

City of Ann Arbor

DHU VARREN ROAD SIDEWALK GAP PRELIMINARY ENGINEERING STUDY

Pontiac Trail to Omlesaad Drive

FINAL REPORT

September 4, 2026



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EXECUTIVE SUMMARY

The City's Sidewalk Gap Program supports safer, more accessible travel for people of all ages and abilities. Consistent with the City's Vision Zero and Complete Streets policies, this study evaluates the high-priority sidewalk gap along Dhu Varren Road from Pontiac Trail to Omlesaad Drive.

The study compared north- and south-side walkway alignments, costs, and tradeoffs to complete the corridor network. The evaluation considered safety, gap length, grades, drainage, utilities, trees, natural resources, right-of-way needs, railroad approvals, constructability, and public input. Water main, sanitary sewer, stormwater infiltration, and streetlighting upgrades were outside the study scope.

Key Findings

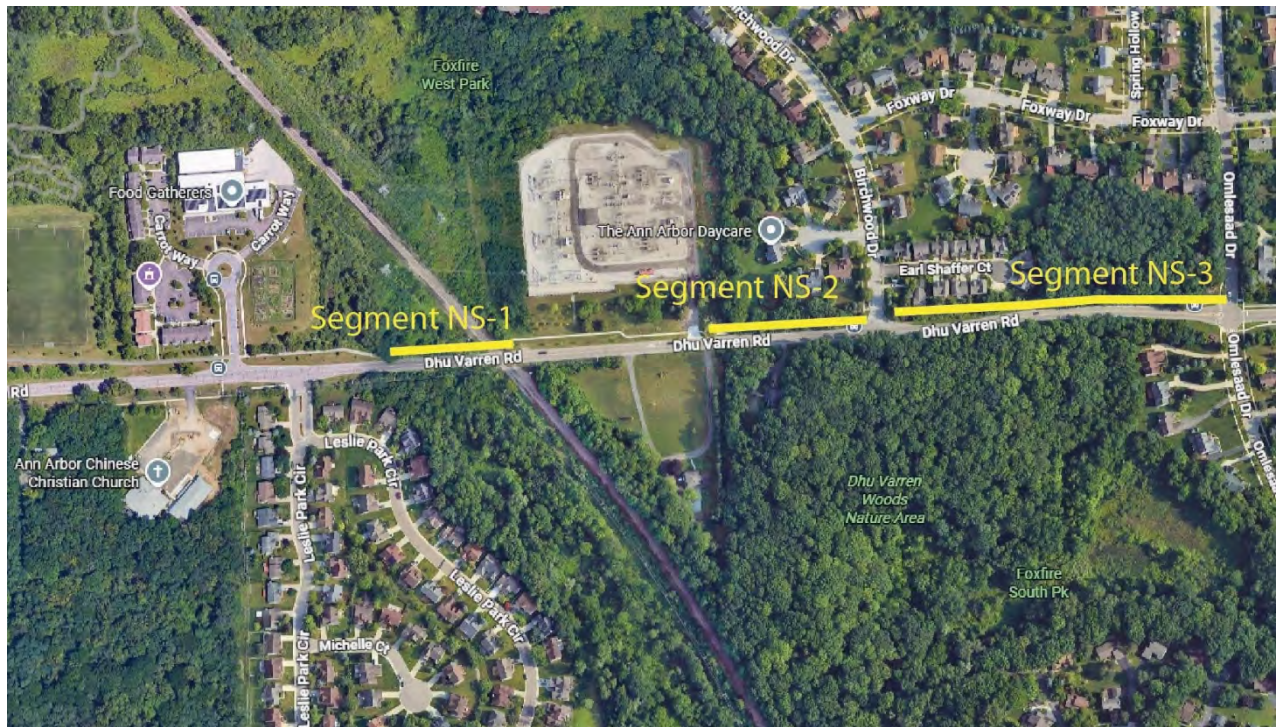
- **Safety and accessibility are the primary needs.** Closing the gaps would keep pedestrians out of the roadway and improve connections to neighborhoods, parks, transit stops, and community services.
- **Prioritize the north-side walkway.** The north side has approximately 1,610 feet of gaps compared with 3,400 feet on the south side, a lower conceptual cost, fewer estimated tree removals, fewer constraints, and stronger public support as the first phase.
- **Use context-appropriate walkway types.** The recommended concept includes 5-foot sidewalks for most gaps, a 10-foot shared-use path from Birchwood Drive to Omlesaad Drive, a 14-foot-wide bridge in Segment NS-1, and a possible boardwalk approach to the bridge.
- **Minimize tree impacts.** Concept-level estimates indicate approximately 40 tree removals on the north side and 70 on the south side. Final totals should be updated after survey and detailed design.

Recommended Route and Concept Design

Prioritize the north-side route. Based on site conditions, environmental constraints, public input, and comparative costs, the City should prioritize the north-side walkway. The recommended concept includes 5-foot sidewalks from Food Gatherers to the Ann Arbor Railroad and from the DTE substation to Birchwood Drive, plus a 10-foot shared-use path from Birchwood Drive to Omlesaad Drive. Segment NS-1 would require a 14-foot-wide bridge across Traver Creek and may also require a boardwalk approach. This concept would close approximately 1,610 feet of gaps and best balance safety, accessibility, affordability, constructability, and impacts to trees and sensitive environmental resources.

Address the south side as a future project. The approximately 3,400 feet of south-side gaps involve steeper grades, more utility and park frontage conflicts, additional retaining walls, and greater estimated tree impacts, particularly near Dhu Varren Woods Nature Area. The south-side gaps may be filled later pending funding.

Figure ES-1 Recommended Route; North-Side Sidewalk Gaps



Cost and Construction Considerations

Conceptual total project costs are approximately \$4.7 million for the north side of Dhu Varren Road and \$5.2 million for the south side. The estimates include construction, a 15 percent contingency, preliminary engineering, and construction engineering and inspection. They include retaining walls and drainage features but exclude railroad signals, new water main, stormwater infiltration systems, and streetlighting upgrades.

If the project advances, detailed engineering should confirm topographic survey data, utilities, drainage, retaining walls, curb and gutter, bridge and boardwalk elements, tree removals, grading limits, right-of-way needs, railroad approvals, and crossing safety improvements where warranted.

Public and Stakeholder Input

Participants strongly supported a continuous walkway along Dhu Varren Road. Although many favored walkways on both sides, they generally supported building the north side first because it has fewer gaps, more available space, fewer utility conflicts, and could be completed sooner. Residents also emphasized safer access for children, bus users, and people traveling to Olson Park and Dhu Varren Woods Nature Area; protection of trees and natural features; and evaluation of additional crosswalks and rectangular rapid flashing beacons near key destinations.

Recommended Next Steps

- Advance the north-side walkway as the preferred first phase and list the north- and south-side projects separately in the Capital Improvement Plan.
- Complete detailed topographic survey, utility coordination, drainage analysis, and engineering refinement if the project advances.
- Confirm tree removals, grading limits, right-of-way needs, design assumptions, access needs, and permitting requirements during detailed engineering.
- Evaluate crosswalks and rectangular rapid flashing beacons where applicable warrants are met.
- Coordinate with City Engineering, Parks and Recreation, utility providers, adjacent property owners, and permitting agencies, and pursue phased funding and grant opportunities.

APPENDIX A. TECHNICAL REPORT

Dhu Varren Road has two 11-foot travel lanes with a 30-mph speed limit. Five-foot shoulders serve as bike lanes from Pontiac Trail to Birchwood Drive, but no designated bicycle space exists east of Birchwood Drive.

Figure 2.2: Existing Sidewalk and Gaps Present on Dhu Varren Study Area



2.2 Project Goals and Constraints

Limited public right-of-way, steep grades, natural resources, and nearby private property constrain walkway construction. The study therefore focused on four goals:

- Select the preferred side if both sides of Dhu Varren Road cannot be built at once.
- Minimize costs associated with grade changes and constructability.
- Limit the need for easements and temporary grading permits.
- Minimize tree removals and impacts to natural features.

2.3 Walkway Width and Accessibility

Closing sidewalk gaps improves safety and accessibility by keeping pedestrians out of the roadway. Accessible curb ramps and clearly marked crossings further reduce conflicts with vehicles.

City standards require sidewalks to be at least 5 feet wide, generally with a 3-foot curb buffer and 6-inch clearance from the property or right-of-way line. Shared-use paths must be at least 10 feet wide with recommended 2-foot clear zones. They accommodate walking and biking but generally cost more, require more land, increase potential tree removals, and demand more surface and winter maintenance than sidewalks.

Applicable accessibility criteria generally limit walkway cross slopes to 2 percent. Running-slope requirements vary by facility type and context; where pedestrian access routes or ramps are

required, the final design should comply with current federal and City standards. Existing grades may require raised curbs or retaining walls.

2.4 Road Characteristics

Dhu Varren Road carries passenger vehicles, light commercial traffic, and hourly AAATA bus service. As noted in Section 2.1, designated bicycle space ends at Birchwood Drive.

2.5 Vegetation and Tree Preservation

Tree preservation is a community priority. The concepts place walkways near the road and use retaining walls where needed to reduce environmental impacts, especially along Dhu Varren Woods Nature Area, where many mature trees are present.

2.6 Existing Utilities

A 20-inch City water main exists along the north side. Eight-inch sanitary sewers are also present on portions of the north side of Dhu Varren Road. AT&T, Comcast, and DTE Electric facilities are located on both sides of the road; DTE Gas is located on the south side. The final design should minimize conflicts, though some relocations may be required.

2.7 Roadside Drainage

Limited public right-of-way requires the roadway, drainage system, and walkway to fit within a narrow corridor. The design must preserve roadside drainage while balancing safety, cost, and the goal of closing sidewalk gaps.

2.8 Township Islands

Several parcels remain in Ann Arbor Township and are considered “township islands.” Walkway construction across these parcels would trigger special assessments, but the City could collect them only after annexation. The City would need to fund those costs initially. Refer to Figure 2.3 for locations of township parcels.

Figure 2.3: Parcels highlighted in red are properties in Ann Arbor Township



2.9 County Drains, Protected Wetlands, and Floodplains

Traver Creek crosses the corridor just west of the Ann Arbor Railroad and is subject to stormwater, wetland, and floodplain regulations, as shown in Figures 2.4 through 2.6.

Figure 2.4: Aerial image of the Traver Creek crossing Dhu Varren Road

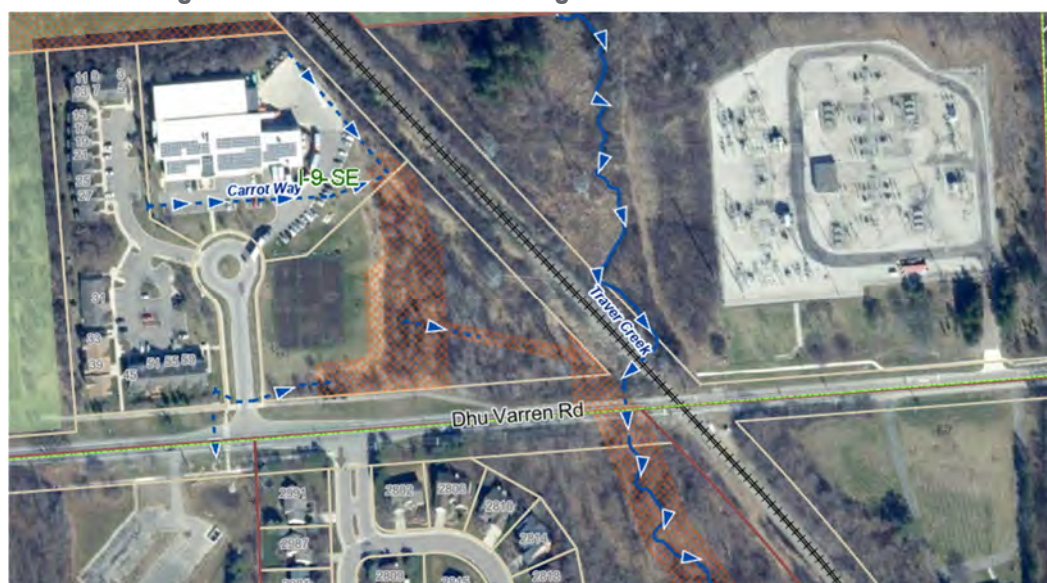


Figure 2.5: EGLE wetland map showing limits in green south of Dhu Varren Road

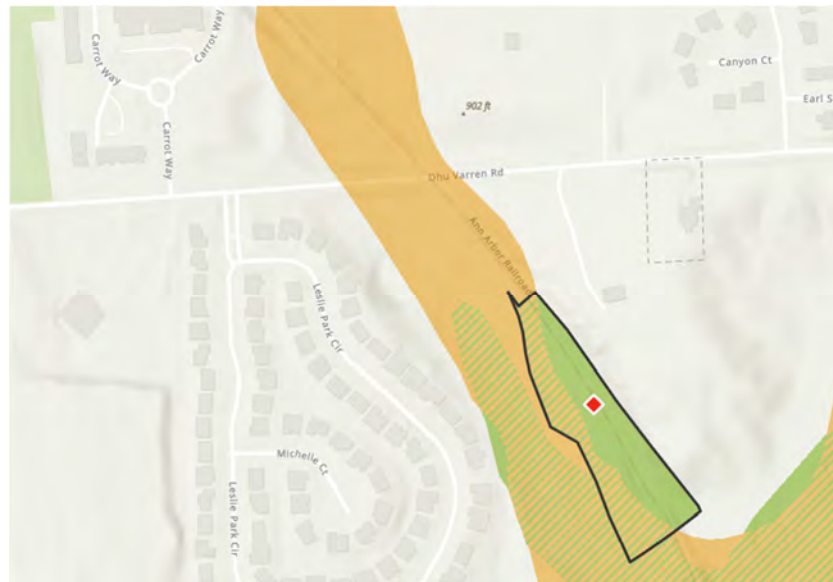
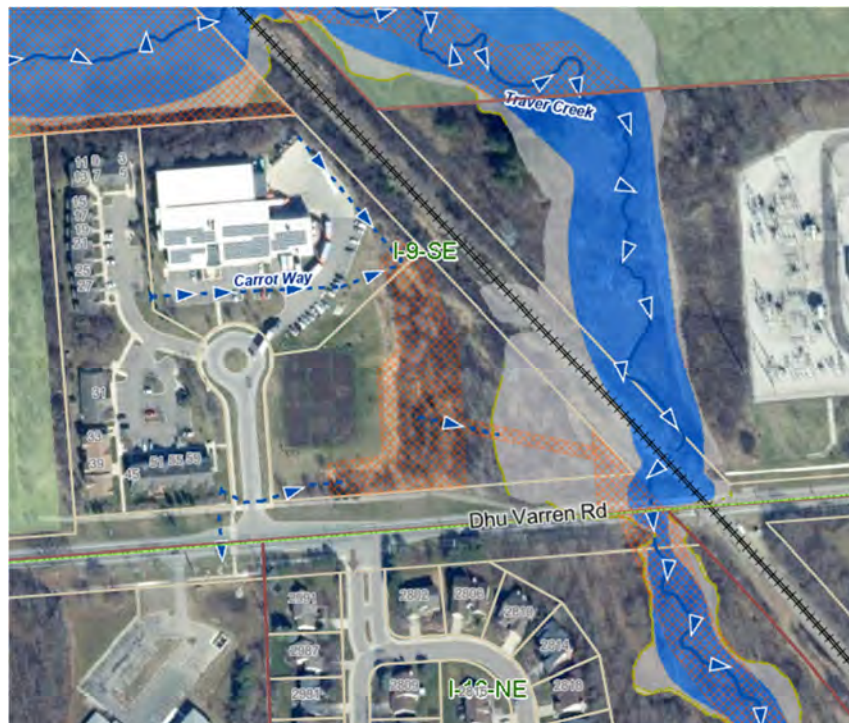


Figure 2.6: Floodplain limits at the Ann Arbor Railroad as represented by FEMA



3.0 DESIGN ALTERNATIVES, TREE IMPACTS & ESTIMATED COSTS

3.1 Walkway Segments

The preferred concept uses 5-foot sidewalks for most gaps and a 10-foot shared-use path on the north side of Dhu Varren Road from Birchwood Drive to Omlesaad Drive, where no designated bicycle space currently exists. Segment NS-1 would require a 14-foot-wide bridge to cross Traver Creek and may also require a boardwalk approaching the bridge.

Table 3.1: Length of Walkway Gaps on the North Side of Dhu Varren Road

Limits	Approx. Length
NS-1; Food Gatherers to Ann Arbor Railroad	335 feet
NS-2; DTE Substation to Birchwood Drive	400 feet
NS-3; Birchwood Drive to Omlesaad Drive	875 feet
Total Length of Gaps	1,610 feet (0.30 mile)

Table 3.2: Length of Walkway Gaps on the South Side of Dhu Varren Road

Limits	Approx. Length
SS-1; Pontiac Trail to Gretchen's House	410 feet
SS-2; Hunley Drive to 340 feet west of Carrot Way	720 feet
SS-3; Leslie Park Circle to Omlesaad Drive	2,270 feet
Total Length of Gaps	3,400 feet (0.65 mile)

Figure 3.1: Locations of North Side (NS) and South Side (SS) Gap Segments





3.2 Design Alternative Details by Segment

3.2.1 North Side of Dhu Varren Road (East of Carrot Way / West of Omlesaad Drive)

- NS-1; Food Gatherers to Ann Arbor Railroad.** A 10-foot grade change exists at the Traver Creek crossing. A 14-foot-wide bridge would be needed, and a boardwalk may also be required on the approach. A conventional path in place of the boardwalk could reduce costs if found feasible during final design.

Watco Companies and MDOT Rail Safety approvals would be required for this segment. Pedestrian crossing gates, if warranted, could add about \$100,000 and are not included in the estimate.

Figure 3.2: NS-1; Food Gatherers (335 feet west of Ann Arbor Railroad) to railroad crossing

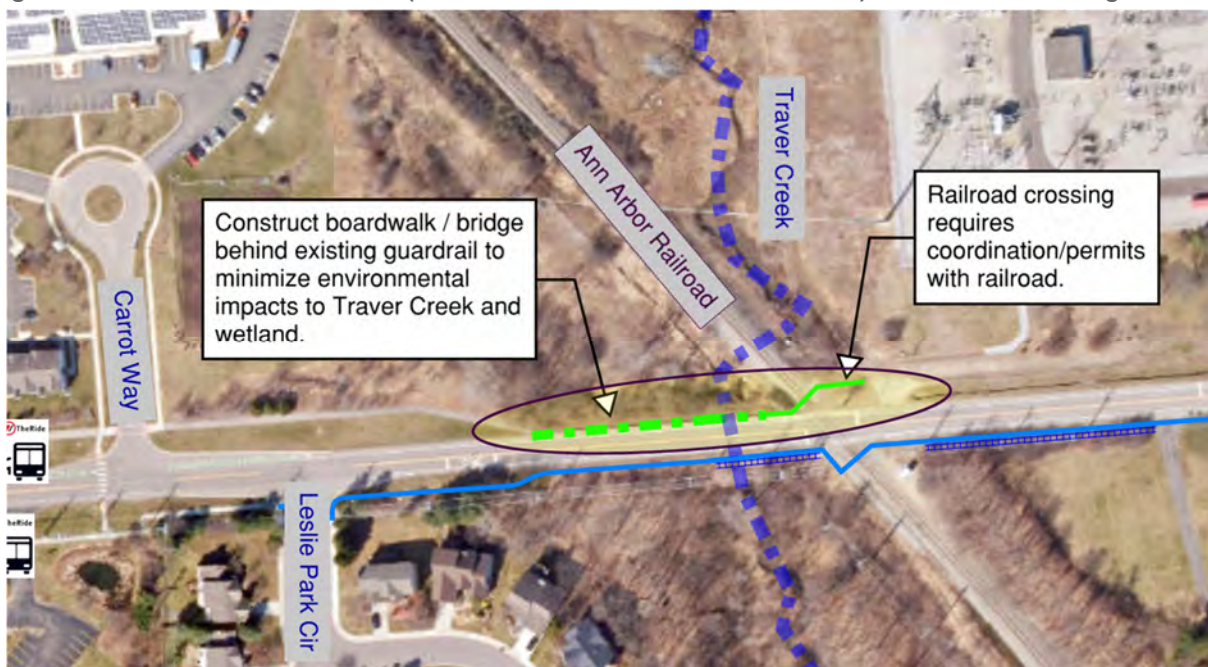
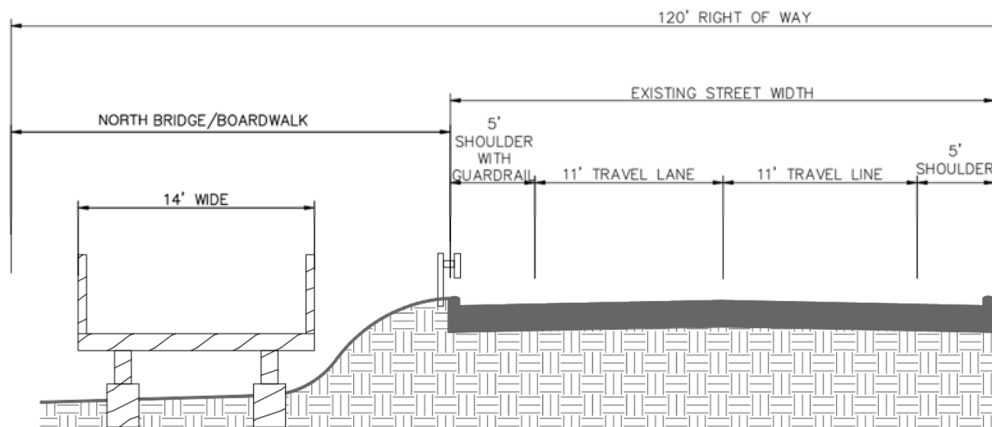


Figure 3.3: NS-1; Typical half cross section of north side of Dhu Varren Road at a location 400 feet east of Leslie Park Circle



- **NS-2; DTE Substation to Birchwood Drive.** This segment passes three Foxfire Subdivision rear yards. A westbound bus stop exists at Birchwood Drive. Existing drainage appears adequate, but the first 100 feet may require a retaining wall about 3 feet high.

Figure 3.4: NS-2; DTE Substation (400 feet west of Birchwood Drive) to Birchwood Drive

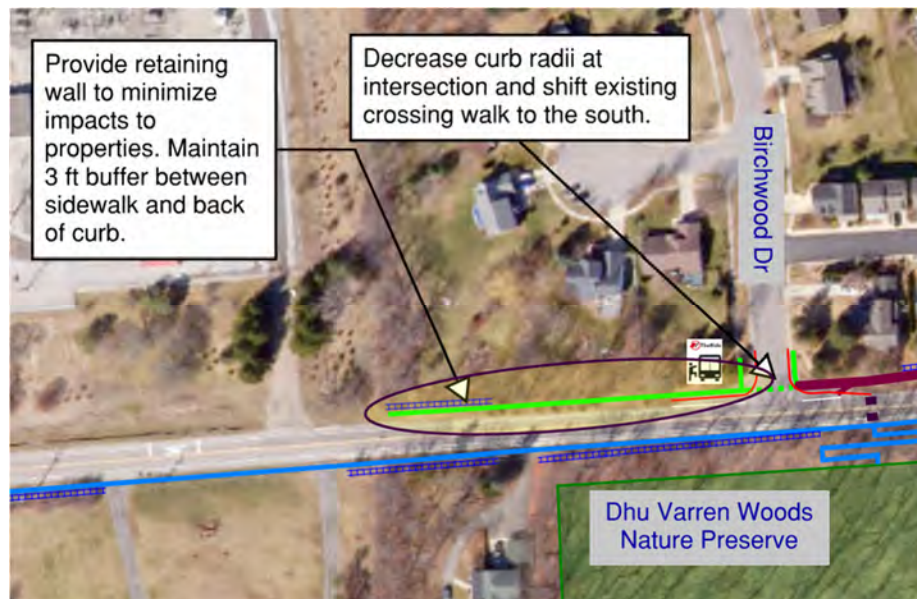
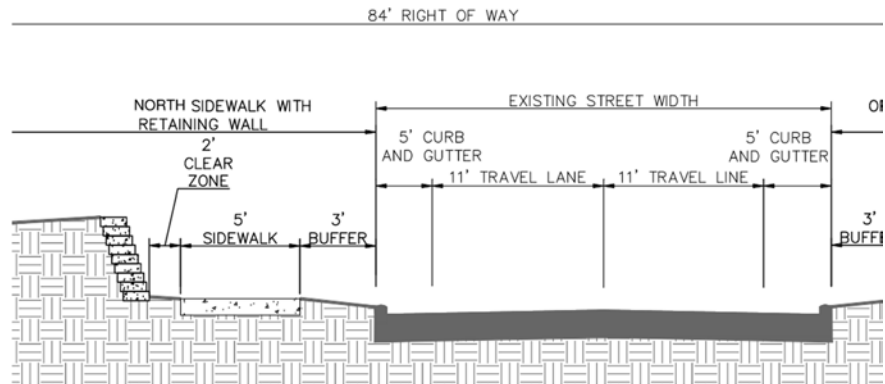


Figure 3.5: NS-2; Typical half cross section of the north side of Dhu Varren Road at a location 300 feet west of Birchwood Drive



- **NS-3; Birchwood Drive to Omlesaad Drive.** This is the only segment proposed as a 10-foot shared-use path because no dedicated space exists for bicycle users. This segment crosses residential frontage, HOA common space, and a stormwater detention area.

Existing curb, guardrail, and storm inlets are present; new storm drainage is not currently expected. Near Foxfire Subdivision, the entrance taper would be removed to preserve an existing retaining wall. A 3- to 6-foot retaining wall would likely be needed for the wider path.

A 14-foot-wide boardwalk or bridge would span the HOA stormwater basin to avoid reducing flood storage. The final 200 feet is relatively flat and is not expected to require a retaining wall.

Figure 3.6: NS-3; Birchwood Drive to Omlesaad Drive

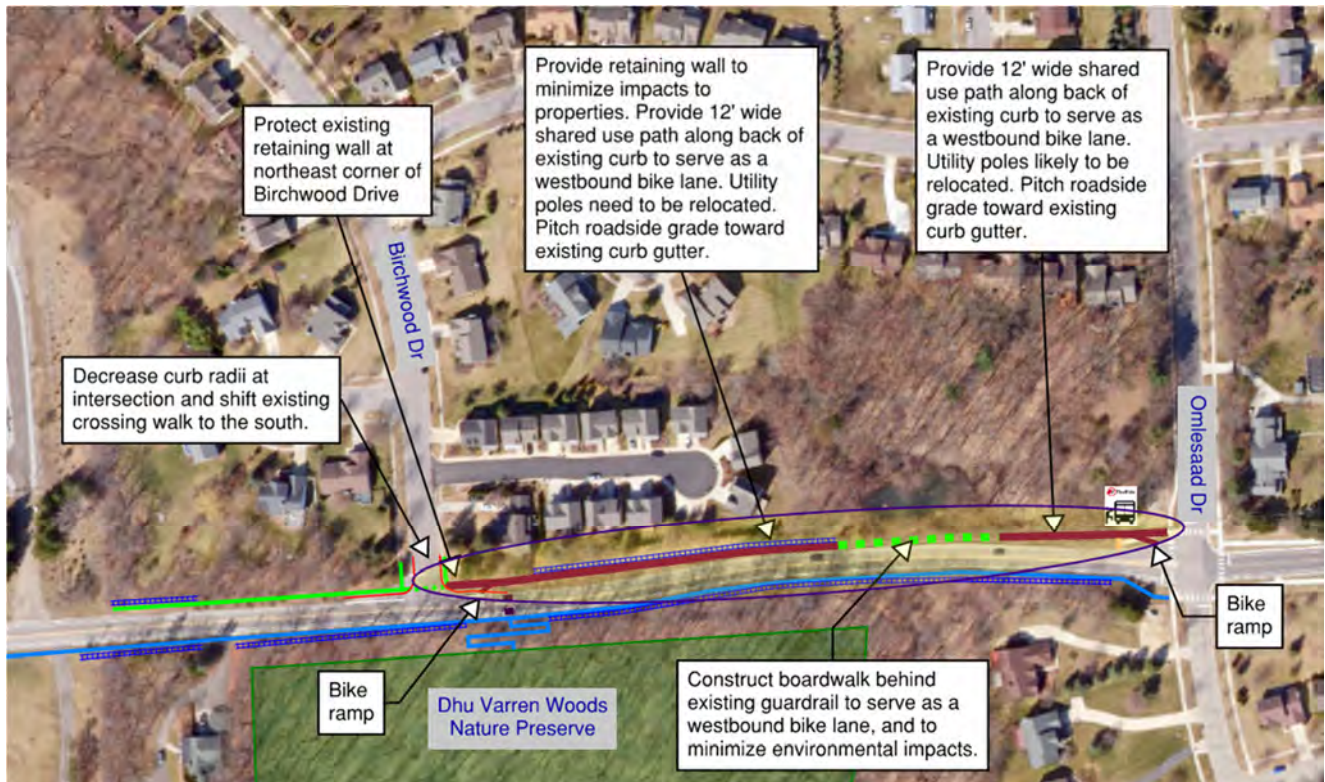
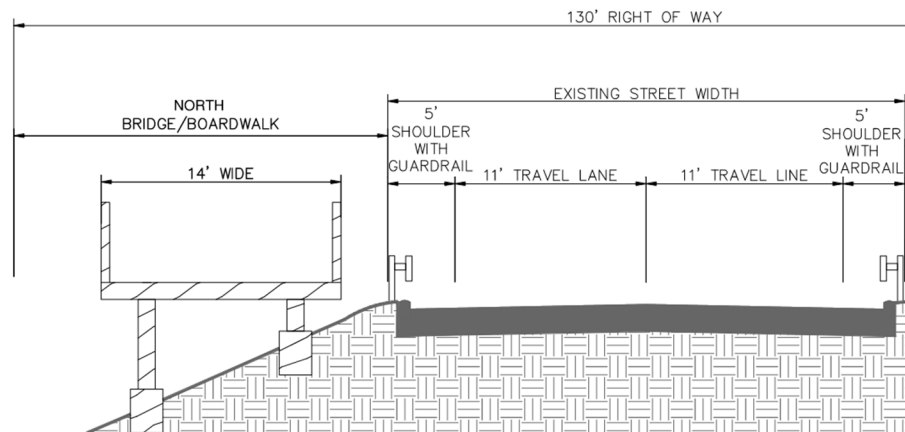


Figure 3.7: NS-3; Typical half cross section of the north side of Dhu Varren Road at a location 250 feet west of Omlesaad Drive



3.2.2 South Side of Dhu Varren Road (Pontiac Trail to Omlesaad Drive)

- SS-1; Pontiac Trail to Gretchen's House.** This relatively flat segment can likely support a 5-foot sidewalk and 3-foot buffer without curb and gutter. Two trees, including a landmark oak, can likely be preserved. The City's Private Development team is expected to coordinate this work with a proposed adjacent development.

Figure 3.8: SS-1; Pontiac Trail to Gretchen's House (410 feet east of Pontiac Trail)

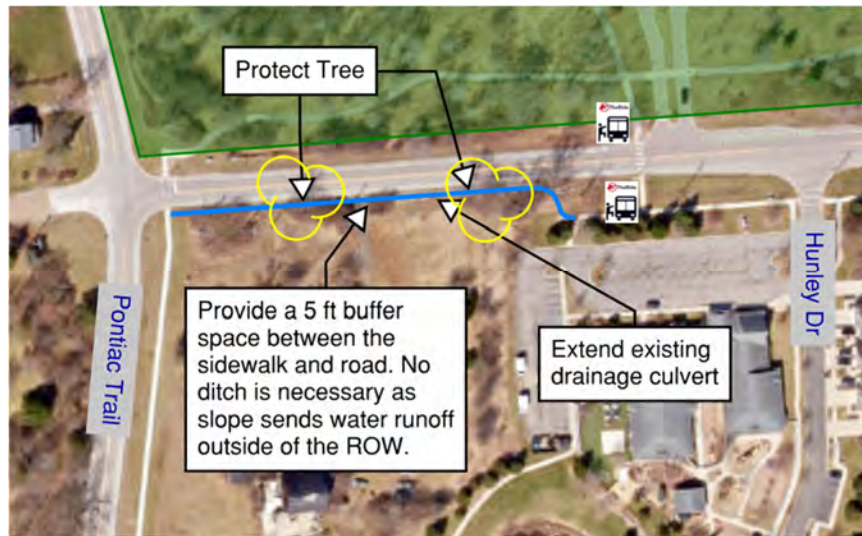
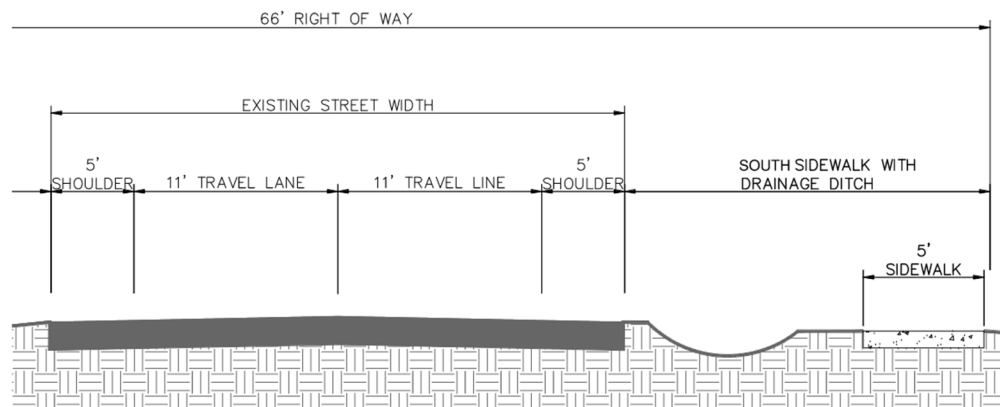
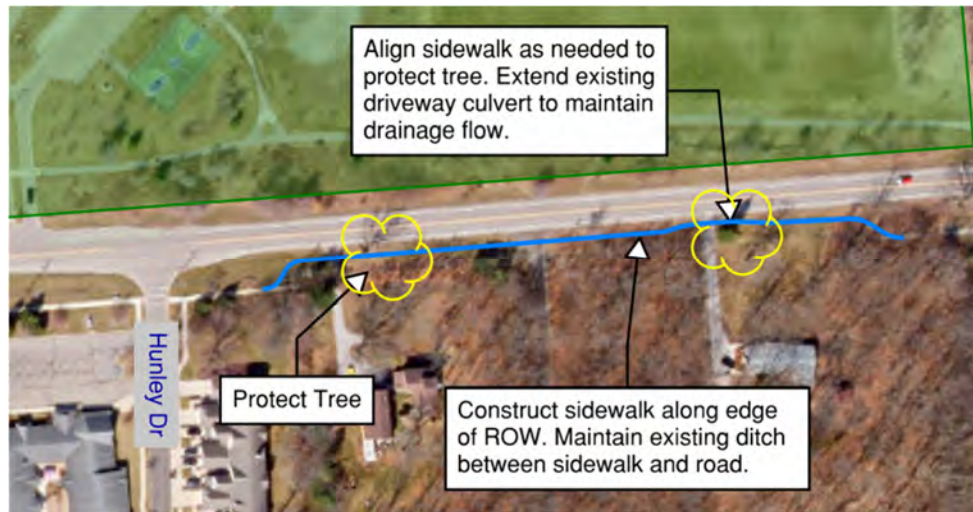


Figure 3.9: SS-1; Typical Half Cross Section of the South Side of Dhu Varren Road at a Location 200 Feet East of Pontiac Trail



- SS-2; Hunley Drive to 340 feet west of Carrot Way.** This segment crosses three single-family residential parcels, including one township island. A 5-foot sidewalk and open drainage ditch appear feasible within the right-of-way while preserving three landmark oaks. The City's Private Development team is expected to coordinate the portion across the middle parcel with a proposed adjacent development.

Figure 3.9: SS-2; Hunley Drive (100 feet east of Hunley Drive) to 340 feet west of Carrot Way



- **SS-3; Leslie Park Circle to Ann Arbor Railroad.** The existing curb and drainage should support sidewalk construction without new storm sewer. The southeast corner of Leslie Park Circle would be reconstructed to connect the sidewalk, relocate the crosswalk and stop sign, and adjust the landscaped retaining wall.

Key intersection changes at Leslie Park Circle include:

- (1) remove the acceleration taper to create room for the sidewalk and buffer;
- (2) extend the Leslie Park Circle sidewalk to Dhu Varren Road;
- (3) move the crosswalk closer to Dhu Varren Road; and
- (4) relocate the retaining wall and stop sign.

Most of this segment is flat. Near Traver Creek, earthwork and a retaining wall would be needed, but the existing culvert appears long enough to avoid the need for a bridge. Watco and MDOT Rail Safety approvals would also be required; railroad gate costs are excluded.

Figure 3.10: SS-3; Leslie Park Circle to Ann Arbor Railroad

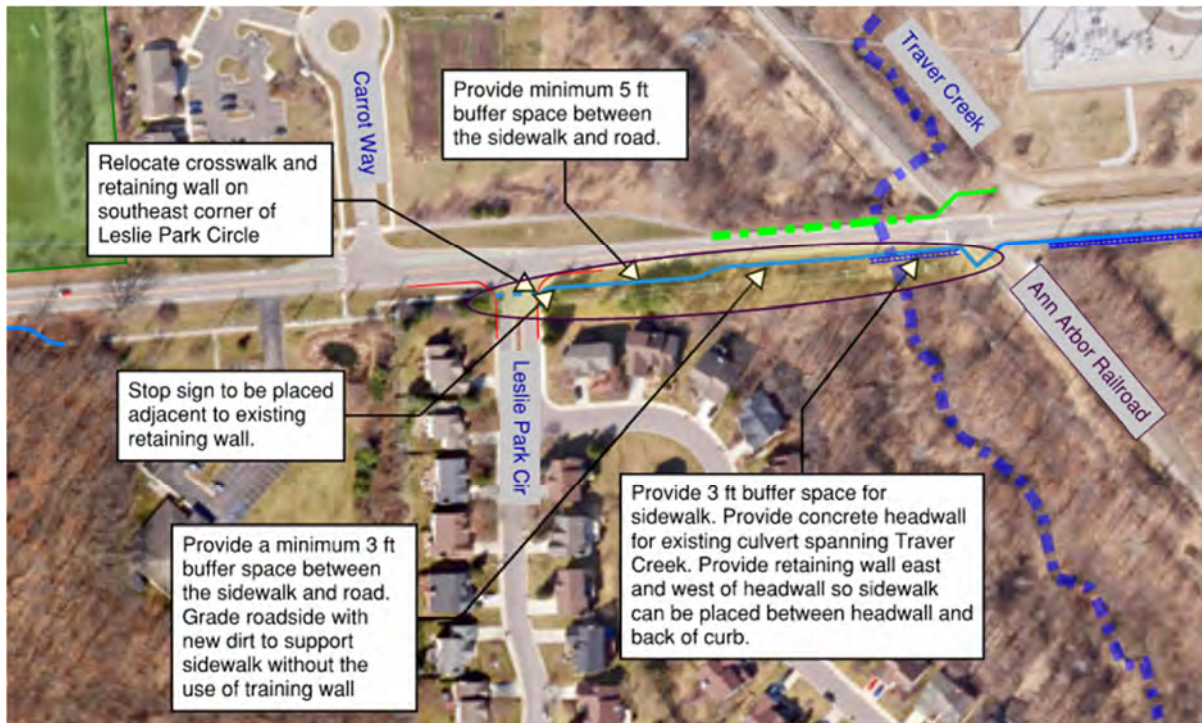
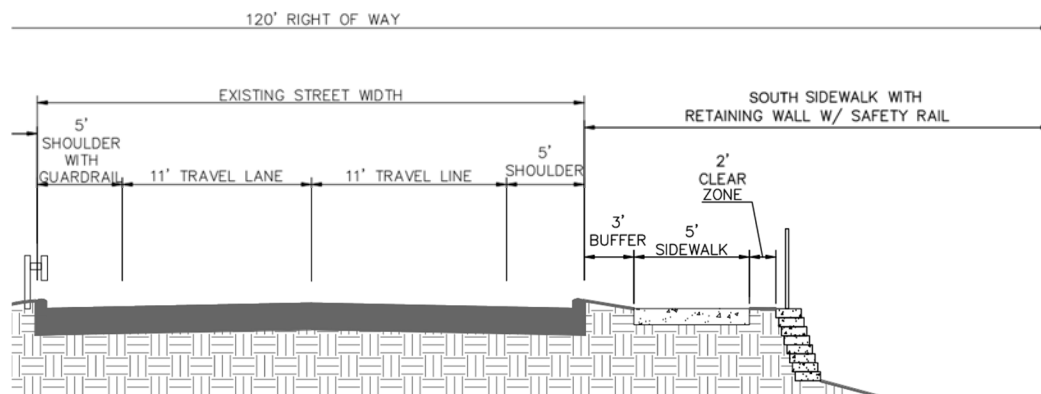


Figure 3.11: SS-3; Typical half cross section of the south side of Dhu Varren Road at a location 400 feet east of Leslie Park Circle



- **Ann Arbor Railroad to Omlesaad Drive.** Continuing east on Segment SS-3, the area passes the Mennonite Guest Home, single-lot residences, and Dhu Varren Woods Nature Area. Existing curb and drainage are present, but utilities, slopes, retaining walls, and tree impacts make this the most complex south-side segment.
 - Near the Mennonite Guest Home, the first 200 feet would require a retaining wall about 3 feet high; the remaining frontage is less constrained.

- At 2030 Dhu Varren Road, an 8-foot grade difference would require a 6- to 7-foot retaining wall and likely a temporary grading permit to construct the wall.
- Along Dhu Varren Woods Nature Area, five power poles would conflict with the sidewalk and require relocation. A retaining wall averaging 6 feet in height is also anticipated. An optional accessible switchback to the trailhead could be included if funded by the Parks Department.

Figure 3.12: SS-3 continued; Ann Arbor Railroad to Birchwood Drive

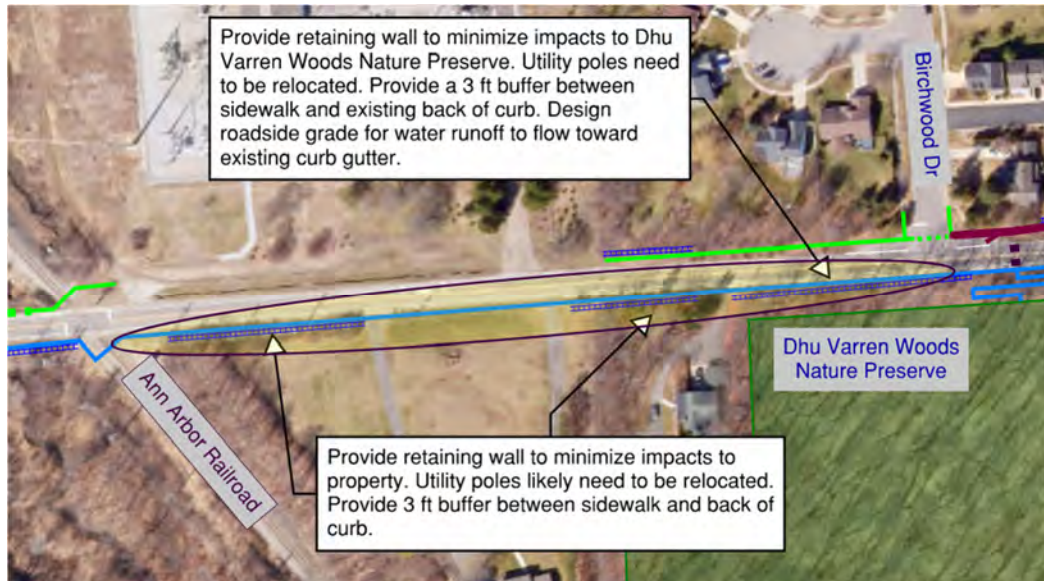
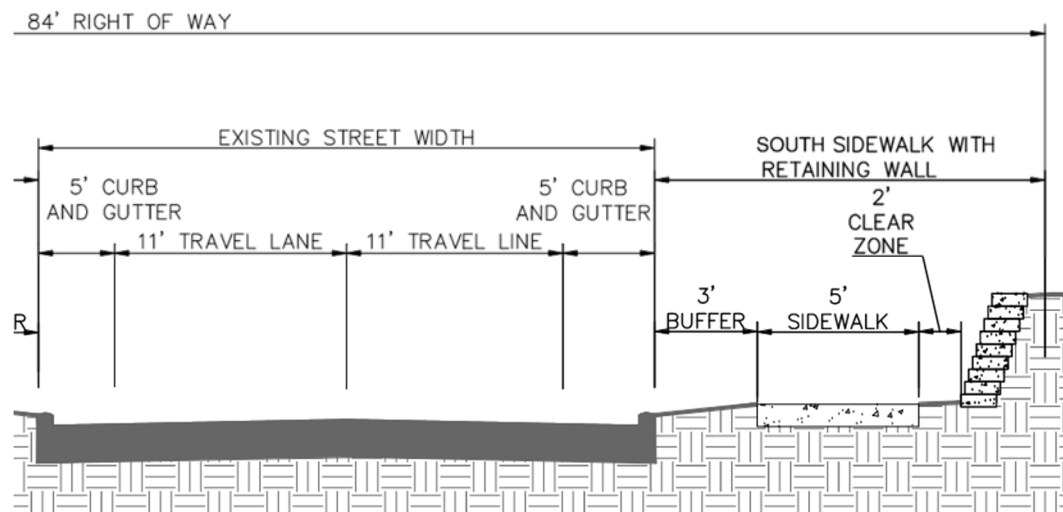


Figure 3.13: Typical half cross section of the south side of Dhu Varren Road at a location 300 feet west of Birchwood Drive



Near Omlesaad Drive, an approximately 5-foot retaining wall would be needed to accommodate the steep fill slopes while minimizing impacts to trees, Dhu Varren Woods Nature Area, and adjacent property.

Figure 3.14: SS-3 continued; South side of Dhu Varren Road from Birchwood Drive to Omlesaad Drive

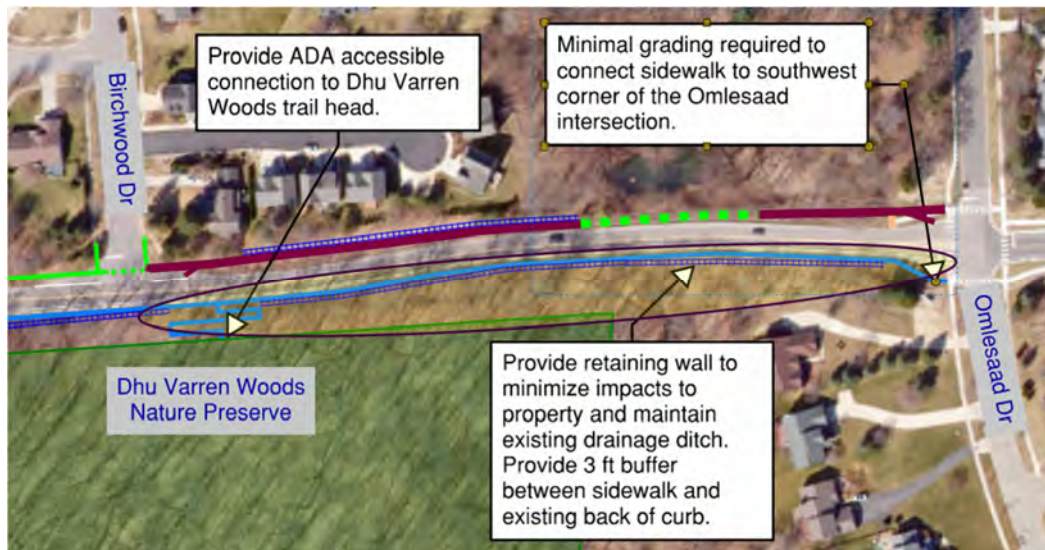
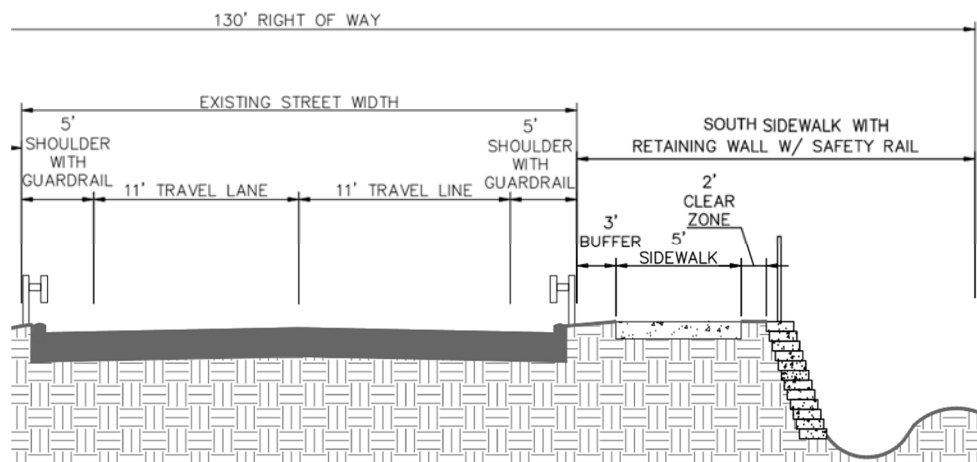


Figure 3.15: Typical half cross section of the south side of Dhu Varren Road at a location 250 feet west of Omlesaad Drive



3.3 Midblock Crossings

Residents requested safer midblock crossings near bus stops and key destinations, including consideration of rectangular rapid flashing beacons. The existing Carrot Way crosswalk connects nearby housing and bus stops but lacks a flashing beacon. Residents also requested a crosswalk east of Birchwood Drive to connect the bus stop with Dhu Varren Woods Nature Area. During final

design, the City Transportation group should evaluate both locations and conduct warrant analyses to determine whether flashing beacons or other safety improvements are justified.

Figure 3.17: Existing Crosswalk at Carrot Way West of Leslie Park Circle; Participants Supported Evaluating RRFBs to Enhance Pedestrian Safety

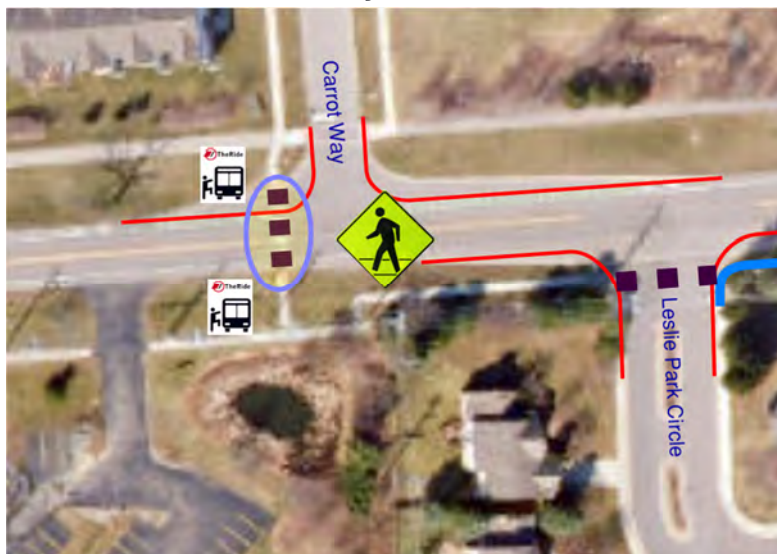
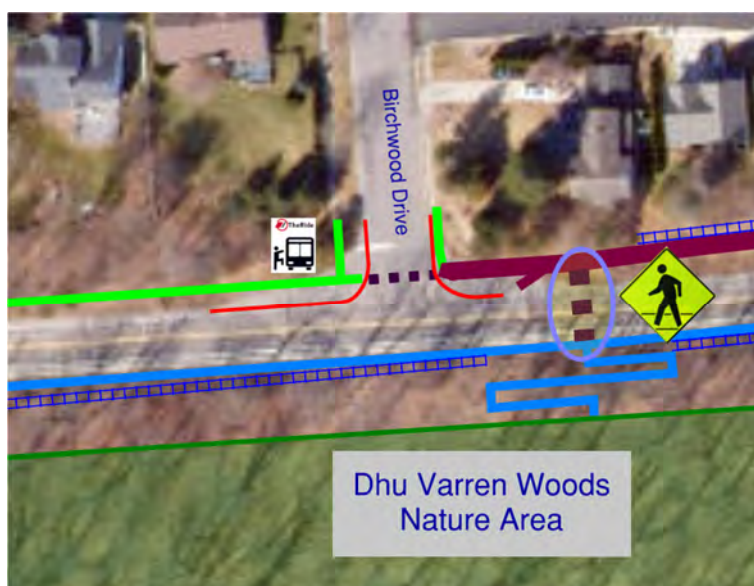


Figure 3.18: Proposed New Crosswalk East of Birchwood Drive Connecting Residents and Bus Users to Dhu Varren Woods Nature Area



3.4 Estimated Tree Removals

Tree preservation was a major public concern expressed during engagement sessions. For this study, a tree is defined as having a diameter at breast height of at least 6 inches. Concept-level estimates indicate about 40 removals on the north side and 70 on the south side. Final totals should be updated after completion of the survey and detailed design.

Table 3.3: Estimated Tree Removals by Side of the Road

Side of Dhu Varren Road	Estimated Number of Trees
North side	Approximately 40 trees (various diameters)
South side	Approximately 70 trees (various diameters)

3.5 Project Costs

Table 3.4 presents preliminary, concept-level cost estimates for each walkway type, side-of-road alignment, and construction phase. These order-of-magnitude estimates support comparison of alternatives and inform funding discussions. They should be refined during final engineering as survey data and assumptions regarding utilities, drainage, right-of-way, and permitting are confirmed. The estimates include retaining walls and drainage features but exclude railroad signals, new water main, stormwater infiltration systems, and streetlighting upgrades.

Table 3.1: Estimated Costs

	North Side	South Side
Construction Cost	\$2,935,300	\$3,205,400
Contingency (15%)	\$440,300	\$480,800
Subtotal with Contingency	\$3,375,600	\$3,686,200
Preliminary Engineering (20%)	\$675,100	\$737,200
Construction Engineering and Inspection (20%)	\$675,100	\$737,200
Total Cost	\$4,725,800	\$5,160,600

4.0 STAKEHOLDER FEEDBACK

4.1 Public Communications

The City provided a dedicated project webpage with background information, anticipated benefits and impacts, public meeting materials, and a community question-and-answer feature developed following the second engagement meeting. The City also offered email and text subscription alerts, held two public meetings, and accepted comments by email and telephone.

4.2 Public Engagement Sessions

The City held two community engagement meetings on June 30 and October 8, 2025, at the Ann Arbor District Library Downtown Branch. The first meeting introduced the Sidewalk Gap Program, potential walkway design tools, and corridor constraints. The second meeting summarized the initial feedback and presented design concepts, tradeoffs, and estimated costs. Breakout discussions at both meetings gathered community priorities and concerns.

Key feedback included the following:

- **Overall support:** Participants strongly supported a continuous walkway along Dhu Varren Road.
- **Preferred route:** Although many favored walkways on both sides, participants generally supported building the north side first because it has fewer gaps, more available space, fewer utility conflicts, and could be completed sooner.
- **Safety and access:** Residents cited speeding, poor visibility, walking in the roadway, and drivers ignoring the Omlesaad Drive stop sign. They requested safer access for children, bus users, and people traveling to Olson Park and Dhu Varren Woods Nature Area.
- **Crossings:** Participants requested additional crosswalks near bus stops, parks, and intersections and supported evaluating rapid flashing beacons, particularly near Olson Park to enhance safety.
- **Environmental impacts:** Residents requested more information about environmental constraints in Dhu Varren Woods Nature Area and the size and species of trees that could be removed.
- **Cost and maintenance:** Participants asked about the cost difference between the alternatives and noted that vegetation can obstruct sidewalks and require ongoing property-owner maintenance.

4.3 Parks and Recreation Feedback

Wade Trim met with Parks and Recreation Department staff to discuss potential impacts to Dhu Varren Woods Nature Area and opportunities to improve accessible connections to the trailhead across from Birchwood Drive. Staff supported evaluating a midblock crossing and an optional accessible switchback connection to the trailhead.

Staff noted that sidewalk gap millage funds may not be available for improvements along public park frontage. Accordingly, any park-specific improvements, including the optional trailhead switchback, would require a separate funding source and coordination with the Parks and Recreation Department. Because Parks funding is limited and other needs are already identified in the Parks and Recreation Capital Improvement Plan, funding for the switchback may not be available. The switchback should therefore remain an optional improvement and is not included in the recommended base walkway project.

4.4 City Staff Review Meeting

Wade Trim met with City Engineering and Transportation staff to review the preliminary findings and reach consensus on three key design decisions before finalizing the report:

- 1) **Prioritize the north-side walkway if funding is limited.**
 - The group agreed to prioritize the north-side walkway if funding is limited. The north- and south-side projects would be listed separately in the CIP.
- 2) **Confirm the recommended walkway width for each segment.**
 - The group confirmed a 10-foot shared-use path for Segment NS-3, a 14-foot-wide bridge for Segment NS-1 with a possible boardwalk approach, and 5-foot sidewalks for all remaining segments.
- 3) **Support crosswalk and RRFB installation where warranted.**
 - The group supported installing crosswalks where none currently exist and adding rectangular rapid flashing beacons (RRFBs) where applicable warrants are met.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Study Outcome Summary

Both the north- and south-side alternatives would advance the City's goal of closing sidewalk gaps and improving nonmotorized safety along Dhu Varren Road. Because constructing both sides at the same time may not be feasible, the improvements can be phased to balance safety benefits with cost, constructability, tree preservation, grading, right-of-way needs, and impacts beyond the public right-of-way.

Based on the site conditions, environmental constraints, public input, and comparative costs, **the City should prioritize the north-side walkway as the first phase.** The recommended concept includes 5-foot sidewalks from Food Gatherers to the Ann Arbor Railroad and from the DTE substation to Birchwood Drive, along with a 10-foot shared-use path from Birchwood Drive to Omlesaad Drive. Segment NS-1 would also require a 14-foot-wide bridge across Traver Creek and may require a boardwalk approach. Overall, the north-side concept provides the best balance of safety, accessibility, cost, constructability, and impacts to trees and sensitive environmental resources. The south-side gaps may be addressed as a future phase when funding becomes available.

Conceptual total project costs are approximately \$4.7 million for the north-side improvements and \$5.2 million for the south-side improvements. These estimates include construction, contingency, preliminary engineering, and construction engineering and inspection, but exclude railroad signals, new water main, stormwater infiltration systems, and streetlighting upgrades.

5.2 Recommended Next Steps

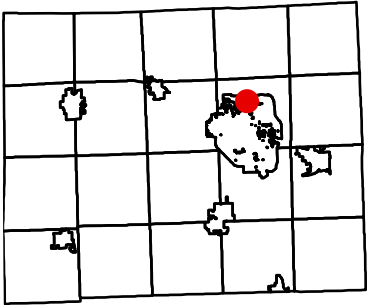
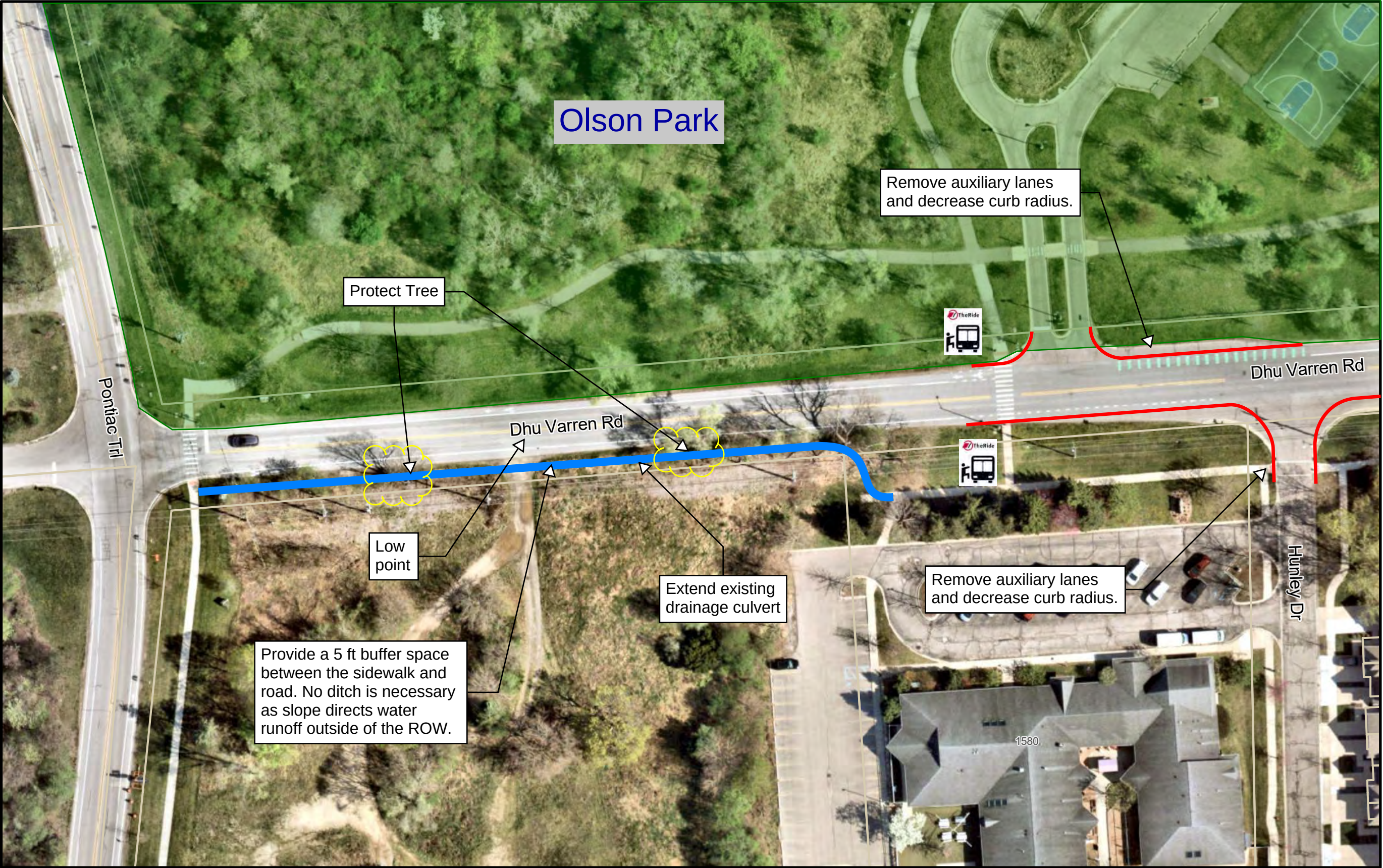
If the project advances to final design, the City should:

- **Complete detailed surveys:** Perform topographic and tree surveys and verify utility locations.
- **Evaluate design conditions:** Assess drainage, driveways, crossings, grading, retaining walls, curb and gutter, and storm sewer requirements.
- **Confirm project requirements:** Refine tree removals, right-of-way and easement needs, permits, and construction costs for the selected north-side alignment.
- **Coordinate early:** Work with City Engineering, utility providers, adjacent property owners, and permitting agencies to confirm design assumptions, access needs, approvals, and implementation responsibilities.

The City should pursue phased CIP implementation of the north- and south-side projects and evaluate available grant and funding opportunities.

APPENDIX B. PLAN LAYOUTS

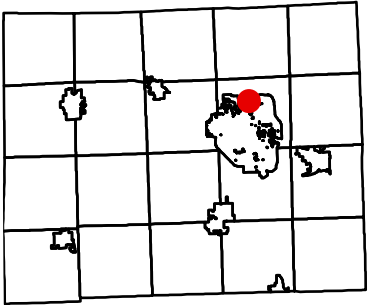
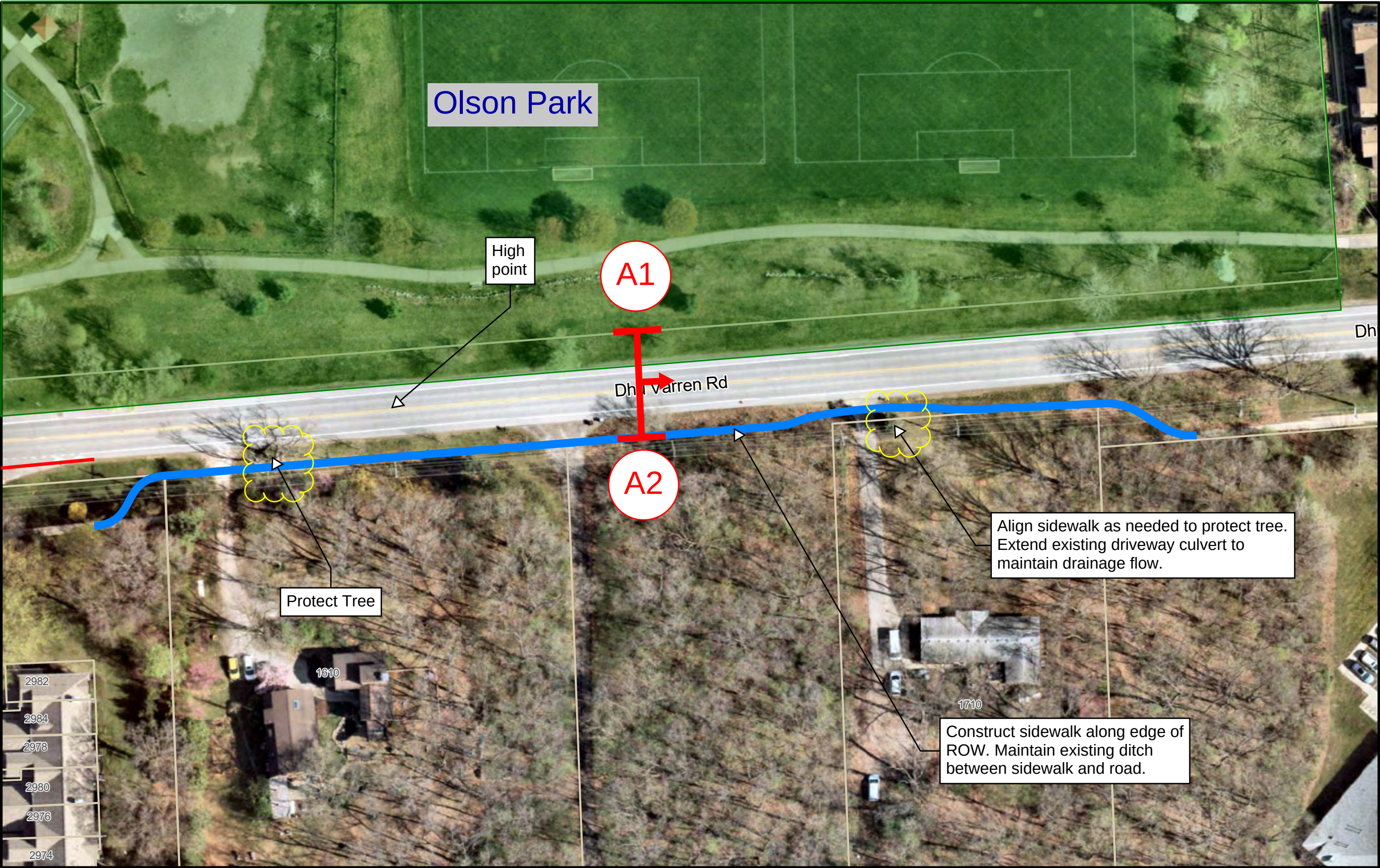
Dhu Varren Road - Pontiac Trail to Hunley



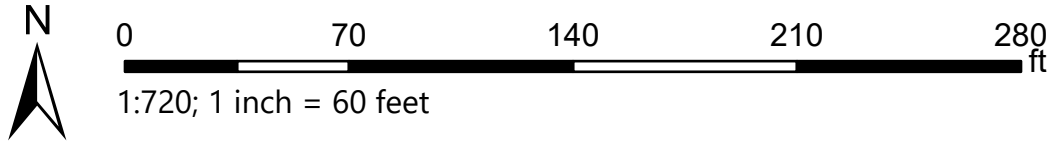
- Legend
- Lot Lines
 - Public Land
 - Proposed Retaining Wall
 - North Side Sidewalk
 - North Side Shared Use Path
 - North Side Proposed Boardwalk
 - South Side Sidewalk
 - Proposed Curb
 - Protect Tree



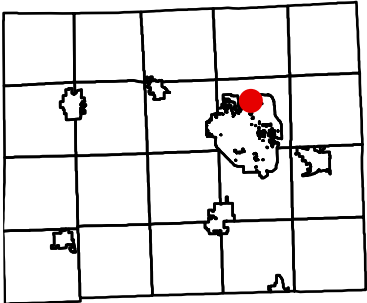
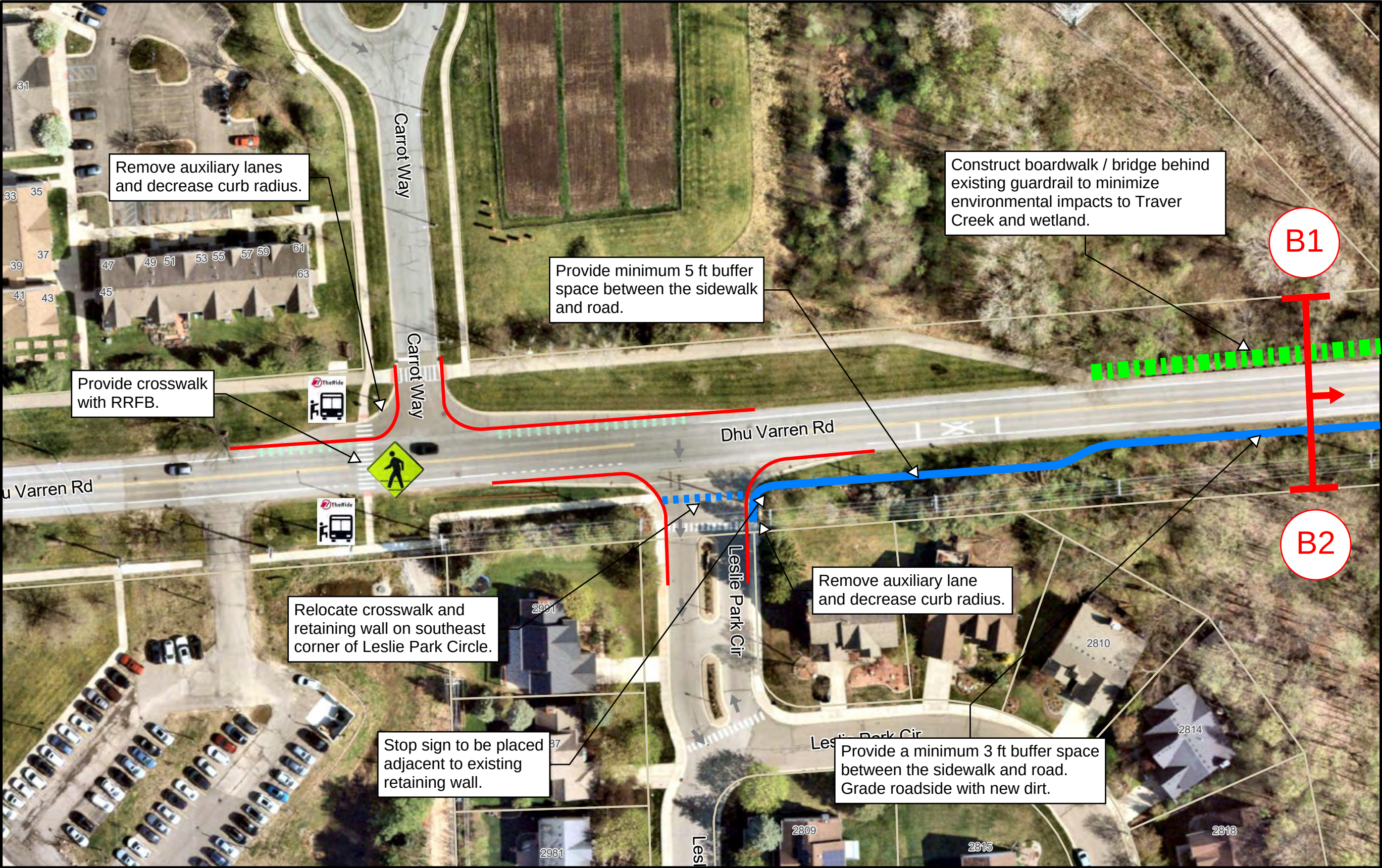
Dhu Varren Road - Hunley to east end of Olson Park



- Legend
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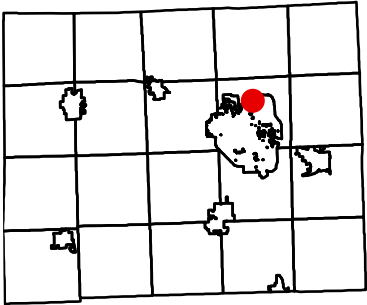
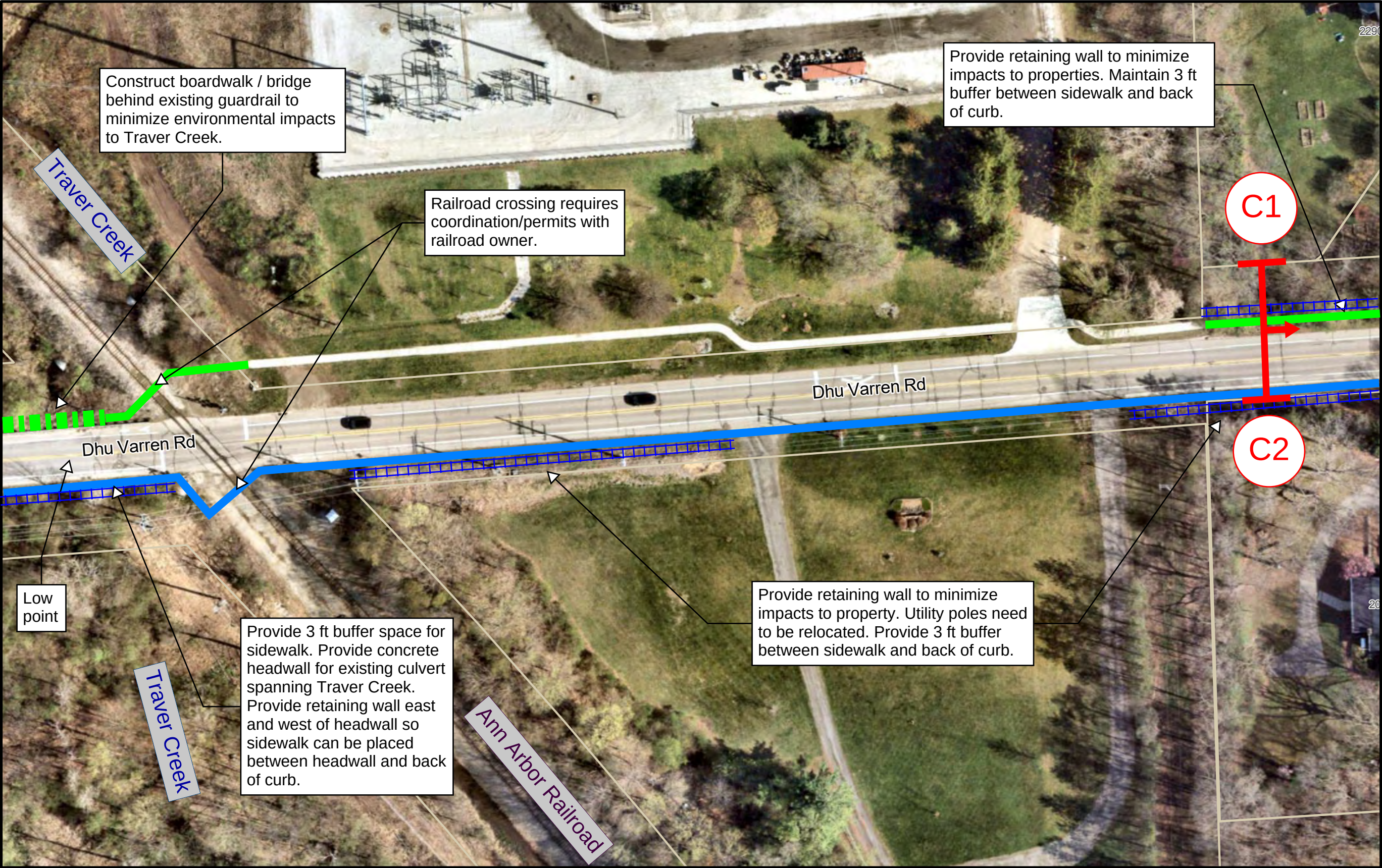
Dhu Varren Road - East end of Hunley Park to Ann Arbor Railroad



- Legend
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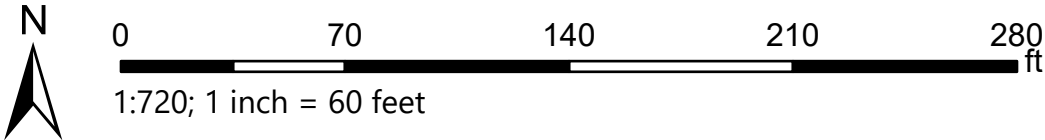


Dhu Varren Road - Ann Arbor Railroad to 350 ft west of Birchwood

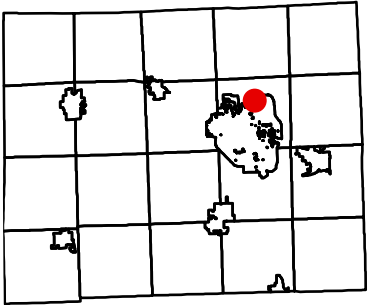
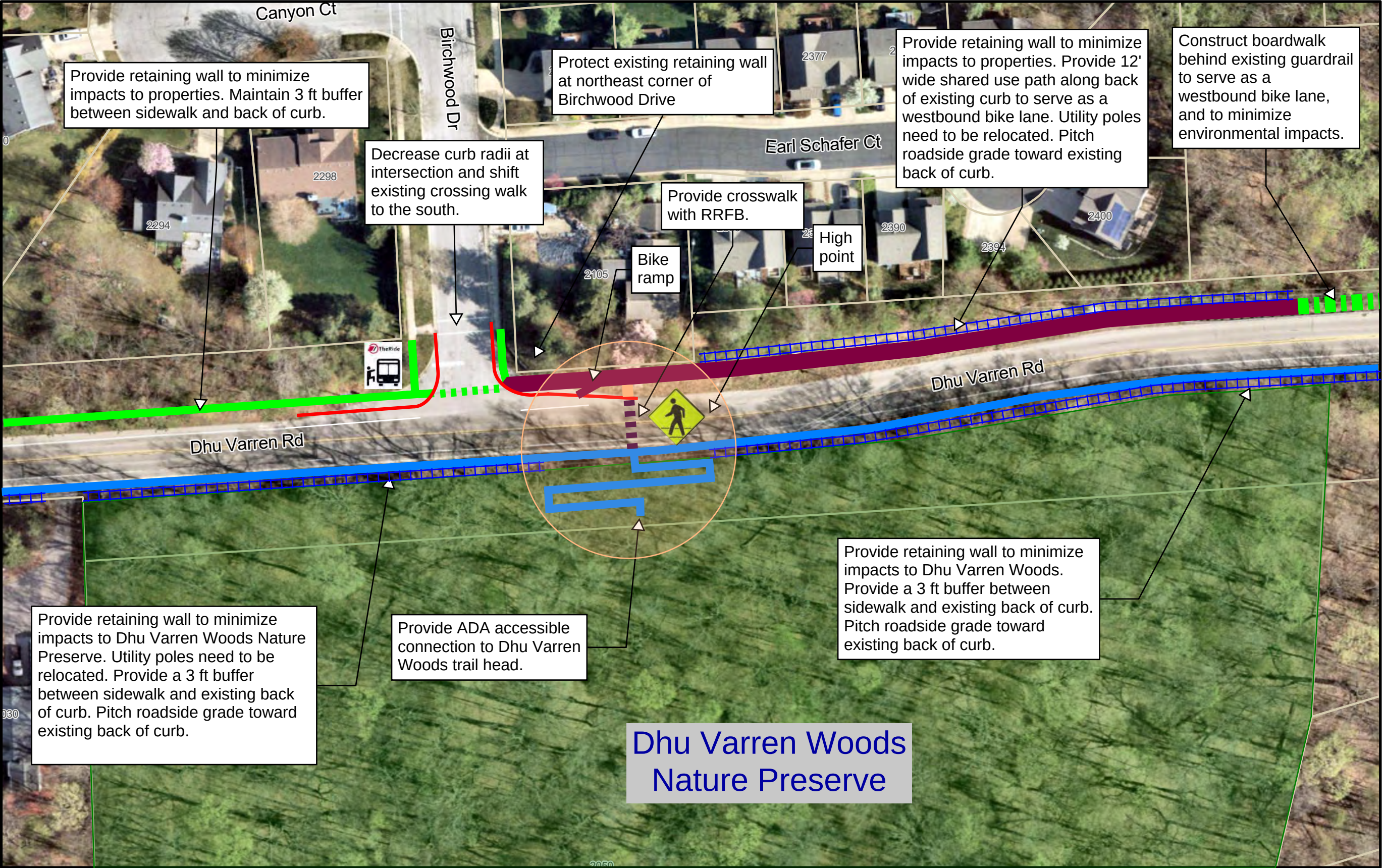


Legend

- Lot Lines
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree



Dhu Varren Road - 350 ft west of Birchwood to 450 ft east of Birchwood



Legend

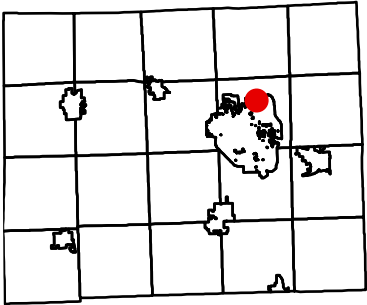
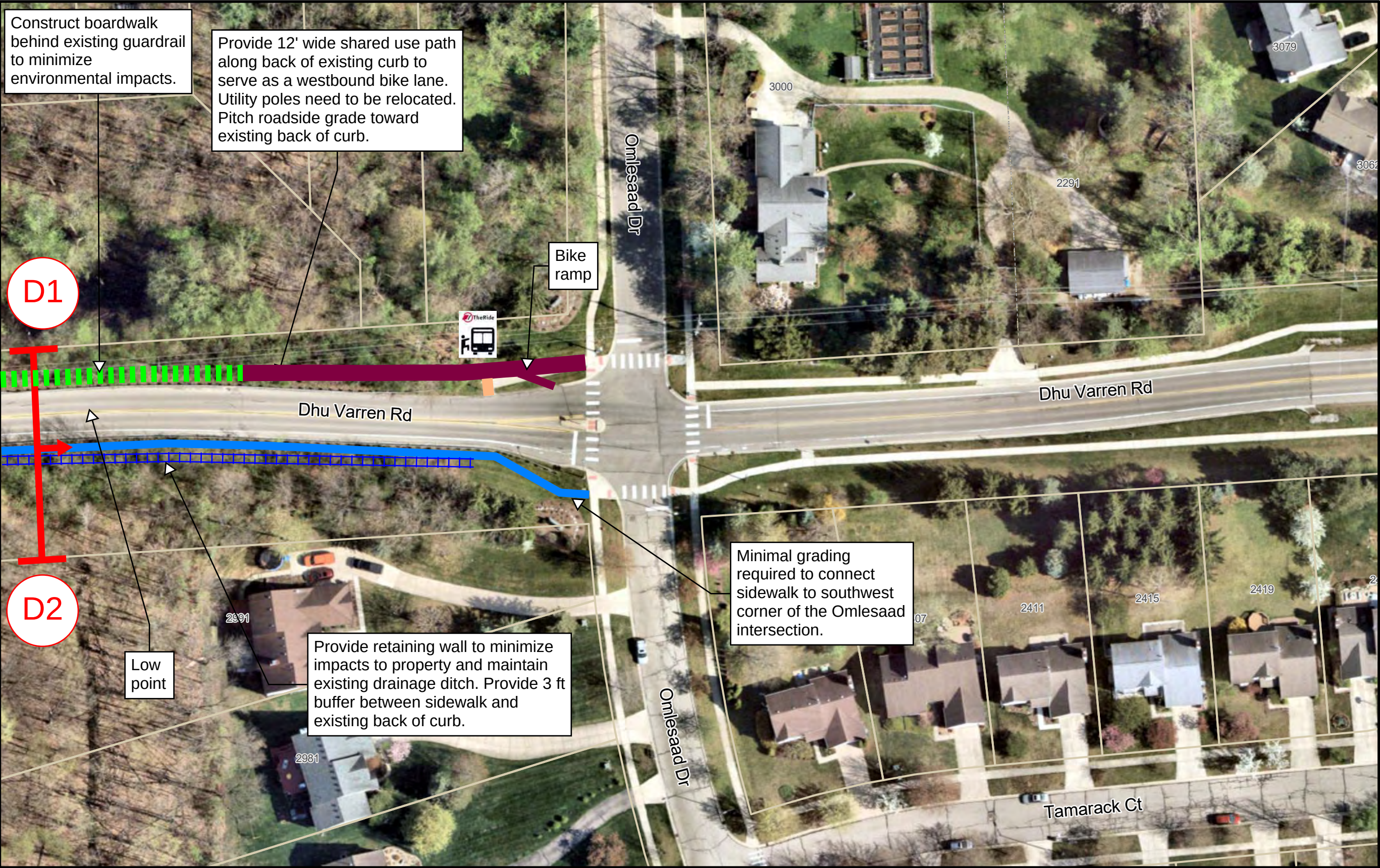
- Lot Lines
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree



0 70 140 210 280 ft

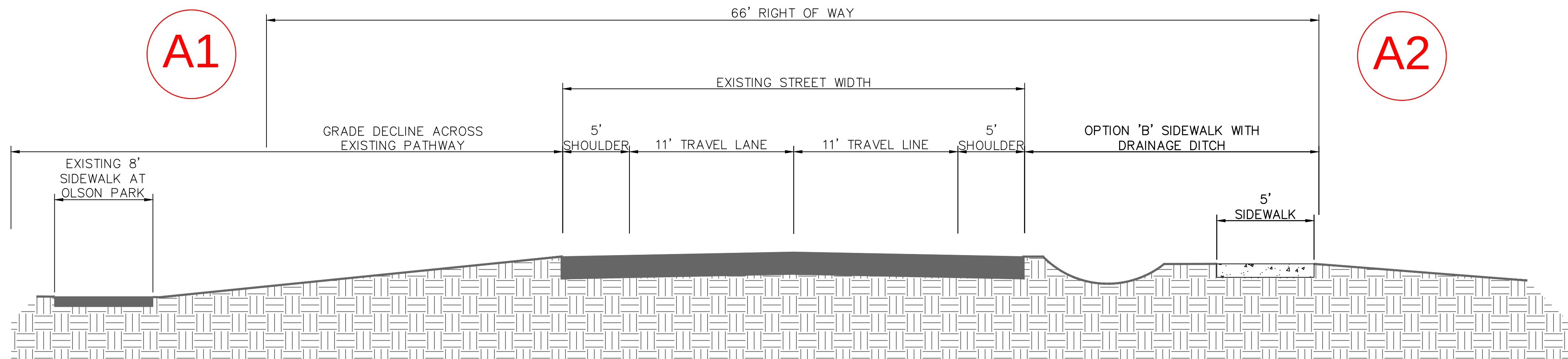
1:720; 1 inch = 60 feet

Dhu Varren Road - 450' east of Birchwood to Omlesaad Dr

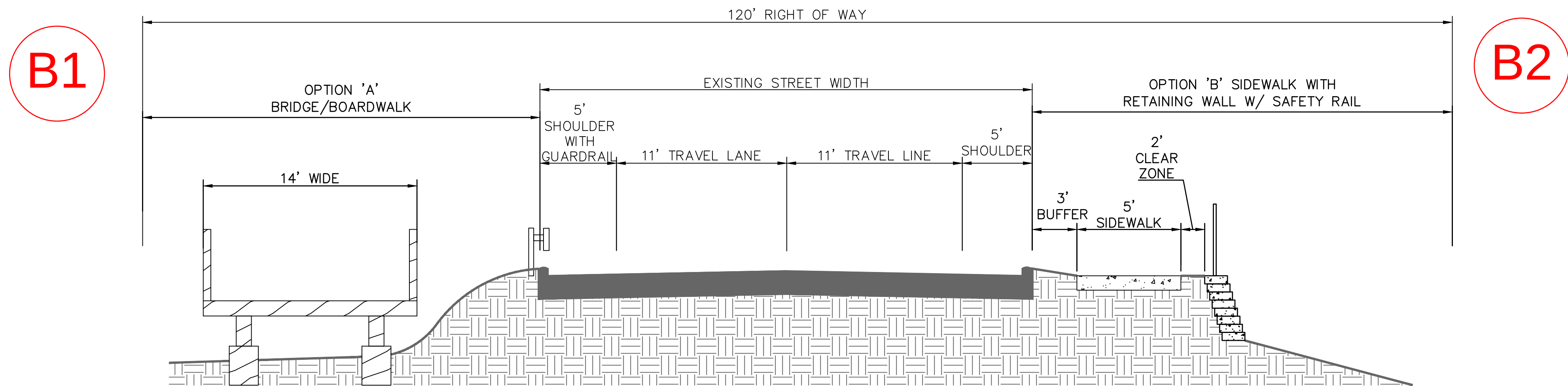


- Legend
- Lot Lines
 - Public Land
 - Proposed Retaining Wall
 - North Side Sidewalk
 - North Side Shared Use Path
 - North Side Proposed Boardwalk
 - South Side Sidewalk
 - Proposed Curb
 - Protect Tree





PROPOSED TYPICAL CROSS SECTION
DHU VARREN RD
1200' EAST OF PONTIAC TRAIL



PROPOSED TYPICAL CROSS SECTION
DHU VARREN RD
400' EAST OF LESLIE PARK CIRCLE



REV	DESCRIPTION	DATE	DRAWN	CHECKED

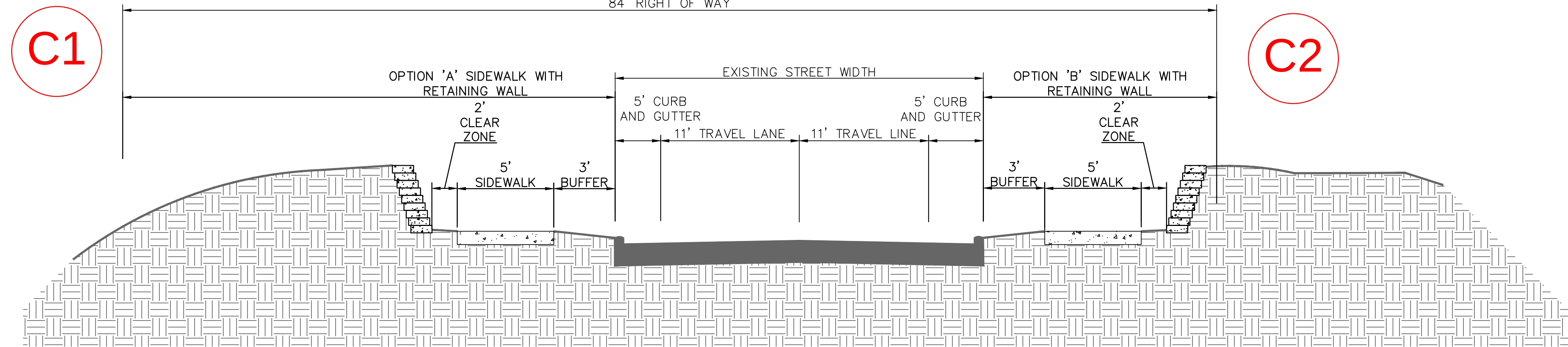
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
P.O. BOX 8647
ANN ARBOR, MI 48108-8647
www.a2gov.org



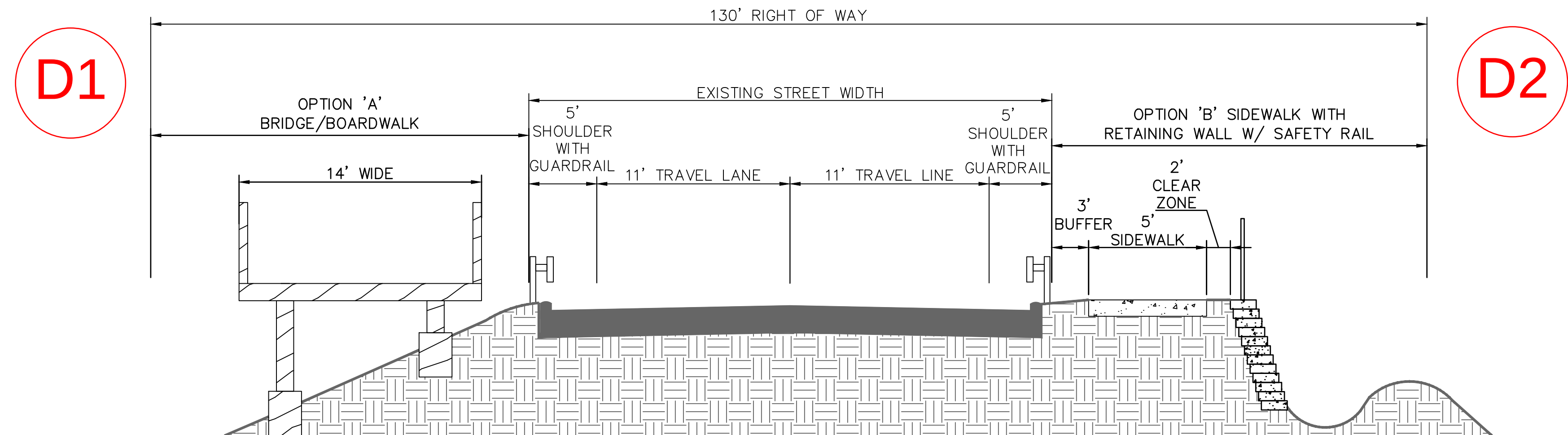
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
DHU VARREN ROAD
TYPICAL CROSS SECTIONS

SCALE	DRAWING No.

SHEET No.



PROPOSED TYPICAL CROSS SECTION
DHU VARREN RD
300' WEST OF BIRCHWOOD DRIVE



PROPOSED TYPICAL CROSS SECTION
DHU VARREN RD
250' WEST OF OMLESAAD DRIVE



REV	DESCRIPTION	DATE	DRAWN	CHECKED

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106
P.O. BOX 8647
ANN ARBOR, MI 48106-8647
www.a2gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

DHU VARREN ROAD

TYPICAL CROSS SECTIONS

SCALE

DRAWING No.

APPENDIX C. COST ESTIMATE

Dhu Varren Road Sidewalk Gap Estimate (5 ft Wide Sidewalk)

Pontiac Trail to Omlesand Drive

Pay Item Description	Unit	Estimated Quantity		Unit Price	Total Price	
		Option A: North Side	Option B: South Side		Option A: North Side	Option B: South Side
General Conditions, Max \$	LS	1	1	\$ -	\$ 100,000	\$ 100,000
Project Supervision	LS	1	1	\$ -	\$ 100,000	\$ 100,000
Project Clean-Up and Restoration	LS	1	1	\$ -	\$ 60,000	\$ 60,000
Pavt, Cleaning	LS	1	1	\$ -	\$ 10,000	\$ 10,000
Digital Audio Visual Coverage	LS	1	1	\$ -	\$ 40,000	\$ 40,000
Erosion Control Items	LS	1	1	\$ -	\$ 50,000	\$ 50,000
Minor Traffic Control, Max. \$	LS	1	1	\$ -	\$ 20,000	\$ 20,000
Traffic Regulator Control	LS	1	1	\$ -	\$ 60,000	\$ 60,000
Signs and Pavement Markings	LS	1	1	\$ -	\$ 20,000	\$ 20,000
Sign, Rem, Salv	LS	1	1	\$ -	\$ 1,000	\$ 1,000
Tree Mitigation	LS	1	1	\$ -	\$ 60,000	\$ 60,000
Environmental Permitting	LS	1	1	\$ -	\$ 30,000	\$ 30,000
Railroad Permitting	LS	1	1	\$ -	\$ 30,000	\$ 30,000
Tree Protection Fence	Ft	2100	2600	\$ 6	\$ 12,600	\$ 15,600
Tree, Rem, 6 In. - 12 In.	Ea	40	40	\$ 350	\$ 14,000	\$ 14,000
Tree, Rem, 13 In. - 19 In	Ea	10	10	\$ 600	\$ 6,000	\$ 6,000
Tree, Rem, 20 In. - 29 In.	Ea	5	5	\$ 1,000	\$ 5,000	\$ 5,000
Tree, Rem, 30 In. - 39 In.	Ea	3	3	\$ 1,200	\$ 3,600	\$ 3,600
Tree, Rem, 40 In. and larger	Ea	2	2	\$ 2,000	\$ 4,000	\$ 4,000
Stump, Rem	Ea	60	60	\$ 350	\$ 21,000	\$ 21,000
Clearing	Sta	16	31	\$ 600	\$ 9,600	\$ 18,600
HMA, Any Thickness, Rem	Syd	919	971	\$ 22	\$ 20,218	\$ 21,362
Curb and Gutter, Rem	Ft	270	380	\$ 17	\$ 4,590	\$ 6,460
Dr Structure, Rem	Ea	2	3	\$ 500	\$ 1,000	\$ 1,500
Machine Grading	Sta	16	37	\$ 10,000	\$ 160,000	\$ 370,000
Subgrade Undercutting, Type II	Cyd	70	140	\$ 80	\$ 5,600	\$ 11,200
Exploratory Excavation, Type I	Ea	10	15	\$ 2,500	\$ 25,000	\$ 37,500
12 In., CL IV RCP Storm Sewer, SD-TD-1	Ft	20	30	\$ 175	\$ 3,500	\$ 5,250
Storm Single Inlet, 24 In. Dia., (0-8' deep)	Ea	2	3	\$ 3,200	\$ 6,400	\$ 9,600
12 In., CMP	Ft	0	280	\$ 80	\$ -	\$ 22,400
18 In., CMP	Ft	0	20	\$ 150	\$ -	\$ 3,000
24 In., CMP	Ft	0	100	\$ 1,000	\$ -	\$ 100,000
Culv, Rem	Ea	0	7	\$ 300	\$ -	\$ 2,100
Subbase, CIP	Cyd	41	316	\$ 130	\$ 5,330	\$ 41,080
Aggregate Base, 8 In., 21AA, CIP	Syd	919	971	\$ 17	\$ 15,623	\$ 16,507
Aggregate Shoulder, CI II, 23A	Ton	0	74	\$ 80	\$ -	\$ 5,920
HMA Approach	Ton	0	47	\$ 250	\$ -	\$ 11,750
4E1	Ton	112	126	\$ 150	\$ 16,800	\$ 18,900
5E1	Ton	278	210	\$ 160	\$ 44,480	\$ 33,600
Conc, Curb or Curb & Gutter, All Types	Ft	640	560	\$ 42	\$ 26,880	\$ 23,520
Retaining Wall	Ft	520	1653	\$ 800	\$ 416,000	\$ 1,322,400
Boardwalk	Ft	444	0	\$ 2,750	\$ 1,221,000	\$ -
Guardrail, Rem	Ft	382	545	\$ 5	\$ 1,910	\$ 2,725
Guardrail	Ft	382	545	\$ 38	\$ 14,516	\$ 20,710
Pathway Safety Rail	Ft	303	671	\$ 120	\$ 36,360	\$ 80,520
Conc, Sidewalk, 4 In	Sft	2240	18195	\$ 10	\$ 22,400	\$ 181,950
Share Use Path, Aggregate	Ton	265	0	\$ 50	\$ 13,260	\$ -
Shared use Path, HMA	Ton	162	0	\$ 200	\$ 32,413	\$ -
Conc, Sidewalk, Ramp, 6 In	Sft	100	100	\$ 12	\$ 1,200	\$ 1,200
Mailbox	Ea	0	7	\$ 200	\$ -	\$ 1,400
Railroad crossing hard surface	Ea	1	1	\$ 10,000	\$ 10,000	\$ 10,000
Railroad Supervision	LS	1	1	\$ -	\$ 50,000	\$ 50,000
ADA ramp to Dhu Varren Woods	LS	1	1	\$ -	\$ 100,000	\$ 100,000
RRFB Assembly	Ea	2	2	\$ 12,000	\$ 24,000	\$ 24,000
Subtotal					\$ 2,935,280	\$ 3,205,354
Contingency (15%)					\$ 440,292	\$ 480,803
Subtotal with Contingency					\$ 3,375,572	\$ 3,686,157
Preliminary Engineering (20%)					\$ 675,114	\$ 737,231
Construction Engineering and Inspection (20%)					\$ 675,114	\$ 737,231
Total					\$ 4,725,801	\$ 5,160,620

APPENDIX D. SITE PHOTOGRAPHS

North side of Dhu Varren Road



300 feet east of Leslie Park Circle looking west at end of shared use path at Food Gathers



300 feet east of Leslie Park Circle looking east with railroad in the distance



150 feet west of Ann Arbor Railroad looking east at the Traver Creek crossing.



Traver Creek crossing railroad and Dhu Varren. Flow goes into the image, left to right.



At Ann Arbor Railroad looking west toward Traver Creek



400 feet west of Birchwood Drive looking east. Sidewalk ends at DTE substation.



300 feet west of Birchwood Drive looking east.



Intersection of Birchwood Drive looking west



Intersection of Birchwood Drive looking east



100 feet east of Birchwood Drive looking west



200 feet east of Birchwood Drive looking east



350 feet east of Birchwood Drive looking west



400 feet east of Birchwood Drive looking east



300 feet east of Omlesaad Drive looking west



300 feet east of Omlesaad Drive looking east. Retention Pond is on the left.



End of sidewalk at Omlesaad Drive looking west.

South side of Dhu Varren Road



Intersection of Pontiac Trail looking east



250 feet east of Pontiac Trail looking east



500 feet east of Pontiac Trail looking west at end of sidewalk at Gretchen's Place



**250 feet east of Olson Park entrance looking west at end of sidewalk at Northside Glen
Condos**



500 feet east of Olson Park entrance looking west (1616 Dhu Varren)



500 feet east of Olson Park entrance looking east (1616 Dhu Varren)



600 feet west of Carrot Way looking west (1710 Dhu Varren)



400 feet west of Carrot Way looking west



End of sidewalk at Chinese Christian Church looking west



Intersection of Leslie Park Circle looking east



200 feet west of Leslie Park Circle looking west



200 feet west of Ann Arbor Railroad looking east



At Ann Arbor Railroad looking west



At Ann Arbor Railroad looking east



350 feet east of Ann Arbor Railroad looking west



300 feet west of Birchwood Drive looking east (2030 Dhu Varren)



250 feet west of Birchwood Drive looking west (2030 Dhu Varren)



Intersection of Birchwood Drive looking east (Dhu Varren Woods Nature Area)



Intersection of Birchwood Drive looking west (Dhu Varren Woods Nature Area)



500 feet west of Omlesaad Drive looking west (Dhu Varren Woods Nature Area)



500 feet west of Omlesaad Drive looking east



100 feet west of Omlesaad Drive looking west

APPENDIX E. PRESENTATIONS

Dhu Varren Road

Sidewalk Engagement Session

June 30, 2025

City of Ann Arbor – Public Services Area – Engineering

www.engage.a2gov.org/sidewalk-gap-study/sidewalk-gap-study-Dhuvarren





Meeting Etiquette

- Commit to learning and avoiding speculation.
- Please remember the importance of rights and the dignity of others.
 - Critique ideas, not people.
 - Use thoughtful language so this can be a comfortable and respectful session for all participants.



Public Engagement

- **The project team will conduct public engagement through online and in-person means to:**
 - Learn stakeholder concerns and values
 - Discuss findings after engineering investigation



City of Ann Arbor - Project Staff

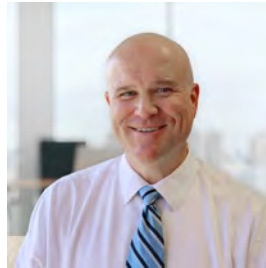


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Agenda



Purpose of Engagement

Project Overview and Need

Project Challenges

Potential Design Options

Next Steps

Breakout Session

Purpose of Engagement



Purpose of Engagement

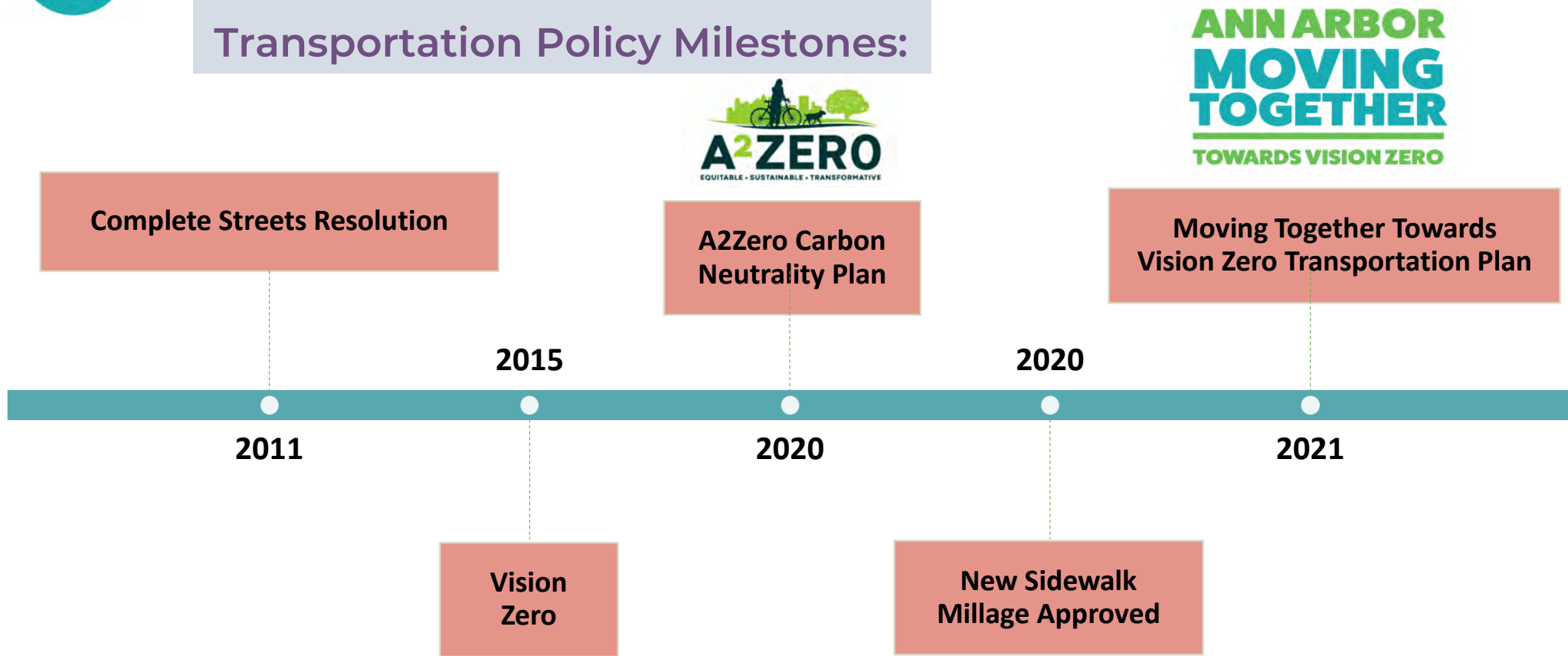
- ✓ Need for Non-motorized Accessibility
- ✓ Receive Feedback on Values and Concerns
- ✓ Develop a Realistic Cost Estimate

Project Overview & Need



Project Purpose and Need

Transportation Policy Milestones:





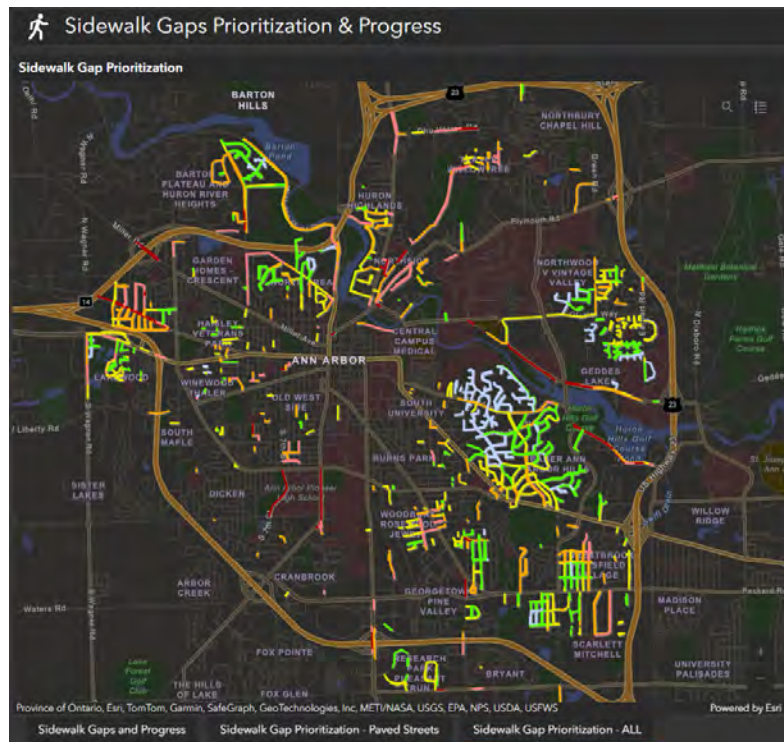
Ann Arbor's Mobility Goals & Values

- ✓ Safety
- ✓ Accessibility for All
- ✓ Mobility





Sidewalk Gap Prioritization and Progress



- 442 miles of existing sidewalk
- 140 miles of “sidewalk gaps”
- 2022 Petition
- An online dashboard is available with information on sidewalk gaps:

a2gov.org/newsidewalks



Existing Right-of-Way/Easements



What is a road **Right-of-Way (R.O.W.)**?

- Property owned by the city, includes the road and strip of property behind it.

What is a **Temporary Grading Easement**?

- Portion of property the city and its contractor can enter during a specified time period in order to make changes to allow for a sidewalk to blend into the existing ground.

What is a **Permanent Easement**?

- An agreement between the city and property owner that grants the city legal rights to use a specified area of the land for sidewalks.



Township Islands



- The special assessment for sidewalks is issued when sidewalk is constructed adjacent to a non-taxable property.
- The assessment will not be collected until such a time when the property annexes to the City.

Project Challenges



Project Challenges



Environment

- Dhu Varren Woods Nature Area
- Trees



Grade Changes (Topography)



Impacts to Property



Project Costs

Potential Design Options



Design Toolbox



Curb and Gutter



Shoulder with Ditch



Shared Use Path



Retaining Wall

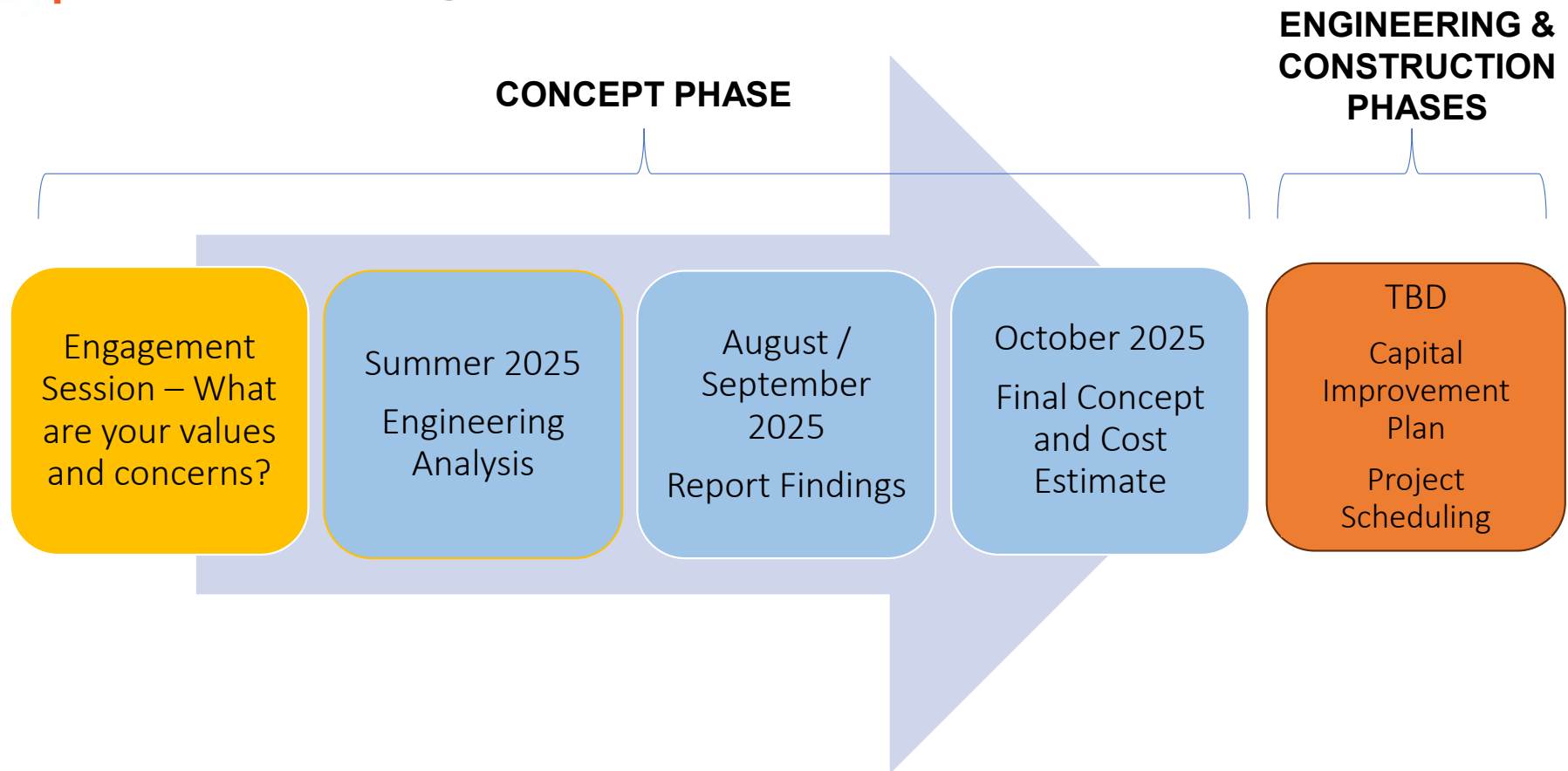


Pedestrian Bridge

Next Steps...



Project Timeline



Breakout





Thank You!

City of Ann Arbor – Public Services Area – Engineering

www.engage.a2gov.org/sidewalk-gap-study

Dhu Varren Road

Sidewalk Engagement Session

October 8, 2025

City of Ann Arbor – Public Services Area – Engineering

www.engage.a2gov.org/sidewalk-gap-study/sidewalk-gap-study-Dhuvarren





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City of Ann Arbor - Project Staff



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Mark McCulloch

Professional Engineer

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Tonight's Agenda

- Recap of Previous Engagement Session**
- Feedback Received**
- Design Concepts by Segment**
- Estimated Project Costs**
- Advantages and Disadvantages**
- Next Steps**
- Breakout Session**

Recap of Last Engagement Session





Purpose of the Previous Engagement Session

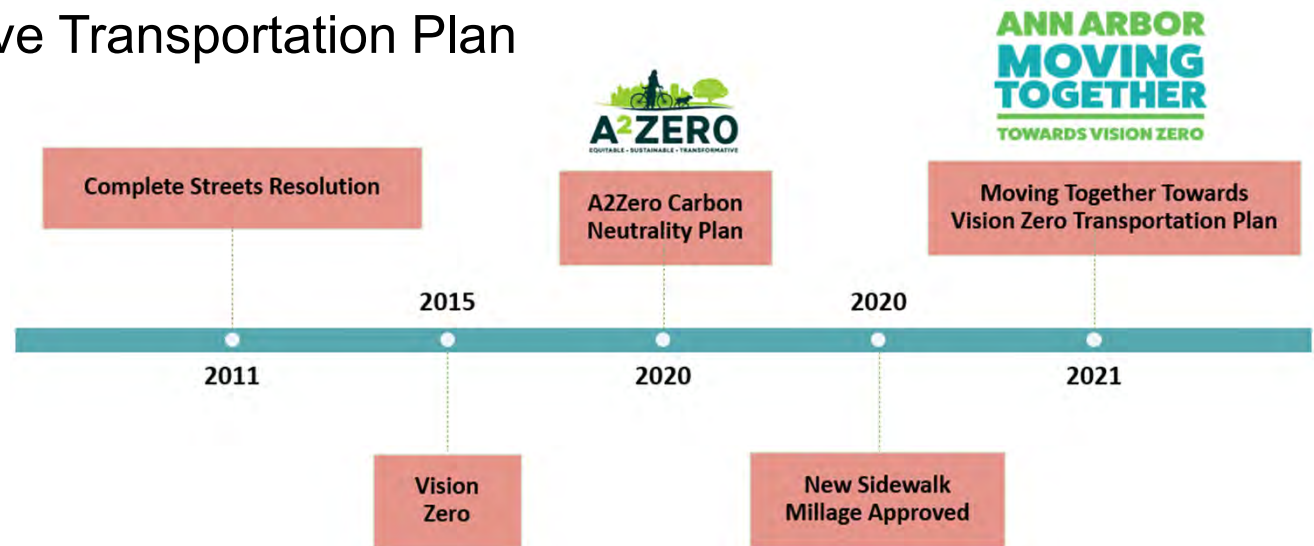
- Last session held on June 30, 2025
- Need for non-motorized accessibility on both sides of the street.
- Desired community feedback on values and concerns.
- Develop a realistic cost estimate for planning purposes.



Transportation Policy Milestones

Highlighted City Council Initiatives and Goals

- Complete Streets
- Vision Zero
- Carbon Neutrality
- Sidewalk Milage
- Comprehensive Transportation Plan



www.engage.a2gov.org/sidewalk-gap-study

Feedback Received



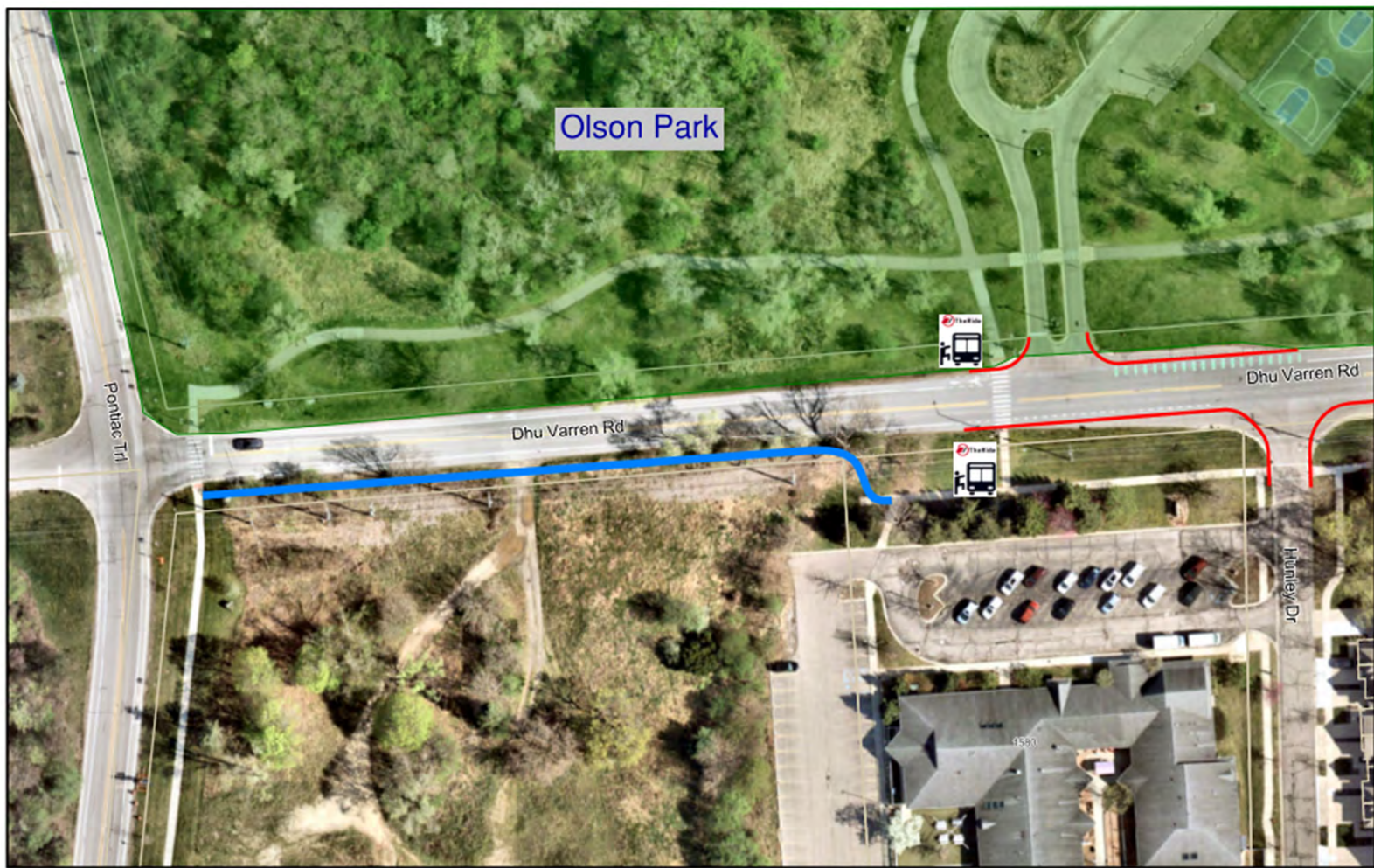


What You Told Us

What We Heard	What We Reviewed
Most participants favored the north side over the south side if resources were limited to build both sides at the same time.	Estimated project costs and impacts were reviewed along the north and south sides of the road.
Desire for safety enhancements at Carrot Way crosswalk.	Included an RRFB (rapid rectangular flashing beacon) in the cost estimate.
Desire for additional marked crosswalks at existing intersections and bus stops	City embraces additional marked crosswalks where safety is enhanced.
Sight distance is limited when exiting Birchwood Drive to Dhu Varren Road.	Sight distance will be improved by removing auxiliary lanes/tapers at entrance.
Environmental impacts to Dhu Varren Woods	Reviewed concepts with City Parks & Recreation Department.

Design Alignment Alternatives





Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree

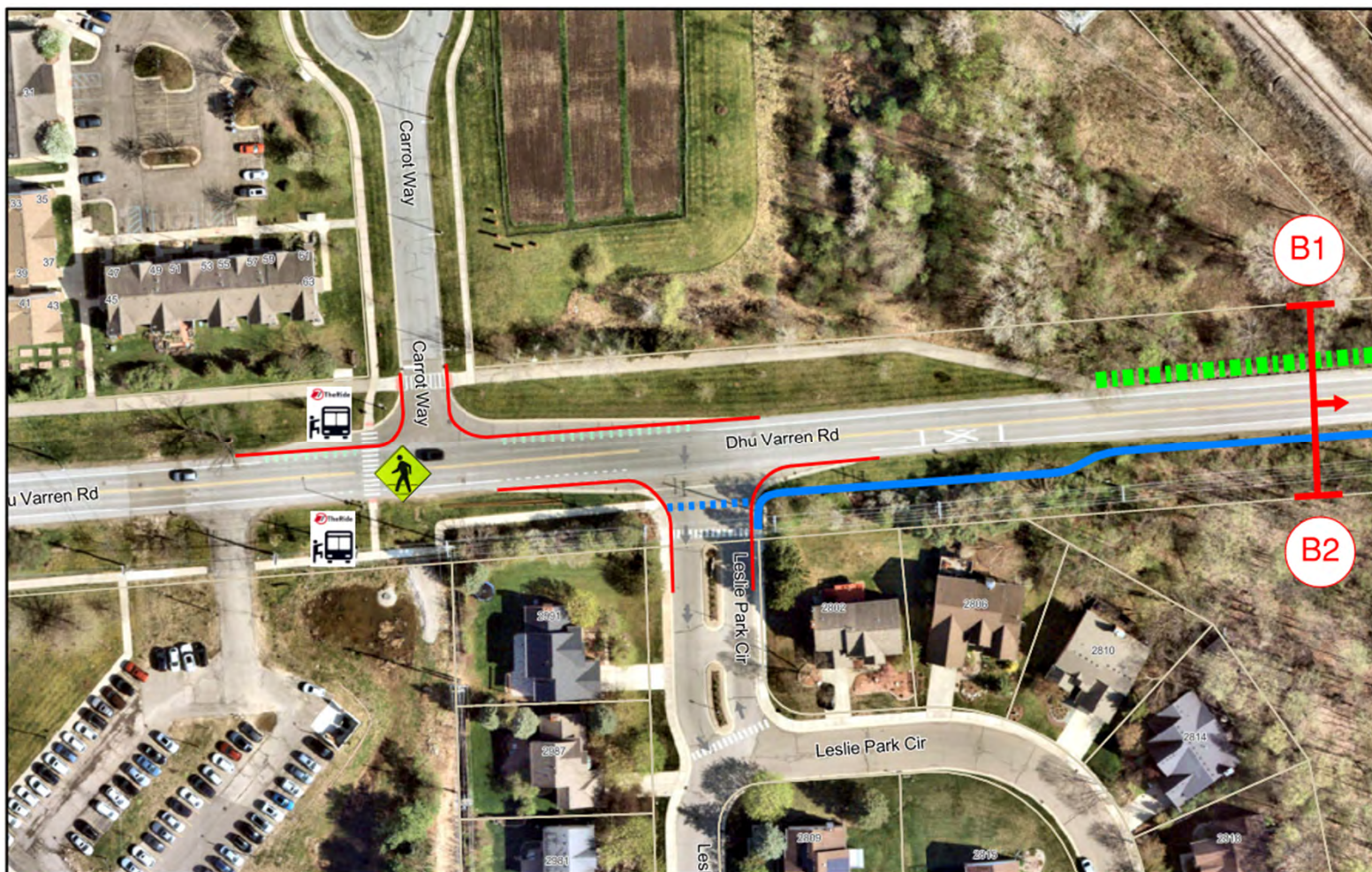


Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree

Hunley Drive to east end of Olson Park

www.engage.a2gov.org/sidewalk-gap-study



Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree

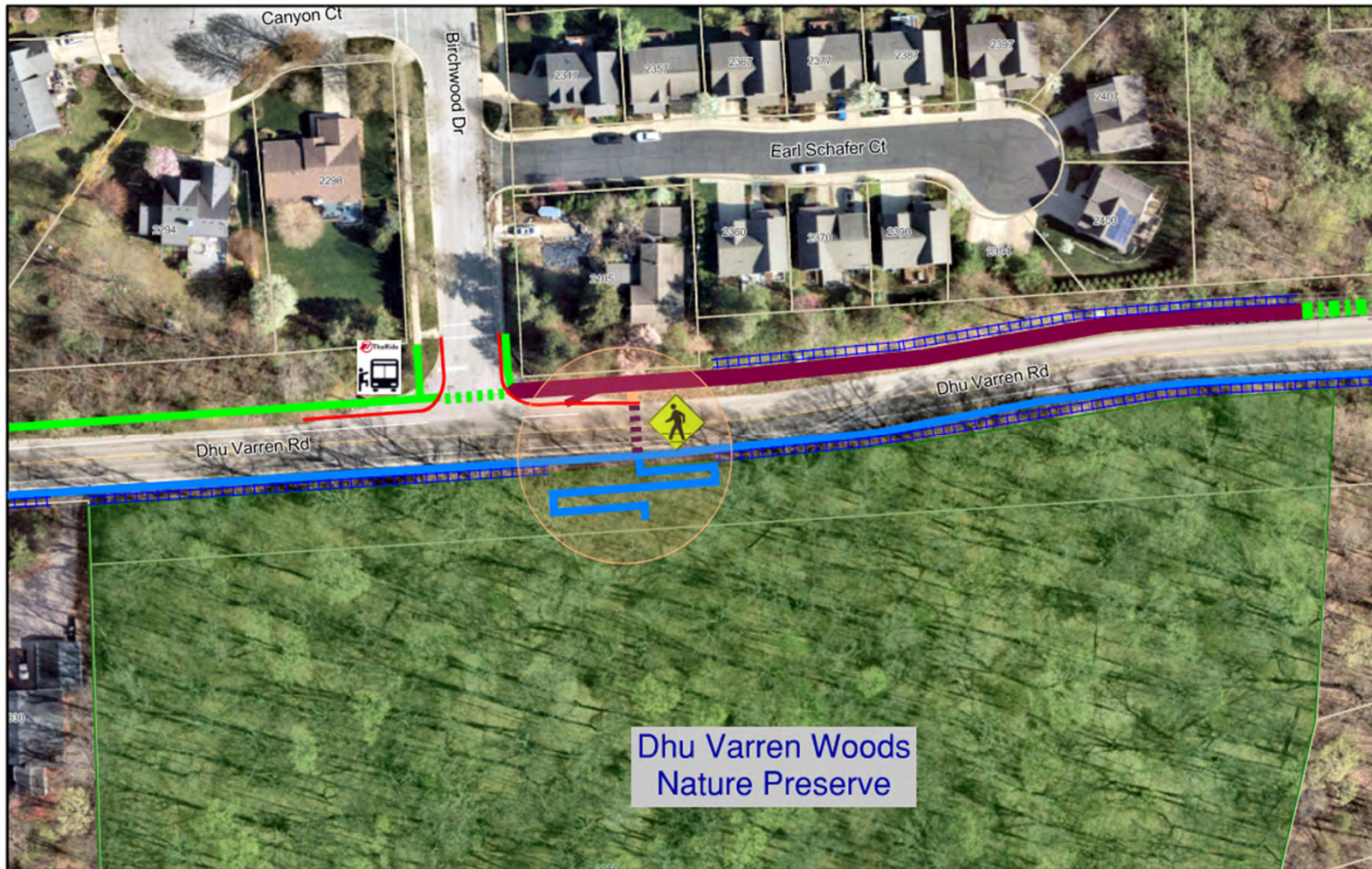
East end of Olson Park to Ann Arbor Railroad

www.engage.a2gov.org/sidewalk-gap-study



Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
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- South Side Sidewalk
- Proposed Curb
- Protect Tree

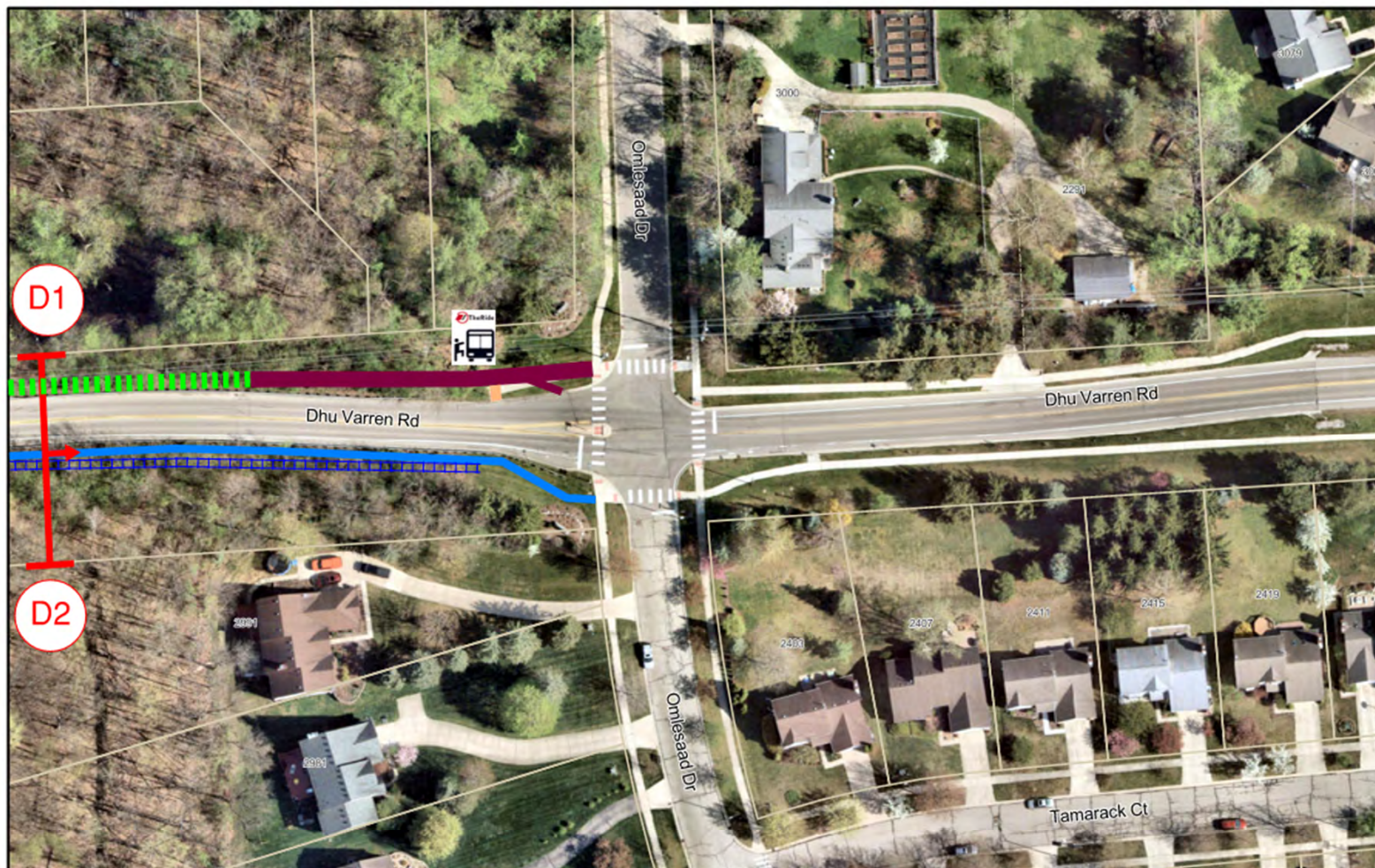


Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
- Proposed Retaining Wall
- North Side Sidewalk
- North Side Shared Use Path
- North Side Proposed Boardwalk
- South Side Sidewalk
- Proposed Curb
- Protect Tree

350' west of Birchwood to 450' east of Birchwood

www.engage.a2gov.org/sidewalk-gap-study



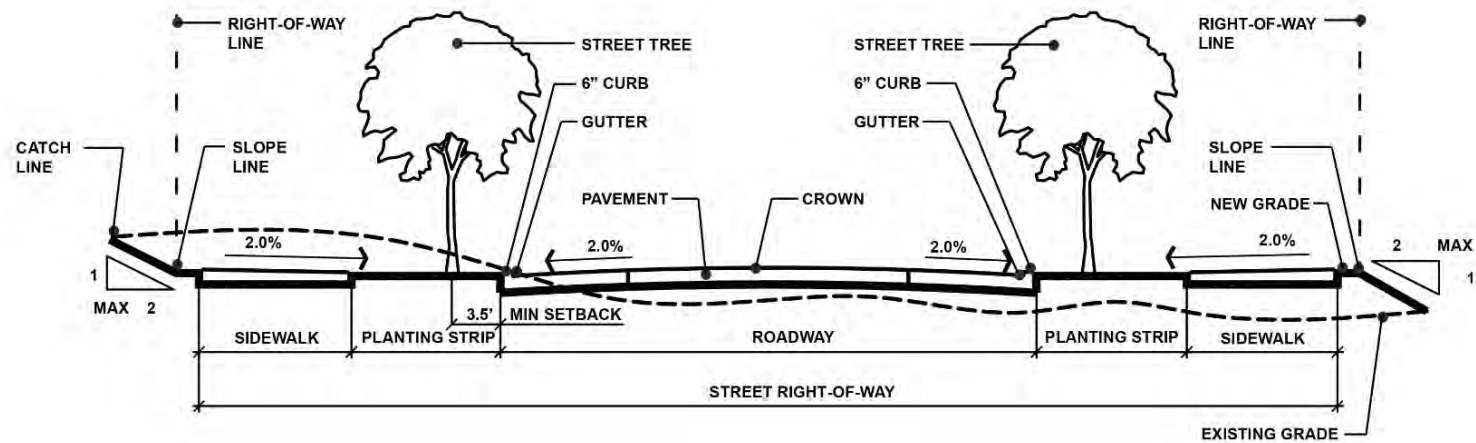
Legend

- Lot Lines
- - - Existing Storm Sewer
- Public Land
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- Protect Tree

450' east of Birchwood to Omlesaad Dr

www.engage.a2gov.org/sidewalk-gap-study

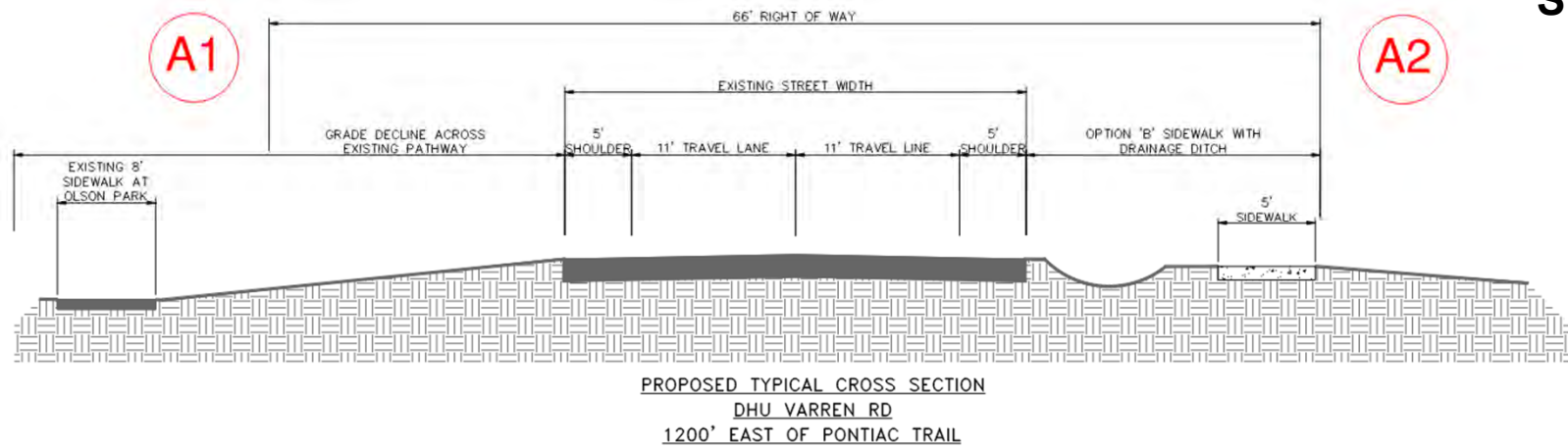
Cross Sectional Views



Aerial Location



Street View



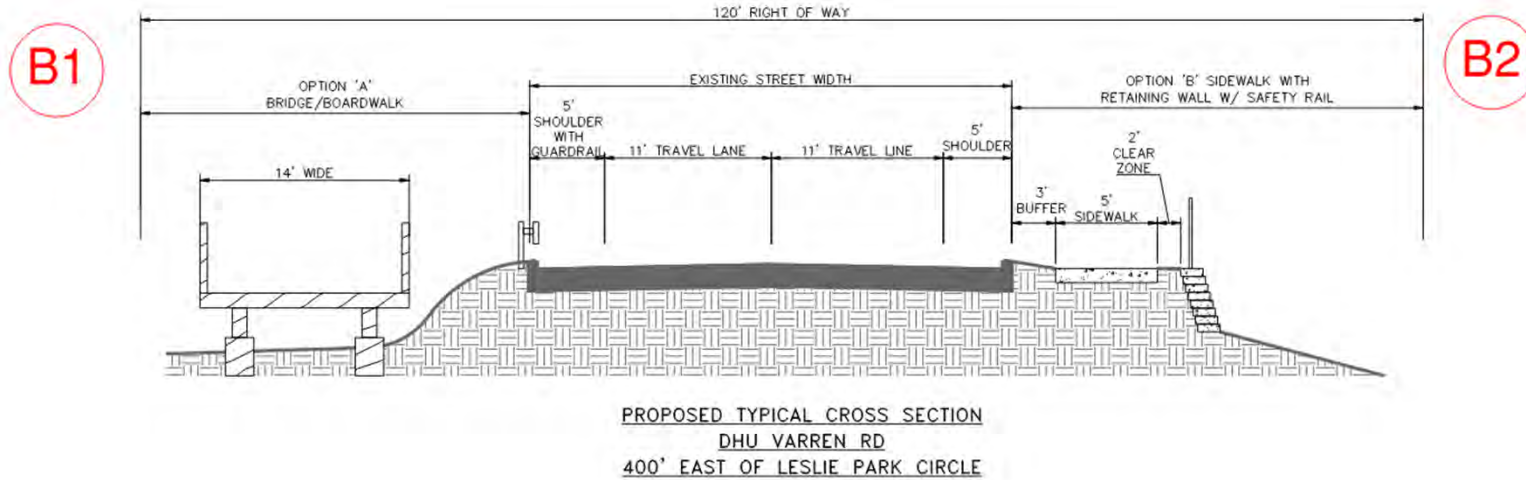
Cross Section 'A' - 400 ft east of Hunley

www.engage.a2gov.org/sidewalk-gap-study

Aerial Location



Street View

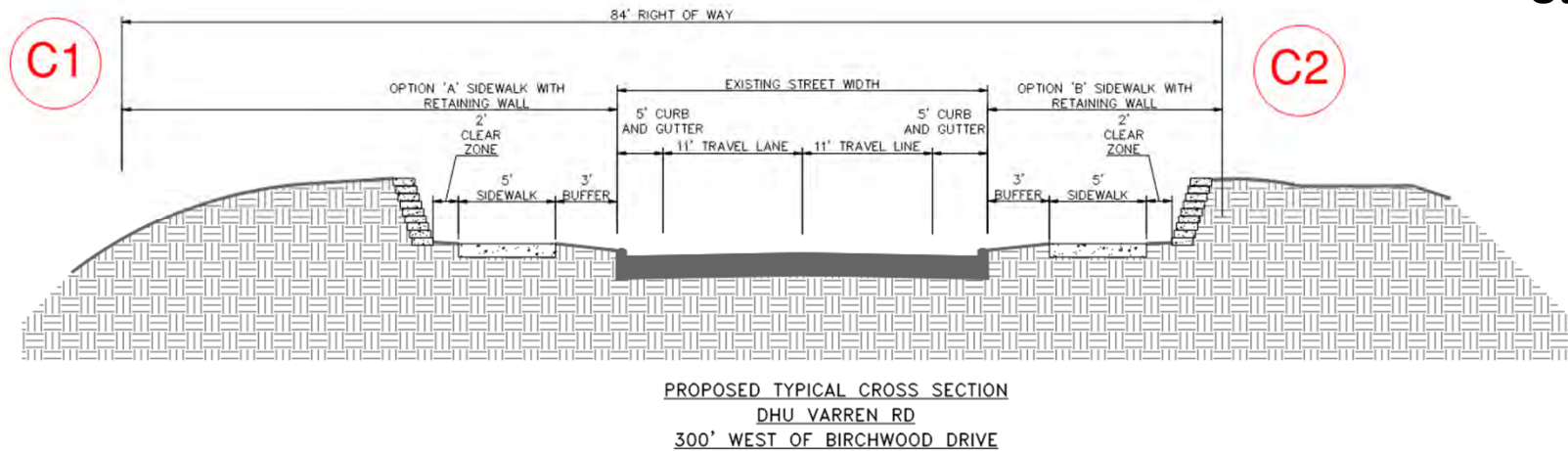


Cross Section 'B' - 500 ft east of Carrot Way www.engage.a2gov.org/sidewalk-gap-study

Aerial Location



Street View



PROPOSED TYPICAL CROSS SECTION
DHU VARREN RD
300' WEST OF BIRCHWOOD DRIVE

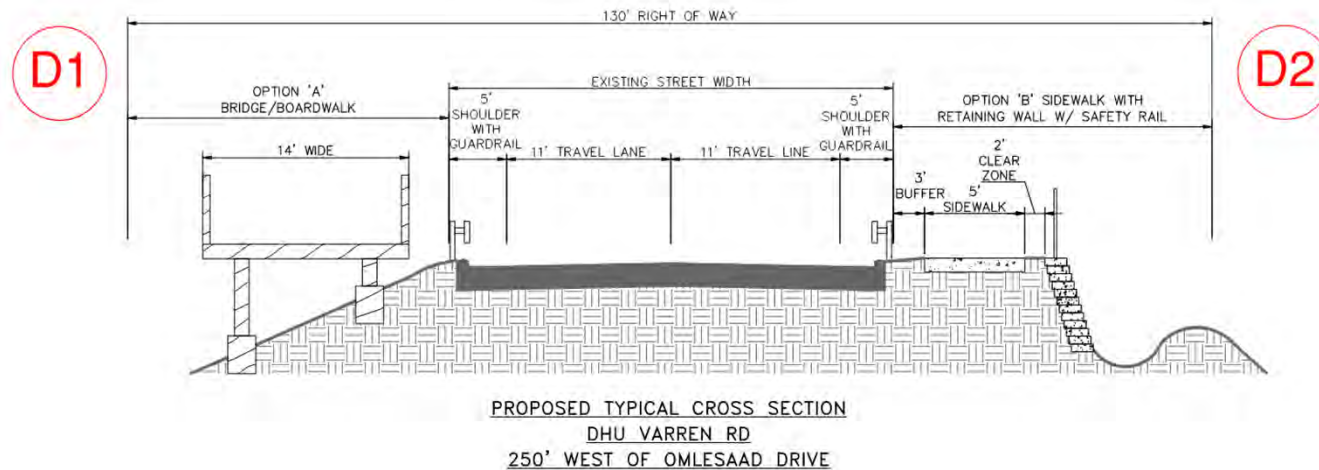
Cross Section 'C' - 350 ft east of Birchwood

www.engage.a2gov.org/sidewalk-gap-study

Aerial Location



Street View



Cross Section 'D' - 300 ft west of Omlesaad

www.engage.a2gov.org/sidewalk-gap-study

Estimated Project Costs



North Side	South Side
\$4.7 Million	\$5.2 Million

Notes

- Funding sources (sidewalk gaps millage v. park properties)
- Estimate is in 2025 dollars

Advantages & Disadvantages





Comparison of Sides

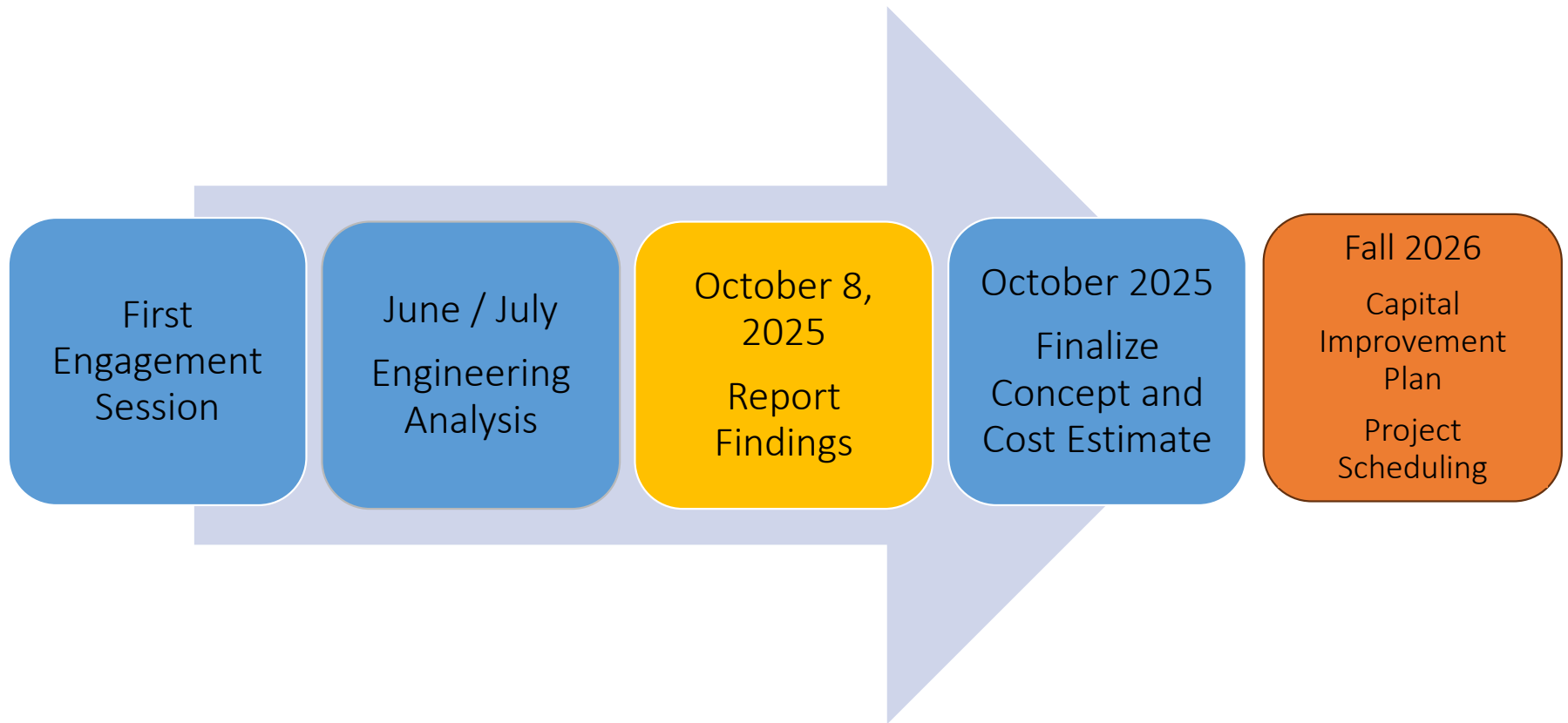
Category	North Side	South Side
Estimated Tree Removals	Less (40)	More (70)
Cost	Lower	Higher
Environmental Impacts	Less	More
Public Lands / Sideway Millage	None	Dhu Varren Woods

Next Steps...





Project Timeline



Breakout





Thank You!

City of Ann Arbor – Public Services Area – Engineering

www.engage.a2gov.org/sidewalk-gap-study

Dhu Varren Road

Sidewalk Gap Study - Summary of Findings

July 17, 2026

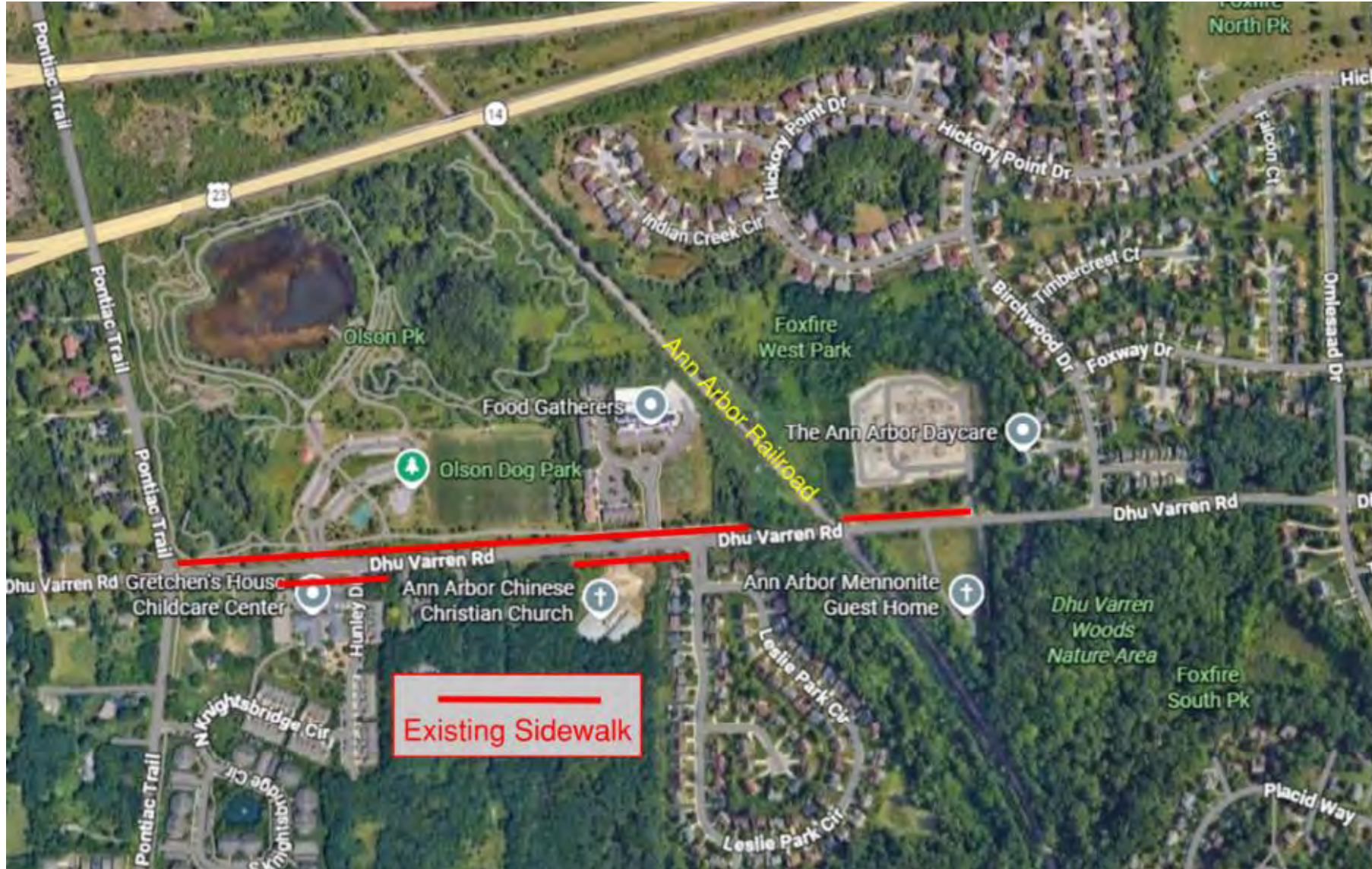


Design Details Requiring City Approval

- **Confirm final walkway widths (5' & 10')**
- **Prioritize the north side if funding is limited**
- **Approve RRFB midblock crosswalk at Dhu Varren Woods Nature Area & Carrot Way**



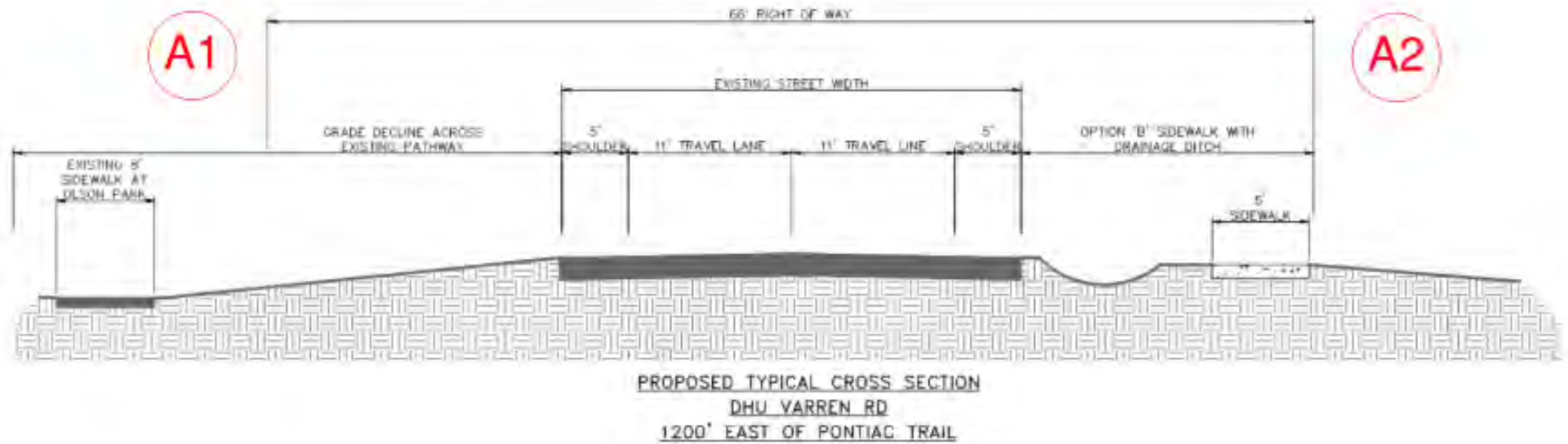
Study Limits – Pontiac Trail to Omlesaad Dr



Aerial Location



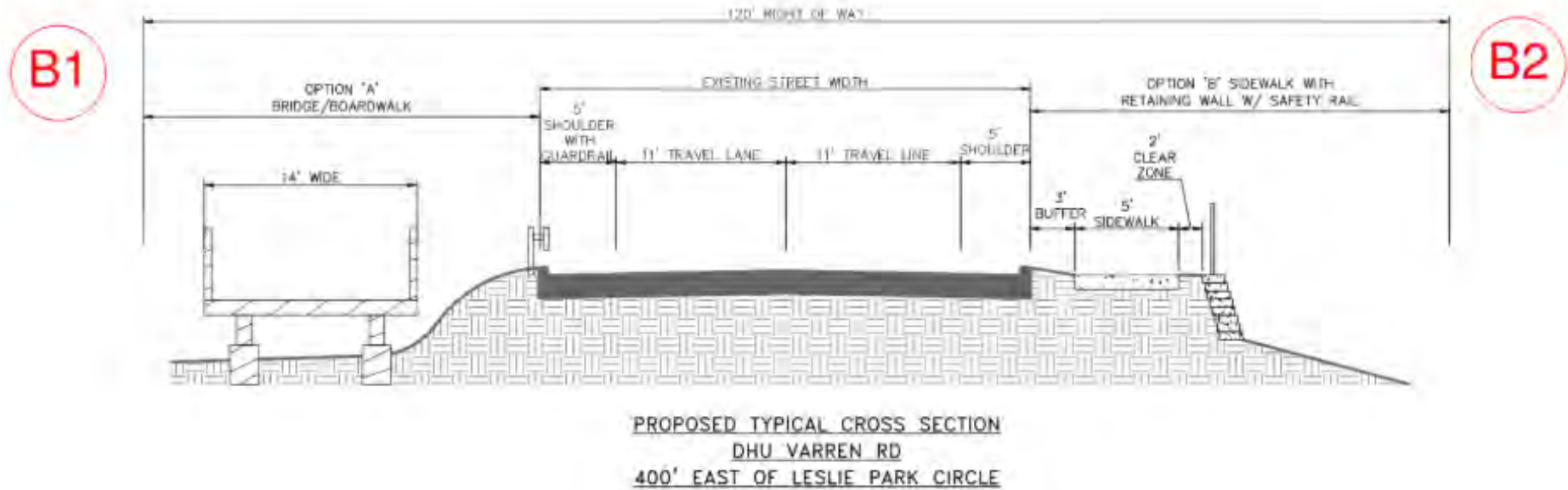
Street View



Aerial Location



Street View

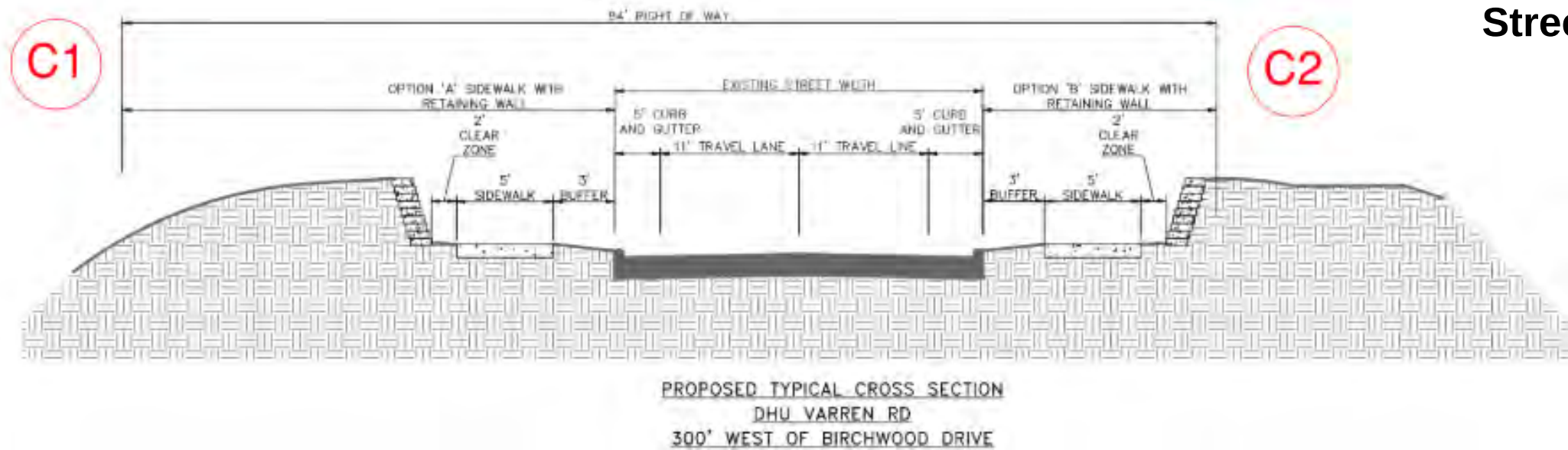


Carrot Way to Ann Arbor Railroad – north and south sides

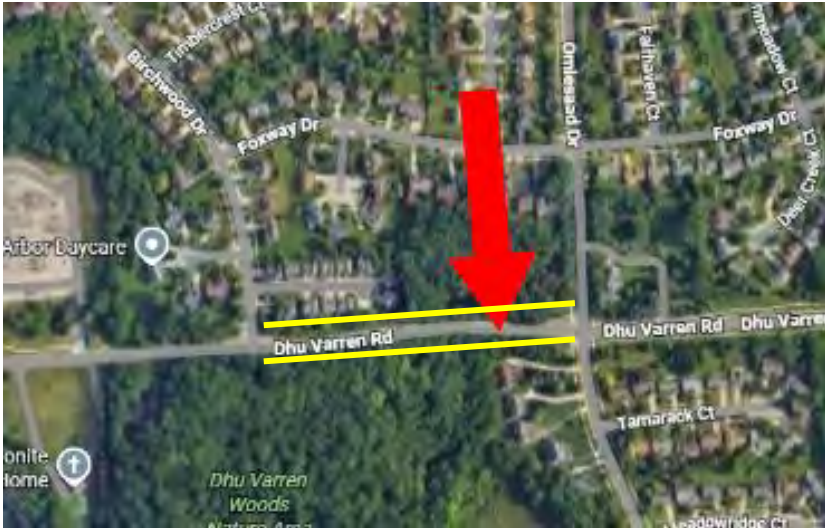
Aerial Location



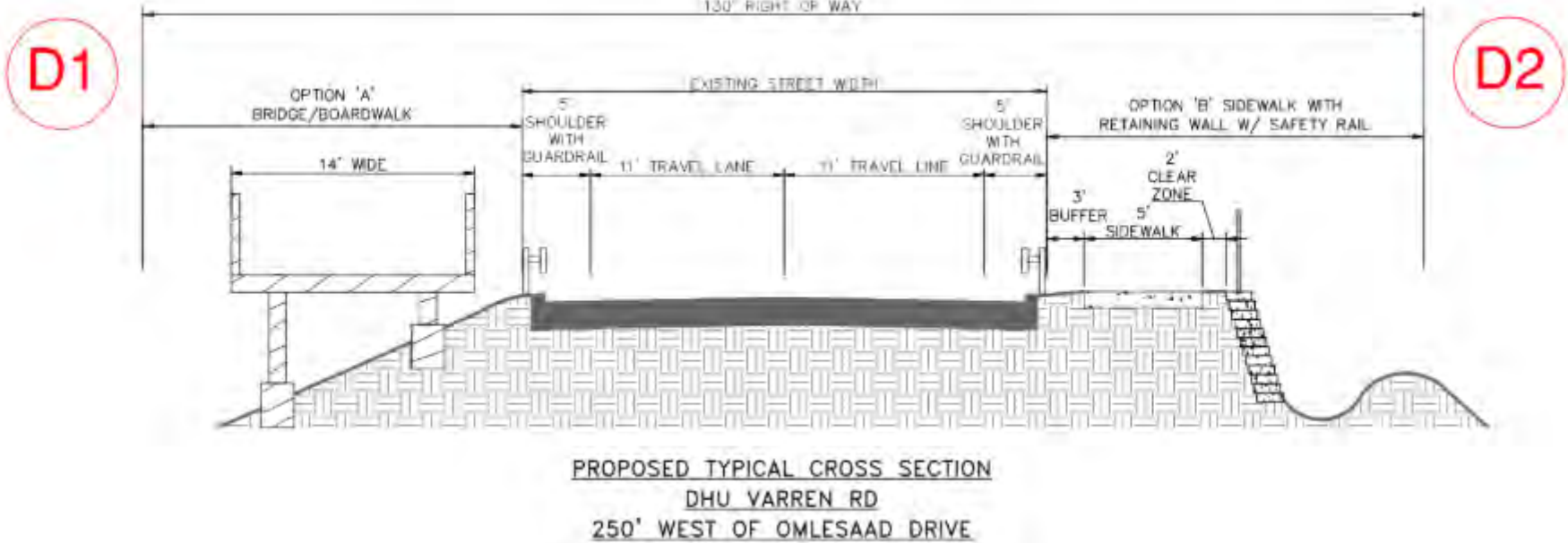
Street View



Aerial Location



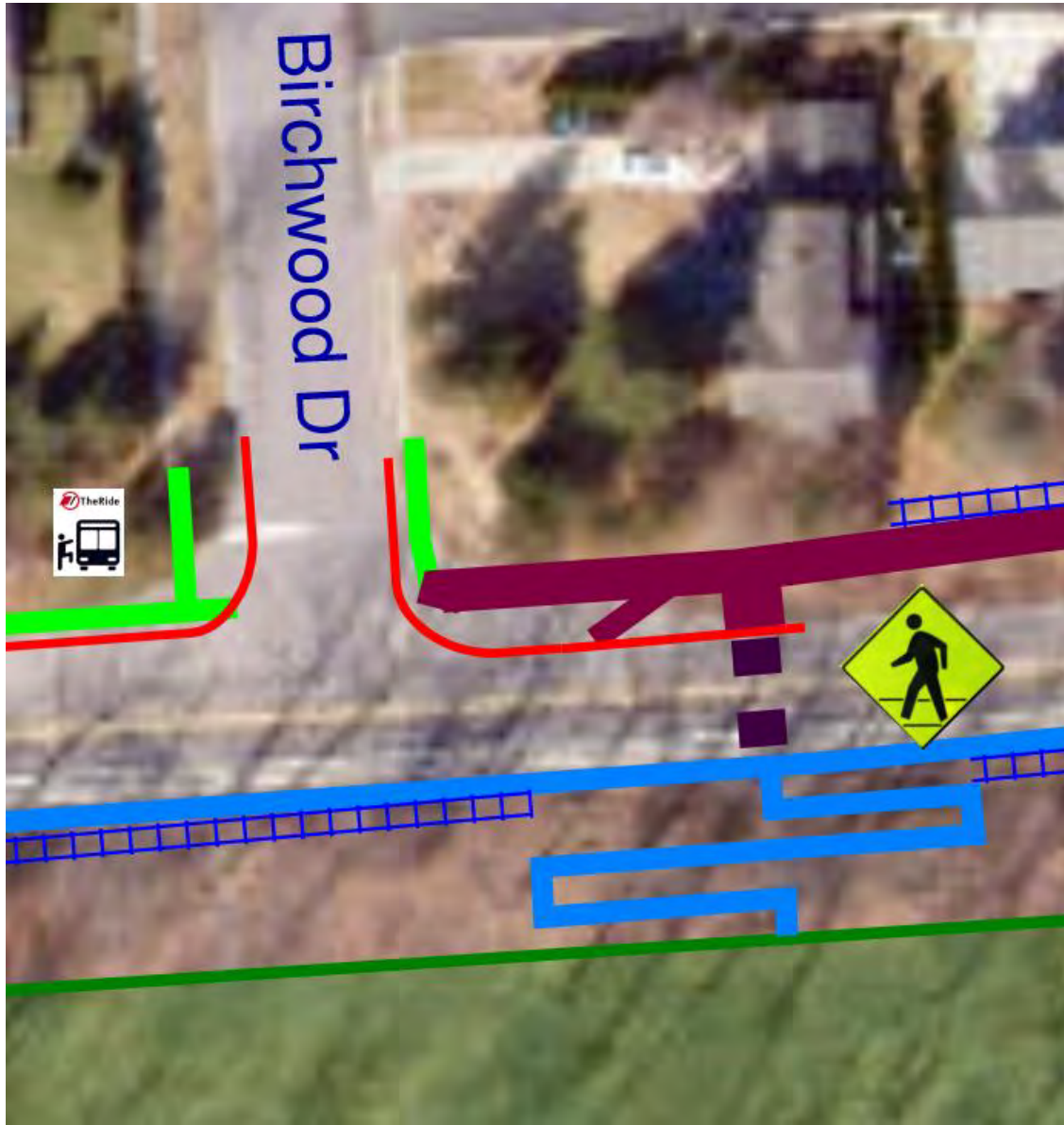
Multiuse Path
on North Side



Street View



Carrot Way @ Dhu Varren Road – Proposed RRFB Cross Walk



Birchwood Drive @ Dhu Varren Road – Proposed RRFB

Table 4-1. Length of Walkway Gaps on North Side of Dhu Varren

Limits	Approximate Length
335 feet west of Ann Arbor Railroad to railroad crossing	325 feet
400 feet west of Birchwood Drive to Birchwood Drive	400 feet
Birchwood Drive to Omlesaad Drive	875 feet
Total Length of Gaps	1,600 feet (0.30 mile)

Table 4-2. Length of Walkway Gaps on South Side of Dhu Varren

Limits	Approximate Length
Pontiac Trail to 410 feet east of Pontiac Trail	410 feet
100 feet east of Hunley Drive to 340 feet west of Carrot Way	720 feet
Leslie Park Circle to Ann Arbor Railroad	310 feet
Ann Arbor Railroad to Omlesaad Drive	1,960 feet
Total Length of Gaps	3,400 feet (0.65 mile) (now 2,825 feet)

**To be done by
Private Development**

165 feet

North Side Gaps

\$4.7 Million

South Side Gaps

\$5.2 Million*

Estimated Project Costs

Note: Some gaps on south side will be constructed via Private Development

Advantages & Disadvantages



	North Side Gaps	South Side Gaps
Funding	✓	
Fewer Trees Removed	✓ (40)	(70)
Lower Costs	✓	
Fewer Environmental Impacts	Same	Same



Public Feedback

- North side of Dhu Varren
- Crosswalk addition and nearby sites
- Environmental concerns
- Safety and traffic volume





Summary of Findings

- **The north side of Dhu Varren Road is recommended for initial prioritization.**
- **10-foot-wide shared-use path from Birchwood Drive to Omlesaad Drive is included to complete the bike network.**
- **The north side provides the strongest overall balance of safety, accessibility, affordability, and reduced impacts to trees and sensitive environmental resources.**

Design Details Requiring City Approval

- **Confirm final walkway widths (5' & 10')**
- **Prioritize the north side if funding is limited**
- **Approve RRFB midblock crosswalk at Dhu Varren Woods Nature Area & Carrot Way**