LITTLE PAPIO CREEK LEVEE/CHANNEL CULVERTS CONSTRUCTION PROJECT (GROUP A CULVERTS) DOUGLAS COUNTY, NEBRASKA

BID LETTING DATE: 24 February 2022

19 February 2022

This Addendum is issued to modify, explain or correct the original Drawings and Specifications (collectively referred to as Construction Documents.), and is hereby made a part of the project to be bid. Please attach this Addendum to the Construction Documents in your possession. **Insert the number and issue date of this Addendum in the blank space provided on the Bid Form.** 

# **DRAWINGS**

- A. <u>General Notes (Sheet A.2)</u> An updated General Notes (Sheet A.2) document is included with this addendum. Updates to noted section include addition of **General Note #42**"TREE REMOVAL CANNOT OCCUR BETWEEN JUNE 1<sup>ST</sup> AND JULY 31<sup>ST</sup> and General Note #43 "PRESSURE TESTING OF REHABILITATED JOINTS IN EXISTING RCP CULVERTS WILL NOT BE REQUIRED AFTER REHABILITATION IS COMPLETED."
- B. Quantities (Sheet A.3-B) An updated Quantities (Sheet A.3-B) document is included with this addendum. Updates to noted section include change of bid item **2.087** from **48" DIA MANHOLE** to **54" DIA MANHOLE** to correspond to the information shown on the plan and profile sheet for culvert LP-L26.
- C. <u>Details (Sheet D.3)</u> Detail 2-D.3 callout for trail material type shall be modified to state "PROPOSED 6" THICK **L65 1PF** CONCRETE" and not L65M. An updated Sheet D.3 is attached.

## **SPECIFICATIONS:**

- A. <u>Bid Form</u> An updated Bid Form document is included with this addendum. Please replace Bid Form document with the included document, which matches the corrected bid item list provided on the quantities table of the construction drawings.
- B. <u>Section 02275 Riprap</u> An updated specification section is included with this addendum. Please replace this section with the included documents which has adjustments to Section 1.4B. Soundness Testing QA, and Section 2.1.F Soundness Loss and Combined Loss. Section 2.1.G. Allowable Quarries has been added to this section.
- C. <u>Section 02240 Dewatering</u> An updated specification section is included with this addendum. Please replace this section with the included documents which has adjustments to Section 1.1 Summary, and addition of Section 3.1.E Temporary Flow Passage System.

# **CLARIFICATIONS:**

- A. Trail Damage by Contractor Site access routes are shown to be on trail that is not included in the quantities for "Trail Removal and Replacement". The PMRNRD expects damage trail and will pay the contractor for removing and replacing damaged trail if it is determined necessary/unavoidable by the project engineer.
- B. Damage to Existing Degraded Pavement Surfacing The condition of degraded pavement/trail shall be documented by the contractor with videos/photos prior to site mobilization. The engineer will provide documentation for the client. Degraded pavement that is further degraded during the construction project will be required to be removed and replaced. Locations that are determined to be necessary/unavoidable damage will be paid for at the unit bid price established for this work.
- C. A project storage site that may be available for the contractor to store project material/equipment on have been identified in the area shown below. Other areas that are owned by the Papio-Missouri River NRD or City of Omaha park areas (possibly Karen Park) may be utilized as well but further approval will be required by the NRD and City. The contractor will be required for re-establishing these areas after construction to preconstruction conditions at their own expense. This may include, but is not limited to site grading, seeding/erosion control blanket, fencing repair, and pavement repair. The areas that will be utilized by the contractor must be approved prior to construction. The owner of these locations shall assume no liability for damages/theft/misuse of any items stored in these locations.



# **GENERAL NOTES:**

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF OMAHA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2020 EDITION EXCEPT AS MODIFIED BY THE DETAILED NOTES AND SPECIFICATIONS. IF A CONFLICT EXISTS BETWEEN THE CITY OF OMAHA STANDARD SPECIFICATIONS AND THE DETAILED NOTES THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- 2. THE LOCATIONS OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES ARE APPROXIMATE OR MAY NOT BE INDICATED IN THESE PLANS. UNDERGROUND FACILITIES, WHETHER INDICATED OR NOT, SHALL BE LOCATED AND FLAGGED BY THE CONTRACTOR AND UTILITY COMPANIES 48 HOURS BEFORE WORK IS STARTED. VERIFY UTILITY LOCATIONS BY CONTACTING THE NEBRASKA DIGGERS HOTLINE (ONLINE AT WWW.NE1CALL.COM AND/OR CALL 800-331-5666 OR 811). THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY AND COORDINATE ALL NECESSARY UTILITY SERVICE INTERRUPTIONS WITH THE OWNERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, PAVEMENT, STRUCTURES, FENCES, POLES, SIGNS, TREES, IRRIGATION LINES, SPRINKLER HEADS, SUB- DRAINS AND OTHER IMPROVEMENTS NOT DESIGNATED FOR REMOVAL. ANY DAMAGE CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 3. THE COMMUNICATION UTILITY LINES INCLUDE TELEPHONE, INTERNET AND CABLE, SOME OF WHICH ARE FIBER OPTIC LINES.
- 4. CONTOURS SHOWN ON THE PLANS ARE 2' CONTOURS FROM LIDAR AND SURVEYED DATA. ELEVATIONS CALLED OUT ON THE PLANS ARE REFERENCED TO NAVD 88 VERTICAL DATUM. HORIZONTAL CONTROL IS NAD83 NEBRASKA STATE PLANE.
- 5. CONTRACTOR SHALL LIMIT CONSTRUCTION OPERATIONS WITHIN THE CONSTRUCTION LIMITS SHOWN ON PLANS. CONTRACTOR TO DEVELOP SCHEDULE, STAGING PLAN AND FINAL LIMITS OF CONSTRUCTION AFTER BID IS AWARDED. PLAN MUST BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION BEGINNING.
- 6. ALL RUBBLE/DEBRIS FROM CONSTRUCTION ACTIVITIES MUST BE REMOVED FROM THE SITE UPON PROJECT COMPLETION. REMOVAL SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY SMOOTHING COMPACTED SOILS PRIOR TO FINISHED GRADING, SEEDING AND MULCHING, OR SODDING WITH SPECIFIED MIX AND METHODS. DISTURBED AREAS SHALL RECEIVE EROSION CONTROL BLANKET.
- 7. THE CONTRACTOR SHALL NOT ALLOW THE PONDING OF WATER WITHIN THE CONSTRUCTION AREA AT ANY TIME. MAINTAIN ALL EXISTING DRAINAGE PATTERNS.
- 8. THE CONTRACTOR SHALL CONDUCT ALL OPERATIONS AND MAINTAIN CONSTRUCTION WORK AREA IN A SAFE MANNER IN ACCORDANCE WITH OSHA COMPLIANCE.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL TEMPORARY MARKERS, LIGHTS, SIGNS, FLAGMEN, BARRICADES AND OTHER PROTECTIVE DEVICES CONFORMING TO THE CITY OF OMAHA BARRICADING STANDARDS MANUAL AS REQUIRED. THE OWNER WILL PROVIDE THE CONTRACTOR WITH TWO (2) TRAIL CLOSURE SIGNS THAT CAN BE USED AS THE CONTRACTOR WISHES. IF MORE SIGNS ARE REQUIRED AT ONE TIME, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE ADDITIONAL TRAIL CLOSURE SIGNS AT NO ADDITIONAL COST. THE CONTRACTOR MUST PROVIDE THE SIGNS BACK TO THE OWNER UPON PROJECT COMPLETION IN THE SAME CONDITION THAT THEY WERE IN WHEN ORIGINALLY PROVIDED TO CONTRACTOR. ANY SIGNS THAT HAVE BEEN DAMAGED WILL REQUIRE FULL REPLACEMENT.
- 10. CONTRACTOR TO ATTEND THE PRE-CONSTRUCTION CONFERENCE WITH OWNER, ENGINEER, AND OTHER PROJECT STAKEHOLDERS.
- 11. SWPPP TO BE IMPLEMENTED AS DESIGNED. CONTRACTOR IS RESPONSIBLE FOR CLEAN OUT AND MAINTENANCE OF ALL SWPPP ITEMS UNTIL VEGETATIVE COVER HAS BEEN SUFFICIENTLY ESTABLISHED AS DETERMINED BY THE FIELD ENGINEER. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DEVICES.
- 12. CONTRACTOR MUST ADHERE TO THE REQUIREMENTS OF THE 404 PERMIT GRANTED BY THE UNTIED STATES ARMY CORPS OF ENGINEERS FOR THIS PROJECT. A COPY OF THE REQUIREMENTS WILL BE PROVIDED TO THE SELECTED CONTRACTOR, OR UPON REQUEST.
- 13. ELECTRONIC GRADING FILES CAN BE PROVIDED UPON REQUEST FROM ENGINEER.
- 14. STORM SEWER LENGTHS OF PIPE MAY VARY ACCORDINGLY
- 15. BACKFILL SHALL BE COMPACTED AS SHOWN IN THE COMPACTION REQUIREMENTS TABLE (SEE SPECIFICATIONS). ALL BACKFILL SHALL BE CLASS "A" MATERIAL
- 16. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS IV PIPE CONFORMING TO ASTM C76 AND AASHTO M170, WALL B.
- 17. CONCRETE FOR STORM SEWER STRUCTURES SHALL BE L75 (CITY OF OMAHA STANDARD SPECIFICATIONS 2014) USING TYPE II PORTLAND CEMENT. THE CEMENT FOR MANHOLE GROUT SHALL BE THE SAME AS THAT FOR MANHOLE CONCRETE AND SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- 18. ALL PIPE SHALL BE BEDDED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS AND THE SPECIFICATIONS.
- 19. THE ENGINEER/INSPECTOR MUST ENSURE ALL STORM SEWER PIPE USED FOR CONSTRUCTION HAS BEEN CERTIFIED BY AMERICAN CONCRETE PIPE ASSOCIATION (ACPA). ALL PIPE MUST DISPLAY THE Q-CAST SYMBOL TO VERIFY THE MANUFACTURER HAS MET THE ACPA'S CERTIFICATION PROGRAM. VISUAL INSPECTIONS FOR DEFECTS SHALL CONTINUE TO TAKE PLACE ON THE SITE
- 20.ALL STORM SEWER JOINTS SHALL BE CONSTRUCTED WITH ASTM C443 CONFINED SOLID O-RING ASTM C361 PIPE JOINTS WITH GASKETS.
- 21.ALL NEW RCP JOINTS UNDER EMBANKMENTS SHALL BE TESTED IN ACCORDANCE WITH USACE ENGINEERING MEMORANDUM (EM) 1110-2-2902 FOR LEAKAGE BY USING A JOINT TESTER. TESTS SHOULD INCLUDE HYDROSTATIC PRESSURE TESTS ON ALL CONCRETE PIPE JOINTS TO BE PERFORMED BY THE CONTRACTOR AFTER THE PIPE HAS BEEN BEDDED AND PRIOR TO PLACING ANY BACKFILL. JOINTS ARE REQUIRED TO WITHSTAND AN INTERNAL PRESSURE OF 13 PSI FOR A DURATION OF 20 MINUTES PER JOINT. FAILED JOINTS WILL BE DISASSEMBLED AND ALL INFERIOR ELEMENTS WILL BE REPLACED.
- 22.ALL NEW FLAP GATES SHALL BE HANSON, TYPE A FLAP GATES UNLESS SPECIFIED DIFFERENTLY ON THE PLAN AND PROFILE SHEETS. ALL FLAP GATES THAT REQUIRE RECONDITIONING SHALL BE REMOVED, CLEANED, SAND BLASTED, PAINTED, REPAIRED, AND REINSTALLED PER THE HANSON'S SPECIFICATIONS. PAINT SHALL CONFORM TO USACE EM 1110-2-3400 OR USACE ERDC/CHL CHETN-1X-43.
- 23.ANY SOIL BROUGHT IN FROM OFF SITE MUST BE OBTAINED FROM AN APPROVED LOCATION THAT DOES NOT AFFECT WETLANDS, T&E SPECIES, OR CULTURAL/HISTORICAL RESOURCES. PRIOR TO DELIVERING EARTHWORK TO ANY PROJECT SITES, THE CONTRACTOR MUST PROVIDE BUCKETS OF THE PROPOSED BORROW MATERIAL TO THE ENGINEER FOR PROCTOR AND ATTERBERG TESTING TO ENSURE MATERIAL IS ACCEPTABLE. THESE TESTS MAY TAKE UP TO TWO (2) WEEKS TO PERFORM.
- 24.DELINEATED WETLANDS ARE SHOWN ON THE PLANS. CONTRACTOR SHALL LIMIT ALL CONSTRUCTION ACTIVITIES FROM ENCROACHING UPON WETLAND AREAS, EXCEPT LOCATIONS SPECIFICALLY DESIGNATED IN THE CONSTRUCTION DRAWINGS. WETLAND AREAS THAT ARE TEMPORARILY DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RESTORED AND RESEEDED WITH THE WETLAND SEEDING MIX AS DETAILED IN THE PROJECT SPECIFICATIONS. THE USE OF MATS OR OTHER MEASURES WILL BE PLACED UNDERNEATH HEAVY EQUIPMENT TO MINIMIZE SOIL DISTURBANCE IN WETLANDS.
- 25.EXCAVATED MATERIAL CAN BE PLACED IN THE DESIGNATED STOCKPILE LOCATIONS (SHOWN ON THE PLANS) FOR REUSE OR HAULED OFFSITE. STOCKPILED MATERIAL SHOULD NOT EXCEED 10 FT IN HEIGHT AND SHALL HAVE SIDE SLOPES OF 3H:1V MAXIMUM. STOCKPILED AREAS THAT ARE EXPECTED TO NOT BE USED WITHIN 14 DAYS SHALL BE SEEDED AND SURROUNDED BY SILT FENCE.
- 26.THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY PAVING, CONCRETE TRAIL, CRUSHED ROCK SURFACING, OR GRASSED SURFACE THAT MAY BE DAMAGED DURING THE CONTRACTOR'S USE OF THESE AREAS DURING CONSTRUCTION. REPAIR SHALL BE INCIDENTAL TO THE PROJECT, EXCEPT FOR AREAS SPECIFICALLY CALLED OUT ON THE CONSTRUCTION DRAWINGS.
- 27.THE QUANTITIES SHOWN FOR SEEDING, MULCHING, AND SODDING INCLUDE ALL NON-PAVED AREAS WITHIN THE LIMITS OF CONSTRUCTION AND DOES NOT ACCOUNT FOR ANY AREA THAT IS DISTURBED OUTSIDE THE LIMITS OF CONSTRUCTION. DISTURBED AREAS OUTSIDE THE LIMITS OF CONSTRUCTION MUST BE RESTORED, SEEDED, AND MULCHED AND WILL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 28.EROSION CONTROL IS A LUMP SUM PAYMENT. CONTRACTOR IS RESPONSIBLE FOR CLEAN OUT AND MAINTENANCE OF ALL SWPPP ITEMS AND REMOVAL ONCE ENGINEER'S APPROVAL IS PROVIDED.
- 29.THE GRADES, ELEVATIONS, DIMENSIONS, LOCATIONS AND FIELD MEASUREMENTS OR ANY DRAWINGS OR SPECIFICATIONS ISSUED BY THE ENGINEER, OR THE WORK INSTALLED BY OTHER CONTRACTORS, ARE NOT GUARANTEED BY THE ENGINEER OR THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL GRADES, ELEVATIONS, DIMENSIONS, LOCATIONS AND FIELD MEASUREMENTS. IN ALL CASES OF THE INTERCONNECTION OF ITS WORK WITH EXISTING OR OTHER WORK, THE CONTRACTOR SHALL VERIFY AT THE SITE ALL DIMENSIONS RELATING TO SUCH EXISTING OR OTHER WORK. ANY ERRORS DUE TO CONTRACTOR'S FAILURE TO VERIFY ALL SUCH GRADES, ELEVATIONS, DIMENSIONS, LOCATIONS, OR FIELD MEASUREMENTS SHALL BE PROMPTLY RECTIFIED BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COSTS TO THE OWNER OR EXTENSIONS OF CONTRACT TIMES.

- 30. TEMPORARY FLAP GATES, OR ENGINEER APPROVED EQUAL CLOSURE SYSTEM, SHALL BE PLACED ON EACH OPEN CULVERT THAT HAD A FLAP GATE ORIGINALLY AT THE END OF EVERY WORKING DAY TO ENSURE THAT THE AREA IS PROTECTED FROM FLOODING DURING HIGH WATER EVENTS. THIS SHALL BE CONSIDERED INCIDENTAL TO OVERALL PROJECT CONSTRUCTION.
- 31.ALL CONCRETE FOR CONCRETE PAVEMENT AND TRAIL SHALL MEET THE REQUIREMENTS OF SECTION 500-CITY OF OMAHA STANDARD SPECIFICATIONS (2020) FOR PCC PAVEMENT: AND PCC SIDEWALK, PCC RECREATIONAL TRAIL, MOW STRIP, AND MEDIAN SURFACING.
- 32.GROUT USED TO FILL IN VOIDS UNDER THE EXISTING PIPES/CULVERTS SHALL UTILIZE THE SAME GROUT MIX THAT IS LISTED IN THE SPECIFICATIONS SECTION 02722 FOR HDPE PIPE REHABILITATION GROUT.
- 33.PRIOR TO THE START OF CONSTRUCTION, THE FIELD REPRESENTATIVE WILL INSPECT THE PORTIONS OF THE CONCRETE TRAIL THAT ARE NOT BEING REMOVED DURING CONSTRUCTION AND WILL DOCUMENT AREAS OF EXISTING TRAIL THAT ARE CRACKED OR DEGRADED WITH PHOTOS AND SURVEYED LOCATION. ANY AREAS OF TRAIL THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE COST OF THE CONTRACTOR. EXCEPT FOR AREAS THAT WERE PREVIOUSLY NOTED AS DAMAGED BY THE FIELD REPRESENTATIVE.
- 34.OVER-EXCAVATION MAY BE REQUIRED AT LOCATIONS WHERE NEW PIPE IS BEING PLACED IF UNSUITABLE BEDDING MATERIAL IS DISCOVERED DURING EXCAVATION. ANY OVER-EXCAVATION THAT MAY BE REQUIRED WILL BE QUANTIFIED IN THE FIELD AND PAID AT THE BID UNIT PRICE FOR EXCAVATION.
- 35. TOPSOIL SHALL BE REMOVED BEFORE CONSTRUCTION ACTIVITIES COMMENCE AND REPLACED IMMEDIATELY AFTERWARD. STRIP, STOCKPILE, AND REPLACE TOPSOIL (6") IN EXCAVATION AREAS AND AREAS WHERE EXISTING GROUND WILL BE DISTURBED BY CONSTRUCTION ACTIVITIES.
- 36. PIPE LENGTHS ARE SHOWN TO THE CENTERLINE OF THE MANHOLE AND THE INTERSECTION OF TWO PIPES WHEN A BEND IS CALLED OUT. AS CONTRACTORS RECEIVE SHOP DRAWINGS FOR BENDS, THE LENGTH OF EACH ARM OF THE BEND MAY BE SUBTRACTED FROM THE TOTAL PIPE LENGTH TO DETERMINE THE TOTAL AMOUNT OF MATERIAL THAT IS REQUIRED FOR CONSTRUCTION.
- 37.TO AVOID DAMAGE TO SANITARY SEWER LINES, STOCKPILE AND WORK STAGING AREAS SHALL NOT OCCUR ABOVE OR ON-TOP OF EXISTING SANITARY SEWER LINES AS DEPICTED. LOCATIONS PROVIDED IN CONSTRUCTION DRAWINGS ARE APPROXIMATE.
- 38.EMBANKMENT FILL QUANTITY ASSUMES A 1.4 FILL FACTOR TO ACCOUNT FOR PLACEMENT AND COMPACTION. SITES MAY REQUIRE ADDITIONAL EMBANKMENT FROM AN OUTSIDE BORROW SOURCE TO MATCH EXISTING GRADE AND/OR THE GRADING PROVIDED IN THE PLANS.
- 39.THE CONTRACTOR WILL SUBMIT A CONSTRUCTION SCHEDULE FOR EACH PENETRATION/SITE PRIOR TO BEGINNING WORK SO THAT COORDINATION WITH LANDOWNERS CAN OCCUR
- 40.ALL PAVING, CURB AND GUTTER, AND CONCRETE TRAIL SHOWS AS BEING REMOVED AND REPLACED WILL ONLY BE COMPLETED IF THE MATERIAL IS DAMAGED DURING CONSTRUCTION ACTIVITIES.
- 41.ALL CMP SHALL MEET THE REQUIREMENTS OF 02722 SITE STORM SEWERAGE SYSTEMS, SETION 2.1.C. PIPE BEDDING SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THESE PLANS. GRANULAR BEDDING WILL NOT BE PERMITTED.
- 42.TREE REMOVAL CANNOT OCCUR BETWEEN JUNE 1ST AND JULY 31ST.
- 43. PRESSURE TESTING OF REHABILITATED JOINTS IN EXISTING RCP CULVERTS WILL NOT BE REQUIRED AFTER REHABILITATION IS COMPLETED.

# TRAIL COORDINATION NOTES:

- 1. IF TRAIL CLOSURE IS REQUIRED FOR A DURATION GREATER THAN 30 MINUTES, THE CLOSURE MUST BE COORDINATED WITH THE PROJECT ENGINEER. 2 WEEKS PRIOR TO CLOSURE THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER TIMES AND DURATIONS OF EXPECTED CLOSURES SO THAT A PUBLIC NOTICE CAN BE ISSUED. CONTRACTOR SHALL ALSO PROVIDE TRAIL CLOSURE SIGNS ½ MILE UPSTREAM AND DOWNSTREAM OF TRAIL CLOSURE AND BARRICADES AT THE CLOSURE LOCATIONS. TRAIL DETOUR SIGNS MAY BE REQUIRED IF PROJECT ENGINEER DETERMINES AN APPROPRIATE AND SAFE DETOUR ROUTE. IF TRAIL IS
- BEING UTILIZED FOR TEMPORARY VEHICLE/EQUIPMENT SITE ACCESS ONLY, FLAGMAN AND BARRICADES MUST BE PROVIDED. THIS WILL BE CONSIDERED INCIDENTAL TO THE PROJECT

# **HDPE PIPE NOTES:**

- 1. STORM SEWER REHABILITATION USING SLIPLINING METHODS SHALL FOLLOW PROJECT SPECIFICATION SECTION 02722 SITE STORM SEWERAGE SYSTEMS AND UFGS 33 01 98 SLIPLINING OF EXISTING PIPE. IN THE CASE OF A CONFLICT. THE MORE STRINGENT REQUIREMENT WILL GOVERN.
- 2. THE CONTRACTOR SHALL REHABILITATE EXISTING STORM SEWER, IN-SITU, WITH SNAP-TITE OR ENGINEER APPROVED EQUAL AT THE LOCATIONS AND SIZES SHOWN IN THE PLANS.
- 3. ALL PIPES USED FOR IN-SITU REHABILITATION SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE CONFORMING TO ASTM D3350 AND ASTM F714.
- 4. IN-SITU REHABILITATION SHALL CONFORM TO ASTM F585 AND INDUSTRY STANDARD FOR CULVERT RELINING. AASHTO M326.
- 5. PRIOR TO IN-SITU REHABILITATION, ALL EXISTING PIPES SHALL BE CLEANED AND JETTED IF NECESSARY.
- 6. IN ADDITION TO THESE PLANS, THE CONTRACTOR SHALL COMPLY WITH SPECIFIC MANUFACTURER REQUIREMENTS FOR IN-SITU
- 7. AFTER THE HDPE PIPE IS INSTALLED, THE CONTRACTOR SHALL CONSTRUCT A BULKHEAD, MADE OF LOW STRENGTH CONCRETE AT EACH END OF THE PIPE EXTENDING 12" TO 18" INTO THE HOST PIPE. THE CONTRACTOR SHALL CONSTRUCT PVC GROUT PORTS AT EACH END OF THE PIPE AS SHOWN IN DETAIL 1 ON SHEET D.7.
- 8. AFTER THE BULKHEADS HAVE BEEN CONSTRUCTED, THE CONTRACTOR SHALL GROUT THE ANNULAR SPACE BETWEEN THE HDPE PIPE AND THE HOST PIPE AS DETAILED IN THE SPECIFICATIONS.
- 9. THE CONTRACTOR SHALL DEVELOP A GROUTING PLAN TO ENSURE THAT GROUT REACHES AND FILLS ALL ANNULAR SPACE BETWEEN THE HOST PIPE AND THE HDPE PIPE. CONTRACTOR SHALL SUBMIT GROUT PLAN TO THE ENGINEER FOR REVIEW.
- 10. GROUT PRESSURE SHALL NOT EXCEED 2 PSI.
- 11.PVC GROUT PORT TUBES SHALL NOT BE PERMANENTLY ATTACHED TO THE HDPE LINER PIPE.
- 12. THE CONTRACTOR SHALL LABEL GROUT PORTS AND VENT PORTS IN THE FIELD.
- 13.IN-SITU REHABILITATION SHALL INCLUDE ALL BULKHEADS, PORTS, INSTALLATION RAIL, HDPE PIPE AND GROUT. ALL EQUIPMENT, TOOLS AND WORK ASSOCIATED IS CONSIDERED INCIDENTAL TO SLIPLINING AND GROUTING.
- 14.PROVIDE 72 HOUR NOTICE TO THE ENGINEER PRIOR TO PLACING LINER PIPE[S]. DO NOT PROCEED WITH SLIP LINING OPERATIONS FOR PIPE[S] THAT ARE LIKELY TO REACH GAUGE OPERATION ELEVATION WITHIN 5 DAYS AS FORECAST BY THE NATIONAL WEATHER SERVICE. LAY OUT THE SEQUENCING OF WORK TO MINIMIZE WORK STOPPAGES AS A RESULT OF HIGH WATER. ADDITIONALLY AFTER LINER PIPE HAS BEEN PLACED, MAKE ALL REASONABLE ATTEMPTS TO GROUT THE ANNULUS PRIOR TO PARTIAL OR TOTAL SUBMERGENCE OF THE PIPE. IN THE EVENT IN WHICH HIGH WATER SUBMERGES A PORTION OF A LINED PIPE PRIOR TO ANNULAR GROUTING, CLEAN OUT THE ANNULAR SPACE USING HIGH PRESSURE WATER JETTING PRIOR TO GROUTING.

# **ABBREVIATIONS:**

- COVER FLEVATION CCCP -CENTRIFUGALLY CAST CONCRETE PIPE CIPP -CURED-IN-PLACE-PIPE CES - CUBIC FEET PER SECOND - CENTERLINE - CUBIC YARD CY - CENTER-TO-CENTER - CORRUGATED METAL PIPE - DIAMETER - ELEVATION - FLOWLINE

- GAUGE - HIGH DENSITY POLYETHYLENE I.D. - INSIDE DIAMETER - INVERT ELEVATION - INCH LBS - POUNDS - LINEAR FEET MAX - MAXIMUM

O.C.

O.D.

- FEET

- MINIMUM NAD83 - NORTH AMERICAN DATUM OF 1983 NAVD 88 - NORTH AMERICAN VERTICAL DATUM OF 1988 PMRNRD- PAPIO MISSOURI RIVER NATURAL RESOURCES DISTRICT

- RADIUS - REINFORCED CONCRETE PIPE STA - STATION - SQUARE YARD SWPPP - STORM WATER POLLUTION

PREVENTION PLAN

- OUTSIDE DIAMETER

- ON CENTER

TYP - TYPICAL USGS - UNITED STATES GEOLOGICAL SURVEY - MATCH EXISTING

NEBRASKA 811 (www.ne1call.com) WAS CONTACTED DURING THE PRELIMINARY DESIGN PHASE OF THIS PROJECT. THE LIST OF UTILITIES BELOW WERE LISTED AS HAVING A POSSIBILITY FOR UTILITIES IN THE VICINITY OF THE PROJECT SITES. UTILITIES THAT WERE MARKED WERE SURVEYED BUT ARE SHOWN AS APPROXIMATE LOCATIONS ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES AS NOTED IN GENERAL NOTE #2 ON THIS SHEET.

AT&T CONTACT: DARREN COURT PHONE: 402.203.5583

CENTURYLINK (QWEST) CONTACT: JACK DODENDORF

EMAIL: JACK.DODENDORF@CENTURYLINK.COM PHONE: 402.572.5814 CITY OF BELLEVUE PUBLIC WORKS DEPARTMEN

**CONTACT: JEFF ROBERTS** EMAIL: JEFF.ROBERTS@BELLEVUE.NET PHONE: 402.293.3025

CITY OF OMAHA PUBLIC WORKS DEPARTMENT SEWER MAINTENANCE: 402.444.5332

CITY OF RALSTON PUBLIC WORKS DEPARTMENT CONTACT: DAN FRESHMAN EMAIL: DFRESHMAN@CITYOFRALSTON.COM

COX CABLE CONTACT: TIM HAHN

PHONE: 402.331.4118

PHONE: 402.934.1791

P-MRNRD CONTACT

NAME: MR. MARTIN CLEVELAND, PE

PHONE: 402.315.1707 (DIRECT)

ADDRESS: 8901 S. 154TH STREET

OMAHA, NE 68138

METROPOLITAN UTILITIES DISTRICT (MUD) EMERGENCY LINE: 402.554.7777 GAS & WATER MAINS CONTACT: MASA NIIYA

**LEGEND** 

—— GAS ——— GAS —

--- OHE --- OHE -

MAJOR CONTOUR

MINOR CONTOUR

**GUARDRAIL/FENCE** 

SANITARY SEWER

WETLAND AREA

ACCESS ROUTE

STOCKPILE AREA

**EXCAVATION AREA** 

LEVEE TOE AND TOP

PARCEL BOUNDARY LINE

**OVERHEAD ELECTRIC** 

GAS UTILITY

LIMITS OF CONSTRUCTION

COMMUNICATION UTILITY

PHONE: 402.504.7913 NORTHERN NATURAL GAS PIPELINE EMERGENCY: 888.367.6671 CONTACT: KYLE BENCKER

EMAIL: KYLE.BENCKER@NNGCO.COM PHONE: 402.536.8067 LEAD UTILITIES COORDINATOR: BRANT DANGEL

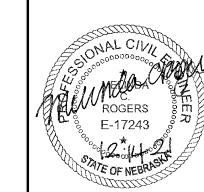
PHONE: 402.636.3918 EMAIL: BDANGEL@OPPD.COM ADDITIONAL CONTACT: SHARYL MCGUIRE PHONE: 402.636.2334

UNITE PRIVATE NETWORKS INTERACTIVE LOCATION MAP: HTTP://UNITEPRIVATENETWORKS.COM/INTERACTIVE-MAP/ PHONE: 816.903.9400

WINDSTREAM COMMUNICATIONS CONTACT: DAVID ACKERMAN EMAIL: DAVID.F.ACKERMAN@WINDSTREAM.COM PHONE: 319.790.1464



**ENGINEER'S SEAL** 



**REVISIONS** 

NO. DATE

DESIGNED BY: DRAWN BY: QA / QC BY: PROJECT NO.: DATE:

001-19-07

12.14.2021

| GENERAL NOTES

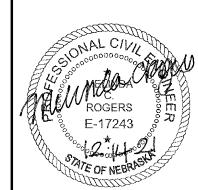
**FYRA ENGINEERING CONTACT** NAME: LINDY ROGERS, PE PHONE: 402.934.8475 EMAIL: MCLEVELAND@PAPIONRD.ORG EMAIL: LROGERS@FYRAENGINEERING.COM ADDRESS: 12702 WESTPORT PARKWAY SUITE 300 OMAHA, NE 68138

ITEM NO	ITEM DESCRIPTION	SUMMARY TA		JANTITIES LP-L32	S FOR GRO	OUP A CULVE	RTS (NRD)	LP-R08	LP-R33	LP-R37	LP-R47	LP-R65	TOTAL QUANTITY	UNIT
2.002	MOBILIZATION STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION FENCE	1 1	1 682	1 96	1	1	1 1 40	1	1 40	1 1	1	1 1	11 5 858	LS EA LF
2.004	TEMPORARY COFFER DAM		082	90			40	1					1	LS
2.005 2.006	TEMPORARY TRAFFIC CONTROL SWPPP MEASURES	1	1 1	1		1	1 1	1	1 1			1	<u>4</u> 7	LS LS
	DEWATERING CLEARING AND GRUBBING	1	1 1	1	1 1	1 1	1 1	1	1 1	1 1	1	1 1	11 11	LS LS
2.009 2.010	TENSAR TRIAX TS130X GEOGRID  6" CRUSHED ROCK SURFACING	842 561				38	79	196					1155 561	SY SY
2.011	CLEAN AND JET 18" CULVERT	501	78	33	64								175	LF
	CLEAN AND JET 30" CULVERT CLEAN AND JET 42" CULVERT						54		117				54 117	LF LF
	CLEAN AND JET 60" CULVERT  EXCAVATION	360	115	4	4	121	261	61 460	141	225	514	109	61 2314	LF CY
2.016	DEGRADED RIPRAP REMOVAL AT OUTLET	100	200		7	100	200	200	100	100	100	100	1200	CY
	EMBANKMENT EARTHWORK (BORROW)	504 249	161 46	6	6 2	169 48	365 114	644 239	197 56	315 90	720 206	153 44	3240 1096	CY
2.019 2.020	STRIP, STOCKPILE AND REPLACE 6" TOPSOIL REMOVE TREE	298 3	53			70	83	168	188	55	351	134	1400 3	SY EA
2.021	REMOVE DEBRIS	4				1							1	LS
2.022 2.023	REMOVE GUARD RAIL REMOVE 15" DIA CMP CULVERT	1										31	31	LS LF
2.024 2.025	REMOVE 18" DIA CMP CULVERT REMOVE 24" DIA CMP CULVERT	78	19	8	8	68				56		82	117 202	LF LF
2.026	REMOVE 30" DIA CMP CULVERT						15				67		15	LF
2.027 2.028	REMOVE 36" DIA CMP CULVERT REMOVE 48" DIA CMP CULVERT								64		67		67 64	LF LF
2.029 2.030	REMOVE 60" DIA CMP CULVERT REMOVE 42" DIA RCP CULVERT	33						32					32 33	LF LF
2.031	REMOVE CONCRETE COLLAR  REMOVE FLAP GATE FOR 36" DIA CULVERT								1		1		1	EA EA
2.033	REMOVE AND REINSTALL 60" DIA FLARED END SECTION							1			ı		1	EA
2.034 2.035	REMOVE SINGLE TIMBER PILE PIPE SUPPORT REMOVE DOUBLE TIMBER PILE PIPE SUPPORT	1	1 1		1	1	1	1	1	1	<u>  1</u>	1	9	EA EA
2.036 2.037	REMOVE AND REPLACE 4" CONCRETE SIDEWALK REMOVE AND REPLACE 6" CONCRETE TRAIL		146 333			SEE LP-L37							146 333	SF SF
2.038	REMOVE AND REPLACE CONCRETE PAVEMENT		577			OLL LI -L37							577	SF
2.039 2.040	REMOVE AND REPLACE COMBINATION CURB AND GUTTER REMOVE AND REPLACE ASPHALT PAVEMENT		30				225					1500	30 1725	LF SF
2.041 2.042	REMOVE AND REPLACE CHAIN LINK FENCE REMOVE AND RESET GUARDRAIL						20					50	50 20	LF LF
2.043	GROUT TO FILL VOIDS						20	6					6	CY
	FLOWABLE FILL FOR PIPE ABANDONMENT TYPE I AREA INLET TOP	1		2	4								6 1	CY EA
	TAP EXISTING AREA INLET TAP EXISTING INLET	1				1				3	1	1	6	EA EA
2.048	18" DIA CMP		19							50		407	19	LF
2.049 2.050	24" DIA CMP 30" DIA CMP	93				68	20			56		107	324 20	LF LF
	36" DIA CMP								58		67		67 58	LF LF
	60" DIA CMP 18" DIA CMP BEND		1					32					32	LF EA
2.055	24" DIA CMP BEND		ı			2				2		2	6	EA
	30" DIA CMP BEND 36" DIA CMP BEND						1				1		1	EA EA
	48" DIA CMP BEND 60" DIA CMP BEND							1	2				2	EA EA
2.060	4" DIA PVC							'		120			120	LF
	6" DIA PVC   8" DIA PVC									395 200			395 200	LF LF
2.063 2.064	10" DIA PVC 45° ELBOW FOR 4" PVC									227 36			227 36	LF EA
2.065	30° ELBOW FOR 10" PVC									1			1	EA
2.067	90° ELBOW FOR 6" PVC 6" PVC TEE									10			2 10	EA EA
2.068 2.069	8" PVC TEE 10" PVC TEE									5 5			5 5	EA EA
2.070	6" PVC TEE WITH SIDE INLET 4" TO 6" PVC REDUCER									1 10			1 10	EA EA
2.072	4" TO 8" PVC REDUCER									4			4	EA
2.074	4" TO 10" PVC REDUCER 6" TO 8" PVC REDUCER									1			1	EA EA
	8" TO 10" PVC REDUCER 4" PVC DOWNSPOUT ADAPTER									1 18			1 18	EA EA
2.077	6" PVC CLEANOUT ADAPTER W/ PLUG									4			4	EA
2.079	8" PVC CLEANOUT ADAPTER W/ PLUG 10" PVC CLEANOUT ADAPTER W/ PLUG									1			1	EA EA
	CIPP LINING FOR 18" DIA CULVERT CIPP LINING FOR 24" DIA CULVERT	93	97			68				56		107	97 324	LF LF
2.082	CIPP LINING FOR 30" DIA CULVERT CIPP LINING FOR 36" DIA CULVERT						74				67		74 67	LF LF
2.084	CIPP LINING FOR 48" DIA CULVERT								58		01		58	LF
	CIPP LINING FOR 60" DIA CULVERT 42" PIPE PLUG	2						93					93	LF EA
2.087	54" DIA MANHOLE 72" DIA MANHOLE		10						13				10 13	VF VF
2.089	JOINT REPAIR FOR 42" DIA CULVERT								16				16	EA
2.090 2.091	REPAIR GRATE INLET FLAP GATE FOR 36" DIA CULVERT								1		1		1	EA EA
2.092 2.093	SINGLE TIMBER PILE PIPE SUPPORT DOUBLE TIMBER PILE PIPE SUPPORT	1	1			1	1	1	1	1	1	1	8	EA EA
2.094	6" RIPRAP BEDDING MATERIAL	140	140			140	140	140	140	140	140	140	1260	SY
2.095 2.096	TYPE "A/B" RIPRAP TYPE "C" RIPRAP	298	154		<u> </u>	194	242	252	200	16 200	200	236	16 1976	TN TN
2.097 2.098	TYPE "B" RIPRAP SEEDING	89 1	46 1			58 1	73 1	75 1	60 1	60 1	60 1	71 1	592 9	TN AC
	EROSION CONTROL BLANKET	3600	130			350	1488	1340	330	1360	1050	740	10388	SY

**QUANTITIES:** 



ENGINEER'S SEAL

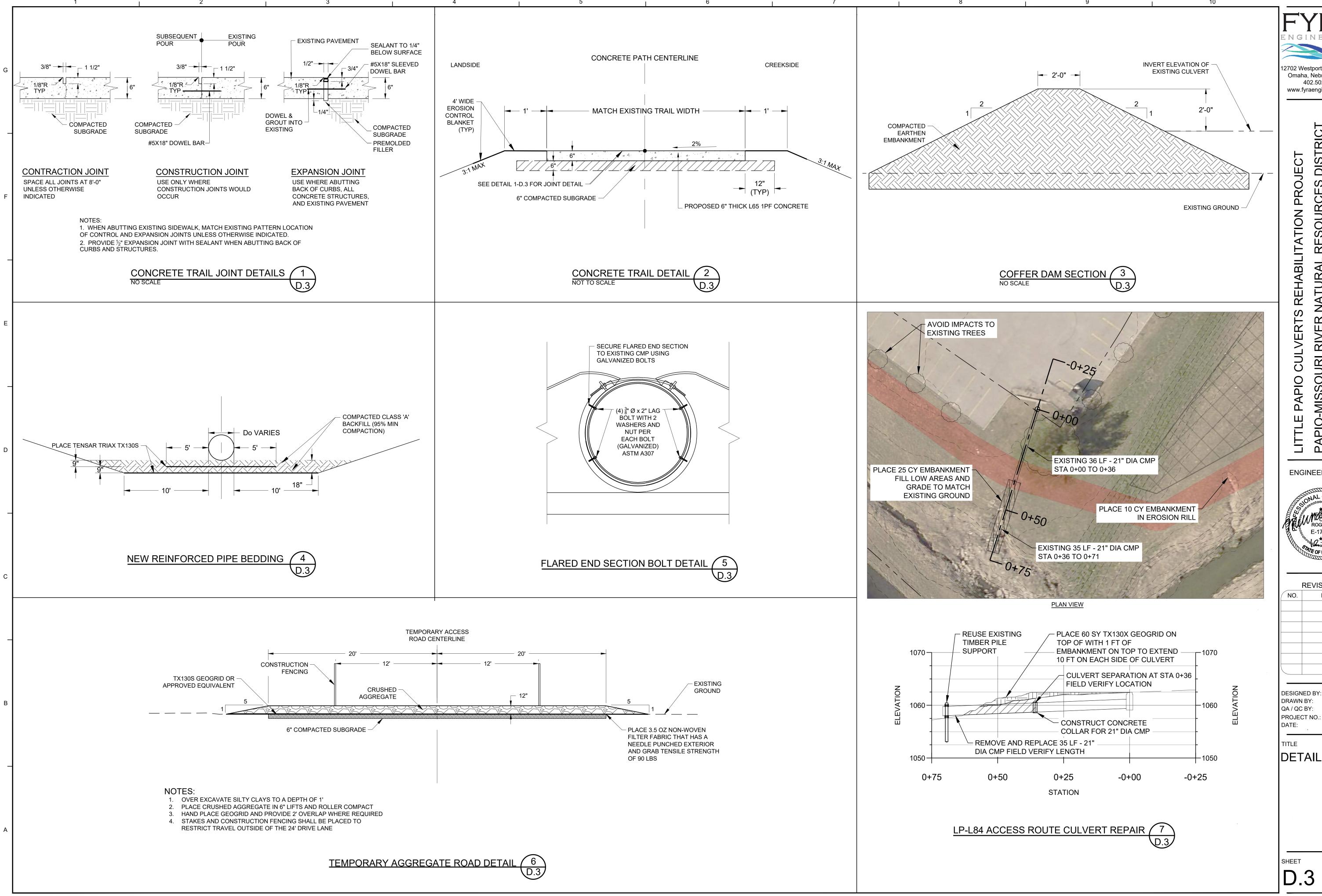


	REVISIONS
NO.	DATE
	•

DESIGNED BY: DRAWN BY: QA / QC BY:

PROJECT NO.: 001-19-07 DATE: 12.14.2021

QUANTITIES



12702 Westport Pkwy, Ste 300 Omaha, Nebraska 68138 402.502.7131

www.fyraengineering.com

DISTRIC

**ENGINEER'S SEAL** 

ROGERS

**REVISIONS** DATE

001-19-07 12.14.2021

DETAILS

## **BID FORM**

## PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

# LITTLE PAPIO CREEK/CHANNEL CULVERTS CONSTRUCTION PROJECT (GROUP A CULVERTS) NRD PROJECT NUMBER 532

#### **ARTICLE 1 – BID RECIPIENT**

1.1 This Bid is submitted to:

Papio-Missouri River Natural Resources District

8901 South 154<sup>th</sup> Street, Omaha, NE 68138

1.2 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

#### ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.1 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

#### **ARTICLE 3 – BIDDER'S REPRESENTATIONS**

- 3.1 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date			

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to

contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

## **ARTICLE 4 – BIDDER'S CERTIFICATION**

## 4.1 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

# **ARTICLE 5 – BASIS OF BID**

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

# **BASE BID 1 – CITY OF OMAHA CULVERTS**

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
1.001	MOBILIZATION	LS	10		
1.002	STABILIZED CONSTRUCTION ENTRANCE	EA	2		
1.003	CONSTRUCTION FENCE	LF	2941		
1.004	TEMPORARY TRAFFIC CONTROL	LS	8		
1.005	SWPPP MEASURES	LS	10		
1.006	DEWATERING	LS	10		
1.007	CLEARING AND GRUBBING	LS	10		
1.008	TENSAR TRIAX TS130X GEOGRID	SY	242		
1.009	SHORING TRENCH STABILIZATION	LS	2		
1.010	CLEAN AND JET 24" CULVERT	LF	93		
1.011	CLEAN AND JET 30" CULVERT	LF	117		
1.012	CLEAN AND JET 42" CULVERT	LF	89		
1.013	CLEAN AND JET 48" CULVERT	LF	219		
1.014	CLEAN AND JET 54" CULVERT	LF	217		
1.015	EXCAVATION	CY	4298		
1.016	DEGRADED RIPRAP REMOVAL AT OUTLET	CY	1700		
1.017	EMBANKMENT	CY	6018		
1.018	EARTHWORK (BORROW)	CY	1800		
1.019	STRIP, STOCKPILE AND REPLACE 6" TOPSOIL	SY	2509		
1.020	REMOVE AND HAUL OFF RUBBLE	LS	1		
1.021	REMOVE TREE	EA	4		
1.022	REMOVE TIMBER RETAINING WALL	LF	40		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
1.023	REMOVE BOLLARD	EA	2		
1.024	REMOVE 21" DIA CMP CULVERT	LF	36		
1.025	REMOVE 24" DIA CMP CULVERT	LF	111		
1.026	REMOVE 30" DIA CMP CULVERT	LF	101		
1.027	REMOVE 36" DIA CMP CULVERT	LF	45		
1.028	REMOVE 42" DIA CMP CULVERT	LF	44		
1.029	REMOVE 48" DIA CMP CULVERT	LF	8		
1.030	REMOVE 54" DIA CMP CULVERT	LF	117		
1.031	REMOVE CONCRETE COLLAR	EA	1		
1.032	REMOVE SINGLE TIMBER PILE PIPE SUPPORT	EA	3		
1.033	REMOVE DOUBLE TIMBER PILE PIPE SUPPORT	EA	4		
1.034	REMOVE AND REPLACE 6" CONCRETE TRAIL	SF	25880		
1.035	REMOVE AND REPLACE 9" THICK CONCRETE PAVEMENT	SF	271		
1.036	REMOVE AND REPLACE COMBINATION CURB AND GUTTER	LF	65		
1.037	REMOVE AND REPLACE INTEGRAL CURB	LF	33		
1.038	REMOVE AND REPLACE ASPHALT PAVEMENT	SF	1925		
1.039	REMOVE AND REPLACE AGGREGATE SURFACING	CY	5		
1.040	REMOVE SALVAGE AND REPLACE CHAIN LINK FENCE	LF	225		
1.041	REMOVE AND REPLACE SPRINKLERS	LF	2355		
1.042	REMOVE AND RESET GUARDRAIL	LF	82		
1.043	REMOVE AND REPLACE CONCRETE RETAINING WALL	LF	34		
1.044	REMOVE AND REPLACE CONCRETE STAMPED BRIDGE APRON	SY	20		
1.045	REMOVE AND REPLACE TYPE B/C RIPRAP AND GABION BASKET	TON	30		
1.046	GROUT TO FILL VOIDS	CY	2		
1.047	TAP EXISTING AREA INLET	EA	1		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
1.048	TAP 36" DIA RCP	EA	1		
1.049	MAINTAIN EXISTING PIPE TAP	EA	1		
1.050	21" DIA CMP	LF	36		
1.051	24" DIA CMP	LF	111		
1.052	30" DIA CMP	LF	101		
1.053	36" DIA CMP	LF	44		
1.054	42" DIA CMP	LF	44		
1.055	48" DIA CMP	LF	8		
1.056	54" DIA CMP	LF	117		
1.057	24" DIA CMP BEND	EA	3		
1.058	30" DIA CMP BEND	EA	3		
1.059	36" DIA CMP BEND	EA	2		
1.060	54" DIA CMP BEND	EA	3		
1.061	24" OD HDPE SLIPLINING	LF	75		
1.062	42" OD HDPE SLIPLINING	LF	227		
1.063	48" OD HDPE SLIPLINING	LF	92		
1.064	GROUT FOR HDPE SLIPLINING	CY	48		
1.065	CIPP LINING FOR 24" DIA CULVERT	LF	201		
1.066	CIPP LINING FOR 30" DIA CULVERT	LF	143		
1.067	CIPP LINING FOR 36" DIA CULVERT	LF	44		
1.068	CIPP LINING FOR 42" DIA CULVERT	LF	133		
1.069	CIPP LINING FOR 54" DIA CULVERT	LF	242		
1.070	72" DIA MANHOLE	VF	20		
1.071	21" CONCRETE COLLAR	EA	1		
1.072	42" CONCRETE COLLAR	EA	1		
1.073	54" CONCRETE COLLAR	EA	2		
1.074	JOINT REPAIR FOR 36" DIA CULVERT	EA	22		
1.075	JOINT REPAIR FOR 54" DIA CULVERT	EA	6		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
1.076	CONSTRUCT RETAINING WALL	LF	40		
1.077	INSTALL BOLLARD	EA	2		
1.078	FLAP GATE FOR 42" DIA CULVERT	EA	1		
1.079	SINGLE TIMBER PILE PIPE SUPPORT	EA	4		
1.080	DOUBLE TIMBER PILE PIPE SUPPORT	EA	4		
1.081	6" RIPRAP BEDDING MATERIAL	SY	1400		
1.082	TYPE "C" RIPRAP	TN	2107		
1.083	TYPE "B" RIPRAP	TN	630		
1.084	SEEDING	AC	10		
1.085	SODDING	SY	2111		
1.086	EROSION CONTROL BLANKET	SY	6814		

# **BASE BID 2 - NRD CULVERTS**

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
2.001	MOBILIZATION	LS	11		
2.002	STABILIZED CONSTRUCTION ENTRANCE	EA	5		
2.003	CONSTRUCTION FENCE	LF	858		
2.004	TEMPORARY COFFER DAM	LS	1		
2.005	TEMPORARY TRAFFIC CONTROL	LS	4		
2.006	SWPPP MEASURES	LS	7		
2.007	DEWATERING	LS	11		
2.008	CLEARING AND GRUBBING	LS	11		
2.009	TENSAR TRIAX TS130X GEOGRID	SY	1155		
2.010	6" CRUSHED ROCK SURFACING	SY	561		
2.011	CLEAN AND JET 18" CULVERT	LF	175		
2.012	CLEAN AND JET 30" CULVERT	LF	54		
2.013	CLEAN AND JET 42" CULVERT	LF	117		
2.014	CLEAN AND JET 60" CULVERT	LF	61		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
2.015	EXCAVATION	CY	2314		
2.016	DEGRADED RIPRAP REMOVAL AT OUTLET	CY	1200		
2.017	EMBANKMENT	CY	3240		
2.018	EARTHWORK (BORROW)	CY	1096		
2.019	STRIP, STOCKPILE AND REPLACE 6" TOPSOIL	SY	1400		
2.020	REMOVE TREE	EA	3		
2.021	REMOVE DEBRIS	LS	1		
2.022	REMOVE GUARD RAIL	LS	1		
2.023	REMOVE 15" DIA CMP CULVERT	LF	31		
2.024	REMOVE 18" DIA CMP CULVERT	LF	117		
2.025	REMOVE 24" DIA CMP CULVERT	LF	202		
2.026	REMOVE 30" DIA CMP CULVERT	LF	15		
2.027	REMOVE 36" DIA CMP CULVERT	LF	67		
2.028	REMOVE 48" DIA CMP CULVERT	LF	64		
2.029	REMOVE 60" DIA CMP CULVERT	LF	32		
2.030	REMOVE 42" DIA RCP CULVERT	LF	33		
2.031	REMOVE CONCRETE COLLAR	EA	1		
2.032	REMOVE FLAP GATE FOR 36" DIA CULVERT	EA	1		
2.033	REMOVE AND REINSTALL 60" DIA FLARED END SECTION	EA	1		
2.034	REMOVE SINGLE TIMBER PILE PIPE SUPPORT	EA	9		
2.035	REMOVE DOUBLE TIMBER PILE PIPE SUPPORT	EA	1		
2.036	REMOVE AND REPLACE 4" CONCRETE SIDEWALK	SF	146		
2.037	REMOVE AND REPLACE 6" CONCRETE TRAIL	SF	333		
2.038	REMOVE AND REPLACE CONCRETE PAVEMENT	SF	577		
2.039	REMOVE AND REPLACE COMBINATION CURB AND GUTTER	LF	30		
2.040	REMOVE AND REPLACE ASPHALT PAVEMENT	SF	1725		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
2.041	REMOVE AND REPLACE CHAIN LINK FENCE	LF	50		
2.042	REMOVE AND RESET GUARDRAIL	LF	20		
2.043	GROUT TO FILL VOIDS	CY	6		
2.044	FLOWABLE FILL FOR PIPE ABANDONMENT	CY	6		
2.045	TYPE I AREA INLET TOP	EA	1		
2.046	TAP EXISTING AREA INLET	EA	6		
2.047	TAP EXISTING INLET	EA	1		
2.048	18" DIA CMP	LF	19		
2.049	24" DIA CMP	LF	324		
2.050	30" DIA CMP	LF	20		
2.051	36" DIA CMP	LF	67		
2.052	48" DIA CMP	LF	58		
2.053	60" DIA CMP	LF	32		
2.054	18" DIA CMP BEND	EA	1		
2.055	24" DIA CMP BEND	EA	6		
2.056	30" DIA CMP BEND	EA	1		
2.057	36" DIA CMP BEND	EA	1		
2.058	48" DIA CMP BEND	EA	2		
2.059	60" DIA CMP BEND	EA	1		
2.060	4" DIA PVC	LF	120		
2.061	6" DIA PVC	LF	395		
2.062	8" DIA PVC	LF	200		
2.063	10" DIA PVC	LF	227		
2.064	45º ELBOW FOR 4" PVC	EA	36		
2.065	30º ELBOW FOR 10" PVC	EA	1		
2.066	90º ELBOW FOR 6" PVC	EA	2		
2.067	6" PVC TEE	EA	10		
2.068	8" PVC TEE	EA	5		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
2.069	10" PVC TEE	EA	5		
2.070	6" PVC TEE WITH SIDE INLET	EA	1		
2.071	4" TO 6" PVC REDUCER	EA	10		
2.072	4" TO 8" PVC REDUCER	EA	4		
2.073	4" TO 10" PVC REDUCER	EA	4		
2.074	6" TO 8" PVC REDUCER	EA	1		
2.075	8" TO 10" PVC REDUCER	EA	1		
2.076	4" PVC DOWNSPOUT ADAPTER	EA	18		
2.077	6" PVC CLEANOUT ADAPTER W/ PLUG	EA	4		
2.078	8" PVC CLEANOUT ADAPTER W/ PLUG	EA	1		
2.079	10" PVC CLEANOUT ADAPTER W/ PLUG	EA	1		
2.080	CIPP LINING FOR 18" DIA CULVERT	LF	97		
2.081	CIPP LINING FOR 24" DIA CULVERT	LF	324		
2.082	CIPP LINING FOR 30" DIA CULVERT	LF	74		
2.083	CIPP LINING FOR 36" DIA CULVERT	LF	67		
2.084	CIPP LINING FOR 48" DIA CULVERT	LF	58		
2.085	CIPP LINING FOR 60" DIA CULVERT	LF	93		
2.086	42" PIPE PLUG	EA	2		
2.087	54" DIA MANHOLE	VF	10		
2.088	72" DIA MANHOLE	VF	13		
2.089	JOINT REPAIR FOR 42" DIA CULVERT	EA	16		
2.090	REPAIR GRATE INLET	EA	1		
2.091	FLAP GATE FOR 36" DIA CULVERT	EA	1		
2.092	SINGLE TIMBER PILE PIPE SUPPORT	EA	8		
2.093	DOUBLE TIMBER PILE PIPE SUPPORT	EA	1		
2.094	6" RIPRAP BEDDING MATERIAL	SY	1260		
2.095	TYPE "A/B" RIPRAP	TN	16		
2.096	TYPE "C" RIPRAP	TN	1976		

ITEM NO	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	BID UNIT PRICE	BID PRICE
2.097	TYPE "B" RIPRAP	TN	592		
2.098	SEEDING	AC	9		
2.099	EROSION CONTROL BLANKET	SY	10388		

DESCRIPTION	TOTAL BID
Base Bid 1 – City of Omaha Culverts	
Base Bid 2 – NRD Culverts	
TOTAL PROJECT BID	

Bidder acknowledges that (1) each Bid Unit Price and Item Lump Sum includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

#### **ARTICLE 6 – TIME OF COMPLETION**

- 6.1 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.2 Bidder accepts the provisions of the Agreement as to liquidated damages.

## ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.1 The following documents are submitted with and made a condition of this Bid:
  - A. Required Bid security; and
  - B. List of Proposed Subcontractors.

#### **ARTICLE 8 – DEFINED TERMS**

8.1 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

# ARTICLE 9 – BID SUBMITTAL

IDDER: [Indicate correct name of bidding entity]
y: Signature]
Printed name]
f Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of uthority to sign.)
ttest: Signature]
Printed name]
itle:
ddress for giving notices:
elephone Number:
ax Number:
ontact Name and e-mail address:
idder's License No.:

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

# SECTION 02275 RIPRAP

#### **PART 1 GENERAL**

# 1.1 SECTION INCLUDES

- A. Furnish and place rock riprap where indicated on the drawings.
- B. Subgrade preparation.
- C. Grouting in place where indicated on the drawings.

#### 1.2 RELATED STUDIES

A. All sections.

#### 1.3 MEASUREMENT AND PAYMENT

A. Section 01019-Contract Considerations.

# 1.4 QUALITY ASSURANCE

- A. Test for bulk specific gravity and absorption of riprap materials in accordance with ASTM C127.
- B. Test for soundness of riprap materials in accordance with ASTM C88.

#### 1.5 SUBMITTALS

- A. Section 01300-Submittals: Procedure for submittals.
- B. Submit gradation analysis of proposed riprap material.
- C. Submit a notarized certificate from supplier that riprap source is approved to provide materials for Nebraska Department of Transportation work and complies with Contract Document requirements.
- D. Submit supplier's laboratory certification that riprap material from the proposed source conforms to specification requirements for specific gravity, absorption, and soundness.

#### **PART 2 PRODUCTS**

#### 2.1 ROCK RIPRAP

- A. Individual rock fragments shall be dense, sound and free from cracks, seams and other defects conducive to accelerated weathering.
- B. Rock fragments shall be angular to sub-rounded in shape.
- C. Least dimension of a fragment shall not be less than one-third the greatest dimension of the fragment.
- D. Bulk specific gravity (saturated surface-dry basis) not less than 2.5 as determined by ASTM C127.
- E. Absorption not more than 2 percent as determined by ASTM Method C127.
- F. Rock riprap shall not have a soundness loss greater than 10 percent in 12 freezing and thawing cycles. The combined loss of soundness in magnesium sulfate at 5 cycles shall not exceed 5 percent, in accordance with ASTM C88.
- G. <u>Rock Riprap</u>: Gradation(s) as indicated on the drawings and Bid Form for Rock Riprap shall conform to Nebraska Department of Transportation Type B or Type C riprap gradation and material requirements as per Section 905.02 of the 2017 Standard Specifications for Highway Construction and the Nebraska Department of Transportation Drainage Design and Erosion Control Manual section 7.A:

Type B

Size of Rock	% of Total Weight Smaller than Given Size
300lb.	100
80lb.	50
5lb.	Less than 10

Median Diameter (D<sub>50</sub>): 1.02 ft Maximum Diameter (D<sub>100</sub>): 1.61 ft

Type C

Size of Rock	% of Total Weight Smaller than Given Size
700lb.	100
150lb.	50
10lb.	Less than 10

Median Diameter (D<sub>50</sub>): 1.28 ft Maximum Diameter (D<sub>100</sub>): 2.12 ft

H. <u>Allowable Quarries:</u> Martin Marietta Fort Calhoun, Weeping Water and Winterset Quarries; Kerford Limestone; all quarries that mine quartzite. Materials will be inspected by the project engineer to determine that provided material appears to match the approved submittal material.

#### **PART 3 EXECUTION**

#### 3.1 EXAMINATION

A. Verify stockpiled riprap material is acceptable to Engineer.

#### 3.2 PREPARATION

- A. Excavate subgrade in accordance with Section 02222- Excavating, for placement of rock riprap to indicated depth with finished surface at lines and grades indicated on the drawings.
- B. Remove all sharp or protruding objects from subgrade surface.
- C. Install filter fabric in accordance with Section 02246-Geotextiles and drawings.

#### 3.3 PLACEMENT

- A. Place riprap at the locations and to the depths indicated on the drawings.
- B. Construct riprap to the full course thickness in one operation and in such a manner as to avoid significant displacement of the underlying materials.
- C. Place riprap such that material in place is reasonably homogeneous with larger fragments uniformly distributed, firmly in contact one to another with smaller fragments and spalls filling voids between larger fragments.
- D. Place riprap in a manner to prevent damage to structures. Zero drop height placement procedures are to be utilized for riprap stone to avoid displacing or damaging riprap and the underlying bedding. Dumping of stone at the top of slopes and rolling or pushing into place will not be permitted. Manipulating or moving stone at any time prior to placement by means of dozers or other blade equipment will not be permitted.
- E. Place riprap fragments by hand where necessary to prevent damage to permanent works. Smaller fragments shall not be a substitute for larger ones, and flat slabs shall be laid on edge.

# 3.4 GROUTING

- A. Where indicated on drawings, use concrete to grout completed and accepted riprap construction.
- B. Consolidate concrete to fill voids and float finish around exposed riprap surface fragments.
- C. Apply curing compound per Section 03300.

# **END OF SECTION**

# SECTION 02240 DEWATERING

# **PART 1 - GENERAL**

#### 1.1 SUMMARY

A. Section includes the following:

1. Dewatering covers the requirements for placement, operation, and removal of a dewatering or temporary flow passage system to control water during construction.

# **PART 2 - PRODUCTS**

Not Used.

#### **PART 3 - EXECUTION**

#### 3.1 **DEWATERING**

A. Provide an adequate system to lower and control groundwater in order to permit excavation, construction of structures, and placement of fill materials under dry conditions. Install sufficient dewatering equipment to pre-drain water-bearing strata above and below bottom of structure foundations, drains, sewers, and other excavations. The excavations shall be kept dry until exterior walls have been completed and until the structures have been backfilled. Drainage ditches shall not be placed within the area to be occupied by any structure except where permitted by ENGINEER. When such ditches are placed beneath the structures, they shall be backfilled with Class C concrete.

- B. Reduce hydrostatic head in water-bearing strata below structure foundations, drains, sewers, and other excavations to extent that water level and piezometric water levels in construction areas are below prevailing excavation surface.
- C. Prior to excavation below groundwater level, place system into operation to lower water levels as required and then operate it continuously 24 hours a day, 7 days a week until drains, sewers, and structures have been constructed, including placement of fill materials, and until dewatering is no longer required.
- D. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of Work under construction or completed. Dispose of water in a manner to avoid inconvenience to others engaged in work about Site. Provide sumps, sedimentation tanks, and other flow control devices as required by governing authorities. Effluent water from dewatering methods shall be sediment free or be discharged through an ENGINEER-approved sediment entrapment basin.
- E. Provide standby equipment on Site, installed and available for immediate operation if required to maintain dewatering on a continuous basis in event any part of system becomes inadequate or fails.

If dewatering requirements are not satisfied due to inadequacy or failure of dewatering system, perform work as may be required to restore damaged structures and foundation soils at no additional expense.

E. Provide a temporary flow passage system as necessary to control water during construction. The temporary flow passage system shall be revised or realigned as required by construction staging. The contractor shall be responsible for any maintenance or required repairs to the flow passage system.

# **END OF SECTION**