



*City of Joliet*  
*South Side Comprehensive Plan*

March, 2007

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## **ACKNOWLEDGEMENTS**

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## **ACKNOWLEDGEMENTS**

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## SECTION 1: INTRODUCTION

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### STUDY AREA

The City of Joliet is a rapidly growing community of detached and attached single-family residential, commercial and industrial uses. The southward expansion of the city limits started in 1997 along Route 53 (South Chicago Street), when the Route 66 Drag Raceway was developed. In the following years, the push south would continue with the addition of several other large-scale, commercial and recreational uses. Most notably among these are The Chicagoland Motor Speedway (added in 1999), the Autobahn Country Club (added in 2004), and Challenge Park X-Treme.

Existing transportation conditions, such as the relative proximity of highways (I-55, I-80, US Route 52, State Route 53), rail lines and the Des Plaines River have made this region a focal point for past and future industrial growth initiatives. Sufficient evidence of this can be found both within and to the south of this study area. Industrial uses (i.e. quarries, landfills, power and chemical plants) have resided along the Des Plaines River in unincorporated Joliet for years, with newer industrial developments occurring to the east (i.e. Laraway Crossing Business Park, Dollar Tree Distribution Center). Further south, the historic Joliet Arsenal (land previously used for ammunitions development and testing) is currently in the process of being changed to sizeable manufacturing and business parks, including the CenterPoint Intermodal Center in Elwood.

Existing residential land in the area consists of primarily rural single-family. The annexation of two substantial residential subdivisions has occurred, and figures to slightly shift the residential-base towards suburban-style development in areas where industry isn't expected to be prevalent.

Despite all of these relatively recent developments, an abundant majority of this land still remains zoned as agricultural, thus necessitating the urgent need for comprehensive planning in the area. This comprehensive plan will help in efficiently managing all of these existing issues, and preparing for future development within this critical area of municipal expansion.

### Defining the Limits

The official bounds of this *South Side Comprehensive Plan* have been determined by both jurisdictional and geographical factors. Jurisdictionally, the City of Joliet currently has pertinent boundary agreements with the following adjacent municipalities:

- **The Village of Elwood** to the South
- **The Village of Manhattan** to the Southeast
- **The Village of New Lenox** to the East

## **SECTION 1: INTRODUCTION**

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The area included within this comprehensive plan extends outward to these legally-recognized boundaries. The existing city limits to the north, along with the Des Plaines River to the west, represent the limiting geographical forces.

*-See Exhibit 1-1 Jurisdictional Map for visual representation.*

### **PURPOSE OF THE PLAN**

Comprehensive land use planning has been a continuous function of the City of Joliet since 1964. This *South Side Comprehensive Plan* is an extension of following previously-completed land use plans:

- The Northwest Quadrant Land Use Plan (adopted 1991, amended 1997)
- The Kendall County Sub Area Comprehensive Plan (adopted 2004).

Many of the goals and objectives of the City contained herein are modified to update the ideas and concepts presented and adopted in these earlier plans.

This Plan lays out recommendations, both broad and specific, regarding the future growth and development of this important area, which will accommodate over 20 years of future urban type development. The Comprehensive Plan is intended to serve as the principal policy document guiding the orderly growth and development of the area towards its ideal, which is outlined in the text and maps of this Plan. The fundamental objectives of this Comprehensive Plan are twofold. First, it is intended to ensure that development within the area takes place in an orderly and complementary fashion. The second objective is to guarantee that all necessary land use and associated issues are considered in accommodating future development.

The Comprehensive Plan is advisory rather than prescriptive in nature. It should not be considered a regulatory document that controls the use and development of individual parcels of private property, as that function is performed by other City ordinances such as the zoning ordinance. The Comprehensive Plan should be used by City officials as the policy basis for guiding decisions regarding new developments, zoning map and text amendments, and other land use and community facility expansion decisions.



# CITY OF JOLIET

## SOUTHSIDE COMPREHENSIVE PLAN



### EXHIBIT 1-1

### JURISDICTIONAL MAP

#### Legend

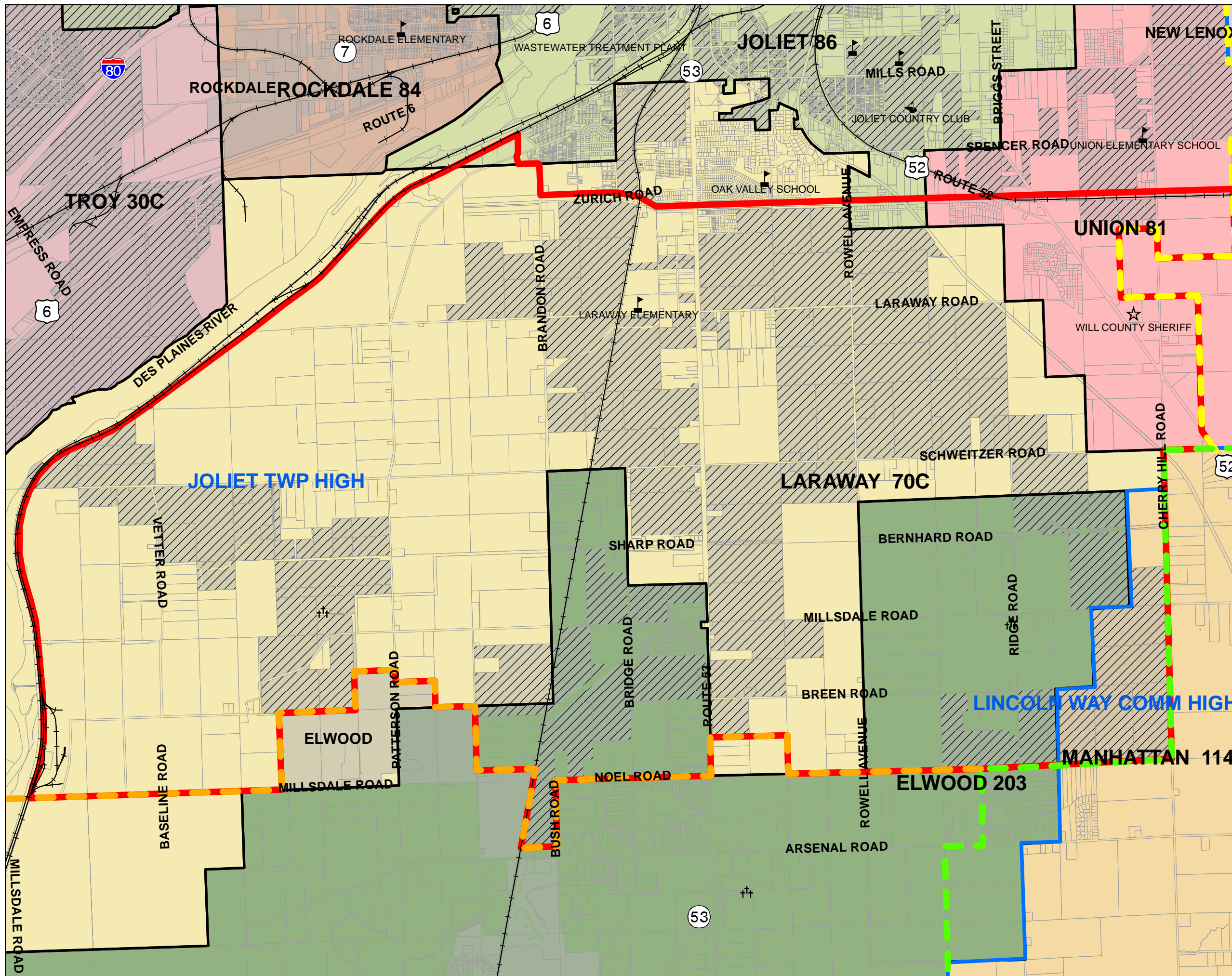
- PLANNING AREA
- BOUNDARY AGREEMENTS**
  - VILLAGE OF ELWOOD
  - VILLAGE OF MANHATTAN
  - VILLAGE OF NEW LENOX
- SCHOOL DISTRICTS**
- ELEMENTARY SCHOOL DISTRICT**
  - ELWOOD 203
  - JOLIET 86
  - LARAWAY 70C
  - MANHATTAN 114
  - ROCKDALE 84
  - TROY 30C
  - UNION 81
- HIGH SCHOOL DISTRICTS**
  - JOLIET 204 / LINCOLNWAY 210
- CORPORATE LIMITS**
  - CITY OF JOLIET
  - OTHER MUNICIPALITIES



NOT TO SCALE



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# SECTION 1: INTRODUCTION

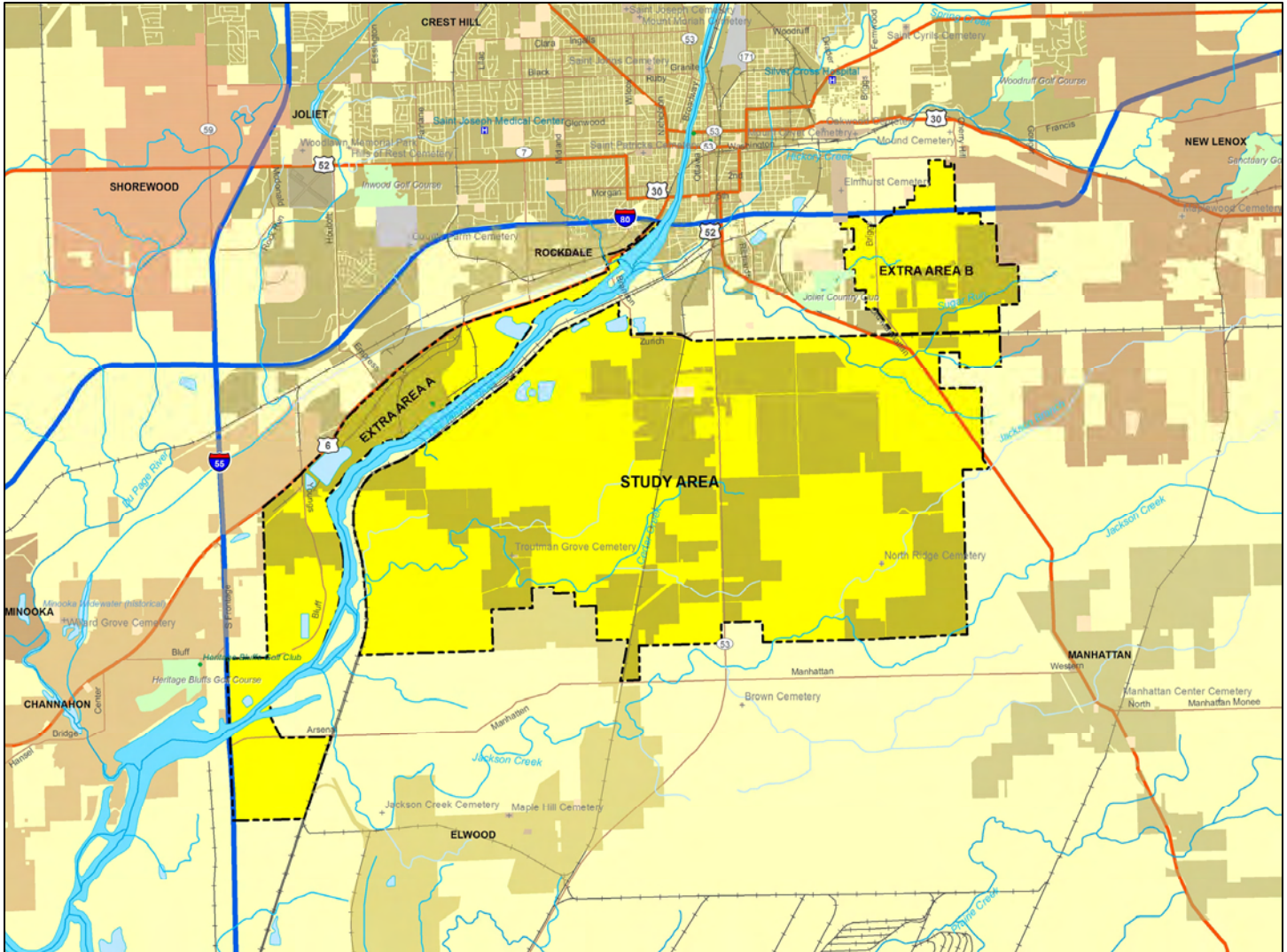


Exhibit 1-2  
*Site Location Map*

## **SECTION 1: INTRODUCTION**

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### **OBJECTIVES**

The following objectives serve as the over-arching principles driving the recommendations in the Plan:

1. To protect residential neighborhoods from incompatible adjacent development.
2. To carefully control new development by maintaining high standards for compatibility between new and existing developments, and incorporating the Planning and Design Guidelines of the Plan.
3. To incorporate proposed land uses that remain consistent with the existing land uses of the study area.
4. To provide a large contiguous area for industrial growth within the city.
5. To strengthen the overall tax base of the city by examining opportunities for the expansion of working, shopping and recreation in the area.
6. To develop a transportation network that provides the study area with rational and efficient opportunities for local and regional mobility.
7. To increase the amount of open undeveloped land (green space) in the City used for passive and active recreation, as well as protection of flood prone areas, natural wetlands, and wooded areas.
8. To annex development projects that will make contributions to off site improvements for roads, schools, parks, utilities and other community facilities as required by the City of Joliet Ordinances.
9. To provide a guide for managing the future storm water needs for Joliet's portion of the DesPlaines Watershed including Cedar Creek and portions of Sugar Creek and Jackson Creek.



## SECTION 2: EXISTING LAND USE

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### EXISTING LAND USE

#### Methodology

The existing land use study is an important component of the planning process. The spatial distribution of land use presents a composite picture of existing development at a given point in time, and provides many valuable insights into understanding development trends and related problems. In order to establish future courses for the development of land in the study area, concentrations of uses and their respective directions of growth must be understood. Although the comprehensive planning program is intended primarily for the southern unincorporated areas of Joliet, if proper coordination is to be achieved between existing and proposed development, it must be based on a general understanding and knowledge of the land uses within the currently-incorporated areas as well. This study was conducted through a combination of the following:

- Interpretation of recent aerial photography
- Field inspections
- Records review
- Tax map analysis
- Tax assessment analysis
- Topographic map review

#### Existing Conditions

The study area contains approximately 16,000 acres or 25 square miles of land. Of this total, 74% is unincorporated and has a predominantly rural character, with significant lands currently devoted to industrial and agricultural uses. The remaining 26% of the area, consisting of 4,220 acres or 6.59 square miles, is currently within the City of Joliet. These incorporated portions consist of mostly industrial (75%), with some residential (22%).

#### Growth Patterns

##### *Non-traditional Commercial/Recreational*

Three substantial uses categorized as commercial/recreational are present: The Chicagoland Speedway/Route 66 Raceway grounds, The Autobahn Country Club, and Challenge Park Xtreme. These types of uses tend to require large amounts of land and buffering from residential uses, which make them optimal to coincide with any future industrial developments.

##### *Industrial Suitability*

The study area contains several concentrations of industrial uses that have located in the western and northern portions of the site. These areas have a high compatibility for expanding such uses, due to nearby state and federal highways, existing rail lines, the Des Plaines River, and the new Inter-modal facility located a short distance south in the Village of Elwood.

## **SECTION 2: EXISTING LAND USE**

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### *Residential Development*

Residential growth has been relatively sporadic and well-contained within subdivisions and rural agricultural residences. Several recently-approved suburban residential plans for future developments have yet to be completed, with more expected to come in the future. Two of these plans have already been annexed by the City of Joliet.

### *Community Resources*

The Will County Forest Preserve has a 298 acre preserve (Sugar Creek Preserve) in the northeast corner of the study area, which also holds their administrative offices off of Laraway Road. The City of Joliet has additionally incorporated requirements for park sites within all new residential development. Existing institutional uses include Laraway Elementary School and the Will County Sheriff's Offices.

*-See Exhibit 2-1 Existing Land Use Map for visual representation.*

### **Topography**















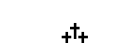


Topographic relief in the study area is generally low, with most of the area nearly level or gently sloping. The areas with the greatest relief are along the banks of the Des Plaines River, Sugar Creek, Jackson Creek and Cedar Creek (including tributaries).

# CITY OF JOLIET SOUTHSIDE COMPREHENSIVE PLAN



## EXHIBIT 2-1 EXISTING LAND USE MAP

### Legend

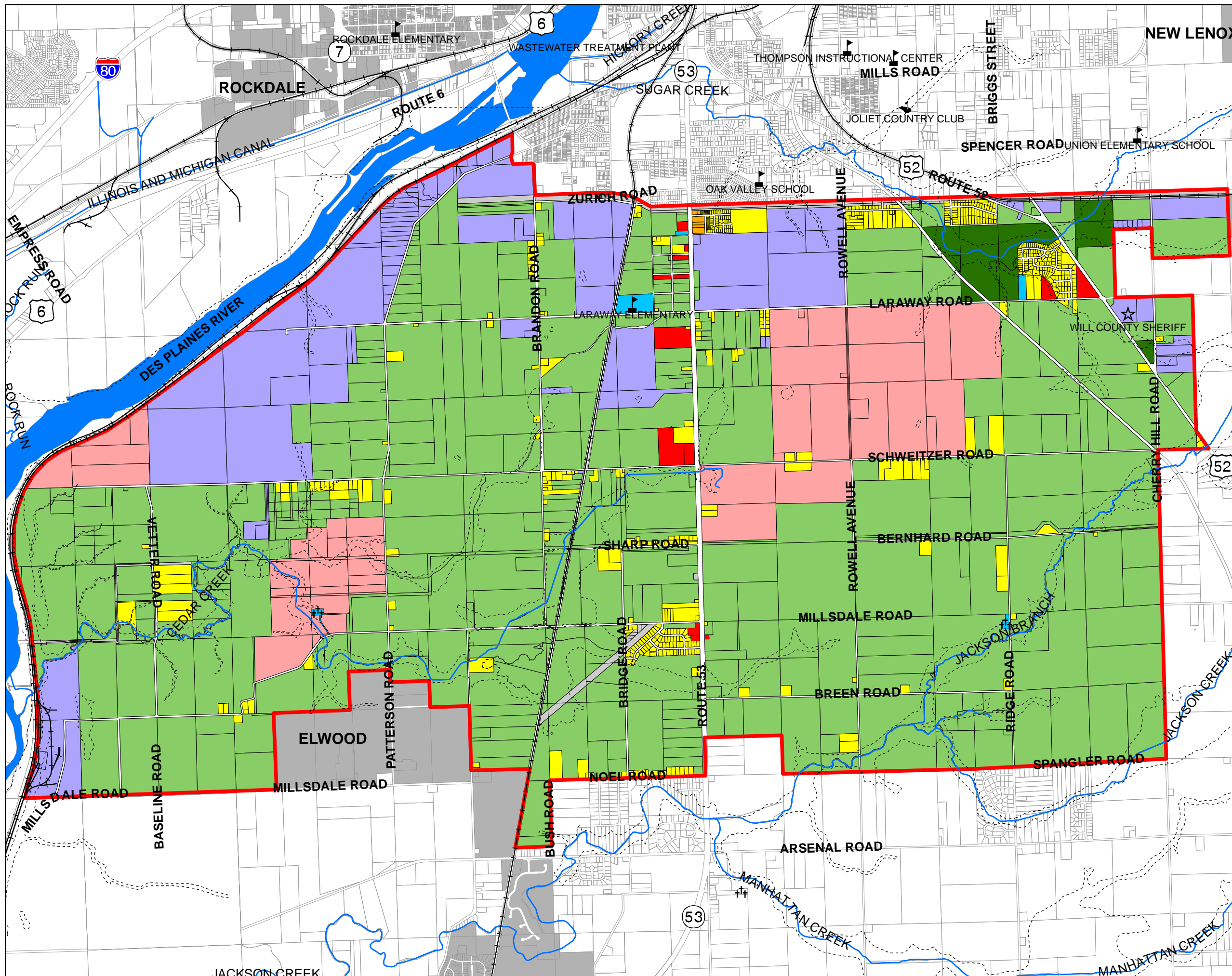
-  PLANNING AREA
- EXISTING LAND USE**
-  RESIDENTIAL: SINGLE-FAMILY
-  RESIDENTIAL: MULTI-FAMILY
-  INSTITUTIONAL/GOVERNMENT
-  COMMERCIAL
-  COMMERCIAL/RECREATIONAL
-  UTILITIES
-  INDUSTRIAL
-  AGRICULTURAL
-  FOREST PRESERVE
-  FLOODPLAIN
-  WATERWAYS
-  MUNICIPALITIES
-  CEMETERY
-  GOLF COURSE
-  SCHOOL
-  WILL COUNTY SHERIFF



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## **SECTION 3: DRAINAGE AND ENVIRONMENTAL**

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### **EXISTING DRAINAGE**

Approximately 3.71 square miles of this study are tributary to the Sugar Run Creek, which flows from east to west just north of our study area. Approximately 19.84 square miles of tributary flow of Jackson Creek run through the southeast portion of the study area, with approximately 4.73 square miles of tributary area directly within the limits of the study area. Approximately 13.64 square miles of this study are tributary to the Cedar Creek, which flows from east to west through the central portion of this study. Approximately 4 square miles of our study area are directly tributary to the Des Plaines River.

#### **Existing Hydraulic and Hydrologic Modeling**

No existing regulatory data exists for the study area at this time. The Zone “A” portion taken from FEMA’s FIRM maps has been scaled onto the drawings.

#### **Modifications to the Existing Models**

In order to determine the existing flow rates over these areas tributary to Sugar Run Creek, Jackson Creek, and Cedar Creek, a hydrologic watershed model was developed using HEC-HMS software. This software is the most current version of the HEC-1 software originally utilized for development of peak runoff rates. This Comprehensive Plan has incorporated the Bulletin 70 rainfall data into a hydrologic model to reflect the current best estimate of peak runoff values for storms of varying probability. Storms with a probability of occurrence of 0.10, 0.02, 0.01 and 0.002 (commonly referred to as the 10, 50, 100 and 500 year storms respectively) were modeled in this study.

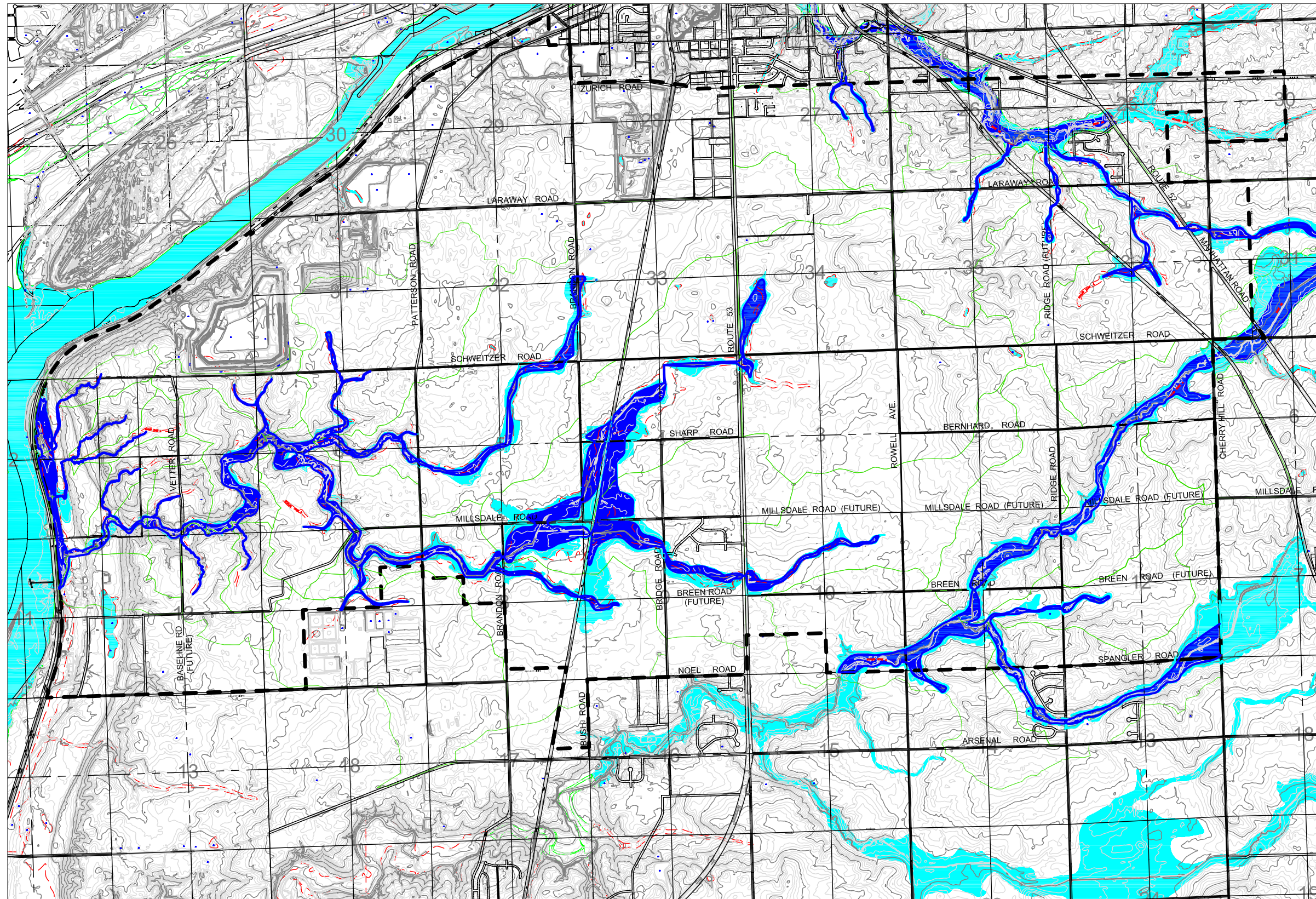
The 100-year water surface elevations generally matched the Zone “A” line mapped on the two-foot contour topographic map provided by the City of Joliet. Exceptions generally occur around the bridge structures where differences in model routines account for larger discrepancies in the water surface elevation.

The hydraulic model was developed using HEC-RAS software. Model cross sections and structure data were obtained from survey data and a two-foot contour topographic map provided by the City of Joliet. Once the modifications were completed, the existing conditions model was run using the Bulletin 70 flow rates calculated by the HEC-HMS model.






*-Exhibit 3-1, Proposed Floodplain Plan, shows the existing drainage areas, the scaled Zone “A” floodplain limits, and the Zone “A” floodplain limits established by this study (non-regulatory).*



# Exhibit 3-1 Proposed Floodplain and Floodway Plan



### Legend

-  Approximate Floodplain Boundary as Calculated by This Study(Non-regulatory)
-  Sub-basin Divide
-  Scaled Zone A Floodplain
-  Floodplain
-  Floodway

