OKLAHOMA DEPARTMENT OF TRANSPORTATION FED. ROAD STATE PROJ. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS DELA. DESCRIPTION DATE

1, 335669,0130, 2692208,8290, 0.00, CALC P 2, 343988.7371, 2692030.2043, 0.00, calc PI 3, 345279, 8165, 2692609, 8745, 0,00, 4, 339968, 4305, 2692116, 5204, 0,00, POT 5, 340295.1652, 2692109.5054, 0.00, 6, 342616.9521, 2692059.6565, 0.00, POT 7, 335598, 3258, 2689941, 7307, 0,00, CALC PI 8, 335784.6206, 2691834.4133, 0.00, CALC PI 9, 341494.8887, 2692083.7473, 0.00, 10 355032 4517 2698097 4945 0.00 PC 11, 335633.6460, 2691074.5295, 0.00, PC 12, 336779.0050, 2691038.8177, 0.00, PC 13, 336803, 6022, 2692184, 4693, 0,00, PC 14. 343558.2710. 2692039.4464. 0.00. PC 15, 343599.2663, 2693948.8657, 0.00, PC 16, 344381.5284, 2692206.5602, 0.00, PC 17, 341292, 7014, 2692088, 0882, 0, 00, 100, 341647.4491, 2692079.9607, 0.00, BR SPLIT 102, 342167.0236, 2692069.0072, 0.00, BR SPLIT 104. 349488.0525. 2694499.2927, 0.00, POT CALC 7401, 345227.1278, 2691977.8903, 0.00, GPS CONTROL 7600, 339967.3572, 2692066.5319, 0.00, R/W COR 7601, 341008.7472, 2692044.1732, 0.00, R/W COR 7602, 341007.6740, 2691994.1847, 0.00, R/W COR 7603, 343307.1440, 2691944.8151, 0.00, R/W COR 7604, 343308,2173, 2691994,8035, 0.00, R/W COF 7605, 343557.1977, 2691989.4579, 0.00, R/W COR 7606, 344402.0080, 2692160.9467, 0.00, R/W COR 7607, 345261,8215, 2692546, 9867, 0.00, R/W COR 7608, 339969.5037, 2692166.5088, 0.00, PC 7609, 341010, 8937, 2692144, 1502, 0.00, R/W COR 7610. 341011.9670. 2692194.1387. 0.00. R/W COR 7611, 343311, 4370, 2692144, 7690, 0.00, R/W COR 7612, 343310, 3638, 2692094, 7805, 0,00, R/W COR 7613, 343559, 3442, 2692089, 4349, 0,00, R/W COR 7614, 344361.0488, 2692252.1736, 0.00, R/W COR 7615, 345264.4473, 2692657.7824, 0.00, R/W COR 7617, 345249, 3227, 2692019, 6008, 0, 00, R/W COR 7618, 345283.0346, 2692049.2462, 0.00, R/W COR 7619, 345305.3154, 2692989.3867, 0.00, R/W COR 7620, 345272, 2606, 2692987, 4668, 0,00, R/W COR 7621, 345297.8116, 2692672.7623, 0.00, R/W COR 7622, 345295.1858, 2692561.9666, 0.00, R/W COR 7623, 345675, 7575, 2692842, 4529, 0,00, R/W COR 7624, 345669.6251, 2692730.0828, 0.00, R/W COR 7625, 345141.6727, 2691988.6325, 0.00, R/W COR 7626, 344052, 9722, 2692042, 2458, 0,00, R/W COR 7627, 343899.5306, 2692012.1443, 0.00, R/W COR

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OKLAHOMA DEPARTMENT OF TRANSPORTATION Survey Division (405)521-2621 Fax 405-522-0364 Date: June 24, 2010

Mr. Larry Reser, Chief of Surveys

From: Ricky E. Steele, Professional Land Surveyor

Subject: SW04578(1) - J/P26346(04) $^{13}\!/_{32}$ U.S. 271 $^{13}\!/_{32}$ PUSHMATAHA COUNTY Bridge over the Kiamichi River, Approx. 2 miles north of Antlers.

HISTORICAL LETTER AND WRITTEN REPORT

Method of Survey * Conventional Survey Methods Units of Measurement - U.S. Survey Foot. Survey Began 15 /₃₂ April 1, 2010 Survey Completed 15 /₃₂ June 24, 2010

To:

Previous Surveys and plans used on this project.

Surveys: 13/32 O.S.H. & U.S. 271 from Antiers East and
North to the City Limits.
SWO 621- Proposed S.H. 3 Grade and Drainage Project from Antiers East. 1936 survey.
SAP 598 13/32 S.H. 10 (now U. S. 271) Alignment Notes from Antiers easterly and northerly To Clayton.

Plans: S.A.P. 598 J $^{13}\!/_{32}$ U.S. 271 From Antlers northerly to Finley.

2.- Survey Assignment: This project was assigned to the Antlers Survey (rew, under my direct supervision by letter detailing the survey scope and special provisions dated March 23, 2010 by Mr. Jeff King Transportation Survey Manager. Survey Assignment:

Purpose of Survey:
 The purpose of this survey was to obtain adequate information for the design and construction of a new bridge and approaches and shoulders.

4. Survey Limits: This survey begins at E-W 191 Section Line and extends Northerly along and identical to Present U.S. 271 through the curve lying just North of the overflow bridge to it\(^3_{2}\)s intersection with E-W 190. The width of this survey is 150 feet left and 300 feet right of centerline of survey. The visible bridge abutments and piers on the old bridge East of the existing bridge were also located and can be found in the TOPO file and represented by Break Lines in the SFF file. a Swinging Foot Bridge. South and West of the existing bridge was located and can be found in the project TOPO file. A Flowline profile of the Kiamichi River 1000 foot upstream and downstream can be found represented by a breakline in the SFF file.

5. Alignment:
The alignment for this survey is along and identical to Present U. S.271 as depicted on SAP 598 Plans. There are 2 tangents on this survey, the following original monumentation was used to establish Centerline of Survey:

- A. Found 2 orig. RPs at PC Sta. 7+63.9 and orig. PI Sta. 15+30.7 on SWO 621 Farm to Market survey, these points used to calculate PI Sta. 52+53.6 on U.S. 271. B Split of North End Klamichi River Bridge POT Sta. 112+19.42 on SAP 598 Plans. C. Used Existing Asphalt Pavement for forward tangent.

Stationing was taken from PI Sta. 52+53.6 on SAP598J U.S. 271 Plans and carried forward without equation to POT Sta. 90+73.19 Begin this project, and continue north and easterly to POT Sta. 144+95.50, End this project.

7. Horizontal Control:
Horizontal Control:
Horizontal Control for this survey is the Oklohoma State Plane Coordinate System,
NAD 83 (1993) Lambert Projection South Zone derived submitting Leica GPS rowdata
from 3 hour static sessions to NGS OPUS for processing. Two project control monuments
were established for this survey; one near the beginning, and end of the project.
The project control Monuments on this project are \$3.472 | Iron Pins set flush with the ground.
Secondary Control for this survey is Centerline of Survey PDT, POST and Curve Points set
and referenced using GPS Real Time Kinematic methods, following accepted ODDT Survey
Division methods and techniques. The primary control network, the secondary control
network and the section boundaries for this survey are in general compliance with
NGS Second Order, Class II Standards for horizontal control (1:20,000).
It is assumed that the GPS positional accuracies obtained have met or exceeded this standard.

8. Vertical Control:
Level datum for this survey is INGS) N.A.V.D. 88 taken from N.G.S. BM 100 (EKO584) ELEV. 497.00 and a double set of spirit levels were run with a Leica NA 2002 Digital Level through the project benchmarks and tied to the D.P.U.S. solution for GPS Control point 7401 at North end of project. The complete Benchmark list containing descriptions and amount of adjustment was created in Microsoft Exel, this report can be found in the project archive and as graphics in the Survey Data Sheets This survey meets the requirements of N.G.S. 3rd order standards as a minimum.

9. Topography:
Topographic information was obtained by field conventional methods. Surface improvements and underground utilities such as: Fences, drives, mail boxes, signs etc. have been labeled and can be found in the project (TOPO(File.

10. Surface features:
The surface features on this project were obtained by the field conventional method, o (Surface Feature File(ISFF), which is a Microstation V8i Design File containing breaklines and random ground points for contouring and quantity computations has been created and archived as per instructions.

11. Land & Property Ties: Complete land ties were obtained on Sections A complete history of the PLSS Corners established on this project can be found on the Geometric Datasheet in this file.

12. Right-of-Way: The Right-of-Way on this survey is taken from SAP598 J Plans and verified using R/W deeds provided by Right-of-Way Division.

13. Utilities:
The underground utilities on this project were flagged or taken from digital records by the awning companies or their representatives with the help of crew personnel. Utilities were located by conventional methods and placed in the project design file at zero elevation and lobeled with owner name, size and depth, when provided.

DDI Form SD-7, "Public and Privately Owned Utilities List," have been submitted with this project. Contact information for utility owners can be found on the 1st Survey Data Sheet.

Hazardous Materials or Waste Sites: There were no hazardous waste sites found during this survey.

There were no abandoned underground storage tanks found on this project.

- 15. Drainage Information:

 a. Drainage areas for all drains crossing the Survey Centerline were taken from digital USGS Quad. maps projected to project datum, the divide lines between these drainage areas have been placed in a Microstation V8 Design File and archived as per instructions.
- Highwater information was obtained by interviewing longtime residents in the area, this information can be found placed in the Microstation V8 Drainage Design File.
- c. No Ravine sections for drains crossing the Survey Centerline were required on this survey.
- d. Flowline profiles have been obtained on drains crossing Centerline of Survey 500' Upstream and $1000^5\!/_{32}\text{downstream}$.

16. Submission of Survey Data: All digital survey data has been placed in the appropriate project folder on the ODOT Intranet storage system as per archiving instruction dated May 20,2003

For a complete listing of computer files created and archived on this project see; http://intranet/engrgrp/survey/fsvarch/SW04523 1/index.txt

In addition to the computer files submitted, hard copies of the following have been submitted to the Central Survey Office:

- Historical Letter & Written Report.
 Form SD-1, Transmittal Letter w/FSVARCH.INDEX attached.
 Note: The FSVARCH.INDEX is a listing of all computer files archived during the course of the survey, as well as a written description of what is contained in each of the files, and the date the files of what is contained in each of the files, and the date the files were archived.

 C. Form SD-7, Public and Privately Owned Utilities List w/ vicinity map on back.

 D. Form SD-9, Final Cost Report of Survey

 E. (2)Form SD-11, Position and Description of Survey Monuments GPS control monuments, Bross/Aluminum Caps for benchmarks, etc.)(if applicable).

 F. Form SD-20, Survey Control Data Statement.

 H. Form SD-11, Surveyor's Certification.

 1. Cogo Data Locordinate list with alignments).

 J. Benchmarks & Check Levels list, including the SWO and description

 K. Driginal and reduced copies (8(" x 11") of Certified Land Corner Forms.

OKLAHOMA DEPARTMENT OF TRANSPORTATION PLS SURVEY DIVISION DRAWN CHECKED SURVEY DATA SHEET APPROVED CREW _() PROJECT NO. 26346(04) SHEET NO. 74