



CITY OF DUNWOODY

41 Perimeter Center East, Suite 250

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MEMORANDUM

To: Honorable Mayor and City Council

From: Chuck Davis, Deputy Director of Public Works

Date: August 9, 2010

Subject: **Stormwater Inventory Update**

Public Works has completed 40% Stormwater Inventory of the City. The purpose of this inventory is to:

1. Comply with the requirements of the City's NPDES Permit to inspect at least 20% of the City's stormwater infrastructure every year.
2. Provide data for the structures and conveyances that can be used to evaluate replacement costs and remaining service life. This information is being used by the City's Finance Department for asset reporting in the City's financial reports

The Inventory, conducted by TerraMark Land Surveyors, Inc. consisted of GPS surveying all the existing stormwater structures & conveyances and determining the condition and materials of each. The condition of each was rated from Immediate Repair to Excellent. The data is summarized in the attached presentation.

Significant findings from the data include:

1. Total area inventoried is 3,640 acres, (42.8% of the City). A total of 3,958 structures and 2,975 conveyances were mapped with a replacement value of \$17.1 million.
2. Although 85% of structures and 90% of conveyances were rated in Fair or better condition the average age of the system is just under 34 years old, based on the recorded plats, the system will begin to deteriorate at an increased rate due to the age and the lack of maintenance.

Public Works is going to evaluate the data gathered with respect to the Stormwater Utility Fee in order to determine if the current fee will be adequate for maintaining the system in the future. The creation of a capital improvement plan will be a part of this evaluation process and will be modified as needed as additional inventory is completed.

Stormwater Inventory Update

Public Works Department

August 9th, 2010



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Why a Stormwater Inventory

- Comply with the Georgia's NPDES permit requirements.
- Obtain a better understanding of the Stormwater Infrastructure in order to:
 - Anticipate and plan for Capital improvements
 - Plan and conduct repairs before they become an emergency
 - Determine a value for the Stormwater Assets

How was the Inventory Completed?

- Structures and conveyances were inventoried using GPS survey equipment and pole mounted cameras
- The data collected will allow each structure or conveyance to be evaluated as to the remaining serviceable life of each.
- Methodology used allows the data to be seamlessly incorporated into the City's Geographical Information System (GIS) so that it can be easily accessed and updated.

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Layers

- ☒ Storm Structures
- ☐ Bike Route Symbols
- ☐ Dunwoody Signals
- ☒ Storm Conveyances
- ☐ Sidewalks
- ☐ FUTURE

Identify

Identify from: <Top-most layer>

Storm Structures
NANCY CREEK

Location: 2,250,805.433 1,434,395.685 Feet

Field	Value
FID	806
Shape	Point
OBJECTID	800
DrainBsnID	NANCY CREEK
StructID	00801
XCoord	2250809.411
YCoord	1434404.614
ZCoord	1024.655
LocateMeth	GPS (MAP GRADE)
StructType	HW (STRAIGHT)
StructStat	OPERATIONAL
Depth	
Length	
Width	
Cover	NOT APPLICABLE
Material	BRICK AND CONCRETE
AdjSurface	DIRT
PhysicalLoc	EASEMENT (SIDE)
Owner	DUNWOODY
IllicitDsc	NO
DischrgTyp	FALSE
ActiveFlow	YES
InstalDate	2/19/1969
InspctDate	4/14/2010
Inspector	TERRAMARK LAND SURVEYING INC
InspctType	MANUAL OBSERVATION (EXTERIOR)
InspctComm	NO COMMENT
NextInspct	<null>
DebrsDepth	1/5 FULL
ClnAssess	EXCELLENT
CleanReqd	NO
CondAssess	GOOD
StructPic1	00801-01.JPG
StructPic2	NONE
StructPic3	NONE

Identified 1 feature

Layers

- ☒ Storm Structures
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Identify

Identify from: <Top-most layer>

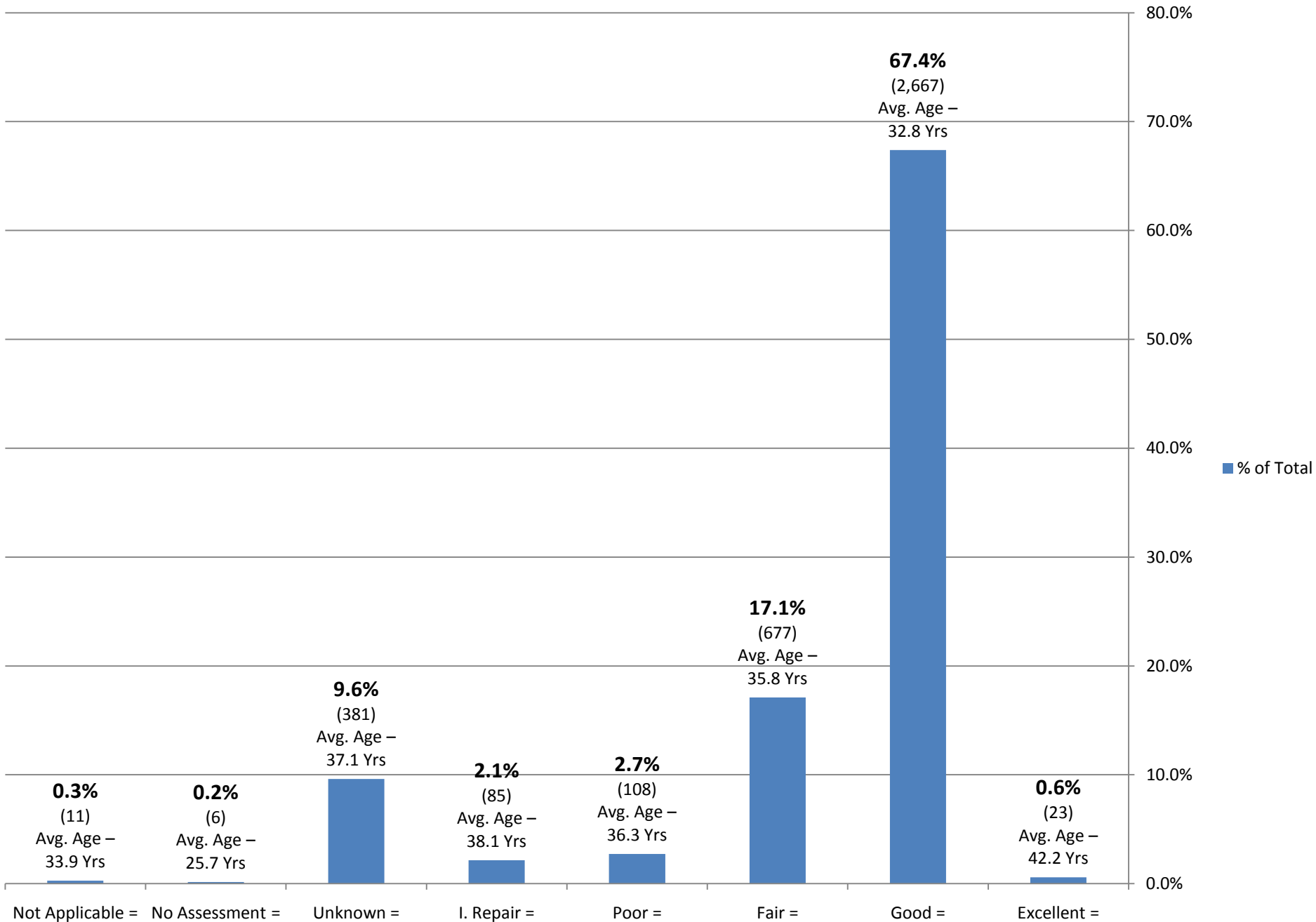
Storm Conveyances
NANCY CREEK

Location: 2,250,383.500 1,435,550.979 Feet

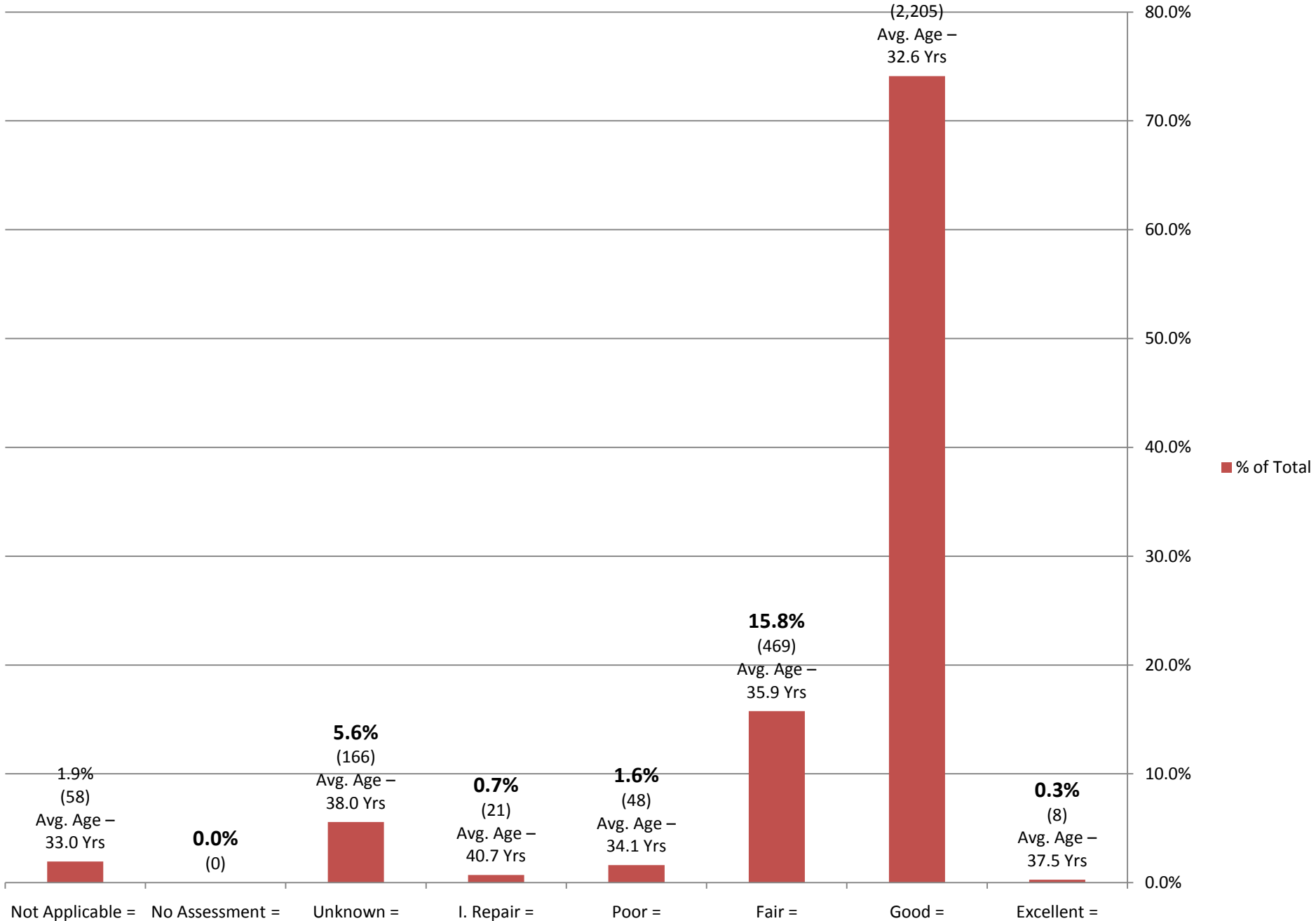
Field	Value
FID	40
Shape	Polyline
OBJECTID	41
DrainBsnID	NANCY CREEK
StructFrom	00787
StructTo	00788
LocateMeth	GPS (MAP GRADE)
ConveyType	GRAVITY PIPE
ConveyStat	OPERATIONAL
ConveyShape	ROUND PIPE
ConveyHgt	18
ConveyWide	18
ConveyLnth	177.080051745005
Material	HDPE
LinerMat	UNKNOWN
AdjSurface	GRASS
PhysicalLoc	
Owner	DUNWOODY
IllicitDsc	NO
ActiveFlow	YES
InstalDate	5/14/1969
InspctDate	4/14/2010
Inspector	TerraMark Land Surveying Inc
InspctType	CAMERA
InspctComm	NO COMMENT
NextInspct	<null>
DebrsDepth	1/5 FULL
ClnAssess	EXCELLENT
CleanReqd	NO
CondAssess	GOOD
ConveyPic1	00788-00787.JPG
ConveyPic2	NONE
ConveyPic3	NONE
Shape_Leng	177.080052

Identified 1 feature

Structure Summary



Conveyance Summary



Next Steps....

- Inventory remaining areas
- Develop a Capital Improvement and Maintenance Plan
- Evaluate Stormwater Utility Fee rate structure versus long term maintenance and capital costs