What are Opportunities for Green Infrastructure?

SMCWPPP

New Development C.3 Workshop

City of San Mateo

June 14, 2016

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EOA Inc.

SAN MATEO COUNTYWIDE Water Pollution Prevention Program

Presentation Overview

- Common Types of GI Opportunities
- Missed Opportunities in Redevelopment
- Summary

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Common Types of GI Opportunities

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Types of Retrofit Projects

1. Road Diet
2. Bike/Ped Facilities & Safe Routes to School (SRTS)
3. Pavement Reconstruction
4. Street Beautification
5. Tree Planting
6. Park/Landscaping Retrofit
7. Drainage Reconstruction
8. Parking Lots
9. Buildings
10. Pollutants – PCBs

1.a Road Diet - Colma: Before

Two travel lanes in each direction, sidewalk only one side, no on-street parking and no cross-walks.

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1.b Road Diet – Colma: After

New bike & parking lanes, sidewalks on both sides, mid-block crossing with RRFB & green bulb-outs.

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2.a SRTS – San Mateo: Before

No cross-walk and long crossing distance.

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2.b SRTS – San Mateo: After

Cross-walk w/ shorter crossing, protection & green bulb-out

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2.c Bike – Emeryville: Before

No bike facilities for Bay Trail. Excessive roadway width.

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2.d Bike – Emeryville: After

First Cycle-track/Green street project in the Bay Area.

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3.a Reconstruction – San Mateo: Before

Excess roadway width, no bike lanes, narrow sidewalks.

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3.b Reconstruction – San Mateo: After

Bioretention areas, new pavement, bike lanes and street lights.

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3.c Reconstruction - Berkeley: Before

Poor pavement quality and new water line needed.

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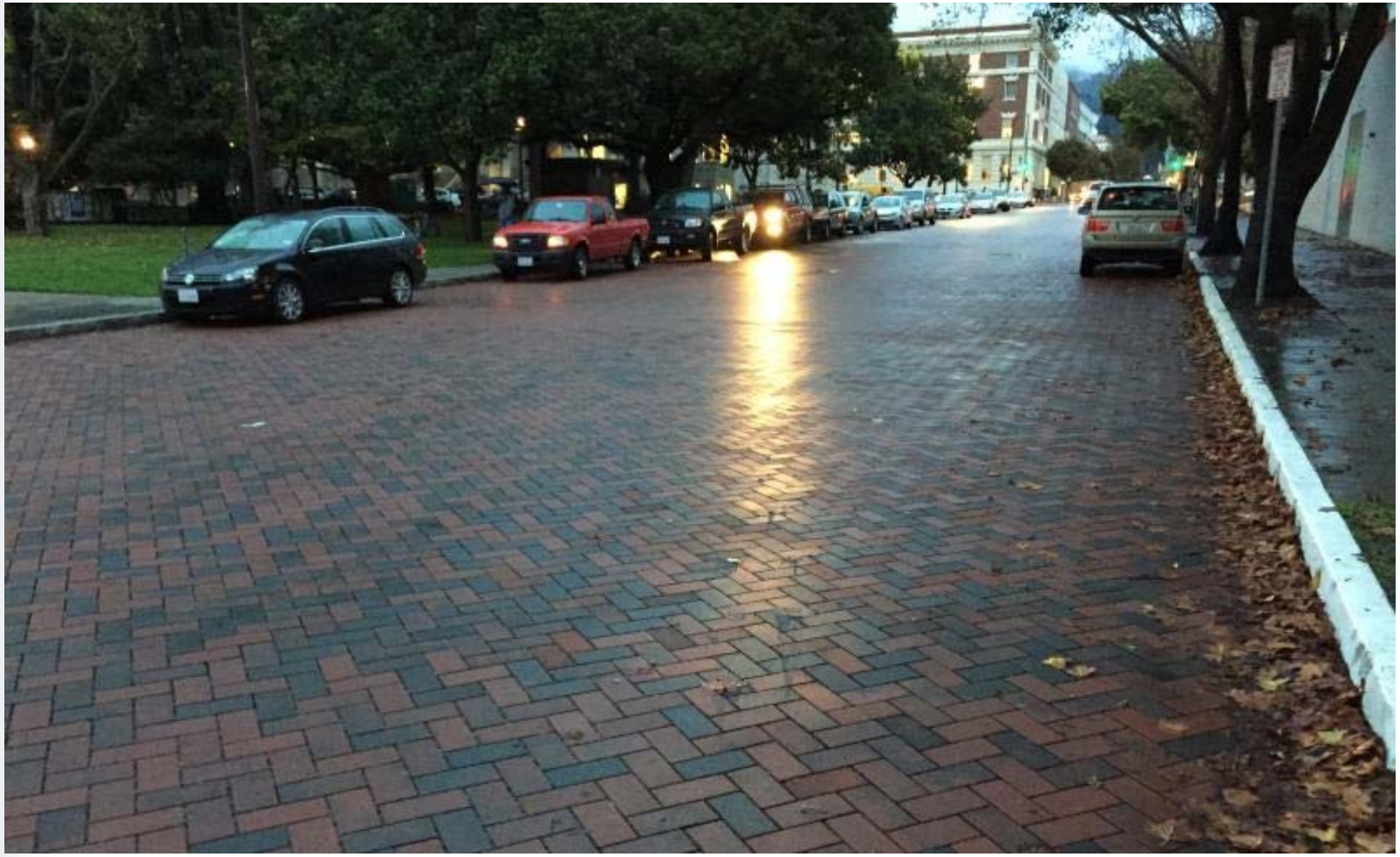
3.d Reconstruction - Berkeley: After



New water line & permeable interlocking concrete pavers.

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4.a Beautification - Burlingame: Before

Poor pavement, landscaping and sidewalk quality & aesthetics.

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4.b Beautification - Burlingame: After

New crosswalks, lights, curb extensions, pavement & trees.

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5.a Tree Planting – El Cerrito: Before

Surplus pavement with no trees.

5.b Tree Planting – El Cerrito: After

New trees with biotreatment.

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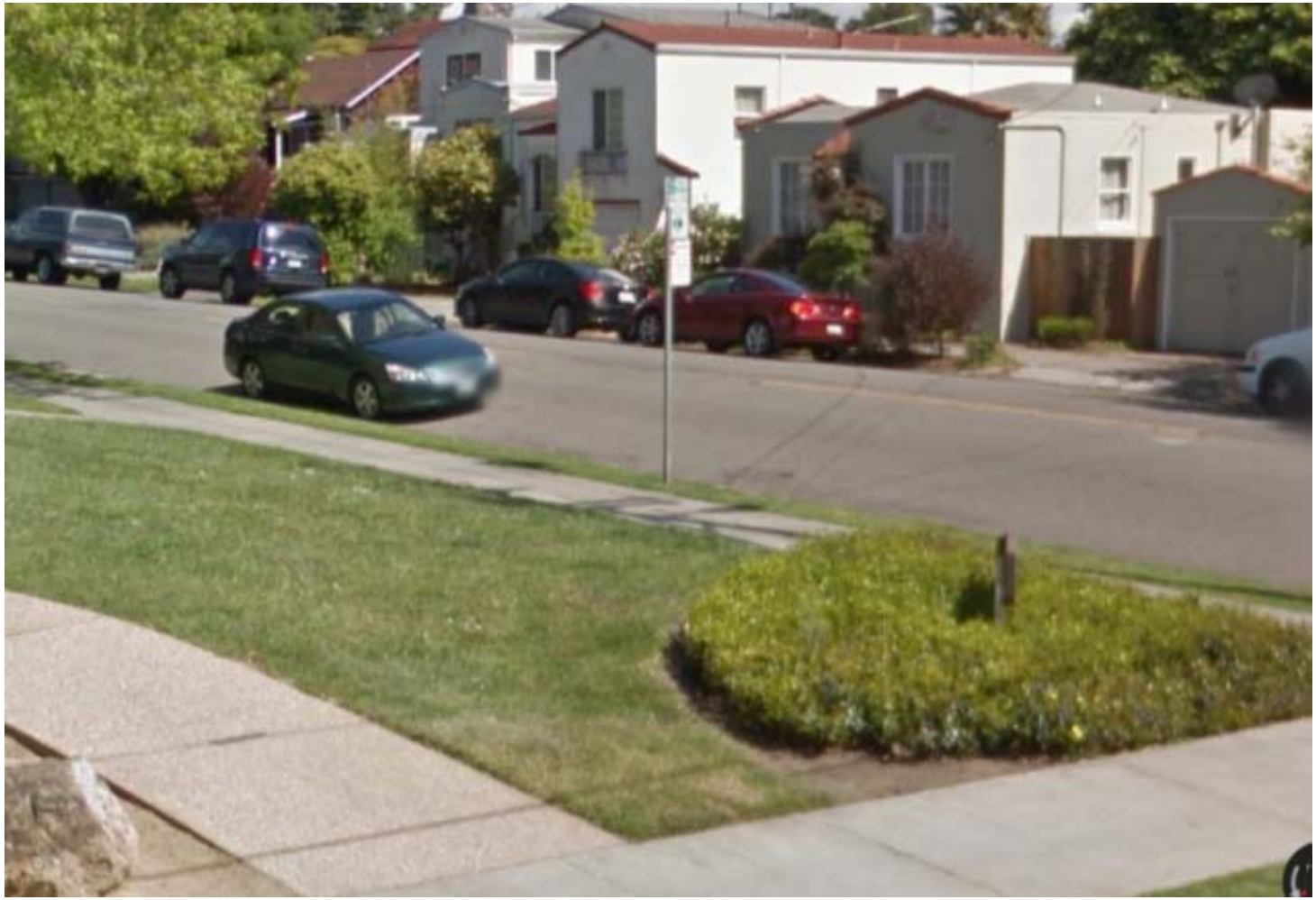
6.a Parks - Berkeley: Before



City park – aesthetic landscaping with high maintenance

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6.b Parks - Berkeley: After

New bioretention area for roadway run-off and low maint.

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7.a Drainage - San Jose: Before

Poor pavement condition and drainage issues.

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7.b Drainage - San Jose: After

New pavement with pervious pavers over infiltration trench.

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8.a Building – Palo Alto: Before

High maintenance aesthetics-only landscaping

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8.b Building – Palo Alto: After

New building with green roof, bioretention, pervious pavers

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9.a Parking Lot - Brisbane: Before

Retrofit of existing parking lot at City Hall.

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9.b Parking Lot - Brisbane: After

New pavement with biotreatment area and trees.

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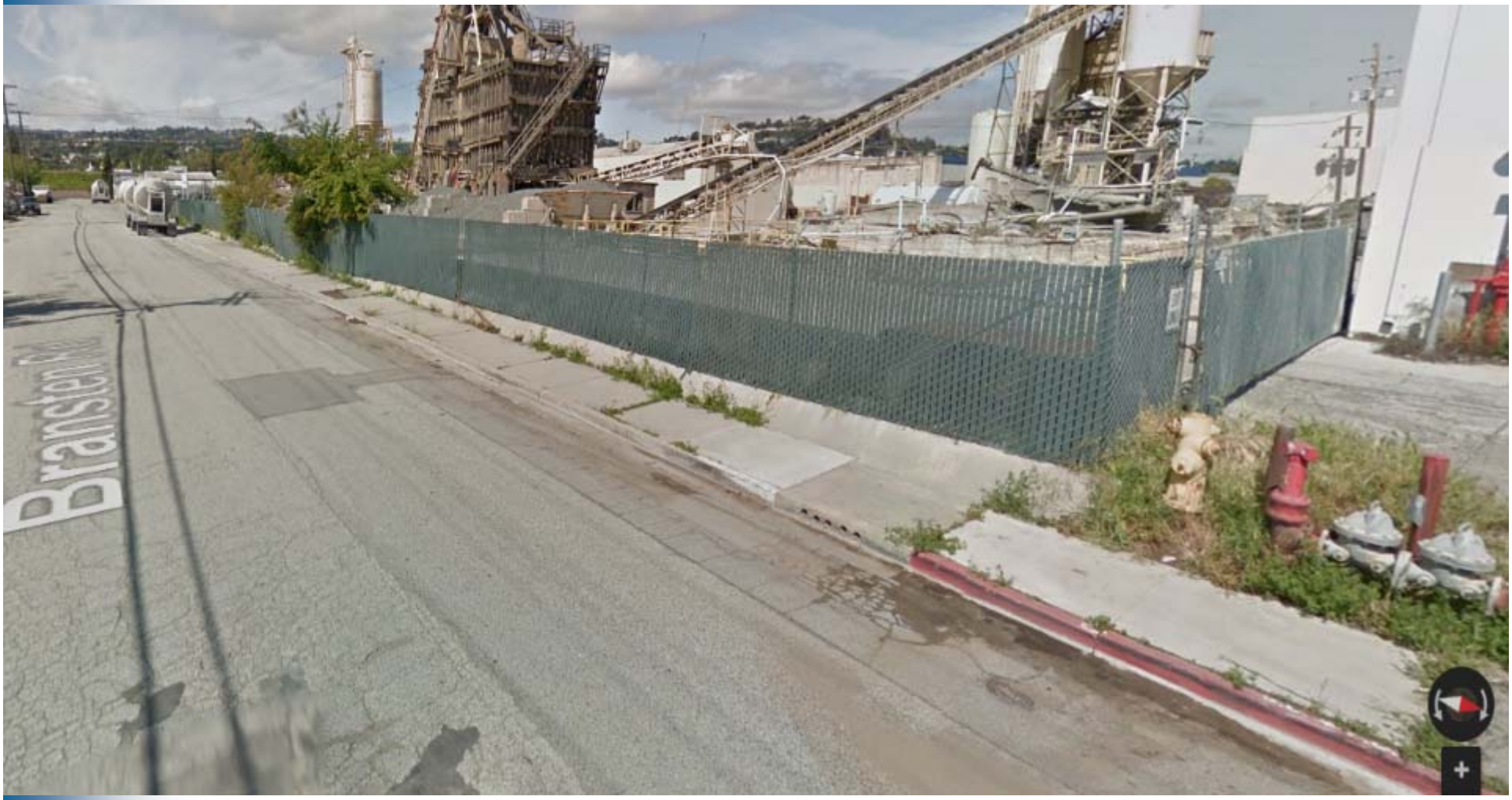
10.a Pollutant/PCBs- San Carlos: Before



Industrial street with PCBs in runoff.

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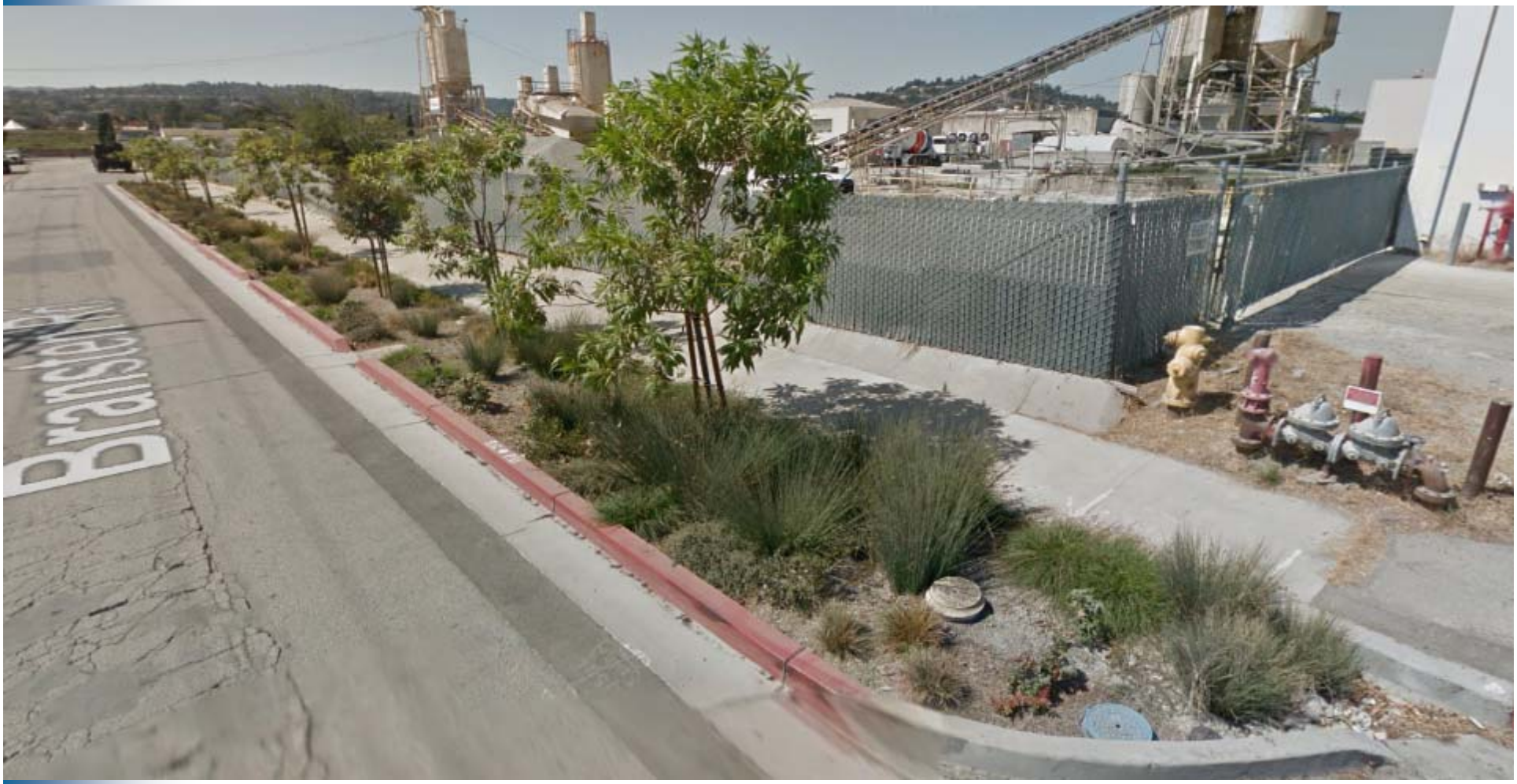
10.b Pollutant/PCBs- San Carlos: After



New biotreatment curb extensions and trees to treat PCBs.

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Missed Opportunities in Redevelopment Projects

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Tree Planting

Bulb out with no biotreatment and low soil volume.

Tree Planting

New trees in bulb-outs w/ no biotreatment & low soil volume.

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Striped red zone

Possible location for a stormwater curb extension?

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Various Opportunities

Possible locations for stormwater curb extensions?

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Summary

- Street and sidewalk projects often contain opportunities for GI implementation especially where there is excess roadway area or sidewalk area, significant adjacent landscaping or where the curb is being extended into the roadway.
- Retrofits of parks, parking lots and buildings can offer significant opportunities.
- Tree planting can be redesigned to provide GI.
- Redevelopment projects can be leveraged to make GI improvements.

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