

The following items have been requested by Councilor Straw to be provided for the September 4, 2019 Town Council workshop.

• **Comprehensive Plan, pps 51-52, Bikeways and Complete Streets**

Bikeways

With lightly traveled roads, few signalized intersections, and beautiful scenery, Cape Elizabeth is a great town for bicycling. However, bike facilities are limited to shoulders on Route 77, Shore Road (South Portland line to Fort Williams Park), Spurwink Avenue, and Sawyer Road. In addition, there are shared travel lanes on Old Ocean House Road, Two Lights Road, Kettle Cove Road, and Fessenden Road, and a growing network of off-road trails.

There may be opportunities for making some low-cost improvements to the existing road system to improve biking safety. For example, restriping to create dedicated bike lanes may be appropriate on Shore Road from the South Portland line to Fort Williams Park and on Route 77 in the Town Center, or any location on Route 77 where parking is prohibited or discouraged. In many cases, pavement stenciling may be sufficient. Pavement markings that indicate a shared (vehicle) bike lane or "bikes may use the full lane" may also be appropriate for Shore Road and Mitchell Road.

Complete Streets

In 2017 Cape Elizabeth adopted a Complete Streets Policy. Complete Streets are designed and operated to provide safety and accessibility for all current and future transportation users whether they are pedestrians, bicyclists, transit riders or vehicular motorists, regardless of age or ability. Complete Streets principles contribute to the safety, health, economic viability, and quality of life by providing accessible and efficient connections between home, school, work, recreation and commercial centers. Ultimately, the town envisions a well-connected multimodal network of transportation facilities that appropriately relates to the existing built environment in capacity and scale, recognizing that all streets are different and the needs of various users will need to be balanced in a flexible manner.

This Complete Streets Policy supports the goals outlined in the town's 2007 Comprehensive Plan, and the Town Center Plan by creating a safer, cost effective, equitable, and fully accessible transportation network that supports walkable, attractive neighborhoods and safe connections from those neighborhoods to local businesses. It also contributes to the town's livability goals by encouraging energy and environmental sustainability.

• **Comprehensive Plan Recommendations 15 and 16**

15. Expand the sidewalk and bicycle network throughout the town. Priorities for sidewalk and bikeways should feature adding sidewalks to Mitchell Rd and other collector roads, completing the town center sidewalk network and overall increased funding for a sidewalk network. Strategies to enhance bicycle safety on roads with a high volume of bicycle traffic, particularly Shore Road, Mitchell Road, and Spurwink Ave, should be implemented.
16. Make specific improvements on existing pedestrian and bicycle infrastructure in safety-challenged areas.

• **Complete Streets Policy adopted 1-9-2017**

**Town of Cape Elizabeth  
Complete Streets Policy  
Adopted 1-9-2017**

**1. Vision and Purpose**

Complete Streets are designed and operated to provide safety and accessibility for all current and future transportation users whether they are pedestrians, bicyclists, transit riders or vehicular motorists, regardless of age or ability. Complete Streets principles contribute toward the safety, health, economic viability, and quality of life in a community by providing accessible and efficient connections between home, school, work, recreation and commercial centers. Ultimately, the town envisions a well-connected multimodal network of transportation facilities that appropriately relates to the existing built environment in capacity and scale, recognizing that all streets are different and that the needs of various users will need to be balanced in a flexible manner.

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**2. Project Considerations**

Early consideration of all modes for all users will be important to the success of this policy. Plan and design of projects that affect public streets shall include due consideration to all roadway users from the very start of planning and design work. This will apply to all roadway projects, including those involving new construction, reconstruction, repaving/ rehabilitation or roadway retrofits. Roadway retrofits may include changes in the allocation of the right-of-way and pavement space on an existing roadway, such as changes to the number and use of lanes, changes in lane widths, and/or the addition or reconfiguration of on-street parking.

When applying for and reviewing projects for funding purposes regardless of funding source, Complete Street practices and principles will be included, as appropriate and reasonable, for all projects that affect the public right-of-way.

### **3. Exceptions**

Bicyclist and pedestrian transportation users shall be included in street construction, re-construction, re-paving, and re-habilitation projects, except under one or more of the following conditions:

- a. The project involves only ordinary maintenance activities designed to keep assets in serviceable condition, such as mowing, cleaning, sweeping, spot repair, concrete joint repair, or pothole filling, overlay paving projects or when interim measures are implemented on temporary detour routes.
- b. The town staff determines there is insufficient space to safely accommodate new facilities and a parallel or nearby facility provides a reasonable level of similar accessibility to destinations.
- c. The town staff determines there are relatively high safety risks.
- d. The town staff or Town Council exempts a project due to the excessive and disproportionate cost of establishing a bikeway, walkway or transit enhancement as part of a project in relation to the anticipated number of users.
- e. As part of its development review process, the Planning Board may waive a sidewalk on one side of the road based upon its waiver provisions.
- f. The Town Engineer, Public Works Director and Town Planner collectively determine that the construction is not practically feasible or cost-effective

because of significant or adverse environmental impacts to historic resources, streams, flood plains, remnants of native vegetation, wetlands, steep slopes or other critical areas, or due to impacts on neighboring land uses, including impact from right of way acquisition.

- g. The town staff determines that a future bus transit route is not likely.

#### **4. Network**

Complete streets are planned, designed, maintained and operated to enable safe, convenient, appealing and continuous travel networks for all users. The goal is to formalize the planning, design, operation, and maintenance of streets so that pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move from destination to destination along and across the street network. Complete Streets can be achieved through network level improvements, through integration into single location projects, or incrementally, through a series of small improvements or maintenance activities.

Transportation improvements will include facilities and amenities, as appropriate, that are recognized as contributing to Complete Streets, which may include pavement markings and signs; street and sidewalk lighting; sidewalks and pedestrian safety improvements such as medians/pedestrian refuges, curb extensions and crosswalk improvements; improvements that provide ADA (Americans with Disabilities Act) compliance and full accessibility such as curb ramps and accessible pedestrian signals; transit accommodations including bus shelters and improved pedestrian access to transit stops and centers; bicycle detection at intersections and bicycle accommodations including, shared use lanes, paved shoulders, wide travel lanes or bike lanes as appropriate; bicycle parking; and street trees, landscaping, street furniture and adequate drainage facilities, including opportunities for 'green' stormwater management facilities and practices.

#### **5. All Agencies and All Roads**

The design of new, rehabilitated or reconstructed facilities should anticipate likely future demand for bicycling, walking, transit and motorist use and should not preclude the provision of future improvements.

The Town of Cape Elizabeth will coordinate and collaborate with other transportation agencies including PACTS and the Maine DOT, and other users of the public right-of-way, such as utilities and public transportation providers, to ensure that the principles and practices of Complete Streets are embedded within their planning, design, construction, and maintenance activities.

## **6. Design Standards and Guidelines**

The Town shall update, develop and adopt inter- departmental policies, zoning and performance standards and other guidelines as applicable, using resources identifying best practices in pedestrian friendly design, street design, construction, operations and maintenance. These resources may include, but are not limited to: the AASHTO Green Book; AASHTO Guide for the Planning, Designing and Operating Pedestrian Facilities; AASHTO Guide for the Development of Bicycle Facilities; ITE Designing Walkable Urban Thoroughfares: A Context Sensitive Approach; NACTO Urban Bikeway Design Guide; Manual on Uniform Traffic Control Devices; US Access Board Public Right-of-Way Accessibility Guidelines; and the PACTS Regional Bicycle and Pedestrian Facility Design Guidance for the PACTS Metropolitan Planning Area.

When fulfilling this Complete Streets policy, the town will generally follow the design manuals, standards and guidelines above, as applicable, but should be not be precluded from considering innovative or non- traditional design options where a comparable level of safety for users is present or provided.

## **7. Community Context**

It is important to the success of the Cape Elizabeth Complete Streets Policy to ensure that the project development process includes early consideration of the land use and transportation context of the project, the identification of gaps or deficiencies in the network for various user groups that could be addressed by the project, and an assessment of the tradeoffs to balance the needs of all users. The context factors that should be given high priority include the following: Whether the corridor provides a primary access to one or more significant destinations such as a community or regional park or recreational area, a school, a shopping/commercial area, a local transportation center or other multimodal center, or an employment center.

- a. Whether the corridor provides access across a natural or man-made barrier such as a river or arterial.
- b. Whether the corridor is in an area where a relatively high number of users of non-motorized transportation modes can be anticipated.
- c. Whether a road corridor provides, or could provide, continuity or connectivity links for an existing trail or path network.
- d. Whether nearby and/or parallel routes provide a similar Level of Service,

convenience and connectivity already exists.

## **8. Performance Measures**

The Town will define performance measures to track the progress of implementation of this policy. Such measures shall include, but not be limited to: improvements in safety for all roadway users; increased capacity and connectivity for all modes of transportation; usage (such as mode share) of biking, walking and transit; miles of bicycle and pedestrian facilities; and attainment of ADA compliance. Such measures shall be incorporated into relevant plans, manuals, policies, processes and programs. The Town shall work with the state and other agencies such as the regional planning organization (GPCOG) to track such performance measures, as appropriate.

## **9. Implementation**

The Town will develop implementation strategies that will include, but are not limited to:

- a. Evaluate and revise standards and practices.
- b. Develop project checklists for the incorporation of Complete Streets elements into projects, plans and other activities affecting streets and the public-right-of way.
- c. Work with governmental agencies such as PACTS and the Maine DOT to encourage incorporation of the Town's Complete Street Policy.
- d. Develop Level/Quality of Service indicators for motor vehicle, pedestrian, bicycle and other travel modes.
- e. Continue education of staff and public officials on the principles and practices of Complete Streets.
- f. Develop tracking measures such as safety, facility use and modal shifts to gauge success.

**•Chapter 16 Subdivision Ordinance, pps 32-33, Appendix E (specifically Collector Rd cross section)**

prevent erosion and where indicated on the plans, erosion control mesh shall be placed in accordance with the technical requirements of Section 613 of said MDOT Specifications.

8. Seeding. All exposed slopes and areas not to be paved shall be seeded in accordance with the technical requirements of Section 618 of said MDOT Specifications. Seeding Method 1 shall be used. Mulch shall be applied to all seeded surfaces in accordance with the technical requirements of Section 619 of said MDOT Specifications.

**Road Classification Standards Table**

	Right of Way	Traveled Way	Minimum Intersection Sight Distance	Width of Shoulder	Horizontal Sight Distance	Design Speed	Sidewalk	Esplanade	Center Line Radius
ARTERIAL	52'	24'	200'	5'	200-400	30-45	5' (1)	5'	300-800
COLLECTOR	50'	24'	200'	1'	200-250	30-35	5' (1)	6'	300-400
RURAL CONNECTOR	66'	24'	200'	4'	200-250	30-35	5'	7'	300-400
FEEDER	50'	24'	150'	0'	150-200	25-30	5'	7'	150-300
LOCAL	50'	22'	125'	0'	125-150	20-25	5'	8'	125-150
(1) Either sidewalk or bikeway. Width should increase for dual purpose									

See also Appendix E, Road Profiles

**Sec. 16-3-3. Design of Other Improvements**

Storm water collection and transport systems shall comply with the Town of Cape Elizabeth Stormwater and Non-Stormwater Control Ordinance, Chapter 18, Article II and the Town of Cape Elizabeth Post Construction Stormwater Management Ordinance, Chapter 18, Article IV.

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2. Ditches, where permitted, on the approved plans shall have a slope of at least two (2) percent and side slopes not exceeding three to one (3:1). Where required to prevent erosion, ditches shall be riprapped, sodded, or otherwise protected.
3. Storm drain pipelines and culverts shall be installed in accordance with the technical requirements of Section 603 of said MDOT Specifications. All pipes shall be designed to withstand earth backfill plus H-20 wheel loadings. Trench backfill over drain lines within the paved way shall be compacted to ninety-five (95) percent of optimum density. Outside of paved areas backfill shall be compacted to ninety (90) percent of optimum density.
4. When required to assure a stable subbase, rigid perforated underdrain pipe shall be installed in accordance with the technical requirements of Section 605 of said MDOT Specifications. Coiled underdrain pipe will not be permitted.
5. Manholes and catch basins on storm drain lines shall meet the technical requirements of Section 604 of said MDOT Specifications. Shop drawings for the units desired for use shall be submitted to the Town Engineer for approval prior to placement.

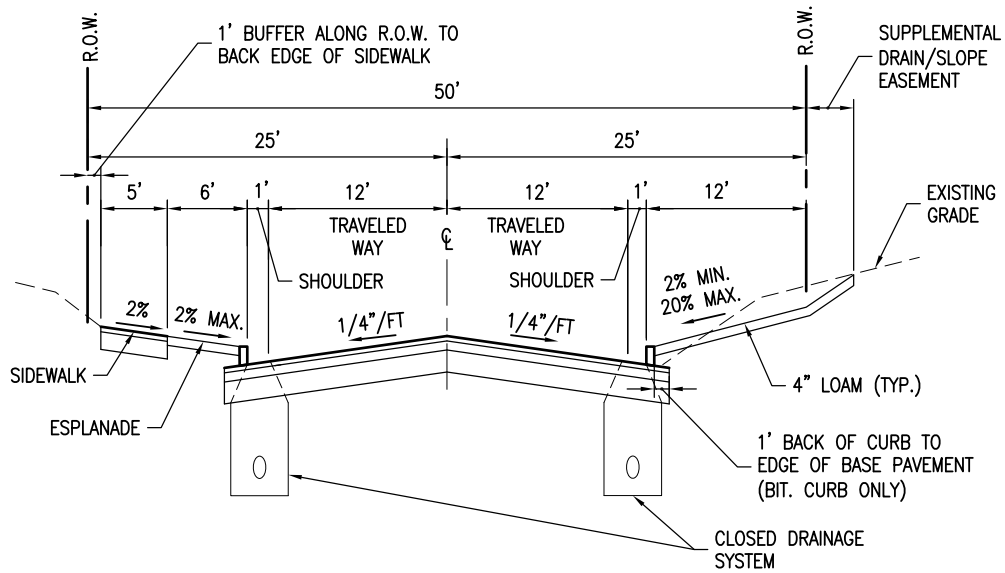
#### **B. Underground Utility Lines**

1. All sanitary sewer lines and appurtenances shall be constructed in accordance with the requirements of the Town of Cape Elizabeth Sewer Ordinance, particularly Sec. 15-1-6 and 15-1-7.
2. Any road to be accepted shall be served by a water main if said road joins a road containing a water main. No water main shall be less than eight (8) inches in diameter unless the fire department and the Planning Board certify in writing that a water main less than eight (8) inches in diameter will furnish adequate water service for the road to be accepted and for any future extension of said road.
3. All underground utility mains shall be installed before the gravel surface is placed; and, if possible utility service lines to individual lots shall be installed before gravel surface is placed.
4. Backfill materials for all underground utilities shall be compacted to ninety-five (95) percent of optimum density under paved areas and to ninety (90) percent of optimum density under non-paved areas.

#### **Sec. 16-3-4. Additional Standards**

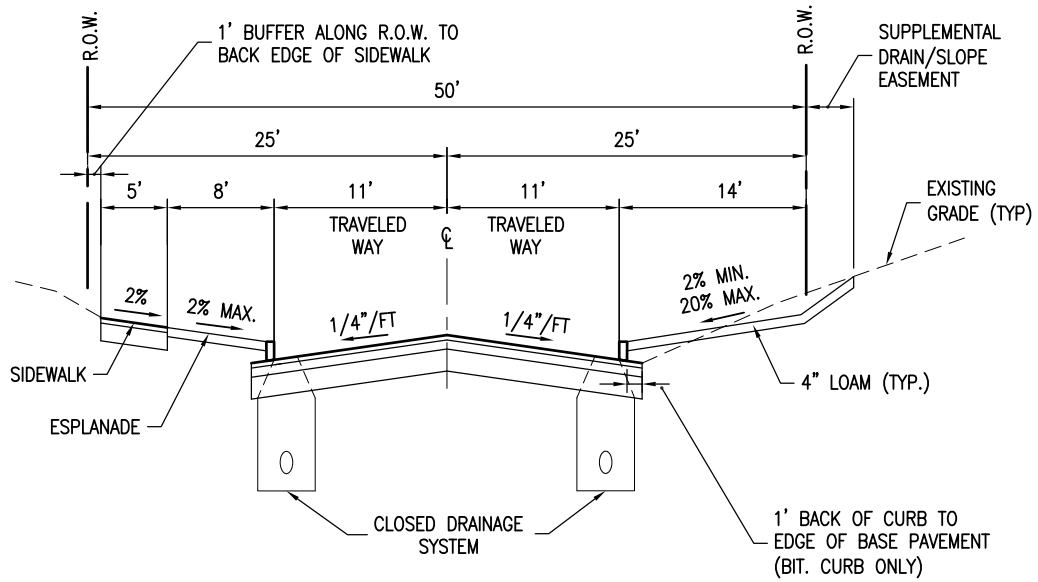


- (a) **Right-of-Way.** The Planning Board with the advice of the Town Engineer may require rights-of-way wider than those set forth in the **Road Classification Standards Table**, in order to satisfy the purposes of this Ordinance.



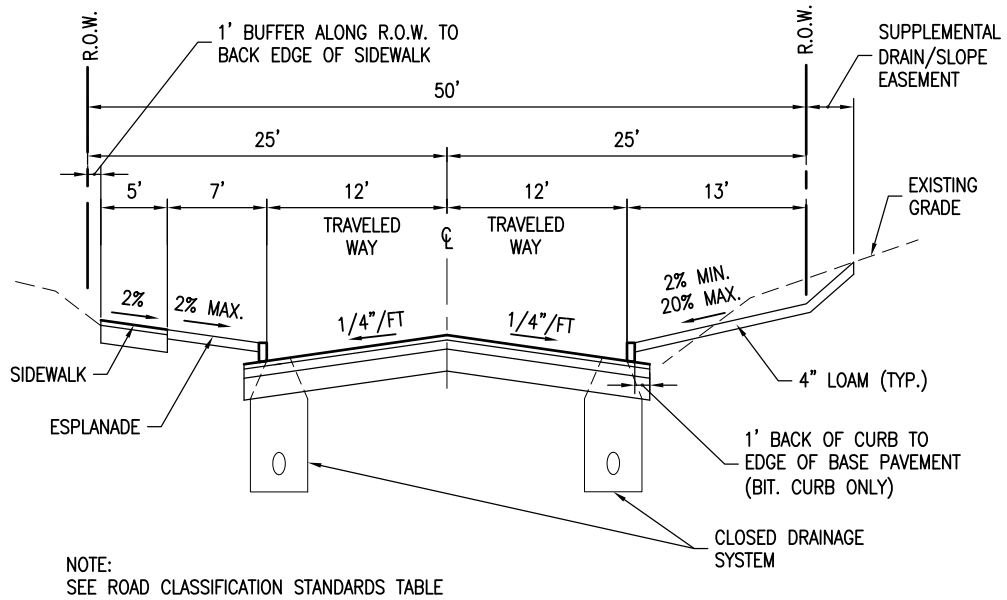
NOTE:  
SEE ROAD CLASSIFICATION STANDARDS TABLE

COLLECTOR ROAD  
NOT TO SCALE

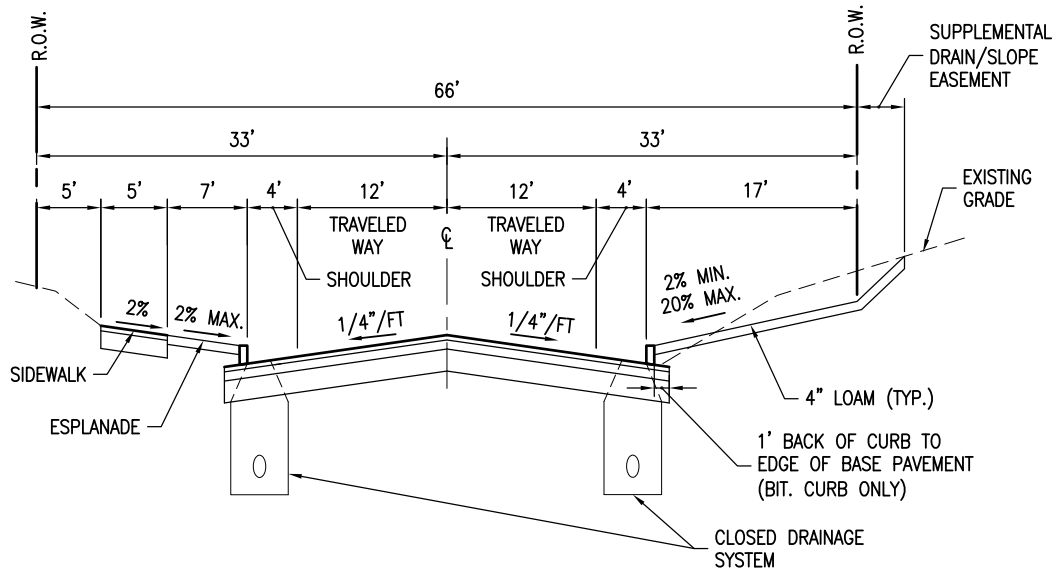


NOTE:  
SEE ROAD CLASSIFICATION STANDARDS TABLE

LOCAL ROAD  
NOT TO SCALE

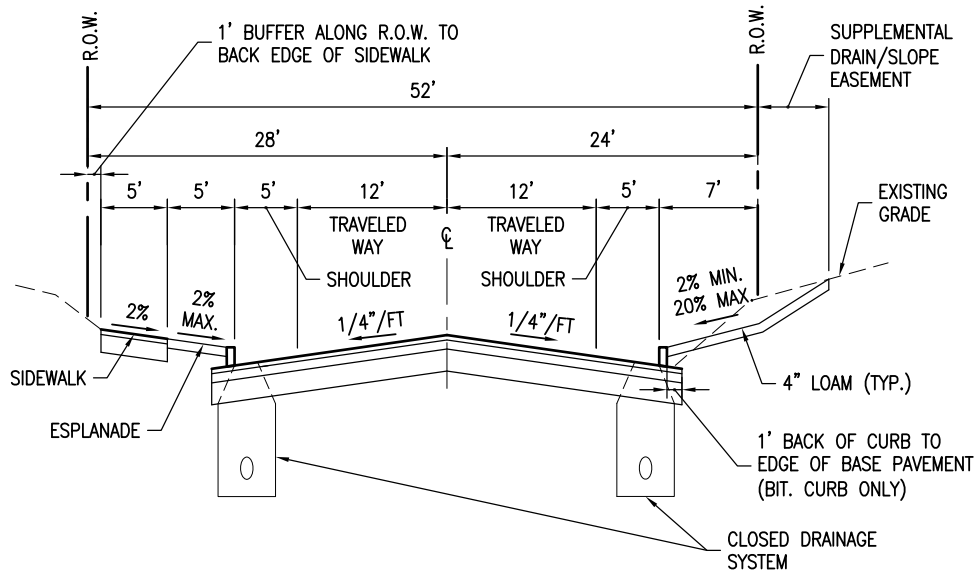


FEEDER ROAD  
NOT TO SCALE



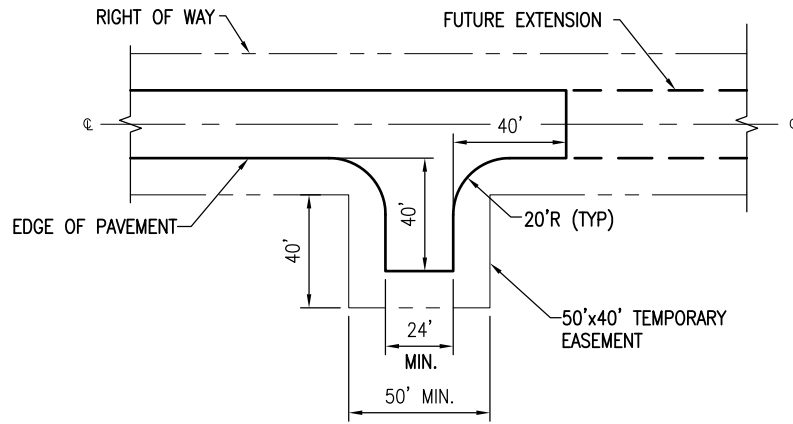
NOTE:  
SEE ROAD CLASSIFICATION STANDARDS TABLE

RURAL CONNECTOR ROAD  
NOT TO SCALE

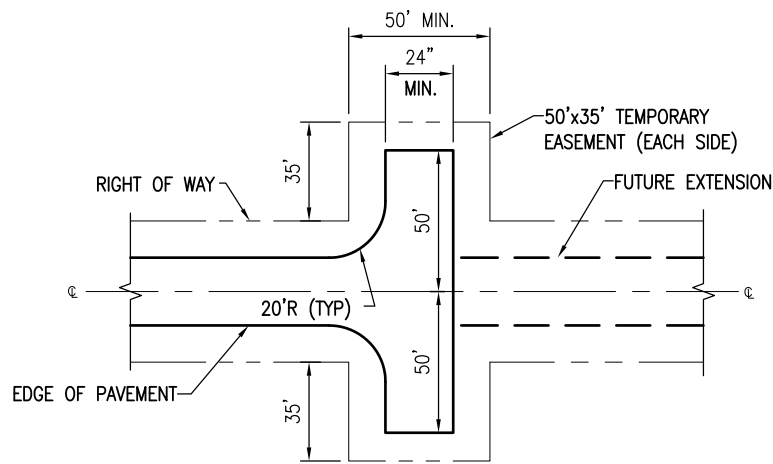


NOTE:  
SEE ROAD CLASSIFICATION STANDARDS TABLE

ARTERIAL ROAD  
NOT TO SCALE

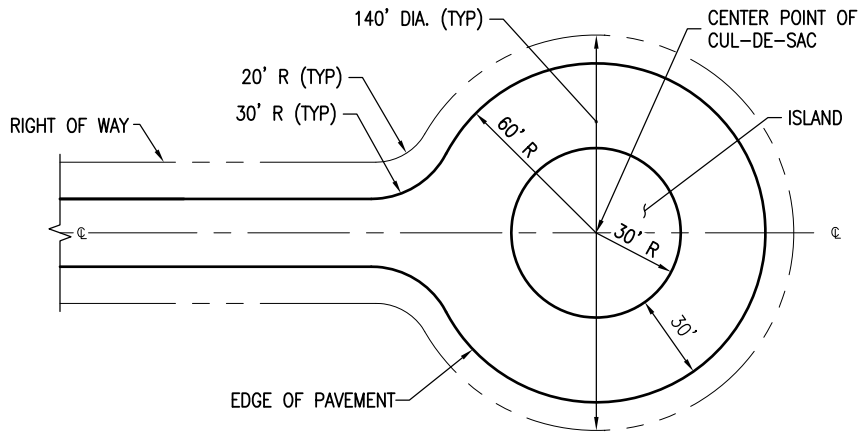


ALTERNATE #1

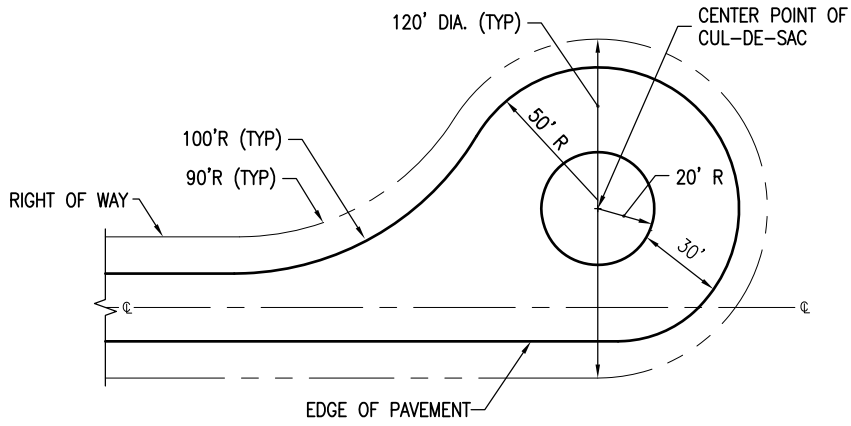


ALTERNATE #2

MINIMUM DIMENSIONS  
TURN-AROUNDS  
 NOT TO SCALE



MINIMUM DIMENSIONS  
CUL-DE-SAC WITH ISLAND  
 NOT TO SCALE



MINIMUM DIMENSIONS  
CUL-DE-SAC WITH ISLAND  
 NOT TO SCALE