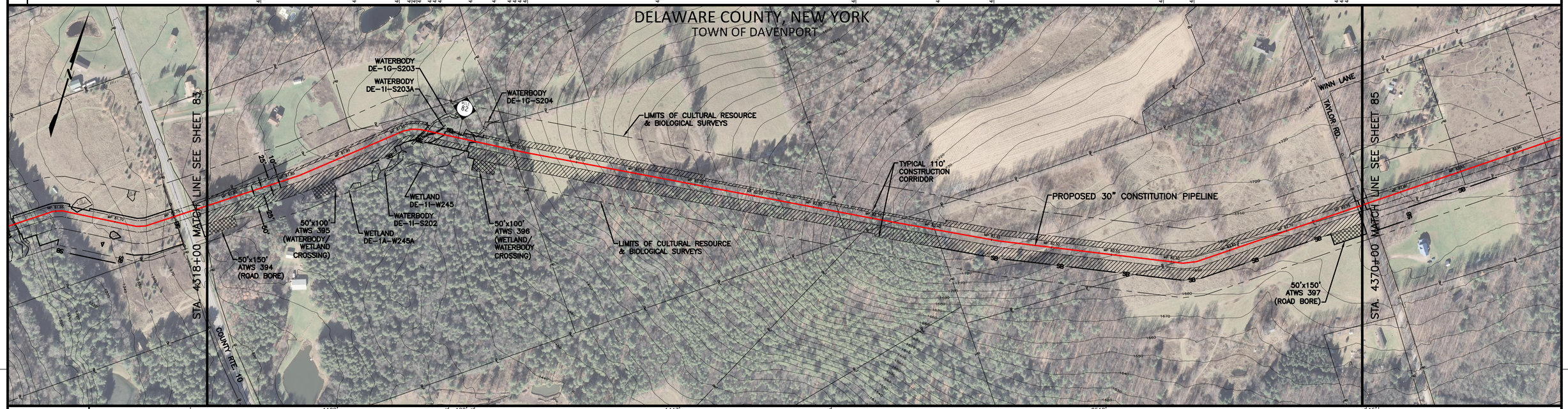
LINE LIST	
4318+00	
NY-DE-165.004	
4332+03	
NY-DE-165.006 (DENIED SURVEY ACCESS)	
4346+55	
NY-DE-165.010	
4348+93	
NY-DE-165.008 (DENIED SURVEY ACCESS)	
4350+83	
NY-DE-165.011 (DENIED SURVEY ACCESS)	
4361+51	
NY-DE-165.012	
4367+02	
NY-DE-165.011 (DENIED SURVEY ACCESS)	
4370+00	

PIPELINE STATIONING
4322+21 P.I. 5°00'00" LT.
4325+43 ℄ DIRT TRAIL
4327+15 P.I. 11°53'24" RT.
4327+51 P.I. 11°53'24" RT.
4328+15 EXIT WATERBODY DE-1G-S203
4329+15 ENTER WATERBODY DE-1G-S203
4329+27 EXIT WATERBODY DE-1G-S203 & WATERBODY DE-1I-S203A
4329+54 EXIT WATERBODY DE-1I-S203A
4329+80 ENTER WETLAND DE-1I-W245
4330+37 EXIT WETLAND DE-1I-W245
4331+39 ℄ DIRT TRAIL
4332+03 ℄ STONE ROW
4332+08 EXISTING FENCE
4332+47 EXIT AGRICULTURAL LAND
4332+51 P.I. 14°20'03" LT.
4339+28 EXIT AGRICULTURAL LAND
4348+35 P.I. 0°33'03" LT.
4351+50 ENTER AGRICULTURAL LAND
4353+69 P.I. 32°21'4" LT.
4361+81 P.I. 12°49'18" LT.
4362+39 P.I. 12°49'18" LT.
4369+76 EXIT AGRICULTURAL LAND
4369+81 ENTER ROW
4369+95 Pr. 237 LT.



MATERIAL	1108' ②	4325+08	120' ⑥	4330+28	1447' ②	4344+75	2510' ①	4369+85	15' ④														
CLASS LOCATION	1																						
LAND USE	UF	OL	UF	WB	UF	WB	UF	PFO	UF	AG	UF	IR	UF	AG	RD								
ENVIRONMENTAL SITE SPECIFIC E & S	2A 5 6 7 18 19 29 29A 32 33 34 35 37 40 58 73				3 12 13 14 18 19 29 34 37 40 46 58A 90 91																		
DEPTH OF COVER	3'	4'	3'	5'	4'	3'	4'	3'	4'	5'													
SOIL TYPE	MoC	WeB	WfC	WeB	MrB	WfC	LaD	LaC	WeC	OpF	OpC	LaC	WeB										

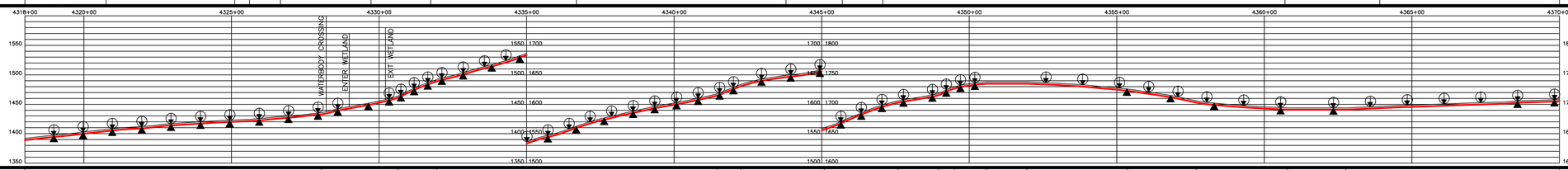
GENERAL E & S FIGURES

18	19	28	29	29A	30	31
37	59	74	75	76	77	86

PROFILE — VERTICAL SCALE IN FEET (0, 100, 200)

GENERAL NOTES

1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSIONS, CONSTRUCTION NOTES, MATERIALS, ETC. THAT SHOULD BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROXIMATE LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORKSPACE ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE ACTUAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.
3. TEMPORARY AND PERMANENT SLOPE BREAKER SPACING IS THE SAME. SLOPE BREAKERS SHALL BE MAINTAINED IN PLACE AT ALL TIMES.



THE LOCATIONS OF TRENCH BREAKERS AND SLOPE BREAKERS SHOWN ON THE PROFILE SHALL BE USED AS A GUIDELINE ONLY. THE ACTUAL LOCATION OF THE BREAKERS SHALL BE DETERMINED IN THE FIELD BASED ON FIELD CONDITIONS, BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT SLOPE BREAKERS (ARROW INDICATES PLAN VIEW FLOW DIRECTION)

PERMANENT TRENCH BREAKER

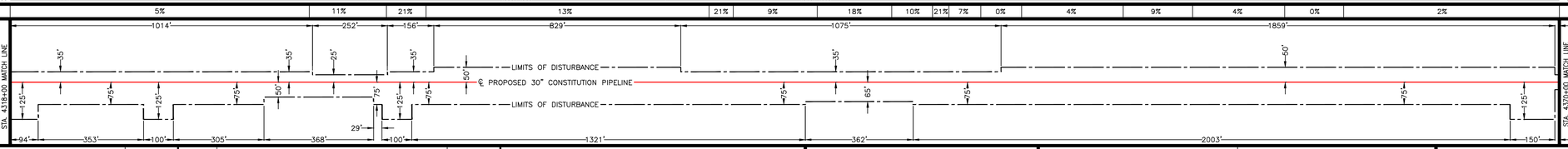
AT A MINIMUM, TRENCH BREAKERS AND SLOPE BREAKERS SHALL BE LOCATED WITHIN 50 FT. OF THE EDGE (BOTH SIDES) OF WETLANDS AND WATERBODIES. ACTUAL LOCATION SHALL BE DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT TRENCH BREAKER SPACING IN AGRICULTURAL LAND	
SLOPE (%)	SPACING (FT)
<5	AS REQ.
5–10	150
>10–15	100
>15–20	80
>20–30	70
>30–40	50
>40–100	40
>100	25

PERMANENT TRENCH / SLOPE BREAKER SPACING	
SLOPE (%)	SPACING (FT)
<5	125
5–10	100
>10–20	75
>20–35	50
>35	25

AVERAGE % SLOPE	5%	11%	21%	13%	21%	9%	18%	10%	21%	7%	0%	4%	9%	4%	0%	2%

WORKSPACE SCHEMATIC — STA. 4318+00 MATCH LINE to STA. 4370+00 MATCH LINE



MATERIAL SUMMARY

ITEM NO.	DESCRIPTION	QTY.
1	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	2510'
2	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	2555'
3	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	0'
4	PIPE, 30" OD, 0.635" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	15'
5	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'
6	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	120'
7	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'
8	PIPE, 30" OD, 0.750" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	0'

SOIL LEGEND

- LaC – Lackawanna flaggy silt loam
- LaD – Lackawanna flaggy silt loam
- MaC – Maplecrest gravelly silt loam
- MrB – Morris flaggy silt loam
- OpC – Oquaga channery silt loam
- OpF – Oquaga channery silt loam
- WeB – Wellsboro channery silt loam
- WeC – Wellsboro channery silt loam
- WfC – Wellsboro and Mardin soils

LAND USE LEGEND

1. AGRICULTURAL LAND (AG)
2. INDUSTRIAL (ID)
3. COMMERCIAL (CM)
4. RESIDENTIAL (RE)
5. ROADS (RD)
6. OPEN WATER (OW)
7. SAND/GRAVEL PITS OR QUARRIES (SG)
8. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURE) (OL)
9. SPECIAL USE (PARKS, GOLF COURSES, MUNICIPAL LAND, ETC.) (SP)
10. FORESTED WETLANDS (PFO)
11. SCRUB-SHRUB WETLANDS (PSS)
12. EMERGENT WETLANDS (PEM)
13. WATERBODY (WB)
14. UPLAND FOREST (UF)
15. INTERIOR FOREST (IR)

0 200 400 600 SCALE IN FEET

GULF INTERSTATE ENGINEERING
HOUSTON, TEXAS

DRAWING NO.	REFERENCE TITLE
26-27-70/001 THRU 26-27-70/022	TYPICAL RIGHT-OF-WAY CROSS SECTIONS

NO.	DATE	BY	REVISION DESCRIPTION	W.O.NO.	CHK.	APP.
3	07/24/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #1 ER	1110415	JRL	TK
4	10/07/13	GIE	ISSUED FOR BID #1	1110415	JRL	TK
5	11/08/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #2 ER	1110415	JRL	TK
6	06/02/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #3 ER	1110415	JRL	TK
7B	07/14/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #4 ER/IFB #3	1110415	JRL	TK

CONSTITUTION PIPELINE COMPANY, LLC
SOIL EROSION AND SEDIMENT CONTROL PLAN
FERC ALIGNMENT SHEETS
PROPOSED 30" NATURAL GAS PIPELINE
STA. 4318+00 TO STA. 4370+00
DELAWARE COUNTY, NEW YORK

CONSTITUTION PIPELINE

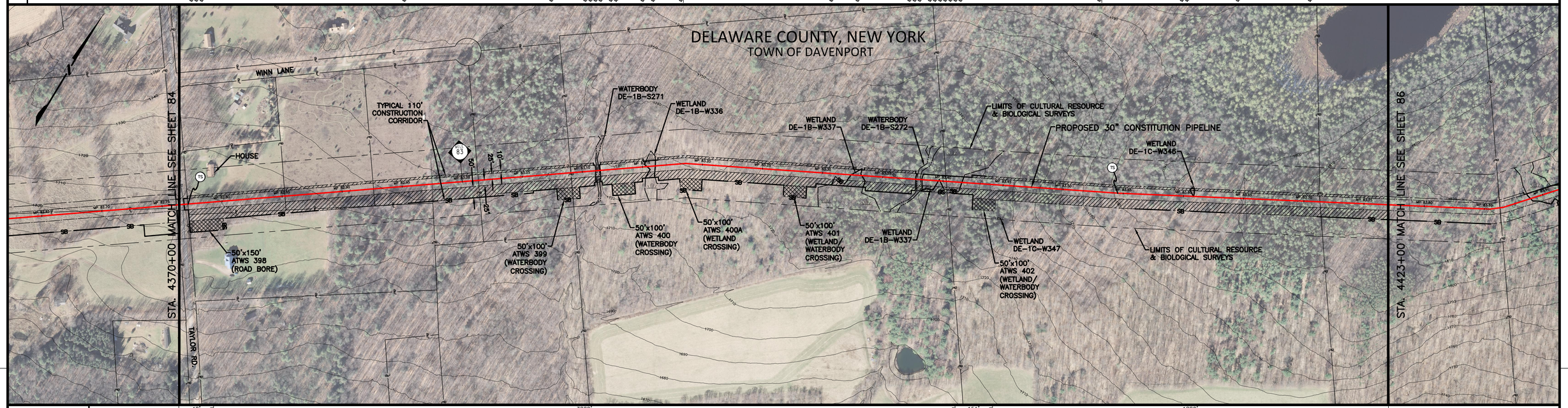
DRAWN BY: GIE	DATE: 09/26/12	ISSUED FOR BID:	SCALE 1" = 200'
CHECKED BY: GIE	DATE: 09/27/12	ISSUED FOR CONSTRUCTION:	
APPROVED BY:	DATE:	DRAWING NUMBER: 26-03-70/0001	SHEET 84 OF 126
W.O.: 1110415			

LINE LIST

TAYLOR RD. | 4370+00 | 4370+34 | NY-DE-175.002 (DENIED SURVEY ACCESS) | 4374+61 | NY-DE-175.004 (DENIED SURVEY ACCESS) | 4378+50 | NY-DE-179.001 | 4383+11 | NY-DE-179.002 (DENIED SURVEY ACCESS) | 4387+18 | NY-DE-180.000 | 4403+67 | NY-DE-181.000 (RESCINDED SURVEY ACCESS) | 4420+06 | NY-DE-182.000 | 4423+00

PIPELINE STATIONING

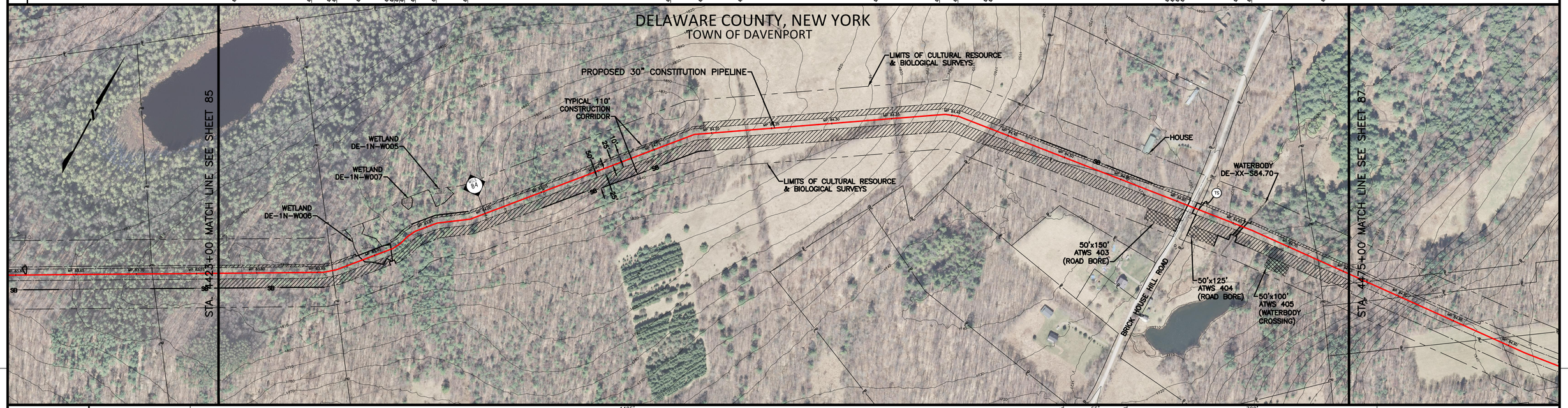
4370+12 ℄ TAYLOR RD.
4370+18 TAYLOR ROAD LINE
4370+28 PP. 94' RT.
4381+08 ℄ STONE ROW
4387+17 ℄ STONE ROW
4388+04 TOP OF SLOPE
4388+22 ENTER WATERBODY DE-1B-S271
4388+34 EXIT WATERBODY DE-1B-S271
4388+42 TOP OF SLOPE
4388+62 TOP OF SLOPE
4390+52 ENTER WETLAND DE-1B-W336
4390+89 EXIT WETLAND DE-1B-W336
4392+21 P.I. 8°36'14" RT.
4399+49 ENTER WETLAND DE-1B-W337
4399+96 EXIT WETLAND DE-1B-W337
4402+38 TOP OF SLOPE
4402+46 ENTER WATERBODY DE-1B-S272
4402+48 TOP OF SLOPE
4402+50 TOP OF SLOPE
4402+53 EXIT WATERBODY DE-1B-S272
4403+19 ENTER WETLAND DE-1B-W337
4403+34 EXIT WETLAND DE-1B-W337
4404+35 EXIT WETLAND DE-1B-W337
4411+19 P.I. 1°30'52" LT.
4414+51 ENTER WETLAND DE-1C-W346
4414+52 EXIT WETLAND DE-1C-W346
4416+79 ℄ STONE ROW
4420+06 ℄ STONE ROW



| | | |

LINE LIST	
4423+00	
NY-DE-182.000	
4427+97	
NY-DE-183.000	
4458+43	
NY-DE-184.000	
4463+33	
NY-DE-185.000 (DENIED SURVEY ACCESS)	
BRICK HOUSE HILL RD.	
4467+38	
4467+89	
NY-DE-186.000 (DENIED SURVEY ACCESS)	
4473+57	
NY-DE-187.000	
4475+00	

PIPELINE STATIONING	
4423+99	℄ STONE ROW
4427+53 P.I. 10°05'02" LT.	
4427+96 ℄ STONE ROW / 4428+12 P.I. 10°05'02" LT.	
4429+36 ENTER WETLAND DE-1N-W006	
4430+20 EXIT WETLAND DE-1N-W006 / 4430+79 P.I. 14°00'00" LT. / 4431+20 P.I. 14°00'00" RT. / 4431+80 P.I. 14°00'00" LT.	
4432+02 P.I. 17°29'59" RT.	
4433+05 P.I. 14°00'00" RT.	
4434+50 P.I. 13°59'59" LT.	
4445+00 P.I. 16°05'33" RT.	
4445+49 ENTER AGRICULTURAL LAND	
4447+27 ℄ STONE ROW	
4453+76 ℄ STONE ROW	
4456+04 P.I. 17°53'19" RT.	
4456+62 P.I. 17°53'19" RT.	
4458+11 EXIT AGRICULTURAL LAND / 4458+44 ℄ STONE ROW	
4467+51 P.O.T. BRICK HOUSE HILL RD. / 4467+57 ℄ BURIED TELE LINE / 4467+70 ℄ BURIED TELE LINE	
4470+00 ℄ WATERBODY DE-XX-S84.70	
4470+40 P.I. 7°56'24" RT.	
4474+32 ℄ STONE ROW	



MATERIAL	4425' ①																								720' ①
CLASS LOCATION	1																								
LAND USE	IR		PFO	IR				UF	AG						UF				OL UF OL RD OL UF OL	UF	OL WB OL UF OL	UF			IR
ENVIRONMENTAL SITE SPECIFIC E & S		3 12 13 14 18 / 19 29 34 37 40 / 46 58A 90 91																		15A / 44 45		2A 5 6 7 18 / 19 29 29A 32 33 34 / 35 37 40 58 73				
DEPTH OF COVER	3'		4'	3'				4'	3'					4'	5'	4'	3'	4'	5'	4'	3'	4'	3'		
SOIL TYPE	MnB	MkB		MnB				HcC			LoB	LoC	MdC	MdB	MsB	MdB				MrB		No		WfC	

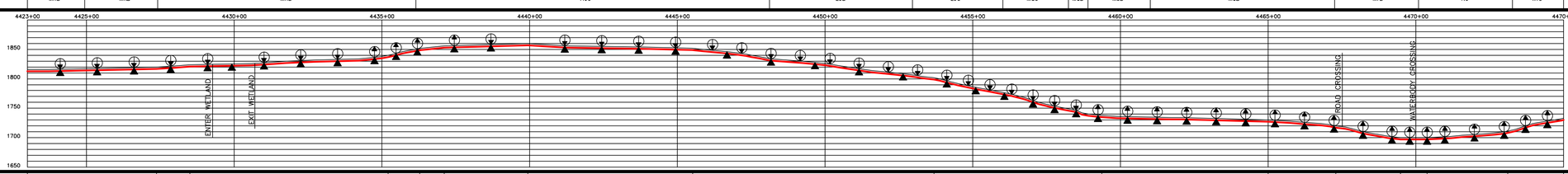
GENERAL E & S FIGURES

18	19	28	29	29A	30	31
37	59	74	75	76	77	86

PROFILE — VERTICAL SCALE IN FEET (0, 100, 200)

GENERAL NOTES

1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSIONS, CONSTRUCTION NOTES, MATERIALS, ETC. THAT SHOULD BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROXIMATE LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORKSPACE ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE ACTUAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.
3. TEMPORARY AND PERMANENT SLOPE BREAKER SPACING IS THE SAME. SLOPE BREAKERS SHALL BE MAINTAINED IN PLACE AT ALL TIMES.



THE LOCATIONS OF TRENCH BREAKERS AND SLOPE BREAKERS SHOWN ON THE PROFILE SHALL BE USED AS A GUIDELINE ONLY. THE ACTUAL LOCATION OF THE SLOPE BREAKERS SHALL BE DETERMINED IN THE FIELD BASED ON CONDITIONS, BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT SLOPE BREAKERS (ARROW INDICATES PLAN VIEW FLOW DIRECTION)

PERMANENT TRENCH BREAKER

AT A MINIMUM, TRENCH BREAKERS AND SLOPE BREAKERS SHALL BE LOCATED WITHIN 50 FT. OF THE EDGE (BOTH SIDES) OF WETLANDS AND WATERBODIES. ACTUAL LOCATION SHALL BE DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT TRENCH BREAKER SPACING IN AGRICULTURAL LAND

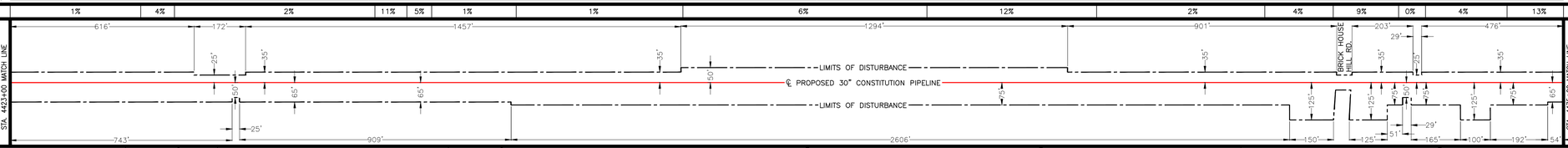
SLOPE (%)	SPACING (FT)
<5	AS REQ.
5–10	150
>10–15	100
>15–20	80
>20–30	70
>30–40	50
>40–100	40
>100	25

PERMANENT TRENCH / SLOPE BREAKER SPACING

SLOPE (%)	SPACING (FT)
<5	125
5–10	100
>10–20	75
>20–35	50
>35	25

AVERAGE % SLOPE	1%	4%	2%	11%	5%	1%	1%	6%	12%	2%	4%	9%	0%	4%	13%

WORKSPACE SCHEMATIC



MATERIAL SUMMARY

ITEM NO.	DESCRIPTION	QTY.	ITEM NO.	DESCRIPTION	QTY.
1	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	5145'			
2	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	0'			
3	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	0'			
4	PIPE, 30" OD, 0.635" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	55'			
5	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
6	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
7	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
8	PIPE, 30" OD, 0.750" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	0'			

SOIL LEGEND

HcC – Halcott, Mongaup, and Vly soils
LoB – Lordstown channery silt loam
LoC – Lordstown channery silt loam
MdB – Mardin channery silt loam
MdC – Mardin channery silt loam
MkB – Middlebrook–Mongaup complex
MnB – Mongaup channery loam
MrB – Morris flaggy silt loam
MsB – Morris and Volusia soils
No – Norchip silt loam
WfC – Wellsboro and Mardin soils

LAND USE LEGEND

1. AGRICULTURAL LAND (AG)
2. INDUSTRIAL (ID)
3. COMMERCIAL (CM)
4. RESIDENTIAL (RE)
5. ROADS (RD)
6. OPEN WATER (OW)
7. SAND/GRAVEL PITS OR QUARRIES (SG)
8. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURE) (OL)
9. SPECIAL USE (PARKS, GOLF COURSES, MUNICIPAL LAND, ETC.) (SP)
10. FORESTED WETLANDS (PFO)
11. SCRUB-SHRUB WETLANDS (PSS)
12. EMERGENT WETLANDS (PEM)
13. WATERBODY (WB)
14. UPLAND FOREST (UF)
15. INTERIOR FOREST (IR)

0 200 400 600
SCALE IN FEET

GULF INTERSTATE ENGINEERING
HOUSTON, TEXAS

DRAWING NO.	REFERENCE TITLE
26–27–70/001 THRU 26–27–70/022 26–07–85/NY–DE–185.005–1–B	TYPICAL RIGHT–OF–WAY CROSS SECTIONS BRICK HOUSE HILL ROAD

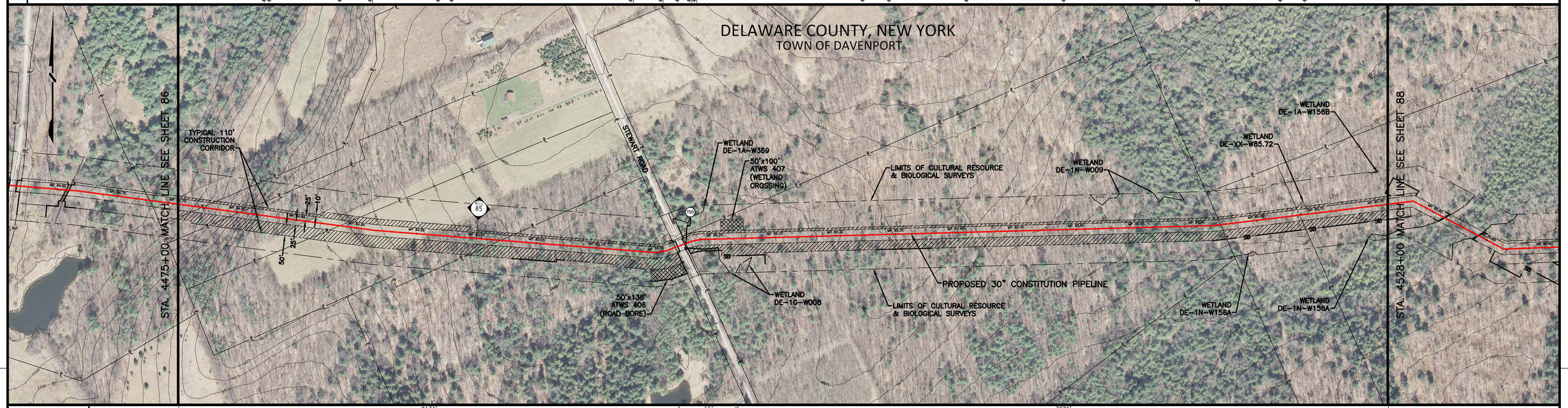
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK	APP
3	07/24/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #1 ER	1110415	JRL	TK
4	10/07/13	GIE	ISSUED FOR BID #1	1110415	JRL	TK
5	11/08/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #2 ER	1110415	JRL	TK
6	06/02/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #3 ER	1110415	JRL	TK
7B	07/14/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #4 ER/IFB #3	1110415	JRL	TK

CONSTITUTION PIPELINE COMPANY, LLC
SOIL EROSION AND SEDIMENT CONTROL PLAN
FERC ALIGNMENT SHEETS
PROPOSED 30" NATURAL GAS PIPELINE
STA. 4423+00 TO STA. 4475+00
DELAWARE COUNTY, NEW YORK

CONSTITUTION PIPELINE

DRAWN BY: GIE	DATE: 09/26/12	ISSUED FOR BID:	SCALE: 1" = 200'
CHECKED BY: GIE	DATE: 09/27/12	ISSUED FOR CONSTRUCTION:	
APPROVED BY:	DATE:	DRAWING NUMBER: 26–03–70/0001	SHEET 86 OF 126
W.O.: 1110415			

LINE LIST	PIPELINE STATIONING
NY-DE-187.000	4475+00
NY-DE-188.000	4475+90
	4477+58
NY-DE-189.000	4481+99
NY-DE-190.000	4485+48 ℄ STONE ROW; 4485+59 ENTER AGRICULTURAL LAND
	4482+42 ℄ STONE ROW
	4483+53 P.I. 2°29'22" LT.
	4486+74 EXIT AGRICULTURAL LAND; 4487+03 ℄ STONE ROW
NY-DE-191.000 (RESCINDED SURVEY ACCESS)	4489+08
	4495+81 P.I. 12°32'08" LT.
STEWART RD.	4496+30 P.I. 12°32'08" LT.; 4497+01 ℄ STEWART RD.
	4497+53 P.I. 5°22'13" RT.; 4497+63 P.I. 9°29'13" RT.
NY-DE-193.000	4506+00 ℄ GRASS PATH; 4506+38 ℄ STONE ROW; 4510+06 ℄ STONE ROW; 4514+42 ℄ STONE ROW; 4520+46 P.I. 5°27'49" LT.
	4520+73
NY-DE-194.000	4523+86 ENTER WETLAND DE-XX-W85.72; 4524+62 EXIT WETLAND DE-XX-W85.72
	4524+22
NY-DE-195.000	4528+00

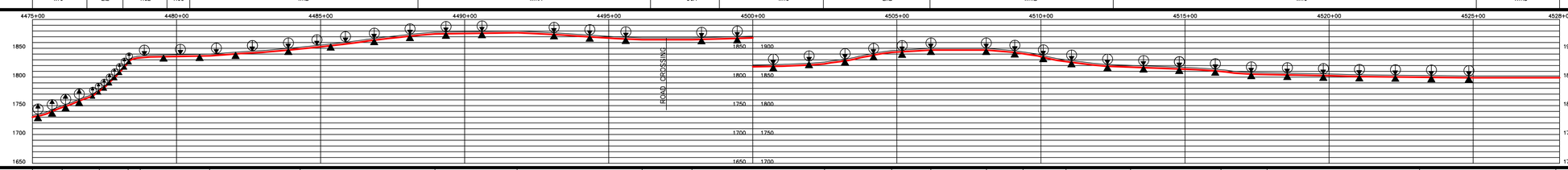


MATERIAL	2174' ①																												4436+74; 55' ④; 4437+29; 3071' ①
CLASS LOCATION	1																												
LAND USE	IR	UF			AG			UF			IR	UF		RD	UF						IR						PFO	IR
ENVIRONMENTAL SITE SPECIFIC E & S														15A; 44; 45	3; 12; 13; 14; 18; 19; 29; 34; 37; 40; 46; 58A; 90; 91													
DEPTH OF COVER	3'				4'			3'						5'	3'													
SOIL TYPE	WfC	EIE	HcE	HcC	WhB			WmA						OeA	WnC			LhB		WmB			WnC					WmB

GENERAL E & S FIGURES

18	19	28	29	29A	30	31
37	59	74	75	76	77	86

PROFILE — VERTICAL SCALE IN FEET (0, 100, 200)



GENERAL NOTES

1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSIONS, CONSTRUCTION NOTES, MATERIALS, ETC. THAT SHOULD BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROXIMATE LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORKSPACE ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE ACTUAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.
3. TEMPORARY AND PERMANENT SLOPE BREAKER SPACING IS THE SAME. SLOPE BREAKERS SHALL BE MAINTAINED IN PLACE AT ALL TIMES.

THE LOCATIONS OF TRENCH BREAKERS AND SLOPE BREAKERS SHOWN ON THE PROFILE SHALL BE USED AS A GUIDELINE ONLY. THE ACTUAL LOCATION OF THE BREAKERS SHALL BE DETERMINED IN THE FIELD BASED ON FIELD CONDITIONS, BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT SLOPE BREAKERS (ARROW INDICATES PLAN VIEW FLOW DIRECTION)

PERMANENT TRENCH BREAKER

NOT A MINIMUM. TRENCH BREAKERS AND SLOPE BREAKERS SHALL BE LOCATED WITHIN 50 FT. OF THE EDGE (BOTH SIDES) OF WETLANDS AND WATERBODIES. ACTUAL LOCATION SHALL BE DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND CONTRACTOR.

PERMANENT TRENCH BREAKER SPACING IN AGRICULTURAL LAND

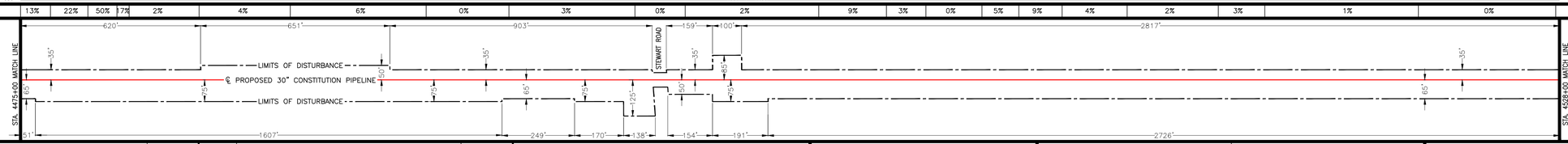
SLOPE (%)	SPACING (FT)
<5	AS REQ.
5–10	150
>10–15	100
>15–20	80
>20–30	70
>30–40	50
>40–100	40
>100	25

PERMANENT TRENCH / SLOPE BREAKER SPACING

SLOPE (%)	SPACING (FT)
<5	125
5–10	100
>10–20	75
>20–35	50
>35	25

AVERAGE % SLOPE	13%	22%	50%	17%	2%	4%	6%	0%	3%	0%	2%	9%	3%	0%	5%	9%	4%	2%	3%	1%	0%

WORKSPACE SCHEMATIC



MATERIAL SUMMARY

ITEM NO.	DESCRIPTION	QTY.	ITEM NO.	DESCRIPTION	QTY.
1	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	5245'			
2	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	0'			
3	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING	0'			
4	PIPE, 30" OD, 0.635" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	55'			
5	PIPE, 30" OD, 0.529" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
6	PIPE, 30" OD, 0.562" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
7	PIPE, 30" OD, 0.635" WT., X-70, w/15-17 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND WEIGHT COATING	0'			
8	PIPE, 30" OD, 0.750" WT., X-70, w/10 MILS FBE EXTERNAL COATING AND 1.5 MILS INTERNAL COATING AND 40 MILS ARO COATING	0'			

SOIL LEGEND

EIE – Elka-Vly channery silt loams
HcC – Halcott, Mongaup, and Vly soils
HcE – Halcott, Mongaup, and Vly soils
LhB – Lewbeach channery loam
OeA – Onteora channery silt loam
WfC – Wellsboro and Mardin soils
WhB – Willdin channery silt loam
WmA – Willowemoc channery silt loam
WmB – Willowemoc channery silt loam
WnC – Willowemoc and Willdin soils

LAND USE LEGEND

1. AGRICULTURAL LAND (AG)
2. INDUSTRIAL (ID)
3. COMMERCIAL (CM)
4. RESIDENTIAL (RE)
5. ROADS (RD)
6. OPEN WATER (OW)
7. SAND/GRAVEL PITS OR QUARRIES (SG)
8. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURE) (OL)
9. SPECIAL USE (PARKS, GOLF COURSES, MUNICIPAL LAND, ETC.) (SP)
10. FORESTED WETLANDS (PFO)
11. SCRUB-SHRUB WETLANDS (PSS)
12. EMERGENT WETLANDS (PEM)
13. WATERBODY (WB)
14. UPLAND FOREST (UF)
15. INTERIOR FOREST (IR)

0 200 400 600
SCALE IN FEET

GULF INTERSTATE ENGINEERING
HOUSTON, TEXAS

DRAWING NO.	REFERENCE TITLE
26-27-70/001 THRU 26-27-70/022 26-07-85/NY-DE-191.003-1-B	TYPICAL RIGHT-OF-WAY CROSS SECTIONS STEWART ROAD

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK	APP
3	07/24/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #1 ER	1110415	JRL	TK
4	10/07/13	GIE	ISSUED FOR BID #1	1110415	JRL	TK
5	11/08/13	GIE	ISSUED FOR SUPPLEMENTAL FERC #2 ER	1110415	JRL	TK
6	06/02/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #3 ER	1110415	JRL	TK
7B	07/14/14	GIE	ISSUED FOR SUPPLEMENTAL FERC #4 ER/IFB #3	1110415	JRL	TK

CONSTITUTION PIPELINE COMPANY, LLC
SOIL EROSION AND SEDIMENT CONTROL PLAN
FERC ALIGNMENT SHEETS
PROPOSED 30" NATURAL GAS PIPELINE
STA. 4475+00 TO STA. 4528+00
DELAWARE COUNTY, NEW YORK

CONSTITUTION PIPELINE

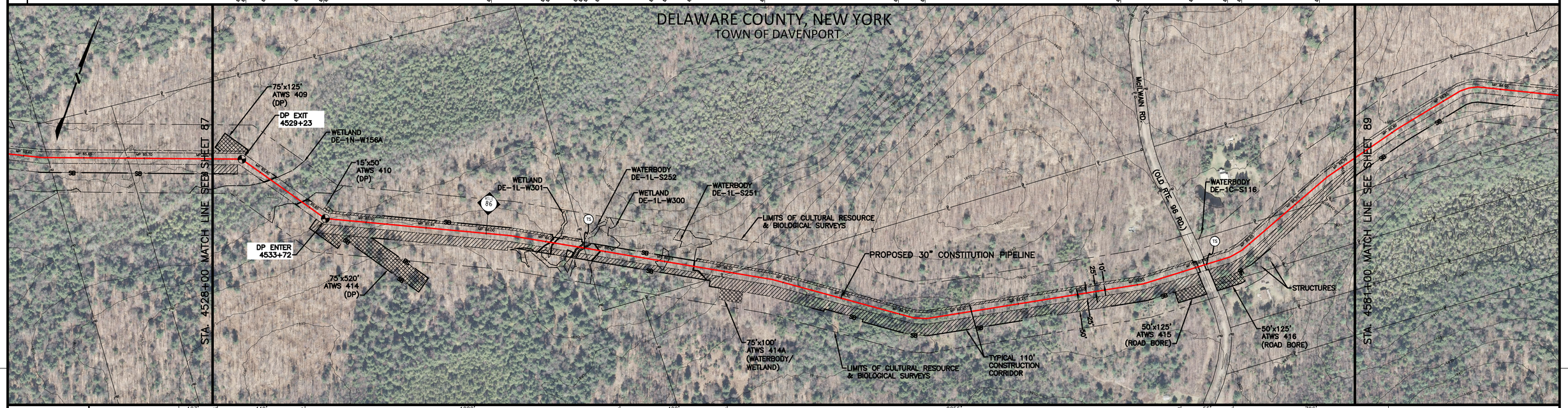
DRAWN BY: GIE	DATE: 09/26/12	ISSUED FOR BID:	SCALE: 1" = 200'
CHECKED BY: GIE	DATE: 09/27/12	ISSUED FOR CONSTRUCTION:	
APPROVED BY:	DATE:	DRAWING NUMBER: 26-03-70/0001	SHEET 87 OF 126
W.O.: 1110415			

LINE LIST

4528+00 | NY-DE-195.000 | 4545+15 | NY-DE-196.001 | 4551+70 | NY-DE-197.000 (DENIED SURVEY ACCESS) | McILWAIN RD. (OLD ROUTE 96 RD.) 4572+76 | 4573+00 NY-DE-199.000 (DENIED SURVEY ACCESS) | 4577+22 | NY-DE-198.000 | 4581+00

PIPELINE STATIONING

4529+23 DP EXIT
4529+23 P.I. N43°53'52" RT.
4530+81 ENTER WETLAND DE-1N-W156A
4532+44 EXIT WETLAND DE-1N-W156A
4533+72 P.I. X0°04'12" LT.
4533+72 DP ENTER
4541+86 P.I. 4°10'02" RT.
4543+65 ENTER WETLAND DE-1L-W301
4543+78 EXIT WETLAND DE-1L-W301
4544+98 ENTER WATERBODY DE-1L-S252
4545+00 EXIT WATERBODY DE-1L-S252
4545+10 EXIT WATERBODY DE-1L-S252
4545+85 ENTER WETLAND DE-1L-W300
4548+47 EXIT WETLAND DE-1L-W300
4549+85 ENTER WETLAND DE-1L-W300
4550+00 EXIT WETLAND DE-1L-W300
4553+50 P.I. 9°43'30" RT.
4559+92 P.I. 12°08'32" LT.
4560+50 P.I. 12°08'32" LT.
4570+12 P.I. 8°11'18" LT.
4572+76 ℄ MCILWAIN RD. (OLD ROUTE 96 RD.)
4574+09 P.I. 11°45'07" LT.
4574+68 P.I. 11°45'07" LT.
4579+62 P.I. 8°14'48" RT.



MATERIAL	123' ①	4529+23 1-35-H	4529+23 1-35-H	449' ④	4533+72 1-30-H	4533+72 1-30-H	1222' ①	4545+84	400' ⑤	4549+84	2255' ①	4572+49	55' ④	4573+04	796' ①										
CLASS LOCATION	1																								
LAND USE	IR		PFO	IR					PFO	IR	WB	IR	PFO		UF	PFO	UF		IR	UF		IR	UF	RD	UF	IR
ENVIRONMENTAL SITE SPECIFIC E & S	3 12 13 14 18 19 29 34 37 40 46 58A 90 91						3 12 13 14 18 19 29 34 37 40 46 58A 90 91				1 2 5 6 7 18 19 29A 32 33 34 35 37 40 58 73		3 12 13 14 18 19 29 34 37 40 46 58A 90 91											15A 44 45		
DEPTH OF COVER	3'		4'	3'					4'	3'	5'	4'						3'						5'	3'	
SOIL TYPE	WmB		No	OfB		LkC			WnC			OfB		WnC		MnD		MnB		WmB			WmA		WmB	VlB

GENERAL E & S FIGURES
18 19 28 29 29A 30 31
37 59 74 75 76 77 86

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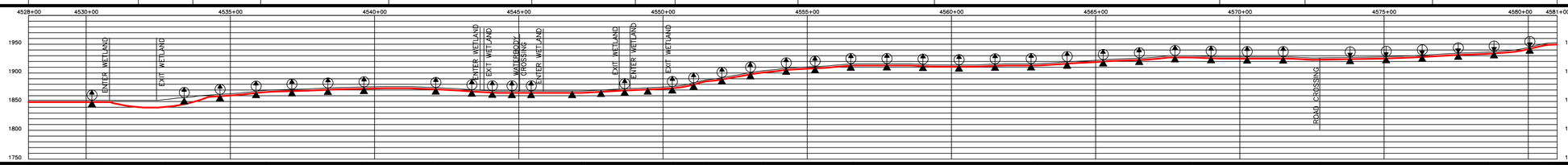
PROFILE — VERTICAL SCALE IN FEET (0, 100, 200)



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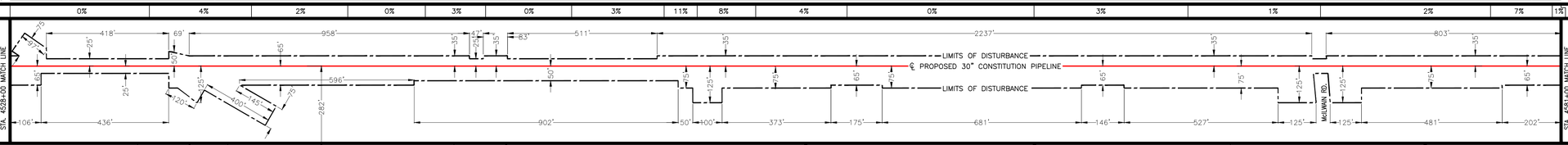
>35	25

AVERAGE % SLOPE	0%	4%	2%	0%	3%	0%	3%	11%	8%	4%	0%	3%	1%	2%	7%	1%

WORKSPACE SCHEMATIC



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SOIL LEGEND

LkC – Lewbeach and Lewbath soils
MnB – Mongaup channery loam
MnD – Mongaup channery loam
No – Norchip silt loam
OfB – Onteora and Ontusia soils
VlB – Vly channery silt loam
WmA – Willowemoc channery silt loam
WmB – Willowemoc channery silt loam
WnC – Willowemoc and Wildin soils

LAND USE LEGEND

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15. INTERIOR FOREST (IR)

0 200 400 600
SCALE IN FEET

GULF INTERSTATE ENGINEERING
HOUSTON, TEXAS

DRAWING NO.	REFERENCE TITLE
26–27–70/001 THRU 26–27–70/022 26–07–85/NY–DE–197.003–1–B	TYPICAL RIGHT–OF–WAY CROSS SECTIONS McILWAIN ROAD

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CONSTITUTION PIPELINE COMPANY, LLC
SOIL EROSION AND SEDIMENT CONTROL PLAN
FERC ALIGNMENT SHEETS
PROPOSED 30" NATURAL GAS PIPELINE
STA. 4528+00 TO STA. 4581+00
DELAWARE COUNTY, NEW YORK

CONSTITUTION PIPELINE

DRAWN BY: GIE	DATE: 09/26/12	ISSUED FOR BID:	SCALE: 1" = 200'
CHECKED BY: GIE	DATE: 09/27/12	ISSUED FOR CONSTRUCTION:	
APPROVED BY:	DATE:	DRAWING NUMBER: 26–03–70/0001	SHEET 88 OF 126
W.O.: 1110415			