



Why NGICP?

- ◆ National certification standards for construction, inspection and maintenance workers
 - ◆ Promotes sustainable communities
 - ◆ Development of green workforce
 - ◆ Careers for GI workers
 - ◆ Protects investment
- 
- A stylized, layered mountain range graphic in shades of teal and blue, located in the bottom right corner of the slide.

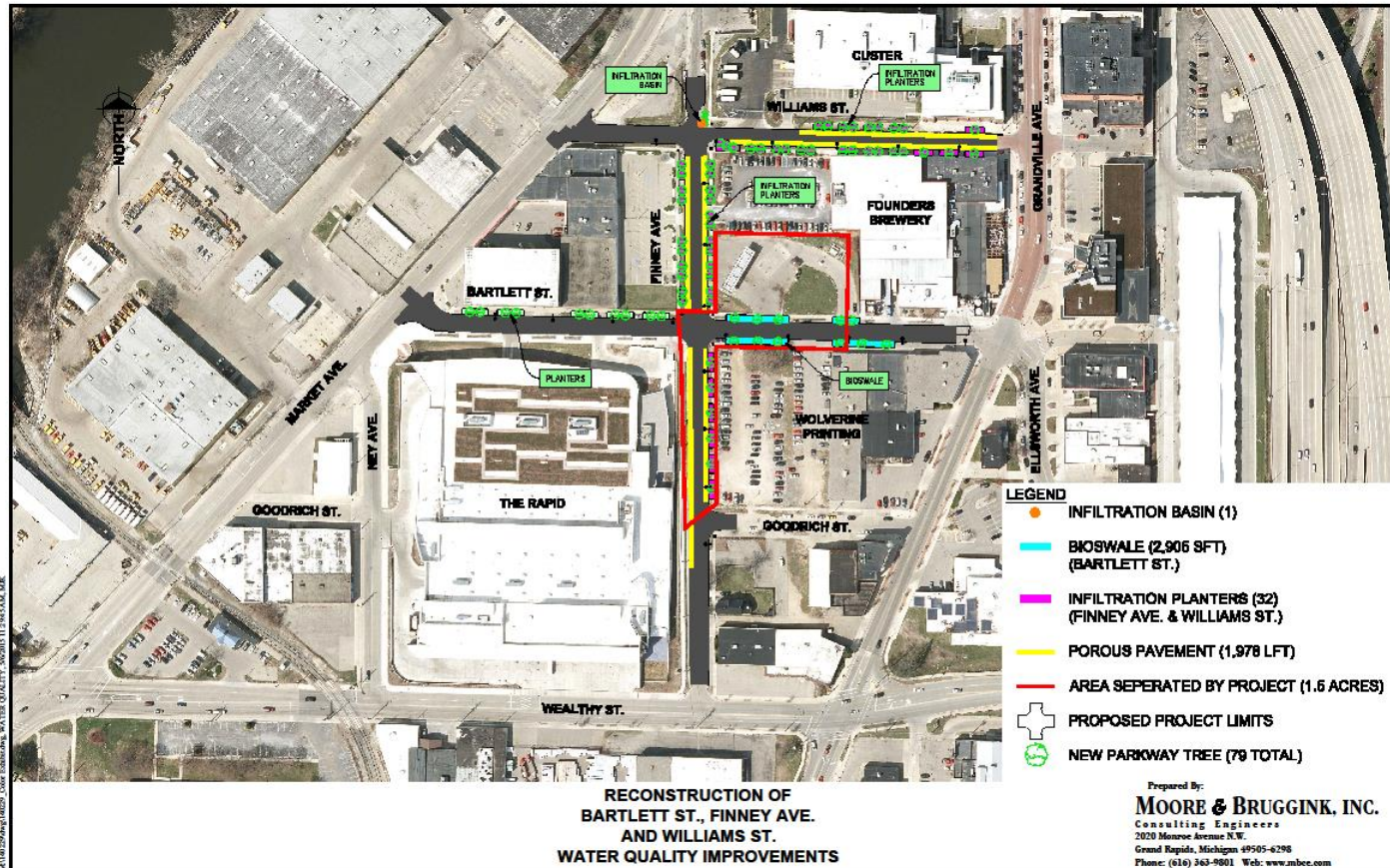
Who?

- ◆ Contractors
 - ◆ Inspectors
 - ◆ Maintenance crews
 - ◆ Designers
- 
- A stylized, dark teal silhouette of a mountain range is positioned in the bottom right corner of the slide, adding a decorative element to the background.

Where?

- ◆ Street Reconstruction
 - ◆ Street Rehabilitation
 - ◆ Private Development
 - ◆ New Buildings
 - ◆ Renovations
 - ◆ Retrofits
- 
- A stylized, dark teal silhouette of a mountain range is positioned in the bottom right corner of the slide, extending from the right edge towards the center.

Williams Street



4/14/2020/dwg140220_CROSS-SECTIONS.dwg, 5 CROSS-SECTIONS, 4/22/2015 10:35:41 AM, MLK

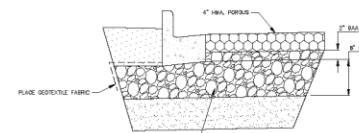


**EXISTING CROSS-SECTION
FROM MARKET AVE. TO GRANDVILLE AVE.**



HMA APPLICATION ESTIMATE					
ITEM	MATERIAL	RATE	APPROXIMATE QUANTITY	APPROXIMATE PRICE/TON	REMARKS
HMA, LUMP, TOP	HMA, LUMP	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	TOP COURSE
HMA, LUMP, LEVelling	HMA, LUMP	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	LEVELING COURSE
HMA, 2C	HMA, 2C	+10.00 TO 15.00 (2.0 HOURS)	18-24	VAR 260	BASE COURSE
HMA, APPROACH	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	TOP COURSE, DRIVEWAY
HMA, APPROACH	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	LEVELING COURSE, DRIVEWAY
HMA, HAND PATCHING	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	BASE COURSE, HAND PATCHES
HMA, FILLING	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	BASE COURSE, HAND LEVELING COURSE, 2 H. HIGH PATCHES
HMA, TEMPORARY	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	TEMPORARY FILL
	HMA, 2C	120.00 TO 150.00 (2.0 HOURS)	18-24	VAR 260	TEMPORARY FILL, 2 H. HIGH PATCHES

HMA MATERIAL FOR ALL INTERSECTION APPROACHES IS INCLUDED IN THE MAIN LINE PAVING QUANTITY



POROUS HMA SECTION

CROSS-SECTIONS

DATE	
REV. NO.	DESCRIPTION
<p>SURVEYED & DESIGNED BY: MOORE & BRUGGINK, INC. CONSULTING ENGINEERS 10000 Highway 100, Suite 100 Grand Rapids, Michigan 49506 Phone: (616) 233-1100, (616) 233-1101, (616) 233-1102</p> <p>CITY OF GRAND RAPIDS Design, Development and Engineering Services Engineering Department</p> <p align="center">RECONSTRUCTION OF WILLIAMS STREET FROM MARKET AVE. TO GRANDVILLE AVE.</p>	
Drawn by: <u>M.J.P.</u>	CITY NO. _____
Check/Field: _____	5326
Check/Office: _____	5 of 51

Open Graded Aggregate



Paving



09/09/2015

Porous Asphalt Pavement



Testing

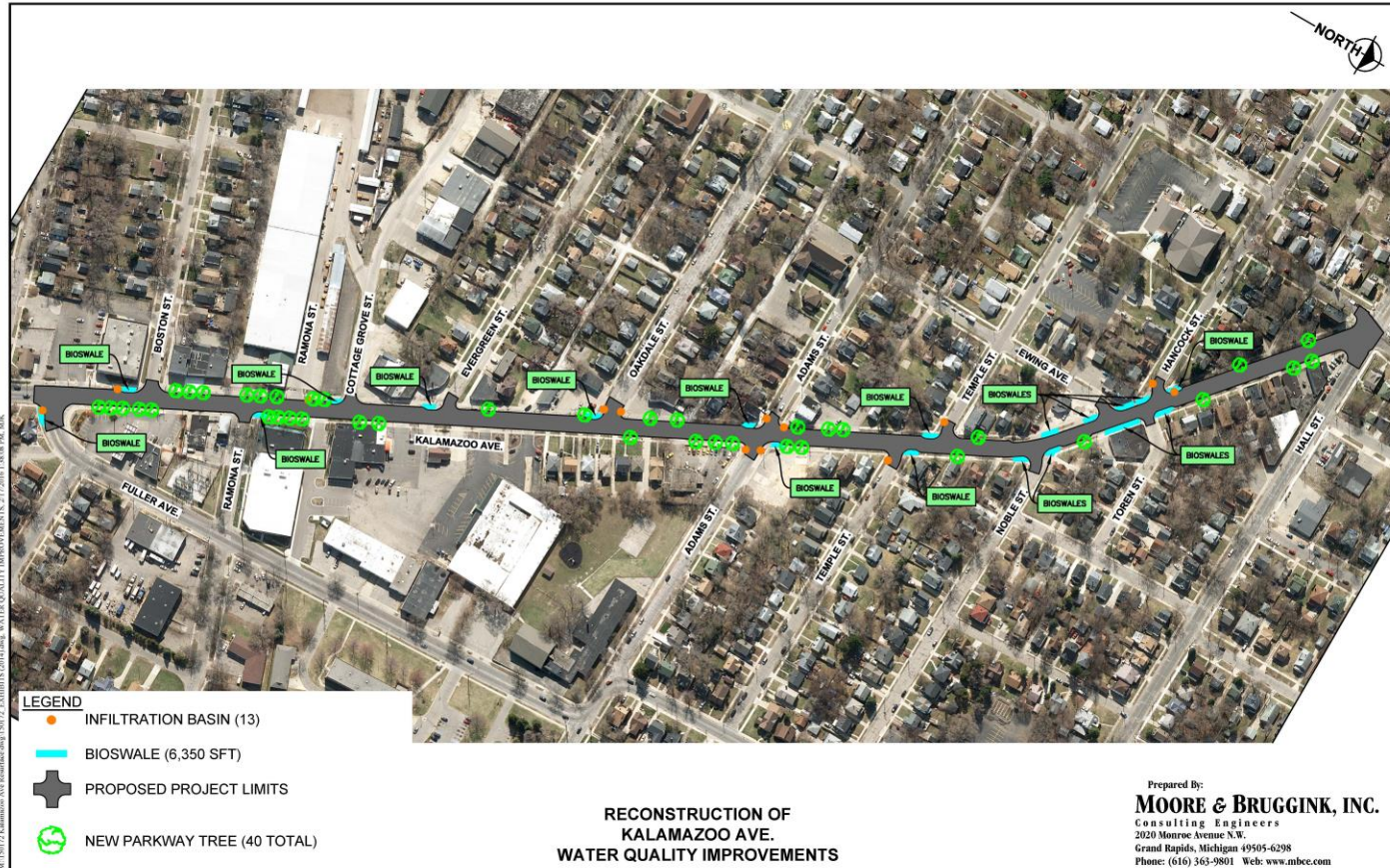


09/09/2015

Completion



Kalamazoo Ave



Fabric



Open Graded Drainage Course



Cobblestone



Planting Mix



Time to Plant



Planting



1 Year Later

