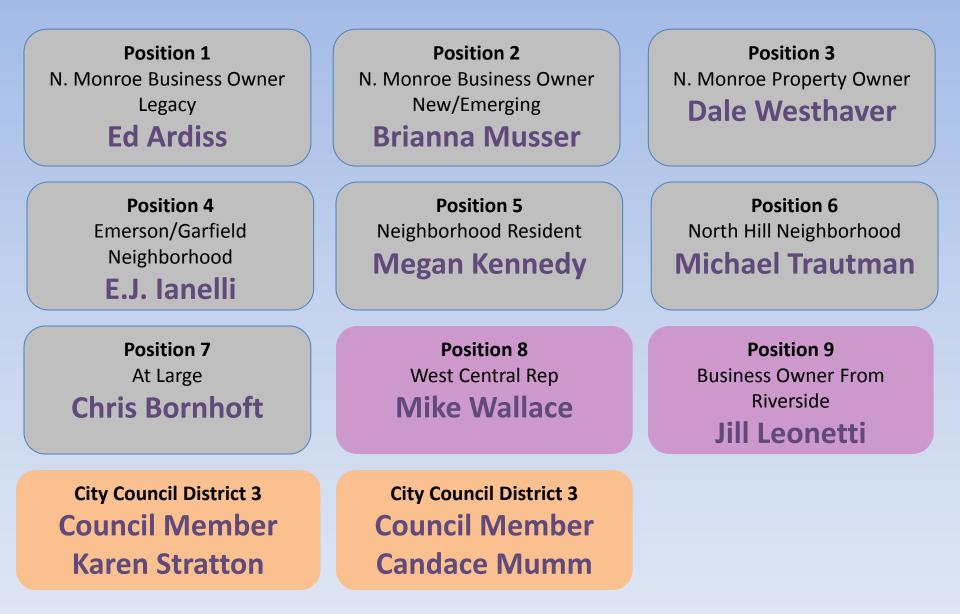
Monroe Street Stormwater, Landscaping and Parking

August 11, 2016





N. Monroe Project Advisory Board



Review of Questions (7-13-2016)

TRANSIT

- High Performance Transit
 Network
- ADA & Bicycles
- Transit Meeting with STA in September

TRAFFIC

- Level of Service (LOS)
- Residential traffic impact
- Snow Removal
- Emergency Response Vehicles
- Garbage Trucks

#

 Traffic Operations Meeting in August

Review of Questions (7-13-2016)

OTHER

- Underground Utilities
- Checking with Avista

TACOBS JAVA

- City Investment
- ~\$2.5 million

##

Review of Questions (7-28-2016)

Housing – Centers & Corridors designation calls for housing to support commercial corridor
Water/Sewer Infrastructure – In good shape generally, but water main work at south end, laterals are opportunity based

Stormwater MS4 System



MS4=Municipal Separated Storm Sewer System

Discharges pollutants directly to the Spokane River

Historic view of the river as a place to send waste

Spokane's Integrated Clean Water Plan

Clean River, Faster



- More stormwater to River than CSOs
- Stormwater key to River health
- Commitment to eliminate stormwater when rebuilding streets

Current Stormwater Standard



Stormwater Options (infiltration tools)

- Bio-Infiltration swales
- Trees with Soil Cells
- Permeable Parking Zone
- Cartridge Filtration

Bio-Infiltration

- Treatment Area / Impact Area = HIGH
- Includes decorative landscaping or greenscape (customizable)
- Traffic Calming and Pedestrian Buffer
- Requires regular maintenance and water
- Turf requires frequent maintenance and water
- Trade-off for parking and/or pedestrian space
- Costs \$\$\$\$

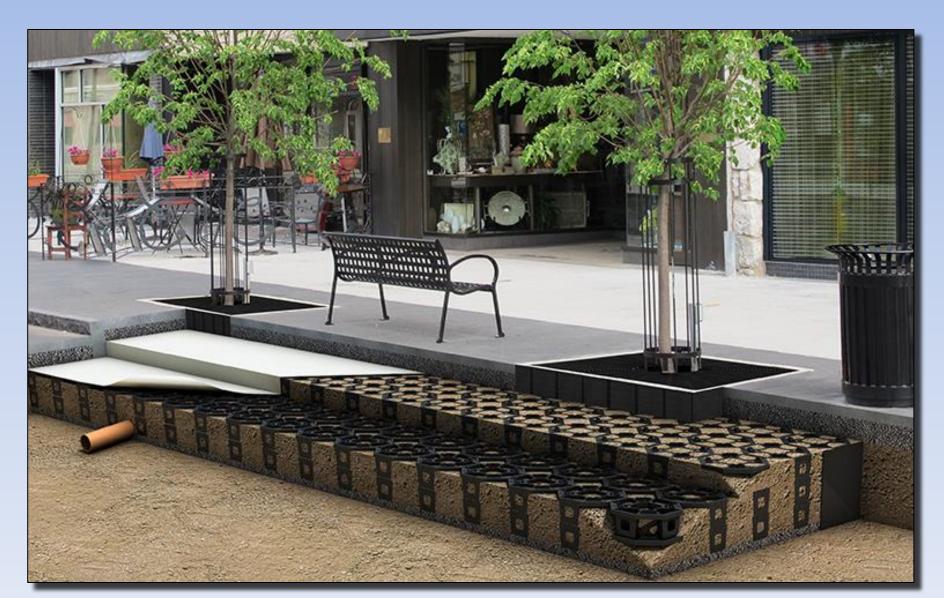
Bio-Infiltration



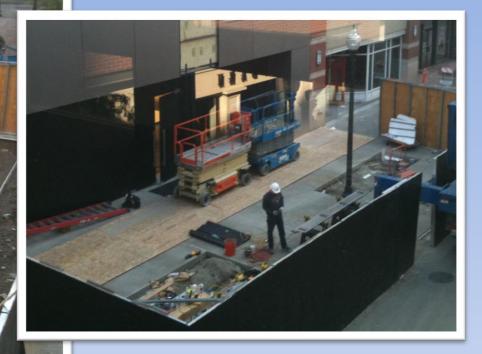
Tree with Soil Cell

- Treatment Area / Impact Area = VERY LOW
- Adds green landscaping (trees/shrubs)
- Infiltration area sits below the hardscape
- Traffic Calming and Pedestrian Buffer
- Requires regular maintenance and watering
- Double benefit with on-street parking
- Costs \$\$\$\$

Tree with Soil Cell









Pervious Concrete Parking

- Treatment Area / Impact Area = VERY LOW
- Infiltration area sits below parking
- No conflict with green space
- Requires regular street maintenance
- Double benefit with on-street parking
- Costs \$\$\$\$

Pervious Parking

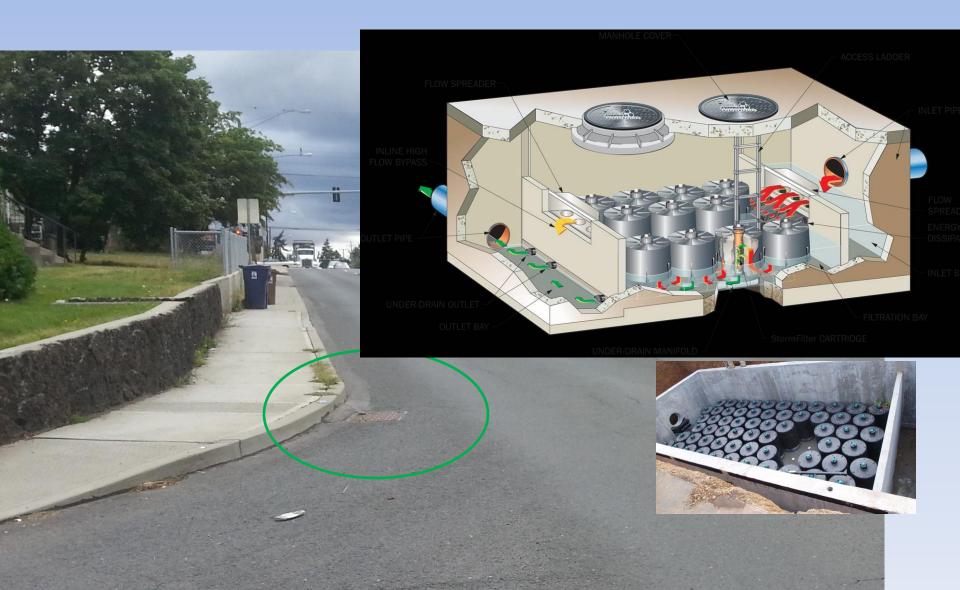




Cartridge Filtration

- Treatment Area / Impact Area = VERY LOW
- Looks like conventional stormwater system
- Requires regular utility maintenance
- No overall loss of on-street parking
- Costs \$\$\$\$

Cartridge Filtration



What do you want?

- Work together to set priorities for the corridor and mix & match option per corridor vision
 - ✓ Green Space
 - Extra trees, landscaping, grass?
 - At corners, along blocks?
 - ✓ Parking Needs
 - Landscape full or partial length of blocks?
 - Where is parking most important
- Focus Areas? For landscaping, furniture, lighting?

Visualization



Landscaping Options

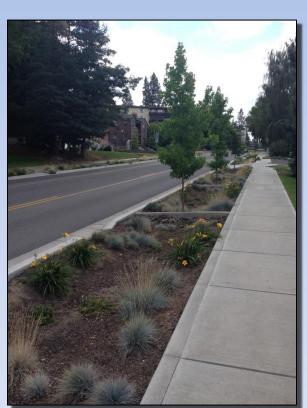
All green landscaping requires a functional watering system. Stormwater landscaping will be maintained by City Staff.

- Trees required by SMC
- Additional trees
- Shrubs
- Grasses and flowers
- Hanging baskets

Landscaping Options



Grass Swale



Tree/Shrubs Swale



Pedestrian Light w/ Baskets

Landscaping Options





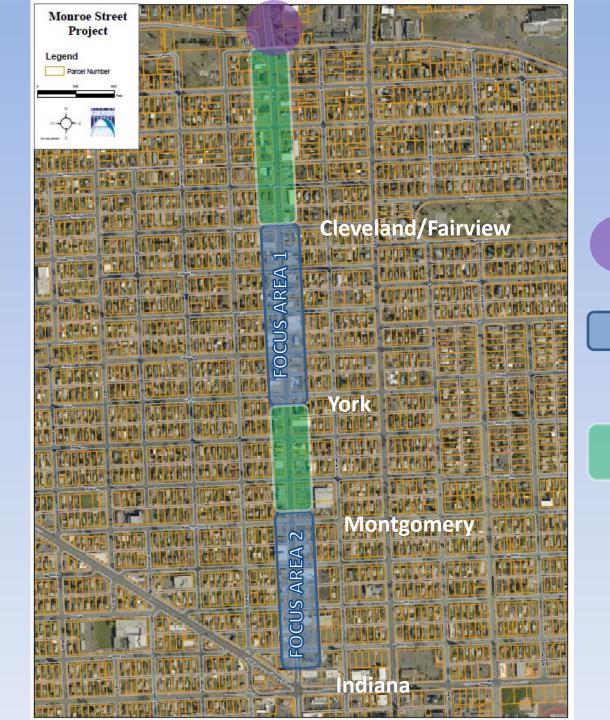
Summary

Where is the focus area?

What level of landscaping is the target?

- More trees
- turf or shrub areas
- amount of parking allowable as trade-off

The City will use this information through the design process to implement the stormwater tools.

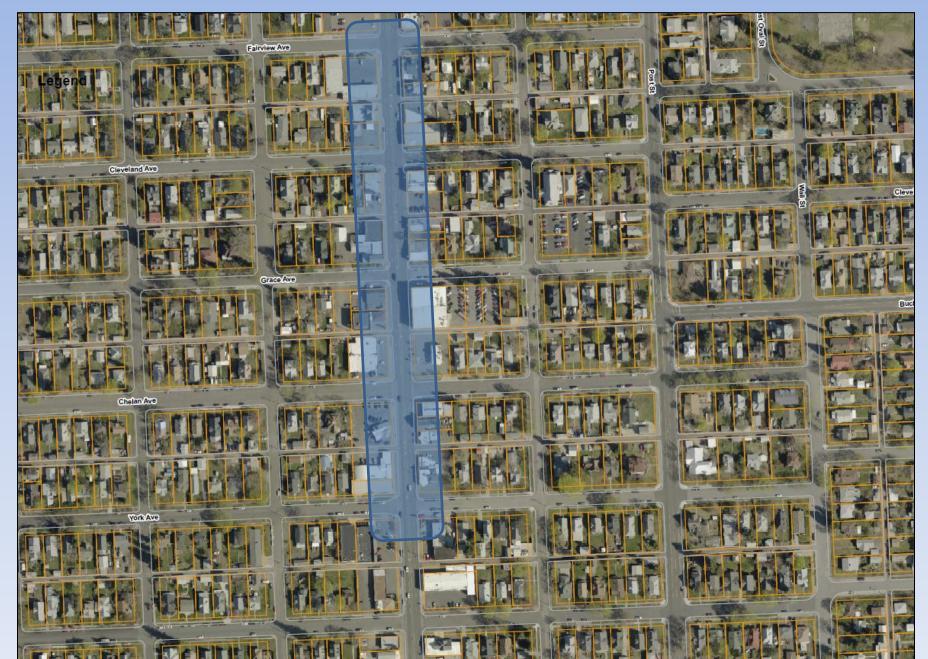




Potential Focus Areas

Remaining Project Area

Focus Area: York to Cleveland or Fairview





NW Corner of Monroe and Grace



NE Corner of Monroe and York



Between Cleveland & Grace looking east



SW Corner of Monroe and Fairview



NW Corner of Monroe and York Looking west



SW Corner of Monroe and Grace looking west



SE Corner of Monroe and Cleveland Looking west

Focus Area: Indiana to Montgomery





Between Montgomery and Mansfield

Between Montgomery and Mansfield



Entering Project Area, Indiana and Monroe (Google Maps Image)



Between Shannon Ave and Knox Ave on Monroe (Google Maps Image)