



Illinois Department of Transportation

PROJECT REPORT

Widening of Illinois Route 159 in the City of Collinsville from
South Morrison Avenue to Kinloch Street

FAP 600 (IL 159)
Section: 60-(30,31,128)-1
Job No. P-98-024-04
Madison & St. Clair Counties



DECEMBER 2008

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FACT SHEET

Marked Route: IL 159

FA Route: FAP 600

Section: Section 60-(30, 31, 128)-1

County: Madison/St. Clair

Functional Classification: Other Principal Arterial

Truck Route: Class II

National Highway System (NHS) Route?: Yes

Project Description: Widen/reconstruct IL 159 from 2 or 3 lanes to 4 or 5 lanes and resurface

Design Policy: New construction / Reconstruction

Structures: 082-2023 (in St. Clair County between Cherokee St.. and S. Morrison Ave.)

Speed Limit: Kinloch Ave. to Union St. – 35 mph Union St. to City St. – 30 mph
City St. to Arrowhead – 40 mph Arrowhead to S. Morrison – 45 mph

Termini: Resurfacing from Kinloch St. to Meadow Ln.
Widening/reconstruction & resurfacing from Meadow Ln. to S. Morrison

Project Length: 2.57 miles

CRS Rating (2008): Kinloch to Indiana Ave. – 6.3 Clay St. to S. Morrison – 5.8
Indiana Ave. to Clay St. – 6.6

Lane Configuration: **Existing:** Kinloch Ave. to Meadow Ln. – 5 lanes (12 ft)
Meadow Ln. to S. Morrison – 3 lanes (varies 12 to 18 ft)
Proposed: Variable 4 and 5 lanes (11 ft)

Shoulders: **Existing:** RR Ave. to S. Clinton St. – bituminous (6 ft)
S. Clinton St. to Arrowhead – aggregate (8 ft)
Arrowhead to S. Morrison – bituminous (4 ft) + aggregate (3 ft)
Proposed: S. Morrison Rd. to Idlewood Dr. – bituminous (8 ft)

ROW: **Existing:** Kinloch Ave. to Indiana Ave. – 100 ft Indiana Ave. to Wickliffe – 60 ft
Wickliffe to Clay St. – 66 ft Clay St. to Main St. – 77 ft
Main St. to Loop St. – 66 ft Loop St. to S. Morrison – 80 ft
Proposed: Variable width throughout corridor

Land Use: Residential, Commercial

Maintenance Responsibility: Beltline Rd. to Illinois Ave. – IDOT
Illinois Ave. to Church St. – IDOT & Collinsville
Church St. to S. Morrison – IDOT

Average Daily Traffic (ADT): See **Exhibit 4** - ADT Map

I) Need for Improvement

Project Location: The Section of FAP 600 (IL 159) to be improved is located in Madison and St. Clair Counties, Illinois, and extends through the City of Collinsville as shown on the Location Map (**Exhibit 1**). The project starts south of Belt Line Road (near Kinloch Street) and runs south along the existing alignment to South Morrison Avenue (near the St. Clair/Madison County Line). The project length is approximately 2.57 miles (4.14 km).

This section of IL 159 is classified as Urban Arterial, Other. IL 159 is locally known as Vandalia Street from Kinloch Street south to Main Street and as South Morrison Avenue from Main Street south to intersection of IL 159 with South Morrison Avenue. The Illinois Department of Transportation has jurisdiction of the entire IL 159 route which includes the streets within the downtown IL 159 couple marked jointly as the streets Morrison, Clay, Vandalia and Main, in addition to the through lanes of Main St. on the west leg of intersection of IL 159 with Main St. The City of Collinsville has jurisdiction of all other side streets and intersecting roads. The City of Collinsville maintains all side streets and intersecting roads and has a maintenance agreement with the IDOT for the mainline pavement for winter snow and ice control. The IDOT has all other pavement and structure maintenance for the mainline route. This section of IL 159 is classified as a Class II truck route and is located on the National Highway System (NHS).

Description of Existing Condition: Along this section of IL 159 land use is primarily residential and commercial as shown in the Land Use Map (**Exhibit 2**). In addition, there is a historic district, two schools, and five places of worship along the project route. On-street parking currently exists along both sides of IL 159 between Grove Avenue and Clay Street, and on the east side only between Clay and Johnson. The existing parking lanes vary in width from 7 feet to 10 feet. The historic district, as described by the Collinsville Historic Preservation Commission, is between Clay Street and Wickliffe Avenue. In addition, there is one National Register of Historic Places (NRHP) site, the Brooks Catsup Bottle Water Tower located just north of South Clinton, and eight sites eligible for listing on the NRHP (please see **Appendix E** Section 106 Report for in-depth details). There are two private schools directly on the west side of the route. Sts. Peter and Paul Catholic Church and School are located between Johnson and Clay Streets and Collinsville



Christian Academy is located just north of High School Street (housed in the former Collinsville High School). The four additional places of worship are First United Presbyterian Church located at Church Street and IL 159, Son Life Church located just north of High School Street, Meadow Heights Baptist Church and Greater New Jerusalem, both located at the intersection of Claremont Avenue and IL 159.

The IL 159 roadway exhibits variable urban typical sections with curb and gutter and sidewalks ranging from five lanes at Belt Line Road, transitioning to a 3-lane section at the north project terminus near Kinloch Street, and then intermittent 2 or 3-lane sections along the remainder of the route through the City. Typical existing cross-sections are shown on **Exhibit 3**. Detailed descriptions of the roadway sections are given below.

A one-way couple system is currently being utilized to handle traffic through a one block portion of the downtown section between Clay Street and Main Street. The existing roadway transitions back to a 5-lane rural section with no curb and gutter and no sidewalks at the south project terminus located near South Morrison Avenue. Five signalized intersections exist within the project study area. The locations of the signalized intersections are:

1. South Morrison Avenue
2. Church Street
3. Main Street
4. Clay Street
5. Wickliffe Avenue.

There are forty intersecting streets, 12 alleys and 350 private and commercial entrances along this portion of IL 159. All intersecting streets, alleys and entrances drain toward the mainline pavement except for the portion of the roadway between Church Street and South Clinton and at isolated locations to the north of Tillotson. The numerous side roads and entrances vary greatly in width, drainage conditions, pavement cross-sections and pavement type. The lane widths of side roads are a minimum of ten feet and are as wide as twelve feet. The alleys and entrances vary from ten foot to fifty foot widths and have good to limited sight distance.

The existing route varies in cross section and drainage details. Starting at the southern project terminus, between South Morrison Avenue and South Clinton Street, the section drops from four 12 foot wide lanes with a bi-directional left turn lane to three 12 foot wide lanes with a bi-directional left turn lane. This section has shoulders, no existing sidewalk and drains to side road ditches. An existing concrete triple box culvert conveys approximately 230-acres of upstream flows in this area. The hydraulic report for this structure calculates overtopping of IL 159 during the 10-year storm event and a variance had been granted in the past for the freeboard clearance requirement. Even though existing calculations show IL Route 159 overtopping in the 10-year event, IDOT District 8 Bureau of Operations reports no roadway overtopping to their knowledge and noted they have occasionally cleaned brush and silt out on the upstream side of the subject structure. IDOT District 8 Bureau of Administration has no record of damage claims or complaints due to flooding at the subject structure.

Heading north, the section between South Clinton and Church Street is mainly two 12 foot lanes with a two to three foot unpaved shoulder and drains to shallow side road ditches. Near Church Street the roadway has small sections of curb and gutter and widens to permit a left turn lane at Church Street. An existing 3'x2' Box Culvert and 4'x3' Box Culvert, located at the intersection of IL 159 and South Clinton Street, convey approximately 80-acres of upstream flows in the area. IDOT and the City of Collinsville Street Department personnel have identified hydraulic capacity issues with this system. The outlet of these structures ties to an existing 42-inch CMP pipe that runs along the north side of South Clinton, which in turn ties to an existing 36-inch CIP that discharges into Canteen Creek on the east side of the railroad tracks. Also within the section a 4-foot sidewalk is located on both sides of the roadway from North Loop Street to Church Street.

The section of IL 159 through downtown Collinsville varies greatly, but is all curb and gutter with subsurface drainage. Between Church Street and Main Street the roadway consists of three 12 foot lanes with a bi-directional left turn lane or parking and 4 to 5 foot sidewalks on both sides of the roadway. The one-way pair begins at Main Street and ends to the north at Clay Street. The travel lanes are 12 feet wide and there is parking adjacent to the many commercial businesses throughout this section.

IL 159 between Clay Street and Wickliffe Avenue is three lanes with a center bi-directional left turn lane and a 4 to 5 foot wide sidewalk on both sides. This section contains the historic district and Saints Peter and Paul Church and School. There are many driveways and alleys in this section that are accessed using the turn lane. Surface drainage is collected by a curb and gutter system with subsurface drainage.

North of Wickliffe Avenue the area is mixed commercial and residential. The curb and gutter section has two 12 foot lanes with a 12 foot bi-directional left turn lane and 4 to 5 foot sidewalks on both sides. Locations along this section have experienced flooding. The existing sump location near the Old Collinsville High School has been identified by IDOT and the City of Collinsville Street Department as having hydraulic capacity issues. Also, in the northernmost section of the project, there is flooding along IL 159 during peak rainfall between Meadow Lane and Kinloch Street. The flooding is due to a lack of storm sewer in the area and a minimum vertical grade of 0.12% along the existing roadway.

Operational and Safety Analysis: The operational and safety aspects of this section of IL 159 reveal a need for improvements. The existing horizontal curves on IL 159 are adequate for the posted speed limit, and although there is one vertical curve just south of Church Street that is deficient, the large number of side road intersections and private and commercial entrances with deficient geometry coupled with the roadway operating above capacity are the predominant geometric reasons for a need for improvement. IL 159 has been improved to 5 lane sections with twelve foot lane widths both north and south of this project. The reduced number of lanes, the increased frequency of sideroads, the reduced speed, and increased percentage of local traffic volume within this urban section (as compared to the less densely urbanized sections to the north and south along IL 159 that have already been improved to 5 lanes) all work in conjunction to reduce the capacity of the roadway and increase congestion within this section. The deficient urban characteristics of this section of IL 159 are witnessed by the number, distribution and type of crashes as discussed below and in **Exhibit 5** (Crash Analysis).

During the CSS process there was consensus for a need for operational and safety improvements to this section of the route. One of the highest priorities identified by the

Community Advisory Group (CAG) was the traffic capacity and safety of the route. The problem statement developed by the CAG reflects this: “The transportation problem in the City of Collinsville along Illinois Route 159 is the flow of vehicular and pedestrian traffic and safety within a highly urbanized and historically significant section of the community that promotes and sustains economic development and redevelopment of the Central Business District.”

The recent crash history shows during the years 2004 through 2006, there were a total of 369 crashes along this section of IL 159. As a result of these crashes, 155 personal injuries resulted with no fatalities. Nearly 57% of these incidences involved rear-end collisions. The remaining 43% were a combination of 18% turning, 9% angle, 8% parked vehicle/animal/side-swipe, 6% fixed object, and less than 1% for pedestrian/bicyclist, and less than 1% for head-on type crashes. The day/night crash ratio during this period was found to be 4.3:1, with nighttime crashes representing 18.6% of the total within the study area. The fact that the primary types of crashes found within the section are rear-end or turning is consistent with a need for capacity improvements. This section of IL 159 has increased traffic congestion and a decreased Level of Service at the intersections, resulting in an increase in stop and go traffic, which likely causes of a majority of these crashes.

Within the limits of the IL 159 project route, there are no areas that appear on the 5% Selected Segment list, which are defined under the SAFETEA-LU Act as the top 5% public roadways with the most severe safety needs in the state. Even though there are no 5% Selected Segments, the intersection of IL 159 and East Wickliffe Avenue had 26 crashes occur from 2004 to 2006. 85% of these crashes involved rear-end crashes. The remaining 15% were the result of a turning type crash. The crashes at Wickliffe Avenue are primarily a result of the geometry of the intersection. Geometric issues at IL159 and Wickliffe Ave include:

- Sight distance deficiencies for the northbound left turn from IL 159 to Wickliffe or to the angled intersection of Keebler Road into Wickliffe (See **Exhibit 5** - Crash Analysis).

- Conflicting movements due to the introduction of traffic from southbound Keebler onto westbound Wickliffe very near the mainline IL 159 intersection and westbound Wickliffe onto northbound Keebler.
- Insufficient turning radii for movements to and from Keebler
- Poor sight distance for vehicles approaching the intersection due to the proximity of buildings and approach angles.

The roadway currently operates at a Level of Service (LOS) that is nearing or above capacity during peak hours at several locations within this section. Most of the signalized intersections have projected construction year LOS of C and a design year LOS between D and F, showing the need for significant capacity improvements. The overwhelming number of rear-end crashes and the wide spread distribution of the crashes further supports the need for capacity and geometric improvements throughout this section of IL 159. With the proposed improvements the LOS can be improved to a LOS C or better for all of the signalized intersections for both the projected construction year and design year traffic volumes.

The one way couple in downtown Collinsville results in non-standard and deficient intersections on IL 159 at South Morrison Avenue and Main Street, Main Street and Vandalia Street, Clay Street and Vandalia Street, and Clay Street and South Morrison Avenue. Issues within this downtown block are primarily related to safety and mobility and include:

- The necessity of through traffic to slow and make the turns results in additional delay related to queuing of traffic.
- Turns on the mainline pavement and the intersection of the one-way couples with two way through traffic can cause some confusion for unfamiliar travelers.
- The proximity of buildings to intersection requiring turning movements also create safety concerns.

All signalized intersections, other than at South Morrison Avenue, are geometrically deficient for all design vehicles except a Single Unit. There is no record for the design vehicle used at the existing intersections. South Morrison Avenue was designed to accept Multiple Unit (MU) 55. The remaining four signalized intersections can only allow a MU, of



any size with encroachment into the adjacent lane, oncoming lanes or across median areas.

Project Purpose: The purpose of the proposed project is to improve traffic capacity, to reduce traffic congestion, to improve safety and to enhance economic opportunities of the IL-159 corridor within the City of Collinsville. The previously mentioned problem statement developed by the CAG reflects this: “The transportation problem in the City of Collinsville along Illinois Route 159 is the flow of vehicular and pedestrian traffic and safety within a highly urbanized and historically significant section of the community that promotes and sustains economic development and redevelopment of the Central Business District.”

Please refer to **Appendix C - ECAD** for the full Purpose & Need Statement.

Throughout the CSS process, the stakeholders identified the need for the improvements to IL 159 to continue the ongoing economic re-vitalization and growth of downtown Collinsville. IL 159 currently does not provide the necessary access to aid the downtown business district to expand. In addition, the congestion that currently exists has impeded the economic growth of the downtown businesses due to the fact that people avoid the congestion and take alternative routes. Coordination with community and business stakeholders revealed that access and congestion have had a negative impact in the economic life of the downtown business district. This coordination resulted in the following suggestions for ways to improve the economic life of downtown Collinsville: access should be improved, the central business district needs to become a destination, and the transportation system needs to fit within the “main street community.” Future traffic projections indicate that traffic along IL 159 will increase and congestion along the route will worsen.

The CSS process helped to outline how the roadway improvements are designed to address the needs of the community. The Illinois Route 159 improvement will address existing issues with traffic congestion, capacity deficiencies, crashes, overall safety and to provide for economic opportunities along existing IL 159 in downtown Collinsville. IDOT and the City of Collinsville have studied the need for improving the traffic mobility along IL 159. The department has developed various plans for improving IL 159 from the early

1980's that met various roadblocks. The city has undertaken various studies that also met with similar results. The concerns of downtown businesses, local residents, the historic areas, environmental concerns, traffic safety and mobility could not be addressed satisfactorily to move the plans forward.

In July of 2005, the Illinois Department of Transportation (IDOT) started a study to address the identified needs for this project. Context Sensitive Solutions (CSS) guidelines were put into place in September of 2005. The department immediately implemented CSS for this project. The department used the CSS process requiring detailed stakeholder identification and involvement in their efforts to develop a plan to improve IL 159. The CSS process is unique in developing context for the various concerns that allows consensus among various stakeholders. Appropriate context is then incorporated into the engineering design for the project.

As a part of the CSS approach to stakeholder involvement, a Citizen's Advisory Group (CAG) was formed to define the context of the improvement, provide input on both the purpose and need for this project and to comment on potential transportation solutions developed for this project. Membership of the CAG is drawn from a cross-section of affected private citizens, groups, agencies, and organizations. The CAG developed the problem statement as shown above, that describes the need for roadway improvements along IL 159 through Collinsville. The CAG also developed the context that the design improvements should address. The following context items were determined by consensus of the CAG:

- Safety
- Increased Traffic Capacity
- Limit impacts to private property
- Maintain and enhance downtown Collinsville as a destination

Maintain the context of the historic district

II) Description of Proposed Improvements

Introduction: The scope of the project primarily included widening the roadway to a basic cross-section of four travel lanes with a bi-directional left turn lane at various locations

throughout the entire project length. To accomplish this goal the project will require the acquisition of right-of-way and temporary easements, building demolition, significant earthwork, Structure replacement, pavement removal and replacement, pavement widening, storm sewer and utility removal and replacement, curb and gutter replacement, sidewalk removal and reconstruction and various other items. The CSS process helped the department decide which portions of the route would differ from the basic cross-section. The following sections of the report describe the differences and the processes that determined the differences in the basic cross-section.

Design Criteria Used: This project has been developed utilizing criteria the Illinois Department of Transportation's - Bureau of Design and Environment Manual.

The reconstruction of IL-159 from South Morrison to Meadow Lane primarily uses Chapter 48 Urban Streets and Highways and Chapter 36 Intersections.

The improvement from Meadow Lane to Beltline Road is a simple resurfacing improvement of the section and will not follow 3R guidelines.

The proposed Typical Sections are shown in **Exhibit 3** and a comprehensive list of Design Criteria used is attached in **Exhibit 15**.

Geometric Improvements: The proposed four-lane and five-lane improvements are necessary to accommodate the future traffic along IL 159 from South Morrison Avenue to Meadow Lane in Collinsville. The areas with a bi-directional left turn lane will allow left turns to be made into businesses, residences and side roads without impeding through traffic on the remaining two through lanes in each direction. The presence of two through lanes in each direction will allow passing movements, further reducing traffic congestion.

Alternatives Considered: There were 24 alignment design alternatives developed and considered as a result of the CSS process. Through the CAG process the roadway was divided into 4 sections that correspond to specific context related items. The four sections were further divided into the 24 alternatives. The sections are:

- South Section – South Morrison Avenue to Church Street
- Downtown Section – Church Street to Clay Street
- Historic Section – Clay Street to Wickliffe Avenue
- North Section – Wickliffe Avenue to Kinloch Street

An alternatives evaluation matrix was developed to assist in selection of the design alternative used to best fulfill the projects purpose and needs. The matrix was used by the PST to assist in evaluating all of the design criteria for the numerous alternatives. Further discussion of the evaluation matrix can be found in the ECAD (Appendix C). The matrix can be found in **Exhibit 18** - Alternatives Evaluation Matrix.

A brief description of the alignment alternatives that were engineered is given below:

South Section:

From South Morrison to South Clinton, **both** centered and best fit

- a. Four 11 foot lanes with bi-directional left turn lane and curb and gutter
- b. Four 12 foot lanes with bi-directional left turn lane and curb and gutter
- c. Four 11 foot lanes with bi-directional left turn lane and shoulders
- d. Four 12 foot lanes with bi-directional left turn lane and shoulders
- e. Move intersection of South Clinton to south

From South Clinton to Church, **both** left and best fit

- a. Four 11 foot lanes with curb and gutter
- b. Four 12 foot lanes with curb and gutter

Downtown Section:

Best fit throughout, 11 foot lanes with curb and gutter

Best fit throughout, 12 foot lanes with curb and gutter

Historic Section:

Best fit throughout

- a. Four 11 foot lanes, curb and gutter, 6 foot wide center raised median
- b. Four 11 foot lanes, curb and gutter, double yellow striped
- c. Move alignment east to avoid historic home south of Wickliffe
- d. Move alignment east to avoid Sts Peter and Paul Church portico

Centered fit throughout

- a. Four 11 foot lanes, curb and gutter, 6 foot wide center raised median
- b. Four 11 foot lanes, curb and gutter, double yellow striped, all private entrances closed, right in right out at cross streets and alleys

North Section

Centered fit throughout

- a. Four 11 foot lanes, bi-directional left turn lane
- b. Four 12 foot lanes, bi-directional left turn lane

Best fit throughout

- a. Four 11 foot lanes, bi-directional left turn lane
- b. Four 12 foot lanes, bi-directional left turn lane

Vertical alignment changes will be made to allow for mainline and side road drainage and sight distance improvements. This will complement the new side road profiles and provide drainage both to storm sewer inlets throughout most of the project limits and towards the limited number of side road ditches primarily on side roads. The proposed section will have concrete curb and gutter, and the storm sewer will be reconstructed. Portions of the roadway have a horizontal cross-slope that is very flat and requires some improvement to provide adequate slope for drainage. Between station 126+00 and 134+00 the roadway has a very steep superelevation of .07 ft./ft/ that will be improved by reducing it to .035 ft./ft.



The downtown section between Main Street and Clay Street on IL 159 has been completely redesigned from a one way couple around the block between Main, Clay, Morrison and Vandalia streets to a four lane roadway traversing the block with two lanes in each direction. This improved alignment will ease flow of traffic through the section, create a more uniform roadway and improve sight distance and safety.

Within the historic section between Johnson Avenue and Wickliffe Avenue the roadway will be shifted to the east to allow a four lane improvement that will avoid a historic property on the west side of the roadway, just south of Wickliffe, as recommended the Illinois Historic Preservation Association. As a result of the CSS process, between Clay and Wickliffe streets the roadway will be designed as a four lane with no private entrances and no bi-directional left turn lane to minimize impacts to both properties and minimize the effects on through traffic. This complies with the recommendations by the CAG in their list of context sensitive criteria.

Right-in, right-out only, side road and alley accesses were included within the section between Clay Street and Wickliffe Avenue. This was done because there are four lanes with no bi-directional left turn lane in order to minimize traffic conflicts for improved safety. Elimination of private entrances along this section of IL 159 was possible because there are alleys behind every property on both the east and west sides of the road. The proposed project will require access from homes directly onto IL Route 159 (Vandalia St.) to be eliminated. The reason for this course of action is to improve the safety of the roadway. Currently, this segment of the roadway does experience a high accident rate; mainly rear-end crashes. In order to decrease the probability of these types of crashes, residents will have to access IL Route 159 via the alley ways behind their homes and connect into the side streets: Madison Ave., East Johnson Ave., and Wickliffe Avenue and then on to IL Route 159. The study team reviewed and studied the possible need for geometric and pavement improvement to the alleys as a result of the possible traffic increase. This was discussed with the city during special meetings and it was determined that there were only three primary access drives eliminated from IL 159 and added to the alley system. As a result, it was decided by the city and the department that no alley improvements were necessary.

Each of the signalized and non signalized cross road intersections will be geometrically improved to meet current design criteria. Intersection sight distances (ISD) at every cross road and entrance were checked and/or improved, unless a design exception was justified and approved. In general, many design exceptions were required to fit the intersection improvements within the context of the community. All required design exceptions have been approved by the FHWA and BDE.

The section of IL 159 from South Morrison Avenue to South Clinton Street will be widened from the existing 3-lane roadway to 5 eleven foot lanes, including a bi-directional turn-lane, and curb and gutter.

The South Clinton Intersection will have radius improvements to accommodate a WB-50 design vehicle on the west leg and a WB-55 design vehicle on the east leg. A significant profile correction will be made on S. Clinton St. to allow for better pavement drainage running off of mainline IL 159 pavement while also providing an acceptable approach grade for eastbound traffic on South Clinton. In addition, very near this intersection McKinley Street will be realigned both vertically and horizontally to accommodate the S. Clinton geometric improvements.

The section of IL 159 from South Clinton Street to Loop Street will be widened from 2 lanes to 5 eleven foot lanes with curb and gutter and sidewalk on both sides.

South Loop Street and South Chestnut will be realigned to a more perpendicular intersection with IL 159, providing significant sight distance improvements for vehicles entering from the sideroads. These sideroads are local streets and the realigned intersection may therefore accommodate a SU design vehicle or a WB-50 with encroachments. A significant vertical profile change will be made on the South Loop Street leg to further improve safety as it relates to approach grade and sight distance.

The section of IL 159 between Loop Street and Angle Street will transition back to 5 eleven foot lanes including a bi-directional left turn lane, with curb and gutter and sidewalk on both sides.



The section of IL 159 from Angle Street to Main Street will be widened from 2 lanes to 4 eleven foot lanes, with intermittent left turn lanes at the side roads, with curb and gutter and sidewalk on both sides.

Horizontal improvements will be made at the Intersection of Church Street and IL 159 to accommodate current design vehicles and sight distance. This signalized intersection will experience radius improvements to allow for turning movements of a WB-50 design vehicle with the necessary set back and sight distance.

The intersection of IL 159 and East Main Street will be reconfigured to accommodate realigned IL 159 which is necessary as part of the removal of the existing one-way pair system between Main and Clay Streets. This intersection will accommodate a WB-65 design vehicle. The east leg of East Main Street will be changed from one-way eastbound to two-way in order to allow vehicle movements in both directions, thus increasing mobility in the CBD. The west leg will continue to be a one-way (east-bound only) roadway. The west leg will be restriped for a left turn lane, a combined left turn and through traffic lane, and a right turn lane. The south leg of IL 159 will have two northbound and two southbound lanes, and the north leg will also have two southbound and northbound lanes in addition to a southbound left turn lane for eastbound turning movements onto East Main Street.

The section from Main Street to Clay Street will be widened from the existing 2 and 3 lane roadway to 5 lanes with curb and gutter and sidewalk on both sides. This eliminates the existing one way couple system with northbound traffic utilizing Main/Morrison to Main/Vandalia to Vandalia/Clay, and southbound traffic utilizing Vandalia/Clay to Clay/Morrison to Morrison/Main. Removal of the one-way couple system will improve safety by eliminating the limited sight distance intersection at Morrison and Clay. The mobility and safety will be improved by eliminating left turn lane/thru lane conflicts at Main and Vandalia and at Morrison and Clay.

Similar to East Main, the intersection of IL159 with Clay Street will be reconfigured to accommodate realigned IL 159 which is necessary as part of the removal of the existing one-way pair system between Main and Clay Streets. This intersection will accommodate



a WB-65 design vehicle. The west leg of Clay Street will be converted from one-way westbound to two-way traffic in order to increase mobility for nearby businesses as well as a nearby school. The west leg will have a left turn lane for northbound turning movements onto IL 159. The north and south legs of IL159 will both have two northbound and southbound lanes and a left turn lane.

The section of IL 159 from Clay Street to Wickliffe Avenue is a highly residential area within a locally designated historic district. This section will be widened from 2 lanes to 4 eleven foot lanes, with intermittent left turn lanes, some right-in right out side-road intersections, with curb and gutter and sidewalks on both sides. In addition, the front parking and driveway accesses have been removed from the properties as described previously.

At the signalized intersection of IL 159 and Wickliffe, Keebler Road will be removed from the intersection and a cul-de-sac will be constructed just outside the limits of the intersection to allow room for local and emergency vehicles to turn around. The intersection will be widened primarily on the east side of the existing pavement to provide an improved horizontal alignment through the intersection. Turning movements for a WB-50 design vehicle will be accommodated with the proposed improvements. Two through lanes in each direction and a left turn lane will be constructed on mainline IL 159. Both legs of Wickliffe will have one through lane and a turn lane for left turning movements onto IL 159.

The section of IL 159 from Wickliffe Avenue to Meadow Lane will be widened from 3 lanes to 5 eleven foot lanes with curb and gutter and sidewalk on both sides. All private and commercial entrances will be maintained.

The intersection of IL 159 with East Park and Spring Street will be newly signalized. This future signalized intersection meets Warrant 3 (Peak Hour) in the Manual for Uniform Traffic Control Devices (MUTCD), which warrant is intended for use at locations where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic (Park Avenue) suffers undue delay when entering or crossing the major street (IL 159). This intersection will also be widened to provide for the widened cross-section on IL



159 and one through lane and a left turn lane in each direction on the sideroads. Radius improvements will be made as well to accommodate a WB-50 design vehicle.

Due to the increased IL 159-bound traffic being diverted from Keebler at the Wickliffe Avenue intersection to Park Avenue-IL 159, the radius improvements will be required at the intersection of Keebler and Park Avenue to ensure the minimum accommodation of a single-unit truck for the northbound to eastbound movement.

The intersection of Autumn Avenue and IL 159 will be realigned to a more perpendicular angle of intersection to improve sight distance and turning movements. A single-unit truck will be accommodated with the proposed improvements as will a WB50 with encroachments.

The existing 5-lane section of IL 159 from Meadow Lane to Kinloch Avenue will be milled and resurfaced to match the existing pavement cross section.

Preliminary Pavement Design:

The depths of the newly constructed pavement and proposed widening and resurfacing will be determined by the department during the Phase II plan preparation. Concrete or bituminous pavement can be used for the reconstruction. Typically, with WB 65 loading and a high number of turning movements and traffic signal stopping areas a reinforced concrete pavement is preferred. The minimum thickness of concrete pavement in this type of design is normally 10 inch or thicker concrete pavement or 12 inch or thicker bituminous pavement over an improved subgrade.

Pavement Drainage: The proposed drainage study begins at the south end of the reconstruction of IL 159 and continues north, through the City of Collinsville, to approximately 350-feet north of Kinloch Avenue. The entire project lies within the City of Collinsville and is made up of nine (9) major outfall basins. Flows from Outfall Basins 1-6, encompassing the area from the beginning of the project at South Morrison, to Mary Lane



to the north, ultimately discharge to the east to Canteen Creek. Flows from the remaining three (3) Outfall Basins discharge to the west and ultimately to the Schoolhouse Branch.

The IL 159 drainage improvements are located in an urban area with a variety of commercial developments, as well as single family and multi-family residential developments. The primary mode of storm water conveyance is underground storm sewer pipes.

The urban nature of this project necessitates curb and gutter throughout the majority of the length of improvement. The proposed storm sewer system will discharge into existing state or city storm sewers. Many of the storm sewers that will connect to those constructed with this project are undersized or in need of improvement. It is the responsibility of the department to maintain the existing flow rates into the city storm sewers. Since the roadway widening will increase the amount of water conveyed into the city system it is necessary to provide inline detention for this increase. The attached drainage report details the dry detention basins, as well as the pipes which are oversized for inline detention.

There are two above ground dry detention basins designed in the south section of the project. The first detention facility is located along the west side of IL 159, just north of Cherokee Drive. This facility is designed to detain the increase in impervious area associated with the improvements from South Morrison to South Clinton, as well as incorporate any existing detention areas that may exist today. The second detention facility is located along the west side of IL 159, just south of South Loop Street. This facility is designed to detain the increase in impervious area associated with the improvements from South Clinton to Church Street, as well as incorporate any existing detention areas that may exist today. All other detention areas to the north have been detained in the proposed storm system via inline detention.

A copy of the IL 159 Final Drainage Report can be found in the **Appendix F** of this report.

Design Exceptions: The location of this roadway is through the center of Collinsville. Residences, businesses, existing side-road and utility concerns, schools, churches and

historically significant properties all exist along the route and required significant coordination to best meet IDOT Design Criteria. (Exceptions are shown in **Appendix B**)

Right-of-way:

Acquisition Required – A total of 219 parcels having a combined area of 8.00 acres of proposed right-of-way, 0.47 acres of permanent easements, and 11.55 acres of temporary easements will be needed for this improvement. All of the parcels are either zoned commercial or residential.

There are a total of twenty-nine (29) displacements required for the improvement. These displacements include four (4) residences, four (4) rental units, and twenty-one (21) businesses. The Public Involvement Meeting was held on April 16, 2008 in the City of Collinsville to provide information to the public and property owners about the IL 159 project (comments and responses to the comments can be found in the Public Involvement Record, **Exhibit 14**). An additional meeting held with only the property owners of the residential, rental unit, and business displacements was held on May 21, 2008.

Structures: This project has one structure. The structure (#082-2023) is a 133.0 ft. long triple cell concrete box culvert located just south of Cherokee Street at station 106+52.89 and crosses over a branch of Canteen Creek. The existing triple 6'x2.5' box culvert was built in 1934 and extended twice on the downstream (east) end in 1985 and 2001. Both extensions consist of three cells with the two outer cells at 6.25 ft. by 5.1 ft. and the center cell at 6.5 ft. by 5.1 ft. Two concrete headwalls with wingwalls are located at both the upstream and downstream ends. The culvert is at a skew of 59.6 degrees from the roadway centerline. The roadway over the culvert is in a tangent section with no vertical curvature and the guardrail is attached to the west headwall and wingwalls.

The culvert inspection performed on August 10, 2006 involved a full visual inspection of all aspects of the culvert including the inside of the barrels (which required an inspection entering a confined space). This inspection found the culvert to be in fair condition with an overall condition rating of 5 (see Bridge Condition Report (BCR) – **Exhibit 8**). The Bureau

of Bridges and Structures approved the BCR, subject to changes and recommendations noted in their April 11, 2008 Memorandum also found in **Exhibit 8**.

As a result of the recommendations provided by the Bureau of Bridges and Structures the existing triple box culvert is proposed to be removed and replaced with a 9'x6' double box culvert. Due to site constraints upstream from the culvert, a drop box is being proposed. A concrete apron and diversion walls are being proposed on the downstream end. The existing high water elevations (H.W.E.) for the 10-year, 50-year and 100-year event are 465.6, 467.3, and 468.1 respectively. The proposed H.W.E.'s for the 10-year, 50-year and 100-year event are 465.3, 466.8, and 467.4 respectively. These hydraulic calculations for the subject structure show IL 159 overtopping in the 10-year storm event and will require a freeboard clearance variance. This variance has been submitted and approved by the District Hydraulic Engineer.

Traffic Signal Modernization: This section of IL 159 has four existing signalized intersections at Church, Main, Clay and Wickliffe that will be improved. The signalization at these locations will be replaced to complement the widened roadway and geometric improvements of the intersections. Additionally, the intersection of IL 159 at Park and Spring Street will be newly signalized since it meets Warrant 3 (PeakHour) from the Manual of Uniform Traffic Control Devices (MUTCD). Traffic Volumes and geometrics for each of these intersections are included in the Intersection Design Studies (**Exhibit 9**). The mid-block pedestrian signal located approximately 200 ft. north of E. Johnson Street (near station 169+00) that serves the SS. Peter and Paul School will be replaced. Additional mid-block pedestrian signals will be installed approximately 200 ft. north of Cherokee Drive (near station 110+50) and approximately 170 ft. north of High School Avenue (near station 209+00) at the high school building. The pedestrian signals will be funded by and maintained by the City of Collinsville. The City will be presented a letter of intent regarding this matter in Phase I.

The traffic signal construction costs are 80% federally funded the remaining 20% of the funding for each intersection will be proportionate to the number of legs of through or driving lane jurisdiction that the city and the state possess.

Lighting: This existing roadway has street lighting from the north limits of the project (at station 239+29.51) to South Clinton St. (near station 125+00). This existing lighting is set on electric utility poles throughout. From South Clinton St. (station 125+00) to the south limits of the project at South Morrison Ave. (station 102+00) street lighting only exists at Cherokee St. and South Morrison Ave. intersections. The City of Collinsville is responsible for maintaining the lighting. Since Ameren IP owns the utility poles along this section of IL 159, IDOT will coordinate relocation of the poles with Ameren IP. The City will need to coordinate with Ameren IP if they want to reinstate the lighting on their poles. Ameren IP will be responsible for reimbursement from the City without involvement from IDOT. The existing utility poles will be relocated in certain areas to facilitate the proposed roadway improvements. Any lighting upgrades will be the responsibility of the City of Collinsville.

On Street Parking: On street parallel parking currently exists in Collinsville along IL 159 in the area of the central business district between Grove Avenue and Johnson Street. The parking usage is primarily by customers and employees of locally-owned commercial retail businesses. Existing parking lane widths vary from 7 to 10 feet. The widening of IL 159 to a 5-lane roadway, while minimizing the right-of-way impacts, necessitates the removal of all existing on-street parking. Within the Central Business District (CBD), approximately 85 on-street public parking spaces will be impacted by the proposed roadway improvement due to widening, addition of turn lanes, and intersection geometric improvements. Proposed mitigation of this parking loss is to replace the loss of the on-street parking spaces with off-street only parking facilities situated at strategic locations throughout the CBD, while still maintaining as much on-street parking on local cross roads as possible. The off-street locations currently being proposed were arrived at by evaluating existing and proposed parking needs on a segment-by-segment basis (See **Exhibit 16** - Parking Impact Maps). Example: Parking impacts and needs for businesses on the east side of IL 159, bound by Main and Clay Streets, (“Section 3” on the Parking Impacts Map) were evaluated by studying only the off-street mitigation options along Vandalia Street to be dead-ended in conjunction with the excess area bound by realigned IL 159 and Vandalia St. The reason for segmentalizing the parking impacts study was to offer a more realistic evaluation of likely public parking usage considering factors such as proximity of parking areas to businesses, major street crossings as potential barriers to pedestrians, and alternative nearby parking areas. Similar rationale was used in establishing the other

parking areas or “Sections” that were evaluated throughout the CBD in the study. Specific proposed off-street mitigation areas included: the excess land bound by realigned IL 159 and N. Morrison (the entrance into the parking lot will be signed *No Thru Traffic*, and no bump-out will be made), two currently vacant parcels just south and north of the east leg of Johnson Avenue, and the soon to be vacant parcel at the southeast quadrant of IL 159 and Main Street. In addition, existing off-street parking areas not impacted by the project, but nonetheless still satisfying needs in particular sections, were analyzed as well. These existing off-street parking areas are located north and south of the west leg of Main Street, approximately mid-block towards the next major parallel street, Center Street. The parking impacts study concluded that in consideration of all impacted on-street parking spaces and if all proposed off-street mitigation options were implemented, a net gain of 10 parking spaces could be realized within the CBD with this project resulting in a total of 184 available parking spaces within the area studied. This net gain would then satisfy one previously stated need for the project which is the economic revitalization of downtown Collinsville. The aforementioned parking impacts study was closely coordinated with the City of Collinsville (See **Appendix A** - Public Involvement Record for meeting correspondence). Upon completion of the project the subject parking areas will be maintained by the City of Collinsville.

Sidewalks: There are existing sidewalks along IL 159 from Loop Street (approx. Sta. 145+00) to the north end of the Project (Sta. 237+50). The existing sidewalks and crosswalks do not meet existing “Americans with Disabilities Act (ADA)” accessibility guidelines at most of the intersections. Widening of the roadway will require removal and replacement of almost all of the existing sidewalk and construction of curb ramps. New sidewalk will be constructed from Cherokee street (near Sta. 108+00) to Claremont St. (approx. Sta. 232+00). All proposed sidewalks will meet ADA accessibility guidelines.

A design modification was made to existing sidewalk to meet the ADA criteria at the southwest corner of the Wickliffe intersection. The existing condition does not meet ADA criteria. This project will not make the southwest corner ADA compliant, but will provide ADA access all along the west side of IL 159 at Wickliffe. The existing steps must remain to eliminate impacts to the historically significant stone wall that is immediately south of the steps. ADA access to this section of sidewalk will be from the south. ADA type traffic

traveling south on the west sidewalk of IL 159 will cross over to the east sidewalk of IL 159 at Wickliffe and cross back to the west sidewalk over IL 159 on ADA compliant crosswalks at Madison Avenue.

Bikeways/Trails: Bicycle lanes were considered for the proposed project. The City of Collinsville is not currently proposing a new bicycle route within the project limits. The addition of bicycle lanes along IL 159 would have required additional right of way. One of the primary context requirements is to limit the amount of private property acquired for the improvement. The CAG considered in detail bicycle routing and the additional right of way and decided not to add the needed ROW. Also, the city preferred to encourage the use of existing less trafficked parallel city streets for bicycles. The records of the CAG meetings and stakeholder meetings with the City of Collinsville document this information which can be found in **Appendix A** - Public Involvement Record.

Mail Delivery: The US Postal Service delivers mail throughout the project area by mail carrier. There are no roadside mailbox turnouts located along this section of IL 159. It is not anticipated that mail delivery service will be interrupted during construction.

Mass Transportation: Five bus routes operated by Madison County Transit Services currently serve the Collinsville area: the Collinsville Shuttle Route, the Edwardsville-Glen Carbon Express, two Collinsville Metro-bus Routes, and the Edwardsville-Collinsville Route. Also the St. Clair Square Route operated by St. Clair County serves as a link to St. Clair County from Collinsville (see Mass Transit Routes - **Exhibit 10**). The existing project will have no impact on two of the routes, and with lanes open to traffic in both directions, only small delays should result in minimal impact to the four routes that utilize IL 159 within the project area.

Utility Adjustments: The following utilities are located on state property within the project limits according to coordination meetings and field locates provided by a SUE consultant hired by the Department. The following involvement is anticipated at the time of this report:

UTILITY COMPANY	TYPE OF UTILITY	ANTICIPATED INVOLVEMENT
City of Collinsville	Water	Water Lines will require replacement throughout.
City of Collinsville	Sanitary Sewer	Sanitary sewer will require adjustment in certain areas.
AT&T	Telephone /FO	Telephone lines will require adjustment in certain areas.
Ameren IP	Natural Gas	Gas lines will require adjustment in certain areas.
Ameren IP	Electric, lighting	Electric lines and lighting will require adjustment in certain areas.
Ameren IP	Electric	Electric lines will require adjustment in certain areas.
Charter	Cable TV	Cable TV lines will require adjustment in certain areas.
McCloud	Fiber Optic (FO) Communications	FO lines will require adjustment in certain areas.

All of the utility companies within the project limits are JULIE members.

There is a utility conflict between the construction of proposed storm sewer and the existing water mains throughout the entire project length. The City of Collinsville will relocate the portions of the water mains that conflict with this improvement.

Another utility conflict is between the proposed storm sewer and existing sanitary sewer along IL 159 between High School Street and Wilson Avenue and at the intersections at Clay Street, Wickliffe Street and Park / Spring Street.

With the widening of the roadway, extensive power pole relocation will be necessary. Subsequently this will require electric, telephone and cable TV relocations. Additionally, gas lines will require relocation throughout the project. The actual gas line relocations will depend on their depth as well as station offset, which will be determined by the utility in the design phase.

Encroachments:

Encroachments for this project have been identified (see Encroachments - **Exhibit 17**).

Landscape/Roadside Development: All areas disturbed by the construction will either be seeded or sodded. Upon the setting of right-of-way and easement limits, a vegetation survey will be completed. This survey will determine the trees that will be removed and make recommendations for their replacement in accordance with IDOT Departmental Policy D&E-18 “Preservation and Replacement of Trees”.

In areas of excess right of way, additional green area was created in the Downtown Business District to beautify the area surrounding the newly constructed off-street parking areas. The department will place stamped concrete or asphalt in the crosswalks from Church Street north through Wickliffe. The stamp pattern will match what has already been used in downtown Collinsville. The aesthetic amenities for this project are a result of stakeholder involvement. Please see the “Public Involvement” section for a listing of stakeholder input.

Erosion Control Plan: In Phase II a Storm Water Pollution Prevention Plan will be made and implemented during construction. This plan will include temporary erosion control measures to be used in order to minimize the loss or displacement of soil from the project site. These measures will likely include erosion control fences, sediment basins, sodding, seeding, mulching, and inlet protection.

In accordance with IDOT Memo 98-60, an erosion and sediment control plan will be designed to incorporate measures in order to minimize sedimentation effects. Through proper use of the plan and the Standard Specifications for erosion and sediment control, no long-term adverse impacts to the storm water quality will occur.

III) Environmental Survey Summaries

This project was processed as a Categorical Exclusion, Group II through preparation of an Environmental Class of Action Determination Report (ECAD) (**Appendix C**). The following is a summary of the environmental analyses that were completed for this project, environmental obligations per IDOT policy, and the ECAD conclusion.

Environmental Clearances

The following are the clearance dates received for biological, cultural, and special waste. . Please see **Exhibit 12** for the clearance memos.

- January 5, 2009 – Special Waste Waiver
- April 29, 2008 – Cultural Resource Concurrence
- March 19, 2008 – Biological Resource Review

Environmental Analyses

A **Section 106** determination was required for the proposed project. Through historical resource surveys and coordination with the Illinois Historic Preservation Agency (IHPA), IDOT identified one National Register of Historic Places (NRHP) site, eight sites eligible for the NRHP, and a locally designated historic district. IDOT avoided these areas to the extent possible and in areas where the land acquisition was necessary; the amount of ROW was minimized. A Section 106 Report (**Appendix E**) has been completed and coordinated with the State Historic Preservation Officer (SHPO). A Determination of No Adverse Effect has been issued by the SHPO in a letter dated March 7, 2008 (See **Exhibit 12**).

A **Noise Analysis (Appendix D)** was completed for the proposed project in February 2008. In summary, the predicted noise levels for the 2032 Build Alternative were found to approach or exceed the FHWA or IDOT Noise Abatement Criteria at three noise sensitive areas representing twenty-five sensitive noise receptors. Based on the noise analysis, there appears to be no apparent solutions available to mitigate the noise impacts at these locations.

An **Air Quality Analysis** was completed for the proposed project in September 2008. The air quality effects of the proposed project were analyzed using the Illinois Carbon Monoxide Screen for Intersection Modeling (COSIM). The “worst case” analysis provided by the COSIM model indicated that the proposed undertaking does not have the potential for contributing to a violation of the National Ambient Air Quality Standard for CO.

A **Preliminary Environmental Site Assessment (PESA)** for sites potentially impacted with regulated substances was completed in July 22, 2005. The PESA Report is Illinois State Geological Survey (ISGS) #1562 and the findings resulted in a high risk involvement.

A PESA validation was completed September 8, 2008 in accordance with BDE Procedure Memorandum 28-02. The memorandum states that if three years or more have elapsed since the last examination for special waste/regulated substance contamination, the entire project should be reevaluated as a new action prior to further investigations. The PESA Report is ISGS #1562B and the findings resulted in a “high risk” involvement. The assessment concluded that the build alternative will involve sites potentially impacted with regulated substances (See **Exhibit 12** for the PESA Report Memos). A PESA Response has been completed identifying the sites that will potentially be impacted. (See **Exhibit 12**). Further investigations (Preliminary Site Investigation) need to be performed to determine the nature and extent for the involvement. A special waste waiver was granted on January 5, 2009 for the results of further hazardous waste investigations (See **Exhibit 12**).

Environmental Obligations per IDOT Policy

Construction Noise: Trucks and machinery used for construction produce noise, which may affect some land uses and activities during the construction period. Individuals inhabiting the homes along the alignment will at some time experience perceptible construction noise from implementation of the project. To minimize or eliminate the effect of construction noise on these receptors, mitigation measures have been incorporated into the Illinois Department of Transportation’s Standard Specifications for Road and Bridge Construction, January 2007, Section 107.35, Page 45, “Construction Noise Restrictions.” The contractor will be required to conform to this specification to reduce the impact of construction noise on the surrounding community

All **trees** removed will be replaced in accordance with the IDOT Departmental Policy D&E-18 Preservation and Replacement of Trees. IDOT will replace trees within ROW and free of the clear zone along the project route where enough space is provided. IDOT will coordinate with the city on what type of trees they would like to have planted. The trees must be native to Illinois.

ECAD Conclusion

Based on the analyses of environmental consequences as documented in the Class of Action Determination Record, this project has been determined to meet the Categorical

Exclusion definition contained in 23 CFR 771.117. The project will not induce significant impacts to planned growth or land use for the area; will not require the relocation of significant numbers of people; will not have a significant impact on any natural, cultural, recreational, historic or other resource; will not involve significant air, noise, or water quality impacts; will not have significant impacts on travel patterns; and will not otherwise, either individual or cumulatively, have any significant environmental impact.

IV) Traffic Management Analysis

A combination of work zone types is recommended as the best strategy. A summary of the construction traffic control issues and recommendations can be found in the Traffic Management Analysis completed for this improvement (see **Exhibit 11**).

In an effort to provide an efficient means of construction the project was divided into the North and South sections, with construction to begin in the South section and be staged as shown below. The South section of the project is tentatively scheduled to be let in November 2009 with subsequent construction to begin January 2010. This will allow a full year for demolition and utility adjustments prior to construction in the South section and the tentatively scheduled letting date of November 2010 for the North section. Similarly the North section will start the following year in January 2011.

The following sequence of construction is recommended:

- Preconstruction utility relocations will be required prior to construction
- Preconstruction local roadway improvements will be coordinated with the local agencies prior to construction to assure that the local roadway structure, and utilities that may affect it, are adequate prior to construction and no closures within the affected area are planned during the project.
- For each of the sections, Staging will be as follows:
 - Stage I -the roadway will be temporarily widened as necessary to allow traffic to use the widened side of the roadway to accommodate one lane of traffic in each direction.
 - Stage II - Traffic will be shifted to the side of the road widened in Stage I and the first half of the roadway will be reconstructed and widened to accommodate the proposed pavement width.

- Stage III – Traffic will be shifted to the newly constructed side of the roadway, one lane in each direction utilizing the newly constructed two lanes of traffic, and the remaining side of the roadway will be reconstructed and widened as necessary.
- Construction Final Stage - Paint Striping and Finish Work - During this stage the final construction items will be completed to provide a seamless finished roadway surface. This work will include the hot mix asphalt surface course, finish pavement striping and markers, final traffic control work, finish grading, and other work.

V) Estimate of Costs

A cost estimate was completed for this improvement and is included as **Exhibit 13** of this report. The total cost estimate for the project is approximately \$47.3 Million, including right of way, engineering and construction costs. The figures used in the cost estimate are based on actual preliminary engineering costs and projected FY 2011 construction costs.

VI) Public Involvement

A stakeholder involvement process that involved Context Sensitive Solutions (CSS) and the stakeholder involvement requirements of the National Environmental Policy Act (NEPA) was followed.

IDOT defines CSS as an interdisciplinary approach that seeks effective, multi-modal transportation solutions by working with stakeholders to develop, build, and maintain cost-effective transportation facilities which fit into and reflect the project's surroundings – it's "context."

The first step in the stakeholder involvement effort for this project was to prepare a Public Involvement Plan (PIP). This plan outlined the various public outreach efforts that would be implemented throughout the project. The Public Involvement Plan has been included with the Public Involvement Record (see **Appendix A**).

PROJECT STUDY TEAM (PST)

A Project Study Team (PST) was formed during the early stages of Phase I. A PST is “a multi-disciplinary team which will develop the project for the district. The disciplines within the PST will depend on the context of the project. The membership of the PST is not static, but can evolve as the understanding of the project’s context does.” For the IL 159 project, the team included members from the following IDOT Region 5, District 8 departments: planning, design, construction, operations, and land acquisition, along with the Bureau of Design and Environment from the Central Office. The team also included the consultants, and FHWA. The role of the PST was to make sure known issues associated with the proposed project were addressed in addition to providing technical input for concerns and issues brought about by the public.

COMMUNITY ADVISORY GROUP (CAG)

Under the guidelines of CSS, a **Community Advisory Group (CAG)** was formed. A CAG is a group of stakeholders that shares their local knowledge, defines the context of the community and expresses the community concerns. The CAG for this project consisted of twenty-seven members from neighborhood organizations, business development organizations, churches, and local government/committees.

The following is a list of the CAG members:

American Legion	Downtown Economic Revitalization Commission
City Beautification Committee	First United Presbyterian Church
City of Collinsville (City Council)	Homeowners (2)
City of Collinsville – Engineering Department	Madison County Housing Authority
Collinsville Action Group	Madison County Transit
Collinsville Chamber of Commerce	Meadow Heights Baptist Church
Collinsville Community Unit School District 10	New Jerusalem Church (declined)
Collinsville Emergency Management Agency	St. Clair County Housing Authority
Collinsville Economic Development Committee	Sts. Peter & Paul Catholic Church
Collinsville Historic Preservation Commission	Senior Citizen Center
Collinsville Progress	Son-Life Fellowship, Inc
Collinsville Township	Vandalia Neighborhood Group (2)
Commuter (Shop N’ Save)	Veterans of Foreign Wars (declined)
Downtown Collinsville	

The IL Route 159 CAG has met nine times since July of 2006. The following describes the activities associated with each meeting:

- July 11, 2006
 - Complete the Community Context Audit Form
 - Develop Problem Statement
- September 12, 2006
 - Divided the project up into three sections (South, Central, and North)
 - Discussed roadway sections that might be used
- September 26, 2006
 - Discussed the Land Acquisition process
 - Recommended alternates for review based on the Problem Statement, number of displacements, and maintaining the context of the community
- January 23, 2007
 - Review of the South Section
 - Recommended three alternates to be carried forward for further study
- January 30, 2007
 - Review of the North Section
 - Recommended two alternates to be carried forward for further study
- March 13, 2007
 - Review of the Central Section
 - Recommended one alternate to be carried forward for further study
- March 20, 2007
 - Presented Historic Resource Survey
 - Discussed Aesthetics
- May 15, 2007
 - Reviewed displays for Public Involvement Meeting #2
- April 9, 2008
 - Final CAG Meeting
 - Review of Preferred Alternative to be presented at the Public Involvement Meeting #3

Additional information regarding the CAG can be found in the Public Involvement Record (see **Appendix A**).

STAKEHOLDER MEETINGS

Approximately fifty-four (54) stakeholder meetings have been held with elected officials, city commissions, community leaders, business leaders, churches, civic groups, environmental groups, and residents in regard to the project and its progress throughout Phase I. Various stakeholders have been met with more than once due to early coordination that identified key issues associated with their organization. The following is a list of these stakeholder organizations and identifies if the organization has been met with more than once.

American Legion (2)	East West Gateway (2)
Ashman's Pharmacy	Economic Development Committee(2)
Bank of Edwardsville	First United Presbyterian Church
Carroll, Brian (homeowner)	Harrison, Richard (homeowner)
City of Collinsville (5)	Haine, Senator William
City of Collinsville (Council) (5)	Hoffman, Representative Jay
City of Collinsville (Downtown Coordinator)	Madison County (2)
Collinsville Chamber of Commerce	Madison County Housing Authority
Collinsville Emergency Services	Madison County Transit
Collinsville Fire Department	Meadow Height Baptist Church
Collinsville Historic Planning Comm.(2)	St. Clair County Transit
Collinsville Planning Commission	Sts. Peter & Paul Church (3)
Collinsville Police Department	Senior Center
Collinsville Progress	Sizzor Shack
Collinsville Township	Son-Life Church
Davis, Tracy (City of Collinsville)	Terry's Appliances
Downtown Business Group	UMB Bank
Downtown Collinsville (2)	United Congregations of Metro East
Downtown Revitalization Committee	Veterans of Foreign War

Some of examples of the concerns expressed by various stakeholders included:

- “How would the project impact the historic homes, businesses, churches and schools?” → Every effort was made to ensure that ROW impacts from the project would be as minimal as possible with the given improvement, particularly to the above types of properties due to their sensitivity. In addition, a thorough study was conducted and reported in the Environmental Class of Action Determination (ECAD) document included herein which details the project impacts to these types of properties.
- “What would be done to maintain the integrity of the residential district?” → Through use of the Context Sensitive Solutions (CSS) process, the project

stakeholders were actively engaged on an unprecedented level to determine the “context” of their community in order to best fit the project within that context. It was determined that to best maintain the integrity of the residential district, minimizing ROW was the best method. To do this, hundreds of design exceptions were proposed and approved that helped the project team fit the project within the context of this area.

- “How would IDOT minimize the loss of parking in the downtown section?” → As discussed in the “Parking” section of this report, the parking impact study involved extensive segment-by-segment evaluation of off-street parking mitigation options. These options were coordinated heavily between the City and the State throughout the Phase I study.
- “How would the construction affect the business entrances?” → The Traffic Management Analysis (TMA) included herein evaluates the potential impacts and mitigation options for businesses during construction. A more detailed analysis will be conducted during Phase II with utilization of the CSS process which will result in more specific mitigation procedures than those outlined in the TMA.
- “What affect would the project have on the property owners?” → Three separate Public Informational Meetings were conducted to keep the stakeholders/property owners apprised as to the effects to their properties. In addition, periodic Newsletters as well as a continuously updated website were utilized to keep the public informed as to the project scope and status. Finally, all specific phone, letter, and email requests for information or meetings were promptly addressed by the Project Study Team.
- “How would they accommodate the safety of the students/children crossing a multi-lane street?” → In addition to keeping the proposed lane widths/roadway as narrow as possible through the use of 11 foot lanes versus 12 foot lanes, the Project Study Team is proposing three signalized mid-block crosswalks. Also, the Project Study Team recommended that concerned stakeholders actively participate in temporary traffic control through the use of school crossing guards, as well as seeking periodic temporary assistance from local police.
- “What accommodations would there be for the emergency vehicles as well as the bicyclists and pedestrians?” → The Project Study Team thoroughly evaluated all proposed intersection geometrics for turning movements that would at a minimum,

accommodate emergency vehicles. The need for bicycle and pedestrian accommodations was directly coordinated with, and to a certain extent the decision largely left to, the Community Advisory Group (CAG). Although pedestrian facilities were deemed critical, the CAG determined that bicycle facilities located directly on IL 159 was not necessary in light of the need to minimize ROW.

- “What will the affects of the roadway and traffic patterns have on the Sts. Peter & Paul Church?” → The Project Study Team conducted an extensive impacts study for this very sensitive property. Before and after internal traffic movements were analyzed relative to the existing and proposed traffic movements on IL 159 and nearby streets. To most accurately assess the before and after scenarios, heavy coordination was conducted with key personnel of the Sts. Peter and Paul parish to ensure that existing and future needs were best met.

Additional information regarding stakeholder meetings can be found in the Public Involvement Record - **Exhibit 14**.

PUBLIC INVOLVEMENT MEETINGS

Three public involvement meetings were held throughout Phase I of the project. These meetings were strategically scheduled so that the input received at the meetings could be taken into consideration during the development of the project. These meetings also allowed for the public to have direct access to the engineers and planners performing Phase I services for the project.

The public involvement meetings were held on February 15, 2006; June 19, 2007; and April 16, 2008. All meetings were open house and have been held at the American Legion Post #365 located on IL Route 159 within the project study area.

The first meeting was attended by 232 people and was held to introduce the project and solicit comments from the public on the proposal of an improved transportation system within the City of Collinsville. Comments included: provide a minimal affect to adjacent property owners, improve traffic flow at rush hour, retain or enhance the historic and scenic value, and limit large truck traffic. Additional information regarding

the first public involvement meeting can be found in the Public Involvement Record - **Exhibit 14**.

The second meeting was attended by 364 people and was held to inform the public and solicit comments on the preliminary design alternatives and sub-alternates for each of the three segments. Comments received essentially reiterated the same concerns and issues communicated after the first public involvement meeting. Additional comments did include: concerns about the impacts of the proposed project on the Sts. Peter and Paul Church, pedestrian and student safety, need for parking, and concerns about speeding. Additional information regarding the second public involvement meeting can be found in the Public Involvement Record - **Exhibit 14**.

The third meeting was attended by 265 people and was held to inform the public and solicit comments on the final alternatives for the three segments of the project. Comments received noted concerns about property impacts, business impacts, and tree removal. Additional information regarding the third public involvement meeting can found in the Public Involvement Record - **Exhibit 14**.

PUBLIC OUTREACH TOOLS

Newsletters – Six newsletters were prepared and distributed throughout Phase I to keep the public informed of the project’s progress. A copy of the newsletters can found in Public Involvement Record - **Exhibit 14**.

Website – A project website, www.dot.il.gov/ilroute159, was setup by IDOT early in the Phase I process. The purpose of the website was to keep the public informed of the project’s progress. The website included general information about the project, information regarding upcoming events concerning the project, the newsletters, the displays from the Public Involvement Meetings, a frequently asked questions section and an opportunity to contact IDOT personnel. The website will be maintained throughout Phase II and Phase III of the project.

Billboard – A billboard was displayed along the route near the southern end of the project to promote the awareness of the project. The billboard displayed the project’s

website address and encouraged the drivers to “Stay Informed and Get Involved” with the project. The billboard was erected in January 2006 and removed in July 2006.

VII) Commitments

The following commitments were made for this project.

Commitments made during the Public Involvement Process:

Commitment Made To:	Address:	Description of Commitment:	Commitment to be Carried Out During:
Mark and Lisa Wrigley	449 S. Chestnut	Investigate installation of retaining wall to avoid pool.	Phase II
JJ DeRousse	806 Vandalia	Design and relocation of street lights.	Phase II
Brian Carroll	310 Vandalia	Investigate saving oak tree.	Phase II
John Leskara	120 E. Church	Investigate saving the large trees located on his property.	Phase II
Mitchell Wrigley	1277 Vandalia St	Investigate constructing a retaining wall along the front of his property.	Phase II
Orville Sova	500 S. Morrison	The response from the 2 nd Public Informational Meeting indicated that IDOT agreed not to close his residential entrance off of Illinois 159. This was a result of a separate meeting with Mr. Sova on July 16, 2007.	Phase II
The American Legion	IL 159 in Collinsville	They requested that a temporary access be designed to make it easier for their customers to gain access to them during construction.	Phase II
Madison County Housing Authority	IL 159 in Collinsville	John Hamm requested that IDOT send him a notification letter to give ample time to relocate any displaced tenants.	Phase I or II (this IDOT action item is pending at the time of the writing of this report)

		Residents are normally given 120 days to find a new place.	
The Bank of Edwardsville	IL 159 in Collinsville	The PST was requested to look at reconfiguring the parking lot to serve traffic entering from Grove Street	Phase I (the PST evaluated this movement and determined that it was unsafe as well as would lead to poor traffic operations at the Church St intersection; instead, it is proposed that traffic enter the parking lot from Church St. only)
Collinsville Fire and Police Departments	IL 159 in Collinsville	<p>The Fire Department was going to provide the needed turning radius for their trucks to navigate the cul-de-sac at Loop Street so the PST could verify if they needed to modify it.</p> <p>The PST was to investigate widening Park Avenue for the Fire Department's trucks if the "five legged" intersection at East Wickliffe is closed and they can no longer access Keebler from Illinois 159 at East Wickliffe.</p> <p>The PST was asked to investigate buying vacant properties from willing sellers to be used as an alley to improve access to the businesses along the abandoned section of IL159/Vandalia Street.</p> <p>The Police Department requested that a crosswalk not be placed at S. Clinton but to have one placed at Idlewood.</p>	<p>Phase I or II (the current cul-de-sac design was checked with AutoTurn to verify it could accommodate a typical fire truck; in addition, the current design abides by City codes)</p> <p>Phase I (the PST determined that the existing lane width in conjunction with existing/proposed geometrics at the Park/IL 159 and Park/Keebler intersections would be sufficient to handle emergency vehicles)</p> <p>Phase I (this IDOT action item is pending at the time of the writing of this report)</p> <p>Phase I (a mid-block crossing is proposed just south of Idlewood; IDOT review and approval of the warrants for this new crossing is pending)</p>

Commitments made during the Land Acquisition Process:

Date:	Made To:	Station To Station:	Description of Commitment:	Commitment to be Carried Out During Phase I, II, or III:
10/08/08		Entire length of Project	Parking areas to be removed from existing and proposed right-of-way, however remaining within 0.50' of said existing and proposed right-of-way (saw cut or reconstructed) need to be verified to ensure they do not encroach on said right-of-ways.	Phase III
10/08/08		Entire length of Project	Within temporary construction easements, eaves on structures to remain will be left undisturbed.	Phase III
10/08/08	Affects Parcels 8411001, 8411002, 8411004 & 8411006	107+55+/- RT to 113+75 +/-	Back of sidewalk being constructed along Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way	Phase III
10/08/08	Affects Parcel 8411060	144+50+/- RT to 145+25 RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III

10/08/08	Affects Parcel 8411077	151+60 LT to 151+64+/- LT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411077	151+88.43 57.50' LT	Back of curb at beginning of radius return being constructed within 0.50' of Proposed Right-of-Way. Back of curb needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411102	154+61.96 40.22' RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411081	Church Street 28+55.00 32.32' RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411081	156+15.70 39.00' LT	Back of curb being constructed within 0.50' of Proposed Right-of-Way. Back of curb needs to be form verified to ensure its constructed within	Phase III

			the right-of-way	
10/08/08	Affects Parcel 8411104	157+79.18 83.74' RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcels 8411105 & 8411106	Main Street 41+22.87 RT to 41+59.86 RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411112	165+84.61 40.57' LT & 166+20.92 40.92' LT	Planters with temporary easement to remain undisturbed.	Phase III
10/08/08	Affects Parcel 8411EFG (to be numbered at a later date)		Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411161	187+14.98 40.08' LT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it	Phase III

			is constructed within the right-of-way.	
10/08/08	Affects Parcel 8411162	188+84.69 43.00' RT	Back of curb being constructed within 0.50' of Proposed Right-of-Way. Back of curb needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411177	194+97.85 LT to 195+67.86 LT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the ROW.	Phase III
10/08/08	Affects Parcel 8411LMN (to be numbered at a later date)	Tillotson Ave 3+78.18 RT to 4+43+/- RT	Back of sidewalk being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411221	222+77.95 39.58' RT	Back of sidewalk (curbed) being constructed within 0.50' of Proposed Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III

10/08/08	Affects Parcel 8411228, 8411____ (MA-3486), 8411____ (MA-3487) & 8411____ (MA-3488)	228+26.21 LT to 231+79.00	Back of sidewalk being constructed within 0.50' of Existing Right-of-Way. Sidewalk needs to be form verified to ensure it is constructed within the right-of-way.	Phase III
10/08/08	Affects Parcel 8411077 (215 S. Morrison/Apartments)	151+12 to 151+67 LT	Structural analysis being performed to determine if building can be modified and remain	Phase II
10/08/08	Affects Parcel 8411108 (209 E. Main/Ashmann Pharmacy)	158+63 to 160+07 RT	Structural analysis being performed to determine if building can be modified and remain	Phase II
10/08/08	Affects Parcel 8411113 (206 Vandalia/Najjar Car Care)	163+78 to 164+72 RT	Structural analysis being performed to determine if building can be modified and remain	Phase II
10/08/08	Affects Parcel 8411166 (702 Vandalia/Moto Mart (store))	190+00 to 190+90 RT	Structural analysis being performed to determine if building can be modified and remain	Phase II
10/08/08	Affects Parcel 8411184 (921 Vandalia/Spring Garden Family Restaurant)	198+74 to 199+21 LT	Structural analysis being performed to determine if building can be modified and remain	Phase II
10/08/08	Affects Parcel 8411220 (1312 Rte 159/Swing City)	220+38 to 221+67 RT	Structural analysis being performed to determine if building can be modified and remain	Phase II

10/08/08	Affects Parcel 8411221(1316 Rte 159/Raqa Inc. (store))	223+43 to 224+07 RT	Structural analysis being performed to determine if building can be modified and remain	Phase II
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Other commitments may be made during Phase II of this project.