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CARLTON E. MASSEY
W. KENNETH TYLER

OFFICE OF

Worcester County Roads

P.O. BOX 7

SNOW HILL, MARYLAND
21863

E. VICTOR SMULLEN
COUNTY ROADS ENGINEER

TEL. 632-2244

September 11, 1990

MAINTENANCE STANDARDS FOR O.P. ROADS

1. Dirt roads to be scraped four (4) times yearly (minimum) and add borrow material as needed.
2. Surface treated roads to be patched as necessary with resurfacing approximately every five (5) years.
3. Cut vegetation one (1) time at end of growing season.
4. Snow removal as required.

**RESOLUTION AMENDING CONSTRUCTION AND
MAINTENANCE STANDARDS AND SPECIFICATIONS FOR
CURB, GUTTER, INLETS AND UTILITIES FOR COUNTY ROADS**

WHEREAS, Section 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repairs of "County Roads" and "Other Public Roads" within the County; and

WHEREAS, the County Commissioners adopted a resolution on November 5, 1991 adopting construction and maintenance standards for County Roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to revise and update such standards and specifications for installation of curb, gutter, inlets and utilities for County Roads;

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County, Maryland that Section (4) (c) of Roadway Construction and Maintenance Standard WO-101.10 be revised to read as follows:

4. Standards and specifications for curb, gutter, inlets and utilities

- c. All utility locations shall require prior approval of the County Roads Engineer. Complete plans and specifications shall be submitted prior to approval.

Utility lines and other structures such as manholes and valve boxes shall be located outside the paved section except in the following cases where approved by the County Roads Engineer:

1. Utility line crossovers of all types may be permitted in the paved section.
2. Sewer and water lines and other structures shall be permitted in cul-de-sacs and curvilinear sections.
3. Where location of sewer and water lines and other structures outside the paved section is impractical or creates undue hardship or unwarranted expense.
4. Where location of sewer and water lines and other structures outside the paved section will result in undue destruction of desirable vegetation.


In reviewing applications for approval, the County Roads Engineer shall consider:

1. Maintenance costs
2. Snow removal
3. Installation costs
4. Preservation of natural beauty and trees

BE IT FURTHER RESOLVED that this Resolution shall take effect immediately upon its passage.

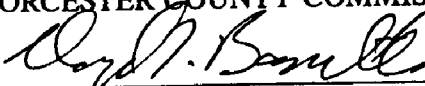
PASSED AND ADOPTED this 14th day of November, 1995.

ATTEST:

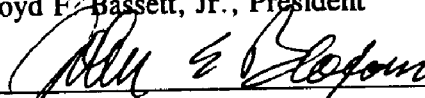


Gerald T. Mason
Chief Administrative Officer

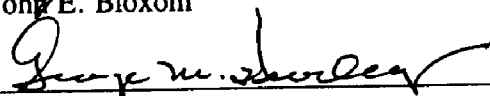
WORCESTER COUNTY COMMISSIONERS



Floyd F. Bassett, Jr., President



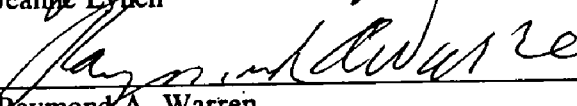
John E. Bloxom



George M. Hurley



Jeanne Lynch



Raymond A. Warren

cc: M. Lockyard

RECEIVED
AUG 20 1998
WORCESTER COUNTY
DEPT. OF PUBLIC WORKS

RESOLUTION 98 - 35

RESOLUTION AMENDING THE
CONSTRUCTION AND MAINTENANCE STANDARDS
FOR COUNTY ROADS TO ADD PROVISIONS FOR A
RURAL STREET - DIVIDED ROAD SECTION
FOR PUBLIC EASEMENT ROADS

WHEREAS, Section PW 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repair of county roads and other public roads within Worcester County, Maryland; and


WHEREAS, the Worcester County Commissioners adopted a resolution on November 5, 1991 adopting Construction and Maintenance Standards for County Roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to add a section to such standards to provide for a rural, divided road section for "Public Easement Roads" to permit the construction of such roads in Worcester County;


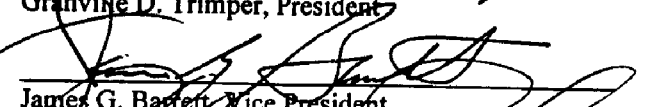
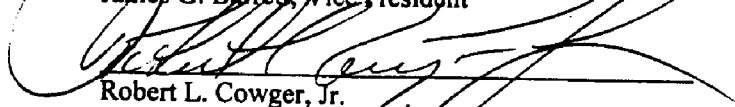
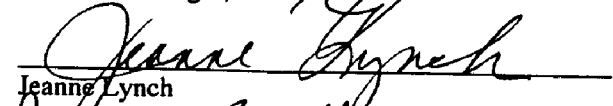
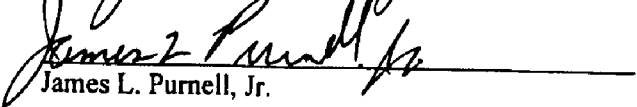
NOW THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County that the attached road construction standard entitled "Rural Street - Divided" is hereby adopted and permitted for all Public Easement Roads within Worcester County, Maryland.

PASSED AND ADOPTED this 18th day of August, 1998 to be effective nunc pro tunc the 4th day of August, 1998.

ATTEST:


Gerald T. Mason
Chief Administrative Officer

WORCESTER COUNTY COMMISSIONERS


Granville D. Trimper, President

James G. Barrett, Vice President

Robert L. Cowger, Jr.

Jeanne Lynch

James L. Purnell, Jr.

RESOLUTION NO. 00 - 3

RESOLUTION ADOPTING
CONSTRUCTION STANDARDS FOR MINOR ROADS
IN WORCESTER COUNTY, MARYLAND

WHEREAS, Section PW 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repair of "County Roads" and "Other Public Roads" within Worcester County; and

WHEREAS, the County Commissioners adopted a resolution on November 5, 1991 adopting construction and maintenance standards for county roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to amend said standards by the addition of a cross section for "minor roads" in major subdivisions.

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County, Maryland that the attached cross section for minor roads as shown on Standard No. WO - 100.01A is hereby adopted.

AND, BE IT FURTHER RESOLVED that this Resolution shall take effect upon its passage.

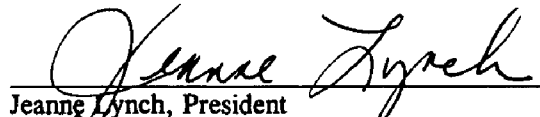
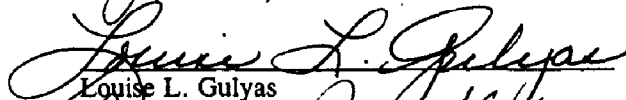
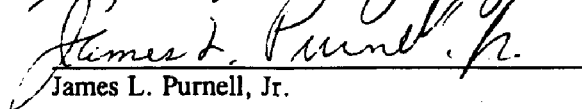
PASSED AND ADOPTED this 1st day of February, 2000.

ATTEST:

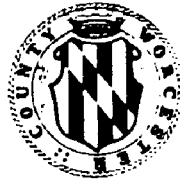


Gerald T. Mason
Chief Administrative Officer

WORCESTER COUNTY COMMISSIONERS


Jeanne Lynch, President
John E. Bloxom, Vice President
Louise L. Gulyas
James L. Purnell, Jr.

Virgil L. Shockley



OFFICE OF THE
COUNTY COMMISSIONERS

COMMISSIONERS
REGINALD T. HANCOCK, PRESIDENT
GEORGE M. HURLEY, VICE PRESIDENT
FLOYD F. BASSETT, JR.
JOHN E. BLOXOM
JEANNE LYNCH

Worcester County

ROOM 112 COURT HOUSE
SNOW HILL, MARYLAND
21863

JOHN A. YANKUS
CHIEF ADMINISTRATIVE OFFICER
EDWARD H. HAMMOND, JR.
COUNTY ATTORNEY

November 7, 1991

TO: W. Kelly Shannahan, Planner
✓ E. Victor Smullen, Roads Engineer
FROM: John A. Yankus, Chief Administrative Officer
SUBJECT: Road Construction and Design Standards

At their meeting on November 5, 1991 the County Commissioners approved the new Road Construction and Design Standards. Enclosed is a copy of the Resolution which officially adopts these standards.

dd
enc.
CC125

RESOLUTION ADOPTING
CONSTRUCTION AND MAINTENANCE STANDARDS
FOR COUNTY ROADS

WHEREAS, Section 1-206 of the Public Works Article of the Public Local Laws of Worcester County provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repairs of "County Roads" and "Other Public Roads" within the County; and

WHEREAS, the County Commissioners adopted a resolution on June 21, 1988 adopting construction and maintenance standards for county roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to revise and update such standards;

NOW THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County that the following road construction standards be adopted.

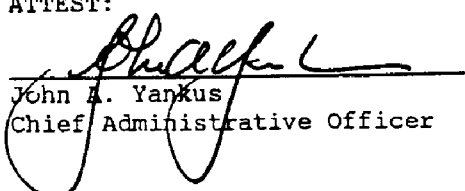
1. GENERAL CONSTRUCTION STANDARDS: Those general construction standards set forth in addendum attached hereto labeled Standard No. WO-101.10 are hereby adopted.
2. CROSS SECTIONS: Those cross sections for urban streets, rural streets, and minor subdivision roads as shown on Standard Nos. WO-100.10, WO-100.11, and WC-100.01 attached hereto are hereby adopted.
3. COST ESTIMATES FOR ROAD CONSTRUCTION: Those cost estimates for road construction for urban streets and rural streets as shown on Standard No. WO-101.11 attached hereto are hereby adopted.
4. TRANSITIONS BETWEEN ROADS CONSTRUCTED TO DIFFERENT STANDARDS: Physical transitions between roads constructed to different standards shall be approved by the County Roads Department prior to commencement of construction.

AND BE IT FURTHER RESOLVED by the County Commissioners of Worcester County that the resolution of June 21, 1988 establishing road standards is hereby repealed as of April 1, 1992 as to plans approval and as of November 30, 1992 as to construction standards, it being the intent hereof that roads being planned and designed as of date of this resolution may continue to be planned and designed in accordance with the standards set forth in the resolution of June 21, 1988, provided approval of the Worcester County Roads Department is given prior to April 1, 1992 for each such road and that each such road is fully completed no later than November 30, 1992. Nothing herein, however, shall preclude the construction of a road in accordance with the standards set forth herein as of the date hereof.

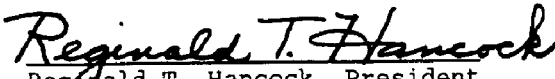
BE IT FURTHER RESOLVED that this Resolution shall take effect upon its passage.

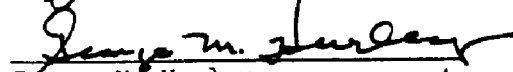
PASSED AND ADOPTED this 5th day of November, 1991.

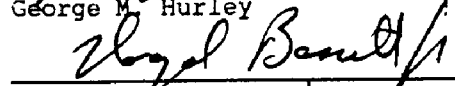
ATTEST:

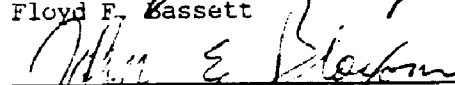

John A. Yankus
Chief Administrative Officer

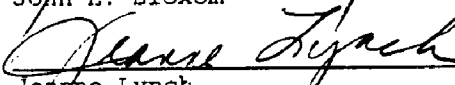
WORCESTER COUNTY COMMISSIONERS

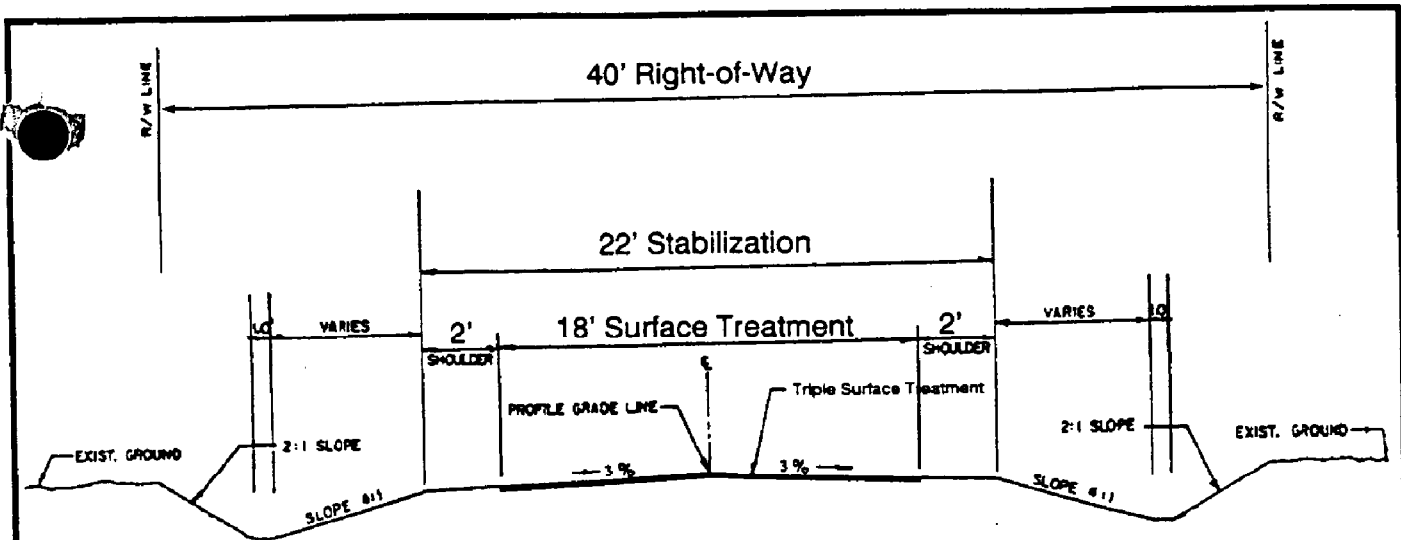

Reginald T. Hancock, President


George M. Hurley


Floyd F. Basset


John E. Bloxon


Jeanne Lynch



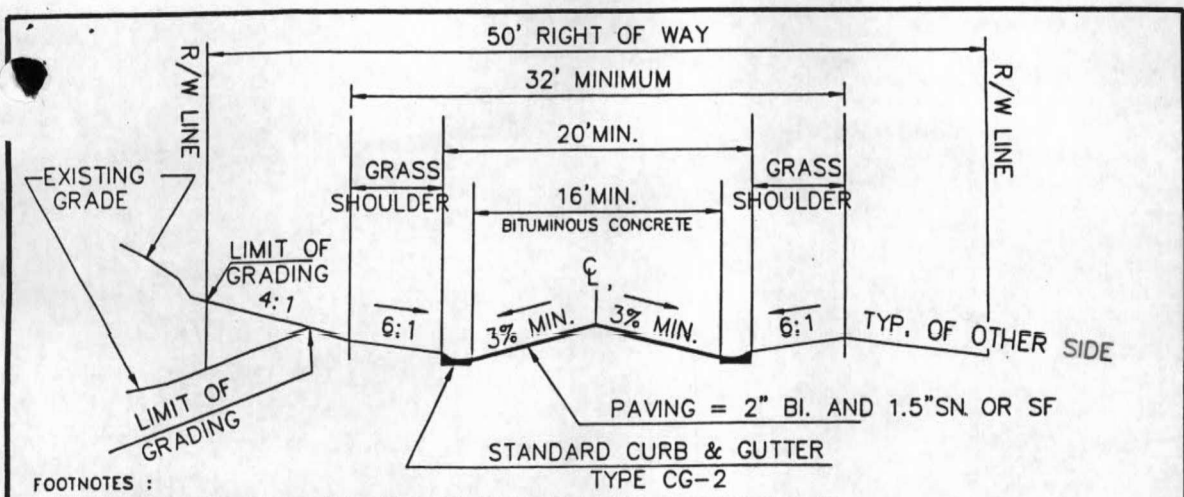
CONDITIONS OF USE:

The minor subdivision road section shall only be used where specifically approved by the Worcester County Planning Commission where it finds that the following conditions have been met:

1. The road shall serve no more than five (5) lots in a minor subdivision only. This road section shall not be permitted in any major subdivision in Worcester County.
2. The road shall not be eligible for future extension or to be used as access for any future development in excess of five (5) minor subdivision lots.
3. No parking shall be permitted within the right-of-way.
4. No public water or sewer utility lines shall be permitted within the right-of-way.
5. Any minor subdivision road which extends greater than three hundred feet (300') in length shall be provided with a cul-de-sac with a minimum sixty foot (60') diameter of surface treatment within a minimum eighty foot (80') diameter right-of-way, unless an alternative means of turnaround approved by the County Roads Engineer is provided.

Approval _____ County Roads Engineer	_____ Date
Revised: _____	

Worcester County, Maryland
 County Roads Department
 Minor Subdivision Road
 Standard No. WO - 100.01



FOOTNOTES :

1. THIS STANDARD APPLIES ONLY TO THOSE SUBDIVISIONS WHICH COMPLY WITH ALL THE FOLLOWING CONDITIONS :
 - A : SUBDIVISIONS WITH 10 LOTS OR LESS.
 - B : PROPOSED SUBDIVISION IS ABUTTING A PUBLIC ROAD WITH AN EXISTING PAVED TRAVELWAY EQUAL TO OR LESS THAN 20' IN WIDTH.
 - C : THE PROPOSED SUBDIVISION HAS ONLY ONE ROAD WHICH DOES NOT EXCEED 250 FEET IN LENGTH.
- 2 : ALL OTHER CONSTRUCTION AND MAINTENANCE STANDARDS SHALL COMPLY WITH THOSE AS SHOWN ON STANDARD WO - 100.11 AND THOSE OF PREVIOUSLY ADOPTED RESOLUTIONS OF THE COUNTY COMMISSIONERS OF WORCESTER COUNTY.
- 3 : A 50' R/W MAY BE REDUCED TO A 40' R/W IF THE ABUTTING PUBLIC ROAD IS A 40' OR LESS WIDTH R/W.
- 4 : PARKING SHALL NOT BE PERMITTED WITHIN THE RIGHT OF WAY.
- 5 : THE ROAD SHALL NOT BE ELIGIBLE FOR FUTURE EXTENSION OR TO BE USED AS ACCESS FOR ANY FUTURE DEVELOPMENT.
- 6 : THE CULDESAC SHALL BE CONSTRUCTED WITH A MINIMUM SIXTY FOOT (60') DIAMETER PAVEMENT WIDTH AND A MINIMUM EIGHTY FOOT (80') DIAMETER RIGHT OF WAY.
- 7 : THE DEVELOPER SHALL PROVIDE STREET PLAN, PROFILE AND DRAINAGE PLAN FOR ALL STREET CONSTRUCTION. THESE PLANS MUST BE APPROVED BY THE WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO START OF ANY CONSTRUCTION.
- 8 : AN "EROSION AND SEDIMENT CONTROL PERMIT" AND "GRADING PERMIT" MUST BE OBTAINED BEFORE ANY CLEARING AND/OR GRADING IS PERMITTED.
- 9 : A "STORMWATER MANAGEMENT PLAN" MUST BE APPROVED PRIOR TO CONSTRUCTION OF ANY STORM WATER FACILITIES.
- 10 : ALL PAVEMENT AND STABILIZED AREAS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARDS FOR AN URBAN STREET PER STANDARD NO. WO-100.11
- 11 : ALL ROADS SHALL BE DESIGNED, CONSTRUCTED, AND MAINTAINED IN ACCORDANCE WITH THE " CONSTRUCTION AND MAINTENANCE STANDARDS FOR COUNTY ROADS" AS ADOPTED AND PERIODICALLY REVISED BY THE WORCESTER COUNTY COMMISSIONERS.
- 12 : CONCRETE CURB AND GUTTER SHALL NOT BE DESIGNED AND CONSTRUCTED AT A GRADE OF LESS 0.30% OR MORE THAN 6.00%. A MINIMUM GRADE OF 0.20% MAY BE USED WHERE A HARDSHIP IS PROVEN AND SPECIFIC APPROVAL IS GIVEN FROM THE WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS.
- 13 : SEE STANDARD WO-201.10 FOR CURB AND GUTTER DETAILS.
- 14 : ALL AREAS DISTURBED BY GRADING, INCLUDING ALL SLOPES AS SHOWN ON ABOVE TYPICAL SECTION, SHALL BE SEEDED AND MULCHED.

APPROVAL _____
 DIRECTOR OF PUBLIC WORKS DATE _____

WORCESTER COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS - ROADS DIVISION

MINOR ROAD

STANDARD NO. WO - 100.01A (ALTERNATE)

Call-de-Sinc

BesTemps



Career Associates

Permanent Employment
Division

Temporary Employment
Division

Culs-de-Sac

50' Row 100' - 80' Surface

40' Row 80 60" "

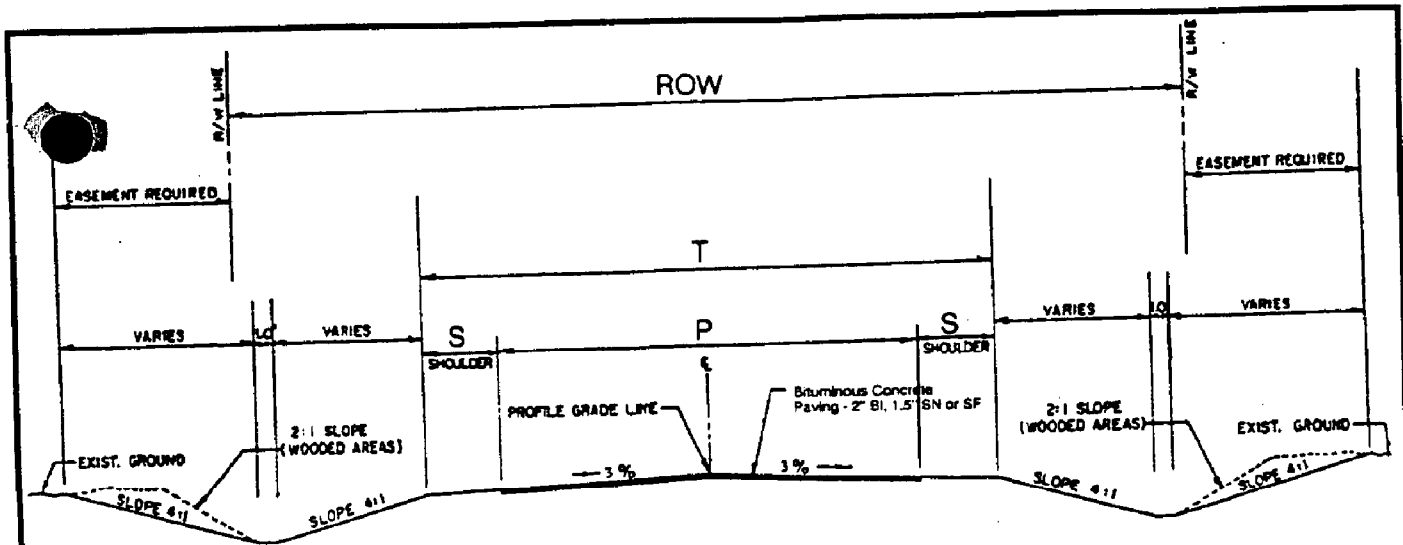
Salisbury
410-546-0252

Seaford, DE
302-629-4357

Cambridge, MD
410-221-9675

Dover, DE
302-674-4357

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Projected Traffic (ADT)	Pavement Width (P)	Stabilized Shoulder Width (S)	Total Stabilized (T)	Minimum Right-of-Way (ROW)
Up to 250	22'	3'	28'	50'
251-400	22'	4'	30'	50'
401-750	24'	4'	32'	50'
751-1500	24'	5'	34'	50'
1501-3000	24'	6'	36'	50'
3001-5500	24'	8'	40'	60'

Footnotes:

1. The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Roads Department prior to start of any construction.
2. An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
3. A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
4. All pavement area (P) shall be bituminous concrete.
5. All stabilized area (T) shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
6. All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
7. Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Roads Engineer is given to use 2:1 slopes.
8. See standard WO-202.10 for typical driveway entrance across side road ditch.
9. All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

Approval

County Roads Engineer

Date



Revised:

Worcester County, Maryland
County Roads Department
Rural Street

Standard No. WO - 100.10

1. STANDARDS AND SPECIFICATIONS FOR GRADING AND BASE COURSES

- a. The right-of-way width shall be a minimum of fifty (50) feet.
- b. All lines and grades shall be approved by the County Roads Engineer before grading operations are begun.
- c. The road bed shall be graded for its full width (right-of-way line to right-of-way line), by removing all topsoil, stumps, root mat, unsuitable material, etc.
- d. Base may be prepared by using local Bank Run Gravel. Material shall meet Maryland State Highway Administration analysis test for A-3 or better materials. 230 lbs. of Md. No. 57 stone per square yard shall be added and worked into the top 6" of base with pulvi-mixer. As an alternate to this specification, 400 lbs. of Cr-6 Crusher Run material per square yard may be added to base and brought to the proper grade and cross-section and thoroughly compacted. Water shall be added by sprinkling in sufficient quantity to attain proper compaction and moisture control.
- e. Compaction of fill areas and base shall be by Sheeps Foot Roller, Self-Propelled Rubber Tired Roller or Vibratory Roller to achieve a minimum of 95% compaction.

2. STANDARDS AND SPECIFICATIONS FOR SURFACE COURSES

- a. All bituminous concrete shall be Type BI Base Intermediate, Type SN Surface Normal or Type SF Surface Fine complying with Maryland State Highway Administration Specifications. (2" BI and 1.5" SN or SF).
- b. No work on surface courses shall be permitted between November 15th and March 1st unless a developer or contractor agrees to accept full responsibility of the work, in writing, for a period of eighteen (18) months following completion of construction. Any damages occurring shall be the full responsibility of the contractor and/or developer.

3. DRAINAGE, SEDIMENT CONTROL, SEEDING AND MULCHING

- a. All drainage structures shall be shown on road plan and profile as to size and location. Storm drainage, open or closed shall indicated invert elevations. Prior to stabilization all drainage structures shall be installed. Pipe to be ACCM or RCP meeting Maryland State Highway specifications.
- b. Drainage facilities shall be provided on development site along with offsite facilities and extensions as may be required for effective drainage.
- c. All drainage facilities are to be located in road right-of-way where possible and where not possible, provisions for drainage easements or right-of-way shall be obtained.

Approval

County Roads Engineer

Date



Revised:

Worcester County, Maryland
County Roads Department

Roadway Construction
and Maintenance Standards

Standard No. WO - 101.10 (Page 1 of 3)

- d. Erosion must be controlled during construction. Facilities to control erosion must be cleaned of deposited material and removed at completion of construction.
- e. All slopes and unstabilized areas shall be properly fertilized, seeded and mulched as per requirements of Worcester County Sediment Control.
- f. Whatever measures needed to insure that a public nuisance is not created as a result of construction operations is required. (Dust, blocking of drainage, traffic, etc.)

4. STANDARDS AND SPECIFICATIONS FOR CURB, GUTTER, INLETS AND UTILITIES


- a. Curb and gutter shall be concrete. Construction methods, materials and other specifications will conform to Maryland State Highway Administration.
- b. Inlets shall generally conform to Maryland State Highway specifications.
- c. All utility locations shall be approved by County Roads Engineer. Utility company shall submit plans for permit. All utilities located in roads right-of-way must be approved by the Worcester County Commissioners.

5. ENTRANCES - RESIDENTIAL, COMMERCIAL, STATE HIGHWAYS

- a. Residential entrances shall be constructed using or maintaining either a swale or drainage pipe. All entrances located along an open section type roadway will require pipes in the ditch line. (20.0' x 12" minimum size and length.) Swales are acceptable only within fifty (50) feet of a crest and upon approval of County Roads Engineer. Paved entrances shall conform to standards of Maryland State Highway Administration.
- b. Commercial entrance channelization shall conform to the policy and standards of the Maryland State Highway Administration. Application and plans will be submitted to Worcester County Roads for a commercial entrance permit. A five thousand dollar (\$5,000.00) performance bond to cover cost of construction will be required. All utility adjustments shall be the responsibility of the permittee.
- c. Subdivisions making connections with State Highways must comply with Maryland State Highway Administration Rules and Regulations.


6. ROAD SIGNS AND MARKING

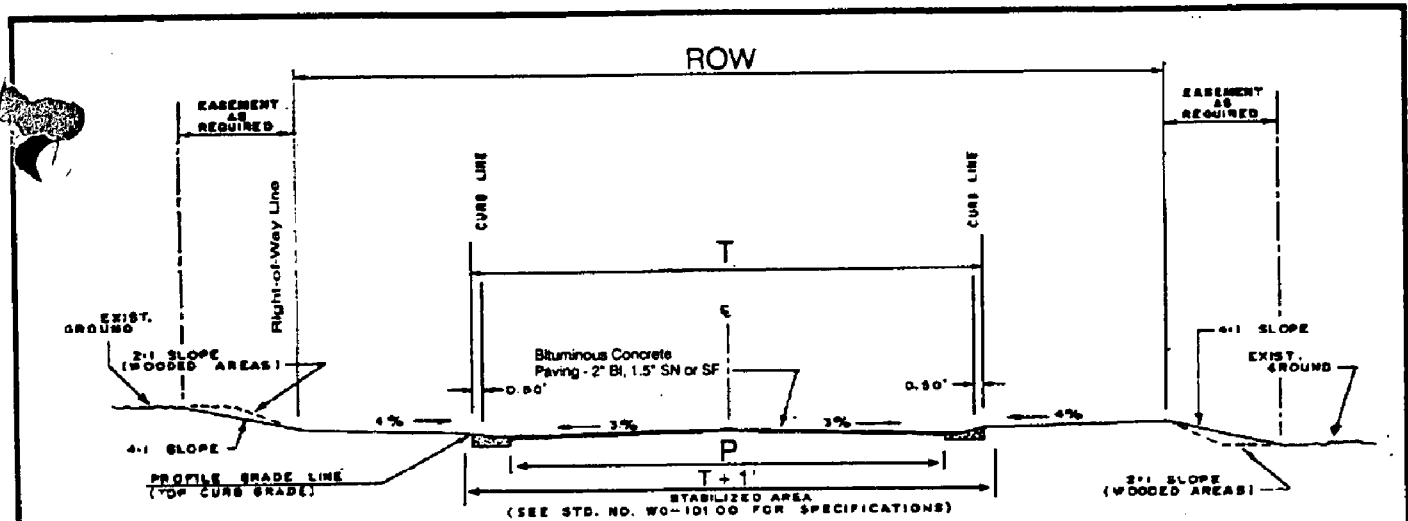
All roads shall be marked and signed in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted and periodically revised by the State Highway Administration of Maryland. All roads shall have such identifying signs as may be required under other County law or regulation.

Approval		Worcester County, Maryland County Roads Department Roadway Construction and Maintenance Standards
County Roads Engineer	Date	
	Revised:	Standard No. WO - 101.10 (Page 2 of 3)

7. PROCEDURES FOR CONSTRUCTION

- a. The developer and/or his contractor shall arrange to meet with the engineer on site to review plans for road construction.
- b. The engineer shall upon notification by the developer and/or his contractor inspect the subgrade and grading operations prior to placing of any base material.
- c. The engineer shall upon notification by the developer and/or his contractor inspect the base, have it checked for depth and density. Unstable or insufficient base will not be acceptable.
- d. Upon approval of base course, stabilization may begin. Worcester County Roads will have an inspector on the job site during stabilization operation. Weight tickets or bills of lading are required for stone weight.
- e. Upon approval of all the above construction phases, and base is graded smooth, bituminous concrete surface can be applied. Worcester County Roads will have an inspector on job site during surfacing operations. Weight tickets for bituminous concrete will be required.
- f. The developer and/or his contractor shall in no instance proceed with any stage of construction until the engineer indicates approval of all previous stages.
- g. Upon approval of all stages of construction, the County Roads Engineer shall indicate approval by letter to the Worcester County Commissioners and a copy of letter to the developer.
- h. Upon approval by the Worcester County Commissioners and upon receipt of fee simple title from the developer, and after any required Public Hearing the Commissioners will accept the road into the Worcester County Roads System for maintenance.

Approval		Worcester County, Maryland County Roads Department Roadway Construction and Maintenance Standards	
_____ County Roads Engineer	_____ Date		
	Revised:	Standard No. WO - 101.10 (Page 3 of 3)	



Projected Traffic (ADT)	Pavement Width (P)	Width Back to Back of Curb (T)	Number of Lanes	Minimum Right-of-Way (ROW)
Up to 750	24'	27' 28	2	50'
751-1500	26'	29' 30	2	50'
1501-3000	33'	36' 37	3	60'
3001-5500	37'	40' 41	3	60'

Footnotes:

1. The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Roads Department prior to start of any construction.
2. An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
3. A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
4. All pavement area (P) shall be bituminous concrete.
5. All stabilized area (T) shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
6. All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
7. Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Roads Engineer is given to use 2:1 slopes.
8. Concrete curb and gutter shall not be designed and constructed at a grade of less than 0.30% or more than 6.00%. A minimum grade of 0.20% may be used where a hardship is proven and specific approval is given by the Worcester County Roads Department.
9. See standard WO-201.10 for for curb and gutter details.
10. All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

Approval

County Roads Engineer

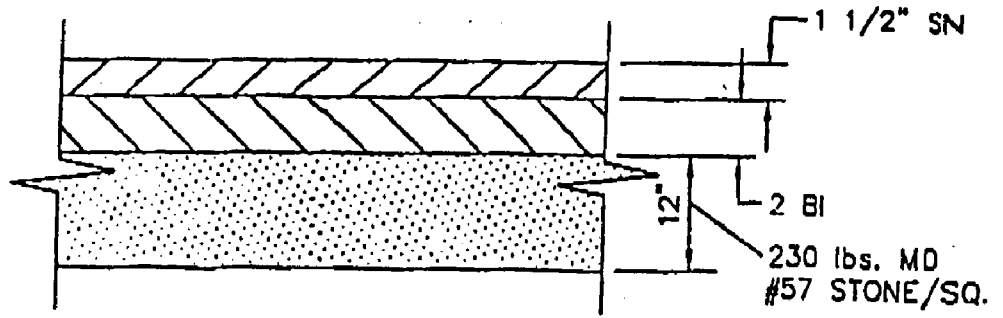
Date

Worcester County, Maryland
County Roads Department
Urban Street



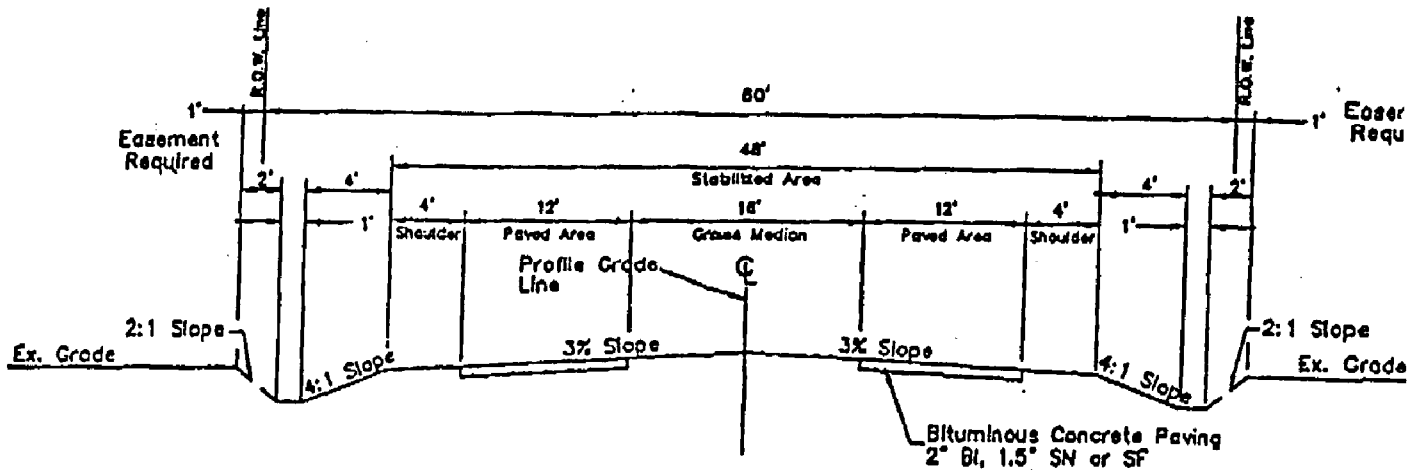
Revised:

Standard No. WO - 100.11



PAVING SECTION

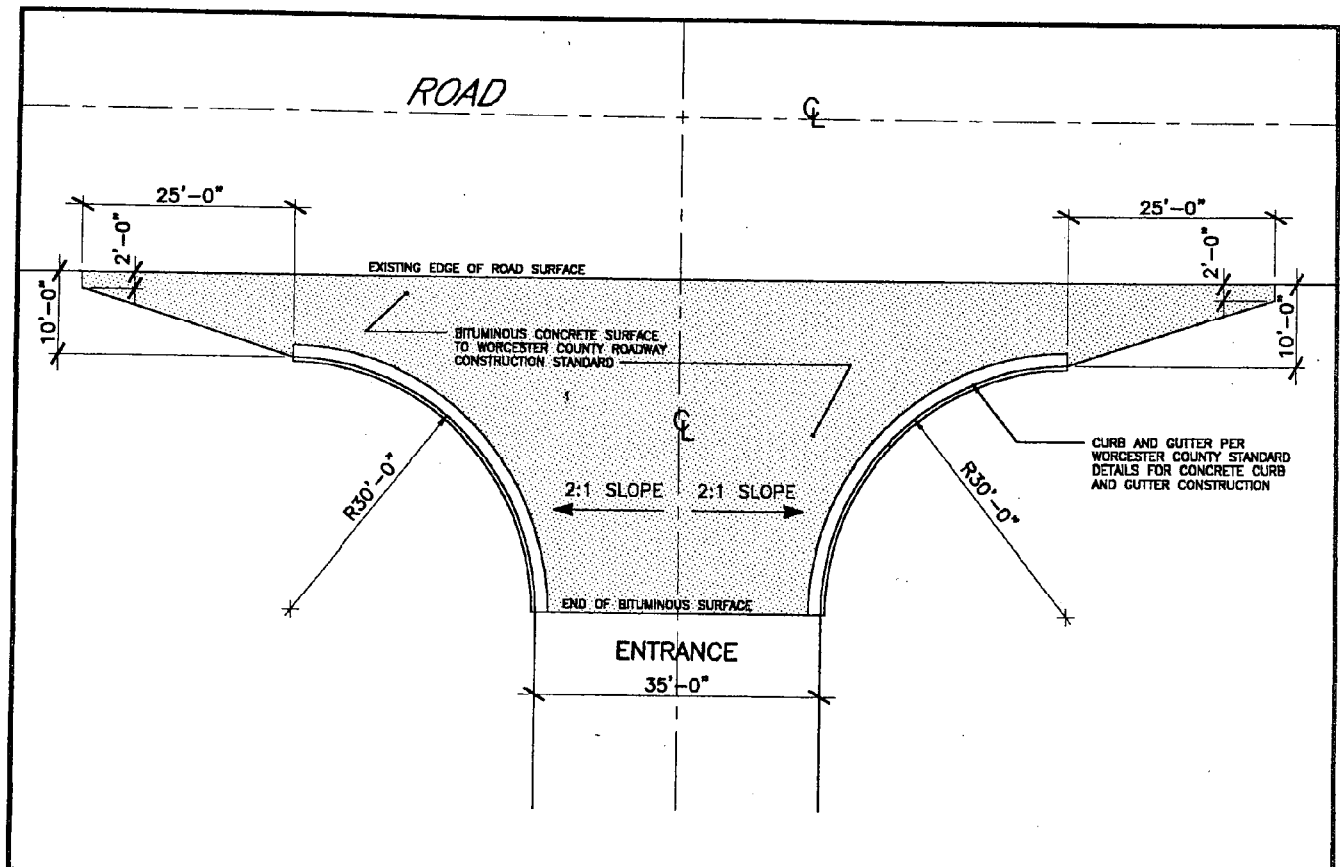
N.T.R.



Footnotes:

1. The Rural Street - Divided road section is permitted for "Public Easement Roads" only in Worcester County.
2. The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Department of Public Works - Roads Division prior to start of construction.
3. An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
4. A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
5. All pavement area shall be bituminous concrete.
6. All stabilized area shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
7. All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
8. Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Department of Public Works - Roads Division is given to use 2:1 slopes.
9. See standard WO-202.10 for typical driveway entrance across side road ditch.
10. All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

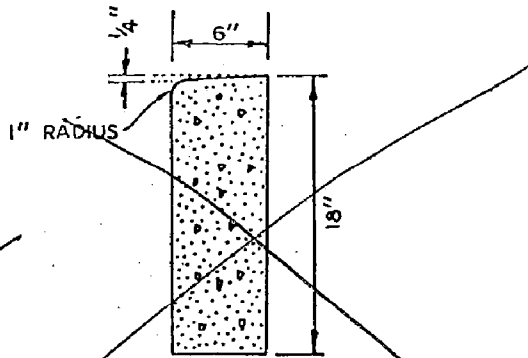
<p>Approval</p> <p>_____</p> <p>County Roads Engineer Date</p> <p>_____</p> <p>Revised:</p>	<p>Worcester County, Maryland</p> <p>County Roads Department</p> <p>Rural Street - Divided</p> <p>(for Public Easement Roads only)</p> <p>_____</p> <p>Standard No. WO - 100.12</p>
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**TYPICAL
COMMERCIAL ENTRANCE
DETAIL**

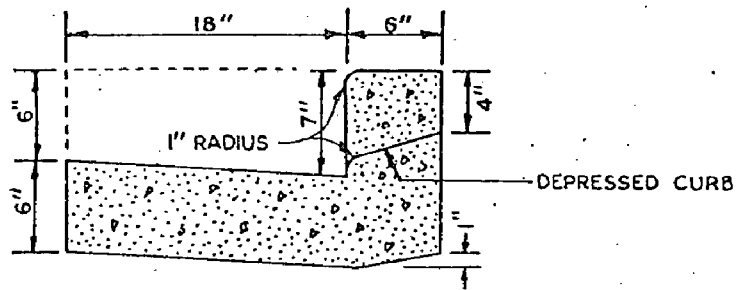
**Worcester County, Maryland
County Roads Department**

No



STANDARD CURB

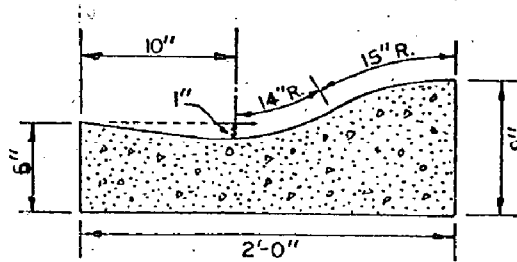
SCALE 1" = 1' 0"



STANDARD CURB & GUTTER

TYPE CG-1

SCALE 1" = 1' 0"



STANDARD CURB & GUTTER

TYPE CG-2

SCALE 1" = 1' 0"

NOTE: TYPE CG-2 CURB & GUTTER
 MAY BE BUILT THROUGHOUT
 EXCEPT WHERE STORM
 WATER INLETS ENCOUNTERED
 IN WHICH CASE TYPE CG-1
 CURB & GUTTER SHALL BE
 BUILT AND A 10' TRANS-
 IITION SHALL BE MADE
 BETWEEN TYPE CG-1 &
 TYPE CG-2.

WORCESTER COUNTY

STANDARD DETAILS FOR
 CONCRETE CURB AND
 GUTTER CONSTRUCTION

APPROVED:

CAUTION
DON'T ALLOW EQUIPMENT & SUPPLY
TRUCKS TO RUN OVER NEW GUTTER
WITHOUT PROTECTION TO GUTTER

CONTRACTION JOINT FORMED
 BY 1/8" STEEL PLATE.

1/2" THICK PREMOLD EXPANSION
 JOINT PLACED 40'-0" INTERVALS
 (MAX.) OR CONTRACTION JOINTS
 Poured WITH ASPHALT JOINT
 SEALING COMPOUND.

BITUMINOUS CONCRETE-SPEC. B-BAND
 SN OR SF, ONE LAYER, NOMINAL DEPT.
 1 1/4"

NO SECTION SHALL BE
 LESS THAN 4'-0".

FLOATED SMOOTH AND EDGES
 ROUNDED WITH APPROVED
 EDGING TOOL.

AFTER CONCRETE HAS SET
 JACKFILL IMMEDIATELY, TAME
 JACKFILL IN 4" LAYERS.

LOPES - SEEDED
 AND MULCHED

10'-0" STANDARD SECTION
 (MAXIMUM)

PLASTERING NOT PERMITTED
 ON FACE, REMOVE

BI BASE INTERMEDIATE 2"

CRACKED AND DEFECTIVE SECTIONS
 SHALL BE REMOVED AND REPAIRED.

SAND AGGREGATE BASE COURSE
 230 LB OF MD #57 STONE S.Y.
 BLENDED INTO TOP 6" SUBGRADE

OR 400 LBS/S.Y. OF CR-6 CRUSHER RI
 ADDED TO BASE, BROUGHT TO PROJ
 GRADE & THOROUGHLY COMPACTED

SUBGRADE - SELECT MATERIAL
 AS REQUIRED

ALL SOFT AND UNSUITABLE
 MATERIAL SHALL BE REMOVED
 AND REPLACED WITH SUITABLE
 BORROW.

ALL PAVEMENT MATERIALS AND
 SUBGRADE TO BE COMPACTED
 IN CONFORMITY WITH MD
 S.H.A. SPECS.

FORMS SHALL BE SET TRUE TO LINE AND GRADES.

ALL MATERIALS SHALL CONFORM TO MD. S.H.A. SPECS
 A. CONCRETE - 5% AIR ENTRAINMENT, MIN. 3500 PSI
 B. BIT. CONC. - SPEC B-BAND SN OR SF.

SURFACE OF CURB & GUTTER SHALL BE CHECKED WITH 10'
 STRAIGHT EDGE; IRREGULARITIES MORE THAN 1/4" IN 10'
 SHALL BE CORRECTED.

JOINT TEMPLATES SHALL BE HELD AT 90° TO FORM, AND
 SHALL BE REMOVED AFTER CONCRETE HAS SET TO HOLD
 ITS SHAPE SUFFICIENTLY.

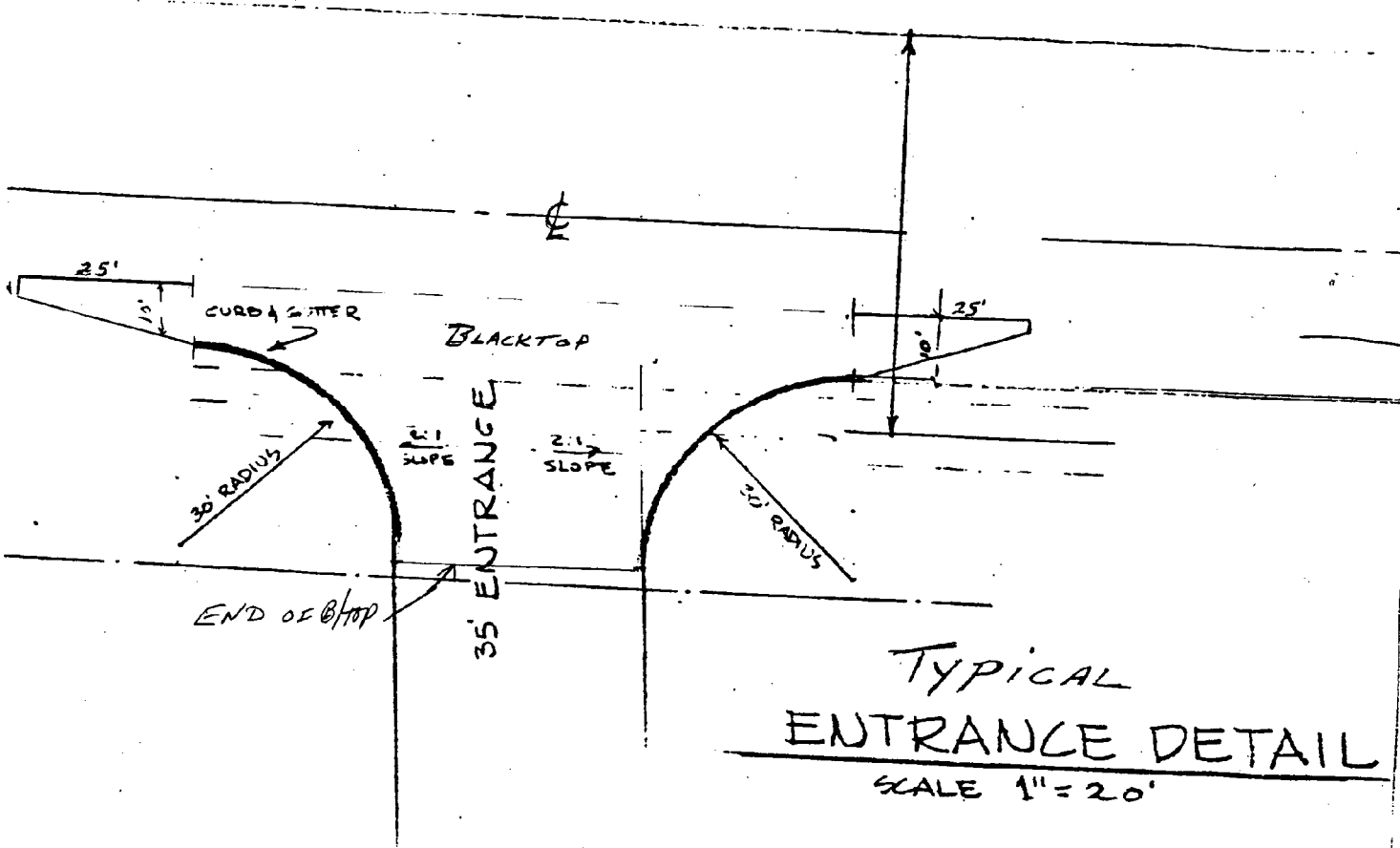
EXPOSED SURFACES SHALL BE FINISHED WHEN GREEN.

CURE IN CONFORMITY TO MD. S.H.A. SPECS.

**MAJOR POINTS FOR CONSTRUCTION
 OF STREETS USING INTEGRAL
 CURB & GUTTER (TYPE cg-2 SHOWN)**

APPROVED:

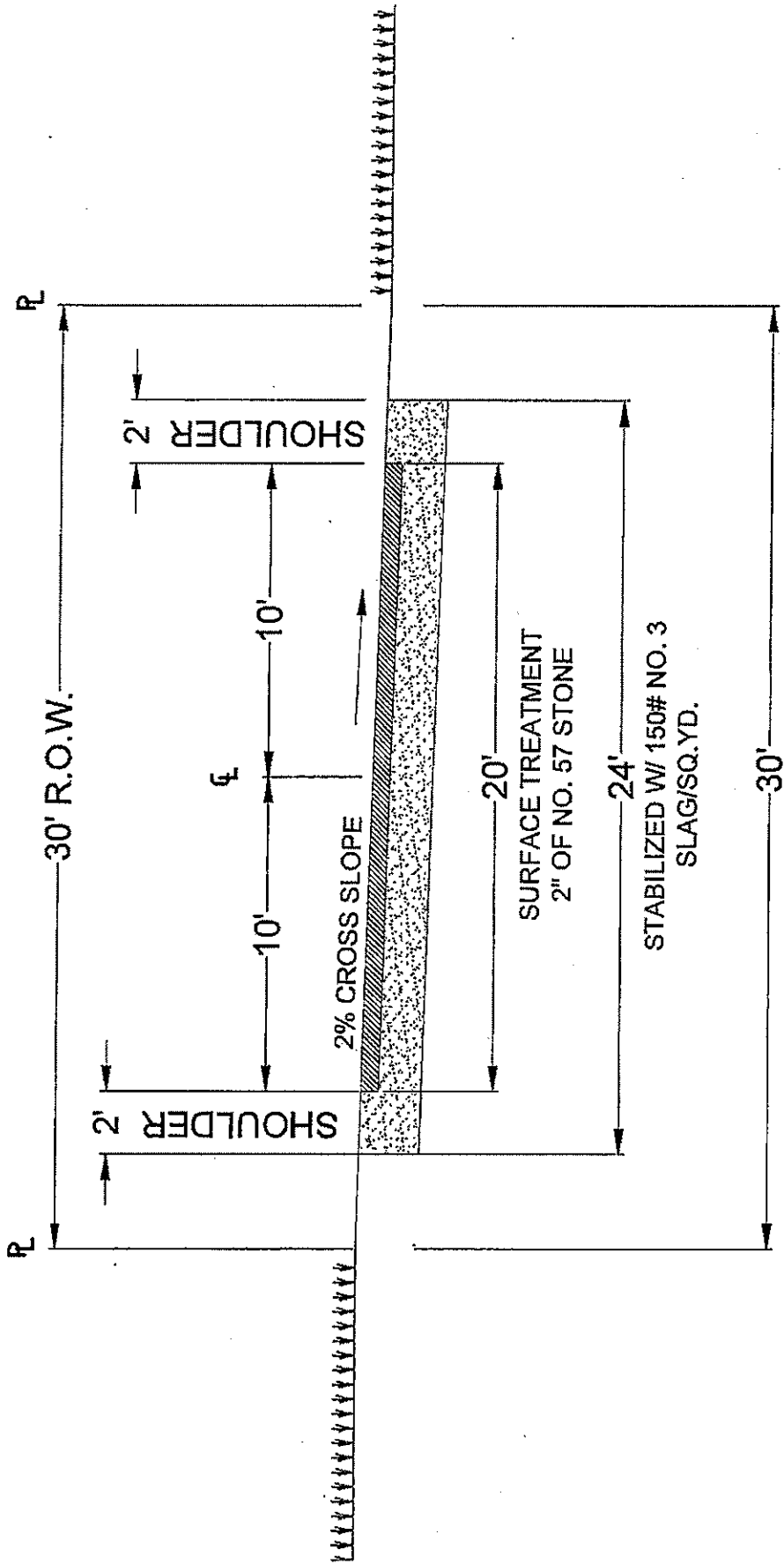
NOT TO SCALE



TYPICAL
ENTRANCE DETAIL

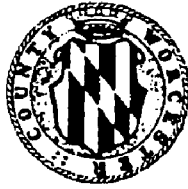
SCALE 1" = 20'

COMMERCIAL ENTRANCE



TYPICAL CROSS SECTION
(SUPERELEVATED WITH STONE SURFACE)
BASE PREPARATION -
SELECT BORROW

- NOTE:
1. ALL ROADS MUST HAVE A MIN OF 10" OF SELECT FILL COMPACTED SUB-BASE.
 2. ROADS SHOULD BE GRADED TO SHEET FLOW RUNOFF TOWARDS SWM MANAGEMENT AREAS.



COMMISSIONERS
JAMES G. BARRETT, PRESIDENT
K. BENNETT BOZMAN, VICE PRESIDENT
REGINALD T. HANCOCK
CARLTON E. MASSEY
W. KENNETH TYLER

OFFICE OF

Worcester County Roads

P.O. BOX 7

SNOW HILL, MARYLAND
21863

E. VICTOR SMULLEN
COUNTY ROADS ENGINEER

TEL. 632-2244

September 11, 1990

MAINTENANCE STANDARDS FOR O.P. ROADS

1. Dirt roads to be scraped four (4) times yearly (minimum) and add borrow material as needed.
2. Surface treated roads to be patched as necessary with resurfacing approximately every five (5) years.
3. Cut vegetation one (1) time at end of growing season.
4. Snow removal as required.

**RESOLUTION AMENDING CONSTRUCTION AND
MAINTENANCE STANDARDS AND SPECIFICATIONS FOR
CURB, GUTTER, INLETS AND UTILITIES FOR COUNTY ROADS**

WHEREAS, Section 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repairs of "County Roads" and "Other Public Roads" within the County; and

WHEREAS, the County Commissioners adopted a resolution on November 5, 1991 adopting construction and maintenance standards for County Roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to revise and update such standards and specifications for installation of curb, gutter, inlets and utilities for County Roads;

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County, Maryland that Section (4) (c) of Roadway Construction and Maintenance Standard WO-101.10 be revised to read as follows:

4. Standards and specifications for curb, gutter, inlets and utilities

- c. All utility locations shall require prior approval of the County Roads Engineer. Complete plans and specifications shall be submitted prior to approval.

Utility lines and other structures such as manholes and valve boxes shall be located outside the paved section except in the following cases where approved by the County Roads Engineer:

1. Utility line crossovers of all types may be permitted in the paved section.
2. Sewer and water lines and other structures shall be permitted in cul-de-sacs and curvilinear sections.
3. Where location of sewer and water lines and other structures outside the paved section is impractical or creates undue hardship or unwarranted expense.
4. Where location of sewer and water lines and other structures outside the paved section will result in undue destruction of desirable vegetation.


In reviewing applications for approval, the County Roads Engineer shall consider:

1. Maintenance costs
2. Snow removal
3. Installation costs
4. Preservation of natural beauty and trees

BE IT FURTHER RESOLVED that this Resolution shall take effect immediately upon its passage.

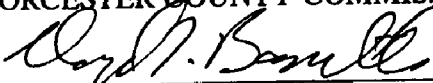
PASSED AND ADOPTED this 14th day of November, 1995.

ATTEST:

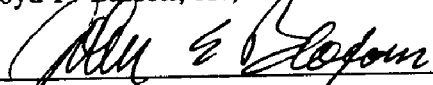


Gerald T. Mason
Chief Administrative Officer

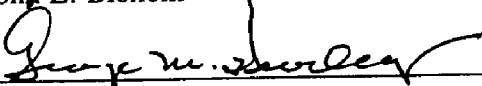
WORCESTER COUNTY COMMISSIONERS




Floyd F. Bassett, Jr., President



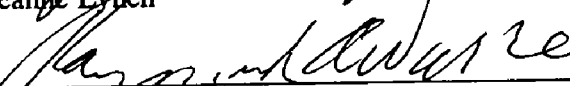
John E. Bloxom



George M. Hurley



Jeanne Lynch



Raymond A. Warren

cc: M. Lockyard

RECEIVED
AUG 20 1998
WORCESTER COUNTY
DEPT. OF PUBLIC WORKS

RESOLUTION 98 - 35

RESOLUTION AMENDING THE
CONSTRUCTION AND MAINTENANCE STANDARDS
FOR COUNTY ROADS TO ADD PROVISIONS FOR A
RURAL STREET - DIVIDED ROAD SECTION
FOR PUBLIC EASEMENT ROADS

WHEREAS, Section PW 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repair of county roads and other public roads within Worcester County, Maryland; and


WHEREAS, the Worcester County Commissioners adopted a resolution on November 5, 1991 adopting Construction and Maintenance Standards for County Roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to add a section to such standards to provide for a rural, divided road section for "Public Easement Roads" to permit the construction of such roads in Worcester County;


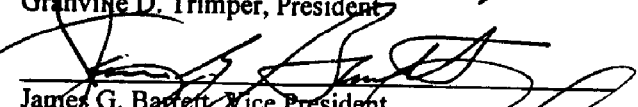
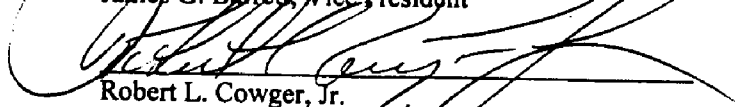
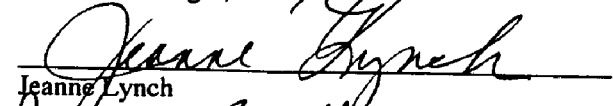
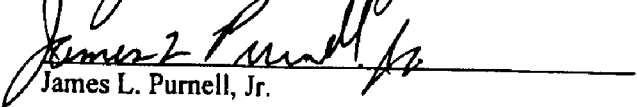
NOW THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County that the attached road construction standard entitled "Rural Street - Divided" is hereby adopted and permitted for all Public Easement Roads within Worcester County, Maryland.

PASSED AND ADOPTED this 18th day of August, 1998 to be effective nunc pro tunc the 4th day of August, 1998.

ATTEST:


Gerald T. Mason
Chief Administrative Officer

WORCESTER COUNTY COMMISSIONERS


Granville D. Trimper, President

James G. Barrett, Vice President

Robert L. Cowger, Jr.

Jeanne Lynch

James L. Purnell, Jr.

RESOLUTION NO. 00 - 3

RESOLUTION ADOPTING
CONSTRUCTION STANDARDS FOR MINOR ROADS
IN WORCESTER COUNTY, MARYLAND

WHEREAS, Section PW 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repair of "County Roads" and "Other Public Roads" within Worcester County; and

WHEREAS, the County Commissioners adopted a resolution on November 5, 1991 adopting construction and maintenance standards for county roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to amend said standards by the addition of a cross section for "minor roads" in major subdivisions.

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County, Maryland that the attached cross section for minor roads as shown on Standard No. WO - 100.01A is hereby adopted.

AND, BE IT FURTHER RESOLVED that this Resolution shall take effect upon its passage.

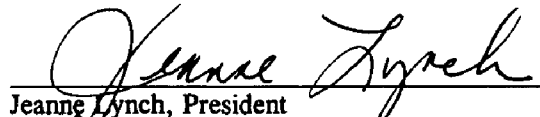
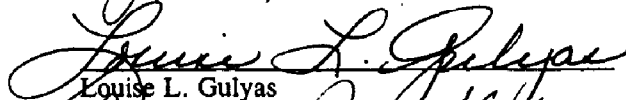
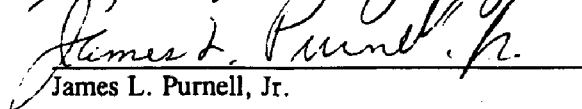
PASSED AND ADOPTED this 1st day of February, 2000.

ATTEST:

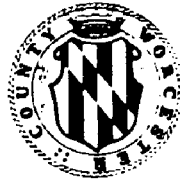


Gerald T. Mason
Chief Administrative Officer

WORCESTER COUNTY COMMISSIONERS


Jeanne Lynch, President
John E. Bloxom, Vice President
Louise L. Gulyas
James L. Purnell, Jr.

Virgil L. Shockley



OFFICE OF THE
COUNTY COMMISSIONERS

COMMISSIONERS
REGINALD T. HANCOCK, PRESIDENT
GEORGE M. HURLEY, VICE PRESIDENT
FLOYD F. BASSETT, JR.
JOHN E. BLOXOM
JEANNE LYNCH

Worcester County

ROOM 112 COURT HOUSE
SNOW HILL, MARYLAND
21863

JOHN A. YANKUS
CHIEF ADMINISTRATIVE OFFICER
EDWARD H. HAMMOND, JR.
COUNTY ATTORNEY

November 7, 1991

TO: W. Kelly Shannahan, Planner
✓ E. Victor Smullen, Roads Engineer
FROM: John A. Yankus, Chief Administrative Officer
SUBJECT: Road Construction and Design Standards

At their meeting on November 5, 1991 the County Commissioners approved the new Road Construction and Design Standards. Enclosed is a copy of the Resolution which officially adopts these standards.

dd
enc.
CC125

RESOLUTION ADOPTING
CONSTRUCTION AND MAINTENANCE STANDARDS
FOR COUNTY ROADS

WHEREAS, Section 1-206 of the Public Works Article of the Public Local Laws of Worcester County provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repairs of "County Roads" and "Other Public Roads" within the County; and

WHEREAS, the County Commissioners adopted a resolution on June 21, 1988 adopting construction and maintenance standards for county roads; and

WHEREAS, the County Commissioners have determined it necessary and appropriate to revise and update such standards;

NOW THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County that the following road construction standards be adopted.

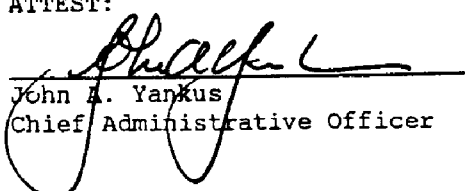
1. GENERAL CONSTRUCTION STANDARDS: Those general construction standards set forth in addendum attached hereto labeled Standard No. WO-101.10 are hereby adopted.
2. CROSS SECTIONS: Those cross sections for urban streets, rural streets, and minor subdivision roads as shown on Standard Nos. WO-100.10, WO-100.11, and WC-100.01 attached hereto are hereby adopted.
3. COST ESTIMATES FOR ROAD CONSTRUCTION: Those cost estimates for road construction for urban streets and rural streets as shown on Standard No. WO-101.11 attached hereto are hereby adopted.
4. TRANSITIONS BETWEEN ROADS CONSTRUCTED TO DIFFERENT STANDARDS: Physical transitions between roads constructed to different standards shall be approved by the County Roads Department prior to commencement of construction.

AND BE IT FURTHER RESOLVED by the County Commissioners of Worcester County that the resolution of June 21, 1988 establishing road standards is hereby repealed as of April 1, 1992 as to plans approval and as of November 30, 1992 as to construction standards, it being the intent hereof that roads being planned and designed as of date of this resolution may continue to be planned and designed in accordance with the standards set forth in the resolution of June 21, 1988, provided approval of the Worcester County Roads Department is given prior to April 1, 1992 for each such road and that each such road is fully completed no later than November 30, 1992. Nothing herein, however, shall preclude the construction of a road in accordance with the standards set forth herein as of the date hereof.

BE IT FURTHER RESOLVED that this Resolution shall take effect upon its passage.

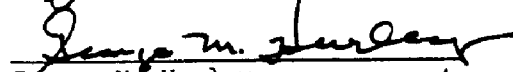
PASSED AND ADOPTED this 5th day of November, 1991.

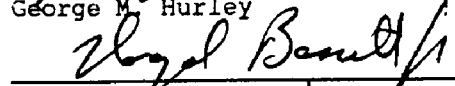
ATTEST:

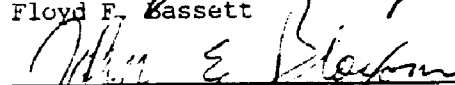

John A. Yankus
Chief Administrative Officer

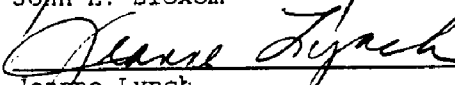
WORCESTER COUNTY COMMISSIONERS

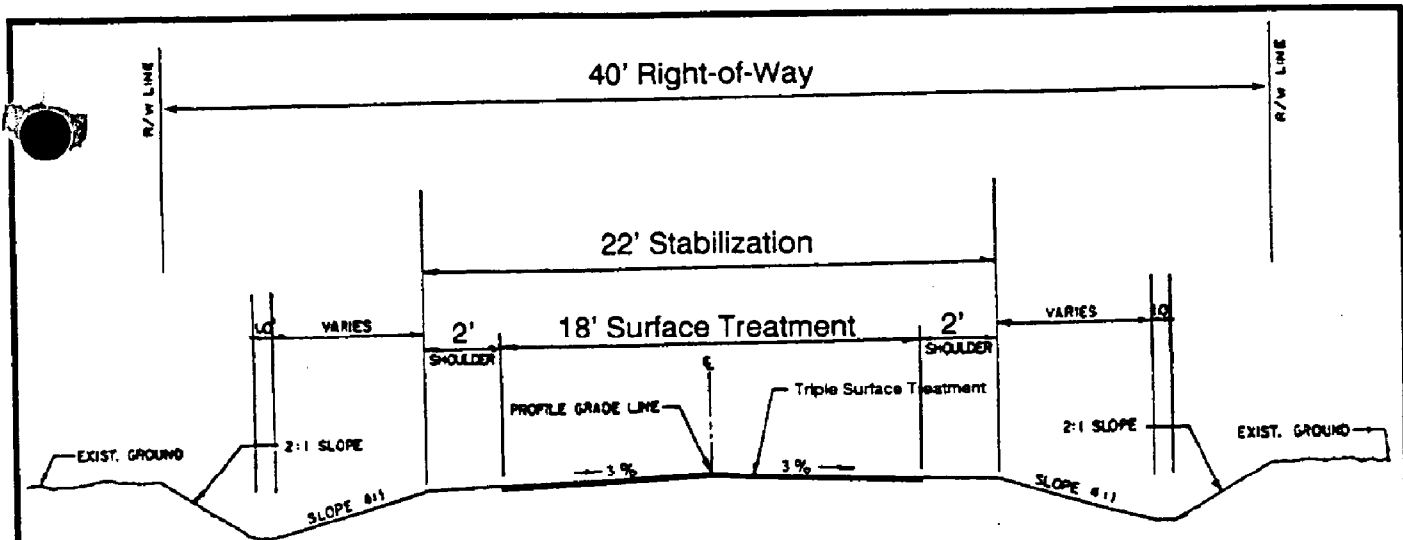

Reginald T. Hancock, President


George M. Hurley


Floyd F. Basset


John E. Bloxon


Jeanne Lynch



CONDITIONS OF USE:

The minor subdivision road section shall only be used where specifically approved by the Worcester County Planning Commission where it finds that the following conditions have been met:

1. The road shall serve no more than five (5) lots in a minor subdivision only. This road section shall not be permitted in any major subdivision in Worcester County.
2. The road shall not be eligible for future extension or to be used as access for any future development in excess of five (5) minor subdivision lots.
3. No parking shall be permitted within the right-of-way.
4. No public water or sewer utility lines shall be permitted within the right-of-way.
5. Any minor subdivision road which extends greater than three hundred feet (300') in length shall be provided with a cul-de-sac with a minimum sixty foot (60') diameter of surface treatment within a minimum eighty foot (80') diameter right-of-way, unless an alternative means of turnaround approved by the County Roads Engineer is provided.

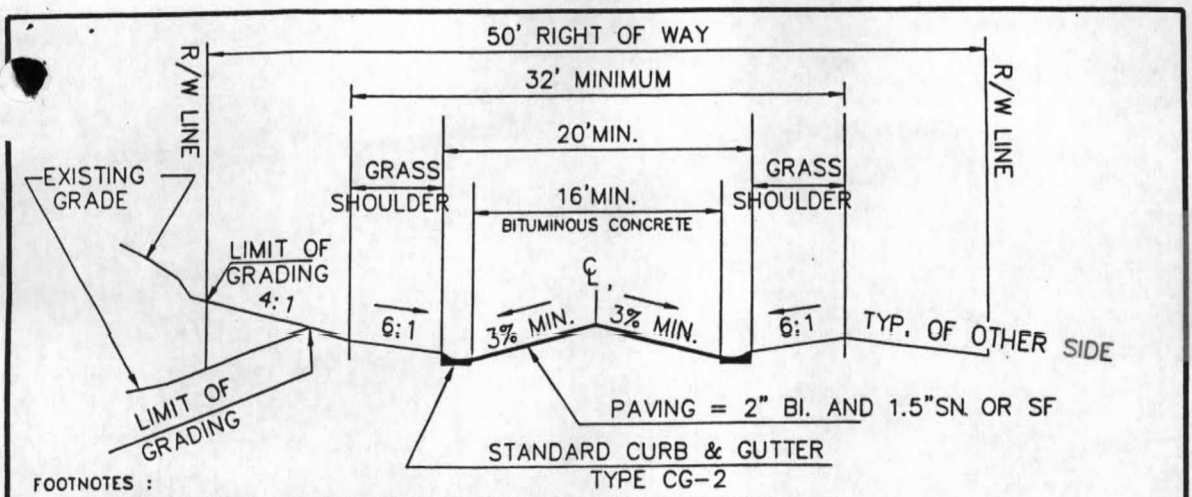
Approval _____
 County Roads Engineer _____ Date _____



Revised: _____

Worcester County, Maryland
 County Roads Department
 Minor Subdivision Road

Standard No. WO - 100.01



FOOTNOTES :

1. THIS STANDARD APPLIES ONLY TO THOSE SUBDIVISIONS WHICH COMPLY WITH ALL THE FOLLOWING CONDITIONS :
 - A : SUBDIVISIONS WITH 10 LOTS OR LESS.
 - B : PROPOSED SUBDIVISION IS ABUTTING A PUBLIC ROAD WITH AN EXISTING PAVED TRAVELWAY EQUAL TO OR LESS THAN 20' IN WIDTH.
 - C : THE PROPOSED SUBDIVISION HAS ONLY ONE ROAD WHICH DOES NOT EXCEED 250 FEET IN LENGTH.
- 2 : ALL OTHER CONSTRUCTION AND MAINTENANCE STANDARDS SHALL COMPLY WITH THOSE AS SHOWN ON STANDARD WO - 100.11 AND THOSE OF PREVIOUSLY ADOPTED RESOLUTIONS OF THE COUNTY COMMISSIONERS OF WORCESTER COUNTY.
- 3 : A 50' R/W MAY BE REDUCED TO A 40' R/W IF THE ABUTTING PUBLIC ROAD IS A 40' OR LESS WIDTH R/W.
- 4 : PARKING SHALL NOT BE PERMITTED WITHIN THE RIGHT OF WAY.
- 5 : THE ROAD SHALL NOT BE ELIGIBLE FOR FUTURE EXTENSION OR TO BE USED AS ACCESS FOR ANY FUTURE DEVELOPMENT.
- 6 : THE CULDESAC SHALL BE CONSTRUCTED WITH A MINIMUM SIXTY FOOT (60') DIAMETER PAVEMENT WIDTH AND A MINIMUM EIGHTY FOOT (80') DIAMETER RIGHT OF WAY.
- 7 : THE DEVELOPER SHALL PROVIDE STREET PLAN, PROFILE AND DRAINAGE PLAN FOR ALL STREET CONSTRUCTION. THESE PLANS MUST BE APPROVED BY THE WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO START OF ANY CONSTRUCTION.
- 8 : AN "EROSION AND SEDIMENT CONTROL PERMIT" AND "GRADING PERMIT" MUST BE OBTAINED BEFORE ANY CLEARING AND/OR GRADING IS PERMITTED.
- 9 : A "STORMWATER MANAGEMENT PLAN" MUST BE APPROVED PRIOR TO CONSTRUCTION OF ANY STORM WATER FACILITIES.
- 10 : ALL PAVEMENT AND STABILIZED AREAS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARDS FOR AN URBAN STREET PER STANDARD NO. WO-100.11
- 11 : ALL ROADS SHALL BE DESIGNED, CONSTRUCTED, AND MAINTAINED IN ACCORDANCE WITH THE " CONSTRUCTION AND MAINTENANCE STANDARDS FOR COUNTY ROADS" AS ADOPTED AND PERIODICALLY REVISED BY THE WORCESTER COUNTY COMMISSIONERS.
- 12 : CONCRETE CURB AND GUTTER SHALL NOT BE DESIGNED AND CONSTRUCTED AT A GRADE OF LESS 0.30% OR MORE THAN 6.00%. A MINIMUM GRADE OF 0.20% MAY BE USED WHERE A HARDSHIP IS PROVEN AND SPECIFIC APPROVAL IS GIVEN FROM THE WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS.
- 13 : SEE STANDARD WO-201.10 FOR CURB AND GUTTER DETAILS.
- 14 : ALL AREAS DISTURBED BY GRADING, INCLUDING ALL SLOPES AS SHOWN ON ABOVE TYPICAL SECTION, SHALL BE SEEDED AND MULCHED.

APPROVAL

 DIRECTOR OF PUBLIC WORKS DATE

WORCESTER COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS - ROADS DIVISION

 MINOR ROAD

 STANDARD NO. WO - 100.01A (ALTERNATE)

Cul-de-Sac

BesTemps



Career Associates

Permanent Employment
Division

Temporary Employment
Division

Culs-de-Sac

50' Row 100' - 80' Surface

40' Row 80 60" "

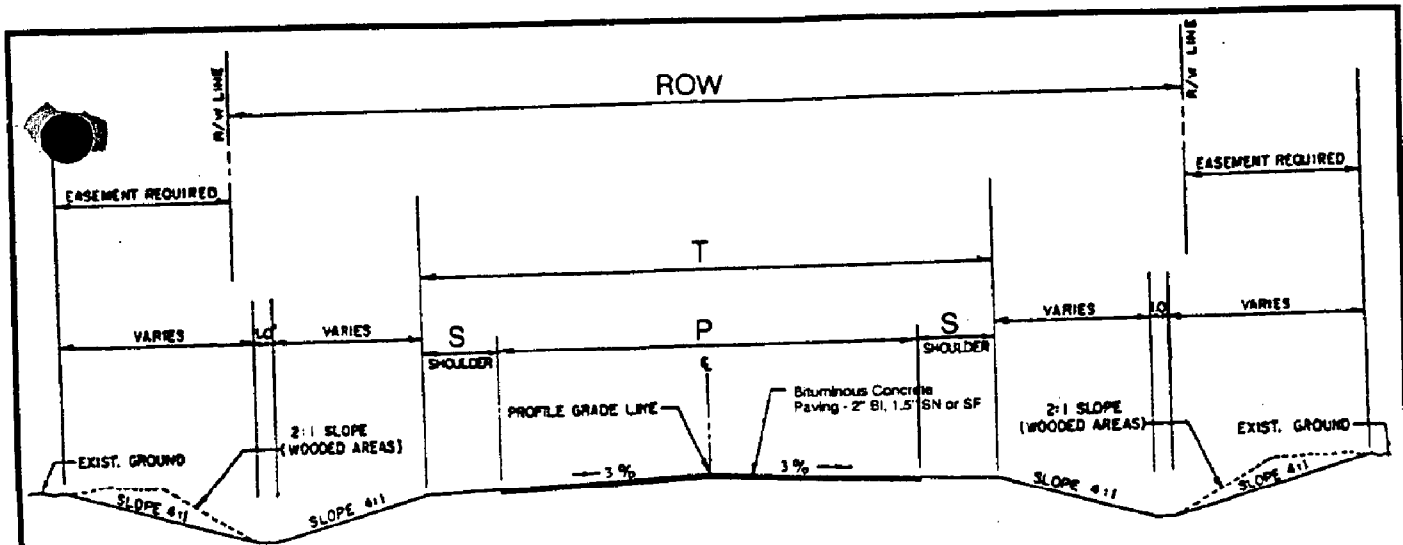
Salisbury
410-546-0252

Seaford, DE
302-629-4357

Cambridge, MD
410-221-9675

Dover, DE
302-674-4357

Serving all of Delmarva Since 1976



Projected Traffic (ADT)	Pavement Width (P)	Stabilized Shoulder Width (S)	Total Stabilized (T)	Minimum Right-of-Way (ROW)
Up to 250	22'	3'	28'	50'
251-400	22'	4'	30'	50'
401-750	24'	4'	32'	50'
751-1500	24'	5'	34'	50'
1501-3000	24'	6'	36'	50'
3001-5500	24'	8'	40'	60'


Footnotes:

1. The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Roads Department prior to start of any construction.
2. An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
3. A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
4. All pavement area (P) shall be bituminous concrete.
5. All stabilized area (T) shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
6. All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
7. Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Roads Engineer is given to use 2:1 slopes.
8. See standard WO-202.10 for typical driveway entrance across side road ditch.
9. All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

Approval

County Roads Engineer _____ Date _____

Revised: _____



Worcester County, Maryland
 County Roads Department
 Rural Street

Standard No. WO - 100.10

1. STANDARDS AND SPECIFICATIONS FOR GRADING AND BASE COURSES

- a. The right-of-way width shall be a minimum of fifty (50) feet.
- b. All lines and grades shall be approved by the County Roads Engineer before grading operations are begun.
- c. The road bed shall be graded for its full width (right-of-way line to right-of-way line), by removing all topsoil, stumps, root mat, unsuitable material, etc.
- d. Base may be prepared by using local Bank Run Gravel. Material shall meet Maryland State Highway Administration analysis test for A-3 or better materials. 230 lbs. of Md. No. 57 stone per square yard shall be added and worked into the top 6" of base with pulvi-mixer. As an alternate to this specification, 400 lbs. of Cr-6 Crusher Run material per square yard may be added to base and brought to the proper grade and cross-section and thoroughly compacted. Water shall be added by sprinkling in sufficient quantity to attain proper compaction and moisture control.
- e. Compaction of fill areas and base shall be by Sheeps Foot Roller, Self-Propelled Rubber Tired Roller or Vibratory Roller to achieve a minimum of 95% compaction.

2. STANDARDS AND SPECIFICATIONS FOR SURFACE COURSES

- a. All bituminous concrete shall be Type BI Base Intermediate, Type SN Surface Normal or Type SF Surface Fine complying with Maryland State Highway Administration Specifications. (2" BI and 1.5" SN or SF).
- b. No work on surface courses shall be permitted between November 15th and March 1st unless a developer or contractor agrees to accept full responsibility of the work, in writing, for a period of eighteen (18) months following completion of construction. Any damages occurring shall be the full responsibility of the contractor and/or developer.

3. DRAINAGE, SEDIMENT CONTROL, SEEDING AND MULCHING

- a. All drainage structures shall be shown on road plan and profile as to size and location. Storm drainage, open or closed shall indicated invert elevations. Prior to stabilization all drainage structures shall be installed. Pipe to be ACCM or RCP meeting Maryland State Highway specifications.
- b. Drainage facilities shall be provided on development site along with offsite facilities and extensions as may be required for effective drainage.
- c. All drainage facilities are to be located in road right-of-way where possible and where not possible, provisions for drainage easements or right-of-way shall be obtained.

Approval

County Roads Engineer

Date



Revised:

Worcester County, Maryland
County Roads Department

Roadway Construction
and Maintenance Standards

Standard No. WO - 101.10 (Page 1 of 3)

- d. Erosion must be controlled during construction. Facilities to control erosion must be cleaned of deposited material and removed at completion of construction.
- e. All slopes and unstabilized areas shall be properly fertilized, seeded and mulched as per requirements of Worcester County Sediment Control.
- f. Whatever measures needed to insure that a public nuisance is not created as a result of construction operations is required. (Dust, blocking of drainage, traffic, etc.)

4. STANDARDS AND SPECIFICATIONS FOR CURB, GUTTER, INLETS AND UTILITIES


- a. Curb and gutter shall be concrete. Construction methods, materials and other specifications will conform to Maryland State Highway Administration.
- b. Inlets shall generally conform to Maryland State Highway specifications.
- c. All utility locations shall be approved by County Roads Engineer. Utility company shall submit plans for permit. All utilities located in roads right-of-way must be approved by the Worcester County Commissioners.

5. ENTRANCES - RESIDENTIAL, COMMERCIAL, STATE HIGHWAYS

- a. Residential entrances shall be constructed using or maintaining either a swale or drainage pipe. All entrances located along an open section type roadway will require pipes in the ditch line. (20.0' x 12" minimum size and length.) Swales are acceptable only within fifty (50) feet of a crest and upon approval of County Roads Engineer. Paved entrances shall conform to standards of Maryland State Highway Administration.
- b. Commercial entrance channelization shall conform to the policy and standards of the Maryland State Highway Administration. Application and plans will be submitted to Worcester County Roads for a commercial entrance permit. A five thousand dollar (\$5,000.00) performance bond to cover cost of construction will be required. All utility adjustments shall be the responsibility of the permittee.
- c. Subdivisions making connections with State Highways must comply with Maryland State Highway Administration Rules and Regulations.


6. ROAD SIGNS AND MARKING

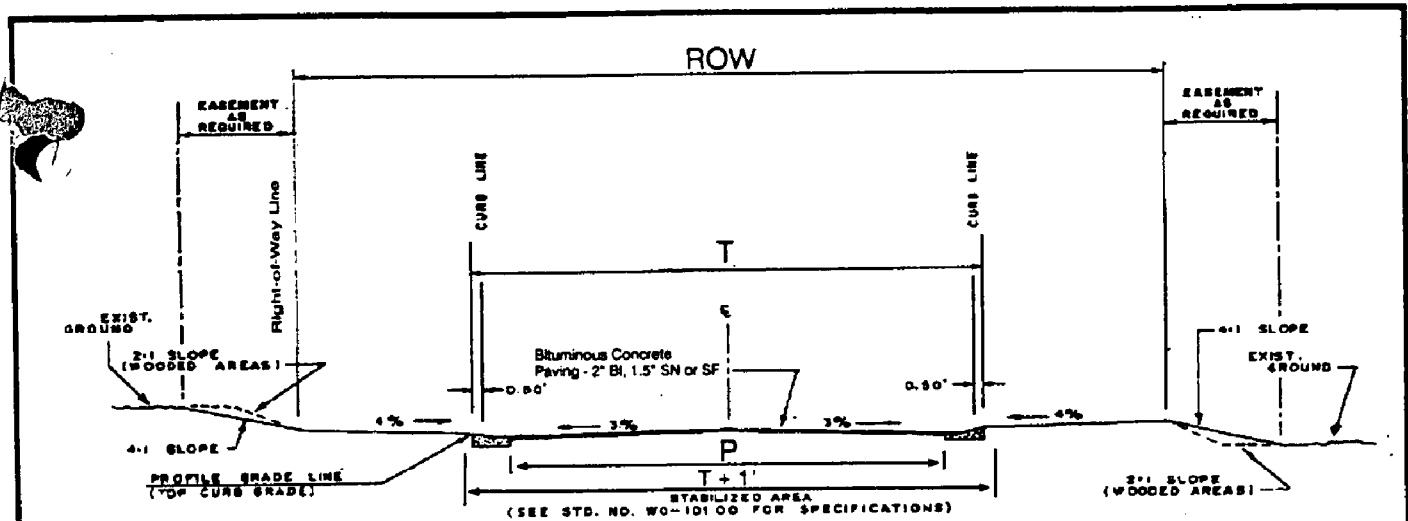
All roads shall be marked and signed in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted and periodically revised by the State Highway Administration of Maryland. All roads shall have such identifying signs as may be required under other County law or regulation.

Approval		Worcester County, Maryland County Roads Department Roadway Construction and Maintenance Standards
County Roads Engineer	Date	
	Revised:	Standard No. WO - 101.10 (Page 2 of 3)

7. PROCEDURES FOR CONSTRUCTION

- a. The developer and/or his contractor shall arrange to meet with the engineer on site to review plans for road construction.
- b. The engineer shall upon notification by the developer and/or his contractor inspect the subgrade and grading operations prior to placing of any base material.
- c. The engineer shall upon notification by the developer and/or his contractor inspect the base, have it checked for depth and density. Unstable or insufficient base will not be acceptable.
- d. Upon approval of base course, stabilization may begin. Worcester County Roads will have an inspector on the job site during stabilization operation. Weight tickets or bills of lading are required for stone weight.
- e. Upon approval of all the above construction phases, and base is graded smooth, bituminous concrete surface can be applied. Worcester County Roads will have an inspector on job site during surfacing operations. Weight tickets for bituminous concrete will be required.
- f. The developer and/or his contractor shall in no instance proceed with any stage of construction until the engineer indicates approval of all previous stages.
- g. Upon approval of all stages of construction, the County Roads Engineer shall indicate approval by letter to the Worcester County Commissioners and a copy of letter to the developer.
- h. Upon approval by the Worcester County Commissioners and upon receipt of fee simple title from the developer, and after any required Public Hearing the Commissioners will accept the road into the Worcester County Roads System for maintenance.

Approval		Worcester County, Maryland County Roads Department Roadway Construction and Maintenance Standards	
_____ County Roads Engineer	_____ Date		
	Revised:	Standard No. WO - 101.10 (Page 3 of 3)	



Projected Traffic (ADT)	Pavement Width (P)	Width Back to Back of Curb (T)	Number of Lanes	Minimum Right-of-Way (ROW)
Up to 750	24'	27' 28"	2	50'
751-1500	26'	29' 30"	2	50'
1501-3000	33'	36' 37"	3	60'
3001-5500	37'	40' 41"	3	60'

Footnotes:

- The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Roads Department prior to start of any construction.
- An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
- A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
- All pavement area (P) shall be bituminous concrete.
- All stabilized area (T) shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
- All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
- Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Roads Engineer is given to use 2:1 slopes.
- Concrete curb and gutter shall not be designed and constructed at a grade of less than 0.30% or more than 6.00%. A minimum grade of 0.20% may be used where a hardship is proven and specific approval is given by the Worcester County Roads Department.
- See standard WO-201.10 for for curb and gutter details.
- All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

Approval

County Roads Engineer

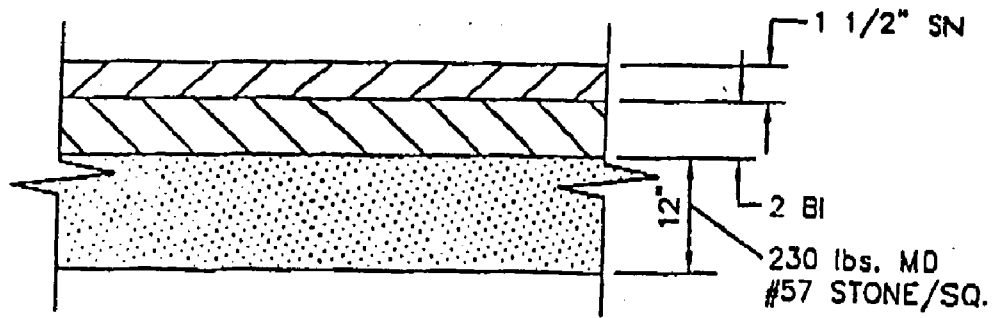
Date

Worcester County, Maryland
County Roads Department
Urban Street



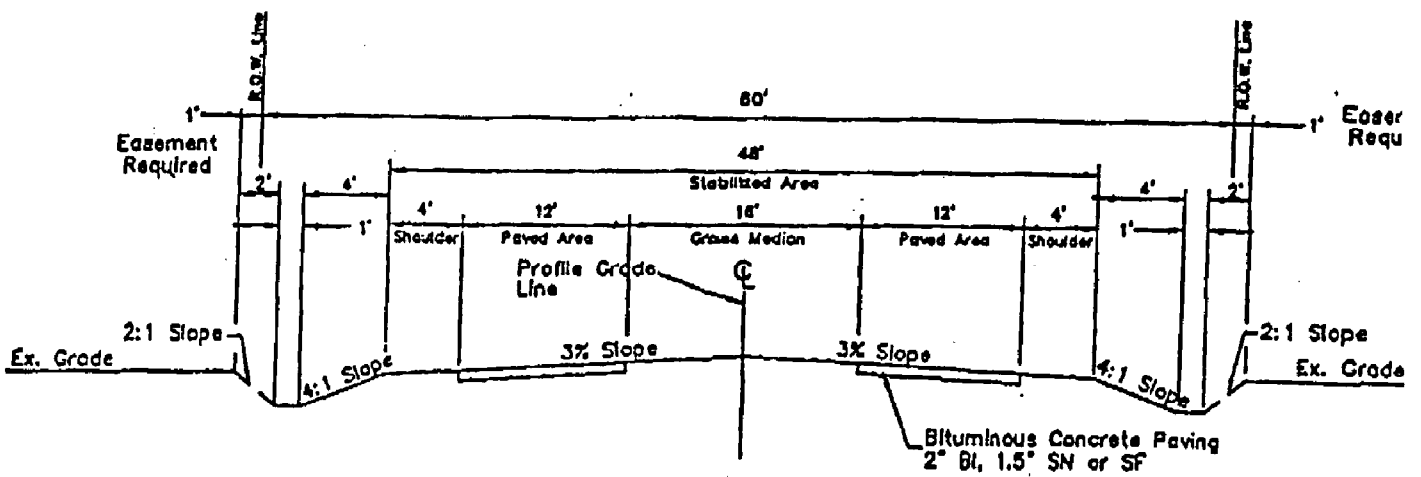
Revised:

Standard No. WO - 100.11



PAVING SECTION

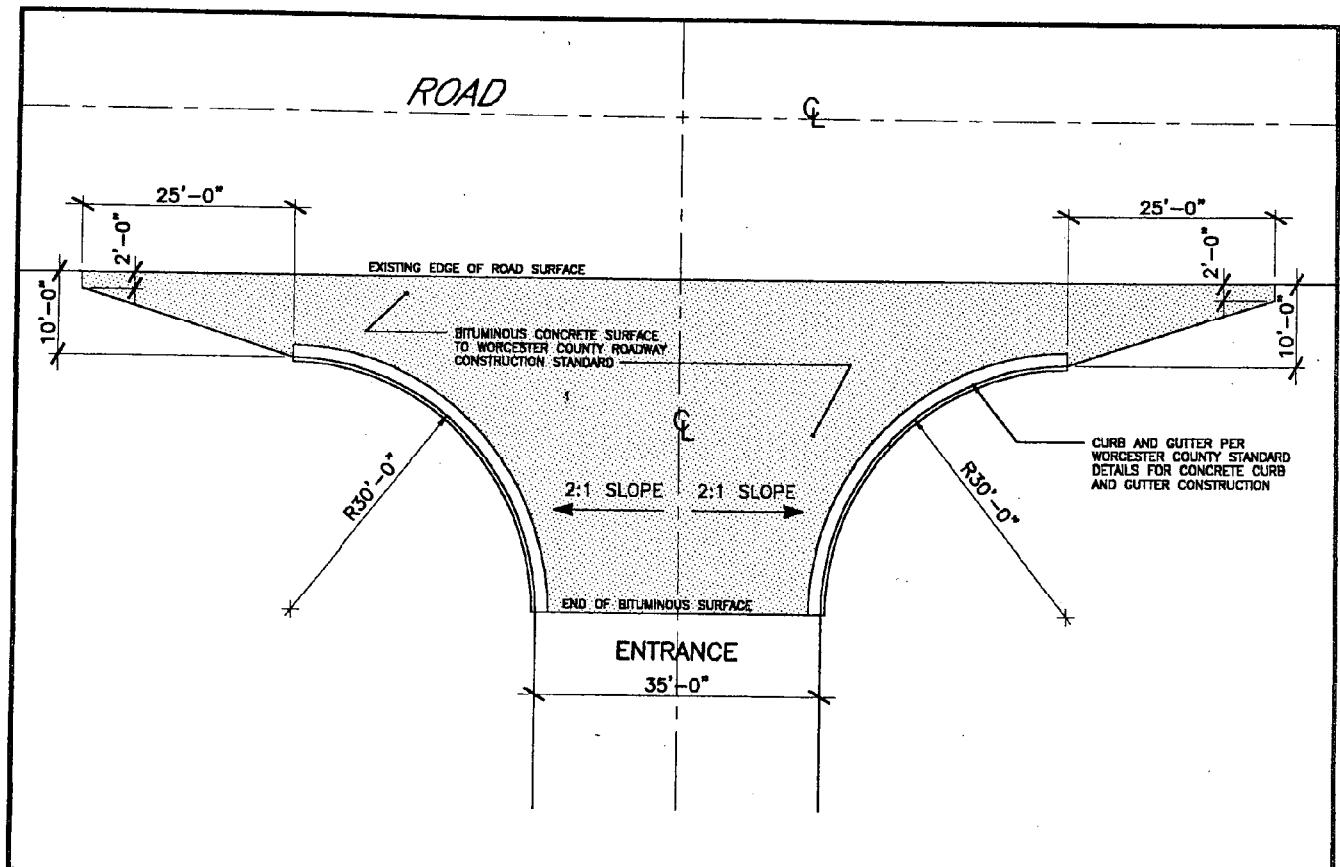
N.T.R.



Footnotes:

1. The Rural Street - Divided road section is permitted for "Public Easement Roads" only in Worcester County.
2. The developer shall provide street plan, profile and drainage plan for all street construction. These plans must be approved by the Worcester County Department of Public Works - Roads Division prior to start of construction.
3. An "erosion and sediment control permit" and "grading permit" must be obtained before any clearing and/or grading is permitted.
4. A "stormwater management plan" must be approved prior to construction of any storm water drain facilities.
5. All pavement area shall be bituminous concrete.
6. All stabilized area shall be stabilized as follows:
 - 230 lb. Md. #57 stone per square yard.
 - 12" compacted borrow.
 - Unsuitable material to be removed to a point 12" below subgrade of the stabilization. The unsuitable material shall be replaced with select borrow.
7. All roads shall be designed, constructed and maintained in accordance with the "Construction and Maintenance Standards for County Roads" as adopted and periodically revised by the Worcester County Commissioners.
8. Slopes of 4:1 required except where street is cut through wooded areas and specific approval from the Worcester County Department of Public Works - Roads Division is given to use 2:1 slopes.
9. See standard WO-202.10 for typical driveway entrance across side road ditch.
10. All areas disturbed by grading, including all slopes as shown on above typical section, shall be seeded and mulched.

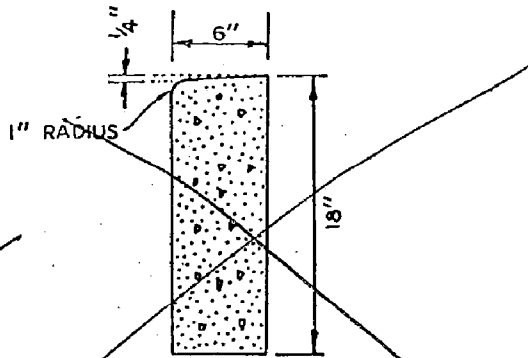
<p>Approval</p> <p>_____</p> <p>County Roads Engineer Date</p> <p>_____</p> <p>Revised:</p>	<p>Worcester County, Maryland</p> <p>County Roads Department</p> <p>Rural Street - Divided</p> <p>(for Public Easement Roads only)</p> <p>_____</p> <p>Standard No. WO - 100.12</p>
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**TYPICAL
COMMERCIAL ENTRANCE
DETAIL**

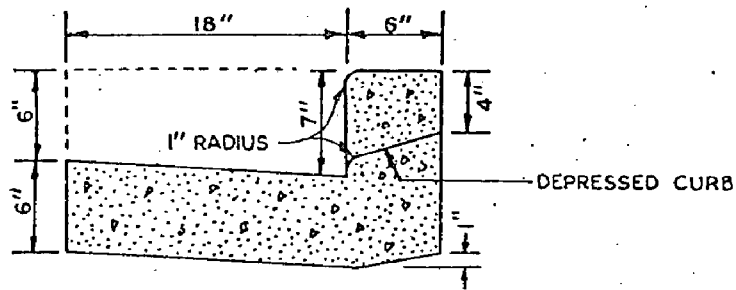
**Worcester County, Maryland
County Roads Department**

No



STANDARD CURB

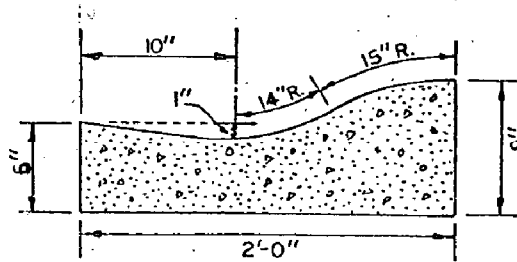
SCALE 1" = 1' 0"



STANDARD CURB & GUTTER

TYPE CG-1

SCALE 1" = 1' 0"



STANDARD CURB & GUTTER

TYPE CG-2

SCALE 1" = 1' 0"

NOTE: TYPE CG-2 CURB & GUTTER
 MAY BE BUILT THROUGHOUT
 EXCEPT WHERE STORM
 WATER INLETS ENCOUNTERED
 IN WHICH CASE TYPE CG-1
 CURB & GUTTER SHALL BE
 BUILT AND A 10' TRANS-
 IITION SHALL BE MADE
 BETWEEN TYPE CG-1 &
 TYPE CG-2.

WORCESTER COUNTY

STANDARD DETAILS FOR
 CONCRETE CURB AND
 GUTTER CONSTRUCTION

APPROVED:

CAUTION
DON'T ALLOW EQUIPMENT & SUPPLY
TRUCKS TO RUN OVER NEW GUTTER
WITHOUT PROTECTION TO GUTTER

CONTRACTION JOINT FORMED
 BY 1/8" STEEL PLATE.

1/2" THICK PREMOLD EXPANSION
 JOINT PLACED 40'-0" INTERVALS
 (MAX.) OR CONTRACTION JOINTS
 Poured WITH ASPHALT JOINT
 SEALING COMPOUND.

BITUMINOUS CONCRETE-SPEC. B-BAND
 SN OR SF, ONE LAYER, NOMINAL DEPT.
 1 1/4"

NO SECTION SHALL BE
 LESS THAN 4'-0".

BI BASE INTERMEDIATE 2"

FLOATED SMOOTH AND EDGES
 ROUNDED WITH APPROVED
 EDGING TOOL.

AFTER CONCRETE HAS SET
 JACKFILL IMMEDIATELY, TAME
 JACKFILL IN 4" LAYERS.

LOPES - SEEDED
 AND MULCHED

10'-0" STANDARD SECTION
 (MAXIMUM)

PLASTERING NOT PERMITTED
 ON FACE, REMOVE

CRACKED AND DEFECTIVE SECTIONS
 SHALL BE REMOVED AND REPAIRED.

SAND AGGREGATE BASE COURSE
 230 LB OF MD #57 STONE S.Y.
 BLENDED INTO TOP 6" SUBGRADE

OR 400 LBS/S.Y. OF CR-6 CRUSHER RI
 ADDED TO BASE, BROUGHT TO PROJ
 GRADE & THOROUGHLY COMPACTED

SUBGRADE - SELECT MATERIAL
 AS REQUIRED

ALL SOFT AND UNSUITABLE
 MATERIAL SHALL BE REMOVED
 AND REPLACED WITH SUITABLE
 BORROW.

ALL PAVEMENT MATERIALS AND
 SUBGRADE TO BE COMPACTED
 IN CONFORMITY WITH MD
 S.H.A. SPECS.

FORMS SHALL BE SET TRUE TO LINE AND GRADES.

ALL MATERIALS SHALL CONFORM TO MD. S.H.A. SPECS
 A. CONCRETE - 5% AIR ENTRAINMENT, MIN. 3500 PSI
 B. BIT. CONC. - SPEC B-BAND SN OR SF.

SURFACE OF CURB & GUTTER SHALL BE CHECKED WITH 10'
 STRAIGHT EDGE; IRREGULARITIES MORE THAN 1/4" IN 10'
 SHALL BE CORRECTED.

JOINT TEMPLATES SHALL BE HELD AT 90° TO FORM, AND
 SHALL BE REMOVED AFTER CONCRETE HAS SET TO HOLD
 ITS SHAPE SUFFICIENTLY.

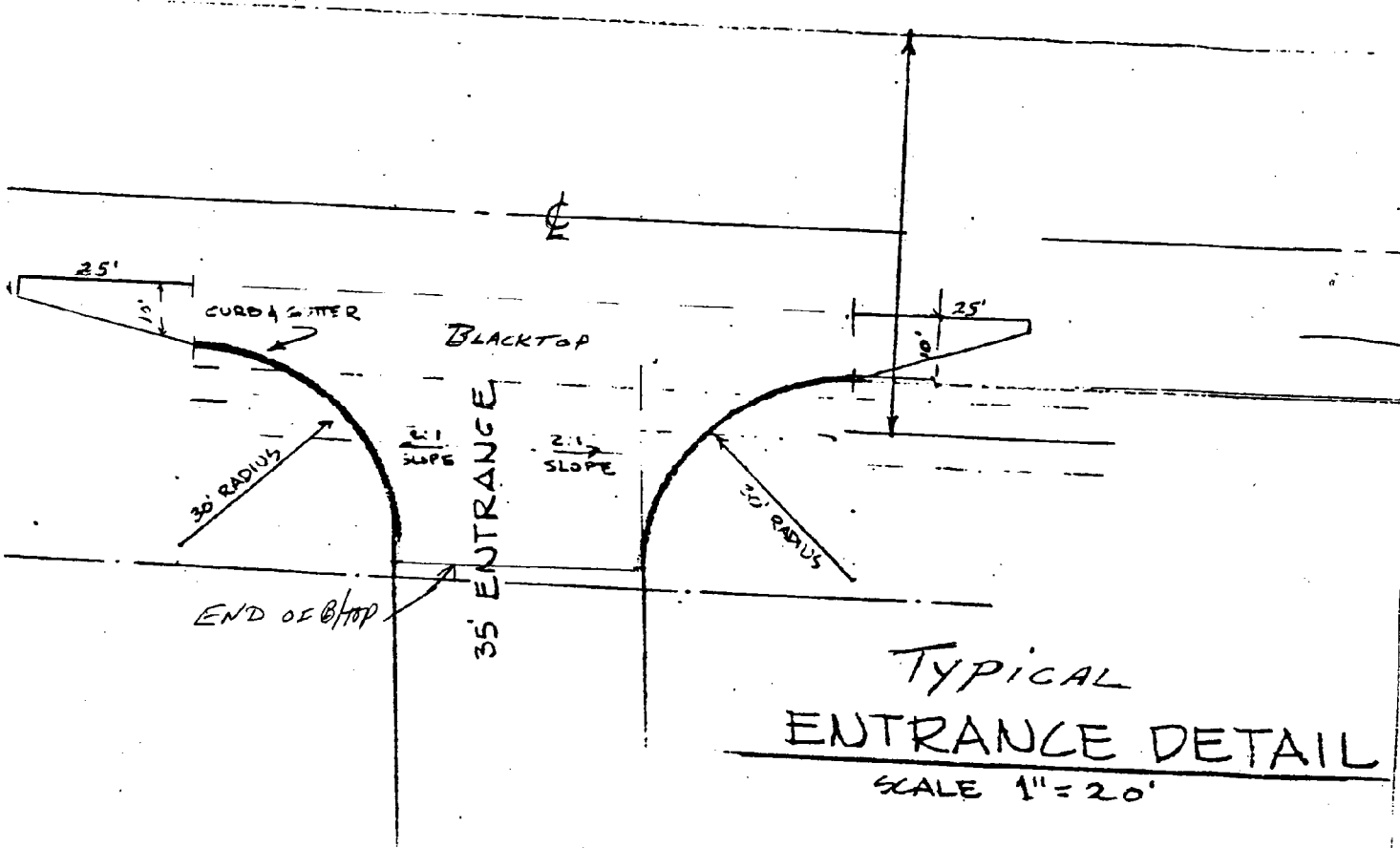
EXPOSED SURFACES SHALL BE FINISHED WHEN GREEN.

CURE IN CONFORMITY TO MD. S.H.A. SPECS.

MAJOR POINTS FOR CONSTRUCTION
OF STREETS USING INTEGRAL
CURB & GUTTER (TYPE cg-2 SHOWN)

APPROVED:

NOT TO SCALE



TYPICAL
ENTRANCE DETAIL

SCALE 1" = 20'

COMMERCIAL ENTRANCE

WORCESTER COUNTY ROADS SPECIFICATIONS
PRIVATE CAMPGROUND SUBDIVISIONS

- I. STANDARDS AND SPECIFICATIONS FOR GRADING AND BASE
- II. STANDARDS AND SPECIFICATIONS FOR SURFACE COURSES
- III. DRAINAGE, SEDIMENT CONTROL, SEEDING AND MULCHING
- IV. STANDARDS AND SPECIFICATIONS FOR CURB, GUTTER
INLETS AND UTILITIES
- V. ENTRANCES -- RESIDENTIAL, COMMERCIAL, STATE HIGHWAYS
- VI. PROCEDURES FOR CONSTRUCTION
- VII. CONSTRUCTION COST ESTIMATES
- VIII. TYPICAL CROSS SECTIONS

I. STANDARDS AND SPECIFICATIONS FOR GRADING AND BASE COURSES - PRIVATE CAMPGROUND SUBDIVISIONS

- A. Width - Collector Roads shall have a right-of-way width of forty (40) feet minimum. All Other Roads shall have a right-of-way width of thirty (30) feet minimum.
- B. All lines and grades shall be approved by County Roads Engineer before grading operations are begun.
- C. Grading - The road bed shall be graded for its full width by removing all topsoil, stumps, root mat, unsuitable material, etc.
- D. Base may be prepared by using local Bank Run Gravel. Material shall meet Maryland State Highway Administration analysis test for A-3 or better materials. 150 lbs. of Md. No. 3 Slag or 175 lbs. Stone per square yard shall be added and worked into the top 4"-6" of base with pulvi-mixer. On site borrow may be used if approved, in writing, by County Roads Engineer and 200 lbs. of Md. No. 3 Slag or 230 lbs. Stone per square yard added and worked into the top 6" of base with pulvi-mixer.
- E. Compaction of fill areas and base shall be by Sheeps Foot Roller, Self-Propelled Rubber Tired Roller or Vibratory Roller to achieve a minimum of 95% compaction. Depth of base shall be a minimum of ten (10) inches compacted.
- F. 1. On typical cross-section roadway Collector Roads the surface treated travel portion shall be twenty-two (22) feet in width with two (2) six (6) foot shoulders. Complete width of roadway and shoulders to have full depth base and stabilization.
2. On typical cross-section roadway All Other Roads the surface treated travel portion shall be twenty (20) feet in width with two (2) two (2) foot shoulders. Complete width of roadway and shoulders to have full depth base and stabilization.

Collector Roads
30' RW
6' paved

II. STANDARDS AND SPECIFICATIONS FOR SURFACE COURSES -
PRIVATE CAMPGROUND SUBDIVISIONS

A. SURFACE TREATMENT

1. Surfacing shall be applied in three applications using 0.50, 0.50 and 0.33 gallons per square yard of bituminous material for each application. No. 3 stone or slag at 35 lbs. per square yard shall be used for the first application, No. 4 stone or slag at 30 lbs. per square yard shall be used for the second application and No. 7 stone or slag at 20 lbs. per square yard for the third application. Surface shall be thoroughly rolled after each application of bituminous and cover materials. At no time will surface treatment be applied until base is completely smooth, stable and free of soft or spongy spots. Cover and bituminous materials shall meet specifications set by the Maryland State Highway Administration for surface treatment work.
2. No work on surface courses shall be permitted between November 15th and March 1st unless a developer or contractor agrees to accept full responsibility of the work, in writing, for a period of eighteen (18) months following completion of construction. Any damages occurring shall be the full responsibility of the contractor and/or developer.

III. DRAINAGE, SEDIMENT CONTROL, SEEDING AND MULCHING -
PRIVATE CAMPGROUND SUBDIVISIONS

- A. All drainage structures to be shown on road plan and profile as to size and location. Storm drainage, open or closed, shall indicate invert elevations. Prior to stabilization all drainage structures shall be installed. Pipe to be ACCM or RCP meeting Maryland State Highway specifications.
- B. Drainage facilities shall be provided on development site along with offsite facilities and extensions as may be required for effective drainage.
- C. All drainage facilities are to be located in road right-of-way where possible and where not possible, provisions for drainage easements or right-of-way shall be obtained.
- D. Erosion must be controlled during construction. Facilities to control erosion must be cleaned of deposited material and removed at completion of construction.
- E. All slopes and unstabilized areas shall be properly fertilized, seeded and mulched as per requirements of Worcester County Sediment Control.
- F. Whatever measures needed to insure that a public nuisance is not created as a result of construction operations is required. (Dust, blocking of drainage, traffic, etc.)

IV. STANDARDS AND SPECIFICATIONS FOR CURB, GUTTER, INLETS AND UTILITIES - PRIVATE CAMPGROUND SUBDIVISIONS

- A. Curb and gutter shall be concrete. Construction methods, materials and other specifications will conform to Maryland State Highway Administration specifications.
- B. Inlets shall generally conform to Maryland State Highway specifications.
- C. All utility locations shall be approved by County Roads Engineer. Utility company shall submit plans for permit. All utility installation shall be completed prior to paving.

V. ENTRANCES - RESIDENTIAL, COMMERCIAL, STATE HIGHWAYS - PRIVATE CAMPGROUND SUBDIVISIONS

- A. Residential entrances shall be constructed using or maintaining either a swale or sheet drainage.
- B. Commercial entrances channelization will be the policy and standards of the Maryland State Highway Administration. Application and plans will be submitted to Worcester County Roads for a commercial entrance permit. A performance bond to cover cost of construction will be required. All utility adjustments shall be the responsibility of the permittee.

VI. PROCEDURES FOR CONSTRUCTION - PRIVATE CAMPGROUND
SUBDIVISIONS

- A. The developer and/or his contractor shall arrange to meet with the engineer on site to review plans for road construction.
- B. The engineer shall upon notification by the developer and/or his contractor inspect the subgrade and grading operations prior to placing of any base material.
- C. The engineer shall upon notification by the developer and/or his contractor inspect the base, have it checked for depth and density. Unstable or insufficient base will not be acceptable.
- D. Upon approval of base course, stabilization with Md. No. 3 Slag may begin. Worcester County Roads will have an inspector on the job site during stabilization operation. Weight tickets or bills of lading are required for slag weight.
- E. Upon approval of all the above construction phases, and base is graded smooth, surface treatment can be applied. Worcester County Roads will have an inspector on job site during surfacing operations. Weight tickets for cover material and asphalt delivery tickets are required.
- F. The developer and/or his contractor shall in no instance proceed with any stage of construction until the engineer indicates approval, in writing, of all previous stages.
- G. Upon approval of all stages of construction, the County Roads Engineer shall indicate approval by letter to the Worcester County Roads Board and a copy of letter to the developer.

CONSTRUCTION COST ESTIMATE
PRIVATE CAMPGROUND SUBDIVISIONS

COLLECTOR ROADS - 40' R/W

40' Clearing, Grading & Drainage	23,467 s.y.	@\$0.40	=	\$	9,386.80
34' Roadway Base	19,947 s.y.	@\$1.95	=		38,896.65
34' Slag Stabilization	19,947 s.y.	@\$1.43	=		28,524.21
22' Surface Treatment	12,907 s.y.	@\$1.75	=		22,587.25
6' Seeding & Mulching	3,520 s.y.	@\$0.72	=		2,534.40
					\$101,929.31

\$101,929.31 = \$19.30 L.F.
\$22.75 L.F. 7/7/87 CC's

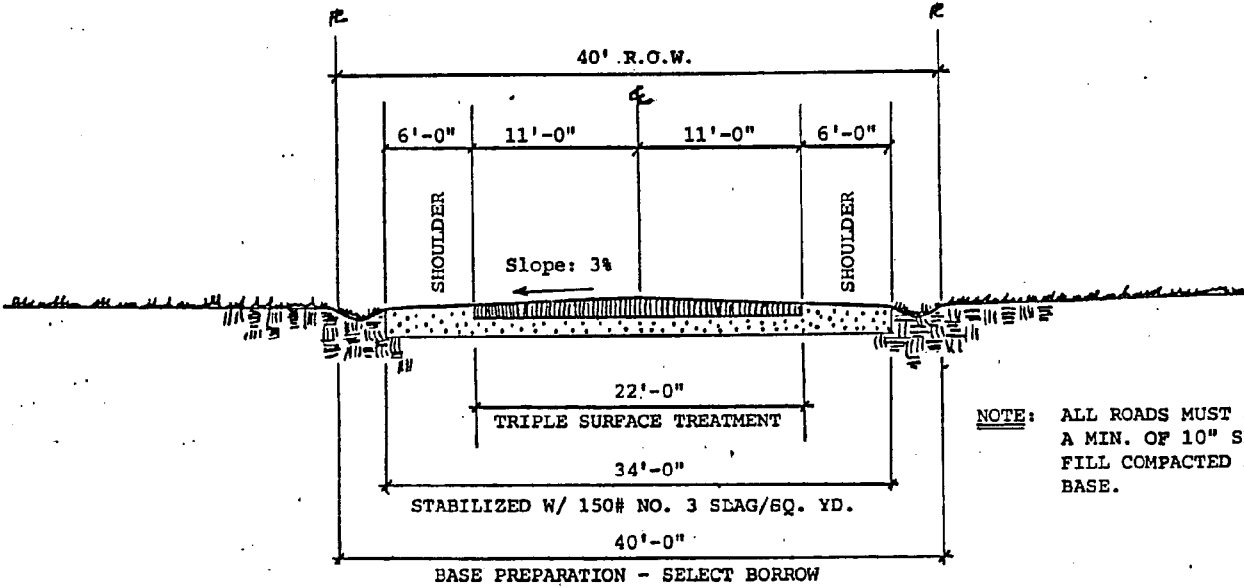
ALL OTHER ROADS - 30' R/W

30' Clearing, Grading & Drainage	17,600 s.y.	@\$0.40	=	\$	7,040.00
24' Roadway Base	14,080 s.y.	@\$1.95	=		27,456.00
24' Slag Stabilization	14,080 s.y.	@\$1.43	=		20,134.40
20' Surface Treatment	11,733 s.y.	@\$1.75	=		20,532.75
6' Seeding & Mulching	3,520 s.y.	@\$0.75	=		2,534.40
					\$ 77,697.55

\$77,697.55 = \$14.72 L.F.
\$17.35 L.F. 7/7/87 CC's

CAMPGROUND SUBDIVISION

COLLECTOR ROAD



NOTE: ALL ROADS MUST HAVE
A MIN. OF 10" SELECT
FILL COMPACTED SUB-
BASE.

TYPICAL CROSS SECTION

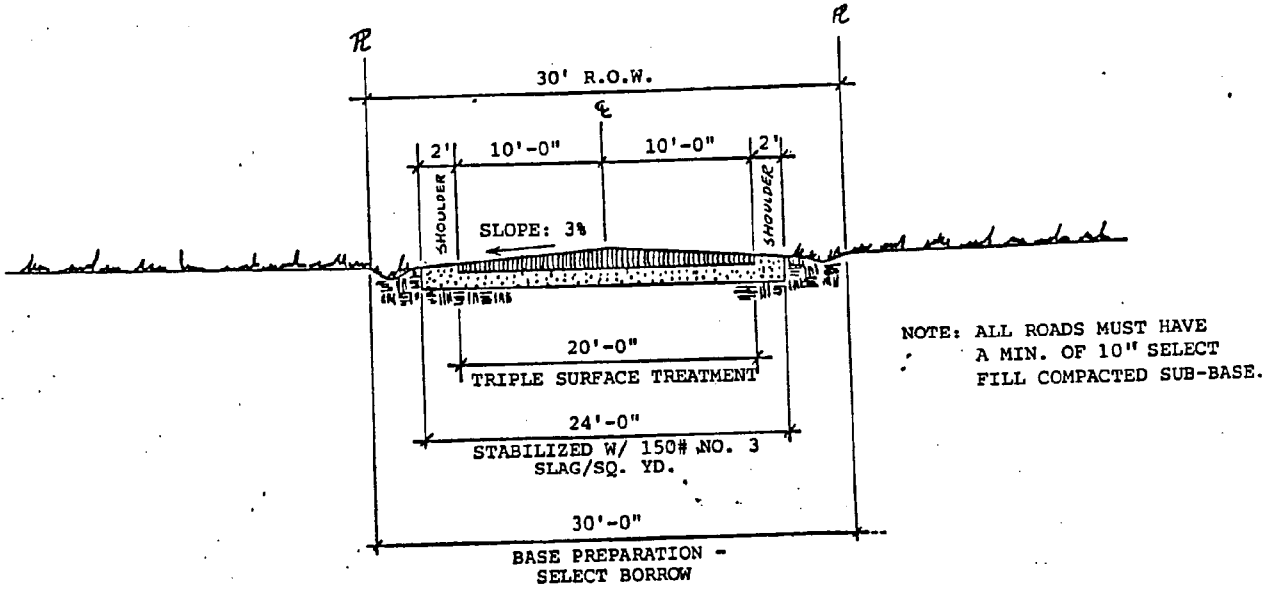
NO SCALE

DATE: MAY 10, 1983

CAMPGROUND SUBDIVISION

MINOR ROAD

(ALL ROADS OTHER THAN COLLECTOR ROADS)



TYPICAL CROSS SECTION

No SCALE

DATE: MAY 10, 1983

John Tustin

RESOLUTION NO. 01 - 30

RECEIVED
8-23-01

**CONSTRUCTION STANDARDS FOR ROADS
IN RESIDENTIAL PLANNED COMMUNITIES
AND RURAL STREET SECTION WITH BIKE PATH
IN WORCESTER COUNTY, MARYLAND**

WHEREAS, Section PW 1-206 of the Public Works Article of the Code of Public Local Laws of Worcester County, Maryland provides that the County Commissioners shall, from time to time, adopt construction standards by resolution providing for the construction, reconstruction, maintenance and repair of "County Roads" and "Other Public Roads" within Worcester County; and

WHEREAS, the County Commissioners adopted a resolution on November 5, 1991 adopting construction and maintenance standards for county roads; and

WHEREAS, the County Commissioners held a public hearing on July 24, 2001 to receive public comment on the addition of specific design standards for roads allowable only within Residential Planned Communities (RPCs); and

WHEREAS, the County Commissioners have determined it necessary and appropriate to amend said standards by the addition of specific design standards for roads allowable only within RPCs under certain conditions.

NOW, THEREFORE, BE IT RESOLVED by the County Commissioners of Worcester County, Maryland that the attached design standards for Residential Planned Community Streets as shown on Standard No. WO-100-10 (R.P.C.), Standards No. WO-200-01, WO-200-02, WO-200-03, WO-200-04 and WO-200-05 (Green Areas within Residential Plan. Comm.), and Standards WO-200-06, WO-200-07, and WO-200-08 (Residential Planned Community Streets) are hereby adopted.

AND, BE IT FURTHER RESOLVED by the County Commissioners of Worcester County, Maryland that these standards for RPC roads shall be allowable only within RPCs under certain conditions considering the following: the proposed lengths, alignments, intersections, cul-de-sacs, average daily traffic (ADT), the density of the development, planned uses of surrounding and connecting areas, and long-range plans within the area.

AND, BE IT FURTHER RESOLVED by the County Commissioners of Worcester County, Maryland that in applying these standards for roads in RPCs, at the discretion of the Worcester County Technical Review Committee, the developer may be required to conduct, at their sole expense, a Traffic Impact Analysis.


AND, BE IT FURTHER RESOLVED by the County Commissioners of Worcester County, Maryland that in applying these standards for roads in RPCs, the Worcester County Technical Review Committee shall invite the Fire Chief in whose primary service area the RPC is located, to review and comment on the plans for street design within the RPC to ensure that the roads are designed to provide adequate access for fire fighting equipment.

AND, BE IT FURTHER RESOLVED by the County Commissioners of Worcester County, Maryland that such RPC roads will require a minimum 30-foot wide right-of-way in order to be classified as Public Roads. All roadways with a right-of-way width less than 30-feet in width shall be constructed to County standards, but shall be classified as Private Roads. In such cases, public easements shall be granted for the periodic maintenance of all public utilities within the private right-of-way.

AND, BE IT FURTHER RESOLVED by the County Commissioners of Worcester County, Maryland that the attached design Standard No. WO-300-01 (Typical Rural Street Section with Bike Path) is hereby adopted for application throughout the unincorporated areas of Worcester County.

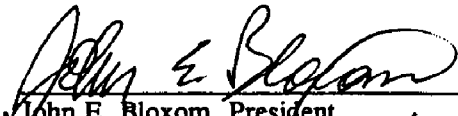
PASSED AND ADOPTED this 7th day of August, 2001 to be effective immediately.

ATTEST:

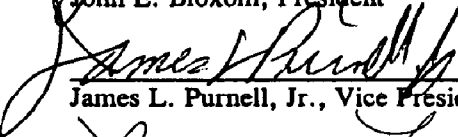


Gerald T. Mason
Chief Administrative Officer

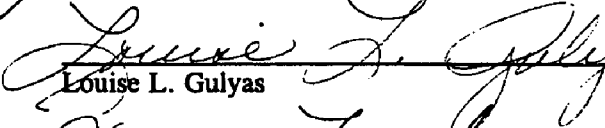
WORCESTER COUNTY COMMISSIONERS



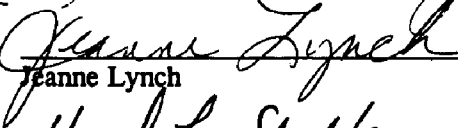
John E. Bloxom, President




James L. Purnell, Jr., Vice President



Louise L. Gulyas



Jeanne Lynch



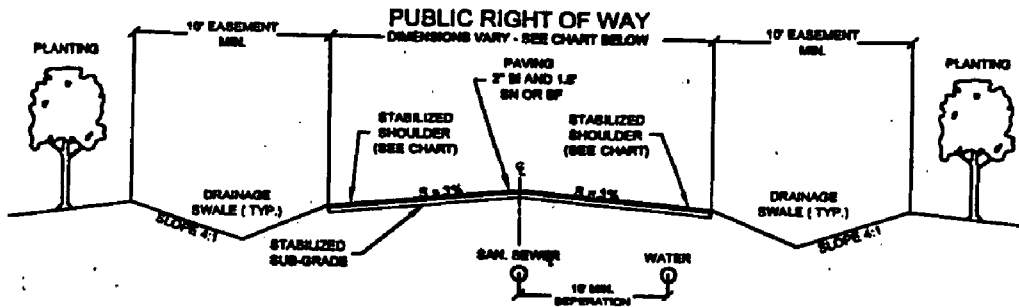
Virgil L. Shockley

**RESIDENTIAL PLANNED COMMUNITIES
PROPOSED ROAD STANDARDS**

The attached Road Standards are intended to be allowable only within Residential Planned Communities (RPC) as defined within the Worcester County Zoning and Subdivision Control Article. In reviewing RPC's, the Technical Review Committee, Planning Commission and the County Commissioners will consider the proposed lengths, alignments, intersections, cul-de-sacs, proposed Average Daily Traffic (ADT), the Developments Density, planned uses of surrounding and connecting areas, long-range plans within the area, consult with the local fire service, and may at their discretion require the developer to conduct and fully fund any Traffic Impact Analysis that is requested by the County.

The proposed Standard WO-100-10 (R.C.P.) will require a minimum 30' Right-of-Way. Green area within Residential Planned Communities shall be as shown on Standard No. 200-01-RPC thru 200-01-05-RPC. Private Road Standards within Residential Planned Communities are shown on Standards WO-200-06 RPC/PRI thru WO-200-08 RPC/PRI. Bike Path Standards are shown on Standard No. WO-300-01

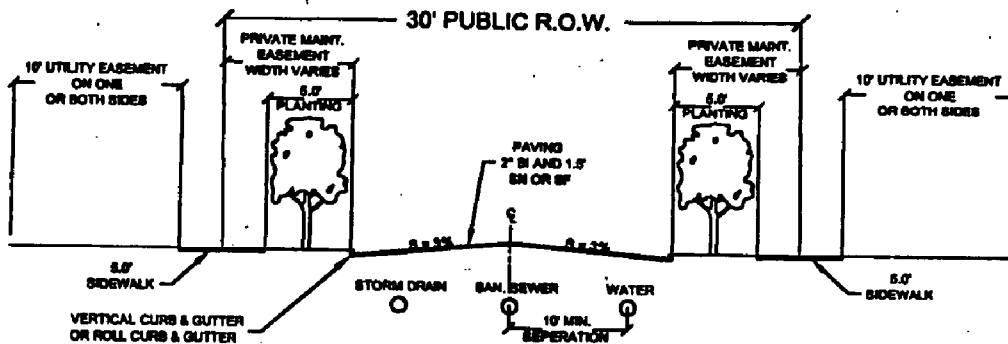
Clearing will be necessary only to the extent required to construct roadways and provide access to adjoining lots and ensure the proper installation of all public and private utilities.



AOT	MIN. PUBLIC R/W	MIN. PAVEMENT WIDTH	MIN. STABILIZED SHOULDER	TRAFFIC FLOW	DRAINAGE
3001 - 6500	30'	24'	8'	TWO WAY	CROWN
1801 - 3000	30'	22'	4'	TWO WAY	CROWN
401 - 1800	30'	20'	3'	TWO WAY	CROWN
UP TO 400	30'	18'	2'	TWO WAY	CROWN OR SHEET

NOTES:
 10' WIDE MIN. EASEMENT AT EACH SIDE OF ROADWAY IS FOR SLOPE, DRAINAGE, TELEPHONE, CABLE TV, ELECTRIC AND GAS, AND MAY BE EXPANDED AS TOPOGRAPHY DICTATES TO INCLUDE CENTER LINE OF FLOW LINE + 5'
 SEWER AND WATER TO BE CONTAINED WITHIN 50' WIDTH (MIN. R.O.W. & MIN EASEMENT)

*** TYPICAL SUBURBAN X - SECTION**



ROAD TYPE	R/W WIDTH	PAVEMENT WIDTH	STABILIZED SHOULDER	TRAFFIC FLOW	PARKING
A	30'	24'	2'	TWO WAY	ONE SIDE
B	30'	18'	2'	TWO WAY	ONE SIDE
C	30'	18'	2'	TWO WAY	NONE
D	30'	18'	2'	ONE WAY	ONE SIDE

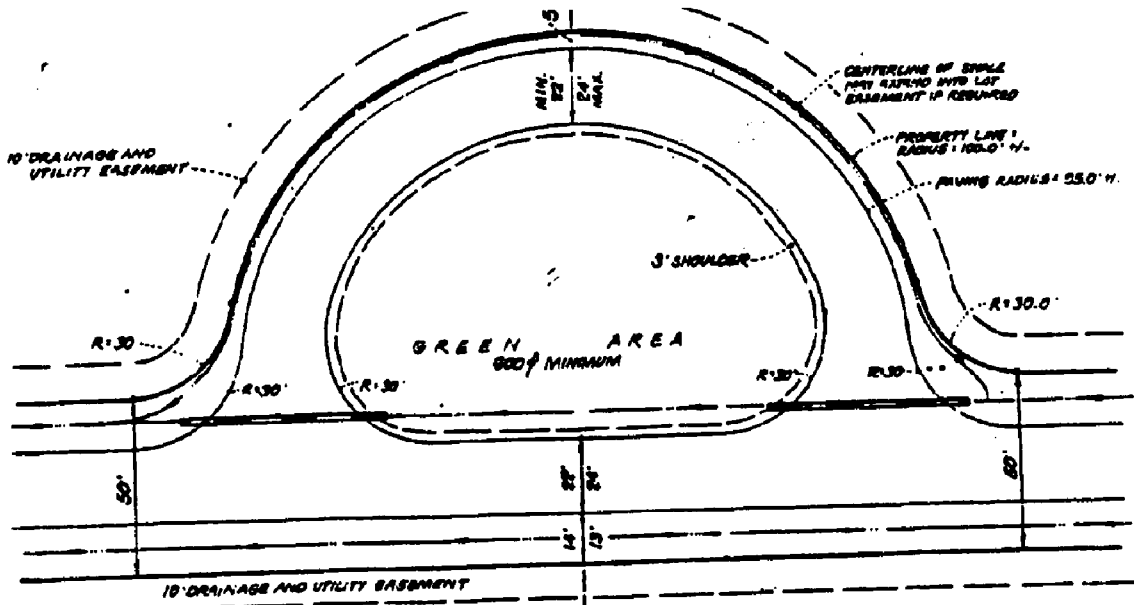
TYPICAL URBAN / SUBURBAN X - SECTION

NOTES :

- THE DEVELOPER SHALL PROVIDE STREET PLAN, PROFILE AND DRAINAGE PLAN FOR ALL CONSTRUCTION. THESE PLANS MUST BE APPROVED BY WORCESTER COUNTY ROAD DEPARTMENT PRIOR TO START OF ANY CONSTRUCTION.
- AN " EROSION AND SEDIMENT CONTROL PERMIT " AND " GRADING PERMIT " MUST BE OBTAINED BEFORE CLEARING OR GRADING IS PERMITTED.
- A " STORMWATER MANAGEMENT PLAN " MUST BE APPROVED PRIOR TO ANY STORMWATER DRAIN FACILITIES.
- ALL STABILIZED AREA (R.O.W. + 2') SHALL BE STABILIZED AS FOLLOWS.
 - 230 LB. MD. # 67 STONE PER SQUARE YARD
 - 12" OF COMPACTED SELECT BORROW
 - UNSUITABLE MATERIAL MUST BE REMOVED TO A POINT 12" BELOW SUB GRADE OF THE STABILIZATION. THE UNSUITABLE MATERIAL IS TO BE REPLACED WITH SELECT BORROW.
- ALL ROADS SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE " CONSTRUCTION AND MAINTENANCE STANDARDS FOR COUNTY ROADS " AS ADOPTED AND PERIODICALLY REVISED BY THE WORCESTER COUNTY COMMISSIONERS.
- SLOPES OF 4:1 REQUIRED EXCEPT WHERE ROAD IS CUT THROUGH WOODED AREAS AND SPECIFIC APPROVAL FROM THE WORCESTER COUNTY ROADS ENGINEER IS GIVEN TO USE 2:1 SLOPES.

* WITH APPROVAL OF THE WORCESTER COUNTY COMMISSIONERS.

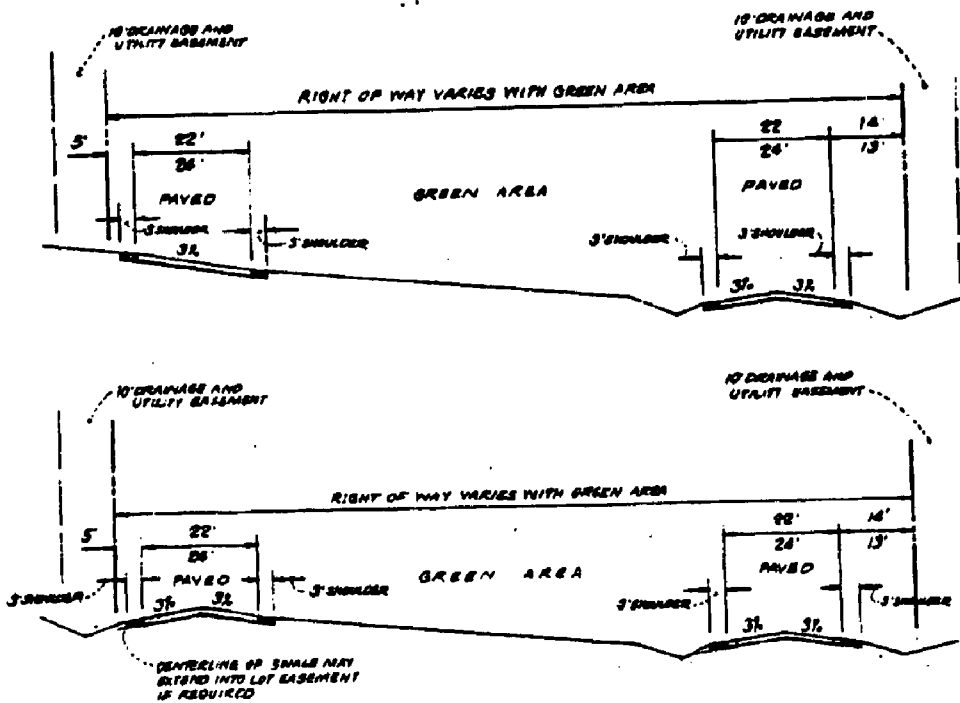
APPROVAL		WORCESTER COUNTY PUBLIC WORKS DEPARTMENT RESIDENTIAL PLANNED COMMUNITY STREETS
DIRECTORS OF PUBLIC WORKS	DATE	
REVISED		* STANDARD NO. WO - 100 - 10 (R.P.C.)



NOTE:
GREEN AREAS WITHIN ROAD R.O.W. MAY BE USED WITH OPEN SECTION, CLOSED SECTION PAVING, STREET FLOW OR SWALE DRAINAGE

NOTE:
GREEN AREAS WITHIN ROAD R/W MAY BE OUTLOTS OR EASEMENTS.

ILLUSTRATIVE DETAIL LARGE GREEN AREA EYEBROW (PREFERRED)



ILLUSTRATIVE SECTION "D-O"

APPROVAL:

DIRECTOR OF PUBLIC WORKS _____ DATE _____

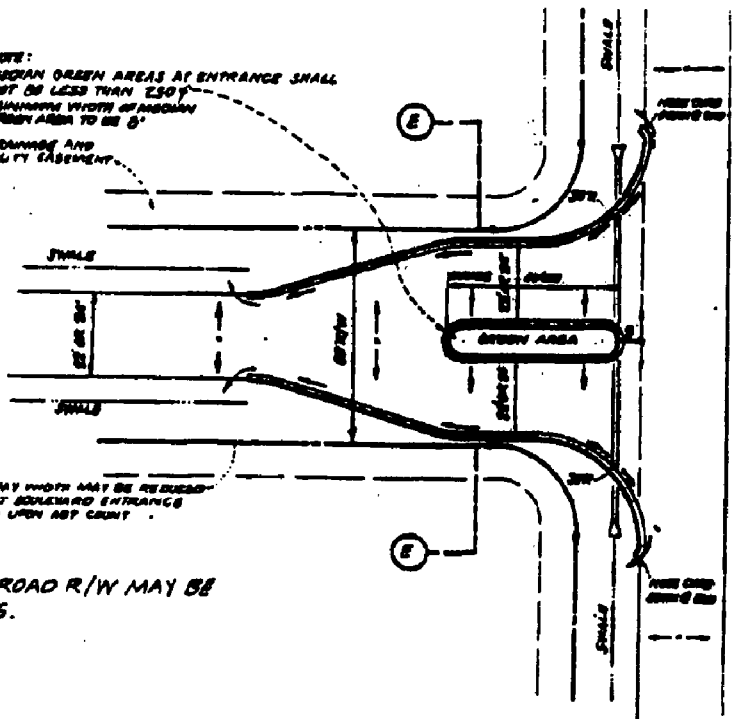
REVISIONS:

WORCESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
 RESIDENTIAL PLANNED COMMUNITY STREETS
 PLANNED UNIT DEVELOPMENT

STANDARD NO. WO 200-01.RPO-PUD

**GREEN AREAS WITHIN RESIDENTIAL PLAN. COMM
 PLANNED UNIT DEVEL**

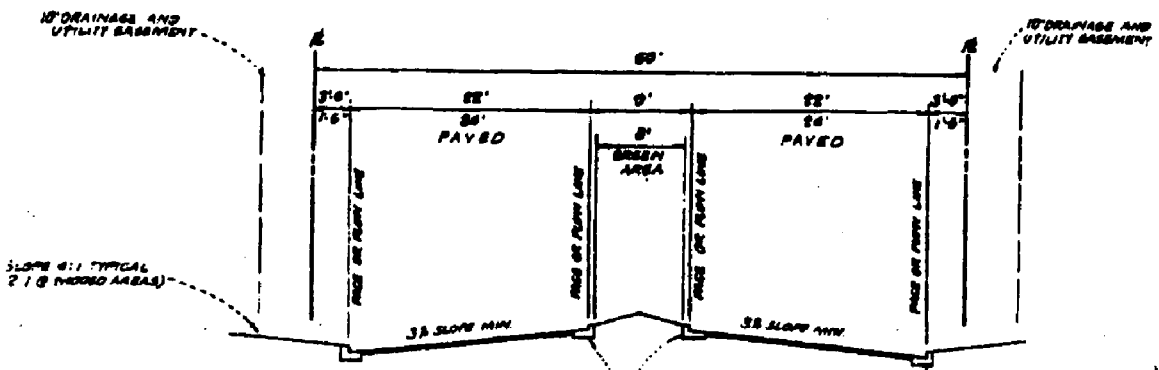
NOTE:
 MEDIAN GREEN AREAS AT ENTRANCE SHALL
 NOT BE LESS THAN 250'
 MINIMUM WIDTH OF MEDIAN
 GREEN AREA TO BE 5'



NOTE:
 RIGHT OF WAY WIDTH MAY BE REDUCED
 TO 50'-10'-12' BOULEVARD ENTRANCE
 DEPENDENT UPON APT COUNT

NOTE:
 GREEN AREAS WITHIN ROAD R/W MAY BE
 OUTLOTS OR EASEMENTS.

TYPICAL BOULEVARD ENTRANCE

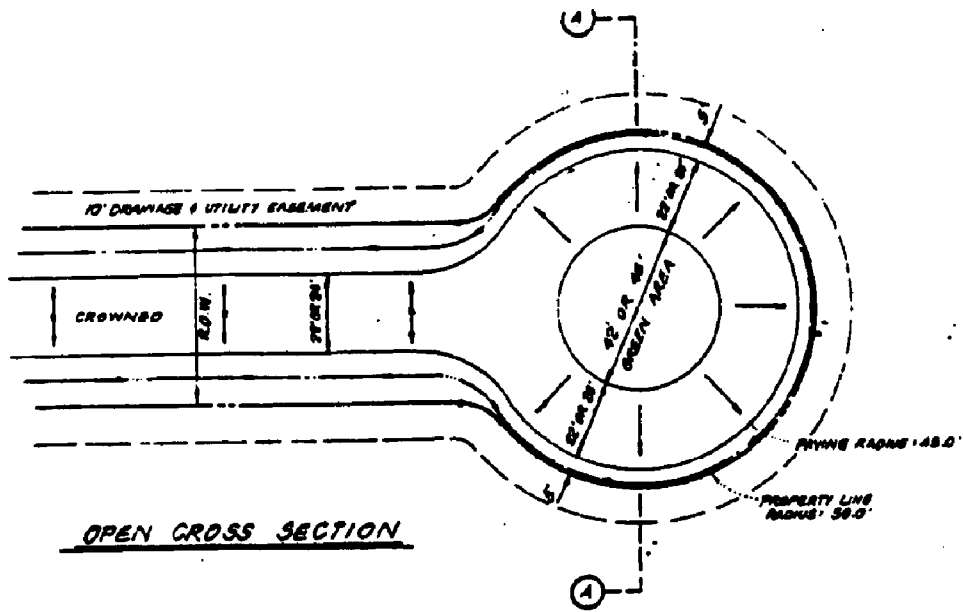


NOTE:
 GREEN AREAS WITHIN ROAD R/W MAY BE USED
 WITH OPEN OR CLOSED SECTION PAVING, SHEET
 FLOW OR SWALE DRAINAGE.

**SECTION "B-B"
 BOULEVARD ENTRANCE
 WITH GREEN AREA ISLAND
 22' OR 24' WIDE PAVING
 CLOSED SECTION PAVING**

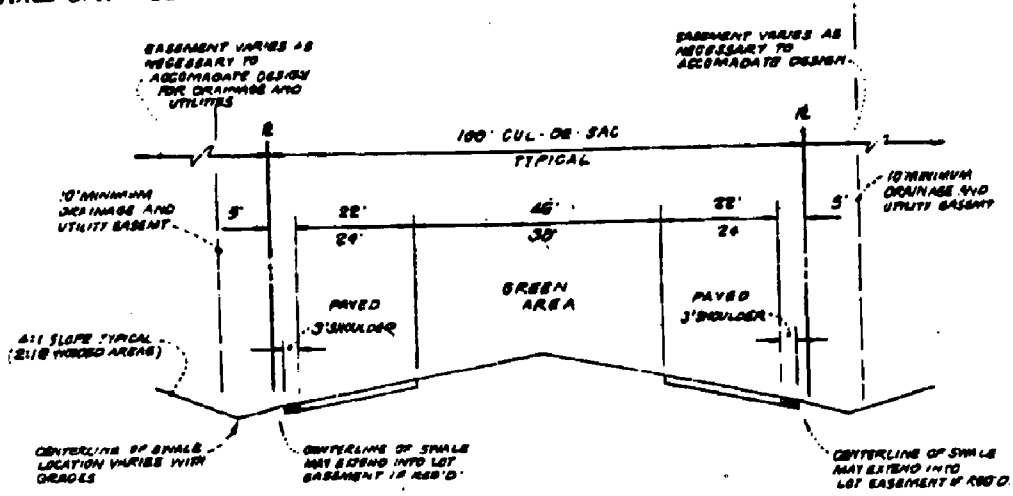
APPROVAL DIRECTOR OF PUBLIC WORKS _____ DATE _____	WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS RESIDENTIAL PLANNED COMMUNITY STREETS PLANNED UNIT DEVELOPMENT
REVISIONS	STANDARD NO. WQ. 200-02 RPC-PUD

**GREEN AREAS WITHIN RESIDENTIAL PLAN. COMM.
 PLANNED UNIT DEVEL.**



NOTE:
GREEN AREAS WITHIN ROAD R/W MAY BE
OUTLOTS OR EASEMENTS.

NOTE:
GREEN AREAS WITHIN ROAD R/W MAY BE USED
WITH OPEN OR CLOSED SECTION PAVING, SHEET
FLOW OR SWALE DRAINAGE.



SECTION "A-A"
CUL-DE-SAC WITH CENTRAL GREEN AREA
OPEN SECTION PAVING
SHEET FLOW - SWALES

APPROVAL _____
DIRECTOR OF PUBLIC WORKS DATE _____

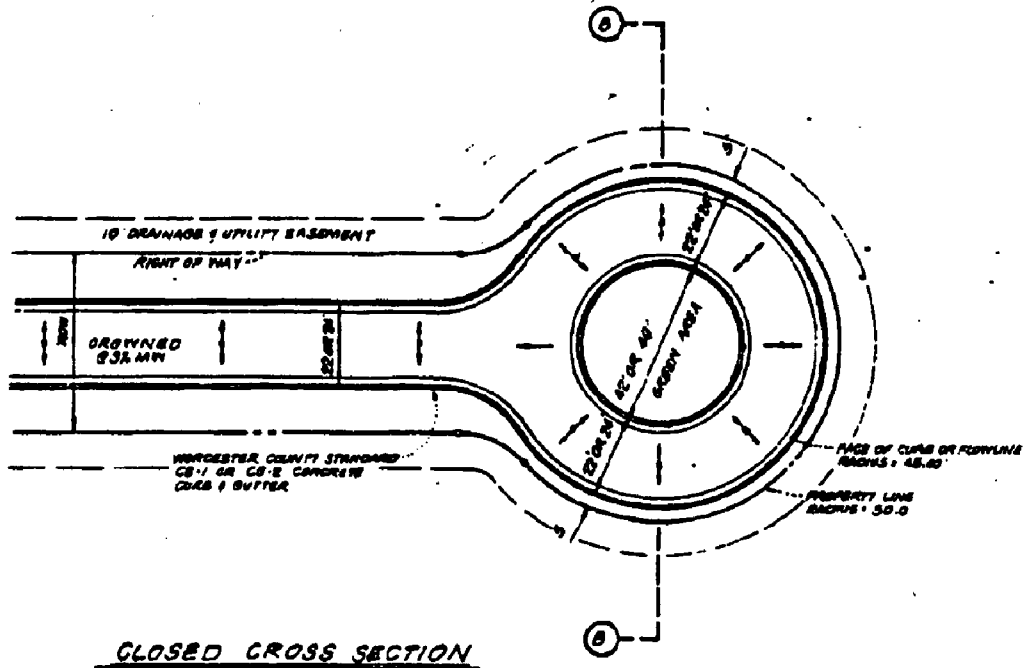
REVISED _____

WORCESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
RESIDENTIAL PLANNED COMMUNITY STREETS
PLANNED UNIT DEVELOPMENT

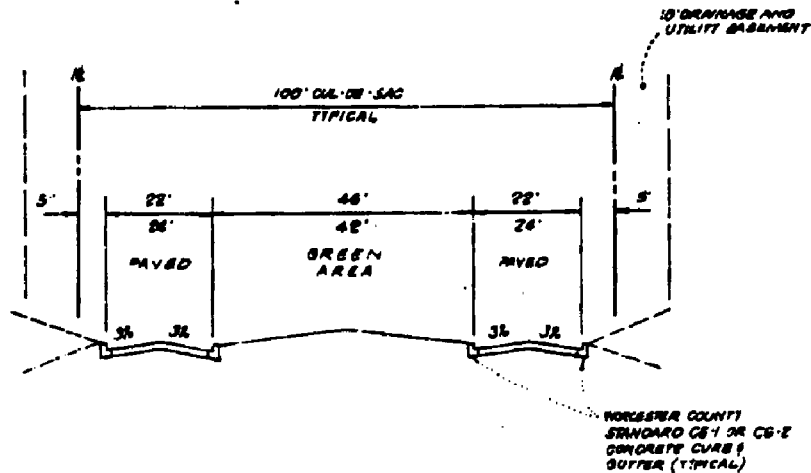
STANDARD NO. NO 200-03 RPO-PUD

**GREEN AREAS WITHIN RESIDENTIAL PLAN. COMM
PLANNED UNIT DEVEL.**

NOTE:
GREEN AREAS WITHIN ROAD R/W MAY BE
CUTLOTS OR EASEMENTS



CLOSED CROSS SECTION



SECTION "B-B"
CUL-DE-SAC WITH CENTRAL GREEN AREA
CLOSED SECTION PAVING

SCALE 1" = 20'

NOTE:
GREEN AREAS WITHIN ROAD RIGHT OF WAY MAY BE USED WITH OPEN SECTION PAVING
CLOSED SECTION PAVING, SHEET PLOW OR SWALE DRAINAGE

APPROVAL:

DIRECTOR OF PUBLIC WORKS

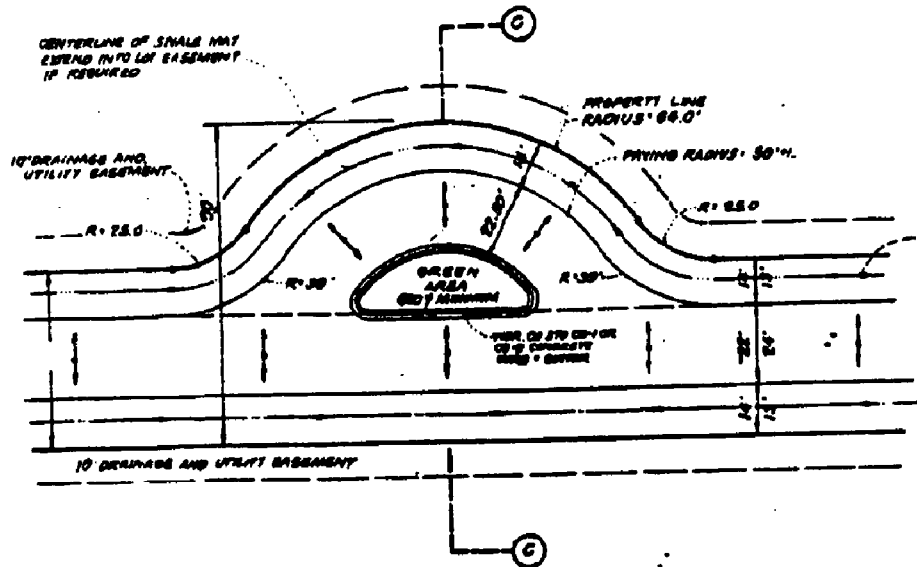
DATE

REVISIONS:

WORCESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
RESIDENTIAL PLANNED COMMUNITY STREETS
PLANNED UNIT DEVELOPMENT

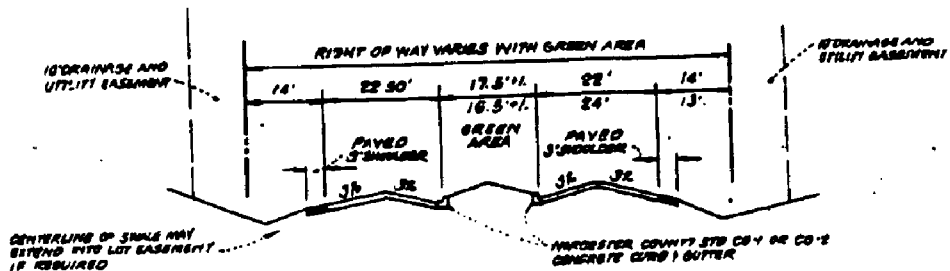
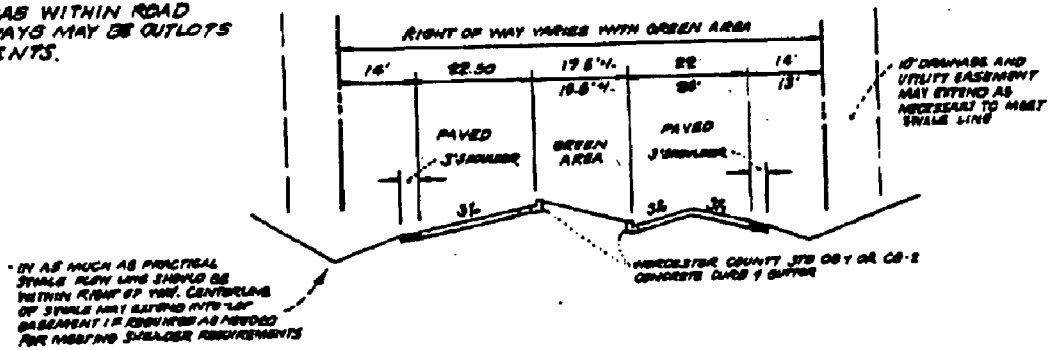
STANDARD NO: **NO 200-04 RPC-PUD**

GREEN AREAS WITHIN RESIDENTIAL PL. COMM.
PLANNED UNIT DEVELOP.



ILLUSTRATIVE DETAIL GREEN AREA EYEBROW

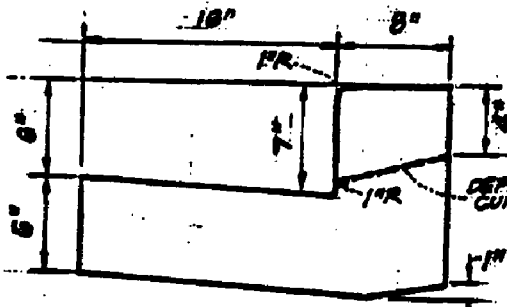
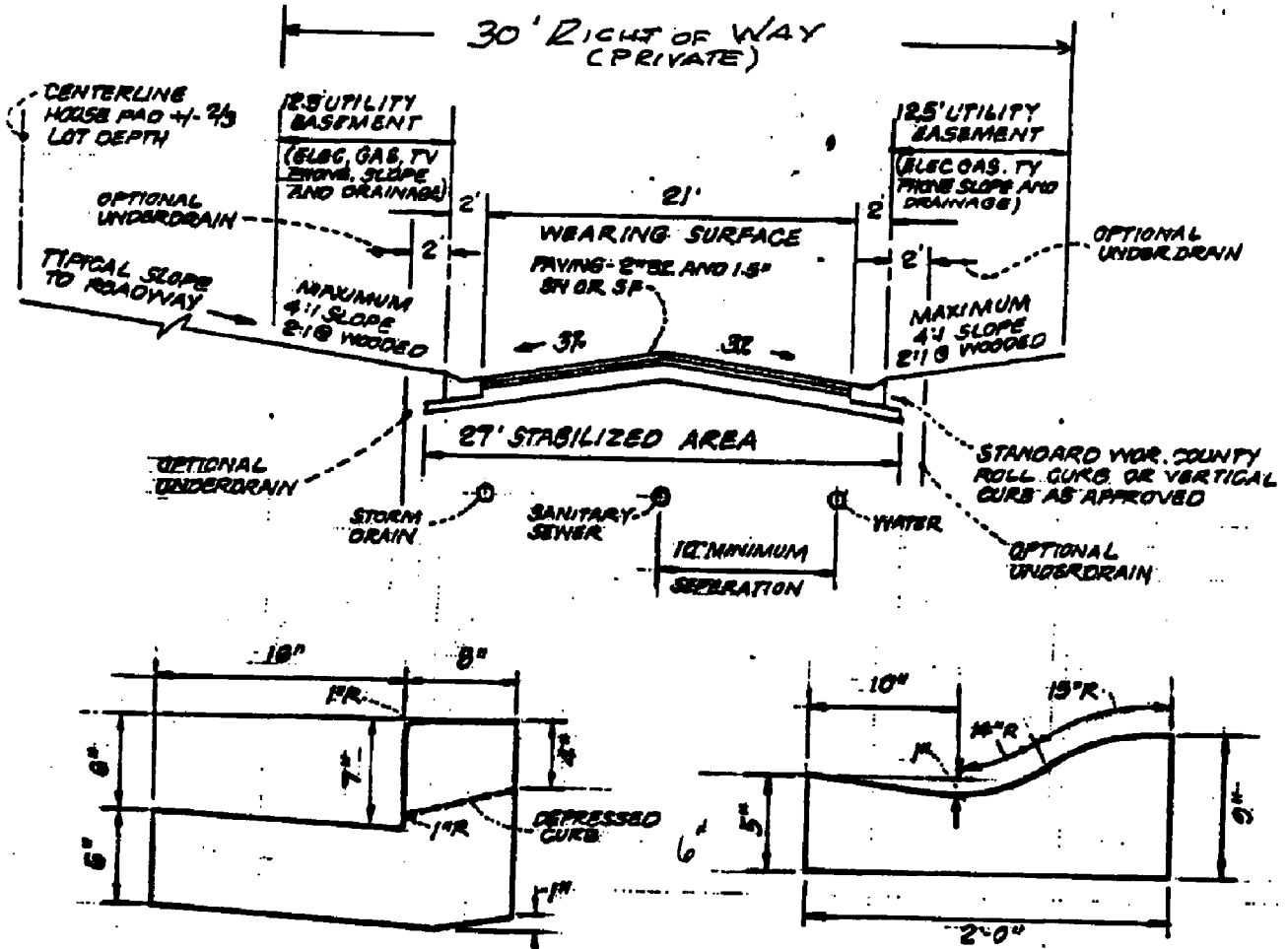
NOTE:
GREEN AREAS WITHIN ROAD
RIGHT OF WAY MAY BE OUTLOTS
OR EASEMENTS.



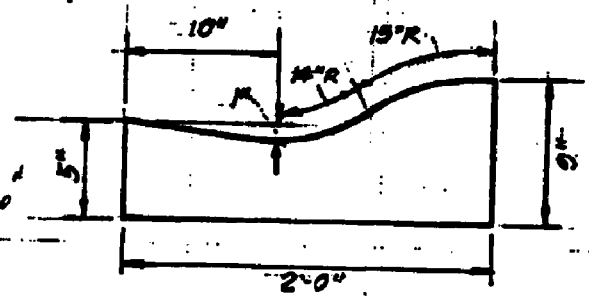
NOTE:
GREEN AREAS WITHIN ROAD R/W MAY BE USED WITH
OPEN OR CLOSED SECTION PAVING, SHEET FLOW OR
SWALE DRAINAGE.

ILLUSTRATIVE
"SECTION G-C"

APPROVAL	DIRECTOR OF PUBLIC WORKS	DATE	WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS RESIDENTIAL PLANNED COMMUNITY STREETS PLANNED UNIT DEVELOPMENT
	REVISIONS		STANDARD NO. <u>W0 200-05 RPC-PUD</u> GREEN AREAS WITHIN RESIDENTIAL PLAN, COMM PLANNED UNIT DEVEL.



**MODIFIED TYPE CG-1
CURB & GUTTER
(VERTICAL CURB)**

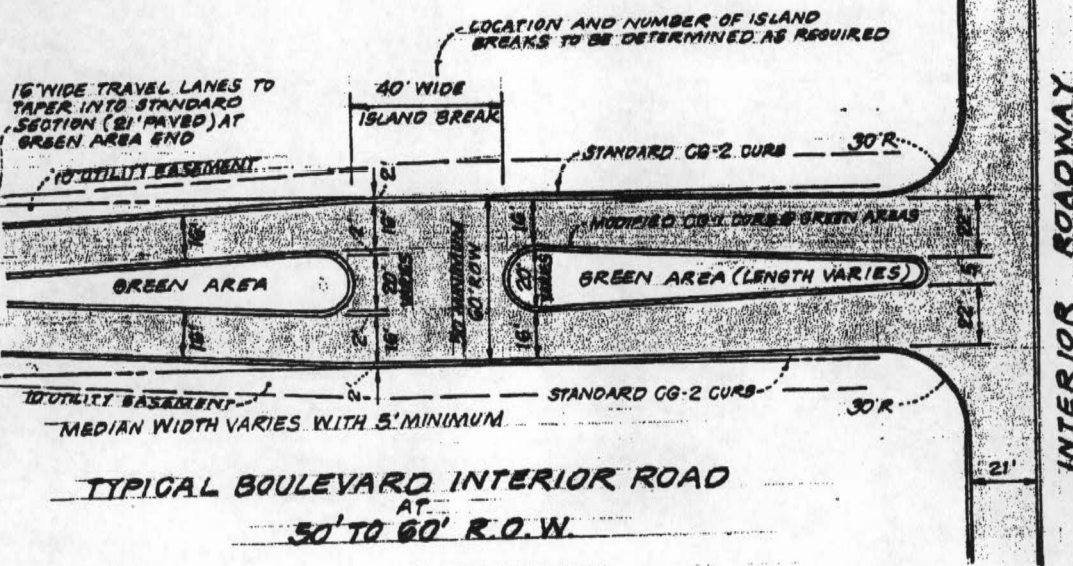


**STANDARD TYPE CG-2
CURB & GUTTER
(ROLL CURB)**

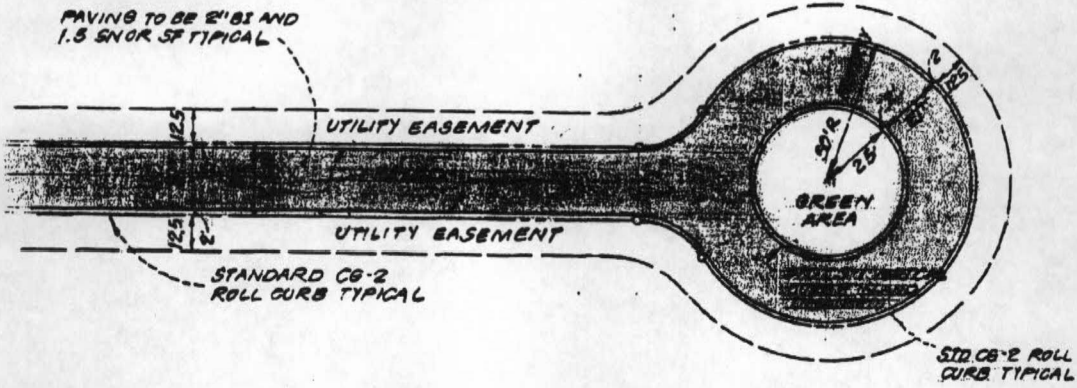
- NOTES:**
1. THE DEVELOPER SHALL PROVIDE STREET PLAN, DRAINAGE PLAN AND PROFILES FOR ALL STREET CONSTRUCTION. THESE PLANS MUST BE APPROVED BY WORCESTER COUNTY ROADS DEPARTMENT PRIOR TO THE START OF CONSTRUCTION.
 2. AN EROSION AND SEDIMENT CONTROL PERMIT AND GRADING PERMIT MUST BE OBTAINED BEFORE CLEARING OR GRADING IS PERMITTED.
 3. A STORM WATER MANAGEMENT PLAN MUST BE APPROVED PRIOR TO ANY STORM WATER DRAIN FACILITIES.
 4. ALL STABILIZED AREA (R.O.W. + 2') SHALL BE STABILIZED AS FOLLOWS:
 250 LB. 1/2" ST. STONE PER SQUARE YARD.
 12" COMPACTED SELECT BORROW
 UNSUITABLE MATERIAL TO BE REMOVED TO A POINT 12" BELOW SOB GRADE OF THE STABILIZATION.
 THE UNREMOVABLE MATERIAL IS TO BE REPLACED WITH SELECT BORROW.
 5. ALL ROADS SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION AND MAINTENANCE STANDARDS FOR COUNTY ROADS AS ADOPTED AND PERIODICALLY REVISED BY THE WORCESTER COUNTY COMMISSIONERS.
 6. ALL UTILITIES (ELEC, PHONE, GAS, CATV) CROSS OVERS SHALL BE PLACED WITHIN SCHEDULE 80 E.S.V. CONDUITS.

**TYPICAL ROAD DETAIL RURAL RESIDENTIAL
R.P.C./P.U.O. SUBDIVISION APPROVED PRIVATE ROAD**

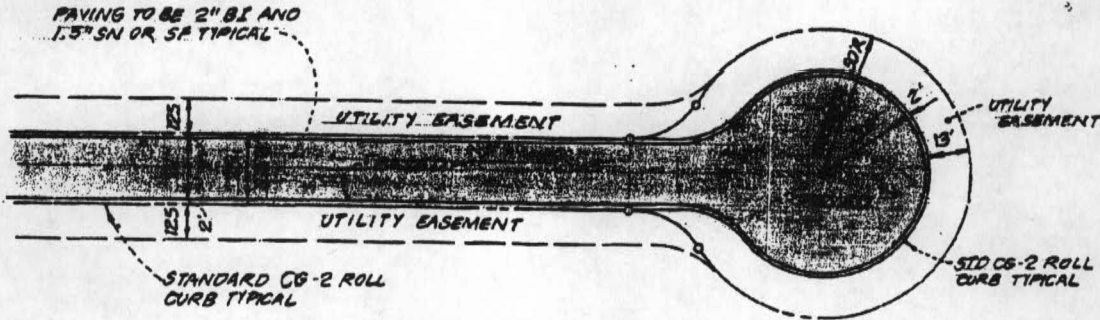
APPROVAL		WORCESTER COUNTY	
_____ DIRECTOR OF PUBLIC WORKS		DEPARTMENT OF PUBLIC WORKS	
_____ REVISIONS		RESIDENTIAL PLANNED COMMUNITY STREETS PLANNED UNIT DEVELOPMENT	
_____ DATE		STANDARD NO: WD-200-06 RPC/PRI.	



TYPICAL BOULEVARD INTERIOR ROAD	
B.E.C. / P.U.D. SUBDIVISION APPROVED PRIVATE ROADS	
APPROVAL	WORCESTER COUNTY
DIRECTOR OF PUBLIC WORKS	DATE
REVISIONS	DEPARTMENT OF PUBLIC WORKS
	RESIDENTIAL PLANNED COMMUNITY STREETS PLANNED UNIT DEVELOPMENT
	STANDARD NO WO 200-07 RPC / PRI.



TYPICAL CUL-DE-SAC DETAIL
WITH GREEN AREA
NOT TO SCALE



TYPICAL CUL-DE-SAC DETAIL
TOTALLY PAVED
NOT TO SCALE

TYPICAL CUL-DE-SAC WITH GREEN AREA AND TOTALLY PAVED CUL-DE-SAC
R.P.C / P.U.D. SUBDIVISION APPROVED PRIVATE ROADS

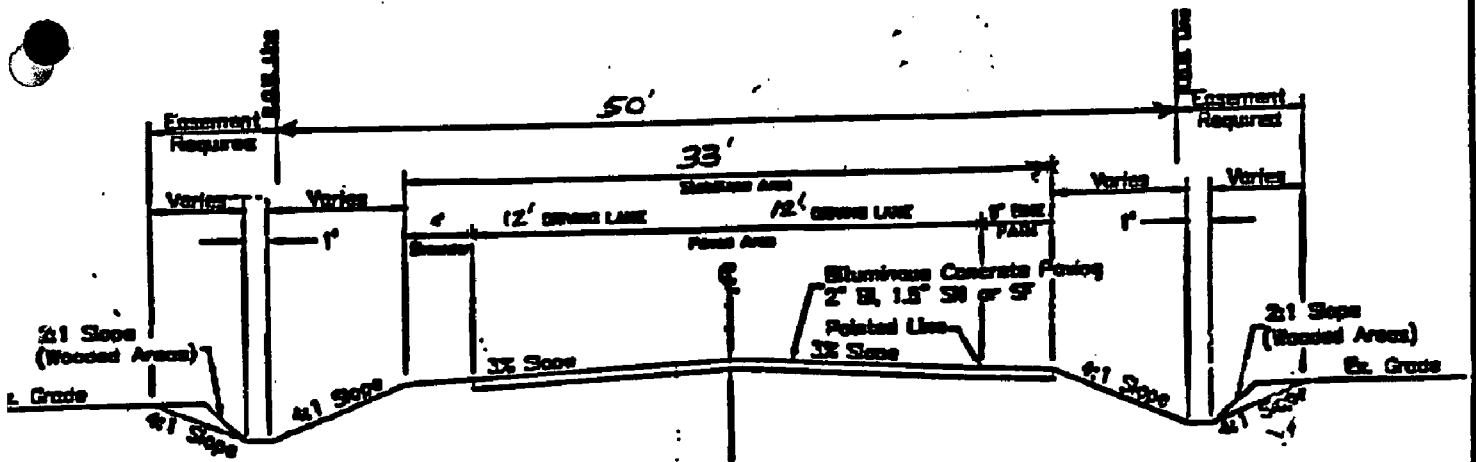
APPROVAL

DIRECTOR OF PUBLIC WORKS DATE

REVISIONS

WORCESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
RESIDENTIAL PLANNED COMMUNITY STREETS
PLANNED UNIT DEVELOPMENT

STANDARD NO WO-200-08 RPC/PRI.



**24 FT. WIDE ROAD
TYPICAL RURAL STREET SECTION WITH BIKE PATH
WORCESTER COUNTY STANDARD NO. WO-300-01**

NOTES:

1. THE DEVELOPER SHALL PROVIDE STREET PLAN, PROFILE AND DRAINAGE PLAN FOR ALL CONSTRUCTION. THESE PLANS MUST BE APPROVED BY WORCESTER COUNTY ROAD DEPARTMENT PRIOR TO START OF ANY CONSTRUCTION.
2. AN "EROSION AND SEDIMENT CONTROL PERMIT" AND "GRADING PERMIT" MUST BE OBTAINED BEFORE CLEARING OR GRADING IS PERMITTED.
3. A "STORMWATER MANAGEMENT PLAN" MUST BE APPROVED PRIOR TO ANY STORMWATER DRAIN FACILITIES.
4. ALL STABILIZED AREA (R.O.W. + 2') SHALL BE STABILIZED AS FOLLOWS.
 - 230 LB. MD. # 57 STONE PER SQUARE YARD
 - 12" OF COMPACTED SELECT BORROW
 - UNSUITABLE MATERIAL MUST BE REMOVED TO A POINT 12" BELOW SUB GRADE OF THE STABILIZATION. THE UNSUITABLE MATERIAL IS TO BE REPLACED WITH SELECT BORROW.
5. ALL ROADS SHALL BE DESIGNED, CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE "CONSTRUCTION AND MAINTENANCE STANDARDS FOR COUNTY ROADS" AS ADOPTED AND PERIODICALLY REVISED BY THE WORCESTER COUNTY COMMISSIONERS.
6. SLOPES OF 4:1 REQUIRED EXCEPT WHERE ROAD IS CUT THROUGH WOODED AREAS AND SPECIFIC APPROVAL FROM THE WORCESTER COUNTY ROADS ENGINEER IS GIVEN TO USE 2:1 SLOPES.

APPROVAL

DIRECTOR OF PUBLIC WORKS

REVISED

DATE

**WORCESTER COUNTY
PUBLIC WORKS DEPARTMENT**

* STANDARD NO. WO-300-01