

## ENGINEER'S STATEMENT OF PROBABLE CONSTRUCTION COST

## PARK BOULEVARD EXTENSION

FROM FM 2514 (PARKER ROAD) TO SH 78 (13,300 LF)

MAJOR COLLECTOR - 4-LANE DIVIDED ROADWAY (EXPANDABLE TO 6-LANE)

Project: Park Boulevard Extension

Prepared by: Brian C. Haynes, P.E.

Client: Collin County

Date: December 5, 2013

Pavement Material:	Concrete Pavement
Pavement Width:	50 feet
Pavement Thickness:	8 in
Right-of-Way Width:	120 feet
Roadway Length:	13300 feet
Current Date:	2013 year
Estimated Construction Date:	2018 year

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section I - General</b>					
1	Mobilization (10% Maximum of Total Bid)	LS	1.0	\$1,550,000.00	\$1,550,000.00
2	Project Signs	EA	4.0	\$750.00	\$3,000.00
3	Barricades, Signs and Traffic Control	MO	24.0	\$2,400.00	\$57,600.00
				<b>Subtotal General</b>	<b>\$1,610,600.00</b>
<b>Section II - Park Boulevard - Paving Improvements</b>					
1	Roadway Preparation (Clearing & Grubbing)	STA	136.0	\$2,600.00	\$353,600.00
2	Remove and Dispose of Asphalt	SY	14,000.0	\$5.00	\$70,000.00
3	Remove and Dispose of Concrete Paving	SY	8,000.0	\$10.00	\$80,000.00
4	Earthwork (Excavation)(Assuming 2.0-ft depth)	CY	119,000	\$7.50	\$892,500.00
5	Earthwork (Embankment)	CY	121,000	\$5.00	\$605,000.00
6	Lime or Cement Treated Subgrade (8")	SY	91,960.0	\$2.50	\$229,900.00
7	Lime or Cement Slurry (6%) (36 lbs./SY)	TON	1,660.0	\$150.00	\$249,000.00
8	Concrete Pavement (Reinforced)(8")(4,000 PSI)	SY	89,000.0	\$45.00	\$4,005,000.00
9	Concrete Driveway (Reinforced) (6") (4,000 PSI)	SY	1,400.0	\$50.00	\$70,000.00
10	Sidewalk (5' Width)	SY	16,000.0	\$45.00	\$720,000.00
11	Wire Fencing	LF	26,600.0	\$10.00	\$266,000.00
12	Gates	EA	27.0	\$1,200.00	\$32,400.00
13	Signage Assembly	EA	100.0	\$450.00	\$45,000.00
14	Pavement Markings	LF	13,300.0	\$3.00	\$39,900.00
15	Street Lighting	EA	70	\$4,000.00	\$280,000.00
16	Electrical Conduit/Wiring for Street Lights	LF	20,000	\$22.00	\$440,000.00
17	Electrical Connection	EA	6	\$5,000.00	\$30,000.00
18	Metal Beam Guardrail	LF	1,400	\$25.00	\$35,000.00
19	Single Guardrail Terminal	EA	28	\$2,500.00	\$70,000.00
20	Traffic Signals (At FM 2514 and SH 78)	LS	2	\$175,000.00	\$350,000.00
21	Railroad Crossing - At Grade	LS	1	\$350,000.00	\$350,000.00
22	NTMWD Pond #1 Modifications (Earthwork & Seeding)	LS	1	\$97,500.00	\$97,500.00
23	NTMWD Pond #2 Modifications (Earthwork & Seeding)	LS	1	\$220,000.00	\$220,000.00
				<b>Subtotal Paving Improvements</b>	<b>\$9,530,800.00</b>

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section III - Park Boulevard - Drainage Improvements</b>					
1	Reinforced Concrete Pipe (CL III) (18 IN)	LF	1,300.0	\$45.00	\$58,500.00
2	Reinforced Concrete Pipe (CL III) (24 IN)	LF	1,700.0	\$55.00	\$93,500.00
3	Reinforced Concrete Pipe (CL III) (36 IN)	LF	1,900.0	\$85.00	\$161,500.00
4	Reinforced Concrete Pipe (CL III) (42 IN)	LF	1,600.0	\$110.00	\$176,000.00
5	Reinforced Concrete Pipe (CL III) (48 IN)	LF	1,750.0	\$135.00	\$236,250.00
6	Reinforced Concrete Box Culvert (6 FT X 4 FT)	LF	120.0	\$275.00	\$33,000.00
7	Reinforced Concrete Box Culvert (6 FT X 5 FT)	LF	120.0	\$300.00	\$36,000.00
8	Reinforced Concrete Box Culvert (7 FT X 4 FT)	LF	240.0	\$325.00	\$78,000.00
9	Reinforced Concrete Box Culvert (7 FT X 6 FT)	LF	120.0	\$350.00	\$42,000.00
10	Trench Safety	LF	8,850.0	\$2.00	\$17,700.00
11	Storm Drain Junction Box	EA	8.0	\$4,000.00	\$32,000.00
12	Curb Inlet	EA	36.0	\$3,500.00	\$126,000.00
13	Stormwater Treatment Unit	EA	8.0	\$4,000.00	\$32,000.00
14	Wingwall (HW=6 FT)	EA	4.0	\$10,000.00	\$40,000.00
15	Wingwall (HW=7 FT)	EA	2.0	\$15,000.00	\$30,000.00
16	Wingwall (HW=8 FT)	EA	2.0	\$20,000.00	\$40,000.00
17	Rock Riprap (24 IN)	CY	1,500.0	\$120.00	\$180,000.00
18	Seeding (Cell Fiber Mulch)	SY	160,000.0	\$1.00	\$160,000.00
19	Erosion Control Fence	LF	27,200.0	\$2.00	\$54,400.00
20	Rock Filter Dams	LF	500.0	\$30.00	\$15,000.00
<b>Subtotal Drainage Improvements</b>					<b>\$1,641,850.00</b>
<b>Section IV - Park Boulevard - Bridges and Structures</b>					
1	Conc Bridge Sturcture at Corps Crossing (72 FT Wide Deck) (200')	SF	14,400.0	\$100.00	\$1,440,000.00
2	Retaining Wall (Average Height =6 FT)	SF	9,000	\$50.00	\$450,000.00
<b>Subtotal Bridges and Structures</b>					<b>\$1,890,000.00</b>
<b>Section V - Park Boulevard - Wastewater Improvements</b>					
1	8-inch Wastewater Line (PVC)	LF	2,000.0	\$65.00	\$130,000.00
2	Trench Safety (Water Line Installation)	LF	2,000.0	\$2.00	\$4,000.00
3	Manhole (4' Diam)	EA	5.0	\$4,000.00	\$20,000.00
4	WasteWater Service Line (Short Service)(6")	EA	5	\$500.00	\$2,500.00
5	WasteWater Service Line (Long Service)(6")	EA	5.0	\$1,000.00	\$5,000.00
6	Connections to Existing Manholes	EA	2.0	\$1,500.00	\$3,000.00
<b>Subtotal Wastewater Improvements</b>					<b>\$164,500.00</b>

ITEM NO.	DESCRIPTION	UNIT	QTY	Engineer's Estimate	
				UNIT PRICE	EXTENDED PRICE
<b>Section VI - Skyview Drive (1000 LF) - Paving (37 FT Wide) and Drainage Improvements</b>					
1	Roadway Preparation (Clearing & Grubbing)	STA	10.0	\$2,600.00	\$26,000.00
2	Remove and Dispose of Asphalt	SY	2,670.0	\$5.00	\$13,350.00
3	Earthwork (Excavation)(Assuming 2.0-ft depth)	CY	3,800	\$7.50	\$28,500.00
4	Lime or Cement Treated Subgrade (8")	SY	4,510.0	\$2.50	\$11,275.00
5	Lime or Cement Slurry (6%) (36 lbs./SY)	TON	80.0	\$150.00	\$12,000.00
6	Concrete Pavement (Reinforced)(8")(4,000 PSI)	SY	4,200.0	\$45.00	\$189,000.00
7	Sidewalk (5' Width)	SY	1,225.0	\$45.00	\$55,125.00
8	Reinforced Concrete Pipe (CL III) (42 IN)	LF	80.0	\$110.00	\$8,800.00
9	Trench Safety	LF	80.0	\$2.00	\$160.00
10	Curb Inlet	EA	2.0	\$3,500.00	\$7,000.00
11	Headwall (42 IN RCP)	EA	2.0	\$3,500.00	\$7,000.00
12	Wire Fencing	LF	2,000.0	\$10.00	\$20,000.00
13	Gates	EA	2.0	\$1,200.00	\$2,400.00
14	Signage Assembly	EA	8.0	\$450.00	\$3,600.00
15	Pavement Markings	LF	1,000.0	\$3.00	\$3,000.00
16	Street Lighting	EA	4	\$4,000.00	\$16,000.00
17	Electrical Conduit/Wiring for Street Lights	LF	1,000	\$22.00	\$22,000.00
18	Electrical Connection	EA	1	\$5,000.00	\$5,000.00
19	Seeding (Cell Fiber Mulch)	SY	3,335.0	\$1.00	\$3,335.00
20	Erosion Control Fence	LF	2,000.0	\$2.00	\$4,000.00
21	Rock Filter Dams	LF	50.0	\$30.00	\$1,500.00
<b>Subtotal Skyview Paving and Drainage Improvements</b>					<b>\$439,045.00</b>
<b>SUBTOTAL IMPROVEMENTS</b>					<b>\$15,276,800.00</b>
<b>CONSTRUCTION MATERIAL TESTING (1%)</b>					<b>\$152,768.00</b>
<b>CONTINGENCY (20%)</b>					<b>\$3,055,360.00</b>
<b>TOTAL IMPROVEMENTS</b>					<b>\$18,484,928.00</b>
<b>INFLATION ADJUSTMENT (2.5% PER YEAR)</b>					<b>\$2,007,500.00</b>
<b>TOTAL IMPROVEMENTS (ASSUMING CONSTRUCTION IN 2018)</b>					<b>\$20,493,000.00</b>
<b>Notes:</b>					
1. Waterlines, landscaping, and irrigation are excluded from this estimate.					
2. An inflation rate of 2.5% was assumed based on the average Consumer Price Index from 2000 to 2013					
3. Design, Construction Inspection, and Right-of-Way Acquisition are excluded from this estimate.					
4. Costs for Corps of Engineers Mitigation items are excluded from this estimate.					
<b>NOTE:</b> This statement was prepared utilizing standard cost and/or estimating practices. It is understood and agreed that this is a statement of probable construction cost only, and the Engineer shall not be liable to the Owner or any Third Party.					