

PROJ. NO.	SHEET NO.	TOTAL SHEETS
20192473-126	1	11

**PLAN OF PROPOSED  
BRIDGE REPLACEMENT CN #126  
35'-0" I-BEAM SPAN  
E0690 RD. (W. 92ND AVE.) OVER UNNAMED CREEK  
STRUCTURE NO. 60E0690N3230001  
BRIDGE NBI NO. 08577  
COUNTY COMMISSIONERS DISTRICT #3  
PAYNE COUNTY, OKLAHOMA**

R-1-W | R-1-E

SCALES  
1" = 10'  
PLAN  
1" = 10'  
PROFILE HOR. 1" = 10'  
VER. 1" = 10'  
LAYOUT MAP 1" = 2,640'

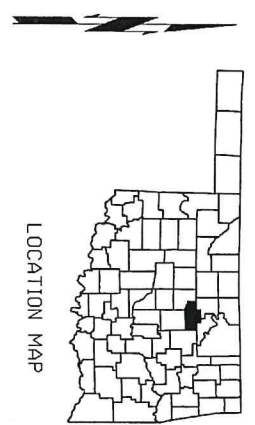
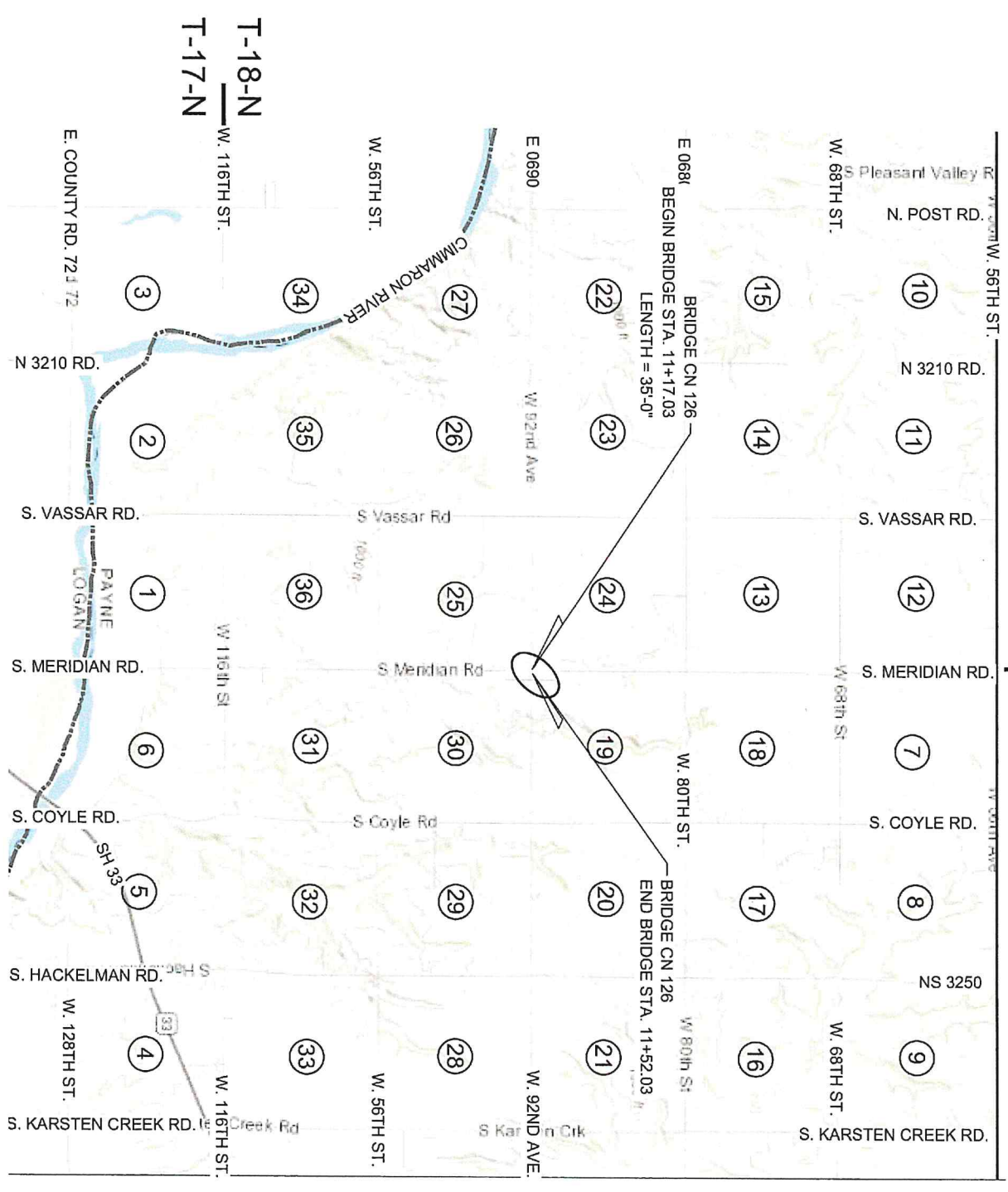
LEVEL DATUM IS ASSUMED BEARINGS AND COORDINATES ARE ASSUMED

- SURVEY DATA
- HORIZONTAL CONTROL FOR THIS SURVEY IS THE ESTABLISHED SECTION CORNERS ALONG THE CONSTRUCTION REFERENCE LINE & SECTION LINE.
  - VERTICAL CONTROL  
A. LEVEL DATUM IS MEAN SEA LEVEL (U.S.C. & G.S.)



**UTILITY STATEMENT:**  
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

- CONVENTIONAL SYMBOLS**
- PROPOSED ROAD
  - RAILROADS
  - RANGE & TOWNSHIP
  - SECTION LINES
  - QUARTER SECTION LINES
  - FENCES
  - GROUND LINE
  - EXISTING ROADS
  - BASE LINE
  - GRADE LINES
  - TELEPHONE & TELEGRAPH
  - POWER LINES
  - OIL WELLS
  - BUILDINGS
  - DRAINAGE STRUCTURES - IN PLACE
  - DRAINAGE STRUCTURES - NEW
  - RIGHT-OF-WAY LINES - EXISTING
  - RIGHT-OF-WAY LINES - NEW
  - RIGHT-OF-WAY MARKERS - IN PLACE
  - RIGHT-OF-WAY MARKERS - REMOVE & RESET
  - RIGHT-OF-WAY MARKERS - NEW
  - CONTROLLED ACCESS
  - RIGHT-OF-WAY FENCE



**SHEET INDEX**

Sheet Number	Sheet Title
0001	REGIONAL MAP
0002	GENERAL NOTES AND PAY QUANTITIES (BRIDGE)
AB01	GENERAL PLAN AND ELEVATION
B001	FOUNDATION REPORT
B002	35' I-BEAM SPAN BRIDGE DETAILS 1 OF 3
B003	35' I-BEAM SPAN BRIDGE DETAILS 2 OF 3
B004	35' I-BEAM SPAN BRIDGE DETAILS 3 OF 3
B005	SECTION 404 PERMIT COMPLIANCE
E001	STORM WATER MANAGEMENT PLAN
R001	EROSION CONTROL PLAN
R002	

**JEFFERY G. DIXON**  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 20651  
 STATE OF OKLAHOMA  
 DATE: 2/26/20

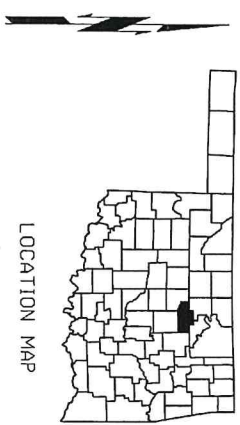
**ISABELLA CRISTINA HORTON**  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 30018  
 STATE OF OKLAHOMA  
 DATE: 02/26/20

5901 Broadway Extension, Suite 500  
 Oklahoma City, Oklahoma 73118  
 Phone (405) 940-2931  
 www.fso-aa.com

APPROVED  
 THIS \_\_\_\_\_ DAY OF \_\_\_\_\_  
 COUNTY COMMISSIONERS  
 CHAIRMAN \_\_\_\_\_  
 MEMBER \_\_\_\_\_  
 MEMBER \_\_\_\_\_  
 ATTEST \_\_\_\_\_  
 COUNTY CLERK \_\_\_\_\_



0 1000 2000 4000  
Scale: 1" = 2000'



**REGIONAL MAP**  
 ACCESS TO CN #126 FROM  
 ST. HWY. 33 AND W. MAIN ST.  
 (COYLE) INTERCHANGE  
 STRUCTURE NO. 60E0690N3230001  
 BRIDGE NBI NO. 08577

**FSB**  
 5801 Broadway Extension, Suite 500  
 Oklahoma City, Oklahoma 73118  
 Phone (405) 840-2931  
 www.fsb-ae.com

CA NO. 1072  
 EXP. 06/30/2020

PAYNE COUNTY DIST. #3 CN# 126

REGIONAL MAP FOR ACCESS TO BRIDGE  
 REPLACEMENT PROJECT CN #126

SHEET NO. 0002 (2 OF 11)

**GENERAL NOTES**

**SPECIFICATIONS:**

COMPLY WITH THE REQUIREMENTS OF THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

**DESCRIPTION OF WORK:**

THE WORK TO BE PERFORMED UNDER THIS CONTRACT CONSISTS OF THE REPLACEMENT OF A SINGLE SPAN BRIDGE LOCATED ON W. 92ND AVE. (E0690 RD.) OVER UNNAMED CREEK IN PAYNE COUNTY, OKLAHOMA. THE APPROACH AND ROADWAY WILL BE THE RESPONSIBILITY OF THE COUNTY AND WILL REQUIRE THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE COUNTY MUNICIPALITIES ON THE SCOPE AND/OR EXTENT OF WHAT WILL BE PROVIDED AND AT WHAT POINT OF TIME IN THE PROJECT.

BRIDGE, APPROACH AND ROADWAY WILL BE WIDENED FROM +20' TO A 28' ROADWAY CLEARANCE. THE WIDENING WILL BE ACCOMPLISHED BY REMOVING AND REPLACING EXISTING DECK, REPLACING THE EXISTING ABUTMENTS WITH NEW ABUTMENTS, AND REPLACING EXISTING BEAMS WITH NEW STEEL BEAMS. THE CENTERLINE OF PROPOSED BRIDGE WILL BE LOCATED 5.0' NORTH OF THE SECTION LINE. BEARINGS N89°50'47.61"E AS PER THE SURVEY.

**VERIFICATION OF EXISTING CONDITIONS:**

ALL DIMENSIONS OF THE EXISTING COMPONENTS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DATA NECESSARY TO CONNECT THE NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF. BIDDERS SHALL FULLY INFORM THEMSELVES OF THE NATURE OF THE WORK AND CONDITIONS UNDER WHICH IT WILL BE PERFORMED. THE CONTRACTOR SHALL ADOPT METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE WORK AREA OR SURROUNDING AREA. ANY DAMAGE TO THE AREA DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. TO THE SATISFACTION OF THE RESIDENT ENGINEER.

CONTRACTOR SHALL BE AWARE OF EXISTING CONDITIONS AND POTENTIAL HAZARDS DURING CONSTRUCTION. CONTRACTOR SHALL TAKE PRECAUTIONS TO MAINTAIN THE INTEGRITY OF ANY EXISTING UTILITIES AND STRUCTURES. ANY DAMAGE TO THESE ITEMS DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER.

**HORIZONTAL GEOMETRY & VERTICAL CURVE DATA:**

THE INFORMATION SHOWN ON THE "GENERAL PLAN AND ELEVATION" (SHEET B001) DRAWINGS REGARDING HORIZONTAL GEOMETRY AND VERTICAL PROFILE WERE TAKEN FROM SURVEYING. THIS INFORMATION IS INCLUDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING HORIZONTAL AND VERTICAL GEOMETRY. THE RECONSTRUCTION OF THE BRIDGE DECKS IS INTENDED TO CONSTRUCT NEW BRIDGE STRUCTURE ABOVE BOTTOM OF EXISTING BRIDGE BEAM (LOW CHORD) ELEVATION AND TRANSITION THE APPROACHING ROADWAY TO MEET THE NEW DECK ELEVATION.

**CONCRETE DECK FINISHING:**

BRIDGE DECKS FOR THIS PROJECT ARE TO BE FINISHED WITH A MECHANICAL TYPE FINISHING MACHINE. OVER-HANGING SLAB FORMS WILL BE REQUIRED TO BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE CONCRETE FORMS, FINISHING MACHINE AND OTHER CONSTRUCTION LOADS. PRIOR TO FINISHING OPERATIONS, A PROPOSAL, STILL PLACING THE TYPE OF FINISHING MACHINE AND THE FINISHING PROCEDURE WILL BE SUBMITTED TO THE RESIDENT ENGINEER. THIS PROPOSAL SHALL SET FORTH ANY AREAS IN WHICH A MECHANICAL FINISHER CANNOT BE USED AND THE METHODS FOR FINISHING THESE AREAS. CONCRETE SHALL NOT BE PLACED UNTIL THIS PROPOSAL IS APPROVED BY THE RESIDENT ENGINEER.

**PAY ITEM NOTES**

**(1) REMOVAL OF BRIDGE ITEMS:**

THE PAY ITEM "REMOVAL OF BRIDGE ITEMS" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL ITEMS TO BE REMOVED FROM THE EXISTING BRIDGE AS SPECIFIED OR SHOWN IN THE PLANS INCLUDING THE FOLLOWING:

1. WOODEN DECK WITH GUARDRAILS.
2. BEAMS AND DIAPHRAGMS.
3. SHEET PILES.
4. DRIVEN PILES.

THE EXISTING STRUCTURE MATERIAL, FROM ITEMS LISTED ABOVE, SHALL BECOME THE PROPERTY OF THE CONTRACTOR, EXCEPT FOR STEEL BEAMS AND PORTIONS OF DRIVEN PILES WHICH WILL BECOME PROPERTY OF THE COUNTY. DRIVE PILES SHALL BE CUT AT GROUND LINE ELEVATION.

ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING THE COST OF CUTTING, DEMOLITION, AND CLEANING, CONTAINMENT AND REMOVAL OF DEBRIS, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LUMP SUM OF "REMOVAL OF BRIDGE ITEMS".

**(2) EROSION CONTROL MAINTENANCE:**

PRICE BID SHALL INCLUDE PLAN QUANTITIES OF SILT FENCE AND SILT DIKES AND ALL MAINTENANCE INCLUDING CUT AND DISPOSAL OF SILT WHEN 50% FULL AND/OR IN CONFORMANCE OF THE SWMP AND/OR SWPPP. SEE SHEET R001 AND DISPOSAL OF SILT WHEN 50% FULL AND/OR IN CONFORMANCE OF THE SWMP AND/OR SWPPP.

**(3) SURVEYING AND CONSTRUCTION STAKING:**

THE CONTRACTOR WILL BE REQUIRED TO CONDUCT ALL SURVEYING AND CONSTRUCTION STAKING NECESSARY FOR THE COMPLETION OF THE PROJECT AS DIRECTED BY THE RESIDENT ENGINEER. THE SURVEYING AND CONSTRUCTION STAKING REQUIRED FOR COMPLETION OF THE PROJECT MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:

- A. ESTABLISHING HORIZONTAL CONTROL, INCLUDING THE STAKING OF CENTERLINE BRIDGE AND APPROACH ROADWAY AND ASSIGNING STATIONING AS DIRECTED BY THE RESIDENT ENGINEER.
- B. ESTABLISHING VERTICAL CONTROL, INCLUDING THE SETTING OF BENCHMARKS.
- C. MEASURING THE ELEVATIONS ALONG THE EXISTING BRIDGE DECK SLAB AT CENTERLINE AND OF DRIVING LANES AND EDGES OF SHOULDERS.
- D. MEASURING THE ELEVATIONS ALONG THE EXISTING APPROACH ROADWAY AT CENTERLINE.
- E. EDGES OF DRIVING LANES AND EDGES OF SHOULDERS.
- F. MEASURING THE EXISTING TOP OF BEAM ELEVATION FOR DETERMINING DECK SLAB HAUNCH AND FORMING DATA.
- F. MEASURING AND SETTING CONSTRUCTION STAKES AS NECESSARY FOR CONDUCTING THE GRADING AND SURFACING WORK ON THE APPROACH ROADWAY.

ALL COST OF SURVEYING AND CONSTRUCTION STAKING NECESSARY FOR COMPLETION OF THE PROJECT, AS DIRECTED BY THE RESIDENT ENGINEER, INCLUDING THE COST OF MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LUMP SUM OF "CONSTRUCTION STAKING LEVEL 1".

**(1) AIR RELIEF VENTS FOR CONCRETE DECK SLAB:**

VENT OPENINGS SHALL BE CONSTRUCTED WITH SCH 40 PVC PIPE AND CAST INTO CONCRETE SLAB AT THE SPACING AND LOCATION SHOWN ON SHEET B003. DRILLING THE CONCRETE SLAB IS PROHIBITED. ALL COST OF MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN IN THE PLANS SHALL BE INCLUDED ON PAY ITEM "CLASS AA CONCRETE".

- BR-1: PAYMENT FOR THIS ITEM WILL BE BASED ON THE PLAN QUANTITIES ONLY.
- BR-2: STRUCTURAL STEEL CONSISTING OF W27X84 ROADWAY BEAMS ONLY.

**BR-3:**

STEEL SHEET PILING SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM A857 FROM MATERIAL CONFORMING TO ASTM A570 GRADE 36. THE MATERIAL SHALL BE HOT DIP GALVANIZED PER ASTM A123 AT A RATE OF 2.0Z. PER SQUARE FOOT ON SURFACE AREA, ON BOTH SIDES. PRE-GALVANIZED MATERIAL SHALL CONFORM TO ASTM A446 GRADE A AND BE GALVANIZED PER ASTM G210 COATING. STEEL SHEET PILING SHALL BE 10 GA., 0.1345 INCHES THICK, WEIGHING 12.5 LBS. PER LINEAR FOOT OF PILE OR 76 LBS. PER SQUARE FEET OF WALL. SHALL HAVE SECTION MODULE OF 3.60 INCHES CUBED PER SECTION AND MOMENT OF INERTIA OF 6.0 IN<sup>4</sup>.

- BR-4: ELEVATIONS PROVIDED ON THESE DOCUMENTS ARE FROM ARE FROM THE SURVEY. CONTRACTOR SHALL FIELD VERIFY. LENGTH OF PILES ARE BASED ON SURVEY AND AVERAGE A LENGTH OF 36'.
- BR-5: CONTRACTOR SHALL PROVIDE STRUCTURAL STEEL FOR HP 10X42 CONFORMING TO AASHTO M270, GRADE 50W.

- BR-6: PRICE TO INCLUDE ALL HARDWARE NECESSARY FOR THE COMPLETE INSTALLATION OF THE GUARDRAIL (SEE SHEET B003), INCLUDING TURNED ENDS AS WELL AS, THE MOUNTING OF OM-3 TYPE 3 OBJECT MARKERS (2) OM3-L AND (2) OM3-RJ SIMILAR TO DETAIL 1, SHEET B005.

**CN #126  
PAY QUANTITIES**

BRIDGE "A" 35' COMPOSITE I-BEAM SPAN, 28'-0" CLEAR ROADWAY

ITEM NO.	DESCRIPTION	UNIT	QUANT.
1	STRUCTURAL STEEL	LB	20580.00
2	CLASS AA CONCRETE	CY	40.00
3	REINFORCING STEEL	LB	5100.00
4	LS3X1/4x6" SHEAR ANGLES @ 12" O.C.	LB	600.00
5	CBX11.5 (SHEET PILING HORIZ. REINFORCEMENT)	LB	4500.00
6	C12X20.7 HEADER	LB	1242.00
7	W-BEAM (GUARDRAIL TYPE A)	LF	140.00
8	GUARD RAIL POST W6X20	LB	2520.00
9	22 GA GALVANIZED DECK	SF	10500.00
10	LS3X1/4 ANGLE (DIAPHRAGM)	LB	1315.00
11	LS3X1/4 ANGLE (SHEET PILES)	LB	770.00
12	PILES FURNISHED (HP10x42)	LB	39312.00
13	PILES DRIVEN (HP10x42)	LB	39312.00
14	SHEET PILING FURNISHED	SF	2476.00
15	SHEET PILING DRIVEN	SF	2476.00
16	HP10x42 PILE CAP	LB	2772.00
17	STIFFNER PLATES	LB	250.00
18	5/8" DIA. x 6" SHEAR STUDS	EA	128.00
19	L4x4x1/4 ANGLE	LB	1400.00
20	TYPE I-A PLAIN IRPAP	TON	220.00
21	TYPE I-A FILTER BLANKET	TON	55.00
22	SHEET ALUMINUM SIGNS	SF	32.00

**CN #126  
PAY QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	QUANT.
23	CONSTRUCTION STAKING LEVEL 1	LSUM	1.00
24	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00
24	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1.00

PAYNE COUNTY

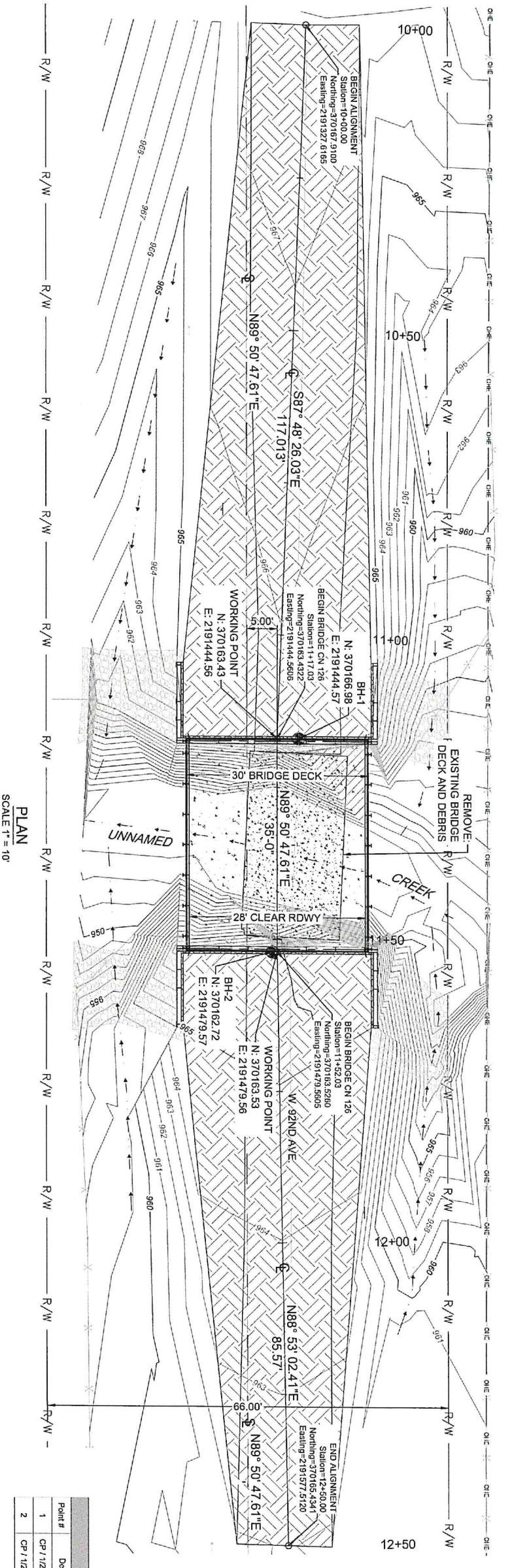
DIST. #3

CN# 126

**GENERAL NOTES AND PAY QUANTITIES  
(BRIDGE)**

AB01-92473

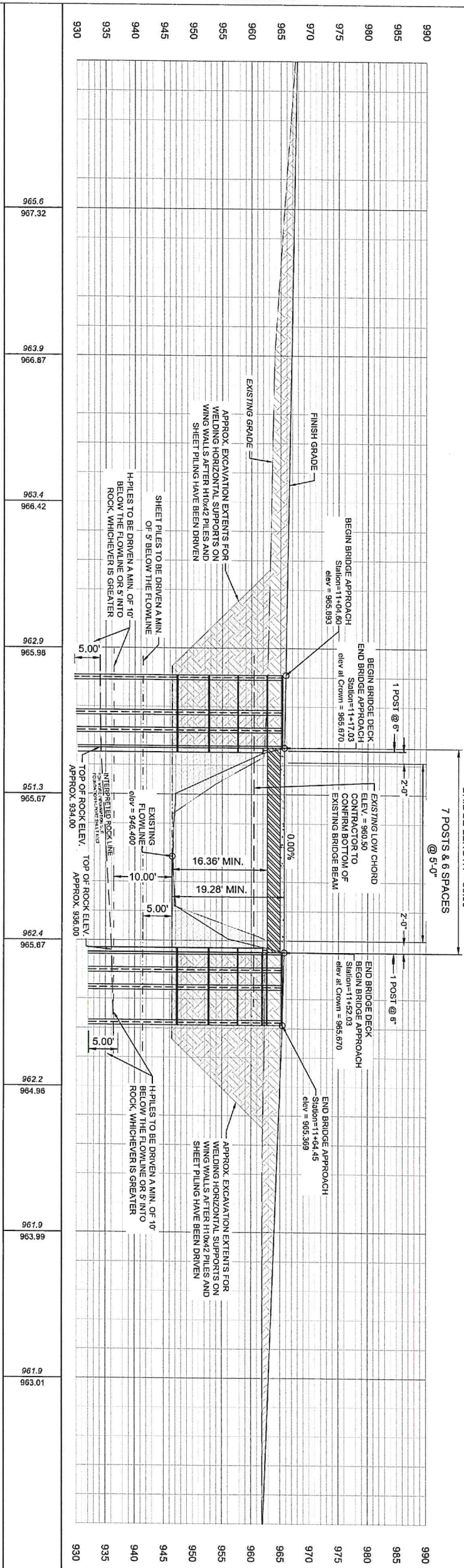
SHEET NO. AB01 (3 OF 11)



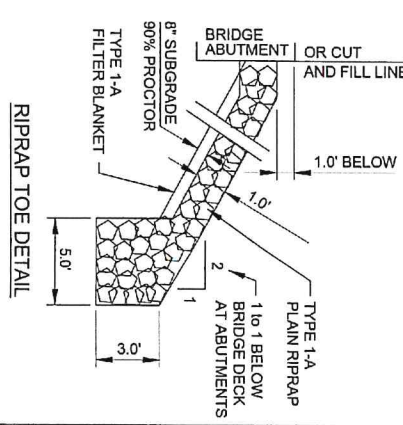
PLAN  
SCALE 1" = 10'

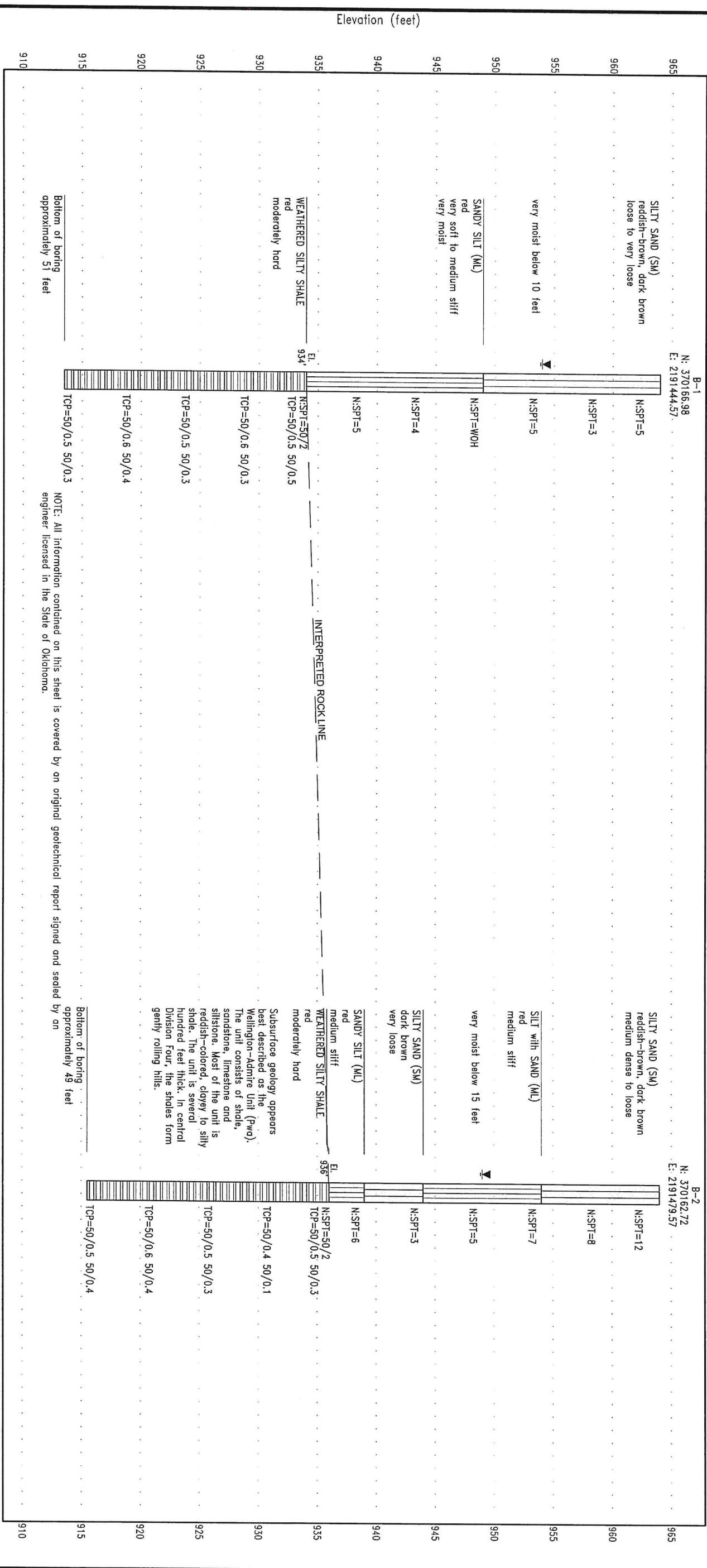
Point #	Description	Nothing	Easting	Elevation
1	CP 1/12IN IP W/CAP	370.130.0957	2.191.722.7980	963.93
2	CP 1/12IN IP W/CAP	370.097.2270	2.191.272.5210	962.06

**DESIGN DATA:**  
 CLASS AA CONCRETE  $F_c = 4000$  PSI  
 REINFORCING STEEL  $F_y = 60,000$  PSI  
 STRUCTURAL STEEL M270  $F_y = 50,000$  PSI  
 (GRADE 50W)  
 LOADINGS:  
 HL-93 LOADING OR OKLAHOMA OVERLOAD TRUCK  
 DESIGN:  
 ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,  
 7TH EDITION WITH CURRENT INTERIMS  
 ANSII/AASHTO/AWS D1.5 BRIDGE WELDING CODE  
 ANSII/AASHTO/AWS D1.5 STRUCTURAL STEEL  
 WELDING CODE - STAINLESS STEEL  
**FOUNDATION DATA:**  
 ABUTMENT H10x42 DRIVEN PILES  
 FACTORED REACTION = 54 TON/PILE  
 ALLOWABLE DESIGN CAPACITY = 70.5 TON/PILE  
 BEARING RESISTANCE FACTOR = 0.5  
 MINIMUM DEPTH INTO ROCK = 3.0 FT



ELEVATION  
SCALE 1" = 10' HORIZ. 1" = 10' VERT.





Hinderliter Geotechnical Engineering  
 4071 NW 3rd Street  
 Oklahoma City, OK 73107  
 Telephone: (405) 942-4090  
 Website: HinderliterGeo.com

**LEGEND:**  
 N:SPT=Standard Penetration Test  
 TCP=Texas Cone Penetrometer  
 R=Recovery  
 ROD=Rock Quality Designation  
 UC=Unconfined Compressive Strength

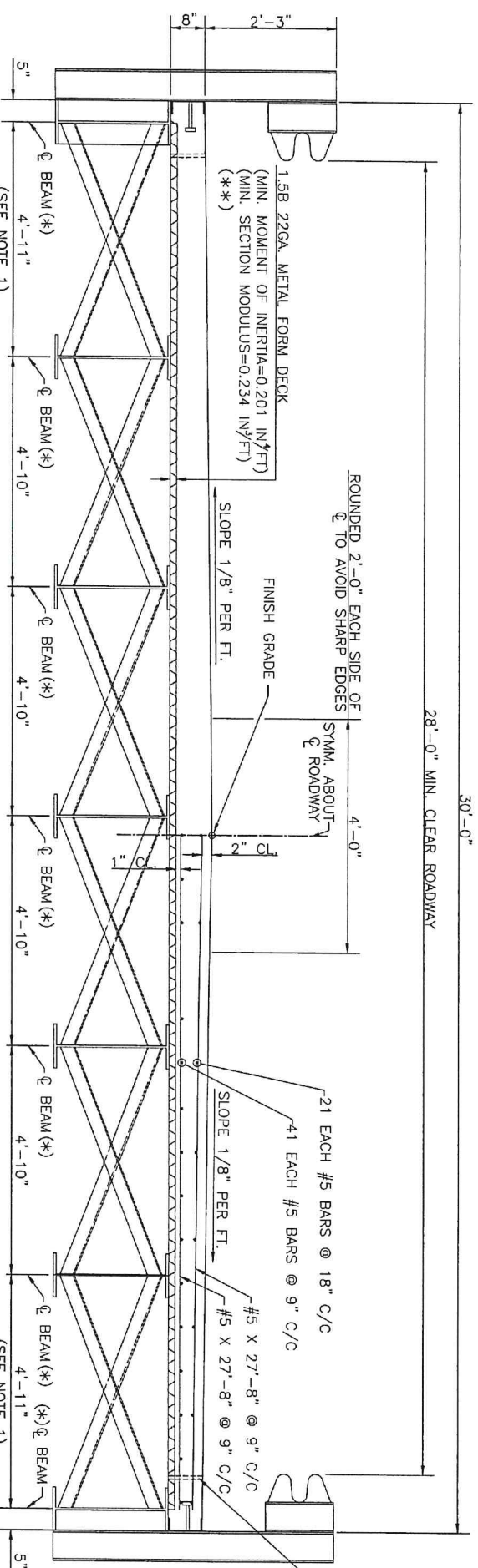
NOTE: All information contained on this sheet is covered by an original geotechnical report signed and sealed by an engineer licensed in the State of Oklahoma.



**SUBSURFACE FENCE DIAGRAM**  
 Project: CN-126 Single-Span Bridge Repair  
 Location: EW-69 & NS-323, Payne County  
 Number: FSB-20-01c

PAYNE COUNTY DIST. #3 CN# 126

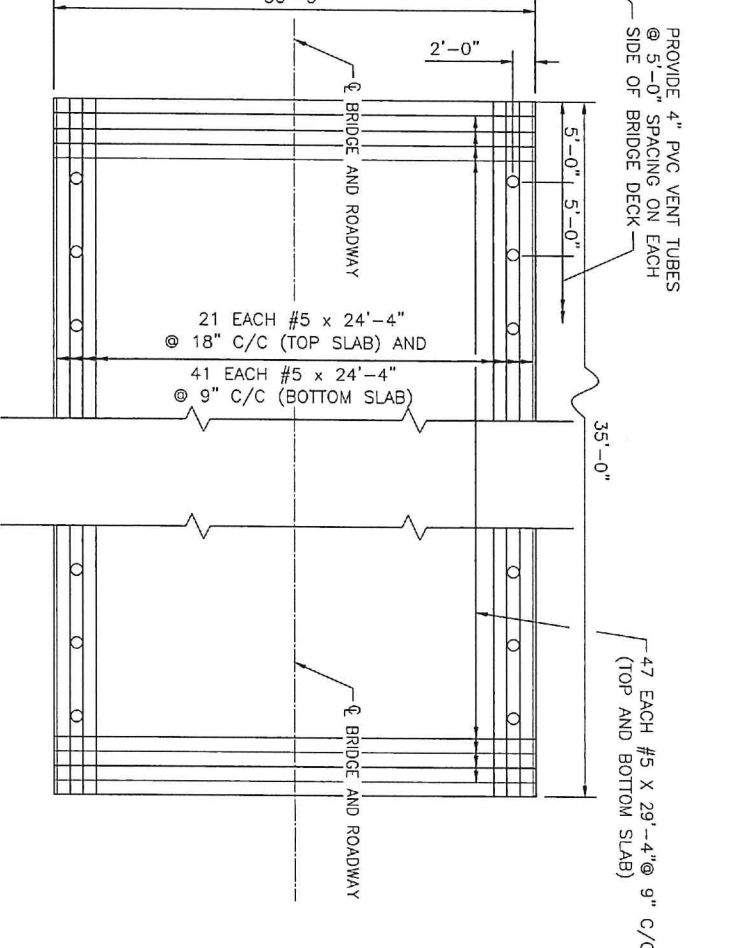
FOUNDATION REPORT  
 SHEET NO. B002 (5 OF 11)  
 B002-92473



END SECTION

INTERIOR SECTION

END SECTION



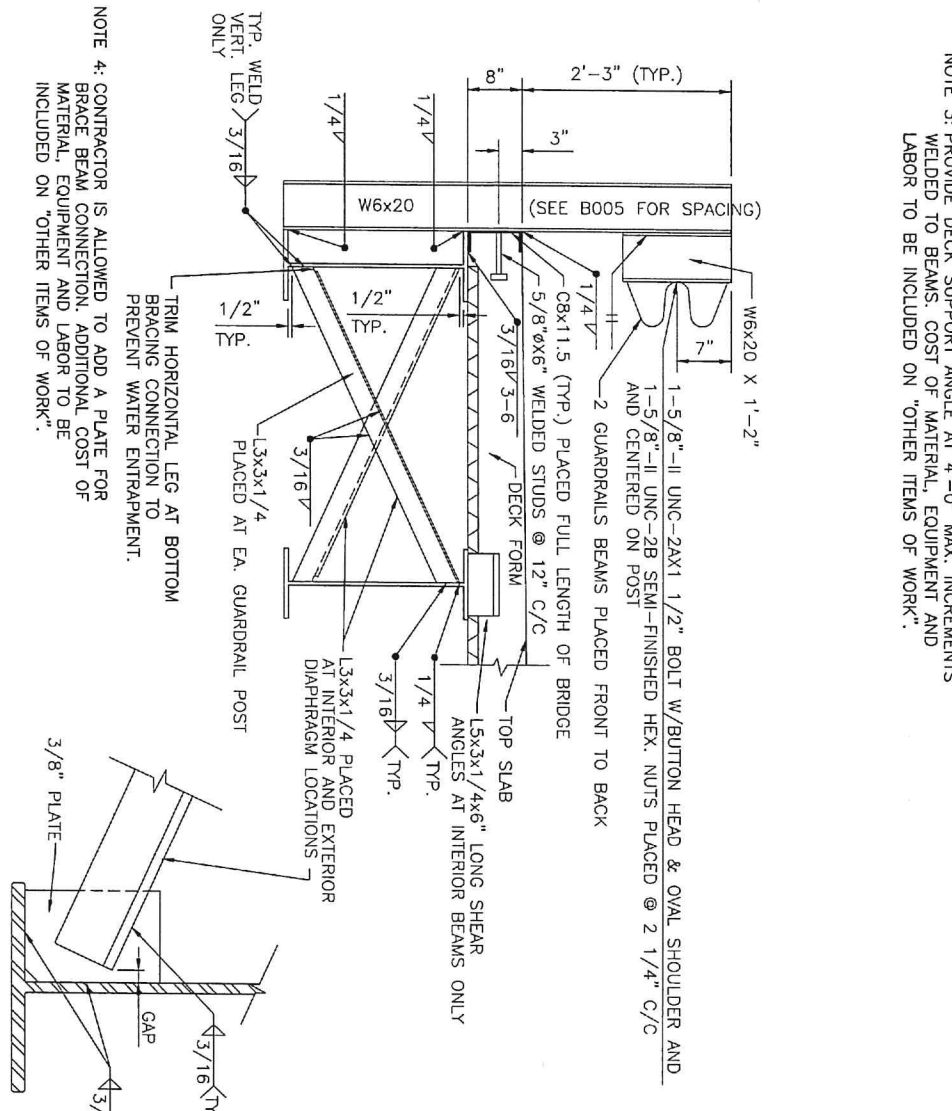
TYPICAL SLAB REINFORCING

NOTE 1: THIS DIMENSION SHALL BE MODIFIED AS NECESSARY TO INSURE THE STRAIGHT ALIGNMENT OF THE C8X11.5 AT THE OUTSIDE EDGE OF SLAB WHEN THE ROADWAY BEAM SIZE CHANGES FROM ONE SPAN TO THE NEXT SPAN.

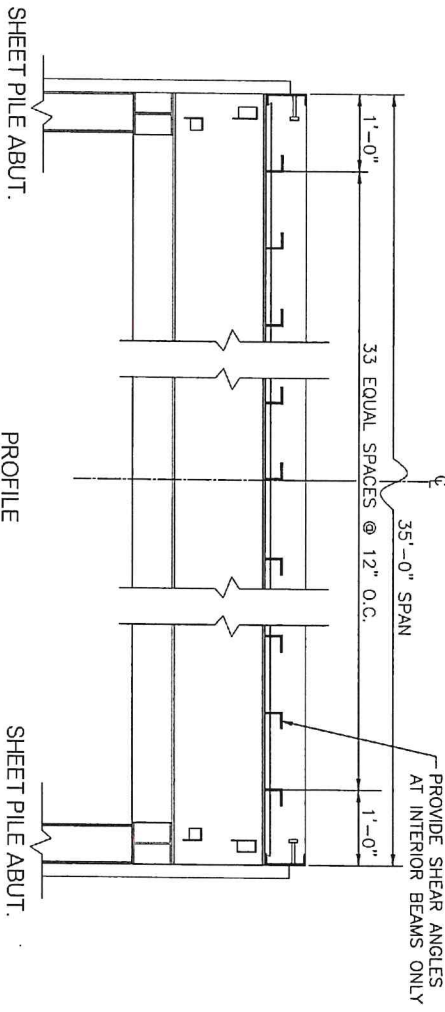
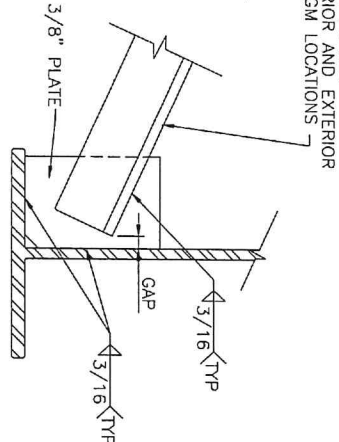
(\* ) 7 EA. W27x84 BEAMS (SEE NOTE 2)

NOTE 2: DECK SUPPORT AND SHEAR ANGLES NOT SHOWN ON BRIDGE SECTION FOR CLARITY. REFER TO TRAFFIC RAIL AND DIAPHRAGM DETAIL.

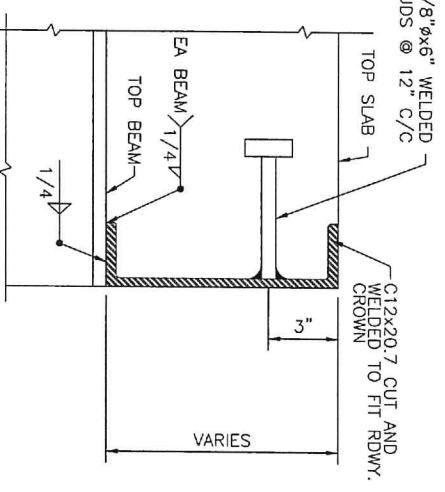
NOTE 3: PROVIDE DECK SUPPORT ANGLE AT 4'-0" MAX. INCREMENTS WELDED TO BEAMS. COST OF MATERIAL, EQUIPMENT AND LABOR TO BE INCLUDED ON "OTHER ITEMS OF WORK".



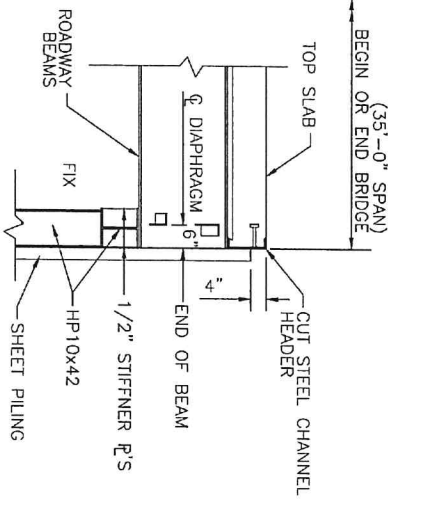
TRAFFIC RAIL AND DIAPHRAGM DETAIL



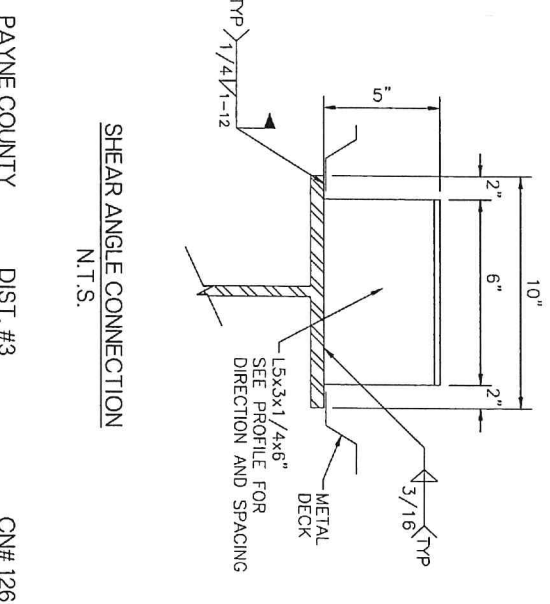
SHEET PILE ABUT.



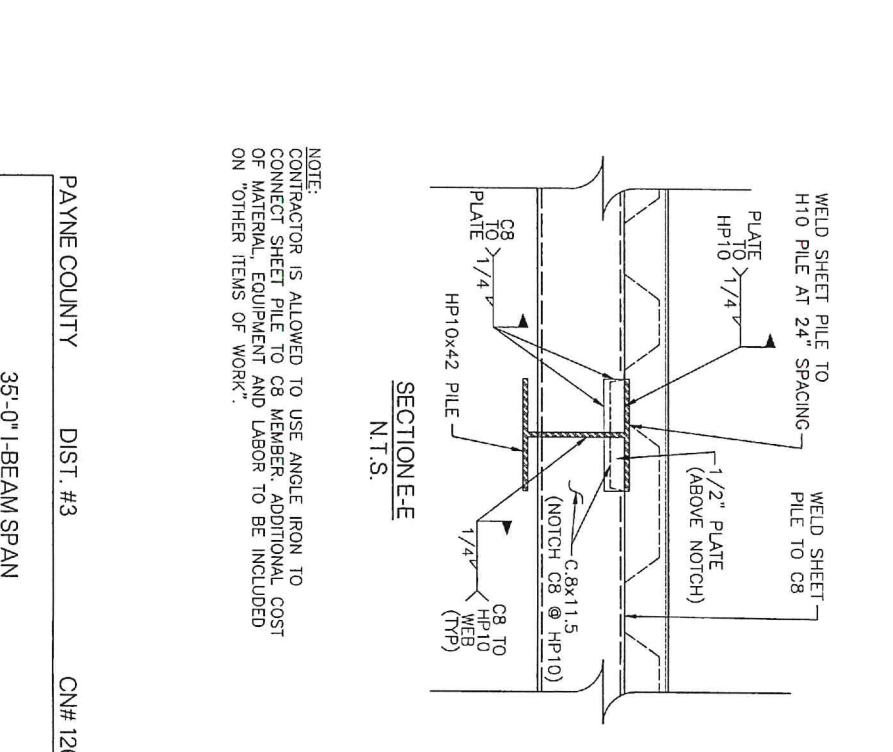
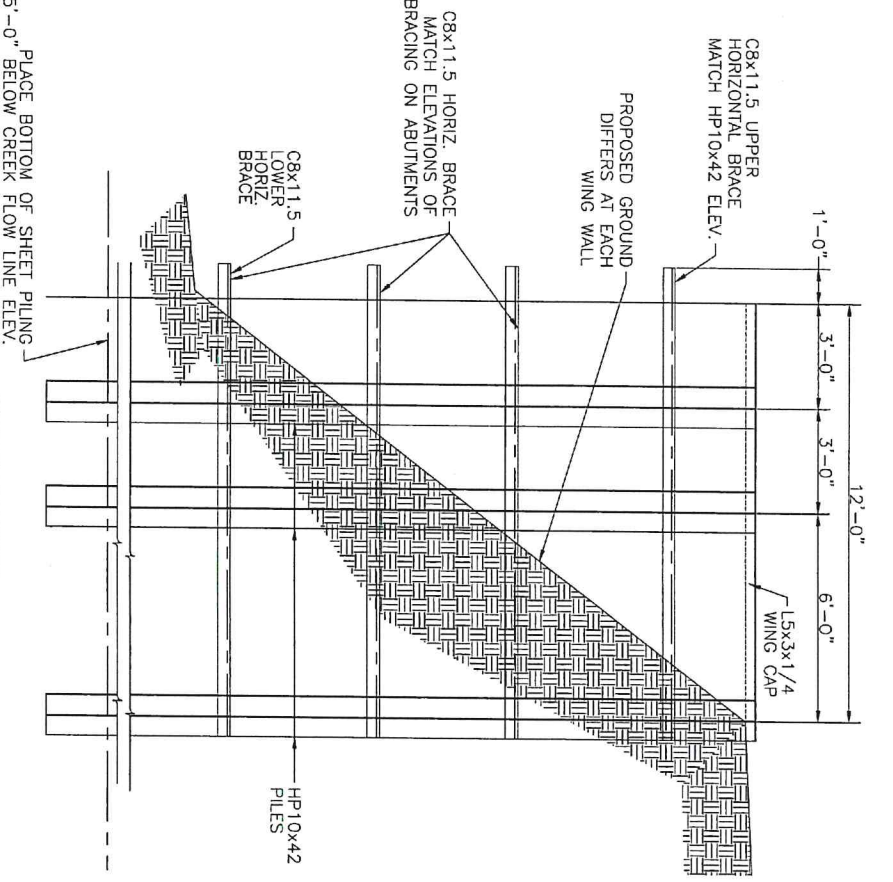
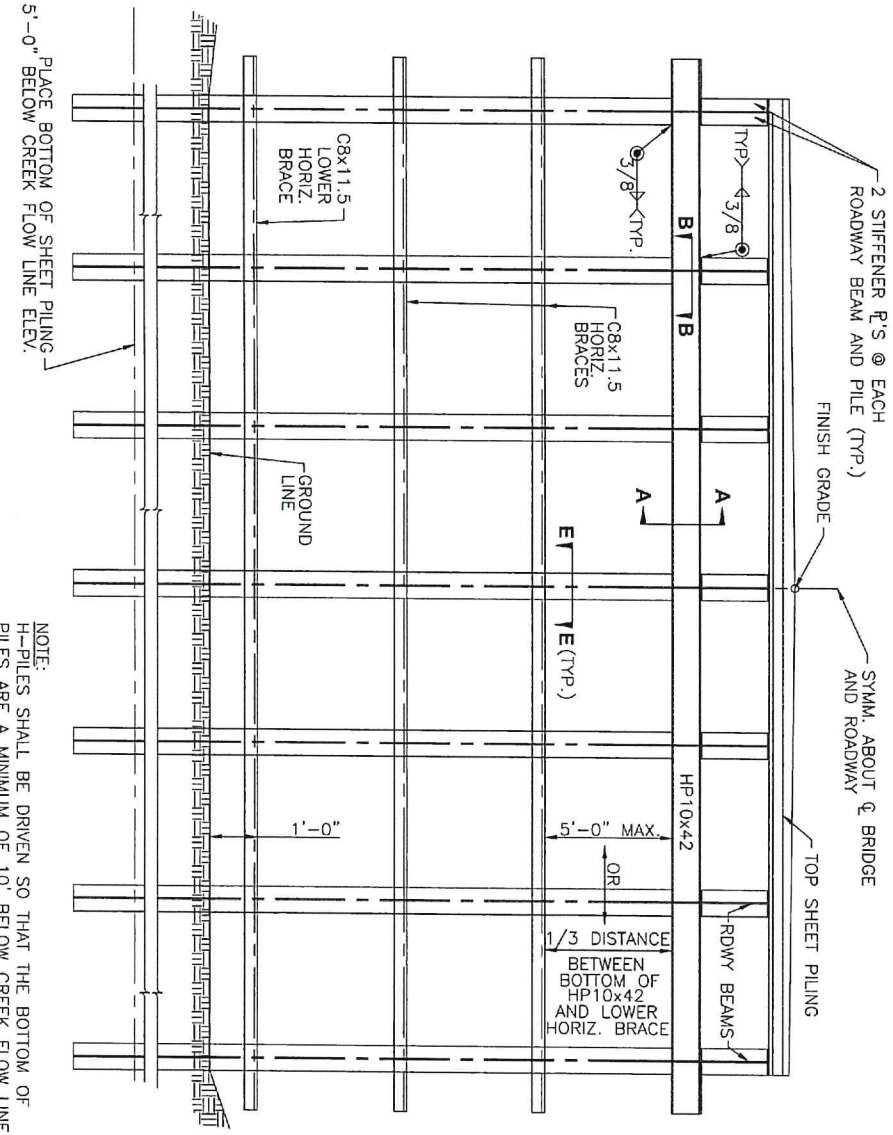
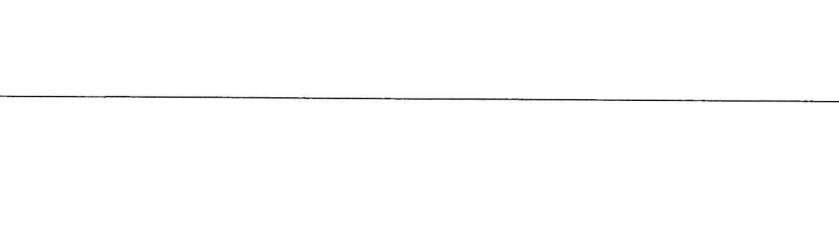
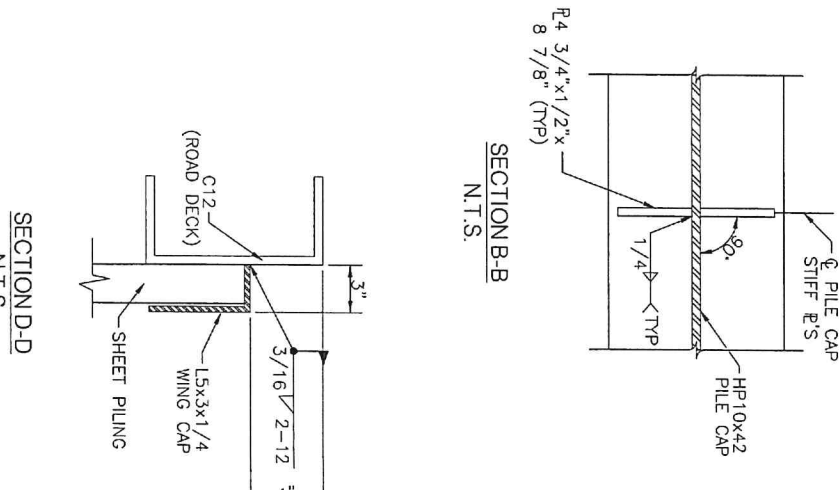
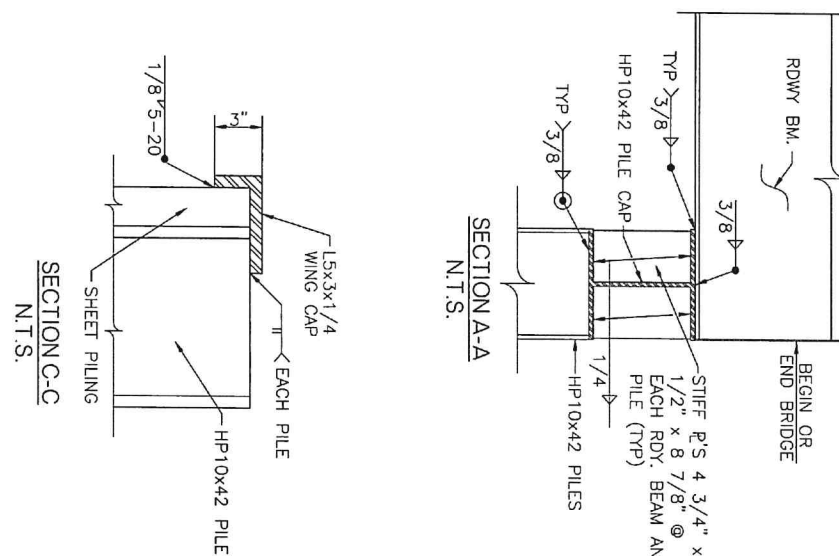
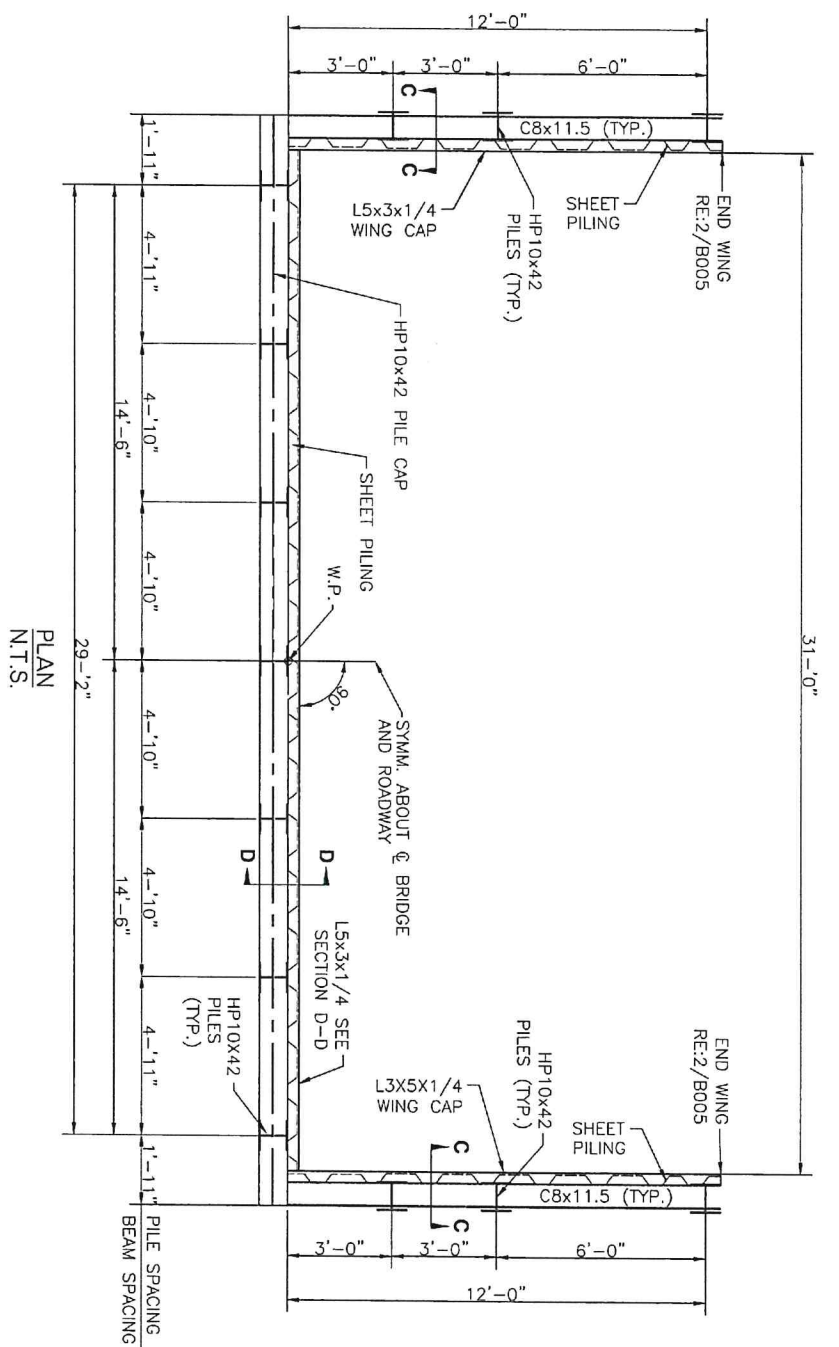
STEEL CHANNEL HEADER AT SHEET PILING ABUTMENTS



SHEET PILING ABUTMENTS

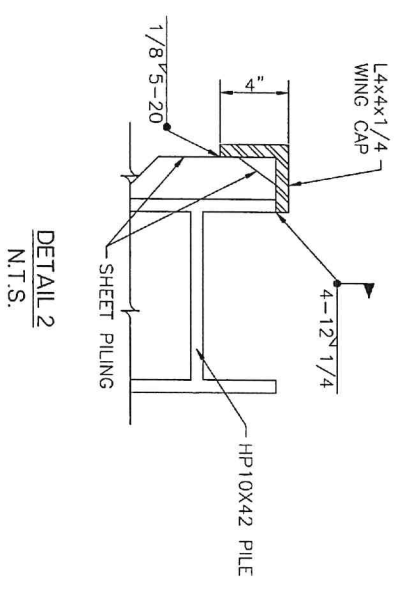
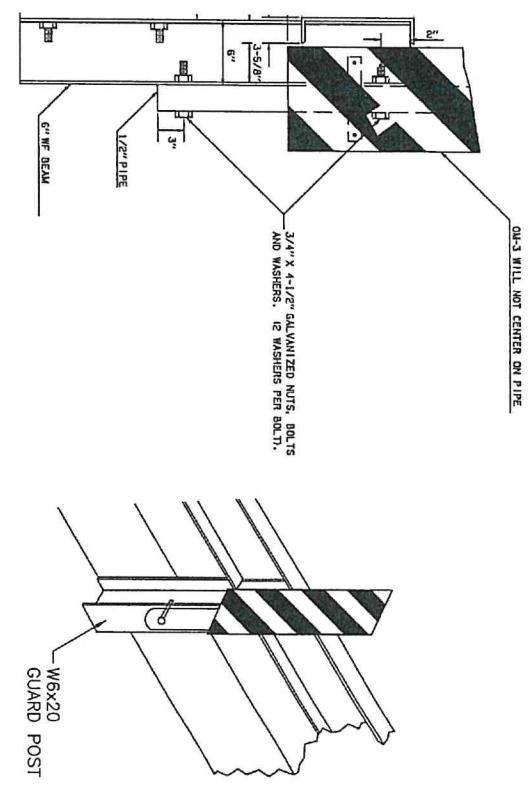
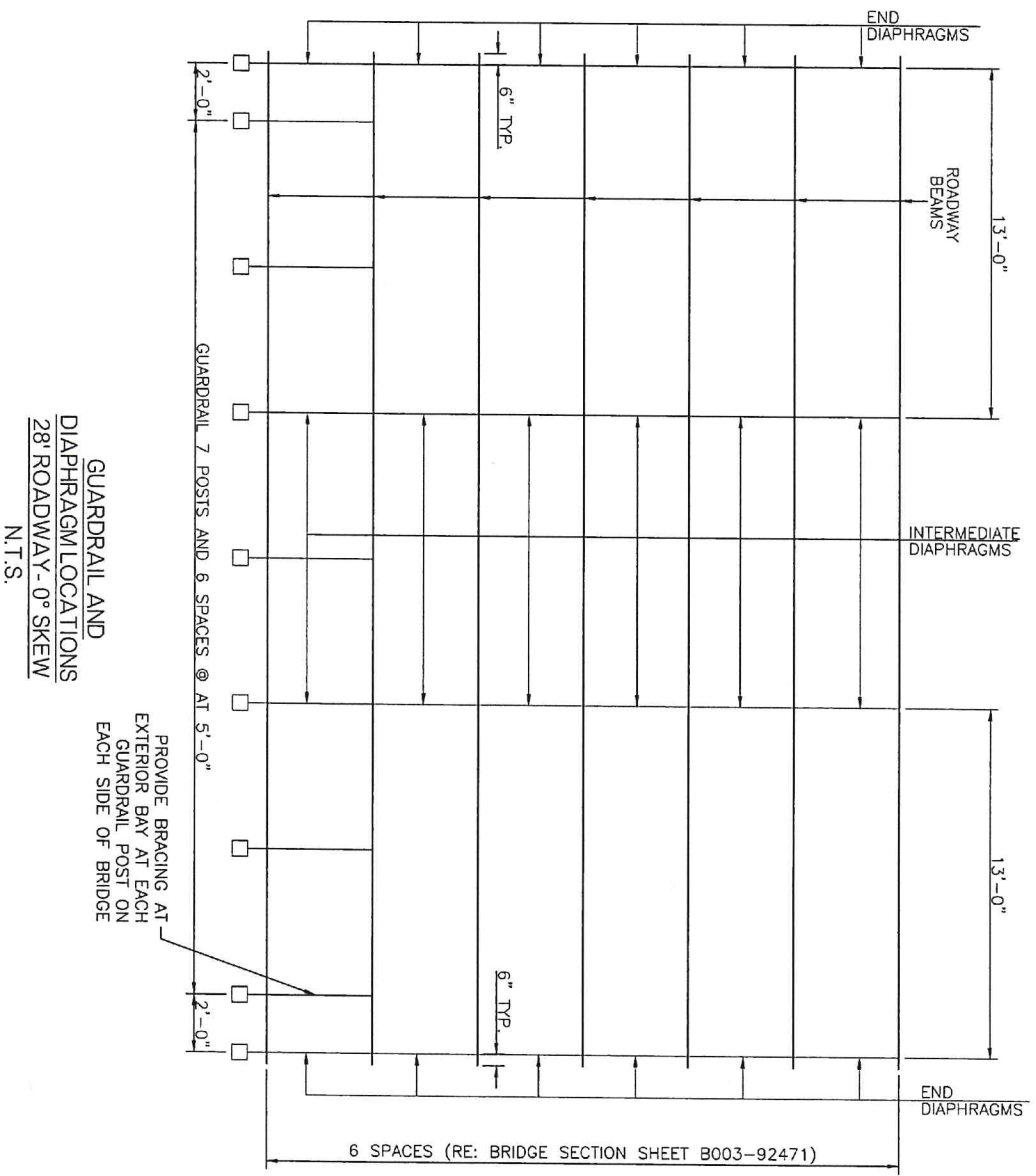
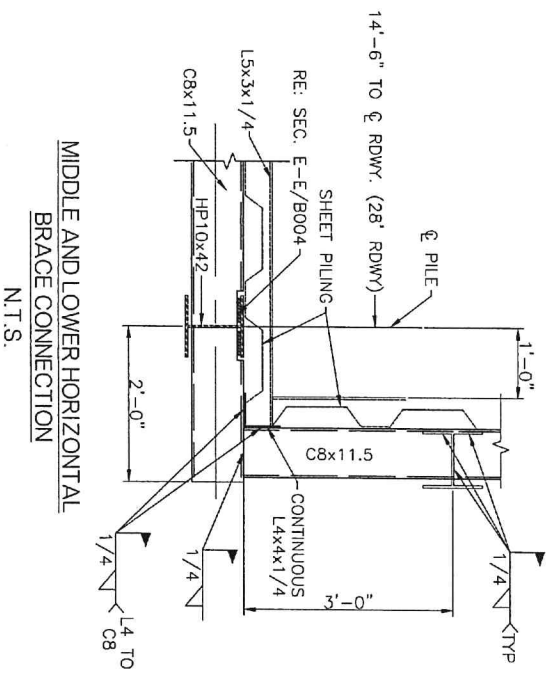
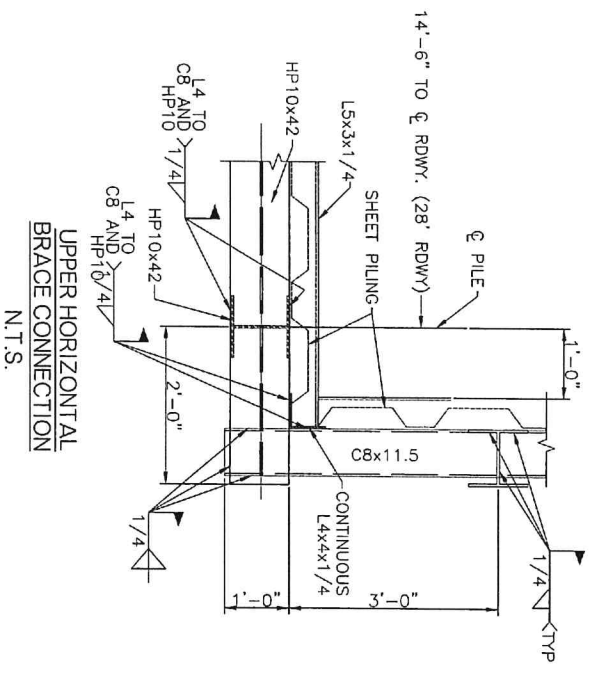


SHEAR ANGLE CONNECTION



NOTE:  
CONTRACTOR IS ALLOWED TO USE ANGLE IRON TO  
CONNECT SHEET PILE TO C8 MEMBER. ADDITIONAL COST  
OF MATERIAL, EQUIPMENT AND LABOR TO BE INCLUDED  
ON "OTHER ITEMS OF WORK".

PAYNE COUNTY DIST. #3 CN# 126  
35'-0" I-BEAM SPAN  
BRIDGE DETAILS  
(SHEET 2 OF 3)  
B004-42473 SHEET NO. B004 (7 OF 11)



PAYNE COUNTY DIST. #3 CN# 126  
35'-0" I-BEAM SPAN BRIDGE DETAILS (SHEET 3 OF 3)  
SHEET NO. B005 (8 OF 11)  
B005-92473



# STORM WATER MANAGEMENT PLAN

## SITE DESCRIPTION

## EROSION AND SEDIMENT CONTROLS

PROJECT LIMITS: W. 92ND AVE. (E0690 RD.) BRIDGE #4 OVER UNNAMED CREEK.  
 COUNTY COMMISSIONERS DISTRICT #3, PAYNE COUNTY, OKLAHOMA

PROJECT DESCRIPTION: CN-126 BRIDGE REPLACEMENT, 35' COMPOSITE I-BEAM WITH 28' CLEAR ROADWAY, APPROACHING ROADWAY AND BRIDGE  
 APPROACHES BEING THE RESPONSIBILITY OF THE COUNTY.  
 STA. 11+17.03 TO STA. 11+52.03

- SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:
1. PLACE TEMPORARY SEDIMENT CONTROL DEVICES AT ALL OFF SITE DRAINAGE LOCATIONS.
  2. PERFORM CLEARING & GRUBBING OPERATIONS, PRESERVING ANY EXISTING VEGETATION NOT IMPEDING CONSTRUCTION.
  3. REMOVE & STOCKPILE TOPSOIL.
  4. ADD ADDITIONAL TEMPORARY SEDIMENT CONTROL DEVICES AND MAINTAIN AS NEEDED.
  5. AS GRADING PROCEEDS, PLACE TEMPORARY MULCHING OR PERMANENT GRASS DEPENDING ON ULTIMATE SLOPES.
  6. AS PERMANENT GRASSING IS ESTABLISHED (70% COVER), REMOVE TEMPORARY SEDIMENT CONTROL DEVICES.

SOIL TYPE: \_\_\_\_\_  
 TOTAL AREA OF THE CONSTRUCTION SITE: #0.388 ACRES  
 ESTIMATED AREA TO BE DISTURBED: #0.207 ACRES  
 OFFSITE AREA TO BE DISTURBED: \_\_\_\_\_  
 (FOR CONTRACTOR USE)  
 TOTAL IMPERVIOUS AREA: #0.007 AC.  
 PRE-CONSTRUCTION: \_\_\_\_\_  
 TOTAL IMPERVIOUS AREA: #0.026 AC.  
 POST-CONSTRUCTION: \_\_\_\_\_  
 POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.60  
 LATITUDE & LONGITUDE OF CENTER OF PROJECT: LAT. 36°00'52.27"N LONG. 97°14'45.88"W  
 PROJECT WILL DISCHARGE TO: \_\_\_\_\_

NAME OF RECEIVING WATERS: CIMARRON RIVER  
 SENSITIVE WATERS OR WATERSHEDS: YES  NO   
 303(d) IMPAIRED WATERS: YES  NO   
 IF YES, LIST IMPAIRMENT: \_\_\_\_\_  
 LOCATED IN A TMDL: YES  NO   
 LAKE THUNDERBIRD TMDL: YES  NO   
 MS4 ENTITY YES  NO   
 IF YES, LOCATION: \_\_\_\_\_

NOTE:  
 THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

- SOIL STABILIZATION PRACTICES:
- TEMPORARY SEEDING
  - PERMANENT SODDING, SPRIGGING OR SEEDING
  - VEGETATIVE MULCHING
  - \_\_\_\_\_ SOIL RETENTION BLANKET
  - PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

- STRUCTURAL PRACTICES:
- \_\_\_\_\_ STABILIZED CONSTRUCTION EXIT
  - TEMPORARY SILT FENCE
  - TEMPORARY SILT DIKES
  - \_\_\_\_\_ TEMPORARY FIBER LOG
  - \_\_\_\_\_ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
  - \_\_\_\_\_ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
  - \_\_\_\_\_ ROCK FILTER DAMS
  - \_\_\_\_\_ TEMPORARY SLOPE DRAIN
  - \_\_\_\_\_ PAVED DITCH W/ DITCH LINER PROTECTION
  - \_\_\_\_\_ TEMPORARY DIVERSION CHANNELS
  - \_\_\_\_\_ TEMPORARY SEDIMENT BASINS
  - \_\_\_\_\_ TEMPORARY SEDIMENT TRAPS
  - \_\_\_\_\_ TEMPORARY SEDIMENT FILTERS
  - TEMPORARY SEDIMENT REMOVAL
  - \_\_\_\_\_ RIP RAP
  - \_\_\_\_\_ INLET SEDIMENT FILTER
  - \_\_\_\_\_ TEMPORARY BRUSH SEDIMENT BARRIERS
  - \_\_\_\_\_ SANDBAG BERMS
  - \_\_\_\_\_ TEMPORARY STREAM CROSSINGS

- OFFSITE VEHICLE TRACKING:
- HAUL ROADS DAMPENED FOR DUST CONTROL
  - LOADED HAUL TRUCKS TO BE COVERED WITH TARP/AULIN
  - \_\_\_\_\_ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:  
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 \_\_\_\_\_  
 \_\_\_\_\_

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:  
 ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

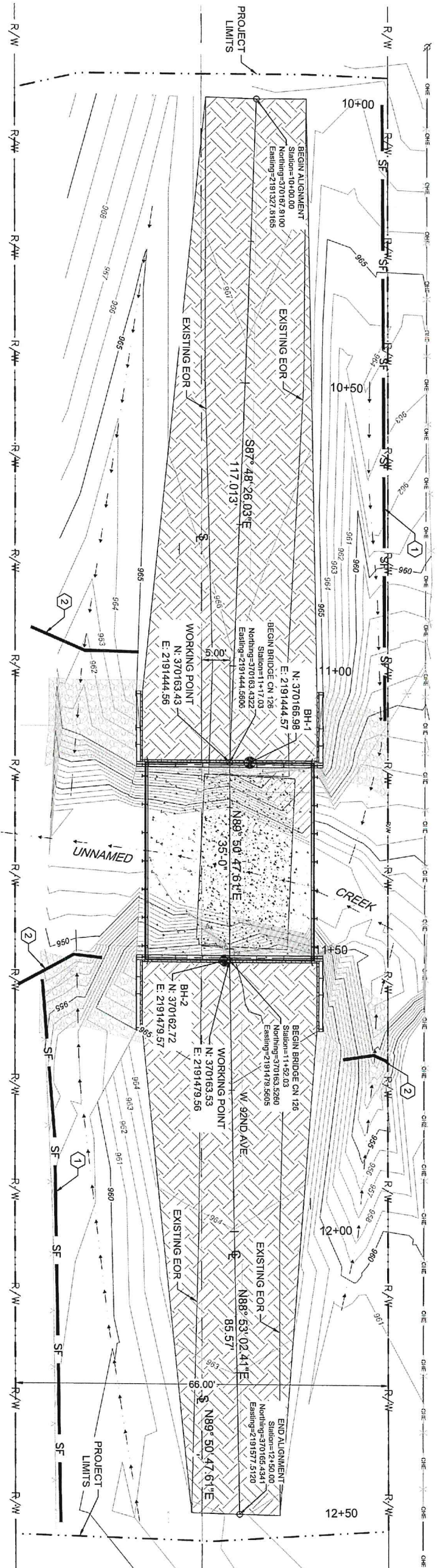
WASTE MATERIALS:  
 PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:  
 PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

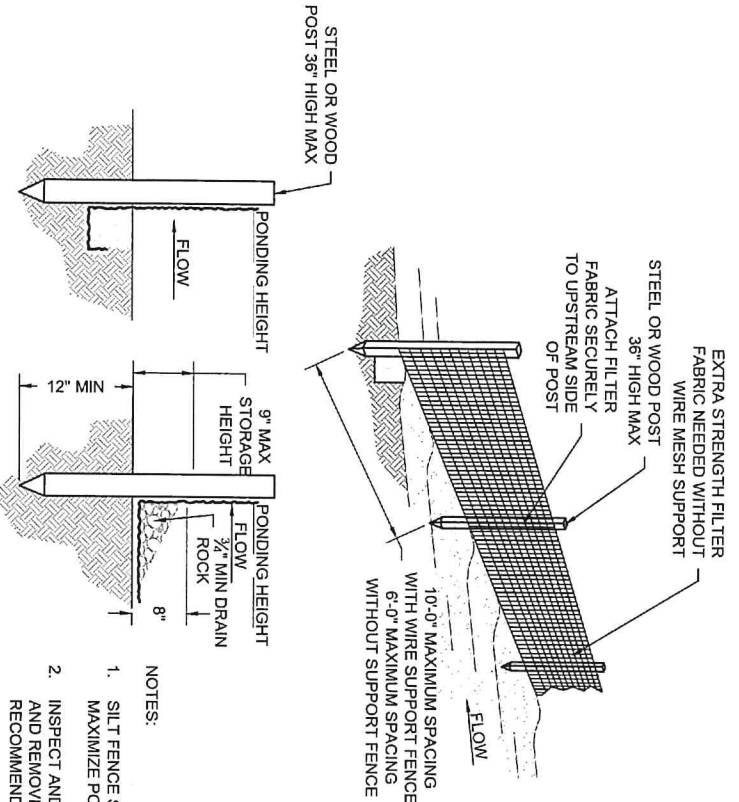
GENERAL NOTES:  
 A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAMINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

- THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:
- 103.05 BONDING REQUIREMENTS
  - 104.10 FINAL CLEANING UP
  - 104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK
  - 104.13 ENVIRONMENTAL PROTECTION
  - 106.08 STORAGE AND HANDLING OF MATERIAL
  - 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED
  - 107.20 STORM WATER MANAGEMENT
  - 220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
  - 221 TEMPORARY SEDIMENT CONTROL

IN ADDITION:  
 \*ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA. \*ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

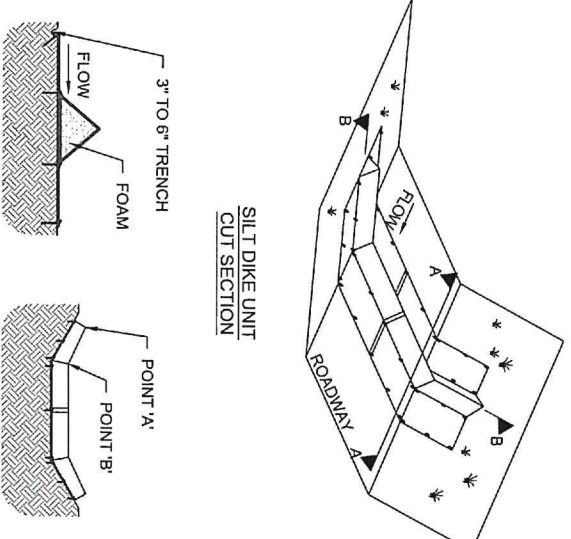


PLAN  
SCALE 1" = 10'



- NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
  2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
  3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTED SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

**1 SILT FENCE DETAIL**  
N.T.S.



- NOTES:
1. STAPLE SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON DETAIL A-A.
  2. POINT 'A' MUST BE HIGHER THAN POINT 'B' TO ENSURE THAT THE WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

**2 SILT DIKE INSTALLATION**  
N.T.S.

**GENERAL NOTES**

- A. REFER TO SHEET B001-92473 FOR BASIS OF VERTICAL AND HORIZONTAL CONTROL.
- B. REFER TO SHEET AB01-92473 FOR ADDITIONAL NOTES AND REQUIREMENTS.
- C. EROSION CONTROL DEVICES, INSTALLATION AND MAINTENANCE SHALL CONFORM TO THE REQUIREMENTS OF PAYNE COUNTY, INCLUDING THE CURRENT COPY OF THE COUNTY'S "BEST MANAGEMENT PRACTICES MANUAL FOR THE STORM WATER QUALITY MANAGEMENT DIVISION".
- D. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE BEST MANAGEMENT PRACTICES (BMP'S) SUCH THAT NO STORMWATER POLLUTION ENTERS EXISTING DRAINAGE SYSTEMS OR ROADWAYS AND MUST COORDINATE THE BMP'S AS REQUIRED FOR CONSTRUCTION PHASING REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- E. WHEN MORE THAN ONE DETAIL IS GIVEN FOR A PARTICULAR EROSION CONTROL METHOD (E.G., INLET PROTECTION), THE CONTRACTOR MAY USE ANY OF THE DETAILED METHODS AT THEIR OPTION, PROVIDED THAT THE CONTRACTOR CONFORMS TO PAYNE COUNTY REQUIREMENTS.
- F. THE CONTRACTOR SHALL MAINTAIN A STORMWATER POLLUTION PREVENTION PLAN AT THE JOB SITE, POSTED AND READILY AVAILABLE TO THE PUBLIC. THIS PLAN SHALL BE THE MOST CURRENT VERSION AND ANY CHANGES TO THE EROSION CONTROL BMP'S AND ALL BE MAINTAINED THRU IT HAS BEEN PERFORMED. THE BMP'S ALONG WITH THE DATES OF SUCH CHANGES AND MAINTENANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF PAYNE COUNTY.
- G. THE CONTRACTOR SHALL MAINTAIN ALL BMP'S IN A FUNCTIONAL CONDITION, EFFECTING MAINTENANCE AT ANY TIME A GIVEN BMP HAS IMPAIRED FUNCTION DUE TO DAMAGE OR SEDIMENT BUILDUP. IMPAIRED FUNCTION INCLUDES, BUT IS NOT LIMITED TO, TORN OR DOWNED SILT FENCE, TORN ROCK BAGS, WASHED-OUT GRAVEL, AND RIP-RAP AND ANY OTHER DEFECT OR DAMAGE THAT IMPAIRS THE FUNCTION OF A BMP. THE CONTRACTOR SHALL INSPECT ALL BMP'S AT LEAST ONCE PER WEEK AND AFTER ANY RAINFALL OF 1" OR MORE.

**SHEET KEYNOTES**

1. SILT FENCE, RE: 1/R002-92473
2. SILT DIKE, RE: 2/R002-92473

**\*\*IMPORTANT NOTE\*\***  
 CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR SHEET PILING ACTIVITIES. CONTRACTOR MUST VERIFY UTILITIES BOTH VERTICAL AND HORIZONTAL.