

May 3, 2016

RESS

Ms. Pascale Duguay  
Facilities Applications  
Ontario Energy Board  
2300 Yonge Street, Suite 2700  
Toronto, Ontario  
M4P 1E4

Dear Ms. Duguay:

**Re: Union Gas Limited (“Union”)  
Burlington Oakville Pipeline Project  
Board File # EB-2014-0182**

Please find attached two Change Requests for the above-noted project.

Union believes that these changes are not significant and would appreciate your timely review and approval of these requests.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-4601.

Sincerely,

Mark A. Murray, LL.B  
Manager Regulatory Projects and Land Acquisition

cc: Zora Crnojacki, OEB Project Advisor

**ONTARIO ENERGY BOARD**  
**LEAVE TO CONSTRUCT CHANGE REQUEST**

**Project Name:** Burlington Oakville Pipeline Project

**OEB File Number:** EB-2014-0182

**Change Request:** #1

**Description and Rationale for Change**

Union is proposing changes, to the dimensions of permanent easements and temporary land use areas at various locations along the pipeline route to facilitate requests from the landowners and pipeline construction.

**Construction and Restoration Practices**

There are no changes proposed for the construction of the proposed facilities.

**Environmental**

No new environmental mitigation measures will be required.

**Consultation**

Union has met with the directly affected landowners and no issues have been identified.

**Lands**

Union has acquired the necessary permanent easements and temporary land rights.

**Costs**

These changes will not result in any additional costs to the project.

**Schedule**

These changes will not result in any change to the project in-services date.

**Maps**

A chart setting out the changes in land rights is attached at Schedule 1. Maps showing the location of the permanent easements and temporary land rights are attached at Schedule 2.



FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Length Width (Hectares)		TEMPORARY EASEMENT Dimensions (Metres) Area Length Width (Hectares)		(M)	(L)	(E)
			Length	Width	Length	Width			
BOP2	Ontario Hydro	PIN 24938-0040 LT Pt Lt 6, Con 9 Trafalgar New Survey, Part 2, 20R4030 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 2, 20R4031 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 2, 20R4032 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 2, 20R4033 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 1, 20R4034 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 2, 20R4035 ; Pt Lt 7, Con 9 Trafalgar New Survey, Part 2, 20R4036 ; Pt Lt 8, Con 9 Trafalgar New Survey, Part 2, 20R4037 ; Pt Lt 8, Con 9 Trafalgar New Survey, Part 1, 20R4038 ; Pt Lt 9, Con 9 Trafalgar New Survey, Part 2,3,4, 20R4039 ; Pt Lt 10, Con 9 Trafalgar New Survey, Part 2, 20R4040 ; Pt Lt 10, Con 9 Trafalgar New Survey, Part 2, 20R4041 ; T/W 557485 ; S/T 74903,776858,R81,R82 Milton/Trafalgar	26.2	x 10	0.03	26.3 x 37.3	0.098099	(e) Union Gas Limited 50 Keil Drive, Chatham ON N7M 5M1 #74903, 776858	
BOP3	Her Majesty the Queen in Right of Ontario as Represented by the Minister of Infrastructure	PIN 24938-0067 LT Pt Lt 7, Con 9 Trafalgar New Survey Des As Pts 1,2, On 20R18790; S/T 762908 Milton/Trafalgar	131.6	x 4	0.13 0.05264	131.6 * 3-7 131.6 *	8 0-048692	(e) Consumers Gas Company PO Box 650, Scarborough ON M1K 5E3 #762908	
BOP4	Ontario Transportation Capital Corporation	PIN 24938-0066 LT Pt Lt 7, Con 9 Trafalgar New Survey, Parts 1 & 2, 20R12355 ; ; S/T 762907 Milton/Trafalgar	61.5	x 4	0.06 0.0246	61.5 * 3-7 61.5 *	8-83 0-022755	(e) Consumers Gas Company PO Box 650, Scarborough ON M1K 5E3 #762907	



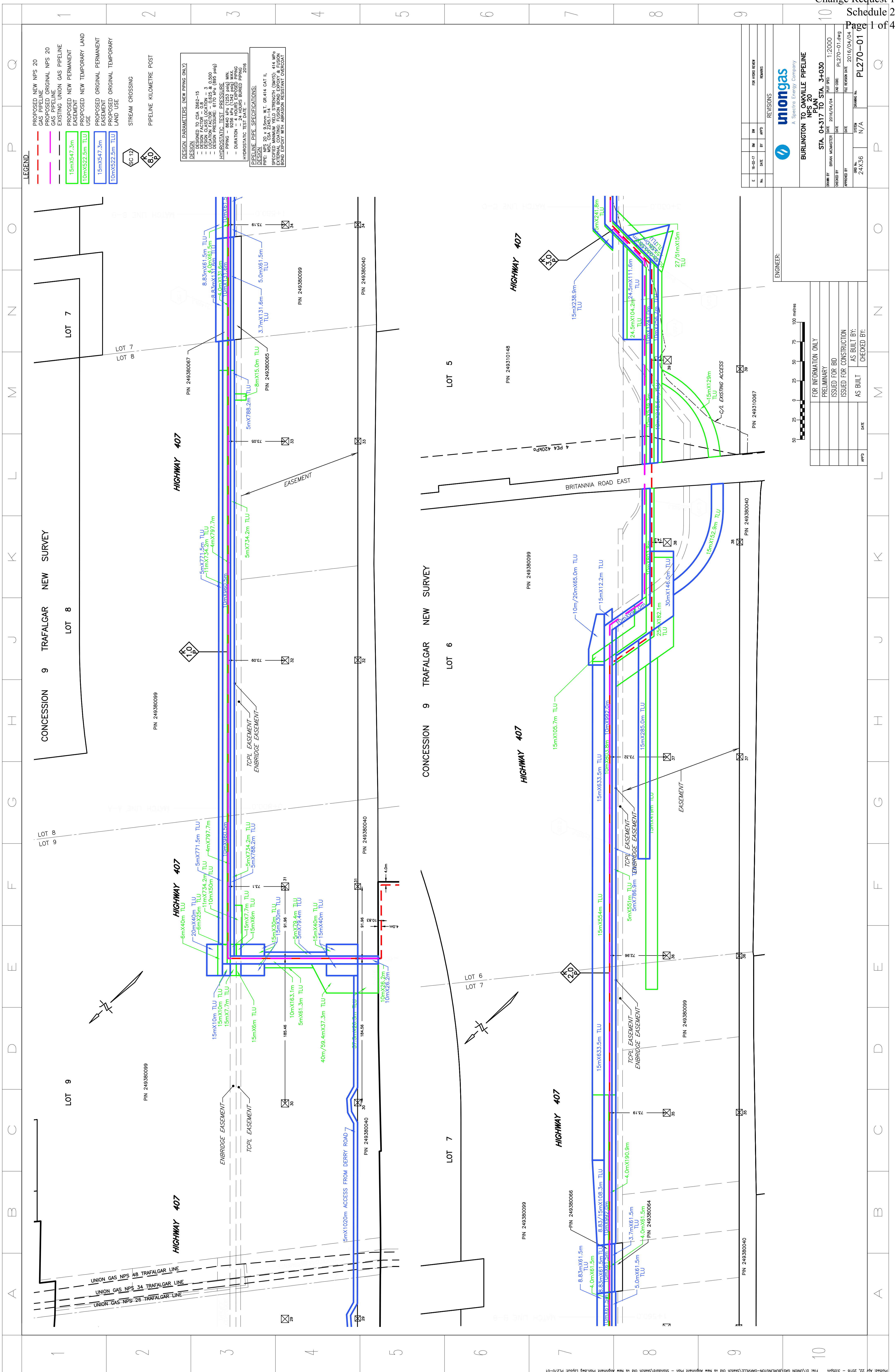
FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT		TEMPORARY EASEMENT		MORTGAGE, LIEN/LEASE, EASEMENT		
			Dimensions (Metres) Area Length Width (Hectares)	Dimensions (Metres) Area Width (Hectares)	Length Width (Hectares)	(M) (L) (E)			
Lower Base Line Road									
BOP7	Her Majesty the Queen in Right of Ontario as Represented by the Minister of Government Services	PIN 24930-0081 LT Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 2 , Pm238, Except Pt 2, 20R3287 ; lts 6 & 7, Pl 162 ; Lt 8, Pl 162 , Except Pt 2, 20R3287 ; Pt Lt 9, Pl 162 , Part 1 , 20R6028 ; S/T 815828 Milton	25.3 * 21.1 x	40 6	0.03 0.01	60.3 * 140.3 x 23 x	30 26 20	0.18 0.36478 0.046	
BOP8	Hydro One Networks Inc	PIN 24930-0128 LT Pt Lt 6, Con 2 Traf Nds Pts 3 & 4, 20R3287; Pt Lt 7, Con 2 Traf Nds, Pt 1, 20R3287; Pt Lt 7 Con 2 Traf Nds & Pt Lt 8, Pl 162, Pt 2, 20R3287; Pt Lt 7 Con 2 Traf Nds & Pts Lt 9 & 10, Pl 162, Pts 1 & 3 To 6, Ex Pl 238 S&E Pts 1 & 2 Exp Pe179; Milton. T/W 167304 & 166133. S/T Tw26405, Tw26407 & 415837.	80 x	10	0.08	147 * 159.2 x 6.3 x	30 20/30 30.2	0.44 0.416 0.416	(e) Imperial Oil Limited 237-4th Ave, PO Box 2480 Calgary, AL T2P 3M9 TW26405, TW26407  (e) Transcanada Pipelines Limited 450- 1 Street SW, Calgary Alberta T2P 5H1 #598244
BOP9	Private Landowner	PIN 24930-0078 LT Pt Lt 8, Con 2 Traf Nds Des As Part 1 On 20R19583 Town Of Milton	639.1 x	15	0.96	50 x 613.6 x	25 10	0.13 0.61	
BOP10	Hydro One Networks Inc	PIN 24930-0129 LT Pt Lt 6, Con 2 Traf Nds As In 167304 Except Pts 1, 4, 7, 10 & 13 To 16, Pe84; Except Pts 1 To 9, Pe180, Pts 5 To 10, 20R13954 & Pts 3 & 4, 20R3287. S/T & T/W 167304. S/T 415837, 502868, 598244, 624755, Tw26388, Tw26401, Tw26404, Tw26405, Tw26407 & Tw27100. Pt Lt 7, Con 2 Traf Nds, As In 166133. S/T & T/W 166133. Pt Lt 8, Con 2 Traf Nds As In 151913. S/T & T/W 151931, Tw19835 Partially Release By 283371. Pt Lts 8 & 9, Con 2 Traf Nds As In 214249. S/T 214249. Pt Lt 10, Con 2 Tra F Nds, As In 250612 & 158253 Except 161621. T/W 161621. S/T 158253; Milton	84.1 x	15	0.13	84.1 x	10	0.08	(e) Imperial Oil Limited 237-4th Ave, PO Box 2480 Calgary, AL T2P 3M9 TW26388, TW26401, TW26404, TW26405 TW26407, TW27100  (e) Interprovincial Pipe Line Ltd 1st Canadian Place Toronto, ON M5X 1A9 #502868, 624755  (e) Transcanada Pipelines Limited 450- 1 Street SW, Calgary Alberta T2P 5H1 #598244

FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Length Width (Hectares)		TEMPORARY EASEMENT Dimensions (Metres) Area Length Width (Hectares)		MORTGAGE, LIEN/LEASE, EASEMENT (M) (L) (E)		
			Length	Width	Length	Width	(M)	(L)	(E)
BOP10A	Ontario Transportation Capital Cooperation	PIN 24930-0090 Pt Lt8, Con 2 Trafalgar, North Of Dundas Street, Parts 3&4, 20R6153; T/W 151913; Subject to TW19835, Partially Released By 283371; S/T TW23611, TW25458, TW27100, TW19835; Milton	120 x	15	0.18				
BOP11	Private Landowner	PIN 249300200 (Formerly PIN 24930-0050 LT) Pt Lt 8, Con 2 Trafalgar, North Of Dundas Street , Part 1 , 20R8443 ; Oakville	29 x	20	0.06	59 * 40 51 x 20 80 x 20	0.059 0.102 0.16		
BOP12	Private Landowner	PIN 249300197 (Formerly PIN 24930-0049 LT) Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , As In 837069 ; Oakville	223.4 x	15	0.34	223.4 x	10	0.22	(e) Transcanada Pipelines Limited 450- 1 Street SW, Calgary Alberta T2P 5H1 #550566  (m) Dorset Developments Inc 3-26 Lesmill Rd, Toronto, ON M3B 2T5 HR301026  (m) Andrin Elgin Limited 3-26 Lesmill Rd, Toronto, ON M3B 2T5 HR301027, HR301028
BOP13	Ontario Hydro	PIN 24930-0047 LT Pt Lts 6 & 7, Con 2 Trafalgar, North Of Dundas Street , Part 1,4 , 20R5348 ; Oakville	160.6 x	15	0.24	160.6 x	10	0.16	
BOP14	Her Majesty the Queen in Right of Ontario as Represented by the Minister of Government Services	PIN 24930-0043 LT Pt Lt 10, Con 2 Trafalgar, North Of Dundas Street , Part 3,4,5,6,8,9,10 , 20R6208, T/W 158253, 250612 ; Pt Lts 8 & 9, Con 2 Trafalgar, North Of Dundas Street , Part 1, 2, 20R199, T/W 214249 ; Pt Lt 8, Con 2 Trafalgar, North Of Dundas Street , Part 1, Pe85 ; Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 1, 20R2548 , Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 1, R42 , Except Pt 1,5, 20R5348, T/W 166133 ; Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 1,3, 20R6129, Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 6,7, 20R6153, Pt Lt 7, Con 2 Trafalgar, North Of Dundas Street , Part 3 , 20R6536 ; Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street , Part 1,3,4,5 , 20R2134 , Except Pt 2,4, 20R3287, Pt 4,	328.2 * 187.8 x	15	0.49 0.28	184.7 * 10 153.3 x 25 25 x	0.18 0.1603 0.38 0.0375	(e) Hydro Electric Power Commission 185 Clegg Road, PO Box 4300 Markham, Ont. L6G 1B7 TW19808, TW19812, TW19836, TW23609 TW23695  (e) Imperial Oil Limited 237-4th Ave, PO Box 2480 Calgary, AL T2P 3M9 TW26403, TW26407 TW26407, TW27100	

FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Length Width (Hectares)		TEMPORARY EASEMENT Dimensions (Metres) Area Length Width (Hectares)		MORTGAGE, LIEN/LEASE, EASEMENT (M) (L) (E)	
			Length	Width	Length	Width	(M)	(L)
		20R5348, Pt 6, 20R7686, T/W 167304 ; Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, 20R1980, Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, 20R6006, Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, 2, 20R6170, Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1 To 16, Pe84, Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, Pt1274 ; Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, 20R5052, Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, Part 1, 2, Pe83, Except Pt 5, 6, 20R7686 ; S/T 502868, 550566, 555217, 618683 (Except Pt 1, Ex198), 619501, 815828, Tw19808, Tw19812, Tw19836, Tw23609, Tw23695, Tw26403, Tw26407; Milton/Oakville & Mississauga					(e) Interprovincial Pipe Line Ltd 1st Canadian Place Toronto, ON M5X 1A9 #502868  (e) Transcanada Pipelines Limited 450- 1 Street SW, Calgary Alberta T2P 5H1 #550566, 555217  (e) Consumers Gas Company PO Box 650, Scarborough ON M1K 5E3 #815828  (L) 407 ETR Concession Company Limited 200 King Street, 20th Floor, Toronto ON M5H 3T5 H787323	
BOP15	Private Landowner	<b>PIN 249300184</b> (Formerly PIN 24930-0038 LT) Pt Lt 6, Con 2 Trafalgar, North Of Dundas Street, As In 251634 Except Pt 1, 20R5052, Pts 1 & 2, Pe83, Pm468; S/T 178010 ; Oakville	iff	iff	0.349	288.2 * 231.5 *	25 25	0.7205 0.57875
		Burnhamthorpe Road						
BOP16	Private Landowner	PIN 24930-0029 LT Pt Lt 6, Con 1 Trafalgar, North Of Dundas Street, As In 812734 ; Oakville/Trafalgar	iff	iff	0.08			
BOP17	Private Landowner	<b>PIN 249300205</b> (Formerly PIN 24930-0106 LT) Pt Lt 6, Con 1 Trafalgar, North Of Dundas Street; Oakville/Trafalgar	iff	iff	0.33 0.07	196.1 * 106.1 x 172.4 *	25 10 25	0.49025 0.11 0.431
<b>BOP17A</b>	<b>Private Landowner</b>	<b>PIN 249300205</b> (Formerly PIN 24930-0106 LT) Pt Lt 6, Con 1 Trafalgar, North Of Dundas Street; Oakville/Trafalgar				195 x 172.4 x	25 25	0.4875 0.431
BOP18	Private Landowner	Pt Lt 6, Con 1 Traf Nds, Pt 5 20R5349 Except Pt 2 20R6407; Oakville. T/W 593925.				60.8 34.4/50.2	0.09	(m) Home Trust Company 145 King Street West, Suite 2300 Toronto, Ontario, M5H 1J8 HR1218757

FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT		TEMPORARY EASEMENT		MORTGAGE, LIEN/LEASE, EASEMENT		
			Dimensions (Metres) Length	Width (Hectares)	Dimensions (Metres) Length	Width (Hectares)	(M)	(L) (E)	
BOP19	Private Landowner	PIN 13413-0035 LT Pcl 14-1, Sec 43-1542, Pt Lt 9, Rcp 1542, Pt 3, 43R11840 ; Mississauga	317.8	5	0.16	387.7 x 339.9 x	10 10	0.39 0.3399	(m) Bank of Nova Scotia 859 Eglinton Avenue West Toronto, ON M6C 2B9 LT1043388; LT1043389
BOP20	Her Majesty The Queen in Right of Ontario as Represented by the Ministry of Infrastructure	PIN 13413-0106 LT Pt Lt 9 Registrar'S Compiled Plan 1542 Mississauga Pts 1 & 4, 43R9144, Save And Except Pts 12, 14, 16, Pl 43R32759 Subject To An Easement As In Ro723951 City Of Mississauga	292.4 * 322.1 x	15 15	0.44 0.48315	318.8 * 263.7 * 103.9 x 155 x 162 x	10 10 10 35 10	0.3188 0.26 0.1039 0.5425 0.162	(e) Interprovincial Pipe Line Ltd 1st Canadian Place RO723951
BOP20A	Private Landowner	PIN 134130100				82.9 x	10		
BOP21	Her Majesty the Queen in Right of the Province of Ontario Represented by the Minister of Government Services for Ontario	PIN 13413-0059 LT PT LT 9 Registrar's Compiled Plan 1542 MISSISSAUGA PT 5 43R6722 ; MISSISSAUGA	608.7	15	0.91	569 x 20/28 x 77 x	10 20 10	0.57 0.02 0.02	
BOP22	Her Majesty the Queen in Right of Ontario as Represented by the Minister of Transportation	PIN 13413-0060 LT Pt Lt 9 Registrar'S Compiled Plan 1542 Mississauga Pt 4 43R6722 ; Mississauga	33.4	15	0.05	33.4 x	10	0.03	
BOP23	Her Majesty the Queen in Right of the Province of Ontario Represented by the Minister of Government Services for Ontario	PIN 13413-0061 LT Pt Lt 9 Registrar'S Compiled Plan 1542 Mississauga Pt 3 43R6722 ; Mississauga	428.9	15	0.64	445.8 x	10	0.45	

FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT		TEMPORARY EASEMENT		MORTGAGE, LIEN/LEASE, EASEMENT		
			Dimensions (Metres) Length	Width (Hectares)	Dimensions (Metres) Length	Width (Hectares)	(M)	(L) (E)	
	Dundas Street East								
BOP24	Ontario Hydro	PIN 24902-0595 LT Pt Lts 4 & 5, Con 1 Traf. Sds, Parts 3, 4, 5, 8 & 9, 20R53350 ; Oakville ; S/T 140875 & 624755	199.4 * 198.4 x 67.2 x 17.6 x	15 15 15 15.2	0.30 0.2976 0.10 0.026752	223.1 * 221.5 x 54.6 x 22.6 x 144.2 x	10 15 10 25 41	0.22 0.33225 0.05 0.0565 0.59122	(e) Transcanada Pipeline Ltd 450- 1 Street SW, Calgary Alberta T2P 5H1 #140875  (e) Interprovincial Pipe Line Ltd 1st Canadian Place Toronto, ON M5X 1A9 #624755
BOP25	Private Landowner	PIN 24902-0620 LT  Pt Lt 5, Con 1 Sds Traf, Parts 1 & 3, 20R13374 ; Oakville ; S/T 555217	190.3 * 184.3 x	15 15	0.29 0.27645	182.5 * 184.3 x 169.3 x	10 10 6	0.18 0.1843 0.10158	(e) Transcanada Pipeline Ltd  450- 1 Street SW, Calgary Alberta T2P 5H1 #555217
BOP26	Private Landowner	PIN 24902-0594 Pt Lt "5", Con 1 Traf. Sds, Part 10, 20R53350 ; Oakville ; S/T 555217. " Amended 2003 05 05 Kh"	535.3 x	15	0.80	547.4 x	10	0.55	(e) Transcanada Pipeline Ltd 450- 1 Street SW, Calgary Alberta T2P 5H1 #555217
BOP27	Her Majesty The Queen in Right of Ontario as Represented by the Ministry of Infrastructure	PIN 24902-0710 Pt Lt 5, Con 1 Traf, Sds, As In Tw12338, Tw12388, Tw28477, Tw28882, 60868, 62940, 127070 & 215846 Except 227540 & Except Pts 7 To 18, 20R19148; Pt Lt 4, Con 1 Traf, Sds, As In Tw12340, Tw12417 & Tw28768, Lying Between Ninth Line & Hwy 403 & Tw29485 Lying North Pt 4, 20R4180 & North Pt 10, 20R5347 Subject To An Easement As In 598243 Subject To An Easement As In 624755 Subject To An Easement As In 822963 Subject To An Easement As In 822964 Town Of Oakville	48.5 x	15	0.07	48.6 x 237.5 x	10 15	0.05 0.35625	(e) Transcanada Pipeline Ltd 450- 1 Street SW, Calgary Alberta T2P 5H1 #598243  (e) Interprovincial Pipe Line Ltd 1st Canadian Place Toronto, ON M5X 1A9 #624755  (e) Union Gas Limited 50 Keil Drive, Chatham ON N7M 5M1 #822963; 822964
BOP28	Union Gas Bronte Station 50 Keil Drive N Chatham, ON	PIN 24902-0173 Pt Lt 5, Con 1 Trafalgar, South Of Dundas Street , Part 1-8 , 20R10385 ; S/T 51491, 609724, 64276, 65843, 794575, 95200 Oakville/Trafalgar							



**LEGEND**

- PROPOSED NEW NPS 20 GAS PIPELINE
- PROPOSED ORIGINAL NPS 20 GAS PIPELINE
- EXISTING UNION GAS PIPELINE
- PROPOSED NEW PERMANENT EASEMENT
- PROPOSED NEW TEMPORARY LAND USE
- PROPOSED ORIGINAL PERMANENT EASEMENT
- PROPOSED ORIGINAL TEMPORARY LAND USE
- STREAM CROSSING
- PIPELINE KILOMETRE POST

**DESIGN PARAMETERS (NEW PIPING ONLY)**

- DESIGNED TO CSA Z662-15
- DESIGN CLASS LOCATION = 3
- DESIGN CLASS = 1
- DESIGN PRESSURE = 6.895 & 6.890
- DESIGN TEMPERATURE = 10.0°C (50°F)
- DESIGN WIND SPEED = 10.0 m/s (20 mph)

**HYDROSTATIC TEST PRESSURE**

- PIPE = 8640 psi (593 MPa) MIN.
- TEST PRESSURE = 1.25 x DESIGN PRESSURE
- DURATION = 4 HOURS BURIED PIPING
- HYDROSTATIC TEST SPECIFICATIONS: ASME B31.8

**PIPELINE PIPE SPECIFICATIONS:**

- DESIGN: NPS 20 x 9.5mm W.T. OR 414 CAT II
- DESIGN: NPS 10 x 4.7mm W.T. OR 207 CAT II
- SPECIFIED MINIMUM YIELD STRENGTH (SMYS): 414 MPa
- EXTERNAL COATING: FUSION BOND EXPOXY & FUSION BOND EXPOXY WITH AMBIENT RESISTANT OVERCOAT

**REVISIONS**

No.	Date	By	App'd	Remarks
1	16-02-17	BM	BP	FOR HYDRO REVIEW

**uniongas**  
 A Spectra Energy Company

**BURLINGTON TO OAKVILLE PIPELINE**  
 NPS 20 PLAN

**STA. 0+317 TO STA. 3+030**

DRAWN BY: BRIAN MCMASTER DATE: 2016/04/04 PLOT NO: PL270-01.dwg  
 CHECKED BY: DATE: FILE REVISION DATE: 2016/04/04  
 APP'D BY: DATE: PL270-01

**FOR INFORMATION ONLY**

APP'D	DATE	AS BUILT BY:	CHECKED BY:

ISSUED FOR BID  
 ISSUED FOR CONSTRUCTION  
 AS BUILT

SCALE: 1:2000

50 25 0 25 50 75 100 metres

ENGINEER:

**REVISIONS**

No.	Date	By	App'd	Remarks

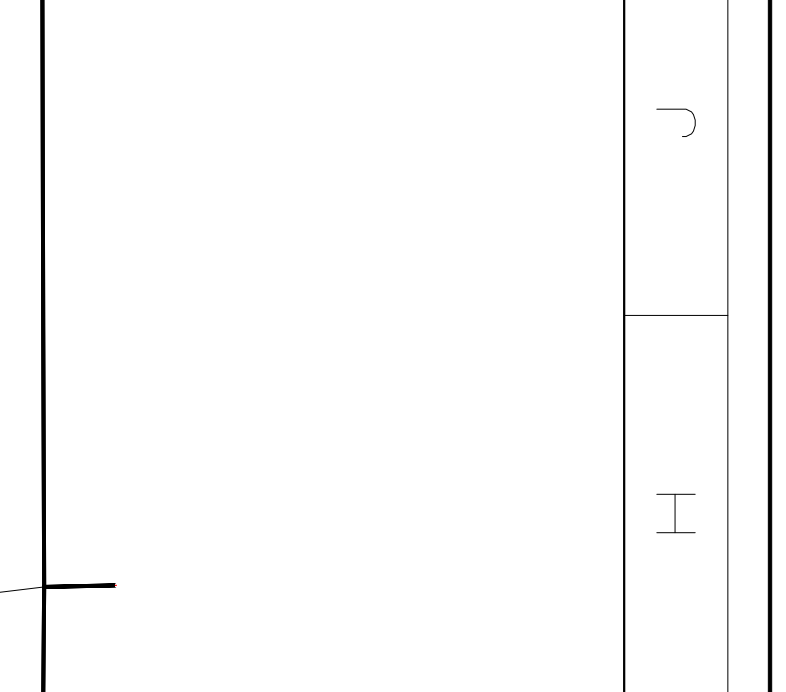
NO.	DATE	BY	APPD	REVISIONS
E	16-02-17	BM	BP	FOR IFORM REVIEW
				REMARKS

BURLINGTON TO OMAHAVILLE PIPELINE A Spectra Energy Company	
STA. 3+030 TO STA. 5+990 NPS 20 PLAN	
DRAWN BY: BRIAN MCMASTER DATE: 2016/04/04 CHECKED BY: [blank] DATE: [blank]	PROJECT NO.: PL270-02.dwg DWG NO.: PL270-02.dwg FILE REVISION DATE: 2016/04/04 SHEET NO.: 24X36 TOTAL SHEETS: N/A

FOR INFORMATION ONLY	DATE	APPD	CHECKED BY:
PRELIMINARY			
ISSUED FOR BID			
ISSUED FOR CONSTRUCTION			
AS BUILT			

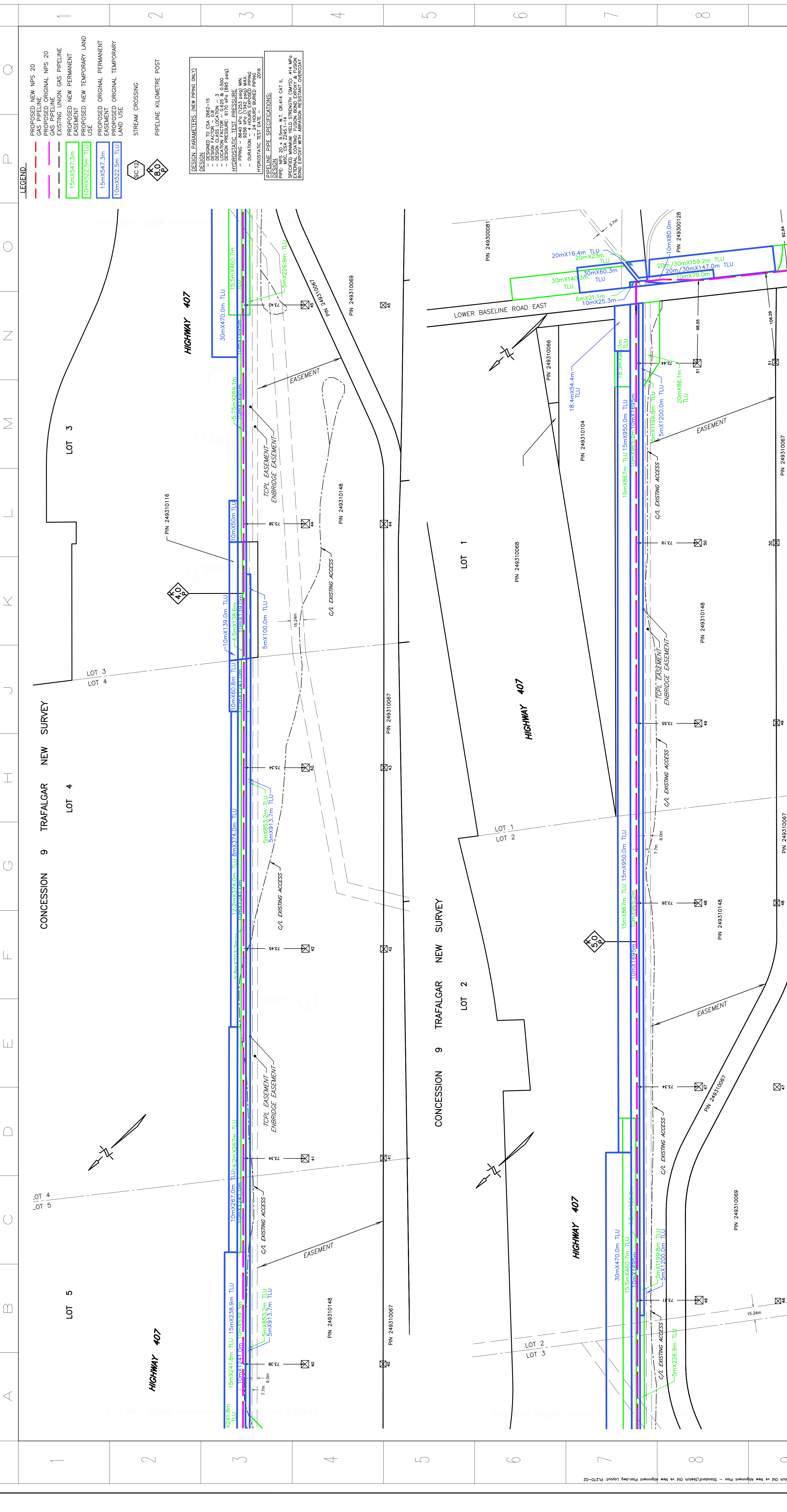
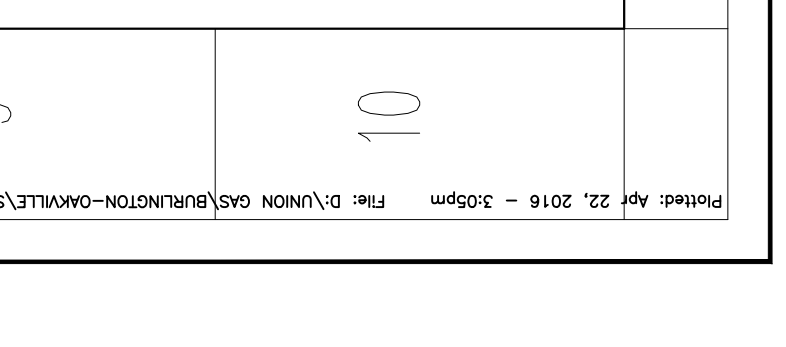
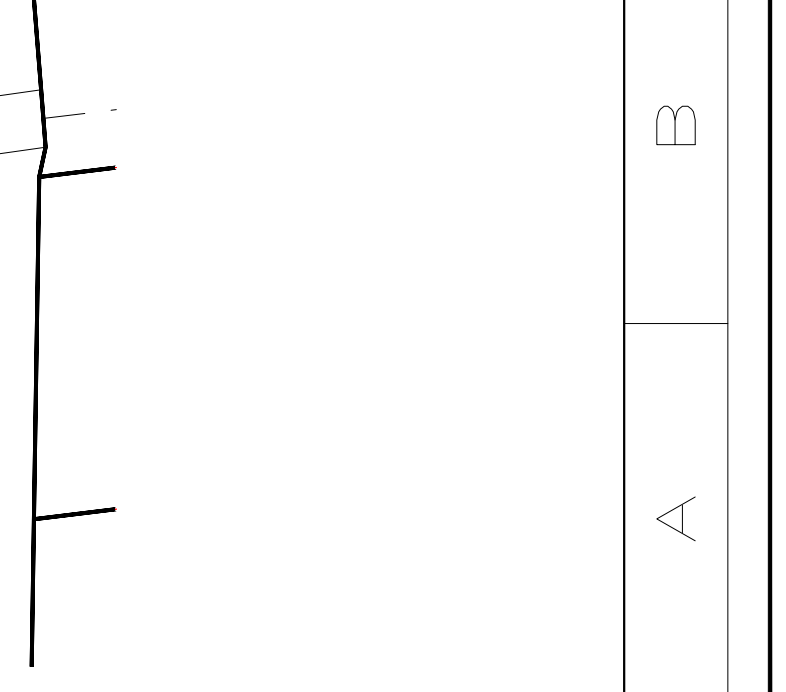
ENGINEER: [Signature]	SCALE: 1:2000 DATE: 2016/04/04
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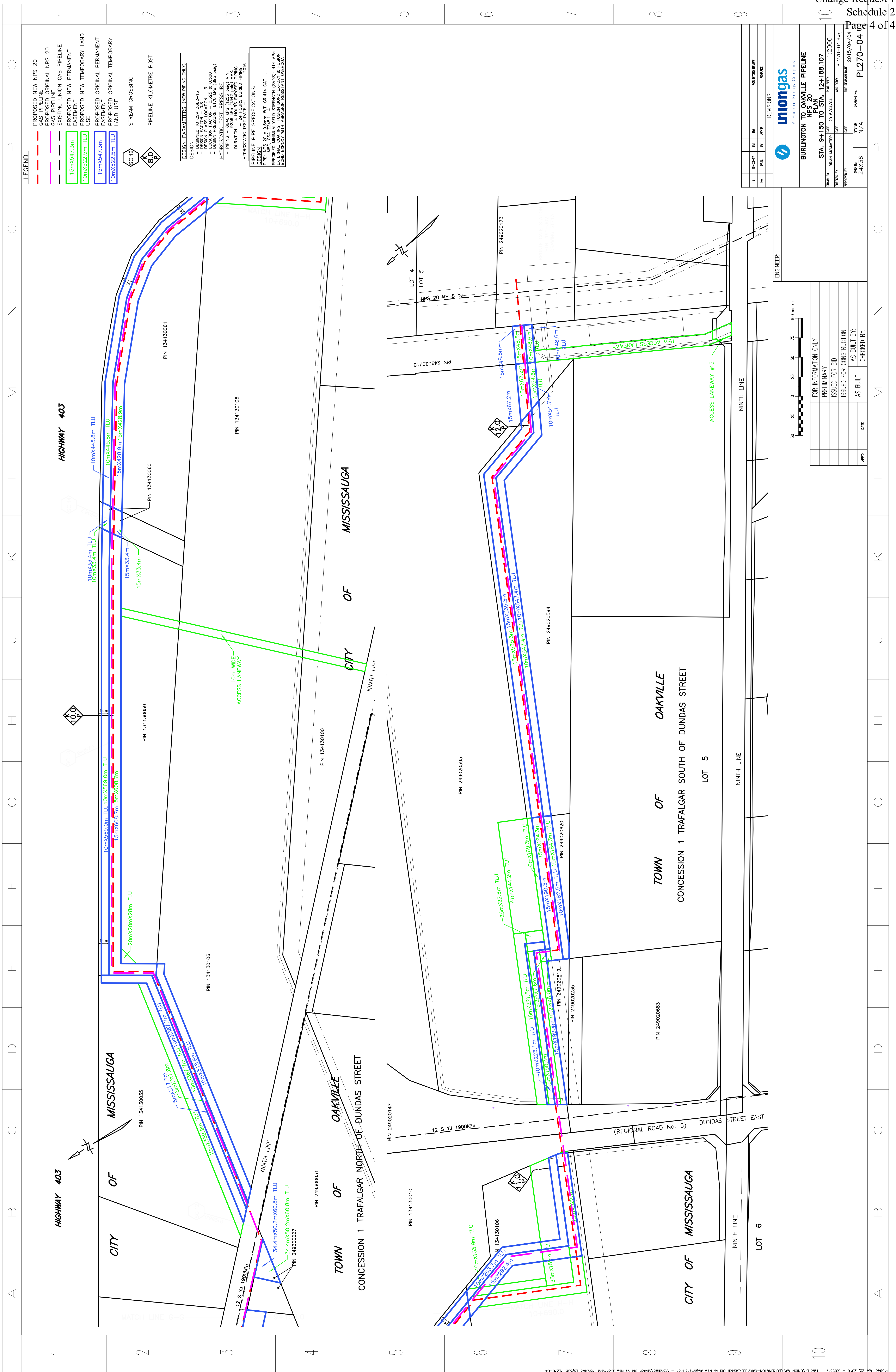
DESIGN PARAMETERS (NEW PIPING ONLY)  
 - DESIGNED TO CSA Z662-15  
 - DESIGN CLASS LOCATION = 3  
 - DESIGN PRESSURE = 10.345 MPa (1494.9 psi)  
 - DESIGN TEMPERATURE = 60°C (140°F)  
 - HYDROSTATIC TEST PRESSURE = 15.5175 MPa (2242.35 psi)  
 - PIPING = 8640 Rp (1253 Rp) MIN.  
 - DURATION = 4 HOURS BURIED PIPING  
 - HYDROSTATIC TEST SPECIFICATIONS:  
 - TEST PRESSURE = 1.5 x DESIGN PRESSURE  
 - PIPE: NPS 20 x 9.5mm W.T. OR 414 CAT II  
 - SPECIFIED MINIMUM TENSILE STRENGTH (SMYS): 414 MPa  
 - EXTERNAL COATING: FUSION BOND EXPOXY & FUSION BOND POWDER WITH AMBIENT RESISTANT OVERCOAT

DESIGN PARAMETERS (EXISTING PIPING)  
 - DESIGN CLASS LOCATION = 3  
 - DESIGN PRESSURE = 10.345 MPa (1494.9 psi)  
 - DESIGN TEMPERATURE = 60°C (140°F)  
 - HYDROSTATIC TEST PRESSURE = 15.5175 MPa (2242.35 psi)  
 - PIPING = 8640 Rp (1253 Rp) MIN.  
 - DURATION = 4 HOURS BURIED PIPING  
 - HYDROSTATIC TEST SPECIFICATIONS:  
 - TEST PRESSURE = 1.5 x DESIGN PRESSURE  
 - PIPE: NPS 20 x 9.5mm W.T. OR 414 CAT II  
 - SPECIFIED MINIMUM TENSILE STRENGTH (SMYS): 414 MPa  
 - EXTERNAL COATING: FUSION BOND EXPOXY & FUSION BOND POWDER WITH AMBIENT RESISTANT OVERCOAT

LEGEND  
 - PROPOSED NEW NPS 20 GAS PIPELINE  
 - PROPOSED ORIGINAL NPS 20 GAS PIPELINE  
 - EXISTING UNION GAS PIPELINE  
 - PROPOSED NEW PERMANENT EASEMENT  
 - PROPOSED NEW TEMPORARY LAND USE  
 - PROPOSED ORIGINAL PERMANENT EASEMENT  
 - PROPOSED ORIGINAL TEMPORARY LAND USE  
 - STREAM CROSSING  
 - PIPELINE KILOMETRE POST







**LEGEND**

- PROPOSED NEW NPS 20 GAS PIPELINE
- PROPOSED ORIGINAL NPS 20 GAS PIPELINE
- EXISTING UNION GAS PIPELINE
- PROPOSED NEW PERMANENT EASEMENT
- PROPOSED NEW TEMPORARY LAND USE
- PROPOSED ORIGINAL PERMANENT EASEMENT
- PROPOSED ORIGINAL TEMPORARY LAND USE
- STREAM CROSSING
- PIPELINE KILOMETRE POST

**DESIGN PARAMETERS (NEW PIPING ONLY)**

- DESIGN TO CSA Z662-15
- DESIGN CLASS LOCATION = 3
- DESIGN PRESSURE = 1000 kPa & 6900 kPa
- LOCAL PRESSURE = 1000 kPa (at P44)

**HYDROSTATIC TEST PRESSURE**

- PIPING = 8640 kPa (1253 psig) MIN.
- DURATION = 4 HOURS EXPOSED PIPING
- HYDROSTATIC TEST PRESSURE = 2016

**PIPELINE PIPE SPECIFICATIONS:**

**DESIGN**

- PIPE: NPS 20 x 9.5mm W.T. OR 414 CAT II
- SPECIFIED MINIMUM YIELD STRENGTH (SMYS): 414 MPa
- EXTERNAL COATING: FUSION BOND EXPOXY & FUSION BOND EXPOXY WITH AMBIEN RESISTANT OVERCOAT

**REVISIONS**

NO.	DATE	BY	APPD	REMARKS
1	15-02-17	BM	BP	FOR IPRD REVIEW

**uniongas**  
A Spectra Energy Company

**BURLINGTON TO OAKVILLE PIPELINE**  
NPS 20 PLAN

STA. 9+150 TO STA. 12+188.107

DRAWN BY: BRIAN MCMASTER DATE: 2015/04/04 PLOT SCALE: 1:2000

CHECKED BY: DATE: 2015/04/04

APPROVED BY: DATE: 2015/04/04

ISSUE NO.: 24X36

ISSUE DATE: 2015/04/04

ISSUE NO.: N/A

ISSUE DATE: 2015/04/04

**FOR INFORMATION ONLY**

APPD	DATE	AS BUILT BY:	CHECKED BY:

ISSUED FOR BID

ISSUED FOR CONSTRUCTION

AS BUILT



ENGINEER:

**ONTARIO ENERGY BOARD**  
**LEAVE TO CONSTRUCT CHANGE REQUEST**

**Project Name:** Burlington Oakville Pipeline Project

**OEB File Number:** EB-2014-0182

**Change Request:** #2

**Description and Rationale for Change**

Union is proposing to change the version of the Canadian Standards Association Code for determination design and construction of the pipeline from version Z662-11 to the most recent version Z662-15. Also to fix a typographical error, the Maximum Operating Pressure design parameter is to be changed from 6160 KPag to 6170 KPag.

**Construction and Restoration Practices**

This change will not impact any construction procedures.

**Environmental**

No new environmental mitigation measures will be required.

**Consultation**

There are no landowners issues associated with this change.

**Lands**

No additional land rights are required.

**Costs**

These changes will not result in any additional costs to the project.

**Schedule**

These changes will not result in any change to the project in-services date.

**Maps**

No attachments are required for this change request.