

Objective

- History and background Why are we here?
- Outcomes What do we do?
- Next Steps for the Town
- Q&A

History of Stormwater in the Town



History of Stormwater in the Town

- Aging & inadequate Infrastructure
- Significant erosion, drainage and flooding issues





Outcomes – What Do We Do?

- Aging & inadequate Infrastructure
- Significant erosic , drainage and flooding issues
- Implement recommendations from 2008 Erosion, Drainage and Flooding Final Report



Stormwater Master Plan (SMP) Purpose & Priorities



- A proactive step to manage stormwater
- Focus on priorities
 - · Minimize drainage and erosion issues
 - Protect creeks and streams
 - Effective O&M of infrastructure
 - Engage the public
 - Build on existing code
 - Develop partnerships
- Establish stormwater program where Town remains in *drivers seat*

SMP has Six Components



- Component 1: Program Management
- Component 2: Stormwater Capital
 Improvement Program
- Component 3: Stormwater Operations and Maintenance Plan
- Component 4: Public Education and Outreach
- Component 5: Retrofit Outreach Program
- Component 6: Construction Site Program

Component 1: Program Management



- Envision a collaborative approach
- Coordinate among multiple Town departments
- Maximize available resources and tools (programs, code, etc.)
- Partner with other agencies to address issues of regional scale

Component 2: Stormwater Capital Improvement Program



- Identified 8 projects
- Address high priority issues
- Feasible to construct in 5.5 months (between May 1 – Oct 15)
- Typically \$1.5M or less
- Example

Component 2: Stormwater Capital Improvement Program



Component 2: Stormwater Capital Improvement Program

• Example : Davison Road Storm Drain



Component 2: Stormwater Capital Improvement Program

• Example : Davison Road Storm Drain

A. C. Marth	Location: Davison Road from #362 to Lake Mary Read, and John Mair Road from #113					Est. Days Required for Construction: 60			
10.001	to Davison Road	Project Priority Area*: 1				Expected Service Life:		25-50 year	5
LE DY	Program: Storm Drain Projects	Est. Project Cost: \$2.062.900		2.062.900		Est, Annual Maintenance Co		\$ 7.90	1000
	Davison Road generally lacks engineered proposed project versil construct surface co- (out) and gatter or avaid) along the edge of and attern dain pipting. The proposed SD a stemastate to determinisfiltration basins to interascient of Davison Road and Late Mar Deterministratifications could also be installed nerth side of Davison Road.	rainage inflawfrach sliection and conve 'pavement and inst ystem would disch o be installed near y Road. I in vacant parcels	ire. The syance all inlets arge the on the	Uncontrolled surfaces on E high mainten deposition, au flooding in di	drainage fr avison Ros mee costs, d increased windtream	om impervious ad causes erosion, sectiment d potential for facilities.	An engineered dr sediment collection reducing mainten potential for floor reduced, improving property loss.	ainage system will ag in downstream a mee needs und dra ing and slope fail ag public safety an	reduce erosis drainage facil innge issues, ture will be d preventing
AN YAY		CONSTRUCTION C		TION COS	T ESTIMATE		MAINTENANCE COST ES		STIMATE
- Aller	Item	Unit	Quan	lity Uni	Cost	Total	Unit Maint. Cost	Annual Freq.	Annual M
STATISTICS IN CONTRACT	Surface Conveyance	LF	5,20) 5	45	\$ 234,000	N/A		See Not
-2.0 350-e-	Storm Drain Pipe	LF	2,30	5 5	120	\$ 276,000	N/A		See Not
10.000	Storm Drain Manhole	EA	9	5	7,000	\$ 63,000	N/A		See Not
	Storm Drain Inlet	EA	8	5	7,500	\$ 60,000	\$ 100.00	2	8
a	Rock Lined Channel	LF	90	5	100	\$ 9,000	\$ 6.00	0.25	5
1916	Detention/Infiltration Basin	SF	10,30	0 5	40	\$ 412,000	\$ 1.20	0.5	S
1000	General Conditions	-	-	_	12%	S 127,000			
State of State	Construction Contingency	-			15%	5 178,000			
	Dispring Design and Demitting	-			1.69/	5 1,359,000			
ow John B					1271	3 203,900			1
e dikan dikan	ROWI and Acquisitions	0.000	1.0	1	\$00,000	\$ \$00,000			

Component 3: Stormwater Operations and Maintenance Plan (OMP)



- Currently staff doing great job responding to issues or fixing damage (Reactive)
- OMP = Proactive
 - Updated GIS inventory
 - Ability to prioritize actions
- Includes work-order system connected to GIS

Component 3: Stormwater Operations and Maintenance Plan (OMP)



Component 4: Public Education and Outreach (E&O)



- Foundation for future comprehensive E&O program
- Increase awareness
- Increase support for and ability to address stormwater issues

Component 5: Retrofit Outreach Program



- Focus on 2 major issues
 - Unpaved and bare areas
 - Large impervious areas
- Developed E&O material to help residents and property owners
- Example E&O Material

Component 5: Retrofit Outreach Program



Component 5: Retrofit Outreach Program



Component 6: Construction Site Program



- Improve effectiveness of Construction Site Program
- Updated and clarified Grading Permit Application
- Created user friendly brochure to assist construction site operators

Component 6: Construction Site Program



Next Steps

- Council approved on Sept. 16
- Include priority projects in CIP
- Keep using OMP to prioritize maintenance
- Conduct outreach to residents, property owners, Construction site operators.....

