

## 3.0 Goals and Strategies

The following provisional goals, strategies, actions and initiatives for the SR 49 corridor have been developed to advance the desires of local citizens and community leaders who have a stake in the future of the SR 49 corridor, and want to preserve and manage landscape character of the corridor in the face of potentially rapid residential and commercial growth and development. The goals were also developed in part to advance the objectives of recently drafted, citizen-driven local and regional programs and plans, which call for improvements to transportation and utilities infrastructure, and methods for stimulating sustainable economic development.

It is understood that growth and development will occur within the region, within Porter County, and within the SR 49 corridor. The principal objective of this report is to devise goals, strategies and actions through which to guide and direct the nature of development so it does not destroy the unique qualities, fabric and character of the remaining rural landscape. For several reasons, the City of Valparaiso is regarded as being a free-standing city. Its citizens want it to remain that way. The Valparaiso Chain of Lakes Conservation Area, the Moraine Nature Preserve and Coffee Creek watershed area, combined with significant regional parks such as the Sunset Hill Farm County Park, and vast areas of remaining prime agricultural lands provide a dense green buffer to the north. This green buffer has been effective in halting southerly movement of sprawl and marginal development from the north. It is through this area that SR 49 passes, and the reason for the corridor's northern segment to be referred to as the "rural reach." This Corridor Plan provides strategies for strengthening this green buffer so agricultural open space can be preserved and managed in perpetuity.

It is within the middle reach of the SR 49 corridor where the greatest amount of development is projected. It is also where the City of Valparaiso's image, as a growing metropolitan community will be defined. The interchange at CR E 500 N is a principal access point to Valparaiso's northern neighborhoods to the west and provides a strong sense of arrival. It is also the site of the recently developed Valparaiso Health Center, the anchor for what is envisioned to be a significant complex of healthcare service providers and professional offices. Along with the development of the Porter County Regional Hospital complex and associated development at the U.S. Highway 6 interchange it is envisioned that SR 49 could become a major healthcare corridor for northern Indiana.

Within the middle reach, the western portions of the SR 49 corridor is largely built-out. The lands to the east of County Roads 300

and beyond are regarded as both prime agricultural and prime developable land. In order to consolidate high-quality office / professional development close to the SR 49 thoroughfare and preserve agricultural lands, county roads and settlement patterns—the elements that provide the rural landscape character that Porter County is known for—an arterial thoroughfare is proposed to run just east of and parallel to SR 49. This alternative thoroughfare will provide access to large portions of developable land, and will extend southward the Valparaiso Health Center campus proposed at the interchange of SR 49 and CR E 500 N. This thoroughfare, named Memorial Drive Extended will intersect Vale Park Road and continue southward, where it will provide access to additional lands for office park development as well as a proposed multi-family housing development, before it reaches Evans Avenue. Departing the western alignment of Evans Avenue, Memorial Drive Extended becomes elevated, spans the Grand Trunk Railroad, and slopes down to connect with Porter's Vale Boulevard and the SR 2 / LaPorte Avenue. Crossing SR 2 Memorial Drive Extended will directly connect with the Eastport Centre Technology Park and beyond to the expanding Porter County Regional Airport.

An ambitious plan, the development of Memorial Drive Extended ensures a coherent pattern of contiguous development that prevents sprawl and preserves open space and rural landscape character. The proposed thoroughfare promotes connectivity and access management to existing transportation corridors while providing synergies with adjacent complementary land uses. The SR 49 Corridor Plan promotes the development of livable centers – multiple use campuses at key interchanges, such as U.S. Highway 6, CR E 500 N and CR E 400 N, to augment transit-oriented development. Improved interchanges at SR 2 and CR E 500 N, and the removal of the CR E 600 N interchange increases the SR 49 thoroughfare's safety, level of service and longevity. Multi-modal improvements including recommendations for complete streets and expanding the network of recreational trails provides enhanced connectivity for multiple users throughout the City of Valparaiso and Porter County.

These and several other recommendations for the SR 49 corridor are outlined within the following focus areas:

- residential and commercial growth and development;
- transportation infrastructure;
- utilities infrastructure;
- economic development and corridor promotion.

### Focus Area 1: Residential and Commercial Growth and Development

#### GOAL 3.1: ACCOMMODATE RESIDENTIAL AND COMMERCIAL GROWTH AND DEVELOPMENT WITHIN THE SR 49 CORRIDOR WHILE PRESERVING LANDSCAPE CHARACTER.

**Strategy 3.1.1: To increase the degree of control, regulation and enforcement of land use within the SR 49 corridor, the City of Valparaiso should develop an annexation program to incorporate the remaining areas of the corridor, as currently delineated within the *Envision 2030 Comprehensive Plan* and illustrated in Map 3.1, *Future Annexation Plan*, into the City's corporate limits.**

##### Initiatives and Actions:

1. Develop a multi-phased annexation program and associated service planning for gradual expansion of the City limits that prioritizes the annexation of key parcels within the corridor, where determined feasible and beneficial, according to the ability of the City to prove that the area meets the State of Indiana annexation requirements, with respect to parcel contiguity with municipal boundaries; that the City can provide the requisite services to said parcels; and the degree to which the parcels will contribute to the city's tax base. The annexation plan should be consistent with the City's growth sequencing plan and coordinated with its capital improvement plan.

#### Strategy 3.1.2: Regulate the location of residential and commercial land use within the SR 49 corridor.

Although the City of Valparaiso Comprehensive Plan recommends infill development within the city limits, residential development will likely continue to occur within Porter County's unincorporated areas east of SR 49. To preserve open space and maintain the integrity of agricultural land uses and overall landscape character, it is recommended to prohibit large-scale residential development (subdivisions) in excess of ten acres within the SR 49 corridor.

##### Initiatives and Actions:

1. In anticipation of a proposed annexation plan strategy for the remaining lands within the corridor, to preserve and maintain the rural and scenic qualities of Porter County, and to encourage agricultural and rural activity, develop an intergovernmental agreement between the City of Valparaiso and Porter County whereby the County will work with the City

in drafting design guidelines for all development within the SR 49 corridor. Deserving particular consideration, with respect to drafting guidelines to regulate development and manage scenic resources are the following county roads within the SR 49 corridor:

- CR E 400 N (SR 49 to CR N 400 E);
- CR E 500 N (SR 49 to CR N 450 E);
- CR E 600 N (SR 49 to U.S. Highway 6);
- CR E 650 N (CR N 200 E to N Old Suman Road);
- Meska Road (N. Calumet Road to its terminus);
- N Old Suman Road (CR E 600 N to U.S. Highway 6);
- CR N 300 E (CR E 500 N to CR E 600 N);
- CR N 325 E (CR E 400 N to CR E 500 N);
- CR E 700 N (N. Calumet Avenue to Meridian Road);
- Meridian Road (CR E 600 N to U.S. Highway 6);

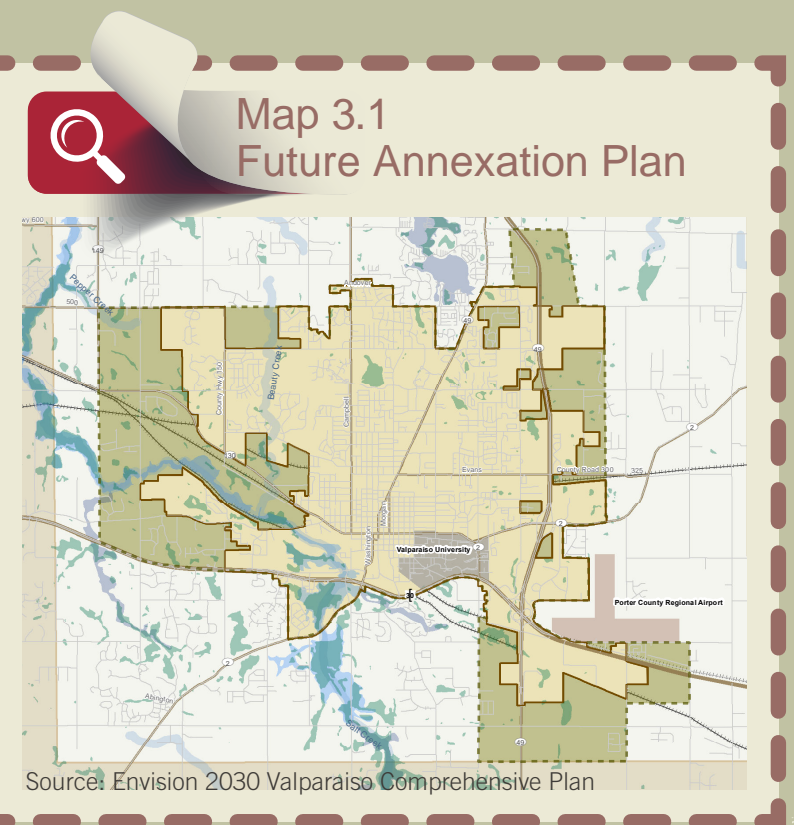




Figure 3.1, Key Concepts

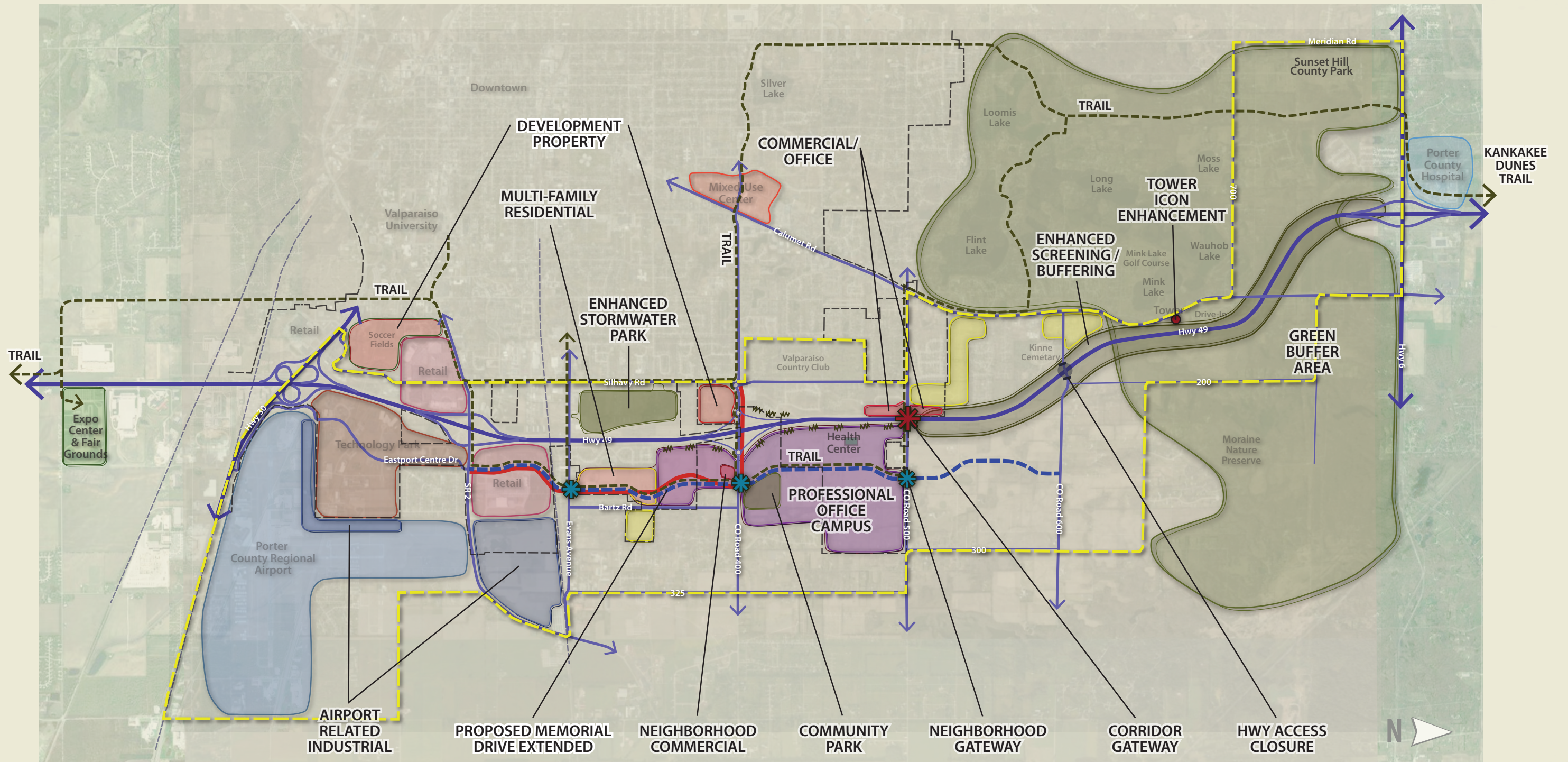






Figure 3.2, Proposed Eastside Community Park Site

- requirements for realtors, developers, etc. to inform potential buyers of the neighboring farming operations and RTF Ordinance.<sup>2</sup>
7. To protect particularly vulnerable agricultural lands from development, Porter County and the City of Valparaiso should consider the application of an Agricultural Tax Increment Financing (ATIF) District, whereby the amount of taxes collected by local taxing districts is frozen for a specific area where a new agricultural development project is occurring. The additional tax revenue generated due to the development, whether it is a biofuels development plant, grain processing and storage, or a feed store, goes back into the ATIF District to pay off debts and bonds, or to pay for needed drainage or irrigation infrastructure.<sup>3</sup>

2. To maintain the integrity of forested and riparian areas, and agricultural lands, and to discourage residential development within the SR 49 corridor, the Valparaiso Redevelopment Commission should facilitate the administration of a conservation easement program within Porter County; following the guidelines outlined within the *Indiana Uniform Conservation Easement Act (1984)*.
3. For highly-visible agricultural parcels that are particularly vulnerable to development pressures, the Valparaiso Redevelopment Commission should facilitate the administration and financing of a Purchase of Development Rights (PDR) program; where the rights to develop agricultural property are purchased from farmers in order to maintain a property's agricultural use in perpetuity.<sup>1</sup>
4. Within Porter County all lands north of CR E 500 N, 2,000 feet from the eastern edge of the SR 49 thoroughfare right-of-way should be zoned Prime Agriculture District (A1), ensuring the minimum lot size is 20 acres.
5. Amend the City of Valparaiso Zoning Map to rezone a parcel immediately south of CR E 500 N from General Residential (GR) to Rural (RU).
6. Porter County and the City of Valparaiso are encouraged to jointly adopt a Right-to-Farm (RTF) ordinance, which would be intended to relieve operating farmers from nuisance claims from new neighbors and developers, thereby insuring that farming operations are able to continue operation as long as the land/market permits. The ordinance can include:
  - *grandfathering*—establishing farming practices as pre-existing uses within zoning ordinances to aid in the relief of nuisance claims against them, should they arise from new developments or homeowners;

8. Amend the City of Valparaiso's Unified Development Ordinance to incorporate the policy recommendations associated with the City's *Envision 2030 Comprehensive Plan, Chapter 2.0, Land Use and Community Character, Chapter 3.0, Sustainability and Chapter 7.0, Growth Capacity*, as outlined in Section 2.5.1 of this Corridor Plan.
9. Amend the Valparaiso Unified Development Ordinance (UDO) to include a district designation for Agriculture/Open Space (AOS) land use.

**Strategy 3.1.3: Regulate the development of linear residential subdivisions along rural access roads.**

The following provisions of the Porter County UDO, *Section 6.06, Cluster Subdivision Standards and effect on Development Standards*, and *Section 6.09, Conservation Subdivision Standards and Effect on Development Standards*, requires cul-de-sacs to be a maximum of 1,000 linear feet. Within *Section 6.12, Traditional Subdivision Standards and Effect on Development Standards*, cul-de-sacs are prohibited. As discussed within *Section 2.6.1, Growth Trends and Resulting Development Pressures*, and illustrated in *Figure 2.2, Development Pattern*, throughout the SR 49 corridor there are examples of residential subdivisions that are in excess of 2,500 linear feet.

**Initiatives and Actions:**

1. Within the Porter County UDO, Scenic Roadway Overlay (SRO) District, and City of Valparaiso UDO, restrict the length of linear residential subdivisions ending in cul-de-sacs, to a maximum of 600 linear feet, or 300 linear feet to the nearest hydrant. Cul-de-sacs shall provide a minimum interior turning radius of 50 feet. To reduce impermeable surface area, cul-

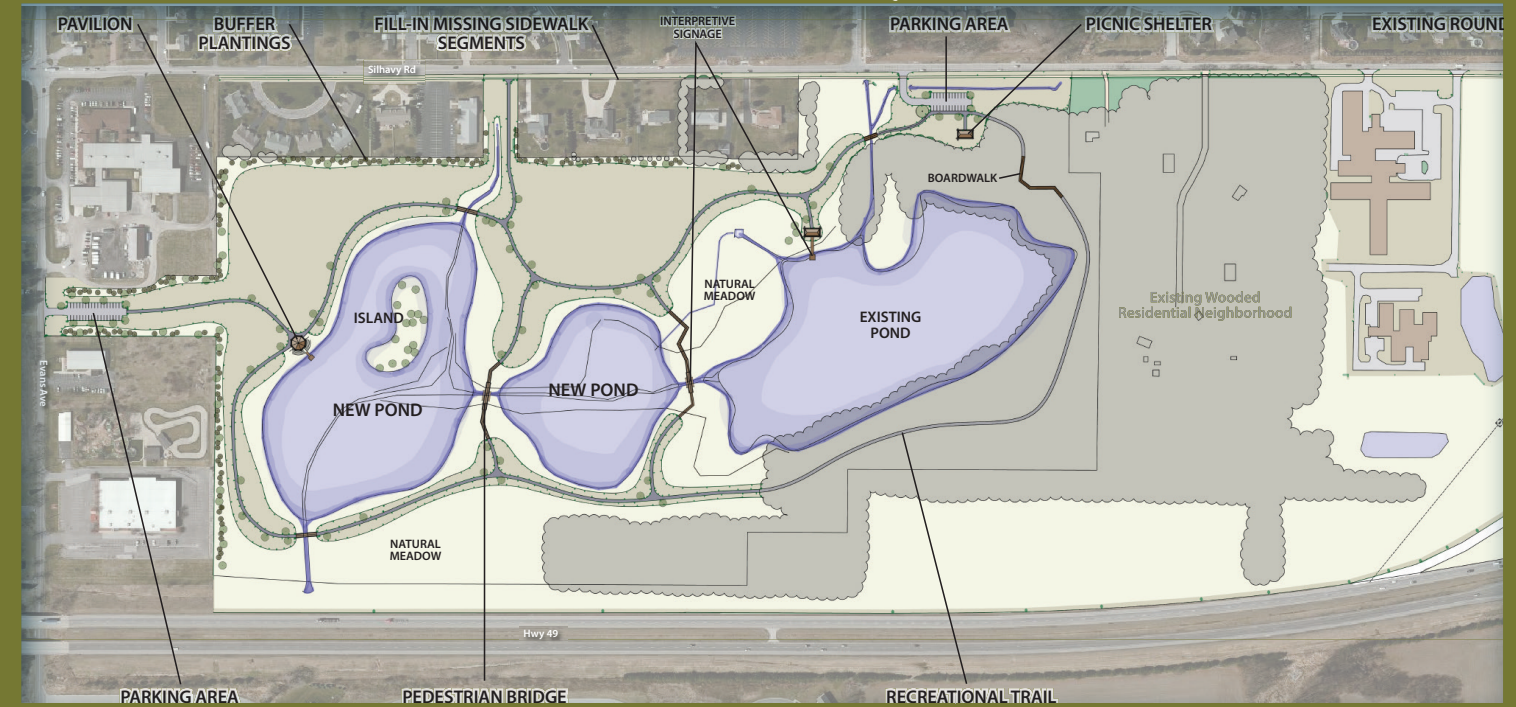


Figure 3.3, Proposed Hotter Lagoon Westside Community Park

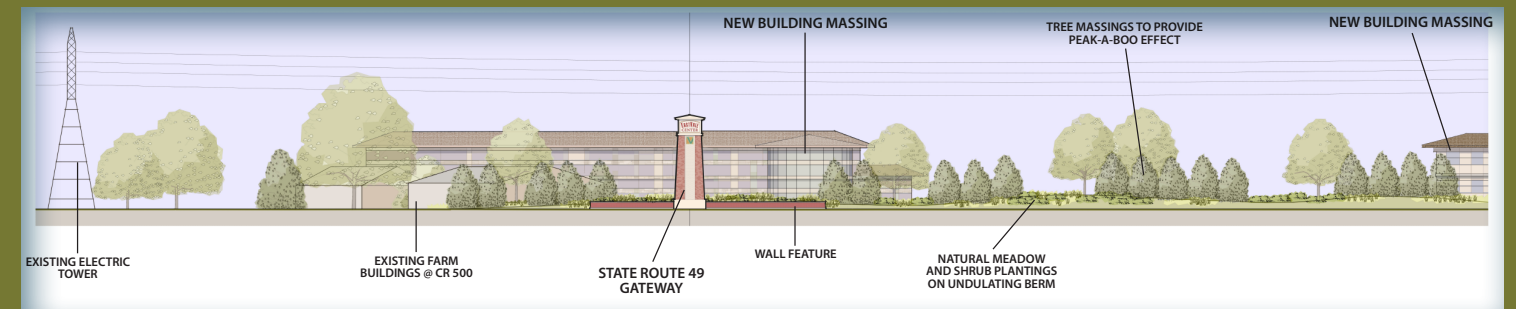


Figure 3.4, Proposed Bufferyard Screening East of CR E 500 N

de-sacs shall incorporate a 20 foot diameter central planting island. To minimize stormwater runoff and control erosion, it is encouraged that, where possible, cul-de-sacs are graded for stormwater to flow into the central planting island and the island incorporate low-impact development construction, landscaping and best management practices.

**GOAL 3.2: PRESERVE AND ENHANCE THE LANDSCAPE CHARACTER OF THE SR 49 CORRIDOR**

**Strategy 3.2.1: To accommodate increased residential demand while preserving sensitive riparian areas, develop passive and active recreational park facilities to the east of the SR 49 corridor.**

**Initiatives and Actions:**

1. In conjunction with the development of Memorial Drive Extended and the Valparaiso Health Center campus, the City of Valparaiso Parks and Recreation Department should explore the feasibility of developing a 30-40 acre combined passive and active recreational facility in proximity to the

SR 49 and Vale Park Road interchange (refer to Figure 3.2, *Proposed Eastside Community Park Site*).

**Strategy 3.2.2: To fulfill the future demand for additional park resources west of SR 49, develop a passive recreational amenity within the Hotter Lagoon stormwater detention basin.**

Hotter Lagoon is approximately 97 acres in area. The majority of the property is open grassland bisected by a large drainage swale. The swale is composed of three large depressions that are perennially filled with stormwater runoff. The swale is flanked by riparian vegetation. The northern end of the property is wooded and contains significant Palustrine wetland resources. According to the Five Points Drainage Study (August 2012), stage-storage data indicates that Hotter Lagoon can store up to 295 acre-feet of water prior to overtopping at the designated emergency overflow weir on the southeast side of the pond.

To accommodate future demand for recreational areas within the City of Valparaiso, west of SR 49, a large passive recreational community park is proposed for the Hotter Lagoon stormwater management basin (refer to **Figure 3.3, Proposed Hotter Lagoon**





Figure 3.5, Low-Impact Development Examples

Low Impact Development takes the environment, and the well-being of an area's residents into consideration. Part of a larger practice of sustainability, low impact development techniques reduce the strain on the environment that a typical development can produce, specially dealing with stormwater management. The main premise of Low Impact Development, or LID, is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. A typical development will deal with stormwater by trying to direct it off site and quickly as possible. Practices involving LID tend to slow the movement of stormwater, and are intended to prevent more stormwater from leaving the site than before development. Techniques to help mitigate stormwater dispersal include: bioretention, green roofs, permeable paving, rain barrels and cisterns, soil amendments, and tree box filters.



interested in providing additional buffering of the Preserve as well as the headwaters of Coffee Creek from development. This may be accomplished in a variety of ways, including forming strategic, cooperative partnerships with adjacent landholders, to manage their land in a way that preserves landscape character and wildlife corridors; administering a conservation easement program to encourage setting aside key landscape easements; prohibiting development in sensitive landscape areas, as summarized within Strategy 3.1.2, and/or outright land acquisition.

#### Initiatives and Actions:

1. Prohibit the use of septic tanks for residential and commercial development occurring within Coffee Creek Watershed and within 750 linear feet of the Moraine Nature Preserve.
2. Amend the Porter County Watershed Overlay (WSO) District to include all lands within the Coffee Creek watershed and all lands within one quarter mile of the Moraine Nature Preserve.

**Westside Community Park).** The principal amenities of the community park would be the development of three permanent detention basins, or ponds; which would be created by excavating depressions and using the fill to develop higher ground within the basin, upon which pavilions and picnic areas would be constructed. The landscape would be sculpted in a manner that would result in a no net loss of stormwater storage capacity with Hotter Lagoon. A circuitous recreational trail would circumnavigate the ponds. Interpretive signage would be installed to describe the unique natural resources found within Porter County, to identify migrating birds, and discuss the importance of freshwater Palustrine wetlands. Boardwalks would provide park enthusiasts with a chance to walk above the sensitive wetland areas. Piers would extend into the ponds and provide places for fishing (the ponds would be stocked). A parking area would be developed off of Evans Avenue. Recreational trails would link Hotter Lagoon Park with the Vale Park Road trail, which is proposed to extend to the proposed Eastside Community Park (refer to Strategy 3.3.1).

#### Initiatives and Actions:

1. Analyze the feasibility of converting the Hotter Lagoon stormwater detention basin into a significant passive recreational community park.

#### Strategy 3.2.3: Develop a vegetation management program for the SR 49 corridor that would be focused on mature tree and forest canopy preservation and management, landscape screening and buffering.

Along key portions of the SR 49 thoroughfare, existing vegetation has been retained immediately adjacent to the shoulder right-of-way and managed to screen adjacent residential and commercial development. This natural screening has helped to maintain the rural character of the SR 49 corridor. The visual preference survey (VPS) conducted during the community workshops revealed that residents prefer landscape screening to structural screening. As depicted within **Figure 3.4, Proposed Bufferyard Screening East of CR E 500 N**, as additional office, commercial and residential development occurs within the corridor, it will be increasingly important to provide landscape plantings along the thoroughfare, to screen and buffer adjacent development and orient views to more rural scenery.

#### Initiatives and Actions:

1. Revise City of Valparaiso UDO bufferyard regulations to include the SR 49 thoroughfare as requiring Class D bufferyard treatment (65 percent opacity) for all new development occurring immediately adjacent to the SR 49 Thoroughfare.

#### Strategy 3.2.4: Incorporate low-impact development strategies, tools and techniques into all new development within the SR 49 corridor.

Part of a larger practice of sustainability, low impact development techniques reduce the strain on the environment that a typical development can produce, especially dealing with stormwater management. The main premise of low impact development, or LID, is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. A typical development will deal with stormwater by trying to direct it off site as quickly as possible. Practices involving LID tend to slow the movement of stormwater, and are intended to prevent more stormwater from leaving the site than before development. As depicted in **Figure 3.5, Low Impact Development Examples**, techniques to help mitigate stormwater dispersal include: bioretention, green roofs, permeable paving, rain barrels and cisterns, soil amendments, and tree box filters.

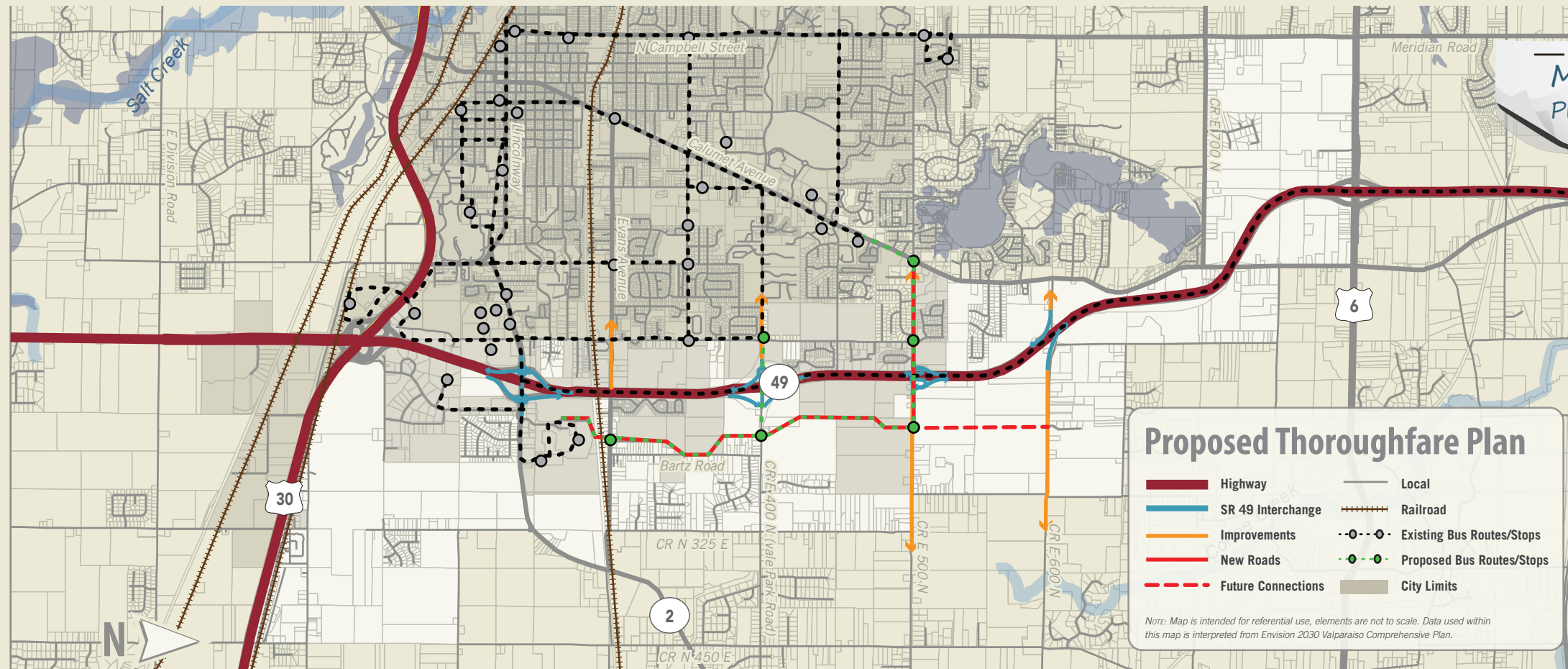
#### Initiatives and Actions:

1. Integrate provisions for low-impact development best construction and management practices within the City of Valparaiso UDO, the City's proposed *Stormwater Technical Standards Manual* (July 2013 edition), and the Porter County UDO.
2. All new development within the SR 49 corridor shall implement Indiana Department of Transportation Temporary Erosion and Sediment Control (Section 205) specifications. Reference Section 205 within the Porter County and City of Valparaiso UDOS.

#### Strategy 3.2.5: Buffer the Moraine Nature Preserve and Coffee Creek Watershed

As discussed, the Moraine Nature Preserve consists of 474 acres of natural, forested land owned and managed by The Nature Conservancy & Division Preserves. Strategic management partnerships include the Indiana Department of Natural Resources (IDNR) Lake Michigan Coastal Program, Indiana Heritage Trust, North America Wetland Conservation Act, Indiana Natural Heritage Protection Campaign, Shirley Heinze Land Trust and the University of Chicago. IDNR plans to improve the facilities of the Moraine Nature Preserve to promote and manage its sustainable use for area residents was discussed during one of the community workshops. The IDNR plans include making access improvements to the main entrance road, parking area and trailheads. The IDNR is also





Map 3.2,  
Proposed Thoroughfare Plan

As discussed within the *Transportation Infrastructure Focus Area*, and illustrated in *Map 3.2, Proposed Thoroughfare Plan*, to improve access, connectivity, safety, level of service (LOS), multi-modality and public transportation services, this Corridor Plan recommends several significant transportation related improvements – including expansion of existing county roads, the development of new arterial thoroughfares, interchange modifications, additional V-Line routes and stops, and additional recreational trails.

**GOAL 3.3: REGULATE THE SCALE AND VISUAL CHARACTER OF COMMERCIAL DEVELOPMENT WITHIN THE SR 49 CORRIDOR.**

**Strategy 3.3.1:** Consistent with the *NIRPC 2040 Comprehensive Regional Plan*, promote commercial/office development campuses along proposed Memorial Drive Extended and at key interchanges within the SR 49 corridor, including U.S. Highway 30, CR E 400 N (Vale Park Road), CR E 500 N (Burlington Beach Road), and U.S. Highway 6.

Land uses within the large parcels immediately to the east of SR 49, in the vicinity of CR E 500 N, in conjunction with the Valparaiso Health Center complex, and the development of the proposed Memorial Drive Extended, southward to Evans Avenue, should be designated for office/business park development. As illustrated in *Section 4.2, Development Guidelines*, design guidelines should be formulated to specify development character, including building massing, height, façade articulation, setbacks, pedestrian and vehicular circulation, landscape site work, screening and buffering, streetscape furnishings, signage, etc.

**Initiatives and Actions:**

1. Revise Section 11.304 State Route 49 Standards, within the City of Valparaiso UDO to incorporate design covenants and guidelines for commercial development within the SR

49 corridor (refer to *Section 4.2, Development Guidelines*). Specifically, revise the following provisions related to:

- H. Residential Setbacks: Residential development should be prohibited along the SR 49 corridor;
- I. Commercial and Industrial Setbacks;
- J. Commercial and Industrial Lot Dimensions;
- K. Commercial and Industrial Lot Coverage;
- L. Building Height;
- M. Access;
- N. Signage.

**Focus Area 2: Transportation Infrastructure**

**GOAL 3.4: IMPROVE THE SAFETY AND EFFICIENCY OF TRANSPORTATION FACILITIES WITHIN THE SR 49 CORRIDOR**

**Strategy 3.4.1:** Improve access management and safety at CR E 500 N signalized interchange.

The intersection of CR E 500 N (Burlington Beach Road) with SR 49 is currently signalized; and as a result, significantly slows through traffic. This signalized intersection is very dangerous

and has resulted in several accidents. From 2005-2009, INDOT accident data reported seven traffic accidents result in injuries or fatalities (There is no data for the years 2010-2012). To improve the access and safety of this intersection, it is recommended that the alignment is redesigned and reconstructed to function as a folded diamond interchange. The overpassing roadway shall match the approach typical section. Similar to the Vale Park Road/CR E 400 N interchange, bicycle and pedestrian facilities are also recommended in conjunction with the capacity expansion project (refer to **Figure 3.6, Proposed Folded Diamond Interchange at CR E 500 N**). For order of magnitude costs, refer to *Table 4.1, Order of Magnitude Costs* (page 69).

**Initiatives and Actions:**

1. To increase demand for interchange improvements, work with the Indiana Department of Transportation to designate this section of SR 49 from rural to urban.
2. Replace signalized intersection with a folded diamond interchange.

**Strategy 3.4.2:** Improve access management and safety at CR E 600 N non-signalized interchange.

According to the level of service analysis generated for this report, CR E 600 N accommodates existing and the projected traffic generated from a projected increase in development. Given that this route does not currently provide direct access to proposed

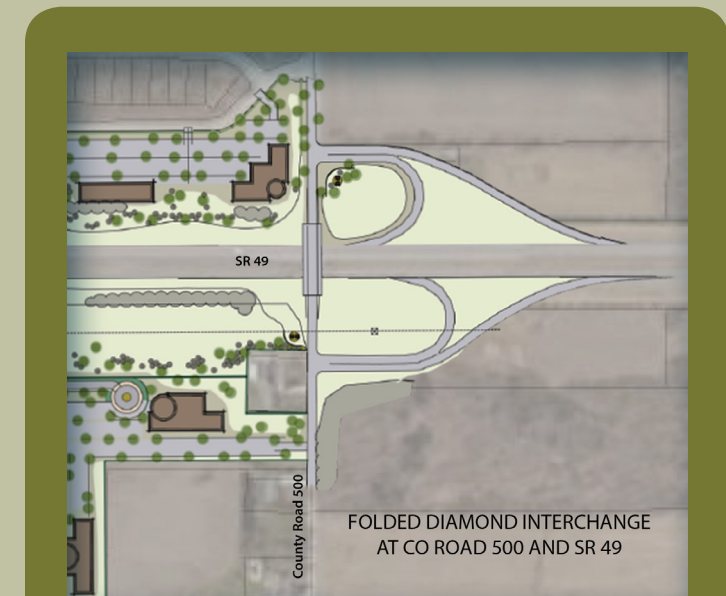
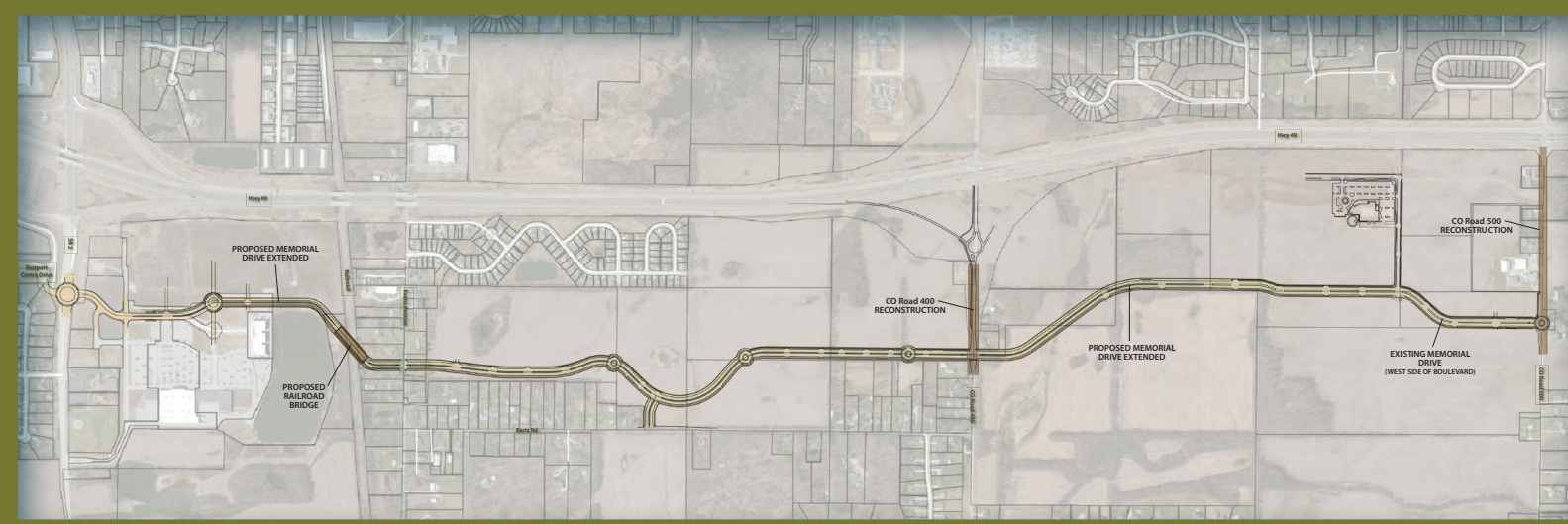


Figure 3.6, Proposed Folded Diamond Interchange at CR E 500 N



## Memorial Drive Extended



Map 3.3, Memorial Drive Extended Alignment

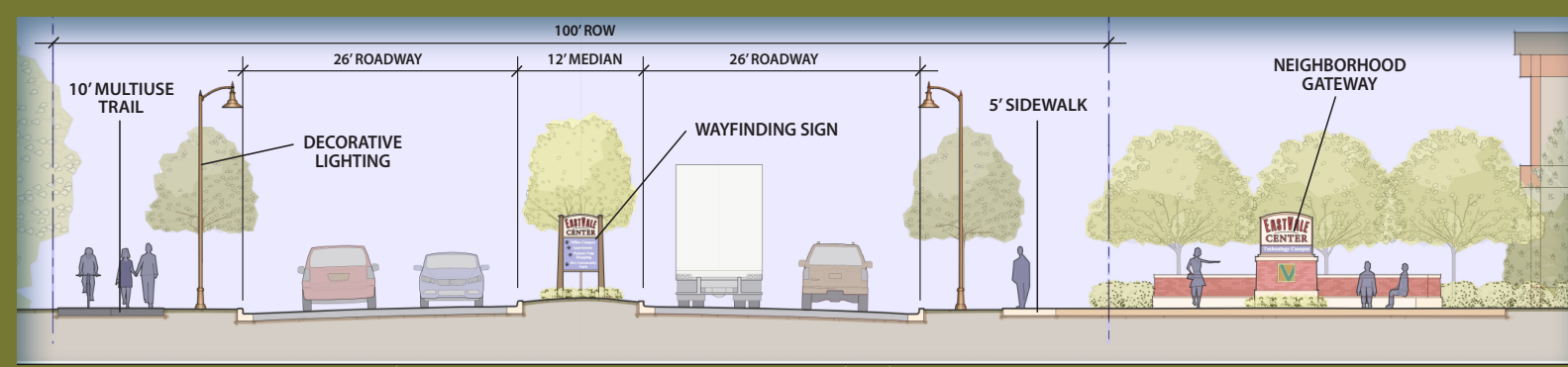


Figure 3.7, Proposed Memorial Drive Extended, Section

areas of development the roadway's traffic counts should remain steady, despite the projected increase in new development in the area. Despite this analysis, the intersection of CR E 600 N with SR 49 is non-signalized and is extremely dangerous as a result. Because development within the northern segment, or rural reach, of the corridor is discouraged, and due to the close proximity of N. Calumet Road to the western portion of CR E 600 N, it is recommended that the intersection with SR 49 is closed to through traffic, with access only to northbound traffic from the east and southbound traffic from the west. Extending the proposed Memorial Drive Extended (CO Rd 250) from CO Rd 500 to CR E 600 N, on the east side of SR 49 will provide access to SR 49 southbound from the proposed CR E 500 N folded diamond interchange. Northbound access on SR 49 from the western portion of CR E 600 N will be via N. Calumet Road to the U.S. Highway 6 interchange with SR 49 (for order of magnitude costs associated with interchange closure and the construction of on ramps, refer to Table 4.1, *Order of Magnitude Costs*).

**Initiatives and Actions:**

1. Close the interchange to cross-bound traffic; whereby westbound traffic on CR E 600 N can access SR 49 northbound only, and eastbound traffic on CR E 600 N can access SR 49 southbound only.
2. Construct northbound and southbound on-ramps for vehicles accessing SR 49 from CR E 600 N.

Interchange improvements at CR E 500 N and CR E 600 N will increase SR 49's level of service.

**Strategy 3.4.3: Determine the extent to which county roads within the SR 49 corridor require expansion to provide optimum level of service.**

**Initiatives and Actions:**

1. **Silhavy Road:** Silhavy Road traffic counts should remain relatively steady, despite the new development increase in the area; given that this route does not provide direct access to the areas of development.
2. **Bartz Road:** Based on current and projected level of service analysis, Bartz Road accommodates the existing and the projected traffic generated as a result of new development in the area. Given that this route does not provide direct access to new areas of development this roadway's traffic counts should remain steady. This segment is not recommended for designated bicycle facilities; however, pedestrian improvements are encouraged and can be added with minimal impact to the existing corridor.

3. **CR N 325 E:** CR N 325 E currently accommodates the existing and the projected traffic generated during the analysis. This roadway's traffic counts should remain relatively steady, despite the increase of new development in the area; given that this route does not provide direct access to the areas of develop. This segment is not recommended for bicycle and/or pedestrian facilities improvements.
4. **SR 2 (LaPorte Avenue):** SR 2 east of the SR 49, currently accommodates the existing and projected level of traffic generated by this development. However, the Porter County Airport report, *"In Plane View: A Clear Vision for the Future,"* recommends an additional travel lane, in each direction, between SR 49 and the Eastport Centre Drive for optimal traffic operations. Therefore, this segment of roadway would consist of three travel lanes in each direction. Additional turning lanes may also be required at this intersection; though the construction of a roundabout may be effective in reducing congestion. East of Eastport Centre Drive, the roadway cross section can transition down to a total of four travel lanes (two travel lanes in each direction), and then to a total of two travel lanes (one travel lane in each direction), further northeast on SR 2. Similar to the SR 49 interchange at CR E 400 N, roundabouts one either side of the SR 2 interchange are recommended.

Based on a recent pathways study conducted by the City of Valparaiso, bicycle and pedestrian facilities are recommended along the southside of this segment of roadway. These facilities can be added to the cross section in conjunction with the capacity expansion project.

5. **Evans Avenue:** Evans Avenue is an east-west roadway commencing at Campbell Street and terminating at SR 2, north of the Grand Trunk Railroad. Despite its classification, Evans Avenue does not interchange with SR 49, but instead passes under. The typical section for Evans Avenue consists of one travel lane in each direction, unimproved shoulders, roadside ditches, with driveway access along the corridor. The existing right-of-way along Evans Avenue varies between 40- and 60-feet; however, it appears that at several locations, adjacent property owners may still own to the centerline of the roadway.

Overhead electric transmission power lines parallel Evans Avenue, within the apparent existing right-of-way, along the north side of said corridor Evans Avenue currently accommodates the existing and the projected traffic generated during the analysis. As a result of the new development this roadway's traffic counts will increase; however, the attractiveness of this

Approaching the bridge Memorial Drive Extended shall consist of two travel lanes and curb and gutter in each direction. A shared-use path shall be constructed along the east side of Memorial Drive with a vegetated median strip between the back of curb and front of the shared-use path. MSE wall with barrier rail shall be utilized along Memorial Drive where required.

Based on the existing topography, Memorial Drive is expected to approach the overpassing bridge from the south at a grade of approximately 3.5%; whereas, north is expected to rise at a grade of nearly 5%. The proposed bridge overpass is projected to span the existing Grand Trunk Railroad at a skewed angle.

The typical section for the overpassing bridge shall consist of two travel lanes and a shoulder in each direction. A shared-use path shall also be constructed on the bridge overpass, along the east side of Memorial Drive; a barrier rail shall separate motorized and non-motorized traffic. Bridge rail shall also be placed at both the edge of shoulder and edge of the shared-use path.

route is disadvantaged by the lack of direct access to SR 49, as well as, the length of travel required to access other major generators. This segment is currently a designated bicycle route; therefore, pedestrian improvements are encouraged and can be added with minimal impact to the existing corridor.

**GOAL 3.5: IMPROVE ACCESS TO LARGE PARCELS ADJACENT TO SR 49 THOROUGHFARE**

As discussed, because SR 49 is a limited access thoroughfare it is not possible to provide access to adjacent parcels, except from the county roads that cross the thoroughfare at one mile increments; principally, CR E 400 N (Vale Park Road), CR E 500 N (Burlington Beach Road) and CR E 600 N. To accommodate additional traffic, CR E 400 N and CR E 500 N will need to be expanded, with regard to right-of-way and facility cross section. However, even with these facility expansions, several very large parcels will remain inaccessible.

**Strategy 3.5.1: Construct an alternative thoroughfare facility: Memorial Drive Extended (CR 250)**

An additional two-way arterial thoroughfare is proposed to the east of SR 49. Referred to as Memorial Drive Extended (CR 250), proposed improvements would involve the construction of a four-lane roadway,



two-lanes in each direction with a center median; the alignment of which would parallel SR 49 to the east and connect CR E 500 N to the north (at the existing Memorial Drive) with SR 2 to the south (refer to **Map 3.3, Memorial Drive Extended Alignment, Plan** (page 43)). Specifically, Memorial Drive Extended would continue the alignment of existing Memorial Drive, south of CR E 500 N, east of the Valparaiso Health Clinic, and intersect CR E 400 N. From CR E 400 N, the thoroughfare would continue southward, aligned to be constructed on the Vandertol parcel southeast of the CR E 400 N – SR 49 interchange, and provide optimum access for the currently proposed office park and multi-family development proposals for the Vandertol parcel, ultimately intersecting with Evans Avenue. Beyond Evans Avenue an overpass would span the Grand Trunk Western (GTW) Railroad and connect Memorial Drive Extended with Porter's Vale Boulevard west of the Porter's Vale Shopping Center.

**Memorial Drive Bridge**

Approaching the bridge Memorial Drive Extended shall consist of two travel lanes and curb and gutter in each direction. A shared-use path shall be constructed along the east side of Memorial Drive with a vegetated median strip between the back of curb and front of the shared-use path. MSE wall with barrier rail shall be utilized along Memorial Drive where required.

Based on the existing topography, Memorial Drive Extended is expected to approach the overpassing bridge from the south at a grade of approximately 3.5 percent; whereas, the northern approach is expected to rise at a grade of nearly five percent, in compliance with Americans with Disabilities Act requirements. The proposed bridge overpass is projected to span the existing Grand Trunk Railroad at a skewed angle.

The typical section for the overpassing bridge shall consist of two travel lanes and a shoulder in each direction. A shared-use path shall also be constructed on the bridge overpass, along the east side of Memorial Drive; a barrier rail shall separate motorized and non-motorized traffic. Bridge rail shall also be placed at both the edge of shoulder and edge of the shared-use path. Proposed improvements would include new pavement, curb and gutter, sidewalks, shared-use recreational trail, street trees, and roadway lighting. Proper drainage solutions shall be designed and constructed as part of the project to aid in storm water management (refer to **Figure 3.7, Proposed Memorial Drive Extended, Section**, page 43).

Memorial Drive Extended would be designed to meet the classification standards of a two-lane arterial thoroughfare, as per Article 8 of the City of Valparaiso UDO.

As parcels are built-out south of CR E 500 N, a future development phase of this thoroughfare would extend further north and connect with CR E 600 N.

**Initiatives and Actions:**

1. Work with INDOT to determine definitive feasibility, costs, phasing and scheduling for the construction of Memorial Drive Extended.
2. Prepare construction documents and specifications for the construction of Memorial Drive Extended.

**Strategy 3.5.2: In anticipation of new development within the corridor, reconstruct key segments of County Roads 400 and 500.**

County Roads 400 and 500 are currently inadequate in scale to accommodate increased vehicular traffic. The standard right-of-way width of these facilities is 33 feet. In many instances, there are very large, mature trees immediately flanking the roadway edges. Some county roads, such as CR E 400 N, have very steep slopes immediately adjacent to the roadway edges.

To expand portions of CR E 400 N and CR E 500 N will require right-of-way acquisition, significant grading and drainage improvements and complete roadway reconstruction. Order of magnitude costs for these improvements can be found within *Table 4.1, Order of Magnitude Costs*.

In compliance with Section 8.201 of the City of Vaparaiso UDO, new streets and substantially improved existing streets shall respect, where possible, natural resources (such as mature trees), topography and drainage. Streets will be adjusted to the contours of the land so as to produce usable lots and streets with reasonable gradients. Where possible, the alignment of reconstructed county roads should be modified to preserve the existing character of the corridor, including the preservation of existing mature trees.

**Initiatives and Actions:**

1. **CR E 400 N (Vale Park Road):** After completing the level of service analysis it was discovered that CR E 400 N, between SR 49 and proposed Memorial Drive Extended (refer to Strategy 3.5.1: *Construct an alternative thoroughfare facility: Memorial Drive Extended (CR 250)*) will require an additional travel lane in each direction. Designated left turn lanes may also be required at the intersection for CR E 400 N and proposed Memorial Drive Extended. East of proposed Memorial Drive Extended, the roadway cross section can transition down to a total of two travel lanes, one in each direction. Additional improvements shall include proper drainage solutions and full depth pavement reconstruction. Bicycle and pedestrian

Figure 3.8, County Road Reconstruction

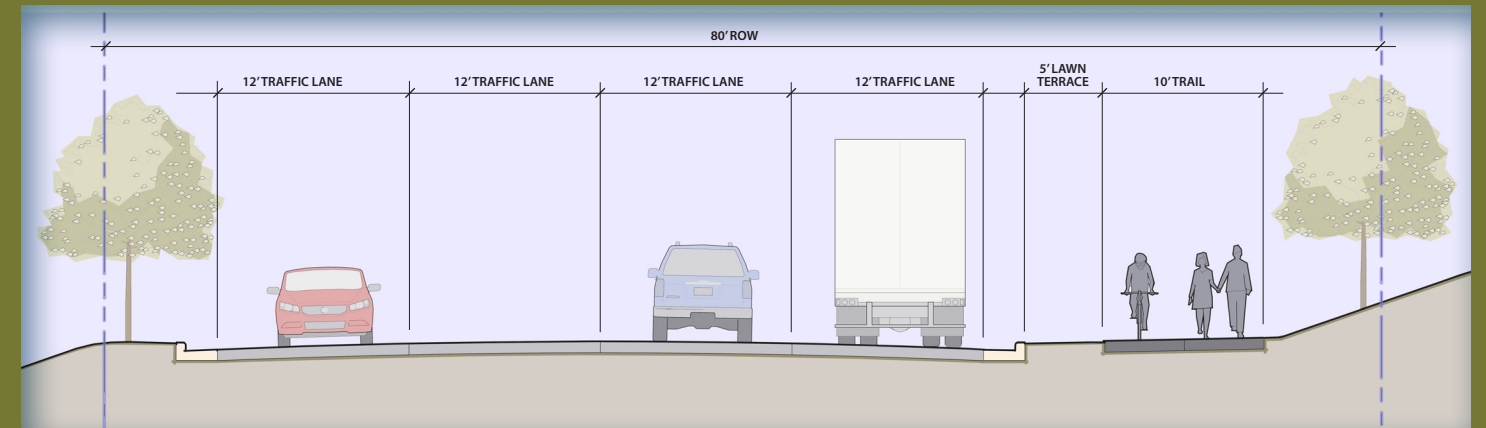


Table 3.1, SR 49 Level of Service Projections to 2042

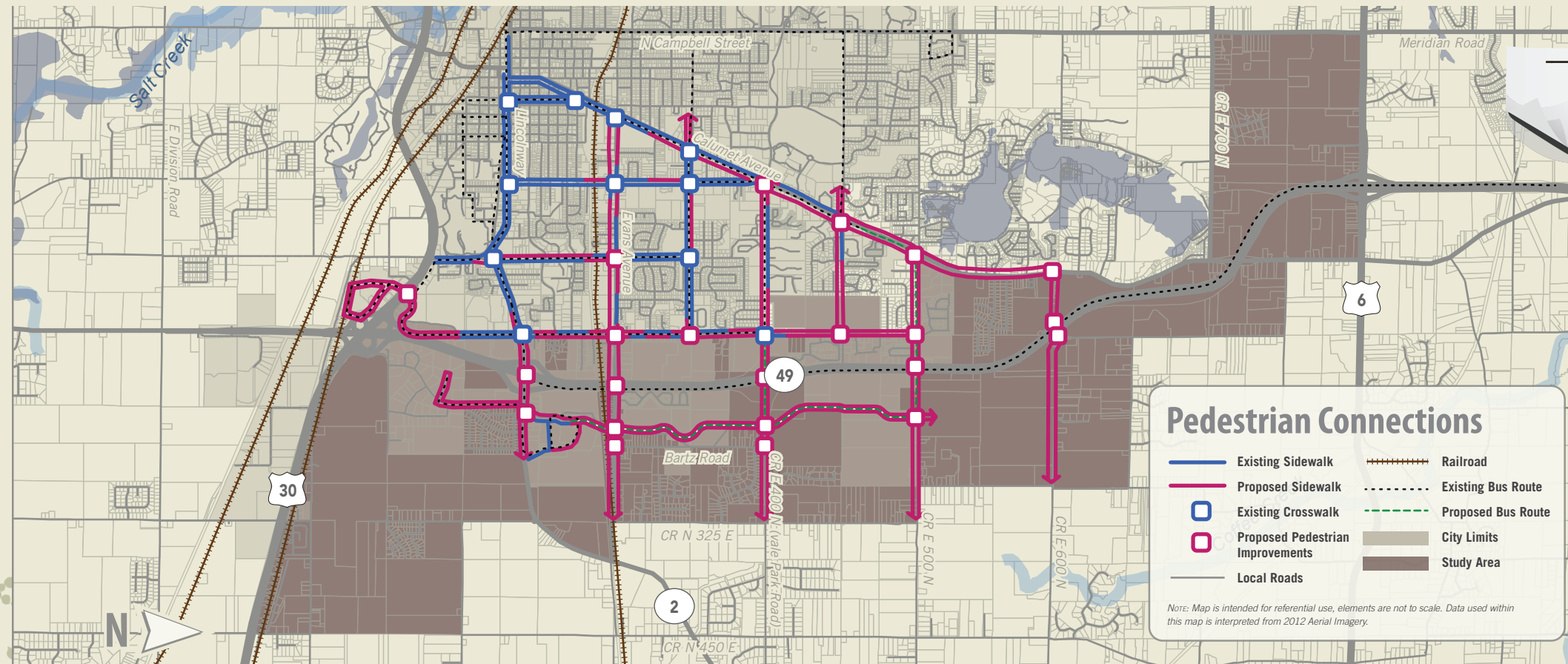
Principal Corridor	Corridor Description	WZK: d i i d i > K ^			
		AM	PM	AM	PM
SR 49	US 30 to US 6	*	*	*	*
Silhavy Road	S. of Vale Park Road	A	B	A	B
Silhavy Road	N. of Vale Park Road	A	B	A	B
Bartz Road	Evans Avenue to CR 400 N	A	A	A	A
SR 2	W. of SR 49	B	D	B	C
SR 2	SR 49 to Cain Drive	B	C	A	B
SR 2	E. of Cain Drive	A	B	A	B
Evans Avenue	W. of SR 49	B	C	B	C
Evans Avenue	E. of SR 49	B	B	A	A
Vale Park Road / CR 400 N	W. of SR 49	*	*	*	*
Vale Park Road / CR 400 N	E. of SR 49	E	E	C	C
Burlington Beach Road/CR 500 N	W. of SR 49	*	*	*	*
Burlington Beach Road/CR 500 N	E. of SR 49	D	D	B	B
CR 600 N	E. of SR 49	A	A	A	A

facilities are also recommended along this segment of roadway. Pedestrian facilities can be added to the cross section in conjunction with the capacity expansion project. Existing bicycle and pedestrian facilities are located on the south side of the Vale Park Road; therefore, it is recommended that proposed extensions of these facilities maintain a similar alignment (refer to **Figure 3.8, County Road Reconstruction**).

2. **CR E 500 N (Burlington Beach Road):** Currently, CR E 500 N, east of SR 49, is a two lane rural cross section. With the capacity expansion project planned for proposed Memorial Drive Extended, vehicular traffic is projected to increase on

CO Road 500. Therefore, CR E 500 N, between SR 49 and Memorial Drive Extended is recommended to be expanded to four travel lanes, two in each direction (refer to *Figure 3.8, County Road Reconstruction*). East of proposed Memorial Drive Extended, the roadway cross section can transition down to a total of two travel lanes, one in each direction. Additional improvements shall include proper drainage solutions and full depth pavement reconstruction. Bicycle and pedestrian facilities are also recommended along this segment of roadway. Said facilities can be added to the cross section in conjunction with the capacity expansion project.





Map 3.4,  
Pedestrian Connections

The street network within the downtown area of Valparaiso has a significant pedestrian network of sidewalks, trails, and crosswalks. This network extends west along State Highway 130, and continues for a portion of La Porte Avenue (SR 2). The new roundabout at the intersection of IN 130, SR 2, and Sturdy Avenue has a good system of sidewalks and crosswalks. The network of sidewalks on the west side of SR 49 in the study area is disconnected and lack crosswalks. Currently, crosswalks can only be located at the intersection of SR 2 and Silhavy Road, as well as around the new roundabout at the intersection of Vale Park Road and Silhavy Road.

3. Perform additional traffic analyses (including an origin/destination analysis) to forecast the level of service for all county roads requiring reconstruction west of SR 49, based upon the projected traffic generated.
4. Ensure that all thoroughfares are reconstructed in conformance with Porter County frost laws.

As depicted in **Table 3.1, Level of Service Projections to 2042** (page 44), as a result of the above-mentioned strategies and recommendations, and despite significant increases to thoroughfare capacity projections, the LOS for several county roads within the SR 49 are projected to improve.

### GOAL 3.6: ENHANCE MULTI-MODAL USE OF THOROUGHFARES WITHIN THE SR 49 CORRIDOR

#### Strategy 3.6.1: Ensure that major roadway improvements are context sensitive, and adhere to “complete streets” principles.

Adopting a complete streets policy ensures that a thoroughfare’s entire right-of-way is routinely designed, operated and maintained to enable safe access for all users including pedestrians, motor vehicles, public transit and cyclists (refer to **Figure 3.9, Complete Streets Example**, page 46). A complete street is a place that enables people of all ages, interests and abilities (including disabled) to feel comfortable, whether moving through or being within a space. The most basic components of a complete street are vehicular travel

lanes, an on- or off-street bicycle facility, cross walks, sidewalks or multi-use trails. Medians, street trees, lighting, signage, special paving and streetscape furnishings also contribute to a complete street’s multi-purpose functionality<sup>4</sup>.

#### Initiatives and Actions:

1. Amend the City of Valparaiso UDO and Porter County UDO to include provisions requiring implementation of essential complete streets components for all new local and arterial classified streets.

#### Strategy 3.6.2: Expand V-Line public transportation to service areas to the east of SR 49.

With the projected growth of Valparaiso University’s student population, as well as general population growth within the City of Valparaiso and Porter County, there will be increased demand for access to local and regional public transportation. The City of Valparaiso is presently engaged in a route study of the current V-Line bus service. Transit improvements, such as bus stops, are proposed as part of this project. Service to the SR 49 corridor is recommended via existing route modification or capacity expansion (e.g. a new route/expanded service). Therefore, the City and/or their consultant shall conduct customer surveys to determine origin/destination of riders, identify specific trip profile of riders, and to obtain information about the V-Line system and the main reasons for riders’ use of the bus. The findings of said assessment

shall be the basis for transit service recommendations throughout the project corridor.

#### Initiatives and Actions:

1. For the purposes of this study, bus routes are proposed along the proposed Memorial Drive Extended connecting the Brown Line at the Porter’s Vale Shopping Center to the south and extending north to CR E 500 N. Additional routes could extend west across SR 49 from Memorial Drive Extended along Vale Park Road to Silhavy Road connecting to the Orange Line and the Green Line; and westward across SR 49 from Memorial Drive Extended along CR E 500 N to Calumet Avenue connecting to the Orange Line and the Red Line. Bus stop/stations are recommended at major intersections of Memorial Drive at Evans Avenue, Vale Park Road, CR E 500 N; Silhavy Road and Vale Park Road, and CR E 500 N; and Calumet Avenue and CR E 500 N (for bus stop locations, refer to *Map 4.1, Proposed Thoroughfare Plan*). The City is currently in the process of conducting a full transit study that will analyze routes and stops for the whole system. These preliminary recommendations should be incorporated into the study for analysis.

**Strategy 3.6.3: Develop an interconnected network of on and off-street pedestrian sidewalks and bicycle-friendly recreational trail facilities that connect livable centers within the City of Valparaiso with adjacent neighborhoods and commercial centers.**

#### Initiatives and Actions:

1. Confirm the locations for recommended sidewalks as well as which vehicular intersections pedestrian crosswalks are required, as depicted on **Map 3.4, Pedestrian Connections**.
2. Coordinate the alignment and future development of the Dunes-Kankakee Trail; that would extend from Dunes State Park, through the SR 49 corridor, to the Porter County Fairgrounds.
3. As depicted on **Map 3.5, Proposed Recreational Trails** (page 46), improve connectivity of existing Valparaiso on-street bicycle lanes and recreational trails.
4. Ensure that all bicycle lanes shall be designed, posted, marked, and striped according to the requirements of the Standards Manual associated with the City of Valparaiso UDO and the recommendations of the American Association of State Highway Transportation Officials (AASHTO).
5. Amend the City of Valparaiso’s Unified Development Ordinance to incorporate the policy recommendations associated with the City’s *Envision 2030 Comprehensive Plan, Chapter 5, Mobility*, as outlined in Section 2.5.1 of this Corridor Plan.



### Map 3.5, Proposed Recreational Trails

To facilitate the future alignment of the Dunes to Kankakee Trail a primary recreational trail spine is proposed to depart Meridian Road, south of the Sunset Hill Farm Country Park, and travel eastward, through the Chain of Lakes Watershed Management Area to Calumet Road; where the trail turns south, before continuing east on CR E 500 N, across SR 49 to proposed Memorial Drive Extended, where it links with the proposed recreational trail and travels south to SR 2/LaPorte Road. Traveling westward along LaPorte Avenue, back across SR 49, the proposed trail then turns south, down Sturdy Road to E. Division Road, which leads back to SR 49 and onward to the Porter County Fairgrounds and Expo Center.

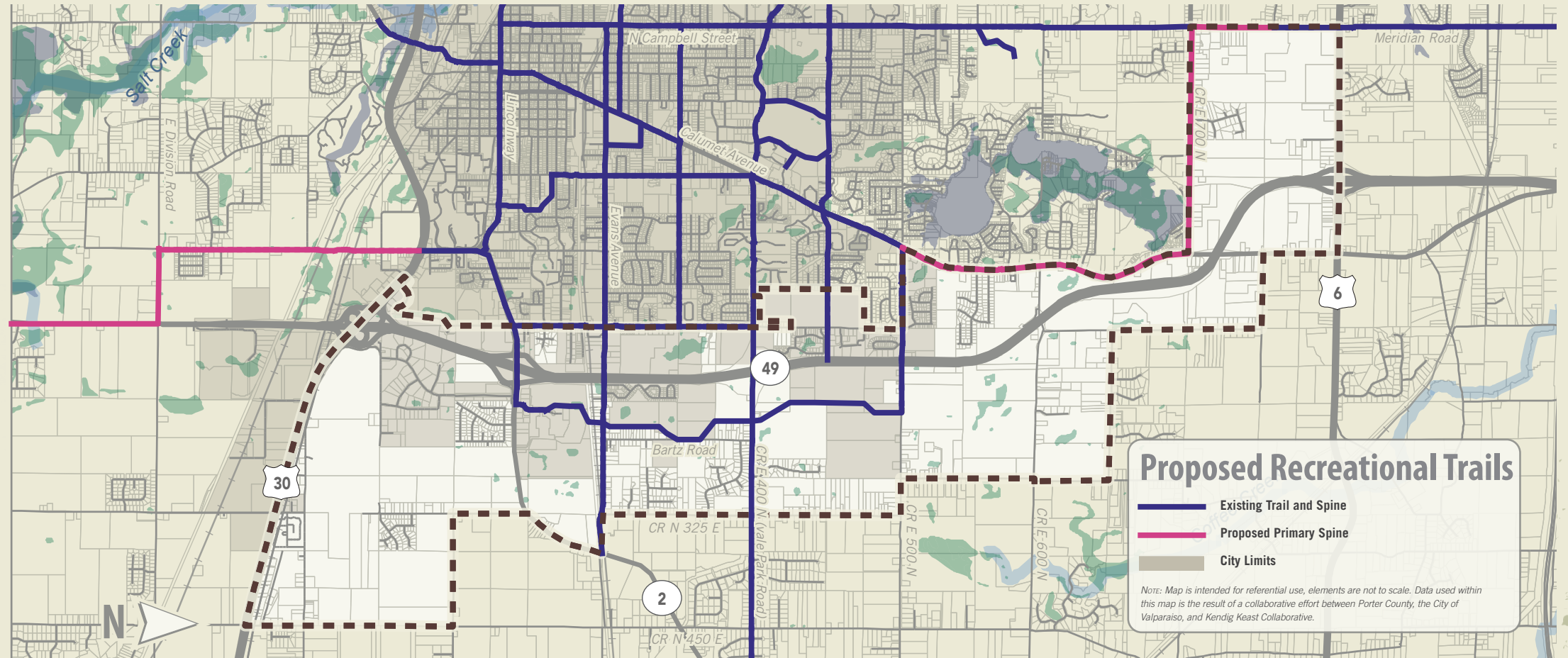


Figure 3.9, Complete Streets Example



Source: Dan Burden, Walkable & Livable Communities Institute

Hamburg, New York's main street is welcoming to all users. Wide sidewalks, curb extensions, and well-marked crosswalks help pedestrians travel to the various businesses along the street. On-street parking gives those traveling by car easy access. Colored pavement narrows the travel lane, keeping speeds at an appropriate level.

### Focus Area 3: Utilities Infrastructure

#### GOAL 3.7: ENSURE THERE IS ADEQUATE UTILITIES INFRASTRUCTURE TO MEET THE DEMANDS OF NEW COMMERCIAL AND RESIDENTIAL GROWTH WITHIN THE SR 49 CORRIDOR.

**Strategy 3.7.1: Develop a phased infrastructure expansion program that will accommodate future growth that is synchronized with the City and County's capital improvement program.**

##### Initiatives and Actions:

##### 1. Proposed Water Improvements

To serve additional development along the east side of the SR 49 corridor will require not only the extension of the existing water mains but also interconnecting the water mains on the east side of SR 49 to provide looping of the water system. This looping will likely address the low pressures in the existing 12" diameter water main along Evans Avenue. The existing extensions across SR 49 do not appear to be looped which would result in better pressures, fire flow capacity and allow for isolation of water main sections without shutting down service for large areas (refer to **Map 3.6, Proposed Utilities Infrastructure**, page 47).

The 20" water main along CR E 500 N could be extended to the east side of SR 49 and connected to the existing 16" diameter water main to provide looping for this north end of the corridor. There is currently a casing pipe under SR 49 to allow for the placement of a water main.

Additional improvements to the water system would be to replace older sections of C.I. water mains showing repeated water main breaks. The 12" diameter water main along Silhavy Road between SR 2 and Evans Avenue needs to be replaced with a 16" water main to eliminate the bottle neck along this route.

The proposed water main extensions and sizing as shown on Figure A.1 (within the Appendix) are preliminary and may change during detailed engineering design.

##### 2. Proposed Sanitary Sewer Improvements

Since the majority of the sanitary shed area along the SR 49 Corridor flows to the Sturdy Road Lift Station, located just south of U.S. Highway 30, it is essential that this lift station is upgraded to handle future flows as development occurs. Even though the existing station has the capacity to handle additional flows as stated above, it is essential to upgrade and improve the outdated control system along with modifying the site so that ingress/egress to the lift station is improved.

Additional capacity within the existing sewer system could

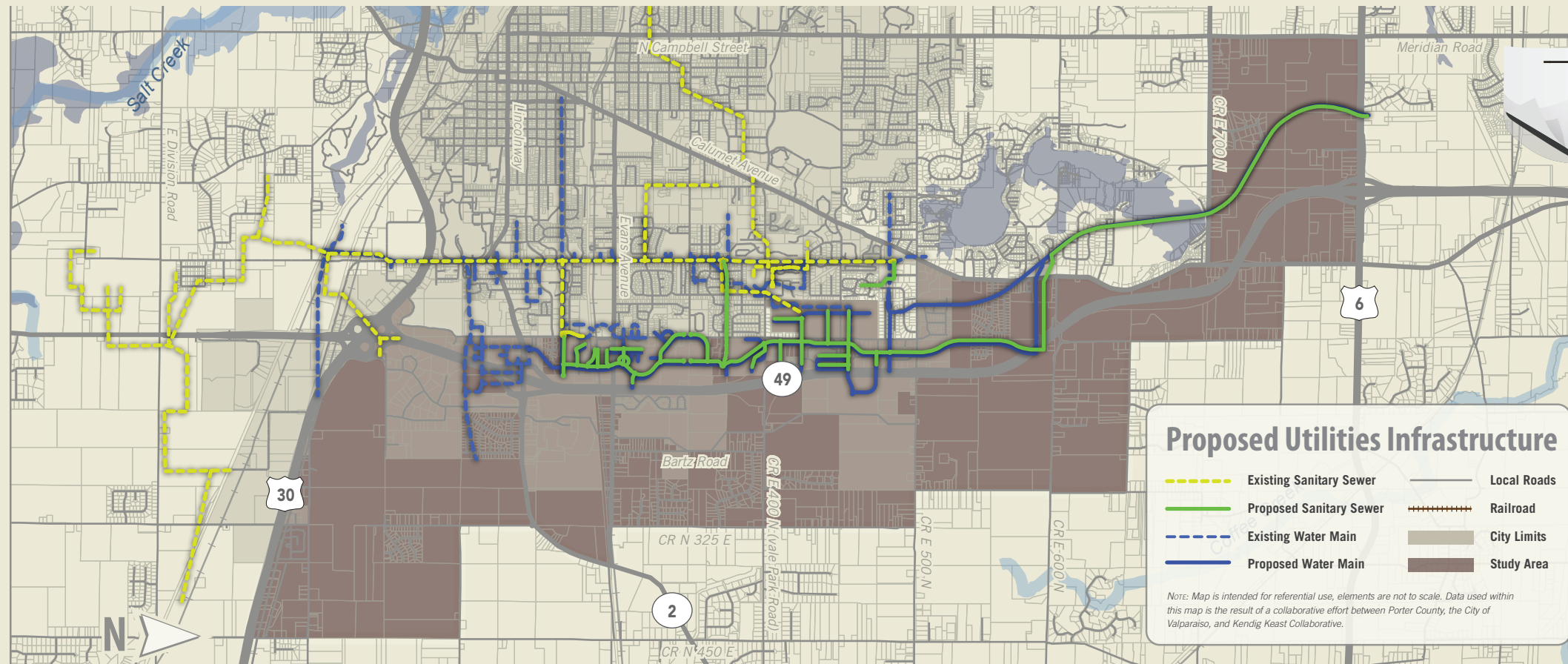
be obtained by reducing inflow/infiltration by improving or replacing older sewers.

The proposed sanitary sewer extensions as shown on Figure A.2 (within Appendix) are based on future modeled flows along the SR 49 Corridor. Based on contour maps, it appears that large portions of the study area can be served with gravity sewers. These gravity sewers can be extended to existing lift stations that have the capacity to handle additional future flows. A new lift station will be required to intercept gravity flows along the proposed Boulevard east of SR 49 to the gravity sewer along Silhavy Road. Serving areas around lakes or outside of possible gravity served areas could be accomplished with smaller lift stations and or grinder pumps discharging to the nearest gravity sewer system.

### Focus Area 4: Economic Development and Corridor Promotion

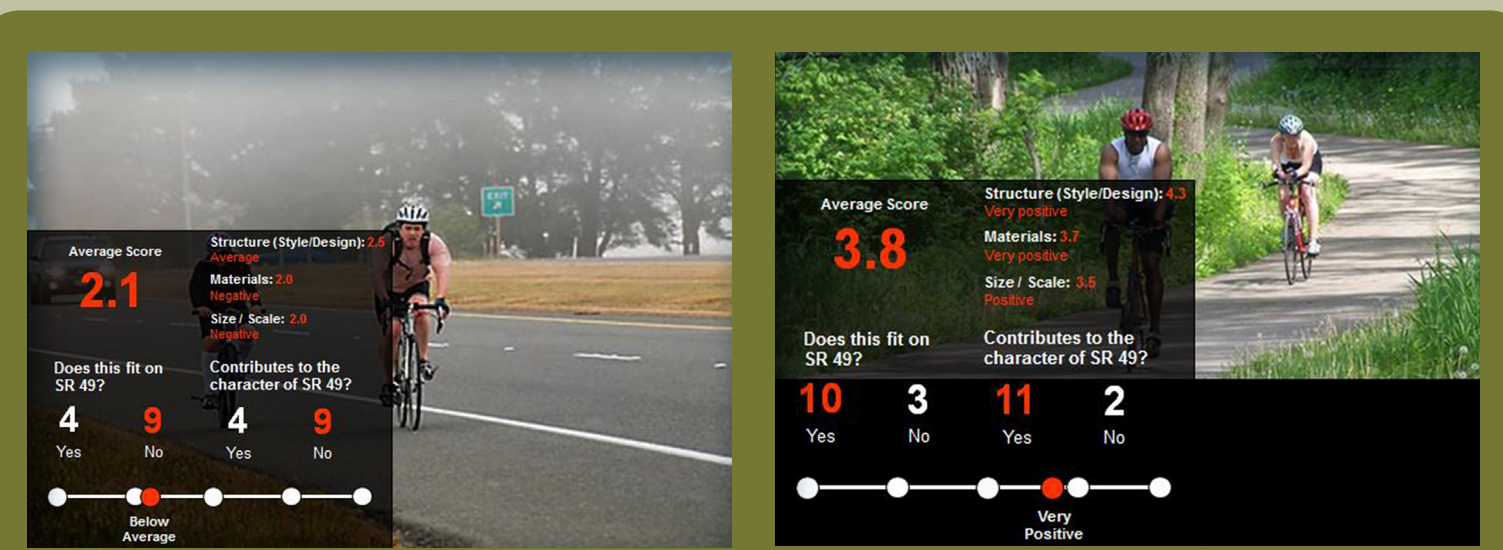
Consistent with the 2012 County of Porter Jobs Cabinet Report, to facilitate new business start-ups, and generate increased tax revenues, it is recommended that the City of Valparaiso and the Valparaiso Redevelopment Commission become a fiscal partner and strategically invest public funds to improve the county's transportation, fiber optic/Wi-Fi network and utilities infrastructure, in order to prepare potentially development sites through which to take advantage of opportunities and advance the vision of SR





Map 3.6,  
Proposed Utilities Infrastructure

Development constraints impacting lands within the SR 49 corridor include severe soils (unsuitable for septic tank absorption, thoroughfare loads, or building construction); steep slopes, streams, water bodies, and wetlands; and developed properties. This map delineates each constraint (in color) to reveal the parcels that are uninhibited or minimally impacted by such constraints and therefore are the most desirable for new or future development sites. Valparaiso soils are the prevailing constraint limiting ideal development sites, however in some places soil constraints can be mitigated by implementing special construction methods.



### Visual Preference Survey: Recreational Trails

As illustrated in the comparative slides from the Visual Preference Survey (VPS), the proposed alignment of future recreational trails recognizes user preferences and suggests an alternative alignment for the Dunes to Kankakee Trail, as it passes through the SR 49 corridor. Participants were shown a series of slides depicting on-street, dedicated bicycle lanes (score: 2.1 out of 5.0), as well as off-street recreational trails (3.8 out of 5.0); the majority of participants preferred the latter.

SR 49 becoming a health care and information technology corridor. The City and County should also develop partnerships to employ a regional focus in developing and optimizing a unified commuter transportation plan.

### GOAL 3.8: PROMOTE ECONOMIC DEVELOPMENT INITIATIVES WITHIN THE SR 49 CORRIDOR.

**Strategy 3.8.1: Promote the SR 49 corridor as a critical link between the Porter County Regional Airport and the interstates and port to the north.**

#### Initiatives and Actions:

1. Revise the City of Valparaiso's land use plan and zoning map to include the Porter County Regional Airport's proposed land use program, as described within the Airport's recent master plan, "In Plane View: A Clear Vision for the Future."
2. Develop an index of developable sites and properties within the SR 49 corridor and prioritize sites and properties based on strategic accessibility. Based on developing proposed Memorial Drive Extended, **Map 3.7, Priority Development Sites** (page 48), attempts to prioritize available developable sites.
3. Encourage developers of large parcels surrounding the airport to be models for sustainable, green development.<sup>5</sup>

4. Encourage business campus master planning and design standards beyond the requirements of the Porter County UDO for the development of airport parcels.<sup>6</sup>

5. The Valparaiso Redevelopment Commission should conduct a market analysis specific to the SR 49 corridor, that evaluates demand and requirements for the following commercial enterprises:

- communications equipment;
- optical instruments and lenses;
- electrical distribution;
- specialty chemical products;
- navigational, measuring, electro-medical and control instruments.

**Strategy 3.8.2: Promote SR 49 as a regional health care corridor for Northern Indiana.**

#### Initiatives and Actions:

1. Revise the Porter County Zoning Map (Institutional District - IN), and the City of Valparaiso Zoning and Land Use maps (Campus - CA) to identify the proposed hospital development and the extent of the supporting healthcare-related businesses. Prioritize area for development at the locations of the proposed hospital complexes.