You may reach the office of Hutchison Engineering, Inc. at (573) 240-9577 or via email at kharris@hutchisoneng.com to order plans and specifications.

Please utilize the attached revised plans for bidding purposes.

Please utilize the attached revised bidding form for bidding purposes.

Please omit JSP-M. Seeding, Fertilizing & Mulching and add the following JSP-M. Temporary and Permanent Fencing

M. TEMPORARY AND PERMANENT FENCING

1.0 Description. Should the contractor remove the existing fence and water gap prior to installation of new fence and water gap, temporary fencing/containment measures shall be installed to adequately contain any and all livestock.

2.0 Basis of Payment Installation and removal of temporary fencing/containment measures shall be considered incidental to the project. No direct payment will be made.

Please acknowledge receipt of Addendum #1 in your bid.
## BIDDING FORM

(work to be completed by contractor only)

RALLS COUNTY BRIDGE REPLACEMENT
FEDERAL PROJECT BRO-B087(24)
BRIDGE NO.2570014 1
40' SINGLE SPAN PRECAST SLAB BRIDGE
OREGON DRIVE

### ROADWAY

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM</th>
<th>UNITS</th>
<th>QTY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>201-99.01</td>
<td>CLEARING AND GRUBBING</td>
<td>L.S.</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>203-50.00</td>
<td>UNCLASSIFIED EXCAVATION</td>
<td>C.Y.</td>
<td>150</td>
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<tr>
<td>203-55.00</td>
<td>EMBANKMENT IN PLACE</td>
<td>C.Y.</td>
<td>165</td>
<td></td>
<td></td>
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<tr>
<td>203-60.00</td>
<td>COMPACTING EMBANKMENT TYPE 5 AGGREGATE FOR BASE (4&quot; THICK SURFACE)</td>
<td>C.Y.</td>
<td>135</td>
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<tr>
<td>304-05.04</td>
<td>TYPE 5 AGGREGATE FOR BASE (4&quot; THICK SURFACE)</td>
<td>S.Y.</td>
<td>650</td>
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<tr>
<td>607-99.01</td>
<td>WATER GAP</td>
<td>EACH</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>607-99.03</td>
<td>BARBED WIRE FENCE</td>
<td>L.F.</td>
<td>230</td>
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<tr>
<td>611-30.20</td>
<td>FURNISHING TYPE 2 ROCK BLANKET</td>
<td>C.Y.</td>
<td>210</td>
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<td>611-30.40</td>
<td>PLACING TYPE 2 ROCK BLANKET</td>
<td>C.Y.</td>
<td>210</td>
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<tr>
<td>616-10.05</td>
<td>CONSTRUCTION SIGNS</td>
<td>S.F.</td>
<td>45</td>
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<tr>
<td>616-10.30</td>
<td>TYPE III TEMPORARY BARRICADES</td>
<td>EACH</td>
<td>2</td>
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<tr>
<td>618-10.00</td>
<td>MOBILIZATION</td>
<td>L.S.</td>
<td>1</td>
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<tr>
<td>624-1.04A</td>
<td>SEPARATION GEOTEXTILE CONDUCTOR FURNISHED SURVEYING AND STAKING</td>
<td>S.Y.</td>
<td>315</td>
<td></td>
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<tr>
<td>627-40.00</td>
<td>21 IN. PIPE GROUP B SEEDING - WARM SEASON MIXTURES</td>
<td>L.F.</td>
<td>25</td>
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<tr>
<td>805-20.00A</td>
<td>SEEDING - WARM SEASON MIXTURES</td>
<td>ACRE</td>
<td>0.5</td>
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<tr>
<td>806-10.05</td>
<td>TYPE 2 ROCK DITCH CHECK</td>
<td>EACH</td>
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<td></td>
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<tr>
<td>806-10.19</td>
<td>SILT FENCE</td>
<td>L.F.</td>
<td>360</td>
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SUBTOTAL (ROADWAY):
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ITEM</th>
<th>UNITS</th>
<th>QTY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
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<tbody>
<tr>
<td>206-10.00</td>
<td>CLASS 1 EXCAVATION</td>
<td>C.Y.</td>
<td>200</td>
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<tr>
<td>206-10.03</td>
<td>CLASS 1 EXCAVATION IN ROCK</td>
<td>C.Y.</td>
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<tr>
<td>216-05.00</td>
<td>REMOVAL OF STRUCTURE</td>
<td>L.S.</td>
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<tr>
<td>606-10.10</td>
<td>BRIDGE RAIL (THREE BEAM)</td>
<td>L.F.</td>
<td>150</td>
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<tr>
<td>606-99.02</td>
<td>BRIDGE RAIL END SHOE</td>
<td>EACH</td>
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<td>702-10.10</td>
<td>STRUCTURAL STEEL PILES (10 INCH)</td>
<td>L.F.</td>
<td>228</td>
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<tr>
<td>702-60.00</td>
<td>PRE-BORE FOR PILING (IN ROCK)</td>
<td>L.F.</td>
<td>120</td>
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<tr>
<td>703-40.01</td>
<td>CLASS B-1 CONCRETE (4000 psi)</td>
<td>C.Y.</td>
<td>95</td>
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<tr>
<td>703-42.14</td>
<td>CLASS B-2 CONCRETE (4000 psi)</td>
<td>C.Y.</td>
<td>5</td>
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<tr>
<td>705-99.02</td>
<td>PRECAST CONCRETE SLAB 40' x 2'-10&quot;</td>
<td>EACH</td>
<td>9</td>
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<tr>
<td>706-10.60</td>
<td>REINFORCING STEEL (Gr. 60)</td>
<td>LB.</td>
<td>7,470</td>
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<tr>
<td>716-10.00</td>
<td>PLAIN NEOPRENE BEARING PADS</td>
<td>EACH</td>
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</tbody>
</table>

SUBTOTAL (BRIDGE): ____________________________

TOTAL: ____________________________

(PLEASE PRINT OR TYPE BID AMOUNT)

Contractor: ____________________________

Representative: ____________________________

(phone print or type name and title along with signature of the individual that completed this bid)

Phone: ____________________________

Address: ____________________________

Fax: ____________________________
OFF SYSTEM BRIDGE REPLACEMENT PROGRAM
PLANS FOR PROPOSED
BRIDGE NUMBER 2570014 1
RALLS COUNTY, MISSOURI

FEDERAL PROJECT BRO-R087(24)
TOWNSHIP 53 NORTH, RANGE 7 WEST, SECTION 20

KEY MAP
IMPORTANT LOCATION OF COUNTY

PROJECT LOCATION

CONVENTIONAL SYMBOLS
(USED IN PLANS)

BUILDINGS AND STRUCTURES
EXISTING
NEW

LOCATION SURVEY MARKER

UTILITIES

OVERHEAD POWER

SANITARY SEWER

GAS

WATER

FENCE

BENCHMARK

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES.

INDEX OF SHEETS
DESCRIPTION
COVER SHEET
GENERAL NOTES
QUANTITIES
PLAN & PROFILE
SIDE TO SIDE
GRADING PLAN
RIGHT OF WAY
DETAILS
BILL OF REINFORCING
TRAFFIC CONTROL
FASSION CONTROL
CROSS SECTIONS
WATER GAP DETAILS

Ralls County Commission

Ralls County, Missouri

PROJECT NUMBER

2021

2043

20

20

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

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30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.

30 M.P.H.
GENERAL NOTES

CONCRETE

ALL CONCRETE ABOVE LOWER JOINT IN END BENTS IS INCLUDED WITH SUPERTURE Structural Concrete and Bridge Shoring shall be Big as Class B1.1.

BEING ALL EXPOSED EDGES OF ALL CONCRETE WITH A 3/4” TRIANGULAR HINTING EXCEPT AS OTHERWISE NOTED ON THE PLANS. USE DOUBLE 3/4” RIVETS AT CERTAIN CONSTRUCTION JOINTS AS NOTED ON THE PLANS. CONSTRUCTION JOINTS ARE OPTIONAL WITH THE CONTRACTOR. IF USED, SHALL BE MADE ONLY AT LOCATIONS APPROVED BY THE ENGINEER.

REINFORCING

ALL DIMENSIONS RELATIVE TO REINFORCING STEEL PLACEMENT ARE TO THE CENTER-LINE OF BARS UNLESS OTHERWISE NOTED. BAR BENDING AND ORIENTATION OF BARS SHALL BE AS SHOWN AND NOTED ON THE BENDING DIAGRAMS. ALL REINFORCING STEEL EXCEPT THE SHORING RIBS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60, OR ASTM A616, GRADE 60, REINFORCING STEEL. ALL REINFORCING STEEL IS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A616, GRADE 60 OR AJ2, AND ARE INCLUDED IN THE WEIGHT OF GRADE 60 REINFORCING STEEL.

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2” UNLESS OTHERWISE SHOWN. ALL SPLICERS IN CONCRETE, LAP BARS 16 DIAMETERS.

BEARING PADS

BEARINGS SHALL BE 60-DIAMETER ELASTOMERIC NEOPRENE PADS. COST OF FURNISHING PAIN BEARINGS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR NEOPRENE BEARING PADS PER EACH.

FABRICATING AND INSTALLING NEOPRENE BEARING PADS COMPLETE IN PLACE, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR NEOPRENE BEARING PADS PER EACH.

PERMANENT SIGNING & MARKING


SEEDING

SEEDING AREAS WITHIN THE LIMITS OF CONSTRUCTION EXCEPT STEEP ROCKY SLOPES AND SURFACED AREAS SHALL BE SEEDED ACCORDING TO THE SPECIFICATIONS.

UTILITIES

ALL EAGLE AND PRIVATE UTILITY FACILITIES SHALL BE MOVED OR ADJUSTED PRIOR TO CONSTRUCTION AS NECESSARY BY THE OWNERS TO FIT THE CONSTRUCTION UNLESS NOTED ON THE PLANS OR IN THE PROPOSAL. THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE.

MATERIAL REQUIREMENTS

CONTRACTOR SHALL MATCH EXISTING FENCE TYPE (i.e. 5 STRAND BARBED WIRE OR WOVEN WIRE FENCE) CONTRACTOR SHALL MATCH EXISTING FENCE TYPE (i.e. 5 STRAND BARBED WIRE OR WOVEN WIRE FENCE) FENCES AND BRACING POSTS TO FIT THE NEW CONSTRUCTION.

NOTES

1. CONTRACTOR SHALL MATCH EXISTING FENCE TYPE (i.e. 5 STRAND BARBED WIRE OR WOVEN WIRE FENCE)

TYPICAL CORNER AND BRACING

TYPICAL FENCE GATE AND BRACING

* CONTRACTOR SHALL MATCH EXISTING FENCE TYPE (i.e. 5 STRAND BARBED WIRE OR WOVEN WIRE FENCE)

NOTES:

1. CONTRACTOR SHALL MATCH EXISTING FENCE TYPE (i.e. 5 STRAND BARBED WIRE OR WOVEN WIRE FENCE)
CONTRACTOR SHALL INSTALL CAST STEEL DRIVING POINTS ON ALL PILES. CAST STEEL MATERIALS SHALL BE ASTM A27 65/35 OR BETTER. COSTS OF PROVIDING AND INSTALLING PILE TIP REINFORCEMENT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF INSTALLING STRUCTURAL BENT NO.

<table>
<thead>
<tr>
<th>APPROXIMATE LENGTH FT.</th>
<th>DESIGN BEARING TONS</th>
<th>HAMMER ENERGY REQUIRED FT. LBS.</th>
<th>ESTIMATED TIP ELEVATION</th>
<th>CUT OFF ELEVATION</th>
<th>PRE-BORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>19'</td>
<td>55</td>
<td>687.2</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>19'</td>
<td>19'</td>
<td>55</td>
<td>687.2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*NOTE: ONLY STEEL PILE HP 10 x 42 SHALL BE USED ON THIS PROJECT. HP-10-42 SHALL BE PRE-BORED A MINIMUM 10 FEET BELOW BOTTOM OF ABUTMENT WALL AND MINIMUM OF 5 FEET INTO SUITABLE LIMESTONE AS DETERMINED BY THE ENGINEER.

**STEEL PILE DATA**

**BORING DATA**

**HYDROLOGIC DATA**

**RECAPITULATION OF ROAD QUANTITIES**
GENERAL ELEVATION

PLAN VIEW
### Parcel Information

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Timothy R. Wyss and Mary Kay Crocker-Wyss Trustees of the Timothy and Mary Kay Wyss Trust under Trust Agreement Dated June 16, 2020</td>
<td>0.118</td>
<td>0.101</td>
<td>0.149</td>
<td>159.73</td>
</tr>
</tbody>
</table>

### Additional Information

**Point of Beginning:**

Commencing at a 2" iron pin marking the Northwest corner of Section 20, Township 53 North, Range 7 West; thence South 02 degrees 10 minutes 56 seconds West a distance of 1,670.23 feet to the Point of Beginning.

1. **Timothy R. Wyss and Mary Kay Crocker-Wyss Trustees of the Timothy and Mary Kay Wyss Trust under Trust Agreement Dated June 16, 2020**

   - Northeast of Sec. 19, T53N, R7W
   - Document #2021-0523 containing 160 acres, more or less

2. **Jay and Beth Asbury**

   - West 1/4 of Northwest 1/4 Sec. 20, T53N, R7W
   - Document #2003-30574 containing 120 acres, more or less
SYMMETRICAL ABOUT CENTERLINE

1/4" PER FT.

SECTION THRU STRUCTURE

(SL-1 RAIL)

NOTES:

- Shop Drawings of Alternate Connections of the Bridge Rail to Deck Beams shall be submitted to the Engineer for approval before fabrication of beams.
- BOLTED CONNECTIONS PREFERRED. Shall be submitted to the Engineer for approval before fabrication of beams.
- CONTRACTOR WILL HAVE TO SUBMIT WELDING CERTIFICATIONS BEFORE A WELDED CONNECTION WILL BE APPROVED.

NOTE:

- Beams shall be constructed of material that meets or exceeds Missouri State Specifications for Highway Construction. Any variation in dimensions from those shown including depth or width shall be approved by the Engineer before a bid is submitted. Shop drawings of any beam will have to be approved by the Engineer before the beams are accepted and shall include loading rating calculation signed and sealed by a Licensed Engineer in the State of Missouri. All beams must be capable of caring a HS20 live load, a 25lb/sq.ft. future wearing surface and all other impact and dead loads as per the latest addition of "AASHTO Standard Specifications for Highway Bridges". The load rating calculations should be in accordance with the "Missouri Department of Transportation Bridge Inspection and Rating Manual" and provide a minimum HS20 inventory rating of 36 tons.

BEARING PLATE

BASE PLATE

BRIDGE POST DETAILS

C/L ELEV. 709.50

18" SQUARE BASE PLATE

5/8" x 20 UNC THRU BOLTS

3/4" x 10 UNC THRU BOLTS

1/2" BOLTS (ONE)

(ASME A325)

W/ BEARING PLATE

1-3/4" BOLT x 7" (ASTM A325)

W/ BEARING PLATE BASE PLATE

3/8" x 12" x 3/4" PLASTIC BASE PLATE

BEARING PLATE

2 B18 THREADING INSERTS x 12"

8" X 7" X 3/4"

BASE PLATE

4 1/2" P

2" LINEAR TAP

3/8" BOLT (ONE)

(ASME A325)

W/ SQUARE WASHER

5/8" BOLT

2" x 12" x 3/4"

BEARING PLATE BASE PLATE

12 GA. THRIE BEAM

TS 6 X 3 X 0.25 X 3'-4" (MIN.)

SEE GUARD RAIL DETAIL

6 EQUAL SPACES AT 6'-3"

12'-6 7/8" "

NOTE:

Deck beams shall be constructed of material that meets or exceeds Missouri State Specifications for Highway Construction. Any variation in dimensions from those shown including depth or width shall be approved by the Engineer before a bid is submitted. Shop drawings of any beam will have to be approved by the Engineer before the beams are accepted and shall include loading rating calculation signed and sealed by a Licensed Engineer in the State of Missouri. All beams must be capable of caring a HS20 live load, a 25lb/sq.ft. future wearing surface and all other impact and dead loads as per the latest addition of "AASHTO Standard Specifications for Highway Bridges". The load rating calculations should be in accordance with the "Missouri Department of Transportation Bridge Inspection and Rating Manual" and provide a minimum HS20 inventory rating of 36 tons.
PLAN VIEW @ END BENT
(NOT TO SCALE)

ALL U-BARS IN END BENT TO BE PLACED PARALLEL TO C/L ROADWAY.

NOTE:

ELEVATION VIEW @ END BENT
(NOT TO SCALE)

SECTION A-A THRU END BENT
(NOT TO SCALE)

NOTE:

CONSTRUCTION JOINT
ELEV. 707.69

CONSTRUCTION JOINT
ELEV. 709.25

ELEVATION VIEW @ END BENT
(NOT TO SCALE)

NOTE:

TYPICAL WING ELEVATION
(NOT TO SCALE)
BARRICADES

(1) TYPE III (10') MOVABLE BARRICADES AT END OF PROJECT. W/ROAD CLOSED SIGN (R11-2)

STA: 4+30

(2) TYPE III (10') MOVABLE BARRICADES AT BEGINNING OF PROJECT. W/ROAD CLOSED SIGN (R11-2)

STA: 1+35

OBJECT MARKERS

WOOD SIGN POST SLOT DETAIL

CHANNELIZER

CONES

CHANNELIZERS. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATION OF OBJECT MARKERS. ALL REFLECTORIZED SURFACES SHALL BE TYPE 2 SHEETING.

**

カーが通行不可能。条線は通行する方の側に向けて傾けること。

マーカーが移動される場合、サインレジェンドに記載されていること。

指し示す距離の限界はタイプ2反射性シートである。非反射性のものはありません。

タイプ2反射性の2.0' x 2.0' スロットが必要です。反射性の4.0' x 6.0'ポール。

コーンの場合は、オレンジと反射性のオレンジの2つと反射性のホワイトの2つが必要です。

リフレクティブな表面はタイプ2シーティングでなければなりません。
EROSION CONTROL SHALL BE PROVIDED AS SHOWN ON THE PLANS. COST FOR FURNISHING, INSTALLING AND MAINTAINING SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
2. SILT FENCE SHALL BE PLACED ON SLOPE CONTURS TO MAXIMIZE PONDING EFFICIENCY.
3. SILT FENCE SHALL BE ATTACHED SECURELY TO UPSTREAM SIDE OF POST.

SECTION A - A

EROSION CONTROL SHALL BE PROVIDED AS SHOWN ON THE PLANS. COST FOR FURNISHING, INSTALLING AND MAINTAINING SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
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SECTION A - A

EROSION CONTROL SHALL BE PROVIDED AS SHOWN ON THE PLANS. COST FOR FURNISHING, INSTALLING AND MAINTAINING SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
2. SILT FENCE SHALL BE PLACED ON SLOPE CONTURS TO MAXIMIZE PONDING EFFICIENCY.

SECTION A - A
* Connect cable to piles looped through hole in web with four galvanized wire rope clamps (Typ).

WATER GAP ELEVATION
N.T.S.