

GENERAL NOTES (CITY OF MESA):

- (REVISED 03-15-18) (2018 VERSION)
- ALL WORK AND MATERIALS SHALL CONFORM TO CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS AND AS AMENDED BY THE CITY OF MESA. ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE AMENDED SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
 - THE INFORMATION SHOWN ON DRAWINGS CONCERNING THE TYPE AND LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER OR THE ENGINEER'S AGENT. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.
 - CALL 602-263-1100 OR 811 FOR BLUE STAKE SERVICES.
 - CALL SALT RIVER POWER FOR POLE BRACING, ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT 602-236-8888.
 - CALL CITY OF MESA ELECTRICAL FOR POLE BRACING, ELECTRICAL SERVICE OR CONSTRUCTION SCHEDULING AT 480-644-2251 WITHIN CITY OF MESA ELECTRICAL SERVICE TERRITORY (DOWNTOWN MESA).
 - WHEN EXCAVATING IN OR ADJACENT TO A CITY PARK OR AQUATIC FACILITY THE CONTRACTOR SHALL CONTACT AQUATICS AND PARKS MAINTENANCE AT 480-644-3097 TO REQUEST ASSISTANCE IN LOCATING UNDERGROUND UTILITY FACILITIES.
 - WHEN EXCAVATING IN OR ADJACENT TO LANDSCAPING WITHIN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL CONTACT TRANSPORTATION FIELD OPERATIONS AT 480-644-3380 TO REQUEST ASSISTANCE IN LOCATING UNDERGROUND IRRIGATION FACILITIES.
 - TRAFFIC CONTROL SHALL CONFORM TO THE CITY OF MESA TEMPORARY TRAFFIC CONTROL MANUAL. ELECTRONIC COPIES ARE AVAILABLE AT <http://www.mesaaz.gov/business/barricading-temporary-traffic-control-permits>. HARD COPIES CAN BE MADE AVAILABLE AT DEVELOPMENT SERVICES, 55 N. CENTER ST., MESA, ARIZONA
 - CONTRACTOR TO NOTIFY TRAFFIC OPERATIONS AT 480-644-3126 PRIOR TO SIGN REMOVAL AND WHEN READY TO PERMANENTLY RELOCATE SIGN.
 - CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED UNLESS OTHERWISE INDICATED, AND COORDINATE ALL IRRIGATION DRY-UPS, RELOCATIONS, AND REMOVALS BY OTHERS.
 - CONTRACTOR SHALL POT HOLE EXISTING UTILITIES AHEAD OF CONSTRUCTION TO ALLOW FOR ANY NECESSARY ADJUSTMENTS IN GRADE LINE AND TO VERIFY PIPE MATERIALS FOR ORDERING THE APPROPRIATE TRANSITION AND TIE-IN FITTINGS THAT MAY BE REQUIRED.
 - THE CONTRACTOR IS RESPONSIBLE TO REMOVE ALL ABANDONED UTILITIES THAT INTERFERE WITH PROPOSED IMPROVEMENTS. THE CITY OF MESA UTILITIES DEPARTMENT LOCATING SECTION WILL ASSIST THE CONTRACTOR AS NEEDED, IN DETERMINING IF THE UTILITY (GAS, WATER, AND WASTEWATER ONLY) IS ABANDONED BY CALLING 480-644-4500.
 - PRIOR TO START OF CONSTRUCTION ON PRIVATE PROPERTY (EASEMENTS), THE CONTRACTOR SHALL GIVE THE OWNER SUFFICIENT TIME (MINIMUM 48 HOURS) TO REMOVE ANY ITEMS IN CONFLICT WITH CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE TO REMOVE AND REPLACE ALL OTHER CONFLICTS AS REQUIRED.
 - THE CONTRACTOR SHALL COORDINATE WORK SCHEDULES TO PREVENT ANY CONFLICTING WORK CONDITIONS WITH THE CITY OF MESA UTILITY AND TRANSPORTATION CREWS.
 - THE CONTRACTOR IS ADVISED THAT A DUST CONTROL PERMIT AND A DUST CONTROL PLAN MAY BE REQUIRED BY THE MARICOPA COUNTY AIR QUALITY DEPARTMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THIS PERMIT, IF NECESSARY, AND COMPLY WITH ITS REQUIREMENTS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A COPY OF THE DUST CONTROL PERMIT AND DUST CONTROL PLAN TO THE CITY FOR REVIEW.
 - INSPECTIONS SHALL BE PROVIDED BY THE CITY OF MESA. THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTION DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION.
 - THE JOB SITE SHALL BE CLEANED OF ANY DEBRIS OR SPOIL RESULTING FROM THIS PROJECT AT THE COMPLETION OF CONSTRUCTION.
 - ALL EQUIPMENT AND MATERIALS NOT SHOWN OR SPECIFIED ON THE PLANS OR SPECIFICATIONS, BUT REQUIRED TO COMPLETE THIS PROJECT, SHALL BE SUPPLIED BY THE CONTRACTOR AS PART OF THIS CONTRACT WORK (NO ADDITIONAL COST TO THE CITY).
 - WHEREVER PAVEMENT REPLACEMENT PER MESA STD DETAIL M-19.04.1 OR MAG STD DETAIL 200 IS REFERRED TO WITHIN THESE PLANS, BACKFILLING SHALL BE PER THE CITY OF MESA STREET TRENCH BACKFILLING AND PAVEMENT REPLACEMENT POLICY STATEMENT, REVISED SEPTEMBER 29, 1999.
 - FOR PURPOSES OF PAVEMENT PER MAG STD DETAIL 200 OR MESA STD DETAIL M-19.04.1, INTERSECTIONS ARE DEFINED BY THE CURB RETURNS IN ALL DIRECTIONS.
 - ANY SURVEY MARKERS DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND BY A REGISTERED LAND SURVEYOR AT NO ADDITIONAL COST TO THE CITY.
 - ALL EXISTING PAVEMENT MARKINGS, SIGNS, AND SIGNAL EQUIPMENT THAT ARE NOT PART OF THIS PROJECT BUT NEED TO BE REMOVED, REPLACED, RELOCATED, OR REPAIRED BECAUSE OF CONTRACTOR'S WORK WILL BE DONE AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS ADVISED THAT DAMAGE TO ANY PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY INSPECTOR. DEPENDING ON DAMAGES, ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES OR SYSTEMS AS A RESULT OF CONTRACTOR'S NEGLIGENCE SHALL BE BORNE BY THE CONTRACTOR.

UTILITY TABLE

UTILITY	UTILITY COMPANY	CONTACT	DATE CONTACTED	DATE RESPONDED
WATER	CITY OF MESA	(480) 644-4273	1/30/24	
SEWER	CITY OF MESA	(480) 644-4273	1/30/24	
POWER	SALT RIVER PROJECT	(602) 236-7726	7/2/24	
COMM	COX COMMUNICATIONS	(623) 792-5506	7/2/24	
FIBER	GIGAPOWER, LLC	INFO@GIGAPOWER.COM	7/2/24	

R.B. WILLIAMS & ASSOCIATES, INC. NOTES TO CONTRACTOR

- ANY AMBIGUITIES OR DEFICIENCIES DISCOVERED ON THESE PLANS ARE TO BE RESOLVED BY R.B. WILLIAMS & ASSOCIATES, INC. ANYONE ELSE WHO MODIFIES THE PLANS OR THE DESIGNS ON THEM OR RESOLVES AMBIGUITIES OR DEFICIENCIES BECOMES RESPONSIBLE FOR HIS MODIFICATION OR DECISION.
- CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL TIE-IN LOCATIONS INCLUDING PAVEMENT MATCHING AT BOUNDARIES AND UTILITY CONNECTIONS PRIOR BEGINNING OF THE WORK.
- THE ENGINEER MAKES NO GUARANTEE REGARDING THE LOCATION OR ELEVATION OF EXISTING UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CALL BLUE STAKE FOR ALL UTILITIES.
- THE CONTRACTOR IS RESPONSIBLE TO MAKE HIS OWN ESTIMATE OF EARTHWORK REQUIREMENTS FOR THE PROJECT AND IS RESPONSIBLE TO IMPORT OR EXPORT MATERIAL AS REQUIRED TO ACCOMPLISH THE GRADING AS SHOWN ON THESE PLANS AT NO EXTRA COST TO THE OWNER.
- THESE QUANTITIES ARE FOR PERMITTING PURPOSES ONLY. THE CONTRACTOR IS TO DETERMINE HIS OWN QUANTITIES.

APPROVALS

ROOSEVELT WATER CONSERVATION DISTRICT

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION, PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES; THE SATISFACTORY PERFORMANCE OF HIS WORK. THE DISTRICT'S REVIEW OF THE PLANS IS A VOLUNTARY AND DISCRETIONARY ACTION WHICH IS NOT MANDATED BY STATE STATUTE. THE DISTRICT'S REVIEW OF THE PLANS IS SOLELY FOR THE DISTRICT'S BENEFIT, CONDUCTED WITH ONLY THE DISTRICT'S INTEREST IN MIND, AND SHOULD NOT BE RELIED UPON BY ANY THIRD PARTY. BY REVIEWING THE PLANS THE DISTRICT DOES NOT ASSUME ANY DUTY TO THIRD PARTIES.

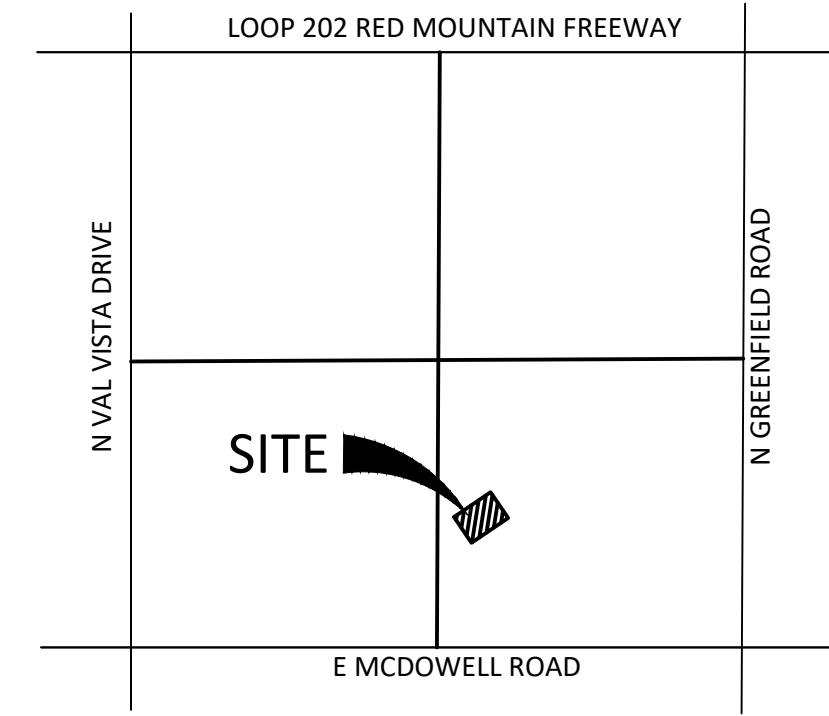
ENGINEER: _____ DATE: _____
 RWCD: _____ DATE: _____

FALCON VIEW INDUSTRIAL PARK (SALT WORKS)

3014 N MAPLE STREET
MESA, AZ 85215

GRADING & DRAINAGE PLAN WITH OFFSITE IMPROVEMENTS

A.P.N.: 141-25-068 COMMONS INDUSTRIAL PARK AT FALCON VIEW UNIT 1



VICINITY MAP
T2N, R6E, S 33 (N.T.S.)

LEGAL DESCRIPTION

LOT 7, THE COMMONS INDUSTRIAL PARK AT FALCON VIEW UNIT 1, ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, RECORDED IN BOOK 466 OF MAPS, PAGE 34.

APN: 141-25-068

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF DEVELOPMENT OF A VACANT LOT, FOR A NEW 10,644 S.F. INDUSTRIAL BUILDING. BUILDING TO BE USED FOR LIGHT-MANUFACTURING/WAREHOUSE SPACE. NEW BUILDING TO INCLUDE OFFICE SPACE, RESTROOMS, AND WAREHOUSE. SITE IMPROVEMENTS INCLUDE NEW LANDSCAPE/ RETENTION, NEW ASPHALT PARKING LOT W/ ACCESS GATES, NEW SIDEWALKS AND TRASH ENCLOSURES.

DRAINAGE STATEMENT

THE SUBJECT SITE DOES LIES WITHIN ZONE AH, A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% CHANCE ANNUAL FLOOD. ZONE AH IS DESCRIBED AS FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY AREAS OF PONDING); BASE FLOOD ELEVATIONS DETERMINED. THE BASE FLOOD ELEVATION IN THIS AREA IS 1356.00.

OFFSITE FLOWS DO NOT AFFECT THE SUBJECT SITE
 RETENTION PROVIDED IS FOR 100YR - 2HR STORM EVENT
 EXTREME STORM OUTFALLS THE SITE AT THE NORTHEAST AT THE ELEVATION OF 1403.16'

FLOOD PLAIN

FLOOD ZONE AH PER FEMA FIRM PANEL 2280L, MAP NO. 04013C 2280L (CITY OF MESA MAP NO. 040048 PANEL 2280L) REVISED 10/16/23.

RETENTION CALCULATION

VOLUME REQUIRED
 TOTAL CONTRIBUTING AREA A (INCLUDES HALF STREET)= 44,453 SF
 RUNOFF COEFFICIENT C = 0.95 (PAVEMENT/ROOF)
 100 YR, 2 HR PRECIPITATION P = 2.16 INCHES
 TOTAL VOLUME REQUIRED = C X P X A
 0.95 X (2.2/12) X 44,453 = 7,742 CF

VOLUME PROVIDED
 ONSITE RETENTION WILL BE PROVIDED VIA UNDERGROUND RETENTION IN 10' DIA CMP WHICH PROVIDES 78.5 CF OF STORAGE PER LINEAL FOOT OF PIPE.

VOLUME PROVIDED = 7,742 CF / 78.5 CF/ LF = 99 LF OF 10' DIA CMP
 VP = 7,772 CF

BENCHMARK

CITY OF MESA BENCHMARK: BRASS TAG AT INTERSECTION OF GREENFIELD DRIVE AND MCDOWELL ROAD.
 2020/2021 COM SMARTNET NAVD88 ELEVATION: 1364.79

QUANTITIES IN ROW/EASEMENTS

NO.	DESCRIPTION	QUANTITY	UNIT
PAVING NOTES			
1A	3.5" AC/5" ABC PAVEMENT PER PAVEMENT SECTION A, SEE SHEET GP02	37	SY
2A	6 INCH SINGLE CURB PER MAG STD DTL 222 TYPE A	12	LF
2B	6 INCH V.C.&G. PER MAG STD DTL 220 TYPE A	13	LF
7	8' HIGH MASONRY WALL, SEE ARCHITECTURAL PLANS	20	LF
10	SIDEWALK PER MAG STD DTL 230, WIDTH PER PLAN	15	SF
13	DRIVEWAY PER COM STD DTL M-42	1	EA
WATER NOTES			
1	INSTALL 6" DIP CLASS 350 WATERLINE, POLYETHYLENE WRAP, PER COM STD DTL M-19.04.1	464	LF
2	INSTALL 8"x6" TAPPING SLEEVE AND VALVE, BOX AND COVER PER MAG STD DTL 340 WITH THRUST BLOCK PER MAG STD DTL 380 AND VALVE BLOCK PER MAG STD DTL 301	2	EA
3	INSTALL 1.5" TYPE "K" COOPER PIPE, BOX AND METER PER COM STD DTLS M-49.01, M-49.02 & M-49.03	3	LF
5	INSTALL 6" GATE VALVE W/ B&C PER MAG STD DTL 301 & 391-1	2	EA
TYPE C			
9	WATERLINE FITTINGS WITH RESTRAINED JOINTS PER MAG STD DTL 303-1 & 303-2 AND THRUST BLOCKS PER MAG STD DTL 380	4	EA
SEWER NOTES			
1	6" PVC SDR-35 SEWER LINE PER COM STD DTL M-19.04.1	12	LF
2	CONNECT TO EXISTING SEWER MAIN PER MAG STD DTL 440-1	1	EA
REMOVAL NOTES			
1	SAWCUT, REMOVE, AND REPLACE (WHERE APPLICABLE) EXISTING PAVEMENT, BACKFILLING & PAVEMENT REPLACEMENT PER C.O.M. STD DTL M-19.01 AND M-19.04.1	12	SY
2	SAWCUT, REMOVE, AND REPLACE (WHERE APPLICABLE) EXISTING SIDEWALK IN KIND TO THE NEAREST JOINT	216	SF
3	SAWCUT, REMOVE, AND REPLACE (WHERE APPLICABLE) EXISTING VC&G IN KIND	54	LF
4	ABANDON EXISTING SEWER SERVICE IN PLACE PER COM ENGINEERING & DESIGN STANDARDS SECTION 434	1	EA

LEGEND

NOT ALL SYMBOLS MAY BE USED

	PROPERTY LINE	B/C	BACK OF CURB
	MONUMENT LINE	ROW	RIGHT-OF-WAY
	BUILDING SETBACK	SW	SIDEWALK
	EASEMENT	C	CONCRETE
	FLOW LINE	FG	FINISHED GRADE
	SLOPE	TC	TOP OF CURB
	FLOW DIRECTION	P	PAVEMENT
	GRADE BREAK	BW	BOTTOM OF WALL
	GRADE CHANGE	FF	FINISH FLOOR
	SAWCUT	BCHH	BRASS CAP IN HANDHOLE
	PAVEMENT SECTION A	SSMH	SANITARY SEWER MANHOLE
	CONCRETE	INV	INVERT
	NEW/EX LIGHT POLE	HW	HIGH WATER
	NEW/EX SEWER MANHOLE	VP	VOLUME PROVIDED
	NEW/EX POWER POLE	EX	EXISTING
	BRASS CAP	XG	EXISTING GRADE
	FOUND PROPERTY CORNER	TW	TOP OF WALL
	PROPERTY CORNER NOTHING FOUND	TF	TOP OF FOOTING
	FIRE HYDRANT		
	WATER VALVE		

ARCHITECT/DESIGNER

SYNETIC DESIGN, INC
 1111 W UNIVERSITY DRIVE, SUITE 104
 TEMPE, AZ 85281
 CONTACT: LANCE BAKER
 PHONE: (480) 948-9766
 EMAIL: LBAKER@SDIAZ.US

ENGINEER

R.B. WILLIAMS & ASSOCIATES, INC.
 1921 SOUTH ALMA SCHOOL RD. STE 101
 MESA, AZ 85210
 PHONE: (480) 220-8243
 CONTACT: JEFF WILLIAMS
 EMAIL: JEFF@RBWILLIAMS.COM

PROPERTY AREA

GROSS SITE AREA: 40,026 SQUARE FEET
 GROSS SITE AREA: .92 ACRES
 NET SITE AREA: .92 ACRES

SITE DATA

TOTAL LOT AREA 40,026 S.F.
 EXISTING STRUCTURES: 0 S.F.
 PROPOSED STRUCTURE: 10,644 S.F.

EXISTING LOT COVERAGE: 0%
 ALLOWABLE LOT COVERAGE: 90%
 PROPOSED LOT COVERAGE: 27%

ZONING: L1

SETBACKS
 REAR = 0'
 SIDES = 0'
 FRONT = 20'

BASIS OF BEARING

THE SOUTH LINE OF SECTION 33, T2N, R6E, USING A BEARING OF N 00°00'00" E AS SHOWN ON THE FINAL PLAT OF THE COMMONS INDUSTRIAL PARK AT FALCON VIEW UNIT 1, BOOK 446, PAGE 34, MCR.

CUT-FILL QUANTITIES

CUT:	775 CY
FILL:	22 CY
NET:	753 CY (CUT)

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/LAND SURVEYOR _____ DATE _____

REGISTRATION NUMBER _____

SHEET INDEX

DESCRIPTION	SHEET NO
COVER SHEET	CS01 1
DETAILS & CROSS SECTIONS	DT01 2
GRADING & DRAINAGE PLAN	GP01 3
GRADING & DRAINAGE PLAN	GP02 4
UTILITY PLAN	UP01 5

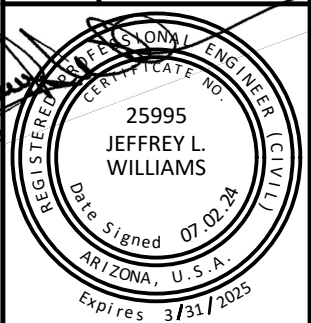
MCESD APPROVAL

APPROVED FOR: _____ DATE _____

MARICOPA COUNTY ENVIRONMENT SERVICES DEPARTMENT DATE

DWR: XX-XXXXX
 WWR: XX-XXXXX

R.B. WILLIAMS & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 1921 S. ALMA SCHOOL RD., STE. 101
 MESA, ARIZONA 85210
 PHONE: (480) 424-2352
 JEFFREY L. WILLIAMS, P.E.



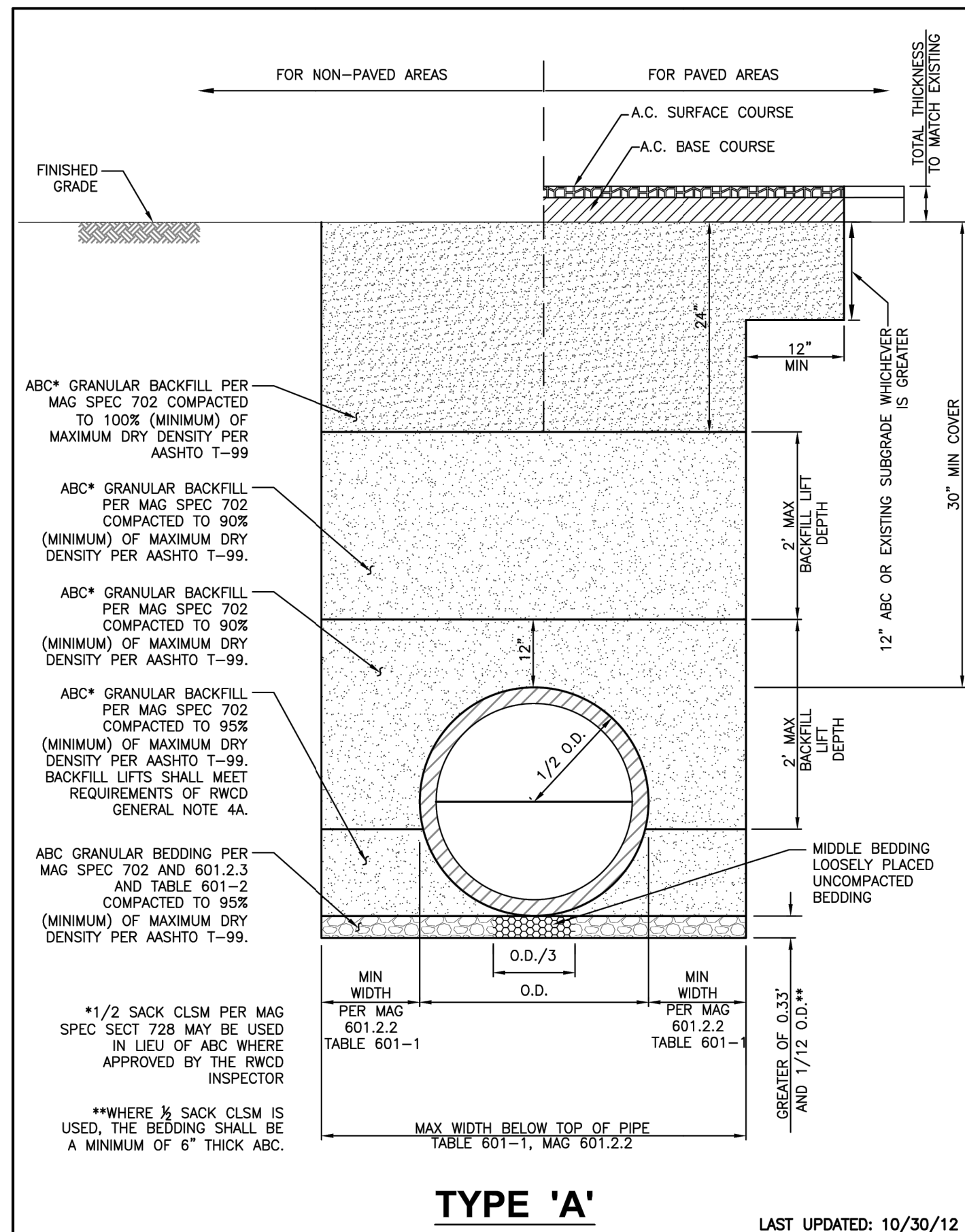
PROJECT NAME

FALCON VIEW INDUSTRIAL PARK

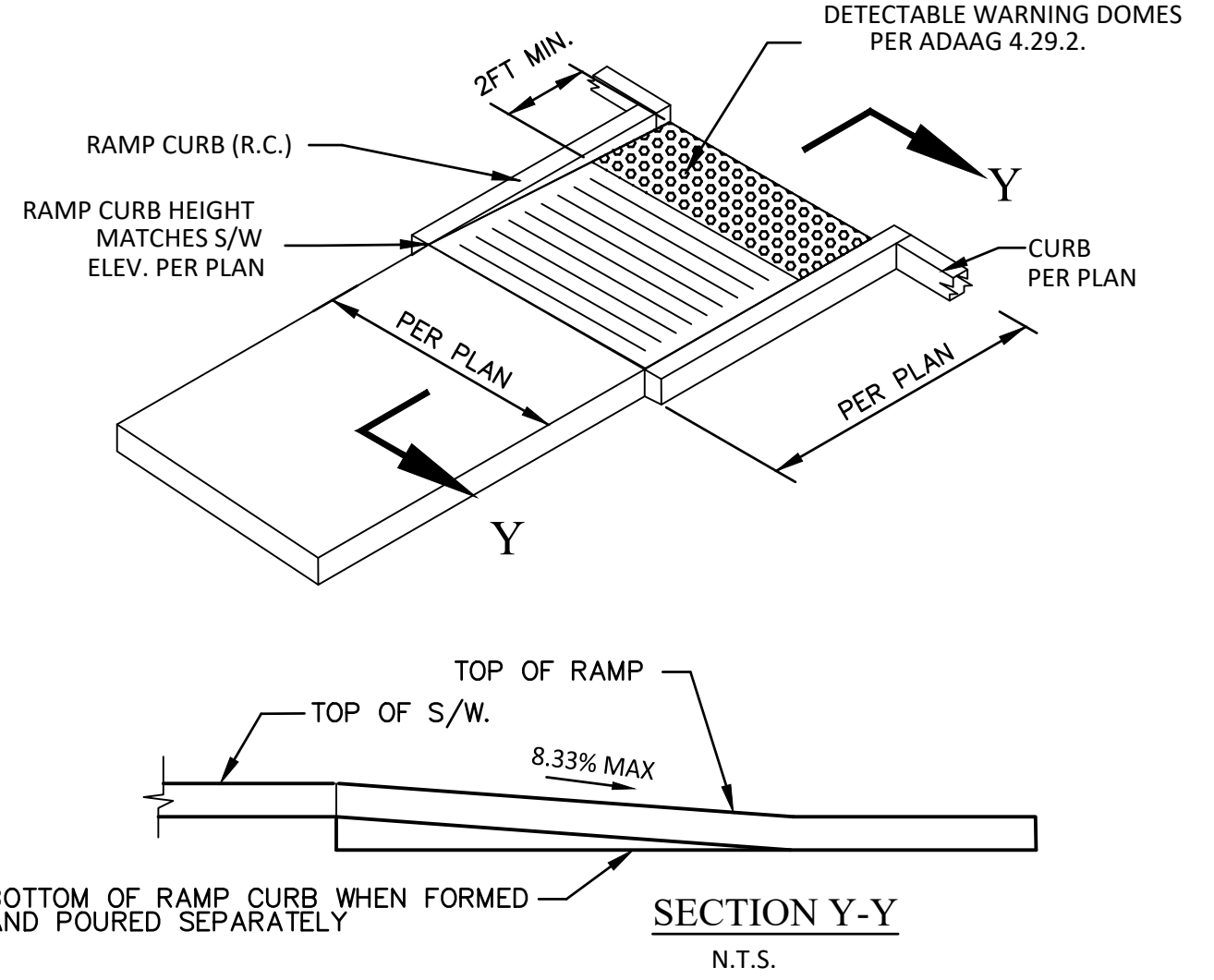
SHEET TITLE

COVER SHEET

REVISIONS:	
DATE	07.02.24
DESIGN	HRW
DRAWN	HRW
CHK'D	JLW
SUB.	
23063CS01 DWG	
CS01	
SHEET NO.	
1/5	



Roosevelt Water Conservation District		
TRENCH DETAIL - TYPE A - UNDER ROADWAY		
SHEET 1 OF 2	MINIMUM REQUIREMENTS AND NOTES	RWCD-36

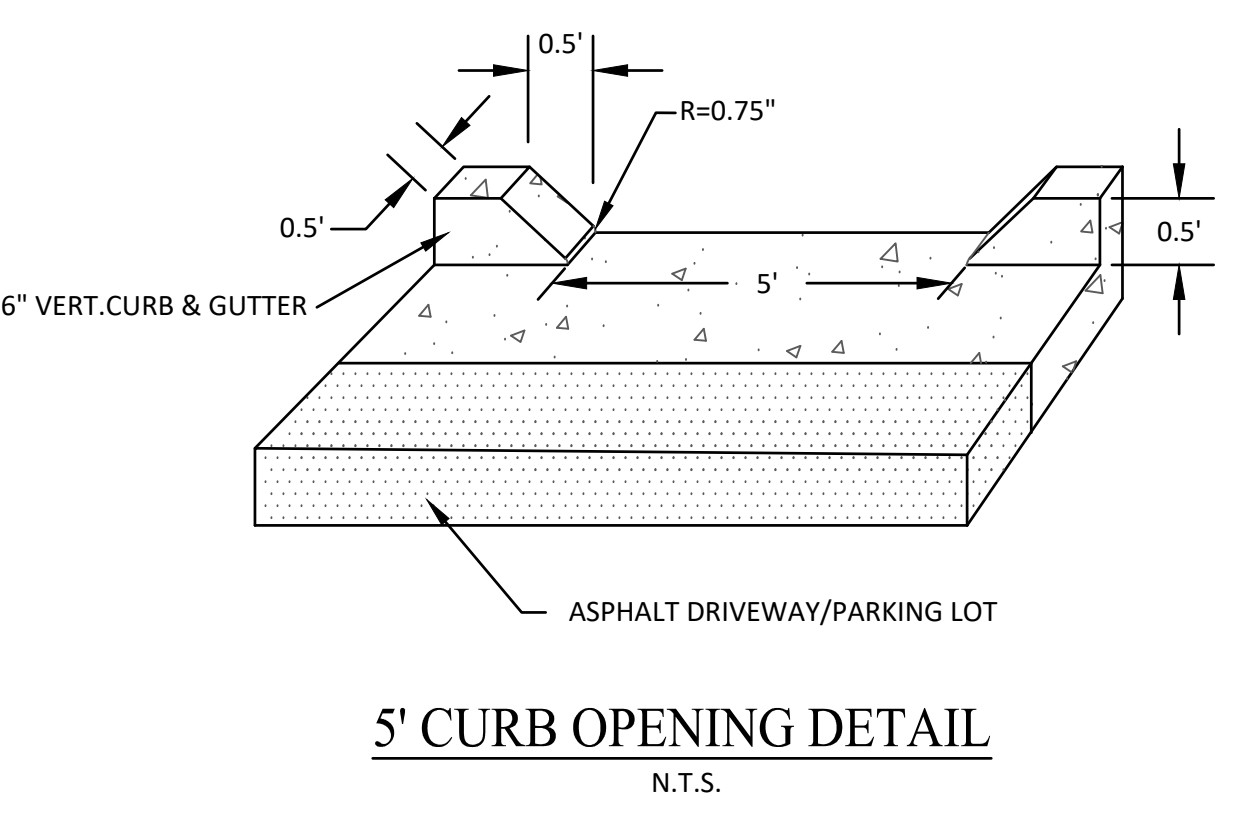


NOTE: 1. CLASS 'B' CONC. CONSTRUCTION AS PER MAG SPEC. SECT. 725.

NOTE: ALL RAMPS MUST MEET ADA ACCESSIBILITY GUIDELINES (ADAAG) STANDARDS; 2% MAX. CROSS SLOPES AND 12:1 MAX LONGITUDINAL SLOPES. TRUNCATED DOMES AS DETECTABLE WARNINGS ARE REQUIRED ON ALL RAMPS PER ADAAG SECTION 4.7.7. TRUNCATED DOMES AS DETECTABLE WARNINGS ARE REQUIRED ON ALL WALKS THAT CROSS OR ADJOIN A VEHICULAR WAY PER ADAAG SECTION 4.29.5.

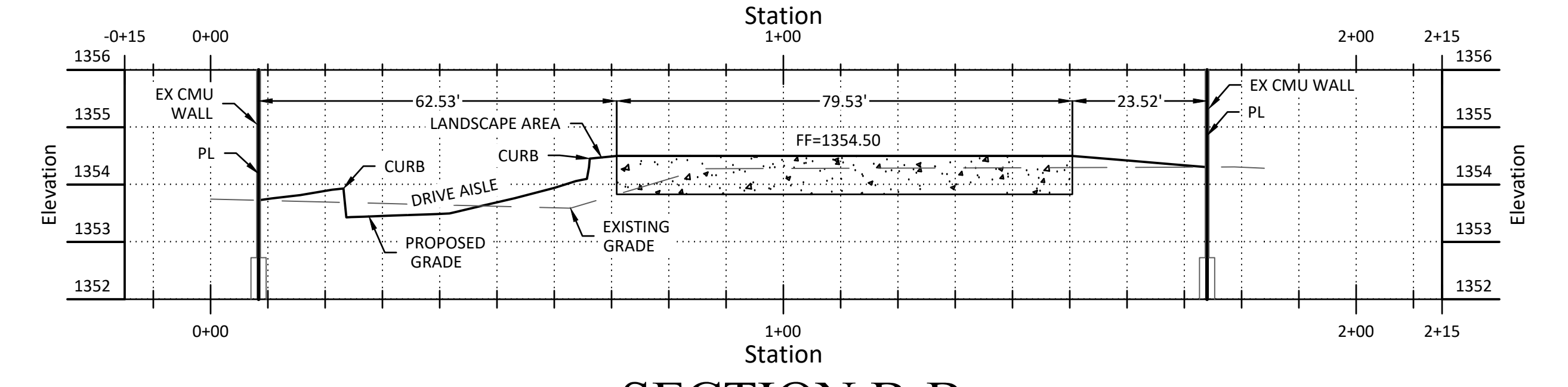
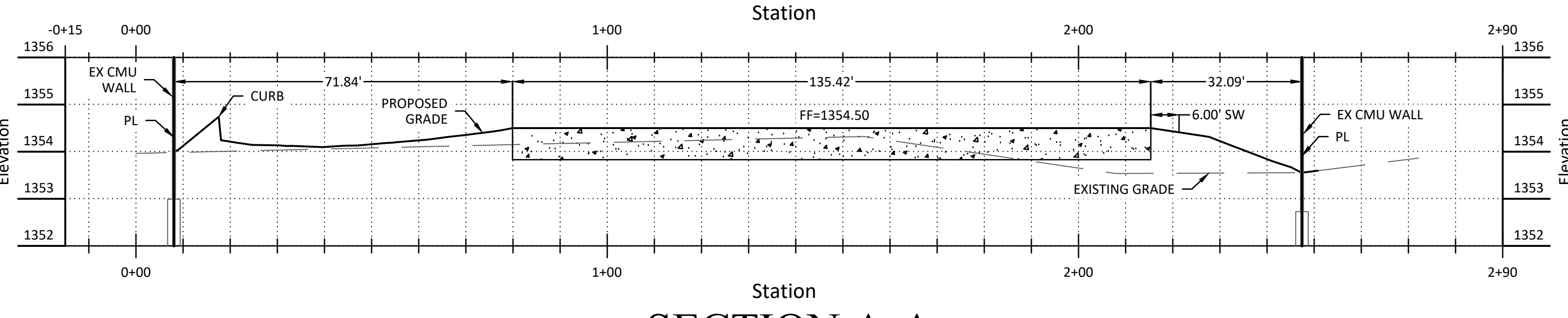
FIRE NOTES:

- A. COMPLY WITH ALL PROVISIONS AND REQUIREMENTS OF MESA BUILDING CODE (MBC) CHAPTER 33 - SAFEGUARDS DURING CONSTRUCTION, MESA FIRE CODE (MFC) CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND NFPA 241 FOR ITEMS SPECIFICALLY ADDRESSED BY MFC CHAPTER 33.
- B. REQUIRED FIRE APPARATUS ACCESS ROAD DURING CONSTRUCTION OR DEMOLITION SHALL COMPLY WITH MESA FIRE AND MEDICAL DEPARTMENT STANDARD DETAIL FPD 3310.1. THE ACCESS ROAD SHALL BE A MINIMUM OF 20 FEET WIDE OF ALL-WEATHER DRIVING SURFACE, GRADED TO DRAIN STANDING WATER AND ENGINEERED TO BEAR THE IMPOSED LOADS OF FIRE APPARATUS (78,000 LBS. / 24,000 LBS. FRONT AXLE, 54,000 LBS. REAR AXLE) WHEN ROADS ARE WET.
- C. WATER SUPPLY FOR FIRE PROTECTION. AN APPROVED WATER SUPPLY FOR CONSTRUCTION SITE SHALL MEET THE REQUIREMENTS OF MFC APPENDIX CHAPTERS B AND C. THE MINIMUM FIRE FLOW REQUIREMENT WHEN CONTRACTOR OR DEVELOPER BRINGS COMBUSTIBLE MATERIALS ON SITE IS 1,500 GPM AT 20 PSI. AT LEAST ONE FIRE HYDRANT SHALL BE WITHIN 500 FEET OF ANY COMBUSTIBLE MATERIAL AND CAPABLE OF DELIVERING THE MINIMUM FIRE FLOW REQUIREMENT. THIS HYDRANT OR HYDRANTS MAY BE EITHER TEMPORARY OR PERMANENT AS THE PROJECT SCHEDULE PERMITS.



GENERAL NOTES (RWCD):

- 1. GENERAL CONDITIONS:
 - A. ALL CONSTRUCTION OF RWCD FACILITIES SHALL CONFORM TO THE LATEST RWCD SPECIFICATIONS (WWW.RWCD.ORG) AND LATEST MAG SPECIFICATIONS.
 - B. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM RWCD BEFORE ANY WORK BEGINS THAT IMPACTS RWCD FACILITIES OR ACCESS TO RWCD FACILITIES.
 - C. IMPROVEMENT PLANS FOR RWCD FACILITIES SHALL NOT BE APPROVED UNTIL POTHOLE INFORMATION FOR CROSSING OR PARALLEL UTILITIES, OR OTHER CONFLICTS, IS RECEIVED, REVIEWED AND DEEMED ADEQUATE BY RWCD. POTHOLE RESULTS SHALL BE SEALED BY A LAND SURVEYOR OR CIVIL ENGINEER REGISTERED IN ARIZONA AND SHALL BE LOCATED BY PROJECT STATION AND OFFSET. EACH POTHOLE SHALL INCLUDE THE ELEVATIONS OF THE SURFACE AND THE TOP AND BOTTOM OF THE BURIED UTILITY BASED ON THE PROJECT DATUM.
 - D. AN APPROVED SET OF PLANS SHALL BE ON THE JOB SITE AT ALL TIMES THAT WORK IS IN PROGRESS. DEVIATION FROM THE PLANS SHALL NOT BE ALLOWED WITHOUT AN APPROVED PLAN REVISION FROM THE ENGINEER.
 - E. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MAG SPECIFICATION 401, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND CURRENT TRAFFIC BARRICADE MANUAL.
 - F. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING, IF NECESSARY, AN EXCAVATION AND DIRT MOVING PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES BARRICADE AND COMPLYING WITH ITS REQUIREMENTS FOR DUST CONTROL.
 - G. NO ACTIVITY INVOLVING AN RWCD MANHOLE SHALL OCCUR WITHOUT PRIOR AUTHORIZATION BY RWCD. THIS INCLUDES, BUT IS NOT LIMITED TO, REMOVING THE MANHOLE LID, RIM OR ANY DEVICE HOLDING THE MANHOLE LID OR RIM IN PLACE. CONTACT RWCD'S CONSTRUCTION INSPECTOR AT 480.267.8999 TO COORDINATE.
- 2. LANDSCAPE NOTES:
 - A. TREES TO BE INSTALLED ADJACENT TO ANY RWCD FACILITY SHALL BE PLANTED NO CLOSER THAN 6' FROM THE OUTSIDE EDGE OF ROOT BALL TO THE OUTSIDE EDGE OF RWCD PIPE OR THE OUTSIDE EDGE OF ANY OTHER STRUCTURE, E.G. MANHOLE, DELIVERY STRUCTURE, ETC. RWCD RESERVES THE RIGHT TO MODIFY THIS CONDITION AT ANY TIME PER OUR DISCRETION.
 - B. NO LANDSCAPE SPRINKLERS OR WATER EMITTERS ARE PERMITTED WITHIN 15 FEET OF ANY RWCD DELIVERY STRUCTURE.
 - C. THE HOME OWNER'S ASSOCIATION IS RESPONSIBLE TO MAKE REPAIRS TO LANDSCAPING (INCLUDING TREES, GROUND COVER, GRASS, ETC) WHERE IT IS DAMAGED DURING REPAIRS TO RWCD PIPE OR OTHER FACILITIES.
 - D. LANDSCAPE BOULDERS SHALL BE KEPT 15' AWAY FROM THE OUTSIDE OF RWCD MANHOLES, TURNOUT STRUCTURES, HEADWALLS, ETC.
 - E. LANDSCAPE FACILITIES SHALL ADHERE TO RWCD'S UTILITY CLEARANCE REQUIREMENTS (RWCD DETAIL 41).
 - F. LANDSCAPE IRRIGATION MAIN LINES SHALL CROSS UNDER RWCD FACILITIES PER RWCD STANDARD DETAIL 41 AND RWCD GENERAL NOTE SECTION 5. LANDSCAPE IRRIGATION LATERALS (ZONE PIPES DOWNSTREAM OF A CONTROL VALVE) 2" AND SMALLER MAY CROSS OVER THE TOP OF AN RWCD LATERAL PIPE WITH A MINIMUM OF 1" CLEARANCE. LANDSCAPE IRRIGATION LATERAL PIPES THAT ARE OVER 2" IN SIZE, OR THAT DO NOT MEET COVER AND CLEARANCE CRITERIA, SHALL CROSS UNDER THE RWCD LATERAL PER RWCD STANDARD DETAIL 41 AND RWCD GENERAL NOTE SECTION 5.
- 3. CONSTRUCTION SEQUENCE AND REQUIREMENTS:
 - A. ALL CONSTRUCTION ACTIVITIES INVOLVING THE MODIFICATIONS AND/OR REPLACEMENT OF RWCD OWNED FACILITIES SHALL BE BONDED AT A FIGURE APPROVED BY THE GENERAL MANAGER. SUCH BOND SHALL BE MADE TO THE BENEFIT OF RWCD AND WILL NOT BE RELEASED UNTIL SUCH TIMES AS THE GENERAL MANAGER OR OTHER AUTHORIZED INDIVIDUAL HAS APPROVED ALL CONSTRUCTION ACTIVITIES FOR COMPLETENESS AND CORRECTNESS.
 - B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING IRRIGATION DRY-UPS. CONTACT THE RWCD WATER DEPARTMENT AT 480.988.9586 TO SCHEDULE A DRY-UP.
 - C. THE CONTRACTOR SHALL PROVIDE A COPY OF THE FOLLOWING TO THE RWCD INSPECTOR BEFORE THE PIPE IS INSTALLED.
 - 1) RESULTS OF D-LOAD TEST ON 1% OF THE PIPE LENGTH FOR EACH DAY OF BATCH PRODUCTION.
 - 2) A CONCRETE CYLINDER BREAK ON 1% OF THE PIPE LENGTH FOR EACH DAY OF BATCH PRODUCTION.
 - 3) THE DATE OF PIPE MANUFACTURE AND CLASS OF PIPE SHALL APPEAR ON EVERY LENGTH OF PIPE DELIVERED TO THE JOBSITE. ALL PIPE SHALL HAVE A MINIMUM 14 DAYS OF CURE TIME BEFORE INSTALLATION.
 - D. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES PRIOR TO EXCAVATION AND AVOID DAMAGE TO SAME. CALL 811 OR 602.263.1100 FOR BLUE STAKE TWO WORKING DAYS PRIOR TO DIGGING. IF AN UNIDENTIFIED UTILITY IS ENCOUNTERED DURING CONSTRUCTION, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL THE UTILITY IS POTHOLED TO VERIFY RWCD CLEARANCE REQUIREMENTS ARE MET AND A PLAN TO RESOLVE CLEARANCE DEFICIENCIES, SUBMITTED BY THE CONTRACTOR, IS ACCEPTED BY RWCD.
 - E. THE CONTRACTOR SHALL ENSURE NO CONSTRUCTION DEBRIS IS ALLOWED TO ENTER ANY RWCD DITCH OR FACILITY DURING CONSTRUCTION.
 - F. WHEN RELOCATING AN EXISTING RWCD FACILITY, REMOVAL OF THE EXISTING FACILITY SHALL OCCUR ONLY DURING AN RWCD AUTHORIZED DRY-UP AND/OR AFTER THE NEW FACILITY IS OPERATIONAL.
 - G. RWCD STRUCTURES ARE TO BE POURED MONOLITHICALLY. SHOULD IT BE NECESSARY TO CONSTRUCT AN RWCD STRUCTURE USING MULTIPLE CONCRETE POURS, THE CONTRACTOR WILL BE REQUIRED TO USE AN RWCD APPROVED METHOD OF WATER STOP ON EACH STRUCTURE THAT IS TO BE CONSTRUCTED USING MULTIPLE CONCRETE POURS. CONTACT RWCD'S CONSTRUCTION INSPECTOR AT 480.267.8999 TO COORDINATE.
 - H. GRINDING AND/OR PATCHING OF NEW DELIVERY STRUCTURES, MANHOLES, HEADWALLS, AND RADIAL GATE STRUCTURES OR ANY CONCRETE STRUCTURE TO CORRECT DEFICIENCIES THAT RESULT FROM IMPROPER GRADE SETTING, OR CONSTRUCTION METHODS, OR BREAKAGE DUE TO ANY CIRCUMSTANCES SHALL NOT BE PERMITTED.
 - I. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING RWCD FACILITY (HEADWALL, PIPE, DITCH, ACCESS ROADS, ETC.) DAMAGED DURING CONSTRUCTION AS DIRECTED BY THE RWCD INSPECTOR. THE REPAIRED FACILITY SHALL BE AT THE LOCATION, ELEVATION AND GRADES PRIOR TO CONSTRUCTION OR AS DIRECTED.
 - J. RWCD MANHOLES ARE TO BE IDENTIFIED AND PROTECTED AT ALL TIMES BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO INSTALL, AT A MINIMUM, TWO (2) 2" X 4" VERTICALLY ON OPPOSITE SIDES OF EACH MANHOLE TO PROVIDE IDENTIFICATION OF THE MANHOLE. CONTACT RWCD'S CONSTRUCTION INSPECTOR AT 480.267.8999 TO COORDINATE.
- 4. TRENCH EXCAVATION:
 - A. TRENCH EXCAVATION, BACKFILLING AND COMPACTION FOR RWCD FACILITIES SHALL BE PER MAG SPEC SECTION 601, OR AS MODIFIED ON THE PLAN. BACKFILLING SHALL NOT BEGIN ON ANY PIPE UNTIL THE LINE HAS BEEN APPROVED BY RWCD'S INSPECTOR. BACKFILLING SHALL CONSIST OF ABC PLACED IN LIFT DEPTHS PER MAG SPEC 601.4.2. ALL OTHER LIFTS SHALL BE A MAX OF TWO (2) FEET. ABC BACKFILL SHALL EXTEND TO TWELVE (12) INCHES ABOVE THE TOP OF THE PIPE. COMPACTION OF THE BEDDING MATERIAL SHALL BE PER MAG SPEC 601.4.5. THE TRENCH BACKFILL SHALL BE THOROUGHLY COMPACTED TO THE DENSITIES LISTED ON THE PLAN OR AS SPECIFIED IN MAG SPEC 601.4.4, WHICHEVER IS MORE STRINGENT. MECHANICAL COMPACTION FROM THE BOTTOM OF THE TRENCH TO 1' ABOVE THE PIPE SHALL BE ACCOMPLISHED BY HAND OR WALK BEHIND EQUIPMENT SUCH AS A WACKER OR JUMPING JACK STYLE COMPACTOR, OR OTHER, AS APPROVED BY THE RWCD INSPECTOR. CONTRACTOR MAY SUBSTITUTE 1/2 SACK CLSM PER MAG SPEC SECTION 604 FOR BACKFILL UP TO SPRINGLINE. THE RWCD INSPECTOR MAY REQUIRE THE USE OF VIBRATORY EQUIPMENT IN CONJUNCTION WITH THE PLACEMENT OF CLSM MATERIAL.
 - B. COMPACTION TESTS SHALL BE PERFORMED AT ALL STRUCTURES AND AT A MINIMUM OF EVERY 300 FEET ALONG THE PIPE AND AT LOCATIONS SPECIFIED BY THE RWCD INSPECTOR. A RESPONSIBLE PARTY FOR COMPACTION TESTING SHALL BE PRESENT DURING BACKFILLING OF ALL RWCD FACILITIES (INSTALLATIONS AND REMOVALS). COPIES OF THE COMPACTION TESTS ARE TO BE SUBMITTED TO THE RWCD INSPECTOR AT THE CONCLUSION OF EACH DAY.
- 5. UTILITY CROSSINGS:
 - A. CALL THE RWCD INSPECTOR AT 480.267.8999 PRIOR TO MAKING THE UTILITY CROSSING. A PERMIT MAY BE REQUIRED FOR EACH UTILITY THAT CROSSES THE RWCD FACILITY.
 - B. UTILITIES CROSSING RWCD SHALL MEET THE CLEARANCES SHOWN IN RWCD STANDARD DETAIL 41.
 - C. WET UTILITIES (IE, WATER, SEWER, ETC.) CROSSING THE NEW RWCD IRRIGATION PIPE SHALL BE CONSTRUCTED PRIOR TO THE RWCD IRRIGATION PIPE.
 - D. THERE SHALL BE NO JOINTS IN THE WET UTILITY LINES FOR A DISTANCE OF 8' EITHER SIDE OF THE CENTER OF THE RWCD IRRIGATION PIPE.
 - E. WET UTILITIES SHALL BE BACKFILLED WITH 1/2 SACK SLURRY FROM THE UTILITY LINE UP TO 6" BELOW THE RWCD IRRIGATION PIPE FOR 7' EITHER SIDE OF THE CENTERLINE OF THE RWCD PIPE.
 - F. WHERE PROPOSED WET UTILITY LINES WILL CROSS AN EXISTING RWCD PIPE LATERAL, THE WET UTILITIES SHALL BE INSTALLED VIA HORIZONTAL EARTH AUGER BORE IN A STEEL CASING PIPE, OR IF THE RWCD PIPE IS PLANNED TO BE REMOVED, THE WET UTILITIES SHALL BE INSTALLED AFTER THE NEW RWCD FACILITY IS OPERATIONAL AND THE OLD RWCD PIPE IS REMOVED. A PROFILE OF THE CROSSING SHALL BE PROVIDED AND THE TOP OF CASING PIPE AND OUTSIDE DIAMETER OF THE RWCD IRRIGATION PIPE ELEVATIONS SHALL BE SHOWN ON THE PLANS AND MEET THE CLEARANCES SHOWN IN RWCD DETAIL 41.
 - G. WHERE PROPOSED WET UTILITY LINES WILL CROSS AN EXISTING RWCD OPEN DITCH LATERAL AND THE LATERAL WILL BE RELOCATED WITH THE CURRENT PROJECT, THE CONTRACTOR MAY REQUEST A DRY-UP FROM RWCD TO CROSS VIA OPEN CUT. IF A DRY-UP IS NOT AVAILABLE OR IF THE OPEN DITCH LATERAL IS NOT BEING RELOCATED WITH THE CURRENT PROJECT THEN THE PROPOSED WET UTILITY SHALL BE INSTALLED VIA A HORIZONTAL EARTH AUGER BORE IN A STEEL CASING PIPE. A PROFILE OF THE CROSSING SHALL BE PROVIDED AND THE TOP OF CASING PIPE AND OUTSIDE DIAMETER OF THE RWCD IRRIGATION PIPE ELEVATIONS SHALL BE SHOWN ON THE PLANS AND MEET THE CLEARANCES SHOWN IN RWCD DETAIL 41.
 - H. DRY UTILITIES MAY BE INSTALLED VIA OPEN CUT TRENCH ACROSS A PROPOSED RWCD LATERAL, IF INSTALLED BEFORE THE RWCD FACILITY IS CONSTRUCTED. IF A DRY UTILITY WILL CROSS AN EXISTING RWCD PIPE OR DITCH THAT WILL REMAIN, THE DRY UTILITY SHALL BE INSTALLED VIA A BORE. BORE PITS SHALL BE LOCATED OUTSIDE ANY RWCD PROPERTY AND SHALL BE LOCATED A SUFFICIENT DISTANCE AWAY FROM THE RWCD FACILITY SUCH THAT THE RWCD FACILITY IS NOT COMPROMISED DURING EXCAVATION OR BORING.
 - I. IF ANY EXISTING UTILITY IS FOUND TO HAVE LESS THAN 2 FT OF CLEARANCE TO THE RWCD FACILITIES, THE CONTRACTOR SHALL CONSULT WITH THE RWCD INSPECTOR AND THE OTHER UTILITY COMPANY FOR CLEARANCE AND RELOCATION REQUIREMENTS.
 - J. UTILITY CROSSINGS AT THE RWCD MAIN CANAL, EXTENSION CANAL OR DRAIN DITCH SHALL BE INSTALLED BY HORIZONTAL EARTH AUGER BORE. NO BORE PITS SHALL BE ALLOWED WITHIN RWCD PROPERTY. ALL UTILITIES SHALL BE ENCASED IN A STEEL CASING. NO UTILITIES SHALL VARY FROM UTILITY CROSSING REQUIREMENTS WITHOUT WRITTEN APPROVAL FROM RWCD.
 - K. ALL OVERHEAD WIRES THAT SUSPEND OVER THE RWCD RIGHT OF WAY SHALL HAVE 25 FEET MINIMUM OVERHEAD CLEARANCE.
- 6. RWCD INSPECTION:
 - A. CALL THE RWCD INSPECTOR AT 480.267.8999 FOR RWCD INSPECTIONS. THE CONTRACTOR SHALL COORDINATE DAILY WITH THE RWCD INSPECTOR RELATIVE TO WORK ONGOING THAT DAY AND UPCOMING WORK THAT REQUIRES INSPECTION WITHIN THE NEXT 48 HOURS.
 - B. THE CONTRACTOR SHALL PROVIDE A SAFE TRENCH FOR THE RWCD INSPECTOR TO INSPECT WORK INCLUDING SHORING AND LADDERS.
 - C. CONSTRUCTION STAKING LATH SHALL INCLUDE STATIONING CONSISTENT WITH STATIONING SHOWN ON THE APPROVED IRRIGATION PLANS.
 - D. MANHOLE AND STRUCTURE RIM ELEVATIONS MUST BE VERIFIED DURING THE CONSTRUCTION BY A "HUB" PLACED BY SURVEYORS.
 - E. RWCD MAY REJECT ANY PART OR PORTION OF THE SUBJECT PIPE AT ANY POINT DURING THE INSTALLATION PROCESS AT ITS SOLE DISCRETION. SUCH DETERMINATION WILL BE BASED ON, AMONG OTHER POINTS, CURRENT ASTM STANDARDS FOR THE PIPE.
- 7. PROJECT ACCEPTANCE:
 - A. THE JOB SITE, AT THE COMPLETION OF THE CONSTRUCTION, SHALL BE CLEANED OF ANY DEBRIS OR SPOIL RESULTING FROM THE CONSTRUCTION INCLUDING REMOVAL OF CONSTRUCTION DEBRIS FROM RWCD DITCHES.
 - B. THE OWNER/DEVELOPER SHALL ACQUIRE PRIOR AUTHORIZATION FROM THE RWCD WATER DEPARTMENT AND RWCD INSPECTOR PRIOR TO PERFORMING AN AS-BUILT SURVEY. MANHOLE LIDS MUST BE TAKEN OFF BY PIPELINE CONTRACTOR. A NO-FEE DRY-UP IS REQUIRED FOR AS-BUILT SURVEY.
 - C. THE OWNER/DEVELOPER SHALL PROVIDE CERTIFIED AS-BUILTS FOR THE LOCATION, ELEVATION AND SIZE OF ALL RWCD FACILITIES FOR RWCD RECORDS PRIOR TO RELEASING THE PROJECT BOND.
- 8. RWCD GENERAL NOTES:
 - A. RWCD'S GENERAL NOTES ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION AT ANY TIME PER OUR DISCRETION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE CONFORMANCE TO THE LATEST RWCD GENERAL NOTES. CONTACT RWCD'S CONSTRUCTION INSPECTOR AT 480.267.8999 TO RECEIVE THE MOST RECENT RWCD GENERAL NOTES.

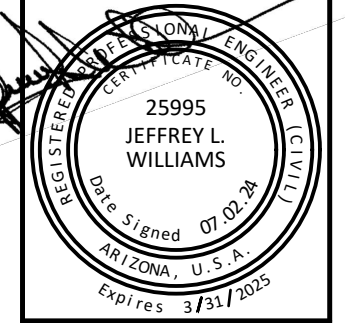


HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

SECTION A-A

SECTION B-B

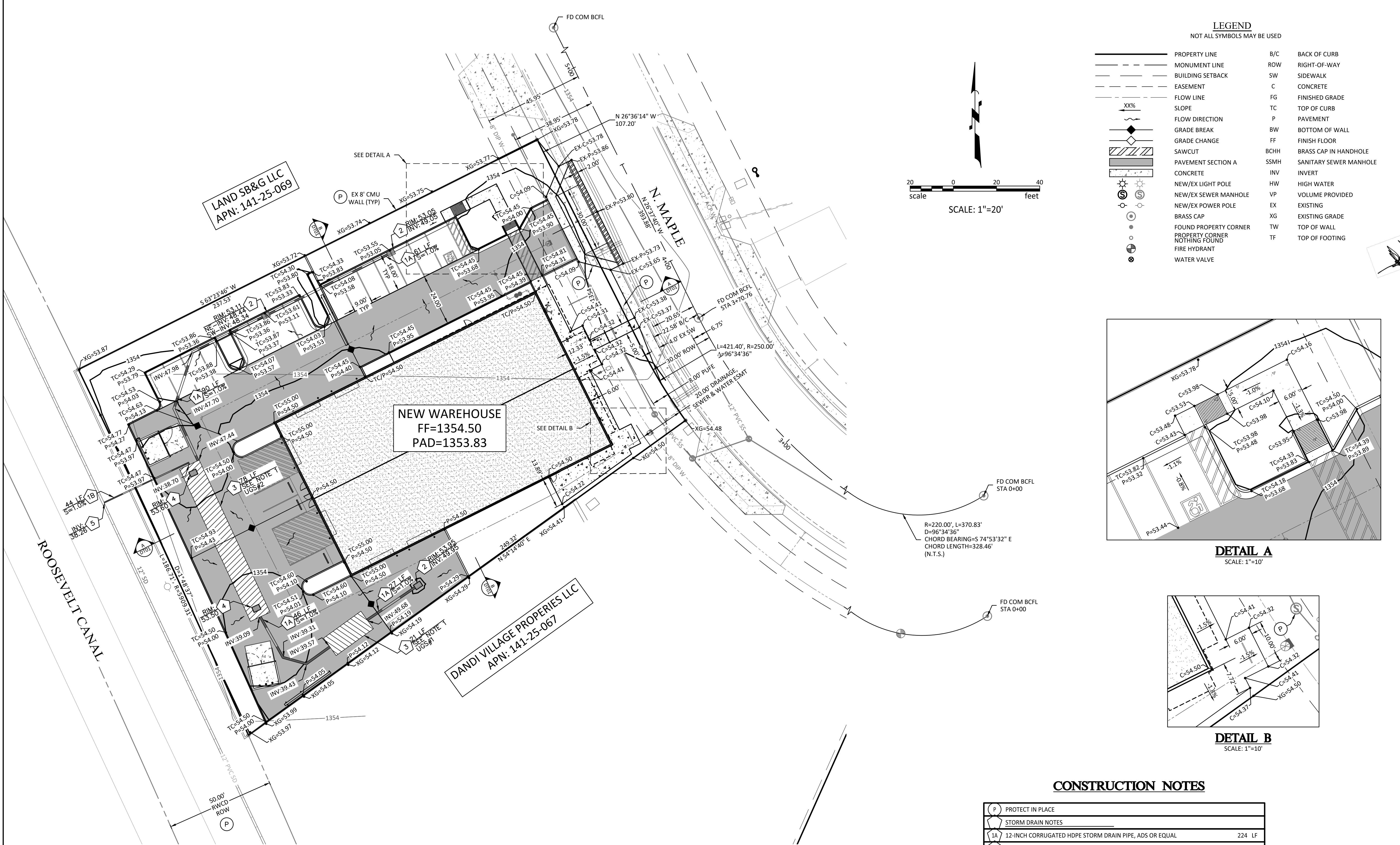
R.B. WILLIAMS & ASSOCIATES, INC.
CONSULTING ENGINEERS
1921 S. ALMA SCHOOL RD., STE 101
MESA, ARIZONA 85210
PHONE: (480) 424-2352



FALCON VIEW INDUSTRIAL PARK
3014 N WABLE
MESA, AZ 85215

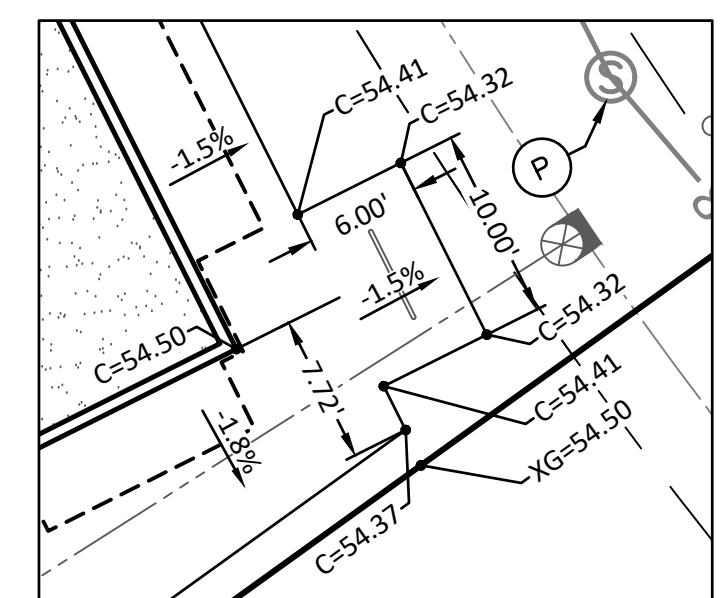
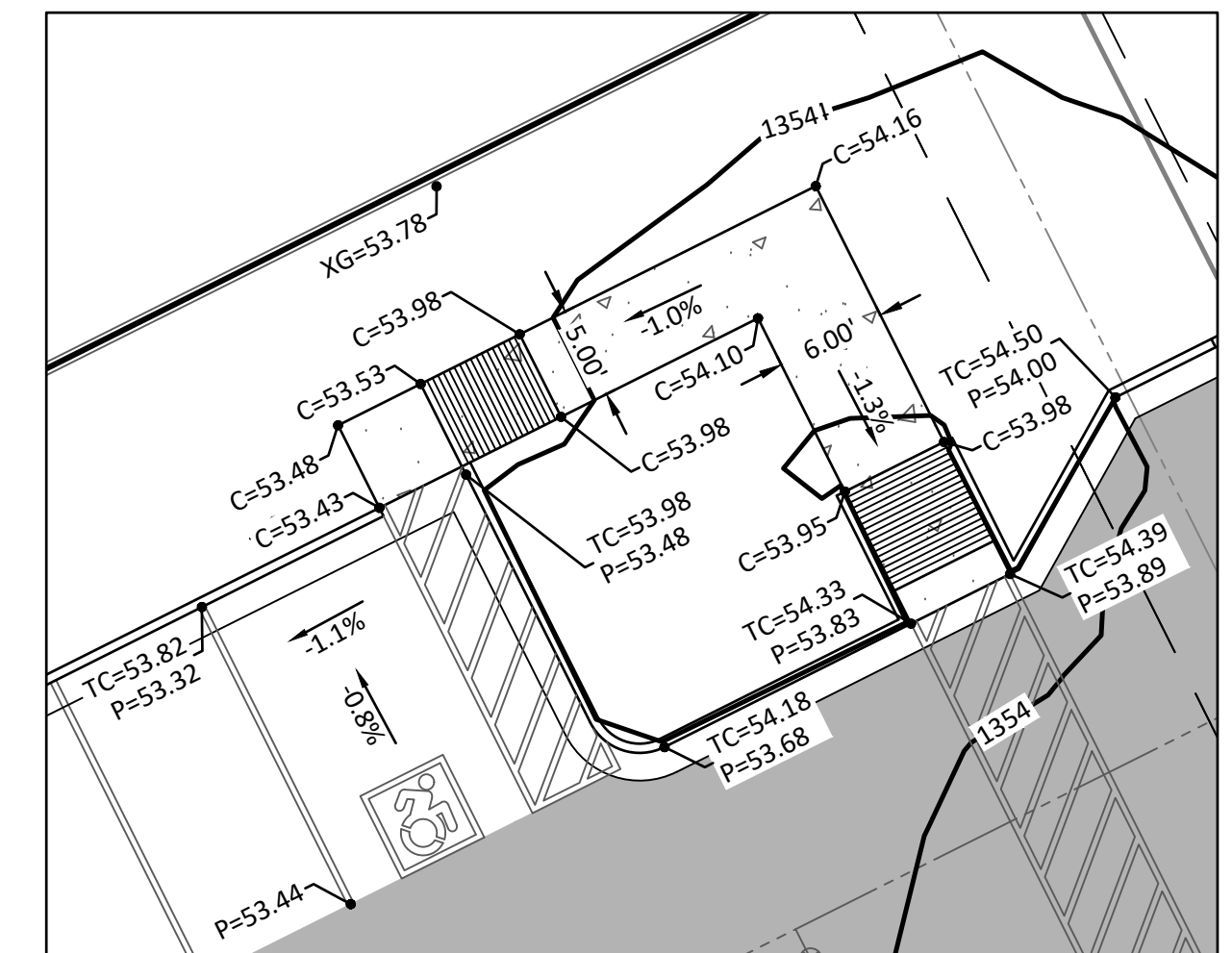
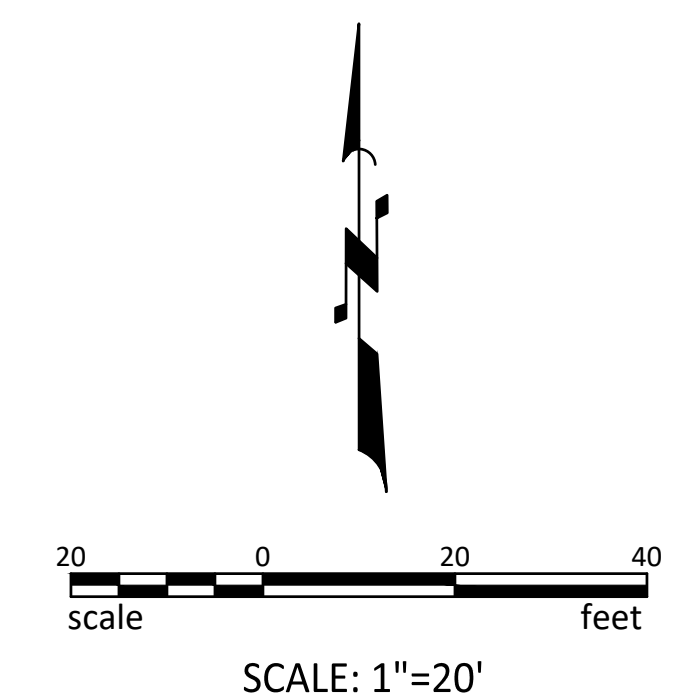
DETAILS & CROSS SECTIONS

REVISIONS:	
DATE	07.02.24
DESIGN	HRW
DRAWN	HRW
CHK'D	JLW
SUB.	
23063D101.DWG	
DT01	
SHEET NO.	
2/5	



LEGEND
NOT ALL SYMBOLS MAY BE USED

	PROPERTY LINE	B/C	BACK OF CURB
	MONUMENT LINE	ROW	RIGHT-OF-WAY
	BUILDING SETBACK	SW	SIDEWALK
	EASEMENT	C	CONCRETE
	FLOW LINE	FG	FINISHED GRADE
	SLOPE	TC	TOP OF CURB
	FLOW DIRECTION	P	PAVEMENT
	GRADE BREAK	BW	BOTTOM OF WALL
	GRADE CHANGE	FF	FINISH FLOOR
	SAWCUT	BCHH	BRASS CAP IN HANDHOLE
	PAVEMENT SECTION A	SSMH	SANITARY SEWER MANHOLE
	CONCRETE	INV	INVERT
	NEW/EX LIGHT POLE	HW	HIGH WATER
	NEW/EX SEWER MANHOLE	VP	VOLUME PROVIDED
	NEW/EX POWER POLE	EX	EXISTING
	BRASS CAP	XG	EXISTING GRADE
	FOUND PROPERTY CORNER	TW	TOP OF WALL
	PROPERTY CORNER NOTHING FOUND	TF	TOP OF FOOTING
	FIRE HYDRANT		
	WATER VALVE		

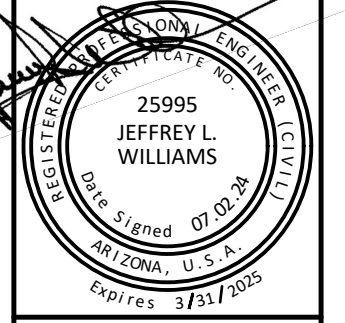


CONSTRUCTION NOTES

	PROTECT IN PLACE	
	STORM DRAIN NOTES	
	12-INCH CORRUGATED HDPE STORM DRAIN PIPE, ADS OR EQUAL	224 LF
	6-INCH PVC SCH 40 STORM DRAIN PIPE, TRENCHING & BACKFILL	44 LF
	PER RWCD DETAIL 36 TYPE 'A', SEE SHEET DT01	
	INSTALL CATCH BASIN TYPE 'F' W/GRATE PER MAG STD. DTL. 535	3 EA
	10' DIA CMP UNDERGROUND STORAGE PER DETAIL ON SHEET GP02	99 LF
	RETENTION DETAIL ON SHEET GP02	
	CONNECT TO EXISTING 12" STORM DRAIN LINE. CONTRACTOR TO	1 EA
	FIELD VERIFY EXISTING LOCATION AND ELEVATION OF PIPE. IF	
	CONNECTION ELEVATION IS NOT FEASIBLE, CONTRACTOR TO CONTACT	
	ENGINEER	

- NOTES:**
- UNDERGROUND STORAGE:
UGS#1:
- VP = 1,673 CF
- SLOPE = 0.5%
- SW-INV = 39.57
- NE-INV = 49.88
UGS#2:
- VP = 6,099 CF
- SLOPE = 0.5%
- S-INV = 39.09
- N-INV = 38.70
 - EASEMENTS PER BK 446, PG 34, MCR
 - NO CONSTRUCTION DEBRIS SHALL ENTER THE RWCD CANAL AT ANY TIME.
 - EXCAVATION FOR CONNECTION TO EXISTING SD LINE IN RWCD ROW TO MAINTAIN MINIMUM OF 4' SEPARATION FROM CANAL.

R.B. WILLIAMS & ASSOCIATES, INC.
CONSULTING ENGINEERS
1921 S. ALMA SCHOOL RD., STE 101
MESA, ARIZONA 85210
PHONE: (480) 464-2522
JEFFREY L. WILLIAMS, P.E.

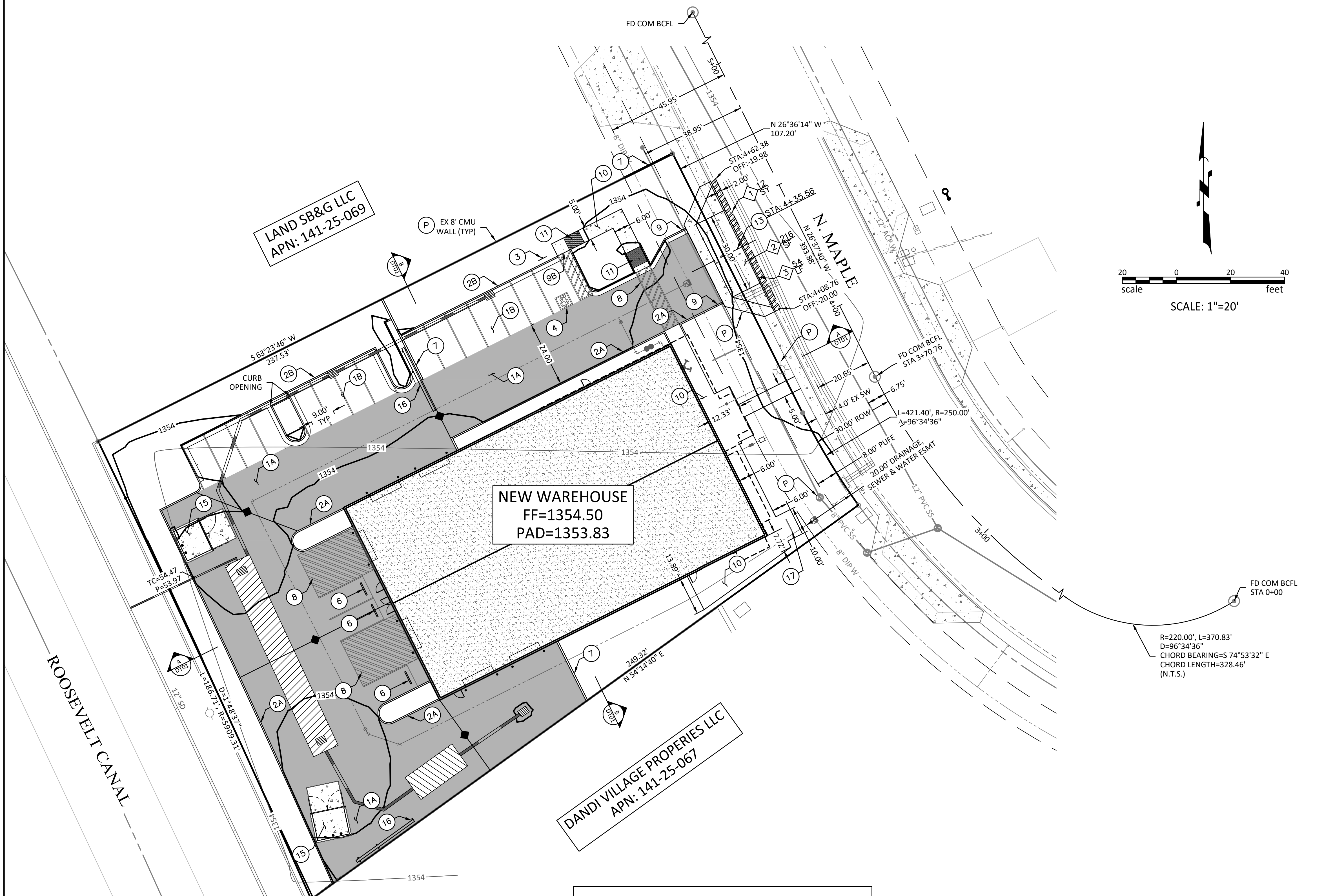


FALCON VIEW INDUSTRIAL PARK
3014 N MAPLE
MESA, AZ 85215

GRADING AND DRAINAGE PLAN

REVISIONS:

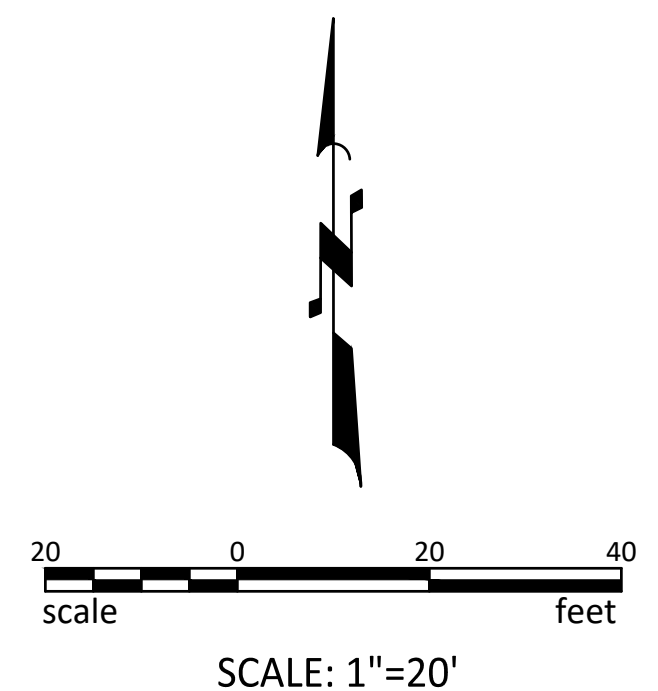
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DESIGN	HRW
DRAWN	HRW
CHK'D	JLW
SUB.	
23063GP01.DWG	
GP01	
SHEET NO.	
3/5	



LEGEND

NOT ALL SYMBOLS MAY BE USED

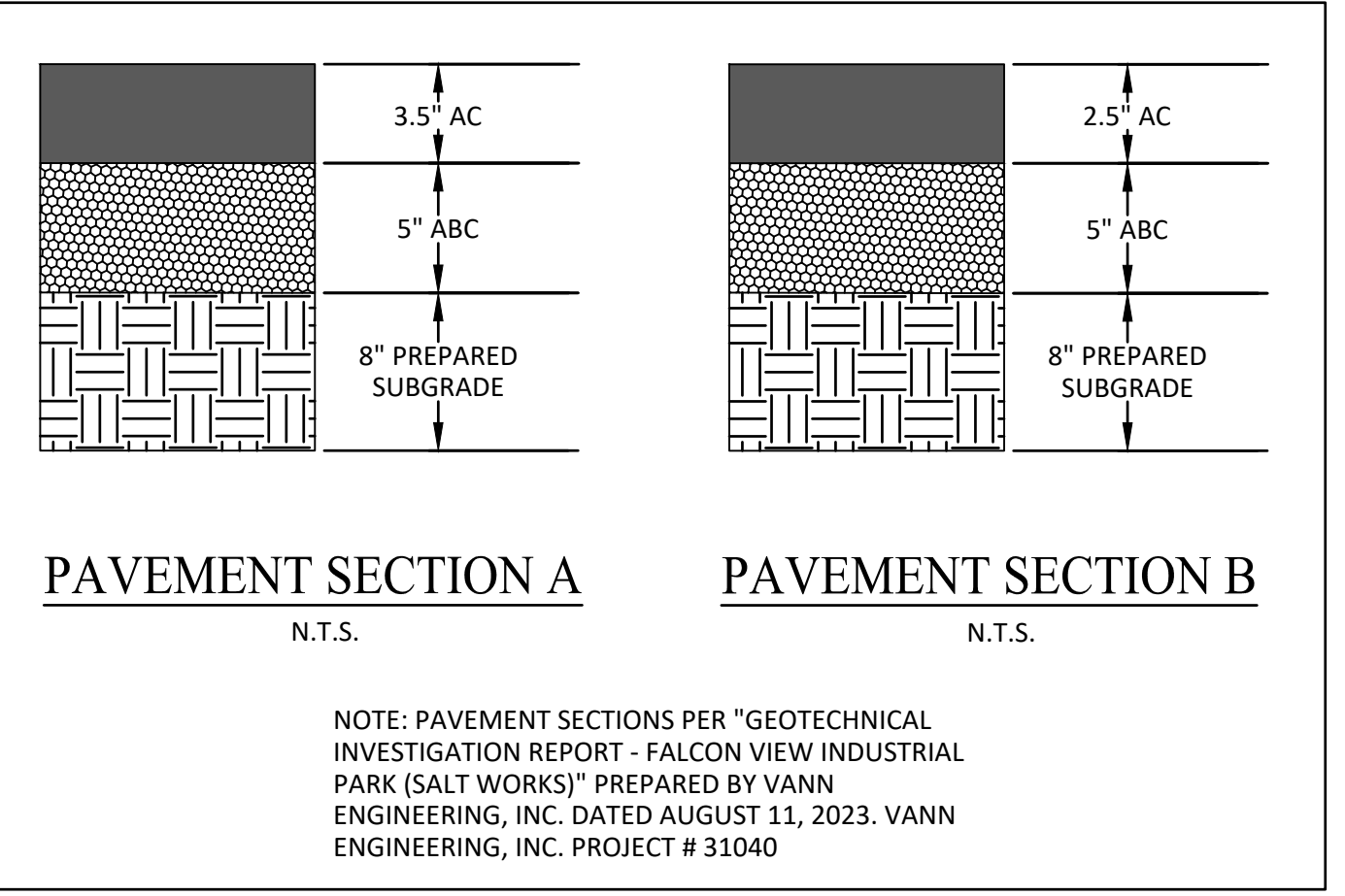
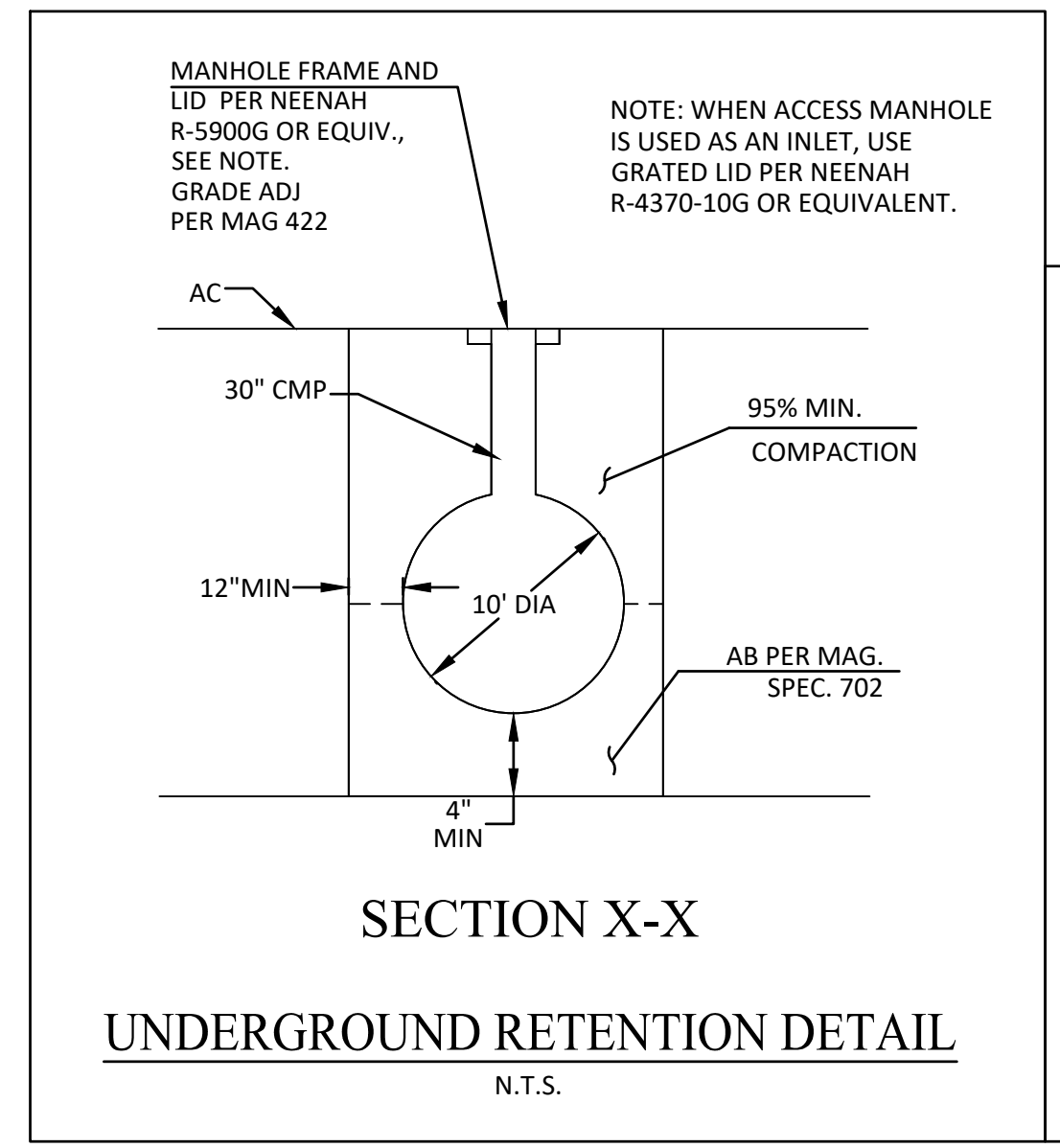
	PROPERTY LINE	B/C	BACK OF CURB
	MONUMENT LINE	ROW	RIGHT-OF-WAY
	BUILDING SETBACK	SW	SIDEWALK
	EASEMENT	C	CONCRETE
	FLOW LINE	FG	FINISHED GRADE
	SLOPE	TC	TOP OF CURB
	FLOW DIRECTION	P	PAVEMENT
	GRADE BREAK	BW	BOTTOM OF WALL
	GRADE CHANGE	FF	FINISH FLOOR
	SAWCUT	BCHH	BRASS CAP IN HANDHOLE
	PAVEMENT SECTION A	SSMH	SANITARY SEWER MANHOLE
	CONCRETE	INV	INVERT
	NEW/EX LIGHT POLE	HW	HIGH WATER
	NEW/EX SEWER MANHOLE	VP	VOLUME PROVIDED
	NEW/EX POWER POLE	EX	EXISTING
	BRASS CAP	XG	EXISTING GRADE
	FOUND PROPERTY CORNER	TW	TOP OF WALL
	PROPERTY CORNER NOTHING FOUND	TF	TOP OF FOOTING
	FIRE HYDRANT		
	WATER VALVE		



CONSTRUCTION NOTES

PAVING NOTES		
1A	3.5\"/>	

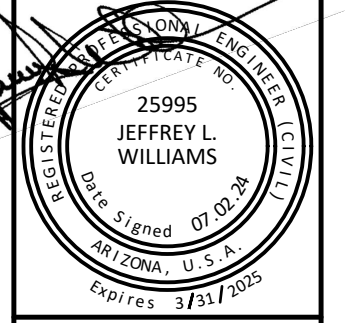
- NOTES:**
- UNDERGROUND STORAGE:
 - UGS#1:
 - VP = 1,673 CF
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 - NE-INV = 49.68
 - UGS#2:
 - VP = 6,099 CF
 - SLOPE = 0.5%
 - S-INV = 39.09
 - N-INV = 38.70
 - EASEMENTS PER BK 446, PG 34, MCR
 - NO CONSTRUCTION DEBRIS SHALL ENTER THE RWCD CANAL AT ANY TIME.
 - EXCAVATION FOR CONNECTION TO EXISTING SD LINE IN RWCD ROW TO MAINTAIN MINIMUM OF 4' SEPARATION FROM CANAL.



R.B. WILLIAMS & ASSOCIATES, INC.
CONSULTING ENGINEERS

1921 S. ALMA SCHOOL RD., STE 101
MESA, ARIZONA 85210
PHONE: (480) 464-2322

JEFFREY L. WILLIAMS, P.E.



FALCON VIEW INDUSTRIAL PARK

3014 N MAPLE
MESA, AZ 85215

GRADING AND DRAINAGE PLAN

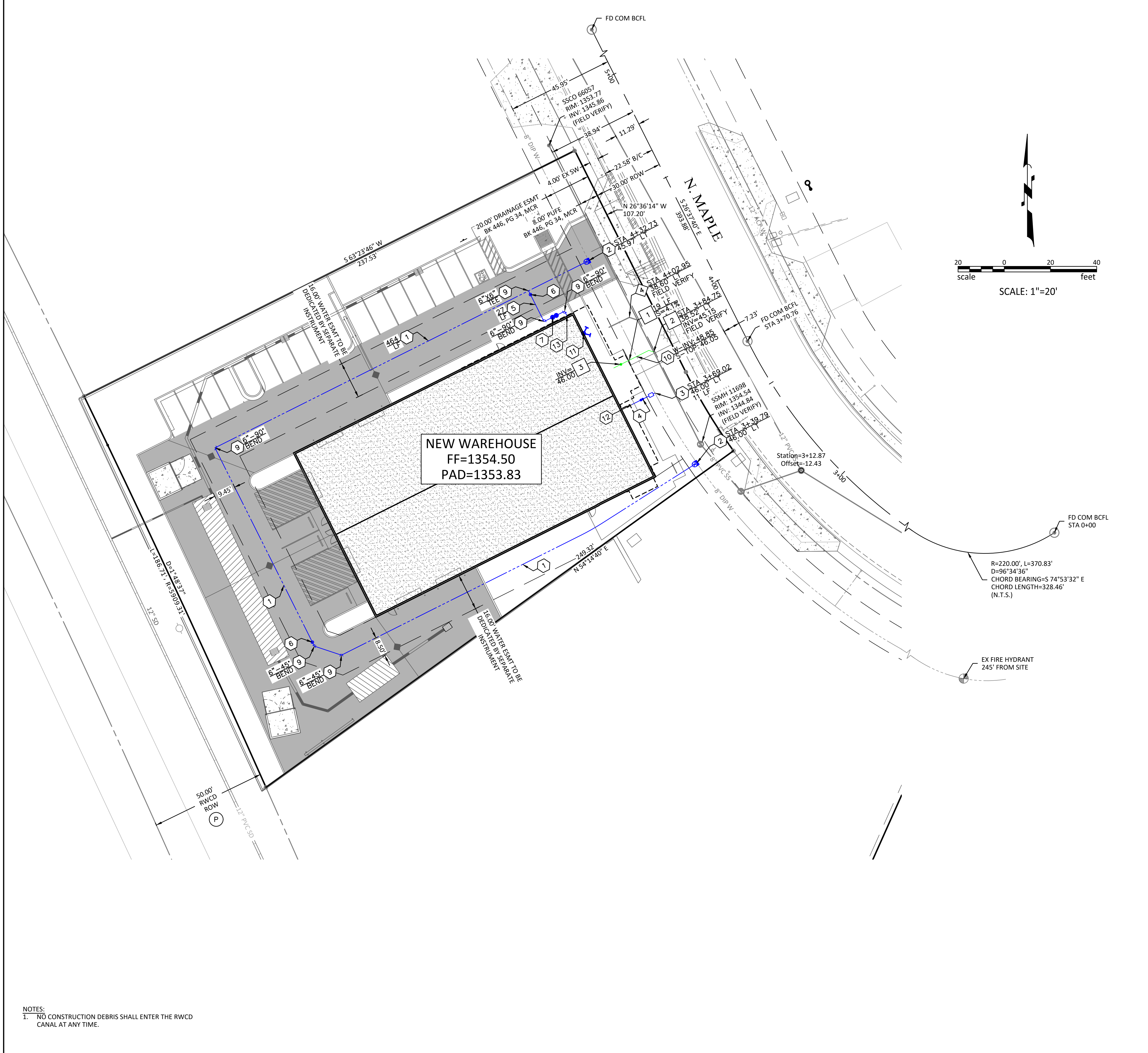
REVISIONS:

DATE	BY	DESCRIPTION
07.02.24	HRW	DESIGN
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	JLW	CHK'D
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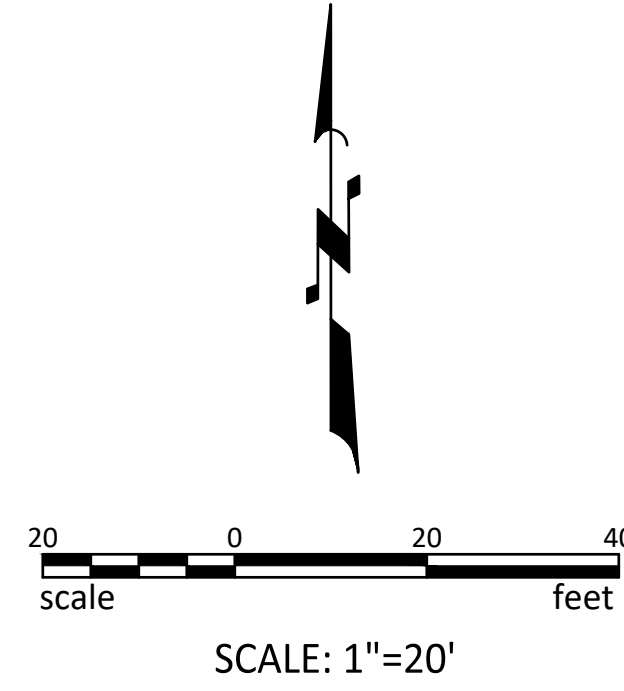
GP02

SHEET NO. 4/5



LEGEND
NOT ALL SYMBOLS MAY BE USED

---	PROPERTY LINE	B/C	BACK OF CURB
---	MONUMENT LINE	ROW	RIGHT-OF-WAY
---	BUILDING SETBACK	SW	SIDEWALK
---	EASEMENT	C	CONCRETE
---	FLOW LINE	FG	FINISHED GRADE
XX%	SLOPE	TC	TOP OF CURB
---	FLOW DIRECTION	P	PAVEMENT
◆	GRADE BREAK	BW	BOTTOM OF WALL
◆	GRADE CHANGE	FF	FINISH FLOOR
▨	SAWCUT	BCHH	BRASS CAP IN HANDHOLE
▨	PAVEMENT SECTION A	SSMH	SANITARY SEWER MANHOLE
▨	CONCRETE	INV	INVERT
⊙	NEW/EX LIGHT POLE	HW	HIGH WATER
⊙	NEW/EX SEWER MANHOLE	VP	VOLUME PROVIDED
⊙	NEW/EX POWER POLE	EX	EXISTING
⊙	BRASS CAP	XG	EXISTING GRADE
⊙	FOUND PROPERTY CORNER	TW	TOP OF WALL
⊙	PROPERTY CORNER NOTHING FOUND	TF	TOP OF FOOTING
⊙	FIRE HYDRANT		
⊙	WATER VALVE		



CONSTRUCTION NOTES

PAVING NOTES	
P	PROTECT IN PLACE
WATER NOTES	
1	INSTALL 6" DIP CLASS 350 WATERLINE, POLYETHYLENE WRAP, PER COM STD DTL M-19.04.1 464 LF
2	INSTALL 8"x6" TAPPING SLEEVE AND VALVE, BOX AND COVER PER MAG STD DTL 340 WITH THRUST BLOCK PER MAG STD DTL 380 AND VALVE BLOCK PER MAG STD DTL 301 2 EA
3	INSTALL 1.5" TYPE "K" COOPER PIPE, BOX AND METER PER COM STD DTL M-49.01, M-49.02 & M-49.03 10 LF
4	1.5" DOUBLE CHECK VALVE BACKFLOW ASSEMBLY PER COM STD DTL M-31.04 1 EA
5	INSTALL 6" DIP CLASS 350 FIRE LINE, POLYETHYLENE WRAP, PER COM STD DTL 31.07 27 LF
6	INSTALL 6" GATE VALVE W/ B/C PER MAG STD DTL 301 & 391-1 TYPE C 2 EA
7	INSTALL 6" DOUBLE CHECK VALVE BACKFLOW ASSEMBLY PER COM STD DTL M-31.02 1 EA
9	WATERLINE FITTINGS WITH RESTRAINED JOINTS PER MAG STD DTL 303-1 & 303-2 AND THRUST BLOCKS PER MAG STD DTL 380 6 EA
10	UTILITY CROSSING PER MAG STD DTL 404-1, 404-2 & 404-3. FIELD VERIFY 1 EA
11	INSTALL FIRE DEPARTMENT CONNECTION 1 EA
12	CONNECT TO BUILDING. SEE PLUMBING PLANS FOR CONTINUATION 1 EA
13	CONNECT TO BUILDING FIRE RISER. SEE SPRINKLER PLANS FOR CONTINUATION 1 EA
SEWER NOTES	
1	6" PVC SDR-35 SEWER LINE PER COM STD DTL M-19.04.1 19 LF
2	CONNECT TO EXISTING SEWER MAIN PER MAG STD DTL 440-1 1 EA
3	INSTALL 2-WAY SEWER CLEANOUT PER MAG STD DTL 440-2 AND CONNECT TO BUILDING PER M.A.G STD DTL 440-1. SEE PLUMBING PLANS FOR CONTINUATION 1 EA
REMOVAL NOTES	
4	ABANDON EXISTING SEWER SERVICE IN PLACE PER COM ENGINEERING & DESIGN STANDARDS SECTION 434 1 EA

NOTES:
1. NO CONSTRUCTION DEBRIS SHALL ENTER THE RWCD CANAL AT ANY TIME.

R.B. WILLIAMS & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 1921 S. ALMA SCHOOL RD., STE. 101
 MESA, ARIZONA 85210
 PHONE: (480) 424-2322
 3014 N. MAPLE
 MESA, AZ 85215
FALCON VIEW INDUSTRIAL PARK
UTILITY PLAN
 SHEET NO. **UP01**
 5/5