



Illinois Department of Transportation

Office of Highways Project Implementation / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

June 30, 2016

The Honorable Angie Underwood
Village President
Village of Long Grove
3110 Old McHenry Road
Long Grove, IL 60047-9635

RECEIVED
JUL 05 2016
VILLAGE OF LONG GROVE

Dear Village President Underwood:

The Illinois Department of Transportation (Department) has completed preliminary engineering and environmental studies (Phase I) for the improvement of US 45 from IL 60 to IL 22 in Lake County. Funding for Phase II engineering and partial funding for land acquisition is included in the Department's FY 2017-2022 Proposed Highway Improvement Program. The remaining elements of the project will be included in our priorities for future funding consideration among similar improvement needs throughout the region. This will serve as a Letter of Intent between the Village of Long Grove (Village) and the Department confirming your concurrence with the proposed improvement plan and the cost participation responsibilities for the subject project.

The general scope of work for this improvement consists of reconstructing and widening US 45 to provide two travel lanes in each direction separated by a median, bicyclist and pedestrian accommodations, as well as intersection and drainage improvements. Public outreach for the project included two public meetings, and a public hearing. This scope of work was discussed in greater detail in several meetings with the Village. A CD of the approved combined design report is enclosed for your information.

Based on previous coordination with the Village, specific items identified by the Department requiring cost participation and/or maintenance by the Village include bicyclist and pedestrian accommodations. Additional discussion regarding utility relocation is included for your information.

Bicyclist and Pedestrian Accommodations

According to Department policy, a separate shared-use path and/or sidewalk is required to accommodate bicyclists and pedestrians along, or short distances outside of, the project limits if the local agency is willing to participate in cost sharing and take maintenance responsibilities of the shared-use path and/or sidewalk. The local cost share for new pedestrian and bicyclist facilities is 20% of the construction cost, plus a 15% engineering fee.

New shared-use paths or sidewalks within the Village limits are proposed as follows:

- A ten-foot wide shared-use path along the south side of IL 83 west of US 45
- A ten-foot wide shared-use path along the east side of IL 83 south of US 45
- A five-foot wide sidewalk along the west side of IL 83 south of US 45

In total, approximately 390 feet of new ten-foot wide shared-use path and 270 feet of new five-foot wide sidewalk are proposed within the Village limits. The estimated cost for the new shared-use path is \$13,650. The Village's portion would be approximately \$3,140, including a 15% engineering fee. The estimated cost for the new sidewalk is \$9,450. The Village's portion would be approximately \$2,174, including a 15% engineering fee. If the Village is willing to include these bicyclist and pedestrian accommodations as part of this improvement, in addition to their share of the costs associated with construction, the Village must agree to accept long-term responsibility for the administration, control, reconstruction and maintenance of the shared-use path and sidewalk.

If the Village chooses not to participate in the bicyclist or pedestrian accommodations, the Department requests that a local resolution indicating their non-participation be sent to the Department (see enclosed example). Without local agency cost participation, the Department will consider a means to accommodate bicyclist and pedestrian facilities in the future. At this time this consists of the proposed installation of an 11 or 17 foot wide shelf along each side of the roadway, depending upon whether the proposed improvement called for a sidewalk or shared-use path. In the future, a path or sidewalk could be installed on the shelf via permit at 100% local cost.

Utility Relocation

Public utilities, installed in the highway right-of-way via permit and requiring relocation, will be relocated at no expense to the Department. The Village will be responsible for relocation of its facilities in conflict with the US 45 improvements. Facilities subject to the previously stated condition may include, but may not be limited to watermain and fire hydrants as well as storm, sanitary and/or combined sewers. Our investigation of the utility information that was provided to the Department in Phase I indicate no apparent Village utility conflicts. However, a more detailed study of conflicts will occur during Phase II, contract plan preparation.

Summary of Estimated Costs

The estimated total cost responsibility for the Village, based on the available information collected during the Phase I process is approximately \$5,314 as outlined in the following table. However, this does not include the cost of utilities, which should be pursued independently by the Village.

Improvement	Village Cost	Engineering Fee (15%)	Total Village Cost
Shared-use path	\$2,730	\$410	\$3,140
Sidewalk	\$1,890	\$284	\$2,174
Total Village Costs			\$5,314

At the end of this Letter of Intent, there is an area where you can state your concurrence to the cost participation and maintenance items outlined above. This Letter of Intent will be used as a basis during Phase II, contract plan preparation, to develop a project agreement between the Village and the Department. Please return an original signed copy of this letter at your earliest convenience.

If you have any questions or need additional information, please contact me or Kimberly Murphy, Consultant Studies Unit Head, at (847) 705-4791.

Very truly yours,

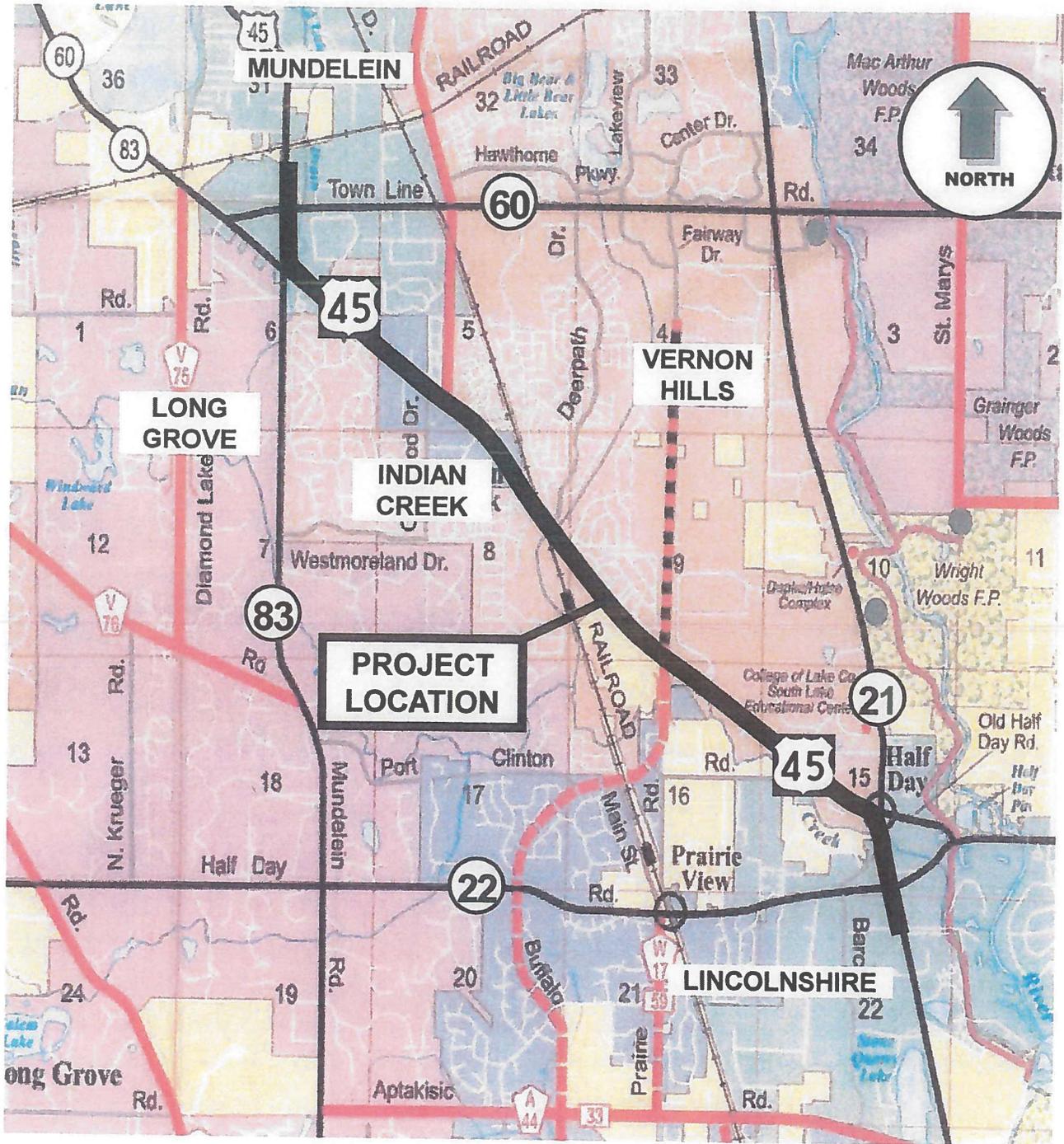


John Fortmann, P.E.
Region One Engineer

Attachments

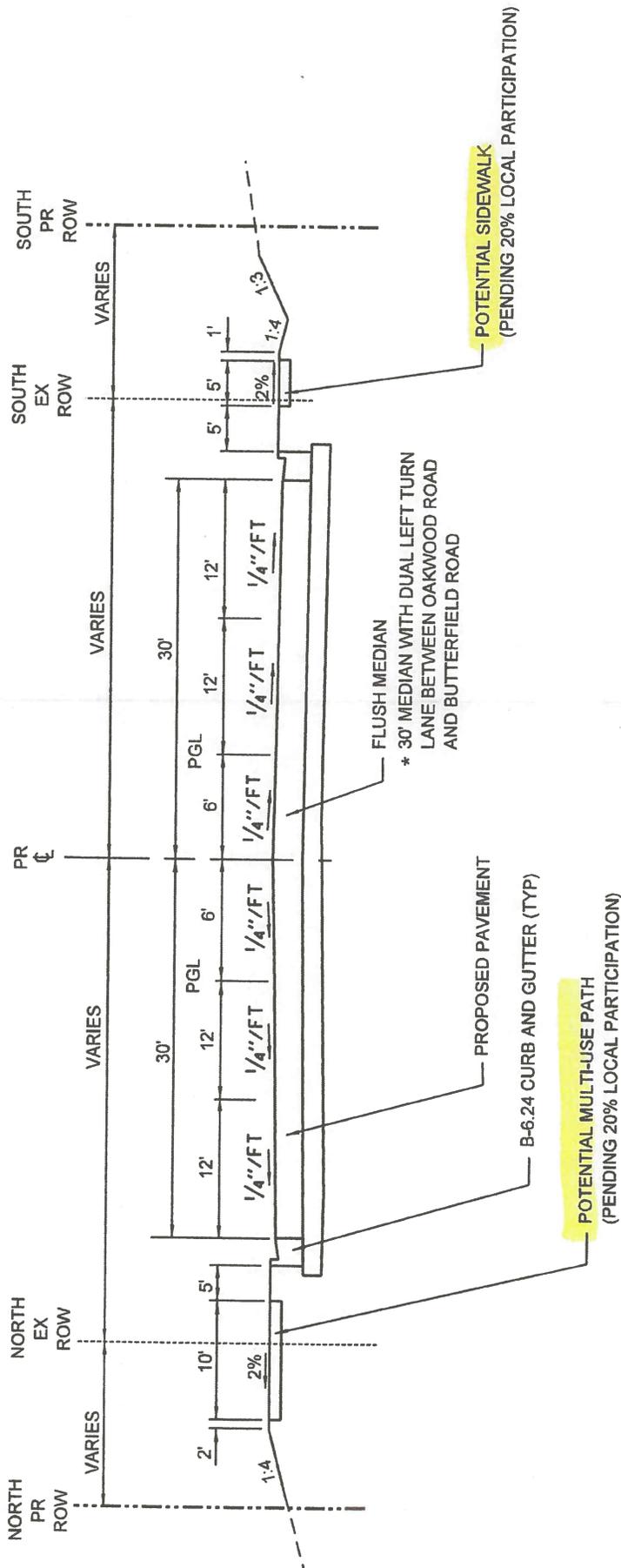
cc: David Lothspeich

PROJECT LOCATION MAP



U.S. ROUTE 45
Illinois Route 60 to Illinois Route 22
Job No. P-91-065-01
PTB # 120/02
Lake County

FIGURE 1



ILLINOIS DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 45
 ILLINOIS ROUTE 60 TO ILLINOIS ROUTE 22

PROPOSED TYPICAL SECTION

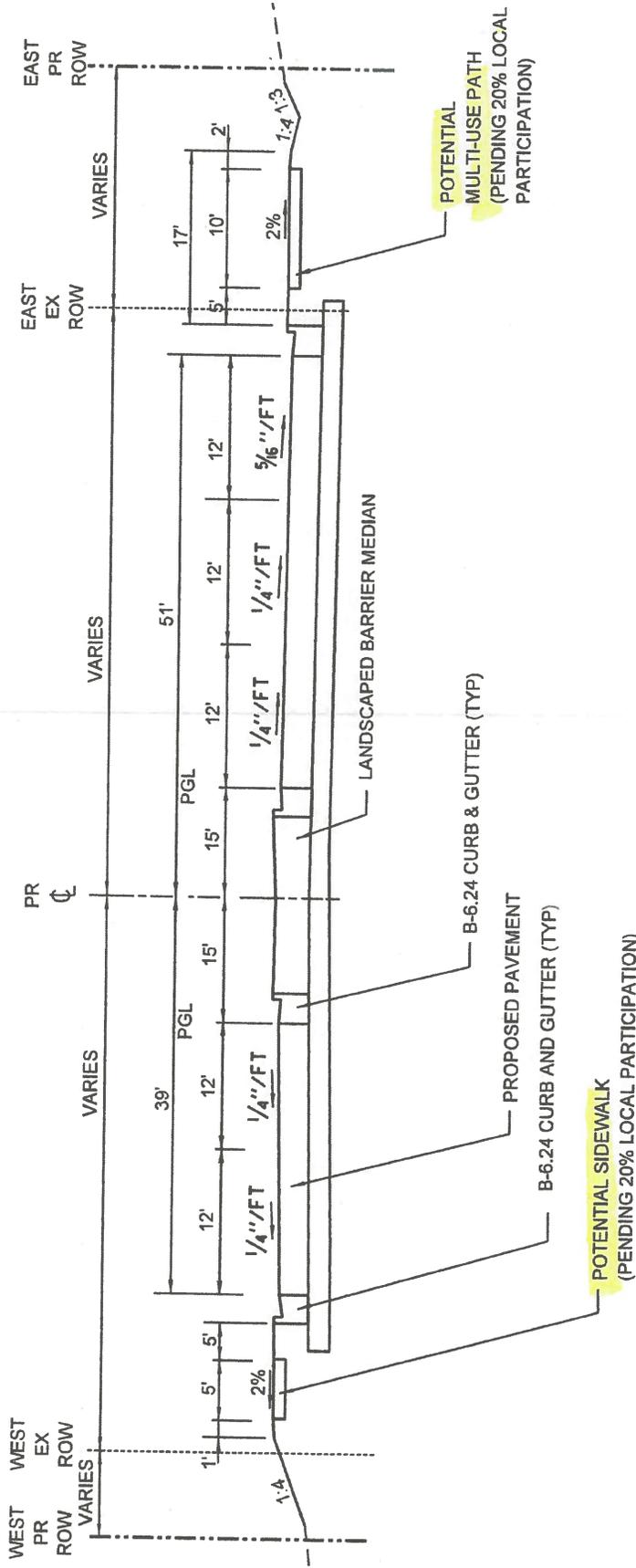
U.S. ROUTE 45

FIGURE 5A

PROPOSED TYPICAL SECTION

U.S. ROUTE 45

ILLINOIS ROUTE 83 TO FAIRWAY DRIVE/ BUFFALO GROVE ROAD



PROPOSED TYPICAL SECTION

U.S. ROUTE 45

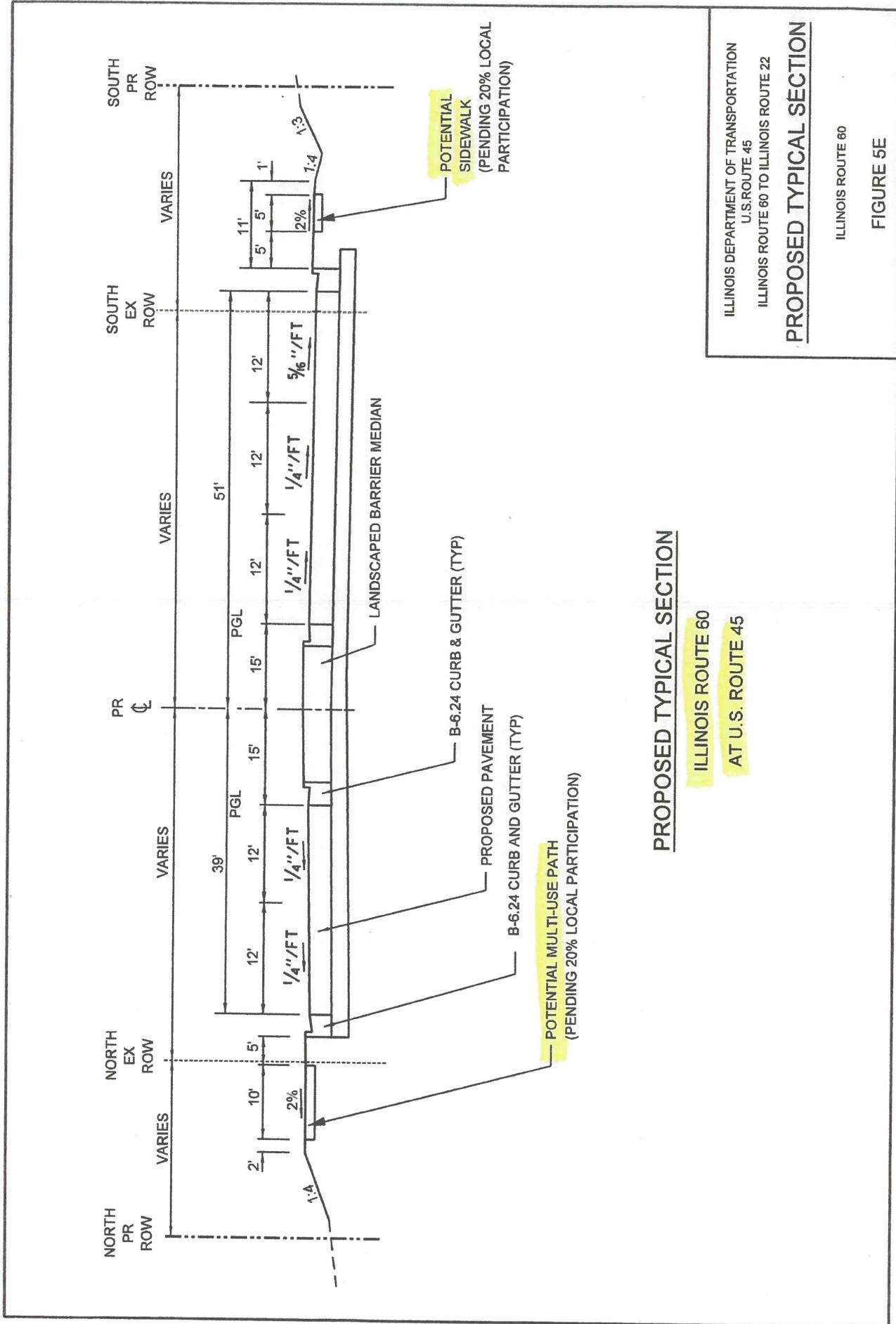
ILLINOIS ROUTE 83 TO ILLINOIS ROUTE 60

ILLINOIS DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 45
 ILLINOIS ROUTE 60 TO ILLINOIS ROUTE 22

PROPOSED TYPICAL SECTION

U.S. ROUTE 45

FIGURE 5C



PROPOSED TYPICAL SECTION

ILLINOIS ROUTE 60
AT U.S. ROUTE 45

ILLINOIS DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 45
ILLINOIS ROUTE 60 TO ILLINOIS ROUTE 22

PROPOSED TYPICAL SECTION

ILLINOIS ROUTE 60

FIGURE 5E

1 INTRODUCTION

1.1 Location and Description of Project

This Combined Design Report summarizes the analyses and investigations conducted for the proposed widening and reconstruction of approximately 5.1 miles of U.S. Route 45 from Illinois Route 60 to Illinois Route 22. The proposed project is located in southern Lake County, Illinois and passes through the Villages of Vernon Hills, Lincolnshire, Indian Creek, Mundelein, Long Grove and portions of unincorporated Lake County. Included in the project limits are the intersections of U.S. Route 45 with Illinois Route 60, Illinois Route 83 and Illinois Route 21, and 12 other intersections along the route. Figure 1 in Appendix A contains a Location Map illustrating the project area.

U.S. Route 45 (FAP 344) is an urban minor arterial highway. With its designation, U.S. Route 45 is a vital link in the transportation network for the area and the region.

1.2 Project Development Process

The objectives of the U.S. Route 45 study are to identify traffic and safety concerns along the route, evaluate long-term improvement needs, develop feasible improvement alternatives, evaluate the impacts of the alternatives on the surrounding land use and sensitive environmental areas, evaluate a congestion management system (CMS) alternative, select a Preferred Alternative, develop a proposed improvement plan, and identify an implementation strategy. These objectives are being accomplished through coordination with Federal, State and local governmental agencies and the public. The preferred improvement plan and the *Environmental Class of Action Determination Document and Record* have been presented to the Federal, State and local governmental agencies as well as the public through a Public Meeting. A Public Hearing was held on February 7, 2012. Section 6 provides a summary of these coordination meetings.

Selection of the Preferred Alternative as the proposed action was the result of engineering and environmental analyses as well as input from agency and public coordination. The final recommendation of the proposed action was made after review of this *Combined Design Report*, the environmental studies, accompanying reports, comments provided by affected agencies, citizens' comments and the results of the Public Meetings and Hearing. Information regarding the environmental effects of the Preferred Alternative and associated mitigation measures can be found in the *Environmental Class of Action Determination Document and Record* bound under separate cover.

1.3 Design Criteria

Study criteria were established for use in developing preliminary alternative concepts and the preferred improvement plan. Design criteria considered the functionality of the roadway, traffic volumes, design speed, safety, costs and environmental effects. The proposed improvements have been designed based on the criteria outlined in the Illinois Department of Transportation *Bureau of Design and Environment (BDE) Manual*. The design criteria utilized for the project is shown in Table 1 in Appendix B.

2 PURPOSE AND NEED FOR THE IMPROVEMENT

2.1 Purpose of the Proposed Action

The overall purpose of the proposed action is to provide an improved transportation facility along U.S. Route 45 from Illinois Route 60 to Illinois Route 22. This will be accomplished by addressing the needs of safety, capacity, system linkage and continuity and economic development.

2.2 Need for the Proposed Action

The proposed project addresses the specific needs of Safety, Capacity, System Linkage and Continuity and Economic Development.

2.2.1 Safety

Crash data was collected and analyzed along U.S. Route 45 from 1999 to 2009. A total of 5,008 crashes occurred within these eleven years, of which 1,432 (29 percent) involved injuries and none involved a fatality. Crash analyses were performed for 17 signalized, 3 unsignalized intersections, and 31 roadway sections located between the intersections. In summary, 2,619 (52 percent) of the crashes occurred at the intersections and 2,389 crashes (48 percent) occurred on the roadway sections.

The predominant crash types were rear end, turning, angle, and sideswipe collisions. A more detailed analysis of the top four predominant crash types found the distribution to be rear end (46 percent), turning (26 percent), angle (8 percent), and sideswipe (8 percent) for a combined 4,370 crashes (89 percent) of the 5,008 total accidents. Rear-end crashes typically occur during heavily congested roadway conditions or in the absence of adequate intersection channelization. Angle crashes typically occur when intersection capacity is not adequate. These predominant crash types support the need for capacity and median channelization improvements to enhance safety for the entire limits of the study.

In 2006, the Federal Highway Administration (FHWA) directed states to analyze the most severe crashes resulting in fatalities or serious injuries. The IDOT Bureau of Safety Engineering developed a listing of locations that exhibit the most severe safety needs based on crashes, injuries, deaths, traffic volume levels, and other relevant information (Five Percent Report). IDOT identified two such locations within the limits of the project. The first location is along U.S. Route 45 from west of Writer Court to Illinois Route 21. The second location is along Illinois Route 21 from West Olde Half Day Road to Knightsbridge Parkway. These two locations are located within the intersections and sections previously identified as having high accident frequencies. Measures to improve the safety within these sections have been factored into the proposed design.

2.2.2 Capacity

According to the Chicago Metropolitan Agency for Planning (CMAP), U.S. Route 45 traffic volumes are anticipated to increase an average of 30 percent by the year 2030. Traffic growth is expected to continue due to the anticipated growth in population, employment, influx of new business, and increased commercial and residential development in the adjacent communities.

The existing average daily traffic volumes along U.S. Route 45 range from 14,800 to 37,200 vehicles per day. The projected volumes for the year 2030 range from 16,700 to 47,800 vehicles per day (See Figure 2 in Appendix A). The average daily capacity of a two-lane highway to operate safely and efficiently is approximately 12,000 to 16,000 vehicles, at which point additional through lanes are considered.

The capacity of an arterial roadway can be measured by the average stopped delay a motorist experiences at the signalized intersections along the route. In turn, this stopped delay time can be quantified and graded on a letter scale of A to F, called the level of service (LOS). LOS A condition is when the average delay at a signalized intersection is 10 seconds or less. Conversely, LOS F condition is when the average delay exceeds 80 seconds and usually results in traffic waiting through two cycles of red and green at the traffic signal before continuing. Long delays result in traffic backups and increased emissions. LOS C is the desirable goal. This provides for an average delay of less than 35 seconds. However, in densely populated areas that are highly urbanized and developed, such as the Chicagoland area, driver proficiency and awareness are higher. In such locations, LOS D is acceptable with an average delay less than 55 seconds.

With the projected year 2030 increased traffic volumes, the existing roadway facility will not have the capacity to handle the traffic. The LOS for the 15 existing signalized intersections within the project limits of U.S. Route 45 at the Jewel Entrance, Illinois Route 60, Illinois Route 83, Oakwood Road, Butterfield Road, Evergreen Drive, Deerpath Drive, Ranney Avenue, Fairway Drive/Buffalo Grove Road, Port Clinton Road, Jamestown Lane, Illinois Route 21, West Olde Half Day Road, Illinois Route 22, and Marriott Drive would be an unacceptable LOS of E and F. Motorists would experience unacceptable delays.

2.2.3 System Linkage and Continuity

U.S. Route 45 is classified as an urban minor arterial. It runs from the northwest to the southeast within the project area. Regionally, it provides connection to Illinois Route 60 and Illinois Route 22 which both have interchanges with Interstate 94. U.S. Route 45 also provides connection to Illinois Route 21 and Illinois Route 83.

U.S. Route 45 within the project limits is an important link in the transportation network for Lake County. U.S. Route 45 north of Illinois Route 60 is a 4-lane urban cross section. U.S. Route 45/ Illinois Route 21 south of Illinois Route 22 is also a 4-lane urban cross section. U.S. Route 45 has direct connections to multiple primary State Routes and principal arterials at Illinois Route 60, Illinois Route 83, Illinois Route 21 and Illinois Route 22 and minor arterials at Fairway Drive/Buffalo Grove Road and Butterfield Road. The study section of U.S. Route 45 from Illinois Route 83 to Illinois Route 21 needs to be widened to provide a consistent cross section and system continuity.

2.2.4 Economic Development

U.S. Route 45 connects the Villages of Vernon Hills, Lincolnshire, Indian Creek, Mundelein, and Long Grove to neighboring municipalities. U.S. Route 45 runs from the northwest to the southeast within the project limits. Most of the major roadways in the area run in a north-south or east-west direction leaving U.S. Route 45 as a direct route. In proximity of the project area, there are several major traffic generators. These include the shopping areas in the triangles on both ends of the project in the Villages of Mundelein and Lincolnshire, the Village of Vernon Hills Metra Station, the Vernon Hills Tax Increment Financing (TIF) District at the northwest quadrant of U.S. Route 45 and Illinois Route 21 and the Corporate Woods Business Park located on U.S. Route 45. A future TIF district development that will increase traffic is planned by Lincolnshire near U.S. Route 45/Illinois Route 21 and West Olde Half Day Road.

This area of southern Lake County is experiencing growth in population, employment, and commercial development resulting in increased traffic volumes. Based on U.S. Census Information, the population of Mundelein has grown from 30,935 to 31,064 between 2000 and 2010; Long Grove from 6,735 to 8,043; Vernon Hills from 20,120 to 25,113; Lincolnshire from 6,108 to 7,275; and Indian Creek from 194 to 462. Chicago Metropolitan Agency for Planning (CMAP, formerly NIPC) information indicates the expected population growth from 2000 to 2030 for the municipalities within the project limits is as follows: Mundelein – 10 percent, Long Grove – 61 percent, Indian Creek – 9 percent, Vernon Hills – 18 percent, and Lincolnshire – 36 percent.

Combined Design Report

VOLUME 1 of 8

U.S. Route 45
Illinois Route 60 to Illinois Route 22
Job No. P-91-065-01
Lake County, Illinois

December 2013

Prepared For:



Illinois Department of Transportation
Division of Highways/Region 1/District 1



Illinois Department of Transportation

Phase I Report Approval

Key Route: _____ Marked Route/Road Name: US 45
F.A. Route: FAP 344 Job Number: P-91-065-01 Contract No.: 60N84
Section: 49-Y Project Length: 5.1 miles PPS No.: 1884900100
Location/Limits: IL 60 to IL 22 County: Lake

General Description of Existing Facility: US 45 has three distinct existing lane configurations. The primary section is from IL 83 to IL 21 which consists of one lane in each direction with gravel shoulders or curb and gutter, and left turn lanes at intersections. The section from IL 60 to IL 83 consists of two lanes in each direction with curb and gutter, and flush median/left-turn lane. The third section along US 45/ IL 21 from US 45 to IL 22 consists of two lanes in each direction with curb and gutter and a flush median/mountable median.

Need for Proposed Improvement: To provide an improved transportation facility by addressing the needs of safety, capacity, system linkage and continuity and economic development.

Design Policies Used: [] New Construction [x] Reconstruction [] 3R [] Other _____

General Description of Proposed Improvement: Reconstructing and widening US 45 to provide two travel lanes in each direction separated by a median, as well as bicyclist and pedestrian accommodations, and intersection and drainage improvements.

Approximate Amount of ROW to be Purchased: 271 Parcels Totaling 40.40 Acres.

Number of Businesses 1 and Residences 0 to be acquired. ROW Cost: \$ 28,600,000

Estimated Program Cost: \$ 73,000,000 (in FY NP) Fund Type: NHPP

Construction Cost: \$ 72,800,000 Utility Reloc. Cost: \$ 5,000,000 Consultant PE Cost: \$ _____

Design Exceptions:

- Level One Required? [] Yes [x] No
Level Two Required? [x] Yes [] No
If yes, note date approved: 6/10/13, 11/5/13

Type of Public Involvement Activity:

- Public Hearing Offered? [x] Yes [] No
Informational Meeting Held? [x] Yes [] No
Property Owners Contacted? [x] Yes [] No

[] Categorical Exclusion I Action

[x] Categorical Exclusion II Action

FHWA Categorical Exclusion II Action approval by

Robin Helmerichs 12/17/13
FHWA Representative Name Date

Regional Design Approval

[Signature] 12/21/13
IDOT Regional Engineer Signature Date

EXECUTIVE SUMMARY

INTRODUCTION

This improvement consists of the widening and reconstruction of approximately 5.1 miles of U.S. Route 45 from Illinois Route 60 to Illinois Route 22. The overall purpose of the proposed action is to provide an improved transportation facility along U.S. Route 45. This will be accomplished by addressing the needs of Safety, Capacity, System Linkage and Continuity and Economic Development.

ROADWAY IMPROVEMENTS

The improvements include widening and reconstructing this section of U.S. Route 45 from two lanes to four lanes with a center median. From the west project limit to Fairway Drive/ Buffalo Grove Road, the proposed improvements will include a 12-foot painted median. From Fairway Drive/ Buffalo Grove Road to Illinois Route 21, the proposed improvements will include a 22-foot barrier median. The north-south stretch of U.S. Route 45/ Illinois Route 21 will be widened and reconstructed to provide three lanes in each direction with a 30-foot barrier median. A 10-foot multi-use path and a 5-foot sidewalk are proposed throughout the entire project limits pending local participation in accordance with IDOT's Complete Streets policy.

Other improvements to this section U.S. Route 45 include provisions for additional turn lanes at intersections and traffic signal modernization at the 15 existing signalized intersections within the project limits. A new enclosed drainage system with curb and gutter along the entire length of the improvement will be installed. The proposed vertical profile is generally designed to follow the existing roadway. However, the proposed profile does vary from the existing profile in order to achieve minimum grades for the enclosed drainage system, reduce some of the existing steep grades, provide sufficient freeboard at culvert and bridge crossings, minimize environmental consequences and generally smooth out the existing profile to meet current design standards.

Property acquisition will be required to construct the improvement in areas where the existing right-of-way is insufficient to accommodate the improvement. The acquisition areas are primarily narrow strips of property adjacent to the existing right-of-way. However, the right-of-way acquisition will include the relocation of one commercial property that contains five businesses.

INTERSECTION IMPROVEMENTS

There are 15 existing signalized intersections within the project. U.S. Route 45 has signalized intersections at the Jewel Entrance, Illinois Route 60, Illinois Route 83, Oakwood Road, Butterfield Road, Evergreen Drive, Deerpath Drive, Ranney Avenue, Fairway Drive/ Buffalo Grove Road, Port Clinton Road and Illinois Route 21. In addition, there are signalized intersections along Illinois Route 21 at Jamestown Lane, West Olde Half Day Road, Illinois Route 22 and Marriott Drive. All of the signals will be modernized.

DRAINAGE

U.S. Route 45 consists of both aggregate shoulders and open ditches and stretches of curb and gutter throughout the project. Within the ditch sections, stormwater runoff sheet flows off the road. Within the curb and gutter sections stormwater runoff enters an existing enclosed drainage system.

The proposed drainage plans for U.S. Route 45 includes an enclosed drainage system with curb and gutter for the entire length of the improvement. In-line detention is proposed for the project. A swale is included behind the back of curb to capture the off-road runoff in areas where it flows toward U.S. Route 45.

There are also eight major water crossings within the improvement limits. The culverts at these crossings are proposed to be reconstructed and increased in size in order to meet current IDOT drainage standards. The project also includes the replacement of the Indian Creek Bridge over U.S. Route 45/ Illinois Route 21. A complete description of the proposed drainage plan is contained in the Location Drainage Study, which is bound under separate cover.

PUBLIC AND AGENCY COORDINATION

The public was actively involved in the roadway improvement development process. Input received from citizen groups, community leaders and local officials played an important role in the evaluation of roadway alternatives. Meetings have been held with the Villages of Vernon Hills, Lincolnshire, Mundelein, Indian Creek and Long Grove throughout the project study. In addition, two public meetings have been held. The first Public Input Meeting was held to introduce the project to the community and obtain feedback regarding the major concerns including barrier median placement, access issues and pedestrian accommodations. The second Public Meeting was held to present the preferred improvements to the public. A public hearing was held in February 2012 to present the final preferred improvements. Comments obtained at each of the public meetings and at the public hearing were incorporated into the design as applicable.

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BOUND AS SEPARATE DOCUMENTS

ECAD RECORD AND DOCUMENT

LOCATION DRAINAGE STUDY

NOISE ANALYSIS REPORT

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APPENDIX C PREFERRED IMPROVEMENT PLANS

U.S. Route 45
U.S. Route 45/ Illinois Route 21
Illinois Route 21
Illinois Route 83
Illinois Route 60
Jewel Entrance
Hilgers Court
Oakwood Road
Butterfield Road
Evergreen Drive
Deerpath Drive
Ranney Avenue/ Metra Station
Fairway Drive/ Buffalo Grove Road
Port Clinton Road
W. Olde Half Day Road
Illinois Route 22
Marriott Drive
Port Clinton Road/ Jamestown Lane

APPENDIX D INTERSECTION DESIGN STUDIES

U.S. Route 45 at Jewel Entrance
U.S. Route 45 at Illinois Route 60
U.S. Route 45 at Illinois Route 83
U.S. Route 45 at Oakwood Road
U.S. Route 45 at Butterfield Road
U.S. Route 45 at Evergreen Drive
U.S. Route 45 at Deerpath Drive
U.S. Route 45 at Ranney Avenue/ Metra Station
U.S. Route 45 at Fairway Drive/ Buffalo Grove Road (Interim)
U.S. Route 45 at Fairway Drive/ Buffalo Grove Road (Ultimate)
U.S. Route 45 at Port Clinton Road
U.S. Route 45/ North Olde Half Day Road at U.S. Route 45/ Illinois Route 21
Illinois Route 21 at Jamestown Lane
U.S. Route 45/ Illinois Route 21 at West Olde Half Day Road
U.S. Route 45/ Illinois Route 21 at Illinois Route 22
U.S. Route 45/ Illinois Route 21 at Marriott Drive

VOLUME 3 TRAFFIC DATA AND TRAFFIC MANAGEMENT PLAN

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- Figure E-1 Existing Peak Hour Traffic Diagrams
- Figure E-2 Projected 2030 Peak Hour Traffic Diagrams
- Table E-1 Level of Service Summary: Signalized Intersections Existing Capacity Analyses
- Table E-2 Level of Service Summary: Signalized Intersections Design Year Capacity Analyses

APPENDIX F TRAFFIC MANAGEMENT PLAN

VOLUME 4A CRASH ANALYSIS REPORT PART 1

VOLUME 4B CRASH ANALYSIS REPORT PART 2

VOLUME 5A PUBLIC INVOLVEMENT PART 1

APPENDIX G PUBLIC INPUT MEETING

- Legal Notice
- Invitations
- Brochure
- Exhibits
- Attendance Sheets
- Comments
- Response to Comments

VOLUME 5B PUBLIC INVOLVEMENT PART 2

APPENDIX H PUBLIC MEETING

- Legal Notice
- Invitations
- Brochure
- Exhibits
- Attendance Sheets
- Comments

APPENDIX I PUBLIC HEARING

- Legal Notice
- Invitations
- Brochure
- Exhibits
- Attendance Sheets
- Comments
- Response to Comments

VOLUME 6 INTERAGENCY COORDINATION AND CORRESPONDENCE

IDOT District One
FHWA
Legislative
Village of Vernon Hills
Village of Mundelein
Village of Lincolnshire
Village of Indian Creek
Village of Long Grove
Other Interagency Coordination
 Fire Departments
 Park Districts
 School Districts
 Bicycle Advocacy Group Coordination
 Metra
 PACE
 U.S. Army Corps of Engineers
 Chicago Metropolitan Agency for Planning (CMAP)
 Illinois Department of Natural Resources (IDNR)
 State Historic Preservation Officer (SHPO)
 United States Fish and Wildlife Service (USFWS)
 Willow Lawn Memorial Park / Aarrowood Pet Cemetery
 Lake County Division of Transportation
 Utilities

VOLUME 7 TREE SURVEY, WETLAND DELINEATION AND SECTION 4(f) DOCUMENTATION

Tree Survey
Wetland Delineation Report And Wetland Impact Evaluation
Section 4(f) Documentation

VOLUME 8 CROSS SECTIONS

U.S. Route 45
U.S. Route 45 / Illinois Route 21
Illinois Route 83 / U.S. Route 45
Illinois Route 60

SUGGESTED RESOLUTION LANGUAGE FOR NON-PARTICIPATING
LOCAL AGENCIES

WHEREAS, The Illinois Department of Transportation (Department) has the power to approve and determine the final plans, specifications and estimates for all State highways; and

WHEREAS, the Department's projects must adequately meet the State's transportation needs, exist in harmony with their surroundings, and add lasting value to the communities they serve; and

WHEREAS, the Department must embrace principles of context sensitive design and context sensitive solutions in its policies and procedures for the planning, design, construction, and operation of its projects for new construction, reconstruction, or major expansion of existing transportation facilities by engaging in early and ongoing collaboration with affected citizens, elected officials, interest groups, and other stakeholders to ensure that the values and needs of the affected communities are identified and carefully considered in the development of transportation projects; and

WHEREAS, Bicyclist and pedestrian ways must be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into State plans and programs; and

WHEREAS, The State's complete streets law requires bicyclist and pedestrian ways to be established in or within one mile of an urban area in conjunction with the construction, reconstruction, or other change of any State transportation facility, except in pavement resurfacing projects that do not widen the existing traveled way or do not provide stabilized shoulders, or where approved by the Secretary of Transportation based upon documented safety issues, excessive cost or absence of need; and

WHEREAS, During the development of highway projects throughout the State, the Department gives consideration to accommodating bicyclists and pedestrians on a need-basis; and

WHEREAS, The Department has presented the Village of Long Grove, for its consideration, a bicyclist and/or pedestrian improvement with funding to be split 80% State, 20% local with maintenance to be provided by the Village of Long Grove; therefore, be it

RESOLVED, That the Village of Long Grove hereby rejects the Department's proposed bicyclist and/or pedestrian improvement and acknowledges that such rejection will result in a cancellation of the proposed improvement; and be it further

The Honorable Angie Underwood
June 30, 2016
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RESOLVED, That a suitable copy of this resolution be presented to the Project Engineer associated with the proposal, or his or her equivalent, within the Department.

Exhibit "A"

TRAFFIC SIGNAL PARTICIPATION

The cost participation associated with traffic signal installation, modernization, or relocation will be in accordance with 92 Ill. Adm. Code 544 "Financing of Traffic Control Signal Installations, Modernization, Maintenance, and Operation on Streets and Highway under State Jurisdiction."

Traffic signals may be installed only where conditions meet warrants established in the current Illinois Manual on Uniform Traffic Control Devices. If a new signal installation is warranted, it may be included within the roadway improvement.

Current IDOT policy requires that IDOT and Local Agency (ies) share the responsibility for installation, modernization, and relocation of traffic signals. The installation, modernization, and relocation of pedestrian signals associated with traffic signal improvements will also require the Department and Local Agency (ies) to share financial responsibility. The eligible share of the cost to each agency will be in proportion to the number of intersection approaches that the agency maintains. Generally, traffic signal costs are 80% Federal and 20% non-Federal based on established cost participation policy (90% Federal and 10% non-Federal for safety projects). IDOT will participate in the non-Federal portion for the State-owned legs of an intersection. At locations where all legs of an intersection are State-owned, IDOT will participate in 100% of the cost of the traffic signal installation, modernization, or relocation. Closely spaced new or modernized traffic signals within the improvement limits generally require signal coordination or hardware interconnection for the purpose of providing vehicle progression. IDOT will be financially responsible for 100% of coordination or interconnection costs.

IDOT will be financially responsible for 100% of the installation and modernization of traffic signals at ramp terminals of ramps connecting to or from a State highway.

The entire cost of installing push button ("Fire pre-emption") and emergency vehicle pre-emption equipment is the responsibility of the requesting local fire district or municipality.

The entire cost of installing, modernizing, relocating, maintaining and energizing private benefit signals is the responsibility of the private benefit agency being served by the traffic signals. However, IDOT will enter into a formal agreement for a private benefit signal installation only with the local jurisdictional or governmental agency.

It should be noted that an agency involved might voluntarily assume responsibility for another agency's share of the cost in order to expedite the installation or modernization.

When warrants are met for school crossing signals at public road intersections, the eligible share to each agency for the installation and modernization cost shall be split on a 50/50 basis or in proportion to the number of intersection approaches that each agency maintains.

TRAFFIC SIGNAL MAINTENANCE

At intersections lying wholly outside the Corporate Limits of any municipality, IDOT will be responsible for the maintenance of the signals.

At intersections lying wholly or partially within the Corporate Limits of one or more municipalities, IDOT will assume the following costs for the maintenance of traffic signals on State highways within municipalities:

- (A) The total costs for all signals at the intersections of two or more State highways.
- (B) The total costs for all signals at the intersections along State highways that have an average daily traffic in excess of 35,000 vehicles per day as shown on the latest published edition of the traffic volume (AADT) map. The District Engineer will determine the limits of this section within the municipality.
- (C) The total costs for all signals located at the terminals of ramps connecting to or from a State highway.
- (D) At all other intersections IDOT and the municipalities will share in the cost of signal maintenance. The cost to the municipalities will be in proportion to the number of approaches that they maintain.

ENERGY CHARGES

The division of financial responsibility for the energy charges will be as follows:

- (A) At intersections lying wholly outside the Corporate Limits of any municipality, IDOT will pay the energy charges for the operation of the signals.
- (B) At intersections lying wholly within the Corporate Limits of a municipality, IDOT and the municipality will share the energy charges according to the proportionate number of intersection approaches maintained by each agency.
- (C) At intersections lying partially within the Corporate Limits of one or more municipalities, the municipalities will be responsible for the energy charges.

Traffic Signal Master Agreements, consummated by IDOT, give municipality defined maintenance and energy responsibilities required for the operation of traffic signals. New traffic signal improvements shall contain maintenance and energy provisions in the improvement agreement adding the new traffic signals to said Master Agreement. Existing traffic signals to be modernized or relocated, shall contain maintenance and energy provisions in the improvement agreement indicating traffic signal maintenance and energy responsibilities for given traffic signal(s) shall continue to be as outlined in the Master Agreement. Certain circumstances, such as jurisdictional transfers of roadway segments affecting signalized intersections with the improvement limits, could result in a revision to maintenance and energy responsibilities contained in the Master Agreement for a given traffic signal(s). An amendment to the Master Agreement would be required.

IDOT does not share in maintenance costs for school crossing signals unless specified otherwise in the Master Agreement or if the school crossing signals are installed at public road intersections for which the maintenance costs shall be shared in proportion to the number of intersection approaches that each agency maintains.

PARKING LANES

If a new parking lane is added, IDOT will participate in 50% of the cost if the ADT is greater than 5,000 vehicles per day and if the pavement composition and lane width meets the IDOT criteria. The municipality would assume the total cost (100%) of the parking lane if the pavement composition or lane width does not meet IDOT criteria or if the ADT is less than 5,000 vehicles per day.

If an exclusive existing parking lane requires resurfacing, IDOT will participate in 50% of the milling and resurfacing costs for parking with lane widths equal to or less than the adjacent travel lanes. The municipality will assume the total cost (100%) of the milling and resurfacing costs for that portion of the parking that is greater than the width of the adjacent travel lane. The municipality will also assume 100% of any base repair cost for the entire width of the existing parking as well as any patching and curb and gutter repairs. If the municipality declines to participate, a very minimal amount of resurfacing would be done IDOT expense. (Minimal amount of resurfacing is defined as a taper across the parking lane ranging from approximately 1½ inch thick adjacent to the through lane to 1 inch or less adjacent to gutter line).

IDOT will assume the total cost (100%) associated with the milling and resurfacing of parking lanes when parking is eliminated during one or more peak hours.

The municipality is responsible for the total cost (100%) of reconstructing existing parking and any adjacent curb and gutter.

The State will not consider an improvement of a State-maintained highway unless the proposed parking or existing parking adjacent to the traffic lanes is parallel parking except as provided under Chapter 95 1/2 Art. 11-1304(c) (Illinois Revised Statutes).

Parking prohibition ordinances will be required through areas where there are no parking lanes.

ROADWAY MAINTENANCE

The State will assume the maintenance cost associated with the through traffic lanes, turning lanes, and the curb and gutter adjacent to these traffic lanes. The municipality will assume the maintenance cost associated with all other facilities including but not limited to items such as storm sewers, parkways, exclusive parking lanes, curb and gutter adjacent to the parking lanes, sidewalks, landscape features, appurtenances, etc.

UTILITY RELOCATION

Municipal utilities, installed by permit and requiring relocation, will be relocated at no expense to the Department.

Municipal utilities installed prior to the Department's assuming maintenance of the roadway will be relocated, if required, at IDOT expense.

The cost of any improvement to, or betterment of municipal utilities, would be the entire financial responsibility (100%) of the local agency.

ROADWAY LIGHTING

Existing highway lighting that is owned and maintained by the municipality, will be relocated and upgraded to current standards. New lighting, proposed by the municipality, may be incorporated into the total improvement plans.

The cost of the above work would be the entire financial responsibility of the local agency.

PEDESTRIAN AND BICYCLE FACILITIES

Sections 17 Bicycle and Pedestrian Accommodations and 48-2.04 Sidewalks of the IDOT Bureau of Design and Environment Manual establish the criteria to determine pedestrian and bicycle needs. Maintenance responsibilities as well as State and local agency participation toward the cost of these facilities included as part of a roadway construction contract on a State route shall be in accordance with Sections 5-03 and 5-05 of the Bureau of Design and Environment Manual as follows.

Maintenance Responsibilities – The Municipality will maintain any new or replacement sidewalks the Department provides in conjunction with the highway improvement project, excluding those constructed on structures. The Municipality will also maintain any bicycle paths associated with the State highway project other than that portion of the bicycle path carried on state structures. The State will assume the maintenance responsibilities for On-Road Bicycle Lanes or Wide Outside Lane and Widened Shoulders constructed as bicycle accommodations.

Cost Participation

1. New and Deteriorated Sidewalks – Use the criteria in Chapters 17 and 48 to determine the warrants for sidewalks. If these criteria are met and the Local Agency agrees to maintain the sidewalks, proportion the improvement costs associated with new or deteriorated sidewalks as follows:
 - a. New Sidewalks – Proportion the cost between the State and Local Agency at 80/20 for new sidewalks within the project termini or for short distances outside the project termini as may be required to connect sidewalks to significant pedestrian generators (e.g., schools, transit facilities). The Phase I Study Report will document the need for sidewalk construction.
 - b. Deteriorated Sidewalks – The Local Agency will pay 100% of the cost to remove existing deteriorated sidewalks. Proportion the cost 80/20 between the State and Local Agency for deteriorated sidewalk replacement when associated with a highway project. Local Agency will pay 100% of the cost of decorative sidewalks.
 - c. Sidewalk Removal and Replacement – The State is 100% financially responsible for removing and replacing existing sidewalks if such a need is caused by the construction of an IDOT highway improvement.
2. Bicycle Accommodations – Use the criteria in Chapter 17 to determine the warrants for bicycle accommodations. If these criteria are met and the Local Agency agrees to maintain the bicycle accommodation as appropriate, proportion the improvement costs associated with the bicycle accommodations as follows:

- a. On-Road Bicycle Lanes – Proportion the cost 80/20 between the State and Local Agency for the construction of new on-road bicycle lanes as indicated by the facility selection criteria contained in Chapter 17.
 - b. Wide Outside Lanes and Widened Shoulders – The State will pay 100% of all costs for wide outside lanes or widened shoulders indicated for bicycle accommodation.
 - c. New Paths – Proportion the cost 80/20 between the State and Local Agency for construction of new paths within the project termini or for short distances outside the project termini as may be required to connect paths to significant bicycle traffic generators (e.g., schools, transit facilities). The Phase I Study Report will document the need for path construction.
 - d. Path Removal and Replacement – The State is 100% financially responsible for removing and replacing existing paths if such a need is caused by the construction of an IDOT highway improvement.
 - e. Adjustment of Existing Paths – If an existing path requires adjustment due to an IDOT improvement, the State will pay 100% of the adjustment cost. The Department will construct the replacement in accordance with IDOT path criteria. The Local Agency is 100% financially responsible for path adjustments that are caused or initiated by a work request from the Local Agency.
 - f. Paths Above and Beyond Selection Criteria – If facility selection criteria for side paths are not met and the Local Agency still requests side path installation, the Local Agency is 100% financially responsible for all costs for installation of the path above those costs for the improvement identified in the selection criteria, including any necessary right-of-way and construction.
3. Utility Adjustments and Other Items – Proportion the cost 80/20 between the State and Local Agency for reimbursable utility adjustments as defined in Chapter 6, Section 6-1.03 of the BDE Manual, as well as pedestrian barriers, retaining walls, and other collateral items that are required solely for pedestrian and bicycle accommodations not necessitated by the IDOT project. The Local Agency is responsible for 100% of the costs for right-of-way, utility adjustments, barriers, retaining walls, and other collateral items that are not required solely for the pedestrian and bicycle accommodations.
 4. Right-of-Way – Proportion the cost 80/20 between the State and Local Agency for right-of-way if acquired solely for sidewalk construction. Also, the Local Agency will pay 100% of the construction costs for sidewalks associated with the construction of on-system parking not necessitated by the IDOT project. The State will pay 100% for right-of-way if additional right-of-way is required to construct an IDOT-proposed highway cross section.
 5. Local Agency Does Not Accept Maintenance Responsibilities – If the Local Agency does not agree to maintain the sidewalk, the State will not construct it, even if it is warranted. However, the State will take reasonable actions to not preclude future additions of sidewalk at such locations.
 6. Local Agency Does Not Choose To Participate – If the local agency chooses not to participate financially in the bicycle or pedestrian accommodation, the Department will request that that local agency pass a local resolution indicating their non-participation and have this noted in the Phase I Project Report.

ADDITIONAL WORK

IDOT would be receptive to considering additional highway related work items suggested and paid for by the local agency for incorporation within the improvement, providing that the additional work items would not delay the implementation of the project. Such items could include lighting, over-size storm sewer, utilities, emergency vehicle pre-emption equipment etc.

The local agency may be expected to provide plans, specifications, and estimates for such additional work that is requested to be incorporated into the contract plans for the State-owned portion of the project. Said plans and specifications shall be of such quality to facilitate inclusion in the contract package and shall be available in a timeframe consistent with anticipated contract processing schedules and deadlines.

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