

2019 QBS
Request for Statement of Interest (SOI)
Kane County Division of Transportation (KDOT)
Harter Road Culvert Replacement
Section Number 19-00509-00-BR

The Kane County Division of Transportation is in need of professional services from a qualified engineering firm to provide Phase I/II Engineering Design Services as detailed in the following Project Description/Scope of Services.

At this time the County anticipates starting this work in August 2019 with approximately 12 months to complete the work.

The Statement of Interest document shall be limited to 2 pages, and shall be submitted electronically via **KDOT QBS** no later than 2:30 pm on April 15, 2019 and should be addressed to Nils Jordahl, Project Manager.

Statements of Interest received will be used by County engineering staff to develop a short-list of three (3) firms. The County will then submit a Request for Proposal (RFP) to the short-listed firms, and the Proposals received will be used to select the consultant for the work. If the Proposals received do not provide sufficient information for the County engineering staff to make a selection, interviews will be scheduled with the short-listed firms.

If you plan to enter into a joint venture with another firm for this project please note this on your Statement of Interest, including the name of the firm you are entering into a joint venture with for this project.

The short-listed firms will be posted on our Consultant Selection Summary Table website at:
<http://www.co.kane.il.us/dot/SOISummary.aspx>.

Any new firm interested in doing work with the Kane County in regards to this or any other future professional service, must first submit their Prequalification Document to Kane County by following the instructions found at <http://kdot.countyofkane.org/Shared%20Documents/QBS.pdf>. The prequalification document will be reviewed and approved in a short period of time if the appropriate documentation was provided. Each firm must first be prequalified in order to electronically submit their Statement of Interest via KDOT QBS no later than the deadline described above.

More information regarding the Qualifications Based Selection process may be found at <http://www.co.kane.il.us/dot/consultant.aspx>.

Firms interested in providing services to Kane County are hereby notified of the Kane County's Ethics Ordinance No. 10-206, in particular, Section 10, page 15. Only the firm that is ultimately selected for these professional services will be required to provide the Ethics Ordinance information directly to the Kane County Division of Transportation as part of the consultant services agreement. The complete Ethics Ordinance No. 10-206 document is available online at the following link [Kane County Ethics Ordinance](#).

A Statement of Interest (SOI) received after the above noted deadline will not be used as part of our consultant selection process.

Harter Road Culvert Replacement Project Description/Scope of Services:

This project consists of Phase I and Phase II type engineering design services for the replacement of the culvert carrying Harter Road over the Tributary to Welch Creek, located immediately west of Dauberman Road in Kane County. The project will be designed and constructed with local funds. The services include:

- Detailed topographic surveys
- Well, septic field, and field tile investigation and surveying
- Environmental and geotechnical studies including wetland delineation and CCDD screening analysis
- Hydrology/hydraulics and modeled analysis for structure sizing and typing
- Engineering design for the replacement structure, roadway geometry, profile, shoulder and guardrail
- Land acquisition negotiation services
- Plats and legal descriptions as required for land acquisition
- Maintenance of traffic plan
- Application and acquisition of all permits from regulatory agencies as required by the scope of improvements

Please see attached references:

- 2017 Harter Road Culvert Inspection Report

Contact Information

Any questions regarding the requested services or QBS or Consultant Selection Process should be directed to Nils Jordahl at 630-845-7871 or via email at jordahnils@co.kane.il.us.

Bridge Inspection Report



Harter Road Culvert

Harter Road over Drainage Ditch

Prepared For

Kane County Division of Transportation

INSPECTION TYPE: Routine
DATE: May 24th, 2017



Hampton, Lenzini and Renwick, Inc.
Civil Engineering • Structural Engineering • Environmental Services • Land Surveying
www.hlrengineering.com

I. ADMINISTRATIVE DATA:

Region / District: 1 / 1
County: Kane
Feature Carried: Harter Road
Feature Crossed: Drainage ditch
Latitude, Longitude: 41°50'24.68" N, 88°31'41.99"W
Weather: 60° F, Cloudy

II. ROADWAY / STRUCTURE DATA:

ADT (current): 2950
ADTT (current): Unknown
Inventory Rating HS: N/A
Operating Rating HS: N/A
Existing Clear Width: 25.0'
Width to Remain in Place: Match Roadway
Improvement Width: N/A

CONSTRUCTION / RECONSTRUCTION / REPAIR HISTORY:

Year Constructed: Unknown, 1951 roadway plans indicate culvert as existing
Year/s Reconstructed: No repairs noted

STRUCTURE DESCRIPTION:

Type: Single barrel CIP box culvert with concrete headwalls with < 2' fill depth.
Span Arrangement: One 7' wide x 3'-6" tall box
Length & Width: 7' wide and 31'-8" long

INSPECTION HISTORY (NBIS Ratings):

Year: **Culvert:**
2017 routine

III. STRUCTURE CONDITION FINDINGS:

APPROACH PAVEMENT:

The HMA pavement is in **Fair** condition.

- There is cracking along the roadway with a larger crack running vertically along the center of the road. (See Photo Nos. 5 & 6)

BRIDGE PARAPET / RAIL:

There is no guardrail or railing present.

TOP SLAB / SOFFIT:

The top slab is in overall **Poor** condition.

- There is a 0.05-0.06 inch wide cracking along the middle of the culvert.

Bridge Inspection Report for Harter Road Culvert; May 24, 2017

- At the north end of the culvert, a 1 foot spall across the culvert exists with exposed and dangling reinforcement. (See Photo Nos. 15 & 16)
- Multiple spalls with exposed reinforcement and delaminated areas exist throughout the top slab. (See Photo Nos. 10 and 14)
- Minor cracking with efflorescence exists in the northernmost 10'. (See Photo No. 14)

SIDEWALLS:

The sidewalls along the culvert are in **Poor** condition.

- At the center of the culvert, there is a 0.8-1.0 inch crack in each wall. The existing walls appear to be 8" thick from inspection and no reinforcement was encountered in the entire height of the crack. (See Photo No. 8 & 9)
- Multiple spalls, delaminations, and cracks occur throughout the culvert. (See Photo No. 11, 12, & 13)

BOTTOM:

The bottom of the culvert is in **Poor** condition.

- At the center of the culvert, there is a 1" crack.

HEADWALLS AND WINGWALLS:

The headwalls and wingwalls are in **Fair** condition.

- There is a 6 inch by 12 inch spall on the south headwall at the southeast corner.
- Minor cracks with efflorescence are present on the north wing walls with a spalling on the north headwall. (See Photo No. 1)

SLOPE / CHANNEL:

Slope / Channel Protection:

The slope and channel appear to be in **Fair** condition. Erosion is present on the creek banks, along with 1 inch of siltation along the bottom of the culvert. No bank protection is existing at this location. (See Photo No. 3)

TRAFFIC SAFETY:

No traffic safety devices were seen around the structure.

UTILITIES:

No utilities were observed to be attached to the structure.

IV. CONCLUSIONS AND RECOMMENDATIONS:

CONCLUSIONS:

The culvert is in overall **Poor** condition. It appears as if the walls and bottom slab were not reinforced during construction. As such, the culvert has acted as a beam and separated in the middle from the vehicular loads. The existing structure life span is 5 years.

RECOMMENDATIONS:

Short Term (1-4 Years):

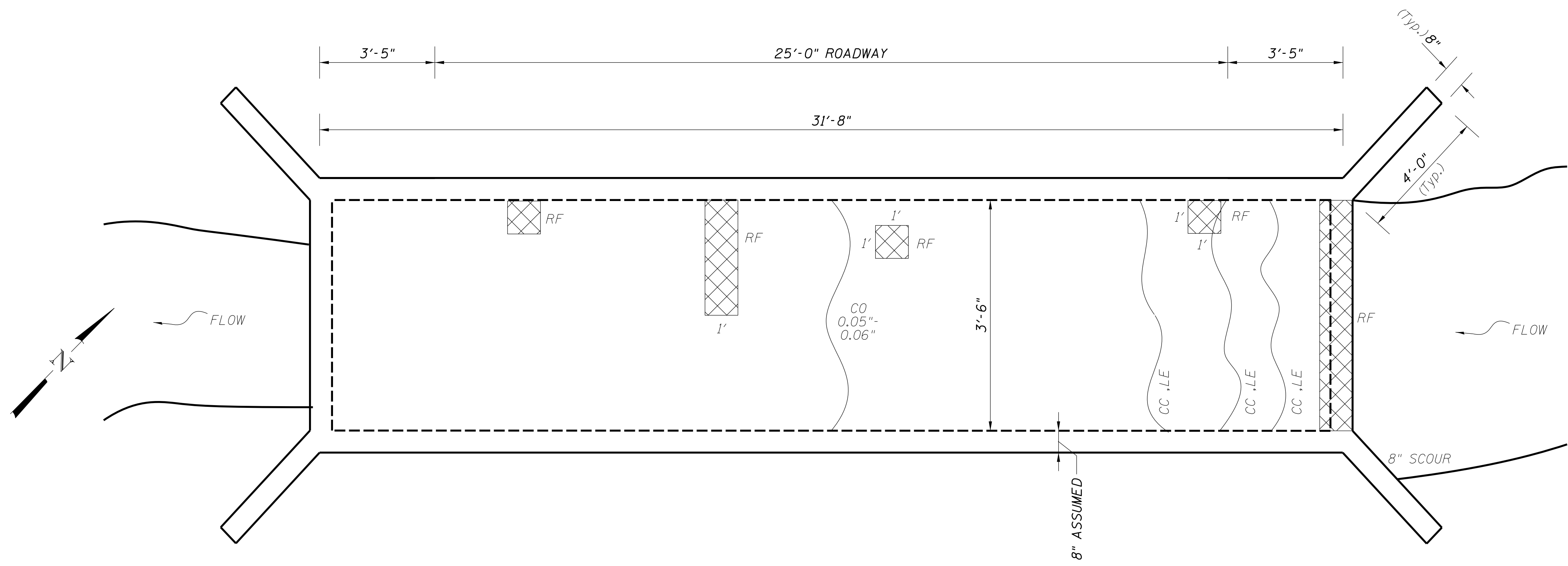
- Monitor.

Mid Term (5 Years):

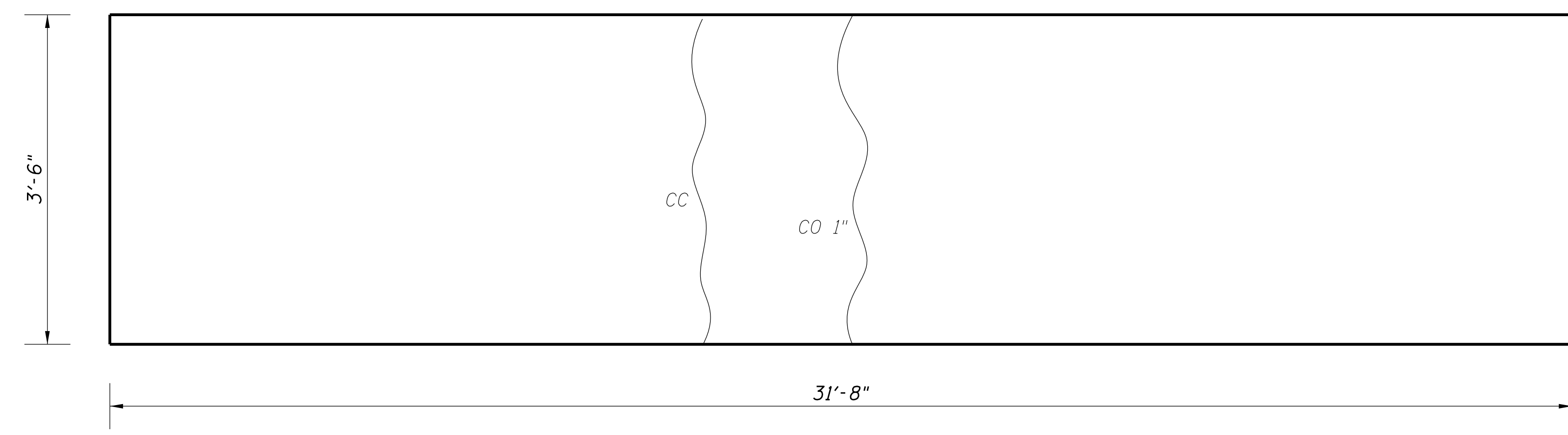
- Replace culvert. It is recommended to review the culvert skew during design. The existing skew is 90°. However, the upstream channel skew is at 45° and the downstream skew is 90°.

V. ATTACHMENTS:

- A. Culvert Sketch**
- B. Structure Photos**
- C. Cost Estimate**



TOP SLAB-REFLECTED



BOTTOM SLAB



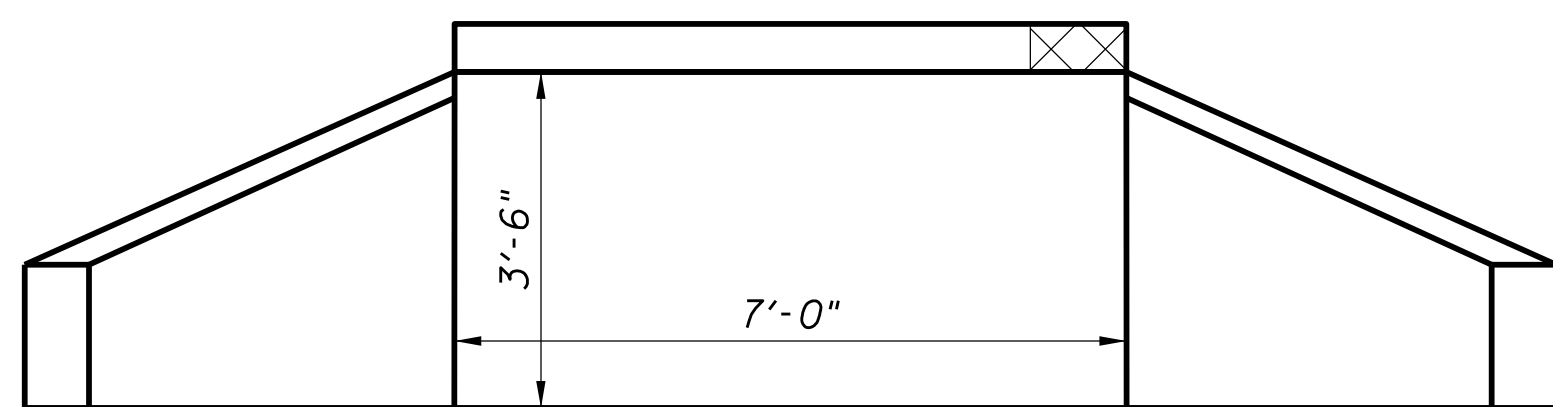
LOCATION SKETCH

LEGEND

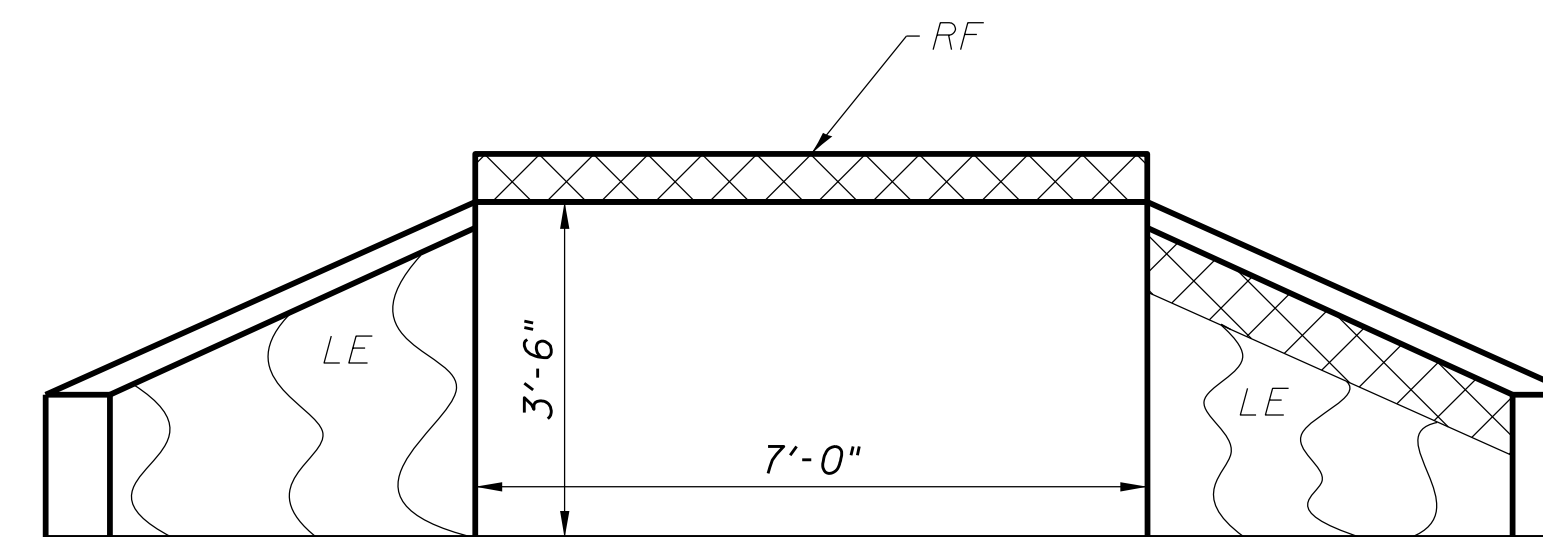
CO = Crack - Open	SS = Shear Stirrup
CC = Crack - Closed	EF = Efflorescence
DL = Delamination	WL = Water Leakage
LE = Leaching	
PD = Plugged Drain Hole	Delamination
PS = Prestressed Strand	Spalls
RF = Reinforcement	Crack
RP = Repair	
RS = Rust Staining	
SP = Spall	

NOTES:
 Dimensions are based on field measurements. No existing plans.
 No guardrail

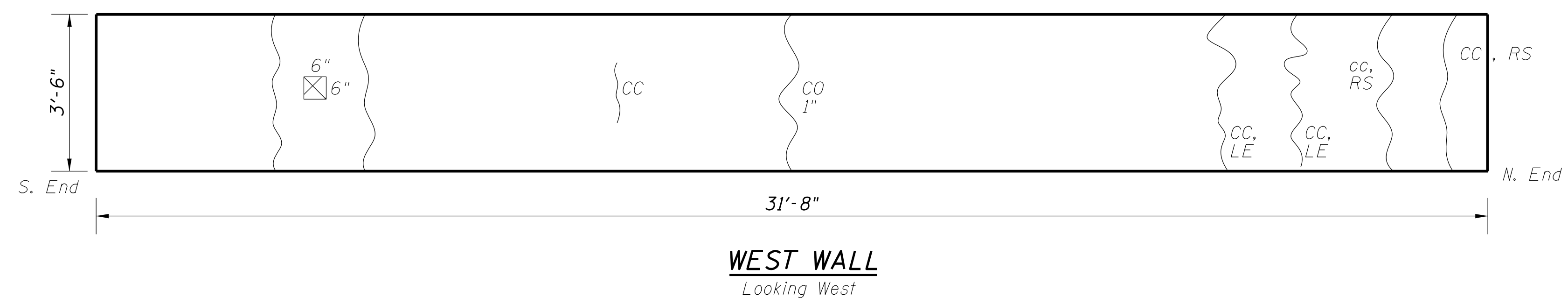
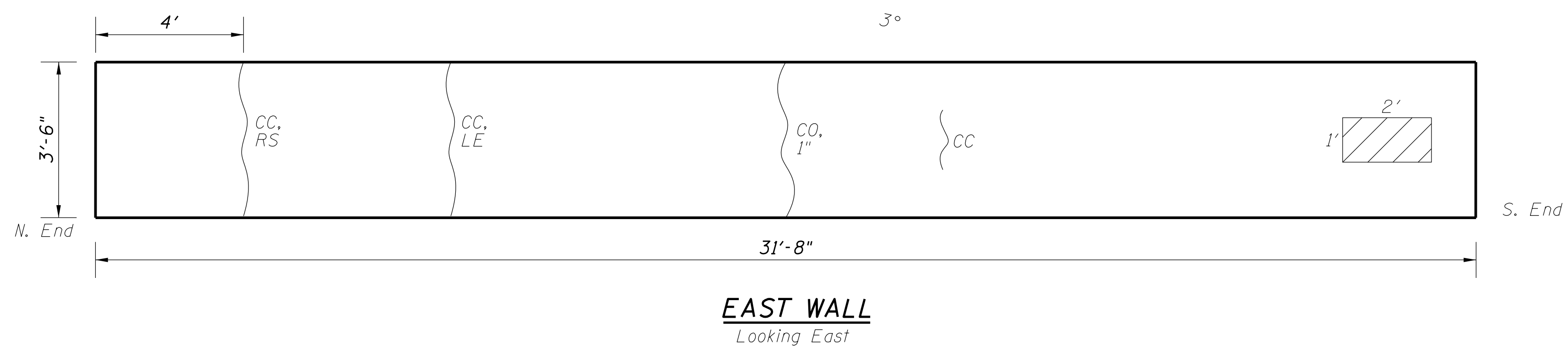
KANE COUNTY DIVISION OF TRANSPORTATION		
HARTER ROAD OVER DRAINAGE DITCH KANE COUNTY		
TOP AND BOTTOM SLAB		
DRAWN BY: SAM	 HAMPTON, LENZINI AND RENWICK, INC. 3083 STEVENSON DRIVE, SUITE 207 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-000999	DATE: MAY 25, 2017
CHECKED BY: JLA		SHEET 1 OF 2
PROJECT NO. 17.0001		



SOUTH ELEVATION



NORTH ELEVATION



LEGEND

- | | |
|-------------------------|--------------------|
| CO = Crack - Open | SS = Shear Stirrup |
| CC = Crack - Closed | EF = Efflorescence |
| DL = Delamination | WL = Water Leakage |
| LE = Leaching | |
| PD = Plugged Drain Hole | Delamination |
| PS = Prestressed Strand | Spalls |
| RF = Reinforcement | Crack |
| RP = Repair | |
| RS = Rust Staining | |
| SP = Spall | |

NOTES:
Dimensions are based on field measurements. No existing plans.
Center span 1" crack in walls is full depth. No reinforcement indicated

KANE COUNTY DIVISION OF TRANSPORTATION		
HARTER ROAD OVER DRAINAGE DITCH KANE COUNTY		
ELEVATIONS		
DRAWN BY: SAM	HAMPTON, LENZINI AND RENWICK, INC. <small>2025 STATEWIDE DESIGN FIRM</small>	DATE: CC
CHECKED BY: JLA	SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-000999	MAY 25, 2017
PROJECT NO. 17,0001		SHEET 2 OF 2



Photo 1 - Upstream, Looking South



Photo 2 - Downstream, Looking North



Photo 3 - From Harter Rd, Looking North



Photo 4 - From Harter Rd, Looking South



Photo 5 - Looking East along Harter Rd



Photo 6 - Looking West along Harter Rd



Photo 7 - North Approach to Harter Rd



Photo 8 - East Wall Mid Span Crack



Photo 9 - East Wall Crack Closeup



Photo 10 - Top Slab Spall near Mid Span Crack



Photo 11 - West Wall North End Cracks



Photo 12 - West Wall North End



Photo 13 - East Wall North End Cracks



Photo 14 - Top Slab Map Cracking at North End



Photo 15 - North Headwall Spalls with Reinforcement



Photo 16 - North Headwall

**KANE COUNTY
HARTER ROAD**

PRELIMINARY ESTIMATE OF COST

SINGLE 7'X4' REINFORCED CONCRETE BOX CULVERT, 34'-0" LONG O-O HEADWALLS
20 DEGREE SKEW, BITUMINOUS SURFACE

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL COST
1.	EARTH EXCAVATION	CU YD	100	\$30.00	\$3,000.00
2.	FURNISHED EXCAVATION	CU YD	50	\$30.00	\$1,500.00
3.	PAVEMENT REMOVAL	SQ YD	120	\$20.00	\$2,400.00
4.	POROUS GRAN EMBANKMENT	TON	120	\$35.00	\$4,200.00
5.	POROUS GRAN BACKFILL	CU YD	15	\$85.00	\$1,275.00
6.	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.2	\$10,000.00	\$2,000.00
7.	STONE RIPRAP, CLASS A4	TON	10	\$60.00	\$600.00
8.	GEOTECH FABRIC FOR GR STAB	SQ YD	50	\$4.00	\$200.00
9.	HOT MIX ASPHALT	TON	50	\$90.00	\$4,500.00
10.	CULVERT REMOVAL	FOOT	32	\$250.00	\$8,000.00
11.	REINFORCEMENT BARS	POUND	6,240	\$1.50	\$9,360.00
12.	NAME PLATES	EACH	1	\$400.00	\$400.00
13.	CONCRETE BOX CULVERTS	CU YD	28	\$900.00	\$25,200.00
14.	GUARDRAIL	FOOT	40	\$120.00	\$4,800.00
15.	GUARDRAIL TERMINALS	EACH	4	\$3,750.00	\$15,000.00
16.	TRAFFIC CONTROL AND PROTECT	LSUM	1	\$5,000.00	\$5,000.00
				SUBTOTAL	\$87,500.00
				20% CONTINGENCIES	\$17,500.00
				TOTAL ESTIMATE OF COST	\$105,000.00