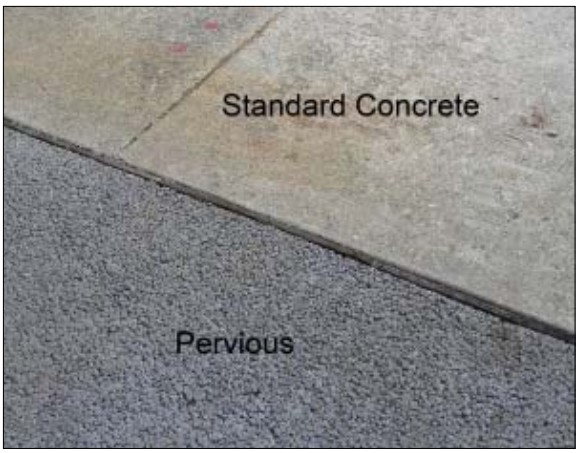
Worksheet B7
Permeable Pavement (BMP T5.15)

Permeable Pavement can only be utilized for hard surfaces if full dispersion is infeasible. Applicants must submit this completed worksheet and an accompanying site plan if selecting this technology. To complete this worksheet, applicant must:

1. Review infeasibility criteria below to determine if this BMP is feasible
2. Check that applicable design criteria below is met
3. Select Applicable Details
4. Submit a Site Plan



{ Step 1: Review Infeasibility Criteria }

If any of the following infeasibility criteria are met, this technology is considered infeasible. Applicant must list the specific infeasibility criteria below on the Stormwater Site Plan (Worksheet A1) and move on to the next BMP technology.

Infeasibility Criteria
Note: The Infeasibility criteria listed below does not require written justification from a licensed professional
Cannot feasibly locate outside of an area designated as an erosion hazard, or landslide hazard.
Cannot feasibly locate further than 50 feet from the top of slopes that are greater than 20%.
Cannot feasibly locate further than 100 feet from an area known to have deep soil contamination.
Surface soils are contaminated, and contaminated areas cannot feasibly be removed.
Site is a federal Superfund site or state cleanup site under the Model Toxics Control Act (MTCA) (uncommon)
Cannot feasibly be located further than 100 feet from a closed or active landfill.

Infeasibility Criteria (Cont.)
Cannot feasibly be located further than 100 feet from a drinking water well if the pavement is a pollution-generating surface (e.g. when used for driveways).
Cannot feasibly be located further than 10 feet from a septic system.
Cannot feasibly be located further than 10 feet away from an underground storage tank containing hazardous materials.
Where the site cannot reasonably be designed to have a porous asphalt surface at less than 5 percent slope, or a pervious concrete surface at less than 10 percent slope, or a permeable interlocking concrete pavement surface (where appropriate) at less than 12 percent slope. Grid systems upper slope limit can range from 6 to 12 percent; Check with manufacturer and local supplier.
Where the native soils below a pollution-generating permeable pavement (e.g., road or parking lot) do not meet the soil suitability criteria for providing treatment. See SSC-6 in III-3.3.7 Site Suitability Criteria (SSC). Note: In these instances, the local government has the option of requiring a six-inch layer of media meeting the soil suitability criteria or the sand filter specification as a condition of construction.
The seasonal high ground water or an underlying impermeable/low permeable layer would create saturated conditions within one foot of the bottom of the lowest gravel base course
Where underlying soils are unsuitable for supporting traffic loads when saturated. Soils meeting a California Bearing Ratio of 5% are considered suitable for residential access roads.
Appropriate field testing indicates soils have a measured (a.k.a., initial) native soil saturated hydraulic conductivity less than 0.3 inches per hour and there is no way to gravity connect an underdrain to the public system.
Where replacing existing impervious surfaces unless the existing surface is a non-pollution generating surface over an outwash soil with a saturated hydraulic conductivity of four inches per hour or greater.
Note: The Infeasibility criteria below requires written documentation from an appropriate licensed professional (e.g. engineer, geologist, hydrogeologist)
Professional geotechnical evaluation recommends infiltration not be used due to reasonable concerns about erosion, slope failure, or down gradient flooding.
Cannot feasibly be located outside of an area whose ground water drains into an erosion hazard, or landslide hazard area.
Infiltrating and ponded water below new permeable pavement area would compromise adjacent impervious pavements.
Infiltrating water below a new permeable pavement area would threaten existing below grade basements.
Infiltrating water would threaten shoreline structures such as levees.
Permeable pavement area would be down slope of steep, erosion-prone areas that are likely to deliver sediment.
Fill soils are being used on-site that can become unstable when saturated.
Installation of permeable pavement would threaten the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, or pre-existing road sub-grades.

{ Step 2: Review Applicable Design Criteria }

Complete the following checklist (list "N/A" where design criteria does not apply).

Design Criteria for Permeable Pavement		
Applicant	**Reviewer**	**Criteria**
		Project does not trigger any of the infeasibility requirements above.
		Permeable surface cannot be used for a driveway that crosses a culvert.
		There is no sheet flow from up-gradient areas (**Exception:** incidental pervious areas are allowed to drain to permeable pavement so long as the area does not exceed 5% of the surface area of permeable pavement.)
		Where the proposed surface exceeds 3% slope, calculation and details for check dams is included in submission to the City.
		If an underdrain is used, it must be elevated in a base course of at least 12" of AASHTO #3 stone.
		If used for a roadway, there are adequate facilities for roadway drainage as if road surface was impervious.

{ Step 3: Select Applicable Details }

City of Puyallup is currently developing standard details for permeable driveways and sidewalks that can be used for most projects.

{ Step 4: Submit a Site Plan }

Submit a site plan that contains all of the following information:

- ☐ Scale and North arrow
- ☐ Location, dimensions, and total area of proposed permeable pavement
- ☐ Topographic information that is sufficient enough to show that adjacent areas are not draining onto proposed permeable surface
- ☐ Location of underdrains and cleanouts, if applicable
- ☐ Applicable details from Step 3 above
- ☐ Dimension to nearby property lines, structures, steep slope, lake, wetland, or other impervious surface where applicable