

TOWN OF COVENTRY, CONNECTICUT



ROAD REGULATIONS

TOWN OF COVENTRY
1712 MAIN STREET
COVENTRY, CT 06238

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COVENTRY ROAD REGULATIONS

SECTION 10 - PREAMBLE

10A - AUTHORITY AND PURPOSE

For the purpose of promoting the public health, safety and welfare, to assure protection of the public against the dangers of unsafe roads, to assure protection of the use, value and enjoyment of premises adjoining roads and to assure the protection of the Town against costs and expenses in the repair and maintenance of roads after acceptance which are avoidable through careful planning, appropriate design and competent construction, these Regulations are and have been adopted pursuant to Sections 8-25 and 13a-71 of the Connecticut General Statutes.

10B - SEPARABILITY

If a court of competent jurisdiction finds any provision of these Regulations to be invalid or ineffective in whole or in part, the effect of such decision shall be limited to the particular provision which is expressly held to be invalid or ineffective and all other provisions of these Regulations shall continue to be separately and fully effective.

10C - APPLICABILITY

If a court of competent jurisdiction finds the application of any provision of these Regulations to any use, land or improvement to be invalid or ineffective in whole or in part, the effect of such decision shall be limited to the person, property or situation immediately involved in the controversy and the application of any such provision to other persons, property or situations shall not be affected.

10D - EFFECTIVE DATE

The effective date of these regulations shall be December 14, 1998.

COVENTRY ROAD REGULATIONS

SECTION 20 - DEFINITIONS

20A - DEFINITIONS

20A.1 General

For the purpose of these regulations, the terms and words listed below shall have the following meanings assigned to them.

Americans with Disabilities Act Accessibility Guidelines - Appendix A to Part 36 entitled "ADA Accessibility Guidelines for Buildings and Facilities" as published in the Federal Register Vol. 56, No. 144, Friday, July 26, 1991, including any revisions.

Applicant - Any person, partnership, or corporation who shall make an application for approval under the provisions of these regulations either for himself or as an agent for others.

Commission - The Coventry Planning and Zoning Commission or its designated agent.

Connecticut Department of Transportation Standard Sheets - The most current detail drawings, including all revisions thereto, as issued by the Connecticut Department of Transportation.

Connecticut Guidelines for Soil Erosion and Sediment Control - The most current document entitled "Connecticut Guidelines for Soil Erosion and Sediment Control", including all corrections thereto, as published by the Connecticut Council on Soil and Water Conservation.

Criteria - The Road Design (Section 70), Drainage Design (Section 90), Soil Erosion and Sediment Control (Section 110), and Final Grading, Stabilization and Landscaping (Section 120) criteria specified in these regulations.

Department of Public Works - The Coventry Department of Public Works.

Director of Planning & Development - The Coventry Director of Planning and Development or his/her authorized agent.

Director of Public Works - The Coventry Director of Public Works or his/her designated agent.

Driveway - A private vehicular accessway that has not been accepted as a public road by the Town or approved as a private road by the Commission.

Major Local Street - Streets that are used or intended primarily to connect state highways to other streets serving neighborhood areas within the Town, or to connect different sections of the Town. Direct access to individual lots or parcels is or may be available from major local streets, but most traffic on major local streets is through traffic. Examples: South Street, Grant Hill Road, Cross Street, Daley Road.

Manual of Uniform Traffic Control - The most current document entitled "Manual on Uniform Traffic Control Devices for Streets and Highways", as published by the U.S. Department of Transportation Federal Highway Administration.

Minor Local Street - Streets used or intended primarily for access to and from individual lots or parcels. Minor local streets may be directly accessible from state highways, but they are not frequently used, or cannot physically be used, for through traffic. Examples: Twin Hills Drive, Nathan Hale Road, Cooper Lane, Cassidy Hill Road.

Parking Lot - An area located entirely within one lot or parcel of land and used for parking of vehicles.

Private Property - Property owned by persons, partnerships or corporations other than the Town of Coventry.

Private Road - Any road not lawfully accepted by the Town or the State of Connecticut for public vehicular travel.

Private Travel or Private Use (of Roads) - Any vehicular use of a road that is not defined as public travel or use.

Public Road - Any road lawfully accepted by the Town or the State of Connecticut for public vehicular travel.

Public Travel, or Public Use (of Roads) - The vehicular use of (1) any public road; (2) any private road approved by the Commission; or (3) any private road that has not been approved by the Commission, except to the extent such use is expressly allowed as private travel under Section 30B of these regulations.

Right-of-Way - A strip of land intended for, or dedicated and accepted for, the purpose of vehicular traffic, which includes the roadway, sidewalks, drainage facilities, shoulders and other improvements.

Road/Roadway - All surfaces, either paved or unpaved, constructed, designated and used to carry or guide vehicular traffic, between different lots or parcels within or outside of Town. The term does not include driveway or parking lots.

Secondary Local Street - Streets that are used on an approximately equal basis for through traffic and for direct access to individual lots or parcels. Examples: Brigham Tavern Road, Brewster Street, Cedar Swamp Road, High Street.

Standards - The Road Construction (Section 80) and Drainage Construction (Section 100) standards specified in these Regulations.

Standard Detail Drawings - The Standard Detail Drawings appended to the Coventry Road Regulations as figures, as may be amended from time to time, the contents of which shall be considered as criteria and standards.

State - The State of Connecticut.

State Department of Transportation - The State of Connecticut Department of Transportation.

State Standard Specifications - The most current document entitled "Standard Specifications for Road, Bridges and Incidental Construction", and all additions, revisions, and supplements thereto, as published by the Connecticut Department of Transportation at the time of the work or installation of improvements.

State Statutes - The most current document entitled "General Statutes of Connecticut", including all volumes and revisions thereto.

Street - Same as Road/Roadway.

Stormwater - Excess precipitation, after accounting for all losses, which becomes surface runoff.

Through Traffic - When used in reference to a particular street or category of streets, "through traffic" means traffic that is using the street only to gain access to another street.

Town - The Town of Coventry.

Town Attorney - The attorney or law firm appointed by the Coventry Town Council to represent the Town of Coventry.

Town Road - Any road lawfully accepted by the Town for public vehicular travel.

Watercourse/Wetlands - Areas designated and defined as "Watercourses" and "Inland Wetlands" by the Coventry Inland Wetlands and Watercourses Agency, pursuant to its Regulations, as the same may be amended from time to time.

COVENTRY ROAD REGULATIONS

SECTION 30 - GENERAL PROHIBITIONS

30A - USE OF LAND AS A ROAD

No person shall open any road for vehicular travel by the public without the approval of the Commission. The Commission's approval of a road shall not obviate any other legal requirement for creating or establishing a public road, including any requirement for formal acceptance by the Town Council or Town Meeting.

30B - USE OF UNAPPROVED PRIVATE ROADS

A private road that has not been approved by the Commission may not be used for public travel. Such a road may be used for private travel, provided the following are erected and maintained at all intersections of the private road with any public road: (1) a gate or other obstruction effectively barring the public from using the private road; and (2) a conspicuous sign, facing the public road, and clearly stating in bold letters that the private road is a private way and is not open for public vehicular travel. Any private road that has not been approved by the Commission and that does not comply with the foregoing requirements as to gates and signs shall be deemed to have been opened for public travel in violation of these regulations.

30C - CONSTRUCTION OF A PUBLIC ROAD

No person shall commence construction of any road which is then intended to be opened, at any future time, to the public unless approval of the location, layout, design and construction plans therefore have been approved by the Commission.

COVENTRY ROAD REGULATIONS

SECTION 40 - DESIGN APPROVAL PROCESS

40A - PROCEDURE

40A.1 Design Approval Required for Public Use of Roads

The Commission may not approve the proposed establishment, construction or use of any road for public travel unless an application for such approval is submitted to the Commission and the Commission grants such approval in accordance with these regulations.

40A.2 Roads Located Within an Area Proposed for Subdivision

If an application for subdivision or resubdivision involves the establishment, construction or use of a road or roads within the area to be subdivided, and such road or roads are proposed to be used for public vehicular travel, the application for subdivision shall also be deemed to be an application for design approval of the road or roads, and no separate application for design approval shall be required. However, all supporting documentation and materials required by these regulations must be submitted in order for the Commission to consider or to grant design approval for the road or roads.

40A.3 Roads Not Located Within an Area Proposed for Subdivision

If a proposal to establish, construct or use a road or roads for public vehicular travel is not made in connection with an application for subdivision or resubdivision, an application for design approval of the road or roads must be submitted to the Commission, together with all supporting documentation and materials required by these regulations.

40A.4 Staff Review Prior to Application

All prospective applicants for design approval of a road or roads for public travel are encouraged to meet with the Town's Director of Planning and Development prior to submission of a formal application. The Director of Planning and Development shall coordinate the review of all the materials submitted by the prospective applicant with other Town staff, officials and consultants, and may set up informal meetings among the prospective applicant and others, including the Commission. The Commission shall not informally discuss any road proposal with any prospect applicant unless the proposal has first been submitted to the Director of Planning and Development for such review as he or she may deem appropriate. The purpose of any and all pre-application reviews, meetings and comments shall be advisory only, and no comments made by any Town staff or Commission member or other Town official or consultant shall be deemed to be

binding in any way on the Commission if and when a formal application for design approval is submitted.

40A.5 Procedure for Decisions on Formal Applications

(A) Applications Made as Part of a Subdivision Application

When an application for design approval is made as part of a subdivision application, the Commission shall follow the same procedures in making its decision on the design approval application as it does in deciding upon the subdivision application. The Commission may approve, modify and approve, or deny design approval. A decision to deny a subdivision application shall also be deemed to be a decision to deny design approval.

(B) Applications Not Made As part of a Subdivision Application

All applications referred to in this subsection (B) are applications for design approval that are not, or have not been, made as part of a subdivision application. The Commission may, but shall not be required to, hold a public hearing on such applications. If the Commission decides to hold a public hearing, it shall publish notice of the hearing at least one time in a newspaper of general circulation within the Town. Such notice shall be published not later than fifteen (15) days before the date of the public hearing.

The Commission shall either hold a public hearing or make a decision on any such application within sixty-five (65) days after the receipt of the application. The day of receipt of any such application shall be deemed to be the date of the Commission's next regularly scheduled meeting after the date of submission of the application or thirty-five (35) days after such submission, whichever is sooner. If the Commission elects to hold a public hearing on any such application, it shall render its decision on the application with sixty-five (65) days after the date upon which the hearing is officially closed. No public hearing on any such application shall be continued for more than ninety-five (95) days without the applicant's written consent.

If the Commission fails to make its decision on any such application within the time limits specified herein, the application shall be deemed to have been denied as of the date upon which the relevant time limit expired. The failure of the Commission to comply with any other time limit specified herein shall not be deemed to result in the approval of any such application. The applicant may waive any time limit specified in this subsection (B) with the exception of the time limit for publishing any required notice.

40B - SUPPORTING INFORMATION

40B.1 General

In addition to any information required to be submitted in the subdivision regulations, an application for design approval to construct, reconstruct or complete construction of a road intended to be opened to the public, shall include the supporting information required in this section.

40B.2 Maps, Drawings and Plans

All information pertaining to topographic maps and delineation of street rights-of-way and property boundaries required under this Section shall be shown on plans, maps or drawings which are prepared by and certified by a registered land surveyor. All information pertaining to design of roads and drainage systems and appurtenant facilities required under this Section shall be shown on plans, maps or drawings which are prepared by and certified by a registered professional engineer. All information shown in construction drawings shall be based on accurate field survey data referenced to U.S.G.S. vertical datum and the Connecticut Coordinate Grid System. Aerial survey data, based on accurate ground control surveys, may be utilized provided it is supplemented by field surveys at locations where elevations and dimensions are critical.

40B.3 General Plan

The general plan shall be a map or maps, drawn to a scale of 1" = 100' or less to the inch, showing the following:

- (A) The proposed road layout.
- (B) Existing topography.
- (C) Wetlands and watercourses, flood hazard zones, floodways, stream channel encroachment lines, existing bridges, culverts, storm drainage systems, and other natural characteristics and all proposed alterations thereof.
- (D) All existing buildings and structures, properly identified, located upon, and within two hundred (200) feet outside of each boundary line of the land to which the application relates.
- (E) All existing roads, driveways and other vehicular access ways entering upon, or which will enter upon, the road to be laid out and constructed.
- (F) All existing parking facilities, playgrounds, recreational facilities, and open space areas, access to which may be obtained from such proposed road.

- (G) The location of all structures and improvements, including subsurface utilities and improvements proposed in connection with the construction of such road.
- (H) All areas to be conveyed to the Town for open space, drainage, etc.

40B.4 Plan & Profile Drawings

Plan & Profile drawings shall be prepared on a 24" x 36" sheet size with scales of 1" = 40' horizontal and 1" = 4' vertical, showing the following:

- (A) The location and dimensions of existing and proposed street rights-of-way, edges of pavement, curbs, sidewalks, piping, catch basins, manholes, endwalls, bridges, utilities and utility easements, drainage easements, open channels, monuments, tops and toes of all slopes, all data required for accurate layout of roadway center lines and rights-of-way, including stationing, bearings, tangent lengths, arc lengths, radii and central angles of all curves; location of property lines intersecting the street right-of-way lines and the names of owners of such adjacent property; typical cross-sections of each street, showing proposed dimensions, materials of construction, and locations of drainage piping and other underground facilities; location and description of survey bench mark; and, street signs and traffic control signs.
- (B) Profiles of existing ground surface on the center line and at each right-of-way line.
- (C) Profile of the proposed center line, showing proposed grades, vertical curve data and stations at grade changes, intersections, high points and low points.
- (D) Profiles of all existing and proposed drainage facilities, bridges and other proposed improvements showing locations, sizes, grades and invert elevations.

40B.5 Detail Drawings

For proposed improvements that cannot be readily shown on the Plan & Profile drawings, or that are not included in the Standard Detail Drawings in Appendix A, additional drawings shall be submitted showing in further detail all information required for construction. Detail drawings shall be prepared at appropriate scales, and shall substantially conform in both form and manner to the Standard Detail Drawings in Appendix A. In addition to any necessary detail drawings, the following statement shall be included on all construction drawings; "All construction shall conform to the criteria and standards included in the Coventry Road Regulations".

40B.6 Drainage Report

A drainage report, conforming with the design criteria in Section 90 of these Regulations, shall be submitted which includes the basis of design, detailed design computations, and a drainage analysis map for sizing all proposed storm drainage

facilities; the analysis of any required existing off-site facilities; and, for any proposed stormwater runoff control measures. Detailed design computations shall include the design criteria, parameters and methods used in selecting the location, configuration, type and size of all proposed drainage facilities. Such computations shall include tabulated summaries of pertinent design computations. Wherever feasible, such tabulations shall follow the most current format utilized by the Connecticut Department of Transportation, the Federal Highway Administration, the U.S. Soil Conservation Service or such format as may be adopted and amended from time to time by the Town.

40B.7 Soils Report

A soils report showing the type, nature and extent of the various soils existing within the proposed road right-of-way and in the area where the roadway slopes extend beyond the proposed road right-of-way. All soils types shall be identified on the basis of test pits, and as shown on the most currently available soils maps as prepared by the U.S. Soil Conservation Service. Such report shall also include a description of the means and methods proposed to be utilized to overcome any potential soils problems.

40B.8 Earthwork Analysis

An earthwork analysis shall be submitted which quantifies the volumes of cut and fill required to construct the proposed road and associated public improvements.

40B.9 Soil Erosion and Sediment Control Plan

A detailed plan for soil erosion and sediment control, conforming with the requirements of Section 110 in these Regulations, shall be submitted. The plan shall include all measures to be taken to control erosion and sedimentation resulting from proposed road and drainage facility construction. All such measures shall be consistent with the requirements and standards outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control". When a project is of a size that requires a "General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities", it shall be the applicant's responsibility to file the required registration form with the Connecticut Department of Environmental Protection and to provide copies to the Town.

40B.10 Landscape Plan

A landscape plan shall be submitted for any median strips or other proposed landscaped areas to be located within the right-of-way lines of a road. All proposed landscaping shall be consistent with the criteria included in Section 120 of these Regulations.

40B.11 Connecticut Department of Transportation Approval

Where any road, drainage facility or other associated work is proposed to join with a state highway, or is to be located within a state highway right-of-way, the applicant shall

obtain a letter from the Connecticut Department of Transportation which shall approve of such work. Such letter may be conditional upon prior approval of the project by the Commission, and/or submission of a permit application to the Connecticut Department of Transportation.

40C - SUPPLEMENTAL INFORMATION

40C.1 General

Whenever the staff or Commission shall deem it reasonably necessary or appropriate to request additional information for consideration of an application, it may require the applicant to submit, at or prior to the hearing, any other information in such form as it may prescribe. Furthermore, whenever the Commission shall deem required information unnecessary for the consideration of an application, it may, upon request of the applicant, waive in writing the requirement of any information specified in Section 40B above.

40C.2 Layout

During the course of review of the application and supporting information, Town Staff may require the approximate location of the proposed road centerline and drainage facilities to be flagged in the field. If such flagging is not completed as requested, the Commission may not proceed to a hearing or determination of the application and may, without further proceedings, disapprove it.

COVENTRY ROAD REGULATIONS

SECTION 50 - CONSTRUCTION INSPECTION PROCESS

50A - PROCEDURE

50A.1 General

Any project for which design approval has been granted by the Coventry Planning & Zoning Commission to construct, reconstruct or complete construction of a road intended to be opened to the public shall require periodic inspections to be conducted by the Town of Coventry to monitor compliance with the approved drawings and plans, the requirements outlined in these regulations, and good construction practices. However, it is the applicant's sole responsibility to ensure that all construction shall conform to such requirements.

50A.2 Construction Coordinator

In respect of all matters pertaining to inspection hereunder, the applicant shall designate one Construction Coordinator who shall be fully authorized to give and receive communications to or from the Town. Such designation shall be made in writing which shall state such individual's mailing address and telephone number and shall be delivered to the Director of Planning and Development prior to commencement of any work. All notices, orders or other communications delivered to or served upon such individual shall be deemed to have been delivered or served upon the applicant. All notices or other communications received from him shall be deemed to have been received from the applicant.

50A.3 Preconstruction Meeting

Prior to the start of any construction, it is the applicant's responsibility to schedule a preconstruction meeting with the Town. Scheduling of this meeting shall be made with the Director of Planning and Development, who shall be responsible for notification of the Public Works Department and other appropriate Town Staff. The applicant shall be responsible for ensuring that the contractor and Construction Coordinator are in attendance. The general purpose of the preconstruction meeting is to introduce all parties, identify the person from the Department of Public Works who will be assigned construction inspection responsibilities, exchange telephone numbers, review the construction schedule, and discuss any additional requirements or concerns specific to the proposed project.

50A.4 Performance Bond

Prior to the start of any construction, to the extent required thereby, the applicant shall post a performance bond with the Town in accordance with the procedures established in Chapter V, Section 2 of the Coventry Subdivision Regulations. (Rev. 3/24/2014)

50A.5 Bond Reductions

During the course of construction, periodic reductions in the amount of the performance bond may be requested by the applicant, and considered by the Commission, to reflect the cost of remaining improvements. Any such request by the applicant for a bond reduction shall be in accordance with the procedures established in Chapter V, Section 54 of the Coventry Subdivision Regulations and in accordance with Section 8-25(d)(2) of the Connecticut General Statutes, as the same may be amended from time to time. (Rev. 3/24/2014)

50B - REQUIRED INSPECTIONS

50B.1 General

In order to provide a reasonable level of confidence that a road, which is to be used for public travel, has been constructed in general conformance with the approved drawings and plans; the requirements outlined in these regulations; and, good construction practice, scheduled inspections shall be conducted by the Town at key construction stages specified in Section 50B.4. At the discretion of the Town, the Construction Coordinator may be notified of additional inspections that may be required. It is the Construction Coordinator's sole responsibility to schedule and coordinate all required inspections with the Town's Construction Inspector. A minimum advance notification of twenty-four (24) hours shall be required for all inspections, which shall only be made during the Public Works Department normal working hours. Unannounced spot inspections may also be made by the Town at any time.

50B.2 Right-of-Entry

All Town Staff, and Board or Commission members, shall have the right to enter upon the premises and to inspect, or cause to be inspected, construction work authorized by Design Approval hereunder at any time with or without notice during, before or after regular business hours.

50B.3 Construction Materials

The applicant shall be required to submit samples and certified laboratory reports to the Town documenting the conformance of certain construction materials with the specifications included in these regulations. The applicant shall not be permitted to place, or to have delivered to the project site, any materials for which approvals have not been granted by the Town. Any approvals granted by the Town on the basis of certified laboratory reports shall be conditional upon the tested sample being representative of all such materials utilized for construction. The Town shall reserve the right at any time during the course of construction, for whatever reason, to have additional materials testing conducted. Should the results of such testing find that the materials do not conform to specifications, then such materials shall be removed and replaced with conforming

materials at the applicant's expense. The applicant shall be required to reimburse the Town for the cost of any such testing only if the results prove that the materials tested do not conform to required specifications.

Samples and/or certified laboratory reports shall be submitted for the following materials:

- (A) Rolled Granular Base - A five (5) gallon sample and sieve analysis for conformance with the State Standard Specification Section M.02.06 Grading A.
- (B) Processed Aggregate Base - A five (5) gallon sample and sieve analysis for conformance with the State Standard Specification Section M.05.01.
- (C) Bituminous Concrete - Plant certification by the State Department of Transportation for use of such materials in state highway construction projects.

50B.4 Scheduled Inspections

The following inspections shall be required and no further work shall be performed until each inspection shall have been made and the Construction Coordinator has been notified by the Town's Construction Inspector that further work may proceed:

- (A) After cutting of trees and brush, and the installation of sediment and erosion control measures, but prior to any stumping and/or grading.
- (B) After stumping and stripping of topsoil and organic material from earth cut and fill areas, but prior to the placement of any fill material.
- (C) After earth cuts and fills and the formation of the road subgrade. Proof rolling of the subgrade must be observed by the Town after installation of storm drainage improvements and prior to the placement of any rolled granular base materials. In roadway fills, the Town may require the applicant to perform compaction tests.
- (D) After the installation of underdrains, but prior to backfilling.
- (E) After the installation of storm drainage pipe and catch basins, but prior to backfilling.
- (F) After the placement of rolled granular base.
- (G) After the placement of processed aggregate base.
- (H) Prior to the placement of bituminous concrete paving, the applicant shall be responsible for the excavation of shallow test holes for the purpose of confirming that the actual compacted depth of rolled granular base and processed aggregate base materials conform to Town Standards. Test holes will be required at a minimum interval of 100 feet at locations designated by the Town of Coventry. In addition, proof rolling of the road base must be observed by the Town.

- (I) During the placement of bituminous concrete paving. All weight slips for bituminous concrete material delivered to the site must be provided to the Town of Coventry.
- (J) After placement of bituminous concrete lip curbs, but prior to any backfilling of curbs.
- (K) After backfilling of curbs and final grading of shoulder areas.
- (L) After restoration of all disturbed areas, placement of road monuments, traffic control/street name signs and street trees.

50C - FAILURE TO PROPERLY EXECUTE REQUIRED IMPROVEMENTS

50C.1 General

Failure to follow the procedures set forth in this section may result in a rejection of that portion of the work completed without required inspections, which may result in delays and added costs to the applicant in demonstrating compliance with applicable regulations and standards. Failure to construct road, drainage and other public improvements in accordance with approved construction plans, Town Regulations and Standards, and good construction practice may result in the Town's refusal to accept any such improvements. If the permittee fails to execute the approved or required improvements in accordance with these regulations or the terms of the permit or approval, and such failure causes unreasonable sedimentation, erosion, pollution or other nuisance conditions, the Town or the Commission may take whatever actions it deems necessary or appropriate to correct and/or abate the nuisance conditions. In such circumstances, the Commission may revoke and rescind the permit or approval, and/or recommend that the Town not accept such improvements, unless and until the permittee reimburses the Town for all costs and expenses of such correction and abatement.

50D - CHANGES DURING CONSTRUCTION

50D.1 Modifications

If at any time during the construction of the required improvements, unforeseen field conditions make it necessary or preferable to modify the location or design of such required improvements, the Construction Coordinator shall notify the Town Construction Inspector, who shall determine whether the change is minor in nature or whether the Commission itself must act on the proposed change. If the change is minor, the Town Construction Inspector shall either approve or disapprove the applicant's request, and shall notify the Commission at its next regular meeting, and the action shall be noted in the meeting minutes. If it is determined that the change is not minor, the applicant shall submit an

application for a modification of the subdivision approval. Such application shall meet all the informational requirements required by the Commission.

50D.2 Additional Work

If during the course of construction of any new road, or any other improvements required by the Commission in connection with the approval of a subdivision, it appears that additional work is required owing to unforeseen conditions such as, but not limited to springs, old drains, wet conditions, side hill drainage from cuts, bedrock, or other conditions which were not apparent at the time of the approval by the Commission, the Town may require such additional work to be done, and the Commission may require additional surety.

COVENTRY ROAD REGULATIONS

SECTION 60 - TOWN ACCEPTANCE OF A COMPLETED ROAD

60A - PROCEDURE

60A.1 General

Whenever a completed road is intended to be offered for acceptance by the Town, a written request for acceptance must first be submitted to the Commission for review, along with all required supporting information specified in this section and supplemental information as may be requested. Such written request and supporting/supplemental information shall be submitted to the Director of Planning and Development, who shall forward such information to the Director of Public Works, Town Engineer and Town Attorney for review. The Director of Planning and Development shall notify the person(s) making the request of comments requiring revisions to the supporting/supplemental information. Upon receipt and confirmation that all required revisions have been made, the Director of Planning and Development shall forward the written request and supporting/supplemental information, along with recommendations from the Director of Public Works, Town Engineer and Town Attorney, to the Planning & Zoning Commission. The Planning & Zoning Commission, after review of all information, shall make a recommendation to the Town Council regarding the request for acceptance as a town road. The procedure for formal acceptance shall be as required by state law and the Charter and Ordinance of the Town.

60A.2 Who May Request Acceptance

A written request for acceptance of a completed road may be made by any person who is:

- (A) The owner, or all the joint owners, of the land underlying the proposed road.
- (B) The purchaser, or all the purchasers, under a written contract to purchase the land underlying the proposed road, provided that written consent of the owner, or all joint owners, of the land accompanies the written request.

60B - SUPPORTING AND SUPPLEMENTAL INFORMATION

60B.1 General

A written request for Town acceptance of a completed road shall include six (6) copies of all required supporting information and supplemental information as may be requested.

60B.2 Supporting Information

Supporting information shall include the following items:

- (A) A written description by metes and bounds or courses and distances, of all land and easements proposed to be conveyed to the Town.
- (B) Record Plan-Profile Drawings, prepared at the scale and, showing the information specified in Section 40 on an "As-Built" basis.
- (C) Record Detail Drawings, where any previously approved details have been modified, showing all information on as "As-Built" basis.
- (D) A copy of a completed Work Permit or letter, issued by the State Department of Transportation, confirming the satisfactory completion of all work conducted within a State Highway Right-of-Way.
- (E) Completed copies of all conveyances or other legal instruments, properly executed in form and manner suitable for recording in the Town Land Records, effectively transferring or creating the rights in each instance required under Sections 70H.5 and 90A.7.
- (F) A Warranty Deed properly executed by the owner or owners of the land to which the written request relates, in form and manner suitable for recording, effectively conveying good and marketable title to said land to the Town, together with a Certificate of Title from an attorney admitted to practice in Connecticut certifying that said owner or owners hold good and marketable title to said land at the date of such written request free and clear of all title defects and encumbrances. By delivery of such deed, said owner or owners shall be deemed to authorize delivery to and recording thereof by the Town upon acceptance of such road by the Town.

60B.3 Supplemental Information

Whenever the Commission shall deem it reasonably necessary or appropriate to a proper disposition of any written request for acceptance of a completed road, it may require submission of any other information in such form as it may prescribe. Until such supplemental information has been received by the Commission, it shall decline to make any recommendation to the Town Council regarding acceptance.

60C - ACCEPTANCE

60C.1 Conformance

Prior to considering acceptance of a road, the Commission shall determine whether or not the road and its associated improvements conform to the approved location, layout,

design and construction plans and to the criteria and standards hereinafter specified or prescribed for such road and all associated improvements in or pursuant to these Regulations;

60C.2 Release of Performance Bond

To the extent such performance bond remains in effect, the obligation of the performance bond prescribed in Section 50A.4 shall not expire, be released or otherwise terminate with respect to any road and associated improvements prior to the effective date of final acceptance by the Town Council and posting of a maintenance bond. (Rev. 3/24/2014)

60C.3 Maintenance Bond

It shall be a condition precedent to the effectiveness of any road acceptance hereunder that the applicant shall post with the Town a maintenance bond or bonds, in an amount and with surety and conditions satisfactory to the Town Attorney indemnifying the Town for a one year period against costs and expenses of labor and materials necessary or appropriate to correct or replace improper or defective materials or faulty workmanship, including any damage to any property of the Town resulting therefrom, or to complete construction in conformity with the standards, criteria and specifications prescribed in these Regulations. Such maintenance bond shall be in an amount equal to not less than ten percent (10%) of the total value of the performance bond specified in Section 50A.4 of these Regulations, or as otherwise approved by the Commission. The maintenance bond shall be delivered to the Director of Planning and Development, who shall forward the bond to the Town Attorney for review and approval. Upon approval by the Town Attorney, the Director of Planning and Development shall deliver the maintenance bond to the Coventry Town Clerk for safe keeping. (Rev. 3/24/2014)

60C.4 Recording of Documents

Upon acceptance of a completed road by the Town Council, and approval of the required maintenance bond by the Town Attorney, it shall become the sole responsibility of the owner to file in the Town Land Records, all deeds, easement documents and fixed line mylars of record drawings. Final acceptance of a completed road shall not be deemed effective until all required documents have been filed in the Town Land Records.

COVENTRY ROAD REGULATIONS

SECTION 70 - ROAD CRITERIA

70A - PAVEMENT AND RIGHT-OF-WAY WIDTH

70A.1 Road Width

The minimum pavement width of roads, as measured from face to face of curbs (or to the edge of pavement where curbs are not required) shall be as follows:

- | | |
|----------------------------|---------|
| (A) Major Local Street | 30 feet |
| (B) Secondary Local Street | 26 feet |
| (C) Minor Local Street | 24 feet |

70A.2 Right-of-Way

For every road, the right-of-way lines on each side of the road shall be parallel or shall be concentric arcs and all intersections of right-of-way lines shall be rounded by a curve having a radius equal to the required curb line radius, but not less than 25 feet. Minimum right-of-way widths shall be as follows:

- | | |
|----------------------------|---------|
| (A) Major Local Street | 60 feet |
| (B) Secondary Local Street | 50 feet |
| (C) Minor Local Street | 50 feet |

70B - GRADIENT

70B.1 General

Roads shall be designed so as to avoid excessive cuts and fills and to avoid a combination of steep grades and sharp curves.

70B.2 Minimum

The minimum gradient on any road shall be 1%, except turnarounds which shall be 1.35%.

70B.3 Maximum

Maximum gradients shall be as follows:

- (A) Major Local Street 8%
- (B) Secondary Local Street 10%
- (C) Minor Local Street 10%
- (D) Turnarounds 5%

The maximum permitted gradient for the entire required turnaround diameter.

- (E) Intersections 3%

For a minimum tangent distance of not less than 100 feet for major local streets and 50 feet for secondary and minor local streets, as measured from the gutter line of the intersected road to any change in gradient.

70C - STOPPING SIGHT DISTANCE

70C.1 Minimum

The horizontal and vertical alignment of all roads shall be based on the following criteria:

	<u>Design Speed (MPH)</u>	<u>Stopping Sight Distance (FT)</u>
(A) Major Local Street	40	300
(B) Secondary Local Street	35	250
(C) Minor Local Street	30	200

70C.2 Determination

Sight distances shall be determined on the basis of height of eye-height of object, headlight beam and horizontal location of eye, and object design criteria currently used by the State of Connecticut Department of Transportation.

70C.3 Vertical and Horizontal Curves

Where crest vertical curves and horizontal curves occur at the same location, sight distance shall be provided to assure that the horizontal curve is visible as drivers approach.

70D - HORIZONTAL ALIGNMENT

70D.1 Curve Tangent and Radius

For all roads, the minimum tangent length between horizontal curves, and the minimum radius of centerline curvature shall be as follows:

	<u>Radius</u>	<u>Tangent</u>
(A) Major Local Street	400 feet	100 feet
(B) Secondary Local Street	300 feet	50 feet
(C) Minor Local Street	200 feet	50 feet

70D.2 Sight Distance

The horizontal alignment of the roadway shall be such as to meet the requirements for sight distance specified in Section 70C.

70E - VERTICAL ALIGNMENT

70E.1 Gradient Transition

Parabolic vertical curves for transition between roadway gradients shall be provided on all roads to insure adequate sight distances in accordance with the minimum requirements specified in Section 70C and to provide a rate of change of gradient that assures safe vehicle operation and does not cause discomfort to vehicle occupants.

70E.2 Curve Length

The required length of vertical curve shall be based upon criteria identified in Section 70C, with the following requirements being the minimum acceptable:

K VALUES

(Length of vertical curve (ft) per percent change in A, where A is equal to the algebraic difference in grades.)

	<u>Type of Vertical Curve</u>	
	<u>Crest</u>	<u>Sag</u>
(A) Major Local Street	74	66
(B) Secondary Local Street	47	49
(C) Minor Local Street	29	36

70E.3 Minimum Curve Length

Vertical curves shall have a minimum length of 100 feet.

70E.4 Maximum Curve Length at Low Points

Where a sag vertical curve results in a low point, the maximum length of vertical curve shall be equal to the minimum length of vertical curve, based on the criteria identified in Section 70E.2 and 70E.3.

70F - INTERSECTIONS

70F.1 General

The following standards shall apply to all intersections:

- (A) No more than two roads shall intersect at any one location.
- (B) Cross (four-cornered) intersections shall be avoided, where possible, except at important and high volume traffic intersections.
- (C) Spacing of intersections, as measured between centerlines, shall be at least 200 feet for Minor and Secondary Local Streets, and 350 feet for Major Local Streets.
- (D) Wherever possible, roads shall intersect at a 90 degree angle, or as close thereto as is practical. In no event however, shall an intersection be allowed where the angle of intersection is less than 75 degrees within 100 feet of the intersection.

(E) The minimum radii of curb lines at intersections shall be as follows:

Major Local Street	50 feet
Secondary Local Street	35 feet
Minor Local Street	25 feet

The Commission may require greater radii where the angle of intersection is less than 90 degrees.

- (F) The visibility at intersections (intersection sight distance) shall be such as to allow a stopped vehicle on the intersecting roadway, located 15 feet back from the gutter line, to see, and to be seen from, a vehicle approaching from either direction (based on a height of eye and object of 3.5 feet) along the intersected roadway for the following distances:

	<u>Intersection Sight Distance</u>
Major Local Street	400 feet
Secondary Local Street	300 feet
Minor Local Street	250 feet

- (G) Sufficient clearing and regrading shall be accomplished to meet the sight distance visibility requirements of Subparagraph (F) of this subsection and no structures, fences, walls, hedges, rock, shrubs, trees or other landscaping shall be permitted to obstruct such visibility.
- (H) Permanent sight line easements shall be provided on all private property so as to maintain the sight line requirements established in this subsection. In addition, no objects of any kind, that are located on private property outside the limits of a permanent sight line easement, shall be permitted to extend or protrude within the plane of such easement. In the case of trees, all foliage shall be trimmed up to a minimum height of six feet as measured from the top of curb or edge of pavement adjacent to the nearest road.

70G - TURNAROUNDS

70G.1 General

All dead end roads (cul-de-sacs), permanent and temporary, shall be provided with a circular right-of-way at the terminating end. The required radii of the right-of-way and pavement shall be as follows:

<u>Element</u>	<u>Radius</u>
Right-of-Way	60 feet
Outside Edge of Pavement	50 feet

70G.2 Layout

The layout of the turnaround shall be in accordance with the most current Standard Detail Drawings for either a circular or offset type turnaround.

70G.3 Snow Storage Reserve Area

An open unrestricted area shall be reserved at the end of all turnarounds for the storage of snow. Such area shall be located at the end of the turnaround between the curb and the right of way line for a distance of 25 feet on each side of the extended road center line. This area, which shall be delineated on the Record Subdivision Map, shall be free from all obstructions including, but not limited to, driveways, mailboxes, landscaping and fences. This area may be relocated at the discretion of the Director of Public Works.

70G.4 Length

The maximum length of a dead end road shall be 1,200 feet as measured from the gutterline of the intersected roadway to the center of the turnaround.

70H - SHOULDERS AND SLOPES

70H.1 General

For all roads, a shoulder area extending from the back of the curbing to the right-of-way line shall be excavated to a depth of at least 6 inches, and then backfilled and final graded with not less than 6 inches of topsoil, as hereinafter specified.

70H.2 Grading of Shoulder Areas

The shoulder areas shall be graded so as to slope toward the centerline of the road where the road is in cut, and away from the centerline of the road where the road is in fill. In either case, the cross slope of the shoulders shall be 3/8 inch per foot.

70H.3 Grading Beyond Shoulder Areas

Areas outside of the shoulders shall be graded up or down to existing grades, at a slope not to exceed two feet horizontal to one foot vertical. In rock cuts, slopes of one foot horizontal to not more than six feet vertical shall be allowed, but care shall be taken to insure that all exposed rock is stable and free from faults, cracks or other infirmities which might lead to collapse or flaking.

70H.4 Special Conditions

The Department of Public Works may require additional measures to be taken to maintain the stability of slopes, and to control groundwater seepage, under prevailing

soil conditions encountered during construction. These measures may include, but not necessarily be limited to, a decrease in the amount of slope, stabilization blankets or grids, stone slope protection, plantings, wedge drains, underdrains, terracing, drainage swales or retaining structures. In cases where the exposed face of a cut slope consists of decomposed, flaking, highly fractured or unstable rock, slopes shall be flattened so as to protect public safety and minimize future maintenance.

70H.5 Limits

No cut or fill slopes shall extend beyond the limits of the right-of-way onto private property unless appropriate slope rights are acquired which provide a perpetual right, running with the land in favor of the owner of the road, to enter upon said private property for purposes of constructing, maintaining and repairing such slopes. In the absence of such slope rights, appropriate retaining structures shall be constructed to prevent encroachment on adjoining private property.

70H.6 Trees

If, in the opinion of the Commission, a slight modification of the shoulder or slope would result in the saving a valuable shade tree, the Commission may in its discretion allow such variation.

70I - CURBING

70I.1 General

Curbs shall be constructed along the edge of street pavement in accordance with the dimensions and details shown in the most current Standard Detail Drawings.

70J - UTILITIES

70J.1 General

All utilities within the right-of-way of a road shall be located underground and installed as shown in the most current Standard Detail Drawings for underground utility assignments, unless otherwise waived by the Commission as per Chapter VI, Section 2.M of the Subdivision Regulations. Individual services shall be extended to the right-of-way line prior to the placement of any pavement.

70K - PROTECTIVE BARRIERS

70K.1 Guide Rails

Protective barriers, consisting of guide railing shall be installed wherever necessary to minimize the risk of personal injury or property damage resulting from vehicle departure from the right-of way. In general, guiderails shall be installed at the following locations:

- (A) Embankments - Such protective barriers shall be required on any roadway section constructed on an embankment which places the roadway surface five (5) feet or more above the existing ground surface at the toe of the embankment slope. This requirement may be waived by the Department of Public Works where the embankment slopes are not steeper than four (4) feet horizontal to one (1) foot vertical.
- (B) Culvert Endwalls - Such protective barriers may be required at culvert endwalls, depending on the height of the endwall and its proximity to the edge of the road.
- (C) Roadside Obstacles - Such protective barriers may be required to shield natural or man-made fixed object hazards including, but not necessarily limited to, trees, rock outcrops, ditches, retaining walls, bridge abutments and permanent bodies of water.

Where marginal situations occur with respect to the placement or omission of a guide rail, or where it is determined that a vehicle striking a guide rail could potentially be more severe than an accident resulting from hitting an unshielded roadside obstacle, the Public Works Department may approve the use of an object marker in accordance with Section 70O.4.

70K.2 Fencing

A securely anchored PVC coated chain link fence shall be installed wherever necessary to minimize the risk of personal injury.

In general, fencing shall be installed at the following locations:

- (A) Rock Cuts - such protective barriers shall be required along the top of slope where a rock cut exceeds five (5) feet in height.
- (B) Culvert Endwalls - Such protective barriers shall be required at the top of any endwall that exceeds five (5) feet in height.

70L - ROAD LIGHTING

70L.1 Places

Road lighting shall be provided if required by the Commission at any location where illumination in darkness is necessary to minimize the risk of accident involving vehicles or pedestrians or to assure safe and convenient vehicle and pedestrian passage. In general, when required, the placement of lighting should be limited to intersections and at turnarounds.

70L.2 Nature

Lighting standards and luminaries shall conform to the most current utility company standards and shall be of a Colonial type design with fiberglass poles, unless otherwise approved by the Commission. They shall be so located as to safeguard against discomfort glare and disability glare and avoid adverse effects from illumination upon the use, enjoyment and value of adjacent property.

70M - MONUMENTS

70M.1 General

All new roads shall be accurately monumented to allow the ready determination of points along all rights-of-way lines. Monuments shall be placed at all points of tangency and points of curvature and elsewhere as required to permit seeing from one monument on a line to another on the same line.

70N - ROAD NAMES AND SIGNS

70N.1 General

Road and other location names shall be approved by the Commission, and be so distinctive as to preclude possible confusion with other existing roads and locations within the Town. Road name signs shall be installed at all intersections. Such signs shall be erected in such places as to assure clear legibility by vehicle operators and shall conform to the dimensions and details shown on the Standard Detail Drawings.

700 - TRAFFIC CONTROL DEVICES

700.1 General

Traffic control devices, including signs, pavement markings and object markers, shall be provided in such places as may be necessary to minimize the risk of accident involving vehicles or pedestrians and to assure safe and convenient vehicle and pedestrian passage.

700.2 Signs

The design and placement of regulatory, warning and guide signs (Stop, Speed Limit, No Outlet, etc.) shall conform to the most current edition of the Manual of Uniform Traffic Control Devices.

700.3 Pavement Markings

The location, type, color, width and patterns of pavement markers and object markers, shall conform to the most current edition of the Manual of Uniform Traffic Control Devices. In general, pavement markings shall include stop lines and crosswalks. Longitudinal pavement markings (center lines), to delineate the separation of traffic flows in opposing directions, shall only be required on Major Local Streets.

700.4 Object Markers

The design and placement of Type 2 Object Markers shall conform to the most current edition of the Manual of Uniform Traffic Control Devices.

70P - SIDEWALKS

70P.1 General

The Commission may require the installation of sidewalks along roads and in pedestrian easements. In general, when required, the installation of sidewalks should be limited to the vicinity of schools and other public or semi-public buildings, playgrounds, parks, shopping areas, transit stops, high density residential areas and at other locations where the expected or probable volume of pedestrian traffic makes sidewalks necessary or appropriate in the interest of public safety and convenience.

70P.2 Location and Dimensions

Sidewalks shall be a minimum of four (4) feet in width and shall be located within the street right-of-way line, as shown on the Standard Detail Drawings.

70P.3 Handicap Ramps

Curb cuts shall be provided at all pedestrian cross walks to provide access for the safe and convenient movement of physically handicapped persons. Such curb cuts shall conform to the most current State Statutes and the Americans with Disabilities Act Accessibility Guidelines.

COVENTRY ROAD REGULATIONS

SECTION 80 - ROAD CONSTRUCTION STANDARDS

80A - CONSTRUCTION SURVEY PROCEDURE

80A.1 General

The centerline of the traveled portion of the road shall be placed in the center of the right-of-way, and shall be located in the field by a State licensed land surveyor. Suitable construction ties shall be established at all control points, which shall be protected during construction so that the centerline may be re-established at any time.

80A.2 Stations

Stations shall be established every 50 feet and at all radius points (P.C. and P.T.'s). The beginning of this line shall be located in the gutterline of the intersected street and shall be designated as Station 10+0. A construction stake shall be placed at right angles to each station, clear of construction and grading. This stake will show the station on the side facing toward Station 10+0 the measured distance to centerline (offset) on the side facing away from Station 10+0 and on the face nearest to center line the cut or fill which will establish the center line grade. A grade list showing the Stations, stake elevations, offset from centerline grade, cuts and fills shall be provided to the Department of Public Works by the Applicant, or his designee who is to have charge of the construction layout, before construction begins.

80A.3 Bench Marks

A permanent Bench Mark shall be established at the beginning and end of each road and at intervals not exceeding 500 feet along the length of the road. These Bench Marks shall be referenced to the same datum shown and identified on the construction drawings for the road. Sketches showing at least three ties to each Bench Mark, the Bench Mark elevation and a description of each Bench Mark shall be provided to the Department of Public Works.

80A.4 Protection of Stakes and Bench Marks

Grade stakes and permanent Bench Marks shall be protected and preserved until the road construction has been approved by the Department of Public Works. If such stakes or Bench Marks are disturbed, they shall be replaced immediately.

80B - CLEARING AND GRUBBING

80B.1 Clearing

All trees, brush, boulders, structures, walls, fences, perishable matter and debris of whatever nature shall be cleared from the full width of the right-of-way, including areas necessary for cuts and fills, construction of storm drainage systems, and required sight lines, except that valuable shade trees may remain in shoulder areas as provided for in Section 80B.3.

80B.2 Grubbing

All roots and stumps within the clearing limits specified in Section 80B.1 above shall be grubbed and excavated. No stumps shall be buried on site within the road right-of-way and associated easement areas.

80B.3 Trees

Valuable shade trees may be permitted by the Commission to remain in shoulder areas as provided for in Section 70H.6, but not within three (3) feet of any curblineline, if no substantial increase in the risk of injury or damage results by reason of its presence in the particular place where it stands, and a written opinion is provided from a qualified arborist stating that the long term health of the tree will not be adversely impacted by proposed construction or proximity to proposed road improvements. Any such tree shall be effectively protected and preserved so as to insure that it will suffer no damage during construction operations. All tree branches overhanging the roadway pavement or shoulder areas shall be trimmed by a qualified arborist to a clearance of fifteen (15) feet above the finished grade of the road.

80B.4 Topsoil

Topsoil shall be stripped from all surfaces of the roadway section which will be disturbed by cut or fill operations. Topsoil so stripped shall be stockpiled on the site of the work and shall be reserved for roadway landscaping. Excess topsoil may only be removed from the site in a lawful manner after all disturbed areas associated with roadway construction have been stabilized.

80C - ROADWAY EXCAVATION, FORMATION OF EMBANKMENT AND DISPOSAL OF SURPLUS MATERIAL

80C.1 General

The excavation, filling, compaction, and the disposal of all surplus or unsuitable materials required to construct the roadbed, subgrade, shoulders, slopes and other associated improvements shall be accomplished in accordance with all applicable

requirements of the State Standard Specifications for "Roadway Excavation, Formation of Embankment and Disposal of Surplus Material" except as modified herein.

80C.2 Unsuitable Material

All unsuitable material, including material removed during clearing and grubbing and preparation of subgrade, shall be removed from within the limits of the right-of-way and disposed of in a lawful manner.

80C.3 Surplus Material

Surplus suitable material may be used to flatten fill slopes within the limits of the right-of-way and any slope easements if approved by the Department of Public Works. Surplus suitable materials that cannot be so utilized shall be disposed of in a lawful manner.

80C.4 Blasting

Blasting shall be performed only by licensed competent personnel and shall be done in accordance with all applicable State and Federal laws, local ordinances, rules and regulations pertaining thereto.

80D - PREPARATION OF SUBGRADE

80D.1 General

All topsoil, peat, other organic matter and all soft and yielding material shall be stripped and removed to their full depth, and boulders and ledge rock removed to a depth of at least twelve (12) inches below finished subgrade. The surface shall then be backfilled up to subgrade elevation with bank or crushed gravel conforming to the requirements of the State Standard Specification Sections M.02.1 and M.02.06 (Grading B). All construction methods shall conform to the requirements of the State Standard Specifications for "Subgrade".

80E - ROLLED GRANULAR BASE

80E.1 General

After the subgrade has been compacted, proof rolled and approved by the Department of Public Works, a rolled granular base shall be applied for the full required width of pavement plus one foot beyond each curb line. The rolled granular base shall not be less than eight (8) inches thick after compaction and shall have the cross-slope shown on the Standard Detail Drawings.

80E.2 Materials and Methods

Construction methods shall conform to the requirements of the State Standard Specifications for "Rolled Granular Base", and materials shall conform to the requirements of the State Standard Specification Sections M.02.03 and M.02.06 (Grading A).

80F - PROCESSED AGGREGATE BASE

80F.1 General

After the rolled granular base has been placed and compacted, processed aggregate base shall be applied for the full required width of pavement plus one foot beyond each curb line. The process aggregate base shall not be less than four (4) inches thick after compaction and shall have the cross slope shown on the Standard Detail Drawings.

80F.2 Materials and Methods

Construction methods shall conform to the requirements of the State Standard Specifications for "Processed Aggregate Base", and materials shall conform to the requirements of the State Standard Specification Section M.05.01.

80G - BITUMINOUS CONCRETE PAVEMENT

80G.1 General

After the processed aggregate base has been brought to the required grade and cross slope, rolled, and compacted, the roadway shall be surfaced with bituminous concrete Class I binder course for the full required width of pavement plus one foot beyond each curb line to a compacted depth of not less than 2 1/2 inches. After placement of bituminous concrete curbing on the binder course, a bituminous concrete Class II top or surface course not less than 1 1/2 inches thick after compaction shall be placed. The total compacted depth of Class I binder course and Class II top or surface course shall not be less than 4 inches. Prior to the pavement of the Class II surface course, the surface of the binder course shall be broomed clean and a tack coat applied. No paving shall be permitted between October 31 and April 1 unless the Public Works Department specifically permits an exception due to unusually mild weather conditions. No paving shall be permitted on any day where the base temperature is less than 35 degrees Fahrenheit or when weather conditions of fog or rain prevail or when the pavement surface shows any signs of moisture. Pavement shall be placed so that each course shall have the cross-slope shown on the Standard Detail Drawings.

80G.2 Materials and Methods

All materials and construction methods shall conform to the requirements of the State Standard Specifications for "Bituminous Concrete" except as modified herein. "Bituminous Concrete" shall conform to the requirements of the State Standard Specifications Sections M.04.01 and M.04.03 (Class I for the binder course and Class II for the top or surface course).

80G.3 Source

All bituminous concrete pavement material shall be obtained from a plant certified by the State Department of Transportation for provision of such materials for use in State highway construction. Original signed copies of certification by the supplier that each load of bituminous concrete pavement materials incorporated in the work conforms to the requirements specified in Section 80.G.1 shall be submitted to the Public Works Department.

80H - BITUMINOUS CONCRETE CURBING

80H.1 General

Machine laid bituminous concrete curbing shall be placed on both sides of the pavement along the entire length of new and improved roads at the offset from centerline of road shown on the Standard Detail Drawings. Bituminous concrete curbing shall not be required on roads designated by the Town of Coventry as "Scenic", or on existing Town roads where it is determined by the Director of Public Works that the installation of enclosed storm drainage systems is not warranted. Wavy or damaged curbing shall not be accepted, and the Public Works Department shall require that improperly placed curbing be removed and replaced.

80H.2 Materials and Methods

All materials and construction methods shall conform to the requirements of the State Standard Specifications for "Bituminous Concrete Lip Curbing". Curbing shall be placed on the road binder course at a height which will maintain a 6 inch curb reveal after placement of the road surface course. Prior to the placement of any curbing, the surface of the pavement shall be cleaned of all loose and foreign material. The surface of the pavement, which shall be dry at the time the curbing is placed, shall be coated with an approved tack coat. All curbing shall conform to the shape shown in the Standard Detail Drawings.

80I - GUIDE RAIL

80I.1 General

Guide railing shall be installed as shown in the Standard Detail Drawings. The type of guide rail to be utilized shall be as follows:

- (A) 3 cable guide rail with steel posts shall be used in all residential areas provided that a minimum clear zone of eleven and one half (11.5) feet is maintained behind the guide rail so as to accommodate the maximum deflection distance.
- (B) R-I metal beam rail shall be used on existing roads when the distance to the nearest residential structure is 200 feet or greater and where a minimum clear zone of seven (7) feet is maintained behind the guide rail so as to accommodate the maximum deflection distance. They shall also be used in residential areas where the clear zone specified in Section 80I.1(A) cannot be provided.
- (C) R-B metal beam rail shall only be used in situations where the clear zone behind the guide rail is limited to a minimum distance of three (3) feet and at all locations where a combination of sidewalks and guide rails are provided.
- (D) Steel backed timber guide rail may be required in areas of aesthetic or historical significance as determined by the Director of Public Works.

Under no circumstances shall ornamental wood rails be permitted within a town road right-of-way.

80I.2 End Anchorage

Regardless of the type of guide rail to be used, all leading and trailing ends shall be secured with concrete end anchors. Blunt or flared ends shall not be permitted.

80I.3 Materials and Methods

For three cable guide rail and end anchorages, construction methods shall conform to the requirements of the State Standard Specifications for "Three Cable Guide Railing (I-Beam Posts) and Anchorages", and materials shall conform to the requirements of the State Standard Specification Sections M.10.08 for wire rope, steel posts and plate anchors, fittings and anchorages, and M.18.09 for reflective delineators.

For R-I metal beam rail and R-B metal beam rail, construction methods shall conform to the requirements of the State Standard Specifications for "Metal Beam Rail", and materials shall conform to the requirements of the State Standard Specification Sections M.10.02 for metal beam rail, M.18.09 for encapsulated lens reflective sheeting and M.18.13 for sheet aluminum brackets. For end anchorages, construction methods shall conform to the requirements of the State Standard Specifications for "Metal Beam Rail

Anchorage", and materials shall conform to the requirements of the State Standard Specification section M.10.02.

80J - FENCING

80J.1 General

Fencing shall be four (4) feet in height and shall be installed as shown in the Standard Detail Drawings.

80J.2 Materials and Methods

Green colored polyvinyl chloride - Coated steel fabric, posts, and hardware shall be provided, with all materials conforming to the requirements of the State Standard Specifications Section M.10.05. All construction methods shall conform to the requirements of the State Standard Specifications for "Chain Link Fence" with the exception that top tension wires shall be provided in lieu of top rails.

80K - MONUMENTS

80K.1 General

Monuments shall be of reinforced concrete, not less than four (4) inches square at the top and not less than three (3) feet long, shall have a cross mark indented in the top to indicate the exact point of reference, and shall be set so as to project not more than two (2) inches above finished grade.

80K.2 Exposed Ledge Areas

In exposed ledge areas, a brass plug 1/2 inch in diameter and three (3) inches long shall be installed in the ledge and cemented in place with Portland cement mortar.

80L - TRAFFIC CONTROL DEVICES

80L.1 General

The design and placement of sign, pavement markings, and object markers shall conform to the most current edition of the Manual of Uniform Traffic Control Devices.

80L.2 Materials and Methods - Signs

Street signs shall be extruded aluminum with materials conforming to the requirements of the State Standard Specification Sections M.18.09, M.18.10, M.18.11 and M.18.12.

Construction methods shall conform to the requirements of the State Standard Specification for "Sign Face - Extruded Aluminum". All other signs shall be sheet aluminum with materials conforming to the requirements of the State Standard Specification Sections M.18.09 and M.18.13. Construction methods shall conform to the requirements of the State Standard Specifications for "Sign-Face - Sheet Aluminum". Materials for metal sign posts and sign mounting bolts shall conform to the requirements of the State Standard Specification Sections M.18.14 and M.18.15 respectively. Posts shall be galvanized U-channel with a weight of two (2) pounds per foot.

80L.3 Materials and Methods - Pavement Markings

Construction methods shall conform to the requirements of the State Standard Specifications for "Painted Pavement Markings", and materials shall conform to the requirements of the State Standard Specification Section M.07.20 for 15-minute dry paint.

80L.4 Materials and Methods - Object Markers

Construction methods shall conform to the requirements of the State Standard Specifications for "Object Marker". Materials shall conform to the Requirements of the State Standard Specification Sections 18.13 for Sheet Aluminum, 18.09 for Reflective Sheeting, 18.14 for Metal Sign Posts, and 18.15 for Sign Mounting Bolts. Posts shall be galvanized U-Channel with a weight of two (2) pounds per foot.

80M - SIDEWALKS

80M.1 General

Sidewalks shall be located as shown on the Standard Detail Drawings, and shall be constructed of 3000 PSI Portland Cement Concrete, with an air entraining admixture. Sidewalks shall be a minimum of four (4) feet in width and five (5) inches thick, and shall be constructed on a granular fill base having a minimum compacted thickness of eight (8) inches. The concrete thickness shall be increased to eight (8) inches, and welded wire fabric reinforcement provided at all driveway crossings.

80M.2 Materials and Methods

All materials and construction methods shall conform to the requirements of the State Standard Specifications for "Concrete Sidewalks". "Granular Fill" shall conform to the requirements of the State Standard Specifications Sections M.02.01 and M.02.06 (Grading A). Portland Cement Concrete shall conform to the requirements of the State Standard Specifications Section M.03.01 (Class A). Welded wire fabric reinforcement shall be WWF 6x6 - W2.9xW2.9.

COVENTRY ROAD REGULATIONS

SECTION 90 - DRAINAGE DESIGN CRITERIA

90A - DESIGN CRITERIA

90A.1 General

Proposed drainage facilities shall be enclosed and designed to accommodate surface runoff from proposed land development as well as the entire upstream drainage area.

90A.2 Analysis

Computations, conforming to the requirements outlined in this section, shall be submitted for sizing all proposed storm drainage facilities as well as the analysis of any existing off-site facilities required by the Commission. In addition, computations shall be submitted for both pre-development and post-development conditions for the 2, 10, 25, 50 and 100-year frequency 24-hour duration Type III storm events at each location from which storm water discharges will exit the property under development.

90A.3 Potential Overload

Where the proposed land development, including roadway and drainage facility construction, is likely to cause an increase in the rate of stormwater runoff such as to hydraulically overload or cause damage to existing downstream drainage structures, facilities, or watercourses, and/or cause flooding which would likely result in physical damage of land and improvements adjacent thereto, adequate stormwater runoff control measures shall be designed and constructed to prevent or alleviate such harmful effects.

90A.4 Stormwater Runoff Control

Where stormwater runoff control measures are required by the Commission, they may include, but not be necessarily limited to, retention and/or detention with controlled release of increased flows, increasing the hydraulic capacity of downstream drainage facilities, erosion protection measures, stormwater treatment or any combination of the above.

90A.5 Stormwater Detention

When stormwater detention facilities are required, they shall be sized such that the peak discharge after development shall not exceed the peak discharge prior to development for each of the storm frequencies identified in Section 90A.2. Design and construction of stormwater detention facilities shall conform to the requirements for "Detention Basin" as outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control". Such facilities shall be located on land to be conveyed to the Town and shall be readily

accessible for maintenance purposes via an improved access drive acceptable to the Director of Public Works.

90A.6 Discharge

Unless otherwise approved by the Commission, the discharge of all stormwater shall be into established watercourses, wetlands, or Town/State Highway drains having adequate capacity to accommodate such discharges.

90A.7 Drainage Easements and Rights to Discharge

Where the discharge of stormwater shall be onto or through private property, perpetual drainage easements and discharge rights, in favor of the owner of the road, shall be secured by the applicant. Where drainage easements are required, they shall have a minimum width of thirty (30) feet. For open channels, flared end sections/headwalls, and other outlet protection measures, they shall extend a minimum of fifteen (15) feet beyond the outside edge of such measures.

90A.8 Diversion

The diversion of stormwater runoff from one watershed or watercourse to another shall normally be avoided. Where it is necessary to create such a diversion, special provisions shall be made to minimize the potential damages which may occur as a result of such diversion.

90A.9 Existing Watercourses

All work on established watercourses shall be accomplished in such a way as to minimize the effects which would be adverse to the regimen of such watercourse. Adequate provision shall be made to prevent or minimize scour or erosion in the adjacent upstream and downstream reaches of the watercourse.

90A.10 Capacity Within Roadway

Storm drainage systems within the roadway, exclusive of culverts and bridges carrying flows under the road, shall be designed to safely accommodate flows resulting from storms of the maximum intensity which can be expected to occur on an average of once in ten (10) years (10-year storm) without being surcharged.

90A.11 Capacity Under Roadways

Culverts crossing under roadways shall be designed to accommodate the following flows:

(A) Minor Structures

These shall include pipe, box culverts or bridges providing for the drainage of adjacent lands less than one square mile in area in which there is no established watercourse. These structures shall be designed to pass a 25-year frequency discharge without flooding or damaging the highway or adjacent property.

(B) Small Structures

These shall include pipe, box culverts or bridges providing for the drainage of adjacent lands less than one square mile in area in which there is an established watercourse. These structures shall be designed to pass a 50-year frequency discharge with one foot of freeboard, and without flooding or damaging adjacent property. The effects of a discharge equal to the 100-year frequency storm shall be checked. Where such effects are likely to cause damage to persons or property, structures shall be designed to alleviate these problems.

(C) Large Structures

These shall include pipe, box culverts or bridges for the drainage of adjacent lands one square mile or larger in area. These structures shall be designed to pass a 100-year frequency discharge with a minimum one foot under clearance, relative to the low chord of the upstream face of the structure, and shall not create a backwater which will flood or endanger property or roads upstream.

90A.12 Municipal Improvements

The requirements specified in Section 90 are not intended in any way to preclude the Coventry Public Works Department from making storm drainage improvements on existing public roadways. Such improvements, including, but not limited to the conversion of road side ditches to piped drainage systems, the extension, repair, or replacement of existing storm drainage systems, and the installation of new storm drainage systems, shall be permitted provided that a determination is made by the Director of Public Works that such improvements will not result in significant adverse impacts.

90B - COMPUTATION OF STORMWATER FLOWS

90B.1 General

Stormwater flows may be computed by use of the Rational Method or by use of the methods described in the most current edition of the U.S. Soil Conservation Service Technical Release No. 20, or Technical Release No. 55. In general, the use of the Rational Method is discouraged for use in computing flows from drainage areas in excess of 200 acres, or for computing flows from 100-year frequency storms.

Regardless of the method that is utilized, all computations shall include a Drainage Analysis Map which clearly delineates the drainage area and flow path used for determining the time of concentration to each proposed drainage facility and each existing downstream drainage structure that may become hydraulically overloaded or damaged. The drainage analysis map shall show existing topography of the drainage areas (based on the best available existing mapping), existing and proposed roads, watercourses, wetlands, flood hazard zones, existing and proposed vegetation (woods, fields, lawns, etc.), existing and proposed drainage facilities and structures, and the proposed area of development. When U.S. Soil Conservation Service methods are used, the drainage analysis map shall also show soil types as shown on the most currently available soils maps as prepared by the U.S. Soil Conservation Service.

90B.2 Rational Method Computations

Where the Rational Method formula is used, computations shall conform with the following guidelines:

(A) Runoff Coefficients

Where the Rational Method formula is used, the following runoff coefficients ("C" values) shall be the minimum values utilized for each type of surface, and a composite "C" value computed for each tributary drainage area. In any case, a composite "C" value of less than 0.30 shall not be used for single family residential developments.

<u>Type of Surface</u>	<u>Runoff Coefficient "C" (1)</u> (10-year Storm)
Pavement, roofs and impervious surfaces	0.90
Embankment Slopes (cuts and fills)	0.40
Lawns:	
Flat Slope (2% or less)	0.17
Average Slope (2% to 7%)	0.22
Steep Slope (7% or greater)	0.35
Cultivated Fields	0.45
Pasture	0.30
Meadows (moist, level grassland)	0.10
Forested Areas	0.20

For 25-year storm increase runoff coefficients by 20%, for 50-year storm increase by 35%, and for 100-year storm increase by 55% (except for pavement, roofs and impervious surfaces).

(B) Time of Concentration

Time of concentration (t) shall be determined by the Seeyle Nomograph for overland flows, and the Kipich Nomograph for concentrated flows.

(C) Rainfall Intensities

Rainfall intensities (i) shall be determined using the frequency/intensity/duration curves for Hartford, Connecticut. The minimum allowable time of concentration shall be five minutes.

90C - MINIMUM PIPE SIZES

90C.1 Surface Drainage

All pipe carrying surface drainage or a combination of surface drainage and subsurface drainage (groundwater) shall have a minimum internal diameter of fifteen (15) inches.

90C.2 Subsurface Drainage

All subsurface drainage pipe used exclusively for intercepting groundwater shall have a minimum internal diameter of six (6) inches.

90D - CATCHBASINS

90D.1 General

Catchbasins shall be provided in order that surface water will not travel along the roadway curblines without interception for more than 350 feet on roads with grades up to and including 5% and not more than 250 feet on roads with grades up to and including 10%. Catchbasins shall also be installed at all low points, roadway intersections and at the lower end of all cul-de-sacs. Catchbasins located within the paved roadway shall be Type "C".

90D.2 Off Road Locations

Where it is necessary to provide catchbasins in off-road locations outside of the limits of pavement, they shall have Type "C-G" heads and shall have no sumps.

90D.3 Inlet Capacity

Where additional inlet capacity is necessary, the installation of double catchbasins, curved grates, or more closely spaced catchbasins shall be required.

90E - MANHOLES

90E.1 General

In general, a manhole is less preferable to a catchbasin and should only be provided where the use of a catchbasin is not feasible.

90E.2 Places

Manholes shall be provided at each change of drainage pipe slope or horizontal alignment, at all pipe junctions and otherwise at intervals of approximately 350 feet on long lengths of pipe where catchbasins are not used.

90F - FLARED END SECTIONS/HEADWALLS

90F.1 General

The inlets and outlets of all exposed drainage conduits shall be protected with flared end sections except where hydraulic, or other considerations necessitate the use of a headwall. When headwalls are provided, they shall be of reinforced concrete construction. Wingwalls shall be provided when required to contain and protect the adjacent earthen slopes and/or direct the flow of water entering or leaving the conduit. Outlet protection shall be provided in accordance with the standards outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control".

90G - OPEN CHANNELS

90G.1 General

In general, open channels shall be avoided, except as may be required at storm drainage system outlets to convey storm water discharges to an acceptable outlet. Where open channel flow is required, the channel shall be properly designed to safely carry the design flow. Open channels shall be in the form of a trapezoid having a bottom width of at least two feet and side slopes of not less than two feet horizontal to one foot vertical. The channel shall be seeded and protected with erosion control blankets, sodded, ripped or otherwise stabilized as the flow quantities and velocities require.

90G.2 Stabilization of Open Channels

Special attention shall be given to the stabilization of open channels in the immediate vicinity of pipe inlets and outlets, bridges, at bends and curves and at other critical locations as required to prevent scouring, erosion and/or siltation of watercourses and culverts, and undermining of drainage structures.

90G.3 Criteria

Hydraulic design of open channels and design of bed and bank stabilization shall be done in accordance with the applicable criteria of the most current edition of the Federal Highway Administration publication entitled "Design of Roadside Drainage Channels".

90H - UNDERDRAINS

90H.1 General

The installation of subsurface drainage systems or underdrains will be required beneath the edge of pavement of a proposed street wherever the ground water is known to be less than three (3) feet below the proposed finished grade of the street. Underdrains shall also be installed where localized seeps or springs are observed within the proposed street lines during construction or where otherwise required by the Director of Public Works.

90J - CONNECTION OF PRIVATE DRAINS

90J.1 General

Unless otherwise approved by the Director of Public Works, private storm drains, yard drains, area drains, footing drains, curtain drains, underdrains, basement drains or other drains of any kind, shall not be permitted to discharge upgradient or into a town road or road proposed to be dedicated to the town at a future date. Any such private drains shall be connected to storm drainage structures. When such a connection is not possible or practical, they may be connected directly to an existing or proposed storm drain if approved by the Director of Public Works. Where direct connections are made, they shall utilize appropriate fittings, and be preceded by an access extended to grade. Such access shall be located within a town road right-of-way or easement, and shall have a minimum diameter of twelve inches, or as otherwise deemed necessary to provide direct observation and to facilitate sampling. All access structures shall be provided with a secure top to preclude accidental entry. The following notation shall be placed on all design drawings where the connection of private drains are proposed; "Private drains are the sole responsibility of the owner and the Town of Coventry shall assume no responsibility for any maintenance, replacement and/or repair. The owner of the drain shall hold the Town of Coventry harmless for any damage or injuries resulting from such connection."

COVENTRY ROAD REGULATIONS

SECTION 100 - DRAINAGE CONSTRUCTION STANDARDS

100A - PIPE

100A.1 General

All pipe used for storm drainage shall be either Class IV Reinforced Concrete Pipe (RCP) or High Density Corrugated Polyethylene Smooth Interior Pipe (CPEP).

100A.2 Minimum Cover

The minimum cover over all storm drainage located within the right-of-way shall be two (2) feet. Where conflicts with other subsurface facilities occur, and with approval of the Director of Public Works, pipe may have as little as 18 inches of cover, but in such cases extra strength Class V RCP shall be used with a crushed stone bedding extending to a minimum depth of four (4) feet below finished grade.

100A.3 Slotted or Perforated Storm Drains

Where water is encountered in the pipe trenches, or where underdrains are required under Section 90H, storm drains shall either be slotted RCP or Perforated High Density Corrugated Polyethylene Smooth Interior Pipe.

100A.4 Additional Underdrains

Where additional underdrains are deemed necessary in locations not requiring other storm drainage, Perforated High Density Corrugated Polyethylene Smooth Interior Pipe with a minimum internal diameter of six (6) inches shall be used.

100A.5 Materials and Methods

Except as noted herein, construction methods shall conform to the State Standard Specifications for "Culverts" and "Underdrain and Outlets". Where High Density Corrugated Polyethylene Smooth Interior Pipe is used for storm drains, it shall be installed in a Type II installation, regardless of the internal pipe diameter, with backfill material conforming to the State Standard Specifications Section M.02.06 - Grading C. For underdrains, pipe shall be installed with holes in a downward position. Aggregate used for backfilling around underdrains and slotted or perforated pipe shall conform to the State Standard Specifications Section M.08.03 - 1 (No. 8 Aggregate). Sand shall not be permitted as backfill around underdrains. Geotextile fabric, conforming to the State Standard Specification Section M.08.01 - 26, shall be wrapped around the aggregate as shown in the Standard Detail Drawings.

Reinforced concrete pipe shall conform to the State Standard Specifications Section M.08.01 - 6, or Section M.08.0 - 10 for Slotted Reinforced Concrete Pipe. Material used for sealing joints in concrete pipe shall conform to the State Standard Specifications for Cold-Applied Bituminous Sealer (Section M.08.01-18), or Pre-formed Plastic Gaskets (Section M.08.09.19). High Density Corrugated Polyethylene Smooth Interior Pipe shall conform to the AASHTO Standard Specifications M 294 Type S, or M 294 Type SP/M 252 Type SP for Perforated High Density Corrugated Polyethylene Smooth Interior Pipe.

100B - CATCH BASINS AND MANHOLES

100B.1 General

Catch basins and manholes shall be constructed in accordance with the Connecticut Department of Transportation Standard Sheets.

100B.2 Materials and Methods

Except as noted herein, all materials and construction methods shall conform to the requirements of the State Standard Specifications for "Catch Basins, Manholes and Drop Inlets". No drainage openings formed by the omission of a brick or open vertical joints shall be permitted in the walls of a catch basin or manhole. All catch basin frames and grates shall be 507K - Type A, constructed of painted steel. Manhole frames and covers shall be heavy traffic duty, constructed of cast iron. Frames shall have a twenty-four (24) inch internal opening. Covers shall either have a plain surface with no markings, or marked "STORM". Where required by the Director of Public Works, covers shall be bolted.

100C - FLARED END SECTIONS/HEADWALLS

100C.1 General

Flared end sections and headwalls shall be constructed in accordance with the Connecticut Department of Transportation Standard Sheets.

100C.2 Materials and Methods

All materials and construction methods shall conform to the State Standard Specifications for "Culvert Ends" and "Retaining Walls, Endwalls and Steps".

100D - RIPRAP

100D.1 General

Stone for this work shall be of the size, and placed to the limits and depth, specified on the Drawings.

100D.2 Materials and Methods

Construction methods shall conform to the requirements of the State Standard Specifications for "Riprap" and materials shall conform to the requirements of the State Standard Specification Section M.12.02. Where geotextile fabric is specified underneath riprap, it shall conform to the requirements of the State Standard Specification Section M.08.01 - 26.

100E - STABILIZATION OF OPEN CHANNELS

100E.1 General

Open channels shall be stabilized with riprap, sod, or seed protected with erosion control blankets. The method of stabilization shall be as specified on the Drawings.

100E.2 Materials and Methods

For stabilization with rip rap, all work shall conform to the requirements specified in Section 100D above. For stabilization with sod or seed protected with erosion control blankets, all materials and methods shall conform to the State Standard Specifications for "Sodding" and "Turf Establishment" respectively.

100F - SPECIAL STRUCTURES

100F.1 General

Special structures, including but not limited to bridges, box culverts and retaining walls shall be designed and constructed in accordance with the most current applicable standards of the Connecticut Department of Transportation, or as otherwise directed by the Director of Public Works.

100F.2 Private Drain Access Structure

Where private drain access structures are required prior to a direct connection to a storm drain, they shall be fabricated from high density corrugated polyethylene pipe and fittings conforming to AASHTO Standard Specification Sections M 294 Type S and M 252 Type S. The fabrication of the access structures shall conform to the Standard Detail

Drawings, and shall include as a minimum a standard 12"x12"x12" tee with reducers and couplings as required at each end of the horizontal run, and a 12-inch inside diameter vertical riser pipe extending to grade. A snap on end cap shall be securely fastened at the end of the vertical riser pipe, and shall be set flush with the proposed finish grade elevation.

COVENTRY ROAD REGULATIONS

SECTION 110 - SOIL EROSION AND SEDIMENT CONTROL CRITERIA

110A - SOIL EROSION AND SEDIMENT CONTROL PLANS & PERMITS

110A.1 General

No construction shall be undertaken unless an erosion and sediment control plan, which explains and illustrates the measures which will be taken to control erosion and sediment problems, is submitted to and approved by the Town of Coventry. Plans shall be prepared in accordance with the requirements and standards outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control".

110A.2 Stormwater General Permits

When a project requires a Connecticut Department of Environmental Protection Agency "General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities", copies of the registration form and Stormwater Pollution Control Plan submitted to the State shall also be submitted to the Town of Coventry.

110B - CONSTRUCTION & MAINTENANCE PROCEDURES

110B.1 General

The practices and measures included in the approved erosion and sediment control plan shall be implemented during the entire construction period and maintained until adequate permanent vegetation is established. Erosion control measures shall be supplemented as field conditions require, or as directed by the Town of Coventry.

110B.2 Contact Person

Prior to the start of any construction, the name, address and day/night telephone numbers of the person designated, by the owner, to be responsible for the implementation of erosion and sediment control practices and measures, shall be provided to the Director of Public Works.

110B.3 Final Site Clean-up

Following the permanent stabilization of all disturbed areas, all remaining temporary erosion control measures that are not bio-degradable, as well as all accumulated sediments, shall be removed from the site and disposed of in a lawful manner. In addition all accumulated sediments remaining in permanent facilities such as plunge

pools, drainage channels, detention areas and catch basins, shall be removed and disposed of in a lawful manner. The removal of temporary erosion control measures and accumulated sediments shall be conducted in a manner so as not to disturb existing permanent vegetation. All exposed areas remaining after the removal of erosion control measures shall be immediately seeded and mulched.

COVENTRY ROAD REGULATIONS

SECTION 120 - FINAL GRADING, STABILIZATION AND LANDSCAPING CRITERIA

120A - FINAL GRADING AND STABILIZATION

120A.1 General

Except as otherwise specified herein, all areas disturbed by the construction of roads, drainage facilities and associated improvements that are not paved or occupied by structures shall be properly graded to smooth uniform slopes, covered with topsoil to a minimum depth after settlement of six (6) inches, and limed, fertilized, seeded and mulched.

120A.2 Materials and Methods

Construction methods shall conform to the requirements of the State Standard Specifications for "Topsoil", "Turf Establishment", and "Liming". Materials shall conform to the State Standard Specification Sections M.13.01-1 for Topsoil, M.13.03 for Fertilizer, M.13.04 for Seed, M.13.05-2 for Mulch, and M.13.02 for Lime.

120B - LANDSCAPING

120B.1 General

All plantings shall be such as to eliminate any requirement for mowing, weeding, or other forms of maintenance by the Town of Coventry.

120B.2 Street Tree Locations

Street trees, when required by the Commission, shall be planted on private property outside of the limits of the road right-of-way, sight line easements, storm drainage easements or other easements. Specific criteria regarding the proximity of street trees to overhead and underground utility lines shall be as follows:

- (A) Tall trees, including all species that may reach heights of 50 feet or more at maturity shall be located a minimum horizontal distance of 50 feet from any overhead utility line.
- (B) Medium trees, including all species that may reach heights ranging from 30 to 50 feet at maturity shall be located a minimum horizontal distance of 30 feet from any overhead utility line.

- (C) Small trees, including all species that reach maximum heights of 30 feet or less at maturity, may be located under or near overhead utility lines.
- (D) No street tree shall be located closer than 20 feet from any underground utility line.

120B.3 Street Trees Species

When selecting street trees, a mixture of species shall be provided so as to protect the community forest from disease, insect and environmental blight. In this regard, the goal of the Town of Coventry is to have a mixture of street trees such that no one species comprises more than ten (10) percent of the total. In general, projects requiring plantings of fifty (50) or more street trees shall have a variety of species such that no one species comprises more than ten (10) percent of the total project plantings. For projects requiring less than fifty (50) street trees, no one species shall comprise more than twenty (20) percent of the total project plantings. Unless otherwise approved by the Coventry Tree Warden, street trees shall have a minimum caliper of 1-1/2" to 2" and shall be one of the following species:

(A) Tall Trees

Heritage River Birch (Betula nigra 'Heritage')

White Fir (Abies concolor)

Pin Oak (Quercus Palustris)

Japanese Zelkova (Zelkova Serrata)

(B) Medium Trees

European Hornbeam (Carpinus betulus)

Katsura Tree (Cercidiphyllum japonicum)

(C) Small Trees

Indian Magic Crabapple (Malus 'Indian Magic')

Japanese Crabapple (Malus floribunda)

Flowering Dogwood (Cornus florida)

Kousa Dogwood (Cornus Kousa)

Fringe Trees (Chlonanthus virginicus)

Crimson Cloud Hawthorn (*Crataegus laevigata* 'Crimson Cloud')

Winterking Hawthorn (*Crataegus viridis* 'Winterking')

American Hornbeam (*Carpinus caroliniana*)

Saucer Magnolia (*Magnolia x soulangiana*)

Japanese Maple (*Acer palmatum*)

Eastern Redbud (*Cercis canadensis*)

Serviceberry (*Amelanchier x grandiflora*)

Sourwood (*Oxydendrum arboreum*)

Prior to planting street trees, the type and proposed location of trees to be planted shall be approved by the Coventry Tree Warden. Construction methods shall conform to the requirements of the State Standard Specifications for "Furnishing, Planting, and Mulching Trees, Shrubs, Vines and Ground Cover Plants". Materials shall conform to the State Standard Specification Section M.13.07 for Plant Materials. Where existing healthy native trees meeting the requirements set forth herein can be protected and saved, they may be used in lieu of new plantings provided that they are approved by the Coventry Tree Warden, and are properly pruned by a qualified arborist to remove all branches which are dead or which would obstruct required sight lines.

120B.4 Ornamental Landscape Features

Ornamental landscape features including, but not necessarily limited to boulders, grouping of rocks, statues, signs, exterior lighting (except required street lights), walls, basketball hoops and other obstructions, shall be prohibited within the road right-of-way, medians, sight line easements, storm drainage easements or other easements.

120B.5 Medians

Medians, when permitted by the Commission, shall be planted with low-growing plants and shrubs that will not exceed a fully mature height in excess of two and one half feet as measured from the adjacent roadway guideline. Surface areas that remain unplanted shall be covered with wood or stone chips underlaid by a landscape fabric barrier designed to retard the growth of weeds, so as to effectively eliminate any requirements for mowing, weeding, or other forms of maintenance. Construction methods for new plantings shall conform to the requirements of the State Standard Specifications for "Furnishing, Planting and Mulching Trees, Shrubs, Vines and Ground Cover Plants". Materials shall conform to the State Standard Specification Section M.13.07 for Plant Materials. The Town of Coventry shall neither accept any responsibility, nor costs, associated with the maintenance of median areas. Where medians are proposed, and

approved by the Commission, a legal mechanism shall be established for perpetual maintenance. Such mechanism shall require the approval of the Commission, the Director of Public Works, and the Town Attorney.

120C - MAINTENANCE OF STABILIZED AND LANDSCAPED AREAS

120C.1 General

All areas stabilized by vegetation, and all landscaped areas, shall be properly maintained by the person or firm constructing the road, drainage facilities and associated improvements until permanent growth of such plantings has been firmly and effectively established for a period of one year after planting. Maintenance shall include watering, mowing, pruning, fertilizing, cultivating and all else required to maintain the planted areas in a vigorous and healthy condition. All grassed areas showing root growth failure, deterioration, bare or thin spots and eroded areas shall be replanted and all dead, dying or diseased shrubs, plants and trees shall be replanted and all dead, dying or diseased shrubs, plants and trees shall be replaced so as to meet the requirements specified herein.

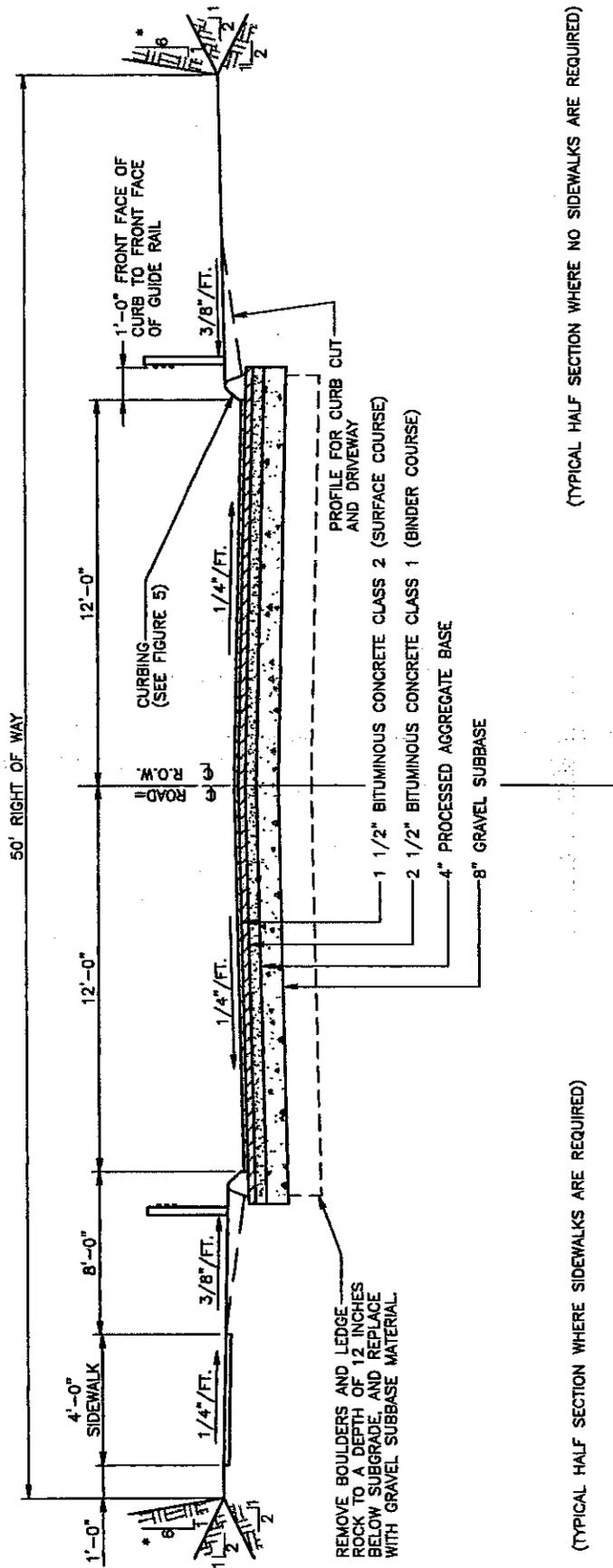
Appendix A

Standard Detail Drawings

COVENTRY ROAD REGULATIONS

APPENDIX A

STANDARD DETAIL DRAWINGS



(TYPICAL HALF SECTION WHERE NO SIDEWALKS ARE REQUIRED)

(TYPICAL HALF SECTION WHERE SIDEWALKS ARE REQUIRED)

* MAXIMUM SLOPE PERMITTED IN ROCK CUTS ONLY.

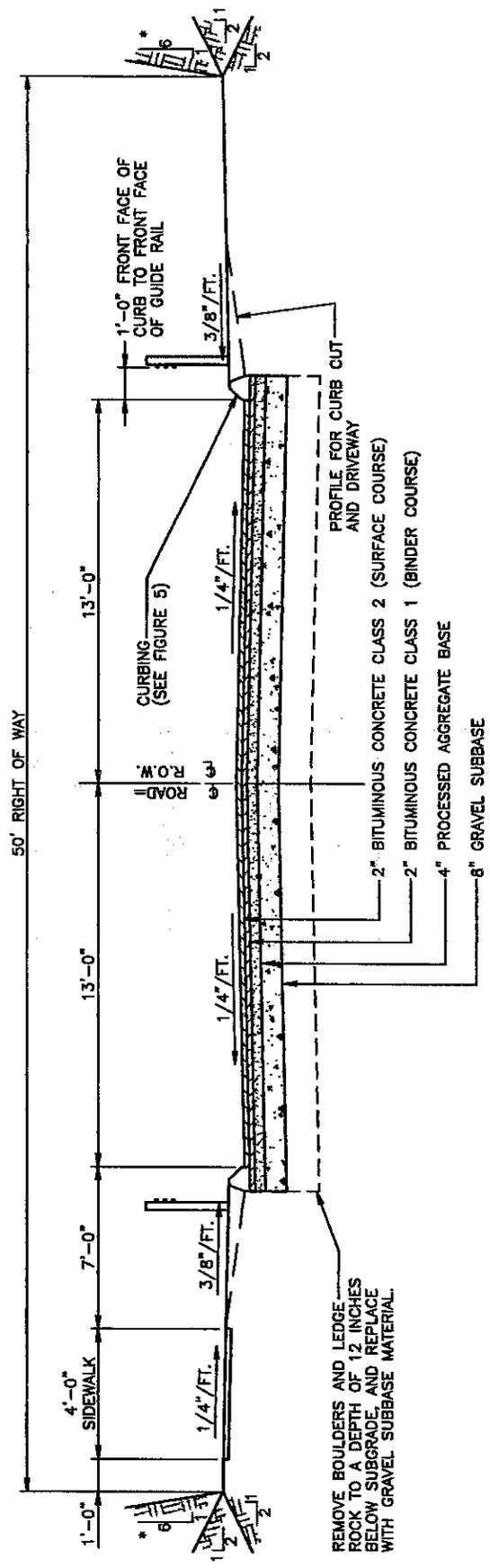
STANDARD DETAIL DRAWING
TYPICAL ROAD SECTION
MINOR LOCAL STREET

SCALE: NONE

REVISIONS:

COVENTRY
ROAD REGULATIONS

DATE: APRIL, 1998



(TYPICAL HALF SECTION WHERE NO SIDEWALKS ARE REQUIRED)

(TYPICAL HALF SECTION WHERE SIDEWALKS ARE REQUIRED)

* MAXIMUM SLOPE PERMITTED IN ROCK CUTS ONLY.

STANDARD DETAIL DRAWING
TYPICAL ROAD SECTION
SECONDARY LOCAL STREET

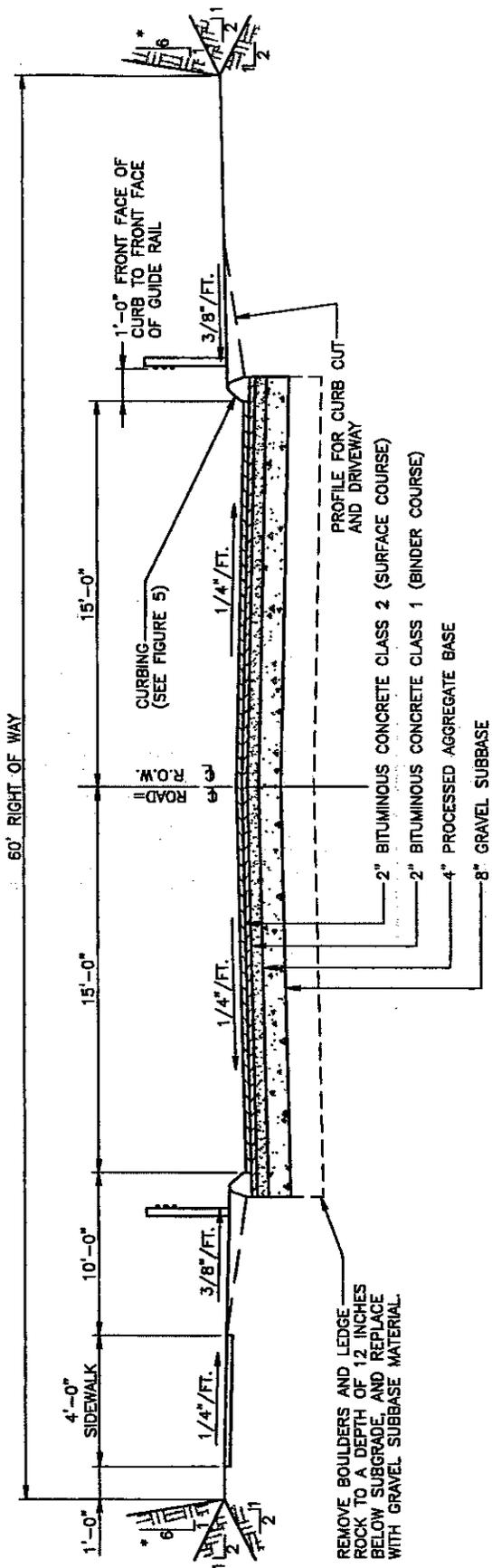
REVISIONS:

SCALE: NONE

COVENTRY
ROAD REGULATIONS

DATE: APRIL, 1998

FIGURE 2



(TYPICAL HALF SECTION WHERE NO SIDEWALKS ARE REQUIRED)

(TYPICAL HALF SECTION WHERE SIDEWALKS ARE REQUIRED)

* MAXIMUM SLOPE PERMITTED IN ROCK CUTS ONLY.

STANDARD DETAIL DRAWING
TYPICAL ROAD SECTION
MAJOR LOCAL STREET

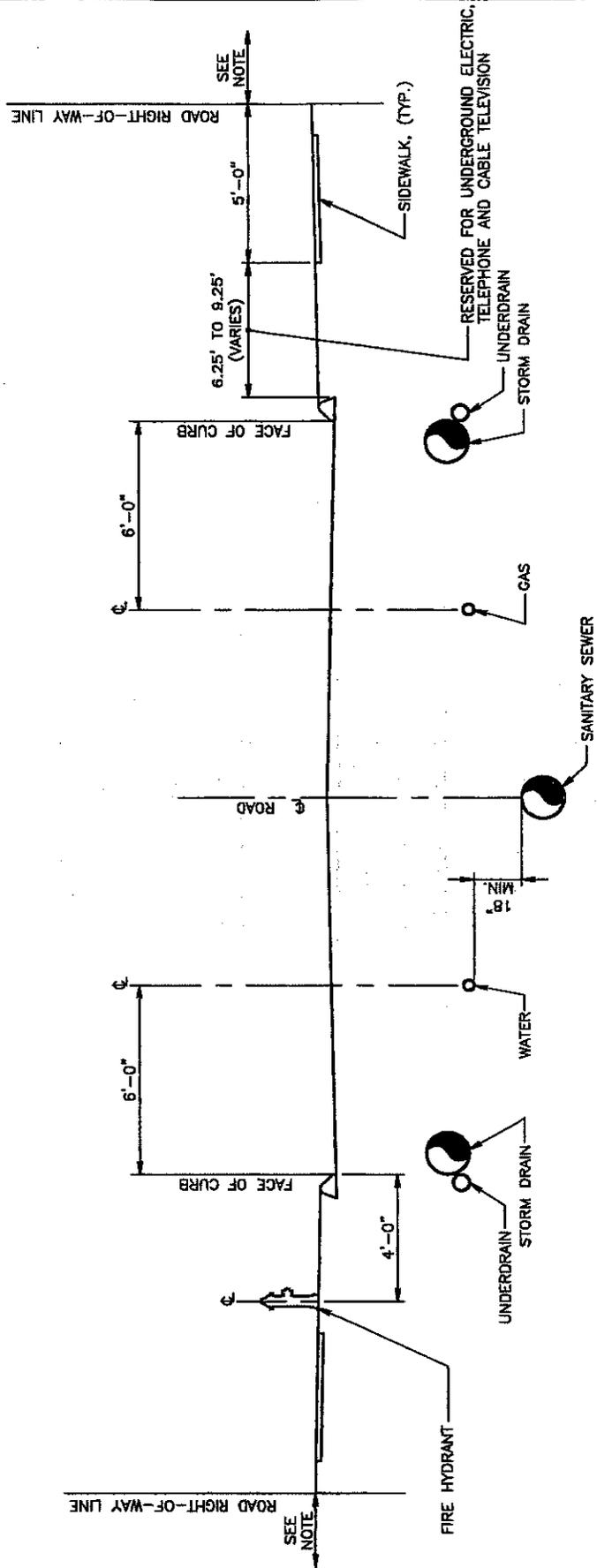
SCALE: NONE

REVISIONS:

COVENTRY
ROAD REGULATIONS

DATE: APRIL, 1998

FIGURE 3



NOTE:
ELECTRICAL TRANSFORMERS SHALL BE LOCATED OUTSIDE
OF THE ROAD RIGHT-OF-WAY.

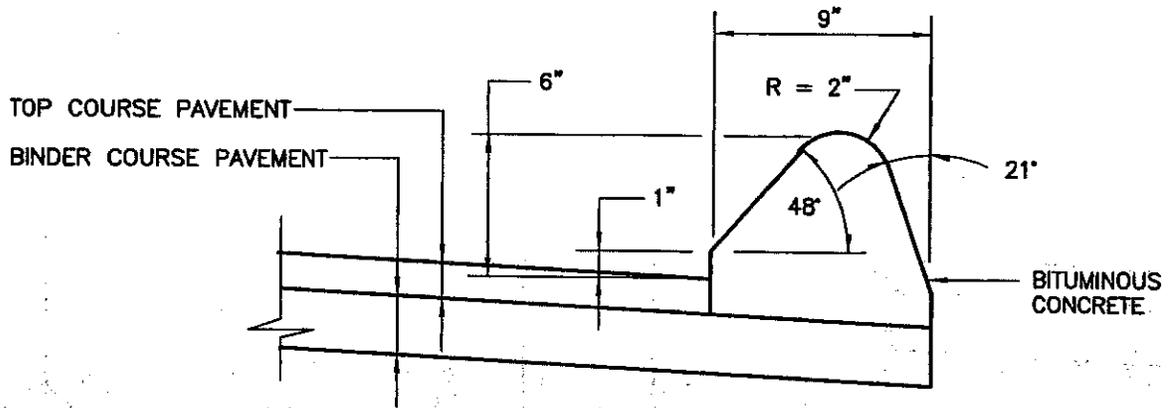
STANDARD DETAIL DRAWING
UNDERGROUND UTILITY ASSIGNMENTS

SCALE: NONE

**COVENTRY
ROAD REGULATIONS**

DATE: APRIL, 1998

REVISIONS:



STANDARD DETAIL DRAWING
BITUMINOUS CONCRETE LIP CURB

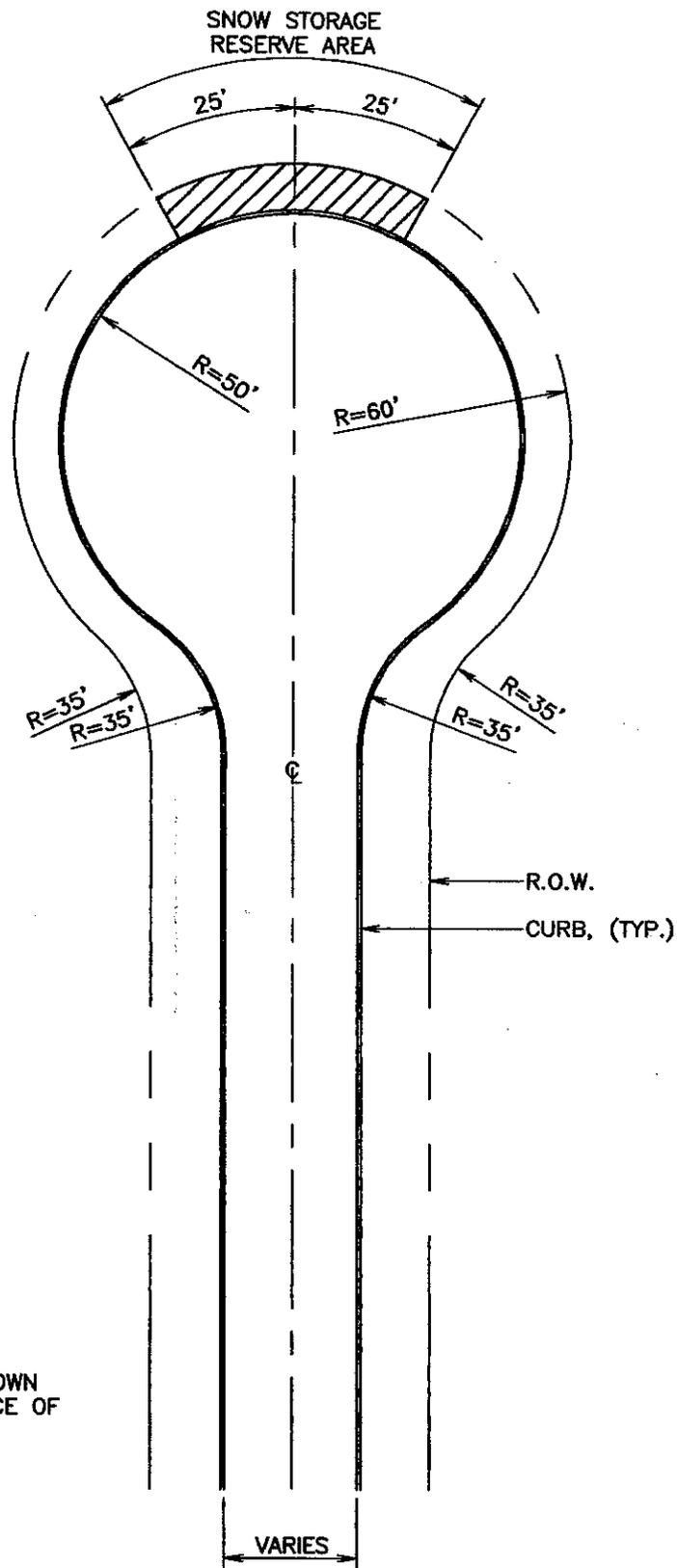
SCALE: NONE

COVENTRY
ROAD REGULATIONS

DATE: APRIL, 1998

REVISIONS:

FIGURE



NOTE:
 1. CURB RADII SHOWN
 ARE TO FRONT FACE OF
 CURB.

STANDARD DETAIL DRAWING

**CUL-DE-SAC
 (CIRCULAR)**

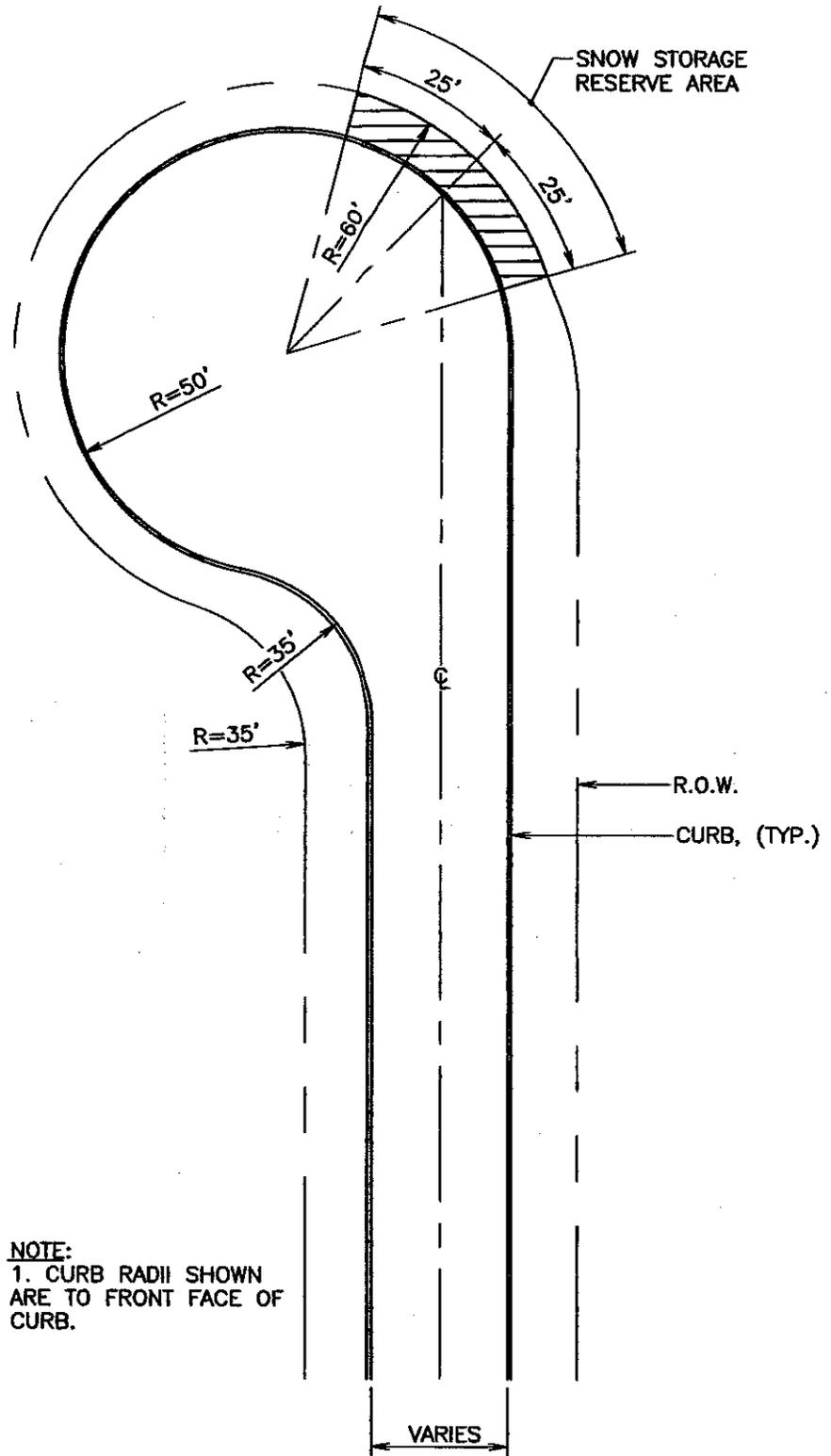
SCALE: 1"=40'

**COVENTRY
 ROAD REGULATIONS**

DATE: APRIL, 1998

FIGURE

REVISIONS:



NOTE:
 1. CURB RADII SHOWN
 ARE TO FRONT FACE OF
 CURB.

STANDARD DETAIL DRAWING

CUL-DE-SAC

(OFFSET)

SCALE: 1"=40'

**COVENTRY
 ROAD REGULATIONS**

DATE: APRIL, 1998

FIGURE

REVISIONS: