

Project Name: Buckhurst Dr to Oak Hill Dr Sanitary Relief
MSD Project No.: 12106 **Service Area:** Lower Meramec
Study Area: **Watershed:** Kiefer Creek
Municipality: Kiefer Creek

New Sewer **Pump Station**
 Sewer Rehabilitation **Public I/I Reduction**
 Tunnel **Private I/I Reduction**
 Storage Facility **Special Feature**

A. Project Information and Background **Priority Points:** 17

Tier Designation: Tier 2
Funding Category: Asset Management - Capacity

Does Project remove CSO-SSO: **If yes, List ref. No(s):**

Problem Summary:
 Overloaded sanitary sewers due to wet weather flows.

Solution Summary:
 Construct approximately 2,850 feet of 12-inch sanitary sewer and appurtenances.

Model Summary:
 The downstream four reaches are part of the Buckhurst Drive HYDRA lateral. The 10-year HGL is above the ground in this section.

General Discussion

(Discussion of pertinent aspects not elsewhere addressed (potential constructability issues, right of way concerns, background info from other sources, modifications(s) from original scope, permit considerations, utility conflicts, special features, etc.).)

No history of complaints, but since the sewer is located in/near a tree covered creek bed, surcharging and OMHs may go un-noticed. Several reaches crossing the creek currently have open work orders to be lined, which could greatly reduce the amount of wet weather flows in the system. Recommend flow monitoring after lining work is completed.

B. Construction and Project Costs

1. Construction Costs

Category	Category Construction Cost	Construction Contingency	Total Construction Cost	Net Present Worth (NPW)
New Sewer	\$555,750	\$166,725	\$722,475	\$722,475
Sewer Rehabilitation	\$0	\$0	\$0	\$0
Tunnel	\$0	\$0	\$0	\$0
Special Feature	\$0	\$0	\$0	\$0
Storage Facility	\$0	\$0	\$0	\$0
Pump Station and Forcemain	\$0	\$0	\$0	\$0
Public I/I Reduction (Sewers)	\$0	\$0	\$0	\$0
Public I/I Reduction (Manholes)	\$0	\$0	\$0	\$0
Private I/I Reduction	\$0	\$0	\$0	\$0
Projected I/I Reduction	\$0	\$0	\$0	\$0
Totals =	\$555,750	\$166,725	\$722,475	\$722,475

2. Additional Project Costs

Item	Cost Basis or Description	%	Extended Cost
Engineering (New Sewer)	Percent of New Sewer Total Construction Cost	25%	\$180,619
Engineering (Sewer Rehab)	Percent of Sewer Rehab Total Construction Cost	10%	\$0
Engineering (Tunnel)	Percent of Tunnel Total Construction Cost	25%	\$0
Engineering (Special Feature)	Percent of Special Feature Total Construction Cost	30%	\$0
Engineering (Storage Facility)	Percent of Storage Facility Total Construction Cost	30%	\$0
Engineering (Pump Station and Forcemain)	Percent of Pump Station Total Construction Cost	30%	\$0
Engineering (Public I/I Reduction)	Percent of Public I/I Reduction Total Construction Cost	15%	\$0
Private I/I Property Review	No. of Impacted Parcels at \$ 2,000 per Parcel	0	\$2,000
Engineering (Projected I/I Reduction)	Percent of Projected I/I Reduction Total Construction Cost	20%	\$0
Additional Private II Design Costs			\$0
Excessive Utility Conflict			\$0
Land Acquisition			\$0
Additional Project Cost =			\$180,619

Cost Estimate Year 2013 **Conceptual Project Capital Cost:** \$903,000
Conceptual Project Net Present Worth: \$903,000

CONSTRUCT APPROXIMATELY 2,850 LINEAL FEET 12" SANITARY SEWER AND APPURTENANCES.

23T2-001S

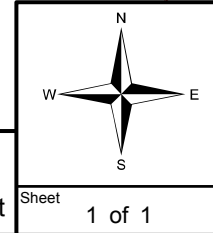
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Legend

- PS Pump Station
- Proposed Sanitary Sewer

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SKETCH ILLUSTRATES PROJECT SCOPE ONLY ALIGNMENT AND FINAL DIMENSIONS MAY CHANGE IN FINAL DESIGN



Lower Meramec Service Area	
Kiefer Creek Watershed	
Buckhurst Dr to Oak Hill Dr Sanitary Relief	
Project Definition Exhibit	
MSD Project Number 12106	Date 01/14
MSD Record ID Number -	Basemaps 23T, 24T