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**METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY**

January 29, 2015

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Re: DOJ Case No. 90-5-1-1-09000  
Submittal of Annual Progress Report and Quarterly Progress Report

Gentlemen and Madam:

In accordance with the provisions of the Consent Decree, Section XIX (Reporting Requirements), Subsection B, herewith we are transmitting the 2014 Annual Report, which covers the time period from January 1, 2014 through December 31, 2014.

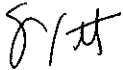
In addition, in accordance with the provisions of the Consent Decree, Section XIX (Reporting Requirements), Subsection A, herewith we are transmitting the Quarterly Progress report which covers the time period from October 1, 2014 through December 31, 2014.

A copy of each of these reports is concurrently being placed in the Public Document Repository (PDR).

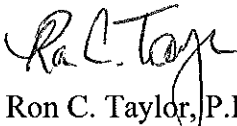
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions concerning this report please contact me.

Sincerely,



Scott A. Potter, P.E.  
Director



Ron C. Taylor, P.E.  
Overflow Abatement Program Director  
Engineering Division

Cc: Mr. David Tucker, Assistant Director, Operations  
Mr. Cyrus Q. Toosi, P.E., Assistant Director / Chief Engineer, Engineering  
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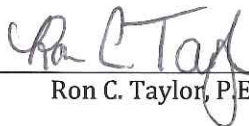
## Clean Water Nashville Overflow Abatement Program

**Metropolitan Government of Nashville and Davidson County  
Department of Water and Sewerage Services**

# CONSENT DECREE QUARTERLY PROGRESS REPORT

**October 1 through December 31, 2014**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Ron C. Taylor, P.E., Program Director

1/29/15

Date

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# Section 1

## Introduction

On March 12, 2009, the Metropolitan Government of Nashville and Davidson County, Tennessee (Metro), entered into a Consent Decree with the United States and the State of Tennessee. To fulfill the reporting requirements defined in Section XIX.A. of the Consent Decree, Metro has prepared this *Quarterly Progress Report*, which includes the following information:

1. Information on sanitary sewer overflows (SSOs) and dry-weather combined sewer system overflows (CSOs) occurring during the reporting period
2. A description of the work conducted during the reporting period to comply with the requirements of the Consent Decree
3. The anticipated work for the upcoming quarter to comply with the requirements of the Consent Decree
4. Any additional information necessary to demonstrate that Metro is adequately implementing the work

Work, as defined in the Consent Decree, includes all activities that Metro is required to perform under the Consent Decree. For the purposes of this *Quarterly Progress Report*, however, the focus will remain on current and upcoming work related to the *Corrective Action Plan/Engineering Report (CAP/ER)*, the *Long Term Control Plan (LTCP)*, and additional activities to address SSOs and CSOs.

### 1.1 Additional Programs

Several additional programs, listed below, were also required to be developed or implemented as part of the Consent Decree. Any modifications or updates to these programs will be identified in Section 4 of this report.

- *Spill and Overflow Response Plan (Section VII.C.2)* – Metro continues to operate under the current *Spill and Overflow Response Plan (SORP)*. A review of the SORP will be conducted annually with any proposed changes submitted for U.S. Environmental Protection Agency (EPA) review and approval by June 1 each year.
- *Inter-jurisdictional Agreement Program (Section VII.C.3)* – All required inter-jurisdictional agreements are now in place, and Metro will continue to operate under these agreements, including monitoring peak flows received.
- *Capacity Assurance Plan (Section VII.C.4)* – The *Capacity Assurance Plan* will continue to be applied as a tracking/approval tool for new development/flow in the sanitary sewer system (SSS).
- *Pump Station Operation Plan for Power Outages (Section VII.C.5)* – All projects identified in the *Pump Station Operation Plan for Power Outages* were completed prior to the start of the reporting period.

- *Nine Minimum Controls Compliance Plan* (Section VII.D.1) – All elements of the *Nine Minimum Controls Compliance Plan* (NMC) were completed in 2012.
- Supplemental Environmental Projects (Section VIII) – The Supplemental Environmental Projects (SEPs) required in the Consent Decree were completed in 2010.

## 1.2 Report Organization

This *Quarterly Progress Report* is organized as follows:

Section 1 – Introduction

Section 2 – *Corrective Action Plan/Engineering Report*

Section 3 – *Long Term Control Plan*

Section 4 – Additional Measures to Maintain Consent Decree Compliance

Section 5 – Quarterly SSO and Dry-Weather CSO Report

## Section 2

### *Corrective Action Plan/Engineering Report*

To address the conditions causing overflows in their sanitary sewer system, Metro developed a *Corrective Action Plan/Engineering Report (CAP/ER)* that was submitted to EPA and the Tennessee Department of Environment and Conservation (TDEC) on September 11, 2011.

The CAP/ER development began with a characterization of Metro's sanitary sewer system through extensive monitoring and modeling to understand the existing system's limitations. The need for improvements to address both current and future sewer capacity needs was then assessed, and potential alternatives were evaluated to select efficient and cost effective solutions. These recommended projects, which include infrastructure rehabilitation, additional conveyance capacity, and storage of wet weather flows, are presented in the CAP/ER.

While EPA and TDEC review the report, Metro continues to move forward with the implementation of multiple projects presented in the CAP/ER. These projects are described in the following subsections, and a schedule illustrating current and upcoming work on CAP/ER projects is presented as Appendix A.

#### 2.1 Completed CAP/ER Projects

The following projects, discussed in the CAP/ER, achieved substantial completion prior to the start of the reporting period:

- Dry Creek Wastewater Treatment Plant Optimization
- Smith Springs Equalization Storage
- Barker Road / Omohundro Equalization Storage Phase I
- West Park Equalization Storage Phase I
- Mill Creek 36-inch Trunk Sewer System Rehabilitation
- Rockwood Conveyance Improvements
- Holiday Travel Park Gravity Conversion
- Whites Creek Wastewater Treatment Plant (WWTP) Optimization and Disinfection Project
- Whites Creek Wastewater Pumping Station
- Dodson Chapel Equalization Tank and Wastewater Pumping Station Expansion
- Joelton Rehabilitation

## 2.2 CAP/ER Projects under Construction

The following projects, discussed in the CAP/ER, were under construction during the reporting period:

- Neely's Bend Rehabilitation

Based on the condition assessment data collected in the area adjacent to the Neely's Bend Rehabilitation project (as presented in the CAP/ER), the area targeted for rehabilitation was extended to include all gravity sewers that drain directly to the Neely's Bend Pump Station. Approximately 31,400 linear feet of gravity sewer and associated manholes were evaluated during design. The scope for construction consists of cured-in-place pipe lining of approximately 22,000 linear feet of sewer, rehabilitation of more than 110 manholes, and approximately 250 service renewals using cured-in-place pipe lining and open-cut techniques.

Design began on September 27, 2012, and was completed in June 2013. Advertisement for construction began on July 1, 2013, with bids due on August 2, 2013. However, following a protest regarding the bid, the project was re-advertised for bids, and new bids were received on October 14, 2013. Construction activities commenced on December 16, 2013, and achieved substantial completion on December 8, 2014,

- Shelby Park Rehabilitation – Area 1 - Virginia Avenue

This rehabilitation project is the first of multiple projects that will be conducted in the Shelby Park Rehabilitation project area. The area evaluated for rehabilitation included approximately 54,400 linear feet of gravity sewer. The resulting construction project consists of cured-in-place pipe lining of over 50,000 linear feet of gravity sewer, rehabilitation of associated manholes, and over 700 service renewals using cured-in-place pipe lining or open-cut techniques.

Design began on September 11, 2012, and was completed in June 2013. Advertisement for construction began on August 14, 2013, and the contract was awarded in September 2013. Construction activities began on January 13, 2014, and are expected to continue during the upcoming quarter.

- Lakewood Water and Sewer Replacement

The design of sewer, water, and stormwater improvements in the Lakewood area is complete. Advertisement for a two-step procurement process began during the 2<sup>nd</sup> Quarter of 2013. Bids for construction from the three pre-qualified contractors were received on October 4, 2013, and the Notice of Award was issued on October 17, 2013. Construction activities began on January 27, 2014, and are anticipated to continue during the upcoming quarter.

This project represents the first of two phases of work in the Lakewood area.

- Mill Creek / Opryland Equalization Facility - Phase II

Phase II of the Mill Creek / Opryland Equalization Facility project includes the construction of approximately 19 million gallons of additional storage. Design began on August 10, 2012, and was complete, including obtaining the required permits and approvals, in July 2013. Advertisement for construction began on August 14, 2013, and the contract was awarded in



September 2013. Construction activities began on January 8, 2014, and are expected to be substantially complete during the upcoming quarter.

- Cowan / Riverside Rehabilitation - Area 1 - Jones Avenue

This rehabilitation project is the first of multiple projects that will be conducted in the Cowan / Riverside Rehabilitation project area. The area evaluated for rehabilitation included approximately 50,200 linear feet of gravity sewer and 270 manholes. The resulting construction project consists of cured-in-place pipe lining of over 40,000 linear feet of gravity sewer, rehabilitation of associated manholes, and over 630 service renewals using cured-in-place pipe lining or open-cut techniques.

Design began on February 4, 2013, and was completed during September 2013. Advertisement for construction began on October 7, 2013, and bids were received on November 8, 2013. Construction began on January 29, 2014, and is anticipated to continue during the upcoming quarter.

- Shelby Park Rehabilitation - Area 2 - Norvel Avenue

This rehabilitation project is the second of multiple projects to be conducted in the Shelby Park Rehabilitation project area. The area evaluated for rehabilitation included approximately 57,000 linear feet of gravity sewer and 330 manholes. The resulting construction project consists of cured-in-place pipe lining of approximately 57,000 linear feet of gravity sewer, rehabilitation of associated manholes, and over 700 service renewals using cured-in-place pipe lining or open-cut techniques.

Design began on July 3, 2013, and was completed in January 2014. Advertisement for construction began on February 5, 2014, and the contract was awarded in March 2014. Construction began on May 12, 2014, and is expected to continue through the upcoming quarter.

- Cowan / Riverside Rehabilitation - Area 2 - Dickerson Pike

This rehabilitation project is the second of multiple projects that will be conducted in the Cowan / Riverside Rehabilitation project area. The area evaluated for rehabilitation included approximately 51,400 linear feet of gravity sewer and 290 manholes. The resulting construction project consists of cured-in-place pipe lining of approximately 42,000 linear feet of gravity sewer, rehabilitation of associated manholes, and over 400 service renewals using cured-in-place pipe lining or open-cut techniques.

Design began on July 3, 2013, and was completed in March 2014. Advertisement for construction began on March 14, 2014, and a contract was awarded in May 2014. Construction activities began on July 7, 2014, and are anticipated to continue through the upcoming quarter.

- Highway 100 / Tyne Boulevard - Trimble Rehabilitation

The Highway 100 / Tyne Boulevard Pipe Improvements project, as presented in the CAP/ER, consisted of approximately 18,500 linear feet of conveyance improvements to alleviate overflows and surcharging in the existing gravity sewer. A detailed review of the existing sewer route and flows in the area indicated that rehabilitation to reduce wet weather flows in this

area may be a viable option to address overflows. Because of this, the Highway 100 / Tyne Boulevard Pipe Improvements project has been delayed to allow time for the completion of the Highway 100 / Tyne Boulevard - Trimble Rehabilitation project. The area evaluated for rehabilitation included approximately 63,000 linear feet of gravity sewer and 300 manholes. The resulting construction project consists of cured-in-place pipe lining of approximately 32,000 linear feet of gravity sewer, rehabilitation of associated manholes, and approximately 170 service renewals using cured-in-place pipe lining or open-cut techniques.

Design began on September 17, 2013, and was completed in March 2014. Advertisement for construction began on April 23, 2014, and the contract was awarded in June 2014. Construction activities began on August 12, 2014, and are anticipated to continue through the upcoming quarter.

## 2.3 CAP/ER Projects under Design

The following projects, discussed in the CAP/ER, were under design during the reporting period:

- West Park Equalization Facility Phase II

In order to minimize impacts to the surrounding neighborhood, Phases II and III of the West Park Equalization Facility were combined into a single design and construction project. Design began in May 2012; however, during preliminary design it was determined that potential flood impacts to adjacent properties required an alternate site for the equalization tank. Following additional investigation, Metro selected the adjacent park site to accommodate the required storage volume. Design efforts for the equalization tank were restarted during the 1<sup>st</sup> Quarter of 2013 and are complete including permitting. Advertisement for construction is anticipated to begin in the upcoming quarter.

When constructed, the additional improvements at the West Park Equalization Facility are expected to add 21 million gallons of storage and expanded pumping capacity.

- Dodson Chapel Pipe Improvements

Following the completion of the Rockwood Conveyance Improvements project and subsequent updates to the hydraulic model in this area, evaluation of the collection system in the Dodson Chapel Pipe Improvements area indicated that the extents of the proposed project could be reduced while still addressing overflows. The current project consists of increasing the conveyance capacity of approximately 3,400 linear feet of sewer. Design began on October 8, 2012. In mid-2013, an analysis of the 60 percent design and the associated Dodson Chapel Equalization Tank and Wastewater Pumping Station Expansion project indicated that an unacceptable level of surcharging is predicted upstream of the project area. To address this, the existing design was reviewed and modified to replace the proposed inverted siphon with an aerial crossing. Design activities were completed in June 2014. Permitting and easement / right of entry activities were completed during the reporting. Advertisement for construction began on November 8, 2014. Award of the construction contract and construction commencement are anticipated in the upcoming quarter.

- **Brick Church Pike Pipe Improvements**

The Brick Church Pike Pipe Improvements project, as presented in the CAP/ER, consisted of increasing the conveyance capacity of approximately 15,500 linear feet of gravity sewer. Following the analysis of additional flow monitoring conducted in the spring of 2013, the project's scope was revised to include approximately 10,000 linear feet of pipe replacement to increase the sewer's conveyance capacity and approximately 3,800 linear feet of rehabilitation of the existing sewer. The rehabilitation project will be advertised as a separate construction project, the Westchester Drive Rehabilitation project, as described below. Additional rehabilitation activities are anticipated to take place in the upstream portion of the project area, including the small diameter sewers, through a separate, future project, the Tuckahoe and Nesbitt Rehabilitation project.

Proposals for design of the Brick Church Pipe Improvements project were submitted on January 11, 2013, and design for this project began on July 25, 2013. Design activities for the Brick Church Pipe Improvements are anticipated to continue through the upcoming quarter.

- **Westchester Drive Rehabilitation**

The Westchester Drive Rehabilitation project was developed as a separate project for the rehabilitation portion of the Brick Church Pike Pipe Improvements project. This project consists of the rehabilitation of approximately 3,800 linear feet of gravity sewer. Design activities for the Westchester Drive Rehabilitation project began on July 25, 2013, are anticipated to be completed during the upcoming quarter.

- **Shelby Park Rehabilitation - Area 3 - Greenland Avenue**

This rehabilitation project is the third of multiple projects that will be conducted in the Shelby Park Rehabilitation project area. The area to be evaluated for rehabilitation includes approximately 49,000 linear feet of gravity sewer and 260 manholes. Design began on December 5, 2013, and was completed in May 2014. Advertisement for construction began on August 27, 2014, and bids were received on September 25, 2014. However, a protest regarding the bid delayed the award of the contract. Construction activities are anticipated to begin during the upcoming quarter.

- **Davidson and Brook Hollow Sewer Improvements**

The Davidson and Brook Hollow Sewer Improvements project, referred to as the 622 Davidson Rehabilitation in the CAP/ER, included the evaluation of approximately 53,800 linear feet of gravity sewer and 300 manholes for rehabilitation. Additional condition assessment data, including flow monitoring and smoke testing data, has also been collected and analyzed. That analysis indicated that approximately 1,900 linear feet of sewer in this area requires upsizing in order to address the associated overflow. The project description was revised to include both the upsizing as well as repair of several adjacent pipe segments. Design began on April 24, 2014, and is anticipated to continue through the upcoming quarter.

- **Shelby Park Rehabilitation - Area 4 - Brush Hill Road**

This rehabilitation project is the fourth of multiple projects that will be conducted in the Shelby Park Rehabilitation project area. The area to be evaluated for rehabilitation includes

approximately 47,400 linear feet of gravity sewer and 260 manholes. Design began on October 27, 2014, and is anticipated to continue through the upcoming quarter.

- Cowan / Riverside Rehabilitation – Area 3 – West Trinity Lane

This rehabilitation project is the third of multiple projects that will be conducted in the Cowan / Riverside Rehabilitation project area. The area to be evaluated for rehabilitation includes approximately 48,100 linear feet of gravity sewer and 260 manholes. Design began on November 17, 2014, and is anticipated to continue through the upcoming quarter.

## 2.4 Upcoming CAP/ER Projects

The following projects, discussed in the CAP/ER, are anticipated to begin procurement for design services during the upcoming quarter:

- 28<sup>th</sup> Avenue Rehabilitation – Area 1 – Clifton Avenue

The 28<sup>th</sup> Avenue Rehabilitation - Area 1 – Clifton Avenue project is the first of multiple projects that will be conducted in the 28<sup>th</sup> Avenue Rehabilitation project area. The area to be evaluated for rehabilitation includes approximately 44,000 linear feet of gravity sewer and associated manholes. A preliminary review of the condition assessment data collected in the project area indicated several locations that require dye testing and closed-circuit television (CCTV) inspection. Procurement of design services began during the reporting period, and design is anticipated to begin in the upcoming quarter.

- Davidson Branch Pump Station and Equalization Facility

The Davidson Branch Pump Station and Equalization Facility project, referred to as the Davidson Branch Equalization Storage project in the CAP/ER, includes the relocation of an existing duty station and construction of a wastewater storage tank and wet weather pumping station on a property adjacent to the existing Davidson Branch Pump Station. The property where the facility will be located was acquired during the reporting period. Procurement of design services continued during the reporting period. Design is anticipated to begin in the upcoming quarter.

- Cowan / Riverside Rehabilitation - Area 4 – Pages Branch

This rehabilitation project is the fourth of multiple projects that will be conducted in the Cowan / Riverside Rehabilitation project area. The area to be evaluated for rehabilitation includes approximately 54,200 linear feet of gravity sewer and 260 manholes. Procurement of design services was initiated during the reporting period, and design is anticipated to begin in the upcoming quarter.

- Smith Springs Rehabilitation – Area 1 - Priest Lake Meadows

The Smith Springs Rehabilitation – Area 1 - Priest Lake Meadows project is the first of multiple rehabilitation projects that will be conducted upstream of the Smith Springs Pump Station. Based on additional flow monitoring data, the boundary of the project area, as presented in the CAP/ER, has been adjusted to target areas that are believed to contribute to higher wet weather flows. The area to be evaluated for rehabilitation includes approximately 63,800 linear feet of

gravity sewer and associated manholes. Procurement of design services was initiated during the reporting period, and design is anticipated to begin in the upcoming quarter.

- Gibson Creek Rehabilitation – Area 1

The Gibson Creek Rehabilitation – Area 1 project is the first of multiple rehabilitation projects that will be conducted upstream of the Gibson Creek Pump Station. The area to be evaluated for rehabilitation includes approximately 57,000 linear feet of gravity sewer and associated manholes. Procurement of design services is anticipated to begin late in the upcoming quarter.

In addition to the projects listed above, Metro continues to conduct planning activities for multiple projects including acquiring necessary land to site facilities and collecting sewer condition assessment data.

## Section 3

### *Long Term Control Plan*

To reduce the occurrence and impact of combined sewer overflows into the Cumberland River, Metro developed an update to the *Long Term Control Plan* (LTCP), that was submitted to EPA and TDEC on September 11, 2011.

The LTCP followed EPA's *Combined Sewer Overflow Control Policy* in implementing a rigorous process for identifying and evaluating alternatives to reduce combined sewer overflows. Consideration included financial and engineering analyses to develop recommended improvements in conjunction with four key objectives that were established early in the planning process:

- Improve the water quality of the Cumberland River by reducing impacts from combined sewer overflows
- Provide a level of CSO control that results in improvements in water quality that are consistent with the community's use of the Cumberland River
- Align investment in CSO controls to be commensurate with the contribution of CSOs to water quality relative to other sources
- Consider the impact of the overall program cost on the ratepayers in the current economic climate

These goals and objectives were developed based on feedback provided by representatives from MWS, local government, and the community through a public engagement campaign developed to solicit input from affected stakeholders.

Metro continues to work with EPA and TDEC to address preliminary feedback on the LTCP. Metro has provided additional information pertaining to the proposed LTCP's compliance with Tennessee's water quality criteria, including a memorandum summarizing additional data describing the impact of CSO discharges on water quality in the Cumberland River. Discussions have been on-going throughout the reporting period and are expected to continue through the upcoming quarter.

As review of the LTCP continues, Metro continues to move forward with the implementation of the Central WWTP Capacity Improvements and CSO Reduction project; however, Metro does not intend to move forward with other projects presented in the LTCP until approval is obtained. Active projects are described in the following subsections, and a schedule illustrating current and upcoming work on LTCP projects is presented as Appendix A.

#### 3.1 Completed LTCP Projects

The following projects, discussed in the LTCP, were completed prior to the start of the reporting period:

- Broadway Improvements
- Washington CSO Facility Improvements

- Van Buren Improvements
- Driftwood Equalization Basin Expansion
- Apex Sewer Corrections

## 3.2 LTCP Projects under Construction

There are currently no LTCP projects under construction.

## 3.3 LTCP Projects under Design

There are currently no LTCP projects under design.

## 3.4 Upcoming LTCP Projects

The following projects, discussed in the LTCP, are anticipated to begin procurement for design services during the upcoming quarter:

- Central WWTP Capacity Improvements and CSO Reduction

The Central WWTP Capacity Improvements and CSO Reduction project is will reduce the overflow frequency and volume from the Kerrigan CSO by increasing both the wet weather treatment capacity of the Central WWTP and the overall capacity of the Central Pumping Station. The project will also add on-site CSO storage and equalization to assist in managing the dramatic flow rate increases from the combined sewer system during intense rainfall events. This project is the result of the *Central Wastewater Treatment Plant Optimization Study* which was finalized during the reporting period. The study identified limiting factors in each of the Central WWTP's unit processes and confirmed that peak wet weather secondary treatment capacity could be significantly increased through upgrades to the existing headworks, secondary aeration, and final clarification systems without building new tankage. As such, this project replaces the following projects presented in the LTCP:

- CWWTP Optimization and EQ Conversion
- CWWTP EQ Addition Phase 1
- CWWTP Pumps / EQ Grit Equipment
- CWWTP EQ Addition Phase 2
- CWWTP EQ Addition Phase 3

It is anticipated that the advertisement for design services for the Central WWTP Capacity Improvements and CSO Reduction project will be published in early January 2015, with the procurement of design services continuing throughout the upcoming quarter.

No additional LTCP projects are anticipated to begin design during the upcoming quarter.

## Section 4

# Additional Measures to Maintain Consent Decree Compliance

In addition to the CAP/ER and LTCP projects described in the previous sections, the measures described in the following subsections are related to Metro's on-going Consent Decree compliance.

### 4.1 2013 Annual Sewer Rehabilitation

Design of the 2013 Annual Sewer Rehabilitation project commenced on June 23, 2013, and was completed in June 2014. Advertisement for construction began on July 8, 2014, and the contract was awarded in September 2014. Construction activities began on October 15, 2014, and are anticipated to continue through the upcoming quarter. For this project, which extends throughout the Metro service area, approximately 150 pipe segments have been identified for repair or rehabilitation. These sewers are located in areas outside of CAP/ER rehabilitation areas and are classified as high-priority or medium-priority sewers for evaluation based upon their observed condition as well as their potential consequence of failure.

### 4.2 2014 Annual Rehabilitation – Whites Creek Trunk

The 2014 Annual Rehabilitation – Area 1 - Whites Creek Trunk project consists of the evaluation and rehabilitation of the trunk sewer that follows or is adjacent to Whites Creek. The area to be evaluated for rehabilitation includes approximately 55,800 linear feet of gravity sewer, ranging in diameter from 8 to 60 inches. These sewers are located outside of CAP/ER rehabilitation areas and are classified as high-priority sewers for evaluation due to observations of infiltration. Design began on October 13, 2014, and is anticipated to continue through the reporting period.



## Section 5

# Quarterly SSO and Dry Weather CSO Report

During the 4<sup>th</sup> Quarter of 2014, Metro experienced 75 SSOs, as listed in **Table 5-1**.

No dry-weather CSOs occurred during the reporting period.

Table 5-1 Quarterly SSO Report

Quarterly SSO Report									
October 1 through December 31, 2014									
Event Start Date	Event End Date	Rainfall (inches)	Duration (hours)	Overflow Volume (MG)	Overflow Cause	Location Manhole ID	Location	Unpermitted Discharge	Building Backup
01-Oct-14	01-Oct-14	0.00	1.00	0.0001	Blockage	WLS052K061	317 Matterhorn Dr	No	No
05-Oct-14	05-Oct-14	0.00	3.00	0.001	Blockage	13308082	829 Reischa Ct	No	No
05-Oct-14	05-Oct-14	0.00	2.00	0.001	Blockage	14808058	32 Waikiki Blvd	No	No
11-Oct-14	11-Oct-14	1.83	3.00	0.15	Electrical	08709040	Farmingham Woods SPS	Yes	No
12-Oct-14	12-Oct-14	0.03	1.00	0.001	Blockage	09310147	301 3rd Ave S	Yes	No
13-Oct-14	14-Oct-14	3.45	27.00	0.001	Rainfall	05010033	3414 Brick Church Pk	Yes	No
13-Oct-14	14-Oct-14	3.02	12.59	0.625	Rainfall	04312004	Vandiver SPS	Yes	No
13-Oct-14	14-Oct-14	2.70	11.16	0.26	Rainfall	05116016	Loves Branch SPS	Yes	No
13-Oct-14	14-Oct-14	2.82	16.50	1.806	Rainfall	10210012	Davidson Branch SPS	Yes	No
13-Oct-14	14-Oct-14	2.67	4.50	0.2	Rainfall	09015045	Sunliner SPS	Yes	No
13-Oct-14	14-Oct-14	3.11	3.75	0.318	Rainfall	09104025	28th Ave SPS / Centennial Blvd.	Yes	No
13-Oct-14	14-Oct-14	4.02	10.00	0.03	Rainfall	01416001	Joelton SPS	Yes	No
13-Oct-14	14-Oct-14	2.82	13.92	0.679	Rainfall	09011002	516 Basswood Ave.	Yes	No
14-Oct-14	14-Oct-14	2.70	5.00	0.001	Rainfall	03413034	1442 Gallatin Rd	No	No
14-Oct-14	14-Oct-14	2.82	13.00	0.001	Rainfall	09012057	6303 Henry Ford Dr	No	No
14-Oct-14	14-Oct-14	2.52	15.00	0.1	Rainfall	11907146	431 E Thompson Ln	Yes	No
14-Oct-14	15-Oct-14	3.43	22.00	0.001	Rainfall	06001011	3258 Brick Church Pk	No	No
14-Oct-14	14-Oct-14	2.82	3.00	0.0001	Rainfall	09015008	471 Annex Ave	No	No
14-Oct-14	15-Oct-14	2.82	24.00	0.001	Rainfall	11507055	615 Georgetown Dr	No	No
14-Oct-14	15-Oct-14	3.43	22.00	0.001	Rainfall	06001013	3258 Brick Church Pk	No	No
14-Oct-14	14-Oct-14	2.52	17.00	0.001	Rainfall	10616031	416 Hollydale Dr	Yes	No
14-Oct-14	14-Oct-14	2.70	19.42	1.495	Rainfall	13609002	Smith Springs SPS	Yes	No
14-Oct-14	14-Oct-14	2.70	3.33	0.307	Rainfall	03411009	Dry Creek SPS	Yes	No
14-Oct-14	14-Oct-14	2.41	9.00	0.2	Rainfall	05213002	Madison Heights SPS	Yes	No
14-Oct-14	14-Oct-14	2.90	4.00	0.25	Rainfall	17609035	Hurricane Creek SPS	Yes	No
14-Oct-14	14-Oct-14	2.41	8.50	0.15	Rainfall	05207007	Berwick Trail SPS / Center St.	Yes	No
14-Oct-14	14-Oct-14	2.90	13.00	0.1	Rainfall	07008061	Riverside SPS	Yes	No
14-Oct-14	14-Oct-14	2.52	13.00	0.5	Rainfall	15110038	Longhunter Chase SPS	Yes	No
14-Oct-14	15-Oct-14	2.81	26.17	2.317	Rainfall	08410007	149 Barker Rd	Yes	No
14-Oct-14	14-Oct-14	2.70	9.50	0.001	Rainfall	04309041	303 N Dupont Ave	No	No
14-Oct-14	14-Oct-14	2.70	10.00	0.001	Rainfall	13607014	177 Timber Ridge Dr	Yes	No

## Quarterly SSO Report

### October 1 through December 31, 2014

Event Start Date	Event End Date	Rainfall (inches)	Duration (hours)	Overflow Volume (MG)	Overflow Cause	Location Manhole ID	Location	Unpermitted Discharge	Building Backup
14-Oct-14	14-Oct-14	2.93	12.00	0.001	Rainfall	13007002	4302 Harding Pl	Yes	No
14-Oct-14	15-Oct-14	3.43	22.00	0.001	Rainfall	05013010	3300 Briley Park Blvd S	No	No
14-Oct-14	14-Oct-14	2.52	15.00	0.001	Rainfall	11909113	2803 Foster Ave	Yes	No
14-Oct-14	15-Oct-14	2.82	24.00	0.001	Rainfall	15107059	622 Davidson Rd	No	No
14-Oct-14	15-Oct-14	2.81	34.00	0.1	Rainfall	09510050	501 Bismark Dr	No	No
29-Oct-14	29-Oct-14	0.00	3.00	0.0001	Blockage	10705024	808 Patricia Dr	Yes	No
04-Nov-14	04-Nov-14	0.00	2.00	0.001	Blockage	07112060	910 Chickasaw Ave	No	No
10-Nov-14	10-Nov-14	0.00	2.00	0.00001	Blockage	11807067	2805 Azalea Pl	No	No
11-Nov-14	11-Nov-14	0.07	3.00	0.001	Blockage	14416028	5925 Timothy Dr	No	No
13-Nov-14	13-Nov-14	0.00	2.50	0.0001	Blockage	10802001	2809 Shauna Ct	No	No
13-Nov-14	13-Nov-14	0.00	1.50	0.001	Blockage	09114091	234 Orlando Ave	Yes	No
14-Nov-14	15-Nov-14	0.00	3.00	0.001	Blockage	13413036	4809 Sunlight Dr	No	No
17-Nov-14	17-Nov-14	1.65	1.00	0.001	Blockage	08603023	513 Old Lebanon Dirt Rd	Yes	No
17-Nov-14	17-Nov-14	1.23	9.00	0.1	Other	07008061	Riverside SPS	Yes	No
17-Nov-14	17-Nov-14	1.65	0.50	0.004	Mechanical	08410007	149 Barker Rd	Yes	No
21-Nov-14	21-Nov-14	0.00	3.00	0.001	Blockage	05914031	740 Moormans Arm Rd	Yes	No
22-Nov-14	22-Nov-14	0.00	2.00	0.00001	Blockage	17102038	5908 Stonebrook Dr	Yes	No
22-Nov-14	22-Nov-14	0.00	2.50	0.00001	Blockage	09306120	615 Church St	No	No
26-Nov-14	26-Nov-14	0.07	1.00	0.00001	Blockage	06009017	565 Brick Church Park Dr	Yes	No
03-Dec-14	03-Dec-14	0.00	3.00	0.001	Force Main	04307042	747 River Landing Way	Yes	No
05-Dec-14	06-Dec-14	2.32	12.33	0.477	Rainfall	04312004	Vandiver SPS	Yes	No
05-Dec-14	06-Dec-14	2.47	16.66	0.771	Rainfall	05116016	Loves Branch SPS	Yes	No
05-Dec-14	06-Dec-14	2.47	10.75	2.192	Rainfall	05205001	Gibson Creek SPS	Yes	No
05-Dec-14	06-Dec-14	1.82	16.59	1.221	Rainfall	10210012	Davidson Branch SPS	Yes	No
05-Dec-14	05-Dec-14	1.83	1.00	0.02	Rainfall	05213002	Madison Heights SPS	Yes	No
05-Dec-14	06-Dec-14	2.08	19.00	0.3	Rainfall	07008061	Riverside SPS	Yes	No
05-Dec-14	06-Dec-14	2.01	9.34	0.34	Rainfall	07114041	Cowan St. SPS	Yes	No
06-Dec-14	07-Dec-14	2.01	24.00	0.001	Rainfall	05914081	740 Moormans Arm Rd	Yes	No
06-Dec-14	07-Dec-14	2.63	24.00	0.0001	Rainfall	05010033	3414 Brick Church Pk	Yes	No
06-Dec-14	07-Dec-14	2.01	28.50	0.0001	Rainfall	05911027	701 Rowan Dr	No	No
06-Dec-14	07-Dec-14	2.01	29.00	0.001	Rainfall	05911028	709 Rowan Dr	No	No
06-Dec-14	06-Dec-14	1.45	3.00	0.001	Blockage	11706063	2164 Golf Club Ln	No	No

## Quarterly SSO Report

### October 1 through December 31, 2014

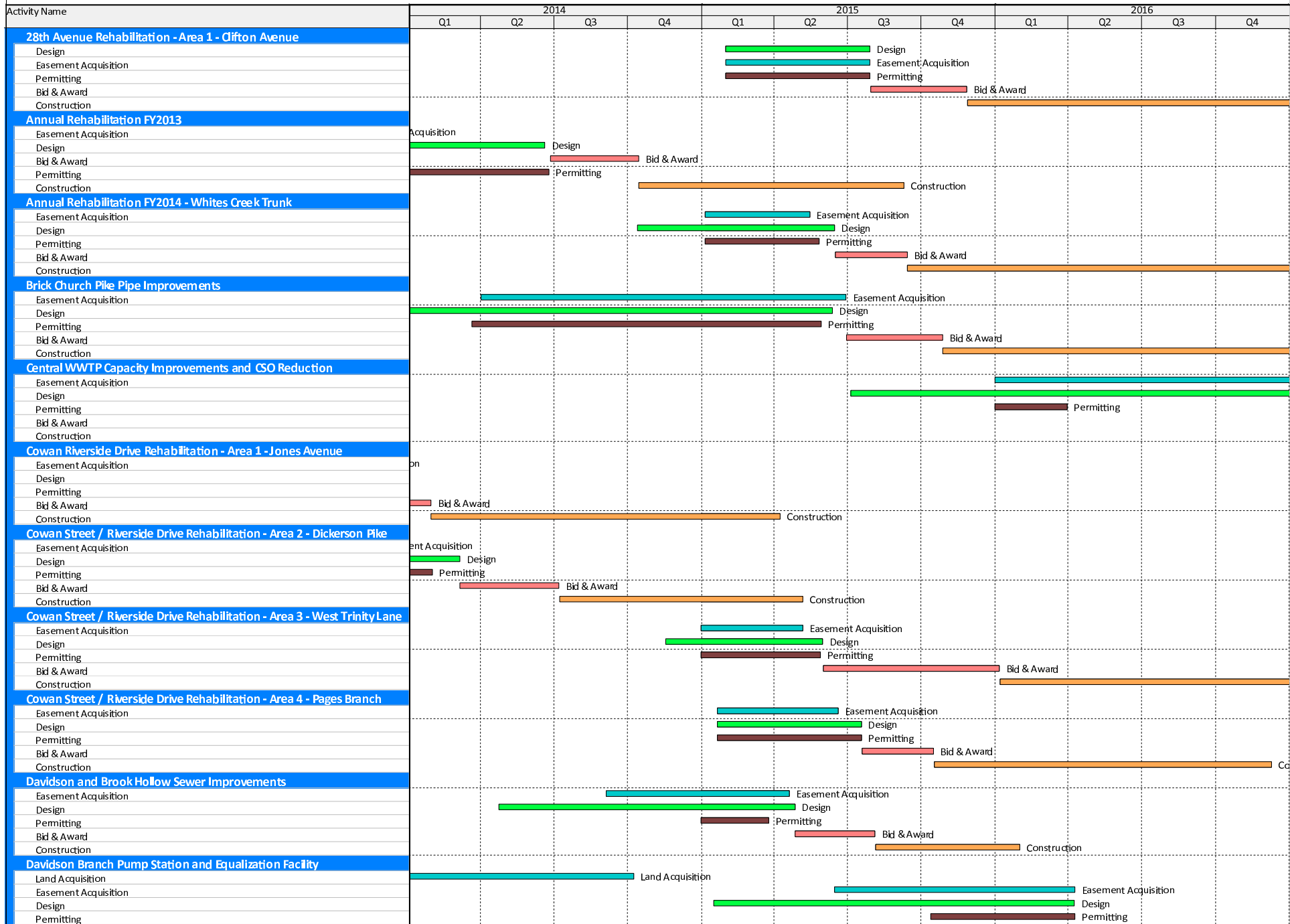
Event Start Date	Event End Date	Rainfall (inches)	Duration (hours)	Overflow Volume (MG)	Overflow Cause	Location Manhole ID	Location	Unpermitted Discharge	Building Backup
06-Dec-14	07-Dec-14	2.63	24.00	0.001	Rainfall	06001013	3258 Brick Church Pk	No	No
06-Dec-14	07-Dec-14	2.01	29.00	0.001	Rainfall	05915182	3812 Cravath Dr	No	No
06-Dec-14	07-Dec-14	2.63	24.00	0.001	Rainfall	06001011	3258 Brick Church Pk	No	No
06-Dec-14	06-Dec-14	2.47	3.00	0.05	Rainfall	05207007	Berwick Trail SPS / Center St.	Yes	No
06-Dec-14	06-Dec-14	1.40	10.42	0.187	Rainfall	08410007	149 Barker Rd	Yes	No
06-Dec-14	07-Dec-14	2.63	24.00	0.001	Rainfall	05013010	3300 Briley Park Blvd S	No	No
19-Dec-14	19-Dec-14	0.00	2.00	0.00001	Blockage	05914031	740 Moormans Arm Rd	Yes	No
22-Dec-14	22-Dec-14	0.03	2.00	0.001	Blockage	13316098	700 Whispering Oaks Pl	Yes	No
22-Dec-14	22-Dec-14	0.10	1.50	0.001	Blockage	10401121	3510 Wrenwood Dr	Yes	No
24-Dec-14	24-Dec-14	1.05	2.50	0.001	Blockage	18105008	6448 Nolensville Pk	Yes	No
26-Dec-14	26-Dec-14	0.00	0.75	0.001	Blockage	06115005	3918 Burrus St	No	No
27-Dec-14	27-Dec-14	0.41	0.75	0.0001	Blockage	16206025CO	116 Valley Way	Yes	No

# Appendix A

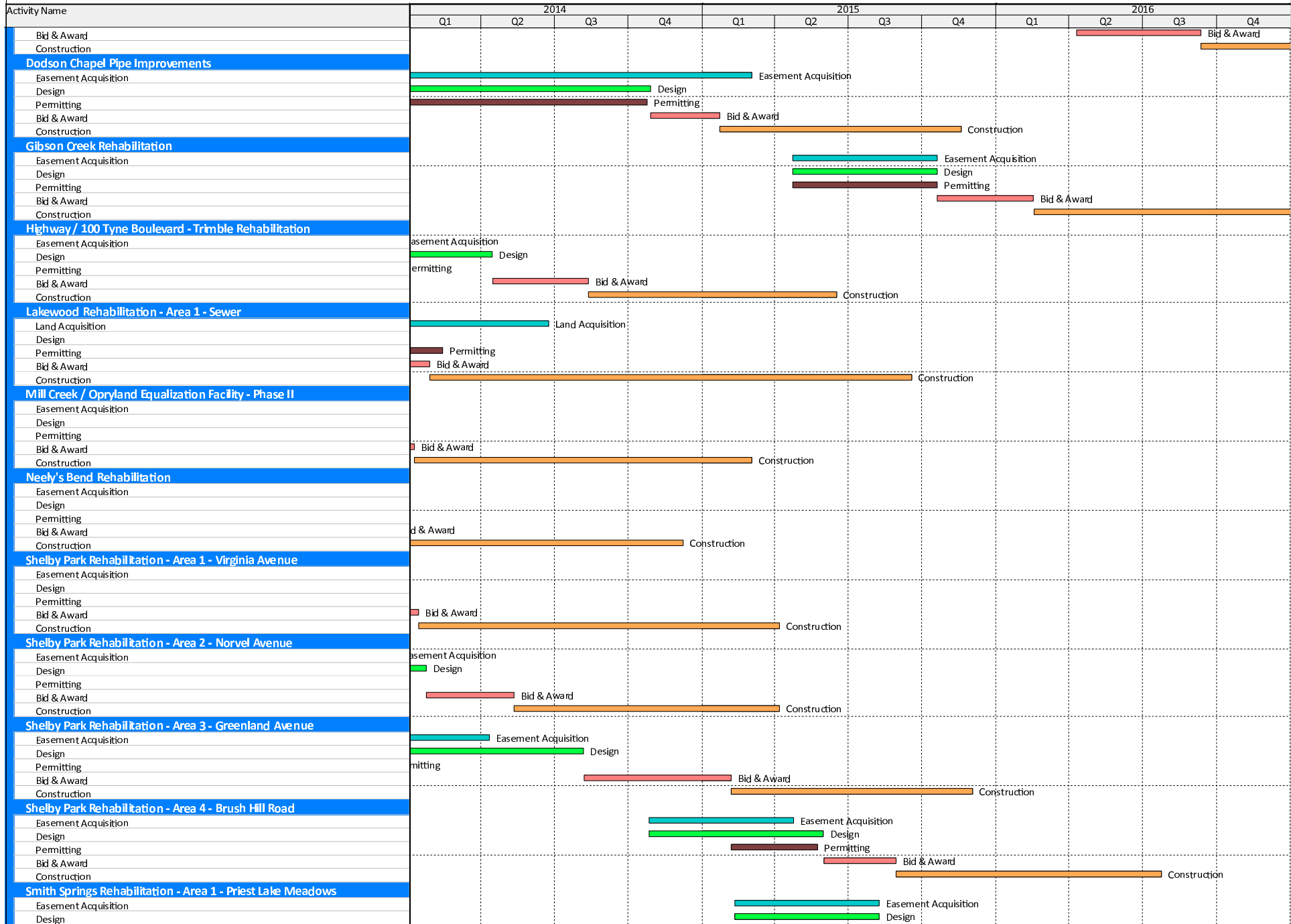
## Schedule for Current and Upcoming Projects

# Nashville Overflow Abatement Program

## 2014 Quarterly Progress Report - 4th Quarter



# Nashville Overflow Abatement Program 2014 Quarterly Progress Report - 4th Quarter



## Nashville Overflow Abatement Program 2014 Quarterly Progress Report - 4th Quarter

