



Proposed Stormwater Ordinance Amendment

Public Works Commission

November 10, 2022



Regulatory Background

- Federal Clean Water Act (CWA)
- National Pollutant Discharge Elimination System (NPDES) Permits
- Regional Municipal Separate Storm Sewer System (MS4) Permits
- 2021 MS4 Permit



Proposed Amendment Sections

1. Prohibited Discharges: Add certain common city activities and requirements
2. Requirements for Existing Properties
3. Lowering the LID Criterion on Development Projects



Prohibited Discharges





Requirements for Existing Properties





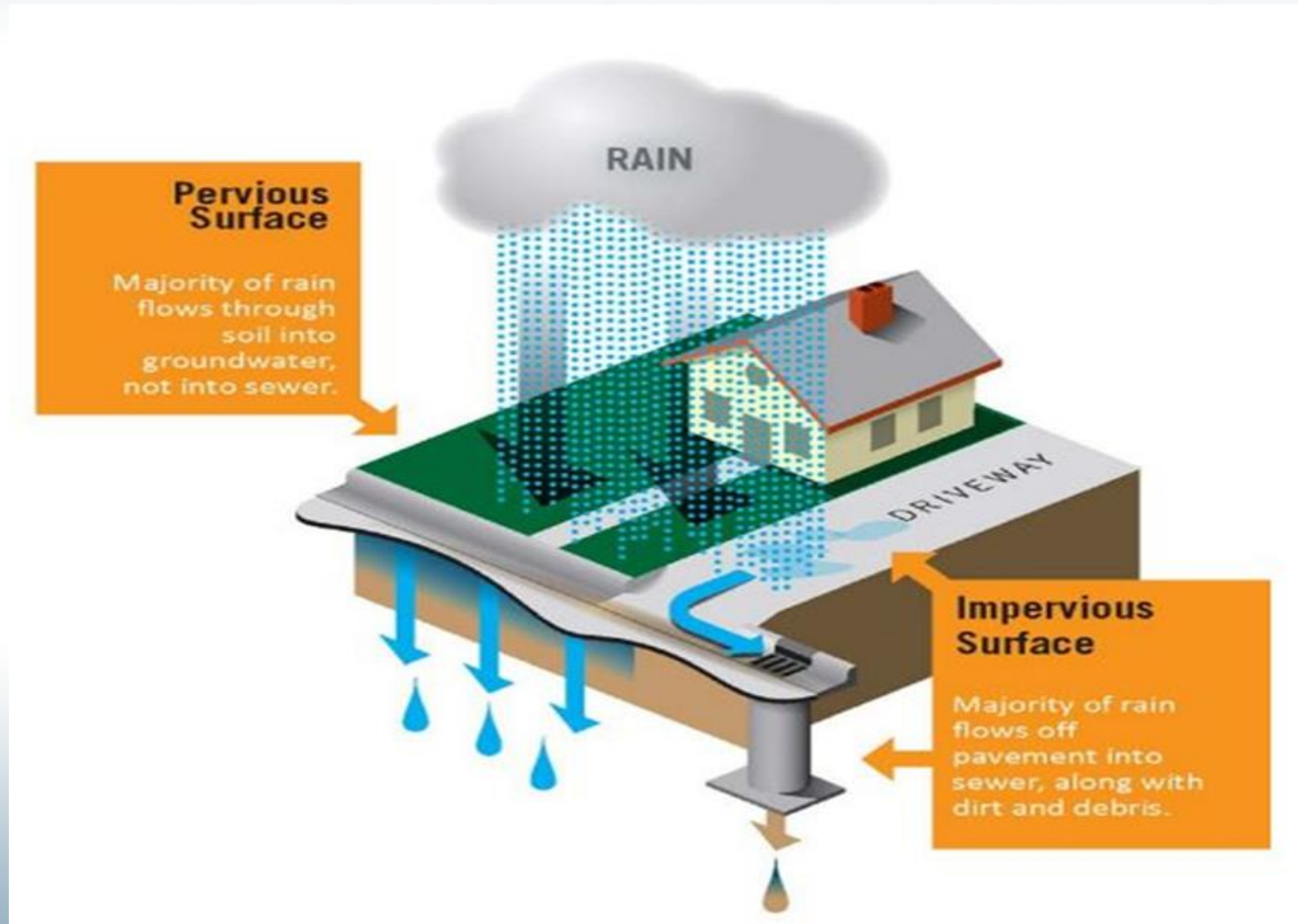
Low Impact Development (LID)

- Design approach to managing stormwater runoff as part of green infrastructure.

Development Project	Size of Impervious Surface Area	LID Required	Permit Requirement
Single-Family Residential (SFR)	5,000 SF	YES	YES
Non SFR (i.e. Commercial, MFR)	5,000 SF	YES	YES
SFR or Non-SFR	<5,000 SF	YES, Small-scale BMP	NO



Stormwater Requirements





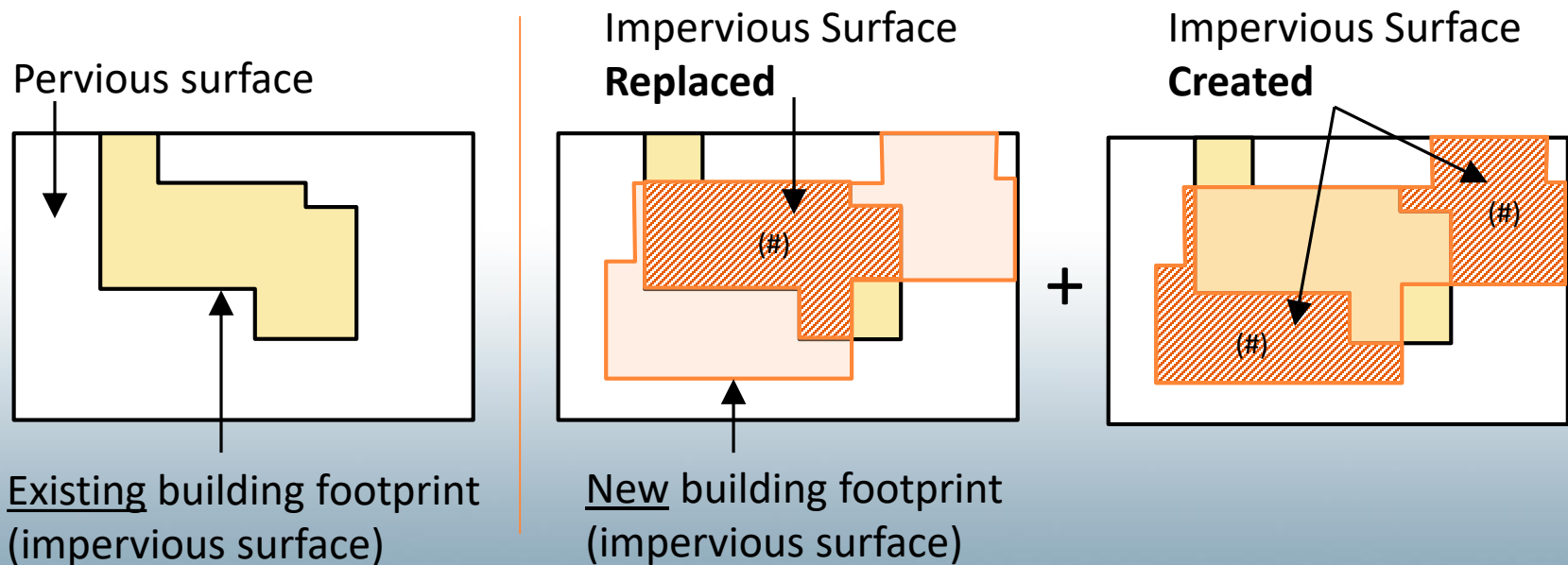
Impervious Surfaces





Determining LID Applicability

- Development projects that **Create and/or Replace** impervious surface above permit thresholds are required to implement specific Low Impact Development (LID) practices



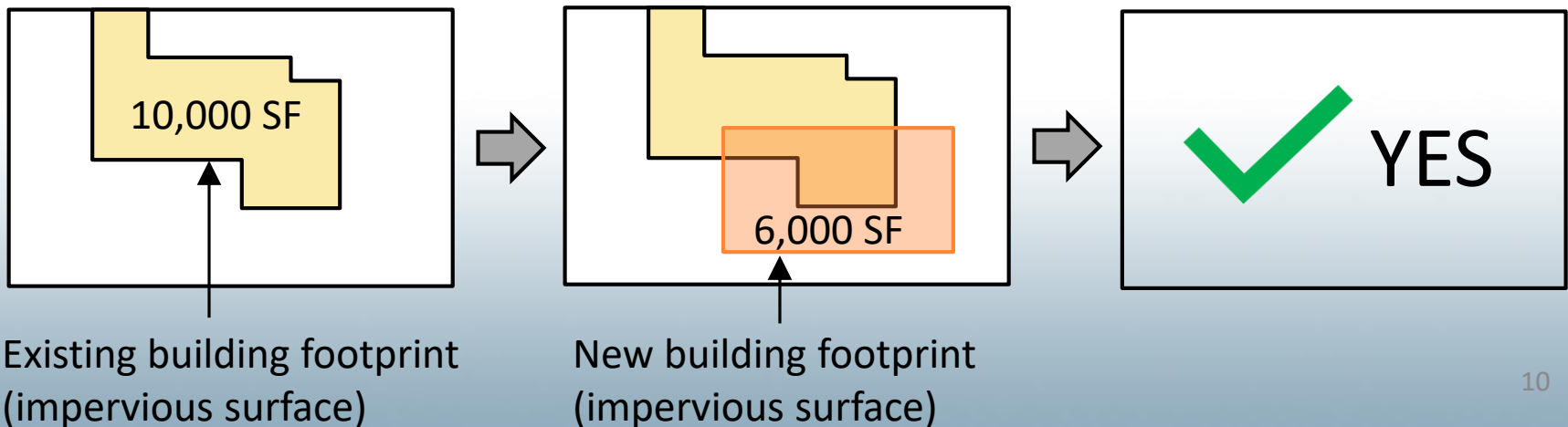


Regulatory LID Threshold

LID Threshold:

Development (SFR or non-SFR) projects that create and/or replace $\geq 5,000$ SF of impervious surface on any existing site $\geq 10,000$ SF of impervious surface

Does LID apply to this project?





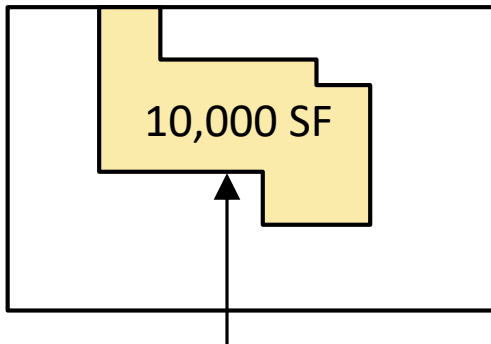
LID Standard: 50% Rule

- For projects subject to LID standard, either some or all of the project must be included in the LID mitigation:
 - If the alteration (created and/or replaced) is $\geq 50\%$ of the existing impervious surface: **Mitigate the Entire Impervious Surface Area**
 - If the alteration (created and/or replaced) is $< 50\%$ of the existing impervious surface altered: **Mitigate Only the New Area**

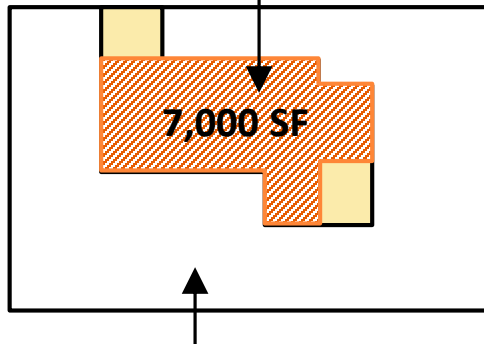


$\geq 50\%$ Treat All

Existing Impervious Surface
Altered by **replacing** 7,000SF



Existing impervious surface area footprint (impervious surface)

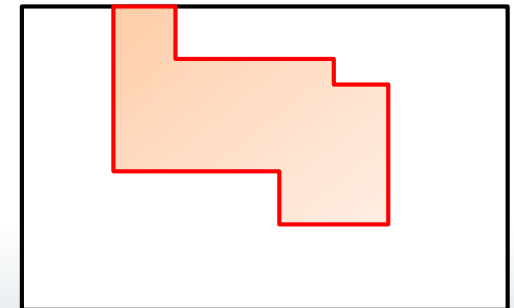


New impervious surface area footprint (impervious surface)

$$7,000/10,000 = 70\%$$

$$70\% > 50\%$$

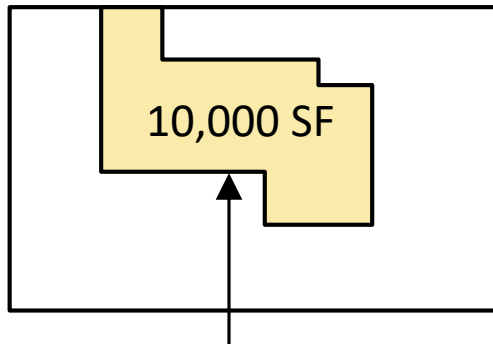
= Treat entire project



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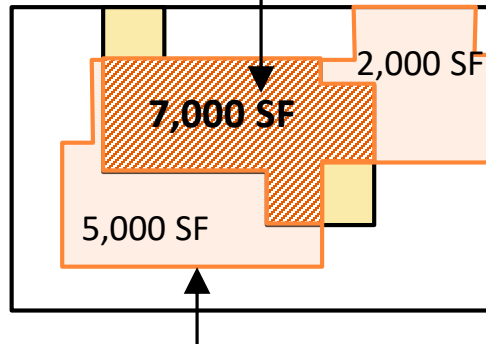


≥ 50% Treat All



Existing impervious surface area footprint (impervious surface)

Existing Impervious Surface
Altered by replacing 7,000 SF

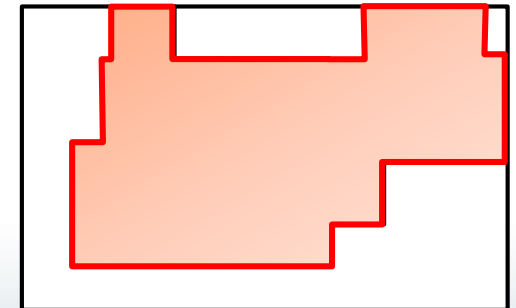


New impervious surface area footprint (impervious surface)

$$7,000/10,000 = 70\%$$

$$70\% > 50\%$$

$$= \text{Treat entire project} = 17,000 \text{ SF}$$

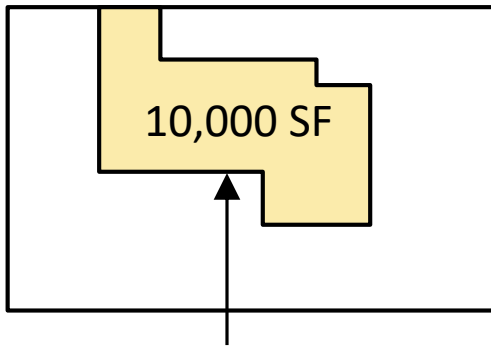


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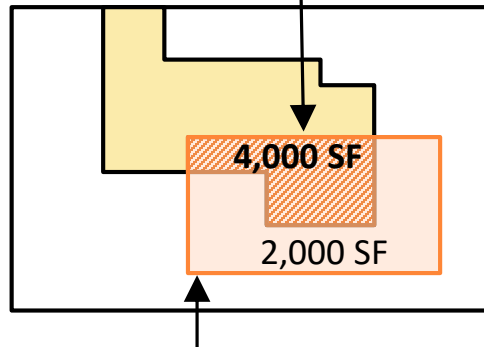


LID Standard: < 50%

Existing Impervious
Surface Altered 4,000 SF



Existing building footprint
(impervious surface)

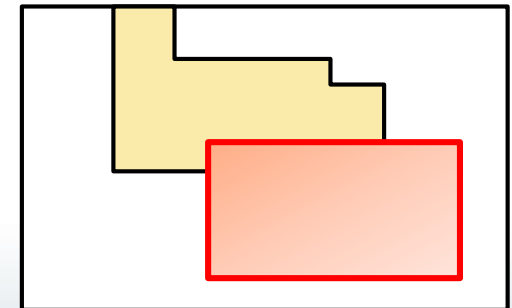


New building footprint
(impervious surface)

$$4,000/10,000 = 40\%$$

$$40\% < 50\%$$

$$= \text{Treat } \underline{\text{new}} \text{ area only} = 6,000 \text{ SF}$$



For illustration purposes only:



Enhancement/Non-Regulatory: All Other Projects

- Non-LID development projects (<5,000 SF created or replaced impervious surface area)
- Projects must implement at least two simple site design BMPs



LID BMPs



Rain Barrels/Cisterns



Rain Garden/Landscaping

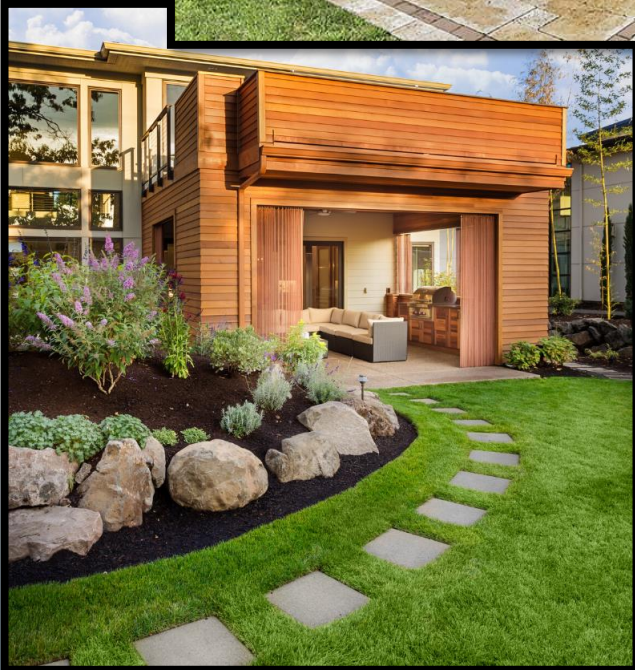


Porous Pavement/Permeable Hardscape

Roof Downspout Routing



LID Design BMPs



Minimize Impervious Surfaces /
Disconnect Impervious Surfaces



LID BMP Manual





Next Steps

- Staff seeks feedback on the proposed amendments, especially the LID proposals.
- If the Commission approves the proposed amendments, a draft ordinance will be presented in first quarter of 2023.



Impervious Surface

