

Appendix J

Capital Improvement Project

Cost Worksheets

Content:

- CIP Prioritization Cost Worksheets

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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-01

Project Description: Grade Control Undermining Perched Adams St Culvert Outfall on Mainstem LCR005



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	1.00	\$ 5,000	\$ 5,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.80	\$ 2,500	\$ 2,000
Subtotal =				\$ 7,000
Contingency = 15%				\$ 1,100
TOTAL OPINION OF SURVEYING COST =				\$ 8,100

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	50	\$ 20	\$ 1,000
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 5,500
Contingency = 15%				\$ 800
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 6,300

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	120	\$ 100	\$ 12,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	60	\$ 100	\$ 6,000
Final Design	HOURS	100	\$ 100	\$ 10,000
Develop Plans and Construction Documents	HOURS	150	\$ 75	\$ 11,300
Construction Support	HOURS	120	\$ 100	\$ 12,000
Subtotal =				\$ 53,300
Contingency = 15%				\$ 8,000
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 61,300

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	2,350	\$ 15	\$ 35,300
Rock Grade Control	CY	1,100	\$ 75	\$ 82,500
Grade Control Sheet Pile	SF	2,125	\$ 25	\$ 53,100
Rock Stilling Basin / Outlet Scour Protection	CY	350	\$ 75	\$ 26,300
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	8,400	\$ 0.50	\$ 4,200
Site Restoration	ACRE	0.80	\$ 15,000	\$ 12,000
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF	0	\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 10,670	\$ 10,700
Subtotal =				\$ 224,100
Contingency = 30%				\$ 67,200
TOTAL OPINION OF CONSTRUCTION COST =				\$ 291,300

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 367,000
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-02

Project Description: Grade Control Incision on Mainstem LCR005 and Side Tributary



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	1.00	\$ 5,000	\$ 5,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	1.00	\$ 2,500	\$ 2,500
Subtotal =				\$ 7,500
Contingency = 15%				\$ 1,100
TOTAL OPINION OF SURVEYING COST =				\$ 8,600

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	100	\$ 20	\$ 2,000
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 6,500
Contingency = 15%				\$ 1,000
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 7,500

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	120	\$ 100	\$ 12,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	60	\$ 100	\$ 6,000
Final Design	HOURS	100	\$ 100	\$ 10,000
Develop Plans and Construction Documents	HOURS	150	\$ 75	\$ 11,300
Construction Support	HOURS	120	\$ 100	\$ 12,000
Subtotal =				\$ 53,300
Contingency = 15%				\$ 8,000
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 61,300

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	2,000	\$ 15	\$ 30,000
Rock Grade Control	CY	1,250	\$ 75	\$ 93,800
Grade Control Sheet Pile	SF	2,400	\$ 25	\$ 60,000
Rock Stilling Basin / Outlet Scour Protection	CY	150	\$ 75	\$ 11,300
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	10,300	\$ 0.50	\$ 5,200
Site Restoration	ACRE	1.00	\$ 15,000	\$ 15,000
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 10,765	\$ 10,800
Subtotal =				\$ 226,100
Contingency = 30%				\$ 67,800
TOTAL OPINION OF CONSTRUCTION COST =				\$ 293,900

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 371,300
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-03



Project Description: Grade Control Incision on Tributary LC005R005

SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	1.00	\$ 5,000	\$ 5,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	1.00	\$ 2,500	\$ 2,500
Subtotal =				\$ 7,500
Contingency = 15%				\$ 1,100
TOTAL OPINION OF SURVEYING COST =				\$ 8,600

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	75	\$ 20	\$ 1,500
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 6,000
Contingency = 15%				\$ 900
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 6,900

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	100	\$ 100	\$ 10,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	40	\$ 100	\$ 4,000
Final Design	HOURS	60	\$ 100	\$ 6,000
Develop Plans and Construction Documents	HOURS	100	\$ 75	\$ 7,500
Construction Support	HOURS	60	\$ 100	\$ 6,000
Subtotal =				\$ 35,500
Contingency = 15%				\$ 5,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 40,800

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	1,125	\$ 15	\$ 16,900
Rock Grade Control	CY	875	\$ 75	\$ 65,600
Grade Control Sheet Pile	SF	1,500	\$ 25	\$ 37,500
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	6,500	\$ 0.50	\$ 3,300
Site Restoration	ACRE	1.00	\$ 15,000	\$ 15,000
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 6,915	\$ 6,900
Subtotal =				\$ 145,200
Contingency = 30%				\$ 43,600
TOTAL OPINION OF CONSTRUCTION COST =				\$ 188,800

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 245,100
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-04

Project Description: Roper Park Trail Relocation and Bank Stabilization on Mainstem LCR005



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	0.30	\$ 5,000	\$ 1,500
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.30	\$ 2,500	\$ 800
			Subtotal =	\$ 2,300
			Contingency = 15%	\$ 300
TOTAL OPINION OF SURVEYING COST =				\$ 2,600

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	60	\$ 20	\$ 1,200
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	1	\$ 100	\$ 100
			Subtotal =	\$ 5,800
			Contingency = 15%	\$ 900
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 6,700

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	100	\$ 100	\$ 10,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	40	\$ 100	\$ 4,000
Final Design	HOURS	60	\$ 100	\$ 6,000
Develop Plans and Construction Documents	HOURS	100	\$ 75	\$ 7,500
Construction Support	HOURS	60	\$ 100	\$ 6,000
			\$ -	\$ -
			Subtotal =	\$ 35,500
			Contingency = 15%	\$ 5,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 40,800

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	275	\$ 15	\$ 4,100
Rock Grade Control	CY	0	\$ 75	\$ -
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	100	\$ 75	\$ 7,500
Riparian Corridor Planting	SF	1,200	\$ 0.50	\$ 600
Site Restoration	ACRE	0.30	\$ 15,000	\$ 4,500
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Sidewalk Removal and Replacement	SF	100.00	\$ 12	\$ 1,200
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 895	\$ 900
			Subtotal =	\$ 18,800
			Contingency = 30%	\$ 5,600
TOTAL OPINION OF CONSTRUCTION COST =				\$ 24,400

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 74,500
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-05



Project Description: Grade Control Scour at NW 1st Culvert Outfall on Mainstem LCR010

SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	0.20	\$ 5,000	\$ 1,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.20	\$ 2,500	\$ 500
Subtotal =				\$ 1,500
Contingency = 15%				\$ 200
TOTAL OPINION OF SURVEYING COST =				\$ 1,700

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	25	\$ 20	\$ 500
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 5,000
Contingency = 15%				\$ 800
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 5,800

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	100	\$ 100	\$ 10,000
ROW	HOURS	40	\$ 100	\$ 4,000
Permitting	HOURS	40	\$ 100	\$ 4,000
Final Design	HOURS	60	\$ 100	\$ 6,000
Develop Plans and Construction Documents	HOURS	100	\$ 75	\$ 7,500
Construction Support	HOURS	60	\$ 100	\$ 6,000
Subtotal =				\$ 37,500
Contingency = 15%				\$ 5,600
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 43,100

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	525	\$ 15	\$ 7,900
Rock Grade Control	CY	350	\$ 75	\$ 26,300
Grade Control Sheet Pile	SF	675	\$ 25	\$ 16,900
Rock Stilling Basin / Outlet Scour Protection	CY	25	\$ 75	\$ 1,900
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	2,200	\$ 0.50	\$ 1,100
Site Restoration	ACRE	0.20	\$ 15,000	\$ 3,000
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 2,855	\$ 2,900
Subtotal =				\$ 60,000
Contingency = 30%				\$ 18,000
TOTAL OPINION OF CONSTRUCTION COST =				\$ 78,000

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 128,600
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-06

Project Description: Grade Control Incision Drainage Ditch at NW 1st Culvert on Mainstem LCR015



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	0.30	\$ 5,000	\$ 1,500
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.30	\$ 2,500	\$ 800
Subtotal =				\$ 2,300
Contingency = 15%				\$ 300
TOTAL OPINION OF SURVEYING COST =				\$ 2,600

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	1	\$ 20	\$ -
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 4,500
Contingency = 15%				\$ 700
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 5,200

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	100	\$ 100	\$ 10,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	40	\$ 100	\$ 4,000
Final Design	HOURS	60	\$ 100	\$ 6,000
Develop Plans and Construction Documents	HOURS	100	\$ 75	\$ 7,500
Construction Support	HOURS	60	\$ 100	\$ 6,000
Subtotal =				\$ 35,500
Contingency = 15%				\$ 5,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 40,800

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	200	\$ 15	\$ 3,000
Rock Grade Control	CY	225	\$ 75	\$ 16,900
Grade Control Sheet Pile	SF	0	\$ 25	\$ -
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	1,200	\$ 0.50	\$ 600
Site Restoration	ACRE	0.30	\$ 15,000	\$ 4,500
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 1,250	\$ 1,300
Subtotal =				\$ 26,300
Contingency = 30%				\$ 7,900
TOTAL OPINION OF CONSTRUCTION COST =				\$ 34,200

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 82,800
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-06 ALT

Project Description: Construct an area inlet and pipe the captured stormwater to the channel. Fill in the tributary.



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	0.30	\$ 5,000	\$ 1,500
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.30	\$ 2,500	\$ 800
Subtotal =				\$ 2,300
Contingency = 15%				\$ 300
TOTAL OPINION OF SURVEYING COST =				\$ 2,600

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	1	\$ 20	\$ -
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 4,500
Contingency = 15%				\$ 700
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 5,200

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	100	\$ 100	\$ 10,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	40	\$ 100	\$ 4,000
Final Design	HOURS	60	\$ 100	\$ 6,000
Develop Plans and Construction Documents	HOURS	100	\$ 75	\$ 7,500
Construction Support	HOURS	60	\$ 100	\$ 6,000
Subtotal =				\$ 35,500
Contingency = 15%				\$ 5,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 40,800

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	300	\$ 15	\$ 4,500
Rock Grade Control	CY	75	\$ 75	\$ 5,600
Grade Control Sheet Pile	SF	0	\$ 25	\$ -
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	2,200	\$ 0.50	\$ 1,100
Site Restoration	ACRE	0.30	\$ 15,000	\$ 4,500
New Culvert	LF	175	\$ 500.0	\$ 87,500
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
404 mitigation	LUMP	1	\$ 10,000	\$ 10,000
Subtotal =				\$ 118,900
Contingency = 30%				\$ 35,700
TOTAL OPINION OF CONSTRUCTION COST =				\$ 154,600

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 203,200
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-07



Project Description: Grade Control Incision on Tributary LC020R005

SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	3.00	\$ 5,000	\$ 15,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	0.50	\$ 2,500	\$ 1,300
Subtotal =				\$ 16,300
Contingency = 15%				\$ 2,400
TOTAL OPINION OF SURVEYING COST =				\$ 18,700

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	125	\$ 20	\$ 2,500
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
Subtotal =				\$ 7,000
Contingency = 15%				\$ 1,100
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 8,100

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	180	\$ 100	\$ 18,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	80	\$ 100	\$ 8,000
Final Design	HOURS	120	\$ 100	\$ 12,000
Develop Plans and Construction Documents	HOURS	200	\$ 75	\$ 15,000
Construction Support	HOURS	200	\$ 100	\$ 20,000
Subtotal =				\$ 75,000
Contingency = 15%				\$ 11,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 86,300

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	1,575	\$ 15	\$ 23,600
Rock Grade Control	CY	1,225	\$ 75	\$ 91,900
Grade Control Sheet Pile	SF	1,925	\$ 25	\$ 48,100
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	0	\$ 75	\$ -
Riparian Corridor Planting	SF	9,100	\$ 0.50	\$ 4,600
Site Restoration	ACRE	0.50	\$ 15,000	\$ 7,500
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 8,785	\$ 8,800
Subtotal =				\$ 184,500
Contingency = 30%				\$ 55,400
TOTAL OPINION OF CONSTRUCTION COST =				\$ 239,900

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 353,000
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Lynn Creek Watershed Masterplan - Cost Opinion Worksheet

Project ID: LC-07 ALT

Project Description: Project Alternate to restore the Tributary LC020R005 reach with a meandering, natural channel.



SURVEYING

Description	Unit	Quantity	Unit Cost	Sub Total
Boundary and Topo Surveying	ACRE	3.00	\$ 5,000	\$ 15,000
Prepare Easement Plat and Scripts; Title Reports	EACH	0	\$ 1,000	\$ -
Construction Staking and As-Built Surveying	ACRE	2.00	\$ 2,500	\$ 5,000
			Subtotal =	\$ 20,000
			Contingency = 15%	\$ 3,000
TOTAL OPINION OF SURVEYING COST =				\$ 23,000

GEOTECHNICAL

Description	Unit	Quantity	Unit Cost	Sub Total
Field Borings	LF	125	\$ 20	\$ 2,500
Geotechnical Report	LUMP	1	\$ 4,500	\$ 4,500
Global Stability Analysis	EACH	0	\$ 100	\$ -
			Subtotal =	\$ 7,000
			Contingency = 15%	\$ 1,100
TOTAL OPINION OF GEOTECHNICAL COST =				\$ 8,100

ENGINEERING DESIGN AND CONSTRUCTION DOCUMENTS

Description	Unit	Quantity	Unit Cost	Sub Total
Preliminary Design	HOURS	180	\$ 100	\$ 18,000
ROW	HOURS	20	\$ 100	\$ 2,000
Permitting	HOURS	80	\$ 100	\$ 8,000
Final Design	HOURS	120	\$ 100	\$ 12,000
Develop Plans and Construction Documents	HOURS	200	\$ 75	\$ 15,000
Construction Support	HOURS	200	\$ 100	\$ 20,000
			\$ -	\$ -
			Subtotal =	\$ 75,000
			Contingency = 15%	\$ 11,300
TOTAL OPINION OF ENGINEERING AND CONSTRUCTION OBSERVATION COST =				\$ 86,300

CONSTRUCTION

Description	Unit	Quantity	Unit Cost	Sub Total
Removal of Existing Structures	LUMP	0	\$ 2,000	\$ -
Excavation and Embankment in Place	CY	2,550	\$ 15	\$ 38,300
Rock Grade Control	CY	1,225	\$ 75	\$ 91,900
Grade Control Sheet Pile	SF	1,925	\$ 25	\$ 48,100
Rock Stilling Basin / Outlet Scour Protection	CY	0	\$ 75	\$ -
Rock Toe and Slope Protection	CY	4,500	\$ 75	\$ 337,500
Riparian Corridor Planting	SF	38,000	\$ 0.50	\$ 19,000
Site Restoration	ACRE	2.00	\$ 15,000	\$ 30,000
New Culvert	LF	0	\$ 500.0	\$ -
Retaining Wall	SF	0	\$ 50	\$ -
Wetland Planting	ACRE	0.00	\$ 40,000	\$ -
Bridge Protection Sheet Pile	SF		\$ 25	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization and Bond	5%	1	\$ 28,240	\$ 28,200
			Subtotal =	\$ 593,000
			Contingency = 30%	\$ 177,900
TOTAL OPINION OF CONSTRUCTION COST =				\$ 770,900

TOTAL SURVEYING, GEOTECHNICAL, ENGINEERING AND CONSTRUCTION COST OPINION =				\$ 888,300
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