## ENVIRONMENTAL ASSESSMENT/ DRAFT SECTION 4(f) EVALUATION

MD 650 from Powder Mill Road to North of US 29
Montgomery County, Maryland
Project No. MO900B21


## NOV 122002

Project No. MO 900B21
MD 650
From Powder Mill Road
To North of US 29
Montgomery County, Maryland
Enclosed for your review and comment is the Environmental Assessment/Draft Section 4(f) Evaluation for the MD 650 project from Powder Mill Road to North of US 29. This document has been prepared in accordance with the CEQ Regulations and 23 CFR 771.

Please provide any comments by December 31, 2002 to the address below.

Ms. Cynthia D. Simpson<br>Deputy Director<br>Office of Planning and Preliminary Engineering<br>Mailstop C-301<br>State Highway Administration<br>707 North Calvert Street<br>Baltimore, Maryland 21202

All responses will be considered in the development of the final environmental document. .


Project No. MO900B21
MD 650 : From Powder Mill Road to North of US 29
Page Two

## Enclosure

cc: Distribution List (enclosed)
Mr. Ken Briggs, Office of Highway Design, State Highway Administration
Ms. Wanda Brocato, Project Planning Division, State Highway Administration
Ms. Denise King, Federal Highway Administration
Ms. Cynthia D. Simpson, Office of Planning and Preliminary Engineering, State Highway Administration
Mr. Donald Sparklin, Project Planning Division, State Highway Administration
Mr. Charlie Watkins, District 3, State Highway Administration

## Environmental Analysis/Draft Section 4(f) Evaluation Distribution List

## Federal Agencies

Mr. Davis P. Doss
State Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture

339 Busch's Frontage Road, Suite 301
Annapolis MD 21401
Mr. Willie Taylor, Director
Office of Environmental Policy and Compliance
U.S. Department of the Interior

Main Interior Building, MS 2340
18 th and C Streets, N.W.
Washington, D.C. 20240
Office of Environmental Programs
U.S. Environmental Protection Agency

1650 Arch Street
Philadelphia PA 19103-2029
Attention: Ms. Barbara Rudnick
Mr. Bill Schultz
U.S. Department of the Interior

Fish and Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis MD 21401
Mr. Paul Wettlaufer
Transportation Program Manager
U.S. Army Corps of Engineers

Baltimore District (CENAB-OP-RT)
P.O. Box 1715

10 S. Howard Street
Baltimore MD 21201
Mr. Eugene Keller
National Capital Planning Commission
401 Ninth Street NW
Suite 500 North
Washington D.C. 20576
State Agencies
Ms. Linda Janey, Chief
State Clearinghouse
Maryland Office of Planning
301 West Preston Street, Room 1101
Baltimore MD ..... 21201
State Clearinghouse Distribution
Local Governments
Maryland Department of Planning
Department of Natural Resources
Department of Budget and Fiscal Planning
Department of General Services
Department of Housing and
Community Development
Department of Education
Department of Health and Mental HygieneInteragency Committee for School Construction
Maryland Historical Trust
Department of Public Safety and
Correctional Service
Ms. Kathleen Fay
Maryland State Department of Education
State Depository Distribution Center
Public Depository and Distribution Program
Enoch Pratt Free Library
400 Cathedral Street
Baltimore MD 21201
Mr. Ray Dintaman, Director
Environmental Review Unit
Maryland Department of Natural Resources
Tawes State Office Building, B-3
Annapolis MD 21401
Mr. Elder Ghigiarelli
Water Management Administration
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230
Maryland State Law Library
Upper Level Court of Appeal Building
361 Rowe Boulevard
Annapolis MD 21401
Ms. Lynda Davis, Director
Library and Information Services Division
Legislative Reference Library
90 State Circle
Annapolis MD 21401-1991

## County/Local Agencies

Mr. Michael Clifford
WASHCOG
777 N. Capitol Street, NE
Suite 300
Washington DC 2007-4226
Mr. Bill Gries
Maryland-National Capital Park and Planning Commission
9500 Brunett Avenue
Silver Spring MD 20910
Montgomery County Department of Planning
Charles R. Loehr, Director
8787 Georgia Avenue
Silver Spring MD 20910
Montgomery County Department of Police
Charles A. Moose, Ph.D., Chief of Police
2350 Research Boulevard
Rockville MD 20850
Montgomery County Division of Fire and Rescue Services
Gordon Ayogi, Fire Administrator
101 Monroe Street
Rockville MD 20850
Montgomery County Department of Public Works and Transportation
Albert J. Genetti, Director
101 Monroe Street
Rockville MD 20850
Ms. Ellen Scavia, Chief
Division of Environmental Policy and Compliance
Department of Environmental Protection
101 Monroe Street
Rockville, MD 20850
Others
Montgomery County Citizens
Bicycle Commission
4000 Wexford Drive
Kensington, MD 20895
Mr. John Talberth
Director of Conservation
Forest Conservation Council
P.O. Box 22488

Santa Fe, New Mexico 87502

# MD 650 FROM POWDER MILL ROAD TO NORTH OF US 29 <br> Montgomery County, Maryland 

# Environmental Assessment/Draft Section 4(f) Evaluation 

Submitted Pursuant to 42 U.S.C. 4332 (2), 49 U.S.C. 303

and CEQ Regulations (40 CFR 1500 (et.seq.)
by the
U.S. Department of Transportation - Federal Highway Administration and Maryland Department of Transportation - State Highway Administration

Cooperating Agency:<br>General Services Administration



The proposed project is to improve traffic operations for vehicles using MD 650 at Powder Mill Road and from Chalmers Road to north of US 29. The project will consider provisions for improving circulation of traffic and pedestrians to and from the proposed Food and Drug Administration (FDA) facility as well as providing adequate vehicular, pedestrian and bicycle access to existing and planned activity centers, including commercial sites. The proposed FDA site is located at the former Naval Surface Warfare Center (NSWC), owned by the General Services Administration (GSA), and is being developed for future FDA consolidation and the future employment of approximately 6,256 (2002 FDA Master Plan) persons at this location. The White Oak Public Golf Course is within GSA's property and is being used and maintained by the Maryland-National Capital Park and Planning Commission (M-NCPPC). The proposed improvements are intended to accommodate the additional highway traffic and capacity needs associated with future anticipated de0velopment of the Federal Research Center including the FDA facility and other future new development in the vicinity that would add traffic to the MD 650 corridor.

SUMMARY

## 1. Administrative Action

( )Environmental Impact Statement
(X )Environmental Assessment
( )Finding of No Significant Impact
(X) Section 4(f) Evaluation

## 2. Additional Information Concerning this Project May Be Obtained By Contacting:

Ms. Cynthia Simpson
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Mail Stop C-301
Baltimore, MD 21202
Phone: (410) 545-8500
Hours: 8:00 a.m. $-4: 30$ p.m.

Ms. Denise King<br>Environmental Specialist<br>Federal Highway Administration<br>The Rotunda - Suite 220<br>711 West $40^{\text {th }}$ Street<br>Baltimore, MD 21211<br>Phone: (410) 962-4342 (x130)<br>Hours: 7:30 a.m. - 4:30 p.m

## 3. Introduction

This Environmental Assessment (EA) presents the results of engineering and environmental studies to improve MD 650 (New Hampshire Avenue) from Powder Mill Road to north of US 29 (Columbia Pike) (Figure S-1), in Montgomery County, Maryland, as required under the National Environmental Policy Act of 1969 (NEPA). The planning study also addresses additional federal and state laws including Section 4(f) requirements of the U.S. Department of Transportation Act of 1966; Section 106 of the National Historic Preservation Act; the Clean Air Act (as amended in 1990); Title VI of the 1964 Civil Rights Act; the Uniform Relocation Assistance and Real Property Acquisition Policies Act (as amended in 1987); Executive Order (EO) 12898; the Maryland Environmental Policy Act (MEPA); the 1992 Maryland Economic Growth, Resource Protection and Planning Act and the 1997 Smart Growth and Neighborhood Conservation Act. The study area is entirely within a designated Priority Funding Area (PFA), and is consistent with the 1997 White Oak Master Plan (Figure S-2).

## 4. Description of Action

The purpose of this project is to improve traffic operations for vehicles using MD 650 at Powder Mill Road and from Chalmers Road to north of US 29. In order to accommodate the additional highway traffic and capacity needs associated with future anticipated development, this study assesses the environmental impacts of the proposed transportation improvements along MD 650.


The project will consider provisions for improving circulation of traffic and pedestrians to and from the proposed FDA facility to accommodate future development associated with FDA's consolidation and the future employment of approximately 6,256 (2002 FDA Master Plan) persons at this location. This project will also consider adequate vehicular, pedestrian and bicycle access to existing and planned activity centers, including commercial sites.

## 5. Alternatives Summary

In the preliminary phase of this project, one conceptual alternative was studied and underwent several modifications. Following the preliminary phase, the no-build alternative and one build alternative were considered for further study.

## Alternative 1 (No-Build)

Alternative 1 would not provide any significant improvements to MD 650 from Powder Mill Road to north of US 29. Any improvements would occur as part of normal maintenance and safety operations and would not measurably affect roadway capacity or address accident potential.

## Alternative 2 (Build Alternative)

Alternative 2 involves outside widening of MD 650 to provide an additional northbound through lane from Crest Haven Drive to the ramp to northbound US 29. Alternative 2 also considers intersection improvements at the following locations in the MD 650 corridor:

- MD 650/Powder Mill Road Intersection
- MD 650/Mahan Drive Intersection
- Relocated Michelson Road
- MD 650/Lockwood Drive Intersection
- US 29/MD 650 Interchange


## 6. Summary of Environmental Impacts

A summary comparison of impacts associated with the alternatives under consideration is presented in Table S-1.

## Table S-1

## Summary of Impacts



## Socio-economic Resources

No displacements would be required with Alternative 1 or 2. Residential and commercial right-ofway acquisitions would be required with Alternative 2. One Section 4(f) resource would be impacted by Alternative 2. Socio-economic resource impacts are discussed in Chapter V, and Section 4(f) impacts are described in Chapter VI.

## Natural Environmental Resources

Minor impacts to streams and woodlands would result from Alternative 2. Natural environmental impacts are detailed in Chapter V.

## Cultural Resources

The State Historic Preservation Officer (SHPO) has determined that one historic site which is on or eligible for the National Register of Historic Places is located within the area of potential effect. This site is the Naval Ordinance Laboratory (NOL) Historic District. The SHPO concurred that there will be no adverse effect on the NOL Historic District (January 14, 2002). Specifically, a portion of the golf course within the NOL Historic District would be used for road improvements. Please refer to Page VII-1b in Chapter VII, Other Agency Correspondence.

## Noise Impacts

Six Noise Sensitive Areas (NSAs), represented by forty-one individual receptors, were identified for this project. Design year build and no-build noise levels will approach or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) of 67 dBA at five of the six NSAs. Since the No-Build Alternative would not involve additional highway improvements or increasing existing capacity, noise abatement was not considered. Feasibility and reasonableness of noise abatement was investigated for the build condition at NSA $1,2,3,5$, and 6 . Right-of-way constraints preclude the construction of earth berms as sound barriers. Therefore, sound barrier walls were evaluated. Sound barriers were considered not feasible or reasonable at each of the evaluated NSAs, based on SHA feasibility and reasonableness criteria, as defined in the SHA Sound Barrier Policy (May 11, 1998).

## Air Quality Impacts

The air quality analysis indicates that carbon monoxide impacts would result in violations of the S/NAAQS 8-hour concentration ( 9.0 parts per million (ppm)) for the 2025 No-Build Alternative. Violations of the S/NAAQS 1-hour standard ( 35 ppm ) also occur in the 2025 No-Build Alternative. A total of three 8-hour and two 1-hour violations occur at the MD 650/Powder Mill intersection for the No-Build Alternative in the 2025 analysis year. No CO concentrations exceeded the S/NAAQS for the 2007 or 2025 Build Alternative.

## 7. Conclusion

The MD 650 study will examine service improvements to reduce congestion in the MD 650 study area. This transportation improvement will consider reducing congestion on MD 650 by providing additional accessibility to the proposed FDA facility; thereby alleviating traffic operation issues.

## TABLE OF CONTENTS

Page No.SUMMARY

1. Administrative Action ..... S-1
2. Additional Information Concerning This Project May Be Obtained By Contacting ..... S-1
3. Introduction ..... S-1
4. Description of Action ..... S-1
5. Alternatives Summary ..... S-4
6. Summary of Environmental Impacts ..... S-4
7. Conclusion ..... S-7
I. DESCRIPTION OF THE PROPOSED ACTION
A. Project Location ..... IT
B. Project Description ..... II
II. PURPOSE AND NEED FOR THE PROJECT
A. Purpose of the Project ..... II-1
B. Need for the Project ..... II -1
C. Traffic Data and Level of Service ..... II-2
D. Intermodal Connectivity ..... II-6
E. Background ..... II-9
8. System Information ..... III-9
9. System Linkage and Regional Plan Consistency ..... II-9
10. Master Plan Consistency and County Support ..... III -10
III. ALTERNATIVES CONSIDERED
A. Project Background/History ..... III-1
B. Development of LABQUEST Community Partnership. ..... II I-3
C. Preliminary Alternatives Developed ..... III I-3
11. Alternative 1 (No Build) ..... III I-3
12. Preliminary Alternative ..... III-5
D. Public Meeting ..... III-6
E. Alternatives Being Studied ..... IIII-7
13. Alternative 1 - No-Build ..... III-7
14. Alternative 2 - Build Alternative ..... III-7
IV. DESCRIPTION OF EXISTING ENVIRONMENT
A. Social Environment ..... IV -1
15. Population and Housing ..... IV-1
16. Communities within the Study Area ..... IV-3
17. Environmental Justice Inventory ..... IV-4
18. Community Facilities and Services ..... IV-7
a. Libraries ..... IV-7
b. Religious Institutions ..... IV-7
c. General Services and Facilities ..... IV-7
19. Visual Quality ..... IV-8
B. Economic Environment ..... IV-9
20. Countywide Employment Characteristics ..... IV-9
21. Study Area Employment Characteristics ..... IV-9
a. General Statistics and Designations ..... IV-9
b. Commercial and Industrial Facilities ..... IV-10
c. Active Farmlands ..... IV-10
22. Transportation Characteristics ..... IV-10
C. Land Use ..... IV-11
23. Existing Land Use ..... IV-11
24. Future Land Use ..... IV-11
D. Cultural Resources ..... IV-11
E. Natural Environment ..... IV-14
25. Physiography/Topography and Geology ..... IV-14
26. Soils ..... IV-14
27. Water Resources ..... IV-16
a. Surface Water ..... IV-16
b. Floodplains ..... IV-16
28. Ecological Conditions ..... IV-16
a. Waterways/Wetlands ..... IV-16
b. Terrestrial Wildlife/Habitat ..... IV-17
c. Aquatic Wildlife/Habitat ..... IV-19
29. Endangered and Threatened Species ..... IV-19
30. Unique Sensitive and Aesthetic Areas ..... IV-19
F. Existing Noise Conditions ..... IV-19
31. Noise Sensitive Area Description. ..... IV-19
32. Existing Noise Conditions ..... IV-22
a. Noise Monitoring ..... IV-22
G. Existing Air Quality ..... IV-23
H. Hazardous Materials ..... IV-26
33. Initial Site Assessment ..... IV-26
34. Summary of Findings ..... IV-27
a. File Review and Agency Coordination ..... IV-27
b. Site Inspection ..... IV-27
V. ENVIRONMENTAL CONSEQUENCES
A. Social Impacts. ..... V-1
35. Property Impacts ..... V-1
36. Summary of SHA's Equal Opportunity Program/Title VI Statement ..... V-1
37. Environmental Justice ..... V-2
38. Effects on Community Services and Facilities ..... V-2
a. Emergency Services ..... V-2
b. Religious Institutions ..... V-3
39. Effects on Visual Quality ..... V-3
B. Economic Impacts ..... V-5
C. Impacts on Historic and Archeological Sites ..... V-6
D. Natural Environment ..... V-7
40. Topography and Geology ..... V-7
41. Soils ..... V-8
a. Erosion and Sedimentation ..... V-8
42. Water Resources ..... V-8
a. Surface Water and Groundwater ..... V-8
43. Ecological Effects ..... V-9
a. Waterways/Wetlands ..... V-9
b. Terrestrial Wildlife/Habitat. ..... V-10
c. Aquatic Wildlife/Habitat. ..... V-11
E. Noise Impacts ..... V-12
44. Prediction Results for Each Alternative ..... V-12
45. Impact Assessment and Feasibility of Noise Control. ..... V-12
46. Construction Impacts ..... V-17
F. Air Quality ..... V-18
47. CO Microscale Analysis ..... V-18
48. Conformity with Regional Air Quality Planning ..... V-19
G. Hazardous Materials ..... V-20
49. Initial Site Assessment ..... V-20
a. Conclusions and Recommendations ..... V-20
H. Secondary and Cumulative Effects Analysis ..... V-21
50. Scoping ..... V-21
a. Resources ..... V-21
b. Boundary ..... V-22
c. Time Frame ..... V-24
51. Past Time Frame ..... V-24
52. Future Time Frame ..... V-24
53. Analysis ..... V-25
a. Land Use Scenarios ..... V-25
54. Past ..... V-25
55. Present ..... V-25
56. Future ..... V-26
b. SCEA Resources ..... V-26
57. Waters of the US ..... V-26
a. Past ..... V-29
b. Future ..... V-29
58. Historic Resources ..... V-30
a. Past ..... V-30
b. Future ..... V-30
59. Recreational Facilities ..... V-32
a. Past ..... V-32
b. Future ..... V-32
60. Conclusions ..... V-32
a. Waters of the US ..... V-32
b. Historic Resources ..... V-33
c. Recreational Facilities ..... V-33
VI. DRAFT SECTION 4(F) EVALUATION
A. Introduction ..... VI-1
B. Proposed Action. ..... VI-1
C. Description of Section 4(f) Resources ..... VI-3
D. Impacts on Section 4(f) Resources ..... VI-4
E. Avoidance and Minimization Alternatives ..... VI-9
61. Minimization Alternative ..... VI-9
62. Avoidance Alternatives ..... VI-9
F. Measures to Minimize Harm ..... VI-15
G. Mitigation ..... VI-16
H. Coordination ..... VI-19

## VII. COMMENTS AND COORDINATION

Elected Official Correspondence
VII -1
Public Involvement Correspondence................................................................................VII-1a
Other Agency Correspondence.........................................................................................VII-1b

## VIII. APPENDICES

Appendix A Business Inventory
Appendix B Supplemental Technical Information
Appendix C References
Appendix D Record of Conversation Regarding Environmental Justice

LIST OF TABLES
Table S-1 Summary of Impacts ..... S-5
Table II-1 Average daily Traffic (ADT) ..... П-3
Table II-2 Level of Service Analysis ..... II-6
Table III-1 Difference in Lane Configurations Recommended ..... III -6
Table IV-1 Population and Housing Characteristics ..... IV-3
Table IV-2 Employment Characteristics ..... IV -9
Table IV-3 Commute Information ..... IV-10
Table IV-4 Education ..... IV-10
Table IV-5 Description of Soil Series in the Study Area ..... IV-15
Table IV-6 Description of Wetlands/Waterways within the Study Area ..... IV-17
Table IV-7 Short Term Monitoring Noise Levels ..... IV-22
Table IV-8 Location of Air Quality Receptors ..... IV-24
Table V-1 Commercial Right of Way Acquisition Impacts ..... V-5
Table V-2 Impacts to Waterways/Wetlands Within the Study Area ..... V-9
Table V-3 Impacts to Large Trees ..... V-10
Table V-4 Predicted Design Year Noise Levels ..... V-14
Table V-5 SCEA Resources ..... V-22
Table V-6 Future Land Development ..... V-26
Table VI-1 Summary of Impacts to the White Oak Golf Course ..... VI-7
Table VI-2 Avoidance Alternative 1 Impacts ..... VI-11
Table VI-3 Avoidance Alternative 2 Impacts ..... VI-14
Table VI-4 Avoidance Alternative 3 Impacts ..... VI-15

## LIST OF FIGURES

Figure S-1 Regional and Study Arca Maps ..... S-2
Figure S-2 Priority Funding Area (PFA) ..... S-3
Figure II-1 Existing (2000) Traffic Volumes and Level of Service ..... II-4
Figure II-2 2025 No-Build Traffic Volumes and Level of Service ..... II-5
Figure III-1 Preliminary Alternative ..... III-4
Figure III-2 2007 No-Build Traffic Volumes and Level of Service ..... III-8
Figure III-3 Alternative 2 - Build Alternative ..... III-9
Figure III-4 Typical Section. ..... III-13
Figure III-5 2007 Build Traffic Volumes and Level of Service ..... III-14
Figure III-6 2025 Build Traffic Volumes and Level of Service ..... III-15
Figure IV-1 White Oak Planning District and Census Tracts ..... IV-2
Figure IV-2 Existing and Future Land Use ..... IV-12
Figure IV-3 Noise and Air Quality Receptors - Alternative 1 ..... IV-21
Figure V-1 Noise and Air Quality Receptors - Alternative 2 ..... V-13
Figure V-2 SCEA Geographical Boundary ..... V-23
Figure V-3 SCEA Study Area Population Change ..... V-24
Figure V-4 Future Development ..... V-27
Figure V-5 Waters of the US Resources ..... V-28
Figure V-6 Historic \& Recreational Facilities ..... V-31
Figure VI-1 Avoidance Alternatives 1 \& 2 ..... VI-10
Figure VI-2 Avoidance Alternative 3 ..... VI-13
Figure VI-3 Section 4(f) Mitigation Concept Plan ..... VI-17

## I. DESCRIPTION OF THE PROPOSED ACTION

## A. Project Location

MD 650 (New Hampshire Avenue) is located in eastern Montgomery County near the Montgomery/Prince George's County Line, and is a primary facility for north-south travel through Montgomery County. The study area is located in White Oak, MD, just north of Washington D.C., and extends along MD 650 from Powder Mill Road to north of US 29 (Columbia Pike). Mahan Road is located in the center of the study area, and provides the main access to the proposed FDA site (Figure S-1). Additional access will be provided via relocated Michelson Road.

## B. Project Description

MD 650 and US 29 are each functionally classified as other principal arterial highways, and Powder Mill Road is functionally classified as a minor arterial highway. The study area is entirely within a designated Priority Funding Area (PFA) (Figure S-2).

The purpose of this project is to improve traffic operations for vehicles using MD 650 at Powder Mill Road and from Chalmers Road to north of US 29. The project will consider provisions for improving circulation of traffic and pedestrians to and from the proposed FDA facility as well as providing adequate vehicular, pedestrian and bicycle access to existing and planned activity centers, including commercial sites. The proposed FDA site is located at the former NSWC, owned by the General Services Administration (GSA), and is being developed for future FDA consolidation. The White Oak Public Golf Course is within GSA's property and is used and maintained by the Maryland-National Capital Park and Planning Commission (M-NCPPC). The proposed improvements are intended to accommodate the additional highway traffic and capacity needs associated with future anticipated development.

## II. PURPOSE AND NEED FOR THE PROJECT

## A. Purpose of the Project

The purpose of this project is to improve traffic operations for vehicles using MD 650 at Powder Mill Road and from Chalmers Road to north of US 29. In order to accommodate the additional highway traffic and capacity needs associated with future anticipated development, this study assesses the environmental impacts of the proposed transportation improvements along MD 650. The project will consider provisions for improving circulation of traffic and pedestrians to and from the proposed FDA facility to accommodate future development associated with FDA's consolidation and the future employment of approximately 6,256 (2002 FDA Master Plan) persons at this location. This project will also consider adequate vehicular, pedestrian and bicycle access to existing and planned activity centers, including commercial sites.

## B. Need For the Project

Transportation improvements along MD 650 are needed to accommodate additional highway traffic and capacity needs. The project was initiated based on roadway transportation needs identified in GSA's 1997 FEIS since FDA's consolidation will substantially contribute to the impact of traffic flow in this area. The following necessary improvements were identified to mitigate traffic impacts associated with the FDA consolidation (1997 FEIS, Pages 4-108 through 4-110):

- MD 650 at Michelson Road - These improvements include the addition of a turn lane along northbound MD 650 into the site.
- MD 650 and Schindler Drive/Mahan Drive - These improvements include the addition of a channelized turn lane into the site; and extending the southbound turn lane on MD 650.
- MD 650 at Lockwood Drive - These improvements include the widening of southbound MD 650 to accommodate the turning movements of turn lanes from the east leg of Powder Mill Road.
- MD 650 at Lockwood Drive - These improvements involve reconfiguring the intersection to provide a turn lane on Lockwood Drive.

Additional traffic analyses [1998 Traffic Access Plan (General Services Administration); Transportation Improvement Feasibility Study (BMI, 1999); and Review of Transportation Improvements along New Hampshire Avenue (MD 650) (General Services Administration 2000)]
were undertaken by Montgomery County and GSA to determine needed transportation roadway improvements to accommodate not only the FDA proposed development, but also other future projected new development at other locations in the vicinity that would add traffic to the MD 650 corridor. These studies concluded that selected intersections would operate at an unacceptable level of service (LOS) with the proposed FDA consolidation and other projected new development. LOS is explained in Section $C$ of this chapter.

SHA's proposed build alternative incorporates the necessary improvements identified in the 2000 Review of Transportation Improvements Along MD 650, which are based on the traffic needs associated with FDA's proposed development as well as other projected new development that would contribute traffic along this corridor. An estimated 1800 PM peak hour trips are forecasted for the fully developed FDA consolidation, with 90 percent of those trips accessing the site from one of two entrances along MD 650. Refer to pages 2 through 6 of the March 28, 2000 Review of Transportation Improvements Along MD 650 report for additional information on trip generation and trip distribution for the FDA site development. Peak hour estimates of traffic accessing the FDA site represent approximately 15 percent of the future peak hour traffic and accounts for roughly one-third of the anticipated traffic growth. The purpose of this Environmental Assessment/Draft Section 4(f) Evaluation is to document the environmental impacts associated with SHA's proposed improvements to MD 650.

The MD 650 project was identified as part of the East-West Intersection Improvement Program in the 2002-2007 Maryland Department of Transportation's Consolidated Transportation Program (CTP) and on the Washington Metropolitan Council of Government's (WashCOG) 2001-2006 Transportation Improvement Plan (TIP).

## C. Traffic Data and Level of Service

The principal roadways within the study area are Interstate 495 (I-495), MD 650 (New Hampshire Avenue), US 29, MD 212 (Powder Mill Road) and Lockwood Drive.

The study area also consists of the following intersections:

- MD 650 at Michelson Road
- MD 650 at Schindler Drive/Mahan Drive
- MD 650 at Powder Mill Road
- MD 650 at Lockwood Drive
- US 29 at Lockwood Drive

For further detail on these roadways and intersections, please refer to Section 3.4.2. (pages 3-89 through 3-92) of the 1997 FEIS for the description of the roadways within the study area.

All traffic signals in Montgomery County, including those in the MD 650 corridor, are interconnected and maintained by Montgomery County. There have not been any recent changes to signal timing or phasing in the corridor.

Average daily traffic (ADT) volumes for existing conditions (2001) and no-build years 2007 and 2025 are shown in Table II-1, and peak hour intersection turning movement volumes are shown in Figures II-1 and II-2. Traffic volume information was provided by SHA Travel Forecasting. The forecasts used in this project were based on previous forecasting efforts described in detail in the "Review of Transportation Improvements Along New Hampshire Avenue" (General Services Administration 2000). Peak hour estimates of traffic accessing the FDA site are approximately 1100 during the AM peak hour and 1800 during the PM peak hour. This represents approximately 15 percent of the future peak hour traffic and accounts for roughly one-third of the anticipated traffic growth in the study area of the MD 650 corridor.

## Table II-1

Average Daily Traffic (ADT)




Critical lane methodology was used at signalized intersections to determine the number of conflicts at the intersection, known as the critical lane volume (CLV) and the ratio of that volume to the intersections capacity ( $\mathrm{v} / \mathrm{c}$ ratio). From this, the Level of Service (LOS) is determined. LOS is a measure of congestion experienced by drivers, and ranges from "A" (free flow with little or no congestion) to " $F$ " (failure with stop-and-go conditions). LOS is normally computed for the peak periods of the typical day, with LOS "D" (approaching unstable flow) or better generally considered acceptable for highways in suburban areas. At LOS " $E$ ", volumes are near or at the capacity of the highway. LOS " $F$ " represents conditions in which the capacity is exceeded resulting in operational breakdowns with stop-and-go traffic and extremely long delays at signalized intersections. A table summarizing the 2001, 2007 No-Build and 2025 No-Build critical lane analysis is included in Table II-2.

## Table II-2

Level of Service Analysis

| Location / Scenario | AM Peak Hour |  |  |  | PM Peak Hour |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LOS | V/C | CLV | LOS | V/C | CLV |  |
| MD 650 at Lockwood Road |  |  |  |  |  |  |  |
| Existing | F | 1.11 | 1770 | F | 1.22 | 1954 |  |
| 2007 No Build | F | 1.43 | 2289 | F | 1.33 | 2125 |  |
| 2025 No Build | F | 2.12 | 3394 | F | 2.02 | 3232 |  |
| MD 650 at Schindler Road / Mahan Road |  |  |  |  |  |  |  |
| Existing | E | 0.94 | 1500 | D | 0.89 | 1423 |  |
| 2007 No Build | F | 1.12 | 1790 | F | 1.40 | 2239 |  |
| 2025 No Build | F | 1.61 | 2578 | F | 2.09 | 3341 |  |
| MD 650 at Powder Mill Road |  |  |  |  |  |  |  |
| Existing | F | 1.03 | 1654 | F | 1.04 | 1665 |  |
| 2007 No Build | F | 1.37 | 2197 | F | 1.33 | 2122 |  |
| 2025 No Build | F | 1.79 | 2863 | F | 1.93 | 3082 |  |

Analysis based on SHA critical lane volume methodology and volume and lane information provided by SHA.

## D. Intermodal Connectivity

The 1997 White Oak Master Plan states that congested LOS at key intersections within the White Oak Master Plan area is due to a restricted roadway network, limited level of transit service and use, and development occurring in the surrounding region. As a means of addressing this problem, the master plan considers the use of alternative modes of travel such as transit, carpools, walking and bicycling.

The current study area is served by multiple surface transportation modes. A White Oak Transit Center Planning Study is underway (to be completed November 2002), based on concepts outlined in the 1997 White Oak Master Plan and the possibility of the Transit Center becoming a stand alone Capital Improvement Program (CIP) project.

Forecasts of future trip patterns indicate that 80 percent of all trips with an origin in Montgomery County would be made to a Montgomery County destination. These intra-county trips would be from multiple origins to multiple destinations and will also be of a shorter length than a traditional trip to downtown Washington D.C. It is recommended that transit center hubs, where patrons can transfer from one local bus to another, are an important element in serving these new types of trips. The current concept for the Transit Center has 500 parking spaces and six bus bays. The White Oak Shopping Center has been identified in the 1997 White Oak Master Plan as the preferred study site for the center (please refer to Figure IV-2 in Chapter IV, Section C). This designation is based on the concept that transit centers should be based in commercial centers in order to create synergies between transit patrons and the businesses in the commercial center. The White Oak planning area is also a major crossroads for vehicular traffic from US 29 and MD 650 and for bus patrons, including Metrobus and Ride On users. In addition to the White Oak Shopping Center (please refer to Figure IV-2 in Chapter IV, Section C), other potential transit center sites considered include the FDA site at Michelson and New Hampshire Avenue and the Clark Site north of US 29. The MD 650 study supports the possibility of a transit center at the White Oak Shopping Center to encourage use of public transportation by FDA employees. The proposed improvements for the MD 650 study are consistent with the proposed transit center mentioned in the 1997 White Oak Master Plan.

According to the 1997 White Oak Master Plan, vehicle, bicycle and pedestrian access should be available for the area's existing planned transit stations. The proposed improvements for MD 650 include new segments of an off-road bicycle path along the east side of the roadway. The new northbound curb lane of MD 650 will also be 16 feet wide to accommodate bicyclists.

The 1997 White Oak Master Plan recommends the following to improve bicycle circulation:

- Class II (a bike lane on a road designated by striped pavement or a barrier) bikeway at White Oak Shopping Center, from US 29 to Lockwood Drive
- Class III (on-street route shared by motor vehicles and bicycles designated by signing only) bikeway for MD 650, from the I-495 to Randolph Road
- Class I (separate off-street path or trail) or Class III bikeway between Powder Mill Road and Lockwood Drive
- MD 650 bikeway to connect to the Prince George's County system
- Class III bikeway at Lockwood Drive through the White Oak Commercial Center
- Class II bikeway from north of the US 29 interchange to Lockwood Drive and from Stewart Lane to the White Oak Commercial Center

The Maryland-National Capital Park and Planning Commission (M-NCPPC) recommended several elements to SHA for the proposed project in order to accommodate bicyclists and pedestrians. As part of the MD 650 study and consistent with the 1997 White Oak Master Plan, an extensive pedestrian network is being further expanded by the addition of new sidewalks. Any intersection improvements would need to accommodate bicycle and pedestrian access to the existing and proposed routes. Sidewalk alignment and width is being considered at the Lockwood Drive and Powder Mill Road intersections, where space is tight due to adjacent commercial land uses. Pedestrian facilities at non-intersection locations within the study area would be compatible with the Americans With Disabilities Act (ADA). As part of the MD 650 project, handicap ramps on the north legs of the Chalmers Road, Cresthaven Drive and Rupert Road "T" intersections are incorporated into the design. Crosswalks are also part of the proposed MD 650 improvements. Crosswalks are proposed at sidewalk/trail on the east side of MD 650 at the service road at Schindler Drive and the Northwest Drive/Relocated Michelson Road intersection. If crossing is prohibited at MD 650 at McCeney Avenue, appropriate signs will be provided directing pedestrians to adjacent intersections. As part of the MD 650 intersection (signalized or not) safety improvements, the study will ensure a sufficient level of lighting to permit drivers to see pedestrians in the roadway.

Other projects within or near the study area that support the bicycle/pedestrian network are identified in the Maryland Department of Transportation 2002-2007 Consolidated Transportation Program (CTP) which presents detailed listings and descriptions of capital projects that are proposed for construction, or for development and evaluation during the next six-year period. They include the following:

- MD 28 (Norbeck Road) / MD 198 (Spencerville Road) - Corridor study to consider capacity improvements in the MD 28 and MD 198 corridor in Montgomery and Prince George's counties ( 10.5 miles). Wide curb lanes will be included to accommodate bicycles, and sidewalks will be included where appropriate. Project planning is underway.
- East-West Link Improvements - Study to construct new east-west link improvements in Montgomery and Prince George's counties between I-370 and US 1. Bicycle and pedestrian access will be provided where appropriate. Project planning is planned to begin for the EastWest Link in the budget fiscal year.
- East-West Intersection Improvement Program - Program to improve intersections in northern Montgomery County and western Prince George's counties. Bicycle and pedestrian access will be included as appropriate. Final engineering, right-of-way and construction are underway.

According to the March 2002 Transportation Management Plan (TMP) for the FDA Consolidation, sidewalks will be constructed on site. GSA will construct sidewalks on site to provide pedestrian circulation between buildings to parking lots.

The TMP also recommended facilities for individual bicyclists to store their bicycles. Bicycle racks or lockers were suggested to be conveniently located at the entrances of the buildings. If feasible, showers were also recommended, so individuals who choose to ride bicycles will be able to change and shower.

## E. Background

## 1. System Information

Based on the Federal Functional Classification System, MD 650 and US 29 are each functionally classified as other principal arterial highways, and Powder Mill Road is functionally classified as a minor arterial highway. MD 650 and US 29 are each classified as major highways by the Master Plan Roadway Designation. Both Lockwood Road (CO 109) and Powder Mill Road (CO 104) are county roadways, designated as arterials in the master plan. The master plan designates Schindler Drive, also within the project study area, as a primary residential road.

## 2. System Linkage and Regional Plan Consistency

Transit owned by the Washington Area Metropolitan Transit Authority (WMATA) serves the White Oak Master Plan area by bus routes along its major highways including MD 650, US 29 and Randolph Road. These routes provide regional access via the Silver Spring, Wheatòn, and Fort Totten Metro stations, and will link the White Oak Master Plan area to the future Glenmont Metro station. Currently, the bus network focuses on transporting people to Silver Spring who are employed in this area or transferring people to Metrorail service to Washington D.C. or to buses bound for Bethesda and other western Montgomery County work locations. The importance of a
transit link to Silver Spring will increase as the congestion on US 29 increases. In addition, there is an increasing amount of employment in other areas of the county that will drive the need for expanded cross-county transit service.

One of the Transportation Demand Management (TDM) strategies listed in the 1997 White Oak Master Plan is the objective of managing transportation demand to achieve better system efficiency and reduce traffic generated by the new and existing development under certain conditions. To assist in meeting this objective, the 1997 White Oak Master Plan recommended that a TDM Program be developed to include the monitoring of ridesharing and traffic conditions at the key intersections or interchanges in the US 29 area. Recommended goals of the TDM Program include:

- Coordinate with the Silver Spring Central Business District Program
- Develop alternatives to single-occupancy vehicles during construction of segments of US 29
- Promote the use of transit and ridesharing among employees and residents in the US 29 area
- Coordinate park and ride lots and bus service
- Monitor all trip mitigation programs on a periodic basis to evaluate effectiveness

The FDA also defines transportation management strategies in the March 2002 TMP for the FDA Consolidation. The TMP identified a goal of developing a program to increase the Average Vehicle Occupancy (AVO) to 1.5 persons per vehicle. To achieve this goal, the plan discusses strategies that will increase transit usage and carpooling, including the following:

- Increase participation in a carpool or vanpool to 23 percent of the employees.
- Increase transit usage to 18 percent of the employees.
- Reduce the number of vehicles by two percent through the implementation of workplace programs, which will reduce the need for driving alone. These will include alternative work hours and telecommuting and shuttle bus services as well as bicycling and walking.


## 3. Master Plan Consistency and County Support

SHA's MD 650 Improvement Study is entirely within the Montgomery County-Certified Priority Funding Area (PFA) (refer to Chapter III.E for a detailed discussion of SHA's improvement alternatives and Figure S-2 that depicts the PFA in relation to the study area). The proposed transportation improvements are consistent with the 1997 White Oak Master Plan recommendations for roadway and intersection improvements for MD 650. The goals of the MD 650 Improvement

Study are consistent with the goals of the 1997 White Oak Master Plan's support for the FDA facility:

1) make all necessary improvements to facilitate the in-flow and out-flow of the approximately 4,000 cars expected to be used by FDA employees;
2) minimize congestion on MD 650 during peak traffic hours;
3) and preclude the use of Lockwood Drive, Schindler Drive and Northwest Drive as commuter thoroughfares for FDA employees.

Several future transportation improvements have been recommended by M-NCPPC within the project area, and are included in the 1997 White Oak Master Plan. Transportation improvements anticipated in this plan included:

- US 29 - Improvements to US 29 should provide six general purpose lanes plus acceleration and deceleration lanes, with four lanes crossing the Patuxent River to the Howard County line. US 29/MD 216 is one of three new interchanges currently being built in partnership with Howard County. The US 29/MD 216 interchange is the first of ten interchanges in Howard and Montgomery counties to be constructed and completed along US 29 in an effort to improve mobility along the congested north-south corridor. SHA opened an interchange at MD 175 (Little Patuxent Parkway) and the Snowden River Parkway. Construction is underway on the US 29/Hopkins/Gorman Road interchange and is scheduled to be complete in Fall 2002. Also by Fall 2002, SHA will break ground on two US 29 interchanges in Montgomery County including the US 29/MD 198 and US 29/Randolph Road interchanges. US 29 interchanges in Montgomery County at Stuart Lane, Industrial Parkway/Tech Road, Musgrove/Fairland, Greencastle Road and Blackburn Road are currently in the design phase.
- MD 650 - Study the potential to widen New Hampshire Avenue from four lanes to six lanes at the US 29 interchange.
- Lockwood Drive - Reaffirm classification of Lockwood Drive between US 29 and a point 400 feet west of New Hampshire Avenue as an arterial road with a two-lane closed section crosssection. This master plan recommendation was reaffirmed, and Lockwood Drive's functional classification remains an arterial road (Personal Interview, April 2002).

Construction is funded for 700 feet of missing sidewalk links on the east side of Lockwood Drive from US 29 to New Hampshire Avenue, as part of a project providing continuity of pedestrian facilities between University Boulevard and Prelude Drive. The scope also includes construction of 3,300 feet of sidewalk on the west side of US 29 where feasible. The project includes the construction of retaining walls to reduce the impacts to properties adjacent to the public right-of-way. This project was completed in Fall 2001 (Personal Interview, April 2002).

- Powder Mill Road - From New Hampshire Avenue to the Prince George's County line, sidewalk and bikeway improvements are recommended. None of the recommended improvements have been funded at this time (Personal Interview, April 2002).

The MD 650 Study considers adding double left turn lanes from MD 650 onto US 29 to alleviate congestion. It also considers widening Lockwood Drive to allow for double left turn lanes. The areas of proposed improvements are consistent with those areas mentioned for improvement in the 1997 White Oak Master Plan.

## III. ALTERNATIVES CONSIDERED

## A. Project Background/History

The Maryland State Highway Administration (SHA) proposed MD 650 and associated improvements were initiated based on roadway transportation needs identified in GSA's 1997 FEIS since FDA's consolidation will substantially contribute to the impact of traffic flow in this area. Prior to the development of the 1997 FEIS, the MD 650 roadway improvements (from I-495 to the Inter-County Connector) were identified in the 1997 White Oak Master Plan. The 1997 White Oak Master Plan recommended widening to a six lane divided highway between Randolph Road and the (then) proposed Inter-County Connector (ICC). Additionally, sidewalk improvements were recommended along MD 650 from I-495 to the (then) proposed ICC.

The purpose of the 1997 FEIS was to provide new consolidated, state-of-the art facilities for the FDA on one location in Montgomery County, Maryland. The 1997 FEIS included a no-action alternative. For a brief description of the April 1997 study, please refer to the 1997 FEIS Summary, Pages S-1 through S-7. Various sections of the 1997 FEIS will be referenced throughout this document. The study area consisted solely of the former NSWC property, located at White Oak. The main entrance is located at 10901 New Hampshire Avenue, approximately 1.15 miles north of I-495 and 0.75 mile south of US 29.

The MD 650 study area extends linearly along existing MD 650, from Powder Mill Road to North of US 29. The purpose of this Environmental Assessment/Draft Section 4(f) Evaluation is to document the environmental impacts associated with SHA's proposed improvements to MD 650.

In July 1997, the GSA proposed to consolidate the FDA at the former site of the NSWC located at White Oak, in Montgomery and Prince George's Counties, Maryland (Record of Decision, July 1997). A "Transportation Improvement Feasibility Study" (BMI, 1999) was prepared for Montgomery County to determine the need for transportation improvements to accommodate for the FDA consolidation as well as other projected new development that would contribute traffic along this corridor. The objective of the 1999 BMI Report was to determine what improvements were needed on the MD 650 corridor between I-495 and US 29. It was determined that the
following interchanges/intersections would require improvements to accommodate the estimated future traffic, even if there were no improvements to the FDA site ("baseline" scenario):

- US 29 and MD 650
- Lockwood Drive and MD 650
- Powder Mill Road and MD 650

Additional improvements would be needed at the following intersections for the "FDA development" scenario (approximately 2.3 million square feet of office, lab and support facilities [2002 FDA Master Plan]):

- Lockwood Drive and MD 650
- Michelson Road and MD 650
- Schindler Drive/Mahan Road and MD 650

Finally, additional improvements would be needed at the following locations under the "FDA Plus" scenario (which includes 860,000 square foot office park):

- MD 650 northbound lanes
- Lockwood Drive and MD 650
- Schindler Drive/Mahan Road

Please refer to the 1999 BMI Report, Table 2. Recommended Improvement Summary, on Page viii, for improvement descriptions and locations for each of the three scenarios.

In March 2000, a report was prepared entitled, "Review of Transportation Improvements Along New Hampshire Avenue (MD 650)" (General Services Administration 2000). The 2000 Review of Transportation Improvements Along MD 650 Report selected the "FDA Plus" scenario for further evaluation and review based on proposed access changes. Please refer to the 2000 Review of Transportation Improvements Along MD 650 Report, Table 2 - Proposed Modifications to New Hampshire (MD 650) Lane Configurations Recommended in the BMI Report (March 1999), for proposed modifications to the 1999 BMI Report regarding lane configurations. This report concluded that the "FDA Plus" scenario, as described in the 1999 BMI Report, was appropriate with the exception of minor lane changes recommended on each approach of Lockwood Drive and a second left turn lane recommended on the Michelson Road approach (General Services Administration 2000). Finally, additional improvements would be needed at the following locations under the "FDA Plus" scenario (which includes approximately 2.3 million square feet of office, lab
and support facilities under the "FDA development" scenario and an additional 860,000 square foot office park). The preliminary concept will be further discussed in Section C, Preliminary Alternatives Developed, of this document.

## B. Development of LABQUEST Community Partnership

Since February 2000, SHA has actively participated in the LABQUEST Community Partnership (LABQUEST), comprised of representatives from local communities, advisory boards, civic associations, FDA, GSA, Montgomery and Prince Georges' Counties and M-NCPPC. LABQUEST has been assisting in the future development of the Federal Research Center for the FDA by GSA, including improvements to the White Oak Public Golf Course and transportation improvements affecting the surrounding communities. Comments and suggestions received from LABQUEST have been evaluated and incorporated into preliminary concepts where possible. Verbal comments received from LABQUEST members (from February 2000 to June 2001) can be found in the Public Involvement Section, in Chapter VII. Thus far, members have provided valuable insights into the proposed transportation improvements, including access to and from the FDA facility, transportation-related problems during peak traffic hours, signage, pedestrian/bicycle/handicapped requirements, environmental concerns, impacts to the business community, and use of transit. In conjunction with LABQUEST, a Landscaping Focus Group was formed to discuss landscaping issues within the MD 650 corridor. For further detail on the Landscaping Focus Group, please refer to Chapter VI, Section F of this document.

## C. Preliminary Alternatives Developed

Comments and suggestions received from LABQUEST have been evaluated and incorporated into the conceptual transportation alternatives where possible (Figure III-1). A brief description of the No-Build and the preliminary alternative is summarized below.

## 1. Alternative 1 (No-Build)

The No-Build Alternative would not provide any significant improvements to MD 650. Minor improvements would occur as part of normal maintenance and safety operations. These improvements would not measurably affect roadway capacity or reduce the accident rate.


## 2. Preliminary Alternative

Refer to the 1999 BMI Report for details of this preliminary concept (Figure III-1). The preliminary concept considered intersection improvements at the following locations in the MD 650 corridor:

- Powder Mill Road/MD 650 Intersection
- Schindler Drive/Mahan Drive/MD 650 Intersection
- Relocated Michelson Road/Northwest Drive/MD 650 Intersection
- Lockwood Drive/MD 650 Intersection
- Ramp to Southbound US 29/MD 650 Intersection

Because these intersection improvements involved closely spaced intersections, traffic operations between Chalmers Road and the MD 650/US 29 interchange were best addressed by the addition of a northbound lane through that part of the corridor.

The 2000 Review of Transportation Improvements Along MD 650 recommended minor changes to the improvements proposed in the 1999 BMI Report at the MD 650/Lockwood Drive intersection. None of the improvements recommended in the 2000 Review of Transportation Improvements Along MD 650 were carried into final design due to community opposition. Local citizens expressed concern that these recommended improvements would encourage through traffic to use local residential streets as alternates routes. Improvements recommended in the 1999 BMI Report were used except for the westbound Lockwood Drive approach, which was revised based on community input and updated traffic calculations. Two left turn lanes, one through lane and one right turn lane were carried into final design for the westbound Lockwood Drive approach to MD 650.

The 2000 Review of Transportation Improvements Along MD 650 also recommended minor changes to the westbound approach at the MD 650/Relocated Michelson Road/Northwest Drive intersection. The improvements to this approach carried into final design included modification from one left turn lane and one right turn lane (BMI, 1999) to two left turn lanes and one right turn lane (General Services Administration, 2000).

The 2000 Review of Transportation Improvements Along MD 650 recommended re-striping the eastbound Schindler Drive approach at the MD 650/Mahan Road/Schindler Drive intersection to
provide one left turn lane and one left-through-right lane. This recommendation was not carried forward into final design due to community opposition regarding the concern that through traffic would be encouraged to use local residential streets as alternate routes. The existing, one left-through-right lane presented in the 1999 BMI Report was taken into final design.

In summary, the preliminary alternative stems from those recommendations presented in the 1999 BMI Report, with the exceptions previously noted. Table III-1 summarizes the differences in lane configurations recommended in the 1999 BMI Report and the 2000 Review of Transportation Improvements Along MD 650, and shows which of these improvements were carried forward into SHA's final design.

## Table III-1

Differences in Lane Configurations Recommended

| Intersection | 1999 BMI Report (BMI) | 2000 Gorove/Slade Report (C/S) | Alternative 2 |
| :---: | :---: | :---: | :---: |
| ghomerg |  |  |  |
| West Leg: EB Approach | $\cdots+\\|^{\uparrow} \rightarrow$ | $\rightarrow+4 \mid p$ |  |
| East Leg: WB Approach | $+7 \nmid \rightarrow$ | $\cdots+\stackrel{+1}{1}$ |  |
|  |  |  |  |
| East Leg: WB Approach | $\dagger \quad \Gamma$ | $\dagger \uparrow \quad p$ |  |
| 大n |  |  |  |
| West Leg: EB Approach | (existing) |  |  |

## D. Public Meeting

Two public meetings were held to obtain community input on the MD 650 project. The initial meeting was held on April 5, 2000 at the Child Center/Hillandale Center/Inwood House (CHI) Center, a center that supports people with disabilities. The purpose of this meeting was to review the traffic reports completed for the project, discuss the proposed improvements contained in these
reports and review the project schedule. On September 10, 2001, a second public meeting was held at the CHI Center to discuss SHA's MD 650 transportation improvement alternatives being studied to accommodate future traffic associated with the FDA Consolidation. SHA and M-NCPPC staff notified attendees that the M-NCPPC would review the design proposals at its meeting on Thursday, October 25, 2001. The public was given the opportunity to direct comments on the project to the Montgomery County Planning Board. Several general comments were voiced from local residents at the meeting. Topics discussed included design-related issues and traffic operations on existing roads, such as speeding and circulation patterns. These verbal comments and concerns, along with three written comments received following the public meeting, can be found in Chapter VII, Public Involvement Correspondence.

## E. Alternatives Being Studied

## 1. Alternative 1-No-Build

This alternative is being studied as a base case scenario to compare with build options. Refer to Figure III-2 for 2007 No-Build traffic volumes and level of service. Alternative 1 would not provide any significant improvements to MD 650 from Powder Mill Road to north of US 29. Any improvements would occur as part of normal maintenance and safety operations and would not measurably affect roadway capacity or address accident potential.

## 2. Alternative 2-Build Alternative

Alternative 2 involves outside widening of MD 650 to provide an additional northbound through lane from Crest Haven Drive to the ramp to northbound US 29. (Figure III-3). The typical section for Alternative 2 is shown in Figure III-4. Figures III-5 and III-6 illustrate peak hour volumes, average daily traffic and level of service information for Alternative 2. Alternative 2 also considers intersection improvements at the following locations:

- MD 650/Powder Mill Road Intersection
- MD 650/Mahan Drive Intersection
- Relocated Michelson Road
- MD 650/Lockwood Drive Intersection
- US 29/MD 650 Interchange






MD 650 from Powder Mill Road
to North of US 29
(- Maryland Department of Transporation
State Highway Administration
FIGURE III-4
Typical Section


## MD 650/Powder Mill Road Intersection

At the MD 650/Powder Mill Road intersection, the northbound left turn lane will be lengthened 175 feet by reducing the median width in this area. The east leg of the intersection will be widened to the south of Powder Mill Road and the westbound lanes configured to provide two left turn lanes, one shared left-through lane and one exclusive right turn lane. A raised median will be added between the westbound lanes and the two eastbound lanes to provide a pedestrian refuge area.

## MD 650/Mahan Drive Intersection

In addition to the northbound through lane added to MD 650, a northbound right turn lane will be added at the MD 650/Mahan Drive intersection. A double left turn lane from southbound MD 650 to Mahan Drive will also be added. Mahan Drive will be widened to provide three eastbound lanes and four westbound lanes, configured as two left turn lanes, one shared left- through lane and one exclusive right turn lane. A grass median will be provided on Mahan Road for pedestrian refuge.

## MD 650/Relocated Michelson Road

Under Alternative 2, Michelson Road will be relocated to a location across from Northwest Drive, approximately 550 feet south of its current intersection location. Two left turn lanes will be added to MD 650 to accommodate southbound left turns to Relocated Michelson Road. Relocated Michelson Road will consist of two eastbound lanes and three westbound lanes (two left turn lanes and one right turn lane) with a grass median for pedestrian refuge.

## MD 650/Lockwood Drive Intersection

Alternative 2 involves improvements to all approaches at the Lockwood Drive/MD 650 intersection:

- On the west leg, the eastbound approach will be widened and the lanes configured to provide one left turn lane, one shared left-through lane, one through lane and two right turn lanes.
- On the east leg, the westbound Lockwood Drive approach will be widened and the lanes configured to provide two left turn lanes, one through lane and one right turn lane.
- With the addition of the northbound turning lane previously discussed, the south leg, northbound MD 650 approach will be configured as a single left turn lane, four through lanes, and an exclusive right turn lane.
- On the north leg, the southbound MD 650 left turn lane will be extended to provide a total storage length of 400 feet, and an exclusive right turn lane will be added. Approximately 400 feet north of Lockwood Drive, an exclusive left turn lane will be provided in the existing median of southbound MD 650 to provide access to the White Oak Shopping Center.


## US 29/MD 650 Interchange

At the US 29/MD 650 interchange, the ramp from southbound US 29 to southbound MD 650 will be reconstructed to provide additional weaving distance to the ramp from southbound MD 650 to northbound US 29. Under Alternative 2, two left turn lanes will be installed for access from northbound MD 650 to southbound US 29. The ramp from MD 650 to southbound US 29 will be widened to two lanes at the entrance to accommodate both turn lanes. Of the four northbound lanes continuing north from the Lockwood Drive intersection, the outside lane will become a lane-drop at the northbound US 29 ramp. A new acceleration lane will be installed at the ramp from northbound US 29 to northbound MD 650.

## IV. DESCRIPTION OF EXISTING ENVIRONMENT

## A. Social Environment

The study area is represented within census tracts and planning areas. The MD 650 study area is located within Planning Area 33 as defined by M-NCPPC (Figure IV-1), and within Census Tracts 701504 and 701505 as defined by the 2000 US Census (Figure IV-1). The state and county codes for this census tract are 24 and 031, respectively.

Information that was not available from the 2000 US Census was taken from the Applied Geographic Solutions (AGS) database to identify estimated 1999 demographic statistics for Census Tracts 701504 and 701505. Data sources reflected in AGS's data includes:

- The Census Bureau
- Bureau of Labor Statistics
- Medicare
- IRS
- Experian's INSOURCE Database

The following census data was selected from county and state data, planning area data and census tracts (Table IV-1). As previously mentioned, this data will allow for comparison from the state to the county to the census tract level. The census tract was selected to provide the most comprehensive and representative census data for the project study area.

## 1. Population and Housing

According to the 2000 Census, Maryland represents less than two percent of the national population. Montgomery County represents 16.5 percent of Maryland's total population, and remains the most populous jurisdiction in Maryland (Census 2000). The County's projected population is expected to reach 1 million by the year 2020 (Census 2000). Table IV-1 provides information on population and housing, median household income and racial and ethnic make-up.

Disabilities within Montgomery County - Based on the County population, 11 percent reported a disability. Seven percent of the reported disabilities were between the ages of 5 and 20 ; nine percent ranged from ages 21 to 64 and 34 percent were age 65 or older.


Table IV-1
Population and Housing Characteristics

*Source: AGS 1999 Data
**According to 2000 Census data, Hispanic includes "of any other race"; therefore, total percentages of minorities may exceed 100 percent.

## 2. Communities within the Study Area

There are a number of communities that exist within the project study area (please refer to Figure $\boldsymbol{I V}-2$ in Section $\mathbf{C}$ of this chapter). Housing types within these communities include apartments, townhomes, and single-family homes.

Apartment complexes within the study area include The Berkshire Towers Apartment Complex (The Point Community), consisting of 1119 units, and The White Oak Park Apartments, consisting of 111 units, and Holly Hall, a rental facility for the elderly. The April/Stuart Lane Community is partially located within the study area and includes the aforementioned White Oak Park Apartments. The April/Stuart Lane Community, as a whole, consists of approximately 3600 apartment units, located behind the White Oak Shopping Center on both sides of Lockwood Drive (please refer to Figure IV-2 in Section C of this chapter).

The following single family communities are also within the study area (please refer to Figure IV-2 and Section $C$ of this chapter):

- The Burnt Mills Community
- The Burnt Mills Hills Community
- The Dumont Oaks Community
- The Hillandale Community
- The Montgomery White Oak Community
- The Point Community
- The Quaint Acres Community
- The Sherbrooke Community
- Springbrooke Manor
- Sunrise Community
- The White Oak Park Community
- The North White Oak Community


## 3. Environmental Justice Inventory

Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations" was signed on February 11, 1994. The EO requires the assessment of disproportionately high adverse human health and environmental impacts on minority and lowincome populations resulting from proposed federal actions. The EO reaffirms the provisions of Title VI of the Civil Rights Act of 1964 and related statutes, emphasizing the incorporation of those provisions with existing planning and environmental processes. Title VI requires federal agencies to ensure that their programs, policies and activities do not have the effect of excluding populations from the benefits of the project, or subjecting persons and populations to discrimination based on race, color, or national origin. EO 12898 adds low-income to the list of populations, which should be investigated to ensure that they are not excluded from the benefits of the project, or subjected to discrimination caused by federal programs policies and activities.

To comply with EO 12898, the United States Department of Transportation (USDOT) published on June 29, 1995, an environmental justice strategy in the Federal Register (60 CFR 33986). A component of the strategy is the establishment of a USDOT Order, which was published, in proposed form for comment ( 60 CFR 33899 ). The proposed strategy states that the USDOT and its operating administrations will integrate the implementation of the EO into the existing guidelines for NEPA, Title VI of the 1964 Civil Rights Act and other statutes concerning planning, public participation, social and economic factors and health issues. The USDOT strategy promotes the public participation process by echoing the policies expressed in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and stresses the timely and meaningful participation of low-income and minority communities in transportation decisions affecting them. Participation
by these groups in the planning process includes access to general information and input in determining research and data collection needs, project design and mitigation. Environmental justice public participation includes outreach to affected communities.

In compliance with federal guidelines on environmental justice, SHA inventoried any readily identifiable group of low-income or minority persons that live within geographic proximity to the project alternative. Identification of low-income and minority populations was based on existing census demographics, field research, correspondence with local planning officials and correspondence with social service organizations.

Low-Income Population - Low-income is identified as a person whose median household income is at or below the Department of Health and Human Services (DHHS) poverty guidelines. The poverty guidelines issued by the DHHS are abstracted from the original poverty thresholds updated each year by the United States Census Bureau. Examination of census tract data shows that the average household income for the study area is higher than the DHHS poverty guidelines for the year 1999 (AGS - Census Tract Summary, 1999). The median household income for the study area is $\$ 81,438$. This is in comparison to Montgomery County's median household income of \$70,794 (2000 Census).

Holly Hall, a rental apartment facility for the elderly, is located near the Hillandale community and is operated by the Housing Opportunities Commission. This facility was identified as a lowincome, elderly population at the September 2001 Public Meeting (see Chapter VII, Public Involvement Correspondence) and is discussed in the 1997 White Oak Master Plan. M-NCPPC verified that this facility should be considered a low-income community compared to the rest of Montgomery County (see Record of Conversation, Appendix D). Holly Hall is within the study area, but well outside the proposed alternative's right-of-way. SHA will outreach to this community by requesting residents of the community to attend the Fall 2002 Public Informational Workshop. SHA will contact Holly Hall representatives prior to the Fall 2002 Workshop so that residents are notified in advance and encouraged to attend.

Additional research through field investigation identified no further low-income and/or minority communities within the study area. No response has been received to date from local service organizations, but coordination will continue in attempt to identify other low income and/or minority neighborhoods/communities.

Minority Population- The racial and ethnic makeup of the study area reveals the presence of a minority population. The minority population of the census tract shows a disproportionately higher percentage ( 43 percent African-American and 14 percent Hispanic) of minority persons found within the census tracts in comparison to surrounding areas within the county. Minority persons were identified as Black (African American origin), Hispanic, Asian American, American Indian and Alaskan Native. Areas of known minority populations are well outside the proposed alternative's right-of-way.

Table IV-1 identifies the racial and ethnic make-up of the study area census tract population. Approximately 77 percent of the study area populations are a race other than white. This is in comparison to 47 percent of the county population being a race other than white. Persons of the African-American race make up 43 percent of the study area compared to 15 percent of the population countywide, which is almost three times that of Montgomery County. The Hispanic ethnic origin also constitutes 14 percent of the study area population, in comparison to the 12 percent of the total County population.

The local M-NCPPC planner for the White Oak Planning Area was contacted regarding the identification of potential environmental justice communities (see Record of Conversation, Appendix D). The M-NCPPC identified a minority and low-income community in White Oak behind the White Oak Shopping Center on both sides of Lockwood Drive, which includes the White Oak Apartments located within the study area. This community, as a whole, is referred to by Montgomery County as the April/Stuart Lane Community, and is occasionally called the Garden Apartments. These apartments consist of several three-story buildings, and have both an AfricanAmerican and Hispanic population, with the majority of the population being Hispanic. As the April/Stuart Lane Community includes the White Oak Apartments, this community is partially within the study area, but well outside the proposed alternative's right-of-way (please refer to

Figure IV-2 in Section C of this chapter). SHA will outreach to this community by requesting residents of the community to attend the Fall 2002 Public Informational Workshop.

SHA will continue to coordinate with M-NCPPC and other community representatives regarding minority populations within the study area. The SHA has encouraged public participation and outreach for the MD 650 study through LABQUEST meetings. Please refer to Chapter III, Section C of this document for information on public participation.

## 4. Community Facilities and Services

Please refer to Section 3.2.7.1 (pg. 3-65) of the April 1997 Final Environmental Impact Statement (FEIS) (General Services Administration) for community facilities and services that exist within the study area and within the surrounding area including: parks, recreation, community facilities, and open space, schools and emergency services. (Please refer to Figure IV-2 in Section C of this chapter for locations of these facilities.)

## a. Libraries

There are no libraries located in the study area. The White Oak Library is located just outside of the study area, along MD 650. Other libraries in the surrounding area include the Long Branch Library on Walden Road, Wheaton Library on Georgia Avenue, and Silver Spring Library on Colesville Road. The town of Kensington also has a special-purpose children's library, known as Noyes Children's Library.

## b. Religious Institutions

There are three (3) religious institutions located in our study area, including Kingdom Hall of Jehovah's Witnesses, the Unitarian Universalist of Silver Spring, and Our Savior Episcopal Church. St. Stephen Lutheran Church is just outside the study area to the north, along MD 650, and Share Tefila Congregation is located just outside the study area, on Lockwood Drive.

## c. General Services and Facilities

In addition to the above mentioned services and facilities, there are a few remaining community facilities just outside the study area. Two postal facilities are located near the study area, including

The Woodmoor Post Office, on University Boulevard West, and the Colesville Post Office, located on MD 650. Metrorail, MARC, and Park and Ride services are located in the immediate surrounding area. A Metrobus Station is located at the corner of New Hampshire Avenue and Lockwood Drive. This line services areas and interconnecting Metrobus lines between Olney and the Metrorail Station in Silver Spring.

## 5. Visual Quality

The general aesthetic along MD 650 within the study area varies greatly with residential, commercial, office and recreational uses lining the highway. At the north end of the study area, there are several large commercial and office park developments that consist of buildings and paved parking lots. However, several large landscape areas are evident, which include planted buffers of shade, flowering, and evergreen trees along with shrubs and perennial beds. The office park developments in particular are screened from the highway. Several of the commercial areas include service stations with minimal landscaping. Residential and commercial identification signs within planted beds of shrubs and perennials are located along MD 650 between the roadway and businesses. Four-foot wide sidewalks are located along either side of the highway, behind a grassed median that occasionally contains shrubs and perennials. Overhead lines also run along MD 650 throughout the study area.

South of the commercial and office park developments on MD 650 are residences and the White Oak Golf Course. Medians between the northbound and southbound lanes and between MD 650 and a service road in the residential development contain a few trees and mowed turf. The property lines between the service road and MD 650 have been allowed to naturalize, resulting in a minimal buffer of pioneer tree and shrub species along fences. However, this buffer provides more of a screen in the spring and summer months since most of the plant material appears to be deciduous. A chain-link fence is located between MD 650 and the golf course, with little if any plant material along it. The golf course, including many large deciduous trees, is in full view along the highway. A volunteer fire department, office building and a park with athletic fields are located south of the golf course. These areas are primarily open to view from MD 650 and contain little, if any, landscape treatment. More residential development is located south of the athletic fields. Although these residences are visible from MD 650, they do not front onto the highway. Therefore, the rear
yards are visible from the highway in several cases. Some property lines are marked with fences, trees and shrubs. It appears that many of the trees and shrub species have been allowed to regenerate naturally, rather than being purposely installed as formal landscape screening. For further detail on aesthetics and visual resources within the White Oak site, please refer to Section 3.2.8 of the April 1997 Final Environmental Impact Statement (FEIS) (General Services Administration).

## B. Economic Environment

## 1. Countywide Employment Characteristics

Please refer to Table IV-2 for employment characteristics for Montgomery County and the study area census tracts.

## 2. Study Area Employment Characteristics

## a. General Statistics and Designations

Census tracts 701504 and 701505 will be representative of the designated study area (Figure IV -1). Please refer to Table IV-2 for the study area employment characteristics, Table IV-3 for study area commuting statistics, and Table IV-4 for a summary of educational statistics.

## Table IV-2

Employment Characteristics


* 2000 Census Data,
** AGS 1999 Data

Table IV-3
Commute Information

|  | Moplgonew couns | Studidere |
| :---: | :---: | :---: |
| Drive to Work | 60\% | 62\% |
| Use Public Transportation | 14\% | 14\% |
| Carpool | 10\% | 16\% |
| Work at Home | 5\% | 3\% |
|  |  |  |
| 45 to 59 minutes |  |  |
| 30 to 34 minutes |  |  |
| 20 to 24 minutes |  |  |
| 15 to 19 minutes |  |  |

Table IV-4
Education

|  | Stiday |
| :---: | :---: |
| Less than ninth grade | 2\% (345 of persons) |
| Some high school | $3 \%$ (485 of persons) |
| Graduated high school | 15\% (2340 of persons) |
| Some college | 13\% (2043 of persons) |
| Associate's degree | 4\% (671 of persons) |
| Bachelor's degree | 19\% (3039 of persons) |
| Graduate/Professional Degree | 15\% (2306 of persons) |

## b. Commercial and Industrial Facilities

Figure IV-2 of section C of this Chapter displays the commercial and industrial facilities within and surrounding the study area. Please refer to Appendix A for a business inventory listing each individual tenant within the commercial property structures. Shopping centers located within the study area include White Oak Shopping Center, White Oak Hillandale Center, White Oak Professional Park, White Oak Center, Hillandale Shopping Mall and Hillandale Strip Mall. The Silver Spring Industrial Center is the only industrial facility within the study area, located in the northeastern portion of the study area, along US 29.

## c. Active Farmlands

There are no active farmlands in the study area.

## 3. Transportation Characteristics

There are many existing public transportation facilities within the vicinity of the study area including the Metrorail and MARC stations, which service both Montgomery and Prince George's County. Public transportation within the study area includes the Metrobus and Ride On routes.

Please refer to Section 3.4 .2 (pg. 3-105 through 3-114) of the April 1997 Final Environmental Impact Statement (FEIS) (General Services Administration) for further information on public transportation within and surrounding the study area.

## C. Land Use

## 1. Existing Land Use

The study area consists predominately of mixed residential and institutional land uses (Figure IV2). The Milestone Drive Properties, which was previously listed as vacant in the 1997 White Oak Master Plan has since been developed into a mixed residential community. The majority of the commercial land use is located adjacent to Lockwood Drive and Powder Mill Road. There are minor amounts of land use consisting of parkland/open space and industrial located within the study area. Please refer to Section 3.2.1 (pg. 3-43 through 3-48) of the April 1997 Final Environmental Impact Statement (FEIS) (General Services Administration) for further information on existing land use within and surrounding the study area.

## 2. Future Land Use

According to the 1997 White Oak Master Plan and supplemented by a field inventory, future (2020) land use is similar to existing land use, with the exception of the proposed build alternative and the proposed White Oak Transit Center to be located in the White Oak Shopping Center (Figure IV-2). The future land use plan is based on the year 2020, which is approximately the lifetime for the proposed development identified in the 1997 White Oak Master Plan. In addition, the proposed project is in coordination with the future land use assumptions specified in the Master Plan. Please refer to Section 3.2.1 (pg. 3-43 through 3-48) of the final FEIS for future land use within and surrounding the study area.

## D. Cultural Resources

Identification and evaluation of the historic architectural and archeological resources were conducted in accordance with the Department of Transportation Act of 1966, as amended in 1968; the National Environmental Policy Act of 1969; the National Historic Preservation Act of 1966, as amended; 36 CFR Part 800 Protection of Historic Properties; Executive Order


11593; and the Maryland Historical Trust Act of 1990 (Article 83B, Sections 5-617 to 5-619 of the Annotated Code of Maryland). All work was performed in accordance with the standards established in Standards and Guidelines for Architectural and Historical Investigations in Maryland (Maryland Historical Trust 2000); Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994); "Collections and Conservation Standards" (Maryland Historical Trust 1999); and Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (National Park Service 1983).

## Historic Resources

Only one historic site listed on or eligible for the National Register of Historic Places (NRHP) is located within the Area of Potential Effect (APE). The State Historic Preservation Officer (SHPO) concurred on January 14, 2002 that the Naval Ordnance Laboratory (NOL) Historic District (M: $33-25$ ) is the only historic property within the APE of the project.

## Archeological Resources

The APE for archeology was defined by the limits of existing and proposed right-of-way and easements in which all ground disturbing activities will take place. With the exception of the proposed relocated Michelson Road and stormwater management facilities, the APE closely follows the existing alignments of MD 650 and its intersection roadways.

Although background research would suggest the project area is sensitive for archeological resources, there has been extensive disturbance from previous road building, drainage and utility installation, as well as commercial, residential, recreational, and institutional development. Consequently, it is not likely that significant archeological deposits remain within the APE, and no further archeological investigations are recommended (January 14, 2002). Please refer to Page VIIlb in Chapter VII, Other Agency Correspondence.

## E. Natural Environment

## 1. Physiography/Topography and Geology

The study area lies within the Piedmont Plateau and Coastal Plain Provinces. The area consists primarily of level to moderately sloping topography. Elevations range from 255 to 400 feet above sea level, with the lowest elevations occurring in the vicinity of Green Forest Drive, located in the southeast portion of the study area. The highest elevations occur near the Quaint Acres community, in the northwest portion of the study area.

Based on the Geologic Map of Montgomery County, Maryland, surface sediments originate from the Cretaceous period. These sediments are grouped as the Patuxent Formation, and consist of: moderately sorted, cross-bedded angular sands, multicolored silts and clays, and sub-rounded quartz gravels. The majority of the study area is further underlain by the Boulder Gneiss Formation of the Pre-Cambrian period, consisting of thick bedded, massive pebble and boulder bearing arenaceous to peltic metamorphic rock. The northern portion of the study area (north of MD 650/MD29 interchange) is in the Piedmont Plateau Province and is underlain by undifferentiated crystalline rocks of the Pre-Cambrian period (Maryland Geological Survey 1967). Generally, the border between the Piedmont Province and the Coastal Plain province falls along US 29.

## 2. Soils

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Soil Survey of Montgomery County, Maryland describes seven soil series and complexes that occur in the study area (Table IV-5) (USDA, NRCS 1995). The dominant soil association in the study area is the Chillum-Croom-Beltsville association. This association is characterized by nearly level to steep, well-drained, very deep soils, which is commonly found on uplands (USDA, NRCS 1995). There are no hydric soils identified within the study area (Straughn Environmental Services 2001).

Table IV-5
Description of Soil Series in the Study Area


Source: USDA, NRCS 1995

Prime farmland soils in Montgomery County are classified by the USDA, NRCS, pursuant to the Farmland Protection Policy Act (FPPA) of 1984. The Glenelg Silt Loam and Giala Silt Loam are listed as Prime Farmland Soils. The Beltsville Silt Loam, Croom Gravelly Loam, Gaila Silt Loam, Glenelg Silt Loam and the Wheaton Silt Loam are listed as soils of statewide importance. Soils of statewide importance are designated similarly by the USDA, NRCS as agriculturally important on a local level. Based on the review of the FPPA, the MD 650 improvements are exempt from FPPA requirements. Section 2 [7 USC 658] states that "farmland does not include land already in or committed to urban development or water storage." Farmland already in urban development includes lands identified as 'urbanized areas' (UA) on the Census Bureau Map, or as urban area mapped with a 'tint overprint' on the USGS topographical maps, or as 'urban-built-up' on the USDA Important Farmland Maps" [7 USC 658]. According to the USGS topographical map for MD 650 area, the entire study area has a tint overprint. Furthermore, according to the 1997 White Oak Master Plan, any undeveloped areas within the study area are committed to future urban development.
3. Water Resources

## a. Surface Water and Groundwater

The study area generally lies on the divide between the Paint Branch watershed to the east and the Northwest Branch watershed to the west. Both watersheds are within the Washington Metropolitan drainage basin. The Paint Branch is a Use III stream and therefore is protected for Water Contact Recreation and Protection of Aquatic Life, Wildlife and Natural trout waters, and the Northwest Branch is a Use IV stream and is therefore protected for Water Contact Recreation and Protection of Aquatic Life, Wildlife and Recreational trout waters. An intermittent stream generally bisects the White Oak Golf Course and drains from north to south. In-stream work is prohibited in these streams from October $1^{\text {st }}$ to April $30^{\text {th }}$ of any given year (MDE, COMAR 26.08.02). There are no perennial streams in the study area. There are no listed Wild or Scenic Rivers in the study area.

Important aquifers that are in the general vicinity of the study area include carbonate-rock aquifers, crystalline-rock aquifers and the Potomac aquifer. The Potomac aquifer is beneath most of the study area consisting of undifferentiated sands and quartz gravels. The Crystalline-rock aquifer rock types include: granite, gneiss, schist and slate. The carbonate-rock aquifers consist of limestone, dolomite and marble (Maryland Geologic Survey, 1967). Both of these types are found north of the MD 650/MD29 interchange.

## b. Floodplains

There are no Federal Emergency Management Agency (FEMA)-designated 100-year floodplains within the study area corridor.

## 4. Ecological Conditions <br> a. Waterways/Wetlands

The project study areas investigated included a 1.4 mile segment from north of Tracy Drive to south of Chalmers Road. This area generally includes a 100 -foot wide swath on the east side of MD 650 and extended along portions of the following areas: US 29 interchange, Lockwood Drive, Michelson Road, and Mahan/Schindler Road (west) and Powder Mill Road. Refer to the detailed Wetlands Delineation Report for further detail on Waters of the United States (waterways)/wetlands (Straughan Environmental Services, INC. 2001). Waters of the United States and wetland areas
were identified within the study area based on investigations following methods in the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987). Please refer to Figure III-3, (beginning on Page III-9) for mapping of the waterways and wetlands within the study area, and Table IV-6 for a description of each wetland/waterway in the study area.

## Table IV-6

Description of Wetlands/Waterways within the Study Area

| Waterway $A$ | The stream appears to originate from a culvert beneath Michelson Road and <br> emerges on the White Oak Golf Course east of MD 650. |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| Waterway B | Waterway B includes the 150-foot portion of waterway that is upstream of the <br> north side of Mahan Road and extends south to a pond located on the White <br> Oak Golf Course. |  |  |  |  |  |
| Waterway D | Waterway D is an approximately 200 foot long ephemeral channel and is <br> approximately located east of MD 650 and south of Mahan Road. |  |  |  |  |  |
| Wetlands |  |  |  |  |  |  |
| Wetland C | Wetland C is a palustrine, emergent, persistent, temporarily flooded (PEM1A) <br> wetland approximately located south of Mahan Drive along Waterway B. |  |  |  |  |  |
| Wetland $D$ | Wetland D is a palustrine, emergent, persistent, saturated (PEM1B) wetland <br> located south of Mahan Drive and east of MD 650. |  |  |  |  |  |
| Wetland $E$ | Wetland E is a palustrine, scrub/shrub, broad-leaved deciduous, permanently <br> flooded wetland (PSS1H) located east of MD 650 and south of Mahan Road. |  |  |  |  |  |

In addition, an intermittent water (connecting Waterway A and Waterway B) flows south, parallel with MD 650 on the White Oak Golf Course (Figure III-3). This stream flows through culverts beneath Mahan and Michelson Roads. A wetland contiguous to the stream exists approximately 90 feet south of Mahan Road.

## b. Terrestrial Wildlife/Habitat

The study area is urbanized, consisting of mixed residential, commercial and institutional land use. Large areas of impervious surface (parking lot or roof-top) are dominant in commercial/institutional areas, with small islands of maintained lawn or landscaping. Residential areas have larger tracts of lawn with sparse canopy and shrub cover and less impervious area.

Large trees are defined as any tree having a diameter at breast height (DBH) of 30 inches or more. A significant tree is defined as any tree having $75 \%$ or more of the state champion tree for that
species. Ten large trees are located within the study area. Please refer to Figure III-3 for size and location of these trees. Large trees are located along Mahan Drive and the intersection of MD 650/Mahan Drive (Figure III-3).

A mature stand of tulip poplar (Liriodendron tulipifera) is located south of Mahan Drive (Figure III-3). The forest canopy is dominated by tulip poplar and black walnut (Juglans nigra), and sycamore (Platanus occidentalis) occurs infrequently within the stand. The dominant understory shrub is Japanese barberry (Beberis thunbergii), which grows in sparse clumps throughout the stand. The understory suffers from heavy browsing pressure from the local deer population; thus, only barberry, a highly unpalatable and thorny shrub, is the only consistent undergrowth.

Coordination with the Forest, Wildlife and Heritage Division of Department of Natural Resources (DNR) indicated that a forested area on or adjacent to the study area may contain Forest Interior Dwelling Species (FIDS) habitat. However, further investigations of forested areas within the study area show that none of the wooded areas meet the criteria for FIDS habitat as outlined by DNR:

1) contiguous upland forests of 50 acres or greater;
2) riparian forest greater than 300 ft in width that border a stream for at least 600 feet;
3) riparian forests at least 150 feet wide and connected to one of the above; or
4) forest patches 10 acres or larger and within 300 ft of the first two definitions.

The most common animals that are expected to occur in the study area are those that easily coexist with humans, including gray squirrel (Sciurus carolinensis), white-tailed deer (Odocoileus virginianus), Virginia opossum (Didelphis marsupialis), Eastern chipmunk (Tamias striatus), woodchuck (Marmot monax) and several species of birds. Within the study area, there is a large deer population at the FDA site. Deer are commonly observed throughout the FDA site, and on the golf course.

A field investigation indicated that there are numerous bird species inhabiting the residential, commercial and institutional landscapes. The English House Sparrow (Passer domesticus), European Starling (Sturnus vulgaris), and European Rock Dove or Pigeon (Columba livia) were observed in commercially developed areas. The American Robin (Turdus migratorius), Northern

Mockingbird (Mimus polyglottos), Blue Jay (Cyanocitta cristata), Slate Colored Junco (Junco hyemalis) and Northern Cardinal (Cardinalis cardinalis) were observed in the residential neighborhoods along with the English House Sparrow and the European Starling. The White Oak Golf Course provides a habitat for a wide diversity of birds. None of the above mentioned species have unique or specific characteristics, and all are commonly found inhabiting urbanized areas.

## c. Aquatic Wildlife/Habitat

The White Oak Golf Course is the only portion of the study area that contains aquatic habitat. Woody vegetation is well established throughout most of the golf course due to current maintenance practices. Herbaceous vegetation found in wetlands and waterways is not maintained during the growing season. Wetland E, Waterway D and a section of Waterway B are within a wellestablished forested area in the southern portion of the golf course. The quality of water associated with the stream is affected by chemicals from golf course turf management and the origin of the Michelson Road culvert water. Aquatic wildlife/habitat is considered poor within the study area.

## 5. Endangered and Threatened Species

Coordination with DNR and United States Fish and Wildlife Service (USFWS) indicated that no known federal or state, rare, threatened or endangered (RTE) species were identified within the study area (refer to DNR and USFWS correspondence in Chapter VII, Other Agency Correspondence).

## 6. Unique, Sensitive, and Aesthetic Areas

Unique, sensitive, and aesthetic areas encompass resources that have unique ecological or geological characteristics, which are sensitive to human induced impacts, or areas that provide unique aesthetic value to the public. There are no areas within the project study corridor areas that are identified as unique, sensitive or aesthetic.

## F. Existing Noise Conditions

## 1. Noise Sensitive Area Description

In coordination with SHA's Office of Planning and Preliminary Engineering, six (6) Noise Sensitive Areas (NSA) were identified in the study corridor. Individual noise receptor locations
were selected to represent each of the noise sensitive communities potentially affected by project improvements. A total of 41 receptors were identified to represent noise sensitive land uses within the six NSA (Figure IV-3).

- NSA 1 (represented by Receptor 1-1) is a two-story brick church (Our Savior Episcopal Church) in the northeast quadrant of the MD 212 (Powder Mill Road)/MD 650 intersection.
- NSA 2 (represented by Receptors 2-1 to 2-23) consists of two residential communities (Hillandale Heights and Burnt Mills Knolls) on the west side of MD 650, between Chalmers Road and Lockwood Drive. The north end of the community contains the White Oak Center and the White Oak Professional Park, two office and professional complexes near the MD 650/Lockwood Drive intersection. Approximately 34 single-story, single-family residences are considered first row residences. A tree-lined grassy strip of land is located between the frontage road and the southbound lanes of MD 650. This area ranges from $5^{\prime}$ wide to $28^{\prime}$ wide at its widest point, near McCeney Avenue. In addition to the row of deciduous trees, the strip contains a row of utility poles with associated transmission lines.
- NSA 3 (represented by Receptors 3-1 to 3-7) is the White Oak Golf Course, which is located on the east side of MD 650, between Chalmers Road and existing Michelson Road. Several tee boxes and greens (Receptor 3-1, the second green; Receptor 3-2, the fifth green; Receptor 3-3, the sixth tee; Receptor 3-4, the first green; Receptor 3-5, the sixth green; Receptor 3-6, the seventh tee; and Receptor 3-7, the seventh green) are affected by traffic noise from MD 650.
- NSA 4 (represented by Receptor 4-1) is the Berkshire Towers, three nineteen-story apartment buildings on the west side of MD 650, between Lockwood Drive and US 29. Each of the towers is air-conditioned and each unit contains a balcony. The only exterior use area is the tennis courts and playground between the two buildings.
- NSA 5 (represented by Receptors 5-1 to 5-8) consists of a community of single-family residences on Sonata Way (Receptors 5-1 to 5-3), the Kingdom Hall of Jehovah's Witnesses (Receptor 5-4), single-family residences (Receptors 5-5, 5-7, and 5-8), and St. Stephen Lutheran Church (Receptor 5-6).
- NSA 6 (represented by Receptor 6-1) consists of two single-family residences and an assisted living center, which is currently under construction, north of the US 29 underpass.



## 2. Existing Noise Conditions

## a. Noise Monitoring

Field measurements of ambient noise levels were performed during worst-case scenario noise to determine existing (2001) noise levels. Short-term measurements of 15 minutes were conducted at each NSA in October and November 2001. Short-term monitoring results are shown in Table IV-7. Measured noise levels ranged from 53 dBA (NSA 5, Receptor 5-7) to 75 dBA (NSA 2, Receptor 23). As identified in Table IV-7, existing noise levels at four Noise Sensitive Areas (NSAs 2, 3, 5 and 6) equal or exceed the SHA 66 dBA Leq impact criterion for land use Category B.

## Table IV-7

Short Term Monitoring Noise Levels

| HSM | $0$ | 4septox excator | fand |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-1 | Our Savior Episcopal Church | Church | 7:55 A.M. | 65 |
| 2 | 2-1 | 1306 Chalmers Road | Residence | 7:00 A.M. | $\tilde{V}_{2}$ |
|  | 2-2 | 10612 New Hampshire Avenue | Residence | 7:00 A.M. | \% |
|  | 2-3 | 10700 New Hampshire Avenue | Residence | 7:45 A.M. | $F$ |
|  | 2-4 | 1313 Ruppert Road | Residence | 7:45 A.M. | 3 |
|  | 2-5 | 1312 Ruppert Road | Residence | 8:30 A.M. |  |
|  | 2-6 | 10806 New Hampshire Avenue | Residence | 8:30 A.M. | 4 |
|  | 2-7 | 1213 Schindler Drive | Residence | 8:00 A.M. |  |
|  | 2-8 | 1212 Schindler Drive | Residence | 8:00 A.M. |  |
|  | 2-9 | 10914 New Hampshire Avenue | Residence | 8:45 A.M. |  |
|  | 2-10 | 10928 New Hampshire Avenue | Residence | 8:45 A.M. | x, |
|  | 2-11 | 11000 New Hampshire Avenue | Residence | 7:10 A.M. |  |
|  | 2-12 | 924 Northwest Drive | Residence | 7:10 A.M. | \% |
|  | 2-13 | 1304 Chalmers Road | Residence | 7:00 A.M. | 61 |
|  | 2-14 | 1313 Cresthaven Drive | Residence | 7:00 A.M. | 62 |
|  | 2-15 | 1314 Cresthaven Drive | Residence | 7:45 A.M. | 65 |
|  | 2-16 | 1311 Ruppert Road | Residence | 7:45 A.M. | 61 |
|  | 2-17 | 10701 East Nolcrest Drive | Residence | 8:30 A.M. | 61 |
|  | 2-18 | 10707 East Nolcrest Drive | Residence | 8:30 A.M. | 59 |
|  | 2-19 | 1209 Schindler Drive | Residence | 8:00 A.M. | 61 |
|  | 2-20 | 1208 Schindler Drive | Residence | 8:00 A.M. | 59 |
|  | 2-21 | 10813 West Nolcrest Drive | Residence | 8:45 A.M. | 56 |
|  | 2-22 | 1027 McCeney Avenue | Residence | 8:45 A.M. | 60 |
|  | 2-23 | 920 Northwest Drive | Residence | 7:10 A.M. | 57 |
| 3 | 3-1 | White Oak Golf Course (2nd Green) | Recreation | 7:52 A.M. | 57 |

## Table IV-7

Short Term Monitoring Noise Levels, Continued


Noise levels equal or exceed SHA 66 dBA noise impact criterion.

## G. Existing Air Quality

The study area is located in the National Capital Intrastate Air Quality Region. This region is not designated as non-attainment for carbon monoxide (CO), Nitrogen Dioxide ( $\mathrm{NO}_{2}$ ), Sulfur Dioxide $\left(\mathrm{SO}_{2}\right)$, Lead $(\mathrm{PB})$, or particulate matter $\left(\mathrm{PM}_{10}\right)$, but is designated as a serious non-attainment area for ozone $\left(\mathrm{O}_{3}\right)$. Since the study area is designated non-attainment for ozone, the region is subject to transportation control measures (TCM). National and State measures include vehicle emission control devices, cleaner fuels and the Maryland State Vehicle Emissions Inspections Program. Implementation of TCMs at the local level that can improve regional air quality includes traffic flow improvement programs, new public transit service and employer sponsored programs to permit flexible work schedules and encourage public transportation ridership.

A detailed microscale air quality analysis has been performed to determine the CO impact of the proposed project. The location of air quality sensitive receptors and the intersection analysis receptors used to assess each of the build alternatives is shown on Table IV-8 and in Figure IV-3.

The results are summarized in Air Quality Environmental Consequences Section (Section V.G). A copy of the technical analysis report is available at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

## Table IV-8

Location of Air Quality Receptors

| Sus |  | Desinitiot | Remetatas | 家 | Descmotid |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | SE Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Shopping Mall | 18 | NE Quadrant - MD $650 /$ Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course |
| 2 | SE Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Shopping Mall | 19 | NE Quadrant - MD $650 /$ Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course |
| 3 | SE Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Shopping Mall | 20 | NE Quadrant - MD $650 /$ Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course |
| 4 | SE Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Shopping Mall | 21 | NW Quadrant - MD 650 /Schindler Drive/Mahan Drive Intersection | Residence, 1212 <br> Schindler Drive |
| 5 | NE Quadrant - MD 650/ Powder Mill Road Intersection | Adjacent to Powder Mill Road | 22 | NW Quadrant - MD 650 /Schindler Drive/Mahan Drive Intersection | Residence, 10902 <br> Frontage Road |
| 6 | NE Quadrant - MD 650/ Powder Mill Road Intersection | Our Savior Episcopal Church | 23 | NW Quadrant - MD 650 /Schindler Drive/Mahan Drive Intersection | Residence, 10904 Frontage Road |
| 7 | NE Quadrant - MD 650 Powder Mill Road Intersection | Our Savior Episcopal Church | 24 | NW Quadrant - MD $650 /$ Schindler Drive/Mahan Drive Intersection | Residence, 10908 <br> Frontage Road |
| 8 | NE Quadrant - MD 650/ Powder Mill Road Intersection | Our Savior Episcopal Church | 25 | SE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 9 | NW Quadrant - MD 650/ Powder Mill Road Intersection | Exxon Gas Station 1126 Powder Mill Road | 26 | SE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 10 | NW Quadrant - MD 650/ Powder Mill Road Intersection | Exxon Gas Station 1126 Powder Mill Road | 27 | SE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 11 | NW Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Center Parking Lot | 28 | SE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 12 | NW Quadrant - MD 650/ Powder Mill Road Intersection | Hillandale Center Parking Lot | 29 | NE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 13 | SE Quadrant - MD 650 Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course | 30 | NE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 14 | SE Quadrant - MD 650 Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course | 31 | NE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 15 | SE Quadrant - MD 650 /Schindler Drive/Maban Drive Intersection | White Oak Public Golf Course | 32 | NW Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | Residence/924 Northwest <br> Drivè Dentist <br> Office/11012 New <br> Hampshire |

Table IV-8
Location of Air Quality Receptors, Continued

| Recetict | oritog | Descoptin |  |  | Descitiod |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | SE Quadrant - MD 650 /Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course | 33 | NW Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | Medical Office, 11016 <br> New Hampshire |
| 17 | NE Quadrant - MD $650 /$ Schindler Drive/Mahan Drive Intersection | White Oak Public Golf Course | 34 | NW Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | Medical Office, 11016 New Hampshire |
| 35 | NW Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | BBT Bank, 11140 New Hampshire | 48 | NW Quadrant - MD 650/Lockwood Drive | Berkshire Towers Apartments |
| 36 | SE Quadrant - MD 650/Lockwood Road Intersection | Exxon Gas Station 11177 New Hampshire | 49 | NW Quadrant - MD 650/Lockwood Drive | Berkshire Towers Apartments |
| 37 | SE Quadrant - MD 650/Lockwood Road Intersection | Exxon Gas Station 11177 New Hampshire | 50 | NW Quadrant - US 29MD 650 Interchange | On Ramp Island from MD 650 to US 29 |
| 38 | SE Quadrant - MD 650/Lockwood Road Intersection | Commercial Parking Lot | 51 | NW Quadrant - US 29MD 650 Interchange | Residence, 742 and 743 Sonata Way |
| 39 | SE Quadrant - MD 650/Lockwood Road Intersection | Commercial Parking Lot | 52 | SE Quadrant - MD $650 /$ Schindler Drive/Maban Drive Intersection | White Oak Public Golf Course |
| 40 | SW Quadrant - MD 650/Lockwood Road Intersection | Shell Gas Station 11150 New Hampshire | 53 | SW Quadrant - MD 650 /Schindler Drive/Mahan Drive Intersection | Residence at 1311 Ruppert Ave |
| 41 | SW Quadrant - MD 650/Lockwood Road Intersection | Shell Gas Station 11150 New Hampshire | 54 | SE Quadrant - MD 650/ Northwest Drive/Relocated Michelson Road Intersection | White Oak Public Golf Course |
| 42 | SW Quadrant - MD 650/Lockwood Road Intersection | Shell Gas Station 11150 New Hampshire | 55 | Between Schindler Drive and McCeney Ave on MD 650 East Bound | Residence, 10918 |
| 43 | NE Quadrant - MD 650/Lockwood Drive Intersection | Commercial Parking Lot | 56 | NW Quadrant - MD 650/Lockwood Drive | Berkshire Towers Apartments |
| 44 | NE Quadrant - MD 650/Lockwood Drive Intersection | Commercial Parking Lot | 57 | NE Quadrant - US 29/MD 650 Interchange | Sidewalk, Adjacent to MD 650 |
| 45 | NE Quadrant - MD 650/Lockwood Drive Intersection | White Oak Shopping Center | 58 | NE Quadrant - MD 650/Milestone Drive Intersection | Residence, 702 Milestone Drive |
| 46 | NE Quadrant - MD 650/Lockwood Drive Intersection | White Oak Shopping. Center | 59 | NE Quadrant - MD 650/Lockwood Drive | Sears Parking Lot, East Bound MD 650 |
| 47 | NW Quadrant - MD <br> 650/Lockwood Drive Intersection | Berkshire Towers Apartments |  |  |  |

## H. Hazardous Materials

## 1. Initial Site Assessment

A substantial amount of risk can be imposed upon humans if municipal, industrial, and residual wastes are not stored, disposed and cared for appropriately. To identify and account for the municipal, industrial and residual waste materials within the study area, an initial site assessment (ISA) was conducted. The investigation consisted of a database search (EDR, Inc.), site history review, file review and agency coordination site inspection and potential liability determination. The database search included all properties within the study area limits. This report was prepared by generating a list of all sites and facilities in the area, which appeared in the following databases/records of federal waste site inventories and waste management programs:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)/No Further Remedial Action Planned (NFRAP)
- Emergency Response Notification System (ERNS)
- National Priority List (NPL)
- Resource Conservation and Recovery Information System (RCRIS)
- Corrective Action Report (CORRACTS)
- Superfund (CERCLA) Consent Decrees (CONSENT)
- Facility Index System (FINDS)
- Material Licensing Tracking System (MLTS)
- Toxic Chemical Release Inventory System (TRIS)
- Toxic Substances Control Act (TSCA)
- NPL Deletions and state waste site inventories and waste management programs
- Leaking Underground Storage Tank Recovery Sites (LUST)
- State Hazardous Waste Sites (SHWS)
- Permitted Solid Waste Disposal Facilities (LF)
- Registered Underground Storage Tank/Aboveground Storage Tank Listings (UST/AST).

The search of available federal and state databases was conducted in accordance with the specific requirements of the American Society for Testing and Materials (ASTM) standard practice for Environmental Site Assessments (E 1527-00). The results of the search of the Maryland Department of Environment (MDE) Hazardous Waste Management Section's files were made in conjunction with this study.

The site inspection was performed on November 14, 2001. For the purposes of this hazardous waste ISA, general site characteristics were examined. The site inspection focused on the following areas of concern:

- Underground Storage Tank (USTs)/Aboveground Storage Tank (ASTi)
- Storage, handling, and disposal of hazardous substances
- Waste disposal areas
- Stained soils, gravel, or pavement
- Air emission sources
- Electrical transformers
- Odors
- Collection ponds
- Stressed vegetation
- Discolored water/seeps/discharges
- Other potential areas of concern


## 2. Summary of Findings

## a. File Review and Agency Coordination

The following findings are based on the review of the published information as described in the previous section. A total of 39 sites were identified within the study area from the file review and site inspection (Appendix B).

The Montgomery County Department of Environmental Protection and MDE were contacted to obtain information on properties within the study area. According to the Montgomery County Department of Environmental Protection, no records were found in their database indicating any environmental problems investigated by their office. A file review with the MDE was also conducted. MDE had several files for sites identified within the study area. The results of the MDE file review regarding tank removal, corrective actions and site monitoring were considered in the assessment of environmental contamination potential.

## b. Site Inspection

Sites were inspected for potential contamination or for hazardous waste concerns within the study area. These sites inspected include active gasoline stations, former gasoline stations, auto repair shops, and facilities with underground storage tanks (USTs). In addition, many properties inspected are looked at because of the materials handled on-site and the nature of activities conducted, and not because of a verified presence of soil and/or groundwater contamination.

A total of thirty-nine (39) sites with potential environmental concerns were identified in the study area during the ISA investigation. The following sites were included in the inspection: active gasoline stations, former gasoline stations, vehicle repair shops, dry cleaners, facilities with USTs and businesses with large or small quantity hazardous waste generator permits. Many of these Description of Existing Environment

IV-27
properties were included because of the materials handled on-site and the nature of activities conducted, and not because of a verified presence of soil and/or groundwater contamination.

## V. ENVIRONMENTAL CONSEQUENCES

The following socio-economic resources were assessed in determining the impacts resulting from the proposed improvements: displacements/property impacts, disruptions to neighborhoods and communities, environmental justice, effects on parks and recreational facilities, effects on regional business activity, effects on existing businesses, effects on tax base and property impacts, land use impacts and impacts on historic and archeological sites. Natural environmental resources assessed included: topography and geology, soils, water resources, ecological effects, noise impacts, air quality and hazardous wastes. Please refer to Table S-1 located in the "Summary" of this document to see the number and corresponding impact quantities. Please note that only the resources impacted will be discussed in this chapter. There are no impacts to resources not included in Table $S-1$ or discussed in this chapter.

## A. Social Impacts

According to the Uniform Relocation Assistance and Real Property Acquisition Policies Act (1970) as amended 2000 , persons displaced by federally funded projects are to be treated fairly, consistently, and equitably so that they will not suffer disproportionate impacts as a result of the project. No residential displacements will result from Alternatives 1 or 2 , nor will any community facilities/services be displaced. This section addresses social impacts including property acquisition (right-of-way).

## 1. Property Impacts

Alternative 2 will require a total residential right-of-way acquisition of 0.38 acres and will require 0.31 acre of temporary construction easement and 0.37 acre of slope easement from residential property. The following residential properties are impacted by right-of-way acquisition (see Table S-1): Berkshire Towers Apartments (The Point Community), White Oak Assisted Living (Sunrise Community), Helen Fairfax, Eugene and Flora Davis, Springbrook Manor and the Sherbrooke Community property.

## 2. Summary of SHA's Equal Opportunity Program/Title VI Statement

It is the policy of the SHA to ensure compliance with the provisions of the Title VI of the Civil Rights Act of 1964 and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age religion, physical or mental handicap or sexual orientation in all SHA projects funded in whole or in part by the Federal Highway Administration (FHWA). The SHA will not discriminate in highway planning, design, or construction, the
acquisition of right-of-way, or the provision of relocating advisory assistance. This policy has been incorporated into all levels of the highway planning process to ensure that proper consideration may be given to social, economic and environmental effects of all highway projects. Alleged discriminatory actions should be addressed to the Equal Opportunity Section of the Maryland SHA, 707 North Calvert Street, Baltimore, Maryland 21202 for investigation.

## 3. Environmental Justice

Census demographics, field research, correspondence with local planning officials and correspondence with social organizations were used to identify the presence of any low-income or minority populations within the project study area. Areas of known environmental justice populations are well outside of the proposed alternative's right-of-way.

## 4. Effects on Community Services and Facilities <br> a. Emergency Services

Alternative 2 will require a temporary construction easement of 0.01 acre and a slope easement of 0.01 acre from the Hillandale Volunteer Fire Company. This temporary impact will not disturb emergency service operations, such as access/egress from the facility, or interrupt the normal operation of the unit. The build altemative is designed to alleviate congestion, and it is anticipated that accessibility for emergency services will improve with the build alternative. Coordination with the Montgomery County Fire and Rescue Service (F\&R) and the Montgomery County Department of Police was necessary to determine the effect on emergency services and response time (January 15, 2002). SHA has received a response from the Department of Police (DOP) stating that Alternative 1 could result in increased traffic congestion (January 29, 2002). The DOP does not foresee any negative impacts from the improvements proposed in Alternative 2 for New Hampshire Avenue between I-495 and US 29, and responded that the proposed changes should result in improved traffic flow throughout the area.

SHA has also received a response from the F\&R (February 25, 2002). The F\&R would like to ensure the following (SHA responses to address these comments are enclosed in parentheses after each Division comment):

- Refuge areas for motorists to move while apparatus is passing during emergency response. (By adding lanes, SHA would provide additional room available for passing emergency vehicles);
- Advance notification of construction start and stop dates, and other benchmark events which may cause additional congestion and lane closures (The current schedule shows a Notice to

Proceed date in late Summer 2003 with approximately two years for construction. As this date approaches, the event dates will be verified and checked regularly with the District 3 Construction Engineer);

- Apparatus egress, both northbound and southbound, will be maintained for Fire Station 12,
$\ldots$ including signal control (The Limit of Work is currently just north of the Fire Station, and there should not be any disruption to egress. The signal will function as it does today. SHA is currently reconstructing the Fire Station signal at MD 650 under a separate contract); and
- Signal control or another type of control to prevent motorists from cutting across all lanes of New Hampshire Avenue to access Northwest Drive from relocated Michelson Road. Northwest Drive provides a short cut to Lockwood Drive and US Route 29 and the Fire and Rescue Division believes that not controlling the intersection will result in an increase in vehicle crashes and pedestrians being struck. (There will be a new signal installed at this intersection)


## b. Religious Institutions

Alternative 2 will require a minor right-of-way acquisition of 0.07 acre from the Kingdom Hall of Jehovah Witnesses. This acquisition will not impact access/egress from the property or impact the parking areas. Alternative 2 will require a temporary construction easement of 0.14 acre from the Kingdom Hall of Jehovah Witnesses.

## 5. Effects on Visual Quality

Proposed streetscape improvements along MD 650 include the addition of plant material, sidewalks, bicycle paths, fences terminating in brick piers, and planted medians, which will complement the improved travel lanes of the highway itself. The sidewalks and bicycle paths will be installed with appropriate ramps and landings to make the design handicap accessible and ADA compliant.

New four-foot wide sidewalks are proposed at the north end and the south end of the project study area; from north of the US 29 overpass to Lockwood Drive (along MD 650) and along the westbound side of Powder Mill Road, which allows for continuous pedestrian movement along MD 650 and Powder Mill Road within the project limits. Medians planted with flowering trees, shade trees and sod, are proposed between the northbound and southbound traffic lanes on MD 650, providing enhanced safety as they assist in directing movement of vehicular traffic. Landscape treatments along both sides of the road, beyond the sidewalks, supplement existing vegetation and add variety and seasonal color to the roadside plantings.

The medians separating north and southbound traffic on MD 650 from the bridge at US 29 to the median break ending at the existing Michelson Road will be given special landscape treatment to deter pedestrian crossings in the middle of the medians. Not only are thorny shrubs proposed in the medians, but a 3.5 -foot high ornamental fence is also proposed under large shade trees. The visual quality of this intersection will be greatly improved with the installation of these additional landscape features. A three to five-foot wide grass strip, planted with street trees, is proposed between the proposed bicycle path and MD 650, which will allow for a buffer between vehicular and bicycle/pedestrian traffic. The street trees will provide shade and seasonal interest as well as a visual barrier between the path and the road.

The street tree planting is proposed along the golf course, between the bikeway and MD 650 with additional buffer plantings located behind the pathway to create a more naturalized setting along the golf course. An eight-foot high fence is also proposed along the perimeter of the golf course between Michelson Road and Mahan Drive, which terminates in brick piers at the entrance to the golf course. The entrance to the golf course will be improved with landscaping for seasonal interest and color, and additional brick piers will enhance the gateway entry feature. South of the entrance at Mahan Drive, an eight-foot high fence is proposed along the perimeter of the golf course. Buffer planting including shade trees, flowering trees and shrub beds, is also proposed along this fence line to create more of a naturalized setting for the golf course and to provide a buffer from MD 650. The proposed bikeway and street tree plantings, between the bikeway and MD 650, continue south to the end of the project limits.

A planted median is located between the service road and MD 650. The existing vegetation in this median is proposed for removal and will be replaced with a variety of plant materials that will increase the buffer and provide color and seasonal interest. The planting within this median, which includes shade trees, flowering trees, shrubs, and perennial beds, has been carefully designed to allow for safe movement in and out of the development by ensuring clear lines of sight at the intersections. The medians within MD 650 will also be improved with street trees and sod.

The proposed landscape and streetscape improvements along MD 650 will result in a well-designed, aesthetically pleasing project that ensures safe and efficient movement for pedestrians, cyclists, and vehicular traffic throughout the project site while enhancing the setting for residents and patrons of the golf course and other businesses in the area.

## B. Economic Impacts

## Effects on Existing Businesses

No commercial displacements will result from Alternatives 1 or 2 (Table S-1). Alternative 1 would not require commercial right-of-way acquisition. Alternative 2 would require a total commercial right-of-way acquisition of 0.30 acres.

## Table V-1

Commercial Right of Way Acquisition Impacts

|  | Preprese MEAFMand <br>  | sidx-20 <br>  |  5898) (1) |
| :---: | :---: | :---: | :---: |
| White Oak Shopping Center I, II, III* | 0.65 | 0.11 | 2.41 |
| White Oak Professional Building* | 0.07 | 0.02 | 0.05 |
| Hillandale Shopping Center I* | 0 | 0.05 | 0.02 |
| PEPCO | 0.04 | 0.02 | 0.03 |
| Exxon Corporation (Powder Mill Road) | 0.003 | 0.008 | 0.04 |
| Hardware City | 0.06 | 0.001 | 0.05 |
| Shell | 0 | 0 | 0.13 |
| Exxon Corporation (Lockwood Drive) | 0.07 | 0 | 0.18 |
| George Meany Center for Labor Studies | 0.05 | 0.02 | 0.06 |
| Other ** | 0.007 | 0.001 | 0 |
| Wextsm | 9 $0^{6}$ | 0 |  |

* Refer to Appendix A for individual businesses within each commercial center
** Easements required from service roadways that access other commercial facilities

Table V-1 lists the commercial properties that would be impacted by Alternative 2. Alternative 2 would impact a total of nine commercial properties. Three of the commercial properties impacted contain multiple businesses (Appendix A). It is anticipated that the overall operation of the impacted commercial properties will not be affected. In general, the right-of-way requirements would occur as minor sliver takings. With the exception of one commercial property, the White Oak Shopping Center, parking spaces would not be impacted by Alternative 2. Alternative 2 would also change access to the White Oak Shopping Center.

Alternative 2 requires the net loss of 14 parking spaces at the White Oak Shopping Center (ten spaces at the north end and 4 spaces at the south end), in order to improve access to the shopping center (Table S-1). From the north, an exclusive left turn lane from southbound MD 650 allows direct access to the reconfigured entrance into White Oak Shopping Center. From the south, traveling northbound on MD 650, two additional lanes improve access to the reconfigured entrance of the shopping center.

## C. Impacts on Historic and Archeological Sites

The requirements of the National Historic Preservation Act (NHPA) are implemented in 36 CFR 800, which provides a role for the Advisory Council on Historic Preservation and establishes the procedures for compliance with Section 106 of the NHPA. If historic properties listed in or determined eligible for the National Register of Historic Places (NRHP) are identified (36 CFR 800.4), the Federal agency must assess how its project will affect them and consider mitigation measures, if applicable. Throughout this assessment, the agency should work with the State Historic Preservation Officer (SHPO) and consider the views of others, such as representatives of local governments, property owners, members of the public, and the Advisory Council on Historic Preservation (ACHP). The agency's assessment should use the criteria found in the ACHP's regulations and guidance (36 CFR 800.5).

SHA identified there is one historic property eligible for inclusion on the NRHP. SHA consulted with the SHPO and others- Montgomery Preservation, Inc. and the Montgomery County Historic Preservation Commission -to determine the potential effects of the project on the Naval Ordnance Laboratory (NOL) Historic District (M: 33-25).

## Historic Sites

NOL Historic District - Located on the east side of MD 650 at 10901 New Hampshire Avenue, the NOL Historic District is approximately 1.15 miles north of the Capital Beltway (I-495) and 0.75 mile south of US 29 and encompasses 732 acres. The district includes 372 contributing resources as well as a golf course that serves as a buffer along the western and southern borders of the district. The only historic resource in the NOL Historic District located within the APE is the nine-hole White Oak Golf Course, a contributing element dating to 1952; there are no contributing buildings located within the APE.

Alternative 2 would require 7.48 acres of permanent impact and 1.89 acres of temporary impact to the White Oak Golf Course, part of the NOL historic district. In addition, 0.48 acres of perpetual easement will be required for maintenance and access to two proposed outfall pipes. Permanent impacts would be necessary for construction of the proposed roadway and the stormwater management facilities, and will require SHA to acquire 7.48 acres of right-of-way from the White Oak Golf Course property. The proposed widening improvements would require impacting the existing golf course layout, including removal of fairways and course circulation. GSA and MNCPPC are currently redesigning the golf course layout in conjunction with the SHA's proposed roadway widening.

The proposed improvements would require temporarily impacting 1.89 acres of the golf course property for fine grading and construction access. The SHA determined that the impacts would have no adverse effect on the NOL Historic District. The SHPO concurred with this determination on January 14, 2002. Please refer to Page VII-1b in Chapter VII, Other Agency Correspondence.

## Archeological Sites

No National Register eligible archeological sites would be impacted by Alternative 2. The SHPO concurred with this finding on January 14, 2002. Please refer to Page VII-1b in Chapter VII, Other Agency Correspondence.

## D. Natural Environment

## 1. Topography and Geology

Alternative 1 (No-Build) would not affect existing topography or geology in the study area.

Alternative 2 would affect existing topography in the study area. Fill to support new road and road banks would be necessary for the expansion of MD 650 and the construction of Mahan and Michelson roads. Less substantial soil cut and fill would be necessary for grading and lane expansion associated with the intersections at Powder Mill Road, Lockwood Drive and the US 29 interchange. Soil will have to be removed for the construction of storm water management (SWM) best management practices (BMP). The top bank of the SWM facility would be built level with existing grade. No unique geologic features or economically important mineral deposits would be affected by the build alternative.

## 2. Soils

## a. Erosion and Sedimentation

Soils would not be affected by Alternative 1. Alternative 2 would affect soils, especially by erosion and subsequent sedimentation during the building phase. Such erosion would primarily be caused by removal of existing vegetation, and placement of un-vegetated fill, leading to increased exposure of soils to weather and runoff potential. Sedimentation may increase slightly as soil becomes disturbed and subsequently erodes. An intermittent watercourse would be affected during the construction of Michelson Road and the adjacent SWM facility. Several methods would be used together to decrease erosion effects, including structural, vegetative, and operational methods during construction. These control measures may as necessary include:

- conducting work during drier seasons (i.e. autumn and early winter),
- seeding, sodding, and stabilizing slopes as soon as possible to minimize the exposed area,
- stabilizing ditches at the tops of cuts and at the bottoms of fill slopes before evacuation and formation of embankments,
- proper use of sediment traps, silt fences, slope drains, water holding areas and other control measures, and
- use of diversion dikes, mulches, netting, energy dissipaters, and other physical erosion controls on slopes where vegetation cannot be supported.

A grading plan and sediment and erosion control plan will be prepared and implemented in accordance with Maryland Department of the Environment (MDE) regulations. The grading and sediment control plans will minimize the potential for impacts to water quality from erosion and sedimentation. Proper implementation of the control plan will help prevent any erosion that would occur pre and post construction. Furthermore, temporary and permanent controls are reviewed and approved by MDE prior to initiation of work. Measures to prevent erosion in highly susceptible areas (i.e. steep slopes) are included in the control plans when necessary.

## 3. Water Resources <br> a. Surface Water and Groundwater

Alternative 1 would not result in the construction or modification of any culverts or bridges, nor would it affect water quality. Alternative 2 would require the construction of two outfall pipes for the two proposed stormwater management facilities (one for each facility). The outfall pipes would extend from each of the stormwater management facilities, drain east through the golf course property, and outfall into a small waterway also located on golf course property.

Alternative 2 would not affect aquifer formations or the level of the groundwater table because local aquifers are recharged by precipitation throughout the study area. In general, fluctuations of the groundwater level depend upon precipitation amounts and temperature. Alternative 2 has limited potential for groundwater contamination from roadway runoff due to the fact that there are closed drainage systems throughout the study area. Possible pollutants would include engine oil, brake lining, coolant, rubber, and road salt. The impacts are limited spatially by the natural processes of the soil, so there should be less effect farther from the roadway.

Alternative 2 would increase impervious areas by approximately 5.1 acres. To minimize adverse effects from road wash, stormwater BMPs would be strictly followed to comply with MDE standards. All runoff in the drainage area of relocated Michelson Road and the right tum lane added by the build alternative will pass through a stormwater management facility before evaporation or discharge into the intermittent stream. Specific measures include adherence to erosion and sediment control procedures, vegetating and stabilizing exposed soil. Other measures may as necessary include properly handling hazardous materials during the construction phase.

## 4. Ecological Effects

## a. Waterways/Wetlands

Alternative 1 (No-Build) would not impact waterways and wetlands within the study area (Table V2). Alternative 2 would impact 43 linear feet of stream from Waterway $A$ and 50 linear feet from Waterway B, for a total of 93 linear feet of stream impact. No wetland impacts are anticipated with Alternative 1 or Alternative 2. Vegetated wetlands would not be impacted by Alternative 2. Please refer to Figure III-3 for mapping of the waterways and wetlands within the study area, and Table $\boldsymbol{V}$ - 2 for a description of impacts to the wetland/waterways in the study area.

## Table V-2



## b. Terrestrial Wildlife/Habitat

Alternative 1 would not affect existing terrestrial habitat conditions. Alternative 2 would have minimal permanent effects upon a small area of pervious ground on the White Oak Golf Course. This existing area does not provide substantial wildlife habitat because it is not large enough to be a wildlife corridor or FIDS habitat, or it is maintained turf and forest stand as part of the golf course, and it provides little use as food, covert, or nesting area for native wildlife. Alternative 2 would impact one-half acre of forest, included in the pervious ground on the golf course, for the construction of the outfall pipe from the southern most SWM facility. This area would be able to revert to forest, but some trees may be subject to removal or root pruning. The remainder of the affected terrestrial habitat is already urbanized, and serves limited use as native wildlife habitat.

Seven large trees that grow parallel to the MD 650 proposed ROW would be impacted. The construction of the bike path and sidewalk would impact all of the red oaks and the black cherry. The fill associated with the road embankment would impact the $34^{\prime \prime}$ tulip poplar and the $30^{\prime \prime}$ sweet gum. The storm water outfall pipe, from the southern SWM facility, would impact a $32^{\prime \prime}$ tulip poplar associated with the forest stand on the golf course. Table V-3 lists the large and significant trees and describes the impacts under Alternative 2. Please refer to Figure III-3 for locations of the large trees.

Table V-3
Impacts to Large Trees


[^0]Per Natural Resources Article 5-103, "Reforestation Law," adopted 1989, amended 1990 and 1991, the construction of a highway by a unit of the state:

1. May cut or clear only the minimum number of trees and other woody plants that are necessary and consistent with sound design practices.
2. Shall make every reasonable effort to minimize the cutting or clearing of trees and other woody plants.

The Maryland Reforestation Act requires the minimizing of forest clearing, replacement of removed wooded areas, or contributions to a reforestation fund if forested areas are taken. Every effort will be made to minimize the impacts within the project area. All highway construction projects utilizing $\$ 1$ or more of State funding must do mitigation for forest impacts. Forest mitigation is required for any State project that requires one or more acre of impact. Replacement is required on an acre-for-acre (1:1) basis and must be accomplished on public land. SHA will adhere to the following prioritized reforestation site requirements:

1. Reforestation within the project right-of-way, or on SHA property adjacent to the construction site,
2. Reforestation on any public land within the County and subwatershed where impacts are anticipated,
3. Reforestation to occur in the County or subwatershed in the state in which the construction activity is located.

The following criterion will apply to all planting sites per the options listed above:

- Open forested planting sites should be at least one-half acre in size and 50 feet wide,
- Sites adjoining other forest land should be at least one-quarter acre in size and one planting row wide,
- Free-standing strip plantings should be at least 50 feet wide and one-half acre in total size,
- Site must not be in forested condition before planting,
- Site must remain in forested condition for the foreseeable future.


## c. Aquatic Wildlife/Habitat

Alternative 1 would not affect current aquatic wildlife. Alternative 2 would add two SWM outfall pipes that may discharge into the stream (Waterways A and B). The quality of storm water discharged would not have any adverse effects on the existing water quality, Stormwater Management Regulations, Code of Maryland Regulations (COMAR) 26.17.02.01 through
26.17.02.12. Vegetated wetlands would not be impacted by Alternative 2. Alternative 2 would not have an adverse effect on water quality or aquatic habitat, and would, therefore not have an adverse impact on aquatic wildlife.

## E. Noise Impacts

## 1. Prediction Results for Each Alternative

All impact analyses were performed in conformance with Title 23 of the Code of Federal Regulations, Part 772 ( 23 CFR 772) Procedures for Abatement of Highway Traffic Noise and Construction Noise and the SHA Sound Barrier Policy (May 1998). Noise Sensitive Areas (NSA) are defined as land use activities that may be affected by highway traffic noise as a result of the proposed highway improvements. They may include picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals. Each noise sensitive area was analyzed to determine potential impacts from each of the alternatives (Figure V-1). Table V-4 presents the results of the prediction modeling and those NSAs and receptors impacted by each alternative.

## 2. Impact Assessment and Feasibility of Noise Control

In defining impact criteria, the SHA Sound Barrier Policy states that mitigation shall be considered for receptors that will experience future noise levels equal to or exceeding 66 dBA , or exceeding existing noise levels by 10 dBA or more, resulting from the construction of new highways or through lane additions to existing highways. As indicated in Table V-4, five of the six identified noise sensitive areas will experience no-build design year noise levels equal to or exceeding the 66 dBA impact criterion. NSA 4 (the Berkshire Apartments) will experience design year Build and No-Build noise levels of 65 dBA and is not considered impacted. Since the No-Build alternative would not involve additional highway improvements or increasing existing capacity, noise abatement was not considered. NSAs $1-3,5$, and 6 will experience build design year noise levels that equal or exceed the impact criteria, and feasibility and reasonableness of noise abatement was investigated for the build condition at each. Since earth berms generally have a flat area' on the top and minimum $2: 1$ side slopes to protect against erosion, they require additional right-of-way to accommodate the berm's wide base.


Air Quality and Noise Receptors Alternative 2

Table V-4
Predicted Design Year Noise Levels


Noise levels equal or exceed SHA 66 dBA noise impact criterion.

Even a minimum $10^{\prime}$ high earth berm requires a base of approximately 50 ', as well as additional room for slope drainage. Right-of-way constraints adjacent to MD 650 preclude the construction of earth berms of sufficient height for noise abatement; therefore, sound barriers were evaluated.

Prior to determining insertion loss of potential sound barriers, each NSA was screened for feasibility and reasonableness based on the other SHA criteria (see Noise Quality Technical Report Analysis Report, November 28, 2001). Sound barriers were considered not reasonable or feasible at each of the evaluated noise sensitive areas. The following is a summary of the detailed evaluation for each NSA, as contained in the MD 650 Noise Quality Technical Analysis Report. Appendix B provides a summary of the SHA feasibility and reasonableness worksheets for each NSA.

## NSA 1

A sound barrier at NSA 1 is considered not feasible or reasonable based on SHA's vehicular/pedestrian access and no-build vs. build relationship criteria ( 3 dBA or less difference between build and no-build noise levels). If a sound barrier were to be constructed at this NSA, a gap or opening would be required for the access drive, as well as Greenacres Drive to maintain access to the church and adjacent community. Gaps or openings of this nature for vehicular access and desirable sight distance at the access point would reduce the achievable barrier insertion loss and compromise the sound barrier's effectiveness.

## NSA 2

A sound barrier at NSA 2 is considered not feasible or reasonable based on SHA's vehicular/pedestrian access and no-build vs. build relationship criteria, as well as the desirable construction width required for a sound barrier. If a sound barrier were to be constructed between Chalmers Road and Rupert Road, gaps or openings would be required to maintain access for Chalmers Road, Rupert Road, and the private driveways to MD 650. The same applies for a sound barrier between Rupert Road and Lockwood Drive. Gaps or openings of this nature for vehicular access and desirable sight distance at the access points would reduce the achievable barrier insertion loss and compromise the sound banter's effectiveness. If the sound barrier would be constructed in the grassy area between the frontage road and the MD 650 southbound roadway, the need for driveway gaps would be eliminated, but gaps would still be required to allow access points at Rupert Road, Schindler Drive, McCeney Avenue, and Northwest Drive. In addition, the grassy
area is quite narrow and is generally insufficient in width for the physical construction of a sound barrier. Lastly, the grassy area contains a line of utility poles and associated transmission lines, which would require relocation.

## NSA 3

A sound barrier at NSA 3, the White Oak Golf Course, is considered not feasible or reasonable based on SHA's vehicular/pedestrian access, no-build vs. build relationship, and the cost per benefited residence criteria, as well as the seasonal and transient nature of the activities taking place on the property. If a sound barrier were to be constructed, it would require gaps or openings to provide pedestrian and vehicular access and desirable sight distances at Mahan Road, Relocated Michelson Road and private driveways north and south of the golf course property. Gaps or openings of this nature would reduce the achievable barrier insertion loss and compromise the sound barrier's effectiveness.

## NSA 4

NSA 4 will not be impacted.

## NSA 5

A sound barrier at NSA 5 is considered not feasible or reasonable based on SHA's vehicular/pedestrian access, no-build vs. build relationship, and cumulative effects criteria, as well as the lack of capacity enhancing improvements affecting the highway noise environment. If a sound barrier were to be constructed, gaps or openings would be required to maintain access for Milestone Drive, Quaint Acres Drive, and the private driveway to MD 650 for the St. Stephen Lutheran Church. Gaps or openings of this nature would reduce the achievable barrier insertion loss and compromise the sound barrier's effectiveness. The improvements proposed for this area are limited to the reconstruction of the US 29 southbound on-ramp to provide a tighter radius, and the provision of a double left-turn from northbound MD 650 to the southbound on-ramp, neither of which are considered capacity enhancements.

## NSA 6

A sound barrier at NSA 6 is considered not feasible or reasonable based on SHA's vehicular/pedestrian access, no-build vs. build relationship, cumulative effects, and aesthetics
criteria. If a sound barrier were to be constructed, gaps or openings would be required to maintain access and provide desirable sight distance for the new subdivision roadway under construction opposite Quaint Acres Drive and the entrance to the library on MD 650. Gaps or openings of this nature would reduce the achievable barrier insertion loss and compromise the sound barrier's effectiveness. In addition, a barrier of the height required could present a visual impact for residents across MD 650 and MD 650 travelers.

## 3. Construction Impacts

Land uses that are sensitive to vehicular noise would also be sensitive to construction noise. Although highway construction is a short-term phenomenon, it can cause significant noise impacts. Additionally, it is possible that some construction may occur at night to avoid severe traffic impacts. The extent and severity of the noise impact would depend upon the phase of construction and the noise characteristics of the construction equipment in use. Construction would have direct impact on receptors located close to the construction site and would have an indirect impact on receptors located near roadways where traffic flow characteristics are altered due to re-routing of vehicles from the construction area.

As with any major construction project, areas around the construction site are likely to experience varied periods and degrees of noise impact. This type of project would probably employ the following types of construction equipment that would likely be sources of construction noise:

- Bulldozers and earth movers,
- Graders,
- Front end loaders,
- Dumps and other diesel trucks, and
- Compressors.

In general, sensitive land use located near construction zones (approximately 100 feet) may experience noise levels between 78 dBA and 83 dBA during construction.

In order to minimize temporary construction impacts, maintenance of construction equipment will be regular and thorough to minimize noise emissions due to inefficiently tuned engines, poorly lubricated moving parts or poor to ineffective muffling/exhaust systems.

## F. Air Quality

## 1. CO Microscale Analysis

The results of the predicted CO concentrations for both the No-Build and Build Alternatives are described in detail below. For additional technical information regarding the CO microscale analysis, refer to the MD 650 (from I-495 to US 29) Intersection Improvements Air Quality Technical Analysis Report. Receptor CO concentrations for the No-Build Alternative exceed the State and National Ambient Air Quality Standards for the 1 -hour ( 35 ppm ) and 8 -hour ( 9.0 ppm ) analyses in the 2025 analysis year. No receptor CO concentration exceeds the 1-hour S/NAAQS standard ( 35.0 ppm ) or the 8 -hour standard ( 9 ppm ) in the 2007 analysis year for the No-Build and Build Alternatives. No CO concentrations exceed the S/NAAQS for the Build Alternative in the 2025 analysis year.

For the 2007 analysis year, CO concentrations in the Build-Alternative are generally higher than that of the No-Build Alternative. The reason for the higher CO concentrations in the Build Alternative is due to greater traffic volumes occurring in the project study area. Relative comparison of the No-Build Alternative versus the Build Alternatives for the 2025 analysis year identifies that CO concentrations for the No-Build Alternative are generally higher than the Build Alternative. This is likely due to the constrained capacity of the roadway to handle forecasted traffic for the year 2025. Both the No-Build Alternative and the Build Alternative experience elevated concentrations of CO at the intersections of MD 650 with Powder Mill Road, Michelson Road, and Lockwood Drive. This would be expected, due to vehicle idle emissions in queue at signalized intersections. The only violations of the S/NAAQS occur at the intersection of MD 650 and Powder Mill Road. The 2025 No-Build Alternative analysis predicts that Receptors 5, 9 and 10 exceed the eight-hour standard ( 9 ppm ), while Receptors 11 and 12 exceed the 1 -hour standard ( 35 ppm). These elevated levels in the 2025 No-Build Alternative may be explained because of the increased traffic volumes and the longer queue lengths at the MD 650/Powder Mill Road intersection. However, the No-Build Alternative is not designed to function properly with increased traffic volumes predicted for the 2025 analysis year.

Receptor 5 is located on the northeast corner of the northbound MD 650 and Powder Mill Road intersection. This receptor CO concentration of 9.2 ppm exceeds the 8 -hour S/NAAQS criteria of 9 ppm in the 2025 analysis year for the No-Build Alternative. The No-Build Alternative does not
contain additional lane assignments for the additional traffic volumes predicted for the 2025 model year. The additional traffic volumes and longer queue lengths predicted for westbound Powder Mill Road in the 2025 model year would result in 8-hour CO violations.

Receptors 9 through 12 are located at the northwest comer of the southbound MD 650 and Powder Mill Road intersection (Figure V-1). The model predicts that Receptors 9 (11.7 ppm) and 10 (9.9 ppm) will have CO concentrations that exceed the 8 -hour $\mathrm{S} / \mathrm{NAAQS}$ criteria for the No-Build Alternative in the 2025 analysis year. Receptors 11 ( 37.7 ppm ) and 12 ( 37.2 ppm ) exceed the 1-hour standard of 35 ppm for the 2025 No-Build Alternative. The violations occur in the 2025 morning rush hour model. The No-Build Alternative is not designed to accommodate the increase in predicted traffic for the 2025 analysis year. The predicted traffic volume moving southbound in the morning rush hour is 5,595 vehicles on the existing three through lanes and one left turn lane. It is reasonable that CO violations would exist in the No-Build Alternative for the 2025 analysis year.

## 2. Conformity with Regional Air Quality Planning

Maryland 650 from I-495 to US 29 Improvement Project is located in Montgomery County, Maryland. The County is not designated as a non-attainment area for carbon monoxide (CO) or particulate matter $\left(\mathrm{PM}_{10}\right)$, but is designated as a non-attainment area for ozone $\left(\mathrm{O}_{3}\right)$. The MD 650 improvement is identified in the 2001-2006 Transportation Improvement Plan (TIP) and the Year 2000 Constrained Long Range Plan (CLRP). The MD 650 project is categorized in the CLRP's Projects under Major Study as a component of the East West Link Improvements. The projects included in the TIP and CLRP are consistent with the air quality budgets set-forth in the State Implementation Plan (SIP), Phase П Attainment Plan. The Phase II Plan has been prepared by the Metropolitan Washington Air Quality Committee to comply with the Clean Air Act Amendments of 1990 and with a U.S. Environmental Protection Agency (EPA) memorandum of March 2, 1995 on the phased attainment demonstration process. Because the project was considered in the region's CLRP as a study, the project may be subject to a future conformity determination once the design of the project has been completed. Meeting conformity requirements in future years may require the implementation of additional transportation control measures that reduce vehicle miles traveled.

Employer based TCMs in the study area include the services provided through the "Commuter Connections" program. "Commuter Connections", a service provided through the Metropolitan Council of Governments, assists commuters in finding a commute alternative to the single occupant vehicle (SOV) trip. Their services include ride-matching assistance to help employees in locating potential carpool/vanpool matches and guaranteed ride home programs. Additional TCM's that reduce the need for SOV trips that are in use at the current FDA facility includes parking space incentives for carpool/vanpool users and flexible work hour programs. Bus service between the FDA site and the Silver Spring Metrorail Station is also available providing an alternative to SOV trips. Since the FDA is a federal government agency, GSA will be required to implement these types of TCM's to reduce emissions (1997 FEIS). Please refer to Chapter II (Section II.E.2) of this document for a description of transportation management strategies, such as transit usage and carpooling, listed in the TMP to achieve the goal of increasing the Average Vehicle Occupancy (AVO) to 1.5 persons per vehicle.

## G. Hazardous Materials

## 1. Initial Site Assessment

## a. Conclusions and Recommendations

SHA guidelines for performing an ISA and the ASTM E 1527-00 Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process were followed.

The database search documented a number of sites where USTs have been removed or are permanently out of service. The Code of Maryland Regulations (COMAR 26.10.10.02, Code of Maryland Regulations is a Maryland state regulation which regulates waste material. Title 26 Department of the Environment, Subtitle 10 - Oil Pollution and Tank Management, Chapter 10 -Out-of-Service UST Systems and Closure, Section 2 - Permanent Closure and Changes-In-Services) requires that USTs be removed from the ground, or with MDE approval, filled with an inert material. Before a UST site is closed, the owner must determine if a release occurred. If evidence of a release exists, the owners must begin corrective action according to COMAR 26.10.03 (Title 26 - Department of the Environment, Subtitle 10 - Oil Pollution and Tank Management, Chapter 3 UST Systems: Design, Construction, Installation, and Notification).

Should a property with underground storage tanks be impacted by the project, the USTs would need to be removed in accordance with all applicable local and state regulations (COMAR 26.10.10.02). At this time, it is not anticipated that any of the identified properties within the project area will need to be removed. However, all the identified properties have the potential for the presence of soil and/or groundwater contamination that may require remediation. Further investigation of these properties may be warranted if the project would directly impact them. Further investigation would entail a detailed reconnaissance of each affected property, and may include soil and/or groundwater sampling, and a geophysical investigation. Appendix $B$ lists the identified properties, the environmental concems associated with each property, and their assigned value of High, Medium, or Low potential for environmental contamination. The assigned value is based on information obtained from the site investigation, review of historical photos, review of Maryland Department of the Environment files and other information obtained in the course of the Initial Site Assessment process.

At a minimum, it is recommended that sites identified as having High potential for environmental contamination be investigated further (Preliminary Assessment) if these properties will be directly impacted by construction activities. A more thorough review of documents, such as permit information, violations and potential collection of environmental samples may be necessary in the future.

## H. Secondary and Cumulative Effects Analysis

Secondary and Cumulative Effects Analysis (SCEA) was performed in compliance with the NEPA and Council of Environmental Quality (CEQ) regulations which require that the secondary and cumulative effects of a project be examined ( 40 CR 1508.25 (c)). SCEA analysis was completed in conformance with SHA's Secondary and Cumulative Effects Analysis (SCEA) Guidelines (Revised June 2000). The SCEA was divided into three main sections including scoping, analysis, and conclusions.

## 1. Scoping

## a. Resources

Resources considered in the SCEA are those that are directly impacted by the project alternatives and those resources impacted from any secondary development that is the result of the project's
action. Coordination initiated with the M-NCPPC concluded that no secondary development is contingent upon implementation of the project's Build Alternative. An environmental inventory identified three resources that are impacted by the project alternatives. The resources considered in the SCEA and how they will be analyzed is presented in Table V-5.

Table V-5
SCEA Resources

| Resource | Analysis Methodology |
| :---: | :--- |
| Waters of the US | Evaluate published trends of watersheds to estimate past impacts to Waters of the US. Trends <br> analysis will be supported with population and employment data for the future time frames to <br> show the effect that growth pressures have on this resource. |
| Recreational <br> Facilities | Inventory recreational facilities, parklands, and schools from Environmental Systems Research <br> Institute (ESRI) data, ADC maps and the Parks, Recreation and Open Space Plan (PROS Plan). <br> Overlay future land use in relation to existing recreational facilities to identify impacts. Support <br> overlay analysis with population and employment data to show the effect that growth pressures <br> have on this type of resource. |
| Historic | Inventory National Register and/or Maryland Inventory sites within the SCEA boundary. <br> Overlay future land use in relation to existing historic properties to identify impacts. Support <br> overlay analysis with population and employment data to show the effect that growth pressures <br> have on this resource. |

## b. Boundary

Establishment of the SCEA boundary considered available data for all the sub-boundaries relevant to the proposed action. The establishment of the SCEA boundary is a synthesis of all subboundaries into one overall SCEA boundary. The sub-boundaries considered in establishing the SCEA boundary are listed below.

- Direct Impacts
- Area of Traffic Influence
- Subwatersheds
- Census Tracts
- County Planning Area
- Sewer and Water Service

Figure V-2 shows the SCEA boundary in relation to the Area of Traffic Influence, Subwatershed, Census Tracts and Traffic Analysis Zones (TAZs) sub-boundaries into the overall SCEA geographical boundary. All sub-boundaries were considered in establishing the SCEA boundary but only those sub-boundaries influencing the shape of the SCEA boundary are shown on Figure V2.


## c. Time Frame

1. Past Time Frame

Data collected to determine the past time frame include events with historic consequence to the development of the SCEA study area. The following events/policy decisions were considered when determining the past time frame, however the past time frame was not significantly influenced by these events/policies:

- 1954-64 Opening/Expansions of I-495
- 1964 General Plan (Wedges and Corridors)
- 1981 Eastern Montgomery County Master Plan

1980 was selected as the past time frame limit. A sewer moratorium on eastern Montgomery County was lifted in 1980. The result helped initiate rapid development of the US 29 corridor in Montgomery and Howard Counties. The selection of 1980 as the past time frame limit is substantiated by trends that show the SCEA study area decreasing in population 37 percent from 1970 to 1980 and increasing in population 50 percent in the period from 1980 to 1990 (Figure V-3).

Figure V-3
SCEA Study Area Population Change


## 2. Future Time Frame

The year 2007 is proposed as the SCEA's future time frame limit. 2007 is the design year of the project and represents the timeframe in which travel forecasting land use assumptions were conducted for the project.

## 2. Analysis

## a. Land Use Scenarios

## 1. Past

The primary data source available for establishing land use in the 1980 time period is the Montgomery County "Eastern Montgomery County Planning Area" Master Plan. This Master Plan identifies land use, zoning, transportation, and public facilities for the year 1979. There are seven land use classifications that make-up the "Eastern Montgomery County Planning Area" Master Plan including:

- Single Family (Townhouses)
- Apartments
- Commercial and Office
- Industrial
- Public Parkland
- Public and Semi-Public
- Agricultural, Woodland, Vacant

The SCEA boundary consists of six land use classifications with Public Parkland (39\%) and Agricultural/Vacant land (22\%) making up the majority of land use.

## 2. Present

The present land use scenario established for the SCEA is based on the 1997 White Oak Master Plan. The SCEA boundary consists of seven land use classifications with Single Family Residential ( $50 \%$ ) making up the majority of land use.

The present land use scenario was updated based on proposed development (one to five years beyond present year), as defined in the 1997 White Oak Master Plan. According to the Master Plan, the Milestone Drive Properties, located at the intersection of US 29 and MD 650, is the only undeveloped area within the SCEA Boundary. Since the publication the 1997 White Oak Master Plan, the property has been developed into a mixed residential community. This site consists of 37 developable acres and is appropriate for single-family detached units and single-family attached units. Two transportation projects, intersection improvements at MD 650/Lockwood and US 29/Stewart Lane, have been completed in the present timeframe but do not alter the underlying land use of the SCEA Boundary. The proposed land developments for this area is consistent with the base land use scenario established in the Master Plan.
3. Future

According to the 1997 White Oak Master Plan, commercial and transit development planned for the study area is consistent with present land use. The Plan supports and reinforces the existing land use patterns of the 1997 White Oak Master Plan communities and encourages development in the commercial centers that will strengthen their function and sense of place.

The future land use scenario was established by overlaying parcels of land recommended for rezoning or development in the 1997 White Oak Master Plan, with the present land use scenario. Each of the land parcels greater than 10 acres overlaid on the present land use scenario is summarized in Table V-6 and shown on Figure V-4. No major transportation projects are planned for the future timeframe (beyond the year 2006).

Table V-6
Future Land Development


The future land use in the SCEA geographical boundary for the year 2007 will remain similar to the existing scenario. Development of land parcels described above may alter the appearance of small isolated land areas, but are unlikely to change the overall land use from its current condition.

## b. SCEA Resources

## 1. Waters of the US

Impacts to Waters of the United States (WUS) examined trends in watershed quality for the Middle Potomac River Basin and Anacostia River Watersheds. The SCEA boundary is contained in both watersheds. Three streams including the Anacostia River and two unnamed tributaries are contained within the SCEA boundary (Figure V-5).



## a. Past

According to the Maryland DNR Watershed Profile for the Anacostia River Watershed, past and current stresses to surface water quality in the SCEA area include agricultural runoff, stormwater runoff, and sedimentation/siltation due to development.

Data obtained from the Middle Potomac Watershed Status and Trends Report indicates that there is a general improvement in water quality in the Middle Potomac River Basin, resulting from the overall decreasing trend in phosphorus concentrations from 1985 to 2000. The nitrogen levels have shown no trend over this time frame. The status for dissolved oxygen content has been good. The Potomac Washington Metro Basin Environmental Assessment of Stream Conditions indicated that overall both fish habitat and benthos indicate substantial problems with stream resources in the basin. These problems are a direct result of urbanization within the watershed. The basin has the highest percentage of urban land use ( 45 percent or 192 square miles) of all 18 major river basins in the state of Maryland.

## b. Future

SHA's Alternative 2 would increase impervious areas by approximately 5.1 acres. SHA is constructing two stormwater management facilities to treat the additional impervious surfaces required under Alternative 2. According to GSA's 1997 FEIS, the proposed FDA facility consolidation will increase impervious area by approximately 29 acres on the main FDA site and 17 acres on the remote parking area. Impervious areas increase the amount of runoff that is discharged into receiving streams. Cumulative impacts from the FDA site and SHA's Alternative 2 include increased levels of sedimentation, pollutants and thermal loading in receiving streams. Impacts from these increases in impervious areas would be mitigated through the use of stormwater best management practices during and after construction. Refer to GSA's 1997 FEIS regarding detailed proposed stormwater management facilities on the FDA site.

Trends analysis (other than SHA's Alternative 2 and FDA's consolidation project) shows that development pressures continue to add stress to WUS habitat inside of the SCEA geographical boundary. According to the M-NCPPC forecasts, future population is expected to increase ten percent between the years 2000 and 2010 for Montgomery County and seven percent for the state of Maryland.

Overlay analysis shows that one of the vacant land parcels will occur in areas of WUS. The Dow Jones ( 15.76 acres) parcel, located on US 29, currently contains a small Technology and Business Park on a portion of the lot, and the rest is vacant. Future development of this parcel will transform the vacant portion of the parcel to residential use. However in order to provide protection of the existing stream valley, the plan recommends a 50 -foot buffer be retained on the property to ensure compatibility with future residential development. The 1997 White Oak Master Plan identifies the need to protect and enhance the natural resources in order to sustain a stable and healthy biological environment. To minimize further degradation of WUS a number of laws and regulations are applicable to preserving this land in the future timeframe. They include:

- Clean Water Act, Section 404
- Clean Water Act, Section 401 (Water Quality Certification)
- Maryland Waterway Construction Statute (COMAR) 26.17.04
- Maryland Planning Act, 1992


## 2. Historic Resources

Evaluation of historic resources included overlaying National Register of Historic Places and Maryland Inventory of Historic Properties with the future land use scenario. One National Register Property (Rachel Carson House) and 11 properties (including the property listed on the National Register of Historic Places) listed in the Maryland Inventory of Historic Properties are contained within the SCEA geographical boundary. These properties are shown on Figure V-6.

## a. Past

Records show that trends in the elimination or protection of historic sites in the past timeframe are not readily available. Because of this, a past to present trend was not conducted for these resources.

## b. Future

Future assessment of historic properties included overlaying future development on the locations of existing known historic properties. Overlay analysis indicated that no National Register of Historic Places or Maryland Inventory of Historic Properties listings would be affected by future development in the study area.


## 3. Recreational Facilities

Data sources from the PROS Plan, ESRI Institution data set, and the Montgomery County ADC map identified eleven recreational facilities contained in the SCEA boundary (Figure V-6).

## a. Past

Records show that trends in the elimination or protection of recreational facilities in the past timeframe are not readily available. Because of this, a past to present trend was not conducted for these resources.

## b. Future

Future assessment of recreation facilities included overlaying future development on the locations of existing known recreational facilities. Overlay analysis determined no recreational facilities would be affected by future development.

## 4. Conclusions

a. Waters of the US

Waters of the US in the past to present time frame have experienced cumulative effects due to rapid residential and employment growth between 1980 and 2000. The rapid development has contributed to the loss of parkland and agricultural/vacant land inside the SCEA boundary. Despite the occurrence of cumulative effects to WUS, the style of growth that did occur is consistent with the goals set forth by the Montgomery County Master Plan.

The development in the past timeframe occurred in a corridor designated for residential and commercial growth in the 1969 General Plan. The 1969 General Plan is an updated version of the 1964 plan. This is based on the concept of Wedges and Corridors and is a general plan for the Maryland-Washington regional district for Montgomery and Prince George's County.

No cumulative effects to WUS are expected to occur in the SCEA geographical boundary for the future time frame. Environmental and conservation programs/laws previously listed in section b.1.b. of the SCEA will minimize impacts from future development.

## b. Historic Resources

According to the 1997 FEIS, construction of the proposed new FDA headquarters will involve the demolition of nearly all of the 100 Area buildings within an area approximately 130 acres on the western portion of the site. Only Building 100, a Non-Contributing resource, and part of the Main Administration Building's facade (Building 1) will be retained within this area. As a result of the construction of the Remote Parking Facility on a 40 acre parcel near the center of the sight, additional 100 Area buildings, and some 200 Area buildings will also be demolished. Approximately 70 Contributing and 46 Non-Contributing historic district resources will be demolished within the 100 Area, and approximately four Contributing resources will be taken within the 200 Area. Refer to GSA's 1997 FEIS regarding impacts to Historic Properties.

SHA's Alternative 2 will have a direct permanent impact of 7.48 acres and 1.89 acres of temporary impact to the White Oak Golf Course, part of the NOL historic district. In addition, 0.48 acres of perpetual easement will be required for maintenance and access to two proposed outfall pipes. SHA's proposed project does not require demolition of any buildings. The SHA determined that the impacts would have no adverse effect on the NOL Historic District, and the SHPO concurred with this determination on January 14, 2002. Therefore, SHA's project will have no additional cumulative effects to historic resources.

Cumulative effects are not expected to occur in the future timeframe due to national and county preservation regulations that protect historic resources. These regulations and preservation programs include the Master Plan for Montgomery County Historic Preservation, the Historic Preservation Ordinance, Chapter 24A of the Montgomery County Code and Section 4(f) of the U.S. Department of Transportation Act of 1966. Future development and transportation projects do not impact any of the historic resources, including the NOL Historic District, identified in the SCEA Boundary.

## c. Recreational Facilities

No cumulative effects to recreational facilities are expected to occur in the future timeframe. Potential impacts to recreation facilities due to population and employment growth would be minimized by local and national laws designed to protect public facilities used for recreation including 49 U.S.C. Section 303 and FHWA Regulation - 23 CFR 771.135.

## VI. DRAFT SECTION 4(f) EVALUATION

## A. Introduction

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC 303 (c)) permits the use of land from a significant publicly owned park or recreation area, wildlife refuge, or historic site (as determined by the officials having jurisdiction over the park, recreation area, refuge or site) only if there are no feasible and prudent alternatives to using that land. The action must also include all possible planning to minimize harm to the protected property resulting from this use. This document has been prepared in accordance with 23 CPR 771.135 and 49 U.S.C. 303.

The requirements of Section 4(f) apply to this project because the Build Alternative would require use of land from the White Oak Golf Course. The White Oak Golf Course is a historic resource in the Naval Ordnance Laboratory (NOL) Historic District, and is also classified as a publicly-owned public recreational land. The White Oak Golf Course is situated in the extreme western portion of GSA's property, immediately adjacent to MD 650. The proposed Build Alternative 2 would impact the golf course by widening MD 650 to the east, encroaching within the golf course boundary. As discussed in Chapter II, the MD 650 proposed improvements are necessary to accommodate additional highway traffic and capacity needs associated with future anticipated development in the area. FDA's consolidation will substantially contribute to the impact of traffic flow in this area. Therefore, impacts to this Section $4(f)$ resource are necessary to provide adequate transportation improvements to support the traffic needs associated with FDA's consolidation and other future projected new development that would add traffic to the MD 650 corridor.

MD 650 is located in Montgomery County (Figure S-1). The study area extends along MD 650 from Powder Mill Road north of US 29. Please refer to Chapter II in this EA for more detailed study area information.

## B. Proposed Action

The selected action must address a variety of traffic congestion issues to satisfy the project purpose and need. The purpose of this project is to improve traffic operations for vehicles using MD 650 at Powder Mill Road and from Chalmers Road to north of US 29. The proposed action involves the widening of MD 650 from approximately Acres Drive to Chalmers Drive (Figure III-3). Widening
will also occur on Powder Mill Road, Mahan Road and Lockwood Drive. The proposed scope of work includes the installation on the golf course of two stormwater management ponds, an access road, inlets and outfalls, landscaping, milling and resurfacing existing pavement, and construction of medians, curbs and gutters, bikeways, and sidewalks. The project also proposes to relocate Michelson Road to a new location across from Northwest Drive, to relocate and reconstruct the US 29 southbound ramp, and to widen the US 29 northbound ramp.

This project was initiated based on roadway transportation needs identified in GSA's 1997 FEIS since FDA's consolidation will substantially contribute to the impact of traffic flow in this area. The following necessary improvements were identified to mitigate traffic impacts associated with the FDA consolidation (1997 FEIS, Pages 4-108 through 4-110):

- MD 650 at Michelson Road - These improvements include the addition of a turn lane along northbound MD 650 into the site.
- MD 650 and Schindler Drive/Mahan Drive - These improvements include the addition of a channelized turn lane into the site; and extending the southbound turn lane on MD 650.
- MD 650 at Lockwood Drive - These improvements include the widening of southbound MD 650 to accommodate the turning movements of turn lanes from the east leg of Powder Mill Road.
- MD 650 at Lockwood Drive - These improvements involve reconfiguring the intersection to provide a turn lane on Lockwood Drive

Additional traffic analyses [1998 Traffic Access Plan (General Services Administration); Transportation Improvement Feasibility Study (BMI, 1999); and Review of Transportation Improvements along New Hampshire Avenue (MD 650) (General Services Administration 2000)] were undertaken by Montgomery County and GSA to determine needed transportation roadway improvements to accommodate not only the FDA proposed development, but also other future projected new development at other locations in the vicinity that would add traffic to the MD 650 corridor. These studies concluded that selected intersections would operate at an unacceptable level of service (LOS) with the proposed FDA consolidation and other projected new development.

SHA's proposed build alternative incorporates the necessary improvements identified in the 2000 Review of Transportation Improvements Along MD 650 Report, which are based on the traffic needs associated with FDA's proposed development as well as other projected new development that would contribute traffic along this corridor. Further information regarding project purpose and need can be found in Chapter II.

## Alternative 1 - No-Build

This alternative is being studied as a base line comparison to the Build Alternative (Figure III-2). Alternative 1 would not provide any significant improvements to MD 650 from Powder Mill Road to north of US 29. Any improvements would occur as part of normal maintenance and safety operations and would not measurably affect roadway capacity or address accident potential.

## Alternative 2-Build Alternative

Alternative 2 involves outside widening of MD 650 to provide an additional northbound through lane from Crest Haven Drive to the ramp to northbound US 29 (Figure III-3). Alternative 2 also considers intersection improvements at several locations in the MD 650 corridor. Further information regarding Alternative 2 can be found in Chapter III of the EA.

## C. Description of Section 4(f) Resources



Photo 1: White Oak Golf Course


Photo 2: White Oak Golf Course from MD 650

The White Oak Golf Course is located on the east side of MD 650. In 1995, the closure of the former Naval Service Warfare Center (NSWC) on New Hampshire Avenue, in White Oak, Maryland, was announced as part of the Defense Base Closure and Realignment Act of 1990. The

White Oak Golf Course property, comprising 730 acres, includes a nine-hole golf course that served as a buffer area to the former naval activities at the installation on the golf course. The golf course was developed by an employees group in the 1950s, and was operated and maintained by the group for the exclusive use of their members. The employees group relinquished their control of the course effective January 1, 1997.

The Department of the Navy granted the Maryland-National Capital Park and Planning Commission (M-NCPPC) a temporary license to operate the golf course, and the course was opened to the public in July, 1997. The license was to continue following transfer of the administrative jurisdiction of the NSWC from the Navy to the General Services Administration (GSA), on October 18, 1997 and remained in place until the M-NCPPC and the GSA entered into a service contract for the golf course. The term of the service contract expired on October 31, 2000. The M-NCPPC is currently negotiating with the GSA to continue operating the course during the planning process for longterm improvements to the course.

The golf course is within the US Naval Ordinance Laboratory (NOL) Historic District (M: 33-25), which is eligible for listing on the National Register of Historic Places (NRHP) (January 14, 2002). The White Oak Golf Course is a historic resource in the NOL Historic District, and has been a contributing element dating to 1952. The golf course is personally important to many former and current employees as a major achievement because all costs associated with the venture were borne by the members, with no Navy-appointed funds used for its construction and maintenance. Initially, membership was restricted to military and civilian employees of NOL, the Army's Harry Diamond Laboratory and employees of tenant activities at NOL. For community relations, membership was opened to residents in the surrounding communities by the 1960s. The current golf course property boundary generally follows the line established for the buffer area and plays to about 2,400 yards.

## D. Impacts on Section 4(f) Resources

The proposed improvements will result in an impact within the White Oak Golf Course boundary. Such impacts constitute a Section 4(f) "use" as defined in 23 CFR 771.135 (Section 4(f)) (49 U.S.C. 303). As previously mentioned, the requirements of Section 4(f) apply to this project because the Build Alternative would require use of land from the White Oak Golf Course, which is classified as
a historic resource in the NOL Historic District, and is also classified as a publicly-owned public recreational land. SHA requested a no adverse effect determination for this project from the State Historic Preservation Officer (SHPO). The SHPO concurred with SHA's no adverse effect determination (January 14, 2002). Please refer to Page VII-1b in Chapter VII, Other Agency Correspondence. The following summarizes impacts to the Section 4(f) resource:


#### Abstract

Alternative 1 (No-Build) - The No-Build Alternative would have no impact on the White Oak Golf Course.


#### Abstract

Alternative 2 (Build) - Alternative 2 would impact the White Oak Golf Course property (Figure III-3). The impacts would occur along the western perimeter of the property, parallel to MD 650. This alternative would impact the golf course by widening MD 650 to the east, encroaching within the golf course boundary. Impacts to this Section 4(f) resource are necessary to provide adequate transportation improvements to support the traffic needs associated with FDA's consolidation and other future projected new development in the area.


These impacts would occur as a result of the proposed widening of MD 650 for an additional northbound through lane along MD 650, and the turn lane from northbound MD 650 to the proposed relocated Michelson Road. Additional property impacts would occur for the proposed relocated Michelson Road. Relocated Michelson Road is proposed south of its current location. The relocated road would shift Michelson Road/MD 650 intersection approximately 550 feet south, across from Northwest Drive.

Impacts to the Section $4(f)$ resource will occur as a result of two proposed stormwater management (SWM) facilities within the White Oak Golf Course property. SHA determined that the SWM ponds are the most feasible alternative for managing stormwater runoff as opposed to the alt0ernative of excavating portions of MD 650 for placement of stormwater drainage pipes parallel to northbound MD 650. One of the SWM facilities would be located on the southern portion of the golf course, and would be approximately 1.59 acres in size. An additional facility would be located on the northern section of the property, north of the proposed relocated Michelson Road, and would
be approximately 1.24 acres in size. Both permanent and temporary impacts to the golf course would occur as a result of the proposed roadway improvements and stormwater management facilities.

The impacts described in this section quantify the impacts to the White Oak Golf Course property. GSA and M-NCPPC are currently redesigning the golf course layout in conjunction with the SHA's proposed roadway widening. The necessary MD 650 widening improvements will, therefore, require impacting the existing golf course layout, while also affecting the redesign layout. Realignment of the golf course (by GSA and M-NCPPC) will require impacting mature trees and development of a forest conservation plan (by GSA and M-NCPPC) for approval by the Maryland Department of Natural Resources. Forest conservation requirements to be completed by GSA and M-NCPPC have the potential of reducing the size of developable areas on the site designated for use by the FDA, GSA and the golf course.

Federal land transfers are applicable for this project since "the provisions of this subpart apply to any project undertaken with funds for the National Highway System. When FHWA determines that a strong Federal transportation interest exists, these provisions may also be applied to highway projects that are eligible for Federal-aid under Chapters 1 and 2 of title 23, of the United States Code, and to highway-related transfers that are requested by a State in conjunction with a military base closure under the Defense Base Closure and Realignment Act of 1990" (CFR 23, Chapter I, Part 710.601). Chapter III includes mapping depicting the relationship between the Section 4(f) resource boundary to the proposed build alternative.

## Proposed Right-of Way

The proposed improvements would require 7.48 acres of permanent impact and 1.89 acres of temporary impact to the golf course property. In addition, 0.48 acres of perpetual easement will be required for maintenance and access to two proposed outfall pipes. Section 4(f) impacts will result not only from the roadway widening, but also from the installation of two stormwater management ponds. Permanent impacts would be necessary for construction of the proposed roadway, roadway embankment and the stormwater management facilities, and will require SHA to acquire 7.48 of acres of right-of-way from the White Oak Golf Course property (Table VI-1).

## Table VI-1

Summary of Impacts to the White Oak Golf Course


## Temporary Easement

The proposed improvements would also require temporarily impacting 1.89 acres of the golf course property. Types of temporary impacts necessary for construction of the project include areas needed to temporarily install erosion and sediment control measures during construction (removed immediately after construction) and areas needed for construction access to allow construction equipment on site to construct the roadway, embankments and stormwater management facilities. In general, temporary impacts extend approximately 15 feet beyond SHA's proposed right-of-way, and will not result in modification to existing terrain. These temporary impacts require SHA to obtain temporary use concurrence from agencies with jurisdiction over the Section 4(f) property. The Federal Highway Administration (FHWA) has determined that the requirements of Section 4(f) do not apply to the temporary use of a publicly-owned public recreational area when officials with jurisdiction over the resource indicate their agreements with the five criteria outlined below. As part of this project, SHA formally requested temporary use concurrence from GSA, M-NCPPC and MHT since these agencies have jurisdiction over the Section 4(f) property. GSA currently owns the property, M-NCPPC uses and maintains the golf course, and MHT has jurisdiction over NOL historic districts. All of these agencies (M-NCPPC, MHT, and GSA) concurred that the requirements of Section 4(f) would not apply this instance based on the following criteria:

- The duration of the use will be temporary and less than the time needed for construction of the project.

The temporary use of the NOL golf course for grading will be completed prior to the final completion of the MD 650 improvements.

- The ownership of the property will not change or result in the retention of long term or indefinite interests in the land for transportation purposes.

The ownership of the NOL golf course outside of existing and proposed SHA right-of-way will remain with GSA, leased by the M-NCPPC, and will continue to be maintained by M-NCPPC.

- The scope of the work will be minor, in which the nature and magnitude of the changes to the resource will be minimal.

Temporary use of the NOL golf course property will be required due to grading within the vicinity of the proposed stormwater management ponds, bike paths, sidewalks, and access roads. This will require approximately 1.89 acres of temporary easement from GSA within the NOL Historic District.

- There will be no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis.

The temporary grading will not adversely impact the front area that was created to provide a physical and natural buffer that preserves the visual character of the main complex. Overall, it is anticipated that there will be no interference with the activities or purposes of the NOL golf course, on either a temporary or permanent basis.

- The land being used will be fully restored, in that the resource will be returned to a condition, which is at least as good as that at which existed prior to the project.

The areas where temporary use is proposed will be restored to an acceptable condition upon completion of grading. Mature trees will be avoided to the extent possible. If any mature trees require removal, they will be properly mitigated with re-planting of the appropriate tree species upon approval by GSA and M-NCPPC.

## Perpetual Easement

The proposed improvements would also require SHA to obtain 0.48 acres of perpetual easement for maintenance and facility access of the outfall pipes for the two proposed stormwater management facilities. The outfall pipes would extend from each of the stormwater management facilities, drain east through the golf course property, and outfall into a small waterway also located on golf course property (see Figure III-3). A perpetual easement is unavoidable at these two locations to allow SHA to maintain these outfall pipes, which extend through the existing golf course.

## E. Avoidance and Minimization Alternatives

In addition to the No-Build Alternative, three other avoidance alternatives were developed to avoid impacting the White Oak Golf Course. SHA's proposed Alternative 2 is considered a minimization alternative because the design was modified extensively since the preliminary alternative to minimize Section 4(f) impacts.

## 1. Minimization Alternative

## Alternative 2 (SHA's Proposed Build Alternative)

The detailed design of Alternative 2 is included in Chapter III (Figure III-3). The following minimization design techniques have been incorporated into SHA's proposed build alternative:

- The design radii of the relocated Michelson Road were tightened to the maximum extent in order to reduce impacts to the golf course.
- The acceleration lane from Mahan Drive to northbound MD 650 was eliminated, thus reducing Section 4(f) impacts.
- The deceleration lane from the firehouse to Mahan Drive was condensed to minimum capacity, which reduced Section 4(f) impacts.
- The proposed stormwater management facility south of Mahan Drive was shifted and modified in shape to minimize impacts and to blend with the redesign plans of the golf course.


## 2. Avoidance Alternatives

Alternative 1 (No-Build)
Alternative 1 would not provide any significant improvements to MD 650 from Powder Mill Road to north of US 29, and would therefore not impact the White Oak Golf Course (Figure III-2).

## Avoidance Alternative 1

Avoidance Alternative 1 holds the existing eastern curb line of existing MD 650 to avoid direct impacts to the golf course. This alternative proposes widening MD 650 to the west, towards the community of Burnt Mills (Figure VI-1). This would require the elimination of the landscaped buffer area between the southbound lanes of MD 650 and the service road parallel to MD 650. This alternative would require the existing service road parallel to MD 650 to be eliminated. The elimination of the service road would require residents to enter their driveways directly from MD 650 , thus compromising safety.


FIGURE VI-1
Avoidance Alternative 1 and
Avoidance Alternative 2

This alternative would consist of four 12 -foot northbound lanes, three 12 -foot southbound lanes and an 18 -foot grassed median on MD 650. Where left turns are proposed, there would be a 6 -foot monolithic median. The southbound lanes would continue to allow access to each of the side streets. Schindler Drive would be the sole point of access for left turns into the Burnt Mills Community. Turns would no longer be allowed from the northbound lanes into Northwest Drive, McCeney Avenue, Rupert Road and Cresthaven Drive. Lockwood Road would provide alternate access to the community. Table VI-2 summarizes the impacts associated with this avoidance alternative.

Table VI-2
Avoidance Alternative 1 Impacts

| Noise | Avoidance Alternative 1 Impacts |
| :--- | :--- |
| Not Category | Noise levels would remain approximately the same or slightly increase, due to the <br> change in distance between the receiver and source. Sound barriers to mitigate traffic <br> noise impacts would remain not feasible or reasonable due to access and sight distance <br> issues for driveways and cross streets entering MD 650. |
| Air | Moving the roadway alignment closer to the Burnt Mills Community may result in a <br> slight increase of CO concentrations for homes located along the existing service road. |
| Cost (In Millions)* | \$16,298,575 |
| Landscaped Buffer | This Avoidance Alternative would require the elimination of the landscaped buffer <br> area between the southbound lanes of MD 650 and the service road parallel to MD <br> 650. |
| Displacements | This alternative has the potential to impact four residents located along MD 650, <br> between Rupert Drive and Cresthaven Drive, and has the potential to displace two <br> commercial properties located at the MD 650/Lockwood Drive intersection. |
| Right-of-Way <br> Acquisition | Considerable right-of-way acquisitions would be required from adjacent residential <br> and commercial properties. Additional right-of-way acquisition would also be <br> required (beyond what is depicted in Figure VI-I) for bikeways, pathways and <br> stormwater management facilities. |
| Local Traffic | The introduction of a median on MD 650 and elimination of the service road would <br> result in changes to local traffic patterns, as traffic from the Burnt Mill Community <br> would only have access to/from northbound MD 650 via Schindler Drive. This may <br> result in increased traffic levels on the local community street system. |
| Safety (Elimination of <br> Service Road) | The elimination of the service road would require residents to enter their driveways <br> directly from MD 650, thus compromising safety. |

* Cost Estimates are Based on Average Cost Per Mile Estimates for Roadway Construction, June 1996, and do not include Right-ofWay Costs.

The MD 650/Mahan Road/Schindler Road intersection would serve as the primary access to and from the GSA property. A double left turn lane is proposed to accommodate the predicted heavy left turn movement from southbound MD 650 to Mahan Road during the morning peak hour.

Existing Michelson Road would remain open, but would not accommodate significant traffic due to its proximity to the Lockwood Drive intersection limits its usefulness.

## Avoidance Alternative 2

Avoidance Alternative 2 also holds the existing eastern curb line of MD 650 to avoid direct impact to the Section 4(f) property, and proposes widening the facility towards the community of Burnt Mills (Figure VI-1). This would require the elimination of the landscaped buffer area between the southbound lanes of MD 650 and the service road. This alternative would require the existing service road parallel to MD 650 to be eliminated. The elimination of the service road would require residents to access their driveways from MD 650, thus compromising safety.

This alternative would consist of three northbound and southbound lanes on MD 650 (Figure VI-1). Mahan Road would serve as the primary access to and from the GSA property. Left turns to and from Mahan Road would be accommodated through underground ramps. Existing Michelson Road will remain open, but would function as right in/right out only.

The southbound lanes would continue to allow access to each of the side streets. Schindler Drive would be the sole point of access for left turns into the Burnt Mills Community. Turns would no longer be allowed from the northbound lanes into Northwest Drive, McCeney Avenue, Rupert Road, Cresthaven Drive or the White Oak Center. Double northbound turn lanes would also be provided at Lockwood Drive. As in Avoidance Alternate 1, Lockwood Drive would provide alternate access to the community. Table VI-3 summarizes the impacts associated with this avoidance alternative.

## Avoidance Alternative 3

Avoidance Alternative 3 also holds the existing eastern curb line of MD 650 to avoid Section 4(f) impacts, and proposes widening the facility towards the community of Burnt Mills (Figure VI-2). This alternative would require the elimination of the landscaped buffer area between the southbound lanes of MD 650 and the service road.


This alternative would consist of three 12 -foot northbound lanes, three 12 -foot southbound lanes and an 18 -foot median on MD 650. Where left turns are proposed, there would be a six-foot monolithic median. The southbound lanes would continue to allow access to each of the side streets. Left turns into the Burnt Mills Community would be allowed at Schindler Drive, Ruppert Road and Cresthaven Drive. Northwest Drive and McCeney Drive would be right in/right out only.

Table VI-4 summarizes the impacts associated with this avoidance alternative.

## Table VI-3

Avoidance Alternative 2 Impacts

$\left.$| Impact Category | Avoidance Alternative 2 Impacts |
| :--- | :--- |
| Noise | Noise levels would remain approximately the same or slightly increase, due to the <br> change in distance between the receiver and source. Sound barriers to mitigate traffic <br> noise impacts would remain not feasible or reasonable due to access and sight <br> distance issues for driveways and cross streets entering MD 650. |
| Air | CO concentrations may increase slightly for the homes located along the existing <br> service road and there may be a potential increase in CO as a result of the <br> underground ramps. |
| Cost (In Millions)* | $\$ 24,807,732$ |
| Landscaped Buffer | This Avoidance Alternative would require the elimination of the landscaped buffer <br> area between the southbound lanes of MD 650 and the service road parallel to MD <br> 650. |
| Displacements |  |
| - Residential |  |
| Commercial |  | | This alternative has the potential to impact four residents located along MD 650, <br> between Ruppert Drive and Cresthaven Drive, and has the potential to displace two <br> commercial properties located at the MD 650/Lockwood Drive intersection. |
| :--- |
| Right-of-Way <br> Acquisition |
| Considerable right-of-way acquisitions would be required from adjacent residential <br> and commercial properties. Additional right-of-way acquisition would also be <br> required (beyond what is depicted in Figure V1-1) for bikeway, pathways and <br> stormwater management facilities. |
| Local Traffic | | The introduction of a median on MD 650 and elimination of the service road would |
| :--- |
| result in changes to local traffic patterns, as traffic from the Burnt Mill Community |
| would only have access toffrom northbound MD 650 via Schindler Drive. This may |
| result in increased traffic levels on the local community street system. | \right\rvert\,

* Cost Estimates are Based on Average Cost Per Mile Estimates for Roadway Construction, June 1996, and do not include Right-ofWay Costs.

Access to the GSA property would be allowed at both Mahan Drive and Michelson Road. However, left turns lanes on MD 650 would be one lane only. Avoidance Alternative 3 would also include a four-lane road connecting Michelson Road and Lockwood Drive (Figure VI-2). This proposed roadway is intended to provide an entrance directly into the northern parking lot from Lockwood Drive.

## F. Measures to Minimize Harm

A variety of measures were incorporated into the proposed build alternative to minimize harm to the White Oak Golf Course. Please refer to Section E of this document for details regarding minimization design strategies associated with Alternative 2 (SHA's Proposed Build Alternative) for minimizing impacts to the Section 4(f) property.

Table VI-4
Avoidance Alternative 3 Impacts


* Cost Estimates are Based on Average Cost Per Mile Estimates for Roadway Construction, June 1996, and do not include Right-ofWay Costs.


## G. Mitigation

Impacts to the Section $4(f)$ resource will be mitigated through the use of landscape improvements (Figure VI-3). While recognizing the recreational use this property serves, landscape elements are being incorporated into the mitigation landscape plan that will blend with the redesign plans for the White Oak Golf Course. SHA, in coordination with M-NCPPC and GSA, is incorporating a mitigation landscape plan into the final design plans. The final mitigation plan is being designed to be consistent with the redesign of the golf course. Landscape elements include street trees, evergreen buffers, ornamental planting beds and ornamental stormwater management enhancements.

In conjunction with LABQUEST, a Landscaping Focus Group was formed to discuss landscaping issues within the MD 650 corridor. The Landscaping Focus Group consisted of private citizens and community representatives, along with the President of LABQUEST. The purpose of this focus group is to discuss proposed landscaping along the MD 650 corridor. SHA coordinated with MNCPPC and GSA directly in developing a mitigation landscape plan that will blend with the redesigned golf course.

SHA, GSA and M-NCPPC must determine the extent of landscaping maintenance each party is willing to commit to so that it may be accounted for in the design process. A temporary 8 -foot fence will be constructed by SHA between the proposed sidewalk and stormwater management facilities. The purpose of the temporary 8 -foot fence is to provide a buffer between the golfers and the construction site, and also to prevent deer from approaching MD 650. The new permanent fence will be installed prior to removing the temporary fence. Also, the recreational use of the property as a golf course is being considered in the landscape design. The following summarizes SHA's proposed Section 4(f) mitigation:

- Golf Course Gateways- The Golf Course has two proposed entrances along MD 650, which are Mahan Drive and the relocated Michelson Road. These driveways will be landscaped to provide a gateway effect and in accordance with the surrounding area. Additional ornamental species will be added to the gateways in order to enhance the visual effects. These plantings include flowering trees and shrubs along the driveways and in the medians. More plantings would be focused in the area of the gateway to help add visual interest.


WHITE OAK GOLF COURSE PROPERT zzz SIDEWALK






$\bigcirc$ §


=3 PERENNLAL GROUND COVER


MD 650 from Powder Mill Road Maryland Department of Transporation
State Highway Administration

FIGURE VI-3
Section 4(f) Mitigation Landscape Concept Plan

Ornamental planting beds will include flowering trees, shrubs, perennials and annuals with an evergreen backdrop. Using species with various bloom periods and seasonal interest would provide year-round enhancements.

- Golf Course Edge- The golf course is sensitive to visual impacts. It is important to buffer intrusive views in order to maintain the golf course's visual integrity. A landscaped buffer will be added along the edge of the property to help create an aesthetically pleasing atmosphere and to block intrusive views of the highway. The buffer would extend between the northern property limit to relocated Michelson Road, between relocated Michelson Road and Mahan Drive and between Mahan Drive and the southern property limit. The landscape buffer consists of earthen berms, evergreen trees, shade trees, ornamental trees and shrubs and decorative perennial planting beds. In addition, SHA will install a temporary eight-foot chain link fence at the limit of disturbance on the golf course along MD 650 prior to removing the existing fence. The new permanent fence will be installed prior to removing the temporary fence.
- Stormwater Management Facilities- The Maryland Department of the Environment (MDE) requires that SHA provide stormwater management, and the proposed locations fall within the Section 4(f) impacted area. The locations are south of Mahan Drive and north of relocated Michelson Road. These facilities would become additional aesthetic features to the golf course. The stormwater management facilities are currently being designed as bioretention ponds. These ponds generally drain fairly quickly (usually within 24 hours). Under the most severe conditions, retained water will seldom, if ever, remain for more than 72 hours, and the standing water will never be greater than 12 -inches deep. Ornamental plantings are proposed along the bench of the pond and along the slopes above the lower pool. Species being incorporated into the landscaping design plan have been carefully selected to provide an aesthetic feature to the golf course, while also considering hydrologic and shade/sunlight tolerances. Proposed plantings generally occur along the bench of the ponds and along the slopes above the lower pool. Plant species currently proposed include Allegany serviceberry (Amelanchier levis), river birch (Betula nigra), Virginia sweetspire (tea virginicia), and inkberry (Ilex glabra).
- Sidewalks and Bike Paths- Sidewalk and bike path areas along the corridor will help connect users to the golf course. The sidewalk and bike path areas will be attractive routes for the alternate modes of travel. These routes will be completely ADA-compatible and may be enhanced with additional landscaping. Landscape opportunities include the use of street trees along the route to add color and shade. A setback is also provided for in the design in order to allow users a comfortable buffer between the path and the road. The buffer will be enhanced with additional trees and shrubs.
- Streetscaping- The MD 650 road improvements will include streetscape features to enhance the corridor. Roadside enhancement areas include medians and setbacks as well as the sidewalks, bike paths, stormwater management facilities and golf course gateways and buffers. Median and setback enhancements include an allee of trees, ornamental shrubs and groundcovers, payers and other aesthetic features. These features would provide a more attractive setting for the corridor and the golf course.


## H. Coordination

Coordination with the MHT was undertaken to identify and evaluate historically significant properties and archeological resources in the project study corridor and to determine the effect of the build alternatives on these resources. Correspondence from MHT regarding the Section 106 process is contained in Chapter VII of the EA. On October 19, 2001, SHA requested MHT to concur that the project will have no adverse effect on the White Oak Golf Course. On January 14, 2002, the MHT provided their concurrence.

As previously mentioned, SHA will continue to coordinate with M-NCPPC and GSA regarding the Section 4(f) mitigation plan.

Lastly, the SHA coordinated with the M-NCPPC, MHT and GSA regarding the temporary use of the White Oak Golf Course property for fine grading and construction access. All of these agencies concurred with the temporary use criteria and agreed that the proposed improvements will not result in permanent or adverse impacts to the golf course property. All correspondence is included in Chapter VII.

| Comments and Coordination |  |  |  |
| :--- | :--- | :--- | :--- |
| Elected Officials Correspondence |  |  | Reference <br> No. |
| Correspondence | To: | From: | VII-1 |
| Provided Suggestions/Improvements <br> for the FDA Consolidation | The Honorable Senator <br> Arthur Norman | Calverton Citizens <br> Association | Barbara A. Mikulski, <br> United States Senator |
| Funding and Appropriations for the <br> FDA Consolidation | Ms. Betsy L. Bretz, <br> Chairperson of LABQUEST | VII-2 |  |
| Thanking Mikulski for Attending the <br> Ground Breaking Ceremony for <br> White Oak | The Honorable Barbara A. <br> Mikulski | LABQUEST Partnership | VII-3 |

## Caltertor Citizens gssoriation

© ${ }^{\text {P. O. 10x }}{ }^{81}$
antshic. mantane zotos

Februar 24, 2000

Eonoralle Senarot Archer Dormur
23rt Disivict Deirgation
Rouse C pfice Enaldive - Rooin 210
urrapal is, Narylund 21 401-1991
RE: FDA ar White dak
Howorabi's Senetar Dormar:
Th.p Calvirno Cinierne Association (C.C.A.) has been concerned for over vise.e years obpus the Food and Drug Administantion consolidarion at Whise Ock, Sinver Spring, Maryland.

Rejiresenzmints from the C.C.A, have been curendin LABQUEST
 wammed sbout tike bark of concsm for the anount of maffic from the East that this focilly will grenereme.

As nou kow, mant intersections on the arsat we thert of thi proposed: focilly acec abready faited insurgections and have yet to fret the full inpart of she develdpment at Wist Form, Riderwood Village and Cross Cruck

The C.C.A rupresentacives haw mivieved the Tharsportarion Inprovenuent Fearitiliny Saufy preparsd on March 30, 1999 by B.d․I. and also the Parbing Ewanand Raport propared by Corove/Slade Associates, Inc., dented slarch 28, 1997 reldaing to she F.D.A. cansabidetion.

We issagree with the axsamptions in both report that onts 10\% of the rofic wil: enme F-DA. from she Eart

* 0 : 5-22: : • ニ
ithe Facleral employers alreacy on site and representatives from the union i epreserzectives of funure workers at this site, recently witified that arcordi ig to shetr membership ralls, mare than $25 \%$ of warkers will coove from thi East and that a signdicarth veater percentage of visitars will also come fiom the East.

Ial addinion 20 6;200 F.DA emplogees and 1,000 visitors a week, this site har the polential for 850,000 square fert of office space for comurrcial developinest

Sipumingr at these factors, the C.C.A. sees total gridlock along Cherry Eill Rorid, Porrdet Mill Road, and Calverton Boukvard. We do not bebieve that the scmall feeder road now envirioned to 80 from the remr of the F.D.A. site to Cherry istu Road just infine the Montgomery County lare is copable of handing: the putendal traffic from this stite.
G.S.A. ond F.D.A. do nor wait to fond the necessari branspontation infrastracture vo the East and how, therefors, proposed onts this meager road ayer slignt dis can'rr.to shr. Eart gre Cherr Bill_Road. $\qquad$
The C.CA har the following recommendatiant to make which we believe will alle riade some of checeancems that-Beterville;-Adelehi and CaVienolt cizizens pave regarding this P.D.A comsoliderion.

1. That the Margland Depomment of Transportation - State Bighway Adruintoraction vake over funl responsibilify for the overall transportation plooning for whis praject.
2. Thar carpiliencrior be giver to ar enoratec ranf from f-95 to Cherr Bril Road and an expss ronp from Chemy Hill Roed of 1-95.
3. Thar vhe proposed rastern cir our of F.D.A. be ar the intersection of Powder SIIII Raad and Chers Bill Road since chere alreaty is on exts ar thir sice todory.

2


## tareapa a mikuiski

Mannuer

quitcd sitates Senote WASHINGION, DC 20510-2003

$$
\text { May 2, } 2000
$$

Ms. Eetay L. 日retz
Chairperson
LABOUEST Commundty partnership
Silver Spritig, Naryland 20903
Dear Ma. Bretz:
-. jhank you for your xind words atout my worx zor the food and Drug Adminiatration (FJA) Consolidation at white oak. I
appreciate your buppore - thanke for taking the time to write.

As you may know; I strongly support the president'a request of $\$ 102.2$ milison for the FDA consolidation in the fiscal Year 2001 Appropriations. You can count on me to contimue to fight for this funding os 1 work on appropriations during this eeveion this extremely important project.

Thanhs again for centacting me. As olways. plesse lat me know if 1 can ever be of aervice to you and the LAEQUEST comminty partnerehip.

Sincerely,
castuall. Thatath
batbarar A. Mikulskin.
United States Senator

EAM:mkh

## LABQUEST partnership

10733 Kjnloch Road Silver Spring, MD 20903

## October 17, 2000

The Honorable Barbara Mikulski
U.S. Senate

Washington, D.C. 20510
Dear Senator Mikulski:
On behalf of our LABQUEST Partnership, I wanted to express my sincere thanks to you for participating in last week's goundbreaking ceremony at White Oak and, more importantly, for your leadership in the Senate Appropriations Committee in ensuring that adequate funding for phase D of the FDA consolidation is included in the FY 2001 GSA budget.

It was with a sense of great satisfaction and relief that we noted the Senate's approval on October 12 of the legislative package containing the GSA budget, with the $\$ 92.1$ million in new construction funds for the next phase of the FDA project.

We look forward to working with you and your staff in the months ahead in order to assure that sufficient funding for phase III is included in the budget of the incoming Administration and approved by Congress.

Meanwhile, thank you, again, for your continuing support and for all the nice things you said at last week's ceremony.

Yours truly,


## Public Involvement Correspondence

| Comments and Coordination |  |  |  |
| :---: | :---: | :---: | :---: |
| Public Involvement Correspondence |  |  |  |
| Public Correspondence | From: | To: | Reference No. |
| Focus Group Correspondence |  |  |  |
| Verbal comments received at LABQUEST VII-1a <br> meetings  |  |  |  |
| Public Correspondence |  |  |  |
| Comment on property locating within the study area | George and Mary McLaughlin | SHA | VII-2a |
| Comments on Improvement Study | CHI Centers Inc. | Ms. Betsy Bretz, LABQUEST | VII-3a |
| Comments on Improvements and FDA Consolidation | Burnt Mills Hills Citizen Association | Memorandum for Record | VII-4a |
| Alternates Public Workshop |  |  |  |
| Written comments received following MD 650 Public Information Meeting on 9/10/01 |  |  | VII-5a |
| Meeting Summary Report of 9/10/2001 |  |  | VII-6a |

Verbal Comments Received from LABQUEST Members


| NAME | Representing | Comment |
| :---: | :---: | :---: |
| General LABQUEST Comment |  | Several people at LABQUEST wanted SHA to consider pedestrians, bicycles and handicap requirements. While looking at bus stops along MD 650. |
| Ms. Ida Ruben | State Senator | Wants FDA advanced signing on I-495 and US 29. Peter Campandes from SHA's District 3 Traffic will discuss this with Maj Shakib. |
| General LABQUEST Comment |  | Look into the possibility of a light at the CHI Center. Maybe just actuated at rush hours. |
| General LABQUEST Comment |  | Look throughout project at sidewalks, crossings and traffic lights. What happens west of Existing Michelson Road in terms of sidewalks? |
| General LABQUEST Comment |  | Powder Mill/MD 650 intersection has a lot of issues. The triple left will have problems with people wanting to exit to I-495. The access to the Church is bad with the left turn storage. It's difficult to cross the street to the shopping center. Possibly move the entrance to the shopping center further back on Powder Mill. Try not to take any more ROW from the Church property. |
| General LABQUEST Comment |  | Chalmers Road has only one outbound lane. Look at adding a second lane so people can make a free right turn. |
| General LABQUEST Comment |  | A citizen requested that SHA try to avoid a large tree in the MD 650 median, just north of Lockwood Drive. The team should make note of this and report back to LABQUEST if it can be avoided. |
| General LABQUEST Comment |  | The community feels that relocating Michelson Road across from Northwest Drive may encourage cut through traffic within the neighborhood. To mitigate this, it was indicated that the traffic signing and signal phasing would disallow through traffic from Michelson Road to NorthWest Drive. It was also mentioned that there are already speed humps on Northwest Drive. |
| General LABQUEST Comment |  | A key reason that a double left turn is necessary from MD 650 to Lockwood Road is because there are no major improvements to the MD 650/MD 29 Interchange at this time. This was identified as a critical issue. The State Highway Administration was asked to look at possible improvements to the MD 650/US 29 Interchange to see what may be done to help traffic and report back to the team. It was noted that Lockwood Drive is no longer marked as MD 895 and has been turned over to the County for maintenance. |
| General LABQUEST Comment |  | The community has concerns as to where the double left turn for MD 650 to Lockwood will go to since the additional acceptance lane will cause major impacts. |
| Mr. Dan Wilhem | Local resident and active community group member | Indicated the possibility of a White Oak Transit Center located in the large parking lot in the north east quadrant of the MD 650/US 29 Interchange. |
| Mr. Dan Wilhem | Local resident and active community group member | Suggested relocating Michelson Road across from the bank entrance to prelude cut-through traffic to NorthWest Drive. The State Highway Administration team will study this issue. |
| Mr. Dan Wilhem | Local resident and active community group member | Suggested looking at adding a third lane north bound on MD 650 at the US 29 crossing. The SHA team will study this issue. |


| NAME | Representing | Comment |
| :---: | :---: | :---: |
| Mr. Dan Wilhem | Local resident and active community group member | Suggested that if the White Oak shopping center transit way is planned and put in place that the ramps from northbound US 29 to MD 650 should be reconfigured so that vehicles could go across MD 650 and access the transit center from the northbound ramp from MD 650 to US 29. The State Highway Administration team will study this issue. |
| Mr. Mike Levin | LABQUEST <br> Member | Great concern about "cut-through" traffic on Lockwood and Northwest. |
| Ms. Ida Rubin | State Senator | If we could improve the interchange at US 29, there would be less traffic trying to use Lockwood as a shortcut. |
| General LABQUEST C | nents | Another community concern is the addition of a lane onto Lockwood in the westbound direction, which then merges down to one westbound lane. There is a community pool, synagogue and apartments along Lockwood. The White Oak Shopping Entrance off of Lockwood is a poor entrance. Also, there are many pedestrians in this area. |
| General LABQUEST C | nents | One suggestion that emerged is to close the direct connection to Lockwood in the eastbound direction and force traffic to make the right turn onto Lockwood at the signal just north of the slip ramp. It was also suggested to add four way stops along Lockwood to allow the neighborhoods to get out onto Lockwood and to slow down Lockwood short cut traffic. It was also noted that SHA is beginning to study an interchange at Stewart Lane, which should also reduce the traffic on Lockwood from the apartments east of MD 650 once this interchange is built. |
| Ms. Bretz | Chairman of LABQUEST | Noted that the Centers for the Handicapped, Inc. (CHI) on New Hampshire Avenue urgently requires assistance in getting its vehicles onto New Hampshire Avenue, particularly between 4 p.m. and 6 p.m. each day of the week. |
| Mr. Alan Lovell | CHI Chief Executive Officer | Noted that an average of 50 vehicles exit the CHI property on New Hampshire Avenue each weekday between those hours. State Senator Ida Ruben said she has already communicated with SHA on this matter and asked Mr. Knight to take another, close look at the CHI problem. Mr. Knight agreed to do so. |
| Ms. Mary L. Arndt | The Asset Manager for GSA | Ms. Arndt was very upset that we "went out to the public" committing to an in-road bike lane, a wide hiker/biker path and a 5 foot grass separation from the curb to the hiker/biker trail before talking to her. Action Item: Team should set up a separate meeting with Mary to discuss her concerns. |
| Chairman Hussmann, Senator Dorman, and Senator Ruben | Chairman of M-NCPPC and Senate of Maryland | Each noted the importance of developing plans for opening a northeast gate onto Cherry Hill Road for FDA commuter traffic. |
| Mr. John Crowley | GSA | Advised that the study on the east side of the base would be part of the master plan for the non-FDA portion. The master planning process is just now getting underway. |
| Chairman Hussmann | Chairman of M-NCPPC | Expressed the view that traffic improvements to the east side of the base are as important as the Route 650 improvements and that GSA should move expeditiously to deal with this important component of the traffic situation. |
| Mr. Steve Paul | Special Assistant to PG County Executive Wayne Curry | Endorsed Senator Dorman's observations about the importance of dealing with his county's side of the base. He observed that his county was patiently waiting for GSA's planning to begin. |




George \& Mary McLaughin 0704 New Hampshire Avenue Silver Spring MD 20903

Steven 1. Hawtof
Maryland Department of Transportation
State Highway Administration
707 North Calvert SL
Batimore MD 21202
Re: Contract \#M0803A21
Project: MD 650 from US 29 interchange to south of Powder Mill Rd.
Exact Property: 10704 New Hampshire Ave.
August 3, 2000
Dear Mr. Hawtof:
Sometime back we received a letuer about the above mentioned highway studies, relevant to FDA being re-located to the property across the street from ours. We saw that there were mary trees and telephone poles marked in the ares, and that they marked something just in fromt of our door.
Is there a scenario being comemplated that would require some of our property being needed for the widening of or other modifications to New Hampshire Avenue? We are coinsidering improvements to our property and would like to know the possibilitios. Please inform us so that we will know how to plan

Thank you,
Thank you
Mary Mcloughlin

CHI Centers Inc

```
surry Locko
``` Alen Lovill. Ph.D.
Chisf Exerive 0 ffice

February 9, 2000

Ms. Betay Bretz
Chairperson, Labquast
lo733 Kinloch Rond
Silver Bpring, mD 20903
Dear Ms, Bretz:
I am writing on behalf of CHI centers and the more than two hundred adulto who attend the Hillandale Centex on a
dally basis. The Hillandale center is located at 10501 hampohire Avenue, silver Spring. Maryland. The traffic congestion getting in and out of Hillandai e center is terible, especiaily between 4:00 p.m. and 5:30 p.m. A traffic aignal is needed only to control the trafific, is oniy trapfic signal is needed only to control the traific, if only
for bhort perfods of time during the weekdays. As additional for short pertoss of time during the weexdays. As addition control device is very much needed. I would appreciate the advocacy of Labguest on CHI Centers' behalf.

Also, I would strongly recommend that an eight foo
tidewaik to accommodate people who use wheelchairs bo developed along New Hampshire Avenue, especially from the Hillandale Center to the white Oak shopping Center. The sldewalk would need to be designed so that it is aocessible without berriers that now exlst between the Hillandale center
and powdor Mill Road. The support of Labquest for the sidewalk project would be greatiy appreolated.

CHI Conters thanks you and your comaltee for their advocacy on behalf of people with developmental disabilities.
sinoorely,
Alan C. Dovell
Chier Executive officer

ACL: sms
10501 Naw Hampphitre Avenur, gilver Spinat. ND 20503-1191



BURNT MILLS HILLS CITIZENS ASSOCIATION

\author{
MEMORANDUM FOR RECORD- ..... .... ..
}

SUBIECT: Review of BMI Tranforctation Improvement Study for FDA Coosolidqtion ut White Qab Feden! Reasarch Cepiet

Pucgrant to iscuesurived by community cepreserastiver and Sinte Senator Ida Ruben at the 16 December 1999 LABQUEST mecting and in previova forums, the Association (BMOCA). The BMHCA finds that uofor cecommended "Kmprovementr" do not constitue, nor were they istended and and its coumprensive plan to meer the lone corm insportion nets ar Adrainistration consolidation at the White Oak Federal Research Center Eurther wh srongly believe that many of its recommendanions are ill-advised and are unnecersarily detrimental to bout the safely and the quality-or-iffe within the communities vurround ing the New Hampshire Avenue comidor.

BMABCA is aware, however, that seyecal subsoquent effins ace oagaing tp reexamine and refine the present BMI study, and to provide a more comprehensive assessment of regional tramsporation issues. crilical io. be ina consalidation al Whit Oak. The following comments are provided, therefore, as support to our findinga efforts. BMHCA would welcome the opportunity to participate in such subrequems atudy provide mose dedailed imput which is bryond the scope of this appor

Tbe BMI swdy in a traffic Iow study of the New Hampshire Avenue (MD Route 650) comidor between Ir49S and US Rourte 29 developed for Montgomery County by the BM Corporation. The study is based on a CORSIM traflic model projecting variout taffic leyels for the designated. New Hampshice Avenue sector, end recommends a wide ange of intersection/roadway changes (apecifie to New Hempshire Avemue) to support the finure FDAconsolidation at the White Oak center. As such the study, conslitules a primary planniog docurpent for the furure western access to ibe FDA at White Oak.

Principal among tha BMBCA Concerms with the BM stouly is that it neither embodies a cormprebencive regional transportation concept for the needs of the FDA White Oak, nor does in proxide mare overacching-aplions/approachenta mecco-jevel

Gincisms can be seen as inappropriate since such requiraments wese not within the linuited chater of the original BMI study. However, BMASCA ls concermod that the BMD ecommendation are being misconsinued by siate ad counuy decisioomakers as the sum of transporiation planaing and homding needs perniniog to tbe FDA coasolidation. To the
 paning options which would belter serve both the long adress numerous macro-level White Oat and the regional compunity at lige. To thaterminteress or the FDA at following planaing inperatives for consideration in the curreat planing prosens it

\section*{Must Balance Planning and Fundigg for the Eastern and Westem EDA Access.}

The BMI study by eharter focuses on the wertern (New Hampshire Averne) access to the White Oak center, and was imended as only a picce of Use comprehensive corespondiag and defined inputs addrasaing the eastern access (Chery Hill Road), tate and local planning/fupding processes appear to be proceeding which largely isolate the BMD-idertified New Harpshhice.Avenue recommendalions as the sole.EDA-telated transportation seguirements.

This situatioo requires innondiate action. Gaverwar Glendeniog will relenase in February his fival FY 0005 Consolideted Transportation Progran (CTP) which recommends funding for "EDA Improvements" idemified teo date as ouly the BMI recommendations for the six (6) iotersections along New Hampshire Avenue. Yen the would require earern access to the White Oak Center. The \(40 \%\) ostime is is up frame
 changes. harges.

Noce also that the BMal suady assumetcompletion of programmed MDDSEA improvernents to the intersection of Cherry Hill Road and Powder Mill Road (MD 212) which were to imponve easternaccess to the White Oak centec vis chre existing service road However, thia constriction as presently planjed, plogammed in the Maryland FY 99 -04 CTP, and scheduled Lo begin in the winter 2000 will da exactly the oppasite. It will effectively deny all soubbound Powder Mill Road traffie (coming from l.95) and all exifing service road to the White Oak Center.

Ploning for othes easential easern accese couten appears not to heve progressed paut tbe prelininary discussion stages among the county, sale, and property owner principals. This hack of headrany isin sharp conoundicionato. the rapidly expanding comrnercial development encroachiog critical ighb-of-ways, and the fiec that the Gavernor's 5 Y \(00-05\) CTR has already been Ginalized which identifies proposed for the new FDA headquarters isucheduled for Septembere 2000. BMHCA balioves the
immediate and concrete action in planning the eastern access for the FDA at White Oak


Muy Recognize the Roure 29 - Nesu Hasposhire Aveme Ioterchange as the Pincipal Eotro-Exis to the Northem New Hamoshire Avenue Cocridor.

The BMHCA believes that the BMI study took a major misdirection in failing to recognize the Route 29 - New Hampshite Avenue semi-cloxexdeaf intection in failing titha key for efficient porthem entry and cxit to the New Hampshire Ayenue corridor - and thus to recognize Route 29 as a major concuit for commuter and other contidor appear to in recorimendetions do.majer condoin the for commnter and other corridor traffic. However higb-capacity ioterchange to promotc optimal traffie flow aod relieve the congertion of higb-capacity iotechange to promotc optimal taffic flow aod relieve the congertion of piecemeal efforts which we find of questionable uility and iangely detrimental to cur community.

For example, the BMI study recommendra nurnher. of changerta the Ncw Hampshire Averue - Lockwood Drivc intersection to handle increased traffic from FDA al the White Oak centec. One sach change is anexpnosionof the northbound New hampshire Avcrue left-rure lane at Lockwood into two left-iun lanes. This presumably is in order to use Lockownod Drive asa.main conduit far traffic to Rouse 29, bul this recommendatioo which defies all common sense. Picturc two left-tura laves emptyiog off New. He mopshire Axemie onto westbound Lackorood Drive; merging inta anc lanc in the mids of a residential ares; competing with eocess ifafic form a twin high-rise



Morcover, this concepp is designed to deliberately channed high-volume commuter raffedirectly ineo the Burne Mills locil neighbartoads secoed by Lochwood Drive. Citizen associations within the Burnt Mills oeighborhoods have voiced strong opposition o such actions_hut hayereceived naceaponse from county and state authoritios. We contione to assent that such present planning ill-serves the traflic needs of both the Whitc Oak FDA conealidation and. will be highly destouctive to theorder and safety of the community itself.

What is particulariy incomprchensible is that such hevoc would be inficted. upon our community while the existing New Hampshire Aveque - Ronte 29 cloverieaf sits less hann 200 yaul worn phassioo and utilization of the cistine Route 29 dovecleafintechage? Wa thine The BMHCA requesta a thorough re.exarnination of the package of BMI ecomurendations for the northem sectoc of ihe New Hurapshice concidor. The pupose should be to adress such commennity concerns, and explore more efficiem options io transpartaion planing to sarve the EDA relocaioo to White Oak.

Must Addrest lmeerdependency of the New Hampahire Avenye-Locknood Drive Intersection und White Oak Shoppipe Center Access/Planning.

The severe congestion inkerent ta the New Hampstise-Lockwood.intersection ind the White Oak Shopping Center is another example of a traffic problem within the New Hampshire Avemue corridox requiring moremacro-planoing solutions thap the Gunctional during peak traffic periods.

The proximity and traficin interactions between the intersection and the shopping Cemter routinely creale sustained gridlocks which are a bane to the community and local businessinteresti, It cian be expected that the incceased concentration. of comamplectirafic associatod with tha FDA relocation will only increase commercied activity and theroby congertion st Uhe shopping center. In addition, the carreat consideration of mase topnsi initiatives which will seriously impact the White Oak area and Route 29 corridor are not addressed in the BMI recomnmendationa

The BMOACA sroogly believes that the expenditure of aignificant FDA supporting finds merely to terekexistingintereccione and madmags.as per the BMI recomunend ations, without addressing the larger and more cansal problems of the White Oak Shopping Cemer sector, will in thetionger leno prove. wane of public-rescuycess and plaming. It in further gupgested, thatany viable plan a pritiority for forther analysis directly dependeot on the reassessment (and subsequent expansion) of the New Hampshire Avenue - Revte 29 intecchange recommended above.

Murt Effecively Addreas Traffic Infiltraion Problems Within Adjacem Bumi Mbilo and
Wextuilandale Neishborhoots wert-rillandale Neighborhoods

Another closely felated and exuremelyserious BMHCA coocern_arising from the BMI study recommedations and exinting traffic control problems, is the expected flooding of the adjacent Aumat Malls and. West Hillandele neighborhoods ssith. Volumincus FDA commuter traffic. Principally, that concern focuses on the projected commuter trafic atterppting to avoid congestion at the Nerwiwest Drive as-sbortcuas for Lockwood intersectioo and ibe cattero-entraces the

Bah Northwest Drive and Burm Mills Avenuc provide aveilable shonats brough.our local oeighbochonds which will he very artactive to FDA commuter tonfic ta the mormiges, northbound Routc 29 traffic fiom the Beltway would turn right onto
 theNew Hampahire - Lochovood intersection. Rior, lo that, wuch traficic will have the
opporturity to turn right on citbes Burn Mills Avenve or Northeres Drive and avoid that incersoction. Northwes Drive weuld. poovidea dirster rouse fram Lochowood. Drive onto New Haropshire Averue in front of the White Oak Cemter and between the two exising cutrances Tbe.BMIrecompended movement of Michrelson Road on the cemer ground to align with Northweat Drivg, and addition of a Dew unffic light is that iatersection, oon eracembates the prochlocma. Under that configurntion, tuffic artian through on Nortiwes Drive would bave the option at the light of directly enering the eenter via Michelson, or mating a lefloum down New Hamphice. Avenue to themin White Oak entrance.

Burnt Mills Averue provides a direa route from Lockwood Drive (vil Griewood Drive) to intecsect with Schindlea Drive lessuha a pera blocke from she muin New Hompshire Averue edtrance to FDA. Uee of this roude by FDA traffic woild totally inundare ha Burn Mills Hilk neighbodhood Morreover, it wauld easentially dany the


The BMHCA and other adjacemt crizens groups believe this infiltration problem to. be potentially devastating to the safery and the homodeamily life ocour communitien. We request inmediate recognition of the issue by planning authorities and the development of approecbes to remedy the prableran. Sevcual such appronaches/actions to address this problem have been voiced within community association meetings. Athoughno conseosen has yat bern yeached, moer proposalu focus either on respricting in some manner access from Lockwood Drive or restricting/closing accene to Schindler Drive froma Gatanood Daiva. Same community disolseions baye questioned the aced for full access to Lockwood Drive from Route 29 pursuant to future itmprovement and expnasion at the Route 29 - Nexw Hampshice Avemue cloverleaf interchange.

\section*{Time is of the Esence.}

The BMACA solicits allappropriate state and comaty aspistance in re-examining the issues and problems identified in this assessmena. In lighs of the recently firalized White Oak Center, and the significam planning and funding requirements involved, we believe thil time is of the assence. We strangly enocourage therefore, the nespoasible autborites to undertake immediately a coordinated developroent of the peeded comprehensive transportation pianito meet the broadrange of.transpocistion needs for the Food and Drig Administration consolidation at the While Oak Foderal Research Certer. -

The BMACA point of cantect for his assessment is the undecigned, whe may be cached ybould further information or assistance be required at the following: home, 301. 593-5347; affice, 301-688-3118: ©c e-maril turichardnon3@u이 comm

Robert Richardson
Transpodtrion Advisory Raned
Bumd Aills Hills Citizeas Acsociution


\title{
MD 650 (New Hampshire Avenue) Improvements, From Powder Mill Road to North of US 29
}

\author{
Monday, September 10, 2001, 7-9 pm \\ CHI Center \\ Public Meeting Summary Report
}

\section*{Introduction}

Mr. Joe Anderson stated that the purpose of the meeting was to discuss the transportation alternatives associated with the improvements to the Food and Drug Administration (FDA) facility. He notified attendees that the Montgomery County Department of Parks and Planning (M-NCPPC), Planning Board will review the design proposals during its regular meeting on Thursday, October 25, 2001. The public may direct comments on the project to the Planning Board. Copies of the letter announcing this meeting were provided at the sign-in table. Mr. Anderson informed the group that the M-NCPPC is responsible for maintaining lists of civic associations, which are used as address lists in sending out invitations to these types of public meetings.

\section*{SHA Overview/Project Background}

Mr. Ken Briggs provided an overview of the project along MD 650 (New Hampshire Avenue). He notified attendees that FDA would eventually be employing approximately 6,500 employees resulting in expansion of the White Oak facility. He said construction should begin by Summer, 2003.

\section*{Project Description}

Mr. Joel Oppenheimer provided a description of the project. He discussed several of the design features, including, but not limited to, the following:
- Triple left at Hillandale Shopping Center from Powder Mill Road on to MD 650, bike path
- Adding a 5 foot sidewalk at the firehouse and an 8 foot hiker/biker trail at the White Oak Golf Course with a 6 foot grass area between the curb and the hiker/biker trail
- Fourth lane introduced to NB New Hampshire Avenue
- Left turn bay into Ruppert Road
- Right lane from 12 to 16 feet wide in order to add an on-road bike facility ( 5 feet)
- Recreation bicyclists expected to use hiker/biker trail, while avid bicyclists expected to use the on-road 5 foot facility
- Double left off of SB New Hampshire Avenue to enter golf course and right turn lane exiting golf course
- Double left into the facility from SB MD 650
- Stormwater management facilities will be made to look like part of the golf course
- Relocated Nichelson Road is designed to line up with Northwest Drive (still has a left turn into shopping center from NB MD 650)
- Single left from NB MD 650 to Lockwood Drive, Double left out to SB MD 650, Single right out to NB MD 650
- Additional property has been added to the golf course facility to accommodate for the property used for the relocated road
- Double left turn to US 29 used to prevent people from using Lockwood Drive
- On ramp to MD 650 from US 29, fourth lane being added ending at library
- Lockwood Drive/MD 650 intersection needs more capacity to accommodate for 6,500 new employees

\section*{General Question Answer Session}
- Q: You mentioned a possible transit center at White Oak. Have you talked to the County about additional bus traffic on Lockwood Drive behind the Giant?
A: A feasibility study is currently being conducted by the County.
- Q: Concern about employees using communities across from the facility at McCeney Avenue and Lockwood Drive.
A: Northwest Drive is the most direct route to Lockwood Drive and it will be more difficult for people to go through Northwest Drive to Lockwood, in turn, using the neighborhood roads. A "No Right Turn" can be considered into McCeney Avenue.
- Q: Concern about impacts to Lockwood Drive and use of Lockwood Drive and other neighborhood/County roads. Argument that design encourages use. Safety is also of concern.
A: Sign at Lockwood Drive directs people to MD 650 to access the site. SHA will look further into these issues.
- Q: Truck traffic is a concern at the proposed small island at the MD 650/Powder Mill Road intersection making a right turn into Green Acres.
A: Median was designed for trucks.
- Q: Will the speed limit change on MD 650? Concern about it turning into a freeway during off-peak hours.
A: Signals during non-peak hours can be adjusted. The District says that the speed limit will stay the same, based on what is safe for the roadway. Landscaping on the side of the road can be designed to take the "speedway" look away.
- Q: What is the schedule for highway construction and for the GSA/FDA expansion? A: Highway construction is tentatively set for 2003-2005. GSA/FDA's number of employees will gradually be increased from 2003 ( 180 new employees) through 2008.
- Q: Businesses are of concern, since several will lose parking spaces and lānd.

A: The SHA will meet separately with the business community in regards to this issue.
- Q: The SHA is increasing a lane on to US 29, but it was stated that there is no funding at this time for the US 29 cloverleaf.
A: Two lanes to US 29 can be considered and minor ramp improvements.
- Q: Pedestrians at Lockwood Drive and Powder Mill Road are of concern. Holly Hall is an issue, as it is elderly, low-income housing. Also, crosswalks and sidewalks for the pedestrians at the Rupert Road bus stop should be considered. Sidewalks should be considered along MD 650 at US 29.
A: SHA will look into these issues.
- Q: Concern between McCeney Avenue and Schindler Drive where there is a service road with a median between service road and MD 650.
A: Landscaping will be looked at by the Labquest Landscaping Committee.

\section*{Facilitator Notes: Joe Anderson}
-Consideration should be given to developing new, direct access between US 29 and the FDA site.
-Need to accommodate area transit operations into the design considerations
-Current plans do not adequately protect the neighborhood west of New Hampshire Avenue from cut through traffic and parking infringement.
-Not enough is being done to "protect" Lockwood Drive from increasing area traffic volumes...proposed improvements will make it worse by encouraging more traffic on Lockwood Drive.
-Pedestrian crossing issues need to be carefully evaluated, especially at Powder Mill Road, Lockwood Drive, and at bus stops in between. A sidewalk is needed on New Hampshire Avenue southbound, through the US 29 interchange, and on sections of Lockwood Drive.
-Landscaping plans should be coordinated with the golf course and should include improvements to plantings on the southbound side of New Hampshire Avenue.
-Other concerns expressed at the meeting related to operational aspects on existing roads such as speeding and circulation patterns.

\section*{Facilitator Notes: Lee Starkloff}
-The Maryland State Highway Administration (SHA) will be sending a design request package to SHA, Office of Traffic and Safety (OOTS) for the numerous signal revisions that will result from these projects, and will forward Peter Campanides's comments on the plans to the team very shortly.
-After the meeting, several concerns were brought to my attention regarding the signal at MD 650/Chalmers, pedestrian crossing difficulties at MD 650/US 29, and pedestrian signal timing at MD 650/ Lockwood Drive. We will look into all of these within 30-45 days.
-I think it's clear from the community that a single right from EB Lockwood Drive to SB MD 650 is what we should pursue, at least initially, so as not to encourage the cut-thru trips. Will there be enough storage available without widening Lockwood Drive if the movement is controlled by a yield condition?
-Even though the projected volumes don't justify the proposed double (exclusive) left from NB MD 650 to SB US 29, it can probably be supported based upon the fact that today using Lockwood Drive can be more attractive to motorists and to use the connection from MD 650 to US 29 is out of your way and further than Lockwood Drive.

\section*{Facilitator Notes: Jessica Brado}
-Mr. Leonard said that the shrubbery needs to be cleaned up and maintained in the median strip separating the service road and MD 650 between McCeney Avenue and Schindler Drive. He also encourages a "No Right Turn" on to McCeney Avenue. Mr. Leonard is also concerned with how the deer in the area will be handled. Ray Leonard, Block Captain, Block \#13, 10924 New Hampshire Avenue, (301) 593-5893. Member of the Hillandale Civic Association
-Ms. Edwards requested a copy of the detailed engineering plans to be used at a Burnt Hills Mills Community Association Meeting. Susan Mellish Edwards, Burnt Hills Mills Citizens Association, 811 McCeney Avenue, Silver Spring, MD 20901, (301) 681-9126. Member of the Burnt Mills Hills Community Association.
\begin{tabular}{|l|l|l|l|}
\hline \multicolumn{4}{|c|}{ Comments and Coordination } \\
\hline \multicolumn{2}{|c|}{ Other Agency Correspondence } & From: & \begin{tabular}{l} 
Reference \\
No.
\end{tabular} \\
\hline Correspondence & To: & Mr. J. Rodney Little, SHPO & SHA \\
\hline \begin{tabular}{l} 
Requesting Concurrence on \\
Determination of Effect
\end{tabular} & \begin{tabular}{l} 
VII-1b \\
\hline \begin{tabular}{l} 
Concurrence on Historic Structures on \\
the White Oak Site
\end{tabular} \\
Historic Preservation \\
Officer, GSA
\end{tabular} & \begin{tabular}{l} 
Ms. Betsy Bretz, \\
LABQUEST Chairperson
\end{tabular} & \begin{tabular}{l} 
General Services \\
Administration (GSA)
\end{tabular} \\
\hline \begin{tabular}{l} 
Information on FDA facility at the \\
White Oak Site
\end{tabular} & \begin{tabular}{l} 
Montgomery Department of \\
Transportation
\end{tabular} & Eileen Finnegan & VII-3b \\
\hline \begin{tabular}{l} 
Consolidation Improvement \\
Feasibility Study
\end{tabular} & \begin{tabular}{l} 
Environmental Review \\
Unit, Maryland \\
Department of Natural \\
Resources
\end{tabular} & VII-5b \\
\hline \begin{tabular}{l} 
Request pertaining to State Threatened \\
or Endangered Species and Unique \\
Habitat that may be in the Study Area.
\end{tabular} & SHA & \begin{tabular}{l} 
U.S. Fish and Wildlife \\
Service
\end{tabular} & VII-6b \\
\hline \begin{tabular}{l} 
Request pertaining to State Threatened \\
or Endangered Species and Unique \\
Habitat in the Study Area.
\end{tabular} & SHA & \begin{tabular}{l} 
Forest, Wildlife and \\
Heritage Service, \\
Maryland Department of \\
Natural Resources
\end{tabular} & VII-7b \\
\hline \begin{tabular}{l} 
Request pertaining to State Threatened \\
or Endangered Species and Unique \\
Habitat in the Study Area.
\end{tabular} & SHA & \begin{tabular}{l} 
Department of Police \\
3rd
\end{tabular} & Vistrict, Silver
\end{tabular}

\section*{Maryland Department of Transportation State Highway Administration}

Oclober 19, 2001

Parris N. Glendening
Governor
John D. Porcar
secielary
Parker F. Williams
Administrator

Re: Project No. MO900B2
MD 650 from 1-495 to US 29
Montgomery County, MD
USGS Beltsville7.5" Quadrangle
Mr. J. Rodney Little
State Historic Preservation Officer Maryland Historical Trus
100 Community Place
Crownsville MD 21032-2023
Dear Mr. Little:
Introduction and Project Description
This letter serves to inform the Maryland Historical Trust (MHT) of proposed Project No. MO900B21, and to request your concurrence in our no adverse effect determination for this project. The project area includes a small portion of the U.S. Naval Ordnance Laboratory (NOL) Historic District.(M: 33-25), which is eligible for listing on the National Register of Historic Places (NRHP).

The project involves the widening of MD 650 from approximately Acres Drive to Chalmers Drive, a distance of 7,100 feet, to provide an additional through lane in the northbound direction. Widening will also occur on Powder Mill Road, Mahan Road, and Lockiwood Drive, o accommodate turn lane improvements. Concomitant with the widening, the project proposes he installation of two stormwater management ponds, an access road, inlets and outfalls, landscaping, milling and resurfacing of existing pavement, and construction of medians, curb and gutter, bike paths, and sidewalks. The project also proposes to relocate Michelson Road to a new. location across from Northwest Drive. The relocated Michelson Drive will include two westbound and eastbound lanes with a median. The original location of Michelson Drive will be econstructed to an eight-foot bike path/sidewalk facility. Finally, the project will include the relocation and reconstruction of the US 29 southbound on ramp, and the widening of the US 29 northbound on ramp. Soil borings will be required to complete design aspects of the project.

Widening and intersection improvements will require new right of way. Permanent easements will be required for drainage improvements and slope maintenance. Temporary construction easements will also be required for grading within the golf course and construction access. Project plans are included for your review as Attachment I.

\section*{My telephone number is}
\(\qquad\)
\(1.800-735-2258\) Smpaired Hearing or Speect
1-800-735-2258 Sletewide Toll Froe
Mallt:s Aeraress: : O. Sox 717 - Batelmorm, MD 2:7n3-m? Stroel Address: 707 North Calvert Streat - Gaitimore, Marytand 21202

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Two

\section*{Fundling}

Federal funds are anticipated for this project.
Identification of Area of Potential Effects
We have examined the project area in light of any changes that might be introduced that would have the potential to affect characteristics qualifying historic properties for inclusion in the NRHP. We have developed the area of potential effects (APE) in consideration of both architecture and archeology. The APE has been drawn broadly enough to accommodate all possible construction impacts and the extent of viewsheds from the roadway, as indicated on the attached State Highway Administration (SHA) GIS quadrangle map for Beltsville, MD (Attachment II, showing the APE and the NOL Historic District boundary).

Identificatlon Methods and Results
Potentially significant architectural and archeological resources were both researched as part of the historic in vestigation instigated by the proposed widening and intersection improvements on MD 650 between 1-495 and US 29.

Architecture: SHA Architectural Historian Liz Buxton consulted MHT files, historic mapping including the SHA-GIS quadrangle mapping, and visited the project area on August 9,2001. .

MD 650 is characterized by mid to late \(20^{\text {th }}\) century residences interspersed with public religious and office buildings as well as commercial surip development. The NOL Historic District (M: 33-35) is the only previously identified historic resource within the APE. Located on the east side of MD 650 at 10901 New Hampshire Avenue, the NOL Historic District is approximately 1.15 miles north of the Capital Beltway ( \(1-495\) ) and 0.75 south of US 29 and encompasses 732 acres. The NOL Historic District was determined eligible for the NRHP in 1997 under Critena A, B and C. The district includes 372 contributing resources as well as a golf course that serves as a buffer along the westem and southern borders of the district (Altachment III, MHIP form and eligibility letter).

The APE is confined to the area of direct construction impacts along the east side of MD 650, and also includes a portion of the NOL Historic District- approximately 1200 feet from the enter of New Hampshire Ave to the front of the closest building within the NOL Historic District, (Area 100, also known as the Front Area). The only historic resource in the NOL Historic District located within the APE is the 9-hole White Oak Golf Course, a contributing element dating to 1952; there are no contributing buildings located in the APE.

Archeology: SHA archeologist Mary F. Barse assessed the archeological potential of the projec area through consultation of the SHA GIS site and survey database, historic mapping, prior archeological studies, planning documents, and modem land use mapping, and conducted a field visit on August 16,2001. The APE for archeology is defined by the limits of existing and

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Three
proposed right of way and easements in which all ground disturbing activities will take place (Attachment 1). With the exception of the planned relocation of Michelson Road, and stormwater management facilities on the NOL property, the APE closely follows the existing alignments of MD 650 and its intersecting roadways.

There are no previously reported archeological sites in or near the project's APE (Attachment IV, Inventoried Archeological Sites and Surveys). A portion of the APE at the intersection of US 29 was included in a prior survey by Ballweber (1988) for transportation improvements on US 29 between 1-495 in Montgomery County and US 40 in Howard County. No archeological resources were identified during that survey within the current APE. The General Services Administration (GSA) prepared a summary of previous cultural resources surveys within the NOL facility as part of the environmental compliance for the consolidation of the U.S. Food and Drug Administration (FDA) headquarters. The current APE was not subject to actual testing during any of the prior surveys conducted within the facility (Greenhome \& O'Mara 1992; Cissna et al. 1982; Rosenzweig 1995). Although several archeological sites we identified during these surveys, none is situated in or near the current APE.

The Phase I archeological identification survey (Rosenzweig 1995) sponsored by GSA for the FDA consolidation project resulted in the determination that no archeological sites were present within the 23 acre area tested (Attachment IV). The remaining 107 acres within the 130 -acre APE were not tested. Approximately 99 of the 107 remaining acres were reported by Rosenzweig (1995) to have low archeological potential by virtue of prior disturbance from grading, filling, construction, and landscaping activities. An eight-acre tract that was previously considered to have high archeological potential (Greenhome \& O'Mara 1992) was reported to be relatively undisturbed. However, this tract is located well to the east of the current APE for widening and intersection improvements on MD 650, and will be avoided by the ụndertaking.

The project area is situated on the drainage divide between the Northwest Branch and Paint Branch; tibutaries of the Anacostia River drainage. For the most part the APE occupies a rolling upland plateau dissected by the headwater valleys of several low order tributaries that now east to Paint Branch. This represents a somewhat marginal ecological senting wherein shortterm resource procurement camps would be the most likely represented prehistoric archeological site type. The results of previous surveys within the NOL validate this expectation, as all six sites that have been identified to date are characterized as low-density lithic scatters. It is also likely that prehistoric populations may have made transient use of the area in crossing between the larger, resource rich drainages of Paint Branch and Northwest Branch; however, archeological evidence of this behavior would be ephemeral at best, and expressed as occasiona isolated nakes or point finds.

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Four
Examination of selected historic maps (Marenet and Bond 1865; Hopkins 1878; USGS 1926, 1949) reveals that MD 650 has been present in its current alignment at least as early as 1865. A few structures are shown at this time, primarily near the current MD 650/US 29 interchange, and on the west side of MD 650 north of Chalmers Road. Very little change in the number or ownership of these structures is evident through the first quarter of the \(20^{\mathbf{m}}\) century. Several new stuuctures do appear on maps between 1878 and 1926 on the NOL property, south of Mahan Road. By 1945, it is apparent that the MD 650 roadway has been improved and realigned. Subsequent development and road construction in the latner half of the \(20^{\infty}\) century has destroyed all the locations of these historic map indicated structures.

A field visit was conducted to ascertain current conditions and land use within the APE on August 16, 2001. All areas of the APE have been disturbed. Widening north of US 29 will take place on the east side of existing MD 650. Although undeveloped tracts of land remain, the APE is confined to areas previously disturbed by road construction. Widening on MD 650 at the US 29 interchange and modifications to the existing interchange will also occur entirely within areas previously disturbed by road construction. South of the US 29 interchange to Michelson Drive, the APE has been disturbed by commercial development, including the massive White Oak Shopping Center on MD 650 at Lockwood Road.

The character of development along MD 650 changes south of Michelson Drive from commercial to primarily residential on the west side of the roadway. The NOL facility occupies a major portion of the APE on the east side of MD 650 between Michelson Drive and the Hillandale Recreation Area. All work in this section of MD 650 will take place on the east side of the roadway in areas disturbed by construction of the White Oak Golf Course, or within the footprints of the existing roadways. The Powder Mill intersection has been completely disturbed by commertial and institutional development.

Athough background research would suggest that the project area is sensitive for archeological resources, there has been extensive disturbance from previous road building. drainage and utility installation, as well as commercial, residential, recreational, and institutional development. Consequently, it is not likely that significant archeological deposits remain within the APE, and no furtier archeological investigations are recommended.

\section*{Determination of Efrec}

The project would involve the relocation of Michelson Road, improvements to Mahan Road, the installation of two stormwater management ponds and a new access road within the boundaries of the NOL Historic District. In addition, soil borings as part of the project design, landscaping, bike paths, sidewalks and milling and resurfacing of the existing pavement will occur. A total of 5.46 acres is required from the Front Area of the NOL property for right-ofway. Only 1.52 acres is needed for perpetual easement and 0.05 acre for slope easement.

Mr. J. Rodney Little
MD 650 from I-495 to US 29
- Page Five

We have considered the potential for this project to affect the NOL Historic District and have determined that the impacts would not constitute an adverse effect since they occur in the Front Area of the property which was designed to be a buffer between New Hampshire Avenue (MD 650) and the NOL complex. The proposed changes will be beneficial to the property by providing better access and enhancing the buffer area. We do not believe that the proposed changes will diminish the overall integrity of the location, design, setting, materials, changes will diminish the overall integnty of the location, design,
workmanship. feeling, or association of the NOL Historic District.

Although there will be some alteration of the landscape in the Front Area, the golf course and campus-like plan will remain intact. In fact, ponds (storm management) are often incorporated into the design of golf courses and appropriately "fit" into the existing landscape. It is also worth noting that the NOL golf course has undergone many physical changes since it was built in 1952. According to the MHPP survey form, Edmund Ault, a registered golf course architect, provided a long-range renovation plan in 1964, and many of those changes have been implemented over the past thirty years. Within the context of the district, we believe the proposed changes will not significantly alter the Front Area that was created to provide a physical and natural buffer that preserves the visual character of the main complex. In conclusion, we ascertain that the proposed project will not introduce elements that would adversely affect characieristics of the district as a whole that would preclude the NOL Historic District foi inclusion in the NRHP. We believe the proposed project will have no adverse impoct on the NOL Historic District (Attachment V, Effect Table).

Additionally, as part of the documentation process for federal-aid projects, SHA must determine if the requirements of Section \(4(f)\) apply to the use of land from the NOL Historic District. The Federal Highway Administration (FHWA) has determined that the requirements of Section \(4(\eta)\) do not apply, however, to the remporory use of the land, when the officials with jurisdiction over the resource indicate their agreement with the following five criteria.

Therefore, SHA secks your concurrence that the temporary use of land with the NOL Historic District for grading within the golf course and construction access will not-permanently impact the NOL Historic District and that:
- The durotion of the use will be temporory and less thon the time needed for construction of the project.

The temporary use of the NOL golf course for grading will be completed prior to final completion of the MD 650 improvements.
- The ownership of the property will not change or result in the retention of long term or indefinite interests in the lond for tronsportotion purposes.

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Six
The ownership of the NOL golf course outside of existing and proposed SHA right-ofway will remain with GSA, leased by M-NCPPC, and will continue to be maintained by MNCPPC.
- The scope of the work will be minor, in which the noture ond magnitude of the changes to the resource will be minimal.

Temporary use of the NOL golf course property will be required due to grading within the vicinity of the proposed stormwater management ponds, bike paths, sidewalks, and access roads. This will require an approximately 1.3 acre temporary easement from GSA within the NOL Historic District.
- There will be no anticipated permanent odverse physical impocts, nor will there be interference with the activities or purposes of the resource, on either a temporory or permanent basis.
The temporary grading will not adversely impact the Front Area that was created to provide a physical and natural buffer that preserves the visual character of the main complex. Overall, it is anticipated that there will be no interference with the activities or purposes of the NOL golf course, on either a temporary or permanent basis.
- The lond being used will be fully restored, in that the resource will be returned to a condition, which is at least as good as thot which existed prior to the project.

The areas where temporary use is proposed will be restored to an acceptable condition upon completion of the grading. Mature trees will be avoided to the extent possible. If any mature trees require removal, they will be properly mitigated with re-planting of the appropriate tree species upon approval by GSA and M-NCPPC.

Please note that your concurrence with the above five criteria is only for determining if Section \(4\left(\begin{array}{l}\text { ) applies to this temporary use of NOL Historic District property. SHA's need for the- }\end{array}\right.\) temporary construction easement will be arranged with members of GSA's staff and their right-of-way officials prior to the construction.

\section*{Review Request}

Please examine the attached maps and plans. We request your concurrence by November 21, 2001 that proposed Project No. MO900B21 will have no adverse effect on the NOL Historic District (M: 33-25), the only historic resource located within the APE. We additionally request your concurrence with the temporary use criteria pertaining to the proposed grading within the NOL golf course.

By carbon copy, we invite the Montgomery County Historic Preservation Commission and Montgomery Preservation, Inc., to provide comments and participate in the consultation process. Pursuant to the requirement of the implementing regulations found at 36 CFR Part 800,

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Seven
SHA seeks their assistance in identifying historic preservation issues as they relate to this specific project (see 36 CFR 800.2 (c) (4) and (6), and 800.3 (1) for information regarding the idencification and participation of consulting parties, and 800.4, and 800.5 regarding the identification of historic properies and assessment of effects). For additional information regarding the Section 106 regulations, see the Advisory Council on Historic Preservation's website, www achp.gov, or contact the Maryland State Highway Administration or the Maryland Historical Trust.) If no response is received by November 21, we will assume that these offices decline to participate. Please call Ms. Liz Buxton at \(410-545-8698\) with questions regarding standing structures for this project. Ms. Mary F. Barse may be reached at \(410-545-2883\) with concerns regarding archeology.

Very truly yours,
Cynthia D. Simpson
Deputy Director
Office of Planning and
Preliminary Engincering
by:


Project Planning Division

Attachments:
D)

Project Plans
SHA Beltsville, MD Quadrangle with Inventoried Resources and APE Indicated
Maryland State Historic Sites Inventory Form/ MHT letter
SHA Beltsville, MD Quadrangle with Inventoried Archeological Sites and Surveys: Effect Table
cc: Ms. Mary F. Barse, (w/ Antachments II through V)
Ms. Liz Buxton, (w/ Attachments II through \(V\)
Ms. Allison Cauthorn (w/ Attachments II through V)
Ms. Pamela McNicholas
Ms. Maria Hocy (w/ Attachments I through V)
Mr. Patrick Schmitt (w/ Attachments II and V)
Ms. Cynthia D. Simpson
Mr. Donald H. Sparklin

Mr. I. Rodncy Litue MD 650 from I-495 to US 29 Page Eight
- Ms. Gwen Marcus Wright, M-NCPPC (w/ Attachments I through V Ms. Denise Winslow, FHWA (w/ Altachments I through V) Ms. Gail Rothrock, PGHPC (w/ Attachments I through V)

Mr. J. Rodney Little
MD 650 from 1-495 to US 29
Page Nine

Concurrence with Determination of Effect
Project No. MO900B21
MD 650 from I-495 to US 29
Montgomery County, MD
October 19, 2001

The Maryland Historical Trust (MHT) concurs with the State Highway Administration's (SHA) determination ofno adverse effect for the referenced undertaking as documented in the SHA's correspondenge, datgd October 19, 2001.
By: timaneul ievis
Maryland State Historic Preservation Office/ Maryland Historical Trust

Date

MHT \(\log\) Number. 200103760

Comments on the determination, if any, or conditions for its acceptance by the MHT:
\begin{tabular}{|c|}
\hline \multirow[t]{3}{*}{} \\
\hline \\
\hline \\
\hline
\end{tabular}
orfer of Preservation Servicea
Mg. Andrea Mones-O'Hara
Historic Prepervation Officer
General Services Administration
General Services Al Capital Region
Washington, D.C. 20407
Re: Naval Surface Warfare Center (Naval Ordnance Laboratory) Determination of Eligibility Section 106 Review

Dear Ms. Mones-O'Hara:
The Maryland Historical Trust has reviewed the oubmitted MHT Historic Sites Inventory Form and photographs for the Naval Ordnance Laboratory, received 26 March 1997. Our office had previousiy no National Register eligible properties at the Naval Ordnance Laboratory. This determination was based on the evaluation of onily eleven (11) structures at the laboratory. The submitted revised documentarion provides a more complete identification and evaluation of the entire laboratory complex including 372 resources. Based on this information, we concur with youx determination that the Naval Ordnance Laboratory is eligible for the National Register as an Historic District under National Register Criteria Consideration G, regarding properties less than so years of age, as it has achieved exceptional significance at the national level as a firat-generation Cold-War-period naval weapone research facility.

The Naval. Ordnance Laboratory achieves significance under criterion \(A\) as the first., and until the late-1960'm, the only comprehensive Cold-War-period naval weapone research and development facility in the United States. The properity achieven significanca \(\dot{\sim}\) employment of several of the country's top scientists, and scientista brought from Germany during and after World war il, whose research whe the aite resulted in major acientifily. Dnder criterion \(C\), the property is significant for its architectural

… . .... .
.

Ms. Andrea Mones-O'Hara
June 6, 1997
Page 2
character and design, with several buildings designed by Eggers a Higgina, one of the largest firms in the country, receiving contracts cor ain military faciod Most important under. Criterion \(C\) is the engint-war period. Most important under Criterion \(C\) is the engineering
aignificance of many facilities where specialized ordnance significance of many facilities where specialized ordnance
development and testing occurred, including several unique development and testing occurred, inciuding several unique C), the complex achieves exceptional significance under National Register Criteria Consideration \(G\), at the national level for its pivotal role as a first-generation Cold-War-period defense weapons research facility, being for many years, the only, and after about 1970, the foremost facility of its kind in the United states.

Our office is concuring with your determination of eligibility for the historic district as a whole. We are not concuring with your determination concerning which individual buildinga do or do not contribute to. the district. Only a few photographe showing representative examples of the resources containedin to ditrict were included with the Inventory Form. In order to make an evaluation of. individual properties, we would need photographs of building played during the district's period of aignificance, and an evaluation of its integrity.

We understand that this identification and evaluation has been performed as part of GSA'B compliance with section 106 of the National Historic Preservation Act of 1966 (as amended) in conjunction with the Environmental Impact Statement (EIS) for the O. S. Food and Drug Administration Consolidation. Our office has clearinghouse. The Eis explains that the white Oak site will be used to provide new, consolidated, state-of-the-art facilities for used to provide new, consolidated, atate-of-the-art facilities for County, Maryland. The EIS indicates that GSA prepared a detailed evaluation of the existing buildings and systems for their potential renovations/reuse in the new development scheme, or their demolition. The findings indicated that it would not be cost effective to rehabilitate and reuse the majority of the existing buildings. All buildings within a 170 acre area will be demolished with the exception of the Building 1 lthe Main Administration Building) and Building 100.

The EIS correctly states that, if the SHPO concurs with the determination that the Naval ordnance Historic District ia eligible ffect on historic properties, and that GSA will need to consult

\section*{Ms. Andrea Mones-0'Hara -}

June 6, 1997

\section*{-}
with the SHPO, the Advisory Council, and involve interested persons to determine ways in which GSA will minimize or mitigate adverse impacts.

To date, GSA has not informed the SHPO or the Advisory Council of, the proposed undertaking, alternatives considered, or the effect of the protect on historic properties. We await thif information project on historic propertics. Should you have effects of the please contact Ms. Jo Ellen Freese at ( 410 ) 514-7630. questions,

Sincerely,
26)
J. Rodney Little

Maryland State Historic
Preservation officer

\section*{JRL/JEF/jef}

W9603243
cc: Hon. Gilbert Gude
Mr. Charles Edson
Ms. Mary Gardiner
Ms: Gwen Marcus
Ma. Marie-Regine Charles-Bowser

\section*{mar 2 A 2000}

Ma. Betsy Bratz
LABCUEST Chaliperson
10733 Kinloch Road
SImer Spring, MD 20903
Dear Ms. Eretri: -
Thank you for your latter of suppoit regarding the consoldation of the Food and Drug Adminiatration (FDAA) at ite Federal Research Cointor at While Oak. Wo took forward to completing the project through its romaining three phrasos and appreclate our continuing dialog with LABQUEST and the bcal community.
As mentioned in your lefler, the FDA complax will not ocoupy the entire whime Oak stte. Now that the funding tor the FDA complex has begun, we will begin the mastor planning process. for the remaining 530 acres:. As statod \(n\) our public meetingt, tor the sake of convenle nce, wa have ldentified the FDA complex ae
Parcel \(A\) and the remuinder of the sile as Parcal \(B\).

Our staff atatad in a LABOUEST meeting on Apini 28, that we plan to begin the mastor planing process of Parcel B by the end of this yent, At that time, we informed the group thet this precoses will difier from tho FDA mester plan in that it likaly will not be a plon for a specific agency, but will provida a framowork for tuture developmerk of vartowa uses. I will identily the size and location of developable areas, and will address alternative uses, inctuding appropilato densitles. We stated that we would coordinale with the exleding usen en well as he FOA complex. especialy. wegarding, suck hoves as acsow, rowd af whe procese procesa regarding historic preservation. Finally, we emphastzed that publio
particlpetion will be a major eloment in the procese.
-2-
We are aware of LABQUESTs aspirations for the slte, and will serlousty consider thum in the planning procees. I have requested that Mr. Thomas Jemes, Director, Portfollo Management Division, of my stall meot with you to discues your concema. Mr. Jomes will be contacting you earty next weak to set up a meeling.

We appreciate your continued partclpation in the development of thits important asser

Shocervit,

\section*{Amintrivento}

Neleon B. Alcalde
Regtonal Administrator
\(\because\)
\[
\begin{aligned}
& 301 \text { 7th Streat BW, Whahington OC 20c07-000 } \\
& \text {.. .. . . .fre... . ... }
\end{aligned}
\]

Jean Chait, Projeal Manager
Mong gomery County Deparment of Trassportation
101 Monroe Street
Rockville, MD 20850
Re: FDA Consolidation Transportation Improvemerx Feasibility Study of March 30, 1999
Dear Ms. Chait: . .- ... . .... .-.. . .--i-.... ........... ...... .....
--..... ...
In the absence of ary public forums, informational programs or presentalions by cither the County or local citizen associations on this trafic study in the past year, 1 have chosen to submit written comments on the project directly to you

I do understand the "Iluid nature" of the project and that traffic numbers are being reviewed along with the questions associated with a second New Hampshire A venue entrance. I also question the seemingly-segmented duraiag approsech which is being used on the traffic aspect of the FDA consolidation. However, the fact that technieal re-evaluations are currently happening provides an opporturity for broeder publici iapat forums be held now. I bope that your office, in conjunction with the Maryland State Highway Administration, will do so.

In the spinit of constructive inpul, here are my specifie comments on the original study:
CONCERN FOR PEDESTRIANS: Given that the Lask is wome more traflic on New Hampshire Avenue by widening the road and re-timing the traffic lights, one unintended result will be additional pressure on pedestria safery. Curently, walking across New Hampshire Avenue at either business center (White Oak and Hillandsle) is hazardous and will become more so. Given the nature of the pedestrian trafic (senior eitizens from HOC's Holly hall Aparments to the Safeway in Hillandale and lots of foot (raffic in White Oak) provisions for safe travel must be made--This should-inchuxle on-damand walk-lights of sulficient length for elderty and safe-havens in known footraffic areas, One specific safe-haven which peeds to be maintained is the medias oo New Hampshire Avenue south of Powder Mill Road. (FYI: Holly Hall is mis-labeled as the George Meany Center on figure 4-9.)

BUS STOPS: Bus stops and shelters along New Hampshire Avenue need to be upgraded as a part of this project (or even sooner). For example, the bus stop on south-bound New Hampshire at the beltway needs a shelter. Many bus-using shoppers patronize the Hillandole Shopping Center and are lef (with heary grocery bags) in the rain and mud at this stop. Also, the shelter at the Shell Station in White Oak needs serious improvements including
expansion, connecting sidewalks, and a floor. expansion, connecting sidewalks, and a floor.

TRACTOR-TRAILER TURNS: The turning radij of tractor trailers, and the new larger 53 -foot-trailer trucks which cuter the businesss areas, need io be accommodated ai the Powder Mill Road, Elon Road and Lockwood intersectionss. For example, the Hillandale Shopping Center requires trucks to use the Powder Mill Road entrance. Large trucks, making the two right funs from New Hampshire Avenue, routinely travel on the sidewalks and require opposing
traflie on Powder Mill Road to back-up in order to negotiate the turn traffic on Powder Mill Road to back-up in order to negoliate the turn

SPEED: The modifications to increase the traffic volume during rush-hours and business-hours means that New Hampshire Averue will become even more of a speeding zonse in the off-hours. Since there is no ability to make an elastic roxd, what methods (elosing off the additional lane, light-tining changes, etc.) will be used to give homoowners (New Hampshire Avenue has single-family homes) and pedestrians a measure of safety when traflic
is ligher?

GOLF COURSE: The continued use of the golf course by MNCPP is a benefit to the greater White Oak community and preserving this recreation facility is important. I urge the County and the Stäte to protect this resource as the final plans are developed.

Beyond these specifics, I hove three issues which are part of the greater picture of the area, the FDA consolidntion and eventual lagger use of the entire Foderl Research Center. (These issues do not include the "Purple Linc," since this particular solution will not be quickly decided, funded, or implemented- and in the end, may no even include White Oak)

NECOTIATED CEILING: Evaluate and potentially reduce the on-site parking available for the FDA (curtently requasted to be 4,S00 [or more?], but subject to final approval by NCPC), thereby requiring greater improvements in IDM plans. Also, negotiste traficic maximuns winh GSA on the total site as was done wirh the Army af Forest
 wanted to walk to work, they sbould take their car.")

TRANSIT CENTER: Currenthy in the Facility Planning Phase with the Montgomery County Department of Public Works and Transportation is a CIP project for a White Oalk Transit Center. Although 1 do not know all the details I understand that the concept is for a 250 -car park-and-ride tot with a 5 -bus-bay transit center tocated at (or near?) the White Oak Shopping Center. Given the tramie pressures which exist at that location, and additional pressure from the FDA consolidation, I suggest that this be re-evahusted in ligtre of the greser whole

First, can these 250 cars be better handled in Fairland, Spencerville, Colesville, or Howard County instend of adding to the congestion of White Oak? Second, will FDA/FRC employees (limited by TDM) find this a convenierx place to park, uneriby deleating a pimary goal of reducing cars? Could a transit center (without a parkwhich the developonent of the FRC adde to white Oat har propaty ich sease Or corse his tarai

NEW HAMPSHIRE AVENUE SOUTH OF THE BELTWAY: The traffie study report that interscections in this area operate at i failing level of service ( \(F\) "LOS"), yet the report makes no recommendations or cost evaluations for improvements. Although expedieng, Lhis is very short-sightod. Montgomery, Prince George's and the State neod oo include improvements in this area also.

The ultimate solution is to redirect the University of Maryland-bound Uaffie to the proposed beltway-toUniversity Boulevard sccess road. This requires political will to authorize a new bellway exit and gain access through the BARC property, but it is the only way to improve many of the over-laxed roads of Adelphi and reduce the increasing neighbothood cut-thru (via Elton to Riggs Rond and Oakview to Mount Pisgah). Füthermore, this would alleviale the problern of bockups on the 650 -south-bound-beltway exit and stacking at ken-tum lanes which contribute to traffic accidents on New Hampshire Avenue. Although the new road is considered to be a Prince Ceorge's issue, it is not. It is an important component to the whole picture of traffic dow in the corridor.

1 hope that the County will be eager to open this procoss to all citizens in the near future.

©. Sernalor Ido Ruben Council Member Berlege Council Mamber Proisner Wrien Huscoman Chip Bruce Romor, Mc-CAO

Mery Amant, GSA Bia Pookerion. GSA
E Lunsford, FDA Gkn Smich. MD-SHA tohn Clerke, MC-DPWET

George Cardwell, POC-DPWAT
Ken loweph, Cheir, ECCDAB
Micharl Schulte, Preciden,
Hillandak Citizens' Asociation


August 10,200」

Mr. Donald H. Sparklin
Project Planning Division
Maryland Department of Transportation
State Highway Administration
P.O. Box 717

Baltimore, Maryland 21203-0717
Dear Mr. Sparklin:
This letter is in response to your letter of request, dated August 6,2001, for information on the presence of finfish species in the vicinity of the Maryland Deparment of Transportation's Project No:
MO900B2I: MD 650 from I-495 to US 29 (Intersection ecion improvements) in Montgomery County.
work will impa ct streams where anadromous fish spawn. However, it does not appear that the proposed would be classified as Use I waters (Water Contact Recreation and Prony drainages within the work area no instream work is permitted in Use 1 streams during the period Protection of Aquatic Life). Generally, during any year. Spawning periods for any resident fish species that may be within your project inclusive, be adequately prolected by ihe Usel instream work restriction period referenced above, sedimet project area will control methods, and other Best Management Practices typically used for probove, sediment and erosion

If you have any questions concerning these comments, you may contact me al 410-260-8331.
Sincerely,
\(\mathrm{Kar}_{\mathrm{Z}} \mathrm{C}\), Dinstoman, of.
Ray C. Dintaman, Jr., Director
Environmental Review Unit
RCD

United States Department of the Interior
FISH AND WILDLIFE SER VICE
Chesapeake Bay Field Office
177 Admiral Cochrane Drive Annapolis, MD 21401

September 12, 200.

Ms. Cynthia D. Simpson
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
P.O. Box 717

Baltimore, MD 21203-0717
ATTN: Mr. Donald Sparklin
E: Project No. MO900B21 MD 650 from 1-495 to US 29 Intersection Improvements Montgomery County, MD

Dear Ms. Simpson:
This responds to your August 9,2001 , request for information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the vicinity of MD 650 , from 1-495 to US 29. We have reviewed the information you enclosed and are providing comments in accordance with Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 ef seg.)

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no biological assessment or further Section 7 consultation is required with the U.S. Fish and Wildlife Service Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered

This response relates only to federally protected threatened or endangered species under ou urisdiction. It does not address the Service's concems pursuant to the Fish and Wild)ife Coordination Act or other legislation. For information on the presence of other rare species, you should contact Ms. Lori Byme of the Maryland Heritage and Wildlife Division at (410) 260-8573

We appreciate the opportunity to provide information relative to fish and wildlife issues, and hank you for your interest in these resources. If you have any questions or need further assistance, please contact Charisa Morris at (410) 573-4550.

Sincerely,
> -1lay Katnas wamy Mary J. Ratnaswamy, Ph.D.
> Program Leader
> Endangered Species Chesapeake Bay Field Office


Parris N. Glendening
Gowemor
Kathleen Kennedy Townsend 4. Goverior

Maryland Department of Natural Resources

\section*{Fora, Wildilife and Heriage Service Tawes State Ofice Building. EAnnapolis, Maryland 21401}

September 10, 2001

Stanley K. Arthur Depwiy Secretary

Ms. Cynthia D. Simpson
Ms. Cymand Department of
Maryland Department of Transportation
State-Highway Administration
P.O. Box 717

Baltimore, MD 21203-0717
RE: Environmental Review for Project No. Mo900B21, MD 650 from 1-495 to US 29, Intersection Improvements, Montgomery County, Maryland.

\section*{Dear Ms. Simpson:}

The Wildlife and Heritage Division has no records for Federal or State rare threatened or endangered plants or animals within this project site. This statement should not be interpreted as meaning that no rare, threatened or endangered species are present. Such species could be present but have not been documented because an adequate survey has not been conducted or because survey results have not been reported to us.

However, the forested area on or adjacent to the project site contains Fores Interior Dwelling Bird habitat. Populations of many Forest Interior Dwelling Bird species FIDS) are declining in Maryland and throughout the eastern United States. The onservation of this habitat is strongly encouraged by the Department of Natural Resources. The following guidelines will help minimize the project's impacts on FIDS and other native forest plants and wildlife:
1. Avoid placement of new roads or related construction in the forest interior. If forest loss or disturbance is absolutely unavoidable, restrict development to the perimeter of the forest (i.c., within 300 feet of the exisiting forest edge), and avoid road placement in areas of high quality FIDS habitat (e.g., old-growth forest). Maximize the amount of remaining contiguous forested habitat.

Page 2
September 10, 2001
2. Do not remove or disturb forest habitat during May-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.
3. Maintain forest habitat as close as possible to the road, and maintain canopy closure where possible.
4. Maintain grass height at least \(10^{n}\) during the breeding season (May-August).

If you should have any further questions regarding conservation of these species, please contact David Brinker, Central Regional Ecologist for the Wildife and Heritage.
Division, at (410) 744-8939.

Sincerely,
Sovi B. Byrue
Lori A. Byme,
Environmental Review Specialist, Widdife and Heritage Division

ER\# 2001.1707.mo

Douglas M. Duncan
County Execullur

Charles A. Moose; Ph.D. Cblefof Police

January 29, 2002

Cynthia Simpson, Deputy Director
Office of Planning and Preliminary Engineering
Maryland Department of Transportation
Stare Highway Administration
P.O. Bax 717

Baltimore, Maryland 21203-0717
Re: Project No. M0900B2I MD 650 from \(1-495\) to US 20 Mongomery County, Maryland

Dear Ms. Simpson.
Thank you for your letter of January 15, 2002, requesting input regarding the effect of the State Highivay Administration's (SHA) study alternatives on response times for emergency services along the New Hampshire Avenue corridor.

Sergeant Daniel C. Mayer, of my staff, looked into the proposed alternatives and advised Alternative 1 could result in increased traffic congestion. We foresee no negativ impacts from the improvements that you propose in Alternative 2 for New Hampshire Avenue between I-\$95 and US 29. The proposed changes should resull in a welcome improvement of traffic flow in the area

Again, thank you for your letter. Please be assured of our continued cooperation in matters of mutual concerin and interex:


Commander Drew J. Tracy
\(3^{n 1}\) District, Silver Spring
DJT:/c


3rd District Station
801 Sligo Avenue • Silver Spring Maryland 20910 • 301/565-7740. FAX 301/365-S860

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Douglas M. Duncan
County Executive

Gordon A. AOyagi
FireAdministrator

February 25, 2002
Cynthia Simpson
Deputy Director
Office of Planning and Preliminary Engineering
P.O. Box 717

Baltimore, Maryland 21203-0717
Re: Project No. MO900B21
Attention: Oarrell Sacks, Group Leader
Project Planning Division

\section*{Dear Ms Simpson:}

Thank you for providing opportunity for the Montgomery County Fire and Rescue Service to comment on the proposed New Hampshire Avenue construction project to ease access into the FDA facility In White Oak. Staff has reviewed the material you sent and we offer the following comments:
- We would like to see refuge areas for motorists to move to while apparatus is passing during emergency response;
- We would like advance notification of construction stant and stop dates, other benchmark events which may cause additional congestion, and lane closures;
- We want to ensure that apparatus egress, both north and south bound will be maintained for Fire Station 12, including signal control; and
- We would like to see signal control or another type of control to prevent motorists from cutting across all lanes of New Hampshire Avenue to access Northwest Orive from relocated Michaelson Road. Northwest Orive provides a short cut to Lockwood Drive and US Route 29 and we believe that not controlling this intersection will result in an increase in vehicle crashes and pedestrians being struck.
\(\square\)


Division of Fire and Reacue Services
101 Monroe Strets, 124h Floor - Rockville, Maryland 20850-2589 - 240/777-2400, TDD 240/777.0725, FAX 240/777.2414 serving with dedication, courags and compastion

Ms. Cynthia Simpson
February 25, 2002
Page 2

Again, thank you for the opportunity to comment. I hope the concems raised will help with the safe completlon of this needed project. if my staff or can provide any additional assistance, please do not hesitate to contact me.


RWSתd
cc:
Mr. Gordon Aoyagi, Fire Administrator

\section*{Maryland Department of Transportation State Highway Administration}

March 25, 2002
Re: Project No. M0900B21
MD 650 from I-495 to US 29
Widening and Intersection Improvements Montgomery County

Mr. Bill Gries
Maryland-National Capital
Park and Planing
9500 Brunett A venue
Silver Spring, MD 20910
Dear Mr. Gries:
The Maryland State Highway Administration (SHA) is proposing to widen MD 650 from approximately I-495 to US 29, in Montgomery County (See Attachment) to provide an additional through lane in the northbound direction. Widening will also occur on Powder Mill Road, Mahan Road and Lockwood Drive to accommodate turn lane improvements. The proposed scope of work includes the installation of two stomwater management ponds, an access road, inlets and outfalls, landscaping, milling and resurfacing existing pavement, and construction of medians, curb and gutter, bike paths, and sidewalks.

The project also proposes to relocate Michelson Road. The relocated Michelson Road will include two westbound and eastbound lanes with a median. The original location of Michelson Drive will be reconstructed to an eight-foot bike path/sidewalk facility. The project will include the relocation and reconstruction of the US 29 southbound on ramp, and the widening of the US 29 northbound on ramp. The proposed improvements would require 7.8 acres of the White Oak Golf Course property, which is within the NOL Historic District and owned by the General Services Administration, for a perpetual easement. The proposed improvements would also temporarily impact 1.40 acres of the golf course properiy.

The measures proposed by the SHA to minimize harm and to mitigate for permanent use of the golf course include the following:
- To enhance the visual quality of the proposed stomnwater management facility (located south of Mahan Drive), proposed landscaping would be incorporated into the pond design. A well-designed stormwater management pond with colorful landscape plantings that change through the seasons can become an amenity feature to the golf course, enhancing the course for both players and passers-by. Flowering trees and shrubs along with perennials and ormamental grasses will be important features of the pond - landscaping.-

Mailing Actryse: P.O. Box 717-Beltimore, MD 21203-0717 Sireel Address: 707 North Calvert Sireot - Baltimore, Maryland 21202

\section*{Mr. Bill Gries}

MD 650 from I-495 to US 29
Page Two
- Street trees planted between MD 650 and the bike/pathways will provide a visual buffer between the pedestrian and bikepath/sidewalks and MD 650. The trees will also provide shade along the path for pedestrians and cyclists.
- Perennial/shrubs/ornamental grasses will be planted in a number of beds between the bike/pathways and the golf course providing color, seasonal interest and visual variety for both the golf course patrons and those using the sidewalk.
- Large evergreen trees within a well-designed landscape area will provide a gateway feature to enhance the entrance to the golf course. Further planting with flowering trees and ground cover in the median at the entrance to the golf course will complete the landscaped gateway feature.

As part of the documentation process for federal-aid projects under the Department of Transportation Act of 1966, SHA must also determine if the requirements of Section 4(f) apply to the temporary use of the land from the White Oak Golf Course (that is, the 1.40 acres that will be affected over and above the perpetual easement). The Federal Highway Administration (FHWA) has determined that the requirements of Section 4(f) do not apply to the temporary use of the land, when the officials with jurisdiction over a resource indicate their agreement with the following five criteria.

Therefore, SHA seeks your concurrence on the signature line (at the end of this correspondence) that the temporary use of land from the White Oak Golf Course for grading and construction access will not permanently impact the. White Oak Golf Course and that:
- The duration of the use will be temporary and less than the time needed for construction of the project.
The temporary use of the goif course/historic district for grading in the vicinity of proposed stormwater management ponds, bike paths, sidewalks, and access roads will be completed prior to the final completion of the MD 650 improvements.
. The ownership of the property will not change or result in the retention of long term or indefinite interests in the land for transportation purposes.
The ownership of the golf course outside of existing and proposed SHA perpetual easement will remain with the General Services Administration (GSA), leased by the Maryland-National Capital Parks and Planning Commission (M-NCPPC), and will continue to be maintained by M-NCPPC.

\section*{Mr. Bill Gries}

MD 650 from I-495 to US 29
Page Three
- The scope of the work will be minor, in which the nature and magnitude of the changes to the resource will be minimal.
Temporary use of the golf course property will be required due to grading within the vicinity of the proposed stommater management ponds, bike paths, sidewalks, and access roads. This will require an approximately 1.40 -acre temporary easement from lead owned by GSA, but leased by M-NCPPC for the goif course area.
- There will be no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis.
The temporary grading will not adversely impact the front area that was created to provide a physical and natural buffer that preserves the visual character of the golf course. Overall, it is anticipated that there will be no interference with the activities or purposes of the golf course.
- The land being used will be fully restored, in that the resource will be returned to a condition, which is at least as good as that at which existed prior to the project.
The areas where temporary use is proposed will be restored to an acceptable condition
- uponcompletion-of the grading. Mature trees will be avoided to the extent possible. If any mature trees require removal, they will be properly mitigated with re-planting of the appropriate tree species upon approval by GSA and M-NCPPC.

Please note that your concurrence with the above five criteria is only for determining if Section \(4(f)\) applies to this temporary use of the golf course property. SHA will coordinate the temporary construction easement with GSA and M-NCPPC staff and right-of-way officials prior to the construction. The Maryland Historical Trust previously indicated their agreement with the temporary use criteria relevant to that NOL Historic District.

Should you have any further questions or concems, please contact Mr. Darrell Sacks at (410) 545-8527 or dsacks@sha.state.md.us.

Very truly yours,
Ms. Cynthia D. Simpson
Deputy Director
Office of Planning and
Preliminary Engineering

Mr. Bill Gries
MD 650 from I-495 to US 29
Page Four

Mr. Donald. Sparklin
Assistant Division Chief
Project Planning Division.


Attachment
cc: Mr. Ken Briggs, SHA-PPD Mr. Darrell Sacks, SHA-PPD Mr. Donald Sparklin, SHA-PPD Mr. Frank Thomas, GSA \(\qquad\)
-

\section*{August 29, 2002}

Mr. Neil Pedersen
Deputy Administrator for Planning \& Engineering
Maryiand Department of Transportation
State Highway Administratio
707 North Calvert Stroet
Baltimoro, Maryiand 21202
Dear Mr. Pedersen:
This letter is to notify you of the status of our coordination with the Maryland State Highway Administration (SHA) on the MD 650 project from I-495 to US 29. Commistion ataff has been attending SHA's monthly coordination meetinga on the project, and all iasues related to the White Oak Golf Course are being resolved to our satisfaction through these meetings. To date, all issues related to the storm water management ponds, slopes, proposed landscaping, construction impacts and construction schedules have been coordinated and resolved to the beat of our knowledge. Ongoing coordination is required with respect to construction sequencing and utility relocation work to ensure that the golf course can remain open during construction.

The Commission is pleased with the level of cooperation and coordination that has been provided by the Maryland State Highway Administration during the course of this project. We look forward to continued cooperation as the project proceeds into the construction phase.


Copy: Jerry Bush

\section*{Maryland Department of Transportation State Highway Administration}

October 23, 2002

Parils N. Glendening Govemor
John D. Porcari
Secromery
Parker F. Williams

Re: Project No. M0900B21
MD 650 from I-495 to US 29 MD 650 from I-495 to US 29
Widening and Intersection Improvements Montgomery County
Mr. Omar N. Beyab
Assistant Manager
US General Services Administration
National Copital Region
\(3017^{\text {m }}\) Street, SW
Washington, DC 20407-0001

\section*{Dear Mr. Beyah:}

The Maryland State Highway Administration (SHA) is proposing to widen MD 650 from approximately I-495 to US 29, in Montgomery County to provide an additional through-lane in the northbound direction. Widening will also occur on Powder Mill Rosd, Mshen Road, and Lockwood Drive to accommodate turn lane improvements. The proposed scope of work includes the installation of two stormwater management ponds, an access rosd, inlets, and outfall, landscaping, milling and resurfacing existing pavement, and construction of medians, curb and gutter, bike paths, and sidewalles.

The project also proposes to relocate Michelson Road. The relocated Michelson Road will include two westbound and eastbound lanes with a median. The original location of Michelson Road will be reconstructed to be an eight-foot bike path/sidewalk facility. The project will include the relocation and reconstruction of the US 29 southbound on-ramp, and the widening of the US 29 northbound on-ramp. The proposed improvements would require right-of-way from the White Oak Golf Course property, which is within the NOL Historic District and owned by the General Services Administration (GSA). The proposed improvements would also require temporary impact to 1.89 acres of the golf course property for fine grading and construction access.

As part of the documentation process for federal-aid projects under the Departonent of Transportation Act of 1966, SHA, on behalf of the Federal Fighway Administration (FHWA), must determine if the requirements of Section 4(i) apply to the temporary use of the land from the White Oak Golf Course. (That is, the 1.89 acres that will be temporarily afficted over and above the required right-of way.) The FHWA has detemmined that the requirements of Section 4(f) do not apply to the temporary use of the land, when the officials with jurisdiction ovar a resource indicate their agreement with the following five criteria. Therefore, SHA seelos your concurrence on the signature line (at the end of this correspondence) that the temporary use of
My telephone number 1 b
Maryland Relay Service for Impelred Hearing or Specch
Relay Sorvice for Inpelired Hoering or

Mailing Addroes: P.O. Box 717 • Baltmore, MD 21203-0717 Sireet Addreas: 707 North Calvert Btreet - Battimorm, Marylend 21202

\section*{Mr. Omar N. Boyah}

MD 650
Page 2
1.89 acres of land from the White Oak Golf Course for grading and construction access will not permanently impact the White Oak Golf Course and that:
- The duration of the use will be temporary and less than the time needed for construction of the project.
The temporary use of the golf course/historic district for grading in the vicinity of proposed atormwater management pondr, bike pathe, sidowalks, and access roads will be completed prior to the final completion of the MD 650 inprovements.
- The ownership of the property will not change or result in the retention of long term or indefinite interests in the land for transportation purpases.
The ownership of the golf course outside of existing and proposed SHA right-of-way will remain with the General Services Adminiatration (GSA), used and meintained by the Marylend-National Cepital Pariat and Planning Commiasion (M-NCPPC).
- The scope of the work will be minor, in which the nature and magnitude of the changes to the resource will be minimal.
Temporary use of the golf course property will be required due to grading within the vicinity of the proposed stornwater management ponds, bike puths, sidewallos, and access ronds. This will require an approximately 1.89 -acre of temporary ansement from land owned by GSA, but usod by M-NCPPC for the golf course area.
- There will be no anticipated permanent adverse physical impacks, nor will there be intorfarence with the activitites or purposes of the resource, on either a temporary or permanent basts.
The temporary greding will not adversely impact the front area that was crested to provide a phynical and natural buffer that preserves the visual character of the golf course. Overall, it is anticipatod that there will be no interference with the setivities or purposes of the golf courna.
- The land being used will be fully restorad, in that the rasource will be returned to a condition, which is at least as good as that which existed pritor to the project.
The areas where temporary use is proposed will be restored to an acceptable condition upon completion of the grading. Mature trees will be avoided to the extent possible. If any mature tree require removal, they will be properiy mitigated with re-planting of the appropriate tree apecies upoa approval by GSA and M-NCPPC.

Mr. Omar N. Beyah
MD 650
Page 3

Should you have any further questions or concerns, please contact Mr. Darrell Sacks at (410) 545-8527 or deacks@shastatemdins

Very truly yours,
Ms. Cyathia D. Simpson Deputy Director Office of Planning and
Preliminary Engineering

By:
\(\xrightarrow[\text { Mr. Donald Hi sparklin }]{\substack{\text { Assistant Division Chief }}}\)
Assistant Division Chief
Project Planning Division
CONCURRENCE:

\(\frac{10}{10 / 29 / 2002}\)
cc: Mr. Max Avizi, FHWA
Mr. Ken Brigge, SHA-PPD
Mr. Bill Gries, M-NCPPC
Mr. Christion C. Larson, SHA-ORE
Mr. J. Rodney Little, MHT
Mr. Derrell Secke, SHA-PPD
Mr. Donald Sparklin, SHA-PPD
\begin{tabular}{|c|c|c|}
\hline Properties in the Vicinity. & Street Address & Business Type \\
\hline \multicolumn{3}{|c|}{Hiliandale Shopping Center \#1} \\
\hline Beneficial - Banking/Financing & 10171 New Hampshire Avenue & FFinancing, Insurance, and Reat Estate \\
\hline Parcel ETC. - Shipping/Mailboxes & 10169 New Hampshire Avenue & Business Services \\
\hline Mattress Warehouse & 10165 New Hampshire Avenue & Miscellaneous Retail \\
\hline KFC & 10163 New Hampshire Avenue & Eating and Drinking Places \\
\hline Radio Shack & 10161 New Hampshire Avenue & Miscellaneous Retail \\
\hline Chevy Chase Bank & 10159 New Hampshire Avenue & Depository Institutions \\
\hline One Hour Moto Photo & 10157 New Hampshire Avenue & Business Services \\
\hline Park Florist & 10155 New Hampshire Avenue & Miscellaneous Retail \\
\hline Brother Sew and Vac & 10153 New Hampshire Avenue & Business Services \\
\hline Hillendale Opticians & 10149 New Hampshire Avenue & Health Services \\
\hline Judy's Hallmark & 10159 New Hampshire Avenue & Miscellaneous Retait \\
\hline \multicolumn{3}{|c|}{Hillandale Shopping Center \$2} \\
\hline Ames & 10121 New Hampshire Avenue & General Merchandise Stores \\
\hline Anisto Vatent Inc. & 10119 New Hampshire Avenue & Business Services \\
\hline Beer/Wine & 10117 New Hampshire Avenue & Miscellaneous Retail \\
\hline CompoClub & 10115 New Hampshire Avenue & Unknown \\
\hline CVS Pharmacy & 10113 New Hampshire Avenue & Miscellaneous Retait \\
\hline Viet Palace Restaurant & 10107 New Hampshire Avenue & Eating and Drinking Places \\
\hline Avani Travel & 1620 Elton Road \#203 & Services \\
\hline Nancy's Nails & 1608 Elton Road & Personal Services \\
\hline Family Hair & 1610 Elton Road & Personal Services \\
\hline Video Stop & 1640 Elton Road & Services \\
\hline \multicolumn{3}{|c|}{Hillandéle Shopping Conter \#3} \\
\hline Safeway & 10101 New Hampshire Ave. & Food Stores \\
\hline & & \\
\hline Our Savior Episcopal Church & 1700 Powder Mill Road & Individual and family Social Services \\
\hline Shell & 10201 New Hampshire Avenue & Automotive Dealers and Gasoline Service Stores \\
\hline & & \\
\hline 7-Eleven & 10203 New Hampshire Avenue & Miscellaneous Retail \\
\hline Eastem Cerry Out & 10205 New Hampshire Avenue & Eating and Drinking Places \\
\hline Cleaners & 10207 New Hampshire Avenue & Personal Services \\
\hline Femily Dentist & 10401 New Hampshire Avenue & Health Services \\
\hline CHt Center & 10501 New Hampshire Avenue & Individual end Family Services \\
\hline Hillandale Park Athletic Field & New Hampshire Avenue & Amusement and Recreation Services \\
\hline \multicolumn{3}{|c|}{Barnelt Buifding} \\
\hline Edward M. Bamett - Atty © Law & 10611 New Hampshire Avenue, Sulte 1 & Legal Services \\
\hline Lena S. Bamett - Atty @ Law & 10611 New Hampshlre Avenue, Sulte ? & Legat Services \\
\hline M-Tech Graphics & 10611 New Hampshire Avenue, Suite 3 & Business Services \\
\hline The Cleaning Authority & 10611 New Hampshire Avenue, Lower Level & Personal Services \\
\hline Recreation Center & 10615 New Hampshire Avenue & Amusement and Recreation Services \\
\hline Hillendale Fire Department & 10617 New Hampshire Avenue & Justice, Public Order and Safety \\
\hline White Oak Public Golf Course & 10911 New Hampshire Avenue & Amusement and Recreation Services \\
\hline \multicolumn{3}{|c|}{Hardware City Building end Warehouse Park} \\
\hline A-1 TV Sales and Service & 11125 New Hampshire Avenue & Business Services \\
\hline Protech Pest Control & 111278 New Hampshire Avenue & Business Services \\
\hline Ballinger Electric Company & 11117 New Hampshire Avenue & Business Services \\
\hline Arc Slgns & 11119 New Hampshire Avenue & Business Services \\
\hline Hardware Store - closed & 11105 New Hampshire Avenue & Miscellaneous Retail \\
\hline \multicolumn{3}{|c|}{White Oak Professionai Building} \\
\hline White Oak Foot Care Center & 11161 New Hampshire Avenue & Health Services \\
\hline Stete Employees Credit Union (SECU) & 11161 New Hampshire Avenue & Financing, Insurance and Real Estate \\
\hline Sylvan Leaming Center & 11161 New Hampshire Avenue & Educational Services \\
\hline White Oak Pediatric & 11161 New Hampshire Avenue & Health Services \\
\hline Provident Bank of Maryland & 11161 New Hampshire Avenue \#101 & Depository Institutions \\
\hline & & \\
\hline Potomac Electric Power Co. (PEPCO) & No Address & Transportation, Communication, Electrical, gas and Sanitatlon Services \\
\hline Fitness Equation & 11313 Lockwood Drive & Personal Services \\
\hline 7-Eleven & 11303 Lockwood Drive & Miscellaneous Retail \\
\hline Exкоп & 11177 New Hampshire Avenue & Automotive Dealers end Gasoline Services Stores \\
\hline \multicolumn{3}{|c|}{Popeye's Complex} \\
\hline Popeye's & 11311 Lockwood Drive & Eating and Drinking Places \\
\hline Checks Cashed & 11311A Lockwood Drive & Financing, Insurance end Real Estate \\
\hline Best City Buffet & 11305 Lockwood Drive & Eating and Drinking Places \\
\hline \multicolumn{3}{|l|}{} \\
\hline Pope's Funeral Home & 11315 Lockwood Drive & Personal Services \\
\hline Private Storage & 111421 Lockwood Drive & Personal Services \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Properties in the Vicinity & Street Address & Business Type \\
\hline \multicolumn{3}{|c|}{White Oak Convience Center} \\
\hline White Oak Convience Store & 11407 Lockwood Dive & Miscellaneous Retail \\
\hline Spicy America & 11409 Lockwood Drive & Eating and Drinking Places \\
\hline Hope Cleaners & 11411 Lockwood Drive & Personal Services \\
\hline White Oak Auto Sales & 11415 Lockwood Drive & Automotive Dealers and Gasoline Services Stores \\
\hline \multicolumn{3}{|c|}{White Oak Shopping Center \#1} \\
\hline Laundromat & 11267 N New Hampshire Avenue & Personal Services \\
\hline Chevy Chase Bank & 11261 New Hampshire Avenue & Depository Institutions \\
\hline Snap Shots Photo & 11253 New Hampshire Avenue & Business Services \\
\hline Radio Shack & 11245 New Hampshire Avenue & Miscellaneous Retail \\
\hline Liquor-Wine & 11239 New Hampshire Avenue & Miscellaneous Retail \\
\hline Hunan Manor & 11237 New Hampshire Avenue & Eating and Drinking Places \\
\hline Nations Carpet & 11233 New Hampshire Avenue & Home Fumiture, Fumlshings and Equipment Services \\
\hline Dollar City & 11231 New Hampshire Avenue & General Merchandise Stores \\
\hline Pet Value & 11229A New Hampshire Avenue & Miscellaneous Retail \\
\hline Conoway Clothing & 11229 New Hampshire Avenue & Apparel and Accessory Stores \\
\hline Ace Vanety Store & 11227 New Hampshire Avenue & Miscellaneous Retail \\
\hline Cingular Wireless & 11225 New Hampshire Avenue & Business Sevices \\
\hline Hair Pair & 11223 New Hampshire Avenue & Personal Services \\
\hline Giant & 11221 New Hampshire Avenue & Food Stores \\
\hline Rite Aid Pharmacy & 11215 New Hampshire Avenue & Miscellaneous Retail \\
\hline Blockbuster Video & 11215A New Hampshire Avenue & Services \\
\hline Simply Wireless & 11213 New Hampshire Avenue & Business Services \\
\hline Subway & 11211 New Hampshire Avenue & Eating and Drinking Places \\
\hline Pearle Vision Center & 11211A New Hampshire Avenue & Health Services \\
\hline White Oak Cleaners & 11209 New Hampshire Avenue & Personal Services \\
\hline Bowring & 11207 New Hampshire Avenue & Amusement and Recreation Services \\
\hline K Nails & 11205 New Hampshire Avenue & Personal Services \\
\hline Barber Stylist & 11203 New Hampshire Avenue & Personal Services \\
\hline Starbucks Cottee & 11201 New Hampshire Avenue & Eating and Drinking Places \\
\hline \multicolumn{3}{|c|}{White Oak Shopping Center it} \\
\hline Chef Theo's & 11271 New Harmpshire Avenue & Eating and Drinking Places \\
\hline Beauty Center & 11273 New Hampshire Avenue & Miscetlaneous Retait \\
\hline Fashion Time & 11275 New Hampshire Avenue & Apparel and Accessory stores \\
\hline Mattress Discounters & \(1127 /\) New Hampshire Avenue & General Merchandise Stores \\
\hline Chesapeake Bagel Bakery & 11279A New Hampshire Avenue & Eating and Drinking Places \\
\hline Pizza Castle & 11279B New Hampshire Avenue & Eating and Drinking Places \\
\hline Payless Shoe Source & 11281 New Hampshlre Avenue & Apparel and Accessory stores \\
\hline Sears & 11255 New Hampshire Avenue & General Merchandise Stores \\
\hline Sears Auto Center & 11255 New Hampshire Avenue & Automotive Repairs, Services and Marketing \\
\hline Jitly Lube & 11259 New Hampshire Avenue & Automotive Repairs, Services and Marketing \\
\hline Boston Market & 11297 New Hampshire Avenue & Eating and Drinking Places \\
\hline White Oak Llbrary & 11701 New Hampshire Avenue & Educational Services \\
\hline St. Stephen Lutheran Church & 11612 New Hampshire Avenue & Individual and Family Social Services \\
\hline The Thorton Friends School & 11612 New Hampshire Avenue & Educational Services \\
\hline Boy Scout Troop & 812 Milestone Drive & Member Organizations \\
\hline Kingdom Hatl of Jehovah's Witnesses & 812 Milestone Drive & Individual and Family Social Services \\
\hline Berkshire Towers & 11215 Oak Leaf Drive & Financing, Insurance and Real Estate \\
\hline Shaare Tefila Congregation & 11120 Lockwood Drive & Individual and Family Social Services \\
\hline \multicolumn{3}{|c|}{White Oak Professional Park \({ }^{\text {\#1 }}\)} \\
\hline Royal Custom Tailor and Dry Cleaning & 11201A Lockwood Drive & Personal Services \\
\hline Private & 11201B Lockwood Drive & Unknown \\
\hline Acupuncture and Massage Therapy & 11203A Lockwood Drive & Health Services \\
\hline Attomey At Law & 11203B Lockwood Drive & Legal Services \\
\hline Barber Shop & 11205A Lockwood Drive & Personal Services \\
\hline Radiation Management Assoclation & 11205B Lockwood Drive & Health Services \\
\hline CBM Fine Needle Asplation & 11207A Lockwood Drive & Health Services \\
\hline Deborah L. Shipler, Abbie, Levine, Deborah F. Feldman & 11207B Lockwood Drive & Heath Services \\
\hline Andrew of London Hair Design & 11209A Lockwood Drive & Personal Services \\
\hline Eva Cares Nursing Services, Inc. & 11209B Lockwood Drive & Health Services \\
\hline Inaccessible & 11213 Lockwood Drive & Unknown \\
\hline Meltzer Group Benefits & 11215 Lockwood Drive & Financing, Insurance and Reat Estate \\
\hline Kum H. Lee, M.D., ST. Lee, M.D., Chitra Chari, M.D. & 11217 Lockwood Drive & Health Services \\
\hline Chase Home Funding & 11219 Lockwood Drive & Financing, Insurance and Real Estate \\
\hline St. Clair \& St. Clair Inc. Lite \& Health Insurance & 11221 Lockwood Drive & Financing, Insurance and Real Estate \\
\hline Inaccessible & 11223 Lockwood Drive & Unknown \\
\hline Joyse Romanus, E.A. Tax and Accounting & 11225 Lockwood Drive & Personal Services \\
\hline Behavior Therapy Center & 11227 Lockwood Drive & Health Services \\
\hline Advertising Attractions Inc., Sudler and Associates & 11229 Lockwood Drive & Business Services \\
\hline Inaccessible & 11231 Lockwood Drive & Unknown \\
\hline Majorie L. Bamett M. D., P.C. & 11233 Lockwoood Drive & Heath Services \\
\hline Vanessa Gilliam Collier - Attomey & 11259 Lockwood Drive & Legal Services \\
\hline The Whitehead Companies & Unknown & Unknown \\
\hline American Pagents & Unknown & Business Services \\
\hline Gus loakim Insurance Agency & 11259 Lockwood Drive & Financing, Insurance and Real Estate \\
\hline
\end{tabular}


APPENDIX B. ASA PROPERTIES - ENVIRONMENTAL CONCERNS AND POTENTIAL CONTAMINATION VALUES



\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{ISA Properties} & \multirow[t]{2}{*}{Reason for Concern} & \multicolumn{3}{|l|}{Potential Contamination Values} \\
\hline & & High & Medium & Low \\
\hline \begin{tabular}{l}
Site 18 \\
George Meany Center for Labor Studies \\
10000 New Hampshire Ave Silver Spring, MD 20903
\end{tabular} & \begin{tabular}{l}
- 15,000 gallon, 6,000 and 1,500 gallon heating oil USTs currently in use \\
- 500 gallon heating oil UST permanently out of use \\
- It is required that UST removal/abandonment be conducted according to COMAR 26.10.10.02 and COMAR 26.10.10.03
\end{tabular} & & X & \\
\hline \begin{tabular}{l}
Site 19 \\
Hillandale Fire Station 10617 New Hampshire Ave Silver Spring, MD 20903
\end{tabular} & \begin{tabular}{l}
- Reported release and cleanup of oil/water separator overflow case closed on 2-18-93 \\
- Unknown capacity UST currently in use \\
- It is required that UST removal/abandonment be conducted according to COMAR 26.10.10.02 and COMAR 26.10.10.03 \\
- Verification with MDE records indicate proper Closure of USTs on 6-15-99
\end{tabular} & & & X \\
\hline \begin{tabular}{l}
Site 20 \\
Hillandale Shopping Center 1701 Elton Street Silver Spring, MD 20903
\end{tabular} & \begin{tabular}{l}
- Unknown UST \\
- No records found at MDE for this facility
\end{tabular} & X & & \\
\hline \begin{tabular}{l}
Site 21 \\
Interstate 495 and MD 650 \\
Silver Spring, MD
\end{tabular} & \begin{tabular}{l}
- Reported release to the Emergency Response Notification System \\
- No Records found at MDE for this incident
\end{tabular} & X & & \\
\hline \begin{tabular}{l}
Site 22 \\
Oak Hills Apartments 11497 Columbia Pike Silver Spring, MD 20904
\end{tabular} & \begin{tabular}{l}
- Heating oil UST \\
- Documented release and cleanup \\
- 15,000 and 20,000 gallon USTs documented as abandoned \\
- It is required that UST removal/abandonment be conducted according to COMAR 26.10.10.02 and COMAR 26.10.10.03
\end{tabular} & & X & \\
\hline \begin{tabular}{l}
Site 23 \\
Outer loop of I-495 exit to South MD 650
\end{tabular} & \begin{tabular}{l}
- Emergency Response Notification System \\
- No other information found \\
- Unknown quantity and materials \\
- No information found at MDE for this incident
\end{tabular} & X & & \\
\hline \begin{tabular}{l}
Site 24 \\
PEPCO Spill \\
11207 Lockwood Drive \\
Silver Spring, MD 20901
\end{tabular} & \begin{tabular}{l}
- Documented release and cleanup \\
- No other information available \\
- No information found at MDE for this incident
\end{tabular} & X & & \\
\hline \begin{tabular}{l}
Site 25 \\
Safety Kleen Corporation 12164 Technology Road Silver Spring, MD 20904
\end{tabular} & \begin{tabular}{l}
- 27 reported violations at the site \\
- Small Quantity Hazardous Waste Generator \\
- No information found at MDE
\end{tabular} & X & & \\
\hline
\end{tabular}




\section*{APPENDIX C. REFERENCES}

American Society for Testing and Materials (ASTM). Standard Practice for Environmental Site Assessment (E 1527-00).

Applied Geographic Solutions Database-Census Update. March 2001. Demographics 2000.

Barrett, M. E., R D. Zuber, E. R. Collins III, J. F. Malina, Jr., R. J. Charbeneau, and G. H. Ward. 1993. A review and evaluation of literature pertaining to the quantity and control of pollution from highway runoff and construction. Center for Transportation Research, Austin, Texas, USA.

Barron, Bill. Montgomery Department of Park and Planning. Personal Interview, March, 2002.

Code of Maryland Regulation (COMAR) Stormwater Management Regulations [26.17.02].

Department of Health and Human Services (DHHS) Poverty Guidelines. 1999.
Database Search for Hazardous Waste Sites. Environmental Data Resources, Inc. October 24, 2001. Southport, Connecticut.

Final Environmental Impact Statement. U.S. Food and Drug Administration Consolidation, Montgomery County. 1997. White Oak, Maryland, USA.

General Services Administration. Transportation Management Plan for the FDA Consolidation. March 5, 2002.

Review of Transportation Improvements Along New Hampshire Avenue (MD 650). General Services Administration (GSA). March 28, 2000. Montgomery and Prince George's Counties, Maryland, USA.

Maryland Department of Natural Resources, Maryland Geological Survey. 1967. Baltimore, Maryland, USA.

Maryland Department of the Environment. Correspondence regarding Hazardous Waste Management Files.

Maryland Department of Transportation, State Highway Administration. 1998. Highway Needs Inventory (HNI). Baltimore, Maryland, USA.

McCormick, Taylor and Associates, Inc. 2001. Air Quality Analysis. MD 650 (New Hampshire Avenue) From Powder Mill Road to North of US 29, Montgomery County, Maryland.

McCormick, Taylor and Associates, Inc. 2001. Hazardous Waste Initial Site Assessment (lISA). MD 650 (New Hampshire Avenue) From Powder Mill Road to North of US 29, Montgomery County, Maryland.

Noise Quality Technical Analysis Report. November 28, 2001. State Highway Administration (SHA). Montgomery County, Maryland.

Montgomery County Department of Park and Planning. 1997. White Oak Master Plan, White Oak, Maryland, USA.

Montgomery County Department of Park and Planning. 1981. Master Plan for Eastern Montgomery County, Maryland, USA.

Montgomery County Planning Department, Research and Technology Center. 1997. Census Update Survey Summary Report.

National Technical Committee on Hydric Soils. 1990. Wetland Delineation Manual.
Naval Facilities Engineering, Environmental Services Command. June 19, 2001. (http://www.navfac.navy.mil/env/p brac.htm)

Wetland Delineation Report. Straughn Environmental Services. 2001.
Transportation Improvement Feasibility Report. BMI Report. March 30, 1999. Montgomery County, Maryland.

Maryland Department of Planning State Data Center (http://www.mdp.state.md.us),
Maryland National-Capital Park and Planning Commission. 2001. (http://www.mcmncppc.org/home.htm).

Maryland State Highway Administration (SHA). Secondary and Cumulative Effects Analysis Guidelines. June, 2000.

Montgomery County Archives. Historic Aerial Photography of the White Oak Area and Vicinity. Montgomery County Courthouse, Rockville, MD

Montgomery County Department of Environmental Protection. Personal Interview with David Rotolone ; Environmental Policy \& Compliance, MD.

Simpson, Bob. Montgomery County Department of Public Works and Transportation. Personal Interview, April 2002.

US Army Corps of Engineers, Wetland Delineation Manual. 1987. Environmental Laboratory.

US Census Bureau. September 2001.
(http://factfinder.census.gov/servlet/BasicFactsTable).
US Census Data. 2000. (http://www.census.gov)
US Department of Agriculture, Natural Resources Conservation Service (NRCS). 1984. Farmland Protection Policy Act (FPPA). Government Printing Office, Washington, D.C., USA.

US Department of Agriculture, Natural Resources Conservation Service (NRCS). 1992. List of Prime and Statewide Important Farmland Soils.

US Department of Agriculture, Soil Conservation Service (SCS). 1974. Soil survey of Montgomery County, Maryland. Government Printing Office, Washington, D.C., USA.

US Department of Health and Human Services. "The 2000 HHS Poverty Guidelines." (http://aspe.hhs.gov/poverty/oopoverty.htm)

US Department of the Interior, Fish and Wildlife Service. August 10, 2001. Correspondence regarding RTE Species.

US Department of Labor. Standard Industrial Code Classification System. (http://www.OSHA.gov)

US Department of Transportation, Federal Highway Administration, Measurement of Highway-Related Noise, May 1996. Washington, DC.

RECORD OF CONVERSATION

\section*{CALL MADE TO:}
\begin{tabular}{lll} 
Mr. & Bill & Barron \\
Title & First
\end{tabular}

REPRESENTING: Maryland-National Capital Park and Planning Commission (M-NCPPC)

FROM (Caller): Jessica Brado, MT/A

PHONE:
\(\frac{\text { (301) 495-4556 }}{\substack{\text { Area } \\ \text { Code }}}\)

DATE:
March 12, 2002
TIME: 2:00 p.m.

\section*{Summary of Conversation:}

Ms. Jessica Brado spoke to Mr. Bill Barron about Holly Hall, the potential elderly, low-income community. He verified that it is run by the Housing Opportunities Commission (HOC), and that it probably would be considered low-income compared to the rest of Montgomery County, although it is not your typical low-income community. He suggested that it still be included as an environmental justice (EJ) community.

Mr. Barron identified a minority and low-income community in White Oak behind White Oak Shopping Center on both sides of Lockwood Drive (which includes the White Oak Apartments that are located within the study area). This community, as a whole, is referred to by the County as the April/Stuart Lane Community and is sometimes called the Garden Apartments. There are about ten different developments within this area. It consists of three or four, three-story buildings, and has both an African-American and Hispanic population, but mainly Hispanic according to Mr. Barron. He said that there are approximately 3600 units with a population estimated at 6,000 people. The April/Stuart Lane Community is well outside the proposed alternative's right-of-way.

Mr. Barron also provided Ms. Brado with another community to add to the community inventory, other than the above identified as minority and low-income. This community is not an EJ community, and is called "North White Oak". It consists of single-family detached homes, and is located in the middle of the new development is going in north of US 29 (former Heartfields Retirement Community...now bought out by Sunrise).```


[^0]:    * Within a Forest stand

