## CONSTRUCTION / CROSSING PROCEDURE CROSSING TRANSMISSION PIPELINES / USING NICOR GAS' PROPERTY

IMPORTANT ITEMS TO CONSIDER WHEN PLANNING TO CROSS OR WORK IN CLOSE PROXIMITY TO NICOR GAS' OWNED AND OPERATED TRANSMISSION PIPELINE(S)

- 1) Prior to commencement of construction: (i) all plans for the proposed facility will have been reviewed and approved by Nicor Gas; (ii) all documentation authorizing the installation of the proposed facility across Nicor Gas owned and operated transmission pipelines and/or Nicor Gas owned property will have been finalized; (iii) all applicable permits for the proposed facility will have been obtained from the appropriate municipal, governmental and/or regulatory agency; (iv) all required proof of insurance will have been furnished to Nicor Gas; and, (v) all required fees, if any, will have been paid to Nicor Gas.
- 2) At no time is any work to be performed within fifteen (15) feet of Nicor Gas? existing transmission pipeline(s) without a Nicor Gas representative being present. To discuss construction procedures and to arrange for on-site inspection services, contact Nicor Gas' Transmission Department Supervisor at 630-983-8888, extension 3145, well in advance of the estimated start of construction (not less than 72 hours). At that time be prepared to discuss: (i) proposed method of installation; and, (ii) proposed staging plans, including but not limited to, storage of material, marshalling of equipment and crew, and construction time line. At that time, Nicor Gas Transmission Department Supervisor may approve your construction plans or may require the plans be modified to address Nicor Gas' reasonable safety concerns and engineering criteria. So long as such plans and specifications meet Nicor Gas' reasonable approval, construction approval will not be unreasonably delayed.
- 3) All digging within ten (10) feet of Nicor Gas' transmission pipeline(s) will be performed by hand until the pipeline has been exposed; then, if approved by Nicor Gas' on-site representative, mechanical excavation equipment may be used until within five (5) feet of Nicor Gas' transmission pipeline(s); afterwards, all excavation will be performed by hand, or as directed by Nicor Gas' on-site representative.
- 4) Unless otherwise previously agreed, the proposed underground facility will be located below the existing transmission pipeline(s) with a minimum separation of two

- 5) During and after any approved excavation under Nicor Gas' transmission pipeline(s), the pipelines will be properly supported as directed by Nicor Gas' on-site representative; in no case will boring be permitted across (over or under) Nicor Gas' transmission pipeline(s) without the prior written approval of Nicor Gas.
- 6) If so directed by Nicor Gas' on-site representative, Nicor Gas' transmission pipelines will be protected from damage from large rocks or other unsuitable material in the backfill by wrapping the transmission pipeline(s) with suitable padding or by using sand as initial fill to one (1) foot above the top of the pipeline(s).
- 7) As determined in advance, or as directed by Nicor Gas on-site representative, the transmission pipeline(s) will be protected from heavy equipment and from large volume vehicular traffic by: (i) permanent pad protection as shown in Nicor Gas' drawing TS 30.104.138, dated 09-18-2000; (ii) temporary crossing protection, Version 1, TS 30.104.128, dated 09-21-2000; (iii) temporary crossing protection, Version 2, TS 30.104.148, dated 09-18-2000; (iv) temporary crossing protection, Version 3, TS 30.104.150, dated 09-18-2000. Copies of these drawings are included in this package.
- 8) Natural drainage will not be impaired; all rock, debris, tree trimmings and unused excavated material will be promptly removed from the site and the site will be left in a clean and orderly condition, all to the satisfaction of Nicor Gas' on-site representative.

(UPDATED SEPTEMBER 25, 2000)

## PROTECTION OF TRANSMISSION PIPELINES SAFETY AND DESIGN CONSIDERATIONS

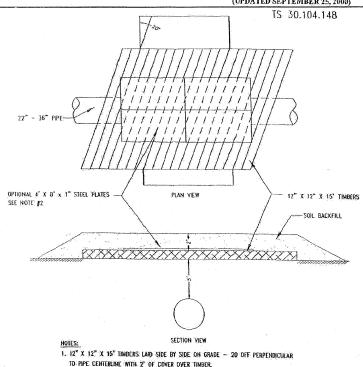
IMPORTANT INFORMATION FOR ALL PARTIES WHO WILL BE (OR ARE) INVOLVED IN ANY PROPOSED (OR CURRENT) DESIGN OR CONSTRUCTION ACTIVITY ACROSS OR IN CLOSE PROXIMITY TO NICOR GAS' OWNED AND OPERATED TRANSMISSION PIPELINE(S)

Please be advised that your project, as currently proposed, appears to directly impact a Nicor Gas owned and operated, buried, large diameter, high pressure, natural gas transmission pipeline (or pipelines). Great care must be taken to protect the integrity of the transmission pipeline(s). Please familiarize yourself with the information contained in this memo and in the accompanying attachments. Please employ all of the stipulated criteria in your design process and in your construction plans, details and specifications. Nicor Gas will insist that all such criteria and precautions be implemented. This will be done in order to: (i) prevent damage to the transmission pipeline(s); and, (ii) insure the safety of those individuals living and/or working in close proximity to the transmission pipeline(s).

In particular, this information package addresses issues including, but not limited to, required clearances, weight distribution and protective padding for heavy equipment operation over or in close proximity to Nicor Gas' transmission pipeline(s). Any proposed improvement(s) must maintain a defined minimum distance from the transmission pipeline, both vertically and horizontally. Drawings for all temporary or permanent facilities must be reviewed and approved in advance of construction. All heavy equipment crossings must be approved in advance and specific pad protection (temporary or permanent) must be installed in order to prevent vibration and/or compression damage to the transmission pipeline(s).

In addition to engineering concerns, there are timing and real estate considerations that must also be addressed. Due to Nicor Gas' system requirements, the redesign or realignment of the existing transmission pipeline(s) can only be performed during a limited seasonal window. Material to facilitate agreed changes may need to be designed and ordered as much as a year in advance. The cost to install such protective measures, or to initiate changes in transmission pipeline alignment, may be substantial. If Nicor Gas owns the right-of-way, there may also be a Real Estate element to address. This may involve Nicor Gas granting a license or easement to document the nature and limits of the proposed installation. If so, there will probably be a fee due Nicor Gas as consideration for the grant.

(UPDATED SEPTEMBER 25, 2000)



2. IF POOR SOIL CONDITIONS EXIST, NICOR FIELD REPRESENTATIVE WAY REQUIRE STEEL PLATES

6. EXCAVATING EQUIPMENT CAN NOT BE OPERATED WHILE SITTING ON PROTECTIVE STRUCTURE.

3. STEEL PLATES SHALL BE 4' X 8' X 1." GRADE OF STEEL SHALL BE ASTM A-36.

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ALTERNATE CROSSING FOR HEAVY EQUIPMENT CROSSING PIPELINES

SECTION

99-00313-03-BT

CONTRACT NO. 63069

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TS 30.104.150

4' X 8' x 1" STEEL PLATES

TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SECTION VIEW

5. EXCAVATING EQUIPMENT CAN NOT BE OPERATED WHILE SITTING ON PROTECTIVE STRUCTURE.

2. PLACE STEEL SHEETS IN TWO LAYERS AS SHOWN ABOVE. ALIGNMENT OF THE UPPER LAYER SHALL BE PERPENDICULAR TO THE LOWER LAYER WITH 2' OF COVER OVER STEEL PLATES.

1. STEEL PLATES SHALL BE 4" X 8" X 1." GRADE OF STEEL SHALL BE A-36.

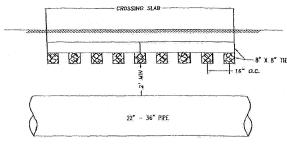
3. PROVIDE TEMPORARY FENCE TO DEFINE CROSSING. 4. MAINTAIN TEMPORARY FENCING DURING CONSTRUCTION

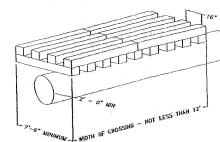
> ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO ILLINOIS 60606 1-312-372-2023 FAX: 1-312-372-5274

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROTECTION OF TRANSMISSION PIPELINES C.H. 47 ILLINOIS PRAIRIE PATH OVER THE

TS 30,104.128





- 1. CONCRETE SLAB TO BE A MINIMUM OF 2 FEET ABOVE PIPE, 7" WIDE, 8" IN DEPTH AND OF LENGTH EQUAL TO CROSSING WIDTH.
- 2. CAST CONCRETE SLAB A MINIMUM OF 7 DAYS IN ADVANCE OF CONSTRUCTION WITH 3000 PSI CONCRETE.
- 3. CONCRETE MAY BE EARTH FORMED.
- 4. PROVIDE TEMPORARY FENCING FOR INDICATING CROSSING LOCATION

TS 30.104.138

5. PREVENT CROSSING OF PIPE LINE AT ALASOTHER LOCATIONS.

6. MAXIMUM LOADING: 15,000 LB, WHEEL LOAD

DETAIL OF CONCRETE SLAB FOR HEAVY **EQUIPMENT CROSSING PIPELINES** 

1. LAY TIES IN TWO LAYERS. SET LOWER TIES AND BACKFILL TO TOP OF TIES; SET SECOND LAYER AND BACKFILL TO GRADE

- 2. PROVIDE TEMPORARY FENCE TO DEFINE CROSSING
- 3. MAINTAIN TEMPORARY FENCING DURING CONSTRUCTION.
- 4. MAX LOADING: WHEFE LOAD: 15,000 LRS. TRACK LOAD: 80,000 LRS.

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DETAIL OF TIE SLAB FOR HEAVY **EQUIPMENT CROSSING PIPELINES** 

nicor 918-2000

CENTERED ON TOP OF TIMBERS (AS SHOWN ABOVE).

5. MAINTAIN TEMPORARY FENCING DURING CONSTRUCTION.

4. PROVIDE TEMPORARY FENCE TO DEFINE CROSSING.

ALTERNATE CROSSING FOR HEAVY EQUIPMENT CROSSING PIPELINES

SEC 99-00313-03-BT PROTECTION OF TRANSMISSION PIPELINES

ONE LAYER 6" X 6" WIRE MESH HO, 6 MESH HEAVIER WESH ALLOWED PLACE MESH AT WID-DEPTH OF SLAB

**nicoi** 

CHRISTIAN-ROGE & ASSOCIATES, INC.

REVISIONS

EAST BRANCH OF THE DUPAGE RIVER

SCALE: NONE DATE: AUGUST 19, 2008

CHECKED BY: S.J.P.

DRAWN BY: A.C.S.

C.H. 47 PRAIRIE PATH