



Engineering Division

701 Laurel Street
 Menlo Park, CA 94025
 Phone: (650) 330-6740
 Fax: (650) 327-5497

IMPERVIOUS AREA WORKSHEET

FOR NEW DEVELOPMENT AND REDEVELOPEMENT PROJECTS

To comply with the City of Menlo Park Stormwater Ordinance 859 (Chapter 7.42) and the NPDES Permit issued by the California State Water Board, project applicants must report changes in impervious surface area resulting from their new development or redevelopment projects within the city. Therefore all new project applicants shall complete this worksheet, submit it to Engineering for plan review and include the relevant data on the site design plans.

Imperviousness refers to the inability of a surface to absorb water. Higher imperviousness causes more water to run off the surface. Imperviousness reduces the amount of ground water recharge and increases the amount of storm water flowing to local creeks and the Bay. Excessive stormwater causes erosion of creek banks and flooding. Storm water also carries pollutants normally found in pesticides, herbicides, engine oil, copper from brake dust, etc.

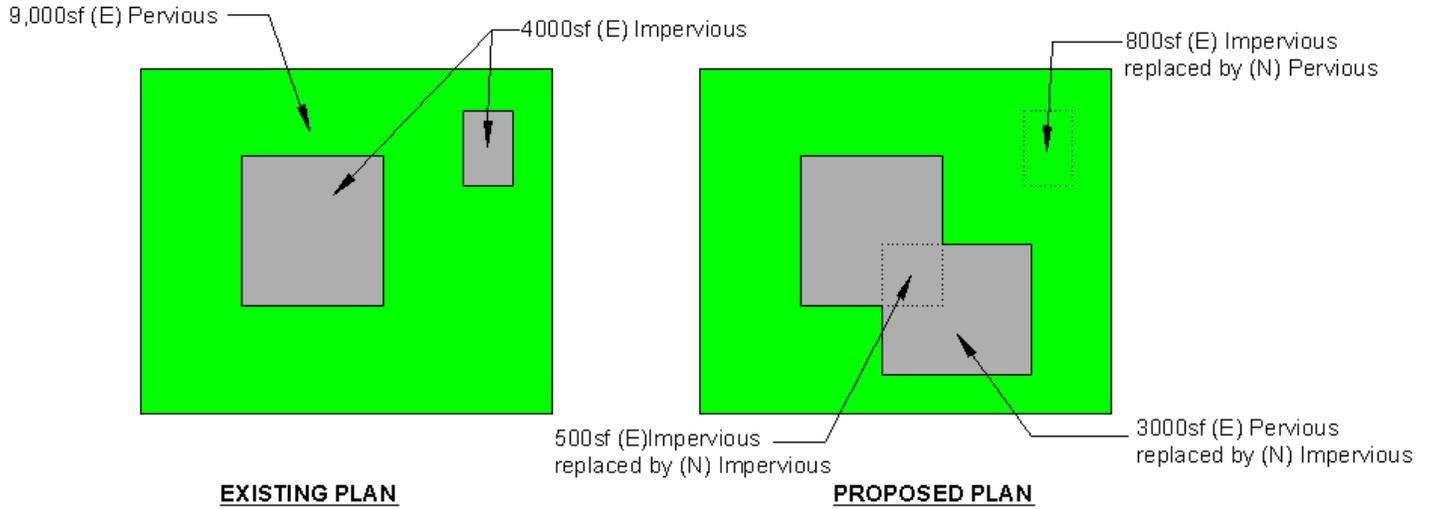
Impervious Surface is defined in this worksheet as any modified surface that **reduces** the land's natural ability to infiltrate or pass water into the soil. This includes any surface that causes storm water to run off in greater quantities than it would have under natural soil conditions given the same rain intensity.

TYPICAL PERVIOUS AND IMPERVIOUS SURFACES	
<u>Pervious Surfaces</u>	<u>Impervious Surfaces</u>
Lawn/Vegetal Cover	Rooftops
Soil	Compacted Soil or Aggregate
Sand	Paved Walkways
Ponds	Swimming Pools
Streams/Creeks	Patios
Unpaved Gravel Driveways	Asphalt/Concrete
Pervious Concrete	Permanent Structures
Pervious Asphalt	Sidewalks
Permeable Pavers (Unit Pavers)*	Cobbles
Gravel Bed	

*Permeable pavers are considered impervious if the underlying substrate is highly compacted soil or impermeable aggregate.

SAMPLE CALCULATION

SAMPLE 13,000 SF LOT PROJECT



IMPERVIOUS AREA SUMMARY		
Total Area of Parcel		A <u>13,000</u> ft ²
Existing Pervious Area		B <u>9,000</u> ft ²
Existing Impervious Area		C <u>4,000</u> ft ²
Existing % Impervious	$\frac{C}{A} \times 100$	D <u>30.8</u> %
Existing Impervious Area To Be Replaced W/ New Impervious Area		E <u>500</u> ft ²
Existing Pervious Area To Be Replaced W/ New Impervious Area		F <u>3,000</u> ft ²
New Impervious Area (Creating and/or Replacing)* *If greater than 10,000sqft, a hydrology report must be submitted	E + F	G <u>3,500</u> ft ²
Existing Impervious Area To Be Replaced W/ New Pervious Area		H <u>800</u> ft ²
Net Change In Impervious Area *This area is required to be detained/retained on-site	F - H	I <u>2,200</u> ft ²
Proposed Pervious Area	B - I	J <u>6,800</u> ft ²
Proposed Impervious Area* *Verify that J + K = A	C + I	K <u>6,200</u> ft ²
Proposed % Impervious	$\frac{K}{A} \times 100$	L <u>47.7</u> %

IMPERVIOUS AREA WORKSHEET

Page 1

Submit this form with the improvement plan set to the City of Menlo Park Engineering Division.

Date: _____ APN: _____

Property Address: _____

Project Description: _____

Contact Name: _____

Contact Telephone Number: _____

Contact Email: _____

Title And Sheet# of Submitted Drawing used For Calculations: _____

Land Use (Circle One):

Residential Commercial Industrial Professional Roadway

Drainage Basin (Circle One):

(See the *Hydrology Report Requirements* for a Drainage Basin map.)

Atherton Creek San Francisquito Creek San Francisco Bay

I certify that the calculations below accurately reflect the proposed changes and final impervious surfaces for the above project.

Calculations Performed By (Print): _____

Title: _____

Calculations Performed By (Signature): _____

Date: _____

IMPERVIOUS AREA WORKSHEET

Page 2

IMPERVIOUS AREA TABLE		
Total Area of Parcel		A _____ ft ²
Existing Pervious Area		B _____ ft ²
Existing Impervious Area		C ft ²
Existing % Impervious	$\frac{C}{A} \times 100$	D _____ %
Existing Impervious Area To Be Replaced W/ New Impervious Area		E ft ²
Existing Pervious Area To Be Replaced W/ New Impervious Area		F ft ²
New Impervious Area (Creating and/or Replacing)* *If greater than 10,000sqft, a hydrology report must be submitted	E + F	G _____ ft ²
Existing Impervious Area To Be Replaced W/ New Pervious Area		H _____ ft ²
Net Change In Impervious Area¹	F - H	I ft²
Proposed Pervious Area	B - I	J ft²
Proposed Impervious Area* *Verify that J + K = A	C + I	K ft²
Proposed % Impervious	$\frac{K}{A} \times 100$	L %

¹ Net change in impervious area is the area required by