

LEGEND

---	RIGHT-OF-WAY LINE	⊗	PROPOSED WATER LINE
- - - - -	EASEMENT LINE (AS NOTED)	⊗	PROPOSED WATER VALVE
—●—	ROADWAY CENTER LINE	⊗	PROPOSED BUTTERFLY VALVE
⊙	SURVEY MONUMENT (AS NOTED)	⊗	OPERATOR MANHOLE
---	FLOWLINE / WASH	▶	PROPOSED REDUCER
⊗	EXISTING FIRE HYDRANT	⊗	PROPOSED AIR RELEASE VALVE
⊗	EXISTING WATER METER	⊗	BORING LOCATION
⊗	EXISTING WATER VALVE		
⊗	EXISTING BACKFLOW PREVENTER		
⊗	EXISTING IRRIGATION MANHOLE		
⊗	EXISTING IRRIGATION VALVE		
⊗	EXISTING SEWER MANHOLE		
⊗	EXISTING STORM DRAIN MANHOLE		
⊗	EXISTING WATER MANHOLE		
⊗	EXISTING ELECTRIC MANHOLE		
⊗	EXISTING TELEPHONE MANHOLE		
⊗	EXISTING STORM DRAIN GRATE		
⊗	EXISTING SCUPPER		
⊗	EXISTING SPILLWAY		
⊗	EXISTING WALL		
⊗	SIGN		
⊗	STREET LIGHT		
⊗	ELECTRIC/PHONE/CABLE EQUIPMENT		
⊗	SPOT ELEVATION		

ACRONYMS / ABBREVIATIONS

FL	FLOW LINE	CR	CABLE RISER
G	GUTTER	CV	CABLE VAULT
P	PAVEMENT	CTV	CABLE TELEVISION
SW	SIDEWALK	E	ELECTRIC
TC	TOP OF CURB	INV	INVERT
VG	VALLEY GUTTER	IRR	IRRIGATION
		S	SEWER
		T	TELEPHONE
		W	WATER
		TRAF	TRAFFIC CONDUIT
		NPI	NON-PAY ITEM

CITY OF PEORIA

BEARDSLEY ROAD 24" WATERLINE

LAKE PLEASANT ROAD TO 87TH AVENUE

SOLICITATION NO. P05-0015

PROJECT NO. W-0505P

OWNER
 CITY OF PEORIA
 ENGINEERING DEPARTMENT
 8401 W. MONROE STREET
 PEORIA, ARIZONA 85345
 PHONE: (623) 773-7212
 FAX: (623) 773-7211

ENGINEER
 BROOKS ENGINEERS & SURVEYORS, INC.
 4602 E. ELWOOD STREET, SUITE 16
 PHOENIX, AZ 85040
 (602) 437-3733 VOICE
 (480) 858-0204 FAX
 MATTHEW K. TSARK

UTILITIES LOCATION INFORMATION DISCLAIMER
 INFORMATION AND DATA PROVIDED IN THESE CONTRACT DOCUMENTS REGARDING EXISTING OVERHEAD OR UNDERGROUND UTILITIES OR OTHER FACILITIES (COLLECTIVELY "UTILITIES") AT OR CONTIGUOUS TO THIS PROJECT WAS PROVIDED BY THE OWNER, OWNERS OF SUCH UTILITIES, OR THIRD PARTIES NOT AFFILIATED WITH ENGINEER. THIS INFORMATION AND DATA HAS NOT BEEN INDEPENDENTLY VERIFIED BY ENGINEER. OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION AND DATA CONCERNING UTILITIES PROVIDED IN THE CONTRACT DOCUMENTS, AND MAKE NO REPRESENTATION OR WARRANTY THAT ALL EXISTING UTILITIES ARE CORRECTLY LOCATED, IDENTIFIED OR DISCLOSED IN THESE CONTRACT DOCUMENTS.

FOR MORE INFORMATION ON, OR TO CONFIRM THE LOCATION OF EXISTING UTILITIES, CONTACT THE ARIZONA BLUE STAKE CENTER AT (602) 263-1100.

MAYOR JOHN KEEGAN

CITY COUNCIL MEMBERS
 PATRICIA DENNIS
 CATHY CARLAT
 BOB BARRETT
 CARLO LEONE
 JOAN EVANS
 VICKI HUNT

SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1
GENERAL NOTES SHEET	2
PLAN & PROFILE SHEETS	3-23
DETAIL SHEETS	24-29

BENCHMARK:
 BENCH MARK #1
 DESCRIPTION: BRASS CAP FLUSH
 LOCATION:
 N=370472.07
 E=389067.02
 ELEVATION: 1243.40

BENCH MARK #2
 DESCRIPTION: BRASS CAP IN HANDHOLE
 LOCATION: 91ST AVE & BEARDSLEY RD
 ELEVATION: 1249.26

BENCH MARK #3
 DESCRIPTION: BRASS CAP FLUSH
 LOCATION: 87TH AVE & BEARDSLEY RD
 ELEVATION: 1252.54

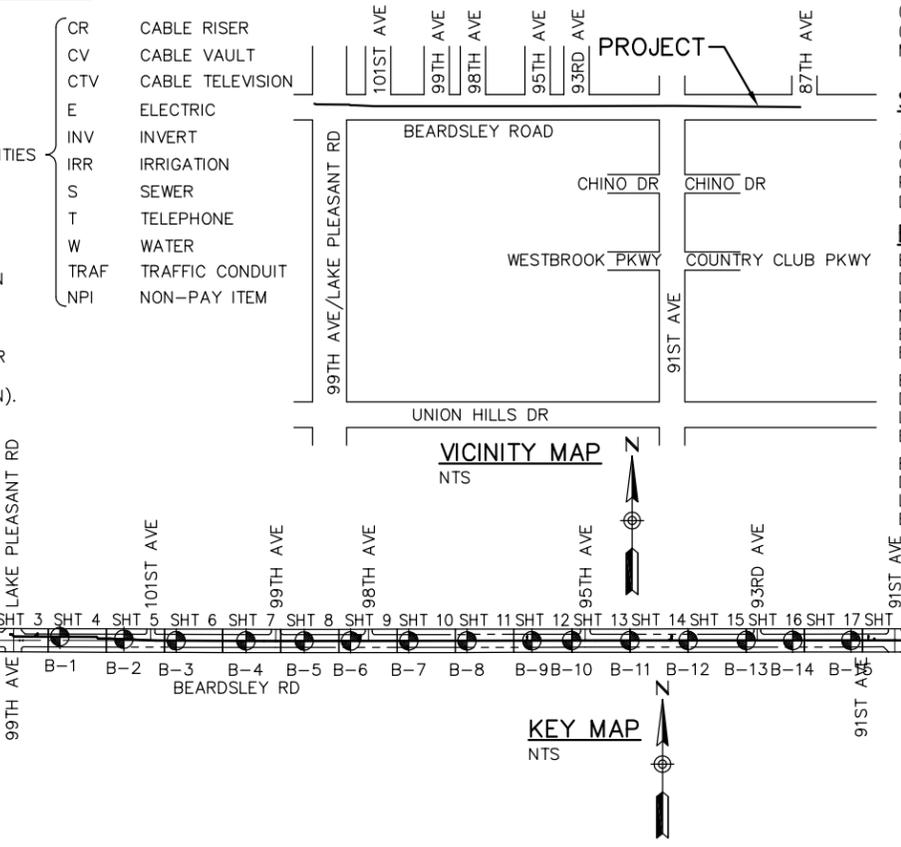
APPROVED BY: _____ DATE: _____
 ENGINEERING DIRECTOR

APPROVED BY: _____ DATE: _____
 UTILITIES DIRECTOR

APPROVED BY: _____ DATE: _____
 MARICOPA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

BROOKS GENERAL NOTES

- BROOKS ENGINEERS AND SURVEYORS, INC. (BROOKS) STANDARD NOTES:
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE WHICH PERMITS ARE REQUIRED BY LOCAL, CITY, COUNTY, STATE, AND FEDERAL AUTHORITIES.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING PERMITS AND RENEWAL OF LAPSED PERMITS.
 - THE CONTRACTOR IS RESPONSIBLE FOR MAKING ARRANGEMENTS FOR INSPECTION AND TESTING.
 - THE CONTRACTOR SHALL NOTIFY THE INSPECTING AGENCY(S) 24 HOURS PRIOR TO CONSTRUCTION. CONSTRUCTION CONCEALED WITHOUT THE REQUIRED INSPECTION SHALL BE SUBJECT TO EXPOSURE AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CALL BLUE STAKE AT (602) 263-1100 AT LEAST 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
 - THE CONTRACTOR WILL FOLLOW GUIDELINES AND REGULATIONS SET FORTH BY O.S.H.A. BROOKS WILL NOT BE RESPONSIBLE FOR JOB-SITE SAFETY PROCEDURES OR CONDITIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN TAKEOFF QUANTITIES. QUANTITIES SHOWN HEREON ARE ESTIMATES ONLY AND AS SUCH ARE NOT TO BE USED FOR BID PURPOSES.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATION OF THE PROPER AUTHORITY(S) IF THERE ARE OBSTRUCTIONS TO PROPOSED IMPROVEMENTS AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY EXISTING ITEM REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN THE SAME OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL ON AND AROUND THE CONSTRUCTION SITE.
 - IN THE EVENT BROOKS PROVIDES CONSTRUCTION STAKING, THE FOLLOWING NOTES SHALL APPLY:
 - THE CONTRACTOR'S AUTHORIZED REPRESENTATIVE SHALL REQUEST STAKING SERVICES TWO WORKING DAYS IN ADVANCE. RESTAKING WILL BE PROVIDED ON A TIME & MATERIALS BASIS AT THE CURRENT CREW RATES.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL CONSTRUCTION STAKES PRIOR TO START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL PROTECT AND PRESERVE THE ORIGINAL SURVEY STAKES. NO CLAIM AGAINST BROOKS WILL BE ALLOWED WHERE SUCH STAKES ARE NOT PRESENT AND VERIFIED AS TO THEIR ORIGIN.
 - RELEASE AND USE OF THESE PLANS CONFERS UPON THE USER A DUTY OF FURTHER, CONTINUED COOPERATION AMONG THE OWNER(S), CONTRACTOR(S) AND BROOKS. ALL CONSTRUCTION DOCUMENTS ARE INSTRUMENTS OF SERVICE AND MAY REQUIRE FURTHER DECISIONS, JUDGMENT AND CLARIFICATION BY BROOKS. ANY PROBLEMS ALLEGED WITH THESE PLANS SHOULD BE REPORTED IMMEDIATELY TO BROOKS SO THAT BROOKS CAN PARTICIPATE IN THE INVESTIGATION AND SOLUTION. WITHOUT SUCH INVOLVEMENT, BROOKS IS RELIEVED FROM RESPONSIBILITY FOR SUBSEQUENT DAMAGES.
 - ANY RE-ESTABLISHMENT OF SURVEY STAKES OR MONUMENTS DESTROYED BY CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - BROOKS ENGINEERS AND SURVEYORS INC. AND THE REGISTRANT SEALING THESE DOCUMENTS HAVE MADE REFERENCE TO MAG STANDARD DETAILS, SPECIFICATIONS, AND SUPPLEMENTS AS REQUIRED BY THE LOCAL AGENCY. SINCE THE DEVELOPMENT OF THE REFERENCED DETAILS AND SPECIFICATIONS WAS NOT UNDER THE DIRECT SUPERVISION OF BROOKS ENGINEERS AND SURVEYORS INC. OR THE REGISTRANT, WE CANNOT ASSUME ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE MAG STANDARD DETAILS, SPECIFICATIONS, AND SUPPLEMENTS.



QUANTITY SUMMARY			
NOTE NO.	DESCRIPTION	QUANTITY	UNIT
①	INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS.	10,276	LF
②	SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25	6,135	SY
④	INSTALL BUTTERFLY VALVE AND OPERATOR MANHOLE PER DETAIL 2 SHEET 24.	5	EA
⑥	INSTALL FIRE HYDRANT BYPASS ASSEMBLY PER DETAIL 4 SHEET 25 AND DETAIL 7 SHEET 26. INSTALL FIRE HYDRANT PER CITY OF PEORIA STD DTL 360-C AS SHOWN ON DETAIL 14 SHEET 29.	5	EA
⑦	REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 220.	20	SF
⑧	REMOVE AND REPLACE EXISTING TRAFFIC LOOP DETECTOR PER DETAIL 13 (ADOT STD DTL TS 7-1) ON SHEET 29	1	LS
⑨	REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" COMBINATION AIR RELEASE VALVE PER MAG STD. DET. 220.	12	SF
⑩	INSTALL 24" BLIND FLANGE WITH CURB STOP & FLUSHING PIPE TO BE ADJUSTED TO GRADE PER MAG STD. DET. 390, TYPE 'A'.	1	EA
⑬	INSTALL 16" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS.	16	LF
⑮	REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 230.	21	SF
⑰	INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29	12	EA
⑳	MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN).	7,685	SY
㉒	INSTALL 6" COMBINATION AIR RELEASE VALVE PER DETAIL 3 SHEET 24.	3	EA
㉔	INSTALL VALVE NUT EXTENSION PER MAG STD. DET. 391-2.	15	EA

UTILITIES

REVIEWED BY:	BOB GARZA	602-371-7989	DATE: --
	ARIZONA PUBLIC SERVICE	(TELEPHONE)	
REVIEWED BY:	HENGAMEH NAJAFI	602-484-5294	DATE: --
	SOUTHWEST GAS COMPANY	(TELEPHONE)	
REVIEWED BY:	RON FLOYD	602-630-1392	DATE: --
	QWEST	(TELEPHONE)	
REVIEWED BY:	CARL MCKAY	602-328-3528	DATE: --
	COX COMMUNICATIONS	(TELEPHONE)	
REVIEWED BY:	JACK MORRIS	602-942-7376	DATE: --
	ROSE VALLEY WATER COMPANY	(TELEPHONE)	
REVIEWED BY:	ROBERT FLETCHER	623-561-1848	DATE: --
	NEW RIVER WATER COMPANY	(TELEPHONE)	
REVIEWED BY:	BILL MATTINGLY	623-773-7286	DATE: --
	CITY OF PEORIA WATER AND SEWER	(TELEPHONE)	

NOTICE: THESE PLANS ARE
PRELIMINARY —
NOT FOR CONSTRUCTION
OR RECORDING

ARIZ. BD. OF TECH REGISTRATION R4-30-304
 THIS NOTE TO BE REMOVED AT THE TIME OF
 MUNICIPAL AGENCY APPROVAL

BROOKS GENERAL NOTES CONT.

14. INFORMATION AND DATA PROVIDED IN THESE CONTRACT DOCUMENTS REGARDING EXISTING OVERHEAD OR UNDERGROUND UTILITIES OR OTHER FACILITIES (COLLECTIVELY "UTILITIES") AT OR CONTIGUOUS TO THIS PROJECT WAS PROVIDED BY THE OWNER, OWNERS OF SUCH UTILITIES, OR THIRD PARTIES NOT AFFILIATED WITH ENGINEER. THIS INFORMATION AND DATA HAS NOT BEEN INDEPENDENTLY VERIFIED BY ENGINEER. OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION AND DATA CONCERNING UTILITIES PROVIDED IN THE CONTRACT DOCUMENTS, AND MAKE NO REPRESENTATION OR WARRANTY THAT ALL EXISTING UTILITIES ARE CORRECTLY LOCATED, IDENTIFIED OR DISCLOSED IN THESE CONTRACT DOCUMENTS. FOR MORE INFORMATION ON, OR TO CONFIRM THE LOCATION OF EXISTING UTILITIES, CONTACT THE ARIZONA BLUE STAKE CENTER AT (602) 263-1100.

CALL TWO WORKING DAYS BEFORE YOU DIG
(602) 263-1100
1-800-STAKE-IT
 (OUTSIDE MARICOPA COUNTY)

XREFS
 MKT-pe
 91607-X-TP
 91607-X-W

**BEARDSLEY RD
 24" WATERLINE
 LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT
JOB NUMBER	916-07FF
SHEET	1 OF 29

CITY OF PEORIA GENERAL INFORMATION

NO PERSON, CORPORATION, CONTRACTOR, OR UTILITY SHALL WORK WITHIN THE RIGHT-OF-WAY, ROAD, STREET, OR EASEMENTS GRANTED FOR PUBLIC USE OR ALLEYS WITHOUT SECURING AN OFFSITE/ONSITE PERMIT FROM THE ENGINEERING DEPARTMENT.

OFFSITE/ONSITE PERMITS ARE REQUIRED FOR THE FOLLOWING:

GRADING/DRAINAGE, EROSION CONTROL, FLOOD CONTROL STRUCTURES, GRADING, HAULING MATERIAL IN EXCESS OF 500 CUBIC YARDS, OILING, GRAVELING OR ANY SURFACING OF ANY STREET, OR ALLEY, WATER SYSTEM, SEWER SYSTEM, STORM DRAIN SYSTEM, TRENCHING, GAS OR ANY OTHER TYPES OF PIPE LINES, DRYWELLS, PAVING, CURB, GUTTER, SIDEWALKS, DRIVEWAYS (CONCRETE), FLOOD IRRIGATION, LANDSCAPE/IRRIGATION, TRAFFIC SIGNALS AND STRIPING AND SIGNAGE, BANK STABILIZATION AND CHANNELIZATION, STREET LIGHTS, WELL ABANDONMENT, UTILITY LINES SUCH AS ELECTRIC, TELEPHONES, TELEVISION, COMMUNICATIONS AND OTHER FRANCHISED FACILITIES.

THE CITY'S ORDINANCE NO. 98-04 ESTABLISHES CONSTRUCTION WORK HOURS AS FOLLOWS:

CONSTRUCTION TYPE:		APR. 2- SEPT. 29	SEPT. 30- APR. 1
A	CONCRETE WORK	5:00 a.m. to 7:00 p.m.	6:00 a.m. to 7:00 p.m.
		6:00 a.m. to 7:00 p.m.	7:00 a.m. to 7:00 p.m.
B	OTHER CONSTRUCTION (WITHIN 500 FEET OF RESIDENTIAL AREA)	5:00 a.m. to 7:00 p.m.	5:00 a.m. to 7:00 p.m.
		6:00 a.m. to 7:00 p.m.	7:00 a.m. to 7:00 p.m.

THIS DOCUMENT ESTABLISHES WORK HOURS IN THE PUBLIC RIGHT-OF-WAY AS FOLLOWS:

NO INTERFERENCE WITH TRAFFIC FLOW ON ARTERIAL STREETS SHALL BE PERMITTED DURING THE HOURS OF 6:00 AM TO 8:30 AM OR FROM 4:00 PM TO 7:00 PM UNLESS PRIOR AUTHORIZATION IS OBTAINED IN WRITING BY THE CITY OF PEORIA TRAFFIC ENGINEER OR HIS DESIGNEE.

PRIOR TO ISSUANCE OF OFF-SITE/ON-SITE PERMITS, THE CONTRACTOR MUST PROVIDE THE CITY OF PEORIA WITH THE SPECIFIC INFORMATION AND PAYMENT OF FEES LISTED BELOW. ANY PERSON, CORPORATION, CONTRACTOR, OR UTILITY COMPANY WORKING IN THE RIGHT-OF-WAY, ROAD, STREET, OR EASEMENTS GRANTED FOR PUBLIC USE OR ALLEYS WITHOUT SECURING A PERMIT IS SUBJECT TO A FINE IN ACCORDANCE WITH ORDINANCE NO. 01-181.

THE CONTRACTOR MUST PROVIDE THE FOLLOWING INFORMATION TO THE CITY OF PEORIA PRIOR TO THE ISSUANCE OF AN OFF-SITE PERMIT:

- A. PAY ALL FEES LISTED ON THE PLAN APPROVAL LETTER.
- B. SHOW PROOF OF COUNCIL APPROVAL AND RECORDATION OF FINAL PLAT OR APPROVAL OF SITE PLAN OR MINOR LAND DIVISION.
- C. SUBMIT AN EXECUTED COPY OF THE AGREEMENT TO INSTALL IMPROVEMENTS, INSTALL-A OR INSTALL-B. REFER TO ORDINANCE 91-17 OF THE PEORIA CITY CODE, SECTION 11-5-5.
- D. ALL CONTRACTORS AND SUB-CONTRACTORS MUST PROVIDE A CERTIFICATE OF INSURANCE NAMING THE CITY AS ADDITIONALLY INSURED. THIS INCLUDES LIABILITY, AUTO, AND WORKER'S COMPENSATION.

E. ALL CONTRACTORS MUST PROVIDE A COPY OF A SIGNED CONTRACT SHOWING QUANTITIES OF MATERIALS AND UNIT PRICES. THE PERMIT FOR WATER, SEWER, PAVING, CONCRETE, TRENCHING, GAS OR OTHER PIPELINES, DRYWELLS, FLOOD IRRIGATION, LANDSCAPE/IRRIGATION, TRAFFIC SIGNALS, STREET LIGHTS, STRIPING, BANK STABILIZATION AND CHANNELIZATION, STORM DRAIN FACILITIES, WELL ABANDONMENT AND UTILITY LINES, IS A \$25.00 ADMINISTRATION FEE.

F. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN PER THE PHOENIX TRAFFIC BARRICADE MANUAL. BARRICADES MUST BE CONTINUALLY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT (REFER TO CITY ORDINANCE #01-181). IF ANY PART OF THE TRAFFIC CONTROL PLAN FALLS WITHIN 300' OF A SIGNALIZED INTERSECTION, AN OFF-DUTY OFFICER WILL BE REQUIRED FOR TRAFFIC CONTROL. A TRAFFIC CONTROL PLAN (TCP) SHALL BE SUBMITTED TO THE ENGINEERING DEPARTMENT AND ACCEPTED A MINIMUM OF 24-HOURS PRIOR TO CONSTRUCTION. AN ACCEPTED TCP WILL BE STAMPED AND A COPY RETURNED TO THE CONTRACTOR. A COPY OF THE ACCEPTED PLAN MUST REMAIN ON THE JOB SITE AT ALL TIMES.

G. ALL CONTRACTORS AND SUB-CONTRACTORS MUST OBTAIN A LICENSE TO OPERATE IN THE CITY OF PEORIA AT THE SALES TAX OFFICE. YOU MUST SHOW RECEIPT UPON OBTAINING A PERMITS, OR PROVIDE A LICENSE NUMBER. FOR MORE INFORMATION, PLEASE CONTACT (623) 773-7160.

H. THE CONTRACTOR MUST PROVIDE 24-HOUR EMERGENCY TELEPHONE AND CELLULAR PHONE NUMBERS.

PRIOR TO THE FINAL ACCEPTANCE OF THE ONSITE/OFFSITE IMPROVEMENTS, THE CITY REQUIRES THE SUBMISSION OF THE FOLLOWING:

- A. REPRODUCIBLE, 24"x36", 4 MIL MYLAR AS-BUILT DRAWINGS (NO ORIGINAL INKING OR STICKY BACK PERMITTED ON AS-BUILT DRAWING), CERTIFIED BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL CIVIL ENGINEER REGISTERED IN THE STATE OF ARIZONA FOR: GRADING AND DRAINAGE, INCLUDING CERTIFICATES OF PAD OR FINISHED FLOOR ELEVATIONS, DRYWELL RIM ELEVATIONS, RETENTION/DETENTION BASIN BOTTOM ELEVATIONS, AND FLOOD ZONE DETERMINATIONS, WATER, SEWER, PAVING, CURB, GUTTER, SIDEWALK, DRIVEWAYS, STORM DRAIN, LANDSCAPE AND LANDSCAPE IRRIGATION, STREET LIGHTS, BANK STABILIZATION AND CHANNELIZATION, TRAFFIC SIGNALS, STRIPING AND SIGNAGE, AND FLOOD IRRIGATION.
- B. ALL MATERIALS TESTING RESULTS, BAC-T TEST RESULTS FOR WATERLINES, AND VIDEO TAPES FOR SEWER LINES.
- C. COPIES OF DRYWELL DRILLING LOGS, ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) CERTIFICATION REGISTRATION AND DRYWELL PERCOLATION TEST RESULTS.
- D. PROVIDE CAD DRAWING, COMPATIBLE WITH CITY SOFTWARE, OF THE WATER AND SEWER SYSTEMS BASE MAPS WITH AS-BUILTS LOCATION OF MAINS AND SERVICES (AUTOCAD DRAWING FILES, THROUGH RELEASE 14).
- E. ALL EXISTING PERIMETER/ADJACENT DAMAGED CONCRETE (SIDEWALK, CURB, GUTTER, APRON, OR VALLEY GUTTER) SHALL BE REPLACED. ALL EXISTING PERIMETER/ADJACENT CONCRETE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED.
- F. ADDITIONAL TEST RESULTS, CERTIFICATIONS, REGISTRATIONS AND REPORTS AS REQUIRED IN THE AS-BUILT REQUIREMENTS SECTION OF THE INFRASTRUCTURE GUIDE.

CITY OF PEORIA GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS, UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (MAG). CITY OF PEORIA INFRASTRUCTURE GUIDE, PEORIA DETAILS AND CITY OF PHOENIX STANDARD DETAILS WILL CONTINUE TO APPLY WHERE SUCH DETAILS WERE NOT ADOPTED OR INCLUDED BY MAG. ALTERNATE DETAILS AND SPECIFICATIONS MAY BE SUBMITTED FOR REVIEW AND ACCEPTANCE BY THE ENGINEERING DEPARTMENT. IF ACCEPTED, ALTERNATE DETAILS WILL BE SHOWN AS PART OF THE APPROVED PLANS/DETAIL SHEETS.
2. THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. HOWEVER, SUCH REVIEW SHALL NOT PREVENT THE CITY ENGINEER FROM REQUIRING CORRECTION OF ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.
3. APPROVAL BY THE CITY ENGINEER MEANS FOR GENERAL LAYOUT IN RIGHT-OF-WAY ONLY. THIS APPROVAL OF CONSTRUCTION PLANS IS VALID FOR A PERIOD OF NINE (9) MONTHS. CONSTRUCTION PERMITS SHALL BE OBTAINED WITHIN THIS PERIOD OR THE PLANS SHALL BE RESUBMITTED FOR APPROVAL. WORK SHALL ALSO BE CONTINUOUSLY PURSUED IN ORDER TO MAINTAIN A VALID PLAN APPROVAL AND PERMIT. APPROVAL IS ONLY FOR WORK WITHIN THE JURISDICTION OF THE CITY OF PEORIA.
4. THE CITY ENGINEER DOES NOT WARRANT ANY QUANTITIES SHOWN ON THESE PLANS.
5. OFFSITE PERMITS FOR ANY WORK WITHIN THE RIGHT-OF-WAY AND EASEMENTS, AND ANY GRADING AND DRAINAGE, WHETHER ONSITE OR OFFSITE, ARE REQUIRED PRIOR TO COMMENCING WORK. THE BUILDING PERMIT SHALL NOT BE CONSTRUCTED IN ANY WAY AS PERMISSION TO COMMENCE WORK COVERED BY AN OFFSITE PERMIT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO UNDERSTAND THE WORK COVERED BY VARIOUS PERMITS.
6. THE ENGINEERING DEPARTMENT, INSPECTION SECTION, SHALL BE NOTIFIED TWENTY-FOUR (24) HOURS PRIOR TO ANY CONSTRUCTION WORK BY TELEPHONE AT (623) 773-7210. ANY WORK CONCEALED WITHOUT INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. AN APPROVED SET OF PLANS MUST BE AVAILABLE ON THE JOB SITE AT ALL TIMES. THE CONTRACTOR'S REPRESENTATIVE (CAPABLE OF COMMUNICATING WITH THE CITY'S REPRESENTATIVES) SHALL BE ON THE JOB AT ALL TIMES THE WORK IS BEING PURSUED.
8. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EMERGENCY TELEPHONE NUMBERS TO THE CITY OF PEORIA AT TIME OF ISSUANCE OF OFFSITE/ONSITE PERMITS AND HAVE PERSONNEL AVAILABLE 24 HOURS A DAY TO RESPOND TO EMERGENCIES. IF THE CITY IS REQUIRED TO RESPOND AND MAKE EMERGENCY REPAIRS ON BEHALF OF THE CONTRACTOR, THE CONTRACTOR IS RESPONSIBLE TO REIMBURSE THE CITY FOR MAN-HOUR, EQUIPMENT RIGHTS-OF-WAY OR EASEMENTS TO THE CITY OF PEORIA PRIOR TO ISSUANCE OF PERMITS.
9. IT SHALL BE THE RESPONSIBILITY OF THE PERMITEE TO ARRANGE FOR THE RELOCATION AND RELOCATION COSTS OF ALL UTILITIES, AND SUBMIT A UTILITY RELOCATION SCHEDULE PRIOR TO THE ISSUANCE OF A CONSTRUCTION PERMIT.
10. THE PROCEDURES AND METHODS USED TO SAMPLE, TEST MATERIALS, AND REPORT TEST RESULTS WILL BE DETERMINED BY THE ENGINEERING DEPARTMENT. FOR ALL PHASES OF CONSTRUCTION, THE TYPE, SCHEDULING, FREQUENCY AND LOCATION OF ALL MATERIALS TESTING AND SAMPLING SHALL BE DETERMINED BY THE ENGINEERING DEPARTMENT. ALL TEST RESULTS SHALL BE REPORTED DIRECTLY (IN WRITING) TO THE ENGINEERING DEPARTMENT. FOR EACH PHASE OF CONSTRUCTION, TEST RESULTS (IN WRITING) MUST BE RECEIVED FROM THE TESTING LABORATORY, PRIOR TO START OF THE NEXT PHASE OF CONSTRUCTION.
11. THE EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM THE OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ONSITE CONSTRUCTION.
12. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ALL EXISTING OVERHEAD AND/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THIS CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT AND TO ADEQUATELY PROTECT AND MAINTAIN ANY SUCH UTILITIES.
13. THE ENGINEERING DEPARTMENT DOES NOT ASSUME ANY LIABILITY FOR ERRORS OF LINE AND/OR GRADE ON ANY STAKING WHICH HAS BEEN DISTURBED IN ANY WAY, NOR DOES THE ENGINEER ASSUME ANY LIABILITY FOR ERRORS OF LINE AND/OR GRADE ON ANY STAKING THAT HAS BEEN IN PLACE FOR A PERIOD OF TWENTY-FOUR (24) HOURS OR MORE WITHOUT THE COMMENCEMENT OF THE CONSTRUCTION FOR WHICH IT WAS SET.
14. THE CONTRACTOR SHALL CONTACT BLUE STAKE (602) 263-1100 PRIOR TO CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CURRENT BLUE STAKE MARKINGS THROUGHOUT CONSTRUCTION.
15. THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FOR CONSTRUCTION FROM THE MANAGEMENT SERVICES DEPARTMENT, CUSTOMER SERVICES. CONTACT CUSTOMER SERVICE AT (623) 773-7160 TO SCHEDULE THE RELOCATION OF HYDRANT METERS. CONTRACTORS SHALL NOT RELOCATE HYDRANT METERS THEMSELVES.
16. ALL CONTRACTORS ARE RESPONSIBLE TO CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES IN ORDER TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. GRAVEL TRACK-OUT PADS SHALL MEET CURRENT MARICOPA COUNTY STANDARDS.
17. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTION DITCHES, PIPES PROTECTIVE BERMS, CONCRETE CHANNELS OR OTHER MEASURES DESIGNED TO PROTECT IMPROVEMENTS, WHETHER EXISTING OR PROPOSED, FROM RUNOFF OR DAMAGE FROM STORM WATER, MUST BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ANY IMPROVEMENTS.
18. TRAFFIC CONTROL SHALL CONFORM WITH THE CITY OF PHOENIX TRAFFIC BARRICADE MANUAL, MUTCD, AND THE CITY OF PEORIA INFRASTRUCTURE DEVELOPMENT GUIDELINES.
19. ANY AND ALL OBSTRUCTIONS WITHIN THE RIGHTS-OF-WAY AND EASEMENTS SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS COMMENCED.
20. ALL CONTRACTORS ARE RESPONSIBLE TO OBTAIN A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS, INCLUDING NOTICE OF INTENT (NOI), NOTICE OF TERMINATION, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP). A COPY OF THE NOI AND SWPPP SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES.
21. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY AND ALL OTHER PERMITS AND MEET ANY REQUIREMENTS SET FORTH BY OTHER AGENCIES OR UTILITIES, WHICH HAVE JURISDICTION, AT THE CONTRACTORS EXPENSE, INCLUDING OSHA.
22. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY AND ALL OTHER PERMITS AND MEET ANY REQUIREMENTS SET FORTH BY OTHER AGENCIES OR UTILITIES, WHICH HAVE JURISDICTION, AT THE CONTRACTORS EXPENSE, INCLUDING OSHA. CONTRACTOR SHALL MEET OSHA STANDARDS FOR TRENCH SAFETY. CONTRACTOR SHALL MEET OSHA STANDARDS FOR TRENCH SAFETY. BY THE CITY OF PEORIA DO NOT COVER THE MARICOPA COUNTY RIGHTS-OF-WAY.

CITY OF PEORIA GENERAL NOTES (CONT.)

23. AS A REMINDER, MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT HAS ASKED THE CITY TO INFORM ALL CONTRACTORS WORKING IN THE CITY OF PEORIA OF THE FOLLOWING:

PER THE MARICOPA COUNTY AIR POLLUTION CONTROL RULES AND REGULATIONS ON EARTH MOVING EQUIPMENT PERMITS, NO PERSON SHALL CAUSE OR PERMIT THE USE OF ANY POWER OF MECHANICAL EQUIPMENT FOR COMMERCIAL PURPOSES TO CLEAR, EXCAVATE OR LEVEL LAND, INCLUDING BUT NOT LIMITED TO BLASTING, DEMOLITION, ROAD AND STREET CONSTRUCTION, SWIMMING POOL EXCAVATING, TRENCHING, VEGETATION REMOVAL, OR ENGAGE IN ANY OTHER EARTH MOVING ACTIVITIES WITHOUT FIRST OBTAINING A PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ACQUIRING THE PERMIT.

ALSO AS A REMINDER, IF THE ABOVE REFERENCED DEVELOPMENT HAS WORK THAT NEEDS TO BE DONE IN MARICOPA COUNTY RIGHTS-OF-WAY, PLEASE OBTAIN ALL PERMITS FROM THE MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION. THE OFF SITE PERMITS ISSUED BY THE CITY OF PEORIA DO NOT COVER THE MARICOPA COUNTY RIGHTS-OF-WAY.
24. ACCEPTABLE WATER LINE MATERIALS:

A. DUCTILE IRON PIPE, PRESSURE CLASS 350, IS ACCEPTABLE FOR WATER LINES SIZES SIX (6) INCHES THROUGH TWELVE (12) INCHES IN DIAMETER. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED IN CONFORMANCE WITH SECTION 610.5 OF THE MAG STANDARD SPECIFICATIONS.

B. DUCTILE IRON PIPE, PRESSURE CLASS 250, IS ACCEPTABLE FOR WATERLINES SIXTEEN (16) INCHES IN DIAMETER. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED IN CONFORMANCE WITH SECTION 610.5 OF THE MAG STANDARD SPECIFICATIONS.

C. DUCTILE IRON PIPE, PRESSURE CLASS 200 MINIMUM, IS ACCEPTABLE FOR WATER LINES TWENTY-FOUR (24) INCHES IN DIAMETER. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED IN CONFORMANCE WITH SECTION 610.5 OF THE MAG STANDARD SPECIFICATIONS.
3. TRENCH EXCAVATION, BACKFILLING AND COMPACTION SHALL CONFORM TO MAG STANDARD SPECIFICATION SECTION 601 EXCEPT AS MODIFIED HEREIN.
4. BACKFILL SHALL BE TYPE I AS DEFINED IN SECTION 601 OF THE MAG STANDARD SPECIFICATIONS.
5. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE PROJECT ENGINEER BEFORE THE WATER LINE OR FITTINGS ARE COVERED, SO "AS-BUILT" MEASUREMENTS MAY BE TAKEN. ANY CHANGES TO THE APPROVED PLANS MUST BE AUTHORIZED BY THE PROJECT ENGINEER AND THE CITY BEFORE THE CHANGE IS MADE IN THE FIELD.
6. SIX (6) INCH AND EIGHT (8) INCH WATERLINES LOCATED IN STREETS SHALL HAVE A MINIMUM COVER OF FORTY-EIGHT (48) INCHES OVER THE TOP OF THE PIPE TO FINISH GRADE. SIX (6) INCH AND EIGHT (8) INCH WATERLINES IN LOCATIONS OTHER THAN STREETS SHALL HAVE A MINIMUM COVER OF THIRTY-SIX (36) INCHES OVER THE TOP OF THE PIPE TO FINISH GRADE, UNLESS DESIGN CONDITIONS WARRANT ADDITIONAL COVER.
7. TWELVE (12) INCH WATERLINES LOCATED IN STREETS SHALL HAVE A MINIMUM COVER OF SIXTY (60) INCHES OVER THE TOP OF THE PIPE TO FINISH GRADE. TWELVE (12) INCH WATERLINES IN LOCATIONS OTHER THAN STREETS SHALL HAVE A MINIMUM COVER OF FORTY-EIGHT (48) INCHES OVER THE TOP OF THE PIPE TO FINISH GRADE, UNLESS DESIGN CONDITIONS WARRANT ADDITIONAL COVER.
8. SIXTEEN (16) INCH WATERLINES SHALL HAVE A MINIMUM COVER OF SIXTY (60) INCHES OVER THE TOP OF THE PIPE TO FINISH GRADE, UNLESS DESIGN CONDITIONS WARRANT ADDITIONAL COVER.
9. ALL STUB-OUTS SHALL HAVE A TWO (2) INCH BRASS BALL CORP STOP AS A BLOW-OFF, LEFT IN PLACE WITH A TWO (2) INCH RISER, PER MAG STANDARD DETAIL 390 "A", AND SHALL BE ACCESSIBLE TO USE.
10. FIRE HYDRANT MANUFACTURER MUST BE APPROVED BY THE CITY OF PEORIA PRIOR TO INSTALLATION. APPROVED HYDRANTS INCLUDE A.V.K., CLOW, AND JONES.
11. ALL VALVES SIXTEEN (16) INCHES AND UNDER SHALL BE RESILIENT SEAT AWWA APPROVED GATE VALVES AND SHALL OPEN BY TURNING TO THE LEFT.
12. VALVES SHALL NOT BE LOCATED IN SIDEWALKS, GUTTERS, CURB, OR VALLEY GUTTERS.
13. ALL VALVE BOXES SHALL CONFORM TO MAG STANDARD DETAIL 391-1, TYPE 'A'.
14. CONTRACTORS SHALL NOT OPERATE VALVES ON THE EXISTING CITY SYSTEM.
15. WATER LINES SHALL BE INSTALLED IN A MANNER WHICH ELIMINATES DIPS OR HIGH POINTS. WATER LINES CONSTRUCTED ON LINEAR STREETS SHALL NOT HAVE HORIZONTAL ALIGNMENT DEFLECTIONS. ALL HORIZONTAL DEFLECTIONS IN WATER LINES (CONSTRUCTED IN NONLINEAR STREETS) SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS FOR DEFLECTION AT JOINTS.
16. THRUST BLOCKS FOR WATER LINES (BLOCKING) ARE SPECIFICALLY NOT APPROVED FOR THIS PROJECT. RESTRAINED OR WELDED JOINTS SHALL BE USED IN LIEU OF THRUST BLOCKS TO RESIST THRUST FORCES, AND SHALL BE SUBJECT TO THE APPROVAL OF THE PROJECT ENGINEER. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR ALL RESTRAINED JOINTS. THRUST RESTRAINT SHALL BE INSPECTED PRIOR TO BACKFILL.
17. WATER SERVICES TWO (2) INCHES AND SMALLER IN DIAMETER SHALL CONFORM TO THE CITY OF PEORIA STANDARD FOR WATER METER INSTALLATION. THE MINIMUM SERVICE CONNECTION SHALL BE ONE (1) INCH. SINGLE FAMILY RESIDENCES MAY USE A MINIMUM ONE (1) INCH SERVICE CONNECTION. WATER SERVICE SADDLE MANUFACTURER AND MODEL MUST BE APPROVED BY THE CITY OF PEORIA PRIOR TO INSTALLATION.
18. WATER SERVICES SHALL NOT BE LOCATED UNDER DRIVEWAYS, OR UNDER CONCRETE APRONS ADJACENT TO DRIVEWAYS.
19. ALL PAVEMENT REPLACEMENT FOR WATERLINES SMALLER THAN TWENTY-FOUR (24) INCHES IN DIAMETER SHALL CONFORM WITH MAG STANDARD DETAIL 200 WITH A "T-TOP" - MODIFIED WITH A SPECIFICATION 728, (MODIFIED FOR ONE-HALF SACK PORTLAND CEMENT), FOR TRENCH BACKFILL FROM ONE (1) FOOT ABOVE THE TOP OF THE EXISTING PAVEMENT SUBGRADE. PAVEMENT REPLACEMENT THICKNESS SHALL BE 1.5 TIMES THE EXISTING ASPHALT THICKNESS.
20. PRESSURE TESTING SHALL NOT BE CONDUCTED UNTIL AFTER THE CONTRACTOR HAS PRETESTED 100% OF THE LINES. INSPECTION TESTING MUST BE CALLED FOR TWENTY-FOUR (24) HOURS IN ADVANCE. WATER LINES MUST PASS PRESSURE TESTING PRIOR TO PAVING.
21. ALL MAINS SHALL BE CHLORINATED IN CONFORMANCE WITH SECTION 611 OF MAG STANDARD SPECIFICATIONS. SAMPLES WILL BE TAKEN ON TWO (2) CONSECUTIVE DAYS AND IN CONFORMANCE WITH MAG STANDARD SPECIFICATION SECTION 611.
22. THE CONTRACTOR SHALL NOT TIE INTO EXISTING MAINS WITHOUT PRIOR APPROVAL OF THE CITY OFF-SITE INSPECTION SUPERVISOR.

CITY OF PEORIA WATER NOTES (CON'T.)

23. THE FOLLOWING MAG UNIFORM STANDARD DETAILS ARE SPECIFICALLY NOT APPROVED.

NO. 345-2 4", 6" WATER METER
NO. 360 FIRE HYDRANT INSTALLATION
NO. 380 THRUST BLOCKS FOR WATER LINES
NO. 389 CURB STOP WITH VALVE BOX & COVER
NO. 391-1 VALVE BOX INSTALLATION AND GRADE ADJUSTMENT, TYPES "B" & "C"
24. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MEET OSHA STANDARDS FOR "TRENCH SAFETY".
25. IN ACCORDANCE WITH AAC 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.

CITY OF PEORIA PAVING NOTES

1. EXACT POINT OF PAVEMENT MATCHING, TERMINATION AND/OR OVERLAY, IF NECESSARY, SHALL BE DETERMINED IN THE FIELD BY THE FIELD ENGINEERING DIVISION.
2. ALL FRAMES, COVERS, VALVE BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION. THE CONCRETE COLLAR SHALL BE ADJUSTED LEVEL WITH EXISTING BITUMINOUS PAVEMENT. ADJUSTMENT OF EXISTING TYPE "A" OR TYPE "B" WATER VALVE BOXES IN RIGHT-OF-WAY SHALL BE CONSIDERED INCIDENTAL.
3. ALL CONTRACTORS/DEVELOPERS SHALL COMPLY WITH THE CITY OF PEORIA STANDARD DETAIL 149 FOR TRENCH PLATING.
4. PAVING SHALL NOT START UNTIL ALL APPROPRIATE TESTING HAS BEEN COMPLETED AND ACCEPTED (PRESSURE TESTING OF UTILITIES, DENSITY TESTING, VIDEOING OF SEWER LINE, ETC.). SERVICE STUBS TO ALL PLATTED LOTS SHALL BE EXTENDED, AND ALL CONFLICTING UTILITY CONSTRUCTION COMPLETED PRIOR TO START OF PAVING.
5. TREES AND SHRUBBERY IN THE RIGHT-OF-WAY, WHICH CONFLICT WITH THE IMPROVEMENTS PROPOSED HEREIN, ARE NOT TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL OF THE CITY OF PEORIA. THE PERMITEE SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY AUTHORIZATION TO REMOVE AND/OR RELOCATE SAID TREES OR SHRUBBERY.
6. IN ALL AREAS WHERE NEW CONSTRUCTION OF CURB, GUTTER, SIDEWALKS, AND DRIVEWAYS IS REQUIRED, AND THE ENGINEER DETERMINES THE EXISTING GRADE TO CONSIST OF SOILS WITH SWELLING CHARACTERISTICS, THE MOISTURE CONTENT SHALL BE BROUGHT AS CLOSE AS POSSIBLE TO OPTIMUM REQUIRED FOR COMPACTION BY THE ADDITION OF WATER, BLENDING OF DRY SUITABLE MATERIAL OR BY DRYING OF EXISTING MATERIAL. THE MATERIAL SHALL THEN BE COMPACTED TO A RELATIVE DENSITY OF 75 PERCENT MINIMUM TO 85 PERCENT MAXIMUM WITH 80 PERCENT AS IDEAL.
7. CONSTRUCTION LOADS: DURING CONSTRUCTION OPERATIONS, HEAVY EQUIPMENT MAY CROSS-EXISTING OR PROPOSED PIPE. IN THIS CASE, AN EARTH FILL SHOULD BE CONSTRUCTED TO AT LEAST THREE (3) FEET ABOVE PIPE. THE FILL MUST BE SUFFICIENT TO PREVENT THE LATERAL DISPLACEMENT OF THE PIPE.
8. UNLESS OTHERWISE SPECIFIED, THE CITY OF PEORIA REQUIRES THAT THE ASPHALTIC CONCRETE MIX DESIGN MET THE CURRENT CITY OF PHOENIX MIX DESIGN FOR A C-3/4 MIX. COPIES OF THIS MIX DESIGN AND RELATED PRODUCT CODES ARE AVAILABLE FROM THE ENGINEERING DEPARTMENT.
9. ALL CONTRACTORS/DEVELOPERS ARE RESPONSIBLE TO CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES IN ORDER TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT TRACKED ONTO PUBLIC RIGHTS-OF-WAYS OR STREETS.
10. IF ANY EXISTING BARRICADES, TRAFFIC SIGNS OR STREET NAME SIGNS NEED TO BE REMOVED DURING CONSTRUCTION, NOTIFY THE CITY OF PEORIA PUBLIC WORKS STREETS DIVISION AT (623) 773-7432. A MINIMUM OF 48-HOURS NOTICE IS NEEDED FOR REMOVALS. IF SIGNS CONTRACTOR/DEVELOPER TO NOTIFY THEM.
11. NO WATER HOSE OR RAMPS SHALL BE PLACED ACROSS OR IN THE ARTERIAL OR COLLECTOR STREETS. APPROVAL IN WRITING FROM THE CITY ENGINEER OR HIS DESIGNEE IS REQUIRED FOR PLACEMENT OF THE SUPPLY HOSE OR RAMPS IN LOCAL STREET. APPLICATIONS SHALL INCLUDE SUBMITTALS OF THE MANUFACTURER'S SPECIFICATIONS, MATERIALS USED, DIMENSIONS OF THE RAMP, PROPOSED LOCATION, PROPOSED BARRICADING AND SIGNAGE.

GENERAL WATER NOTES

1. THE LOCATIONS OF ALL SEWER LEAD FROM CATCH BASIN ARE NOT KNOWN.
2. USE PIPE DEFLECTION AND/OR BENDS TO GAIN SUFFICIENT SEPARATION FROM EXISTING STRUCTURES, WHERE NECESSARY.
3. USE VERTICAL BENDS TO AVOID CONFLICT WITH EXISTING UTILITIES, AS NEEDED.

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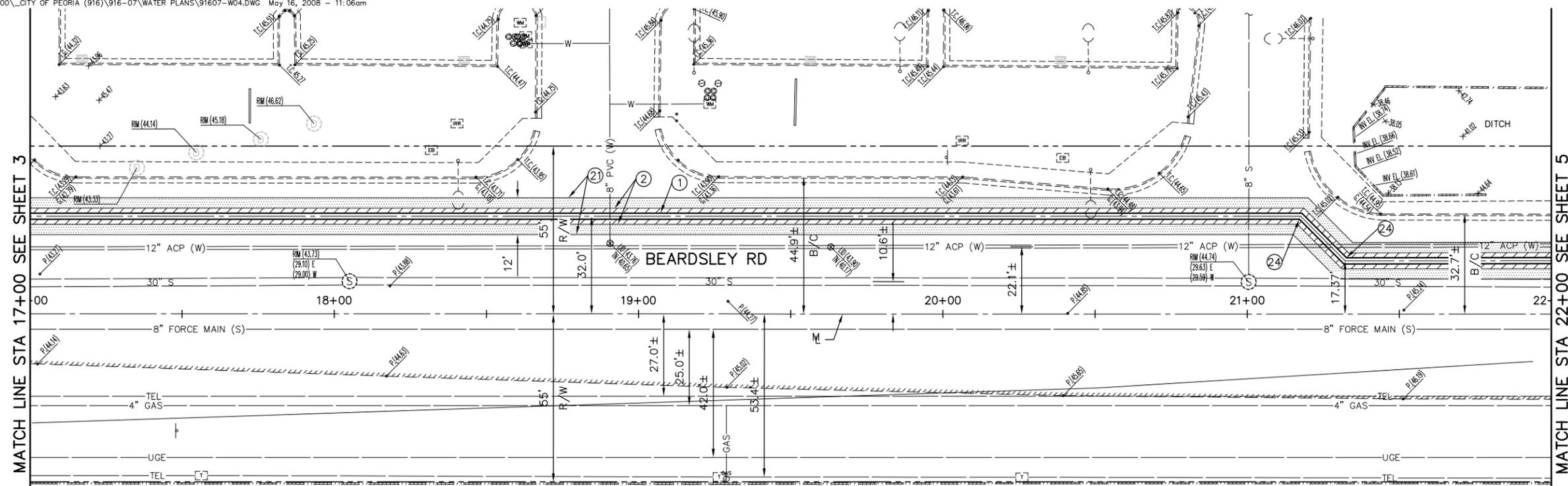
**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT
	
	
4002 E ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-5700 (FAX) (480) 868-0804	
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916-07FF	2 OF 29



NOTICE: THESE PLANS ARE
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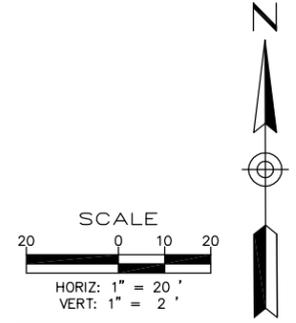
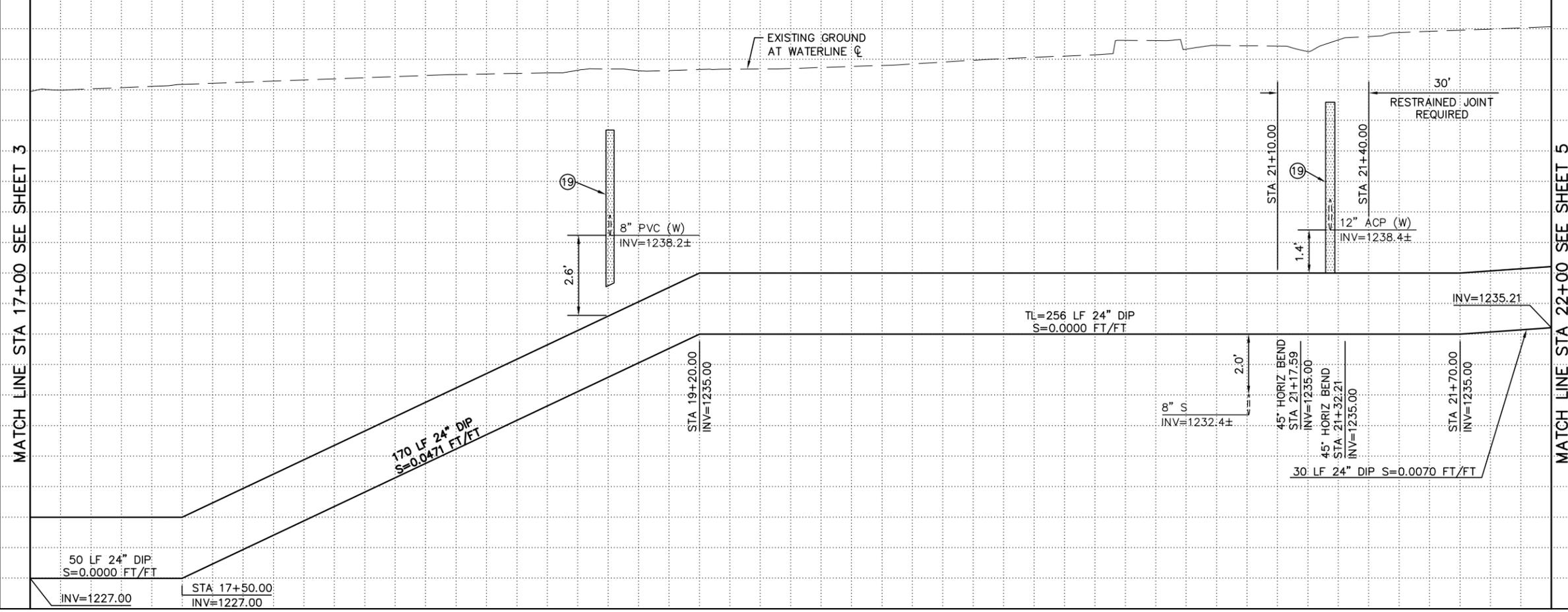


NOTE:
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UTILITY NOTICE:
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CONSTRUCTION NOTES

- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 506 LF
- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25 295 SY
- ⑱ INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29 2 EA
- ㉑ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 380 SY
- ㉒ INSTALL 24"-45° HORIZONTAL BEND. NPI



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**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

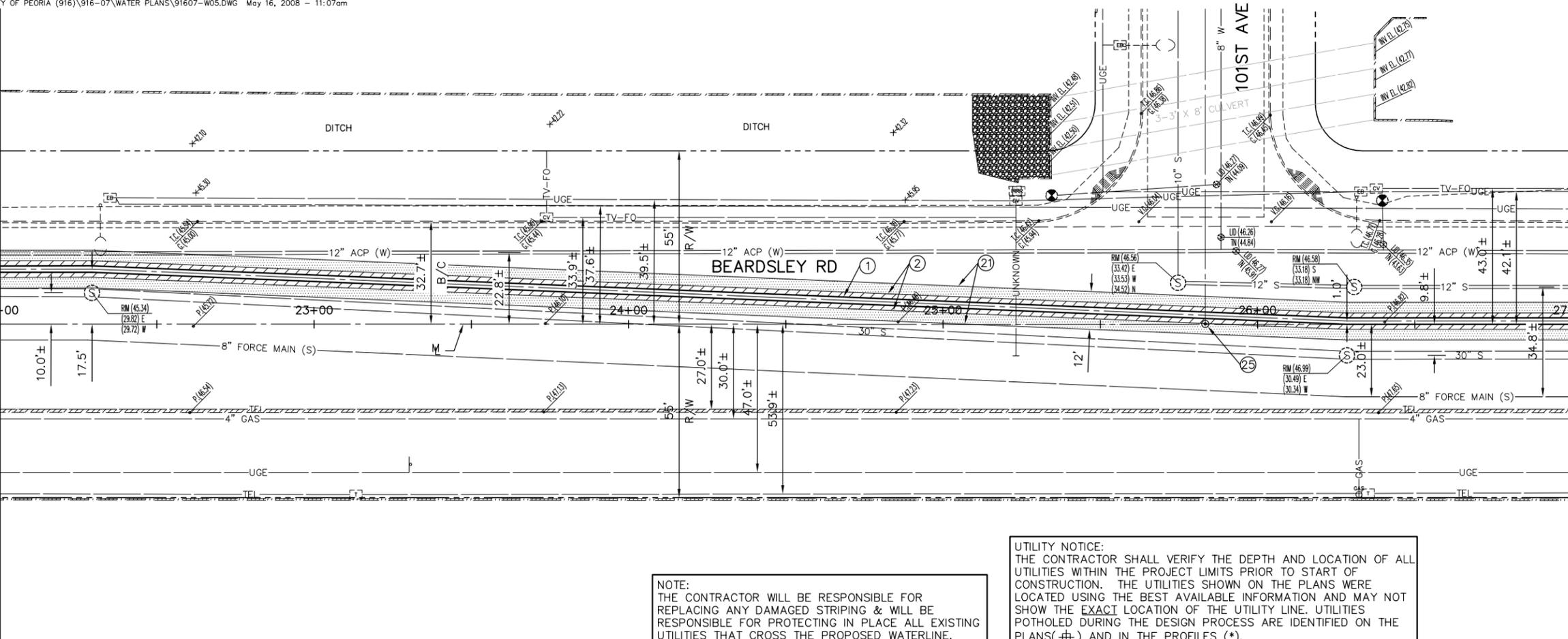
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JOB NUMBER 916-07FF SHEET 4 OF 29

MATCH LINE STA 22+00 SEE SHEET 4

MATCH LINE STA 27+00 SEE SHEET 6

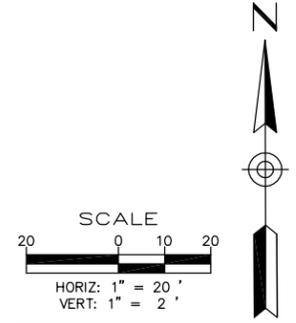
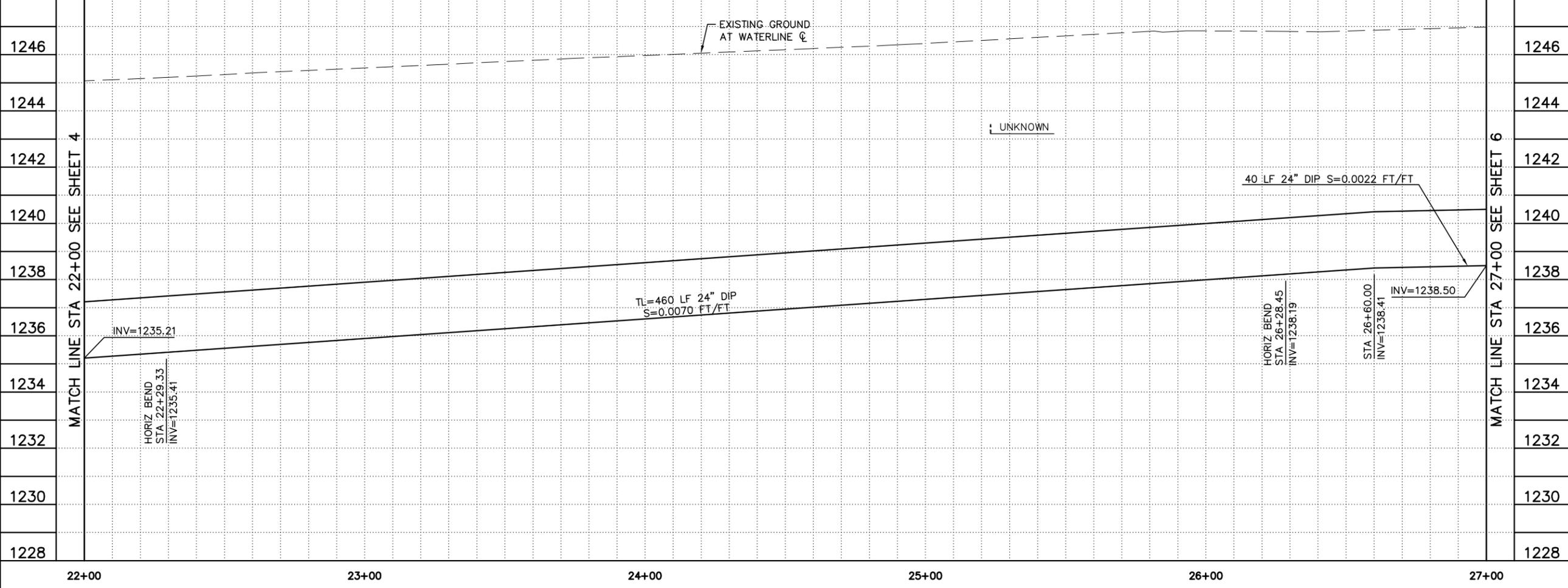


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- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 291 SY
- ②① MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY
- ②⑤ REMOVE AND REPLACE EXISTING BENCHMARK WITH BRASS CAP PER MAG STD DET 120-1. NPI



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24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

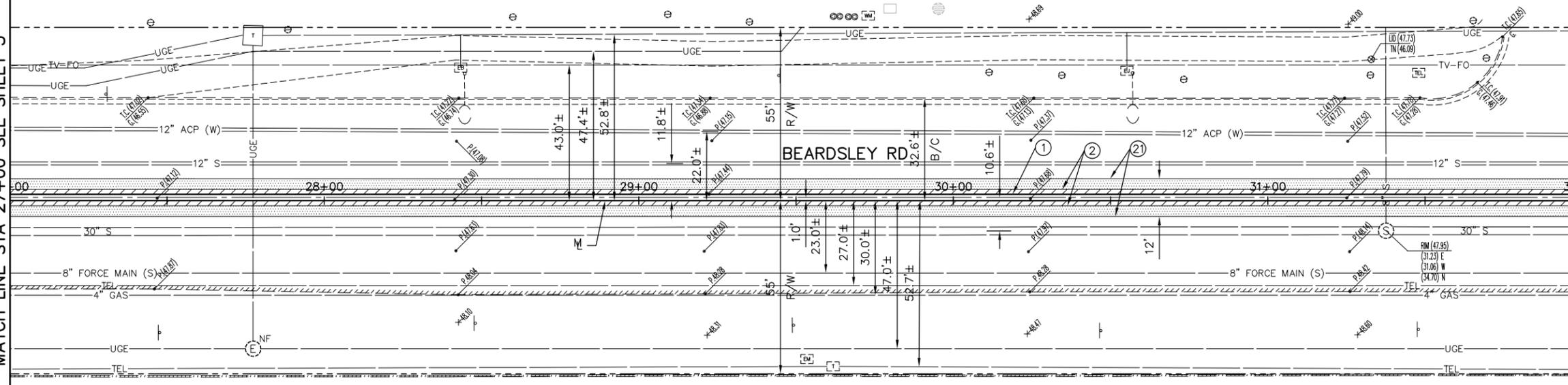
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JOB NUMBER: 916-07FF SHEET: 5 OF 29

MATCH LINE STA 27+00 SEE SHEET 5

MATCH LINE STA 32+00 SEE SHEET 7

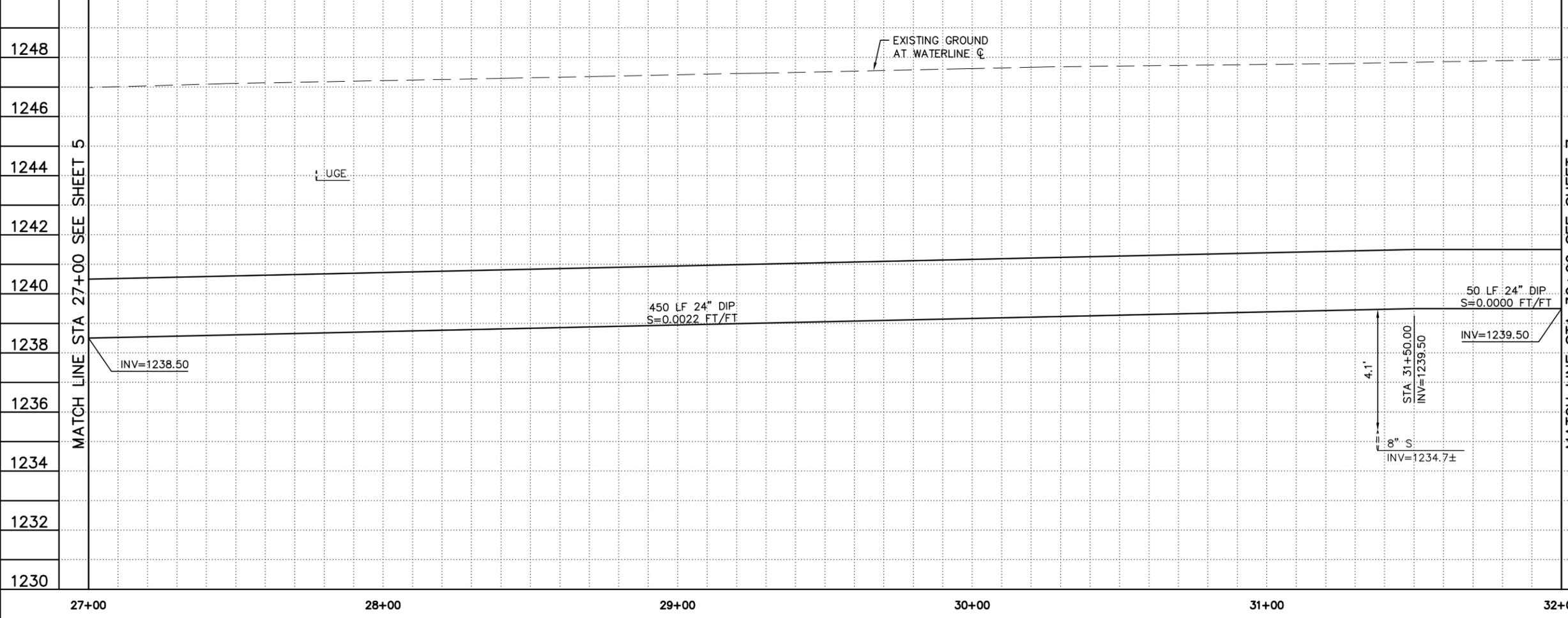


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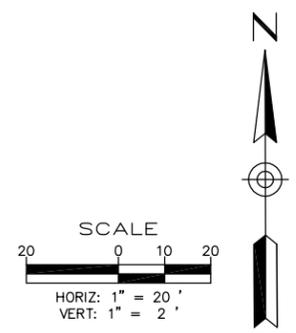
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- ③ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY



MATCH LINE STA 27+00 SEE SHEET 5

MATCH LINE STA 32+00 SEE SHEET 7



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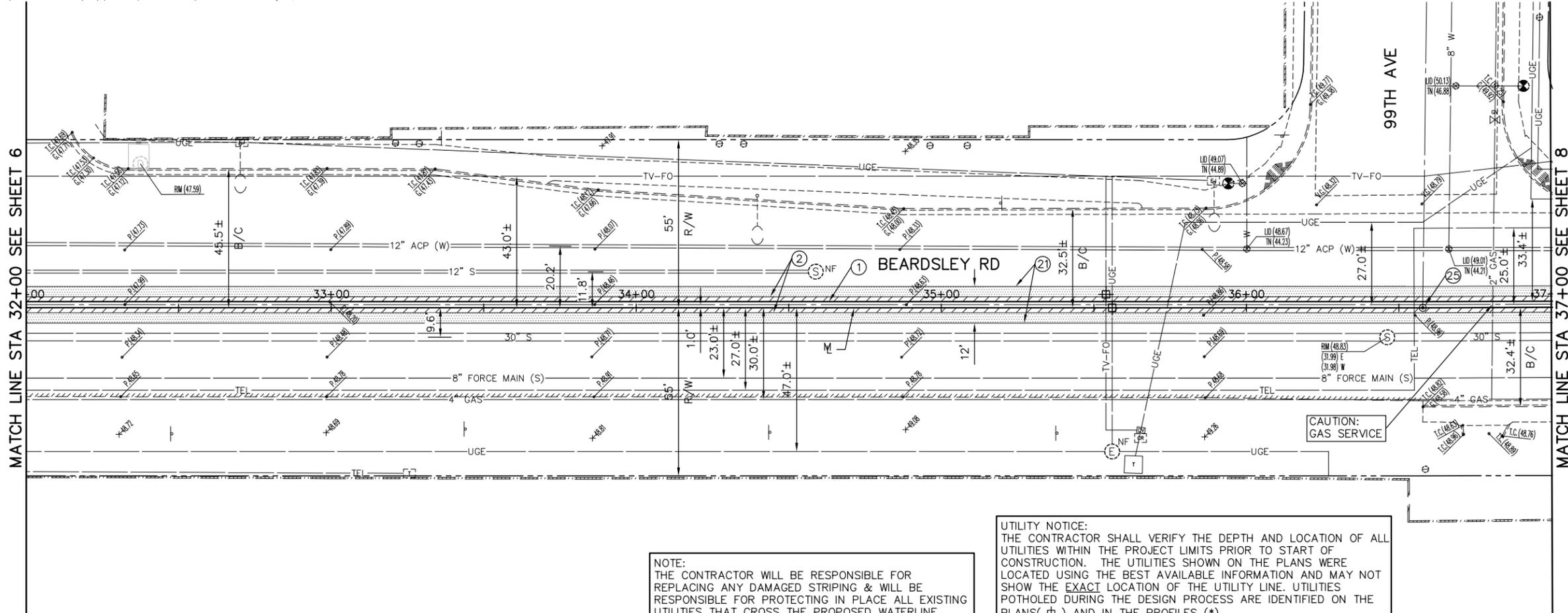
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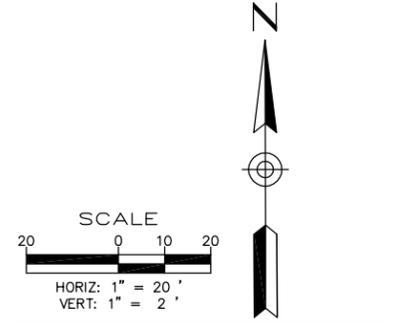
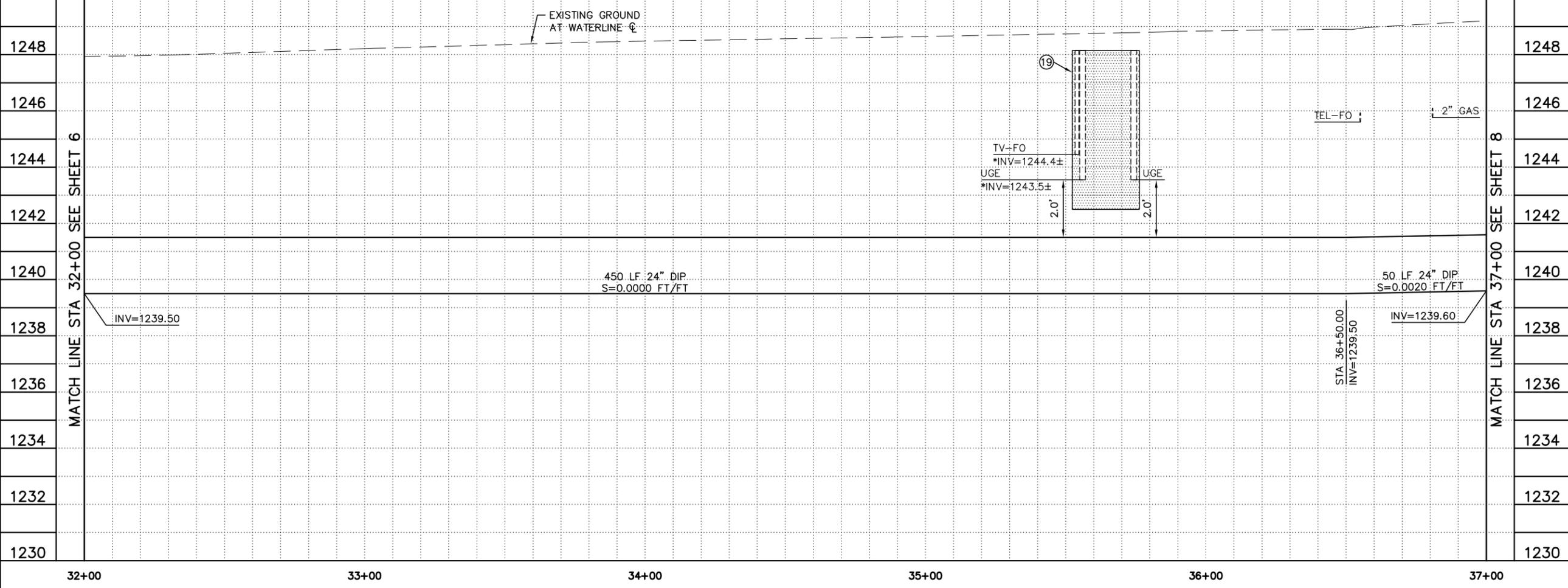
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- CONSTRUCTION NOTES**
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 - ⑬ INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29. 1 EA
 - ⑭ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY
 - ⑮ REMOVE AND REPLACE EXISTING BENCHMARK WITH BRASS CAP PER MAG STD DET 120-1. NPI

NOTE:
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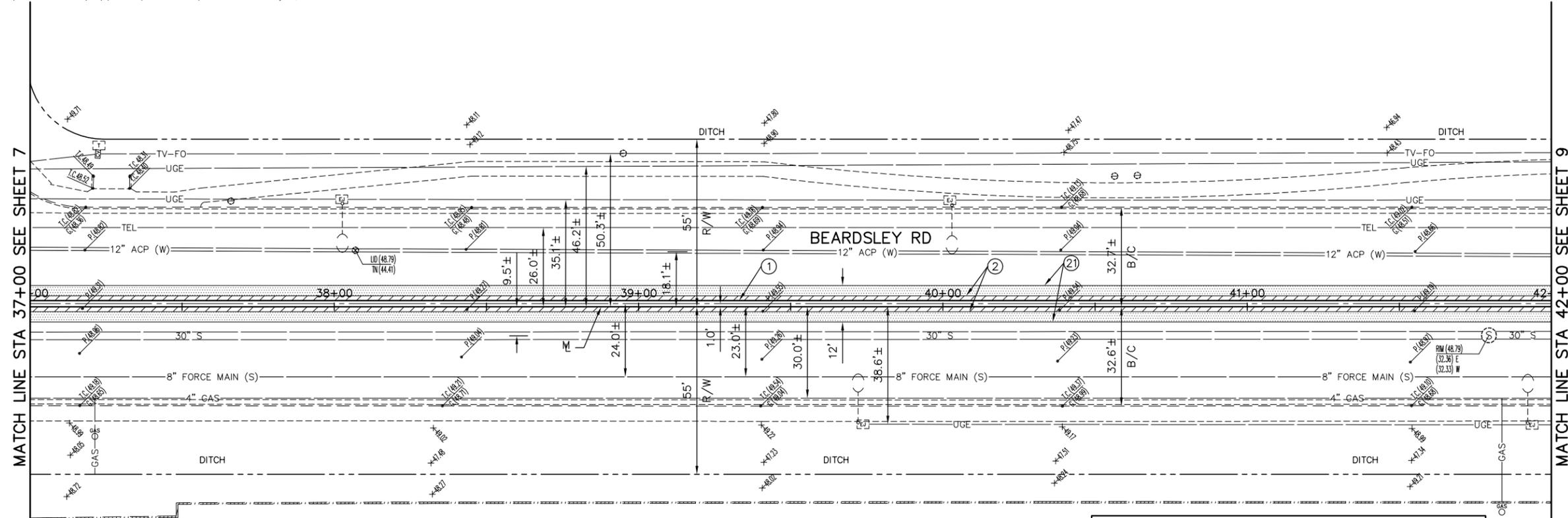
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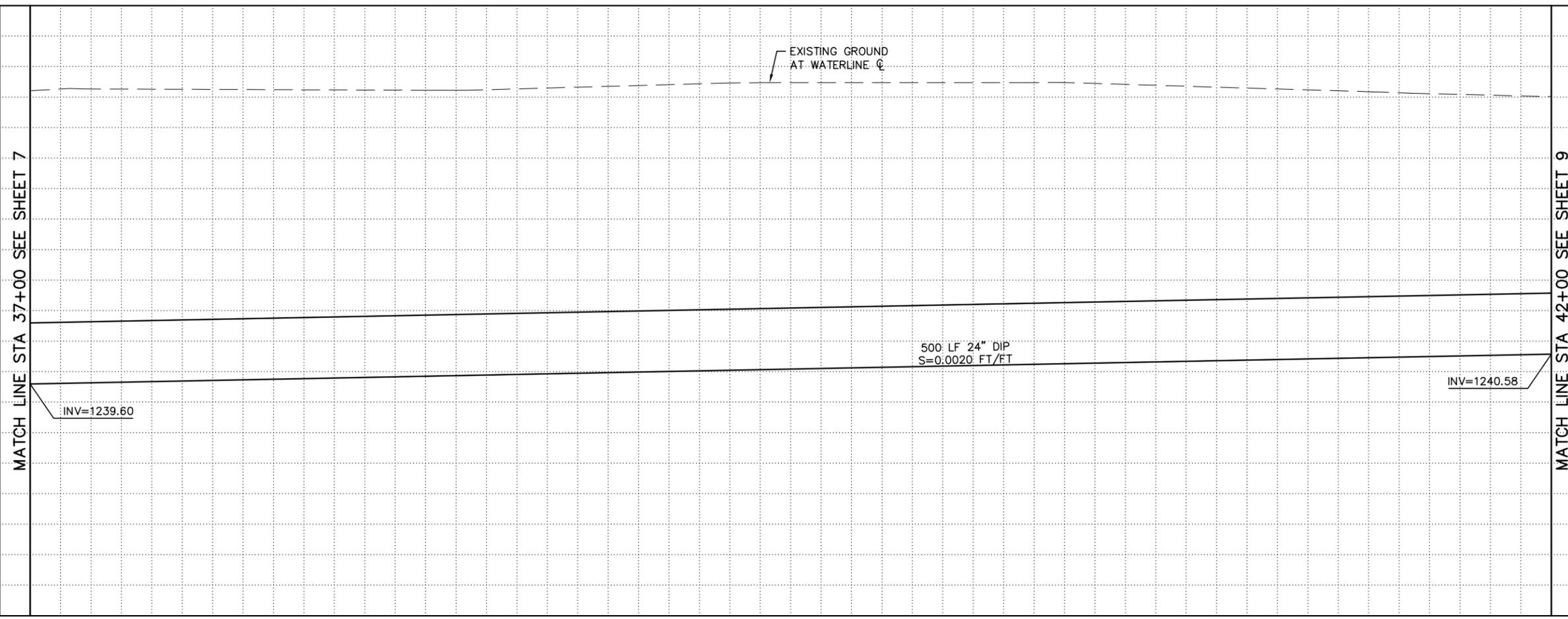
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- CONSTRUCTION NOTES**
- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
 - ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25 297 SY
 - ③ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY



N

SCALE
20 0 10 20
HORIZ: 1" = 20'
VERT: 1" = 2'

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ARIZ. BD. OF TECH REGISTRATION R4-30-304
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XREFS
91607-X-TP
MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

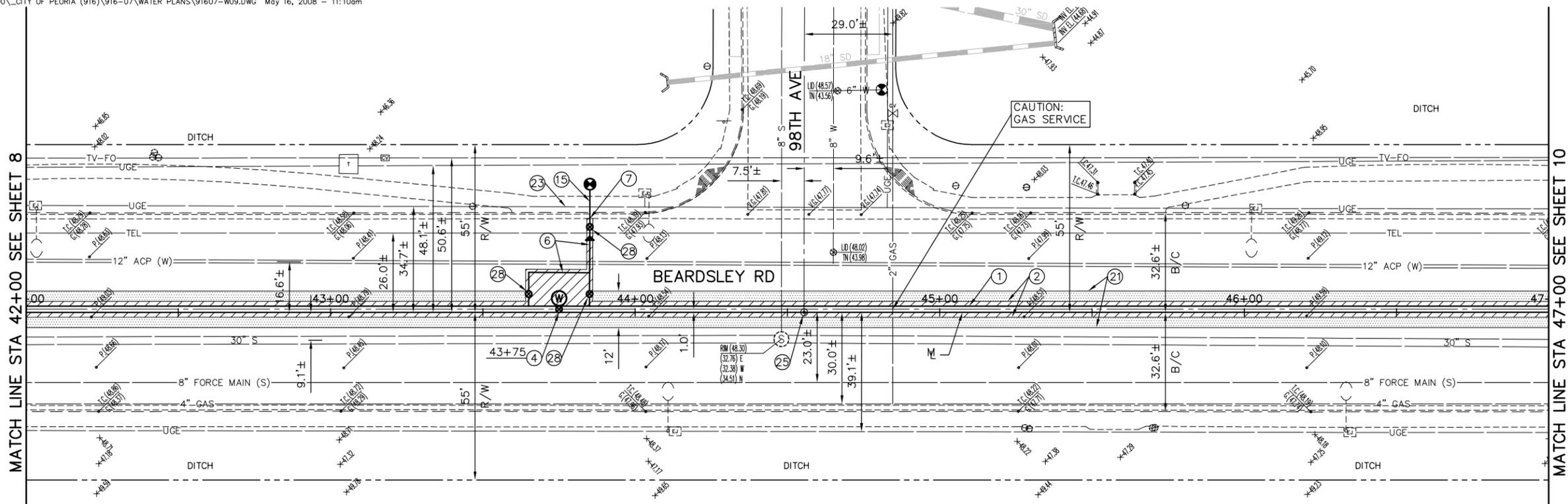
**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT

**BROOKS
ENGINEERS &
SURVEYORS
INC.**

4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 868-0804

JOB NUMBER 916-07FF SHEET 8 OF 29

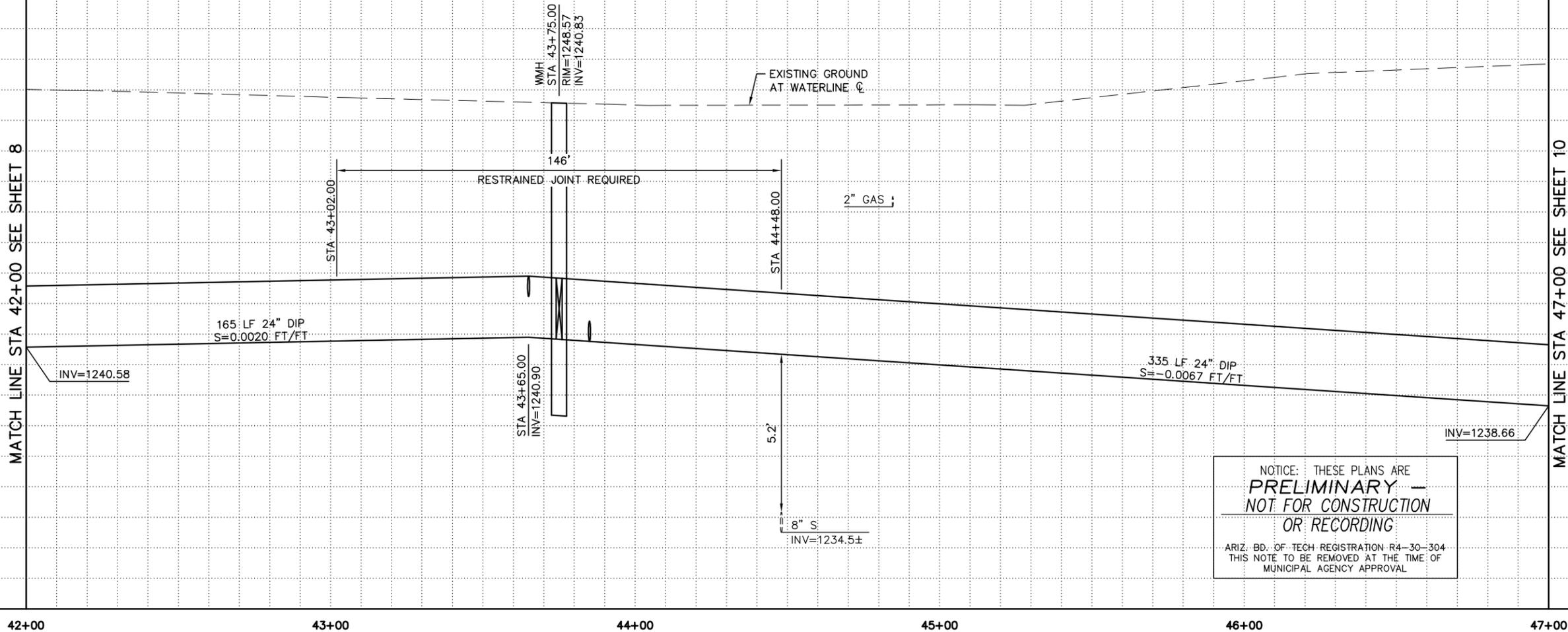


NOTE:
THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY DAMAGED STRIPING & WILL BE RESPONSIBLE FOR PROTECTING IN PLACE ALL EXISTING UTILITIES THAT CROSS THE PROPOSED WATERLINE.

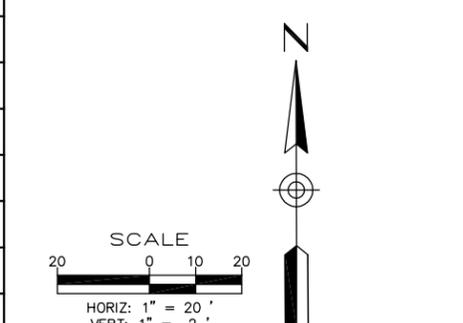
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CONSTRUCTION NOTES

- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 320 SY
- ④ INSTALL BUTTERFLY VALVE AND OPERATOR MANHOLE PER DETAIL 2 SHEET 24. 1 EA
- ⑥ INSTALL FIRE HYDRANT BYPASS ASSEMBLY PER DETAIL 4 SHEET 25 AND DETAIL 8 SHEET 26. INSTALL FIRE HYDRANT PER CITY OF PEORIA STD DTL 360-C AS SHOWN ON DETAIL 14 SHEET 29. 1 EA
- ⑦ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 220. 4 SF
- ⑮ REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 230. 11 SF
- ⑳ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 367 SY
- ㉓ RELOCATE EXISTING ELECTRIC LINE BY APS. NPI
- ㉕ REMOVE AND REPLACE EXISTING BENCHMARK WITH BRASS CAP PER MAG STD DET 120-1. NPI
- ㉘ INSTALL VALVE NUT EXTENSION PER MAG STD. DET. 391-2. 3 EA



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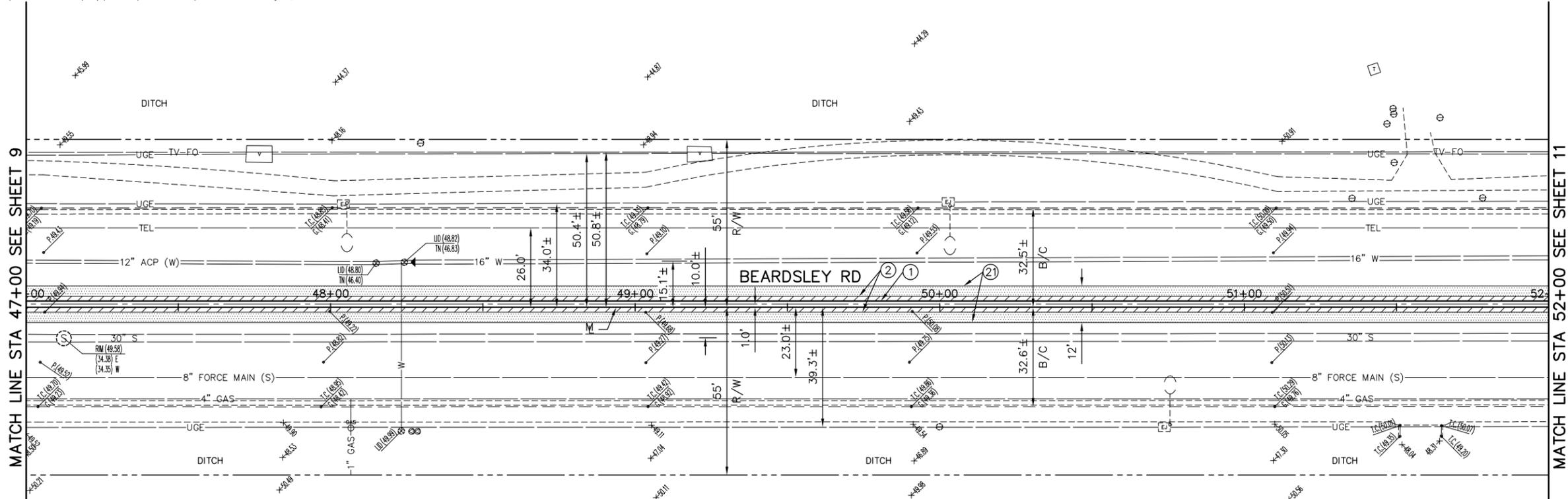
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MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

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JOB NUMBER 916-07FF SHEET 9 OF 29

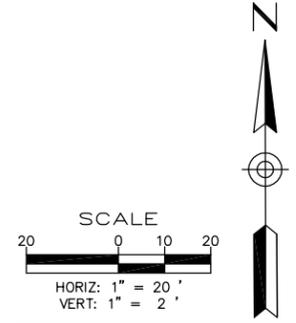
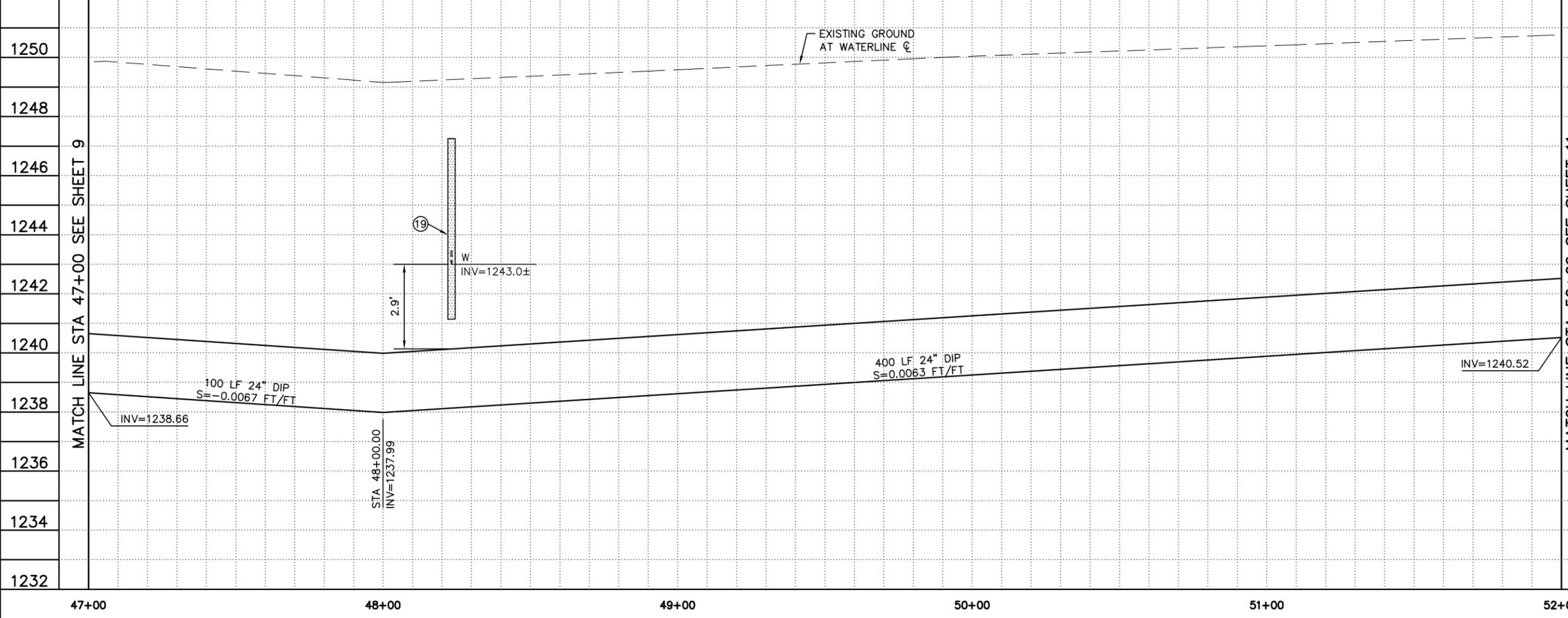


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- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 291 SY
- ⑱ INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29. 1 EA
- ⑳ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY



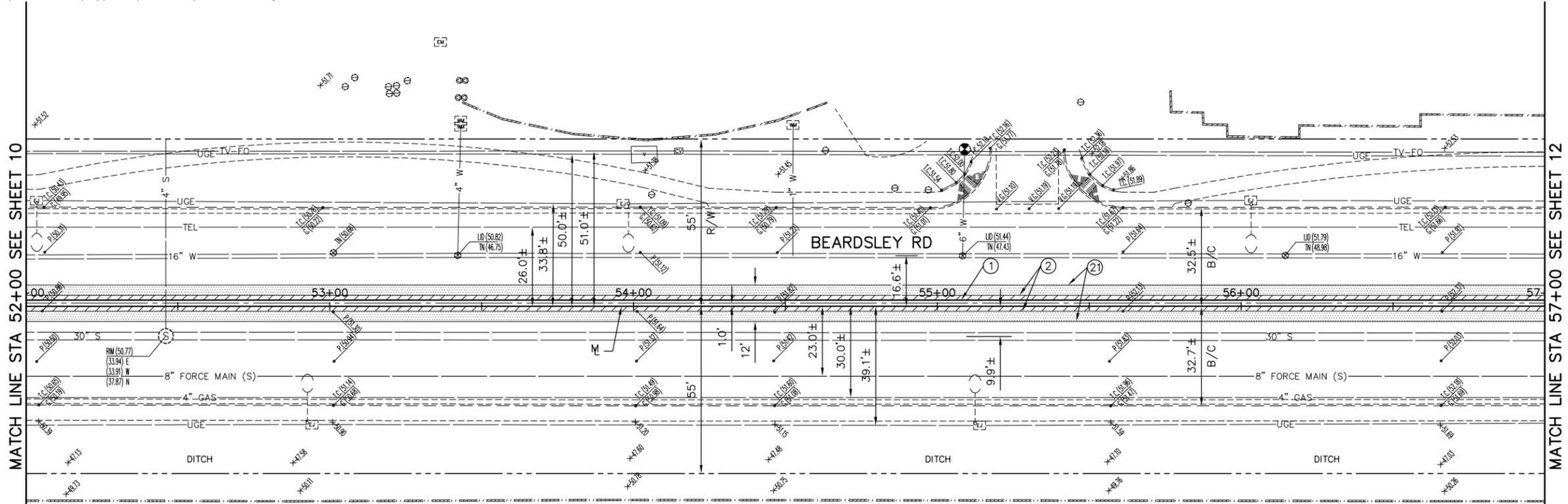
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**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
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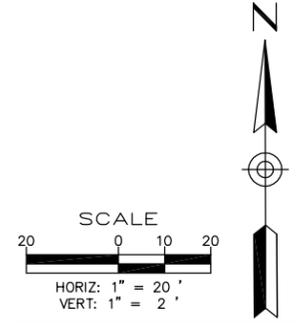
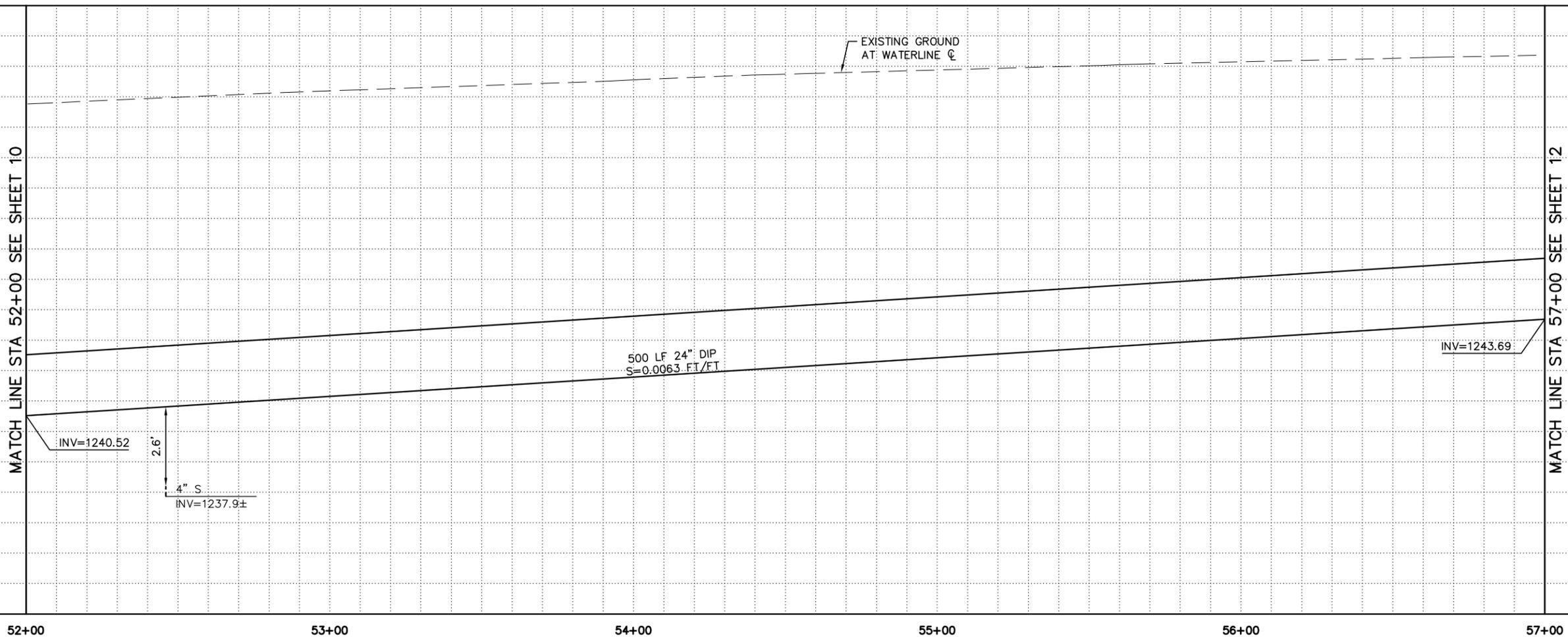


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- ③ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY



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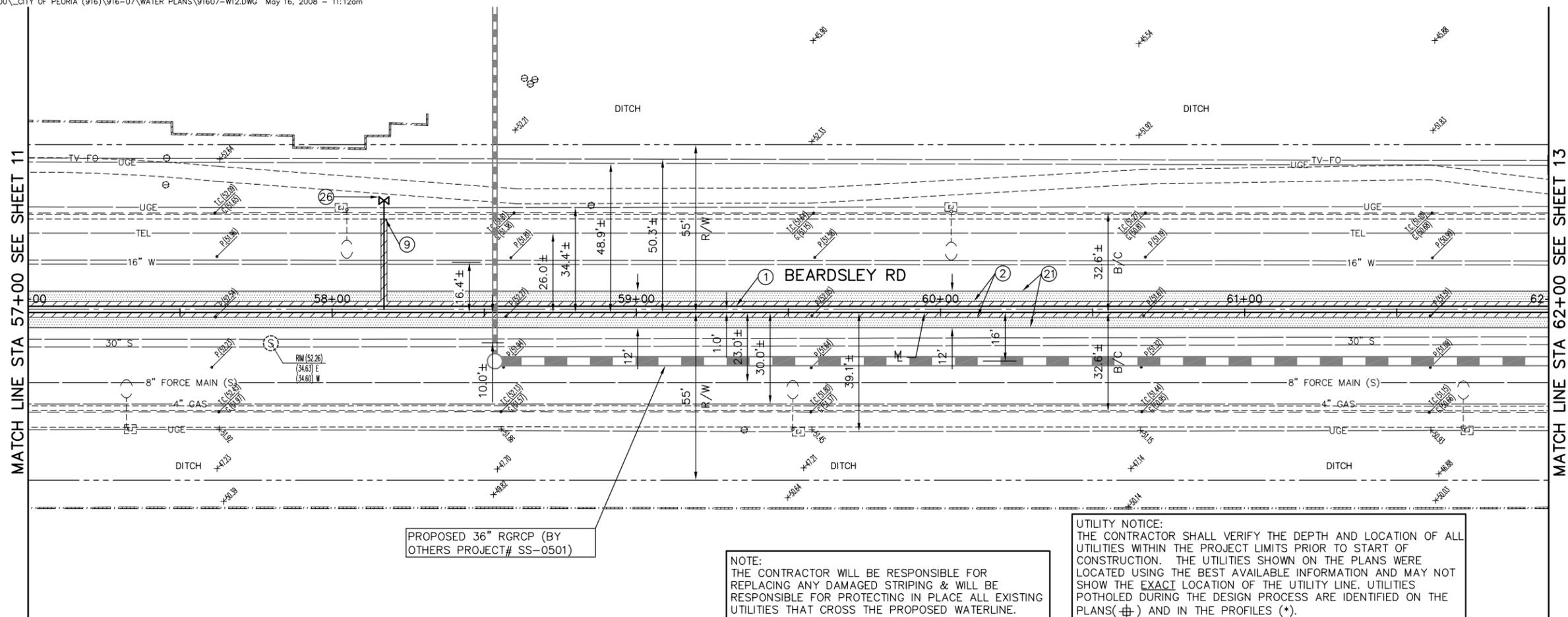
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JOB NUMBER 916-07FF SHEET 11 OF 29



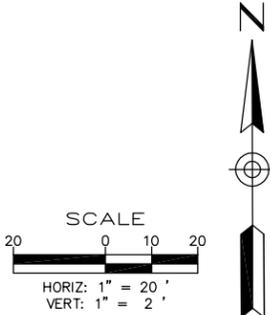
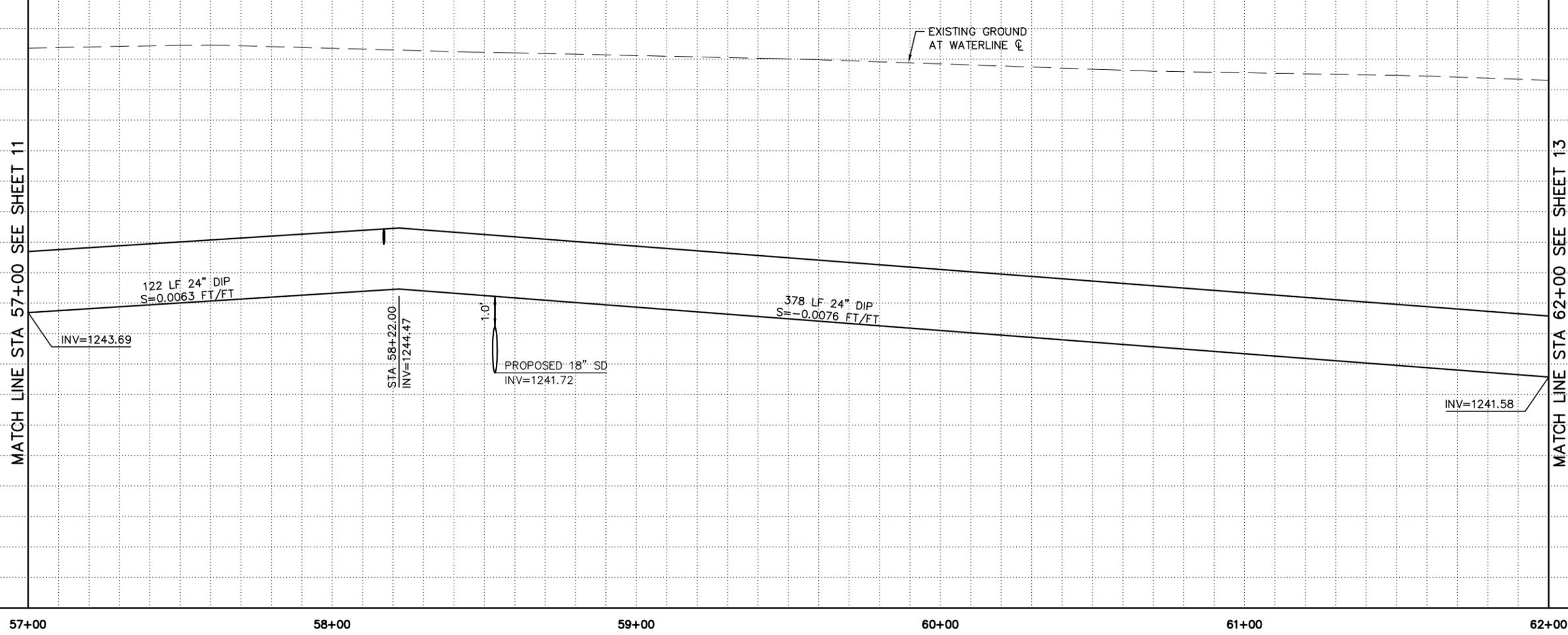
PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

NOTE:
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CONSTRUCTION NOTES

- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25 297 SY
- ⑨ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" COMBINATION AIR RELEASE VALVE PER MAG STD. DET. 220. 4 SF
- ⑳ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 375 SY
- ㉔ INSTALL 6" COMBINATION AIR RELEASE VALVE PER DETAIL 3 SHEET 24. 1 EA



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XREFS
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MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

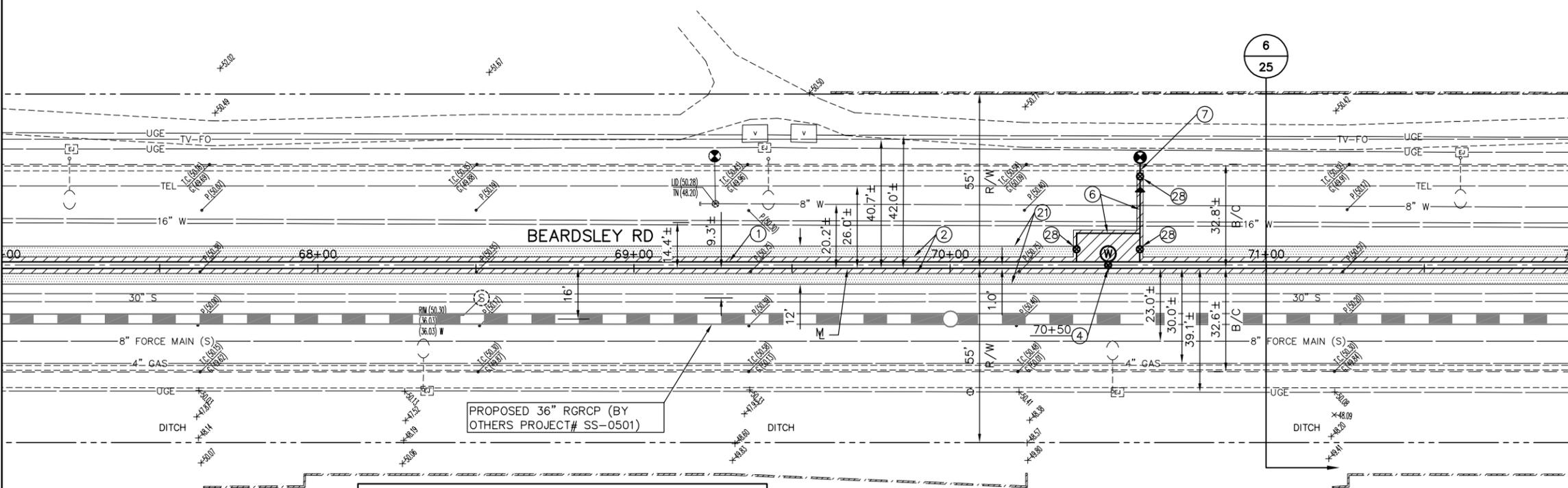
**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



MATCH LINE STA 67+00 SEE SHEET 13

MATCH LINE STA 72+00 SEE SHEET 15



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PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

CONSTRUCTION NOTES

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- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 316 SY
- ④ INSTALL BUTTERFLY VALVE AND OPERATOR MANHOLE PER DETAIL 2 SHEET 24. 1 EA
- ⑥ INSTALL FIRE HYDRANT BYPASS ASSEMBLY PER DETAIL 4 SHEET 25 AND DETAIL 9 SHEET 27. INSTALL FIRE HYDRANT PER CITY OF PEORIA STD DTL 360-C AS SHOWN ON DETAIL 14 SHEET 29. 1 EA
- ⑦ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 220. 4 SF
- ⑰ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 367 SY
- ⑳ INSTALL VALVE NUT EXTENSION PER MAG STD. DET. 391-2. 3 EA



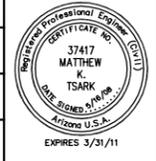
SCALE
HORIZ: 1" = 20'
VERT: 1" = 2'

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MKT-pe
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BFPROP_SD

**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
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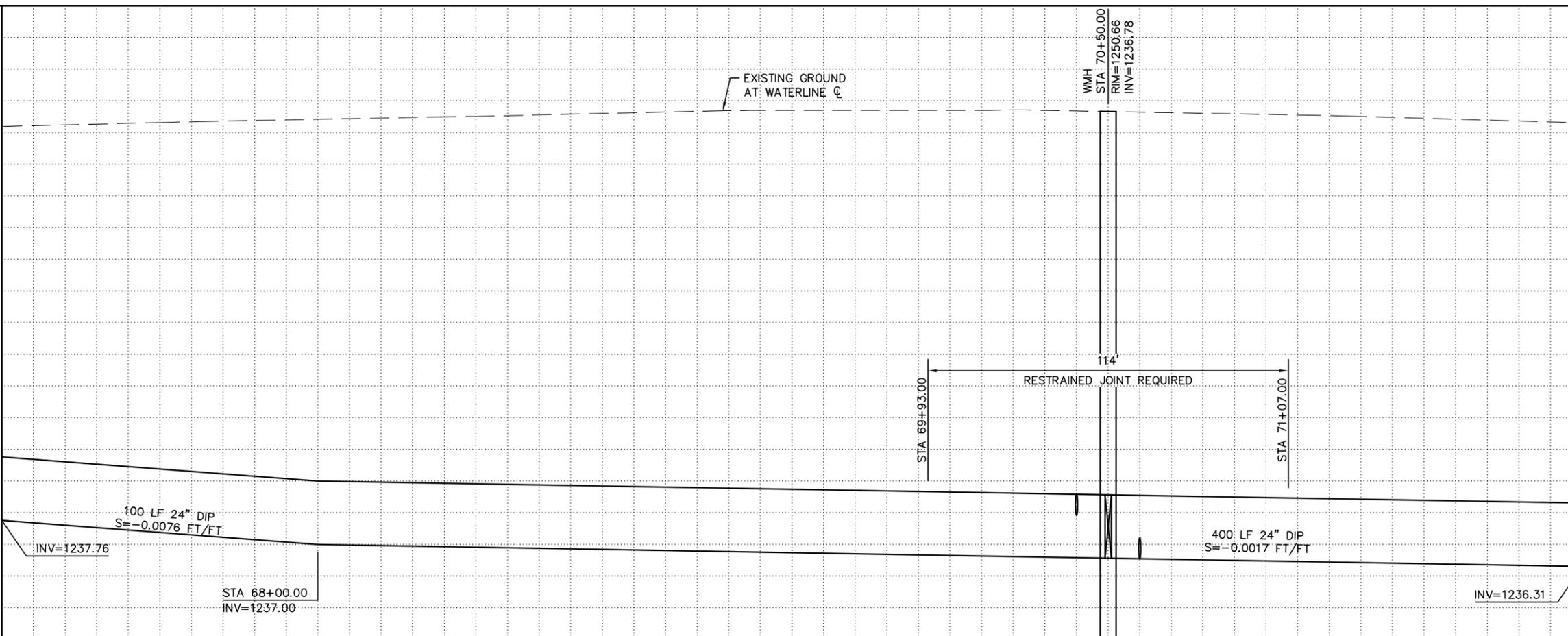


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4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 868-0804

JOB NUMBER 916-07FF SHEET 14 OF 29

MATCH LINE STA 67+00 SEE SHEET 13

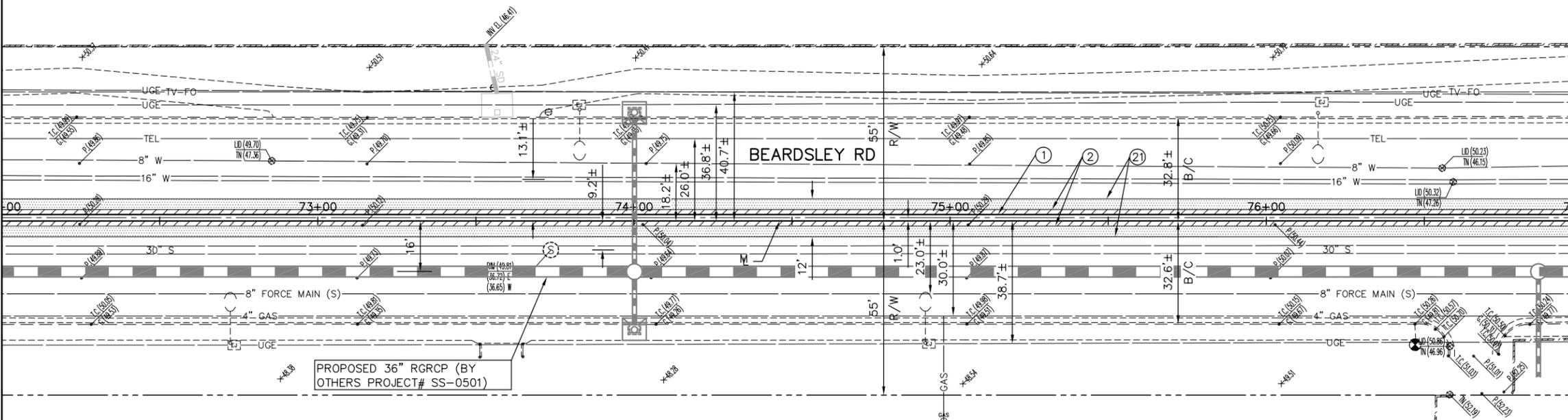
MATCH LINE STA 72+00 SEE SHEET 15



67+00 68+00 69+00 70+00 71+00 72+00

MATCH LINE STA 72+00 SEE SHEET 14

MATCH LINE STA 77+00 SEE SHEET 16



PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

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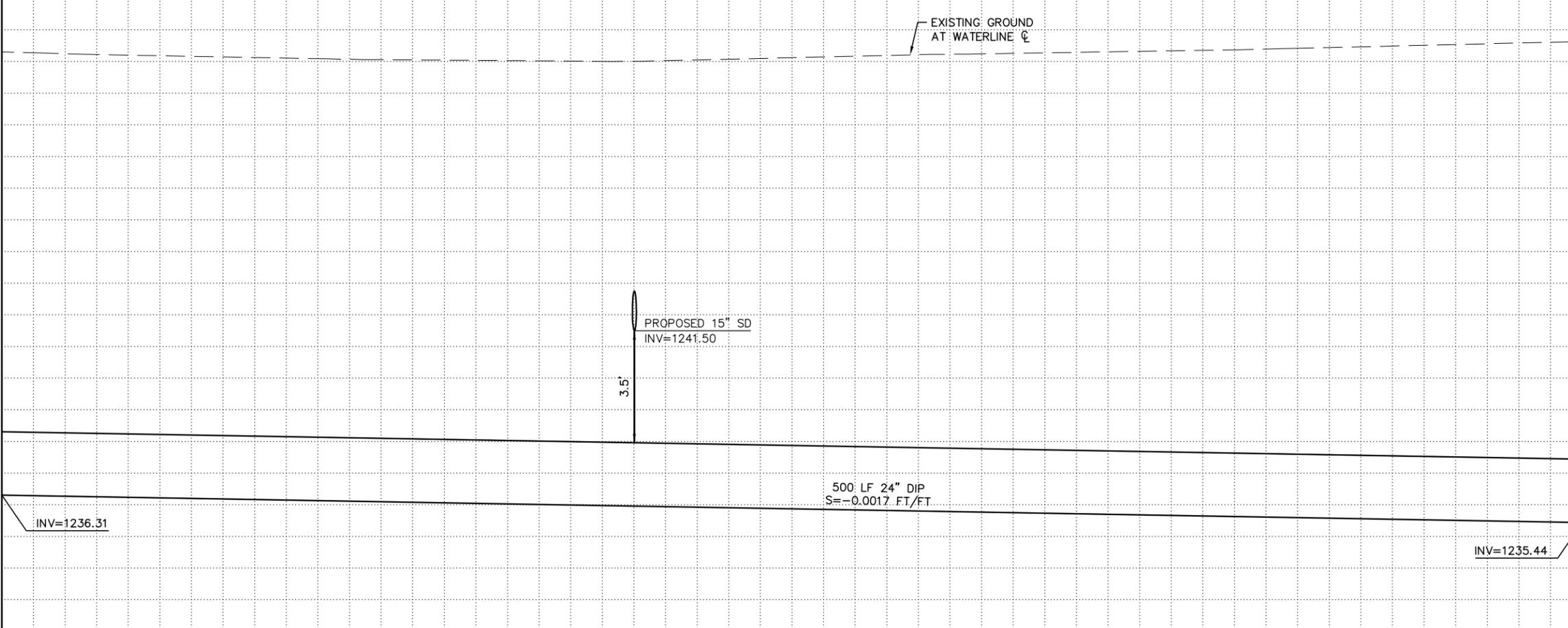
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- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25 291 SY
- ③ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY

MATCH LINE STA 72+00 SEE SHEET 14

MATCH LINE STA 77+00 SEE SHEET 16



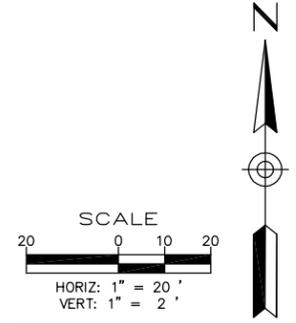
EXISTING GROUND AT WATERLINE @

PROPOSED 15" SD
INV=1241.50

500 LF 24" DIP
S=-0.0017 FT/FT

INV=1236.31

INV=1235.44



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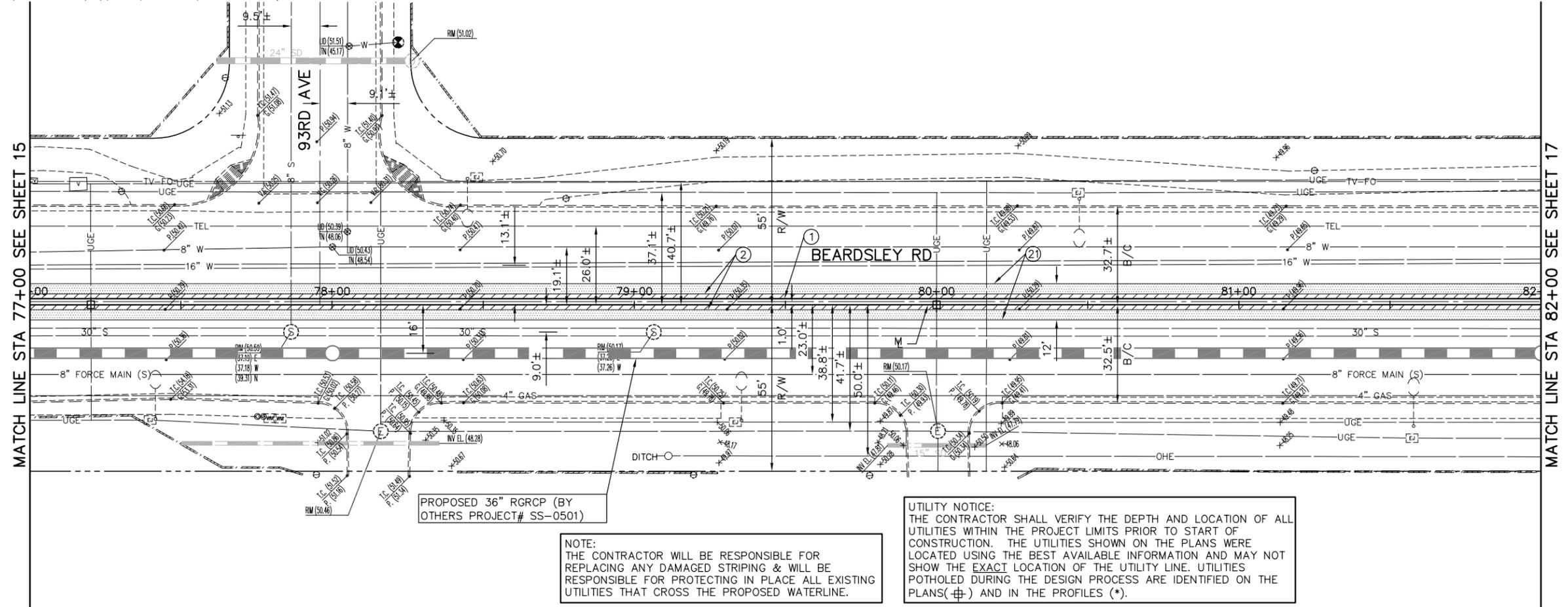
**BEARDSLEY RD
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LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
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JOB NUMBER 916-07FF SHEET 15 OF 29

72+00 73+00 74+00 75+00 76+00 77+00



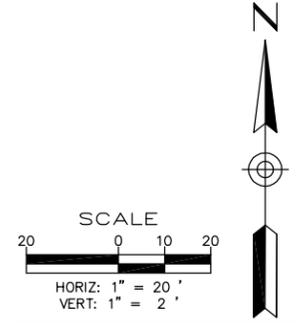
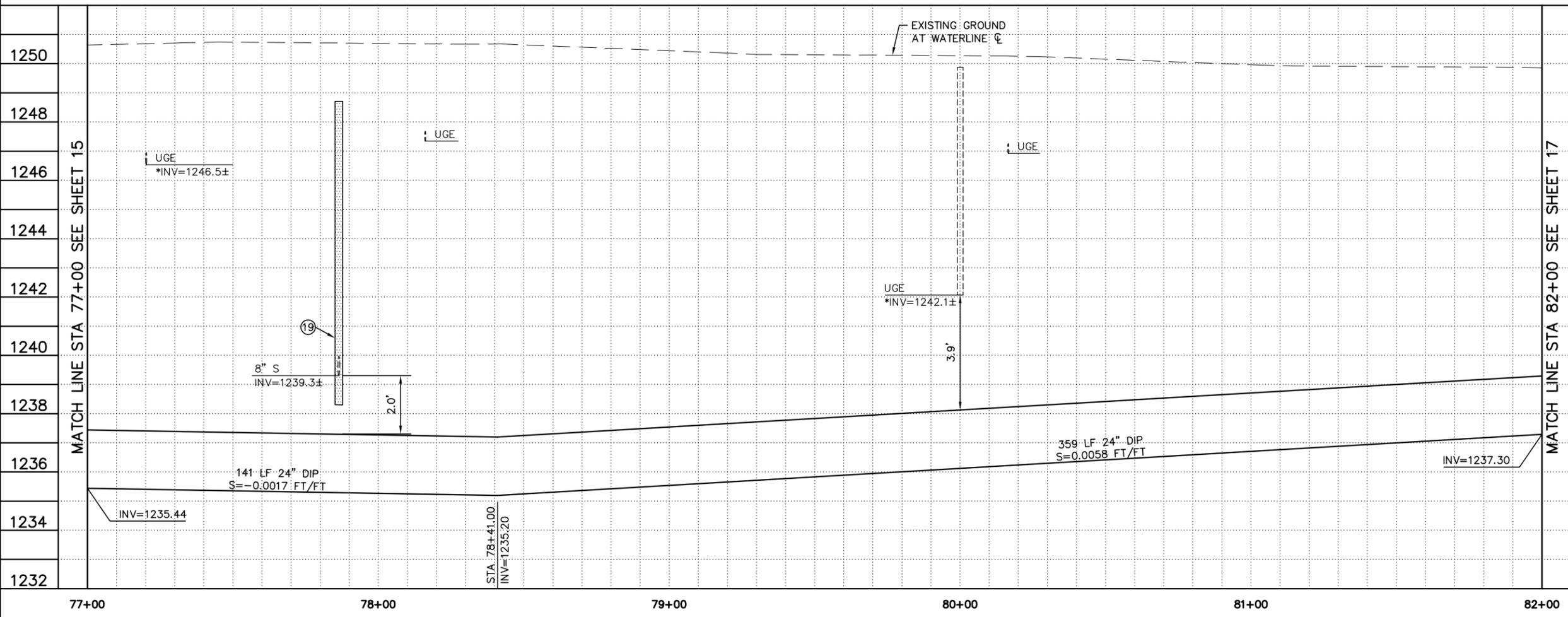
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- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25 291 SY
- ⑱ INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29 1 EA
- ⑳ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY

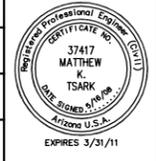


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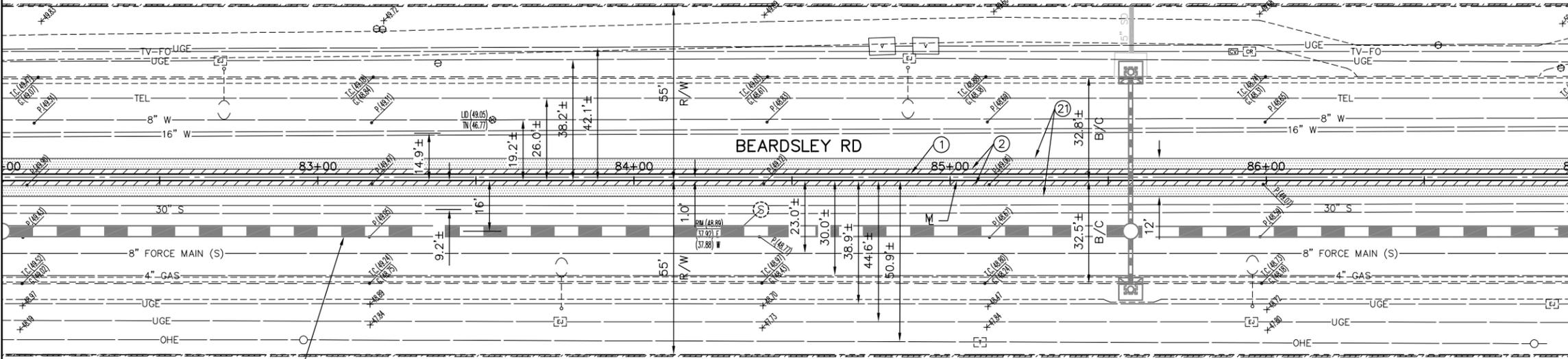


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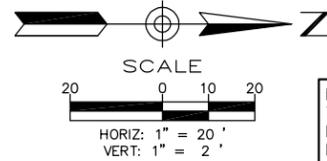
JOB NUMBER 916-07FF SHEET 16 OF 29

MATCH LINE STA 82+00 SEE SHEET 16

MATCH LINE STA 87+00 SEE SHEET 18



PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)



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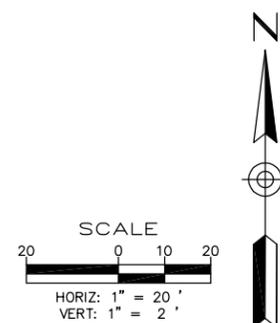
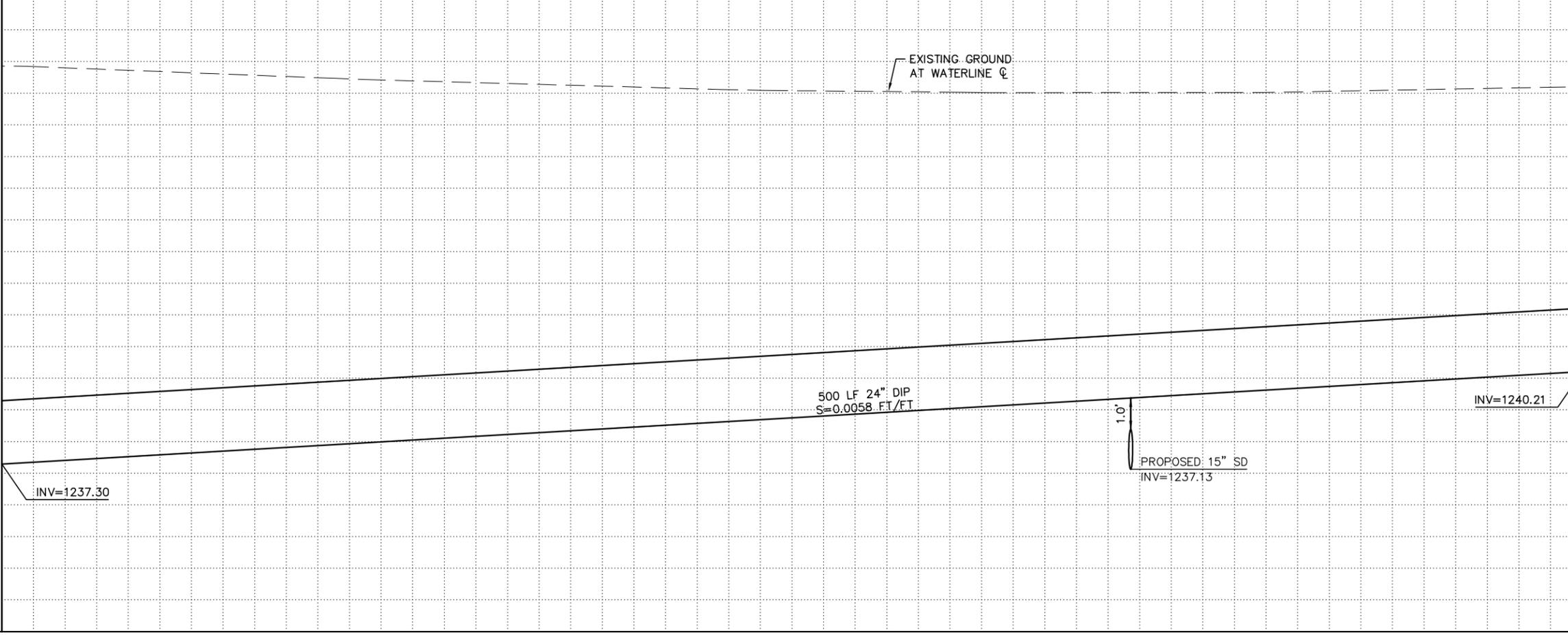
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MATCH LINE STA 87+00 SEE SHEET 18

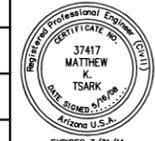


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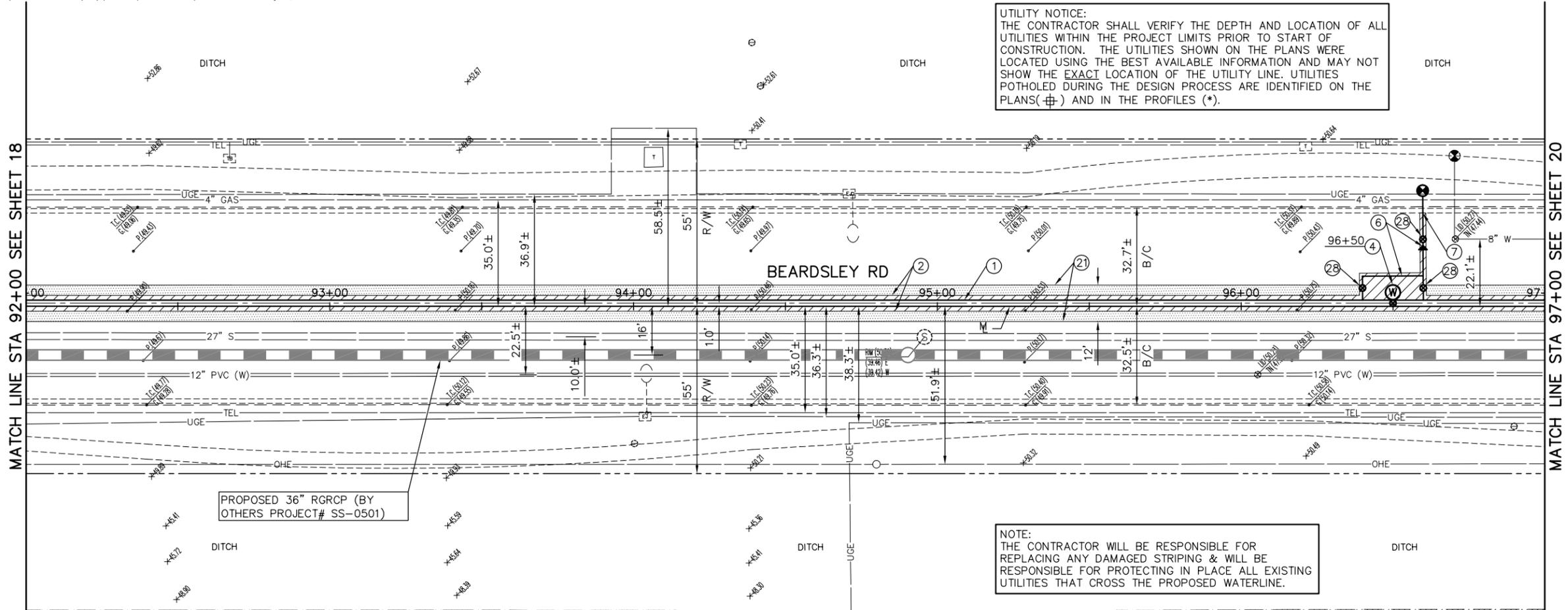
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LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



JOB NUMBER 916-07FF SHEET 17 OF 29

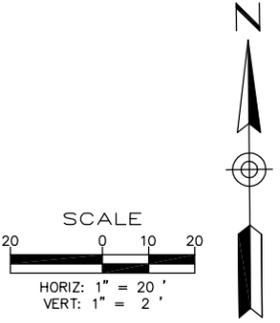
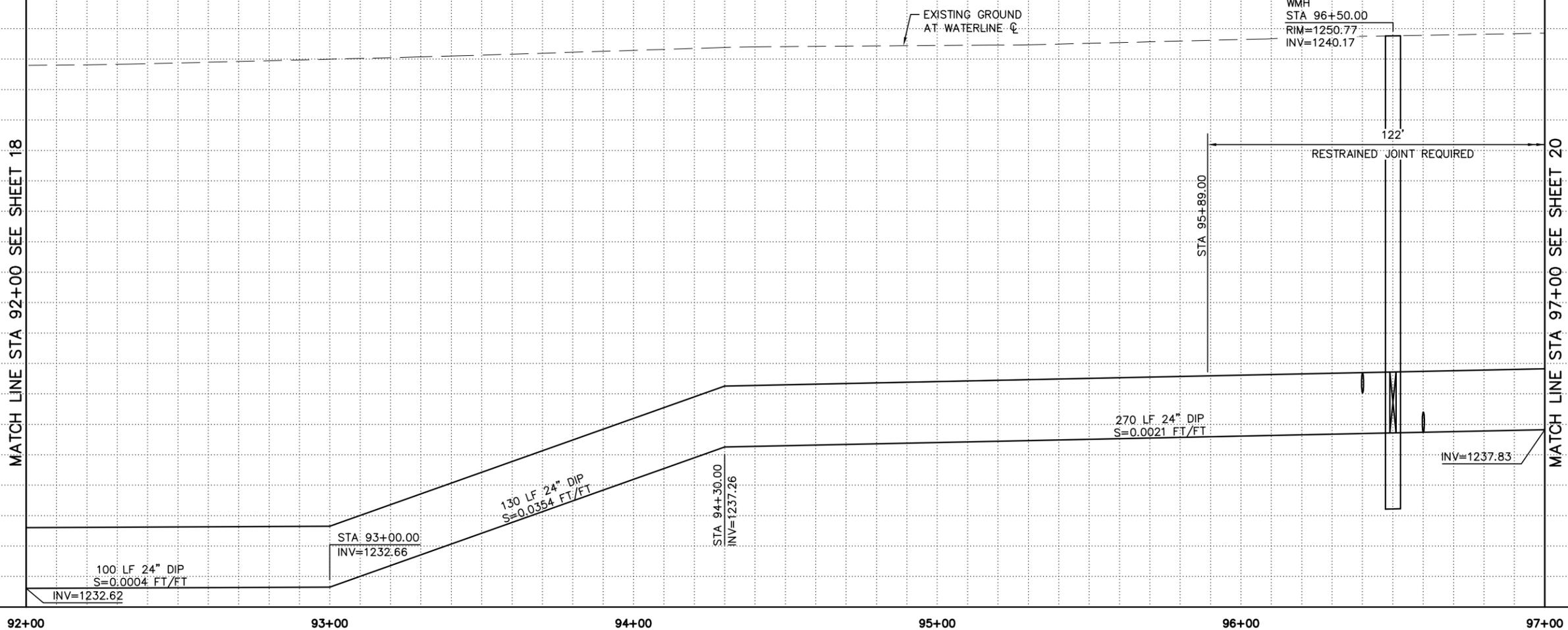


UTILITY NOTICE:
 THE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL UTILITIES WITHIN THE PROJECT LIMITS PRIOR TO START OF CONSTRUCTION. THE UTILITIES SHOWN ON THE PLANS WERE LOCATED USING THE BEST AVAILABLE INFORMATION AND MAY NOT SHOW THE EXACT LOCATION OF THE UTILITY LINE. UTILITIES POTHOLED DURING THE DESIGN PROCESS ARE IDENTIFIED ON THE PLANS (⊕) AND IN THE PROFILES (*).

NOTE:
 THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY DAMAGED STRIPING & WILL BE RESPONSIBLE FOR PROTECTING IN PLACE ALL EXISTING UTILITIES THAT CROSS THE PROPOSED WATERLINE.

PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

- CONSTRUCTION NOTES**
- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
 - ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 313 SY
 - ④ INSTALL BUTTERFLY VALVE AND OPERATOR MANHOLE PER DETAIL 2 SHEET 24. 1 EA
 - ⑥ INSTALL FIRE HYDRANT BYPASS ASSEMBLY PER DETAIL 4 SHEET 25 AND DETAIL 10 SHEET 27. INSTALL FIRE HYDRANT PER CITY OF PEORIA STD DTL 360-C AS SHOWN ON DETAIL 14 SHEET 29. 1 EA
 - ⑦ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 220. 4 SF
 - ⑰ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 367 SY
 - ⑳ INSTALL VALVE NUT EXTENSION PER MAG STD. DET. 391-2. 3 EA



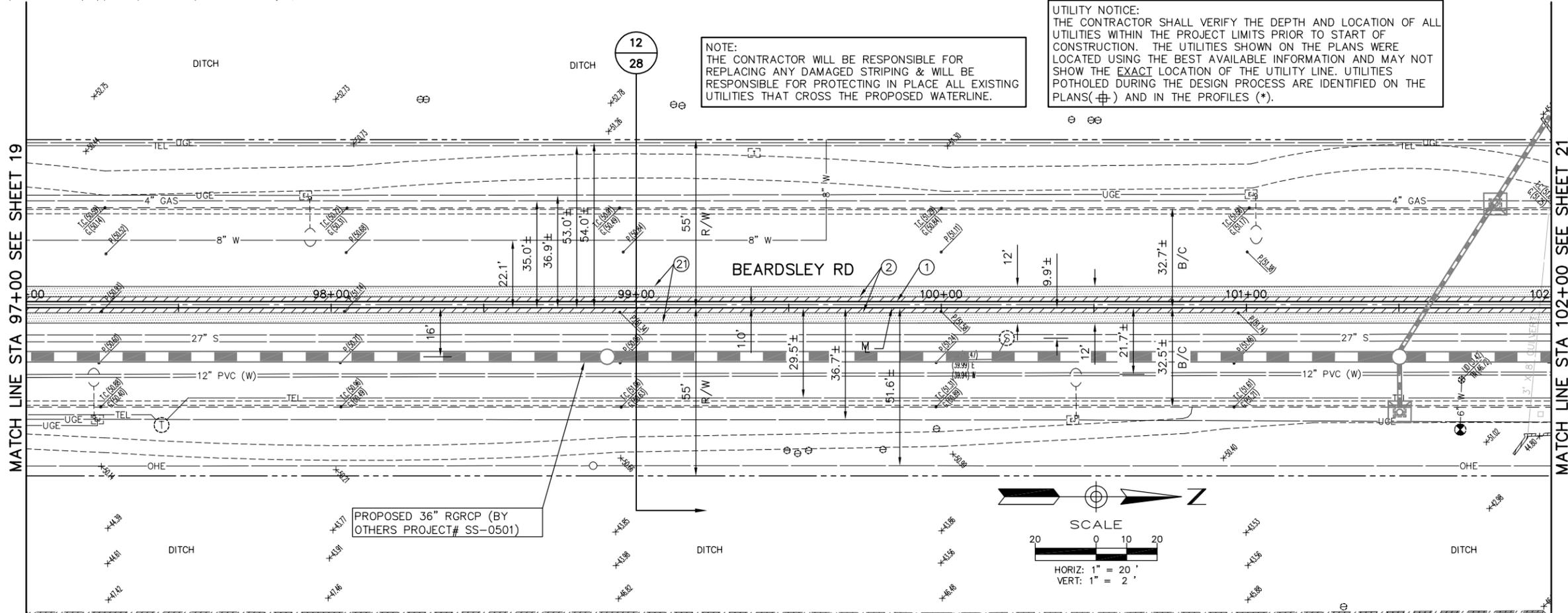
NOTICE: THESE PLANS ARE
PRELIMINARY —
NOT FOR CONSTRUCTION
OR RECORDING
 ARIZ. BD. OF TECH REGISTRATION R4-30-304
 THIS NOTE TO BE REMOVED AT THE TIME OF
 MUNICIPAL AGENCY APPROVAL

XREFS
 91607-X-TP
 MKT-pe
 91607-X-W
 91607-X-WPR
 BFPROP_SD

**BEARDSLEY RD
 24" WATERLINE
 LAKE PLEASANT RD TO 87TH AVE**

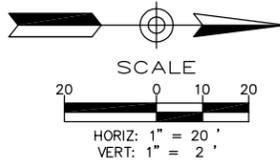
DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT

BROOKS ENGINEERS & SURVEYORS INC.
 4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 868-0804

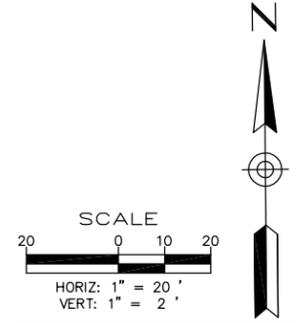
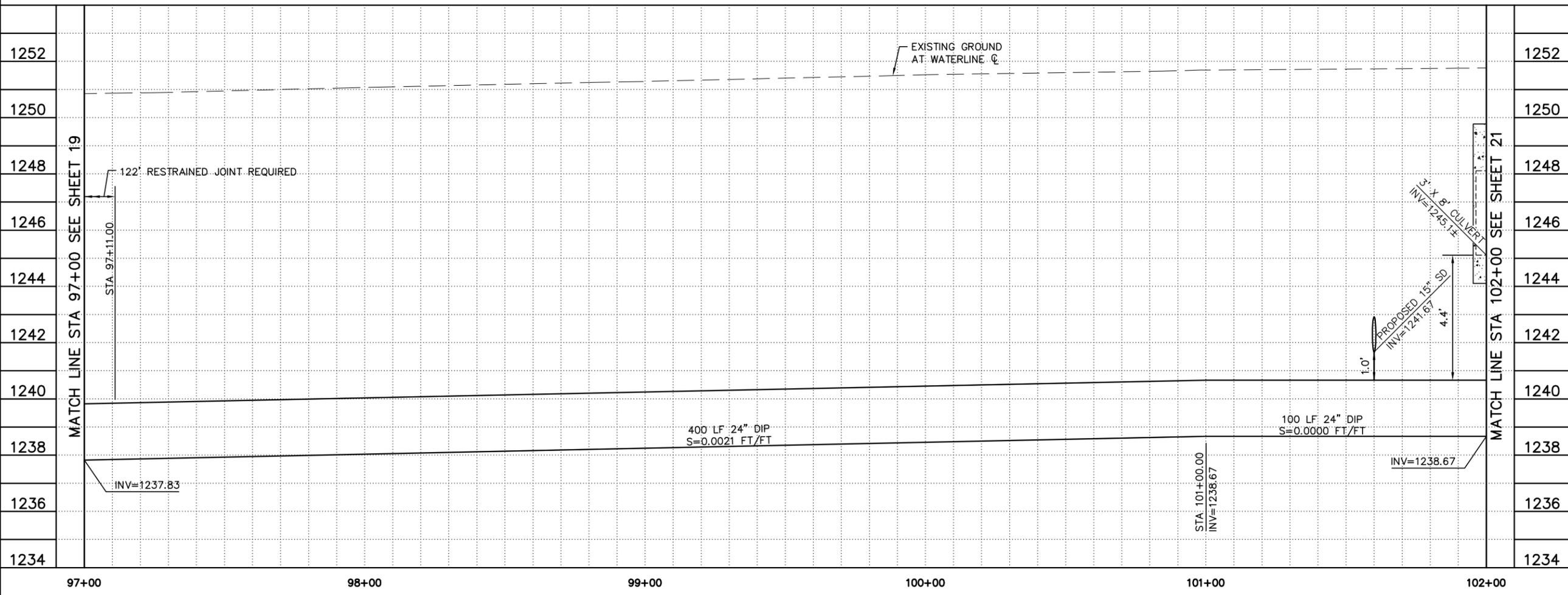


NOTE:
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UTILITY NOTICE:
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- CONSTRUCTION NOTES**
- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
 - ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 291 SY
 - ③ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY



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XREFS
91607-X-TP
MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



JOB NUMBER 916-07FF SHEET 20 OF 29

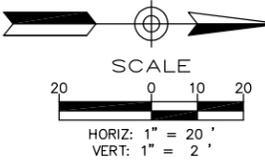
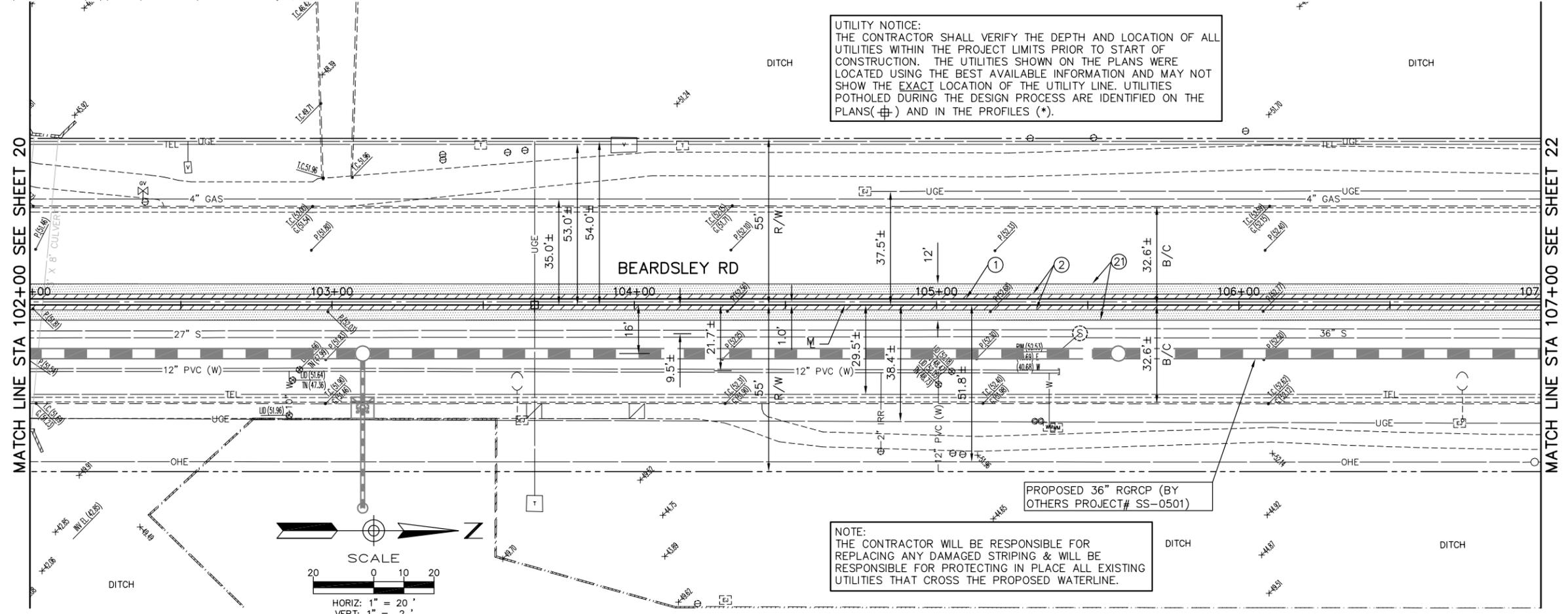
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PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

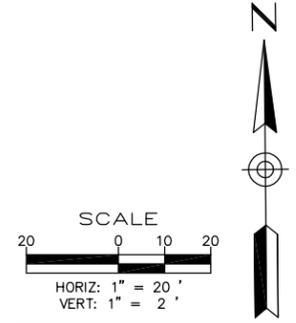
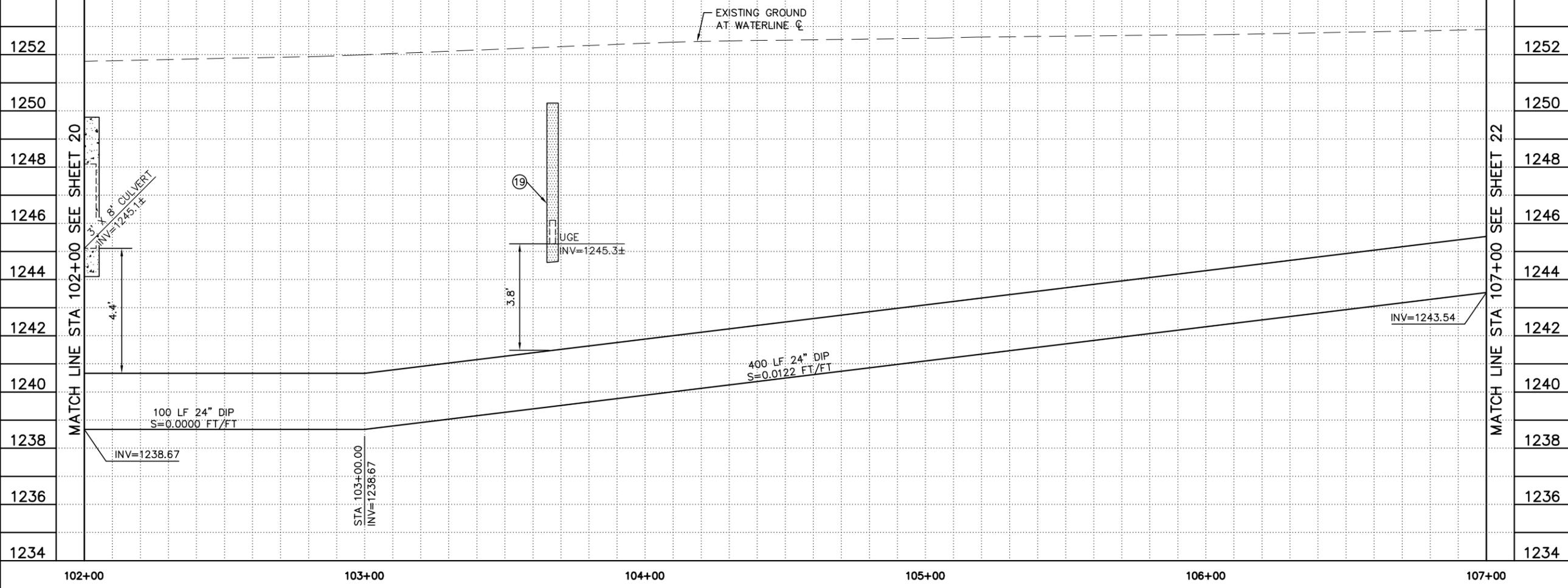
MATCH LINE STA 102+00 SEE SHEET 20

MATCH LINE STA 107+00 SEE SHEET 22



CONSTRUCTION NOTES

- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 291 SY
- ⑱ INSTALL 1/2 SACK CLSM BACKFILL PER DETAIL 15 SHEET 29. 1 EA
- ⑳ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 376 SY

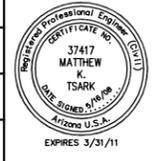


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 ARIZ. BD. OF TECH REGISTRATION R4-30-304
 THIS NOTE TO BE REMOVED AT THE TIME OF MUNICIPAL AGENCY APPROVAL

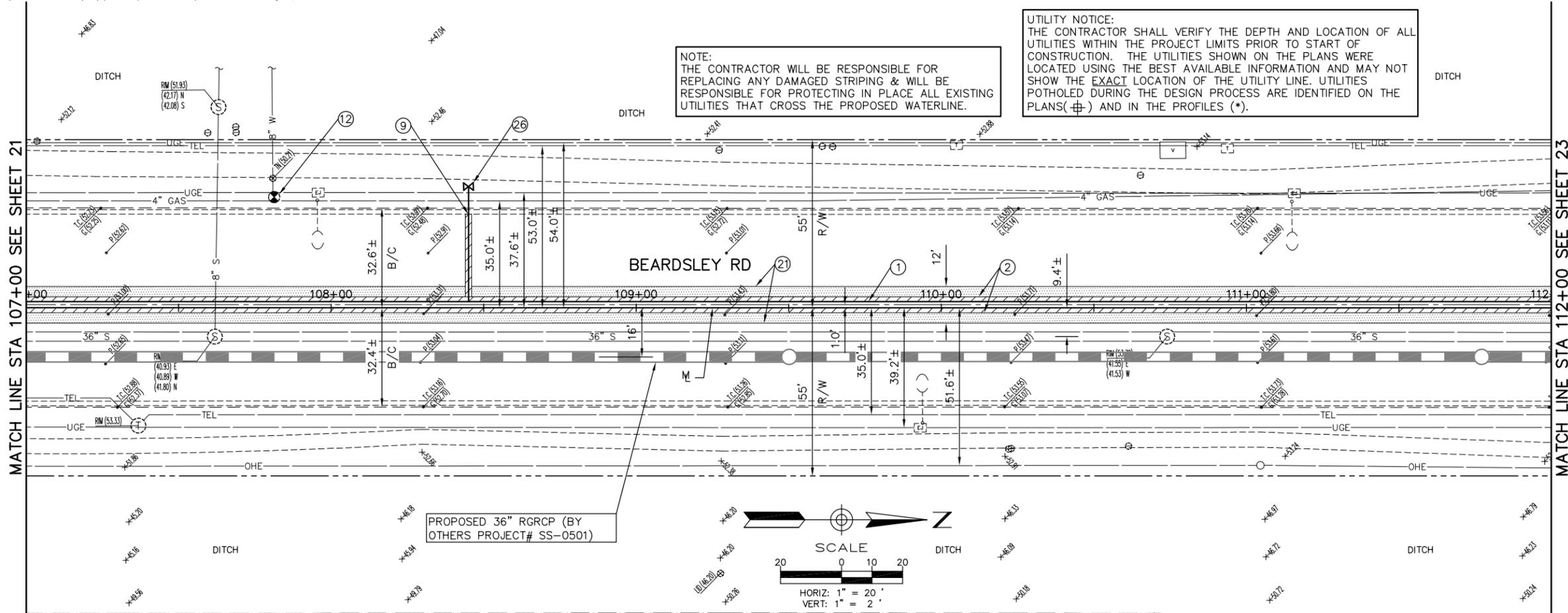
XREFS
 91607-X-TP
 MKT-pe
 91607-X-W
 91607-X-WPR
 BFPROP_SD

**BEARDSLEY RD
 24" WATERLINE
 LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



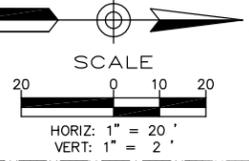
BROOKS ENGINEERS & SURVEYORS INC.
 4802 E. ELWOOD STREET #18 PHOENIX, ARIZONA 85046 (PHONE) (602) 487-8788 (FAX) (480) 866-0804



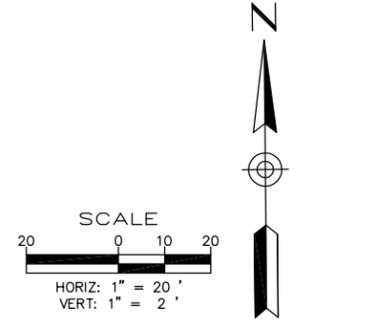
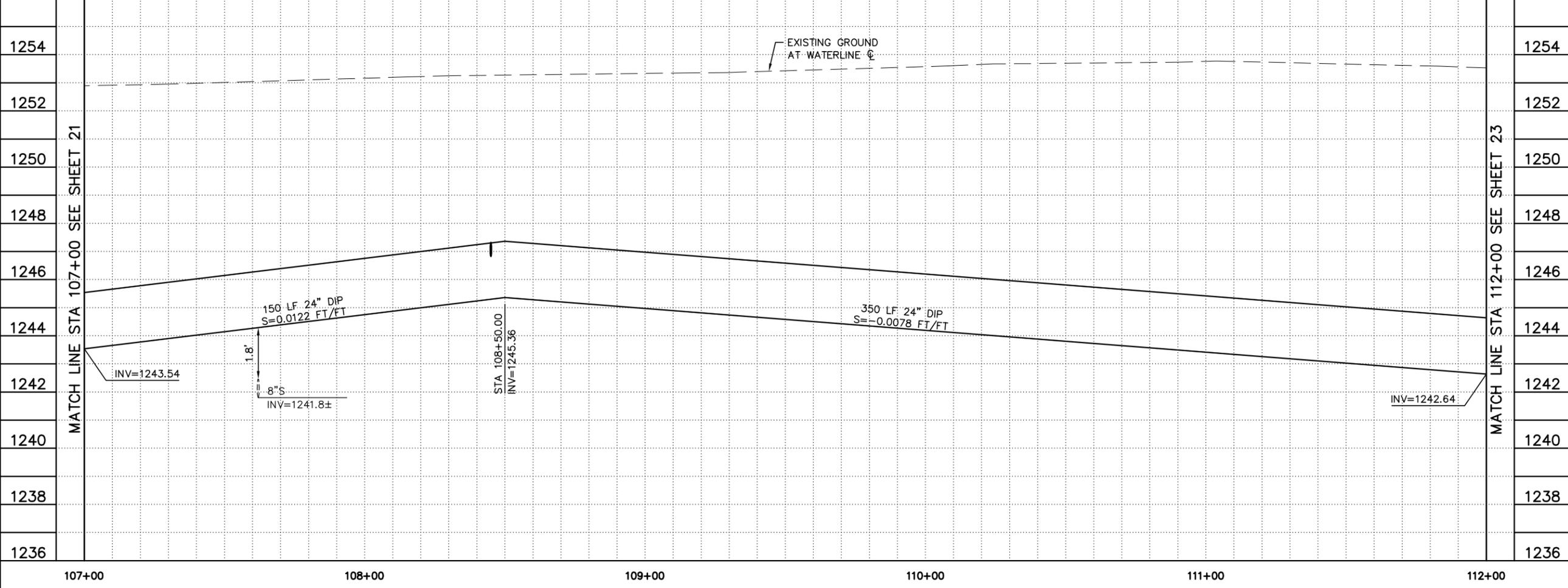
NOTE:
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UTILITY NOTICE:
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PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)



- CONSTRUCTION NOTES**
- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 500 LF
 - ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 297 SY
 - ⑨ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" COMBINATION AIR RELEASE VALVE PER MAG STD. DET. 220. 4 SF
 - ⑫ REMOVE EXISTING FIRE HYDRANT AND CAP THE WATERLINE. NEW RIVER WATER COMPANY. NPI
 - ⑰ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 375 SY
 - ⑳ INSTALL 6" COMBINATION AIR RELEASE VALVE PER DETAIL 3 SHEET 24. 1 EA



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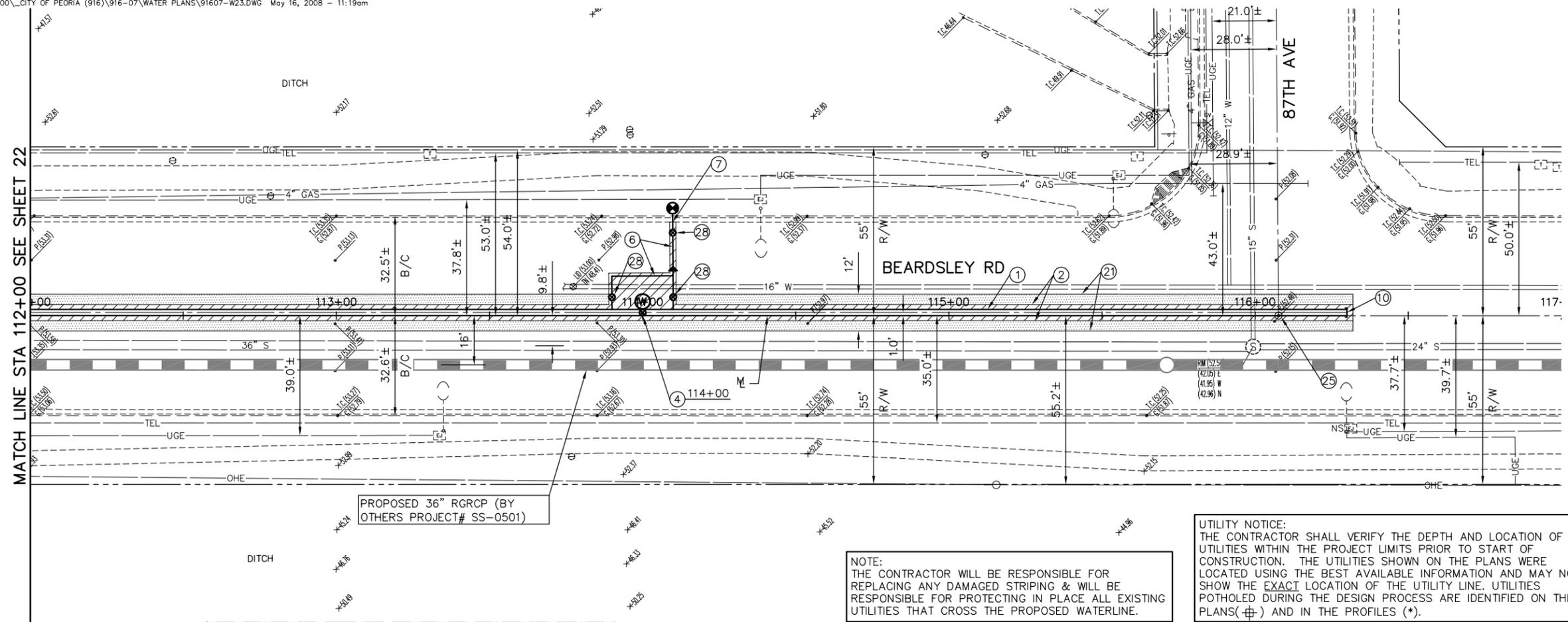
XREFS
91607-X-TP
MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



BROOKS ENGINEERS & SURVEYORS INC.
4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040
(PHONE) (602) 487-8700
(FAX) (480) 868-0804



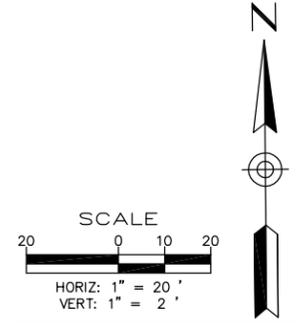
PROPOSED 36" RGRCP (BY OTHERS PROJECT# SS-0501)

NOTE:
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CONSTRUCTION NOTES

- ① INSTALL 24" DIP WATERLINE WITH MECHANICAL RESTRAINT PER INVERTS SHOWN IN PROFILE. DEFLECTION OF JOINTS NOT TO EXCEED 50% OF MANUFACTURER'S RECOMMENDATIONS. 430 LF
- ② SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT TO FACILITATE INSTALLATION OF NEW WATER MAIN PER DETAIL 5 SHEET 25. 281 SY
- ④ INSTALL BUTTERFLY VALVE AND OPERATOR MANHOLE PER DETAIL 2 SHEET 24.. 1 EA
- ⑥ INSTALL FIRE HYDRANT BYPASS ASSEMBLY PER DETAIL 4 SHEET 25 AND DETAIL 11 SHEET 28. INSTALL FIRE HYDRANT PER CITY OF PEORIA STD DTL 360-C AS SHOWN ON DETAIL 14 SHEET 29. 1 EA
- ⑦ REMOVE AND REPLACE EXISTING CURB AND GUTTER TO FACILITATE INSTALLATION OF 6" FIRE LINE PER MAG STD. DET. 220. 4 SF
- ⑩ INSTALL 24" BLIND FLANGE WITH CURB STOP & FLUSHING PIPE TO BE ADJUSTED TO GRADE PER MAG STD. DET. 390, TYPE 'A'. 1 EA
- ⑪ MILL EXISTING AC PAVEMENT AND INSTALL 2" (MIN) AC OVERLAY PER DETAIL 5 SHEET 25. LIMITS TO BE DETERMINED IN THE FIELD WIDTH=(12' MIN). 316 SY
- ⑮ REMOVE AND REPLACE EXISTING BENCHMARK WITH BRASS CAP PER MAG STD DET 120-1. NPI
- ⑳ INSTALL VALVE NUT EXTENSION PER MAG STD. DET. 391-2. 3 EA



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XREFS
91607-X-TP
MKT-pe
91607-X-W
91607-X-WPR
BFPROP_SD

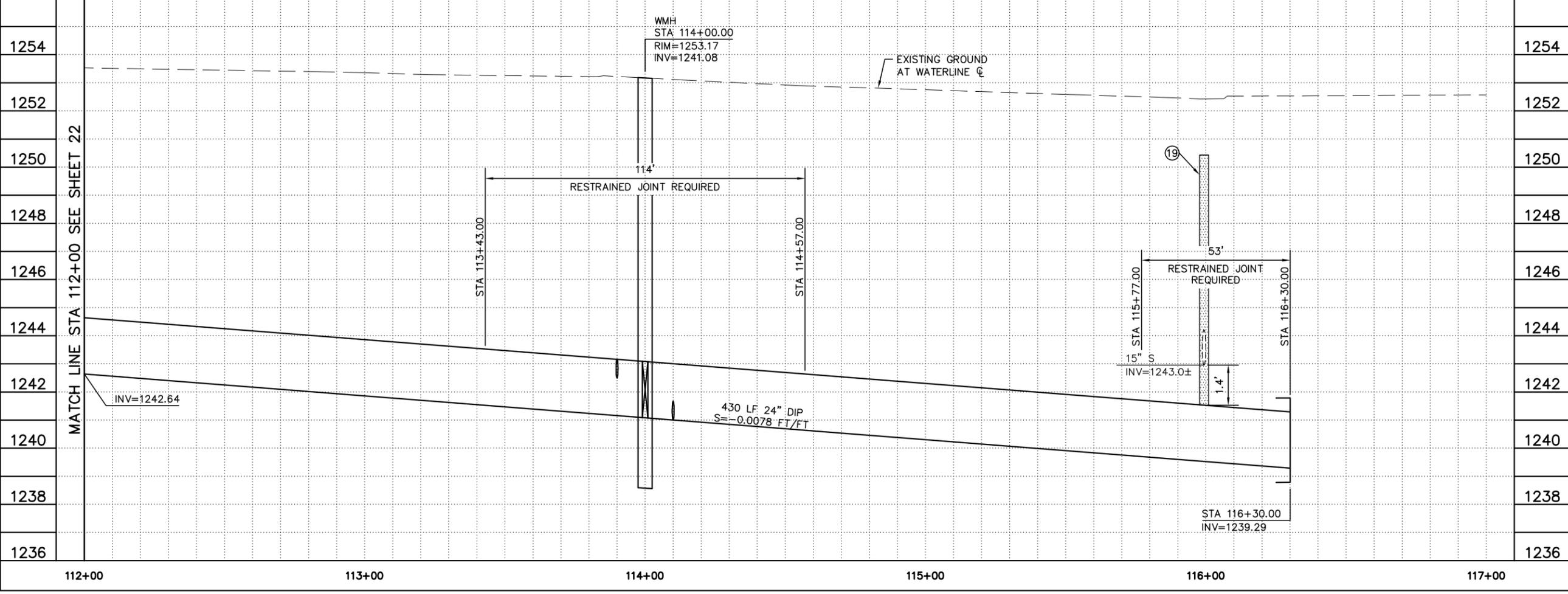
**BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE**

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT



BROOKS ENGINEERS & SURVEYORS INC.
4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 868-0804

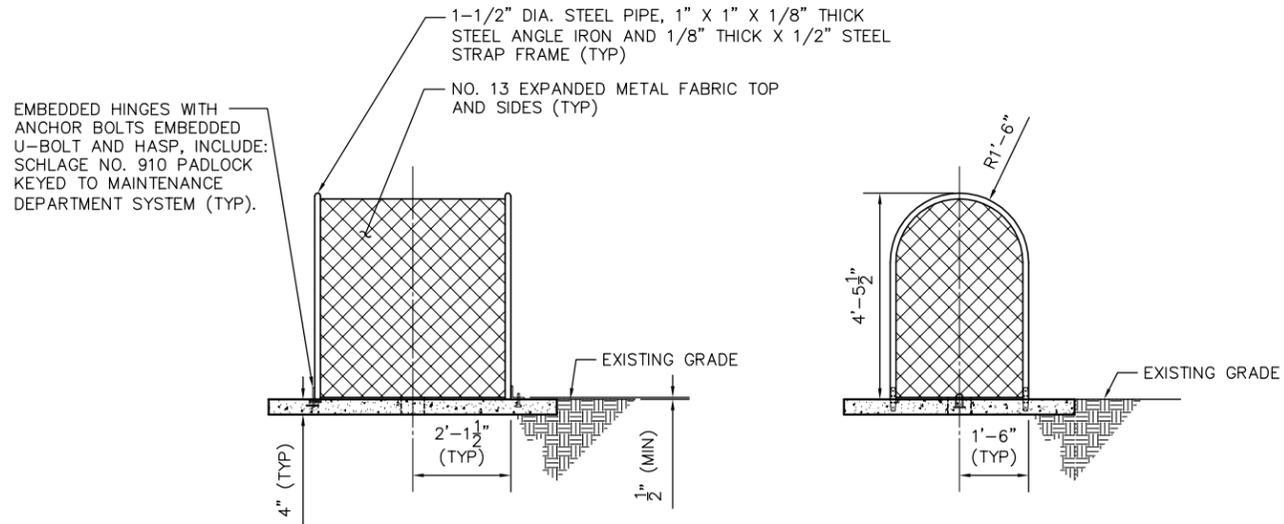
JOB NUMBER 916-07FF SHEET 23 OF 29



MATCH LINE STA 112+00 SEE SHEET 22

MATCH LINE STA 117+00 SEE SHEET 23

112+00 113+00 114+00 115+00 116+00 117+00

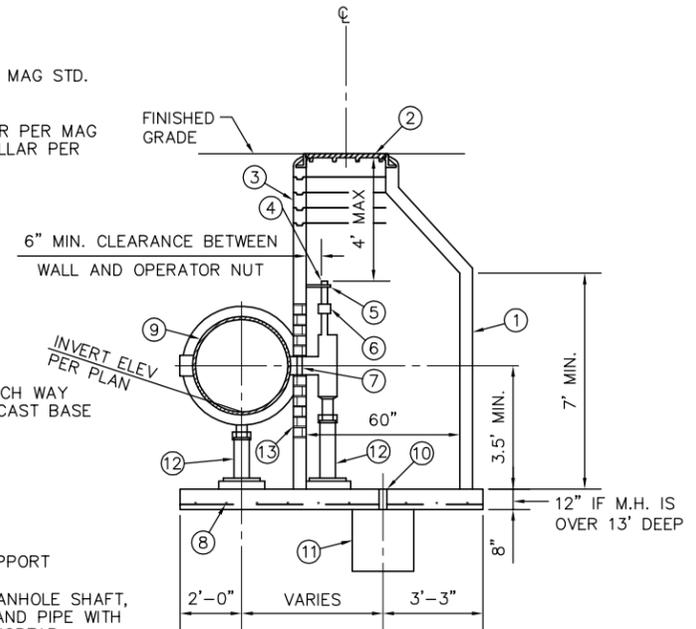


- 4" THICK CONCRETE PAD SHALL HAVE TOP SURFACE SLOPED AT 0.5% WITH BROOM FINISH. OPENING IN PAD SHALL BE SLEEVED FOR 6" DIP
- THE ENCLOSURE SHALL BE SIZED, POSITIONED AND INSTALLED FOR UNRESTRICTED OPERATION, ACCESS AND CLEARANCE AROUND ITEMS ENCLOSED.
- ALL HINGED CONNECTION LOCATIONS AND HARDWARE TO BE TAMPER PROOF.
- WELD ALL JOINTS CONTINUOUS AND GRIND SMOOTH ALL ROUGH SURFACES OR SHARP EDGES. PRIME AND PAINT ALL SURFACES WITH 2 COATS OF RUSTPROOF "DESERT TAN" COLORED. PROVIDE COLOR SAMPLE FOR SELECTION AND APPROVAL.
- VANDAL ENCLOSURE TO BE "LOCKBOX" OR APPROVED EQUAL

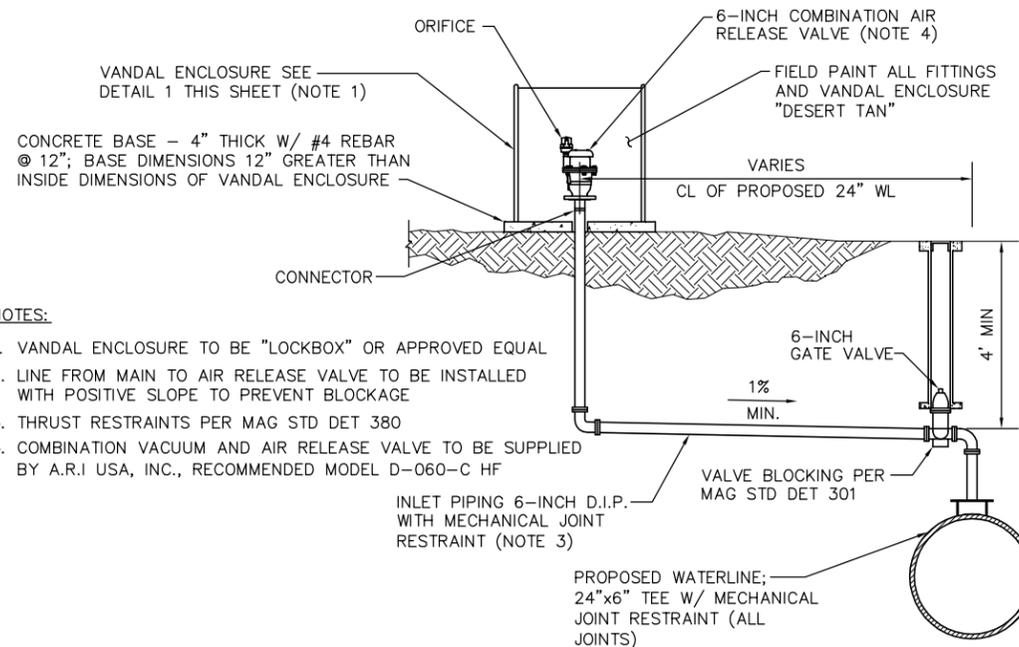
1 VANDAL ENCLOSURE
NTS

NOTES:

- 60" I.D. MANHOLE SHAFT PER MAG STD. DET. 420, TYPE "A" TOP
- 30" MANHOLE FRAME & COVER PER MAG STD. DET. 424. CONCRETE COLLAR PER MAG STD DET 422.
- GROUTED ADJUSTING RINGS
- OPERATOR NUT
- WALL BRACKET
- PACKING GLAND
- 6" EXTENSION
- #4 REBAR 12" ON CENTER EACH WAY 2" CLEAR TYPICAL FOR PRE-CAST BASE
- 24" BUTTERFLY VALVE
- 3" DIAMETER DRAIN
- 8 CU. FT. GRAVEL SUMP
- ADJUSTABLE PIPE SADDLE SUPPORT
- RECTANGULAR CUT-OUT IN MANHOLE SHAFT, FILL SPACE BETWEEN SHAFT AND PIPE WITH 1" SHEET FOAM, BRICK AND MORTAR



2 BUTTERFLY VALVE AND OPERATOR MANHOLE
3 NTS



NOTES:

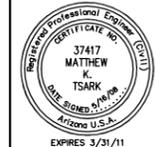
- VANDAL ENCLOSURE TO BE "LOCKBOX" OR APPROVED EQUAL
- LINE FROM MAIN TO AIR RELEASE VALVE TO BE INSTALLED WITH POSITIVE SLOPE TO PREVENT BLOCKAGE
- THRUST RESTRAINTS PER MAG STD DET 380
- COMBINATION VACUUM AND AIR RELEASE VALVE TO BE SUPPLIED BY A.R.I USA, INC., RECOMMENDED MODEL D-060-C HF

3 UNIVERSAL AIR-VACUUM VALVE
3 NTS

XREFS
MKT-pe
91607-DTL5-WithBollards
91607-DTL7
91607-DTL6

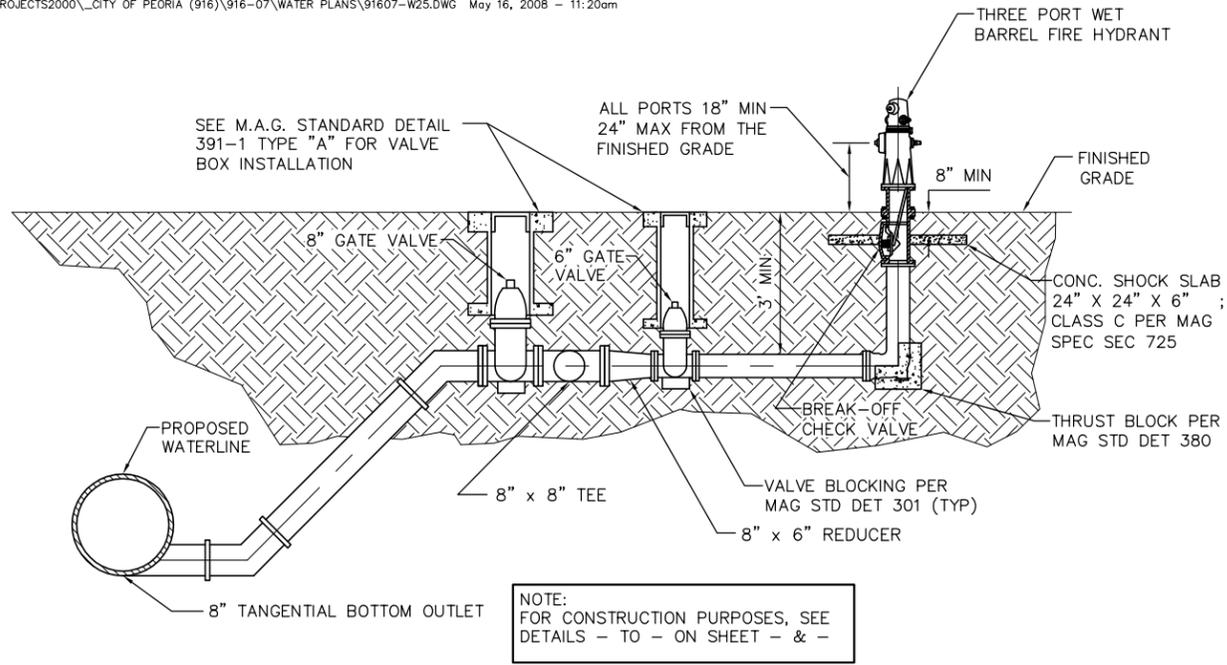
BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE

DATE	5/2/08
DESIGNED	JHT
DRAWN	GDZ
CHECKED	MKT



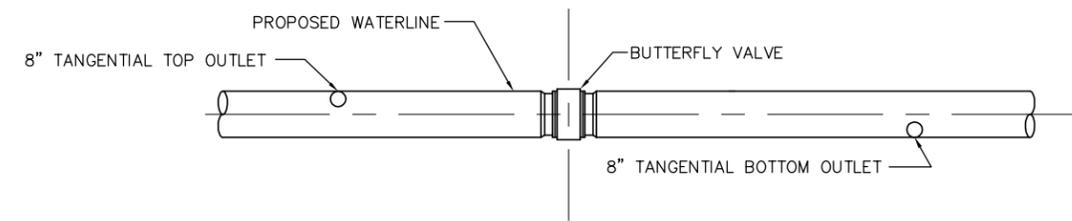
BROOKS ENGINEERS & SURVEYORS INC.
4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 866-0804

JOB NUMBER 916-07FF SHEET 24 OF 29

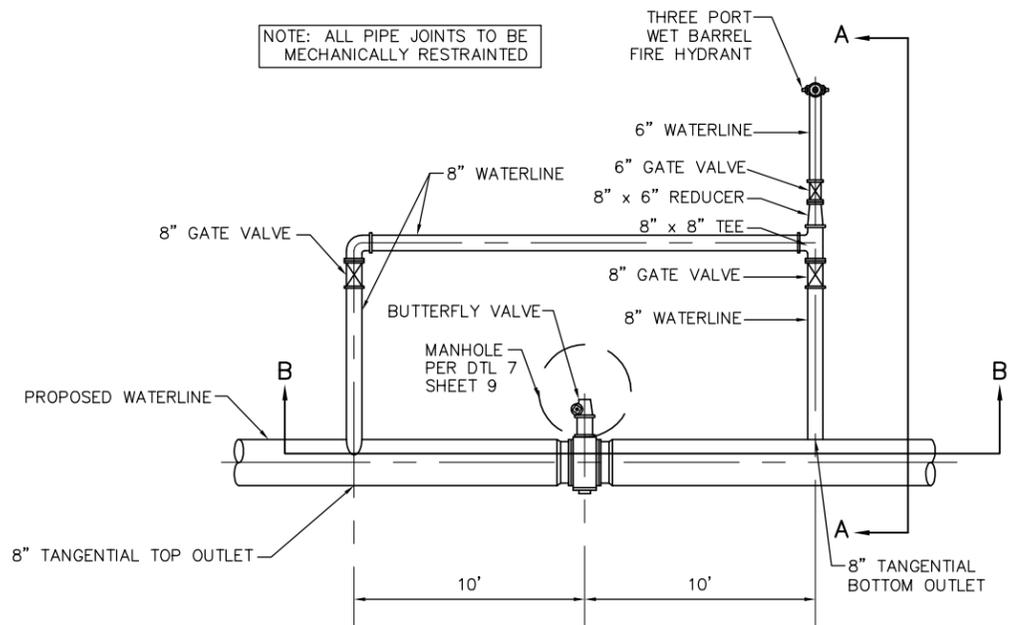


NOTE:
FOR CONSTRUCTION PURPOSES, SEE
DETAILS - TO - ON SHEET - & -

SECTION A-A

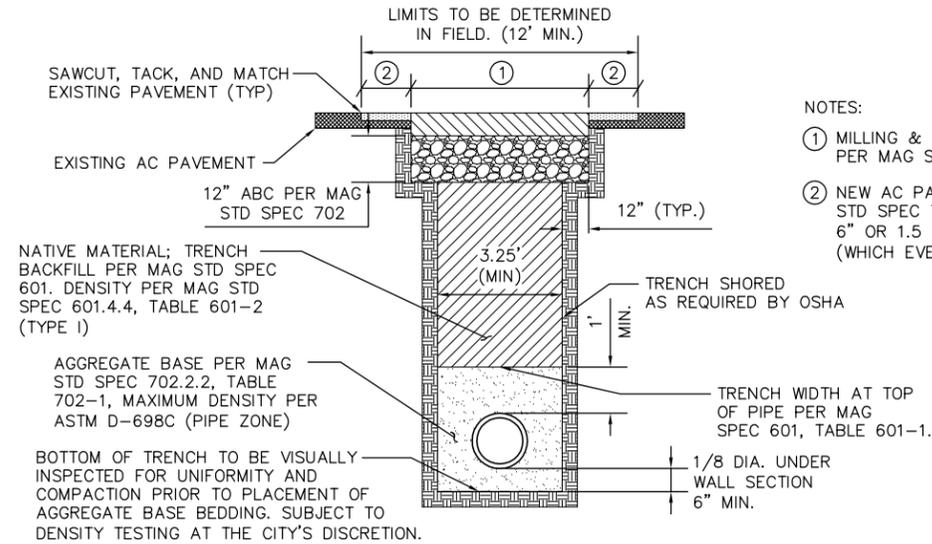


SECTION B-B



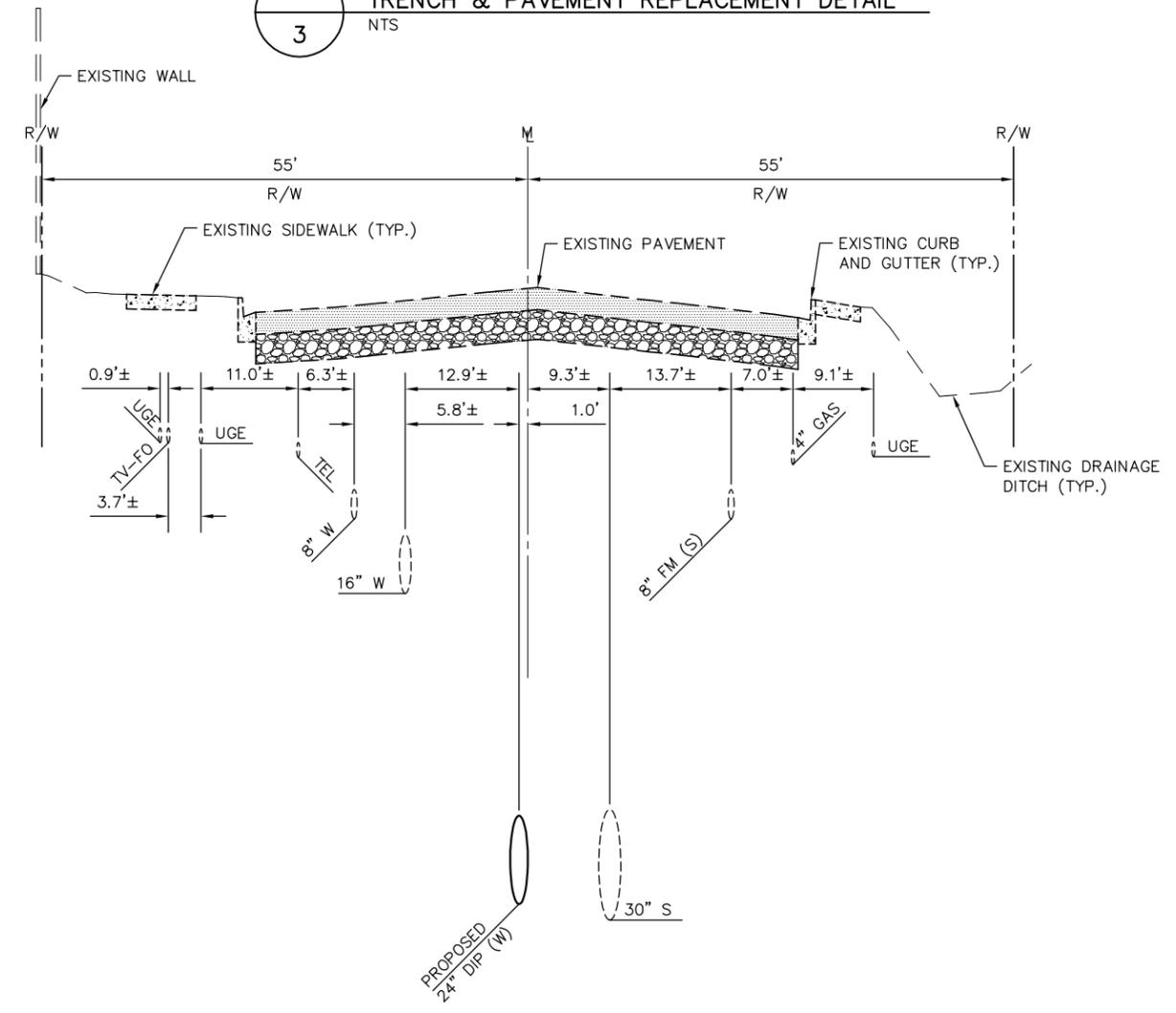
NOTE: ALL PIPE JOINTS TO BE
MECHANICALLY RESTRAINED

4 FIRE HYDRANT BYPASS ASSEMBLY
3 NTS



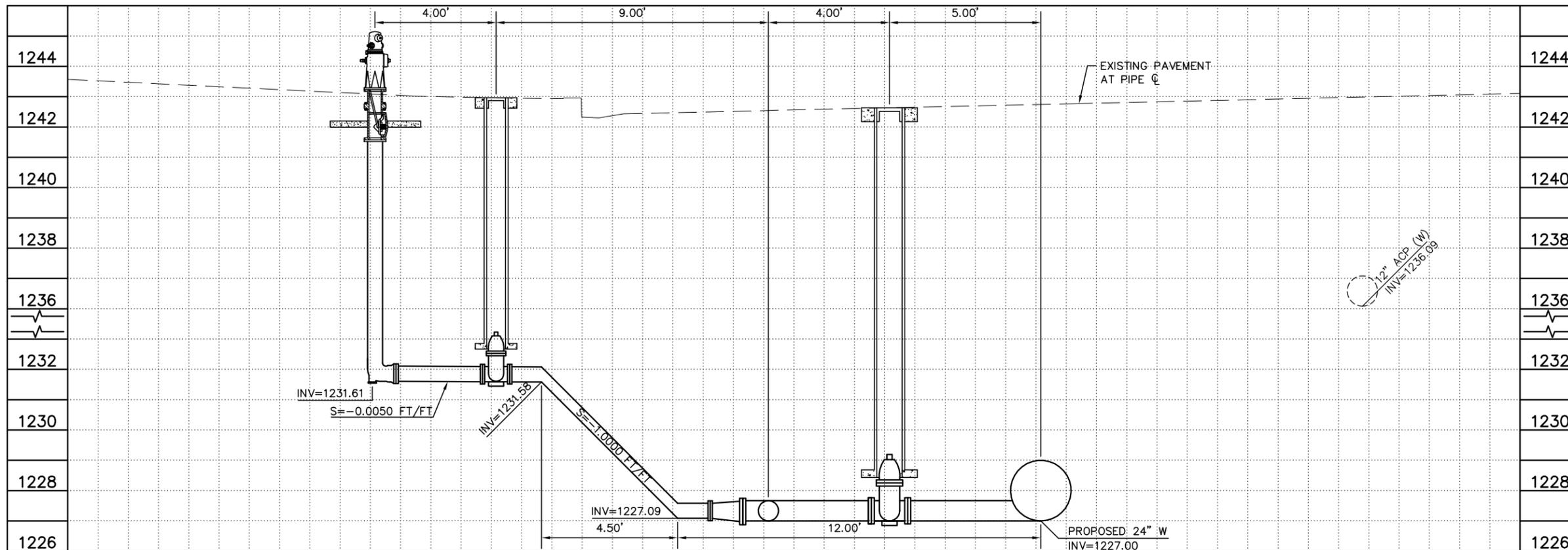
- NOTES:
- ① MILLING & AC OVERLAY (2" MIN.) PER MAG STD SPEC 322 & TABLE 710-1
 - ② NEW AC PAVEMENT (C-3/4) PER C.O.P. STD SPEC 710. MINIMUM THICKNESS = 6" OR 1.5 X EXISTING THICKNESS (WHICH EVER IS GREATER)

5 TRENCH & PAVEMENT REPLACEMENT DETAIL
3 NTS

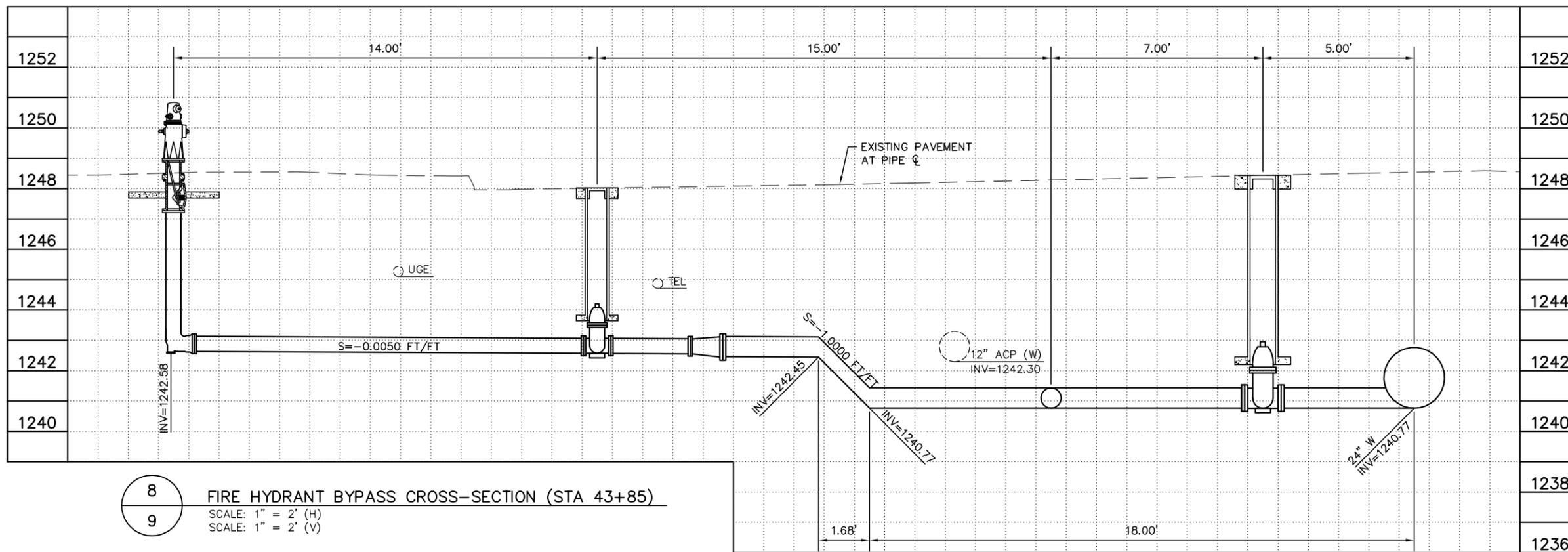


6 TYPICAL UTILITY CROSS SECTION
DETAIL-BEARDSLEY RD AT STA 71+00
14 NTS

XREFS MKT-pe 91607-DTL13 91607-DTL9 91607-DTL10 91607-DTL1 91607-DTL3	
BEARDSLEY RD 24" WATERLINE LAKE PLEASANT RD TO 87TH AVE	
DATE DESIGNED DRAWN CHECKED	5/2/08 HJ MKT MKT
	BROOKS ENGINEERS & SURVEYORS INC. 4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 487-8700 (FAX) (480) 868-0804
JOB NUMBER 916-07FF	SHEET 25 OF 29

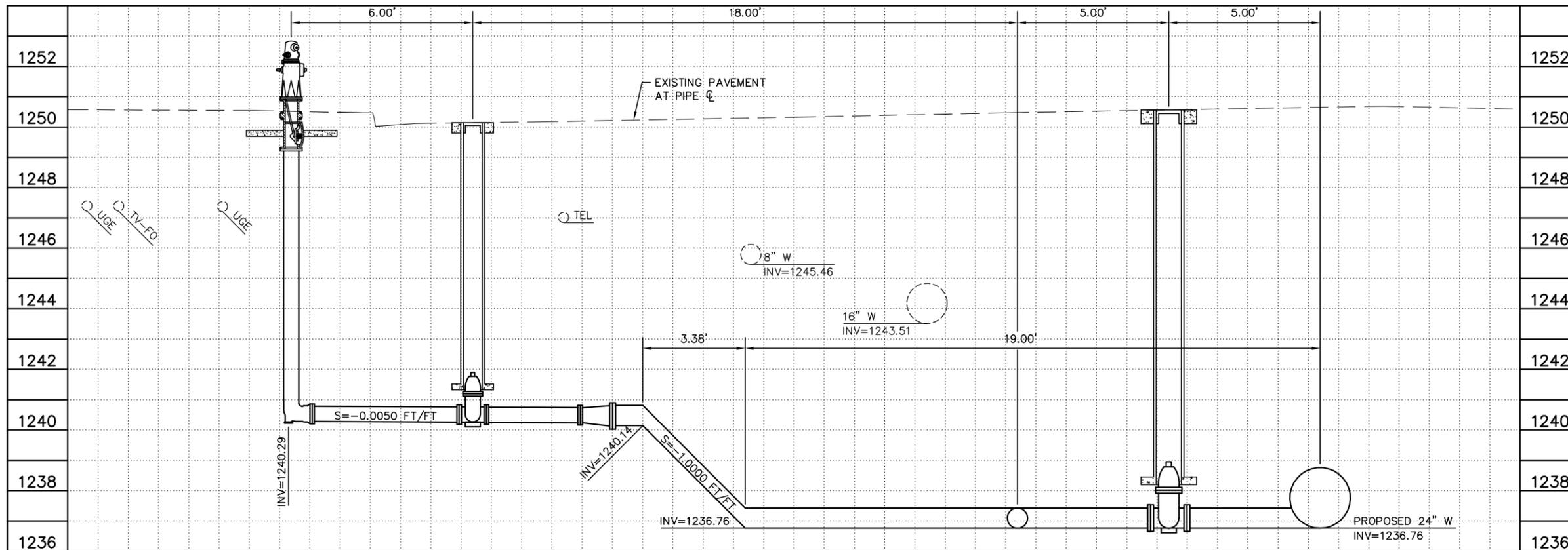


7
3 FIRE HYDRANT BYPASS CROSS-SECTION (STA 16+10)
SCALE: 1" = 2' (H)
SCALE: 1" = 2' (V)

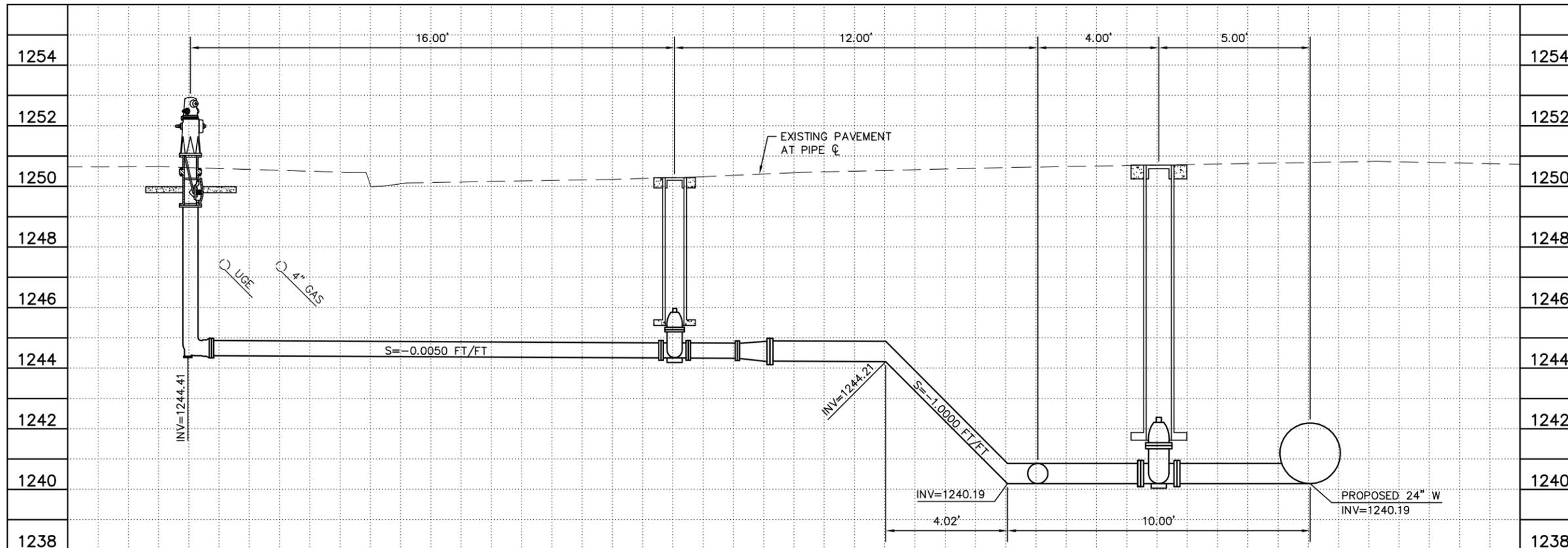


8
9 FIRE HYDRANT BYPASS CROSS-SECTION (STA 43+85)
SCALE: 1" = 2' (H)
SCALE: 1" = 2' (V)

XREFS MKT-pe 91607-BYPASS-DTL-1610 91607-BYPASS-DTL-4385	
BEARDSLEY RD 24" WATERLINE LAKE PLEASANT RD TO 87TH AVE	
DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT
 	
<small>4002 E. ELWOOD STREET #10 PHOENIX, ARIZONA 85040 (PHONE) (602) 457-5700 (FAX) (480) 866-0804</small>	
JOB NUMBER 916-07FF	SHEET 26 OF 29



9 FIRE HYDRANT BYPASS CROSS-SECTION (STA 70+60)
 14 SCALE: 1" = 2' (H)
 SCALE: 1" = 2' (V)



10 FIRE HYDRANT BYPASS CROSS-SECTION (STA 96+60)
 19 SCALE: 1" = 2' (H)
 SCALE: 1" = 2' (V)

XREFS
 MKT-pe
 91607-BYPASS-DTL-9660
 91607-BYPASS-DTL-7060

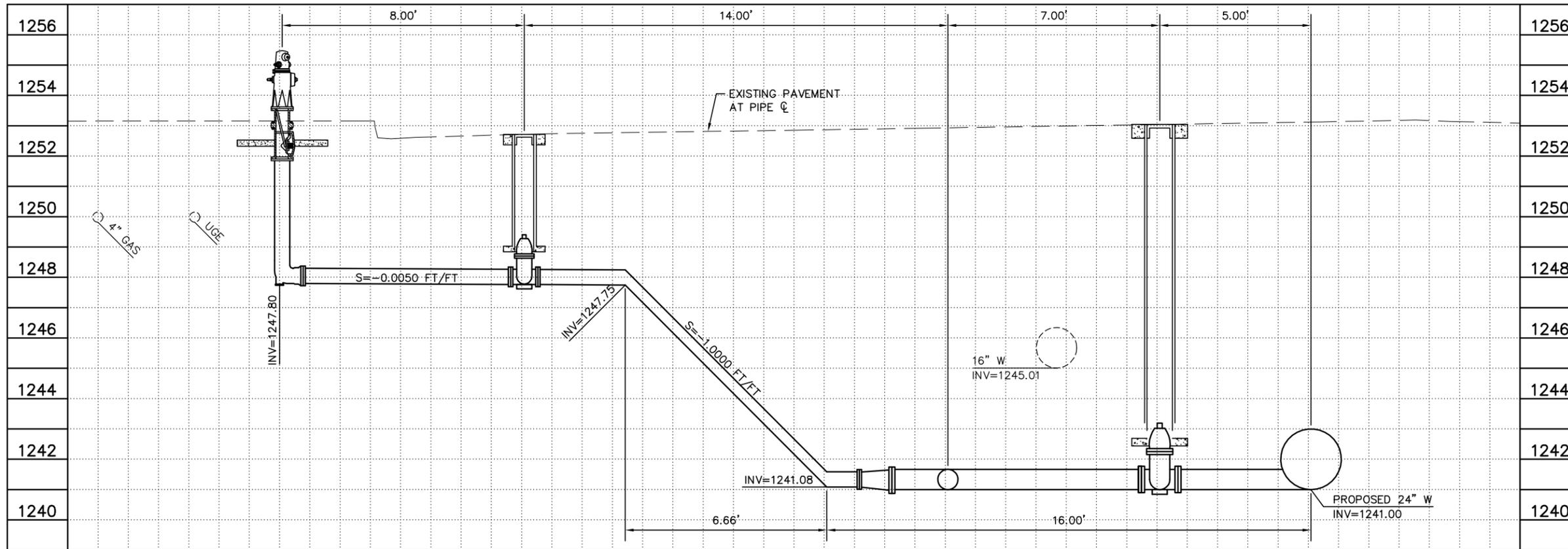
BEARDSLEY RD
 24" WATERLINE
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DRAWN	GDZ
CHECKED	MKT

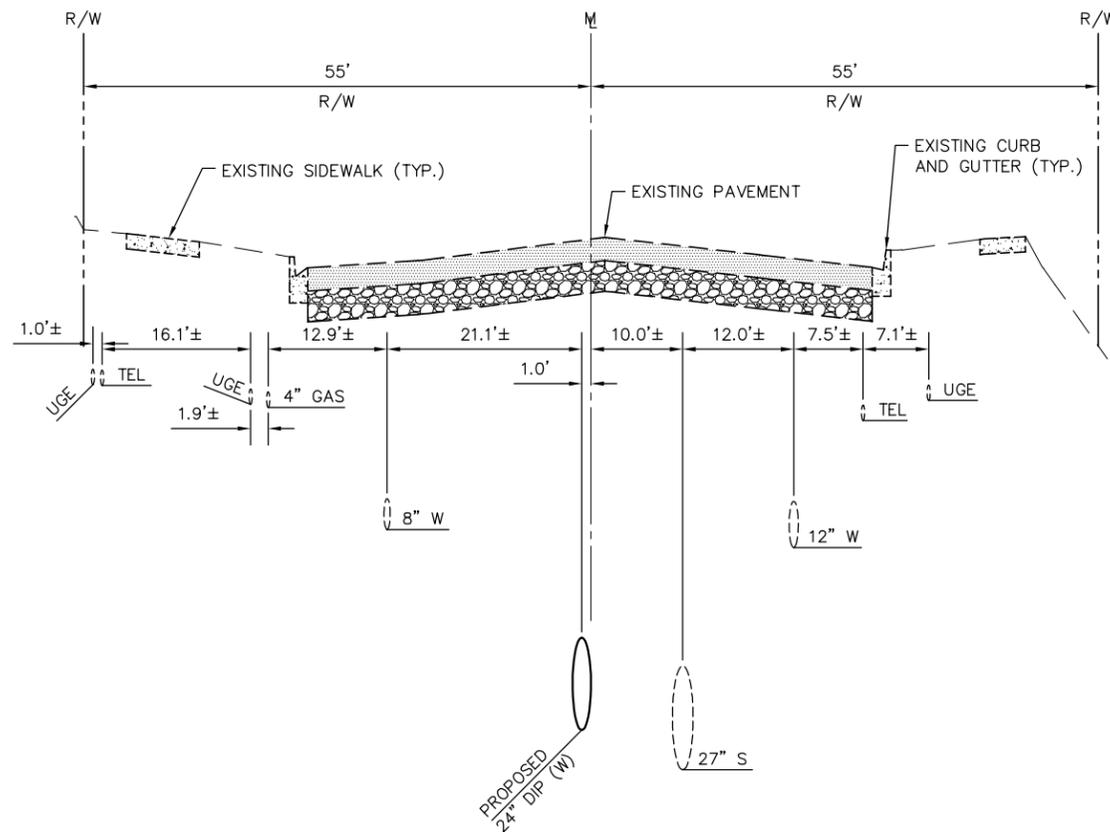


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JOB NUMBER	916-07FF	SHEET	27 OF 29
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11 FIRE HYDRANT BYPASS CROSS-SECTION (STA 114+10)
 23 SCALE: 1" = 2' (H)
 SCALE: 1" = 2' (V)



12 TYPICAL UTILITY CROSS SECTION
 20 DETAIL-BEARDSLEY RD AT STA 99+00
 NTS

XREFS
 MKT-pe
 91607-DTL4
 91607-BYPASS-DTL-11410

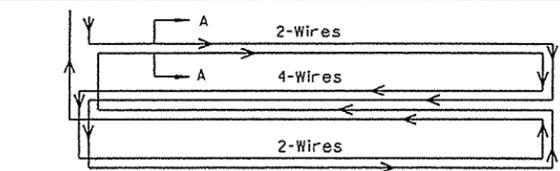
BEARDSLEY RD
 24" WATERLINE
 LAKE PLEASANT RD TO 87TH AVE

DATE	5/2/08
DESIGNED	HJ
DRAWN	GDZ
CHECKED	MKT

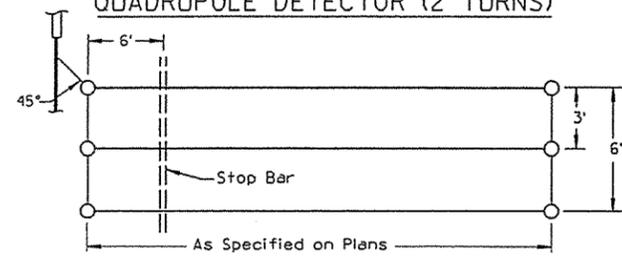


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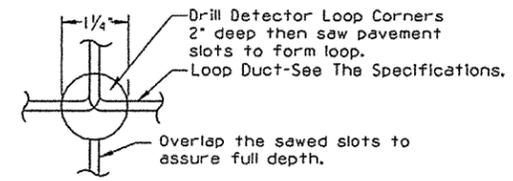
JOB NUMBER 916-07FF SHEET 28 OF 29



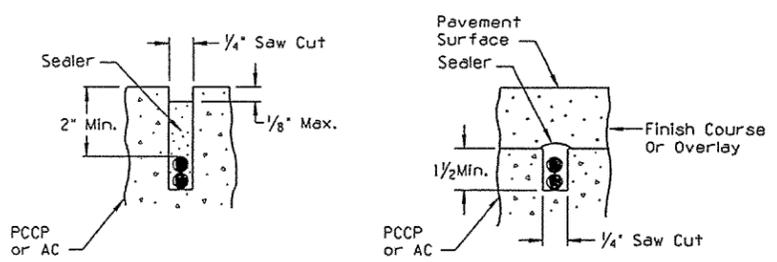
WIRING DIAGRAM FOR QUADRUPOLE DETECTOR (2 TURNS)



SAW CUT PATTERN FOR QUADRUPOLE DETECTOR



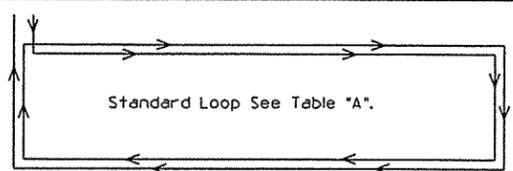
DRILLING DETAIL



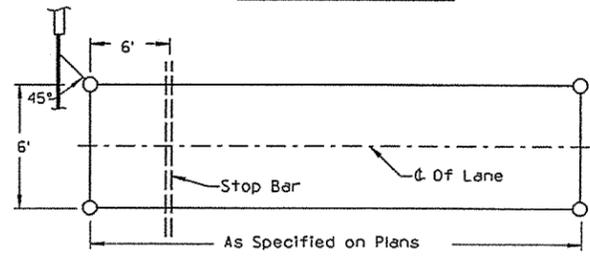
DETAIL 1

DETAIL 2

LOOP INSTALLATIONS SECTION A-A



WIRING DIAGRAM



SAW CUT PATTERN FOR STANDARD DETECTOR

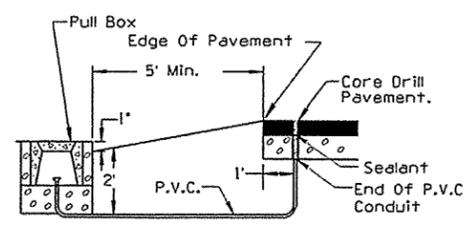
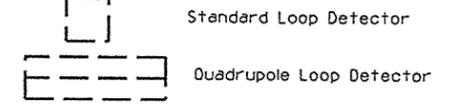
TABLE "A"

LOOP PERIMETER	NO. OF TURNS
0 - 40'	3
40' or more	2

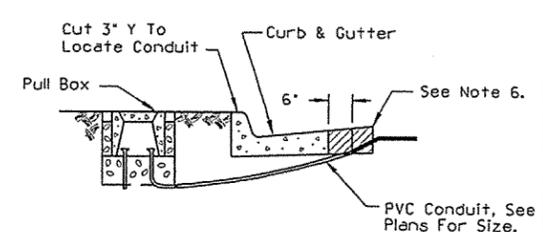
NOTES:

- All material and construction shall conform to the requirements of the Specifications.
- Clean and dry all saw cuts before installing the loop duct.
- Saw cut sealant for detector loops in AC shall be the emulsified crack filler sealant per the Standard Specifications. The sand shall be pre-mixed by the manufacturer. Sealant for detector loops in PCCP shall be the Elastomeric Sealant per the Standard Specifications, or an approved two-part epoxy loop sealant.
- All detector loops shall be given a continuity and insulation test before and after placing the final paving or placing the sealer in the sawcuts.
- Loop wires in sub-base shall have 2" of sand above and below.
- Use same material (or approved equal) for patching existing pavement. Patch to at least 1/4" greater thickness than existing pavement.
- Loop detectors shall be located in center of traveled lane unless otherwise noted on plans.
- Number of loop turns shall be as shown unless otherwise specified.
- Sawcut depth shall be a minimum of 2" to the top of the loop duct on all sawcuts.

PLAN SYMBOLS



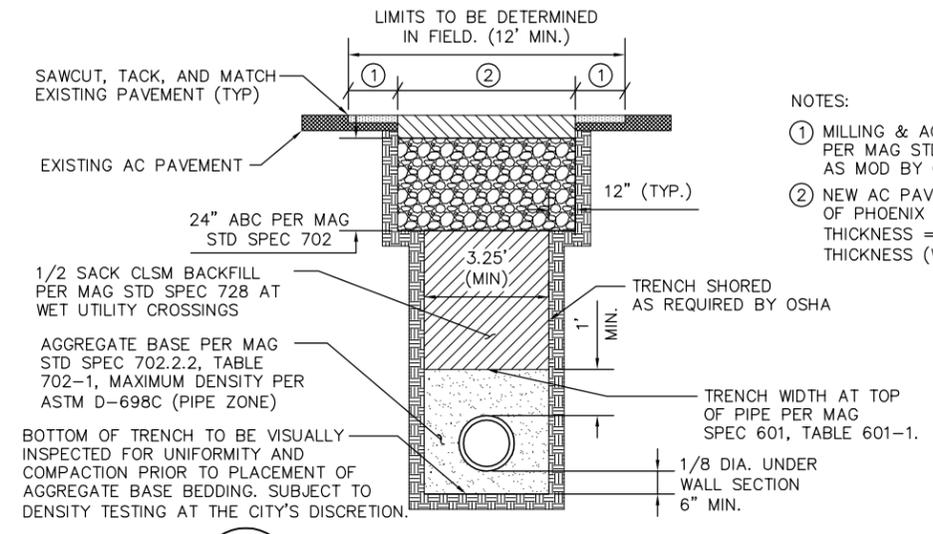
DETAIL "B" WITHOUT CURB & GUTTER



DETAIL "A" WITH CURB AND GUTTER

DESIGN APPROVED	SIGNATURE	ARIZONA DEPT. OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION TRAFFIC SIGNALS & LIGHTING STANDARD DRAWINGS	REV.
APPROVED FOR DISTRIBUTION	ON FILE	LOOP DETECTOR LOCATION AND INSTALLATION DETAILS	DRAWING NO. T.S. 7-1

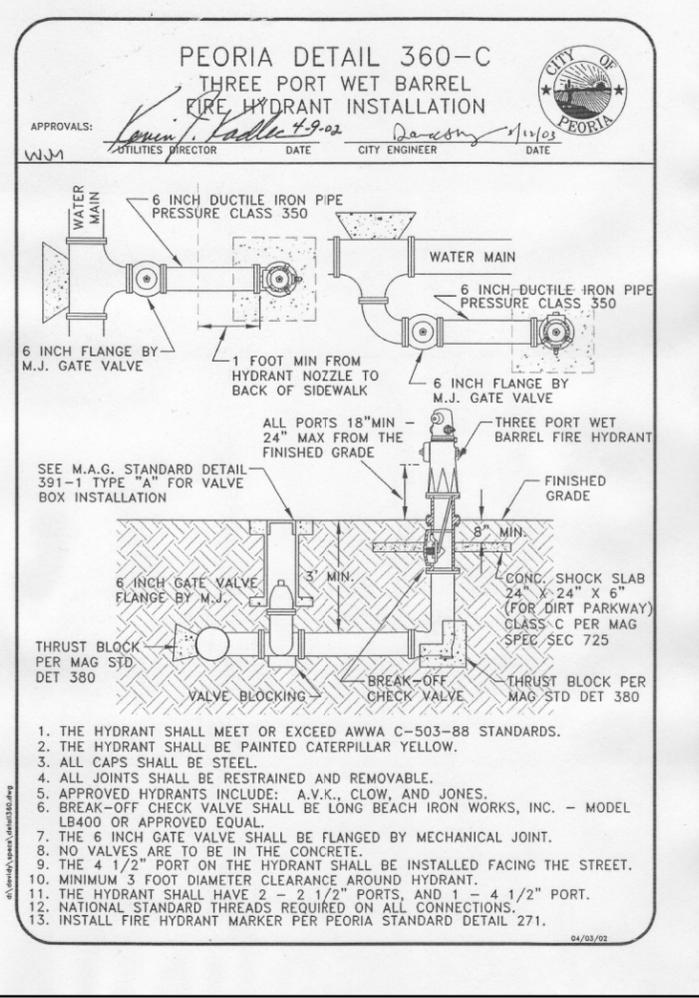
13 LOOP DETECTOR DETAIL
18 NTS



15 TYPICAL SLURRY BACKFILL TRENCH DETAIL
3 NTS

NOTES:

- MILLING & AC OVERLAY (2" MIN.) PER MAG STD SPEC 322 & TABLE 710-1 AS MOD BY CITY OF PHOENIX
- NEW AC PAVEMENT (C-3/4) PER CITY OF PHOENIX STD SPEC 710. MINIMUM THICKNESS = 6" OR 1.5 X EXISTING THICKNESS (WHICH EVER IS GREATER)



NOTE:

THE OPERATING NUTS AND HOSE CAPS MUST BE COMPATIBLE WITH COMPARABLE DRY BARREL HYDRANTS WHICH ARE STANDARD IN MARICOPA COUNTY, AZ. HYDRANTS ARE SUPPLIED WITH A 1.5" (PENTAGONAL) VALVE OPERATING NUT AND 1.5" NUTS ON THE HOSE THREADS

14 FIRE HYDRANT DETAIL
3 NTS

XREFS
MKT-pe
91607-DTL14

BEARDSLEY RD
24" WATERLINE
LAKE PLEASANT RD TO 87TH AVE

DATE	5/2/08
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JOB NUMBER	916-07FF	SHEET	29 OF 29
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