Southern Region

Utility Crossing/Encroachment Application Packet

Revised: 12/04/2018
Table of Contents

1. Initial Notification of Intent to Construct Utility Crossing/Encroachment
   a. Requirements and Instructions
   b. Forms
2. CN Insurance Requirements
3. Example Certificate of Insurance
4. Flagging/Cable Locate Specifications and Form
INITIAL NOTIFICATION OF INTENT TO CONSTRUCT UTILITY CROSSING/ENCROACHMENT
REQUIREMENTS AND INSTRUCTIONS

The Applicant shall submit a completed application for utility crossing engineering review to the appropriate contact shown in the “Pipeline/Wireline Crossing Contacts” Section (Section I). The application can be downloaded from Railroad’s website but the application and all supporting documentation must be submitted to the Railroad via certified mail to the address shown on the application. Any application transmitted to Railroad other than by certified mail, or that does not include all requested information or required documentation will be considered incomplete. Railroad shall notify the applicant when Railroad receives an incomplete application but under no circumstances shall Railroad review an incomplete application. Repeat: no application will be reviewed until the application is complete. Unless otherwise advised by Railroad, all submittals necessary to complete a previously submitted incomplete application must also be submitted via certified mail. Any application which remains incomplete one (1) year after the date of the first notification of an incomplete submittal from Railroad will be discarded and a new application must be submitted, including a new application fee. All information and documentation contained in any application must meet the approval of the Railroad, in its sole discretion. Unless otherwise required by law, Railroad will respond to all applications in the order in which they are received. In no event shall any construction related activities be scheduled or conducted on Railroad’s property until Railroad has issued its final approval of the application, a written agreement outlining the legal terms of the installation has been signed and flaggers have been secured.

An application shall include the following documents:

☐ A completed and signed application form also known as Initial Notification of Intent Form.

☐ A map with an aerial image of the location of where work will be performed, showing the work site as well as nearby streets or other landmarks close to the work location(s).

☐ A certificate of insurance meeting the requirements set forth in this packet (unless lower coverage requirements are prescribed by local law and signed off by CN Legal Department).

☐ Six (6) copies of complete stamped engineering plans which shall conform to the guidelines established by the American Railway Engineering and Maintenance of Way Association (AREMA), all applicable federal, state and local legal and professional requirements, CN standards and any additional requirements set forth in this packet. In the event of any conflict or inconsistency between the aforesaid guidelines, requirements and standards, the most stringent shall apply.

☐ The non-refundable application fee. Unless otherwise specified by law, the non-refundable application fee shall be $1,350.00, which is intended to cover the cost of Railroad’s review of the application and all required documentation and information. The Applicant will be charged an additional fee of $200 for each review after the initial review of the completed application due to inadequate or missing information or other failure by the Applicant to meet the requirements of Railroad. This fee shall be included with any revision sent. Any revision sent without the accompanying fee will be considered incomplete and will not be reviewed.
I. Pipeline/Wireline Utility Contacts

Utilities

Name: Joseph Wojcik  
Address: CN  
17641 S. Ashland Avenue  
Homewood, IL 60430  
Phone: (708) 332-4739  
Email: Josephs.Wojcik@cn.ca

FLAGGING AND/OR CABLE LOCATES

Address: CN Flagging - US  
17641 South Ashland Avenue  
Homewood, IL 60430  
Email: Flagging_US@cn.ca
II. Scope

1. These specifications cover minimum requirements for utilities installed within or adjacent to railway rights-of-way. Railroad reserves the right to increase the specifications based on physical conditions or other factors specific to the installation point, including but not limited to:
   a. Track speed
   b. Traffic density
   c. Traffic sensitivity
   d. Terrain conditions
   e. Curvature and grade
   f. Bridges and other structures
   g. Pipe size, capacity and material carried
   h. Environmental risks/damages
III. Engineering Plan Requirements

1. A cover page including:
   a. Include caption stating “Construction and maintenance to be in accordance with all applicable regulatory requirements and standards”
   b. Contact name, address and phone number of Utility Owner
   c. Professional Engineer’s stamp, signature, and date

2. A plan view or site plan displaying:
   a. A north arrow
   b. Any tracks and railroad facilities
   c. Railroad/roadway crossings
   d. Railroad mileposts
   e. Proposed utility crossing location
   f. Location of proposed utility crossing in relation to a legal description or road allowance
   g. Public Land Survey System (PLSS) Information (sections, quarter sections, etc.)
   h. Right of way lines of railroad and labeled street or highway, if involved
   i. Warning, utility markers that are proposed for the site in accordance with this document.
   j. Indicate direction of flow and location of nearest shut off valves, if shutoff valves are required.
   k. Indicate location and distance of nearest excavation from centerline of nearest track.
   l. Location and methods of storage and disposal of excavated material. Excavated material should be stored to the back side of excavation with respect to the tracks unless this position creates an unsafe condition or a better location can be justified. All excavated material should be treated as contaminated with details provided for review unless known otherwise.
   m. Excavation protection methods shall be shown for review. All excavations must be protected at all times and fenced in with reflective material or illuminated if left unattended.

3. A profile along the proposed crossing of actual situations showing:
   a. Any tracks
   b. The existing ground surface
   c. The proposed utility
   d. Exact depth of burial below base of rail, roadway surface, ditch bottom, and other points of interest to the top of utility (depth measured to casing pipe, if used)
   e. Method of installation (i.e. boring, dry jack and bore, dry directional bore, etc.)
   f. Indicate type and details of utility protection.

4. Show a detailed spec and cross-section of the pipe including:
   a. Note and show if carrier pipe will be held clear of the casing pipe by supports. CN requires carrier & casing to be designed for cooper E-80 loading.
   b. The type, wall thickness, and maximum test pressures of carrier and casing pipes must be listed on the plans. CN requires the AREMA standard listed in Table 1-5-1. Minimum Wall Thickness for Steel Casing Pipe for E80 Loading also found in Section A-2 of this document.
   c. Indicate type of cathodic protection, if required for the type of construction. (See AREMA Section 5.2.3.3 Cathodic Protection for more information)
   d. The ends of the casing shall be suitably sealed to the outside of the carrier pipe or casing vents shall be required.
   e. Provide hoop stress calculation. See AREMA Sections 5.2.3 Carrier Pipe for more information.
   f. Cross sections of the utility shall be perpendicular to the center line of the railroads tracks.
g. The location of the cross sections will be at:
   i. Bore pit
   ii. Receiving pit
   iii. Intersection of utility and center line of any tracks
   iv. Any other points of interest along the utility line

5. A detail of the proposed utility marker to be used on site showing all information to be displayed as well as all dimensions and materials.

6. Drawings must be to scale and have all dimensions shown. This includes but is not limited to:
   a. Distance from each utility (encroachment) to the centerline of track, nearest road, crossing, bridge or other Railroad structures
   b. Dimension width of CN right-of-way
   c. Number of tracks proposed utility crossing will cross
   d. Angle of proposed utility crossing
   e. All existing and proposed signals and facilities with dimensions showing horizontal distance and depth to the proposed utility

7. All information regarding all seeding/surface restoration work shall be provided with the plans and conform to the local DOT specs.

8. Revised drawings shall be marked as revised (with revision date included) and state reason for revision. Each individual revision shall be called out in this manner. In addition, each page shall have a section near the title block with a list of revisions, where the revision version and date shall be marked in for any revision to that page.

9. **Professional Engineer’s stamp, signature and date is required on all plans and submittals.**

10. Attachments to the plans as required in the following sections of this document may include but are not limited to:
    a. Soil Boring Logs
    b. Geotechnical Report
    c. De-Watering Plan
    d. Induction Interference Study
    e. Vibration Monitoring Plan
    f. Shoring Plan
    g. Site Safety Action Plan
    h. Emergency Action Plan
    i. An estimated construction schedule and Gantt chart with field contact name and phone number.
    j. Detailed Work Plan
    k. Settlement Monitoring Plan
    l. Construction Monitoring Plan
IV. Above Ground Utility Requirements

1. General Above Ground Utility Requirements
   a. CN’s operations are not to be impaired or affected by any utility work.
      i. Flagging protection during construction will be required and may be expanded by local supervisors to include any work on, under, over, or near Railroad property.
   b. All employees of contractors not hired by CN that will work on, over, under or near CN property are required to have, at a minimum, safety certification with www.contractororientation.com and the railroad representative will be responsible for verifying and documenting said certifications.
      i. Applicant must compile an Emergency Action Plan per OSHA which incorporates the proper Railroad contact information. Identify and list an adequate amount of properly trained employees to be able to enter CN property to respond to an emergency situation.
   c. On projects which have the potential to encroach or effect the operations to CN’s property, it is required of the contractor to post informational documents at the jobsite for the benefit of the construction workers, CN personal, and the general public. The following required information is to be posted on a bulletin board. The bulletin board shall be weatherproof and watertight and be located in an area readily accessible to both CN and the general public.
      i. Project overview: Including a general work description, job site location address, and approximate duration of the project
      ii. Owner / Applicants Information
      iii. Contractor’s Designated points of contact: Including the Safety Officer, Superintendent, and 24 hour contact number
      iv. Copies of reviewed drawings by CN
      v. Copies of the Safety Action Plan
      vi. Copies of approved permits
   d. All utilities must be a minimum of 15 ft horizontally away from any existing or planned CN signals and facilities, when practicable. Minimum distance in any direction from a vertical road crossing gate shall be no less than 4 ft.
   e. Utilities shall not be placed within a culvert, under railroad bridges, nor closer than 300 feet to any portion of any railroad bridge, building, or other structure, except in special cases and be of special design as approved by the CN Chief Engineer or the designated representative.
   f. Must not be attached to a CN pole line or pole lines licensed to others except where specifically authorized.
   g. All poles extending in height above ground equal to or greater than the distance from pole to the edge of ties on the nearest track will be anchored and guyed against tipping toward track.
      i. Guys will be guarded to a distance of 8’ above ground line and the guards shall be orange in color.
   h. All clearances and safety provisions are subject to the National Electric Safety Code (American National Standard Institute) as well as any applicable National, State, and local codes, whichever is more restrictive.
   i. All overhead electrical utilities will require an induction interference study.
   j. During construction, the Applicant shall maintain positive drainage of Railroad property. After construction is completed, the Railroad’s right-of-way shall be restored to its original condition.
and to the satisfaction of the Railroad. Any fencing removed to facilitate construction shall be restored.

k. All piers or poles shall be located off of CN right-of-way.

l. Warning, utility markers shall be installed at any intersection of any utility and CN right-of-way, and on any pole on CN right-of-way.

2. Above Ground Utility Crossing Requirements
   a. Utilities crossing over any railroad track must have a minimum height measured at the lowest point of the utility to the top of rail:
      i. Pipe/Pipe Bridge = 25 ft Min
         a. Cable Supported Pipe Bridge = 50 ft
      ii. Conveyors = 25 ft Min
      iii. Fiber/Coaxial Cable = See Section A-3
      iv. Electric Wire = See Section A-3
   b. Utilities shall be located, where practicable, to cross tracks at approximately right angles but must not cross at an angle less than 45 degrees.
      i. Any utility crossing that is less than 45 degrees will be considered a longitudinal utility and may be subject to higher requirements as required by the CN Chief Engineer or the designated representative.
   c. If any new utilities are attached onto an existing structure, the existing structure must be analyzed to ensure it can withstand the new loading. If a re-design of the existing structure is required, this must be included with the plans.

3. Above Ground Longitudinal Utility Requirements
   a. All longitudinal utilities shall be placed towards the outer edge of the railroad right-of-way, except in special cases and be of special design as approved by the CN Chief Engineer or the designated representative.
V. Underground Utility Requirements

If underground utility is greater in diameter than 10” including any casing protection, the requirements in the Section VI (immediately following this section) are required.

1. General Underground Utilities Requirements
   a. CN’s operations are not to be impaired or affected by any utility work.
      i. Flagging protection during construction will be required and may be expanded by local supervisors to include any work on, under, over, or near Railroad property.
   b. All employees of contractors not hired by CN that will work on, over, under or near CN property are required to have, at a minimum, safety certification with www.contractororientation.com and the railroad representative will be responsible for verifying and documenting said certifications.
      i. Applicant must compile an Emergency Action Plan per OSHA which incorporates the proper Railroad contact information. Identify and list an adequate amount of properly trained employees to be able to enter CN property to respond to an emergency situation.
   c. On projects which have the potential to encroach or effect the operations to CN’s property, it is required of the contractor to post informational documents at the jobsite for the benefit of the construction workers, CN personal, and the general public. The following required information is to be posted on a bulletin board. The bulletin board shall be weatherproof and watertight and be located in an area readily accessible to both CN and the general public.
      i. Project overview: Including a general work description, job site location address, and approximate duration of the project
      ii. Owner / Applicants Information
      iii. Contractor’s Designated points of contact: Including the Safety Officer, Superintendent, and 24 hour contact number
      iv. Copies of reviewed drawings by CN
      v. Copies of the Safety Action Plan
      vi. Copies of approved permits
   d. Jacking or boring of corrugated metal pipe, cast iron pipe or pipe with flanges, bells or couplings will not be permitted.
   e. Casing may need to be extended to accommodate any proposed projects for Railroad as required by CN Chief Engineer or the designated representative.
   f. Soils investigation and a geotechnical report may be required.
   g. All underground utilities shall have an adequate casing for protection.
   h. Utilities shall not be placed within a culvert, under railroad bridges, nor closer than 100 feet to any portion of any railroad bridge, building, or other structure, except in special cases and be of special design as approved by the CN Chief Engineer or the designated representative.
   i. Restoration and backfill compaction should conform to a 95% Proctor test suitable for the soil type at the site and commence in lifts specified by the CN Chief Engineer or the designated representative.
   j. No excavation can be closer than 25’ from the centerline of the nearest track.
   k. All utilities must be a minimum of 15 ft horizontally away from any existing or planned CN signals and facilities, when practicable.
   l. The zone of influence is as follows: Starting 15 feet from the centerline of nearest track at the base of rail, measured perpendicular to the track centerline, calculate a slope to the bottom of the proposed pipe at a 2H:1V slope. (See Section A-6)
INITIAL NOTIFICATION OF INTENT TO CONSTRUCT UTILITY CROSSING/ENCROACHMENT REQUIREMENTS AND INSTRUCTIONS

i. If a 2H: 1V slope cannot be maintained or more restrictive conditions occur, approved shoring will be required. (See Section A-7)

ii. If shoring is required as stated above, a shoring plan designed to withstand E-80 loading shall be created, stamped by a Professional Engineer, and submitted to CN.

iii. If the excavation is outside the zone of influence, then the excavation shall follow OSHA requirements.

m. A dewatering plan shall be created, stamped by a Professional Engineer, and submitted to CN as required by the CN Chief Engineer or the designated representative.

n. Dry Horizontal Directional Drilling (HDD) is only allowed.
   i. Mud slurry directional bore will be allowed only with the use of vents.
   ii. No wet directional drilling is allowed.

o. Vibrations Requirements
   i. If there are fiber optic cables buried within the ROW, the Contractor shall submit details on the type of equipment to be used for pile driving, and estimate the vibrations that will be induced at ground level during operation.
   ii. The Contractor may be required to monitor vibrations levels during pile driving operations, for which the Contractor shall submit a procedure and the type of monitoring equipment to be used.
      - Induced vibrations shall be limited to a maximum peak particle velocity (PPV) of less than 3.5"/sec (measured in 3 mutually perpendicular directions taken at tie level / ground surface). And induced amplitude of movement shall be less than 1/128".
      - Vibrations undertaken within 150 ft of fiber optic cables, induced vibrations shall be limited to a maximum of PPV of less than 1.5"/sec.

p. During construction, the Applicant shall maintain positive drainage of Railroad property. After construction is completed, the Railroad’s right-of-way shall be restored to its original condition and to the satisfaction of the Railroad. Any fencing removed to facilitate construction shall be restored.

q. Additional Resources for Underground Utilities:

http://www.undergroundfocus.com/onecalldir.php
Provides links and information on state calls for cable locates
http://www.ntdpc.com/
National Telecommunications Damage Prevention Council
http://www.commongroundalliance.com
Common Ground Alliance

2. Underground Utility Crossing Requirements
   a. Utilities shall be located, where practicable, to cross tracks at approximately right angles but must not cross at an angle less than 45 degrees.
      i. Any utility crossing that is less than 45 degrees will be considered a longitudinal utility and may be subject to higher requirements as required by the CN Chief Engineer or the designated representative.
   b. For all utility crossings the utility must be protected by a casing for the full width of CN’s right-of-way or 50 ft whichever is greater.
      i. All casing pipes shall be sloped not less that 0.3%.
ii. Pipelines carrying commodities in a gaseous state are not required to have a steel casing as long as the top of the utility is at least 10 ft below base of rail.

iii. Fiber optic utilities do not need a steel casing if the depth is 15 ft or greater below the base of rail.

c. Directional boring will be allowed at the discretion of the Railroad.
   i. If practicable, boring excavation must not exceed the outside diameter of the pipe.
      • Bore shall not be greater than 1” larger than the utility diameter

d. Minimum depth of burial below:
   i. Dry jack and Bore
      • Main Tracks Base of Rail = 6 ft
      • Industrial Tracks Base of Rail = 6 ft
      • Road Surface = 4 ft
      • Ditch Bottom = 5 ft
   ii. Uncased Utility
      • Main Tracks Base of Rail = 10 ft
      • Industrial Tracks Base of Rail = 10 ft
      • Road Surface = 6 ft
      • Ditch Bottom = 6 ft
   iii. Directional Bore
      • Main Tracks Base of Rail = 15 ft
      • Industrial Tracks Base of Rail = 15 ft
      • Road Surface = 5 ft
      • Ditch Bottom = 6 ft

e. Any excavation must not be located on CN right-of-way or within a minimum of 50 ft from the centerline of track, whichever is greater.

f. Warning, utility markers shall be installed at any intersection of any utility and CN right-of-way.
   i. Marker should show accurate owner, contact, and CN Agreement Number.

3. Longitudinal Underground Utility Requirements
   a. Underground utilities laid longitudinally in railroad right-of-way shall be located as far as practicable from any tracks or other important structures.
   b. Longitudinal lines must be a minimum of 25 ft from the center line of track, or outside the track embankment section, whichever is greater.
   c. Uncased steel carrier pipe utilities laid longitudinally on the railroad right-of-way, 25 ft to 50 ft from the center line of the nearest rail shall be buried not less than 6 ft from the natural ground surface to the top of pipe. If distance is more than 50 ft from centerline of track, minimum cover shall be 5 ft.
      i. At all locations on the right-of-way farther than 25 ft away from the centerline of the nearest track, the minimum natural ground cover for uncased steel natural gas pipes must be 6 ft.
   d. Plastic carrier pipes are not allowed for longitudinal utilities on CN right-of-way.
   e. Longitudinal underground utilities must be marked by a sign approved by the CN Chief Engineer or the designated representative every 500 ft, at every road crossing, streambed, other utility crossing, and at locations of major change in direction of the line.
      i. Marker should show accurate owner, contact, and CN Agreement Number.
VI. Additional Requirements for Underground Utilities with Diameter of 10 Inches or Greater (Including Casing)

1. Drawings shall be stamped, signed, and dated by a Professional Engineer licensed in the State where the work is being performed. CN reserves the right to prohibit a certain construction methodology, at its own discretion; however, CN shall not assume any responsibility for the suitability of the accepted method. Open cut methodology shall only be considered where other installation techniques are deemed impractical and where rail traffic volumes are low. Installations using water jet methods shall not be permitted.

2. Complete Subsurface Investigation
   a. Boreholes are required at each end of the crossing and at each entry/exit pit with a maximum spacing between boreholes of 150 ft.
   b. The boreholes shall be drilled to a depth of 20 ft below the proposed crossing depth or to 20 ft below the maximum feasible crossing depth if the proposed crossing depth has not yet been determined.
   c. Soils samples shall be obtained at 3 ft intervals to a depth of 15 ft and also within the proposed utility horizon (i.e., from at least 7 ft or one pipe/casing diameter above the proposed utility obvert to at least 7 ft or one pipe/casing diameter below the proposed utility invert). At other depths, soil samples may be obtained at 5 ft intervals; No boreholes will be completed between ties or tracks in double track territory.
   d. If bedrock is encountered at the proposed location, the bedrock will be cored to establish the competency and engineering characteristics of the bedrock. The bedrock shall be cored to at least 5 ft below the invert of the proposed crossing.
   e. Soil classification testing (i.e., water content determination, Atterberg Limits testing and grain size distributions) shall be carried out on soil samples obtained from all major soil strata and on soil samples obtained from every layer that the proposed tunnel would intersect.
   f. The stabilized groundwater elevation must be established by installation of piezometer/monitoring well(s); at least one piezometer/monitoring well must be maintained in operation and checked prior to construction to confirm the groundwater elevation.

3. Submit a stamped Geotechnical Report prepared by a Licensed Geotechnical Engineer with experience in trenchless technology. The Report shall include:
   a. Comments and recommendations with respect to construction methodology
   b. An estimate of the expected extent and magnitude of ground movement over time
   c. Measures to be undertaken to preserve the safety of rail operations and the structural integrity of the track structure
   d. A detailed proposal for ground surface and subsurface monitoring
   e. Factual subsurface information with all field and laboratory test data
   f. A description of the site and soil stratigraphy including results of soil classification testing
   g. A plan of the proposed crossing with borehole/testing/installation locations
   h. A summary of groundwater conditions encountered during the investigation including the observed groundwater levels within the boreholes and the presence of any perched water levels at the borehole locations
   i. Anticipated settlements as well as an assessment of the anticipated settlement through configurations
INITIAL NOTIFICATION OF INTENT TO CONSTRUCT UTILITY CROSSING/ENCROACHMENT REQUIREMENTS AND INSTRUCTIONS

j. A detailed monitoring plan to monitor any ground surface and subsurface movements during construction shall be provided. The Review and Alert (work stoppage) levels shall be provided.

k. Submit a contingency plan and notification procedure to be implemented in the event of excessive/unexpected settlement or heave, and unforeseen changes in subsurface conditions, i.e. cobbles and boulders, raveling/flowing ground.

4. Submit a Detailed Work Plan

a. Details of the proposed methodology - the installation operations, methods of maintaining and adjusting line and grade, drilled/bored diameter, drill hole stabilization procedures, temporary dewatering measures and any mitigation procedures if sinkholes/settlement above the pipe occurs or excessive movement of the settlement monitors is observed.

b. The design of the crossing - length, diameter and thickness of the casing, elevations of the crossing invert at both ends, excavation shoring details and methods of dealing with cobbles/boulders and obstructions.

c. Provide additional details for specific installation methodologies as follows:
   i. Jack and Bore: size and location of the auger head relative to the casing, estimated jacking thrust required, method of monitoring casing elevation, thrust block design calculations, record keeping system to document casing advance and jacking pressures, bulk heading, and grouting procedures. Bore head should not extend more than 1” ahead of the casing.

d. Pipe Ramming: length, diameter and thickness of the casing, details of the reinforcing ring used at the leading edge of the pipe

e. HDD; slurry pressure and mitigation measures for frac out if applicable. Vents shall be installed on each side of the track(s) to prevent frac-outs.

f. TBM: type of machine, methods of primary ground support, grouting between the casing, ribs and lagging (primary support) and the surrounding soil/rock

5. Submit a Settlement Monitoring Plan including:

a. Summary of Proposed Settlement Monitoring
   i. Geographical Location
   ii. Number of Settlement Monitoring Probes
   iii. Type of Probe & installation Method
   iv. Expected Amount of Settlement (in)
   v. Frequency of Monitoring
   vi. Duration of Monitoring

b. Site Plan:
   i. Site Plan
   ii. Identify Probe Locations and Offset Distances to Nearest Rails
   iii. Elevation of Top-of-Probes

c. Probe Detail Drawing:
   i. Show section through Railroad Track Road Bed
   ii. Existing Ground Line
   iii. Depth of Bore
   iv. Distance to Bottom-of-Probe to Top of Casing Pipe
   v. Submit a dewatering plan.
6. Monitoring During Construction
   a. Monitoring by a qualified geotechnical personnel and report to CN on a daily basis.
   b. Installation in accordance with the Contractor’s detailed work plan.
   c. Over-excavation does not occur, and the liner / casing is installed tight to the excavation.
   d. Report theoretical vs. actual volumes of spoils removed on per meter and total bases.
   e. The excavation is fully supported until the liner / pipe installation is complete.
   f. The bulkhead is installed at the end of every work shift or during any prolonged stoppage of work.
   g. Voids are fully grouted to refusal immediately after the completion of liner / pipe installation. Report theoretical vs. actual volumes of grout pumped.

7. Reporting to CN during/post Construction
   a. Progress of the contractor and pipe installation and what work was completed on that day,
   b. A summary of the daily ground surface and subsurface movements showing a comparison to a baseline reading taken before the start of construction, settlements of greater than 3/8” shall be reported to CN immediately.
   c. Any other geotechnical issues that may be of concern to CN.
   d. Log of settlement survey results showing
      i. Station
      ii. Date and Elevation of Initial Readings
      iii. Date and Elevation of Subsequent Readings
      iv. Difference in Elevation
   e. Submit ground surface and subsurface monitoring reports to CN on a daily basis, showing a comparison to baseline readings taken prior to the commencement of construction. Settlement of 3/16” is to be reported to CN immediately, and a settlement of 3/8” or greater the work is stopped until a resolution is achieved.

8. Provide, in writing, the name and phone number of the Applicant’s qualified site inspector who will be on the job site on a full time basis for the duration of construction. Update prior to work beginning if there are any changes.

NO CONSTRUCTION OR ACCESS TO CN ROW WILL COMMENCE UNTIL AN AGREEMENT HAS BEEN ENTERED INTO BETWEEN CN AND THE UTILITY OWNER
A-1. Monitoring Points Requirements

LEGEND

-○- DEEP SETTLEMENT MONITOR
○ SURFACE SETTLEMENT MONITOR

REFERENCE

NOTE
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

Heights of Surface Rods Should Not Exceed Top of Ties
A-2. Minimum Wall Thickness for Steel Casing Pipe for E80 Loading

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<th>Nominal Diameter (inches)</th>
<th>When coated or cathodically protected Nominal Thickness (inches)</th>
<th>When not coated or cathodically protected Nominal Thickness (inches)</th>
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<td>56 and 58</td>
<td>0.750</td>
<td>0.812</td>
</tr>
<tr>
<td>60</td>
<td>0.781</td>
<td>0.844</td>
</tr>
<tr>
<td>62</td>
<td>0.812</td>
<td>0.875</td>
</tr>
<tr>
<td>64</td>
<td>0.844</td>
<td>0.906</td>
</tr>
<tr>
<td>66 and 68</td>
<td>0.875</td>
<td>0.938</td>
</tr>
<tr>
<td>70</td>
<td>0.906</td>
<td>0.969</td>
</tr>
<tr>
<td>72</td>
<td>0.938</td>
<td>1.000</td>
</tr>
</tbody>
</table>
### Overhead Wireline Clearance Chart

**Formula:**
- 0.5" increase for every 1,000 volts in excess of 50 KV
- 6" increase for every 12,000 volts in excess of 50 KV

<table>
<thead>
<tr>
<th>Voltage (to ground)</th>
<th>Minimum Clearance Required above top Of rail</th>
<th>Minimum Clearance (Including Static Wires) Required above Communication and Signal Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 750</td>
<td>27'0&quot;</td>
<td>4'0&quot;</td>
</tr>
<tr>
<td>8,700</td>
<td>28'0&quot;</td>
<td>4'0&quot;</td>
</tr>
<tr>
<td>15,000</td>
<td>28'0&quot;</td>
<td>6'0&quot;</td>
</tr>
<tr>
<td>50,000</td>
<td>30'0&quot;</td>
<td>6'0&quot;</td>
</tr>
<tr>
<td>74,000</td>
<td>31'0&quot;</td>
<td>7'0&quot;</td>
</tr>
<tr>
<td>98,000</td>
<td>32'0&quot;</td>
<td>8'0&quot;</td>
</tr>
<tr>
<td>122,000</td>
<td>33'0&quot;</td>
<td>9'0&quot;</td>
</tr>
<tr>
<td>146,000</td>
<td>34'0&quot;</td>
<td>10'0&quot;</td>
</tr>
<tr>
<td>170,000</td>
<td>35'0&quot;</td>
<td>11'0&quot;</td>
</tr>
<tr>
<td>194,000</td>
<td>36'0&quot;</td>
<td>12'0&quot;</td>
</tr>
<tr>
<td>218,000</td>
<td>37'0&quot;</td>
<td>13'0&quot;</td>
</tr>
<tr>
<td>242,000</td>
<td>38'0&quot;</td>
<td>14'0&quot;</td>
</tr>
<tr>
<td>266,000</td>
<td>39'0&quot;</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>290,000</td>
<td>40'0&quot;</td>
<td>16'0&quot;</td>
</tr>
</tbody>
</table>

**These clearances are to include all tracks operated as main tracks, sidings, and other auxiliary trackage.**
A-4.  Marking of Utilities on Railroad Right-of-Way

CABLE ROUTE MUST BE MARKED AT EDGE OF RIGHT OF WAY WHERE CABLE ENTERS OR LEAVES RAILROAD PROPERTY. IN CASES OF PARALLEL CABLE ROUTE, SIGNS AS INDICATED IN FIGURE 1 ON THIS EXHIBIT WILL BE PLACED APPROXIMATELY EVERY 200 FEET. SIGNS TO BE OF A PERMANENT VERTICAL TYPE, NOT SMALLER THAN 5 INCHES WIDE BY 12 INCHES HEIGHT. YELLOW BACKGROUND WITH BOLD BLACK LETTERING. SIGNS TO BE MOUNTED ON METAL POSTS OR AS OTHERWISE AGREED TO AT A HEIGHT OF 3 FEET ABOVE GROUND LEVEL.
INITIAL NOTIFICATION OF INTENT TO CONSTRUCT UTILITY CROSSING/ENCROACHMENT
REQUIREMENTS AND INSTRUCTIONS

Page 19 of 23
A-7. Example Profile 2 – Requires Shoring

### MINIMUM DEPTH BELOW

<table>
<thead>
<tr>
<th></th>
<th>DRY JACK &amp; BORE</th>
<th>DIRECTIONAL BORE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CASED</td>
<td>UNCASED</td>
</tr>
<tr>
<td>BASE OF RAIL (a)</td>
<td>6’</td>
<td>10’</td>
</tr>
<tr>
<td>EXISTING GROUND (b)</td>
<td>5’</td>
<td>6’</td>
</tr>
<tr>
<td>FLOWLINE DITCH (c)</td>
<td>5’</td>
<td>6’</td>
</tr>
</tbody>
</table>

### REQUIREMENTS

1. NO EXCAVATION CAN BE CLOSER THAN 25’ FROM CENTERLINE OF NEAREST TRACK
2. IF THE EXCAVATION IS INSIDE THE ZONE OF INFLUENCE THEN SHORING PLANS ARE REQUIRED AND MUST INCLUDE THE LIVE EIO LOADING FROM PASSING TRAINS
3. THE ZONE OF INFLUENCE IS DESCRIBED AS 15’ FROM CENTERLINE THEN A 2:1 SLOPE OUTWARD
4. IF EXCAVATION IS OUTSIDE OF ZONE OF INFLUENCE THEN EXCAVATION SHALL FOLLOW OSHA REQUIREMENTS

### Required Notes

SEE TABLE BELOW FOR MINIMUM DEPTHS

SEE SHEET NOT FOR DIRECTIONAL BORE

SEE SHEET NOT FOR EXISTING GROUND

SEE SHEET NOT FOR BASE RAIL

SEE SHEET NOT FOR FLOWLINE DITCH

CONTACT: [CONTACT INFORMATION]

[METHOD OF INSTALLATION]

FOR [PROPOSED UNDERGROUND UTILITY]

[DATE] [SIGNATURE]

[APPROVAL]

[CN]
INITIAL NOTIFICATION OF INTENT TO CONSTRUCT UTILITY CROSSING/ENCROACHMENT

Complete this form and return it along with a non-refundable preparation fee of $1350 made out to CN.

Date: ________________

<table>
<thead>
<tr>
<th>1. Owner/Applicant Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Name: ______________________</td>
</tr>
<tr>
<td>B. Address: ____________________</td>
</tr>
<tr>
<td>C. Authorized Representative: ____________________</td>
</tr>
<tr>
<td>D. Title: ______________________</td>
</tr>
<tr>
<td>E. Phone Number: ________________</td>
</tr>
<tr>
<td>G. Email Address: ____________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Engineer/Consultant Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Name: ______________________</td>
</tr>
<tr>
<td>B. Address: ____________________</td>
</tr>
<tr>
<td>C. Authorized Representative: ____________________</td>
</tr>
<tr>
<td>D. Title: ______________________</td>
</tr>
<tr>
<td>E. Phone Number: ________________</td>
</tr>
<tr>
<td>G. Email Address: ____________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Location Description (Attach a Copy of a Sketch Showing Location)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. __________ ¼ __________ ¼ Sec. __________________, Township __________, Range __________</td>
</tr>
<tr>
<td>B. Nearest Public Road Crossing Name: ____________________</td>
</tr>
<tr>
<td>C. Nearest Public Road Crossing DOT Number: _______ _______ _______ _______ _______ _______ (Number on Blue Sign at Crossing, e.g. 123456L)</td>
</tr>
<tr>
<td>D. City / Village /Township: ____________________ (Circle One)</td>
</tr>
<tr>
<td>E. County: ____________________</td>
</tr>
<tr>
<td>G. Utility Location – Railroad Mile Post: ____________________ plus __________ ft (Start Railroad Mile Post of Segment if Longitudinal)</td>
</tr>
<tr>
<td>H. Utility Location – Railroad Mile Post: ____________________ plus __________ ft (End Railroad Mile Post of Segment if Longitudinal)</td>
</tr>
<tr>
<td>I. Latitude: __ __ __ __ __ __ __ °, Longitude: __ __ __ __ __ __ __ __ °</td>
</tr>
</tbody>
</table>

__________________________  __________________  __________________    ____________________
Name ofSubmitter     Signature     Telephone #     Date
4. Indicate Type of Utility/Facility
   A. Power Line ________
   B. Telephone
      • Fiber Optic ________
      • Copper Pair ________
   C. Cable TV
      • Fiber Optic ________
      • Coaxial ________
   D. Other ________

5. Desired Method of Installation/Construction
   A. Underground ________
   B. Overhead ________
   C. Crossing ________
   D. Longitudinal ________
   E. Copper Pairs
      • # of Wires ________
   F. Fiber Optic
      • # of Strands ________
   G. Other ________

6. Wire/Cable Data
   A. Number of Poles/Towers on Property
   B. Number of Guys/Anchors on Property
   C. Cross arm Overhang ft
   D. Maximum Voltage
   E. Number of Wires/Cables/Pairs/Strands (circle one)
   F. Depth of Top of Wire/Cable/Casing below base of Rail or Top of Ground ft
   G. Clearance Over Railroad Company’s Wires ft
   H. Clearance Over Railroad Company’s Tracks ft
   I. Casing Length (Property Line to Property Line) ft
   J. Size & Kind of Pipe or Duct
   K. Method: How is Pipe or Duct to be installed under the track
      (dry bore & jack, directional, tunnel, other – specify)
   L. Size and Type of Wire/Cable
   M. Insulated
   N. Bare/Open Wire
   O. Stranded
   P. Solid
   Q. Angle of Crossing
   R. Length of Span Crossing Tracks (unsupported length if above tracks) ft

7. Location References and Clearances of Facility (Encroachment)
   A. Width of Public Road (crossing track)
   B. Distance From Each Facility (Encroachment) to Center Line of Main Track ft
   C. Distance From Each Facility (Encroachment) to Center Line of any Adjacent Track ft
   D. Side Clearance from Railroad Company’s Wire to Nearest Pole/Tower ft
   E. Distance and Direction From Bridge Abutment, Culvert, Switch, Road Crossing, etc. ft

Name of Submitter ___________________________ Signature ___________________________ Telephone # ___________________________ Date ___________________________
**8. Commodity to be transmitted in pipe:**
(Steam, air, water, gasoline or other petroleum products, chemical−specify: natural or artificial gas. If sewer, identify as to force or gravity line, sanitary, storm or chemical waste – specify)

**9. Pipe Data**

<table>
<thead>
<tr>
<th>CARRIER PIPE</th>
<th>CASING PIPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Inside Diameter:</td>
<td></td>
</tr>
<tr>
<td>B. Outside Diameter:</td>
<td></td>
</tr>
<tr>
<td>C. Wall Thickness:</td>
<td></td>
</tr>
<tr>
<td>D. Pipe Material:</td>
<td></td>
</tr>
<tr>
<td>E. Specification/Grade or class:</td>
<td></td>
</tr>
<tr>
<td>F. Min. Yield Point of Material</td>
<td></td>
</tr>
<tr>
<td>G. Process of Manufacture</td>
<td></td>
</tr>
<tr>
<td>H. Name of Manufacturer</td>
<td></td>
</tr>
<tr>
<td>I. Type of Joint</td>
<td></td>
</tr>
<tr>
<td>J. Working Pressure</td>
<td></td>
</tr>
<tr>
<td>K. Maximum operating pressure (by gauge)</td>
<td>psi</td>
</tr>
<tr>
<td>L. Length of Casing pipe:</td>
<td>ft</td>
</tr>
<tr>
<td>M. Casing pipe/uncased carrier pipe cathodically protected?</td>
<td>Y / N</td>
</tr>
<tr>
<td>N. Hydrostatic pressure carrier pipe test pressure</td>
<td>psi</td>
</tr>
<tr>
<td>O. Will casing pipe be vented?</td>
<td>Y / N</td>
</tr>
<tr>
<td>P. Pipe Vent Size:</td>
<td>in</td>
</tr>
<tr>
<td>Q. Will casing pipe/uncased carrier pipe have a protective coating?</td>
<td>Y / N</td>
</tr>
<tr>
<td>R. Protective Coating Type</td>
<td></td>
</tr>
<tr>
<td>S. Depth of top of casing or uncased carrier pipe below base of rail or top of ground.</td>
<td>ft</td>
</tr>
<tr>
<td>(Closest point of utility to any base of rail or ground)</td>
<td></td>
</tr>
<tr>
<td>T. Method of installing casing pipe /uncased carrier pipe</td>
<td></td>
</tr>
<tr>
<td>(Dry bore &amp; jack, directional, tunnel, other – specify)</td>
<td></td>
</tr>
<tr>
<td>U. Depth of pipe below the ground. (not beneath tracks)</td>
<td>ft</td>
</tr>
<tr>
<td>V. Depth of pipe below ditches.</td>
<td>ft</td>
</tr>
<tr>
<td>W. Distance from centerline of track to face of jacking/receiving pits.</td>
<td>ft</td>
</tr>
<tr>
<td>X. Depth from base of rail to bottom of jacking /receiving pits.</td>
<td>ft</td>
</tr>
</tbody>
</table>
INSURANCE REQUIREMENTS

1. By Licensee

Before commencing work, and until this Agreement shall be terminated or the FACILITY shall be
removed (whichever date is later), the LICENSEE shall provide and maintain the following insurance
in form and amount with companies satisfactory to and as approved by the RAILROAD.

a. Statutory Workers Compensation and Employer’s Liability insurance.

b. Automobile Liability in an amount not less than $1,000,000 dollars combined single limit.

c. Comprehensive General Liability (Occurrence Form) in an amount not less than $5,000,000
dollars combined single limit, with an aggregate of at least $10,000,000 dollars. The Policy
must name the appropriate RAILROAD as an Additional Insured and must not contain any
exclusions related to:

1. Doing business on, near, or adjacent to railroad facilities.

2. Loss or damage resulting from surface, subsurface pollution contamination or
seepage, or handling, treatment, disposal, or dumping of waste materials or
substances.

Before commencing work, the LICENSEE shall deliver to the RAILROAD a certificate of insurance
evidencing the foregoing coverage and upon request the LICENSEE shall deliver a certified, true and
complete copy of the policy or policies. The policies shall provide for not less that ten (10) days prior written
notice to the RAILROAD of cancellation of or any material change in, the policies; and shall contain the
waiver of right of subrogation.

It is understood and agreed that the foregoing insurance coverage is not intended to, and shall not, relieve
the LICENSEE from or serve to limit LICENSEE’s liability under the indemnity provisions of any applicable
agreement.

It is further understood and agreed that, so long as the Agreement shall remain in force or the FACILITY
shall have been removed (whichever shall be later), the RAILROAD shall have the right, from time to
time, to revise the amount or form of insurance coverage provided as circumstances or changing
economic conditions may require. The RAILROAD shall give the LICENSEE written notice of any such
requested change at least thirty (30) days prior to the date of expiration of the then existing policy or
policies; and the LICENSEE agrees to, and shall, thereupon provide the RAILROAD with such revised
policy or policies thereof.
2. **By the Licensee’s Contractor**

If a contractor is to be employed by the Licensee for the installation of the FACILITY, then, before commencing work, the contractor shall provide and maintain the following insurance, in form and amount and with companies satisfactory to, and as approved by, the RAILROAD.

a. Statutory Workers’ Compensation and Employer’s Liability insurance.

b. Automobile Liability in an amount not less than $1,000,000 dollars combined single limit.

c. An Occurrence Form Railroad Protective Policy with limits of not less that $5,000,000 dollars per occurrence for Bodily Injury Liability, Property Damage Liability and Physical Damage to Property with $10,000,000 dollars aggregate for the term of the policy with respect of Bodily Injury Liability, Property Damage Liability and Physical Damage to Property. The policy must name the appropriate RAILROAD as the insured, and shall provide for not less than ten (10) days prior written notice to the RAILROAD’S as cancellation of, or any material change, in the policy.
**CERTIFICATE OF LIABILITY INSURANCE**

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONSENSUS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

**PRODUCER**

**CONTACT**

**NAME:**

**PHONE**

**FAX**

**E-MAIL**

**ADDRESS**

**INSURER(S) AFFORDING COVERAGE**

**NAIC #**

**INSURED**

**INSURER A :**

**INSURER B :**

**INSURER C :**

**INSURER D :**

**INSURER E :**

**INSURER F :**

---

**COVERAGES**

**CERTIFICATE NUMBER:**

**REVISION NUMBER:** 1

---

<table>
<thead>
<tr>
<th>LTR</th>
<th>TYPE OF INSURANCE</th>
<th>TRIGGER</th>
<th>POLICY NUMBER</th>
<th>DED</th>
<th>RETENTION</th>
<th>LIMITS</th>
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</thead>
<tbody>
<tr>
<td>X</td>
<td>COMMERCIAL GENERAL LIABILITY</td>
<td>OCCUR</td>
<td>EACH OCCURRENCE</td>
<td>$5,000,000</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>CLAIMS MADE</td>
<td>OCCUR</td>
<td>DAMAGE TO RENTED PREMISES (Ex occurrence)</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>MED EXP (Any one person)</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>PERSONAL &amp; ADV INJURY</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>GENERAL AGGREGATE</td>
<td>$10,000,000</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>PRODUCTS - COMP/OP AGG</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>EFFECTIVE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCCUR</td>
<td>EXPIRATION</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ANY AUTO**

**POLICY**

**SCHEDULED AUTOS NON-OwNED AUTOS**

**PER: LOC**

---

**Umbrella Liability**

**EXCESS LIABILITY**

**POLICY**

**CLAIMS-MADE**

**EACH OCCURRENCE**

**BODILY INJURY (Per person)**

**PROPERTY DAMAGE (Per accident)**

**COMBINED SINGLE**

**$1,000,000**

**BODILY INJURY (Per accident)**

**$**

**PROPERTY DAMAGE (Per accident)**

**$**

**AGGREGATE**

**$10,000,000**

**CERTIFICATE HOLDER**

(Appropriate Railroad Company Subsidiary for work location)

Example: Wisconsin Central Ltd. and its Parents

Attn: CN Flagging - US

17641 South Ashland Avenue

Homewood, IL 60430

---

**SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.**

---

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REQUIREMENTS TO PROVIDE FLAGGING PROTECTION AND CABLE LOCATION
FOR PROJECTS ON OR IN THE VICINITY OF CN PROPERTY
(Hereinafter called “Railroad”)
(Revised: Effective December 4th, 2018)

NOTE: Flagging and/or Cable Locate fees may apply

A utility or contractor shall not commence, or carry on, any work for installation, maintenance, repair, changing or renewal of any FACILITY, under, over, on, or near RAILROAD property at any location without giving notice to the RAILROAD authorized representative at the RAILROAD’s office located at Homewood, IL. If in the opinion of the RAILROAD the presence of an authorized representative of the RAILROAD is required to supervise the same, the RAILROAD shall render bills to the utility or contractor for all expenses incurred by it for such supervision. This includes all labor costs for flagmen or cable locate supplied by the RAILROAD to protect RAILROAD operation, and for the full cost of furnishing, installation and later removal of any temporary supports for said tracks, as the RAILROAD’s Chief Engineer’s Office may deem necessary.

A flagman is required any time any work is performed (i) under or across any Railroad track, regardless of whether said work involves a physical presence on the surface of the Railroad property; (ii) on the surface of the Railroad property within twenty-five (25) feet horizontally of the centerline of any railroad track; or (iii) on, near, or over Railroad property if the work may potentially encroach (intentionally or unintentionally) within twenty-five (25) feet from the centerline of any railroad track. Causes of potential encroachment include but are not limited to equipment that has the potential to swing, pivot, extend or mechanically fail. Potential encroachment must also account for a distance of one-half the length of the largest load that any equipment may lift. Additionally, Railroad reserves the right to require a flagman for work on Railroad property not meeting the above criteria when there are other conditions or considerations that would indicate the need for a flagman to safeguard Railroad’s operations, property and safety of any person.

Cable Location

A cable location of RAILROAD owned facilities may be required prior to the start of any work based on the RAILROAD’s review of the proposed project. The purpose of cable location is to identify and protect Signal & Communication cables that have been installed to provide power, signal control, and wayside communications. These cables are vital to a safe and reliable railway operation. The cable locate will be performed by a qualified RAILROAD employee.

The cost for a cable location is $350.00, and must be prepaid by check before RAILROAD will undertake the cable locate work.

Outside contractors are prohibited from driving on, along, or across any track that does not have a CN installed crossing. They may utilize an existing public crossing. The practice of allowing rubber tired equipment to operate over track with no crossing is strictly prohibited. Exceptions to this rule will require the express approval from CN Engineering.

Prior to any project being started, the RAILROAD requires a “Request for Flagging Services and Cable Location” form to be completed and submitted, including check for prepayment based on the number of days and hours flagging protection will be required and also prepayment for cable location as necessary. Separate checks must be issued for flagging protection and cable location. You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License, or Formal Agreement in addition to any necessary flagging before you may enter CN property.
Request for Flagging Services and Cable Location

U.S.

Is this a continuation of an existing project? Yes □ No □

If YES, please provide your Service Order #__________

All blanks below must be completely filled in before any flagman request will be honored.

Work Authorization:

Right of Entry/License/Permit No.: _____________________________ Dated: ________________ Railroad: _____________

Does your Right of Entry/License/Permit require a Railroad Cable Locate? Yes □ No □

You must have an agreement with a CN railroad subsidiary, such as a Right of Entry, Permit, License or Formal Agreement in addition to any necessary flagging before you may enter CN property.

Project Information: Please submit a detailed map of the location where protection is being requested.

Street Location/Intersection_________________________________________________ City/State___________________________

Railroad Milepost_____________________ Railroad Subdivision______________________

Description of work being performed: ___________________________________________________________________________

___________________________________________________________________________________________________________

Location for flagman to report: __________________________________________________________________________________

Name of Site Contact: _______________________Site Contact Phone: (       )       -         Alt: (     )      -

Requested Dates/Times: Dates requested are subject to flagman availability. Minimum 5 business days advance notice required.

Requested Dates for Flagging Protection: __________, ___________, ____________, ____________, ____________,____________,

______________________________

Project Starting time: ___________________ Anticipated Ending Time: __________________ Anticipated # Hours per Day: _________

*Flagmen start and end time may vary based on type of protection required.

Billing Information: All blanks spaces must be filled out

Company Name: ___________________________________________ Requestor Name: ______________________________

Billing Address: ___________________________________________________________________________________________

City:  ____________________________________ State:  ___________   Zip:  ______________________________

Company Phone: _____________________ Company Fax: ______________________  E-Mail: ___________________________

CN required online training must be completed before Flagman Protection will be scheduled.

Prepayment must be received before Flagging Protection will be scheduled. There is an 8 hour minimum per day. The base rate per day for Flagman Protection is $1,300.00 for 10 hours; this includes 2 overtime hours for flagman to set up/take down protection if needed. Additional overtime hours must be prepaid at the rate of $150.00 per hour. Weekends and Holidays must be prepaid at the overtime rate with a $1,500.00 / 10 hour minimum. Any prepayment for additional days or overtime not used can be refunded.

Railroad Cable Location must be prepaid, the cost is $350.00 per locate.

Separate Checks must be issued for Flagging Protection and Cable Location. Checks should be made payable to the railroad subsidiary listed on your Right of Entry/Permit/License or, Formal Agreement.

If additional days of protection are required they must be prepaid in advance. Rates Effective January 1st 2017.

THIS COMPLETED FORM MUST BE SENT WITH A MAP, PREPAYMENT CHECK(S), AND PROOF OF INSURANCE TO:

US-FLAGGING / 17641 SOUTH ASHLAND AVE. HOMewood, IL 60430

I agree to pay for flagging services as requested: ____________________________________________________________

(SIGN AND PRINT NAME)