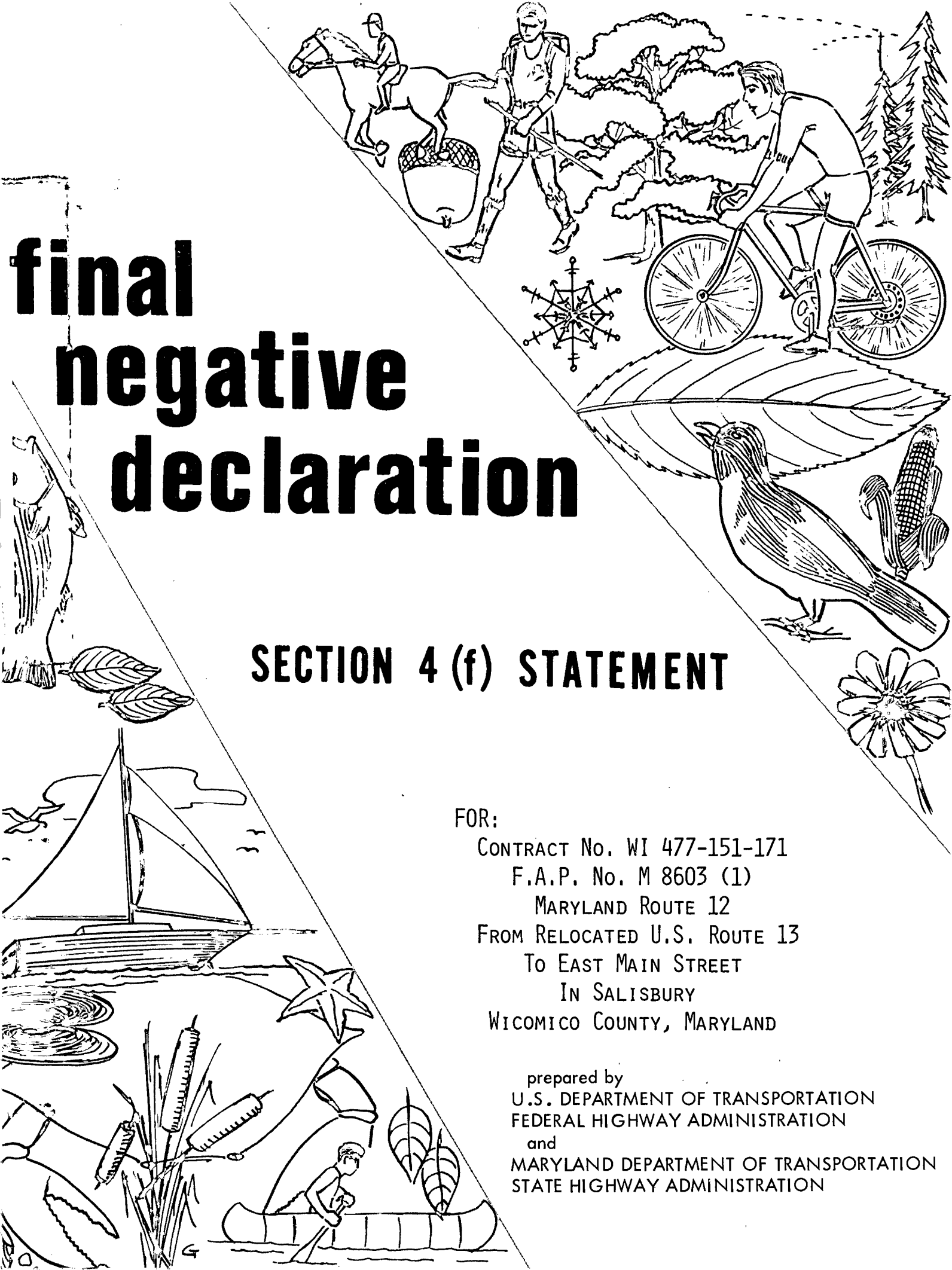

final negative declaration

SECTION 4 (f) STATEMENT

FOR:
CONTRACT No. WI 477-151-171
F.A.P. No. M 8603 (1)
MARYLAND ROUTE 12
FROM RELOCATED U.S. ROUTE 13
TO EAST MAIN STREET
IN SALISBURY
WICOMICO COUNTY, MARYLAND

prepared by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

REPORT NUMBER: FHWA-MD-NEG-79-04-F

FEDERAL HIGHWAY ADMINISTRATION

REGION III

MARYLAND ROUTE 12
FROM RELOCATED U.S. ROUTE 13
TO EAST MAIN STREET IN SALISBURY
WICOMICO COUNTY, MARYLAND

ADMINISTRATIVE ACTION

FINAL NEGATIVE DECLARATION
SECTION 4(f) STATEMENT

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

SUBMITTED PURSUANT TO 42 U.S.C. 4332 (2), (C) 23 U.S.C. 128(a)
49 U.S.C. 1653(f), 16 U.S.C. 470(f)

M. S. CALTRIDER
STATE HIGHWAY ADMINISTRATOR

3/10/80
Date

By: Hal Kassoff
Hal Kassoff
Director, Office of Planning
and Preliminary Engineering

4-24-80
Date

By: For Emil Elinsky
Emil Elinsky
Division Administrator
Federal Highway Administration

FINAL
NEGATIVE DECLARATION
OF ENVIRONMENTAL IMPACT

Improvement to Maryland Route 12

TABLE OF CONTENTS

4

TABLE OF CONTENTS

(Continued)

TABLES

TABLE OF CONTENTS

(Continued)

PLATES

6

SUMMARY

(1)

Federal Highway Administration

Administrative Action Negative Declaration

( ) Draft (X) Final

(X) Section 4(f) Statement Included (P. 78)

(2) Individuals who can be contacted for additional information concerning the proposed project and this document:

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Phone: (301) 383-4327
Office Hours: 8:15 A.M. to 4:15 P.M.

Mr. Roy D. Gingrich
District Engineer
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Baltimore, Md. 21211
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(3) Description of Action

The proposed action consists of improvements to Md. Rte. 12 (Snow Hill Road) from Relocated U.S. Route 13 to the city limits of Salisbury, or E. Vine Street, a distance of 1.9 miles. The study limits of the project for the purposes of environmental assessments are Relocated U.S. 13 and East Main Street in Salisbury. The improvements proposed consist of roadway and shoulder widenings, providing a raised median in some areas, minor alignment changes and intersection improvements to improve the capacity and safety of the highway. See Plate 2 following page 1 for the location of the project.

It is proposed that two through lanes be provided in each direction for the entire length of the project. In the rural segment south of College Avenue, the selected alternate

(Alternate 2) would consist of a 4-lane roadway divided with a raised median 24 feet wide. Left-turning lanes would be provided in the median at the intersections. Paved shoulders and safety grading would be provided on the outside within a minimum 160' right of way. The posted speed is 50 miles per hour from U.S. Rte. 13 to Robins Avenue and 40 miles per hour between Robins Avenue and College Avenue. These speed limits are expected to remain in effect after completion of the project.

The alignment coincides closely with the existing roadway except just south of Holly Center where three existing short horizontal curves would be replaced by one long sweeping curve.

The selected alternate would encroach 10 to 15 feet onto the property of the farmhouse on the west side of Md. 12 just north of Toadvine Road, which has been designated as an historic site of local inventory significance. This property acquisition would not require a 4(f) statement because only the structure was considered of historic significance and it would not be affected by this project. See letter of January 24, 1979 from the Maryland Historical Trust in the Comments and Coordination Section.

In the urban section Alternate 4 has been selected. This alternate consists of a four-lane, undivided urban street 56 feet wide with curb, gutter and sidewalk on both sides. Bicyclists would be accommodated in the outer curb lane.

A longitudinal drainage system would collect and discharge the runoff through three new outfalls into Beaverdam Creek. In the rural section the longitudinal system would consist of continuous ditches along both sides of the roadway. One outfall would be provided south of the Johnson Road intersection and would consist of a culvert passing through the open fields and discharging into Schumaker Pond at the north end.

In the urban area a drainage system consisting of inlets and longitudinal pipes would collect and discharge the runoff through two outfalls. One outfall would pass along Regency Drive to Schumaker Drive and across open land into Beaverdam Creek.

The second outfall would be carried along Shiloh Street to Schumaker Drive, to Churchill Avenue and discharged into Beaverdam Creek at Salisbury City Zoo. The exact locations of these outfalls would be determined during the design phase.

(4) Alternates

Several alternates, other than the selected alternates described above as Alternates 2 and 4, were studied for the project; Alternate 1 (the No Build Alternate) was analyzed throughout the project corridor.

The project was divided into two segments at College Avenue. Within the rural segment south of College Avenue three Alternates, 1, 2 and 3, were studied. In the urban segment north of College Avenue the No Build Alternate 1 and two Build Alternates 4 and 5 were studied. The segments were studied independently and the alternates within each segment were compared to each other. Any alternate in the rural segment could be combined with any alternate in the urban segment to provide the complete project.

RURAL SEGMENT

Alternate 1 (No Build)

This alternate assumes that no improvements would be made to Md. 12 except normal maintenance. The two-lane roadway with 2 foot shoulders would be maintained. As traffic volumes continue to increase the accident rate is expected to increase. The highway is expected to reach capacity in 2001.

Alternate 3

This alternate would provide a four-lane divided highway between U.S. 13 and College Avenue with curb, gutters and sidewalks on both sides of the roadway. Bicyclists would be accommodated by widening the outside lane to 14 feet from the centerline to the curbline. The minimum right of way would be 98 feet wide.

The drainage concept is identical for Alternates 2 and 3; however, the longitudinal system in Alternate 3 would consist of inlets and pipes rather than open ditches. The major outfall would consist of a culvert from 400 feet south of Robins Avenue that would cross Johnson Road and discharge into Schumaker Pond. The horizontal and vertical alignment of Alternates 2 and 3 are essentially identical.

URBAN SEGMENT

Alternate 1 (No Build)

As described in the rural segment there would be no improvements to Md. 12 within this segment except for normal maintenance.

Alternate 5

This alternate is identical to Alternate 4 with respect to drainage systems, intersections, street closures, and alignment. The typical section consists of a five-lane undivided urban roadway with curbs, gutters and sidewalks on both sides. The centerline of the proposed roadway is the centerline of the existing roadway for both Alternates 4 and 5.

(5) Summary of Environmental Effects of the Selected Alternates 2 and 4

The various environmental effects of the selected alternates are described below:

a. Alternate 2 would produce lower concentrations of CO than the No Build Alternate at all receptors studied for the design years.

In the urban section, Alternate 4 produces CO concentrations from 15 to 30 percent lower than those produced by the No Build Alternate for the design year 2004.

The No Build Alternate consistently produces more carbon monoxide and hydrocarbon burdens than the selected Alternate. However, the Build Alternates produce more nitrogen oxides burden than the No Build Alternate due to the increased travel speeds expected with the Build Alternates in the design year. There will be no violations of the National Ambient Air Quality Standards.

b. The No Build Alternate would produce no levels above the federal design noise levels and would produce levels lower than the selected alternates. Alternate 2 would produce minor to negligible effects on the noise levels at sensitive receptors in the rural section. The levels at three receptors would exceed the federal design noise levels by 4 to 6 dBA.

Alternate 4 in the urban section would produce a minor to negligible effect on the ambient noise levels. The levels at two receptors would exceed the federal design noise levels by 1 to 2 dBA during the design year.

c. The major concern with respect to water quality is the impact the proposed drainage outfalls would have on Beaverdam Creek. Presently there is occasional flooding in the flood plain causing problems at the zoo and the municipal wells. However, the concentration of the storm water along the proposed Md. 12 and transporting of the runoff to Beaverdam Creek in storm drains will have a beneficial effect on the flooding of the stream. See the explanation in the sections on Environmental Effects - Water Quality.

d. No rare or endangered species of plants or animals would be affected by this project.

e. The drainage outfalls would impact wildlife habitat to a minor degree. The areas disturbed by the outfalls to Schumaker Pond and along Regency Drive are prime nesting habitat of quail, rabbits, songbirds and other wildlife.

The discharge of highway runoff with its roadway pollutants would affect aquatic life in the immediate vicinity of the outlets.

f. The selected Alternates are consistent with the goals of local and regional comprehensive plans. No minority communities would be affected by the project.

g. A total of 7.6 acres of prime agricultural land will be acquired for right of way. However, since this land is zoned residential and planned for residential and commercial uses, its designation as prime agricultural land is not significant.

h. No wetlands will be affected by the project.

i. The selected Alternates would reduce the accident costs on the roadway over that experienced with the No Build Alternate by providing a safer facility.

j. Alternate 2 would require the relocation of one family. Alternate 4 would require the relocation of three families and one produce stand.

(6) 4(f) Involvement

The selected Alternates require taking of 4(f) land from the City Park for permanent drainage easements for the three drainage outfalls. Alternates to this taking and mitigation measures are described in the attached 4(f) Statement on page 79.

PROJECT DESCRIPTION AND LOCATION

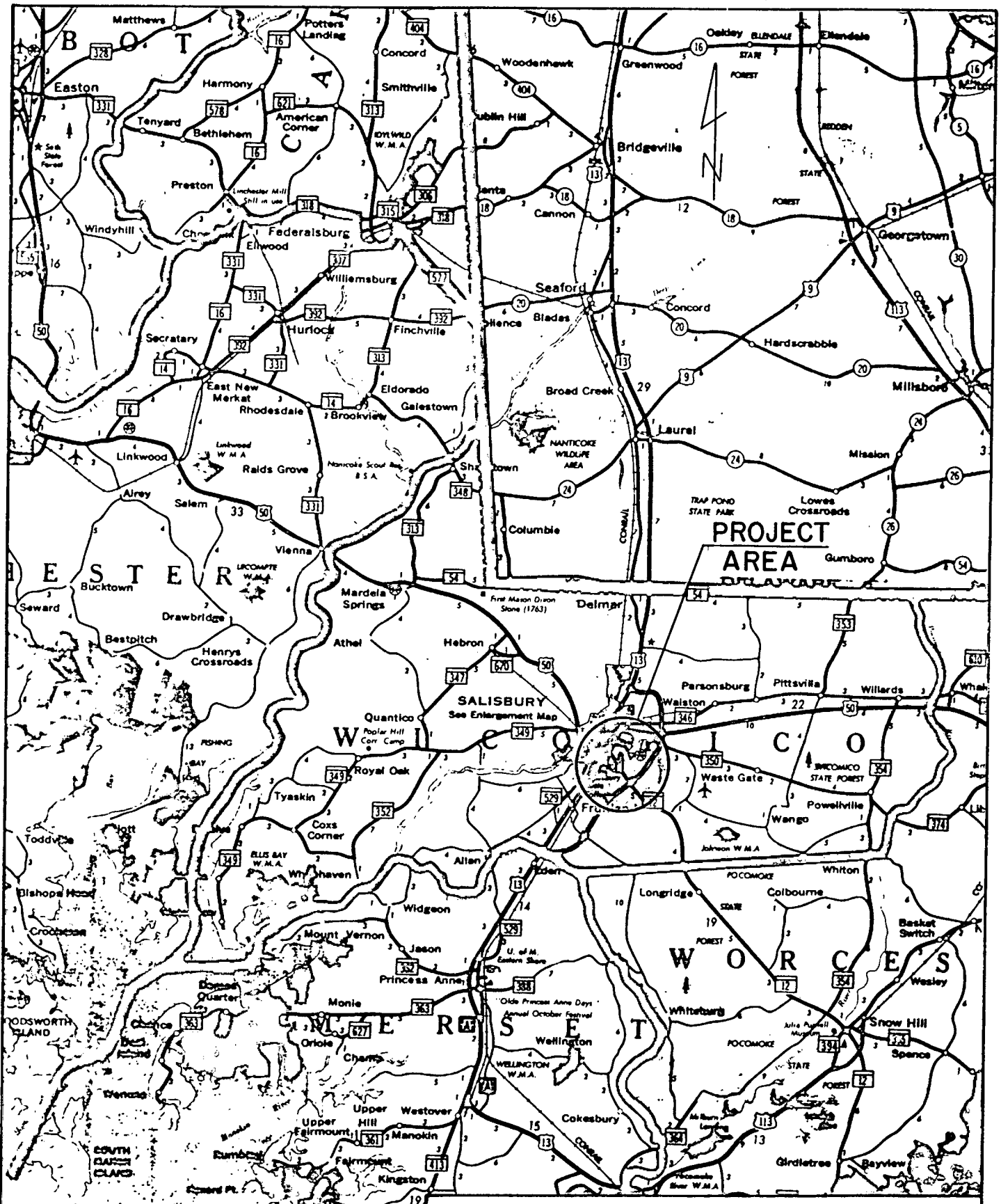
PROJECT LOCATION

The project is located to the southeast of the City of Salisbury in central Wicomico County. See Plate 1, Vicinity Map following page 1. The limits of the proposed improvements are the Relocated U.S. Route 13 interchange and E. Vine Street. The environmental study area extends further north to the intersection of Md. 12 and E. Main Street. The study portion of Md. 12 is classified as a minor arterial since it provides a direct link between Salisbury and Snow Hill and because it is a major segment of Salisbury's street system.

The project was divided into two segments at College Avenue because of the distinct differences in existing and proposed land uses north and south of College Avenue. The section between U.S. 13 and College Avenue is referred to as the rural segment in view of the existing and proposed land uses in this area. The section between College Avenue and E. Main Street is referred to as the urban segment, recognizing the existing development along the route and proposed commercial development in this area.

South of College Avenue along Md. 12 the predominant land use is agricultural. However, on the west side of Md. 12 just south of College Avenue, there is a state institution for the mentally retarded, called Holly Center. The area south of College Avenue is presently zoned R-15 and R-20, medium density residential. The Salisbury Metro Core Comprehensive Plan, adopted on December 27, 1976, shows the proposed land uses for this area as light business - institutional to medium - density residential.

North of College Avenue, the predominant land uses are residential and commercial with some minor agricultural sections.



MD. RTE 12

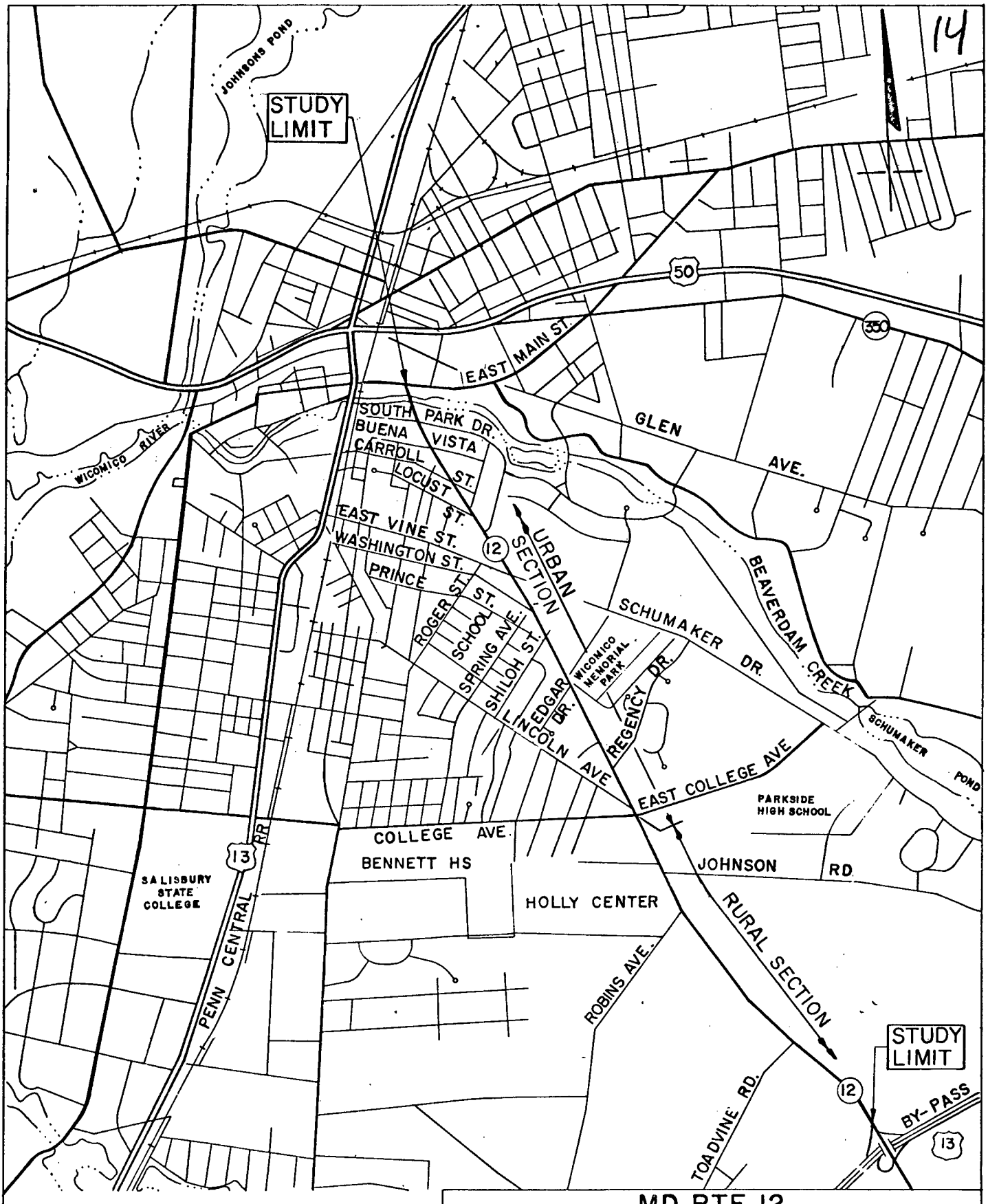
FROM RELOCATED U.S. RTE 13
TO EAST LIMITS OF SALISBURY

VICINITY MAP

CONTRACT NO. W1-477-151-171

SCALE 1" = 6 MI. PLATE NO. 1

13



MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

LOCATION MAP

CONTRACT NO. W1-477-151-171

SCALE 1"=APPROX. 3/8 MI. PLATE NO. 2

This area is zoned commercial. The Salisbury Metro Core Comprehensive Plan shows the proposed land uses for this area as highway-oriented commercial and commercial.

The terrain of the study area is flat with elevations between 30 and 40 feet above sea level. The soils are loam sands, gravels and clays. The section of farmland from College Avenue to approximately 3,000 feet south of College Avenue is considered prime and unique farmland by the Maryland Department of State Planning. The existing roadway follows a slight ridge line so no well-defined drainage courses cross the route except Beaverdam Run at East Main Street. The land to the east of Md. 12 drains towards Beaverdam Run approximately three-quarters of a mile to the east. The land to the west drains towards Tony Tank Creek approximately 1.5 miles to the west of Md. 12.

PROJECT DESCRIPTION

The proposed action is the improvement of Md. Rte. 12 from Relocated U.S. 13 to the city limits of Salisbury or E. Vine Street, a total distance of 1.9 miles. These improvements consist of widenings, minor alignment changes and intersection improvements to improve the capacity and safety of the highway costing $4,078,000 including $940,000 for right of way.

The opening of the Relocated U.S. 13 interchange with Md. 12 and the expanding development along Md. 12 has resulted in increased traffic. These traffic volumes will continue to increase with expanded commercial and residential activities along Md. 12 and the opening of the remaining portion of the Relocated U.S. 13 interchange.

The proposed improvements in the rural section consist of a divided four-lane highway with left-turning lanes provided at the intersections. The posted speed is expected to be 50 mph between U.S. Rte. 13 and Robins Avenue. Between Robins Avenue and College Avenue, the posted speed will be maintained at 40 mph in consideration of the safety of the residents of Holly Center. Correspondence from Holly Center can be found in the Comments and Coordination Section.

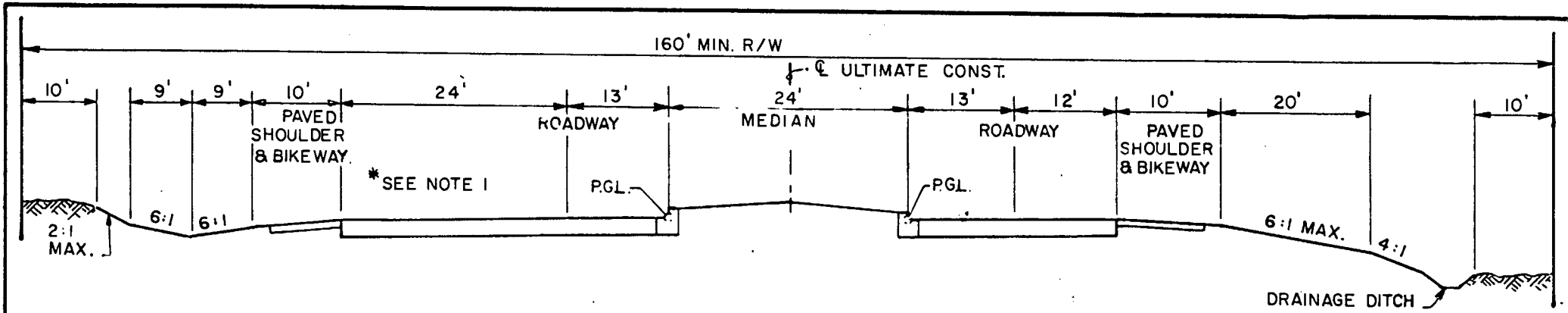
The typical section for the selected alternate in the rural section consists of two twenty-five foot wide roadways separated by a raised median of twenty-four feet. Ten foot paved shoulders would be provided outside both roadways. Twenty feet beyond the shoulder would be gently graded to provide full safety grading for a vehicle recovery area. The minimum right of way required for this alternate is 160 feet. See Plate 3 following this page. Bicyclists would be accommodated along the paved shoulders. Access would be uncontrolled in this section.

The alignment coincides fairly closely with the existing roadway. Just south of Holly Center, the alignment would be improved to replace three short curves, relocating the roadway slightly to the west into the cultivated fields away from the three houses on the east side of Md. 12. The existing outside edge of pavement of the southbound roadway was held as the proposed edge of pavement between Robins Avenue and College Avenue to maintain the existing front yard depth to the residential cottages at Holly Center.

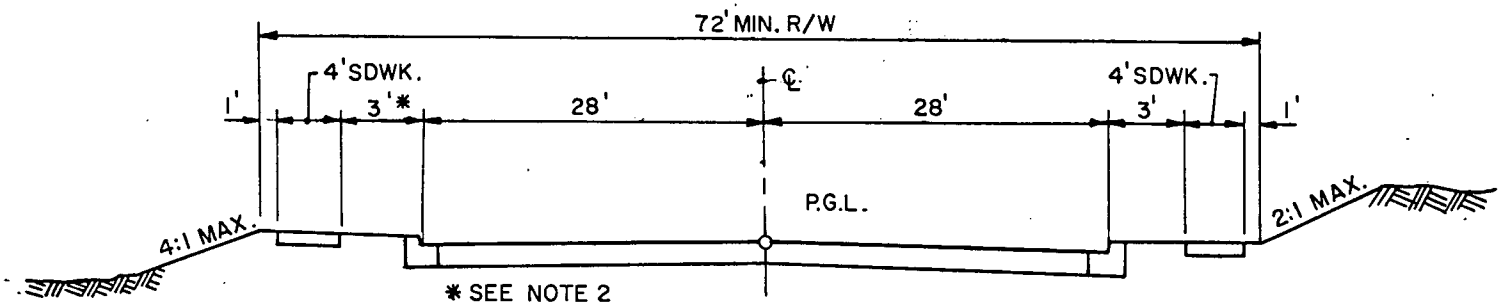
At the connection to the interchange with U.S. 13, some adjustments are required to maintain the proposed median width in the interchange. Ramp B would be relocated slightly to the east to accommodate the widened roadway of Md. 12.

The State Police are conducting a noise monitoring program throughout the state as part of their program for enforcement of traffic noise regulations. Locations were chosen as monitoring sites for this program and are located along Md. 12 north of Toadvine Road as shown on Plate 5 following this page. The sites would be used to locate the noise monitoring equipment necessary to measure the noise levels produced by passing vehicles. No structures would be build on the sites.

The main entrance to Holly Center would be relocated to the south to meet Johnson Road as a four-way intersection with vehicles queuing in the left-turn lanes in the southbound and northbound roadways of Md. 12. This arrangement would also be better suited for a signalized intersection.



U.S. RTE. 13 TO COLLEGE AVE.



COLLEGE AVE. TO EAST VINE ST.

NOTE 1: BETWEEN ROBINS AVE. AND COLLEGE AVE., AN ADDITIONAL 12' ACCELERATION OR DECELERATION LANE WILL BE ADDED TO THE SOUTHBOUND ROADWAY.

NOTE 2: IN RESTRICTED AREAS ON THE WEST SIDE OF MD. 12 THE OFFSET BETWEEN THE CURB & SIDEWALK WILL BE ELIMINATED.

NOTE 3: THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACTS, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

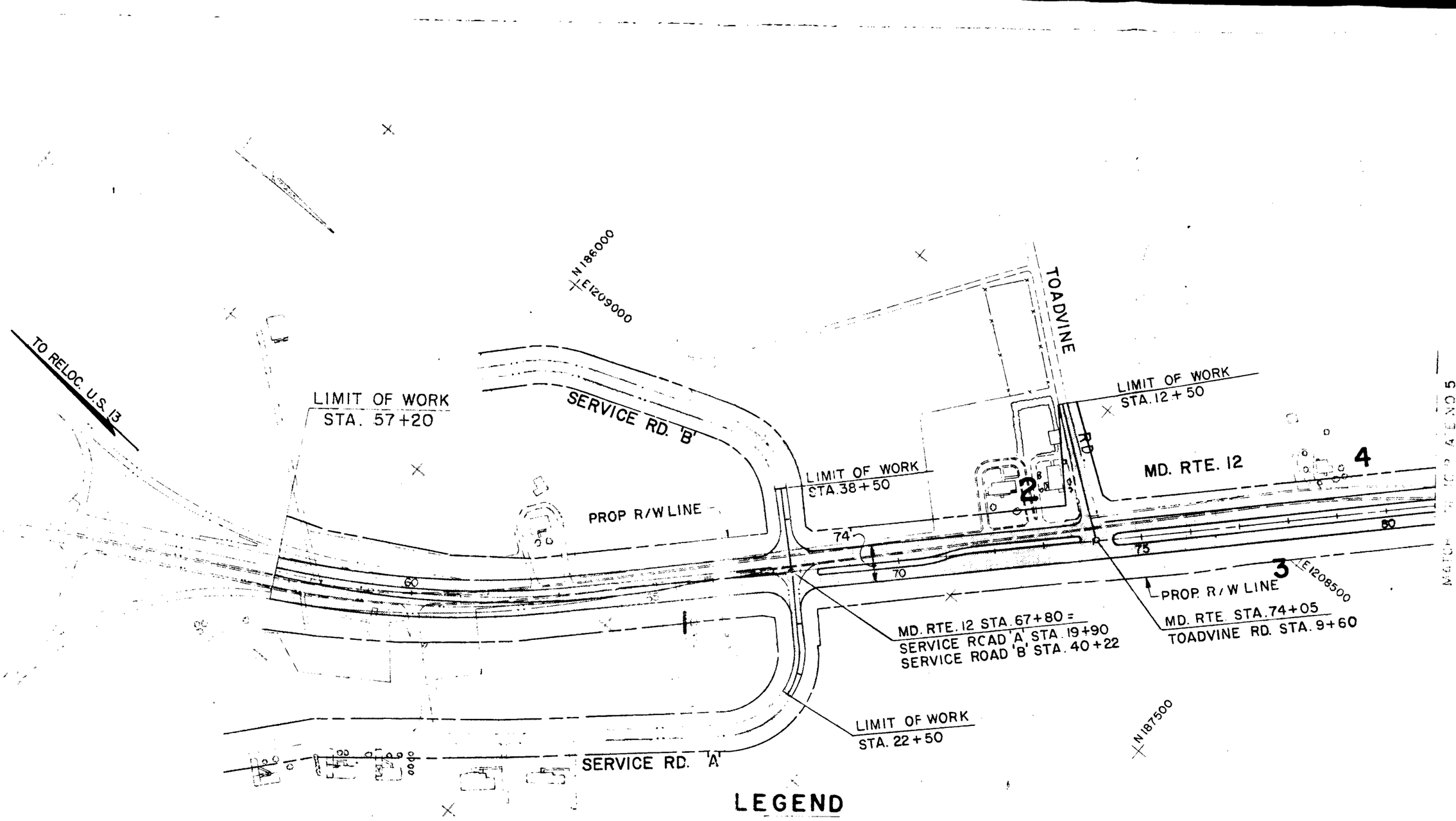
TYPICAL SECTIONS

MD. RTE. 12

CONTRACT NO. W1-477-151-171

NOT TO SCALE

PLATE. NO. 3



LEGEND

EXISTING ROADWAYS

PROPOSED EDGE OF ROADWAY

80 PROPOSED CENTERLINE

PROPOSED RIGHT OF WAY LINE

AIR POLLUTION RECEPTOR

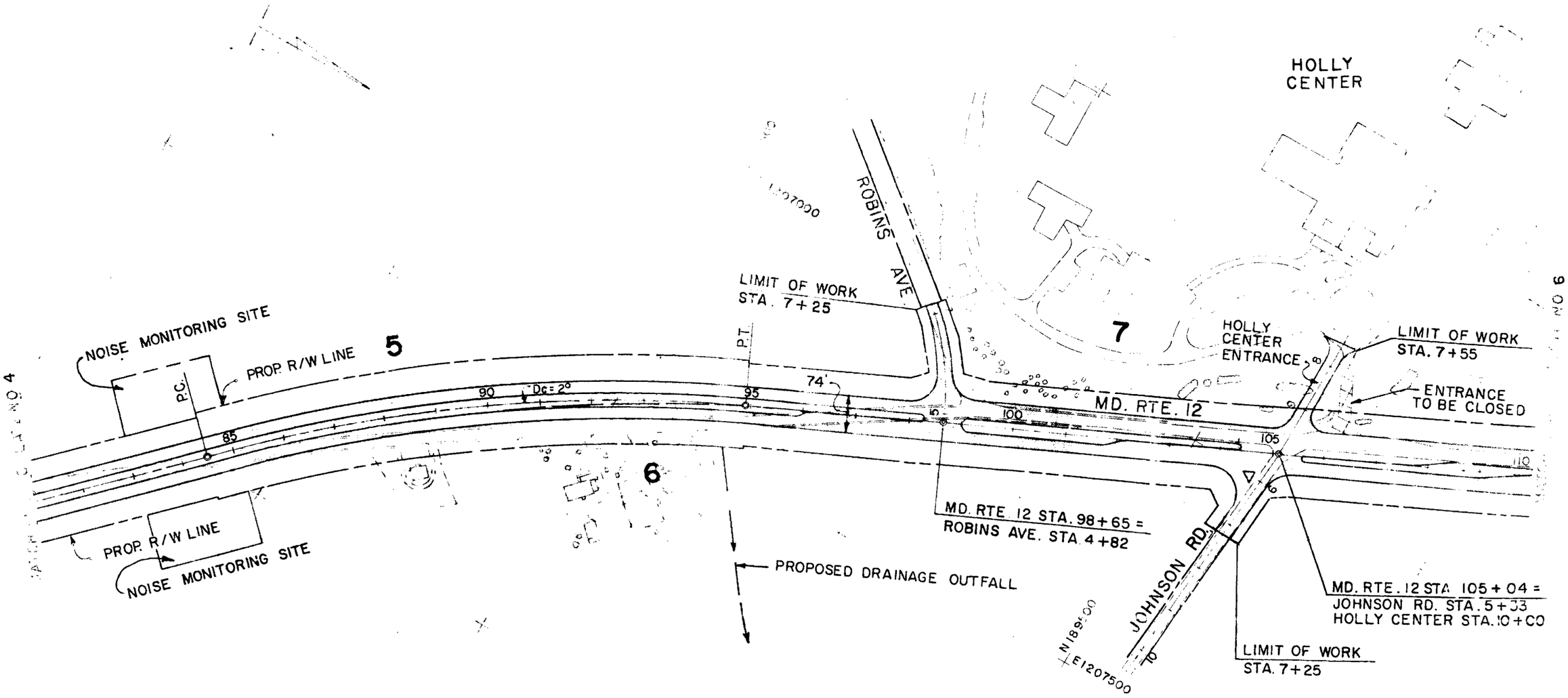
MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
SELECTED ALTERNATE

CONTRACT NO. WI-477-151-7.

SCALE 1"=200'

PLATE NO 4



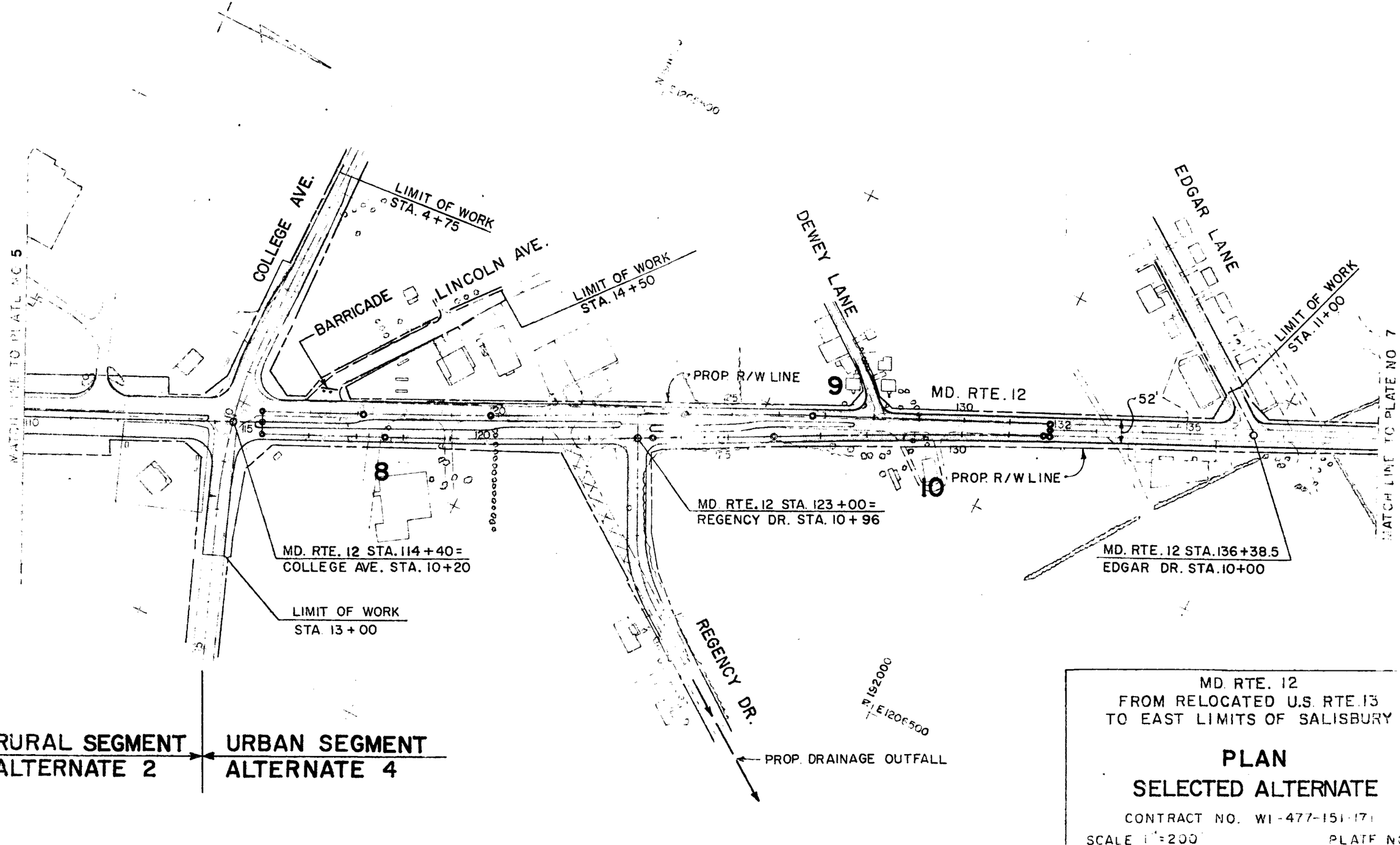
MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
SELECTED ALTERNATE

CONTRACT NO. WI-477-151-171

SCALE 1"=200'

PLATE NO. 5



RURAL SEGMENT
ALTERNATE 2

URBAN SEGMENT
ALTERNATE 4

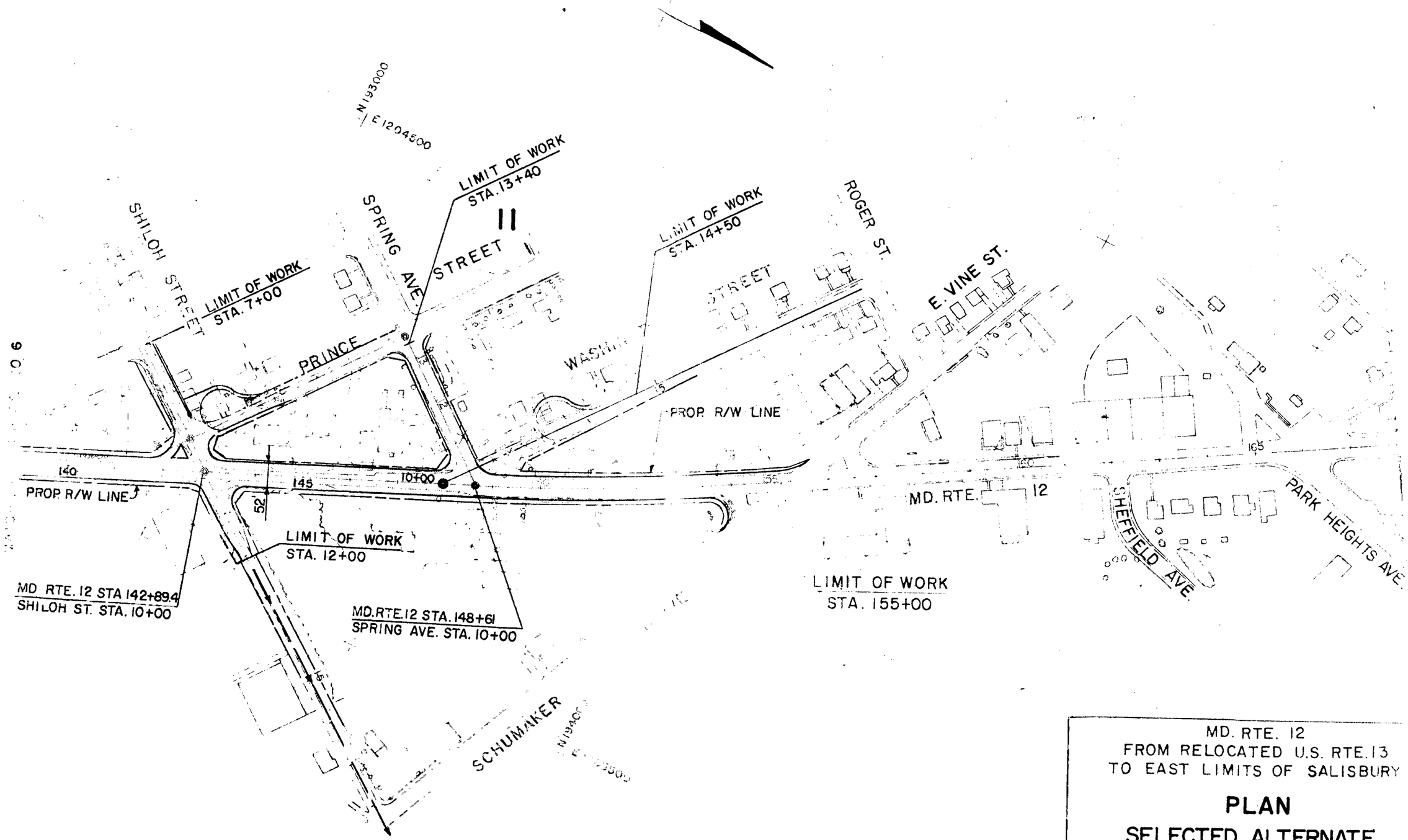
MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
SELECTED ALTERNATE

CONTRACT NO. WI-477-151-171

SCALE 1"=200'

PLATE NO. 6



MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
SELECTED ALTERNATE

CONTRACT NO. WI-477-151-171

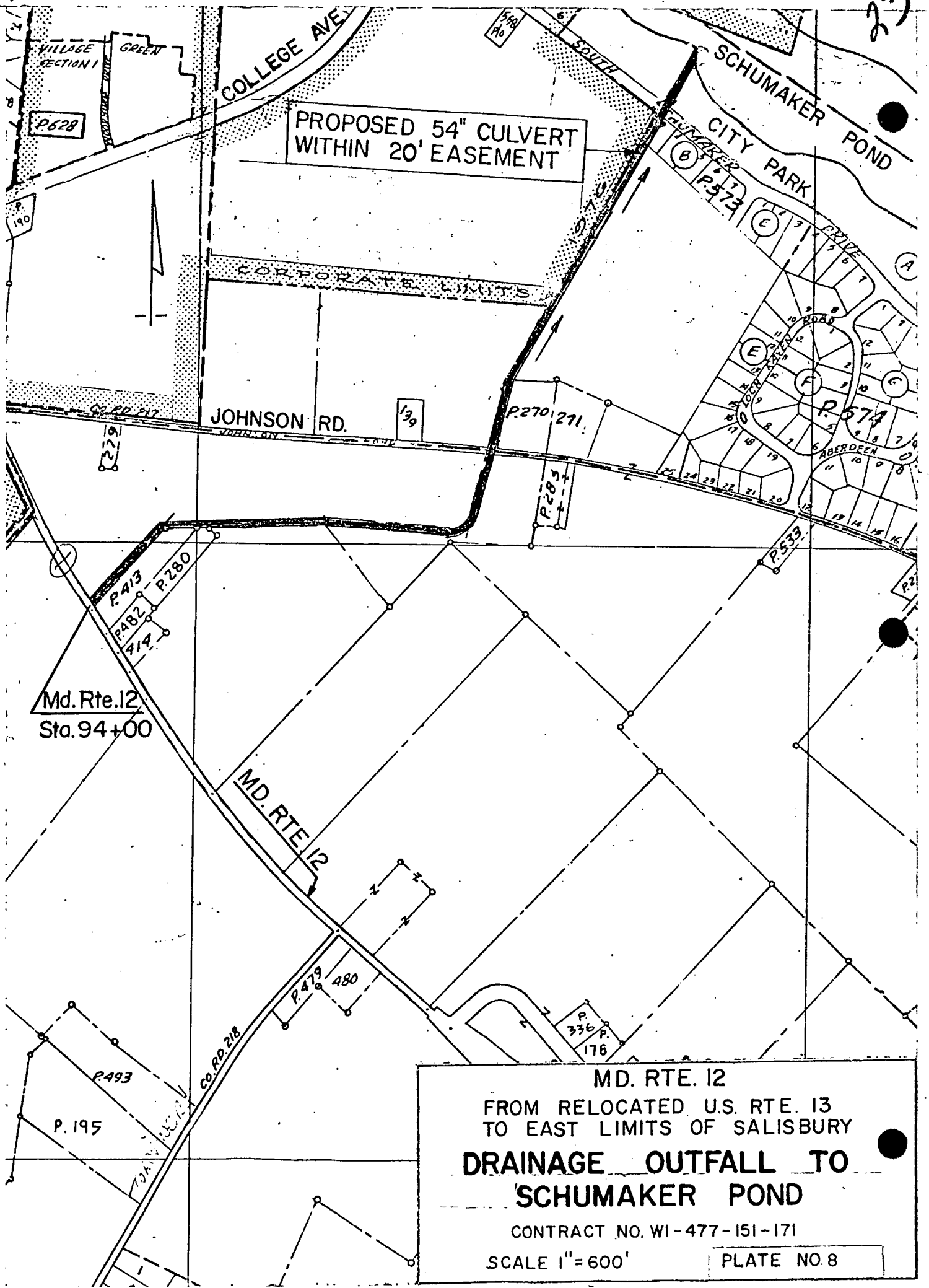
SCALE 1"=200

The roadway surface drainage would be collected in side ditches along both sides of the roadway. From station 78+00, 400 feet north of Toadvine Road, the ditches would drain south and connect with the surface drainage system for U.S. 13. On the west side of Md. 12, ditches from 78+00 to 102+50 or 300 feet north of Robins Avenue, would carry the runoff to a low point just north of the group of three homes on the east side of Md. 12 south of Robins Avenue (Sta. 94+00). On the east side, ditches from 78+00 to Johnson Road would carry the runoff to the same low point at Sta. 94+00. At this point, the flow in both side ditches would be combined and carried easterly in a culvert on a minimum grade to Schumaker Pond. The alignment of this outfall would follow property lines where possible to reduce the impact on existing properties. See Plate 8 following this page.

The runoff between College Avenue and Station 102+50 on the west and Johnson Road on the east would be discharged into the College Avenue drainage system and carried to Beaverdam Creek just north of the dam on Schumaker Pond.

The proposed improvement in the urban section is a 4 lane undivided urban roadway 56 feet wide using the centerline of the existing roadway as the proposed centerline. Bicyclists would be accommodated in the outside lanes of traffic. See Plates 4 to 7.

In keeping with the urban character of the area and in order to minimize property damages along the route, the selected alternate in this section consists of a closed roadway with curb, gutter and sidewalks along both sides. Between College Avenue and Regency Drive, the typical section consists of two 27 foot roadways separated by a 24 foot raised median. A right-turn lane is added to the southbound roadway between Regency Drive and College Avenue. North of Regency Drive, the roadway transitions to a four lane 56 foot undivided urban roadway, using the existing centerline as the proposed centerline in order to minimize property damage. Access would be uncontrolled in this section.



MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

DRAINAGE OUTFALL TO SCHUMAKER POND

CONTRACT NO. WI-477-151-171

SCALE 1"=600'

PLATE NO. 8

The four lane roadway is extended to the intersection of Md. 12 with East Vine Street and Schumaker Drive in order to increase the capacity of the intersection.

College Avenue would be realigned slightly to provide a more direct pathway for vehicles traveling through the intersection on College Avenue.

It is proposed that the connection of Lincoln Avenue to Md. 12 be closed. The proximity of the existing Lincoln Avenue intersection to the College Avenue intersection with Md. 12 would create confusion and possibly congestion at the College Avenue intersection. The officials with jurisdiction over this street have waived the need for a cul de sac at this street closing; therefore only a barricade would be provided.

Regency Drive would be relocated to the north for a short section to improve the angle of skew between Md. 12 and existing Regency Drive which is less than the desirable 70^{o} while maintaining a minimum crossover spacing of 750' from College Avenue.

Prince Street would be closed with a cul de sac at its Shiloh Street end. This would minimize the confusion and congestion at the existing intersection of Prince Street with Shiloh Street which is 60 feet from the intersection of Shiloh Street and Md. Rte. 12. Two families would be relocated by this cul de sac.

Washington Street intersects Md. 12 at a skew angle of only 30 degrees and at the same location as Spring Avenue. As traffic on these roads increases, there would be much confusion among drivers turning at this intersection. Therefore, it is proposed that Washington Street be closed at Md. 12. Many of the businesses having access to Washington Street in this section have front access to Md. 12. Therefore, the closing of Washington Street at Md. 12 would create little inconvenience. Those using Washington Street would have to enter and leave at Roger Street. This dead end street would be approximately 800 feet long with a turnaround near Md. 12 One family would be relocated due to this cul-de-sac. The home on the corner of Spring Avenue has access to Spring Avenue. The second house will have access to the cul-de-sac by means of an access

driveway provided in the existing right of way of Washington Street. See Plate 7. The third house will have direct access to the cul-de-sac.

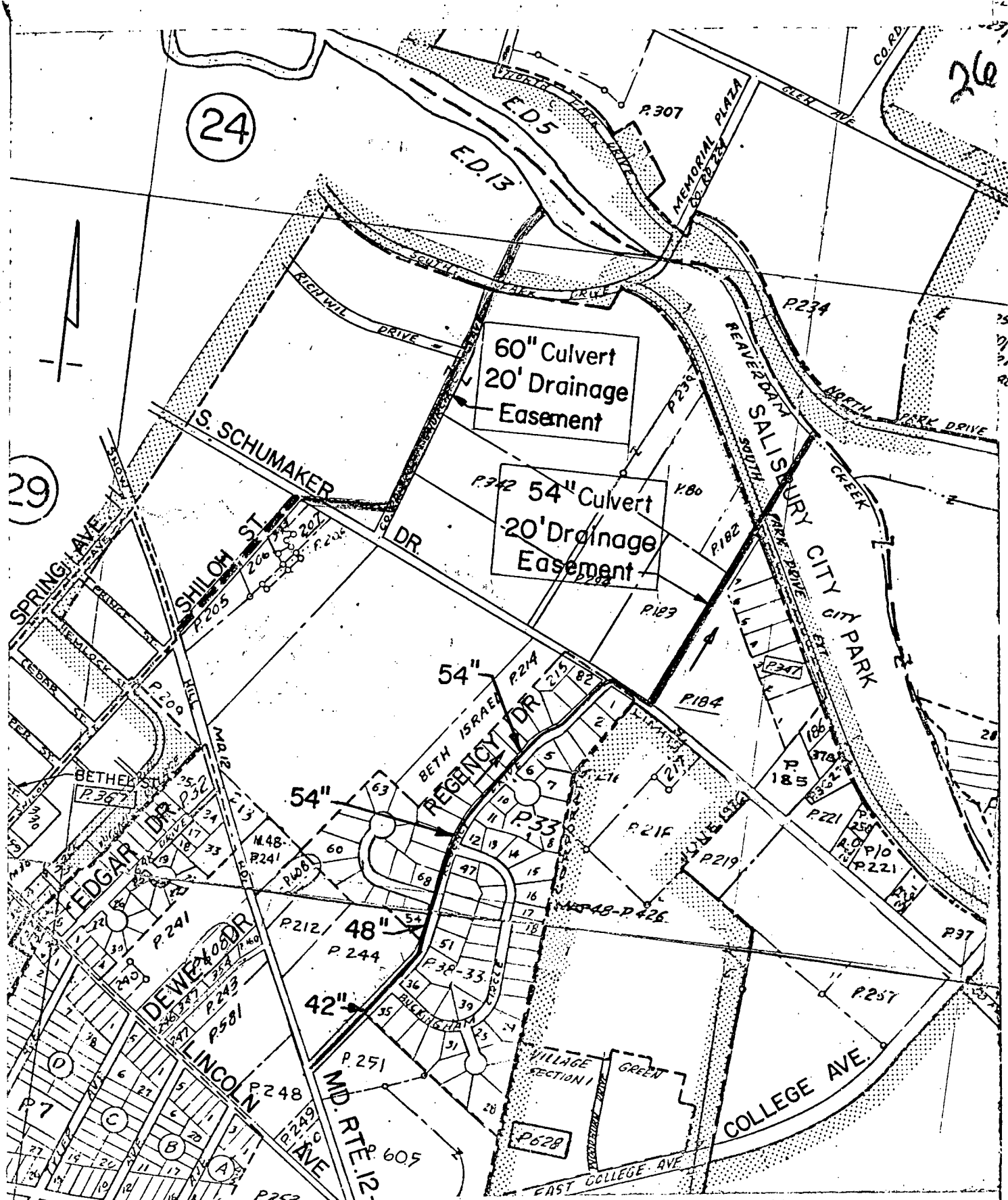
Since this section would provide combination curb and gutter, a longitudinal drainage system would be provided. Construction plans and calculations for the existing and proposed storm drainage systems in the project area were obtained from the Department of Public Works of Wicomico County and the City of Salisbury. It was found that existing storm drain systems are located along College Avenue, Schumaker Drive and Churchill Avenue, all draining into Beaverdam Creek. These systems do not have sufficient capacity to carry additional runoff from Md. 12.

The area from College Avenue to Station 119+50 (400 feet north of College Avenue) would drain back to College Avenue and be discharged into the existing College Avenue system.

From Station 119+50 to the high point at Dewey Lane, the runoff would be carried to an outlet system that would be provided along Regency Drive to Schumaker Drive. The culvert would then pass across vacant land within a permanent drainage easement to outlet into Beaverdam Creek. The exact location of this easement would be determined during the design phase. See Plate No. 9 following this page.

This system would drain the existing low area just north of Regency Drive which has experienced flooding. The storm drainage system for the residential area along Regency Drive would discharge into the outfall storm drain from Md. 12.

From Dewey Lane to Spring Avenue the runoff would drain to Shiloh Street. The City of Salisbury has built a storm drainage system for Wicomico Village and the Salisbury Apartments and connected it temporarily into an existing 36" pipe along Bethel Street. The City is anticipating combining this flow, additional flow from north of College Avenue, west of Md. 12 and south of Shiloh Street and the flow collected along Md. 12 in a common outfall.



MD. RTE. 12
FROM RELOCATED U.S. RTE 13
TO EAST LIMITS OF SALISBURY

DRAINAGE OUTFALLS TO BEAVERDAM CREEK

CONTRACT NO. WI-477-151-171

SCALE 1"=600'

PLATE NO. 9

This common outfall would be located along Shiloh Street to Schumaker Drive, east to Churchill Avenue and along Churchill Avenue to an outfall into Beaverdam Creek just north of the zoo. The final location of this drainage outfall will be determined during the design phase. See Plate 9.

Discussions with the City of Salisbury Department of Public Works will be held to coordinate the development of this system and to determine the appropriate responsibilities of each agency.

A major concern is the flooding of the Beaverdam Creek flood plain which contains the City Zoo and municipal water supply facilities. Therefore, meetings were held with the Maryland Department of Natural Resources (DNR), Water Resources Administration to discuss the potential impact of these proposed drainage outfalls on the Beaverdam Creek watershed. DNR is presently developing a hydrologic study of the entire watershed and has studied the consequences of the proposed outfalls. See the section titled Environmental Effects - Water Quality for discussion and the results of the DNR study. The proposed drainage systems would reduce flooding potential in Beaverdam Run.

All three proposed drainage outfalls pass through park property before discharging into the creek. Therefore, 4(f) land is involved with the outfalls. Twenty foot wide easements would be provided for each drainage outlet.

TRAFFIC CHARACTERISTICS

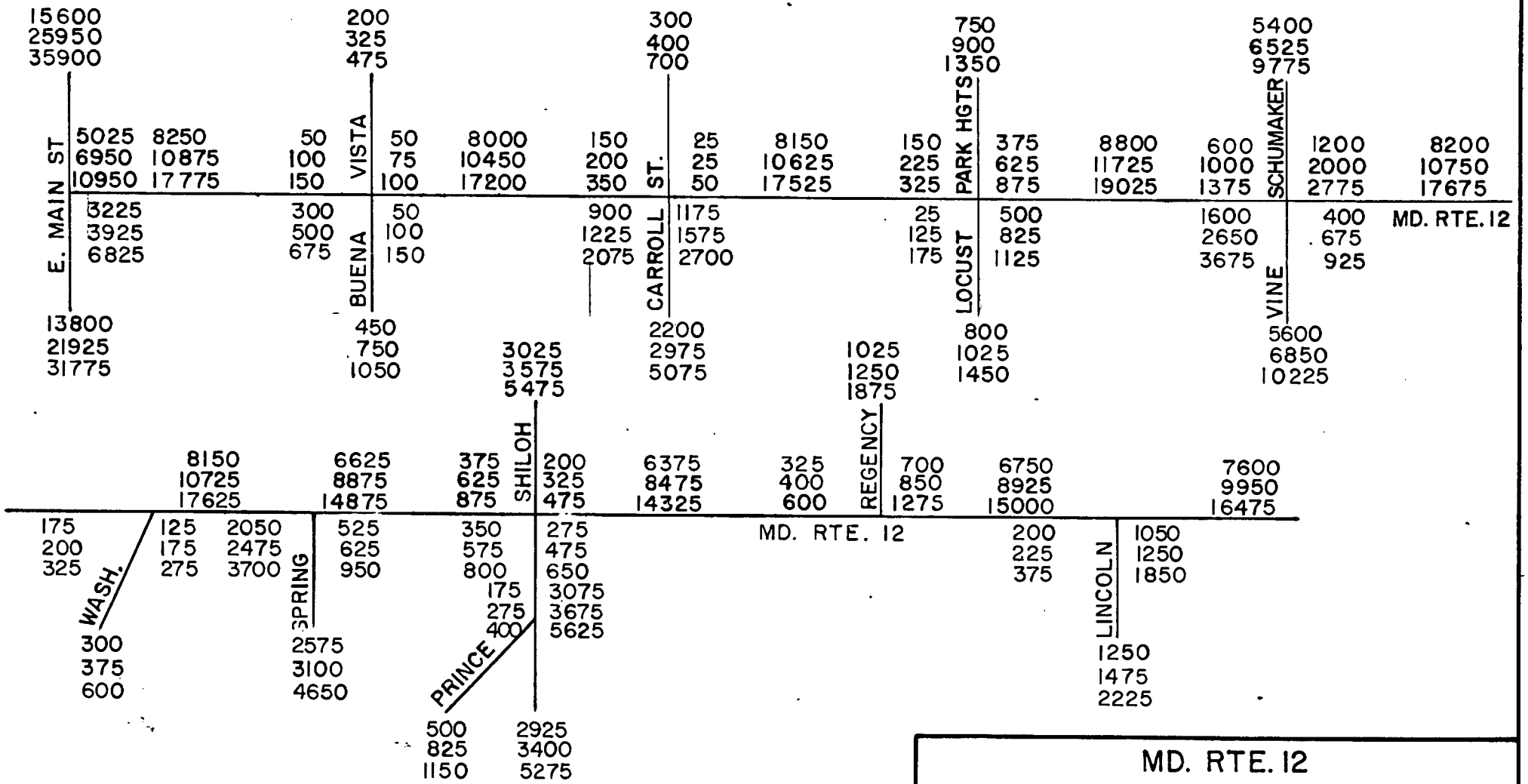
The traffic data contained herein have been developed by the Maryland State Highway Administration, Bureau of Highway Statistics. The traffic projections for the design years reflect the completion of the College Avenue extension to U.S. Rte. 50 and the Carroll Street improvements to Md. Rte. 12. It was found that the capacity of the existing roadway would be exceeded by the design year. However, forecasted traffic volumes are identical, because the amount the volumes exceed capacity in the design year are not sufficient to create diversions to other routes.

See Plates 10 and 11 following this page for the existing and projected traffic volumes. See Table 1 for additional traffic information used in the study. The accident statistics for the project area show an accident rate slightly greater than the statewide average for similar class highways. Two intersections, College Avenue and Shiloh Street, are considered high accident intersections by the State Highway Administration, which means that there were more accidents at this intersection than at 95% of the intersections in the county.

TABLE 1

TRAFFIC DATA

1.	Design Hour Volume	-	9% of ADT
2.	Directional Distribution	-	55%
3.	Percent of Trucks		
	ADT	-	9%
	DHV	-	7%
	Gasoline Powered	-	34% of Total Trucks
	Diesel Powered	-	66% of Total Trucks



MD. RTE. 12

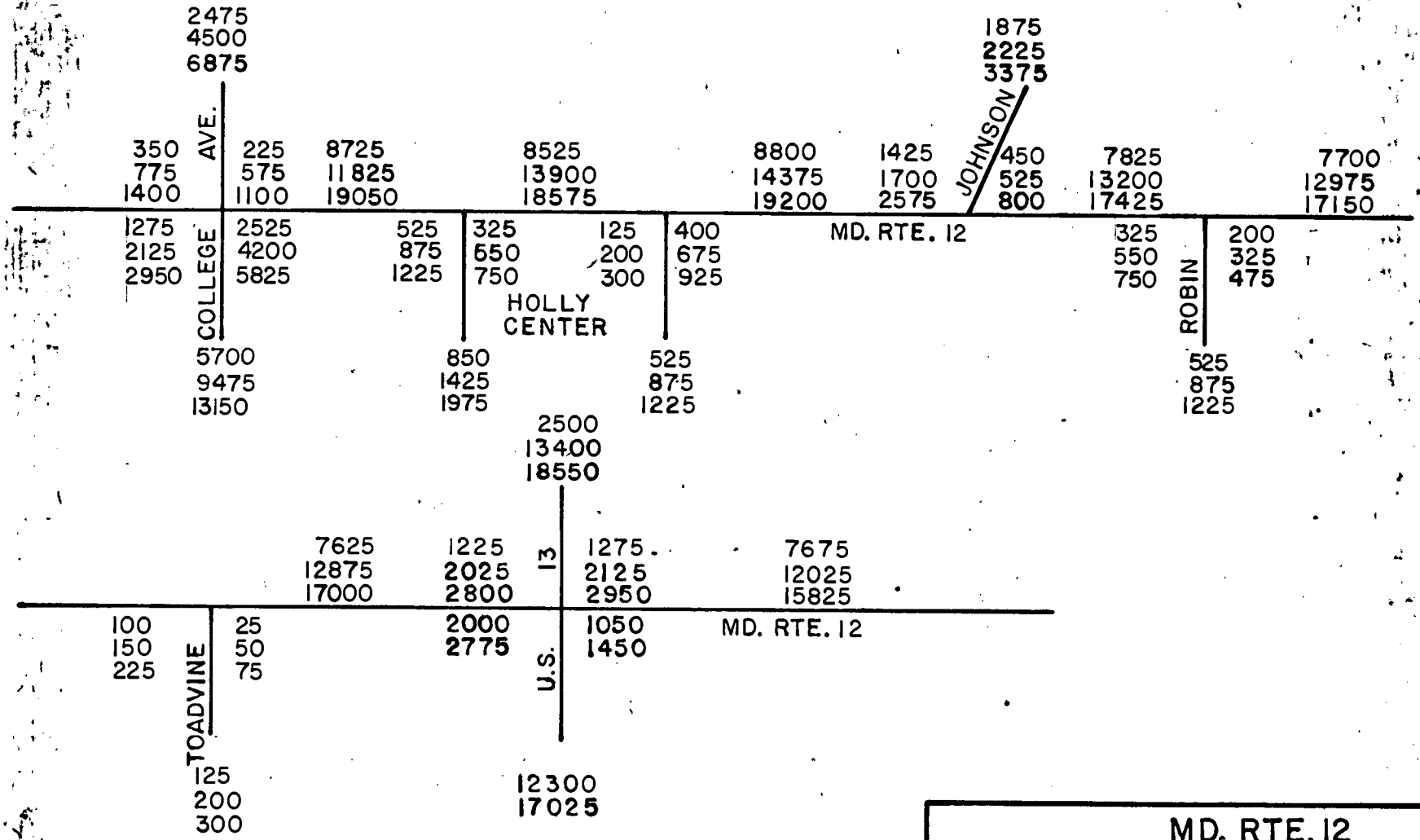
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

TRAFFIC DATA (1)

MD. RTE. 12

CONTRACT NO. W1-477-151-171

NOT TO SCALE PLATE NO. 10



ADT 1984
2004

MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

TRAFFIC DATA (2)
MD. RTE. 12

CONTRACT NO. WI-477-151-171

NOT TO SCALE

PLATE NO. 11

ALTERNATES

Three alternates, including the No Build Alternate, were studied in each project segment, rural and urban. The selected alternate for each segment was described above under Project Description. The remaining alternates are described below.

RURAL SEGMENT

Alternate 1 - No Build

This alternate assumes that no improvements would be made to Md. 12 except normal maintenance. The two-lane roadway with 2 foot shoulders would be maintained. The posted speeds would remain 50 mph between U.S. 13 and Robins Avenue and 40 mph from Robins Avenue to College Avenue.

Reasons for Elimination

1. The accident rate would continue to increase with increased traffic volumes.
2. The air pollution levels at sensitive receptors would be higher than for the Build Alternates in the design year.
3. This alternate is inconsistent with local comprehensive plans for the area.
4. As the traffic volumes increase, the level of traffic service on the roadway would decrease. By the design year capacity would be reached and the traffic operation would be characterized by long delays at signals and overall travel speeds from 25 to 30 mph.

Alternate 3

This alternate would provide a four-lane divided highway from U.S. 13 to College Avenue. The typical section for this alternate consists of two twenty-seven foot urban roadways with curb and gutter on both sides separated by a raised median of

24 feet. Four-foot sidewalks would be provided on the outsides of both roadways. The minimum right of way required for this section is 98 feet plus slope easements. The noise monitoring sites described under Project Description would be provided under this alternate also.

The alignment of Alternate 3 is almost identical to that of Alternate 2 except that, due to the narrower right of way required, the roadway can be located closer to the historic farmhouse and still not require the acquisition of the structure.

Bicyclists would be accommodated by widening the outside lane to fourteen feet from the centerline to the curbline. The use of this lane would be shared by bicyclists and motorists. No separate bike lane would be provided.

The concept for the drainage system is identical to that described under the recommended alternate. The runoff from Relocated U.S. 13 to 400 ft. north of Toadvine Road (Sta. 78+00) would be carried south to discharge into the drainage system for U.S. Rte. 13. From Station 78+00 to 300 feet north of Robins Avenue, (Station 102+50) on the west and Johnson Road on the east, the runoff would be carried to the low point just north of the group of three homes on the east side of Md. 12 south of Robins Avenue, (Station 94+00). The runoff north of these points would be discharged into the College Avenue system. However, this alternate would consist of a longitudinal drainage system rather than open ditches. This system would consist of inlets along the curbs connected by pipes carrying the runoff to the outfall points described above, and would involve higher velocities and higher peak discharges at Schumaker Pond or Beaverdam Creek. The two-year storm was used for inlet spacing and the 10-year storm for the sizing of the pipes.

Reasons for Elimination

1. The closed drainage system would have a greater impact on Schumaker Pond than that proposed under the selected alternate.

2. The closed roadway section is not in keeping with the rural character of the area.
3. There would be no recovery area for stalled or out of control vehicles or storage area for snow.
4. Bicyclists must share the roadway with vehicles.
5. The estimated construction costs are higher for Alternate 3 than for the selected alternate.

URBAN SEGMENT

Alternate 1 - No Build

This alternate would consist of maintaining the existing two-lane roadway with two-foot unpaved shoulders from College Avenue to Spring Street. Between Spring Street and E. Main Street, the roadway is 40 feet wide with curb and gutter on both sides. The alignment is straight with both residential and commercial development occurring along both sides of the roadway.

Reasons for Elimination

1. The increased traffic volumes would create congestion and cause delays at the signals since the roadway would be operating close to capacity in the design year. The travel speeds would be approximately 15 mph due to congestion.
2. The high accident rate would continue to increase with increased traffic volumes.
3. The air pollution levels at sensitive receptors would be higher than for the Build Alternate in the design year.
4. This alternate is inconsistent with local comprehensive plans for the area.

Alternate 5

This alternate is identical to the recommended alternate, Alternate 4, with respect to alignment, intersecting roads and drainage systems. Between College Avenue and Regency Drive, the proposed roadway consists of two 27-foot roadways separated

by a 24-foot raised median as described in Alternate 4. North of Regency Drive, the roadway transitions to a 5-lane, 64-foot undivided urban roadway, using the existing centerline as the proposed centerline.

The center lane of the five-lane roadway would serve as a continuous left-turning lane to facilitate access to the commercial establishments along the roadway and to reduce the conflicts between turning and through traffic. This fifth lane facilitates smoother traffic operation and increases the capacity of the roadway over that provided by the four-lane alternate, Alternate 4, by removing the left turning vehicles from the through lanes and eliminating any backups in the through lanes caused by vehicles waiting to turn left. The through lanes would only be used by through movements, thereby reducing the number of vehicles using these lanes and the delays encountered.

Reasons for Elimination

1. The additional right of way requirements for this alternate would encroach on the adjacent properties more than the selected alternate, creating more property damage.
2. This alternate would cost approximately 10% more than the recommended alternate.

BASIS FOR SELECTION OF SELECTED ALTERNATES

As mentioned previously, the urban and rural sections were studied independently. Any alternate in either section could be combined with any alternate in the adjacent section to provide the complete project. Alternate 2 was chosen in the rural section and Alternate 4 in the urban section. The reasons for these selections are described below:

RURAL SECTION

1. An open section is in keeping with the present rural character of the area. As the corridor develops, curb and gutter could be added to provide an urban roadway.
2. The open drainage system of side ditches allows for lower velocities and seepage into the permeable soils.
3. The construction costs of this alternate are significantly less than those of Alternate 3.
4. This alternate is consistent with local and regional plans.
5. The recovery area beyond the pavement provides a refuge for disabled and out of control vehicles and a storage area for plowed snow.
6. The paved shoulder provides an area for bicyclists separated from the travel way of the vehicles and facilitates law enforcement programs such as noise monitoring and radar checks.

URBAN SECTION

1. The four-lane roadway would substantially increase the capacity of the existing roadway.
2. The closed roadway section would provide sidewalk for pedestrians in this urbanized area.
3. The improvements to the intersecting roads would reduce congestion and confusion for those using these intersections.

4. The drainage system would provide control of surface runoff and reduce flooding potential.
5. This alternate is consistent with local and regional plans.
6. This roadway section would require less construction cost, right of way acquisition and property damage than Alternate 5.

PROJECT HISTORY AND NEED

PROJECT HISTORY

The proposal for improvements to Md. Rte. 12 from the interchange of Md. Rte. 12 and Relocated U.S. 13 to the east limit of the City of Salisbury first appeared in the "1971-1990 Twenty Year Highways Needs Study". It also appeared in the "1974-1978 Secondary Highway Program".

The project is included in the "Consolidated Transportation Program, 1979-1984" in the Secondary Highway Program for Wicomico County. It is also included in the Md. Transportation Plan as a category 1 project which means that funds for construction are included in the Consolidated Transportation Program.

A recommendation for improvements to Md. Rte. 12 is also included in the draft "Comprehensive Plan for Wicomico County, Maryland". The subject roadway is also mentioned as a "pressing circulation problem" in the "Salisbury Metro Core Comprehensive Plan", adopted on December 27, 1976.

Public meetings were announced in local papers and on local radio stations and were held in Salisbury in October of 1977 and July of 1978 and 1979 to solicit comments and suggestions concerning the proposed improvements as they were being developed. The comments received at these meetings are included in the Comments and Coordination Section of this document.

NEED

As described above, the need for improvements to Md. Rte. 12 has been recognized for several years. Md. Rte. 12 is classified a minor arterial because it serves as a direct link between Salisbury and Snow Hill and because it is used as a major segment of Salisbury's street system.

The Salisbury-Wicomico Economic Development Corporation has described the southeast quadrant of the city as the fastest growing sector of the Salisbury metropolitan area.

This growth will be accelerated by the provision of the complete interchange of Relocated U.S. Rte. 13 and Md. Rte. 12. This growth results in increased traffic volumes on existing Md. Rte. 12 creating congestion and its consequent higher accident rates and delays to motorists.

The Salisbury Metro Core Comprehensive Plan proposes the land along Md. Rte. 12 out to the U.S. Rte. 13 interchange be developed as medium density residential, light business and institutional or commercial. The exisiting zoning map shows medium and low density residential zoning, R-15 and R-20, between Relocated U.S. Rte. 13 and College Avenue. The adjacent land north of College Avenue is zoned commercial. These zoning and land use plans indicate that the development occuring along this corridor will be continuing in accordance with local planning goals and that the present agricultural uses will be replaced. This transition from agricultural to commercial and residential uses suggests increased traffic on the facility in the future.

The projected traffic volumes show that the existing rural roadway would reach capacity by the year 2001. However, by the year 1981, the existing 2 lane roadway beyond the city limits would reach level of traffic service D during peak hours. This traffic operation is marginally acceptable for a rural highway, and is defined as unstable flow with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Travel speeds would be between 30 and 35 mph due to congestion. Significant development along the Md. Rte. 12 corridor could accelerate this deterioration of traffic service beyond that predicted by the projected traffic volumes.

The existing intersection at Spring Avenue and Maryland Rte. 12 would operate at level of service D in the design year during the peak hours. This level of service is characterized by substantial delays during short peaks within the peak periods.

The rate of accidents experienced on Md. 12 between U.S. 13 and E. Main Street from January, 1972 to October, 1977 was 651 accidents per 100 million vehicle miles (100 M.V.M.) of travel. The statewide average for all similar class highways now under state maintenance is 630 accidents/100 M.V.M. The existing accident rate produces accident costs accrued by the motorists and the general public of $2,910,000/100 M.V.M. between U.S. 13 and College Avenue and costs of $2,980,000 between College Avenue and E. Vine Street. The selected alternates would decrease these accidents and their respective costs. Two intersections, College Avenue and Shiloh Street, have been designated High Accident Intersections and, as traffic volumes increase on the existing roadway, this accident rate is expected to increase. Intersections are considered high accident locations if there are more accidents at these locations than at 95% of the intersections in the county.

The existing urban roadway north of Vine Street to E. Main Street is 40 feet wide with curb and gutter on both sides. Operating as a two-lane urban roadway, capacity would not be reached by the design year. Due to the lower posted speed, more traffic can be accomodated without the drivers feeling restricted. Therefore, the existing roadway is sufficient to accomodate design year traffic within the city limits. In addition, this roadway could operate as a three lane roadway with the center lane used for left turning traffic if parking were eliminated. This would further increase the capacity of this section of roadway.

The greatest obstacle to commuter traffic along Md 12 within the city is the railroad underpass on E. Main Street west of Md. 12. E. Carroll Street is being constructed to relieve this traffic between E. Carroll Street and E. Main Street and serve as an alternate route to downtown.

Eventually the section between E. Vine Street and E. Main Street will also warrant some improvement such as widening 10 feet to a four-lane facility.

BASIS FOR NEGATIVE DECLARATION

A Negative Declaration is a document that records the determination that the implementation of the proposed project would not have a significant effect upon the quality of the environment as it presently exists.

The major effect of the project would be the improvement of traffic service on Md. Rte. 12 in the project area. None of the adverse effects described in the Environmental Effects Section are significant with respect to their degree of impact on the environment. It appears, therefore, that the project would have an overall beneficial effect on the environment of the project area.

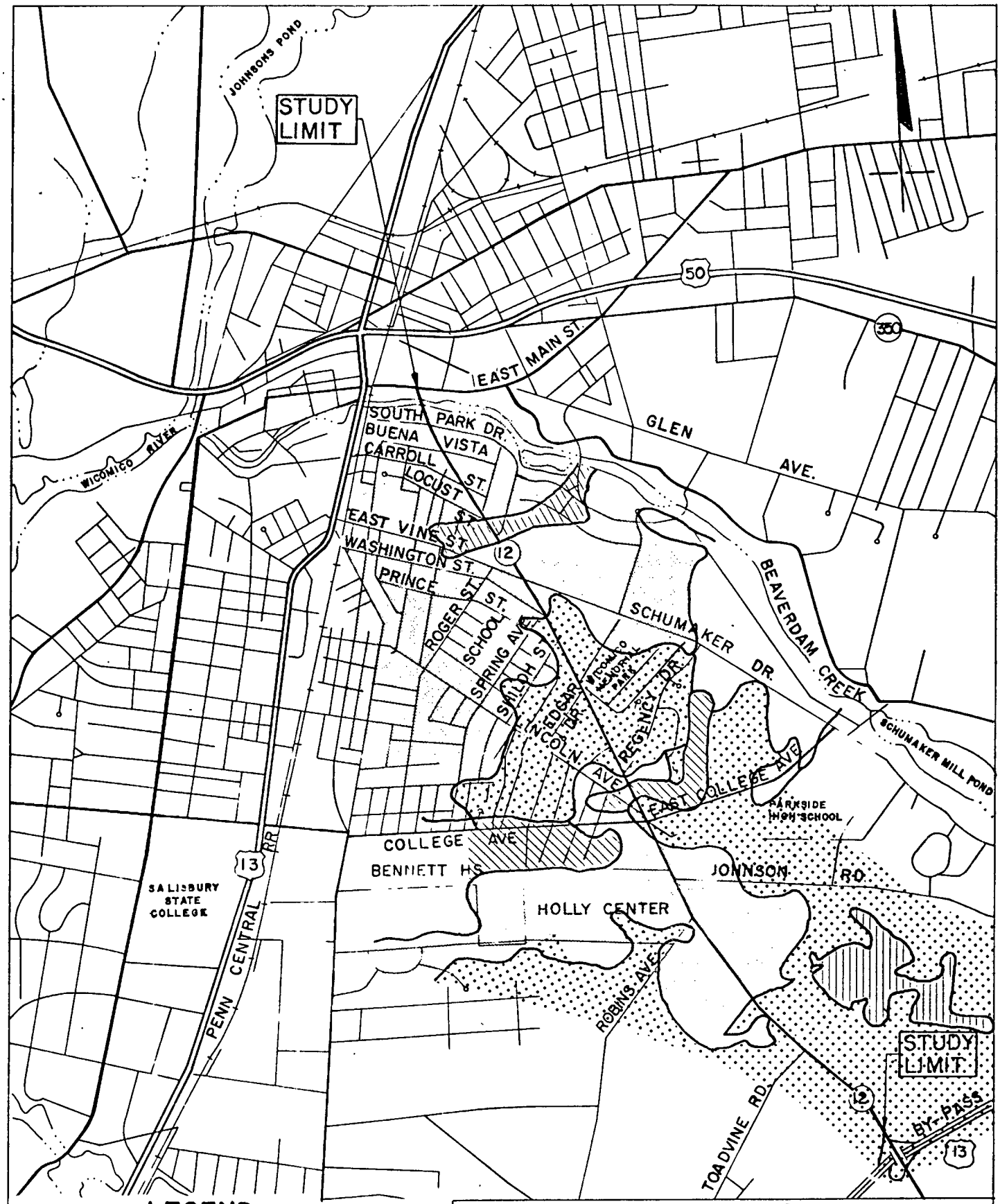
GEOMORPHOLOGICAL CONDITIONS

The terrain in the project area is essentially level, with slopes between 0 and 5 percent. The existing roadway lies on an ill-defined ridge sloping gradually away from Md. Rte. 12 on both sides. The entire area is within the Eastern Shore Division of the Coastal Plain Physiographic Province, with elevations ranging from approximately 30 to 40 feet above sea level.

Ground water depths to the seasonally high water table in upland areas are from 0 to 10 feet or more. In upland depressions, this depth varies from 0 to 3 feet. Minor flooding has occurred along the existing roadway. Provisions will be incorporated in the design of the project for effective control of surface and subsurface water. Such controls will include, but not limited to, vertical grade adjustments, pipe and shoulder drains, pervious drainage media, spring controls and well and drainage field adjustments or relocations.

Depths to rock are undetermined, but should be great within this geologic formation. Power equipment should be sufficient to meet excavation needs.

The soils types found throughout the project area are generally loamy sands. See Plate12 following this page. The Matawan loamy sand consists of various layers of loamy sand, sandy clay loam, clay loam and sandy clay up to a depth of 60 inches. The soil is less suited for crops than finer textured soils and is droughty in dry weather. Therefore, the Matawan soil is susceptible to blowing and requires irrigation in dry spells. These soils have moderate seepage, low to moderate available moisture capacity and are erodible. The rate of infiltration is medium to rapid.



LEGEND

- MATAWAN LOAMY SAND
- NORFOLK LOAMY SAND
- EVESBORO LOAMY SAND
- MATAWAN SANDY LOAM

MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

SOILS MAP

CONTRACT NO. WI-477-151-171

SCALE 1" = APPROX. 3/8 MI. PLATE NO. 12

The Norfolk loamy sand consists of loamy sands, sandy loams and clayloams to a depth of about 60 inches. The soil is well suited to most crops even though the soil is limited by low available moisture capacity and moderately low fertility. These soils are characterized by very deep water tables, moderate seepage and rapid infiltration. They are only slightly erodible.

Evesboro loamy sand is highly susceptible to soil blowing and is generally not used for crops except perhaps watermelons and cucumbers. These soils have very rapid infiltration, excessive seepage and fair stability.

WATER QUALITY

The existing roadway of Md. Rte. 12 lies along a ridge line with the ground sloping away from the roadway with slopes of 0 to 5% and minor depressions and high points. Therefore, there are no streams crossed by the highway except Beaverdam Creek at the intersection of Md. Rte. 12 and E. Main Street. The terrain slopes towards the west to Tony Tank Creek which lies about one and a quarter miles to the west. To the east, the terrain slopes towards Beaverdam Creek which is about three-quarters of a mile to the east.

Beaverdam Creek has been dammed for flood control and recreation, forming Schumaker Pond, which is used for swimming as part of the City Park of Salisbury. Downstream of the dam, Beaverdam Creek flows through the zoo site before it crosses Md. Rte. 12. Sixteen wells, a treatment plant and the main pumping station serving the municipal water supply system are located in the floodplain of the stream. Presently, periodic flooding of this area threatens the water supply through well contamination. The waters of the creek flowing through the zoo site and the park are low velocity, turbid and fertile. There are no wetlands within the study area affected by the project.

The waters of Beaverdam Creek are classified as Class I, Water Contact Recreation and Aquatic Life, by the Water Resource Administration of the Maryland Department of Natural Resources. Table 2 describes the water quality as determined by an analysis of the stream in July of 1978.

TABLE 2

WATER QUALITY OF BEAVERDAM CREEK AT MD. 12

Temperature	71°F.
Visible Light Penetration (Secchi disk)	4 ft.
Dissolved oxygen	9 mg/l
CO_2	3.75 mg/l
Nitrogen	1.1 mg/l
NH_3	1.4 mg/l
NO_2	3.6 mg/l
NO_3	5.0 mg/l
NaCl	100 mg/l

VEGETATION

South of College Avenue, the land adjacent to the existing roadway is used predominantly for agricultural crops such as soybeans, truck crops, corn and some grain. These fields are usually bordered with thin covers of grasses, weeds and some hedgerows consisting of perennials, sumac, sassafras, choke cherries, etc..

North of College Avenue, there are some agricultural crop fields, mostly soybeans and some vacant lots containing grasses and weeds. Three vacant lots contain second growth hardwoods, brush and grasses. Most of this section is urban in character.

Schumaker Pond is typical of shallow freshwater impoundments on the Eastern Shore. Surrounding the pond there are stands of mixed hardwoods and pitch pines. In the pond, there are various forms of algae, rushes, eel grass and water lilies. These species prevail throughout the length of Beaverdam Creek downstream of the dam except that species more adapted to streams, such as eel grass, are favored. There are no rare or endangered species in the project area.

WILDLIFE

The animal species associated with agricultural fields are found in these habitats and include voles, mice, shrews, rabbits, chipmunks and gray squirrels. Some deer, oppossums, raccoons and foxes occur. Birds such as doves, bobwhites, owls and hawks are found. Reptiles such as box turtle, black corn, king, pine snakes, black racers and copperhead could also be found in the project area. No rare or endangered species were encountered or reported to inhabit the project area. Densities of population of the resident species are generally low which is common to agricultural fields and urban areas. The overall site quality of the project area relative to wildlife value is generally poor to fair due to the frequency of disturbances due to agricultural activity and the urban character of much of the area.

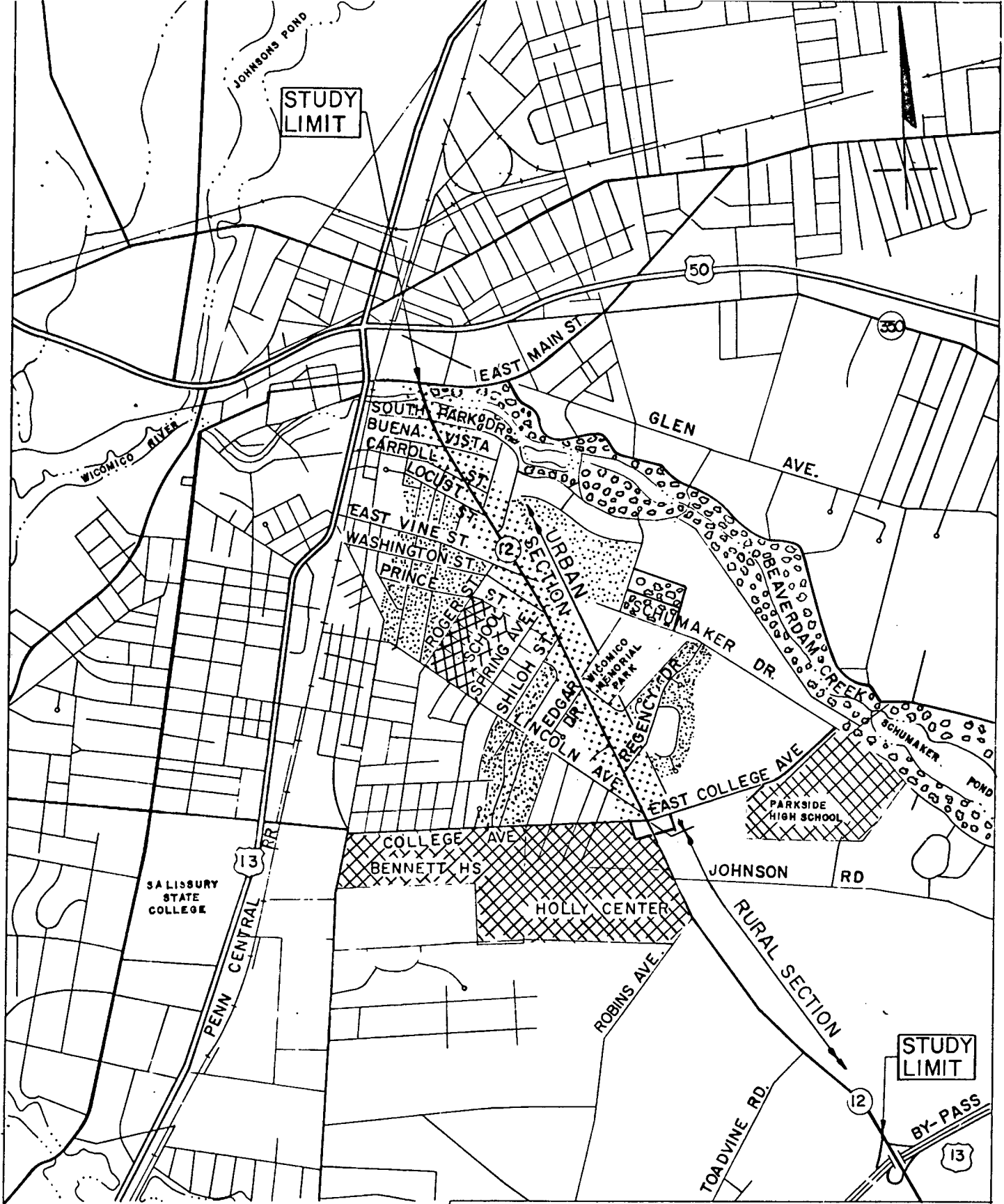
The aquatic and semi-aquatic fauna of Beaverdam Creek and Schumaker Pond are typical of Wicomico County freshwater streams and include such species as largemouth bass, pickerel, trout, bullheads, carp, bluegills, sunfish, crappies, minnows, shivers and daces. Amphibians include toads, frogs, turtles and water snakes. Birds include waterfowl and shorebirds. Muskrats are also found along the Creek.

PLANNING AND LAND USES

South of College Avenue, the predominant land use is agricultural. See Plate 13 following this page. Several residences are located along Md. Rte. 12 between U.S. 13 and College Avenue. Holly Center, a state institution for the mentally retarded, is located on the west side of Md. Rte. 12 between Robins Avenue and College Avenue. On the south corners of College Avenue, there are two commercial establishments; a farm store and a gas station.

The zoning south of College Avenue along Md. Rte. 12 is significantly different from the existing land uses except for Holly Center and the commercial properties on the corner of College Avenue which are zoned institutional and commercial, respectively. The property on the west side of Md. 12 between Robins Avenue and Toadvine Road is zoned R-15, residential, which allows lots of 15,000 S.F. or greater. From Johnson Road south on the east side of Md. Rte. 12 and from Toadvine Road south on the west side, the zoning is R-20, residential, or minimum lot sizes of 20,000 S.F.

The proposed land uses for the area along Md. Rte. 12, according to the Salisbury Metro Core Comprehensive Plan, would involve more intensive development than that allowed under the present zoning. See Plate 14 following this page. The land between Johnson Road and Toadvine Road on the east and Robins Avenue and Toadvine Road on the west would be developed as medium density residential, (6-10 dwelling units per acre). The area between Toadvine Road and Relocated U.S. Rte. 13 along both sides of the roadway is proposed as light business and institutional, which could include such uses as offices, clinics, nursing homes, religious institutions. Retail sales establishments would be excluded from this district.



LEGEND

- PUBLIC SCHOOLS AND INSTITUTIONAL
- PARKS
- COMMERCIAL
- RESIDENTIAL
- AGRICULTURE

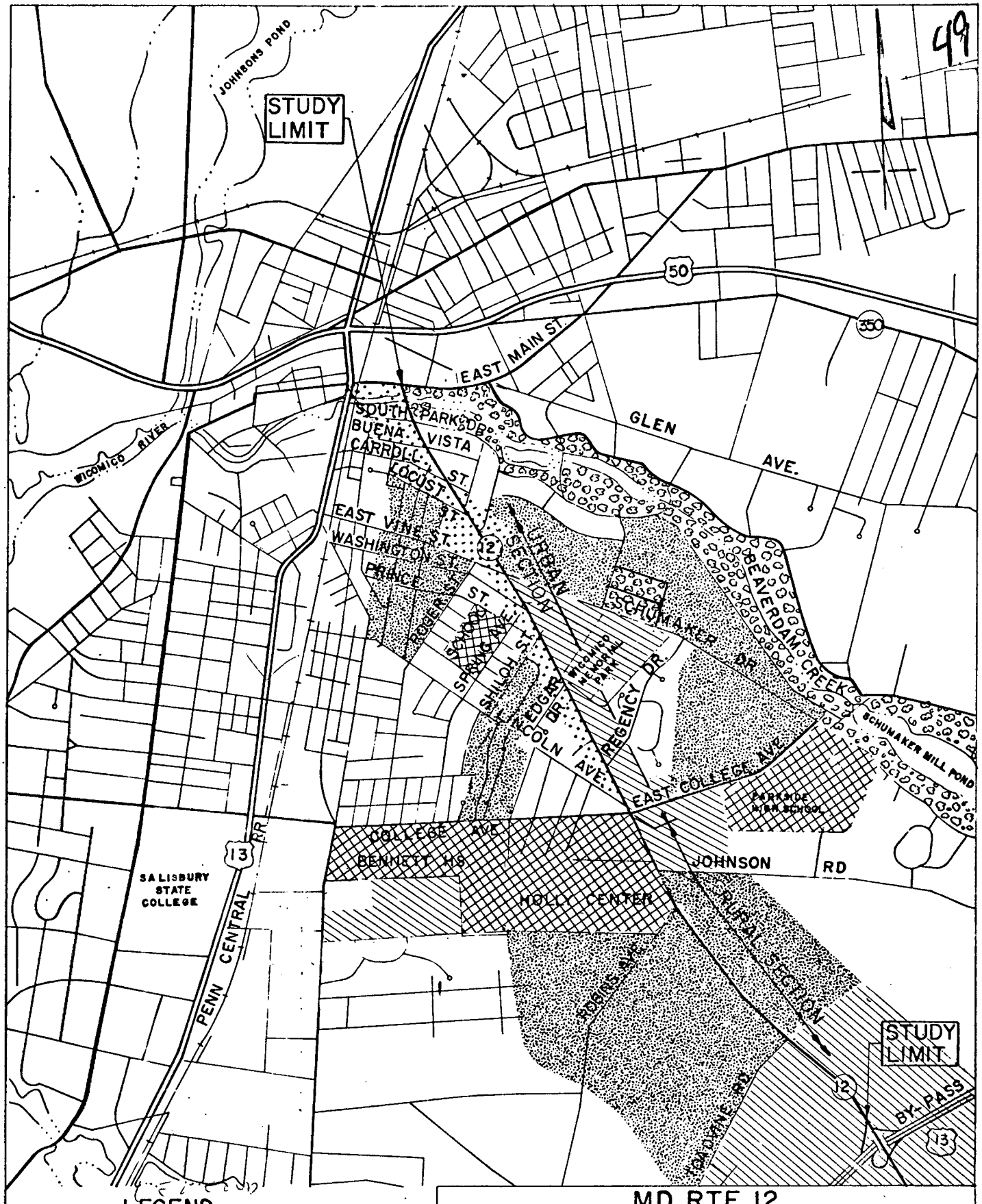
MD. RTE. 12

FROM RELOCATED U.S. RTE. 13..
TO EAST LIMITS OF SALISBURY

EXISTING LAND USES

CONTRACT NO. WI-477-151-171

SCALE 1"=APPROX. 3/8 MI. PLATE NO. 13



LEGEND

- RESIDENTIAL (MEDIUM DENSITY)
- RESIDENTIAL (LOW DENSITY)
- LIGHT BUSINESS AND INSTITUTIONAL
- PUBLIC SCHOOLS AND INSTITUTIONAL
- COMMERCIAL (HIGHWAY ORIENTED)
- PARKS

MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PROPOSED LAND USES

CONTRACT NO. WI-477-151-171

SCALE 1"=APPROX. 3/8 MI. PLATE NO. 14

North of College Avenue, the existing land uses range from agricultural to residential and commercial. The predominant use is commercial and the density of development increases towards the City. This corridor is completely zoned commercial and the new development occurring along the route is commercial. The proposed land use for this corridor north of College Avenue, as shown in the Salisbury Metro Core Comprehensive Plan, is also commercial.

COMMUNITY FACILITIES

There are no facilities for emergency services such as police, fire or ambulance located on Md. 12 within the project study area. No churches are located within the study limits.

Several schools are within a short distance of Md. Rte. 12 within the study limits. Prince Street Elementary School is located within one block of Md. Rte. 12 at Spring Avenue. Parkside High School is located approximately 2000 feet east of Md. Rte. 12 along College Avenue. James M. Bennett Junior and Senior High Schools are located approximately 2000 feet west of Md. Rte. 12 along College Avenue.

Holly Center for the mentally retarded is located just south of College Avenue on the west side of Md. 12. This center serves the community with many programs for day-time students and other community organizations. There are 225 residents and approximately 100 out-patients per day at the center. There are 327 state employees and 100 volunteers and other employees.

The City Park of Salisbury extends along Beaverdam Creek from Md. 12 upstream to Schumaker Pond. This park includes a zoo and other recreational facilities such as tennis courts, baseball diamonds, swimming and picnic areas. The swimming area is at Schumaker Pond. For details on this park, see the section on 4(f) Involvement.

HISTORIC AND ARCHEOLOGICAL SITES

Historic Sites

A survey was performed in the project study area by the Maryland Historical Trust to identify any sites of historic significance. There are no sites listed on the National Register or eligible for the National Register within the study area. Several sites are considered to be of a local inventory level of significance. These sites are shown on Plate 15 following this page, and are described below:

1. White frame - late 19th century farmhouse with unpainted gambrel barn.
2. White house with asbestos shingles, late Greek Revival frame.
3. White frame house, 1920's or earlier.
4. Regionally typical white farmhouse.
5. White frame farmhouse.
6. Morris family cemetery.

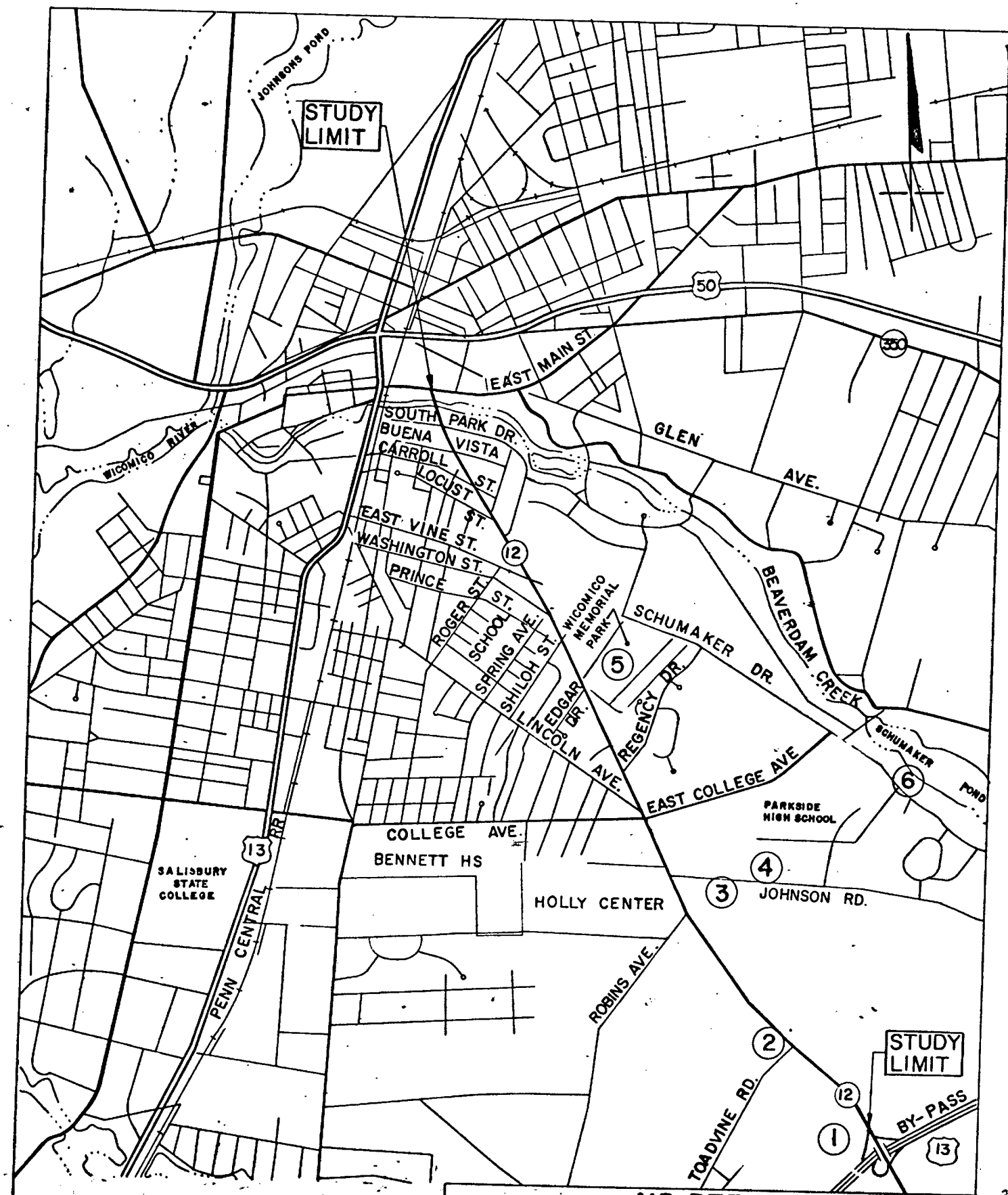
Archeological Sites

An archeological reconnaissance was performed for the study area in order to determine the actual or probable existence of significant arecheological remains. The results indicate that there are no known sites or sites likely to contain archeological remains within the area affected by the project.

SOCIO-ECONOMIC FEATURES

Population Characteristics

The growth trends of the County, Metro Core and City of Salisbury population are shown in Table 3. These projections were made by the Maryland Department of State Planning and Salisbury - Wicomico County Planning and Zoning Commission.



LEGEND

① Historic Site

See text for description of sites

MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

HISTORIC SITES

CONTRACT NO. WI-477-151-171

SCALE 1"=APPROX. 3/8 MI. PLATE NO. 15

TABLE 3

POPULATION TRENDS

	1970	% Co. Pop.	1980	% Change	% Co. Pop.	1990	% Change	% Co. Pop.
City of Salisbury	15,252	28	17,650	16	29	18,800	7	26
Metropolitan Core	34,710	64	39,040	12	65	44,000	13	61
Wicomico County	54,310	100	60,490	11	100	72,200	19	100
County non-white Population	11,550	21	11,740	2	19	12,790	9	18

These trends indicate that the City of Salisbury and the metropolitan area will continue to increase in population, but at a slower rate.

Employment

Agriculture is becoming less important to the county's economy than in the past. Manufacturing and trade account for over half the employment in the county. This trend is projected to continue in the future and is consistent with the prediction that the farming area in the project corridor will be developed into commercial or residential uses in the future.

ENVIRONMENTAL EFFECTS

AIR QUALITY

General

An analysis was performed to assess the potential impact on the air quality associated with the various alternates studied for the proposed improvements to Md. Rte. 12 and the No Build Alternate. This analysis consisted of two separate anaylses dealing with different aspects of air quality and is available at the Maryland State Highway Administration, 301 West Preston Street, Baltimore, Maryland 21201.

The first analysis deals with carbon monoxide (CO) concentrations in the vicinity of the existing and proposed facilities and is referred to as the "near field" analysis. Traffic data, emission data, meteorological conditions and roadway conditions all have an influence on the pollutant concentrations produced in the area.

The second type of analysis, referred to as the "burden" analysis, determines the amounts of various vehicle-related pollutants generated by each alternate. The variables used in this analysis were traffic data, emission data and roadway length. The burden of each pollutant and alternate were determined in tons per day. These burdens were then compared for the alternates studied to indicate the relative pollutant loads produced.

Two years were established as study years for this project; the estimated time of completion (ETC) which was assumed to be 1984 and ETC plus twenty years, or 2004. These two years were used because emission characteristics of vehicles and traffic volumes are continually changing. The design year of the roadway is 2004 and reflects long-term impacts. 1984 describes the immediate impact of the project on the area.

National Ambient Air Quality Standards were established by the Environmental Protection Agency (EPA) for carbon monoxide concentrations and are shown on Table 4. The estimated concentrations along the right-of-way of the proposed project are compared to these standards.

TABLE 4

NATIONAL AMBIENT AIR QUALITY STANDARDS FOR CO

Level not to be exceeded more than once per year		Averaging Period
40 mg/m^3	35 ppm *	1-hour
10 mg/m^3	9 ppm *	8-hour

* ppm - parts per million

Near Field Analysis

A computer model called HIWAY, developed by the EPA, was used to predict the pollutant concentrations created at various distances from the road by each alternate being studied and the No Build Alternate. The receptors chosen for study are shown on Plates 4 through 7 following page 3.

The computer program, MOBILE I, developed by EPA, was used to determine the emission rates for various travel speeds and design years, assuming the age distributions for Baltimore for light duty vehicles. National averages for truck age distributions were used.

Two conditions were analyzed for each alternate. First, the concentrations were modeled for the Design Hourly Volumes (DHV). The DHV were assumed to be 9% of the ADT and represent the one-hour peak concentrations.

The average concentrations of CO were also determined for the highest 8-hour period during the day for all alternates for both design years. To obtain these 8-hour averages, hourly traffic volumes as described by the diurnal curve

were modeled. Two meteorological conditions were used to describe the worst conditions over an 8-hour period. The highest 8 consecutive hourly concentrations were selected to arrive at the 8 hour average.

Background concentrations of 5 ppm for the one-hour period and 2 ppm for the 8-hour averages were assumed for this project. The basis for these assumptions are included in the technical air quality report.

The results of these studies are shown in Table 5. The near-field analysis of CO concentrations in the project corridor showed that the selected alternate in the rural section would produce some advantages over the No Build Alternate. Alternate 2 would produce lower CO concentrations than the No Build Alternate at all receptors studied for both study years 1984 and 2004. This results from the higher travel speeds anticipated with the selected alternate since emission rates of CO decrease with increased travel speeds. Alternate 2 results in a decrease in CO concentrations of from 20 to 50 percent from the No Build levels.

In the urban section the results are slightly different. For the analysis of 1984 conditions the travel speeds are identical for all alternates, including the No Build Alternate. Alternate 4 provides a wider pavement than the No Build along the same existing centerline. This wider pavement allows traffic to pass closer to the receptors producing higher concentrations for the selected alternate than the No Build Alternate.

In the design year 2004, increased traffic volumes would cause a decrease in travel speeds with the No Build Alternate. No reduction in travel speeds would occur on Alternate 4. This reduction in travel speeds on the No Build Alternate creates higher pollutant concentrations at the receptors

despite the fact that the selected alternate allows traffic to pass closer to the receptors. Therefore, Alternate 4 creates a beneficial effect on air quality in the project area in the design year. This reduction in concentrations amounts to from 15 to 30 percent of the No Build levels.

No violations were found of either the one-hour or eight-hour average standards for any of the alternates analyzed.

Pollutant Burden

Table 6 describes the results of the burden analysis performed for the recommended alternate and the No Build. The No Build Alternate consistently produces more carbon monoxide and hydrocarbons (HC) burden than any of the selected alternates. The recommended alternates realize a reduction in pollutant burdens of from 0 to 25% of the No Build levels for these pollutants.

Alternate 2 produces more nitrogen oxides (NOX) burden than the No Build Alternate since the nitrogen oxides emission rate increases with increased travel speed. The increase in emissions is from 15 to 20% for Alternate 2 over the No Build Alternate.

Alternate 4 shows a higher burden of nitrogen oxides than the No Build Alternate only for the design year 2004. The burdens shown for 1984 are essentially identical since the travel speeds are identical for all alternates. The increase in nitrogen oxides in 2004 is approximately 15% for the recommended alternate over the No Build Alternate.

The study area falls within the Eastern Shore Intrastate Air Quality Control Region. Currently, no violations of national standards are being measured in this region.

The project is consistent with the State Implementation Plan. The consistency of the project in relation to construction activities was addressed through consultation with the Maryland Bureau of Air Quality and Noise Control. The State Highway Administration has established Specifications for Materials, Highway, Bridges and Incidental Structures which specify procedures to be followed by contractors involved in State work. The Maryland Bureau of Air Quality and Noise Control has reviewed these Specifications and has found them consistent with the Regulations Governing the Control of Air Pollution in the State of Maryland.

The technical air analysis was submitted to the Maryland Bureau of Air Quality and the U.S. Environmental Protection Agency for review and comment. Both agencies concurred in the procedures used and had no objections to further development of the project.

See the letters dated January 18, 1979 and October 27, 1978 in the Comments and Coordination Section.

TABLE 5

TOTAL CO CONCENTRATIONS

59

RECOMMENDED ALTERNATE AND NO BUILD

		1 Hr. Peak*				8 Hr. Average			
		1984 (ppm)		2004 (ppm)		1984 (ppm)		2004 (ppm)	
	Receptor	Select. Alt.	No Build	Select. Alt.	No Build	Select. Alt.	No Build	Select. Alt.	No Build
1	Sta 66± Rt Dwelling	-	7.24	-	6.38	-	3.25	-	2.62
2	Sta 73± Lt Dwelling	6.49	6.89	5.80	6.33	2.78	3.06	2.42	2.60
3	Alt 2 Edge of R/W	6.82	-	5.99	-	2.96	-	2.52	-
4	Sta 79± Lt Dwelling	6.70	7.69	5.90	6.89	2.72	3.50	2.47	2.85
5	Alt 3 Edge of R/W	-	-	-	-	-	-	-	-
6	Sta 93± Rt Dwelling	6.32	7.14	5.72	4.50	2.69	3.20	2.38	2.67
7	Sta 102± Lt Holly Center-Cottage 100	6.63	6.84	5.88	6.29	2.86	2.66	2.46	2.58
8	Sta 119± Rt Moose Lodge	6.44	6.30	6.03	6.24	2.76	2.68	2.54	2.59
9	Sta 128± Lt Dwelling	7.71	7.48	6.70	7.43	3.42	3.30	2.89	3.16
10	Sta 129± Rt Dwelling	7.51	6.86	6.90	6.79	3.32	2.98	2.99	2.86
11	Sta 149± Lt School	5.59	5.60	5.37	5.52	2.31	2.30	2.19	2.25
12	Sta 153± Funeral Home	9.80	9.72	8.07	9.63	4.52	4.48	3.61	4.31
13	Dwelling 40' from Centerline Md. 12	14.72	14.72	11.05	11.05	5.38	5.38	4.59	4.59
14	Dwelling 34' from Centerline Md. 12	15.28	15.28	11.40	11.40	5.58	5.58	4.74	4.74
15	City Park 90' from R/W Md.12	8.60	8.60	7.24	7.24	3.25	3.25	3.03	3.03

* National Standards are 35 ppm for 1-hour peaks and 9 ppm for 8-hour averages The concentrations for the 1-hr. peak include 5 ppm background CO concentrations and the 8-hr. average values include 2 ppm background.

TABLE 6

POLLUTANT BURDEN

(Tons/day)

	CO		HC		NOX	
	1984	2004	1984	2004	1984	2004
Selected Alternate 2	.182	.1075	.0206	.0105	.0515	.0404
No Build	.196	.1412	.0224	.0151	.0455	.0337
Selected Alternate 4	.144	.0850	.0159	.0090	.0275	.0219
No Build	.144	.1106	.0159	.0126	.0267	.0193

NOISE

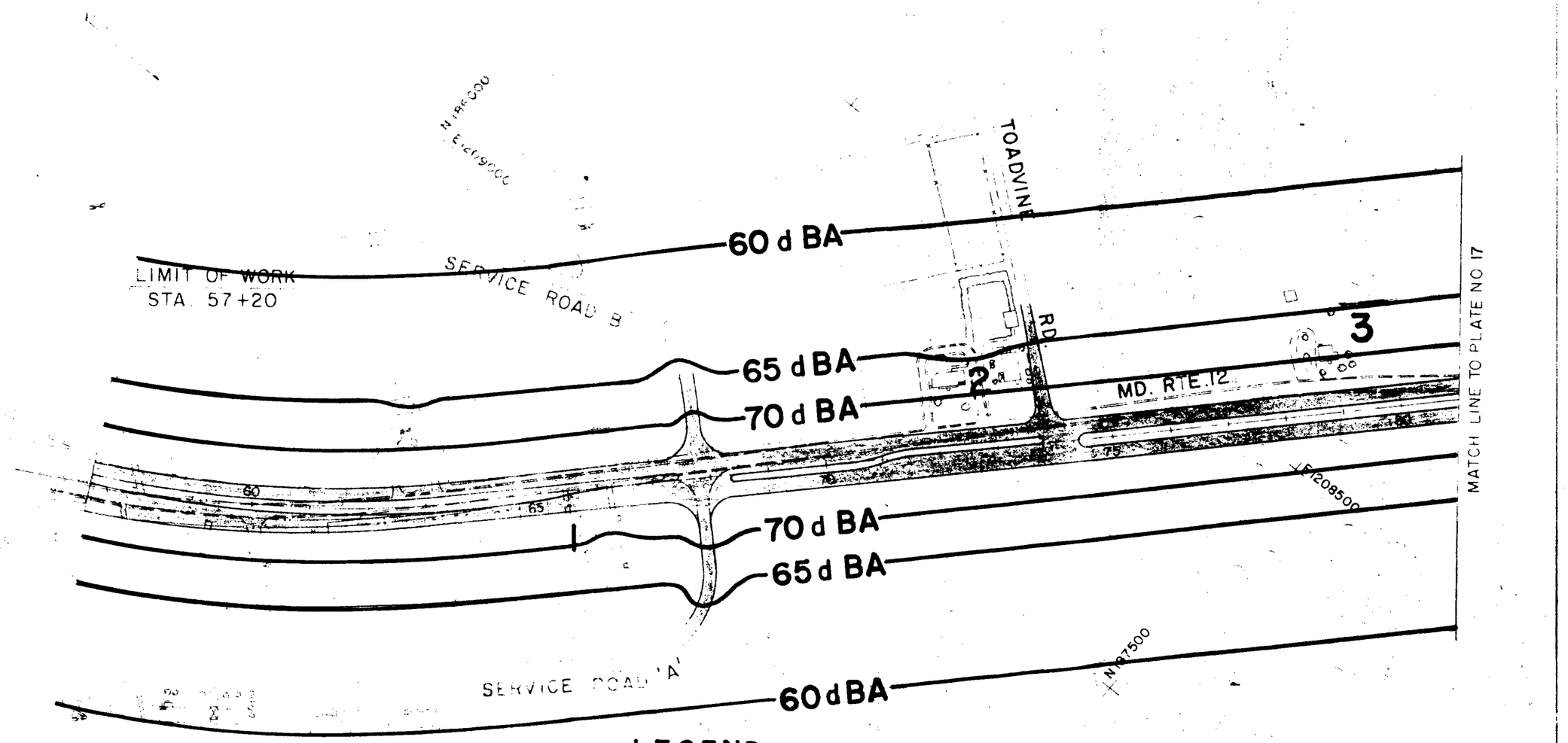
A noise analysis was prepared to assess the impact of the various alternates studied on the noise levels in the project area of the proposed improvements to Md. Rte. 12. These alternates are all analyzed for the design year, 2004, traffic conditions.

The project corridor was studied to determine the locations of any sensitive noise receptors that could be affected by noise from the proposed highway. These "Noise Sensitive Areas," or receptors, include dwellings adjacent to the roadway, Holly Center, parks, schools and commercial establishments and are shown on Plates 16 through 20 following this page. The land uses at each receptor were noted to determine the highest noise level acceptable.

The Federal Highway Administration has developed Design Noise Levels for various land use categories. These design noise levels represent the maximum noise levels acceptable for the particular land use involved. If predicted noise levels are higher than these design levels, noise abatement methods should be investigated. These Design Noise Levels are shown on Table 7.

Ambient noise measurements were taken at the receptors to establish the existing noise environment and to provide a basis for comparison with anticipated noise levels from the proposed highway project. The differences between ambient and predicted levels of noise is also a measure of the noise impact of the roadway. The L_{10} noise levels were determined, which are the noise levels that are exceeded only 10% of a given time period at that location.

Traffic data were supplied by the State Highway Administration and are shown on Plates 10 and 11. With the use of the Highway Capacity Manual, speeds were determined for the projected traffic on the route.



LEGEND

2	NOISE RECEPTOR
— 70 d BA —	NOISE CONTOUR
	EXISTING ROADWAYS
	PROPOSED EDGE OF ROADWAY
	PROPOSED CENTERLINE

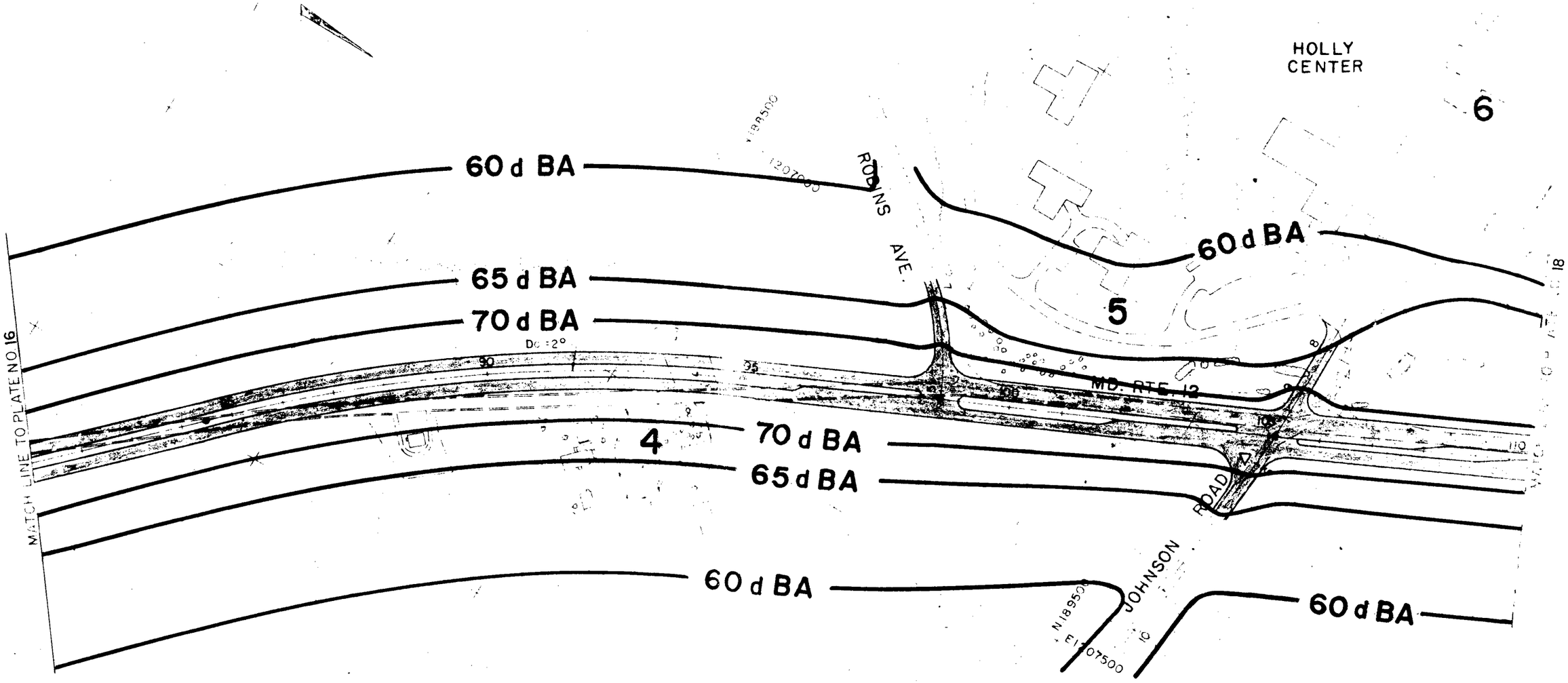
MD RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN MD. RTE. 12 NOISE CONTOURS

CONTRACT NO. WI-477-151-171

SCALE 1"=200'

PLATE NO 16



LEGEND

2	NOISE RECEPTOR
—70 d BA—	NOISE CONTOUR
- - - - - - - -	EXISTING ROADWAYS
———	PROPOSED EDGE OF ROADWAY
80	PROPOSED CENTERLINE

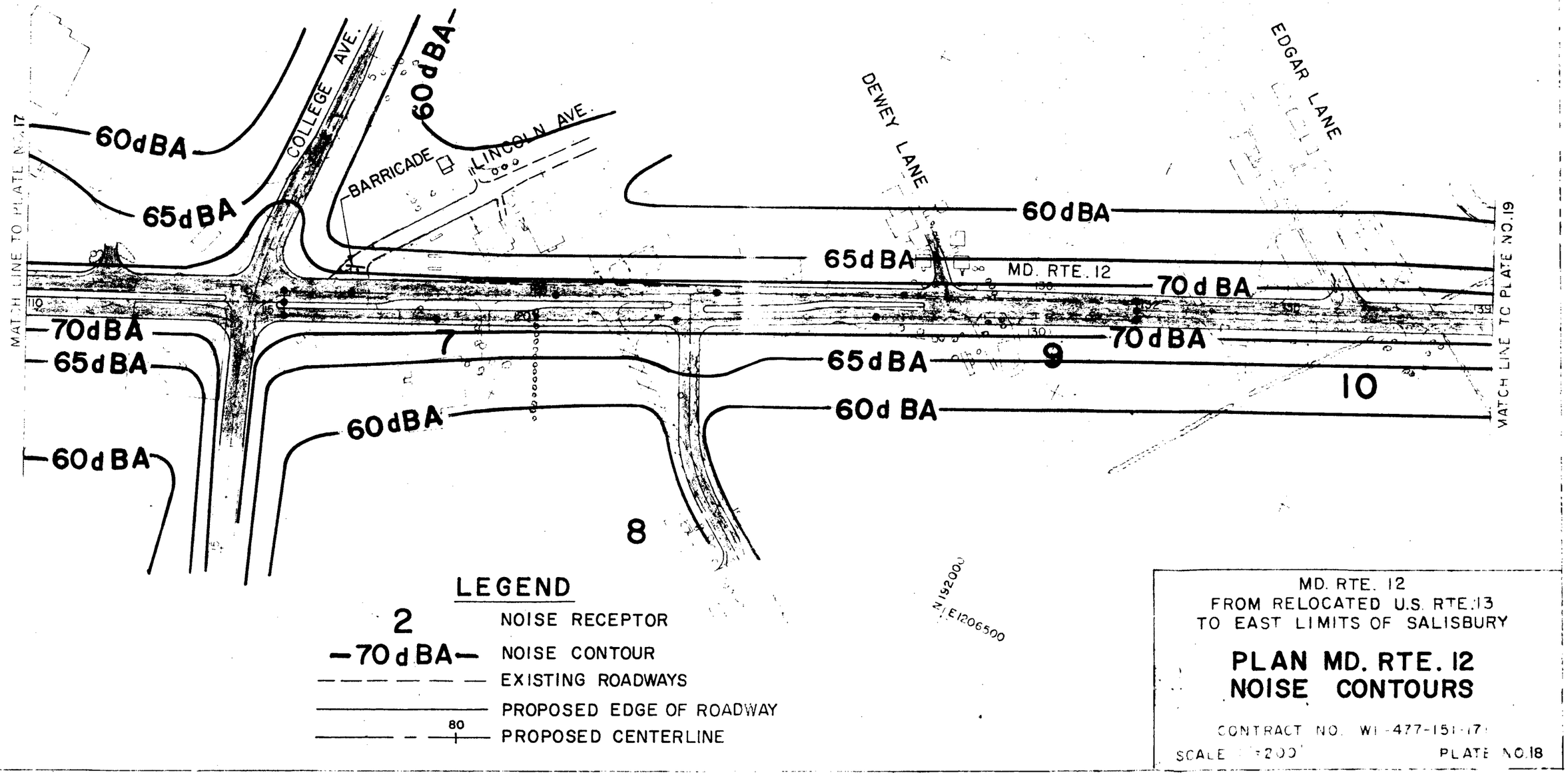
MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN MD. RTE, 12 NOISE CONTOURS

CONTRACT NO. WI-477 151 171

SCALE 1"=200

PLATE NO 17



LEGEND

2 NOISE RECEPTOR

—70dBA— NOISE CONTOUR

EXISTING ROADWAYS

PROPOSED EDGE OF ROADWAY

80 PROPOSED CENTERLINE

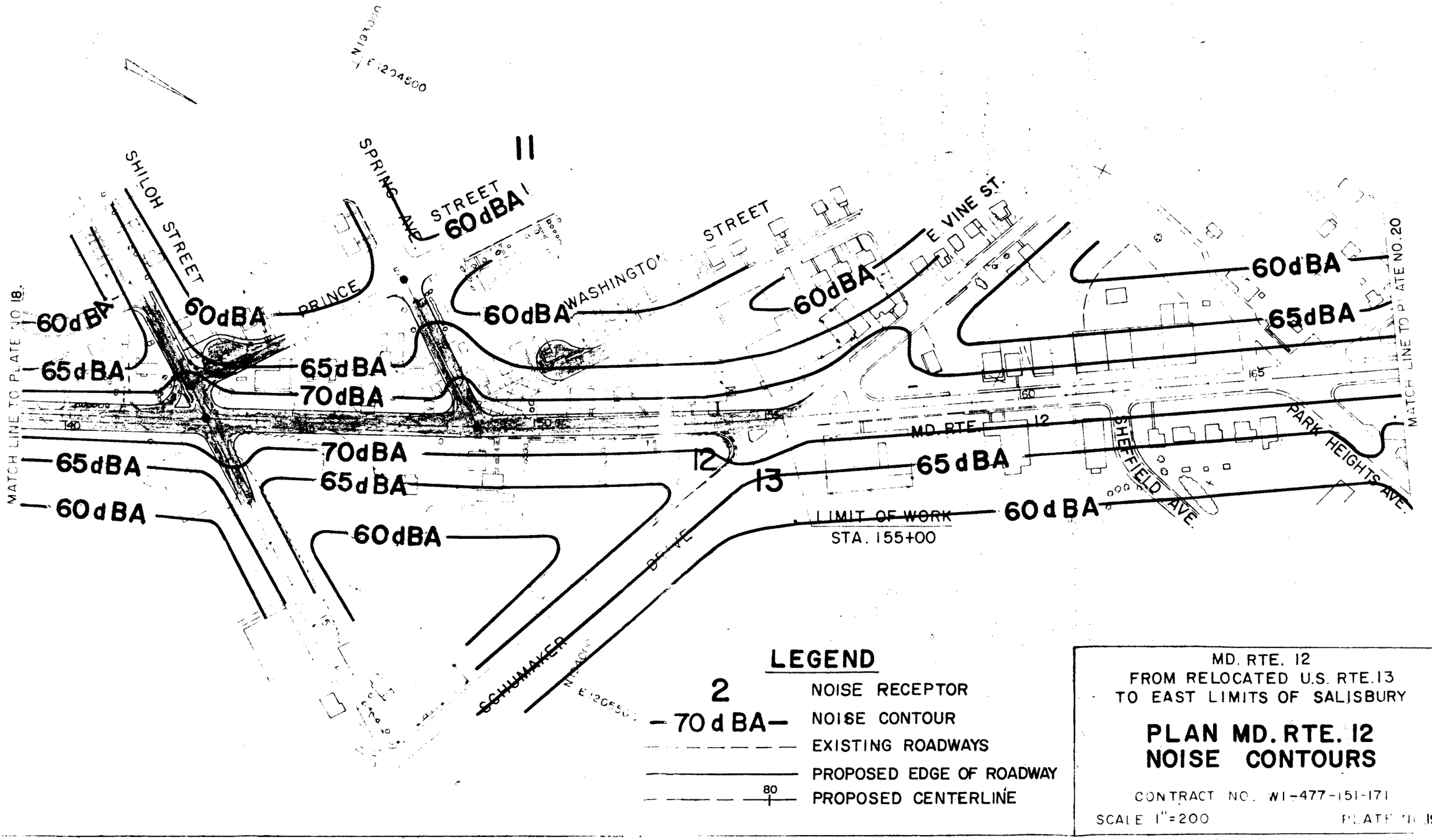
MD. RTE. 12
FROM RELOCATED U.S. RTE.13
TO EAST LIMITS OF SALISBURY

PLAN MD. RTE. 12 NOISE CONTOURS

CONTRACT NO. WI-477-151-17

SCALE 1"=200'

PLATE NO.18



LEGEND

2	NOISE RECEPTOR
—70dBA—	NOISE CONTOUR
- - - - - - - -	EXISTING ROADWAYS
———	PROPOSED EDGE OF ROADWAY
— — — 80	PROPOSED CENTERLINE

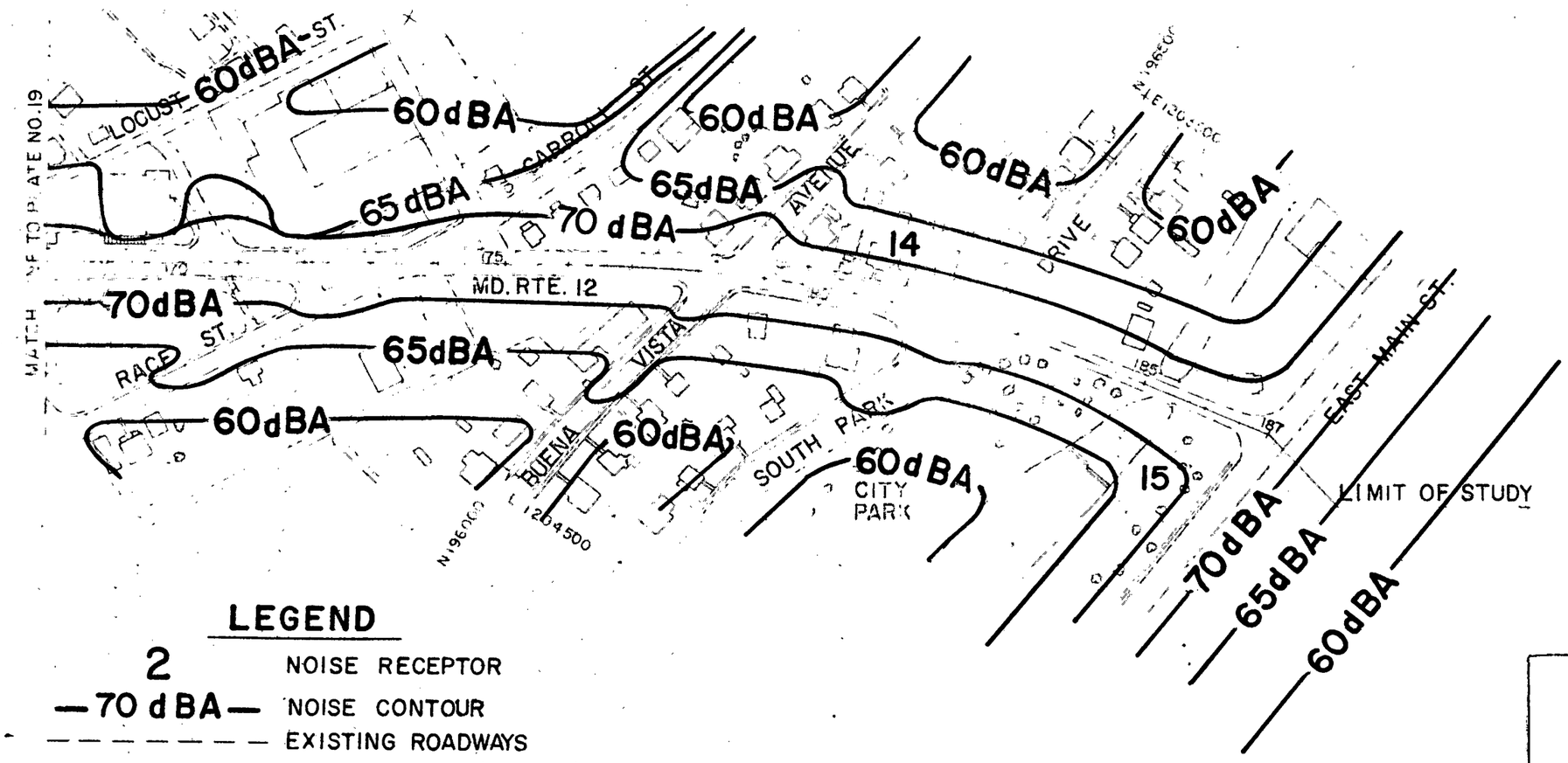
MD. RTE. 12
FROM RELOCATED U.S. RTE.13
TO EAST LIMITS OF SALISBURY

PLAN MD. RTE. 12 NOISE CONTOURS

CONTRACT NO. WI-477-151-171

SCALE 1"=200

PLATE NO. 19



LEGEND

- 2 — NOISE RECEPTOR
- —70 dBA— NOISE CONTOUR
- EXISTING ROADWAYS
- PROPOSED EDGE OF ROADWAY
- PROPOSED CENTERLINE (80)

MD. RTE. 12
FROM RELOCATED U.S. RTE.13
TO EAST LIMITS OF SALISBURY

PLAN MD. RTE. 12
NOISE CONTOURS

CONTRACT NO. WI-477-151-171

SCALE 1"=200'

PLATE NO.20

TABLE 7

Design Noise Level/Activity Relationship

Design Noise Levels - dBA		Activity	
Leq(h)[1]	L10(h)[2]	Category	Description of Activity Category
57 (Exterior)	60 (Exterior)	A	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
67 (Exterior)	70 (Exterior)	B	Picnic areas, recreation areas, playgrounds, active sports areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries and hospitals.
72 (Exterior)	75 (Exterior)	C	Developed lands, properties or activities not included in Categories A or B above.
---	---	D	For requirements on undeveloped lands see page 23
52 (Interior)	55 (Interior)	E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.

[1] Leq(h) - The equivalent steady state sound level which would contain the same acoustic energy as the time-varying sound level for a period of one hour.

[2] $L_{10}(h)$ - The sound level that is exceeded 10 percent of a one hour period.

Projections of design year L_{10} noise levels were made utilizing the Federal Highway Administration Noise Prediction Model. This method determines the noise levels produced at a fixed (reference) distance, 15 meters, from the roadway by the projected traffic volumes. A series of adjustments are then applied to these reference levels to account for traffic speed, type of vehicles, distance to receptor, ground surface conditions and barriers.

The predicted noise levels obtained by the method described above were compared to the ambient levels and design noise levels to determine the impact of the project on the noise environment. The following catergories have been established to assist in the determination of impact:

Increase Over Ambient Level	Degree of Increase
0 - 5 dBA	negligible
6 - 10 dBA	minor
11 - 14 dBA	significant
over 15 dBA	severe

Table 8 on page 39 shows the comparisons of the predicted noise levels with the design levels and the ambient levels at the various noise sensitive areas for the selected alternates.

Rural Section

Alternate 2 in the rural section would produce a minor to negligible adverse effect on ambient noise levels.

The L_{10} noise levels at two receptors would exceed the federal design noise levels by 2 to 3 dBA. The L_{10} noise levels at these receptors would exceed the design noise levels for 10 to 15 hours per day during the design year.

The uncontrolled access along Md. 12 and closely spaced driveways preclude the use of noise barriers to reduce the predicted noise levels to below federal design noise levels. In

fact, at receptor No. 2, any barrier along the front of the residence would not produce the required reduction in noise level due to the existing driveways which would interrupt any proposed barrier, thereby reducing substantially its effectiveness. In order to reduce the noise levels by more than 1 dBA a barrier over 6 feet high would be required along the entire front of the property, creating an unacceptable visual and aesthetic barrier for an insignificant reduction in noise levels.

The earth mounds along the front of Holly Center reduce noise levels reaching the buildings by less than 1 dBA. Therefore they cannot be considered noise barriers. The project will not affect these mounds except for minor grading and to relocate the entrance road. Their effectiveness as noise barriers will not be reduced. These mounds serve more as a visual barrier between the road and the buildings for the residents.

Urban Segment

The selected alternate (Alternate 4) would produce a minor to negligible effect on the ambient noise levels. The L_{10} noise levels at two receptors would exceed the federal design noise levels by 1 to 2 dBA from one to two hours per day during the design year.

The urban area does not permit the provision of continuous noise barriers to reduce the noise levels below the design noise levels due to the many driveway connections to Md. 12 and the close proximity of development to the edge of roadway.

Since this highway has uncontrolled access throughout its length, there is no requirement to apply for exceptions to the noise standards where the design noise levels will be exceeded.

TABLE 8

PROJECT NOISE LEVELS AND IMPACTS

Noise Sensitive Receptor	Description	Ambient L_{10} (dBA)	Predicted Noise Levels L_{10} (dBA)	Impact on Ambient Levels L_{10} (dBA)	Relation To Design Levels*** Build
1	Dwelling	67	**	-	-
2	Dwelling	65	72	Minor	+2@
3	Dwelling	69	73	Neg.	+3@
4	Dwelling	65	70	Neg.	0
5	Cottage 100 at Holly Center	57	65	Minor	-5
6	Infirmary at Holly Center	55*	49	-	-21
7	Moose Lodge	63	69	Minor	-1
8	Dwelling at Regency Dr.	53	60	Minor	-10
9	Dwelling	65	71	Minor	+1@
10	Cemetery Entrance	63	69	Minor	-6
11	Prince St. School	51	51	Neg.	-19
12	Funeral Home	67	72	Neg.	+2@
13	Golf Course	67	69	Neg.	-1
14	Dwelling	71	63	Pos.	-7
15	City Park	63	63	Neg.	-7

Pos. - Positive Impact
Neg. - Negligible Impact
@ - Federal Design Noise Level Exceeded

* Ambient noise level due to air conditioning equipment

** Noise receptor No. 1 will be relocated under recommended alternate.

*** All receptors fall in Category B except No. 10 which is Category C. See Table 6.

Impact on Undeveloped Lands

There are large areas of land along the project route that are presently undeveloped or being farmed. According to the county and city comprehensive plans, much of this area will eventually be developed as residential and commercial uses.

To assist local officials in the planning and development of lands adjacent to the highways and in order to insure the development of land uses compatible with the noise levels predicted for the highway, Plates 16 - 20 were prepared to show generalized noise contours anticipated for the year 2004. These contours serve as a guide for the planning of the adjacent lands. Copies of the noise report have been forwarded to the following agencies to assist in their planning efforts:

Salisbury - Wicomico County Planning and Zoning Commission
Salisbury - Wicomico Economic Development, Inc.

Construction Noise

The period of construction of all major projects generally involves periods of significant noise impacts. This noise is temporary and would terminate upon completion of construction. This type of project would probably require the use of the following types of equipment which would be sources of construction noise:

Bulldozers and earthmovers
Graders
Front end loaders
Dump and other trucks
Air compressors, paving machines, pneumatic tools

Construction activities are generally restricted to weekdays between the hours of 7:00 A.M. and 5:00 P.M. which restrict the impact of construction noise to these times.

Evening, weekend or holiday activities would not be affected by the construction. However, school and hospital activities could be disrupted at Holly Center.

WATER QUALITY

As described in the Existing Environment Section the existing roadway lies on a ridge; therefore no streams are crossed by the highway except Beaverdam Creek at the intersection of Md. Rte. 12 and E. Main Street.

The drainage systems for the selected alternate incorporate four drainage outfalls which discharge into either Schumaker Pond or Beaverdam Creek. These outfalls with their discharges of highway runoff, including heavy metals, oil and salts, will have some effect on the quality of water in the stream and pond in the immediate vicinity of the outfalls. These pollutants could cause some smothering of food organisms and fish spawn, changes in bottom configuration and substrates, and alterations in communities locally at the outfall. These pollutants could reduce the fish reproductive success in the area of the outfall in the pond since it is a spawning area for bass and sunfish. Construction activities will be scheduled to minimize the effect to spawning activity. These local effects would diminish with distance from the point of discharge and would have an overall minor to moderate effect on the aquatic communities in the pond and stream.

The outfall at the pond is located approximately 900 feet north of the public swimming area. There would be a slight, if any, effect on the water quality with respect to its use as a swimming facility. There would also be an overall insignificant to slight effect on the pond with respect to its use as a fishing area.

The outfalls discharging into Beaverdam Creek would produce similar adverse effects on the stream including increased sedimentation, siltation, scouring and salinity resulting in some smothering of food organisms and fish spawn, changes in bottom configuration and consequent com-

munity alterations locally at the outfalls. The pollutants discharged into the creek would be dispersed by the stream flow, affecting a larger area than at the pond outfall. At the same time the concentrations at the outfall would be less than at the pond outfall due to the same dispersal effect. However, the localized effect of these outfalls on the stream would be more severe than at the pond due to the smaller volume of water in the receiving body. These impacts would diminish with distance from the outfalls. Overall, these impacts would be minor to moderate. The increase in flow in the College Avenue system would produce an insignificant impact on the stream at that existing outfall.

Flooding of the Beaverdam Creek flood plain is the major concern with respect to this watershed due to the existence of the zoo, park facilities, municipal wells, treatment plant and pumping stations in the flood plain of the stream. Presently, the stream overflows its banks occasionally. The Maryland Department of Natural Resources, Water Resources Administration, is performing a study of the Beaverdam Creek watershed and it was shown that the proposed storm drainage system for Md. 12 would have a beneficial effect on the flooding potential of Beaverdam Creek in the area of the zoo and water supplies. Presently, the storm runoff finds its way to Beaverdam Creek naturally by way of seepage and overland flow. The amount of runoff would not be increased due to the project since the impervious area of the watershed would not be increased significantly. However, by concentrating in side ditches and storm drains, the runoff of storm water from Md. 12, the Lincoln Avenue area and Regency Drive area, the time it takes for the runoff to reach the stream (time of concentration) is greatly reduced. Therefore, the runoff reaches the stream sooner and passes through the stream earlier than the runoff under existing conditions.

The major portion of the runoff carried by Beaverdam Creek comes from much further upstream and takes considerably longer to reach the area of concern at the zoo than the runoff from the

project area. Therefore, the runoff from the project area does not contribute to the peak flood since the runoff has passed through the zoo long before the flow in the stream peaks and causes flooding. In fact, by reducing the time for the runoff from the project area to reach the stream, the stream's peak flow is reduced, thereby reducing flooding potential and reducing the potential for contamination of the wells in the park.

By decreasing the time of concentration of the runoff from the project area, the peak flow from this area is increased slightly. However, the volumes are so small that they do not affect the flooding potential of the stream adversely. See the letter from DNR in the Comments and Coordination Section.

Schumaker Dam created Schumaker Pond as a flood management and recreational facility. By impounding the water upstream of the dam the peak volumes of water downstream of the dam can be controlled and reduced, thereby reducing flooding. This dam has excess capacity so that the relatively small discharge at the outfall into the pond would have no effect on flooding potential of Beaverdam Creek.

Development of the watershed into residential and commercial uses have more potential for increasing flooding than outletting the discharge from Md. 12 because this development would greatly increase the amount of runoff by increasing the impervious areas of the watershed. Storm water management must be utilized with any increase in development of the watershed. The limits of the 100-year flood plain are shown on Plate 6F in the 4(f) Statement.

The selected alternates will not have a significant encroachment on the floodplain resulting in any risks or impacts to the beneficial floodplain values or provide direct or indirect support for further development within the floodplain.

Since no outfalls would discharge into tidal waters and no wetlands are affected by the project no wetland license would be required. Also, since the effects of the roadway pollutants would be very local in the immediate area of the outlets, the coastal waters would not be affected by the project and the project is consistent with the Coastal Zone Management Program for Maryland as it is outside the area of focus.

VEGETATION

There are no rare or endangered species of plant that would be affected by the project. The roadway improvements would have an insignificant effect on the vegetation in the project

area along Md. 12. The drainage outfall from Md. 12 south of College Avenue to Schumaker Pond would pass through an area of sparse, poorly defined grass and sumac hedgerow for approximately 1200 feet, along a hardwoods lot for about 800 feet, through soybean fields for about 1200 feet, then through an annual legume swath and old fields into a mixed pine and hardwood park into Schumaker Pond. The significance of this vegetation lies in its use as wildlife habitat which will be discussed in the next section. Also, since this outfall will be a culvert, the effect on plant and wildlife will be temporary. After construction the easement area would again support the same types of vegetation and wildlife as exists today.

The Regency Drive outfall passes through a vacant lot with sassafras, scrub oak and cherry brush. The Shiloh Street outfall would affect very little vegetation.

WILDLIFE

The overall site quality of the area along Md. 12, with respect to its value as wildlife habitat, is generally poor to fair due to the frequency of disturbance by agricultural activity and the urban character of much of the project corridor. Densities for most resident species are generally low. Reduced carrying capacities are often characteristic of agricultural fields and urban areas.

Adverse impacts of habitat loss along Md. 12 are minimal since these habitats are of low value to wildlife. Disturbance of habitat adjacent to Md. 12 during construction would not greatly exceed the normal annual disturbances associated with current agricultural use of this land. In the urban section, the levels of wildlife usage are so low that the effects of highway improvements would be difficult to detect. Slight reductions in carrying capacities for some species would result from habitat loss, producing slightly altered food chains and slightly lowered overall ecological stability.

The outfall culvert from Md. 12 to Schumaker Pond passes through prime nesting habitat of quail, rabbits, songbirds and other wildlife. However, the disturbance to wildlife should be temporary as discussed previously. The land adjacent to the Parkside High School property is the best nesting habitat for quail and rabbits in the area but could be destroyed by scheduled residential development.

The Regency Drive outfall passes through prime habitat for quail, rabbits and songbirds between Schumaker Drive and South Park Drive, a distance of 800 feet. Little, if any, prime habitat would be lost by the outfall along Shiloh Street.

These drainage outfalls would have some effect on aquatic wildlife in the immediate vicinity of the outfalls. Such effects would be reduced fish reproductive success, smothering of food organisms and fish spawn, changes of bottom configuration and substrates resulting in community alterations. These impacts would be less evident at locations removed from the outfalls.

The impacts on terrestial and aquatic wildlife of the drainage outfalls are potentially more serious than that of the roadway improvements. However, adverse terrestial effects may become superfluous as development occurs. Adverse impacts will be minimized by standard erosion and sediment control procedures, revegetation along roadside surfaces, and streambank stabilization.

Erosion control procedures will be required in accordance with Erosion and Sediment Control Procedures developed by the Maryland State Highway Administration and approved by the Maryland Department of Natural Resources.

HISTORICAL AND ARCHEOLOGICAL SITES

Historic Sites

As shown on Plate 15, several sites of local historic interest were identified within the project area. These sites are listed in the section on Man Made Environment. At Site 2 only the structure itself is of any historic significance. The proposed roadway would not affect this house since the proposed right of way is more than 10 feet from the building and the roadway is more than 50 feet away. See the letter in the Comments and Coordination Section from the State Historic Preservation Office dated January 24, 1979.

The drainage outfall from Md. 12 to Schumaker Pond would be located to avoid any impacts, either direct or indirect, on the Morris family cemetery, located at the pond on the north side of Schumaker Drive, near the proposed outfall.

Archeological Sites

A preliminary archaeological survey was completed for the project area. No significant archaeological sites would be affected and no additional surveys were recommended. See the letters in the Correspondence Section from the State Archaeologist and State Historic Preservation Office dated October 24, 1978 and March 9, 1979, respectively.

COMMUNITY FACILITIES

Since there are no facilities for emergency services such as police, fire or ambulance, located on Md. 12 within the project area, the project will have no direct effect on these facilities. However, the roadway improvements would have an indirect beneficial effect by reducing travel time on the existing roadway for these services for which time is a critical element.

The travel way would be no closer to the buildings of Holly Center under the selected alternates than it is under the existing conditions in order to maintain the existing distance between the cottages and the roadway for the safety of the residents. Also the posted speed on the highway in front of the facility is expected to be maintained at 40 m.p.h. in the interest of safety of center residents.

Under Alternate 2, a strip of property from 30 to 35 feet wide would be acquired from Holly Center along Md. 12. This widening of the right-of-way would consist of grading for a recovery area and the provision of a shallow drainage swale to collect surface runoff. The existing earth mounds used for sight and sound barriers would be maintained. This right-of-way acquisition would not affect any of the facilities of Holly Center. The area disturbed would be restored to conditions equal or better than the existing conditions.

The main entrance drive of Holly Center would be relocated to intersect Md. 12 at Johnson Road in order to create a four-way intersection. The management of Holly Center has stated they have no objections to this relocation.

The schools near the project area including Prince Street Elementary School, Parkside High School and James M. Bennett Junior and Senior High Schools would not be adversely affected by the selected alternates. There would be no increase in traffic in front of the schools due to the project. There would be some beneficial effect of the project on these schools by improving their accessibility and improving the safety and traffic service on Md. 12 and at the intersections of local roads. Also, Alternate 4 would accommodate bicyclists in a shared roadway. Bicyclists would use the paved shoulders under Alternate 2.

LAND USE

As described in the section titled Man Made Environment, the lands adjacent to Md. 12 south of College Avenue are zoned for medium density residential development. The comprehensive plans for the area recommend more intensive residential development, business and institutional uses. These land uses would generate traffic in addition to that generated by normal growth of the area. The provision of the interchange at Relocated U S. Rte. 13 would also increase the need for the improvements to Md. 12 in this area.

As mentioned previously, the land on both sides of Md. Rte. 12 between College Avenue and 1500 feet south of Robins Avenue is considered prime farmland by the Md. Department of State Planning. Presently, the portion between Robins Avenue and College Avenue on the west side of Md. 12 is being used as Holly Center. The east side of Md. 12 is being cultivated except for the commercial property at the corner of College Avenue A total of 7.6 acres of prime agricultural land will be acquired for right of way. Since this land is zoned residential and planned for residential and commercial uses, its designation as prime agricultural land is not significant.

North of College Avenue the predominant land use is commercial. This trend will continue as more properties are developed in this section. Both the present zoning and projected land uses are commercial in this area. Commercial development will also generate more traffic and create more conflicts with turning movements into and out of commercial properties along the highway. The project would substantially increase the capacity of the existing 2-lane highway by providing 2 through lanes in each direction.

North of Spring Avenue within the city limits the existing roadway is 40 feet wide and curbed on both sides. This width roadway could operate as a three-lane facility with the center lane operating as a left turning lane.

The project is consistent with local and regional comprehensive plans for the project area.

SOCIO-ECONOMIC FEATURES

The project would have no effect on the socio-economic characteristics of the total population in the area. The income levels, employment or population growth in the area would not be affected by the project. The project would increase the capacity of the existing roadway but would not draw significant traffic volumes to the facility since the capacity of the existing roadway would be only slightly exceeded by the design year. Therefore, growth patterns would continue as shown by current trends and proposed land use plans. Employment and income levels in the area could be raised slightly for the duration of the construction phase. After completion of the construction, these levels would return to the levels expected without the project.

Since Alternate 2 is a rural four-lane divided highway with no control of access, its accident rate is predicted to be 406/100 million vehicle miles (MVM). Alternate 2 is expected to result in a lower accident rate than the No Build Alternate, producing accident costs of $1,374,000 per 100 M.V.M. resulting in savings of $1,536,000/100 M.V.M.

Alternate 4 is expected to experience an accident rate of approximately 574 accidents/100 M.V.M. with a cost of $1,812,000/100 M.V.M. This cost represents a savings of $1,168,000/100 M.V.M. as compared with the existing facility, (No Build Alternate).

The accident statistics and costs were developed by the Maryland State Highway Administration, Bureau of Accident Studies.

Several businesses located along Md. 12 north of College Avenue would be adversely affected by the project. By widening the existing roadway, property would be required from these businesses and would encroach on the parking areas along the fronts of the establishments. These encroachments would not require relocation of any of these businesses.

No minority communities would be affected by the project.

It is the policy of the Maryland State Highway Administration to insure compliance with the provisions of 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, religion, national origin, physical or mental handicap in all State Highway program projects funded in whole or in part by the Federal Highway Administration. The State Highway Administration will not discriminate in highway planning, highway design, highway construction, the acquisition of right-of-way or the provision of relocation advisory assistance. This policy has been incorporated into all levels of the highway planning process in order that proper consideration be given to the social, economic and environmental effects of all highway projects. Alleged discrimination actions should be addressed to the State Highway Administration for investigation.

RELOCATIONS

Rural Section

Alternate 2 would require the relocation of one family residing in the dwelling located on the east side of Md. 12 south of Service Road A at Station 66+00. The family affected is of the middle income group and consists of four people. The residence is tenant-occupied.

Urban Section

One residence would be demolished on Washington Street to provide for the cul-de-sac proposed. Two residences would be acquired to provide the cul-de-sac on Prince Street. Three families would be affected by these residential relocations.

There should be no problem in finding comparable decent, safe and sanitary housing for the relocatees. A lead time of from six months to one year would be needed to complete the necessary relocations.

A summary of the relocation assistance program of the Maryland State Highway Administration is included in Appendix B.

COMMENTS AND COORDINATION

The project planning phase of this project is being coordinated with all interested local, county, state and federal agencies as well as with the public.

In order to inform the public of the studies being performed and solicit their comments concerning the project, a Project Initiation Meeting was held in Salisbury on October 31, 1977, an Alternates Public Meeting was held on July 26, 1978 and a combined Location/Design Hearing was held on July 18, 1979.

At the Public Hearing in July of 1979 several people made comments concerning the project. These comments and their responses are summarized below.

Several persons were concerned with the effects of the project on the access to their businesses located along Md. 12 north of College Avenue. In this regard, these people were in favor of the No Build or terminating the project south of their site.

Several people recommended that the drainage outfall to Schumaker Pond be closed. This alternate was adopted as part of the selected alternate.

Several people in the rural section prefer either the No Build or the urban typical section (Alternate 3) south of College Avenue because less right of way acquisition would be needed from their properties. The rural typical section (Alternate 2) was chosen for the reasons stated on page 13.

It was also mentioned that the project should be extended to Carroll Street since the city is improving this street to serve as a major route into downtown Salisbury. This section is within the city limits and any improvements to Md. 12 north of E. Vine Street would be the responsibility of the City. E. Vine Street was selected as the northern terminus because it is the first major intersection north of the city limits and is the logical location to tie into the city's road section.

Comments from various agencies are also included in this section and are organized by subject in accordance with the index given on page 52. Within each subject section the correspondence is organized chronologically.

All coordination concerning the 4(f) land at the city park is included in the 4(f) Statement beginning on page 79.

COMMENTS AND COORDINATION

STATE OF MARYLAND

DEPARTMENT OF
PUBLIC SAFETY AND CORRECTIONAL SERVICES

MARYLAND STATE POLICE

HARRY HUGHES
GOVERNOR

GORDON C. KAMKA
SECRETARY
PUBLIC SAFETY AND
CORRECTIONAL SERVICES

EDWIN R. TULLY
DEPUTY SECRETARY
FOR PUBLIC SAFETY

COLONEL THOMAS S. SMITH
SUPERINTENDENT
MARYLAND STATE POLICE

Automotive Safety Enforcement Division
1921 Lansdowne Road
Baltimore, MD 21227

August 8, 1979

ADMINISTRATION
PROJECT PLANNING

RECEIVED
AUG 15 1979
THE WILSON T. BALLARD CO.
BY

Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

Dear Mr. Camponeschi:

In response to your letter of June 5, 1979 concerning the Draft Negative Declaration Section 4(F) Involvement, Maryland Route 12 from relocated U. S. Route 13 to East Main Street, Salisbury, the following comments are offered. Noise monitoring site alternate 2 is perferred over site alternate 1 as shown on plate number 9 in the draft because of several reasons: See Plate 5.

1. Site alternate 2 would be further from Toadvine Road than site alternate 1 would be from Robbins Avenue. The greater distance would lessen the possibility of vehicles at the intersection interferring with noise level readings.

2. At the public hearing on July 18, 1979 some concern was shown by citizens who live near site alternate 1, regarding possible truck traffic and additional noise created by weighing of these vehicles on these sites.

3. Concern was also shown because these sites could become a congregation point for certain individuals.

The concerns shown in reason 2 and 3 could be controlled or eliminated by excluding these sites for the use of weighing trucks and a chain or some other type of barrier could be used to prevent access to the sites when not in use for measurement of vehicle noise.

In regards to Mr. Honeywell's memorandum of August 3, 1979 to you, reference the Taylor property, we would perfer site alternate 2 on both sides of Route 12. If acquisition of this property becomes to enormous, then our recommendation would be to construct site alternate 2 across from the Taylor property.

Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

Any assistance this Division can provide in this matter will be extended.

Sincerely,

B E Diehl M

B. E. Diehl, Captain
Commander, A. S. E. D.

BED:M:dah

cc. Wm. Lee
Chas. Adams
Dale Hillard
Gary Hitchcock
Dick Krolak

In accordance with the recommendations of the State Police and the preferences of the residents in the area, noise monitoring sites 2 were selected and are shown on Plate 5.

State of Maryland

DEPARTMENT of HEALTH and MENTAL HYGIENE
NEIL SOLOMON, M. D., Ph. D., Secretary
MENTAL RETARDATION ADMINISTRATION
John F. Monaghan, Director

HOLLY CENTER
P.O. BOX 2358 SNOW HILL ROAD SALISBURY, MARYLAND 21801

Telephone 301-546-2181

PHILIP S. MASSEY, Ph.D.
Superintendent

April 5, 1977

Mr. William Lee, District Engineer
Roads Commission, Dept. of Transportation
West Road
Salisbury, Maryland 21801

Dear Bill:

Recently, Holly Center was visited by a Mr. Leroy Habersack, Highway Engineering and Survey Division, who, I understand, is conducting a survey in regard to the future widening of Route 12.

As we have discussed personally and in previous correspondence, I am concerned that improvements to Route 12 be made in a manner that would not unnecessarily jeopardize the safety of Holly Center residents. As you aware, several cottages are located near the present Route 12. Widening the road on Holly Center's side would seriously reduce the safety margin of space needed for the staff to catch up with and retrieve a resident who may have wandered off. In addition it would destroy the visual and sound barriers that were constructed at great expense to the State along the existing road.

See Page 3

I certainly hope that every consideration of the future development of Route 12 would include serious thought of widening the road along the side opposite Holly Center, which is presently undeveloped farm land. We very much appreciate your continued consideration of this matter.

Sincerely yours,

Philip S. Massey, Ph. D.
Superintendent

PSM:jws
CC: Mr. Monaghan
Mr. Dove

RECEIVED
APR 14 1977

87

April 15, 1977

Dr. Philip S. Massey
Superintendent
Holly Center
P. O. Box 2358
Snow Hill Road
Salisbury, Maryland 21801

Dear Dr. Massey:

I received your correspondence of April 5, 1977 concerning the future improvement of Md. 12. This is to advise that the actual physical improvement to Md. 12 is not scheduled until after 1981. In the meantime the State Highway Administration will be accomplishing the project planning and preliminary engineering. During this period there will be public hearings or advertisements in the newspapers for an interest in public hearings.

The information in your letter will be forwarded to our Project Planning Division so that they can consider your request in their planning. However, when the public hearings are held, Holly Center should be represented so as to present your recommendations.

Very truly yours,

William K. Lee III
District Engineer

WKL:ma
CC: Mr. Fred J. Gottemoeller

98

Maryland Historical Trust

March 9, 1979

ADMINISTRATION
PROJECT PLANNING

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203

Re: Maryland Route 12
U.S. 13 to Salisbury
WI 477-151-171

Dear Mr. Camponeschi:

A review of the above-referenced reports indicate that no significant archeological sites will be affected by the proposed road and drainage improvements. Additional archeological investigations are not recommended.

The report submitted by Dr. McNett could be considerably improved as suggested in Tyler Bastian's letter of October 23, 1978. While rewriting of the report is not necessary, future reports by the contractor should incorporate Tyler's general suggestions for improvement. Greater consideration should also be given to historical archeological resources as stated in my February 28 letter to you. The resultant improvement in future reports will assist in the review process and help avoid delays due to report rewriting.

Should you have any questions, please contact Wayne Clark.

Sincerely,

J. Rodney Little
State Historic Preservation Officer

JRL/Can

cc: T.Bastian
M.Ballard
C. McNett
cc. Garrett R. Hitchcock

Maryland Historical Trust

January 24, 1979

Mr. Eugene T. Camponeschi
Bureau of Project Planning
State Highway Administration
300 West Prestontreet
Baltimore, Maryland 21203

In Re: Maryland Rt. 12 from relocated U. S. Rt. 13 to the east limit of Salisbury, WI 477-151-171

Dear Mr. Camponeschi:

I am writing in regard to the boundaries of historic site #2 near the project listed above. This house is of local significance, and the historically associated property would be only that on which the house itself is located.

Sincerely,

J. Rodney Little
State Historic
Preservation Officer

JRL/lkm
cc: Margaret Ballard
George Andreve

cc: Garett Hitchcock

Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301)269-2212, 269-2438
Department of Economic and Community Development

90

Maryland Historical Trust

MAY 1 AM 10 09

STATE HIGHWAY ADMINISTRATION
PROJECT PLANNING

April 24, 1978

RECEIVED
MAY 2 1978
THE WILSON T. BALLARD CO.
BY

Mr. Eugene T. Camponeschi
Bureau of Project Planning
State Highway Administration
Maryland Department of Transportation
300 West Preston Street
P. O. Box 717
Baltimore, Maryland 21203

In re: Improvements to Maryland Route 12, relocated U.S. Route 13 to East Main Street, Salisbury, Maryland.
WI-477-251-171

Dear Mr. Camponeschi:

Enclosed is a map of Maryland Route 12 outside Salisbury, with historic sites noted in the vicinity of proposed improvements, and a brief identification of those sites. This constitutes a preliminary historic inventory for the project. There are no sites of National Register or of National Register eligible quality, all five sites being of an Inventory level of significance. Further work of this project will be initiated at your request.

Sincerely,

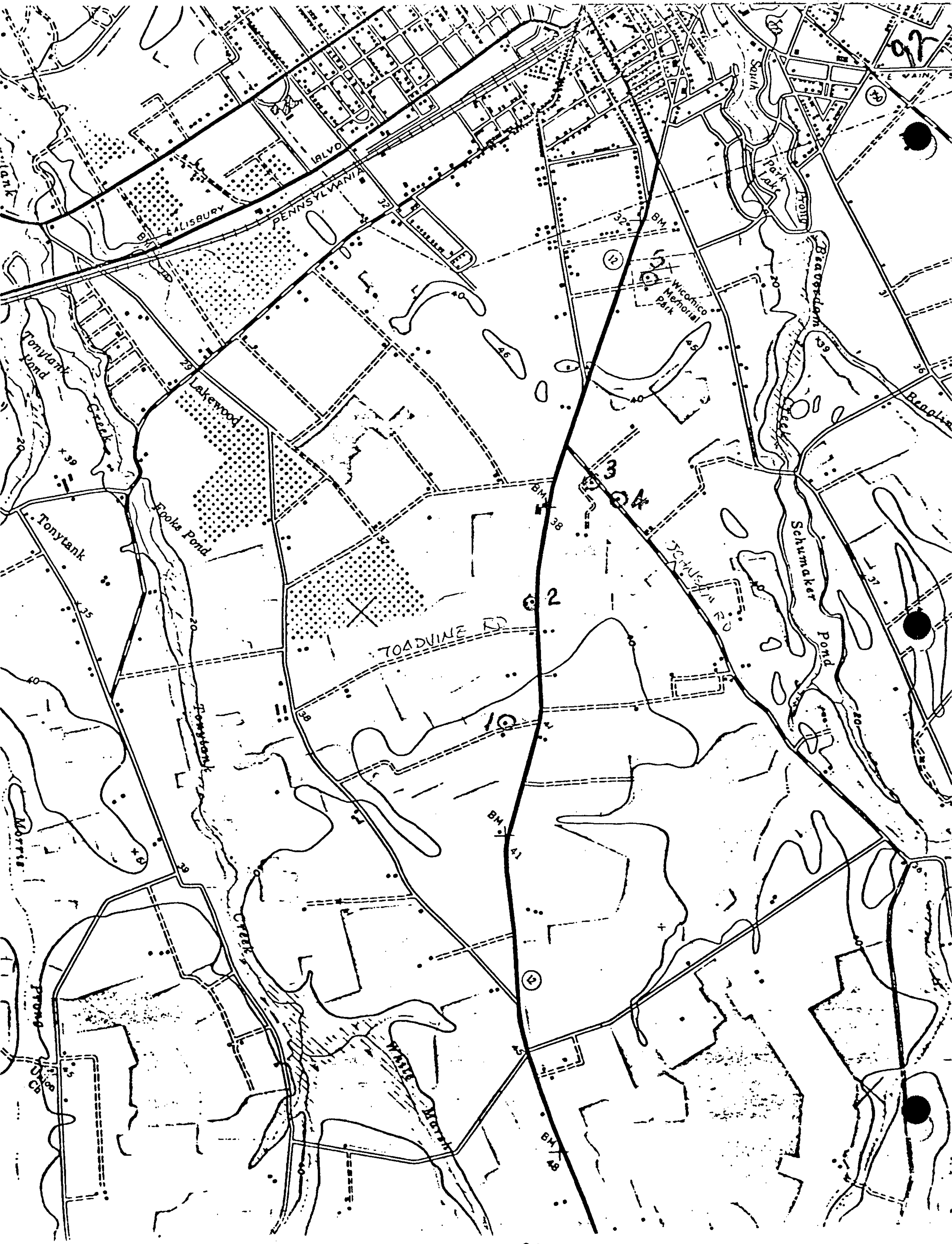
John Hnedak
Preservation Planner

JH/lkm
Enclosures
cc: Mark R. Edwards
Margaret Ballard
Garrett R. Hitchcock
Wm. K. Lee III

...ew House, 21 State Circle Annapolis, Maryland 21401 (301) 269-2212, 269-2438
...epartment of Economic and Community Development

U.S. 12 INVENTORY

1. White frame - late 19th century farmhouse with unpainted gambrel barn.
2. White house with asbestos shingles, late Greek Revival frame.
3. White frame house, 1920's or earlier.
4. Regionally typical white farmhouse.
5. White frame farmhouse.



92
SALISBURY
PENNSYLVANIA
BLVD
Tonytank Pond
Tonytank Creek
Lakewood
Fooks Pond
Tonytank
Wicomico Memorial Park
Park Lake
Beaverdam Creek
Schumaker Pond
TOADVINE RD
White Marsh
Morris
Union Ch
3
4
2
1

MARYLAND GEOLOGICAL SURVEY
THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND 21218

Division of Archeology
23 October 1978

Mr. Eugene T. Camponeschi
Chief - Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore MD 21203

Re: Maryland Route 12
US 13 to Salisbury
WI 477-151-171
Preliminary Archeological
Reconnaissance

Dear Mr. Camponeschi:

As requested by your letter of 13 October 1978, I have reviewed the 25 August 1978 revision of the subject report prepared by Dr. McNett.

The report is acceptable. However, for the record, I have several observations.

The findings would be of more significance if viewed in context of a brief background statement indicating the nature of archeological remains anticipated to occur in the study area on the basis of available regional data.

"Dr. Laury" evidently refers to Dr. Lee L. Lawry of Salisbury.

The report by Conrad should be cited as a reference.

A standard map, preferably a USGS 7.5' quadrangle, showing the project location would be helpful.

The discussion of historic remains is unclear. What, if anything, did Dent observe in the areas shown as scars on the photo mosaic and as houses on the 1942 USGS 7.5' quadrangle? It is unlikely that there were any above ground foundations at that location, as the report may imply. "Great age" has no generally accepted meaning; what is meant in terms of years? The report implies that none of the historic remains found are of archeological significance, but specific data needs to be presented to facilitate independent evaluation by others.

Appendix I clearly documents the field conditions encountered and is indicative of the kind of specific information that should be

provided concerning archeological findings. Although the appendix states that no remains were found, the report body implies that historic artifacts were found. While discretion should be used about including unnecessary detail, diagnostic artifacts should be summarized, listed, or described.

Thank you for the opportunity to comment.

Sincerely,

Tyler Bastian

Tyler Bastian
State Archeologist

cc: Dr. C. W. McNett, Jr.
Garrett Hitchcock

MARYLAND
DEPARTMENT OF STATE PLANNING
301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201
TELEPHONE: 301-383-2451

MARVIN MANDEL
GOVERNOR

VLADIMIR A. WAHBE
SECRETARY OF STATE PLANNING

VC 95

January 19, 1979

PROJECT PLANNING

Mr. Eugene Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

RE: Improvements to Maryland Route 12-U.S. 13 Relocated to Salisbury

Dear Mr. Camponeschi:

Staff from this Department have continued to participate in the project planning activities for Maryland Route 12. The last event regarding this project was review of the Preliminary Draft Negative Declaration at an SHA meeting held on January 17, 1979. This document has addressed most of our comments raised in earlier correspondence and at other project planning meetings. We would like to indicate our support for the reconstruction of Route 12 in a manner which eliminates the current problems at the existing intersections. In particular, it would seem that Shiloh Street, which experiences a high accident rate, should be closed at Route 12.

We also feel that the issue of highway-related stormwater runoff and the location of outfalls to accomodate this runoff requires resolution as to the State's position prior to the public hearing on Route 12. We are interested in the findings of the Department of Natural Resources who are currently studying the impacts of additional highway-generated runoff into Schumaker Pond and Beaverdam Creek. It is our feeling that this issue remains as one of the critical elements in the Route 12 project study.

See page 41

Thank you for your cooperation. We appreciate the opportunities made available to us to participate in the project planning for Route 12.

Sincerely,

E L Thomas

Edwin L. Thomas

cc: GARRETT HITCHCOCK

If Shiloh Street was closed at Md. 12 it would divert all traffic to Spring Street, creating congestion at the Spring Street intersection with Md. 12, diverting more traffic past Prince Street School. It would create a circuitous route for that traffic now crossing Md. 12 on Shiloh Street. By closing Prince Street the accident rate should decrease.
See page 5.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

JAN 1 8 1979

Mr. Charles R. Anderson, Chief
Bureau of Landscape Architecture
Maryland State Highway Administration
2323 West Joppa Road
Brooklandville, Maryland 21022

Re: Air Analysis, Maryland Route 12, Relocated U.S. 13 to E. Main Street in Salisbury, Md.

100-112

Dear Mr. Anderson:

We have reviewed the air quality analysis performed for the above referenced project. Based upon this review, we have no objection to further development of the project from an air quality standpoint.

If you have any questions concerning our review, or if we can be of any further assistance, feel free to contact Mr. William J. Hoffman of my staff at 215-597-2650. We would be interested in reviewing any additional environmental documents that might be prepared for this project.

Sincerely yours,

John R. Pomponio, Chief
EIS & Wetlands Review Section

State of Maryland

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
ENVIRONMENTAL HEALTH ADMINISTRATION

NEIL SOLOMON, M.D., PH.D.
SECRETARY

P.O. BOX 13387
201 WEST PRESTON STREET
BALTIMORE, MARYLAND 21203
PHONE • 301-383- 3245

DONALD H. NOREN
DIRECTOR

October 27, 1978

Mr. Andy Brooks
Bureau of Landscape Architecture
2323 West Joppa Road
Brooklandville, Maryland 21022

Dear Andy,

RE: Air Quality Analysis, Md. Rte. 12
100-115

We have reviewed the Air Quality Analysis prepared for the above subject project and have found that it is consistent with the Programs' plans and objectives.

Thank you for the opportunity to review this analysis.

Sincerely yours,

Bill

William K. Bonta, Chief
Division of Program Planning & Analysis
Air Quality Programs

WKB:bac

C. R. ANDERSON

Thomas C. Andrews
DIRECTOR

98

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401
(301) 269-3825

April 17, 1979

M E M O R A N D U M

APR 19 1979

WATER RESOURCES ADMIN.
WATERSHED PERMITS

TO: Mike Ports

FROM: Gary Setzer GS
Bob Dannecker RBD

SUBJ: Md. Rte. 12, U.S. 13 to Salisbury
Highway Drainage modifications to Beaverdam Creek

From our hydraulic and hydrologic analysis of the Beaverdam Creek Watershed, we have found that the three proposed State Highway Administration outfalls appear to have no detrimental effects on Beaverdam Creek in its present stage of development. There is an increased peak discharge and shorter time of concentration at each proposed outfall. Since the flow from the proposed outfalls reaches the stream before the major upstream peak, a decrease in total peak flow and elevation results.

As long as the upstream reach of the watershed remains undeveloped and retains the capacity to detain a large volume of runoff, measures which tend to accelerate runoff in the downstream reach will help to decrease peak discharges and elevations. However, if the upstream watershed is extensively modified so that the storage and timing are reduced, flows in the Beaverdam Creek could become higher due to this proposal.

In reviewing the enclosed chart, a discrepancy is apparent between the estimated discharges calculated by the State Highway Administration and our predicted values at each outfall. This conflict is due to the drainage areas calculated at each pipe. Since the terrain in the Salisbury area is flat, lacking any definite drainage divides in many places, a discrepancy of this sort is not unusual. It should be noted, however, that our drainage areas for each culvert are larger and would, most likely, have a more pronounced impact on the system.

Before construction of this project, a review of this hydraulic model should be made to update the characteristics of the watershed to include any new development. New developers should be required to include storm water management in their plans to maintain the same offsite flows as before development.

99

Although we feel the computer model is representative of the watershed, it is important to remember that the model has not, at this time, been calibrated and that the peak values given are subject to change as the model more accurately depicts watershed conditions. However, we do not anticipate that any changes made to the model will alter the relative effects of the State Highway Administration modifications.

GS, BD/vtf

Enclosure

PEAK VALUES FOR PROPOSED DRAINAGE OUTFALLS

Outfall Description	Location	Existing Watershed Conditions			State Highway Modifications		
		Discharge (cfs)	Time (hrs)	Elevation (ft)	Discharge (cfs)	Time (hrs)	Elevation (ft)
1. Rural section 500' south of Robins Ave. to Schumaker Pond 1600' upstream of College Ave.	Outfall	265	13.3		581	12.5	
	Old Dam	1549	26.9	24.0	1522	27.0	23.9
	New Dam	1549	26.9	22.2	1522	27.0	22.2
	3727' DS	1550	27.2	11.3	1523	27.4	11.2
2. Regency Drive to Beaverdam Creek 2000' downstream of College Ave.	300' US	1751	25.6	11.5	1722	25.7	11.5
	Outfall	107	13.0		163	12.6	
	400' DS	1758	25.6	10.8	1725	25.6	10.8
	1044' DS	1758	25.6	10.3	1725	25.7	10.3
3. Shiloh Street to Churchill Ave. to Beaverdam Creek	648' US	1758	25.6	10.3	1725	25.7	10.3
	Outfall	70	12.9		108	12.6	
	0' DS	1819	25.0	10.0	1783	25.1	10.0
	1542' DS	1832	25.2	9.6	1796	25.3	9.6
	3994' DS	1846	24.9	2.00	1809	25.0	2.00

101

July 25 1978

RE: Maryland Route 12
(Snow Hill Road)
Relocated U.S. Route 13
to Salisbury
Control No. 76-4-793

Mr. James M. McConnaughhay, Chief
State Clearinghouse
Department of State Planning
301 West Preston Street
Baltimore, Maryland 21201

Dear Mr. McConnaughhay:

This refers to your letter dated July 11, 1978 and attachments which advise of the concerns of Dr. Philip S. Massey, Superintendent of the Holly Center at Salisbury with regard to potential impacts due to the proposed improvement of Maryland Route 12.

We envision the proposed improvements to Snow Hill Road as reconstruction along the existing alignment with adjustments to minimize damages wherever feasible. In response to previous comments by Dr. Massey, we have held the western edge of roadway to reduce encroachments on the Holly Center. This arrangement was found acceptable to all parties, including the Holly Center representative at the In-House Review Meeting of June 12, 1978.

The Alternates Public Meeting scheduled for July 26, 1978 will essentially complete the first stage of the Project Planning process for Maryland Route 12. As the study continues, the comments of Dr. Massey will be considered together with those of other agencies and the public.

Should a Build Alternate finally be selected and implemented, this Administration would restore any disturbed landscaping, including shrubs, to a condition equal to or better than original. Our Bureau of Landscape Architecture will be available for consultation in an effort to ensure that vital aspects of the restored safety margin will be acceptable to the Holly Center.

Thank you for bringing these concerns to our attention.

Very truly yours,
ORIGINAL SIGNED BY:
FREDERICK GOTTEMOELLER

Frederick Gottemoeller
Deputy State Highway Administrator

FG:bh
cc: Mr. Irvin I. Klein
Dr. P. S. Massey
Mr. Hal Kassoff
Mr. Eugene T. Camponeschi
Mr. Charles R. Anderson
Mr. William K. Lee, III

102

MARYLAND
DEPARTMENT OF STATE PLANNING
301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201
TELEPHONE: 301-383-2451

MARVIN MANDEL
GOVERNOR

VLADIMIR A. WAHBE
SECRETARY OF STATE PLANNING

July 11, 1978

Mr. Frederick J. Gottemoeller
Deputy Administrator
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

RE: State Clearinghouse Control Number: 76-4-793
Md. Routh 12 - From Reloc. U.S. 13 to the E. Limits of City of Salisbury

Dear Mr. Gottemoeller:

Enclosed is a letter of June 26, 1978 from Mr. Irvin I. Klein, chief Capital Budget, Department of Health and Mental Hygiene with an attachment from Dr. P.S. Massey, Superintendent of Holly Hill, indicating his concerns in regards to the referenced project.

Dr. Massey's concerns are basically those for the safety of the clients of Holly Hill.

In order to assist him in this matter, I am forwarding the above information mentioned for your consideration and action.

Respectfully,

James W. McConnaughhay
Chief, State Clearinghouse

cc: Irvin I. Klein
Dr. P.S. Massey

tar

State of Maryland

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
201 WEST PRESTON STREET • BALTIMORE MARYLAND 21201 • Area Code 301 • 383-
Neil Solomon, M.D., Ph.D., Secretary

June 26, 1978

Mr. James McConnaughhay
Chief, State Clearinghouse
Department of State Planning
301 West Preston Street
Baltimore, Maryland 21201

RE: Widening of Maryland Route 12
Holly Center

Dear Mr. McConnaughhay:

I am enclosing a letter from Dr. Massey, Superintendent of Holly Center dated 6/13/78 stating objections to the proposed widening of Maryland Route 12. This Department concurs with Dr. Massey and requests that your Department recommend the selection of alternates that minimizes the taking of frontage that is required for the safety of clients.

See page 3

Very truly yours,

Irvin I. Klein, Chief
Capital Budget
Engineering and Maintenance

IIK:ab

Enclosure 1 memo

cc: Mr. Monaghan
Mr. Murray
Dr. Massey

...LLY CENTER POST OFFICE BOX 2358 SNOW HILL ROAD SALISBURY, MARYLAND ...
Telephone 546 2181

154

MEMORANDUM

Copies

TO Irvin I. Klein, Chief, Cap. Bud. Eng. & Maint. FROM P. S. Massey, Ph. D., Superintendent DATE 6/13/78

Subject Widening of Maryland Route 12

To follow up on our telephone conversation of June 13th, please be advised that the Maryland Highway Administration intends to go ahead with its plans to widen Maryland Route 12 from the U. S. 13 bypass to College Avenue, and then from College Avenue into Salisbury. A cross-section of the highway widening plans is attached and shows Alternate 1 and 2 of the widening from the bypass to College Avenue, both of which involve Holly Center.

Alternate 1 involves approximately 160 feet of right-of-way. Based on our present information, the present roadway would be the approximate position of the southbound lane of the divided highway. This would mean that Holly Center property would be infringed on to the extent that there would be a 12 foot paved shoulder and bikeway, an 18 foot slope to drainage, and then a drainage ditch itself, all on Holly Center property. While we were most pleased that the median of the highway has been moved to the other side of the road and that the infringement on Holly Center is not as great as before, even this amount of infringement interferes with identification signs, direction signs, lighting, shrubbery, trees, and landscaping at the two intersections where Holly Center driveway currently intersects with Route 12. In addition, it would cut into the earthen visual and noise barriers that were purposely erected along the southerly edge of the property and destroy one of our most expensive shrubbery and landscaping areas of the southwest corner.

To a certain extent, the infringement on these earthen barriers and shrubbery somewhat reduces our safety margin or distance between Cottage 100 and the roadway, should a resident wander away from the cottage.

Finally, the State Highway Administration proposes to realign the main entrance to the traffic circle in front of the Activities Building so that it lines directly with Johnson Avenue. While we do not particularly like having the front driveway realigned, we would not object to that, provided some other option for the widening of Route 12 along its common boundary with Holly Center was considered. We would not consider it a significant infringement if ten to fifteen feet of Holly Center property were used in widening the road. While we are concerned with the inconvenience and disruption of having to relocate shrubbery, lighting, signs, and so forth, we are mostly concerned with the loss to our safety zone between Cottage 100 and the roadway. Therefore, any option that would increase that safety margin should be seriously considered. This could be accomplished in a number of ways.

1. The angle of the highway could be changed so that there would be less encroachment on the southerly end of the property, and hence, less interference with our safety margin.

RECEIVED
JUN 23 1978

105

2. A less ambitious widening of the road that would not include a 12 foot paved shoulder, 18 foot grade to a drainage ditch, and so forth, could be considered. Alternate 2 would be acceptable as would be the type of widening being done from College Avenue to East Vine Street in town. Either of these options could be used to Robins Avenue and have the dual lane divided highway begin at Robins Avenue rather than at College Avenue. Either of these two options would have minimal impact on Holly Center, as opposed to the serious interference that Alternate 1 proposes. If either of the other two alternatives were accepted, we would have no objection to the relocation of the main driveway to intersect directly with Johnson Road.

A public hearing is scheduled on July 26th at 7:30 p.m. at Parkside High school. We intend to appear at the public hearing and oppose Alternative 1 plan for the widening of the highway along the stretch that it has in common with the Holly Center property. We will keep you informed in regards to any further developments.

PSM fc
CC: George Kohler
Joe Kelly

DEPARTMENT OF STATE PLANNING

STAFF COMMENTS

See responses on page 76.

1) While it is noted that the project is in accord with local plans, a review of the Salisbury Metro Core Plan found no specific delineation of this project's relationship to other Metro Core improvements, especially with regard to the timing of facility construction. Coordination of the facilities' construction appears to be a crucial point if the various components of the Core Plan are to function effectively.

2) Recognizing the difficulties of widening Rte. 12 within the city and the objective of channeling non-CBD traffic away from the town center, it may be advisable to study the improvement of Rte. 12 to the proposed College-Beaglin Drive inner loop only. Should Rte. 12 be extended beyond this point into the city, traffic analysis should determine the impact of such action on downtown and peripheral traffic movements.

3) Access on this facility should be consistent with the type of access restrictions planned for other interconnecting Metro Core network improvements.

4) Appropriate noise control and abatement measures should be considered so as to minimize the negative impact on sensitive receptors in the area (health and educational institutions which are both existing and planned).

5) The relationship of this project to the remaining portion of unimproved Rte. 12 to Snow Hill should be determined and made clear.

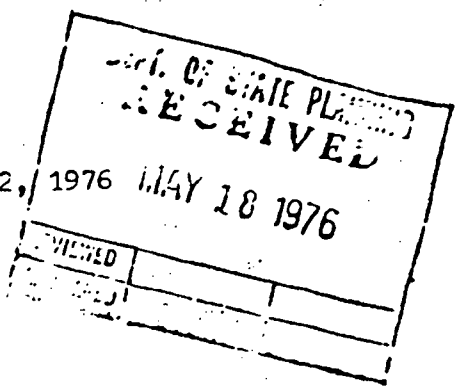
The proposed land use plans as shown in the Salisbury Metro Core Comprehensive Plan show the area north of College Avenue as commercial and highway-oriented commercial uses. These uses will generate considerable traffic and turns into and out of the commercial properties. These turning maneuvers will reduce the capacity of the two-lane roadway considerably by blocking the through lane while waiting to turn left into the commercial properties. These land uses therefore increase the need for a four-lane facility north of College Avenue.

The City is proposing a reconstruction of Carroll Street and its intersection with Md. 12 to provide a major route into and out of downtown Salisbury. This connection will reduce the congestion at E. Main Street and Md. 13. The improvements of Md. 12 between College Avenue and E. Vine Street would improve the level of traffic service for this major route into the city.

The limits of this project were chosen at Relocated U.S. Rte. 13 interchange and the city limits. Much traffic for Md. 12 will be generated by the interchange at Relocated U.S. Rte. 13 since Md. 12 serves as a major radial route into Salisbury and traffic on the bypass destined for the city will exist at Md. 12 or one of the other radial routes.

At present the projected traffic volumes do not justify the improvement of Md. 12 south of the U.S. 13 interchange towards Snow Hill. As traffic increases this need could arise in the future.

108



Date: May 12, 1976

Maryland Department of State Planning
State Office Building
301 West Preston Street
Baltimore, Maryland 21201

SUBJECT: PROJECT SUMMARY NOTIFICATION REVIEW

Applicant: State Highway Administration

Project: Maryland Route 12 from Relocated US Route 13 to the E. Limit of City of Salisbury.

State Clearinghouse Control Number: 76-4-793

CHECK ONE

This agency has reviewed the above project and has determined that:

1. The project is not inconsistent with this agency's plans, programs or objectives. ____

2. The project is not inconsistent with this agency's plans, programs or objectives, but the attached comments are submitted for consideration by the applicant. X

3. Additional information is required before this agency can complete its review. Information desired is attached. ____

4. The project is not consistent with this agency's plans, programs or objectives for the reasons indicated on attachment. ____

Signature: Stewart Sommers, II for

Title: Director

Agency: Community Development Administration
Dept. of Economic and Community Development

MAY 11 1976 109

MARYLAND

DEPARTMENT OF STATE PLANNING

301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201
TELEPHONE: 301-383-2451

MARVIN MANDEL
GOVERNOR

VLADIMIR A. WAHBE
SECRETARY OF STATE PLANNING
MADELINE L. SCHUSTER
DEPUTY SECRETARY

May 7, 1976

cc: F. J. GOTTEMOELLER
J. A. AGRO
E. T. CAMPONESCHI
J. L. WHITE
D. HERRING
H. BERGER
5-12-76

Mr. Robert J. Hajzyk, Director
Office of Planning and Preliminary Engineering
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

SUBJECT: PROJECT NOTIFICATION AND REVIEW

Applicant: State Highway Administration

Project: Maryland Rt. 12, From Relocated U.S. Rt. 13 to the East Limit of the City of Salisbury

Funds: FWHA - $84,000; State - $36,000

State Clearinghouse Control Number: 76-4-793

State Clearinghouse Contact: Warren D. Hodges (383-2467)

Dear Mr. Hajzyk:

The State Clearinghouse has reviewed the above project. In accordance with the procedures established by the Office of Management and Budget Circular A-95, the State Clearinghouse received comments from the following:

Department of Health & Mental Hygiene, Department of Natural Resources and Wicomico County: advised that the project is not inconsistent with their plans, programs or objectives.

Department of Economic & Community Development: was afforded the opportunit to comment, but failed to respond.

Our staff review determined that the project is not inconsistent with this department's plans, programs or objectives. A copy of our staff comments is attached for your consideration.

As a result of the review, it has been determined that the proposed project not inconsistent with State plans, programs and objectives as of this date.

In consonance with OMB Circular A-95, a copy of this letter with its attachments along with a statement as to the consideration which has been given to the comments and/or recommendations madehherein must be included with your formal application. The comments contained herein are valid for a period of two years from the date of this letter. If application for funding is not submitted within this period of time, the project must be resubmitted to the Clearinghouse for updating of the comments. If you have any questions, please contact the State Clearinghouse member named above.

Sincerely,

Vladimir Wahbe

Encl.
cc: Edward Symes, Donald Noren, Paul McKee, Matthew Creamer and R. F. E

4(f) STATEMENT

Improvements To Md. 12

from Relocated U.S. Rte. 13
to East Main St. in Salisbury

111

SECTION 4(f) STATEMENT

Improvements to Md. 12

from Relocated U.S. Rte. 13 to East Main Street in Salisbury

TABLE OF CONTENTS

PLATES

SECTION 4(f) STATEMENT

Maryland Route 12

from Relocated U.S. Rte. 13 to East Main St. in Salisbury

NEED FOR 4(f) STATEMENT

Section 4(f) of the Federal Aid Highway Act of 1968 specifies that publicly owned land from a public park, recreational area, or wildlife and waterfowl refuge of national, state or local significance, or any land from an historic site of national, state or local significance may be used for Federal Aid projects only if there is no feasible and prudent alternative to the use of such land and the project includes all possible planning to minimize harm to 4(f) lands resulting from such use.

The environmental documents for all projects which involve the possible taking of 4(f) lands must therefore document the alternative studies, considerations and consultations made to determine that there are no feasible or prudent alternatives to the use of this land. This document must also show that all possible planning to minimize harm to these lands has been done and must show the consultations with the affected agencies.

Since the selected alternate for the improvements to Md. 12 involves the use of parkland in the Salisbury City Park, a 4(f) Statement must be prepared. Two alternates to the use of parkland were studied and are described under the section Alternates.

PROJECT LOCATION AND DESCRIPTION

The project consists of improvements to Md. Rte. 12 between Relocated U.S. 13 and E. Vine Street in Salisbury. In the rural section between U.S. 13 and College Avenue a 4-lane rural divided highway with a 24-foot raised median is proposed. Paved shoulder and safety grading will be provided outside the travel lanes.

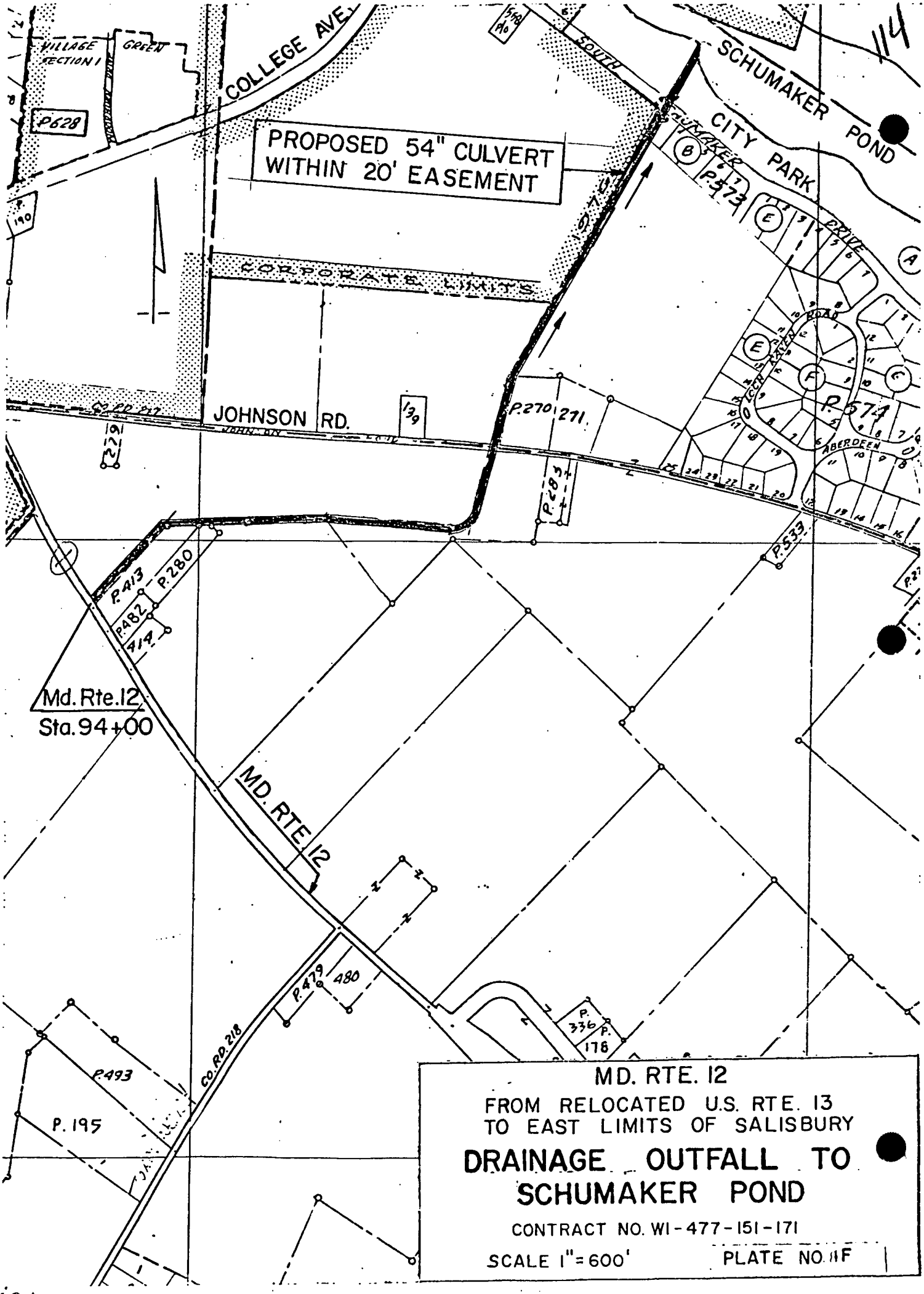
In the urban section north of College Avenue a 4-lane 56-foot wide urban street is proposed with curb, gutter and sidewalk on both sides. Bicyclists will be accommodated in the widened outside travel lane.

The roadway improvements would not affect any 4(f) land. However, the drainage outfalls proposed to discharge the runoff from the roadway and adjacent land would discharge into either Beaverdam Creek or Schumaker Pond which are within the Salisbury City Park boundaries. The locations of the proposed outfalls are shown on Plates 1F and 2F.

In the rural section, the roadway runoff would collect in the side ditches and drain towards a common outfall point just north of the group of three homes on the east side of Md. 12 south of Robins Avenue (Sta. 94+00). See Plates 4 through 7 in the Negative Declaration. At this point the flow in both side ditches would be combined and carried easterly in a culvert to Schumaker Pond. The outfall would be located north of the swimming area and just south of the Morris family cemetery approximately 2000 feet south of College Avenue. This outfall would consist of a 54" culvert buried within a permanent drainage easement in the park 20 feet wide by 200 feet long. See Plate 3F.

In the urban section, the roadway runoff collected between College Avenue and Dewey Lane would drain to an outfall along Regency Drive. This culvert located in Regency Drive would collect the runoff from the residential area along Regency Drive and discharge into Beaverdam Creek approximately 2000 feet north of College Avenue. See Plate 4F. This outfall would consist of a 54" culvert buried within a permanent drainage easement in the park 20 feet wide by 500 feet long.

The runoff between Dewey Lane and Spring Avenue would be collected in the longitudinal drainage system and drained to Shiloh Street. The City of Salisbury has built a storm water system for Wicomico Village and Salisbury Apartments which is temporarily discharging into an existing 36" pipe along Bethel



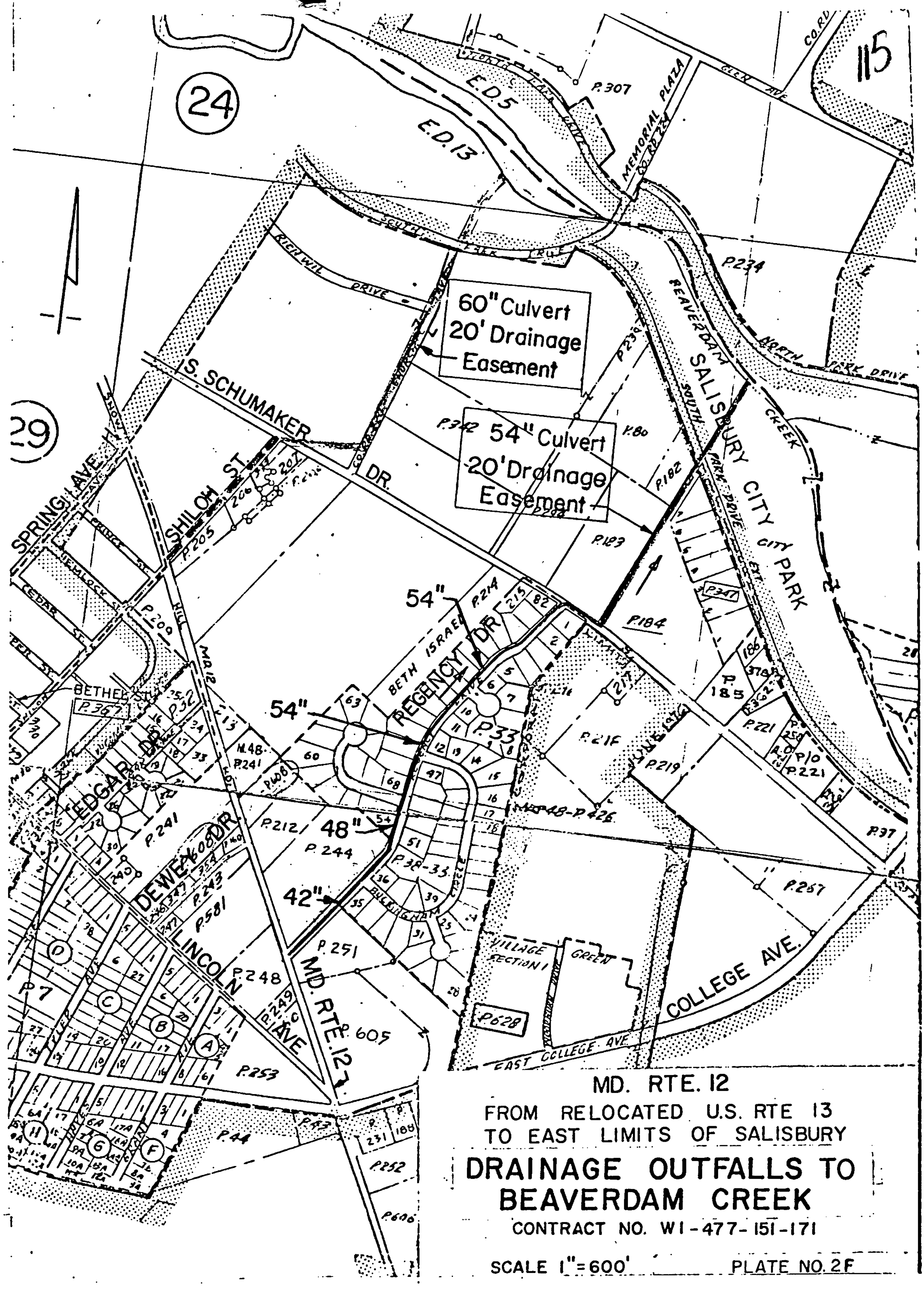
MD. RTE. 12

FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

DRAINAGE OUTFALL TO SCHUMAKER POND

CONTRACT NO. WI-477-151-171

SCALE 1"=600' PLATE NO. 11F



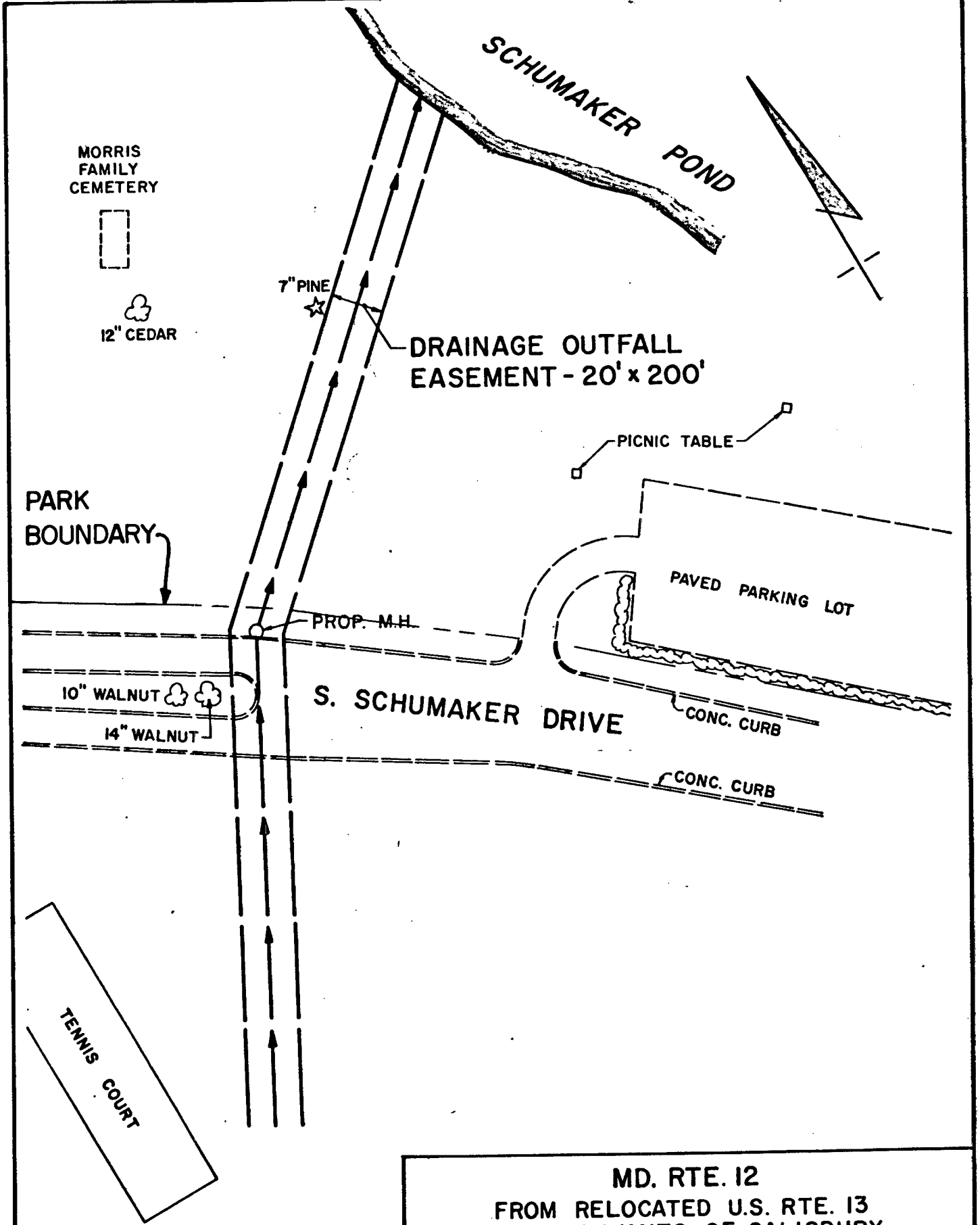
MD. RTE. 12

FROM RELOCATED U.S. RTE 13
TO EAST LIMITS OF SALISBURY

DRAINAGE OUTFALLS TO BEAVERDAM CREEK

CONTRACT NO. W1-477-151-171

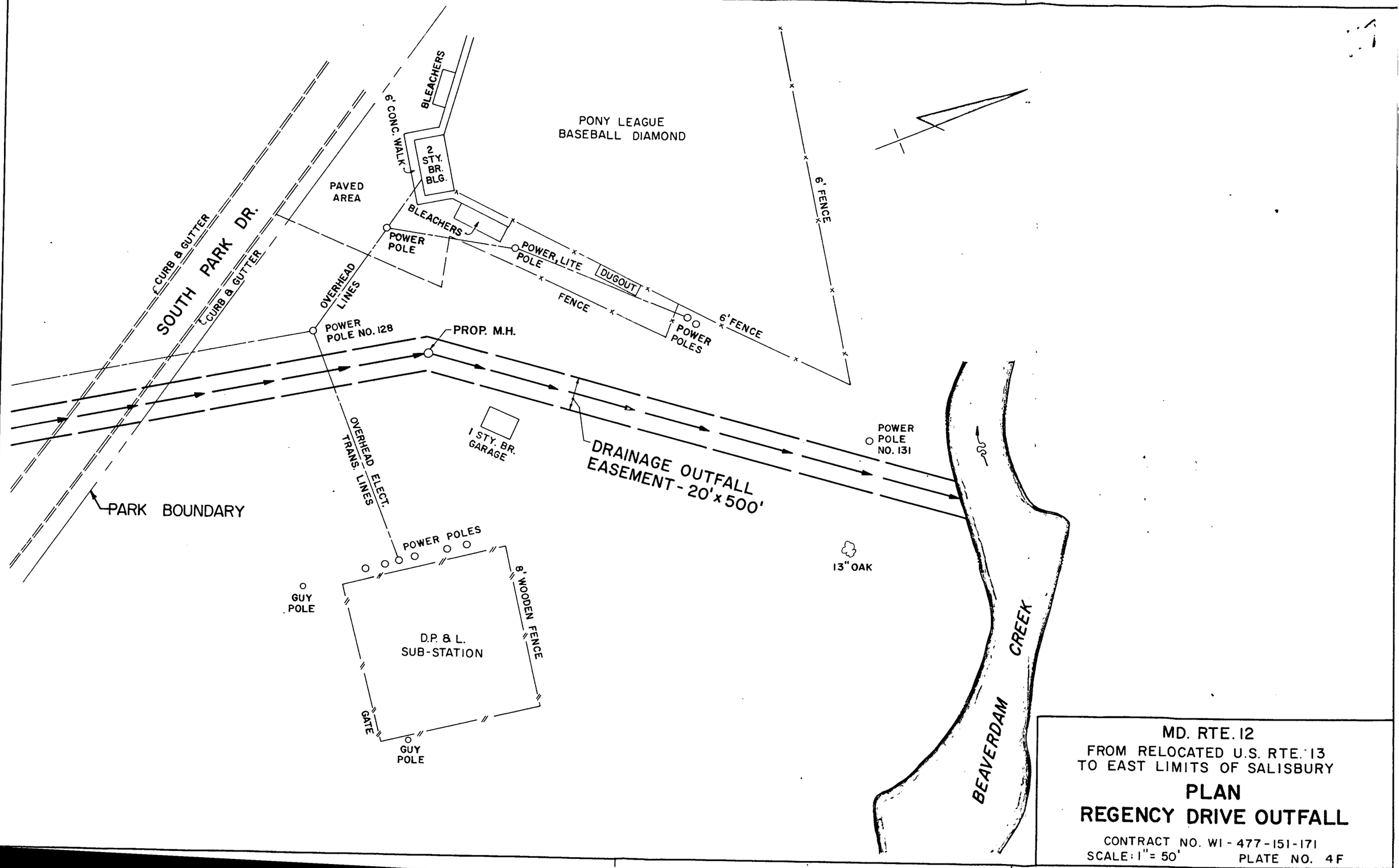
SCALE 1" = 600'   PLATE NO. 2F



MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN - SCHUMAKER POND DRAINAGE OUTFALL

CONTRACT NO. WI - 477 - 151 - 171
SCALE: 1" = 50' PLATE NO. 3F



MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
REGENCY DRIVE OUTFALL

CONTRACT NO. WI - 477 - 151 - 171
SCALE: 1" = 50'
PLATE NO. 4F

Street. The City is anticipating building another system to drain the area bounded by College Avenue on the south, Shiloh Street on the north and west and combining the two areas in a common outfall to pass along Shiloh Street and Churchill Avenue to Beaverdam Creek. The runoff from Md. 12 collected at Shiloh Street would also discharge into this common outfall providing a 60" culvert. This culvert would discharge into Beaverdam Creek at the north end of Churchill Avenue approximately 250 feet north of Memorial Plaza Road outside the area of the zoo. The permanent drainage easement within the park would be 20 feet wide by 350 feet long. See Plate 5F.

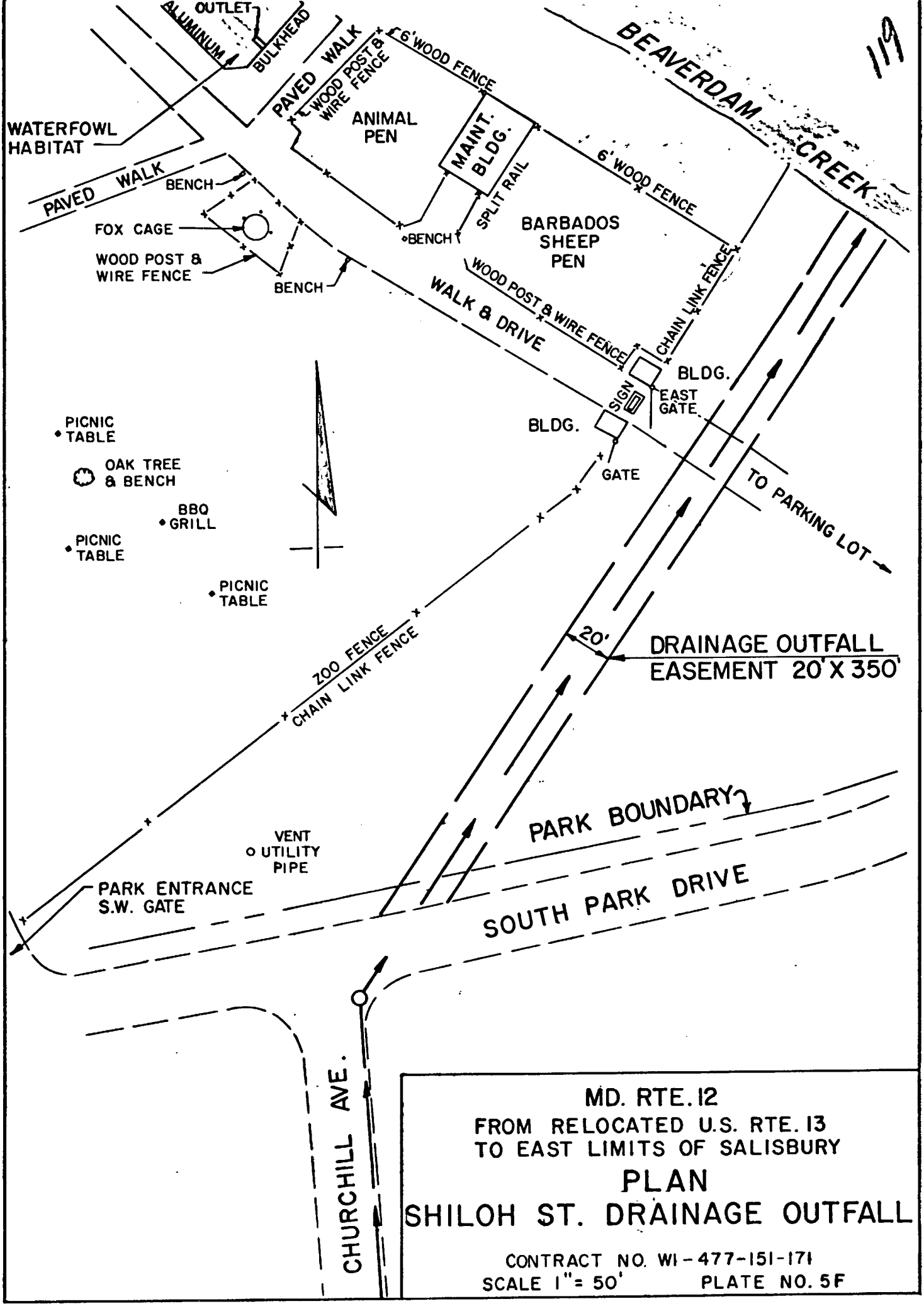
DESCRIPTION OF 4(f) LAND

The Salisbury City Park is located along the banks of Beaverdam Creek from Md. Rte. 12 to north of College Ave. along Schumaker Pond.

The Park is under the jurisdiction of the City of Salisbury and includes such facilities as a zoo, picnic areas, baseball diamonds and swimming area. In addition, there are 16 wells serving the municipal water system located in the flood plain of Beaverdam Creek within the park. See Plate 6F following this page. This park is the most significant part of the park system available in Salisbury. See the letter from the Department of Public Works of the City of Salisbury in the Coordination Section.

Patronage figures for some of the facilities including the zoo, tennis instruction, horseshoe pits, skateboard ramp, baseball league, and band concerts total approximately 142,000 per year. These figures do not include picnickers, hikers, tennis players and passive users of the park.

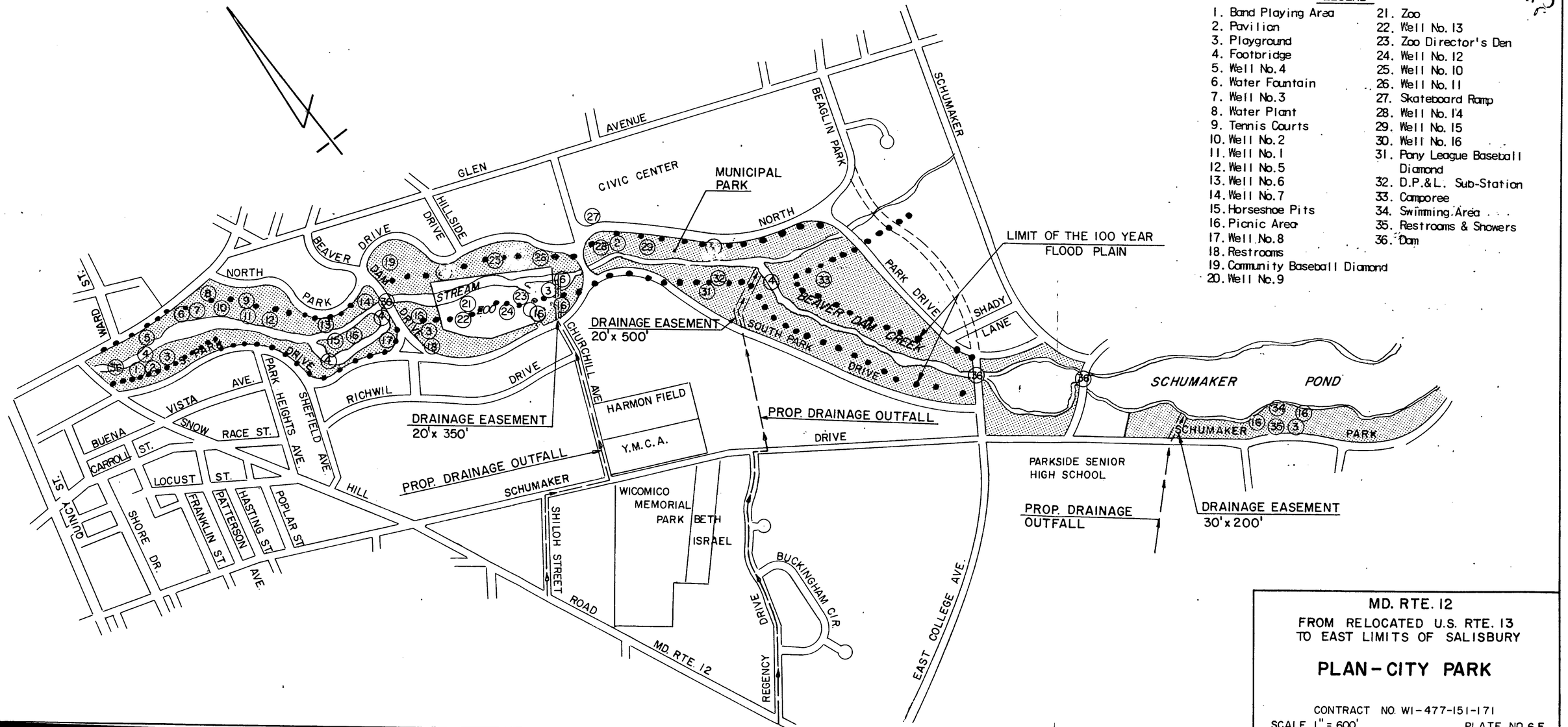
Vehicular access to the park can be gained by way of Schumaker Drive, South Park Drive, North Park Drive, Memorial Plaza Road and Churchill Avenue. Pedestrian access to the park can be gained anywhere along its perimeter since there is no barrier except the fence surrounding the zoo area.



MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
SHILOH ST. DRAINAGE OUTFALL

CONTRACT NO. WI-477-151-171
SCALE 1" = 50' PLATE NO. 5F



MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN - CITY PARK

CONTRACT NO. WI-477-151-171
SCALE 1" = 600'
PLATE NO. 6 F

The park downstream of Schumaker Dam is subject to periodic flooding since it lies within the flood plain of Beaverdam Creek. The zoo areas are often damaged from floods and the municipal wells in the park have been threatened with contamination caused by flooding.

AREAS AFFECTED

As described in the section titled Project Location and Description, three drainage outfalls would pass through park land and discharge into Beaverdam Creek and Schumaker Pond.

The area of the park traversed by the outfall into Schumaker Pond is located approximately 900 feet north of the public swimming area and 700 feet south of the dam. There are no recreational facilities located in this area which is covered by mixed pines and hardwoods. The Morris family cemetery located just north of the outfall site will not be affected by the outfall, either directly or indirectly.

The outfall will consist of a 54" pipe culvert that will be buried with the limits of Schumaker Drive and the point of discharge at the pond. The proposed easement would be 20 feet wide by approximately 200 feet long. No permanent structures would be allowed within the easement area. See Plate 3F for details at this site.

The area of the park traversed by the Regency Drive outfall consists of scrub oak, brush and sassafras trees. No recreational facilities would be affected by this outfall since it will be located to bypass the Delmarva Power and Light substation and the Pony League baseball diamond. The easement would not come within 40 feet of the fence around the playing field. See Plate 4F. The outfall would consist of a 54" culvert that will be buried between the park limits and the point of discharge at Beaverdam Creek. The easement would be approximately 500 feet long and 20 feet wide.

The Shiloh Street outfall would enter the park at Churchill Avenue and discharge into Beaverdam Creek just south of the zoo boundary. The easement would be approximately 350 feet long by 20 feet wide. See Plate5F for a description of the area involved.

EFFECTS ON PARKLAND

The proposed drainage outfalls would involve some temporary (visual) disruptions during construction. These disruptions during construction would create no effects on the areas traversed by the Regency Drive and Schumaker Pond outfalls since there are no recreational facilities in the immediate vicinity of the easements. The construction of the outfall at the zoo would have some disruptive effect on users of the zoo and picnic areas adjacent to the easement.

The outfalls into Beaverdam Creek would have a slight beneficial effect on the Beaverdam Creek watershed by reducing the peak volumes of water, thereby reducing potential flooding which in turn reduces the potential for contamination of the wells in the flood plain. This benefit results from the fact that allowing the runoff from Md. 12 to reach the stream sooner than at present would permit this water to pass through the area of flooding before the peak discharge arrives from the major portion of the watershed. See Water Quality Section of Environmental Effects in Negative Declaration on page 42.

These outfalls would have a minor adverse effect on the water quality of the stream and pond in the immediate vicinity of the outfall pipes as described in the Environmental Effects - Water Quality Section. The water in Beaverdam Creek downstream of the dam is generally turbid, slow moving, and fertile. The effects of the outfalls would be in the form of increased sedimentation, road salts, oils and other pollutant. These pollutants could cause some smothering of food organisms and fish spawn. The effects would diminish with distance from the outfalls; but overall the effects would be minor to moderate on the aquatic life in the pond. The pond does not provide habitat for the support of any rare or endangered species. There should be no significant effect on the water quality of the pond in terms of swimming.

The proposed easements would have an insignificant effect on wildlife since the three outfalls pass through areas of the park where there is considerable human disturbance, therefore the importance of these three easement areas as wildlife habitat is minimal. Also, the terrain would be returned to its original

conditions after construction of the outfalls, thereby creating only a temporary disruption of wildlife habitat.

These outfalls would create no permanent adverse effects on the parkland because all outfalls would be buried between the limits of the park and the discharge points. The terrain within the easements would be restored to existing conditions after construction and, therefore, could be returned to their uses before construction. The only differences between the land within the easements before and after construction would be the loss of a few mature trees along the Regency Drive and Schumaker Pond outfalls and the restriction on building permanent structures within the easements after construction.

MITIGATION MEASURES

All mitigation and restoration measures will be reviewed and concurred with by park officials.

All three of the proposed drainage outfalls would consist of culverts, buried with the ground backfilled, landscaped and restored to the original conditions. The area within the easement would then be restored to its original use with the restriction that no permanent structures could be built within the easement.

The locations shown for the outfalls are subject to slight modification during the design phase. These locations were chosen to minimize property and environmental damages, since the topography does not govern their alignments. No recreational facility is directly affected by any of the outfalls since all these easements would contain buried culverts and the locations could be chosen to avoid existing recreational facilities.

The main concern with respect to the park is increased flooding caused by any increase of the discharge rate of outfalls discharging into Beaverdam Creek and Schumaker Pond. This aspect of the project was discussed in detail in the Water Quality Section of the Negative Declaration. Beaverdam Creek and its flood plain is particularly sensitive to flooding due to the municipal wells which could be contaminated by flooding and the zoo which

houses many species of birds and animals in the flood plain. The stream floods occasionally which indicates the lack of any excess capacity in the stream bed for additional flow.

As described in the Water Quality Section, under present levels of development in the watershed, the proposed drainage systems for the selected alternate would reduce the flooding potential in Beaverdam Creek, thereby providing a net benefit to the park with respect to flooding. In order to maintain this advantage storm water management must be incorporated in any new development plans in the watersheds.

Since no park land would be acquired and removed from use as recreational land, there would be no need to obtain replacement land for that land affected by the drainage easements.

Contact with the City of Salisbury Department of Public Works, the agency with jurisdiction over the park has been continued throughout the project. The final locations of the outfalls will be determined in coordination with the Department of Public Works. See letters from the City of Salisbury in the Coordination Section.

The construction of the outfall at the zoo could create some temporary disruption of activities in the area. The picnic tables located adjacent to the easement could be moved temporarily to another area of the park not affected by the construction. Also, the construction of the outfalls would be scheduled to occur during the periods of low park usage to minimize the inconvenience to park users and effects on aquatic life.

The outfall sites would be enclosed by barriers to protect the public during construction. In addition, erosion control methods developed by the Maryland State Highway Administration and approved by the Maryland Department of Natural Resources would be used.

The selected alternate in the rural section would minimize the impact on Schumaker Pond by reducing the velocity of flow in the side ditches and allowing for percolation into the permeable soils. This would reduce the overall and peak flows into the pond. Other methods to reduce erosion and sedimentation such as revegetation and streambank stabilization would be used.

ALTERNATES

Since the various build alternates studied for the roadway improvements all include the same drainage outfalls, they will not be discussed in this section. The No Build Alternate would not include the drainage outfalls and will, therefore, be addressed as an alternative to the using of 4(f) land. Two alternates to the drainage outfalls will also be discussed.

No Build Alternate

The existing two-lane roadway with 2-foot shoulders would be maintained throughout the study area from Relocated Rte. U.S. 13 to Spring Street. Between Spring Street and E. Main Street the roadway is 40 feet wide with curb and gutter on both sides.

In the rural segment the roadway would reach capacity by the design year and traffic operation would be characterized by long delays at signals and overall running speeds from 25 to 30 m.p.h. In this segment overall travel speeds would be approximately 15 m.p.h. due to congestion.

This alternate is not consistent with local comprehensive plans for the corridor from the city limits to Relocated U.S. Rte. 13. These plans show proposed residential, commercial and industrial uses throughout the project area, considerably increasing the need for upgrading the existing rural two-lane facility to provide acceptable traffic service to these higher density land uses.

The air pollutant concentrations at sensitive receptors along the project would be higher for the No Build Alternate than for the recommended alternate.

The accident rate on the existing roadway would continue to increase with increased traffic volumes.

For the above reasons, the No Build Alternate was eliminated as a prudent alternate to the selected alternate.

Alternatives to the use of parkland for drainage easements were studied. Two alternates were analyzed and are described below:

12le

Alternate A

An alternative to discharging the runoff from the rural section into Schumaker Pond would be to carry the runoff south from Md. 12 along Robins Avenue to discharge into Tony Tank Creek. This culvert would be 7000 feet long versus 4600 feet for the outfall to Schumaker Pond. See Plate 7F.

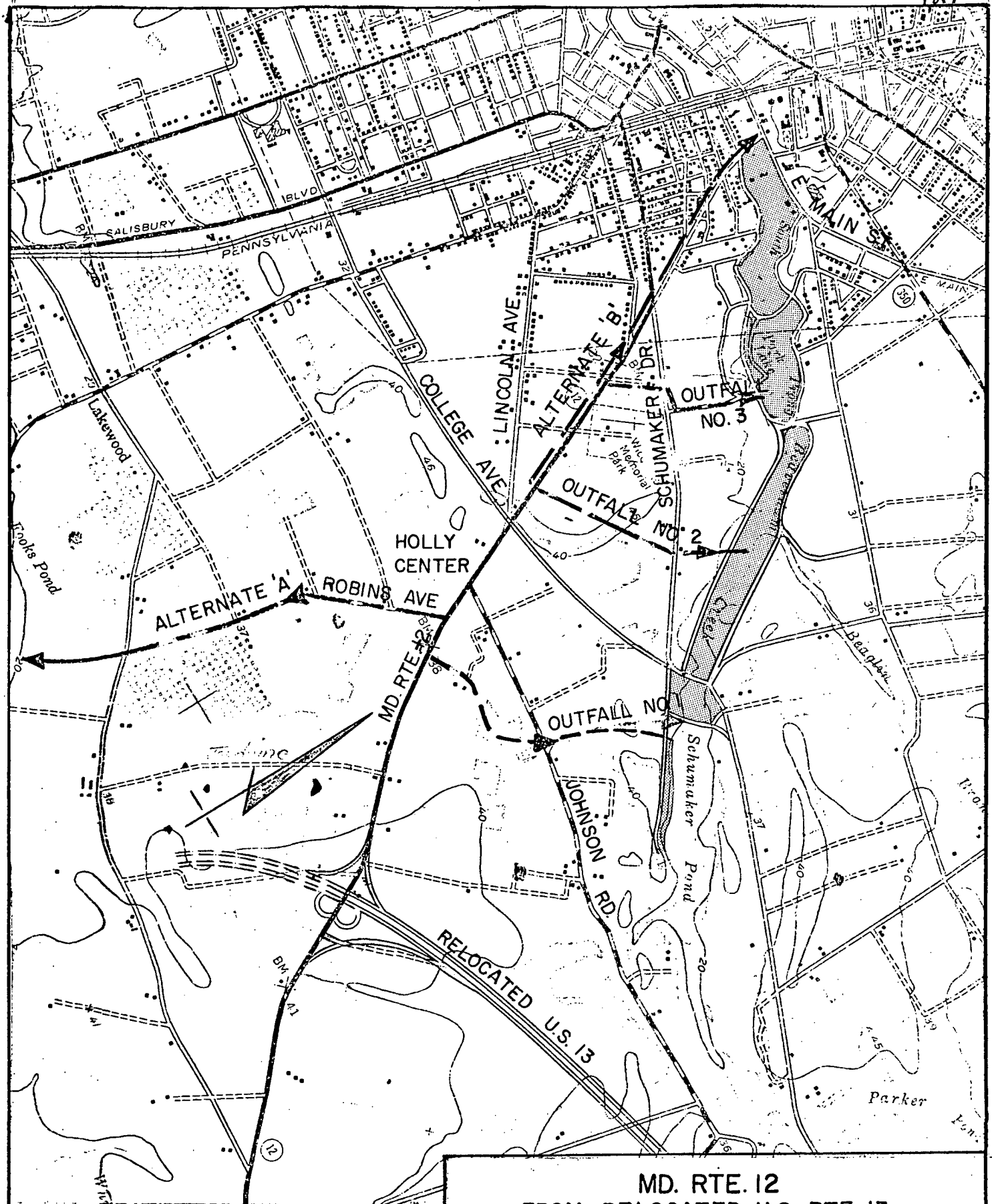
This alternate would divert flow that presently drains to Beaverdam Creek to a different watershed, Tony Tank Creek. This diversion would increase the area included in the Tony Tank watershed and increase the peak flow and the flooding potential of that stream. The watershed of Tony Tank Creek is less than one-third the size of the Schumaker Pond watershed, which would result in a much shorter time of concentration for the peak flow. Therefore, the additional flow of this outfall would affect the peak flow of Tony Tank Creek to a greater degree than the Schumaker Pond peak. In fact, the Schumaker Pond peak flow is decreased with the provision of the outfall discharging into the pond.

The roadway pollutants carried to Tony Tank Creek under this alternate would have a greater adverse effect on the water quality and aquatic life in the immediate vicinity of the outfall in Tony Tank Creek as that described in the Water Section of the Negative Declaration because the volume of the receiving body is considerably less than that of Schumaker Pond.

This culvert would be placed within the right of way of Robins Avenue causing inconvenience to the traveling public during the construction phase.

The cost of the outfall to Tony Tank Creek is approximately $220,000 more expensive than the outfall to Schumaker Pond, which represents an increase of 50% over the Schumaker Pond outfall.

In summary, the outfall to Tony Tank Creek is not a prudent alternate to the Schumaker Pond outfall for the following reasons:



LEGEND

CITY OF SALISBURY PARK

PROP. DRAIN OUTFALLS

MD. RTE. 12
FROM RELOCATED U.S. RTE. 13
TO EAST LIMITS OF SALISBURY

PLAN
ALTERNATIVE OUTFALLS

CONTRACT NO. WI-477-151-171
SCALE 1" = 2000' PLATE NO. 7

1. Water is diverted from its natural watershed causing increased flow in the Tony Tank watershed increasing the potential of flooding.
2. Effect of pollutants on aquatic life in Tony Tank Creek would be equal or greater than that on Schumaker Pond.
3. Construction would create inconvenience to the traveling public on Robins Avenue.
4. This outfall is significantly more expensive than the Schumaker Pond outfall.

Alternate B

An alternative to the drainage outfalls along Regency Drive and Shiloh Street would be to collect the runoff and carry it along Md. 12 to the crossing of Beaverdam Creek near E. Main Street. See Plate 7. This flow would be discharged into the stream west of Md. 12 near the existing city outfall, eliminating the discharges from the park area. This alternate would discharge into the tidal portion of the stream downstream of the dam in the park at Md. 12. A wetlands license might be required by the Department of Natural Resources in order to discharge into tidal waters. This alternate would consist of approximately 6500 feet of drainage systems including longitudinal pipes and inlets.

The effects of this outfall on water quality would be similar to those mentioned for the proposed outfalls. However, since the volume of flow and concentrations of pollutants would be significantly higher with this alternate than with either of the proposed outfalls, the extent of affected water around the outfall would be significantly greater than for the proposed outfalls.

The comparative costs between Alternate B and the proposed alternate for the drainage system between College Avenue and E. Vine Street including outfalls are as follows:

Proposed Alternate	$ 740,000.
Alternate B	$1,270,000.

Alternate B does not appear to be a prudent alternate to the Regency Drive and Shiloh Street outfalls for the following reasons:

1. The same amount of pollutants will be discharged into Beaverdam Creek under both alternates. The concentrations of pollutants at the outfall would be greater under this alternate than under the proposed alternate.
2. Construction within the existing Md. 12 corridor would create inconvenience to the traveling public and the property owners along the route.
3. The additional costs of this alternate are not justified since no benefits would be accrued through this alternate with respect to either water quality, flooding potential or impact on recreational lands.

COORDINATION

Contact has been maintained with the responsible agency for the Salisbury City Park, the Salisbury Department of Public Works, since the beginning of the project. The pertinent correspondence documenting this liaison is included in this section. In addition, the Md. Department of Natural Resources was consulted with respect to the Beaverdam Creek watershed.

CONCLUSION

The final detailed design locations of the drainage outfalls will be determined during the final design phase. Since topography is not the controlling factor in the location of the outfalls, they can be located to minimize adverse impacts on park facilities, water quality and property owners along these routes. The final locations will be determined in coordination with the Department of Public Works to assure that the outfalls cause the least disruption to existing and proposed recreational facilities.

The above factors and considerations establish that there is no feasible or prudent alternate to the use of land from the park property and that the project includes all possible planning to minimize harm resulting from such use.

If significant changes in the location of the proposed outfalls are determined to be necessary during the design phase, a Section 4(f) Supplement to this document will be processed.

City of Salisbury

MARYLAND

PHILIP C. COOPER
Director
PUBLIC WORKS DEPT.

P.O. Box 791
Salisbury, Md. 21801
301-742-2289

23 January 1978

100715

Mr. Garrett Hitchcock
WILSON T. BALLARD COMPANY
17 Gwynns Mill Court
Owings Mills, Maryland 21117

Re: Maryland Rt. 12 - Snow Hill Rd.

Dear Garrett:

Enclosed are a drainage area map, hydraulic computations, preliminary profiles, and as built drawings for the vicinity south of Snow Hill Road near Shiloh Street. You will note certain discrepancies between the computations and the "as-built" pipe sizes which were dictated by the geometrics of the system into which a temporary 36" pipe was connected. I have, therefore, marked those pipes which are temporary.

You will also note that I did not project the profile for a 60" outfall beyond Snow Hill Road because we anticipated the very program you are now involved with. I would also remind you of the critical nature of the Beaver Dam Creek watershed into which this area will drain. The stream valley is subject to damaging flooding of City Zoo and water supply facilities and storm water management in this shed is an absolute must. Just within the last several weeks the City Park area was damaged by a 4" rain and subsequent less intense storms. The State Water Resources Administration has recently commenced a flood management study of the watershed which we hope will suggest remedial measures necessary to protect the valley.

See Page 42

If you have any questions on this matter, please contact us.

Sincerely,

CITY OF SALISBURY

K. M. Haensler

Kenneth M. Haensler, P.E.
Assistant Director - Public Works

KMH:kc
Encl.

City of Salisbury

MARYLAND

131

JUN 12 19[illegible]

THE WILSON T. BALLARD CO.

BY_____

[redacted]
Director
PUBLIC WORKS DEPT.

P.O. Box 791
Salisbury, Md. 21801
301-742-2289

9 June 1978

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
STATE HIGHWAY ADMINISTRATION
300 West Preston Street
Baltimore, Maryland

Re: Improvements to Md. 12 from
Relocated U.S. Rt. 13 to the
East Limit of Salisbury -
Contract No. Wi 744-151-171

Dear Mr. Camponeschi:

We have reviewed the "Alternate Alignment Studies" for the above referenced project, prepared by the Wilson T. Ballard Company, dated February 1978, and would like to offer the following comments.

TRAFFIC CHARACTERISTICS

We believe that you may have neglected one important street intersection in the area north of College Avenue, namely, East Carroll Street. It is the City's intent to make a major improvement to this street within the next two (2) years and it will serve as a major carrier for traffic from Snow Hill Road to the Central Business District of Salisbury. This factor may impact on your traffic count projections for north of College Avenue and in your considerations of signal needs.

The traffic data includes Carroll St.

DESIGN CRITERIA

South of College Avenue: We would encourage Alternate No. 1 for several reasons. The rural section would be less expensive to contend with in the event water and sewer utilities are extended southerly in Rt. 12 in years to come. We also like the advantages in the area of storm water management which the rural section offers. Finally, this portion of Rt. 12 has been designated for predominately residential development and we feel that the rural

132

DESIGN CRITERIA (Continued)

section will be more compatible with the infrequent intersections and entrances which are likely to occur.

North of College Avenue: We believe that Alternate No. 2 is the more practical suggestion for this area from the standpoints of right-of-way acquisition costs and construction costs.

DRAINAGE CONSIDERATIONS

We do not believe the alignment study gives sufficient emphasis to the importance of storm water management for this project. The Beaverdam Watershed into which drainage would be discharged is already under severe stress every year. We do not believe that it can sustain any additional substantial increases in runoff. The Maryland Water Resources Administration is currently engaged in a flood study for the watershed and we would hope that they would, in due time, be in a position to advise your Department on matters relating to storm water management. We, of course, are also anxiously awaiting for the results of their study. The City of Salisbury has substantial interest and investment in the stream valley in that it serves as a source of public water supply and as the location for the Salisbury Zoo. We believe that you will find the drainage from south of College Avenue will require a bit more management than a simple open ditch system can provide. There is no question in our minds that drainage from north of College Avenue will require an extensive management system as well as a very careful selection for useful locations.

See page 42

INTERSECTING ROADWAYS

We endorse the proposal to close Lincoln Avenue intersection. However, we do not believe that any useful purpose will be served to extend Regency Drive to Grant Avenue. We also object to the closing of Prince Street and Washington Street and the proposed creation of extremely long cul-de-sacs in these locations.

ENVIRONMENTAL ASSESSMENT

See comments for Drainage Considerations.

Sincerely,

CITY OF SALISBURY

K. M. Haensler

Kenneth M. Haensler, P.E.
Acting Director - Public Works

KMH:kc
cc: Merrill Burhans
William Lee

Maryland Department of Transportation
State Highway Administration

Hermann K. Greismann
Secretary
W. S. Cartmell
Administrator

August 16, 1978

RE: Contract No. MI 477-151-171
Maryland Route 12
Relocated U.S. Route 13
to the City of Salisbury

Mr. Kenneth M. Haensler, P.E.
Acting Director
City of Salisbury
Department of Public Works
Government Office Building
Salisbury, Maryland 21801

Dear Mr. Haensler:

The Maryland State Highway Administration is studying alternate improvements to Maryland Route 12 between Relocated U.S. Route 13 and the limits of the City of Salisbury. These studies were presented to the public at the Alternates Meeting held on July 26, 1978 at Parkside High School.

All alternatives involve discharge of storm water, collected along Maryland Route 12, into Beaverdam Creek. The tentative locations of these outfalls are shown on the attached sketches. All outfalls are located within City Park property.

Since all the alternates except the No-Build would require acquisition of permanent drainage easements in land designated for public use, Section 4(f) involvement may be applicable. Therefore, we must request that the local official having jurisdiction over the public land provide a determination of significance for the land required for these easements and the needs of the public. Should you find that the land is not significant or that the area is designated as multiple use and therefore, that portion of the land to be taken is not in fact being used for park or recreation areas, then the provisions of Section 4(f) are not applicable. Your determination in this matter is needed.

Should you determine that the land in question is significant and is not administrated for multiple use, then the following supportive information is required:

1. A map showing the dimensions and boundaries of the park.

My telephone number is (301) 383-4327

2. Type of facilities included in the park, such as baseball diamonds, picnic areas, swimming areas, etc., and their locations.

3. Activities available in the park.

4. Patronage figures for each activity if possible.

5. Relationship to other similarly used land in the area.

6. Locations and types of access to the park.

7. Any applicable clauses affecting title of the park such as use restrictions or covenants.

8. Unusual characteristics of the land being contemplated for acquisition such as flooding, terrain problems or other features that reduce or enhance the value of their lands.

9. The location of existing and proposed public water supply wells within the park property.

Should you desire further clarification concerning this and other issues relative to the proposed improvements to Maryland Route [illegible], please call the Project Manager, Mr. Donald G. Honeywell at 383-7109. Your earliest response to our request will be appreciated.

Very truly yours,

Eugene T. Camponeschi

Eugene T. Camponeschi, Chief
Bureau of Project Planning

ETC:bh
Attachment

cc: Mr. William K. Lee, III
Mr. Schuyler L. Mellor
Mr. Richard S. Krolak
Mr. Donald G. Honeywell ✓

RECEIVED 135

OCT - 31 1978

THE WILSON T. BALLARD CO.

BY

1978 OCT 27 AM 10 01

City of Salisbury

MARYLAND

Kenneth M. Haensler, P.E.
Director
PUBLIC WORKS DEPT.

ADMINISTRATION
PROJECT PLANNING
P.O. Box 791
Salisbury, Md. 21801
301-742-2339

October 25, 1978

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
P.O. Box 717
Baltimore, Maryland 21203

Re: Contract WI 477-151-171
Maryland Route 12

Dear Mr. Camponeschi:

Please accept our apology for taking so long to reply to your letter of August 16, 1978, requesting information on the significance of the Salisbury City Park. We will respond directly to the numerical listing in your letter as follows:

1. Map of Park enclosed, with legend identifying significant features.

2. Type of facilities included in Park - see map.

3. Activities available - see map.

4. Patronage figures - these are not available for all facilities, but we have some estimates from the County Recreation Department and the Zoo. Zoo - 125,000/yr., tennis instruction - 3,000/yr. (public patronage not included), horseshoe pits - 5,000/yr., skateboard ramp - 4,200/yr., Pony League baseball - 2,500/yr., band concerts - 1,700/yr.

5. The City Park is an important element in a total recreational complex. It is immediately adjacent to or nearby two high schools, the Mid-Delmarva YMCA, Harmon Field (soccer & softball), the Wicomico County Youth & Civic Center, the Elks Club golf course, and the County Stadium.

136

6. Locations and types of access - The Park is served by numerous City and County streets and by perimeter streets.

7. Use restrictions or covenants - unknown.

8. Unusual characteristics - The Park area downstream of Schumaker Dam is subject to periodic flooding which often damages the zoo area and endangers the bridges. In addition, the wells for municipal water supply, the treatment plant, and main pumping station are located in the Park and have been periodically threatened by flooding, the threat being in the form of well contamination.

9. Water supply wells - see map for locations.

You can readily see from the above that the City Park is an intensely utilized public facility and must be protected from further flood influences.

Sincerely,

CITY OF SALISBURY

Kenneth M. Haensler, P.E. - Director
Department of Public Works

137

City of Salisbury

MARYLAND

Kenneth M. Haensler, P.E.
~~XXXXXXXXXXXXXXXX~~
Director
PUBLIC WORKS DEPT.

9 January 1979

P.O. Box 791
Salisbury, Md. 21801
301-742-2289

STATE HIGHWAY ADMINISTRATION
P.O. Box 717
300 West Preston Street
Baltimore, Maryland 21203

ATTENTION: Eugene T. Camponeschi
Bureau of Project Planning

Re: Contract Wi 477-151-171
Maryland Route 12

Gentlemen:

I regret that it will not be convenient for me or my representative to attend the review of the Preliminary Draft Negative Declaration for the above project on January 17, 1979.

In lieu of our attendance, we would like to make the following comments:

1. Table 13 (P. 18-A) tabulates a Comparison of Environmental Effects which excludes Flooding as an effect. Perhaps this is not an element in whatever manual spells our Environmental Effects but we consider it to be a very serious one. Until more comprehensive studies have been completed by DNR it would be difficult to rate "adverse effect" but we suspect it may be significant.

2. In general, the City of Salisbury requests that further storm drainage details, design and environmental impact, be held in abeyance until we have jointly had the opportunity to review the recommendations resulting from the DNR Study.

3. Alternative Outfall "B", or some variation, as depicted on Plate No. 16, should be held open as a possible necessity should the flood plain studies so dictate.

138

Your consideration of the above will be greatly appreciated.

Sincerely,

CITY OF SALISBURY

Kenneth M. Haensler, P.E. - Director
Department of Public Works

KMH:kc
cc: Joe Strahl
Bill Lee
Merrill Burhans

139

RECEIVED

AUG 14 19

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER-79/560

160-115

AUG 3 1979

THE WILSON T. BALLARD CO.

BY

cc: STEEMAN (HED-03
KROLAK (SHA)
on 8-6-79

ok

Dear Mr. Elinsky:

This is in response to a request for the Department of the Interior's comments on the Section 4(f) Statement and Negative Declaration for SR-12 (from relocated US-13 to East Main Street in Salisbury), Wicomico County, Maryland.

PRELIMINARY SECTION 4(f) COMMENTS

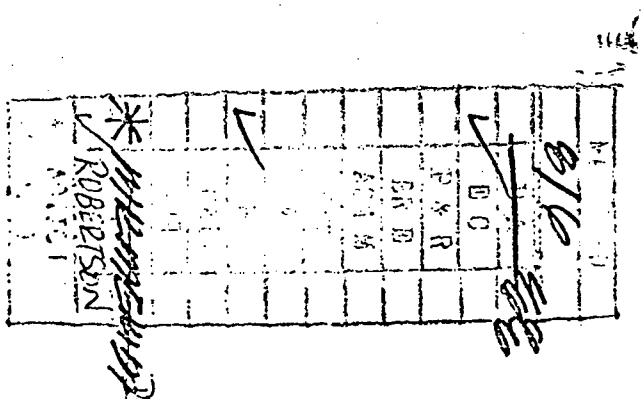
We concur that there is no feasible and prudent alternative to the proposed project as it relates to the acquisition of drainage easements in Salisbury City Park and that the project includes sufficient measures to minimize harm to the park. In fact, it appears that the project will reduce flooding problems in the park zoo.

ENVIRONMENTAL STATEMENT COMMENTS

The statement adequately describes the existing fish and wildlife resources. It indicates on page 58 that the locations of the drainage outfalls are subject to modification during the design phase. We recommend that locations be chosen that minimize potential negative effects on prime wildlife habitat.

Within the rural segment Alternate 2 appears to be preferable because the open drainage system allows for lower stormwater velocities and seepage into the permeable soils. This would reduce scouring and sedimentation at the outfall and may help reduce maintenance dredging costs in navigable waterways.

We are pleased to note that each of the build alternatives makes accommodation for bicyclists, either in widened outside lanes or in separate curb lanes.



Mr. Emil Elinsky, Baltimore, Maryland

SUMMARY COMMENTS

The Department of the Interior would not object to approval of the Section 4(f) determination by the Department of Transportation.

Sincerely yours,

Larry E. Meierotto
Secretary of the Interior

Assistant

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda, Suite 220
Baltimore, Maryland 21211

cc: Mr. Eugene T. Camponeschi
Chief
Bureau of Project Planning
Maryland State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

APPENDIX A

ENVIRONMENTAL ASSESSMENT FORM

The Environmental Assessment Form, which is included on the following pages, was developed in response to the requirements of the Maryland Environmental Policy Act of 1974. This report is to be prepared for all state actions and registered with the Maryland State Clearinghouse through the Maryland Department of Transportation.

ASSESSMENT OF SIGNIFICANT ENVIRONMENTAL EFFECTS

The following questions should be answered by placing a check in the appropriate column(s). If desirable, the "comments attached" column can be checked by itself or in combination with an answer of "yes" or "no" to provide additonal information or to overcome an affirmative presumption.

In answering the questions, the significant beneficial and adverse, short and long term effects of the proposed action, on-site and off-site during construction and operation should be considered.

All questions should be answered as if the agency is subject to the same requirements as a private person requesting a license or permit from the State or Federal Government.

	Yes	No	Comments Attached
A. Land Use Considerations			
1. Will the action be within the 100 year flood plain?	X		X
2. Will the action require a permit for construction or alteration within the 50 year flood plain?	X		X
3. Will the action require a permit for dredging, filling, draining or alteration of a wetland?		X	
4. Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?		X	
5. Will the action occur on slopes exceeding 15%		X	
6. Will the action require a grading plan or a sediment control permit?	X		
7. Will the action require a mining permit for deep or surface mining?		X	
8. Will the action require a permit for drilling a gas or oil well?		X	
9. Will the action require a permit for airport construction?		X	
10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?		X	

	Yes	No	Comments Attached
11. Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?	___	X	X
12. Will the action affect the use of any natural or man-made features that are unique to the county, state or nation?	___	X	___
13. Will the action affect the use of an archaeological or historical site or structure?	___	X	X
B. Water Use Considerations			
14. Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water?	___	X	___
15. Will the action require the construction, alteration or removal of a dam, reservoir or waterway obstruction?	X	___	X
16. Will the action change the overland flow of storm water or reduce the absorption capacity of the ground?	X	___	X
17. Will the action require a permit for the drilling of a water well?	___	X	___
18. Will the action require a permit for water appropriation?	___	X	___
19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	___	X	___
20. Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?	___	X	___
21. Will the action result in any discharge into surface or subsurface water?	X	___	X

	Yes	No	Comments Attached
			144
22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	X		X
C. Air Use Considerations			
23. Will the action result in any discharge into the air?	X		X
24. If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?		X	
25. Will the action generate additional noise which differs in character or level from present conditions?	X		X
26. Will the action preclude future use of related air space?		X	
27. Will the action generate any radiological, electrical, magnetic, or light influences?		X	
D. Plants and Animals			
28. Will the action cause the disturbance, reduction or loss of any rare, unique or valuable plant or animal?		X	
29. Will the action result in the significant reduction or loss of any fish or wildlife habitats?		X	
30. Will the action require a permit for the use of pesticides, herbicides or other biological chemical or radiological control agents?		X	
E. Socio-Economic			
31. Will the action result in a pre-emption or division of properties or impair their economic use?		X	

		Yes	No	Comments Attached
32.	Will the action cause relocation of activities, structures or result in a change in the population density or distribution?	___	X	___
33.	Will the action alter land values?	___	X	___
34.	Will the action affect traffic flow and volume?	X	___	___
35.	Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?	___	X	___
36.	Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	___	X	___
37.	Is the action in accord with federal, state, regional and local comprehensive or functional plans--including zoning?	X	___	___
38.	Will the action affect the employment opportunities for persons in the area?	___	X	___
39.	Will the action affect the ability of the area to attract new sources of tax revenue?	___	X	___
40.	Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	___	X	___
41.	Will the action affect the ability of the area to attract tourism?	___	X	___
F.	Other Considerations			
42.	Could the action endanger the public health safety or welfare?	___	X	___
43.	Could the action be eliminated without deleterious effects to the public health, safety, welfare or the natural environment?	___	X	___

	Yes	No	Attached
44. Will the action be of statewide significance?	___	X	146
45. Are there any other plans or actions (federal, state, county or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on the public health, safety, welfare or environment?	___	X	___
46. Will the action require additional power generation or transmission capacity?	___	X	___
G. Conslusion			
47. This agency will develop a complete environmental effects report on the proposed action.	X	___	___

MD. RTE. 12

COMMENTS FOR THE ENVIRONMENTAL ASSESSMENT FORM

1. This project will require the extension of an existing culvert and the provision of additional drainage structures to handle the storm water. The drainage outfalls along Beaverdam Run will most likely be located within the 50 year flood plain. However, the proposed drainage systems would reduce the flooding peaks for the 50 and 100 year storm.

11. Md. 12 crosses the Salisbury Park at the intersection of East Main. No construction alternates are recommended at this location and the traffic volumes will not change significantly at this site due to the project. The drainage outfalls discharging into Beaverdam Run within the park will not affect the use of the park for any recreational activity.See 4(f) Statement for additional information.

13. No historical or archeological sites will be affected by the project.

15. Culverts will be designed to carry the storm water away from the highway.

16. The additional paving required for the project will reduce the absorption capacity of the ground by increasing the impervious area to an insignificant degree. The drainage system required for this roadway would alter existing patterns of runoff by controlling the runoff and concentrating the flow in channels and culverts.

21 and 22. During the construction phase of the project, there will be increased erosion and sedimentation. However, these effects will be minimized through the use of erosion and sediment control devices developed by the State Highway Administration and Department of Natural Resources. There should be no additonal runoff of roadway pollutants during the operational phase since the traffic volumes are the same for the build and the no build alternates. The roadway pollutants could have minor effects on aquatic life in the immediate vicinity of the drainage outfalls on beaverdam Run.

23 and 24. The air pollution resulting from the proposed action would be slightly less than that resulting from the no build alternate since the traffic volumes are the same. The decreased congestion at the intersections and the slightly increased travel speed associated with the proposed action would reduce slightly the concentrations of pollutants arising from the traffic on the roadway. See page 27 of this document for additional information.

25. The noise levels along the roadway with the proposed action would be slightly higher than with the no build alternate. Since the project involves widening, the sources of noise will generally be closer to the existing noise receptors than under the no build alternate. Also, the slight increase in travel speeds would increase the noise levels slightly. However, the resultant noise levels should be insignificantly higher than those under the no build alternate. See page 34 of this document for additional information.

STATE HIGHWAY ADMINISTRATION

QUESTION AND/OR RECOMMENDATION FORM

100-115 148

MARYLAND ROUTE 12
From Relocated U.S. Route 13
To the East Limit of the City of Salisbury
Contract No. WI 477-151-171
F.A.P. No. M 8603(1)

In order to provide a method by which comments or inquiries of an involved or individual nature can be answered satisfactorily, please submit the following information:

PLEASE PRINT

Holly Center Citizens Advisory Board
NAME Philip S. Massey, Ph. D., Superintendent, Holly Center

ADDRESS Post Office Box 2358

Salisbury, Maryland 21801 ZIP CODE

COUNTY Wicomico

I/We wish to comment or inquire about the following aspects of this project.

As we have discussed personally and in previous correspondence, I am concerned that improvements to Route 12 be made in a manner that would not unnecessarily jeopardize the safety of Holly Center residents. As you are aware, several cottages are located near the present Route 12. Widening the road on Holly Center's side would seriously reduce the safety margin of space needed for the staff to catch up with and retrieve a resident who may have wandered off. In addition, it would destroy the visual and sound barriers that were constructed at great expense to the State along the existing road. I certainly hope that every consideration of the future development of Route 12 would include serious thought of widening the road along the side opposite Holly Center, which is presently undeveloped farm land. We very much appreciate your continued consideration in this matter.

See page 3 of this document.

SHA 61.3-9-35

STATE HIGHWAY ADMINISTRATION

QUESTION AND/OR RECOMMENDATION FORM

MARYLAND ROUTE 12

From Relocated U.S. Route 13
To the East Limit of the City of Salisbury

Contract No. WI 477-151-171
F.A.P. No. M 8603(1)

In order to provide a method by which comments or inquiries of an involved or individual nature can be answered satisfactorily, please submit the following information:

PLEASE PRINT

NAME Philip C. Cooper, Director - Public Works

ADDRESS CITY OF SALISBURY

P.O. Box 791, Salisbury, Maryland ZIP CODE 21801

COUNTY Wicomico

I/We wish to comment or inquire about the following aspects of this project.

I have reviewed this project in the field and in the office with a representative of the Wilson T. Ballard Company consulting firm, and I wish to point out a substantial deficiency in storm drainage in the area through which Rt. 12 passes between the City Limits of Salisbury and College Avenue. In my opinion, substantial storm drain outfall lines will need to be developed to carry any storm water from this area to the Beaverdam Watershed stream. Careful study should be given to this aspect of the highway improvement. It might be that other local agencies should have an interest in this and should be a part of the design making process.

See pages 4 - 7.

Philip C. Cooper
Dir. Public Works
Salisbury, Md. 21801

SHA 61.3-9-35
(Rev. 5/14/76)

APPENDIX B

SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE STATE HIGHWAY ADMINISTRATION OF MARYLAND

"SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE STATE HIGHWAY ADMINISTRATION OF MARYLAND"

All State Highway Administration projects must comply with the provisions of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (P.L. 91-646) and/or the Annotated Code of Maryland, Article 21, Section 12-201 through 12-209. The Maryland Department of Transportation, State Highway Administration, Bureau of Relocation Assistance, administers the Relocation Assistance Program in the State of Maryland.

The provisions of the Federal and State Law require the State Highway Administration to provide payments and services to persons displaced by a public project. The payments that are provided for include replacement housing payments and/or moving costs. The maximum limits of the replacement housing payments are $15,000 for owner-occupants and $4,000 for tenant-occupants. In addition, but within the above limits, certain payments may be made for increased mortgage interest costs and/or incidental expenses. In order to receive these payments, the displaced person must occupy decent, safe, and sanitary replacement housing. In addition to the replacement housing payments described above, there are also moving cost payments to persons, businesses, farms, and non-profit organizations. Actual moving costs for displaced residences include actual moving costs up to 50 miles or a schedule moving cost payment up to $500.

The moving cost payments to businesses are broken down into several categories, which include actual moving expenses and payments "in lieu of" actual moving expenses. The owner of a displaced business is entitled to receive a payment for actual reasonable moving and related expenses in moving his business, or personal property; actual direct losses of tangible personal property; and actual reasonable expenses for searching for a replacement site.

The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Generally, payments for the actual reasonable moving expenses are limited to a 50 mile radius. In both cases, the expenses must be supported by receipted bills. An inventory of the items to be moved must be prepared, and two estimates of the cost must be obtained. The owner may be paid the amount equal to the low bid or estimate. In some circumstances, the State may negotiate an amount not to exceed the lower of the two bids. The allowable expenses of a self-move may

include amounts paid for equipment hired, the cost of using the business's vehicles or equipment, wages paid to persons who physically participate in the move, and the cost of the actual supervision of the move.

When personal property of a displaced business is of low value and high bulk, and the estimated cost of moving would be disproportionate in relation to the value, the State may negotiate for an amount not to exceed the difference between the cost of the replacement and the amount that could be realized from the sale of the personal property.

In addition to the actual moving expenses mentioned above, the displaced business is entitled to recive a payment for the actual direct losses of tangible personal property that the business is entitled to relocate but elects not to move. These payments may only be made after an effort by the owner to sell the personal property involved. The costs of the sale are also reimbursable moving expenses. If the business is to be re-established, and personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement costs minus the net proceeds of the sale or the estimated cost of moving the item. If the business is being discontinued or the item is not to be replaced in the re-established business, the payment will be the lesser of the difference between the depreciated value of the item in place and the net proceeds of the sale or the estimated cost of moving the item.

If no offer is received for the personal property, the owner is entitled to receive the reasonable expenses of the sale and the estimated cost of moving the item. In this case, the business should arrange to have the personal property removed from the premises.

The owner of a displaced business may be reimbursed for the actual reasonable expenses in searching for a replacement business up to $500. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, but such rate may not exceed $10 per hour.

In lieu of the payments described above, the owner of a displaced business is eligible to receive a payment equal to the average annual net earnings of the business. Such payment shall not be less than $2,500 nor more than $10,000. In order to be entitled to this payment, the State mujst determine that the business cannot be relocated without a substantial loss of its

existing patronage, the business is not part of a commercial enterprise having at least one other establishment in the same or similar business that is not being acquired, and the business contributes materially to the income of a displaced owner.

Considerations in the State's determination of loss of existing patronage are the type of business conducted by the displaced business and the nature of the clientele. The relative importance of the present and proposed locations to the displaced business, and the availability of suitable replacement sites are also factors.

In order to determine the amount of the "in lieu of" moving expenses payment, the average annual net earnings of the business is considered to be one-half of the net earnings before taxes, during the two taxable years immediately preceding the taxable year in which the business is relocated. If the two taxable years are not representative, the State, with approval of the Federal Highway Administration, may use another two-year period that would be more representative. Average annual net earings include any compensation paid by the business to the owner, his spouse, or his dependents during the period. Should a business be in operation less than two years, but for twelve consecutive months during the two taxable years prior to the taxable year in which it is required to relocate, the owner of the business is eligible to receive the "in lieu of" payment. In all cases, the owner of the business must provide information to support its net earnings, such as income tax returns, for the tax years in question.

For displaced farms and non-profit organizations, actual reasonable moving costs generally up to 50 miles, actual direct losses of tangible personal property, and searching costs are paid. The "in lieu of" actual moving cost payments provide that a displaced farm may be paid a minimum of $2,500 to a maximum of $10,000 based upon the net income of the farm, provided that the farm cannot be established in the area or cannot operate as an economic unit. A non-profit organization is eligible to receive "in lieu of " actual moving cost payments, in the amount of $2,500.

A more detailed explanation of the benefits and payments available to displaced persons, businesses, farms, and non-profit organizations is available in Relocation Brochures that will be distributed at the public hearings for this project and will also be given to displaced persons individually in the future.

In the event adequate replacement housing is not available to rehouse persons displaced by public projects or that available replacement housing is beyond their financial means, replacement "housing as a last resort" will be utilized to accomplish the rehousing. Detailed studies will be completed by the State Highway Administration and approved by the Federal Highway Administration before "housing as a last resort" could be utilized. "Housing as a last resort" could be provided to displaced persons in several different ways although not limited to the following:

(1) An improved property can be purchased or leased.
(2) Dwelling units can be rehabilitated and purchased or leased.
(3) New dwelling units can be constructed.
(4) State acquired dwellings can be relocated, rehabilitated, and purchased or leased.

Any of these methods could be utilized by the State Highway Administration and such housing would be made available to displaced persons. In addition to the above procedure, individual replacement housing payments can be increased beyond the statutory limits in order to allow a displaced person to purchase or rent a dwelling that is within his financial means.

The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any person, or proceed with any construction project until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons will be satisfatorily relocated to comparable decent, safe, and sanitary housing within their financial means or that such housing is in place and has been made available to the displaced person.

[redacted] West Preston Street - Room [redacted]
Baltimore, Maryland 21201

DEPARTMENT OF TRANSPORTATION
OF MARYLAND

REVISED 1/11/80

Maryland Project: W1477-151-171 Federal Aid Project: N/A

Termini: Md. Rte. 12 Relocated, U.S. 13 to Salisbury

Alternate Number: 2 General File No.

Indicate which of the following applies to the information below: Draft Environmental Impact Statement _____ Conceptual Stage Study _____ Final Environmental Impact Statement X Acquisition Stage Study _____

RESIDENTIAL OCCUPANTS AND IMPROVEMENTS AFFECTED

OCCUPANCY STATUS	DWLGS.	DWLG. UNITS	FAM.	IND.	TYPE OF CONSTRUCTION							AGE			ROOMS							BEDROOMS				ESTIMATED VALUE (000's) OR RENT (USE 10K)		
					BRICK	FRAME	COMB.	DET.	SEM. DET.	ROW	MULTI FAM.	0-10 YRS.	11-30 YRS.	31 YRS. UP	3	4	5	6	7	8 up	1	2	3	4 up	$0-$20	$20-$40	$40 -
OWNER OCCUPIED	1	1	1				1	1					1					1					1			1	
TENANT OCCUPIED																											
TOTALS	1	1	1				1	1					1					1					1			1	

RESIDENTIAL IMPROVEMENTS AVAILABLE

FOR SALE

ASKING PRICE RANGE (000's)	DWLGS.	TYPE OF CONSTRUCTION						AGE			ROOMS						BEDROOMS			
		BRICK	FRAME	COMB.	DET.	SEM. DET.	ROW	0-10 YRS.	11-30 YRS.	31 YRS. UP	3	4	5	6	7	8 up	1	2	3	4 up
$0-20																				
$20-40	8	4	4		8				8					8					8	
$40 -																				
TOTALS	8	4	4		8				8					8					8	

Sources: _____

FOR RENT

BDR.	MONTHLY RENT						APT.	HOMES	TOTALS
	0 to $100	$100 to $150	$150 to $200	$200 to $250	$250 to $300	$300 & UP			
1									
2			N						
3				/					
4 up									

Sources: _____

BUSINESSES, FARMS, AND NON-PROFIT ORGANIZATIONS AFFECTED

OCCUPANCY STATUS	BUSINESSES					FARMS				NON-PROFIT ORGANIZATIONS			
	RETAIL	COMM.	MFGR.	CHAIN	EMP.	DAIRY	CATTLE	TRUCK	EMP.	REL.	SOC.	INST.	EMP.
OWNER													
TENANT						N	/						
TOTALS							A						

AVAILABLE REPLACEMENT SITES

TYPE OF SITE	BUSINESS	NON-PROFIT	FARMS
SALE	N		
LEASE		/	
TOTALS		X	

Sources: Wm. Rayfield, Realtor, Coastal Multiple List

Remarks: There are many available residences on the market comparable to affected dwelling.

Estimated average family size 4.
Estimated total number persons affected 4.
Estimated total number of minority group members affected 0, number of owner occupant families 0, number of tenant occupant families 0, and number of individuals 0.

Estimated number of minority owned or operated businesses 0.
Estimated number of minority employees 0.
Estimated number of minority owned or operated farms 0.
Estimated number of minority employees 0.
Estimated number of minority non-profit organizations 0.
Estimated number of minority employees 0.

Signature: _____ December 12, 1978

(RELOCATION OFFICER) (DATE)

55

15[illegible]

West Pre[illegible] Street - Room 402
Baltimore, Maryland 21201

DEPARTMENT OF TRANSPORTATION
OF MARYLAND

REVISED 1/16/80

Maryland Project: W1 47[illegible]-171 Federal Aid Project: N/A
Termini: Md. Rte. 12, [illegible]elocated, U.S. 13 to Salisbury
Alternate Number: General File No. ______

Indicate which of the following applies to the information below: Draft Environmental Impact Statement ______ Conceptual Stage Study ______ Final Environmental Impact Statement X Acquisition Stage Study ______

RESIDENTIAL OCCUPANTS AND IMPROVEMENTS AFFECTED

OCCUPANCY STATUS	DWLGS.	DWLG. UNITS	FAM.	IND.	TYPE OF CONSTRUCTION: BRICK	FRAME	COMB.	DET.	SEM. DET.	ROW	MULTI FAM.	AGE: 0-10 YRS.	11-30 YRS.	31 YRS. UP	ROOMS: 3	4	5	6	7	8 up	BEDROOMS: 1	2	3	4 up	ESTIMATED VALUE (000's) OR RENT (USE 10%): $0-$20	$20-$40	$40 -
OWNER OCCUPIED	3	3	3			3		3						3				3				2	1			3	
TENANT OCCUPIED																											
TOTALS	3	3	3			3		3						3				3				2	1			3	

RESIDENTIAL IMPROVEMENTS AVAILABLE

FOR SALE

SELLING PRICE RANGE (000's)	DWLGS.	TYPE OF CONSTRUCTION: BRICK	FRAME	COMB.	DET.	SEM. DET.	ROW	AGE: 0-10 YRS.	11-30 YRS.	31 YRS. UP	ROOMS: 3	4	5	6	7	8 up	BEDROOMS: 1	2	3	4 up
$0-20																				
$20-40	8	4	4		8				8					8					8	
$40 -																				
TOTALS	8	4	4		8				8					8					8	

Sources: ______

FOR RENT

BDR.	MONTHLY RENT: 0 to $100	$100 to $150	$150 to $200	$200 to $250	$250 to $300	$300 & UP	APT.	HOMES	TOTALS
1									
2			N						
3				/ A					
4 up									

Sources: ______

BUSINESSES, FARMS, AND NON-PROFIT ORGANIZATIONS AFFECTED

OCCUPANCY STATUS	BUSINESSES: RETAIL	COMM.	MFGR.	CHAIN	EMP.	FARMS: DAIRY	CATTLE	TRUCK	EMP.	NON-PROFIT ORGANIZATIONS: REL.	SOC.	INST.	EMP.
OWNER			N/A										
TENANT													
TOTALS													

AVAILABLE REPLACEMENT SITES

TYPE OF SITE	BUSINESS	NON-PROFIT	FARMS
SALE	N/A		
LEASE			
TOTALS			

Sources: Wm. Rayfield, Realtor, Coastal Multiple List

Remarks: There are many available residences on the market. It is possible to move any or all of these homes to other sites.

Estimated average family size 4.
Estimated total number persons affected 12.
Estimated total number of minority group members affected 0, number of owner occupant families 0, number of tenant occupant families 0, and number of individuals 0.

Estimated number of minority owned or operated businesses 0.
Estimated number of minority employees 0.
Estimated number of minority owned or operated farms 0.
Estimated number of minority employees 0.
Estimated number of minority non-profit organizations 0.
Estimated number of minority employees 0.

Signature: [illegible signature] December 12, 1978

(RELOCATION OFFICER) (DATE)