

NICOR GAS CONSTRUCTION PUBLIC IMPROVEMENT FOR LAKE COUNTY DOT PETERSON ROAD AND IL ROUTE 83 GRAYSLAKE & ROUND LAKE PARK, ILLINOIS W.O. 127907/327907 (NON-REIMBURSABLE) W.O. 127994/327994/427994 - PARTIAL (100% REIMBURSABLE)

GENERAL NOTES:

1. CONTRACTOR TO INSTALL THE PROPOSED GAS MAIN TO THE ELEVATIONS SHOWN ON THE PLANS USING THE BENCHMARKS PROVIDED. APPROXIMATE COVER SHOWN AFTER THE REQUIRED ELEVATION IS FOR INFORMATION PURPOSES ONLY.
2. BACKFILL WITH SAND WHERE PIPE TRENCH IS UNDER OR WITHIN 2' OF PAVEMENT, CURB, OR SIDEWALK.
3. INSTALL PROPOSED MAIN USING ROAD STATIONING WHERE GIVEN. OTHER DIMENSIONS ARE FOR MAPPING PURPOSES ONLY.
4. ALL RIGHT-OF-WAY MUST BE STAKED AND STATIONING PROVIDED BEFORE GAS MAIN CAN BE INSTALLED.
5. INSTALL ALL MAIN WITH A MINIMUM COVER OF 4' BELOW EXISTING GRADE IN LAKE COUNTY RIGHT-OF-WAY.
6. PIPE CONTRACTOR SHALL INSTALL THE PROPOSED GAS MAINS CROSSING CONCRETE, ASPHALT, MACADAM, OR OTHER HARD SURFACED PAVEMENTS, WALKS, OR DRIVEWAYS BY BORING OR PUSHING UNLESS OTHERWISE SPECIFIED. CONTRACTOR WILL INSTALL A TEMPORARY PATCH PER GAS CONSTRUCTION SPECIFICATIONS FOR CONTRACTORS. PERMANENT REPAIRS TO BE COMPLETED BY OTHERS.
7. CONTRACTOR SHALL FURNISH AND INSTALL ALL CAPS AND OTHER FITTINGS NECESSARY FOR TESTING THE MAIN.
8. INSTALL LOCATING WIRE PER GCS 700.
9. RETIRE OLD MAIN PER GCS 849.
10. IT IS THE RESPONSIBILITY OF THE NICOR GAS INSPECTOR, CONTRACTOR, AND ANYONE INVOLVED IN THE CONSTRUCTION OF THE FACILITIES TO FOLLOW THE LATEST NICOR GAS GMS AND GCS SPECIFICATIONS. CONTACT NICOR'S TECHNICAL SERVICES DEPARTMENT, MARK TUPY, SENIOR CODES AND STANDARDS ENGINEER, AT (630) 388-2322 FOR A COPY OF THE LATEST EDITION.
11. COORDINATE WITH NICOR GAS INSPECTOR FOR LOCATION OF UNDERGROUND UTILITIES PRIOR TO STARTING ANY EXCAVATION. EXERCISE CARE WHEN EXCAVATING NEAR EXISTING STRUCTURES.
12. ANY PROPOSED DIRECTIONALLY BORED PIPE TO BE INSTALLED PER NICOR GAS DIRECTIONAL BORING GUIDELINES DATED DECEMBER 15, 2005.
13. UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR SHALL CONTACT J.U.L.I.E. AND LOCAL GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION FOR ALL UTILITY LOCATIONS.
14. INSTALL VERTICAL ELBOWS AS REQUIRED PER GCS 881.
15. COMPLY WITH ALL APPLICABLE PROVISIONS OF LAKE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT) "SPECIAL CONDITIONS FOR CONSTRUCTION WITHIN A COUNTY HIGHWAY," "MANDATORY GENERAL CONDITIONS FOR UTILITY PERMITS" AND ENVIRONMENTAL SPECIAL CONDITION FOR ALL WORK ALONG COUNTY HIGHWAYS.
16. KEEP COPIES OF APPROVED PERMITS ON THE JOB SITE WHILE WORK IS BEING DONE AND BE ABLE TO PRODUCE ON DEMAND OF COUNTY OR OTHER PERSONNEL WITH AUTHORITY OVER AREA WHERE WORK IS BEING PERFORMED. DO NOT MAKE DESIGN REVISIONS ALONG COUNTY HIGHWAYS WITHOUT PRIOR APPROVAL OF THE LAKE COUNTY DEPARTMENT OF TRANSPORTATION.
17. STAKE THE PROPOSED GAS MAIN RUNNING LINE PRIOR TO CONSTRUCTION.
18. POSTED SPEED LIMIT ON PETERSON ROAD (LC HWY 20/CTY A33) IS 55 MPH.
19. REFER TO I.D.O.T. STANDARDS 213-28001-06, 213-701001-02, 213-701301-04 & 213-701901-02 AND L.C.D.O.T. STANDARDS LC205, LC2051 & LC7000 FOR TRAFFIC CONTROL REQUIREMENTS ALONG COUNTY ROW.
20. NOTIFY L.C.D.O.T. AT (847) 362-3960 OF ANY TILE LINES FOUND ALONG COUNTY HIGHWAYS.
21. RETURN ALL DITCHES TO ORIGINAL GRADE/ELEVATION.
22. THE OPEN CUT PAVEMENT SHALL BE REPLACED WITH FLOWABLE FILL WITHIN 12" OF THE FINISHED GRADE. THE REMAINING 12" SHALL BE HOT MIX ASPHALT BINDER COURSE, IL 19 N70, 10" AND HOT MIX ASPHALT SURFACE, MIX D, N70, 2". THE FLOWABLE FILL MUST SET UP WITHIN 1 HOUR.
23. PROJECT CONTACT: JOYCE J. DELONG, P.E., APPLIED TECHNOLOGIES, INC., PHONE: (847) 265-7325 EXT. 101
24. IT IS THE RESPONSIBILITY OF THE CREW (INTERNAL OR CONTRACTOR) INSTALLING THE GAS FACILITIES TO LOCATE ALL SEWER MAINS AND LATERALS WITHIN THE SCOPE OF THE PROJECT. NO BORING, DIRECTIONAL DRILLING OR OTHER TRENCH LESS CONSTRUCTION METHODS SHALL BE EMPLOYED WITHOUT EITHER LOCATING SEWERS OR OBTAINING PROOF OF SEPTIC SYSTEMS. THE USE OF A SONDE DEVICE (CALIBRATED DAILY) IS RECOMMENDED FOR LOCATING THE SEWER FACILITIES. SPOTTING OF SEWER FACILITIES IS REQUIRED IF A SONDE DEVICE IS NOT USED (HOWEVER, SPOTTING OF FACILITIES MAY STILL BE REQUIRED WHEN USING A SONDE DEVICE). PROPER CLEARANCE OF GAS FACILITIES AND SEWER MAINS/LATERALS SHALL BE MAINTAINED PER GCS 700 SECTION 10.
25. CONTACT PERSON: MARTIN WORKMAN, PE / CHRISTOPHER B. BURKE ENGINEERING, LTD. TEL. (847) 823-0500. SURFACE WATER STATEMENT: STATE OF ILLINOIS SS. COUNTY OF LAKE TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF OR THAT IF SUCH SURFACE WATER DRAINAGE WILL CHANGE, REASONABLE PROVISIONS HAVE BEEN MADE FOR COLLECTION AND DISCHARGE OF SURFACE WATERS INTO PUBLIC OR PRIVATE AREA AND/OR DRAINS WHICH THE DEVELOPER HAS A RIGHT TO USE AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF SUBSTANTIVE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

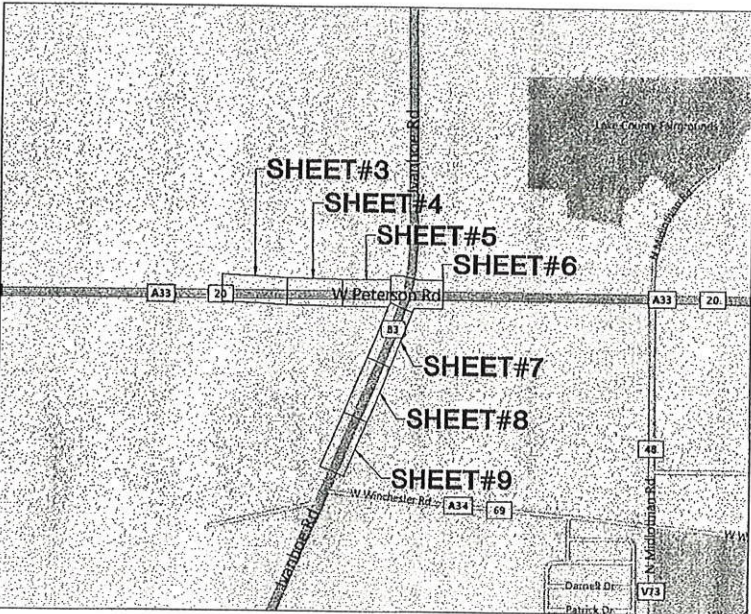
DATED THIS _____ DAY OF _____, 20____.

OWNER OF ATTORNEY

ENGINEER (SEAL)

ENVIRONMENTAL NOTES:

1. PCB WIPE SAMPLES, PERFORMED BY NICOR GAS EMPLOYEES, ARE REQUIRED FOR ALL 4" AND LARGER PIPE THAT IS ABANDONED OR REMOVED ON THIS WORK ORDER. DIRECT QUESTIONS ON PCB WIPE SAMPLE PROCEDURES TO THE SYSTEM OPERATIONS DEPARTMENT OF ENVIRONMENTAL, HEALTH AND SAFETY (630) 388-2381.
2. COLLECT AND PROPERLY DISPOSE OF ALL LIQUIDS FROM PIPELINES BEING RETIRED. ANY SPILLS FROM PIPELINES SHOULD BE IMMEDIATELY CONTAINED. REFER TO STANDARD PRACTICE ENVIRONMENTAL -5.
3. ANY RETIRED PIPE THAT MUST BE REMOVED FROM THE SITE SHOULD HAVE THE ENDS COVERED WITH PLASTIC OR SIMILAR MATERIAL UNTIL THE PCB WIPE SAMPLE LAB RESULTS ARE KNOWN. INDICATE ON THE "NICOR GAS PCB SAMPLE INFORMATION FORM" WHERE ANY PIPE REMOVE FROM THE SITE IS BEING TEMPORARILY LOCATED.
4. IF ASBESTOS COAL WRAP IS IDENTIFIED, REFER TO ASBESTOS COAL TAR WRAP REMOVAL GUIDELINES TO BE COMPLETED BY A TRAINED EMPLOYEE FOR ANY QUESTIONS OF PROCEDURE OR TRAINED EMPLOYEES, CALL KEITH BODGER IN ENVIRONMENTAL, HEALTH AND SAFETY @ (630) 388-2381 FOR REGULATORY COMPLIANCE INSTRUCTION.
5. IF CONTAMINATED SOIL IS SUSPECTED, CALL THE ENVIRONMENTAL, HEALTH AND SAFETY @ (630) 388-2381 FOR REGULATORY COMPLIANCE INSTRUCTION.
6. ALL WETLANDS SHOULD BE IDENTIFIED ON THESE WORK ORDER DRAWINGS. IF THERE IS A QUESTION ABOUT THE WETLAND BOUNDARIES OR BUFFERS, PLEASE CALL JULIE PASCHAL AT (630) 388-3057.
7. IF THE AREA DISTURBED DURING CONSTRUCTION IS GREATER THAN ONE ACRE IN SIZE, THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE NICOR GAS STORM WATER POLLUTION PREVENTION PLAN, LATEST EDITION. CONTACT JULIE PASCHAL AT (630) 388-3057 IN THE ENVIRONMENTAL, HEALTH AND SAFETY DEPARTMENT.
8. IF BORING IS TO OCCUR NEAR A WETLAND OR WATER BODY AND A FRACTURE IS ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR STOPPING THE BORE AND IMMEDIATELY CONTACTING CLAUDIA MACHOLZ AT (630) 388-2456 IN THE ENVIRONMENTAL, HEALTH AND SAFETY DEPARTMENT.
9. REFUEL AND STORE EQUIPMENT 100 FEET FROM WETLAND OR WATER BODY.
10. INSTALL SOIL AND EROSION CONTROL PROTECTION TO PROTECT ANY OPEN GRATED STRUCTURES, I.E. INLETS, CATCH BASINS, OR MANHOLES WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LOCATION.
11. IF MUD IS BEING TRACKED ON STREETS BY EQUIPMENT AND/OR VEHICLES, THEN DAILY STREET SWEEPING WILL BE REQUIRED.
12. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONTOURS AND CONDITIONS. RESTORATION MUST BE COMPLETED WITHIN 7 TO 14 DAYS DEPENDING ON PERMIT CONDITIONS.



BENCHMARK SUMMARY		
BM #15	CUT SQ. S. SIDE MAST ARM BASE AT NE COR RTE 83 & PETERSON RD.	ELEVATION = 835.07

IDENTIFIED BY NICOR UTILITY INSPECTOR					COMPLETED BY NICOR GAS*	
WIPE TEST #	WORK ORDER PAGE	TEST LOCATION	PIPE SIZE	PIPE MATERIAL	DATE TEST COMPLETED	COMMENTS

NOTE: NICOR UTILITY INSPECTOR TO IDENTIFY TEST LOCATIONS BASED UPON THE CRITERION OF ONE TEST FOR EACH "CUT AND CAP" ON PIPE THAT MEASURES FOUR INCHES IN DIAMETER OR GREATER. AN ENGINEERING AND NICOR GAS UNDERSTAND THAT FIELD PERSONNEL MAY DECIDE TO MOVE "CUT AND CAP" LOCATIONS, DELETE "CUT AND CAPS", OR CONDUCT ADDITIONAL "CUT AND CAPS". AN ENGINEERING UNDERSTANDS THAT NICOR GAS WILL INCLUDE WIPE TESTS AS PART OF THEIR ROUTINES TO COMPLETE A "CUT AND CAP" AND IT IS THE RESPONSIBILITY OF NICOR GAS TO ASSURE THAT NECESSARY WIPE TESTS ARE CONDUCTED AS REQUIRED BY FEDERAL REGULATIONS.

DRAWING - SHEET	DESCRIPTION
NW46114A- - 1	LOCATION MAP AND WIPE TEST TABLE
NW46114A- - 2	SITE PLAN, TEST DATA, SYMBOL LEGEND & WORK ORDER QUANTITIES
NW46114A- - 3	PETERSON ROAD (STA 114+00 TO STA 120+00)
NW46114A- - 4	PETERSON ROAD (STA 120+00 TO STA 125+00)
NW46114A- - 5	PETERSON ROAD (STA 125+00 TO STA 129+50)
NW46114A- - 6	PETERSON ROAD & IL ROUTE 83 (STA 129+50 TO STA 134+50)
NW46114A- - 7	IL ROUTE 83 (STA 93+00 TO STA 98+00)
NW46114A- - 8	IL ROUTE 83 (STA 87+50 TO STA 93+00)
NW46114A- - 9	IL ROUTE 83 (STA 82+00 TO STA 87+50)
NW46114A- - 10	PETERSON ROAD, PROFILE #1 & #2 (STA 114+00 TO STA 125+00)
NW46114A- - 11	PETERSON ROAD, PROFILE #3 (STA 125+00 TO STA 130+00)
NW46114A- - 12	LAKE COUNTY EROSION CONTROL NOTES & ENVIRONMENTAL DETAILS
NW46114A- - 13	I.D.O.T. & L.C.D.O.T. STANDARD DRAWINGS

CONFLICTS WITH PROPOSED STORM SEWER AND DITCH CUTS

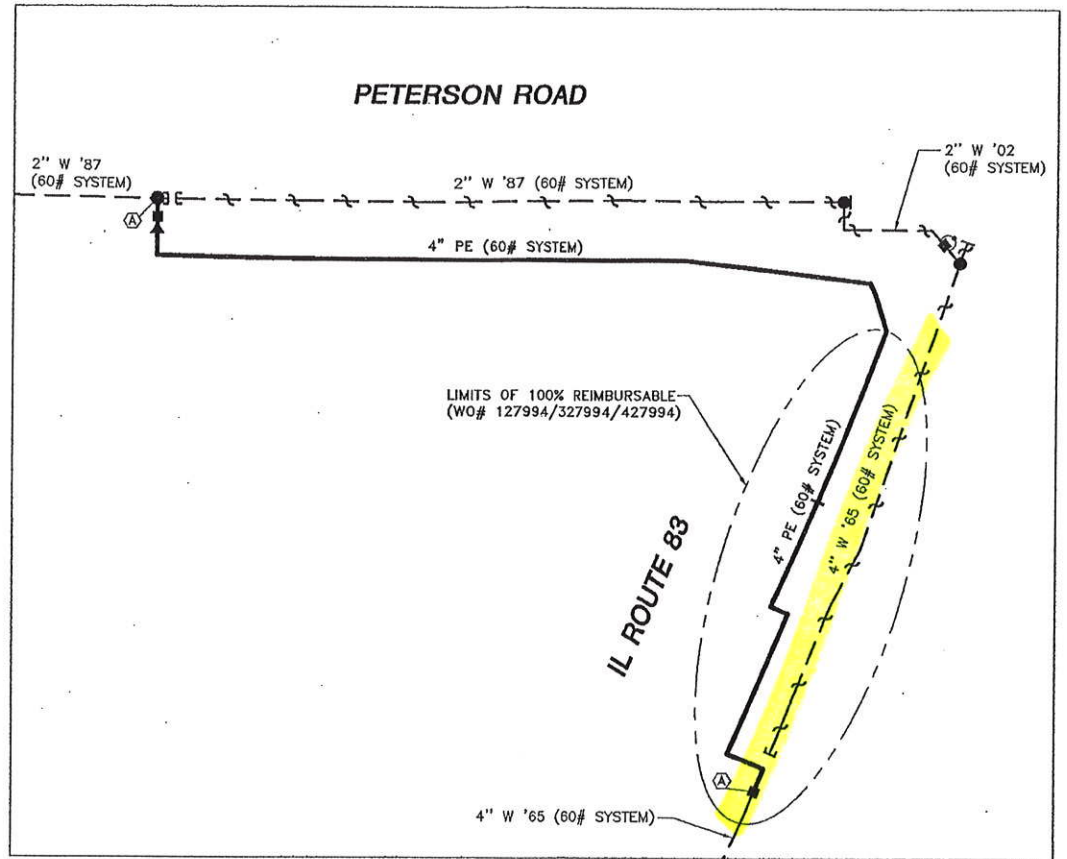
SEALED BY: SIGNATURE	SEALED ON: 8/8/12 LICENSE EXPIRATION: 11/30/13	PREPARED FOR: PREPARED BY: 7135 JANES AVENUE WOODRIDGE, IL 60517 TEL 630-353-4000 FAX 630-353-7777 WWW.ENENGINEERING.COM
APPROVED FOR CONSTRUCTION		COUNTY LAKE TOWNSHIP FREMONT TIER RANGE 44N 10E 3PM DEPARTMENT D.RUIZ ENGINEER/DESIGNER NORTHERN FOC DATE 05/25/12
REV. DESCRIPTION BY CHK'D BY APP'D. BY DATE		WORK ORDER NO. 127907/327907/127994/327994/427994 DRAWN BY S. GIOVENCO DATE 05/25/12 NICOR JOB NO. N7455 NODE/LD NO. 546A402S CHECKED BY P. B. [Signature] DATE 8-8-12 CORROSION C. KROEGER DATE 07/11/12 SCALE NONE DATE 8/8/12 APPROVED BY [Signature]
DATE IN SERVICE		DRAWING FILE NO. SHEET 1 OF 13 NW46114A-



REQUIRED PERMITS APPROVAL BEFORE CONSTRUCTION	REQUIRED	APPROVED DATE
REAL ESTATE:		
RAILROAD		
HIGHWAY, STATE		
HIGHWAY, COUNTY		
FOREST PRESERVE		
SANITARY DIST.		
PRIVATE PROP. EASEMENT		
FRONTAGE		
OTHER GOV. AGENCY		
ENVIRONMENTAL:		
WATERWAYS		
WETLANDS		
CONTAMINATED SOIL		
STORM WATER		

REQUIRED PERMITS APPROVAL BEFORE CONSTRUCTION	REQUIRED	APPROVED DATE
ENGINEERING:		
C.P.L. APPROVAL/REVIEW		
REGION APPROVAL/REVIEW		
ENVIRONMENTAL APPROVAL/REVIEW		
G.O. APPROVAL/REVIEW		
MISC:		
TO BE REVISED		
ON HOLD		
CANCELED		





SITE PLAN
(NOT TO SCALE)

SYMBOL LEGEND	
T	PURGE END (GCS 209 / 709)
⊕	ANODE (GCS 513/514)
⊕	LATERAL TEE (GCS 210 .21-.33, 720, 721)
⊕	PRESSURE CNTL. FIG. (GCS 210.38/39)
⊕	TRANSITION FITTING (GCS 703)
⊕	VALVE - GENERAL
⊕	REDUCER (GMS 308 & 336)
⊕	INS. COUPLING (ETC)
⊕	TIN WHISTLE (GMS 639.2, .3, .4)
⊕	DUAL 5' x 5' VAULT
⊕	CUT AND CAP (GCS 849)
⊕	RETIRE MAIN (GCS 849)
⊕	EXCAVATE AREA (GCS 870)

TOTAL WORK ORDER QUANTITIES (PER W.O. 127907)		
DESCRIPTION	ESTIMATED	ACTUAL
TOTAL PIPE INSTALLATION		
4" PIPE IPS PE SDR 11.5	1825'	
TOTAL PIPE RETIREMENT		
2" STEEL (1987)	1545'	
2" STEEL (2002)	115'	
4" STEEL (1965)	125'	
TOTAL PIPE BORING		
4" BORING	715'	
TOTAL TRENCH BACKFILL	70 C.Y.	
TOTAL ASPHALT & CONCRETE BREAKS	0 SQ. FT.	
TOTAL SERVICE TRANSFERS	1	

TOTAL WORK ORDER QUANTITIES (PER W.O. 127994)		
DESCRIPTION	ESTIMATED	ACTUAL
TOTAL PIPE INSTALLATION		
4" PIPE IPS PE SDR 11.5	1175'	
TOTAL PIPE RETIREMENT		
4" STEEL (1965)	1155'	
TOTAL PIPE BORING		
4" BORING	710'	
TOTAL TRENCH BACKFILL	50 C.Y.	
TOTAL ASPHALT & CONCRETE BREAKS	0 SQ. FT.	
TOTAL SERVICE TRANSFERS	0	

TEST SEC.	DESCRIPTION	LEAK TEST PER GCS 887				STRENGTH TEST PER GCS 888				WELD INSPECTION PER GCS 851			FIELD RECORD PER GCS 860		
		TEST PRESS. P.S.I.	PRIOR TO STRENGTH	COMBINED W/ STRENGTH	MIN. HOURS	TEST PRESS. P.S.I.	% SMYS	TEST MEDIUM	MIN. HOURS	VISUAL GRAPHIC	RADIO	OTHERS	SEC.	DIA.	PIPE IDENTIFICATION "DATA CODE" - STEEL MAIN ONLY
(A) 60	2800' 4" PE 3-9	90	-	-	12	-	NOT REQUIRED	-		[X]			(A)	4"	

APPROVED FOR CONSTRUCTION					
REV.	DESCRIPTION	BY	CHK'D BY	APP'D. BY	DATE

PREPARED FOR:

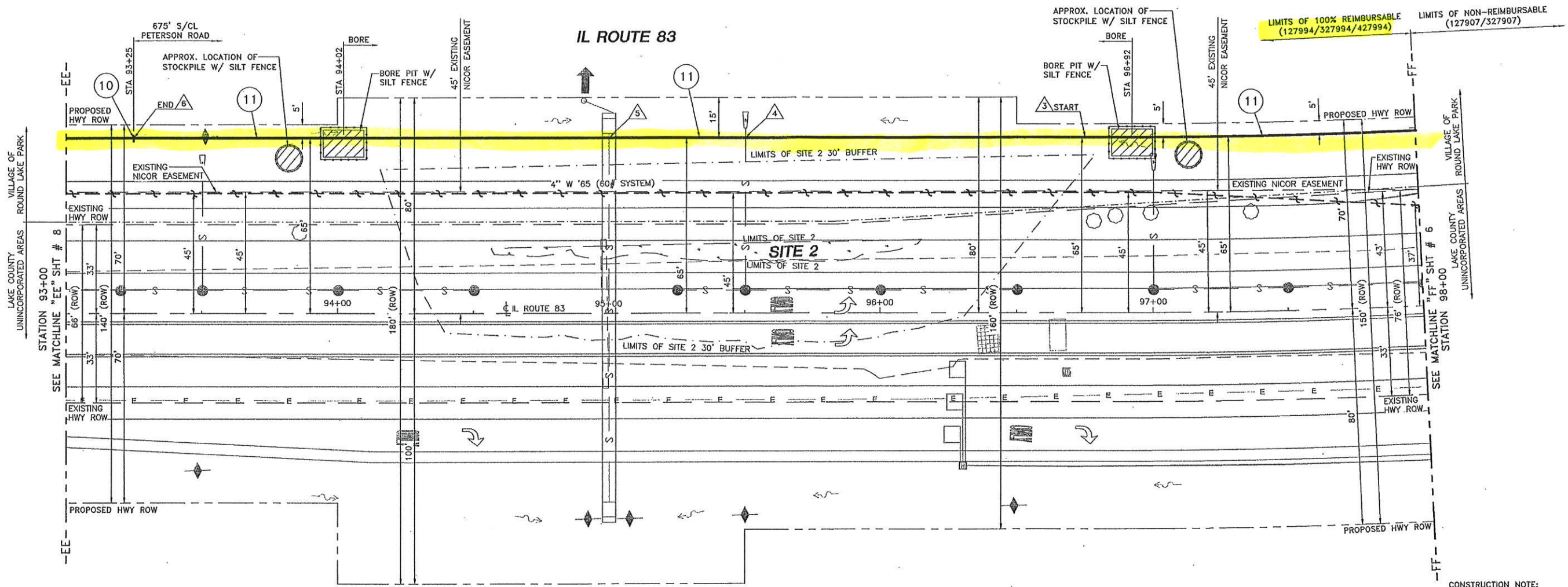
nicor
GAS

**PUBLIC IMPROVEMENT
SITE PLAN, SYMBOL LEGEND, TEST DATA &
WORK ORDER QUANTITIES
GRAYSLAKE & ROUND LAKE PARK, ILLINOIS**

PREPARED BY: **ENengineering**

7135 JAMES AVENUE
WOODRIDGE, IL 60517
TEL. 630-353-4000
FAX 630-353-7777
WWW.ENENGINEERING.COM

COUNTY LAKE	TOWNSHIP FRANKLIN	1/4 SECTION 113
TOWN GRAYSLAKE & ROUND LAKE PARK	RANGE 10E 3PM	114
REGION NORTHERN	DEPARTMENT FOC	ENGINEER/DESIGNER D.RUIZ
WORK ORDER NO. 127994/327994/427994	DRAWN BY S. GIOVENCO	DATE 05/25/12
RICOR JOB NO. N7455	CHECKED BY D. [Signature]	DATE 8-8-12
ENE PROJECT NO. 110001.75	CORROSION C. KROEGER	DATE 07/11/12
SCALE NONE	APPROVED BY T. Bell	DATE 8/8/12
DATE IN SERVICE	DRAWING FILE NO. NW46114A-	SHEET 2 OF 13



10 INSTALL
 (2) 4" 90° ELL IPS PE SDR 11.5 (VERTICAL)
 (1) GCS 249.4 (FLEXIBLE DRIVE-IN PIPELINE MARKER)

11 INSTALL
 (500') 4" PE PIPE IPS PE SDR 11.5
 (TEST SECTION "A")
 (80# SYSTEM)

CONSTRUCTION NOTE:
 1. LOCATION AND SIZE OF STOCKPILES AND SILT FENCE AROUND STOCKPILES ARE APPROXIMATE. CONTRACTOR TO DETERMINE EXACT LOCATION AND SIZE AT THE TIME OF CONSTRUCTION.

ENVIRONMENTAL NOTES:
 1. CONTRACTOR TO DETERMINE LOCATION OF STAGING AREAS WITH STABILIZED CONSTRUCTION ENTRANCES, AT THE TIME OF CONSTRUCTION.
 2. SPOIL LOCATIONS ARE TO BE OUTSIDE OF DITCHES, FLOODPLAINS, FLOODWAYS, WETLANDS AND BUFFERS AREAS AND ENCLOSED IN SILT FENCE.

EROSION CONTROL NOTES:
 1. ROADS NEED TO BE KEPT CLEAN.
 2. SHORT TERM MAINTENANCE OF EROSION CONTROL.

PREPARED FOR:

nicor
 GAS

PUBLIC IMPROVEMENT
 IL ROUTE 83
 (STA 93+00 TO STA 98+00)
 ROUND LAKE PARK, ILLINOIS

PREPARED BY:

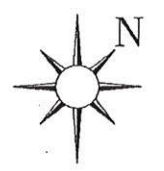
ENEngineering

7135 JAMES AVENUE
 WOODRIDGE, IL 60517
 TEL 630-353-4000
 FAX 630-353-7777
 WWW.ENENGINEERING.COM

100% REIMBURSABLE

APPROVED FOR CONSTRUCTION

REV. DESCRIPTION BY CHK'D BY APP'D. BY DATE

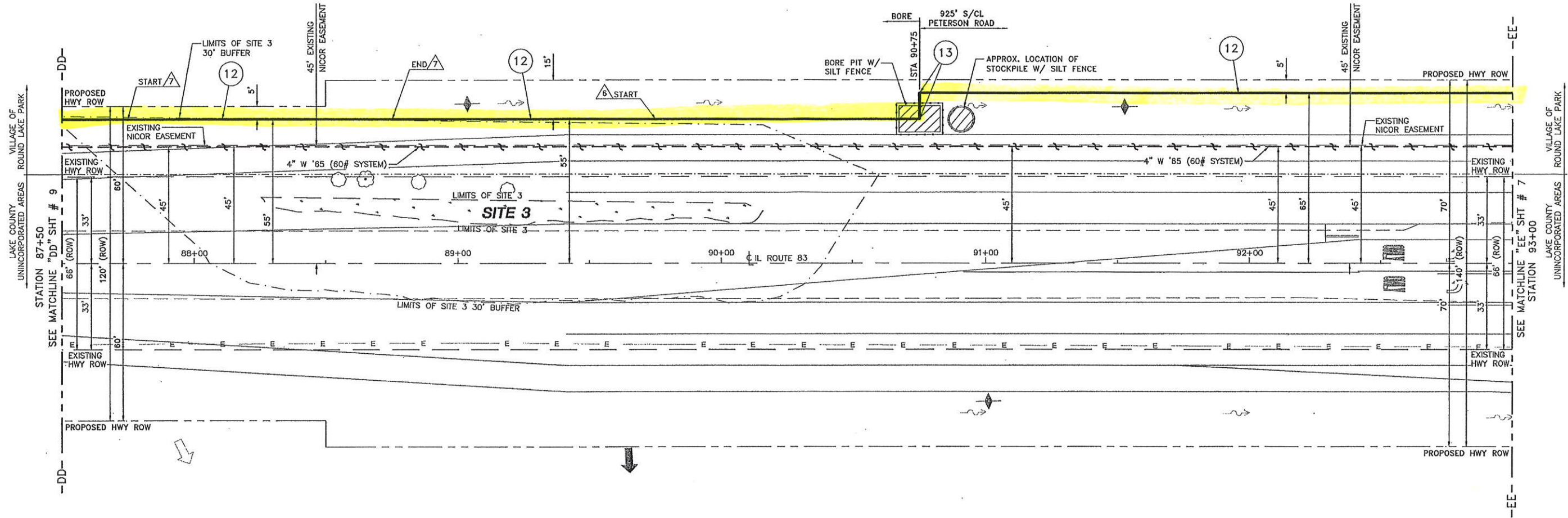


WORK ORDER QUANTITIES THIS SHEET (PER W.O. 127994)		
PIPE INSTALLATION THIS SHEET	ESTIMATED	ACTUAL
4" PE PIPE IPS PE SDR 11.5	500'	
PIPE RETIREMENT THIS SHEET	ESTIMATED	ACTUAL
4" STEEL (1965)	500'	
PIPE BORING THIS SHEET	ESTIMATED	ACTUAL
4" BORING	285'	
TRENCH BACKFILL THIS SHEET	15 C.Y.	
ASPHALT & CONCRETE BREAKS THIS SHEET	0 SQ. FT.	
SERVICE TRANSFERS THIS SHEET	0	

LOC.	MAIN SIZE	STATION	DISTANCE FROM		PROPOSED T.O.P. ELEVATION	APPROX. COVER PROPOSED MAIN		REASON
			PROPOSED R.O.W.	EXISTING CL.		BEFORE ROAD WORK	AFTER ROAD WORK	
3	4"	96+75 TO 98+07	5' E/W	65' W TO 69' W	VARIES	4'-6"	3'-0"	INSTALL 132' OF 4" PE MAIN BELOW PROPOSED DITCH CUTS
4	4"	95+50	5' E/W	65' W	817.5	3'-0"	6'-0"	INSTALL 4" PE MAIN BELOW PROPOSED 12" SS PIPE W/ INV~820.5
5	4"	95+00	5' E/W	65' W	817.3	3'-0"	6'-0"	INSTALL 4" PE MAIN BELOW PROPOSED 24" SS PIPE W/ INV~820.25
6	4"	89+75 TO 93+25	15' E/W TO 5' E/W	55' W TO 65' W	VARIES	5'-6"	3'-0"	INSTALL 350' OF 4" PE MAIN BELOW PROPOSED DITCH CUTS

COUNTY LAKE	TOWNSHIP FREMONT	1/4 SECTION 114
TOWN ROUND LAKE PARK	RANGE 44N	10E 3PM
REGION NORTHERN	DEPARTMENT FOC	ENGINEER/DESIGNER D.RUIZ
WORK ORDER NO. 127994/327994/427994	DRAWN BY S. GIOVENCO	DATE 05/25/12
INCOB JOB NO. N7455	CHECKED BY D. J. KROEGER	DATE 8-8-12
ENR PROJECT NO. 110001.75	CORROSION C. KROEGER	DATE 07/11/12
SCALE 1"=20'	APPROVED BY [Signature]	DATE 8/18/12
DATE IN SERVICE	DRAWING FILE NO. NW46114A-	SHEET 7 OF 13

IL ROUTE 83



- 12 INSTALL
(560') 4" PIPE IPS PE SDR 11.5
(TEST SECTION "A")
(60# SYSTEM)
- 13 INSTALL
(2) 4" 90' ELL IPS PE SDR 11.5
(2) GCS 249.4 (FLEXIBLE DRIVE-IN PIPELINE MARKER)

CONSTRUCTION NOTE:
1. LOCATION AND SIZE OF STOCKPILES AND SILT FENCE AROUND STOCKPILES ARE APPROXIMATE. CONTRACTOR TO DETERMINE EXACT LOCATION AND SIZE AT THE TIME OF CONSTRUCTION.

ENVIRONMENTAL NOTES:
1. CONTRACTOR TO DETERMINE LOCATION OF STAGING AREAS WITH STABILIZED CONSTRUCTION ENTRANCES, AT THE TIME OF CONSTRUCTION.
2. SPOIL LOCATIONS ARE TO BE OUTSIDE OF DITCHES, FLOODPLAINS, FLOODWAYS, WETLANDS AND BUFFERS AREAS AND ENCLOSED IN SILT FENCE.

EROSION CONTROL NOTES:
1. ROADS NEED TO BE KEPT CLEAN.
2. SHORT TERM MAINTENANCE OF EROSION CONTROL.

WORK ORDER QUANTITIES THIS SHEET (PER W.O. 127994)

PIPE INSTALLATION THIS SHEET	ESTIMATED	ACTUAL
4" PIPE IPS PE SDR 11.5	560'	
PIPE RETIREMENT THIS SHEET	ESTIMATED	ACTUAL
4" STEEL (1965)	550'	
PIPE BORING THIS SHEET	ESTIMATED	ACTUAL
4" BORING	325'	
TRENCH BACKFILL THIS SHEET	20 C.Y.	
ASPHALT & CONCRETE BREAKS THIS SHEET	0 SQ. FT.	
SERVICE TRANSFERS THIS SHEET	0	

LOC.	MAIN SIZE	STATION	DISTANCE FROM		PROPOSED T.O.P. ELEVATION	APPROX. COVER PROPOSED MAIN		REASON
			PROPOSED R.O.W.	EXISTING CL.		BEFORE ROAD WORK	AFTER ROAD WORK	
6	4"	89+75 TO 93+25	15' E/W TO 5' E/W	55' W TO 65' W	VARIES	5'-6"	3'-0"	INSTALL 350' OF 4" PE MAIN BELOW PROPOSED DITCH CUTS
7	4"	87+75 TO 88+75	5' E/W TO 15' E/W	55' W	VARIES	3'-6"	3'-0"	INSTALL 100' OF 4" PE MAIN BELOW PROPOSED DITCH CUTS

100% REIMBURSABLE

APPROVED FOR CONSTRUCTION

REV.	DESCRIPTION	BY	CHK'D BY	APP'D. BY	DATE



PREPARED FOR:

nicor
GAS

**PUBLIC IMPROVEMENT
IL ROUTE 83
(STA 87+50 TO STA 93+00)
ROUND LAKE PARK, ILLINOIS**

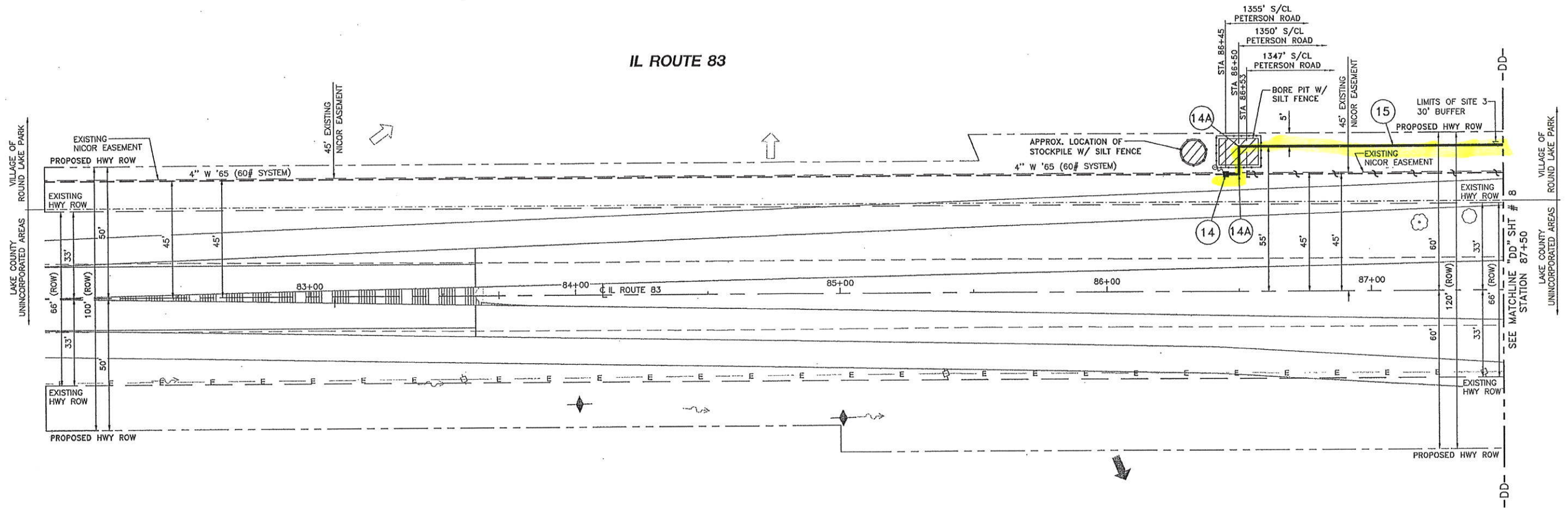
PREPARED BY:

ENEngineering

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WWW.ENENGINEERING.COM

COUNTY LAKE	TOWNSHIP FREMONT	1/4 SECTION 114
TOWN ROUND LAKE PARK	RANGE 44N	DATE 05/25/12
REGION NORTHERN	DEPARTMENT FOC	ENGINEER/DESIGNER D.RUIZ
WORK ORDER NO. 127994/327994/427994	DRAWN BY S. GIOVENCO	DATE 05/25/12
NICOR JOB NO. N7455	CHECKED BY P. J. KROEGER	DATE 07/11/12
ENE PROJECT NO. 110001.75	APPROVED BY T. BELL	DATE 07/11/12
SCALE 1"=20'	DATE IN SERVICE	DRAWING FILE NO. SHEET 6 OF 13
		NW46114A-

IL ROUTE 83



CONSTRUCTION NOTE:
 1. LOCATION AND SIZE OF STOCKPILES AND SILT FENCE AROUND STOCKPILES ARE APPROXIMATE. CONTRACTOR TO DETERMINE EXACT LOCATION AND SIZE AT THE TIME OF CONSTRUCTION.

ENVIRONMENTAL NOTES:
 1. CONTRACTOR TO DETERMINE LOCATION OF STAGING AREAS WITH STABILIZED CONSTRUCTION ENTRANCES, AT THE TIME OF CONSTRUCTION.
 2. SPOIL LOCATIONS ARE TO BE OUTSIDE OF DITCHES, FLOODPLAINS, FLOODWAYS, WETLANDS AND BUFFERS AREAS AND ENCLOSED IN SILT FENCE.

CORROSION NOTE:
 1. INSTALL ETC/ETS WITH ANODE LEADS ROUTED TO TERMINAL BOX.

EROSION CONTROL NOTES:
 1. ROADS NEED TO BE KEPT CLEAN.
 2. SHORT TERM MAINTENANCE OF EROSION CONTROL.

WORK ORDER QUANTITIES THIS SHEET (PER W.O. 127994)		
PIPE INSTALLATION THIS SHEET	ESTIMATED	ACTUAL
4" PIPE IPS PE SDR 11.5	115'	
PIPE RETIREMENT THIS SHEET	ESTIMATED	ACTUAL
4" STEEL (1965)	105'	
PIPE BORING THIS SHEET	ESTIMATED	ACTUAL
4" BORING	100'	
TRENCH BACKFILL THIS SHEET	15 C.Y.	
ASPHALT & CONCRETE BREAKS THIS SHEET	0 SQ. FT.	
SERVICE TRANSFERS THIS SHEET	0	

- 14** INSTALL
 (1) GCS 720.42* (4" SOLID TIE-IN TRANSITION FITTINGS EF)
 *INCL: (2) 4" NIPPLE STOPPER IPS ASSEMBLY PER GCS 210.93 (STOPPER NIPPLE ASSEMBLY)
 (1) 1/2" TEE SERVICE BODY NPT 1/4" PUNCH O RING SEAL, CAP-PUNCH VALVE
 (1) 1/2" CAP BLK MI NPT TAPER THREAD ANSI 150
 (1) 4"x4" FITTING TRANS IPS STL PE SDR 11.5 W/GCS 702 (ANTI SHEAR SLEEVE PE PIPE)
 (1) 4" COUPLING IPS PE EF
 (1) GCS 714.03 (LOCATE WIRE CONNECTION FOR STL TO PE EXT)
 (1) GCS 714.33* (ETC/ETS WIRE CONNECTION FOR STEEL TO PE SYSTEMS)
 *INCL: (1) BOX TERMINAL 18" LG 4" OD
 (1) #12 WIRE RED 1/C SOLID 600V 2/64 NYLON INSULATION TYPE THIN/THWN THERMOPLASTIC (AS REQ'D)
 (1) WIRE, STEEL #12 GAUGE COPPER CLAD, HMWPEHD, 2500 FT SPOOLS (SPOOL #W1410), YELLOW TRACING WIRE, 12 AWG SOLID, 30 MIL COATING, PER NICOR GAS PURCHASING SPECIFICATION DATED JANUARY 30, 2004 (AS REQ'D)
 (2) THERMOWELD KITS 40 CHARGES THERMOWELD KIT MODEL 38-4351-01
 (1) WOOD BLOCK 2"x10"x12"
 (1) 32# ANODE INSTALLED ON EXISTING PIPE
 (1) GCS 249.4 (FLEXIBLE DRIVE-IN PIPELINE MARKER)

CUT & CAP
 (SEAL RETIRED MAIN PER GCS 849)
 (CONDUCT WIPE TEST PER GCS 849.2)

SOLID TIE-IN NOTE:
 BACKFED PER NICOR SYSTEM PLANNING. CONTACT NICOR SYSTEM PLANNING AT TIME OF CONSTRUCTION FOR BYPASS REQUIREMENTS.

- 14A** INSTALL
 (2) 4" 90° ELL IPS PE SDR 11.5

- 15** INSTALL
 (115') 4" PIPE IPS PE SDR 11.5 (TEST SECTION "A") (60# SYSTEM)

100% REIMBURSABLE

APPROVED FOR CONSTRUCTION

REV.	DESCRIPTION	BY	CHK'D BY	APP'D. BY	DATE

PREPARED FOR: nicor GAS PUBLIC IMPROVEMENT IL ROUTE 83 (STA 82+00 TO STA 87+50) ROUND LAKE PARK, ILLINOIS		
PREPARED BY: ENEngineering 7135 JANES AVENUE WOODRIDGE, IL 60517 TEL. 630-353-4000 FAX 630-353-7777 WWW.ENENGINEERING.COM		
COUNTY LAKE	TOWNSHIP FREMONT	1/4 SECTION 114
TOWN ROUND LAKE PARK	RANGE 44N	10E 3PM
REGION NORTHERN	DEPARTMENT FOC	ENGINEER/DESIGNER D. RUIZ
WORK ORDER NO. 127994/327994/427994		DATE 05/25/12
NICOR JOB NO. N7455	NODE/LD NO. 546A402S	DRAWN BY S. GIOVENCO
ENE PROJECT NO. 110001.75		CHECKED BY P. Paul
SCALE 1"=20'		DATE 8-2-12
DATE IN SERVICE		APPROVED BY C. KROEGER
		DATE 8/10/12
		DRAWING FILE NO. SHEET # OF 13 NW46114A-