

APPENDIX C

Cost Estimate for Project

Rural Opportunity to Advance Development (ROAD) Project Cost Estimate Documentation

City of Wagoner BUILD 2019

Includes:

- Water and sewer
 - Source: Infrastructure Solutions Group LLC. Figures used for final costs estimates do not completely align with cost estimates from Infrastructure Solutions. Due to City of Wagoner providing labor costs for local match, labor costs were removed from the final cost for this line item. Additionally, design and the contingency were also moved to the to be moved to a line item for the entire project.
- Hardscape, amenities, bridges, and railroad crossing
 - Source: Robert Shears, PE (Licensed Professional Engineer)
- Stormwater (PDF and excel)
 - Source: This is provided by Bill Smith, PE. This was provided with the project total as well as the material costs. Due to City of Wagoner providing labor costs for local match, labor costs were removed from the final the two figures. Again, design and the contingency were also moved to the to be moved to a line item for the entire project.

Notes:

- Electric relocation figure was based on an industry standard of \$1m per mile

**CITY OF WAGONER
BUILD GRANT APPLICATION
ESTIMATE OF PROBABLE COST**

US 69 TO EAST RAILROAD IMPROVEMENTS				
ITEM	UNIT	QUAN.	UNIT\$	EXTENDED
HARDSCAPE (SIDEWALKS, DRIVEWAYS, CURB RAMPS, RETAINING WALLS, ETC.)	LF	8500	\$85	\$722,500
STORM DRAINAGE IMPROVEMENTS	LSUM	1	\$2,457,160	\$2,457,160
PEDESTRIAN BRIDGE (CREEK CROSSING, LINCOLN STREET)	EA	2	\$900,000	\$1,800,000
LANDSCAPING AND BEAUTIFICATION	LSUM	1	\$215,000	\$215,000
STREET TREES	EA	114	\$900	\$102,600
ORNAMENTAL TREES	EA	193	\$500	\$96,500
IRRIGATION	LSUM	1	\$200,000	\$200,000
GATEWAY MONUMENT (SH51 AND US69 INTERSECTION)	LSUM	1	\$225,000	\$225,000
ROADWAY AND PEDESTRIAN LIGHTING	EA	70	\$12,000	\$840,000
STREETScape AMENITIES (BENCHES, LITTER RECEPTICLES, AND BIKE RACKS)	LSUM	1	\$61,200	\$61,200
RAILROAD CROSSING	EA	4	\$20,000	\$80,000
DEMOLITION	LSUM	1	\$175,000	\$175,000
SIGNAGE	LSUM	1	\$25,000	\$25,000
PAVING AND MILLING	LSUM	1	\$500,000	\$500,000
INTERSECTION MODIFICATION (SH51 AND US69)	LSUM	1	\$545,000	\$545,000
			SUBTOTAL	\$8,044,960

*ITEM A Sub-total
\$8,044,960*

UTILITY IMPROVEMENTS				
ITEM	UNIT	QUAN.	UNIT\$	EXTENDED
WATER/SEWER RELOCATION	LSUM	1	\$438,225	\$438,225
ELECTRIC RELOCATION	LSUM	1	\$1,000,000	\$1,000,000
FIBER INSTALLATION	LSUM	1	\$70,000	\$70,000
			SUBTOTAL	\$1,508,225

*ITEM B Sub-total
\$1,508,225*

SOUTH TRAIL IMPROVEMENTS				
ITEM	UNIT	QUAN.	UNIT \$	EXTENDED
HARDSCAPE (TRAIL, RETAINING WALLS, ETC.)	LF	2500	\$85	\$212,500
STREET TREES	EA	33	\$900	\$29,700
ORNAMENTAL TREES	EA	57	\$500	\$28,500
ROADWAY AND PEDESTRIAN LIGHTING	EA	20	\$12,000	\$240,000
US69 CULVERT/ACCESS IMPROVEMENTS	LSUM	1	\$165,000	\$165,000
GRADING	LSUM	1	\$17,000	\$17,000
			SUBTOTAL	\$692,700

*ITEM C Sub-total
\$692,700*

BUILD GRANT ESTIMATE OF PROBABLE COST TOTAL				
ITEM	UNIT	QUAN.	UNIT\$	EXTENDED
HARDSCAPE (SIDEWALKS, DRIVEWAYS, CURB RAMPS, RETAINING WALLS, ETC.)	LF	11,000	\$85	\$935,000
STORM DRAINAGE IMPROVEMENTS	LSUM	1	\$2,457,160	\$2,457,160
PEDESTRIAN BRIDGE (CREEK CROSSING, LINCOLN STREET)	EA	2	\$900,000	\$1,800,000
LANDSCAPING AND BEAUTIFICATION	LSUM	1	\$215,000	\$215,000
STREET TREES	EA	147	\$900	\$132,300
ORNAMENTAL TREES	EA	250	\$500	\$125,000
IRRIGATION	LSUM	1	\$200,000	\$200,000
GATEWAY MONUMENT (SH51 AND US69 INTERSECTION)	LSUM	1	\$225,000	\$225,000
WATER/SEWER RELOCATION	LSUM	1	\$438,225	\$438,225
ELECTRIC RELOCATION	LSUM	1	\$1,000,000	\$1,000,000
ROADWAY AND PEDESTRIAN LIGHTING	EA	90	\$12,000	\$1,080,000
STREETScape AMENITIES (BENCHES, LITTER RECEPTICLES, AND BIKE RACKS)	LSUM	1	\$61,200	\$61,200
RAILROAD CROSSING	EA	4	\$20,000	\$80,000
DEMOLITION	LSUM	1	\$175,000	\$175,000
SIGNAGE	LSUM	1	\$25,000	\$25,000
FIBER INSTALLATION	LSUM	1	\$70,000	\$70,000
PAVING AND MILLING	LSUM	1	\$500,000	\$500,000
INTERSECTION MODIFICATION (SH51 AND US69)	LSUM	1	\$545,000	\$545,000
US69 CULVERT/ACCESS IMPROVEMENTS	LSUM	1	\$165,000	\$165,000
GRADING	LSUM	1	\$17,000	\$17,000
			SUBTOTAL	\$10,245,885.00
			20% CONTINGENCY	\$2,049,177.00
			CONSTRUCTION TOTAL	\$12,295,062.00
			TOPOGRAPHIC SURVEY	\$30,000
			DESIGN FEE (8%)	\$983,604.96
			CONTRACT ADMINISTRATION (5%)	\$614,753.10
			TOTAL	\$13,923,420.06

ITEM D Sub-total \$10,245,885 is the sum of previous subtotals for ITEMS A, B, and C

Non-Federal Match	
STORM DRAINAGE IMPROVEMENTS (CITY)	\$1,407,695
WATER/SEWER RELOCATION (CITY)	\$154,000
ELECTRIC RELOCATION (CITY)	\$1,000,000
INTERSECTION MODIFICATION (ODOT)	\$545,000
PAVING AND MILLING (ODOT)	\$500,000
SUBTOTAL	\$3,606,695



**W. CHEROKEE WATER /SEWER REPLACEMENT
2019 BUILD GRANT - WAGONER, OK.**

Date: JUNE 2019

Page 1 of 1

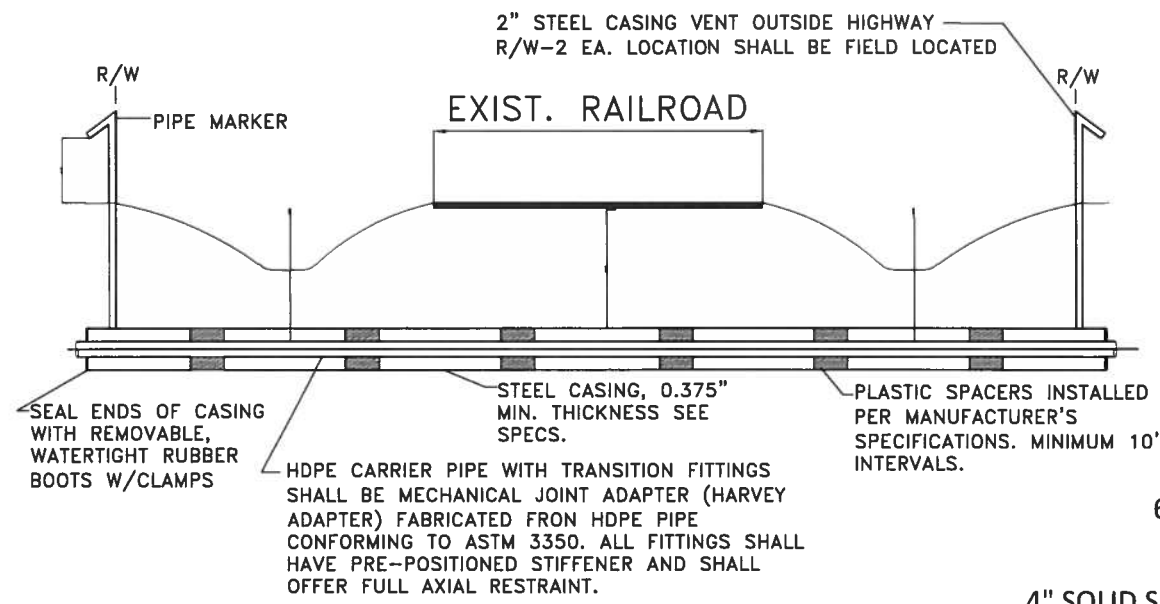
Project #WAG 19-04

Project Title -Grading, drainage, utility, and Access.

Item	Description - WATER LINE REPLACEMENT	Unit	Qty	Unit Price	Total Price
1	6" c-900 PVC LINE W/ GASKETS AND INSTALL KITS	LF	2,586	\$ 15.50	\$ 40,083.00
2	6" GATE VALVES W/ KITS, RJ,	EA	10	\$ 375.00	\$ 3,750.00
3	4" SOLID SLEEVES, RJ	EA	10	\$ 225.00	\$ 2,250.00
4	4" X 6" REDUCERS, RJ	EA	8	\$ 200.00	\$ 1,600.00
5	6" 45 BENDS, RJ	EA	16	\$ 200.00	\$ 3,200.00
6	4" PLUG	EA	10	\$ 200.00	\$ 2,000.00
7	Street Crossings, Full Depth Bedding, materials only	CY	1,535	\$ 10.00	\$ 15,350.00
					\$ 68,233.00
Item	Description - SANITARY SEWER REPLACEMENT	Unit	Qty	Unit Price	Total Price
1	8 inch PVC DR 35 Sewer, materials only	FT	1,286	\$ 22.00	\$ 28,292.00
2	4' Dia. MH, Ring/Cover,materials only	EA	2	\$ 1,800.00	\$ 3,600.00
3	R&R Pavement, materials only	SY	580	\$ 30.00	\$ 17,400.00
4	Connection to Exist. MH w. A-Lock Gaskets	LS	2	\$ 500.00	\$ 1,000.00
5	Full Depth Agg. Bedding, materials only	CY	1,334	\$ 10.00	\$ 13,340.00
6	Filter Seperator Fabric, materials only	SY	580	\$ 3.00	\$ 1,740.00
7	Pressure and Mandrel Testing	EA	1	\$ 5,000.00	\$ 5,000.00
					\$ 70,372.00
Item	Description - BORING AND CASING (CONTRACT)	Unit	Qty	Unit Price	Total Price
1	16" Steel Casing, in place for Sewer	FT	250	\$ 160.00	\$ 40,000.00
2	16" Steel Casing, in place for Water	FT	250	\$ 160.00	\$ 40,000.00
3	Remote Vents for Sewer Casing	EA	2	\$ 2,500.00	\$ 5,000.00
4	Vents for Water Casing	EA	2	\$ 1,500.00	\$ 3,000.00
5	Plug and Fill Sand Both Casings	CY	30	\$ 10.00	\$ 300.00
					\$ 88,300.00
Item	Description - HIGHWAY TRAFFIC CONTROL	Unit	Qty	Unit Price	Total Price
1	ADVANCE SIGNAGE	SY	586	\$ 15.00	\$ 8,790.00
2	BARRELS @ 1/25FT = 112	EA	112	\$ 2.50	\$ 280.00
3	CLOSED / LANE SHIFT / SPEED/ SGINAGE	SD	500	\$ 5.00	\$ 2,500.00
4	BARRICADES, TYPE 3 AND 1 W. LIGHTS	EA	20	\$ 100.00	\$ 2,000.00
5	TEMP. STRIPING & PYLONS	LF	3,000	\$ 4.00	\$ 12,000.00
6	WARNING LIGHTS	SD	500	\$ 3.50	\$ 1,750.00
5	FLAGMEN @ 2 MEN / DAY 10 DAYS	MD	20	\$ 500.00	\$ 10,000.00
					\$ 37,320.00
Item	Description - LABOR (IN KIND SERVICES)	Unit	Qty	Unit Price	Total Price
1	Water Line Labor / Equip. Cost (32 const. days)	MD *	128	\$ 500.00	\$ 64,000.00
2	Sanitary Sewer Labor / Equip. Cost (45 const. days)	MD *	180	\$ 500.00	\$ 90,000.00
	*1 MD = 1 Man + 1 Piece Equip.				\$ 154,000.00
	Cont. on Materials / Contract Construction @ 10%	\$ 491,130.00	1	\$ 49,113.00	\$ 49,100.00
	Cont. on Labor / Equip @ 15%	\$ 154,000.00	1	\$ 23,100.00	\$ 23,100.00
	UPRR PERMIT FEES		1	\$ 10,000.00	\$ 10,000.00
					\$ 500,425.00
	SPECIAL ENGINEER FEE -Coordinate Traffic Control Plan with ODOT, UPRR				\$ 10,000.00
	Engineering Design Fee PER STATE APPROVED TABLE				\$ 45,000.00
	it. Representative Fee - BORING WORK ONLY				\$ 10,000.00
	Survey Fee				\$ 15,000.00
					\$ -
	Total Estimated Cost				\$ 580,425.00

*** Estimated Labor costs, design, surveying, and contingency shown here are not included in the cost estimates for water and sewer category. The labor costs are included in the City of Wagoner local match and the surveying, design, and contingency costs are included separately in the final project budget.

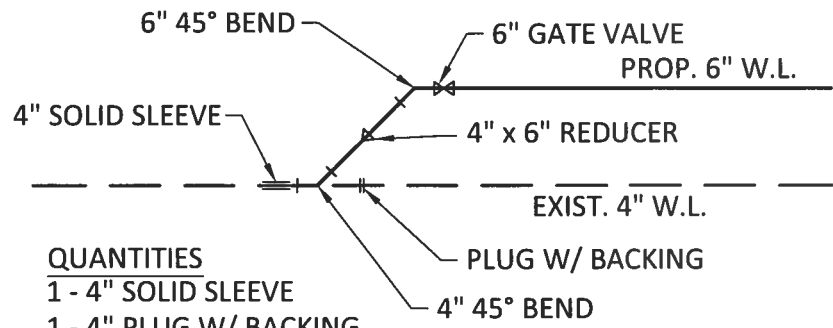




TYPICAL RAILROAD CROSSING
N.T.S.

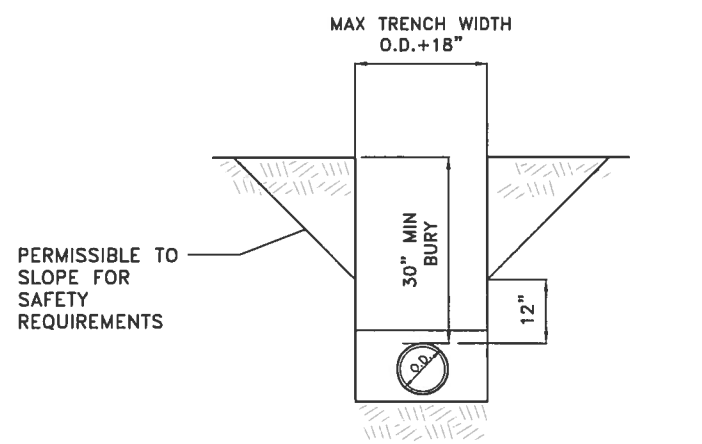
FOR RAILROAD CROSSINGS:
CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF CITY/COUNTY PERMITS.
NO EXCAVATION SHALL BE MADE CLOSER THAN 10' FROM THE EDGE OF RAILROAD & SHALL NOT BE LEFT OPEN LONGER THAN NECESSARY TO INSTALL CASING AND PIPE
CONTRACTOR SHALL NOTIFY RAILROAD BEFORE EXCAVATING WITHIN RAILROAD R/W
VENTING AND SIGNAGE WILL BE REQUIRED FOR RAILROAD CROSSING

GENERAL DATA FOR CASING AND CARRIER PIPES		
CARRIER PIPE SIZE	HDPE CASING SIZE	STEEL CASING SIZE
6"	16"	16"
8"	16"	16"

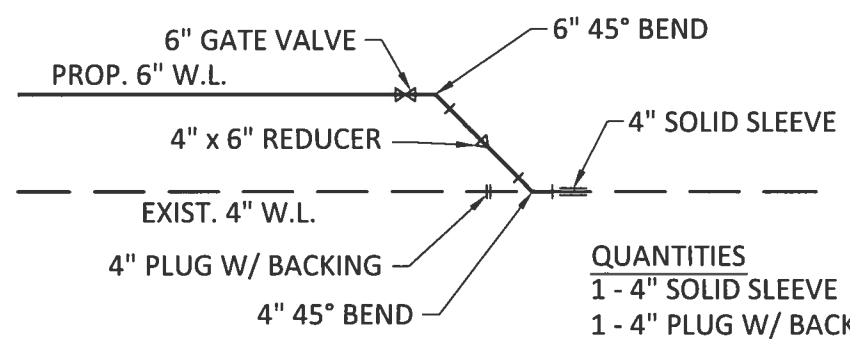


- QUANTITIES**
 1 - 4" SOLID SLEEVE
 1 - 4" PLUG W/ BACKING
 1 - 4" 45° BEND
 1 - 4" x 6" REDUCER
 1 - 6" 45° BEND
 1 - 6" GATE VALVE

INSERT "A"

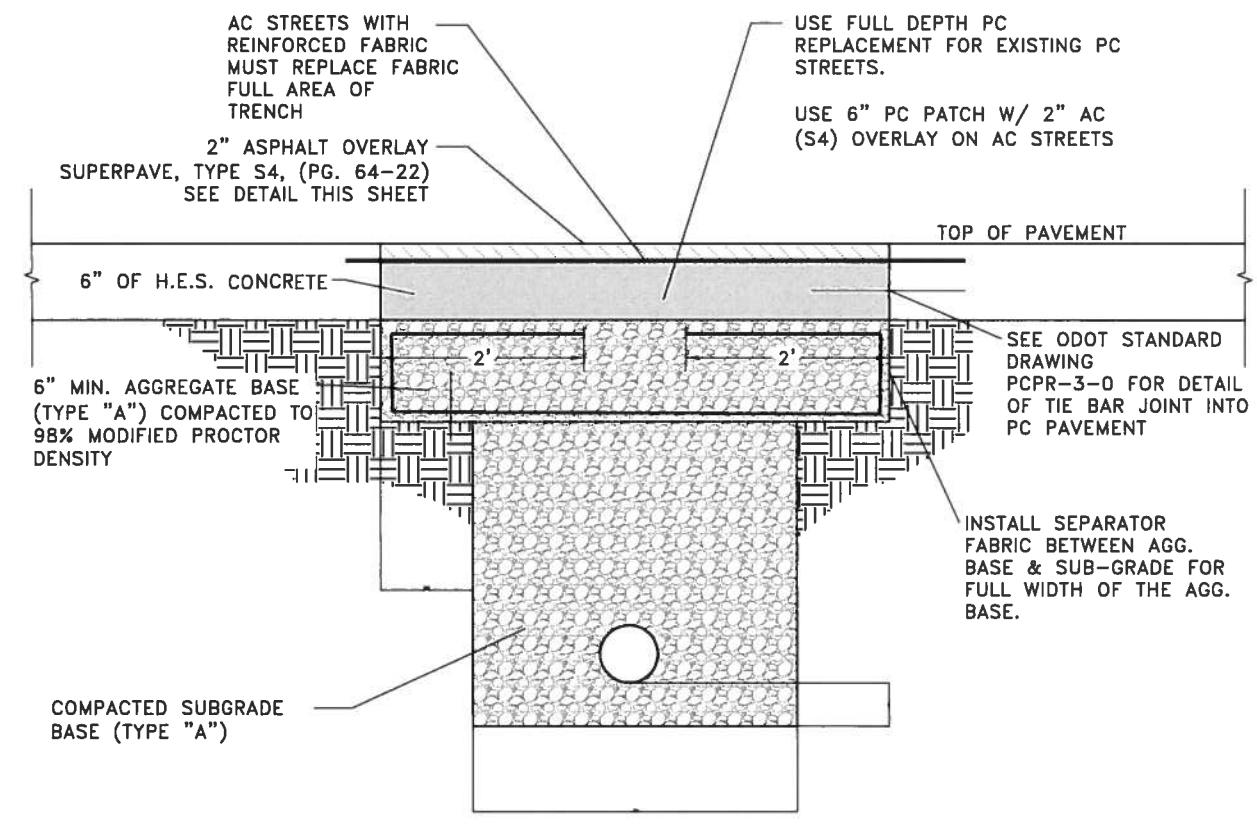


TYPICAL TRENCH SECTION
N.T.S.

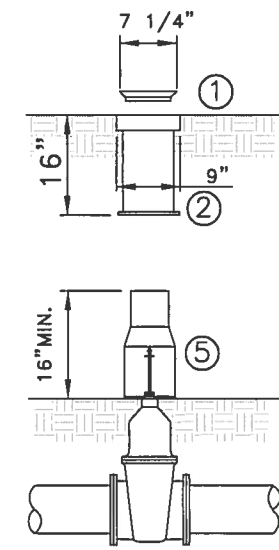


- QUANTITIES**
 1 - 4" SOLID SLEEVE
 1 - 4" PLUG W/ BACKING
 1 - 4" 45° BEND
 1 - 4" x 6" REDUCER
 1 - 6" 45° BEND
 1 - 6" GATE VALVE

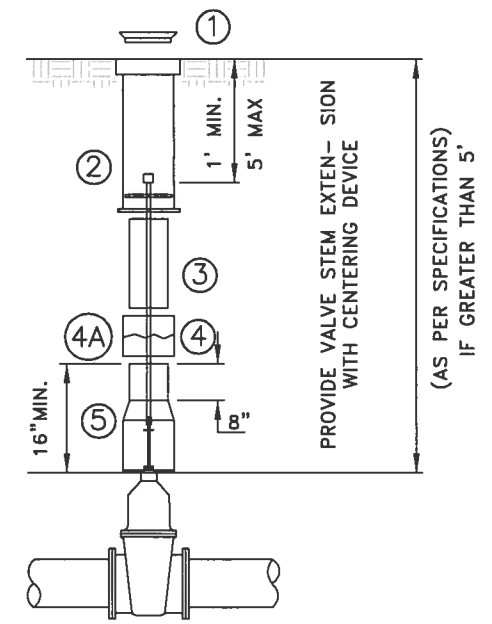
INSERT "B"



PC/AC PATCH WITHIN STREET AREA
SCALE: N.T.S.



- LIST OF MATERIALS**
 1. CAST IRON COVER
 2. CAST IRON TOP SECTION
 3. PLASTIC EXTENSION PIECE
 4. PLASTIC EXTENSION COUPLING
 4A. 6" PRESSURE PIPE
 5. CAST IRON BOTTOM SECTION



- NOTES:**
 1. IF PLASTIC EXTENSION PIECE(3) AND COUPLING(4) ARE NOT USED, PRESSURE PIPE(4A) AND ANOTHER VALVE BOX(5) MAY BE USED INSTEAD.
 2. EXTENSION PIECE CAN BE CUT TO LENGTH REQUIRED.
 3. PROVIDE 1'-6" X 1'-6" X 8" THICK CONCRETE AROUND TOP OF VALVE BOX.

VALVE BOX INSTALLATION
N.T.S.

CITY OF WAGONER
BUILD GRANT APPLICATION
STREETSCAPE AND BEAUTIFICATION PROJECT
INTERSECTION OF SH 51 AND 69 TO EAST SIDEW OF RAILROAD TRACKS
Estimate of Probable Cost

June 27, 2018

ITEM	UNIT	QUAN.	UNIT \$	EXTENDED
HARDSCAPE (SIDEWALKS, DRIVEWAYS, CURB RAMPS, RETAINING WALLS ETC.)	LF	11,000	\$85	\$935,000
STORM DRAINAGE IMPROVEMENTS	LSUM	1	\$2,877,604	\$2,877,604
PEDESTIAN BRIDGE	EA	2	\$90,000	\$180,000
LANDSCAPING AND BEAUTIFICATION	LSUM	1	\$215,000	\$215,000
STREET TREES	EA	147	\$900	\$132,300
ORNAMENTAL TREES	EA	250	\$500	\$125,000
IRRIGATION	LSUM	1	\$200,000	\$200,000
GATEWAY MONUMENT (SH 51 AND 69 INTERSECTION)	LSUM	1	\$225,000	\$225,000
UTILITY RELOCATION (OVERHEAD ELECTRICAL UNDERGROUND)	LSUM	1	\$1,000,000	\$1,000,000
ROADWAY AND PEDESTRIAN LIGHTING	EA	90	\$12,000	\$1,080,000
STREETSCAPE AMENITIES (BENCHES, LITTER RECEPTICLES, AND BIKE RACKS)	LSUM	1	\$61,200	\$61,200
RAILROAD CROSSINGS	EA	2	\$20,000	\$40,000
DEMOLITION	LSUM	1	\$175,000	\$175,000
SIGNAGE	LSUM	1	\$25,000	\$25,000

SUBTOTAL	\$7,271,104.00
20% CONTINGENCY	\$1,454,220.80
CONSTRUCTION TOTAL	\$8,725,324.80
TOPOGRAPHIC SURVEY	\$30,000.00
DESIGN FEE (8%)	\$698,025.98
CONTRACT ADMINISTRATION (5%)	\$436,266.24
TOTAL	\$9,889,617.02

**CITY OF WAGONER
BUILD GRANT - STORM DRAINAGE ESTIMATE**

Estimates provided by Robert Shears, PE

LOCATION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
US 69 TO S GRANT AVE					
US 69 TO S GRANT AVE (SOUTH SIDE)	5X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	865	LF	425	\$ 367,625.00
DROP INLETS	CURB OPENING GRATES (TRIPLE)	4	SETS	4500	18,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	233	SY	65	
US 69 TO S GRANT AVE (NORTH SIDE)	5X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	502	LF	425	213,350.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (TRIPLE)	4	SETS	4500	18,000.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	78	SY	65	
UTILITY RELOCATION - POWER AND LIGHT POLES	RELOCATION OF LIGHT/POWER POLES	4	EA	2500	
S HAYES AVE					
CHEROKEE TO UN-NAMED TRIBUTARY	6X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	800	LF	425	340,000.00
STREET REPAIR	ASPHALT PAVING	1,333	SY	45	
S GRANT TO LINCOLN					
S GRANT AVE TO LINCOLN (SOUTH SIDE)	24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	865	LF	55	47,575.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	4	SETS	4500	18,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	233	SY	65	
US 69 TO S GRANT AVE (NORTH SIDE)	24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	502	LF	55	27,610.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	4	SETS	4500	18,000.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	78	SY	65	
UTILITY RELOCATION - POWER AND LIGHT POLES	RELOCATION OF LIGHT/POWER POLES	4	EA	2500	
NORTH TRIBUTARY					
UNDER CHEROKEE STREET	NEW BOX CULVERT (DOUBLE 6X10)	80	LF	800	64,000.00
LINCOLN TO RR					
LINCOLN TO RAILROAD (SOUTH SIDE)	24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	2,900	LF	55	159,500.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	15	SETS	4500	67,500.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	1,089	SY	65	
LINCOLN TO RAILROAD (NORTH SIDE)	24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	2,900	LF	55	159,500.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	15	SETS	4500	67,500.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	1,011	SY	65	
MAJOR STORM DRAINS TO NORTH TRIBUTARY					
POLK AVE (POLK TO SECOND TO NORTH TRIB)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	4,000	LF	55	220,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	10	SETS	4500	45,000.00
	CONCRETE PAVING	233	SY	65	
PIERCE AVE (PIERCE TO SECOND TO POLK AVE)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	4,000	LF	55	220,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	10	SETS	4500	45,000.00
	CONCRETE PAVING	233	SY	65	
TYLER AVE (TYLER TO SECOND TO PIERCE)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	2,400	LF	55	132,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	6	SETS	4500	27,000.00
	CONCRETE PAVING	233	SY	65	
CULVERT & ACCESSWAY UNDER HWY 69					
ADD RCB FOR 1% FLOW	10 X6	100	LF	1000	100,000.00
ADD RCB FOR PED ACCESS	8X5	100	LF	650	65,000.00
RE-GRADING CHANNEL AND ACCESS RAMPS	GRADING	200	LF	85	17,000.00
UTILITY RELOCATION	ABOVE AND BELOW GROUND UTILITIES	12,000	LF	25	
SUBTOTAL					\$ 2,457,160.00
CONTINGENCY (15%)					\$ 368,574.00
SUBTOTAL					\$ 2,825,734.00
G&A CONTRACTOR					\$ 226,058.72
INSURANCE AND BONDS					\$ 226,058.72
SUBTOTAL					\$ 3,277,851.44
DESIGN FEE (8%)					\$ 226,058.72
ENGINEERING SERVICES DURING BIDDING & CONSTRUCTION (10%)					\$ 282,573.40
ESTIMATE OF DESIGN AND CONSTRUCTION					\$ 3,786,483.56

LOCATION	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
US 69 TO S GRANT AVE					
US 69 TO S GRANT AVE (SOUTH SIDE)	5X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	865	LF	165 \$	142,725.00
DROP INLETS	CURB OPENING GRATES (TRIPLE)	4	SETS	2500	10,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	233	SY	33	
US 69 TO S GRANT AVE (NORTH SIDE)	5X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	502	LF	165	82,830.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (TRIPLE)	4	SETS	2000	8,000.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	78	SY	33	
UTILITY RELOCATION - POWER AND LIGHT POLES	RELOCATION OF LIGHT/POWER POLES	4	EA	1200	
S HAYES AVE					
CHEROKEE TO UN-NAMED TRIBUTARY	6X3 RCB (INCLUDING EXCAVATION AND BACKFILL)	800	LF	209	167,200.00
STREET REPAIR	ASPHALT PAVING	1,333	SY	30	
S GRANT TO LINCOLN					
S GRANT AVE TO LINCOLN (SOUTH SIDE)	24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	865	LF	30	25,950.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	4	SETS	2000	8,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	233	SY	33	
US 69 TO S GRANT AVE (NORTH SIDE)	24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	502	LF	30	15,060.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	4	SETS	2000	8,000.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	78	SY	33	
UTILITY RELOCATION - POWER AND LIGHT POLES	RELOCATION OF LIGHT/POWER POLES	4	EA	1200	
NORTH TRIBUTARY					
UNDER CHEROKEE STREET	NEW BOX CULVERT (DOUBLE 6X10)	80	LF	435	34,800.00
LINCOLN TO RR					
LINCOLN TO RAILROAD (SOUTH SIDE)	24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	2,900	LF	22	63,800.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	15	SETS	2000	30,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CONCRETE PAVING	1,089	SY	33	
LINCOLN TO RAILROAD (NORTH SIDE)	24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	2,900	LF	22	63,800.00
CURB OPENING - GRATE INLETS	CURB OPENING GRATES (DOUBLE)	15	SETS	2000	30,000.00
DRIVEWAY REPAIR (NORTH SIDE)	CONCRETE PAVING	1,011	SY	33	
MAJOR STORM DRAINS TO NORTH TRIBUTARY					
POLK AVE (POLK TO SECOND TO NORTH TRIB)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (INCLUDING EXCAVATION AND BACKFILL)	4,000	LF	22	88,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	10	SETS	2000	20,000.00
	CONCRETE PAVING	233	SY	33	
PIERCE AVE (PIERCE TO SECOND TO POLK AVE)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	4,000	LF	22	88,000.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	10	SETS	2000	20,000.00
	CONCRETE PAVING	233	SY	33	
TYLER AVE (TYLER TO SECOND TO PIERCE)					
CURB OPENING - GRATE INLETS	DOUBLE 24-INCH RCP (EXCLUDING EXCAVATION AND BACKFILL)	2,400	LF	22	52,800.00
DRIVEWAY REPAIR (SOUTH SIDE)	CURB OPENING GRATES (DOUBLE)	6	SETS	2000	12,000.00
	CONCRETE PAVING	233	SY	33	
CULVERT & ACCESSWAY UNDER HWY 69					
ADD RCB FOR 1% FLOW	10 X6	100	LF	450	45,000.00
ADD RCB FOR PED ACCESS	8X5	100	LF	275	27,500.00
RE-GRADING CHANNEL AND ACCESS RAMPS	GRADING	200	LF	30	6,000.00
UTILITY RELOCATION					
	ABOVE AND BELOW GROUND UTILITIES	12,000	LF	20	
SUBTOTAL				\$	1,049,465.00
CONTINGENCY (15%)				\$	157,419.75
TOTAL MATERIALS				\$	1,206,884.75
DESIGN FEE (8%)				\$	226,058.72
ENGINEERING SERVICES DURING BIDDING & CONSTRUCTION (10%)				\$	282,573.40
ESTIMATE OF DESIGN AND CONSTRUCTION MATERIALS				\$	508,632.12