


Municipality	LOCAL AGENCY	 <b>Illinois Department of Transportation</b>	CONSULTANT	Name RS&H, Inc.
Township				Address 525 Dunham Road, Suite 20
County Lake County – Division of Transportation		<b>Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds</b>		City St. Charles
Section				State IL

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-Motor Fuel Tax Funds, allotted to the LA ~~by the State of Illinois~~, under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely ~~or in part~~ to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

### Section Description

Name Wadsworth Road @ Lewis Avenue Intersection Improvements.

Route \_\_\_\_\_ Length \_\_\_\_\_ Mi. 5200 FT (Structure No. \_\_\_\_\_)

Termini Approximately 500' N & S, 2600' West, and 1600' East of the Subject Intersection.

Description:  
Phase 2 Design for intersection and pedestrian improvements.

### Agreement Provisions

#### The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
  - a. ☒ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
  - b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
  - c. ☒ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
  - d. ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
  - e. ☒ Prepare Army Corps of Engineers Permit, Lake County Stormwater Management Commission Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
  - f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
  - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with one (1) copy of each document in both hardcopy and electronic format. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
  - h. ☒ Furnish the LA with survey and drafts in duplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
  - i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals

- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
  - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
  - l. ☒ Services as included and/or defined in the attached Scope of Services.
- 2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the LA. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA.
  - 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA.
  - 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.
  - 5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this AGREEMENT will be made available, upon request, to the LA ~~at~~ without cost and without restriction or limitations as to their use.
  - 6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

**The LA Agrees,**

- 1. To pay for all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"Cost to Engineer" to be verified by furnishing the LA copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

The Total Not-to-Exceed Contract Amount shall be **\$498,506.90**

- 2. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed.

By Mutual agreement, partial payments may be made from time to time as the work progresses.

- 3. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 192 percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
- 4. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 192 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

**It is Mutually Agreed,**

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with section 4 of the LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA
4. That the ENGINEER warrants that the ENGINEER has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that the ENGINEER's has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in triplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST:

By

Lake County

Clerk

(Seal)

County of Lake

(Municipality/Township/County)

of the

State of Illinois, acting by and through its

County Board

By

Title

Chairman of the County Board

RECOMMENDED FOR EXECUTION

Paula J. Trigg, P.E.  
Director of Transportation/County Engineer  
Lake County

Executed by the ENGINEER:

ATTEST:

By

Title

Engineering Firm

Street Address

City, State

By

Title

**SCOPE OF ENGINEERING SERVICES  
WADSWORTH ROAD AT LEWIS AVENUE  
LAKE COUNTY DIVISION OF TRANSPORTATION  
Phase II**

**Project Overview**

Wadsworth Road at Lewis Avenue is a signal controlled intersection located in the City of Waukegan and the Village of Beach Park. Wadsworth Road is generally a two-lane undivided arterial street; whereas Lewis Avenue is a four-lane arterial street. There are left turn lanes at each leg of the intersection; no right turn lanes exist at the intersection. The project area is generally an urban environment, with a mixture of residential, commercial, and aviation land uses. The southwest quadrant houses the Waukegan National Airport and the northeast and southeast quadrants consist of a gas station and strip mall respectively. There is a school and an associated school zone immediately east of the intersection.

There are no sidewalks or pedestrian facilities present at the intersection. Street lighting is provided in the form of a single light located atop a Commonwealth Edison utility pole. Parkways are variously composed of dirt, grass, or gravel; there are no dedicated parking locations along the route. There is an existing storm sewer system and culvert crossings at and adjacent to the intersection. Trees and landscaping are sporadic, there are numerous utilities including utility poles near the roadway. The posted speed limit is 45 mph with the exception of the east leg which is posted at 35 mph.

A Phase I study and report is being completed at this time. This project will follow the recommendations of the approved project development report and associated documents. The scope items in this project include Phase II detailed design as well the preparation of construction documents. Also included are those items to extend the proposed multi-use-path (MUP) east to the Robert McClory bike path as requested by the Village of Beach Park; in particular, this includes those items not included in the original Phase I scope as well as Phase II design and the addition of the MUP to the construction documents. Other scope items include aviation services to coordinate with the Waukegan National Airport and the FAA, comprehensive right-of-way (ROW) acquisition services, conceptual cost estimates, and construction phase services. The attached Phase II Wadsworth and Lewis Detailed Work Hours and Direct Costs document provides a further breakdown of work by discipline as well as scope and costs for items pertaining to the Lake County Division of Transportation (LCDOT) project limits and the Beach Park multi-use path extension and project limits.

A list of tasks anticipated to be accomplished during the project is as follows:

**Task 1 – Field Checks and Meetings, CMAQ Application**

Upon receipt of the notice to proceed, RS&H will attend a Project Kick-off Meeting with the Lake County Division of Transportation. A project schedule will be developed and agreed upon by both parties. RS&H will continue the coordination initiated during the Phase I process including the City of Waukegan, the Village of Beach Park, as well as the Waukegan Port District (Waukegan National Airport), and the Illinois Department of Transportation. Project coordination meetings with the Lake County Division of Transportation will take place as needed. RS&H will also conduct coordination meetings with sub-consultants, local agencies, and stakeholders as appropriate. RS&H will prepare a Congestion Mitigation and Air Quality Improvement Program

Application for funding including any necessary documents or estimates for the 2017 call for project cycle.

## **Task 2 – Surveys (Environmental Design International, Inc. (EDI))**

### Topographic Survey:

EDI will perform additional pickup survey to augment the Phase I survey as necessary within the LCDOT project limits. Additionally, full topographic survey will be performed to facilitate the extension of the MUP from east project limits on Wadsworth Road to Robert McClory Bike path, and 200' up and down bike path from Wadsworth Road. Survey information will be gathered to 25-35' beyond in existing ROW in each direction. Separate estimates in CECS format have been included for LCDOT

Based on the survey limits described above, field survey work will be performed to obtain topographic and planimetric data will be in accordance with IDOT and LCDOT requirements and the content requirements outlined below as well as in the attached LCDOT Design Survey Procedures (12/4/14) memorandum:

- The location, elevation, and material composition of street pavements, sidewalk pavements, driveway pavements, curb and gutter sections, and other land surfaces. Roadway cross-sections will be obtained at a 100 foot interval.
- The location, elevation, and material composition of storm sewer conveyance, sanitary sewer collection, and water distribution systems as measured at structures visible and retrievable from the ground surface (underground exploration is not within the scope of these services).
- The location, elevation, and material composition (if applicable) of ditches and culverts with shapes and sizes, direction of flow, elevation of inverts or flow lines and other physical properties of those drainage structures visible and retrievable from the ground surface which information will be supplemented by public records and plans (underground exploration is not within the scope of these services).
- The location and elevation at the base of utility poles, street lights, ground boxes, pedestals, and transformers with notation as to the identity of the utility company and other planimetric features when visible and retrievable from the ground surface (underground exploration is not within the scope of these services).
- The location, elevation at base and diameter of individual or isolated trees 4 inches or greater in diameter as measured 3 feet above the base. For tree lines or groupings in more heavily wooded areas, only the tree line perimeter will be located. The trees will be identified as either coniferous or deciduous. Bushes will be identified as such.
- The location (by station), extent, physical description and color of existing pavement striping, pavement markings, roadway signage (with specific type and legend).
- In accordance with IDOT survey requirements, collect detailed sketches, photographs, topographic and planimetric data for waterway structures along the survey route.
- When requested, mark all 100-foot interval station locations on the survey baseline for construction (when on paved surfaces) with a PK or Mag nail and spray paint.

In accordance with IDOT and LCDOT data format and deliverable standards, compile said topographic and planimetric field survey work along with any information gathered and prepare Composite Topographic and Planimetric Survey Base Sheets as well as digital terrain models in digitized and layered electronic format at an estimated scale of 1 inch = 20 feet with contours

interpolated on a one-foot interval, and depicting the R.O.W. limits, as defined by the record plats of dedication and survey documentation. Provide copies from field books showing benchmarks, level circuits and structure details, such as sizes and inverts to the Lake County Division of Transportation in accordance with deliverable requirements.

Land Acquisitions survey:

- The establishment of approximately 2 section corners with monument records and at least four (4) recovery ties for recording with the Lake County Recorder.
- The establishment of all property and land lines including private ownership lines, section lines, Right of Way lines and Easement lines not previously established during the phase I survey for the area where the proposed parcels are going to take place
- The creation of approximately 4 Plats of Highway
- The creation of approximately 27 legal descriptions
- Stake and tie all centerline alignments and approximately 40 proposed Right of Way corners
- All services shall be performed at the direction of the LCDOT and in accordance with the policies and procedures of the LCDOT Design Survey Procedures (12/4/14)

### **Task 3 – Land/Right-of-Way (ROW) Acquisition Services (Santacruz Land Acquisitions)**

Santacruz Land Acquisitions shall perform all necessary services in the preparation of appraisals and review appraisals and the negotiation of the acquisition of necessary properties required for the completion of the Project. All services shall be performed at the direction of the LCDOT and in accordance with the policies and procedures of the LCDOT Design Survey Procedures (12/4/14), IDOT as applicable, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (“Uniform Act”), as amended (49 CFR Part 24), the Illinois Eminent Domain Act (735 ILCS 30) (“Eminent Domain Act”) and the Illinois Code of Civil Procedure (“Code of Civil Procedure”). Specific tasks are expected to include but not be limited to:

- ROW appraisals, waivers, negotiations, and recording services to be billed per parcel
- Direct costs including but not limited to recording fees, title insurance, lender and or trustee fees will be invoiced at actual cost
- Introductory Notices
- Appraisal/Waiver Valuation
- Appraisal Review and Certification
- Negotiation and Acquisition
- Recording

### **Task 4 – Multi-use Path Extension (Beach Park):**

The scope items include items necessary to include the extension of the proposed multi-use path (MUP) beyond the original contract limits east to the Robert McClory bike path and not included in the Phase I scope; as well as those items necessary to complete Phase II activities. Phase I activities include preliminary design and modifications necessary to add the MUP extension to the Phase I report, survey, updates to the location drainage study, as well as additional environmental studies. Phase II scope items generally includes land acquisition activities and the preparation of construction documents.

Phase I Services:

- Multi-Use Path preliminary design
- Concept Plan and Profile Sheets
- Concept Profile & Cross-section Studies (Includes Test Cross-sections in Critical Areas & Final Cross-sections)
- Typical Sections and IDS Revisions
- Right of Way Studies
- Update Project Development Report
- Update Location Drainage Study
- Environmental (Kowalenko)
  - Additional Wetland Delineation
  - Amend Wetland Report
  - Additional PESA
  - pH testing and 3662/663 Form Completion
- Survey (see also task 2)
  - Additional topographic survey from east project limits on Wadsworth Road to Robert McClory Bike path, and 200' up and down bike path from Wadsworth Road (Beach Park).
    - Survey information will be gathered to 25-35' beyond in existing ROW in each direction
    - Cross Sections
    - Utility Survey
    - Trees 4" and Greater
    - Base Mapping, Plotting of Existing Topography Including all Utilities and Drainage Elements
  - Locate Right-of-Way (R.O.W.) Monuments
  - Research Property Ownership
  - The creation of approximately 1 Plats of Highway including takes, permanent easements, and temporary easements.
  - The creation of approximately 2 legal descriptions.
  - Additional Wetland Delineation Survey

Phase II Services:

- Land Acquisition (see also task 3)
  - ROW appraisals, waivers, negotiations, and recording services to be billed per parcel
  - Direct costs including but not limited to recording fees, title insurance, lender and or trustee fees will be invoiced at actual cost
  - Introductory Notices
  - Appraisal/Waiver Valuation
  - Appraisal Review and Certification
  - Negotiation and Acquisition
  - Recording
- MUP Detailed Design and Construction Documents to be included in LCDOT Construction Documents (see also task 6)

**Task 5 – Aviation Services**

Coordination with the FAA and Waukegan Port District will be provided with the intent of facilitating the construction of the preferred appropriate roadway alternative. The following items are anticipated to be a part of this task:



- Continued coordination
- Runway Protection Zone Study and/or exhibits as necessary

### **Task 6 – Construction Document Preparation**

RS&H will prepare construction documents including plans, details, and specifications based upon the Phase I preferred alternative. Submittals will be made at the preliminary, pre-final, and final milestones for LCDOT and IDOT review and comment. RS&H will incorporate any applicable review comments. The contract documents will conform the LCDOT and IDOT local roads standards. Specific tasks and/or plan sheet disciplines are expected to include:

- Prepare Base Files
- Cover Sheet
- Index of Sheets, Highway Standards, General Notes, Commitments
- Summary of Quantities with pay code columns based upon funding
- Schedules of Quantities for all items (except lump sum & contingency items)
- Typical Sections/HMA Table
- Alignment, Ties, and Benchmarks
- Geometric Design
  - Geometric Analysis and Design; alignment, profile, and superelevation verification
  - Sidewalk/Pathway Design including ADA compliance including individual ramp details at all crossings
  - Pavement Design
- Removal Plans
- Maintenance of Traffic
- Plan and Profile Sheets
- Intersection Detail Sheet(s)
- MALS SR Grading and Protection Detail
- Erosion Control and Landscaping Plan (includes all traffic control stages)
- Drainage & Utilities
  - Drainage Plans per approved Phase 1 Drainage Study
  - Utility coordination, meetings, permit review, and location/conflict determination
- Right-of-Way Sheets
- Signage & Pavement Marking
- Landscaping
- Traffic Signals
- Construction Details
  - Prepare construction details as necessary.
  - Modify IDOT/LCDOT details as necessary.
- Cross Sections.
  - Every 50', half sections at side roads, cross road culverts, and driveways.
  - Include earthwork quantities on sections.
  - Include trees, utilities. Per LCDOT Plan Preparations Guide (rev 10/1/2011)
  - Plot cross sections on sheets.
- Quantity Calculations
- Special Provisions
- Provide signed 662/663 forms (RS&H/Kowalenko)
- PH Testing/ for identified PIP's (Kowalenko)

#### **Task 6 – Traffic Signal Design (DLZ, Inc.)**

Design will be performed for temporary and permanent traffic control signals at the intersection of Wadsworth Road and Lewis Avenue as well as the proposed installation of a Rectangular Rapid Flashing Beacon (RRFB) at the crossing near the Kenneth Murphy School. Other tasks include temporary and permanent interconnect of the Wadsworth & Lewis intersection signal along Lewis Avenue between 33<sup>rd</sup> Street to Beach Road. Specific tasks are expected to include:

- Permanent Signal Plan for the intersection of Wadsworth Road at Lewis Avenue
- Temporary Signal Plan for the intersection of Wadsworth Road at Lewis Avenue
- Signal Interconnect from 33<sup>rd</sup> Street to Beach Road for the above intersection
- Cable Plans and Sequences of Operation for the above intersection
- Addition of a RRFB at the Kenneth Murphy School crossing location, based upon LCDOT standards

#### **Task 7 – Opinion of Probable Project Cost**

Provide and Engineers Opinion of Probable Construction Cost based upon recent Lake County and IDOT bid tabulation data. Costing will be provided at the preliminary, pre-final, and final submittals and will include a breakdown for items related to any municipal costs including the Beach Park Multi Use Path Extension as noted in task 4.

#### **Task 9 – Construction Phase Services**

The RS&H project team will provide up to 80 hours of construction phase support services including but not limited to:

- Shop Drawing and/or Material Review
- Request for Information/Clarification
- Construction Observation
- Design Revisions due to Unforeseen Conditions
- Review of Contractor Value Engineering Proposals

#### **Task 10 – Quality Assurance/Quality Control**

RS&H will submit a project specific QA/QC plan for approval by the Lake County Division of Transportation. The Plan will define the procedures used to control and insure the quality of the design process from data collection through the submittal of the final PDR. The QA/QC Plan will address the following:

- Management responsibility
- Design standards and documents
- QA/QC check sheets
- Document control
- QA Process control
- Quality records and audit procedures
- Training

The project team will follow the procedures outlined in the approved QA/QC Plan. Internal peer reviews will be conducted at reasonable intervals and documented. All major submittals will follow internal technical reviews, and the project manager will review progress with respect to budget and schedule at least monthly to ensure that the project remains on track.

## **Task 11 – Administration**

The RS&H team will undertake all other administrative duties necessary to support the successful completion of the project. This work will include:

- General Project Management duties including Project Officer oversight
- Writing and filing project correspondence including phone memos, meeting minutes, etc.
- Managing sub-consultants
- Monitoring project schedule and budget, and preparing monthly invoices and progress reports for submission to the Lake County Division of Transportation Project Manager

### **ASSUMPTIONS**

- Preliminary plans will be developed using the horizontal and vertical geometry from the Phase I preferred alternative
- RS&H will utilize the existing survey, record, and plan data transmitted from the Phase I project. Additional survey or data collection not expressly listed herein required to complete the work is not included in this scope of work
- Bid phase services are not included in the scope of work
- Schedules of Quantities will be developed for Pre-final and Final plans

### **EXCLUSIONS**

- Lighting design
- Watermain or sanitary sewer design
- Utility relocation detailed design
- Structural design
- Additional testing other than those items listed.
- Permit fees or any proposed electrical service fees

### **ANTICIPATED PROJECT SCHEDULE**

Upon notice to proceed, RS&H will prepare a project schedule in concert with LCDOT staff. It is our understanding that construction is scheduled for 2020 but may be earlier depending on plan readiness and available funding.

**WORKHOURS AND DIRECT COSTS  
WADSWORTH ROAD AT LEWIS AVENUE  
LAKE COUNTY DIVISION OF TRANSPORTATION  
Phase II**

1. Field Checks & Meetings

a. Meetings with Lake County and Local Agencies – Up to 8 Meetings (2 staff, 6 hours)	96
b. Field Check – Up to 1 Site Visit (2 staff, 6 hours each + 4 prep. time)	16
c. Coordination for Beach Park Watermain Project	8
d. CMAQ Application	40

TOTAL WORKHOURS	160
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Mileage to Lake County DOT/Project Location 9 trips@120miles/round trip - 1080 miles @\$0.54/mile	\$583.20
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ESTIMATED DIRECT COSTS	\$583.20
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2. Surveys (Environmental Design International, Inc.)

a. Locate Right-of-Way (R.O.W.) Monuments	
b. Research Property Ownership along the Project Corridor	
c. Pick up Survey as needed.	
d. Base Mapping, Plotting of Existing Topography Including all Utilities and Drainage Elements	
e. The creation of approximately 4 Plats of Highway containing approximately 13 takes, 13 Temporary Easements and 1 Permanent Easement to be acquired for LCDOT.	
f. The creation of approximately 27 legal descriptions.	
g. Title commitments	
h. Stake and tie centerline alignments and proposed Right of Way corners.	
i. The Establishment and Monument of approximately 2 section corners	
j. The establishment of all property and land lines including private ownership lines, section lines, Right of Way lines and Easement lines not previously established during the phase 1 survey for the area where the proposed parcels are going to take place. Includes setting property corners after construction is complete.	
k. Survey Points Shall Use IDOT Line and Point Codes	
l. Additional Wetland Delineation Survey	
m. Coordination	16

WORKHOURS	16
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WORKHOURS – SUBCONSULTANT (Services by others)	439
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ESTIMATED DIRECT COSTS – SUBCONSULTANT (Services by others)	\$7740.80
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3. Right-of-Way Acquisition Services (Santacruz Associates, Inc.)

The attached estimate is based upon 16 parcels. This work will be billed as per parcel including actual title, recording, and document fees.

- a. Introductory Notice to Owners
- b. Appraisal/Waiver Valuations
- c. Review Appraisals
- d. Negotiations & Acquisitions
  - a. Conveyance Documents
  - b. Processing Documents/ Recording Fees
  - c. Title Commitments
  - d. Title Insurance
- e. Coordination 16

WORKHOURS 16

WORKHOURS – SUBCONSULTANT (Services by others) Per Parcel

ESTIMATED DIRECT COSTS – SUBCONSULTANT (Services by others) Per Parcel

4. Multi-Use Path Extension (Beach Park Multi-Use Path extension from Bernice Terrace to Robert McClory Bike Path)

- a. Phase 1 Services
  - a. Multi-Use Path preliminary design 80
  - b. Phase 1 Plan and Profile Sheets (2 sheets @ 20 scale 16 hours per sheet) 32
  - c. Phase 1 Profile & Cross-section Studies (Includes Test Cross-sections in Critical Areas & Final Cross-sections) 32
  - d. Phase 1 Typical Sections and IDS Revisions (2 sheets @ 4 hours/sheet) 8
  - e. Right of Way Studies 8
  - f. Update Project Development Report to include path extension and pedestrian crossing 8
  - g. Update Location Drainage Study to include path extension 32
  - h. Environmental (Kowalenko) – see by others below
    - i. Additional Wetland Delineation
    - ii. Amend Wetland Report
    - iii. Additional PESA
- b. Phase 2 Design and addition to LCDOT Construction Documents 100
- c. Topographic Survey/ROW (EDI, Inc.) – see by others below
  - a. Additional topographic survey from east project limits on Wadsworth Road to Robert McClory Bike path, and 200’ up and down bike path from Wadsworth Road (Beach Park). Survey information will be gathered to 25-35’ beyond in existing ROW in each direction.
    - i. Cross Sections
    - ii. Utility Survey
    - iii. Trees 4” and Greater
    - iv. Base Mapping, Plotting of Existing Topography Including all Utilities and Drainage Elements
  - b. Locate Right-of-Way (R.O.W.) Monuments
  - c. Research Property Ownership
  - d. The establishment of all property and land lines including private ownership lines, section lines, Right of Way lines and Easement lines not previously established during the phase 1 survey for the area where the proposed parcels are going to take place.

- e. The creation of approximately 1 Plats of Highway including takes, permanent easements, and temporary easements.
- f. The creation of approximately 2 legal descriptions.
- g. Survey Points Shall Use IDOT Line and Point Codes
- h. Additional Wetland Delineation Survey
- d. ROW Acquisition Services (Santacruz) – see by others below  
The attached estimate is based upon 2 parcels. This work will be billed as per parcel including actual title, recording, and document fees.
  - a. Introductory Notice to Owners
  - b. Appraisal/Waiver Valuations
  - c. Review Appraisals
  - d. Negotiations & Acquisitions
    - i. Conveyance Documents
    - ii. Processing Documents/ Recording Fees
    - iii. Title Commitments
    - iv. Title Insurance

Miscellaneous Printing – 10 sets @ 50 pages/set = 500 pages @ \$.25/sheet \$125.00

TOTAL WORKHOURS 300

WORKHOURS – SUBCONSULTANT (Services by others)

EDI 163  
 Santacruz Per Parcel  
 Kowalenko 87

ESTIMATED DIRECT COSTS \$125.00

ESTIMATED DIRECT COSTS – SUBCONSULTANT (Services by others)

EDI \$801.40  
 Santacruz Per Parcel  
 Kowalenko \$485.00

#### 5. Aviation Services

- a. Runway Protection Zone Study 80
- b. Additional Coordination 20

TOTAL WORKHOURS 100

#### 6. Construction Documents

- a. Prepare Plans and Specifications for Preliminary, Pre-final, and Final submittals including:
  - a. Prepare Base Files
  - b. Cover Sheet (1)
  - c. Index of Sheets, Highway Standards, General Notes, Commitments (1)
  - d. Summary/Schedules of Quantities (5)
  - e. Typical Sections/HMA Table (3)
  - f. Alignment, Ties, and Benchmarks (2)
  - g. Phase II Geometric Design
    - i. Detailed geometric analysis and design; alignment, profile, and superelevation verification, property tie in details
    - ii. Sidewalk/Pathway Design including ADA compliance, ramp details for each crossing

- iii. Pavement Design
- h. Removal Plans (7)
- i. Plan and Profile Sheets (14)
- j. Intersection Detail Sheets (1)
- k. MALS SR Grading and Protection Detail Sheet (1)
- l. Maintenance of Traffic
  - i. Traffic Control Notes & Sequence of Construction (1)
  - ii. Traffic Control Typical Sections (2)
  - iii. Traffic Control Plan Sheets (12)
  - iv. Staging and Traffic Control Detail Sheets (2)
- m. Erosion Control:
  - i. Provide design of appropriate soil erosion/sedimentation control measures as necessary in accordance with LCDOT/IDOT standards
  - ii. Stage control ESC design
  - iii. Erosion and Sediment Control Plans and Details (9)
- n. Drainage Detailed Design, Drainage & Utilities Sheets, Details. (9)
  - i. Drainage Plans per approved Phase 1 Drainage Study
  - ii. Utility coordination, meetings, permit review, and location/conflict determination
- o. Right-of-Way Sheets (8)
- p. Signage & Pavement Marking
  - i. Existing Signage Inventory
  - ii. Proposed Signing & Pavement Marking Plans (8)
- q. Landscaping:
  - i. Determine Tree Replacement(s) necessary and locate placement areas.
  - ii. Preparation of Landscaping plans (8)
- r. Signals: See Item 6 below
- s. Prepare construction details as necessary (2)
- t. IDOT/LCDOT details as necessary (4)
- u. Boring Logs (4)
- v. Cross Sections (25)
  - i. Every 50', half sections at side roads, and driveways.
  - ii. Include earthwork quantities on sections.
  - iii. Include trees, utilities. Per LCDOT Plan Preparations Guide (rev 10/1/2011)
  - iv. Plot cross sections on sheets.
- w. Quantity Calculations
- x. Special Provisions
- y. Provide signed 662/663 forms.
  - i. Testing (Kowalenko) – see by others below
  - ii. Review and Determination (Kowalenko) – see by others below

Miscellaneous Printing – 20 sets @ 130 pages/set = 2600 pages @ \$.25/sheet	\$650.00
TOTAL WORKHOURS*	1436
WORKHOURS – SUBCONSULTANT (Services by others)	13.5
ESTIMATED DIRECT COSTS – SUBCONSULTANT (Services by others)	\$1648.00

\*NOTE: Addition of Beach Park MUP to plan set (100 hours) is included in item 4 above.

7. Traffic Signal Design (DLZ, Inc.)

- a. Signal Design
  - a. Intersection of Wadsworth Road & Lewis Avenue
    - i. Removal
    - ii. Installation
    - iii. Interconnect
  - b. Pedestrian Crossing at Bernice Terrace
  - c. Temporary Signals (3 Phases)
- b. Prepare Signal Plans for above (13)
- c. Service Coordination for Ped Crossing at Bernice Terrace
- d. Construction Phase Services (up to 10 hours)
- e. Cost Estimating
- f. Specifications
- g. Coordination 16

TOTAL WORKHOURS 16  
WORKHOURS – SUBCONSULTANT (Services by others) 228  
ESTIMATED DIRECT COSTS – SUBCONSULTANT (Services by others) \$216.40

8. Opinion of Probable Project Cost

- a. Provide Opinion of Probably Construction Cost for Preliminary, Pre-Final, and Final Plan Submittals 60

TOTAL WORKHOURS 60

9. Construction Phase Services

- a. Construction support as necessary including RFI, RFQ, and shop drawing review. Up to 80 hours. 80

TOTAL WORKHOURS 80

10. Quality Assurance/Quality Control

TOTAL WORKHOURS 56

11. Administration

TOTAL WORKHOURS 40

ASSUMPTIONS

1. Copies of available existing plans surveys or plats will be made available to the consultant.
2. Additional construction phase services beyond 96 hours will be considered supplemental work.
3. LCDOT/IDOT will prepare bidding documents.



## EXCLUSIONS

1. Survey other than that specified above.
2. Lighting design is not included in this scope.
3. Watermain or sanitary sewer design.
4. Utility relocation detailed design.
5. Additional testing other than those items listed.
6. Permit fees or any proposed electrical service fees other than those specified above.

**PAYROLL ESCALATION TABLE  
FIXED RAISES**

FIRM NAME RS&H, Inc.  
PRIME/SUPPLEMENT Prime

DATE 09/19/16  
PTB NO. NA

CONTRACT TERM 18 MONTHS  
START DATE 8/1/2016  
RAISE DATE 4/1/2017

OVERHEAD RATE 178.83%  
COMPLEXITY FACTOR 0  
% OF RAISE 3.00%

**ESCALATION PER YEAR**

8/1/2016 - 4/1/2017
8
18

4/2/2017 - 2/1/2018
10
18




= 44.44%  
= 1.0167

57.22%

**The total escalation for this project would be:**

1.67%

## PAYROLL RATES

FIRM NAME RS&H, Inc. DATE 09/19/16  
PRIME/SUPPLEMENT Prime  
PSB NO. NA

ESCALATION FACTOR 1.67%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
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Principal	\$82.72	\$70.00 max 2 categories at \$70
Engineer IV	\$67.70	\$68.83 max 2 categories at \$70
Engineer III	\$45.25	\$46.00 max 60
Engineer II	\$32.14	\$32.68 max 60
Engineer I	\$27.69	\$28.15 max 60
Planner V	\$75.87	\$60.00 max 60
Planner IV	\$76.14	\$60.00 max 60
Planner III	\$42.69	\$43.40 max 60
Planner II	\$32.96	\$33.51 max 60
Planner I	\$25.36	\$25.78 max 60
Technician IV	\$39.44	\$40.10 max 60
Technician III	\$31.20	\$31.72 max 60
Technician II	\$25.00	\$25.42 max 60
Environmental Specialist	\$38.68	\$39.32 max 60
Administrative Assistant	\$25.72	\$26.15 max 60

## Subconsultants

FIRM NAME  
PRIME/SUPPLEMENT  
PSB NO.

RS&H, Inc.  
Prime  
NA

DATE 09/19/16

NAME	Direct Labor Total	Contribution to Prime Consultant
EDI	19,774.11	2,372.89
Kowalenko	5,152.98	618.36
Santacruz	32,250.00	3,870.00
DLZ	9,116.58	1,093.99
		0.00
		0.00
		0.00
		0.00
Total	66,293.67	7,955.24

DF-824-039  
REV 12/04  
**09/23/16**

DATE

**DBE 38.54%**

**SHEET**                      **1**      **OF**      **2**

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# AVERAGE HOURLY PROJECT RATES

**FIRM** RS&H, Inc.  
**PSB** NA  
**PRIME/SUPPLEMENT** Prime

**DATE** 09/19/16

**SHEET** 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Construction Documents			Signal Design			Costing			Construction Phase			QAQC			Administration		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	24	1.67%	1.17				4	6.67%	4.67				16	28.57%	20.00	4	10.00%	7.00
Engineer IV	68.83	100	6.96%	4.79	8	50.00%	34.41	16	26.67%	18.35	8	10.00%	6.88	24	42.86%	29.50	12	30.00%	20.65
Engineer III	46.00	168	11.70%	5.38							8	10.00%	4.60	16	28.57%	13.14			
Engineer II	32.68	356	24.79%	8.10	8	50.00%	16.34	24	40.00%	13.07	32	40.00%	13.07						
Engineer I	28.15	348	24.23%	6.82							24	30.00%	8.45						
Planner V	60.00																		
Planner IV	60.00																		
Planner III	43.40																		
Planner II	33.51																		
Planner I	25.78																		
Technician IV	40.10																		
Technician III	31.72	440	30.64%	9.72				16	26.67%	8.46	8	10.00%	3.17						
Technician II	25.42																		
Environmental Spec	39.32																		
Administrative Assist	26.15																24	60.00%	15.69
<b>TOTALS</b>		1436	100%	\$35.99	16	100%	\$50.75	60	100%	\$44.55	80	100%	\$36.17	56	100%	\$62.64	40	100%	\$43.34

# PROPOSAL FOR LAND ACQUISITION SERVICES

**Lake County Division of  
Transportation**

**RS&H**



**Intersection of  
Wadsworth Road and  
Lewis Avenue**

**Santacruz Land  
Acquisitions**

310 Happ Road · Suite 206  
Northfield, IL 60093  
[www.santacruz-associates.com](http://www.santacruz-associates.com)

Contact:  
J. Steve Santacruz  
847-868-9620  
[jsteve@santacruz-associates.com](mailto:jsteve@santacruz-associates.com)



# 1

## EXECUTIVE SUMMARY

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Having extensive experience with right of way projects, we understand the importance of keeping on schedule. On-time lettings gives the Lake County Division of Transportation, the Local Public Agency (“LPA”) the best use of its resources and strengthens the efficiencies in the implementation of its roadway improvement program. To achieve your goals, it is critical that your land acquisition consultant understands the importance and addresses three critical issues in your acquisition of right of way:

- Deliver the right of way on-time to meet the letting
- Manage the acquisition risks, including the cost of condemnation litigation
- Compliance with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), IDOT land acquisition policies and procedures and FWA policies.

### **CRITICAL ISSUE 1: DELIVER THE RIGHT-OF-WAY ON-TIME TO MEET LETTING**

Delivery of right of way on-time keeps the project on its letting schedule. We understand that nothing is more important to the LPA. We also know that keeping the land acquisition on-time and within budget is a measurement of success for the LPA. When a project does not meet its letting schedule, we know it can impact the budget for the LPA, causing scheduling conflicts with potential contractors and also affect other economic factors which govern the delivery of the overall roadway improvement program for the LPA.

**Our solution is to assemble a team of industry leading right of way professionals that have years of experience working on land acquisition projects with the understanding of what needs to be done to complete an acquisition on time.**

Santacruz Land Acquisitions will work with the staff for the LPA and/or RS&H, Engineer for the LPA, (“Consultant”) to develop a land acquisition plan for the reconstruction of the intersection of Wadsworth Road and Lewis Avenue (the “Project”) to assure that the goals are met. Beginning with waiver valuations on the appraisal side, we look for ways to reduce the time on the acquisition cycle. With years of right of way acquisition work, we have a large database of real estate representatives for corporate acquisitions to cut down the time spent in the initial steps of locating the real estate representative for each property.

All of these efficiencies lead to ways in which we minimize our time with an acquisition and translate to your project staying on schedule.

## **CRITICAL ISSUE 2: MANAGE THE ACQUISITION RISKS**

Equally important as the scheduled letting is the acquisition budget for the Project. Cost overruns can jeopardize a project from moving forward. Because real estate costs can represent a significant portion of the budget for a transportation project, our team will suggest ways to minimize impacts and reduce costs in challenging acquisitions. We will also work with the LPA to minimize the condemnation referrals that impact the budget for this Project. By the same token, our team will quickly identify parcels in the very beginning of the process that have title issues that can only be resolved through condemnation.

Through experience, we know that a portion of the parcels will need to be acquired through condemnation. As such, your land acquisition consultant needs to have knowledge of the legal requirements necessary to position an agency for condemnation. Our team possesses that knowledge and has years of experience providing “expert witness” testimony in these matters.

**Santacruz Land Acquisitions is made up of skilled right of way professionals with a vast background in real estate and civil engineering with respect to transportation projects which gives us the ability to recognize issues and resolve them before they create delays.**

## **CRITICAL ISSUE 3: COMPLIANCE WITH GOVERNMENT REGULATIONS**

All land acquisition services must be performed in accordance with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act). In addition, we are familiar with IDOT’s land acquisition guidelines, policies and procedures.

### **WHY SANTACRUZ LAND ACQUISITIONS?**

As you review our proposal, you will see that the team that Santacruz Land Acquisitions has assembled is versatile, experienced and qualified to deliver the full scope of the land acquisition needs for the LPA. What sets apart our team is:

- Years of successful on-time delivery of right of way land acquisition services to various other agencies
- Diverse set of real estate acquisition disciplines including backgrounds in law and civil engineering
- Extensive experience with complex valuations and acquisitions
- Title review experience, including familiarity with all types of recorded documents affecting real estate and knowledge on how to clear title
- Experience in reviewing plats and legal descriptions, as well as an ability to review and understand roadway construction plans
- Expertise with the Uniform Relocation Assistance and Real Property Act of 1970, as amended (Uniform Act), Illinois Eminent Domain Act (735 ILCS 30), IDOT Land Acquisition Guidelines.
- Familiarity with IDOT policies and procedures related to land acquisition and appraisals.

**Our solution is to apply our team’s extensive collective decades of experience complying with federal and state laws and maximizing the team’s knowledge of the land acquisition policies of IDOT.**

## ADDITIONAL COMPONENT OF OUR PROPOSAL: BEP UTILIZATION

Santacruz Land Acquisitions is a BEP with Central Management Services, a DBE with IDOT and an MBE with Cook County and the City of Chicago.

## TEAM ORGANIZATION

Santacruz Land Acquisitions has assembled a versatile team of professional right of way consultants with the experience to deliver successful land acquisition services and meet the letting dates of the project. J. Steve Santacruz, President of Santacruz Associates Ltd. d/b/a Santacruz Land Acquisitions will lead the team as Project Manager. The team brings a wealth of experience in land acquisition for governmental agencies and related real estate law and civil engineering disciplines to assure the proper handling of even the most complicated of acquisitions. Additionally, the key members of the Santacruz Land Acquisitions team have collaborated in the past on projects.

## SUMMARY

**With a long history of successful delivery of a variety of right of way projects on-time, within budget and to our client's satisfaction, we look forward to the opportunity to assist the LPA with its land acquisition needs**

## COMPENSATION

Santacruz Land Acquisitions shall be entitled to the compensation as shown on the attached schedule. Our cost proposal, based on **sixteen (16)** projected parcels of right-of-way, is as follows:

<b><u>APPRAISALS/WAIVERS:</u></b>	<b>\$41,200.00.</b>
<b><u>REVIEW APPRAISALS:</u></b>	<b>\$19,400.00.</b>
<b><u>NEGOTIATIONS:</u></b>	<b>\$43,200.00.</b>

As directed, Santacruz Land Acquisitions shall invoice the LPA or Consultant for any fees and charges related to the acquisitions including, without limitation, (i) the cost of the later date title commitments, (ii) the cost of title insurance

policies obtained on the parcels to be acquired, (iii) the cost of recording any necessary documents to complete the conveyance and obtain clear title, (iv) lender's fees related to the processing of any partial releases needed to provide clear title, and (v) land trustee processing fees. Santacruz Land Acquisitions shall include **\$500.00** per parcel for these charges. Santacruz Land Acquisitions shall pay any such fees and charges in excess of the **\$500.00** per parcel allowance for which Santacruz Land Acquisitions shall be entitled to additional compensation in the amount of any such payments pursuant to a separate work order issued.

Santacruz Land Acquisitions will attend and/or participate in up to four (4) hours of meetings and conference calls for consultations on the project. This will include, without limitation, kick-off meetings, planning discussions, project strategy development and review of parcels with acquisition challenges.

Based on the projected total number of parcels of right-of-way to be acquired for the Project, the land acquisition negotiation services provided herein are offered a cost not to exceed of **\$112,800.00** as follows:

Land Acquisition Services	<b>\$103,800.00</b>
Consultation/Meeting Services	<b>\$1,000.00</b>
Direct Billable Expenses	<b>\$8,000.00</b>

This amount is allocated between LPA and the Village of Beach Park as follows:

<b><u>FOR LPA</u></b>	<b>\$100,150.00</b>
Land Acquisition Services	<b>\$92,400.00</b>
Consultation/Meeting Services	<b>\$750.00</b>
Direct Billable Expenses	<b>\$7,000.00</b>
<b><u>FOR BEACH PARK</u></b>	<b>\$12,650.00</b>
Land Acquisition Services	<b>\$11,400.00</b>
Consultation/Meeting Services	<b>\$250.00</b>
Direct Billable Expenses	<b>\$1,000.00</b>

# 2

## TECHNICAL APPROACH

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Santacruz Land Acquisitions shall perform all necessary services in the preparation of appraisals and review appraisals and the negotiation of the acquisition of necessary properties required for the completion of the Project. All services shall be performed at the direction of the LPA and Consultant in accordance with the policies and procedures of IDOT, as applicable, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 ("Uniform Act"), as amended (49 CFR Part 24), the Illinois Eminent Domain Act (735 ILCS 30) ("Eminent Domain Act") and the Illinois Code of Civil Procedure ("Code of Civil Procedure").

Santacruz Land Acquisitions will review the highway construction plans with the LPA and/or the Consultant to understand the nature and purpose of the project.

Santacruz Land Acquisitions agrees to perform the services as set forth herein as well as furnish and deliver to the LPA the final reports accompanied by all necessary documents needed for recordation and/or necessary for eminent domain proceedings. **The process described in this section has been the roadmap to many successful right of way projects for Santacruz Land Acquisitions helping us help you keep your projects on-time and within budget.**

### **LAND ACQUISITION CRITICAL PATH STEPS – "OUR ROAD MAP"**

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#### **Task 1: Notice to Proceed**

Our services start within one week (or sooner, if requested) of an authorization to proceed from the LPA.

#### **Task 2: Kick-off Meeting**

Santacruz Land Acquisitions will meet with the LPA and/or Consultant to discuss the Project, identify issues and develop any necessary strategies to assure the timely completion of the Project. At that time, we will identify the subconsultants that shall be assigned to the Project to perform the appraisal and review appraisal functions.

### **Task 3: Delivery and Review of Project Information**

The LPA or Consultant will provide Santacruz Land Acquisitions with plats of highway, legal descriptions, the most recent title commitments and any other pertinent information regarding the property owner for each parcel assigned for acquisition. In addition, the LPA or Consultant will also provide us with a set of project plans, including, (i) plan and profile, (ii) drainage and utilities, (iii) pavement markings and (iv) cross sections.

### **Task 4: Introductory Notice to Owners**

The assigned Appraiser will notify the property owner of the proposed taking and the beginning the valuation process of the property. The notice will invite the property owner to be present during the inspection by the appraiser.

### **Task 5: Appraisal / Waiver Valuation**

All appraisal work shall be completed within the time frame provided by the LPA at the time the project is assigned.

The Appraiser will review the plat of highways and the construction plans to determine the type of appraisal to be used for each parcel. The Appraiser shall make a detailed inspection of the properties and make such investigations and studies as are consistent with industry standard and necessary to derive sound conclusions for the preparation of appraisal reports.

While IDOT has revised its policies regarding waiver valuations, their use on this Project would be available at this time. Waiver valuations would require coordination with the LPA. In addition, waiver valuations can only be used if the right-of-way is acquired in the name of the LPA.

It should be noted that a waiver valuation is not an appraisal and may not be represented to be an appraisal. Accordingly, when an offer to purchase based on a waiver valuation is rejected and the

parcel is referred to condemnation, an appraisal, written by a qualified staff or fee appraiser, must be written and reviewed.

Santacruz Land Acquisitions will provide guidance to the LPA in making its decision on whether or it should proceed with waiver valuations for this Project.

The Appraiser shall assist in analyzing and responding to valuation information provided by a property owner in support of a counter offer. At the request of the LPA or Consultant, Santacruz Land Acquisitions will furnish and deliver updated or revised appraisals resulting from a revision to the right of way or for condemnation purposes.

We understand that appearances in court and/or pretrial conferences, which may include depositions, and preparation for litigation or pre-trial conferences may be required by the LPA so that it may complete the acquisition of the property through condemnation. In such case, at the request of the LPA or its trial counsel, the Appraiser assigned to appraise the parcel shall make any such appearances or complete such preparation work in order to assist with this process. Such requests will be pursuant to a separate work order.

### **Task 6: Review Appraisal**

All appraisals will be reviewed by the Review Appraiser assuring that all items affecting the value of the property have been considered in the appraisal.

The Review Appraiser will complete the Right of Way Appraisal Review Certification (using the form designated by IDOT) and a copy will be attached to the appraisal delivered by Santacruz Land Acquisitions.

At the request of the LPA or Consultant, Santacruz Land Acquisitions will furnish and deliver updated or revised appraisals and/or reviews resulting from a revision to the right of way or for condemnation purposes. Such requests will be pursuant to a separate work order.

## **Task 7: Negotiation and Acquisition**

All negotiations and acquisition services shall be provided by Santacruz Land Acquisitions after approval by the LPA of the amount of just compensation to be offered to the property owner.

The Negotiator will not have any authority to determine administrative settlements. The Negotiator will consult with the LPA for approval of any counter offers and upon acceptance by the LPA of any such counter offer, Santacruz Land Acquisitions will prepare the necessary documentation for administrative settlement.

Prior to the start of negotiations, the Negotiator will review the plats of highway and appraisals for each parcel before the start of negotiations with a property owner to understand the valuation and impact to the property. Santacruz Land Acquisitions will review the title commitment provided for each parcel to determine the liens and encumbrances that will need to be addressed in order to complete the acquisition process for the LPA. Santacruz Land Acquisitions will direct any questions to the LPA or Consultant resulting from its review of the plans, plats, appraisals and title commitments so that Santacruz Land Acquisitions is prepared for any issues raised by the property owner during negotiations.

Before contacting the owner of a parcel, Santacruz Land Acquisitions will prepare and send the introductory letter to the property owner on the LPA's letterhead. This letter will provide a general statement of the Project, identify the property and the legal property owner, and briefly state the right of requirements necessary from the parcel. This letter shall also contain contact information for Santacruz Land Acquisitions and a representative of the LPA.

Santacruz Land Acquisitions will prepare an offer package for presentation to the owner at the first meeting. The offer package shall contain the Basis for Computing Total Approved Compensation and Offer to Purchase (in the format approved by IDOT), a copy of the plat of highway with the

acquisition areas highlighted and a copy of the legal descriptions of the parcels to be acquired. If, after repeated efforts to contact the property owner to schedule a meeting to present the offer, Santacruz Land Acquisitions is unable to make contact with the property owner, or if the property owner is located out of town, or at the request of the property owner to have the offer package mailed, Santacruz Land Acquisitions will send the offer package by certified mail so that a receipt of delivery can be established.

Santacruz Land Acquisitions will personally contact the property owner a minimum of three times before making a determination that the acquisition of the parcel cannot be successfully negotiated. In most cases, Santacruz Land Acquisitions will exceed the minimum number of contacts in an attempt to make all reasonable efforts to reach a settlement before recommending that the LPA commence condemnation proceedings. All contacts and efforts to make contact with the property owner shall be documented in the negotiator's report maintained by Santacruz Land Acquisitions for each parcel.

If, during its discussions with the property owner, errors in the plans are discovered or the property owner requests design changes, Santacruz Land Acquisitions will immediately notify LPA or Consultant with this information. At any time during negotiations for situations involving design changes, errors in plans or for any other reason, if requested by LPA or Consultant, Santacruz Land Acquisitions will cease negotiations on certain parcels until corrected information or further instruction is provided to Santacruz Land Acquisitions.

Upon successful negotiations with the property owner, Santacruz Land Acquisitions will prepare all necessary conveyance documents in the forms provided by and approved by IDOT in order to complete the acquisition and obtain title approval for the property. Santacruz Land Acquisitions will submit the completed parcel file with original conveyance documents, any documents necessary for title clearance, the Negotiator's Log



documenting all negotiation activities, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by the LPA.

In the event that Santacruz Land Acquisitions, after having made every reasonable effort to contact and negotiate with the owner of a parcel, is unable to obtain a settlement on the approved appraisal amount, Santacruz Land Acquisitions shall prepare and submit to the LPA a completed parcel file with its recommendation to acquire the parcel by means of condemnation. In addition, the file will include the Negotiator's Log, copies of all correspondence with the property owner, title commitments, plats, and all other documentation as required by the LPA.

We understand that appearances in court and/or pretrial conferences, which may include depositions, and preparation for litigation or pre-trial conferences may be required by the LPA so that it may complete the acquisition of the property through condemnation. In such case, at the request of the LPA or its trial counsel, the Negotiator assigned to negotiate the parcel shall make any such appearances or complete such preparation work in order to assist with this process. Such requests will be pursuant to a separate work order.

## **PERSONNEL**

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The experience and talent of the right of way professionals that make up the team for Santacruz Land Acquisitions will, to a large extent, be the basis for the success of keeping this Project on-time and within budget. J. Steve Santacruz brings over twenty years of right of way acquisition experience to lead this team as its project manager. Steve has worked on thousands of acquisition parcels for ISTHA, IDOT, Cook, Kane, Lake, and Will Counties. He has also worked for numerous township and municipalities. Steve has a reputation in the right of community of being able to handle the most complex of land acquisition transactions.

The internal support team members for Santacruz Land Acquisitions include Robin Weber, a real estate paralegal with over twenty years of experience in closing residential and commercial real estate transactions, and Jonathan Abplanalp, a District 1 fee negotiator.

Each of our team members, including our subconsultants, have relevant experience working collaboratively with professionals of other disciplines and other agencies. They understand the importance of effective coordination throughout the land acquisition process.

## **PRIOR EXPERIENCE**

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Santacruz Land Acquisitions was founded in 1992 as Santacruz Associates Ltd. and has grown to be one of the most dependable right of way negotiation firms in IDOT's District 1. Since it opened, Santacruz Land Acquisitions has been providing comprehensive right of way solutions, including negotiation activities and the coordination of the valuations of parcels for various public agencies. Our proprietary database overlay allows us to handle hundreds of parcels at one time keeping deadlines organized for each of our different clients.

Our team brings an array of services and broad disciplines in real estate which give us a distinct advantage in handling even the most complex of your land acquisition projects. In addition, our team of subconsultants is not new to each other as we have collaborated together on various other projects.

**Our team has delivered real estate solutions for its public agencies balancing risk management and letting dates on some of the largest and most intricate projects in the State.**

# 3

## EXHIBITS

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### a. Pricing Schedule



# Compensation for Services

## Appraisal Services (based on complexity)

Appraisals	\$1,800.00 - \$4,000.00
Waiver Valuations	\$1,500.00
Revision to appraisal due to change in ROW or plans <sup>1</sup>	\$1,200.00 - \$4,000.00

## Review Appraisal Services (based on complexity)

Review Appraisals	\$800.00 - \$2,000.00
Revision to review appraisal due to change in ROW or plans <sup>1</sup>	\$600.00 - \$2,000.00

## Negotiation Services (based on complexity)

Negotiation and acquisition services for Right of Way including, without limitation, documentation of conveyance of property interest	\$2,400.00 - \$2,750.00
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## Witness Services

Rate for each ½ day in pretrial conference or in court for Negotiator <sup>1</sup>	\$1,000.00
Rate for each ½ day in pretrial conference or in court for Appraiser <sup>1</sup>	\$1,000.00
Hourly rate for consultation not otherwise specifically provided for herein	\$250.00

## Title Services (if applicable)

Later date commitment – In addition to actual recording costs + Administrative fee	\$25.00
Title insurance policies – In addition to actual recording costs + Administrative fee	\$25.00
Recording of Documents – In addition to actual recording costs + Administrative fee	\$25.00
Copies of recorded documents – In addition to actual copying costs & research fees + Administrative fee	\$25.00

<sup>1</sup> Requires additional work order.



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

**Wadsworth Rd at Lewis Ave**  
**Lake County Illinois**  
**LCDOT Contract No. XXXXX**  
**DLZ Job Num. XXXXXXXXX**

## PROJECT SCOPE

June 29, 2016

Location: Wadsworth Road (CH 17) at Lewis Avenue (CH 27)

DLZ Illinois, Inc., has been retained by RS&H to perform sub-consultant work to prepare Phase II Design traffic signal documents for the Wadsworth Road (CH 17) at Lewis Avenue (CH 27) intersection widening and reconstruction project for the Lake County Division of Transportation (LCDOT). The following details a scope of work for each anticipated task along with an estimate of hours to perform each task.

### **Traffic Signal Plan Sheets**

DLZ expects that all Microstation base files will be provided, including any topographic survey files, for the traffic signal plan sheets to be prepared by DLZ. DLZ will utilize Maintenance of Traffic (MOT), pavement marking, signing, proposed and existing geometric, drainage and utility plans to be supplied by RS& H. DLZ anticipates only coordination with outside agencies or other firms for Emergency Vehicle Pre-Emption (EVP) and minor coordination with the Waukegan National Airport. No other coordination with outside agencies or utilities is anticipated in this scope.

DLZ anticipates submitting two reduced size plans per submittal for this project.

Traffic signal specifications, all reviews and dispositions, any QA/QC, pay items and engineer's estimate of cost will be included with each submittal package.

DLZ anticipates attending no more than three meetings for coordination on this project.

### **I. Traffic Signal Design – Wadsworth Road at Lewis Avenue**

The hours for development of one permanent traffic signal plan (2 sht.), one cable plan and sequences of operation (1 sht.), as well as one temporary traffic signal plan (2 sht.), and one temporary cable plan and standard sequences of operation (2 sht. up to 4 stages) are included in this item. The hours for the addition of a Rectangular Rapid Flashing Beacon (RRFB) System to the proposed traffic signal plans are also included in this item. Based on preliminary information the RRFB is to be located just east of the subject intersection, near the Kenneth Murphy School. The Latest MUTCD and LCDOT Standards shall be utilized.

Plan sets will be developed for preliminary, pre-final and final review. All plan sheets shall be 1"=20' scale.

**2. Traffic Signal Interconnect from 33<sup>rd</sup> Street to Beach Road.**

The hours for temporary interconnect plan and schematic, and development of a new interconnect plan and interconnect schematic for the proposed interconnect on Lewis Road between 33<sup>rd</sup> Street to Beach Road are included in this item. Any additional interconnect work east or west along Wadsworth Road work is not included.

Plan sets will be developed for preliminary, pre-final and final review. All plan sheets shall be 1"=50' scale.

No other services or responsibilities are inferred or implied in the Scope of Work except those expressly set forth above. Consultant shall not be obligated to provide nor entitled to compensation for any services except those set forth above or as otherwise agreed to in writing.

---

## PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME DLZ Illinois  
PRIME/SUPPLEMENT Prime

DATE 06/29/16  
PTB NO. Wadsworth @ Lewis

CONTRACT TERM 12 MONTHS  
START DATE 9/1/2016  
RAISE DATE 1/1/2017

OVERHEAD RATE 149.03%  
COMPLEXITY FACTOR 0  
% OF RAISE 3.00%

### ESCALATION PER YEAR

9/1/2016 - 1/1/2017

1/2/2017 - 9/1/2017

4  
12

8  
12

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

= 33.33%  
= 1.0200

68.67%

**The total escalation for this project would be:**

2.00%

## PAYROLL RATES

**FIRM NAME**  
**PRIME/SUPPLEMENT**  
**PSB NO.**

**DLZ Illinois** \_\_\_\_\_ **DATE**  
**Prime** \_\_\_\_\_  
**Wadsworth @ Lewis** \_\_\_\_\_

**06/29/16**

**ESCALATION FACTOR** **2.00%**

[illegible]

DF-824-039  
REV 12/04  
06/29/16

DATE \_\_\_\_\_

**DBE 0.00%**

Printed 6/29/2016 10:19 AM

# AVERAGE HOURLY PROJECT RATES

FIRM DLZ Illinois  
PSB Wadsworth @ Lewis  
PRIME/SUPPLEMENT Prime

DATE 06/29/16

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Temp & Prop TS Signal			Interconnect			Project Management			QA/QC					
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Principal	71.40	0																	
Project Eng./Senior E	52.96	102	44.74%	23.69	60	42.86%	22.70	30	45.45%	24.07	6	54.55%	28.89	6	54.55%	28.89			
Engineer	31.63	58	25.44%	8.05	40	28.57%	9.04	18	27.27%	8.63									
CAD Designer	27.74	58	25.44%	7.06	40	28.57%	7.93	18	27.27%	7.57									
Administrative	27.11	10	4.39%	1.19							5	45.45%	12.32	5	45.45%	12.32			
		0																	
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TOTALS		228	100%	\$39.98	140	100.00%	\$39.66	66	100%	\$40.26	11	100%	\$41.21	11	100%	\$41.21	0	0%	\$0.00



TODAY'S DATE: **6/29/2016**

*\*If other allowable costs are needed and not listed, please add in the above spaces provided.*

W.O. = Work Order  
J.S. = Job Specific





33 W. Monroe St., Suite 1825  
Chicago, Illinois 60603  
phone: 312.345.1400  
fax: 312.345.0529  
www.envdesigni.com

RS&H, Inc.  
525 Dunham Road, Suite 20  
St. Charles, IL 60174

August 25, 2016

**ATTN: Mr. James R. Shaw**  
**St. Charles Office Leader**

**Subject: Lake County DOT Phase II**  
**W. Wadsworth Rd. and N. Lewis Ave.**  
**Beach Park, IL 60087**

### **Scope of Work**

#### **Assumptions**

1. The Boundary and Improvement Survey and Topographic Survey will be performed concurrently.
2. Sufficient monumentation exists to perform the boundary portion of the work without requiring surveying above and beyond that of a typical boundary survey.
3. Datum:
  - a. The horizontal datum will be Illinois State Plane East Zone, NAD83(2011), GPS derived.
  - b. The vertical datum will be NAVD 88, GPS derived.

Limits: Additional topographic survey from east project limits on Wadsworth Road to Robert McClory Bike path, and 200' up and down bike path from Wadsworth Road (Beach Park). Survey information will be gathered to 25-35' beyond in existing ROW in each direction. 1 week of additional pickup survey (including office work) is also included for areas to be determined by Client.

In concert with the Lake County Division of Transportation, Consultant will conduct research of the public record and obtain Plats of Subdivision or Plats of Highway defining the R.O.W. or prescriptive easement for the subject roadway and intersecting roadways. Consultant will research the public record to obtain record surveys and perform a field reconnaissance to recover monumentation purportedly found or set defining the R.O.W. or roadway easement. Consultant will also extend a level circuit from the vertical datum (NAVD 88) established for the Project.

Based on the survey limits described above, field survey work will be performed to obtain topographic and planimetric data will be in accordance with IDOT requirements and the content requirements outlined below in Items a. through g within the additional topographic survey project limits:

1. The location, elevation, and material composition of street pavements, sidewalk pavements, driveway pavements, curb and gutter sections, and other land surfaces. Roadway cross-sections will be obtained at a 100 foot interval.

2. The location, elevation, and material composition of storm sewer conveyance, sanitary sewer collection, and water distribution systems as measured at structures visible and retrievable from the ground surface (underground exploration is not within the scope of these services).
3. The location, elevation, and material composition (if applicable) of ditches and culverts with shapes and sizes, direction of flow, elevation of inverts or flow lines and other physical properties of those drainage structures visible and retrievable from the ground surface which information will be supplemented by public records and plans (underground exploration is not within the scope of these services).
4. The location and elevation at the base of utility poles, street lights, ground boxes, pedestals, and transformers with notation as to the identity of the utility company and other planimetric features when visible and retrievable from the ground surface (underground exploration is not within the scope of these services).
5. The location, elevation at base and diameter of individual or isolated trees 4 inches or greater in diameter as measured 3 feet above the base. For tree lines or groupings in more heavily wooded areas, only the tree line perimeter will be located. The trees will be identified as either coniferous or deciduous. Bushes will be identified as such.
6. The location (by station), extent, physical description and color of existing pavement striping, pavement markings, roadway signage (with specific type and legend).
7. In accordance with IDOT survey requirements, collect detailed sketches, photographs, topographic and planimetric data for waterway structures along the survey route.
8. When requested, mark all 100-foot interval station locations on the survey baseline for construction (when on paved surfaces) with a PK or Mag nail and spray paint.

Land Acquisitions survey will be performed including:

1. The establishment of approximately 2 section corners with monument records and at least four (4) recovery ties for recording with the Lake County Recorder.
2. The establishment of all property and land lines including private ownership lines, section lines, Right of Way lines and Easement lines not previously established during the phase 1 survey for the area where the proposed parcels are going to take place.
3. The creation of approximately 5 Plats of Highway (4 LCDOT and 1 Beach Park) containing approximately 13 takes, 13 Temporary Easements and 1 Permanent Easement to be acquired for LCDOT and 1 take and 1 Temporary Easement to be acquired for Beach Park.
4. The creation of approximately 27 legal descriptions for LCDOT and 2 legal descriptions for Beach Park.
5. Stake and tie all centerline alignments and approximately 40 proposed Right of Way corners.

In accordance with IDOT data format and deliverable standards, compile said topographic and planimetric field survey work along with any information gathered and prepare Composite Topographic and Planimetric Survey Base Sheets as well as digital terrain models in digitized and layered electronic format at an estimated scale of 1 inch = 20 feet with contours interpolated on a one-foot interval, and depicting the R.O.W. limits, as defined by the record plats of dedication and survey documentation. Provide copies from field books showing benchmarks, level circuits and structure details, such as sizes and inverts to the Lake County Division of Transportation in accordance with deliverable requirements.

All survey work will be done in accordance with the attached Lake County "Design Survey Procedures" memorandum.

Minimum Standards: The Boundary Survey will conform to the current Illinois Minimum Standards for a Boundary Survey per Administrative Code Section 1270.56:

<http://www.ilga.gov/commission/jcar/admincode/068/068012700000560R.html>.

L:\1811 RS&H\1811.003 LCDOT Wadsworth & Lewis\01 Project Management\01 Proposals\Phase 2\SURVEY Scope.doc

Seperate extimates of cost for work within the Lake County Project Limits and the Beach Park Multi Use Path Extension as defined herein are attached below.

# LAKE COUNTY PROJECT LIMITS ESTIMATE

## PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Environmental Design International inc.  
PRIME/SUPPLEMENT Prime - Lake County Survey

DATE 08/25/16  
PTB NO. LCDOT

CONTRACT TERM 18 MONTHS  
START DATE 8/1/2016  
RAISE DATE 7/1/2017

OVERHEAD RATE 140.53%  
COMPLEXITY FACTOR 0  
% OF RAISE 3.00%

## ESCALATION PER YEAR

<u>8/1/2016 - 6/30/2017</u>	<u>7/1/2017 - 1/31/2018</u>	<u></u>	<u></u>	<u></u>
<u>11</u>	<u>7</u>	<u></u>	<u></u>	<u></u>
<u>18</u>	<u>18</u>	<u></u>	<u></u>	<u></u>
= 61.11%	40.06%			
= 1.0117				

The total escalation for this project would be: 1.17%

# LAKE COUNTY PROJECT LIMITS ESTIMATE

## PAYROLL RATES

FIRM NAME Environmental Design Inc DATE 08/25/16  
 PRIME/SUPPLEMENT Prime - Lake County Survey  
 PSB NO. LCDOT

ESCALATION FACTOR 1.17%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal	\$74.71	\$75.58
Program Manager	\$58.90	\$59.58
Project Manager	\$71.09	\$71.92
PLS	\$38.00	\$38.44
Project Surveyor	\$34.00	\$34.40
Survey Crew Chief	\$27.83	\$28.16
Instrument Person	\$18.25	\$18.46
CADD Manager	\$32.50	\$32.88
CADD Technician	\$27.00	\$27.32
Engineer III	\$56.73	\$57.39
Engineer II	\$36.31	\$36.73
Engineer I	\$24.18	\$24.46
Assistant Resident Engineer	\$44.69	\$45.21
Documentation Technician	\$37.26	\$37.70
Documentation Engineer	\$41.20	\$41.68
Construction Inspector	\$35.86	\$36.27
Task Manager	\$50.48	\$51.06
Environmental Scientist II	\$27.06	\$27.38
Environmental Scientist I	\$18.25	\$18.46
Senior Environmental Scientist	\$49.52	\$50.10
Senior Industrial Hygienist	\$55.19	\$55.83
Industrial Hygienist II	\$29.58	\$29.93
Industrial Hygienist I	\$23.36	\$23.63
Environmental Engineer III	\$45.67	\$46.20
Environmental Engineer II	\$41.83	\$42.32
Admin Support II	\$41.16	\$41.64
Admin Support I	\$30.52	\$30.87
Clerical	\$12.00	\$12.14

**COST PLUS FIXED FEE  
COST ESTIMATE OF CONSULTANT SERVICES**

**FIRM**

**Environmental Design International inc.**

DATE \_\_\_\_\_

08/25/16

**PSB**

**LCDOT**

## OVERHEAD RATE

**1.4053**

PRIME/SUPPLEMENT

## Prime - Lake County Survey

## COMPLEXITY FACTOR

0

[illegible]

**DBE 100.00%**

# LAKE COUNTY PROJECT LIMITS ESTIMATE

## AVERAGE HOURLY PROJECT RATES

FIRM Environmental Design International inc.  
 PSB LCDOT  
 PRIME/SUPPLEMENT Prime - Lake County Survey

DATE 08/25/16

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Project Management			Research & Control			Additional Pickup Survey			Existing Parcels			Plats & Legals		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	75.58	0																	
Program Manager	59.58	32	6.91%	4.12	12	35.29%	21.03	2	6.67%	3.97	3	2.07%	1.23	3	4.05%	2.42	10	10.00%	5.96
Project Manager	71.92	0																	
PLS	38.44	44	9.50%	3.65	12	35.29%	13.57	4	13.33%	5.13	2	1.38%	0.53	8	10.81%	4.16	16	16.00%	6.15
Project Surveyor	34.40	78	16.85%	5.79				12	40.00%	13.76	10	33.33%	11.47	16	21.62%	7.44	36	36.00%	12.38
Survey Crew Chief	28.16	86	18.57%	5.23				6	20.00%	5.63	40	27.59%	7.77	16	21.62%	6.09			
Instrument Person	18.46	86	18.57%	3.43				6	20.00%	3.69	40	27.59%	5.09	16	21.62%	3.99			
CADD Manager	32.88	45	9.72%	2.65							10	6.90%	1.88	3	4.05%	1.11	8	8.00%	2.19
CADD Technician	27.32	82	17.71%	4.84							40	27.59%	7.54	12	16.22%	4.43	30	30.00%	8.19
Engineer III	57.39	0																	
Engineer II	36.73	0																	
Engineer I	24.46	0																	
Assistant Resident E	45.21	0																	
Documentation Tech	37.70	0																	
Documentation Engin	41.68	0																	
Construction Inspect	36.27	0																	
Task Manager	51.06	0																	
Environmental Scien	27.38	0																	
Environmental Scien	18.46	0																	
Senior Environmental	50.10	0																	
Senior Industrial Hyc	55.83	0																	
Industrial Hygienist II	29.93	0																	
Industrial Hygienist I	23.63	0																	
Environmental Engin	46.20	0																	
Environmental Engin	42.32	0																	
Admin Support II	41.64	0																	
Admin Support I	30.87	10	2.16%	0.67	10	29.41%	9.08												
Clerical	12.14	0																	
<b>TOTALS</b>		463	100%	\$30.38	34	100.00%	\$43.68	30	100%	\$32.18	145	126%	\$35.51	74	100%	\$29.63	100	100%	\$34.87

# LAKE COUNTY PROJECT LIMITS ESTIMATE

## AVERAGE HOURLY PROJECT RATES

**FIRM** Environmental Design International inc.  
**PSB** LCDOT  
**PRIME/SUPPLEMENT** Prime - Lake County Survey

**DATE** 08/25/16

**SHEET** 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Set Monuments			Set Stationing														
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	75.58																		
Program Manager	59.58	1	3.57%	2.13	1	3.57%	2.13												
Project Manager	71.92																		
PLS	38.44	1	3.57%	1.37	1	3.57%	1.37												
Project Surveyor	34.40	2	7.14%	2.46	2	7.14%	2.46												
Survey Crew Chief	28.16	12	42.86%	12.07	12	42.86%	12.07												
Instrument Person	18.46	12	42.86%	7.91	12	42.86%	7.91												
CADD Manager	32.88																		
CADD Technician	27.32																		
Engineer III	57.39																		
Engineer II	36.73																		
Engineer I	24.46																		
Assistant Resident E	45.21																		
Documentation Tech	37.70																		
Documentation Engi	41.68																		
Construction Inspect	36.27																		
Task Manager	51.06																		
Environmental Scien	27.38																		
Environmental Scien	18.46																		
Senior Environmental	50.10																		
Senior Industrial Hyc	55.83																		
Industrial Hygienist I	29.93																		
Industrial Hygienist I	23.63																		
Environmental Engin	46.20																		
Environmental Engin	42.32																		
Admin Support II	41.64																		
Admin Support I	30.87																		
Clerical	12.14																		
<b>TOTALS</b>		28	100%	\$25.94	28	100%	\$25.94	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00



### Direct Costs Check Sheet

TODAY'S DATE: 6/27/2016

*\*If other allowable costs are needed and not listed, please add in the above spaces provided.*

J.S. = Job Specific

# BEACH PARK MULTI USE PATH ESTIMATE

## PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Environmental Design International inc.  
PRIME/SUPPLEMENT Prime

DATE 08/23/16  
PTB NO. Beach Park

CONTRACT TERM 18 MONTHS  
START DATE 8/1/2016  
RAISE DATE 7/1/2017

OVERHEAD RATE 140.53%  
COMPLEXITY FACTOR 0  
% OF RAISE 3.00%

### ESCALATION PER YEAR

<div>8/1/2016 - 6/30/2017</div> <div>11</div> <div>18</div>	<div>7/1/2017 - 1/31/2018</div> <div>7</div> <div>18</div>	<div></div> <div></div> <div></div>	<div></div> <div></div> <div></div>	<div></div> <div></div> <div></div>
= 61.11%	= 40.06%			
= 1.0117				

The total escalation for this project would be: 1.17%

# BEACH PARK MULTI USE PATH ESTIMATE

## PAYROLL RATES

FIRM NAME Environmental Design Inc DATE 08/23/16  
PRIME/SUPPLEMENT Prime  
PSB NO. Beach Park

ESCALATION FACTOR 1.17%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal	\$74.71	\$75.58
Program Manager	\$58.90	\$59.58
Project Manager	\$71.09	\$71.92
PLS	\$38.00	\$38.44
Project Surveyor	\$34.00	\$34.40
Survey Crew Chief	\$27.83	\$28.16
Instrument Person	\$18.25	\$18.46
CADD Manager	\$32.50	\$32.88
CADD Technician	\$27.00	\$27.32
Engineer III	\$56.73	\$57.39
Engineer II	\$36.31	\$36.73
Engineer I	\$24.18	\$24.46
Assistant Resident Engineer	\$44.69	\$45.21
Documentation Technician	\$37.26	\$37.70
Documentation Engineer	\$41.20	\$41.68
Construction Inspector	\$35.86	\$36.27
Task Manager	\$50.48	\$51.06
Environmental Scientist II	\$27.06	\$27.38
Environmental Scientist I	\$18.25	\$18.46
Senior Environmental Scientist	\$49.52	\$50.10
Senior Industrial Hygienist	\$55.19	\$55.83
Industrial Hygienist II	\$29.58	\$29.93
Industrial Hygienist I	\$23.36	\$23.63
Environmental Engineer III	\$45.67	\$46.20
Environmental Engineer II	\$41.83	\$42.32
Admin Support II	\$41.16	\$41.64
Admin Support I	\$30.52	\$30.87
Clerical	\$12.00	\$12.14

**COST PLUS FIXED FEE  
COST ESTIMATE OF CONSULTANT SERVICES**

[illegible]

# BEACH PARK MULTI USE PATH ESTIMATE

## AVERAGE HOURLY PROJECT RATES

FIRM Environmental Design International inc.  
 PSB Beach Park  
 PRIME/SUPPLEMENT Prime

DATE 08/23/16

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Project Management			Research & Control			Additional Pickup Survey			Existing ROW/Parcels			Plats & Legals		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	75.58	0																	
Program Manager	59.58	9	5.39%	3.21	4	33.33%	19.86	1	6.67%	3.97	1	1.67%	0.99	1	2.13%	1.27	1	5.56%	3.31
Project Manager	71.92	0																	
PLS	38.44	13	7.78%	2.99	4	33.33%	12.81	2	13.33%	5.13	1	1.67%	0.64	3	6.38%	2.45	2	11.11%	4.27
Project Surveyor	34.40	27	16.17%	5.56				8	53.33%	18.34	2	13.33%	4.59	10	21.28%	7.32	6	33.33%	11.47
Survey Crew Chief	28.16	32	19.16%	5.40				2	13.33%	3.75	16	26.67%	7.51	10	21.28%	5.99			
Instrument Person	18.46	32	19.16%	3.54				2	13.33%	2.46	16	26.67%	4.92	10	21.28%	3.93			
CADD Manager	32.88	18	10.78%	2.94							8	13.33%	3.64	3	6.38%	1.74	3	16.67%	4.55
CADD Technician	27.32	32	19.16%	5.23							16	26.67%	7.28	10	21.28%	5.81	6	33.33%	9.11
Engineer III	57.39	0																	
Engineer II	36.73	0																	
Engineer I	24.46	0																	
Assistant Resident E	45.21	0																	
Documentation Tech	37.70	0																	
Documentation Engin	41.68	0																	
Construction Inspect	36.27	0																	
Task Manager	51.06	0																	
Environmental Scien	27.38	0																	
Environmental Scien	18.46	0																	
Senior Environmental	50.10	0																	
Senior Industrial Hyc	55.83	0																	
Industrial Hygienist II	29.93	0																	
Industrial Hygienist I	23.63	0																	
Environmental Engin	46.20	0																	
Environmental Engin	42.32	0																	
Admin Support II	41.64	0																	
Admin Support I	30.87	4	2.40%	0.74	4	33.33%	10.29												
Clerical	12.14	0																	
<b>TOTALS</b>		167	100%	\$29.62	12	100.00%	\$42.97	15	100%	\$33.66	60	110%	\$29.58	47	100%	\$28.51	18	100%	\$32.70

# BEACH PARK MULTI USE PATH ESTIMATE

## AVERAGE HOURLY PROJECT RATES

**FIRM** Environmental Design International inc.  
**PSB** Beach Park  
**PRIME/SUPPLEMENT** Prime

**DATE** 08/23/16

**SHEET** 2 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Set Monuments																	
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	75.58																		
Program Manager	59.58	1	9.09%	5.42															
Project Manager	71.92																		
PLS	38.44	1	9.09%	3.49															
Project Surveyor	34.40	1	9.09%	3.13															
Survey Crew Chief	28.16	4	36.36%	10.24															
Instrument Person	18.46	4	36.36%	6.71															
CADD Manager	32.88																		
CADD Technician	27.32																		
Engineer III	57.39																		
Engineer II	36.73																		
Engineer I	24.46																		
Assistant Resident E	45.21																		
Documentation Tech	37.70																		
Documentation Engi	41.68																		
Construction Inspect	36.27																		
Task Manager	51.06																		
Environmental Scien	27.38																		
Environmental Scien	18.46																		
Senior Environmental	50.10																		
Senior Industrial Hyc	55.83																		
Industrial Hygienist I	29.93																		
Industrial Hygienist I	23.63																		
Environmental Engin	46.20																		
Environmental Engin	42.32																		
Admin Support II	41.64																		
Admin Support I	30.87																		
Clerical	12.14																		
<b>TOTALS</b>		11	100%	\$28.99	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00



### Direct Costs Check Sheet

TODAY'S DATE: **6/27/2016**

*\*If other allowable costs are needed and not listed, please add in the above spaces provided.*

J.S. = Job Specific

474 Central Avenue, Suite 205  
Highland Park, IL 60035  
Tel 847-433-8747  
eFax 844-270-5522  
[www.kowalenkogroup.com](http://www.kowalenkogroup.com)

KOWALENKO CONSULTING GROUP, INC.

MANAGEMENT

ENVIRONMENT

ENGINEERING



August 25, 2016

James R. Shaw, P.E.  
St. Charles Office Leader  
525 Dunham Rd, Suite 20, St. Charles, IL 60174

Re: Wadsworth Road – Lewis Avenue Improvement, Beach Park and Waukegan, Illinois

James,

Per your request, Kowalenko Consulting Group, Inc. (KCG) is pleased to submit the following proposal and CECS for the required additional environmental services at the referenced project. KCG commits to providing the required services in a timely manner, in coordination with RS&H and other subconsultants.

- Additional wetlands delineation/investigation and updates to the wetlands report to include the Beach Park Multi-Use Path extension.
- Additional PESA investigation updates to the PESA report to include the Beach Park Multi-Use Path extension.
- Additional soil testing for pH on properties impacted by ROW acquisition with respect to the Multi-Use Path extension. Preparation of IEPA 662/663 forms for reuse/disposal of uncontaminated access material at an approved CCDD facility.

Please contact me if you have questions or comments regarding the above or the CECS.

Regards,

Anthony Bilotti, Ph.D., M.P.H.  
Director, Environmental and Transportation Services  
Kowalenko Consulting Group, Inc.  
474 Central Avenue, Suite 205  
Highland Park, IL 60035

Office: 847-433-8747  
eFax: 844-270-5522  
Mobile: 312-859-0500  
[abilotti@kowalenkogroup.com](mailto:abilotti@kowalenkogroup.com)



## PAYROLL RATES

FIRM NAME  
PRIME/SUPPLEMENT  
PSB NO.

Kowalenko Consulting Group, Inc. DATE

NA

ESCALATION FACTOR

4.29%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Project Director	\$67.00	\$69.88
Project Manager	\$65.44	\$68.25
Assistant Project Manager	\$59.31	\$61.86
Environmental Scientist/Engineer III	\$58.28	\$60.78
Environmental Scientist/Engineer II	\$46.01	\$47.98
Environmental Land Use/Transportation Planner III	\$54.19	\$56.52
Environmental Land Use/Transportation Planner I	\$35.79	\$37.33
Field Technician I	\$32.72	\$34.12
Systems/GIS Analyst	\$47.04	\$49.06
Systems/GIS Manager	\$51.13	\$53.32
Project Support Staff	\$32.72	\$34.12

# Subconsultants

FIRM NAME

PRIME/SUPPLEMENT

PSB NO.

Kowalenko Consulting Group, Inc.

NA

DATE

08/25/16

NAME	Direct Labor Total	Contribution to Prime Consultant
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Total	0.00	0.00

**Kowalenko Consulting Group, Inc.**  
**NA**

OVERHEAD RATE	130%
COMPLEXITY FACTOR	0

DATE 08/23/2016

Subconsultant DL					0.00				0.00	0.00%
<b>TOTALS</b>	100.5	5,152.98	6,698.88	54.00	1,906.60	779.00	1,300.00	13,758.46	<b>15,891.46</b>	97.81%

DBE

**Kowalenko Consulting Group, Inc.**  
**NA**

PAYROLL  CLASSIFICATION	AVG	TOTAL PROJECT RATES			Envir. Survey Request			Wetland Delineation/Wetland Impact Evaluation			Prelim Site Investigation (PSI)			PESA (non-State Routes)		
	HOURLY RATES	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Director	69.88	0														
Project Manager	68.25	4.5	4.48%	3.06	0			1	2.44%	1.66	1.5	11.11%	7.58	2	4.35%	2.97
Assistant Project Manager	61.86	0														
Environmental Scientist/Engineer III	60.78	16	15.92%	9.68							12	88.89%	54.03	4	8.70%	5.29
Environmental Scientist/Engineer II	47.98	0														
Environmental Land Use/Transportation Planner III	56.52	80	79.60%	44.99	0			40	97.56%	55.14				40	86.96%	49.14
Environmental Land Use/Transportation Planner I	37.33	0														
Field Technician I	34.12	0														
Systems/GIS Analyst	49.06	0														
Systems/GIS Manager	53.32	0														
Project Support Staff	34.12	0														
		0														
		0														
		0														
		0														
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TOTALS		100.5	100%	\$57.72	0	0.00%	\$0.00	41	100%	\$56.80	13.5	100%	\$61.61	46	100%	\$57.40

## **DESIGN SURVEY PROCEDURES** (Revised 12/4/14)

### **HORIZONTAL ALIGNMENT**

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. The CONSULTANT'S SURVEYOR will try to re-establish the original horizontal alignment as shown on the recorded R.O.W. plats. The CONSULTANT shall contact LCDOT's Land Surveyor to obtain R.O.W. plats and field notes before establishing the horizontal alignment and stationing. The CONSULTANT shall notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, PIs, PTs, and POTs so that the alignment location can be verified before construction staking is initiated. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments that are located within the construction limits. The reference points should be located outside of the anticipated construction limits if practical, so that they can be used after construction to replace the monuments. The CONSULTANT shall record Monument Records for all Section and Quarter Section corners set or found within the construction limits.

The CONSULTANT will mark all 100-foot interval station locations on the survey base line for construction when on paved surfaces with a P.K. or Mag nail and spray paint. The baseline for relocated alignments when off pavement will be marked at the PCs, PTs, and POTs with iron rods. The rods shall be set one foot below the surface in farmed land. The CONSULTANT will advise the County of any pavement alignment variations. In cases where the proposed centerline of construction or survey baseline is different from the existing centerline of R.O.W., both shall be shown and the relationship between them shall be indicated on an Alignment & Tie sheet.

### **ALIGNMENT & TIE SHEET**

An Alignment & Tie Sheet shall be provided as part of the final plans. The plans are to be prepared using English units of measure and the U.S. Survey Foot. The station, offset, and coordinates of the alignment points (PCs, PTs, PIs, and POTs) and survey control (traverse) points shall be shown. Coordinates for all projects shall be on the Illinois State Plane Coordinate System, - East zone, NAD83 (Adjustment). The grid (combination) factor for the project shall be shown. A list of traverse points with station, offset, and coordinates shall be provided.

### **VERTICAL ALIGNMENT**

The North American Vertical Datum of 1988 (NAVD 88) shall be used for vertical control. Lake County Mapping Benchmarks are available on-line (<http://gis.lakeco.org/maps/>). NAVD88 benchmarks are available on-line from the National Geodetic Survey. LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The primary benchmarks and site benchmarks shall be listed and described on the Alignment & Tie Sheet. The location of the site

benchmarks shall also be shown on the plan sheets with a symbol. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks shall be located on stable objects. LCDOT prefers these objects to be outside the construction limits. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations.

### **TOPOGRAPHY**

The CONSULTANT shall cut cross-sections at 50-foot intervals and at all points needing clarification. For areas of superelevation or requiring greater detail, cross-sections shall be cut at 25-foot intervals. The cross section interval should be defined in the engineering services contract.

Full cross-section profiles will be taken at all cross streets, alleys, cross road culverts, and entrances (commercial, private, and field). Half cross-sections will not be accepted because they skew the computer terrain model.

The CONSULTANT will locate and identify all trees (6 inches in diameter or greater) within the area either side of the centerline, defined by the proposed ROW or construction limits (whichever is greater) plus an additional 10 feet. The trees shall be identified by species and size. The trees shall be located by station/offset and have a ground elevation.

Streams, tributaries, or major drainage ditches located within a lateral distance of 250 feet from centerline (upstream and downstream) shall be surveyed. Alignment, profiles, and cross-sections shall be taken. The stream width shall be shown as the distance measured between the tops of the stream banks. Profile elevations along the bottom of the watercourse shall be taken at a minimum of 50-foot intervals.

The survey shall extend a minimum of 200 feet beyond the roadway construction limits. Cross-sections shall be taken a minimum of 10 feet beyond the proposed R.O.W. or construction limits (whichever is greater). Cross-sections will extend 30 feet beyond the proposed R.O.W. at entrances and 150 feet at minor side roads.

All survey data shall be collected in Illinois State Plane Coordinates – East Zone. The collected survey data for the existing topography shall have a minimum of 3<sup>rd</sup> Order Accuracy horizontally with readings to the nearest 0.1 feet for vertical on gravel or ground and readings to the nearest 0.01 feet for vertical on all other surfaces.

### **RAILROAD INSURANCE**

The CONSULTANT will comply with the railroad's requirements when conducting a survey on the railroad's R.O.W. Usually, this includes obtaining a permit, paying a fee, obtaining Railroad Protective Liability Insurance, notification of a flagman to be present near the rails during the

survey operations, and any other requirements of the railroad. The CONSULTANT is responsible for all of the foregoing requirements.

**DELIVERABLES**

- I. Copies from the CONSULTANT'S field books, showing benchmarks, level circuits, & structure details, such as size and inverts etc.
- II. Base Drawing at 1:1. All the topographic information shall be plotted electronically. The data shall be in Illinois State Plane Coordinates – East Zone and be recorded in a MICROSTATION .DGN format. All CAD work shall be according to LCDOT CAD Standards. ASCII files, gpk files, and/or InRoads files containing all point information as described below shall be included. A filename “ID” acronym explanation sheet shall be provided. Backup CDs shall be provided.
- III. Point Information:
  - (1) Point number
  - (2) Northing and Easting coordinate values
  - (3) "Z" elevations
  - (4) Point identification by code
  - (5) Notes



## **PLAT OF HIGHWAYS & LEGAL DESCRIPTION CHECKLIST**

REVISED 5/29/2015

A copy of this initialed and dated checklist shall be submitted to Lake County Division of Transportation along with the Plats of Highway and Legal Descriptions.

	<u>Initials</u> <u>or N/A</u>	<u>Date</u>
1. Plat of Highways sheet size is 22" x 34".	_____	_____
2. A project cover sheet is required.	_____	_____
3. All lettering should be 1/10 <sup>th</sup> inch or greater.	_____	_____
4. Complete the project box in the lower right-hand corner.	_____	_____
5. Show survey company name, address and/or logo (if applicable) above the title box.	_____	_____
6. Show North Arrow, up or to the right and appropriate scale bar on each page.	_____	_____
7. Coordinates for all projects should be based on Illinois State Plane Coordinate System, East zone, NAD83 (Adjustment). The referenced NGS monumentation should be noted on the plat.	_____	_____
8. Plat will include the following notes:	_____	_____
• Bearings and distances shown hereon reference the Illinois State Plane Coordinate System, East Zone, North American Datum of 1983 (adjustment year) "grid". NOTE: added "grid" for those who look at the plats, such as appraisers, and are not aware that state plane and grid are synonymous and it ties into the next statement.		
• All measured and calculated distances are "grid" not "ground". To obtain ground distances, divide grid distances shown by the combination factor of 0.000001.		
• Areas shown on this plat are "ground".		
9. Label the Section, Township, Range, Principal meridian and County at the top of each applicable sheet.	_____	_____
10. Label all subdivisions, (incl. recording date and document number), blocks, and lots on the plat of highways.	_____	_____
11. All known recording dates and document numbers (subdivision, right-of-way, deed, etc.) will be included in the legal descriptions.	_____	_____
12. Show all section/quarter section corners and ties on the Plat of Highway. These should relate to the ties on the corresponding monument records. Label the monument recording date and document number.	_____	_____
13. Show necessary land lines with proper line types (section lines, lot lines, property lines, etc.)	_____	_____
14. Indicate and label the following lines (use the proper line types):	_____	_____
• Existing and proposed right-of-way lines (use the proper line types)		
• Existing and proposed access control lines		
• Existing roadway easements lines and proposed IDPT easement lines		
15. Show width of existing right-of way at least once per sheet.	_____	_____



16. Reference the documents which established the existing right-of-way or "As monumented and occupied" on the plat of highway. \_\_\_\_\_
17. Show all distances and bearings as used in the legal descriptions. \_\_\_\_\_
18. Show the radius (R), length (L), chord length (CH) and chord bearing (CB) for all curves as used in the legal descriptions (Use curve tables as applicable). \_\_\_\_\_
19. Label the Point of Commencing (P.O.C.) and Point of Beginning (P.O.B.) for every parcel when applicable. \_\_\_\_\_
20. Total holding property (including contiguous property) should be shown and labels (bearings, distances, angles, etc.) will be identical to the title report legal description. \_\_\_\_\_
21. Use land hooks to show common lines of ownership for contiguous property. \_\_\_\_\_
22. The property line symbol should be shown on all sides of the total holding parcel. \_\_\_\_\_
23. Indicate any land locked remainders. \_\_\_\_\_
24. Parcel numbers are to be shown as four (4) digits and boxed in a rectangle. Use the suffix "PE" for Permanent easement "TE" for temporary easement and "AC" for access control. No suffix is needed for a parcel being conveyed. \_\_\_\_\_
25. Areas shall be shown to the nearest 0.001 Acre. All parcels 0.010 of an acre or less should also be shown to the nearest square foot. \_\_\_\_\_
26. Complete the Parcel Table: \_\_\_\_\_
  - Parcel Number
  - Total Holdings Acres
  - Part Taken Acres (Include Square Feet when 0.010 of an acre or less)
  - Areas in existing R.O.W. Acres (prescription, monumented, occupied or common law)
  - Remainder Area Acres
  - Easement Area Acres (Include Square Feet when 0.010 of an acre or less)
  - Parcel Index Number (List all P.I.N.'s for the total holdings)
27. Complete the Index Table on cover or as 2nd sheet if too many parcels for cover: \_\_\_\_\_
  - Parcel Number
  - Owners' Name (as listed in the title commitment)
  - Sheet Number
  - Property Acquired By
28. Legal Description Heading to be on right side & on each sheet: \_\_\_\_\_
  - Route
  - Section
  - County
  - Parcel Number
  - Beginning to ending station (Both stations should be from same center line)
  - Parcel Index Number (List only P.I.N.'s for the affected parcel)
29. Legal Descriptions will include the following: \_\_\_\_\_
  - CAPTION FORMAT: "... In (Name) County, Illinois, bearings and distances Based on the Illinois State Plane Coordinate System, East Zone, NAD83 (Adjustment year), with a combined factor of \_\_\_\_\_", described as follows..."
  - ...BODY OF LEGAL...
  - END WITH AREA STATEMENT: Said parcel Containing X.XXX acres, more or less, of which X.XXX acres, more or less, was previously dedicated or used for highway purposes.
30. The type and use of all buildings on the total holding should be indicated. \_\_\_\_\_
  - All buildings within 100 feet of the proposed right-of-way or easement should be dimensioned and tied perpendicular to the proposed right-of-way.
  - All buildings beyond 100 feet from the proposed right-of-way or easement should just be outlined on the plat.

31. Show and label all private improvements in the proposed/existing Right-of-Way and proposed easement lines in the parcel. This includes fences, signs, light standards, private utilities, canopies, driveways, parking lots, etc. \_\_\_\_\_
32. Show all fuel pump islands with perpendicular ties to the proposed right-of-way or proposed easements. \_\_\_\_\_
33. Show all encroachments within the existing right of way. (This would include parking areas) \_\_\_\_\_
34. Label the route and street name designation once per sheet. \_\_\_\_\_
35. Label the project's beginning and ending stations \_\_\_\_\_
36. Show the proposed centerline and label with IDOT stationing for State highways and LCDOT stationing for County highways, including all station equations. \_\_\_\_\_
37. Label the station and offset at the following points: \_\_\_\_\_
  - All proposed take and easement corners. \_\_\_\_\_
  - Intersection of all property lines with the proposed right-of-way lines and easement lines. \_\_\_\_\_
38. The station of the intersection of the proposed centerline with all Section and Quarter Section lines should be shown. \_\_\_\_\_
39. The bearing and distance of all section and quarter section lines measured for the project shall be shown. \_\_\_\_\_
40. Show all found monumentation with reference to true corner location. ( Note: Following the completion of construction, all property corner monumentation found where new R.O.W. was not acquired shall be verified to still be in place. Any property corner monumentation destroyed during construction is to be replaced in the previously located positions. This will be coordinated with the Resident Engineer). \_\_\_\_\_
41. Show all set monumentation. (Note: Monumentation for proposed R.O.W. is to be placed after completion of construction in areas that may be disturbed during construction, e.g., temporary construction easements. The consultant will be notified by the Resident Engineer). \_\_\_\_\_
42. List in tabular form the state plane coordinates for: \_\_\_\_\_
  - All centerline control points
  - P.C., P.I., P.T.
  - Station equations
  - Project begin and project end points
  - Proposed right of way monuments
  - All found monumentation
  - All section/quarter section corners utilized.
  - Header for coordinate table text box.

<b>PROJECT COORDINATES</b> Illinois State Plane, East Zone, NAD 83 (Adjustment Year)
---

Items 43 and 44 shall be completed after initial approval.

43. Monument Record Documents should be prepared and recorded for Section/Quarter Section corners utilized for which no Monument Record exists. New Monument Records should be prepared and recorded for those documents which show ties within the proposed right-of-way. \_\_\_\_\_
44. Submit one complete set of signed and sealed mylars, a MicroStation file (.dgn), a .pdf file of the signed Plat of Highways, and the legal descriptions in Microsoft Word format and in a .pdf file. \_\_\_\_\_