



Legend

- Future Road Diet
- Road Diet Type 1 - East/West Bound Bike Lanes, Parallel On-Street Parking &/Or Shoulder
- Road Diet Type 2 - East/West Bound Bike Lane, Back-In Angled On-Street Parking &/Or Shoulder

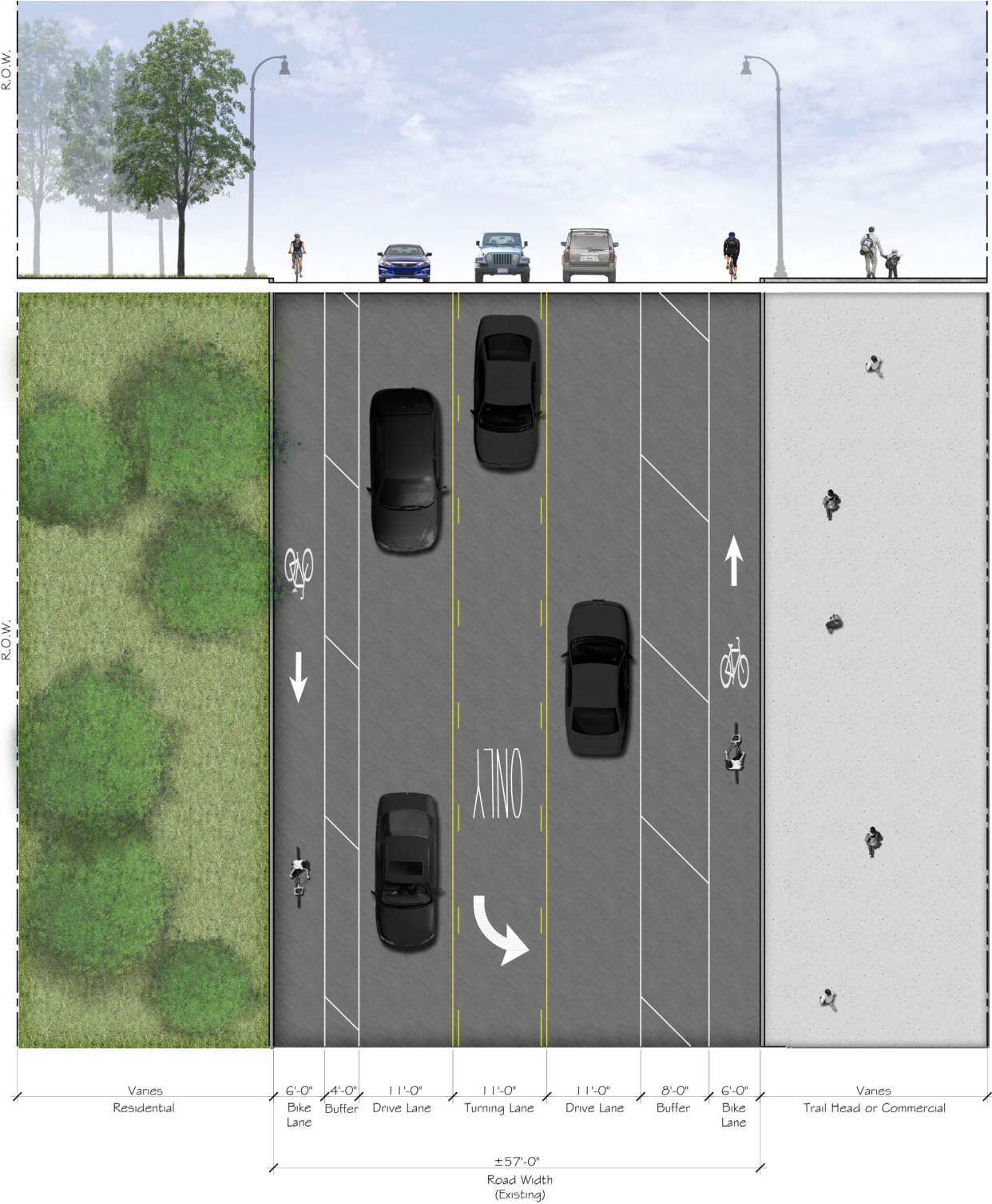
ROAD DIET

NINE MILE ROAD | OAK PARK, MI



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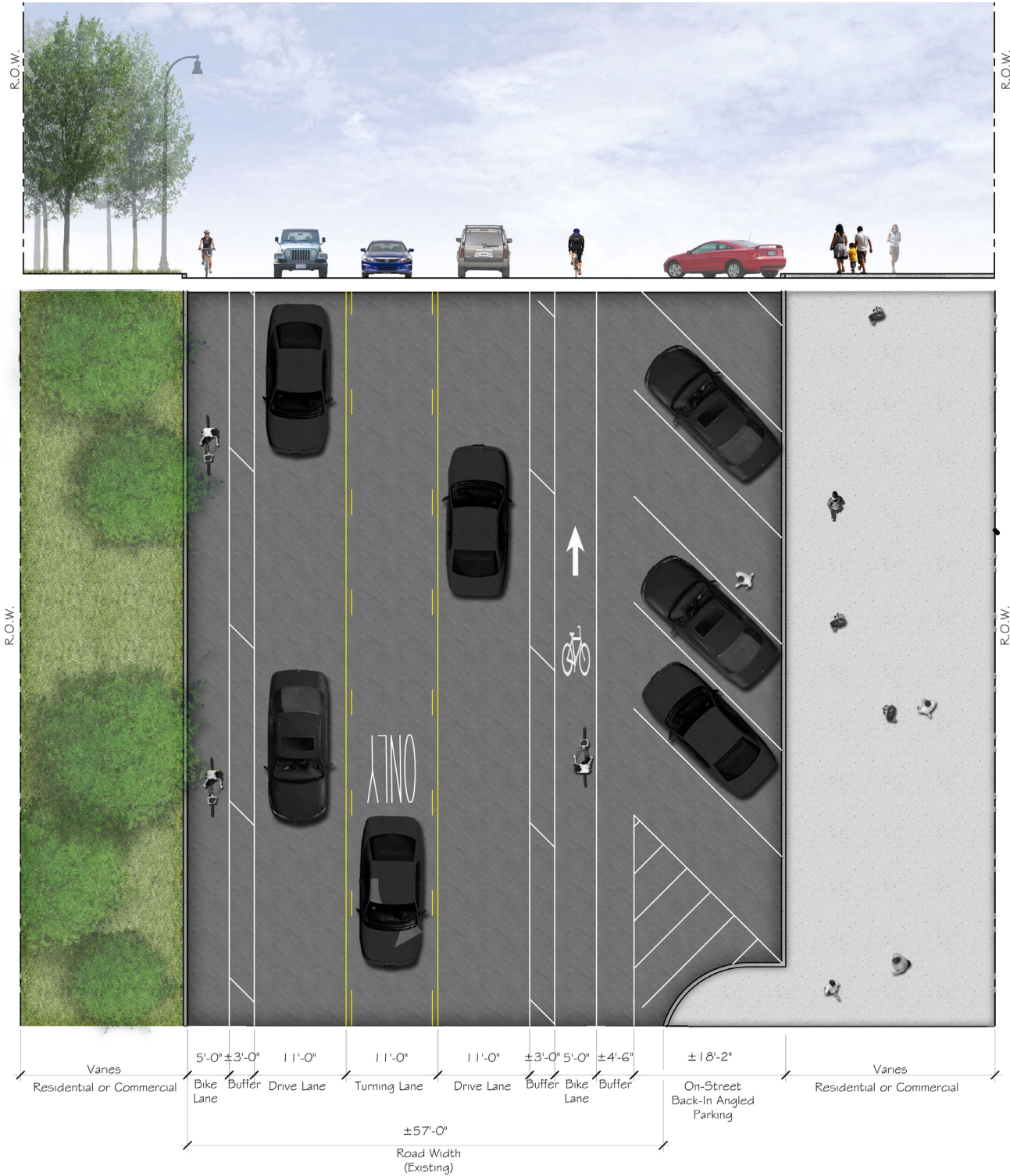


ROAD DIET TYPE 1



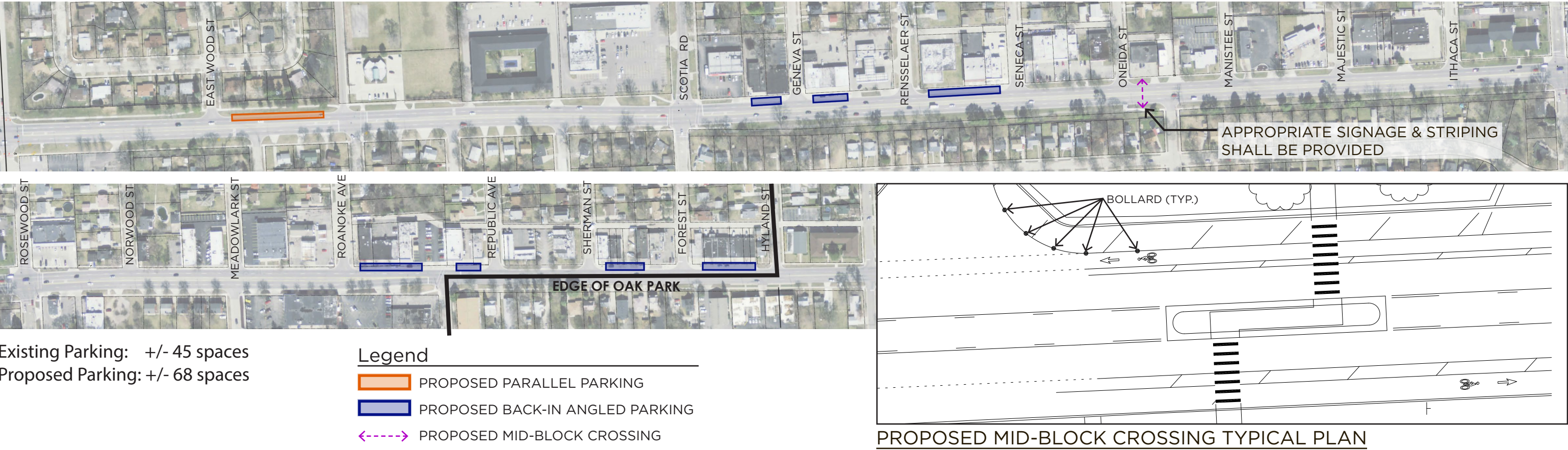
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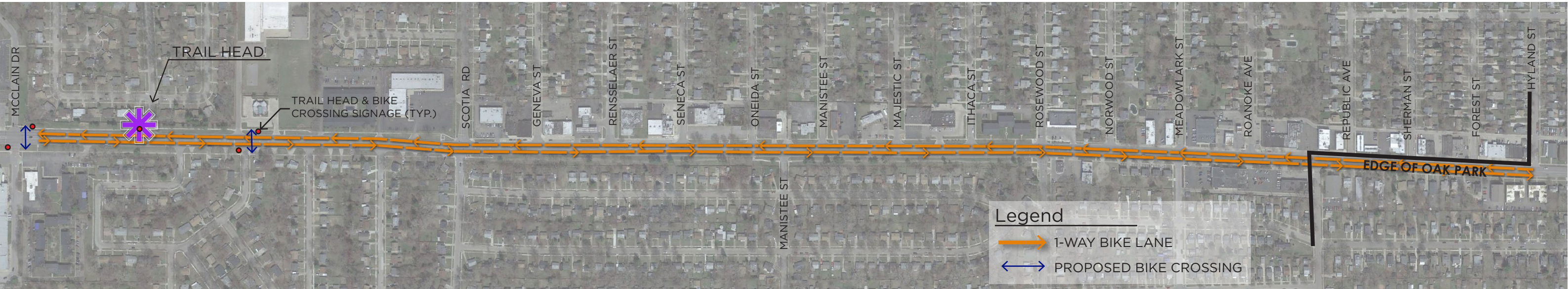


ROAD DIET TYPE 2

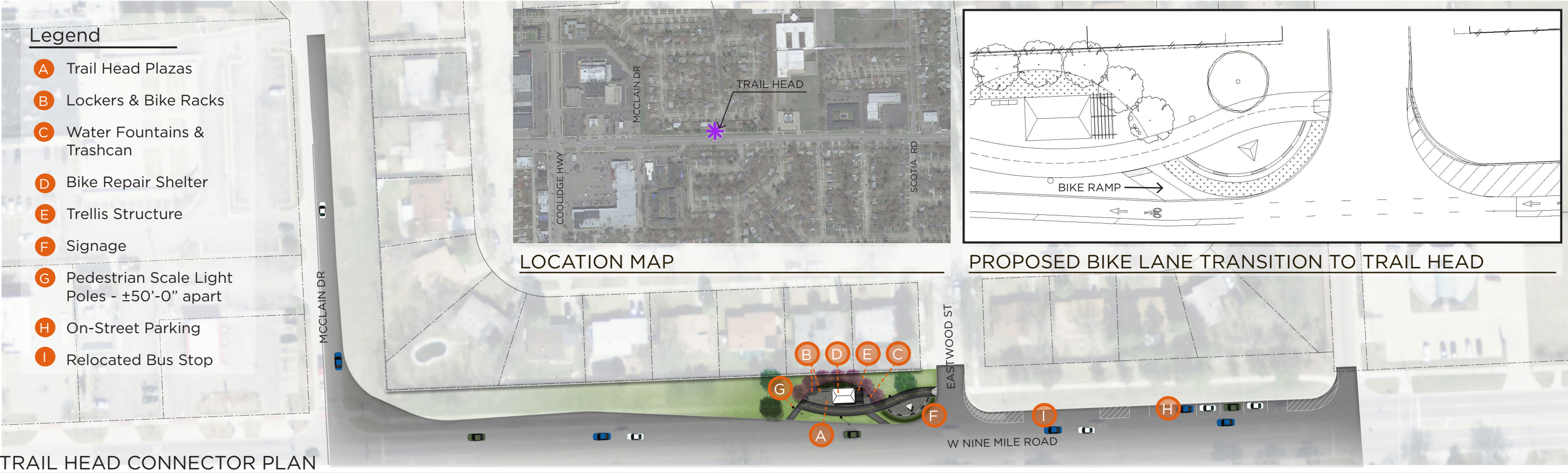
PROPOSED PARKING & MID-BLOCK CROSSING DIAGRAM



BIKE ROUTE DIAGRAM



ROAD DIET



TRAIL HEAD CONNECTOR

9 MILE ROAD DIET
Back of Curb to Back of Curb
Oak Park, MI
PRELIMINARY COST ESTIMATE
Apr-16

Description	Quantity	Units	Material and Labor per Unit Price	Total Item Price	Remarks
ROAD DIET PAVEMENT MARKINGS					Road Diet pavement marking changes
Mobilization	1	LS	\$86,000.00	\$86,000.00	10% of project cost of everything below including contingency but not the engineering fee
Pavt Mrkg, Ovly Cold Plastic, 6 inch, White	3200	Ft	\$3.35	\$10,720.00	Shoulder Cross hatching, bike lane separation crosshatching, parking crosshatching
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	728	Ft	\$6.00	\$4,368.00	High visibility crosswalk lines for linear park path crossings
Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar	225	Ft	\$12.00	\$2,700.00	Stop bar at signalized intersections
Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	44	Ea	\$150.00	\$6,600.00	Bike symbol arrow at all intersections
Pavt Mrkg, Ovly Cold Plastic, Bike	44	Ea	\$150.00	\$6,600.00	Bike symbol at all intersections
Pavt Mrkg, Green Conflict Area	7213	Sft	\$13.00	\$93,769.00	Green pavement markings for bike lanes at intersections and bus stops
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	8	Ea	\$165.00	\$1,320.00	Left turn arrow for left turn lanes at singalized intersections
Pavt Mrkg, Ovly Cold Plastic, Only	8	Ea	\$175.00	\$1,400.00	"Only" pavement marking to compliment the left turn arrow at signalized intersections
Pavt Mrkg, Ovly Cold Plastic, School	2	Ea	\$210.00	\$420.00	"School" pavement markings at the west end of the project area to replace existing
Pavt Mrkg, Sprayable Thermopl, 4 inch, White	13723	Ft	\$0.50	\$6,861.50	Bike lane lines, parking lines, driveway lines, dashed bike lane lines
Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	13450	Ft	\$0.50	\$6,725.00	Center turn lane; solid lines and dashed lines
Pavt Mrkg, Sprayable Thermopl, 6 inch, White	9650	Ft	\$0.50	\$4,825.00	Outer lane line
Rem Spec Mrkg	950	Sft	\$3.50	\$3,325.00	Removal for special existing pavement markings (ie left turn arrow, "Only," "School," etc)
Pavt Mrkg, Longit, Water Blasting, 6 inch or less Width, Rem	36284	Ft	\$1.25	\$45,355.00	Removal for existing pavement markings
Bollard	99	Ea	\$24.00	\$2,376.00	Every 300' in shoulder area and on the extended painted radii
Maintenance of Traffic	1	LS	\$18,000.00	\$18,000.00	
Signing	1	LS	\$13,000.00	\$13,000.00	
TOTAL				\$314,364.50	
MEDIAN ISLANDS					3 Median islands at the mid-block crosswalk areas
Pavt, Rem	342	Syd	\$15.00	\$5,130.00	Median width + curb width on either side + additional 2'
Excavation Earth	70	Cyd	\$18.00	\$1,260.00	
Curb and Gutter, Rem	48	Ft	\$17.00	\$816.00	
Embankment, CIP	30	Cyd	\$18.00	\$540.00	
Aggregate Base, 6 inch	446	Syd	\$16.00	\$7,136.00	
Sidewalk Ramp, Conc, 6 inch	671	Sft	\$10.00	\$6,710.00	
Sidewalk, Conc, 4 inch	983	Sft	\$8.00	\$7,864.00	
Hand Patching	53	Ton	\$130.00	\$6,890.00	
Curb and Gutter, Conc, Det F4	386	Ft	\$23.00	\$8,878.00	
TOTAL				\$45,224.00	
ANGLED PARKING AREA 1					Angled Parking reconstruct Scotia to Seneca
Curb and Gutter, Rem	456	Ft	\$17.00	\$7,752.00	
Gutter, Rem	520	Ft	\$22.00	\$11,440.00	
Pavt, Rem	1177	Syd	\$15.00	\$17,655.00	
Sidewalk, Rem	325	Syd	\$13.00	\$4,225.00	
Aggregate Base, 6 inch	1573	Syd	\$16.00	\$25,168.00	
Sidewalk, Conc, 4 inch	3345	Sft	\$8.00	\$26,760.00	
HMA, 3C	134	Ton	\$80.00	\$10,720.00	
HMA, 13A	134	Ton	\$90.00	\$12,060.00	
Curb and Gutter, Conc, Det F4	580	Ft	\$23.00	\$13,340.00	
TOTAL				\$129,120.00	
ANGLED PARKING AREA 2					Angled Parking reconstruct Roanoke to Hyland
Curb and Gutter, Rem	756	Ft	\$17.00	\$12,852.00	
Gutter, Rem	702	Ft	\$22.00	\$15,444.00	
Pavt, Rem	1498	Syd	\$15.00	\$22,470.00	
Sidewalk, Rem	1150	Syd	\$13.00	\$14,950.00	
Aggregate Base, 6 inch	2621	Syd	\$16.00	\$41,936.00	
Sidewalk, Conc, 4 inch	7426	Sft	\$8.00	\$59,408.00	
HMA, 3C	220	Ton	\$80.00	\$17,600.00	
HMA, 13A	220	Ton	\$90.00	\$19,800.00	
Curb and Gutter, Conc, Det F4	775	Ft	\$23.00	\$17,825.00	
Green Infrastructure	2780	Sft	\$38.00	\$105,640.00	
TOTAL				\$327,925.00	
SUBTOTAL CONSTRUCTION COST				\$816,633.50	
10% CONTINGENCY				\$81,663.35	10% Contingency of all costs above
25% ENGINEERING FEE				\$204,158.38	25% Engineering Design Fee of construction cost
TOTAL COSTS				\$1,102,455.23	Total Cost of all above

OAK PARK ROADWAY \$1,102,455

FERNDALE ROADWAY \$290,267

TRAIL HEAD CONNECTOR \$314,557

TOTAL \$1,707,279

OAK PARK ROADWAY COST ESTIMATE

WEST NINE MILE TAP GRANT

GW PROJ. NO.: 14787.76
DATE: March 28, 2016
Rev August 31, 2016

CONCEPTUAL CONSTRUCTION COST ESTIMATE

THE FOLLOWING COST ESTIMATE IS FOR THE WEST NINE MILE ROAD DIET / CONVERSION FROM 4 LANES TO 3 LANES WITH DEDICATED BIKE LANES, MEDIAN ISLANDS, SIGNAGE, AND PAVEMENT MARKINGS FROM PINCREST TO REPUBLIC. UNIT PRICES WERE TAKEN FROM RECENT PROJECTS BID IN 2015. UNIT PRICES AND FINAL COST WILL VARY DEPENDING ON MARKET CONDITIONS AND QUANTITY OF WORK SINCE OAK PARKS PROJECT WOULD BE INCLUDED.

ITEM	WORK ACTIVITY	QUANTITY	UNIT	UNIT PRICE	TOTAL	COMMENTS
MOBILIZATIONS, TRAFFIC, PERMITS						
	Mobilization, Max ___%	1	LS	\$20,000.00	\$20,000.00	Max 10%
	Traffic Control	1	LS	\$20,000.00	\$20,000.00	Budget 10%
	Flag Control	1	LS	\$17,500.00	\$17,500.00	Budget
	SUBTOTAL - MOBILIZATIONS, TRAFFIC, PERMITS				\$57,500	
DEMOLITION						
	Curb and Gutter, Conc, Rem	50	LF	\$50.00	\$2,500.00	
	Pavt, Rem	295	SY	\$20.00	\$5,900.00	
	Sidewalk, Rem	64	SY	\$10.00	\$640.00	
	Rem HMA surface	295	SY	\$15.00	\$4,425.00	
	SUBTOTAL - DEMOLITION				\$13,465	
MEDIAN ISLANDS						
	Curb & Gutter, Conc, Modified	570	LF	\$25.00	\$14,250.00	
	Agg Base, 21AA, 4 Inch	126	SYD	\$8.00	\$1,008.00	570' x 2' (under curb)
	Lane Ties, Epoxy Coated	250	EA	\$10.00	\$2,500.00	
	Sidewalk, Conc, 4 Inch	575	SFT	\$7.00	\$4,025.00	
	Sidewalk Ramp, 6 Inch	400	SFT	\$10.00	\$4,000.00	
	Detectable Warning Surface	40	LF	\$45.00	\$1,800.00	
	Decorative Concrete, Colored, 4 Inch	670	SFT	\$20.00	\$13,400.00	In 2 medians
	Agg Base, 21AA, 8 Inch	670	SYD	\$15.00	\$10,050.00	Under decorative conc.
	Landscaping	945	SFT	\$10.00	\$9,450.00	In 2 medians (plants, mulch, etc)
	SUBTOTAL - CURBS AND SIDEWALKS				\$60,483	
PAVT MARKINGS AND SIGNAGE						
	Pavt Mrkg, Longit, Rem, 6" or Less	7000	LF	\$1.00	\$7,000.00	
	Rem Spec Mrkgs	400	SFT	\$3.50	\$1,400.00	
	Pavt Mrkg, Waterborne, 4 inch, Wh	3700	LF	\$0.50	\$1,850.00	
	Pavt Mrkg, Waterborne, 4 inch, Yel	4900	LF	\$0.50	\$2,450.00	
	Pavt Mrkg, Waterborne, 6 inch, Wh	4500	LF	\$0.75	\$3,375.00	
	Pavt Mrkg, Green Conflict Areas	2800	SFT	\$13.00	\$36,400.00	
	Pavt Mrkg, WB, 6 inch, Wh, X Hatch	630	LF	\$3.00	\$1,890.00	
	Pavt Mrkg, Cold Plastic, 12" Crosswalk	300	LF	\$6.00	\$1,800.00	
	Pavt Mrkg, Cold Plastic, 24" Stop Bar	90	LF	\$12.00	\$1,080.00	
	Pavt Mrkg, Cold Plastic, Dir Arrow	8	EA	\$200.00	\$1,600.00	
	Pavt Mrkg, Cold Plastic, Bike	24	EA	\$135.00	\$3,240.00	
	Pavt Mrkg, Cold Plastic, Bike Arrow	24	EA	\$135.00	\$3,240.00	
	Pavt Mrkg, Cold Plastic, Bike, Lrg	24	EA	\$175.00	\$4,200.00	In Bike Box (if approved)
	Pavt Mrkg, Cold Plastic, Sharrow Symb	7	EA	\$230.00	\$1,610.00	Bike and Chevron
	Sign, Type IIIA or IIIB	200	SFT	\$20.00	\$4,000.00	
	Post, Steel, 3 lb	420	FT	\$6.00	\$2,520.00	
	Flexible Delineator Posts	20	EA	\$100.00	\$2,000.00	Pinecrest Inters. (estimated)
	SUBTOTAL TRAFFIC CONTROL AND STRIPING				\$79,655	
	SUBTOTAL CONSTRUCTION COST				\$211,103	

ITEM	WORK ACTIVITY	QUANTITY	UNIT	UNIT PRICE	TOTAL	COMMENTS
	SUBTOTAL CONSTRUCTION COST				\$211,103	
	CONSTRUCTION CONTINGENCY			10%	\$21,110	
	SUBTOTAL ENGINEERING (MDOT)			25%	\$58,053	Could be 20% since mainly a striping project
	TOTAL ESTIMATED COST				\$290,267	

Specific work items that ARE NOT included in this estimate include:

- No pavement work was included (resurfacing, deteriorated curb replacement, etc.).

It should be pointed out that since we have no control over the Contractor's method of determining prices, competitive bidding or market conditions, our opinion of the probable construction cost as provided for herein is made on the basis of experience and represents our best judgment as design professionals. We cannot guarantee that the final construction cost will not vary from this estimate.

Respectfully,
GIFFELS WEBSTER

Estimate Prepared By: Scott A. Ringler, PE
Date: 3/28/2016 Rev 08/31/2016

Estimate Checked By: Justin Wellman, PE
Date: March 28, 2016

1025 E. Maple, Suite 100 Birmingham, MI 48009 (248) 852-3100 Fax: (248) 852-6372	28 W. Adams, Suite 1200 Detroit, MI 48226 (313) 962-4442 Fax: (313) 962-5068	6303 26 Mile Road, Suite 100 Washington Twp, MI 48094 (586) 781-8950 Fax (586) 781-8951
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OAK PARK ROADWAY	\$1,102,455
FERNDALE ROADWAY	\$290,267
TRAIL HEAD CONNECTOR	\$314,557
TOTAL	\$1,707,279

FERNDALE ROADWAY COST ESTIMATE

NINE MILE ROAD | OAK PARK, MI

Trail Head Connector
Back of Curb to Right-of-Way
Oak Park, MI
PRELIMINARY COST ESTIMATE
Jul-16

Description	Quantity	Units	Material and Labor per Unit Price	Total Item Price	Remarks
SITE DEMOLITION / PREP					
Excavation/Earthwork	138	CY	\$28	\$3,864	
Concrete Sidewalk Removal	110	SY	\$16	\$1,760	
Tree Removal	4	EA	\$1,500	\$6,000	
Utility Relocation	1	Allow	\$5,000	\$5,000	
TOTAL				\$16,624	
SITE IMPROVEMENTS					
General Utility/Site Work	1	Allow	\$4,000	\$4,000	
Final Site Grading	830	SY	\$4	\$3,320	
TOTAL				\$7,320	
LANDSCAPE/SOFTSCAPE PACKAGE					
Deciduous Tree	1	EA	\$600	\$600	
Ornamental Tree	7	EA	\$400	\$2,800	
Shrub/Ground Cover	670	SF	\$12	\$8,040	
Mulch	8	CY	\$40	\$320	
Seeded Turf	4000	SF	\$0.25	\$1,000	
Planting Soil Mixture	25	CY	\$40	\$1,000	
Steel Edging	100	LF	\$11	\$1,100	
TOTAL				\$14,860	
HARDSCAPE					
Multi-use Path - Asphalt Course	30	TON	\$121	\$3,630	use 36A pavement
Multi-use Path - Aggregate Base	26	CY	\$66	\$1,716	item 302
Multi-use Path - Machine Grading	0.4	STA	\$1,000	\$400	subgrade compaction, item 205
Multi-use Path - Centerline	140	LF	\$1	\$70	4" Sprayable Thermoplastic
Curb Ramp	1	EA	\$1,800	\$1,800	
Standard Concrete - Bus Stop	1200	SF	\$7	\$8,400	at Commercial Corridor Streetscape
Decorative Concrete	1650	SF	\$12	\$19,800	
Crosswalk Pavement Enhancements	1300	SF	\$18	\$23,400	at 2 Bike Crossings
TOTAL				\$59,216	
SITE FURNISHINGS & AMENITIES					
Pedestrian Scale Lighting	3	EA	\$5,000	\$15,000	
Bike Repair Shelter	1	Allow	\$45,000	\$45,000	
Informational Signage	1	Allow	\$8,000	\$8,000	
Bike Racks	11	EA	\$1,000	\$11,000	at Trail Head Connector & Commercial Corridor Streetscape
Bike Lockers	3	EA	\$2,000	\$6,000	
Drinking Fountains	1	EA	\$2,000	\$2,000	
Trash Can	10	EA	\$800	\$8,000	at Trail Head Connector & Commercial Corridor Streetscape
Bench	12	EA	\$2,500	\$30,000	at Trail Head Connector & Commercial Corridor Streetscape
Streetscape Planter Pots	10	EA	\$1,000	\$10,000	at Commercial Corridor Streetscape
TOTAL				\$135,000	
BUDGET COSTS				\$233,020	
10% CONTINGENCY				\$23,302.00	
25% DESIGN FEES				\$58,255.00	
TOTAL COSTS				\$314,577	

OAK PARK ROADWAY	\$1,102,455
FERNDAL ROADWAY	\$290,267
TRAIL HEAD CONNECTOR	\$314,557
TOTAL	\$1,707,279

TRAIL HEAD CONNECTOR COST ESTIMATE