

# City of Bainbridge Island

Public Works Engineering 280 Madison Avenue N, Bainbridge Island, WA 98110 pwadmin@bainbridgewa.gov P 206.842.2016 F 206.780.3710

Permit #:
Existing Only RA
Fee: \$250 □ Paid
Receipt #:

# **Road Approach Application**

Applicant:	Email:	Phone:	
Applicant Address:	City/State/Zip:		
Site Address (if different):			
Planning & Community Developmen	t (PCD) Project No. ( <i>if</i>	applicable):	
Section 1 – General Information Assessors Tax Parcel #: (All new approaches are submitted through NOTE: Applications for existing road appro	PCD – Existing Road App	roaches are submitted through PW Engr.)	
Section 2 – Project Details	gged. Permits will not	be processed until the approach is flagged**  Nearest Cross Street	
All work must be performed to the City of Be material must meet WSDOT Standards and line or 13 feet, whichever is greater. This pe construction, utilities, and infrastructure construction.	ainbridge Island road con I specifications. Asphalt/ rmit is issued for access construction.	mooth Wall Polyethylene  Other  Struction standards and the BIMC 20.04 Fire Code. All  Concrete from edge of existing road surface to the property connection only. Additional permits are required for road	
City to provide any maintenance or service oth	ner than that required by la roperty served by the abov	re referenced approach, or that I am authorized by said owner	
Applicant Signature		Date	
Approved - Engineering Division	Date	Inspected – Engineering Date	

### City of Bainbridge Island Road Approach Application Procedures

Any connection to be made to a public roadway requires approval from the Public Works / Engineering Department. The following are the steps for this procedure:

Any connection to be made to a public roadway requires approval from the Public Works Engineering Department. The following are procedure steps:

- 1. All new and relocated road approaches to public roads shall be constructed in accordance with the most current edition of the following: City of Bainbridge Island Design and Construction Standards and Specifications, the BIMC Fire Code Chapter 20.04, and the most current edition of the WSDOT/APWA Standard Plans and Specifications.
- 2. A construction plan showing the connection to the right of way (approach) must be prepared in accordance with the standards outlined in the above-mentioned documents and must be provided to the City for review and approval prior to issuance. Plan should include: existing conditions; geometry of driveway approach; material specifications; culvert locations; and adjacent access points or streets (if necessary).
- 3. Driveway approach location must be flagged when the application is submitted to allow for approval.
- 4. Driveway approach should be situated with consideration of traffic safety, sight distances, good construction practice, proper stormwater drainage, and utility locations.
- 5. Driveway approach adjacent to paved roads must be paved within the public right-of-way in accordance with City Standards for the roadway classification.
- 6. Driveway approach adjacent to public gravel roads must be graveled within the public right-of-way to meet the gravel base in accordance with the standards for the roadway classification. Driveways adjacent to public gravel roads can also be paved.
- 7. Driveway approach across existing or proposed concrete sidewalks must be constructed with a concrete apron in accordance with City Standards.
- 8. If the Road Approach Application is for an existing approach, the applicant is required to notify Public Works/ Engineering Department at the completion of construction. All new approaches will be reviewed and inspected via the land use permit process.
  - NOTE: Applications for existing road approaches expire 180 days after approval
- 9. Nothing in this construction shall infringe the City's right to conduct any necessary maintenance within the right of way, nor require the City to provide any maintenance or service other than that required by law or City policy.

#### **Bainbridge Island Municipal Code**

20.04 Fire Code 20.04.080 Amendments to Section 503.

#### **Exceptions:**

- 1. The width may be reduced in residential areas consisting of only single-family homes, providing the width is consistent with public works street standards and not less than a 12-foot-wide drivable surface.
- 2. Public streets shall be in accordance with Public Works Department street standards.

503.2.2 Authority. The fire code official shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. (See also Appendix D Section D102.1.)

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around fire apparatus.

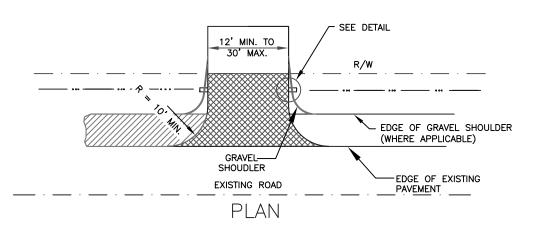
503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO Standard Specification for Highway Bridges HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

503.2.7 Grade. The grade of the fire apparatus access road shall be based on the fire department apparatus and be within the limits established by the fire code official.

503.2.7.1 Public Fire Apparatus Access Roadways. The grade of public fire apparatus access roads shall be in accordance with Public Works Department Standards but shall not exceed the limits set forth in 503.2.7.2.

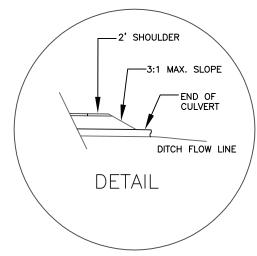
503.2.7.2 Private Fire Apparatus Access Roadways. The grade of existing private fire apparatus access roads shall not exceed 12%.

Exception: Private fire apparatus access roads where grades are greater than 12% but not exceeding 15% shall be paved, or in lieu of paving, shall have an automatic fire sprinkler system installed in any new structure. Grades exceeding 15% will require the fire apparatus access road to be paved, all new structures to be equipped with automatic fire sprinkler systems, and special approval by the fire code official.



#### NOTES:

- 1) FOR ACCESSING RESIDENTIAL DEVELOPMENTS WITH TWO OR LESS DWELLING UNITS (DUPLEX OR SINGLE FAMILY RESIDENCE) PER PARCEL.
- 2) ALL SURFACE DRAINAGE FROM THE DRIVEWAY MUST BE MANAGED ON SITE AND THEN CONTAINED AND DIRECTED TO THE CITY STORMWATER CONVEYANCES NO SURFACE DRAINAGE SHALL FLOW ONTO THE CITY ROAD SURFACE.
- 3) SUBGRADE SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 2-03.3(14)C OF THE WSDOT/APWA SPECIFICATIONS (METHOD B) SURFACING MATERIALS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY (MODIFIED PROCTOR).
- 4) CULVERT PIPE SHALL BE SIZED TO ACCOMMODATE STORMWATER RUNOFF BUT IN NO CASE BE SMALLER THAN 12 INCHES.
- 5) CULVERT COVER DEPTHS LESS THAN 12" REQUIRE APPROVAL BY THE ENGINEER.
- 6) A DRIVEWAY CULVERT HEADWALL, SUBJECT TO APPROVAL BY THE ENGINEER, MAY BE USED IN LIEU OF THE 3:1 SIDESLOPE.
- 7) PAVEMENT IN THE RIGHT-OF-WAY SHELL BE DESIGNED IN ACCORDANCE WITH THE ROADWAY STANDARDS FOR THE EXISTING ROAD.
- 8) ELEVATION DETAILS LOCATED IN DRAWING 8-175.





CITY OF BAINBRIDGE ISLAND STANDARD DETAILS

RESIDENTIAL DRIVEWAY APPROACH — ASPHALT

REV. 12/14/2016 REW. RTG

APPROVED 123116
PUBLIC WORKS OFFECTOR DATE

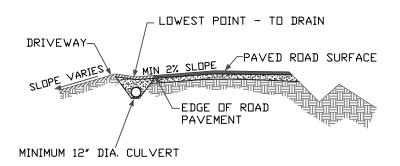
DWG. NO. 8-170

See Text Section 8-10

#### PROPERTY HIGHER THAN ROAD

# DRIVEWAY SLOPE VARIES MIN 2% SLOPE PAVED ROAD SURFACE EDGE OF ROAD PAVEMENT

#### PROPERTY LOWER THAN ROAD



PROPERTY HIGHER THAN ROAD WITH

DRAINAGE SWALE

(USE WHERE DITCH IS TOO SHALLOW FOR CULVERT)

DRIVEWAY

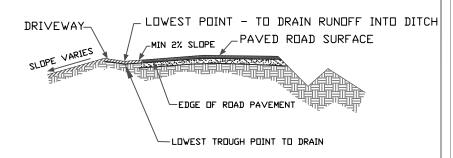
SLOPE VARIES

MIN 2% SLOPE

PAVED ROAD SURFACE

EDGE OF ROAD PAVEMENT

PROPERTY LOWER THAN ROAD WITH DRAINAGE SWALE (USE WHERE DITCH IS TOO SHALLOW FOR CULVERT)



NOTE: STANDARDS APPLY TO DRIVEWAYS APPROACHING ROADS CONSTRUCTED OF ANY MATERIALS



CITY OF BAINBRIDGE ISLAND STANDARD DETAILS

DRIVEWAY APPROACHES

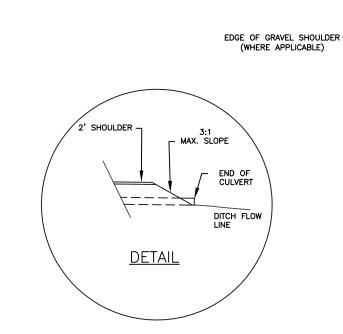
REV. 12/14/2016 API REW. RTG

APPROVED

PUBLIC WORKS DIRECTOR

DATE

DWG. NO. 8-175R





GRAVEL SHOULDER-

(typical)

12' MIN. TO 30' MAX.

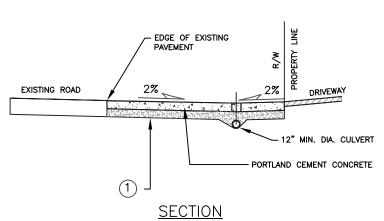
8

EXISTING ROAD

PLAN

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- 4) CULVERT COVER DEPTHS LESS THAN 12" REQUIRE APPROVAL BY THE ENGINEER
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EDGE OF EXISTING PAVEMENT

SEE DETAIL

R/W

See Text Section 8-10



CITY OF BAINBRIDGE ISLAND STANDARD DETAILS

COMMERCIAL / INDUSTRIAL CONCRETE DRIVEWAY APPROACH

REV. 12/19/2016 REW. RTG

APPROVED

PUBLIC WORKS DIRECTOR

12 3 1 6

DWG. NO. 8-180R



## City of Bainbridge Island

#### **Public Works Engineering**

(206) 842-2016 Fax (206) 780-3710 pwadmin@bainbridgewa.gov

#### **ROAD APPROACH APPLICATION – AVOIDING COMMON ERRORS**

The following are common errors that have resulted in reconstruction or modifications of newly constructed road approaches:

- Driveway widths not adequate (12-feet minimum for residential driveways).
- Missing radius at driveway intersection with roadway.
- Unauthorized reduction of roadway and roadway shoulder widths. Note that 5-foot minimum width shoulders are required at many locations.
- Shoulders not widened to standard widths at new driveway locations.
- Locating the cross culvert too close to the roadway such that the roadway embankment slope is not maintained for supporting the road edge. Note that the ditch may need to be located further back from the roadway to accommodate the culvert.
- Culverts not long enough to maintain driveway embankment slope.
- Cover on culverts is less than 12-inches. Note that ductile iron or HDPE must be used for culverts without 12-inches of cover.
- Ditches downstream of the culvert are not profiled to gravity drain.
- Not using acceptable culvert pipe per Standards such as substituting water or sewer pipe for culvert pipe.

Note that the above errors can and have resulted in expensive reconstructions or modifications. Please be familiar with the City's Design and Construction Standards to avoid unnecessary reworking of road approaches. Refer to Section 7 drawings for minimum shoulder widths and embankment slopes to be maintained. Also, refer to Section 8 Drawing Number 8-175R showing driveway approaches.

See link below to view the Design & Construction Standards: <a href="http://www.bainbridgewa.gov/169/Design-Construction-Standards">http://www.bainbridgewa.gov/169/Design-Construction-Standards</a>

The City recommends that driveway culverts be inspected prior to paving to avoid more costly reconstructions.

KCH

280 Madison Avenue North Bainbridge Island, Washington 98110-1812 www.bainbridgewa.gov

## City of Bainbridge Island PUBLIC WORKS DEPARTMENT



#### AM I DAM (O) RVANNI DJUJAM I

TO:

Development Engineering

**ROW Permitting Staff** 

FROM:

K. Chris Hammer, PE PMP, Engineering Manager

Michael Michael, PE, Engineering Manager

THRU:

Barry Loveless PE, Public Works Director

DATE:

March 17, 2017 - DRAFT

RE:

Driveways abutting the roadway

Configuration of abutting driveways at roadways is not well defined in the City's Design and Construction Standards or otherwise. This memo will serve as an interim direction until the design and construction standards are updated.

The surfacing material for driveways abutting a public roadway shall match the material of the roadway (usually asphalt) for a distance of the existing gravel shoulder width or 18 inches, whichever is greater. This is to ensure uniformity and that a joint between different materials is not located along the gutter line.

#### **Exceptions:**

• Deviations may be considered.