



Takoma Park City Council Meeting – October 16, 2019 Agenda Item 7

Work Session

Ordinance Authorizing Execution of a Contract for Indefinite Quantities for Street, Sidewalk and Stormwater Structure Construction

Recommended Council Action

Consider the Ordinance

Context with Key Issues

In September the City issued a Request for Proposals for indefinite quantities for asphalt, concrete, and stormwater structure construction. Three bids were received and opened on September 26. The bid results tabulation is attached. The intended contract period is for three (3) years with the option to extend for two (2) additional one (1) year periods.

Based on staff's analysis of the price proposals, the two lowest bidders are NZI Construction Corporation and D & F Construction. These companies were also awarded the prior contract in 2014. The FY 20 capital budget includes funding for numerous construction projects including \$500,000 for street resurfacing, \$250,000 for new sidewalk and traffic calming design and construction and \$500,000 for ADA compliance on existing sidewalks (\$250,000 on city streets and \$250,000 on State roadways). The FY20 Stormwater budget includes funding of over \$160,000 in capital projects and \$129,000 in maintenance projects that would be expected to be assigned to these contractors.

Due to the significant number of projects for which this contract could be put to use, the Department recommends awarding a contract to the two lowest bidders. By having two vendors on contract, projects could be scheduled simultaneously and delays in one vendor's availability will not necessarily delay work on a construction project.

Council Priority

Engaged, Responsive and Service-Oriented Government

Environmental Considerations

The work completed by these contracts will have environmental impacts due to emissions of equipment and use of concrete and asphalt materials. The contractors are required to comply with all rules and regulations related to their work. Any concrete or asphalt removed in the course of the work is recycled and reused as construction fill. The stormwater projects to be completed will address pollution issues and enhance the stormwater system for the City.

Fiscal Considerations

Funding for this work is allocated in the Capital Budget and Stormwater Fund.

Racial Equity Considerations

The award of this contract will not adversely affect or disproportionately impact any particular group.

Attachments and Links

Bid Result Tabulation Sheet

Draft Single Reading Ordinance

Introduced by:

Single Reading

CITY OF TAKOMA PARK, MARYLAND

ORDINANCE NO.

AWARDING AN INDEFINITE QUANTITIES CONTRACT FOR STREET, SIDEWALK AND STORMWATER STRUCTURE CONSTRUCTION WITH D&F CONSTRUCTION

WHEREAS, the FY20 budget provides funding for street restoration and other infrastructure improvements; and

WHEREAS, in accordance with the City's procurement procedures, a Request for Proposals was publicly advertised and mailed to interested vendor; and

WHEREAS, bids were publicly opened at 4 pm on September 26, 2019 and three bids were received; and

WHEREAS, the Public Works Department recommends an award of contracts to the two lowest bidders to enable multiple projects to be completed at the same time and increase the pace with which construction projects can be undertaken; and

WHEREAS, after analysis of the unit pricing provided in the bids received, staff determined that the second lowest bid was submitted by D&F Construction; and

WHEREAS, the City Engineer has determined that the bid is both responsive and responsible; and

WHEREAS, funds are available in the FY20 budget to cover the anticipated cost of these services.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TAKOMA PARK, MARYLAND, THAT

Section 1. The bid received from D&F Construction is hereby accepted.

Section 2. The City Manager is authorized to enter into a contract with D&F Construction for an indefinite quantity of the items specified in the bid documents at the quoted unit prices.

Section 3. This Ordinance shall become effective upon adoption.

Adopted this ____ day of October, 2019.

AYE:

NAY:

ABSTAIN:

ABSENT:

Introduced by:

Single Reading

CITY OF TAKOMA PARK, MARYLAND

**ORDINANCE NO.
AWARDING AN INDEFINITE QUANTITIES CONTRACT FOR STREET, SIDEWALK
AND STORMWATER STRUCTURE CONSTRUCTION
WITH NZI CONSTRUCTION CORPORATION**

WHEREAS, the FY20 budget provides funding for street restoration and other infrastructure improvements; and

WHEREAS, in accordance with the City's procurement procedures, a Request for Proposals was publicly advertised and mailed to interested vendor; and

WHEREAS, bids were publicly opened at 4 pm on September 26, 2019 and three bids were received; and

WHEREAS, the Public Works Department recommends an award of contracts to the two lowest bidders to enable multiple projects to be completed at the same time and increase the pace with which construction projects can be undertaken; and

WHEREAS, after analysis of the unit pricing provided in the bids received, staff determined that the lowest bidder was NZI Construction Corporation; and

WHEREAS, the City Engineer has determined that the bid is both responsive and responsible; and

WHEREAS, funds are available in the FY20 budget to cover the anticipated cost of these services.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TAKOMA PARK, MARYLAND, THAT

Section 1. The bid received from NZI Construction Corporation is hereby accepted.

Section 2. The City Manager is authorized to enter into a contract with NZI Construction Corporation for an indefinite quantity of the items specified in the bid documents at the quoted unit prices.

Section 3. This Ordinance shall become effective upon adoption.

Adopted this ____ day of October, 2019.

AYE:

NAY:

ABSTAIN:

ABSENT:

INDEFINITE QUANTITIES - STREET, SIDEWALK, AND STORMWATER STRUCTURES

Table A - Concrete & Asphalt Unit Prices

Item No.	Description	Unit	Projected 2 Yr Quantity	D & F Unit Price	D & F Projected Cost	NZI Unit Price	NZI Projected Cost	ECM Unit Price	ECM Projected Cost	Lowest Price	Unit	BIDDER
A.1	Roadway Excavation and Grading	CY	519.59	\$ 40.00	\$ 20,783.60	\$ 50.00	\$ 25,979.50	\$ 45.00	\$ 23,381.55	\$ 40.00		D&F
A.2	Gravel Base Construction	TON	2371.8	\$ 45.00	\$ 106,731.00	\$ 35.00	\$ 83,013.00	\$ 35.00	\$ 83,013.00	\$ 35.00		NZI & EMC
A.3	Milling (1-1/2 – 2-1/2 inches)	SY	26372.88	\$ 7.00	\$ 184,610.16	\$ 5.00	\$ 131,864.40	\$ 4.00	\$ 105,491.52	\$ 4.00		EMC
A.3.1	Milling (4 inches)	SY	709.89	\$ 9.00	\$ 6,389.01	\$ 8.00	\$ 5,679.12	\$ 5.00	\$ 3,549.45	\$ 5.00		EMC
A.3.2	Milling (6 inches)	SY	0	\$ 12.00	\$ -	\$ 9.00	\$ -	\$ 8.50	\$ -	\$ 8.50		EMC
A.4	Preparation of Existing Pavement	SY	2310.12	\$ 37.00	\$ 85,474.44	\$ 60.00	\$ 138,607.20	\$ 18.00	\$ 41,582.16	\$ 18.00		EMC
A.5	Hot Mix Asphalt Base	TON	-	\$ 95.00	\$ -	\$ 90.00	\$ -	\$ 120.00	\$ -	\$ 90.00		NZI
A.6	Hot Mix Asphalt Surface	TON	3,364.94	\$ 105.00	\$ 353,318.70	\$ 97.00	\$ 326,399.18	\$ 135.00	\$ 454,266.90	\$ 97.00		NZI
A.7	Pavement Reinforcing (i.e., Petro mat ©)	SY	46.50	\$ 4.00	\$ 186.00	\$ 3.50	\$ 162.75	\$ 5.00	\$ 232.50	\$ 3.50		NZI
A.8	Pavement Marking	LF	-	\$ 1.00	\$ -	\$ 1.00	\$ -	\$ 1.50	\$ -	\$ 1.00		D&F & NZI
A.9	Thermoplastic Stripping on Hot Asphalt	LF	194.50	\$ 2.00	\$ 389.00	\$ 2.50	\$ 486.25	\$ 2.50	\$ 486.25	\$ 2.00		D&F
A.10	Thermal Stripping by Heat Application	LF	-	\$ 5.00	\$ -	\$ 2.50	\$ -	\$ 2.00	\$ -	\$ 2.00		ECM
A.11	Preformed Thermoplastic Pavement Markings	LF	-	\$ 5.00	\$ -	\$ 7.00	\$ -	\$ 15.00	\$ -	\$ 5.00		D&F
A.12	Pavement Seal Coating	SF	-	\$ 1.00	\$ -	\$ 0.50	\$ -	\$ 0.50	\$ -	\$ 0.50		NZI & ECM
A.13	Asphalt Pavement Patching	SF	6,345.44	\$ 7.00	\$ 44,418.08	\$ 5.00	\$ 31,727.20	\$ 7.00	\$ 44,418.08	\$ 5.00		NZI
A.14	Subgrade Improvement (2 ft. Deep)	SF	8	\$ 6.50	\$ 52.00	\$ 6.50	\$ 52.00	\$ 4.00	\$ 32.00	\$ 4.00		ECM
A.15	Plain, Conventionally Reinforced or Continuously Reinforced Portland Cement Concrete Pavement Base Repair	CY	11	\$ 600.00	\$ 6,600.00	\$ 450.00	\$ 4,950.00	\$ 700.00	\$ 7,700.00	\$ 450.00		NZI
A.16	Adjust Sewer Manhole to Finished Grade	EA	16	\$ 450.00	\$ 7,200.00	\$ 200.00	\$ 3,200.00	\$ 600.00	\$ 9,600.00	\$ 200.00		NZI
A.17	Adjust Water Valve Box	EA	0	\$ 250.00	\$ -	\$ 100.00	\$ -	\$ 450.00	\$ -	\$ 100.00		NZI
A.18	Maintenance of Traffic (Special Provisions)	DAY	0	\$ 1,800.00	\$ -	\$ 500.00	\$ -	\$ 2,200.00	\$ -	\$ 500.00		NZI
A.19	Speed Bump (City Standard)	EA	5	\$ 2,500.00	\$ 12,500.00	\$ 3,500.00	\$ 17,500.00	\$ 4,500.00	\$ 22,500.00	\$ 2,500.00		D&F
A.20	Speed Hump (Montgomery County Standard)	EA	2	\$ 3,000.00	\$ 6,000.00	\$ 3,500.00	\$ 7,000.00	\$ 8,000.00	\$ 16,000.00	\$ 3,000.00		D&F
A.21	Speed Table (Montgomery County Standard)	EA	0	\$ 4,500.00	\$ -	\$ 4,000.00	\$ -	\$ 5,500.00	\$ -	\$ 4,000.00		NZI
A.22	Raised Crosswalk (County Standard)	EA	40	\$ 4,500.00	\$ 180,000.00	\$ 4,000.00	\$ 160,000.00	\$ 5,000.00	\$ 200,000.00	\$ 4,000.00		NZI
A.23	FOUR 4" Pipe Bollard Installed	EA	0	\$ 650.00	\$ -	\$ 450.00	\$ -	\$ 800.00	\$ -	\$ 450.00		NZI
A.24	SIX 6 "Pipe Bollard Installed	EA	0	\$ 700.00	\$ -	\$ 650.00	\$ -	\$ 700.00	\$ -	\$ 650.00		NZI
TOTAL COST FOR TABLE A					\$ 1,014,651.99	\$ 936,620.60	\$ 1,012,253.41					

Table A

D & F # of Lowest Items	NZI # of Lowest Items	EMC # of Items	Lowest
5	14	3	
23%	64%	13%	

INDEFINITE QUANTITIES - STREET, SIDEWALK, AND STORMWATER STRUCTURES

Table B: Street Structure Unit Prices

Item No.	Description	Unit	Projected 2 Yr Quantity	D & F Price	Unit	D & F Projected Cost	NZI Unit Price	NZI Projected Cost	ECM Unit Price	ECM Projected Cost	Lowest Unit Price	
B.1	Remove/Replace Curb and Gutter	LF	35930.61	\$	30.00	\$ 1,077,918.30	\$ 28.75	\$ 1,033,005.04	\$ 40.00	\$ 1,437,224.40	\$ 28.75	NZI
B.2	Remove/Replace Handicap Ramp	SY	130.19	\$	45.00	\$ 5,858.55	\$ 76.50	\$ 9,959.54	\$ 95.00	\$ 12,368.05	\$ 45.00	D&F
B.3	Detectable Warning Mat Installation	SF	22	\$	22.00	\$ 484.00	\$ 25.00	\$ 550.00	\$ 50.00	\$ 1,100.00	\$ 22.00	D&F
B.4	Montgomery County Standard 10-A 10-C Curb and Gutter	LF	206.68	\$	30.00	\$ 6,200.40	\$ 28.75	\$ 5,942.05	\$ 28.00	\$ 5,787.04	\$ 28.00	ECM
B.5	New Handicap Ramp Installation	SF	136.96	\$	6.00	\$ 821.76	\$ 8.50	\$ 1,164.16	\$ 14.00	\$ 1,917.44	\$ 6.00	D&F
B.6	Remove and Replace Concrete Sidewalk	SY	386.64	\$	45.00	\$ 17,398.80	\$ 45.00	\$ 17,398.80	\$ 72.00	\$ 27,838.08	\$ 45.00	D&F, NZI
B.7	Install New Sidewalk	SY	0	\$	54.00	\$ -	\$ 45.00	\$ -	\$ 72.00	\$ -	\$ 45.00	NZI
B.8	Remove/Replace Residential Driveway Apron	SY	458.07	\$	56.00	\$ 25,651.92	\$ 55.00	\$ 25,193.85	\$ 94.50	\$ 43,287.62	\$ 55.00	NZI
B.9	Remove/Replace Commercial Driveway Apron	SY	43.59	\$	72.00	\$ 3,138.48	\$ 68.00	\$ 2,964.12	\$ 126.00	\$ 5,492.34	\$ 68.00	NZI
B.10	Drain Connection through Curb	EA	13	\$	250.00	\$ 3,250.00	\$ 100.00	\$ 600.00	\$ 700.00	\$ 9,100.00	\$ 100.00	NZI
B.11	Saw Cut Concrete and Asphalt 4 in. to 8 in.	LF	905	\$	4.00	\$ 3,620.00	\$ 4.00	\$ 3,648.00	\$ 3.00	\$ 2,715.00	\$ 3.00	ECM
B.12	Install Brick Pavers on 2-inch Sand	SF	224	\$	25.00	\$ 5,600.00	\$ 20.00	\$ 4,480.00	\$ 25.00	\$ 5,600.00	\$ 20.00	NZI
B.13	Install Brick Pavers on 4-inch Concrete	SF	60	\$	30.00	\$ 1,800.00	\$ 25.00	\$ 1,500.00	\$ 32.00	\$ 1,920.00	\$ 25.00	NZI
B.14	Install Concrete Block Pavers	SF	665	\$	30.00	\$ 19,950.00	\$ 25.00	\$ 16,625.00	\$ 40.00	\$ 26,600.00	\$ 25.00	NZI
B.15	Install Flexible Sidewalk	SF	60	\$	25.00	\$ 1,500.00	\$ 28.00	\$ 1,680.00	\$ 50.00	\$ 3,000.00	\$ 25.00	D&F
B.16	RIP RAP Placement	SF	0	\$	3.85	\$ -	\$ 4.00	\$ -	\$ 21.00	\$ -	\$ 3.85	D&F
B.17	Imbricated RIP RAP for Channel Protection	TON	0	\$	200.00	\$ -	\$ 300.00	\$ -	\$ 120.00	\$ -	\$ 120.00	ECM
B.17.1	Grouted RIP RAP Placement	SF	0	\$	10.00	\$ -	\$ 6.00	\$ -	\$ 20.00	\$ -	\$ 6.00	NZI
B.18	Traffic Circle Construction	SF	0	\$	25.00	\$ -	\$ 25.00	\$ -	\$ 16.00	\$ -	\$ 16.00	ECM
B.19	Reinforcement Steel	TON	0	\$	4,000.00	\$ -	\$ 300.00	\$ -	\$ 1,500.00	\$ -	\$ 300.00	NZI
B.20	MSHA TYPE "A" or "C" Curb and Gutter	LF	0	\$	30.00	\$ -	\$ 28.75	\$ -	\$ 35.00	\$ -	\$ 28.75	NZI
B.21	Timber Retaining Wall	SF	0	\$	25.00	\$ -	\$ 40.00	\$ -	\$ 20.00	\$ -	\$ 20.00	ECM
B.22	Interlocking Concrete Block Retaining Wall	SF	0	\$	30.00	\$ -	\$ 40.00	\$ -	\$ 40.00	\$ -	\$ 30.00	D&F
B.23	Reinforced Concrete Retaining Wall	SF	118	\$	80.00	\$ 9,440.00	\$ 50.00	\$ 5,900.00	\$ 65.00	\$ 7,670.00	\$ 50.00	NZI
B.24	Remove and relocate fence	LF	0	\$	20.00	\$ -	\$ 15.00	\$ -	\$ 40.00	\$ -	\$ 15.00	NZI
						\$ 1,182,632.21		\$ 1,130,610.55		\$ 1,591,619.97		

Table B

D & F # of Items	Lowest	NZI # Of Items	Lowest	EMC # of Items	Lowest
7		14		5	
27%		54%		19%	

Item No.	Description	Unit	Projected 2 Yr Quantity	D & F Unit Price	D & F Projected Cost	NZI Unit Price	NZI Projected Cost	ECM Corp Unit Price	ECM Projected Cost	Lowest Unit Price	
C.1	Removal of Defective Drain Pipes – All Sizes	LF	0	\$ 30.00	\$ -	\$ 20.00	\$ -	\$ 45.00	\$ -	\$ 20.00	NZI
C.2	Trench Unclassified Excavation and Backfill	CY	977.74	\$ 75.00	\$ 73,330.50	\$ 75.00	\$ 73,330.50	\$ 120.00	\$ 117,328.80	\$ 75.00	NZI
C.3	Drain Pipe Installation 4" – 12" Schedule 40 PVC	LF	868.2	\$ 32.00	\$ 27,782.40	\$ 30.00	\$ 26,046.00	\$ 40.00	\$ 34,728.00	\$ 30.00	NZI
C.3.1	Install 15" Diameter: HDPE Drain Pipe	LF	629.5	\$ 25.00	\$ 15,737.50	\$ 45.00	\$ 28,327.50	\$ 80.00	\$ 50,360.00	\$ 25.00	D&F
C.3.2	Install 15 Diameter: RCP Drain	LF	254.95	\$ 35.00	\$ 8,923.25	\$ 60.00	\$ 15,297.00	\$ 90.00	\$ 22,945.50	\$ 35.00	D&F
C.3.3	Install 24" – 36" Dia. HDPE	LF	3	\$ 75.00	\$ 225.00	\$ 80.00	\$ 240.00	\$ 130.00	\$ 390.00	\$ 75.00	D&F
C.3.4	Install 24" – 36" Dia. RCP	LF	12	\$ 100.00	\$ 1,200.00	\$ 90.00	\$ 1,080.00	\$ 160.00	\$ 1,920.00	\$ 90.00	NZI
C.4	Inlet Top Slab Replacement 5-10 ft. Length	EA	10	\$ 750.00	\$ 7,500.00	\$ 1,000.00	\$ 10,000.00	\$ 4,000.00	\$ 40,000.00	\$ 750.00	D&F
C4.1	Inlet Top Slab Replacement 10 – 20 ft. Length	EA	7	\$ 1,250.00	\$ 8,750.00	\$ 1,500.00	\$ 10,500.00	\$ 6,000.00	\$ 42,000.00	\$ 1,250.00	D&F
C.4.2	Remove or Replace Drain Inlet Throat	LF	196.25	\$ 30.00	\$ 5,887.50	\$ 35.00	\$ 6,868.75	\$ 450.00	\$ 88,312.50	\$ 30.00	D&F
C.5	New Inlet Structure Construction	EA	2	\$ 3,500.00	\$ 7,000.00	\$ 4,000.00	\$ 8,000.00	\$ 7,000.00	\$ 14,000.00	\$ 3,500.00	D&F
C.6	Install Sidewalk Trench Drain	LF	16.75	\$ 125.00	\$ 2,093.75	\$ 200.00	\$ 3,350.00	\$ 250.00	\$ 4,187.50	\$ 125.00	D&F
C.7	Underdrain (UD) Installation as per Detail	LF	802	\$ 20.00	\$ 16,040.00	\$ 25.00	\$ 20,050.00	\$ 45.00	\$ 36,090.00	\$ 20.00	D&F
C.8	Under Sidewalk Intake Structure	EA	1	\$ 4,500.00	\$ 4,500.00	\$ 2,500.00	\$ 2,500.00	\$ 3,500.00	\$ 3,500.00	\$ 2,500.00	NZI
C.9	Standard Concrete End Section for 15"-30" R.C.P	EA	0	\$ 1,900.00	\$ -	\$ 1,700.00	\$ -	\$ 3,000.00	\$ -	\$ 1,700.00	NZI
C.10	End Section for 15" – 30" HDPE	EA	0	\$ 1,000.00	\$ -	\$ 1,100.00	\$ -	\$ 2,500.00	\$ -	\$ 1,000.00	D&F
C.11	Standard Manhole and Yard Inlet	EA	13	\$ 3,500.00	\$ 45,500.00	\$ 3,500.00	\$ 45,500.00	\$ 5,500.00	\$ 71,500.00	\$ 3,500.00	D&F, NZI
C.12	Inlet Brick Work Repair	EA	264.45	\$ 75.00	\$ 19,833.75	\$ 40.00	\$ 10,578.00	\$ 2,000.00	\$ 528,900.00	\$ 40.00	NZI
C.13	Temporary Curb Inlet Projection (any size)	EA	0	\$ 200.00	\$ -	\$ 200.00	\$ -	\$ 400.00	\$ -	\$ 200.00	D&F, NZI
C.14	Field Connections for Pipe 8 Inches In diameter or Largerto Existing structureAny Size	EA	3	\$ 500.00	\$ 1,500.00	\$ 500.00	\$ 1,500.00	\$ 3,000.00	\$ 9,000.00	\$ 500.00	D&F
C.15	Field Connections for Pipe 8 Inches In diameter or Larger: Field connections New Pipe	EA	3	\$ 1,000.00	\$ 3,000.00	\$ 500.00	\$ 1,500.00	\$ 3,000.00	\$ 9,000.00	\$ 500.00	NZI
					\$ 248,803.65		\$ 264,667.75		\$ 1,074,162.30		

Table C

D & F # of Lowest Items	NZI # of Items	Lowest	EMC # of Lowest Items
12	10		0
56%	44%		0%

INDEFINITE QUANTITIES - STREET, SIDEWALK, AND STORMWATER STRUCTURES

Table D: Tree Protection & Miscellaneous Material Unit Prices

Item No.	Description	Unit	Projected 2 Yr Quantity	D & F Unit Price	D & F Projected Cost	NZI Unit Price	NZI Projected Cost	ECM Corp Unit Price	ECM Projected Cost	Lowest Unit Price	
D.1	Hand Removal of Curb and Sidewalk	LF	0	\$ 40	\$ -	\$ 10	\$ -	\$ 25	\$ -	\$ 10	NZI
D.2	Tree Protection Fencing	LF	70	\$ 4	\$ 280.00	\$ 4	\$ 280.00	\$ 5	\$ 350.00	\$ 4	D&F, NZI
D.3	Root Zone Pruning	LF	0	\$ 10	\$ -	\$ 20	\$ -	\$ 18	\$ -	\$ 10	D&F, NZI
D.4	Installation of Wooden Tree Wraps	EA	0	\$ 175	\$ -	\$ 250	\$ -	\$ 500	\$ -	\$ 175	D&F, NZI
D.5	Top Soil Replacement	SY	1541.13	\$ 5	\$ 7,705.65	\$ 5	\$ 7,705.65	\$ 9	\$ 13,870.17	\$ 5	D&F, NZI
D.6	Grass Seeding and Mulching	SY	243.13	\$ 2	\$ 486.26	\$ 2	\$ 486.26	\$ 5	\$ 1,215.65	\$ 2	D&F, NZI
D.7	Sod Placed over 2-inch Topsoil	SY	0	\$ 10	\$ -	\$ 10	\$ -	\$ 18	\$ -	\$ 10	D&F, NZI
D.8	Shredded Hardwood Mulch – 3-inch	SY	0	\$ 3	\$ -	\$ 10	\$ -	\$ 20	\$ -	\$ 3	D&F
D.9	Soil Mix Bio Retention	CY	29.8	\$ 99	\$ 2,950.20	\$ 110	\$ 3,278.00	\$ 250	\$ 7,450.00	\$ 99	D&F
D.10	Soil Stabilization Matting – Type A and B	SY	177	\$ 6	\$ 1,062.00	\$ 7	\$ 1,239.00	\$ 8	\$ 1,416.00	\$ 6	D&F
D.11	Impermeable Liner	SY	194.61	\$ 15	\$ 2,919.15	\$ 15	\$ 2,919.15	\$ 9	\$ 1,751.49	\$ 9	ECM
D.12	Aggregate No. 57	TON	195.78	\$ 60	\$ 11,746.80	\$ 50	\$ 9,789.00	\$ 100	\$ 19,578.00	\$ 50	NZI
D.13	Aggregate No. 7 or No. 8	TON	80.82	\$ 60	\$ 4,849.20	\$ 50	\$ 4,041.00	\$ 100	\$ 8,082.00	\$ 50	NZI
D.14	Aggregate No. 2	TON	0	\$ 60	\$ -	\$ 50	\$ -	\$ 120	\$ -	\$ 50	NZI
D.15	Riprap Replacement for Erosion (Class I and II)	TON	19.64	\$ 105	\$ 2,062.20	\$ 110	\$ 2,160.40	\$ 150	\$ 2,946.00	\$ 105	D&F
D.16	River Jack Boulders Stone 4" – 7"	TON	19.61	\$ 150	\$ 2,941.50	\$ 175	\$ 3,431.75	\$ 200	\$ 3,922.00	\$ 150	D&F
D.17	Imbricated Rip Rap (Class IV and V)	TON	0	\$ 225	\$ -	\$ 300	\$ -	\$ 200	\$ -	\$ 200	ECM
D.18	Pea Gravel	TON	86	\$ 80	\$ 6,880.00	\$ 60	\$ 5,160.00	\$ 160	\$ 13,760.00	\$ 60	NZI
D.19	Super Silt Fence	LF	50	\$ 10	\$ 500.00	\$ 15	\$ 750.00	\$ 12	\$ 600.00	\$ 10	D&F
D.20	Minimum Amount of Work Order	EA	NA	\$ 3,000	NA	\$ 3,000	NA	\$ 6,000	NA		
D.21	Period of Warranty (Min. 12-Month)	Month	NA		12 months		12 months		12 months		
D.22	Timeframe for Repair of Defective Work	Month	NA		2 months		2 months		1 month		
					\$ 44,382.96		\$ 41,240.21		\$ 74,941.31		

Table D

D & F # of Lowest Items	NZI # of Lowest Items	ECM # of Lowest Items
12	11	2
48%	44%	8%