



Details: Joint separation, physical damage, and corrosion is present in each pipe.



Details:

Three (3) 84" metal pipes



Project:	120 Shoal Creek Road	Page
Date:	July 18, 2018	1

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General In	TOTMATION	Мар
Project ID	420 Ch and Own do D.d.	/
Street Name	120 Shoal Creek Rd.	
Site Visit Date	5/21/13	*5
Road Classification	Internal Local	\$ C
Project Rural Typical Section	Inotes	Stambad Rd
Field I	Notes	
Design (Existing	g Site Features)	Shoal dreek
Existing Road Laneage	2-10'	No.
Existing ShId Width (paved and o	grass) (feet) 2' Grass	Carrolle My
Existing Side Slopes	2:1	Dama Dr.
Existing Guardrail	None	9
Depth fm Pavement to Top of Cu		Protection (A)
Pipe Type and Size	3-96" CMP	Assistance De la Contraction d
Pipe Condition (1-5) (1 is new)	3	
Condition Notes:		
Pavement Type/Condition	Asphalt/Good	
2.	. 105.1013 2000	Stage Construction Options
Environmen	tal Features	Close Location to Traffic
Wetlands	Yes	Maintain One Lane - No Temp Pavement X
Ditches	None	Maintain One Lane - Temp Pavement
Contrib. Stream (2)		Stage Construction Notes:
Utilities (Visua		
Electric	Aerial	
Cable	Buried	
Phone	Aerial	
Gas	None	
Water	None	
Sewer	None	
Other	Drawa	ad Daging
	Replace in kind	ed Design
Roadway Section	Triple 8' x 8' box culvert	
Proposed Design	Telephone and Cable	
Utility Relocations	Guardrail may be needed based of	on culvert longth
Guardrail Replacement		
Miscellaneous Features	Zone A, Floodplain Analysis Requ	uneu
	Dlawing	Post Estimate
Toma		Cost Estimate
Type Design	Notes Includes 10% Construction	
Right of Way Cost	Assuming project extends	
Utility Relocation Cost	Buried phone a	
Construction Cost	1/3 acre clearing and gr	
Environmental Permits	Permits, Zone A Flor	
Livii Ciinicitai i Ciinits	1 Strinto, Zono A Flor	ψ10,000
	Total P	lanning Estimate \$380,630.36
	i Otal I	WOOD,000.00







Photo 1:



Photo 2:

Photo Date:

5/21/2013

Taken By:

David King

Page:

1





Photo 3:



Photo 4:

Photo Date:

5/21/2013

Taken By:

David King

Page:

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Roadway Construction	Removal Unit C		Installation Unit Cost	Amount		otal Cost
Pavement (SF)		0.73	\$ 4.87	1,040.00	\$	5,829.55
Curb and Gutter (LF)	\$ 28	8.56	\$ 30.60	0.00	\$	-
Drain Inlet (EA)			\$ 3,000.00	0.00		-
4" Sidewalk (SY)		3.56	\$ 36.90	0.00		
Guardrail (LF)	\$	4.88	\$ 49.09	104.00		5,613.50
End Anchorage (EA)			\$ 1,380.00	4.00		5,520.00
Subtotal					\$	16,963.05
0 11 0 1 1 (50) (5 11 0 5 7 1 10)					•	
Grading Complete (5% of Rwy Items & Drng Total \$)					\$	11,996.39
					_	
Roadway Total					\$	28,959.44
2	D		1	A	_	
Drainage	Removal Unit C	ost	Installation Unit Cost	Amount		otal Cost
Trench Excavation (CY)	Φ 0	2.00	\$ 10.38	755.56	\$	7,842.67
96" CMP (LF)	\$ 63	3.00	Φ 455.00	70.00		13,230.00
96" RCP			\$ 455.00 \$ 892.19	0.00		164,929.87
Class A Conc (CY) Steel (lb)				19,942.00		•
Pipe Bedding (CY)			\$ 48.60	50.10		2,434.86
Trench Backfill (CY)			\$ 2.99	778.79		2,327.02
Trench Compaction (CY)			\$ 6.36			3,962.48
Trench Compaction (CT)			ψ 0.30	023.03	Ψ	3,902.40
Drainage Total					\$:	222,964.77
Drailage Total					Ψ	222,504.11
Signing and Marking			Installation Unit Cost	Amount	To	otal Cost
Permanent Striping (LF)			\$ 0.71	0.00	\$	-
Tomation outping (Et)			Ψ 0.71	0.00	Ψ	
Signing and Marking Total					\$	-
organis and maning rotal					Ψ	
Staging			Installation Unit Cost	Amount	To	otal Cost
Clearing and Grubbing (Acre)			\$ 10,260.00	0.33	\$	3,385.80
Temporary Pavement					\$	· -
Temporary Drainage (Stream Diversion)			\$ 4,428.00	2.00	\$	8,856.00
Staging Total					\$	12,241.80
Erosion Control			Installation Unit Cost	Amount	To	otal Cost
Fine Grading and Seeding (SY)			\$ 4.39	86.67	\$	380.64
Temporary Grassing (AC)			\$ 855.60	0.00	\$	-
Type C Silt Fence (LF)			\$ 4.24	500.00	Φ	2,118.00
			· · · ·		Ψ	
Check Dam Type C Silt Fence (LF)			\$ 6.79	500.00		3,396.00
			\$ 6.79 \$ 1.87		\$	
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)			\$ 6.79 \$ 1.87 \$ 3.58	500.00 166.67 166.67	\$ \$ \$	3,396.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20	500.00 166.67 166.67 0.00	\$ \$ \$	3,396.00 312.00 596.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98	500.00 166.67 166.67 0.00 69.33	\$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$	3,396.00 312.00 596.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98	500.00 166.67 166.67 0.00 69.33	\$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22 396.86 - 11,427.73
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$	3,396.00 312.00 596.00 - 4,228.22 396.86 - 11,427.73
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$)			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 - 4,228.22 396.86 - 11,427.73 275,593.74
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$)	Removal Unit C	Cost	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	500.00 166.67 166.67 0.00 69.33 69.33	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total		cost	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	500.00 166.67 166.67 0.00 69.33 69.33 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation	\$ 1	ost 1.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	500.00 166.67 166.67 0.00 69.33 69.33 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric	\$ 1° \$ 16		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	500.00 166.67 166.67 0.00 69.33 69.33 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial	\$ 1° \$ 16	1.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	500.00 166.67 166.67 0.00 69.33 69.33 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried	\$ 1° \$ 16 \$ 82	1.00 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ 10 \$ 16 \$ 82 \$ 11	1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried	\$ 10 \$ 86 \$ 87 \$ 11	1.00 6.50 2.50 1.00 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 275,593.74 22,047.50 297,641.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Wooden Pole Wooden Pole	\$ 10 \$ 82 \$ 11 \$ 10	1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 2275,593.74 22,047.50 297,641.24 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ 11° \$ 85° \$ 11° \$ 85° \$ 11° \$ 85°	1.00 6.50 2.50 1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 55.00 \$ 605.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 2275,593.74 22,047.50 297,641.24 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Aerial	\$ 11 \$ 82 \$ 11 \$ 83 \$ 11 \$ 83	1.00 6.50 2.50 1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 605.00 \$ 27.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 83	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount	\$	3,396.00 312.00 596.00 4,228.22 396.86 - 11,427.73 2275,593.74 22,047.50 297,641.24 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 83 \$ 12 \$ 12 \$ 14	1.00 6.50 2.50 1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 605.00 \$ 27.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ 11 \$ 83 \$ 16 \$ 85 \$ 11 \$ 85 \$ 85	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 55.00 \$ 605.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Casle	\$ 11 \$ 83 \$ 16 \$ 85 \$ 16 \$ 85 \$ 17 \$ 85	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water	\$ 11 \$ 82 \$ 11 \$ 83 \$ 11 \$ 83 \$ 16 \$ 83	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 66.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	\$ 11 \$ 82 \$ 11 \$ 83 \$ 11 \$ 83 \$ 16 \$ 83	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 93.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA)	\$ 11 \$ 82 \$ 11 \$ 83 \$ 11 \$ 83 \$ 16 \$ 83	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 66.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Relocate Fire Hydrant (EA) Sewer	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 65.00 \$ 55.00 \$ 605.00 \$ 93.50 \$ 66.00 \$ 93.50 \$ 66.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Case A'' main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 93.50	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 65.00 \$ 55.00 \$ 605.00 \$ 93.50 \$ 66.00 \$ 93.50 \$ 66.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 93.50 \$ 66.00 \$ 93.50 \$ 2,609.22	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00 0.00 0.00	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	3,396.00 312.00 596.00 4,228.22 396.86
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total Right of Way (Sq Ft)	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 605.00 \$ 55.00 \$ 605.00 \$ 27.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 82.50 \$ 605.00	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00 0.00 0.00 Sq Ft	\$	3,396.00 312.00 596.00 4,228.22 396.86 11,427.73 275,593.74 22,047.50 297,641.24 otal Cost 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11 \$ 82 \$ 11	1.00 6.50 2.50 1.00 6.50 2.50 1.00 6.50 2.50 6.50 6.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 93.50 \$ 66.00 \$ 93.50 \$ 2,609.22	500.00 166.67 166.67 0.00 69.33 69.33 0.00 Amount 0.00 0.00 75.00 0.00 0.00 0.00	\$	3,396.00 312.00 596.00 4,228.22 396.86