HILGARTWILSON STANDARD ENGINEERING NOTES

- THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE PRESENTED TO THE ENGINEER. ANYONE WHO TAKES IT UPON THEMSELVES THE INTERPRETATION OF THE DRAWINGS OR MAKES REVISIONS TO THE SAME WITHOUT CONFERRING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THEREOF.
- THE ESTIMATED QUANTITIES SHOWN ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETENESS AND ACCURACY OF A DETAILED ESTIMATE BASED ON THESE PLANS, CURRENT CODES, AND SITE
- ALL EARTHWORK CONSTRUCTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAILS AND/OR SPECIFICATIONS INCLUDING ANY SUPPLEMENTS THERETO, AND ALL ADDENDA. THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATION OF THE SOIL INVESTIGATION REPORT AND LETTER, AS PREPARED BY ______, PHONE
- NO. (____, DATED _____, PROJECT NO. _____, DATED ______ PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OR DEFICIENCY IN QUANTITIES. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR 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.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC. THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE SURVEYOR REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE SURVEYOR 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 SURVEYOR, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, ANY REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OF IMPROPER CONSTRUCTION WORK SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR. THE SURVEYOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK UPON NOTIFICATION BY THE CLIENT OR HIS
- REPRESENTATIVE THAT THE WORK IS COMPLETE AND READY FOR AS-BUILT SURVEY. FOR PIPE WORK, THE CONTRACTOR IS RESPONSIBLE FOR LEAVING TRENCHES OPEN SO THAT AS-BUILTS CAN BE PERFORMED TO COMPLY WITH THE AGENCY'S REQUIREMENTS. (IF THE TRENCHES ARE BACKFILLED AND OBSCURED TO THE POINT THAT AS-BUILT MEASUREMENTS CANNO BE PERFORMED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POTHOLE UTILITY TRENCHES AS NECESSARY TO
- 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, CONDITIONS, OR PAVEMENT CROSS-SLOPES DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT BEING 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.
- 10. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED ACCORDING TO INFORMATION PROVIDED BY THE AGENCY OPERATING EACH UTILITY. LOCATIONS SHOWN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN LIKE KIND.
- 11. PRIOR TO CONSTRUCTION, THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE ANY ALTERATION, OR VARIANCE FROM THESE PLANS. ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND
- 12. ANY INSPECTION BY THE CITY, COUNTY, ENGINEER, OR OTHER JURISDICTIONAL AGENCY, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH APPLICABLE CODES AND AGENCY REQUIREMENTS.
- 13. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL STORM DRAIN PIPES, STORM WATER RETENTION PIPES AND DRAINAGE FACILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION. THE DEPTH OF COVER ON THE STORM DRAIN PIPE IS DESIGNED FOR FINAL GRADE. THEREFORE, EXTRA CARE SUCH AS BERMING OVER PIPES, FLAGGING OR SIGNAGE SHOULD BE USED DURING CONSTRUCTION TO MAINTAIN COVER OR PROTECT THE PIPES.
- 14. 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
- 15. IF PAD CERTIFICATIONS ARE PERFORMED, IT IS UNDERSTOOD THAT THE CERTIFICATION PROVIDES ONLY A REPRESENTATIVE ELEVATION OF THE AVERAGE GRADE OF EACH LOT, BUILDINGS OR UNIT PAD, AND SHALL NOT BE CONSTRUED TO INCLUDE YARD AND STREET SUB-GRADE CERTIFICATION OR CERTIFICATION THAT THE ENTIRE PAD IS LEVEL, THAT IT WAS CONSTRUCTED IN THE DESIGNED LOCATION OR WAS GRADED TO THE CROSS-SECTION SET FORTH ON THE PLANS OR AS DESIGNATED IN THE SOILS REPORT.
- 16. FINISH GRADES SHOWN ON THESE PLANS ARE THE FINAL FINISH GRADES. CONTRACTOR IS RESPONSIBLE FOR OVER-EXCAVATING LANDSCAPE AREAS TO ALLOW FOR PLANTING AND UTILITY TRENCHING SPOILS AND FOR THE FINAL LANDSCAPE TREATMENT (DECOMPOSED GRANITE, LAWN, ETC.).
- 17. UNDERGROUND UTILITIES SHALL BE MARKED IN ACCORDANCE WITH SECTION 40-360 OF THE ARIZONA REVISED STATUTES AND LOCAL MUNICIPALITY REQUIREMENTS.
- 18. SEWER SERVICES SHALL BE INSTALLED TO 5 FEET OF COVER AT 2 FEET BEHIND THE PUE, WHERE POSSIBLE.

I ECENID

<u>LEGEND</u>			
	PROPERTY LINE	TC=	TOP OF CURB
	CENTER LINE	C=	CONCRETE
~	EASEMENT LINE OUTFALL ARROW	P=	PAVEMENT
	PROPOSED PAVEMENT GRADE BREAK	G=	GUTTER
DW	PROPOSED DRYWELL	GR=	GRATE
		RIM=	RIM
	PROPOSED LOOSE RIP-RAP	FF=	FINISHED FLOOR
	PROPOSED STORM DRAIN PIPE	HW	HIGH WATER ELEVATION
	CATCH BASIN	вот	ВОТТОМ
 75	PROPOSED CONTOUR	Vp	VOLUME PROVIDED
— – 75 — —	EMOTING CONTROL	PUE	PUBLIC UTILITY EASEMENT
W	EX. WATERLINE	CL	CENTER LINE
S	EX. SEWERLINE EX. GASLINE	PL	PROPERTY LINE
E	EX. ELECTRIC LINE	ROW	RIGHT OF WAY
Ē	ELECTRIC MANHOLE	DW	DOMESTIC WATER
VAULT E	ELECTRIC VAULT	FL	FIRE LINE
PB E	ELECTRIC PULL BOX	SD	STORM DRAIN
←	LIGHT POLE W/ARM	DIP	DUCTILE IRON PIPE
卒	LIGHT POLE	ACP	ASBESTOS CLAY PIPE
	SIGN	VCP	VITRIFIED CLAY PIPE
PB	TELEPHONE PULL BOX		
FO	FIBER OPTIC PULL BOX		
VAULT FO	FIBER OPTIC VAULT		
<u> </u>	CABLE TV PULL BOX		
S. S	STORM DRAIN MANHOLE		
	IRRIGATION CONTROL VALVE WATER VALVE		
⊗	WATER STUB OUT		
<u>©</u>	SANITARY SEWER MANHOLE		
	PALO VERDE TREE		
	TREE (UNKNOWN TYPE)		

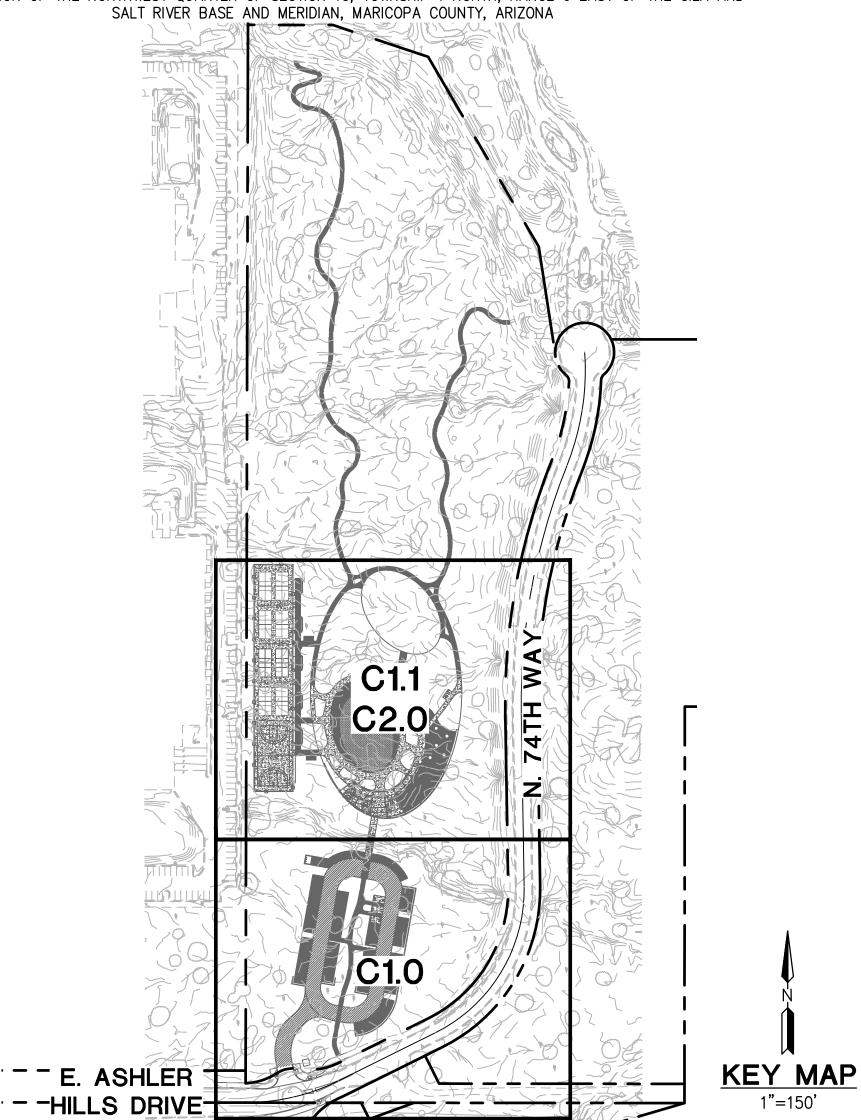
PRELIMINARY IMPROVEMENT PLANS

ASHLER HILLS

ADDRESS

SCOTTSDALE, ARIZONA

OF A PORTION OF THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 1 NORTH, RANGE 6 EAST OF THE GILA AND



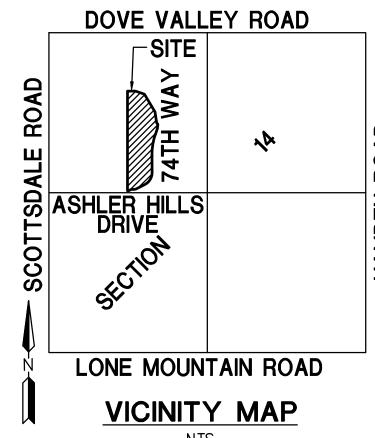
SHEET INDEX

SHEET SHEET TITLE

CO.O PRELIMINARY IMPROVEMENT PLANS CROSS-SECTIONS

C1.0 PRELIMINARY GRADING & DRAINAGE PLAN C1.1 PRELIMINARY GRADING & DRAINAGE PLAN

C1.2 STORM DRAIN PROFILES C2.0 PRELIMINARY WATER & SEWER PLAN



BASIS OF BEARING

THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 14. SAID LINE BEARS SOUTH 00 DEGREES 07 MINUTES 47 SECONDS WEST.

BENCHMARK

FOUND 2 1/2" GLO BRASS CAP IN HANDHOLE AT THE INTERSECTION OF N. SCOTTSDALE ROAD AND ASHLER HILLS DRIVE. MCDOT UNIQUE POINT ID 11168.

ELEVATION = 2235.15 NAVD'88

SITE DATA

EXISTING ZONING = R-5(CITY OF SCOTTSDALE)

 $AREA = 653,225 \pm SQFT$, OR

14.996± ACRES

FLOOD PLAIN DESIGNATION ACCORDING TO FEMA FLOOD INSURANCE RATE MAP, MAP NUMBER 04013C0895L DATED OCTOBER 16, 2013, THE SUBJECT PROPERTY IS LOCATED IN ZONE X (SHADED). ZONE X (SHADED) IS DEFINED AS "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD."

NTS

DEVELOPER

CITY OF SCOTTSDALE 7447 E. INDIAN SCHOOL RD., STE 100 SCOTTSDALE, ARIZONA 85251 CONTACT: PHONE: (480) 312-4327

CIVIL ENGINEER

EMAIL:

HILGARTWILSON 2141 E. HIGHLAND AVE. SUITE 250 PHOENIX, ARIZONA 85016 CONTACT: CASEY WHITEMAN PHONE: (602) 490-0535 FAX: (602) 368-2436 EMAIL: CWHITEMAN@HILGARTWILSON.COM

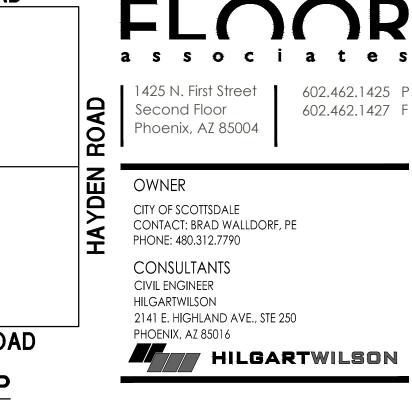
ARCHITECT

HILGARTWILSON

FLOOR & ASSOCIATES 1425 N. 1ST ST., STE 200 PHOENIX, ARIZONA 85004-1632 CONTACT: CHRIS BROWN PHONE: (602) 445-7136 EMAIL: CHRIS@FLOORASSOCIATES.COM

LEGAL DESCRIPTION

SEVANO VILLAGE, PARCEL 2, ACCORDING TO MAP OF DEDICATION SEVANO VILLAGE, RECORDED IN BOOK 610 OF MAPS, PAGE 31, RECORDS OF MARICOPA COUNTY, ARIZONA.



CERTIFICATION

CASEY R.

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RETENTION CALCULATIONS TABLE

2299 Ashler Hills

May, 2022 100-YEAR, 2-HOUR CALCULATIONS

Prepared By:

Retention Volume Required (100-Year, 2-Hour) = C * (P/12) * A

- Precipitation depth associated with the 100-year, 2-hour storm event

Plan-view area of an individual drainage area

Weighted average runoff coefficient

Drainage Area	Retention Basin ID	Area	Weighted Runoff Coefficient (100-YR)	Runoff Volume Required for 100-Year, 2- Hour	Overflow From Upstream	Total Retention Required	Surface Retention Provided	Underground Vault Diameter	Underground Vault Length	Undergroun Retention Provided	TOTAL Retention Volume Provided	Overflow Volume	Overflows to Basin
		[ft ²]		[ft ³]	[ft ³]	[ft ³]	[ft ³]	[ft]	[ft]	[ft ³]	[ft ³]	[ft³]	1
ON-4	RB-1/UG-1	69,285	0.69	10,612	4,153	14,764	2,056	8	255	12,818	14,874	0	-
ON-1	RB-2	17,780	0.45	1,767	0	4,842	689	0	0	0	689	4,153	RB-1/UG-1
ON-3		18,611	0.75	3,075									
ON-2	RB-3	38,564	0.49	4,148	0	4,148	4,601	0	0	0	4,601	0	=
ON-5	RB-4	20,523	0.45	2,039	0	2,039	803	0	0	0	803	1,236	RB-5
ON-6	RB-5	78,948	0.62	10,882	1,236	12,119	12,901	0	0	0	12,901	0	-

Volume Required: Total Volume Provided

32,524 CF

33,868 CF

(1) NOAA Atlas 14, Volume 1, Version 5, Point Precipitation Frequency Estimates (100-year, 2-hour)

SUBMITTAL NO. DATE ISSUED FOR

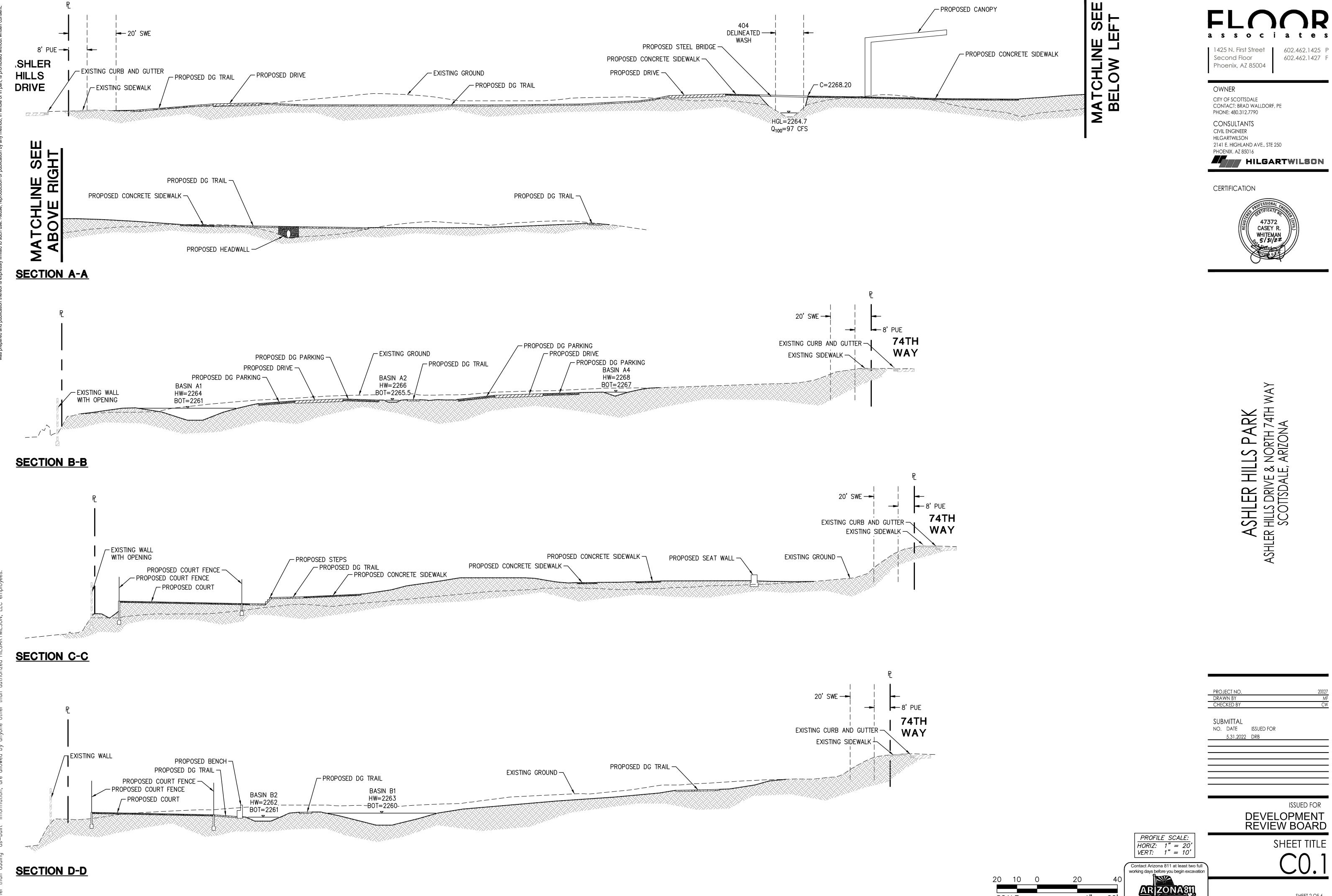
> ISSUED FOR **DEVELOPMENT REVIEW BOARD**

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SHEET 1 OF 6



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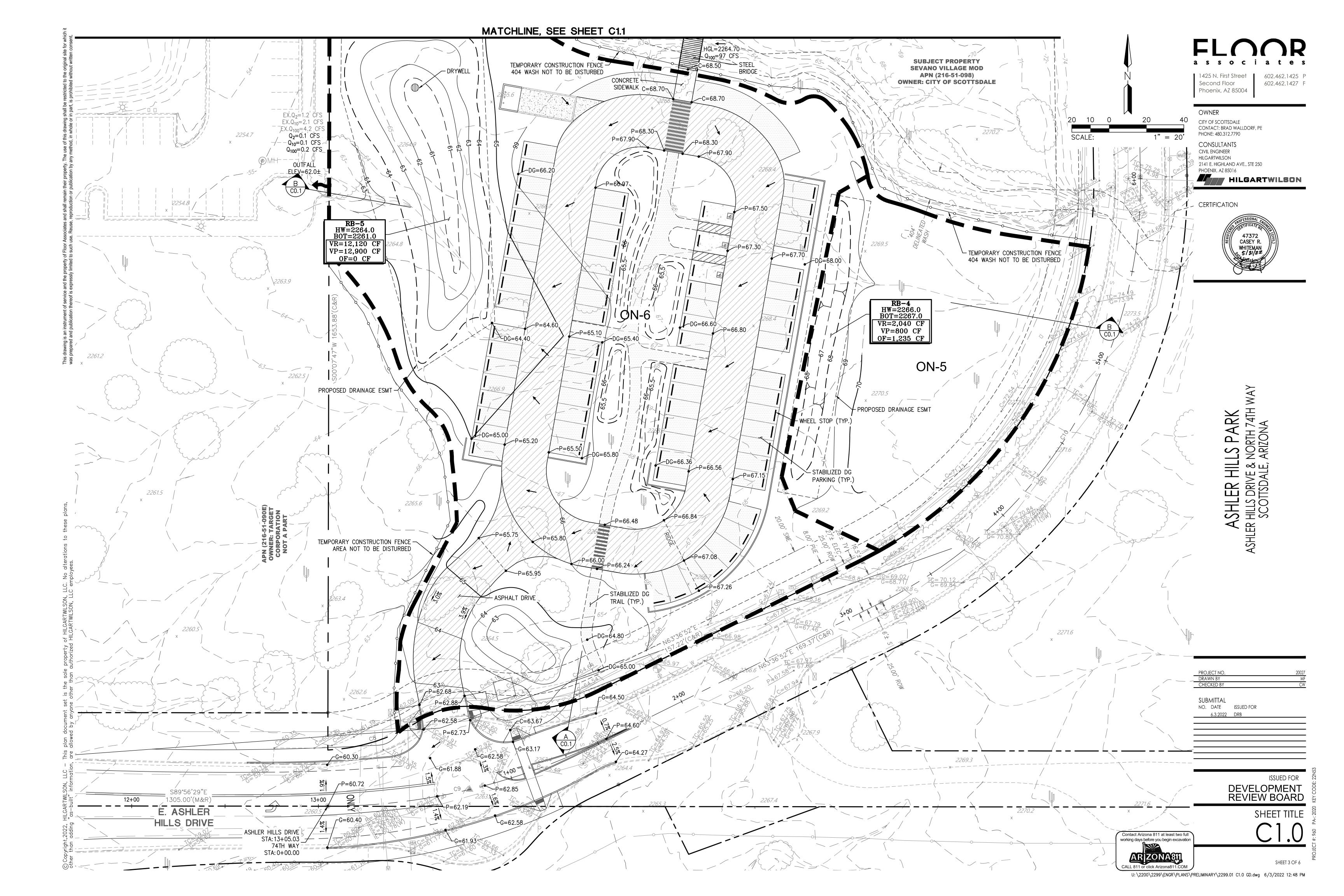


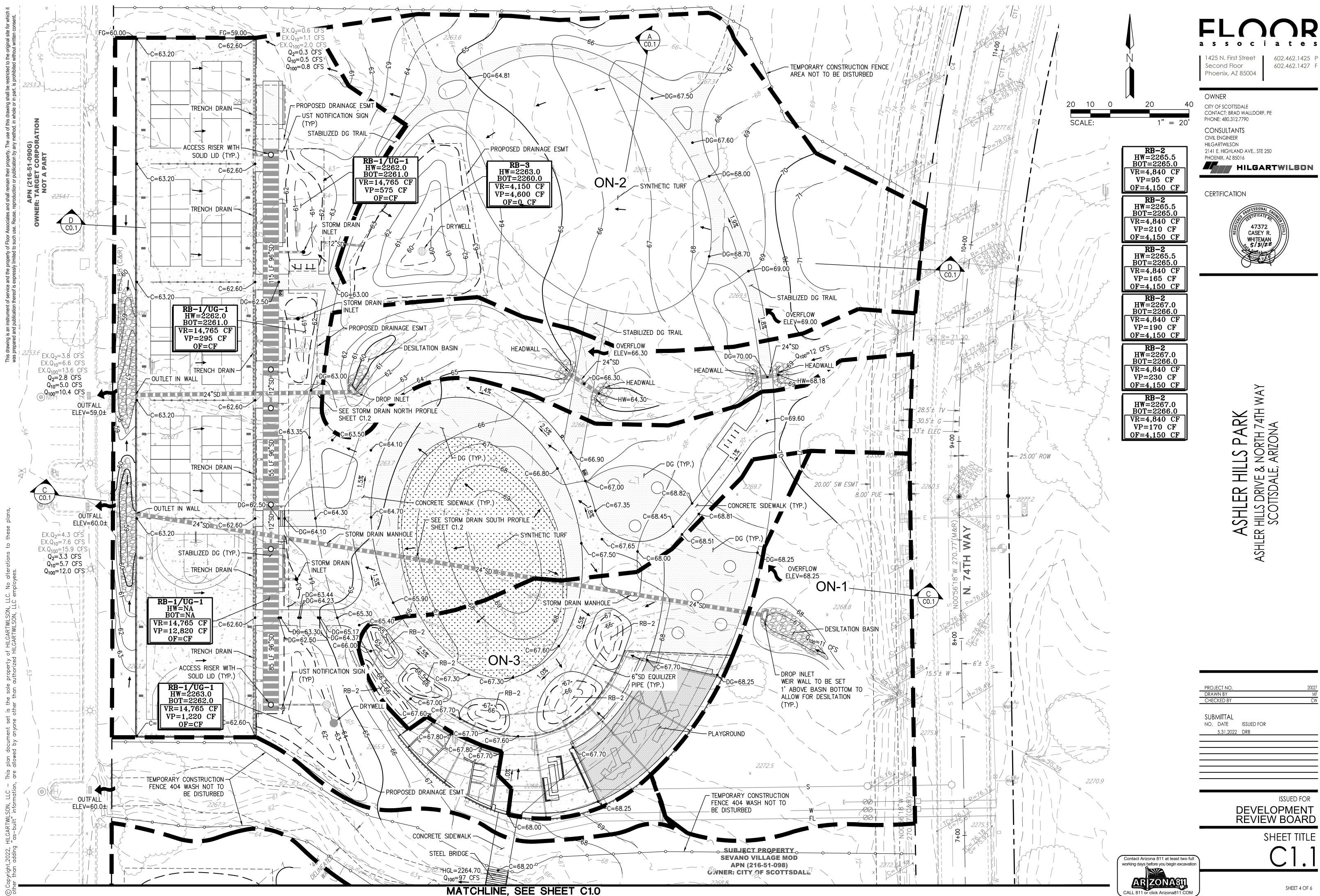
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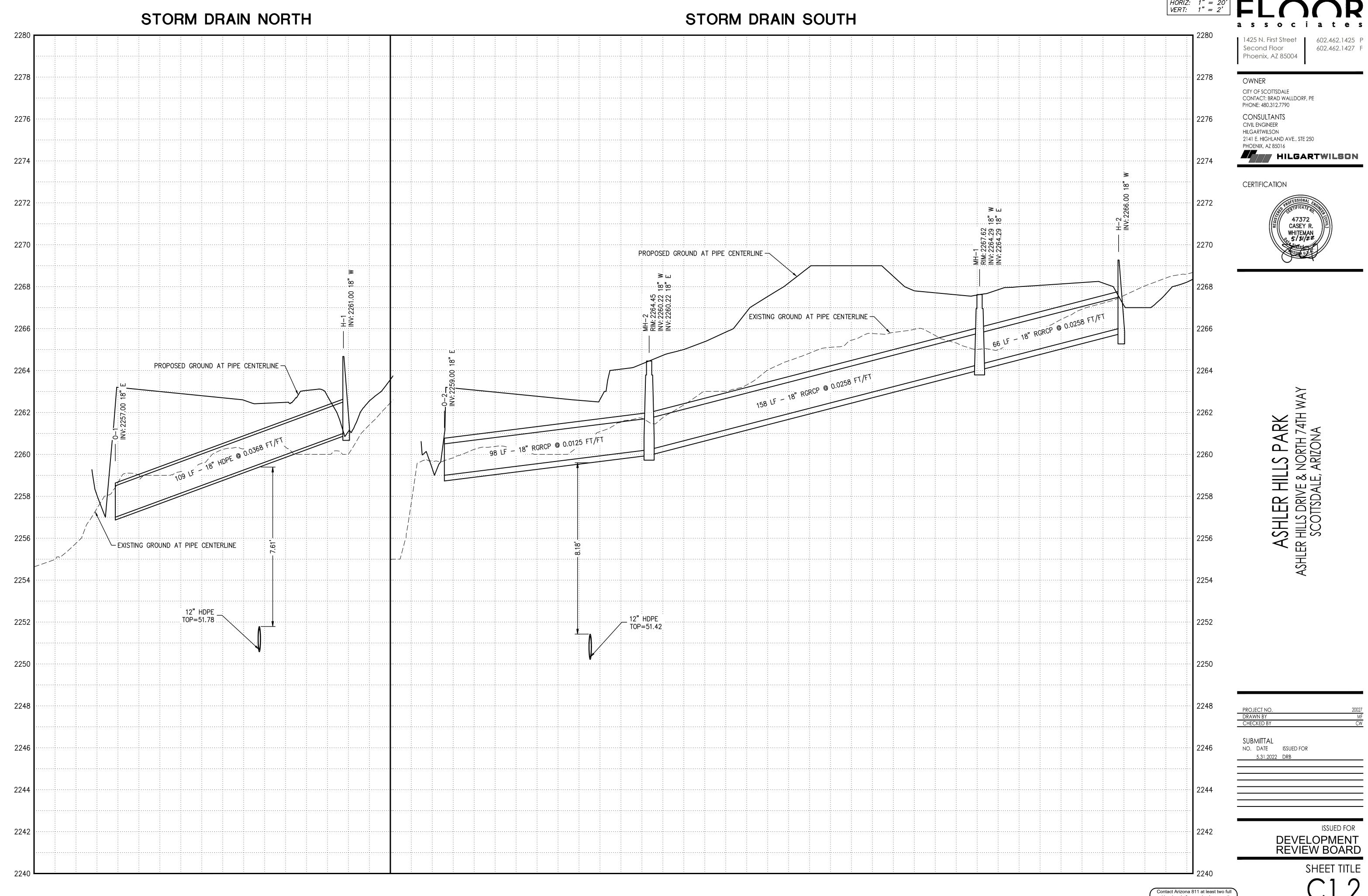
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SHEET 4 OF 6

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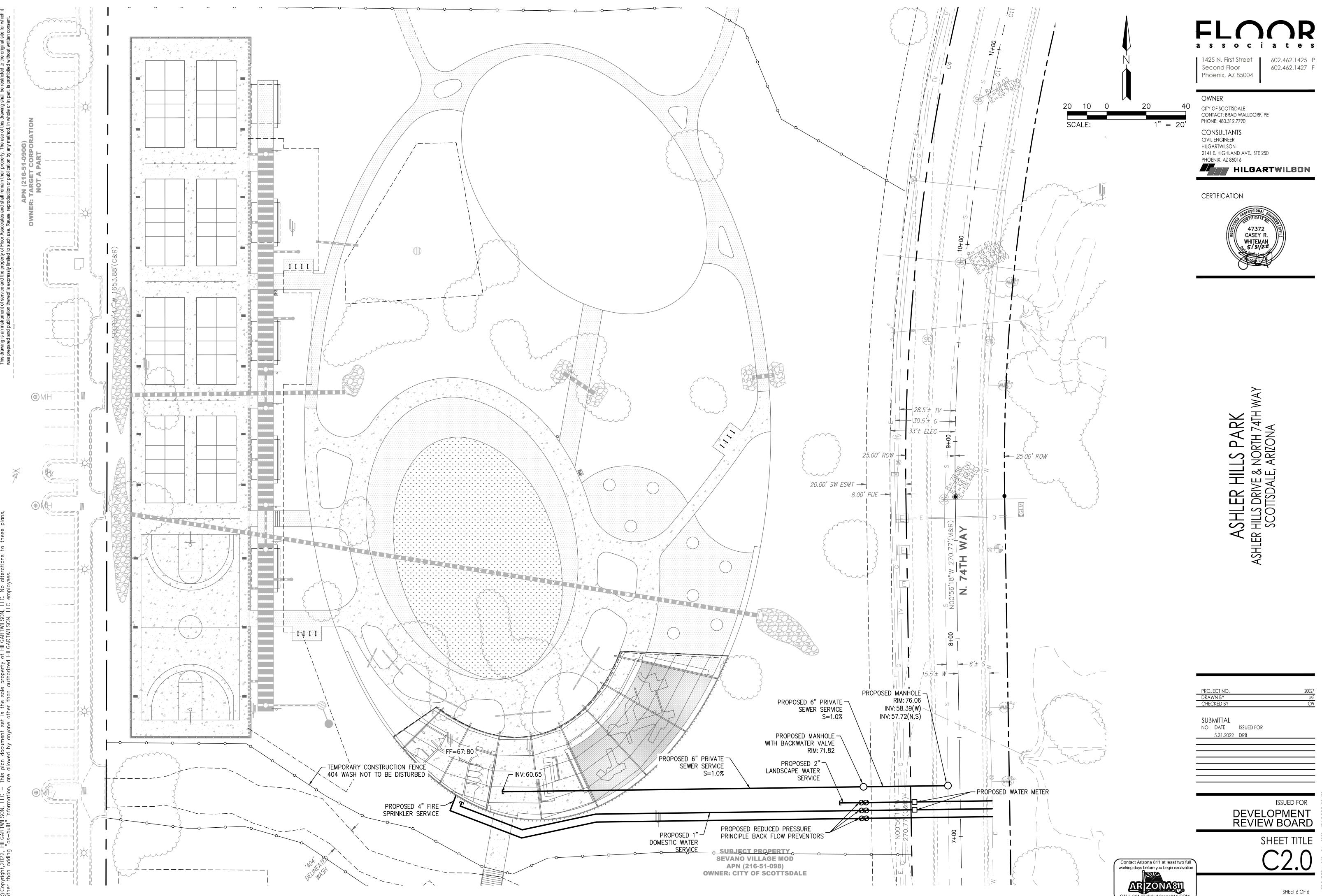


DEVELOPMENT REVIEW BOARD

SHEET TITLE



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