APPENDIX M
Internal Meeting Minutes

Oklahoma Department of Transportation

Planning and Research Division Office 521-2704 Fax 521-6917

DATE: September 1, 2004
TO: Files and Attendees
FROM: Planning and Research Division
SUBJECT: Meeting minutes for US 81 Kickoff Meeting

On Monday, August 30, 2004, a meeting was held in the Planning and Research Division Conference room to kickoff the US 81 corridor study project. In attendance were:

Johnny Shan	ODOT Planning & Research Division	405 521-2672
Steve Roper	ODOT Planning & Research Division	405 521-2672
Larry Reser	ODOT Survey	405 521-2621
Larry Wicks	Benham	918 492-1600
Diane Abernathy	Benham	405 701-3167
Craig Moody	ODOT Planning & Research Division	405 522-1465
Terry McFall	Benham	405 794-3531
Dawn Sullivan	ODOT Planning& Research Division	405 521-2927
Brenda Perry	ODOT Public Affairs	405 521-6006
Ronda Lindsay	ODOT Project Management	405 522-7603
Ron Weltzheimer	Benham	405 478-5353
Bob Rose	ODOT Division 7	580 255-7586
Red Miller	ODOT Traffic Division	405 521-2864
David Streb	ODOD Preconstruction	405 521-6916

A contact list of ODOT, Benham, and contract staff who are anticipated to be involved in the project was distributed for review and revision. The project work plan sequence was reviewed, as well as detailed traffic study and environmental work plans (see attachments). After some discussion of the "east-west corridor" bypass desired by Chickasha, which would connect US 81 north of the airport with I-44, it was agreed that such a bypass is actually outside the scope of the US 81 corridor study and, if requested by Chickasha, would have to be a separate study. The possibility of mailing surveys to Chickasha residents to determine traffic patterns was discussed, but was dismissed. Any existing traffic count data will be requested from Chickasha during the informal stakeholder meeting.

During discussion of the proposed traffic study, B. Rose indicated that Chickasha wants to consider the possibility of connecting a west US 81 bypass to SH 19 and, therefore, the traffic study should collect adequate data to evaluate the best location to connect the bypass with US 81 south of Chickasha. ODOT also requested that Benham prepare a graphic that depicts the proposed locations of the traffic and turning movement counts and license plate survey.

Two (2) informal stakeholder meetings will be scheduled with (1) Chickasha and (2) Union City, Minco, and Pocasset within approximately 30 days. It was agreed that, at a minimum, the Chickasha Chamber of Commerce Economic Development Committee, city officials from each of the cities, and representatives from Grady and Canadian Counties would be invited to attend approximately 2 – 3 weeks prior to the scheduled meetings. Benham will schedule the meetings in coordination with ODOT.

It was agreed that ODOT will conduct the archaeological and historic structures file review. Also, ODOT will provide a list of agencies to be used for the comment solicitation letters.

The concept of dividing the project into a Chickasha bypass portion and a northern portion was discussed. The advantage to this approach would be that, if the Chickasha bypass portion became delayed by controversy, the cost estimating work for the northern portion could proceed, thus providing B. Rose with the budgeting information he needs in a timely fashion. Also, it was determined in the meeting that an ODOT scoping team site visit to the corridor would not be necessary.

Cc: Chief Engineer
Division VIII Engineer
Attendees

BENHAM

US-81 CORRIDOR STUDY – GRADY COUNTY
KICKOFF MEETING

SIGN IN SHEET

Benham Project #	4050462000
Project Name	US-81 Corridor Study
Project Location	Grady County, OK (Division VII)
Client	Oklahoma Department of Transportation (ODOT)
	EC-899
	NHY-001N(068)EC
	J/P 21603(04)

NAME	ORGANIZATION	PHONE NUMBER
Johnny Shaw	P&R Division	521-2672
Steve Roper	ODOT Planning & Research	521-2672
Larry Reser	ODOT Survey	521-2621
Larry Wicks	Benham	918 492-1600
Diane Abernathy	Benham	701-3167
Craig Moody	ODOT Planning	522-1465
Terry McFall	Benham	794-3531
Dawn Sullivan	Planning & Research	521-2927
Brenda Perry	Public Affairs	521-6000
Ronda Lindsay	Proj. mgt	522-7603
Ronald Weitzenhofer	Benham	478-5353
Bob Rose	ODOT	(580) 255-7586
Red Miller	ODOT - Traffic Div.	(405) 521-2864
David Streb	ODOT - Preconstruction	521-6916

Oklahoma Department of Transportation

Planning and Research Division
Office 521-2704 Fax 521-6917

DATE: **January 26, 2005**
TO: **Files and Attendees**
FROM: **Planning and Research Division**
SUBJECT: **Meeting Minutes for US 81 Roadway Design Criteria Meeting**

On Tuesday, January 25, 2005, a meeting was held in the Design Conference Room (ODOT Second Floor) to discuss the design criteria to be used for evaluating the US 81 corridor. In attendance were:

Johnny Shan	ODOT Planning & Research Division	405 521-2672
Craig Moody	ODOT Planning & Research Division	405 522-1465
Brian Schmitt	ODOT Roadway Design Division	405 521-2672
Eduardo Elder	ODOT Roadway Design Division	405 521-2621
Bob Rusch	ODOT Bridge Division	405 521-2927
Terry McFall	Benham	405 794-3531
Larry Wicks	Benham	918 492-1600
Ronald Weltzheimer	Benham	405 478-5353

An overview of the process of the project was presented. Last fall the Project Kick-off Meeting was held at ODOT and Stakeholder Meetings were held at Chickasha and Minco. Benham has completed the field work for the traffic counts. Data has been collected for the turning movements at Union City and Minco including traffic counts along US-81 north of Chickasha through Union City. Benham has completed the field work for the license plate survey in Chickasha including traffic counts. Evaluation of the data has not been completed. The analysis of the traffic data will be presented to ODOT for review when complete.

Benham presented the proposed design criteria to be used for the evaluation of the roadway engineering aspects of the US-81 Corridor Study. The Criteria was divided into three parts (Rural, Suburban and Bypass). The main discussion was regarding the criteria for curves, clear zones, etc, that will be used to evaluate the existing roadway and recommendations for improvements or new alignment. The revised criterion based on the comments received and discussed is attached to these minutes. Discussion included:

1. US-81 is an NHS Route, proposed to be developed into a four lane divided facility. New lanes will be ultimately constructed with the rehabilitation of the existing lanes at a later date. Benham has received as-built drawings on much of the corridor; additional information was requested to help in the final evaluation.

2. A desirable median width for the corridor should be a 64 feet, with a 46 feet minimum. The evaluation of the median should include review median widths north of Union City on the improved section currently under construction and the median width south of Chickasha. The proposed median width could be the minimum required in areas where existing right-of-way would allow the construction of a divided facility without purchasing additional right-of-way. The

proposed median width should be consistent along the entire length of the corridor. Median openings should be at the quarter section lines, no more than two openings per mile.

3. Driver expectations should be one of the considerations when evaluating horizontal curves. Three degree maximum curve would be desirable for the rural high speed areas; however if a curve that falls within the desirable curvature range but does not "fit" with driver expectations along the corridor, this curve should be considered for correction. It was noted during the discussions that most of the horizontal curves along the corridor do not appear to exceed current design standards.

4. The rural and bypass typical sections typically will be a divided four lane open section, the suburban typical sections through town are expected to be an undivided curb and gutter section. The transition between open sections and curb & gutter should be well defined and described. The location of the transitions and the length of the curb & gutter sections should follow proper design logic and be a reasonable length. The transition section, if open, should be designed to allow for modification to a curb & gutter section in the future.

5. Benham will contact the City of Chickasha regarding any planning for the airport and industrial areas north of town.

6. Possible alignments for the proposed Chickasha Bypass should consider several factors. The north tie to the existing alignment of US-81 should consider an interchange near the existing intersection of US-81 and US-62. The interchange / intersection should consider the possible phasing of the projects (at grade / grade separation), the possibility of a grade separation structure over the railroad to the north and the adjacent businesses / right-of-way. Other locations for the interchange might include a possibility of a new alignment north near a location where one grade separation structure would cross both the railroad and US-62. The south end of the possible bypass is less congested with existing development; however several residential developments have occurred near the proposed 1978 bypass alignment west of Chickasha that will have to be considered. Full access control (Access Management) would be desired for the bypasses, limiting driveway to outlet streets as far away from the intersections as possible and intersections limited to major cross streets.

7. The floodplain at Rock Creek is very wide; the creek channel is not well defined. The study will need to consider the possibility of developing a defined creek channel and the associated efforts required to coordinate with FEMA (LOMR).

Once Benham completes the initial review of the roadway aspects of the corridor to determine deficiencies, they plan to visit the site to review the findings in the field.

Cc: Chief Engineer
Division VII Engineer
Attendees

U.S. 81 Corridor Study
Chickasha north to Union City
J/P 21603(04) Canadian and Grady Counties

Design Criteria - Rural

Functional Classification: Principal Arterial (Rural, Divided Multi-lane)
Design speed = 70 mph
Access control = none; median openings no closer than 0.5 mile
Lane width = 12'
Paved shoulder width = 10' right; 4' left
Cross slope = 2% lane; 4% shoulder
Median width = 64' preferred, 46' minimum
Clear Zone (V = 70 mph, ADT = over 6000, fore slope = 6:1, back slope = 4:1)
- Fill CZ = 34'
- Cut CZ = Not applicable

Side slopes
- Cut ⇒ 6:1 fore slope, 8' ditch width, 4:1 back slope
- Fill ⇒ 0-4' height = 6:1
  - 4'-10' height = 6:1 to CZ, 4:1 to toe
  - >10' height = 6:1 to CZ, 3:1 to toe

Stopping sight distance = 850' (ODOT), 730' (AASHTO 2001)
Intersection sight distance = Dependent on Stop Control and direction of travel
Passing sight distance = 2500' (ODOT), 2480' (AASHTO 2001)
Maximum degree of curvature = 3° (R = 1909.86')
Maximum superelevation = 0.08 roadway, 0.06 bridges
Maximum grade = 3% (level)
Minimum grade = 0.5%
Vertical curvature for desirable SSD
- Crest K = 540 (ODOT Desirable), 290 (ODOT Minimum), 247 (AASHTO 2001)
- Sag K = 220 (ODOT Desirable), 150 (ODOT Minimum), 181 (AASHTO 2001)

Bridges

Structural capacity	HL-93
Width	full approach roadway width
Vertical clearance	16'-9"

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Design Criteria - Suburban

Functional Classification: Principal Arterial (Suburban, Multi-lane)
Design speed = 45 mph or less for curbed section, 45 – 60 mph for open section
Access control = none
Lane width = 12'
Curb Offset = 2' right; 2' left
Cross slope = 2% lane; 3% for lane next to curb
TWLT lane width = 14'
Parking lane width = 12'
Clear Zone = 10' behind curb
Side slopes
- Cut ⇒ 3:1 back slope
- Fill ⇒ 0-4' height = 3:1
  - 4'-10' height = 3:1

>10' height = 3:1
Stopping sight distance = 400' for 45 mph; 650' for 60 mph
Intersection sight distance = Dependent on Stop Control and direction of travel
Maximum degree of curvature = 9° 15' (R = 619.41') for 45 mph; 4° 15' (R = 1348.14') for 60 mph
Maximum superelevation = 0.06
Maximum grade (level) = 6.5% for 45 mph; 5% for 60 mph
Minimum grade = 0.5%
Vertical curvature for desirable SSD
Crest K = 120 for 45 mph; 310 for 60 mph
Sag K = 90 for 45 mph; 160 for 60 mph

Bridges

Structural capacity	HL-93
Width	full approach roadway width
Vertical clearance	16'-9"

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Design Criteria – Bypass

Functional Classification: Principal Arterial (Urban, Divided Multi-lane)
Design speed = 70 mph
Access control = full for ultimate design, partial for interim design
Lane width = 12'
Paved shoulder width = 10' right; 4' left
Cross slope = 2% lane; 4% shoulder
Median width = 64' preferred, 46' minimum
Clear Zone (V = 70 mph, ADT = over 6000, fore slope = 6:1, back slope = 4:1)
Fill CZ = 34'
Cut CZ = Not applicable
Side slopes
Cut ⇒ 6:1 fore slope, 8' ditch width, 4:1 back slope
Fill ⇒ 0-4' height = 6:1
4'-10' height = 6:1 to CZ, 4:1 to toe
>10' height = 6:1 to CZ, 3:1 to toe
Stopping sight distance = 850' (ODOT), 730' (AASHTO 2001)
Intersection sight distance = Not applicable
Passing sight distance = 2500' (ODOT), 2480' (AASHTO 2001)
Maximum degree of curvature = 2° (R = 2864.79')
Maximum superelevation = 0.08 roadway, 0.06 bridges
Maximum grade = 3% (level)
Minimum grade = 0.5%
Vertical curvature for desirable SSD
Crest K = 540 (ODOT Desirable), 290 (ODOT Minimum), 247 (AASHTO 2001)
Sag K = 220 (ODOT Desirable), 150 (ODOT Minimum), 181 (AASHTO 2001)

Bridges

Structural capacity	HL-93
Width	full approach roadway width
Vertical clearance	16'-9"

DA

Oklahoma Department of Transportation

Planning and Research Division Office 521-2704 Fax 521-6917

Date: May 19, 2005

To: Files and Attendees

From: Planning and Research Division

Subject: US 81 – Potential Bypass Locations

On May 12, 2005, a meeting was held to review and discuss potential bypass location locations on US 81. In attendance were:

Reza Amini	ODOT Roadway Design Division	405-521-6779
Laila Fosse	ODOT Planning & Research Division	405-522-6719
Ronda Lindsay	ODOT Project Management	405-522-7603
Craig Moody	ODOT Planning & Research Division	405-522-1465
Larry Reser	ODOT Survey	405-521-2621
Bob Rose	ODOT Division VII	580-255-7586
Brian Schmitt	ODOT Roadway	405-521-2695
Dawn Sullivan	ODOT Planning & Research Division	405-521-2927
Ryan Abbotts	Benham	918-599-4238
Diane Abernathy	Benham	405-701-3167
Terry McFall	Benham	405-794-3531
Ronald Weltzheimer	Benham	405-478-5353
Larry Wicks	Benham	918-492-1600
Mike Brice	City of Chickasha	405-222-6028
Jim Parker	City of Chickasha	405-224-5444
Larry Shelton	City of Chickasha	405-222-6045

1. Chickasha Western Bypass

The first topic of conversation was review and discussion of eight (8) potential western bypasses of Chickasha. The participants from City of Chickasha quickly recommended elimination of all bypass locations except for the two (2) westernmost locations (i.e., bypass locations #3 and 4) due to recent development trends.

Potential constraints identified in the vicinity of bypass locations 3 and 4 included:

- A newly-construction Chickasha water tower
- Current construction of a new church
- A 100-acre parcel currently being platted by Dry Creek Developers for residential development

The Chickasha participants indicated a preference for:

- Future economic development along the western bypass.
- Per the Chickasha Master Plan, Pikes Peak Road to be widened and re-aligned into the western bypass.

- Interchanges with the western bypass be provided at several points: SH 92, I-44, Grand Avenue, and Idaho Street.

ODOT expressed the following concerns:

- The western bypass should cross existing streets at 90° to facilitate potential future interchanges.
- The type of access control and the number of access points must be carefully considered in light of the desired bypass function and the proposed 70 mph speed limit.
- The number of access points should be minimized and kept at least 1 mile apart.

At the end of the discussion it was decided that two potential Chickasha bypass locations would be carried forward for further consideration. These locations will be some combination of #3 and 4, with a common alignment on the south end and two variations on the north end.

Benham will check with Oklahoma Turnpike Authority regarding plans to modify and/or relocate the toll plaza on I-44 south of Chickasha..

2. Chickasha Northern Bypass

The potential for a Chickasha northern bypass was briefly discussed. The preliminary results of the license plate survey conducted by Benham indicate current traffic is insufficient to support such a bypass. Chickasha officials indicated that the idea of a northern bypass is supported by a group of local individuals, and is proposed to consist of utilizing existing I-44 to conduct northbound US 81 traffic from south of Chickasha to a point approximately 3 miles north of Chickasha (and north of the existing I-44 Washita River crossing). From this point, traffic would exit I-44 and travel west to US 81 (approximately 2.5 miles north of the US 81/US 62 intersection. This concept would require construction of approximately 5.5 miles of roadway along existing county roads, 2 railroad crossings, an interchange at I-44 and the new road north of Chickasha, and removing the toll fee for traffic using I-44 for the northern bypass. Benham will evaluate the demand for such a bypass (as indicated from license plate survey data) and the feasibility of removing the I-44 toll for northern bypass traffic.

3. Pocasset Bypass

East and West potential bypasses of Pocasset were reviewed. The East bypass was dropped from further consideration due to the need for two (2) railroad crossings. The West bypass and Existing alignment will be carried forward for further consideration and comment from the public. Current on-street parking should be considered in the analysis of the improvement of the existing facility.

4. Minco Bypass

East and West potential bypasses of Minco were reviewed. Connecting either bypass to SH 37 north of Minco will be problematic. The East bypass can be connected more easily; therefore, the West bypass was eliminated from further consideration. The East bypass and Existing alignment will be carried forward for further consideration and comment from the public.

5. Union City Bypass

East and West potential bypasses of Union City were reviewed. The East bypass offers convenient access to SH 152 and requires no railroad crossing. Therefore, the West bypass was eliminated from further consideration. The East bypass and Existing alignment will be carried forward for further consideration and comment from the public.

6. Letter to Chickasha Chamber of Commerce

At Bob Rose's suggestion, ODOT will prepare a letter to the Chickasha Chamber of Commerce requesting that they provide any pertinent general feedback regarding a Chickasha western bypass at this time. Subsequent stakeholder and public meetings will be held, with ample opportunity for additional public input.

Cc: Chief Engineer/Deputy Director
Division VII Engineer
Attendees

Oklahoma Department of Transportation

Planning and Research Division Office 521-2704 Fax 521-6917

Date: July 29, 2005

To: Files and Attendees

From: Planning and Research Division

Subject: US 81 – Preliminary Bypass Alignments

On July 27, 2005, a meeting was held to review the preliminary bypass alignments on US 81. In attendance were:

Eduardo Elder	ODOT Roadway	
Bob Rose	ODOT Division VII	580-255-7586
Brian Schmitt	ODOT Roadway	405-521-2695
Diane Abernathy	Benham	405-701-3167
Terry McFall	Benham	405-794-3531
Ronald Weltzheimer	Benham	405-478-5353
Larry Wicks	Benham	918-492-1600

US 81 North Segment

The proposed bypass alignments for Union City (east side), Minco (east side), and Pocasset (west side) were reviewed. The following comments were made:

1. Union City Bypass: The proposed Union City bypass will be a diamond interchange at SH 152, east of Union City. ODOT suggested that Benham present the proposed bypass and existing alignment improvements to Division 4 for review and comment.

2. Minco Bypass: The Minco bypass will require two (2) interchanges: a diamond interchange with US 81 over SH 37 southeast of Minco (south interchange), and a loop ramp to SH 37 north of Minco (north interchange). It is presumed that the portion of US 81 bypassed will come off the system. The north interchange proposal at Minco included two possible configurations. The first configuration extends the county road east with a new railroad grade separation structure offset to the east and a diamond interchange at the proposed bypass. The second configuration would feature an interchange of US 81 and SH 37 along the existing US-81 alignment north of the existing railroad grade separation. Because the second proposal was not fully developed at the time of this meeting, Benham will complete enough geometrics to determine if an interchange is actually possible at this location and the extents to make all of the grades work. ODOT staff commented that the railroad grade separation structure north of Minco was fracture critical, which may require replacement or other significant work.

The extents of the five-lane sections will be reviewed to determine the best location to transition to a four-lane divided section. A transition typical section should be considered (5-lane open

with shoulders) between the curb and gutter urban areas and the divided rural areas. Shoulder widths for the transition section should match the shoulders widths for the proposed divided section. The railroad grade separation north of Minco should be included in this review, considering construction phasing. The alternate for improving US-81 on the existing alignment should consider extending the transition section north of the existing railroad grade separation.

ODOT suggested that the Minco information be presented to the public as two primary alternates, each having two different variations. Alternate 1 would be improvements along the existing alignment, or the existing alignment with a new alignment on the south end of Minco correcting the horizontal curves. Alternate 2 would be the proposed bypass with the south interchange, with either the first or second configuration for the north interchange.

3. General: ODOT prefers to have access control on all of the proposed bypasses. Access control will require a review of the right-of-way parcels. A recommendation of the limits of Access Control will be included in BenhamÆs final report.

Chickasha Western Bypass

Two (2) different western bypass alignments have been studied, referenced as Alignment 3 (eastern) and 4 (western). Each alignment includes six (6) interchanges (i.e., US 62, Idaho Street, Grand Avenue, SH 92, I-44, and US 81 south). The graphics showing the proposed interchanges were reviewed.

1. General: The Chickasha bypass will be a controlled access facility with no frontage roads.

2. US 62 Interchange: This interchange is proposed as a diamond interchange with US 81 over US 62. Construction of the interchange will likely impact the floodplain; therefore, some easement purchases will be necessary.

3. Idaho Interchange: The eastern alignment would avoid the new Chickasha water tower, while the western alignment would be located with the water tower in the median. Additional research is required to determine if a plat has been filed west of the proposed interchange location at Idaho. All impacts should be mapped included any proposed ôgreen areasöfor a filed plat.

4. Grand Interchange: A diamond interchange is proposed.

5. SH 92 Interchange: Alignment 3 would impact Hermetic Switch, while Alignment 4 avoids the facility. The SH 92 interchange will likely need to be folded to avoid the railroad.

6. I-44 Interchange: Two interchange configurations were discussed at I-44, one of which might allow connecting Pikes Peak Road to the bypass. ODOT requested that a third interchange be developed featuring a conventional ôclover leafödesign. The interchange layouts will be discussed with Reza Amini of the Roadway Deign Geometrics Branch. Benham will discuss the interchange geometrics and the requirements for Toll Gates with OTA. After reviewing the graphics, ODOT indicated that a connection of Pikes Peak Road to the bypass might not be

practical because the connection would be difficult, complex and costly, and the associated traffic volumes are likely very low.

7. Existing US 81 Interchange: Two (2) alignments were presented for the interchange back to existing US 81: a directional interchange, and an interchange featuring buttonhook ramps. Traffic volumes and patterns will be reviewed to justify a directional interchange. If the traffic study supports a directional interchange, a buttonhook ramp interchange will not be considered further or presented to the public. ODOT expressed concerns regarding stopping US 81 traffic entering/leaving existing US 81, and accommodating traffic on 29th Avenue and East 1400 Road. Benham will review the previous ODOT studies at this location. ODOT requested that Benham coordinate with OTA to determine how the toll may be captured, and to consider the geometrics for tying the bypass back to existing US 81.

Cc: Chief Engineer/Deputy Director
Division VII Engineer
Attendees

We believe the following record to be an accurate summary of decisions and related discussions. We will appreciate notification of exceptions to this record within 10 (ten) days of its receipt. Failing such notification, we will consider this a statement of fact in which you concur.

PROJECT		WRITTEN BY
US 81 Corridor Study – Union City to Chickasha		Terry McFall/Ron Weltzheimer
PROJECT NUMBER	FILE NUMBER	DATE WRITTEN
		9/1/05

Subject: US 81 Corridor Study – Meeting with Tim Stewart, Deputy Director of the Oklahoma Transportation Authority

Date: 08/30/05

Time: 3:00 p.m.

Attendees: Tim Stewart, OTA
Terry McFall – Benham
Ron Weltzheimer – Benham

On Wednesday August 30, 2005 at 3:00 p.m. a meeting to discuss the US 81 Corridor Study was held at the Oklahoma Turnpike Authority (OTA). Attending were Tim Stewart OTA, Ronald Weltzheimer Benham, Terry McFall Benham.

Purpose of the meeting was to exchange information regarding the study. Ron briefly described the scope of the study and the progress to date. The primary item to be discussed was the impact of the Chickasha West Bypass on the H.E. Bailey turnpike particularly on the existing toll plaza.

An aerial showing the proposed new interchange of the Bypass and the turnpike and its relationship with the existing toll plaza was displayed. Tim said OTA preferred not to place the gate within an interchange. OTA prefers toll gates similar to the gate at Newcastle using ramps outside the toll booths for the PikePass lanes.

After much discussion it was concluded if the toll plaza was to be relocated it would be better to locate it southwest of the existing location. Moving it northeast could result in noise problems and providing adequate acceleration and deceleration lanes would be difficult. Moving it to the southwest would require tollgates on the eastbound on and westbound off ramps at the proposed interchange. Tim suggested we look at the SH 4/ Bailey Turnpike interchange construction plans for ideas and methods for toll plaza locations on ramps. Tim liked the idea of using collector/distributor roads to channel traffic to the toll gates.

Tim stated replacement of the toll plaza is not in his current five-year plan. However he is interested in the results of the study because it could affect the location of any future planned replacement. Tim stated that a suitable site for a new toll plaza would require about a one-mile flat stretch of road, or relatively flat with the toll plaza at the crest. We will add Tim to the mailing list for the project and provide him with a copy of the final study report.

Also discussed was the "east bypass" proposed by Pat Brooks of Chickasha, which would include a portion of the turnpike. Tim indicated there are a lot of problems associated with this proposal, the largest being how the lost tolls would be recaptured. Under the trust agreement some entity would have to be responsible for payment of all tolls before OTA could remove the tolls for that section of turnpike. He also questioned how much demand there would be for such a bypass.

Oklahoma Department of Transportation

Planning and Research Division Office 521-2704 Fax 521-6917

DATE: **October 19, 2005**

TO: **Files and Attendees**

FROM: **Planning and Research Division**

SUBJECT: **US 81 ODOT Meeting Minutes**

On Tuesday, October 18, 2005, a meeting was held to prepare for the bypass stakeholder and public meetings to be held for the US 81 Corridor Study project. In attendance were:

Eduardo Elder	ODOT Roadway	405-521-4848
Laila Fosse	ODOT	405-522-6719
Teresa Harris	ODOT RW Relocation	405-521-2648
Ronda Lindsay	ODOT Project Management	405-522-7603
Craig Moody	ODOT Planning	405-522-1465
Bob Rose	ODOT Division VII	580-255-7586
David Streb	ODOT Asst Dir of Preconst/Asst Chief Engr	405-521-6916
Tim Tegeler	ODOT Roadway	405-521-2601
Diane Abernathy	Benham	405-701-3167
Linda Koenig	Benham	405-478-5353
Aruna Mathuranayagam	Benham	405-478-5353
Terry McFall	Benham	405-794-3531
Ron Weltzheimer	Benham	405-478-5353
Larry Wicks	Benham	918-492-1600

The group decided that the optimum date for both bypass stakeholder meetings would be Tuesday, November 1, 2005, and that the dates for the public meetings would be Monday, November 7 and Thursday, November 10, 2005.

The draft letters, mailing lists, public notice, and meeting handouts were reviewed and suggestions for several changes or additions were made.

The group decided that the graphics presenting the bypass locations would show only the bypass or bypasses that had been selected as more feasible. For example, only the east bypass would be graphically presented for Union City and Minco, only the west bypass for Pocasset, and only western bypass alternates 3 and 4 for Chickasha. It would be briefly explained at the meetings that other bypass locations had been considered, but the bypass locations indicated on the graphics had been selected as most feasible.

The graphics related to the Chickasha north and west bypass were reviewed, and it was agreed that the graphics should only reflect the percentage of US 81 traffic which would utilize each bypass. The group also discussed that these percentages and the origin-destination study did not take into consideration the effects of (1) turnpike tolls or (2) the traffic presently using 29th Street as a bypass on drivers' willingness to utilize the bypasses.

It was agreed that the stakeholders' participation should be acknowledged clearly at the public meetings. The stakeholder meetings would use a Powerpoint® format, and the public meeting format would be "open forum", consisting of an introductory session, followed by an open forum with topical stations and associated graphics.

Cc: Attendees
Casey Shell – Division 4 Engineer

Oklahoma Department of Transportation
Planning and Research Division
Office 521-2704 Fax 521-6917

DATE: March 23, 2006

TO: Files and Attendees

FROM: Planning and Research Division

SUBJECT: US 81 Recommendations Meeting Minutes

On 1/23/06, a meeting was held in the Planning and Research Division Conference room to review Benham's recommended improvements for US 81. In attendance were:

Steve Roper	ODOT Planning & Research Division	405 521-2672
Larry Reser	ODOT Survey	405-521-2621
Dawn Sullivan	ODOT Planning & Research Division	405 521-2927
Casey Shell	ODOT Division IV Engineer	405-521-3805
Bob Rose	ODOT Division VII Engineer	580-255-7586
Greg Allen	ODOT Bridge Division	405-521-2606
Ron Weltzheimer	Benham	405-478-5353
Oscar Molla	ODOT Bridge Division	405-521-6490
Diane Abernathy	Benham	405 701-3167
Terry McFall	Benham	405 794-3531
Larry Wicks	Benham	918 492-1600
Ronda Lindsay	ODOT Project Management	405-521-7603
Tim Tegeler	ODOT Roadway	405 521-2695
Eduardo Elder	ODOT Roadway	405-521-4848
Bob Rusch	ODOT Bridge	405 521-2606

General:

Ron Weltzheimer provided an update of the US 81 corridor study status, and explained how Benham had developed the recommendations for US 81 from north of Union City to south of Chickasha. The recommended improvements and ODOT comments were as follow:

North Segment Recommendations:

- **US 81/SH 62 to Pocasset: 4 lane divided, add new lanes east of existing.**
  ODOT agreed.

- **Pocasset: No bypass, 4 lane undivided along existing alignment.**
  ODOT agreed.

- **Pocasset to Minco: 4 lane divided, add new lanes east of existing.**
  ODOT agreed. ODOT asked Benham to review locations of Rural Water District lines, and consider if adding lanes to the East or the West has less impacts to RWD.

- **Minco: No bypass, 4 lane divided changing to 4 lane undivided south of town along an Alternate alignment correcting the curve south of town.**
  ODOT questioned the comparative right-of-way estimates for the Existing and Alternate options, and requested a more detailed study of the Existing vs. the Alternate in terms of relocations and row costs. Benham will authorize Cinnabar to do, and will e-mail results to ODOT.

- ODOT requested that the info in Tab 2 of the handout be clarified that while the recommendations were 4 lane, the costs were based on 5 lanes through towns.

- For programming, control of access should be considered a ROW cost.

- ODOT requested consideration of realignment of the railroad crossing north of Minco to a less severe angle.

- **Minco to Union City: 4 lane divided, add new lanes east of existing.**
  ODOT agreed.

- **Union City: No bypass; 4 lane undivided along existing alignment.**
  ODOT agreed.

- **Union City to Project End: 4 lane divided, add new lanes east of existing.**
  ODOT agreed.

- It was agreed that an additional stakeholder meeting was not necessary for the North Segment.

Chickasha Segment Recommendation:

- **Recommended a 4 lane divided along the west bypass alternate 3-4 hybrid.**
  ODOT agreed.

- ODOT requested that the USAO property and impacts from West bypass alternates 3 and 4 be reviewed/confirmed.

- The North Bypass is not feasible and can be dropped from further consideration.

- Bob Rose will advise regarding need for an additional stakeholder meeting for the Chickasha segment. In subsequent e-mail to Benham dated 2/21/06, ODOT confirmed no stakeholder meeting is necessary, but a letter to the stakeholders should be issued, informing them of our intentions and offering the opportunity for comment.

Program Segments/Programming:

- The final report will identify programming segments and categorize them as "high/medium/low", but Benham will provide a numbered priority list of segments to Bob Rose.

- Program segments should be divided such that the costs are $5 - $10 million per segment.

- Program segments should break at the Canadian/Grady county line.

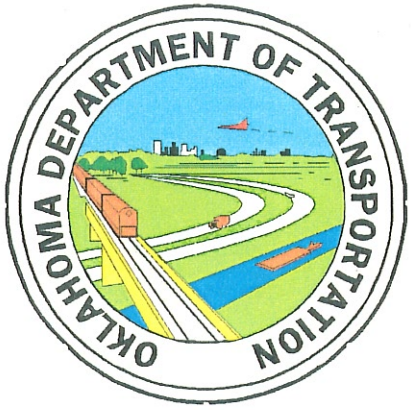
- The section of US 81 north of US 81/SH 152 intersection in Union City to Project End is likely already programmed as part of the District IV improvements. This will be verified and if so, the program segments will end at the US 81/SH 152 intersection.

- Known "high" priority segments include: US81/SH 62 to Chickasha Airport, the curve correction south of Minco, and US 81/SH 152 to the Canadian River.

- The final report should divide the North Segment into 2 sections: north and south of US 81/SH 37 East intersection in Minco.

- Per Bob Rusch, two separate bridges should be built over Buggy Creek south of Minco.

Cc: Attendees



US-81 CORRIDOR STUDY

Preliminary Cost Study
Recommendation of Alternates

US-81
Grady and Canadian Counties

EC No. 899
J/C 21603(04)

BENHAM

January 2006

PRELIMINARY COST STUDY
RECOMMENDATION OF ALTERNATES

US-81 CORRIDOR STUDY

OKLAHOMA DEPARTMENT OF TRANSPORTATION

THE BENHAM COMPANIES, LLC

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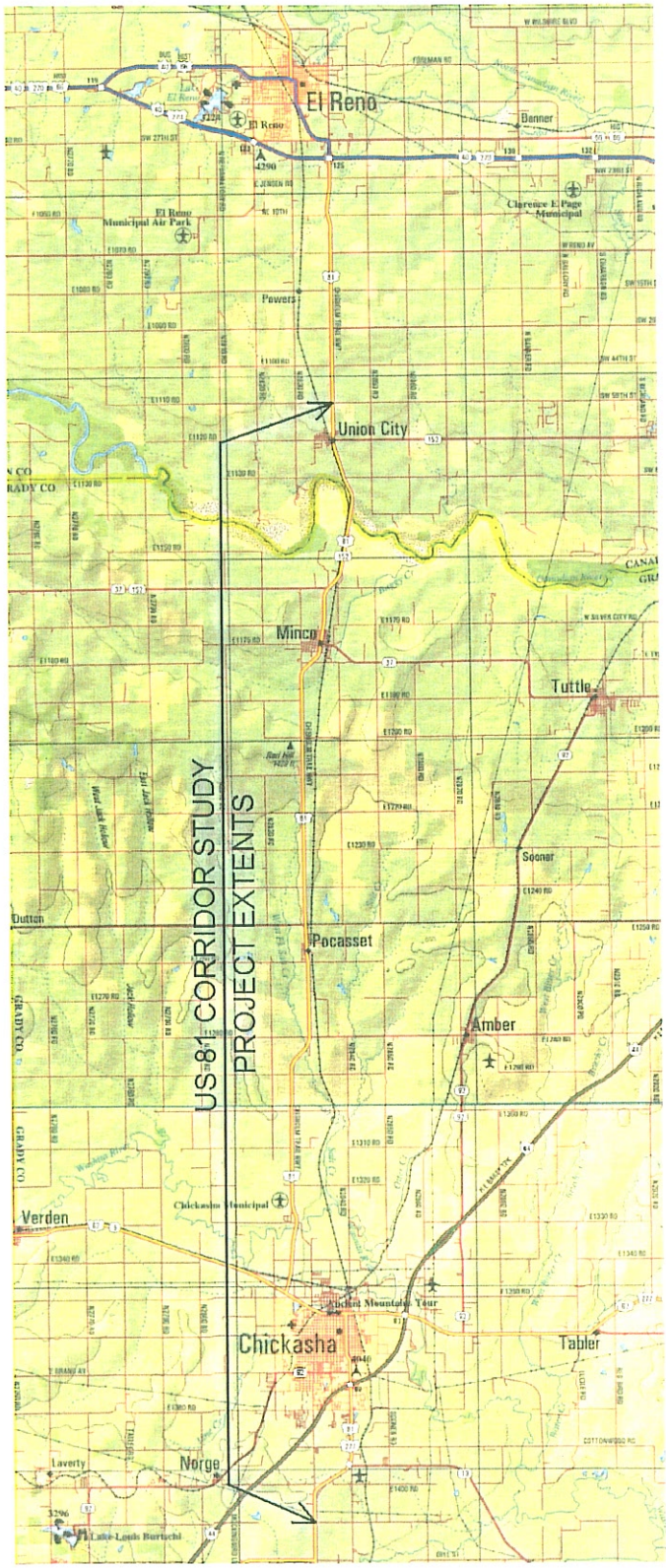
01/16/2006

BENHAM



01/16/2006

BENHAM

PRELIMINARY COST STUDY
RECOMMENDATION OF ALTERNATES

U.S. 81 CORRIDOR STUDY

OKLAHOMA DEPARTMENT OF TRANSPORTATION
THE BENHAM COMPANIES, LLC

The focus of the US-81 Corridor Study is to evaluate existing U.S. 81 for improvement from Union City South to Chickasha including a possible Chickasha bypass. The study includes an inventory of existing conditions including traffic capacities, sufficiency rating and environmental conditions. A projection of future conditions concluding with a recommended alternate which is economical and has minimal environmental impacts is the purpose of this study.

PRELIMINARY COST STUDY

A cost estimate is presented in this report for each of the alternatives discussed at the public meetings which is comprised of construction, right-of-way and utility relocation cost. These cost estimates are based upon "per mile", "per acre", "per square foot", etc. unit planning costs provided by ODOT. With minor adjustment, the unit costs utilized for this study are from the "2003 Needs Study Construction Cost Estimates" from the Strategic Planning Branch of the Planning & Research Division, Oklahoma Department of Transportation. *These are planning level costs estimates to be used for alternate comparison only. The costs presented are not intended for the programming of projects.*

The purpose of this preliminary report is to present information that will be used to determine the final recommended alternate for each section of the project. After the final alternates have been determined, a detailed study will be completed to identify all significant Right-of-Way and Utility needs to establish cost estimates for programming. Parcel counts will be determined using the tax roles from the County Assessor's office and Right-of-Way cost (including relocations) will be determined using real estate comparable costs and a windshield survey. Utility relocation needs will be identified and cost estimates will be developed using information provided by ODOT and direct contact with utility companies. Final numbers will be submitted to ODOT Right-of-Way Division for review.

After the final alternates have been determined, a detailed study will be completed to determine final engineering and construction costs. The As-Built drawings of the existing US-81 facility will be used to identify all sub-standard sections, significant cut, fill, drainage structures and bridges. Estimated construction cost will be determined using a database of construction unit costs furnished by ODOT for recommended improvements.

PRELIMINARY COST STUDY
RECOMMENDATION OF ALTERNATES

U.S. 81 CORRIDOR STUDY

The Final Alternate Cost Summary will be included in the Final Report. Costs for construction, right-of-way and utility relocation will be developed for each project on the project priority list of the corridor identified during the completion of the Final Alternate Study.

PROJECT STATUS:

DATA COLLECTION / ANALYSIS OF EXISTING DATA 95%
Task Remaining: Finalize selection of Alternates
Update construction unit costs

TRAFFIC ANALYSIS 95%
Tasks Remaining: Complete Traffic Count Estimates for Chickasha Bypass

ENVIRONMENTAL CONSIDERATIONS 100%

MEETINGS / PUBLIC INVOLVEMENT 80%
Task Remaining: Final Public Meetings
(Additional Stakeholder Meeting??)

ALTERNATE STUDIES / FINAL REPORT 40%
Tasks Remaining: Determine Preferred Alternates
Develop Project Priority List
Cost Estimates
Detailed Right-of-Way & Utility Cost Estimate
Final Report

US 81 Corridor Study
Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

North Segment Summary

Segment	Length (miles)	Ultimate Section	Location	Estimated Cost[2]
US 62 to south of Pocasset	8.13	4 lane divided	east of existing lanes	$23,454,114
Pocasset	2.38	4 lane divided & 5 lane undivided[1]	existing alignment	$5,794,802
north of Pocasset to south of Minco	5.24	4 lane divided	east of existing lanes	$10,940,596
Minco	4.24	4 lane divided & 5 lane undivided[1]	alternate alignment	$16,743,276
north of Minco to south of Union City	1.84	4 lane divided	east of existing lanes	$9,035,236
Union City	2.59	4 lane divided & 5 lane undivided[1]	existing alignment	$6,135,357
north of Union City to End of Project	2.00	4 lane divided	east of existing lanes	$4,002,200
	26.42			$76,105,581

[1] *Estimated costs have been calculated utilizing 5 lanes for the undivided section.*

[2] *Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.*

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

US 62 to south of Pocasset

Existing alignment: length = 8.13 miles
ultimate section = 4 lane divided
add parallel lanes east of existing lanes
full access control between US 62 and E 1340 Road
bridges = Washita River, 3 others

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$23,454,114	$15,539,099	$5,264,000	$800,627	$1,850,388

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

Pocasset

West Bypass: length = 2.50 miles
ultimate section = 4 lane divided
full access control
at-grade intersections

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
West	$8,206,000	$6,688,750	$0	$754,750	$762,500

Existing alignment: length = 2.38 miles
ultimate section = 4 lane divided and 5 lane undivided
5 lane undivided between E 1260 Road and E 1250 Road

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$5,794,802	$4,917,462	$0	$410,752	$466,588

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

north of Pocasset to south of Minco

Existing alignment: length = 5.24 miles
ultimate section = 4 lane divided
add parallel lanes east of existing lanes

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$10,940,596	$9,248,076	$0	$499,896	$1,192,624

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

Minco

Existing alignment: length = 4.35 miles
ultimate section = 4 lane divided and 5 lane undivided
5 lane undivided between Buggy Creek and north railroad overpass bridge
bridges = Buggy Creek, north railroad overpass, 3 others

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$16,787,905	$10,734,380	$3,207,750	$2,111,806	$733,969

East Bypass: length = 4.61 miles
ultimate section = 4 lane divided
bridges = south railroad overpass, Buggy Creek
interchanges = SH 37 East, SH 37 West

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
East	$42,766,581	$34,453,272	$5,515,500	$1,391,759	$1,406,050

Alternate alignment: length = 4.24 miles
ultimate section = 4 lane divided and 5 lane undivided
5 lane undivided between Buggy Creek and north railroad overpass bridge
bridges = Buggy Creek, north railroad overpass, 3 others

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Alternate	$16,743,276	$10,577,086	$3,595,500	$1,907,530	$663,160

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

north of Minco to south of Union City

Existing alignment: length = 1.84 miles
ultimate section = 4 lane divided
add parallel lanes east of existing lanes
bridge = Canadian River

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$9,035,236	$3,247,416	$5,193,500	$175,536	$418,784

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

Union City

Existing alignment: length = 2.59 miles
ultimate section = 4 lane divided and 5 lane undivided
5 lane undivided between 0.25 miles south of SH 152 East and 0.5 miles north of SH 152 East

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$6,135,357	$5,252,431	$0	$625,262	$257,664

East Bypass: length = 2.60 miles
ultimate section = 4 lane divided
interchange = SH 152 East

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
East	$17,424,480	$16,151,520	$0	$784,940	$488,020

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

north of Union City to End of Project

Existing alignment: length = 2.00 miles
ultimate section = 4 lane divided
add parallel lanes east of existing lanes

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Existing	$4,002,200	$3,529,800	$0	$190,800	$281,600

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US 81 Corridor Study
Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

Chickasha Summary

Segment	Length (miles)	Ultimate Section	Estimated Cost[1]
Alternate 3	6.59	4 lane divided	$127,833,968
Alternate 4	6.92	4 lane divided	$131,228,584
Alternate 3 - 4 Hybrid	6.85	4 lane divided	$130,931,660
North	6.99 [2]	4 lane divided	$136,335,084

[1] *Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.*

[2] *Length of new roadway.*

US 81 Corridor Study

Chickasha to Union City
Canadian & Grady Counties
Job Piece No. 21603(04)

Chickasha West

Alternate 3: length = 6.59 miles
ultimate section = 4 lane divided
bridges = West Side Creek, Country Club Road, Line Creek, 29th Street, Rock Hollow Creek
interchanges = SH 19, I-44, Norge Road, Grand Avenue, Idaho Avenue, US 62

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Alternate 3	$127,833,968	$110,660,968	$10,000,000	$5,163,000	$2,010,000

Alternate 4: length = 6.92 miles
ultimate section = 4 lane divided
bridges = West Side Creek, Country Club Road, Line Creek, N 2815 Road, 29th Street, Rock Hollow Creek
interchanges = SH 19, I-44, Norge Road, Grand Avenue, Idaho Avenue, US 62

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Alternate 4	$131,228,584	$111,695,584	$12,000,000	$5,422,000	$2,111,000

Alternate 3 - 4 Hybrid: length = 6.85 miles
ultimate section = 4 lane divided
bridges = West Side Creek, Country Club Road, Line Creek, N 2815 Road, 29th Street, Rock Hollow Creek
interchanges = SH 19, I-44, Norge Road, Grand Avenue, Idaho Avenue, US 62

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
Alternate 3 - 4 Hybrid	$130,931,660	$111,476,120	$12,000,000	$5,366,290	$2,089,250

Chickasha North

North: length = 6.99 miles of new roadway
ultimate section = 4 lane divided
bridges = N 2860 Road, BNSF railroad / Otter Creek, N 2850 Road, Union Pacific railroad / Salt Creek
interchanges = SH 19, I-44 southwest, I-44 northeast, SH 92, N 2840 Road, US 81

Route	Estimated Total Cost	Estimated Roadway Cost	Estimated Bridge Cost	Estimated R/W Cost	Estimated Utility Cost
North	$136,335,084	$119,235,783	$12,000,000	$2,967,351	$2,131,950

Amounts are planning level cost estimates to be used for alternate comparison only. These amounts are not intended for the programming of projects.

US-81 Corridor Study
4-Lane vs. 5 Lane Comparison/Recommendation

CITY	CRITERIA CONSIDERED					RECOMMENDATION
	TRAFFIC	SAFETY	INTERSECTION DENSITY	DRIVEWAY DENSITY	COMMERCIAL DENSITY	
Pocasset	No	No	Yes	No	No	4 lane undivided
Minco	No	No	Yes	Yes	No	4 lane undivided
Union City	No	No	Yes	No	No	4 lane undivided

9.4 TWO-WAY LEFT-TURN LANES (TWLTL)

Designs using the two-way left-turn lane (TWLTL) are often a cost-effective method to accommodate a continuous left-turn demand and to reduce delay and accidents. These lanes will often improve operations on roadways which were originally intended to serve the through movement but now must accommodate the demand for accessibility created by changes in adjacent land use.

9.4.1 Warrants

9.4.1.1 General

The physical conditions under which a TWLTL should be considered typically include:

1. areas with a high number of driveways per mile (e.g., 45 driveways total per mile on both sides);

2. areas of high-density commercial development; and

3. areas with substantial mid-block left turns.

The applicability of the TWLTL is a function of the traffic conditions resulting from the adjacent land use. The designer should evaluate the area to determine the relative attractiveness of a TWLTL as compared to alternative access techniques. For example, a TWLTL may perpetuate more strip development. If this is not desirable, a raised median is an alternative treatment.

9.4.1.2 Functional Class

An undivided, 4-lane urban or suburban arterial is the most common candidate for the implementation of a TWLTL. This is commonly referred to as a 5-lane facility. The use of a TWLTL on a 2-lane arterial (i.e., a 3-lane facility) may also be appropriate.

9.4.1.3 Traffic Volumes

Traffic volumes are a significant factor in the consideration of a TWLTL. When evaluating its use based on traffic volumes, the designer should use volumes projected for the project design year (see Chapters Twelve and Thirteen). As general guidance, the following should be used:

1. On 4-lane highways, a TWLTL will often be advantageous for traffic volumes between 10,000 and 25,000 ADT with a significant number of left-turning vehicles. On 2-lane highways, a TWLTL will often be advantageous for traffic volumes between 5000 and 12,000 ADT.

2. For traffic volumes greater than 30,000 ADT and/or greater than 1000 DDHV, a raised median should be considered; however, a 6-lane highway with a TWLTL (i.e., a 7-lane facility) may be the more advantageous design selection, especially where roadside development is extremely dense.

3. The decision on whether to provide a TWLTL for traffic volumes between 25,000 and 30,000 ADT will be determined on a case-by-case basis. See Reference (7) for additional information.

9.4.1.4 Pedestrians

Pedestrian crossing volumes are also a consideration because of the large paved area which must be traversed when a TWLTL is present (i.e., no pedestrian refuge exists).

the intersection (i.e., provide no exclusive left-turn lane).

3. Minimum Length of TWLTL. The TWLTL should have sufficient length to operate properly, and the type of intersection treatment will determine the length of the TWLTL. The appropriate minimum length will be influenced by through traffic volumes and operating speeds on the highway. The following guidance may be used:

   a. On facilities where V $\leq$ 30 mph and/or lower traffic volumes exist, the minimum uninterrupted length of a TWLTL should be 300-400 ft.

   b. On facilities where V > 30 mph and/or higher traffic volumes exist, the minimum uninterrupted length of a TWLTL should be 500-600 ft.

   The final decision on the length of the TWLTL will be based on site conditions in coordination with the Traffic Engineering Division and the Urban Design Division, Geometric Design Branch.

9.4.2.3 Railroad Crossings

A TWLTL should not extend across a railroad/highway grade crossing. The TWLTL is striped out in advance of the crossing on both sides by a distance of 100-ft desirable and 50-ft minimum. The designer should coordinate with the Traffic Engineering Division.

9.4.3 Rural Transition Section

9.4.3.1 Warrants

In some cases, a rural transition section may be appropriate, which is a variation of the TWLTL. The rural transition section provides a design which may be advantageous in areas which have both urban and rural features. The use of this section should be considered in transitional areas where design speeds are 50 mph or higher and on the following facilities:

1. major collectors on the State highway system with design year ADT between 8000 and 18,000;

2. principal arterials (other than freeways and arterials with partial control of access) with design year ADT between 5000 and 18,000; and

3. other arterials with design year ADT between 7200 and 18,000.

The rural transition section may also be considered in urban areas on facilities which meet these criteria. For this purpose, an urban area is defined as an area currently developed or having probable future development (within the forecast period) as strip commercial or lot development of 0.5 acres or less and where at-grade access is allowed.

9.4.3.2 Design

The rural transition section is designed according to the typical criteria in Table 9.4A.

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DATE: June 17, 1997

TO: Roadway Design Manual Holders

FROM: Assistant Director - Preconstruction MG

SUBJECT: Addition to Roadway Design Manual - Section 9.4

Attached are the 4 lane/5 lane design guidelines. Effective immediately, this should be used as guidance for the design of the 4 lane/5 lane sections. Please insert these pages into section 9.4 of your Roadway Design Manual.

Veldo Goins

VG:RBL:km

Could you please give copies to All: Engr. Mngrs.
Prof. Engrs
Squad Supvr.

RECEIVED
JUN 23 1997
ROADWAY DESIGN
DIVISION

9.4.4 4 Lane/5 Lane Design Guidelines

The following tables are intended for use by the designer for determining the best typical section on both rural and urban routes. It gives guidance of which there is still much room for overlap. All features of a particular route should be considered to come up with the best alternative. The designer should not focus on one particular feature when selecting a typical section, but rather look for a preponderance of the features which make that the most suitable alternative. It is advisable to conduct a thorough site review of each project to check for site specific traffic generators which may dictate a change in the typical section.

Table 9.4B

4 LANE/5 LANE DESIGN GUIDELINES

Feature	4- Lane Undivided		4-Lane Divided	5-Lane w/TWLTL(a)	
	Curbed	10' Shoulders		Curbed	10' Shoulders
Functional Class	Collectors or Minor Arterials		Principal Arterials	All Routes (c)	
Traffic Volumes	DHV < 1000 vph ADT < 10,000 vpd		DHV > 1000 vph ADT > 7200 vpd	DHV <1000 vph ADT <30,000 vpd	DHV < 1000 vph ADT < 20,000 vpd
Projected Development	Low to Moderate		Low - Isolated Traffic Generators	Moderate to High	
Intersection Density (d)	≤ 4 intersections./mi.		≤ 4 int/mi.	> 4 intersections/mi.	
Driveway Density	≤ 45 drives/mi. 40% or more Commercial	≤45 drives/mi. Predominately Residential	≤ 45 drives/mi.	> 45 drives/mi. Predominately Commercial	> 45 drives/mi. Predominately Residential
Pedestrian Traffic	Curb or sidewalk warranted (b)	Minimal Pedestrian Traffic	Minimal Pedestrian Traffic	Curb or sidewalk warranted (b)	Minimal Pedestrian Traffic
Design Speed (e)	45 mph	65 mph	65 mph+	45 mph	55/65 mph (g)
Access Control	None	None	Full or Partial (f)	None	None

Footnotes:

(a) Complete TWLTL warrants are covered in section 9.4 of the Design Manual.

(b) See Section 8.1.5 of the Design Manual for curb warrants and Section 8.1.6 of the Design Manual for sidewalk warrants.

(c) 5-Lane section should be avoided on NHS routes except where there is existing high density commercial development.

(d) Intersections include any public streets or roads as well as drives which generate a large volume of left turns, such as those into malls or large retail outlets.

(e) Design speed noted in the table may of course be increased. Posted speed may be based on appropriate speed studies.

(f) Full control required on interstate or other facilities designed to Interstate standards. Partial control (access at section line and quarter section line) is preferred, but not required, on all others.

(g) In order to increase to a 65 mph design speed, the median must be 16' paved with rumble strips adjacent to the inside travel lanes.

Table 9.4C

ADVANTAGES (+) AND DISADVANTAGES (-) OF THE DESIGN ALTERNATIVES

Advantage/Disadvantage	4 Undivided		4 Divided	5 w/TWLTL	
	Curbed	Shoulders		Curbed	Shoulders
Cost					
Initial	-	+	-	-	+
Maintenance	+	+	-	+	+
R/W Needs	+	+	-	+	+
Design Speed	-	+	+	-	-
Capacity	-	-	+	+	+
Delay Time	-	-	+	+	+
Control of Future Improvements	-	-	+	-	-
Access to Adjoining Properties	+	+	-	+	+
Left Turn Storage	-	-	+	+	+
Accident Reduction					
Angle	-	-	+	-	-
Rear End	-	-	+	+	+
Head On	-	-	+	+	+
Sideswipe	-	-	+	-	-
Pedestrian Safety					
Length Crossing	+	+	-	-	-
Refuge @ Median	-	-	+	-	-
Refuge Along Facility	+	-	-	+	-
Side Street Traffic					
Crossing Highway	-	-	+	-	-
Turning Left Onto Highway	-	-	+	+	+
Mail Delivery [a]	-	+	+	-	+
School Bus [b]	-	+	+	-	+

(a) Assuming mail boxes are located on opposite sides of the highway (mail delivery vehicle must go up one side and down the other).

US 81 Corridor Improvement Recommendation Summary

Options	Cost (million)	Environmental Constraints	Public Input	Recommendation
North Segment				
1. US 81/US 62 Intersection to Pocasset				
Add lanes to east of existing	$23.5	• 1 NRHP structure	None	**X, 4 lane divided**
Add lanes to west of existing	Not estimated; assumed to be equal to or greater than adding lanes to the east	• 1 Church • 2 Cemeteries	None	
2. Pocasset				
Existing alignment	$5.8	None	None	**X, 4 lane undivided**
West Bypass	$8.2	None	• Against bypass • Concerns re: city or county responsibility for abandoned road	
3. Pocasset to Minco				
Add lanes east	$10.9	None	None	**X, 4 lane divided**
Add lanes west	Not estimated; assumed to be equal to or greater than adding lanes to the east	• RWD 6 Distribution Line • 1 NRHP structure	Rancher has expressed concerns	
4. Minco				
Existing alignment	$16.8	None	More relocations than Alternate	
Alternate alignment (corrects sub-standard curves)	$16.7	None	• 1 affected landowner objects • Concerns re: city or county responsibility for abandoned road	**X, 4-lane undivided**
East bypass	$42.8	• 100-yr floodplain • 2 RR crossings	• Against bypass • Concerns re: city or county responsibility for abandoned road	

US 81 Corridor Improvement Recommendation Summary

Options	Cost	Environmental Constraints	Public Input	Recommendation
5. Minco to Union City				
Add lanes east	$9.0	• Aligns with new Canadian River Bridge	None	**X, 4 lane divided**
Add lanes west	Not estimated; assumed to be equal to or greater than adding lanes to the east	• Railroad	None	
6. Union City				
Existing Alignment	$6.1	None	None	**X, 4 lane undivided**
East Bypass	$17.4	None	• Against bypass • Concerns re: city or county responsibility for abandoned road	
7. Union City to Project End				
Add lanes east	$4.0	• Aligns with construction north of project	None	**X, 4 lane divided**
Add lanes west	Not estimated; assumed to be equal to or greater than adding lanes to the east	None	None	

US 81 Corridor Improvement Recommendation Summary
Page 3 of 3

Options	Cost	Environmental Constraints	Public Input	Recommendation
Chickasha Segment				
Existing Alignment	Not estimated	• Numerous relocations, UST/LUST, NRHP	Concerns expressed re: downtown congestion	
West Bypass Alternate 3	$127.8	• Hermetic Switch impacts • Electrical substation impacts • Vine Street residential neighborhood impacts • Fewer relocations than Existing	USAO property more impacted ~~than Alternate 4~~ — support existing or North Bypass	
West Bypass Alternate 4	$131.2	• Chickasha water tower impacts • Fewer relocations than Existing	• USAO property ~~slightly~~ impacted – support existing or North Bypass • Developers expressed concern re: impacts to platted parcel	
West Bypass Alternate 3-4 Hybrid	$130.9	None	• USAO property slightly impacted – support existing or North Bypass • Verbal expression of support	**X,** **4 lane divided**
North Bypass	$136.3	None	▪ Initially suggested by local interests	

COUNTY	CONTROL	ROUTE	BEGIN SUBSECTION	SUBSECTION TYPE	LANE ID	LENGTH	SURFACE							BASE			SHOULDER				MED		CITY					URBAN		ADMINISTRATION								CONST. HISTORY		MAINT.			HWY COMM DIVISION	ENDING DESCRIPTION
							LANES	WIDTH	EXPOSED	PRIMARY	ORIGINAL	THICKNESS	FABRIC REINF.	WIDTH	TYPE	THICKNESS	OUT TYPE	OUT WIDTH	IN TYPE	IN WIDTH	MEDIAN TYPE	MEDIAN WIDTH	RURAL - MUNICIPAL	CITY NUMBER	CITY FIPS	PARKING TYPE	POPULATION	U.A.T. AREA TYPE	URBAN FIPS	TERRAIN AREA TYPE	NHS	NHS ROUTE	DES. TRUCK ROUTE	FUNCTIONAL CLASS	ACCESS CONTROL	JURISDICTION	STATUS CONTROL	RIGHT-OF-WAY	A.D.T.	CONST. DATE	MAINT. DATE	DIVISION	RESPONSIBILITY	DISTRICT - CREW		
9	6	S066	4.54		S	1.47	4	24	N	H	H	9		33	A	0	1	9	4	0	2	30	1	0		0	0	1		2	0		0	5	3	1	2	200	5800	11/1/1951	7/1/1986	4	S	D	4	ENT OKC CL YUKON LFT
9	6	S066	6.01		N	2.92	4	24	I	H	H	9		24	A	0	3	6	4	0	2	30	2	70	1815	0	8	1		2	0		0	5	3	1	2	200		11/1/1951	10/1/1997	4	C	D	4	ENTER OKC U/L
9	6	S066	6.01		S	2.92	4	24	I	H	H	9		24	A	0	3	6	4	0	2	30	2	70	1815	0	8	1		2	0		0	5	3	1	2	200	5100	11/1/1951	10/1/1997	4	C	D	4	ENT OKC U/L - FRISCO
9	6	S066	8.93		N	0.50	4	24	I	H	H	9		24	A	0	3	6	4	0	2	30	2	30	2720	0	4	6	45	7	0		0	3	3	1	2	200		11/1/1951	10/1/1997	4	C	D	4	ENTER YUKON C/L
9	6	S066	8.93		S	0.50	4	24	I	H	H	9		24	A	0	3	6	4	0	2	30	2	30	2720	0	4	6	45	7	0		0	3	3	1	2	200	5900	11/1/1951	10/1/1997	4	C	D	4	ENTER YUKON C/L
9	6	S066	9.43		N	0.48	4	24	I	H	H	9		33	A	0	1	9	4	0	2	30	2	30	2720	0	4	6	45	6	0		0	3	3	1	2	200		11/1/1951	10/1/1997	4	C	D	4	JCT SH 92
9	6	S066	9.43		S	0.48	4	24	I	H	H	9		33	A	0	1	9	4	0	2	30	2	30	2720	0	4	6	45	6	0		0	3	3	1	2	200	6900	11/1/1951	10/1/1997	4	C	D	4	JCT SH 92
9	6	S066	9.91		N	0.46	4	33	L	L	0	2		33	H	4	4	0	4	0	2	5	2	30	2720	1	4	6	45	5	0		0	3	3	1	2	100		11/1/1951	11/1/1951	4	C	D	4	TOWN CENTER AT 6TH ST
9	6	S066	9.91		S	0.46	4	33	L	L	0	2		33	H	4	4	0	4	0	2	5	2	30	2720	1	4	6	45	5	0		0	3	3	1	2	100	11100	11/1/1951	11/1/1951	4	C	D	4	TOWN CENTER AT 6TH ST
9	6	S066	10.37			0.27	4	76	I	I	L	3		76	H	4	4	0			0		2	30	2720	3	4	6	45	4	0		0	3	3	1	2	80	16400	11/1/1951	4/1/2003	4	C	D	4	3RD STREET
9	6	S066	10.64			0.26	4	48	I	I	L	3		68	H	4	1	10			0		2	30	2720	0	4	6	45	5	0		0	3	3	1	2	80	15400	3/1/1967	4/1/2003	4	C	D	4	JCT SH 4 NORTH
9	6	S066	10.90		N	0.21	4	24	L	L	0	1		34	H	4	1	10	4	0	2	50	2	30	2720	0	4	6	45	5	0		0	3	3	1	2	200		3/1/1967	3/1/1967	4	C	D	4	JCT SH 4 SOUTH
9	6	S066	10.90		S	0.21	4	24	L	L	0	1		34	H	4	1	10	4	0	2	50	2	30	2720	0	4	6	45	5	0		0	3	3	1	2	200	13400	3/1/1967	3/1/1967	4	C	D	4	JCT SH 4 SOUTH
9	6	S066	11.11		N	0.61	4	24	L	L	0	1		24	H	4	3	8	4	0	2	26	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200		11/1/1951	11/1/1951	4	C	D	4	SHLDR CHANGE
9	6	S066	11.11		S	0.61	4	24	L	L	0	1		24	H	4	3	8	4	0	2	26	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200	15900	11/1/1951	11/1/1951	4	C	D	4	SHLDR CHANGE
9	6	S066	11.72		N	0.31	4	24	L	L	0	1		34	H	4	1	10	4	0	2	26	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200		11/1/1949	11/1/1949	4	C	D	4	SHLDR CHANGE
9	6	S066	11.72		S	0.31	4	24	L	L	0	1		34	H	4	1	10	4	0	2	26	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200	13100	11/1/1949	11/1/1949	4	C	D	4	SHLDR CHANGE
9	6	S066	12.03		N	0.43	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200		7/1/1958	7/1/1958	4	C	D	4	LVE YUKON-ENT OKC C/L
9	6	S066	12.03		S	0.43	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	30	2720	1	4	6	45	6	0		0	3	3	1	2	200	13600	7/1/1958	7/1/1958	4	C	D	4	LVE YUKON-ENT OKC C/L
9	6	S066	12.46		N	1.11	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	70	1815	1	8	6	45	6	0		0	3	3	1	2	200		7/1/1958	7/1/1958	4	C	D	4	JCT KILPATRICK T.P.
9	6	S066	12.46		S	1.11	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	70	1815	1	8	6	45	6	0		0	3	3	1	2	200	13500	7/1/1958	7/1/1958	4	C	D	4	JCT KILPATRICK T.P.
9	6	S066	13.57		N	1.41	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	70	1815	1	8	6	45	6	0		0	3	3	1	2	200		7/1/1958	7/1/1958	4	C	D	4	OKLA CO LINE
9	6	S066	13.57		S	1.41	4	24	L	L	0	1		34	H	4	1	10	3	4	1	30	2	70	1815	1	8	6	45	6	0		0	3	3	1	2	200	13600	7/1/1958	7/1/1958	4	C	D	4	OKLA CO LINE
9	8	U081	0.00			0.54	2	24	I	I	L	1		40	H	4	1	8			0		2	25	2485	0	0	1		1	1	11	1	3	3	1	2	120	5100	7/1/1958	9/1/1994	4	C	D	4	BEG ASPH OVLAY
9	8	U081	0.54			1.16	2	24	I	I	L	2		40	A	0	1	8			0		2	25	2485	0	0	1		1	1	11	1	3	3	1	2	120	5100	3/1/1972	9/1/1994	4	C	D	4	0.16 S SH 152
9	8	U081	1.70			0.16	4	52	I	I	0	2		52	E	10	4	0			0		2	25	2485	0	0	1		7	1	11	1	3	3	1	2	120	5100	11/1/1985	11/1/1985	4	C	D	4	JCT SH 152 - TOWN CEN
9	8	U081	1.86			0.51	4	52	I	I	0	2		52	E	10	4	0			0		2	25	2485	0	0	1		7	1	11	1	3	3	1	2	120	5100	11/1/1985	11/1/1985	4	C	D	4	UNION CITY RAISE AREA
9	8	U081	2.37			4.52	2	24	I	I	L	3		24	A	0	3	2			0		2	25	2485	0	0	1		2	1	11	1	3	3	1	2	120	4900	2/1/1976	11/1/1998	4	C	D	4	ENTER EL RENO C/L
9	8	U081	6.89			1.95	2	24	I	I	L	3		24	A	0	3	2			0		2	10	785	0	4	1		2	1	11	1	3	3	1	2	120	5100		11/1/1998	4	C	D	4	ENTER EL RENO U/L
9	8	U081	8.84		E	0.20	4	24	H	H	L	1		38	A	0	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	1	3	1	1	2	250	5800	11/1/1967	6/1/1976	4	C	D	4	SURF CHANGE
9	8	U081	8.84		W	0.20	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	0	3	1	1	2	250		11/1/1967	11/1/1967	4	C	D	4	
9	8	U081	9.04		E	0.32	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	1	3	1	1	2	250	5800	11/1/1967	11/1/1967	4	C	D	4	JCT I-40
9	8	U081	9.04		W	0.32	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	0	3	1	1	2	250		11/1/1967	11/1/1967	4	C	D	4	JCT I-40
9	8	U081	9.36		E	0.23	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	1	3	1	1	2	250	10600	11/1/1967	11/1/1967	4	C	D	4	0.25 MIS S. I-40B
9	8	U081	9.36		W	0.23	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	0	3	1	1	2	250		11/1/1967	11/1/1967	4	C	D	4	0.25 MIS S. I-40B
9	8	U081	9.59		E	0.25	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	1	3	2	1	2	250	13300	11/1/1967	11/1/1967	4	C	D	4	JCT I-40B & SH 66
9	8	U081	9.59		W	0.25	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	10	785	0	4	2	716	6	1	11	0	3	2	1	2	250		11/1/1967	11/1/1967	4	C	D	4	JCT I-40B & SH 66
9	12	U081	0.00			0.19	4	59	H	H	L	1		59	A	0	4	0			0		2	10	785	5	4	2	716	4	1	11	1	3	3	1	2	80	10000		3/1/1971	4	C	D	4	ROGERS ST IN EL RENO
9	12	U081	0.19			0.44	4	52	I	I	0	2		52	E	10	4	0			0		2	10	785	1	4	2	716	5	1	11	1	3	3	1	2	80	8900	12/1/1997	12/1/1997	4	C	D	4	0.63 MIS N. I-40B
9	12	U081	0.63			0.28	4	52	I	I	0	2		52	E	10	4	0			0		2	10	785	1	4	2	716	7	1	11	1	3	3	1	2	80	6400	12/1/1997	12/1/1997	4	C	D	4	0.91 MIS N. I-40B
9	12	U081	0.91			0.26	4	52	I	I	0	2		52	E	10	4	0			0		2	10	785	1	4	2	716	7	1	11	1	3	3	1	2	120	6000	12/1/1997	12/1/1997	4	C	D	4	LEAVE EL RENO C/L
9	12	U081	1.17			0.15	4	52	I	I	0	2		52	E	10	4	0			0		1	10		1	0	2	716	7	1	11	1	3	3	1	2	120	5500	12/1/1997	12/1/1997	4	S	D	4	1.32 N I-40B
9	12	U081	1.32			0.43	4	48	H	H	0	4		68	F	8	1	10			0		1	10		0	0	2	716	7	1	11	1	3	3	1	2	300	5500	6/1/1973	6/1/1973	4	S	D	4	BEG 4 LANE DIVIDED
9	12	U081	1.75		E	0.58	4	24	H	H	0	4		44	F	8	1	10	1	10	1	50	1	10		0	0	2	716	7	1	11	1	3	3	1	2	300	5500	6/1/1973	6/1/1973	4	S	D	4	LEAVE EL RENO U/L
9	12	U081	1.75		W	0.58	4	24	I	I	0	2		38	E	8	1	10	1	4	1	50	1	10		0	0	2	716	7	1	11	1	3	3	1	2	300	5500	12/1/2003	12/1/2003	4	S	D	4	BRITTON ROAD
9	12	U081	2.33		E	0.33	4	24	H	H	0	4		44	F	8	1	10	1	10	1	50	1	0		0	0	1		1	1	11	1	3	3	1	2	300	5100	6/1/1973	6/1/1973	4	S	D	4	2.66 MIS. N. I-40B
9	12	U081	2.33		W	0.33	4	24	I	I	0	2		38	E	8	1	10	1	4	1	50	1	0		0	0	1		1	1	11	1	3	3	1	2	300	5100	12/1/2003	12/1/2003	4	S	D	4	2.66 MIS. N. I-40B
9	12	U081	2.66		E	0.56	4	24	L	L	0	1		24	A	0	3	8	3	8	1	50	1	0		0	0	1		1	1	11	1	3	3	1	2	300	5100	7/1/1964	7/1/1964	4	S	D	4	3.22 MIS. N. I-40B
9	12	U081	2.66		W	0.56	4	24	I	I	0	2		38	E	8	1	10	1	4	1	50	1	0		0	0	1		1	1	11	1	3	3	1	2	300	5100	12/1/2003	12/1/2003	4	S	D	4	3.22 MIS. N. I-40B
9	12	U081	3.22		E	0.85	4	24	L	L	0	1		24	A	0	3	8	3	8	1	50	1	0		0	0	1		1	1	11	1	3	3	1	2	300	4900	7/1/1964	7/1/1964	4	S	D	4	4.07 MIS. N. I-40B

Manual 2004

COUNTY	CONTROL	ROUTE	BEGIN SUBSECTION	SUBSECTION TYPE	LANE ID	LENGTH	SURFACE							BASE			SHOULDER				MED		CITY				URBAN			ADMINISTRATION								CONST. HISTORY		MAINT.			HWY COMM DIVISION	ENDING DESCRIPTION
							LANES	WIDTH	EXPOSED	PRIMARY	ORIGINAL THICKNESS	FABRIC REINF.		WIDTH	TYPE	THICKNESS	OUT TYPE	OUT WIDTH	IN TYPE	IN WIDTH	MEDIAN TYPE	MEDIAN WIDTH	RURAL - MUNICIPAL	CITY NUMBER	CITY FIPS	PARKING TYPE	POPULATION	U.A.T. AREA TYPE	URBAN FIPS	TERRAIN AREA TYPE	NHS	NHS ROUTE	DES. TRUCK ROUTE	FUNCTIONAL CLASS	ACCESS CONTROL	JURISDICTION	STATUS CONTROL	RIGHT-OF-WAY	A.D.T.	CONST. DATE	MAINT. DATE	DIVISION	RESPONSIBILITY	DISTRICT - CREW		
26	2	U062	0.81			0.12	4	48	I	I	0	2		68	E	9	1	10			0		1	0		0	0	1		1	0		1	4	3	1	2	120	6800	5/1/2004	5/1/2004	7	S	E	7	BEG 4 LANE DIVIDED
26	2	U062	0.93		N	5.24	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	1	0		0	0	1		1	0		1	4	3	1	2	300		5/1/2004	5/1/2004	7	S	E	7	ENTER CHICKASHA U/L
26	2	U062	0.93		S	5.24	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	1	0		0	0	1		1	0		1	4	3	1	2	300	7000	5/1/2004	5/1/2004	7	S	E	7	ENTER CHICKASHA U/L
26	2	U062	6.17		N	0.11	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	1	15		0	0	2	708	6	0		1	3	3	1	2	300		5/1/2004	5/1/2004	7	S	E	7	1.37 W US 81
26	2	U062	6.17		S	0.11	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	1	15		0	0	2	708	6	0		1	3	3	1	2	300	7100	5/1/2004	5/1/2004	7	S	E	7	1.37 W US 81
26	2	U062	6.28		N	0.30	4	24	I	H	H	6		38	F	4	1	10	1	4	1	40	1	15		0	0	2	708	6	0		1	3	3	1	2	300		7/1/1969	5/1/2004	7	S	E	7	ENT CHICKSHA C/L
26	2	U062	6.28		S	0.30	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	1	15		0	0	2	708	6	0		1	3	3	1	2	300	7300	5/1/2004	5/1/2004	7	S	E	7	ENT CHICKSHA C/L
26	2	U062	6.58		N	0.71	4	24	H	H	0	4		38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		1	3	3	1	2	300		7/1/1969	5/1/2004	7	C	E	7	29TH STREET
26	2	U062	6.58		S	0.71	4	24	I	I	0	2		38	E	9	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		1	3	3	1	2	300	7400	5/1/2004	5/1/2004	7	C	E	7	29TH STREET
26	2	U062	7.29		N	0.19	4	24	I	I	H	6	1	38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		1	3	3	1	2	300		7/1/1969	5/1/2004	7	C	E	7	0.17 MIS. W. US 81N
26	2	U062	7.29		S	0.19	4	24	I	I	0	2	1	38	E	9	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		1	3	3	1	2	300	7400	5/1/2004	5/1/2004	7	C	E	7	0.17 MIS. W. US 81N
26	2	U062	7.48		N	0.17	4	24	I	I	H	3	1	38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		0	3	2	1	2	315		11/1/1970	8/1/1993	7	C	E	7	JCT US 81 NORTH
26	2	U062	7.48		S	0.17	4	24	I	I	H	3	1	38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	6	0		1	3	2	1	2	315	7500	11/1/1970	8/1/1993	7	C	E	7	JCT US 81 NORTH
26	2	U062	7.65		N	1.02	4	24	I	I	H	3	1	38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	5	1	11	0	3	2	1	2	340		11/1/1970	8/1/1993	7	C	E	7	1.02 MIS E. US 81N
26	2	U062	7.65		S	1.02	4	24	I	I	H	3	1	38	F	4	1	10	1	4	1	40	2	15	485	0	4	2	708	5	1	11	1	3	2	1	2	340	7500	11/1/1970	8/1/1993	7	C	E	7	1.02 MIS E. US 81N
26	2	U062	8.67		N	0.08	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	15	485	0	4	2	708	4	1	11	0	3	2	1	2	340		11/1/1970	11/1/1970	7	C	E	7	WIDTH CHANGE 12TH ST
26	2	U062	8.67		S	0.08	4	24	L	L	0	0		38	H	4	1	10	1	4	1	40	2	15	485	0	4	2	708	4	1	11	1	3	2	1	2	340	11800	11/1/1970	11/1/1970	7	C	E	7	WIDTH CHANGE 12TH ST
26	2	U062	8.75		N	0.08	4	26	L	L	0	0		26	H	4	4	0	4	0	2	10	2	15	485	1	4	2	708	4	1	11	0	3	3	1	2	340		11/1/1970	11/1/1970	7	C	E	7	BEG PC OVERLY 11TH ST
26	2	U062	8.75		S	0.08	4	26	L	L	0	0		26	H	4	4	0	4	0	2	10	2	15	485	1	4	2	708	4	1	11	1	3	3	1	2	340	10800	11/1/1970	11/1/1970	7	C	E	7	BEG PC OVERLY 11TH ST
26	2	U062	8.83			0.41	4	50	I	I	L	4	1	50	A	0	4	0			0	0	2	15	485	1	4	2	708	4	1	11	1	3	3	1	2	80	13600	1/1/1970	8/1/1993	7	C	E	7	WIDTH CHANGE 6TH ST
26	2	U062	9.24			0.14	2	72	I	I	L	3	1	72	A	0	4	0			0		2	15	485	3	4	2	708	4	1	11	1	3	3	1	2	80	14400	1/1/1970	8/1/1993	7	C	E	7	JCT US 81 SOUTH -TC-
26	2	U062	9.38			0.08	2	72	I	I	L	3	1	72	A	0	4	0			0		2	15	485	3	4	2	708	4	0		1	3	3	1	2	80	10200		8/1/1993	7	C	E	7	BEG DIV 3RD STREET
26	2	U062	9.46		N	0.06	4	36	I	I	L	3	1	36	A	0	4	0			2	8	2	15	485	3	4	2	708	5	0		0	3	2	1	2	80			8/1/1993	7	C	E	7	BEG PC CONC 2ND ST
26	2	U062	9.46		S	0.06	4	36	I	I	L	3	1	36	A	0	4	0			2	8	2	15	485	3	4	2	708	5	0		1	3	2	1	2	80	10200		8/1/1993	7	C	E	7	BEG PC CONC 2ND ST
26	2	U062	9.52		N	0.39	4	28	L	L	0	1		28	F	4	4	0	4	0	2	5	2	15	485	1	4	2	708	5	0		0	3	2	1	2	80		8/1/1973	8/1/1973	7	C	E	7	WIDTH CHANGE
26	2	U062	9.52		S	0.39	4	28	L	L	0	1		28	F	4	4	0	4	0	2	5	2	15	485	1	4	2	708	5	0		1	3	2	1	2	80	9300	8/1/1973	8/1/1973	7	C	E	7	WIDTH CHANGE
26	2	U062	9.91			0.09	4	58	L	L	0	1		58	F	4	4	0			0	0	2	15	485	1	4	2	708	6	0		1	3	3	1	2	100	9100	8/1/1973	8/1/1973	7	C	E	7	LEAVE CHICKASHA C/L
26	2	U062	10.00			0.25	4	58	L	L	0	1		58	F	4	4	0			0	0	1	15		1	0	2	708	6	0		1	3	3	1	2	100	9100	8/1/1973	8/1/1973	7	S	E	7	WIDTH CHANGE
26	2	U062	10.25			0.62	4	52	L	L	0	1		52	A	0	4	0			0	0	1	15		1	0	2	708	6	0		1	3	3	1	2	100	8000	8/1/1973	8/1/1973	7	S	E	7	0.12 MIS W I-44
26	2	U062	10.87		N	0.12	4	24	L	L	0	1		34	A	0	1	10	4	0	2	16	1	15		0	0	2	708	6	0		0	3	3	1	2	250		8/1/1973	8/1/1973	7	S	E	7	JCT I-44
26	2	U062	10.87		S	0.12	4	24	L	L	0	1		34	A	0	1	10	4	0	2	16	1	15		0	0	2	708	6	0		1	3	3	1	2	250	7700	8/1/1973	8/1/1973	7	S	E	7	JCT I-44
26	2	U062	10.99		N	0.56	4	24	H	H	0	5		34	F	8	1	10	4	0	2	16	1	15		0	0	2	708	6	0		0	3	3	1	2	250		3/1/1967	2/1/1984	7	S	E	7	LEV CHICKASHA U/L
26	2	U062	10.99		S	0.56	4	24	H	H	0	5		34	F	8	1	10	4	0	2	16	1	15		0	0	2	708	6	0		1	3	3	1	2	250	7300	3/1/1967	2/1/1984	7	S	E	7	LEV CHICKASHA U/L
26	2	U062	11.55		N	1.09	4	24	H	H	0	2		37	B	8	1	10	1	3	1	55	1	0		0	0	1		2	0		0	4	3	1	2	275		6/1/1984	6/1/1984	7	S	E	7	JCT SH 92 NORTH
26	2	U062	11.55		S	1.09	4	24	H	H	0	2		37	B	8	1	10	1	3	1	55	1	0		0	0	1		2	0		1	4	3	1	2	275	8000	6/1/1984	6/1/1984	7	S	E	7	JCT SH 92 NORTH
26	2	U062	12.64		N	0.21	4	24	H	H	0	2		37	B	8	1	10	1	3	1	55	1	0		0	0	1		2	0		0	4	3	1	2	275		6/1/1984	6/1/1984	7	S	E	7	0.21 MI E SH 92
26	2	U062	12.64		S	0.21	4	24	H	H	0	2		37	B	8	1	10	1	3	1	55	1	0		0	0	1		2	0		1	4	3	1	2	275	5600	6/1/1984	6/1/1984	7	S	E	7	0.21 MI E SH 92
26	2	U062	12.85			0.31	4	52	H	H	0	2		52	Q	8	4	0			0		1	0		0	0	1		2	0		1	4	3	1	2	100	5500	6/1/1984	6/1/1984	7	S	E	7	0.52 MI E SH 92
26	2	U062	13.16			2.95	2	24	H	H	0	2		40	Q	8	1	8			0		1	0		0	0	1		2	0		1	4	3	1	2	200	4500	6/1/1984	6/1/1984	7	S	E	7	JCT SH 39 - US 62
26	4	U062	0.00			0.60	2	24	H	H	0	2		40	B	8	1	8			0		1	0		0	0	1		2	0		1	4	3	1	2	250	2600	6/1/1984	6/1/1984	7	S	E	7	0.60 MIS E. SH 39
26	4	U062	0.60			2.40	2	24	I	I	L	2		40	Q	6	1	8			0		1	0		0	0	1		2	0		1	4	3	1	2	180	2600	9/1/1998	9/1/1998	7	S	E	7	3.00 MIS E. SH 39
26	4	U062	3.00			7.52	2	24	I	I	0	2		40	E	6	1	8			0		1	0		0	0	1		2	0		1	4	3	1	2	200	3800	5/1/2002	5/1/2002	7	S	E	7	0.14 MI W MCLAIN CO/L
26	4	U062	10.52			0.14	2	20	L	L	0	1		20	A	0	3	5		0	0		1	0		0	0	1		2	0		1	4	3	1	2	100	6000	7/1/1972	7/1/1972	7	S	E	7	MCLAIN COUNTY LINE
26	6	U081	0.00			0.22	4	52	I	I	0	2		52	E	8	4	0			0		1	0		0	0	1		2	1	11	1	3	3	1	2	200	7200	9/1/1989	9/1/1989	7	S	E	7	0.22 MI N OF CO/LINE
26	6	U081	0.22		E	1.43	4	24	I	I	L	9	1	38	A	0	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	250	7200	7/1/1972	11/1/2003	7	S	E	7	1.65 MIS N. CO/LINE
26	6	U081	0.22		W	1.43	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	250		11/1/1988	9/1/2000	7	S	E	7	NEW CONST. BOTH SIDES
26	6	U081	1.65		E	0.33	4	24	I	I	I	6		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	250	7200	11/1/1988	11/1/2003	7	S	E	7	1.98 MIS N. CO/LINE
26	6	U081	1.65		W	0.33	4	24	I	I	I	6		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	250		11/1/1988	11/1/2003	7	S	E	7	1.98 MIS N. CO/LINE
26	6	U081	1.98		E	1.99	4	24	I	I	L	9	1	38	A	0	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	250	7200	7/1/1972	9/1/2000	7	S	E	7	1.83 MIS S. US 81B
26	6	U081	1.98		W	1.99	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	250		11/1/1988	9/1/2000	7	S	E	7	

Grady County

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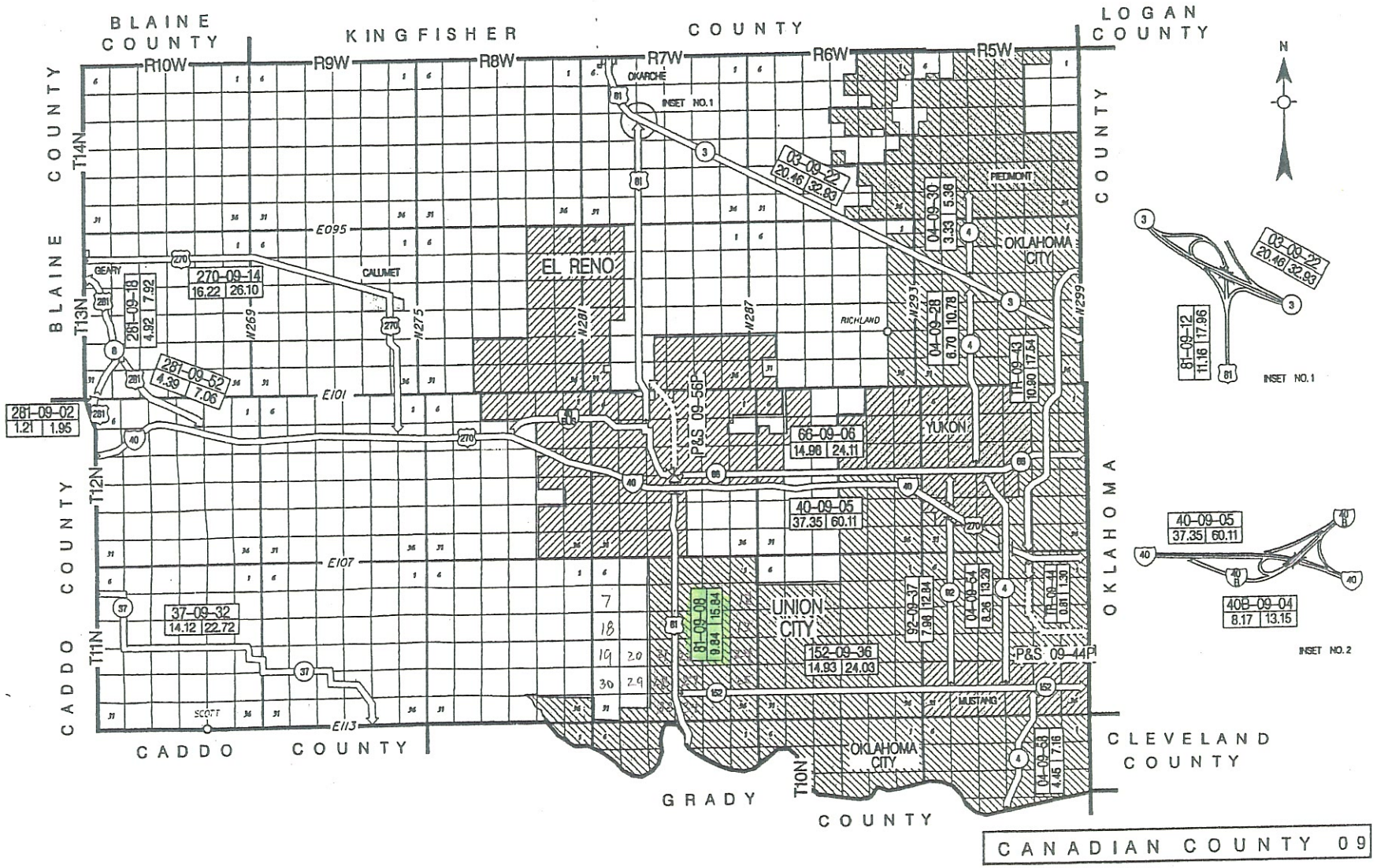
COUNTY	CONTROL	ROUTE	BEGIN SUBSECTION	SUBSECTION TYPE	LANE ID	LENGTH	SURFACE							BASE			SHOULDER				MED		CITY					URBAN			ADMINISTRATION									CONST. HISTORY		MAINT.			HWY COMM DIVISION	ENDING DESCRIPTION
							LANES	WIDTH	EXPOSED	PRIMARY	ORIGINAL	THICKNESS	FABRIC REINF.	WIDTH	TYPE	THICKNESS	OUT TYPE	OUT WIDTH	IN TYPE	IN WIDTH	MEDIAN TYPE	MEDIAN WIDTH	RURAL - MUNICIPAL	CITY NUMBER	CITY FIPS	PARKING TYPE	POPULATION	U.A.T. AREA TYPE	URBAN FIPS	TERRAIN AREA TYPE	NHS	NHS ROUTE	DES. TRUCK ROUTE	FUNCTIONAL CLASS	ACCESS CONTROL	JURISDICTION	STATUS CONTROL	RIGHT-OF-WAY	A.D.T.	CONST. DATE	MAINT. DATE	DIVISION	RESPONSIBILITY	DISTRICT - CREW		
26	6	U081	3.97		E	0.81	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	250	6500	11/1/1988	9/1/2000	7	S	E	7	1.02 MIS S. US 81B
26	6	U081	3.97		W	0.81	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	250		11/1/1988	9/1/2000	7	S	E	7	1.02 MIS S. US 81B
26	6	U081	4.78		E	0.67	4	24	I	I	L	9	1	38	A	0	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	250	6400	7/1/1972	9/1/2000	7	S	E	7	0.35 MIS S. US 81B
26	6	U081	4.78		W	0.67	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	250		11/1/1988	9/1/2000	7	S	E	7	
26	6	U081	5.45		E	0.35	4	24	I	H	H	8	1	38	F	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	320	6000	8/1/1972	9/1/2000	7	S	E	7	JCT US 81B
26	6	U081	5.45		W	0.35	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	320		11/1/1988	9/1/2000	7	S	E	7	
26	6	U081	5.80		E	1.04	4	24	I	H	H	8	1	38	F	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	1	3	3	1	2	320	5400	8/1/1972	6/1/1996	7	S	E	7	0.22 MIS S. SH 17
26	6	U081	5.80		W	1.04	4	24	I	I	I	4		38	E	8	1	10	1	4	1	30	1	0		0	0	1		2	1	11	0	3	3	1	2	320		11/1/1988	9/1/2000	7	S	E	7	1.04 MIS N. US 81B
26	6	U081	6.84		E	0.22	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	320	5400	8/1/1972	6/1/1996	7	S	E	7	JCT SH 17
26	6	U081	6.84		W	0.22	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	320		8/1/1972	6/1/1996	7	S	E	7	JCT SH 17
26	6	U081	7.06		E	0.05	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	320	5300	8/1/1972	6/1/1996	7	S	E	7	ENT RUSH SPRINGS C/L
26	6	U081	7.06		W	0.05	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	320		8/1/1972	6/1/1996	7	S	E	7	ENT RUSH SPRINGS C/L
26	6	U081	7.11		E	0.25	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	320	5200	8/1/1972	6/1/1996	7	S	E	7	LVE RUSH SPRINGS C/L
26	6	U081	7.11		W	0.25	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	320		8/1/1972	6/1/1996	7	S	E	7	LVE RUSH SPRINGS C/L
26	6	U081	7.36		E	1.21	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	320	5200	8/1/1972	6/1/1996	7	S	E	7	JCT US 81B
26	6	U081	7.36		W	1.21	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	320		8/1/1972	6/1/1996	7	S	E	7	JCT US 81B
26	6	U081	8.57		E	0.33	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	250	6600	7/1/1968	6/1/1996	7	S	E	7	SURF. CHANGE
26	6	U081	8.57		W	0.33	4	24	I	H	H	6		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	250		7/1/1968	6/1/1996	7	S	E	7	SURF. CHANGE
26	6	U081	8.90		E	3.60	4	24	D	H	H	4		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	250	6400	7/1/1968	5/1/1998	7	S	E	7	SURF. CHANGE
26	6	U081	8.90		W	3.60	4	24	D	H	H	4		38	F	8	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	250		7/1/1968	5/1/1998	7	S	E	7	SURF. CHANGE
26	6	U081	12.50		E	4.98	4	24	I	I	L	2	1	38	F	4	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	250	6400	7/1/1968	3/1/1988	7	S	E	7	1.89 MI W. JCT US 277
26	6	U081	12.50		W	4.98	4	24	I	I	L	2	1	38	F	4	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	250		7/1/1968	3/1/1988	7	S	E	7	1.89 MI W. JCT US 277
26	6	U081	17.48		E	0.89	4	24	L	L	0	0		38	F	4	1	10	1	4	1	62	1	0		0	0	1		2	1	11	1	3	2	1	2	250	7100	7/1/1968	7/1/1968	7	S	E	7	ENTER NINNEKAH C/L
26	6	U081	17.48		W	0.89	4	24	L	L	0	0		38	F	4	1	10	1	4	1	62	1	0		0	0	1		2	1	11	0	3	2	1	2	250		7/1/1968	7/1/1968	7	S	E	7	ENTER NINNEKAH C/L
26	6	U081	18.37		E	1.00	4	24	L	L	0	0		38	A	4	1	10	1	4	1	62	2	50	748	0	0	1		2	1	11	1	3	2	1	2	250	6800	7/1/1968	7/1/1968	7	C	E	7	JCT US 277 WEST -TC-
26	6	U081	18.37		W	1.00	4	24	L	L	0	0		38	A	4	1	10	1	4	1	62	2	50	748	0	0	1		2	1	11	0	3	2	1	2	250		7/1/1968	7/1/1968	7	C	E	7	JCT US 277 WEST -TC-
26	6	U081	19.37		E	1.00	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	1		2	1	11	1	3	2	1	2	200	7000	7/1/1959	7/1/1959	7	C	E	7	LEAVE NINNEKAH C/L
26	6	U081	19.37		W	1.00	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	1		2	1	11	0	3	2	1	2	200		7/1/1959	7/1/1959	7	C	E	7	LEAVE NINNEKAH C/L
26	6	U081	20.37		E	0.53	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	1	0		0	0	1		2	1	11	1	3	2	1	2	200	7500	7/1/1959	7/1/1959	7	S	E	7	NEEDS STUDY BREAK
26	6	U081	20.37		W	0.53	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	1	0		0	0	1		2	1	11	0	3	2	1	2	200		7/1/1959	7/1/1959	7	S	E	7	NEEDS STUDY BREAK
26	6	U081	20.90		E	0.20	4	24	L	L	0	0		38	A	0	1	10	1	4	1	99	1	0		0	0	1		2	1	11	1	3	2	1	2	300	8100	7/1/1959	7/1/1959	7	S	E	7	ENTER NINNEKAH C/L
26	6	U081	20.90		W	0.20	4	24	L	L	0	0		38	A	0	1	10	1	4	1	99	1	0		0	0	1		2	1	11	0	3	2	1	2	300		7/1/1959	7/1/1959	7	S	E	7	ENTER NINNEKAH C/L
26	6	U081	21.10		E	0.39	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	1		2	1	11	1	3	2	1	2	200	8100	7/1/1959	7/1/1959	7	C	E	7	ENT CHICKASHA U/L
26	6	U081	21.10		W	0.39	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	1		2	1	11	0	3	2	1	2	200		7/1/1959	7/1/1959	7	C	E	7	ENT CHICKASHA U/L
26	6	U081	21.49		E	0.81	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	2	708	6	1	11	1	3	2	1	2	200	8100	7/1/1959	7/1/1959	7	C	E	7	JCT SH 19 EAST
26	6	U081	21.49		W	0.81	4	24	L	L	0	0		38	A	0	1	10	1	4	1	40	2	50	748	0	0	2	708	6	1	11	0	3	2	1	2	200		7/1/1959	7/1/1959	7	C	E	7	JCT SH 19 EAST
26	8	U081	0.00		E	0.50	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	1	15		1	0	2	708	6	1	11	1	3	2	1	2	200	10600	6/1/1956	6/1/1956	7	S	E	7	0.50 MIS N. SH 19N
26	8	U081	0.00		W	0.50	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	1	15		1	0	2	708	6	1	11	0	3	2	1	2	200		6/1/1956	6/1/1956	7	S	E	7	0.50 MIS N. SH 19N
26	8	U081	0.50		E	1.00	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	1	15		1	0	2	708	6	1	11	1	3	2	1	2	200	10600	6/1/1956	6/1/1956	7	S	E	7	ENTER CHICKASHA UC/L
26	8	U081	0.50		W	1.00	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	1	15		1	0	2	708	6	1	11	0	3	2	1	2	200		6/1/1956	6/1/1956	7	S	E	7	ENTER CHICKASHA UC/L
26	8	U081	1.50		E	0.12	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	2	15	485	1	4	2	708	6	1	11	1	3	2	1	2	200	12500	6/1/1956	6/1/1956	7	C	E	7	END PC CONC EAST LANE
26	8	U081	1.50		W	0.12	4	24	L	L	0	0		24	A	0	4	0	4	0	2	24	2	15	485	1	4	2	708	6	1	11	0	3	2	1	2	200		6/1/1956	6/1/1956	7	C	E	7	END PC CONC EAST LANE
26	8	U081	1.62		E	0.41	4	24	I	H	H	9		33	B	0	1	9	4	0	2	16	2	15	485	1	4	2	708	6	1	11	1	3	2	1	2	200	12500	6/1/1956	12/1/1999	7	C	E	7	SURF CHANGE
26	8	U081	1.62		W	0.41	4	24	L	L	0	0		24	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	0	3	2	1	2	200		6/1/1956	6/1/1956	7	C	E	7	
26	8	U081	2.03		E	0.14	4	34	I	I	K	3		34	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	1	3	2	1	2	300	18600	6/1/1956	12/1/1999	7	C	E	7	JCT TURNPIKE I-44
26	8	U081	2.03		W	0.14	4	24	L	L	0	0		24	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	0	3	2	1	2	300		6/1/1956	6/1/1956	7	C	E	7	
26	8	U081	2.17		E	0.20	4	34	I	I	K	3		34	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	1	3	2	1	2	300	18900	6/1/1956	12/1/1999	7	C	E	7	BEGIN PC CONC
26	8	U081	2.17		W	0.20	4	24	L	L	0	0		24	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	0	3	2	1	2	300		6/1/1956	6/1/1956	7	C	E	7	
26	8	U081	2.37		E	0.13	4	34	I	I	L	2		34	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	1	3	2	1	2	300	18900	6/1/1956	12/1/1999	7	C	E	7	JCT SH 92
26	8	U081	2.37		W	0.13	4	24	L	L	0	0		24	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	6	1	11	0	3	2	1	2	300		6/1/1956	6/1/1956	7	C	E	7	

Grady County

COUNTY	CONTROL	ROUTE	BEGIN SUBSECTION	SUBSECTION TYPE	LANE ID	LENGTH	SURFACE							BASE			SHOULDER				MED		CITY					URBAN		ADMINISTRATION									CONST. HISTORY		MAINT.			HWY COMM DIVISION	ENDING DESCRIPTION
							LANES	WIDTH	EXPOSED	PRIMARY	ORIGINAL	THICKNESS	FABRIC REINF.	WIDTH	TYPE	THICKNESS	OUT TYPE	OUT WIDTH	IN TYPE	IN WIDTH	MEDIAN TYPE	MEDIAN WIDTH	RURAL - MUNICIPAL	CITY NUMBER	CITY FIPS	PARKING TYPE	POPULATION	U.A.T. AREA TYPE	URBAN FIPS	TERRAIN AREA TYPE	NHS	NHS ROUTE	DES. TRUCK ROUTE	FUNCTIONAL CLASS	ACCESS CONTROL	JURISDICTION	STATUS CONTROL	RIGHT-OF-WAY	A.D.T.	CONST. DATE	MAINT. DATE	DIVISION	RESPONSIBILITY	DISTRICT - CREW		
26	8	U081	2.50		E	0.25	4	34	L	L	0	0		34	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	5	1	11	1	3	3	1	2	100	19000	6/1/1956	6/1/1956	7	C	E	7	END DIVIDED
26	8	U081	2.50		W	0.25	4	34	L	L	0	0		34	A	0	4	0	4	0	2	16	2	15	485	1	4	2	708	5	1	11	0	3	3	1	2	100		6/1/1956	6/1/1956	7	C	E	7	END DIVIDED
26	8	U081	2.75			0.99	4	48	L	L	0	0		64	A	0	4	0			6	16	2	15	485	1	4	2	708	5	1	11	1	3	3	1	2	100	18900	6/1/1956	6/1/1956	7	C	E	7	MINNESOTA AVE
26	8	U081	3.74			0.36	4	53	H	H	L	1		53	A	0	4	0			6	16	2	15	485	5	4	2	708	4	1	11	1	3	3	1	2	80	18800	12/1/1967	5/1/1993	7	C	E	7	JCT US 62 -TC-
26	12	U081	0.00			0.90	2	24	I	I	H	7	1	44	F	8	1	10			0		2	15	485	0	4	2	708	6	1	11	1	3	3	1	2	120	4600	4/1/1971	6/1/2002	7	C	E	7	LVE CHICKASHA UC/L
26	12	U081	0.90			1.66	2	24	I	I	H	7	1	44	F	8	1	10			0		1	0		0	0	1		2	1	11	1	3	3	1	2	120	4300	4/1/1971	6/1/2002	7	S	E	7	BEG PC CONC
26	12	U081	2.56			1.44	2	24	I	I	L	4		40	A	7	1	8			0		1	0		0	0	1		2	1	11	1	3	3	1	2	100	4100	7/1/1975	8/1/1989	7	S	E	7	13.88 MI S SH 37
26	12	U081	4.00			5.36	2	24	I	H	L	4	1	40	A	7	1	8			0		1	0		0	0	1		2	1	11	1	3	3	1	2	100	4100	7/1/1975	10/1/1991	7	S	E	7	8.52 MI S SH 37
26	12	U081	9.36			0.26	2	52	I	I	L	2	1	52	A	0	4	0	Packset		0		1	0		5	0	1		7	1	11	1	3	3	1	2	100	3300	7/1/1975	10/1/1991	7	S	E	7	8.26 MIS. S SH-37
26	12	U081	9.62			0.53	2	24	I	I	L	2	1	44	A	0	1	10			0		1	0		0	0	1		2	1	11	1	3	3	1	2	100	3500	7/1/1980	10/1/1991	7	S	E	7	7.73 MIS. S SH-37
26	12	U081	10.15			6.27	2	24	I	I	L	2	1	44	A	0	1	10			0		1	0		0	0	1		2	1	11	1	3	3	1	2	100	2900	7/1/1980	10/1/1992	7	S	E	7	ENTER MINCO C/L
26	12	U081	16.42			0.60	2	24	I	I	L	2	1	44	A	0	1	10			0		2	20	1645	0	0	1		2	1	11	1	3	3	1	2	100	3100	7/1/1980	10/1/1992	7	C	E	7	0.86MI S SH 37 EAST
26	12	U081	17.02			0.63	2	24	I	I	L	2	1	44	A	0	1	10			0		2	20	1645	0	0	1		2	1	11	1	3	3	1	2	100	3100	7/1/1980	5/1/1993	7	C	E	7	0.23MI S SH 37 EAST
26	12	U081	17.65			0.23	4	50	I	I	L	2	1	50	A	0	4	0			0		2	20	1645	1	0	1		4	1	11	1	3	3	1	2	80	3200	11/1/1979	5/1/1993	7	C	E	7	JCT SH 37 E MAIN TC
26	12	U081	17.88			0.36	4	50	I	I	L	2	1	50	A	0	4	0			0		2	20	1645	1	0	1		4	1	11	1	3	3	1	2	80	5500	11/1/1979	5/1/1993	7	C	E	7	HPMS BREAK
26	12	U081	18.24			0.69	4	50	I	I	L	2	1	50	A	0	4	0			0		2	20	1645	1	0	1		7	1	11	1	3	3	1	2	80	5500	11/1/1979	5/1/1993	7	C	E	7	LVE MINCO C/L N ST
26	12	U081	18.93			0.36	2	24	I	I	H	3	1	40	E	8	1	8			0	0	2	20	1645	0	0	1		2	1	11	1	3	3	1	2	160	5500	8/1/1977	5/1/1993	7	S	E	7	JCT SH 37 WEST
26	12	U081	19.29			0.91	2	24	I	I	H	3	1	40	E	8	1	8			0		2	20	1645	0	0	1		2	1	11	1	3	3	1	2	160	4600	8/1/1977	5/1/1993	7	S	E	7	BEG PC OVERLAY
26	12	U081	20.20			0.74	2	24	I	I	L	3	1	40	A		1	8			0		2	20	1645	0	0	1		2	1	11	1	3	3	1	2	160	5200	8/1/1977	5/1/1993	7	S	E	7	BEG PC CONC
26	12	U081	20.94			0.78	2	24	I	I	L	1	1	40	A	0	1	8	0		0		2	20	1645	0	0	1		2	1	11	1	3	3	1	2	100	6100	6/1/1956	5/1/1993	7	S	E	7	CANADAIN CO LINE
26	14	U277	0.00			3.28	2	24	D	H	D	3		24	L	8	3	3			0		1	0		0	0	1		2	0		0	5	3	1	2	80	1600	2/1/1970	8/1/1999	7	S	E	7	3.28 MIS E CADDO CO/L
26	14	U277	3.28			3.25	2	24	I	H	D	3		24	L	8	3	4			0		1	0		0	0	1		2	0		0	5	3	1	2	80	1600	2/1/1978	11/1/1997	7	S	E	7	ENTER NINNEKAH C/L
26	14	U277	6.53			0.33	2	24	I	H	L	3		24	D	8	3	4			0		2	50	748	0	0	1		2	0		0	5	3	1	2	80	1700	2/1/1978	11/1/1997	7	C	E	7	LEAVE NINNEKAH C/L
26	14	U277	6.86			0.22	2	24	I	H	D	3		24	L	8	3	3			0		1	0		0	0	1		2	0		0	5	3	1	2	80	1700	2/1/1978	11/1/1997	7	S	E	7	ENTER NINNEKAH C/L
26	14	U277	7.08			1.50	2	24	I	H	D	3		24	L	8	3	3			0		2	50	748	0	0	1		2	0		0	5	3	1	2	80	1700	2/1/1978	11/1/1997	7	C	E	7	JCT US 81
26	16	S017	0.00			6.84	2	24	I	I	D	2		24	L	9	3	4			0		1	0		0	0	1		2	0		0	5	3	1	2	100	980	9/1/1971	7/1/2003	7	S	E	7	1.02 W US 81
26	16	S017	6.84			1.02	2	24	I	H	H	5	1	44	F	8	1	10			0		1	0		0	0	1		2	0		0	5	3	1	2	200	1300	8/1/1972	7/1/2003	7	S	E	7	JCT US 81
26	16	S017	7.86			0.05	2	51	I	I	H	2		51	F	8	4	0			0		1	0		1	0	1		7	0		0	5	3	1	2	100	1700	8/1/1972	6/1/1992	7	S	E	7	ENT RUSH SPRINGS C/L
26	16	S017	7.91			0.45	2	51	I	I	H	2		51	F	8	4	0			0		2	25	2100	1	0	1		7	0		0	5	3	1	2	100	1700	8/1/1972	6/1/1992	7	C	E	7	BEG PC CONC 4TH ST
26	16	S017	8.36			0.08	2	75	I	I	L	1		75	A	0	4	0			0		2	25	2100	3	0	1		4	0		0	5	3	1	2	100	3400	8/1/1972	6/1/1992	7	C	E	7	JCT US 81B -TC-
26	18	S019	0.00			0.12	2	24	I	I	H	2		44	D	6	1	10			0		1	15		0	0	2	708	7	0		0	4	3	1	2	100	3700	2/1/1979	10/1/1993	7	S	E	7	0.12 MIS. E. US 81
26	18	S019	0.12			0.08	2	24	I	I	H	4		38	D	6	1	7			0		1	15		0	0	2	708	7	0		0	4	3	1	2	100	3700	5/1/2002	5/1/2002	7	S	E	7	0.20 MIS. E. US 81
26	18	S019	0.20			0.37	2	24	I	I	D	4	1	38	L	6	1	7			0		1	15		0	0	2	708	7	0		0	4	3	1	2	100	3900	5/1/2002	5/1/2002	7	S	E	7	LEV OLD CHICKASHA U/L
26	18	S019	0.57			0.11	2	24	I	I	D	4	1	38	L	6	1	7			0		1	15		0	0	2	708	7	0		0	4	3	1	2	100	3900	5/1/2002	5/1/2002	7	S	E	7	ENTER NINNEKAH C/L
26	18	S019	0.68			0.10	2	24	I	I	D	4	1	38	L	6	1	7			0		2	50	748	0	0	2	708	7	0		0	4	3	1	2	100	3900	5/1/2002	5/1/2002	7	C	E	7	0.78 MIS. E. US 81
26	18	S019	0.78			0.30	2	24	I	I	0	2		40	E	8	1	8			0		2	50	748	0	0	2	708	7	0		0	4	3	1	2	100	3600	5/1/2002	5/1/2002	7	C	E	7	LEAVE NINNEKAH C/L
26	18	S019	1.08			1.00	2	24	I	I	0	2		40	E	8	1	8			0		1	15		0	0	2	708	7	0		0	4	3	1	2	100	3600	5/1/2002	5/1/2002	7	S	E	7	LEV CHICKASHA U/L
26	18	S019	2.08			1.85	2	24	I	I	0	2		40	E	8	1	8			0		1	0		0	0	1		2	0		0	5	3	1	2	100	2400	5/1/2002	5/1/2002	7	S	E	7	3.93 MIS. E. US 81
26	18	S019	3.93			1.10	2	24	I	I	D	4	1	38	L	6	1	7			0		1	0		0	0	1		2	0		0	5	3	1	2	100	2400	5/1/2002	5/1/2002	7	S	E	7	5.03 MIS. E. US 81
26	18	S019	5.03			2.43	2	24	I	I	D	2	1	24	L	6	6	6			0		1	0		0	0	1		2	0		0	5	3	1	2	100	2400	12/1/1968	10/1/1993	7	S	E	7	3.86 W SH 19C
26	18	S019	7.46			3.50	2	24	I	I	I	9	1	26	E	0	6	7			0		1	0		0	0	1		2	0		0	5	3	1	2	100	2500	2/1/1975	10/1/1995	7	S	E	7	ENTER ALEX C/L
26	18	S019	10.96			0.17	2	24	I	I	I	9	1	26	E	0	6	7			0		2	7	45	0	0	1		2	0		0	5	3	1	2	120	2200	2/1/1975	10/1/1995	7	C	E	7	LEAVE ALEX C/L
26	18	S019	11.13			0.19	2	24	I	I	I	9	1	26	E	0	6	6			0		1	0		0	0	1		2	0		0	5	3	1	2	140	2500	2/1/1975	10/1/1995	7	S	E	7	JCT SH 19C
26	18	S019	11.32			2.54	2	24	I	I	I	9	1	26	E	0	6	5			0		1	0		0	0	1		2	0		0	5	3	1	2	120	2200	2/1/1975	10/1/1995	7	S	E	7	2.54 MIS E SH 19C
26	18	S019	13.86			2.00	2	24	I	I	I	9	1	26	E	0	6	5			0		1	0		0	0	1		2	0		0	5	3	1	2	120	2200	2/1/1975	6/1/1996	7	S	E	7	ENTER BRADLEY C/L
26	18	S019	15.86			0.05	2	24	I	I	I	9	1	26	E	0	6	5			0		2	10	255	0	0	1		2	0		0	5	3	1	2	120	2200	2/1/1975	6/1/1996	7	C	E	7	SHLDR CHANGE -TC-
26	18	S019	15.91			0.05	2	24	I	I	I	9	1	44	E	0	1	10			0		2	10	255	0	0	1		4	0		0	5	3	1	2	120	2200	2/1/1975	6/1/1996	7	C	E	7	JCT SH 19D
26	18	S019	15.96			0.04	2	24	I	I	I	9	1	44	E	0	1	10			0		2	10	255	0	0	1		4	0		0	5	3	1	2	120	2200	2/1/1975	6/1/1996	7	C	E	7	SHLDR CHANGE
26	18	S019	16.00			0.11	2	24	I	I	I	9	1	26	E	0	6	6			0		2	10	255	0	0	1		2	0		0	5	3	1	2	120	2200	2/1/1976	6/1/1996	7	C	E	7	LEAVE BRADLEY C/L
26	18	S019	16.11			3.07	2	24	I	I	I	9	1	26	E	0	6	7			0		1	0		0	0	1		2	0		0	5	3	1	2	120	2000	2/1/1975	6/1/1996	7	S	E	7	GARVIN CO LINE

Grady County

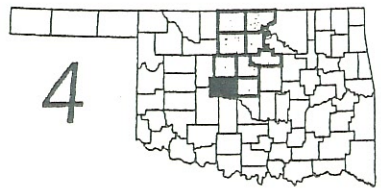


CANADIAN COUNTY 09

OKLAHOMA DEPARTMENT OF TRANSPORTATION — CONTROL SEC[illegible] LOG ---- CANADIAN COUNTY

CONTROL	ROUTE	LENGTH	STARTING DESRIPTION	DIRECTION	ENDING DESCRIPTION	NOTES
0902	US 281	1.21	CADDO COUNTY LINE (W. END BR.)	EASTERLY	US 281 SPUR	
0904	IS 40B	8.17	JCT. I-40 W. OF EL RENO (OFF RAMP GORE PT)	EASTERLY	JCT. US 81 IN EL RENO	
0905	IS 40	37.35	CADDO COUNTY LINE	SOUTHEASTERLY	OKLAHOMA COUNTY LINE	
0906	SH 66	14.98	JCT. US 81 IN EL RENO	EASTERLY	OKLAHOMA COUNTY LINE	
0908	US 81	9.84	GRADY COUNTY LINE (N. END BR.)	NORTHERLY	JCT. SH 66 IN EL RENO	
0912	US 81	11.16	JCT. I-40B(RUSSELL ST & CHOCTAW AV)IN EL RENO	NORTHERLY	JCT. SH 3 (N. SIDE STR.)	
0914	US 270	16.22	BLAINE COUNTY LINE	EAST AND SOUTHERLY	JCT. I-40 (S. SIDE STR.)	
0918	US 281	4.92	JCT. US 281 SPUR S. OF GEARY	NORTHERLY	BLAINE COUNTY LINE	
0922	SH 3	20.46	KINGFISHER COUNTY LINE	SOUTHEASTERLY	OKLAHOMA COUNTY LINE	
0928	SH 4	6.70	JCT. SH 66(MAIN ST & CORNWELL DR)IN YUKON	NORTHERLY	JCT. SH 3 N. OF YUKON	
0930	SH 4	3.33	JCT. SH 3 N. OF YUKON	NORTHERLY	IN PIEDMONT (EDMOND RD.)	
0932	SH 37	14.12	CADDO COUNTY LINE	SOUTHEASTERLY	CADDO COUNTY LINE	
0936	SH 152	14.93	JCT. US 81(WALNUT AVE & 1ST ST) IN UNION CITY	EASTERLY	OKLAHOMA COUNTY LINE	
0937	SH 92	7.98	JCT. SH 152 & CLEAR SPRINGS RD IN MUSTANG	NORTHERLY	JCT. SH 66(MAIN ST & ELEVENTH ST)IN YUKON	
0943	T0	10.90	OKLAHOMA COUNTY LINE	SOUTHERLY	JCT I-40(S. SIDE STR.)	
0944	T0	0.81	JCT. I-40 (S. SIDE STR.)	SOUTH & EAST	S.W. 15TH STREET	CONSTRUCTED 2001
0944P	P & S	0.00	S.W. 15TH STREET	SOUTH & EAST	OKLAHOMA COUNTY LINE	
0952	US 281	4.24	JCT. US 281	EASTERLY	JCT. I-40 (S. SIDE STR.)	NEW ALIGNMENT 2002 FROM 0.00 FOR 1.21
0954	SH 4	8.26	JCT. SH 152 & MUSTANG RD IN MUSTANG	NORTHERLY	JCT. SH 66(MAIN ST & RANCHWOOD DR)IN YUKON	
0956P	P & S	0.00	JCT SH 66 & US 81	NORTHWESTERLY	JCT US 81	
0958	SH 4	4.45	GRADY COUNTY LINE (N. END BR.)	NORTHERLY	JCT SH 152	CONSTRUCTED 2002

200.03 TOTAL COUNTY MILEAGE

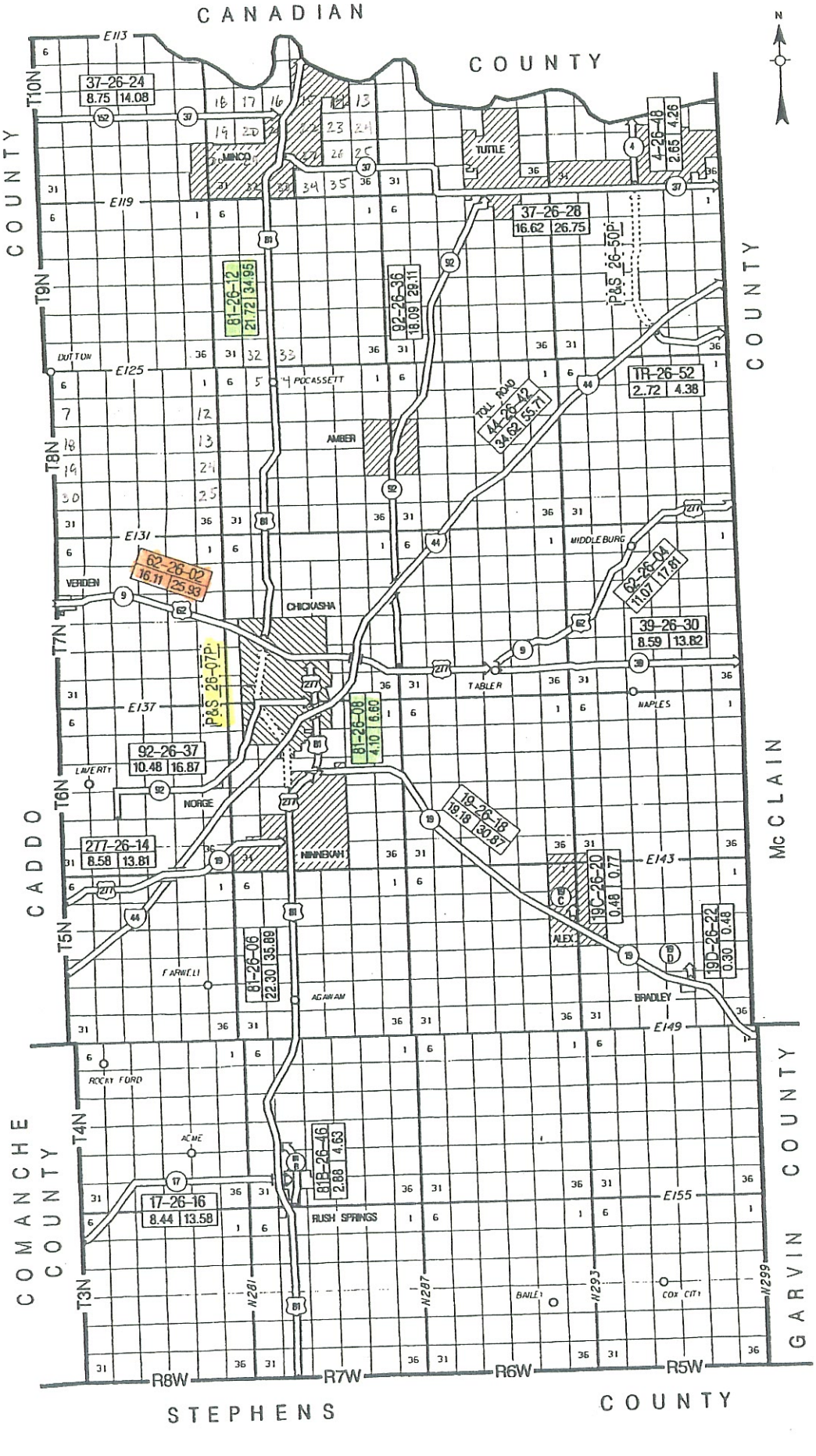


CANADIAN COUNTY 09

OKLAHOMA DEPARTMENT OF TRANSPORTATION — COMMISSIONER DISTRICT 4 — CANADIAN — PAGE:

PLANNING DIVISION - SUFFICIENCY RATING REPORT — JULY 1, 2002

HIGHWAY NUMBER	CONTROL SECTION NUMBER	SUBSECTION: ROADWAY OR BRIDGE(X) BEGINNING MILES	LENGTH (RDY-MILES) (BRG - FEET): RURAL	LENGTH (RDY-MILES) (BRG - FEET): MUNICIPAL	SUBSECTION: ENDPOINT	ANNUAL AVERAGE DAILY TRAFFIC	SURFACE OR BRIDGE: TYPE	SURFACE OR BRIDGE: WIDTH FEET	CURB OR SHLDR: TYPE	CURB OR SHLDR: WIDTH FEET	BRIDGE LOAD LIMIT	SUFFICIENCY RATING	CAPACITY ADEQUACY	NHS ROUTE	FUNCTION CLASS	DESIGN CLASS	NO. LANES	ACCESS CONT	GRADING TYPE	IMPROVEMENT TYPE	ESTIMATED IMPROVEMENT COST IN THOUSANDS: ROADWAY	BRIDGE	CONTROL SECTION TOTAL
S066	09-06	N 09.01	YUKON	.50	ENTER YUKON C/L	6110	IHHA	24	3	6		85	1	0	3								
S066	09-06	S 09.01		.00	ENTER YUKON C/L	6110	IHHA	24	3	6		85	1	0	3								
S066	09-06	N 09.51		.40	JCT SH 92	7130	IHHA	24	1	9		87	1	0	3								
S066	09-06	S 09.51		.00	JCT SH 92	7130	IHHA	24	1	9		87	1	0	3								
S066	09-06	N 09.91		.46	TOWN CENTER AT 6TH S	11470	LLOH	33	4			89	1	0	3								
S066	09-06	S 09.91		.00	TOWN CENTER AT 6TH S	11470	LLOH	33	4			89	1	0	3								
S066	09-06	10.37		.27	3RD STREET	17030	HHLH	76	4			81	1	0	3								
S066	09-06	10.64		.26	JCT SH 4 NORTH	15930	HHLH	48	1	10		77	1	0	3								
S066	09-06	N 10.90		.21	JCT SH 4 SOUTH	13900	LLOH	24	1	10		85	1	0	3								
S066	09-06	S 10.90		.00	JCT SH 4 SOUTH	13900	LLOH	24	1	10		85	1	0	3								
S066	09-06	X10.93		26		13900	BXUF				HS	NR		0	3								
S066	09-06	X11.04		22		13900	BXUF				HS	NR		0	3								
S066	09-06	N 11.11		.61	SHLDR CHANGE	16490	LLOH	24	3	8		77	1	0	3								
S066	09-06	S 11.11		.00	SHLDR CHANGE	16490	LLOH	24	3	8		77	1	0	3								
S066	09-06	N 11.72		.31	SHLDR CHANGE	15210	LLOH	24	1	10		84	1	0	3								
S066	09-06	S 11.72		.00	SHLDR CHANGE	15210	LLOH	24	1	10		84	1	0	3								
S066	09-06	N 12.03		.43	LVE YUKON-ENT OKC C/	15610	LLOH	24	1	10		88	1	0	3								
S066	09-06	S 12.03		.00	LVE YUKON-ENT OKC C/	15610	LLOH	24	1	10		88	1	0	3								
S066	09-06	N 12.46	OKLA. CI	1.11	JCT KILPATRICK T.P.	17040	LLOH	24	1	10		88	1	0	3								
S066	09-06	S 12.46		.00	JCT KILPATRICK T.P.	17040	LLOH	24	1	10		88	1	0	3								18,109
S066	09-06	N 13.57		1.41	OKLA CO LINE	17040	LLOH	24	1	10		88	1	0	3								
S066	09-06	S 13.57		.00	OKLA CO LINE	17040	LLOH	24	1	10		88	1	0	3								
U081	09-08	00.00	UNION CI	.54	BEG ASPH OVLAY	5750	IILH	24	1	8		89	1	1	3								
U081	09-08	00.54		1.16	0.16 S SH 152	5750	IILA	24	1	8		89	1	1	3								
U081	09-08	01.70		.16	JCT SH 152 - TOWN CE	6780	IIOE	52	4			89	1	1	3								
U081	09-08	01.86		.51	UNION CITY RAISE ARE	5870	IIOE	52	4			90	1	1	3								
U081	09-08	02.37		4.52	ENTER EL RENO UC/L	5440	IILA	24	3	2		76	1	1	3								
U081	09-08	06.89	EL RENO	1.95	.5 MI S OF I 40	5170	IILA	24	3	2		71	1	1	3								
U081	09-08	X07.85		103		5170	BRDG	32			HS	SD		1	3	03	4	1		31		3,286	
U081	09-08	X08.22		79		5170	BRDG	20			HS	SD		1	3	03	4	2		31		2,860	
U081	09-08	E 08.84		.20	SURF CHANGE	4810	HHLA	24	1	10		86	1	1	3								
U081	09-08	W 08.84		.00	SURF CHANGE	4810	LLOH	24	1	10		85	1	1	3								
U081	09-08	E 09.04		.32	JCT I-40	4310	LLOH	24	1	10		87	1	1	3								
U081	09-08	W 09.04		.00	JCT I-40	4310	LLOH	24	1	10		87	1	1	3								
U081	09-08	E 09.36		.23	0.25 MIS S. I-40B	10100	LLOH	24	1	10		81	1	1	3								
U081	09-08	W 09.36		.00	0.25 MIS S. I-40B	10100	LLOH	24	1	10		87	1	1	3								
U081	09-08	X09.36			0.25 MIS S. I-40B	10100	UP-H	45			00	SD		1	3	02	4	6		31		2,462	
U081	09-08	X09.38				10100	UP-H	45			00	SD		1	3	02	4	6		31		2,462	
U081	09-08	E 09.59		.25	JCT I-40B & SH 66	12040	LLOH	24	1	10		87	1	1	3								
U081	09-08	W 09.59		.00	JCT I-40B & SH 66	12040	LLOH	24	1	10		87	1	1	3								
U081	09-12	00.00		.19	ROGERS ST IN EL RENO	9520	HHLA	59	4			94	1	1	3								
U081	09-12	00.19		.44	0.63 MIS N. I-40B	8470	IIOE	52	4			100	1	1	3								
U081	09-12	00.63		.28	0.91 MIS N. I-40B	4870	IIOE	52	4			100	1	1	3								
U081	09-12	X00.63		101	0.91 MIS N. I-40B	4870	BRDG	56			29	AD			3								
U081	09-12	X00.71		273		4870	H-HR	56			29	AD			3								
U081	09-12	00.91		.19	LEAVE EL RENO C/L	5690	IIOE	52	4			100	1	1	3								
U081	09-12	01.10	.22		1.32 N I-40B	5220	IIOE	52	4			100	1	1	3								
U081	09-12	01.32	1.34		2.6 MI N I-40B	5170	HHOF	24	1	10		71	1	1	3								
U081	09-12	X02.05	604			5170	BRDG	47			HS	AD		1	3	03	4	1		50			
U081	09-12	02.66	.56		LEAVE EL RENO U/L	5170	LLOA	24	3	8		66	1	1	3	03	4	0	4	50			
U081	09-12	03.22	1.16		4.40 MIS N. I-40B	4930	LLOA	24	3	8		59	1	1	3	03	4	0	4	50			11,070


CANADIAN COUNTY
COMANCHE COUNTY
CADDO
McCLAIN
GARVIN COUNTY
STEPHENS COUNTY
GRADY COUNTY 26
T10N
T9N
T8N
T7N
T6N
T5N
T4N
T3N
R8W
R7W
R6W
R5W
E113
E119
E125
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E143
E149
E155
N281
N287
N293
N299
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21.72 34.95
92-26-36
18.09 29.11
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2.65 4.26
P&S 26-50P
TR-26-52
2.72 4.38
TOLL ROAD
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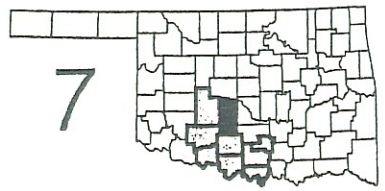
34.62 55.71
62-26-02
16.11 25.93
62-26-04
11.07 17.81
39-26-30
8.59 13.82
P&S 26-07P
81-26-08
4.10 6.60
92-26-37
10.48 16.87
19-26-18
19.18 30.87
277-26-14
8.58 13.81
19C-26-20
0.48 0.77
19D-26-22
0.30 0.48
81-26-06
22.30 35.89
81B-26-46
2.88 4.63
17-26-16
8.44 13.58
DUTTON
VERDEN
CHICKASHA
AMBER
MIDDLEBURG
TABLER
NAPLES
LAVERTY
NORGE
NINNEKAH
ALEX
BRADLEY
TUTTLE
MINCO
POCASSETT
FARWELL
AGAWAM
ROCKY FORD
ACME
RUSH SPRINGS
BAILEY
COX CITY
N

OKLAHOMA DEPARTMENT OF TRANSPORTATION — CONTROL S. ON LOG — GRADY COUNTY

CONTROL	ROUTE	LENGTH	STARTING DESRIPTION	DIRECTION	ENDING DESCRIPTION	NOTES
2602	US 62	16.11	CADDO COUNTY LINE IN VERDEN	EASTERLY	JCT. SH 39 AT TABLER	
2604	US 62	11.07	JCT. SH 39 AT TABLER	NORTHEASTERLY	MCCLAIN COUNTY LINE S.W. OF BLANCHARD	
2606	US 81	22.30	STEPHENS COUNTY LINE	NORTHERLY	JCT. SH 19, S. OF CHICKASHA	
2607P	P & S	0.00	JCT. US 81 S. OF CHICKASHA	NORTHERLY	JCT. US 62 WEST OF CHICKASHA	
2608	US 81	4.10	JCT. SH 19(S. OF CHICKASHA)	NORTHERLY	JCT. US 62(CHOCTAW AV & 4TH ST)IN CHICKASHA	
2612	US 81	21.72	JCT. US 62 W. IN CHICKASHA	NORTHERLY	CANADIAN COUNTY LINE (N. END BRIDGE)	
2614	US 277	8.58	CADDO COUNTY LINE	EASTERLY	JCT. US 81 S. OF CHICKASHA	
2616	SH 17	8.44	COMANCHE COUNTY LINE	NORTH & EASTERLY	JCT. US 81B(RUSH & BLAKELEY)IN RUSH SPRINGS	
2618	SH 19	19.18	JCT. US 81, S. OF CHICKASHA	SOUTHEASTERLY	GARVIN COUNTY LINE	
2620	SH 19C	0.48	JCT. SH 19 S. OF ALEX	NORTHERLY	"E" AVE & MAIN ST IN ALEX	
2622	SH 19D	0.30	JCT. SH 19 IN BRADLEY	NORTHERLY	STATE MAINTENANCE ENDS SIGN	
2624	SH 37	8.75	CADDO COUNTY LINE	EASTERLY	JCT. US 81 IN MINCO	
2628	SH 37	16.62	JCT. US 81(W. SECOND ST & MAIN ST)IN MINCO	EASTERLY	MCCLAIN COUNTY LINE	
2630	SH 39	8.59	JCT. US 62 AT TABLER	EASTERLY	MCCLAIN COUNTY LINE	
2636	SH 92	18.09	JCT. US 62, E. OF CHICKASHA	NORTHEASTERLY	JCT. SH 37(MAIN ST & FOURTH)IN TUTTLE	
2637	SH 92	10.48	LEWIS BURTSCHI LAKE S. OF LAVERTY	NORTHEASTERLY	JCT. US 81(4TH ST & GRAND BLVD)IN CHICKASHA	
2642	IS 44	34.62	CADDO COUNTY LINE	NORTHEASTERLY	MCCLAIN COUNTY LINE	
2646	US 81B	2.88	JCT. US 81 S. OF RUSH SPRINGS	NORTHERLY	JCT. US 81 N. OF RUSH SPRINGS	
2648	SH 4	2.65	JCT SH 37 IN TUTTLE	NORTHERLY	CANADIAN COUNTY LINE (N. END BRIDGE)	NEW CONSTRUCTION 2002
2650P	P & S	0.00	JCT I-44 (H.E. BAILEY TURNPIKE)	NORTHERLY	JCT SH 37	
2652	TOLL RD	2.72	JCT I-44 (H.E. BAILEY TURNPIKE)	EASTERLY	MCCLAIN COUNTY LINE	NEW CONSTRUCTION 2002

217.68 TOTAL COUNTY MILEAGE



GRADY COUNTY 26

OKLAH[illegible]A DEPARTMENT OF TRANSPORTATION

PLANNI[illegible]DIVISION - SUFFICIENCY RATING REPORT JULY 1, 2[illegible] COMMISSIONER DISTRICT 7 GRADY P : 119

HIGHWAY NUMBER	CONTROL SECTION NUMBER	SUBSECTION: ROADWAY OR BRIDGE(X) BEGINNING MILES	LENGTH (RDY-MILES) (BRG - FEET): RURAL	LENGTH (RDY-MILES) (BRG - FEET): MUNICIPAL	ENDPOINT	ANNUAL AVERAGE DAILY TRAFFIC	SURFACE OR BRIDGE: TYPE	SURFACE OR BRIDGE: WIDTH FEET	CURB OR SHLDR: TYPE	CURB OR SHLDR: WIDTH FEET	BRIDGE LOAD LIMIT	SUFFICIENCY RATING	CAPACITY ADEQUACY	NHS ROUTE	FUNCTION CLASS	DESIGN CLASS	NO. LANES	ACCESS CONT	GRADING TYPE	IMPROVEMENT TYPE	ESTIMATED IMPROVEMENT COST IN [illegible]USANDS: ROADWAY	BRIDGE	CONTROL SECTION TOTAL
U062	26-02	00.00	VERDEN	.48	LOCUST STREET -TC-	6720	HHOB	50	4			90	1	0	4								
U062	26-02	00.48		.16	LEAVE VERDEN E. C/L	6720	HHOB	50	4			88	1	0	4								
U062	26-02	00.64	5.53		ENTER CHICKASHA U/L	6170	IHLA	24	3	7		75	1	0	4								
U062	26-02	X02.02	44			6170	BXBR	30			HS	FD		0	4	04	4	2		50			
U062	26-02	X02.95	55			6170	BXBR	30			HS	FD		0	4	04	4	2		50			
U062	26-02	X03.61	34			6170	BXBR	30			HS	FD		0	4	04	4	2		50			
U062	26-02	06.17	.11		1.37 W US 81	6720	IHLA	24	3	6		74	1	0	4								
U062	26-02	06.28	.42		ENT CHICKSHA UC/L	6980	IHHF	24	1	10		84	1	0	4								
U062	26-02	06.70	CHICKASH	.59	29TH STREET	7040	HHOF	24	1	10		83	1	0	3								
U062	26-02	07.29		.19	BEG 4 LANE DIVIDED	7040	IIHF	24	1	10		83	1	0	3								
U062	26-02	N 07.48		.17	JCT US 81 NORTH	10040	IIHF	24	1	10		90	1	0	3								
U062	26-02	S 07.48		.00	JCT US 81 NORTH	10040	IIHF	24	1	10		90	1	0	3								
U062	26-02	N 07.65		1.02	1.02 MIS E. US 81N	8200	IIHF	24	1	10		90	1	1	3								
U062	26-02	S 07.65		.00	1.02 MIS E. US 81N	8200	IIHF	24	1	10		90	1	1	3								
U062	26-02	NX08.27		262		8200	BRDG	41			HS	AD		1	3								
U062	26-02	SX08.27		263		8200	BRDG	41			HS	AD		1	3								
U062	26-02	NX08.62		157		8200	OP-R	41			HS	AD		1	3								
U062	26-02	SX08.62		154		8200	OP-R	41			HS	AD		1	3								
U062	26-02	N 08.67		.08	WIDTH CHANGE 12TH ST	10460	LLOH	24	1	10		92	1	1	3								
U062	26-02	S 08.67		.00	WIDTH CHANGE 12TH ST	10460	LLOH	24	1	10		92	1	1	3								
U062	26-02	N 08.75		.08	BEG PC OVERLY 11TH S	12510	LLOH	26	4			91	1	1	3								
U062	26-02	S 08.75		.00	BEG PC OVERLY 11TH S	12510	LLOH	26	4			91	1	1	3								
U062	26-02	08.83		.41	WIDTH CHANGE 6TH ST	12980	IILA	50	4			78	1	1	3								
U062	26-02	09.24		.14	JCT US 81 SOUTH -TC-	13740	IILA	72	4			82	1	1	3								
U062	26-02	09.38		.08	BEG DIV 3RD STREET	9730	IILA	72	4			86	1	0	3								
U062	26-02	N 09.46		.06	BEG PC CONC 2ND ST	9730	IILA	36	4			92	1	0	3								
U062	26-02	S 09.46		.00	BEG PC CONC 2ND ST	9730	IILA	36	4			92	1	0	3								
U062	26-02	N 09.52		.39	WIDTH CHANGE	8880	LLOF	28	4			95	1	0	3								
U062	26-02	S 09.52		.00	WIDTH CHANGE	8880	LLOF	28	4			95	1	0	3								
U062	26-02	X09.58		950		8880	H-HR	62			HS	AD		0	3								
U062	26-02	09.91		.09	LEAVE CHICKASHA C/L	8650	LLOF	58	4			91	1	0	3								
U062	26-02	10.00	.25		WIDTH CHANGE	8650	LLOF	58	4			91	1	0	3								
U062	26-02	10.25	.62		0.12 MIS W I-44	7580	LLOA	52	4			91	1	0	3								
U062	26-02	N 10.87	.12		JCT I-44, LEV. U/L	7350	LLOA	24	1	10		82	1	0	3								
U062	26-02	S 10.87	.00		JCT I-44, LEV. U/L	7350	LLOA	24	1	10		82	1	0	3								
U062	26-02	X10.98	156			7350	OP-H	83			HS	AD		0	3								
U062	26-02	N 10.99	.56		0.56 MI E TURNPIKE	8450	HHOF	24	1	10		89	1	0	4								
U062	26-02	S 10.99	.00		0.56 MI E TURNPIKE	8450	HHOF	24	1	10		95	1	0	4								
U062	26-02	NX11.20	962			8450	BRDG	30			HS	SD		0	4	04	4	1		31		3,513	
U062	26-02	SX11.20	994			8450	BRDG	30			HS	SD		0	4	04	4	1		31		3,583	
U062	26-02	N 11.55	1.09		JCT SH 92 NORTH	7590	HHOB	24	1	10		90	1	0	4								
U062	26-02	S 11.55	.00		JCT SH 92 NORTH	7590	HHOB	24	1	10		95	1	0	4								
U062	26-02	X12.27	34			7590	BXUF				HS	NR		0	4								
U062	26-02	N 12.64	.21		0.21 MI E SH 92	5340	HHOB	24	1	10		93	1	0	4								
U062	26-02	S 12.64	.00		0.21 MI E SH 92	5340	HHOB	24	1	10		93	1	0	4								
U062	26-02	12.85	.31		0.52 MI E SH 92	5240	HHOQ	52	4			89	1	0	4								
U062	26-02	13.16	2.95		JCT SH 39 - US 62	4380	HHOQ	24	1	8		86	1	0	4								
U062	26-02	X13.72	300			4380	BRDG	40			HS	AD		0	4								
U062	26-02	X14.10	150			4380	BRDG	40			HS	AD		0	4								
U062	26-02	X15.66	200			4380	BRDG	40			HS	AD		0	4								
U062	26-02	X15.85	150			4380	BRDG	40			HS	AD		0	4								7,096

FORM SRATE
3/99

OKL[illegible]OMA DEPARTMENT OF TRANSPORTATION

PLAN[illegible]G DIVISION - SUFFICIENCY RATING REPORT JULY 1 02 COMMISSIONER DISTRICT 7 GRADY [illegible] 121

HIGHWAY NUMBER	CONTROL SECTION NUMBER	SUBSECTION: ROADWAY OR BRIDGE(X) BEGINNING MILES	LENGTH (RDY-MILES) (BRG - FEET): RURAL	LENGTH (RDY-MILES) (BRG - FEET): MUNICIPAL	ENDPOINT	ANNUAL AVERAGE DAILY TRAFFIC	SURFACE OR BRIDGE: TYPE	SURFACE OR BRIDGE: WIDTH FEET	CURB OR SHLDR: TYPE	CURB OR SHLDR: WIDTH FEET	BRIDGE LOAD LIMIT	SUFFICIENCY RATING	CAPACITY ADEQUACY	NHS ROUTE	FUNCTION CLASS	DESIGN CLASS	NO. LANES	ACCESS CONT	GRADING TYPE	IMPROVEMENT TYPE	ESTIMATED IMPROVEMENT COST THOUSANDS: ROADWAY	ESTIMATED IMPROVEMENT COST THOUSANDS: BRIDGE	ESTIMATED IMPROVEMENT COST THOUSANDS: CONTROL SECTION TOTAL
U081	26-06	E 19.37		1.00	LEAVE NINNEKAH C/L	8900	LLOA	24	1	10		87	1	1	3								
U081	26-06	W 19.37		.00	LEAVE NINNEKAH C/L	8900	LLOA	24	1	10		87	1	1	3								
U081	26-06	E 20.37	.53		NEEDS STUDY BREAK	8200	LLOA	24	1	10		87	1	1	3								
U081	26-06	W 20.37	.00		NEEDS STUDY BREAK	8200	LLOA	24	1	10		87	1	1	3								
U081	26-06	E 20.90	.20		ENTER NINNEKAH C/L	8300	LLOA	24	1	10		89	1	1	3								
U081	26-06	W 20.90	.00		ENTER NINNEKAH C/L	8300	LLOA	24	1	10		89	1	1	3								
U081	26-06	E 21.10		1.20	JCT SH 19 EAST	7890	LLOA	24	1	10		89	1	1	3								
U081	26-06	W 21.10		.00	JCT SH 19 EAST	7890	LLOA	24	1	10		89	1	1	3								
U081	26-06	X21.90		26		7890	BXUF				HS	NR		1	3								4,716
U081	26-08	E 00.00	.50		0.50 MIS N. SH 19N	10060	LLOA	24	4			85	1	1	3								
U081	26-08	W 00.00	.00		0.50 MIS N. SH 19N	10060	LLOA	24	4			85	1	1	3								
U081	26-08	E 00.50	1.00		ENTER CHICKASHA UC/L	10060	LLOA	24	4			85	1	1	3								
U081	26-08	W 00.50	.00		ENTER CHICKASHA UC/L	10060	LLOA	24	4			85	1	1	3								
U081	26-08	E 01.50		.12	END PC CONC EAST LAN	11890	LLOA	24	4			86	1	1	3								
U081	26-08	W 01.50		.00	END PC CONC EAST LAN	11890	LLOA	24	4			86	1	1	3								
U081	26-08	E 01.62		.41	SURF CHANGE	11890	IHHB	24	1	9		90	1	1	3								
U081	26-08	W 01.62		.00	SURF CHANGE	11890	LLOA	24	4			87	1	1	3								
U081	26-08	E 02.03		.14	JCT TURNPIKE I-44	16210	IIKA	34	4			90	1	1	3								
U081	26-08	W 02.03		.00	JCT TURNPIKE I-44	16210	LLOA	24	4			86	1	1	3								
U081	26-08	E 02.17		.20	BEGIN PC CONC	22270	IIKA	34	4			88	1	1	3								
U081	26-08	W 02.17		.00	BEGIN PC CONC	22270	LLOA	24	4			87	1	1	3								
U081	26-08	X02.17		241	BEGIN PC CONC	22270	OP-H	94			HS	AD		1	3								0
U081	26-08	E 02.37		.13	JCT SH 92	22270	IILA	34	4			89	1	1	3								
U081	26-08	W 02.37		.00	JCT SH 92	22270	LLOA	24	4			89	1	1	3								
U081	26-08	E 02.50		.25	END DIVIDED	18390	LLOA	34	4			85	1	1	3								
U081	26-08	W 02.50		.00	END DIVIDED	18390	LLOA	34	4			85	1	1	3								
U081	26-08	02.75		.99	MINNESOTA AVE	17090	LLOA	48	4			83	1	1	3								
U081	26-08	X02.95		59		17090	BXBR	64			HS	AD		1	3								
U081	26-08	03.74		.36	JCT US 62 -TC-	17960	HHLA	53	4			86	2	1	3								
U081	26-12	00.00		.90	LVE CHICKASHA UC/L	4390	IIHF	24	1	10		94	1	1	3								
U081	26-12	00.90	1.66		BEG PC CONC	3940	IIHF	24	1	10		89	1	1	3								
U081	26-12	X01.38	300			3940	BRDG	47			HS	AD		1	3								
U081	26-12	X01.56	300			3940	BRDG	47			HS	AD		1	3								
U081	26-12	X01.75	400			3940	BRDG	47			HS	AD		1	3								
U081	26-12	02.56	1.44		13.88 MI S SH 37	3790	IILA	24	1	8		88	1	1	3								
U081	26-12	04.00	5.36		8.52 MI S SH 37	3790	IHLA	24	1	8		85	1	1	3								
U081	26-12	X06.85	182			3790	BRDG	43			HS	AD		1	3								
U081	26-12	09.36	.26		8.26 MIS. S SH-37 Pocasset	3370	IILA	52	4			91	1	1	3								
U081	26-12	09.62	.53		7.73 MIS. S SH-37	3220	IILA	24	1	10		91	1	1	3								
U081	26-12	10.15	6.27		ENTER MINCO C/L	3170	IILA	24	1	10		85	1	1	3								
U081	26-12	X16.25	34			3170	BXUF				HS	NR		1	3								
U081	26-12	X16.31	56			3170	BXBR	52			HS	AD		1	3								
U081	26-12	16.42	MINCO	.60	0.86MI S SH 37 EAST	3280	IILA	24	1	10		87	1	1	3								
U081	26-12	X16.44		110		3280	BRDG	43			HS	AD		1	3								
U081	26-12	17.02		.63	0.23MI S SH 37 EAST	3280	IILA	24	1	10		87	1	1	3								
U081	26-12	17.65		.23	JCT SH 37 E MAIN TC	5430	IILA	50	4			85	1	1	3								
U081	26-12	17.88		.36	HPMS BREAK	5080	IILA	50	4			85	1	1	3								
U081	26-12	18.24		.69	LVE MINCO C/L N ST	5080	IILA	50	4			86	1	1	3								
U081	26-12	X18.45		28		5080	BXBR	72			HS	AD		1	3								
U081	26-12	18.93		.36	JCT SH 37 WEST	5080	IIHE	24	1	8		86	1	1	3								
U081	26-12	19.29		.91	BEG PC OVERLAY	4940	IIHE	24	1	8		86	1	1	3								

FORM SRATE
3/99

OKL OMA DEPARTMENT OF TRANSPORTATION

PLANNING DIVISION - SUFFICIENCY RATING REPORT JULY 1, 2002 COMMISSIONER DISTRICT 7 GRADY

HIGHWAY NUMBER	CONTROL SECTION NUMBER	SUBSECTION: ROADWAY OR BRIDGE(X) BEGINNING MILES	LENGTH (RDY-MILES) (BRG-FEET): RURAL	LENGTH (RDY-MILES) (BRG-FEET): MUNICIPAL	SUBSECTION: ENDPOINT	ANNUAL AVERAGE DAILY TRAFFIC	SURFACE OR BRIDGE: TYPE	SURFACE OR BRIDGE: WDTH FEET	CURB OR SHLDR: TYPE	CURB OR SHLDR: WIDTH FEET	BRIDGE LOAD LIMIT	SUFFICIENCY RATING	CAPACITY ADEQUACY	NHS ROUTE	FUNCTION CLASS	DESIGN CLASS	NO. LANES	ACCESS CONT	GRADING TYPE	IMPROVEMENT TYPE	ESTIMATED IMPROVEMENT COST IN THOUSANDS: ROADWAY	BRIDGE	CONTROL SECTION TOTAL
U081	26-12	X19.53		.363		4940	OP-R	43			HS	AD		1	3								
U081	26-12	20.20		.74	BEG PC CONC	3350	IILA	24	1	8		80	1	1	3								
U081	26-12	20.94		.76	CANADAIN CO LINE	5610	IILA	24	1	8		80	1	1	3								
U081	26-12	X21.59		1708		5610	BRDG	28			16	SD		1	3	03	4	1		31		5,124	5,124
U277	26-14	00.00	3.28		3.28 MIS E CADDO CO/	1900	DHDL	24	3	3		65	1	0	5	09	2	0	5	03	4,998		
U277	26-14	X00.82	79			1900	BRDG	31			HS	AD		0	5	09	2	1		31		1,095	
U277	26-14	X01.46	100			1900	BRDG	40			29	AD		0	5	09	2	2		31		1,124	
U277	26-14	03.28	3.25		ENTER NINNEKAH C/L	1900	IHDL	24	3	4		70	1	0	5								
U277	26-14	X03.58	125			1900	BRDG	32			HS	AD		0	5								
U277	26-14	X04.20	201			1900	UP-H	33			00	AD		0	5								
U277	26-14	X05.92	103			1900	BRDG	32			HS	AD		0	5								
U277	26-14	06.53	NINNEKAH	.33	LEAVE NINNEKAH C/L	1620	IHLD	24	3	4		70	1	0	5								
U277	26-14	06.86	.22		ENTER NINNEKAH C/L	1620	IHDL	24	3	3		70	1	0	5								
U277	26-14	07.08		1.50	JCT US 81	1620	IHDL	24	3	3		69	1	0	5	09	2	0	5	03	2,283		
U277	26-14	X07.61		100		1620	BRDG	40			29	AD		0	5	09	2	2		31		1,124	
U277	26-14	X08.40		23		1620	BXBR	30			HS	AD		0	5	09	2	2		33		360	10,984
S017	26-16	00.00	6.84		1.02 W US 81	960	DDDL	24	3	4		56	1	0	5	10	2	0	3	03	7,353		
S017	26-16	06.84	1.02		JCT US 81	1280	DHHF	24	1	10		75	1	0	5								
S017	26-16	07.86	.05		ENT RUSH SPRINGS C/L	1620	IIHF	51	4			92	1	0	5								
S017	26-16	07.91	RUSH SPR	.45	BEG PC CONC 4TH ST	1620	IIHF	51	4			92	1	0	5								7,353
S017	26-16	08.36		.08	JCT US 81B -TC-	3290	IILA	75	4			86	1	0	5								
S019	26-18	00.00	.12		0.12 MIS. E. US 81	3970	IIHD	24	1	10		94	1	0	5								
S019	26-18	00.12	.08		0.20 MIS. E. US 81	3970	IIHD	24	1	7		89	1	0	5								
S019	26-18	00.20	.37		LEV OLD CHICKASHA U/	3690	IIDL	24	1	7		83	1	0	5								
S019	26-18	X00.47	210			3690	OP-R	40			HS	AD		0	5	08	2	4		50			
S019	26-18	00.57	.11		ENTER NINNEKAH C/L	3690	IIDL	24	1	7		83	1	0	5								
S019	26-18	00.68	NINNEKAH	.10	0.78 MIS. E. US 81	3690	IIDL	24	1	7		83	1	0	5								
S019	26-18	00.78		.30	LEAVE NINNEKAH C/L	3690	IIOE	24	1	8		83	1	0	5								
S019	26-18	01.08	2.85		3.93 MIS. E. US 81	3440	IIOE	24	1	8		83	1	0	5								
S019	26-18	03.93	1.10		5.03 MIS. E. US81	3440	IIDL	24	1	7		83	1	0	5								
S019	26-18	X04.27	112			3440	BRDG	40			HS	AD		0	5	08	2	2		50			
S019	26-18	X04.52	345			3440	BRDG	40			HS	AD		0	5	08	2	1		50			
S019	26-18	X04.92	31			3440	BXUF				HS	NR		0	5	08	2	2		50			
S019	26-18	05.03	2.43		3.86 W SH 19C	3440	IIDL	24	6	6		77	1	0	5								
S019	26-18	X07.05	48			3440	BXBR	30			HS	AD		0	5	08	2	2		50			
S019	26-18	X07.21	38			3440	BRDG	30			HS	AD		0	5	08	2	2		50			
S019	26-18	X07.29	48			3440	BXBR	30			HS	AD		0	5	08	2	2		50			
S019	26-18	07.46	3.50		ENTER ALEX C/L	2300	IIIE	24	6	7		80	1	0	5								
S019	26-18	X09.93	58			2300	BXBR	38			HS	AD		0	5								
S019	26-18	X10.10	100			2300	BRDG	28			HS	AD		0	5								
S019	26-18	10.96	ALEX	.17	LEAVE ALEX C/L	2320	IIIE	24	6	7		86	1	0	5								
S019	26-18	11.13	.19		JCT SH 19C	2450	IIIE	24	6	6		85	1	0	5								
S019	26-18	11.32	2.54		2.54 MIS E SH 19C	2170	IIIE	24	6	5		77	1	0	5								
S019	26-18	X13.07	200			2170	BRDG	28			HS	AD		0	5								
S019	26-18	X13.44	161			2170	BRDG	28			HS	SD		0	5	08	2	1		31		1,439	
S019	26-18	13.86	2.00		ENTER BRADLEY C/L	2170	IIIE	24	6	5		77	1	0	5								
S019	26-18	X14.84	26			2170	BXUF				HS	NR		0	5								
S019	26-18	15.86	BRADLEY	.05	SHLDR CHANGE -TC-	2170	IIIE	24	6	5		86	1	0	5								
S019	26-18	15.91		.05	JCT SH 19D	2170	IIIE	24	1	10		84	1	0	5								
S019	26-18	15.96		.04	SHLDR CHANGE	2640	IIIE	24	1	10		81	1	0	5								
S019	26-18	16.00		.11	LEAVE BRADLEY C/L	2160	IIIE	24	6	6		85	1	0	5								

FORM SR-ATE

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BRIDGE TYPE CODES

BRIDGE CODES	BRIDGE TYPES
OP-H	Highway over a highway, with or without pedestrian crossing.
OP-R	Highway over a railroad.
OP-P	Highway over a pedestrian crossing only.
H-HR	Highway over a highway and railroad.
BRDG	Highway over a waterway.
H-HW	Highway over a highway and waterway.
H-RW	Highway over a railroad and waterway.
HHRW	Highway over a highway, railroad and waterway.
OTHR	Highway over others.
UP-H	Highway under a highway.
UP-R	Highway under a railroad.
UP-P	Highway under a pedestrian crossing only.
UPHR	Highway under a highway and railroad.
UPHP	Highway under a highway and pedestrian crossing.
UPML	Highway under a overpass structure at interchange or second level of multilevel.
UPML	Highway under a third level (interchange).
UPML	Highway under a forth level (interchange).
UPML	Highway under a building of plaza.
UP-O	Highway under others.
BXBR	Box bridge not underfill.
BXUF	Box bridge underfill.

2003

NEEDS STUDY

CONSTRUCTION COST

ESTIMATES

Strategic Planning Branch
Planning & Research Division

2003

INTRODUCTION

This report contains construction Costs Per Mile for all standard improvement types and design standards. It contains sufficient cost information to determine an estimated construction cost for any type rural or urban highway improvement. The Costs Per Mile were developed by the Strategic Planning Branch of the Planning Division and are used in determining the construction dollar needs for the state highway system as shown in the continuing highway needs study report.
Structure costs are to be obtained from the Bridge Division.

All cost figures shown include 15% for Administration, Engineering and Contingencies. These costs are for planning purposes only, an actual individual project improvement or cost may differ when a detailed project study is performed. Costs are shown in thousands of dollars.

RURAL IMPROVEMENT TYPES

The Rural Improvement Types possible, are as follows:

01 - Widen and Resurface to standard with little or no grade or alignment change.

02 - Complete reconstruction of roadway on existing alignment. OR
If less than 50% of the roadway has geometry's requiring reconstruction, widen & resurface and correct geometry's

03 - Construct on offset alignment using existing facility as a detour.

04 - Construct on new alignment.

05 - Construct 2 parallel lanes, no improvement to existing lanes.

06 - Construct 2 parallel lanes, widen and resurface existing lanes.

Rural Grading Types are as follows:

1 - Light - May apply in flat, rolling or mountainous terrain where grading to standard width would require little if any movement of material other than borrow from the side ditches.

2 - Medium - May apply in any terrain type. Grading would require some small amount of cut and fill, mostly around stream crossing, but otherwise would fit the natural slope of the terrain.

3 - Medium Heavy - May apply in any terrain type. Choppy terrain requiring considerable amounts of cut and fill with most of the overhaul within the non-pay category.

4 - Heavy - May apply in any terrain type. Rough terrain requiring almost continuous cut and fill to maintain proper grade line. Large fill to raise grade line above flood or surface water.

5 - Extra Heavy - Applies in extremely hilly and mountainous terrain. Requires heavy cuts and fills to maintain proper grade line.

Where full control of access is proposed, the cost for grade separations and interchange structures are shown as a cost per mile figure under the structure column. Stream crossing structure costs are incorporated from the Bridge Division Database File.

Find the appropriate improvement type, design class and grading type and determine the cost per mile.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 01
Widen and Resurface to Standard Section with little or no Vertical or Horizontal Corrections

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
Buy 4-Ln. R/W 3	7	None 0, 1	1) Light	24.0	138.2	72.0	423.4	8.0	40.8			1	13.0	66.4	5	23.6	120.4	602.4
			2) Medium	30.0	172.8	72.0	423.4	8.0	40.8			2	14.8	75.7	6	28.8	146.9	637.0
			3) Med. Heavy	35.0	201.6	72.0	423.4	8.0	40.8			3	18.5	94.2	7	39.2	199.9	665.8
			4) Heavy	46.0	265.0	72.0	423.4	8.0	40.8			4	22.1	112.8				729.1
			5) Ex. Heavy	57.0	328.3	72.0	423.4	8.0	40.8			5	25.8	131.4				792.5
2	1, 2, 4 3, 7	None 0	1) Light	24.0	138.2	72.0	423.4	8.0	40.8			1	6.9	35.0	5	11.5	58.7	602.4
			2) Medium	30.0	172.8	72.0	423.4	8.0	40.8			2	7.7	39.3	6	13.9	70.9	637.0
			3) Med. Heavy	35.0	201.6	72.0	423.4	8.0	40.8			3	9.4	47.8	7	16.7	85.2	665.8
			4) Heavy	46.0	265.0	72.0	423.4	8.0	40.8			4	11.1	56.4				729.1
			5) Ex. Heavy	57.0	328.3	72.0	423.4	8.0	40.8			5	12.7	65.0				792.5
2	5, 8	None 0	1) Light	22.0	126.7	68.0	399.8	7.5	38.3			1	5.9	30.0	5	9.7	49.5	564.8
			2) Medium	28.0	161.3	68.0	399.8	7.5	38.3			2	6.6	33.6	6	11.7	59.7	599.4
			3) Med. Heavy	33.0	190.1	68.0	399.8	7.5	38.3			3	8.0	40.7	7	15.7	80.1	628.2
			4) Heavy	44.0	253.4	68.0	399.8	7.5	38.3			4	9.4	47.8				691.5
			5) Ex. Heavy	55.0	316.8	68.0	399.8	7.5	38.3			5	10.8	55.0				754.9
2	9	None 0	1) Light	15.0	86.4	35.0	205.8	6.0	30.6			1	5.7	29.3	5	9.1	46.4	322.8
			2) Medium	20.0	115.2	35.0	205.8	6.0	30.6			2	6.3	32.1	6	10.9	55.6	351.6
			3) Med. Heavy	25.0	144.0	35.0	205.8	6.0	30.6			3	7.8	40.0	7	14.5	74.0	380.4
			4) Heavy	30.0	172.8	35.0	205.8	6.0	30.6			4	8.8	45.0				409.2
			5) Ex. Heavy	35.0	201.6	35.0	205.8	6.0	30.6			5	10.1	51.4				438.0
2	6	None 0	1) Light	15.0	86.4	68.0	399.8	7.0	35.7			1	4.8	24.3	5	7.2	36.7	521.9
			2) Medium	20.0	115.2	68.0	399.8	7.0	35.7			2	5.2	26.4	6	8.7	44.4	550.7
			3) Med. Heavy	25.0	144.0	68.0	399.8	7.0	35.7			3	6.2	31.4	7	11.7	59.7	579.5
			4) Heavy	30.0	172.8	68.0	399.8	7.0	35.7			4	7.3	37.1				608.3
			5) Ex. Heavy	35.0	201.6	68.0	399.8	7.0	35.7			5	8.3	42.1				637.1
2	10, 13	None 0	1) Light	10.0	57.6	25.0	147.0	5.0	25.5			1	4.8	24.3	5	7.2	36.7	230.1
			2) Medium	15.0	86.4	25.0	147.0	5.0	25.5			2	5.2	26.4	6	8.7	44.4	258.9
			3) Med. Heavy	20.0	115.2	25.0	147.0	5.0	25.5			3	6.2	31.4	7	11.7	59.7	287.7
			4) Heavy	25.0	144.0	25.0	147.0	5.0	25.5			4	7.3	37.1				316.5
			5) Ex. Heavy	30.0	172.8	25.0	147.0	5.0	25.5			5	8.3	42.1				345.3

All base R/W increased 1.40 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 01
Widen and Resurface to Standard Section with little or no Vertical or Horizontal Corrections

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
2	11 , 12	None 0	1) Light	15.0	86.4	35.0	205.8	6.0	30.6				3.8	19.3		5.4	27.5	322.8
			2) Medium	20.0	115.2	35.0	205.8	6.0	30.6				4.1	20.7		6.4	32.6	351.6
			3) Med. Heavy	25.0	144.0	35.0	205.8	6.0	30.6				4.8	24.3		8.4	42.8	380.4
			4) Heavy	30.0	172.8	35.0	205.8	6.0	30.6				5.5	27.8				409.2
			5) Ex. Heavy	35.0	201.6	35.0	205.8	6.0	30.6				6.2	31.4				438.0

All base R/W increased 1.40 from 2002.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 02
Widen Resurface and Correction of Vertical and Horizontal Deficiencies or Reconstruct on Existing Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE														Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE		RIGHT-OF-WAY						
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	5.100 Factor	Code	Base	5.100 Factor	
Buy 4-Ln. R/W 3	3	None 0	1) Light	36.3	209.1	95.7	562.7	15.4	78.5			1	35.8	182.6	6	105.0	535.5	850.3
			2) Medium	48.4	278.8	95.7	562.7	15.4	78.5			2	42.0	214.2	7	130.2	664.0	920.0
			3) Med. Heavy	62.7	361.2	95.7	562.7	15.4	78.5			3	54.8	279.5	8	180.8	922.1	1,002.4
			4) Heavy	79.7	459.1	95.7	562.7	15.4	78.5			4	67.2	342.7				1,100.3
			5) Ex. Heavy	101.2	582.9	95.7	562.7	15.4	78.5			5	80.8	412.1				1,224.2
2	3	None 0	1) Light	34.1	196.4	91.3	536.8	13.2	67.3			1	24.0	122.4	6	83.2	424.3	800.6
			2) Medium	46.2	266.1	91.3	536.8	13.2	67.3			2	29.2	148.9	7	96.4	491.6	870.3
			3) Med. Heavy	60.5	348.5	91.3	536.8	13.2	67.3			3	38.0	193.8	8	136.8	697.7	952.6
			4) Heavy	77.0	443.5	91.3	536.8	13.2	67.3			4	48.6	247.9				1,047.7
			5) Ex. Heavy	99.0	570.2	91.3	536.8	13.2	67.3			5	57.2	291.7				1,174.4
2	1, 2, 3 4, 7	None 0	1) Light	34.1	196.4	91.3	536.8	13.2	67.3			1	11.4	58.1	6	38.8	197.9	800.6
			2) Medium	46.2	266.1	91.3	536.8	13.2	67.3			2	14.0	71.4	7	48.8	248.9	870.3
			3) Med. Heavy	60.5	348.5	91.3	536.8	13.2	67.3			3	18.8	95.9	8	68.8	350.9	952.6
			4) Heavy	77.0	443.5	91.3	536.8	13.2	67.3			4	24.0	122.4				1,047.7
			5) Ex. Heavy	99.0	570.2	91.3	536.8	13.2	67.3			5	28.8	146.9				1,174.4
2	5, 8	None 0	1) Light	29.7	171.1	88.0	517.4	9.9	50.5			1	11.4	58.1	6	38.8	197.9	739.0
			2) Medium	42.9	247.1	88.0	517.4	9.9	50.5			2	14.0	71.4	7	48.8	248.9	815.0
			3) Med. Heavy	56.6	326.0	88.0	517.4	9.9	50.5			3	18.8	95.9	8	68.8	350.9	893.9
			4) Heavy	72.6	418.2	88.0	517.4	9.9	50.5			4	24.0	122.4				986.1
			5) Ex. Heavy	95.7	551.2	88.0	517.4	9.9	50.5			5	28.8	146.9				1,119.2
2	9	None 0	1) Light	19.8	114.0	51.7	304.0	7.7	39.3			1	10.8	55.1	6	35.6	181.6	457.3
			2) Medium	29.7	171.1	51.7	304.0	7.7	39.3			2	13.0	66.3	7	44.8	228.5	514.3
			3) Med. Heavy	42.9	247.1	51.7	304.0	7.7	39.3			3	17.6	89.8	8	62.6	319.3	590.4
			4) Heavy	56.1	323.1	51.7	304.0	7.7	39.3			4	22.0	112.2				666.4
			5) Ex. Heavy	66.0	380.2	51.7	304.0	7.7	39.3			5	24.6	125.5				723.4
2	6	None 0	1) Light	20.9	120.4	80.3	472.2	7.7	39.3			1	6.0	30.6	6	15.4	78.5	631.8
			2) Medium	33.0	190.1	80.3	472.2	7.7	39.3			2	6.8	34.7	7	18.8	95.9	701.5
			3) Med. Heavy	46.2	266.1	80.3	472.2	7.7	39.3			3	9.0	45.9	8	25.6	130.6	777.5
			4) Heavy	58.3	335.8	80.3	472.2	7.7	39.3			4	10.4	53.0				847.2
			5) Ex. Heavy	75.9	437.2	80.3	472.2	7.7	39.3			5	12.0	61.2				948.6

All base R/W increased 2.00 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 02
Widen Resurface and Correction of Vertical and Horizontal Deficiencies or Reconstruct on Existing Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE														Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE		RIGHT-OF-WAY						
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	5.100 Factor	Code	Base	5.100 Factor	
2	10 , 13	None 0	1) Light	12.1	69.7	38.5	226.4	6.6	33.7			1	6.0	30.6	6	15.4	78.5	329.7
			2) Medium	10.9	62.8	38.5	226.4	6.6	33.7			2	6.8	34.7	7	18.8	95.9	322.8
			3) Med. Heavy	35.2	202.8	38.5	226.4	6.6	33.7			3	9.0	45.9	8	25.6	130.6	462.8
			4) Heavy	47.3	272.4	38.5	226.4	6.6	33.7			4	10.4	53.0				532.5
			5) Ex. Heavy	66.0	380.2	38.5	226.4	6.6	33.7			5	12.0	61.2				640.2
2	11 , 12	None 0	1) Light	19.8	114.0	49.5	291.1	9.9	50.5			1	7.2	36.7	6	23.3	118.8	455.6
			2) Medium	29.7	171.1	49.5	291.1	9.9	50.5			2	8.6	43.9	7	28.8	146.9	512.6
			3) Med. Heavy	39.6	228.1	49.5	291.1	9.9	50.5			3	10.6	54.1	8	40.6	207.1	569.6
			4) Heavy	49.5	285.1	49.5	291.1	9.9	50.5			4	14.4	73.4				626.7
			5) Ex. Heavy	59.4	342.1	49.5	291.1	9.9	50.5			5	17.4	88.7				683.7

All base R/W increased 2.00 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 03
Reconstruct on Offset Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
Buy 4-Ln. R/W 3	3	Full Ultimate 1	1) Light	49.5	285.1	126.5	743.8	13.2	67.3	5.5	32.8	1	38.5	196.4	6	90.0	459.0	1,129.1
			2) Medium	69.5	400.3	126.5	743.8	13.2	67.3	5.5	32.8	2	43.0	219.3	7	108.8	554.6	1,244.3
			3) Med. Heavy	99.0	570.2	126.5	743.8	13.2	67.3	5.5	32.8	3	52.5	267.8	8	143.5	731.9	1,414.2
			4) Heavy	121.0	697.0	126.5	743.8	13.2	67.3	5.5	32.8	4	61.8	314.9				1,540.9
			5) Ex. Heavy	360.0	2,073.6	126.5	743.8	13.2	67.3	5.5	32.8	5	72.5	369.8				2,917.6
Buy 4-Ln. R/W 3	3, 7	None 0	1) Light	44.0	253.4	115.5	679.1	11.0	56.1			1	30.0	153.0	6	104.0	530.4	988.7
			2) Medium	66.0	380.2	115.5	679.1	11.0	56.1			2	36.5	186.2	7	120.5	614.6	1,115.4
			3) Med. Heavy	93.5	538.6	115.5	679.1	11.0	56.1			3	47.5	242.3	8	171.0	872.1	1,273.8
			4) Heavy	115.5	665.3	115.5	679.1	11.0	56.1			4	60.8	309.8				1,400.5
			5) Ex. Heavy	360.0	2,073.6	115.5	679.1	11.0	56.1			5	71.5	364.7				2,808.8
2	3	None 0	1) Light	44.0	253.4	115.5	679.1	11.0	56.1			1	16.8	85.4	6	37.5	191.3	988.7
			2) Medium	66.0	380.2	115.5	679.1	11.0	56.1			2	18.5	94.4	7	43.8	223.1	1,115.4
			3) Med. Heavy	93.5	538.6	115.5	679.1	11.0	56.1			3	22.5	114.8	8	55.0	280.5	1,273.8
			4) Heavy	115.5	665.3	115.5	679.1	11.0	56.1			4	26.0	132.6				1,400.5
			5) Ex. Heavy	360.0	2,073.6	115.5	679.1	11.0	56.1			5	30.0	153.0				2,808.8
2	1, 2, 4 5, 8	None 0	1) Light	38.5	221.8	110.0	646.8	9.9	50.5			1	16.8	85.4	6	45.0	229.5	919.1
			2) Medium	60.5	348.5	110.0	646.8	9.9	50.5			2	18.5	94.4	7	56.2	286.6	1,045.8
			3) Med. Heavy	84.7	487.9	110.0	646.8	9.9	50.5			3	22.5	114.8	8	75.0	382.5	1,185.2
			4) Heavy	108.9	627.3	110.0	646.8	9.9	50.5			4	28.7	146.4				1,324.6
			5) Ex. Heavy	350.0	2,016.0	110.0	646.8	9.9	50.5			5	35.0	178.5				2,713.3
2	9	None 0	1) Light	33.0	190.1	71.5	420.4	10.5	53.6			1	15.0	76.5	6	39.8	202.7	664.1
			2) Medium	49.5	285.1	71.5	420.4	10.5	53.6			2	17.3	88.0	7	48.8	248.6	759.1
			3) Med. Heavy	71.5	411.8	71.5	420.4	10.5	53.6			3	21.8	110.9	8	66.8	340.4	885.8
			4) Heavy	93.5	538.6	71.5	420.4	10.5	53.6			4	26.3	133.9				1,012.5
			5) Ex. Heavy	320.0	1,843.2	71.5	420.4	10.5	53.6			5	30.8	156.8				2,317.2
2	6	None 0	1) Light	27.5	158.4	88.0	517.4	8.8	44.9			1	7.5	38.3	6	19.3	98.2	720.7
			2) Medium	49.5	285.1	88.0	517.4	8.8	44.9			2	8.5	43.4	7	23.5	119.9	847.4
			3) Med. Heavy	73.7	424.5	88.0	517.4	8.8	44.9			3	11.3	57.4	8	32.0	163.2	986.8
			4) Heavy	97.9	563.9	88.0	517.4	8.8	44.9			4	13.0	66.3				1,126.2
			5) Ex. Heavy	390.0	2,246.4	88.0	517.4	8.8	44.9			5	15.0	76.5				2,808.7

Base R/W code 4,5,6,7,8 increased from 2000.

All base R/W increased 2.50 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 03
Reconstruct on Offset Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.360 Factor	Base	5.480 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
2	10 , 13	None 0	1) Light	27.5	147.4	55.0	301.4	6.6	33.7			1	7.5	38.3	6	19.3	98.2	482.5
			2) Medium	49.5	265.3	55.0	301.4	6.6	33.7			2	8.5	43.4	7	23.5	119.9	600.4
			3) Med. Heavy	73.7	395.0	55.0	301.4	6.6	33.7			3	11.3	57.4	8	32.0	163.2	730.1
			4) Heavy	97.9	524.7	55.0	301.4	6.6	33.7			4	13.0	66.3				859.8
			5) Ex. Heavy	390.0	2,090.4	55.0	301.4	6.6	33.7			5	15.0	76.5				2,425.5
2	11 , 12	None 0	1) Light	33.0	176.9	66.0	361.7	8.8	44.9			1	12.8	65.0	6	25.3	128.8	583.4
			2) Medium	49.5	265.3	66.0	361.7	8.8	44.9			2	14.0	71.4	7	29.8	151.7	671.9
			3) Med. Heavy	66.0	353.8	66.0	361.7	8.8	44.9			3	16.3	82.9	8	36.3	184.9	760.3
			4) Heavy	82.5	442.2	66.0	361.7	8.8	44.9			4	18.5	94.4				848.8
			5) Ex. Heavy	300.0	1,608.0	66.0	361.7	8.8	44.9			5	20.8	105.8				2,014.6

All base R/W increased 2.00 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 04
Construct on New Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
4	1,2,4 7	None 0	1) Light	77.0	443.5	231.0	1,358.3	19.8	101.0			1	33.6	171.4	6	121.6	620.2	1,902.8
			2) Medium	121.0	697.0	231.0	1,358.3	19.8	101.0			2	41.6	212.2	7	153.6	783.4	2,156.2
			3) Med. Heavy	176.0	1,013.8	231.0	1,358.3	19.8	101.0			3	59.2	301.9	8	217.6	1109.8	2,473.0
			4) Heavy	220.0	1,267.2	231.0	1,358.3	19.8	101.0			4	73.6	375.4		0.0	0.0	2,726.5
			5) Ex. Heavy	264.0	1,520.6	231.0	1,358.3	19.8	101.0			5	89.6	457.0		0.0	0.0	2,979.9
4	1,2,4 7	Full Ultimate 1	1) Light	88.0	506.9	242.0	1,423.0	29.7	151.5	16.5	98.5	1	33.6	171.4	6	121.6	620.2	2,179.8
			2) Medium	143.0	823.7	242.0	1,423.0	29.7	151.5	16.5	98.5	2	41.6	212.2	7	153.6	783.4	2,496.6
			3) Med. Heavy	187.0	1,077.1	242.0	1,423.0	29.7	151.5	16.5	98.5	3	59.2	301.9	8	217.6	1109.8	2,750.1
			4) Heavy	231.0	1,330.6	242.0	1,423.0	29.7	151.5	16.5	98.5	4	73.6	375.4			0.0	3,003.5
			5) Ex. Heavy	275.0	1,584.0	242.0	1,423.0	29.7	151.5	16.5	98.5	5	89.6	457.0			0.0	3,256.9
4	1,2,4 7	Full Initial 2	1) Light	99.0	570.2	266.0	1,564.1	44.0	224.4	77.0	459.7	1	33.6	171.4	6	121.6	620.2	2,818.4
			2) Medium	154.0	887.0	266.0	1,564.1	44.0	224.4	77.0	459.7	2	41.6	212.2	7	153.6	783.4	3,135.2
			3) Med. Heavy	198.0	1,140.5	266.0	1,564.1	44.0	224.4	77.0	459.7	3	59.2	301.9	8	217.6	1109.8	3,388.7
			4) Heavy	242.0	1,393.9	266.0	1,564.1	44.0	224.4	77.0	459.7	4	73.6	375.4		0.0	0.0	3,642.1
			5) Ex. Heavy	286.0	1,647.4	266.0	1,564.1	44.0	224.4	77.0	459.7	5	89.6	457.0		0.0	0.0	3,895.5
Buy 4-Ln. R/W 2,3	3 Urban-22	Full Ultimate 1	1) Light	49.5	285.1	126.0	740.9	13.2	67.3	5.5	32.8	1	33.6	171.4	6	121.6	620.2	1,126.2
			2) Medium	71.5	411.8	126.0	740.9	13.2	67.3	5.5	32.8	2	41.6	212.2	7	153.6	783.4	1,252.9
			3) Med. Heavy	99.0	570.2	126.0	740.9	13.2	67.3	5.5	32.8	3	59.2	301.9	8	217.6	1109.8	1,411.3
			4) Heavy	121.0	697.0	126.0	740.9	13.2	67.3	5.5	32.8	4	73.6	375.4			0.0	1,538.0
			5) Ex. Heavy	414.0	2,384.6	126.0	740.9	13.2	67.3	5.5	32.8	5	89.6	457.0			0.0	3,225.7
Buy 4-Ln. R/W 2,3	3	None 0	1) Light	44.0	253.4	115.5	679.1	11.0	56.1			1	24.0	122.4	6	96.0	489.6	988.7
			2) Medium	66.0	380.2	115.5	679.1	11.0	56.1			2	30.4	155.0	7	108.8	554.9	1,115.4
			3) Med. Heavy	93.5	538.6	115.5	679.1	11.0	56.1			3	40.0	204.0	8	153.6	783.4	1,273.8
			4) Heavy	115.5	665.3	115.5	679.1	11.0	56.1			4	52.8	269.3		0.0	0.0	1,400.5
			5) Ex. Heavy	414.0	2,384.6	115.5	679.1	11.0	56.1			5	62.4	318.2		0.0	0.0	3,119.9
2	5,8	None 0	1) Light	43.5	250.6	110.0	646.8	9.9	50.5			1	11.2	57.1	6	46.4	236.6	947.9
			2) Medium	64.5	371.5	110.0	646.8	9.9	50.5			2	14.4	73.4	7	59.2	301.9	1,068.8
			3) Med. Heavy	89.5	515.5	110.0	646.8	9.9	50.5			3	20.8	106.1	8	84.8	432.5	1,212.8
			4) Heavy	113.5	653.8	110.0	646.8	9.9	50.5			4	27.2	138.7				1,351.1
			5) Ex. Heavy	400.0	2,304.0	110.0	646.8	9.9	50.5			5	33.6	171.4				3,001.3

All base R/W increased 1.60 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 04
Construct on New Alignment

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE								RIGHT-OF-WAY						Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE				5.100			5.100	
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	Factor	Code	Base	Factor	
2	9 , 10	None 0	1) Light	40.0	230.4	71.5	420.4	10.5	53.6				10.1	51.4	16	41.8	213.0	704.4
			2) Medium	56.5	325.4	71.5	420.4	10.5	53.6				11.4	57.9		53.4	272.5	799.4
			3) Med. Heavy	78.5	452.2	71.5	420.4	10.5	53.6				18.7	95.5	18	76.3	389.2	926.1
			4) Heavy	100.5	578.9	71.5	420.4	10.5	53.6				24.5	124.8				1,052.9
			5) Ex. Heavy	380.5	2,191.7	71.5	420.4	10.5	53.6				30.2	154.2				2,665.7
2	6 , 13	None 0	1) Light	39.5	227.5	88.0	517.4	8.8	44.9				7.5	38.4	16	16.3	83.2	789.8
			2) Medium	61.5	354.2	88.0	517.4	8.8	44.9				8.3	42.4		19.5	99.6	916.6
			3) Med. Heavy	85.5	492.5	88.0	517.4	8.8	44.9				9.9	50.6	18	25.9	132.2	1,054.8
			4) Heavy	119.9	690.6	88.0	517.4	8.8	44.9				11.5	58.8				1,252.9
			5) Ex. Heavy	400.0	2,304.0	88.0	517.4	8.8	44.9				13.1	66.9				2,866.3
2	11 , 12	None 0	1) Light	33.0	190.1	66.0	388.1	8.8	44.9				8.2	41.6	16	29.4	150.1	623.0
			2) Medium	49.5	285.1	66.0	388.1	8.8	44.9				10.1	51.4		36.6	186.9	718.1
			3) Med. Heavy	66.0	380.2	66.0	388.1	8.8	44.9				13.9	71.0	18	52.3	266.8	813.1
			4) Heavy	82.5	475.2	66.0	388.1	8.8	44.9				17.8	90.6				908.2
			5) Ex. Heavy	250.0	1,440.0	66.0	388.1	8.8	44.9				21.6	110.2				1,873.0

All base R/W increased 1.60 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 05
Add 2 New Lanes, No Improvement to Old Lanes

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE													Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE		RIGHT-OF-WAY					
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	5.100 Factor	Code	Base	5.100 Factor	
4	1, 2, 4 7	None 0	1) Light	48.4	278.8	110.0	646.8	13.2	67.3				23.3	118.8		62.4	318.2	992.9
			2) Medium	75.9	437.2	110.0	646.8	13.2	67.3				26.7	136.1		68.3	348.5	1,151.3
			3) Med. Heavy	103.4	595.6	110.0	646.8	13.2	67.3				31.8	162.1		92.1	469.9	1,309.7
			4) Heavy	125.4	722.3	110.0	646.8	13.2	67.3				38.6	196.8				1,436.4
			5) Ex. Heavy	414.0	2,384.6	110.0	646.8	13.2	67.3				43.7	222.8				3,098.8
4	1, 2, 4 7	Full Initial 1	1) Light	66.0	380.2	187.0	1,099.6	44.0	224.4	77.0	459.7		28.2	143.9		75.0	382.3	2,163.8
			2) Medium	110.0	633.6	187.0	1,099.6	44.0	224.4	77.0	459.7		32.5	165.6		92.0	469.0	2,417.3
			3) Med. Heavy	137.5	792.0	187.0	1,099.6	44.0	224.4	77.0	459.7		41.0	208.9		109.0	555.7	2,575.7
			4) Heavy	170.5	982.1	187.0	1,099.6	44.0	224.4	77.0	459.7		49.5	252.3				2,765.7
			5) Ex. Heavy	450.0	2,592.0	187.0	1,099.6	44.0	224.4	77.0	459.7		58.0	295.6				4,375.7

All base R/W increased 1.70 from 2000.

2002 RURAL DESIGN COST PER MILE
IMPROVEMENT TYPE 06
Add 2 New Lanes, Widen & Resurface Old Lanes

Includes 15% A., E. & C.

Number of Lanes	Future Design Class	Access Control	Grading Type	COST PER MILE														Total Less R/W
				GRADE & DRAIN		BASE & SURFACE		SOD & SIGN		STRUCTURE		RIGHT-OF-WAY						
				Base	5.760 Factor	Base	5.880 Factor	Base	5.100 Factor	Base	5.970 Factor	Code	Base	5.100 Factor	Code	Base	5.100 Factor	
4	1, 2, 4 7	None 0	1) Light	75.9	437.2	178.2	1,047.8	17.6	89.8	77.0			13.7	69.9		36.7	187.2	1,574.8
			2) Medium	108.9	627.3	178.2	1,047.8	17.6	89.8	77.0			15.7	80.1		40.2	205.0	1,764.8
			3) Med. Heavy	141.9	817.3	178.2	1,047.8	17.6	89.8	77.0			18.7	95.4		54.2	276.4	1,954.9
			4) Heavy	176.0	1,013.8	178.2	1,047.8	17.6	89.8	77.0			22.7	115.8				2,151.3
			5) Ex. Heavy	470.0	2,707.2	178.2	1,047.8	17.6	89.8	77.0			25.7	131.1				3,844.8
4	1, 2, 4 7	Full Initial 1	1) Light	92.4	532.2	266.2	1,565.3	44.0	224.4	77.0	459.7		16.6	84.7		44.1	224.9	2,781.6
			2) Medium	143.0	823.7	266.2	1,565.3	44.0	224.4	77.0	459.7		19.1	97.4		54.1	275.9	3,073.0
			3) Med. Heavy	176.0	1,013.8	266.2	1,565.3	44.0	224.4	77.0	459.7		24.1	122.9		64.1	326.9	3,263.1
			4) Heavy	221.1	1,273.5	266.2	1,565.3	44.0	224.4	77.0	459.7		29.1	148.4				3,522.9
			5) Ex. Heavy	490.0	2,822.4	266.2	1,565.3	44.0	224.4	77.0	459.7		34.1	173.9				5,071.7

2002 RURAL UTILITY COSTS FOR DESIGN CLASS 1 - 13

County Number	Imp. Type	Cost		Code
		Base	5.1 Factor	
1, 3, 11, 39, 58, 77	R/W each side R/W one side New R/W	11.5 17.0 23.0	58.7 86.8 117.3	1 2, 3, 5, 6 4, 7
2, 5, 7, 9, 16, 17, 23, 28 31, 45, 46, 48, 61, 64, 77	R/W each side R/W one side New R/W	18.4 27.6 36.8	93.8 140.8 187.7	1 2, 3, 5, 6 4, 7
4, 8, 15, 20, 34 50 , 57, 65, 71	R/W each side R/W one side New R/W	16.1 23.9 32.2	82.1 122.0 164.2	1 2, 3, 5, 6 4, 7
6, 12, 18, 21, 22 29, 35, 40, 49, 53, 73	R/W each side R/W one side New R/W	13.8 20.7 27.6	70.4 105.6 140.8	1 2, 3, 5, 6 4, 7
19, 24, 36, 42, 43 47, 54, 59, 66, 74, 75	R/W each side R/W one side New R/W	20.7 30.8 41.4	105.6 157.2 211.1	1 2, 3, 5, 6 4, 7
13, 70	R/W each side R/W one side New R/W	7.8 12.0 16.1	39.9 61.0 82.1	1 2, 3, 5, 6 4, 7

Base cost increased by 4.60 from 2000.

County Number	Imp. Type	Cost		Code
		Base	5.1 Factor	
33, 38, 44, 60, 68	R/W each side R/W one side New R/W	23.0 34.5 46.0	117.3 176.0 234.6	1 2, 3, 5, 6 4, 7
25, 27, 30, 52, 56, 67	R/W each side R/W one side New R/W	27.6 41.4 55.2	140.8 211.1 281.5	1 2, 3, 5, 6 4, 7
26, 37, 62	R/W each side R/W one side New R/W	29.9 44.6 59.8	152.5 227.6 305.0	1 2, 3, 5, 6 4, 7
51, 63, 69	R/W each side R/W one side New R/W	34.5 51.5 69.0	176.0 262.8 351.9	1 2, 3, 5, 6 4, 7
10, 14, 32	R/W each side R/W one side New R/W	43.7 65.3 87.4	222.9 333.1 445.7	1 2, 3, 5, 6 4, 7
55, 72	R/W each side R/W one side New R/W	48.3 72.2 96.6	246.3 368.3 492.7	1 2, 3, 5, 6 4, 7

Base cost increased by 4.60 from 2000.

Note: to determine utility cost- Multiply length in miles times cost per mile, add to R/W Cost.

MUNICIPAL TYPE IMPROVEMENTS
(08, 09)

Urban freeway estimated costs per mile are shown on the urban expressways sheet, page 16. The costs per mile shown are for the through lanes only. The cost of interchanges, frontage roads and cross streets must be calculated separately from the roadway additions sheet, page 17, and added to the mainline cost. Grade separation and interchange structures must also be calculated individually from the structures sheet, page 18.

To determine the cost per mile for a curbed section find the appropriate type of work code number for grading, drainage, base, surface and other on the municipal improvement code sheet, pages 13-14. Enter the work code cost form the Municipal Improvement Cost sheet, page 15, to obtain the cost per mile for each work type.
Multiply cost per mile times length (item 7), times correction factor (item 48) for grading and drainage.
Multiply cost per mile times length (item 7), times correction factor (item 48), times improvement width (item 50) for base and surface.

MUNICIPAL IMPROVEMENT CODES

IMPROVEMENT TYPE 08, 09

Design Class 23 - 30

GRADING	
Code	Requirement
0	No grading.
1	Remove existing curbs and widen under 12'.
2	Remove existing curbs and widen 12'- 22'.
3	Remove existing curbs and widen over 22'.
4	Widen existing open type to 48' standard curbed.
5	Widen existing open type to 52' standard curbed.
6	Widen existing open type to 48' standard expressway.
7	Widen existing open type to 72' standard expressway.
8	New 48' or 52' standard curbed.

DRAINAGE	
Code	Requirement
0	No drainage.
1	Curbs only.
2	Curbs and new minor storm drains.
3	Curbs and new major storm drains.
4	Curbs and tie to existing storm drains system.
5	Expressway shoulders.
*6	Number 1 with raised median.
*7	Number 2 with raised median.
*8	Number 3 with raised median.

* If median is to be non-barrier type, add width to surface width (includes continuous left turn lanes).

BASE	
Code	Requirement
0	No base.
1	Widen from existing width.
2	Remove existing base and surface and replace base.
3	Nothing in place, all new base.

SURFACE	
Code	Requirement
0	No surfacing
1	Widen from existing width to new width - high type.
2	Widen from existing width to new width - intermediate type.
3	Surface completely - high type.
4	Surface completely - intermediate type.

MUNICIPAL IMPROVEMENT CODES

IMPROVEMENT TYPE 08, 09

Design Class 23 - 30

OTHER		
A) Landscape. B) Replace sidewalks and driveways. C) Install or replace signal lights. D) Illuminate.		
Requirement	Major	Minor
None	0	0
A	1	1
A, B	2	2
A, B, C	3	4
A, B, C, D	5	6
C	7	7
D	8	9

RIGHT-OF-WAY			
MUNICIPAL			
Requirement	Low	Average	High
No right-of-way required or no cost involved.	0	0	0
Rural type area.	1	2	3
Residential area.	4	5	6
Business area.	7	8	9

RIGHT-OF-WAY	
RURAL	
Code	Cost per acre, average
0	No cost involved.
1	$0 to $400
2	400 to 800
3	800 to 1,200
4	1,200 to 1,600
5	1,600 to 2,000
6	2,000 to 3,000
7	3,000 to 4,000
8	Over 4,000

REDO RURAL TABLE

MUNICIPAL IMPROVEMENT COST

Improvement Type 08, 09
Design Class 23 - 30

GRADING				DRAINAGE			BASE			SURFACE			OTHER			RIGHT OF WAY		
Code	Area Type	Base	5.760 Factor	Code	Base	5.760 Factor	Code	Base*	5.880 Factor*	Code	Base*	5.880 Factor*	Code	Base	5.100 Factor	Code	Base	5.100 Factor
	6) Low	9.3	53.6	0	0	0.0	0	0	0.0	0	0	0.0	0	0.0	0.0	0	0	0.0
1	7) Average	11.7	67.4	1	29.0	167.0	1	1.4	8.2	1	3.3	19.4	1	14.1	71.8	1	27.36	139.5
	8) High	16.5	95.0	2	70.1	405.5	2	1.6	9.4	2	2	11.8	2	35.2	179.5	2	54.72	279.1
	6) Low	18.8	108.3	3	122	546.3	3	1.7	10.0	3	2.9	17.1	3	70.4	359.0	3	109.44	558.1
2	7) Average	23.5	135.4	4	50.6	291.5				4	2.6	15.3	4	123.2	628.3	4	58.14	296.5
	8) High	33.0	190.1	5	38.5	221.8							5	123.2	628.3	5	116.28	593.0
	6) Low	28.1	161.9	6	58.0	334.1							6	228.8	1166.9	6	348.84	1779.1
3	7) Average	35.2	202.8	7	110.4	635.9							7	35.2	179.5	7	129.96	662.8
	8) High	49.2	283.4	8	141.2	813.3							8	52.8	269.3	8	258.78	1 319.8
	6) Low	28.1	161.9										9	105.6	538.6	9	780.9	3 982.6
4	7) Average	35.2	202.8															
	8) High	49.5	285.1															
	6) Low	28.6	164.7															
5	7) Average	35.8	206.2															
	8) High	50.0	288.0															
	6) Low	30.8	177.4															
6	7) Average	38.5	221.8															
	8) High	46.2	266.1															
	6) Low	36.3	209.1															
7	7) Average	44.0	253.4															
	8) High	51.7	297.8															
	6) Low	41.8	240.8															
8	7) Average	52.2	300.7															
	8) High	74.1	426.8															
	6) Low	0.0	0.0															
0	7) Average	0.0	0.0															
	8) High	0.0	0.0															

* Cost is in cost per mile-per foot of width.

Other base increased to 3.20. by

R/W base increased to 11.94. by

URBAN EXPRESSWAYS*

Mainline Construction Only (FDC 20-22)

Includes 15% Administration, Engineering & Contingencies

Number Lanes	Improvement Type	Access Control	Grade Type	Grade & Drain		Base & Surface		Sod & Sign		Right - Of - Way & Utilities						Total Less R/W
					5.760		5.880		5.100			5.100			5.100	
				Base	Factor	Base	Factor	Base	Factor	Code	Base	Factor	Code	Base	Factor	
4	08 , 09	Full Initial 2	6) Low	128.0	737.3	291.0	1,711.1	96.0	489.6	0	0.0	0.0	5	1,150.0	4,105.5	2,938.0
			7) Median	170.0	979.2	291.0	1,711.1	96.0	489.6	1	11.5	41.1	6	1,875.0	6,693.8	3,179.9
			8) High	229.0	1,319.0	291.0	1,711.1	96.0	489.6	2	37.5	133.9	7	3,000.0	10,710.0	3,519.7
			9) Extra High	290.0	1,670.4	291.0	1,711.1	96.0	489.6	3	375.0	1,338.8	8	3,750.0	13,387.5	3,871.1
										4	750.0	2,677.5	9	5,250.0	18,742.5	
6	08 , 09	Full Initial 2	6) Low	166.0	956.2	424.0	2,493.1	117.0	596.7	0	0.0	0.0	5	1,150.0	4,105.5	4,046.0
			7) Median	232.0	1,336.3	424.0	2,493.1	117.0	596.7	1	11.5	41.1	6	1,875.0	6,693.8	4,426.1
			8) High	315.0	1,814.4	424.0	2,493.1	117.0	596.7	2	37.5	133.9	7	3,000.0	10,710.0	4,904.2
			9) Extra High	400.0	2,304.0	424.0	2,493.1	117.0	596.7	3	375.0	1,338.8	8	3,750.0	13,387.5	5,393.8
										4	750.0	2,677.5	9	5,250.0	18,742.5	
8	08 , 09	Full Initial 2	6) Low	207.0	1,192.3	555.0	3,263.4	123.0	627.3	0	0.0	0.0	5	1,150.0	4,105.5	5,083.0
			7) Median	289.0	1,664.6	555.0	3,263.4	123.0	627.3	1	11.5	41.1	6	1,875.0	6,693.8	5,555.3
			8) High	408.0	2,350.1	555.0	3,263.4	123.0	627.3	2	37.5	133.9	7	3,000.0	10,710.0	6,240.8
			9) Extra High	525.0	3,024.0	555.0	3,263.4	123.0	627.3	3	375.0	1,338.8	8	3,750.0	13,387.5	6,914.7
										4	750.0	2,677.5	9	5,250.0	18,742.5	

* Costs of interchanges, frontage roads, cross streets, grade separations and interchange structures must be calculated and added. See mainline addition sheet and structure cost sheet.

Note: Cost works off Future Design Class, not improvement type.

ROADWAY ADDITION TO MAINLINE URBAN EXPRESSWAYS

Construction costs only, does not include r/w or utility relocation.

Additions	Improvement Type	Estimated Cost (in thousands)
Frontage Roads	13	2,500 per mile
Ramps	14	300 per mile
Cross Streets	15	Use Municipal Imp. Sheets
1/2 Diamond	17	6,000
Diamond (Minor)	16	8,000
Ramps (Hwy to Hwy)	20	5,000 per mile
Diamond (Major)	21	15,000
Urban Interchange without collector roads	18	50,000
Urban Interchange with collector roads	19	60,000

Includes A, E. & C.

STRUCTURE COST

Cost to construct a new structure

Length (ft.)	2002 Cost per Foot
20 to 110	
111 to 150	
151 to 190	
191 to 310	
over 310	

This is an estimated cost, actual cost depends on design and materials.

Oklahoma Department of Transportation
Planning and Research Division
Office 521-2704 Fax 521-6917

DATE: **June 6, 2006**

TO: **Files and Attendees**

FROM: **Planning and Research Division**

SUBJECT: **US 81 Corridor Study, ODOT Internal Status Meeting Minutes**

On Friday, May 26, 2006, a meeting was held to discuss the US 81 corridor study status. The meeting agenda is attached. In attendance were:

Bob Rose	ODOT Division VII	580-255-7586
Joe Khatib	ODOT Planning	405-521-3651
Eduardo Elder	ODOT Roadway	405-521-4848
Ronda Lindsay	ODOT Project Management	405-522-7603
Bob Rusch	ODOT Bridge	405-521-2606
Diane Abernathy	Benham	405-701-3167
Terry McFall	Benham	405-794-3531
Ron Weltzheimer	Benham	405-478-5353
Larry Wicks	Benham	918-492-1600

The following items were discussed and determined:

1. **Discussion of ROW costs for 2 alignments south of Minco: Existing and Alternate (i.e., curve correction) Alignments**
   - The total cost estimate for the Existing is approximately $1 milllion less than the Alternate.
   - If the Existing alternate is selected, Buggy Creek bridge could be widened for less money than a new Buggy Creek bridge could be built on the Alternate Alignment.
   - In summary, Bob Rose requested that Benham present the Existing Alignment as the recommended alternate at the next public meetings, and explain that the Alternate was not selected due to its additional costs and the fact that it would take the bank.

2. **Identified the following 12 construction segments and priorities ($5-10 million per segment):**
   - US 62 to 1320 CR (~3 miles); High Priority
   - 1320 CR to 1290 CR (~3 miles); Low Priority
   - 1290 CR to 1260 CR (~3 miles); Low Priority
   - 1260 CR to 1250 CR (~1 mile); Low Priority
   - 1250 CR to 1230 CR (~2 miles); Low Priority
   - 1230 CR to 1200 CR (3 miles); Low Priority
   - 1200 CR to South Street in Minco (beginning of existing 4-lane segment) (~2.5 miles); Medium Priority

- South Street to end of existing 4-lane segment north of Minco (~2 miles); Medium Priority
- 4-lane segment north of Minco to Canadian River Bridge; Medium Priority
- Canadian River Bridge, Medium Priority
- Canadian River Bridge to the Programmed Division IV project north of Union City; High Priority
- Programmed Division IV project, High Priority

3. **Chickasha Bypass Issues:**
   - Final report will recommend that all ROW for the Chickasha Bypass be acquired as soon as possible to protect the alignment.
   - ROW/utility costs will be presented in 2 segments, i.e., north and south of Norge Road.
   - Construction costs will be presented for the entire Chickasha Bypass.
   - Relocating utilities and construction of the bypass will be considered as Low Priority. The acquisition of ROW will be considered High Priority, with ROW acquisition starting on the north end.

4. **Public Meeting Issues:**

The next (and last) set of public meetings will briefly review the history of the corridor study, then present the Recommended Alternates. The construction segments in the Northern Segment and their priorities will be presented. Graphics of the Recommended Alternates and the segments will be presented. A table will be prepared for the meeting that provides information on each project length, improvement type, cost, and priority. The anticipated project schedule will be explained as follows:

- NEPA & Preliminary Engineering (2 – 3 years)
- ROW acquisition (4 years)
- Construction commences 8 – 10 years from now, at the earliest

5. **Final Report**
   - The "matrix" will be a simple decision table, with no use of scoring.
   - The concept of re-routing SH 37 will be briefly addressed in the report, with a note that the concept merits additional study in the future.
   - Bob Rose requested that Benham conduct a full-blown utility cost evaluation for use in costing the construction segments.
   - The construction costing approach will include the following:
     - The recently constructed Division IV project between I-40 and E1090 Country Road north of Union City will serve as example for pavement thicknesses.
     - 4-lane divided improvements will be estimated for construction of 2 new parallel lanes and reconstruction of the existing 2 lanes.
     - 4-lane undivided improvement in Minco will be estimated for mill, overlay, intersection improvement, and signals.
     - 4-lane undivided improvements (other than the Minco segment mentioned above) will be estimated for construction of 4 new lanes.

6. **Wrap-Up**
   - Bob Rose requested the costs for all "high priority" segments ASAP for programming purposes.

Oklahoma Department of Transportation

Planning and Research Division Office 521-2704 Fax 521-6917

DATE: August 22, 2006

TO: Files and Attendees

FROM: Planning and Research Division Engineer

SUBJECT: US 81 Corridor Study – ODOT Meeting Minutes

On Thursday, August 17, 2006, a meeting was held to prepare for the final set of public meetings for the US 81 Corridor Study project. In attendance were:

Diana Barlow	ODOT Relocation	521-2648
Kirk Goins	ODOT Roadway	521-2695
Jay Herbert	ODOT Relocation	521-2648
Joe Khatib	ODOT Planning	522-1410
Craig Moody	ODOT Planning	522-1465
Brenda Perry	ODOT Public Affairs	521-6006
Larry Reser	ODOT Survey	521-2621
Bob Rose	ODOT Division VII	580-255-7586
Bob Rusch	ODOT Bridge	521-2606
Dawn Sullivan	ODOT Planning	521-2927
Tim Tegeler	ODOT Roadway	521-2695
Diane Abernathy	Benham	701-3167
Terry McFall	Benham	794-3531
Ron Weltzheimer	Benham	478-5353
Larry Wicks	Benham	918-492-1600

The dates for the public meetings are:

- Thursday, 9/7/06, 6 – 8 pm, Grady County Fairgrounds Community Building, Chickasha, OK
- Tuesday, 9/19/06, 6 – 8 pm, Minco Public School Auditorium, Minco, OK

The group reviewed the draft public letters, addresses, notice, and meeting handouts for the public meetings. It was agreed that the public letters and meeting handouts should indicate that the public notice and meeting graphics will be posted on both the ODOT and Benham US 81 project websites. The meeting handouts should be modified to include a "What's Next?" section that discusses scheduling of the US 81 segments. It was agreed that a figure of the corridor will be included with the letters, and that comment sheets will be made available at the public meetings. The group was asked to forward any additional comments on the meeting documents by 8/22/06, so as to allow the letters to be mailed on 8/24/06.

The meeting graphics were reviewed. Footnotes indicating that construction costs were expressed in 2006$ will be added to both the North Segment and the Chickasha Segment

figures. The priorities for the Chickasha Bypass will indicate that ROW acquisition is "High" priority, and utility relocation and construction are "Low" priority. Benham will modify the 2030 traffic volume graphic for the Chickasha Segment to note the remaining traffic volume on "old" US 81.

The estimated construction costs for Segment 1 of the North Segment were discussed, particularly the various options for phasing and construction of the US 81/US 62 interchange ramps and the grade separation at the Union Pacific Railroad crossing on US 81.

The utility cost terminology was discussed. It was agreed that the current term "Private" should be clarified to represent those utilities ODOT is responsible for relocating, while "Public" represents those utilities that other entities must relocate.

The final report will be submitted to ODOT on a CD (as well as hard copy), so ODOT can post the report on their website. Benham's US 81 project website will link to ODOT, until it terminates sometime in Spring 2007.

US-81 CORRIDOR STUDY

Final Public Meeting
Recommended Alignments

US-81
Grady and Canadian Counties

EC No. 899
J/C 21603(04)

BENHAM

August 2006

MEETING AGENDA
US 81 CORRIDOR STUDY - ODOT PRE-MEETING
AUGUST 17, 2006

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1. Project Status Update

2. Proposed Public Meetings
   - Date, Time, Location:
     - Chickasha, Thursday, 09/07/06, 6:00 p.m. to 8:00 p.m.
     - Minco, Tuesday, 09/19/06, 6:00 p.m. to 8:00 p.m.
   - Letter and Mailing List (do we include basic figure of corridor?)
   - Public Notice
   - Meeting Handout
   - Comment Sheet or Not?
   - Graphics and Exhibits

3. Review of Minco Alignment
   - Existing vs. Alternate
   - Construction, ROW, and Utilities Cost Comparison

4. Review of Cost Estimates for Construction Segments, North Segment and Chickasha Bypass

5. Notice of Final Report Availability on Project Website
   a. Proposed project schedule (final report by 1/1/07; website operated until 4/1/07?)

PRELIMINARY COST STUDY
RECOMMENDATION OF ALTERNATES

US-81 CORRIDOR STUDY

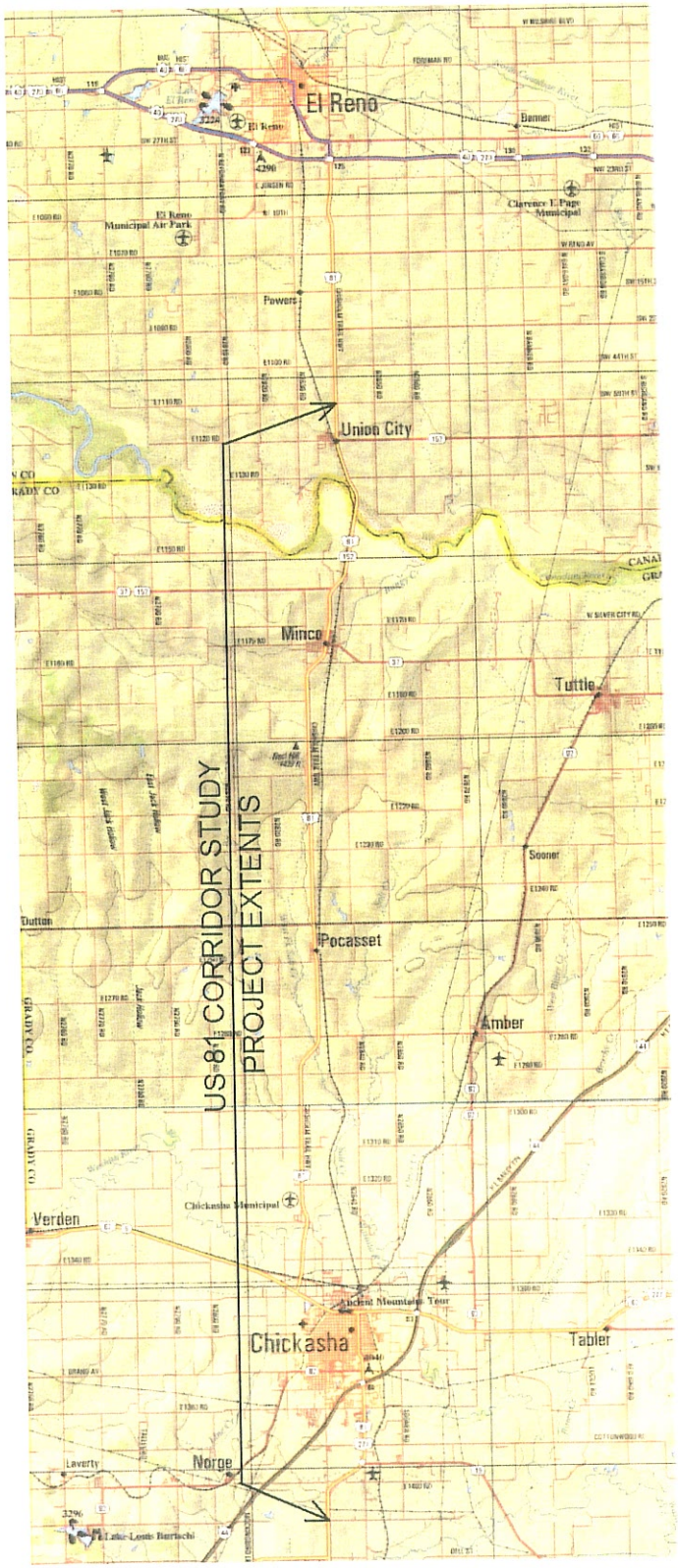
OKLAHOMA DEPARTMENT OF TRANSPORTATION

THE BENHAM COMPANIES, LLC

CONTENTS

08/17/2006

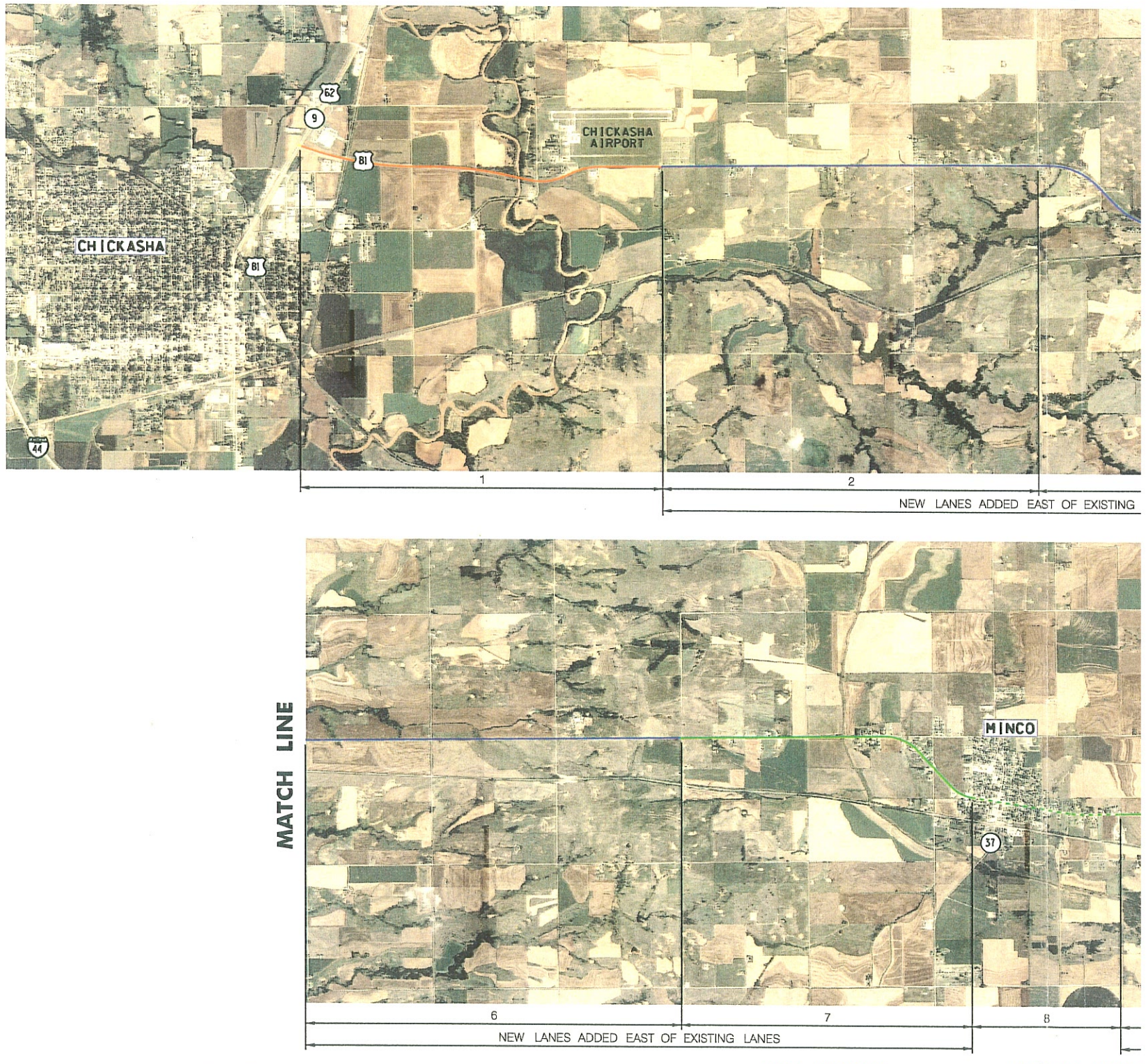
BENHAM



08/17/2006

BENHAM

US 81 CORRIDC
CHICKASHA, OK – U



LEGEND

Type of Improvement

AA Add Median & 2 New Lanes, Reconstruct Existing Lanes
BB Widen from Existing 2–Lane to 4–Lane Undivided
CC Mill and Overlay Existing 4–Lane Undivided

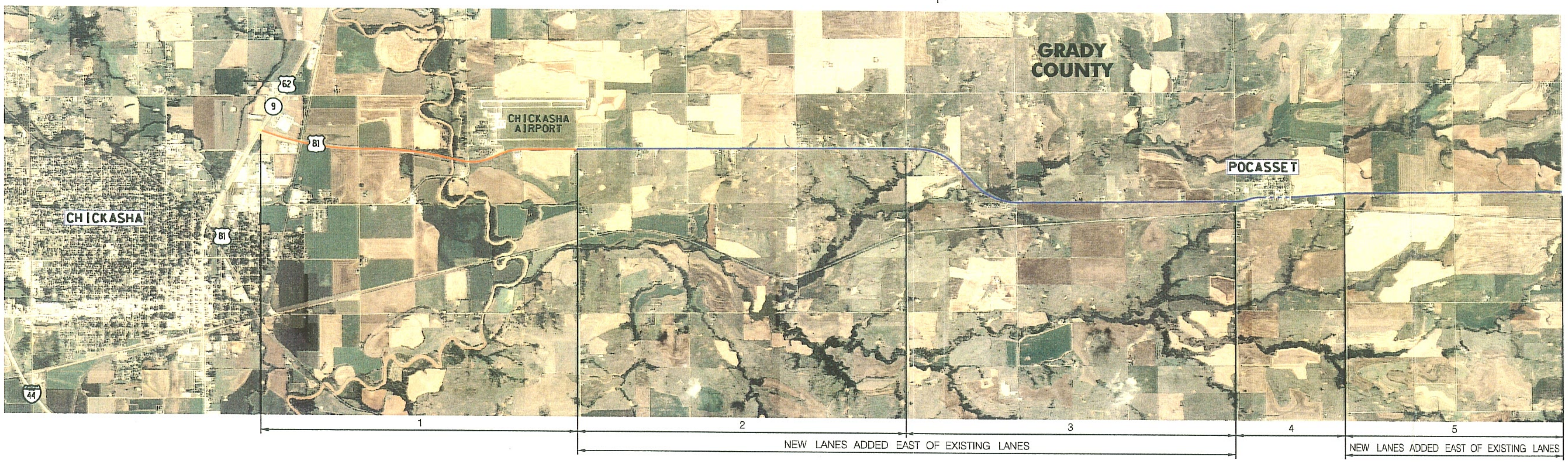
----- Existing 4 Lane Undivided

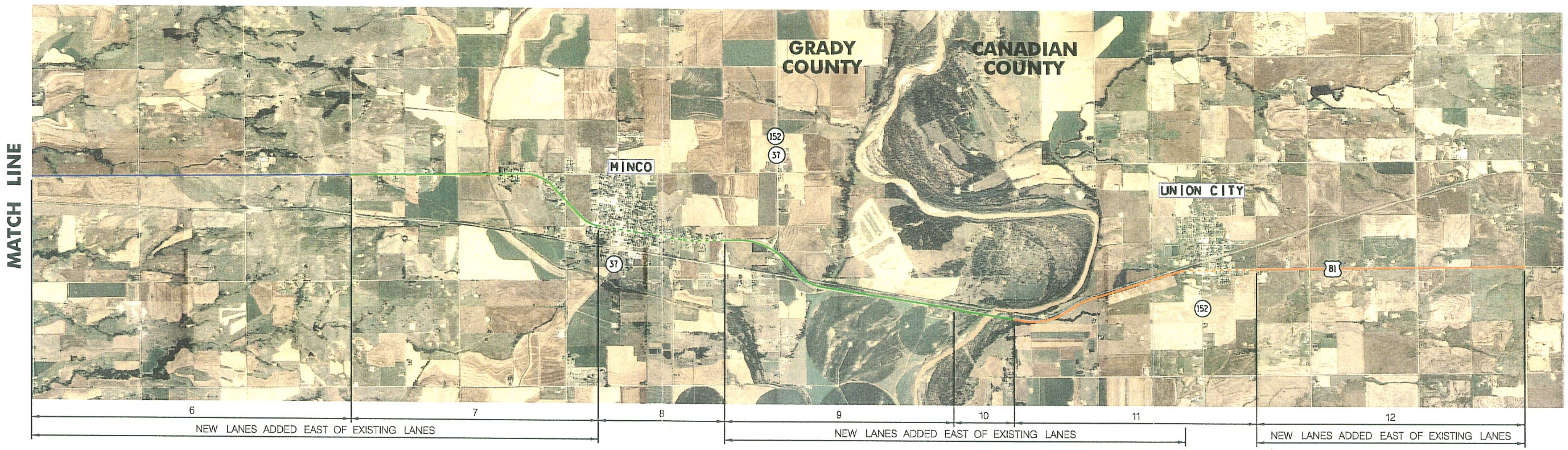
HIGH PRIORITY

MEDIUM PRIOR

Segment Identification	1	2	3	
Project Length (miles)	2.94	3.00	3.17	
Type of Improvement	AA	AA	AA	E
Project Cost ($ Million)	26.38	14.03	12.97	
Priority Group	High	Low	Low	

US 81 CORRIDOR STUDY
CHICKASHA, OK – UNION CITY, OK





LEGEND

Type of Improvement
- AA Add Median & 2 New Lanes, Reconstruct Existing Lanes
- BB Widen from Existing 2-Lane to 4-Lane Undivided
- CC Mill and Overlay Existing 4-Lane Undivided

- ----- Existing 4 Lane Undivided

HIGH PRIORITY MEDIUM PRIORITY LOW PRIORITY

Segment Identification	1	2	3	4	5	6	7	8	9	10	11	12
Project Length (miles)	2.94	3.00	3.17	1.00	2.00	3.00	2.50	1.20	2.30	0.57	2.36	2.50
Type of Improvement	AA	AA	AA	BB /CC	AA	AA	AA /BB	CC	AA /BB	AA	AA /CC	AA
Project Cost ($ Million)	26.38	14.03	12.97	3.19	7.75	10.76	11.43	2.83	11.61	6.89	9.50	11.95
Priority Group	High	Low	Low	Low	Low	Low	Medium	Medium	Medium	Medium	High	High

US 81 Corridor Study
PROJECT PRIORITY MAP

FINAL PUBLIC MEETING
RECOMMENDED ALIGNMENTS

U.S. 81 CORRIDOR STUDY

OKLAHOMA DEPARTMENT OF TRANSPORTATION
THE BENHAM COMPANIES, LLC

PROJECT STATUS:

DATA COLLECTION / ANALYSIS OF EXISTING DATA	100%
TRAFFIC ANALYSIS	100%
ENVIRONMENTAL CONSIDERATIONS	100%
MEETINGS / PUBLIC INVOLVEMENT Task Remaining: Final Public Meetings	80%
ALTERNATE STUDIES / FINAL REPORT Task Remaining: Final Report	75%

FINAL PUBLIC MEETING
RECOMMENDED ALIGNMENTS

U.S. 81 CORRIDOR STUDY

OKLAHOMA DEPARTMENT OF TRANSPORTATION
THE BENHAM COMPANIES, LLC

The focus of the US-81 Corridor Study is to evaluate existing U.S. 81 for improvement from Union City South to Chickasha including a possible Chickasha bypass. The study includes an inventory of existing conditions including traffic capacities, sufficiency rating and environmental conditions. A projection of future conditions concluding with a recommended alternate which is economical and has minimal environmental impacts is the purpose of this study.

FINAL PUBLIC MEETING

The project team will conduct two (2) public meetings at each of two stages during the project (4 meetings total). Appropriate locations will be selected throughout the project area. Public notice will consist of press releases and letters to elected and appointed local officials and key stakeholders. The first set of meetings will focus upon general characteristics of the U.S. 81 corridor, and preliminary alternatives under consideration. The second set of meetings will present tentative final recommended alternatives throughout the corridor. Exhibits will include alignments on aerial photographs, and appropriate handouts. After receipt of comments, summaries of the meetings will be prepared and included in the feasibility report.

FINAL REPORT

The study will be documented in report format. The final report will contain a refinement of data presented in previous submittals and also include final alternate recommendations with cost estimates. Alternates will be drawn on aerial photography utilizing the 1 inch=200 foot mosaics for by-pass areas only and 1 inch=1000 foot mosaics for the remainder of the corridor. Sketches will be provided of all new design and existing connections. Appropriate text and exhibits will document existing conditions, traffic data and analysis, estimated costs, and comparison of alternatives.

Final submittal will include bound copies:

- Summary Report – 100 copies
- Final Report – 25 copies
- Environmental Report – 5 copies

Oklahoma Department of Transportation

September 7, 2006
Grady County Fairgrounds Community Building

Welcome to the US 81 Public Meeting!

This public meeting is to present the results of the Corridor Study to evaluate US 81 for improvement to four lanes from the south end of the existing reconstruction of US 81 just north of Union City to south of SH 19 in Chickasha. The Study also considered the need for bypasses in the communities of Union City, Minco, Pocasset, and Chickasha. The improvement alternates selected as a result of the Study will be presented tonight.

US 81 Corridor Study Purpose

The purpose of this Study was to:

(1) evaluate existing conditions, including traffic capacities, roadway conditions, and environmental conditions;

(2) develop recommendations for improvements along the corridor which will be economical and have minimal environmental impacts;

(3) develop preliminary improvement construction costs and project requirements to aid in the programming of individual project segments; and

(4) provide information which may be used in the detailed environmental and design studies that will be necessary prior to actual construction.

Public Meeting Purpose

- Present the environmental, traffic and roadway information considered in developing the study recommendations
- Present the improvement alternates selected as a result of the Study

What's Next?

Meeting Agenda

1. Welcome and Introductions
2. Project Background
3. Environmental Data and Review Process
4. Design Process
5. Final Corridor Study Report
6. ~~ROW, Utilities, and Construction Scheduling~~ What's Next
7. Questions and Answers
8. Open Forum Session

Attachments

A graphic displaying the extent of the US 81 Corridor is attached as part of this handout. In addition, a comment sheet is attached for your convenience.

OKLAHOMA
KEEP OUR LAND GRAND

Add 2 websites

Oklahoma Department of Transportation

September 19, 2006
Minco Public School Auditorium

Welcome to the US 81 Public Meeting!

This public meeting is to present the results of the Corridor Study to evaluate US 81 for improvement to four lanes from the south end of the existing reconstruction of US 81 just north of Union City to south of SH 19 in Chickasha. The Study also considered the need for bypasses in the communities of Union City, Minco, Pocasset, and Chickasha. The improvement alternates selected as a result of the Study will be presented tonight.

US 81 Corridor Study Purpose

The purpose of this Study was to:

(1) evaluate existing conditions, including traffic capacities, roadway conditions, and environmental conditions;

(2) develop recommendations for improvements along the corridor which will be economical and have minimal environmental impacts;

(3) develop preliminary improvement construction costs and project requirements to aid in the programming of individual project segments; and

(4) provide information which may be used in the detailed environmental and design studies that will be necessary prior to actual construction.

Public Meeting Purpose

- Present the environmental, traffic and roadway information considered in developing the study recommendations
- Present the improvement alternates selected as a result of the Study

Meeting Agenda

1. Welcome and Introductions
2. Project Background
3. Environmental Data and Review Process
4. Design Process
5. Final Corridor Study Report
6. ROW, Utilities, and Construction Scheduling
7. Questions and Answers
8. Open Forum Session

Attachments

A graphic displaying the extent of the US 81 Corridor is attached as part of this handout. In addition, a comment sheet is attached for your convenience.

Oklahoma
Keep Our Land Grand

NOTICE OF PUBLIC MEETING

The Oklahoma Department of Transportation (ODOT) invites you to attend a public meeting at which the results of a **Corridor Study to evaluate US 81 for improvement to four lanes** from the south end of the existing reconstruction of US 81 just north of Union City to south of SH 19 in Chickasha will be presented. The Study also considered the need for bypasses in the communities of Union City, Minco, Pocasset, and Chickasha. The improvement alternates which have been selected as a result of the Study will be presented.

ODOT has scheduled public meetings in Minco and Chickasha. The Chickasha meeting is scheduled from **6:00 p.m. to 8:00 p.m, Thursday, September 7, 2006,** at the Grady County Fairgrounds Community Building, in Chickasha, OK. The Minco meeting is scheduled from **6:00 p.m. to 8:00 p.m, Tuesday, September 19, 2006,** at the Minco Public Schools Auditorium, Minco, OK. Representatives from ODOT and The Benham Companies, the engineering firm retained by ODOT to prepare the Corridor Study and documentation, will be on hand to present information regarding the selected improvement alternates.

Questions prior to the meeting may be directed to Mr. Joe Khatib, ODOT, at (405)522-1410, jkhatib@odot.org, Mrs. Diane Abernathy, Benham, at (405) 701-3167, diane.abernathy@benham.com, or by writing the Planning & Research Division, 200 Northeast 21st Street, Oklahoma City, Oklahoma 73105.

The Oklahoma Department of Transportation strives to accommodate the needs of all citizens, including those who may be disabled. If you would like to attend this meeting but find it difficult due to disability, architectural barrier, or other special needs, or if you require a sign-language interpreter, please contact Mr. Craig Moody at (405) 522-1465 or in writing at the Oklahoma Department of Transportation, 200 Northeast 21st Street, Room 2A2, Oklahoma City, Oklahoma 73105, no later than September 1, 2006.

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLEASE TELL YOUR FRIENDS AND NEIGHBORS

August ___, 2006

James Allard
Field Office Manager
Bureau of Reclamation, Oklahoma City Office
4149 Highline Blvd, Ste. 200

Oklahoma City, OK 73108-2097

Dear Mr. Allard:

The Oklahoma Department of Transportation (ODOT) has conducted a Study of the US 81 corridor to evaluate its improvement to four lanes from just north of Union City to south of SH 19 in Chickasha. The Study also considered the need for bypasses in the communities of Union City, Minco, Pocasset, and Chickasha. Two (2) public meetings have been scheduled to present the improvement alternates which have been selected as a result of the Study. The content of the meetings will be the same; the meetings will be held at different locations for the public's convenience. The first meeting will be held from 6:00 p.m. to 8:00 p.m., Thursday, September 7, 2006 at the Grady County Fairgrounds Community Building, Chickasha, Oklahoma. The second meeting will be held from 6:00 p.m. to 8:00 p.m. on Tuesday, September 19, 2006 at the Minco Public Schools Auditorium. Your participation is encouraged.

The meeting is further described in the enclosed public meeting notice. The local and surrounding media will be notified with a press release. In addition, the public meeting notice will be posted on the US 81 project website, as follows:

the and ODOT website

Address:	http://us81.benham.com
Username:	BENHAM/US81
Password:	ODOT81

Add ODOT website

Should you have any questions, please contact Mr. Joe Khatib, ODOT, at (405) 522-1410, jkhatib@odot.org or Mrs. Diane Abernathy at (405) 701-3167, Benham, diane.abernathy@benham.com.

Sincerely,

Dawn R. Sullivan, P.E.
Planning & Research Division Engineer

DRS/jda

Attachments: Public Meeting Notice

Field Office Manager James Allard
Bureau of Reclamation,
Oklahoma City Office
Highline Blvd, Ste. 200
Oklahoma City, OK 73108-2097

Chief Rob D. Lawrence
USEPA (6EN-XP)
Compliance Assurance & Enforcement
1445 Ross Avenue
Dallas, TX 75202-2733

Regulatory Branch Chief David Manning
Tulsa District Corps of Engineers
Environmental Analysis Section
1645 S. 101 E. Avenue
Tulsa, OK 74128-4628

Planning, Environmental & Regulatory (PER) Division Chief Larry Hogue
Tulsa District Corps of Engineers
1645 S. 101 E. Avenue
Tulsa, OK 74128-4629

Director Dan DeerInwater
Bureau of Indian Affairs
Southern Plains Regional Office
P.O. Box 368, WCD Office Complex
Anadarko, OK 73005

Field Supervisor (ES) Jerry Brabander
Attn: Ken Frazier
U.S. Fish & Wildlife Service
P.O. Box 1306
Albuquerque, NM 87103

State Conservationist M. Darrel Dominick
The Natural Resources Conservation Service
100 USDA, Suite 203
Stillwater, OK 74074-2655

Larry Fiddler, Director or
Michael Schmidt, Deputy Director
OCC Oil & Gas Conservation Division
Jim Thorpe Building
2101 North Lincoln Blvd
Oklahoma City, OK 73105

Environmental Review Coordinator
Margaret M. Graham
D.E.Q. - Customer Assistance Program
P.O. Box 1677
Oklahoma City, OK 73101-1677

Executive Director Bob Blackburn
Oklahoma Historical Society
2101 North Lincoln Blvd, Historical Bldg.
Oklahoma City, OK 73105-4915

Director Greg Duffy
Department of Wildlife Conservation
1807 North Lincoln Blvd
P.O. Box 53465
Oklahoma City, OK 73152-8804

Ken Morris
Oklahoma Water Resources Board
3800 North Classen
Oklahoma City, OK 73118

Executive Director Mike Thralls
Oklahoma Conservation Commission
2800 North Lincoln Blvd, Ste 160
Oklahoma City, OK 73105

Director Charles J. Mankin
Oklahoma Geological Survey
100 East Boyd, Room N-131
Norman, OK 73019-0628

Robert L. Brooks
Oklahoma Archaeological Survey
University of Oklahoma
111 East Chesapeake, Bldg 134
Norman, OK 73019-0575

Chairman Robert Tabor
Cheyenne-Arapaho Tribe
P.O. Box 38
Concho, OK 73022

Governor Bill Anoatubby
Chickasaw Nation
P.O. Box 1548
Ada, OK 74821

President Gary McAdams
Wichita & Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005

President Lindel Pettigrew
Chickasha Bank & Trust
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Chickasha, OK 73018

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Chickasha Chamber of Commerce
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Chickasha, OK 73018

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Standley Systems
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Chickasha, OK 73023

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Grady County Commissioner District 2
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Chickasha, OK 73018

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Chickasha Vice-Mayor
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Chickasha, OK 73018

George Plummer
KWCO Radio
500 Country Club
Chickasha, OK 73023

Helen Garrison, CPA
2802 County Club Drive
Chickasha, OK 73023

Mike Coponiti
USAO
2712 County Street 2780
Chickasha, OK 73018

George Tiner
Canadian Valley Technical Center
1401 Michigan Avenue
Chickasha, OK 73018

J Hays
Hays & Gordon
228 Chickasha Avenue
3rd Floor
Chickasha, OK 73018

John Mosley
Century 21/Mosley Real Estate
P.O. Box 2100
Chickasha, OK 73023

Mike Day
Michael Day Insurance
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Chickasha, OK 73018

Steve LaForge
LaForge Properties
S. 4th Street
Chickasha, OK 73018

Mike Brice
City of Chickasha
117 N. 4th Street
Chickasha, OK 73018

Henry Ross
Ross Home Care
301 S. 2nd
Chickasha, OK 73018

Chris Johnson
First National Bank & Trust
P.O. Box 271
Minco, OK 73045

Keith Lindsey
Minco Planning Commission
306 McComas Drive
Minco, OK 73059

Jim Ross
Minco School Board
1309 SW 3rd
Minco, OK 73059

Mike Nunamaker
Grady Memorial Hospital
2220 W. Iowa
Chickasha, OK 73018

Johhny Verser
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Minco, OK 73059

Barry and Susan Hollandsworth
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Minco, OK 73059

Hubert Davis
406 Hatcher Drive
Minco, OK 73059

Steve Boswell
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Minco, OK 73059

Randy Gregory
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Minco, OK 73059

Robert Reaka
P.O. Box 485
Minco, OK 73059-0485

Mary Lou Mitchell
Mary Lou's Eagles Nest Café
P.O. Box 359
Minco, OK 73059-0359

Harold Ratterman
P.O. Box A
Minco, OK 73059-0020

Bob Bratcher
Dairy Boy Drive In
1014 Carolyn Way
Minco, OK 73059-9470

Laramie Tallent
108 N. 5th
Minco, OK 73059

Roy and Marilyn Moss
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Oklahoma City, OK 73127

Alva Kirkegard
801 SW Burt
Minco, OK 73059

LaVerne Hines
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Minco, OK 73059-0523

Debi Keeble
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Minco, OK 73059-0221

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Minco, OK 73059

Larry Fitzgerald
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Minco, OK 73059

Gail Bomgardner
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Minco, OK 73059

Roy Koerner
900 State Highway 152
Minco, OK 73059

Robert Gray
928 SW Burt
Minco, OK 73059

John H. Swofford
Sooner Easy Shop
P.O. Drawer H
Minco, OK 73059

Grant A. Swofford
Sooner Easy Shop
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Minco, OK 73059

Elmer R. Johnson
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Minco, OK 73059

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883 County Road 1280
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), OK 73059

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TK Cattle Co.
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Pocasset, OK 73079

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518 N. Main
Union City, OK 73090

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Minco, OK 73059

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Minco, OK 73059

Bill Sheets
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Pocasset, OK 73079

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Minco Auto Supply
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Minco, OK 73059

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Minco, OK 73059

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Chickasha, OK 73018

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Box 527
Minco, OK 73059

Joe McComas
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Audie Ruthardt
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Minco, OK 73059

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Minco, OK 73059

Jay Garrett
405 NE Cemetery Road
Minco, OK 73059

JD and Myrna Crow
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Nick and Inga Sprowls
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David Sprowls
2002 NE Cemetery Road
Minco, OK 73059

Virginia Hayes
Box 624
Minco, OK 73059

Dave McGraw
1619 N. Cemetery Road
Minco, OK 73059

Jeremy Brown
1054 County Road 1240
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Gene and Sue Turner
Grady County Rural Water District #1
400 East Cardinal Street
Pocasset, OK 73079

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Dara Ross
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Minco City Council
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Leo Radtke
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l City, OK 73090

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Duncan, OK 73534

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326 South Main
Pocasset, OK 73079

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Oklahoma Turnpike Authority
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Oklahoma City, OK 73136-0357

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House of Representatives
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The Senate of Oklahoma
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The Honorable Ron Justice
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City of Union City
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Union City, OK 73090

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Mayor of Minco
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Minco, OK 73059

The Honorable Christie Rainey
Mayor of Pocasset
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Pocasset, OK 73079

The Honorable Jim Parker
Mayor of Chickasha
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Chickasha, OK 73018

City Manager Larry Shelton
City of Chickasha
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Executive Director Marilyn Feaver
Chickasha Chamber of Commerce
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Minco, OK 73059

Eric and Sheri Jensen
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Minco, OK 73054

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The First National Bank & Trust Co.
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Chickasha, OK 73023

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707 SW 10th
Minco, OK 73059

The Honorable T.J. McCullough
Mayor of Union City
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Union City, OK 73090

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Vice-Mayor of Union City
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Union City, OK 73090

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City of Union City Water Support
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...es Pappe
City of Union City Board Member
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Cecelia Kennedy
City of Union City Board Member
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Union City, OK 73090

Janice Monroe
City of Union City Board Member
P.O. Box 36
Union City, OK 73090

Chairman
Board of Grady County Commissioners
Grady County Courthouse
West Choctaw
Chickasha, OK 73018

Chairman
Board of Canadian County
Commissioners
Canadian County Courthouse
201 North Choctaw
El Reno, OK 73036

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1st Choice Realty in Oklahoma, LLC
25 East Carl Albert Parkway #A
McAlester, OK 74501

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The Senate of Oklahoma
2300 North Lincoln Boulevard,
Room 425
Oklahoma City, OK 73105

The Honorable Daisy Lawler
Route 1, Box 91
Comanche, OK 73529

Board Member Janice Monroe
City of Union City
P.O. Box 36
Union City, OK 73090

James Inhofe
United States Senate
Washington, DC 20510-3603

Tom Cole
United States House of Representatives
Washington, DC 20515

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The Senate of Oklahoma
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Room 412A
Oklahoma City, OK 73105

The Honorable Don Barrington
4605 NE Highlander Circle
Lawton, OK 73507

The Honorable Gilmer Capps
The Senate of Oklahoma
2300 North Lincoln Boulevard,
Room 424A
Oklahoma City, OK 73105

The Honorable Gilmer Capps
820 East 11th Street
Snyder, OK 73566

The Honorable Joe Dorman
The Senate of Oklahoma
2300 North Lincoln Boulevard,
Room 500
Oklahoma City, OK 73105

The Honorable Joe Dorman
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Rush Springs, OK 73082

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Morrison Propane
P.O. Box 181
Minco, OK 73059

Galen and Malinda Morrison
Morrison Propane
813 S. Hwy 81
Minco, OK 73059

Jerry and Deana Walje
3406 SW Clayton Road
Minco, OK 73059

Larry and Nancy Malcom
602 W Main
Minco, OK 73059

Randy and Donna Jackson
Jackson Services
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Minco, OK 73059

Peggy Hendrix
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Minco, OK 73059

Dallas Davis
410 NW Main Street
Minco, OK 73059

Johnny Verser
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Minco, OK 73059

Kevin McComas
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Minco, OK 73059

Truman Hamlett
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Minco, OK 73059

Bob Brown
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, OK 73059

Kenneth A. Morris
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Minco, OK 73059

Jerry Hines
617 NW 3rd Street
Minco, OK 73059

Richard Brownen
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Minco, OK 73059

Bobbie Sue Tallent
Box 112
Minco, OK 73059

Nabeel Abusadah
FHWA
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Oklahoma City, OK 73107

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Amber, OK 73004-4906

Melvin Verser
1007 SW Carolyn Way
Minco, OK 73059

Keith McMullen
217 SW 10th
Minco, OK 73059

Bruce Baade
Oklahoma Folding Carton
124 West Main
Minco, OK 73059

Frank Bond
607 NW North Street
Minco, OK 73059

Glenn Carrell
804 SW South Street
Minco, OK 73059

Jessica Dempsey
20270 SW 59th
ElReno, OK 73030

Garry Hinrichs
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Tuttle, OK 73089

Ricky Anthony
Anthony Backhoe
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Minco, OK 73059

Clarence Barr
804 Hwy 81
Minco, OK 73059

Gerald Coleman
1748 Hwy 81
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Donald and Jan McDaniel
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Minco, OK 73059

Roland and Patsy Harrison
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Minco, OK 73059

Susan Robinson
Red Bud Cottage
P.O. Box 385
Minco, OK 73059

Cleo Smith
1512 NE Mission Road
Minco, OK 73059

David Dacus
P.O. Box 309
Minco, OK 73059

Allen Miller
910 NE Cemetary Road
Minco, OK 73059

Ernest McMullen
3455 SW Clayton Road
Minco, OK 73059

B. Hodges
Box 225
Minco, OK 73059

Imagene Clark
1987 Hwy 81
Chickasha, OK 73018

Shirley Howard
1613 County Street 2830
Amber, OK 73004

Delvin Albers
Rt. 2 Box 226
Minco, OK 73059

Keith and Terri Streeter
P.O. Box 371
Mustang, OK 73064

Lori Hendrix
109 SW Wichita Street
Minco, OK 73059

Larry Hendrix
109 SW Wichita Street
[illegible], OK 73059

Reed Maples, Jr.
20485 SW 15th
Union City, OK 73090

Jimmy Mitchell
P.O. Box 359
Minco, OK 73059

Brent Barr
816 Highway 81
Minco, OK 73059

Russell Streater
P.O. Box 371
Mustang, OK 73064

William Cruzier
Oklahoma Motor Works
P.O. Box 222
Union City, OK 73090

Lindy Beck
Chickasha Towing
2607 Lakewood Drive
Chickasha, OK 73018

Greg Shoemaker
Chickasha Towing
2607 Lakewood Drive
Chickasha, OK 73018

Raymond Goater
1983 Highway 81
Chickasha, OK 73018

Bo Ellis
Chickasaw Nation
P.O. Box 788
Ada, OK 74821

Ola Edwards
1347 Highway 81
Pocasset, OK 73079

Cynthia Thorsen
304 E. Europe Drive
Midwest City, OK 73130

Wade Steelman
410 Chickasha Avenue
Chickasha, OK 73018

Doug Phelps
2619 Fox Drive
Tuttle, OK 73089

Marvin Koerner
659 County Road 1220
Pocasset, OK 73079

Darrel and Jeannie Johnston
3478 State Highway 92
Chickasha, OK 73018

Dean and Linda Griffith
1612 Highway 81
Amber, OK 73004

David Perryman
689 County Road 1365
Chickasha, OK 73018

Allen Ryan
USACE
1645 S. 101st East Avenue
Tulsa, OK 74128

Dick McCalla
1782 County Road 1330
Chickasha, OK 73018

Albert Lagaly
1001 County Road 1260
Pocasset, OK 73079

Leon Jensen
2510 Lakewood
Chickasha, OK 73018

Clarence G. Thorsen
872 County Road 140
Chickasha, OK 73018

Connie Allbritton
1638 Highway 81
Amber, OK 73004

Jimmy Johnson
Johnson's Wreckers
307 Christopher
Chickasha, OK 73018

Charlie Burrus
201 Saint James Place
Chickasha, OK 73018

Llyod N. Thorsen, Jr.
901 Christine
Midwest City, OK 73130

Ken Singleton
1710 Louisiana
Chickasha, OK 73018

Keith and Tracy Caraway
734 County Road 1330
Chickasha, OK 73018

Matthew Mollman
500 W. Country Club Road
Chickasha, OK 73018

Mark Martin
218 Chickasha Avenue
Chickasha, OK 73018

Barry and Donna Thomas
2900 W. Idaho
Chickasha, OK 73018

Tom and Joan Harwell
8 Cottonwood Drive
Chickasha, OK 73018-2114

James Harmon
3404 S. 24th
Chickasha, OK 73018

William A. Graves
416 East Quail Road
Chickasha, OK 73018

Victor Wesson
3810 Hickory Stick
Chickasha, OK 73018

J.E. Fredrickson
39 Village Drive
Chickasha, OK 73018

John Carroll
B&M Oil
118 Ruskin
Chickasha, OK 73018

Darrell Mollett
Shoot the Moon Gifts
426 W Chockew
Chickasha, OK 73018

Howard Carpenter
111 Minnesota Avenue
Chickasha, OK 73018

Kirk Spurlin
853 County Road 1320
Chickasha, OK 73018

Jason Clarke
3016 W. Montana
Chickasha, OK 73018

Amanda Thorsen
1410 County Street 2850
Pocasset, OK 73079

Llyod N. Thornsen, III
1410 County Street 2859
Pocasset, OK 73079

Patricia Gutierrez
1712 Cliffside Court
Norman, OK 73072

Marshall Settle
P.O. Box 1245
Chickasha, OK 73018

Ronald & Debra Weiss
854 County Road 1315
Chickasha, OK 73018

Gary Daniel
1361 County Street 2850
Pocasset, OK 73079

Wayne Leu
853 County Road 1315
Chickasha, OK 73018

Michael Ersland
1727 Grand Avenue
Chickasha, OK 73018

Windell Shockey
1256 Highway 62
Chickasha, OK 73018

Nickie Riley
1688 Highway 81
Amber, OK 73004

Norman Fritz
4225 S. 4th Street
Chickasha, OK 73018

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

SEGMENT 7 COMPARISON - ULTIMATE 4 LANE

Segment 7 Summary

Segment	Approximate Extents	Length (miles)	Preliminary Engineering	Construction	Right-of-Way	Utilities	Construction Engineering	Segment Sub-total	TOTAL
						Public and Private			
7	E 1200 Road to South Street in Minco	2.50	$ 454,480	$ 9,089,597	$ 604,560	$ 554,000	$ 727,168	$ 11,429,805	
7A	E 1200 Road to South Street in Minco - Alternate	2.39	$ 457,825	$ 9,156,502	$ 1,790,600	$ 100,125	$ 732,520	$ 12,237,572	
								$ (807,767)	**Existing Alignment Less**
	Difference - including both Public and Private Utility Costs								
						Private Only			
7	E 1200 Road to South Street in Minco	2.50	$ 454,480	$ 9,089,597	$ 604,560	$ 250,000	$ 727,168	$ 11,125,805	
7A	E 1200 Road to South Street in Minco - Alternate	2.39	$ 457,825	$ 9,156,502	$ 1,790,600	$ 85,125	$ 732,520	$ 12,222,572	
								$ (1,096,767)	**Existing Alignment Less**
	Difference - with only Private Utility Cost								

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 7 - E 1200 Road to South Street in Minco
US 81: Sta. 897+35.36- Sta. 1029+17.41
Length = 2.50 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	6,430	ton	60	$ 385,800	
3" Type S3 Asph. Conc. (PG 76-28 OK)	9,745	ton	56	$ 545,720	
7" Type S2 Asph. Conc. (PG 64-22 OK)	23,220	ton	53	$ 1,230,660	
Tack Coat	8,770	Gal	1.75	$ 15,348	
Prime Coat	9,920	Gal	2.25	$ 22,320	
8" Lime Stabilized Subgrade					
Lime	1,200	ton	135	$ 162,000	
Lime Stabilized Subgrade	66,090	SY	2.25	$ 148,703	
					$ 2,510,550
Undivided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	3,850	ton	60	$ 231,000	
3" Type S3 Asph. Conc. (PG 76-28 OK)	5,780	ton	56	$ 323,680	
7" Type S2 Asph. Conc. (PG 64-22 OK)	14,970	ton	53	$ 793,410	
Tack Coat	5,350	Gal	1.75	$ 9,363	
Prime Coat	6,165	Gal	2.25	$ 13,871	
8" Lime Stabilized Subgrade					
Lime	745	ton	135	$ 100,575	
Lime Stabilized Subgrade	41,035	SY	2.25	$ 92,329	
2'-8" Curb & Gutter (8" Barrier)	12,885	LF	22	$ 283,470	
					$ 1,847,698
EARTHWORK			($)		
Excavation	92,540	CY	5	$ 462,700	
Borrow	0	CY	6	$ -	
					$ 462,700
BRIDGE			($)		
Bridge Box near Sta. 955+30	4,200	SF	80	$ 336,000	
Bridge Box near Sta. 958+60	6,600	SF	80	$ 528,000	
Buggy Creek	5,875	SF	95	$ 558,125	
					$ 1,422,125
DRAINAGE			($)		
Pipe (24" or smaller)	1,092	LF	55	$ 60,060	
Pipe (30" or larger)	6,454	LF	80	$ 516,320	
RCB (24 SF or smaller)	500	LF	300	$ 150,000	
RCB (30 SF to 64 SF)	300	LF	475	$ 142,500	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	1	LSUM	73,500	$ 73,500	
					$ 942,380
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,185,453	$ 718,545	
					$ 718,545
CONTINGENCY			($)		
% of above Item Costs	15%	%	7,903,998	$ 1,185,600	
					$ 1,185,600
					$ 9,089,597

Divided 4-lane roadway is proposed between E 1200 Road and Buggy Creek (Sta. 897+35.36 - Sta. 965+00), a length of 1.28 miles.
Undivided 4-lane roadway is proposed between Buggy Creek and South Street in Minco (Sta. 965+00 - Sta. 1029+17.41), a length of 1.22 miles.

ULTIMATE 4 LANE

Segment 7 Alternate Alignment - E 1200 Road to South Street in Minco
US 81: Sta. 897+35.36 - Sta. 931+69.85; Sta. 9+02.71 - Sta. 100+58.94; Sta. 1028+82.19 - Sta. 1029+17.41
Length = 2.39 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	7,530	ton	60	$ 451,800	
3" Type S3 Asph. Conc. (PG 76-28 OK)	11,415	ton	56	$ 639,240	
7" Type S2 Asph. Conc. (PG 64-22 OK)	27,210	ton	53	$ 1,442,130	
Tack Coat	10,275	Gal	1.75	$ 17,981	
Prime Coat	11,625	Gal	2.25	$ 26,156	
8" Lime Stabilized Subgrade					
Lime	1,405	ton	135	$ 189,675	
Lime Stabilized Subgrade	77,445	SY	2.25	$ 174,251	
					$ 2,941,234
Undivided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	2,810	ton	60	$ 168,600	
3" Type S3 Asph. Conc. (PG 76-28 OK)	4,215	ton	56	$ 236,040	
7" Type S2 Asph. Conc. (PG 64-22 OK)	10,925	ton	53	$ 579,025	
Tack Coat	3,905	Gal	1.75	$ 6,834	
Prime Coat	4,495	Gal	2.25	$ 10,114	
8" Lime Stabilized Subgrade					
Lime	545	ton	135	$ 73,575	
Lime Stabilized Subgrade	29,940	SY	2.25	$ 67,365	
2'-8" Curb & Gutter (8" Barrier)	9,400	LF	22	$ 206,800	
					$ 1,348,353
EARTHWORK			($)		
Excavation	116,850	CY	5	$ 584,250	
Borrow	0	CY	6	$ -	
					$ 584,250
BRIDGE			($)		
Bridge Box near Sta. 955+30	4,200	SF	80	$ 336,000	
Bridge Box near Sta. 958+60	6,600	SF	80	$ 528,000	
Buggy Creek	5,875	SF	95	$ 558,125	
					$ 1,422,125
DRAINAGE			($)		
Pipe (24" or smaller)	1,092	LF	55	$ 60,060	
Pipe (30" or larger)	6,454	LF	80	$ 516,320	
RCB (24 SF or smaller)	500	LF	300	$ 150,000	
RCB (30 SF to 64 SF)	300	LF	475	$ 142,500	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	1	LSUM	73,500	$ 73,500	
					$ 942,380
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,238,341	$ 723,834	
					$ 723,834
CONTINGENCY			($)		
% of above Item Costs	15%	%	7,962,175	$ 1,194,326	
					$ 1,194,326
					$ 9,156,502

Equation: Sta. 931+69.85 Back = Sta. 9+02.71 Ahead
Equation: Sta. 100+58.94 Back = Sta. 1028+82.19 Ahead
Divided 4-lane roadway is proposed between E 1200 Road and north of Buggy Creek (Sta. 897+35.36 - Sta. 54+00), a length of 1.50 miles.
Undivided 4-lane roadway is proposed between north of Buggy Creek and South Street in Minco (Sta. 54+00 - Sta. 1029+17.41), a length of 0.89 miles.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

RIGHT-OF-WAY						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
1	US 62 to E 1320 Road	1	LSUM	690,720	$ 690,720	
2	E 1320 Road to E 1290 Road	1	LSUM	1,708,320	$ 1,708,320	
3	E 1290 Road to E 1260 Road	1	LSUM	423,840	$ 423,840	
4	Pocasset	1	LSUM	103,920	$ 103,920	
5	E 1250 Road to E 1230 Road	1	LSUM	455,400	$ 455,400	
6	E 1230 Road to E 1200 Road	1	LSUM	289,800	$ 289,800	
7	E 1200 Road to South Street in Minco	1	LSUM	604,560	$ 604,560	
8	Minco	1	LSUM	0	$ -	
9	0.45 miles south of SH 37 West to Canadian River	1	LSUM	296,520	$ 296,520	
10	Canadian River [2]	1	LSUM	123,600	$ 123,600	
11	Canadian River to 0.50 miles north of SH 152 East	1	LSUM	949,020	$ 949,020	
12	0.50 miles north of SH 152 East to E 1090 Road [2]	1	LSUM	1,825,295	$ 1,825,295	
						$ 7,470,995

[2] From ODOT Project Report dated 1/23/06.

UTILITIES						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
1	US 62 to E 1320 Road [3]	1	LSUM	216,812	$ 216,812	
2	E 1320 Road to E 1290 Road [3]	1	LSUM	1,320,719	$ 1,320,719	
3	E 1290 Road to E 1260 Road [3]	1	LSUM	520,063	$ 520,063	
4	Pocasset [3]	1	LSUM	345,938	$ 345,938	
5	E 1250 Road to E 1230 Road [3]	1	LSUM	646,250	$ 646,250	
6	E 1230 Road to E 1200 Road [3]	1	LSUM	450,063	$ 450,063	
7	E 1200 Road to South Street in Minco [3]	1	LSUM	554,000	$ 554,000	
8	Minco [3]	1	LSUM	0	$ -	
9	0.45 miles south of SH 37 West to Canadian River [3]	1	LSUM	627,156	$ 627,156	
10	Canadian River [2]	1	LSUM	318,270	$ 318,270	
11	Canadian River to 0.50 miles north of SH 152 East [3]	1	LSUM	925,594	$ 925,594	
12	0.50 miles north of SH 152 East to E 1090 Road [2]	1	LSUM	1,523,436	$ 1,523,436	
						$ 7,448,301

[2] From ODOT Project Report dated 1/23/06.
[3] Unit Cost includes both public and private utility costs.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

North Segment Summary

Segment	Approximate Extents	Length (miles)	Preliminary Engineering	Construction	Right-of-Way	Utilities	Construction Engineering	Segment Sub-total	TOTAL
1	US 62 to E 1320 Road	2.94	$ 1,117,157	$ 22,343,132	$ 914,330	$ 216,812	$ 1,787,451	$ 26,378,881	
2	E 1320 Road to E 1290 Road	3.00	$ 484,925	$ 9,698,493	$ 1,746,400	$ 1,320,719	$ 775,879	$ 14,026,416	
3	E 1290 Road to E 1260 Road	3.17	$ 538,541	$ 10,770,819	$ 283,890	$ 520,063	$ 861,666	$ 12,974,978	
4	Pocasset	1.00	$ 124,187	$ 2,483,744	$ 35,894	$ 345,938	$ 198,699	$ 3,188,462	
5	E 1250 Road to E 1230 Road	2.00	$ 297,351	$ 5,947,012	$ 386,340	$ 646,250	$ 475,761	$ 7,752,713	
6	E 1230 Road to E 1200 Road	3.00	$ 447,923	$ 8,958,468	$ 187,954	$ 450,063	$ 716,677	$ 10,761,085	
7	E 1200 Road to South Street in Minco	2.50	$ 454,480	$ 9,089,597	$ 604,560	$ 554,000	$ 727,168	$ 11,429,805	
8	Minco	1.20	$ 125,333	$ 2,506,662	$ -	$ -	$ 200,533	$ 2,832,528	
9	0.45 miles south of SH 37 West to Canadian River	2.30	$ 472,871	$ 9,457,417	$ 296,488	$ 627,156	$ 756,593	$ 11,610,525	
10	Canadian River	0.57	$ -	$ 6446,930	$ 123,600	$ 318,270	$ -	$ 6,888,800	
11	Canadian River to 0.50 miles north of SH 152 East	2.36	$ 337,181	$ 6,743,623	$ 949,464	$ 925,594	$ 539,490	$ 9,495,352	
12	0.50 miles north of SH 152 East to E 1090 Road	2.50	$ -	$ 8,597,520	$ 1825,295	$ 1,523,436	$ -	$ 11,946,251	
	Category Sub-total	26.54	$ 4,399,948	$ 103,043,416	$ 7,354,215	$ 7,448,301	$ 7,039,917		$ 129,285,798

NOTES

Construction cost for Segment 1 includes earthwork for the north side of the future US 81 / US 62 interchange and for the grade separation at the Union Pacific Railroad crossing. The construction cost also includes the Union Pacific Railroad Overpass bridge.

[redacted] - from ODOT Project Report dated 1/23/06

********** Amounts computed are based on 2006 dollars. A 2.5% inflation rate is recommended for future projections. **********

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 1 - US 62 to E 1320 Road
US 81: Sta. 100+00 - Sta. 255+18.88
Length = 2.94 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	14,760	ton	60	$ 885,600	
3" Type S3 Asph. Conc. (PG 76-28 OK)	22,375	ton	56	$ 1,253,000	
7" Type S2 Asph. Conc. (PG 64-22 OK)	53,335	ton	53	$ 2,826,755	
Tack Coat	20,140	Gal	1.75	$ 35,245	
Prime Coat	22,785	Gal	2.25	$ 51,266	
8" Lime Stabilized Subgrade					
Lime	2,750	ton	135	$ 371,250	
Lime Stabilized Subgrade	151,795	SY	2.25	$ 341,539	
					$ 5,764,655
EARTHWORK			($)		
Excavation	176,400	CY	5	$ 882,000	
Borrow [1]	701,650	CY	6	$ 4,209,900	
					$ 5,091,900
BRIDGE			($)		
Union Pacific Railroad Overpass	18,800	SF	115	$ 2,162,000	
Washita River overflow	14,100	SF	95	$ 1,339,500	
Washita River overflow	14,100	SF	95	$ 1,339,500	
Washita River	18,800	SF	95	$ 1,786,000	
					$ 6,627,000
DRAINAGE			($)		
Pipe (24" or smaller)	200	LF	55	$ 11,000	
Pipe (30" or larger)	600	LF	80	$ 48,000	
RCB (24 SF or smaller)	400	LF	300	$ 120,000	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
					$ 179,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	17,662,555	$ 1,766,256	
					$ 1,766,256
CONTINGENCY			($)		
% of above Item Costs	15%	%	19,428,811	$ 2,914,322	
					$ 2,914,322
					$ 22,343,132

[1] Borrow quantity comprised of the elevated portion of US 81 on the north side of the future US 81 / US 62 interchange and the grade separation at the Union Pacific Railroad crossing. If the US 81 profile is kept at-grade, i.e. no US 81 / US 62 interchange nor Union Pacific Railroad Overpass bridge, the construction cost would be reduced to $14,282,679.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 2 - E 1320 Road to E 1290 Road
US 81: Sta. 255+18.88 - Sta. 413+54.00
Length = 3.00 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	15,060	ton	60	$ 903,600	
3" Type S3 Asph. Conc. (PG 76-28 OK)	22,830	ton	56	$ 1,278,480	
7" Type S2 Asph. Conc. (PG 64-22 OK)	54,420	ton	53	$ 2,884,260	
Tack Coat	20,550	Gal	1.75	$ 35,963	
Prime Coat	23,250	Gal	2.25	$ 52,313	
8" Lime Stabilized Subgrade					
Lime	2,805	ton	135	$ 378,675	
Lime Stabilized Subgrade	154,890	SY	2.25	$ 348,503	
					$ 5,881,793
EARTHWORK			($)		
Excavation	180,000	CY	5	$ 900,000	
Borrow	0	CY	6	$ -	
					$ 900,000
BRIDGE			($)		
	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	1,600	LF	300	$ 480,000	
RCB (30 SF to 64 SF)	600	LF	475	$ 285,000	
RCB (70 SF or larger)	200	LF	600	$ 120,000	
					$ 885,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,666,793	$ 766,679	
					$ 766,679
CONTINGENCY			($)		
% of above Item Costs	15%	%	8,433,472	$ 1,265,021	
					$ 1,265,021
					$ 9,698,493

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 3 - E 1290 Road to E 1260 Road
US 81: Sta. 413+54.00 - Sta. 580+67.40
Length = 3.17 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	15,915	ton	60	$ 954,900	
3" Type S3 Asph. Conc. (PG 76-28 OK)	24,125	ton	56	$ 1,351,000	
7" Type S2 Asph. Conc. (PG 64-22 OK)	57,505	ton	53	$ 3,047,765	
Tack Coat	21,715	Gal	1.75	$ 38,001	
Prime Coat	24,570	Gal	2.25	$ 55,283	
8" Lime Stabilized Subgrade					
Lime	2,965	ton	135	$ 400,275	
Lime Stabilized Subgrade	163,670	SY	2.25	$ 368,258	
					$ 6,215,481
EARTHWORK			($)		
Excavation	190,200	CY	5	$ 951,000	
Borrow	0	CY	6	$ -	
					$ 951,000
BRIDGE			($)		
West Fork of Salt Creek	9,400	SF	95	$ 893,000	
					$ 893,000
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	800	LF	300	$ 240,000	
RCB (30 SF to 64 SF)	200	LF	475	$ 95,000	
RCB (70 SF or larger)	200	LF	600	$ 120,000	
					$ 455,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	8,514,481	$ 851,448	
					$ 851,448
CONTINGENCY			($)		
% of above Item Costs	15%	%	9,365,929	$ 1,404,889	
					$ 1,404,889
					$ 10,770,819

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 4 - Pocasset (E 1260 Road to E 1250 Road)
US 81: Sta. 580+67.40 - Sta. 633+31.13
Length = 1.00 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Undivided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	2,370	ton	60	$ 142,200	
3" Type S3 Asph. Conc. (PG 76-28 OK)	3,555	ton	56	$ 199,080	
7" Type S2 Asph. Conc. (PG 64-22 OK)	9,205	ton	53	$ 487,865	
Tack Coat	3,645	Gal	1.75	$ 6,379	
Prime Coat	3,790	Gal	2.25	$ 8,528	
8" Lime Stabilized Subgrade					
Lime	460	ton	135	$ 62,100	
Lime Stabilized Subgrade	25,230	SY	2.25	$ 56,768	
2'-8" Curb & Gutter (8" Barrier)	7,920	LF	22	$ 174,240	
Cold Milling Pavement	7,040	SY	50	$ 352,000	
2.5" Type S4 Asph. Conc. (PG 76-28 OK)	990	ton	61	$ 60,390	
					$ 1,549,549
EARTHWORK			($)		
Excavation	9,675	CY	5	$ 48,375	
Borrow	0	CY	6	$ -	
					$ 48,375
BRIDGE			($)		
	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	4,682	LF	55	$ 257,510	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	200	LF	300	$ 60,000	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	1	LSUM	48,000	$ 48,000	
					$ 365,510
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	1,963,434	$ 196,343	
					$ 196,343
CONTINGENCY			($)		
% of above Item Costs	15%	%	2,159,777	$ 323,967	
					$ 323,967
					$ 2,483,744

4-lane undivided curbed section currently exists in Pocasset between 5th Street and 1st Street (Sta. 594+07.82 - Sta. 607+21.56). The estimated length of new 4-lane undivided curbed section is 0.75 miles.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 5 - E 1250 Road to E 1230 Road
US 81: Sta. 633+31.13 - Sta. 738+96.39
Length = 2.00 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	10,040	ton	60	$ 602,400	
3" Type S3 Asph. Conc. (PG 76-28 OK)	15,220	ton	56	$ 852,320	
7" Type S2 Asph. Conc. (PG 64-22 OK)	36,280	ton	53	$ 1,922,840	
Tack Coat	13,700	Gal	1.75	$ 23,975	
Prime Coat	15,500	Gal	2.25	$ 34,875	
8" Lime Stabilized Subgrade					
Lime	1,870	ton	135	$ 252,450	
Lime Stabilized Subgrade	103,260	SY	2.25	$ 232,335	
					$ 3,921,195
EARTHWORK			($)		
Excavation	120,000	CY	5	$ 600,000	
Borrow	0	CY	6	$ -	
					$ 600,000
BRIDGE			($)		
	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	600	LF	300	$ 180,000	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
					$ 180,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	4,701,195	$ 470,120	
					$ 470,120
CONTINGENCY			($)		
% of above Item Costs	15%	%	5,171,315	$ 775,697	
					$ 775,697
					$ 5,947,012

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 6 - E 1230 Road to E 1200 Road
US 81: Sta. 738+96.39 - Sta. 897+35.36
Length = 3.00 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	15,060	ton	60	$ 903,600	
3" Type S3 Asph. Conc. (PG 76-28 OK)	22,830	ton	56	$ 1,278,480	
7" Type S2 Asph. Conc. (PG 64-22 OK)	54,420	ton	53	$ 2,884,260	
Tack Coat	20,550	Gal	1.75	$ 35,963	
Prime Coat	23,250	Gal	2.25	$ 52,313	
8" Lime Stabilized Subgrade					
Lime	2,805	ton	135	$ 378,675	
Lime Stabilized Subgrade	154,890	SY	2.25	$ 348,503	
					$ 5,881,793
EARTHWORK			($)		
Excavation	180,000	CY	5	$ 900,000	
Borrow	0	CY	6	$ -	
					$ 900,000
BRIDGE			($)		
	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	600	LF	300	$ 180,000	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	200	LF	600	$ 120,000	
					$ 300,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,081,793	$ 708,179	
					$ 708,179
CONTINGENCY			($)		
% of above Item Costs	15%	%	7,789,972	$ 1,168,496	
					$ 1,168,496
					$ 8,958,468

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 7 - E 1200 Road to South Street in Minco
US 81: Sta. 897+35.36- Sta. 1029+17.41
Length = 2.50 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	6,430	ton	60	$ 385,800	
3" Type S3 Asph. Conc. (PG 76-28 OK)	9,745	ton	56	$ 545,720	
7" Type S2 Asph. Conc. (PG 64-22 OK)	23,220	ton	53	$ 1,230,660	
Tack Coat	8,770	Gal	1.75	$ 15,348	
Prime Coat	9,920	Gal	2.25	$ 22,320	
8" Lime Stabilized Subgrade					
Lime	1,200	ton	135	$ 162,000	
Lime Stabilized Subgrade	66,090	SY	2.25	$ 148,703	
					$ 2,510,550
Undivided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	3,850	ton	60	$ 231,000	
3" Type S3 Asph. Conc. (PG 76-28 OK)	5,780	ton	56	$ 323,680	
7" Type S2 Asph. Conc. (PG 64-22 OK)	14,970	ton	53	$ 793,410	
Tack Coat	5,350	Gal	1.75	$ 9,363	
Prime Coat	6,165	Gal	2.25	$ 13,871	
8" Lime Stabilized Subgrade					
Lime	745	ton	135	$ 100,575	
Lime Stabilized Subgrade	41,035	SY	2.25	$ 92,329	
2'-8" Curb & Gutter (8" Barrier)	12,885	LF	22	$ 283,470	
					$ 1,847,698
EARTHWORK			($)		
Excavation	92,540	CY	5	$ 462,700	
Borrow	0	CY	6	$ -	
					$ 462,700
BRIDGE			($)		
Bridge Box near Sta. 955+30	4,200	SF	80	$ 336,000	
Bridge Box near Sta. 958+60	6,600	SF	80	$ 528,000	
Buggy Creek	5,875	SF	95	$ 558,125	
					$ 1,422,125
DRAINAGE			($)		
Pipe (24" or smaller)	1,092	LF	55	$ 60,060	
Pipe (30" or larger)	6,454	LF	80	$ 516,320	
RCB (24 SF or smaller)	500	LF	300	$ 150,000	
RCB (30 SF to 64 SF)	300	LF	475	$ 142,500	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	1	LSUM	73,500	$ 73,500	
					$ 942,380
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,185,453	$ 718,545	
					$ 718,545
CONTINGENCY			($)		
% of above Item Costs	15%	%	7,903,998	$ 1,185,600	
					$ 1,185,600
					$ 9,089,597

Divided 4-lane roadway is proposed between E 1200 Road and Buggy Creek (Sta. 897+35.36 - Sta. 965+00), a length of 1.28 miles.
Undivided 4-lane roadway is proposed between Buggy Creek and South Street in Minco (Sta. 965+00 - Sta. 1029+17.41), a length of 1.22 miles.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 8 - Minco (South Street to 0.45 miles south of SH 37 West)
US 81: Sta. 1029+17.41 - Sta. 1092+40.71
Length = 1.20 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Undivided 4-Lane					
~~2" Type S4 Asph. Conc. (PG 76-28 OK)~~	0	ton	60	$ -	
~~3" Type S3 Asph. Conc. (PG 76-28 OK)~~	0	ton	56	$ -	
~~7" Type S2 Asph. Conc. (PG 64-22 OK)~~	0	ton	53	$ -	
Tack Coat	1,695	Gal	1.75	$ 2,966	
~~Prime Coat~~	0	Gal	2.25	$ -	
~~8" Lime Stabilized Subgrade~~					
~~*Lime*~~	0	ton	135	$ -	
~~*Lime Stabilized Subgrade*~~	0	SY	2.25	$ -	
~~2' 8" Curb & Gutter (8" Barrier)~~	0	LF	22	$ -	
Cold Milling Pavement	33,795	SY	50	$ 1,689,750	
2.5" Type S4 Asph. Conc. (PG 76-28 OK)	4,735	ton	61	$ 288,835	
					$ 1,981,551
EARTHWORK			($)		
Excavation	0	CY	5	$ -	
Borrow	0	CY	6	$ -	
					$ -
BRIDGE			($)		
Bridge Box near Sta. 1067+80	0	SF	80	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	0	LF	300	$ -	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	0	LSUM	0	$ -	
					$ -
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	1,981,551	$ 198,155	
					$ 198,155
CONTINGENCY			($)		
% of above Item Costs	15%	%	2,179,706	$ 326,956	
					$ 326,956
					$ 2,506,662

4-lane undivided curbed section currently exists in Minco between South Street and about 0.45 miles south of SH 37 West (Sta. 1029+17.41 - Sta. 1092+40.71).

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 9 - 0.45 miles south of SH 37 West to Canadian River
US 81: Sta. 1092+40.71 - Sta. 1214+00
Length = 2.30 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	7,030	ton	60	$ 421,800	
3" Type S3 Asph. Conc. (PG 76-28 OK)	10,655	ton	56	$ 596,680	
7" Type S2 Asph. Conc. (PG 64-22 OK)	25,400	ton	53	$ 1,346,200	
Tack Coat	9,590	Gal	1.75	$ 16,783	
Prime Coat	10,850	Gal	2.25	$ 24,413	
8" Lime Stabilized Subgrade					
Lime	1,310	ton	135	$ 176,850	
Lime Stabilized Subgrade	72,285	SY	2.25	$ 162,641	
					$ 2,745,366
Undivided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	2,840	ton	60	$ 170,400	
3" Type S3 Asph. Conc. (PG 76-28 OK)	4,265	ton	56	$ 238,840	
7" Type S2 Asph. Conc. (PG 64-22 OK)	11,045	ton	53	$ 585,385	
Tack Coat	3,950	Gal	1.75	$ 6,913	
Prime Coat	4,545	Gal	2.25	$ 10,226	
8" Lime Stabilized Subgrade					
Lime	550	ton	135	$ 74,250	
Lime Stabilized Subgrade	30,275	SY	2.25	$ 68,119	
2'-8" Curb & Gutter (8" Barrier)	9,505	LF	22	$ 209,110	
					$ 1,363,243
EARTHWORK			($)		
Excavation	95,610	CY	5	$ 478,050	
Borrow	0	CY	6	$ -	
					$ 478,050
BRIDGE			($)		
Union Pacific Railroad Overpass	21,000	SF	115	$ 2,415,000	
					$ 2,415,000
DRAINAGE			($)		
Pipe (24" or smaller)	832	LF	55	$ 45,760	
Pipe (30" or larger)	4,660	LF	80	$ 372,800	
RCB (24 SF or smaller)	0	LF	300	$ -	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
Closed System (inlets, manholes, etc.)	1	LSUM	56,000	$ 56,000	
					$ 474,560
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	7,476,219	$ 747,622	
					$ 747,622
CONTINGENCY			($)		
% of above Item Costs	15%	%	8,223,841	$ 1,233,576	
					$ 1,233,576
					$ 9,457,417

Divided 4-lane roadway is proposed between 0.45 miles north of SH 37 West and 0.34 miles south of the Canadian River (Sta. 1140+00 - Sta. 1214+00), a length of 1.40 miles.
Undivided 4-lane roadway is proposed between 0.45 miles south of SH 37 West and 0.45 miles north of SH 37 West (Sta. 1092+40.71 - Sta. 1140+00), a length of 0.90 miles.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 10 - Canadian River
US 81: Sta. 1214+00 - Sta. 1244+00
Length = 0.57 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	0	ton	60	$ -	
3" Type S3 Asph. Conc. (PG 76-28 OK)	0	ton	56	$ -	
7" Type S2 Asph. Conc. (PG 64-22 OK)	0	ton	53	$ -	
Tack Coat	0	Gal	1.75	$ -	
Prime Coat	0	Gal	2.25	$ -	
8" Lime Stabilized Subgrade					
Lime	0	ton	135	$ -	
Lime Stabilized Subgrade	0	SY	2.25	$ -	
					$ -
EARTHWORK			($)		
Excavation	0	CY	5	$ -	
Borrow	0	CY	6	$ -	
					$ -
BRIDGE			($)		
Canadian River	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	0	LF	300	$ -	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
					$ -
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	0	$ -	
					$ -
CONTINGENCY			($)		
% of above Item Costs	15%	%	0	$ -	
					$ -
					$ -

From ODOT Project Report dated 1/23/06 —> US 81 bridge over the Canadian River, BRFY-011N(054)
construction cost = $ 6,446,930

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 11 - Canadian River to 0.50 miles north of SH 152 East
US 81: Sta. 1244+00 - Sta. 1368+72.39
Length = 2.36 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	8,335	ton	60	$ 500,100	
3" Type S3 Asph. Conc. (PG 76-28 OK)	12,635	ton	56	$ 707,560	
7" Type S2 Asph. Conc. (PG 64-22 OK)	30,115	ton	53	$ 1,596,095	
Tack Coat	11,375	Gal	1.75	$ 19,906	
Prime Coat	12,865	Gal	2.25	$ 28,946	
8" Lime Stabilized Subgrade					
Lime	1,555	ton	135	$ 209,925	
Lime Stabilized Subgrade	85,710	SY	2.25	$ 192,848	
					$ 3,255,380
Undivided 4-Lane					
~~2" Type S4 Asph. Conc. (PG 76-28 OK)~~	0	ton	60	$ -	
~~3" Type S3 Asph. Conc. (PG 76-28 OK)~~	0	ton	56	$ -	
~~7" Type S2 Asph. Conc. (PG 64-22 OK)~~	0	ton	53	$ -	
Tack Coat	990	Gal	1.75	$ 1,733	
~~Prime Coat~~	0	Gal	2.25	$ -	
~~8" Lime Stabilized Subgrade~~					
~~*Lime*~~	0	ton	135	$ -	
~~*Lime Stabilized Subgrade*~~	0	SY	2.25	$ -	
~~2' 8" Curb & Gutter (8" Barrier)~~	0	LF	22	$ -	
Cold Milling Pavement	19,715	SY	50	$ 985,750	
2.5" Type S4 Asph. Conc. (PG 76-28 OK)	2,765	ton	61	$ 168,665	
					$ 1,156,148
EARTHWORK			($)		
Excavation	99,600	CY	5	$ 498,000	
Borrow	0	CY	6	$ -	
					$ 498,000
BRIDGE			($)		
Bridge Box near Sta. 1261+60	2,880	SF	80	$ 230,400	
					$ 230,400
DRAINAGE			($)		
Pipe (24" or smaller)	200	LF	55	$ 11,000	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	200	LF	300	$ 60,000	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	200	LF	600	$ 120,000	
Closed System (inlets, manholes, etc.)	0	LSUM	0	$ -	
					$ 191,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	5,330,928	$ 533,093	
					$ 533,093
CONTINGENCY			($)		
% of above Item Costs	15%	%	5,864,020	$ 879,603	
					$ 879,603
					$ 6,743,623

Divided 4-lane roadway is proposed between 0.23 miles north of the Canadian River and 0.22 miles south of SH 152 East (Sta. 1244+00 - Sta. 1331+53.12), a length of 1.66 miles.
4-lane undivided curbed section currently exists in Union City between 0.20 miles south of SH 152 East and 0.50 miles north of SH 152 East (Sta. 1331+53.12 - Sta. 1368+72.39).

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment 12 - 0.50 miles north of SH 152 East to E 1090 Road
US 81: Sta. 1368+72.39 - Sta. 1500+90.10
Length = 2.50 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	0	ton	60	$ -	
3" Type S3 Asph. Conc. (PG 76-28 OK)	0	ton	56	$ -	
7" Type S2 Asph. Conc. (PG 64-22 OK)	0	ton	53	$ -	
Tack Coat	0	Gal	1.75	$ -	
Prime Coat	0	Gal	2.25	$ -	
8" Lime Stabilized Subgrade					
Lime	0	ton	135	$ -	
Lime Stabilized Subgrade	0	SY	2.25	$ -	
					$ -
EARTHWORK			($)		
Excavation	0	CY	5	$ -	
Borrow	0	CY	6	$ -	
					$ -
BRIDGE			($)		
	0	SF	95	$ -	
					$ -
DRAINAGE			($)		
Pipe (24" or smaller)	0	LF	55	$ -	
Pipe (30" or larger)	0	LF	80	$ -	
RCB (24 SF or smaller)	0	LF	300	$ -	
RCB (30 SF to 64 SF)	0	LF	475	$ -	
RCB (70 SF or larger)	0	LF	600	$ -	
					$ -
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	0	$ -	
					$ -
CONTINGENCY			($)		
% of above Item Costs	15%	%	0	$ -	
					$ -
					$ -

From ODOT Project Report dated 1/23/06 ---> US 81 from north edge of Union City north 3.34 miles, NHY-011N(008)
construction cost = $ 8,597,520

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

RIGHT-OF-WAY						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
1	US 62 to E 1320 Road	1	LSUM	690,720	$ 690,720	
2	E 1320 Road to E 1290 Road	1	LSUM	1,708,320	$ 1,708,320	
3	E 1290 Road to E 1260 Road	1	LSUM	423,840	$ 423,840	
4	Pocasset	1	LSUM	103,920	$ 103,920	
5	E 1250 Road to E 1230 Road	1	LSUM	455,400	$ 455,400	
6	E 1230 Road to E 1200 Road	1	LSUM	289,800	$ 289,800	
7	E 1200 Road to South Street in Minco	1	LSUM	604,560	$ 604,560	
8	Minco	1	LSUM	0	$ -	
9	0.45 miles south of SH 37 West to Canadian River	1	LSUM	296,520	$ 296,520	
10	Canadian River [2]	1	LSUM	123,600	$ 123,600	
11	Canadian River to 0.50 miles north of SH 152 East	1	LSUM	949,020	$ 949,020	
12	0.50 miles north of SH 152 East to E 1090 Road [2]	1	LSUM	1,825,295	$ 1,825,295	
						$ 7,470,995

[2] From ODOT Project Report dated 1/23/06.

UTILITIES						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
1	US 62 to E 1320 Road [3]	1	LSUM	216,812	$ 216,812	
2	E 1320 Road to E 1290 Road [3]	1	LSUM	1,320,719	$ 1,320,719	
3	E 1290 Road to E 1260 Road [3]	1	LSUM	520,063	$ 520,063	
4	Pocasset [3]	1	LSUM	345,938	$ 345,938	
5	E 1250 Road to E 1230 Road [3]	1	LSUM	646,250	$ 646,250	
6	E 1230 Road to E 1200 Road [3]	1	LSUM	450,063	$ 450,063	
7	E 1200 Road to South Street in Minco [3]	1	LSUM	554,000	$ 554,000	
8	Minco [3]	1	LSUM	0	$ -	
9	0.45 miles south of SH 37 West to Canadian River [3]	1	LSUM	627,156	$ 627,156	
10	Canadian River [2]	1	LSUM	318,270	$ 318,270	
11	Canadian River to 0.50 miles north of SH 152 East [3]	1	LSUM	925,594	$ 925,594	
12	0.50 miles north of SH 152 East to E 1090 Road [2]	1	LSUM	1,523,436	$ 1,523,436	
						$ 7,448,301

[2] From ODOT Project Report dated 1/23/06.
[3] Unit Cost includes both public and private utility costs.

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Chickasha Bypass Summary

Segment	Approximate Extents	Length (miles)	Preliminary Engineering	Construction	Right-of-Way	Utilites	Construction Engineering	Segment Sub-total	TOTAL
C - 1	South of SH 19 to Norge Road	2.76	$ 3,795,534	$ 75,910,674	$ 1,520,470	$ 536,813	$ 6,072,854	$ 87,836,345	
C - 2	Norge Road to US 62	4.09	$ 3,860,425	$ 77,208,502	$ 1,676,096	$ 1,148,525	$ 6,176,680	$ 90,070,229	
	Category Sub-total	6.85	$ 7,655,959	$ 153,119,177	$ 3,196,566	$ 1,685,338	$ 12,249,534		$ 177,906,574

NOTES

********** Amounts computed are based on 2006 dollars. A 2.5% inflation rate is recommended for future projections. **********

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment C - 1: South of SH 19 to Norge Road
US 81: Sta. 0+00 - Sta. 145+65.00
Length = 2.76 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	10,845	ton	60	$ 650,700	
3" Type S3 Asph. Conc. (PG 76-28 OK)	16,440	ton	56	$ 920,640	
7" Type S2 Asph. Conc. (PG 64-22 OK)	39,185	ton	53	$ 2,076,805	
Tack Coat	14,800	Gal	1.75	$ 25,900	
Prime Coat	16,740	Gal	2.25	$ 37,665	
8" Lime Stabilized Subgrade					
Lime	2,020	ton	135	$ 272,700	
Lime Stabilized Subgrade	111,525	SY	2.25	$ 250,931	
					$ 4,235,341
EARTHWORK			($)		
% of Surfacing Cost	25%	%	4,235,341	$ 1,058,835	
					$ 1,058,835
BRIDGE			($)		
West Side Creek	2	LSUM	2,000,000	$ 4,000,000	
Country Club Road	1	LSUM	2,000,000	$ 2,000,000	
Tributary to the Washita River	1	LSUM	2,000,000	$ 2,000,000	
					$ 8,000,000
DRAINAGE			($)		
% of Surfacing Cost	15%	%	4,235,341	$ 635,301	
					$ 635,301
INTERCHANGE			($)		
SH 19	1	LSUM	18,000,000	$ 18,000,000	
I-44	1	LSUM	18,000,000	$ 18,000,000	
Norge Road	1	LSUM	12,000,000	$ 12,000,000	
					$ 48,000,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	13,294,177	$ 1,329,418	
					$ 1,329,418
CONTINGENCY			($)		
% of above Item Costs	20%	%	63,258,895	$ 12,651,779	
					$ 12,651,779
					$ 75,910,674

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

Segment C - 2: Norge Road to US 62
US 81: Sta. 145+65.00 - Sta. 361+66.86
Length = 4.09 miles

Item	Quantity	Units	Unit Cost	Sub-total	Total
SURFACING			($)		
Divided 4-Lane					
2" Type S4 Asph. Conc. (PG 76-28 OK)	17,520	ton	60	$ 1,051,200	
3" Type S3 Asph. Conc. (PG 76-28 OK)	26,560	ton	56	$ 1,487,360	
7" Type S2 Asph. Conc. (PG 64-22 OK)	63,310	ton	53	$ 3,355,430	
Tack Coat	23,910	Gal	1.75	$ 41,843	
Prime Coat	27,050	Gal	2.25	$ 60,863	
8" Lime Stabilized Subgrade					
Lime	3,265	ton	135	$ 440,775	
Lime Stabilized Subgrade	180,190	SY	2.25	$ 405,428	
					$ 6,842,898
EARTHWORK			($)		
% of Surfacing Cost	25%	%	6,842,898	$ 1,710,724	
					$ 1,710,724
BRIDGE			($)		
Line Creek	1	LSUM	2,000,000	$ 2,000,000	
N 2815 Road	1	LSUM	2,000,000	$ 2,000,000	
29th Street	1	LSUM	2,000,000	$ 2,000,000	
Rock Hollow Creek	1	LSUM	2,000,000	$ 2,000,000	
					$ 8,000,000
DRAINAGE			($)		
% of Surfacing Cost	15%	%	6,842,898	$ 1,026,435	
Rock Hollow Creek Channel Improvements - Earthwork	450,000	CY	6	$ 2,700,000	
Rock Hollow Creek Channel Improvements - Paved Ditch	4,500	SY	90	$ 405,000	
					$ 4,131,435
INTERCHANGE			($)		
Grand Avenue	1	LSUM	12,000,000	$ 12,000,000	
Idaho Avenue	1	LSUM	12,000,000	$ 12,000,000	
US 62	1	LSUM	18,000,000	$ 18,000,000	
					$ 42,000,000
MISCELLANEOUS			($)		
% of Surfacing, Earthwork, Bridge, and Drainage Costs	10%	%	16,553,622	$ 1,655,362	
					$ 1,655,362
CONTINGENCY			($)		
% of above Item Costs	20%	%	64,340,419	$ 12,868,084	
					$ 12,868,084
					$ 77,208,502

US 81 CORRIDOR STUDY

Chickasha to Union City
Canadian and Grady Counties
Job Piece No. 21603(04)

ULTIMATE 4 LANE

RIGHT-OF-WAY						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
C - 1	South of SH 19 to Norge Road	1	LSUM	1,520,470	$ 1,520,470	
C - 2	Norge Road to US 62	1	LSUM	1,676,096	$ 1,676,096	
						$ 3,196,566

UTILITIES						
Segment	Approximate Extents	Quantity	Units	Unit Cost ($)	Sub-total	Total
C - 1	South of SH 19 to Norge Road	1	LSUM	536,813	$ 536,813	
C - 2	Norge Road to US 62	1	LSUM	1,148,525	$ 1,148,525	
						$ 1,685,338

Unit Cost includes both public and private utility costs.

Cinnabar Service Company
Land and Right Of Way Acquisition

TRANSMITTAL

To: Ron Weltzheimer, Diane Abernathy,
Larry Wicks, Benham

From: Annette Owens, Cinnabar Service Company

Date: August 1, 2006

Subject: US-81 Corridor Study, Segments 1-12

NOTE: The following land values were used in the estimates

Segment 1 $6,000/acre
Segment 2 $4,000/acre
Segment 3 $3,000/acre
Segment 4 $7,000/acre
Segment 5 $3,000/acre
Segment 6 $3,000/acre
Segment 7A Existing Station 900-970 $4,000/acre Station 970-1030 land value included
Segment 7B Alternate Station 900-950 $4,000/acre Station 950-1030 land value included
Segment 8 $8,000/acre
Segment 9 $7,000/acre
Segment 10 $4,000/acre
Segment 11 $6,500/acre
Segment 12 $6,500/acre

NOTE: Nominal takes (values less than $2,000) for each segment were estimated at $2,000.

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SEGMENT #1

Station 100-255 125'East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
100-120					Present R/W
120-200	Agricutural Land	$132,741			
201-221	Agricutural Land	$36,157			
200	Residential			$20,000	SFD; 2161 Hwy 81 damaged
221-230	Mixed Use	$155,000		$50,000	SFD; 2200 Hwy 81 damaged;Dusters & Sprayers Supply, Inc.
230-235	Agricutural Land	$8,609			
235-255	Agricutural Land	$34,435			
255	Residential	$275,000	$50,000		SFD
	SUBTOTALS	**$641,942**	**$50,000**	**$70,000**	
	TOTAL		**$761,942**		
	Contingency		**$152,388**		**20% OF TOTAL**
	GRAND TOTAL		**$914,330**		

SEGMENT #2

Station 255-415 125'East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
255-280	Agricultural Land	$28,696			
280-290	Residential	$100,000	$50,000		
"	Residential	$200,000	$50,000		
"	Residential	$70,000	$40,000		
291	Residential	$70,000	$40,000		
292	Commercial	$120,000	$25,000		Morse Welding & office
292-320	Agricultural Land	$32,140			
320-325	Residential	$175,000	$40,000		
325-335	Residential			$35,000	SFD; not taken
335-336	Residential	$35,000	$50,000		SFD; mobile;
"	Commercial			$18,000	1967 Hwy 81; 81 Auction; damages
"	Residential	$80,000	$25,000		SFD; mobile
336-365	Agricultural Land	$33,287			
365	Commercial	$5,000			Hoffman Gate Speciality Fence
366-386	Acreage Homesite	$22,957			
387-390	Acreage Homesite	$35,000			Metal bldg. & land
390-412	Acreage Homesite	$25,253			
412	Acreage Homesite	$50,000			Pipe fencing & land
	SUBTOTALS	**$1,082,333**	**$320,000**	**$53,000**	
	TOTAL		**$1,455,333**		
	Contingency		**$291,067**		**20% OF TOTAL**
	GRAND TOTAL		**$1,746,400**		

SEGMENT #3

Station 415-580 125'East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
415-424	Acreage Homesite	$2,000			Nominal take
424-425	Residential	$32,000		$40,000	In-ground house; damaged
426-460	Acreage Homesite	$29,270			
460-470	Acreage Homesite	$8,608			SFD; 1605 Hwy 81
470-550	Acreage Homesite	$68,871		$30,000	Pipe fencing, landscaping; damaged
550-580	Acreage Homesite	$25,826			
	SUBTOTALS	$166,575	$0	$70,000	
	TOTAL		$236,575		
	Contingency		$47,315		20% OF TOTAL
	GRAND TOTAL		$283,890		

SEGMENT #4

Station 580-635 15' East & West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
580-585 East	Residential	$2,000			Nominal take
585-595 East	Commercial	$2,410			
595-602 East	Residential	$2,000			Nominal take
602-628 East	Commercial	$7,931			
628-635 East	Acreage Homesite	$2,000			Nominal take
580-593 West	Acreage Homesite	$3,134			
593-600 West	Residential	$2,000			Nominal take
600-635 West	Acreage Homesite	$8,437			
	SUBTOTALS	$29,912	$0	$0	
	TOTAL		$29,912		
	Contingency		$5,982		20% OF TOTAL
	GRAND TOTAL		$35,894		

SEGMENT #5

Station 635-740 125' East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
635-644	Agricultural Land	$7,748			
645	Residential	$50,000	$40,000		SFD; 1347 Hwy 81
646-684	Agricultural Land	$32,714			
685	Residential	$120,000	$25,000		SFD; 1240 Rd. & Hwy 81
686-740	Agricultural Land	$46,488			
	SUBTOTALS	**$256,950**	**$65,000**	**$0**	
	TOTAL		**$321,950**		
	Contingency		**$64,390**		**20% OF TOTAL**
	GRAND TOTAL		**$386,340**		

SEGMENT #6

Station 740-900 125' East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
740-844	Agricultural Land	$89,532			
845	Agricultural Land	$10,609			Pipe fencing & land
845-885	Agricultural Land	$34,435			
885	Commercial			$10,000	Proximity damage
886-900	Agricultural Land	$12,052			
	SUBTOTALS	$146,628	$0	$10,000	
	TOTAL		$156,628		
	Contingency		$31,326		20% OF TOTAL
	GRAND TOTAL		$187,954		

SEGMENT #7A EXISTING

Station 900-1030 900-930 125'East / 930-1030 25' East & West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
900-930 East	Agricultural Land	$34,435.00			
930-970 East & West	Agricultural Land	$18,365.00			
970-1000 East & West					
East	Residential			$2,000.00	1216 SH81 land only
East	Residential			$15,000.00	2- SFD damages
East	Residential	$5,000.00			Acrage homesite land
West	Residential	$5,000.00			Acrage homesite land
East	Vacant Land	$5,000.00			Acreage homesite land
West	Residential			$1,000.00	Damages to 5th wheel trailer
East	Residential			$40,000.00	J & M Motor Company
East	Residential			$5,000.00	Mobile Home damages
West	Residential			$10,000.00	Mobile Home damges
East	Residential			$10,000.00	Quansant hut
West	Residential			$10,000.00	SFD 921 SH81 damages
East	Residential			$10,000.00	SFD 1243 SH81
West	Residential			$10,000.00	SFD 1283 SH81 damges
East	Residential			$15,000.00	SFD 1369 SH81 damages
West	Residential			$10,000.00	SFD 1449 SH81 damages
West	Residential			$12,000.00	SFD 1460 SH81 damages
West	Residential			$12,000.00	SFD 1502 SH81 damages
West	Residential			$10,000.00	SFD 870 SH 81 damages
East	Vacant Land	$8,000.00		$15,000.00	SFD 877 SH81 damages
East	Residential			$15,000.00	SFD 905 SH81 damages
East	Vacant Land	$15,000.00		$12,000.00	SFD damages
West	Residential			$10,000.00	SFD damages
East	Residential			$12,000.00	SFD damages
West	Residential			$10,000.00	SFD 1057 SH81 damages
West	Residential			$10,000.00	SFD 1151 SH81 damages
West	Residential			$15,000.00	SFD 1316 SH81 damages
West	Residential			$10,000.00	SFD damage
East	Residential			$5,000.00	SFD damages
West	Residential			$10,000.00	SFD damages
East	Residential			$10,000.00	SFD damages
West	Commercial			$10,000.00	SFD damages
West	Residential			$10,000.00	SFD damages
West	Residential			$10,000.00	SFD damages
East	Vacant Land	$5,000.00			
East	Residential			$20,000.00	SFD and buildings Sager & SH81
1000-1030 West	Vacant Land	$2,000.00			Acreagehomesite land
1020 East	Commercial			$50,000.00	Bank parking and lanscaping
	SUBTOTALS	**$97,800**	**$0**	**$406,000**	
	TOTAL		**$503,800**		
	Contingency		**$100,760**		**20% OF TOTAL**
	GRAND TOTAL		**$604,560**		

SEGMENT #7(B) ALTERNATE

Station 930-1030 **900-930 125'East / 930-1030 75' East & West**

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
900-930	Agriculture Land	$3,450			
930-950	Agriculture Land	$2,750			
950-1020 East	Agriculture Land	$19,300		$50,000	Land severance damage
1020 East	Commercial	$750,000	$75,000		Bank damages to parking and landscaping
1020 West	Metal Barn			$5,000	Metal Barn
1025 East	Commercial			$20,000	Williams Discount Foods Damages to parking
1025 West	Commercial	$150,000	$40,000	$30,000	Mary Lou's Café Damages to parking
1030 West	Commercial	$300,000	$50,000	$50,000	Conoco Gas Damages to parking and canopy
	SUBTOTALS	**$1,225,500**	**$165,000**	**$155,000**	
	TOTAL		**$1,545,500**		
	Contingency		**$245,100**		20% OF TOTAL
	GRAND TOTAL		**$1,790,600**		

SEGMENT #8

Station 1030- 109 East West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
1030-1035					Present R/W
1035-1040	Commercial/Resid.	$2,000			Mixed use
West	Residential			$5,000	Metal triplex; parking damage
West	Commercial			$5,000	Minco Storage Bldgs.; 15 storage units; parking damage
1040-1042	**INTERSECTION:**				
S/W Corner	Commercial	$80,000	$15,000		Coffee Cup Café
S/E Corner	Commercial	$250,000	$40,000		Senior Citizens Bldg.
N/W Corner	Commercial	$140,000	$10,000		Blue Bldg; remodel in progress
N/E Corner	Commercial	$45,000			Vacant gas station; value included to remove UST
1042-1050	Commercial/Resid.	$2,000			Mixed use
1050	Commercial			$10,000	Minco Fire Department; parking damage
1050-1080					
East	Commercial			$5,000	Ron's Welding
East	Residential			$10,000	Hwy 81 & Cloud
East	Residential			$10,000	Carport damaged
East	Residential	$90,000	$35,000		SFD; 208 Ponotoc
West	Commercial			$20,000	Greg's Tube & Lube parking lot damaged
East	Commercial			$7,000	Redbud Cottage parlking lot damaged
East	Residential			$10,000	SFD; 706 Hwy 81; proximity damages
East	Residential			$10,000	SFD; 410 Hwy 81; proximity damages
East	Residential			$10,000	SFD; 402 Hwy 81; proximity damages
East	Residential			$10,000	SFD; proximity damages
East	Residential			$10,000	SFD; 508 Hwy 81; proximity damages
East	Residential			$6,000	SFD; 208 Hwy 81; proximity damages
East	Residential			$6,000	SFD; 206 Hwy 81; proximity damages
East	Commercial	$30,000	$15,000		Don's Bar-B-Que
West	Residential			$12,000	SFD
West	Residential			$12,000	SFD
West	Commercial			$35,000	Church entrance
West	Residential	$100,000	$25,000		SFD
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$12,000	SFD; proximity damages
West	Residential			$6,000	SFD; proximity damages
West	Residential			$6,000	SFD; 607 Hwy 81
East	Commercial			$60,000	Shamrock Gas Station
East	Commercial			$20,000	R&R Insurance; 2 signs, parking, pipe fence
West	Residential			$25,000	SFD; 609 Hwy 81
West	Residential			$12,000	SFD; 611 Hwy 81
West	Residential			$10,000	SFD; 613 Hwy 81
West	Residential			$6,000	SFD; 615 Hwy 81
West	Residential			$6,000	SFD; 617 Hwy 81

SEG[illegible] #8

Station 1030- 10[illegible] East West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
West	Residential			$10,000	SFD & landscaping; underground house
West	Residential			$5,000	SFD; 706 Hwy 81; proximity damages
East	Residential			$4,000	Rail fencing & sign
East	Residential			$6,000	SFD; proximity damages
West	Residential	$80,000	$25,000		SFD; 731 Hwy 81
West	Residential			$17,000	SFD; 723 Hwy 81; proximity damages
East	Residential			$4,000	SFD; damages
1080 East	Commercial			$4,000	Bill Johnson Park
1080-1090					
West	Residential			$12,000	SFD; 781 Hwy 81; damages
West	Residential			$15,000	SFD; 785 Hwy 81; damages
West	Residential			$15,000	SFD; 797 Hwy 81; rail fencing
West	Residential			$10,000	SFD; 825 & 817 Hwy 81; $5,000 ea; landcaping
West	Residential			$12,000	SFD; 831 Hwy 81; proximity damages
1090-1092					Present R/W
	SUBTOTALS	**$819,000**	**$165,000**	**$578,000**	
	TOTAL		**$1,562,000**		
	Contingency		**$312,400**		**20% OF TOTAL**
	GRAND TOTAL		**$1,874,400**		

SEGMENT #9

Station 1092-1215 1092-1120 125' West / 1120-1215 125' East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
1092-1120 West	Agricultural land	$56,244			Acreage homesite
1120-1215 East	Commercial	$190,829			Speciality fence at Hwy 37 not taken
	SUBTOTALS	$247,073	$0	$0	
	TOTAL		$247,073		
	Contingency		$49,415		20% OF TOTAL
	GRAND TOTAL		$296,488		

SEGMENT # 10

Station 1215-1245 125' East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
1215-1245	Agricultural land	$34,435			
	SUBTOTALS	$34,435	$0	$0	
	TOTAL		$34,435		
	Contingency		$6,887		20% OF TOTAL
	GRAND TOTAL		$41,322		

SEGMENT #11

Station 1245-1370 1245-1330 125'East / 1330-1370 10' East & West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
1245-1290	Agricultural Land	$83,936.00			
1290-1295	Residential	$250,000.00	$15,000.00		
1295-1330 East	Agricultural Land	$65,284.00			
1330-1346	INTERSECTION:				
1330	Residential	$12,000			SFD; land only
1335	Commercial	$35,000	$5,000		Dairy Mart
1340	Commercial	$200,000	$10,000		Gas station
1345	Residential			$15,000	SFD;proximiy damage
1346-1370	Residential			$10,000	SFD;proximiy damage
"	Residential			$15,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
"	Residential			$15,000	SFD;proximiy damage
"	Residential			$10,000	SFD;proximiy damage
	SUBTOTALS	$646,220	$30,000	$115,000	
	TOTAL		$791,220		
	Contingency		$158,244		20% OF TOTAL
	GRAND TOTAL		$949,464		

SEGMENT #12

Station 1370-1500 125' East

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
1370-1420	Agricultural land	$93,262			
1420	Residential			$15,000	SFD; proximity damages
1420-1500	Agricultural land	$149,219			
	SUBTOTALS	$242,481	$0	$15,000	
	TOTAL		$257,481		
	Contingency		$51,496		20% OF TOTAL
	GRAND TOTAL		$308,977		

Cinnabar Service Company
Land and Right of Way Acquisition

TRANSMITTAL

To: Ron Weltzheimer and Diane Abernathy

From: Annette Owens, Cinnabar Service Company

Date: August 3, 2006

Subject: US-81 Corridor Study, C-1 and C-2

NOTE: The following land values were used in the estimates

Station	0-35	$7,000/acre
Station	35-90	$5,000/acre
Station	90-150	$4,500/acre
Station	150-230	$4,000/acre
Station	230-265	$3,000/acre
Station	265-360	$6,000/acre

5121 S. Wheeling Ave. • Tulsa, OK 74105-6421 • TEL: 918.742.0082 • FAX: 918.742.0097 • csctulsa@cinnabar.cc

C-1

Station 0-145 125' East & West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
0-25 East					Present R/W
0-10 West	Agricultural Land	$20,870			
05 West	Commercial	$1,000			Harry's Repair Sign
10-25 West	Mixed Use	$30,131		$25,000	Masonry Electronic Gate damage
25-45 E & W	Agricultural Land	$68,880			
45 East	Residential	$250,000	$50,000		SFD & shop bldg
45-50 E & W	Agricultural Land	$14,348			
50-90 E & W	Agricultural Land	$114,784			
90-145 E & W	Agricultural Land	$142,045			
120 East	Residential	$500,000	$50,000		SFD
	SUBTOTALS	**$1,142,058**	**$100,000**	**$25,000**	
	TOTAL		**$1,267,058**		
	Contingency		**$253,412**		20% OF TOTAL
	GRAND TOTAL		**$1,520,470**		

C-2

Station 145-360 125' East & West

STATION	TYPE	VALUE	RELOCATION	DAMAGES	COMMENTS
145-150	Agricultural Land	$12,913			
150-230	Agricultural Land	$183,655			
221	Residential			$50,000	SFD;damage
230-265	Agricultural Land	$60,262			
230	Commercial	$475,000	$50,000		
230	Residential			$40,000	SFD; damage
265-295	Agricultural Land	$103,305			
295	Residential			$50,000	SFD; damages
295-331	Agricultural Land	$123,967			
331-355	Mixed Use	$82,645		$50,000	Land severance damge
355-360	Commercial			$115,000	Commercial land severance damage
	SUBTOTALS	$1,041,747	$50,000	$305,000	
	TOTAL		$1,396,747		
	Contingency		$279,349		20% OF TOTAL
	GRAND TOTAL		$1,676,096		

CNB, Inc.
4608 West Canyon Road
Guthrie, Oklahoma 73044-8786
Phone (405) 260-1290

July 7, 2006

Mr. Ronald G. Weltzheimer, Professional Engineer
The Benham Companies, LLC
9400 North Broadway
Oklahoma City, Oklahoma 73114

Dear Mr. Weltzheimer:

RE: U. S. Highway 81 SUBCONTRACT CONSULTING AGREEMENT
Work Authorization No. 1, Signed June 19, 2006

The estimated costs to rearrange utility lines along U.S. Highway 81 from the south side of Chickasha and extending northerly to the north edge of Union City are attached. The estimates are made from available information and are broken into the segments you presented on the strip mosaic maps.

The costs were determined by making a site inspection and using experience costs established by the Oklahoma Department of Transportation. I find the route to be 30 miles in length; this includes the extra segment for the Minco realignment.

If additional information is needed, please feel free to call me at 405-260-1290.

Sincerely,

Charles N Blatt
Utilities Specialist

Attachments

Sent 7/19/06

CNB, Inc.
4608 West Canyon Road
Guthrie, Oklahoma 73044-8786
Phone (405) 260-1290

July 13, 2006

Mr. Ronald G. Weltzheimer, Professional Engineer
The Benham Companies, LLC
9400 North Broadway
Oklahoma City, Oklahoma 73114

Dear Mr. Weltzheimer:

RE: U. S. Highway 81 SUBCONTRACT CONSULTING AGREEMENT
Work Authorization No. 1, Signed June 19, 2006

Attached are the revisions recently requested by Ms. Diane Abernathy for the Chickasha By-Pass. The By-Pass is broken into two segments: One beginning at U.S. Highway 81 south of Chickasha and extending northwesterly to Norge Road; the second segment begins at Norge Road and extends north and northeasterly to U.S. Highway 62. The reference to the Minco Alternate Route has been corrected.

If additional information is needed, please feel free to call me at 405-260-1290.

Sincerely,

Charles N Blatt
Utilities Specialist

Attachments

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Segment No. 1
U. S. 62 to E/W 1320

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 125,250.00	$ 95,250.00	$ 30,000.00
Pipeline Utilities	23,281.00	23,281.00	
Telephone Utilities	48,750.00		48,750.00
Water Utilities	19,531.00	19,531.00	
TOTAL COST-Segment #1	**$ 216,812.00**	**$ 138,062.00**	**$ 78,750.00**

Segment No. 2
E/W 1320 to 1290

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 117,750.00	$ 117,750.00	$
Pipeline Utilities	656,719.00	656,719.00	
Telephone Utilities	296,250.00		296,250.00
Water Utilities	250,000.00	250,000.00	
TOTAL COST-Segment #1	**$ 1,320,719.00**	**$ 1,024,469.00**	**$ 296,250.00**

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Segment No. 3
E/W 1290 to 1260

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 78,500.00	$ 39,250.00	$ 39,250.00
Pipeline Utilities	156,250.00	156,250.00	
Telephone Utilities	216,250.00		216,250.00
Water Utilities	69,063.00	69,063.00	
TOTAL COST-Segment #3	**$ 520,063.00**	**$ 264,563.00**	**$ 255,500.00**

Segment No. 4
E/W 1260 to 1250

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 55,000.00	$ 9,500.00	$ 45,500.00
Pipeline Utilities	143,125.00	56,875.00	86,250.00
Telephone Utilities	93,750.00		93,750.00
Water Utilities	54,063.00	54,063.00	
TOTAL COST-Segment #4	**$ 345,938.00**	**$ 120,438.00**	**$ 225,500.00**

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Segment No. 5
E/W 1250 to 1230

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 57,000.00	$ 28,500.00	$ 28,500.00
Pipeline Utilities	258,750.00	258,750.00	
Telephone Utilities	187,500.00	31,250.00	156,250.00
Water Utilities	143,000.00	143,000.00	
TOTAL COST-Segment #5	**$ 646,250.00**	**$ 461,500.00**	**$ 184,750.00**

Segment No. 6
E/W 1230 to 1200

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 32,250.00	$ 15,500.00	$ 16,750.00
Pipeline Utilities	226,875.00	226,875.00	
Telephone Utilities	187,500.00		187,500.00
Water Utilities	3,438.00	3,438.00	
TOTAL COST-Segment #6	**$ 450,063.00**	**$ 245,813.00**	**$ 204,250.00**

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Segment No. 7
E/W 1200 to 1170.75

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 66,500.00	$ 47,500.00	$ 19,000.00
Pipeline Utilities	120,000.00	22,500.00	97,500.00
Telephone Utilities	200,000.00	12,500.00	187,500.00
Water Utilities	167,500.00	167,500.00	
TOTAL COST-Segment #7	**$ 554,000.00**	**$ 250,000.00**	**$ 304,000.00**

Segment No. 8
E/W 1170.75 to 1160.5

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 19,000.00	$	$ 19,000.00
Pipeline Utilities	112,500.00	84,375.00	28,125.00
Telephone Utilities	18,750.00		18,750.00
Water Utilities	28,125.00	28,125.00	
TOTAL COST-Segment #8	**$ 178,375.00**	**$ 112,500.00**	**$ 65,875.00**

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Segment No. 9
E/W 1160.5 to 1140

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 349,500.00	$ 264,750.00	$ 84,750.00
Pipeline Utilities	32,656.00	32,656.00	
Telephone Utilities	218,750.00	93,750.00	125,000.00
Water Utilities	26,250.00	26,250.00	
TOTAL COST-Segment #9	**$ 627,156.00**	**$ 417,406.00**	**$ 209,750.00**

Segment No. 11
E/W 1130.5 to 1110.5

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 40,750.00	$ 10,750.00	$ 30,000.00
Pipeline Utilities	23,281.00	23,281.00	
Telephone Utilities	250,000.00		250,000.00
Water Utilities	611,563.00	611,563.00	
TOTAL COST-Segment #11	**$ 925,594.00**	**$ 645,594.00**	**$ 280,000.00**

Mr. Ken Brown (Telephone #234-2264), ACOG, has GPS mapping for Union City.

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Chickasha By-Pass
(U.S. Highway 81 Northwesterly to Norge Road)

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 259,000.00	$ 230,500.00	$ 28,500.00
Pipeline Utilities	185,000.00	175,750.00	9,250.00
Telephone Utilities	31,875.00		31,875.00
Water Utilities	60,938.00	60,938.00	
TOTAL COST-This Segment	**$ 536,813.00**	**$ 467,188.00**	**$ 69,625.00**

Chickasha By-Pass
(Norge Road Northeasterly to U.S. Highway 62)

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 294,400.00	$ 211,800.00	$ 82,600.00
Pipeline Utilities	402,750.00	402,750.00	
Telephone Utilities	12,188.00		12,188.00
Water Utilities	438,437.00	438,437.00	
CATV	750.00		750.00
TOTAL COST-This Segment	**$1,148,525.00**	**$ 1,052,987.00**	**$ 95,538 .00**

Estimated Utility Rearrangement Costs
U.S. Highway 81 from South of Chickasha
North To Union City

Minco Alternate

	Total Cost	Private Costs	Public Costs
Electric Utilities	$ 47,500.00	$ 47,500.00	$
Telephone Utilities	27,500.00	12,500.00	15,000.00
Water Utilities	25,125.00	25,125.00	
TOTAL COST-Minco	**$ 100,125.00**	**$ 85,125.00**	**$ 15,000.00**

Oklahoma Department of Transportation

Planning and Research Division

Office 521-2704 Fax 521-6917

DATE: October 4, 2006

TO: Files and Attendees

FROM: Planning and Research Division Engineer

SUBJECT: US 81 Corridor Study – ODOT Meeting Minutes

On Monday, October 2, 2006, a meeting was held to discuss the recent written public comments received on the US 81 Corridor Study project. In attendance were:

Bob Rose	ODOT Division VII
Joe Khatib	ODOT Planning
Ronda Lindsay	ODOT Project Management
Siv Sundarem	ODOT Planning
Eduardo Elder	ODOT Roadway
Diane Abernathy	Benham
Terry McFall	Benham
Ron Weltzheimer	Benham

1. Diane A. explained the recent written comments received from the public, and that the meeting was to determine what tasks were necessary as a result of the comments.

2. Bob R. mentioned that Mr. Thomas (citizen) requested that letters be sent to all property owners during such a study. Joe K. indicated that ODOT's current practice of notifying all property owners by mail of all NEPA clearances and corridor studies was implemented in 2005 and, because the US 81 Corridor Study began prior to that, notification to all property owners was not made.

3. Joe K. suggested that the written comments received from the Minco and the Chickasha public meetings be combined together in the report.

4. It was determined that written responses for Dawn Sullivan's signature will be prepared to the following citizens:
   - GW III and Bertha Thomas
   - Cary DeHart
   - Marilyn Wagstaff Moss and Lawrence Betche

   The responses will provide a brief history of the Corridor Study, including the North Bypass evaluation and why that bypass was eliminated. The responses will address each of the commenter's points, and will explain that all citizens on the mailing list and all property owners will be notified during the NEPA clearance phase. All public inputs will be considered along with other environmental considerations during the NEPA clearance phase to select the final alignment.

5. It was agreed that no additional scope should be added to the Corridor Study as a result of recent public comment, and that preparation of the Corridor Study summary report should commence.

6. Bob R. requested that Benham prepare a summary of all the written public comments, clarifying those in support of and opposing the Chickasha Bypass. Bob will review this information and reconsider whether purchase of the Chickasha Bypass ROW is a "High" priority.

7. It was discussed that the NEPA process will likely evaluate additional areas adjacent and to the west of the area studied for the Western Bypass during the Corridor Study.

US-81 CORRIDOR STUDY

Public Comments Summary

US-81
Grady and Canadian Counties

EC No. 899
J/C 21603(04)

BENHAM

October 2006

MEETING AGENDA
US 81 CORRIDOR STUDY – PUBLIC COMMENT SUMMARY
OCTOBER 2, 2006

1. Recent Public Comments
   - Thomas Letter, 9/19/06
   - Thomas Letter, 9/24/06
   - DeHart Letter, 9/27/06

2. ODOT Response

3. Additional Corridor Study Tasks Required?

4. Final Corridor Study Report Format

G. W. Thomas III and Bertha Thomas
P. O. Box 1673
Chickasha, OK 73023-1673
405-224-5784 (home)
405-313-7040 (cell)

September 19, 2006

The Benham Companies, LLC
9400 North Broadway, Suite 300
Oklahoma City, OK 73114-7401

Re: US 81 Corridor Study

Gentlemen:

Regarding the proposed western bypass for the referenced project, we wish to express the following:

The Bypass Alt 4 Route cuts across land south of Country Club Rd. on either side of the BNSF Railroad which has been used in my family's cattle ranching operations for three generations. There is a possible interchange proposed on these lands as well.

As cattle producers, we have to efficiently maximize our land use. The Bypass Alt 4 Route and possible interchange shown on Highway 92 would have a definite adverse impact on our ability to efficiently continue our cattle operations in this area. Consequently, our livelihood is affected.

While the Bypass Alt 3 Route still cuts across our land, it is not quite as intrusive for us as Alt 4 especially if the interchange could be relocated. Therefore, the negative effect on our cattle operations is less severe.

We recognize our evolving transportation industry is crucial in the efficient movement of people and goods in our society and are hopeful an Alternative Route can be recommended which will be compatible with the needs of all concerned.

Thank you.

Sincerely,

G. W. Thomas III

Cc: Refer to attached

Distribution:

The Benham Companies, LLC

Diane Abernathy
Aruna Mathuranayagam
Ronald Weltzheimer
Larry Wicks

Oklahoma Dept. of Transportation

Terry Angier
Sandra Arnold
EduardoElder
Laila Fosse
Tim Gatz
Kurt Harms
John Hartley
Joe Khatib
Ronda Lindsay
Craig Moody
Brenda Perry
Larry Reser
Bob Rose
Bob Rusch
Casey Shell
Harold Smart
David Streb
Dawn Sullivan

G. W. Thomas III and Bertha Thomas
4000 S. Highway 92
Chickasha, OK 73018
405-224-5784

September 24, 2006

Refer to Distribution List Attached

Re: U.S.-81 Corridor Study

To All Parties Addressed:

After careful consideration, we must advise we are not in favor of the proposed bypass which has been included as part of the U.S. Highway 81 Corridor Study. As previously expressed, this bypass and proposed interchange would have a significant adverse effect on our cattle ranching operation. We would have approximately 600 acres of grazing land affected – many of which would be lost to the bypass. In addition to the loss of grazing land, we would suffer an associated loss of income over the remainder of our lives and incur substantial expense in restructuring the cattle operation.

Also, as citizens concerned about the overall proposed project, we wish to make the following comments:

- It is evident improvements are needed within the U.S. 81 Corridor being studied. However, it is difficult to see why so much emphasis is being placed on the proposed bypass when other viable options exist. For example, an interest has been expressed by several community leaders that a bypass on the north side on Chickasha is preferred. Their suggestion, which we understand was presented at an ODOT public meeting, was apparently not considered.

  If the push for the west bypass is because ODOT purchased a small right-of-way many years ago, it may be better to recognize the plans made at that time are not in today's best interest. ODOT's ownership interest could be sold and other options considered.

- Traffic from Highways 19, 39 and 62, in all likelihood, would not be utilizing the bypass.

- Most Chickasha businesses are located on Highway 81 or adjacent thereto. Customers and suppliers would still be required to use the existing route for access.

- A population growth within the Chickasha area is not apparent unless additional industries, businesses, etc. are established. According to the U. S. Census Bureau, a population of 14,812 was reported for Chickasha in 1995. For 2000, 15,850 was reported. And, today's population is shown at 16,370.

The following information is taken from ODOT's 2005 – 2030 Statewide Intermodal Transportation Plan which was approved by the Transportation Commission on December 5, 2005:

- For 2003, truck percentage of average daily traffic in Grady County was reported to be minimal compared to other areas of the state.

- According to the 2003 Highway Needs Study Data, ODOT's Division 7, which includes Caddo, Grady, Comanche, Cotton, Stephens, Murray, Jefferson, Carter, and Love Counties reported there were 450.18 miles (31.8%) in poor condition; i.e., requiring attention now. There were 607.92 miles (43.0%) in fair condition; i.e., requiring attention in 1-5 years and there were 355.63 miles (25.2%) in good condition; i.e., requiring attention in 6 or more years. Majority of Grady County highways were shown to be in fair or good condition.

- For all ODOT Divisions combined, 35.3% of highways were classified as being in poor surface condition – 36.7% in fair surface condition and 28.0% in good surface condition. In 2003, ODOT identified that over two-thirds of the roads in the State Highway System will need surface replacement by 2008. Many of the major roadways leading into the state's two largest metropolitan areas, Oklahoma City and Tulsa, have poor surface conditions.

- Roads in poor surface condition accelerate the depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface. Tire wear and fuel consumption also increase because there is less efficient transfer of power to the drive train and additional friction between the road and the tires. Roads in poor surface condition may also result in slower driving speeds and increased traffic congestion, which increases travel time and associated labor costs.

- Surveys conducted include responses such as: (a) Existing highway system should be properly maintained before considering new projects. (b) Majority of Oklahomans believe the statewide transportation system has become somewhat worse. (c) Utilize the routing of funded government projects by managing the overall plan, not unnecessary bypasses.

- According to an analysis of the 2002 Federal Highway Administration National Bridge Inventory, Oklahoma leads the nation in the percentage of its bridges rated structurally deficient.

- 60.7% of Oklahoma's on-system bridges are either structurally deficient or functionally obsolete. Of the off-system bridges, 41.2% are either structurally deficient or functionally obsolete.

- As of October 2004, 1,082 structurally deficient and 547 functionally obsolete on-system bridges exist throughout the State.

- Also, of the 1,629 structurally deficient and functionally obsolete on-system bridges in the State, over 100 are within the Oklahoma City Metro Area and over 70 are within the City of Tulsa Metro Area. Oklahoma City and Tulsa are regional freight distribution centers within Oklahoma.

- Heavy trucks are often forced to use alternate routes or detours to bypass these structurally deficient bridges. This may slow the delivery of freight and increase fuel and labor costs.

- Functionally obsolete bridges no longer meet current highway design standards and reduce traffic safety. Narrow roadways make it difficult for drivers to safely maneuver in emergency and non-emergency situations because there is not enough room.

- Only 24 of the 77 counties within Oklahoma do not contain load posted bridges. As a result of load posted bridges, trucking companies must determine the axle configuration and maximum truck weight before a route can be planned for a specific destination. Multiple destinations compound the process. This may slow delivery of freight as vehicles make detours around load posted bridges or take alternate and less direct routes. This results in inefficiency and higher fuel, vehicle maintenance, and labor costs. As more and more bridges become structurally deficient, more and more of them will become load posted. The cost of freight movement on the roadways within the state will increase accordingly.

- Inadequate maintenance of existing infrastructure – inadequate bridges – and Oklahoma's aged bridges relate to long-deferred maintenance and the fact that the bridge's original design standards do not accommodate current heavy truck needs.

- Highway condition problems affect every part of our State. Surface replacement, repairs, etc. That work costs money – its time to give serious consideration to significant, consistent rehabilitation efforts before the problem gets totally out of hand. Local roads are fair – not getting any better.

As ODOT has stated in their 2005-2030 Statewide Intermodal Transportation Plan, the current condition of the Oklahoma Highway System is in great need of attention. Without adequate funding, the roadways and bridges in Oklahoma will continue to deteriorate faster than they can be repaired.

We strongly believe the priority for ODOT should be in taking care of the inadequacies identified. Perhaps by taking care of our existing highway system and bridges, the efficiency of the overall highway system would improve - alternate routes would not be a consideration which might alleviate congestion, stops, etc. in towns – and, there would be less risk to the safety of our Oklahoma citizens and others using our highway system.

Thank you.

Sincerely,

G. W. Thomas III and Bertha Thomas

Distribution List:

Senator Ron Justice
Oklahoma State Capitol
2300 N. Lincoln – Room 533
Oklahoma City, OK 73105

Representative Susan Winchester
Oklahoma State Capitol
2300 N. Lincoln – Room 411
Oklahoma City, OK 73105

Representative Phil Richardson
Oklahoma State Capitol
2300 N. Lincoln – Room 537B
Oklahoma City, OK 73105

Mr. Gary Ridley
Director
Oklahoma Department of Transportation
200 N. E. 21st St.
Oklahoma City, OK 73105

Mr. Bob Rose
Division Engineer
Oklahoma Department of Transportation
P. O. Box 460
Duncan, OK 73533

Mr. Dan B. Overland
Chairman
OK Transportation Commission
1 West Main
Earlsboro, OK 74840

Mr. James H. Dunegan
Vice-Chairman
OK Transportation Commission
P. O. Box 425
Calera, OK 74730

Mr. Larry Shelton
City Manager
117 N. 4th St.
Chickasha, OK 73018

Mr. Carlisle Mabrey III, Member
OK Transportation Commission
P. O. Box 1117
Okmulgee, OK 74447-1117

Mr. Jackie R. Cooper, Member
OK Transportation Commission
6806 Grand Boulevard
Oklahoma City, OK 73116

Mr. Loyd Benson, Member
OK Transportation Commission
P. O. Box 486
Frederick, OK 73542

Mr. Bruce Benbrook, Member
OK Transportation Commission
P. O. Box 1008
Woodward, OK 73802

Mr. Bradley W. Burgess, Member
OK Transportation Commission
21 NW 4th St., Suite 201
Lawton, OK 73505

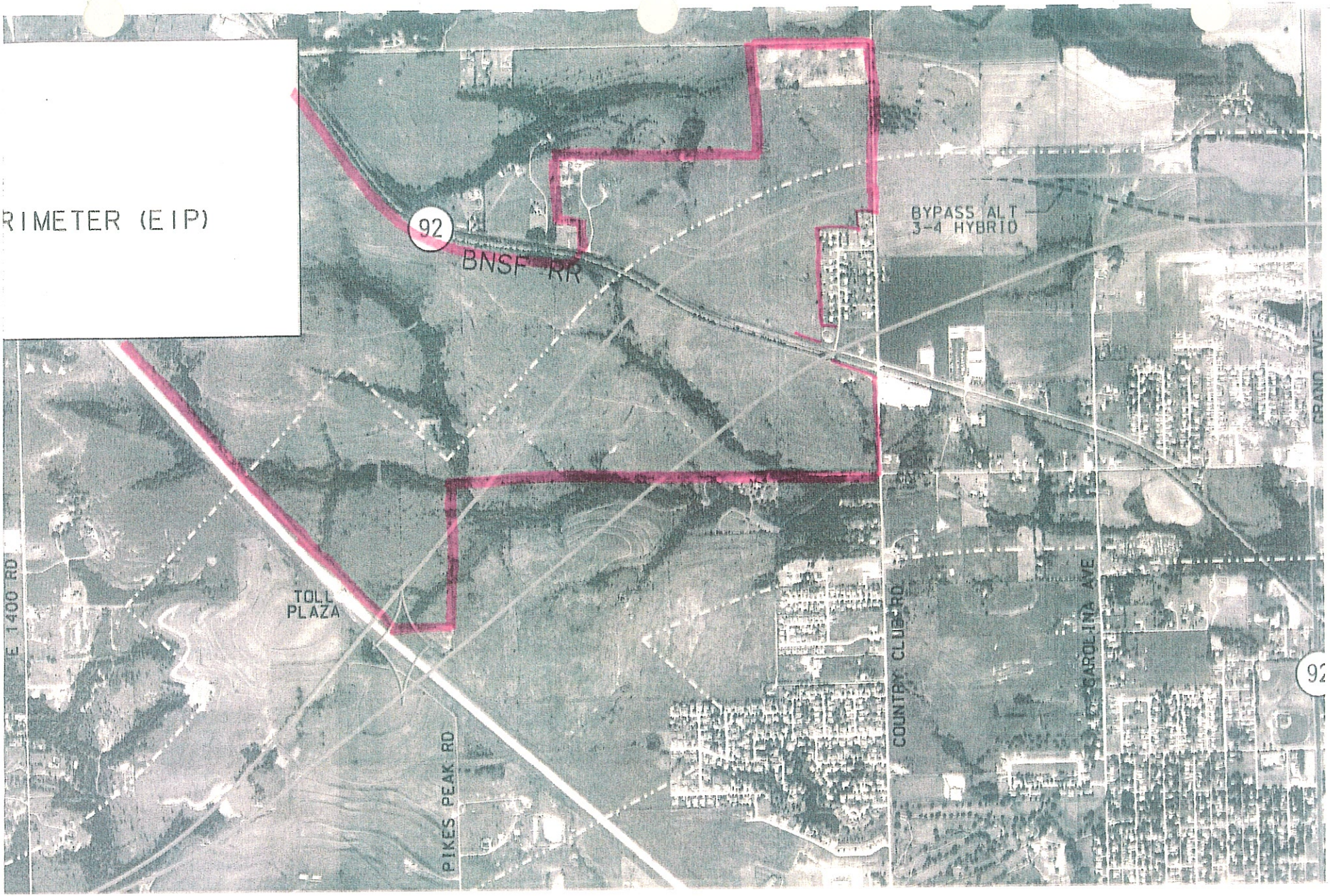
Mr. Guy Berry, Member
OK Transportation Commission
P. O. Box 1408
Sapulpa, OK 74067

Mr. Ronald G. Weltzheimer, P.E.
Senior Project Manager
The Benham Companies, LLC
9400 N. Broadway, Suite 300
Oklahoma City, OK 73114

Ms. Ronda Lindsay
Project Mgr., Division 7
Oklahoma Dept. of Transportation
200 N. E. 21st St.
Oklahoma City, OK 73105

Mr. Greg Elliott, Mayor
City Mayor
117 N. 4th St.
Chickasha, OK 73018

RIMETER (EIP)


92
BNSF RR
BYPASS ALT
3-4 HYBRID
TOLL
PLAZA
E 1400 RD
PIKES PEAK RD
COUNTRY CLUB RD
CAROLINA AVE
92

September 27, 2006

Cary and BJ DeHart
3210 West Idaho
Chickasha, OK 73018
405-224-1554 Work
405-224-1092 Home
405-370-6082 Cell
cdehart@cmswillowbrook.com email

Mr. Weltzheimer, P.E.
Senior Project Manager
The Benham Companies, LLC
9400 N. Broadway, Suite 300
Oklahoma City, OK 73114

Re: U.S. 81 at Chickasha

Mr. Weltzheimer,

I attended the September 7th public meeting about Highway 81 at Grady County Fairgrounds. At that meeting we were shown the proposed location for the West Bypass around Chickasha. I asked how we could speak against the proposed plan and was told to send a comment form provided.

In talking to friends and neighbors I discovered that very few of them new about the public meetings and many of them did not know about the proposed West Bypass. Many of them that heard about a West Bypass assumed it would be much further west and not right on the edge of town.

In order to show the people making the decisions concerning the purchase of right-of-way that there is a great amount of opposition against the proposed West Bypass plan, I have attached approximately 125 signatures with addresses voicing our comments and concerns.

We respectfully request your help and consideration concerning our comments. We would like to have another opportunity to meet with you and the others who may be involved in these decisions concerning the West Bypass.

Sincerely,

Cary DeHart

Cary DeHart

Cc: Larry Shelton, City Manager/City of Chickasha
Greg Elliott, Mayor/City of Chickasha

US 81 Corridor Study
Community Building
Grady County Fairgrounds
September 7, 2006
Public Comments Form

Dear Participants:

We would like to thank you for taking the time to attend this meeting. This form is provided for your convenience should you have any final written comments regarding the US 81 Corridor Study.

I have the following comments or questions about the US 81 Corridor Study from north of Union City to South of SH 19 in Chickasha:

(See Attached)

See Attached

Name:_____

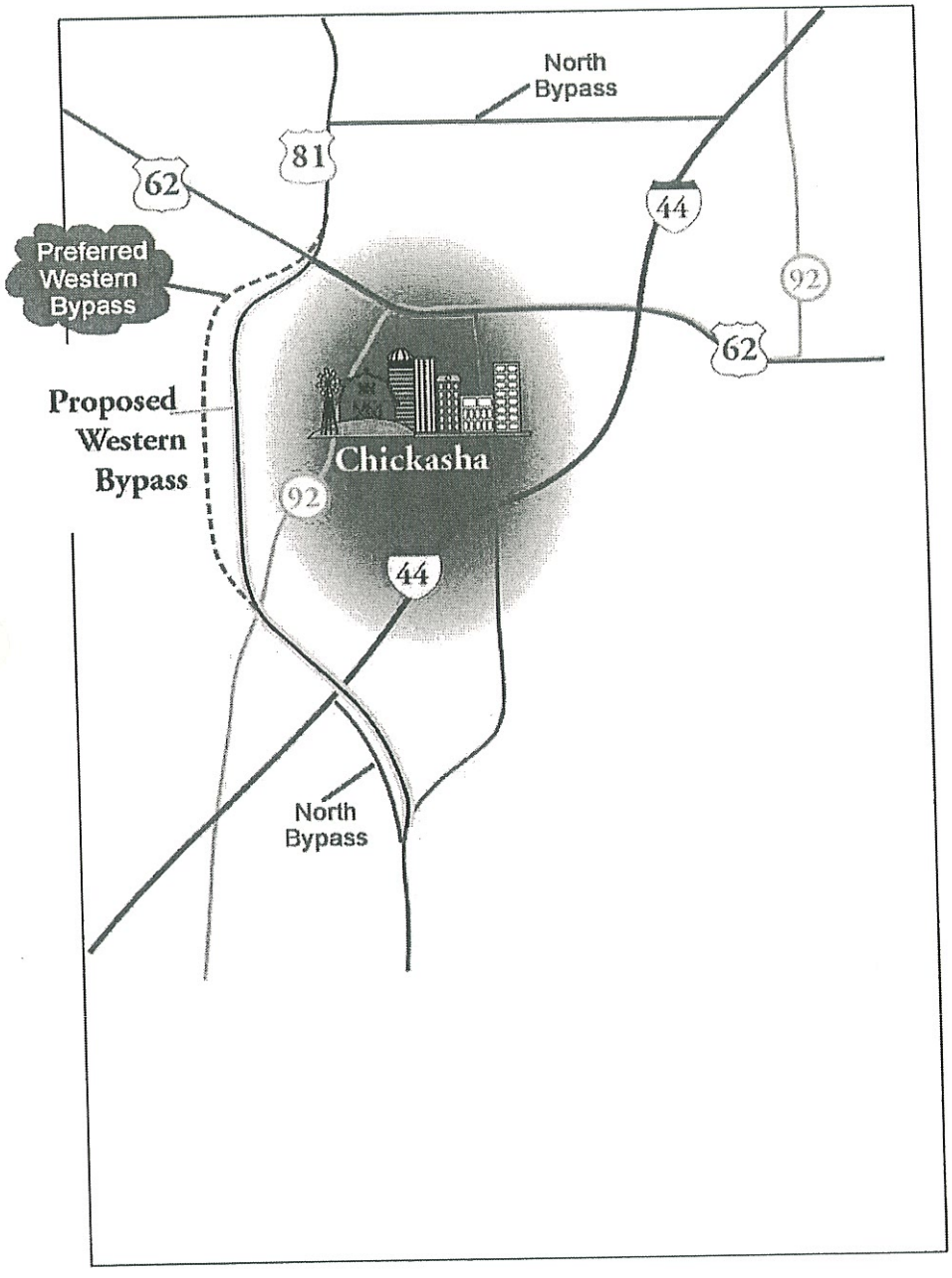
Address:_____

City, State, Zip_____

(Above information is optional)

Planning & Research Division Engineer
Oklahoma Department of Transportation
200 Northeast 21st Street
Oklahoma City, Oklahoma 73105

FAX:(405) 521-6917



Looking East from 29th

Looking West from 29th & Idaho

We feel the proposed Chickasha West Bypass that was presented at the Grady County Fairgrounds on September 7, 2006 is being located too far east. This location is too close to existing homes and this plan is not considering the best interest of the future growth of Chickasha. The "North Bypass" would be by far more acceptable and would allow Chickasha to expand to the west.

If the Bypass is to be located on the west side of Chickasha, it should be located further to the west of Chickasha. Alternate 4 or further west, would be preferred over the Alternate 3 or the 3-4 hybrid. By purchasing right-of-way further west, future homeowners will know the highway's future location before they build in this area.

Also, the plan indicated an intersection/exit from the new 4-lane bypass at Idaho Ave. This would greatly increase the future traffic on Idaho, which is residential and very narrow road. Idaho is a dead end to the east from 29th Street. The following signs are located on Idaho between 29th Street and the proposed new intersection.

Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Tim Dunkin	2100 S. 29th	Chickasha	OK 73018
Pam Ervin	Pam Ervin 2100 S. 29th	Chickasha,	OK 73018
Jan Dunkin	Jan Dunkin 2100 S. 29th	Chickasha,	OK 73018
	Wade Dunkin 1601 S 19th	Chickasha	OK 730
Tammy Remy	Tammie Remy 2100 S. 29th	Chickasha	OK 73018
	Lisa Dunkin 2100 S 29th	chickasha	OK 73018

We feel the proposed Chickasha West Bypass that was presented at the Grady County Fairgrounds on September 7, 2006 [redacted] is too close to existing homes and this plan is not considering the best interest of the future growth of Chickasha. The "North Bypass" would be by far more acceptable [redacted]

[redacted]

[redacted]

Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State:	Zip:
E W Thomas III	PO Box 1673	Chickasha		73018
B Thomas	P.O. Box 1673	Chickasha	Okla	73018

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Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Marion Griswold	3310 W Idaho Ave	Chickasha	OK 73018
Evelyn Griswold	3310 W Idaho Ave	Chickasha	OK 73018

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Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
R. Hunter	3333 Solb	Chickasha	OK 73018
Patti Bogstad	879 CR 1403	Chickasha,	OK 73018
	879 CR 1403	Chickasha	OK 73018

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Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Angie Barnett	1143 CR 1400	Chickasha,	OK 73018
Barry C. Thomas	2900 W. Idaho	Chick.	OK "
Donna J Thomas	2900 W. Idaho	Chick	OK. 73018

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Chris Snodgrass	3325 Arizona	Chix	OK 73018
Gary Baird	106 St James Place	Chickasha	OK 73018
[illegible]	3739 State Hwy 92	chickasha	ok 73018
Danny King	2305 S 33rd	Chickasha	ok 73018
[illegible]	2029 S 19	Chickasha	OK 73018
Tommy Holt	2900 South 29th Street	Chickasha	OK 73018
[illegible]	1175 9th Circle	Chickasha	OK 73018

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Thank you for your consideration,

Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Patricia A. Brooks	P.O. Box 1130	Chickasha	OK 73018
Carol Lewis	104 Cavalier	Chickasha	OK 73018
Curtis A. Brooks	13822 Nicholas Rd.	Chickasha	OK 730
[illegible]	28 Christopher Dr.	Chickasha	OK 730[illegible]5
Dana Hamilton	1506 S 17th	Chickasha	OK 73018
Lisa Baker	48 Hillcrest Dr.	Chickasha	OK 73018
David Steele	110 Cavalier	Chickasha	OK 73018
[illegible]	1013 Gravel Terrace	Chickasha	OK 73018

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Sheldon Smith	115 N 29th	Chickasha,	OK 73018
Sara Smith	115 N 29th	Chickasha,	OK 73018
Lon Smith	737 Co Rd 1360	chickasha,	OK 73018
LaVera Smith	737 Co Rd 1360	Chickasha,	OK 73018
LaDonna Smith	737 C. R. 1360	Chickasha,	OK. 73018
Lavern Nightingale	727. CO. RD. 1360	Chickasha	OK 73018
Elaine Nightingale	"	"	"
Cheryl Nightingale	727 Co. Rd. 1360,	Chickasha,	OK 73018

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State:	Zip:
Paul Horton	3213 California	Chickasha	OK	73018
Richard Jago	673 County Rd 1365	Chick	ok	73018
Brittany Otto	902 S. 19th	Chickasha,	OK	73018
Teresa Smith	141 Co Rd 1440	Cement	OK	73017
Kevin Robison	3600 W. Grand	Chickasha,	OK	73023
Annica Canady	1112 S. 12th	Chickasha,	OK	73018
Mark Lattimore	3310 W Highway 62	Chickasha	OK	73018
Elsie Kahn	3310 W Highway 62	Chickasha,	OK	73018

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Name	Address:	City:	State:	Zip:
Tricia Duncan	PO Box 1595	Chickasha	OK	73023
Dorothy L Brigham	1209 So 7th	Chickasha	OK	73018
Gerald Smith	224 CR 1340	Verden	OK	73092
Joyce Smith	224 CR 1340	Verden	OK	73092
Terry Smith	1103 So 16th	Chickasha	OK	
Linda Roper	3206 Park	Chickasha,	OK	73018
	3819 Heatherwood Dr.	Chickasha	OK	73018
Jeanne Hellmer	3091 CS 2800	Minnehaha	OK	73067

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
Teresa Gardner	1922 Dakota	Chickasha	73018
Shana Wilson	2996 N. old Highway Lot 37	Chickasha	73018
Alan Schultz	408 CR 1360	Chickasha	73018
Bill Carruth		Chickasha	OK
Mike Carruth	412 23RD AVE N.E	Norman	OK 73071
Greg McDaniel	1416 Frisco Apt J	Chick	Okla 73018
Heather Harmon	1100 Park Ave	Chickasha	OK 73018
[illegible]	1733 CR 1470	Alex	OK 73002

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Name	Address:	City:	State: Zip:
Terri Sinka	2781 CoSt 2794	Chickasha,	OK 73018
Betty Vincent	227 S12	Chickasha	OK, 73018
Jerry Hewin	3385 Co St. 2850	Minnekah,	OK 73067
Jane Dooly	2628 S 16th	Chickasha	OK 73018
Tony Brandt	866 County Road 1490	Chickasha	Ok 73018
Joseph G. Rempe	2182 N 5th	Chickasha,	OK 73018
[illegible]	611 us Hwy 277	Minnekah	OK 73067

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Name	Address:	City:	State: Zip:
Wayne Robnett	2901 Idaho	Chickasha	73018
Amelia Scaffells	2210 Unit Park		73018
Chad Kennard	2213 University	Chickasha	73018
Kristi Bates	2213 Univ. Blvd.	Chickasha	OK 73018
Bob Phillips	2225 "	"	"
Bailey Dees	2105 University Blvd	chickasha	73018
Ron Felder	3015 Idaho	Chickasha	73018
Carolyn Hunter	3333 20 Ho	Chickasha	73018

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Name	Address:	City:	State: Zip:
Pam Dorman	2227 S. 14th	Chickasha	OK 73018
Charlotte Parker	203 Flowerdy Dr.	Chickasha,	OK 73018
Ollie Monroe	3211 Arizona	Chickasha,	OK 73018
Donnie Monroe	3211 Arizona	Chickasha	OK 73018
Tom Woodall	3204 Arizona	Chickasha	OK 73018
Nathan Brockman	3680 W. Iowa ave	Chickasha	OK 73018
	2211 University Park	Chickasha	OK 73018
Lora McPherson	828 S 8th	Chickasha	OK 73018

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Name	Address:	City:	State: Zip:
Cary Dettard	3210 W. Idaho	Chickasha,	OK 73018
Kim Griffith	3028 W. Idaho	Chickasha,	OK 73018
Robert L Barnett	1143 C.R. 1400	Chickasha,	OK 73018
BJ Dettard	3210 W. Idaho	Chickasha	OK 73018
Nancy Griffith	3028 W Idaho	Chickasha	OK 73018
Bill Crowell	3306 W. IDAHO	CHICKASHA,	OK. 73018
[illegible]	3306 W. Idaho	Chickasha,	Ok
Angela Self	3306 W. Idaho	Chickasha	Ok

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Name	Address:	City:	State: Zip:
Nancy Boone	3327 W Idaho	Chickasha	73018
Bill Sibrand	3500 W. Iow	Chickasha	73018
Pat Schwenk	3500 W. Iowa	Chickasha	73018
Jolynn Horn	3126 W. Iowa	Chickasha	73018
Pat Crawford	3100 W. Iowa,	Chickasha	73018
Jerry Grotha	2828 W Iowa	Chick.	73018
Mark Kobrett	2901 W Idaho	Chick	
[illegible] Grimes	3000 W Idaho	Chick	

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name:	Address:	City:	State: Zip:
[illegible]	1216 S 29th	Chickasha	OK 73018
[illegible]	715 County Rd	Chickasha	73018
[illegible]	715 County Rd	Chickasha	730[illegible]
[illegible]	715 County RD	Chickasha	73018
[illegible]	721 County RD	Chickasha	73018
Natalie Kee[illegible]	33 HazyBrook	Chickasha,	OK 73018
[illegible]	1828 Carolina	Chickasha,	OK 73018
[illegible]	1828 Carolina	Chickasha,	OK 73018

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State: Zip:
[illegible]	1927 S 14th	Chickasha	OK 73018
[illegible]	1828 S. 19th St	Chix	OK, 73018
Katherine Horton	2001 S 14th St	Chix,	OK 73018
Addie Dunn	1923 S. 14th	Chickasha	OK 73018
Gabriela Boone	1713 S. 14th	Chickasha,	OK 73018
Dominic King	2305 S. 30th	Chickasha	OK 73018
Muhammad Noman.	2306 S 30th	Chickasha	OK 73018
[illegible]	3327 West Idaho Ave,	Chickasha,	
[illegible]	3301 W. Idaho	Chickasha,	OK 73018

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Name	Address:	City:	State: Zip:
E V Hicken	Rt 1 Box 74	Chickasha	73018

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Cc: Representative Susan Winchester, Senator Ron Justice, and Representative Phil Richardson.

Name	Address:	City:	State:	Zip:
George A Horn	3126 W. Iowa	Chickasha	OK	73018

SUMMARY OF ALL US 81 WRITTEN PUBLIC COMMENTS
10/10/06 - PAGE 1

Date	Name	Comment	Chickasha Western Bypass			Small Town Bypasses	
			PRO	"PRO" w/Changes	CON	PRO	CON
1/22/99	Larry Shelton, City of Chickasha	Resolution from the City Council requesting ODOT include a west bypass in their list of projects	X				
6/15/04	Marilyn Feaver, Grady Co Econ Dev Council	Resolution from Development Council requesting that ODOT improve US 81 to 4-lane and build a north bypass			X		
5/10/05	Dwight Yokum, Chix Public Schools	Supports bypass if it makes Chix more attractive for potential business; against if it hurt any existing business					
5/17/05	Patrick Brooks	Supports a Northern Bypass			X		
5/19/05	Gina Dickerson; TJ McCullough, Jr. – City of UC	Support widening Us 81; against UC bypass					X
5/19/05	Rep. Phil Richardson	Supports improving US 81 from El Reno to south of Chickasha					
11/5/05	Greg Elliott	For Chix w. bypass; prefers hybrid	X				
11/7/05	Lindel Pettigrew	For Chix w. bypass; prefers hybrid	X				
11/17/05	Charlie Brown	Suggesting a variation of west bypass route		X			
11/9/05	Steve Boswell	Against Minco Bypass					X
11/9/05	Dara Ross	Against Minco Bypass					X
11/9/05	Reedy Maples Jr.	Against Minco Bypass					X
11/9/05	Larry Maples	Against small town bypasses; For Chix bypass	X				X
11/9/05	Virginia Hayes	Against small town bypasses					X
11/11/05	John Swafford	Against Minco Bypass					X
11/11/05	Elizabeth Gilpen	Against UC bypass					X
11/13/05	LD & Stella Hamlett	Prefers no impacts to west side of US 81					

SUMMARY OF ALL US 81 WRITTEN PUBLIC COMMENTS
10/10/06 - PAGE 2

Date	Name	Comment	Chickasha Western Bypass			Small Town Bypasses	
			PRO	"PRO" w/Changes	PRO	PRO	PRO
11/15/05	B. Thomas	Against Chix bypass and Idaho Interchange			X		
11/17/05	Doug Phelps	Against small town bypasses; For Chix bypass	X				X
11/17/05	John Hacker	Against Minco BP					X
11/17/05	Nancy Malcom	Against Minco Bypass					X
11/17/05	Bob Bratcher	Against Minco Bypass					X
11/17/05	Karen Bratcher	Against Minco Bypass					X
11/17/05	Doug Denard	Against small town bypasses					X
11/17/05	Darrell Mollett	Against Chix bypass			X		
11/17/05	Charlie Burress	For Chix bypass	X				
11/17/05	Leon & Mary Jensen	For Chix bypass	X (2)				
11/18/05	Moss/Betche	Against Minco Alternate, Prefers Minco East Bypass				X (2)	
11/18/05	J. Mason	Against Minco Bypass					X
11/18/05	Larry & Linda Shipman	Prefers no impacts to west side of US 81					
11/18/05	TK Cattle & Co	Concerns over impacts to west side of US 81					
11/21/05	Nick Sprowls	Against Minco Bypass					X
11/21/05	Inga Sprowls	Against Minco Bypass					X
11/21/05	Nick Sprowls Jr.	Against Minco Bypass					X
11/23/05	David Sprowls	Against Minco Bypass					X
11/23/05	Julia Sprowls	Against Minco Bypass					X

SUMMARY OF ALL US 81 WRITTEN PUBLIC COMMENTS
10/10/06 - PAGE 3

Date	Name	Comment	Chickasha Western Bypass			Small Town Bypasses	
			PRO	"PRO" w/Changes	CON	PRO	CON
11/23/05	LaPrinia Richardson	Against Chix Bypass			X		
11/23/05	David Holding	Against Chix Bypass			X		
11/23/05	Dana Holding	Against Chix bypass			X		
11/23/05	Bonnie Moddrell	Against Chix bypass			X		
11/23/05	Jeannie Singleton	Wants US 81 to be 4-lane					
11/23/05	Ken Singleton	For Chix bypass	X				
11/28/05	Lloyd Menz	Against Union City Bypass					X
11/28/05	Tracey Pappe	Against Union City Bypass					X
11/28/05	James Pappe	For Union City Bypass				X	
9/19/06	Bill Sheets	How much Pocasset ROW needed					
9/7/06	Larry & Linda Shipman	Supports new lanes on the east side of US 81					
8/30/06	Tim Stewart – OTA	Doesn't plan to attend meeting					
9/4/06	OWRB	Contact local floodplain administrator					
9/11/06	William McDuff	Against Chix Bypass			X		
9/13/06	Moss/Betche	For Minco existing alignment; questions re: ROW and US 37/US 81 alignment along Sager Road					
9/13/06	Mike Nunamaker	For Chix Bypass	X				
9/13/06	M. C. Rempe	Against Chix W bypass			X		
9/13/06	Moss/Betche	Against East Bypass and Alternate					X (2)
9/18/06	Lucille Looney	For Chix Bypass	X				
9/18/06	Tracy Caraway (JCCA)	Questions re: compensation for preliminary work on abandoned school site					
9/18/06	Mary Jensen	For Chix Bypass	X				
9/20/06	Wickie & Peggy Riley	For small town bypasses; questions about ROW and notification				X (2)	

SUMMARY OF ALL US 81 WRITTEN PUBLIC COMMENTS
10/10/06 - PAGE 4

Date	Name	Comment	Chickasha Bypass		Western	Small Town Bypasses	
			PRO	"PRO" w/Changes	PRO	PRO	PRO
9/29/06	Anonymous	Against current alignment of Chix W bypass; prefer North bypass or moving further west		X			
9/19/06	GW III and Bertha Thomas	Against Bypass Alt 4; prefer Bypass Alt 3 (less intrusive)		X (2)			
9/24/06	GW III and Bertha Thomas	Against Chix W bypass; prefer North Bypass; traffic won't use bypass; doubt Chix pop growth merits bypass; fix bridges instead			X (2)		
9/27/06	Cary DeHart (petition)	Current alignment of W Bypass is too far east; prefer either N Bypass or using West Alternate 4 or even further west; against Idaho interchange		X (120)	X (2)		
10/03/06	GW III and Bertha Thomas	States that US 81 corridor study public involvement effort was not adequate; requests another meeting to discuss bypass alternatives.			X (2)		
10/3/06	James Winslow, MD	Suggests west bypass should be moved west ½ mile, or consider a north bypass		X			
10/4/06	Kenneth & Jeanie Singleton	Supports 4-laning US 81; supports a logical bypass	X (2)				
		TOTALS	**14**	**125**	**16**	**5**	**24**

SUMMARY OF US 81 PUBLIC COMMENTS
CHICKASHA WESTERN BYPASS
10/10/06 - PAGE 1

Date	Name	Comment	Chickasha Western Bypass		
			PRO	"PRO" w/Changes	CON
1/22/99	Larry Shelton, City of Chickasha	Resolution from the City Council requesting ODOT include a west bypass in their list of projects	X		
6/15/04	Marilyn Feaver, Grady Co Econ Dev Council	Resolution from Development Council requesting that ODOT improve US 81 to 4-lane and build a north bypass			X
5/17/05	Patrick Brooks	Supports a Northern Bypass			X
11/5/05	Greg Elliott	For Chix w. bypass; prefers hybrid	X		
11/7/05	Lindel Pettigrew	For Chix w. bypass; prefers hybrid	X		
11/17/05	Charlie Brown	Suggesting a variation of west bypass route		X	
11/9/05	Larry Maples	Against small town bypasses; For Chix bypass	X		
11/15/05	B. Thomas	Against Chix bypass and Idaho Interchange			X
11/17/05	Doug Phelps	Against small town bypasses; For Chix bypass	X		
11/17/05	Darrell Mollett	Against Chix bypass			X
11/17/05	Charlie Burress	For Chix bypass	X		
11/17/05	Leon & Mary Jensen	For Chix bypass	X (2)		
11/23/05	LaPrinia Richardson	Against Chix Bypass			X
11/23/05	David Holding	Against Chix Bypass			X
11/23/05	Dana Holding	Against Chix bypass			X
11/23/05	Bonnie Moddrell	Against Chix bypass			X
11/23/05	Ken Singleton	For Chix bypass	X		
9/11/06	William McDuff	Against Chix Bypass			X
9/13/06	Mike Nunamaker	For Chix Bypass	X		
9/13/06	M. C. Rempe	Against Chix W bypass			X

SUMMARY OF US 81 PUBLIC COMMENTS
CHICKASHA WESTERN BYPASS
10/10/06 - PAGE 2

Date	Name	Comment	Chickasha Western Bypass		
			PRO	"PRO" w/Changes	CON
9/18/06	Lucille Looney	For Chix Bypass	X		
9/18/06	Mary Jensen	For Chix Bypass	X		
9/29/06	Anonymous	Against current alignment of Chix W bypass; prefer North bypass or moving further west		X	
9/19/06	GW III and Bertha Thomas	Against Bypass Alt 4; prefer Bypass Alt 3 (less intrusive)		X (2)	
9/24/06	GW III and Bertha Thomas	Against Chix W bypass; prefer North Bypass; traffic won't use bypass; doubt Chix pop growth merits bypass; fix bridges instead			X (2)
9/27/06	Cary DeHart (petition)	Current alignment of W Bypass is too far east; prefer either N Bypass or using West Alternate 4 or even further west; against Idaho interchange		X (120)	X (2)
10/03/06	GW III and Bertha Thomas	States that US 81 corridor study public involvement effort was not adequate; requests another meeting to discuss bypass alternatives.			X (2)
10/3/06	James Winslow, MD	Suggests west bypass should be moved west ½ mile, or consider a north bypass		X	
10/4/06	Kenneth & Jeanie Singleton	Supports 4-laning US 81; supports a logical bypass	X (2)		
		TOTALS	**14**	**125**	**16**

SUMMARY OF US 81 PUBLIC COMMENTS
SMALL TOWN BYPASSES
10/10/06 - PAGE 1

Date	Name	Comment	Small Town Bypasses	
			PRO	CON
5/19/05	Gina Dickerson; TJ McCullough, Jr. – City of UC	Support widening Us 81; against UC bypass		X
11/9/05	Steve Boswell	Against Minco Bypass		X
11/9/05	Dara Ross	Against Minco Bypass		X
11/9/05	Reedy Maples Jr.	Against Minco Bypass		X
11/9/05	Larry Maples	Against small town bypasses; For Chix bypass		X
11/9/05	Virginia Hayes	Against small town bypasses		X
11/11/05	John Swafford	Against Minco Bypass		X
11/11/05	Elizabeth Gilpen	Against UC bypass		X
11/17/05	Doug Phelps	Against small town bypasses; For Chix bypass		X
11/17/05	John Hacker	Against Minco BP		X
11/17/05	Nancy Malcom	Against Minco Bypass		X
11/17/05	Bob Bratcher	Against Minco Bypass		X
11/17/05	Karen Bratcher	Against Minco Bypass		X
11/17/05	Doug Denard	Against small town bypasses		X
11/18/05	Moss/Betche	Against Minco Alternate, Prefers Minco East Bypass	X (2)	
11/18/05	J. Mason	Against Minco Bypass		X
11/21/05	Nick Sprowls	Against Minco Bypass		X
11/21/05	Inga Sprowls	Against Minco Bypass		X
11/21/05	Nick Sprowls Jr.	Against Minco Bypass		X
11/23/05	David Sprowls	Against Minco Bypass		X
11/23/05	Julia Sprowls	Against Minco Bypass		X
11/28/05	Lloyd Menz	Against Union City Bypass		X
11/28/05	Tracey Pappe	Against Union City Bypass		X
11/28/05	James Pappe	For Union City Bypass	X	
9/13/06	Moss/Betche	Against East Bypass and Alternate		X (2)
9/20/06	Wickie & Peggy Riley	For small town bypasses; questions about ROW and notification	X (2)	
		TOTALS	**5**	**24**