STAFFORD Virginia

Board of Supervisors
Susan B. Stimpson, Chairman
Robert "Bob" Thomas, Jr., Vice Chairman
Jack R. Cavalier
Paul V. Milde, III
Ty A. Schieber
Gary F. Snellings
Cord A. Sterling

Anthony J. Romanello, ICMA-CM
County Administrator

Infrastructure Committee
AGENDA

September 17, 2013 @ 9:00 a.m.
ABC Conference Room, First floor

	Agenda Item
	Introduction • Welcome
1.	Transportation Matters a. FY2015 Revenue Sharing b. FY2015 MAP 21 (Transportation Enhancement) Grant c. North Stafford Pedestrian Accommodations Update d. U. S. Route 1 Widening Study (BRAC)
2.	Parks & Recreation Park Facilities Planning
3.	Courthouse Area Water Tank Site
4.	Rocky Pen Run Update
5.	Parks Projects Update
	Next Meeting October 15, 2013 at 1:00 PM; ABC Conference Room
	• Adjourn

1300 Courthouse Road, P. O. Box 339, Stafford, VA 22555-0339 Phone: (540) 658.8600 Fax: (540) 658.7643 www.staffordcountyva.gov

Transportation Matters

a. FY2015 Revenue Sharing
b. FY2015 MAP 21 (Transportation Enhancement) Grant
c. North Stafford Pedestrian Accommodations Update
d. U. S. Route 1 Widening Study (BRAC)

1

1a. Revenue Sharing

September 17, 2013

- Each year the Virginia Department of Transportation (VDOT) Revenue Sharing Program allows localities to receive matching funding for eligible improvement projects.
- The total funds available each year is determined by the Commonwealth Transportation Board (CTB)
- In order to identify the amount of state funds required to fully maximize local participation in advance of the FY2014 budget, VDOT has requested localities submit applications for revenue sharing by November 1, 2012
- Our local VDOT office has requested that we submit our applications to them by October 1st for their review.
- Each locality may request up to $10 million dollars in state allocations

- Allocations awarded for FY2014
  - Courthouse Road (west) $6,089,500
  - Garrisonville Road Widening* $500,000
    - * To replace funds transferred to other projects last year
  - Truslow Road (West) $1,908,500
  - Courthouse and Rt. 1 Intersection $1,502,000

    TOTAL = $10,000,000

- Recommended Road Projects and allocations for FY2015:
  - Courthouse Road (Mine Road to Winding Creek Road) $7,774,000
  - Courthouse Rd. Intersection @ Rt. 1 $433,000
  - Enon Road $376,000
  - Ferry Road $500,000
  - Mt. View Road Phase I $917,000

    TOTAL = $10,000,000
- Courthouse Road West is the #1 priority. When combined with County revenues, this will fund the project into the construction phase, currently scheduled for 2016.
- The intersection improvements at Courthouse Road & Route 1 are the #2 priority. This maximizes revenue sharing for this project and completes funding through the right of way phase.

- Enon Road is our #3 priority. Funding for design was provided with local funds in the current fiscal year. We expect to come to the Board soon asking for authorization to award a design contract.
- Ferry Road is the #4 priority and the revenue sharing would fund the total estimated project cost. The balance comes from local impact fee revenue.
- The 1st phase of Mountain View Road is the 5th priority, and would apply some additional revenue sharing, allowing us to shift some previously dedicated transportation fund revenues to other road priorities. The initial revenue sharing request was based on the project cost estimate included with the bond revenue. These estimates are outdated and are consistently low.
- In order for an application to be processed, a resolution outlining the request which states the Board's support of the projects identified must be submitted to VDOT no later than November 1, 2013
- Staff will prepare a resolution and bring it to the full Board in mid-October

1b

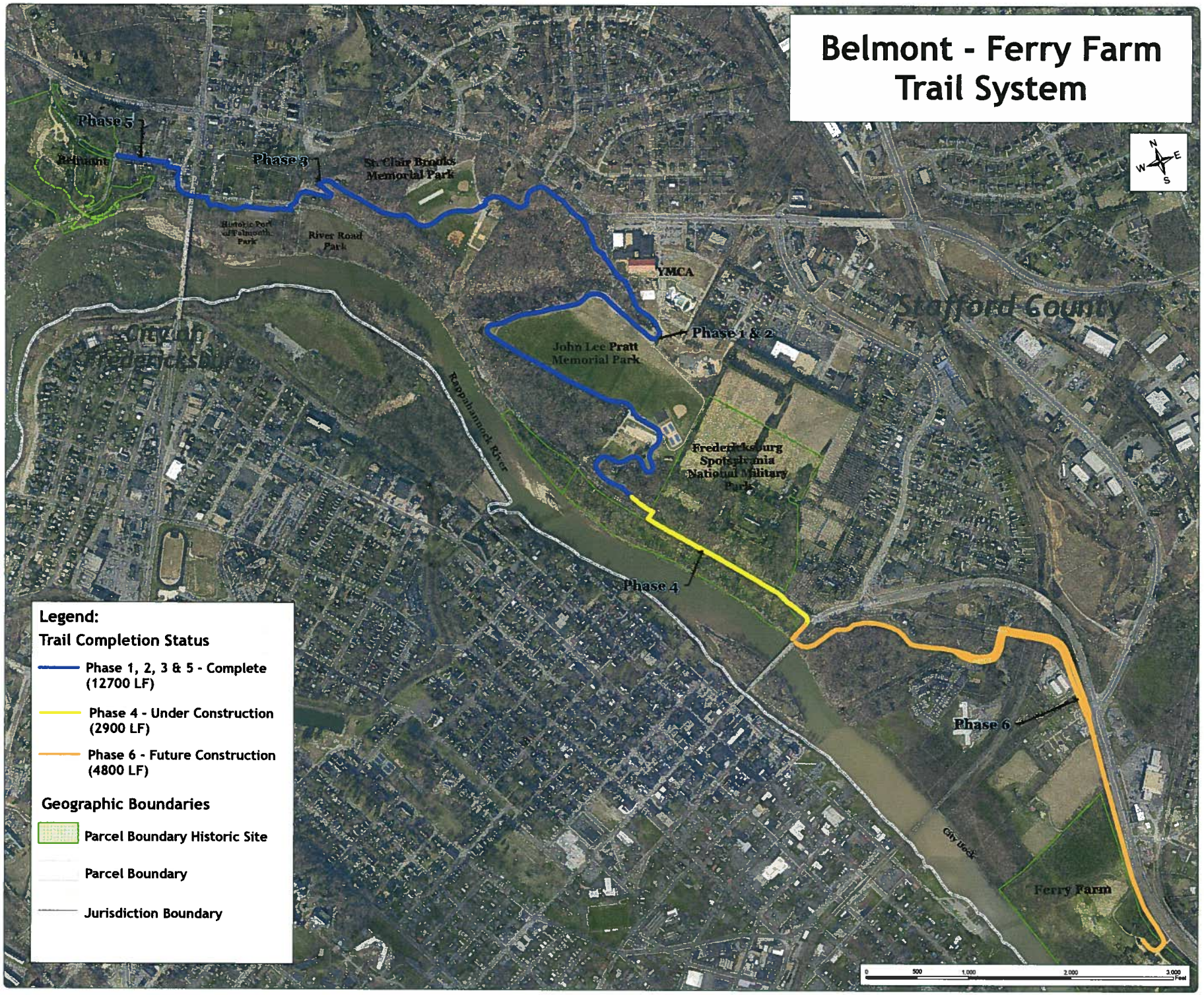
1b. MAP – 21 (Transportation Alternatives)

September 17, 2013

- The federal Moving Ahead for Progress in the 21st Century Act (MAP-21) provides for a statewide Transportation Alternatives Program, using federal transportation funds and state or local matching funds
- The Commonwealth Transportation Board (CTB) and/or the local MPO will select the projects each year depending on several criteria
- Over the years, Transportation Enhancement funds (the precursor to MAP-21) were granted to both the Courthouse Streetscape project ($2.2 M) and the Belmont Ferry Farm Trail Project ($1.5)
- Last year Stafford applied for $500,000 for each project; however, only the Phase I-C of the Courthouse Streetscape project was funded
- Design of phase 4 of the trail is ongoing with completion expected in 2015. This includes pedestrian safety enhancements in the Phase 3 portion near Belmont
- Selection Criteria
    1. MPOs representing urbanized areas with populations greater than 200,000 will select Transportation Alternatives projects in their areas up to the amount of funding provided them in MAP-21.
    2. The Secretary and CTB At-Large members will select Transportation Alternatives projects with the funds made available for population areas less than 200,000, up to the amount provided in MAP-21 for that requirement.
    3. Statewide Transportation Alternative funds (remaining 50% of allocation and available for use anywhere in the state) will be apportioned equally among the District CTB members up to total amount of $9M. The District members will select eligible Transportation Alternatives projects with these funds.
    4. If the statewide funds mentioned in item 3 above exceed $9M, the Secretary and CTB At-Large members will collectively select projects that address statewide funding gaps or needs up to the amount of the additional funding.
    5. All projects selected must be under construction within four (4) years of the project's first allocations availability, unless that time is extended for a documented reason.
    6. All projects selected by the Board shall receive not less than 50% of the amount of Transportation Alternative program funds requested in the application. In addition, all projects selected by the Board will be fully funded to the requested Transportation Alternatives Program amount, if that amount is $200,000 or less and such amount is all that is required to complete the project.
    7. Once various project selections have been made in accordance with the foregoing process, the project list will be presented to the full Board for its consideration and approval.

- Staff recommends requesting funding for Phase 6 of the trail in the amount of $1 Million. The estimate for design and construction of this portion of the Trail is $1.25 Million, the County match will be $250,000 **which would fully fund this section of the trail and complete the Belmont to Ferry Farm Trail system**.

Belmont - Ferry Farm Trail System



1c

1c. Sidewalks from Aquia Town Center to Salisbury Drive

- Staff, with the help of a consultant, investigated options for a pedestrian crossing to connect the Aquia Town Center area with accommodations across I-95 on Garrisonville Road.
- The initial phase of the study was to determine if a feasible option was available without expanding the existing bridge, or building a separate pedestrian bridge
- The challenges include; heavy traffic, coordination of traffic signals, on and off ramps for 95, and connection with sidewalks on either end of the bridge.

Option 1

- Though investigation of the site, and discussions with our consultant, the primary option appeared to be creating a center lane for pedestrian traffic. (a graphic is attached)
- This barrier protected center lane would allow pedestrians to avoid the majority of the merging and weaving traffic as they cross the bridge.
- Pedestrians would enter the center median with cross walks on either end of the bridge
- A center median would require narrowing of the existing travel lanes from 12 feet to 11 feet, would require additional signalization, and would require lighting for pedestrians.
- The concept was presented to VDOT; after an internal meeting with VDOT staff, it was determined that they would not entertain this concept due to:
    - Reducing the lane width in this heavy traffic area would cause safety issues for the motorists
    - The existing lanes and traffic on the western side of the bridge would not allow the center lane to carry the pedestrians across all of the on/off ramps which would put them in a dangerous situation.
    - The additional signalization required would increase the delays and traffic congestion on the bridge and abutting roadways

Option 2

- A second option would be to build a separate pedestrian crossing
- Staff investigated area structures which are similar:
    - In 2009, VDOT completed a Pedestrian/Bike bridge over Route 50 in the Seven Corners area. The bridge is 141 feet long and cost $5.2 Million.
    - The Parkside Pedestrian Bridge in Anacostia which should begin construction this fall. The bridge is a 450 foot span and is estimated at $16 Million dollars.
    - The span required to cross 95 in this location would be approximately 2,000 feet.

Option 3

- A third option would be to expand or replace the existing bridge – this would also be cost prohibitive

- Staff was unable to identify a cost effective solution to enhance pedestrian accommodations across the Garrisonville Road bridge over I-95.

1d

Planning and Preliminary Engineering for Route 1 in Stafford and Prince William Counties

September 17, 2013

- In February 2011, Stafford entered into an agreement with the US Department of Transportation, Federal Highway Administration (FHWA), Eastern Federal Lands Highway Division to provide funding for preliminary engineering for the US 1 widening project from the intersection of Telegraph Rd (VA 634) north to Joplin/Fuller Road (VA 619)

- All work by FHWA was completed in February 2013.

- The agreement requires the Stafford Board, which is acting as the fiscal agent for the Quantico Growth Management Committee (QGMC), to provide acceptance of the deliverables and allow FHWA to close out this project.

- Stafford cannot provide their acceptance until Prince William County has agreed to accept the deliverables as well. We are waiting on Prince William County's response. Once Prince William has provided their approval, this item will come to the full Board for their approval.

- Jack VanDop from FHWA is here to give a brief overview of their report

- VDOT will take over the administration of the widening project once FHWA has completed their portion.

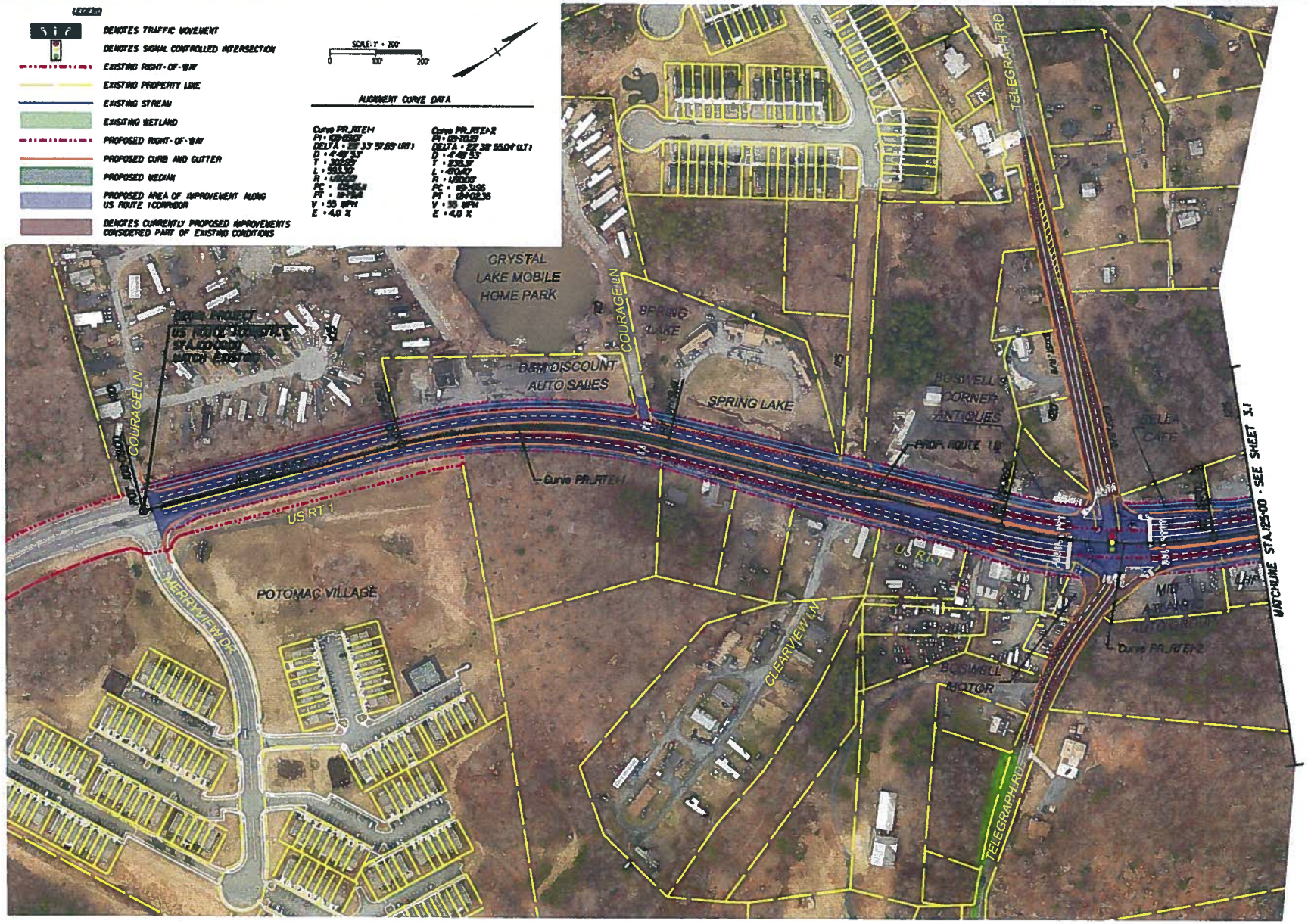
LEGEND

- DENOTES TRAFFIC MOVEMENT
- DENOTES SIGNAL CONTROLLED INTERSECTION
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING STREAM
- EXISTING WETLAND
- PROPOSED RIGHT-OF-WAY
- PROPOSED CURB AND GUTTER
- PROPOSED MEDIAN
- PROPOSED AREA OF IMPROVEMENT ALONG US ROUTE 1 CORRIDOR
- DENOTES CURRENTLY PROPOSED IMPROVEMENTS CONSIDERED PART OF EXISTING CONDITIONS

SCALE: 1" = 200'
0 100' 200'

AUGMENT CURVE DATA

Curve PR_RTE1-1	Curve PR_RTE1-2
PI = [illegible]	PI = [illegible]
DELTA = [illegible] 57.63" (RT)	DELTA = [illegible] 55.04" (LT)
D = 4°48'53"	D = 4°48'53"
T = [illegible]	T = [illegible]
L = [illegible]	L = [illegible]
R = [illegible]	R = [illegible]
PC = [illegible]	PC = [illegible]
PT = [illegible]	PT = [illegible]
V = 55 MPH	V = 35 MPH
E = 4.0 %	E = 4.0 %



CONCEPTUAL PLAN ONLY

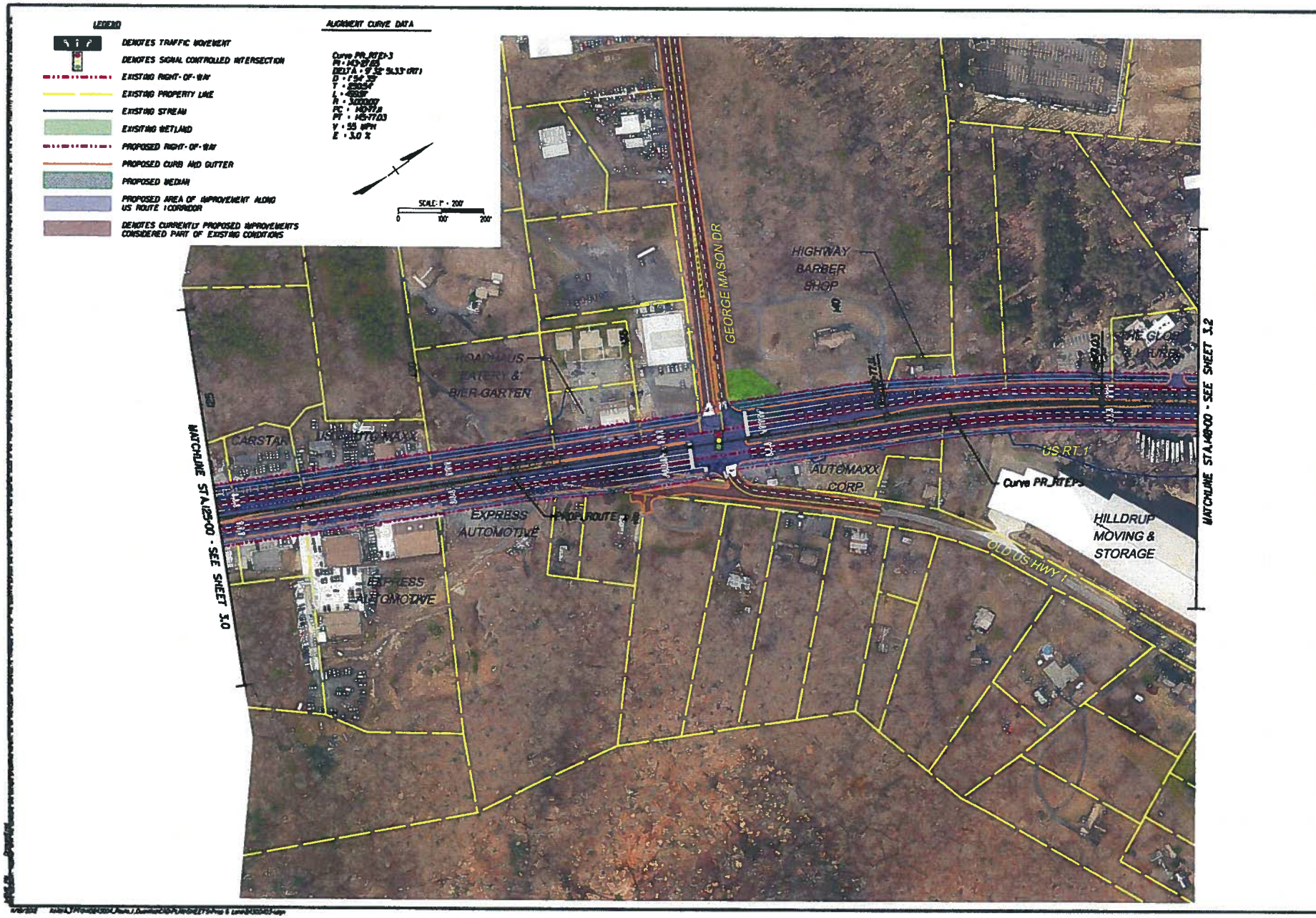
Kimley-Horn and Associates, Inc.
© 2012 KIMLEY-HORN AND ASSOCIATES, INC.
Engineering, Planning, and Environmental Consultants

PROPOSED
6 LANE DIVIDED HIGHWAY

ROUTE 1 CORRIDOR STUDY
MARINE CORPS BASE QUANTICO VA
PUBLIC IMPROVEMENTS

Federal Highway Adminstration,
Eastern Federal Lands Highway Divison

SHEET NUMBER
3.0



CONCEPTUAL PLAN ONLY

Kimley-Horn and Associates, Inc.
© 2012 KIMLEY-HORN AND ASSOCIATES, INC.

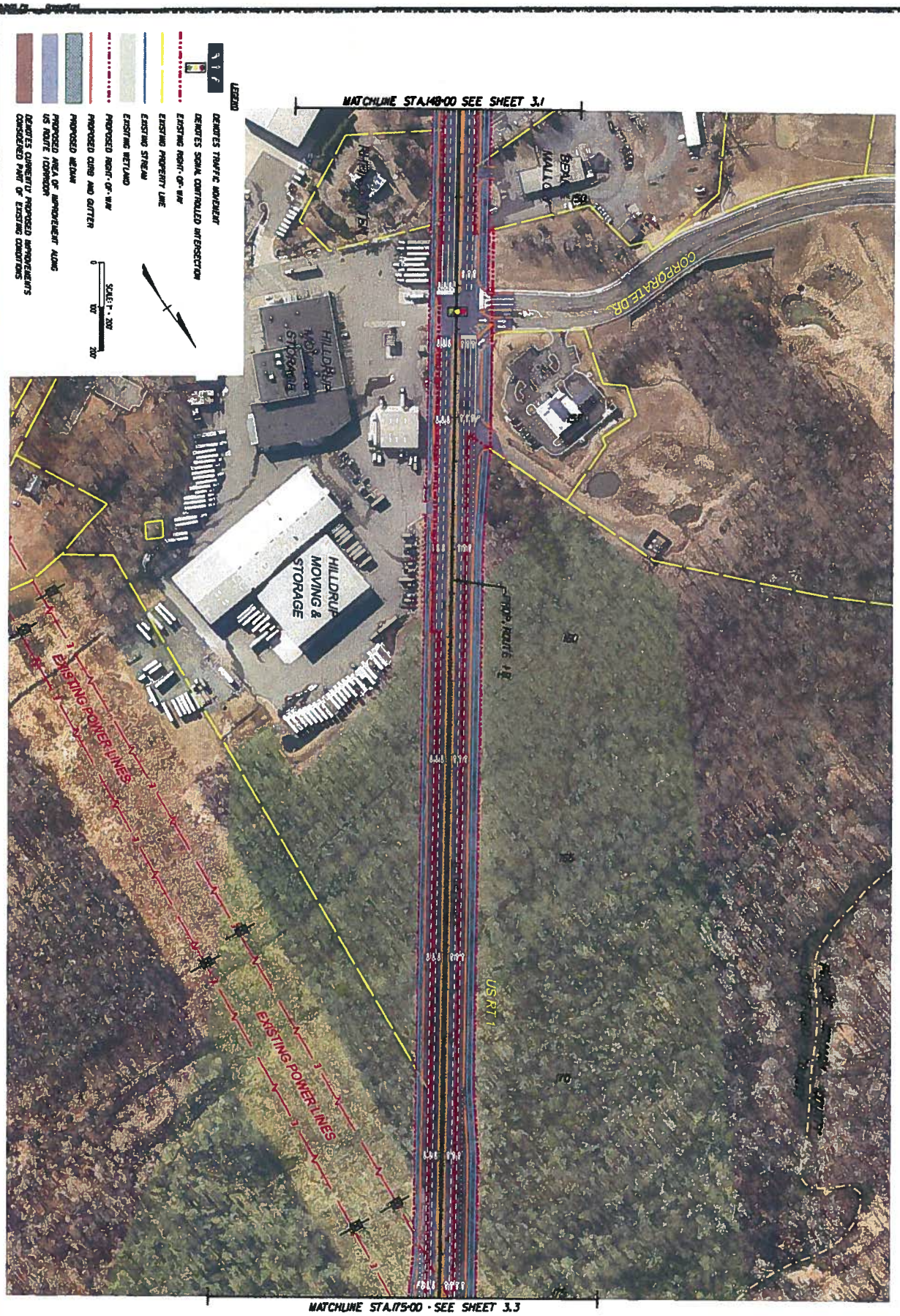
PROPOSED
6 LANE DIVIDED HIGHWAY

ROUTE 1 CORRIDOR STUDY
MARINE CORPS BASE QUANTICO VA
PUBLIC IMPROVEMENTS

Federal Highway Administration
Eastern Federal Lands Highway Division

SHEET NUMBER

3.1



SHEET NUMBER 3.2		ROUTE 1 CORRIDOR STUDY MARINE CORPS BASE QUANTICO VA PUBLIC IMPROVEMENTS Federal Highway Administration, Eastern Federal Lands Highway Division	PROPOSED 6 LANE DIVIDED HIGHWAY	DATE NOV. 2012 PROJECT NO. 19243004 DESIGNED BY NAW DRAWN BY MEC CHECKED BY RFB	Kimley-Horn and Associates, Inc. © 2012 KIMLEY-HORN AND ASSOCIATES, INC. 11400 COMMERCE PARK DRIVE SUITE 400 RESTON, VA 20191 PHONE: (703) 674-1300 FAX: (703) 674-1350 Engineering, Planning, and Environmental Consultants	CONCEPTUAL PLAN ONLY

Parks & Recreation
Park Facilities Planning

2

2- Parks Facilities Planning

- The Board recently authorized a parks facilities planning study to examine the location, type and number of future parks facilities in the County.

- The study would incorporate the new parks facilities currently under construction at Chichester Park and the Park at Embrey Mill, as well as the facilities included in the adopted Capital Improvement Program, changing County demographics and our resident's desire for new sports opportunities.

- The study would also include recent efforts to define recreational opportunities at a number of sites around the County. Three of these include Mountain View, Patawomeck Park, and Duff Green Park. These are described in more detail as follows.

MOUNTAIN VIEW

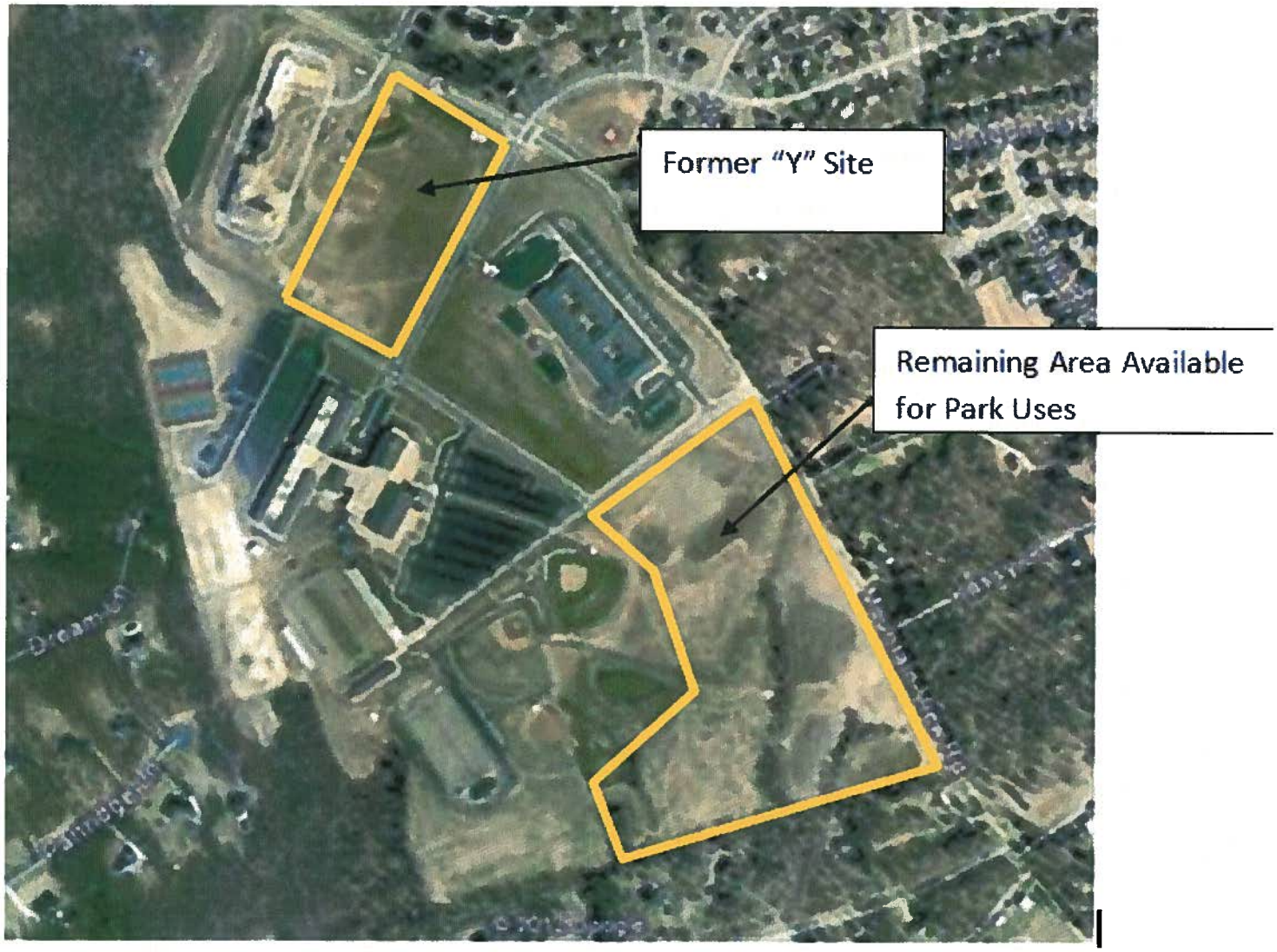
- The Mountain View Site is on county-owned property adjacent to the Mountain View High School and the Margaret Brent Elementary School. This proposed project is included in the adopted FY2014-2023 CIP as a future park bond funded project. The project would include 6 lighted, irrigated sports fields (3 rectangular and 3 diamond), along with appurtenant facilities such as restrooms and concession facilities, parking and stormwater management.

- Implementation of this project envisions construction to occur in two phases. The first phase would construct rectangular fields on the former "YMCA" parcel. The services to be provided at the YMCA indoor recreational complex have been relocated to the Park at Embrey Mill, freeing up this site. The remaining fields will be built as a second phase in the open area to the south and east of the two schools.

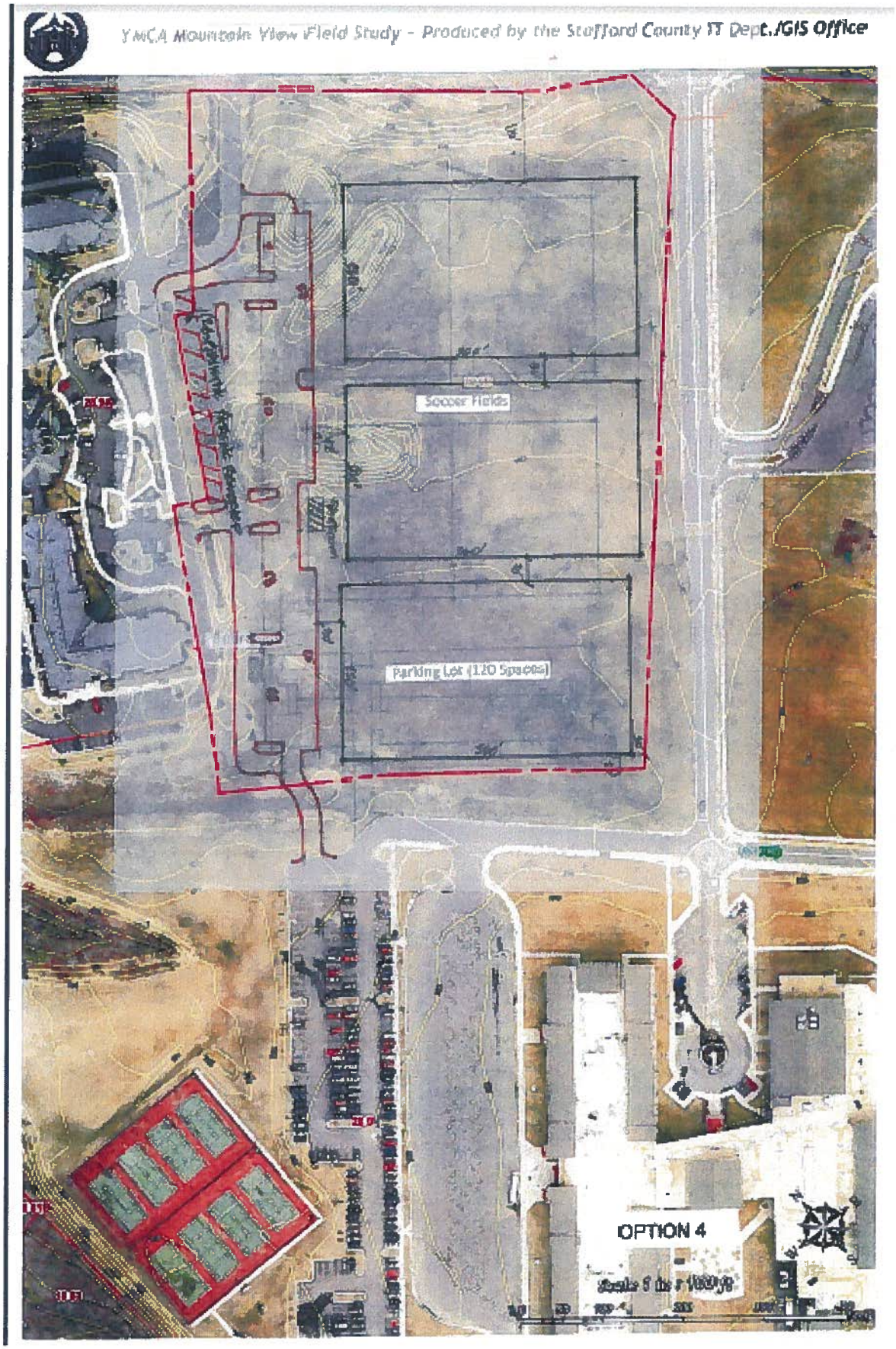
- The cost of this project is estimated at $10,750,000, and is scheduled to begin design in FY2018 in the adopted CIP.

- Following is an aerial photo of the site and a graphic of 3 rectangular fields on the "YMCA" site:

MOUNTAIN VIEW SITE



YMCA SITE


YMCA Mountain View Field Study - Produced by the Stafford County IT Dept./GIS Office
Soccer Fields
Parking Lot (120 Spaces)
OPTION 4

PATAWOMECK PARK

- Phase 1 of Patawomeck Park has been completed.

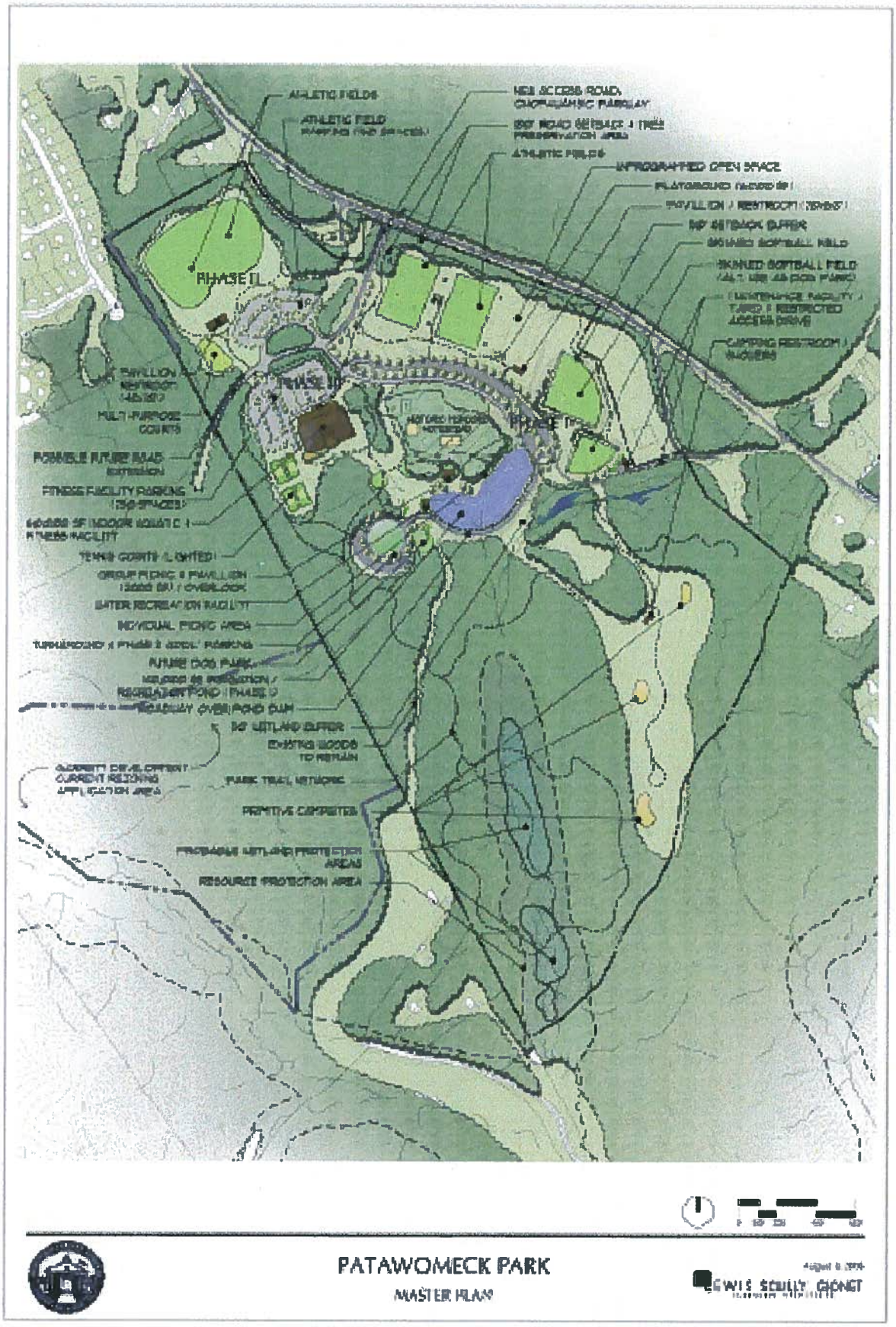
- A park expansion is included in the adopted FY2014-2023 CIP as a future park bond funded project. The proposed project includes 3-4 additional lighted athletic fields, restrooms, picnic shelters, utility upgrades, updated signage, expanded parking, multi-purpose courts, dog park, group and individual picnic areas, primitive camp sites with restroom/shower building, trails, and a fenced maintenance facility.

- The cost of this project is estimated at $4,600,000, and is scheduled to begin design in FY2017 in the adopted CIP.

- Following is an aerial photo of the site and a graphic of the master plan for the park:

PATAWOMECK PARK

FUTURE PARK FACILITIES



PATAWOMECK PARK

MASTER PLAN

LEWIS SCULLY GIONET

DUFF McDUFF GREEN PARK

- Phase 1 of Duff McDuff Green Park has been completed. In 2009 approximately 125 acres of new parkland was donated to the County adjacent to the existing Duff McDuff Green Park

- A project at this location is included in the adopted FY2014-2023 CIP as a future park bond funded project. The project in the CIP included lighted synthetic turf fields, additional lighted, irrigated ballfields, drainage improvements, updated signage, trail repairs, new trails, expanded parking, a fenced district maintenance facility, and other amenities.

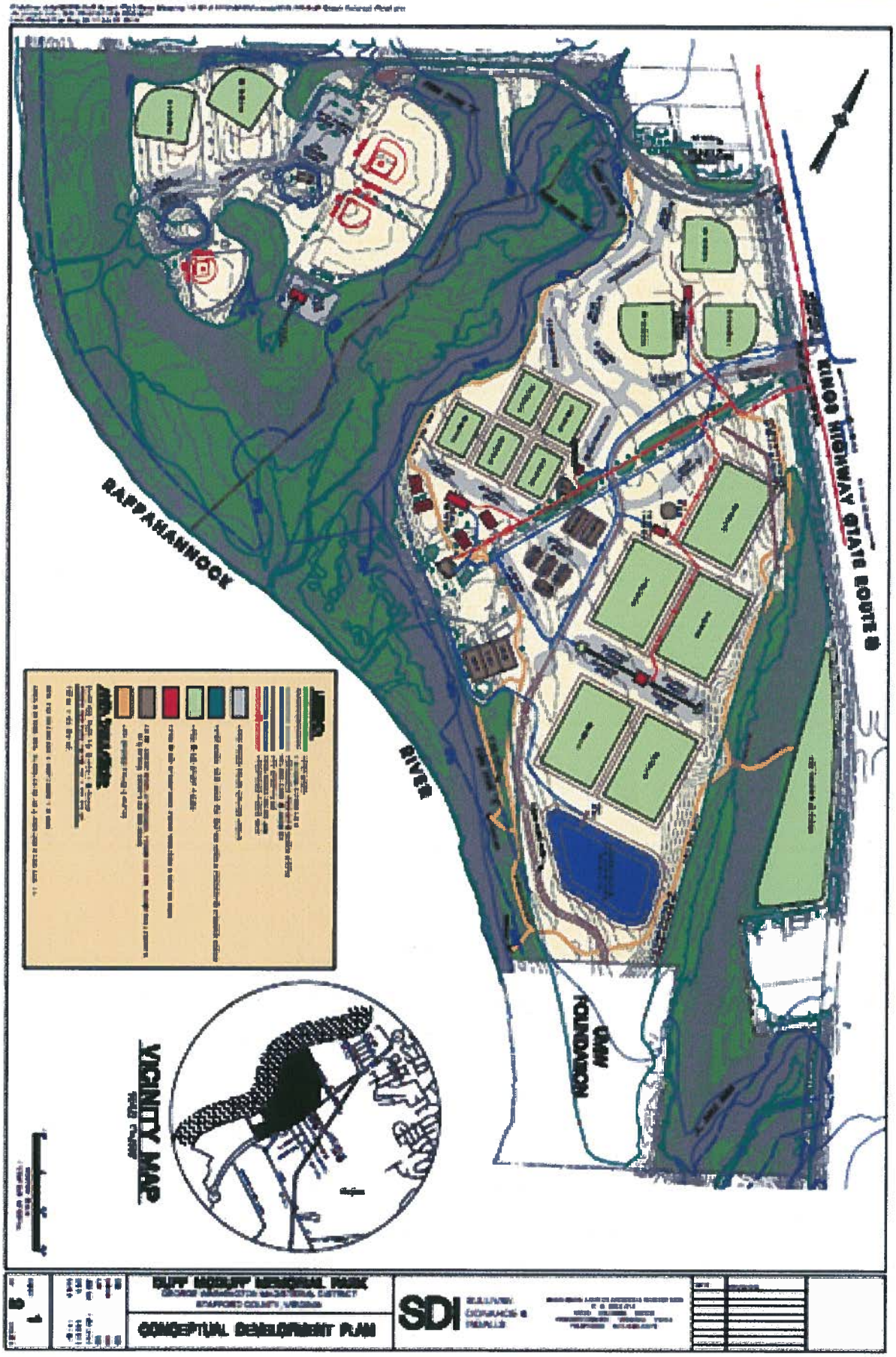
- The cost of this project is estimated at $6,575,000, and is scheduled to begin design in FY2017 in the adopted CIP.

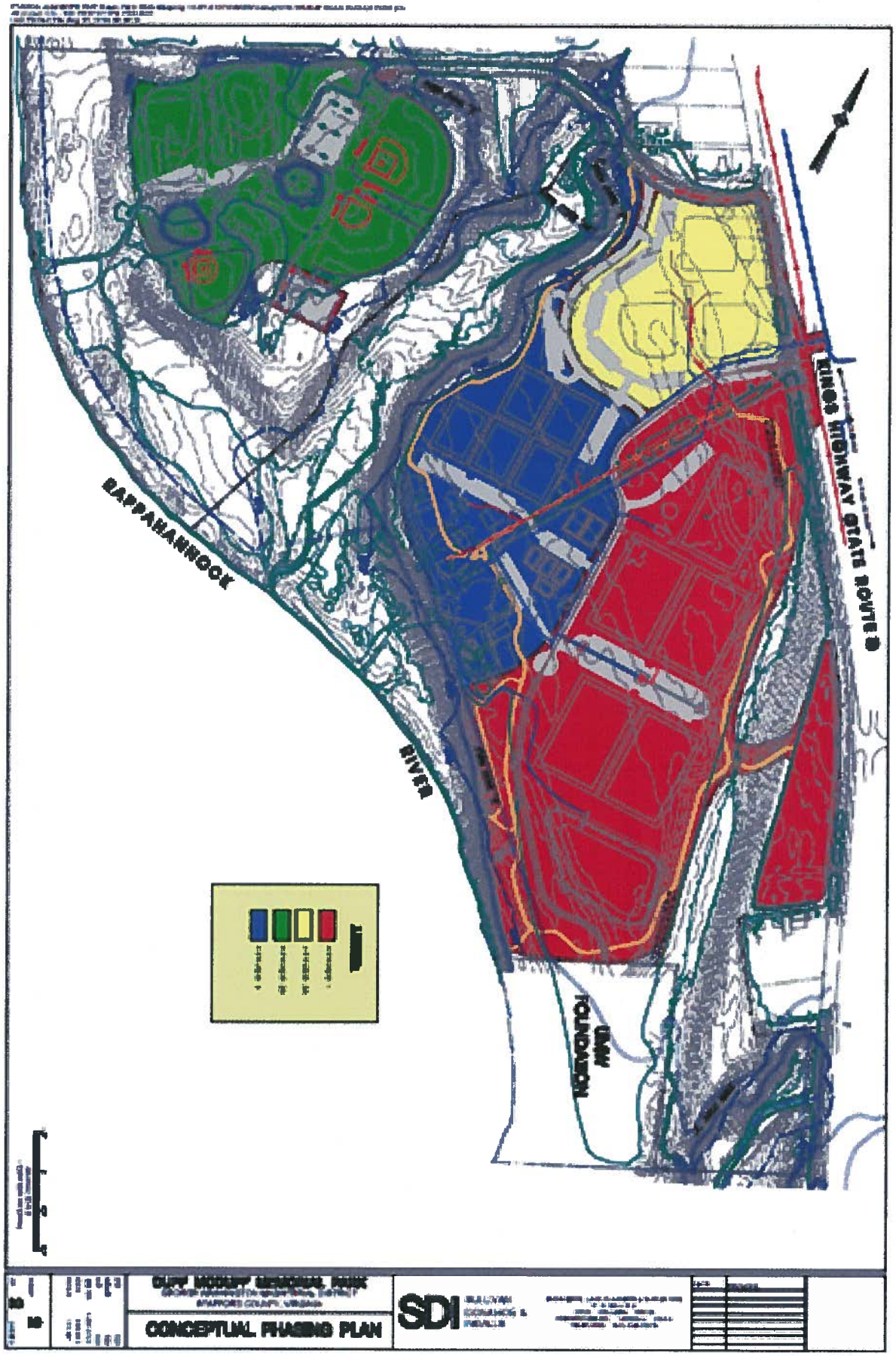
- Recently staff worked with a consultant to prepare a conceptual plan, cost estimate, and phasing plan for possible development at Duff McDuff Green Park which incorporated the new acreage.

- This plan was presented to the Parks and Recreation Advisory Commission on August 15, 2013. The Commission provided a few comments for consideration and endorsed the plan.

- Below are the conceptual plan, a proposed phasing plan, and a summary of costs for the phases.

DUFF McDUFF GREEN PARK




RAPPAHANNOCK
RIVER
KINGS HIGHWAY STATE ROUTE 3
UMW FOUNDATION
CONCEPTUAL PHASING PLAN
SDI

Overall Park - Cost Summary		
Phase 1		
Hard Cost:	$	7,471,200.00
Soft Cost:	$	3,047,396.37
Total Cost - Phase 1	**$**	**10,518,596.37**
Phase 2A		
Hard Cost:	$	3,133,650.00
Soft Cost:	$	1,065,441.00
Total Cost - Phase 2A	**$**	**4,199,091.00**
Phase 2B		
Hard Cost:	$	1,709,169.00
Soft Cost:	$	581,117.46
Total Cost - Phase 2B	**$**	**2,290,286.46**
Phase 3		
Hard Cost:	$	4,592,260.00
Soft Cost:	$	1,561,368.40
Total Cost - Phase 3	**$**	**6,153,628.40**
Overall Park Total Costs	**$**	**23,161,602.23**
Overall Park (Possible) - Cost Summary		
Signalization (If Required)		
Signalization Hard Cost (Lump Sum):	$	250,000.00
** Soft Cost: (29%):	$	72,500.00
Total Signalization Cost	**$**	**322,500.00**
Public Water Service to Phase 2B		
6" Waterline Hard Cost (Lump Sum):	$	54,000.00
Fire Hydrant Assembly Hard Cost (4 @ $5,000):	$	20,000.00
Fittings & Valves Hard Cost (Lump Sum):	$	8,000.00
** Soft Cost (29%)	$	23,780.00
Total Water Service Cost	**$**	**105,780.00**
Import Topsoil		
Import Topsoil - All Fields (907,877 S.F. @ 6"+/- Depth):	$	453,951.00
** Soft Cost (29%):	$	131,645.79
Total Topsoil Cost	**$**	**585,596.79**
Synthetic Soccer Fields (5 Fields)		
5 Synthetic Fields @ ($800,000 Per Field):	$	4,000,000.00
** Soft Cost: (29%):	$	1,160,000.00
Total Synthetic Field Cost	**$**	**5,160,000.00**
Overall Park (Possible) Total Costs	**$**	**6,173,876.79**
Overall Park Total Costs	**$**	**23,161,602.23**
Overall Park (Possible) Total Costs	**$**	**29,335,479.02**
** Note: 29% Soft Cost = Contingency+Engineering+Surveying+Project Management		

Courthouse Area Water Tank Site

3

3 - New Courthouse Area Water Tank Site

September 17, 2013

- By ordinances O06-29 and O09-03, Medicorp proffered a 1.6 acre site in the northeast corner of their east campus hospital site. This site is illustrated on the attached exhibit.

- Medicorp desires to incorporate the proffered site into their east campus project for medical office buildings and to substitute a different parcel.

- Staff agreed that medical offices were a better use for the property and agreed to a future property swap, provided a mutually agreed upon site could be found.

- Staff examined other sites, but was unable to negotiate a successful purchase. The Utilities Commission was opposed to the use of condemnation.

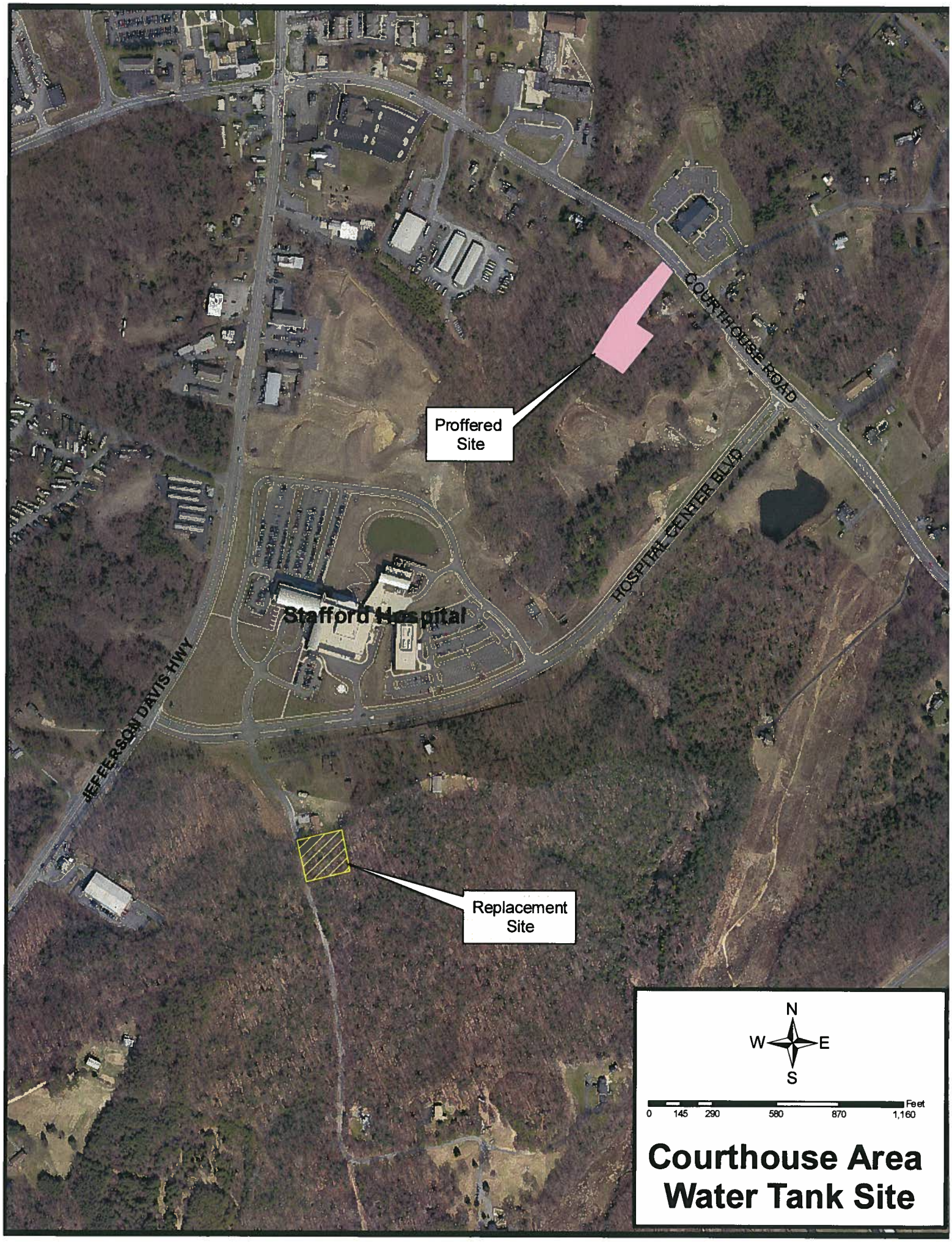
- Medicorp subsequently negotiated with a local developer to donate a site to the county to satisfy the original proffer.

- Staff has studied the proposed site and found it to be suitable.

- Medicorp, the local developer, and county staff are negotiating a contract that would dedicate the site to the county and release Medicorp from the proffer.

- Because the conveyance of the property will satisfy a proffer, the property substitution must be approved by the Board of Supervisors

- Staff will present this matter to the Board after final details of the contract are resolved.


COURTHOUSE ROAD
Proffered Site
HOSPITAL CENTER BLVD
Stafford Hospital
JEFFERSON DAVIS HWY
Replacement Site
N
W
E
S
Feet
0
145
290
580
870
1,160
Courthouse Area Water Tank Site

Rocky Pen Run Update

4

4 - Rocky Pen Run Project Update

Infrastructure Committee Meeting **September 17, 2013**

Dam

Embankment is about 99% complete. Fine grading and paving the access road is all that remains.

The emergency spillway is complete.

The pump station building structure has been erected and is under roof. Much of the piping and interior fit out is complete. Electrical, Mechanical, and Instrumentation is approximately 50% complete.

General clean-up and restoration has begun.

The project has several issues which resulted in both increases and decreases in cost. There are three primary areas where issues resulted in substantial increases; including the embankment blanket/chimney drain material, spillway concrete, and foundation excavation quantities. While these quantities are currently being scrutinized, indications are that the increase in unit quantities could add as much as $4M to the dam project cost. Staff is also aware of other potential cost issues that are currently being discussed with project management staff and the contractor.

The issues referenced above are the result of the Engineer including unrealistically low quantities for unit items included with the bid, and some instances where additional quantities were necessary due to site conditions. Staff plans to schedule this matter for the next Utilities Commission meeting, and will ultimately bring the matter to the full Board for consideration.

The Construction Management estimate for the project is nearly exhausted and will require just under $300,000 to allow the firm to complete the inspection and monitoring of the project as well as the formal Construction Report at the end of construction. This additional fee request is scheduled for Board consideration at the October 1st meeting.

Funds are available in the cash funded portion of the CIP for much of the projected increase in project budget.

Water Treatment Facility

Vertical concrete such as clarifier walls, PAC Room, and sludge thickener tank are nearly complete. Block partitions and walls are nearly complete.

Building enclosure began in March and is approximately 60% complete.

Electrical, Mechanical, and Instrumentation is underway and is approximately 20% complete.

The project continues to lag behind schedule due to Contractor-caused delays, resulting from poor work execution and quality control. Due to the delays, now estimated to be six months, it will be necessary to retain our Construction Management for a period longer than that originally estimated.

The Contractor is liable for liquidated damages which will offset most, if not all of these costs. The Board will be advised of construction issues related to the dam and treatment facility projects in closed session.

Reservoir

Cool Well Court Extension is complete.

The raising of Walnut Grove Drive is complete.

Clearing NTP was in October 2012 and is completely timbered (500 acres) with about 390 in final condition.

The abandonment of a portion of Rocky Run Road has been approved by the Board and VDOT. Rocky Run Road will remain open until the last practical moment of closure.

Distribution Pipelines

The large pipelines that will be constructed in Greenbank Road and between the project and the eastern part of the county will begin fall 2013.

Environmental Mitigation

Four projects (3 in Ridge Pointe subdivision and one at the Fleet Maintenance Facility) are advertised for construction. Construction should begin October 2013.

Design work for the stream restoration work at the dam property is complete and will advertise for construction late September 2013.

Design plans for the Fish Passage are approved and will advertise for construction late September 2013.

The purchase of 1,698 stream credits is complete.

The conservation of the last parcel of property (Rappahannock River Intake Pump Station Parcel) has begun with a Board item on September 17th agenda with a request to authorize a public hearing. This action, when combined with other preservation actions taken by the Board, has resulted in savings of approximately $500,000 for the mitigation portion of the project.

Celebrate Virginia Water Storage Tank

Acquisition of an easement on the proposed site is in the final stages and should be complete early October 2013. Project should be advertised for construction during October 2013.

Parks Projects Update

5

5. PARK PROJECTS UPDATE

CHICHESTER PARK

- Clearing and timbering of site is complete.
- Removal of stumps and grinding of remaining small trees and branches continues.
- Culvert end walls and culvert pipes for the streams under the entrance road were delivered and installation of the first culvert is complete. The second will be installed the week of 9/16.
- The contractor discovered a previously unknown family cemetery within the park boundary during clearing operations. Staff brought in a consultant to assist in identifying the number of graves present. We believe there are five, with a single headstone discovered. The one identified is James Snellings, and seems to be a distant relative of the Hartwood District supervisor. We are working through the process to have the remains relocated to a nearby cemetery. At the present time, there is no project delay associated with this activity.

CURTIS PARK POOL

- Notice to proceed was issued to contractor on August 5th.
- Shop drawings are being reviewed.
- Pool pumped out 9/9-10.
- Contractor to begin demolition work 9/12

PARK AT EMBREY MILL

- Fencing on top of retaining wall #2 has begun.
- Retaining wall #1 construction is nearly complete with fencing started on the top.
- Excavation for wall #4 is underway.
- Earthwork continues and is about 70% complete. Portions of site are at final grade.
- Permanent seeding on some slopes and temporary seeding on two field areas was done 9/13.
- Plats for the parcels of land to be dedicated to the County to satisfy the proffer requirement have been finalized and the developer is preparing the deed.
- Submitted Phase 2 plans to Planning for site plan review August 22. TRC meeting is September 25.

INDOOR RECREATION FACILITY AT EMBREY MILL

- Staff has provided comments in the 75% complete pool and building plans.
- We have received updated swimming pools plans. Bid documents for the pools nearly ready for Purchasing.
- Anticipate receipt of completed building plans for staff review and building permit submission mid/late-September.
- After staff review, will begin preparation of bid documents.

BELMONT – FERRY FARM TRAIL PHASE 4

- VDOT has approved contract modification #1 and are reviewing contract modification #2 for additional survey, environmental, archaeological, and design for terminating the trail on the south/east side of the Chatham Bridge.

- Coordinating NEPA reviews.

- Staff comments on the design of the street crossing at Belmont end of trail have been provide to the consultant. This plan will be submitted to VDOT with a letter requesting to proceed to bid ahead of the Chatham section.

- Before September is over we will review 30% design of the trail plans with the Nation Park Service.

WOODSTREAM TRAIL TO SMITH LAKE PARK

- Wetlands have been flagged and surveyed. Topographic survey is complete.

- Schematic plans to be delivered for staff review the week of 9/16.