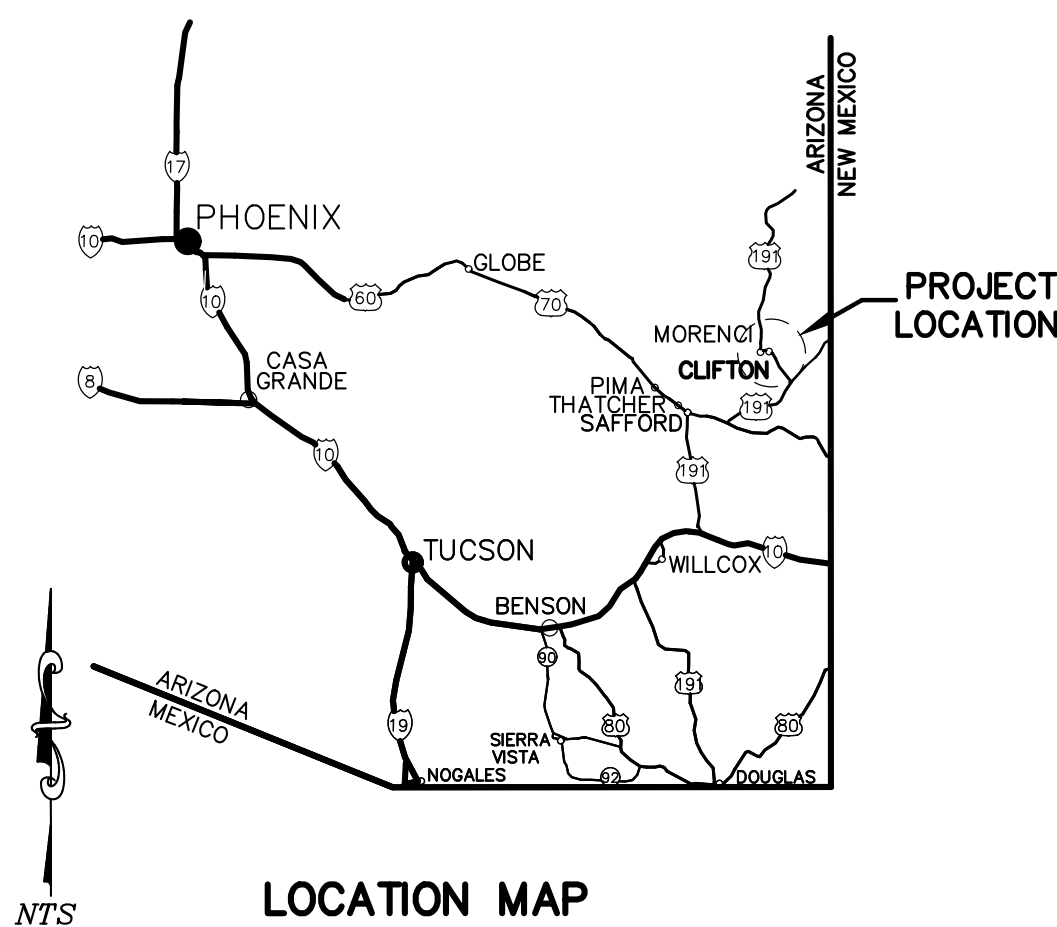


TOWN OF CLIFTON WASTEWATER TREATMENT PLANT PARSHALL FLUME PROJECT



INDEX OF DRAWINGS

NO.	TITLE
1	COVER SHEET
2	NOTES
3	CONSTRUCTION PLAN

AS-BUILT CERTIFICATION

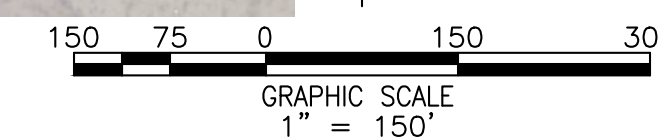
I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE WASTEWATER TREATMENT PLANT MODIFICATIONS AS SHOWN HEREON HAS BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS AND SPECIFICATIONS EXCEPT AS DELINEATED ON THESE "AS-BUILT" PLANS PREPARED UNDER MY DIRECTION.

ARIZONA REGISTRANT # _____ REGISTRANT SEAL* _____

*PLANS ARE NOT TO BE CONSIDERED "AS-BUILT" WITHOUT SIGNED REGISTRANT SEAL

APPROVALS

TOWN OF CLIFTON _____ DATE _____



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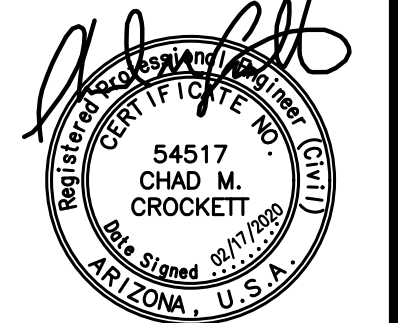
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TOWN OF CLIFTON
WASTEWATER TREATMENT PLANT
PARSHALL FLUME PROJECT
COVER SHEET

GREENLEE COUNTY
CLIFTON, AZ

050535-01-001
PROJECT NUMBER



PLAN STATUS
2/17/2020 ADDENDUM #1

DATE	DESCRIPTION
CMC DESIGN	DCS DRAWN CMC CHKD
SCALE	H: N/A V: N/A
JOB No.	050535-01-001
DATE	FEBRUARY 17, 2020

GENERAL NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THESE APPROVED PLANS AND SPECIFICATIONS, OR ANY PROVISIONS OR DETAILS PROVIDED BY THE CONTRACTING AGENCY, CURRENT STANDARD DETAILS AND SPECIFICATIONS AS PREPARED BY PCWRD (PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT), MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), THE INTERNATIONAL BUILDING CODE (IBC), AND TUCSON WATER, IN THIS ORDER OF PRECEDENCE. ALL UTILITY INSTALLATIONS AND REQUIRED RELOCATIONS OR ADJUSTMENTS SHALL BE IN ACCORDANCE WITH PCWRD, UNIFORM PLUMBING CODE, AND ADEQ RULES AND REQUIREMENTS AS APPLICABLE.
- THE CONTRACTOR SHALL FULFILL THE EXTENT OF THE CONTRACT WHILE COMPLYING WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS. THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON THE PROJECT IF WORK IS NOT PERFORMED IN COMPLIANCE WITH APPLICABLE OSHA REGULATIONS. NO ADDITIONAL COMPENSATION OR CONSTRUCTION DAYS SHALL BE PERMITTED FOR DAYS LOST DUE TO THE CONTRACTOR'S NON-COMPLIANCE WITH APPLICABLE OSHA REGULATIONS.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODES.
- ALL FIELD ADJUSTMENTS NECESSARY TO MEET THE INTENT OF THE CONSTRUCTION PLANS SHALL REQUIRE THE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO THE START OF ANY ADJUSTMENTS. ALL CHANGES IN CONSTRUCTION SHALL BE ADMINISTERED BY CHANGE ORDER, APPROVED BY THE ENGINEER, THE CONTRACTOR AND THE TOWN OF CLIFTON. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE OWNER AND/OR HIS INSPECTOR AND/OR ALL CONSTRUCTION OR MATERIALS NOT IN CONFORMANCE WITH THESE PLANS AND SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO STARTING ANY PHASE OF CONSTRUCTION.
- THE LOCATIONS AND COMPLETENESS OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES (INCLUDING SERVICES) SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. THE HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND OTHER FACILITIES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UTILITIES AND OTHER FACILITIES ARE SHOWN. THE CONTRACTOR SHALL COMPLETE ALL INSTALLATIONS SUCH THAT MINIMUM REQUIRED CLEARANCES ARE MAINTAINED. THE CONTRACTOR AS REQUIRED BY LAW, SHALL CONTACT ARIZONA 811 (FORMERLY BLUE STAKE) 811 FROM WITHIN ARIZONA OR 1-800-782-5348 FROM OUTSIDE OF ARIZONA, FOR THE LOCATIONS OF ALL UNDERGROUND UTILITIES TWO WORKING DAYS BEFORE DIGGING AT EACH LOCATION. THE CONTRACTOR SHALL VERIFY WHETHER KNOWN UTILITY COMPANIES PROVIDING SERVICE IN THE AREA PARTICIPATE IN ARIZONA 811, AND SHALL DIRECTLY CONTACT ALL NON-PARTICIPATING UTILITY COMPANIES TO COMPLETE THE UTILITY INVESTIGATION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IN ADVANCE OF HIS/HER CONSTRUCTION OPERATIONS, THE LOCATIONS OF ALL UNDERGROUND UTILITIES (GAS, TELEPHONE, ELECTRICAL, WATER, SEWER, ETC.), WHETHER SHOWN ON THE DRAWINGS OR NOT, THAT MAY INTERFERE WITH THE CONTRACTOR'S CONSTRUCTION OPERATIONS. THE TIMEFRAME IN WHICH THE CONTRACTOR SHALL DETERMINE THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHALL BE WITH GENERAL NOTE 6 AS FOUND ON THIS SHEET. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY TO REMOVE OR RELOCATE UTILITY OBSTRUCTIONS. ANY UTILITY RELOCATIONS OR ADJUSTMENTS NECESSARY FOR COMPLETION OF THE WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR, OR THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ARRANGEMENT AND/OR RELOCATION OF CONFLICTING UTILITIES BY OTHER AGENCIES. SUCH WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.
- THE CONTRACTOR SHALL BEGIN FIELD VERIFICATION OF POTENTIAL CONFLICTS AND CONNECTION LOCATIONS PRIOR TO CONSTRUCTION, INCLUDING ANY POTHOLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING FIELD VERIFICATION, INCLUDING POTHOLES ACTIVITIES, ARE CONDUCTED A MINIMUM OF THREE WEEKS AHEAD OF PLANNED CONSTRUCTION AT ANY LOCATION. THE CONTRACTOR SHALL ACCEPT SOLE RESPONSIBILITY FOR PROJECT DELAYS AND ANY ADDITIONAL PROJECT COSTS DUE TO THE CONTRACTOR'S FAILURE TO WITH FIELD VERIFY AND POTHOLES CONFLICTS A MINIMUM OF THREE WEEKS AHEAD OF PLANNED CONSTRUCTION AT ANY LOCATION. THESE ACTIVITIES ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY NECESSARY PERMITS REQUIRED BY PRIVATE, CITY, COUNTY, STATE, OR FEDERAL AGENCIES PRIOR TO ANY CONSTRUCTION ACTIVITIES, AND SHALL PROVIDE THE OWNER WITH COPIES OF ALL PERMITS OBTAINED.
- THE CONTRACTOR SHALL TAKE WHATEVER PROCEDURES AND STEPS NECESSARY TO PREVENT AND CONTROL DUST DUE TO HIS/HER OPERATIONS AND SHALL CONTROL DUST AS DIRECTED BY THE OWNER OR HIS INSPECTOR. DUST CONTROL IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND REPLACEMENT OF ANY IMPROVEMENTS OR FACILITIES, ABOVE OR BELOW GROUND, NEW OR EXISTING; WHICH ARE SCARRED, DAMAGED, OR REMOVED DURING CONSTRUCTION OPERATIONS. EXISTING FACILITIES NOT BEING RELOCATED OR REPLACED BY THIS PROJECT SHALL REMAIN UNDISTURBED DURING TRENCHING OPERATIONS AND INSTALLATION OF NEW PIPELINE. THE CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORT FOR THESE FACILITIES TO INSURE THEIR SAFETY DURING AND UPON COMPLETION OF CONSTRUCTION.
- TRASH, CONSTRUCTION WASTE, AND SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY DISPOSED OF. CLEANUP IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED. THE OWNER WILL NOT ISSUE A CERTIFICATE OF SUBSTANTIAL COMPLETION UNTIL THE WORK SITE HAS BEEN CLEANED TO THE SATISFACTION OF THE OWNER. ALL CURBS, PAVEMENTS, AND SIDEWALKS SHALL BE SWEEP CLEAN OF ALL DIRT AND DEBRIS.
- THE CONTRACTOR SHALL AVOID SPOILING MATERIAL ON THE PAVEMENT WHENEVER POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY PAVEMENT SURFACE OCCURRING AS A RESULT OF ANY CONSTRUCTION ACTIVITIES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL DRAINAGE AND IRRIGATION FACILITIES AFFECTED BY CONSTRUCTION, WHETHER SHOWN ON THESE DRAWINGS OR NOT, REMAIN OPERABLE AT ALL TIMES.
- UNLESS OTHERWISE NOTED, ALL DEMOLISHED AND/OR REMOVED EQUIPMENT AND STRUCTURES SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LAWFUL MANNER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE & FEDERAL LAWS.
- THE CONTRACTOR SHALL PERFORM SITE CLEARING IN ACCORDANCE WITH TUCSON WATER SPECIFICATIONS, SECTION 0203, ONLY TO THE EXTENT NECESSARY TO COMPLETE CONSTRUCTION. ALL COSTS ASSOCIATED WITH SITE CLEARING ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.

- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANNING AND TRAFFIC CONTROL AS SPECIFIED BY GREENLEE COUNTY, AND/OR A.D.O.T. AS APPLICABLE. WHERE PEDESTRIAN OR VEHICULAR TRAFFIC ARE AFFECTED BY THE CONSTRUCTION, OR THE CONTRACTOR'S WORK IS WITHIN TWENTY FEET OF A PUBLIC TRAVELED WAY, TRAFFIC CONTROL IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.
- THE CONTRACTOR SHALL SUBMIT A NOTICE OF INTENT (NOI) TO OBTAIN AUTHORIZATION FOR THE ACTIVITIES UNDER THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES) GENERAL PERMIT FOR DISCHARGE FROM CONSTRUCTION ACTIVITIES TO WATERS OF THE UNITED STATES, AND TO COMPLY WITH THE CONDITIONS OF THE PERMIT, IT SHALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO:
 - OBTAIN A COPY OF THE GENERAL PERMIT AND NOI FORM FROM THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AT WWW.ADEQ.STATE.AZ.US OR CALL (602)771-4428 OR TOLL FREE IN ARIZONA (800)234-5677.
 - PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
 - CAREFULLY COMPLETE THE NOI FORM AND SUBMIT IT TO ADEQ BY FAX, CERTIFIED MAIL OR HAND DELIVERY, OR USE THE SMART NOI SYSTEM TO APPLY FOR PERMIT COVERAGE.
 - RECEIVE THE AUTHORIZING CERTIFICATE FROM ADEQ AND POST AT THE CONSTRUCTION SITE. MAINTAIN A SIGNED AND CERTIFIED SWPPP ON SITE.
 - CONDUCT AND COMPLETE CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE GENERAL PERMIT AND THE SWPPP.
 - COMPLETE THE NOTICE OF TERMINATION (NOT) FORM AND SUBMIT TO ADEQ WITHIN 30 DAYS AFTER CESSATION OF CONSTRUCTION ACTIVITIES AND FINAL STABILIZATION OF THE SITE. A COPY OF THE COMPLETED NOT AND PROOF OF ADEQ RECEIPT OF SAME MUST BE PRESENTED TO THE OWNER IN ORDER TO COMPLETE THE CONTRACTOR'S OBLIGATIONS UNDER THIS CONTRACT.
- SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING:

	YES	NO	NA
A. CONCRETE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. EPOXY ANCHORS INSTALLED IN CONCRETE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. REINFORCING STEEL AND PRE-STRESSING STEEL TENDONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. PILING, DRILLED PIERS AND CAISSONS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E. SPECIAL GRADING, EXCAVATION & FILLING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- DESIGN LOADS:
 - NO SOILS REPORT (REF: IBC TABLE 1804.2) BEARING PRESSURE = 1500 PSF
ACTIVE FLUID PRESSURE = 35 PSF/FT
AT REST FLUID PRESSURE = 55 PSF/FT
PASSIVE PRESSURE = 250 PSF/FT
COEFFICIENT OF FRICTION = .25
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS BETWEEN CIVIL & STRUCTURAL DRAWINGS AND THE EXISTING STRUCTURES PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE CIVIL ENGINEER.
- OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY IF CONTRACTOR CHOOSES AN OPTION, AND CONTRACTOR SHALL COORDINATE ALL DETAILS.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.
- WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. MODIFICATION OF CERTAIN CONNECTION DETAILS AS PART OF THE SHOP DRAWING REVIEW PROCESS SHALL BE ANTICIPATED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO ORDERING MATERIALS AND STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- ALL CONSTRUCTION BRACING AND SHORING MUST BE DESIGNED BY THE CONTRACTOR. BRACING AND SHORING SHALL BE DESIGNED TO MEET OSHA, AND ANY APPLICABLE IBC OR PCWRD REQUIREMENTS.

MATERIAL NOTES

- ALL CONCRETE COATING MATERIAL SHALL BE NOVOCOAT WHITE PART A (SG2510A) AND GREEN PART B (SG2508B) OR ENGINEER APPROVED EQUAL.
- CONCRETE PRIMER SHALL BE NOVOCOAT SC1100 CONCRETE PRIMER OR ENGINEER APPROVED EQUAL.

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING BASED ON THE INFORMATION CONTAINED WITHIN THESE DRAWINGS, OR INSTRUCTIONS GIVEN. WHEN WORK IS COMPLETE, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE SET OF PRINTS WITH ALL CHANGES CLEARLY MARKED IN RED AND INITIALED. THESE ACTIVITIES ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.
- BENCHMARKS FOR USE DURING CONSTRUCTION WILL BE PROVIDED BY THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN GEOTECHNICAL EXPLORATION AND ANALYSIS FOR THE ENTIRE PROJECT FOR CONSTRUCTION PROCEDURAL AND SAFETY ASPECT INFORMATION.
- EXACT POINTS OF MATCH OR TERMINATION OF FACILITIES INSTALLED UNDER THIS

- CONTRACT, IF NECESSARY, MAY BE DETERMINED IN THE FIELD BY THE OWNER OR HIS INSPECTOR.
- ALL UTILITIES SHALL BE PROTECTED AND SUPPORTED AS NECESSARY.
 - THE CONTRACTOR SHALL COVER EACH SEWER LINE WITH AT LEAST THREE FEET OF BACKFILL MEETING THE REQUIREMENTS OF SUBSECTION (D)(2)(b) OF AAC R18-9-E301. WHERE 3 FEET OF COVER CANNOT BE OBTAINED CONTRACTOR SHALL CONSTRUCT THE SEWER OUT OF DUCTILE IRON PIPE IN ACCORDANCE WITH THESE PLANS.
 - PIPE BEDDING SHALL BE SAND BEDDING IN ACCORDANCE WITH PIMA COUNTY WASTEWATER MANAGEMENT DEPARTMENT STANDARD DETAIL RWRD 104.
 - CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AS-BUILT INFORMATION AND TESTING PER ADEQ REQUIREMENTS. ALL MANHOLE AND SEWER LINE TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE. THE RESULTS OF ALL TESTING SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER. AS-BUILTS SHALL BE PRODUCED BY A REGISTERED LAND SURVEYOR AND SUBMITTED TO THE ENGINEER.
 - WHERE CHANGES IN GRADE OCCUR AT A MANHOLE, THE SLOPE OF THE CHANNEL BOTTOM THROUGH SAID MANHOLE SHALL BE SUCH AS TO PROVIDE FOR A SMOOTH TRANSITION OF FLOW FROM ALL INLET AND OUTLET PIPES. THE MINIMUM FLOWLINE RADIUS SHALL BE 2.0 FEET.
 - SANITARY SEWER SHALL BE INSTALLED BEGINNING AT THE DOWNSTREAM END

TESTING NOTES

- WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.
- THE CONTRACTOR SHALL PERFORM CONTINUITY (HOLIDAY) TESTING ON ALL COATED SURFACES IN ACCORDANCE WITH ASTM: D4787-13 (REAPPROVED 2018). ALL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE. ALL AREAS WHICH FAIL CONTINUITY TESTING SHALL BE REPAIRED AND RECOATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR REPAIR. ALL TESTING INCLUDING RETESTING AREAS WHICH DO NOT PASS INITIAL TESTING AND ARE REPAIRED, IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE PERMITTED.

SECTION 11201 PARSHALL FLUME & ULTRASONIC FLOW METER

PART 1 - GENERAL

- SUMMARY
THIS SECTION SPECIFIES THE REQUIREMENTS FOR THE PARSHALL FLUME AND FLOW METER TO BE PROVIDED AS PART OF THIS PROJECT.
- SUBMITTALS
PROVIDE TWO (2) COPIES OF SHOP DRAWINGS OF THE EQUIPMENT SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO DELIVERY.

PART 2 - PRODUCTS

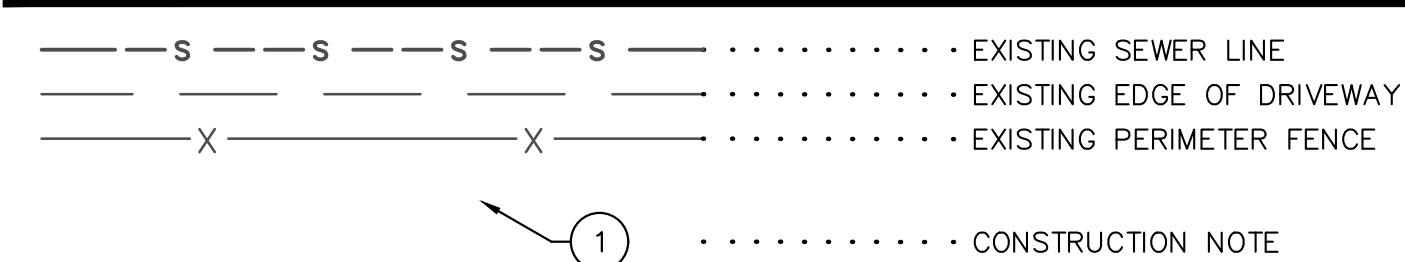
- PARSHALL FLUME
 - THE PARSHALL FLUME SHALL BE EQUIPPED WITH A LAMINATED, HIGH VISIBILITY STAFF GAUGE GRADUATED IN 1/10-FOOT, 1/100-FOOT AND MGD INCREMENTS.
 - THE PARSHALL FLUME SHALL BE COVERED WITH REMOVABLE ALUMINUM GRATING.
 - STAINLESS STEEL ADJUSTABLE ULTRASONIC SENSOR MOUNTING BRACKET SHALL BE PROVIDED.
- OPEN CHANNEL ULTRASONIC FLOWMETER
 - ULTRASONIC FLOWMETER
A GREYLINE MODEL OCF 5.0 ULTRASONIC OPEN CHANNEL FLOWMETER SHALL BE PROVIDED AS MANUFACTURED BY GREYLINE INSTRUMENTS, INC. OR ENGINEER APPROVED EQUAL.
 - MONITOR
 - THE GRAPHIC DISPLAY MONITOR SHALL BE LOCATED AT THE WWTP ELECTRICAL RACK AS SHOWN ON THE CONTRACT DRAWINGS.
 - THE MONITOR SHALL DISPLAY FLOW RATE IN FLOW IN GPM AND MGD, TOTALIZED FLOW, SENSOR TEMPERATURE, AND DATA LOGGING. THE MONITOR SHALL BE SET UP WITH A V-NOTCH WEIR EQUATION.
 - THE UNIT SHALL HAVE A 4-20 MA OUTPUT WHICH SHALL BE CONNECTED TO FUTURE SCADA SYSTEM FOR FLOWRATE MONITORING.
 - UNIT SHALL BE 115 VAC, 60 HERTZ. UNIT SHALL BE HARDWIRED TO ITS POWER SOURCE.
 - THE TRANSMITTER ENCLOSURE SHALL BE WATERTIGHT AND DUST TIGHT NEMA 4X, IP66 POLYCARBONATE WITH CLEAR, SHATTERPROOF COVER.
 - SENSOR
 - SENSOR SHALL BE INSTALLED IN THE EXISTING FLUME PER CONTRACT DRAWINGS AND PER MANUFACTURER'S RECOMMENDATIONS.
 - SENSOR SHALL WITHSTAND ACCIDENTAL SUBMERSION TO 10 FEET MAXIMUM.
 - SENSOR MINIMUM RANGE SHALL BE 8" AND MAXIMUM RANGE SHALL BE 15 FEET.
 - SENSOR SHALL BE CALIBRATED IN THE FIELD BY THE MANUFACTURER OR A REPRESENTATIVE.
 - SENSOR SHALL INCLUDE INTEGRAL TEMPERATURE SENSOR. TEMPERATURE SENSORS REQUIRING SEPARATE MOUNTING AND WIRE RUNS SHALL NOT BE ACCEPTED.
 - MEASUREMENT ACCURACY SHALL BE +/- 0.25% AND SHALL BE AUTOMATICALLY TEMPERATURE COMPENSATED.
 - CONTRACTOR SHALL PROVIDE A SUFFICIENT SENSOR CABLE BETWEEN THE SENSOR AND THE MONITOR.

- ALUMINUM GRATING
 - GRATING PANELS SHALL BE PROVIDED AS SHOWN ON THE CONTRACT DRAWINGS.
 - GRATING PANELS SHALL EACH CONSIST OF ONE-PIECE SERRATED 6061-T6 ALUMINUM BAR GRATING, 1-1/2" DEEP, A MAXIMUM OF 4'-0" WIDE X 5'-0" LONG GRATING PANELS SHALL BE USED.

PART 3 - EXECUTION

- WARRANTY
THE EQUIPMENT SUPPLIER SHALL WARRANTY THE EQUIPMENT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF START-UP.
- O&M MANUALS
FOUR (4) COPIES OF A COMPLETE OPERATIONS MANUAL FOR ALL EQUIPMENT, INCLUDING DETAIL DRAWINGS, SPARE PARTS, MAINTENANCE INSTRUCTIONS AND OTHER PERTINENT DATA SHALL BE COMPILED AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE ACCEPTANCE OF THE FACILITY. O&M MANUALS MUST BE MARKED SPECIFICALLY TO SHOW THE EQUIPMENT INSTALLED. GENERAL WEBSITE LITERATURE WILL NOT BE ACCEPTED. PROVIDE DIGITAL COPY IN ADDITION TO HARD COPIES.

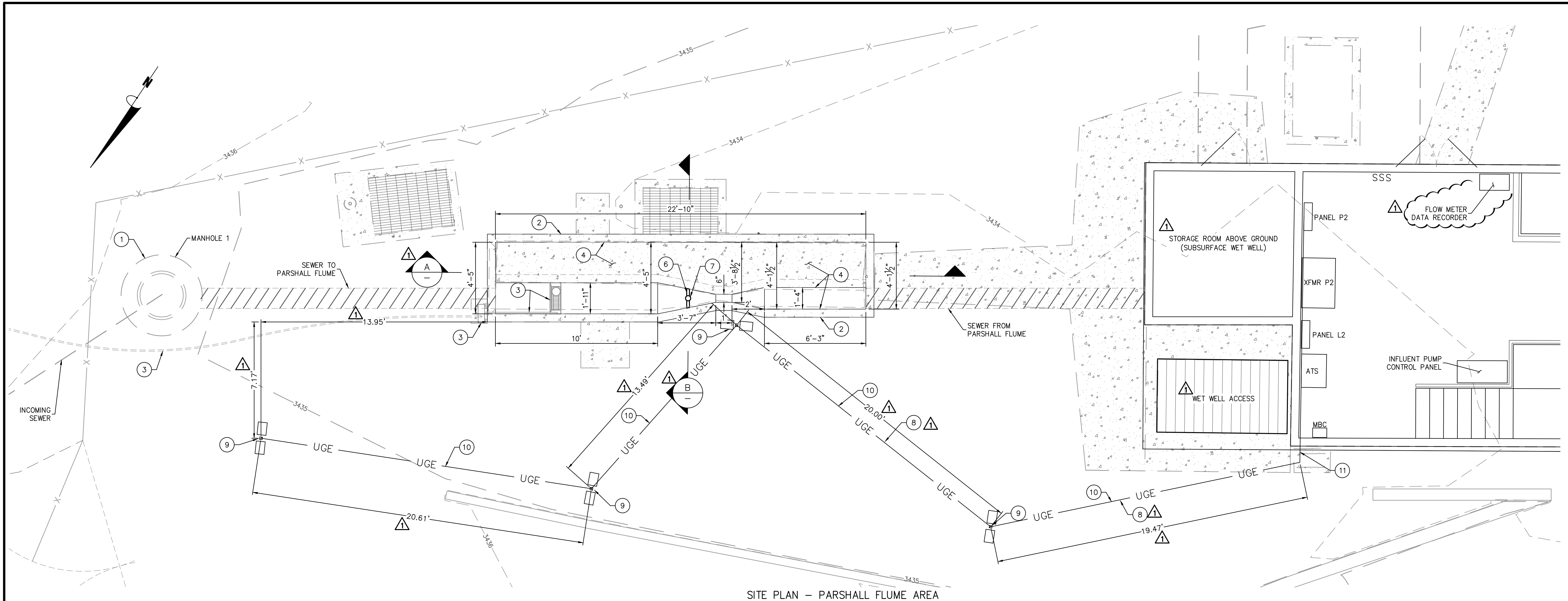
LEGEND



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TOWN OF CLIFTON
WASTEWATER TREATMENT PLANT
PARSHALL FLUME PROJECT
NOTES
GREENLEE COUNTY
CLIFTON, AZ

050535-01-001 PROJECT NUMBER		
EXPIRES 6/30/22		
PLAN STATUS		
2/17/2020 ADDENDUM #1		
DATE	DESCRIPTION	
CMC DESIGN	DCS DRAWN	CMC CHKD
SCALE	H: NA V: NA	
JOB No. 050535-01-001		
DATE : FEBRUARY 17, 2020		
SHEET 2 OF 3		

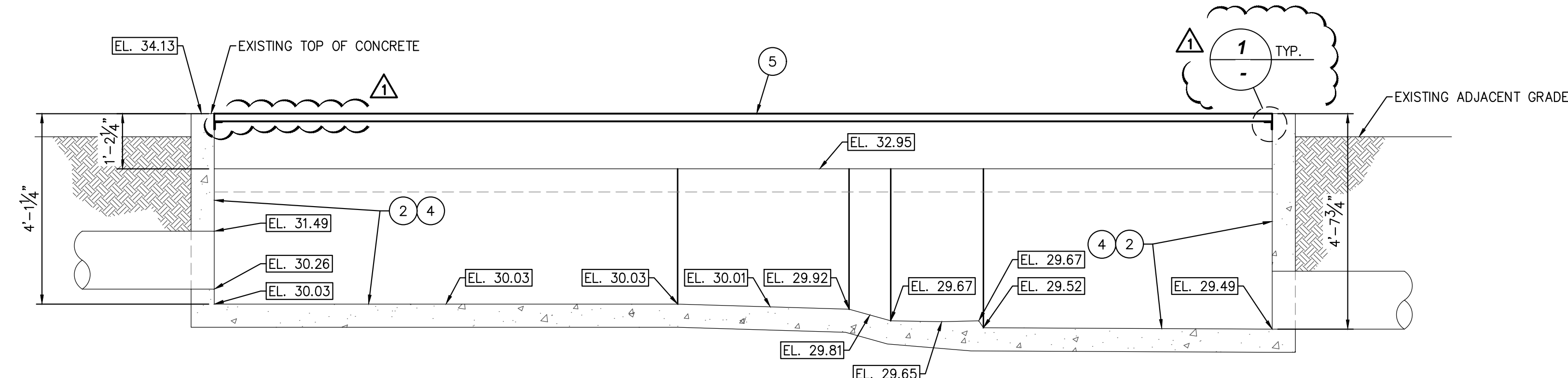


SITE PLAN - PARSHALL FLUME AREA

SCALE: 1" = 3'-0"

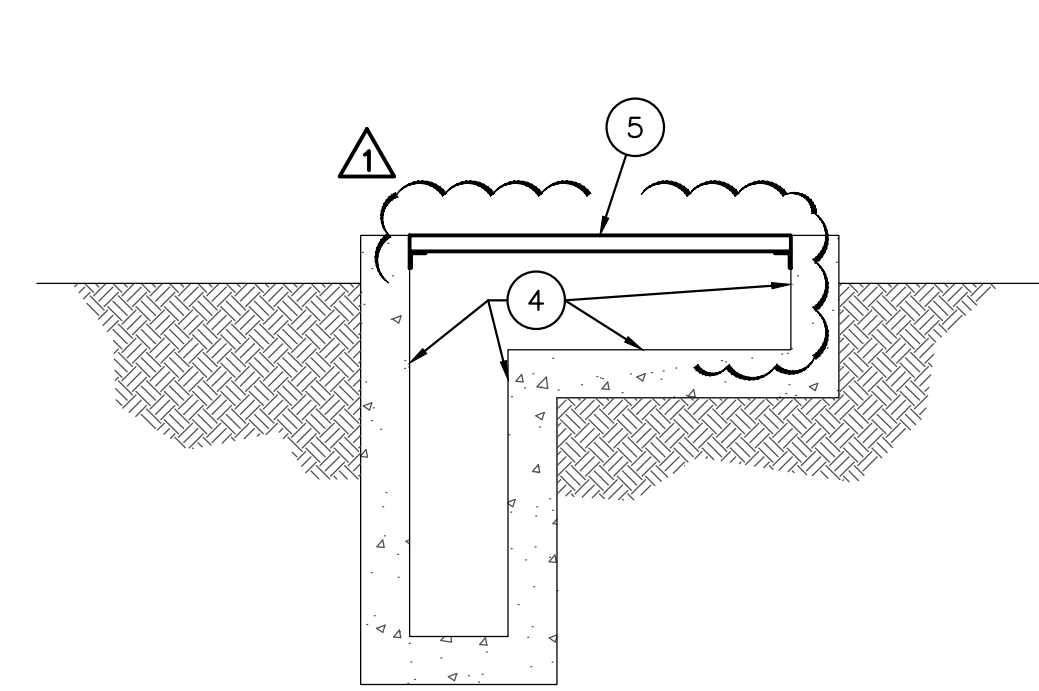
CONSTRUCTION NOTES

- 1 INSTALL TEMPORARY SEWER BY-PASS PUMP AND ASSOCIATED PIPE TO PUMP SEWER FROM EXISTING MANHOLE 1 TO THE EXISTING WET WELL. PLUG EXISTING SEWER PIPE BETWEEN EXISTING MANHOLE 1 AND THE EXISTING PARSHALL FLUME AT THE OUTLET OF EXISTING MANHOLE 1. CONTRACTOR SHALL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE TEMPORARY BY-PASS SEWER PUMP AND ASSOCIATED PIPING DURING THE EXTENT OF THE PROJECT. CLEAN THE EXISTING PARSHALL FLUME CHANNEL TO ELIMINATE ALL FOREIGN MATERIAL FROM THE EXISTING CONCRETE WALLS, AND UPPER AND LOWER BASES.
- 2 EXISTING PARSHALL FLUME STRUCTURE
- 3 REMOVE AND SALVAGE EXISTING MUFFIN MONSTER FOR REINSTALLATION PRIOR TO COATING CONCRETE, CONTROL PANEL AND ELECTRICAL CONDUIT TO BE PROTECTED IN PLACE. MUFFIN MONSTER SHALL BE REINSTALLED UPON COMPLETION OF CONCRETE COATINGS AND BEFORE THE PARSHALL FLUME IS PLACED BACK INTO SERVICE.
- 4 THE EXISTING PARSHALL FLUME INTERIOR SHALL BE STRIPPED AND COATED WITH THE COATING SYSTEM SPECIFIED IN THE MATERIAL NOTES ON SHEET 2. ALL COATINGS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODES.
- 5 REMOVE EXISTING PARSHALL FLUME COVER AND INSTALL NEW ALUMINUM GRATING. GRATING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 11201, PART 2.03 AS SHOWN ON SHEET 2 OF THESE PLANS. GRATING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 6 INSTALL NEW 316SS BRACKET FOR FLOW METER SENSOR.
- 7 INSTALL NEW GREYLINE OCF 5.0 OPEN CHANNEL FLOW SENSOR, OR APPROVED EQUAL.
- 8 INSTALL NEW 1" DIA. CONDUIT FOR FLOW SENSOR. CONNECT TO BUILDING. INSTALL SENSOR CONDUIT IN THE SAME TRENCH AS SITE LIGHTING CONDUIT WHERE POSSIBLE.
- 9 INSTALL NEW 30" HIGH FIBERGLASS TAPERED LIGHT POLES WITH A CONCRETE BASE. LIGHT FIXTURES SHALL BE 2 EACH PHILIPS GARDCO GULWING LED GL18 LIGHTS MOUNTED 180 DEGREES AND EACH LIGHT FIXTURE SHALL ALSO INCLUDE A PHOTOCELL. COORDINATE WITH ELECTRICAL PLANS BY OTHERS.
- 10 INSTALL NEW 1" DIA. CONDUIT FOR SITE LIGHTING. COORDINATE WITH ELECTRICAL PLANS BY OTHERS.
- 11 TRANSITION TO ABOVE GROUND, PENETRATE WALL, PLACE CONDUIT HIGH ON INSIDE WALL.



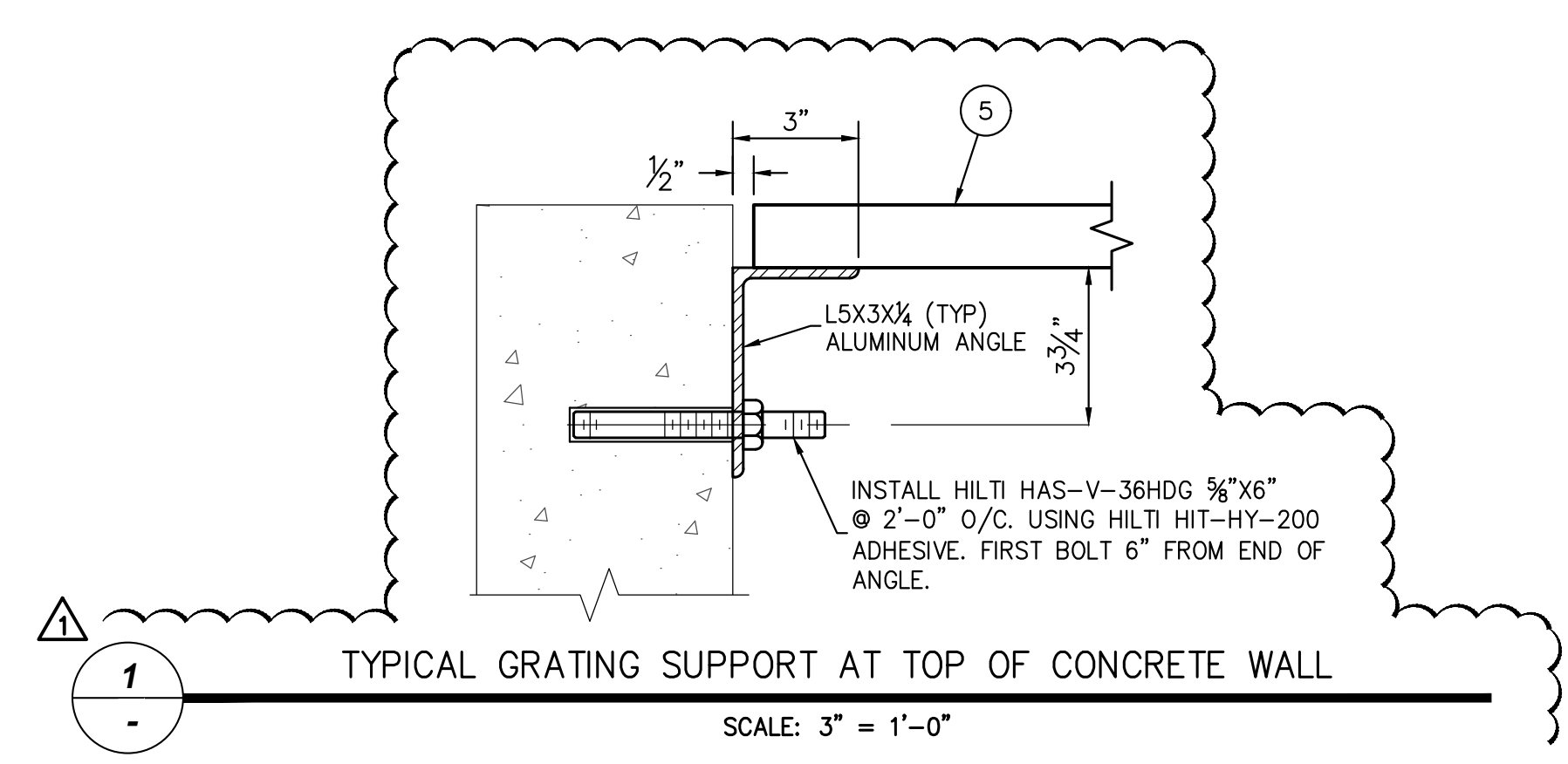
PARSHALL FLUME SECTION

SCALE: 1/2" = 1'-0"



SECTION B

SCALE: 1/2" = 1'-0"



TYPICAL GRATING SUPPORT AT TOP OF CONCRETE WALL

SCALE: 3" = 1'-0"