City of Elma

Community Development
P.O. Box 3005 – 202 W. Main Street
Elma, WA 98541-0487
(360) 482-4482 Fax (360) 482-4960
steve@cityofelma.com

May 24, 2011

Dan Glenn

Re: SEPA application 2011-03

Dear Mr. Glenn:

I have included a signed copy of the MDNS 2011-03 and provided to you for the proper filing as requested. As I understand it the UTC did receive a copy of the MDNS and according to Ms. Woods UTC did review the document. This was mailed to the UTC on or about March 10, 2011, along to the other appropriate agency.

If you have any further questions or require any additional information please do not hesitate to contact me.

Respectfully,

Steve Petitt
Director of Community Development/Building Official

cc: Dave Osgood, Mayor
File

SP/sp

City of Elma

Public Works/Community Development
P.O. Box 3005 – 202 W. Main Street
Elma, WA 98541-0487
(360) 482-4482 Fax (360) 482-4960
steve@cityofelma.com

STATE ENVIRONMENTAL POLICY ACT
MITIGATED DETERMINATION OF NON-SIGNIFICANCE

SEPA Application 2011-03

Description of proposal: Puget Sound & Pacific Railroad proposes to close the North 2nd Street crossing, North 5th Street crossing, North 10th Street crossing, North 17th Street crossing, and Hewitt Street crossing, at grade, highway/railroad crossing to **vehicular traffic.** The project entails removing the existing crossing surface and grade crossing warning active or passive systems along with the roadway on each side of the railroad track to the railroad right of way line. Barricades are to be installed at the railroad right of way line prevent ingress onto the railroad's property. Signage is to be installed in advance of the crossing indicating the crossing closure. The proposed work is planned to be performed by PSAP personnel. The planned work should take approximately two days per crossing too remove the existing crossing, install signage, remove the roadway pavement to the railroad right of way line and install barricades. The work will be done with a crew of approximately Four (4) men using a backhoe, air compressor and a boom truck. The work will be performed during day light working hours.

Proponent: Puget Sound & Pacific Railroad
411 North 3rd Street
Elma, WA 98541

***Location of Proposal, including street address, if any*:** The projects are located at the grade street crossings at North 2nd Street, North 5th Street, and North 10th Street, which lie in Elma City Limits, Elma Washington. The crossings are identified by Washington Department Of Transportation as Latitude and Longitude and are taken from the Washington Utility Transportation Commission Crossing Inventory list. North 2nd street, DOT number is 096525J with a latitude of 47.00794 and longitude of -123.40333. North 5th Street, DOT number 096635U and latitude 47.0074 and longitude -123.40747, and North 10th Street, DOT number 096639W, Latitude 47.00728 and Longitude -123.41395.

Lead agency: City of Elma

Findings: The lead agency, pursuant to WAC Chapter 197-11-924, has determined that this proposal does not represent a probable significant adverse impact on the environment, provided that the attached mitigating measures are conditions of closing the crossings. This decision is based upon review of the completed environmental checklist and other information on file and is available for review Monday through Friday from 8:00 a.m. to 5:00 p.m., at the Department of Community Development/Building Official office, 202 West Main Street, Elma, WA. An environmental impact statement (EIS) is not required under RCW 43.21C.030. The following mitigation measures are assigned to this proposal pursuant to the authority granted under the City of Elma Unified Development Code (UDC) Article 11, Adverse Impact Mitigation Fees, RCW chapter 4321C.135 and WAC Chapter 197-11-350:

A. BACKGROUND

11. Location: The submitted checklist listed North 17th street and Hewitt street as within the City limits. However 17th and Hewitt street crossings are outside of the corporate limits.

B. ENVIRONMENTAL ELEMENTS

1.EARTH: To mitigate for probable significant adverse impacts from the proposed work to the natural environment:

1. The applicant shall install temporary erosion and sediment control measures during construction, with measures consistent with those contained in latest edition of the Washington Department of Ecology stormwater manual.

2. The applicant shall install barrier and silt fence's to the best management practice (BMP's) as an appropriate means to prevent silt-laden stormwater and other pollutants from entering waters of the state.

(b) WATER. To mitigate for probable significant adverse impacts from the proposed work to the natural environment:

1. Applicant has indicated a construction stormwater pollution prevention plans will be prepared and implemented, and shall be provided to the City of Elma for review and comment.

2. Provisions should be made to minimize the tracking of sediment by construction equipment onto paved public roads. If sediment is deposited on public right of ways it should be cleaned every day by shoveling or sweeping. Water should be used only after the area has been shoveled or swept.

(c) TRANSPORTATION. To mitigate for probable significant adverse impacts from the road closures:

1. The applicant shall be responsible for all improvements necessary for the additional traffic that will be routed onto the closest arterials. These cost are identified in a report generated by the City of Elma consultant engineer John Duncan P.E. from Gibbs and Olson, dated March 7, 2011 and is available on request for review. Any additional cost for investigation, analysis, or reports necessary for a determination of direct impacts shall be borne by the applicant. These cost are identified by Article 11 of the Elma Unified Development Code to mitigate the direct impacts that have been identified by the City as a consequence of the proposed street closures.

A. 2nd Street:

The North 2nd Street Crossing is an at-grade, north-south, crossing that is relatively flat in each direction. It is located in the Martins Addition to the Town

of Elma subdivision platted in November of 1889. Based on preliminary review of records, it appears that the plat predates the existence of the railroad, and as such the rights of the public to access 2nd Street as a public right-of-way precede any railroad rights. A formal street vacation process administered by the City of Elma will be required to close the 2nd street crossing. Since this location has a very flat grade crossing in each direction, it accommodates the passage of large vehicles with minimal street clearance, such as lowboy trailers, chip trucks, trailers with low hitches and cars that have been lowered. Should a closure at the proposed 2nd street be approved, cul-de-sacs accommodating emergency vehicle and school buses, turnaround areas will need to be installed on both the north and south side of the railroad tracks. The closing of North 2nd Street will reroute traffic onto North 3rd Street, which has sufficient width to handle increased traffic, but is in extremely poor condition. The State of Washington Transportation Improvement Board (TIB) rates streets under their GMap Dashboard, available for review on-line at TIBGMA.com, click on Small City Maintenance, then to City of Elma under Gray's Harbor County. As shown on the TIB GMap, Third (3rd) Street is tied for the lowest street rating in the entire city, with the portion from the railroad right of way southerly to Anderson Street, rated the lowest in the City of Elma. Routing additional traffic onto the lowest rated street in the City is not recommended without significant improvements.

Additionally, while the vertical street grade northerly from the existing railroad crossing at 3rd street is a relatively flat grade, the vertical alignment to the south of the tracks drops 5 feet ± within a short distance, providing opportunity for vehicles to become high-centered while crossing the tracks. This represents a safety hazard.

To accommodate the proposed crossing closures at the identified locations, cul-de-sacs will be required to provide turnarounds for emergency, buses, and public vehicles. A maximum distance of 150 feet or less for emergency vehicle backup is allowed by the International Fire Code before a turnaround is required. Costs were developed for a cul-de-sac turnaround capable of being constructed at the indentified locations. An alternate turnaround design, such as a hammer head, may also be a viable option but will be designed by the applicant and approved by the City of Elma. Land acquisitions costs for required right of way will be in addition to the indentified project construction costs, listed for the each crossing identified within this MDNS.

Proposed estimated cost for improvements to Pine Street, 3rd street to 2nd street, and cul-de-sacs for North 2nd street, north and south. John Duncans Report dated March 7, 2011 (exhibit A and exhibit B) **$316,200.00 dollars**
Proposed estimated cost for 3rd street improvements from Young street to Railroad crossing on Southerly side of closure. (exhibit D) **$921,250.00 dollars**

B. North 5th Street Crossing

The north 5th Street crossing is a light traffic area with a narrow, at grade crossing, north and south, with access to commercial and residential properties on the north

side of the tracts. The existing street is narrow, with a 30 foot right of way, on the northerly side of the tracts. The north and south sides of 5th street shall be provided with cul-de-sacs to accommodate emergency, buses, commercial and private vehicles. Additionally, West Pine street and North 5th street will require widening to accommodate the rerouted vehicle traffic. As noted, the existing 30 foot right of way is insufficient to accommodate the street widening, and therefore, additional right of way will need to be purchased for any proposed street improvements. See John Duncans report dated March 7, 2011.

Proposed estimated cost for two cul-de-sacs, Pine street from 3rd street to 5th street, 5th street to cul-de-sac, (exhibit A and exhibit C) **$495,800.00 dollars**

C. North 10th Street

Initial concern was raised that the traffic count was conducted during off season use of the City Park facilities. Thus the count is likely far below the average one would obtain if done during the extended season during which the facilities are utilized by the public. A revised traffic count of North 10th shall be conducted at a time when the fields are being used for spring, summer or fall events. The North 10th street crossing is an at grade (north-south) crossing which provides access to residential neighborhoods and the City park. The area northerly of the railroad tracks is relatively flat, and during large storm events, 11th and 12th streets experience ponding of rainwater and vehicle wash wakes from traffic, which flood the adjacent homes on either side of the streets. During these heavy rainfall events, traffic is detoured to the 10th street crossing to reduce storm water impacts to the existing homes. The proposed 10th street closure shall be provided with cul-de-sacs on the north and south side of the railroad crossing accommodating turnaround for emergency vehicles, school buses, and private vehicles. Additionally an engineering design study is required to address the storm water, wash wake issue that occurs during heavy rainfall events. Based on the results of the storm water pre-design, a cost can then be developed for the required improvements to the City's storm water system. The current north 10th street traffic would be routed to 11th street.

Proposed estimated cost for two cul-de-sacs, and storm water design study (storm water improvement cost are unknown) **$201,400.00 dollars**

D. North 17th Street

The north 17th street crossing is an at grade, north-south, crossing with the southerly side of the tracts zoned City of Elma residential and the north side zoned Gray's Harbor County rural. The north side is at a relatively even grade with the railroad tracks, and the southerly side experiencing a sharp drop of 6 feet ± within a short distance. This crossing location provides access to the City's potable water wells, which are located 1,500 hundred feet northwesterly from this crossing. This location provides the most direct access from the westerly side of the City, and is the back up access during the heavy rainfall storm events discussed in the North

10th street crossing above. The north 17th street crossing shall be provided with a cul-de-sac accommodating turnaround for emergency and private vehicles, installed on the south side (City). It is unknown at this time what improvements Grays Harbor County will require. The current 17th street traffic will be routed to 11th street, except during heavy rainfall events

Proposed estimated cost for a cul-de-sac on the southerly side of 17th street.

$90,700.00 dollars

Total probable estimated cost for the four closures **$2,388,150.00 dollars**. Some of the unknown costs associated with this SEPA mitigation are:

1. Land acquisition
2. Stormwater Improvements
3. Improvements for 11th street and 12th street

Responsible official: Steve Petitt ***Position/title:*** Dir. of Community Development/ Building Official
Address: PO Box 3005, Elma, WA 98541
Phone: (360) 482-4482 ***Date:*** March 9, 2011

This MDNS is issued under WAC 197-11-340(1). The City of Elma will not take final action on this proposal for 15 days from the published date listed below. Comments relative to the subject application shall be directed to the City of Elma Responsible Official as noted above and submitted by April 1, 2011. Appeals of this determination shall be made as set forth by the laws of Washington State RCW 43.21C.

Signature: Steve Petitt ***Date:*** March 9, 2010

Published in the Montesano Vidette on March 17, 2011

GIBBS & OLSON, INC.
since 1950

COPY

March 7, 2011

RECEIVED
MAR - 9 2011
ELMA CITY HALL

Jim Starks, Public Works Director
Steve Petitt, Building Official/Fire Marshal/Director of Community Development
City of Elma
202 W Main Street
P.O. Box E
Elma, WA 98541

Re: Four (4) Proposed Railroad Crossing Closures

Dear Jim and Steve;

I have reviewed the four proposed railroad crossing closures and developed project construction costs associated with each closure. Enclosed are copies of the Opinion of Probable Cost spreadsheets for each identified railroad crossing closure location. The following are my evaluations of each closure location:

1. **North 2nd Street Crossing**

   The North 2nd Street Crossing is an at-grade (north-south) crossing that is relatively flat in each directions. It is located in the Martins Addition to the Town of Elma subdivision platted in November 1889. Based on preliminary review of records, it appears that the plat predates the existence of the railroad, and as such, the rights of the public to 2nd Street as a public right-of-way precede any railroad rights. A formal street vacation process administered by the City of Elma will likely be required to close the 2nd Street crossing.

   Since this location has a very flat grade crossing in each direction, it accommodates well the passage of vehicles with minimal street clearance, such as lowboy trailers, chip trucks, trailers with low hitches and cars that have been lowered (low riders). Should a closure at this proposed location be approved, cul-de-sacs accommodating emergency vehicle's turnaround areas will need to be installed on both the north side and south side of the railroad tracks.

   Additionally, West Pine Street and North 2nd Street would require improvements to accommodate the rerouted vehicle traffic (see attached opinion of cost). The current North 2nd Street crossing traffic would most likely be routed to 3rd Street.

1405 17TH AVENUE ■ SUITE 300 ■ P.O. BOX 400 ■ LONGVIEW, WA 98632
PHONE: (360) 425-0991 ■ FAX: (360) 423-3162 ■ www.gibbs-olson.com

2. **North 5th Street Crossing**

The North 5th Street Crossing is a light traffic area with a narrow, at-grade crossing (north-south), with access primarily to commercial and industrial properties on the north side of the tracks. In addition, the existing street is narrow, with a 30-foot right-of-way on the northerly side of the tracks. Should the proposed North 5th Street closure be approved, cul-de-sacs accommodating emergency vehicles and commercial trucks will need to be installed on both the north side and the south side of the tracks. Additionally, West Pine Street and North 5th Street will require widening to accommodate the rerouted vehicle traffic. As a note, the existing 30-foot right-of-way is insufficient to accommodate the street widening, and therefore, additional right-of-way will need to be purchased for any proposed street improvements (see attached opinion of cost). Closure of the 5th Street crossing traffic would most likely be routed to 3rd Street.

3. **North 10th Street**

The North 10th Street Crossing is an at-grade (north-south) crossing which provides access to residential neighborhoods and the city park. The area northerly of the railroad tracks is relatively flat, and during large storm events, 11th and 12th Streets experience ponding and vehicle wash wakes from traffic, which flood the adjoining homes on either side of the street. During these heavy rainfall events, traffic is detoured to the 10th Street crossing to reduce stormwater impacts to the existing homes.

Should the proposed North 10th Street closure be approved, cul-de-sacs accommodating turnaround for emergency vehicles will need to be installed on both the north side and south sides of the tracks. Additionally, an engineering design study is recommended to be undertaken to address the stormwater, wash wake issue that occurs during heavy rainfall events. A $20,000 budget for a stormwater pre-design study is proposed. Based on the results of the stormwater pre-design, an opinion of cost can be developed for the required improvements to the City's stormwater system. The current North 10th Street traffic would most likely be routed to 11th Street.

4. **North 17th Street Crossing**

The North 17th Street Crossing is an at-grade (north-south) crossing with the southerly side of the tracks zoned City of Elma residential and the north side zoned Gray's Harbor County rural. The north side is at a relatively even grade with the railroad tracks, with the southerly side experiencing a sharp drop of 6-feet ± within a short distance. This crossing location provides access to the City's potable water wells, which are located 1,500-feet northwesterly from this crossing. This location

provides the most direct access from the westerly side of the City, and is the backup access during the heavy rainfall storm events discussed in the North 10th Street crossing narrative above.

Should the proposed North 17th Street closure be approved, a cul-de-sac accommodating turnaround for emergency vehicles will need to be installed on the south side (City side) of the tracks. It is unknown at this time what improvements Gray's Harbor County will require. The current 17th Street traffic would most likely be routed to 11th Street, except during heavy rainfall events.

General Discussion

The closing of North 2nd Street and North 5th Street will reroute traffic onto North 3rd Street, which has sufficient width to handle the traffic, but is in extremely poor street condition. The State of Washington Transportation Improvement Board (TIB) rates streets under their GMap dashboard (available for review on-line at TIBGMAP.com, click on Small City Maintenance, then to City of Elma under Gray's Harbor County). As shown on the GMap dashboard, Third (3rd) Street is tied for the lowest street rating in the entire city, with the portion from the railroad southerly to Anderson Street the lowest rated street in the City. Routing additional traffic onto the lowest rated street in the city is not recommended without significant improvements.

Additionally, while the vertical street grade northerly from the existing railroad track crossing at 3rd Street is a relatively flat grade, the vertical alignment to the south of the tracks drops 5-feet ± within a short distance, providing opportunity for vehicles to become high-centered while crossing the tracks. This represents a safety hazard.

To accommodate the proposed crossing closures at identified locations, cul-de-sacs to provide turnarounds for emergency vehicles will be required. A maximum distance of 150-feet or less for emergency vehicle backup is allowed before a turnaround is required. Costs were developed for a cul-de-sac turnaround capable of being constructed at the identified locations. An alternate turnaround design, such as a hammer head, may also be a viable option, with the costs for this style of turnaround similar to those of a cul-de-sac. Further, additional right-of-way will need to be acquired to accommodate required street improvements on both North 5th Street and West Pine Street, as well as the required cul-de-sac turnarounds at all the identified locations. Land acquisition costs for required right-of-way will be in addition to the identified project construction costs, which are shown below. (See attached Opinion of Probable Cost breakdowns of individual cost elements).

Proposed Railroad Crossing Closures

North 2nd Street

Cul-de-sac North (Exhibit A).....$90,700
Cul-de-sac South (Exhibit A).....$90,700
Pine St., 3rd to 2nd and 2nd to Cul-de-sac (Exhibit B) $316,200

North 3rd Street

Young to Pine Street (Exhibit D).....$921,250

North 5th Street

Cul-de-sac North (Exhibit A).....$90,700
Cul-de-sac South (Exhibit A).....$90,700
Pine St., 3rd to 5th and 5th to Cul-de-sac (Exhibit C) $495,800

North 10th Street

Cul-de-sac North (Exhibit A).....$90,700
Cul-de-sac South (Exhibit A).....$90,700
Stormwater Design Study $20,000
Stormwater Improvement Cost.....Unknown

North 17th Street

Cul-de-sac South (Exhibit A).....$90,700

Opinion of Total Probable Costs for Closures as Proposed $2,388,150

Unknown costs:

- Land acquisition
- Stormwater Improvements
- Improvements for 11th and 12th Streets

Jim Starks, Public Works Director
Steve Petit, Building Inspector
City of Elma
March 7, 2011

Should you have any questions or wish to discuss further, please do not hesitate to contact me at your convenience.

Sincerely

GIBBS & OLSON, INC.

John A. Duncan

John A. Duncan, P.E.

JAD/bbk

Attached: Exhibits A, B, C and D

Exhibit A

Owner: City of Elma
Project: Cul-de-Sac for Railroad Closure
Opinion of of Probable Cost March 7, 2011

Radius = 45' with Curb

Item No.	Item Description	Bid Quanitiy		Engineer's Estimate Gibbs & Olson, Inc.	
				Unit Price	Amount
1	Mobilization	1	L.S.	$ 3,840.00	$ 3,840.00
2	Traffic Control	1	L.S.	$ 1,000.00	$ 1,000.00
3	Miscellaneous Construction	1	L.S.	$ 800.00	$ 800.00
4	Clearing & Grubbing	1	L.S.	$ 1,200.00	$ 1,200.00
5	Removal of Structures and Obstructions	1	L.S.	$ 2,000.00	$ 2,000.00
6	Cul-de-Sac Excavation, Including Haul	250	C.Y.	$ 25.00	$ 6,250.00
7	Unsuitable Foundation Excavation	20	C.Y.	$ 10.00	$ 200.00
8	Embankment Compaction	20	C.Y.	$ 20.00	$ 400.00
9	Gravel Borrow	20	C.Y.	$ 18.00	$ 360.00
10	Crushed Surfacing Base Course	360	TN.	$ 20.00	$ 7,200.00
11	Crushed Surfacing Top Course	125	TN.	$ 22.00	$ 2,750.00
12	Hot Mix Asphalt, Class A	130	TN.	$ 110.00	$ 14,300.00
13	12- inch HDPE Storm Pipe	75	L.F.	$ 50.00	$ 3,750.00
14	Trench Safety Systems	1	L.S.	$ 2,000.00	$ 2,000.00
15	Type 1 Catch Basin	1	E.A	$ 1,100.00	$ 1,100.00
16	Temporary Erosion Control	1	F.A	$ 1,500.00	$ 1,500.00
17	Cement Concrete Curb & Gutter	250	L.F.	$ 12.00	$ 3,000.00
	Subtotal				**$ 51,650.00**
	Construction Contingency @ 25%				**$ 12,900.00**
	Total Construction Cost				**$ 64,550.00**
	Design Engineering and Construction Management @25%				**$ 16,150.00**
	Biological Historical Archeological Assessment				**$ 10,000.00**
	Project Total Cost				**$ 90,700.00**

Prepared by:

John A. Duncan

John A. Duncan, P.E.
Gibbs & Olson, Inc.

March 7, 2011
Date

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Exhibit B

Owner: City of Elma
Project: Pine St., 3rd to 2nd and 2nd St. South to Railroad
Opinion of of Probable Cost March 7, 2011

L = 630'
W = 32' Curb to Curb
5' Sidewalk on One Side

Item No.	Item Description	Bid Quanitiy		Engineer's Estimate Gibbs & Olson, Inc.	
				Unit Price	Amount
1	Mobilization	1	L.S.	$ 14,240.00	$ 14,240.00
2	Traffic Control	1	L.S.	$ 4,000.00	$ 4,000.00
3	Miscellaneous Construction	1	F.A	$ 3,500.00	$ 3,500.00
4	Clearing & Grubbing	1	L.S.	$ 2,000.00	$ 2,000.00
5	Removal of Structures and Obstructions	1	L.S.	$ 8,000.00	$ 8,000.00
6	Roadway Excavation Incl. Haul	750	C.Y.	$ 25.00	$ 18,750.00
7	Unsuitable Foundation Excavation	20	C.Y.	$ 10.00	$ 200.00
8	Embankment Compaction	20	C.Y.	$ 20.00	$ 400.00
9	Gravel Borrow	20	C.Y.	$ 18.00	$ 360.00
10	Crushed Surfacing Base Course	1,150	TN.	$ 20.00	$ 23,000.00
11	Crushed Surfacing Top Course	450	TN.	$ 22.00	$ 9,900.00
12	Hot Mix Asphalt, Class A	440	TN.	$ 110.00	$ 48,400.00
13	12- inch HDPE Storm Pipe	250	L.F.	$ 50.00	$ 12,500.00
14	Trench Safety Systems	1	L.S.	$ 3,000.00	$ 3,000.00
15	Type 1 Catch Basin	2	E.A	$ 1,100.00	$ 2,200.00
16	Temporary Erosion Control	1	F.A	$ 2,000.00	$ 2,000.00
17	Cement Concrete Curb & Gutter	1,250	L.F.	$ 12.00	$ 15,000.00
18	Concrete Sidewalk (4 inch thick)	300	S.Y.	$ 30.00	$ 9,000.00
19	Cement Concrete Driveway (6 inch thick)	50	S.Y.	$ 35.00	$ 1,750.00
20	Pedestrian Ramps with Detectable Warning	2	E.A	$ 700.00	$ 1,400.00
21	Pavement Markings	1	L.S.	$ 1,200.00	$ 1,200.00
22	Monument Case and Cover	1	E.A	$ 400.00	$ 400.00
23	Hydrant Relocation	1	EA.	$ 4,000.00	$ 4,000.00
24	Water Service Replacement	6	EA.	$ 1,100.00	$ 6,600.00
	Subtotal				**$ 191,800.00**
	Construction Contingency @ 25%				**$ 47,950.00**
	Total Construction Cost				**$ 239,750.00**
	Design Engineering and Construction Management @25%				**$ 59,950.00**
	Biological Historical Archeological Assessment				**$ 16,500.00**
	Project Total Cost				**$ 316,200.00**

Prepared by:

John A. Duncan

John A. Duncan, P.E.
Gibbs & Olson, Inc.

March 7, 2011
Date

Exhibit C

Owner: City of Elma
Project: Pine St., 3rd to 5th and 5th/Pine Street to Railroad
Opinion of of Probable Cost March 7, 2011
Additional R/W required

L = 1,025'
W = 32' Curb to Curb
5' Sidewalk on One Side

Item No.	Item Description	Bid Quanitiy		Engineer's Estimate Gibbs & Olson, Inc.	
				Unit Price	Amount
1	Mobilization	1	L.S.	$ 22,740.00	$ 22,740.00
2	Traffic Control	1	L.S.	$ 5,000.00	$ 5,000.00
3	Miscellaneous Construction	1	F.A	$ 4,000.00	$ 4,000.00
4	Clearing & Grubbing	1	L.S.	$ 4,000.00	$ 4,000.00
5	Removal of Structures and Obstructions	1	L.S.	$ 10,000.00	$ 10,000.00
6	Roadway Excavation Incl. Haul	1,300	C.Y.	$ 25.00	$ 32,500.00
7	Unsuitable Foundation Excavation	20	C.Y.	$ 10.00	$ 200.00
8	Embankment Compaction	20	C.Y.	$ 20.00	$ 400.00
9	Gravel Borrow	20	C.Y.	$ 18.00	$ 360.00
10	Crushed Surfacing Base Course	1,850	TN.	$ 20.00	$ 37,000.00
11	Crushed Surfacing Top Course	750	TN.	$ 22.00	$ 16,500.00
12	Hot Mix Asphalt, Class A	650	TN.	$ 110.00	$ 71,500.00
13	12- inch HDPE Storm Pipe	500	L.F.	$ 50.00	$ 25,000.00
14	Trench Safety Systems	1	L.S.	$ 3,000.00	$ 3,000.00
15	Type 1 Catch Basin	4	E.A	$ 1,100.00	$ 4,400.00
16	Temporary Erosion Control	1	F.A	$ 2,000.00	$ 2,000.00
17	Cement Concrete Curb & Gutter	2,050	L.F.	$ 12.00	$ 24,600.00
18	Concrete Sidewalk (4 inch thick)	500	S.Y.	$ 30.00	$ 15,000.00
19	Cement Concrete Driveway (6 inch thick)	70	S.Y.	$ 35.00	$ 2,450.00
20	Pedestrian Ramps with Detectable Warning	4	E.A	$ 700.00	$ 2,800.00
21	Pavement Markings	1	L.S.	$ 4,500.00	$ 4,500.00
22	Monument Case and Cover	1	E.A	$ 2,000.00	$ 2,000.00
23	Hydrant Relocation	2	EA.	$ 4,000.00	$ 8,000.00
24	Water Service Replacement	8	EA.	$ 1,100.00	$ 8,800.00
	Subtotal				**$ 306,750.00**
	Construction Contingency @ 25%				**$ 76,700.00**
	Total Construction Cost				**$ 383,450.00**
	Design Engineering and Construction Management @25%				**$ 95,850.00**
	Biological Historical Archeological Assessment				**$ 16,500.00**
	Project Total Cost				**$ 495,800.00**

Prepared by:

John A. Duncan

John A. Duncan, P.E.
Gibbs & Olson, Inc.

March 7, 2011
Date

Exhibit D

Owner: City of Elma
Project: N 3rd Street From Young Street, North to Pine Street
Opinion of of Probable Cost March 7, 2010

L = 1,200'
W = 42' Curb to Curb
8' Sidewalks on Both Sides

Item No.	Item Description	Bid Quanitiy		Engineer's Estimate Gibbs & Olson, Inc.	
				Unit Price	Amount
1	Mobilization	1	L.S.	$ 37,890.00	$ 37,890.00
2	Traffic Control	1	L.S.	$ 35,000.00	$ 35,000.00
3	Miscellaneous Construction	1	F.A	$ 5,000.00	$ 5,000.00
4	Clearing & Grubbing	1	L.S.	$ 1,000.00	$ 1,000.00
5	Removal of Structures and Obstructions	1	L.S.	$ 20,000.00	$ 20,000.00
6	Roadway Excavation Incl. Haul	200	C.Y.	$ 25.00	$ 5,000.00
7	Unsuitable Foundation Excavation	20	C.Y.	$ 10.00	$ 200.00
8	Embankment Compaction	20	C.Y.	$ 20.00	$ 400.00
9	Gravel Borrow	20	C.Y.	$ 18.00	$ 360.00
10	Fibreglass Paving Mat	5,600	S.Y.	$ 6.00	$ 33,600.00
11	Crushed Surfacing Base Course	400	TN.	$ 20.00	$ 8,000.00
12	Planing Bituminios Pavement	5,500	S.Y.	$ 7.00	$ 38,500.00
13	Hot Mix Asphalt, Class A	1,100	TN.	$ 110.00	$ 121,000.00
14	12- inch HDPE Storm Pipe	250	L.F.	$ 50.00	$ 12,500.00
15	Trench Safety Systems	1	L.S.	$ 3,000.00	$ 3,000.00
16	Type 1 Catch Basin	14	E.A	$ 1,100.00	$ 15,400.00
17	Temporary Erosion Control	1	F.A	$ 2,000.00	$ 2,000.00
18	Cement Concrete Curb & Gutter	2,350	L.F.	$ 12.00	$ 28,200.00
19	Concrete Sidewalk (4 inch thick)	1,820	S.Y.	$ 30.00	$ 54,600.00
20	Cement Concrete Driveway (6 inch thick)	270	S.Y.	$ 35.00	$ 9,450.00
21	Pedestrian Ramps with Detectable Warning	12	E.A	$ 700.00	$ 8,400.00
22	Pavement Markings	1	L.S.	$ 4,500.00	$ 4,500.00
23	Monument Case and Cover	2	E.A	$ 400.00	$ 800.00
24	8-inch 3034 SDR 35 Sanitary Sewer Pipe	200	L.F.	$ 50.00	$ 10,000.00
25	12-inch Ductile Iron Water Pipe with Fittings	1,200	L.F.	$ 70.00	$ 84,000.00
26	Hydrant Replacement	4	EA.	$ 4,000.00	$ 16,000.00
27	Water Service Replacement	22	EA.	$ 1,100.00	$ 24,200.00
	Subtotal				**$ 579,000.00**
	Construction Contingency @ 25%				**$ 144,750.00**
	Total Construction Cost				**$ 723,750.00**
	Design Engineering and Construction Management @25%				**$ 181,000.00**
	Biological Historical Archeological Assessment				**$ 16,500.00**
	Project Total Cost				**$ 921,250.00**

Prepared by:

John A. Duncan

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March 7, 2011
Date

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