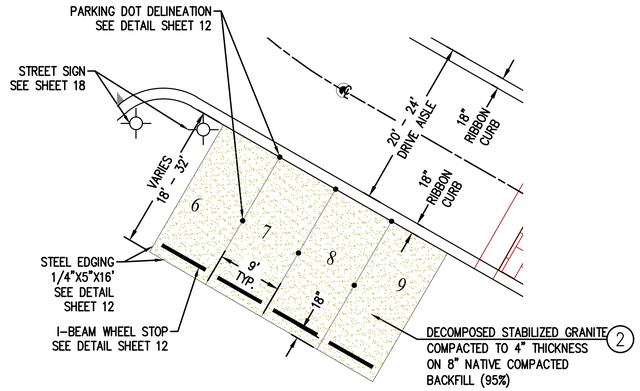


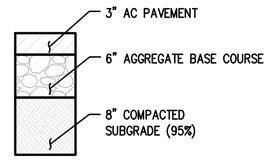
ACCESS ROAD TYPICAL SECTION

STA 1+60 TO 4+15 (SHEET 9)
(WITH MEDIAN)
N.T.S.



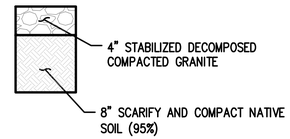
4 TYPICAL PARKING STALLS

COMPACTED STABILIZED DECOMPOSE GRANITE
NTS



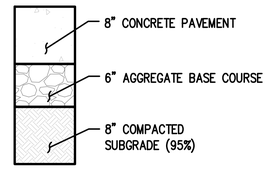
1 TYPICAL PAVEMENT SECTION

NTS



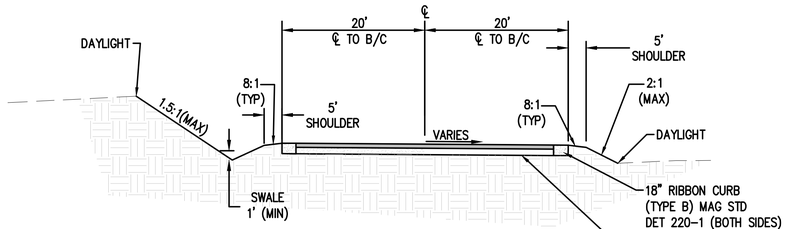
2 PARKING LOT SECTION

NTS



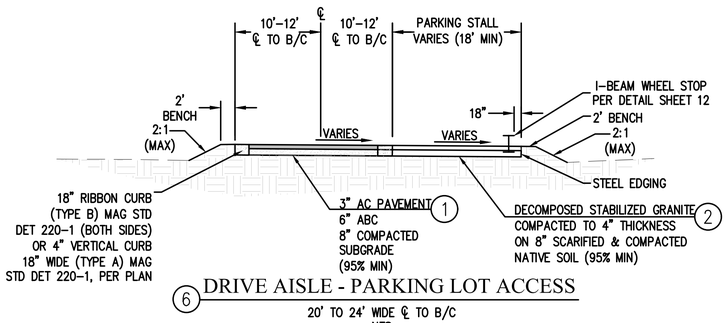
3 CONCRETE PAVEMENT SECTION

NTS



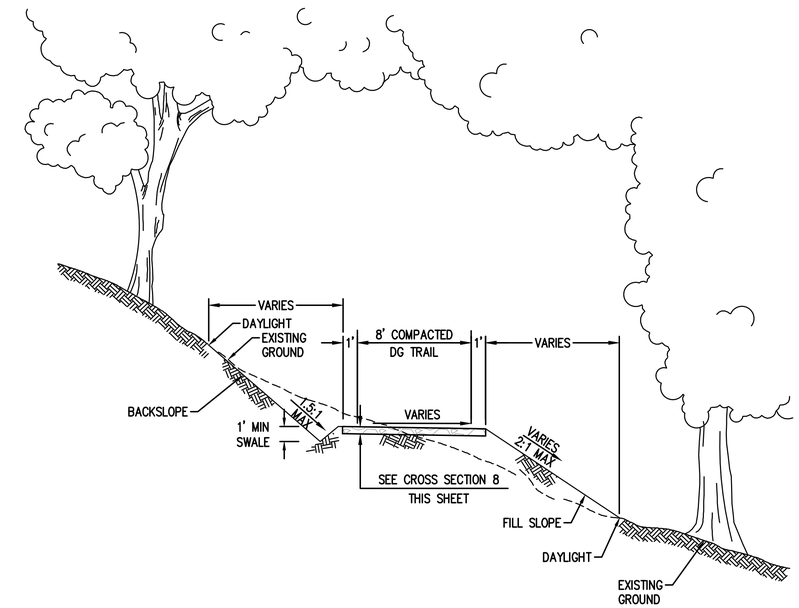
5 ACCESS ROAD 40' WIDTH

STA 1+40 TO 1+60 (SHEET 9)
NTS



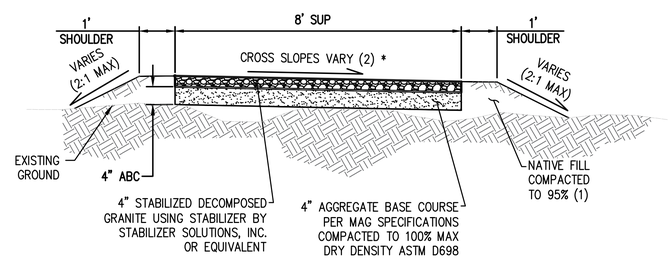
6 DRIVE AISLE - PARKING LOT ACCESS

20' TO 24' WIDE ℄ TO B/C
NTS



SUNSET TRAIL CROSS-SECTION

N.T.S.



NOTE:
(1) USE NATIVE MATERIAL TO CREATE PATH, IN EITHER FILL OR CUT SITUATIONS. TRAIL LONGITUDINAL GRADES TO AVERAGE 10% WITH SHORT SEGMENTS IN THE 15% TO 20% RANGE
(2) TRAIL CROSS-SLOPE VARIES ACCORDING TO LONGITUDINAL SLOPE OF TRAIL.

*1.5% PREFERRED

SECTION 8: SHARED USE PATH - CROSS SECTION

NTS

HUITT-ZOLLARS
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EXPIRES 12/31/2023

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SIM-11B PARKING LOT
IMPROVEMENT PLANS

TYPICAL CROSS SECTIONS

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ENGINEER'S GENERAL NOTES

CONSTRUCTION SURVEY CREWS AND/OR CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER, PRIOR TO CONSTRUCTION, IN REGARDS TO ANY AND ALL CONFLICTING INFORMATION AND DISCREPANCIES PERTAINING TO THE STATIONING, ELEVATIONS, OR CONSTRUCTION CALLOUTS SHOWN WITHIN THESE PLANS. ELECTRONIC FILES MAY BE PROVIDED FOR THE CONSTRUCTION SURVEY CREWS CONVENIENCE; HOWEVER, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED DESIGN DRAWINGS. IN THE EVENT OF CONFLICTING INFORMATION, AND UPON REQUEST FROM AN OWNER'S REPRESENTATIVE, ENGINEER WILL WORK PROMPTLY TO DETERMINE A RESOLUTION. IF ENGINEER IS NOT CONTACTED TO ASSIST IN CONFLICT RESOLUTION THE RESPONSIBILITY FOR ANY RESULTING FUTURE CONSTRUCTION ERROR OR CONFLICT SHALL RESIDE WITH THE FIELD ENGINEER, FIELD SURVEYOR AND/OR THE CONTRACTOR.

ALL CONDUITS (I.E. BOX CULVERTS, REINFORCED CONCRETE PIPE, CAST-IN-PLACE PIPE, HDPE PIPE, AND/OR CORRUGATED METAL PIPE) SHOWN ON THESE PLANS ARE DESIGNED FOR STANDARD HIGHWAY LOADING. THE STANDARD MINIMUM COVER REQUIREMENTS, AS ESTABLISHED BY THE CONDUIT MANUFACTURER, MAY NOT ALWAYS BE SUFFICIENT FOR LOADING CONDITIONS IMPOSED BY CONSTRUCTION ACTIVITY. IF CONSTRUCTION EQUIPMENT WILL BE DRIVEN CLOSE TO OR OVER THE BURIED CONDUIT, THE CONTRACTOR SHALL PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE CONDUIT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ANALYZE AND CHECK THE ADEQUACY OF THE ADDITIONAL COVER REQUIREMENTS, ASSOCIATED WITH LOADING CONDITIONS IMPOSED BY CONSTRUCTION ACTIVITIES.

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

THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA, HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES, PRIOR TO ANY EXCAVATION, TO VERIFY THE PRECISE HORIZONTAL AND VERTICAL LOCATION OF THEIR UTILITIES.

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

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.

CONTRACTOR WILL NOT BEGIN CONSTRUCTION UNLESS ALL NECESSARY APPROVALS ARE OBTAINED.

PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS AND EARTHWORK QUANTITIES, IF ANY. NO CLAIM SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.

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

ALL COMPACTION IN STREETS TO BE PER MAG SPECS. SECTION 601.

ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, PIPES, PROTECTIVE BERMS OR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO ANY STRUCTURE BEING BUILT.

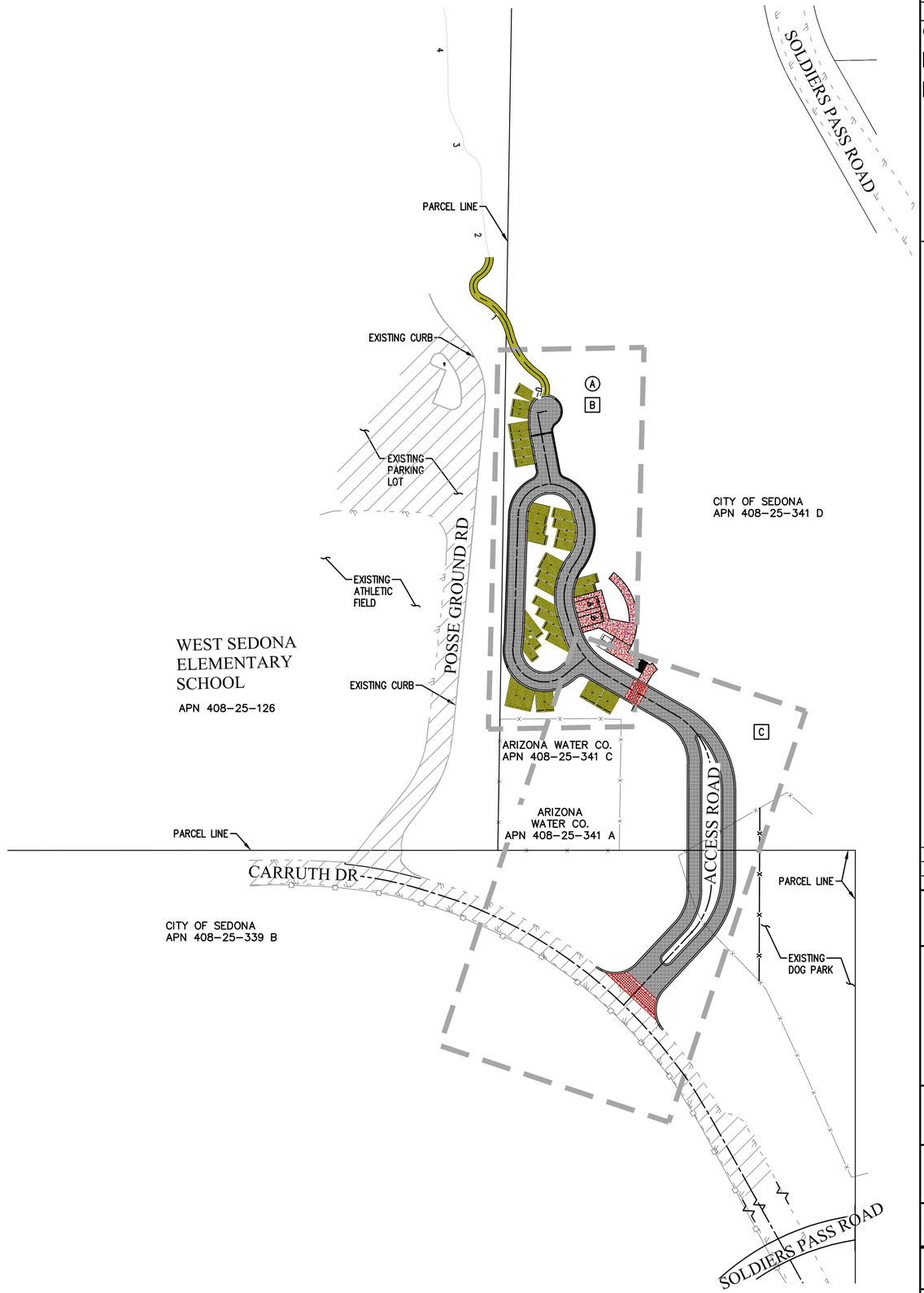
THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE E.P.A.'S REQUIREMENTS FOR AN N.P.D.E.S. PERMIT & AZPDES PERMIT.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ADOPTED MAG SPECIFICATIONS AND STANDARD DETAILS AS MODIFIED BY THE "JURISDICTIONAL AGENCIES".

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE BASED ON INFORMATION SUPPLIED TO THE ENGINEER BY UTILITY COMPANIES. NO GUARANTEE ON LOCATIONS OR ACCURATENESS IS IMPLIED OR GIVEN.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT BLUE STAKE (602-263-1100) AND OTHER INVOLVED AGENCIES TO LOCATE UTILITIES PRIOR TO CONSTRUCTION.



SHEET KEYMAP

SHEET LIST

A	PARK IMPROVEMENTS: GRADING AND DRAINAGE SHEETS 6 – 7
B	PAVING PLAN & PAVING PLAN CONSTRUCTION NOTES SHEET 8
C	ACCESS ROAD PAVING PLANS SHEET 9

REVISIONS:

Call at least two full working days before you begin excavation. ARIZONA 811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (782-5348) In Maricopa County: (602) 263-1100

100% SUBMITTAL

0 30' 60' 120'

SCALE: 1"=60'

Registered Professional Engineer (Civil) CERTIFICATE NO. 22190 THOMAS E. GRANILLO Date Signed 3/19/2021 ARIZONA U.S.A.

EXPIRES 12/31/2023

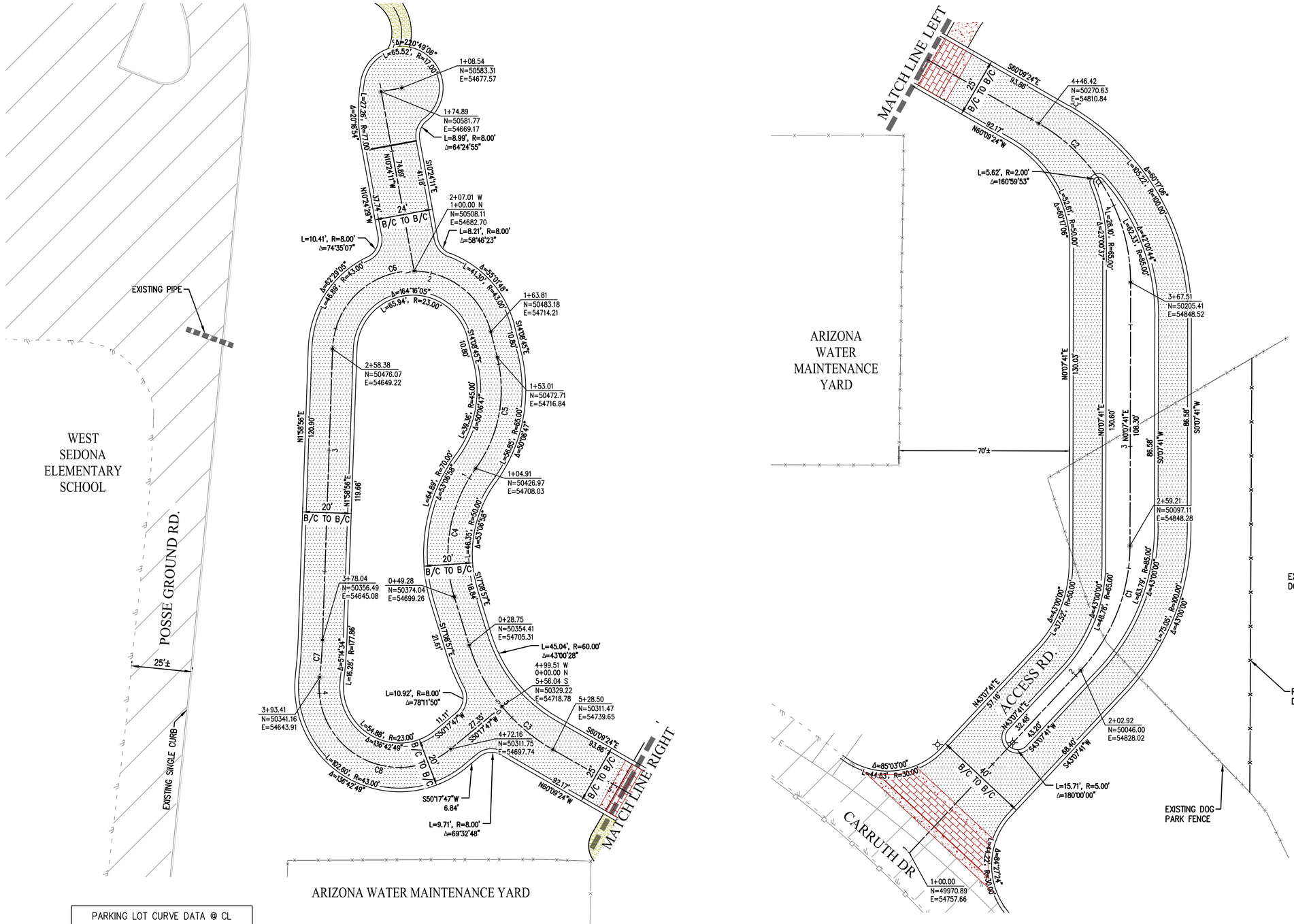
POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

KEY MAP & ENGINEER'S NOTES

Hoskin•Ryan Consultants, Inc.
a Huitt-Zollars Company
5050 N. 40th Street Suite #100
Phoenix, AZ 85018
Office (602) 252-8384 | Fax (602) 252-8385 | www.hoskinryan.com

DATE	PROJECT NO.	SHEET NUMBER
3/19/2021	R311624.01	4 OF 18

HUITT-ZOLLARS
INTERIM REVIEW ____ % REVIEWED BY _____ DATE _____
FINAL REVIEW ____ % CORRECTED BY _____ DATE _____
VERIFIED BY _____ DATE _____



PARKING LOT CURVE DATA @ CL			
CURVE #	RADIUS	DELTA	LENGTH

GENERAL NOTE:
ALL GEOMETRIC CONTROL SHOWN IS TO BACK OF CURB AND CENTERLINE OF ACCESS ROAD AND PARKING AISLE.

CONSTRUCTION NOTES

PAVING

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3. CONSTRUCT 6" VERTICAL CURB PER MAG STD DET 220–1.
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5. CONSTRUCT STABILIZED DECOMPOSED GRANITE PARKING AREA USING STABILIZER BY STABILIZER SOLUTIONS, INC OR EQUIVALENT PER SECTION 2, SHT 3
6. INSTALL NATURAL GAUGE ¼"x 5"x 16' STEEL EDGING FOR PARKING AREA.
7. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER MAG STD DET 230, WIDTH PER PLAN
8. CONSTRUCT 8" THICK CONCRETE PAVEMENT PER SECTION 3 SHT 3
9. STABILIZED DG TRAIL USING STABILIZER BY STABILIZER SOLUTIONS, INC OR EQUIVALENT COMPACTED PER SECTION 8 ON SHT 3
10. STREET SIGN BASE, SEE SHT 18
11. CONSTRUCT 5' CURB TRANSITION PER MAG STD DET 221
12. CONCRETE STEPS
13. DOUBLE VAULT WATERLESS RESTROOM PER DETAIL ON SHEET 13
14. CONSTRUCT ROCK RETAINING WALL PER DET B SHT 12
15. INSTALL SURVEY MONUMENT PER MAG STD DET 120–1, TYPE 'B'
16. INSTALL STREET SIGN BASE
17. CONSTRUCT CATCH BASIN & GRATE PER MAG STD DET 535–F
18. CONSTRUCT CONCRETE APRON PER ADOT STD DET C–15.81
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21. INSTALL FLARED END SECTION 545 PER MAG STD DET 545, MODIFIED PER DET D. SHT 12, WITH ACCESS BARRIER PER DET L ON SHT 12
22. I–BEAM WHEEL STOP 4"x 8"x ¾". I–BEAM 72" LONG. PER DET K, SHT 12 (OR APPROVED EQUIVALENT)
23. PARKING DOT DELINEATION; 2 PER SIDE, PER DET J, SHT 12 (OR APPROVED EQUIVALENT)
24. RELOCATED DOG PARK CHAIN LINK FENCE. EXACT LOCATION TO BE DETERMINED BY THE CITY OF SEDONA
- INSTALL ADA SIGNAGE & PAVEMENT MARKERS PER

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In Maricopa County: (602) 263-1100

100% SUBMITTAL

0 10' 20' 40'
SCALE: 1"=20' HORIZ.
SCALE: 1"=4' VERT.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

HORIZONTAL GEOMETRY CONTROL

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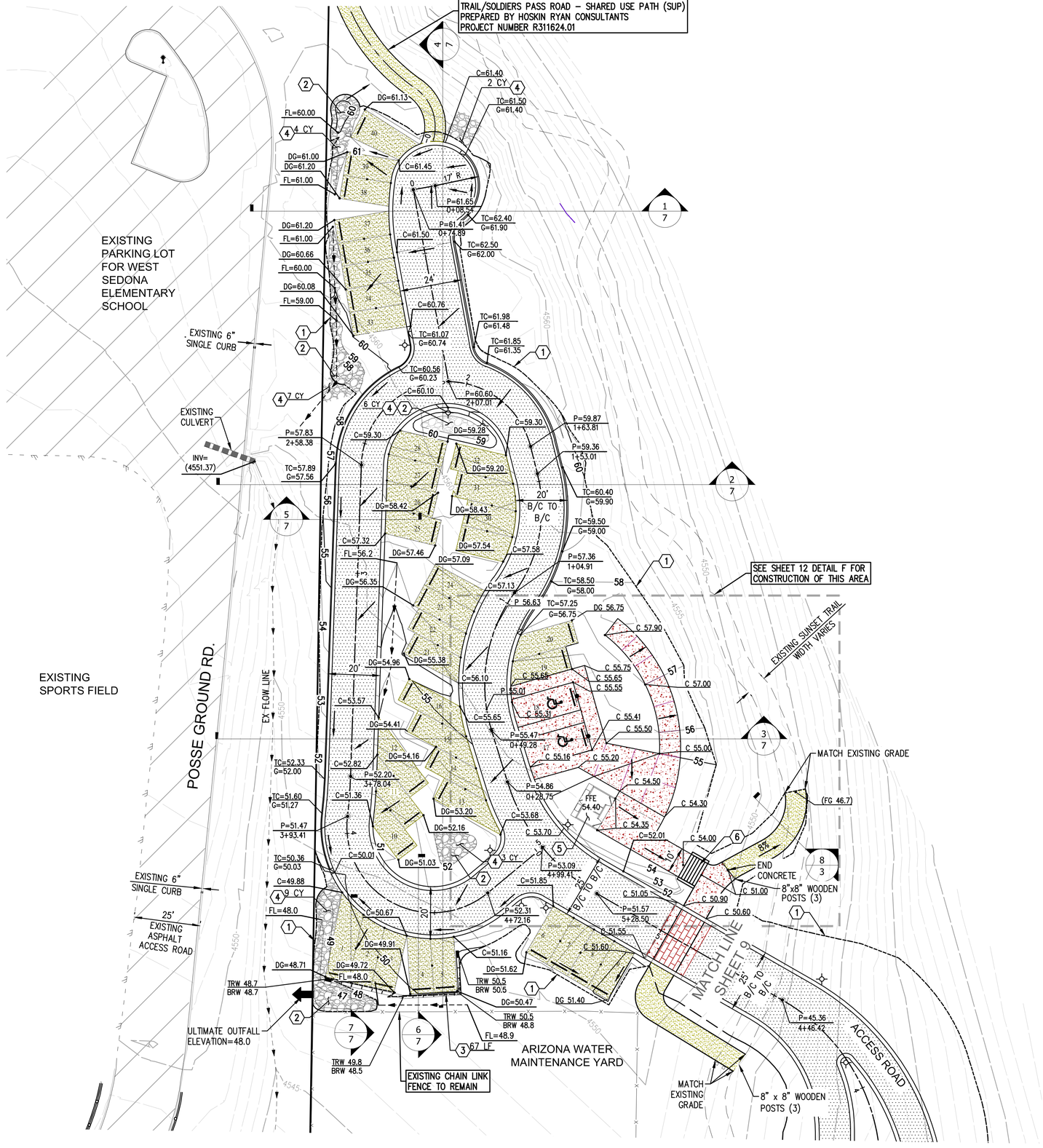

CONSTRUCTION NOTES

GRADING & DRAINAGE NOTES

1. DAYLIGHT TO EXISTING GROUND
2. INSTALL BASIN EROSION PROTECTION PER DET C, SHT 12
3. CONSTRUCT ROCK RETAINING WALL PER DET B, SHT 12
4. INSTALL RIP-RAP D50=6". PER DET G, SHT 11
5. DOUBLE VAULTED WATERLESS RESTROOM
6. STAIRS PER ADA STANDARDS

FOR HORIZONTAL GEOMETRY CONTROL, SEE SHEET 5.

CONTRACTOR TO PRE-STAKE ALL ROADWAYS, PARKING STALLS AND HARDSCAPE.
SITE REVIEW OF THE STAKING BY THE CITY ENGINEER.
CONTRACTOR TO DETERMINE WHICH TREES ARE TO BE SAVED AND PROTECTED.

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In Maricopa County: (602) 263-1100

100% SUBMITTAL

0 10' 20' 40'
SCALE: 1"=20'

Registered Professional Engineer (Civil) CERTIFICATE NO. 22760 THOMAS E. GRANILLO Date Signed 3/19/2021 ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

GRADING PLANS

Hoskin•Ryan Consultants, Inc.
a Huitt-Zollars Company
5050 N. 40th Street Suite #100
Phoenix, AZ 85018
Office (602) 252-8384 | Fax (602) 252-8385 | www.hoskinryan.com

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HUITT-ZOLLARS
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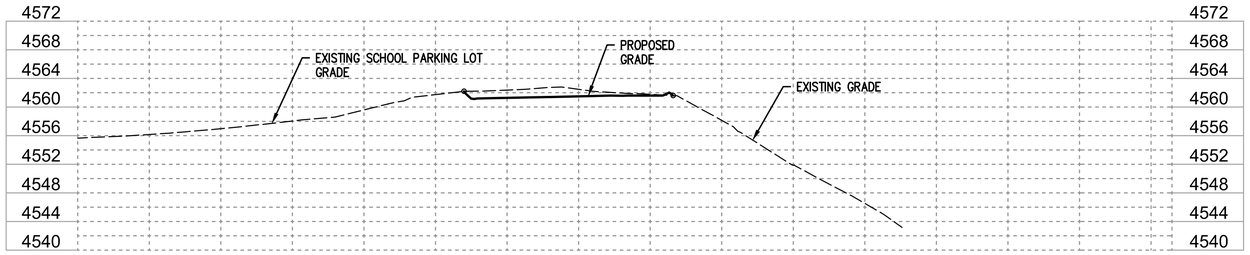
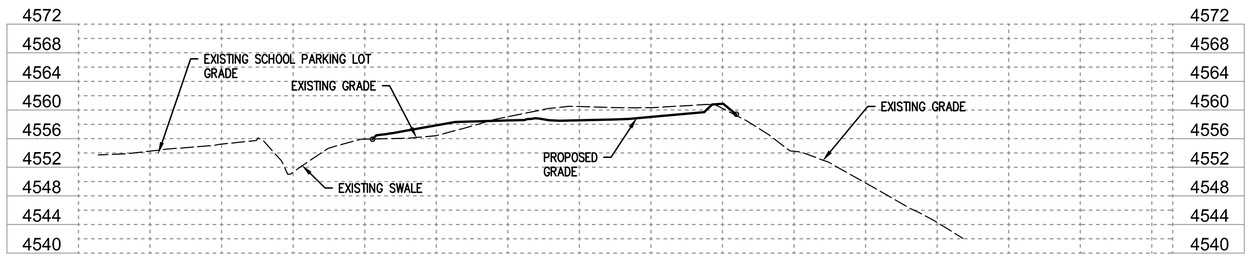


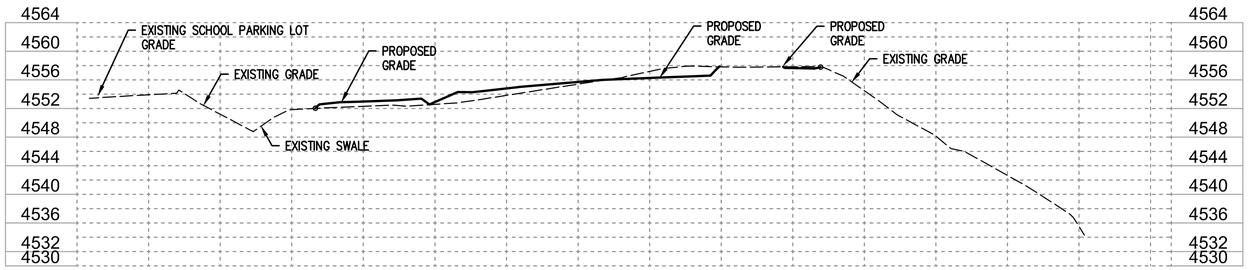
1 GRADING SECTION 01

Scale: 1:20



2 GRADING SECTION 02

Scale: 1:20



3 GRADING SECTION 03

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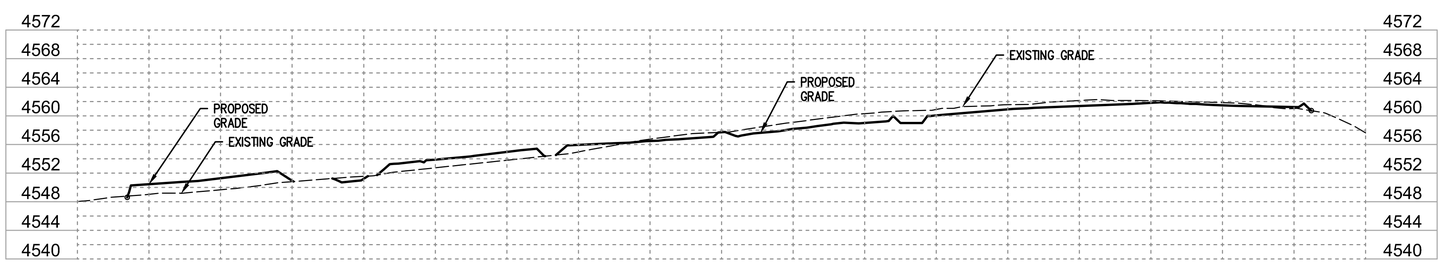
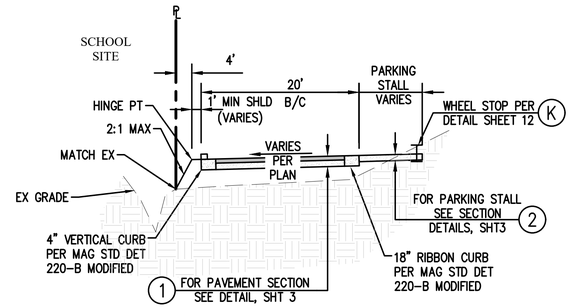


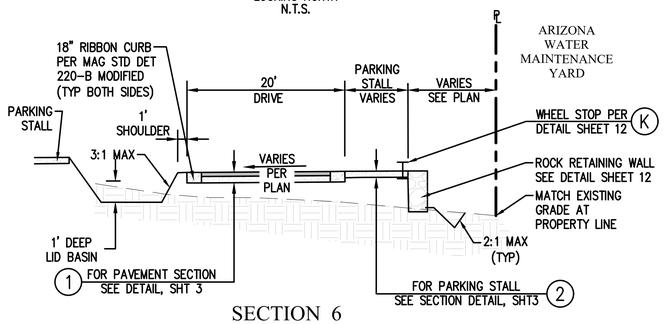
4 GRADING SECTION 04

Scale: 1:20



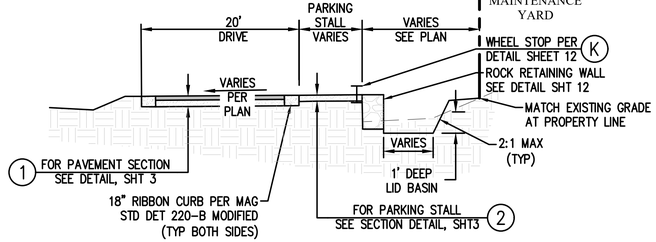
SECTION 5

LOOKING NORTH
N.T.S.



SECTION 6

LOOKING EAST
N.T.S.



SECTION 7

LOOKING EAST
N.T.S.

REVIEWED BY	DATE
CORRECTED BY	DATE
VERIFIED BY	DATE

HUITT-ZOLLARS	%
INTERIM REVIEW	%
FINAL REVIEW	

REVISIONS:

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100% SUBMITTAL

0 10' 20' 40'

SCALE: 1"=20'

Registered Professional Engineer CERTIFICATE NO. 22790 THOMAS E. GRANILLO Date Signed 3/19/2021 ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT
IMPROVEMENT PLANS

SPECIFIC
CROSS SECTIONS

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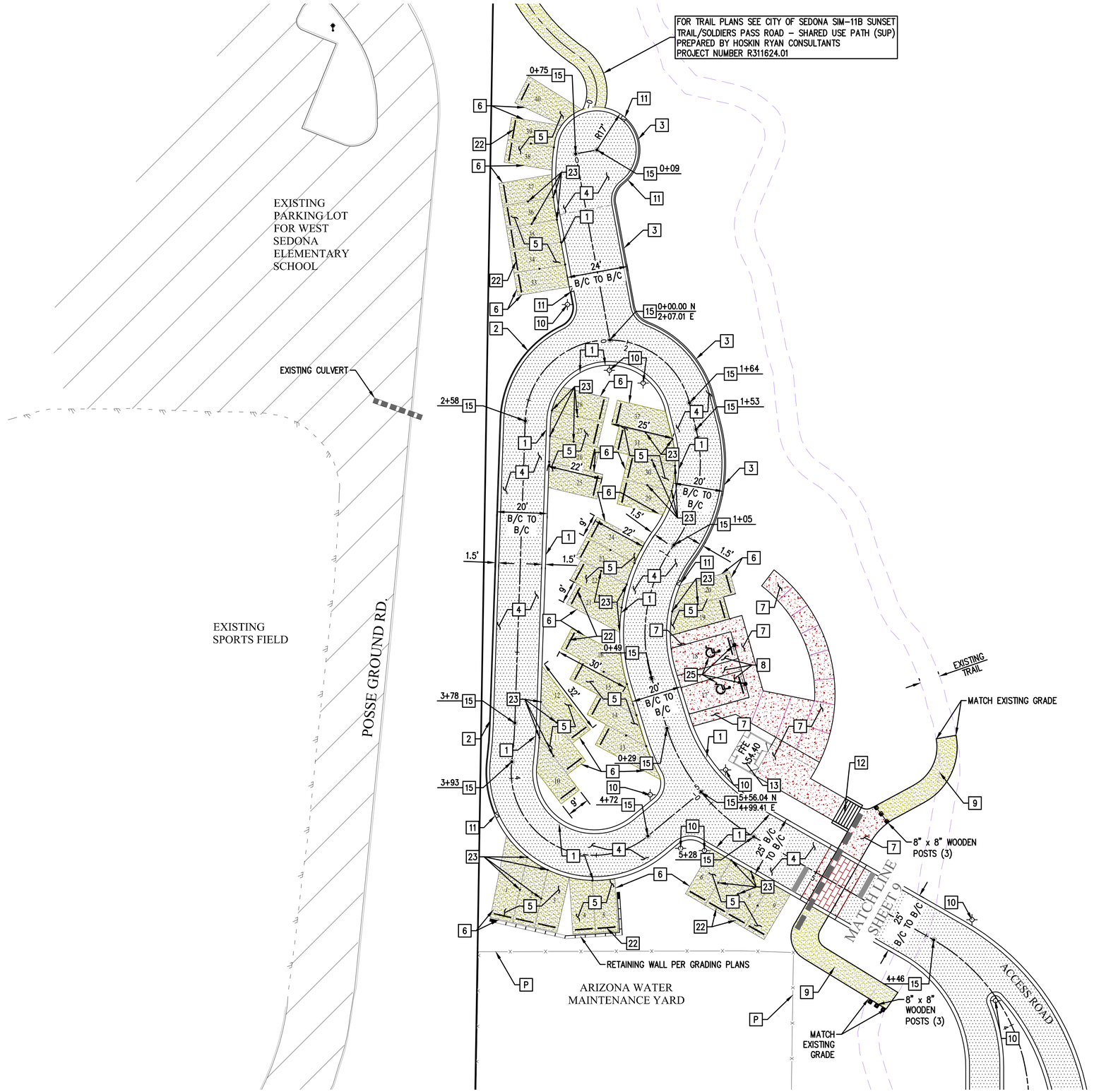
3/19/2021	R311624.01	7 OF 18



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25. INSTALL ADA SIGNAGE & PAVEMENT MARKERS PER SEDONA LAND DEVELOPMENT CODE 912.09D. CONCRETE WHEEL STOPS TO BE PERMANENTLY INSTALLED.

P. PROTECT IN PLACE

FOR HORIZONTAL GEOMETRY CONTROL, SEE SHEET 5.

CONTRACTOR TO PRE-STAKE ALL ROADWAYS, PARKING STALLS AND HARDSCAPE.
SITE REVIEW OF THE STAKING BY THE CITY ENGINEER.
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EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT
IMPROVEMENT PLANS

PARKING LOT CONSTRUCTION NOTES

HUITT-ZOLLARS
INTERIM REVIEW ____ % DATE ____
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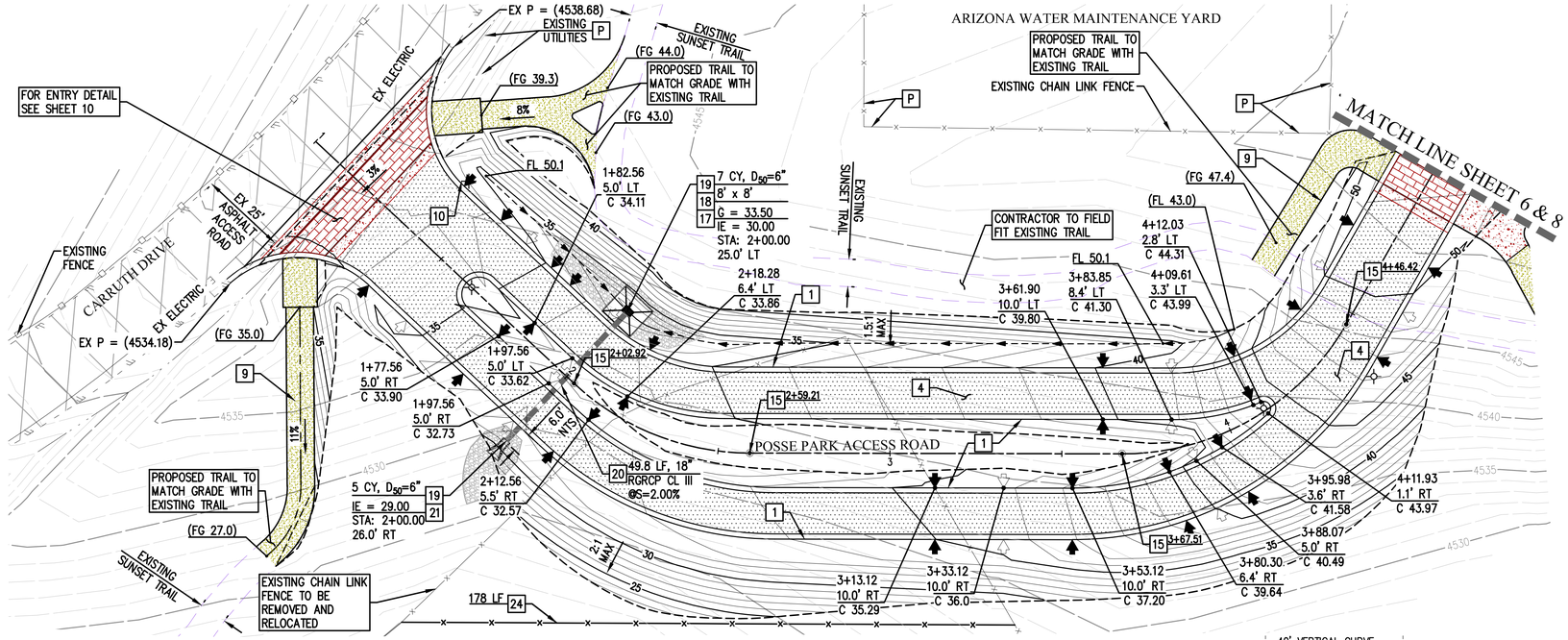

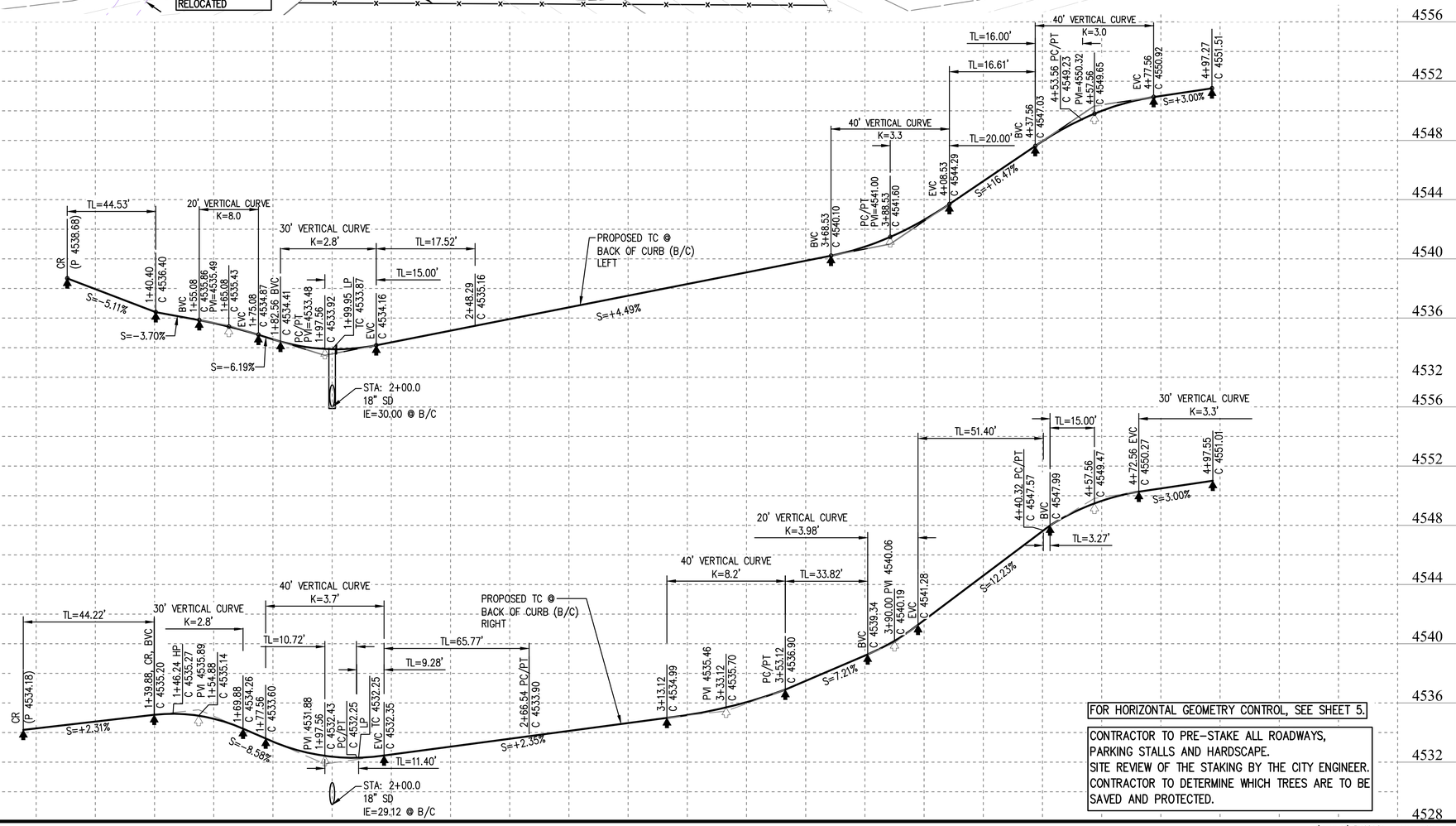

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EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

ACCESS ROAD PLAN & PROFILE

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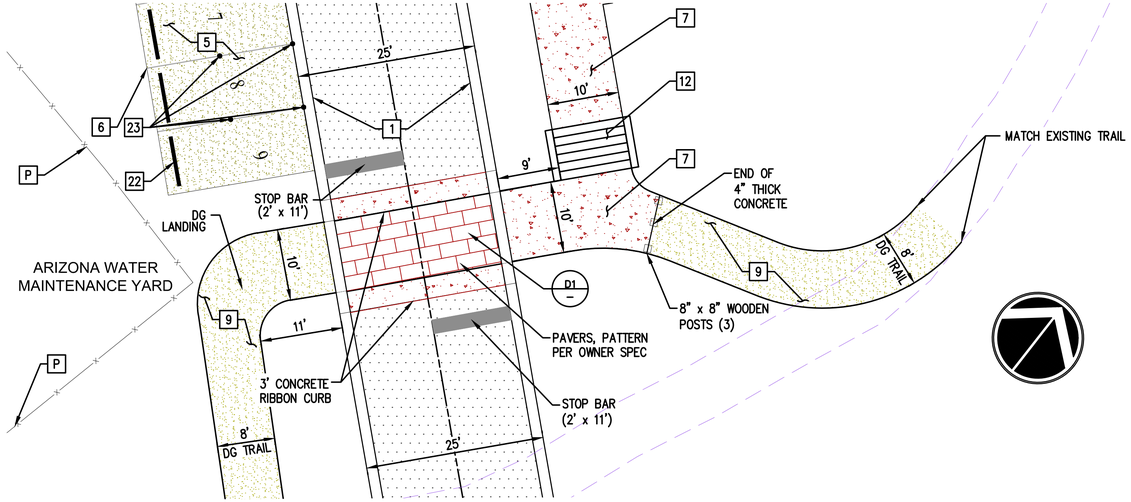
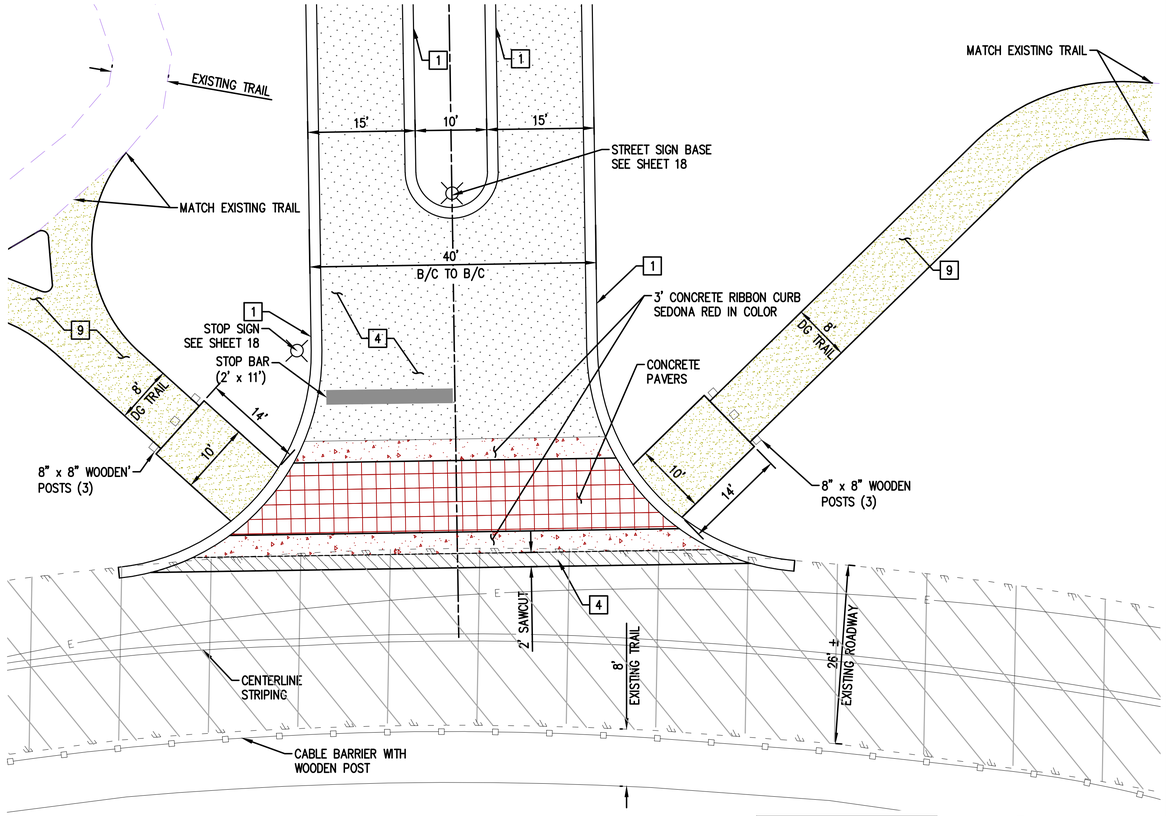


D2 TRAIL CROSSING-1

SEE SHEET 8 FOR CONSTRUCTION NOTES

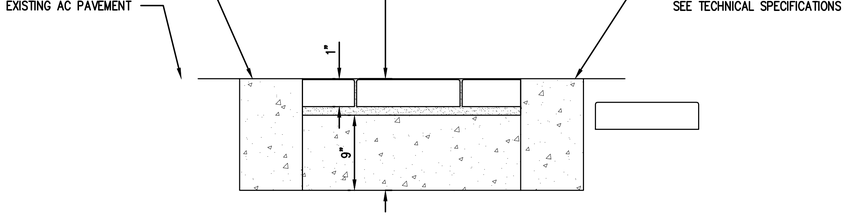
Scale: 1:10



D2 TRAIL CROSSING-2

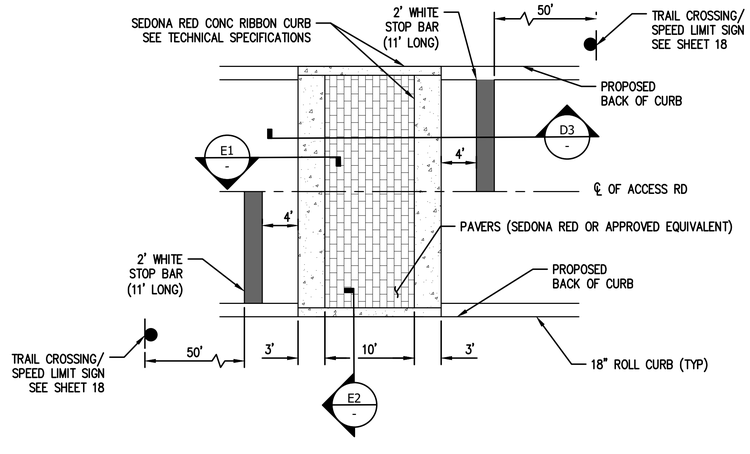
NOTE:
CONTRACTOR TO LOCATE & VERIFY ALL EXISTING UTILITIES IN CARRUTH DRIVE

Scale: 1:10



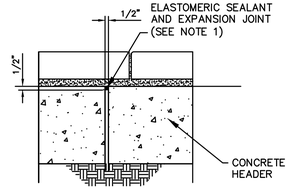
D3 SECTION

MATCH EXISTING PAVEMENT



D1 TRAIL CROSSING

NTS

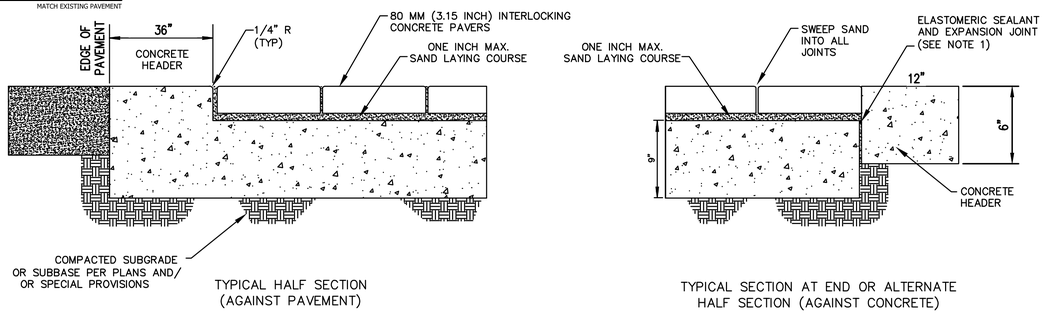


EXPANSION JOINT DETAIL

NOTES:

1. ½ INCH EXPANSION JOINT, ASTM D-1751 PER SEC. 729 AND ELASTOMERIC SEALANT
2. PAVER TO BE SEDONA RED IN COLOR OR APPROVED EQUIVALENT

MATCH EXISTING PAVEMENT



TYPICAL HALF SECTION
(AGAINST PAVEMENT)

TYPICAL SECTION AT END OR ALTERNATE
HALF SECTION (AGAINST CONCRETE)

E1 SECTION

E2 SECTION

E PAVER AND BASE DETAIL

REVIEWED BY ____ DATE ____
CORRECTED BY ____ DATE ____
VERIFIED BY ____ DATE ____

HUITT-ZOLLARS
INTERIM REVIEW ____ %
FINAL REVIEW ____ %

REVISIONS:

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ARIZONA 811
Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

100% SUBMITTAL

Registered Professional Engineer (Civil)
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT
IMPROVEMENT PLANS

TRAIL CROSSING DETAILS &
CONSTRUCTION NOTES

Hoskin•Ryan Consultants, Inc.
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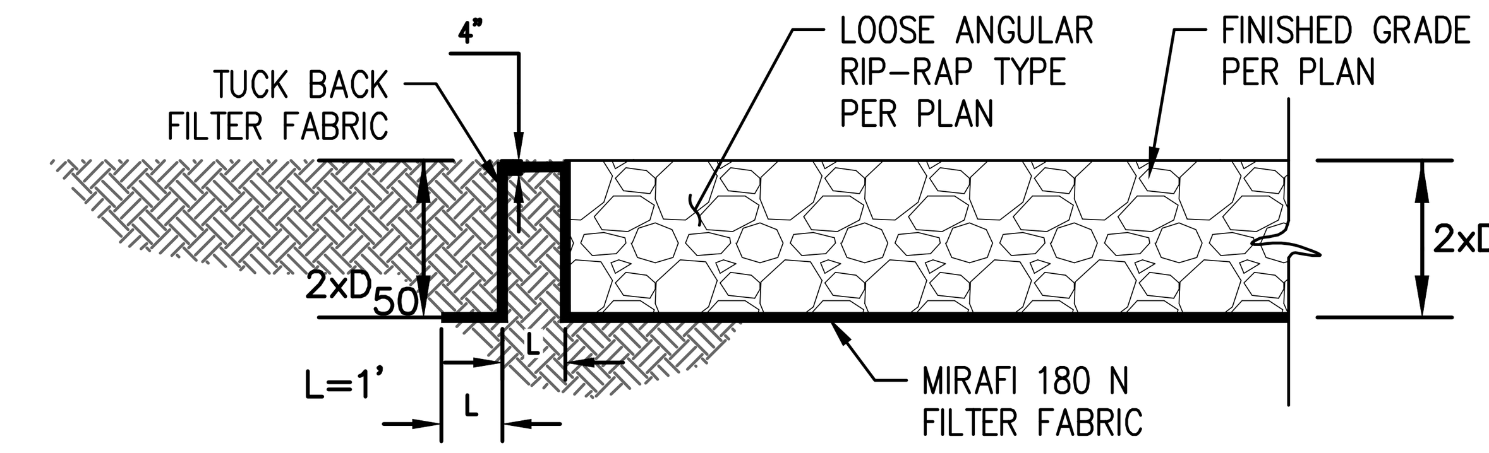
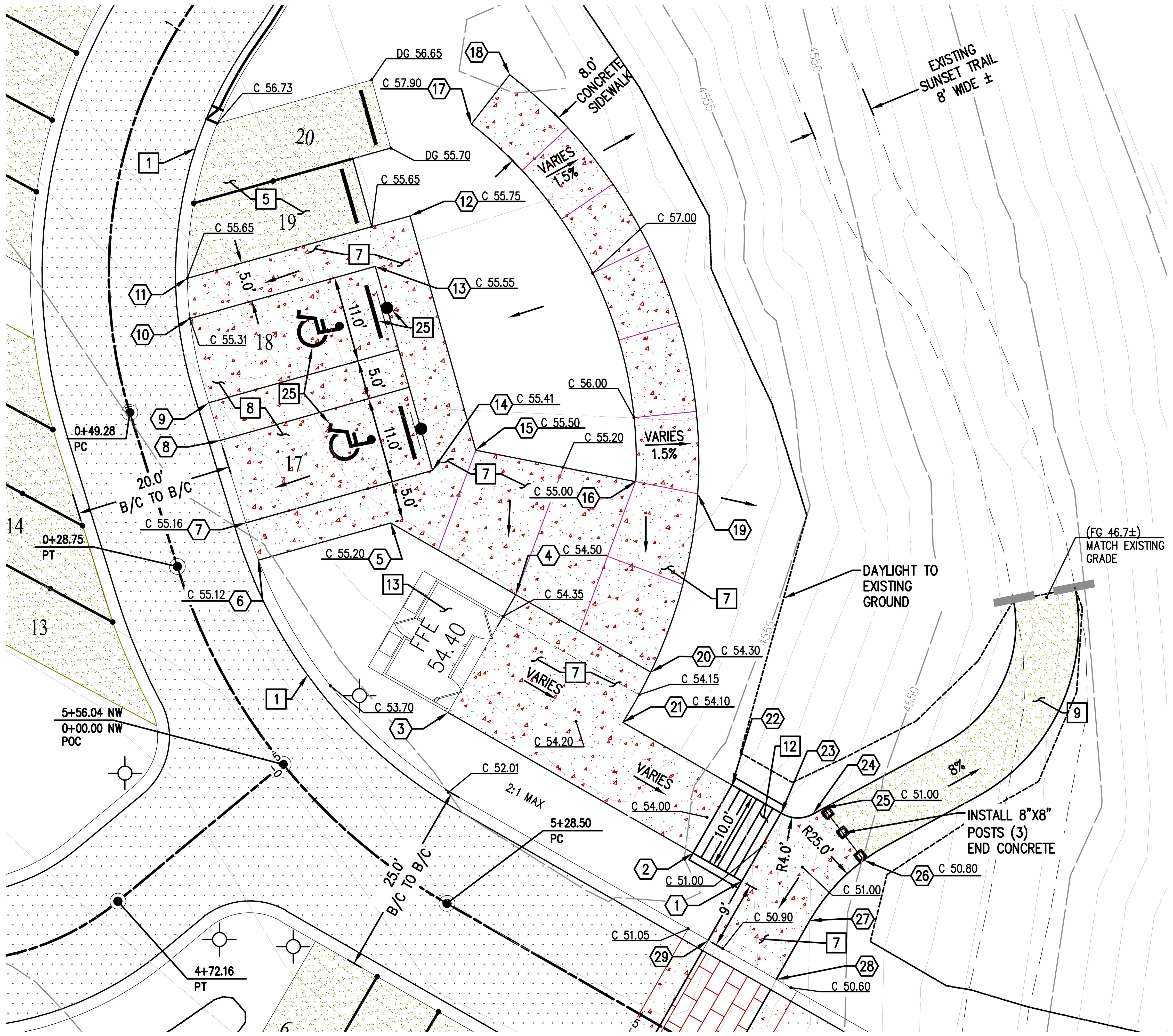


G LOOSE ANGULAR NATIVE RIP-RAP

NTS

LOOSE ANGULAR NATIVE RIP-RAP GRADATION TABLE				
PERCENT FINER BY WEIGHT (D)	36" THICK D50=18"	24" THICK D50=12"	18" THICK D50=9"	12" THICK D50=6"
100 - 90	30"	24"	18"	12"
85 - 70	27"	19"	14"	9"
50 - 35	18"	12"	9"	6"
35 - 15	10"	7"	5"	3'
15 - 0	6"	4"	3"	2"

RIP RAP NOTES:
1. EXPOSED TO OF RIP-RAP SHALL BE EQUAL TO FINISHED GRADE
2. GENERAL PLACEMENT OF RIP-RAP SHALL BE IRREGULAR IN SHAPE AND CONFIRM TO FINISHED CONTOURS AND LANDSCAPE FEATURES
3. RIP-RAP SIZE (D50) AS NOTED ON THIS DETAIL
4. VOID IN RIP-RAP SHALL BE BACK FILLED WITH LOOSE GRANULAR MATERIAL FOR THE ENTIRE DEPTH OF THE RIP-RAP BLANKET. RIP RAP TO BE PLACED PRIOR TO BACKFILLING



F BLOW UP DETAIL

1:10

SEE SHEET 8 FOR CONSTRUCTION NOTES

NOTE TO CONTRACTOR:
ALL PRE-STAKING TO BE REVIEWED PRIOR TO CONSTRUCTION FOR LAYOUT OF CONCRETE WALKS. FIELD ADJUSTMENT IS POSSIBLE TO AVOID TREES OR ROCK CROPPINGS, BE CITY OR ENGINEER.

CONTROL POINTS			
	STATION*	OFFSET	CONC ELEV
1	4+97.32	21.18' RT	51.00
2	5+04.52	21.18' RT	54.00
3	5+44.92	19.86' RT	54.35
4	5+52.29	36.58' RT	54.50
5	0+24.45	27.54' RT	55.20
6	0+26.12	10.09' RT	55.12
7	0+31.48	10.00' RT	55.16
8	0+42.48	10.00' RT	55.15
9	0+47.49	10.00' RT	55.20
10	0+60.37	10.00' RT	55.31
11	0+66.51	10.00' RT	55.65
12	0+86.89	37.14' RT	55.75
13	0+69.35	33.91' RT	55.55
14	0+30.85	34.67' RT	55.41
15	0+31.70	40.70' RT	50.50
16	5+54.41	57.55' RT	55.00
17	1+09.22	37.91' RT	57.90
18	1+13.87	39.12' RT	–
19	5+26.76	61.18' RT	–
20	5+20.65	38.50' RT	54.30
21	5+20.54	31.18' RT	54.10
22	5+04.52	31.18' RT	54.00
23	4+97.32	31.18' RT	51.00
24	4+93.74	33.07' RT	51.00
25	4+92.91	34.41' RT	51.00
26	4+85.19	31.22' RT	50.80
27	4+87.32	21.13' RT	50.95
28	4+87.26	12.50' RT	50.65
29	4+97.26	12.50' RT	51.00

* ℄ OF DRIVE AISLE

HUITT-ZOLLARS
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Registered Professional Engineer CERTIFICATE NO. 22190 THOMAS E. GRANILLO (Civil) Date Signed 3/19/2021 ARIZONA U.S.A.

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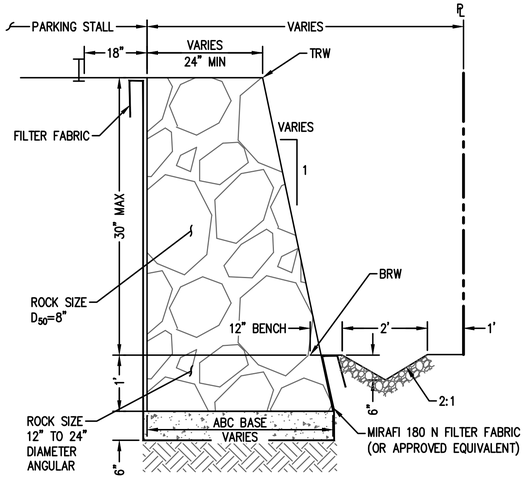
3/19/2021	R311624.01	11 OF 18

A NOT USED

NTS



B ROCK RETAINING WALL

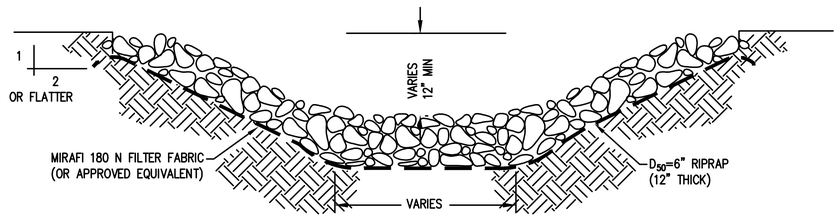
NTS

ROCK WALL DETAIL

(SEE WALL NOTES – RIGHT) NTS

WALL NOTES

1. BASE SURFACE: THE BASE OF THE BOULDERS SHOULD BE SLOPED BACK INTO THE FILL SLOPE FOR STABILITY AND PREVENT SLIDING.
2. ALLOWABLE STEEPNESS/FACE BATTER: 4V:1H OR FLATTER.
3. SOIL CUT: 6V:1H OR FLATTER.
4. STRUCTURAL ROCKS SHALL NOT BE LOOSE OR ABLE TO BE MOVED BY A PRY BAR AFTER INSTALLATION.
5. NON–STRUCTURAL CHINKING ROCKS SHALL NOT BE LOOSE OR ABLE TO BE REMOVED BY HAND AFTER CONSTRUCTION IS COMPLETE. CHINKING ROCKS CONSIST OF SMALL ROCKS USED TO FILL VOIDS AND DISTRIBUTE LOADS BETWEEN LARGER FACING ROCKS.
6. THE LONGEST ROCK DIMENSION SHOULD BE ORIENTED PERPENDICULAR TO THE ROCK WALL FACE.
7. THE LONGEST ROCK DIMENSION SHALL NOT EXCEED THREE TIMES THE SHORTEST DIMENSION.



NOTE:
THE CONTRACTOR SHALL EXCAVATE AND REMOVE THE SOIL UNDER THE RIP RAP SO THAT THE TOP OF THE RIP RAP WILL MATCH THE FINISHED GRADE CALLED OUT ON THE PLAN

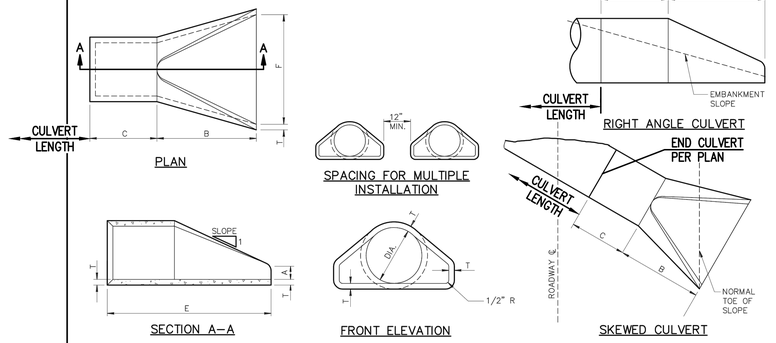
C LID BASIN CROSS-SECTION

NTS

PIPE DIA.	APPROX. WEIGHT (LBS.)	DIMENSIONS – INCHES						APPROX. SLOPE
		T	A	B	C	E	F	
18"	990	2–1/2	9	27	46	73	36	3
24"	1520	3	9–1/2	43–1/2	30	73–1/2	48	3

NOTES

1. DESIGN OF END SECTION SHALL CONFORM TO STANDARD FOR REINFORCED CONCRETE PIPE.
2. END SECTION JOINT CONFORMATION SHALL MATCH THE PIPE JOINTS.
3. EMBANKMENT SLOPE SHALL BE WARPED TO MATCH SLOPE OF END SECTION.
4. CULVERT LENGTH IS AS SHOWN ON PLANS.

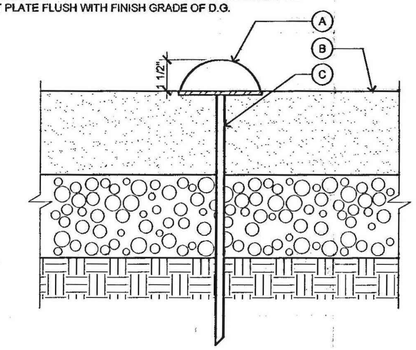


DETAIL NO.			REVISED	DETAIL NO.
545	MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH	END SECTION–REINFORCED CONCRETE PIPE	01–01–1998	545

D MODIFIED MAG STANDARD DETAIL 545

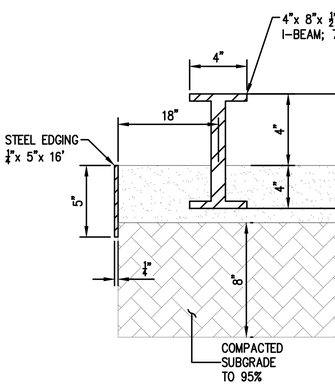
MODIFICATION TO MAG 545 FOR PIPES NTS

A. 4" TYPE 'A', WHITE, RAISED PAVEMENT MARKER - EPOXY TO STL. PL. PER ADOT STANDARD SPECS
B. STABILIZED D.G. PARKING AREA OVER COMPACTED A.B.C. OVER COMPACTED SUBGRADE
C. 4" DIA. X 3/16" STL. PL. - BUTT WELD TO 12" #3 REBAR STAKE - SET PLATE FLUSH WITH FINISH GRADE OF D.G.



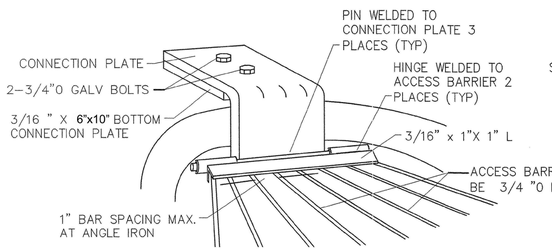
J PARKING DOT DELINEATION

NTS

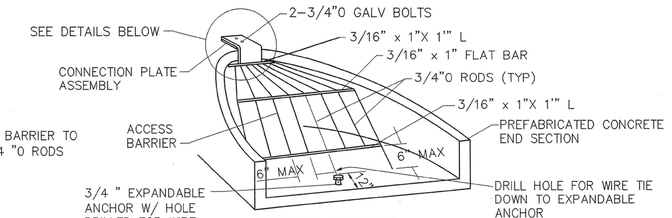


K I-BEAM WHEEL STOP

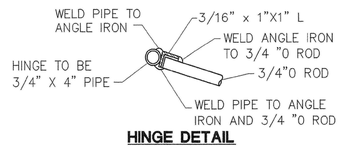
NTS



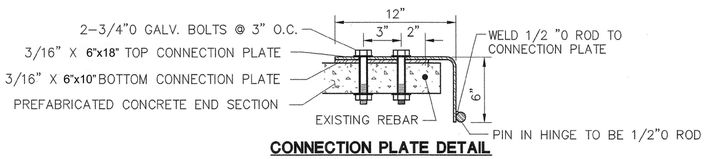
ASSEMBLY DETAIL
N.T.S.



ACCESS BARRIER
N.T.S.



HINGE DETAIL
N.T.S.



CONNECTION PLATE DETAIL
N.T.S.

L ACCESS BARRIER DETAIL

NTS

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HUITT–ZOLLARS
INTERIM REVIEW ____ % CORRECTED BY ____ DATE ____
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VAULT

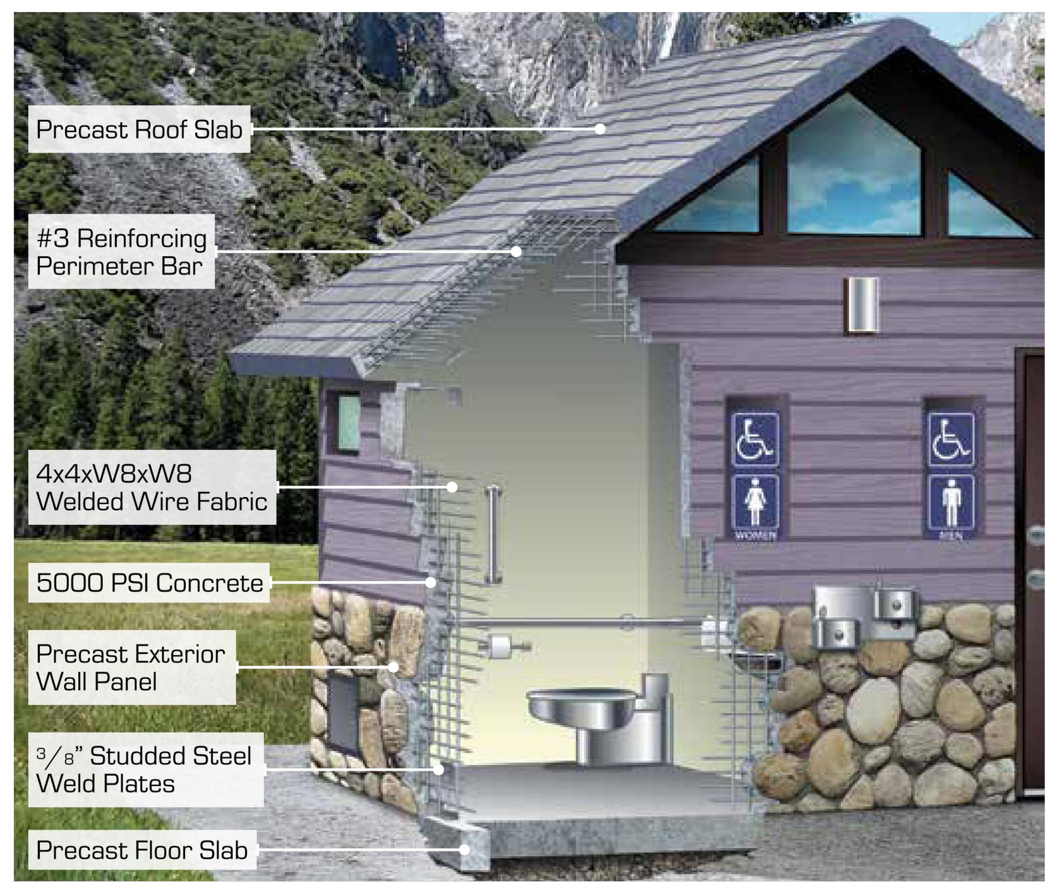
- Installed below ground level with vault dimensions that match the perimeter of the building to provide a stable structure that supports the full weight of the building.
- Holds up to 1,000 gallons of waste (approximately 15,000 uses).
- Sloped so that waste will drain to the clean out end.
- Lined with a black polyethylene liner that is cast into the side walls of the concrete vault using dovetail embeds.

SWEET SMELLING TECHNOLOGY

- Designed and placed to ensure an unobstructed airflow over the top of the vent stack for passive ventilation.
- The location of the wall vent and orientation of the building takes advantage of the unobstructed airflow.
- The positive continual air flow carries the vault air out through the vent pipe keeping the building odor-free.

- Meets UFAS, ADA and California Title 24 requirements
- Vandal resistant building and toilet components
- 4" thick steel reinforced concrete walls
- 5" thick steel reinforced concrete roof and floors
- Quick installation and hookup at the job site
- Will not rot, rust or burn
- Easily cleaned with a brush and warm soapy water
- Available in 28 different colors
- Custom textures and colors also available

ENGINEERED TO WITHSTAND SNOW, WIND, WATER AND ZONE-4 SEISMIC LOADS



CXT®

www.cxtinc.com
800.696.5766

CXT® vault restrooms are engineered and designed for long life in extreme conditions.

- Built to Look Great and Designed to Last
- Simple to Install and Ready to Use
- Easy to Maintain and Vandal Resistant
- Pre-Engineered
- Tougher Than Kits, Block or Steel

SPECIFICATIONS

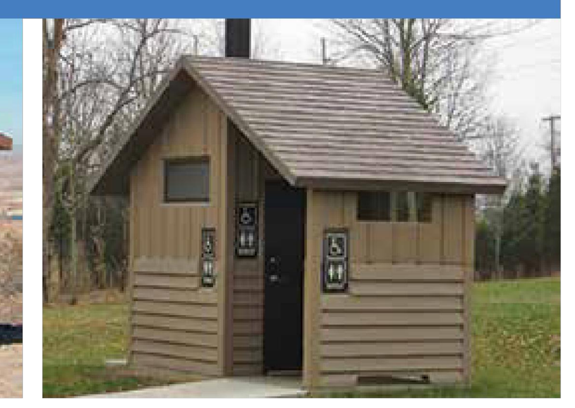
- One single user waterless restroom
- 6' 6" x 14' 7½" floor plan
- One ADA toilet riser
- ADA grab bars
- One waste clean out hatch
- One 1,000 gallon polyethylene lined concrete waste vault
- Sweet smelling technology

GREEN BUILDINGS

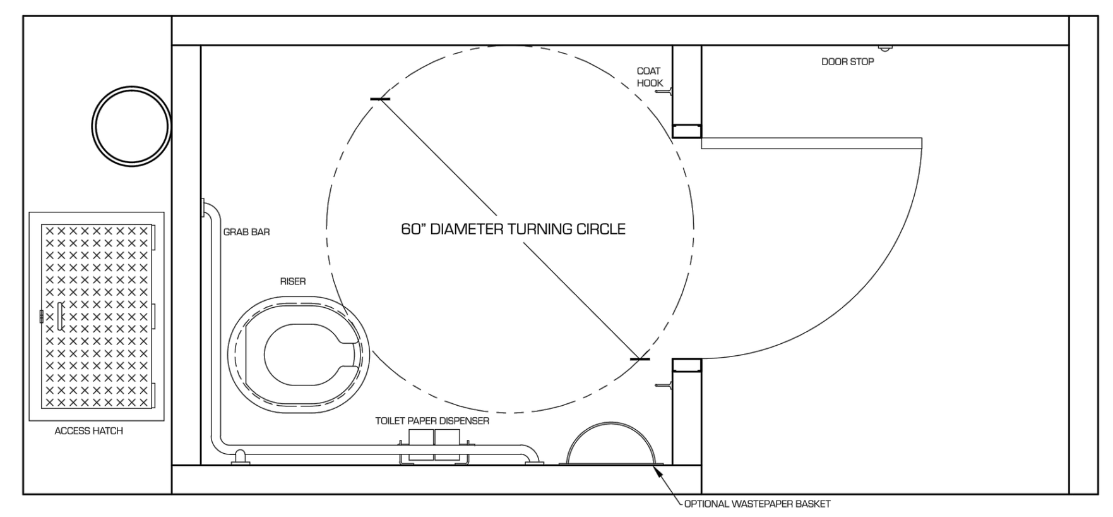
SINGLE VAULT WATERLESS RESTROOMS

ROCKY MOUNTAIN
Mocha Caramel Board & Batt Upper Walls
Basalt Rock Lower Walls
Mocha Caramel Cedar Shake Roof

GUNNISON
Sand Beige Stucco Walls
Pueblo Gold Cedar Shake Roof



CASCADIAN
Natural Honey Board & Batt Upper and Lap Siding Lower Walls
Toasted Almond Cedar Shake Roof



Standard Floor Plan with Options Shown (for reference only)

Sourcewell | GSA Schedule Contract GS-07F-0602N

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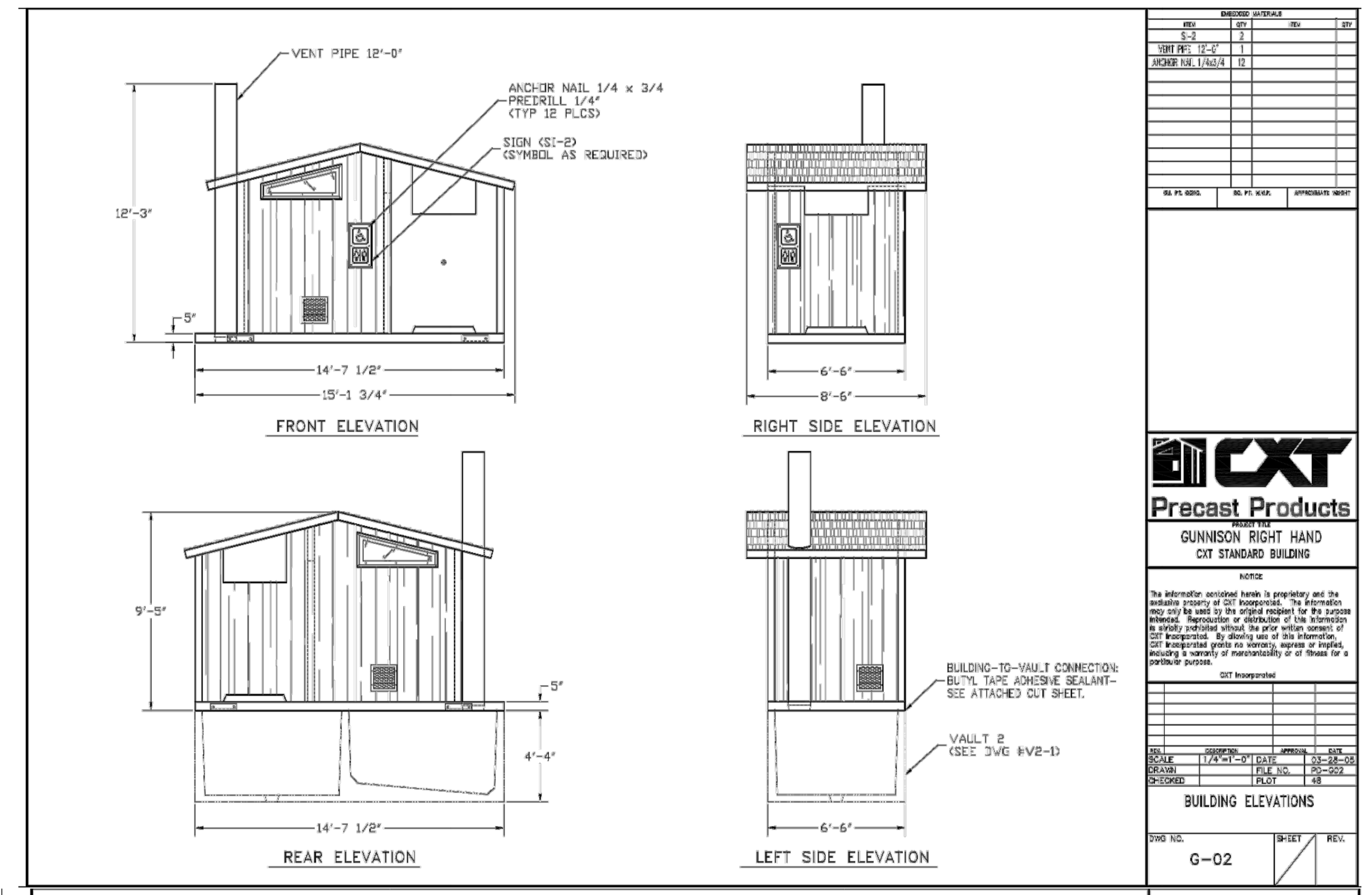

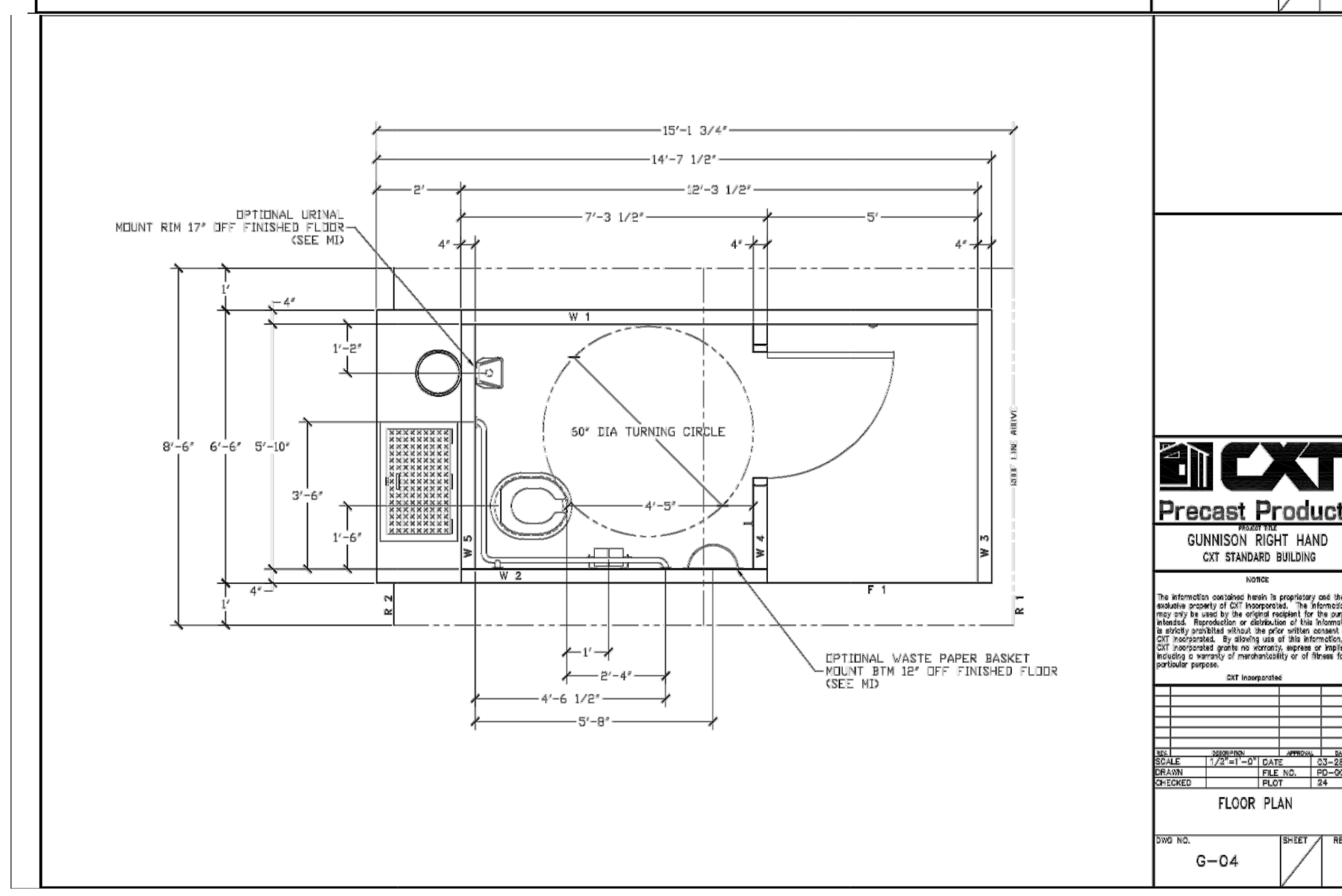

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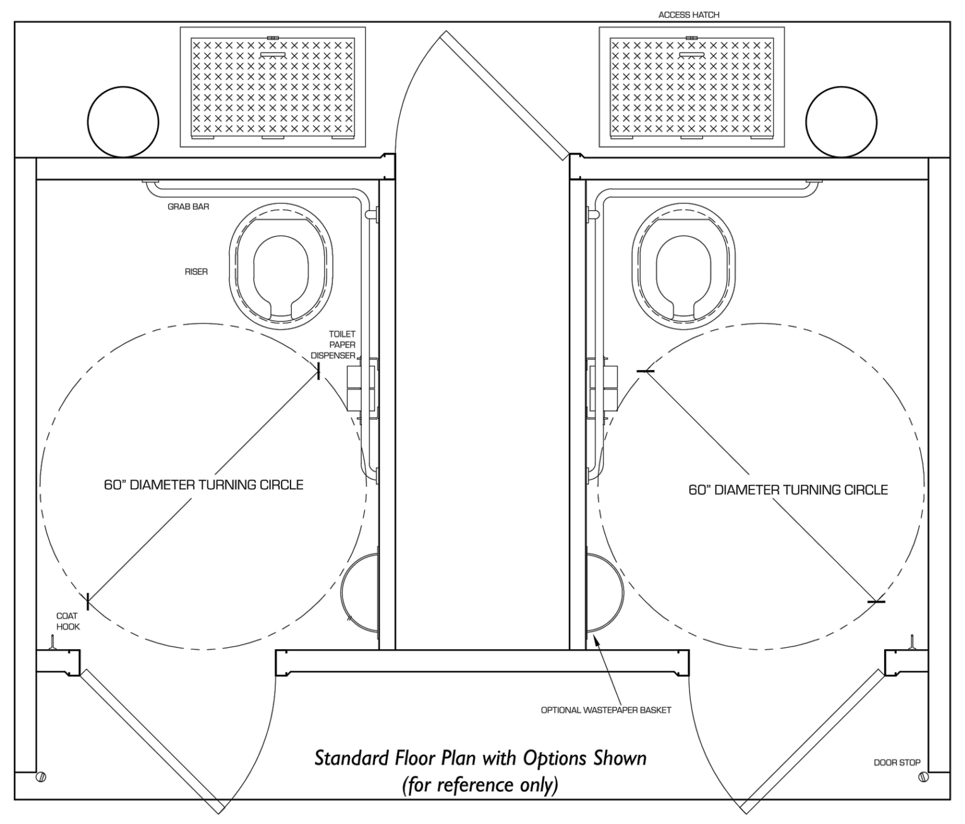

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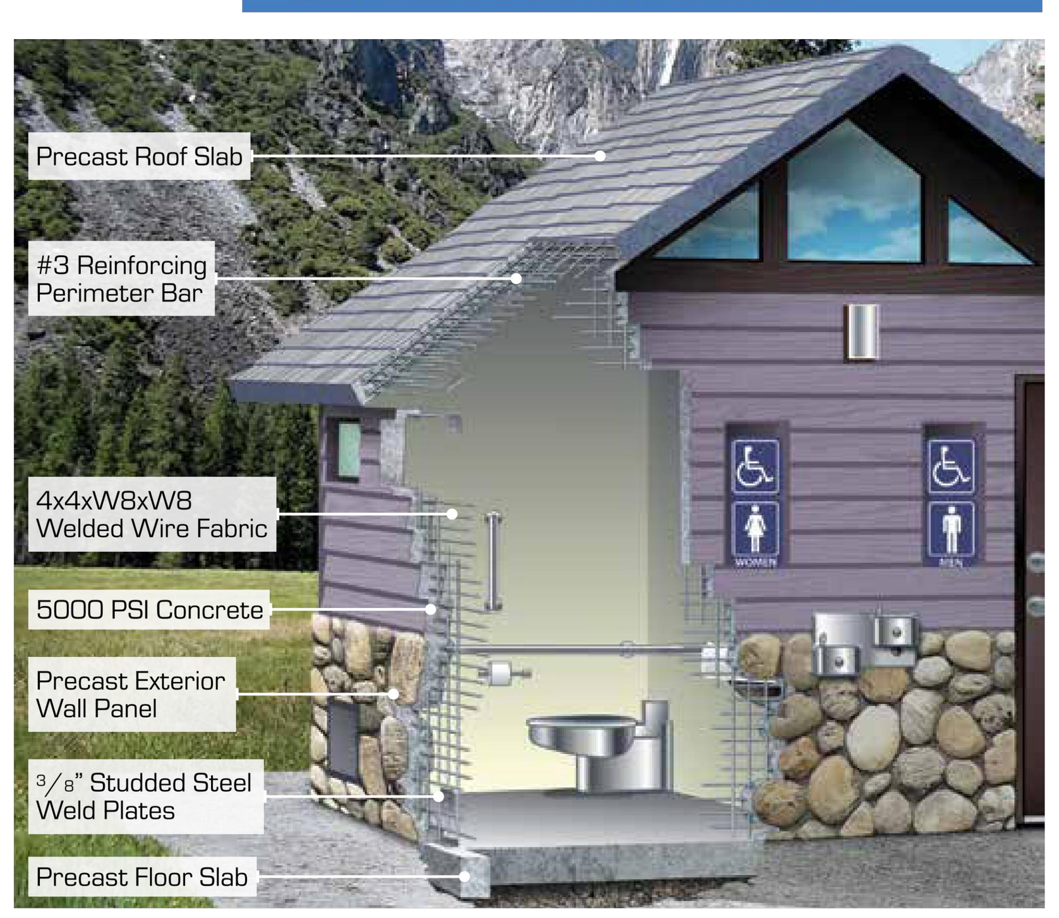

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SPECIFICATIONS

- Two single user waterless restrooms
- 11' 11" x 14' 4" floor plan
- Two ADA toilet risers
- ADA grab bars
- Two waste clean out hatches
- Two 1,000 gallon polyethylene lined concrete waste vaults
- Sweet smelling technology

GREEN BUILDINGS

DOUBLE VAULT WATERLESS RESTROOMS

TIAGO SPECIAL
Mocha Caramel Split Face Block Walls
Malibu Taupe Cedar Shake Roof

DOUBLE ROCKY MOUNTAIN
Cocoa Milk Board & Batt Upper Walls
Napa Valley Sone Lower Walls
Granite Rock Cedar Shake Roof

DOUBLE CASCADIAN
Oatmeal Buff Horizontal Lap Walls
and Cedar Shake Roof

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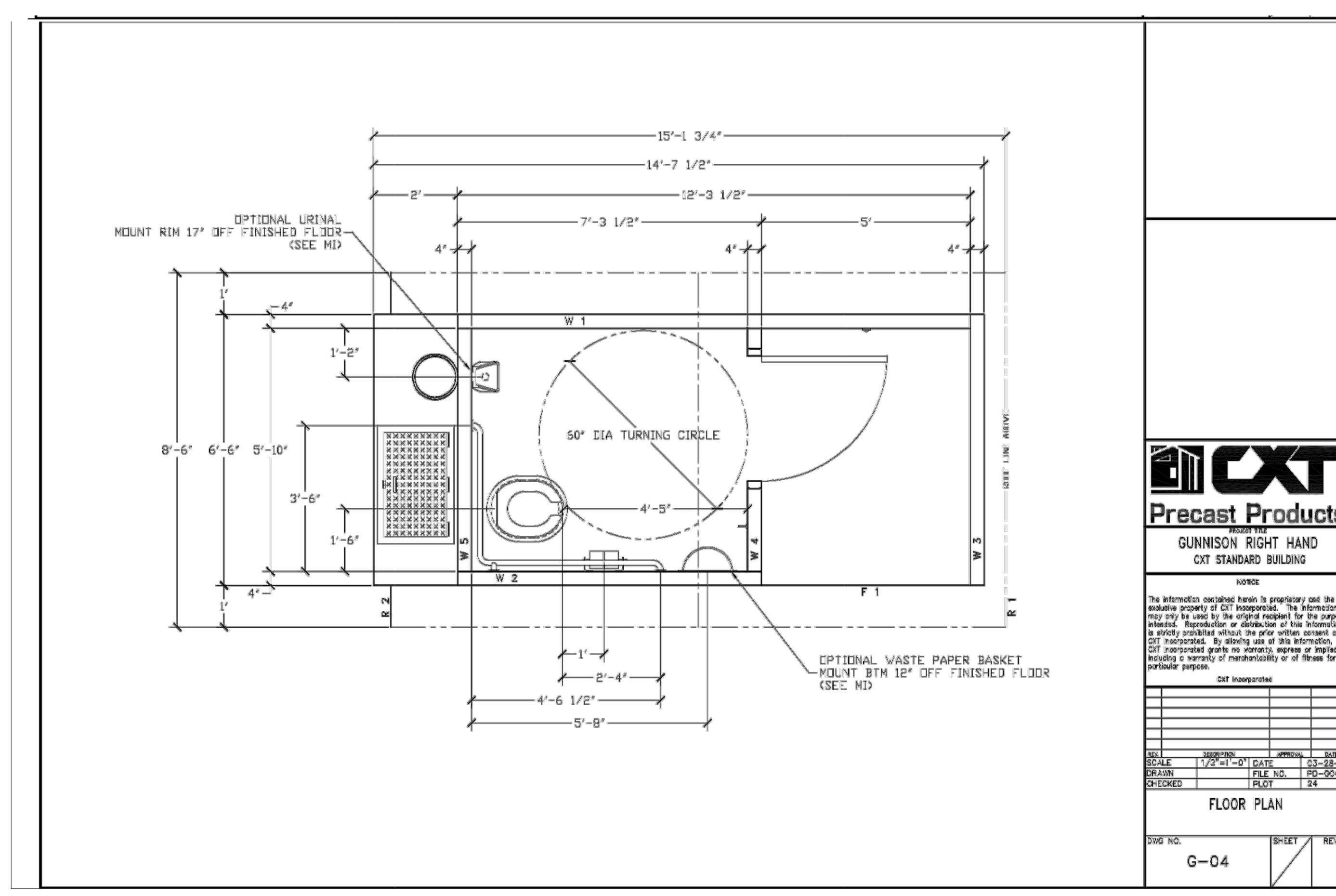

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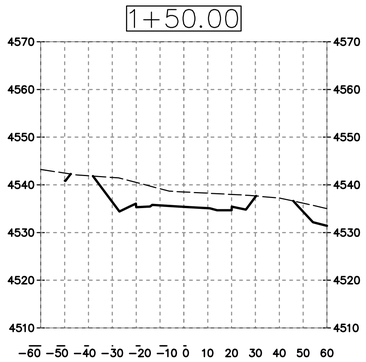
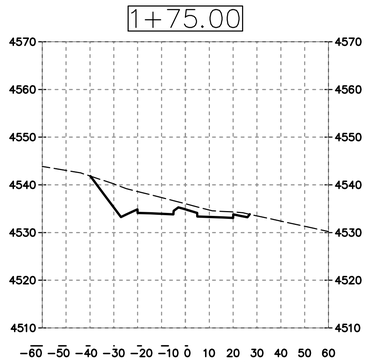
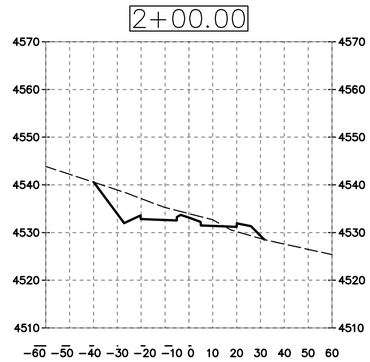
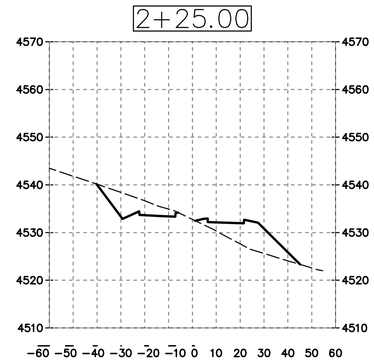
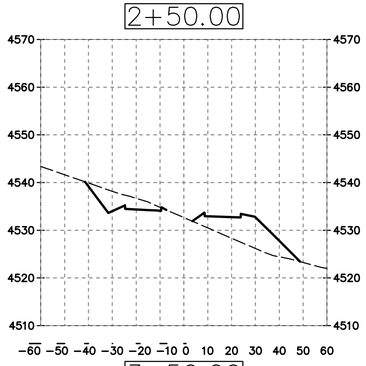
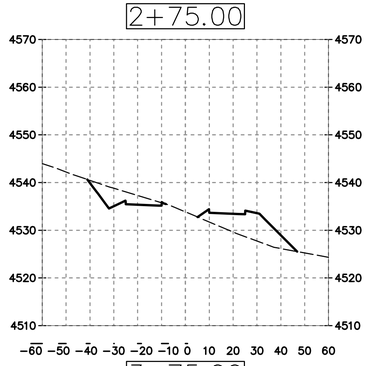


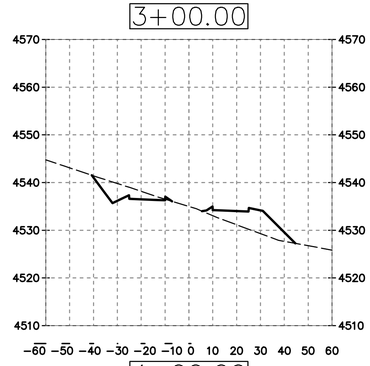


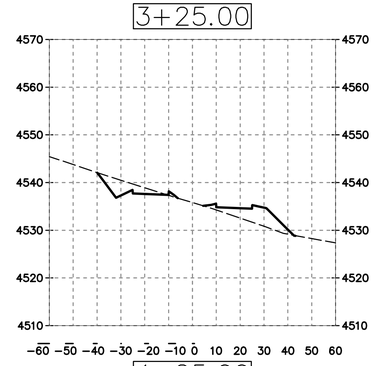


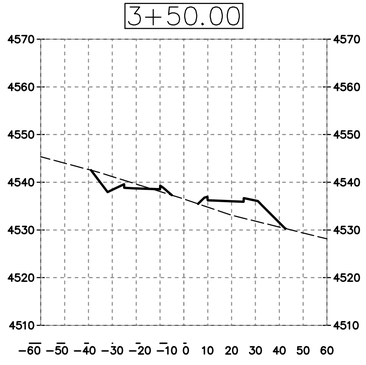


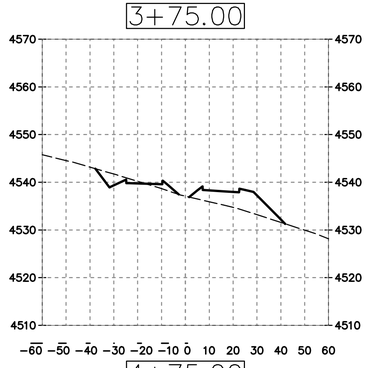


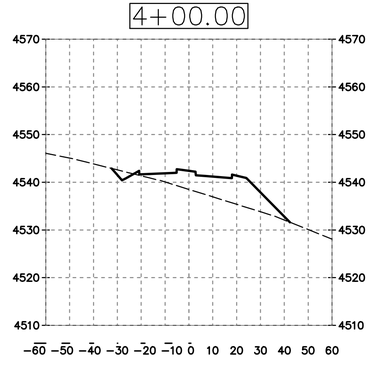


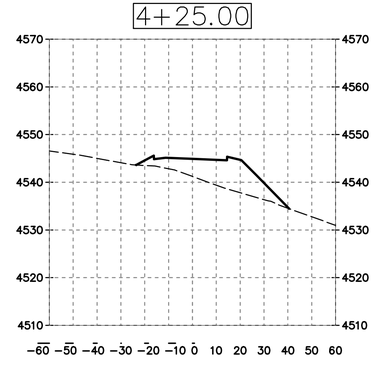


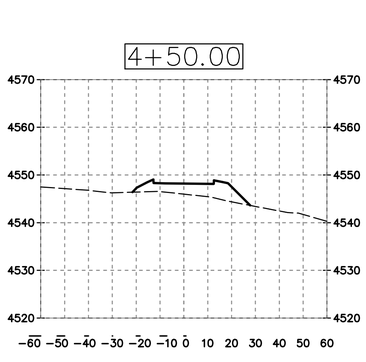


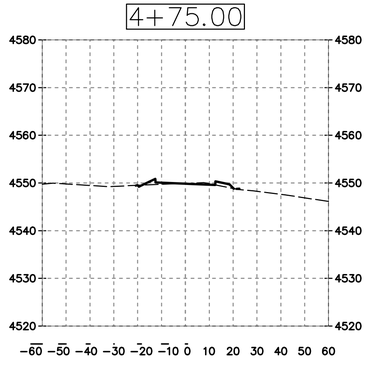












HUITT-ZOLLARS
INTERIM REVIEW ____ % ____ DATE
FINAL REVIEW ____ % ____ DATE

REVIEWED BY ____ DATE ____
CORRECTED BY ____ DATE ____
VERIFIED BY ____ DATE ____

REVISIONS:

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

100% SUBMITTAL

0 15' 30' 60'
SCALE: 1"=30' HORIZ.
SCALE: 1"=15' VERT.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

ACCESS ROAD SECTIONS

Hoskin•Ryan Consultants, Inc.
a Huitt-Zollars Company
5050 N. 40th Street Suite #100
Phoenix, AZ 85018
Office (602) 252-8384 | Fax (602) 252-8385 | www.hoskinryan.com

DATE	PROJECT NO.	SHEET NUMBER
3/19/2021	R311624.01	14 OF 18

ENGINEER'S NOTES

CONSTRUCTION SURVEY CREWS AND/OR CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER, PRIOR TO CONSTRUCTION, IN REGARDS TO ANY AND ALL CONFLICTING INFORMATION AND DISCREPANCIES PERTAINING TO THE STATIONING, ELEVATIONS, OR CONSTRUCTION CALLOUTS SHOWN WITHIN THESE PLANS. ELECTRONIC FILES MAY BE PROVIDED FOR THE CONSTRUCTION SURVEY CREWS CONVENIENCE; HOWEVER, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED DESIGN DRAWINGS. IN THE EVENT OF CONFLICTING INFORMATION, AND UPON REQUEST FROM AN OWNER'S REPRESENTATIVE, ENGINEER WILL WORK PROMPTLY TO DETERMINE A RESOLUTION. IF ENGINEER IS NOT CONTACTED TO ASSIST IN CONFLICT RESOLUTION THE RESPONSIBILITY FOR ANY RESULTING FUTURE CONSTRUCTION ERROR OR CONFLICT SHALL RESIDE WITH THE FIELD ENGINEER, FIELD SURVEYOR AND/OR THE CONTRACTOR.

ALL CONDUITS (I.E. BOX CULVERTS, REINFORCED CONCRETE PIPE, CAST-IN-PLACE PIPE, HDPE PIPE, AND/OR CORRUGATED METAL PIPE) SHOWN ON THESE PLANS ARE DESIGNED FOR STANDARD HIGHWAY LOADING. THE STANDARD MINIMUM COVER REQUIREMENTS, AS ESTABLISHED BY THE CONDUIT MANUFACTURER, MAY NOT ALWAYS BE SUFFICIENT FOR LOADING CONDITIONS IMPOSED BY CONSTRUCTION ACTIVITY. IF CONSTRUCTION EQUIPMENT WILL BE DRIVEN CLOSE TO OR OVER THE BURIED CONDUIT, THE CONTRACTOR SHALL PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE CONDUIT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ANALYZE AND CHECK THE ADEQUACY OF THE ADDITIONAL COVER REQUIREMENTS, ASSOCIATED WITH LOADING CONDITIONS IMPOSED BY CONSTRUCTION ACTIVITIES.

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

THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA, HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES, PRIOR TO ANY EXCAVATION, TO VERIFY THE PRECISE HORIZONTAL AND VERTICAL LOCATION OF THEIR UTILITIES.

THE OWNER/DEVELOPER SHALL CONTRACT WITH THE ENGINEER OF RECORD TO MAKE FIELD RECORD MEASUREMENTS, OR PROVIDE TO THE ENGINEER OF RECORD CERTIFIED COPIES, SEALED BY A REGISTERED LAND SURVEYOR, OF THE FIELD RECORD MEASUREMENTS, OF THE WORK UPON NOTIFICATION BY THE WATER/SEWER CONTRACTOR THAT THE PIPE WORK IS COMPLETE AND IS READY FOR RECORD DRAWING SURVEY. IF THE CONTRACTOR DOES NOT LEAVE THE TRENCHES OPEN SO THE ACTUAL PIPELINE AND SERVICES CAN BE OBSERVED, THE RECORD DRAWING MEASUREMENTS WILL REFLECT THE TRENCH LOCATION ONLY. IF THE TRENCHES ARE BACKFILLED AND OBSCURED TO THE POINT THAT RECORD DRAWING MEASUREMENTS CANNOT BE PERFORMED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ACCURATE RECORD DRAWING MEASUREMENTS AND SECURING THE ACCEPTANCE OF THE RECORD DRAWING BY THE JURISDICTIONAL AGENCY.

THE CONTRACTOR SHALL NOTIFY THE RESPONSIBLE PARTY FOR THE FIELD RECORD MEASUREMENTS, BEFORE FITTINGS ARE COVERED SO RECORD DRAWING MEASUREMENTS MAY BE TAKEN. FITTINGS SHALL NOT BE COVERED UNTIL SURVEY SHAVE BEEN COMPLETED.

THE CONTRACTOR SHALL BEGIN ALL GRAVITY DRAIN LINE CONSTRUCTION FROM THE MOST DOWNSTREAM MANHOLE OR STUB. PRIOR TO INSTALLATION THE CONTRACTOR SHALL EXCAVATE, EXPOSE AND VERIFY THE LOCATION AND ELEVATION OF CONNECTION. SHOULD THE EXISTING CONDITION VARY FROM THE DESIGN PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.

CONTRACTOR WILL NOT BEGIN CONSTRUCTION UNLESS ALL NECESSARY APPROVALS ARE OBTAINED.

PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS AND EARTHWORK QUANTITIES, IF ANY. NO CLAIM SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.

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

ALL COMPACTION IN STREETS TO BE PER M.A.G. SPECS. SECTION 601.

ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, PIPES, PROTECTIVE BERMS OR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO ANY STRUCTURE BEING BUILT.

THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE E.P.A.'S REQUIREMENTS FOR AN N.P.D.E.S. PERMIT & AZPDES PERMIT.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ADOPTED MAG SPECIFICATIONS AND STANDARD DETAILS AS MODIFIED BY THE "JURISDICTIONAL AGENCIES".

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE BASED ON INFORMATION SUPPLIED TO THE ENGINEER BY UTILITY COMPANIES. NO GUARANTEE ON LOCATIONS OR ACCURATENESS IS IMPLIED OR GIVEN.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT BLUE STAKE (1 800 STAKE IT) AND OTHER INVOLVED AGENCIES TO LOCATE UTILITIES PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION.

THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED FOR THE CONSTRUCTION OF THE PUBLIC WORKS FACILITIES SHOWN HEREON. THE PROJECT OWNER AND THE OWNER'S LENDERS, CONSULTANTS, CONTRACTORS AND SUBCONTRACTORS ARE PROHIBITED FROM DISCLOSING THE PLANS AND SPECIFICATIONS TO ANY PERSONS OTHER THAN THOSE WHO HAVE A NEED TO KNOW THE INFORMATION FOR THE PURPOSE OF THE PROJECT.

HUITT-ZOLLARS
INTERIM REVIEW ____ % CORRECTED BY ____ DATE ____
FINAL REVIEW ____ % VERIFIED BY ____ DATE ____

EC-7 DUST CONTROL (DESIGN MANUAL)

PURPOSE

SEDIMENTS WHICH ARE TRANSPORTED FROM CONSTRUCTION SITES BY STORMWATER RUNOFF, WIND, EROSION AND VEHICLE TRACKOUT ARE OFTEN RE-DISPERSED TO THE AIR BY SUBSEQUENT VEHICULAR TRAFFIC AND HIGH WINDS. LIKEWISE, THESE SEDIMENTS MAY BE TRANSPORTED BY THE NEXT RAINFALL INTO PUBLIC STORM SEWER SYSTEMS. IMPLEMENTATION OF CONTROL MEASURES TO MINIMIZE THE GENERATION OF FUGITIVE DUST FROM CONSTRUCTION SITES WILL REDUCE PARTICULATE MATTER IN THE AIR, WHICH HAS SIGNIFICANT HEALTH EFFECTS TO WORKERS AND ANY NEARBY RESIDENTS. THERE ARE THREE METHODS OF DUST CONTROL: (1) GEOTEXTILES, MATS, PLASTIC COVERS, AND OTHER MECHANICAL METHODS (2) DUST PALLIATIVES (SOIL BINDERS), AND (3) REVEGETATION.

APPROPRIATE APPLICATIONS

DUST CONTROL MEASURES SHOULD BE APPLIED AT THE FOLLOWING LOCATIONS AND ACTIVITIES:

- GRADING OPERATIONS (LAND CLEARING AND EARTHMOVING)
- DRILLING AND BLASTING
- BATCH DROP OPERATIONS (LOADER OPERATION)
- EXPOSED AREAS, CLEARED UNSTABILIZED AREA.
- VEHICLE TRAFFIC ON UNPAVED SURFACES
- SEDIMENT TRACKING ON PAVED SURFACES
- BLASTING AND WRECKING BALL OPERATIONS
- SOIL AND DEBRIS STORAGE PILES

THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE MARICOPA COUNTY AIR QUALITY REGULATIONS. A SUMMARY OF THE BASIC REQUIREMENTS ARE AS FOLLOWS:

- PERMITS REQUIRE THE USE OF REASONABLY AVAILABLE DUST CONTROL MEASURES.
- ENFORCE VISIBLE OPACITY EMISSION LIMITS TO DETERMINE COMPLIANCE.
- REQUIRE DUST CONTROL PLANS FOR CONSTRUCTION OR LAND CLEARING PROJECTS.
- ENFORCEMENT ACTIVITIES WITH PRIORITY GIVEN TO CITIZEN COMPLAINTS.
- REQUIRE CONTRACTORS TO MAINTAIN RECORDS.

LIMITATIONS

- ALL DUST SUPPRESSANTS ARE TEMPORARY IN NATURE AND MAY NEED REAPPLICATION(S) THROUGHOUT THE LIFE OF A PROJECT.
- DUST SUPPRESSANTS REQUIRE A MINIMUM CURING TIME UNTIL FULLY EFFECTIVE, AS PRESCRIBED BY THE MANUFACTURER, WHICH MAY BE 24 HOURS OR LONGER. REAPPLICATION MAY BE NECESSARY AFTER A STORM EVENT.
- DUST SUPPRESSANTS WILL GENERALLY EXPERIENCE SPOT FAILURES DURING HEAVY RAINFALL EVENTS. IF RUNOFF PENETRATES THE SOIL AT THE TOP OF A SLOPE TREATED WITH A SOIL BINDER, THE RUNOFF MAY COMPLETELY UNDERCUT THE STABILIZED SOIL LAYER AND DISCHARGE AT A POINT FURTHER DOWN THE SLOPE.
- DUST SUPPRESSANTS MAY NOT PENETRATE SOIL SURFACES MADE UP PRIMARILY OF SILT AND CLAY, PARTICULARLY WHEN COMPACTED.
- SOME DUST SUPPRESSANTS CAN BE ENVIRONMENTALLY HAZARDOUS, ESPECIALLY IF THE DUST SUPPRESSANT DISSOLVES IN WATER. DISSOLVED CHEMICALS CAN MIGRATE WITH THE RUNOFF OR PERCOLATE FURTHER BELOW THE GROUND SURFACE. FOR ADDITIONAL INFORMATION, REFER TO THE EPA DOCUMENT, "POTENTIAL ENVIRONMENTAL IMPACTS OF DUST SUPPRESSANTS: AVOIDING ANOTHER TIMES BEACH", REFERENCED AT THE END OF THIS BMP.
- SOME DUST SUPPRESSANTS DO NOT PERFORM WELL WITH LOW RELATIVE HUMIDITY, WHILE OTHERS BECOME SLIPPERY OR LEACH OUT OF THE SOIL UNDER HEAVY PRECIPITATION.

PLANNING CONSIDERATIONS

MANY OF THE REASONABLY AVAILABLE CONTROL MEASURES FOR CONTROLLING FUGITIVE DUST FROM CONSTRUCTION SITES CAN ALSO BE IMPLEMENTED AS BEST MANAGEMENT PRACTICES FOR STORMWATER POLLUTION PREVENTION. THOSE BEST MANAGEMENT PRACTICES INCLUDE:

- PAVE, VEGETATE, OR CHEMICALLY STABILIZE ACCESS POINTS TO PAVED ROADS.
- PROVIDE COVERS FOR TRUCKS TRANSPORTING MATERIALS THAT CONTRIBUTE DUST.
- PROVIDE FOR WET SUPPRESSION OR CHEMICAL STABILIZATION OF EXPOSED SOILS.
- FURNISH STABILIZED CONSTRUCTION ROAD ENTRANCES AND VEHICLE WASH DOWN AREAS.
- STABILIZE UNPAVED HAUL ROADS, PARKING AND STAGING AREAS.
- IMPLEMENT DUST CONTROL MEASURES FOR MATERIAL STOCKPILES.
- PREVENT DRAINAGE OF SEDIMENT-LADEN STORMWATER ONTO PAVED SURFACES.
- LIMIT THE AMOUNT OF AREAS DISTURBED BY CLEARING AND EARTH MOVING OPERATIONS BY SCHEDULING THESE ACTIVITIES IN PHASES.

RECOMMENDED MAINTENANCE AND INSPECTION

DUST CONTROL IS AN ONGOING PROCESS DURING SITE CONSTRUCTION. RE-APPLICATION OF DUST CONTROL MEASURE MAY BE NECESSARY UNTIL CONSTRUCTION IS COMPLETE.

SYMBOL: D.C. | **DUST CONTROL** | FLOOD CONTROL DISTRICT OF MARICOPA COUNTY | 2 of 4

- Permits require the use of reasonably available dust control measures.
- Enforce visible opacity emission limits to determine compliance.
- Require dust control plans for construction or land clearing projects.
- Enforcement activities with priority given to citizen complaints.
- Require contractors to maintain records.

PLANNING CONSIDERATIONS

Many of the reasonably available control measures for controlling fugitive dust from construction sites can also be implemented as Best Management Practices for stormwater pollution prevention. Those best management practices include:

- Pave, vegetate, or chemically stabilize access points to paved roads.
- Provide covers for trucks transporting materials that contribute dust.
- Provide for wet suppression or chemical stabilization of exposed soils.
- Provide for rapid cleanup of sediments deposited on paved roads.
- Furnish stabilized construction road entrances and vehicle wash down areas.
- Stabilize unpaved haul roads, parking and staging areas.
- Implement dust control measures for material stockpiles.
- Prevent drainage of sediment-laden stormwater onto paved surfaces.
- Stabilize abandoned construction sites using vegetation or chemical stabilization methods.
- Limit the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

The following Table, Dust Control Application provides guidance on the appropriate best management practices recommended for typical field operations and conditions
There are many products available as dust palliatives for chemically stabilizing gravel roadways and stockpiles. The types of chemicals available and recommendations for their use are tabulated in the chart of Commonly Used Dust Palliatives.

MAINTENANCE REQUIREMENTS

Dust control is an ongoing process during site construction. Re-application of dust control measure may be necessary until construction is complete.

SYMBOL: D.C. | **DUST CONTROL** | FLOOD CONTROL DISTRICT OF MARICOPA COUNTY | 1 of 4

DIAGRAM

CONDITIONS WHERE PRACTICE APPLIES

- ___ PERIMETER CONTROL
- ___ SLOPE PROTECTION
- * SEDIMENT TRAPPING
- ___ DRAINAGEWAY & STREAM PROTECTION
- * TEMPORARY STABILIZATION
- ___ PERMANENT STABILIZATION & EXPOSURE LIMITS
- ___ NON-SEDIMENT POLLUTION CONTROL

DEFINITION

A comprehensive plan to limit off-site sedimentation by controlling the sites potential for producing air borne fugitive dust and track-out of sediments.

PURPOSE

Sediments which are transported from construction sites by stormwater runoff, wind, erosion and vehicle trackout are often re-dispersed to the air by subsequent vehicular traffic and high winds. Likewise, these sediments may be transported by the next rainfall into public storm sewer systems. Implementation of control measures to minimize the generation of fugitive dust from construction sites will also limit quantity of sediments in stormwater.

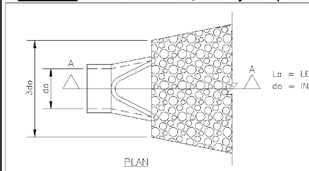
APPROPRIATE APPLICATIONS

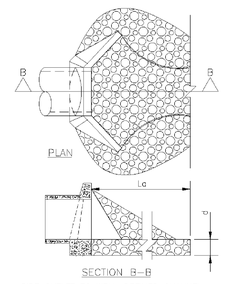
Primary sources of dust from development and construction activities are:

- Grading Operations (land clearing and earthmoving)
- Drilling and blasting
- Batch drop operations (loader operation)
- Exposed areas, cleared unstabilized area.
- Vehicle traffic on unpaved surfaces
- Sediment tracking on paved surfaces
- Blasting and wrecking ball operations
- Soil and debris storage piles

The contractor is responsible for complying with the requirements of the air pollution control permit. Refer to Appendix D for additional information on dust control in Maricopa County. The Division of Air Pollution Control's approach to reduce air pollution from construction sites will be to require:

EC-11 Outlet Protection, Velocity Dissipation Devices Drawing





NOTES

1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, OR CONCRETE.
2. WHERE AS TECHNICAL DESIGN PROCEDURES EXIST FOR DETERMINING La, FCDMC RECOMMENDS USE OF THE FOLLOWING TABLE FOR TEMPORARY ROCK OUTLET PROTECTION.

PIPE SIZE	AVERAGE ROCK DIA.	La
12"	6"	12'
15"	10"	18'
18"	12"	21'
21"	15"	25'
24"	15"	30'

3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.

PIPE OUTLET CONDITIONS

STORM WATER MANAGEMENT NOTES

1. A COPY OF THE APPROVED GRADING AND DRAINAGE PLAN FOR THIS PROJECT, TOGETHER WITH A COPY OF THE NOTICE OF INTENT (NOI) AND THIS STORM WATER MANAGEMENT PLAN (SWMP), SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW. THOSE ELEMENTS OF THE GRADING AND DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE SWMP SHALL BE CONSIDERED A PART OF THE SWMP.
2. PLANNING & DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, AT (602) 262-7811.
3. THE OPERATOR SHALL OBTAIN A DUST CONTROL PERMIT FROM MARICOPA COUNTY HEALTH DEPARTMENT AND PERFORM MEASURES AS REQUIRED BY THE PERMIT TO PREVENT EXCESS DUST.
4. THE OPERATOR SHALL PERFORM, AT A MINIMUM, A VISUAL INSPECTION OF THE CONSTRUCTION SITE ONCE EVERY MONTH AND WITHIN 24 HOURS OF RAINFALL GREATER THAN OR EQUAL TO A HALF OF AN INCH OR MORE. THE OPERATOR SHALL PREPARE A REPORT DOCUMENTING HIS/HER FINDINGS ON THE CONDITIONS OF THE SWMP CONTROLS AND NOTE ANY EROSION PROBLEM AREAS. THE OPERATOR'S REPORT IS TO BE SUBMITTED TO THE PLANNING & DEVELOPMENT DEPARTMENT CIVIL/SITE INSPECTOR FOR REVIEW AND APPROVAL. FACILITIES SHALL BE MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED.
5. THE OPERATOR SHALL AMEND THIS PLAN AS NECESSARY DURING THE COURSE OF CONSTRUCTION TO RESOLVE ANY PROBLEM AREAS, WHICH BECOME EVIDENT DURING THE CONSTRUCTION AND/OR DURING RAINFALLS.
6. THE PERMITTEE SHALL FILE A NOTICE OF TERMINATION (N.O.T.) AFTER COMPLETION OF CONSTRUCTION AND PLACEMENT OF FINAL LANDSCAPE MATERIALS. THE N.O.T. IS TO BE SUBMITTED TO THE PLANNING & DEVELOPMENT DEPARTMENT CIVIL/SITE INSPECTOR TO FINAL THE SWMP PERMIT.
7. THE PERMITTEE SHALL SAVE ALL RECORDS, INCLUDING THE N.O.I., SWMP, N.O.T., AND INSPECTION REPORTS, ON FILE FOR A MINIMUM OF THREE YEARS FROM THE DATE OF FILING THE N.O.T.
8. THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED AND THE N.O.T. IS SUBMITTED TO THE PLANNING & DEVELOPMENT DEPARTMENT CIVIL/SITE INSPECTOR.
9. THE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO INSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS, AND MUST BE INSTALLED AND IN OPERATION PRIOR TO ANY GRADING OR LAND CLEARING. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
10. PLAN APPROVAL IS VALID FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

LEGEND

- -(1141)- PRE-DEVELOPMENT CONTOURS
- S.C.E. — STABILIZED CONSTRUCTION ENTRANCE/EXIT PER COUNTY DRAINAGE DESIGN MANUAL EC-5
- W.A. — WASH OUT AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- DC — DUST CONTROL PER DRAINAGE DESIGN MANUAL EC-7
- DRAINAGE FLOW
- ULTIMATE OUTFALL
- SILT FENCE/OR APPROVED EQUAL PER COUNTY DRAINAGE DESIGN MANUAL SPC-5
- ESA — EQUIPMENT STORAGE AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- MSA — MATERIAL STORAGE AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- INLET PROTECTION SEDIMENT BARRIER PER COUNTY DRAINAGE DESIGN MANUAL SPC-7

REVISIONS:

Call at least two full working days before you begin excavation
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

100% SUBMITTAL

Registered Professional Engineer (Civil)
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT IMPROVEMENT PLANS

STORM WATER POLUTION PREVENTION SWPP DETAILS

Hoskin•Ryan Consultants, Inc.
a Huitt-Zollars Company
5050 N. 40th Street Suite #100
Phoenix, AZ 85018
Office (602) 252-8384 | Fax (602) 252-8385 | www.hoskinryan.com

DATE	PROJECT NO.	SHEET NUMBER
3/19/2021	R311624.01 SWPP01	15 OF 18

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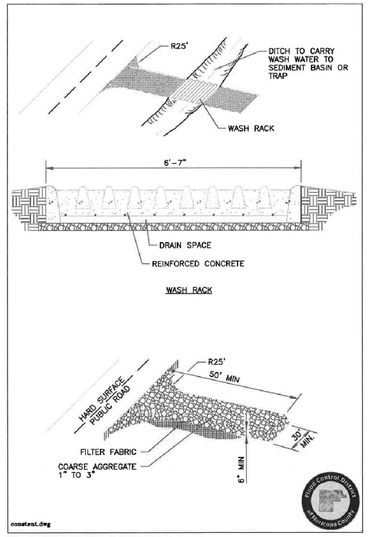
EC-5 Stabilized Construction Entrance Drawing



EC-7 EC-7: Dust Control

DEFINITION

A comprehensive plan to limit offsite sediment depression by minimizing or controlling airborne fugitive dust.

GENERAL INFORMATION
Applicability - Effectiveness Perimeter and Access Controls - high
Most effective when used with: EC-5 Stabilized Construction Entrance; EC-6 Construction Road Stabilization; GH-6 Road Sweeping/Trackout Cleaning
Alternative BMPs: For long term dust control, consider SPC-6 Revegetation

RATINGS			
Associated Costs	**H**	**M**	**L**
Implementation			X
Maintenance	X		
Training			X
Target Pollutants Removal	**H**	**M**	**L**
Oil and Grease			X
Nutrients			X
Sediment	X		
Floatable Material			X
Metals		X	
Other Construction Waste			X

FIGURES

Photos/Sketches

EC-7 Dust Control Photos

Tables

Commonly Used Dust Suppressants

EC-7 Dust Control Table

TABLE 5.2
COMMONLY USED DUST SUPPRESSANTS

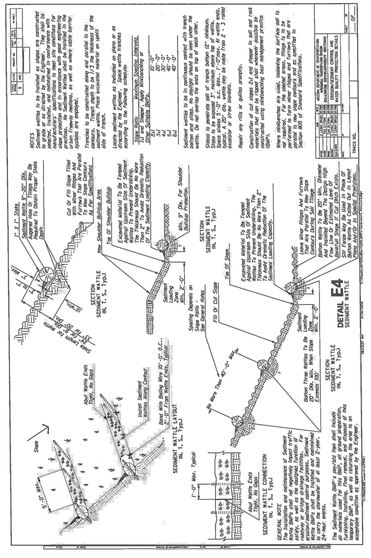
Types	Functional Mechanism	Advantages	Limitations
Freshwater	Moisture wets particles, thereby increasing their mass and binding them together.	Usually readily available, low material cost, and easy to apply	Frequent light applications may be necessary during hot dry weather and can be labor intensive. Over application may result in loss of traction, erosion, or points of road failure.
Calcium Chloride	At a relative humidity greater than approximately 30% (77° F), the salts within the soil will pull moisture from the air above and retain it in the soil.	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance. Calcium Chloride also increases the compacted density of existing road base material. Effectiveness is retained after reblading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity. It is very corrosive to aluminum alloys and slightly corrosive to steel. Solubility of calcium chloride results in leaching during heavy precipitation. Releases heat when mixed with water.
Magnesium Chloride	At a relative humidity greater than approximately 30% (77° F), the salts within the soil will pull moisture from the air above and retain it in the soil.	Reduces evaporation rate of surface moisture, lowers the freezing point of water, which reduces frost heave and freeze-thaw cycles, thereby reducing required road maintenance. Magnesium Chloride increases the compacted density of existing road base material more than Calcium Chloride. Effectiveness is retained after reblading.	Effectiveness in arid and semi-arid regions may be limited due to low relative humidity. It is very corrosive to aluminum alloys and slightly corrosive to steel. Solubility of calcium chloride results in leaching during heavy precipitation.
Lignin Derivatives	Act as adhesives by binding soil particles together and curing.	Greatly increases dry strength of soil, not humidity-dependant, imparts some plasticity to road surfaces, and lowers freezing point of road surface and base. Effectiveness is retained after reblading.	High solubility results in leaching during heavy precipitation. It is corrosive to aluminum alloys due to acidity ($CaCO_3$ can neutralize the acidity). Proper aggregate mix is important to performance. Becomes slippery when wet and brittle when dry.
Tree Resin Emulsions (tall oil)	Act as adhesives by binding soil particles together and curing.	Low solubility after curing minimizes leaching and provides degree of surface waterproofing. Imparts some plasticity to road surfaces, has a high bonding strength, and is non-corrosive.	Requires proper weather and time to cure. No residual effectiveness after reblading. Equipment requires prompt cleanup to avoid curing of resin in hoses and pipes.
Synthetic Polymer	Bind soil particles together by forming a polymerizing matrix; a function similar to adhesives.	Applicable to a range of emission sources and function well in sandy soil conditions. Some types allow seeded vegetation to grow through the polymer matrix.	Requires proper weather and time to cure. Water repellent. May be subject to UV (sunlight) degradation. Application equipment requires timely cleaning. There is no residual effectiveness after reblading.
Bitumens, Tars, and Resins	Asphalt and resinous products are adhesive binding soil particles together. Petroleum oil products coat soil particles, increasing their mass and binding them together.	Water insoluble when dry; provide a degree of surface waterproofing. Good residual effectiveness.	Surface crusting fracturing and potholing may develop. Long-term application may cause road to become too hard for reblading. Bitumens won't lower freezing point and petroleum oil products lack adhesive characteristics.
Cementitious Based Binders	High purity gypsum mixes with water and mulch to form a thin cement-like crust on the soil surface.	Flexible, durable, water permeable, and resists soil chemicals. Reduces amount of aggregate required during initial construction and has lower maintenance costs than other dust suppressants.	Cementitious based binders are only effective for dust control in non-traffic areas. Instead, consider mixing cementitious based binders with sub-base soils for greater soil strength.

EC-7 Dust Control Table

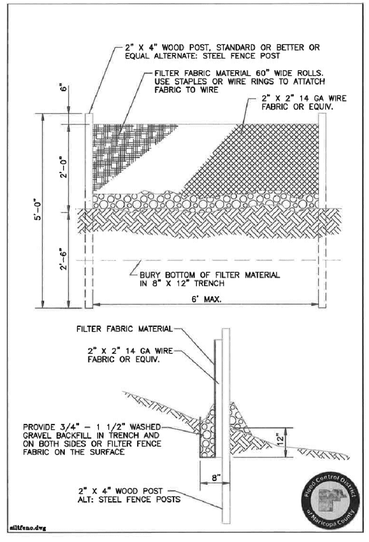
TABLE 5.2
COMMONLY USED DUST SUPPRESSANTS (CONTINUED)

Types	Ideal Soil Characteristics	Relative Cost Comparison (average life expectancy)	Environmental Considerations
Freshwater	None	Low initial cost, high long-term maintenance cost (0 months)	Minimal environmental hazard. If applied excessively, may result in erosion and sediment runoff. Supply may be limited in some areas and, depending on the source, may require a water right permit.
Calcium Chloride	Plasticity index > 8 10-20 percent fines passing the No. 200 sieve (by weight)	Low initial cost, medium long-term maintenance cost (1-6 months)	Repeated applications and long term use may harm adjacent vegetation (See the manufacturer's product information).
Magnesium Chloride	Plasticity index > 8 10-20 percent fines passing the No. 200 sieve (by weight)	Low initial cost, medium long-term maintenance cost (1-6 months)	Repeated applications and long term use may harm adjacent and nearby vegetation (See the manufacturer's product information).
Lignin Derivatives	Plasticity index > 8 10-30 percent fines passing the No. 200 sieve (by weight)	Medium initial cost, low long-term maintenance cost (3-12 months)	Lignin products have high BOD (biological oxygen demand) in aquatic systems. Spills or runoff into surface or groundwaters may create low dissolved oxygen conditions resulting in fish kills or increases in ground water concentrations of iron, sulfur compounds and other pollutants. (See the product MSDS for specific information).
Tree Resin Emulsions (tall oil)	Plasticity index < 3 10-20 percent fines passing the No. 200 sieve (by weight)	Medium initial cost, low long-term maintenance cost (1-6 months)	(See the manufacturer's product information)
Synthetic Polymer	Plasticity index < 3 5-20 percent fines passing the No. 200 sieve (by weight)	High initial cost, low long-term maintenance cost (1-3 months)	(See the manufacturer's product information)
Bitumens, Tars, and Resins	Plasticity index < 3 <20 percent fines passing the No. 200 sieve (by weight)	High initial cost, high long-term maintenance cost (1-3 months)	Use of used oils prohibited. Some petroleum based products may contain carcinogenic polycyclic aromatic hydrocarbons (PAHs). (See the manufacturer's product information)
Cementitious Based Binders	Depending on the type of cementitious based binder, will work with both high and low plasticity index soils.	Low initial cost, medium long-term maintenance cost (3-6 months)	None

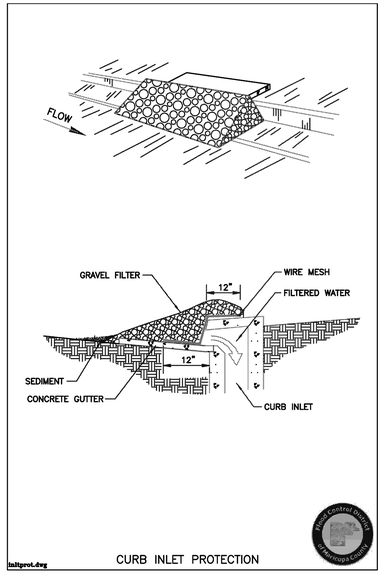
SPC-1 Sediment Wattle Drawing



SPC-5 Silt Fence Drawing



SPC-7 Storm Drain Curb Inlet Protection Drawing



HUITT-ZOLLARS
INTERIM REVIEW ____ % CORRECTED BY ____ DATE ____
FINAL REVIEW ____ % VERIFIED BY ____ DATE ____

REVISIONS:

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

100% SUBMITTAL

Registered Professional Engineer (Civil) CERTIFICATE NO. 22190 THOMAS E. GRANILLO Date Signed 3/19/2021 ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK:
SIM-11B PARKING LOT IMPROVEMENT PLANS

STORM WATER POLUTION PREVENTION SWPP DETAILS

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3/19/2021	R311624.01 SWPP02	16 OF 18

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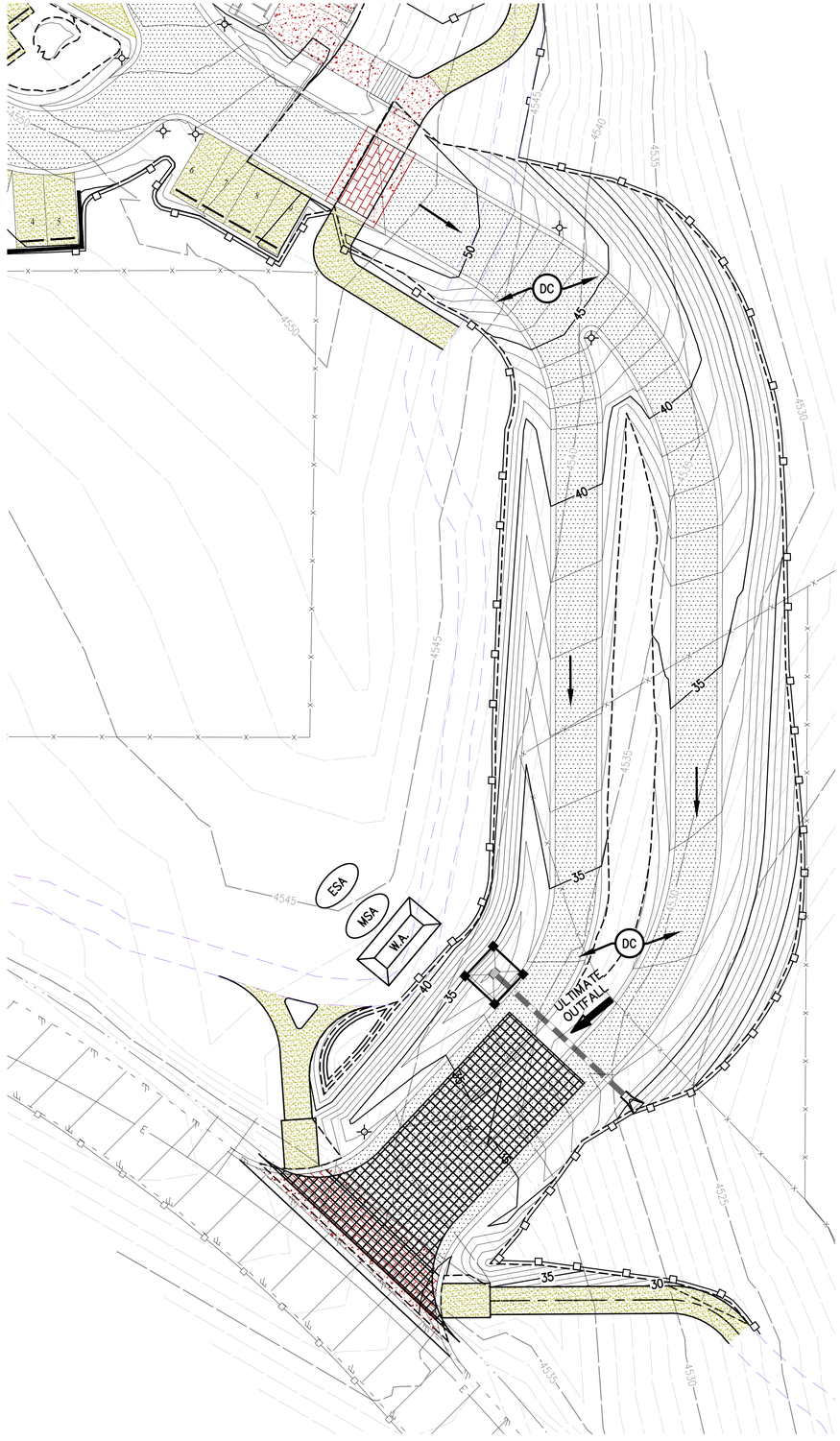

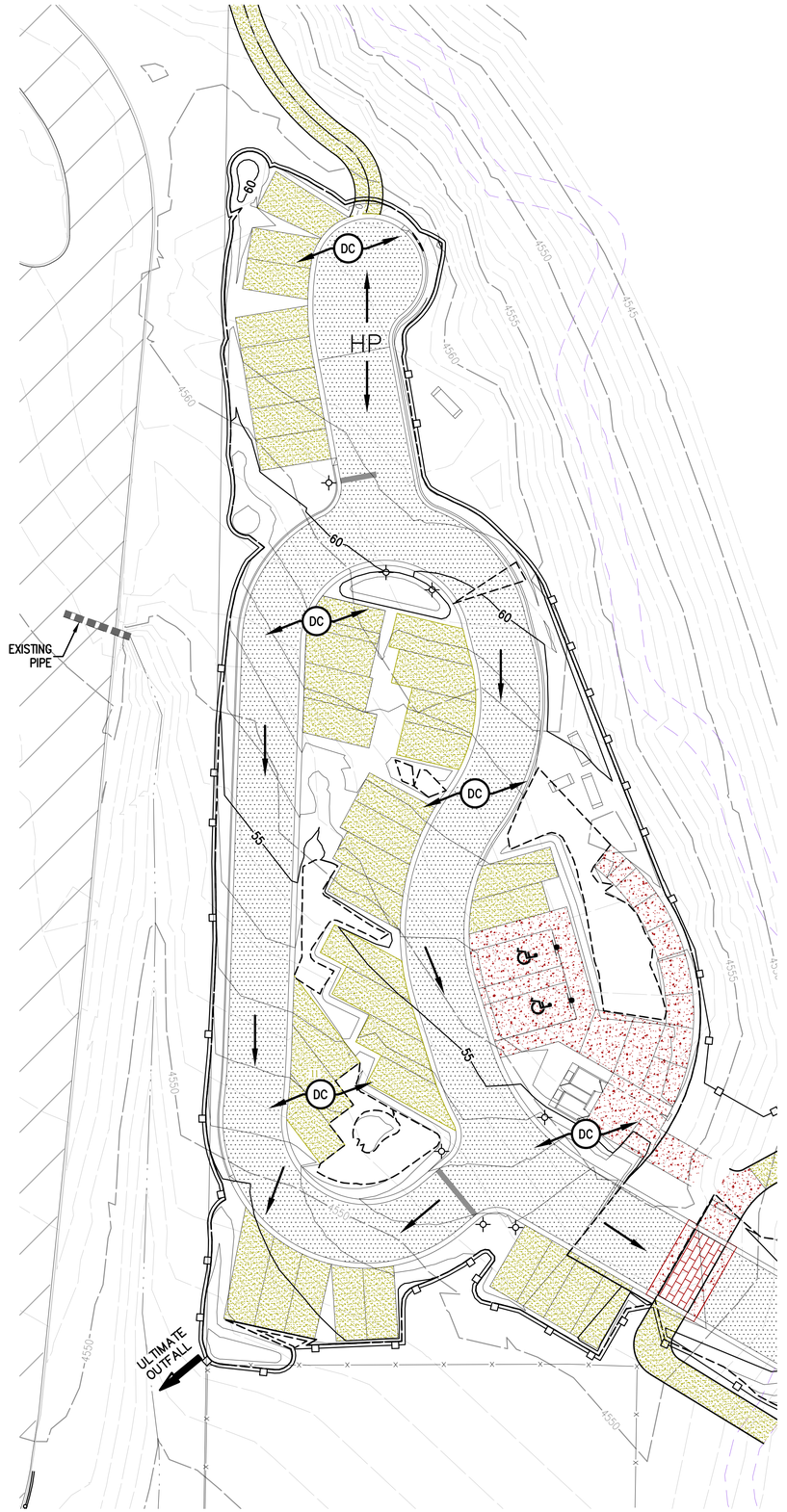

LEGEND

- (1141) — PRE-DEVELOPMENT CONTOURS
- S.C.E. — STABILIZED CONSTRUCTION ENTRANCE/EXIT PER COUNTY DRAINAGE DESIGN MANUAL EC-5
- W.A. — WASH OUT AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- DC — DUST CONTROL PER DRAINAGE DESIGN MANUAL EC-7
- DRAINAGE FLOW
- ULTIMATE OUTFALL
- SILT FENCE/OR APPROVED EQUAL PER COUNTY DRAINAGE DESIGN MANUAL SPC-5
- ESA — EQUIPMENT STORAGE AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- MSA — MATERIAL STORAGE AREA PER COUNTY DRAINAGE DESIGN MANUAL (CONTRACTOR TO DETERMINE EXACT LOCATION)
- INLET PROTECTION SEDIMENT BARRIER PER COUNTY DRAINAGE DESIGN MANUAL SPC-7

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In Maricopa County: (602) 263-1100

100% SUBMITTAL

0 10' 20' 40'
SCALE: 1"=20'

Registered Professional Engineer (Civil)
CERTIFICATE NO.
22190
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

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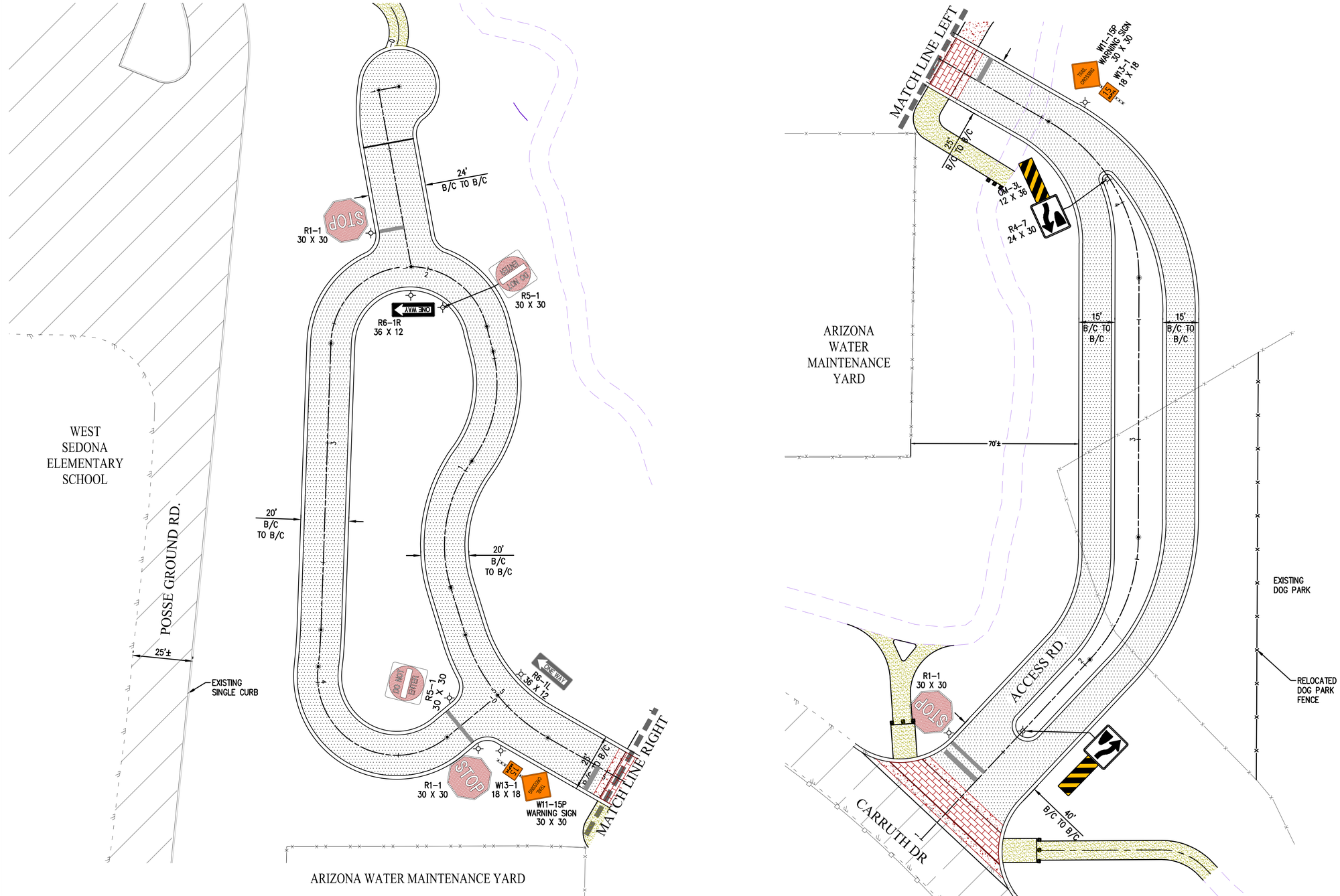

LEGEND

- STREET SIGN BASE PER MAG STD DET 131, TYPE B
- W11-15P WARNING SIGN 30 X 30
- W13-1 18 X 18
- PLACE 50' FROM CROSSING, ON BOTH SIDES
- R4-7 24 X 30
- OM-3L 12 X 36
- R5-1 30 X 30
- R1-1 30 X 30
- R6-1L 36 X 12
- R6-1R 36 X 12
- STOP BAR

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FINAL REVIEW ____ % VERIFIED BY ____ DATE ____

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CERTIFICATE NO.
22790
THOMAS E. GRANILLO
Date Signed 3/19/2021
ARIZONA U.S.A.

EXPIRES 12/31/2023

POSSE GROUNDS PARK: SIM-11B PARKING LOT IMPROVEMENT PLANS

SIGNING & STRIPING PLAN

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