

# **CITY ADMINISTRATION POLICY & PROCEDURES**

## **New Road Construction Quality Standards**

### **Pertaining to ORDINANCE 06.04**

#### **I. Policy**

It shall be the policy of the City of Gustavus that roads constructed in Gustavus since the community became a City shall at least meet the standards herein in order to qualify for City maintenance.

#### **II. Scope**

- A. This policy applies to new subdivision road construction begun after the incorporation of Gustavus as a City, for which City road maintenance service is requested.
- B. This policy does not apply to roads that existed before incorporation of the City of Gustavus and does not imply that those pre-existing roads will be, or necessarily should be, reconstructed by the City to meet this standard. However neighborhoods upgrading existing roads are encouraged to consider these standards in their planning.
- C. This policy does not apply to access roads or driveways entirely on private property even if said roads serve multiple residences or properties.

#### **III. Regulatory requirements**

- A. The constructor of a subdivision road shall demonstrate conformance with all State and Federal regulatory requirements for construction of the road. Specifically included are permits for wetland construction or fish stream construction from the US Army Corps of Engineers or the Alaska Department of Natural Resources, Habitat Division. The conformance to these standards may be demonstrated in the Engineer's drainage plan.
- B. Subdivision roads shall only be constructed as shown on an approved subdivision plat from the platting authority covering Gustavus.

- C. Subdivision roads shall be constructed within the platted right-of-way, only, unless a specific variance is approved by the platting authority.

#### **IV. Road classifications and minimum widths**

- A. Road Classifications:

Pioneer access roads may be appropriate for access to individual or non-residential properties requiring road construction.

Local road 1 is a road within residential subdivisions providing direct access to individual properties and having the potential of serving 10 or fewer residential lots, with a maximum length of 1,320 feet.

Local road 2 is a road within residential subdivisions that provides or supports direct access to 11 to 40 lots and/or is greater than 1,320 feet in length. Also the road does not function as a minor collector.

Minor Collectors collect and distribute traffic from local roads and carry it to major collectors or the arterial system. Minor collectors serve as potential through or spine roads within subdivisions or serve nonresidential uses including moderate-traffic retail or lodging facilities.

Major Collectors collect traffic from local streets and minor collectors, and from high-traffic public facilities, and channel it into the arterial system.

Arterials are asphalt-paved roads maintained by the Alaska DOT.

- B. Minimum ROW design and construction widths:

Right-of-way (ROW) dimensions may be recommended by the city, but they are ultimately determined by the platting authority and shown on the approved subdivision plat. The City *recommends* to subdivision designers that road ROW widths be no less than the minimums indicated in Table 1, below. The minimum *recommended* ROW radius for a cul-de-sac is 50 feet. It is the policy of the City that, in order to qualify for City maintenance, new roads constructed after Gustavus became a City shall have traffic-way and shoulder widths at least as wide as the indicated minimums in Table 1.

Table 1. Minimum design and construction widths for new Gustavus Roads

Road Classification	Minimum ROW (feet)	Minimum traffic-way (feet)	Minimum with shoulder (2 feet each side)
Pioneer	N/A	12	12
Local 1	40	14	18
Local 2	40	14	18
Minor Collector	40	18	22
Major Collector	60	20	24
Arterial (DOT)	N/A	N/A	N/A

Road intersection flair radius: Roads must be flaired at intersection at intersections to provide for ease of turning and sight distance. Radius of the flair shall be at least 20 feet unless that would put construction outside of the ROW

## V. Road construction standards

### A. Sub base:

1. All base material shall be placed upon a properly prepared and compacted sub base of sufficient depth and composition to ensure a drivable surface during adverse weather conditions.
2. Prior to construction of the road sub base, all organic materials shall be removed down to native soil where road base materials will be laid. Variations to this standard shall be submitted to and may be approved by the Road Committee.
3. Trees and brush shall be removed for at least 5 feet beyond each road shoulder and to a height of 14 feet above the road. This debris may be burned or otherwise shall be removed from the road ROW, but only to a site where permission has been granted by the site owner.

B. Base: Subdivision roads shall be constructed with at least 12 inches of base material, with the top four inches surface course containing material no larger than two inches in diameter. All material shall be non frost susceptible.

C. Materials: Borrow may be procured from the State gravel pit in Gustavus, or from other sources approved by the Committee. Borrow

shall be earth, sand, gravel, rock or combination thereof, and shall contain not muck, peat, frozen material, roots, sod, or other deleterious matter.

- D. Elevation: Subdivision roads shall be built to an elevation sufficient to ensure a drivable surface for two-way traffic during periods of adverse conditions or seasonal high water flows. The surfaces of the traffic-way and shoulders shall be a minimum of 4" above the adjacent surface.
- E. Placement: All construction shall be contained within the platted right-of-way.
- F. Compaction and Grading.
  - 1. The constructor shall grade and compact all roadway surfaces prior to final inspection and approval by the Road Maintenance Committee.
  - 2. All unpaved roads shall have a three to five percent crown. (A reduced crown may be maintained during icy winter conditions.)
  - 3. The roadway shall be compacted to provide a firm drivable surface, capable of supporting a loaded dump truck without rutting.

## **VI. Structures and bridges**

The design of bridges, bottomless culverts, and culverts of 36 inches in diameter or greater, retaining walls and other structures shall be prepared, signed and sealed by a registered professional engineer.

## **VII. Drainage**

- A. A drainage plan, if required for the site, shall be prepared, signed and sealed by a registered professional Engineer and shall include, at a minimum, a description of the property, description of the drainage basin disturbed by the development, methods and assumptions of the registered professional Engineer, and results for culvert locations, culvert outlet controls, drainage easements, ditch section and ditch lining.

- B. The design of any drainage structures or reservoirs shall be sufficient to carry surface water runoff from fall rains and/or ten-year rainstorm events.
- C. All structures for erosion/runoff control shall be designed by the subdivider in compliance with applicable state and federal statutes and regulations.
- D. Minimum roadway culvert size for drainage shall be 18-inch diameter corrugated metal or ABS plastic pipe or equal with at least a one-percent drainage grade through the culvert. In areas where the natural drainage is one-percent or less, the minimum drainage grade through the culvert may be reduced to three-tenths of one percent.
- E. All structures included in the drainage plan for the road section under construction, shall be constructed by the road constructor as they were designed.

## **VIII. Utilities**

- A. Utilities, including cable, transformers and phone/power pedestals shall be located within the dedicated ROW and not on private property. Placement of utilities shall be outside of the traffic-way with provision for future expansion of the traffic-way width taken into account, and at least beyond a 20 foot radius from the center of any intersection for above ground installations. All work shall be performed per NESC Utility Standards. Coordinate all work with the local utility company.
- B. Utility Structures: All above ground utility structures shall be within 2 feet of the outside edge of the ROW to provide clearance for snowplowing and other maintenance activities.

## **IX. Signs and Road Names.**

- A. Road names shall be approved by the City Council and shall not duplicate any existing road or subdivision names in spelling or sound such that they may be confused with existing names.
- B. An existing road name shall be continued when a new road extends the alignment of an existing road.
- C. Subdivision roads signs shall be provided by and erected by the constructor.
- D. Subdivision road name signs shall be provided and installed by the constructor. All signs and sign support columns shall be of metal construction and conform to the State of Alaska DOT/PF Standard Specifications for Highway Construction.
- E. If approved by the Road Maintenance Committee, the constructor may be permitted to use alternate sign and support material for artistic or aesthetic reasons if the same degree of permanence and visibility can be achieved.

*Sandra Markham*

*Sept. 13, 2007*

Signed: Mayor of the City of Gustavus

Date

Adopted by City Council – September 13, 2007