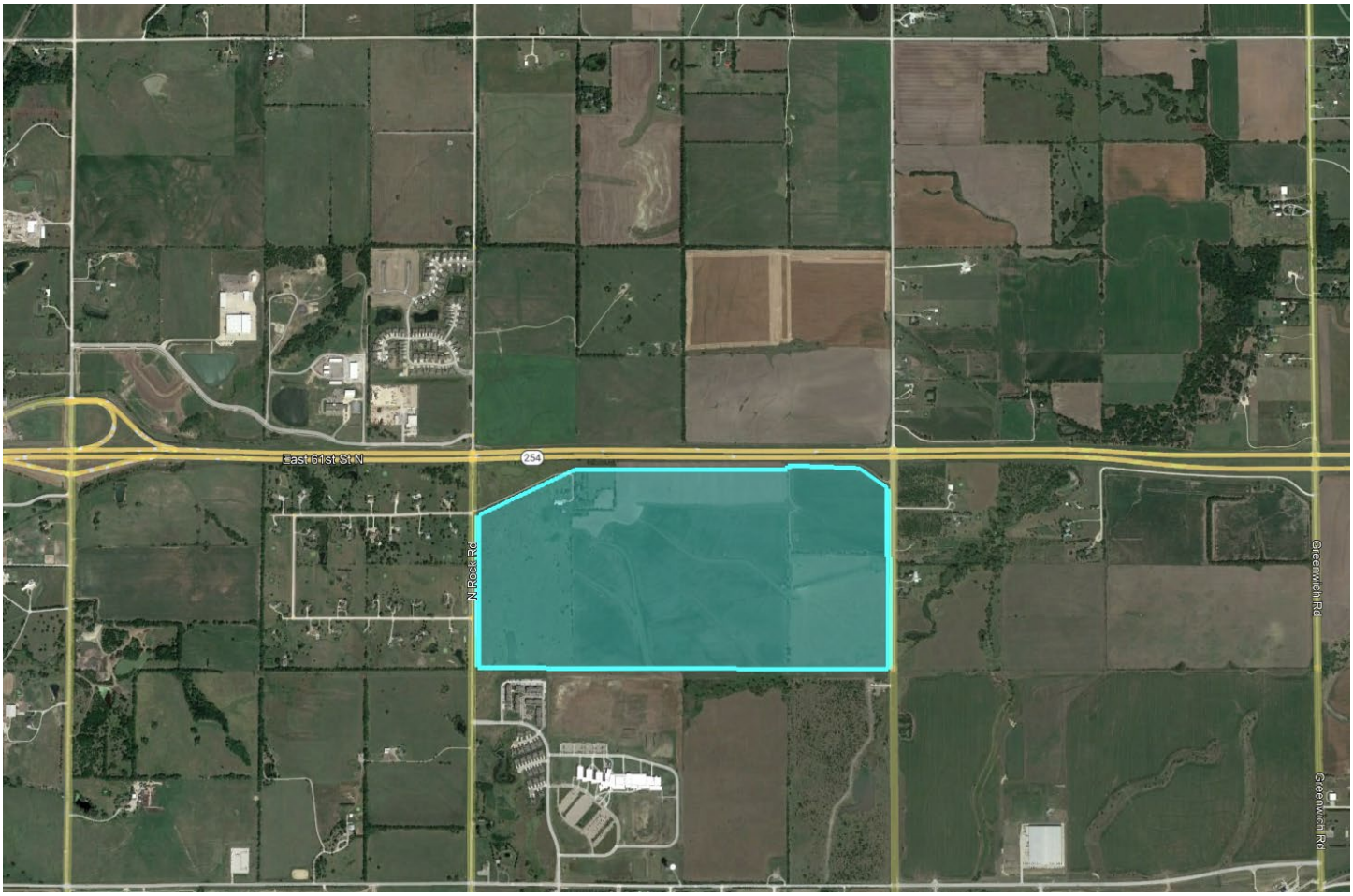
City of Bel Aire
Integra Site Access Transportation Plan
Scope of Services
June 15, 2023

Project Objectives

The project objectives for this project are to examine the effects of the Integra site on the surrounding transportation system. The project will be developed with input from the city of Bel Aire ("Client") and the other partner study stakeholders including the Kansas Department of Transportation (KDOT), and Sedgwick County, Kansas. The study will focus on the needs for transportation improvements along K-254 (including possible interchange configurations) from Rock to Greenwich, and the surrounding system of Rock Road and Webb Road between 69th Street North and 37th Street North. TranSystems anticipates using some of the modeling work that was completed with the K-96 project to ensure data cooperation between studies. The work will include more specific generation associated with the Integra site as well as anticipated development on the north side of K-254 between Rock and Webb and 69th Street.



Project Tasks

The study will be conducted in in three phases, which are listed below with a brief description of each phase.

Phase 100 – Project Management	Keeping project goals, schedule and budget
Phase 200 – Study Content	Data Collection and Alternative Development
Phase 300 – Report Development	Draft and Final Report with Executive Summary

Phase 100 – Project Management

- Develop and maintain a schedule with milestones, which identifies the different tasks associated with the project with a project completion anticipated approximately **September 2024**.

- We have assumed three (3) one-on-one meetings; these could include governing bodies, KDOT or other individuals as necessary for the study and growth projections.
- Four (4) online progress meetings are anticipated as part of the study; these could be included with other project meetings and are assumed one every two months.

Phase 200 – Study Content

200.1 – Data Collection

- Development Plans – CLIENT and/or partner stakeholders will provide copies of plats for any developments within the corridor that are planned or under development. Any available information about potential projects not yet approved or submitted will also be helpful.
- Review existing information to help generate proposed traffic projections along K-254 through the study limits. It is anticipated that the study work completed for Integra and the K-96 projections completed for KDOT may be reused on this project.

200.2 – Traffic Analysis

- Conduct Traffic counts at the following:
  - Conduct 24 hour counts along Rock and Webb which includes vehicle classification data:
    - Rock south of K-254
    - Webb south of K-254
  - Conduct peak hour (6-10 am and 3-7pm) turning movement counts over a typical weekday (Tuesday, Wednesday or Thursday) at the following intersections:

    - 69th Street N. and Rock
    - 69th Street N. and Webb
    - 53rd Street N. and Rock
    - 53rd Street N. and Webb
    - Rock and Bel Aire City hall Access
    - Rock and Deer Run
    - Rock and Saw Mill Road
    - Rock and Old Mill Road
    - Rock and 45th Street
    - Rock and Champions
    - Rock and Mulberry
    - Rock and Jasmine
    - Rock and Thorn
    - Rock and 37th
    - Webb and 39th
    - Webb and 40th/WSU entrance
    - Webb and 42nd
    - Webb and 43rd
    - Webb and Champions Circle
    - Webb and 45th
    - Webb and 46th
    - Webb and 49th
    - Webb and 50th
    - Webb and E. Chris St.

  - Traffic Forecasting, Operations and Safety Review
    - TranSystems will use the K-96 modeling to develop growth assumptions along the corridor.
    - TranSystems will use ITE trip generation for site traffic and for site north of K-254, between Rock and Webb and 69th Street
    - Operational Analysis
      Perform Operational Analysis at key study intersections along the corridor to identify improvements necessary to support future traffic growth and identifying and mitigating impacts to the limits of the study.
  - Develop Synchro/SimTraffic analysis of the corridor intersection. VISSIM models may be used on a limited basis to test complex interactions but is anticipated to limited in nature.
  - Develop safety analysis for the corridor
- Crash Frequency and Severity metrics will be developed using a minimum of five (5) years' worth of data.

200.3 – Existing Study Review

- Review corridor study reports, plans, capital improvement and project funding documents related to the project provided by the client

200.4 – Existing Condition Inventory

- Gather and review information and data necessary to develop an inventory of existing conditions.
- Prepare an inventory of existing conditions within the project limits. This will include, but not be limited to:
    - Land uses
    - Demographics
    - Utility infrastructure
    - Transportation infrastructure
    - Traffic generators
    - Existing traffic volumes and patterns
    - Environmental conditions

200.5 – Concept Development

- Develop two scenarios which are anticipated for interim and design year for the study area. Concepts will include short term (1 year) and Medium term (2-20 years) options to preserve the corridor as it continues to develop..

200.6 – Environmental and Land Use Condition

Consultant will conduct a desktop environmental scan of the Study Area based on the existing data and data collected in previous tasks. The scan will examine, and document existing environmental resource conditions include summary of findings and critical issues, with supporting maps, figures and tables as necessary. Issues requiring further investigation and processing will be identified. The list of critical environmental issues includes:

- Current and planned land uses including community profiles, population, trends, and socio-economic characteristics
- Environmental Justice areas
- Public lands
- Soils and geology
- Surface water
- Floodplains
- Wetlands and ponds
- Prime farmland
- Air Quality
- Noise
- Habitat
- Threatened and Endangered Species
- Hazardous materials sites
- Cultural and Historic Resources

Phase 300 – Report Development

- Develop a Draft Report summarizing the analysis, methodology and recommendations from our Study Content Phase, an electronic copy of the Draft Report including an Executive Summary will be delivered to the CLIENT.
- After receiving comments from the CLIENT's on the Draft Report, a Final Report summarizing the analysis, methodology and recommendations from our Study Content Phase, an electronic copy of the Final Report including an Executive Summary will be delivered to the CLIENT.

Final Deliverables

The final deliverables of this project will be developed with input from the city of Bel Aire, Kansas Department of Transportation (KDOT) and the other partner study stakeholders including Sedgwick

County, Kansas. Final deliverables will include the following:

- A final report outlining the findings, projections and recommendations from the design team;
- An Executive Summary summarizing study recommendations;
- Drawings illustrating the existing right of way, estimated future right of way needs and proposed future lane configurations;

All reports shall be produced with associated text, graphics, tables, maps and figures and is anticipated to be completed in legal or 11 x 17 inch format. All deliverables will be provided in an electronic PDF format.

Assumptions

- Qualitative Safety analysis is assumed for the project; no HSM, IHDSM or AASHTOware analyses are anticipated to compare future expected crashes. CMF's may be referenced to identify appropriate wrong way driving and other countermeasures associated with any crash patterns that may exist.
- No permitting or environmental is anticipated as part of the design.
- Bel Aire and KDOT will provide review comments on the design concept.
- No drainage report, site plan development, plans for construction or environmental considerations will be included under this scope of services.
- Geological investigations are not included in this proposal.
- We are assuming 14 days for agency (Bel Aire, KDOT) review times on the corridor.
- No alternative transportation modes such as transit, pedestrian or bicycle will be collected or analyzed.

Design Fee

Our design fee to complete the above scope of work will be a lump sum amount of $90,000.