

To submit comments on this report please use the contact information below:

**Mr. Kyle Tarnoviski**, Project Manager, District 3 Engineering Systems

*Email:* [ktarnoviski@sha.state.md.us](mailto:ktarnoviski@sha.state.md.us)

*Address:* SHA District 3 Office, 9300 Kenilworth Avenue, Greenbelt, MD 20770

**Ms. Chrissy Brandt**, SHA Environmental Manager

*Email:* [cbrandt@sha.state.md.us](mailto:cbrandt@sha.state.md.us)

*Address:* SHA Environmental Planning Division, Mail Stop C-301, 707 North Calvert Street, Baltimore, MD 21202

MD 124 (MIDCOUNTY HIGHWAY) AT  
SAYBROOKE OAKS BOULEVARD/  
WOODFIELD ROAD

AIR QUALITY ANALYSIS  
TECHNICAL REPORT

October 2013

**Montgomery County, Maryland**



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION



MARYLAND DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

---

# TABLE OF CONTENTS

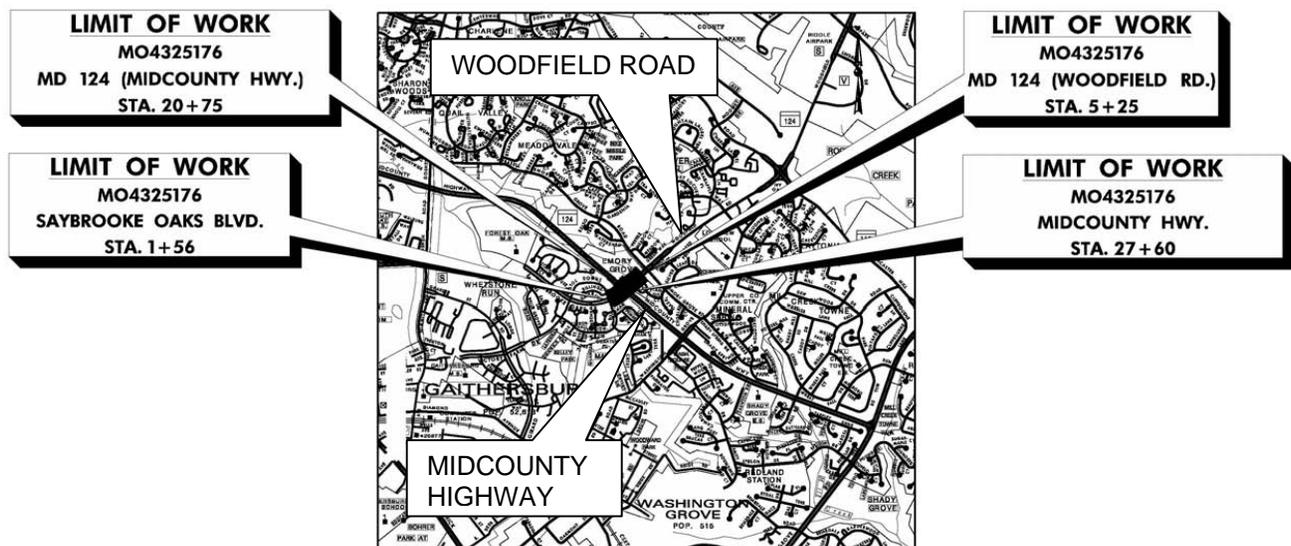
<b>I. INTRODUCTION</b> .....	1
<b>II. AIR QUALITY BACKGROUND</b> .....	2
<b>III. ENVIRONMENTAL ANALYSIS</b> .....	4
<b>IV. ENVIRONMENTAL CONSEQUENCES</b> .....	5
1. Carbon Monoxide (CO) Assessment .....	6
2. Particulate Matter (PM <sub>2.5</sub> ) Assessment .....	6
3. MSAT Assessment.....	8
4. Greenhouse Gas Assessment .....	10
5. Construction Impacts.....	11
<b>V. AGENCY COORDINATION / INTERAGENCY CONSULTATION</b> .....	11
<b>APPENDICES</b>	
Appendix A: Monitored Ambient Air Quality Data 2010-2012	
Appendix B: Traffic Data	
Appendix C: Interagency Consultation Correspondence	
Appendix D: Project Mapping	
<b>LIST OF TABLES</b>	
TABLE 1: National Ambient Air Quality Standards (NAAQS).....	3
TABLE 2: Ambient Air Quality Monitoring Data 2010-2012.....	5
TABLE 3: Traffic Data.....	6
<b>LIST OF FIGURES</b>	
FIGURE 1: Project Area .....	1
FIGURE 2: National MSAT Emission Trends 1999-2050.....	10

---

## I. INTRODUCTION

This report presents the results of a review of air quality impacts associated with the proposed intersection improvements along MD 124 (Midcounty Highway) at Saybrooke Oaks Boulevard / MD 124 (Woodfield Road) in Montgomery County, Maryland (see **Figure 1**). This study is intended as an evaluation of the project level air quality impacts of the proposed improvements. This evaluation is provided to meet the requirements of the Clean Air Act (CAA) and the National Environmental Policy Act (NEPA).

The project limits along MD 124 are from 575 feet west of Saybrooke Oaks Boulevard to 210 feet north of Midcounty Highway. MD 124 runs east-west along Woodfield Road west of the intersection and north-south along Midcounty Highway east of the intersection, and is classified as an urban minor arterial. The Average Daily Traffic (ADT) on MD 124 is 23,800 vehicles per day (VPD) at Saybrooke Oaks Boulevard, and is projected to be 35,375 VPD in Build and No-Build conditions. Trucks are projected to account for 5% of the ADT under Build and No-Build conditions along MD 124.



**FIGURE 1 – PROJECT AREA**

The purpose of this project is to improve intersection safety along MD 124. Crash history analysis indicates improvements are needed at the intersection of MD 124 and Saybrooke Oaks Boulevard. Work consists of converting the existing left turn bay along eastbound MD 124 from one to two lanes and lengthening both left turn lanes to 350 feet. The project also consists of patching, grinding and resurfacing the existing pavement; cleaning existing inlets; upgrading existing sidewalk ramps to meet current ADA standards; replacing damaged curb and gutter; replacing traffic barrier and end treatments and installing pavement markings (see Appendix D).

Land use in the vicinity of this portion of MD 124 is mainly medium density residential, comprised of single-family detached houses and apartments. The childcare business, La Petite, is located in the southeast quadrant of the intersection. The overall study area is approximately 0.17 mile in length.

## II. AIR QUALITY BACKGROUND

The Clean Air Act (CAA) Amendments of 1990 and the Final Transportation Conformity Rule [40 CFR Parts 51 and 93] direct the U.S. Environmental Protection Agency (EPA) to implement environmental policies and regulations that will ensure acceptable levels of air quality. Both the Clean Air Act and the Final Transportation Conformity Rule affect proposed transportation projects.

According to the CAA Title I, Section 176 (c) 2; *“No federal agency may approve, accept, or fund any transportation plan, program, or project unless such plan, program, or project has been found to conform to any applicable State Implementation Plan (SIP) in effect under this act.”* The Final Conformity Rule defines conformity as; *“Conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and that such activities will not:*

- *Cause or contribute to any new violation of any NAAQS in any area;*
- *Increase the frequency or severity of any existing violation of any NAAQS in any area; or*
- *Delay timely attainment of any NAAQS or any required interim emission reductions or other milestones in any area.”*

To comply with the CAA, the Environmental Protection Agency (EPA) has issued Proposed Rules, Guidance Clarifications, and Final Rules concerning the Conformity Determination of fine and coarse particulates (PM<sub>2.5</sub> and PM<sub>10</sub>); and Draft and Final Rules concerning quantitative analysis of CO and PM<sub>2.5</sub>, and guidance on analysis of Mobile Air Source Toxics (MSATs). Following is a summary of recent rules and clarifications from EPA and FHWA:

Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments; March 10, 2006

Final PM Qualitative Guidance Clarification; June 12, 2009

Final PM Conformity Rule; March 10, 2010

Draft Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas; May 26, 2010

Final Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas; December 20, 2010.

Final Transportation Conformity Guidance for Quantitative Hot-spot Analyses in CO Nonattainment and Maintenance Areas; December 2010

Transportation Conformity Rule Restructuring Amendments; March 2012

Transportation Conformity Regulations as of April 2012

Interim Guidance Update on MSAT Analysis in NEPA; December 6, 2012

Revised Air Quality Standards for Particle Pollution, Annual PM<sub>2.5</sub> NAAQS; December 14, 2012

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants. These pollutants, known as criteria pollutants, are carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub>& PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (pb). These federal standards are summarized in **Table 1**. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare, and they account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

**TABLE 1  
NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)**

Pollutant	Primary/ Secondary	Standard		Form
		Level	Averaging Time	
Carbon Monoxide 76 FR 54294	Primary	9 ppm	8-hour	Not to be exceeded more than once per year
		35 ppm	1-hour	
Lead 73 FR 66964	Primary and Secondary	0.15 µg/m <sup>3</sup>	Rolling 3-Month Average	Not to be exceeded
Nitrogen Dioxide 75 FR 6474	Primary	100 ppb	1-hour	98 <sup>th</sup> percentile, averaged over 3 years
	Primary and Secondary	53 ppb	Annual	Annual Mean
Particulate Matter (PM <sub>10</sub> ) 71 FR 61144	Primary and Secondary	150 µg/m	24-hour	Not to be exceeded more than once per year on average over 3 years
Particulate Matter (PM <sub>2.5</sub> ) 78 FR 3086	Primary	12 µg/m <sup>3</sup>	Annual	Annual mean averaged over 3 years
	Secondary	15 µg/m <sup>3</sup>	Annual	Annual mean averaged over 3 years
	Primary and Secondary	35 µg/m <sup>3</sup>	24-hour	98 <sup>th</sup> percentile, averaged over 3 years
Ozone 73 FR 16436	Primary and Secondary	0.075 ppm	8-hour	Annual fourth highest daily maximum 8-hour concentration, averaged over 3 years
Sulfur Dioxide 75 FR 35520	Primary	75 ppb	1-hour	Not to be exceeded more than once per year
	Secondary	0.5 ppm	3-hour	

Section 107 of the 1977 Clean Air Act Amendment requires that EPA publish a list of all geographic areas in compliance with the NAAQS, as well as those areas not in compliance with the NAAQS. The designation of an area is made on a pollutant-by-pollutant basis. EPA's area designations consist of: Attainment, Unclassified, Maintenance, and Nonattainment. Ambient air quality is monitored through a network of stations to determine conditions throughout the country. EPA reviews the monitoring data, and areas where air pollution levels persistently exceed the NAAQS may be designated "nonattainment" for one or more pollutants. After a nonattainment area improves conditions to meet the standard for a pollutant, it is redesignated as a maintenance area. Typically these designations are applied to entire counties or groups of counties.

In addition to the criteria pollutants for which there are NAAQS, EPA also regulates air toxics. Toxic air pollutants are those pollutants known or suspected to cause cancer or other serious health effects. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries). The Clean Air Act (CAA) identified 188 air toxics. In 2001 EPA identified a list of 21 Mobile Source Air Toxics (MSAT), and highlighted six of these MSATs as “priority” MSAT.

Gases that trap heat in the atmosphere are often referred to as greenhouse gases (GHG). Greenhouse gases are necessary to life, as we know it, because they keep the planet’s surface warmer than it otherwise would be. This is referred to as the Greenhouse Effect. As concentrations of greenhouse gases are increasing, the Earth’s temperature appears to be increasing. The principal greenhouse gases that enter the atmosphere because of human activities include carbon dioxide, methane, nitrous oxide, and fluorinated gases.

### III. ENVIRONMENTAL ANALYSIS

The MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway is located in Montgomery County, Maryland, which is included as a part of the Washington, DC-MD-VA Metropolitan Statistical Area (MSA). The region has been classified as marginal nonattainment with respect to the 2008 eight-hour ozone standard and moderate nonattainment with respect to the 1997 eight-hour ozone standard. In addition this MSA has been classified as a nonattainment area for the 1997 fine particulate (PM<sub>2.5</sub>) standard. A portion of the MSA, election districts 4, 7 and 13 in Montgomery County, had been nonattainment for carbon monoxide; however, as of September 27, 2010 this area has been re-designated as a CO Maintenance Area. This project is in election district 9, and therefore is not in a nonattainment or maintenance area for carbon monoxide (CO).

Transportation programs and plans must be evaluated for “conformity” to the applicable State Implementation Plan (SIP) provisions before projects can receive Federal funding. In addition, they must be in the current Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP). A TIP generally presents projects anticipated over the next several years while the CLRP covers a longer period. A Metropolitan Planning Organization (MPO) is designated to develop the TIP and CLRP for a region, and to document their conformity with SIP provisions. For the Washington, DC MSA region, the National Capital Region Transportation Planning Board (NCRTPB), which is part of the Metropolitan Washington Council of Governments (MWCOCG), serves as the MPO for the MSA.

As the MPO, NCRTPB develops the TIP and CLRP for the region, including Montgomery County. Furthermore, it performs the related regional conformity analysis. Updates to the CLRP, referred to as the *2013 National Capital Region’s Financially Constrained Long-Range Transportation Plan*, were approved by NCRTPB on July 17, 2013. The latest TIP, covering the period FY 2013 to 2018, was also approved by NCRTPB on July 17, 2013. An updated regional conformity analysis covering both the TIP and CLRP was also approved on July 17, 2013.

At a regional level, a project is considered to be conforming if it is a part of a conforming TIP and CLRP. The proposed project is included in the CLRP as part of the Areawide Safety and Spot Improvement Projects and the FY 2013-2018 TIP as System Preservation Project ID 3084, for the Washington Metropolitan Region.

#### IV. ENVIRONMENTAL CONSEQUENCES

In addition to the regional conformity analysis, any Federally funded project within a nonattainment or maintenance area for carbon monoxide or particulate matter must be analyzed at the project-level. At the project level, the pollutants could possibly have localized (“hot-spot”) levels above the criteria. To satisfy the NEPA air quality assessment purpose, it has been common to analyze project-level CO conditions. The MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway is not in a CO nonattainment area; therefore, a qualitative CO assessment has been included. Since Montgomery County is a nonattainment area for PM<sub>2.5</sub>, a project-specific PM<sub>2.5</sub> assessment has also been provided.

The Division of Air Quality, within the Maryland Department of the Environment is responsible for implementing and enforcing regulations to ensure that the air that Maryland citizens breathe is clean and healthful. This mission is accomplished through several methods, including air pollution monitoring. The MDE CO air monitoring stations nearest to the study area are located at the Howard University Laboratory in Beltsville, Maryland and the NARSTO (North American Research Strategy for Tropospheric Ozone) site in Arendtsville, Pennsylvania. The MDE PM<sub>2.5</sub> air monitoring stations nearest to the study area are located at 18530 Roxbury Road in Hagerstown, Maryland and the Lathrop E. Smith Environmental Education Center in Rockville, Maryland. These sites are in EPA Region 3. Monitored air quality data within or near the study area for the years 2010-2012 is presented in **Table 2**. For details of monitored data see Appendix A.

**TABLE 2**

<b>Ambient Air Quality Data 2010-2012</b>								
			<b>Site 42-001-0001 Arendtsville Adams County, PA</b>			<b>Site 24-033-0030 12003 Old Baltimore Pike Beltsville, Maryland</b>		
			<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Carbon Monoxide (CO) [ppm]	1-Hour	Maximum	0.8	0.7	0.8	1.5	1.7	1.3
		2nd Maximum	0.7	0.2	0.7	1.3	1.3	1.2
		# of Exceedances	0	0	0	0	0	0
	8-Hour	Maximum	0.5	0.3	0.7	1	1.1	1.2
		2nd Maximum	0.4	0.3	0.6	1	0.8	0.9
		# of Exceedances	0	0	0	0	0	0
			<b>Site 24-043-0009 18530 Roxbury Road Hagerstown, Maryland</b>			<b>Site 24-031-3001 5110 Meadows Lane Rockville, Maryland</b>		
			<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Particulate Matter [ug/m <sup>3</sup> ]	PM <sub>2.5</sub>	98th Pct. 24-Hour	31	28	27	28	25	23
		# of Exceedances	0	0	0	0	0	0
		Mean Annual	12.6*	11.5	10.8	11.1	10.9	10.3
		# of Exceedances	0	0	0	0	0	0

\*Exceeds the primary annual PM<sub>2.5</sub> NAAQS of 12 µg/m<sup>3</sup>

## 1. Carbon Monoxide (CO) Assessment

As mentioned, a portion of the Washington, DC-MD-VA Metropolitan Statistical Area (MSA) is considered to be a moderate maintenance area in terms of carbon monoxide (CO). This maintenance area only encompasses Election Districts 4, 7 and 13 in Montgomery County and Election Districts 2, 6, 12, 16, 17 and 18 in Prince George's County. The project area is in Election District 9 of Montgomery County. There has not been a local violation of the CO standard since 1988. Code of Federal Regulations Title 40, Part 93-Subpart A (40CFR93A) implements section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 *et seq.*). Paragraph 40CFR93.102 (b): *Geographic Applicability* states that the provisions of the subpart apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. Since the study area is not in a CO nonattainment or maintenance area, a project level hot-spot conformity determination in conformance with 40 CFR 93.116 is not required. Therefore, a qualitative assessment considering local factors in conformance with 40 CFR 93.123(a)(2)(ii) is provided hereinafter.

As shown in Table 2, the maximum 1-hour monitored CO concentration between 2010 and 2012 is 1.7 ppm at MDE site 24-0330030 in 2011, located in Beltsville, Maryland. This concentration is only 4.9 percent of the 1-hour CO NAAQS of 35.0 ppm. The maximum 8-hour monitored CO concentration between 2010 and 2012 is 1.2 ppm at this same site in 2012, which is only 13.3 percent of the 8-hour NAAQS of 9.0 ppm.

A review of data provided, including traffic data summarized in Table 3 (see Appendix B for details), demonstrates that the MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway does not result in significant traffic volumes, or changes in vehicle mix or other factors that would cause an increase in CO emissions relative to the No-Build conditions. This project has been designed to improve safety, rather than increase roadway capacity; therefore, there is no noticeable change expected in the No-Build and Build traffic volumes or vehicle mix.

**TABLE 3  
TRAFFIC DATA FOR MD 108 AT MUNCASTER ROAD**

Scenario	Existing ADT	Existing Truck Percentage	Existing # of Trucks	Prop. ADT	Prop. Truck Percentage	Prop. # of Trucks
No Build	23,800	5%	1,190	35,375	5%	1,769
Build	23,800	5%	1,190	35,375	5%	1,769

In conclusion, because the data in **Table 2** demonstrates monitored CO concentrations are a small percentage of the CO NAAQS, and data in **Table 3** demonstrates the vehicle mix will not be altered by the project, this project will not cause or contribute to a new violation of the CO NAAQS.

## 2. Particulate Matter (PM<sub>2.5</sub>) Assessment

The project is located in Montgomery County, which is in the Washington DC-MD-VA Fine Particulate Matter (PM<sub>2.5</sub>) nonattainment Area. This area was designated as nonattainment for PM<sub>2.5</sub> based on 1997 NAAQS on January 5, 2005 by EPA. This designation became effective on April 5, 2005, 90 days after EPA's published action in the Federal Register. Transportation conformity for the PM<sub>2.5</sub> standards applied on April 5, 2006, after the one-year grace period provided by the Clean Air Act. On November 13, 2009 EPA designated nonattainment areas based on the 2006 24-hour PM<sub>2.5</sub>

NAAQS. The Washington DC-MD-VA region was not designated as nonattainment for the 2006 standard, therefore the designations based on the 1997 NAAQS remain in effect.

On March 10, 2006, EPA issued amendments to the Transportation Conformity Rule to address localized impacts of particulate matter: “*PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-level Transportation Conformity Determinations for the New PM<sub>2.5</sub> and Existing PM<sub>10</sub> National Ambient Air Quality Standards*” (71 FR 12468). These rule amendments require the assessment of localized air quality impacts of Federally funded or approved transportation projects in PM<sub>10</sub> and PM<sub>2.5</sub> nonattainment and maintenance areas. On December 20, 2010, EPA issued “*Final Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas*”, (75 FR 79370), which helps state and local agencies complete quantitative PM<sub>2.5</sub> and PM<sub>10</sub> hot-spot analyses for project-level transportation conformity determinations of certain highway and transit projects. This guidance included a two-year grace period until December 20, 2012. Because this project was commenced prior to the end of the grace period, a quantitative analysis is not required for this project.

Projects that require hotspot analysis for PM<sub>2.5</sub> are those that are *Projects of Air Quality Concern* as enumerated in 40 CFR 93.123(b)(1):

- (i) *New highway projects that have a significant number of diesel vehicles, and expanded projects that have a significant increase in the number of diesel vehicles;*
- (ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;*
- (iii) *New bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location;*
- (iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*
- (v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violations.*

As discussed in the examples of the preamble to the March 10, 2006 Final Rule for PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-Level Transportation Conformity Determinations (71 FR 12491), for projects involving the expansion of an existing highway, 40 CFR 93.123(b)(1)(i) has been interpreted as applying only to projects that would involve a significant increase in the number of diesel transit buses and diesel trucks on the existing facility.

Determination as to whether the MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway is a *Project of Air Quality Concern* will be finalized by Interagency Consultation. To assist with the Interagency Consultation process, SHA has prepared the following assessment of the proposed improvements:

- The MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway is considered under the following paragraph of 40 CFR 93:
  - 40 CFR 92.123(b)(1)(i), as amended, which includes “*New highway projects that have a significant number of diesel vehicles, and expanded projects that have a significant increase in the number of diesel vehicles.*”
- The proposed improvements do not meet the criteria set forth in 40 CFR 93.123(b)(1)(i) to be considered a project of “air quality concern” based on the following considerations:
  - The project consists of converting the existing left turn bay along eastbound MD 124 from one to two lanes and lengthening both left turn lanes to 350 feet.

- o As shown in **Table 3**, MD 124 at Saybrooke Oaks Boulevard does not serve a significant number of vehicles; nor will there be a significant increase in trucks between the No-Build and Build conditions. From **Table 3** the combined truck percentage along MD 124 at the intersection is projected to remain at 5% even with the Build conditions. The expected number of trucks in both Build and No-Build conditions is 1,769.
  - o The construction will not result in meaningful changes between No-Build and Build traffic volumes or vehicle mix. A review of the traffic data demonstrates that there will not be a "significant" increase in the number of trucks.
- A review of the traffic data discussed above demonstrates that there will not be a "significant" increase in the number of trucks from the No-Build condition to the Build. This project has been designed to improve safety at the intersection of MD 124 and Saybrooke Oaks Boulevard, rather than increase corridor capacity; therefore, there is no noticeable change expected in the No-Build and Build traffic volumes or vehicle mix.
  - Section 176(c) of the Clean Air Act and the Federal Conformity Rule require that transportation plans and programs conform to the intent of the air quality state implementation plan (SIP) through a regional emissions analysis in PM<sub>2.5</sub> nonattainment areas. The National Capital Regional Transportation Planning Board (NCRTPB) serves as the Metropolitan Planning Organization (MPO), and therefore it is responsible for the regional conformity determination.
  - The currently approved NCRTPB Constrained Long Range Plan (CLRP), referred to as the *2013 Constrained Long Range Plan*, and the *2013-2018 Transportation Improvement Program* (TIP), have been determined to conform to the requirements of the Clean Air Act Amendments of 1990. These represent the currently conforming CLRP and TIP in accordance with 40 CFR 93.114. The proposed project is included in the July 17, 2013 Updates to the 2013 CLRP and the FY 2013 to 2018 TIP (Project ID 3084).
  - Resolution R5-2014 on an amendment to the FY 2013-2018 TIP, which was adopted by the Transportation Planning Board on July 17, 2013, states the project is exempt from the air quality conformity requirements, as defined in EPA regulations 40 CFR Parts 51 and 93.
  - Based on review and analysis as discussed above, it is determined that the proposed MD 124 improvement project from west of Saybrooke Oaks Boulevard to north of Midcounty Highway in Montgomery County will meet the Clean Air Act and 40 CFR 93.109 requirements for Fine Particulate Matter – PM<sub>2.5</sub>. These requirements are met without a hot-spot analysis because the project has not been found to be a project of air quality concern as defined under 40 CFR 93.123(b)(1). The project will not cause or contribute to a new violation of the PM<sub>2.5</sub> NAAQS, or increase the frequency or severity of an existing violation.

### 3. MSAT Assessment

The Federal Highway Administration (FHWA) *Guidance Update on Mobile Source Air Toxic Analysis in NEPA* requires an assessment of Mobile Source Air Toxics (MSAT) under specific conditions. The EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers. These seven MSATs are: acrolein; benzene; 1,3-butadiene; diesel exhaust (organic gases and diesel particulate matter); formaldehyde; naphthalene; and polycyclic organic matter. Since the projected No-Build and Build traffic volumes and vehicle mixes are substantially the same, as reflected in **Table 3**, the project will have no

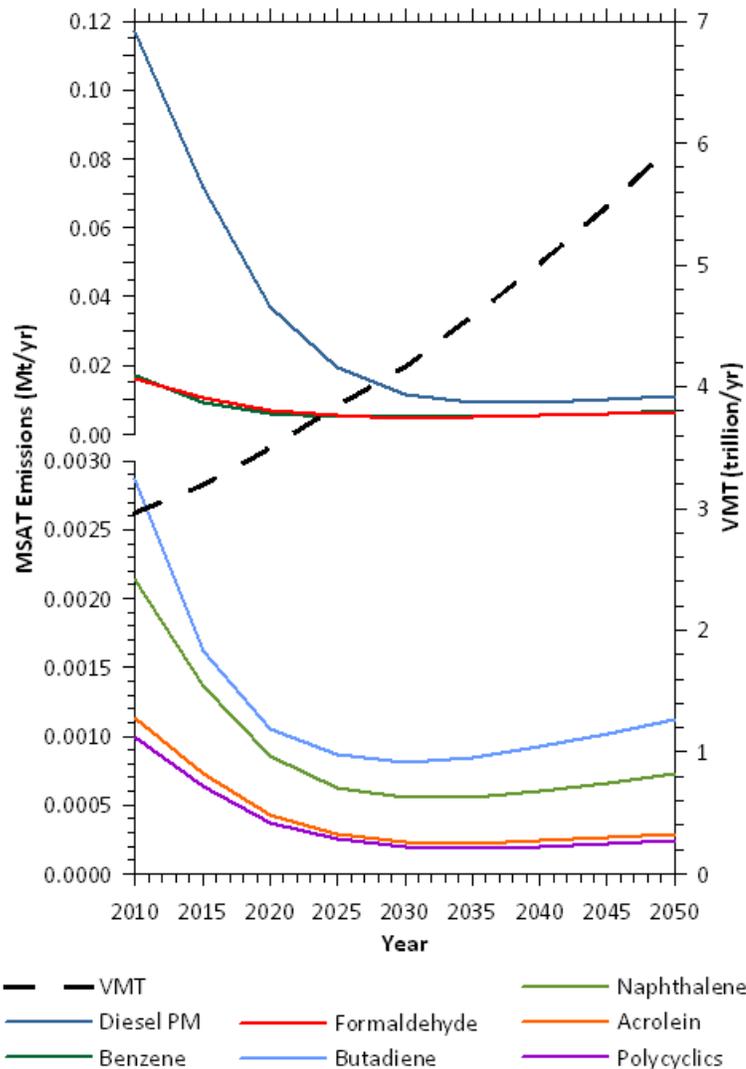
meaningful impacts on traffic volumes or vehicle mixes. Therefore in accordance with the above referenced FHWA guidance, the project would be considered a **Project with No Meaningful Potential MSAT Effects.**

The purpose of this project is to improve safety at the intersection of MD 124 and Saybrooke Oaks Boulevard. Work consists of converting the existing left turn bay along eastbound MD 124 from one to two lanes and lengthening both left turn lanes to 350 feet. The project also consists of patching, grinding and resurfacing the existing pavement; cleaning existing inlets; upgrading existing sidewalk ramps to meet current ADA standards; replacing damaged curb and gutter; replacing traffic barrier and end treatments and installing pavement markings.

This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the No-Build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent (see **Figure 2**). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

**FIGURE 2:  
NATIONAL MSAT EMISSION TRENDS 1999 - 2050  
FOR VEHICLES OPERATING ON ROADWAYS  
USING EPA's MOVES2010b MODEL**



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors.  
Source: EPA MOVES2010b model runs conducted during May - June 2012 by FHWA.

#### 4. Greenhouse Gas Assessment

From a NEPA perspective, it is analytically problematic to conduct a project level cumulative effects analysis of greenhouse gas emissions on a global-scale problem. Also, while Criteria Pollutant emissions last in the atmosphere for months, CO<sub>2</sub> emissions remain in the atmosphere far longer - over 100 years - and therefore require a much more sustained, intergenerational effort. Finally, due to the interactions between elements of the transportation system as a whole, project-level emissions analyses would be less informative than ones conducted at regional, state, or national levels. Because of these concerns, FHWA concluded that the CO<sub>2</sub> emissions cannot be usefully evaluated in the same way that other vehicle emissions are addressed. However, it can be stated

that estimates of CO<sub>2</sub> emissions, a primary factor in greenhouse gases, are based on the amount of direct energy required. The direct energy values represent the energy required for vehicle propulsion. This energy is a function of traffic characteristics such as volume, speed, distance traveled, vehicle mix, and thermal value of the fuel being used. A review of traffic data for the project reveals that, because there will not be a significant change in traffic volumes from the No-Build to Build conditions, CO<sub>2</sub> emission burdens will most likely result in almost no change as compared to the existing conditions.

In 2009, Maryland Governor Martin O'Malley and the Maryland General Assembly passed the Greenhouse Gas Emission Reduction Act of 2009 (GGRA). The law requires the State to develop and implement a Plan (the GGRA Plan or the Plan) to reduce greenhouse gas (GHG) emissions 25 percent from a 2006 baseline by 2020. The Greenhouse Gas Emissions Reduction Act Plan was published July 25, 2013. The Plan puts the State on track to achieve the 25 percent GHG reduction required by the law while also creating jobs and improving Maryland's economy. Initiatives outlined in the Plan also will help with other environmental priorities, including restoration of the Chesapeake Bay, improving air quality and other critical energy and national security issues.

## 5. Construction Impacts

The construction phase of the proposed project has the potential to impact the local ambient air quality by generating fugitive dust through activities such as demolition and materials handling. The State Highway Administration has addressed this possibility by establishing "Specifications for Construction and Materials" which specifies procedures to be followed by contractors involved in site work. The Maryland Air and Radiation Management Administration was consulted to determine the adequacy of the "Specifications" in terms of satisfying the requirements of the "Regulations Governing the Control of Air Pollution in the State of Maryland". The Maryland Air and Radiation Management Administration found the specifications to be consistent with the requirements of these regulations. Therefore, during the construction period, all appropriate measures (Code of Maryland Regulations 10.18.06.03 D) would be incorporated to minimize the impact of the proposed transportation improvements on the air quality of the area. Mobile source emissions can also be minimized during construction by not permitting idling delivery trucks or other equipment during periods of unloading or other non-active use. The existing number of traffic lanes should be maintained during construction, to the maximum extent possible, and construction schedules should be planned in a manner that will not create traffic disruption and increase air pollutants. Application of these measures will ensure that construction impact of the project is insignificant.

## V. AGENCY COORDINATION / INTERAGENCY CONSULTATION

Copies of this air quality analysis were circulated to the Federal Highway Administration (FHWA), the Environmental Protection Agency (EPA), the Maryland Department of the Environment (MDE), and the MWCOG (NC RTPB) for a 15-day Interagency Consultation review and comment period via email on October 30, 2013. The agencies concurred that the project did not require quantitative hot-spot analysis. This Air Quality Analysis will be placed on SHA's website for a 15 day public review and comment period. Refer to Appendix C for Interagency Consultation emails.

## **APPENDIX**

- A: MONITORED AMBIENT AIR QUALITY DATA 2010-2012**
- B: TRAFFIC DATA**
- C: INTERAGENCY CONSULTATION CORRESPONDENCE**
- D: PROJECT MAPPING**

**APPENDIX A: MONITORED AMBIENT AIR QUALITY DATA 2010-2012**

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2010

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	8107	1.5	1.3	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2010

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	8103	1	1	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2011

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	8183	1.7	1.3	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2011

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	8145	1.1	0.8	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2012

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	8571	1.3	1.2	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Prince Georges County, MD

**Pollutant:** CO

**Year:** 2012

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	8651	1.2	0.9	0	None	1	240330030	Howard University'S Beltsville Laboratory, 12003 Old Baltimore Pike	Beltsville	Prince George's	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2010

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	5109	0.8	0.7	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2010

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	5108	0.5	0.4	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2011

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	5372	0.7	0.2	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2011

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	5360	0.3	0.3	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2012

**Exceptional Events:** Included (if any)

**Duration Description=1 HOUR**

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
1 HOUR	6361	0.8	0.7	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Adams County, PA

**Pollutant:** CO

**Year:** 2012

**Exceptional Events:** Included (if any)

### Duration Description=8-HR RUN AVG END HOUR

Duration Description	Obs	First Max	Second Max	Actual Exc	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8-HR RUN AVG END HOUR	6358	0.7	0.6	0	None	1	420010001	Narsto Site - Arendtsville	Not in a city	Adams	PA	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Washington County, MD

**Pollutant:** PM2.5

**Year:** 2010

**Exceptional Events:** Included (if any)

### Duration Description=24 HOUR

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24 HOUR	58	30.2	21.2	20.3	19.5	21	10.5	None	1	240430009	18530 Roxbury Road	Hagerstown	Washington	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Washington County, MD

**Pollutant:** PM2.5

**Year:** 2010

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	161	39	36.8	34.1	31	31	12.6	None	3	240430009	18530 Roxbury Road	Hagerstown	Washington	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Washington County, MD

**Pollutant:** PM2.5

**Year:** 2011

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	340	34.7	32.6	32.5	31.7	28	11.5	None	3	240430009	18530 Roxbury Road	Hagerstown	Washington	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Washington County, MD

**Pollutant:** PM2.5

**Year:** 2012

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	349	38.3	31.8	29.3	29	27	10.8	None	3	240430009	18530 Roxbury Road	Hagerstown	Washington	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Montgomery County, MD

**Pollutant:** PM2.5

**Year:** 2010

**Exceptional Events:** Included (if any)

**Duration Description=24 HOUR**

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24 HOUR	50	18.6	17.7	17.2	16.9	19	9.1	None	1	240313001	Lathrop E. Smith Environmental Education Center, 5110 Meadowside Lane	Rockville	Montgomery	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Montgomery County, MD

**Pollutant:** PM2.5

**Year:** 2010

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	352	35.8	33.8	33.1	29.6	28	11.1	None	3	240313001	Lathrop E. Smith Environmental Education Center, 5110 Meadowside Lane	Rockville	Montgomery	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Montgomery County, MD

**Pollutant:** PM2.5

**Year:** 2011

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	331	31.8	30.5	30.2	29.9	25	10.9	None	3	240313001	Lathrop E. Smith Environmental Education Center, 5110 Meadowside Lane	Rockville	Montgomery	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## Monitor Values Report

**Geographic Area:** Montgomery County, MD

**Pollutant:** PM2.5

**Year:** 2012

**Exceptional Events:** Included (if any)

### Duration Description=24-HR BLK AVG

Duration Description	Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
24-HR BLK AVG	356	33.1	30.2	29	25	23	10.3	None	3	240313001	Lathrop E. Smith Environmental Education Center, 5110 Meadowside Lane	Rockville	Montgomery	MD	03

Get detailed information about this report, including column descriptions, at [http://www.epa.gov/airquality/airdata/ad\\_about\\_reports.html#mon](http://www.epa.gov/airquality/airdata/ad_about_reports.html#mon)

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated daily by state, local, and tribal organizations who own and submit the data. Please contact the appropriate air quality monitoring agency to report any data problems.

<[http://www.epa.gov/airquality/airdata/ad\\_contacts.html](http://www.epa.gov/airquality/airdata/ad_contacts.html)>

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <<http://www.epa.gov/airdata>>

Generated: April 15, 2013

## **APPENDIX B: TRAFFIC DATA**

**GEOMETRIC DATA SHEET**

Project Description: MD 124 @ MD 124 (Woodfield Road)/Saybrooke Oaks Blvd.

SHA Contract No. MO4325176

FAP No. Pending

- Expressway                       Rural Road  
 Arterial                               Urban Road  
 Collector

I. Design Data

<u>DESIGN ELEMENTS</u>	<u>EXISTING CONDITION</u> Does it meet AASHTO *	<u>PROPOSED CONDITION</u> Is this an improvement to existing conditions *	<u>** MEETS SHA/AASHTO DESIGN STANDARDS</u>
ADT	<i>Title Sheet</i> 23,800	35,375	YES
% Trucks	<i>Title Sheet</i> 5%	5%	YES
Design Speed	<i>Title Sheet</i> 55 mph	55 mph	YES
Posted Speed Limits	<i>Field Visit</i> 35/45 mph	35/45 mph	YES
Number of Lanes	<i>Field Visit</i> 2 lanes	2 lanes	YES
Through-Lane Width	<i>Field Visit</i> 12 ft	12 ft	YES
Turn.-Lane Width	<i>Field Visit</i> 12 ft	12 ft	YES
Shoulder Width	<i>Field Visit</i> N/A	N/A	YES
Cross Slope	<i>Field Visit</i> Normal: 2%	Normal: 2%	YES
Horizontal Alignments: Curvature* Superelevation* Sight Distance*	<i>As-Builts</i> YES YES YES	NO NO NO	YES YES YES
Vertical Alignments: Grades* Sight Distance*	<i>As-Builts/Field Visit</i> YES YES	NO NO	YES YES
Bridge Clear Width	N/A	N/A	N/A
Bridge Railings	N/A	N/A	N/A
Median Width	<i>As-Builts</i> Varies	Varies	YES

**APPENDIX C: INTERAGENCY CONSULTATION CORRESPONDENCE**

## Shawn Burnett

---

**From:** Christina Brandt [CBrandt@sha.state.md.us]  
**Sent:** Thursday, November 14, 2013 8:10 AM  
**To:** Shawn Burnett; Nicole M. Hebert  
**Subject:** FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

---

**From:** Khadr, Asrah [mailto:Khadr.Asrah@epa.gov]  
**Sent:** Wednesday, November 13, 2013 5:08 PM  
**To:** Christina Brandt  
**Cc:** McCurdy, Alaina; Becoat, gregory; Rudnick, Barbara  
**Subject:** RE: MD 124 at Saybrooke - Air Quality Interagency Consultation

EPA concurs with SHA's recommendation that this project does not require a quantitative hot-spot analysis.

Asrah Khadr, Environmental Engineer, EIT  
U.S. Environmental Protection Agency, Region III  
Air Protection Division  
Office of Air Program Planning  
1650 Arch Street  
Philadelphia, PA 19103  
Phone: 215-814-2071

---

**From:** Christina Brandt [mailto:CBrandt@sha.state.md.us]  
**Sent:** Wednesday, October 30, 2013 10:32 AM  
**To:** 'bhug@mde.state.md.us'; 'jeanette.mar@dot.gov'; McCurdy, Alaina; Rudnick, Barbara; Becoat, gregory; Khadr, Asrah; 'molly.berger@maryland.gov'; 'jrohlf@mwcog.org'  
**Cc:** 'Shawn Burnett'; 'Nicole M. Hebert'  
**Subject:** MD 124 at Saybrooke - Air Quality Interagency Consultation

Good Morning,

Attached is the PM2.5 Conformity Determination for the MD 124 at Saybrooke project located in Montgomery County, Maryland.

SHA is requesting concurrence that this project meets the requirements of the Clean Air Act and 40 CFR 93 without an additional quantitative hot-spot analysis.

The project is included in the FY 2013-2018 TIP as Project ID 3084.

Please review and provide concurrence/comments prior to November 13, 2013.

Thank you,

Chrissy

Christina Brandt

Environmental Manager

OPPE-Environmental Planning Division

MD State Highway Administration

707 North Calvert Street, Mail Stop C-301

Baltimore, MD 21202

Phone: 410-545-2874

E-mail: [cbrandt@sha.state.md.us](mailto:cbrandt@sha.state.md.us)



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.

## Shawn Burnett

---

**From:** Christina Brandt [CBrandt@sha.state.md.us]  
**Sent:** Thursday, November 14, 2013 11:19 AM  
**To:** Shawn Burnett; Nicole M. Hebert  
**Subject:** FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

---

**From:** Jeanette.Mar@dot.gov [mailto:Jeanette.Mar@dot.gov]  
**Sent:** Thursday, November 14, 2013 11:18 AM  
**To:** Christina Brandt  
**Subject:** RE: MD 124 at Saybrooke - Air Quality Interagency Consultation

Hi Chrissy:

I concur that the MD 124 at Saybrooke project meets the requirements of the CAA and 40 CFR 93 and does not need an additional quantitative hot-spot analysis.

Thanks!

*Jeanette*

Jeanette Mar  
Environmental Program Manager  
FHWA - DelMar Division  
10 South Howard Street, Suite 2450  
Baltimore, MD 21201  
phone (410) 779-7152  
fax (410) 962-4054

---

**From:** Christina Brandt [<mailto:CBrandt@sha.state.md.us>]  
**Sent:** Wednesday, October 30, 2013 10:32 AM  
**To:** 'bhug@mde.state.md.us'; Mar, Jeanette (FHWA); 'McCurdy.Alaina@epa.gov'; 'Rudnick.Barbara@epamail.epa.gov'; 'Becoat,gregory'; 'Khadr, Asrah'; 'molly.berger@maryland.gov'; 'jrohlf@mwcog.org'  
**Cc:** 'Shawn Burnett'; 'Nicole M. Hebert'  
**Subject:** MD 124 at Saybrooke - Air Quality Interagency Consultation

Good Morning,

Attached is the PM2.5 Conformity Determination for the MD 124 at Saybrooke project located in Montgomery County, Maryland.

SHA is requesting concurrence that this project meets the requirements of the Clean Air Act and 40 CFR 93 without an additional quantitative hot-spot analysis.

The project is included in the FY 2013-2018 TIP as Project ID 3084.

Please review and provide concurrence/comments prior to November 13, 2013.

Thank you,

Chrissy

Christina Brandt

Environmental Manager

OPPE-Environmental Planning Division

MD State Highway Administration

707 North Calvert Street, Mail Stop C-301

Baltimore, MD 21202

Phone: 410-545-2874

E-mail: [cbrandt@sha.state.md.us](mailto:cbrandt@sha.state.md.us)



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this

## Shawn Burnett

---

**From:** Christina Brandt [CBrandt@sha.state.md.us]  
**Sent:** Wednesday, November 27, 2013 10:55 AM  
**To:** Shawn Burnett; Nicole M. Hebert  
**Subject:** FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

---

**From:** Joan Rohlfs [mailto:jrohlfs@mwkog.org]  
**Sent:** Wednesday, November 27, 2013 10:41 AM  
**To:** Christina Brandt; 'molly.berger@maryland.gov'  
**Subject:** RE: MD 124 at Saybrooke - Air Quality Interagency Consultation

My response to the previous two projects also applies to this one. No further comment needed.

Joan Rohlfs  
Environmental Resources Program Director  
Metropolitan Washington Council of Governments  
777 North Capitol St., NE  
Washington, D.C. 20002-4239  
Tel: 202-962-3358  
Fax: 202-962-3203

---

**From:** Christina Brandt [mailto:CBrandt@sha.state.md.us]  
**Sent:** Wednesday, November 27, 2013 9:59 AM  
**To:** 'molly.berger@maryland.gov'; Joan Rohlfs  
**Subject:** FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

Good Morning,

I am following up to see if you have any comments on the attached report.

Thank You!

Chrissy

---

**From:** Christina Brandt  
**Sent:** Wednesday, October 30, 2013 10:32 AM  
**To:** 'bhug@mde.state.md.us'; 'jeanette.mar@dot.gov'; 'McCurdy.Alaina@epa.gov'; 'Rudnick.Barbara@epamail.epa.gov'; 'Becoat,gregory'; 'Khadr, Asrah'; 'molly.berger@maryland.gov'; 'jrohlfs@mwkog.org'  
**Cc:** 'Shawn Burnett'; 'Nicole M. Hebert'  
**Subject:** MD 124 at Saybrooke - Air Quality Interagency Consultation

Good Morning,

Attached is the PM2.5 Conformity Determination for the MD 124 at Saybrooke project located in Montgomery County, Maryland.

SHA is requesting concurrence that this project meets the requirements of the Clean Air Act and 40 CFR 93

without an additional quantitative hot-spot analysis.

The project is included in the FY 2013-2018 TIP as Project ID 3084.

Please review and provide concurrence/comments prior to November 13, 2013.

Thank you,

Chrissy

Christina Brandt

Environmental Manager

OPPE-Environmental Planning Division

MD State Highway Administration

707 North Calvert Street, Mail Stop C-301

Baltimore, MD 21202

Phone: 410-545-2874

E-mail: [cbrandt@sha.state.md.us](mailto:cbrandt@sha.state.md.us)



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)

## Shawn Burnett

---

**From:** Christina Brandt [CBrandt@sha.state.md.us]  
**Sent:** Tuesday, December 03, 2013 11:42 AM  
**To:** Shawn Burnett  
**Subject:** FW: FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

---

**From:** Molly Berger -MDE- [mailto:molly.berger@maryland.gov]  
**Sent:** Tuesday, December 03, 2013 11:33 AM  
**To:** Christina Brandt; Brian Hug -MDE-  
**Subject:** Re: FW: MD 124 at Saybrooke - Air Quality Interagency Consultation

Chrissy,

MDE is fine with the MD 124 at Saybrooke Air Quality Analysis.

Thanks,

Molly

On Wed, Nov 27, 2013 at 9:58 AM, Christina Brandt <[CBrandt@sha.state.md.us](mailto:CBrandt@sha.state.md.us)> wrote:

Good Morning,

I am following up to see if you have any comments on the attached report.

Thank You!

Chrissy

---

**From:** Christina Brandt  
**Sent:** Wednesday, October 30, 2013 10:32 AM  
**To:** '[bhug@mde.state.md.us](mailto:bhug@mde.state.md.us)'; '[jeanette.mar@dot.gov](mailto:jeanette.mar@dot.gov)'; '[McCurdy.Alaina@epa.gov](mailto:McCurdy.Alaina@epa.gov)'; '[Rudnick.Barbara@epamail.epa.gov](mailto:Rudnick.Barbara@epamail.epa.gov)'; 'Becoat, gregory'; 'Khadr, Asrah'; '[molly.berger@maryland.gov](mailto:molly.berger@maryland.gov)'; '[jrohlf@mwcog.org](mailto:jrohlf@mwcog.org)'  
**Cc:** 'Shawn Burnett'; 'Nicole M. Hebert'  
**Subject:** MD 124 at Saybrooke - Air Quality Interagency Consultation

Good Morning,

Attached is the PM2.5 Conformity Determination for the MD 124 at Saybrooke project located in Montgomery County, Maryland.

SHA is requesting concurrence that this project meets the requirements of the Clean Air Act and 40 CFR 93 without an additional quantitative hot-spot analysis.

12/3/2013

The project is included in the FY 2013-2018 TIP as Project ID 3084.

Please review and provide concurrence/comments prior to November 13, 2013.

Thank you,

Chrissy

Christina Brandt

Environmental Manager

OPPE-Environmental Planning Division

MD State Highway Administration

707 North Calvert Street, Mail Stop C-301

Baltimore, MD 21202

Phone: [410-545-2874](tel:410-545-2874)

E-mail: [cbrandt@sha.state.md.us](mailto:cbrandt@sha.state.md.us)



Maryland now features 511 traveler information!  
Call 511 or visit: [www.md511.org](http://www.md511.org)



Please consider the environment before printing this email

LEGAL DISCLAIMER - The information contained in this communication (including any attachments) may be confidential and legally privileged. This email may not serve as a contractual agreement unless explicit written agreement for this purpose has been made. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication or any of its contents is strictly prohibited. If you have received this communication in error, please re-send this communication to the sender indicating that it was received in error and delete the original message and any copy of it from your computer system.

--

Molly Berger

Natural Resource Planner

Air Quality Planning Program, ARMA

Maryland Department of the Environment

12/3/2013

## **APPENDIX D: PROJECT MAPPING**



**Maryland Department of Transportation**  
**STATE HIGHWAY ADMINISTRATION**  
**PLANS OF PROPOSED HIGHWAY**  
**S.H.A. CONTRACT NO. MO4325176**  
**FEDERAL AID PROJECT NO.**

**AASHTO DESIGN CRITERIA**

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2001 PUBLICATION OF AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS."

**STANDARD SPECIFICATIONS BOOK, BOOK OF STANDARDS AND MUTCD**

ALL WORK ON THIS PROJECT SHALL CONFORM TO: THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATIONS SPECIFICATIONS ENTITLED STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED JULY 2008 REVISIONS THEREOF OR ADDITIONS THERETO; THE SPECIAL PROVISIONS INCLUDED IN THE INVITATION FOR BIDS BOOK; THE ADMINISTRATIONS BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES AND THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

**RIGHT OF WAY**

RIGHT OF WAY AND EASEMENT LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THEY ARE NOT OFFICIAL. FOR OFFICIAL FEE RIGHT OF WAY AND EASEMENT INFORMATION, SEE APPROPRIATE RIGHT OF WAY PLATS.

**UTILITIES**

THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE OF THE ACCURACY OF SAID LOCATIONS.

**COMPLETENESS OF DOCUMENTS**

THE STATE HIGHWAY ADMINISTRATION SHALL ONLY BE RESPONSIBLE FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM THE STATE HIGHWAY ADMINISTRATION'S CASHIER'S OFFICE. FAILURE TO ATTACH ADDENDA MAY CAUSE THE BID TO BE IRREGULAR.

**ADA COMPLIANCE**

THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH THE STATE AND FEDERAL LEGISLATION.

**ENVIRONMENTAL INFORMATION**

**MDE #**

ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED FOR CONTRACT NO. MO4325176 SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE STATE HIGHWAY ADMINISTRATIONS BEST MANAGEMENT PRACTICES (BMP) INSPECTION AND REMEDIATION PROGRAM.

SEDIMENT AND EROSION CONTROL REGULATIONS WILL BE STRICTLY ENFORCED DURING CONSTRUCTION.

**STANDARD STABILIZATION NOTE :**

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDER DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND FOURTEEN DAYS (14) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

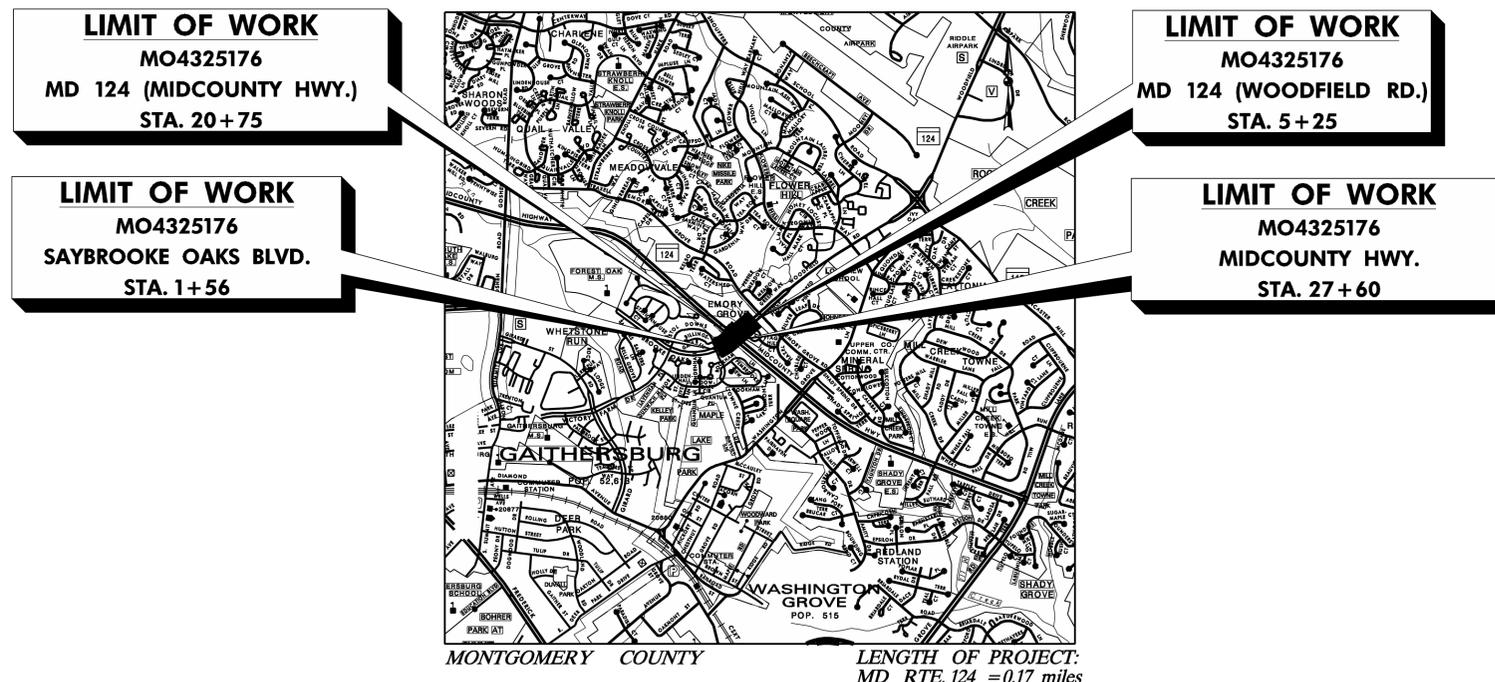
**OWNERS / DEVELOPERS CERTIFICATION :**

I / WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS.

**INDEX OF SHEETS**

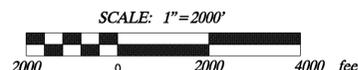
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION
3-4	EROSION AND SEDIMENT CONTROL
5-6	DETAILS
7	GEOMETRY SHEET
8	ROADWAY PLAN
9-10	MAINTENANCE OF TRAFFIC

**MD 124 (MIDCOUNTY HWY) AT**  
**SAYBROOKE OAKS BLVD. WOODFIELD ROAD**



LENGTH OF PROJECT:  
MD RTE. 124 = 0.17 miles

HORIZONTAL DATUM	NAD 83 /91
VERTICAL DATUM	NAVD 88



DESIGN DESIGNATION		
ROADWAY	MD 124 (WOODFIELD RD)	MD 124 (MIDCOUNTY HWY)
CONTROLS / YEARS		
AVERAGE DAILY TRAFFIC (A.D.T.)		
DESIGN HOURLY VOLUME (D.H.V.)		
DIRECTIONAL DISTRIBUTION		
% TRUCKS - A.D.T.		
% TRUCKS - D.H.V.		
DESIGN SPEED M. P. H.	45 MPH	55 MPH
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL	URBAN MINOR ARTERIAL
CONTROL OF ACCESS	NONE	NONE
INTENSITY OF DEVELOPMENT	URBAN	URBAN
TERRAIN	ROLLING	ROLLING
ANTICIPATED POSTED SPEED	35 MPH	45 MPH

**PARSONS BRINCKERHOFF**

100 S. Charles Street  
Tower 1, 10th Floor  
Baltimore, MD 21201  
(Ph) 410-787-5050 / (Fax) 410-727-4608  
<http://www.pbworld.com>

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE MARYLAND, LICENSE NO. 10661, EXPIRATION DATE: 9-5-2013.

R-O-W PLAT NUMBERS	SURVEY BOOK NUMBERS
N / A	NONE

REVIEWED AND APPROVAL RECOMMENDED DATE

CHEF, HIGHWAY DESIGN DIVISION

APPROVAL RECOMMENDED DATE

DIRECTOR, OFFICE OF HIGHWAY DEVELOPMENT

APPROVED DATE

DEPUTY ADMINISTRATOR / CHIEF ENGINEER FOR PLANNING, ENGINEERING, REAL ESTATE AND ENVIRONMENT

SURVEY BOOK NO.

INDEXED

BY: WAGNER - DRILL HOLES

STD. TYPE A COMBINATION CONCRETE CURB AND GUTTER 12 INCH GUTTER PAN, 8 INCH DEPTH (MD 620.02)		
203 L.F.	STA. 3+70 TO STA. 5+24 RT. (MEDIAN)	
147 L.F.	STA. 22+50 TO STA. 23+60 LT. (MEDIAN)	
147 L.F.	STA. 22+50 TO STA. 23+60 RT. (MEDIAN)	
STD. TYPE C COMBINATION CONCRETE CURB AND GUTTER 12 INCH GUTTER PAN (620.02-01)		
170 L.F.	STA. 20+75 TO STA. 22+50 LT. (MEDIAN)	
175 L.F.	STA. 20+75 TO STA. 22+50 RT. (MEDIAN)	
205 L.F.	STA. 25+60 TO STA. 26+26 LT. (ISLAND)	

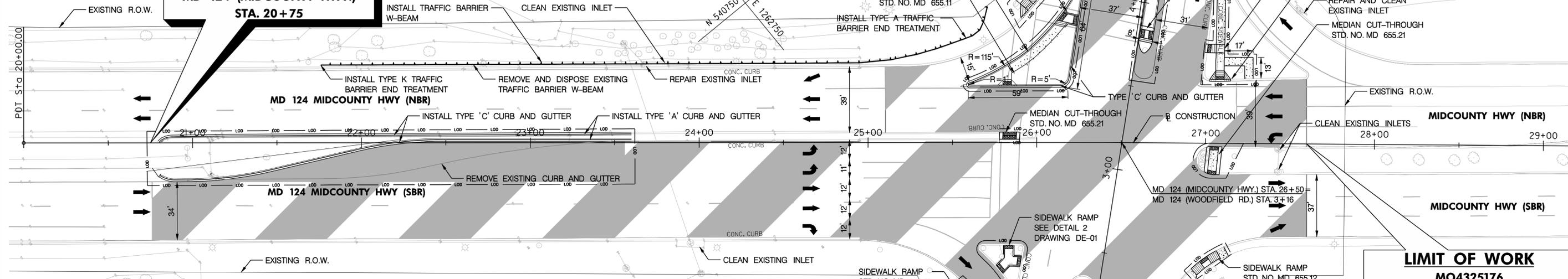
5' CONCRETE SIDEWALK		
85 S.F.	STA. 2+09 TO STA. 2+15 LT.	
9 S.F.	STA. 2+39 TO STA. 2+40 RT.	
25 S.F.	STA. 2+50 TO STA. 2+55 RT.	
63 S.F.	STA. 3+00 TO STA. 3+12 RT. (MEDIAN)	
228 S.F.	STA. 3+56 TO STA. 3+87 LT. (ISLAND)	
25 S.F.	STA. 3+79 TO STA. 3+84 RT.	
25 S.F.	STA. 3+98 TO STA. 4+03 LT.	
25 S.F.	STA. 3+61 TO STA. 3+66 RT. (ISLAND)	
25 S.F.	STA. 3+77 TO STA. 3+82 RT. (ISLAND)	
25 S.F.	STA. 4+35 TO STA. 4+40 RT.	

**LIMIT OF WORK**  
MO0432A21  
MD 124 (MIDCOUNTY HWY.)  
STA. 20+75

**LIMIT OF WORK**  
MO4325176  
MD 124 (WOODFIELD RD.)  
STA. 5+25

**LIMIT OF WORK**  
MO4325176  
MIDCOUNTY HWY.  
STA. 27+60

**LIMIT OF WORK**  
MO4325176  
SAYBROOKE OAKS BLVD.  
STA. 1+56



TRAFFIC BARRIER W BEAM SINGLE FACE (MD 605.22)		
500 LF	STA. 21+71 TO STA. 25+69 LT	

TYPE K TRAFFIC BARRIER END TREATMENT (MD 605.10)		
1 EA.	STA. 21+76 LT	

TYPE A TRAFFIC BARRIER END TREATMENT (MD 605.01)		
1 EA.	STA. 25+68 TO STA. 25+71 LT	

TO MONTGOMERY VILLAGE AVE.

TO SHADY GROVE RD.

**LEGEND**

	GRIND AND RESURFACE
	FULL DEPTH PAVEMENT
	CONCRETE

- NOTES:**
- NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO AN MDE APPROVED ESC DEVICE.
  - BID ITEM CLEAN EXISTING INLET TO BE UTILIZED AS DIRECTED BY ENGINEER.
  - MAXIMUM CROSS-SLOPE FOR SIDEWALK REPLACEMENT SHALL BE 48:1.
  - SIDEWALK REMOVAL AREAS ARE TO BE EXCAVATED TO A DEPTH OF 6 INCHES, OR AS NECESSARY TO REMOVE COMPACTED SOIL AND DEBRIS BEFORE TOPSOIL IS PLACED IN PREPARATION FOR SOD INSTALLATION.

CROSS REFERENCE	R/W PLAT NUMBER	REVISIONS
ITEM SHEET NOS.		
TYPICAL SHEETS		
SUPERELEVATION SHEETS		
PIPE & DRAINAGE SCHEDULE		
GEOMETRIC LAYOUT SHEETS		
ROADWAY PLAN SHEETS		
ROADWAY PROFILE SHEETS		
TRAFFIC CONTROL SHEETS		
EROSION & SEDIMENT CONTROL		
SIGNING & MARKING PLANS		
LANDSCAPE PLAN SHEETS		
UTILITIES		

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
DISTRICT 3  
MD 124 (MIDCOUNTY HIGHWAY) AT  
SAYBROOKE OAKS BLVD/WOODFIELD ROAD  
(SAFETY AND SPOT IMPROVEMENTS)

**ROADWAY PLAN**

SCALE 1" = 30' DATE JUNE 2013 CONTRACT NO. MO4325176

DESIGNED BY RR COUNTY MONTGOMERY  
DRAWN BY RR LOGMILE  
CHECKED BY CHB  
F.A.P. NO.

DRAWING NO. PS-01 OF 01 SHEET NO. OF

**PARSONS BRINCKERHOFF**  
100 S. Charles Street  
Tower 1, 10th Floor  
Baltimore, MD 21201  
(Ph) 410-787-5050  
(Fax) 410-727-4608  
http://www.pbworld.com