



# ALTERNATIVE METHODS OR CONSTRUCTION MATERIALS REQUEST

## *Engineering Design Standards*

This request must be filled out completely for the City to consider any deviations from their design standards and requirements for engineering design. Please be aware the City of Puyallup's design standards are **MINIMUM** requirements. These requirements are considered by the City as fair, reasonable and promote public safety. The applicant is obligated to convince City staff this request is necessary, justifiable, and will not reduce public safety. To be granted, **all** departments must be in agreement.

When preparing this application, please print or type the reply to each question. Incomplete applications will delay the timeliness of the review. This application is the sole basis for approval of deviations from standards. include any and all supporting documentation to the application.

If you have any questions, please contact Engineering Services at (253) 864-4165.  
**Application Fee: \$250.00**

**OWNER**

Name: Vladimir Tcaci  
 Address: 1633 S. Geiger St  
 City St Zip: Tacoma, WA, 98456  
 Contact No: 253-579-8018  
 Email: vtcaci1978@yahoo.com

**APPLICANT**

Name: Vladimir Tcaci  
 Address: 1633 S. Geiger St  
 City St Zip: Tacoma, WA, 98456  
 Contact No: 235-579-8018  
 Email: vtcaci1978@yahoo.com

**ENGINEER/ARCHITECT**

Name: Apex Engineering  
 Address: 2601 S 35th St #200  
 City St Zip: Tacoma, WA, 98409  
 Contact No: 253-473-4494  
 Email: kirkebo@apexengineering.net

**CONTRACTOR**

Name: N/A  
 Address: \_\_\_\_\_  
 City St Zip: \_\_\_\_\_  
 Contact No: \_\_\_\_\_  
 Email: \_\_\_\_\_

SITE ADDRESS: ### 7th St SW PARCEL NO: 4320000160 ZONING: RM CORE  
 PROJECT NAME: 43rd Avenue Multi-Family  
 LAND USE APPLICATION #: PLPSP20220016 BUILDING PERMIT APPLICATION #: \_\_\_\_\_

Signature of Applicant:  Date 09/22/22

Items 1-9 are issues and concerns that must be addressed by the applicant. If additional reports, supporting documents and attachments are necessary to clarify/support this request, material shall be listed in item 9 and referenced within items 1-9.

**1. Describe the proposed modification (from what requirements are you seeking relief?).**

City of Puyallup - City Standards Table 100-2 Roadway Geometric Design Criteria Note (4), for stopping sight distance object height of 0.5-ft. per in favor of the more commonly used 2.0-ft object height.

**2. Describe how the proposed modification is based on sound engineering principles. (Granting the modification will not result in risk or harm to the public related to storm drainage, traffic, water, sanitary sewer, transportation, fire protection or structural matters).**

The 2.0-ft object height is used in AASHTO's Green Book and WSDOT design standards for stopping sight distance calculations. The following jurisdictions use a 2.0-ft object height: City of Tacoma, Auburn, Bonney Lake, Issaquah, Maple Valley, Milton, Olympia, University Place, Yelm and King County. (this is not an extensive list, but those whose standards are readily available). See attached memo by Heath & Associates for further information.

**3. Describe how a strict application of the requirement would impose an undue hardship on the applicant.**

Using a 0.5-ft object height would not allow any access point to the site from adjacent roadways (43rd Ave SW or 7th St SW). This would render the property impossible to develop based on the current zoning and existing conditions of the adjacent roadways.

**4. Describe how the requirements for safety, environmental considerations, function, appearance and maintainability would be fully met, assuming the granting of your request.**

A 2.0-ft object height is widely accepted based on surrounding jurisdictions along with WSDOT and AASHTO standards. Using an object height of 0.5-ft would result in longer crest vertical curves for roadways and increased construction costs, without a substantial decrease in the frequency or severity of collisions. See attached memo by Heath & Associates for further information.

**5. Describe how the granting of the modification provides adequate protection of the public health, safety and welfare.**

AASHTO research indicates that object heights less than 2.0-ft is rarely a risk to drivers. See attached memo by Heath & Associates for further information.

**6. Does this request require different maintenance cycles, equipment or skills?**

No. The roadway cross section will be constructed per city standards.

**7. Does this request provide for a service life equal to or greater than the City requirement?**

Yes. The materials used for frontage improvements will not be affected by this deviation.

**8. Describe how the granting of the modification will be in the best interest of the public?**

Without relief from this engineering standard, that is incompatible with the project site and surrounding properties, the applicant's proposed multi-family project will be unattainable. The property will not be able to meet zoning and density requirements outlined in the City of Puyallup municipal code. Granting this modification will be in the best interest of the public by bringing more residential units into the City of Puyallup.

**9. List reports, supporting documents and attachments accompanying this request:**

See associated memo prepared by Heath & Associates on August 15, 2022 including supporting documents and exhibits by Apex Engineering.



STAFF RECOMMENDATIONS	APPROVED	DENIED	DATE
Development Engineering	<i>Jared Cabas</i>		10/11/2022
Conditions:			
Planning Department	N/A		
Conditions:			
Traffic Engineering	<i>BR</i>		10/6/22
Conditions: AMR approval based on using 2ft object height for SSD only (Current AASHTO standard). All other City engineering standards still apply.			
Public Works - Streets	N/A		
Conditions:			
Public Works - Water	N/A		
Conditions:			
Public Works - Collections	N/A		
Conditions:			
Stormwater Engineer	N/A		
Conditions:			
Fire Code Official	N/A		
Conditions:			
Police Department	N/A		
Conditions:			

City Engineer	APPROVED	DENIED	DATE
	DocuSigned by: <i>Ken Code</i> 20DB362E4E87476...	DocuSigned by: <i>Hans Hunger</i> 1D7EB0CED63645D...	10/17/2022

CONDITIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_