City of Carroll

112 E. 5th Street Carroll, Iowa 51401-2799 (712) 792-1000 FAX: (712) 792-0139

MEMO TO: Mike Pogge-Weaver, City Manager MPW

FROM: Jack Wardell, Director of Parks and Recreation JW

DATE: April 16, 2019

SUBJECT: Graham Park Master Plan Presentation

❖ Graham Park Master Plan

The Graham Park Master Plan originated in 2016 with the Graham Park Recreation District assistance of Iowa State University Design Lab. The project overview looked at the current conditions of the District. The plan gave some design strategies and concepts.

In January 2018 City Council approved a Resolution to work with Shive Hattery to develop the Graham Park Master Plan. The Graham Park committee was established and after several meetings, the attached plan was created for City Council review.

An overview of the Master Plan is divided into four projects.

Project 1 - Graham Park Improvements $1,420,100

- Park Amenities, trails, lighting and entrance
- Restroom Improvements
- Playground Improvements

Project 2 - Creek Improvements $129,700

- Reinforced concrete wall
- Riprap Armoring
- Rebuild Outfalls and Footings
- Earthwork Excavation
- Utility Adjustments
- Surfacing - Path and Gathering Area
- Boulder or Outcropping Stone Terracing

Project 3 - Grant Road Streetscape	$947,200

Pedestrian Crossing
Paving Removal
ADA Ramps
8' Wide Trail - 5" PCC Paving
Trees
Signage
Roadway Lighting

Project 4 - Stadium Parking and Plaza	$1,162,600

HMA Pavement Demolition
Sidewalk, curb and gutter
Storm Sewer Improvements
Bio-swale
Earthwork
Signage, lighting and electrical
HMA Paving Parking

Total Project Costs:	**$3,659,600**

Each project will be discussed in more detail at the City Council meeting.

RECOMMENDATION: Mayor and City Council consideration and approval of the Graham Park Master Plan.

CARROLL GRAHAM PARK RECREATIONAL DISTRICT

CAPITAL IMPROVEMENTS PLAN

SHIVEHATTERY
ARCHITECTURE + ENGINEERING

NOVEMBER 16 . 2018

INTRODUCTION

THIS REPORT IS A CONTINUATION OF THE WORK DONE BY THE ISU CDL ON THE GRAHAM PARK RECREATIONAL DISTRICT. THE SCOPE OF THIS REPORT IS TO FURTHER REFINE SELECTED RECOMMENDATIONS FROM THE ISU CDL REPORT FOR THE PURPOSE OF CREATING HIGH LEVEL OPINIONS OF PROBABLE COSTS TO BE USED IN FUTURE CAPITAL IMPROVEMENTS PLANS (CIP).

TABLE OF CONTENTS

OVERALL PLAN 2-3

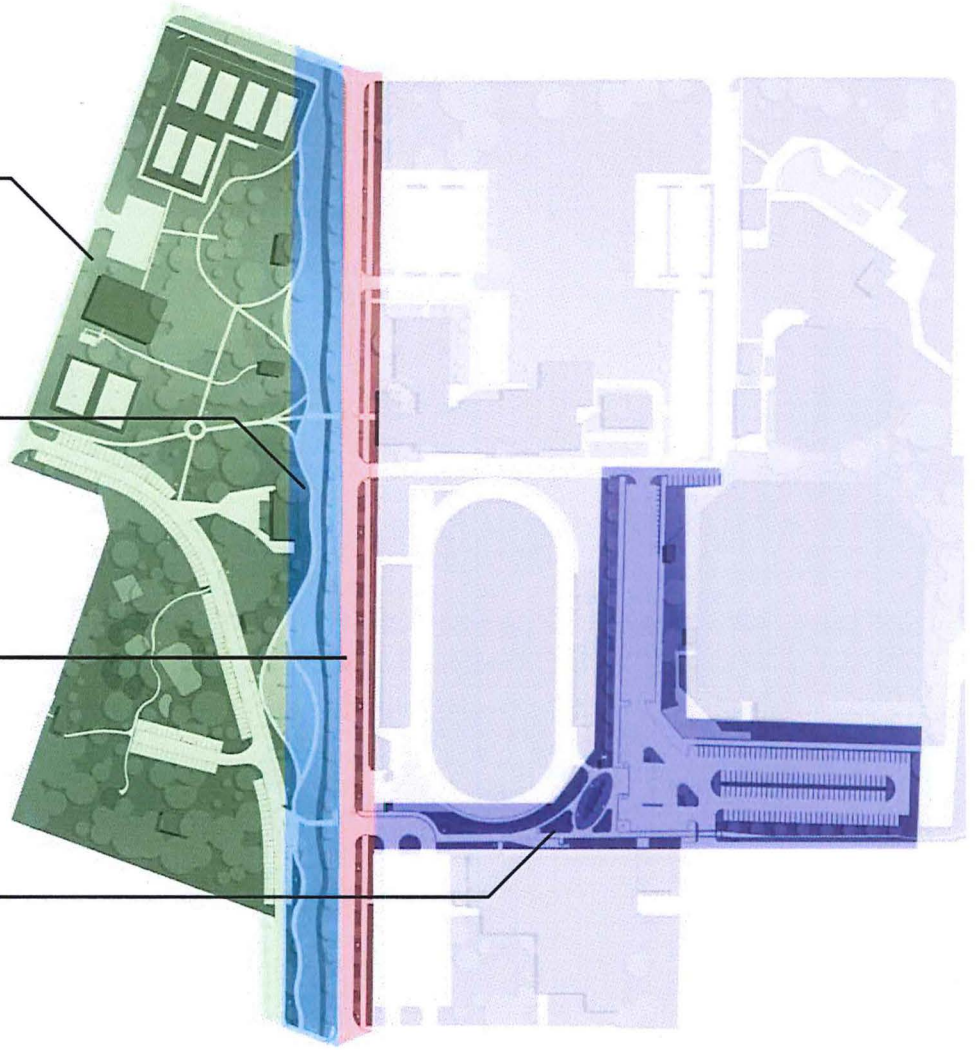
PROJECT 1 - GRAHAM PARK IMPROVEMENTS 4-11

PROJECT 2 - CREEK IMPROVEMENTS 12-13

PROJECT 3 - GRANT ROAD STREETSCAPE 14-16

PROJECT 4 - STADIUM PARKING AND PLAZA 17-25

GRAHAM PARK RECREATIONAL DISTRICT
PROJECT AREAS



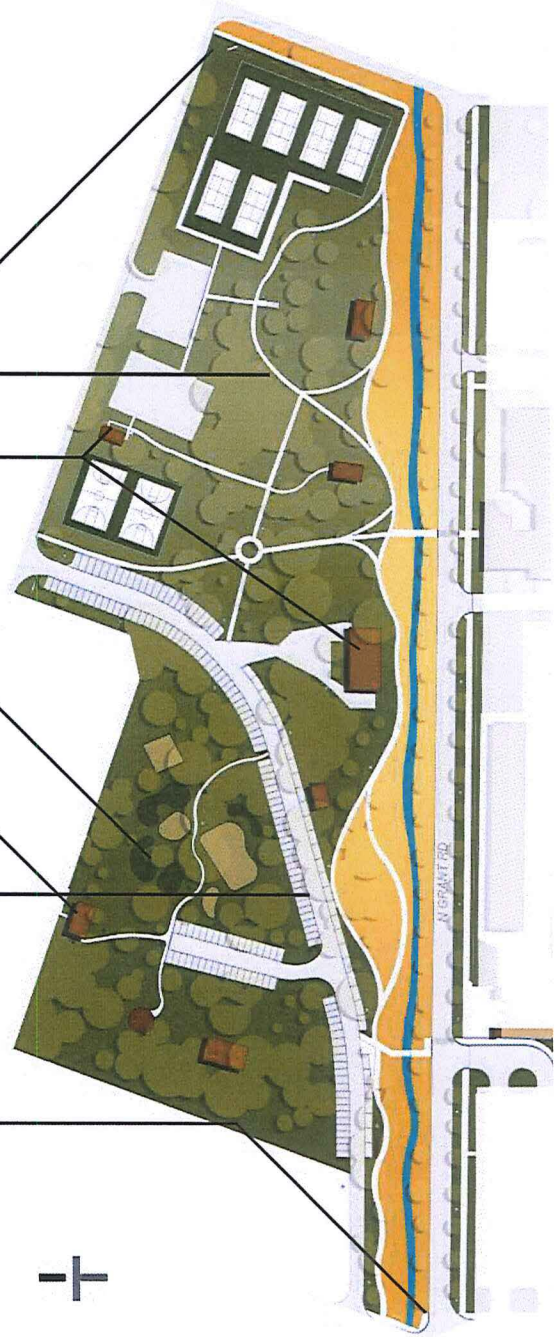
GRAHAM PARK RECREATIONAL DISTRICT
SUMMARY OPINION OF PROBABLE PROJECT COSTS

PROJECT #	ITEM DESCRIPTION		TOTAL COST
1	PARK IMPROVEMENTS		
	PARK AMENITITES, TRAILS, LIGHTING & ENTRANCE	=	$864,400
	RESTROOMS IMPROVEMENTS	=	$163,700
	PLAYGROUND IMPROVEMENTS	=	$392,000
	PROJECT 1 TOTAL	=	**$1,420,100**
2	CREEK IMPROVEMENTS	=	$129,700
3	GRANT ROAD STREETSCAPE	=	$947,200
4	STADIUM PARKING AND PLAZA	=	$1,162,600
	PROJECT 2-4 TOTAL	=	**$2,239,500**
	TOTAL PROJECT COSTS	=	**$3,659,600**

*ALL COSTS ARE IN 2019 DOLLARS. ESCALATE COSTS APPROPRIATELY FOR FUTURE CONSTRUCTION YEARS.
*TOTAL PROJECT COSTS AND CONSTRUCTION COSTS PROVIDED HEREIN ARE MADE ON THE BASIS OF ENGINEER'S EXPERIENCE AND QUALIFICATIONS AND REPRESENT THE ENGINEER'S BEST JUDGMENT. HOWEVER, THE ENGINEER CANNOT AND DOES NOT GUARANTEE THAT BIDS OR ACTUAL TOTAL PROJECT OR CONSTRUCTION COSTS WILL NOT VARY FROM THE ESTIMATE OF PROBABLE CONSTRUCTION COST. THIS COST OPINION IS INTENDED TO ASSIST IN BUDGETARY ASSESSMENT AND DOES NOT GUARANTEE THAT ACTUAL PROJECT COSTS WILL NOT EXCEED OR BE LOWER THAN THE AMOUNTS STATED IN THIS ESTIMATE.

PROJECT 1
GRAHAM PARK IMPROVEMENTS

IMPROVEMENTS INCLUDED:



PARK SIGNAGE

ADDITIONAL PARK TRAILS

RESTROOM IMPROVEMENTS

PLAYGROUND IMPROVEMENTS

RESTROOM IMPROVEMENTS

PARKING IMPROVEMENTS

LIGHTING IMPROVEMENTS THROUGHOUT PARK

ENTRANCE SIGNAGE

PROJECT 1
GRAHAM PARK IMPROVEMENTS

OPINION OF PROBABLE COSTS
(2019 DOLLARS)

#	PARK AMENITIES, TRAILS, LIGHTING & ENTRANCE ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	PAVED PARKING @ EXISTING GRANULAR PARKING, 6" PCC PAVING	3,600	SY	*	$75	=	$270,000
2	LOG PARKING BARRIER REPAIR	1	LS	*	$10,000	=	$10,000
3	BENCH*	27	EA	*	$1,200	=	$32,400
4	TRASH RECEPTACLE	12	EA	*	$600	=	$7,200
5	WATER FOUNTAIN	2	EA	*	$6,500	=	$13,000
6	ELECTRICAL DISTRIBUTION MODIFICATIONS	1	LS	*	$20,000	=	$20,000
7	ROADWAY LIGHTING	16	EA	*	$6,000	=	$96,000
8	PEDESTRIAN LIGHTING	17	EA	*	$4,000	=	$68,000
9	ENTRANCE SIGNAGE	1	EA	*	$25,000	=	$25,000
					SUBTOTAL	=	$541,600
					DESIGN CONTINGENCY (20%)	=	$108,300
					SUBTOTAL	=	**$649,900**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$97,500
					MATERIALS TESTING / PERMITS (3%)	=	$19,500
					CONSTRUCTION CONTINGENCY (15%)	=	$97,500
					TOTAL PROJECT COSTS	=	**$864,400**

*EXISTING 20 PARK BENCHES WILL BE REMOVED AND REPLACED WITH NEW BENCHES IN PLAYGROUND IMPROVEMENTS

PROJECT 1
GRAHAM PARK IMPROVEMENTS

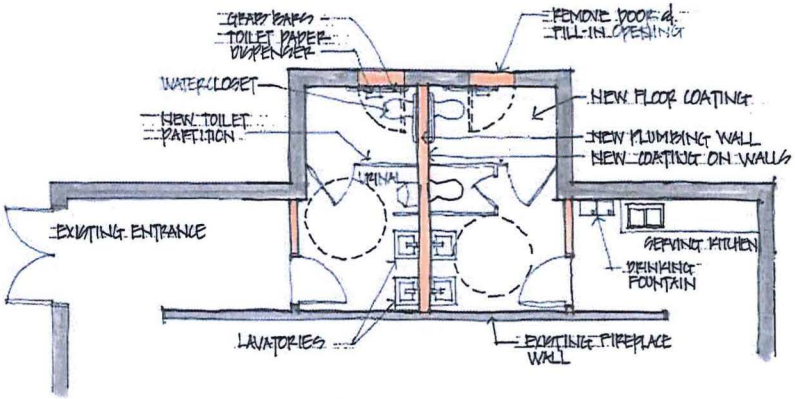
PARKING & TRAIL IMPROVEMENTS

NEW PAVED PARKING

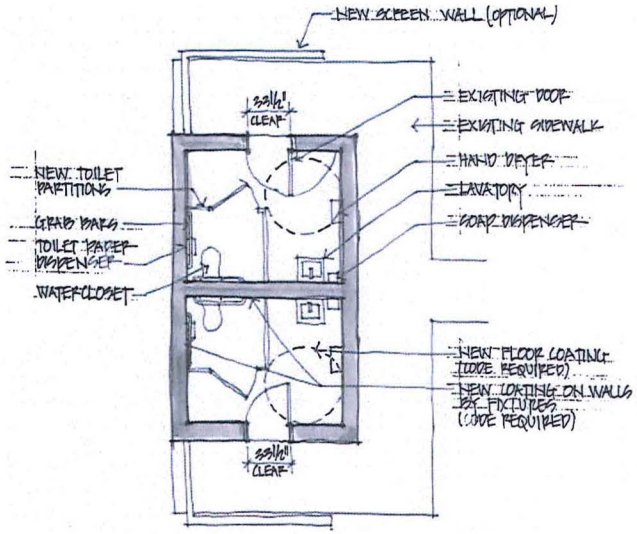
NEW TRAIL

PROJECT 1
GRAHAM PARK IMPROVEMENTS

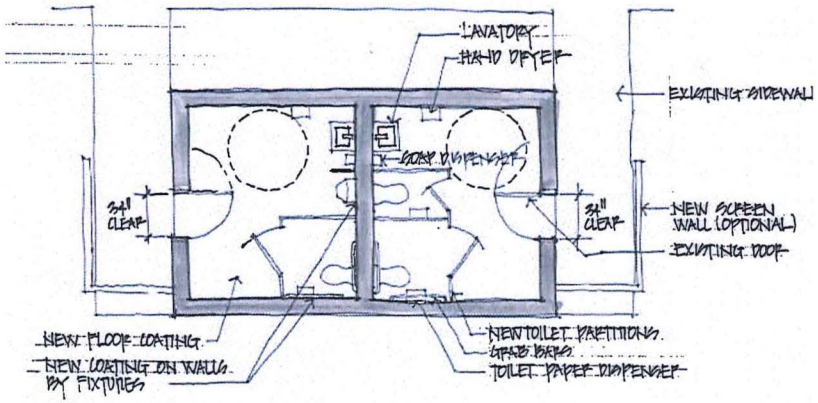
RESTROOM MODIFICATIONS PROPOSED



Restrooms in Community Center



Restrooms near Playground

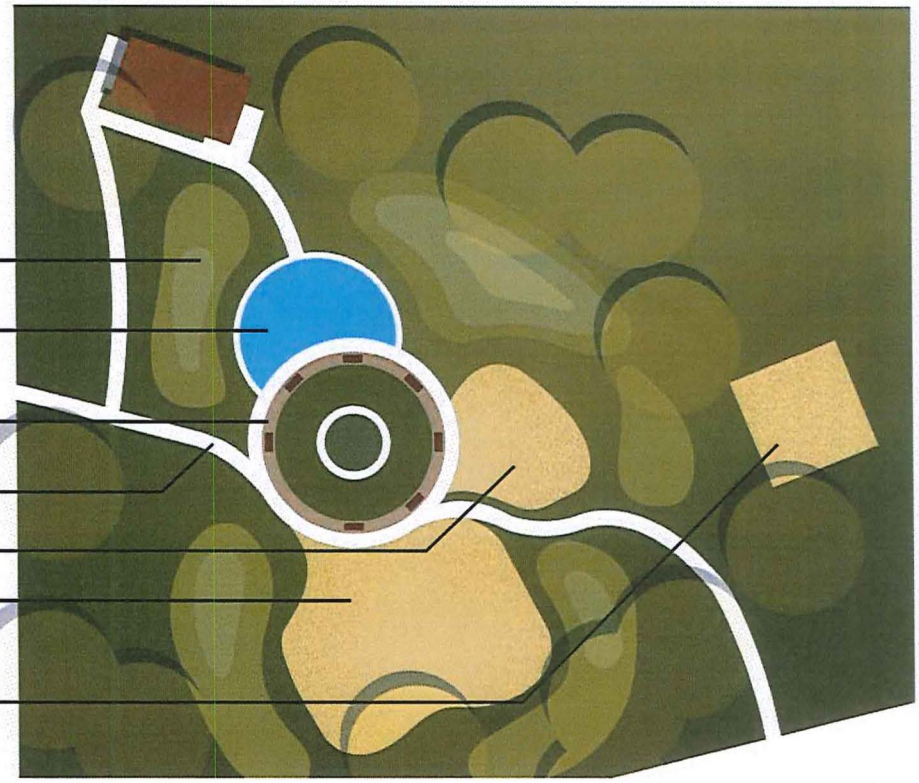


Restrooms near Skate Park

#	RESTROOM IMPROVEMENTS - ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
SOUTH RESTROOMS							
1	DEMOLITION	1	LS	*	$3,500	=	$3,500
2	ADA COMPLIANT MODIFICATIONS	1	LS	*	$30,000	=	$30,000
3	DRINKING FOUNTAIN	1	LS	*	$6,000	=	$6,000
					SUBTOTAL	=	$39,500
RESTROOMS BY SKATE PARK							
1	DEMOLITION	1	LS	*	$4,000	=	$4,000
2	ADA COMPLIANT MODIFICATIONS	1	LS	*	$45,000	=	$45,000
3	DRINKING FOUNTAIN	1	LS	*	$6,000	=	$6,000
					SUBTOTAL	=	$55,000
OPTIONAL MODIFICATIONS							
1	SCREEN WALLS AT ENTRANCES (QTY 4)	4	EA	*	$2,000	=	$8,000
					SUBTOTAL	=	$102,500
					DESIGN CONTINGENCY (20%)	=	$20,500
					SUBTOTAL	=	**$123,000**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$18,500
					MATERIALS TESTING / PERMITS (3%)	=	$3,700
					CONSTRUCTION CONTINGENCY (15%)	=	$18,500
					TOTAL PROJECT COSTS	=	**$163,700**

PROJECT 1
GRAHAM PARK IMPROVEMENTS

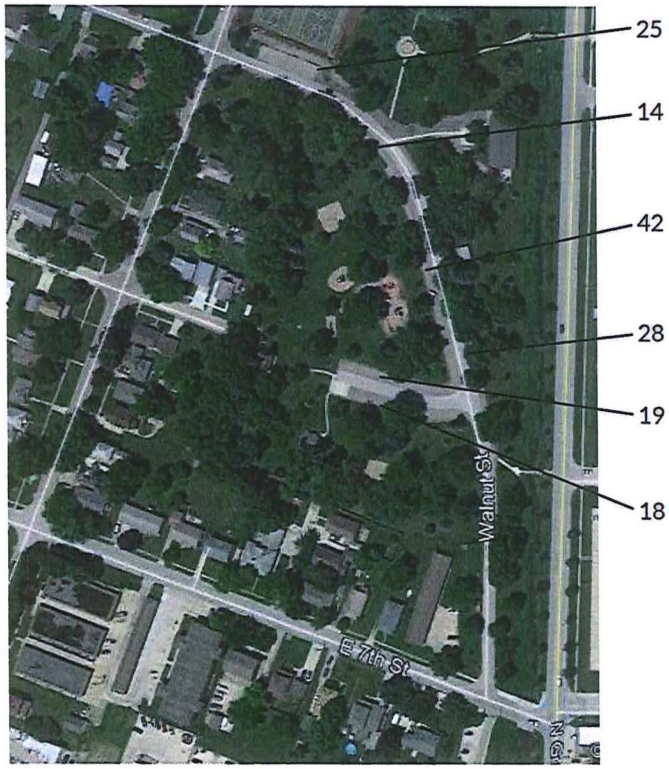
PLAYGROUND MODIFICATIONS:



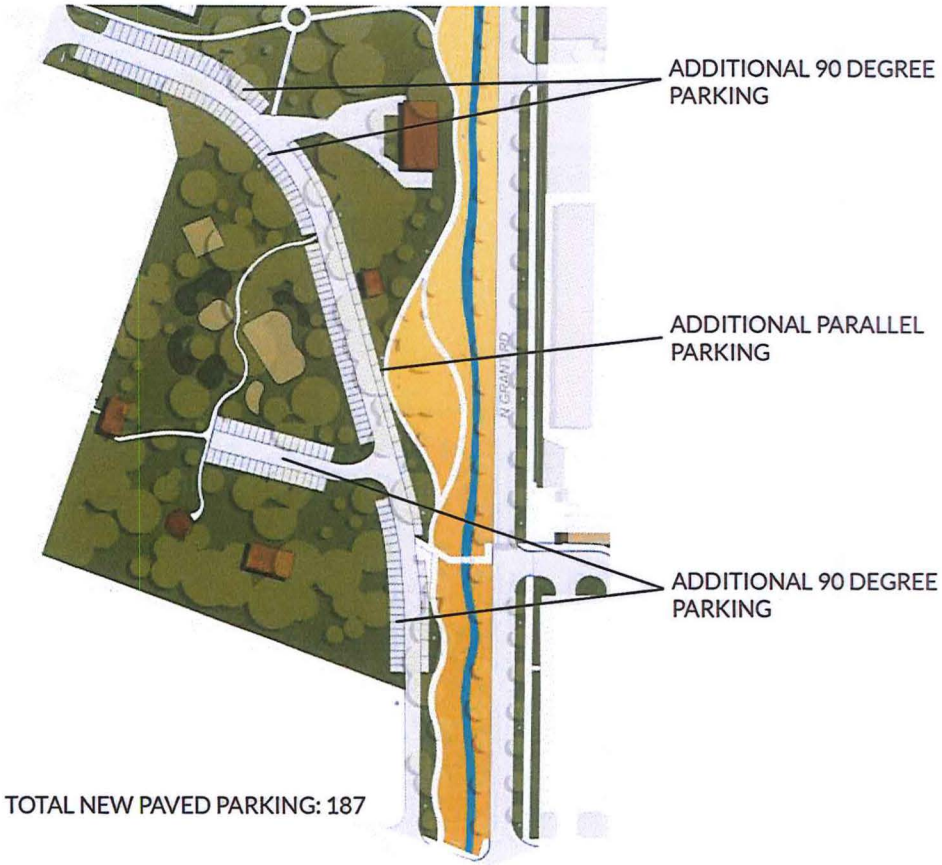
#	PLAYGROUND IMPROVEMENTS - ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	EARTHWORK, BERMING	1	LS	*	$15,000	=	$15,000
2	PLAYGROUND REMOVALS/MODIFICATIONS AND ADA IMPROVEMENTS	1	LS	*	$25,000	=	$25,000
3	PLAYGROUND ADA TRANSITIONS	2	EA	*	$5,000	=	$10,000
4	DRINKING FOUNTAIN	1	LS	*	$7,500	=	$7,500
5	SIDEWALK, 5" PCC PAVING	360	SY	*	$65	=	$23,400
6	SEATING AREA PAVING, 5" PCC PAVING	80	SY	*	$65	=	$5,200
7	BENCH	7	EA	*	$1,200	=	$8,400
8	TRASH RECEPTACLE	2	EA	*	$600	=	$1,200
9	SPLASH PAD	1	EA	*	$150,000	=	$150,000
					SUBTOTAL	=	$245,700
					DESIGN CONTINGENCY (20%)	=	$49,100
					SUBTOTAL	=	**$294,800**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$44,200
					MATERIALS TESTING / PERMITS (3%)	=	$8,800
					CONSTRUCTION CONTINGENCY (15%)	=	$44,200
					TOTAL PROJECT COSTS	=	**$392,000**

PROJECT 1
GRAHAM PARK IMPROVEMENTS

PARKING MODIFICATIONS



APPROXIMATE TOTAL EXISTING GRAVEL PARKING: 146



TOTAL NEW PAVED PARKING: 187

PROJECT 1
GRAHAM PARK IMPROVEMENTS

LIGHTING IMPROVEMENTS

TOTAL: 38

- PEDESTRIAN: 17
- STREET: 16

PROJECT 1
GRAHAM PARK IMPROVEMENTS

OPINION OF PROBABLE COSTS
(2019 DOLLARS)

#	PROJECT 1: GRAHAM PARK IMPROVEMENTS	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	PARK AMENITITES, TRAILS, LIGHTING & ENTRANCE	1	LS	*	$649,900	=	$649,900
2	RESTROOMS IMPROVEMENTS	1	LS	*	$123,000	=	$123,000
3	PLAYGROUND IMPROVEMENTS	1	LS	*	$294,800	=	$294,800
					SUBTOTAL	=	$1,067,700
					PROFESSIONAL DESIGN/ENGINEERING FEE (15%)	=	$160,200
					MATERIALS TESTING / PERMITS (3%)	=	$32,000
					CONSTRUCTION CONTINGENCY (15%)	=	$160,200
					TOTAL PROJECT COSTS	**=**	**$1,420,100**

PROJECT 2
CREEK IMPROVEMENTS

IMPROVEMENTS INCLUDED:

WINGWALL

STABILIZATION IS NEEDED ALONG WEST WINGWALL OF CULVERT TO PROTECT NEARBY TENNIS COURTS. RECOMMENDED EXTENDING WINGWALL OR NEW RETAINING WALL OFFSET BACK FROM BANK.

PROTECTION OF EXISTING INFRASTRUCTURE

PROTECTION OF NORTH GRANT ROAD AND PEDESTRIAN BRIDGES FROM EROSION IS RECOMMENDED. ARMOR EXISTING PEDESTRIAN BRIDGE ABUTMENTS AND PROVIDE BED AND BANK STABILIZATION WHERE NEEDED TO ADDRES EROSION OR SLOPE STABILITY CONCERNS.

OUTFALL PROTECTION

MULTIPLE STREAM OUTFALLS HAVE COLLAPSED OR ARE ACTIVELY ARODING ADJACENT BANKS. RECOMMEND REBUILDING OUTFALLS AND ARMORING WITH RIPRAP OR FIELDSTONE.

CREEK ACCESS / EXPERIENCE

ACCESS TO THE STREAM CAN PROVIDE AN OPPORTUNITY FOR PARK USERS TO EXPERIENCE THIS NATURAL RESOURCE. EXISTING BANKS ARE VERY STEEP AND SHOULD BE LAID BACK. SPACE NEXT TO STREAM FOR RESTING, TEACHING, ACCESS IS RECOMMENDED.

PROJECT 2
CREEK IMPROVEMENTS

OPINION OF PROBABLE COSTS
(2019 DOLLARS)

#	CREEK IMPROVEMENTS - ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	REINFORCED CONCRETE WALL	250	SF	*	$40	=	$10,000
2	RIPRAP ARMORING	350	TN	*	$55	=	$19,300
3	REBUILD OUTFALLS AND FOOTINGS	6	EA	*	$1,500	=	$9,000
4	EARTHWORK EXCAVATION - STREAM ACCESS	400	CY	*	$15	=	$6,000
5	UTILITY ADJUSTMENTS	1	LA	*	$2,000	=	$2,000
6	SURFACING - PATH AND GATHERING AREA	1,000	SF	*	$7	=	$7,000
7	BOULDER OR OUTCROPPING STONE TERRACING	50	EA	*	$400	=	$20,000
8	SEEDING AND RESTORATION	1	LS	*	$8,000	=	$8,000
					SUBTOTAL	=	$81,300
					DESIGN CONTINGENCY (20%)	=	$16,300
					SUBTOTAL	**=**	**$97,600**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$14,600
					MATERIALS TESTING / PERMITS (3%)	=	$2,900
					CONSTRUCTION CONTINGENCY (15%)	=	$14,600
					TOTAL PROJECT COSTS	**=**	**$129,700**

PROJECT 3
GRANT ROAD STREETSCAPE

IMPROVEMENTS INCLUDED:

TRAIL WIDENING

REMOVE 4' SIDEWALK AND REPLACE WITH 8' TRAIL.

STREET TREES

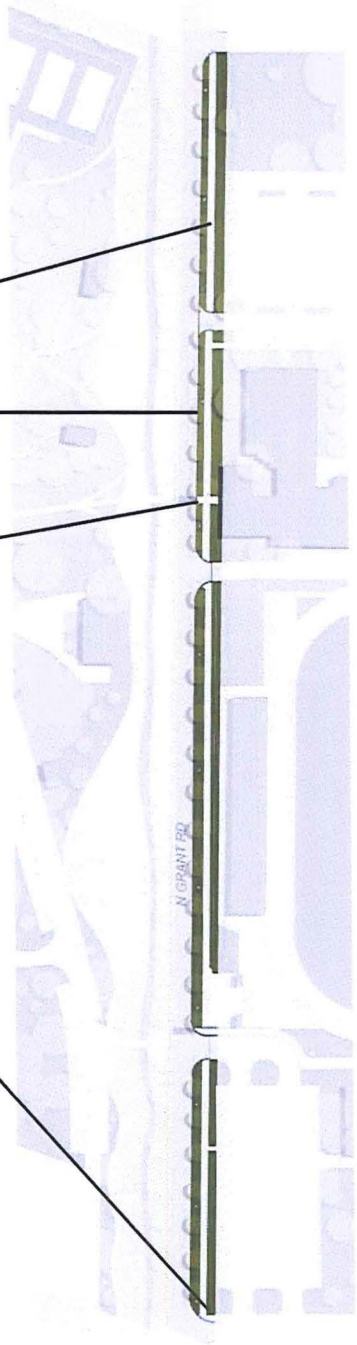
PROVIDE CONSISTENT STREET TREE PLANTINGS ON BOTH SIDES OF THE STREET. ASSUME 27 NEW TREES AND 4 ADDITIONAL MISSING TREES ON THE WEST SIDE OF GRANT ROAD.

PEDESTRIAN ACTIVATED CROSSING

PROVIDE PEDESTRIAN ACTIVATED CROSSWALK SIGNAL WITH SIGNAGE, CROSSWALK MARKINGS, SIDEWALK MODIFICATIONS, AND CURB RAMPS.

SIGNAGE

PROVIDE DISTRICT IDENTIFCATION MONUMENTS ON NORTH AND SOUTH END OF THE CORRIDOR.



PROJECT 3
GRANT ROAD STREETSCAPE

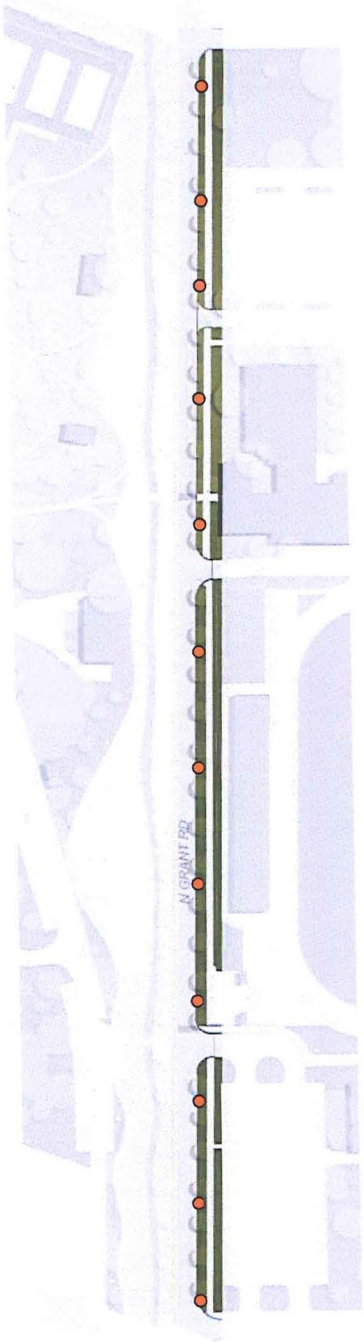
OPINION OF PROBABLE COSTS
(2019 DOLLARS)

#	GRANT ROAD STREETSCAPE - ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	PEDESTRIAN CROSSINGS	2	EA	*	$100,000	=	$200,000
2	PAVING REMOVAL	1,600	SY	*	$15	=	$24,000
3	ADA RAMPS	8	EA	*	$3,000	=	$24,000
4	8' WIDE TRAIL, 5" PCC PAVING	3,200	SY	*	$65	=	$208,000
5	TREES	31	EA	*	$500	=	$15,500
6	SIGNAGE	2	EA	*	$25,000	=	$50,000
7	ROADWAY LIGHTING	12	EA	*	$6,000	=	$72,000
					SUBTOTAL	=	$593,500
					DESIGN CONTINGENCY (20%)	=	$118,700
					SUBTOTAL	**=**	**$712,200**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$106,800
					MATERIALS TESTING / PERMITS (3%)	=	$21,400
					CONSTRUCTION CONTINGENCY (15%)	=	$106,800
					TOTAL PROJECT COSTS	**=**	**$947,200**

PROJECT 3
GRANT ROAD STREETSCAPE

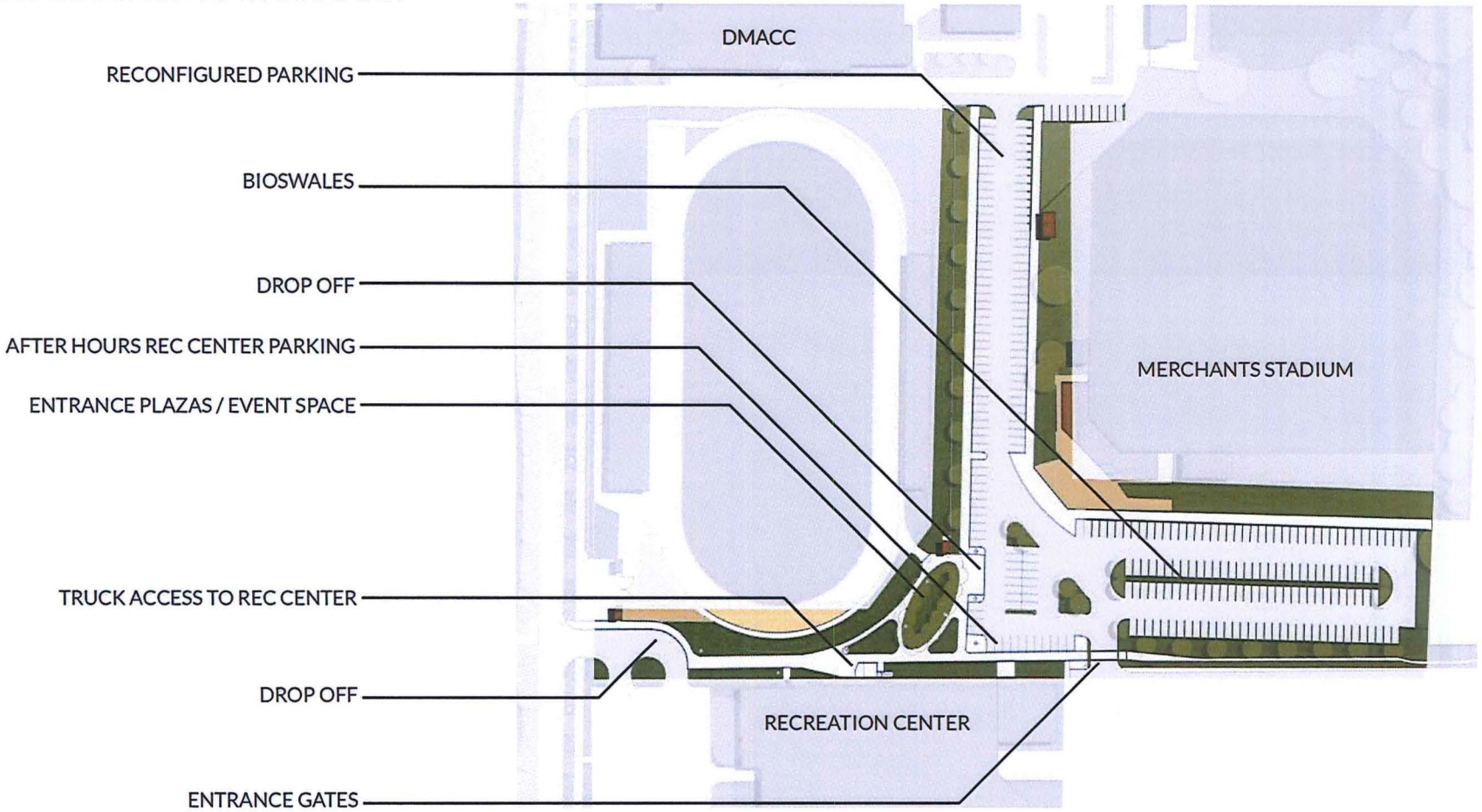
LIGHTING IMPROVEMENTS

● 12 TOTAL STREET LIGHTS



PROJECT 4
STADIUM PARKING AND PLAZA

IMPROVEMENTS INCLUDED:



PROJECT 4
STADIUM PARKING AREAS AND PLAZA

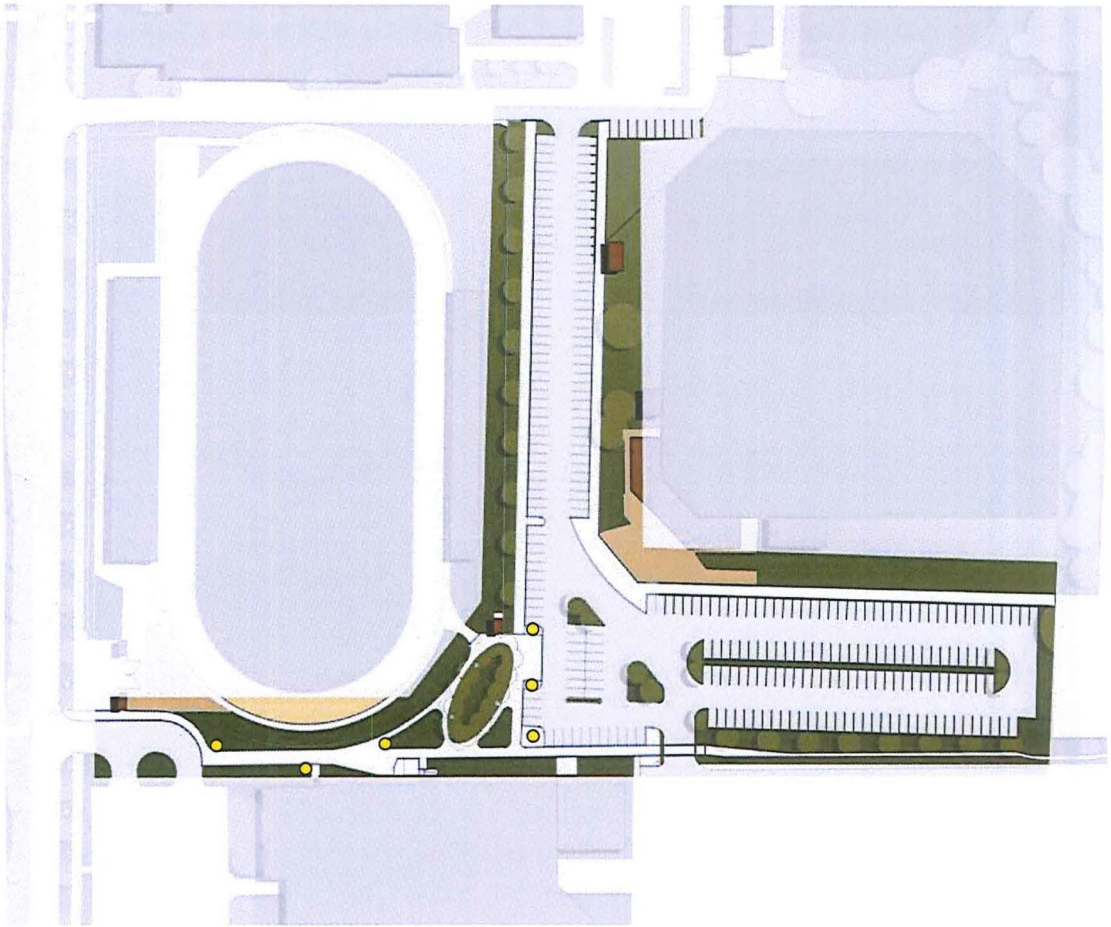
OPINION OF PROBABLE COSTS
(2019 DOLLARS)

#	STADIUM PARKING & PLAZA - ITEM DESCRIPTION	QUANTITY	UNITS		UNIT COST		TOTAL COST
1	HMA PAVEMENT DEMOLITION	3,700	SY	*	$15	=	$55,500
2	5" PCC PAVING, SIDEWALK	2,700	SY	*	$60	=	$162,000
3	7" PCC PAVING	350	SY	*	$70	=	$24,500
4	PCC 6" CURB AND GUTTER	3,500	LF	*	$30	=	$105,000
5	HMA PAVING, PARKING	700	SY	*	$40	=	$28,000
6	HMA PATCHING	1	LS	*	$50,000	=	$50,000
7	PAVERS	2,500	SF	*	$25	=	$62,500
8	STORM SEWER IMPROVEMENTS	1	LS	*	$30,000	=	$30,000
9	BIO-SWALE	1,600	SF	*	$30	=	$48,000
10	TOPSOIL	298	CY	*	$20	=	$6,000
11	TREE	40	EA	*	$500	=	$20,000
12	LANDSCAPING	1	LS	*	$20,000	=	$20,000
13	BENCH	6	EA	*	$1,200	=	$7,200
14	TRASH RECEPTACLE	3	EA	*	$600	=	$1,800
15	ENTRANCE SIGNAGE	1	LS	*	$50,000	=	$50,000
16	PEDESTRIAN LIGHTING	6	EA	*	$3,500	=	$21,000
17	ELECTRICAL DISTRIBUTION	1	LS	*	$20,000	=	$20,000
18	PAVEMENT STRIPING	1	LS	*	$2,000	=	$2,000
19	TRUCK DOCK IMPROVEMENTS	1	LS	*	$15,000	=	$15,000
					SUBTOTAL	=	$728,500
					DESIGN CONTINGENCY (20%)	=	$145,700
					SUBTOTAL	=	**$874,200**
					PROFESSIONAL ENGINEERING FEE (15%)	=	$131,100
					MATERIALS TESTING / PERMITS (3%)	=	$26,200
					CONSTRUCTION CONTINGENCY (15%)	=	$131,100
					TOTAL PROJECT COSTS	=	**$1,162,600**

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

LIGHTING IMPROVEMENTS

● 6 TOTAL PEDESTRIAN LIGHTS



PROJECT 4
STADIUM PARKING AREAS AND PLAZA

AERIAL VIEW FROM SOUTHEAST

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

AERIAL VIEW FROM EAST

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

ENTRY PLAZA AT DROP OFF

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

SEATING AREA IN PLAZA

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

PLAZA VIEW FROM REC CENTER

PROJECT 4
STADIUM PARKING AREAS AND PLAZA

TRUCK ACCESS TO REC CENTER