PRELIMINARY Basis of Design Report

- ☐ ACCEPTED
- ☑ ACCEPTED AS NOTED
- ☐ REVISE AND RESUBMIT

CITY OF SCOTTSDALE
SCOTTSDALE WATER
9379 E San Salvador Dr.
Scottsdale, AZ 85258

Disclaimer: If accepted; the preliminary approval is granted under the condition that a final basis of design report will also be submitted for city review and approval (typically during the DR or PP case). The final report shall incorporate further water or sewer design and analysis requirements as defined in the city design standards and policy manual and address those items noted in the preliminary review comments (both separate and included herein). The final report shall be submitted and approved prior to the plan review submission.
For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

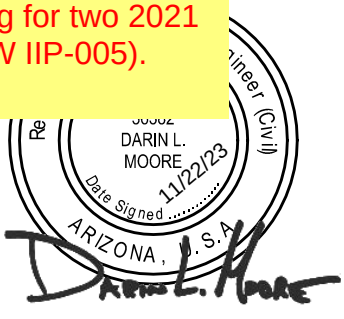
BY apritchard **DATE** 1/29/2024

WOOD PATEL

WASTEWATER COLLECTION SYSTEM CONCEPT BASIS OF DESIGN REPORT FOR FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION

November 22, 2023
WP# 215319.50

Wastewater from the Guest Room Addition may NOT be discharged to the City of Scottsdale wastewater collection system prior to completion and County acceptance of new sewer infrastructure from north of Scottsdale Road and Mayo Blvd to the North Pumpback. This infrastructure is needed to accommodate increased flows from the development.
The Princess Resort will be responsible for repayment (via payback agreements) of proportional design and construction costs for new sewer infrastructure required to convey flows as noted previous. The segments of new wastewater infrastructure that are impacted by this development are as follows:
•From the Scottsdale Rd diversion at Mayo Blvd to the intersection of Mayo Blvd and Miller Rd
•From the intersection of the Mayo Blvd and Miller Rd, south along Miller Rd, across Princess Blvd to Princess Dr,
•South/southeast along Princess Dr to City owned property west of and parallel to Hayden Rd
•South to the TPC golf courses
•East through the TPC golf courses (parallel to the existing sewer) to Pima Rd alignment.
A portion of the overall project costs will be reduced by the allocated funding for two 2021 Wastewater Infrastructure Improvement Plan projects (WW IIP-004 and WW IIP-005).



EXPIRES 06-30-25

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APPENDICES

EXHIBITS

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EXPIRES 06-30-25

1.0 INTRODUCTION

The Fairmont Scottsdale Princess Guest Room Addition (Site) is a proposed Hotel/Resort with underground parking on approximately 0.89 acres of the approximate 34-acre parcel of the Fairmont Scottsdale Princess in the City of Scottsdale (APN#215-08-695). The project will include hardscape, landscape, and utility improvements to support the development. The Site is located approximately 1,300-feet to the east of Scottsdale Road and directly south of East Hacienda Way within Section 35, Township 4 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona. Refer to Exhibit 1 – *Vicinity Map* for the project location. The existing property, currently zoned C-2, is primarily developed with buildings, parking lots, pools, sidewalks, and a variety of landscaping (desert and grass).

The design criteria used to estimate wastewater demands and evaluate system hydraulics are based on Wood, Patel & Associates, Inc's (WOODPATEL's) understanding of the requirements listed in the *City of Scottsdale Design Standards and Policies Manual, 2018*.

The following is a summary of the design criteria utilized:

Average Day Wastewater Demand, Resort/Hotel: ..... 380 gpd / DU
Peak Factor, Resort/Hotel: 4.5
Minimum Mean Full Flow Velocity: ..... 2.50 fps
Maximum Peak Full Flow Velocity: ..... 10.0 fps
Maximum Peak Flow d/D Ratio (12-inch diameter or less sewers): ..... d/D = 0.65
Abbreviations: gpd = gallons per day; fps = feet per second; P = population/1,000

2.0 EXISTING WASTEWATER INFRASTRUCTURE

2.1 Existing Utility System Conditions

The existing wastewater infrastructure adjacent to the Site, includes an existing public 18-inch sewer main within Cottage Terrace. In addition, there is an existing private 8-inch sewer main within Hacienda Way north of the Site. Please refer to Exhibit 2 – *Wastewater Exhibit* for a depiction of the existing wastewater infrastructure surrounding the Site.

3.0 PROPOSED WASTEWATER INFRASTRUCTURE

3.1 Proposed Wastewater Conditions

Through the analysis of the proposed Site the proposed wastewater infrastructure is sized to convey the calculated wastewater flows for the Site. The proposed infrastructure includes an 8-inch service connection into the existing 18-inch pipe in Cottage Terrace through a proposed manhole. Refer to Exhibit 2 – *Wastewater Layout* for proposed infrastructure layout.

3.2 Modeling and Results

Based on the current City of Scottsdale design criteria, the projected average-day flow for the proposed Site is calculated to be 59,280 gallons per day (gpd), or 41.2 gallon per minute (gpm). The peak flow is projected to be 266,760 gpd, or 185 gpm. Refer to Appendix A – *Wastewater Demand Calculations* for a summary of the proposed sewer slopes, projected flow velocities, and pipe flow capacities with the current flows.

4.0 CONCLUSIONS

Based on our wastewater collection system analysis for the proposed Site, the following conclusions are made:

1. The design criteria used to estimate wastewater flows and evaluate system hydraulics are based on WOODPATEL's understanding of the published City of Scottsdale Design Standards and Policies Manual, 2018.

2. The projected average-day flow for the proposed Site is calculated to be 59,280 gallons per day (gpd), or 41.2 gallon per minute (gpm).

3. The projected peak flow for the proposed Site is calculated to be 266,760 gallons per day (gpd), or 185 gallon per minute (gpm).

5.0 REFERENCES

1. City of Scottsdale Design Standards and Policies Manual, 2018

APPENDIX A – WASTEWATER DEMAND CALCULATIONS

WOOD PATEL

TABLE 1
WASTEWATER DESIGN CRITERIA

Project	Fairmont Scottsdale Princess - Guest Room Addition
Location	Scottsdale AZ
Project Number	215319.50
Project Engineer	Andrew J. Sanchez
References	City of Scottsdale Design Standards and Policies Manual (2018)

WASTEWATER DEMANDS

LAND USE	AVERAGE DAILY DEMAND (ADD)		POPULATION[1]
	VALUE	UNITS	
Commercial/Retail	0.50	gpd/sf	0.005 Persons per sf
Office	0.40	gpd/sf	0.004 Persons per sf
Restaurant	1.20	gpd/sf	0.012 Persons per sf
High Density Condominiums	140	gpd/DU	1.4 Persons per DU
School: without Cafeteria	30	gpd/Student	0.3 Persons per Student
School: with Cafeteria	50	gpd/Student	0.5 Persons per Student
Resort Hotel	380	gpd/Room	3.8 Persons per Room
Cultural	0.1	gpd/sf	0.001 Persons per sf
Fitness Center/Spa/ Health Club	0.8	gpd/sf	0.008 Persons per sf

HYDRAULIC MODELING CRITERIA

DESCRIPTION		VALUE[2]
PEAK FLOW		
Peak Flow = Peaking Factor (PF) x ADD		
	Commercial/Retail	3.0
	Fitness Center/Spa/Health Club	3.5
	High Density Condominium	4.5
	Resort Hotel (includes site amenities)	4.5
	Restaurant	6.0
	Resort Hotel	4.5
	Clubhouse for Subdivision Golf Course	4.5
HYDRAULICS		
Minimum Pipe Diameter (in)		8
Manning's "n" value		0.013
Maximum d/D ratio at peak flow		0.65

PIPE SIZE	MEAN VELOCITY[2]		DESIGN SLOPE[2]	
(in)	Minimum (ft/sec)	Maximum (ft/sec)	Minimum (%)	Maximum (%)
8	2.5	10.0	0.380	6.980
10	2.5	10.0	0.306	5.121
12	2.5	10.0	0.256	3.919

Notes
1. Per Arizona Administrative Code, Title 18, Chapter 9
2. Per City of Scottsdale Design Standards and Policies Manual (2018)

WOOD PATEL

TABLE 2
WASTEWATER MODEL, FULL BUILD-OUT CONDITION
PROPOSED WASTEWATER MODEL

Project	Fairmont Scottsdale Princess - Guest Room Addition
Location	Scottsdale AZ
Project Number	215319.50
Project Engineer	Andrew J. Sanchez
References	City of Scottsdale Design Standards and Policies Manual (2018)
	Arizona Administrative Code, Title 18, Chapter 9

FROM NODE	TO NODE	Resort Hotel (DU)	SEWER NODE ADD (GPD)	PEAKING FACTOR	PEAK FLOW (GPD)	TOTAL PEAK FLOW (GPD)	TOTAL PEAK FLOW (GPM)
Outfall							
Rooms Expansion	Outfall	155	58,900	4.5	265,050	265,050	184
Total Outfall		**155**	**58,900**		265,050		184

WOOD PATEL

TABLE 3
CALCULATED PIPE CAPACITIES, FULL BUILD-OUT CONDITION

Project Fairmont Scottsdale Princess - Guest Room Addition
Location Scottsdale AZ
Project Number 215319.50
Project Engineer Andrew J. Sanchez
References City of Scottsdale Design Standards and Policies Manual (2018)
ADEQ Bulletin No. 11

					PEAK FLOW RESULTS					
FROM NODE	**PIPE SIZE**	**MODELED PIPE SLOPE**	**PIPE CAPACITY (FULL)**		**PEAK FLOW**	**PEAK FLOW**	**d/D**	**MEAN VELOCITY (at d/D=0.75)**	**SURPLUS CAPACITY**	**PERCENT OF CAPACITY**
	(in)	**(ft/ft)**	**(gpd)**	**(gpm)**	**(gpd)**	**(gpm)**		**(ft/sec)**	**(gpd)**	**(%)**
Outfall										
Rooms Expansion	8	0.0143	936,535	650	265,050	184.1	0.36	15.0	671,485	28.3%

APPENDIX B – FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION GRADING, DRAINAGE, WATER & SEWER PLAN, PREPARED BY WOOD, PATEL & ASSOCIATES, INC., DATED NOVEMBER 22, 2023

FAIRMONT SCOTTSDALE PRINCESS
GUEST ROOM ADDITION
CONCEPT GRADING, DRAINAGE, WATER & SEWER
SCOTTSDALE, ARIZONA
A PORTION OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

ENGINEER'S NOTES

1. MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTALS THEREOF PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
2. 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.
3. 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 IN THE CONTRACT.
4. THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN.
6. THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR GENERAL INFORMATIONAL PURPOSES ONLY AND MIGHT NOT REFLECT ACTUAL QUANTITIES AND SITE CONDITIONS. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
7. 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.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
9. ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT FILL AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL BE AWARE THAT CERTAIN UTILITIES REQUIRE PROPER ATTENTION AND CAREFUL PLANNING DURING SITE CONSTRUCTION. PLEASE NOTE THAT UTILITIES ON THESE PLANS MAY NOT EXHIBIT THE FULL PROTECTIVE COVER REQUIRED DURING THE SUBGRADE PREPARATION PHASE OF THE CONSTRUCTION. IN SUCH INSTANCES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL PROTECTION (SUCH AS RAMPING) OR INCREASED PIPE STRENGTH TO PROVIDE THE NECESSARY PROTECTION REQUIRED TO PREVENT DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL HOLD THE ENGINEER HARMLESS IN ALL CASES FOR DAMAGES TO UTILITIES WHERE INADEQUATE PROTECTIVE MEASURES OCCUR.
10. 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.
11. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOUT WITH ARCHITECT'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT.
12. COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
13. 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.
14. 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.
15. 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.
16. CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
17. 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.
18. SEWER LINES DESIGNED IN PROFILE AND PUBLIC WATER LINES ARE REQUIRED TO BE ASBUILT AND THE INSTALLATION AND TESTING WITNESSED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODES R18-9-E301 "4.01 GENERAL PERMIT: SEWAGE COLLECTIONS SYSTEMS" AND R18-5-507 AND 508 "APPROVAL OF CONSTRUCTION" AND "RECORD DRAWINGS", RESPECTIVELY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNER 72 HOURS IN ADVANCE WHEN THOSE SYSTEMS ARE READY TO BE WITNESSED.
19. THE WORK PRODUCT PRESENTED IS BELIEVED TO BE COMPLIANT WITH THE INTENT OF THE CURRENT AMERICANS DISABILITIES ACT (ADA) REQUIREMENTS AS INTERPRETED BY THE REVIEWING AGENCY(S). IF CONSTRUCTION OF THE PROJECT IS DELAYED, THIS WORK PRODUCT SHOULD BE UPDATED TO ACCOUNT FOR ANY RELEVANT ADA UPDATES BEFORE CONSTRUCTION BEGINS.
20. LOWEST FLOOR (LF) REFERS TO EITHER FLOOR/SLAB ELEVATION OR TOP OF BASEMENT SLAB. LF ELEVATIONS ON THE GRADING AND DRAINAGE PLANS FOR RESIDENTIAL UNITS REFLECT SLAB ON GRADE CONDITIONS AND CANNOT BE LOWERED WITHOUT AGENCY APPROVAL IN LOCATIONS WHERE 'SPECIAL FLOOD HAZARD AREAS' EXIST. IN NON-FLOOD HAZARD LOCATIONS, TO ENSURE THAT ADEQUATE RESIDENTIAL LOT DRAINAGE CAN BE ACHIEVED, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF THE LF FOR THE SLAB IS PROPOSED TO BE LOWERED, OR IF A BASEMENT IS TO BE CONSTRUCTED.

PARCEL DESCRIPTION

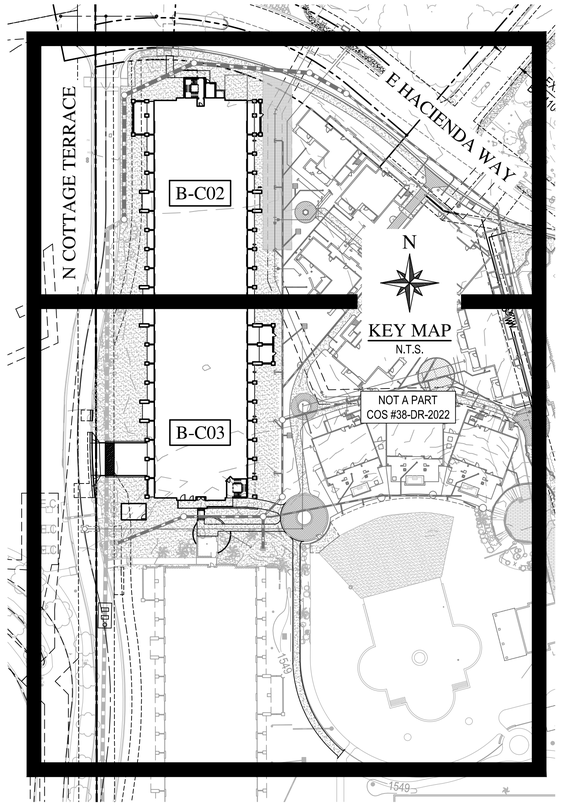
PARCEL NO. 1:
(HOTEL PARCEL)
LOT 3 AND A PORTION OF LOT 2, OF FAIRMONT SCOTTSDALE PRINCESS, ACCORDING TO BOOK 1104 OF MAPS, PAGE 3, RECORDS OF MARICOPA COUNTY, ARIZONA, TOGETHER WITH A PART OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ALL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTH ONE-QUARTER CORNER OF SECTION 35;
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST ALONG THE NORTH-SOUTH MIDSECTION LINE OF SECTION 35, 1206.58 FEET TO THE POINT OF BEGINNING;
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 111.62 FEET;
THENCE NORTH 05 DEGREES 04 MINUTES 10 SECONDS WEST, 34.51 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 75.00 FEET;
THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 60 DEGREES 29 MINUTES 58 SECONDS, 79.19 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 75.00 FEET;
THENCE NORTHEASTERLY, NORTHERLY AND SOUTHWESTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 168 DEGREES 47 MINUTES 48 SECONDS, 220.95 FEET;
THENCE SOUTH 66 DEGREES 38 MINUTES 00 SECONDS WEST, 521.45 FEET;
THENCE NORTH 07 DEGREES 07 MINUTES 02 SECONDS WEST, 47.49 FEET;
THENCE NORTH 88 DEGREES 18 MINUTES 25 SECONDS WEST, 29.86 FEET;
THENCE NORTH 58 DEGREES 07 MINUTES 53 SECONDS WEST, 43.04 FEET;
THENCE NORTH 26 DEGREES 47 MINUTES 27 SECONDS WEST, 26.35 FEET;
THENCE NORTH 83 DEGREES 46 MINUTES 19 SECONDS WEST, 39.13 FEET;
THENCE NORTH 27 DEGREES 44 MINUTES 13 SECONDS WEST, 177.75 FEET;
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 103.52 FEET;
THENCE SOUTH 00 DEGREES 01 MINUTES 45 SECONDS WEST, 18.00 FEET;
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 377.78 FEET;
THENCE NORTH 00 DEGREES 01 MINUTE 45 SECONDS EAST, 756.50 FEET;
THENCE NORTH 78 DEGREES 51 MINUTES 20 SECONDS EAST, 4.33 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTH HAVING A RADIUS OF 250.00 FEET;
THENCE EASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 51 DEGREES 43 MINUTES 26 SECONDS, 225.69 FEET;
THENCE SOUTH 49 DEGREES 25 MINUTES 14 SECONDS EAST, 59.77 FEET;
THENCE NORTH 40 DEGREES 34 MINUTES 36 SECONDS EAST, 352.13 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHEAST HAVING A RADIUS OF 100.00 FEET;
THENCE NORTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 49 DEGREES 35 MINUTES 38 SECONDS, 86.56 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 385.35 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EAST HAVING A RADIUS OF 500.00 FEET, AND A RADIAL BEARING TO THE BEGINNING OF SOUTH 73 DEGREES 52 MINUTES 17 SECONDS WEST;
THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 16 DEGREES 17 MINUTES 57 SECONDS, 142.24 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 55.5 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 444.50 FEET AND A RADIAL BEARING TO THE BEGINNING OF NORTH 89 DEGREES 46 MINUTES 46 SECONDS WEST;
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 75 DEGREES 09 MINUTES 12 SECONDS, 583.04 FEET;
THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 6.41 FEET TO THE NORTH-SOUTH MIDSECTION LINE OF SECTION 35;
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, ALONG THE MIDSECTION LINE, 57.42 FEET;
THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 337.32 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 300.00 FEET;
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 35 DEGREES 25 MINUTES 14 SECONDS, 185.46 FEET;
THENCE SOUTH 39 DEGREES 33 MINUTES 43 SECONDS EAST, 125.23 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 1000.00 FEET;
THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 11 DEGREES 27 MINUTES 33 SECONDS, 200.00 FEET;
THENCE SOUTH 38 DEGREES 58 MINUTES 44 SECONDS WEST, 55.50 FEET;
THENCE SOUTH 16 DEGREES 17 MINUTES 23 SECONDS WEST, 211.79 FEET;
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 270.00 FEET;
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 208.40 FEET;
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 148.26 FEET;
THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 14.66 FEET;
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 67.83 FEET;
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST, 10.06 FEET;
THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 122.29 FEET TO THE POINT OF BEGINNING; EXCEPT ONE-HALF OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN DOCKET 124, PAGE 39, RECORDS OF MARICOPA COUNTY, ARIZONA; AND
EXCEPT ALL OIL, GAS, OTHER HYDROCARBON SUBSTANCES, HELIUM OR OTHER SUBSTANCES OF A GASEOUS NATURE, COAL, METALS, MINERALS, FOSSILS, FERTILIZER OF EVERY NAME AND DESCRIPTION; AND
EXCEPT ALL URANIUM, THORIUM OR ANY OTHER MATERIAL WHICH IS OR MAY BE DETERMINED TO BE PECULIARLY ESSENTIAL TO THE PRODUCTION OF FISSIONABLE MATERIALS WHETHER OR NOT OF COMMERCIAL VALUE, AS SET FORTH IN SECTION 37-231, ARIZONA REVISED STATUTES.

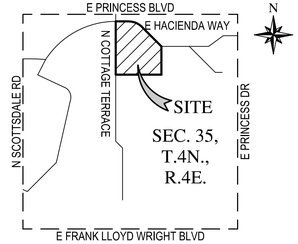
FEMA FIRM NOTE (ZONE AO)

ACCORDING TO FEMA FLOOD INSURANCE RATE MAPPING, THE SUBJECT PROPERTY IS LOCATED IN 'SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD' "ZONE AO", ZONE AO IS DESCRIBED AS: "FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY SHEET FLOW ON SLOPING TERRAIN); AVERAGE DEPTHS DETERMINED. FOR AREAS OF ALLUVIAL FAN FLOODING, VELOCITIES ALSO DETERMINED."

FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	INDEX DATE	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH)
04013C	1320	L	10/16/2013	07/20/2021	AO	1





VICINITY MAP
N.T.S.

BENCHMARK

CITY OF SCOTTSDALE BRASS CAP FLUSH 450'± NORTH OF PRINCESS DRIVE ON SCOTTSDALE ROAD, BEING THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST.
CITY OF SCOTTSDALE DATUM, NAVD88 DATUM
ELEVATION=1553.22'.

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD 1988, MCDOT, AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

ENGINEER'S CERTIFICATION

ENGINEER'S CERTIFICATION: THE LOWEST FLOOR ELEVATION(S) AND/OR FLOOD PROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY A ONE-HUNDRED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37-FLOODPLAIN AND STORMWATER REGULATIONS.

ENGINEER SIGNATURE

11/22/2023
DATE

PAVING QUANTITIES (ESTIMATED)

X" A.C. OVER X" A.B.C.	120	SY
6" SINGLE CURB	80	LF
CONCRETE SIDEWALK	2,523	SF
DRIVEWAY - (DETAIL #)	1	EA
SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT	13	SY

WATER QUANTITIES (ESTIMATED)

6" VALVE, BOX & COVER	1	EA
12" X 6" TEE	1	EA
6" FIRE SPRINKLER SERVICE	44	LF
2" DOMESTIC WATER SERVICE & METER	1	EA
CONNECT TO EXISTING WATERLINE	2	EA
SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT	8	SY

SEWER QUANTITIES (ESTIMATED)

X" SEWER	44	LF
MANHOLE	1	EA
8" SEWER PLUG	1	EA
CONNECT TO EXISTING SEWER LINE	1	EA
SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT	6	SY

FINISH FLOOR ELEVATION CALCULATION

HAG = 1551.32
LAG = 1547.04
FF=1554.00
RFD=1553.32
ALL ELECTROMECHANICAL EQUIPMENT SHALL BE ELEVATED TO RFD ELEVATION

LEGEND

EXISTING SURVEY	PROPOSED GRADING, DRAINAGE & PAVING	ABBREVIATIONS
RIGHT OF WAY	STORM DRAIN PIPE	A.E. ACCESS EASEMENT
PROPERTY LINE	STORM DRAIN CATCH BASIN	PVT. PRIVATE
ROAD CENTERLINE	DRYWELL	SMH SEWER MANHOLE
EASEMENT	PROPOSED FIRELINE, WATER & SEWER	E.J.B. ELECRICAL JUNCTION BOX
SURVEY MARKER	WATER LINE	S.L. STREET LIGHT
4"G (MATERIAL) GAS LINE	WATER LINE FITTINGS	INV INVERT ELEVATION
8"S (MATERIAL) SEWER LINE	BACKFLOW PREVENTION DEVICE	I.V.B. IRRIGATION VALVE BOX
8"W (MATERIAL) WATER LINE	WATER VALVE	LFF LOWEST FINISHED FLOOR ELEVATION
CURB	FIRE HYDRANT	W.V. WATER VALVE
SIDEWALK	WATER METER	
VEGETATION	PLUG	
SEWER MANHOLE	TAPPING SLEEVE & VALVE	
JUNCTION BOX/RISER	SEWER LINE	
WATER VALVE	SEWER MANHOLE	
STREET LIGHT	CLEANOUT	

OWNER / DEVELOPER

STRATEGIC HOTELS & RESORTS
150 NORTH RIVERSIDE PLAZA, SUITE 4270
CHICAGO, IL 60606
CONTACT: TIMOTHY TAYLOR
PHONE: (312) 658-6038

ENGINEER

WOOD, PATEL & ASSOCIATES, INC.
2051 WEST NORTHERN AVENUE, SUITE 100
PHOENIX, ARIZONA 85021
CONTACT: DARIN MOORE, P.E.
PHONE: (602) 335-8500
FAX: (602) 335-8580

ARCHITECT

ALLEN + PHILP ARCHITECTS
7154 EAST STETSON DRIVE,
4TH FLOOR
SCOTTSDALE, AZ 85251
CONTACT: MATTHEW J. KOSEDNAR
PHONE: (480) 990-2800

PROJECT SITE DATA

ASSESSOR PARCEL NUMBER(S):
215-08-003C
PROJECT SITE ADDRESS:
7575 E PRINCESS BLVD
SCOTTSDALE, ARIZONA 85255
PROJECT SITE AREA(S):
NET AREA = 7.08 AC
DISTURBED AREA = 1.5± AC
ZONING:
C2

SHEET INDEX

WOOD PATEL
Wood, Patel & Associates, Inc.
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Water Resources
Land Survey
Construction Management
602.335.8500
www.woodpatel.com

FAIRMONT SCOTTSDALE PRINCESS
GUEST ROOM ADDITION
CONCEPT GRADING, DRAINAGE, WATER & SEWER
SCOTTSDALE, ARIZONA
COVER SHEET

REV	DESCRIPTION	DATE

Registered Professional Engineer
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 11/22/2023
ARIZONA, U.S.A.
EXPIRES 06-30-25

SCALE (HORIZ.)
SCALE (VERT.)
DATE 11/22/2023
JOB NUMBER 215319.50
SHEET B-C01 OF 4

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: DLH / JRS

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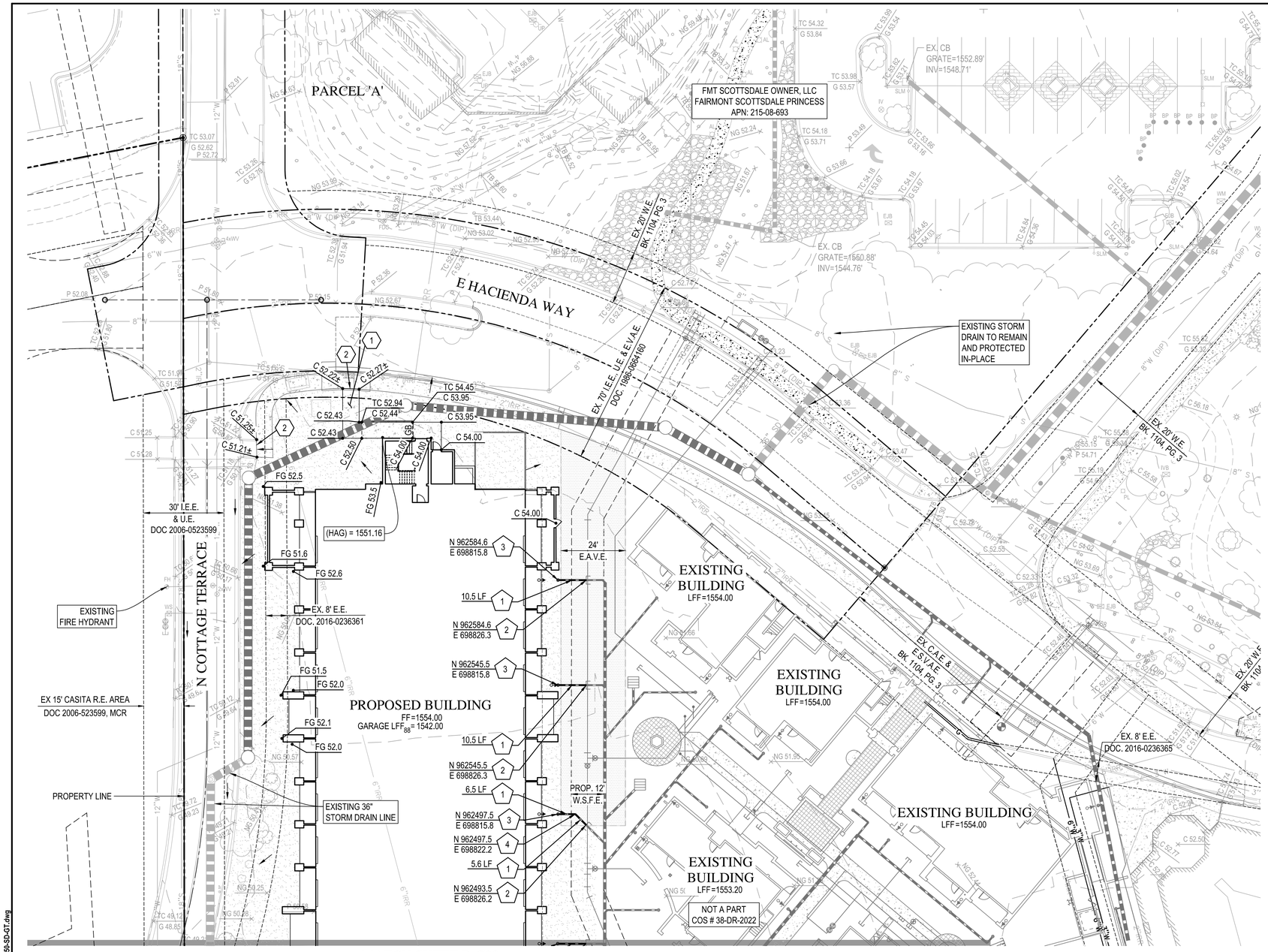

N

0 20 40

Horz. 1 in. = 20 ft.

PAVING NOTES

1. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS FOR COLOR & FINISH.
2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.

STORM DRAIN NOTES

1. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. CONNECT TO EXISTING 6" STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
3. INSTALL DRAIN BASIN WITH STANDARD RATED GRATE (ADS NYLOPLAST OR APPROVED EQUAL). GRATE AND BASIN SIZE PER ADJOINING PIPE DIAMETER, UNLESS OTHERWISE NOTED ON PLAN. A PEDESTRIAN RATED GRATE MAY BE SUBSTITUTED IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, INSTALL FLO-GARD STORMWATER TREATMENT INSERT OR APPROVED EQUAL.
4. INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.

NOTE:

1. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. CONTRACTOR TO VERIFY WITH THE GEOTECHNICAL ENGINEER THAT THE ROAD MEETS OR EXCEEDS THE 83,000 LB REQUIREMENT.
3. REFER TO SHEET B-C01 FOR HAG, LAG, AND RFD ELEVATION INFORMATION.

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FAIRMONT SCOTTSDALE PRINCESS
GUEST ROOM ADDITION

CONCEPT GRADING, DRAINAGE, WATER & SEWER
SCOTTSDALE, ARIZONA
CONCEPT GRADING, DRAINAGE, WATER & SEWER PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L.
MOORE
Date Signed 11/22/23
ARIZONA

EXPIRES 06-30-25

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	11/22/2023
JOB NUMBER	215319.50
SHEET	B-C02 OF 4

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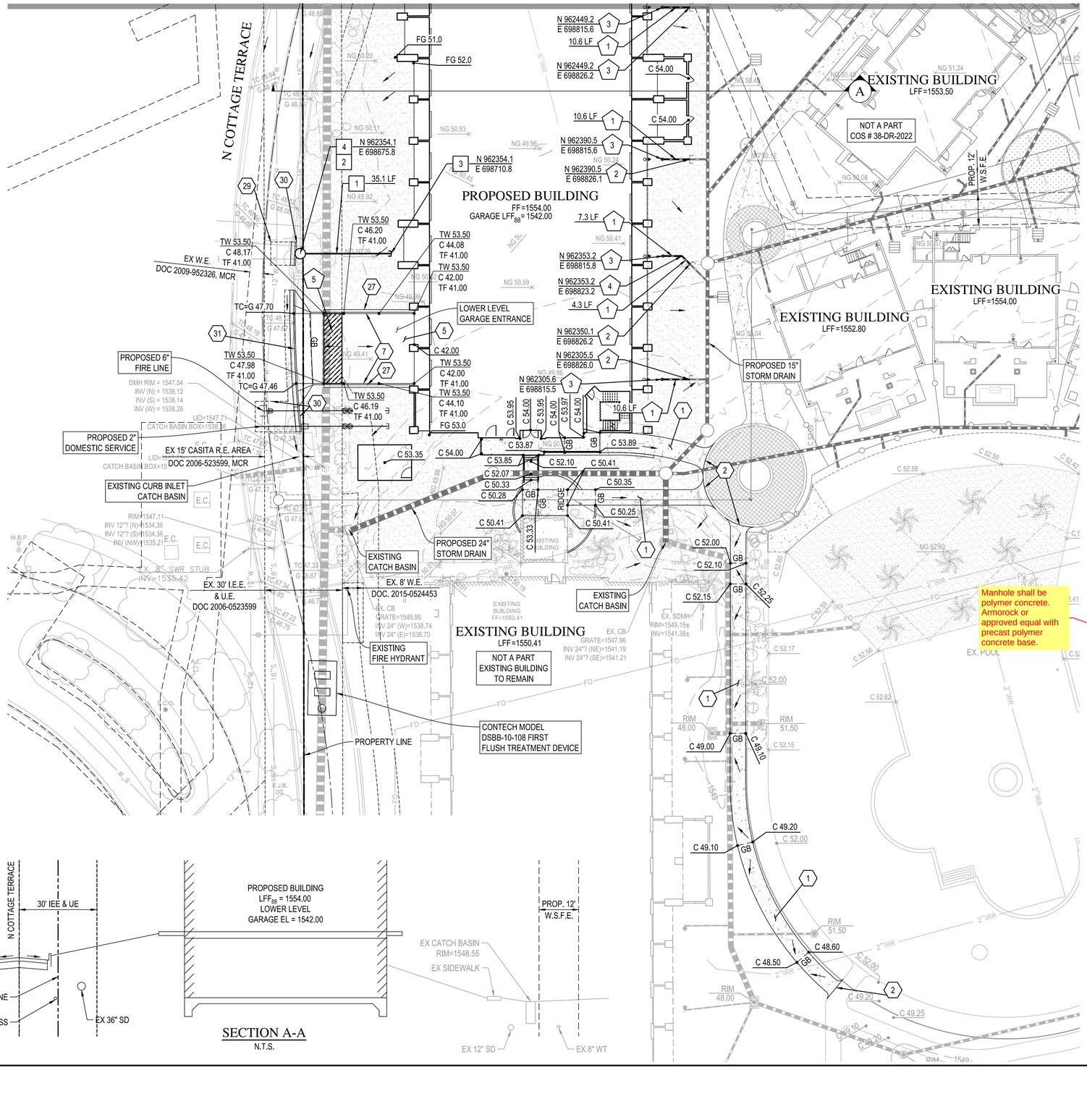
MATCH SHEET B-C02



SECTION A-A
N.T.S.

N

0 20 40

Horz. 1 in. = 20 ft.

PAVING NOTES

1. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS FOR COLOR & FINISH.
2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
7. CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A.
27. CONSTRUCT RETAINING WALL. SEE ARCHITECTURAL PLAN FOR DETAILS.
29. REMOVE & REPLACE EXISTING PAVEMENT FOR UTILITY CONSTRUCTION PER M.A.G. STD. DETAIL 200-1.
30. SAWCUT, REMOVE & REPLACE EXISTING SINGLE CURB, CURB & GUTTER, AND CONCRETE SIDEWALK FOR PROPOSED UTILITY CONSTRUCTION TO THE NEAREST JOINT OF THE LIMITS SHOWN.
31. CONSTRUCT DRIVEWAY PER C.O.S. STD. DETAIL 2251-2.

SEWER NOTES

1. INSTALL 8" POLYWRAPPED DIP PRESSURE CLASS 350 WITH EPOXY LINING FOR SANITARY SEWER PER MAG SPEC SECTION 615.
2. CONNECT TO EXISTING 18" SANITARY SEWER. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. INSTALL 48" SANITARY SEWER MANHOLE PER M.A.G. STD. DTL. 420-1. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.

STORM DRAIN NOTES

1. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
2. CONNECT TO EXISTING 6" STORM DRAIN PIPE. CONTRACTOR TO VERIFY HORIZONTAL LOCATION AND VERTICAL ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCY.
3. INSTALL DRAIN BASIN WITH STANDARD RATED GRATE (ADS NYLOPLAST OR APPROVED EQUAL). GRATE AND BASIN SIZE PER ADJOINING PIPE DIAMETER, UNLESS OTHERWISE NOTED ON PLAN. A PEDESTRIAN RATED GRATE MAY BE SUBSTITUTED IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC. INSTALL FLO-GARD STORMWATER TREATMENT INSERT OR APPROVED EQUAL.
4. INSTALL BEND. SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.
5. INSTALL VEHICULAR FLOOD GATE BY FLOOD BREAK PER THE DETAILS ON SHEET B-CO4.

NOTE:

1. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. CONTRACTOR TO VERIFY WITH THE GEOTECHNICAL ENGINEER THAT THE ROAD MEETS OR EXCEEDS THE 83,000 LB REQUIREMENT.
3. REFER TO SHEET B-C01 FOR HAG, LAG, AND RFD ELEVATION INFORMATION.

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FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION

CONCEPT GRADING, DRAINAGE, WATER & SEWER
SCOTTSDALE, ARIZONA
CONCEPT GRADING, DRAINAGE, WATER & SEWER PLAN

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
36382
DARIN L. MOORE
Registered Engineer
ARIZONA
EXPIRES 06-30-25

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	11/22/2023
JOB NUMBER	215319.50
SHEET	B-C03 OF 4

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: DLH / JRS

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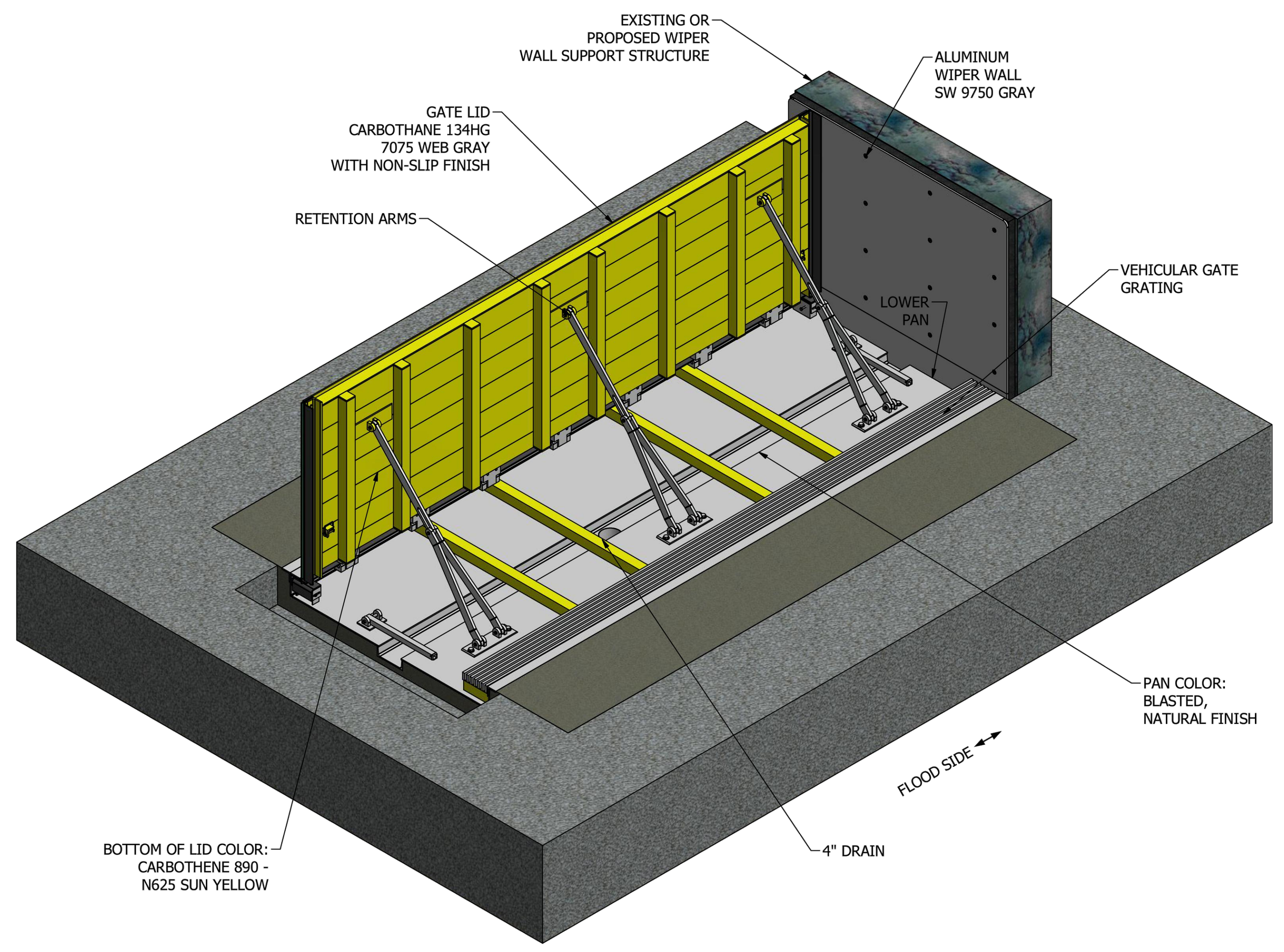


STRUCTURAL SPECIFICATIONS:

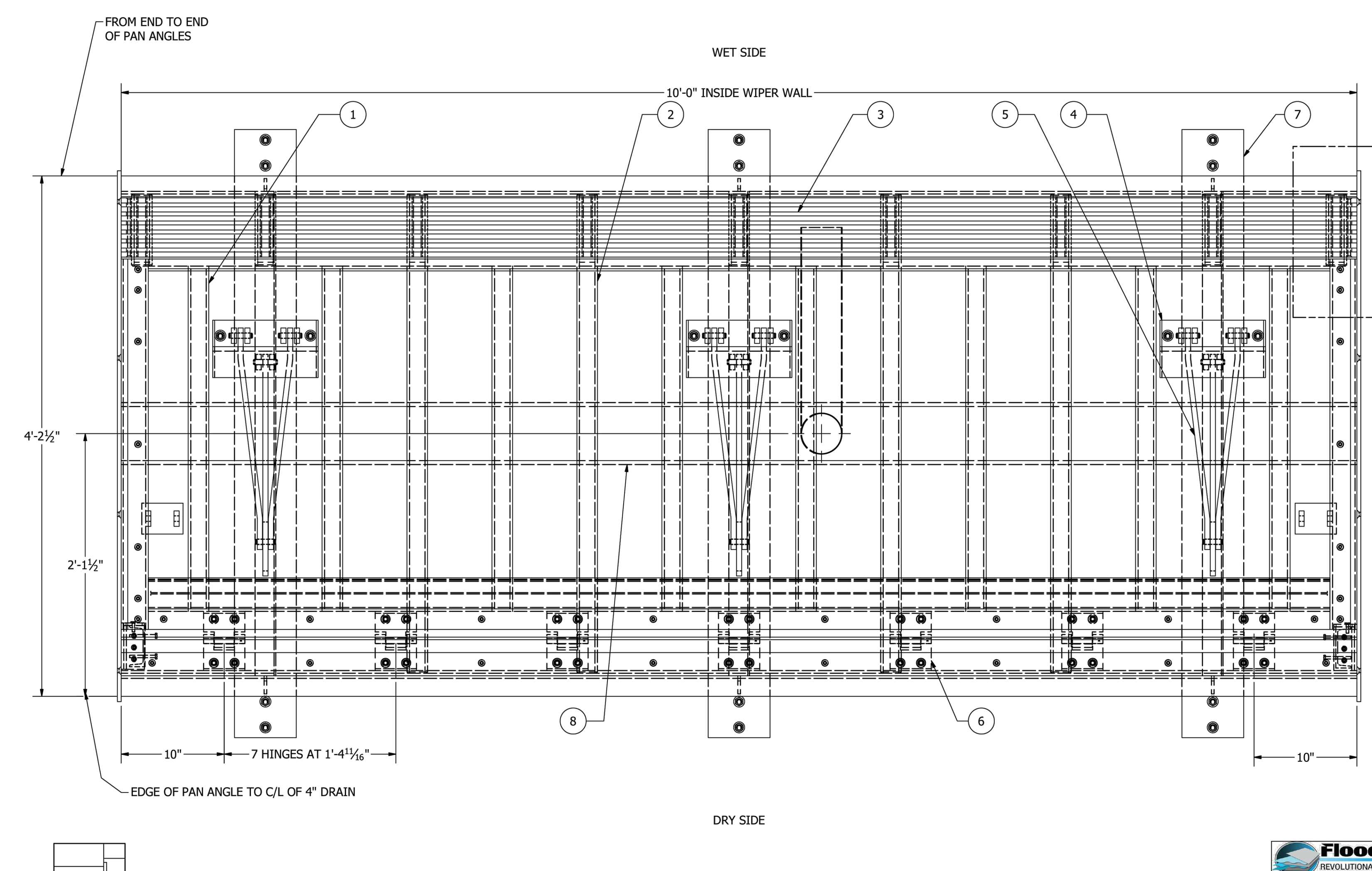
1. FLOODGATE MATERIAL TO BE ALUMINUM AS FOLLOWS:
   LID - 5" x 2 1/2" x 1/8" ALUM EXTRUSIONS - GRADE 6005-T5 MIN. F_Y=35 KSI
   LID AND PAN - 2" x 2" x 1/4" ALUM TUBING - GRADE 6061 MIN. F_Y=35 KSI
   PAN - 1/4" SMOOTH ALUM PLATE - GRADE 5052 MIN. F_Y=25.8 KSI
   ALUM FLAT BARS, STRUCTURAL ANGLES, HINGES GRADE 6061-T6 MIN. F_Y=35 KSI
   ALUM CHANNELS - 4" x 2" x 1/4" VERTICAL & 6" x 2" x 1/4" HORIZONTAL.
2. HINGE BOLTS, PINS, AND MACHINE SCREWS TO BE STAINLESS STEEL - GRADE 304, MIN. F_Y=90 KSI.
3. RETENTION ARM ANCHOR BOLTS SHALL BE STAINLESS STEEL STANDARD THREAD BOLTS SET IN VINYLESTER BASED ADHESIVE CONTAINED IN A GLASS CAPSULE, INSTALLED PER SIMPSON STRONG TIE SPECIFICATIONS.
4. ALUMINUM TO BE WELDED WITH ALUMINUM WIRE - PER 4043 AWS A5.10 3/64.
5. GROUT TO BE COMMERCIAL GRADE NON-SHRINKING GROUT.
6. ALL WELDS REQUIRED FOR STRUCTURAL STRENGTH OF THE LID OR PAN ARE CALLED OUT ON THESE DRAWINGS. ALL OTHER WELDING, NOT SHOWN OR CALLED OUT ON THESE DRAWINGS, ARE ESSENTIALLY NON-STRUCTURAL WELDS OR WELDS WITH NEGLIGIBLE LOADS AND RESULTING STRESSES. EXAMPLES OF SUCH WELDS ARE AT SEAMS, SIDES, PAN TROUGH, AND LID TRIM ANGLES. THESE WELDS ARE TO BE SIZED BY THE FABRICATOR, TAKING INTO CONSIDERATION ASSEMBLY, TRANSPORT LIFT AND CONTINUITY REQUIREMENTS. THEY MUST BE APPROVED BY FLOODBREAK.
7. ALL CONCRETE FOUNDATION POURS AND THEIR TIE-DOWNS TO EXISTING FOUNDATIONS SHOWN IN THESE DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY. DESIGN OF THE CONCRETE FOUNDATION SLABS IS BY OTHERS. DESIGN AND SUPERVISION OF INSTALLATION OF RETENTION ARMS, ANCHOR BOLTS, AND GATE ANCHORS ARE BY FLOODBREAK. ALL CONCRETE TO BE 4000 PSI MINIMUM 28 DAY STRENGTH. REINFORCED IN EACH DIRECTION WITH ASTM - A615 MIN. F_Y=60 KSI. SPECIAL ATTENTION SHALL BE PAID TO PROPER SUPPORT OF RETENTION ARM ANCHOR BOLTS INTO THE SUPPORTING CONCRETE.
8. ALL GASKET MATERIAL TO BE EPDM RUBBER.
9. ALL DIMENSIONS ARE IN FEET AND INCHES.
10. TOTAL WEIGHT: 899.1 LBS
11. SLOPE: NONE

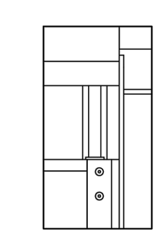
TYPICAL VEHICULAR GATE
NOTE: LAYOUT, SIZES AND DETAIL ARE GATE-SPECIFIC. THIS VIEW SHOWN HAS ONE WIPER WALL REMOVED FOR CLARITY.

GENERAL ISOMETRIC LAYOUT

FloodBreak REVOLUTIONARY FLOOD CONTROL
DEMO - VEHICULAR GATE
STANDARD LOCATION
VEHICULAR GATE
10'-0" L x 3'-0" H

VG# 0001		
REV 0		
SCALE	VARIES	
DRAWN	A. JOLLY	8/1/2018
CHECKED	N. EASTMAN	8/1/2018
APPROVED	M. POSADA	8/1/2018
SHEET 1 OF 10		





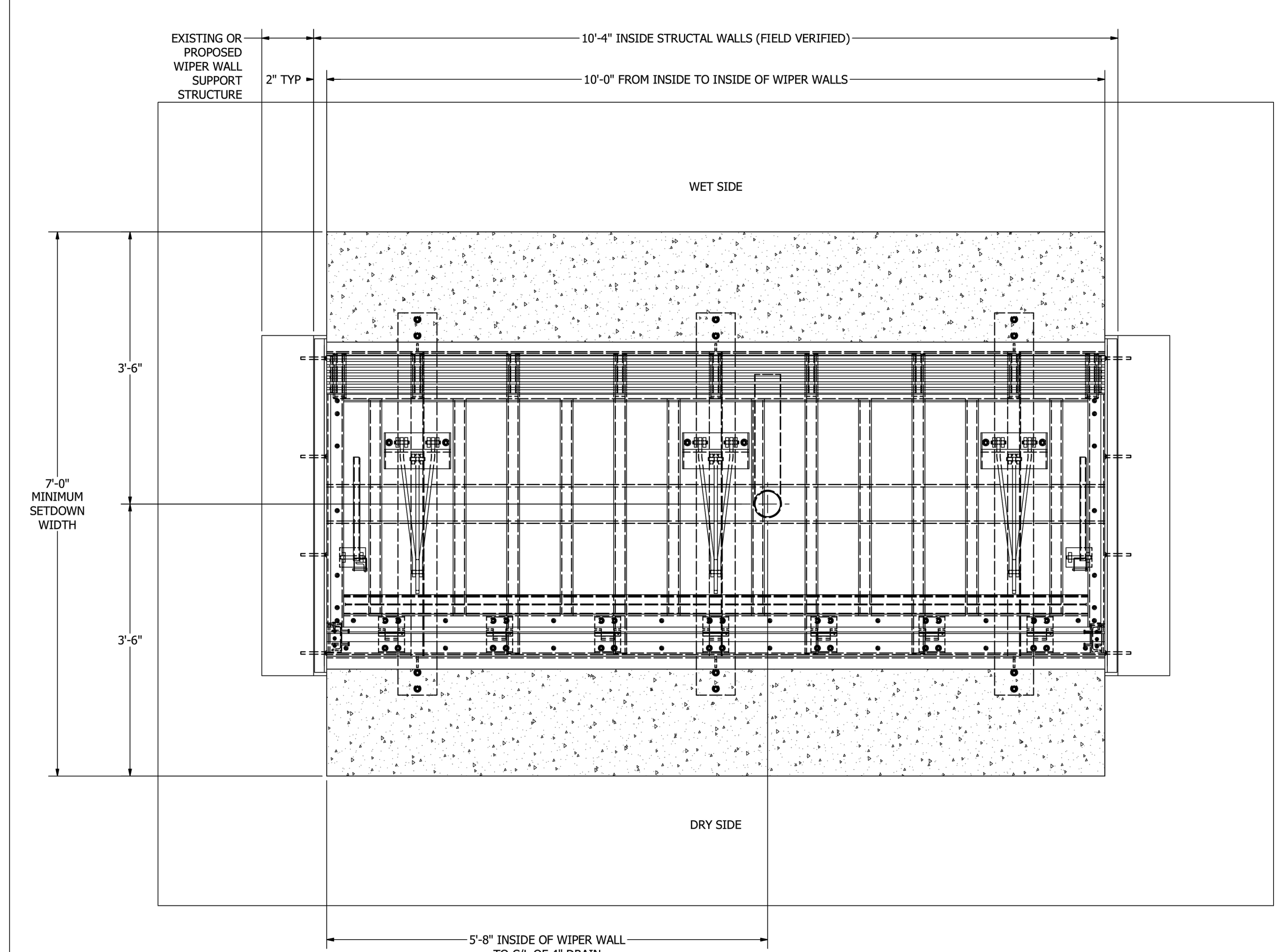
DETAIL T
(PLACE GRATING TUBING, SPACER, AND STOP AT ENDS OF GATE, AND ALSO EQUALLY SPACED)

TYP LID AND PAN LAYOUT

PARTS LIST	
ITEM	DESCRIPTION
1	TYPICAL 2"x2"x1/4" LID STIFFENER TUBE
2	TYPICAL 2"x2"x1/4" PAN STIFFENER TUBE
3	TYPICAL GRATING
4	TYPICAL PAN ANCHOR PLATE
5	TYPICAL LID ANCHOR PLATE AND RETENTION ARMS
6	TYPICAL HINGE DETAIL
7	TYPICAL 4" VERTICAL AND 6" HORIZONTA LINSTALL BRACKETS
8	6"x2" CONTINUOUS DRAIN TROUGH

FloodBreak REVOLUTIONARY FLOOD CONTROL
DEMO - VEHICULAR GATE
STANDARD LOCATION
VEHICULAR GATE
10'-0" L x 3'-0" H

VG# 0001		
REV 0		
SCALE	VARIES	
DRAWN	A. JOLLY	8/1/2018
CHECKED	N. EASTMAN	8/1/2018
APPROVED	M. POSADA	8/1/2018
SHEET 3 OF 10		



LID AND PAN INSTALLATION VIEW
(WITH CONCRETE SET-DOWN)

GENERAL FORMULA FOR SET-DOWN:
GATE HEIGHT + 48" = WIDTH
GATE LENGTH + 4" = LENGTH
12" TOPPING SLAB = DEPTH

FloodBreak REVOLUTIONARY FLOOD CONTROL
DEMO - VEHICULAR GATE
STANDARD LOCATION
VEHICULAR GATE
10'-0" L x 3'-0" H

VG# 0001		
REV 0		
SCALE	VARIES	
DRAWN	A. JOLLY	8/1/2018
CHECKED	N. EASTMAN	8/1/2018
APPROVED	M. POSADA	8/1/2018
SHEET 4 OF 10		

WOOD PATEL
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Civil Engineering
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602.335.8500
www.woodpatel.com

Call at least two full working days before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

FAIRMONT SCOTTSDALE PRINCESS GUEST ROOM ADDITION

CONCEPT GRADING, DRAINAGE, WATER & SEWER
SCOTTSDALE, ARIZONA
DETAILS

REV	DESCRIPTION	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO. 36382
DARIN L. MOORE
Date Signed 11/22/23
ARIZONA, U.S.A.
EXPIRES 06-30-25

SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A
DATE	11/22/2023
JOB NUMBER	215319.50
SHEET	B-C04 OF 4

CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: DLH / JRS

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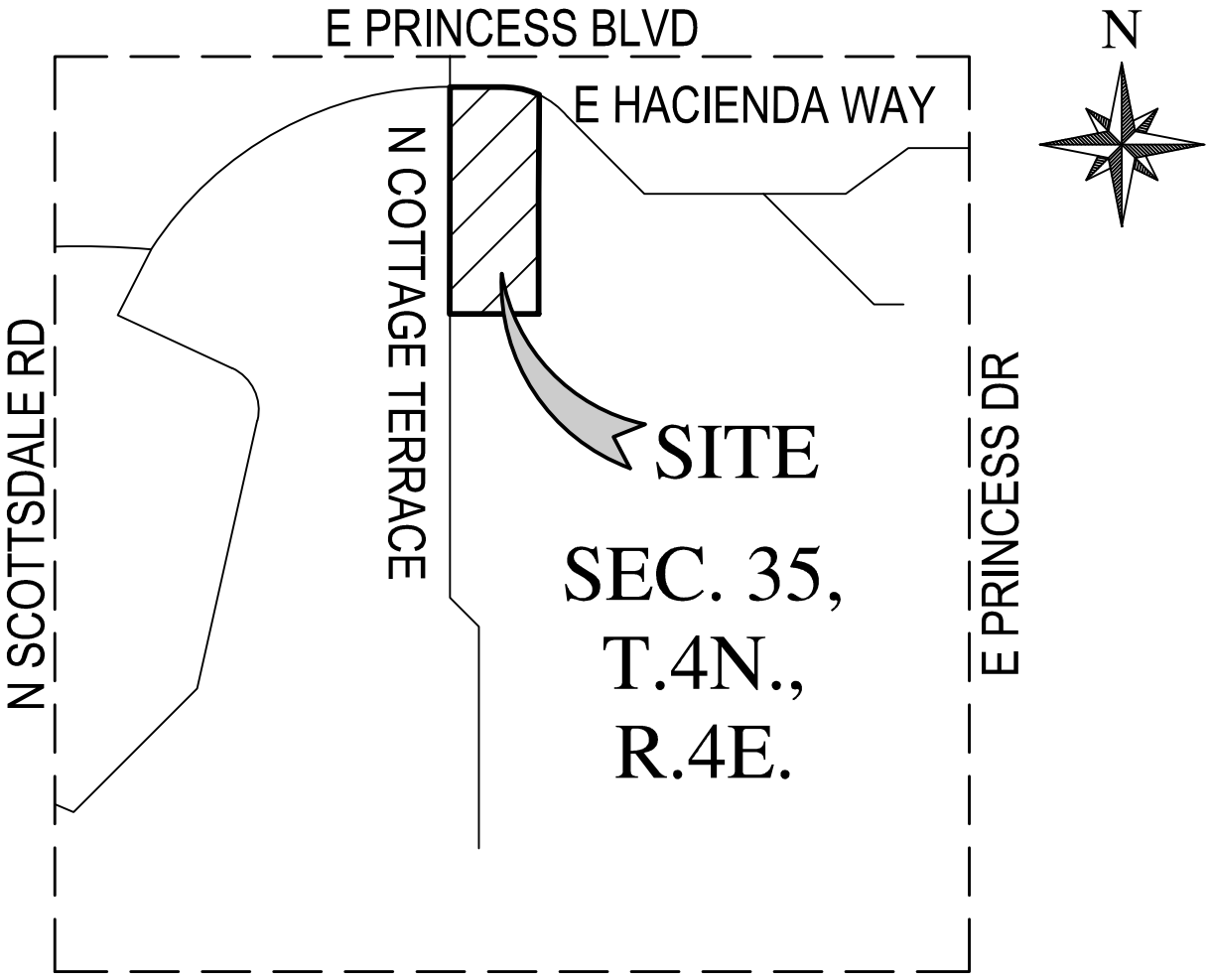
EXHIBIT 1 – VICINITY MAP



VICINITY MAP

N.T.S.

NOT
FOR
CONSTRUCTION
OR RECORDING

WOOD PATEL

FAIRMONT SCOTTSDALE PRINCESS

GUEST ROOM ADDITION
VICINITY MAP EXHIBIT

DATE	11/22/2023	SCALE	N.T.S	SHEET	1 OF 1
JOB NO.	215319.50	DESIGN	AJS	CHECK	RS
		DRAWN	AJS	RFI #	

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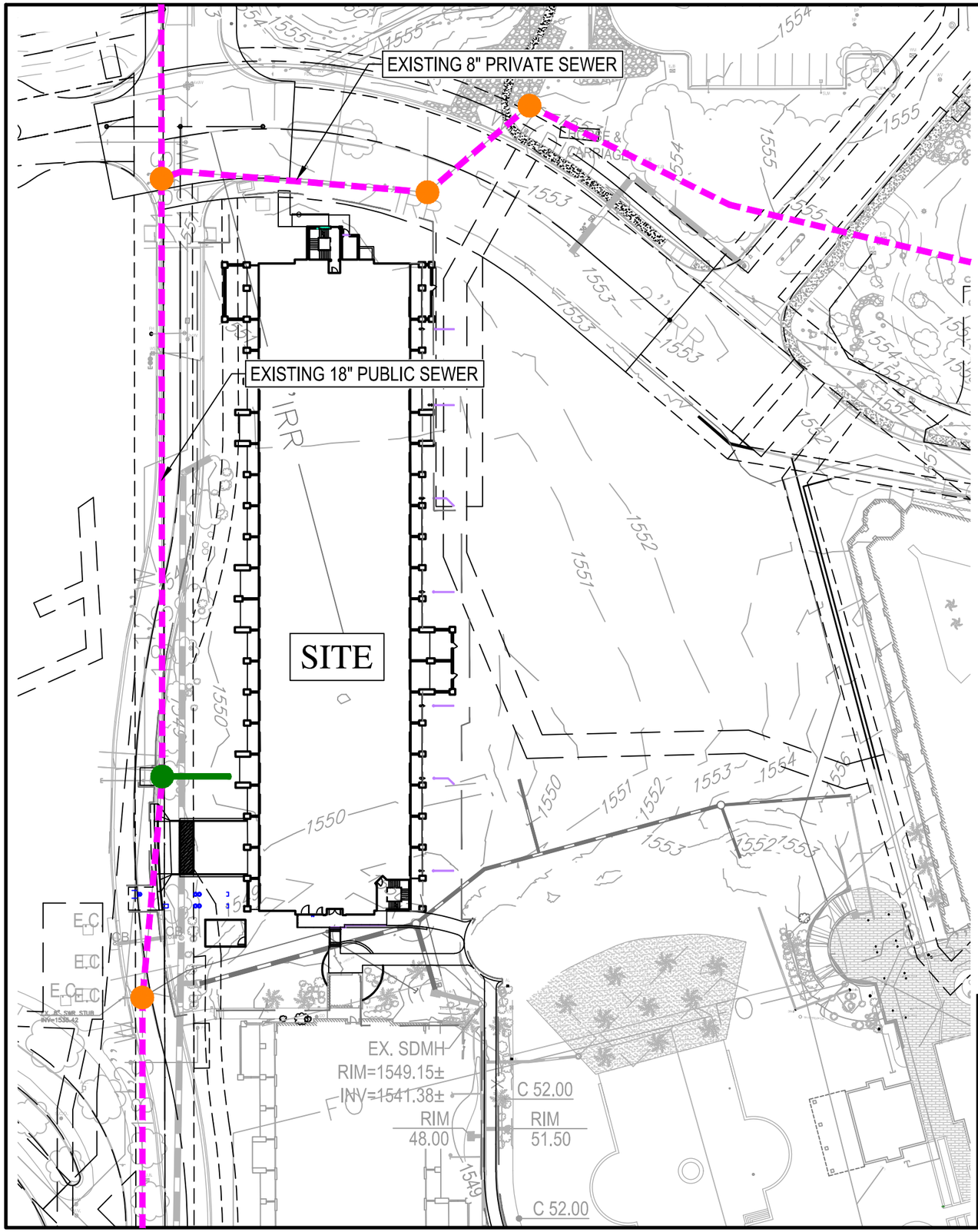
EXHIBIT 2 – WASTEWATER EXHIBIT



N

0 30 60

Horz. 1 in. = 60 ft.

LEGEND

- EXISTING SEWER
- PROPOSED 6" SEWER
- PROPERTY BOUNDARY
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE

NOT FOR CONSTRUCTION OR RECORDING

WOOD PATEL

FAIRMONT SCOTTSDALE PRINCESS

GUEST ROOM ADDITION
WASTEWATER EXHIBIT 2

DATE	11/22/2023	SCALE	1" = 60'	SHEET	1 OF 1
JOB NO.	215319.50	DESIGN	AJS	DRAWN	AJS

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