Agenda Item: 10.

MEMORANDUM

TO:

Programs, Projects and Operations Subcommittee

FROM:

Martin P. Cleveland, Construction Engineer

SUBJECT:

Pigeon/Jones Site 15 Outlet Repair Project

DATE:

April 2, 2018

The Pigeon/Jones Site 15 Outlet Repair Project is located near Hubbard, Nebraska, as shown on the enclosed location map. The project consists of repairing two rock weirs in the principal spillway outlet channel of the Pigeon/Jones Site 15 Dam Site, also known as Danish Alps Recreation Area. The stream bed is eroding, because of rock weirs not operating as designed due to weirs not trapping silt and stabilizing the channel. The weirs will be rebuilt as depicted in attached drawings. Grout will be added to rebuilt weirs to block openings in rock riprap and allow for sediment accumulation upstream of the weirs.

On March 16, 2018, the District opened bids for the Pigeon/Jones Site 15 Outlet Repair Project. The 2 bids ranged from \$37,391 to 30,436.80. The apparent low bid of \$30,436.80 was submitted by Detlefsen Construction LLC. Enclosed is a bid summary.

The Engineer's estimate of the cost of the Pigeon/Jones Site 15 Outlet Repair Project is \$26,925.00. A recommendation letter from the District's consultant, Olsson Associates is enclosed.

Management recommends that the Programs, Projects and Operations Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute a contract with Detlefsen Construction LLC in the amount of \$ 30,436.80 for the construction of the Pigeon/Jones Site 15 Outlet Repair Project, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.

Pigeon/Jones Site 15 Outlet Channel Repair Project - Bid Summary Bid Opening: March 16, 2018 at 10:00 a.m.

| CONTRACTOR NAME | | | | Niewohner Construction, Inc. | | Detlefsen Construction, LLC | | Engineer's Estimate | |
|-----------------|--|------|----------|---------------------------------|-------------|--------------------------------|---------------|---------------------|-------------|
| Bid Item No. | Description | Unit | Quantity | Unit Cost | Total Cost | Unit Cost | Total Cost | Unit Cost | Total Cost |
| 1. | Mobilization and Construction Staffing | LS | 1 | 4,000 | 4,000 | 1,000 | 1,000 | 10,000 | 10,000 |
| 2, | General Clearing and Grubbing | LS | 1 | 1,000 | 1,000 | 1,000 | 1,000 | 2,000 | 2,000 |
| 3. | Excavation | CY | 45 | 20 | 900 | 50 | 2,250 | 10 | 450 |
| 4. | Riprap Type B | TON | 52 | 125 | 6,500 | 75 | 3,900 | 60 | 3,120 |
| 5. | Riprap Type C * | TON | 93 | 125 | 11,625 | 140 | 13,020 | 60 | 5,580 |
| 6. | Geotextile Filter Fabric | SY | 210 | 5.00 | 1,050 | 20 | 4,200 | 2 | 420 |
| 7. | Erosion Control Blanket | SY | 352 | 8.00 | 2,816 | 2.15 | 756.80 | 2.50 | 880 |
| 8. | Seeding | AC | 0.11 | 10,000 | 1,100 | 1,000 | 110 | 2,500 | 275 |
| 9. | Grout | CY | 21 | 400 | 8,400 | 200 | 4,200 | 200 | 4,200 |
| | TOTAL | | | | \$37,391.00 | | \$30,436.80 * | | \$26,925.00 |

MANAGEMENT RECOMMENDATION *

March 23, 2018

Papio-Missouri River NRD Attn: Mr. Martin Cleveland, P.E. 8901 S. 154th Street. Omaha, Nebraska 68138-3621

Re:

Pigeon/Jones Site 15 Outlet Channel Repair

Dakota County, Nebraska

Letter of Recommendation of Award

OA Project No. 017-1529

Dear Mr. Cleveland:

On March 1, 2018 bids were mailed to five (5) contractors for the above referenced project, on Friday March 16, 2018 bids were received and opened. This letter is prepared to summarize the bids received and provide our recommendation for making an award on the project.

A total of two (2) bids were submitted for the project as follows:

| Bidder | Lump Sum Base Bid | | |
|------------------------|-------------------|--|--|
| Detlefsen Construction | \$ 30,436.80 | | |
| Niewohner Construction | \$ 37,391.00 | | |

The engineer's opinion of probable costs for the project was \$26,925.00. The low bid in the amount of \$30,436.80 was submitted by Detlefsen Construction of Laurel, NE.

Since Detlefsen Construction has been deemed a responsive and responsible bidder, it is our recommendation they should be awarded the contract in the amount of \$30,436.80.

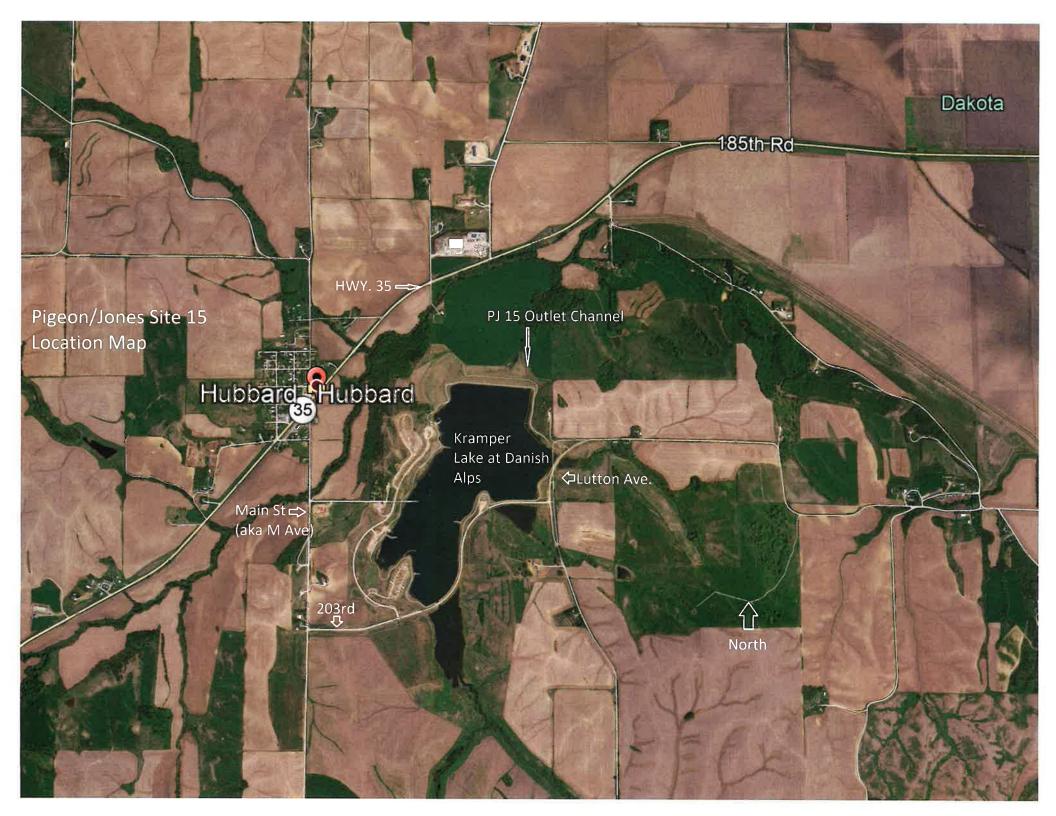
Please contact us with any additional questions that you may have.

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Michael Placke, P.E.

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PIGEON/JONES SITE 15 OUTLET CHANNEL REPAIR

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT

NEAR THE VILLAGE OF HUBBARD IN DAKOTA COUNTY, NE 2017

| SCHEDULE OF QUANTITIES | | | | |
|---------------------------------------|-----|------|--|--|
| MOBILIZATION AND CONSTRUCTION STAKING | LS | 1 | | |
| SENERAL CLEARING AND SRUBBANS | 15 | - 1 | | |
| EXCAVATION | CY | 45 | | |
| RIPRAP TYPE B | TON | 52 | | |
| RORAD TYPE C* | 104 | 93 | | |
| SECTEXALE FILTER FABRIC | SY | 213 | | |
| EROSION CONTROL BLANKET | SY | 352 | | |
| SECONG | AC. | 0.1 | | |
| GROUT | CY | - 21 | | |

POSES NOT INCLUDE BO TON OF EXISTING TYPE C HIPRAP ASSUMED TO BE



LOCATION MAP

INDEX OF DRAWINGS COVER SHEET

- FESTING SITE LAYOUT
- PROPOSED ROCK WERE DETAILS
- PROPOSED ROCK WEIR NOTES

GENERAL NOTES

- CONTRACTOR TO PRESERVE ALL SURVEY CONTROL
- PRIOR TO MOVING OFF THE PROJECT THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND REQUEST A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.
- THE EMSTINEE AND LOCATION OF UNDERGROUND UTILITY PRES AND STRUCTURES SHOWN ON HESE PLANS WREE COBINED BY A SEARCH OF AVAILABLE RECORDS AND TO THE BEST OF ONE MOVEMENT CONSTITUTES ALL KNOWN A PALITIES HORIZON FILE CONTRACTOR'S OR STRUCTURES LOCATED AT 11-K WORK SILE II IS THE CONTRACTOR'S RESPONSALLY TO CONTRACTOR SHAPE AND ADMINISTRATION OF CONTRACTOR SHAPE RESPONSALLY OF THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OF DIRECTOR SHAPE RESPONSALLY OF THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OF DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OF DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OF DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OR DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OR DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OR DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OR DIRECTOR SHAPE RESPONSALLE OR THE REPARS OF SUCH STRUCTURES WHEN SHOOLD OR DIRECTOR SHAPE RESPONSALLE OR THE RESPONSALLE OR THE
- PRIOR TO EXCAVATING, THE CONTRACTOR SHALL FIELD VERFY LOCATION OF UNDERGROUND UTILITIES CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING LORDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS FACE INCESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES
- CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS WITHIN THE PROPERTY.
- ANY AREA DISTURBED OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE RE-ESTABLISHED TO PRE-CONSTRUCTION CONDITIONS AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS AT ALL TIMES TO PROPERTY OWNERS ADJACENT TO THE PROJECT SITE.
- 9 THIS PROJECT IS TO REPAIR TWO EXISTING ROCK WEIRS

PROJECT LOCATION

Diggers Hotline Of Nebraska Statewide (#DD) 331-5856 Call Before You Dig. It's The Law

PRIOR TO CONSTRUCTION

CALL : B11 OR 1-800-331-5666 FOR LOCATION OF UNDERGROUND TELEPHONE, ELECTRIC, GAS MAINS, AND CABLE TELEVISION

NDTE: EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND BRANACE STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE HOPGIALTION AND THEFFORE THE OBLY IT IS THE RESTONSHILLY OF THE MONOUNAL CONTRACTORS TO EMACULATE AND PROTECT EACH EMSTING UTILITY BEFORE AND DURING ACTUAL CONSTITUCTION.

STATE OF NERRASKA

OLSSON ,

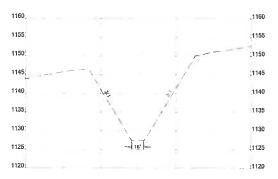


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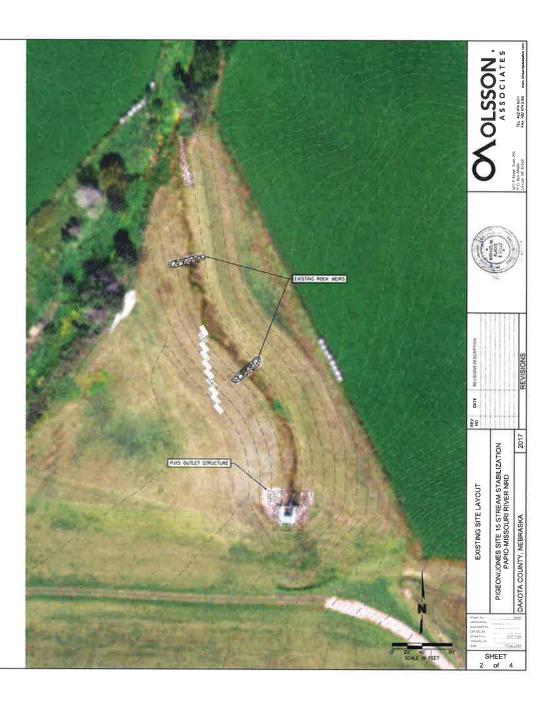
PIGEON/JONES SITE 15 STREAM S PAPIO-MISSOURI RIVER COVER 5

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- 2. CONTRACTOR SHALL KEEP ALL EQUIPMENT AND WATERIALS WITHIN THE CONSTRUCTION LIWIS.
- 3 ANY AREA DISTURBED OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE RE-ESTABLISHED TO PRE-CONSTRUCTION CONDITIONS AT CONTRACTOR'S EXPENSE.
- $\mathbf{4}_{\scriptscriptstyle\parallel}$ contractor shall maintain vehicular access at all times to property owners adjacent to the project site



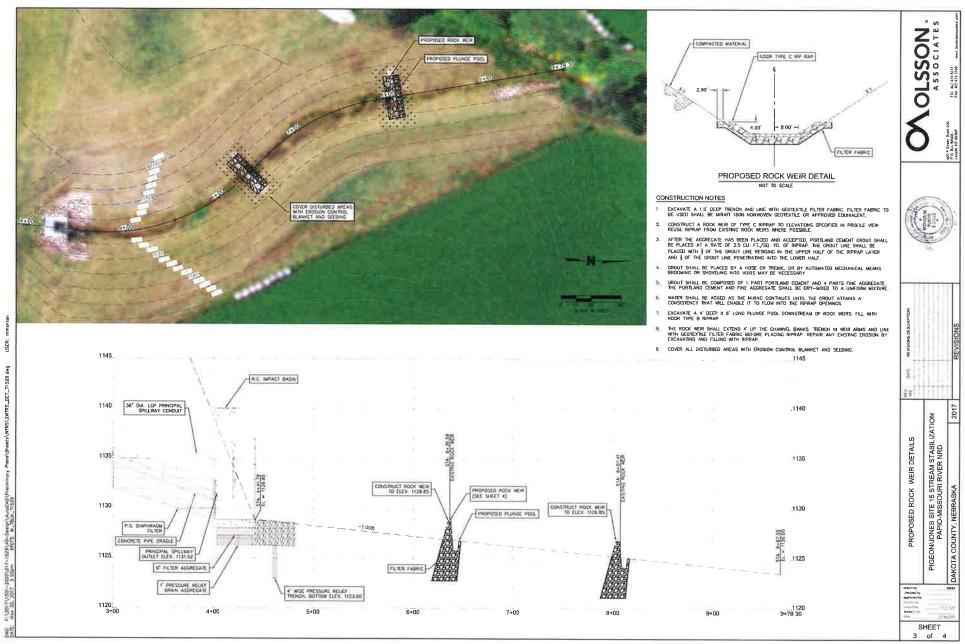
OUTLET CHANNEL TYPICAL SECTION (LOOKING DOWNSTREAM)



JSER: mmorton

15/27/40" Design AutoCAD (Premissor, Plons Shoots W7AS WTRS_SIT_71529 dwg

24G 6 2017 1551-2550 017-15



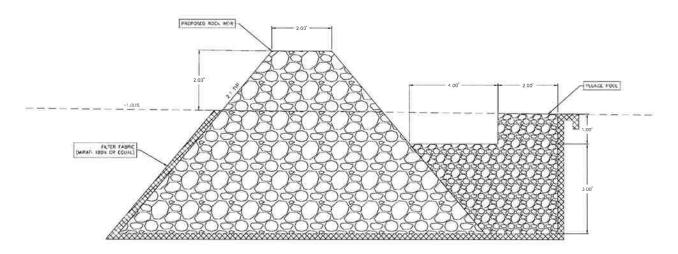
- THE CONTRACTOR SHALL AT ITS COST AND UNDER ITS SOLE RESPONSIBILITY FURNISH ALL LABOR, TODIS, MATERIALS, TRANSPORTATION, EQUIPPENT AND PERFORM ALL WORK SHOWN ON THE DRAWINGS
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, STAKING, AND FOR THE ADEQUACY AND ACCURACY OF THE LAYOUT OF THE WORK
- ▲ CONTRACTOR IS TO RECORD AND DOCUMENT PROJECT COMPONENT LAYOUT INFORMATION AND ASSIST OWNER/ENGINEER WITH REVIEW OF FIELD CHECKING LAYOUTS
- 4. If IS UNDERSTOOD THAT THE SERVICES PROVIDED HEREN SHALL BE PERFORAGE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FILLY RESPONSIBLE TO THE PARIO-MISSOUR RIVER HID FOR THE ACTS AND DIVISIONS OF HIS NOTPENBENT SUSCENTRACTORS AND OF PERSONS DIRECTLY EMPLOYED BY THEM
- b. HE CONTRACTOR SHALL NOT COMMENCE WORK UNDER THIS CONTRACT UNTIL HE/SHE HAS DBIANED ALL THE CONTRACT WITH HE/SHE HAS DBIANED ALL THE CONTRACTOR SHALL THE CONTRACTOR ALLOW ANY INSEPENDENT SUBCONTRACT UNTIL ALL SHILL AND ANY INSEPENDENT SUBCONTRACT OF HIS DEED SHALL NOT COMMENCE HORSE OF THE PROPERTY SUBCONTRACTOR HAS BEEN APPROVED.
- MOBILIZATION AND CONSTRUCTION STAKING SHALL INCLUDE, ALL BOKOS, PERMITS, INSURANCE, ADMINISTRATIONS, TRANSPORTATION TO AND FROM THE SITE, OPERATING SUPPLIES, STAKING FOR CONSTRUCTION LANGUED IN LANGUES, RELEVANCE TO THE CONFIDER TO AND COMPONENT AND COMPONENT AND COMPONENT AND COMPONENT AND COMPONENT AND COMPONENT AND AND COMPONENT AND AND COMPONENT AND AND COMPONENT
- 7 CENERAL CLEARANG AND GRUBBING SHALL INCLIDE ALL LABOR, EQUIPMENT, MATERIALS, DISPOSAL AND INCIDENTAL THE SPICE FOR THIS PAY TIEM SHALL INCLUDE ALL CLEARING AND GRUBBING MCCESSARY TO ALLOW AND FACULTATE PERFORMANCE AND COMPLETION OF ALL WORK REDURED UNDER THE OTHER PAY TIEMS INCLUDED IN THE CONSTRUCTION CONTRACT AREAS TO BE CLEARED AND GRUBBED SHALL BE WITHIN THE DESIGNATED LIWITS OF CONSTRUCTOR, OR AS APPROVED BY OWNER AND ENGINEER PRIOR TO CLEARING AND GRUBBEN THE PAY TIEM'S INCLUDED.
- B DEWATERING THE CONSTRUCTION OF THE ROCK MERRS SHALL BE. DEWATERING AS INCESSARY FOR THE PROPER EXECUTION OF THE CONSTRUCTION WORK, THE CONTRACTOR SHALL FURNISH, INSTALL FURNI
- 10 ROCK RIPRAP RIPRAP SHALL CONFORM TO THE RODR TYPE B RPPAP, ROCKS SHALL CONFORM TO THE REQUIREMENTS SHOWN ON THE PLANS IT SHALL BE FREE FROW DRIT, CLAY, SAND, ROCK FILES AND OTHER VATERIAL, NOT MEETING THE REQUIREMENT SHALL BE PARED FOR CERTIFIED SCALE DELIVERY WEIGHT TICKETS THRE WEIGHT, REPRAP AT EXISTING WEIGS MAY BE USED FOR CONSTRUCTION. THE PAY LIEM IS DUE TON, VEASURED PER CERTIFIED SCALE DELIVERY WEIGHT TICKETS THRE WEIGHT, REPRAP AT EXISTING WEIGS MAY BE USED FOR
- 11 GROUT PLACE GROUT AS SHOWN ON THE PLANS GROUT SHALL IN NO CASE BE LESS THAN 70 PERCENT OF THE DEPTH OF THE RPRAP, CONSOLDATE GROUT INTO PLACE WITH SUITABLE SPADES, TROWELS OR OTHER APPROVED MEANS TO PROVIDE A DEVES STONE AND MORTAR LAYER WITH ALL VOIDS AND INTERSTICES FILED. AFTER GROUT HAS BEEN PLACED, THE ROCKS SHALL BE THOROUGHLY SMEULANDED OF THE LIVER FOR SURFICIALS ARE EXPOSED. IF REQUIRED, LISE OF WATER PRESSURE TO CENH INTO THE MORTAR HAS ACHIEVED SUFFICIAL STRENGTH. IN COURS SHALL PROJECT § 10 § THE ROCK DHAMETER ABOVE THE GROUTE SURFICIAL BE THE MINISTRANGE WHICH INTERSTICES WHITH UNITED STRENGTH. IN SOLUTION OF THE FOR THE OFFICE AND THE PROJECT FOR THE OFFICE AND THE OFF
- 12 SEIDING THE SEEDING SHALL HE PREPARED WITH LOSS SURFACE AT LEAST THREE INCHES THICK THE CRASS MIXTURE TO BE FURNISHED UNFORMLY DIRECTOR ON ALL AREAS ACCESSIBLE TO MACHINERY IN ACCESSIBLE TO MACHINERY THE SEED MAY BE BROADCAST AND MILE COVERED BY THE USE OF A HARROW SEED MIX SHALL CONSIST OF THE FOLLOWING.

STED WIXTURE

| SPEC-ES | STRAIN | SEED PER ACRE |
|--------------------|-------------------------|---------------|
| VIRGINIA WILDRYE | (NE, MN, (A) | 2.0 |
| SWITCHGRASS | (PATHFINDER, BLACKWELL) | 2 0 |
| WESTERN WHEATCRASS | (FLINTLOCK, BARTON) | 2 0 |
| BIG BLUESTEW | (BONANZA, ROUNTREE) | 1,5 |
| LITTLE BLUESTEM | (BLAZE, CAMPER) | 1.5 |
| FESCUE | (SHEEP) | 5.0 |

THE COVER CROP WILL BE UNIFORMLY NO-TILL DRILLED ON ALL AREAS WHICH RECEIVE SEEDING AND MULCHING TURE REINFORCEMENT WAT SHALL BE NORTH AMERICAN GREEN PSSO

13 EXCAVATION - ALL SURPLUS OR WASTE SOILS EXCAVATED FOR THE CONSTRUCTION OF THE ROCK WEIRS MAY BE PLACED ON SITE IN AN AREA APPROVED BY THE CONSTRUCTION VANAGER



PROPOSED ROCK WEIR CROSS SECTION

NOT TO SCALE

NOLSSON ASSOCIATES

P.O. Box Bridge Lincoln NC BRIGG



42 MAIN SAVAGON DESCRIPTION ACTORION AC

PROPOSED ROCK WEIR NOTES
JONES SITE 15 STREAM STABILIZATION
PAPIO-MISSOURI RIVER NRD

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