



# New Requirements for Green Infrastructure in Transportation Projects

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**San Mateo Countywide Pollution Prevention Program**

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# Presentation Overview

- Overview of MRP 3.0 Requirements for Transportation and Pavement Projects
  - New categories of regulated projects
  - New thresholds
- Example Transportation Projects
  - Three examples:
    - Reconstructed road
    - Intersection improvement
    - Utility trenching
  - Alternative compliance scenarios
  - Maximizing C.3.j credit



# Regulated Transportation Project Categories

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## ■ Roads and Trails

- New or widened
  - includes sidewalks and bike facilities)
- Trails (impervious surface)
  - 10 feet or greater in width
- Major maintenance
  - Reconstructed roads (including sidewalks and bike facilities)
  - Significant sidewalk or intersection work
- Utility trenching
- Extending roadway edge

## ■ Parking Lots

- Major maintenance
  - Reconstructed



# Changes/New Requirements – Regulated Projects

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- Roads, sidewalks and trails
  - Threshold reduced to 5,000 SF (contiguous) for:
    - New roads, including sidewalks and bike lanes
    - Adding traffic lane to an existing road
    - New stand-alone trail projects => 10 feet wide or  $\leq$  50 feet from creek bank built with impervious surface\*

\* Gravel is considered an impervious surface unless constructed like pervious pavement

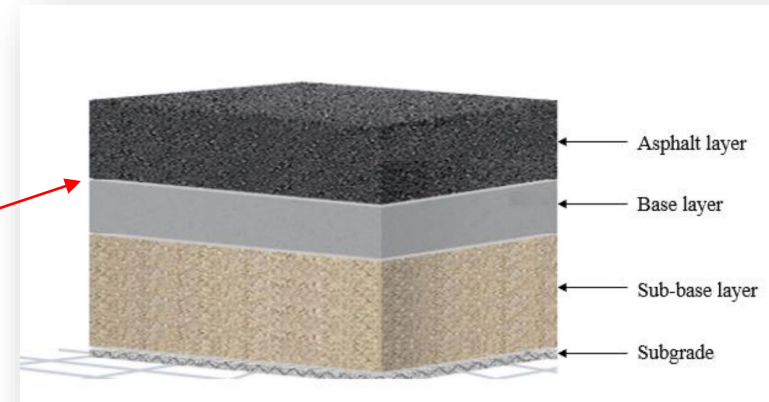
# Pavement Maintenance Details

- Pavement maintenance definitions

- Base course

- Layer of material (typically aggregate base) located above the subbase course and/or subgrade course, and below the surface layer

Top of base  
course



- Bituminous Surface Treatment

- A thin protective wearing surface which can provide protection of underlying pavement and a filler for existing cracks or raveled surfaces. Types include chip seal, slurry seal, seal coat, and cape seal.

# Pavement Maintenance Requirements

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- Road reconstruction projects (C.3.b.ii.(5)) – regulated at  $\geq 1$  acre of contiguous\* impervious surface
  - Reconstruction of existing public streets and roads (and adjacent sidewalks and bike lanes) down to top of base course
  - Extending the pavement edge of an existing road (e.g., paving gravel shoulders)
  - Utility trenching projects which are  $\geq 8$  feet wide on average, over the entire length of the project
- \* Project areas interrupted by cross streets or intersections are considered contiguous

# Pavement Maintenance Requirements

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- Pavement maintenance on Roads
  - Included practices – regulated at  $\geq 5,000$  SF (cumulative)
    - Upgrade from dirt to gravel\* (exempt if built to spec for pervious pavement)
    - Upgrade from dirt/gravel to chip seal, asphalt, or concrete pavement
    - Removing/replacing asphalt or concrete to top of base course or lower
    - Repair of pavement base (i.e., base failure repair)
    - Extending the pavement edge or paving graveled shoulders
  - For Road Reconstruction Projects, these practices are included only if they trigger all criteria specified in Provision C.3.b.ii.(5), including the criteria regarding contiguousness.

\*Gravel is considered an impervious surface unless constructed like pervious pavement

# Pavement Maintenance Requirements

- Public works maintenance projects (C.3.b.ii.(3))
  - Additional exclusions for small discontinuous projects in the public right-of-way that do not disturb  $\geq 5,000$  SF of contiguous impervious surface
  - Examples: sidewalk gap closures, sidewalk replacement, and ADA curb ramps not associated with a parcel-based project
  - If associated with a Regulated Project, must be added to the cumulative impervious surface total of that project and treatment provided





# Road Reconstruction and the “50% Rule”

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- Where a reconstruction project disturbs  $\geq 50\%$  of the existing impervious surface of the road, the entire road surface must be included in the treatment system design.
- Where a reconstruction project disturbs  $< 50\%$  of the existing impervious surface of the road, only the new and/or replaced impervious surface of the road project must be included in the treatment system design.
  - However, if the runoff from that portion of the road cannot be separated from runoff from the rest of the road, the runoff from the entire surface draining onto the reconstructed portion must be treated.
  - This may also be an issue with regulated utility trenching projects that disturb a portion of the road but need to treat runoff from larger drainage areas
  - Can consider alternative compliance options to minimize the treatment area

# Unregulated Pavement Maintenance - Roads

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- Pavement maintenance on parcels (C.3.b.ii.(1)(b)(ii)-(iv)), e.g., parking lots and other pavement
  - Excluded practices
    - Pothole and square cut patching
    - Overlay gravel on existing gravel
    - Overlay asphalt or concrete on existing asphalt or concrete (no increase in area)
    - Apply bituminous surface treatment (e.g., “chip seal”) to existing asphalt or concrete (no increase in area)
    - Upgrade from chip seal to asphalt or concrete (no increase in area)
    - Shoulder grading
    - Reshaping/regrading drainage
    - Crack sealing and pavement preservation that does not expand road prism

# Regulated Pavement Maintenance – Parking Lots

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- Pavement maintenance on parcels (C.3.b.ii.(1)(b)(ii)-(iv)), cont'd
  - Included practices – regulated at  $\geq 5,000$  SF (cumulative)
    - Upgrade from dirt to gravel\* (exempt if built to spec for pervious pavement)
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# Unregulated Pavement Maintenance - Parking Lots

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# Summary of Regulated Transportation Project Requirements

Project Type/Description	Threshold Area	MRP 2.0	MRP 3.0
<b>Roads, Sidewalks, and Trails</b>			
New roads, including sidewalks and bike lanes	Contiguous	10,000 SF	<b>5,000 SF</b>
Adding traffic lanes to an existing road	Contiguous	10,000 SF	<b>5,000 SF</b>
New stand-alone trail projects => 10 feet wide with impervious surface	Contiguous	10,000 SF	<b>5,000 SF</b>
Sidewalk gap closures, sidewalk replacement, ADA curb ramps not associated with a parcel-based project	Contiguous	10,000 SF	<b>5,000 SF</b>
<b>Road Reconstruction (Maintenance) Projects (Count towards C.3.j)</b>			
Reconstructing existing roads, including sidewalks and bicycle lanes	Contiguous	Exempt	<b>1 acre</b>
Extending roadway edge	Contiguous	Exempt	<b>1 acre</b>
Utility trenching projects with average trench width $\geq$ 8 feet	Contiguous	Exempt	<b>1 acre</b>

# Transportation Projects: Alternative Compliance Considerations

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- Construction of GI related to Project AC
  - Might be easier to build close to project
  - Permittee builds improvements elsewhere in the jurisdiction
  - Permittee uses greened acres from previously built “voluntary” GI project (e.g., from a non-regulated CIP that includes GI)
  - Tracking and maintenance required
- Maintenance
  - Permittee builds improvements next to transportation project site (e.g., across the street where construction is more feasible)
  - Tracking and maintenance required, but possibly easier to do since the GI is in the same area as the other project improvements.



# Road Reconstruction AC Example



- Road, bike lane and gutter replacement boundary (Regulated treatment area)
- Sidewalk replacement (Regulated treatment area)
- Project boundary (Regulated treatment area)
- Alternative compliance treatment area
- Additional treatment area (additional C.3.j credit)

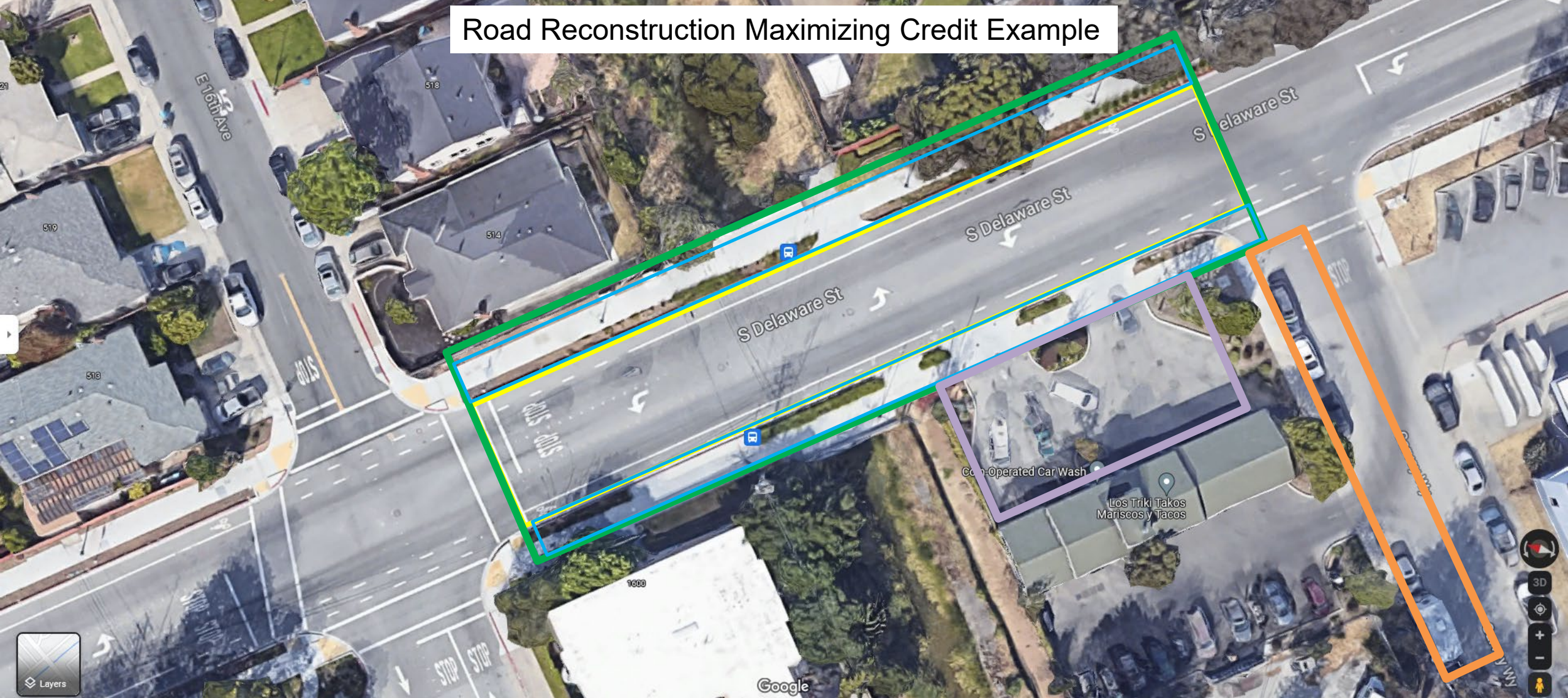
# Transportation Projects: Maximizing C.3.j GI (Attachment H) Credit






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- Road Reconstruction Projects:
  - Treated areas receive C.3.j credit (even though it's regulated, the project receives C.3.j credit as a compromise in the permit adoption)
- Areas not regulated by the MRP can also receive C.3.j credit
  - Impervious areas treated that are not being replaced or created (e.g., parking lots that drain to the street on the surface\*)
  - Upstream roadway areas that are treated in addition to the required areas



## Road Reconstruction Maximizing Credit Example



-  Road, bike lane and gutter replacement boundary (Regulated treatment area)
-  Sidewalk replacement (Regulated treatment area)
-  Project boundary (Regulated treatment area)
-  Excess parking lot treatment (potential C.3.j credit)
-  Excess upstream treatment area (C.3.j credit area)

# Transportation Projects: Intersection Work Considerations



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- Pavement ADA, curb ramp and sidewalk projects:
  - This work will not often be regulated because these types of projects involve work that is not contiguous and in small amounts under the 5,000 threshold.
  - However, if these areas can be treated (with pervious pavement or adjacent landscaping) then they could supply C.3.j credit for other constrained projects.



## Intersection Work – AC Example



-  Project boundary (Regulated treatment area)
-  Excess upstream treatment area (C.3.j credit area)

# Transportation Projects: Intersection Work Considerations

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## ■ Utility Trenching:

- If the work can be kept below the trench width threshold of 8 feet (measured at the asphalt layer) this work will not often be regulated.
- However, if these areas can be treated (with pervious pavement or adjacent landscaping) then they could supply C.3.j credit for other constrained projects.



## Utility Trenching – AC Example



- Project boundary for utility trenching (Regulated treatment area)
- Alternative compliance area



# Questions?

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