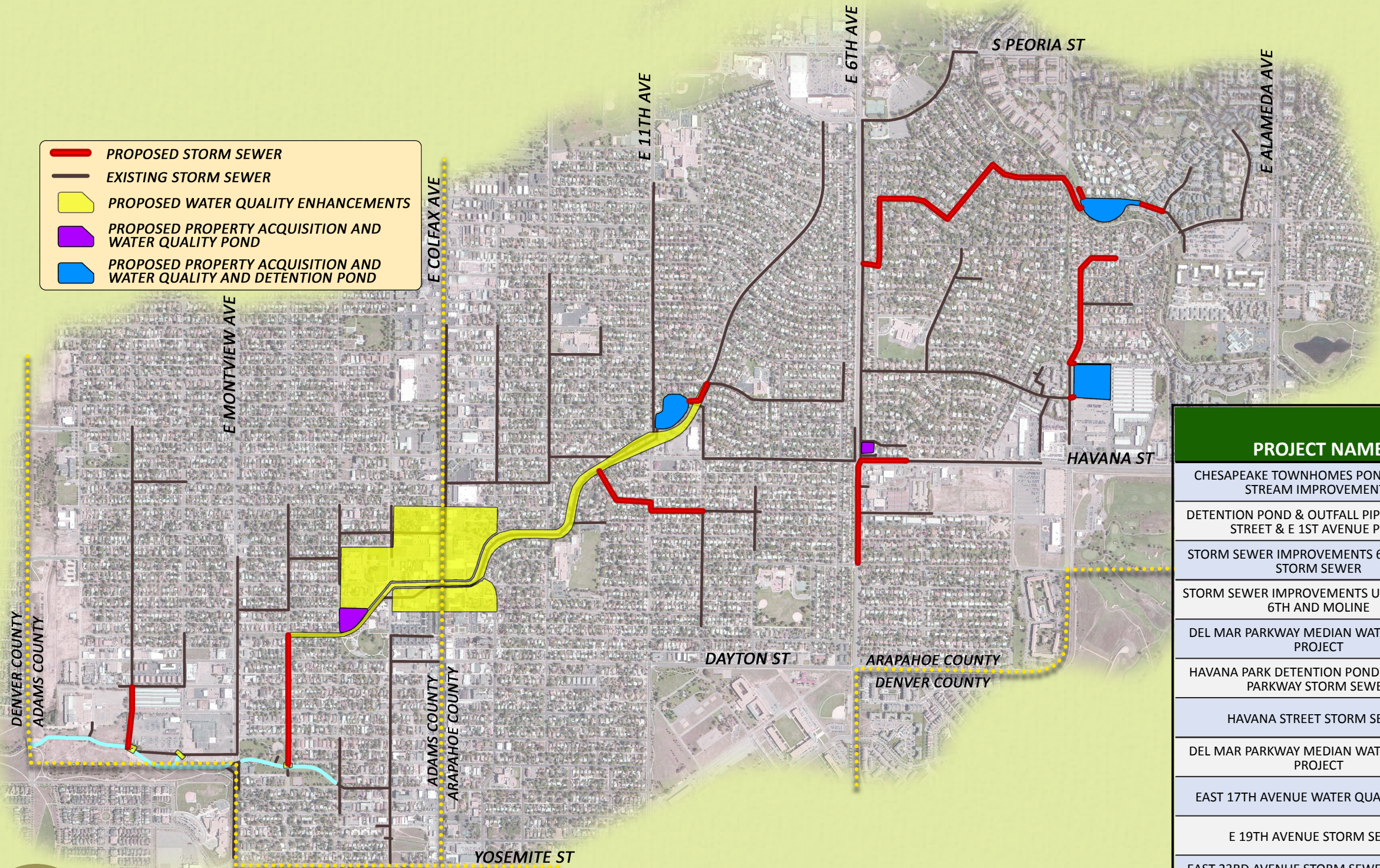


EASTERLY CREEK CREEK OVERVIEW

EAST ALAMEDA AVENUE TO WESTERLY CREEK

- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- PROPOSED WATER QUALITY ENHANCEMENTS
- PROPOSED PROPERTY ACQUISITION AND WATER QUALITY POND
- PROPOSED PROPERTY ACQUISITION AND WATER QUALITY AND DETENTION POND

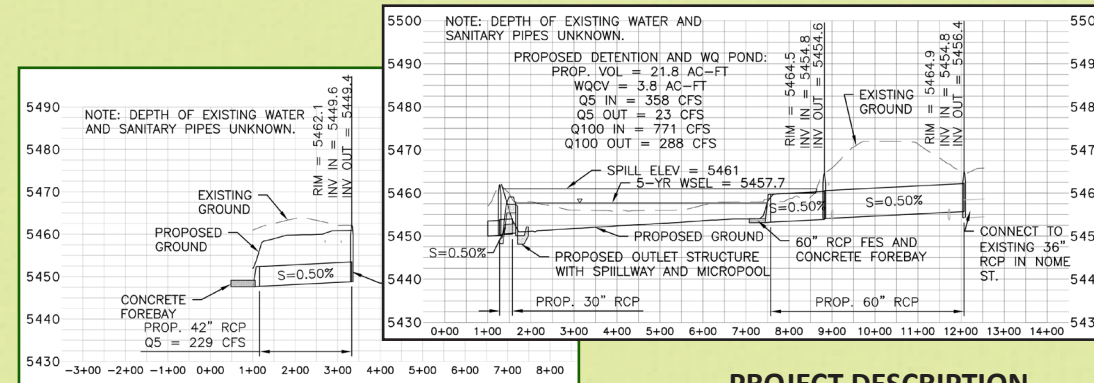
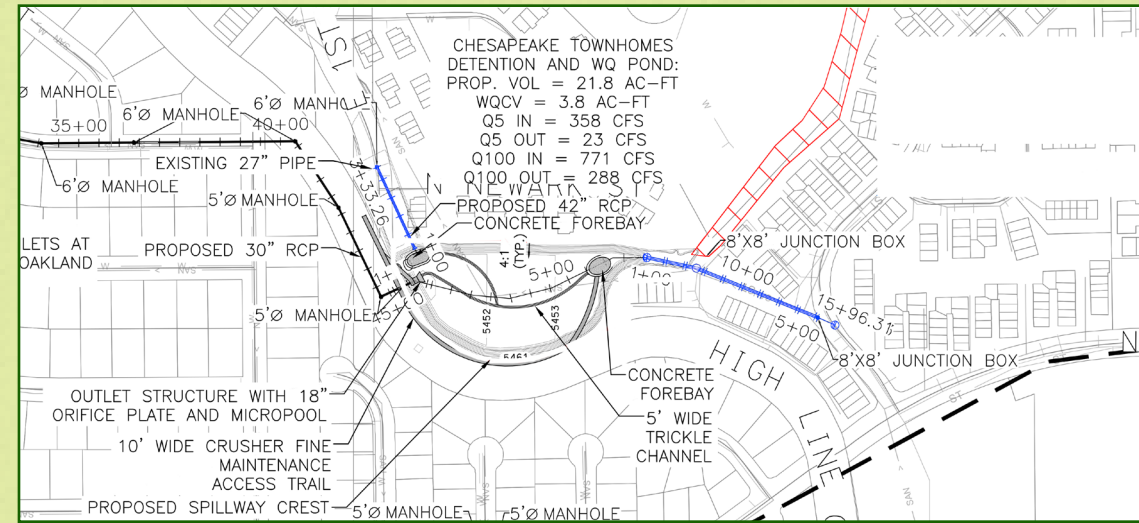


PROJECT NAME	EASTERLY CREEK REACH NUMBER	LENGTH OR AREA OF PROJECT
CHESAPEAKE TOWNHOMES POND AND UP-STREAM IMPROVEMENTS	REACH 1	1,867 LF
DETENTION POND & OUTFALL PIPE N KENTON STREET & E 1ST AVENUE POND	REACH 2	1,612 LF
STORM SEWER IMPROVEMENTS 6TH AVENUE STORM SEWER	REACH 2	3,444 LF
STORM SEWER IMPROVEMENTS UPSTREAM OF 6TH AND MOLINE	REACH 2	4,684 LF
DEL MAR PARKWAY MEDIAN WATER QUALITY PROJECT	REACH 3	4,300 LF
HAVANA PARK DETENTION POND & DEL MAR PARKWAY STORM SEWER	REACH 3	4,789 LF
HAVANA STREET STORM SEWER	REACH 3	1,721 LF
DEL MAR PARKWAY MEDIAN WATER QUALITY PROJECT	REACH 4	2,200 LF / 43,560 SQFT
EAST 17TH AVENUE WATER QUALITY POND	REACH 4	1.1 AC-FT
E 19TH AVENUE STORM SEWER	REACH 4	1,704 LF
EAST 23RD AVENUE STORM SEWER & OUTLET PROTECTION	REACH 5	776 LF



EASTERLY CREEK PROJECT E.R1.1 - CHESAPEAKE TOWNHOMES POND AND UPSTREAM IMPROVEMENTS

SOUTH MOLINE STREET AND SOUTH NOME STREET



Item	Quantity	Unit	Unit Cost	Total Cost
42" RCP	217	LF	\$161	\$34,937
60" RCP	450	LF	\$229	\$103,050
42" RCP Outfall	1	EA	\$2,100	\$2,100
60" RCP Outfall	1	EA	\$2,400	\$2,400
Type R Inlet*	75	EA	\$3,825	\$286,875
Manhole	1	EA	\$11,000	\$11,000
Junction Box	2	EA	\$16,400	\$32,800
Detention	21.8	AC-FT	\$50,000	\$1,090,000
Buried Riprap**	45	CY	\$65	\$2,925
Grass-lined Swale+	1200	LF	\$100	\$120,000
Dewatering				\$5,000
Mobilization			5%	\$84,304
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$84,304
Stormwater Management/Erosion Control			5%	\$84,304
SUBTOTAL				\$1,963,999
Contingencies			25%	\$491,000
Engineering Design Services			15%	\$294,600
Legal and Administrative Services			5%	\$98,200
Construction Administration & Management			10%	\$196,400
TOTAL ESTIMATED COST				\$3,044,198
Annual Operation and Maintenance				
Mowing and Debris Removal (5/yr)	3.7	AC	\$600	\$2,220
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$2,220

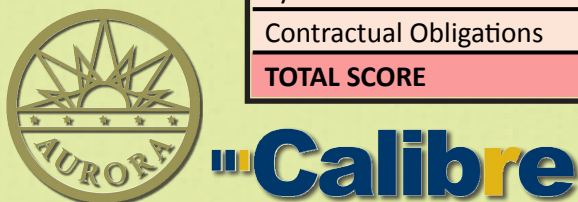
PROJECT DESCRIPTION

This project includes upsizing the existing 36-inch RCP in S. Nome Street from S. Moline Street to the Chesapeake Townhomes HOA pond to a 60-inch RCP. On the north side of the Chesapeake Townhomes HOA pond, the existing 27-inch RCP beneath E. 1st Avenue is replaced by 42-inch RCP that must discharge into the pond along its east boundary. The capacity of the Chesapeake Townhomes HOA pond is increased to 20.2 acre-feet, and an 18-inch RCP outlet is added at the north end of the pond. The pond is not capable of detaining the 100-year event. During a 5-year event, the pond will receive approximately 358 cfs and release at a rate of 24 cfs; during a 100-year event, the pond will receive 771 cfs and release at a rate of 25 cfs and overtop at a rate of 545 cfs. Discharged flows are conveyed north and east paralleling the High Line Canal, then beneath the High Line Canal along the N. Oswego Street alignment. This plan requires that the land for the detention pond be acquired from the Chesapeake Townhomes HOA, and that easements for the 60-inch RCP inlet and 18-inch RCP discharge be acquired from the Chesapeake Townhomes HOA and Denver Water, respectively. NOTE: POND OUTLET IS NOT PART OF THIS PROJECT.

In addition to the conveyance and detention components of the recommended plan, WQCV can be attained if included as part of the 100-year volume in the pond. Although the City of Aurora does not typically maintain swales unless they are a part of a major drainageway, the acquisition of the existing channel/swale that conveys overland flows to the Chesapeake Townhomes HOA detention pond is also part of the recommended plan as a way to ensure that the swale is properly maintained and to provide water quality enhancement through a grass-lined swale or porous landscape detention.

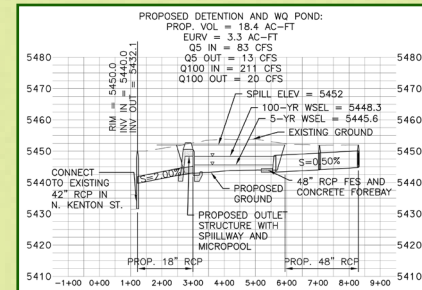
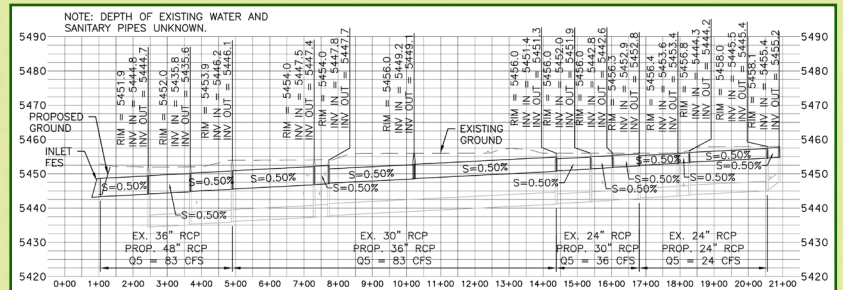
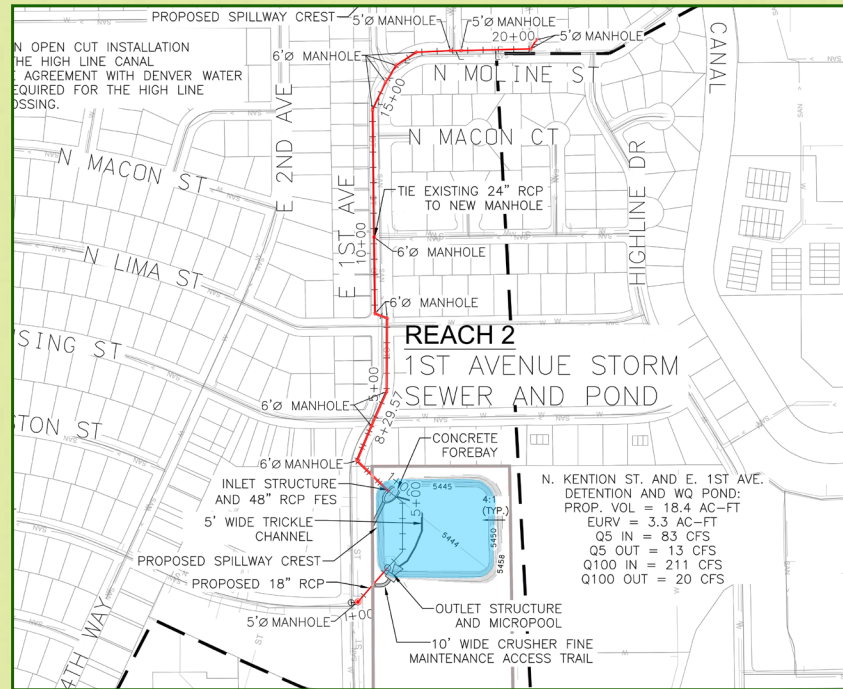
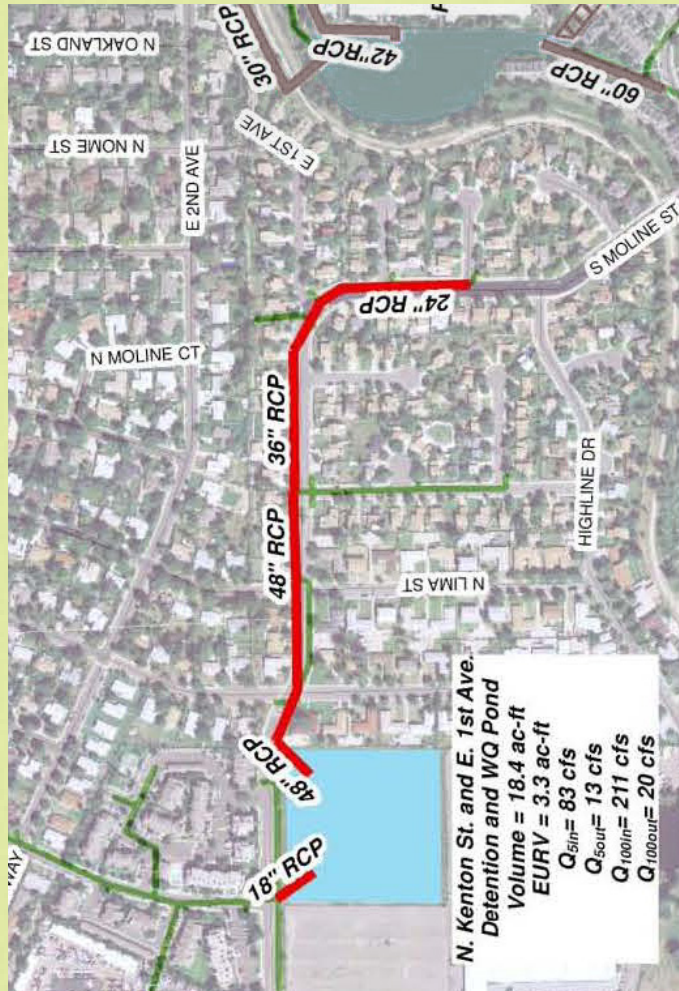
In summary, the recommended plan for Reach 1 mitigates the flooding problems in Reaches 2 and 3 by detaining flows and significantly reducing peak flows. Water quality is also enhanced through extended detention and pre-treatment by a grass-lined swale.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK PROJECT E.R2.1 - DETENTION POND & OUTFALL PIPE N KENTON ST & E 1ST AVE

SOUTH MOLINE STREET TO NORTH LANSING STREET



Item	Quantity	Unit	Unit Cost	Total Cost
18" RCP	148	LF	\$69	\$10,212
24" RCP	409	LF	\$92	\$37,628
36" RCP	662	LF	\$138	\$91,356
48" RCP	393	LF	\$184	\$72,312
48" RCP Outfall	1	EA	\$2,200	\$2,200
Type R Inlet*	17	EA	\$3,825	\$65,025
Manhole	17	EA	\$11,000	\$187,000
Detention	18.4	AC-FT	\$50,000	\$920,000
Buried Riprap**	19	CY	\$65	\$1,235
Water Quality Pond	1.1	AC-FT	\$50,000	\$55,000
Land Acquisition-Undeveloped	1	EA	\$1,232,000	\$1,232,000
Dewatering				\$5,000
Mobilization			5%	\$133,698
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$133,698
Stormwater Management/Erosion Control			5%	\$133,698
SUBTOTAL				\$3,100,063
Contingencies			25%	\$775,016
Engineering Design Services			15%	\$465,009
Legal and Administrative Services			5%	\$155,003
Construction Administration & Management			10%	\$310,006
TOTAL ESTIMATED COST				\$4,805,098
Annual Operation and Maintenance				
Mowing and Debris Removal (5/yr)	8.3	AC	\$600	\$4,980
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$4,980

PROJECT DESCRIPTION

The selected plan for Reach 2 upsizes the existing 24-inch RCP in E. 1st Avenue to a 48-inch RCP from approximately S. Moline Street to the inlet for the new sub-regional detention and water quality pond, just west of N. Lansing Street. Approximately 3 acres of undeveloped land needs to be acquired to accommodate the new, 18.4 acre-foot sub-regional detention pond that includes 1 acre-foot of WQCV. An 18-inch RCP with an orifice plate will be required for the outlet to the new pond. The existing 42-inch RCP in N. Kenton Street can be used to convey detained flows north to join the existing 54-inch RCP in E. 6th Avenue.

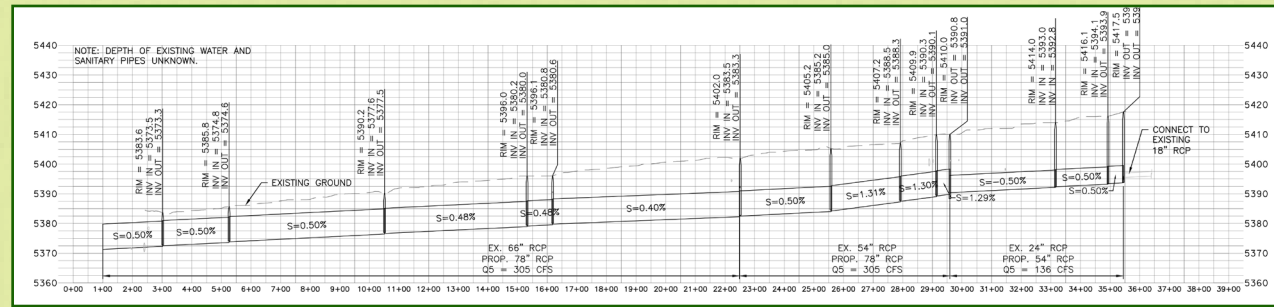
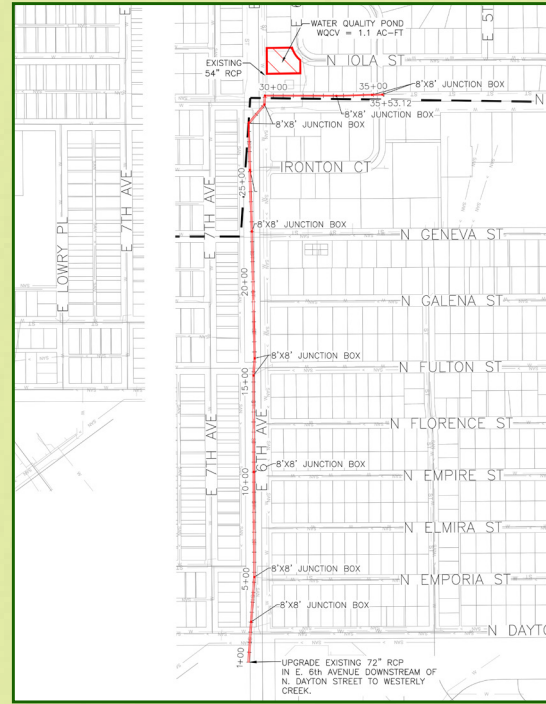
The selected plan advances the theme of detaining flows and reducing peak flows through the incorporation of the new sub-regional detention pond at E. 1st Avenue and N. Lansing Street. During a 5-year event, this pond receives 83 cfs and releases at a rate of 13 cfs. The residential property at the corner of E. 6th Place and N. Iola Street is removed from the path of the overland flows, and water quality is enhanced by treating the WQCV. The plan improves the ability of the system to capture and convey the 5-year storm event, and mitigates larger storm events by maximizing detention volumes. Flooding problems at E. 6th Avenue and N. Kenton and Moline Streets are helped considerably through the implementation of the selected plan.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK PROJECT E.R2.2 - STORM SEWER IMPROVEMENTS 6TH AVENUE STORM SEWER

EAST 6TH AVENUE FROM FULTON STREET TO HAVANA STREET



Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521

Item	Quantity	Unit	Unit Cost	Total Cost
54" RCP	586	LF	\$207	\$121,302
78" RCP	2858	LF	\$426	\$1,217,508
Water Quality Pond	1	EA	\$50,000	\$50,000
Land Acquisition Residential	1	EA	\$150,000	\$150,000
Residential Relocation	1	EA	\$100,000	\$100,000
Manhole	1	EA	\$11,000	\$11,000
Junction Box	10	EA	\$16,400	\$164,000
78" Outlet Structure	1	AC-FT	\$50,000	\$50,000
Dewatering				\$5,000
Mobilization			5%	\$93,191
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$93,191
Stormwater Management/Erosion Control			5%	\$93,191
SUBTOTAL				\$2,168,382
Contingencies			25%	\$465,953
Engineering Design Services			15%	\$279,572
Legal and Administrative Services			5%	\$93,191
Construction Administration & Management			10%	\$186,381
TOTAL ESTIMATED COST				\$3,193,477
Annual Operation and Maintenance				
Mowing and Debris Removal (5/yr)	1	AC		\$0
TOTAL ANNUAL OPERATION & MAINTENANCE COST			\$600	\$660

PROJECT DESCRIPTION

The plan includes new 54-inch RCP in N. Havana Street from N. Ironton Court to E. 6th Avenue. New 78-inch RCP is required for the 5-year conveyance in E. 6th Avenue downstream of N. Havana Street. The cost to extend this pipe through the Lowry Redevelopment Area to Westerly Creek was included in the cost estimate.

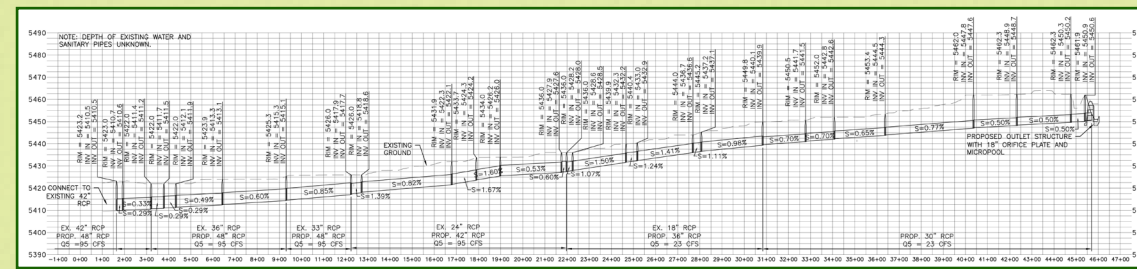
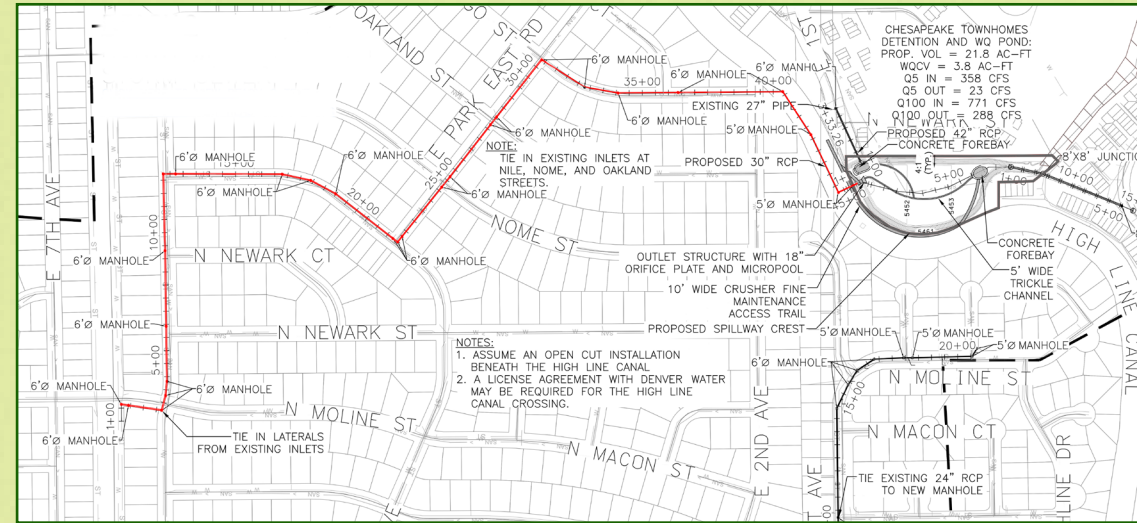
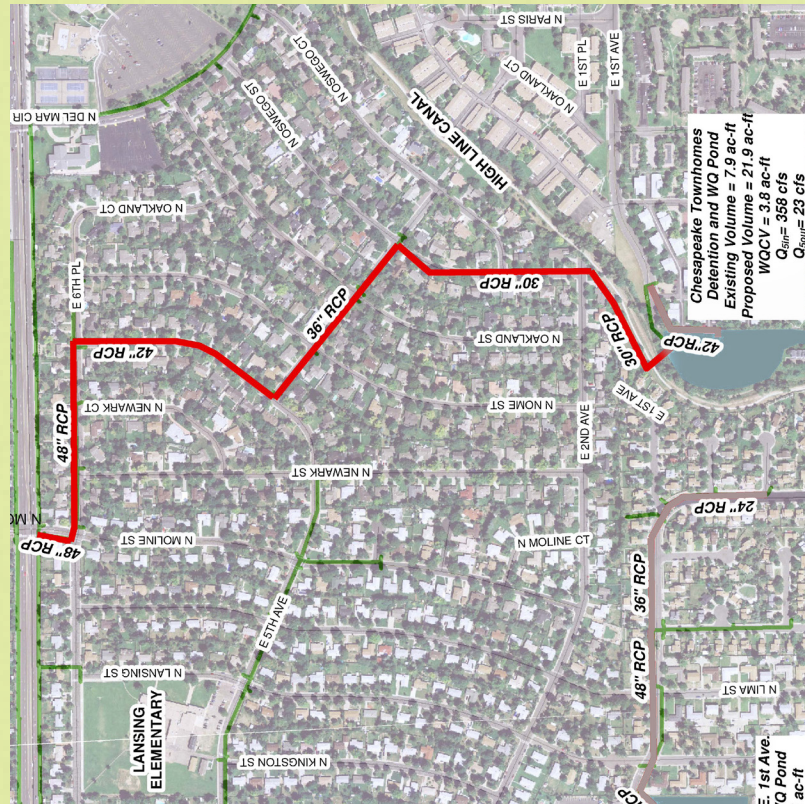
Finally, the selected plan in Reach 2 includes acquisition of the property at E. 6th Place and N. Iola Street. The property is situated in a low-lying area that is susceptible to flooding as a result of routine storm events. If the property owner is willing to sell the property, the house could be preserved and moved, if designated as historical, to a more suitable site. Upon acquiring the property, the City of Aurora could transform the site into a water quality pond. The site provides 1.1 acre-feet of WQCV, just shy of the 1.3 acre-feet required by City of Aurora and UDFCD criteria.

The residential property at the corner of E. 6th Place and N. Iola Street is removed from the path of the overland flows, and water quality is enhanced by treating the WQCV. In combination with other aspects of Reach 2 master plan the plan improves the ability of the system to capture and convey the 5-year storm event.



EASTERLY CREEK PROJECT E.R2.3 - STORM SEWER IMPROVEMENTS UPSTREAM OF 6TH & MOLINE

FROM E 6TH AVENUE & MOLINE STREET TO CHESAPEAKE POND



Item	Quantity	Unit	Unit Cost	Total Cost
30" RCP	1485	LF	\$115	\$170,775
36" RCP	890	LF	\$138	\$122,820
42" RCP	974	LF	\$161	\$156,814
48" RCP	1335	LF	\$184	\$245,640
Type R Inlet*	19	EA	\$3,825	\$72,675
Manhole	27	EA	\$11,000	\$297,000
Dewatering				\$5,000
Mobilization			5%	\$53,286
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$53,286
Stormwater Management/Erosion Control			5%	\$53,286
SUBTOTAL				\$1,250,583
Contingencies			25%	\$312,646
Engineering Design Services			15%	\$187,587
Legal and Administrative Services			5%	\$62,529
Construction Administration & Management			10%	\$125,058
TOTAL ESTIMATED COST				\$1,938,403
Annual Operation and Maintenance				
Mowing and Debris Removal (5 times/year)	1	AC	\$600	\$600
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$600

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521

PROJECT DESCRIPTION

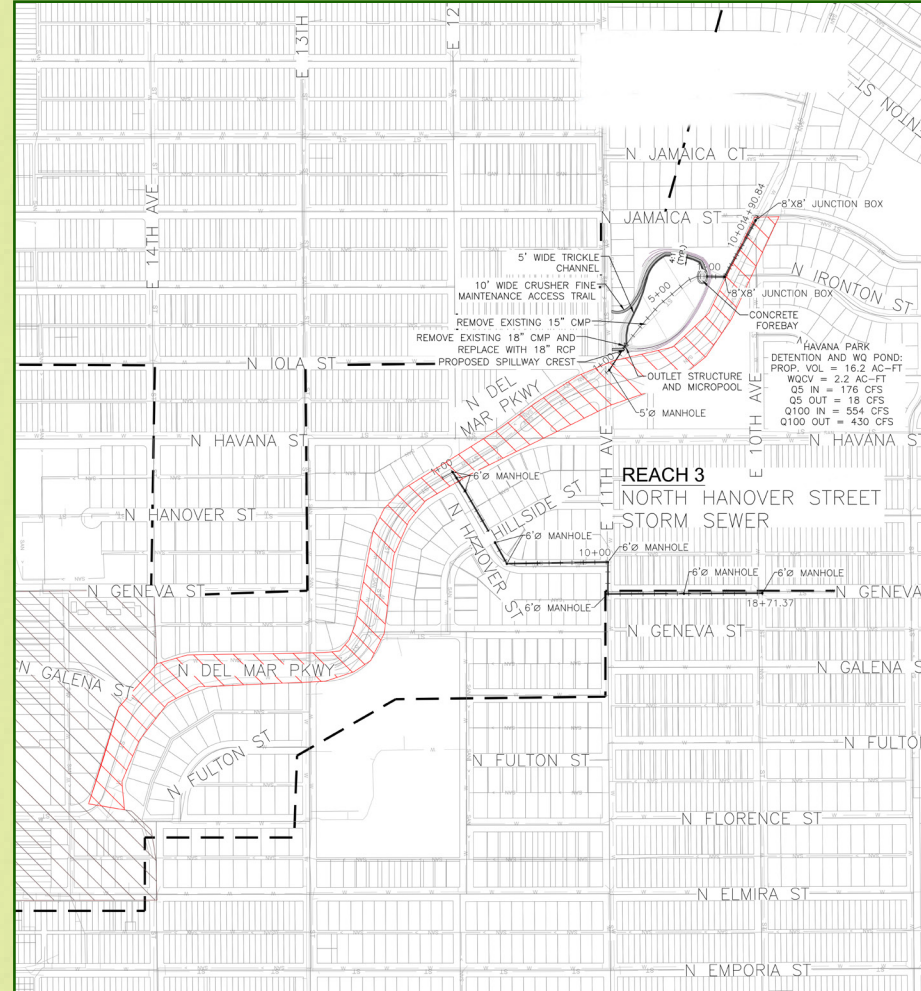
On the north side of the outlet pipe for the Chesapeake Town-homes HOA sub-regional detention pond, the new 30- to 48-inch RCP required for the 5-year system that discharges flows to the existing 48-inch RCP in E. 6th Avenue at N. Moline Street is included in the selected plan.

The plan improves the ability of the system to capture and convey the 5-year storm event, and mitigates larger storm events by maximizing detention volumes. Flooding problems at E. 6th Avenue and N. Kenton and Moline Streets are helped considerably through the implementation of the selected plan.



EASTERLY CREEK PROJECT E.R3.1 - DEL MAR PARKWAY MEDIAN WATER QUALITY PROJECT

NORTH DEL MAR PARKWAY FROM NORTH FLORENCE STREET TO NORTH JAMAICA STREET



Item	Quantity	Unit	Unit Cost	Total Cost
Type R Inlet*	10	EA	\$3,825	\$38,250
Grass-lined Swale+	4300	LF	\$100	\$430,000
Porous Landscape Detention+	2	AC-FT	\$435,600	\$871,200
Dewatering				\$5,000
Mobilization			5%	\$66,973
Traffic Control				\$10,000
Utility Coordination/Relocation			5%	\$66,973
Stormwater Management/Erosion Control			5%	\$66,973
SUBTOTAL				\$1,555,368
Contingencies			25%	\$388,842
Engineering Design Services			15%	\$233,305
Legal and Administrative Services			5%	\$77,768
Construction Administration & Management			10%	\$155,537
TOTAL ESTIMATED COST				\$2,410,820
Annual Operation and Maintenance				
Mowing and Debris Removal (5 times/year)	4.1	AC	\$600	\$2,460
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$2,460

PROJECT DESCRIPTION

Reach 3 also presents an opportunity to introduce grass-lined swales, porous landscape detention, and other water quality components to the Del Mar Parkway medians downstream of N. Jamaica Street. While not a high priority, these medians could be re-graded and re-designed as water quality BMPs concurrently with Del Mar Parkway curb and gutter or pavement reconstruction projects, to take full advantage of their potential to improve water quality while preserving the mature trees and healthy landscape. Del Mar Parkway runoff could be directed into the medians for BMP treatment. Area inlets and/or underdrains could outlet to the existing storm sewer within the Del Mar Parkway median.

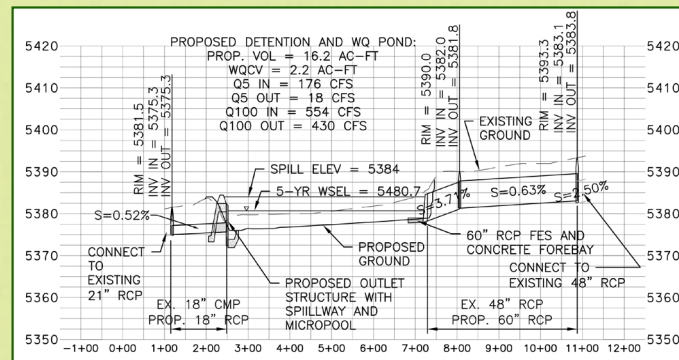
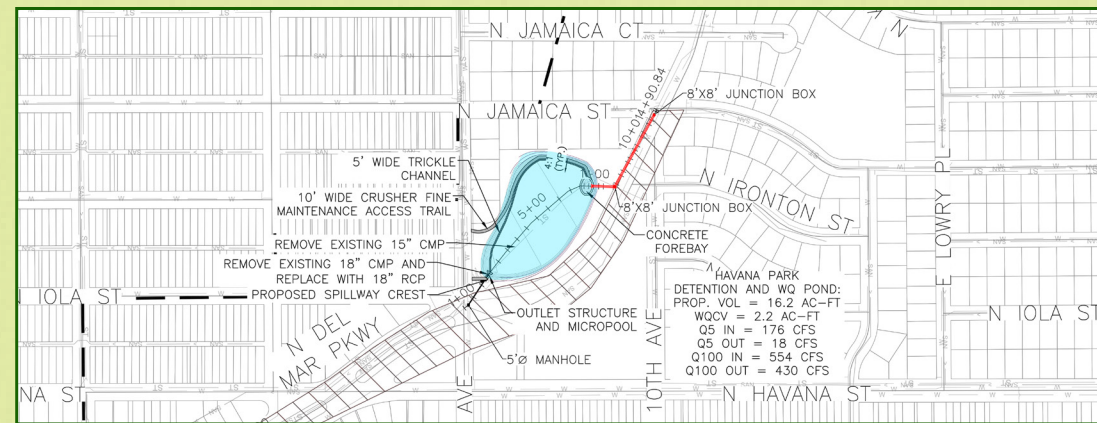
Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK

PROJECT E.R3.2 - HAVANA PARK DETENTION POND & DEL MAR PARKWAY STORM SEWER

NORTH DEL MAR PARKWAY AND EAST 11TH AVENUE



Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521

PROJECT DESCRIPTION

The most significant upgrades included in the selected plan for Reach 3 involve regrading the Havana Park detention pond for increased volume and WQCV. The inlet to the pond is modified for more efficient delivery of flows to the pond. A 60-inch RCP is required within Del Mar Parkway from N. Jamaica Street to the modified inlet to the pond to ensure that 5-year flows reach the upgraded pond. The existing 15-inch RCP that serves as a trickle channel could be preserved in concept or replaced with a buried cobble trickle channel that still can be covered with sod to preserve the functionality of the pond as a sodded playing field and active park. Decades of sedimentation will be removed, and volume will be added through the tasteful use of stepped retaining walls, seating benches, and planters. A maintenance path would also be required around the pond, which could serve as an internal path for park users. The playground equipment and play area at the south end of the pond is preserved as well. The outlet structure for the pond will be modified for water quality and to maximize detention volume, and the existing 18-inch RCP will be replaced in kind to the existing manhole E. 11th Avenue. With improvements made upstream of the pond and to the pond, the pond will receive approximately 176 cfs and release at a rate of 18 cfs during a 5-year event. The pond will not have the volume to detain the 100-year event; during a 100-year event the pond will receive 554 cfs and will release at a rate of 26 cfs and overtop at a rate of 404 cfs. The intent of improvements to Havana Park pond is to maximize the recreational area within the pond while also increasing the detention volume.

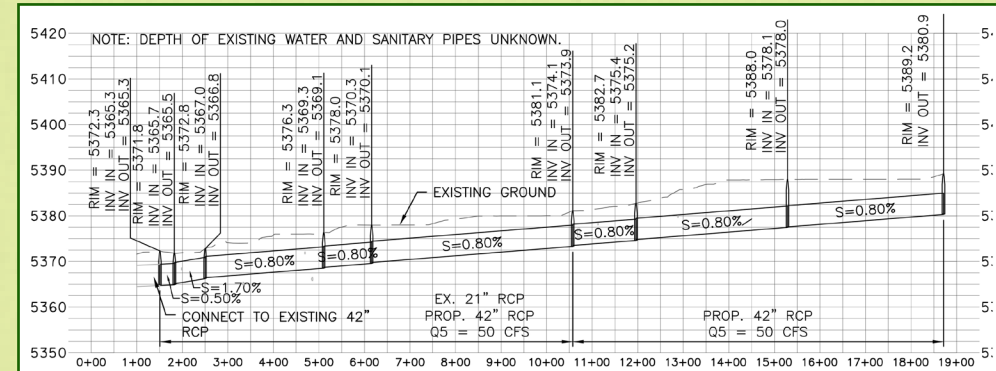
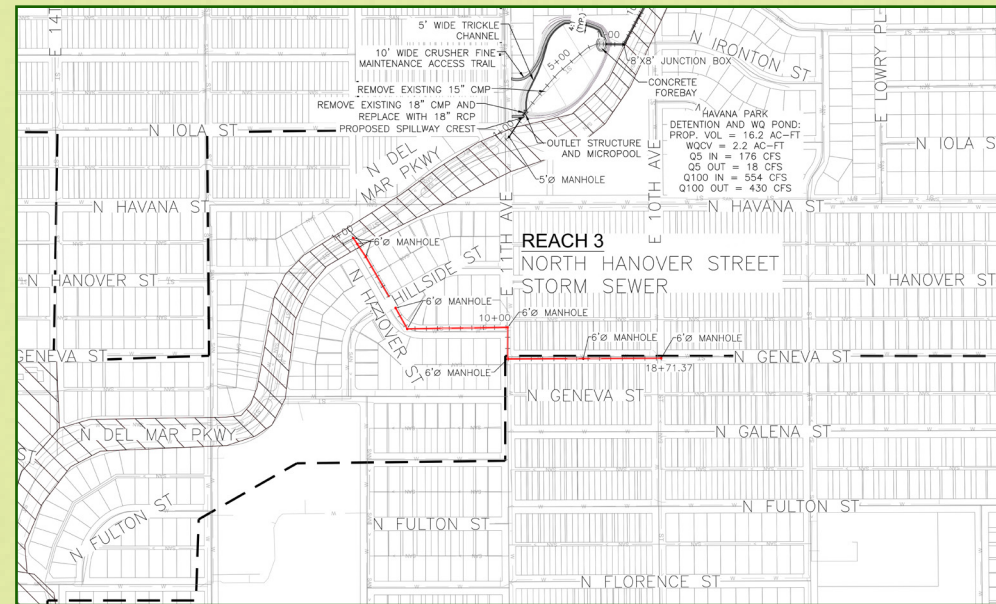
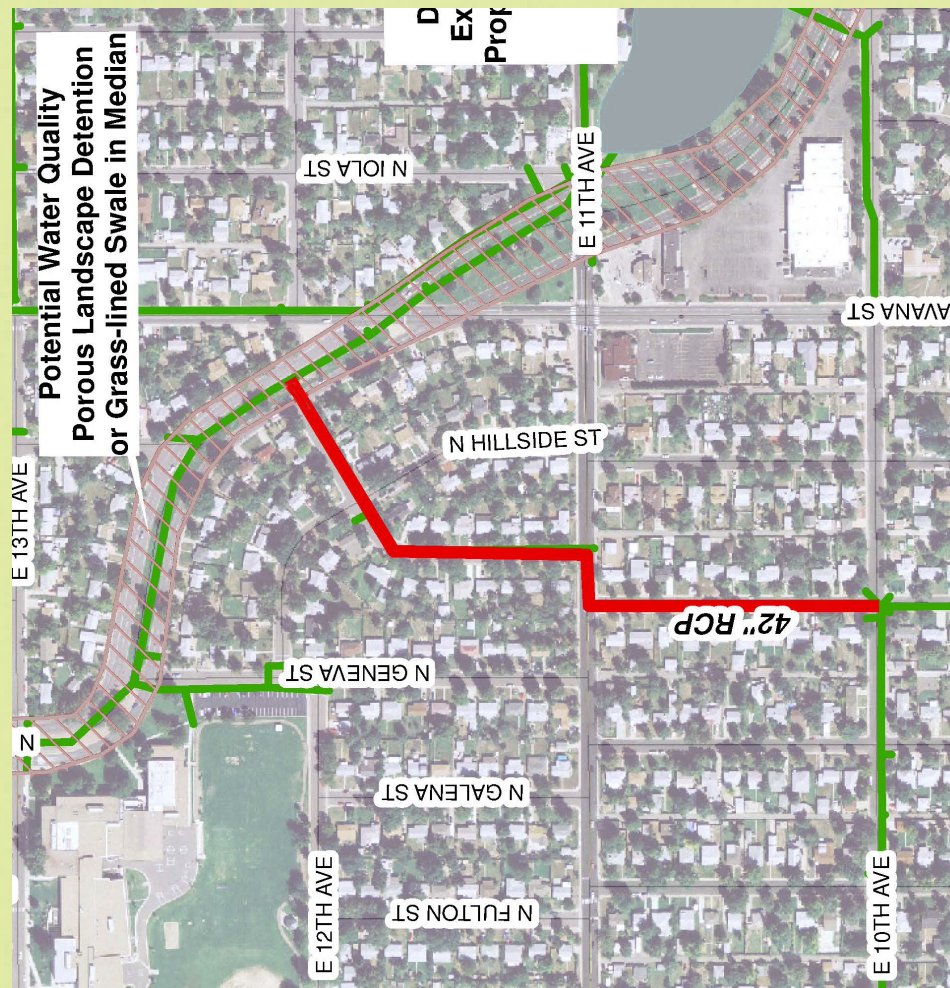
Water quality recommendations include the 2.2 acre-feet of WQCV in the modified Havana Park detention pond. Reach 3 also presents an opportunity to introduce grass-lined swales, porous landscape detention, and other water quality components to the Del Mar Parkway medians downstream of N. Jamaica Street. While not a high priority, these medians could be re-graded and re-designed as water quality BMPs concurrently with Del Mar Parkway curb and gutter or pavement reconstruction projects, to take full advantage of their potential to improve water quality while preserving the mature trees and healthy landscape. Del Mar Parkway runoff could be directed into the medians for BMP treatment. Area inlets and/or underdrains could outlet to the existing storm sewer within the Del Mar Parkway median.

Item	Quantity	Unit	Unit Cost	Total Cost
18" RCP	131	LF	\$69	\$9,039
60" RCP	358	LF	\$229	\$81,982
60" RCP Outfall	1	EA	\$2,400	\$2,400
Type R Inlet*	35	EA	\$3,825	\$133,875
Manhole	10	EA	\$11,000	\$110,000
Junction Box	2	EA	\$16,400	\$32,800
Detention	16.2	AC-FT	\$50,000	\$810,000
Buried Riprap**	30	CY	\$65	\$1,950
Grass-lined Swale+	4300	LF	\$100	\$430,000
Porous Landscape Detention+	2	AC-FT	\$435,600	\$871,200
Dewatering				\$5,000
Mobilization			5%	\$124,162
Traffic Control				\$10,000
Utility Coordination/Relocation			5%	\$124,162
Stormwater Management/Erosion Control			5%	\$124,162
SUBTOTAL				\$2,870,733
Contingencies			25%	\$717,683
Engineering Design Services			15%	\$430,610
Legal and Administrative Services			5%	\$143,537
Construction Administration & Management			10%	\$287,073
TOTAL ESTIMATED COST				\$4,449,636
Annual Operation and Maintenance				
Mowing and Debris Removal (5/yr)	4.1	AC	\$600	\$2,460
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$2,460



EASTERLY CREEK PROJECT E.R3.3 - HAVANA STREET STORM SEWER

GENEVA STREET FROM EAST 10TH AVENUE TO NORTH DEL MAR PARKWAY



Item	Quantity	Unit	Unit Cost	Total Cost
42" RCP	1721	LF	\$161	\$277,081
Type R Inlet*	10	EA	\$3,825	\$38,250
Manhole	9	EA	\$11,000	\$99,000
Dewatering				\$5,000
Mobilization			5%	\$20,717
Traffic Control				\$15,000
Utility Coordination/Relocation			5%	\$20,717
Stormwater Management/Erosion Control			5%	\$20,717
SUBTOTAL				\$496,481
Contingencies			25%	\$124,120
Engineering Design Services			15%	\$74,472
Legal and Administrative Services			5%	\$24,824
Construction Administration & Management			10%	\$49,648
TOTAL ESTIMATED COST				\$769,545

PROJECT DESCRIPTION

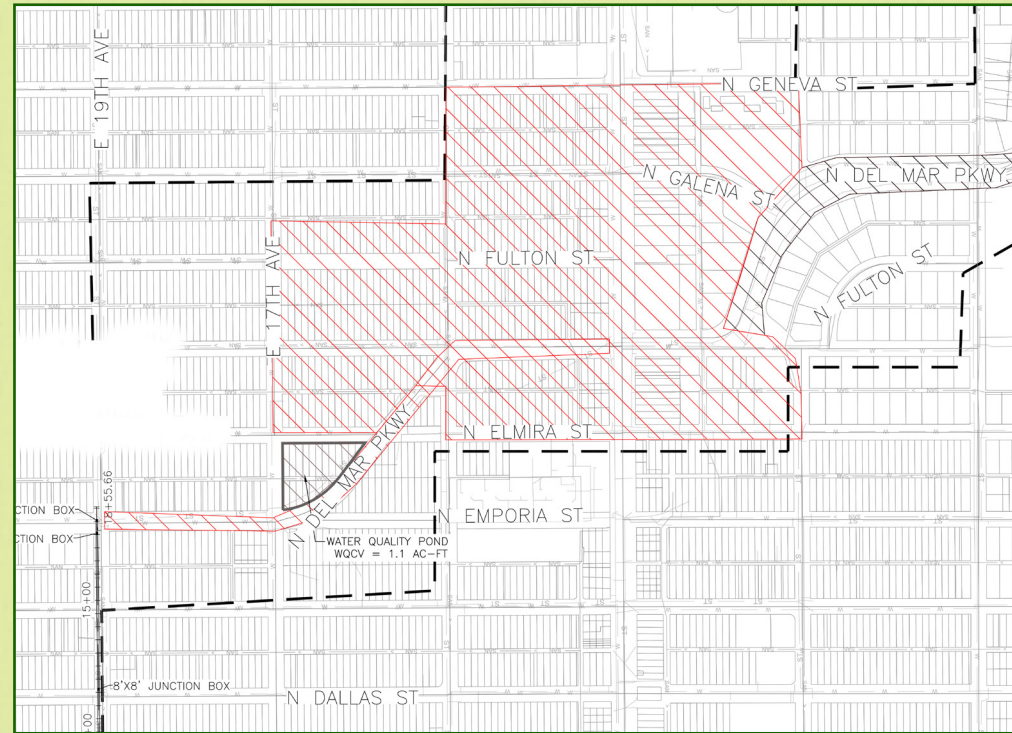
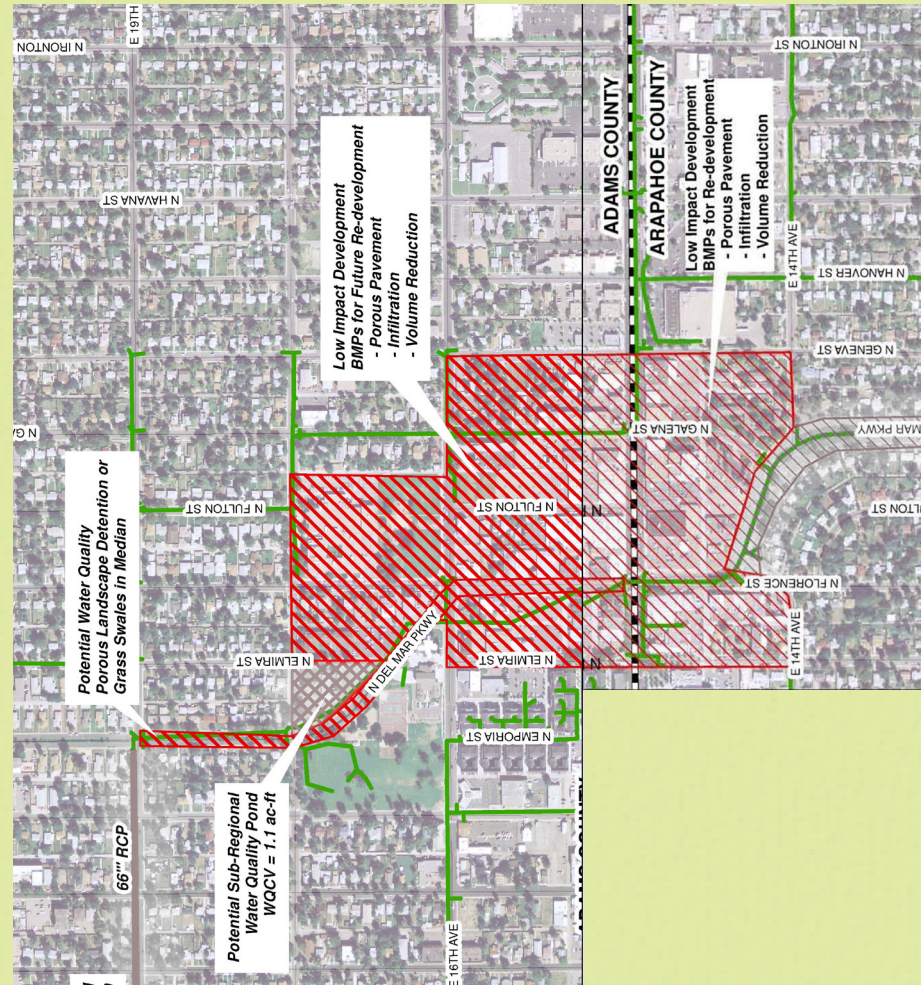
The selected plan also includes new 42-inch RCP to convey 5-year flows north along N. Geneva Street from E. 10th Avenue to join the existing storm sewer system in Del Mar Parkway. New inlets will be required at E. 10th Avenue and N. Geneva Street, as well as strategic locations along N. Hanover Street and E. 11th Avenue. Existing inlets along this path should also be replaced with appropriately sized Type R inlets at final design.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK PROJECT E.R4.1 - DEL MAR PARKWAY MEDIAN WATER QUALITY IMPROVEMENTS

NORTH DEL MAR PARKWAY FROM EAST COLFAX AVENUE TO EAST 19TH AVENUE



Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521

Item	Quantity	Unit	Unit Cost	Total Cost
Type R Inlet*	20	EA	\$3,825	\$76,500
Grass-lined Swale+	2200	LF	\$100	\$220,000
Porous Landscape Detention+	1	AC-FT	\$435,600	\$435,600
Porous Pavement+	43560	SF	\$15	\$653,400
Dewatering				\$5,000
Mobilization			5%	\$69,275
Traffic Control				\$10,000
Utility Coordination/Relocation			5%	\$69,275
Stormwater Management/Erosion Control			5%	\$69,275
SUBTOTAL				\$1,608,325
Contingencies			25%	\$402,081
Engineering Design Services			15%	\$241,249
Legal and Administrative Services			5%	\$80,416
Construction Administration & Management			10%	\$160,833
TOTAL ESTIMATED COST				\$2,492,904
Annual Operation and Maintenance				
Mowing and Debris Removal (5 times/year)	1.2	AC	\$600	\$720
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$720

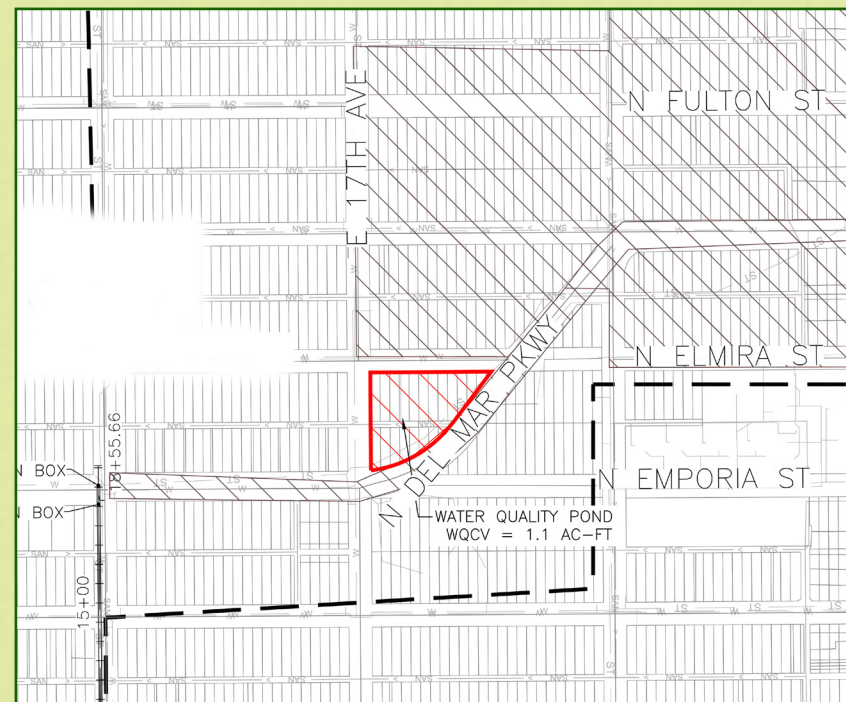
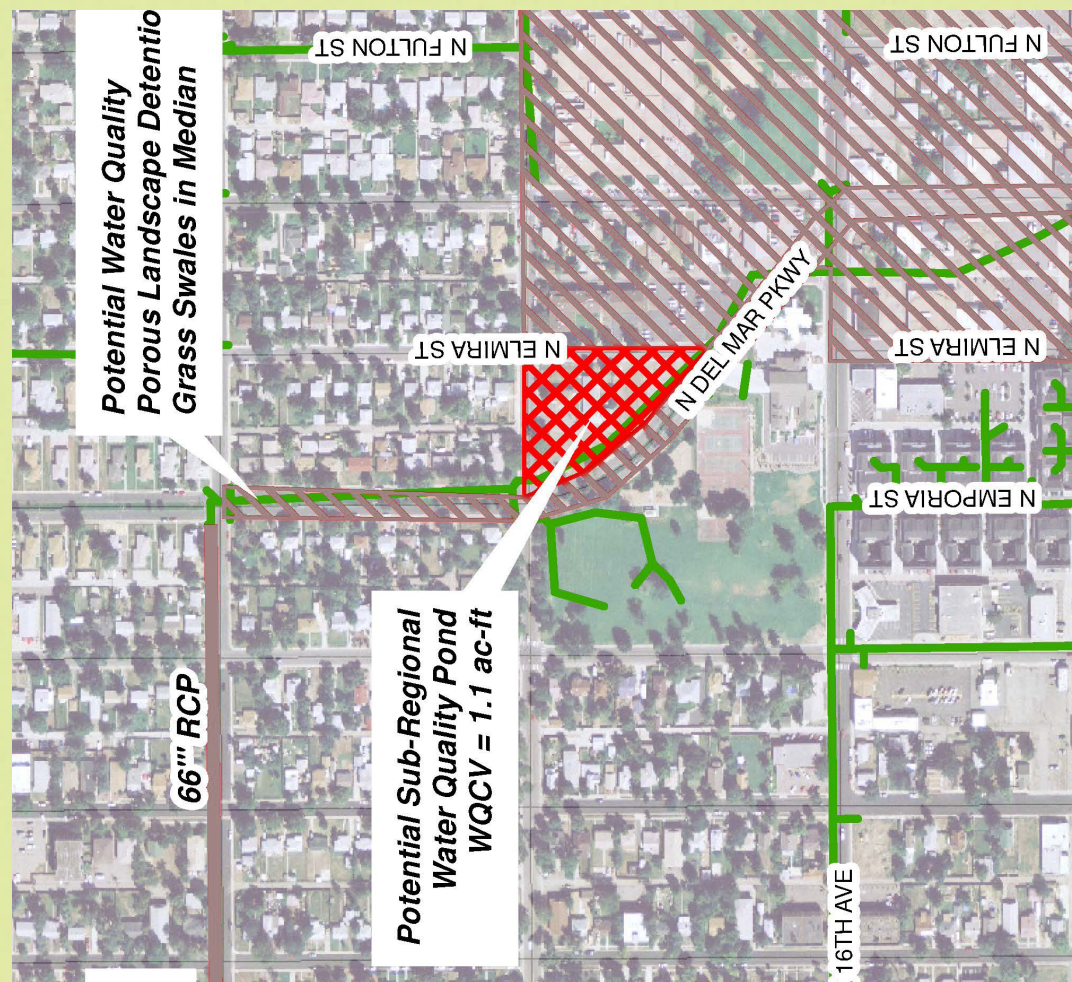
PROJECT DESCRIPTION

The potential to introduce Low Impact Development BMPs extends downstream into Reach 4, as a portion of the Fletcher Plaza Urban Renewal Area and the Arts District lies within Reach 4. Opportunities to continue the theme of transforming the Del Mar Parkway medians into strategically placed porous landscape detention and other water quality BMPs also extend into Reach 4 to E. Montview Boulevard.



EASTERLY CREEK PROJECT E.R4.2 - EAST 17TH AVENUE WATER QUALITY POND

EAST 17TH AVENUE AND NORTH DEL MAR PARKWAY



Item	Quantity	Unit	Unit Cost	Total Cost
Buried Riprap**	36	CY	\$65	\$2,340
Water Quality Pond	1.1	AC-FT	\$50,000	\$55,000
Land Acquisition-Residential ²	1	EA	\$174,000	\$174,000
Land Acquisition-Church ²	1	EA	\$126,000	\$126,000
Dewatering				\$5,000
Mobilization			5%	\$17,867
Traffic Control				\$5,000
Utility Coordination/Relocation			5%	\$17,867
Stormwater Management/Erosion Control			5%	\$17,867
SUBTOTAL				\$420,941
Contingencies			25%	\$105,235
Engineering Design Services			15%	\$63,141
Legal and Administrative Services			5%	\$21,047
Construction Administration & Management			10%	\$42,094
TOTAL ESTIMATED COST				\$652,459
Annual Operation and Maintenance				
Mowing and Debris Removal (5 times/year)	1.2	AC	\$600	\$720
TOTAL ANNUAL OPERATION & MAINTENANCE COST				\$720

PROJECT DESCRIPTION

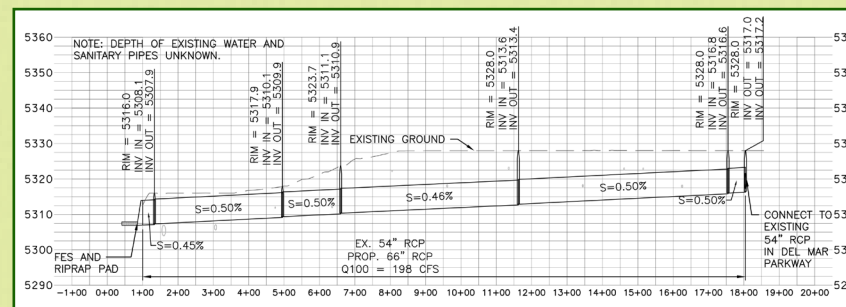
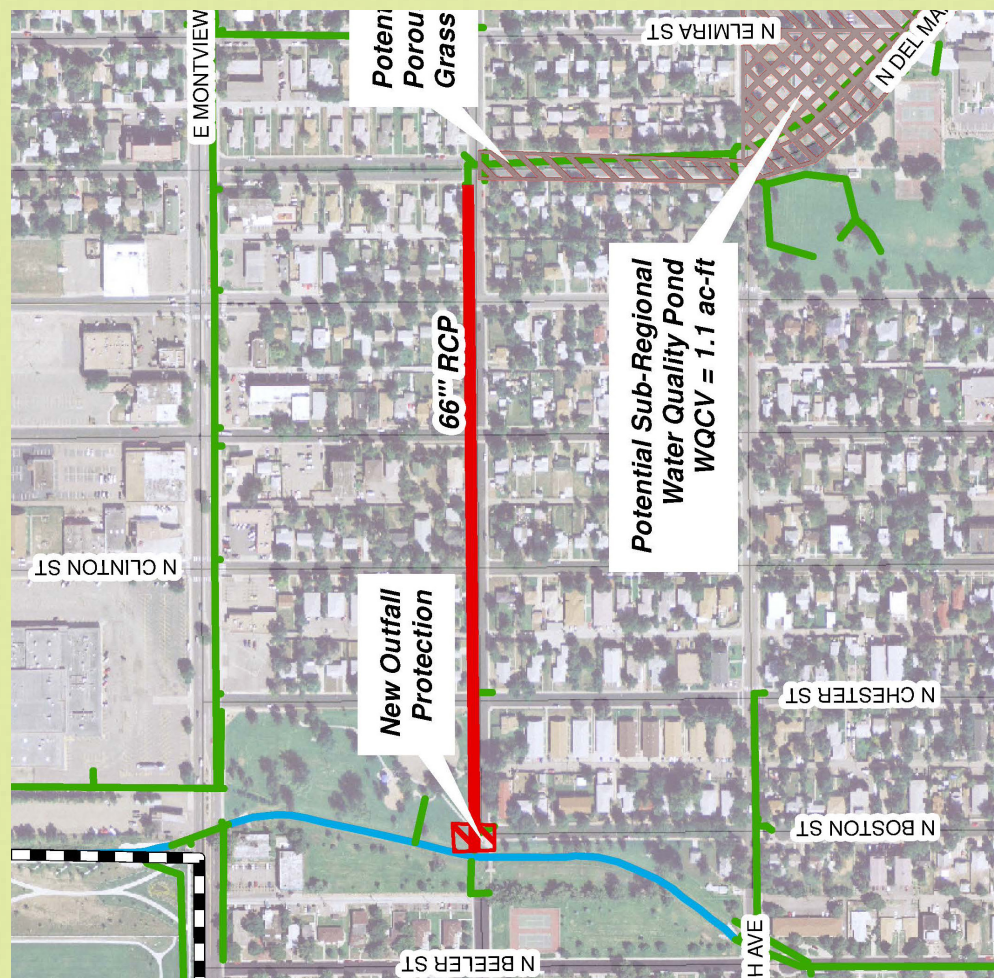
The property at the southeast corner of E. 17th Avenue and Del Mar Parkway is recommended for a 1.1 acre-foot sub-regional water quality pond. Coordination with the Parks, Recreation and Open Space Department would be necessary if multiple use or closer integration with the existing City Park is considered. Since this property has also been considered for other public/municipal purposes besides being developed into a water quality pond, the land use(s) that would best serve the highest priority needs of Aurora should be decided before construction drawings for improvements are finalized, to inform whether a water quality function can be a viable option for the future.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK PROJECT E.R4.3 - E 19TH AVENUE STORM SEWER

EAST 19TH AVENUE FROM NORTH DEL MAR PARKWAY TO WESTERLY CREEK



Item	Quantity	Unit	Unit Cost	Total Cost
66" RCP	1704	LF	\$252	\$429,408
66" RCP Outfall	1	EA	\$2,600	\$2,600
Type R Inlet*	40	EA	\$3,825	\$153,000
Junction Box	6	EA	\$16,400	\$98,400
Dewatering				\$5,000
Mobilization			5%	\$34,170
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$34,170
Stormwater Management/Erosion Control			5%	\$34,170
SUBTOTAL				\$810,919
Contingencies			25%	\$202,730
Engineering Design Services			15%	\$121,638
Legal and Administrative Services			5%	\$40,546
Construction Administration & Management			10%	\$81,092
TOTAL ESTIMATED COST				\$1,256,925

PROJECT DESCRIPTION

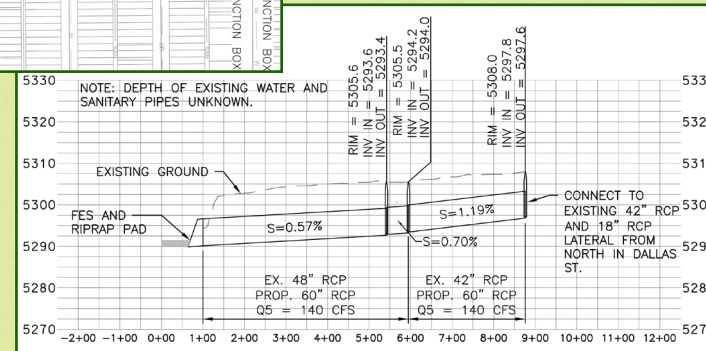
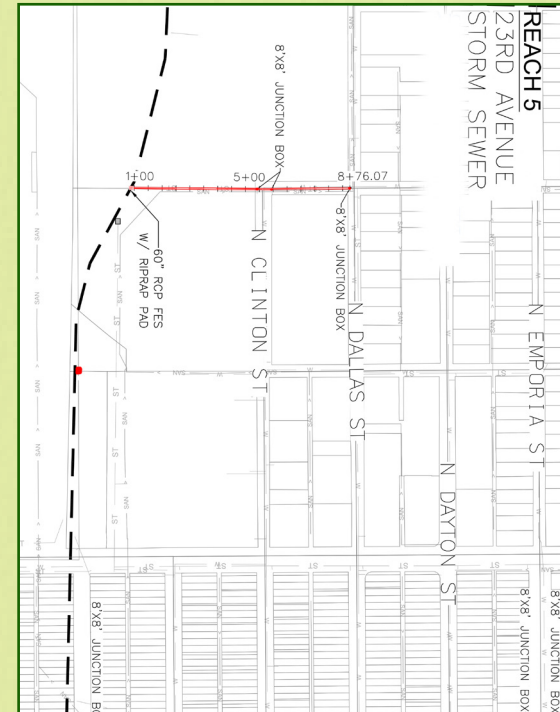
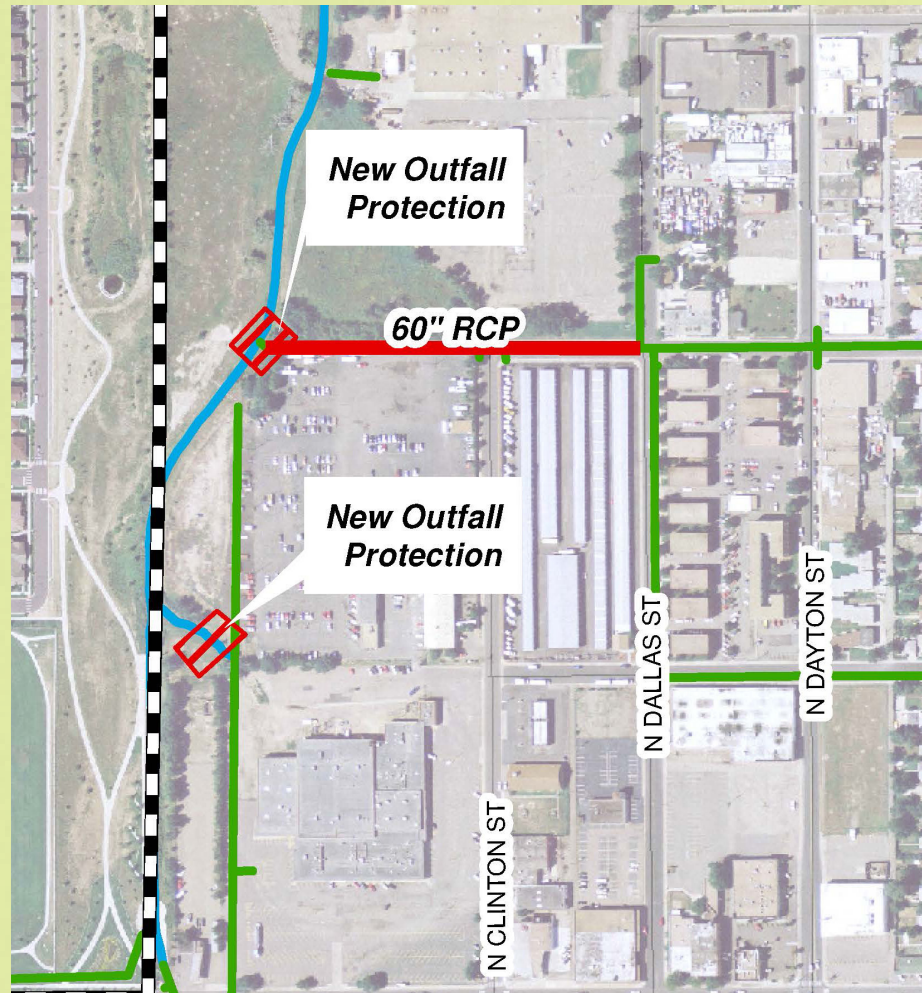
To convey the 5-year storm event, new 66-inch RCP was selected to replace the existing 54-inch RCP in E. 19th Avenue between Del Mar Parkway and the outfall to Westerly Creek. New inlets are also recommended to replace existing, outdated inlets, and to ensure that the pipe system is the limiting factor in conveying the 5-year storm event. New outfall protection is included in the selected plan for the E. 19th Avenue outfall at Westerly Creek to accommodate the new 66-inch RCP.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521



EASTERLY CREEK PROJECT E.R5.1 - E 23RD AVENUE STORM SEWER AND OUTLET PROTECTION

EAST 23RD AVENUE FROM DALLAS STREET TO WESTERLY CREEK



Item	Quantity	Unit	Unit Cost	Total Cost
60" RCP	776	LF	\$229	\$177,704
60" RCP Outfall	1	EA	\$2,400	\$2,400
Type R Inlet*	30	EA	\$3,825	\$114,750
Junction Box	3	EA	\$16,400	\$49,200
Buried Riprap**	30	CY	\$65	\$1,950
Dewatering				\$5,000
Mobilization			5%	\$17,300
Traffic Control				\$20,000
Utility Coordination/Relocation			5%	\$17,300
Stormwater Management/Erosion Control			5%	\$17,300
SUBTOTAL				\$422,904
Contingencies			25%	\$105,726
Engineering Design Services			15%	\$63,436
Legal and Administrative Services			5%	\$21,145
Construction Administration & Management			10%	\$42,290
TOTAL ESTIMATED COST				\$655,501

PROJECT DESCRIPTION

The selected improvements within this reach include a new 60-inch RCP to replace the existing 42- to 48-inch RCP in E. 23rd Avenue between N. Dallas Street and the outfall to Westerly Creek, as well as new inlets along E. 23rd Avenue to replace outdated and undersized inlets. New outfall protection is included at the new 60-inch RCP outfall to Westerly Creek. Although no upgrades are recommended for the existing 8-foot by 8-foot RCB outfall from E. Montview Boulevard, new outfall protection is required to accommodate the additional flows in the storm sewer system that result from the selected plan upgrades.

Item	Local Priority	Global Priority	Project Rating	Project Score
ECONOMIC		0.5		
Optimized Asset Lifecycle Costs	0.33	0.165	0.75	0.124
Operational Efficiencies	0.33	0.165	0.5	0.083
Growth and Economic Development	0.34	0.17	0.5	0.085
ENVIRONMENTAL		0.25		
City Sustainability Initiatives	0.33	0.083	0.4	0.033
Environmental Risk Management	0.33	0.083	0.6	0.050
Regulatory Compliance	0.34	0.085	0.2	0.017
SOCIAL		0.25		
Levels of Service	0.2	0.05	0.8	0.04
Customer/Community Benefit	0.2	0.05	0.4	0.02
Social Risk Management	0.2	0.05	0.8	0.04
System Performance	0.2	0.05	0.4	0.02
Contractual Obligations	0.2	0.05	0.2	0.01
TOTAL SCORE				0.521

