

GRADING AND DRAINAGE PLAN
FOR
HAPPY WIFE STORAGE, MESA, AZ

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF:

SOUTH PARKING EXPANSION (DETAIL A)
REPLACING THE SOUTH RETENTION BASIN WITH STORAGE PARKING SPACES,
DRIVEWAY, AND UNDERGROUND RETENTION.

PHASE 2 PARKING IMPROVEMENTS/EXPANSION
PROPOSED PARKING IMPROVEMENTS ON PARCEL APN 304-30-007M

PROJECT DATA

ASSESSOR'S PARCEL NUMBERS : 304-30-007M
: 304-30-007N
PROJECT ADDRESS : 3815 S SOSSAMAN RD,
MESA, AZ 85212
ZONING : L1
CONSTRUCTION TYPE : TYPE B
RV BUILDING B : 14,568 SF
RV BUILDING C : 14,208 SF

LOT AREA : APN 304-30-007N 726,861 SQ.FT. = 16.61 AC
NET AREA : 348,875 SF (8.01 AC) 694,408 SF = 15.94 AC
NARRATIVE : PROPOSED PARKING SOUTH PARKING EXPANSION

OWNER

HAPPY WIFE STORAGE LLC
3815 S SOSSAMAN RD,
MESA, AZ 85212

ARCHITECT

TIM QUICKLEY
TIM@TDIAMONDS.COM
608-444-4000

ENGINEER

NPS MARICOPA INC
859 NORTH LAFAYETTE
MESA, AZ 85201
TEL: 480.201.5476
EMAIL: TOM.HAWS@GMAIL.COM

SURVEYOR

D2 SURVEYING
24468 N. CORN ST.
FLORENCE, AZ 85132
(480) 221-1365
DATE SURVEYED NOV 6, 2021

LEGAL DESCRIPTION:

PARCEL 304-30-007
LOT 1, OF MINOR LAND DIVISION FOR HW STORAGE, ACCORDING TO THE PLAT OF
RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA,
RECORDED IN BOOK 1484 OF MAPS, PAGE 28.

PROJECT BENCHMARK:

TAG IN HEADWALL AT THE INTERSECTION OF SOSSAMAN ROAD AND ELLIOT ROAD.
ELEVATION = 1350.18' (NAVD88 DATUM)

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT
I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS
DEFINED IN SECTION R4-30-301 OF THE RULES OF THE ARIZONA STATE BOARD
OF TECHNICAL REGISTRATION, AND THAT THE DESIGN IS CONSISTENT WITH
CURRENT STANDARDS.
I UNDERSTAND THAT THE REVIEW OF THE PROJECT DRAWINGS AND SPECIFICATIONS
BY CITY OF MESA IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME,
AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

ABBREVIATIONS LIST

APN ASSESSOR'S PARCEL NUMBER
ABC AGGREGATE BASE COURSE
BVC BACK OF VERTICAL CURB
C CONCRETE
CF,CU,FT CUBIC FEET
COM CITY OF MESA
EX EXISTING
FFE FINISHED FLOOR ELEVATION
FL FLOW LINE
G GUTTER
IE INVERT ELEVATION
LF LINEAR FOOT
MCR MARICOPA COUNTY RECORDER
P PAVEMENT
PL PROPERTY LINE
ROW RIGHT OF WAY
SD STORM DRAIN
SF SQUARE FEET
TBM TEMPORARY BENCH MARK
TC TOP OF CURB
YR YEAR

SHEET INDEX

PHASE 2 ON-SITE PARKING IMPROVEMENTS
C001 - ON-SITE COVER SHEET
C002 - ON-SITE GENERAL NOTES
C201 - ON-SITE GRADING AND DRAINAGE PLAN
C202 - ON-SITE GRADING AND DRAINAGE SECTIONS
C301 - ON-SITE UTILITY PLAN
C302 - ON-SITE DETAILS

PHASE 1 ON-SITE SOUTH PARKING EXPANSION
C203 - ON-SITE GRADING, DRAINAGE AND UTILITY PLAN

PHASE 2 OFFSITE ROW IMPROVEMENTS
C801 - OFFSITE COVER SHEET
C802 - OFFSITE GENERAL NOTES
C801 - OFFSITE PAVING PLAN
C802-C803 - STRIPING PLAN
C804 - OFFSITE WATER PLAN

LEGEND OF SYMBOLS

RIP RAP
CONCRETE AREA
EXISTING PAVEMENT
RIGHT OF WAY LINE
ADJACENT LOT
LOT BOUNDARY
FLOW LINE
MONUMENT LINE
EASEMENT
FINISHED GROUND CONTOUR (1' INTERVAL)
EXISTING GROUND CONTOUR (1' INTERVAL)
DRAINAGE FLOW ARROW
BUILDING SETBACK LINE
BOTTOM OF PROPOSED DRAINAGE DITCH
BOTTOM OF EXISTING DRAINAGE DITCH (TO REMAIN)
BOTTOM OF EXISTING DRAINAGE DITCH (DEMO)
EXISTING SEWER LINE
EXISTING 24" WATER LINE
EXISTING 12" WATER LINE
EXISTING GAS LINE
EXISTING OVERHEAD ELECTRIC LINE
EXISTING FENCE
EXISTING FIRELINE
EXISTING UNDERGROUND ELECTRIC LINE
EXISTING LUMEN DUCT
PROPOSED WATER LINE
PROPOSED GUARD RAIL
EXISTING GUARD RAIL
EXISTING EDGE OF PAVEMENT

ESTIMATED DIRT QUANTITIES

RAW FG CUT 3,706 CY
RAW FG FILL 9,222
NET RAW FILL -5,516
FILL ADDITION FOR COMPACTION AND SHRINKAGE =0.15*340683/27 1,893
FILL REDUCTION FOR 8" THICK FLOOR =0.67*28776/27 714
FILL REDUCTION FOR WALKWAYS (4") =0.33*0/27 0
FILL REDUCTION FOR CONC. PVMT (8") =0.67*272707/27 6,734
TOTAL CUT 11,154
TOTAL FILL 11,115
ADJUSTED NET CUT 39

AS-BUILT CERTIFICATION:

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

RESIDENT ENGINEER/LAND SURVEYOR DATE

FINISHED FLOOR GENERAL STATEMENT:

FINISHED FLOORS ARE SAFE FROM INUNDATION DURING A 100-YEAR, 24-HR PEAK
RUN-OFF EVENT IF CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS.

STANDARDS

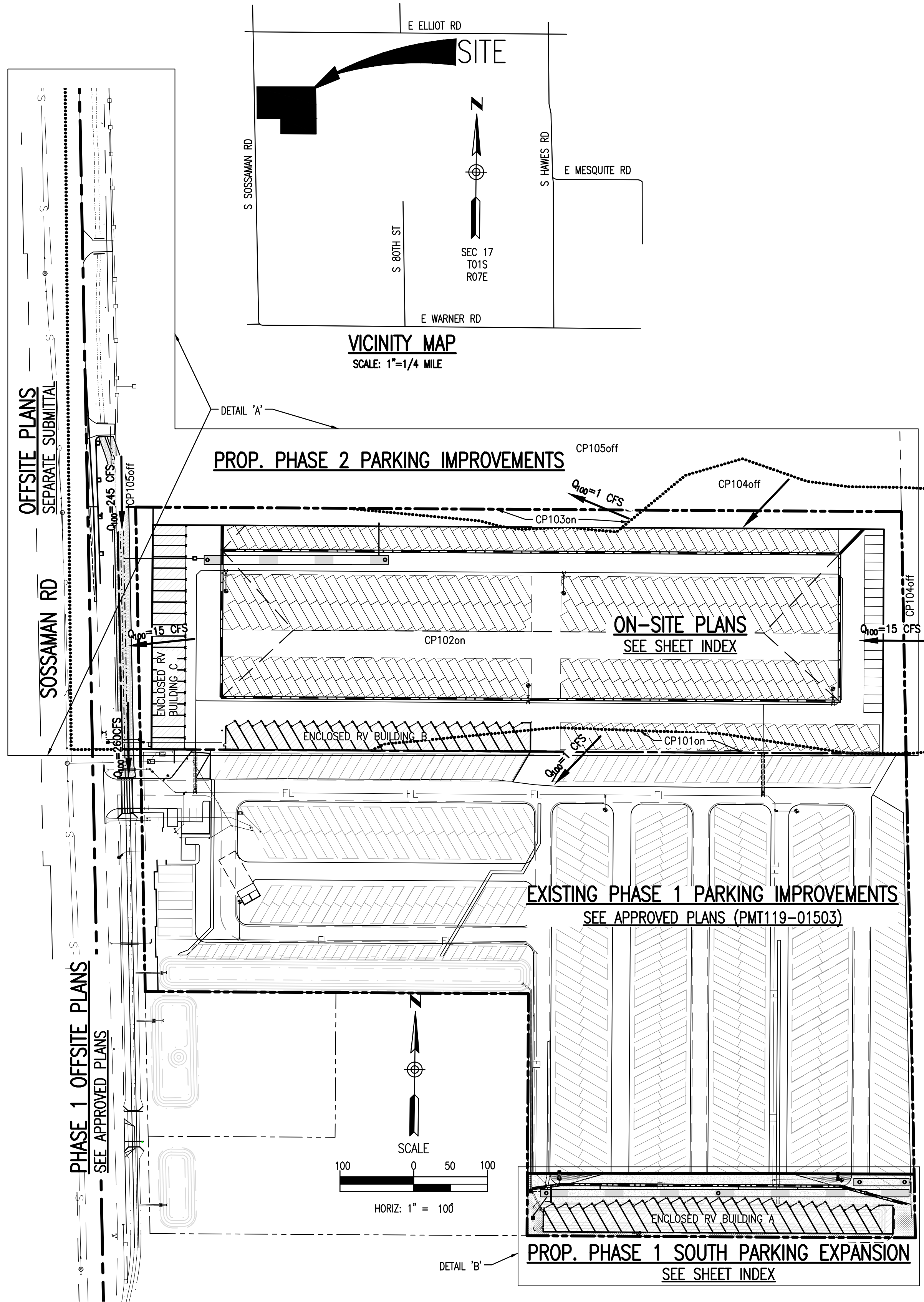
CITY OF MESA ENGINEERING DESIGN STANDARDS MANUAL (2021).

MCDOT APPROVAL

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION DATE

MCESD APPROVAL

MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT DATE



UTILITY COORDINATION

UTILITY COMPANY	ADDRESS	CONTACT	PHONE	EMAIL	DATE SUBMITTED	RESPONSE
CENTURY LINK/LUMEN	135 W ORION ST TEMPE, AZ 85283	KAREN BROWN	602-630-5476	KAREN.BROWN1@LUMEN.COM	2022-06-20	POSSIBLE CONFLICTS
SOUTHWEST GAS	5705 S. KYRENE RD, TEMPE AZ 85283	ANDY SAKS	480-730-3857	ANDREW.SAKS@SWGAS.COM	2022-06-20	NO CONFLICTS
SRP ELECTRIC	P.O. BOX 52025, PHOENIX, AZ 85072-2025	ANDRE BENAVIDEZ	602-236-3586	ANDRE.BENAVIDEZ@SRPNET.COM	2022-06-20	POSSIBLE CONFLICTS

REVISIONS:

NPS MARICOPA INC.

AN ARIZONA NONPROFIT CORPORATION
859 N LAFAYETTE
MESA, ARIZONA 85201
(480) 201-5476
TOM.HAWS@GMAIL.COM

ON-SITE COVER SHEET

PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
HAPPY AND PHASE 2 PARKING IMPROVEMENTS
3815 S SOSSAMAN RD, MESA, AZ 85212

811
Know what's below.
Call before you dig.

Professional Engineer
30503
THOMAS GAIL
HAWS
State of Arizona
DATE SIGNED
EXPIRATION DATE

JOB NO.

M21040

DRAWN BY: SWN

SHEET NO.

C001

HAPPY WIFE STORAGE LLC, MESA, AZ

CITY OF MESA GENERAL REQUIREMENT NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARD SPECIFICATIONS AND DETAILS FOR THE CITY OF MESA. WORKS CONSTRUCTION AS FURNISHED 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.
2. SEPARATE RIGHT-OF-WAY PERMITS ARE REQUIRED FOR ALL PUBLIC UTILITIES, PUBLIC STREET IMPROVEMENTS, AND RIGHT-OF-WAY LANDSCAPING. FOR INFORMATION REGARDING AVAILABILITY AND COST OF RIGHT-OF-WAY PERMITS, CONTACT THE PERMIT SERVICES SECTION OF THE BUILDING SAFETY DIVISION AT (480) 644-4BSD OR AT [HTTP://WWW.MESAAZ.GOV/DEVSUSTAIN/CONSTRUCTIONPERMITS.ASPX](http://www.mesaaz.gov/dev/sustain/constructionpermits.aspx)
3. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED UNLESS OTHERWISE NOTED. CONTRACTORS MUST HOLD THE APPROPRIATE CLASS OF LICENSE AND SHALL HAVE ON FILE WITH THE PERMIT SERVICES SECTION PROOF OF INSURANCE COVERAGE. PERMITS BECOME INVALID AND MUST BE UPDATED IF WORK HAS NOT BEGUN WITHIN NINETY (90) DAYS. PERMITS ALSO BECOME INVALID IF THE CONTRACTOR'S INSURANCE LAPSES OR IS VOIDED.
4. TWENTY FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY CITY OF MESA ENGINEERING CONSTRUCTION SERVICES AT (480) 644-2253 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRELIMINARY FIELD REVIEW AT THE PROJECT SITE WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR. FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE, SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED.
5. CONTRACTOR'S SHALL COMPLY WITH THE REQUIREMENTS TO OBTAIN THE NECESSARY RIGHT-OF-WAY PERMITS AND SHALL COMPLY WITH THE RIGHT-OF-WAY PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.
6. THE CITY OF MESA PARKS & RECREATION DIVISION IS NOT REPRESENTED BY BLUE STAKE. WHEN THE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO A CITY PARK, THE CONTRACTOR SHALL CONTACT THE PARKS & RECREATION ADMINISTRATION SECTION AT (480) 644-2354 TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES.
7. THE CONTRACTOR SHALL OBTAIN AN EARTH-MOVING PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL.
8. THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL & SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED AND ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS. THE ENGINEER OR ARCHITECT ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY OR EASEMENT HAVE BEEN CORRECTLY PLOTTED/SHOWN.
9. THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM SEWER, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT" DRAWINGS PROVIDED BY THE ENGINEER TO THE ENGINEERING DEPARTMENT - CONSTRUCTION SERVICES SECTION.
10. THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OF-WAY OR EASEMENTS HAS BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.
11. THE DEVELOPER SHALL PROVIDE ALL CONSTRUCTION STAKING FOR THE PROJECT.
12. THE DEVELOPER OR THE ENGINEER IS RESPONSIBLE FOR ARRANGING FOR THE RELOCATION OR REMOVAL OF ALL UTILITIES OR FACILITIES THAT ARE IN CONFLICT WITH THE PROPOSED PUBLIC IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ALL UTILITIES, POWER POLES, IRRIGATION DRY-UPS, RESETS REMOVALS BY OTHERS, ETC.
13. THE CONTRACTORS SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATION AND AVOID DAMAGE TO SAME. CALL (602)263-1100 FOR BLUE STAKE TWO WORKING DAYS PRIOR TO DIGGING. CALL SALT RIVER PROJECT FOR POLE BRACING, ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT (602) 273-8888.
14. WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
15. CONTRACTORS SHALL COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AND BARRICADING PER THE CURRENT CITY OF MESA TRAFFIC BARRICADE MANUAL.
16. IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM PERMIT SERVICES AND PAY ALL APPLICABLE FEES AND CHARGES.
17. IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST OF THE ENGINEERING CONSTRUCTION INSPECTOR, AND IT IS NECESSARY FOR CITY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE CITY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY CITY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.

CITY OF MESA PUBLIC STREET/RIGHT-OF-WAY IMPROVEMENT NOTES

1. THE DEVELOPER AND THE CONTRACTOR ARE REQUIRED TO COORDINATE THE PLACEMENT OR INSTALLATION OF DRIVEWAYS IN ORDER TO AVOID CONFLICT WITH UTILITY SERVICES.
2. ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC., SHALL BE INSTALLED TO FINISH GRADE OR SHALL BE ADJUSTED TO FINISH GRADE AFTER PLACING OF ASPHALTIC SURFACE COURSE BY THE CONTRACTOR PER M.A.G. STANDARD DETAIL 270 AND 422.
3. THE CONTRACTOR SHALL ADJUST ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. THAT ARE LOCATED WITHIN THE PARKWAY AREA AFTER FINAL GRADING AND INSTALLATION OF LANDSCAPING.
4. ALL LANDSCAPING IMPROVEMENTS, INCLUDING IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT-OF-WAY OR RETENTION BASINS THAT ARE TO BE MAINTAINED BY THE CITY OF MESA, SHALL BE IN ACCORDANCE WITH THE LANDSCAPING AND IRRIGATION STANDARDS BOOKLET.
5. THE STREET PAVING PERMITEE/CONTRACTOR IS HEREBY NOTIFIED THAT IN THE EVENT THAT ACCEPTANCE OF THE PUBLIC STREET PAVING IS DELAYED; SIX MONTHS OR MORE AFTER THE PAVEMENT WAS INSTALLED, THE PERMITEE/CONTRACTOR SHALL APPLY A SEAL COAT TO THE PAVEMENT. TYPE OF MATERIAL AND RATE OF APPLICATION WILL BE DIRECTED BY THE CITY OF MESA ENGINEERING DEPARTMENT - FIELD SUPERVISING ENGINEER.
6. A STANDARD RESIDENTIAL DRIVEWAY APPROACH SHALL BE CONSTRUCTED TO A MAXIMUM WIDTH OF 30 FEET UNLESS SPECIAL APPROVAL HAS BEEN OBTAINED.

A.D.E.Q. NOTES

1. WATER LINE AND FITTINGS SHALL HAVE NSF-PW SEAL.
2. CONSTRUCTION MATERIALS USED IN THE WATER SYSTEM SHALL BE LEAD FREE AS DEFINED AT A.A.C. R18-4-504 AND A.A.C. R18-4-101.
3. BACKFLOW PREVENTION ASSEMBLY SHALL MEET A.A.C. R18-4-115.
4. MINIMUM DEPTH OF COVER OVER WATER LINES SHALL BE 3 FEET.
5. UNIFORM SLOPE TESTING OF TOTAL LENGTH OF SEWER LINE IS REQUIRED PER AAC R18-9-E301(D)(2)(K).

CITY OF MESA PUBLIC WATER UTILITY NOTES

1. ALL PUBLIC WATER MAIN MATERIALS SHALL BE PER SECTION 610.3 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS, ALL DUCTILE IRON PIPE (D.I.P.) WATER MAINS SHALL HAVE POLYETHYLENE CORROSION PROTECTION PER SECTION 610.5 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS.
2. ALL NEW WATERLINES THAT REQUIRE SERVICE DISRUPTION IN ORDER TO CONNECT TO THE CITY SYSTEM SHALL REQUIRE A DAYTIME TIE-IN. THE CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY TO RESTORE UTILITY SERVICE AND FULLY OPEN THE TIE-IN AREA TO VEHICULAR TRAFFIC WITHIN THE TIME FRAME ALLOWED BY THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
3. THE CONTRACTOR SHALL INSTALL A TEMPORARY PLUG OR VALVE ON A SECTION OF NEW WATER LINE TO TEST LINES BEFORE CONNECTING TO THE EXISTING PUBLIC WATER SYSTEM WHERE THERE IS NO WATER VALVE ON THE EXISTING LINE.
4. WATER LINE TESTS SHALL BE CONDUCTED SO THAT EXISTING WATER LINES WILL NOT BE INCLUDED IN THE TEST OF THE NEW LINE.
5. THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE A MANUFACTURER AND MODEL DESIGNATED IN THE CURRENT "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES" AS PUBLISHED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
6. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN DESIGNATED IN THE CURRENT CITY OF MESA "LIST OF APPROVED INSPECTORS" PRIOR TO THE REQUEST FOR FINAL INSPECTION.
7. IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE (A.A.C.) R18-4-119, ALL MATERIALS ADDED AFTER JANUARY 1, 1993, WHICH MAY COME INTO CONTACT WITH DRINKING WATER, SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
8. PER CITY ORDINANCE NO. 2341, ALL WATER METERS ARE TO BE PURCHASED FROM THE CITY OF MESA. METERS TWO INCHES OR LESS WILL BE DELIVERED AND INSTALLED BY CITY FORCES. METERS LARGER THAN TWO INCHES WILL BE DELIVERED BY THE CITY AND INSTALLED BY THE CONTRACTOR AND REQUIRE SCHEDULING AND INSPECTIONS WITH CITY FORCES (CONTACT BUILDING SAFETY - PERMIT SERVICES (480)- 644-48SD FOR THE SPECIFIC PROCEDURE).

CITY OF MESA PUBLIC WASTEWATER UTILITY NOTES

1. CONTRACTORS SHALL VERIFY ALL INVERT ELEVATIONS BEFORE PROCEEDING WITH THE BALANCE OF THE UTILITY TRENCHING.
2. ALL MANHOLES PER M.A.G. DETAILS MUST NECK DOWN TO USE THE STANDARD 30INCH FRAME AND COVER. STEPS SHALL NOT BE INSTALLED WITHIN THE MANHOLE.

CITY OF MESA NATURAL GAS UTILITY NOTES

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE MOST CURRENT CITY OF MESA GAS OPERATIONS, MAINTENANCE, EMERGENCY RESPONSE AND CONSTRUCTION PRACTICE MANUAL.
2. WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
3. BEDDING OR SHADING MATERIAL ADJACENT TO THE CITY OF MESA GAS PIPE SHALL BE SELECT SANDY TYPE SOIL FREE OF ROCK AND DEBRIS THAT WILL PASS THROUGH A 3/8" SCREEN AS INSPECTED AND APPROVED BY CITY GAS INSPECTION PERSONNEL.
4. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AS INDICATED ON THE CITY OF MESA DETAIL M-58 WHEN TRENCHING FOR THE WATERLINE WHERE A GAS MAIN IS TO BE INSTALLED IN THE SAME TRENCH.
5. CONTACT CITY OF MESA GAS DIVISION AT 480-644-2753 FOR SCHEDULING AND COORDINATION OF THE INSTALLATION OF NATURAL GAS SERVICES AND MAINS.
6. GAS LINE SHALL MAINTAIN A NOMINAL 12" (MINIMUM OF 8") SEPARATION FROM EXISTING WATER, SEWER, ELECTRICAL, CABLE TV AND TELCO FACILITIES.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CALL (602) 263-1100 FOR BLUE STAKES. OUTSIDE MARICOPA COUNTY CALL 1-800-STAKEIT.
8. ALL GAS NOTES IN DASHED BOXES ARE TO BE COMPLETED BY CITY OF MESA CREWS OR CITY OF MESA GAS LINE CONTRACTOR.

CITY OF MESA NON-CITY UTILITY NOTES

EL PASO NATURAL GAS:

MARICOPA COUNTY:

1. ALL CONSTRUCTION WITHIN MARICOPA COUNTY RIGHT-OF-WAY SHALL CONFORM TO CURRENT MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARD PROVISIONS FOR CONSTRUCTION OF STREET IMPROVEMENTS AND INSTALLATION OF UNDERGROUND UTILITIES.
2. CONTRACTORS ARE TO OBTAIN ALL NECESSARY MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION PERMITS PRIOR TO CONSTRUCTION WITHIN MARICOPA COUNTY RIGHT-OF-WAY.

ROOSEVELT WATER CONSERVATION DISTRICT (RWCD):

1. CONTRACTORS SHALL OBTAIN A PERMIT FROM RWCD PRIOR TO CROSSING, REMOVING REPLACING OR MAKING ANY MODIFICATIONS TO RWCD FACILITIES.

CITY OF MESA STORMWATER DRAINAGE & RETENTION NOTES

1. THE ENGINEER, OR LAND SURVEYOR SHALL CERTIFY THAT THE REQUIRED STORM WATER RETENTION HAS BEEN PROVIDED. THE CERTIFICATION SHALL ALSO INDICATE THE ACTUAL VOLUME PROVIDED. SUCH CERTIFICATION SHALL BE PROVIDED TO BUILDING SAFETY DIVISION – BUILDING INSPECTIONS WHEN THE RETENTION AREA IS TO REMAIN PRIVATE PROPERTY AND TO ENGINEERING CONSTRUCTION SERVICES WHEN THE RETENTION AREA IS TO BECOME CITY OF MESA PROPERTY.
2. ALL DRYWELLS SHOWN ON THIS PROJECT SHALL BE MAINTAINED BY THE OWNERS AND ARE TO BE REPLACED BY THE OWNERS WHEN THEY CEASE TO DRAIN WATER IN A 36-HOUR PERIOD. REGULAR MAINTENANCE OF THE DRYWELL-SILTING CHAMBER IS REQUIRED TO ACHIEVE THE BEST OPERATION OF THE DRYWELL. IN ACCORDANCE WITH ARIZONA REVISED STATUTES, DRYWELLS ARE REQUIRED TO BE REGISTERED WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (A.D.E.Q.) IT IS THE OWNER'S RESPONSIBILITY TO REGISTER ALL DRYWELLS. AN AQUIFER PROTECTION PERMIT MAY BE REQUIRED BY A.D.E.Q. FOR DRYWELLS DEEMED TO BE HAZARDOUS TO GROUNDWATER.

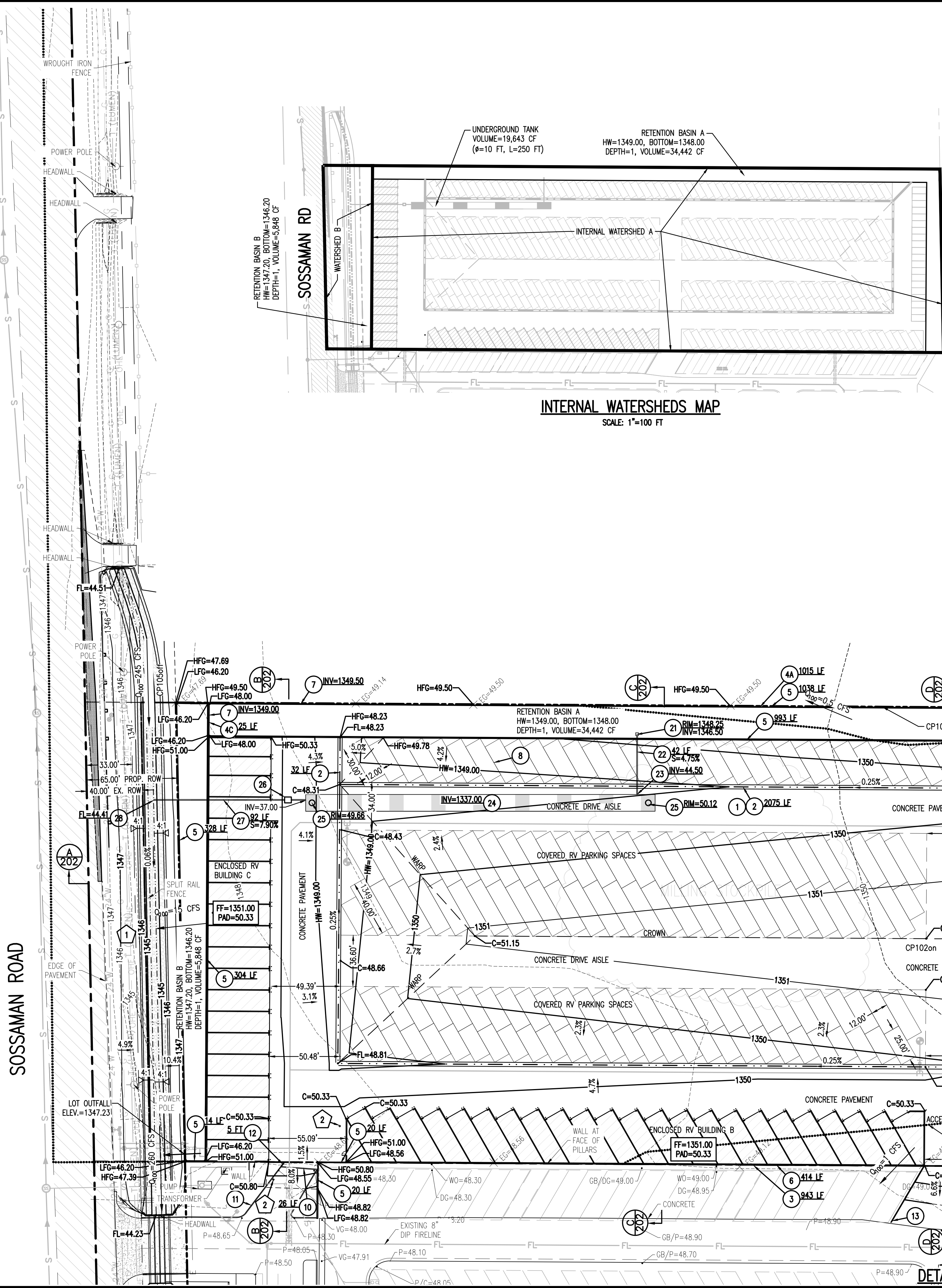
CITY OF MESA PUBLIC STREET LIGHTING NOTES

1. STREET LIGHT CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF STREETLIGHT CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, CONTRACTOR SHALL BORE CONDUIT UNDER THE DRIVEWAY PER CITY OF MESA DETAIL M-18. MEANDERING THE CONDUIT BEHIND THE DRIVEWAY ENTRANCE WILL NOT BE PERMITTED.
2. MATERIALS AND INSTALLATION OF THIS PROJECT SHALL COMPLY WITH THE CURRENT MESA STANDARD DETAILS, AMENDMENTS TO THE UNIFORM STANDARD DETAILS, THE CITY OF MESA ENGINEERING PROCEDURE MANUAL AND AMENDMENTS TO THE CITY OF MESA ENGINEERING PROCEDURE MANUAL.
3. THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL I (1) STREET LIGHT TECHNICIAN OR AN IMSA LEVEL I (1) TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY STREET LIGHT WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE STREET LIGHTS WILL BE SUSPENDED.
4. ALL TREES SHALL BE PLANTED A MINIMUM OF EIGHTEEN (18) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS. ALL SHRUBS SHALL BE PLANTED A MINIMUM OF SEVEN (7) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS.
5. ALL CONDUIT, CONDUCTORS, WIRE, AND QUANTITIES SHALL BE MEASURED BY THE LINEAR FOOT HORIZONTALLY BETWEEN POLES, PULL BOXES AND CONTROL CABINETS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SWEEPS AND VERTICAL RUNS, AS THEY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE HORIZONTAL MEASUREMENT OF THE QUANTITIES.
6. CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, THE CONTRACTOR SHALL BORE UNDER THE DRIVEWAY, PER (M-18), FOR CONDUIT INSTALLATION. MEANDERING THE CONDUIT BEHIND THE ENTRANCE WILL NOT BE ALLOWED.
7. NOTE: THE LOCATION OF THE TRAFFIC SIGNAL FIBER OPTIC CONDUIT (TSFO) AS SHOWN IS DRAWN AT AN OFFSET AND IS FOR GRAPHICAL REPRESENTATION ONLY AND SHALL BE INSTALLED IN A JOINT TRENCH WITH THE STREET LIGHT CONDUIT PER COM DETAIL (M-93.3 & 93.4).
8. AREAS WHERE 24" OF COVER IS NOT POSSIBLE SEE CHAPTER 9 OF THE CITY OF MESA ENGINEERING & DESIGN STANDARDS; THESE AREAS SHALL BE IDENTIFIED ON PLANS. SUPPLY FULL CONFLICT DATA, INCLUDING TOP OF CURB, SIZE AND MATERIAL OF PIPE, INVERT ETC.
9. TO RETURN SALVAGED STREET LIGHT MATERIALS THE CONTRACTOR SHALL CONTACT THE STREET LIGHT FOREMAN FOR THE AREA THE WORK IS OCCURRING IN. WEST OF VAL VISTA CALL 480-644-3178. EAST OF VAL VISTA CALL 480-644-5077. ARRANGEMENTS TO DELIVER MATERIALS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE. THE CONTRACTOR IS RESPONSIBLE FOR UNLOADING AND STACKING ALL MATERIALS. A CITY OF MESA STAFF MEMBER MUST BE PRESENT WHEN MATERIALS ARE DELIVERED TO GET CREDIT FOR THE SALVAGE MATERIALS.
10. ALL EXISTING CONCRETE DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
11. ALL EXISTING LANDSCAPE, HARDSCAPE OR SPRINKLER SYSTEMS DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
12. THE CONTRACTOR IS TO USE UTMOST CAUTION WHILE WORKING AROUND ALL OVERHEAD AND UNDERGROUND UTILITIES. SPECIFICALLY ELECTRIC, GAS, WATER, SEWER AND FIBER OPTIC LINES.

CITY OF MESA PUBLIC TRAFFIC SIGNAL NOTES

1. CONTRACTORS SHALL CONTACT THE CITY OF MESA TRAFFIC SIGNALS SUPERVISOR (480) 644-3122 PRIOR TO ANY WORK WITHIN THE VICINITY OF OR THROUGH A SIGNALIZED INTERSECTION, WHICH WILL CHANGE TRAFFIC LANE PATTERNS.
2. CONTRACTORS ARE ADVISED THAT DAMAGE TO ANY TRAFFIC SIGNAL EQUIPMENT (DETECTOR LOOPS, PULLBOXES, CONDUIT, ETC.) AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY OF MESA TRAFFIC SIGNALS GROUP. DETECTOR LOOPS SHALL BE REINSTALLED WITHIN TWENTY-FOUR (24) HOURS OF REMOVAL AND PRIOR TO THE PLACEMENT OF THE ASPHALT FINISH COURSE.
3. THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL II (2) TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY TRAFFIC SIGNAL WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE TRAFFIC SIGNAL WILL BE SUSPENDED.
4. IN TRAFFIC AREAS ADD A SLURRY CAP TO THE TRAFFIC SIGNAL FIBER OPTIC (TSFO) CONDUIT TRENCH WHERE THE 48" DEPTH REQUIRED PER (M-93.3 & M-93.4) CANNOT BE MAINTAINED. IN NON-TRAFFIC AREAS (BACK OF SIDEWALK) IF THE TSFO CONDUIT IS INSTALLED AT A DEPTH OF LESS THAN 36", A 6" SLURRY CAP IS REQUIRED. THE MINIMUM ALLOWABLE DEPTH FOR TSFO CONDUITS IS 24". THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR SHALL BE NOTIFIED 48 HOURS PRIOR TO INSTALLING CONDUITS WHEN ANY VARIATION TO DETAIL (M-93.3 & M-93.4) IS REQUIRED. IF TSFO CONDUIT IS REQUIRED TO MEANDER VERTICALLY OR HORIZONTALLY, NO CONDUIT BEND SHALL EXCEED 45 DEGREES.
5. TSFO CONDUITS SHALL BE INSTALLED 48" DEEP IN A JOINT TRENCH WITH STREET LIGHT CONDUIT PER (M-93.3 & M-93.4).

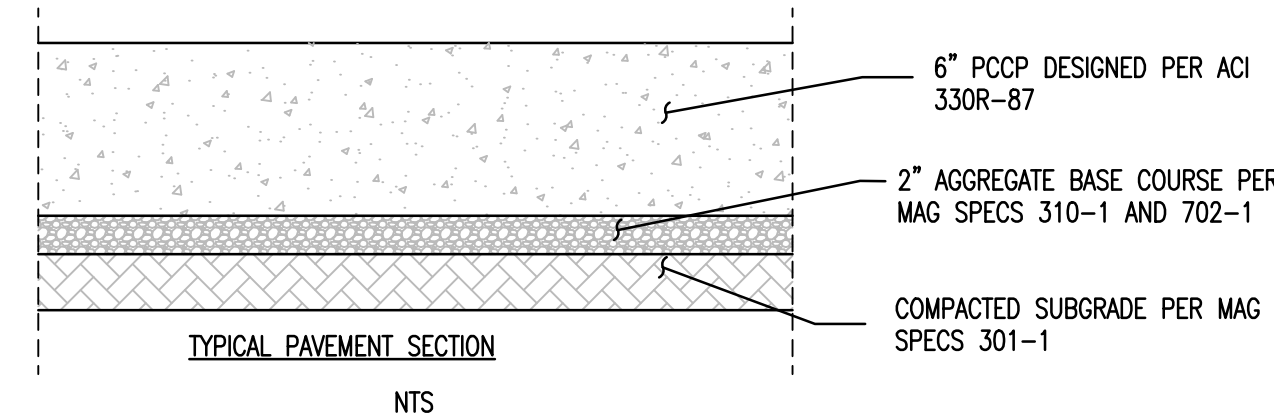
SOSSAMAN ROAD



INTERNAL WATERSHEDS MAP
SCALE: 1"=100 FT

INFORMATION NOTES

- SEE OFFSITE PLANS FOR ROW IMPROVEMENTS.
 - KEYPAD
- GRADING AND PAVING NOTES
- 6" CLASS A CONCRETE PAVEMENT PER SECTION ON THIS SHEET. 272707 SF
 - CONSTRUCT 3 FT VALLEY GUTTER PER MAG DETAIL 240 2154 LF
 - REMOVE AND SALVAGE THE EXISTING 8 FT PRECAST FENCE WITH PILLARS. RETAINING WALL TO REMAIN, IF ANY. 943 LF
 - INSTALL THE 8 FT PRECAST FENCE WITH PILLARS (REMOVED ALONG SOUTH PROPERTY LINE AND SALVAGED) ABOVE THE RETAINING WALL. 1015 LF
 - INSTALL THE 8 FT PRECAST FENCE ABOVE THE RETAINING WALL. MATCH THE SALVAGED FENCE. 328 LF
 - INSTALL THE 8 FT PRECAST FENCE. MATCH THE SALVAGED FENCE. 25 LF
 - RETAINING WALL PER DETAIL ON THIS CIVIL SHEET. SEE THIS SHEET FOR RETAINING WALL ELEVATIONS. SEE STRUCTURAL PLANS FOR MORE DETAILS. 3852 LF
 - HIGH STEM WALL 414 LF
 - PROVIDE OPENINGS AT THE BOTTOM. 4 EA
 - 4" NON-REFLECTORIZED WHITE PAINT STRIPE (PARKING), TYPICAL.
 - MATCH EXISTING ELEVATION.
 - REMOVE EXISTING CURB. 26 LF



- EXISTING CURB TO REMAIN.
- 6" SINGLE CURB PER MAG STD DTL 222, TYPE A 5 LF
- CURB TERMINATION PER MAG STD DTL 222. 1 EA
- CONCRETE CATCH BASIN PER COM STD DTL M-64. RIM AND INVERT ELEVATIONS PER PLANS. 1 EA
- 8" HDPE STORM DRAIN PIPE PER MAG SPEC 738. BACKFILL AND COMPACTION PER MAG SPEC 601. SLOPE AND INVERTS PER PLAN. 42 LF
- CONNECT HDPE TO LATERAL FULL CIRCUMFERENCE WELDED CMP INLET. USE FLAT BAND WITH GASKET FOR HDPE TO CMP CONNECTION 1 EA
- 120" DIA, 275 FT LONG 14 GAUGE POLYMER COATED CMP STORAGE TANK PIPE WITH 3"x1" CORRUGATION PER UNDERGROUND RETENTION TANK DETAIL ON CIVIL SHEET C006. 1 EA
- ACCESS MANHOLE 2 EA
- RETENTION BLEED-OFF PUMP STATION. Q=0.42 CFS AND TOTAL DYNAMIC HEAD, TDH =7.41 FT. 1 EA
- 4" PVC SDR-35 STORM DRAIN BLEED-OFF PIPELINE PER MAG SPEC 738, BACK FILL AND COMPACTION PER MAG SPEC 601 92 LF
- RETENTION BLEED-OFF LINE DISCHARGE POINT. FLOW LINE =1344.41

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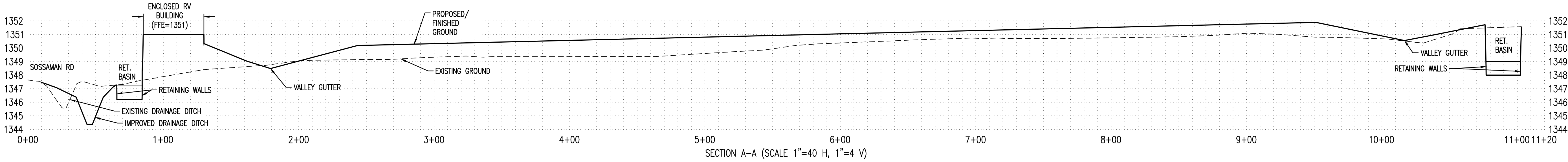
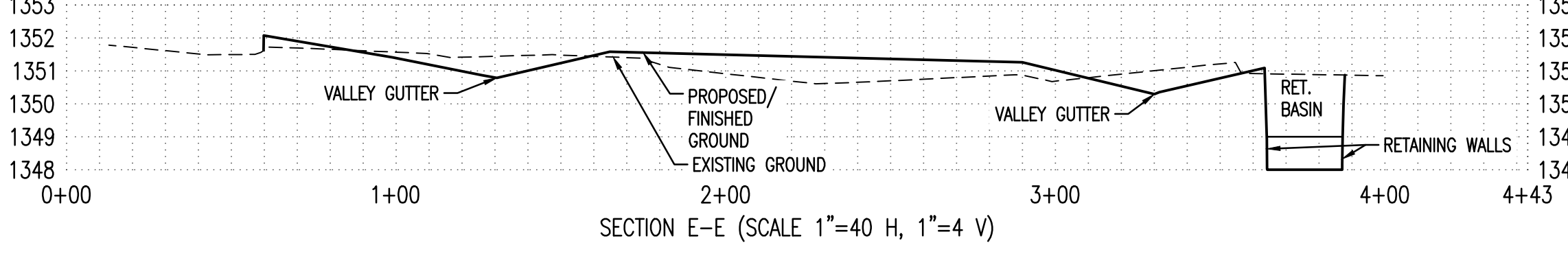
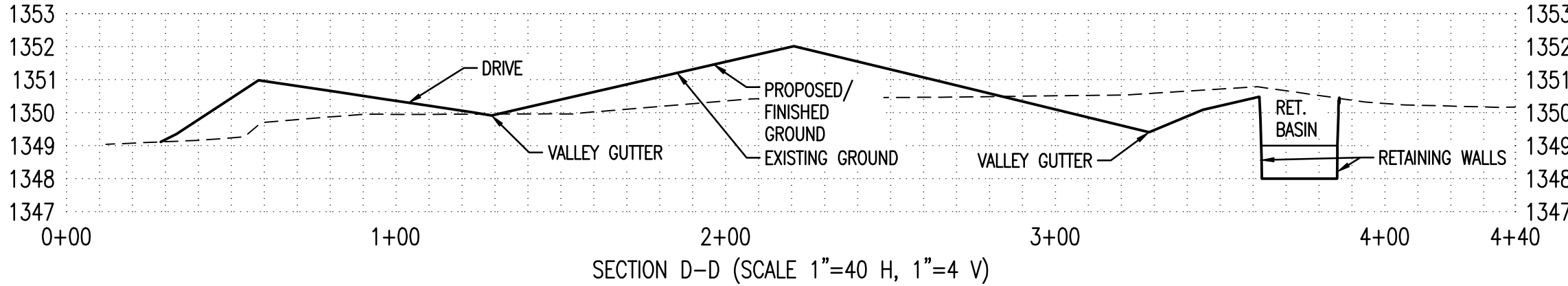
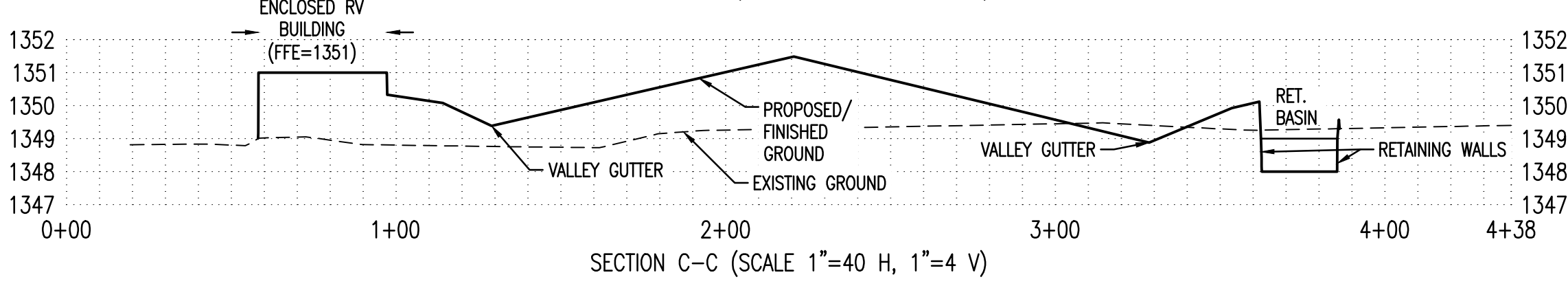
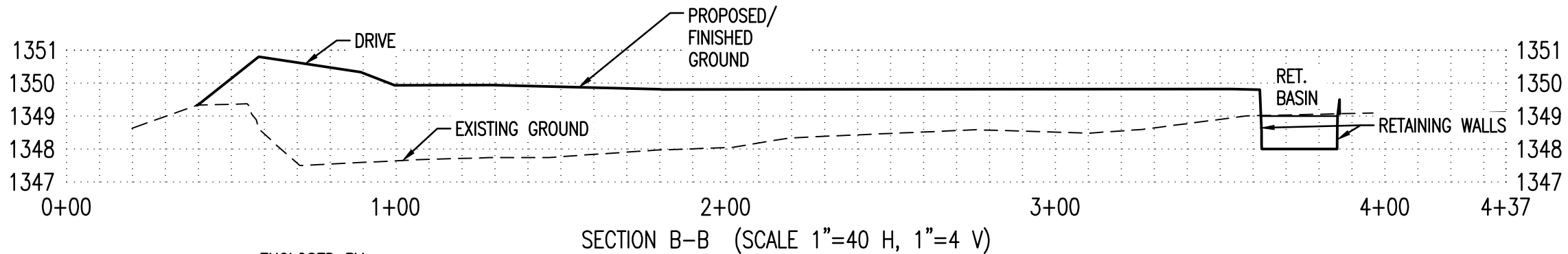
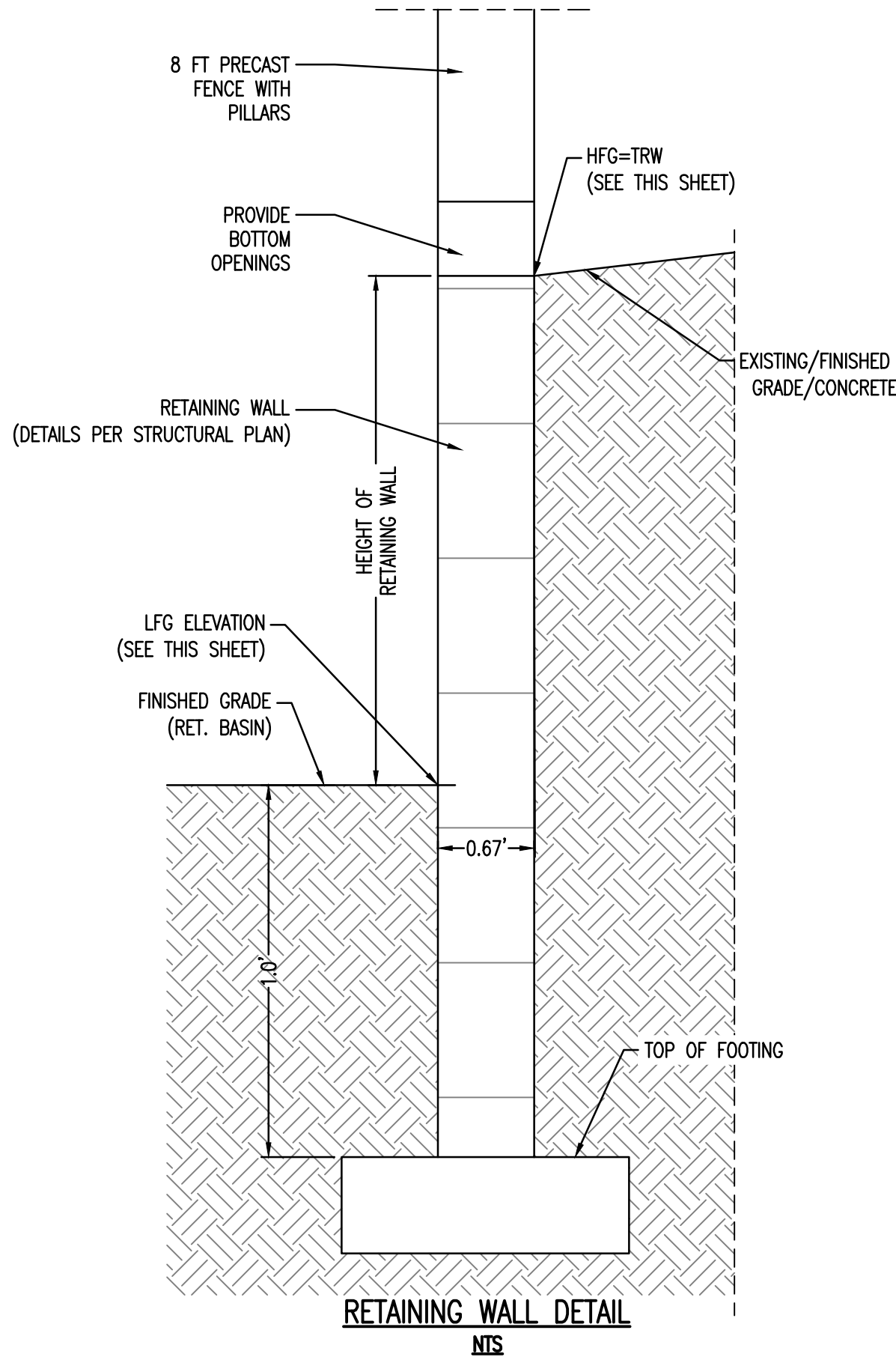
GRADING AND DRAINAGE PLAN
PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
38115 S SOSSAMAN RD., MESA, AZ 85212

811
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REGISTERED PROFESSIONAL ENGINEER
30503
THOMAS GAIL
HAWS
STATE OF ARIZONA

JOB NO.
M21040
DRAWN BY: SWN
SHEET NO.
C201

GRADING AND DRAINAGE SECTIONS
FOR
HAPPY WIFE STORAGE, MESA, AZ



REVISIONS:

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GRADING AND DRAINAGE SECTIONS

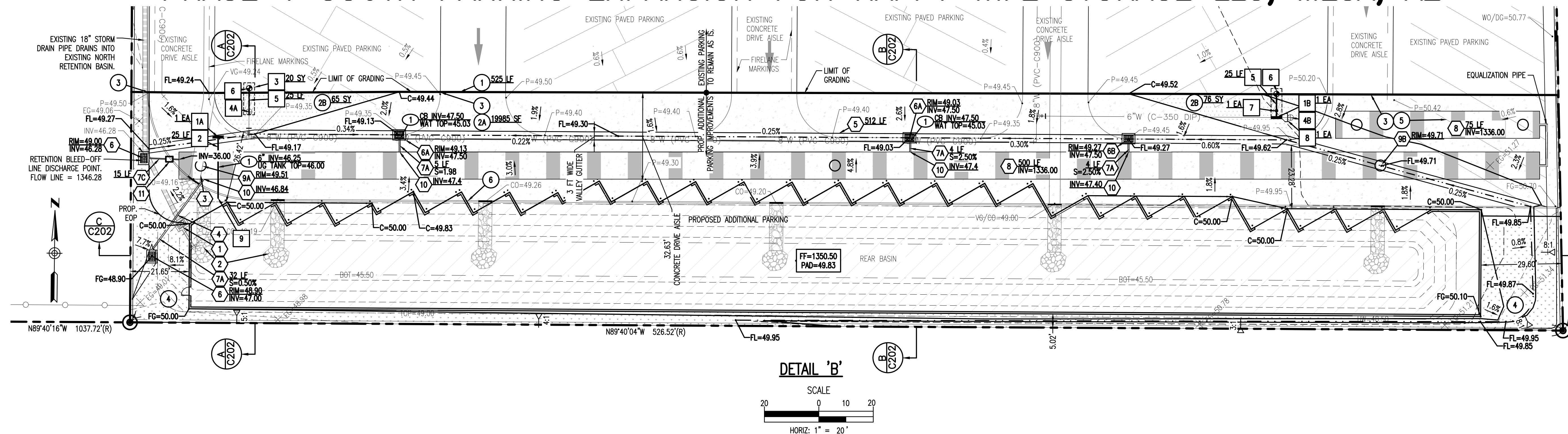
PROJECT: HAPPY WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
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THOMAS GAIL HAWS
30503
Date Signed
2022.07.22 12:50:09
Arizona Professional Engineer
No. 17174
U.S.A.

JOB NO.
M21040
DRAWN BY: SWN
SHEET NO.
C202

PHASE 1 SOUTH PARKING EXPANSION FOR HAPPY WIFE STORAGE LLC, MESA, AZ



DRAINAGE REPORT

FLOODPLAIN
THIS PARCEL IS LOCATED IN ZONE X AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP PANEL 04013C2760L REVISED OCTOBER 16, 2013. THE ENTIRE SITE IS POSITIONED IN ZONE X OUTSIDE THE FLOOD PLAIN. ZONE X DENOTES AREAS OF 0.2% ANNUAL CHANCE OF FLOOD; AREAS OF 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL FLOOD CHANCE.

EXISTING SITE CONDITIONS

THE ENTIRE SITE HAS BEEN PAVED, GRADED AND DRAINED PER APPROVED GRADING AND DRAINAGE PLANS (PERMIT PMT119-01503). ALL ONSITE FLOWS ARE RETAINED ON SITE IN THE EXISTING RETENTION BASINS. THE PAVED AND LANDSCAPED AREAS HAVE BEEN GRADED TO DRAIN TOWARDS RETENTION BASINS.

OFF-SITE FLOWS

OFFSITE FLOWS THAT AFFECTED THE SITE FROM NORTH AND EAST ARE ACCEPTED ON SITE AND ROUTED TO THE HISTORICAL LOCATIONS.

ON-SITE AND OFFSITE DRAINAGE

THE EXISTING OFFSITE AND ONSITE DRAINAGE CONDITIONS FOR THE EXISTING IMPROVEMENTS WILL BE MAINTAINED SAVE FOR THE AREA EARMARKED FOR THE ADDITIONAL PARKING.

THE PROPOSED ADDITIONAL PARKING IS PROPOSED ON THE RETENTION BASIN 2 LOCATION. THE PROPOSED IMPROVEMENTS WILL BE GRADED SUCH THAT ALL STORM RUNOFF THAT WAS RETAINED IN RETENTION BASIN 2 WILL BE CAPTURED BY CATCH BASINS/SLOTTED MANHOLE COVERS DIRECTLY ABOVE PROPOSED UNDERGROUND TANKS.

RETENTION SYSTEM SUMMARY

EXISTING REAR BASIN (RETENTION BASIN 2) VOLUME = 43,048 CF (PERMIT PMT119-01503).

PROPOSED UNDERGROUND TANK VOLUME $V_{TOT}=45,257$ CU FT (1EA, D=12', L=400')

THE VOLUME OF THE PROPOSED UNDERGROUND TANK IS GREATER THAN THAT OF THE EXISTING REAR RETENTION BASIN AND THUS OK.

BLEED-OFF DESIGN

BLEED-OFF PIPE WILL CONNECT THE UNDERGROUND RETENTION TO THE EXISTING DRAINAGE DITCH ON SOSSAMAN ROAD. A PUMP WILL BE USED TO DISSIPATE THE RETENTION VOLUME.

FINISHED FLOOR GENERAL STATEMENT:

FINISHED FLOORS ARE SAFE FROM INUNDATION DURING A 100-YEAR, 24-HR PEAK RUN-OFF EVENT IF CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS.

STANDARDS

CITY OF MESA ENGINEERING DESIGN STANDARDS MANUAL (2021).

GRADING AND PAVING NOTES

- 1 SAWCUT AND REMOVE EXISTING PAVEMENT SURFACE.
- 2A DEMOLISH EXISTING PAVEMENT/CONCRETE. CONSTRUCT 6" CONCRETE PAVEMENT OVER 6" ABC. GRADE PER THIS PLAN ELEVATIONS.
- 2B DEMOLISH EXISTING PAVEMENT/CONCRETE. REPLACE PAVEMENT IN KIND. GRADE PER THIS PLAN ELEVATIONS.
- 3 MATCH EXISTING PAVEMENT ELEVATION.
- 4 LANDSCAPED AREA
- 5 PARKING STRIPE. MATCH EXISTING.
- 6 DEMOLISH EXISTING VERTICAL CURB.

STORM DRAIN CONSTRUCTION NOTES

- 1 DEMOLISH OR REMOVE AND SALVAGE EXISTING CATCH BASIN.
- 2 DEMOLISH OR ABANDON THE RIP RAP ROCK (TYPICAL).
- 3 DEMOLISH VALLEY GUTTER AND GRADE PAVEMENT PER THE GRADING PLAN.
- 4 ABANDON EXISTING STORM DRAIN PIPE.
- 5 3 FT WIDE VALLEY GUTTER.
- 6A CATCH BASIN PER MAG DTL 534. POT HOLE EXISTING WATER BEFORE CONSTRUCTION AND NOTIFY ENGINEER IF A FIELD CHANGE IS NEEDED.
- 6B CATCH BASIN PER MAG DTL 534.
- 7A 6" HDPE STORM DRAIN PIPE PER MAG SPEC 738, BACKFILL AND COMPACTION PER MAG SPEC 601. SLOPE AND INVERTS PER PLAN.
- 7C 4" PVC SDR-35 STORM DRAIN BLEEDOFF PIPELINE PER MAG SPEC 738, BACK FILL AND COMPACTION PER MAG SPEC 601
- 8 10 FT DIA 14 GAUGE POLYMER COATED CMP STORAGE TANK PIPE WITH 3"x1" CORRUGATION PER UNDERGROUND RETENTION TANK DETAIL. LENGTH PER PLAN.
- 9A ACCESS MANHOLE PER DETAIL ON SHEET C302
- 9B ACCESS MANHOLE WITH SLOTTED COVER.

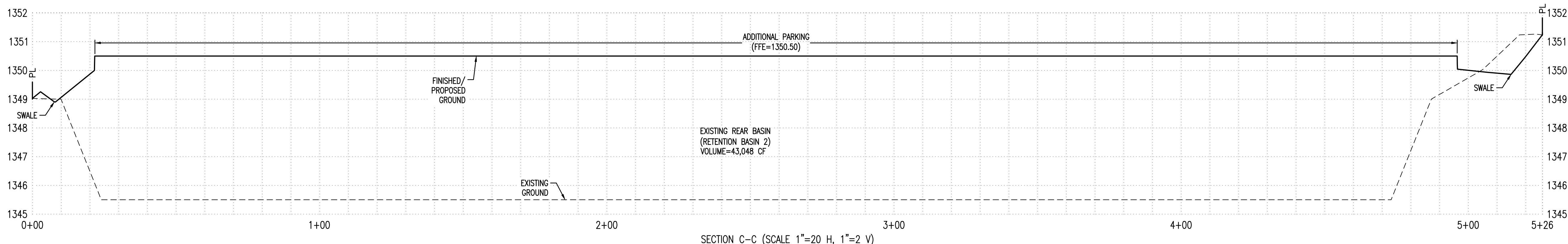
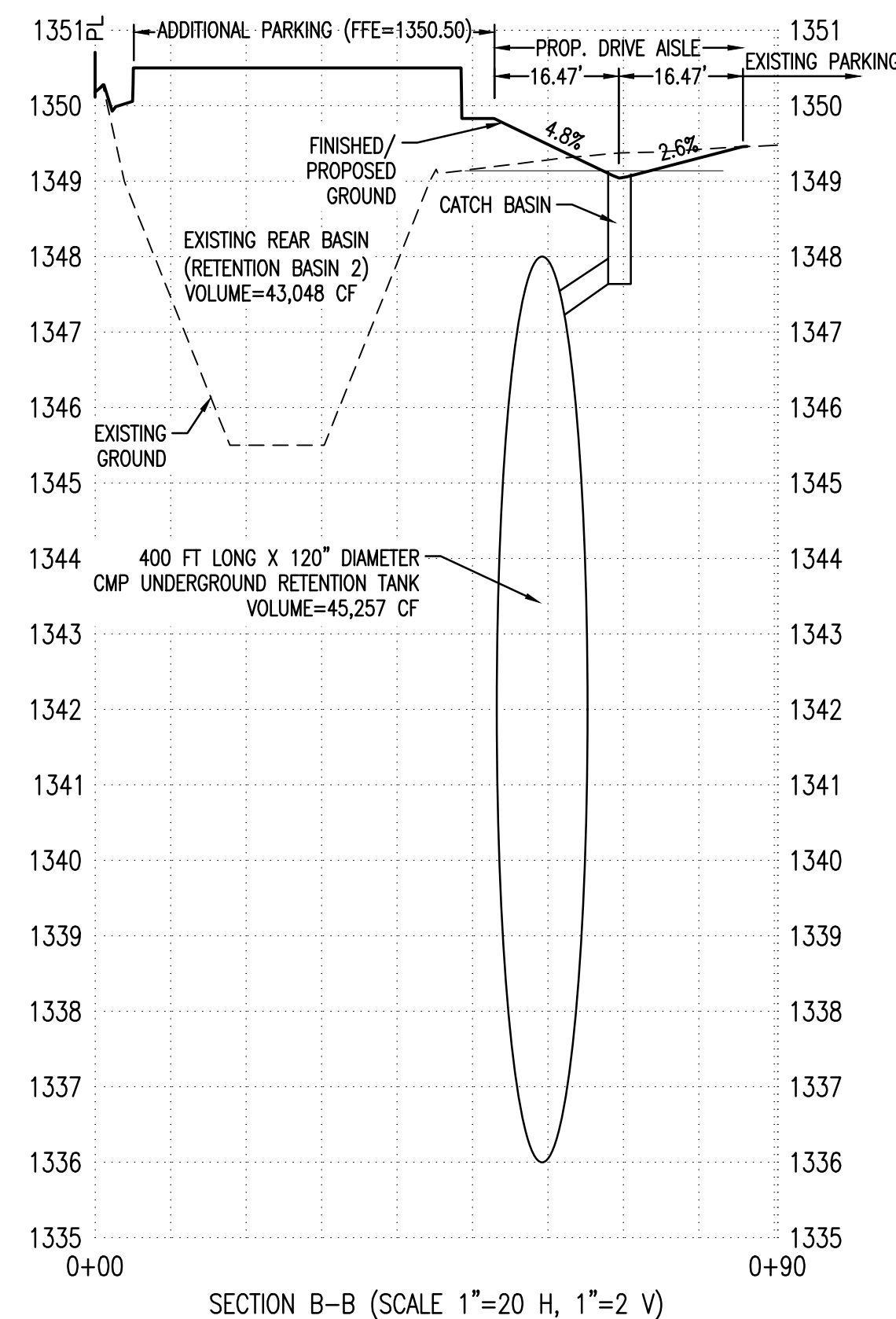
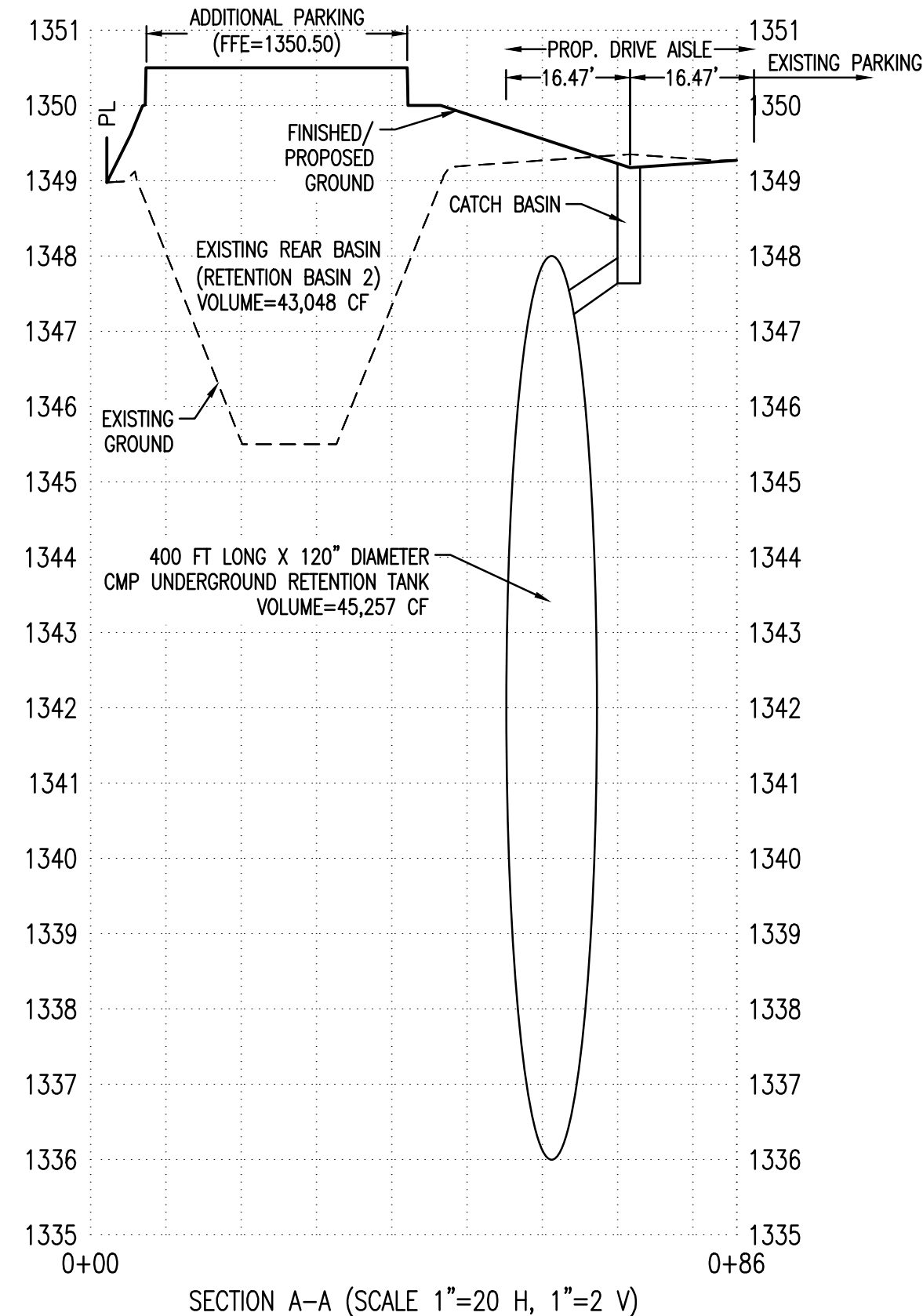
- 10 CONNECT HDPE TO LATERAL FULL CIRCUMFERENCE WELDED CMP INLET. USE FLAT BAND WITH GASKET FOR HDPE TO CMP CONNECTION
- 11 RETENTION BLEED-OFF PUMP STATION. Q=0.35 CFS AND TOTAL DYNAMIC HEAD, TDH =10.28 FT.

WATER NOTES

- 1A 8"x4" TEE WITH JOINT RESTRAINTS PER MAG DETAIL 303
- 1B 6"x6" TEE FOR FIRELINE
- 2 6" CLASS 350 D.I.P. WATER LINE.
- 3 SAWCUT AND REMOVE EXISTING PAVEMENT SURFACE, 2' MIN. LEAVE NEAT EDGE FOR REPAIR.
- 4A REMOVE AND SALVAGE EXISTING FIRE HYDRANT AND INSTALL D.I.P TO D.I.P MATERIAL COUPLER.
- 4B REMOVE AND SALVAGE EXISTING FIRE HYDRANT.
- 5 6" CLASS 350 D.I.P. WATER LINE.
- 6 INSTALL SALVAGED FIRE HYDRANT.
- 7 6" VALVE PER MAG STD DTL 301 AND 391-1 WITH JOINT RESTRAINTS PER MAG DETAIL 303 AND THRUST BLOCK PER MAG STD DETAIL 380.
- 8 6" BLIND FLANGE END CAP.
- 9 SEE PLUMBING PLANS FOR CONTINUATION.

UTILITY CROSSINGS

- 1 UTILITY CROSSING. ELEVATIONS PER PLAN.



REVISIONS:

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GRADING, DRAINAGE AND UTILITY PLAN

PROJECT:
HAPPY WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
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per
Professional Engineer
THOMAS GAIL HAWS
30503
DATE SIGNED
ATTEST
STATE OF ARIZONA

JOB NO.
M21040

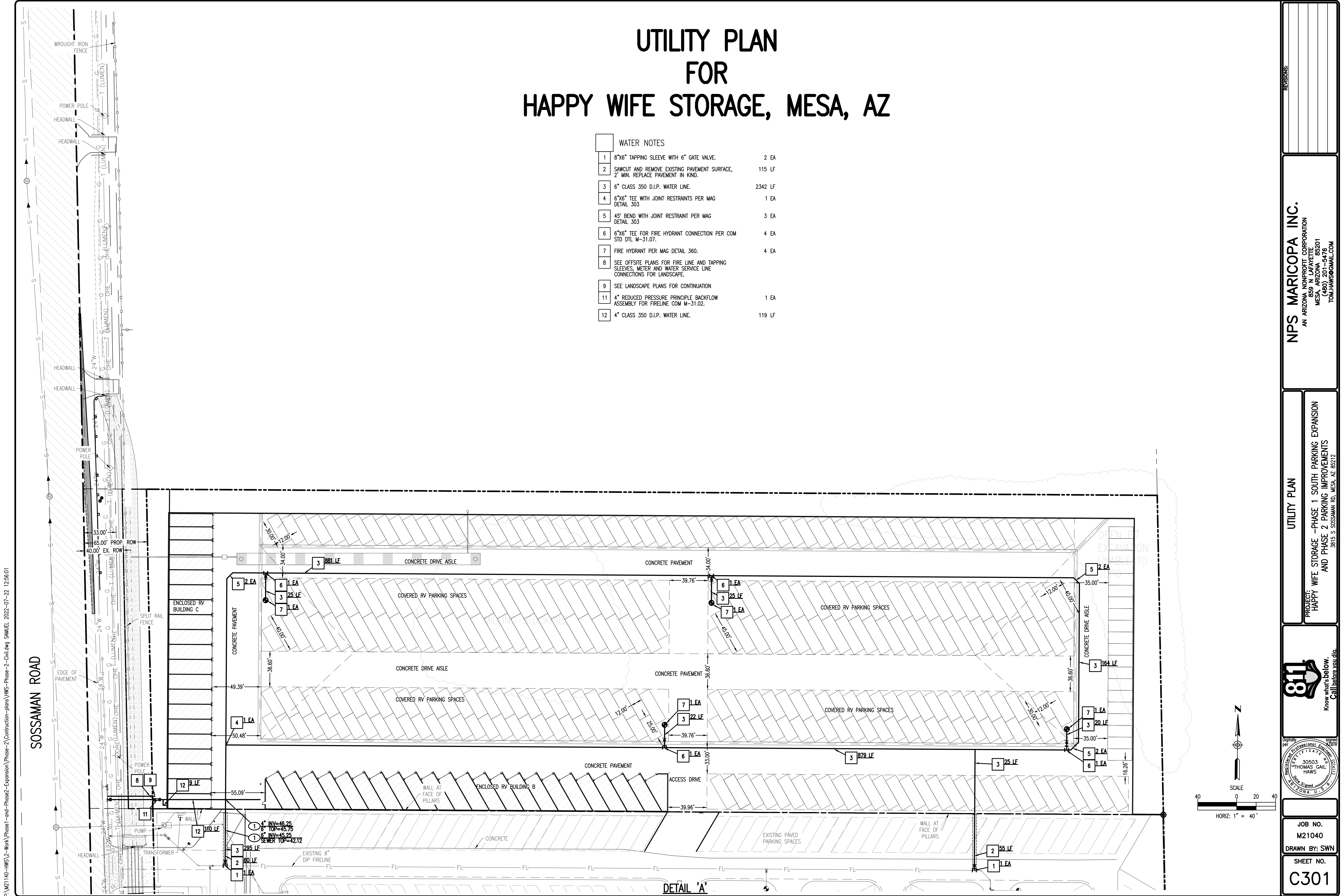
DRAWN BY: SWN

SHEET NO.

C203

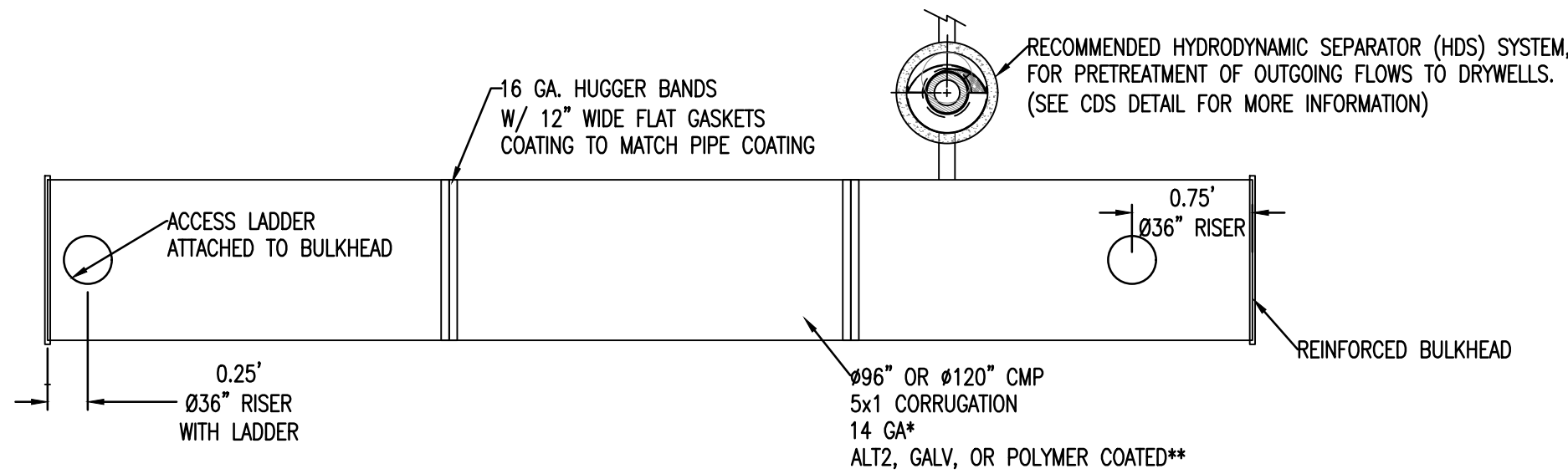
UTILITY PLAN FOR HAPPY WIFE STORAGE, MESA, AZ

WATER NOTES		
1	8"x6" TAPPING SLEEVE WITH 6" GATE VALVE.	2 EA
2	SAWCUT AND REMOVE EXISTING PAVEMENT SURFACE, 2' MIN. REPLACE PAVEMENT IN KIND.	115 LF
3	6" CLASS 350 D.I.P. WATER LINE.	2342 LF
4	6"x6" TEE WITH JOINT RESTRAINTS PER MAG DETAIL 303	1 EA
5	45° BEND WITH JOINT RESTRAINT PER MAG DETAIL 303	3 EA
6	6"x6" TEE FOR FIRE HYDRANT CONNECTION PER COM STD DTL M-31.07.	4 EA
7	FIRE HYDRANT PER MAG DETAIL 360.	4 EA
8	SEE OFFSITE PLANS FOR FIRE LINE AND TAPPING SLEEVES, METER AND WATER SERVICE LINE CONNECTIONS FOR LANDSCAPE.	
9	SEE LANDSCAPE PLANS FOR CONTINUATION	
11	4" REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY FOR FIRELINE COM M-31.02.	1 EA
12	4" CLASS 350 D.I.P. WATER LINE.	119 LF

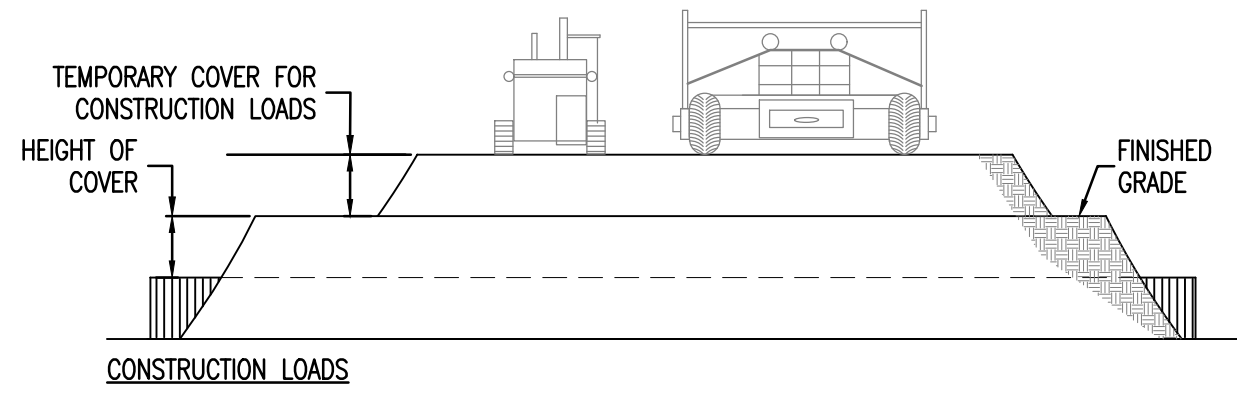


P:\M21140-HWS\2-Work\Phase1-and-Phase2-Expansion\Phase-2\Construction-plans\HWS-Phase-2-Civil.dwg SAMUEL 2022-07-22 12:56:37

TYPICAL CMP SECTION DETAIL
N.T.S.



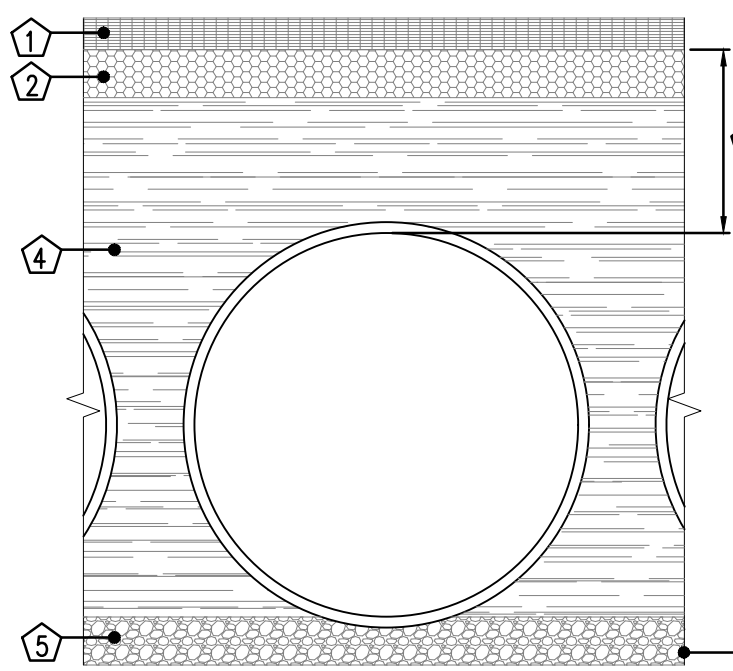
ALL INFORMATION ON THIS SHEET IS FOR A TYPICAL DETENTION SYSTEM AND IS SUBJECT TO CHANGE ON A PROJECT BASIS
* GAUGE TO BE SELECTED BY ENGINEER OF RECORD (EOR), 14 GA IS SUGGESTED FOR LARGE DIAMETERS
** COATING TO BE SELECTED BY EOR BASED ON SOIL TYPES
*** WELDS TO CONFORM TO AASHTO REGULATION
TYPICAL ACCESS RISER DIAMETERS 30"Ø, 36"Ø AND 48"Ø SEE MUNICIPALITY STANDARDS FOR DIAMETER DESIGN



FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.



- KEY
1. RIGID OR FLEXIBLE PAVEMENT
 2. GRANULAR ROAD BASE
 3. 12" MIN. FOR DIAMETERS THROUGH 96"
18" MIN. FOR DIAMETERS FROM 102"
AND LARGER MEASURED TO TOP OF RIGID
OR BOTTOM OF FLEXIBLE PAVEMENT.
 4. SELECT GRANULAR FILL PER AASHTO M145
A1, A2 OR A3, OR APPROVED EQUAL.
PLACED IN 8" LIFTS (COMPACTED TO MIN.
90% STANDARD DENSITY PER AASHTO T99.)
INCLUDING 3/8" MINUS ANGULAR STONE
 5. GRANULAR BEDDING, ROUGHLY SHAPED TO
FIT THE BOTTOM OF PIPE, 4" TO 6" IN DEPTH
 6. CONTECH C-40 OR C-45 NON-WOVEN
GEOTEXTILE REQUIRED TO WRAP ENTIRE TRENCH.

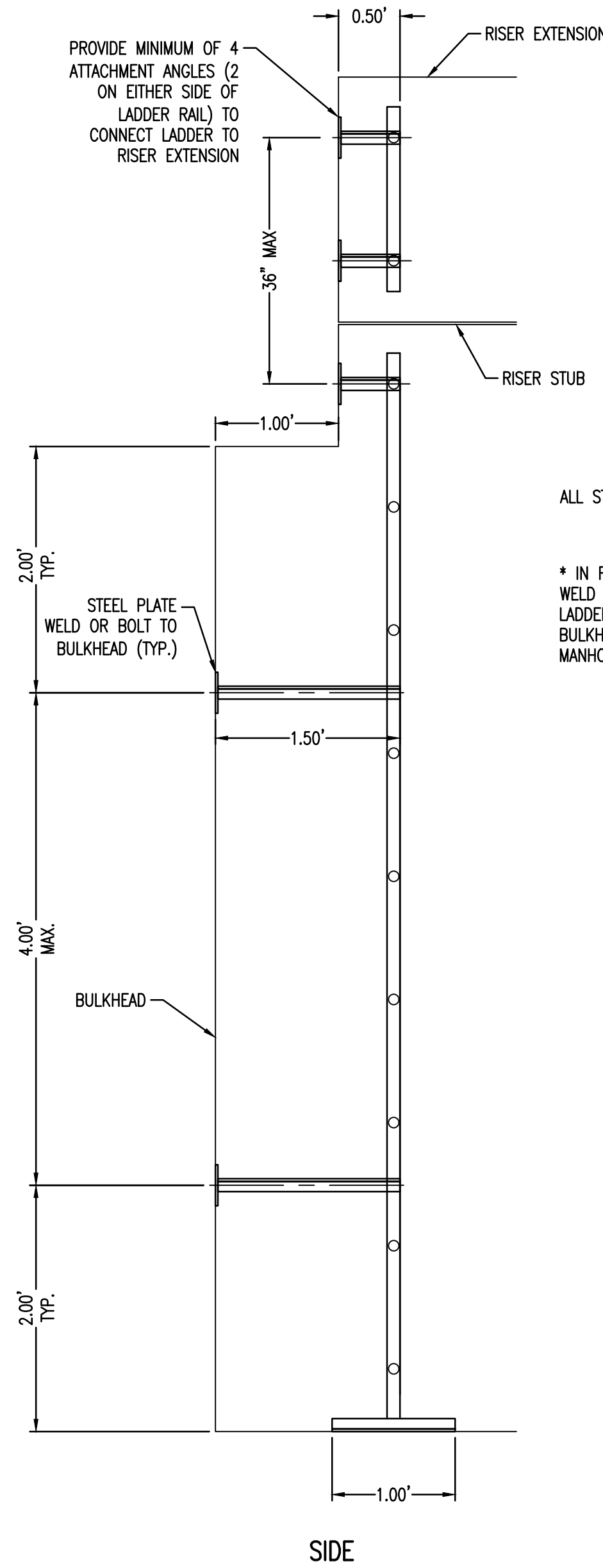
FOUNDATION/BEDDING PREPARATION

PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION PREPARATION IS COMPLETE, 4" - 6" OF A WELL-GRADED GRANULAR MATERIAL SHALL BE PLACED AS THE BEDDING.

BACKFILL

THE BACKFILL SHALL BE AN A1, A2 OR A3 GRANULAR FILL PER AASHTO M145, OR A WELL-GRADED GRANULAR FILL AS APPROVED BY THE SITE ENGINEER (SEE INSTALLATION GUIDELINES). THE MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 90% AASHTO T99 STANDARD PROCTOR DENSITY. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

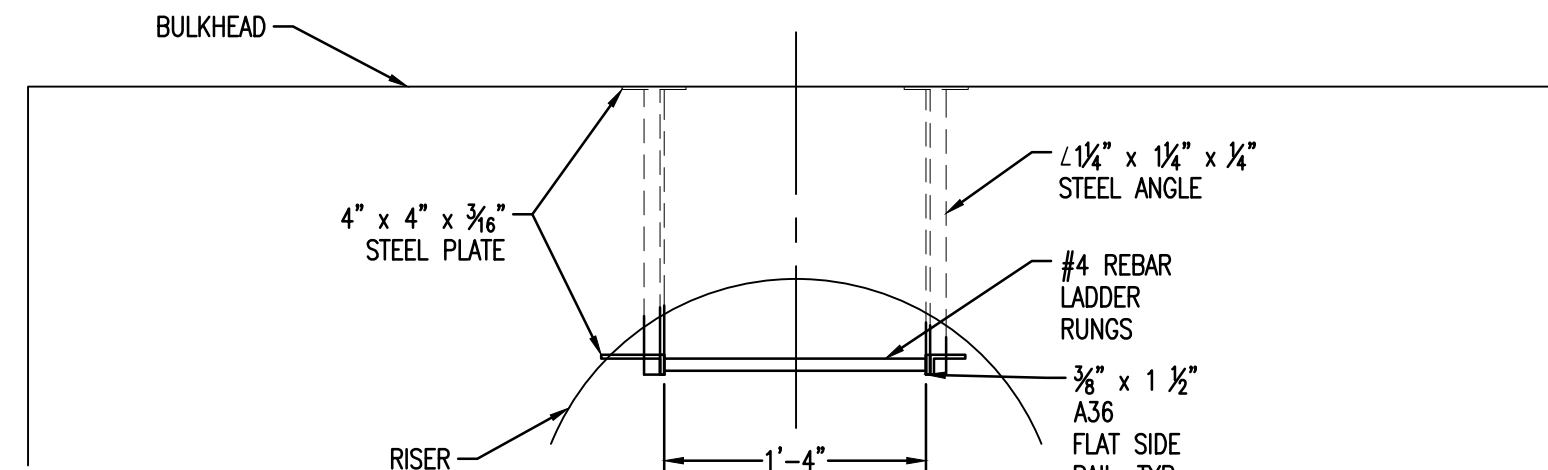
OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.



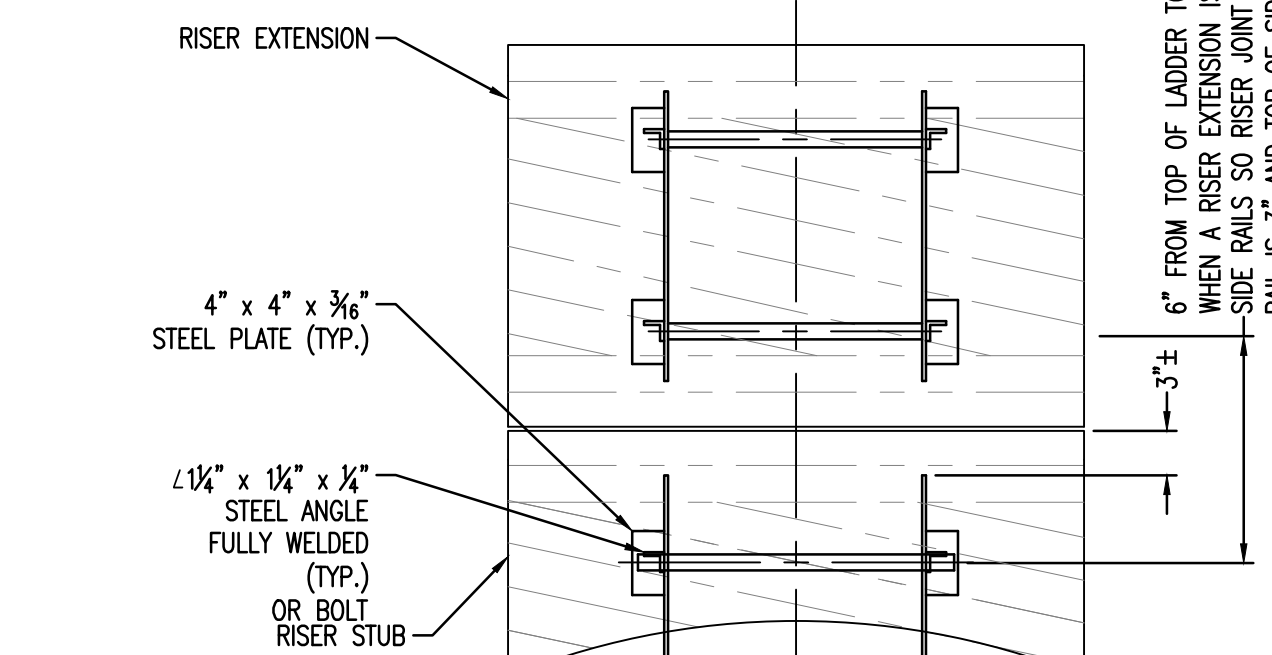
SIDE

ALL STEEL PER ASTM A36

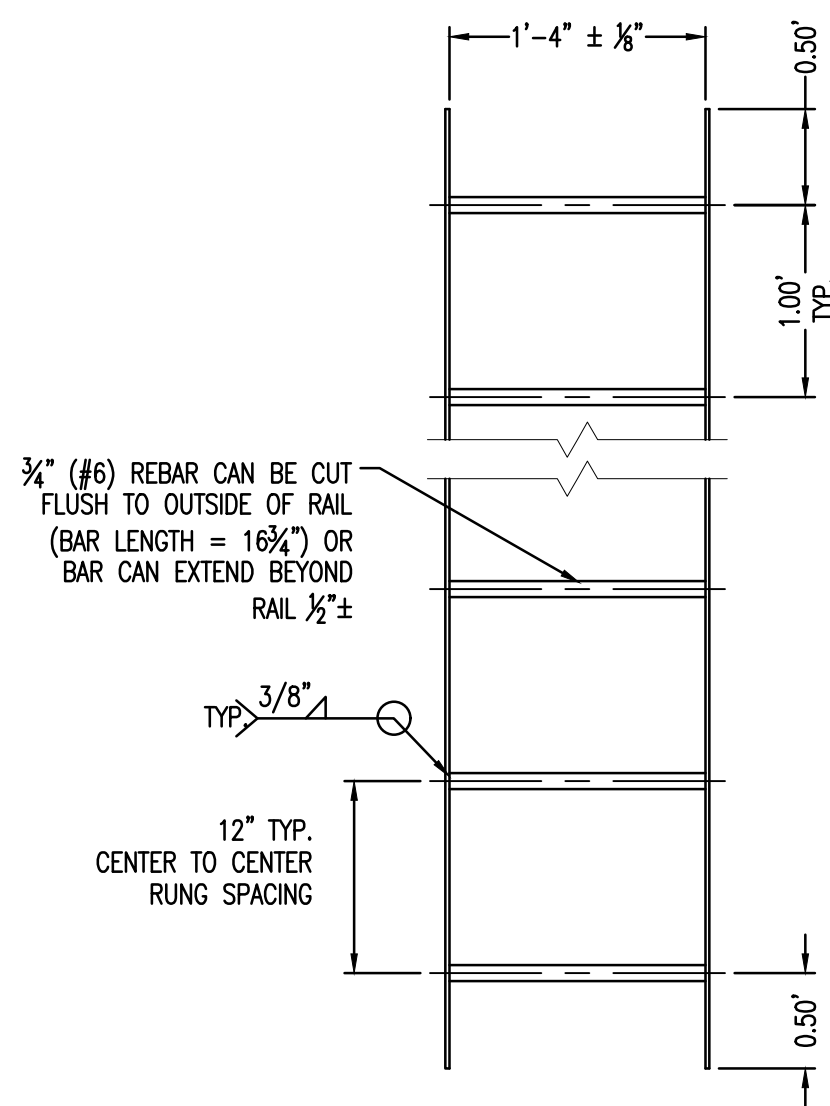
* IN FIELD
WELD OR BOLT
LADDER TO
BULKHEAD AND
MANHOLE RISER



PLAN



ELEVATION



ELEVATION

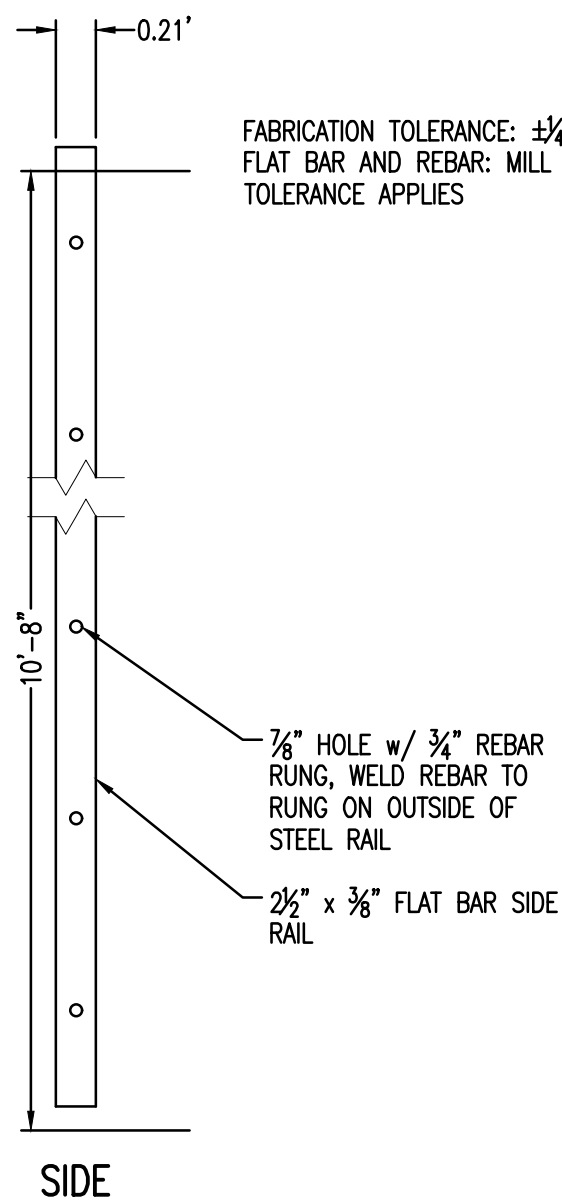
NOTES:

1. LADDERS CAN BE MADE IN STANDARD LENGTHS AND CUT TO FIT
2. ALL MATERIAL TO MEET ASTM A-36
3. LADDER TO BE HOT DIPPED GALVANIZED PER ASTM A-123 AFTER FABRICATION IS COMPLETE

STANDARD LADDER DETAIL

SCALE : N.T.S.

PART No. L-128-16



SIDE

NOTE:

THIS DRAWING IS INTENDED TO APPLY TO LADDERS INSTALLED IN RISERS HAVING A DIAMETER OF 36" OR LARGER AND LOCATED ONE FOOT FROM THE BULKHEAD ONLY

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DETAILS

PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
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State of Arizona
Professional Engineer
No. 30503
Date Signed
10/15/2022

JOB NO.

M21040

DRAWN BY: SWN

SHEET NO.

C302

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION (MCDOT)
GENERAL NOTES FOR RIGHT-OF-WAY PERMITS NOTES

- ALL WORK SHALL CONFORM TO THE REVISED EDITION OF THE UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS/CONSTRUCTION PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AS AUTHORIZED AND MODIFIED BY THE MOST CURRENT MCDOT SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND NON-CONFLICTING PROJECT SPECIAL PROVISIONS. ALL WORK MUST ALSO COMPLY WITH ORDINANCE P-36 "MARICOPA COUNTY ORDINANCE ADDRESSING REQUIREMENTS FOR PERMITS TO WORK IN RIGHT-OF-WAY WITHIN UNINCORPORATED MARICOPA COUNTY." ANY EXCEPTIONS MUST RECEIVE EXPLICIT APPROVAL FROM MCDOT AND SHALL BE IDENTIFIED ON THE PLANS AS HAVING EXPLICIT APPROVAL FROM MCDOT.
- CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY MCDOT. APPROVAL OF THESE PLANS IS FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT MCDOT FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, THE MCDOT ROADWAY DESIGN MANUAL, OR OTHER APPLICABLE DESIGN STANDARDS.
- THE MOST CURRENT APPROVED SET OF PLANS SHALL BE ON THE SITE DURING CONSTRUCTION AND AVAILABLE TO MCDOT INSPECTORS.
- ALL BOX CULVERTS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) LATEST DESIGN SPECIFICATIONS AND STANDARDS.
- CONTRACTOR TO OBTAIN MCDOT PERMITS PRIOR TO CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY, AND ALL NECESSARY PERMITS FROM OTHER AGENCIES AND FROM LOCAL GOVERNMENTS FOR WORK WITHIN THEIR JURISDICTION.
- CONTRACTOR SHALL NOTIFY THE ASSIGNED MCDOT INSPECTOR LISTED ON PERMIT AT LEAST 24 HOURS IN ADVANCE OF ANY CONSTRUCTION.
- CONTRACTOR PERFORMING CONSTRUCTION OR EXCAVATING OPERATIONS IS RESPONSIBLE FOR LOCATING AND RELOCATING ALL UTILITIES IN CONFLICT AT NO EXPENSE TO MARICOPA COUNTY. THE CONTRACTOR SHALL CONTACT ARIZONA 811 PRIOR TO BEGINNING CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR EARTH MOVING FROM MARICOPA COUNTY AIR QUALITY DEPARTMENTS DUST COMPLIANCE DIVISION PRIOR TO CONDUCTING EXCAVATION OPERATIONS. A COPY OF THE PERMIT AND DUST CONTROL PLAN SHALL BE SUBMITTED TO THE COUNTY ENGINEER PRIOR TO COMMENCEMENT OF ANY EARTHMOVING ACTIVITIES.
- PRIOR TO CONDUCTING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL OBTAIN FROM THE ARIZONA STATE HISTORICAL PRESERVATION OFFICER RECOMMENDATIONS REGARDING THE NEED FOR CULTURAL RESOURCES (ARCHAEOLOGICAL) CLEARANCE. ALL DISCOVERIES OF HUMAN REMAINS, CULTURAL ARTIFACTS, OR PALEONTOLOGICAL REMAINS SHALL BE REPORTED TO THE ARIZONA STATE MUSEUM AND MCDOT. UPON DISCOVERY, CONTRACTOR SHALL CEASE OPERATIONS IN THE VICINITY OF THE FIND AND PROTECT THE DISCOVERY AREA FROM FURTHER DISTURBANCE UNTIL THE FIND CAN BE PROFESSIONALLY INVESTIGATED BY THE ARIZONA STATE MUSEUM AND MCDOT.
- EXCEPT UNDER EMERGENCY CONDITIONS, ROADS SHALL NOT BE CLOSED FOR CONSTRUCTION ACTIVITY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE MCDOT TRANSPORTATION DIRECTOR.
- PRIOR TO MOVING OR DESTROYING PROTECTED NATIVE PLANT SPECIES, THE CONTRACTOR SHALL FILE A FORMAL NOTICE OF INTENT WITH THE ARIZONA DEPARTMENT OF AGRICULTURE NATIVE PLANTS.
- PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, BASE COURSE AND WEARING SURFACE, A PAVEMENT VERIFICATION REPORT SUBMITTAL IS REQUIRED TO BE SUBMITTED TO MCDOT FOR REVIEW AND APPROVAL. IF SUBGRADE STABILIZATION IS REQUIRED, THE AREA STABILIZED SHALL BE FROM BACK OF SIDEWALK TO BACK OF SIDEWALK AND MATCH THE STABILIZATION DEPTH OF THE PAVEMENT STRUCTURE.
- ASPHALT MIX DESIGNS SHALL BE SUBMITTED TO MCDOT A MINIMUM OF TWO BUSINESS DAYS PRIOR TO PLACING ANY ASPHALT COURSES. (TRENCH WORK EXCLUDED.) ASPHALT MIX DESIGNS MUST BE APPROVED PRIOR TO PAVING ACTIVITIES. ALL PAVED TURNOUTS SHALL HAVE THE SAME ASPHALT AND BASE REQUIREMENTS AS THE ADJACENT ROADWAY UNLESS NOTED OTHERWISE.
- ALL ASPHALT CONCRETE PAVEMENT OF LOCAL AND MINOR COLLECTOR ROADS WITH A LONGITUDINAL GRADE LESS THAN 5% SHALL RECEIVE A PRESERVATIVE SEAL (FILLED) ASPHALT SEALER) IN ACCORDANCE WITH SECTIONS 334 AND 718.3 OF THE MAG UNIFORM STANDARD SPECIFICATIONS.
- EXCEPT FOR ARAC MIXES, ALL OTHER AC MIXES SHALL BE SUPERPAVE/GRYATORY TYPE UNLESS APPROVED BY MCDOT. AC MIX DESIGN USED ON LOCAL AND MINOR COLLECTOR STREETS SHALL BE FOR LOW TRAFFIC CONDITION. NOMINAL SIZE TO THICKNESS RATIO SHALL NOT EXCEED 1:3. THE NOMINAL SIZE DESIGNATION FOR THE SURFACE COURSE ON URBAN ROADWAYS SHALL BE A ½" MIX, UNLESS APPROVED BY MCDOT.
- ALL COMPACTION AND BACKFILL WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE MCDOT SUPPLEMENT TO MAC SPECIFICATION SECTION 601. BACKFILL UNDER EXISTING PAVEMENT, CURB AND GUTTER, ROADWAY SHOULDERS, AND UNPAVED ROADWAYS SHALL CONSIST OF ONE-HALF (1/2) OR ONE SACK CLSM. UNPAVED ROADWAY AREAS INCLUDE THE TRAVELLED WAY PLUS FIVE FEET BEYOND THE TRAVELLED WAY.
- ALL STRUCTURES, SUCH AS MANHOLES, VALVE BOX & COVERS, AND MONITORING WELLS MUST BE MARKED WITH AT LEAST TWO REFLECTIVE FLEXIBLE POSTS WHEN STRUCTURES ARE LOCATED OUTSIDE THE TRAVELED WAY AND WITHIN THE RIGHT-OF-WAY. (APPLIES ONLY WHEN THERE IS NO CURB.) ALL CLEAR ZONE HAZARDS SHALL BE MITIGATED IN A MANOR APPROVED BY MCDOT AT NO COST TO THE COUNTY.
- PAVEMENT WIDENING AND PAVEMENT REPLACEMENT SHALL CONFORM TO THE REQUIREMENTS OF MAG SPECIFICATION SECTION 336 AND THE MCDOT SUPPLEMENT THERETO. PAVEMENT CUTS SHALL NOT BE LOCATED WITHIN A LANE WHEEL PATH. THE LANE WHEEL PATH IS THE ENTIRE LANE WIDTH EXCEPT THE AREA WITHIN ONE FOOT OF A LANE LINE STROKE AND EXCEPT THE CENTER TWO FEET OF THE TRAVEL LANE.
- ALL EXISTING PAVEMENT MARKINGS, TRAFFIC SIGNS AND SIGNAL EQUIPMENT TO BE REMOVED, REPLACED, RELOCATED OR REPAIRED DUE TO CONTRACTOR'S WORK WILL BE DONE BY THE CONTRACTOR AT THEIR EXPENSE. ALL SALVAGED SIGNS SHALL BE DELIVERED TO THE TRAFFIC OPERATIONS BUILDING AT 2909 W. DURANGO ST. ARRANGEMENTS CAN BE MADE FOR DELIVERY BY CALLING (602) 506-8662. ALL NEW STREET NAME SIGNS SHALL BE PROVIDED AND INSTALLED BY THE PERMITTEE AT NO EXPENSE TO MARICOPA COUNTY.
- ALL PERMITTED CONSTRUCTION IS SUBJECT TO INSPECTION AND IS REQUIRED TO MEET ALL APPLICABLE STANDARDS PRIOR TO THE RELEASE OF THE CORRESPONDING BOND.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS PER MAC 107.9. DISPOSAL OF ALL WASTE MATERIAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CHIPPED, CRACKED, OR IMPRINTED CURB, GUTTER, OR SIDEWALK IS NOT PERMITTED. CONCRETE PATCHING OF CURB, GUTTER, AND SIDEWALK IS NOT PERMITTED.
- THE PERMITTEE'S ENGINEER OF RECORD IS REQUIRED TO CERTIFY SUBDIVISION CONSTRUCTION IN ACCORDANCE WITH THE MCDOT SUBDIVISION INSPECTION GUIDELINES.

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION R4-30-301 OF THE RULES OF THE ARIZONA STATE BOARD OF TECHNICAL REGISTRATION, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE REVIEW OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY CITY OF MESA IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT I HAVE REVIEWED THE 'AS-BUILT' FOR THE ABOVE REFERENCED PROJECT AND CERTIFY THAT THE PROJECT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS AND REVISIONS THAT IT WILL FUNCTION AS DESIGNED AND PERMITTED.

REGISTERED CIVIL ENGINEER _____ DATE _____

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

REGISTERED SURVEYOR _____ DATE _____

MCDOT APPROVAL

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION _____ DATE _____

UTILITY COORDINATION

UTILITY COMPANY	ADDRESS	CONTACT	PHONE	EMAIL	DATE SUBMITTED	RESPONSE
CENTURY LINK/LUMEN	135 W ORION ST TEMPE, AZ 85283	KAREN BROWN	602-630-5476	KAREN.BROWN1@LUMEN.COM	2022-06-20	POSSIBLE CONFLICTS
SOUTHWEST GAS	5705 S. KYRENE RD. TEMPE AZ 85283	ANDY SAKS	480-730-3857	ANDREW.SAKS@SWGAS.COM	2022-06-20	NO CONFLICTS
SRP ELECTRIC	P.O. BOX 52025, PHOENIX, AZ 85072-2025	ANDRE BENAVIDEZ	602-236-3586	ANDRE.BENAVIDEZ@SRPNET.COM	2022-06-20	POSSIBLE CONFLICTS

PHASE 2 OFFSITE IMPROVEMENTS PLANS FOR HAPPY WIFE STORAGE, MESA, AZ

PROJECT DATA

ASSESSOR'S PARCEL NUMBER : 304-30-007M
PROJECT ADDRESS : 3815 S SOSSAMAN RD, MESA, AZ 85212
ZONING : L1
LOT AREA : 348,875 SQ.FT. = 8.01 AC
PROJECT NARRATIVE : PROPOSED PARKING

ROAD DESIGN DATA

ROAD NAME : SOSSAMAN ROAD
CLASSIFICATION : URBAN/MINOR ARTERIAL
TERRAIN : LEVEL
DESIGN SPEED : 45 MPH
AVERAGE DAILY TRAFFIC : 9500/VPD
CLEAR DISTANCE WIDTH : 24 FT - 28 FT

OWNER

REDPOINT CONTRACTING HOLDINGS LLC
39506 N DAISAY MOUNTAIN,
PHOENIX, AZ 85086

ENGINEER

NPS MARICOPA INC
859 NORTH LAFAYETTE'
MESA, AZ 85201
TEL: 480.201.5476
EMAIL: TOM.HAWS@GMAIL.COM

ARCHITECT

TM QUIGLEY
TIM@TODDAMMONDS.COM
608-444-4000

SURVEYOR

D2 SURVEYING
24468 N. CORN ST.
FLORENCE, AZ 85132
(480) 221-1365

DATE SURVEYED NOV 6, 2021

DRAINAGE REPORT

SEE SEPARATE DRAINAGE REPORT
PROVIDED AS PART OF THIS SUBMITTAL.

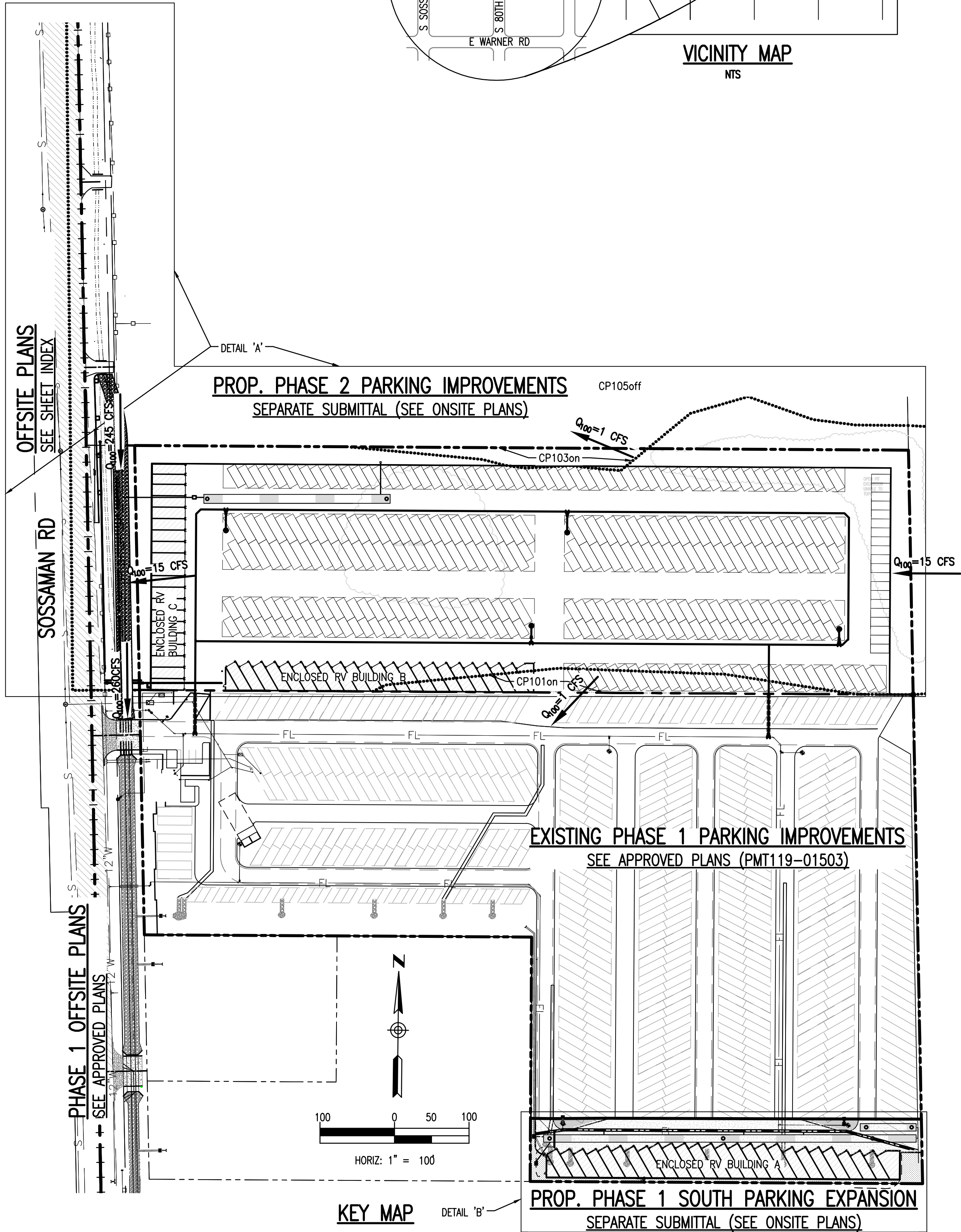
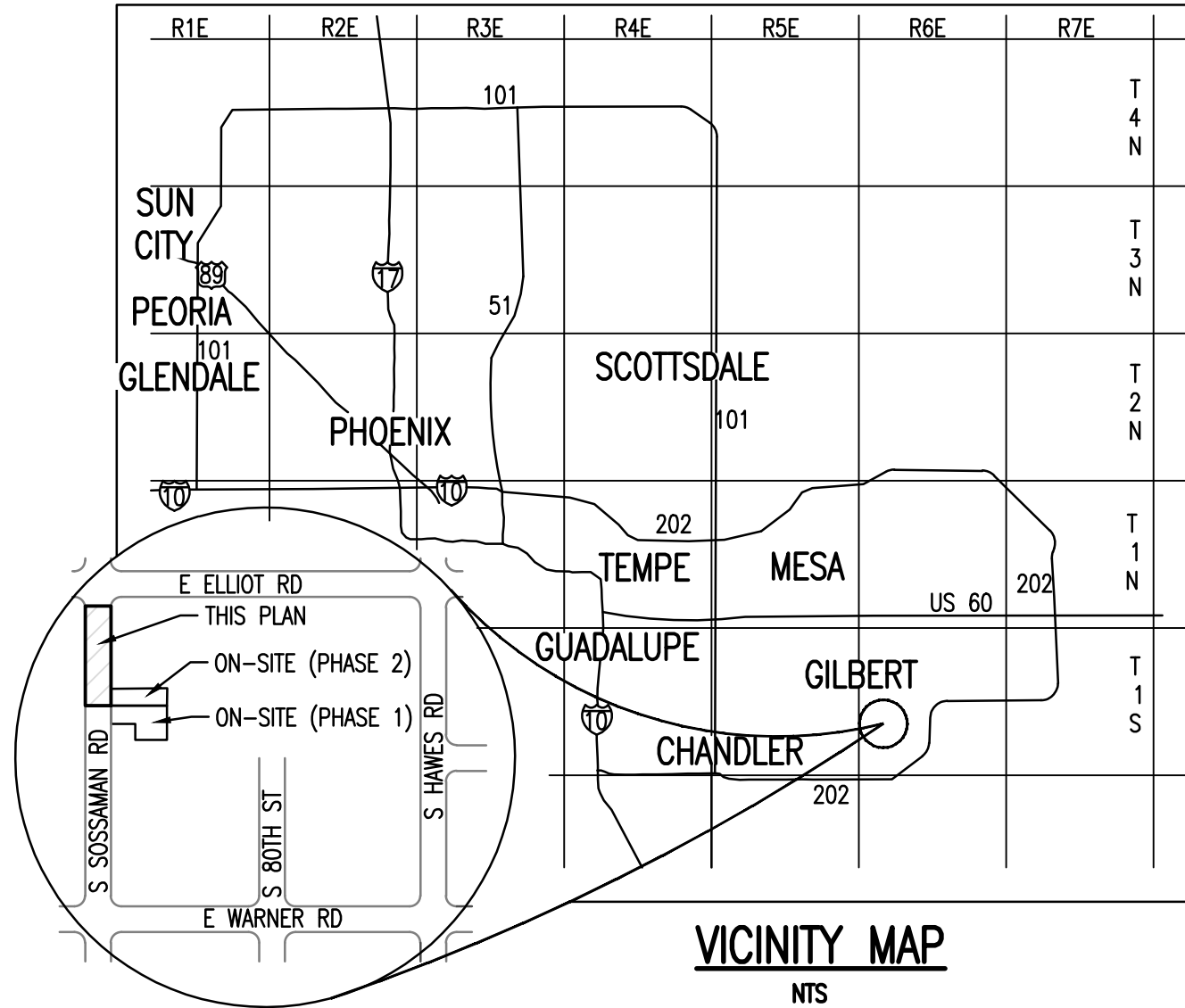
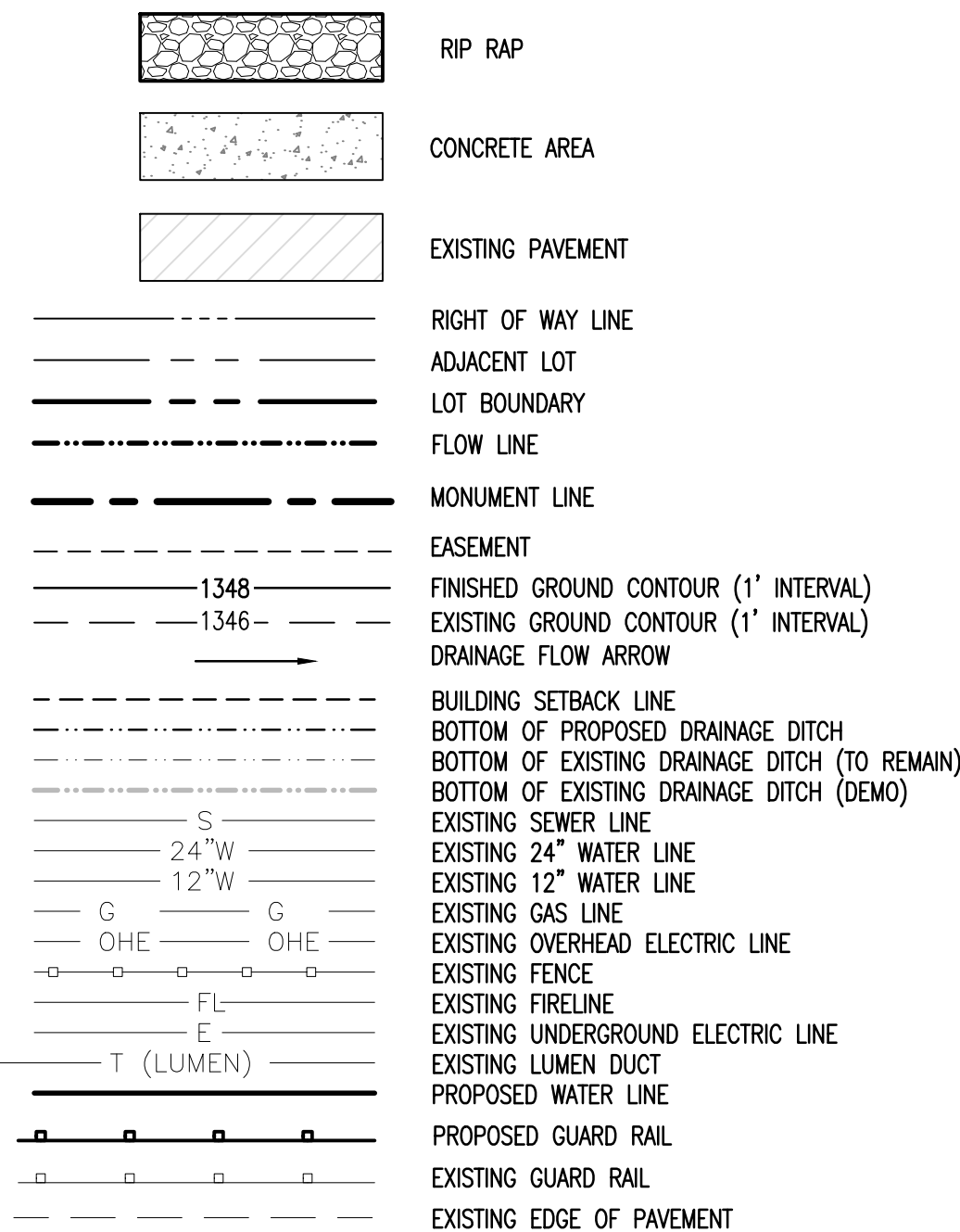
ABBREVIATIONS LIST

APN ASSESSOR PARCEL NUMBER
ABC AGGREGATE BASE COURSE
BVC BACK OF VERTICAL CURB
C CONCRETE
CF,CU,FT CUBIC FEET
COM CITY OF MESA
EX EXISTING
FFE FINISHED FLOOR ELEVATION
FL FLOW LINE
G GUTTER
IE INVERT ELEVATION
LF LINEAR FOOT
MCR MARICOPA COUNTY RECORDER
P PAVEMENT
PL PROPERTY LINE
ROW RIGHT OF WAY
SD STORM DRAIN
SF SQUARE FEET
TBM TEMPORARY BENCH MARK
TC TOP OF CURB
YR YEAR

SHEET INDEX

C801 - OFFSITE COVER SHEET
C802 - OFFSITE GENERAL NOTES
C803 - OFFSITE GRADING AND DRAINAGE PLAN
C806 - WATER PLAN

LEGEND OF SYMBOLS



REVISIONS:

NPS MARICOPA INC.
AN ARIZONA NONPROFIT CORPORATION
859 N LAFAYETTE
MESA, ARIZONA 85201
(480) 201-5476
TOM.HAWS@GMAIL.COM

PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
3815 S SOSSAMAN RD, MESA, AZ 85212

811
Know what's below.
Call before you dig.

Digitally
per
Professional Engineer
30503
THOMAS GAIL
HAWS
State Signed
ARIZONA U.S.A.

JOB NO.
M21140

DRAWN BY: SWN

SHEET NO.

C801

PHASE 2 OFFSITE IMPROVEMENTS FOR HAPPY WIFE STORAGE, MESA, AZ

CITY OF MESA GENERAL REQUIREMENT NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THE CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS FURNISHED 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.
- SEPARATE RIGHT-OF-WAY PERMITS ARE REQUIRED FOR ALL PUBLIC UTILITIES, PUBLIC STREET IMPROVEMENTS, AND RIGHT-OF-WAY LANDSCAPING. FOR INFORMATION REGARDING AVAILABILITY AND COST OF RIGHT-OF-WAY PERMITS, CONTACT THE PERMIT SERVICES SECTION OF THE BUILDING SAFETY DIVISION AT (480) 644-48SD OR AT [HTTP://WWW.MESAAZ.GOV/DEVSUSTAIN/CONSTRUCTIONPERMITS.ASPX](http://www.mesaaz.gov/devsustain/constructionpermits.aspx)
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED UNLESS OTHERWISE NOTED. CONTRACTORS MUST HOLD THE APPROPRIATE CLASS OF LICENSE AND SHALL HAVE ON FILE WITH THE PERMIT SERVICES SECTION PROOF OF INSURANCE COVERAGE. PERMITS BECOME INVALID AND MUST BE UPDATED IF WORK HAS NOT BEGUN WITHIN NINETY (90) DAYS. PERMITS ALSO BECOME INVALID IF THE CONTRACTOR'S INSURANCE LAPSES OR IS VOIDED.
- TWENTY FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY CITY OF MESA ENGINEERING CONSTRUCTION SERVICES AT (480) 644-2253 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRELIMINARY FIELD REVIEW AT THE PROJECT SITE WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR. FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE, SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED.
- CONTRACTOR'S SHALL COMPLY WITH THE REQUI REMENTS TO OBTAIN THE NECESSARY RIGHT-OF-WAY PERMITS AND SHALL COMPLY WITH THE RIGHT-OF-WAY PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.
- THE CITY OF MESA PARKS & RECREATION DIVISION IS NOT REPRESENTED BY BLUE STAKE. WHEN THE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO A CITY PARK, THE CONTRACTOR SHALL CONTACT THE PARKS & RECREATION ADMINISTRATION SECTION AT (480) 644-2354 TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES.
- THE CONTRACTOR SHALL OBTAIN AN EARTH-MOVING PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL.
- THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL & SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED AND ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS. THE ENGINEER OR ARCHITECT ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY OR EASEMENT HAVE BEEN CORRECTLY PLOTTED/SHOWN.
- THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM SEWER, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT" DRAWINGS PROVIDED BY THE ENGINEER TO THE ENGINEERING DEPARTMENT – CONSTRUCTION SERVICES SECTION.
- THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OF-WAY OR EASEMENTS HAS BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.
- THE DEVELOPER SHALL PROVIDE ALL CONSTRUCTION STAKING FOR THE PROJECT.
- THE DEVELOPER OR THE ENGINEER IS RESPONSIBLE FOR ARRANGING FOR THE RELOCATION OR REMOVAL OF ALL UTILITIES OR FACILITIES THAT ARE IN CONFLICT WITH THE PROPOSED PUBLIC IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ALL UTILITIES, POWER POLES, IRRIGATION DRY-UPS, RESETS REMOVALS BY OTHERS, ETC.
- THE CONTRACTORS SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATION AND AVOID DAMAGE TO SAME. CALL (602)263-1100 FOR BLUE STAKE TWO WORKING DAYS PRIOR TO DIGGING. CALL SALT RIVER PROJECT FOR POLE BRACING, ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT (602) 273-8888.
- WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
- CONTRACTORS SHALL COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AND BARRICADING PER THE CURRENT CITY OF MESA TRAFFIC BARRICADE MANUAL.
- IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM PERMIT SERVICES AND PAY ALL APPLICABLE FEES AND CHARGES.
- IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST OF THE ENGINEERING CONSTRUCTION INSPECTOR, AND IT IS NECESSARY FOR CITY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE CITY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY CITY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.

CITY OF MESA PUBLIC STREET/RIGHT-OF-WAY IMPROVEMENT NOTES

- THE DEVELOPER AND THE CONTRACTOR ARE REQUIRED TO COORDINATE THE PLACEMENT OR INSTALLATION OF DRIVEWAYS IN ORDER TO AVOID CONFLICT WITH UTILITY SERVICES.
- ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC., SHALL BE INSTALLED TO FINISH GRADE OR SHALL BE ADJUSTED TO FINISH GRADE AFTER PLACING OF ASPHALTIC SURFACE COURSE BY THE CONTRACTOR PER M.A.G. STANDARD DETAIL 270 AND 422.
- THE CONTRACTOR SHALL ADJUST ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. THAT ARE LOCATED WITHIN THE PARKWAY AREA AFTER FINAL GRADING AND INSTALLATION OF LANDSCAPING.
- ALL LANDSCAPING IMPROVEMENTS, INCLUDING IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT-OF-WAY OR RETENTION BASINS THAT ARE TO BE MAINTAINED BY THE CITY OF MESA, SHALL BE IN ACCORDANCE WITH THE LANDSCAPING AND IRRIGATION STANDARDS BOOKLET.
- THE STREET PAVING PERMITTEE/CONTRACTOR IS HEREBY NOTIFIED THAT IN THE EVENT THAT ACCEPTANCE OF THE PUBLIC STREET PAVING IS DELAYED; SIX MONTHS OR MORE AFTER THE PAVEMENT WAS INSTALLED, THE PERMITTEE/CONTRACTOR SHALL APPLY A SEAL COAT TO THE PAVEMENT. TYPE OF MATERIAL AND RATE OF APPLICATION WILL BE DIRECTED BY THE CITY OF MESA ENGINEERING DEPARTMENT – FIELD SUPERVISING ENGINEER.
- A STANDARD RESIDENTIAL DRIVEWAY APPROACH SHALL BE CONSTRUCTED TO A MAXIMUM WIDTH OF 30 FEET UNLESS SPECIAL APPROVAL HAS BEEN OBTAINED.

A.D.E.Q. NOTES

- WATER LINE AND FITTINGS SHALL HAVE NSF-PW SEAL.
- CONSTRUCTION MATERIALS USED IN THE WATER SYSTEM SHALL BE LEAD FREE AS DEFINED AT A.A.C. R18-4-504 AND A.A.C. R18-4-101.
- BACKFLOW PREVENTION ASSEMBLY SHALL MEET A.A.C. R18-4-115.
- MINIMUM DEPTH OF COVER OVER WATER LINES SHALL BE 3 FEET.
- UNIFORM SLOPE TESTING OF TOTAL LENGTH OF SEWER LINE IS REQUIRED PER AAC R18-9-E301(D)(2)(K).

CITY OF MESA PUBLIC WATER UTILITY NOTES

- ALL PUBLIC WATER MAIN MATERIALS SHALL BE PER SECTION 610.3 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS. ALL DUCTILE IRON PIPE (D.I.P.) WATER MAINS SHALL HAVE POLYETHYLENE CORROSION PROTECTION PER SECTION 610.5 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS.
- ALL NEW WATERLINES THAT REQUIRE SERVICE DISRUPTION IN ORDER TO CONNECT TO THE CITY SYSTEM SHALL REQUIRE A DAYTIME TIE-IN. THE CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY TO RESTORE UTILITY SERVICE AND FULLY OPEN THE TIE-IN AREA TO VEHICULAR TRAFFIC WITHIN THE TIME FRAME ALLOWED BY THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
- THE CONTRACTOR SHALL INSTALL A TEMPORARY PLUG OR VALVE ON A SECTION OF NEW WATER LINE TO TEST LINES BEFORE CONNECTING TO THE EXISTING PUBLIC WATER SYSTEM WHERE THERE IS NO WATER VALVE ON THE EXISTING LINE.
- WATER LINE TESTS SHALL BE CONDUCTED SO THAT EXISTING WATER LINES WILL NOT BE INCLUDED IN THE TEST OF THE NEW LINE.
- THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE A MANUFACTURER AND MODEL DESIGNATED IN THE CURRENT "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES" AS PUBLISHED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
- THE BACKFLOW PREVENTION ASSEMBLY SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN DESIGNATED IN THE CURRENT CITY OF MESA "LIST OF APPROVED INSPECTORS" PRIOR TO THE REQUEST FOR FINAL INSPECTION.
- IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE (A.A.C). R18-4-119, ALL MATERIALS ADDED AFTER JANUARY 1, 1993, WHICH MAY COME INTO CONTACT WITH DRINKING WATER, SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
- PER CITY ORDINANCE NO. 2341, ALL WATER METERS ARE TO BE PURCHASED FROM THE CITY OF MESA. METERS TWO INCHES OR LESS WILL BE DELIVERED AND INSTALLED BY CITY FORCES. METERS LARGER THAN TWO INCHES WILL BE DELIVERED BY THE CITY AND INSTALLED BY THE CONTRACTOR AND REQUIRE SCHEDULING AND INSPECTIONS WITH CITY FORCES (CONTACT BUILDING SAFETY – PERMIT SERVICES (480)- 644-48SD FOR THE SPECIFIC PROCEDURE).

CITY OF MESA PUBLIC WASTEWATER UTILITY NOTES

- CONTRACTORS SHALL VERIFY ALL INVERT ELEVATIONS BEFORE PROCEEDING WITH THE BALANCE OF THE UTILITY TRENCHING.
- ALL MANHOLES PER M.A.G. DETAILS MUST NECK DOWN TO USE THE STANDARD 30INCH FRAME AND COVER. STEPS SHALL NOT BE INSTALLED WITHIN THE MANHOLE.

CITY OF MESA NATURAL GAS UTILITY NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THE MOST CURRENT CITY OF MESA GAS OPERATIONS, MAINTENANCE, EMERGENCY RESPONSE AND CONSTRUCTION PRACTICE MANUAL.
- WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
- BEDDING OR SHADING MATERIAL ADJACENT TO THE CITY OF MESA GAS PIPE SHALL BE SELECT SANDY TYPE SOIL FREE OF ROCK AND DEBRIS THAT WILL PASS THROUGH A 3/8" SCREEN AS INSPECTED AND APPROVED BY CITY GAS INSPECTION PERSONNEL.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AS INDICATED ON THE CITY OF MESA DETAIL M-58 WHEN TRENCHING FOR THE WATERLINE WHERE A GAS MAIN IS TO BE INSTALLED IN THE SAME TRENCH.
- CONTACT CITY OF MESA GAS DIVISION AT 480-644-2753 FOR SCHEDULING AND COORDINATION OF THE INSTALLATION OF NATURAL GAS SERVICES AND MAINS.
- GAS LINE SHALL MAINTAIN A NOMINAL 12" (MINIMUM OF 8") SEPARATION FROM EXISTING WATER, SEWER, ELECTRICAL, CABLE TV AND TELCO FACILITIES.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CALL (602) 263-1100 FOR BLUE STAKES. OUTSIDE MARICOPA COUNTY CALL 1-800-STAKEIT.
- ALL GAS NOTES IN DASHED BOXES ARE TO BE COMPLETED BY CITY OF MESA CREWS OR CITY OF MESA GAS LINE CONTRACTOR.

CITY OF MESA NON-CITY UTILITY NOTES

EL PASO NATURAL GAS:

- THE CONTRACTOR SHALL NOTIFY EL PASO NATURAL GAS (602) 967-1686 48 HOURS PRIOR TO COMMENCING CONSTRUCTION IN THE VICINITY OF EL PASO NATURAL GAS RIGHT-OF-WAY.

MARICOPA COUNTY:

- ALL CONSTRUCTION WITHIN MARICOPA COUNTY RIGHT-OF-WAY SHALL CONFORM TO CURRENT MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARD PROVISIONS FOR CONSTRUCTION OF STREET IMPROVEMENTS AND INSTALLATION OF UNDERGROUND UTILITIES.
- CONTRACTORS ARE TO OBTAIN ALL NECESSARY MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION PERMITS PRIOR TO CONSTRUCTION WITHIN MARICOPA COUNTY RIGHT-OF-WAY.

ROOSEVELT WATER CONSERVATION DISTRICT (RWCD):

- CONTRACTORS SHALL OBTAIN A PERMIT FROM RWCD PRIOR TO CROSSING, REMOVING REPLACING OR MAKING ANY MODIFICATIONS TO RWCD FACILITIES.

CITY OF MESA STORMWATER DRAINAGE & RETENTION NOTES

- THE ENGINEER, OR LAND SURVEYOR SHALL CERTIFY THAT THE REQUIRED STORM WATER RETENTION HAS BEEN PROVIDED. THE CERTIFICATION SHALL ALSO INDICATE THE ACTUAL VOLUME PROVIDED. SUCH CERTIFICATION SHALL BE PROVIDED TO BUILDING SAFETY DIVISION – BUILDING INSPECTIONS WHEN THE RETENTION AREA IS TO REMAIN PRIVATE PROPERTY AND TO ENGINEERING CONSTRUCTION SERVICES WHEN THE RETENTION AREA IS TO BECOME CITY OF MESA PROPERTY.
- ALL DRYWELLS SHOWN ON THIS PROJECT SHALL BE MAINTAINED BY THE OWNERS AND ARE TO BE REPLACED BY THE OWNERS WHEN THEY CEASE TO DRAIN WATER IN A 36HOUR PERIOD. REGULAR MAINTENANCE OF THE DRYWELL-SILTING CHAMBER IS REQUIRED TO ACHIEVE THE BEST OPERATION OF THE DRYWELL. IN ACCORDANCE WITH ARIZONA REVISED STATUTES, DRYWELLS ARE REQUIRED TO BE REGISTERED WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (A.D.E.Q.) IT IS THE OWNER'S RESPONSIBILITY TO REGISTER ALL DRYWELLS. AN AQUIFER PROTECTION PERMIT MAY BE REQUIRED BY A.D.E.Q. FOR DRYWELLS DEEMED TO BE HAZARDOUS TO GROUNDWATER.

CITY OF MESA PUBLIC STREET LIGHTING NOTES

- STREET LIGHT CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF STREETLIGHT CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, CONTRACTOR SHALL BORE CONDUIT UNDER THE DRIVEWAY PER CITY OF MESA DETAIL M-18. MEANDERING THE CONDUIT BEHIND THE DRIVEWAY ENTRANCE WILL NOT BE PERMITTED.
- MATERIALS AND INSTALLATION OF THIS PROJECT SHALL COMPLY WITH THE CURRENT MESA STANDARD DETAILS, AMENDMENTS TO THE UNIFORM STANDARD DETAILS, THE CITY OF MESA ENGINEERING PROCEDURE MANUAL AND AMENDMENTS TO THE CITY OF MESA ENGINEERING PROCEDURE MANUAL.
- THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL I (1) STREET LIGHT TECHNICIAN OR AN IMSA LEVEL I (1) TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY STREET LIGHT WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE STREET LIGHTS WILL BE SUSPENDED.
- ALL TREES SHALL BE PLANTED A MINIMUM OF EIGHTEEN (18) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS. ALL SHRUBS SHALL BE PLANTED A MINIMUM OF SEVEN (7) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS.
- ALL CONDUIT, CONDUCTORS, WIRE, AND QUANTITIES SHALL BE MEASURED BY THE LINEAR FOOT HORIZONTALLY BETWEEN POLES, PULL BOXES AND CONTROL CABINETS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SWEEPS AND VERTICAL RUNS, AS THEY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE HORIZONTAL MEASUREMENT OF THE QUANTITIES.
- CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, THE CONTRACTOR SHALL BORE UNDER THE DRIVEWAY, PER (M-18), FOR CONDUIT INSTALLATION. MEANDERING THE CONDUIT BEHIND THE ENTRANCE WILL NOT BE ALLOWED.
- NOTE: THE LOCATION OF THE TRAFFIC SIGNAL FIBER OPTIC CONDUIT (TSFO) AS SHOWN IS DRAWN AT AN OFFSET AND IS FOR GRAPHICAL REPRESENTATION ONLY AND SHALL BE INSTALLED IN A JOINT TRENCH WITH THE STREET LIGHT CONDUIT PER COM DETAIL (M-93.3 & 93.4).
- AREAS WHERE 24" OF COVER IS NOT POSSIBLE SEE CHAPTER 9 OF THE CITY OF MESA ENGINEERING & DESIGN STANDARDS; THESE AREAS SHALL BE IDENTIFIED ON PLANS. SUPPLY FULL CONFLICT DATA, INCLUDING TOP OF CURB, SIZE AND MATERIAL OF PIPE, INVERT ETC.
- TO RETURN SALVAGED STREET LIGHT MATERIALS THE CONTRACTOR SHALL CONTACT THE STREET LIGHT FOREMAN FOR THE AREA THE WORK IS OCCURRING IN. WEST OF VAL VISTA CALL 480-644-3178. EAST OF VAL VISTA CALL 480-644-5077. ARRANGEMENTS TO DELIVER MATERIALS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE. THE CONTRACTOR IS RESPONSIBLE FOR UNLOADING AND STACKING ALL MATERIALS. A CITY OF MESA STAFF MEMBER MUST BE PRESENT WHEN MATERIALS ARE DELIVERED TO GET CREDIT FOR THE SALVAGE MATERIALS
- ALL EXISTING CONCRETE DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
- ALL EXISTING LANDSCAPE, HARDSCAPE OR SPRINKLER SYSTEMS DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
- THE CONTRACTOR IS TO USE UTMOST CAUTION WHILE WORKING AROUND ALL OVERHEAD AND UNDERGROUND UTILITIES. SPECIFICALLY ELECTRIC, GAS, WATER, SEWER AND FIBER OPTIC LINES.

CITY OF MESA PUBLIC TRAFFIC SIGNAL NOTES

- CONTRACTORS SHALL CONTACT THE CITY OF MESA TRAFFIC SIGNALS SUPERVISOR (480) 644-3122 PRIOR TO ANY WORK WITHIN THE VICINITY OF OR THROUGH A SIGNALIZED INTERSECTION, WHICH WILL CHANGE TRAFFIC LANE PATTERNS.
- CONTRACTORS ARE ADVISED THAT DAMAGE TO ANY TRAFFIC SIGNAL EQUIPMENT (DETECTOR LOOPS, PULLBOXES, CONDUIT, ETC.) AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY OF MESA TRAFFIC SIGNALS GROUP. DETECTOR LOOPS SHALL BE REINSTALLED WITHIN TWENTY-FOUR (24) HOURS OF REMOVAL AND PRIOR TO THE PLACEMENT OF THE ASPHALT FINISH COURSE.
- THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL II (2) TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY TRAFFIC SIGNAL WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE TRAFFIC SIGNAL WILL BE SUSPENDED.
- IN TRAFFIC AREAS ADD A SLURRY CAP TO THE TRAFFIC SIGNAL FIBER OPTIC (TSFO) CONDUIT TRENCH WHERE THE 48" DEPTH REQUIRED PER (M-93.3 & M-93.4) CANNOT BE MAINTAINED. IN NON-TRAFFIC AREAS (BACK OF SIDEWALK) IF THE TSFO CONDUIT IS INSTALLED AT A DEPTH OF LESS THAN 36", A 6" SLURRY CAP IS REQUIRED. THE MINIMUM ALLOWABLE DEPTH FOR TSFO CONDUITS IS 24". THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR SHALL BE NOTIFIED 48 HOURS PRIOR TO INSTALLING CONDUITS WHEN ANY VARIATION TO DETAIL (M-93.3 & M-93.4) IS REQUIRED. IF TSFO CONDUIT IS REQUIRED TO MEANDER VERTICALLY OR HORIZONTALLY, NO CONDUIT BEND SHALL EXCEED 45 DEGREES.
- TSFO CONDUITS SHALL BE INSTALLED 48" DEEP IN A JOINT TRENCH WITH STREET LIGHT CONDUIT PER (M-93.3 & M-93.4).

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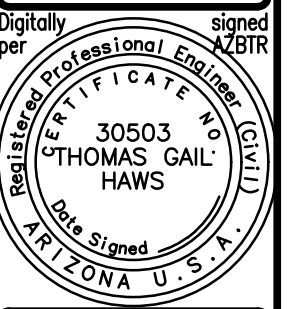
859 N LAFAYETTE
MESA, ARIZONA 85201

(480) 201-5476
TOM.HAWS@NIAL.COM

OFFSITE GENERAL NOTES

PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
HAPPY AND PHASE 2 PARKING IMPROVEMENTS

3815 S SIOSSAWAN RD., MESA, AZ 85212



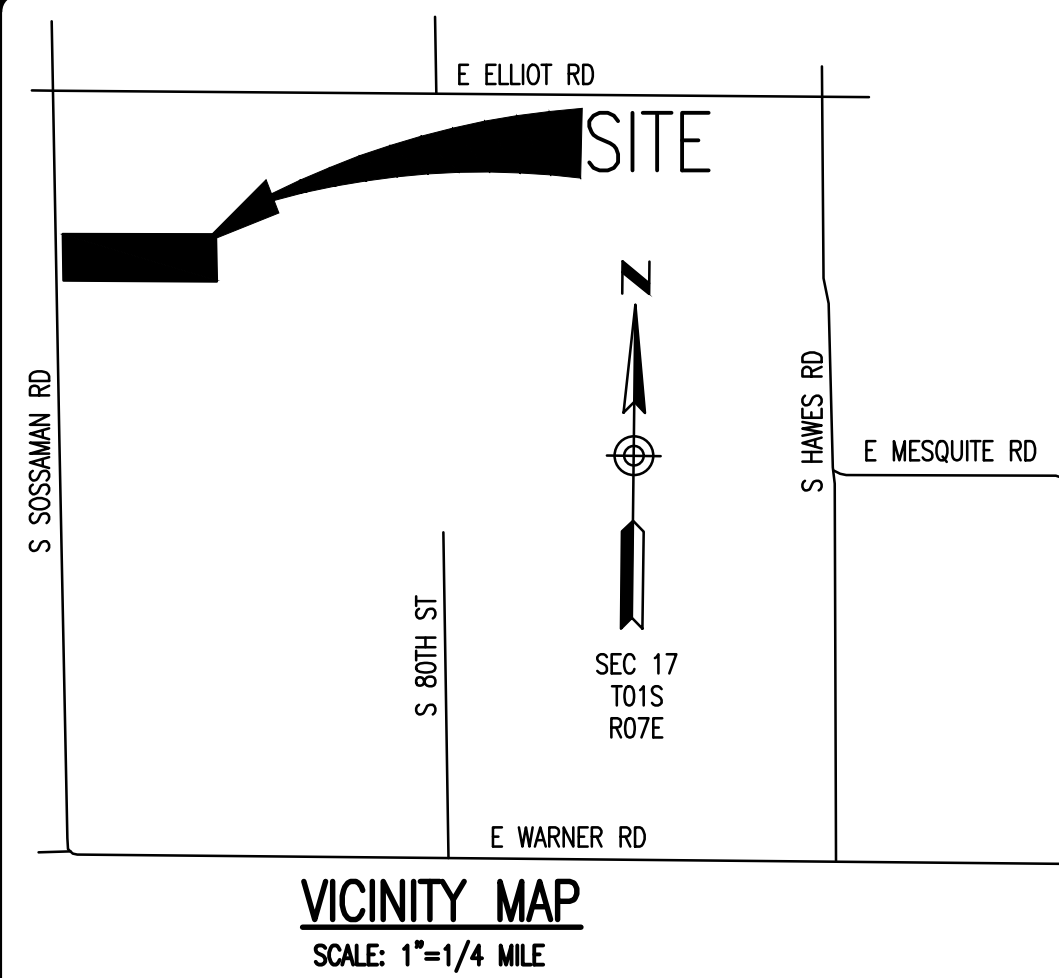
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M21140

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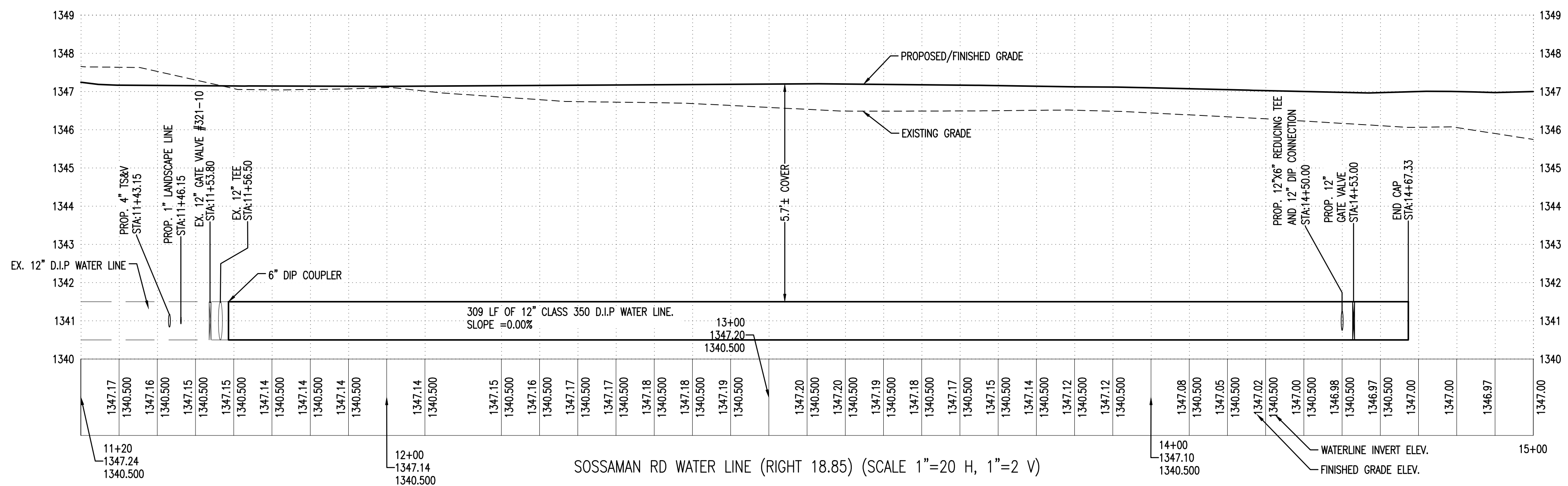
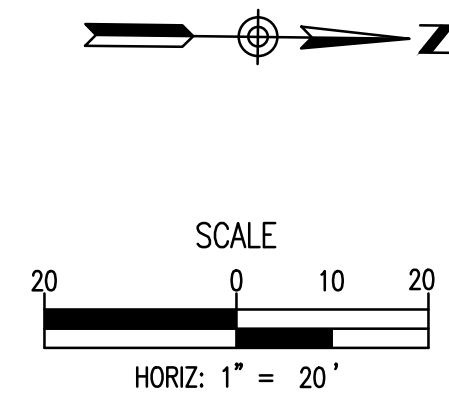
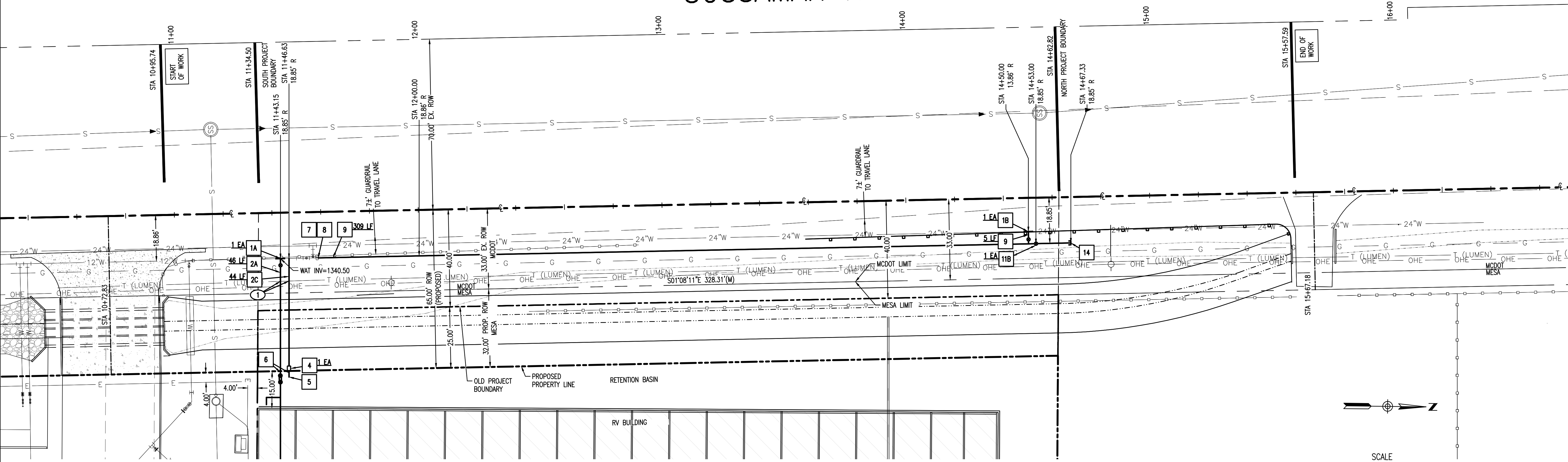
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C802

PHASE 2 OFFSITE IMPROVEMENTS PLANS
FOR
HAPPY WIFE STORAGE, MESA, AZ



WATER NOTES		
1A	12"x4" TAPPING SLEEVE AND VALVE PER MAG DETAIL 340	1 EA
1B	24"x12" TAPPING SLEEVE AND VALVE PER MAG DETAIL 340 (FIELD VERIFY LOCATION OF THE EXISTING 24" WATERLINE OFFSET FROM MONUMENT LINE)	1 EA
2A	4" D.I.P. CLASS 350 WATERLINE PIPE WITH POLY WRAP.	46 LF
2C	1" SERVICE LINE FOR LANDSCAPE	44 LF
4	1" SERVICE TAP PER COM M-49.01 & M-49.02 AND 1" METER BOX FOR LANDSCAPE PER COM DTL M-29. (METER TO BE INSTALLED BY CITY WHEN PERMITTED).	1 EA
5	SEE LANDSCAPE PLANS FOR CONTINUATION	
6	SEE ON-SITE PLANS FOR CONTINUATION	
7	REMOVE AND SALVAGE EXISTING END CAP	1 EA
8	12" D.I.P. CLASS 350 COUPLER	1 EA
9	12" D.I.P. CLASS 350 WATERLINE PIPE WITH POLY WRAP, BEDDING PER C.O.M. STD DTL M19.05, 48" TYPICAL COVER, SLURRY TRENCH BACKFILL PER GENERAL NOTE #14 ON CIVIL SHEET C002.	314 LF
11B	12" D.I.P. VALVE BOX AND COVER PER MAG STD DTL 391-1.	1 EA
14	12" D.I.P. END CAP.	1 EA
	UTILITY CROSSINGS	
1	WATERLINE AND LUMEN DUCT CROSSING. VERIFY LUMEN DUCT LOCATION AND PROTECT IN PLACE. ADJUST WATERLINE AS NECESSARY TO AVOID CONFLICT. MAINTAIN 12" VERTICAL SEPARATION.	1 EA



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OFFSITE WATER PLAN

PROJECT: WIFE STORAGE -PHASE 1 SOUTH PARKING EXPANSION
AND PHASE 2 PARKING IMPROVEMENTS
3815 S SOSSAMAN RD, MESA, AZ 85212

811
Know what's below.
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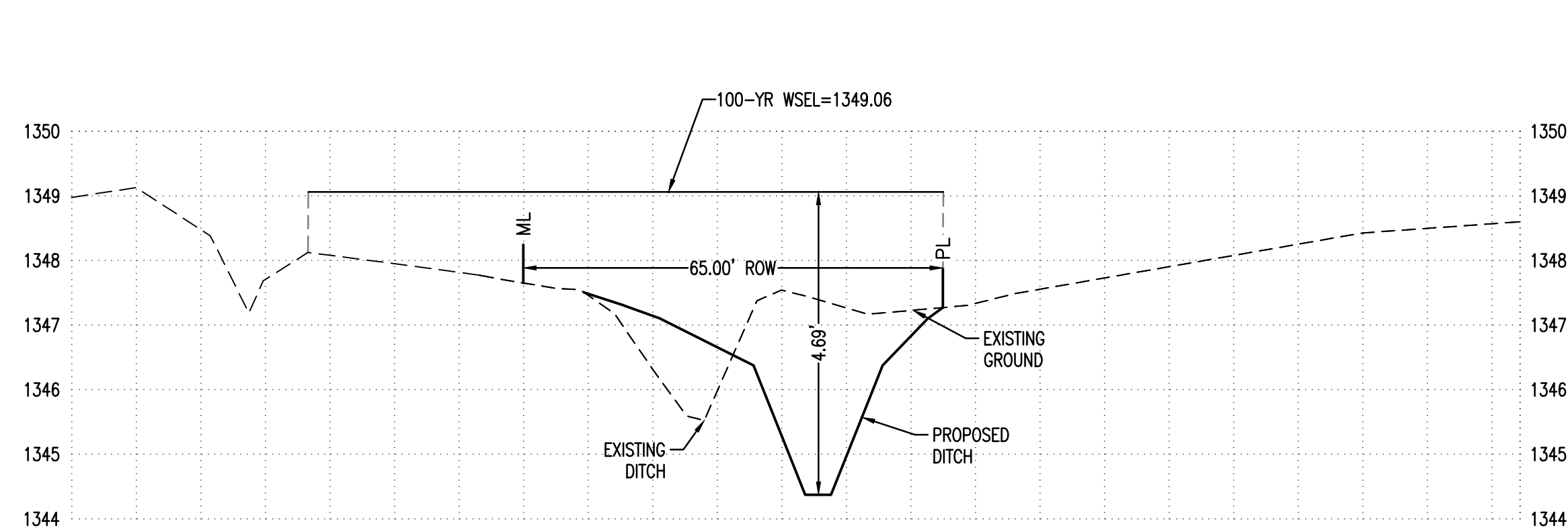
Digitally signed per 30503 THOMAS GAIL: HAWS
Arizona Professional Engineer No. 17193

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M21140
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SHEET NO.
C806

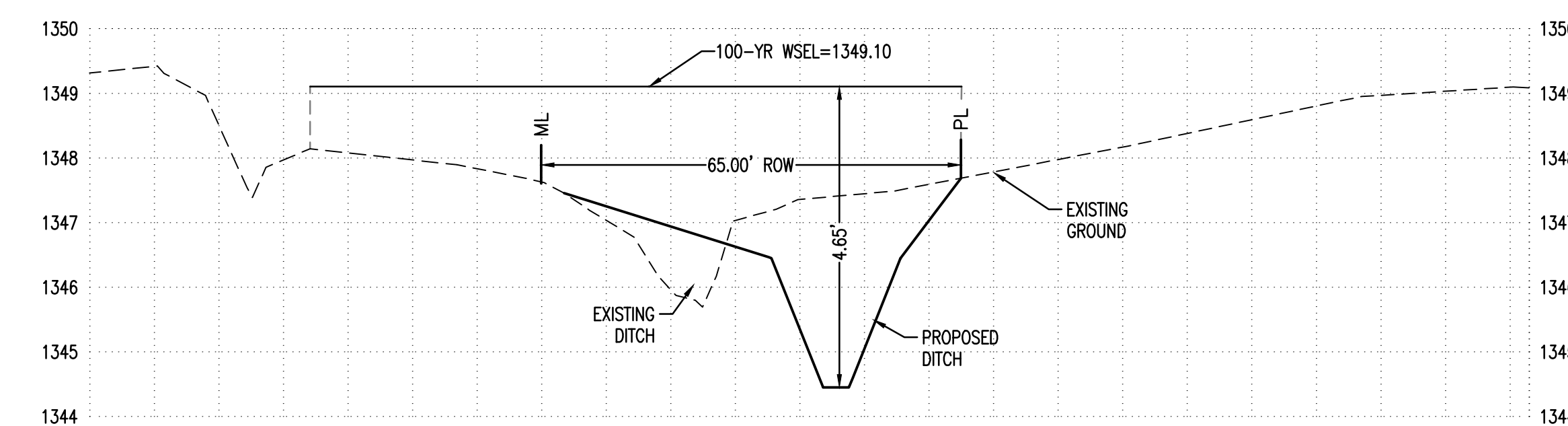
PHASE 2 OFFSITE IMPROVEMENTS PLANS
FOR
HAPPY WIFE STORAGE, MESA, AZ

GRADING, DRAINAGE AND PAVING NOTES

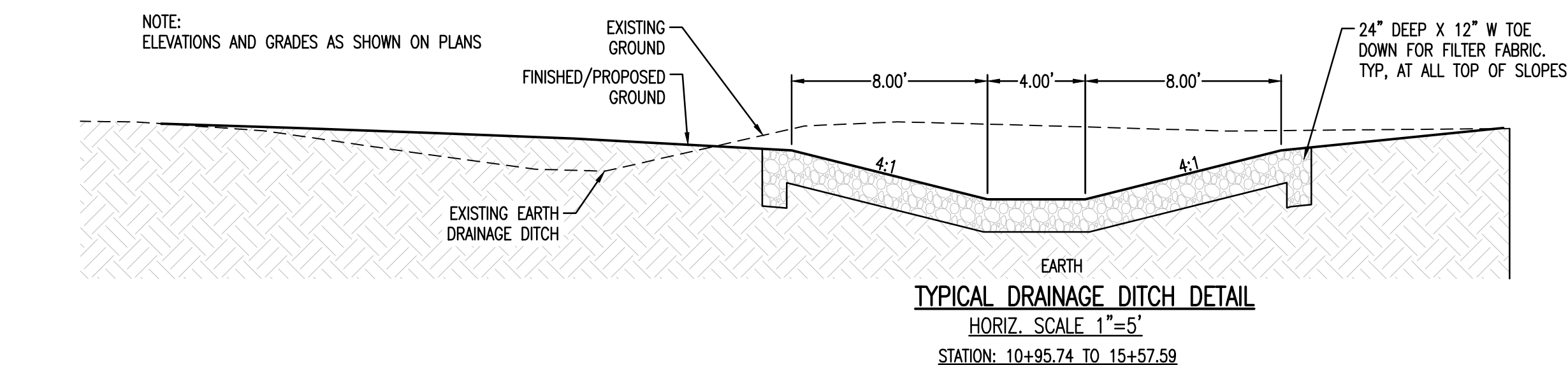
- 1 EXISTING PAVEMENT, STRIPING CONDITIONS AND PAVEMENT MARKINGS TO REMAIN. 2 EA
- 2 EXISTING DRIVEWAY. TO REMAIN. 2 EA
- 4 EXISTING POWER POLE. TO REMAIN. 2 EA
- 5 REMOVE AND SALVAGE EXISTING RIP RAP TO BE REUSED FOR THE PROPOSED DITCH. 388 SY
- 6 475' FT LONG IMPROVED DRAINAGE CHANNEL. INSTALL LINING AT THE BOTTOM OF THE CHANNEL AND TO SIDES SLOPES UP TO THE EXISTING GROUND. SIZE NOTED. SHALL CONSIST OF TWO LAYERS OF SOIL PROTECTION (RIPRAP AND FILTER). ROCK SHALL BE ANGULAR AND SHALL COMPLY WITH MAG SPEC 703, WHICH GOVERNS ROCK SPECIFIC GRAVITY, SHAPE, SIZE, AND STRENGTH. SIZE OF ROCK SHALL VARY UNIFORMLY AT ALL LOCATIONS BETWEEN 0.5 * D50 AND 1.5 * D50, WITH 15% OF ROCK BEING 1.5 * D50 OR LARGER, 50% OF ROCK BEING SMALLER THAN D50, AND 15% OF ROCK BEING SMALLER THAN 0.5 * D50. THICKNESS OF RIPRAP LAYER SHALL BE AT LEAST EQUAL TO MAXIMUM ROCK SIZE (1.5 * D50). TO PROTECT THE SUBGRADE FROM ERODING THROUGH THE RIPRAP LAYER, RIPRAP SHALL BE UNDERLAIN WITH NON-WOVEN GEOTEXTILE FABRIC OR A FILTER LAYER THAT ALSO MEETS THE REQUIREMENTS FILTER LAYER D50 SHALL BE 0.2 * RIPRAP D50. THICKNESS OF FILTER LAYER SHALL BE AT LEAST 0.5 * RIPRAP D50. 1051 SY
- 7A SEE ON-SITE PLANS FOR CONTINUATION
- 7B 8" BLEED-OFF PIPE. LENGTH AND SLOPES PER PLAN. 17 LF
- 7C BLEED-OFF PIPE OUTFALL.
- 8A STANDARD GUARDRAIL. 205 LF
- 8B MASH COMPLIANT MGS END TERMINAL PER DETAIL 3107 (TEST LEVEL NO. 2, TL2) PER MCDOT SUPPLEMENT TO MAG STANDARD UNIFORM STANDARD SPECIFICATIONS AND DETAILS 3000 AND 3100 SERIES AND APPROVED MATERIAL LIST. 1 EA
- 9 REMOVE EXISTING FENCE. 218 LF



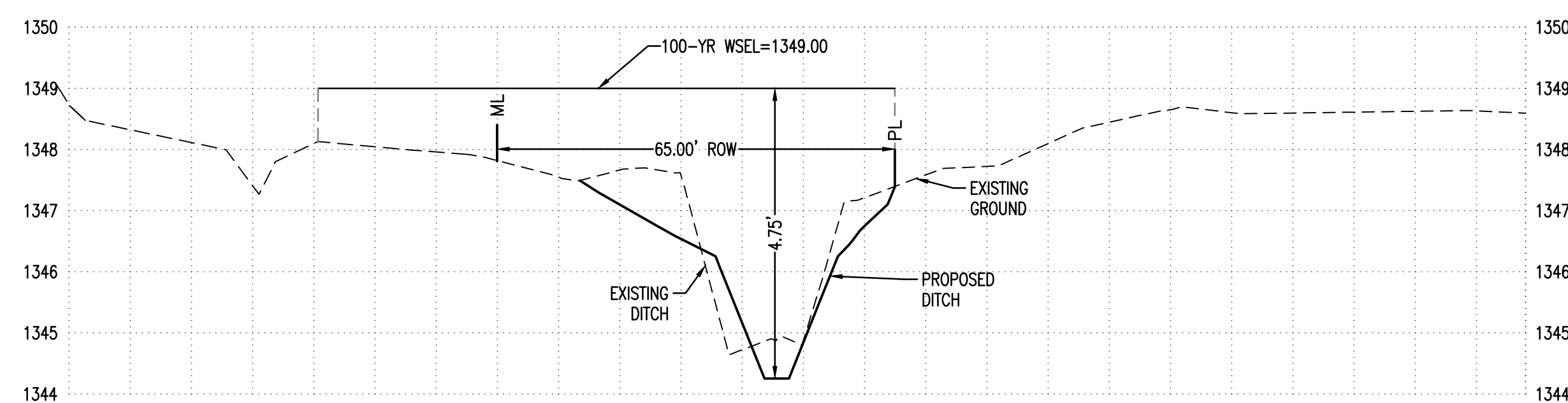
SECTION A-A (SCALE 1"=20 H, 1"=2 V)



DITCH CROSS-SECTION AT THE NORTH PL (SCALE 1"=20 H, 1"=2 V)

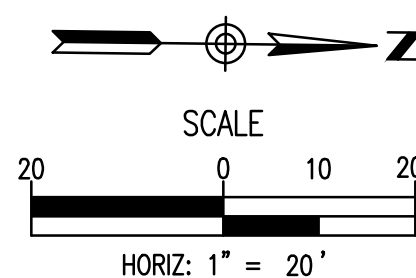
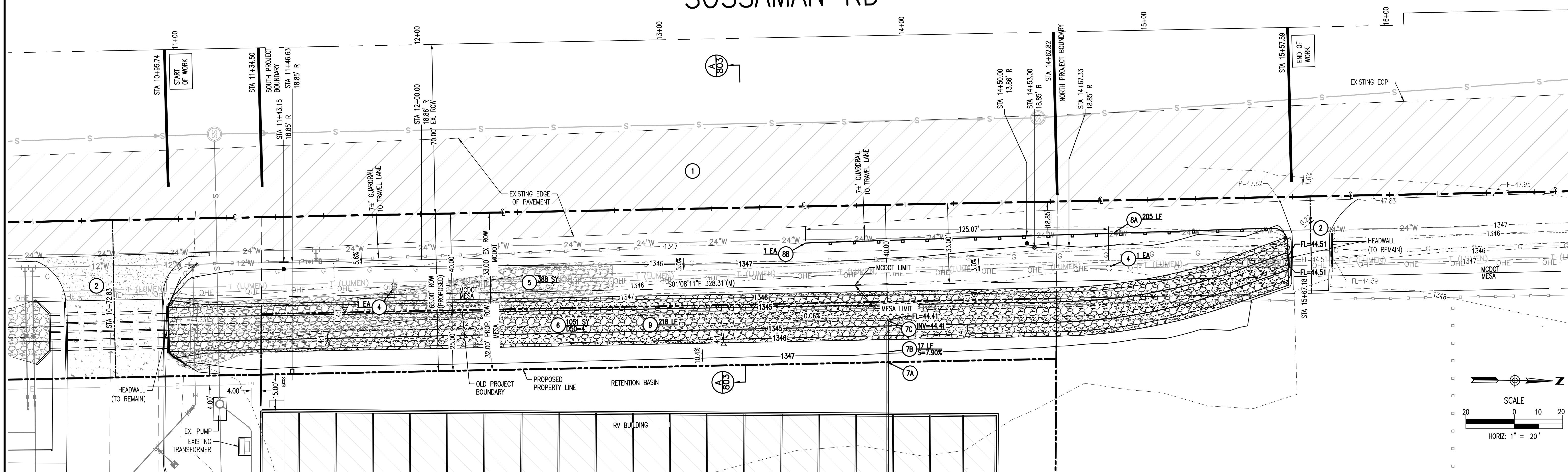


TYPICAL DRAINAGE DITCH DETAIL
HORIZ. SCALE 1"=5'
STATION: 10+95.74 TO 15+57.59



DITCH CROSS-SECTION AT THE SOUTH PL (SCALE 1"=20 H, 1"=2 V)

SOSSAMAN RD



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PAVING PLAN

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AND PHASE 2 PARKING IMPROVEMENTS
3815 S SOSSAMAN RD, MESA, AZ 85212



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