

PRELIMINARY GRADING & DRAINAGE PLAN
TONN RESIDENCE
5429 E SOLANO DR., PARADISE VALLEY, AZ 85253
LOT 19 - STONE CANYON EAST
RECORDED IN BOOK 81 OF MAPS, PAGE 34, M.C.R.,
LOCATED IN A PORTION OF THE NW 1/4 OF THE SE 1/4 NE 1/4 OF SECTION 17, T.2N, R.4E OF THE
GILA & SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

TOWN OF PARADISE VALLEY GENERAL NOTES

- PRIOR TO THE FIRST INSPECTION OF STRUCTURES WITHIN 3 FEET OF A SETBACK LINE, THE PROPERTY PINS SHALL BE PLACED BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR OF THE STATE OF ARIZONA, AND THE PROPERTY LINE(S) IDENTIFIED.
- WHERE EXCAVATION IS TO OCCUR THE TOP 4" OF EXCAVATED NATIVE SOIL SHALL REMAIN ON THE SITE AND SHALL BE REUSED IN A MANNER THAT TAKES ADVANTAGE OF THE NATURAL SOIL SEED BANK IT CONTAINS.
- ALL WORK REQUIRED TO COMPLETE THE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH THE MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL MUNICIPALITY UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
- ALL EXTERIOR SITE LIGHTING SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR TYPE, LOCATION, HEIGHT, WATTAGE, AND LUMEN BASED UPON THE FIXTURES INSTALLED PURSUANT TO SECTION 1023 OF THE TOWN OF PARADISE VALLEY ZONING ORDINANCE FOR NON-HILLSIDE PROPERTIES, SECTION 2208 OF THE TOWN OF PARADISE VALLEY ZONING ORDINANCE FOR HILLSIDE PROPERTIES, OR AS SPECIFIED IN THE SPECIAL USE PERMIT FOR SPECIAL USE PERMIT PROPERTIES.
- A DUST CONTROL PLAN AND PERMIT MEETING THE REQUIREMENTS OF RULE 310 OF THE MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS, AS AMENDED, IS REQUIRED.
- A SEPARATE RIGHT-OF-WAY PERMIT IS NECESSARY FOR ANY OFF-SITE CONSTRUCTION.
- AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- EAVE PROJECTIONS INTO REQUIRED SETBACKS ARE LIMITED TO A MAXIMUM OF 24" PURSUANT TO SECTION 1008 OF THE TOWN OF PARADISE VALLEY ZONING ORDINANCE.
- ALL STRUCTURES AND LANDSCAPING WITHIN THE SIGHT VISIBILITY TRIANGLE SHALL HAVE A 2 FOOT MAXIMUM HEIGHT.
- ALL NEW AND EXISTING ELECTRICAL SERVICE LINES SHALL BE BURIED PER THE TOWN OF PARADISE VALLEY REQUIREMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO ARRANGE FOR THE RELOCATION AND RELOCATION COSTS OF ALL UTILITIES, AND TO SUBMIT A UTILITY RELOCATION SCHEDULE PRIOR TO THE ISSUANCE OF AN ENGINEERING CONSTRUCTION PERMIT.
- EXISTING AND/OR NEW UTILITY CABINETS AND PEDESTALS SHALL BE LOCATED A MINIMUM OF 4' BEHIND ULTIMATE BACK OF CURB LOCATION.
- POOL, SPA, BARBECUE AND ANY PROPOSED STRUCTURES OVER 8' ABOVE GRADE REQUIRE SEPARATE PERMIT APPLICATIONS.
- POOLS SHALL BE CONSTRUCTED BY SEPARATE PERMIT AND SECURED FROM UNWANTED ACCESS PER TOWN CODE, ARTICLE 5-2.
- ALL FILL MATERIAL UNDER SLABS AND WALKS SHALL BE COMPACTED TO NOT LESS THAN 95%.
- SETBACK CERTIFICATION IS REQUIRED AND SHALL BE PROVIDED TO TOWN INSPECTOR PRIOR TO STEM WALL INSPECTION.
- FOR BUILDING PADS THAT HAVE 1' OR MORE OF FILL MATERIAL, SOILS COMPACTION TEST RESULTS ARE REQUIRED AND SHALL BE PROVIDED TO TOWN INSPECTOR PRIOR TO PRE-SLAB INSPECTION.
- FINISHED FLOOR ELEVATION CERTIFICATION IS REQUIRED AND SHALL BE PROVIDED TO TOWN INSPECTOR PRIOR TO FRAMING INSPECTION.
- MAIL BOXES SHALL COMPLY WITH THE TOWN OF PARADISE VALLEY STANDARDS FOR MAIL BOXES IN THE RIGHT-OF-WAY FOR HEIGHT, WIDTH AND BREAK AWAY FEATURES.
- ALL PATIOS, WALKS, AND DRIVES TO SLOPE AWAY FROM BUILDING AND GARAGES AT A MINIMUM SLOPE OF 1/4" PER FOOT UNLESS SPECIFIED OTHERWISE.
- TRENCH BEDDING AND SHADING SHALL BE FREE OF ROCKS AND DEBRIS.
- THE TOWN ONLY APPROVES THE SCOPE OF WORK AND NOT THE ENGINEERING DESIGN. ANY CONSTRUCTION QUANTITIES SHOWN ARE NOT VERIFIED BY THE TOWN.
- THE APPROVAL OF THE PLANS IS VALID FOR 180 DAYS. IF A PERMIT FOR CONSTRUCTION HAS NOT BEEN ISSUED WITHIN 180 DAYS, THE PERMIT MUST BE RENEWED.
- A TOWN INSPECTOR WILL INSPECT ALL WORK WITHIN THE TOWN'S RIGHTS-OF-WAY. NOTIFY TOWN INSPECTION SERVICES TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO STARTING CONSTRUCTION.
- WHENEVER EXCAVATION IS NECESSARY, CALL ARIZONA811 BY DIALING 811 OR 602-263-1100, TWO (2) WORKING DAYS BEFORE EXCAVATION BEGINS.
- EXCAVATIONS SHALL COMPLY WITH REQUIREMENTS OF OSHA EXCAVATION STANDARDS (29 CFR, PART 1926, SUBPART P). UNDER NO CIRCUMSTANCES WILL THE CONTRACTORS BE ALLOWED TO WORK IN A TRENCH LOCATED WITHIN THE TOWN'S RIGHT-OF-WAY WITHOUT PROPER SHORING OR EXCAVATION METHODS.
- PERMIT HOLDER SHALL POST A 6 SQUARE FOOT (2'X3') IDENTIFICATION SIGN, MADE OF DURABLE MATERIAL, IN THE FRONT YARD OF SUBJECT PROPERTY AND NOT IN THE TOWN'S RIGHT-OF-WAY. THE SIGN MAY NOT EXCEED A MAXIMUM OF 6 FEET IN HEIGHT FROM GRADE TO TOP OF THE SIGN. THE SIGN MUST INCLUDE THE PERMITTEE OR COMPANY NAME, PHONE NUMBER, TYPE OF WORK, ADDRESS OF PROJECT AND TOWN CONTACT NUMBER, 480-348-3556.
- WHEN DEEMED NECESSARY, A 6-FOOT HIGH CHAIN LINK FENCE MUST BE INSTALLED AROUND THE CONSTRUCTION AREA TO PREVENT ANY POTENTIAL SAFETY HAZARD FOR THE PUBLIC. THE FENCE SHALL BE SETBACK AT LEAST 10 FEET FROM ALL RIGHTS-OF-WAY AND HAVE A 50-FOOT STREET CORNER SITE TRIANGLE WHERE APPLICABLE.
- CLEAR ACCESS FOR NEIGHBORING PROPERTIES AND EMERGENCY VEHICLES MUST BE MAINTAINED AT ALL TIMES. CONSTRUCTION RELATED VEHICLES MUST BE LEGALLY PARKED ONLY ON ONE SIDE OF THE STREET OR JOB SITE PROPERTY.
- ALL CONSTRUCTION DEBRIS AND EQUIPMENT MUST BE CONTAINED ON SITE AT ALL TIMES. CONTRACTOR AND PROPERTY OWNER MUST MAINTAIN THE JOB SITE FREE OF LITTER AND UNSIGHTLY MATERIALS AT ALL TIMES. CONSTRUCTION MATERIALS ARE PROHIBITED IN THE TOWN'S RIGHT-OF-WAY.
- CONSTRUCTION ACTIVITIES ARE PERMITTED BETWEEN THE HOURS OF 7 AM AND 5 PM MONDAY THROUGH FRIDAY. CONSTRUCTION ACTIVITIES MAY START ONE (1) HOUR EARLIER DURING THE SUMMER (MAY 1ST THROUGH SEPTEMBER 30TH).
- THE USE AND OPERATION OF FUEL-FIRED GENERATORS IS PROHIBITED UNLESS DUE TO A HARDSHIP. TOWN APPROVAL SHALL BE REQUIRED.
- THE CONTRACTOR AND PROPERTY OWNER SHALL BE LIABLE FOR ANY DAMAGE DONE TO ANY PUBLIC PROPERTY AS A RESULT OF ANY CONSTRUCTION OR CONSTRUCTION RELATED ACTIVITIES. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL AFFECTED RIGHTS-OF-WAY ARE CLEANED AND/OR REPAIRED TO THEIR ORIGINAL CONDITION AND UNTIL ANY AND ALL DAMAGES TO AFFECTED PROPERTIES ARE RESTORED TO ORIGINAL CONDITION.
- A KEYSWITCH SHALL BE REQUIRED ON ALL NEW AND EXISTING ELECTRIC ENTRY GATES. THE KEYSWITCH SHALL BE INSTALLED IN A LOCATION THAT IS READILY VISIBLE AND ACCESSIBLE. KNOX BOX ORDER FORMS ARE AVAILABLE AT THE TOWN'S BUILDING SAFETY DEPARTMENT.
- PROPERTY OWNER, BUILDER, OR GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR CONTROLLING DUST FROM THE SITE AT ALL TIMES. ALL MEANS NECESSARY SHALL BE USED BY THE BUILDER OR GENERAL CONTRACTOR TO CONTROL THE EXISTENCE OF DUST CAUSED BY ANY EARTHWORK, SPRAY APPLICATION OF MATERIALS, OR OTHER DUST-CAUSING PRACTICES REQUIRED BY THE CONSTRUCTION PROCESS.
- APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE TOWN FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES.
- ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, CONCRETE CHANNELS OR OTHER MEASURES DESIGNED TO PROTECT PROPOSED AND EXISTING IMPROVEMENTS FROM RUNOFF OR DAMAGE FROM STORM WATER, MUST BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ANY IMPROVEMENTS.

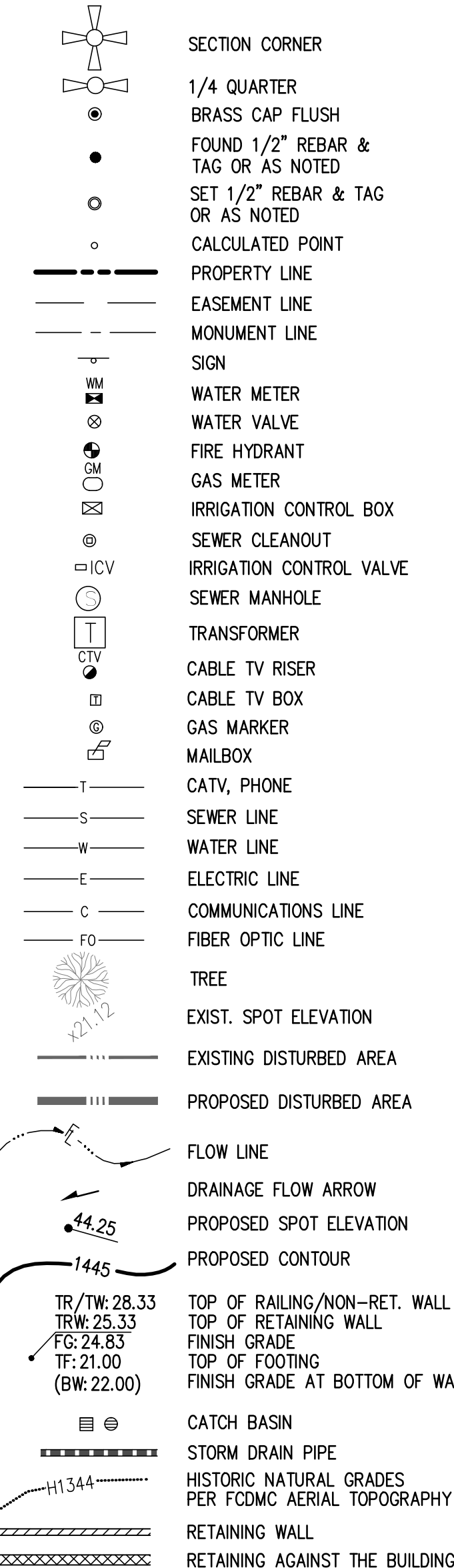
TOWN OF PARADISE VALLEY GENERAL HILLSIDE NOTES

- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL ALL HILLSIDE STIPULATIONS AND ALL TOWN CODE REQUIREMENTS ARE COMPLIED INCLUDING, BUT NOT LIMITED TO LANDSCAPING, GROUND RESTORATION, FIRE FLOW, FIRE SAFETY AND ALL ONSITE AND OFFSITE IMPROVEMENTS.
- ALL OUTDOOR LIGHTING SHALL BE IN CONFORMANCE WITH ARTICLE XXII OF THE TOWN ZONING ORDINANCE.
- ALL EXCESS FILL MATERIAL SHALL BE REMOVED FROM THE SITE WITH NO NEW SPILL SLOPES.
- THE USE OF HYDRAULIC RAM HAMMERS, OR OTHER HEAVY EQUIPMENT USED TO CUT THROUGH ROCK, INCLUDING MACHINERY WITH AUDIBLE BACK UP WARNING DEVICES SHALL BE LIMITED TO USE BETWEEN THE HOURS OF 7:00AM OR SUNRISE, WHICHEVER IS LATER, AND 6:00PM OR SUNSET, WHICHEVER IS EARLIER, MONDAY THROUGH FRIDAY, WITH LIMITED WORK ON SATURDAY AND NO WORK ON SUNDAY OR LEGAL HOLIDAYS. RAM HAMMERS AND OTHER HEAVY EQUIPMENT CANNOT BE USED ON SATURDAYS WITHOUT A WAIVER FROM THE TOWN MANAGER.
- CONSTRUCTION STAKING AND /OR FENCING SHALL BE PLACED AROUND THE CONSTRUCTION SITE SO AS TO PROTECT THE UNDISTURBED NATURAL AREA.
- ALL RETAINING WALLS SHALL NOT EXTEND MORE THAN 6 INCHES ABOVE THE MATERIAL THEY RETAIN (WITH EXCEPTION OF DRIVEWAY RETAINING WALLS IN ACCORDANCE WITH 2207.VI.6).

ENGINEERS NOTES

- MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
- ALL WORK REQUIRED TO COMPLETE THE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH THE M.A.G. STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL CITY OR TOWN UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- GRADING SHALL BE IN CONFORMANCE WITH 2012 IBC SEC. 1803 AND APPENDIX J.
- 5% MINIMUM SLOPE AWAY FROM BUILDING FOR A MINIMUM 10', U.N.O.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) SPECIFICATIONS AND STANDARD DETAILS.
- A DUST CONTROL PLAN MEETING THE REQUIREMENTS OF RULE 310 OF THE MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS, AS AMENDED, IS REQUIRED.
- A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.
- AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.
- ALL STRUCTURES AND LANDSCAPING WITHIN THE SIGHT VISIBILITY TRIANGLE SHALL HAVE A 2 FOOT MAXIMUM HEIGHT.
- ALL PATIOS, WALKS, AND DRIVES TO SLOPE AWAY FROM BUILDING AND GARAGES AT A MINIMUM SLOPE OF 1/4" PER FOOT UNLESS SPECIFIED OTHERWISE. ALL LAWN AREAS ADJOINING WALKS OR SLABS WILL BE GRADED TO 2" BELOW THE TOP OF SLAB. TYPICAL FINISHED GRADE AROUND PERIMETER OF BUILDING IS MINUS 6" BELOW FINISHED FLOOR UNLESS SPECIFIED OTHERWISE.
- ALL MATERIAL TO BE UNDER SLABS AND WALKS SHALL BE COMPACTED TO NOT LESS THAN 95% PER ASTM D698.
- THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERROR AND OMISSION. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING, AND SAFETY CONCERNS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION, UNLESS SPECIFICALLY ADDRESSED OTHERWISE IN THIS PLAN OR ELSEWHERE.
- A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48 HOURS IN ADVANCE FOR BLUE STAKE (1-800-STAKE-IT) PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
- ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT, FILL AND BACKFILL SHALL COMPLY WITH THE COMMANDMENTS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS.
- THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINTS OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.
- CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOUT WITH ARCHITECTURE'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT.
- COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
- CONTRACTOR IS RESPONSIBLE FOR PROJECT AND SITE CONDITIONS, AND TO WORK WITH WEATHER CONDITIONS AS THE PROJECT SITE MAY BE LOCATED IN A FLOOD PRONE AREA AND SUBJECT TO FLOODING AND ITS HAZARDS.
- THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS-SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER, OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS-SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY CROSSINGS AT CULVERT CROSSINGS BEFORE STARTING WORK ON CULVERT. COORDINATE WITH OWNER REPRESENTATIVE. VERIFY UTILITY LINES AND/OR CONDUITS ARE IN PLACE BEFORE STARTING CULVERT WORK.
- ALL ON-SITE UTILITIES PER OTHERS.
- THIS PROJECT REQUIRES A REGULAR ONGOING MAINTENANCE PROGRAM FOR THE DESIGNED DRAINAGE SYSTEM(S) TO PRESERVE THE DESIGN INTEGRITY AND THE ABILITY TO PERFORM ITS OPERATIONAL INTENT. FAILURE TO PROVIDE MAINTENANCE WILL JEOPARDIZE THE DRAINAGE SYSTEM(S) PERFORMANCE AND MAY LEAD TO IT'S INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- IF A DISCREPANCY IS FOUND BETWEEN ENGINEER'S PLAN OR SURVEYOR'S STAKING AND THE ARCHITECTURAL PLAN, ENGINEER SHALL BE NOTIFIED IMMEDIATELY. FAILURE TO NOTIFY ENGINEER SHALL NEGATE ENGINEER'S LIABILITY.
- ALL DISTURBED AREAS ARE TO BE ROPED AND ROPING MUST MATCH PLAN.
- VEGETATION OUTSIDE OF CONSTRUCTION AREA TO REMAIN.
- AREAS OUTSIDE THE WALL AND CUT AND FILL SLOPES SHALL BE REVEGETATED WITH SIMILAR PLANT TYPES AND DENSITIES FOUND ON THE SITE. REVEGETATION SHALL BE COMPLETED PRIOR TO OCCUPANCY AND THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- MECHANICAL EQUIPMENT SHALL BE SCREENED TO A MINIMUM OF ONE FOOT ABOVE TOP OF EQUIPMENT.
- ANY FUTURE IMPROVEMENTS SHOWN HEREON SHALL REQUIRE A SEPARATE PERMIT.
- ANY POINTS OF DRAINAGE CONCENTRATION SHOULD BE PROTECTED AGAINST EROSION WITH NATIVE STONE.
- THIS PLAN IS DESIGNED TO SHOW SITE GRADING AND DRAINAGE. CONTRACTOR SHALL USE THE ARCHITECTURAL SITE PLAN TO DETERMINE FINAL HOUSE, WALL, STEP, ETC., LOCATIONS AND ELEVATIONS.
- ALL DRAINAGE FACILITIES TO BE MAINTAINED BY HOMEOWNER.
- SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR SITE AND RETAINING WALLS LAYOUT, DIMENSIONS, AND DETAILS. TOP OF FOOTING ELEVATIONS SHOWN IN PLAN ARE APPROXIMATE ONLY. ACTUAL TOP OF FOOTINGS TO BE DETERMINED AT TIME OF CONSTRUCTION AND TO BE A MINIMUM OF SIX INCHES BELOW EXISTING NATURAL GRADE OR FINISHED GRADE WHICHEVER IS LOWER (TYPICAL).
- REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUT, DIMENSIONS AND ELEVATIONS.
- REFER TO STRUCTURAL DRAWINGS, DETAILS AND CALCULATIONS FOR ALL PROPOSED RETAINING WALLS.
- FOR CHANGE IN ELEVATION THAT ARE GREATER THAN 30", PROVIDE 36" HIGH GUARDRAILS FOR TOTAL OF 42" FALL PROTECTION BARRIER U.N.O.
- CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURE - 5% MIN SLOPE FOR FIRST 10 FEET, U.N.O.
- ALL WATER AND SEWER LINES AND CONNECTIONS MUST BE INSTALLED PER IPC 2012, MAG AND TOWN OF PARADISE VALLEY SUPPLEMENT TO MAG.
- WATERPROOF ALL EXTERIOR WALLS 18" ABOVE FINISH GRADE-(BITUTHENE® 3000 HC MEMBRANE W/ GRACE PROTECTION 03 OR APPROVED EQUAL).
- ALL PIPES AND FITTINGS SHALL BE INSTALLED PER MANUFACTURE'S SPECIFICATIONS AND DETAILS.
- ABANDONMENT OF EXISTING AND INSTALLATION OF NEW SEPTIC SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT RULES AND STANDARDS, AND WILL REQUIRE SEPARATE PERMIT.
- COORDINATE RIPRAP COLOR WITH LANDSCAPE PLANS AND DETAILS.
- VERIFY AND COORDINATE WITH LANDSCAPE PLANS FINAL LOCATION AND GRATE TYPE OF SPECIFIED AREA DRAINS AND TRENCH DRAINS.
- VERIFY AND COORDINATE WITH ARCHITECTURAL AND LANDSCAPE PLANS LOCATION AND HEIGHT OF ALL SITE WALLS.
- DISTURBED AREA: TOTAL ACRES = 0.5 ACRES < 1 ACRE; NPDES PERMIT IS NOT REQUIRED.
- REFER TO ARCHITECTURAL PLANS AND DETAILS FOR DEMOLITION AND REMOVAL OF ANY EXISTING BUILDING STRUCTURES, SITE WALLS, POOL AND PAVEMENT ETC.
- REFER TO GEOTECHNICAL REPORT FOR SPECIFIC RECOMMENDATIONS AND MAXIMUM ALLOWED FILL AND CUT SLOPES.

LEGEND



ABBREVIATIONS

- BC BACK OF CURB
- BSL BUILDING SETBACK LINE
- BW BOTTOM OF WALL
- C11 CURVE LABEL
- C CONCRETE, CALCULATED
- CL CENTERLINE
- TPV TOWN OF PARADISE VALLEY
- DE DRAINAGE EASEMENT
- ESMT EASEMENT
- EX EXISTING
- EQ EXISTING GRADE
- FG FINISH GRADE
- FFE FINISH FLOOR ELEVATION
- FL FLOW LINE
- FND FOUND
- G GUTTER, GAS
- INV INVERT
- L11 LINE LABEL
- MAG MARICOPA ASSOCIATION OF GOVERNMENTS
- (M) MEASURED
- MCR MARICOPA COUNTY RECORDER
- P PAVEMENT
- PUE PUBLIC UTILITY EASEMENT
- (R) RECORDED
- R RADIIUS
- R/W RIGHT OF WAY
- T TANGENT, TELEPHONE
- W WEST, WATERLINE
- TP TOP OF PARAPET
- TC TOP OF CURB
- TG TOP OF GRATE
- TF TOP OF FOOTING
- TR TOP OF RAILING
- TW TOP OF RETAINING WALL
- TW TOP OF WALL
- WM WATER METER

DISTURBED AREA CALCULATIONS

AREA OF LOT:	44,542 S.F. (1.0225 AC.)
TOTAL FLOOR AREA:	6,267 S.F.
FLOOR AREA RATIO:	14.07% < 25%
(TOTAL FLOOR AREA/AREA OF LOT)	
BUILDING PAD SLOPE:	12.5%
VERTICAL:	17 FT
HORIZONTAL:	136 FT
ALLOWABLE NET DISTURBED AREA:	20,213 S.F. (45.38%)
EXISTING GROSS DISTURBED AREA:	18,846 S.F.
LESS EXISTING BUILDING FOOTPRINT:	3,668 S.F.
EXISTING NET DISTURBED AREA:	15,178 S.F. (34.1%)

PROPOSED GROSS DISTURBED AREA:	19,381 S.F.
LESS TEMPORARY AREAS OF DISTURBANCE TO BE RESTORED AND REVEGETATED:	0 S.F.
LESS 25% CREDIT FOR NEW PAVERS RESURFACED D/W OVER 6" AND UNDER 18" OF NATURAL GRADE:	3,316 S.F.*0.25=829 S.F.
LESS BUILDING FOOTPRINT AREA:	4,694 S.F.
PROPOSED NET DISTURBED AREA:	13,858 S.F. < 20,213 S.F.
ALLOWED SLOPES STEEPER THAN NATURAL GRADE (5% MAX.):	2,227 S.F. (5%)
PROPOSED SLOPES STEEPER THAN NATURAL GRADE (AREA):	2,092 S.F. (4.7%)
EARTHWORK BASED ON HISTORIC VACANT SITE CONDITION:	
VOLUME OF CUT:	3,369 C.Y.
VOLUME OF FILL:	8 C.Y.
TOTAL CUT/FILL:	3,377 C.Y.
GRADING PERMIT FEE:	\$3,255.15
HILLSIDE ASSURANCE @ 35 TIMES GRADING PERMIT FEE:	\$113,930.25
ALL QUANTITIES LISTED ON THESE PLANS ARE ESTIMATES ONLY. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE QUANTITIES AND BASE THEIR BIDS ON THEIR ESTIMATES.	

EARTHWORK QUANTITIES (CURRENT CONDITION)

CUT: 331 C.Y.
FILL: 108 C.Y.
NET CUT: 223 C.Y.

ALL QUANTITIES LISTED ON THESE PLANS ARE ESTIMATES ONLY. NO SHRINK OR SWELL IS ASSUMED. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE QUANTITIES AND BASE THEIR BIDS ON THEIR ESTIMATES.

UTILITIES NOTES

HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE ONLY AND WILL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION WORK. CALL BLUE STAKE @ (602) 263-1100.

FIRE SPRINKLER SYSTEM

FIRE SPRINKLER SYSTEM TO BE INSTALLED PER THE REQUIREMENTS OF THE TOWN OF PARADISE VALLEY AND IN ACCORDANCE WITH I.B.C. SECT. 904.2.2 AMD. AND I.F.C. SECT. 1003.2.1 AMD.

FLOOD INSURANCE RATE MAP (FIRM) DATA

COMMUNITY #	PANEL #	SUFFIX	BASED FLOOD ELEVATION
040049	1765 OF 4425	L	N/A
MAP #	PANEL DATE	ZONE	
04013C	10/16/2013	x*	

*AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN;

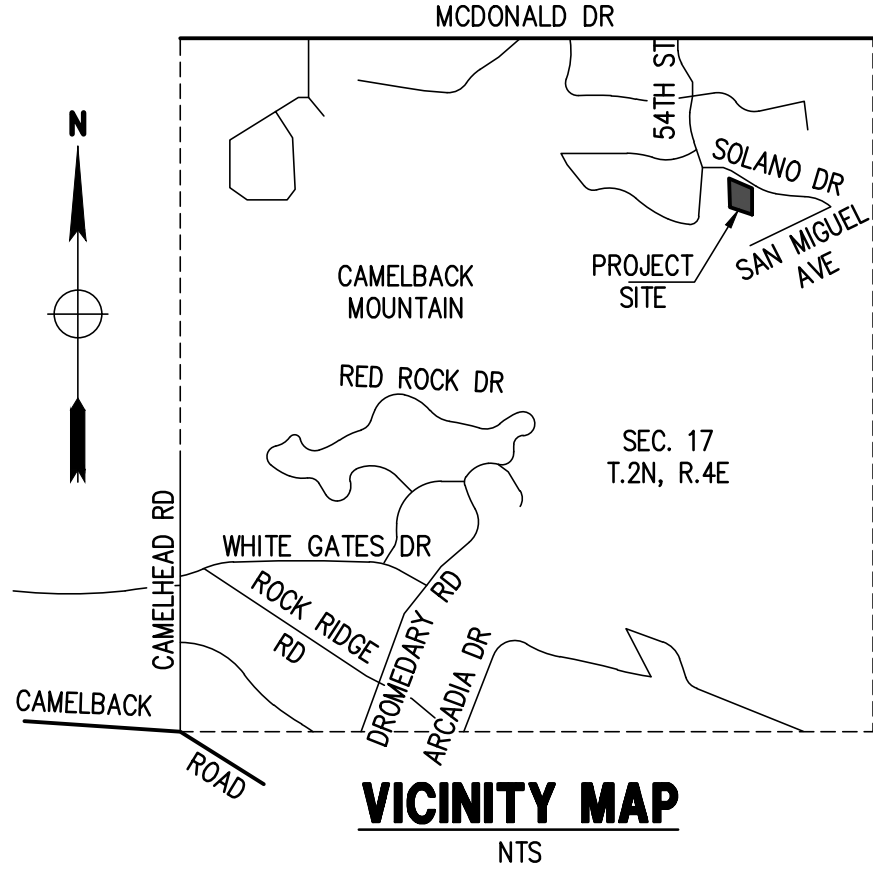
ON-SITE RETENTION FOR THE PRE VS. POST DEVELOPMENT RUNOFF FROM 100-YEAR, 2-HOUR STORM EVENT					
V=Dxax(Cpost-Cpre)/12=(0.95-0.80) D=RAINFALL DEPTH=2.82" A=TRIBUTARY AREA, SF Cw=WEIGHTED RUNOFF COEFFICIENT					
DRAINAGE AREA	AREA	RUNOFF COEFFICIENT	VOLUME REQUIRED	RETENTION TYPE	VOLUME PROVIDED
	S.F.	Cw	C.F.		C.F.
A	5,206 *	0.15	184	28' LONG (36" DIA) UNDERGROUND STORM WATER STORAGE	163
B	3,560 *	0.15	125	18' LONG (36" DIA) UNDERGROUND STORM WATER STORAGE	127
TOTAL			309		290

*HARDSCAPE AND ROOF ONLY

HISTORIC EARTHWORK QUANTITIES

CUT: 3975 C.Y.
FILL: 9 C.Y.
NET CUT: 3966 C.Y.

ALL QUANTITIES LISTED ON THESE PLANS ARE ESTIMATES ONLY. NO SHRINK OR SWELL IS ASSUMED. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE QUANTITIES AND BASE THEIR BIDS ON THEIR ESTIMATES.



OWNER

TONN INVESTMENTS, L.L.C.
4350 E. CAMELBACK RD.
PHOENIX, AZ. 85018
P: 602-684-1000
CONTACT: SCOTT TONN
EMAIL: STONN@TONNINV.COM

SITE DATA

APN: 172-47-063
ADDRESS: 5429 E SOLANO DRIVE
PARADISE VALLEY, AZ 85253
ZONING: R-43 (HILLSIDE)
LOT AREA: 44,542 S.F. (1.0225 AC.)

ARCHITECT

A-I-R, INC.
7610 E MCDONALD DR., SUITE K,
SCOTTSDALE, AZ 85250
P: 480 329 1888

LAND SURVEYOR

SITE CONSULTANTS, INC.
113 S ROCKFORD DR
TEMPE, AZ 85281
P: 480 894 2820

SHEET INDEX

SHEET C-1 - COVER SHEET
SHEET C-2 - OVERALL SITE TOPOGRAPHY
HISTORIC CONTOURS
DISTURBANCE CALCULATIONS
DETAILS
SHEET C-3 - GRADING & DRAINAGE PLAN

UTILITIES

WATER: EPCOR WATER
SANITARY SEWER: SEPTIC
ELECTRIC: ARIZONA PUBLIC SERVICE
TELEPHONE: CENTURY LINK, COX COMMUNICATIONS
NATURAL GAS: SOUTHWEST GAS
CABLE TV: CENTURY LINK, COX COMMUNICATIONS

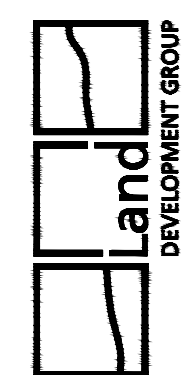
APPROVAL

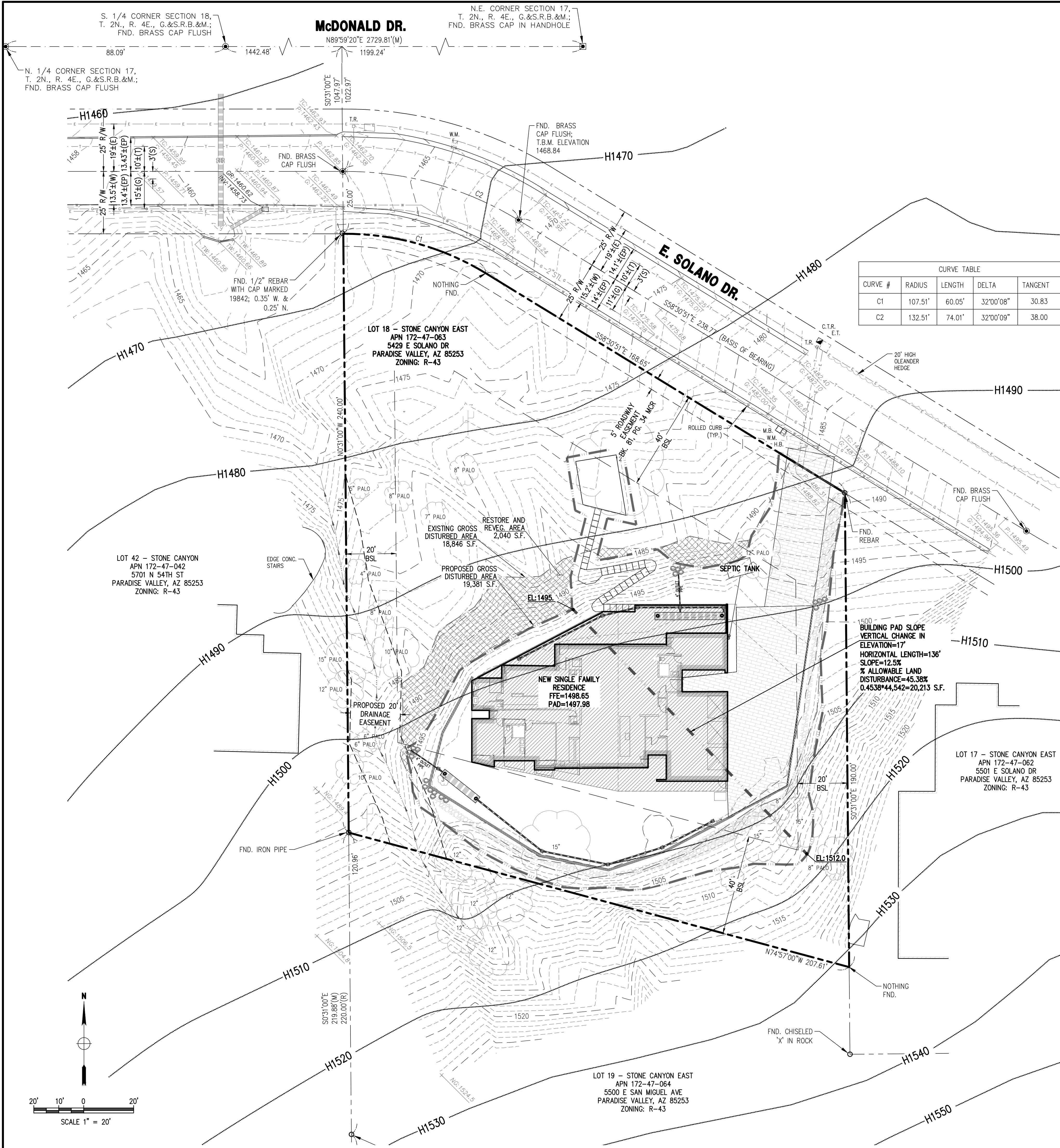
TOWN ENGINEER
TOWN OF PARADISE VALLEY
DATE

PRELIMINARY
GRADING & DRAINAGE PLAN
COVER SHEET

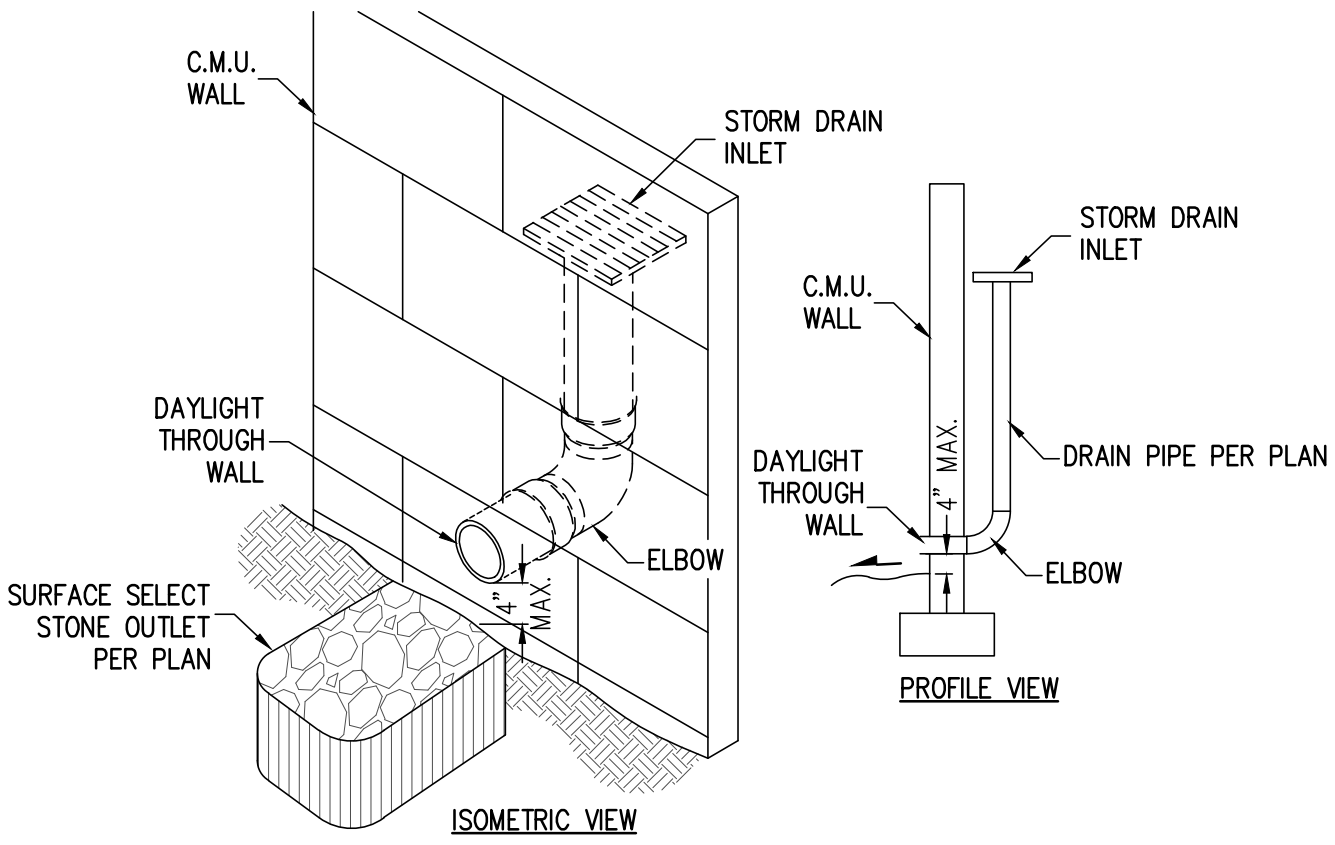
TONN RESIDENCE
5429 E SOLANO DR.,
PARADISE VALLEY, AZ 85253

P. 602 889 1984 | F. 602 445 9492
8808 N CENTRAL AVE., SUITE 288
PHOENIX, AZ 85020
phoenix@ding.com

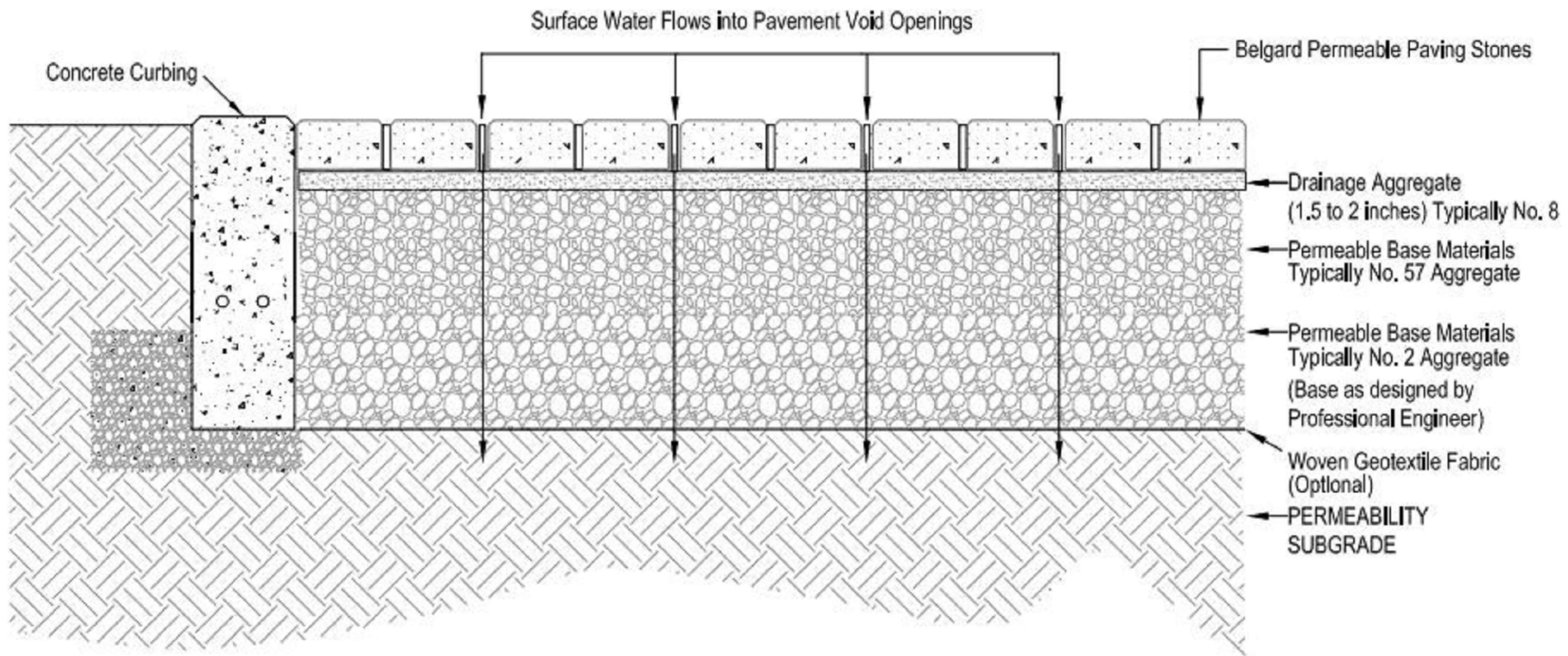




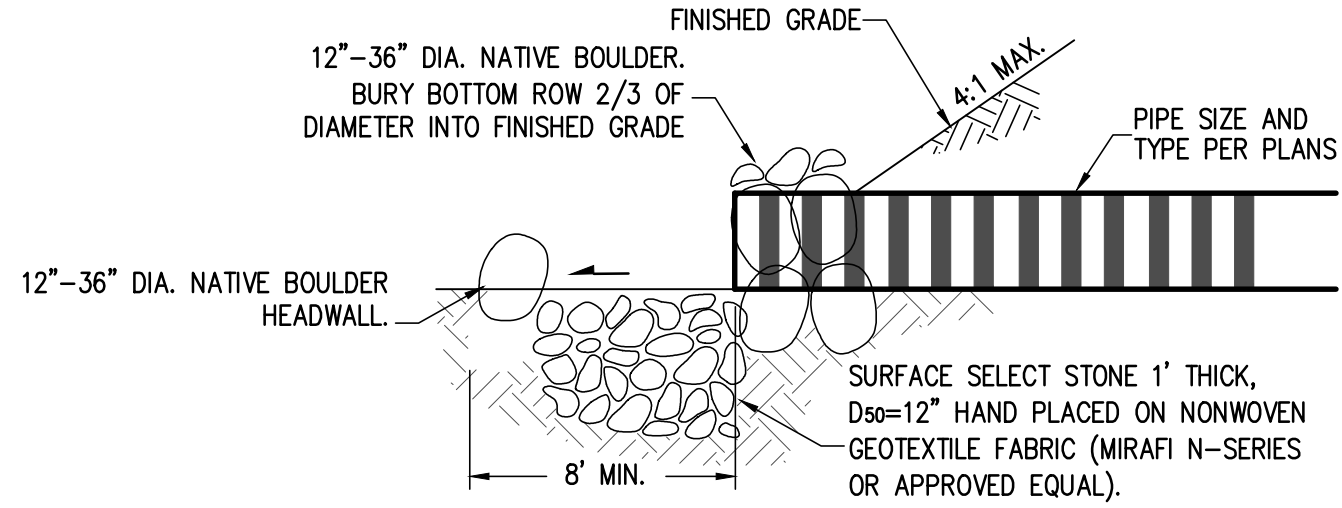
CURVE TABLE				
CURVE #	RADIUS	LENGTH	DELTA	TANGENT
C1	107.51'	60.05'	32°00'08"	30.83
C2	132.51'	74.01'	32°00'09"	38.00



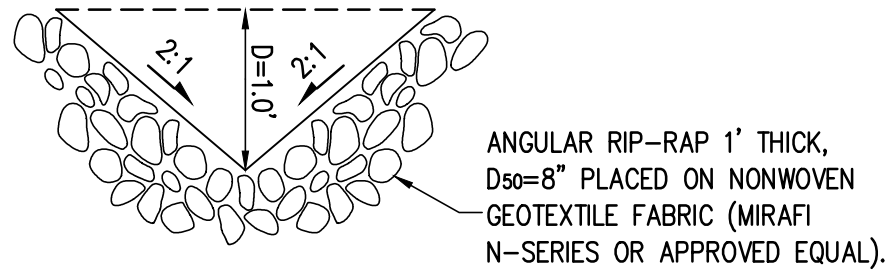
STORM DRAIN OUTLET AT WALL DETAIL
N.T.S.



PERMEABLE DRIVEWAY PAVERS DETAIL
N.T.S.



PIPE OUTLET DETAIL
N.T.S.



DRAINAGE SWALE DETAIL
N.T.S.

PERCENT PASSING	SIZE	D50 CLASS, INCHES
100 TO 90	1.5 D50	4 6 8 12
85 TO 70	1.5 D50	6 8 12 18
50 TO 30	1.0 D50	4 6 8 12
15 TO 5	0.67 D50	3 4 5 8
5 TO 0	0.50 D50	2 3 4 6

RIP-RAP GRADATION TABLE
N.T.S.

DATE: 07/26/18
JOB: 151217
DESIGNED BY: NP
DRAWN BY: CM
CHECKED BY: JJ
PLOT DATE: 07/26/18

DATE: 07/26/18
JOB: 151217
DESIGNED BY: NP
DRAWN BY: CM
CHECKED BY: JJ
PLOT DATE: 07/26/18

DATE: 07/26/18
JOB: 151217
DESIGNED BY: NP
DRAWN BY: CM
CHECKED BY: JJ
PLOT DATE: 07/26/18

PRELIMINARY
OVERALL SITE TOPOGRAPHY
HISTORIC CONTOURS
DISTURBANCE CALCULATIONS
DETAILS

TONN RESIDENCE
5429 E SOLANO DR.,
PARADISE VALLEY, AZ 85253

P 602 889 1984 | F 602 445 9482
8808 N CENTRAL AVE., SUITE 288
PHOENIX, AZ 85020
phoenix@ding.com

ARIZONA
LAND
DEVELOPMENT GROUP

ARIZONA
LAND
DEVELOPMENT GROUP

ARIZONA
LAND
DEVELOPMENT GROUP

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

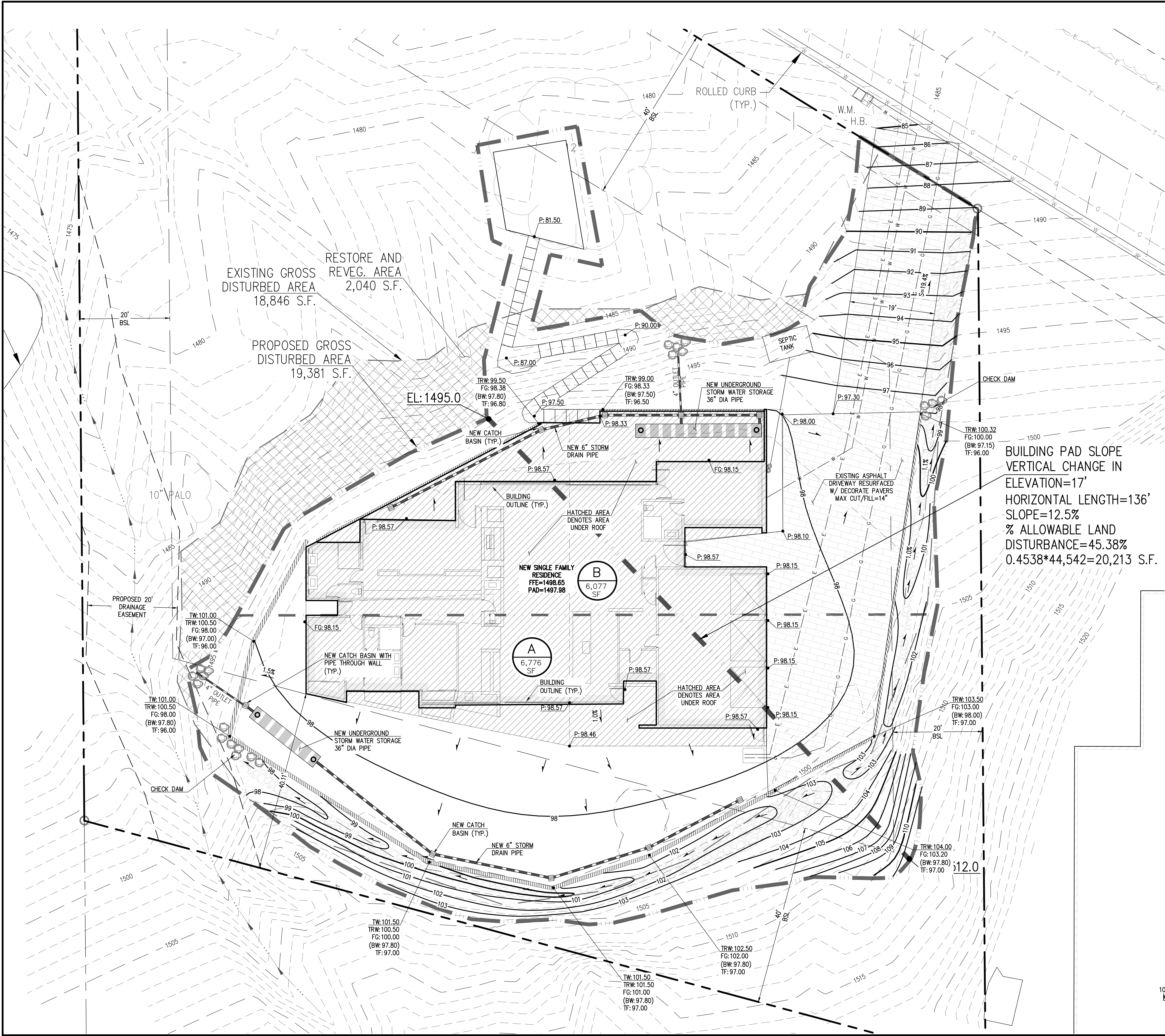
ARIZONA
811

Call 811 or click Arizona811.com

PRELIMINARY
NOT FOR CONSTRUCTION

C-2

2 OF 3



DISTURBED AREA CALCULATIONS

AREA OF LOT:	44,542 S.F. (1.0225 AC.)
TOTAL FLOOR AREA:	6,267 S.F.
FLOOR AREA RATIO:	14.07% < 25%
(TOTAL FLOOR AREA/AREA OF LOT)	
BUILDING PAD SLOPE:	12.5%
VERTICAL:	17 FT
HORIZONTAL:	136 FT
ALLOWABLE NET DISTURBED AREA:	20,213 S.F. (45.38%)
EXISTING GROSS DISTURBED AREA:	18,846 S.F.
LESS EXISTING BUILDING FOOTPRINT:	3,668 S.F.
EXISTING NET DISTURBED AREA:	15,178 S.F. (34.1%)

PROPOSED GROSS DISTURBED AREA: 19,381 S.F.
LESS TEMPORARY AREAS OF DISTURBANCE
TO BE RESTORED AND REVEGETATED: 0 S.F.

LESS 25% CREDIT FOR NEW PAVERS RESURFACED D/W OVER 6" AND
UNDER 18" OF NATURAL GRADE: 3,316 S.F.*0.25=829 S.F.
LESS BUILDING FOOTPRINT AREA: 4,694 S.F.

PROPOSED NET DISTURBED AREA: 13,858 S.F. < 20,213 S.F.

ALLOWED SLOPES STEEPER
THAN NATURAL GRADE (5% MAX.): 2,227 S.F. (5%)

PROPOSED SLOPES STEEPER
THAN NATURAL GRADE (AREA): 2,092 S.F. (4.7%)

EARTHWORK BASED ON HISTORIC VACANT SITE CONDITION:

VOLUME OF CUT:	3,369 C.Y.
VOLUME OF FILL:	8 C.Y.
TOTAL CUT&FILL:	3,377 C.Y.

GRADING PERMIT FEE: \$3,255.15

HILLSIDE ASSURANCE @ 35 TIMES GRADING PERMIT FEE: \$113,930.25

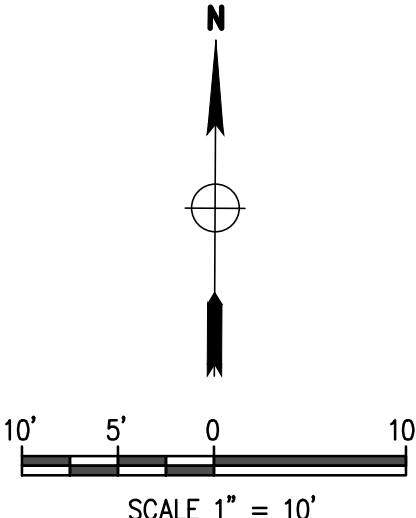
ALL QUANTITIES LISTED ON THESE PLANS ARE ESTIMATES ONLY.

THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE
QUANTITIES AND BASE THEIR BIDS ON THEIR ESTIMATES.

BUILDING PAD SLOPE
VERTICAL CHANGE IN
ELEVATION=17'
HORIZONTAL LENGTH=136'
SLOPE=12.5%
% ALLOWABLE LAND
DISTURBANCE=45.38%
0.4538*44,542=20,213 S.F.

ELEVATION NOTE

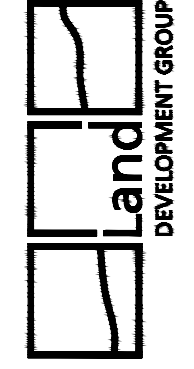
ADD 1400' TO ALL PROPOSED GRADING ELEVATIONS TO
ACHIEVE FULL TOPO DATUM.



**PRELIMINARY
GRADING & DRAINAGE PLAN
IMPROVEMENT PLAN**

**TOWN RESIDENCE
5429 E SOLANO DR.,
PARADISE VALLEY, AZ 85253**

P. 602.889.1984 | F. 602.445.9482
8808 N CENTRAL AVE., SUITE 288
PHOENIX, AZ 85020
phoenix@dgng.com



C-3
3 OF 3

REVISIONS:	DATE:	SCALE: 1"=10'	DATE: 07/26/18
		DESIGNED BY: NP	JOB: 151217
		DRAWN BY: CM	VERSION: 2.1
		CHECKED BY: JJ	PLOT DATE: 07/26/18

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH SHALL REMAIN THE PROPERTY OF LAND DEVELOPMENT GROUP, LLC. UNAUTHORIZED USE, REUSE, REPRODUCTION, OR PUBLICATION OF ANY PORTION OF THIS DRAWING SHALL BE PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES.