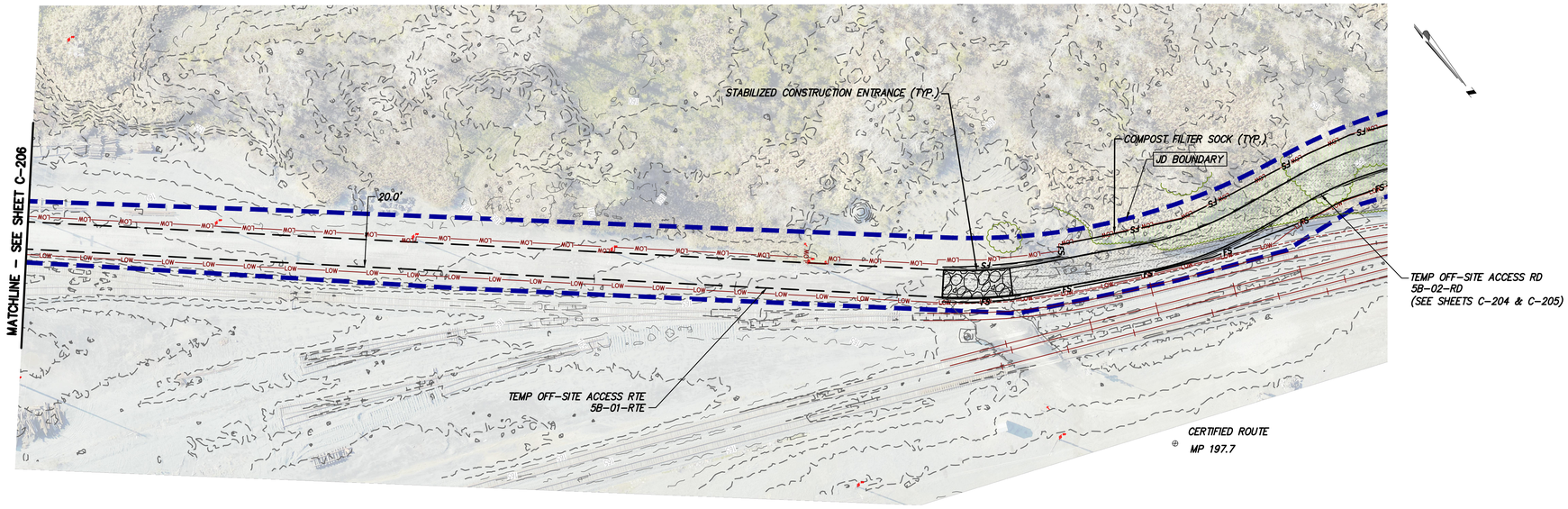

TEMP OFF-SITE ACCESS RTE 5B-01-RTE PLAN VIEW

SCALE: 1" = 50'

0 50 100
Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

STATE OF NEW YORK · THOMAS A. KELLY · 106559 · LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK · NATHANIEL DALE HAVENER · 103692 · LICENSED PROFESSIONAL ENGINEER

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 9 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

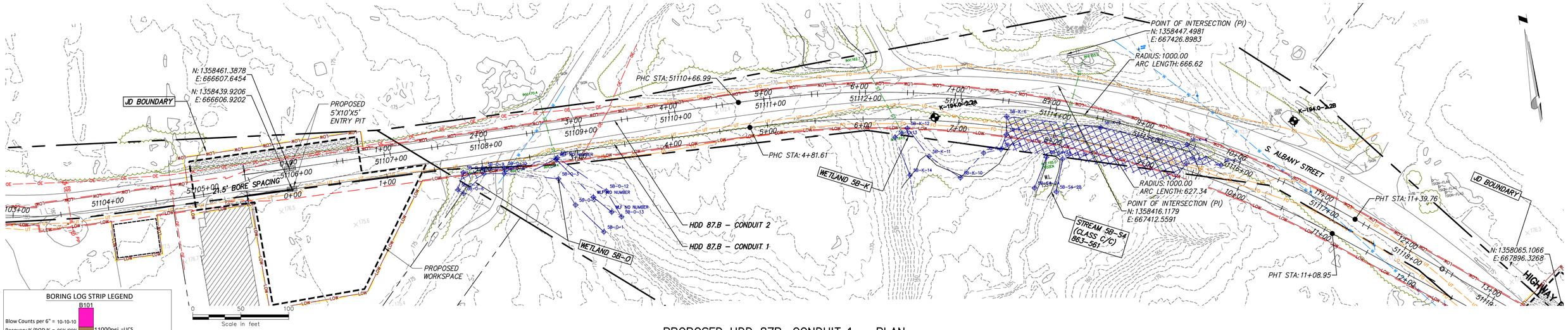
TEMP OFF-SITE ACCESS ROUTES (5B-01-RTE)

KIEWIT PROJECT NO. 21162

DRAWING NO. **C-207**

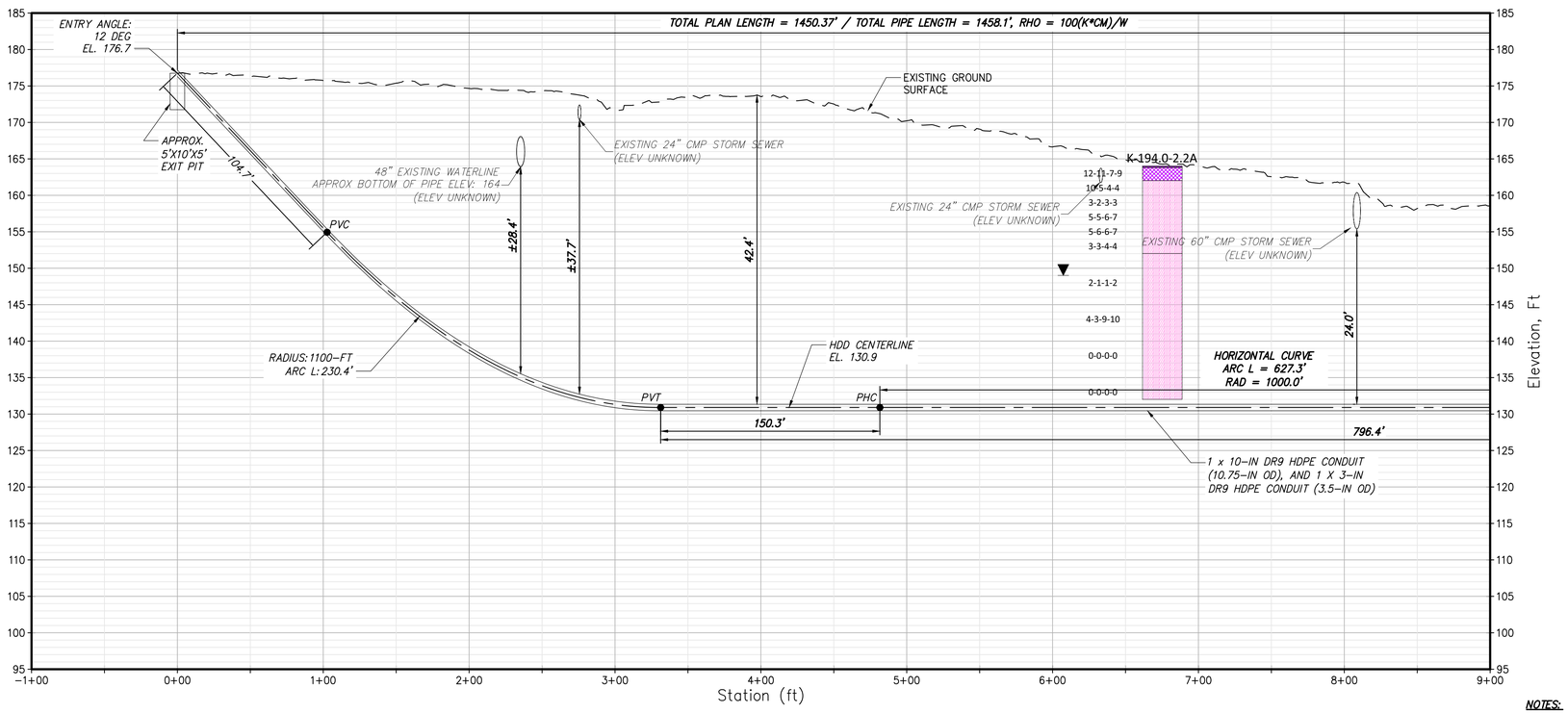
DRAWN BY: AR | DESIGNED BY: BV | APPROVED BY: TK | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: P:\KIE-CHPE\3-DES\02 RDWY\SHTS\P5B\21162_5B_C_AR_206-207.DWG Saved: 6/8/2023 8:49:11 AM Plotted: 6/8/2023 9:57:03 AM Current User: Fernando.Rivas1 LastSavedBy: Fernando.Rivas1



PROPOSED HDD 87B, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 87B, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration
Boring ground elevations are from survey data and topo maps (or approximated from Google Earth when topo or survey aren't available)

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
CH	Fat CLAY
CH-MH	SILTY Fat CLAY
CL	Lean CLAY
CL-ML	SILTY CLAY
CONCRETE	Concrete
Fill	Fill
GC	CLAYEY GRAVEL
GC-GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
GP-GC	Poorly Graded Gravel with CLAY
GP-GM	Poorly Graded GRAVEL with SILT
GW	Well Graded GRAVEL
GW-GC	Well Graded GRAVEL with CLAY
GW-GM	Well Graded GRAVEL with SILT
Limestone	Limestone
MH	Elastic SILT
ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC-SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
SM	SILTY SAND
SP	Poorly Graded SAND
SP-SC	Poorly Graded SAND with CLAY
SP-SM	Poorly Graded SAND with SILT
SW	Well graded SAND
SW-SC	Well Graded SAND with CLAY
SW-SM	Well Graded SAND with SILT
Topsoil	Topsoil
USGS 601	Gravel or Conglomerate 1
USGS 654	Subgraywacke
USGS 670	Interbedded Sandstone and Shale
USGS 702	Quartzite
USGS 705	Schist
USGS 705	Schist
USGS 708	Gneiss
USGS 708	Gneiss
USGS 718	Granite 1
Void	Void
Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
Delayed Water Table	Water Table after drilling

NOTES:

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2. CSX SHALL BE CONTACTED WHENEVER WORK IS BEING PERFORMED WITHIN THE RAILROAD RIGHT OF WAY.

Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
26 Smith Pl, Ste 2, Cambridge, MA 02138
PHONE: 617.714.5784

6/7/2023 STATE OF NEW YORK BRIAN C DORWART 080342 LICENSED PROFESSIONAL ENGINEER

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 87B

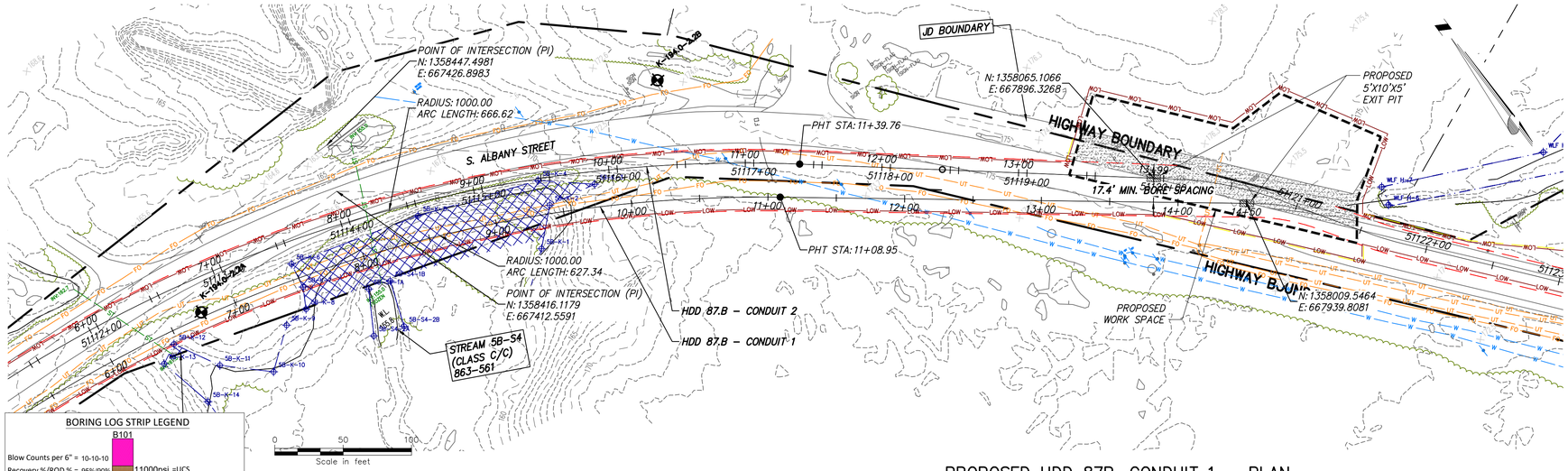
SOUTH ALBANY STREET CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0

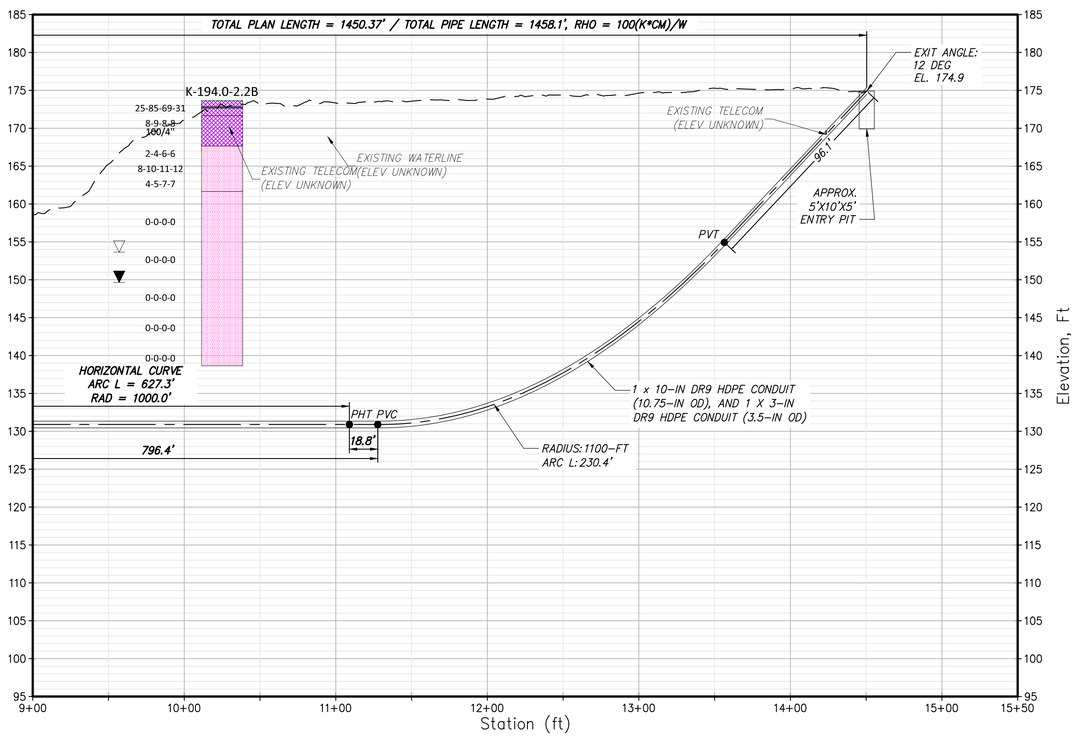
KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-301**
DATE 06/09/2023
SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:41:57 PM Current User: Brian Connelly
LastSavedBy: bconnelly



PROPOSED HDD 87B, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 87B, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

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Weathered Rock	Undefined
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NOTES:

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Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
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PHONE: 617.714.5784

6/7/2023 STATE OF NEW YORK · BRIAN C DORIWARD · 080342 · LICENSED PROFESSIONAL ENGINEER

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0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	NS	BD

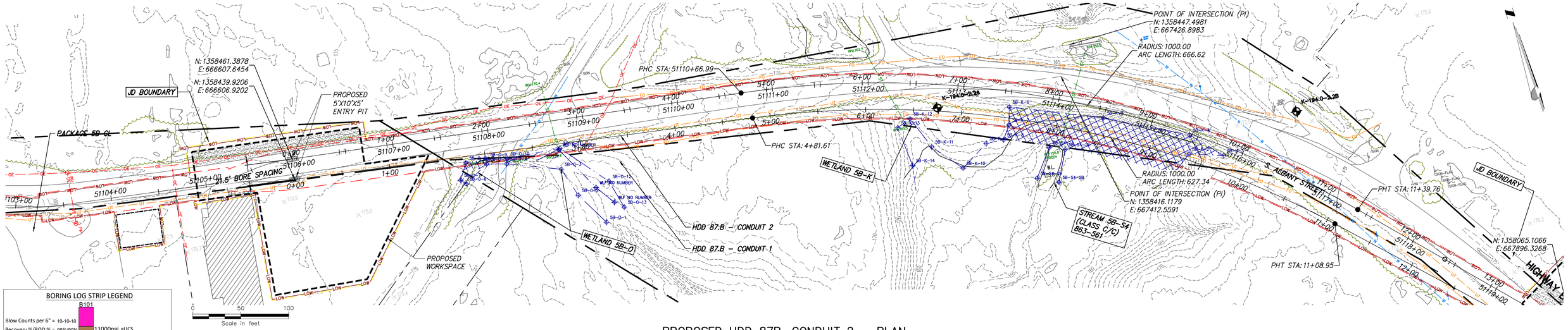
CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS
PROPOSED PLAN AND PROFILE - HDD 87B
SOUTH ALBANY STREET CROSSING, CONDUIT 1
SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-302**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:43:13 PM Current User: Brian Connelly
LastSavedBy: bconnelly



PROPOSED HDD 87B, CONDUIT 2 – PLAN

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration

3D strip logs have no exaggeration

Boring ground elevations are from survey data and topo maps (or approximated from Google Earth when topo or survey aren't available)

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
CH	Fat CLAY
CH-MH	SILTY Fat CLAY
CL	Lean CLAY
CL-ML	SILTY CLAY
CONCRETE	Concrete
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OL	ORGANIC Lean CLAY
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SC-SM	SILT, CLAYEY SAND
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SILTSTONE	Siltstone
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SP-SC	Poorly Graded SAND with CLAY
SP-SM	Poorly Graded SAND with SILT
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SW-SC	Well Graded SAND with CLAY
SW-SM	Well Graded SAND with SILT
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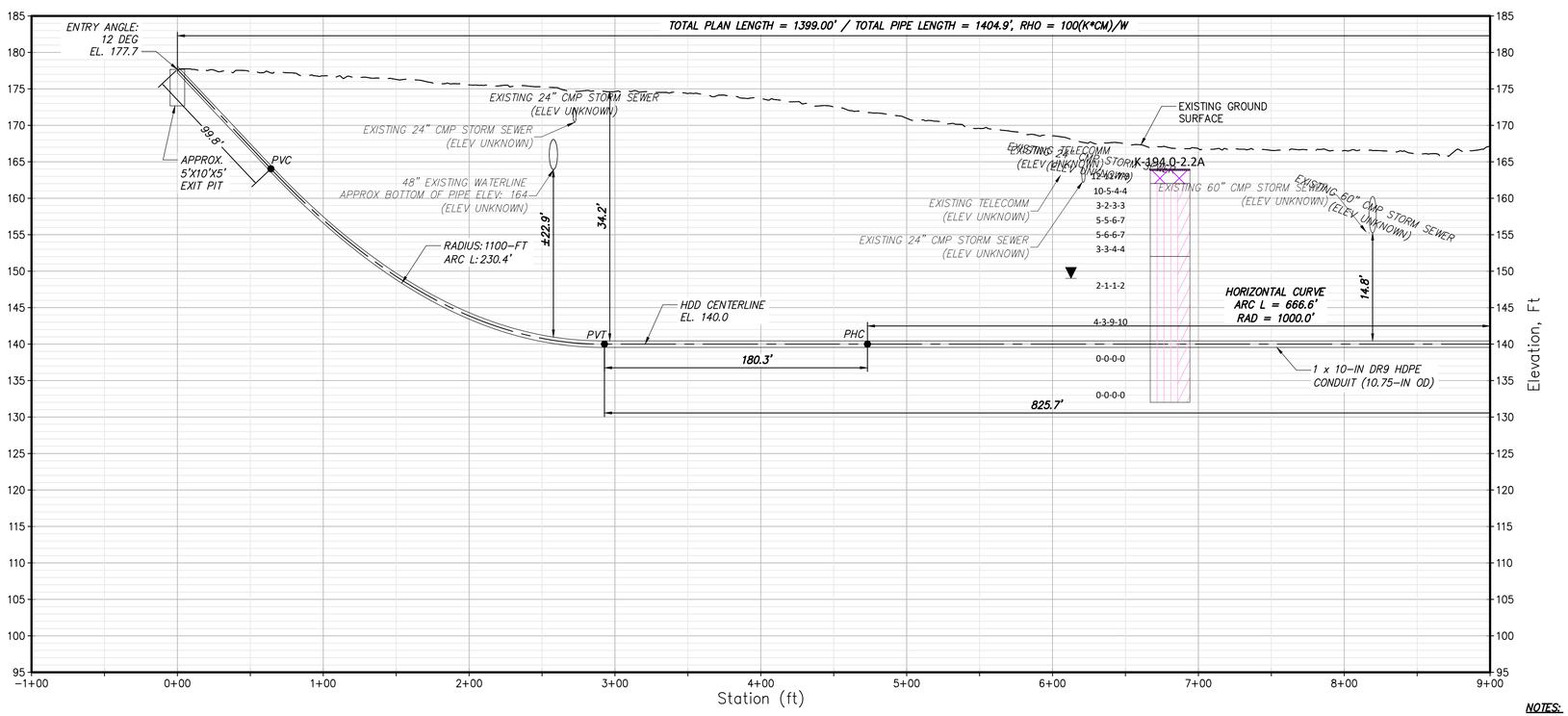
USGS 654	Subgraywacke
USGS 670	Interbedded Sandstone and Shale
USGS 702	Quartzite
USGS 705	Schist
USGS 705	Schist
USGS 708	Gneiss
USGS 708	Gneiss
USGS 718	Granite 1
Void	Void
Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
Delayed Water Table	Water Table after drilling



PROPOSED HDD 87B, CONDUIT 2 – PROFILE

SCALE: 1" = 50'

NOTES:

1. ALL BURIED LINE DEPTHS ARE APPROXIMATE. PRIOR TO ANY EXCAVATION OR EXPLORATORY BORING, CONTRACTOR MUST CONTACT 811 AND ABIDE BY ALL STATE EXCAVATION REQUIREMENTS.
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Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
26 Smith Pl, Ste 2, Cambridge, MA 02138
PHONE: 617.714.5784

6/7/2023

STATE OF NEW YORK · BRIAN C DORIWANG · 080342 · LICENSED PROFESSIONAL ENGINEER

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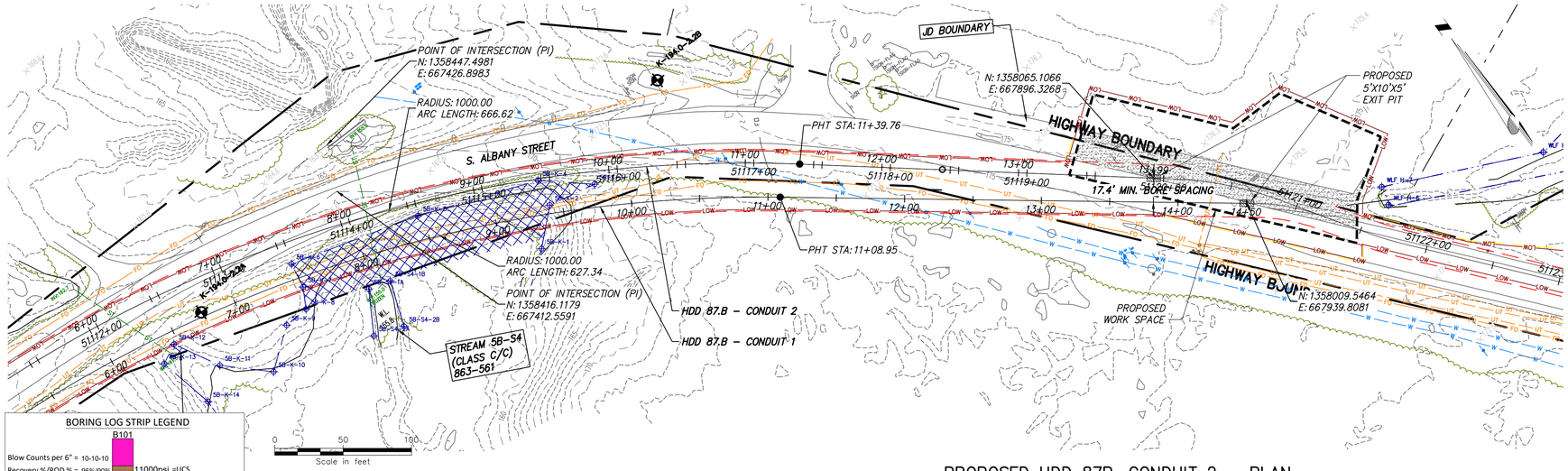
CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS
PROPOSED PLAN AND PROFILE - HDD 87B
SOUTH ALBANY STREET CROSSING, CONDUIT 2
SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-303**

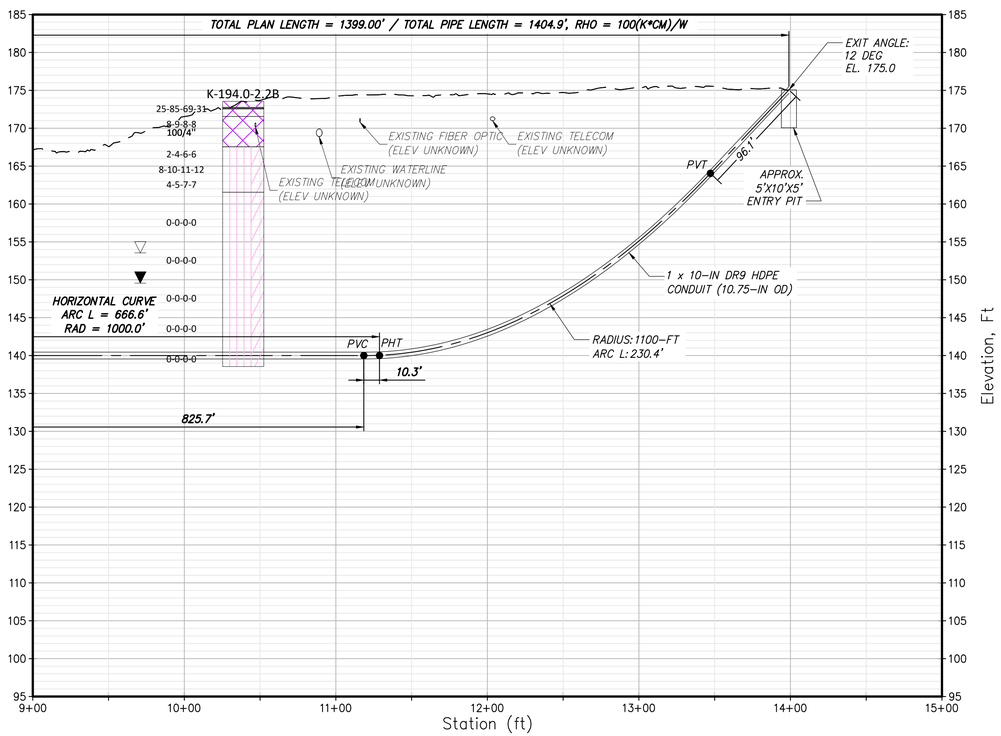
DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:44:34 PM Current User: Brian Connelly
LastSavedBy: bconnelly



PROPOSED HDD 87B, CONDUIT 2 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 87B, CONDUIT 2 – PROFILE

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

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CL-ML	SILTY CLAY
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OL/OH	ORGANIC SOIL
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SC-SM	SILT, CLAYEY SAND
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Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

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6/7/2023
STATE OF NEW YORK · BRIAN C. DORNAN · 080342 · LICENSED PROFESSIONAL ENGINEER

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS
PROPOSED PLAN AND PROFILE - HDD 87B
SOUTH ALBANY STREET CROSSING, CONDUIT 2
SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-304**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:45:58 PM Current User: Brian Connelly
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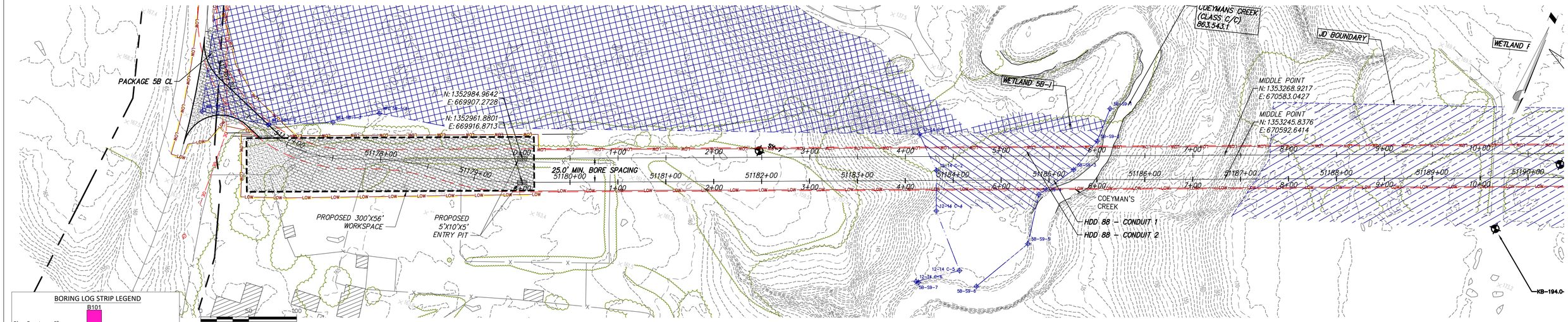
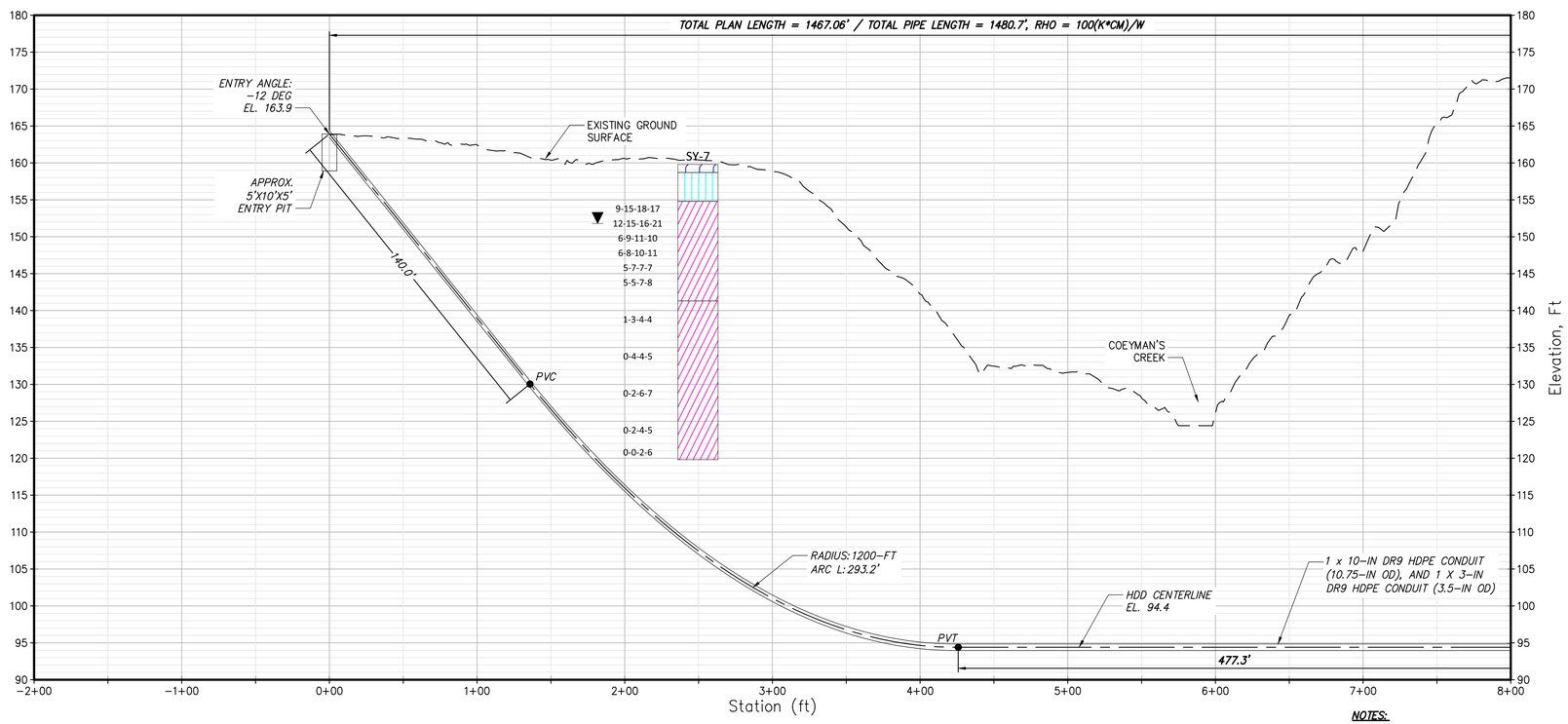


PROPOSED HDD 88, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 88, CONDUIT 1 – PROFILE

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Scale in feet

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B101

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CH-MH	SILTY Fat CLAY
CL	Lean CLAY
CL-ML	SILTY CLAY
CONCRETE	Concrete
Fill	Fill
GC	CLAYEY GRAVEL
GC-GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
GP-GC	Poorly Graded Gravel with CLAY
GP-GM	Poorly Graded GRAVEL with SILT
GW	Well Graded GRAVEL
GW-GC	Well Graded GRAVEL with CLAY
GW-GM	Well Graded GRAVEL with SILT
Limestone	Limestone
MH	Elastic SILT
ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC-SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
SM	SILTY SAND
SP	Poorly Graded SAND
SP-SC	Poorly Graded SAND with CLAY
SP-SM	Poorly Graded SAND with SILT
SW	Well graded SAND
SW-SC	Well Graded SAND with CLAY
SW-SM	Well Graded SAND with SILT
Topsoil	Topsoil
USGS 601	Gravel or Conglomerate 1
USGS 654	Subgraywacke
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USGS 702	Quartzite
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Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
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CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
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PHONE: 617.714.5784

6/7/2023

STATE OF NEW YORK · BRIAN C DORWART · 080342 · LICENSED PROFESSIONAL ENGINEER

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 88

COEYMAN'S CREEK CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD

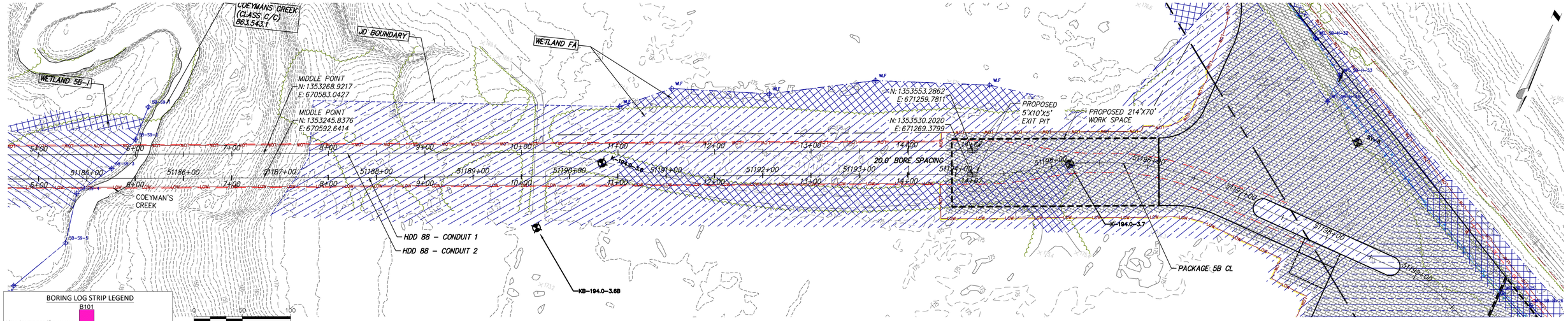
SCALE: AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

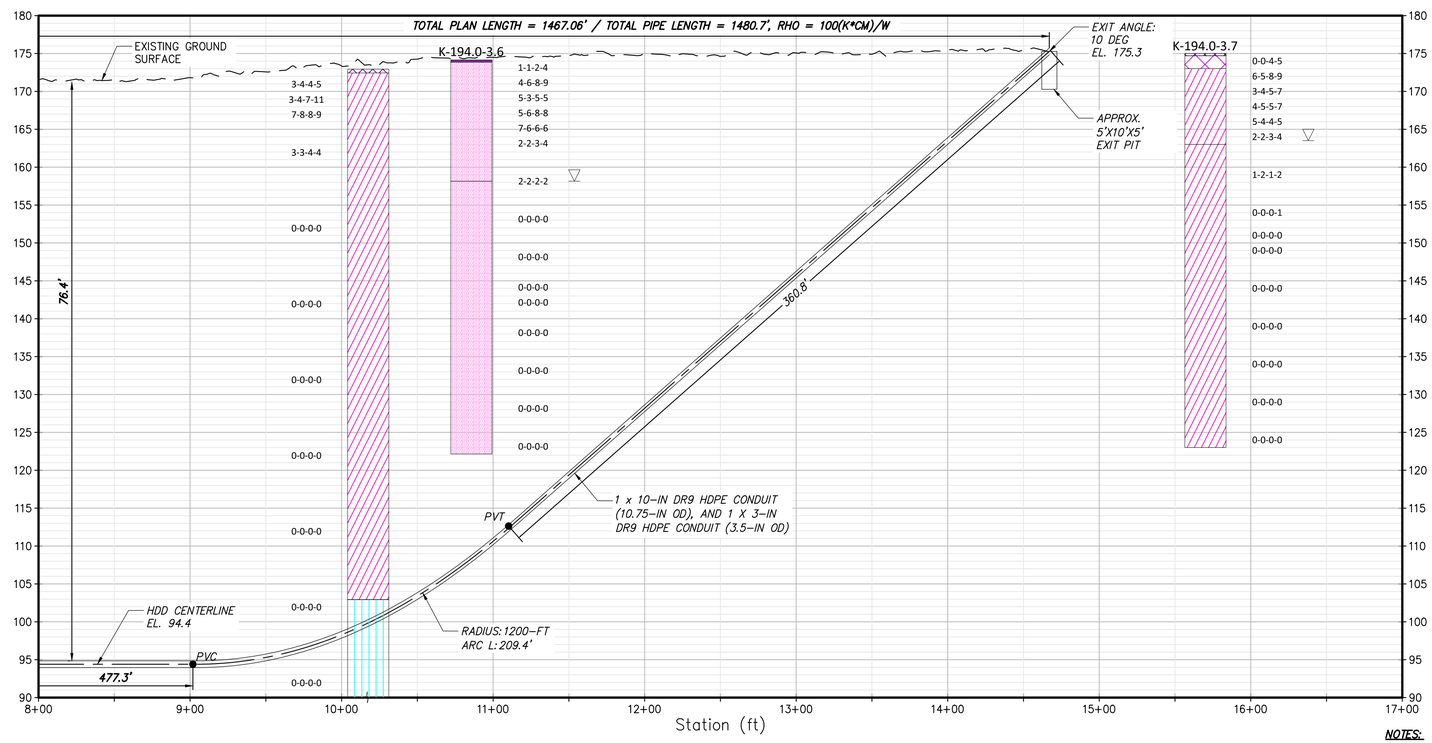
DRAWING NO. **C-305**

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA_HDD-CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:47:18 PM Current User: Brian Connelly
LastSavedBy: bconnelly



PROPOSED HDD 88, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 88, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration
Boring ground elevations are from survey data and topo maps (or approximated from Google Earth when topo or survey aren't available)

Legend

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Bedrock	Bedrock
Boulder	Boulder
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CHPE Champlain Hudson Power Express

Kiewit

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 88

COEYMAN'S CREEK CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

DRAWING NO. **C-306**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE: AS SHOWN | REV. NO. 0 | DATE: 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:48:44 PM Current User: Brian Connelly
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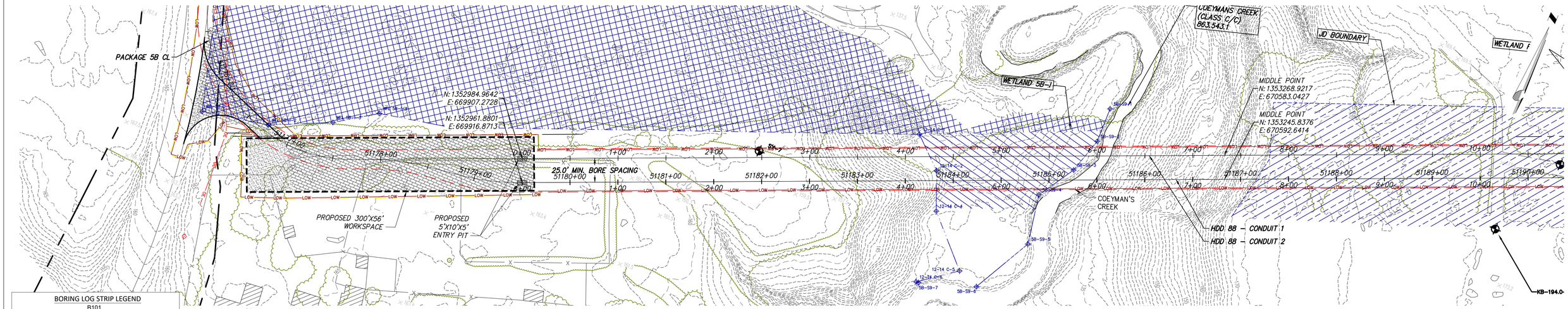
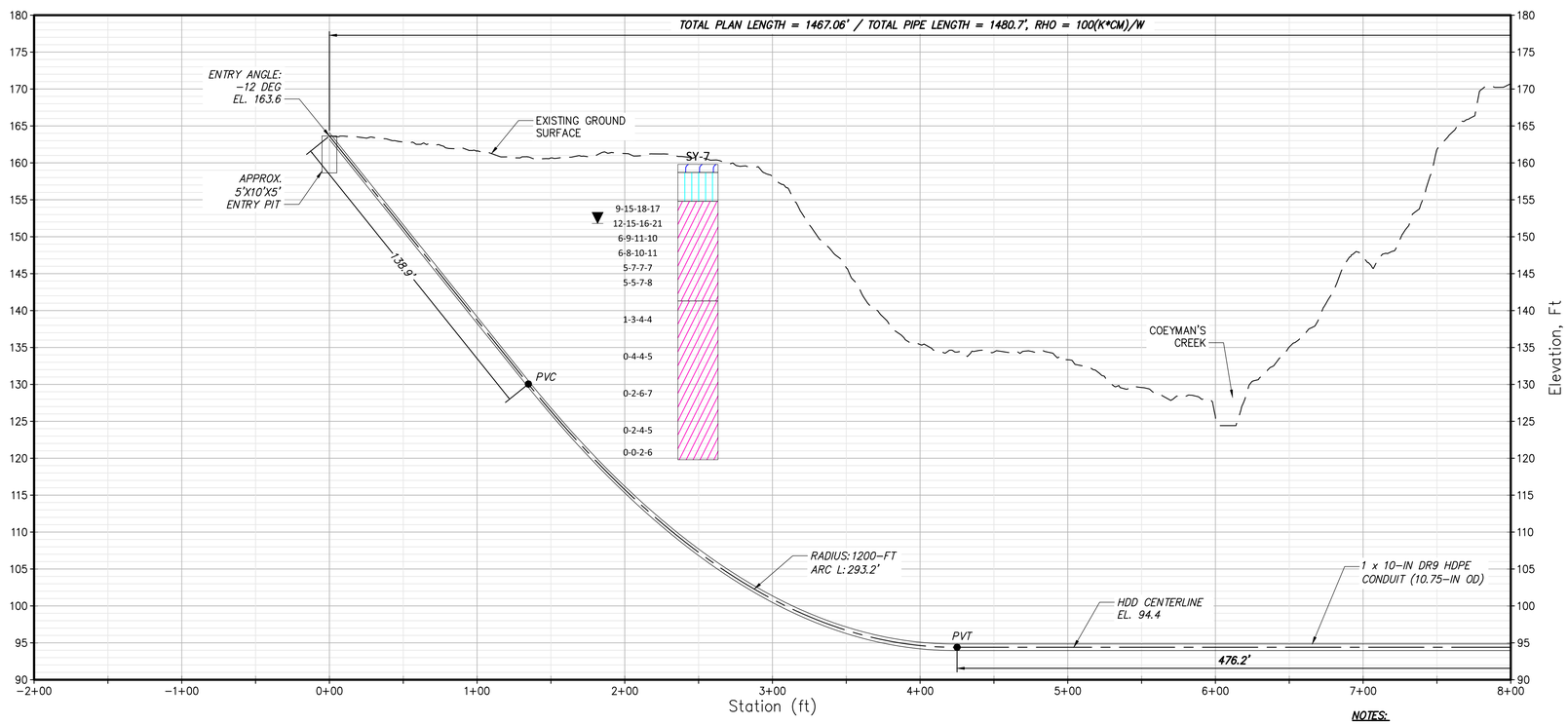


PROPOSED HDD 88, CONDUIT 2 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 88, CONDUIT 2 – PROFILE

SCALE: 1" = 50'

NOTES:

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Scale in feet

BORING LOG STRIP LEGEND

B101

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Recovery %/RQD % = 95%/90%

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CHPE Champlain Hudson Power Express

Kiewit

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 88

COEYMAN'S CREEK CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD

SCALE: AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

DRAWING NO. **C-306**

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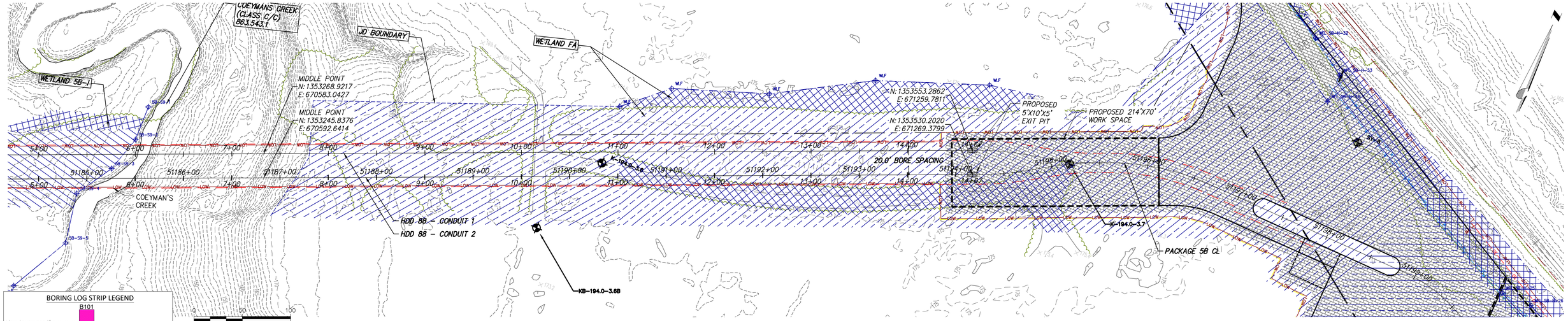

PROPOSED HDD 88, CONDUIT 2 – PLAN

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

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3D strip logs have no exaggeration

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Bedrock	Bedrock
Boulder	Boulder
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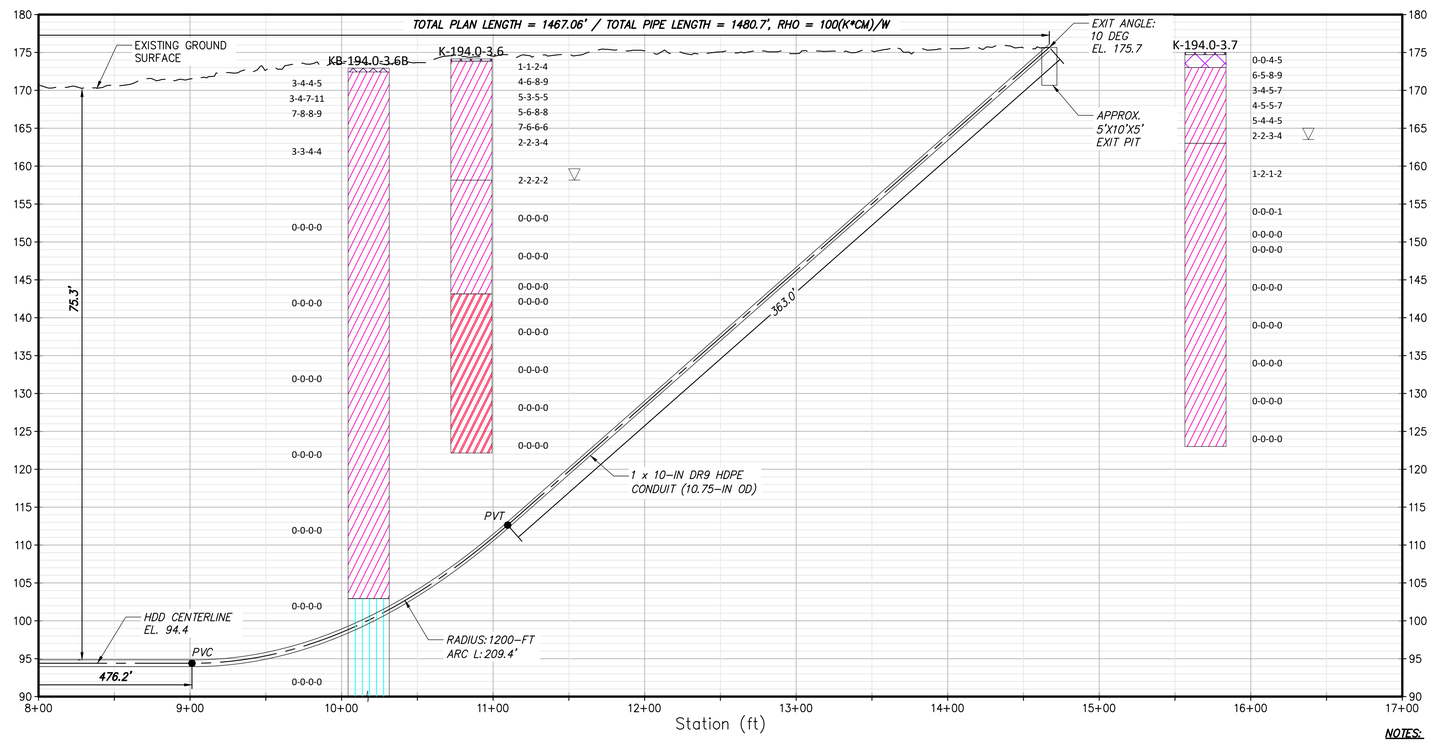

PROPOSED HDD 88, CONDUIT 2 – PROFILE

SCALE: 1" = 50'

NOTES:

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Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

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6/7/2023 STATE OF NEW YORK BRIAN C DORWART 080342 LICENSED PROFESSIONAL ENGINEER

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 88

COEYMAN'S CREEK CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

DRAWING NO. **C-308**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

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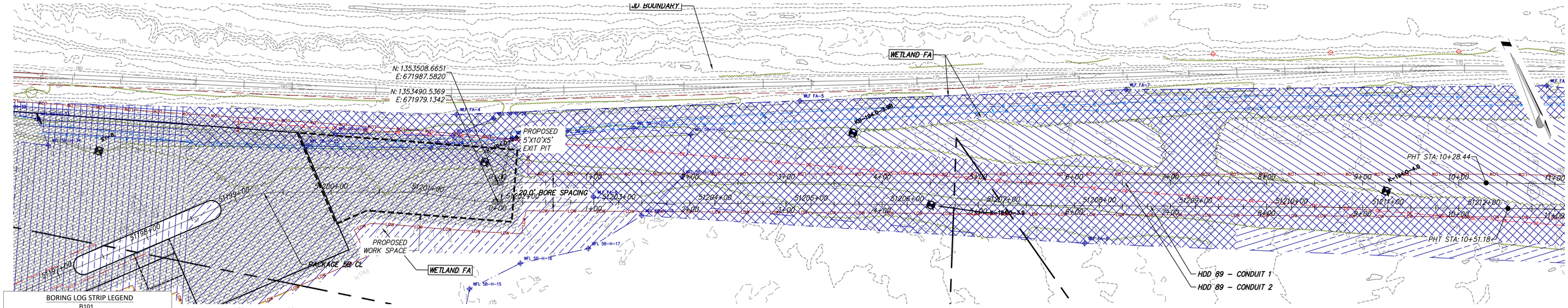
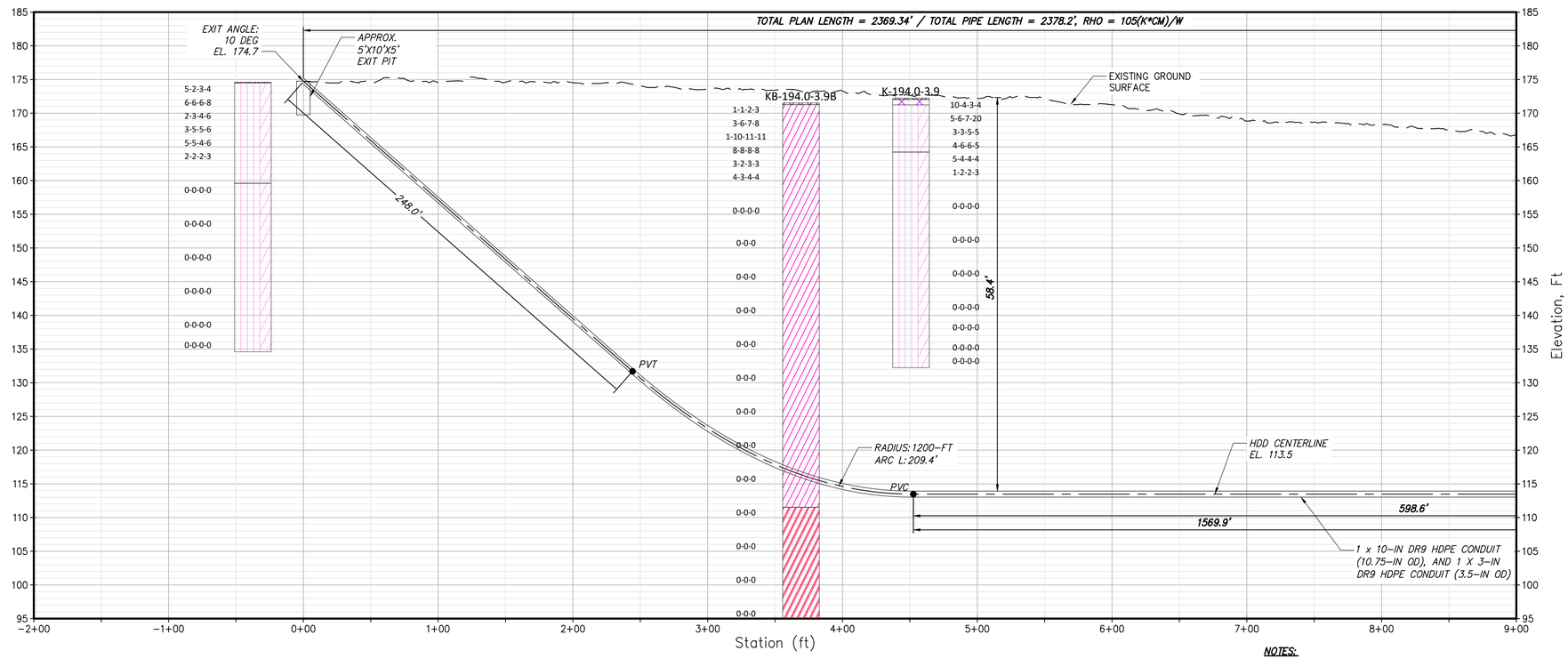


PROPOSED HDD 89, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 89, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 89

STREAM CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-309**
DATE 06/09/2023
SH.NO.

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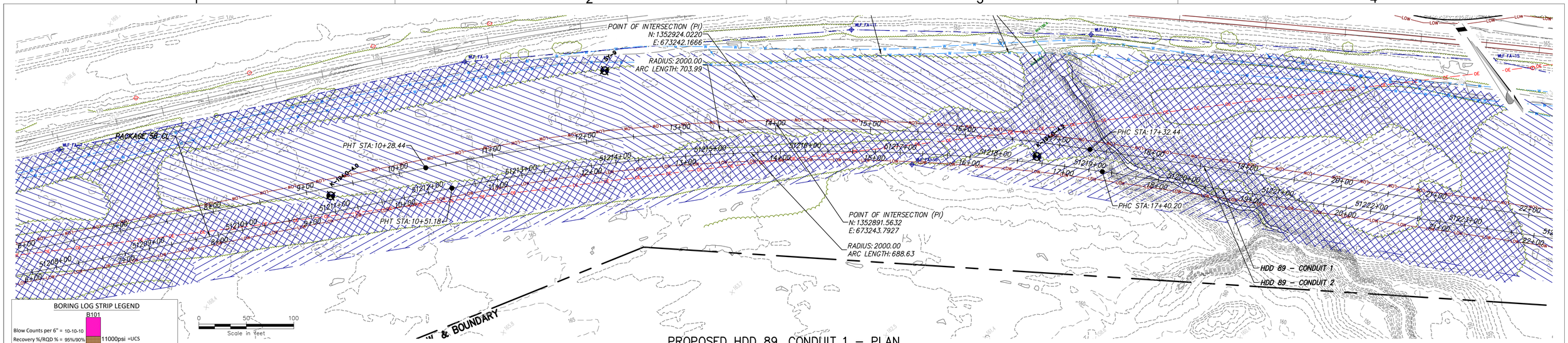
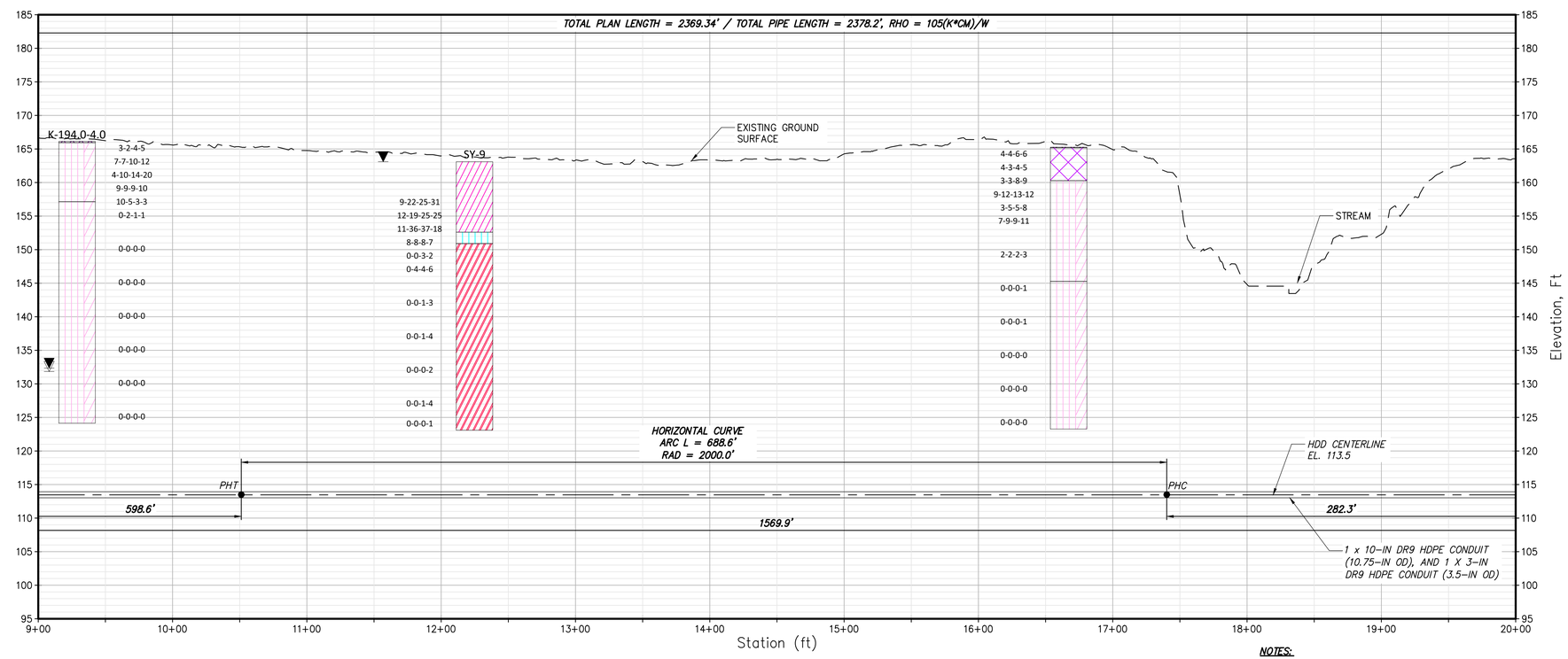


PROPOSED HDD 89, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 89, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration
Boring ground elevations are from survey data and topo maps (or approximated from Google Earth when topo or survey aren't available)

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
CH	Fat CLAY
CH-MH	SILTY Fat CLAY
CL	Lean CLAY
CL-ML	SILTY CLAY
CONCRETE	Concrete
Fill	Fill
GC	CLAYEY GRAVEL
GC-GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
GP-GC	Poorly Graded Gravel with CLAY
GP-GM	Poorly Graded GRAVEL with SILT
GW	Well Graded GRAVEL
GW-GC	Well Graded GRAVEL with CLAY
GW-GM	Well Graded GRAVEL with SILT
Limestone	Limestone
MH	Elastic SILT
ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC-SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
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Weathered Rock	Undefined
Water Table	Water Table during drilling
Delayed Water Table	Water Table after drilling

NOTES:

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CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
26 Smith Pl, Ste 2, Cambridge, MA 02138
PHONE: 617.714.5784

6/7/2023 STATE OF NEW YORK BRIAN C DORWART 080342 LICENSED PROFESSIONAL ENGINEER

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	NS	BD

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 89

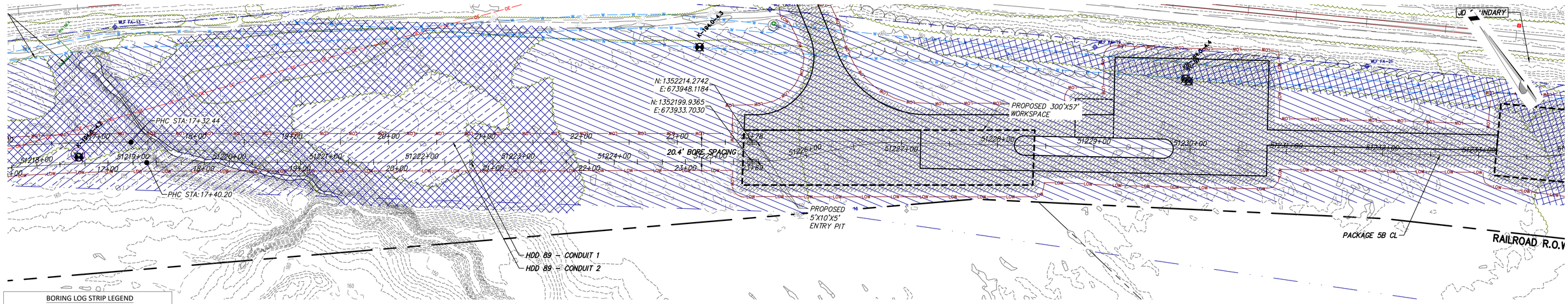
STREAM CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE: AS SHOWN | REV. NO. 0

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-310**
DATE 06/09/2023
SH.NO.

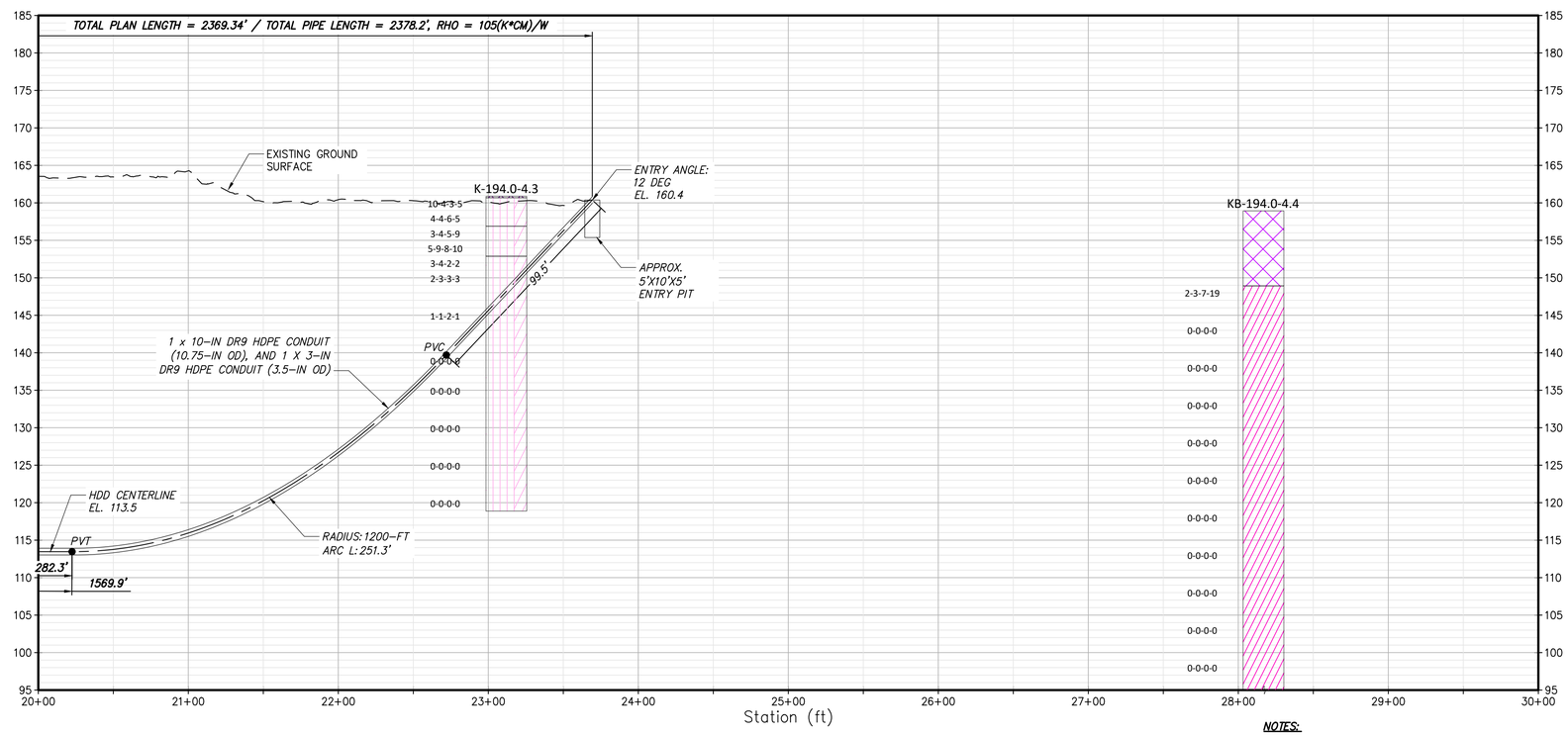
File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:53:15 PM Current User: Brian Connelly
LastSavedBy: bconnelly



0 50 100
Scale in feet

PROPOSED HDD 89, CONDUIT 1 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 89, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

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0 50 100
Scale in feet

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B101

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6/7/2023

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS
PROPOSED PLAN AND PROFILE - HDD 89
STREAM CROSSING, CONDUIT 1
SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE: AS SHOWN | REV. NO. 0

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-311**
DATE 06/09/2023
SH.NO.

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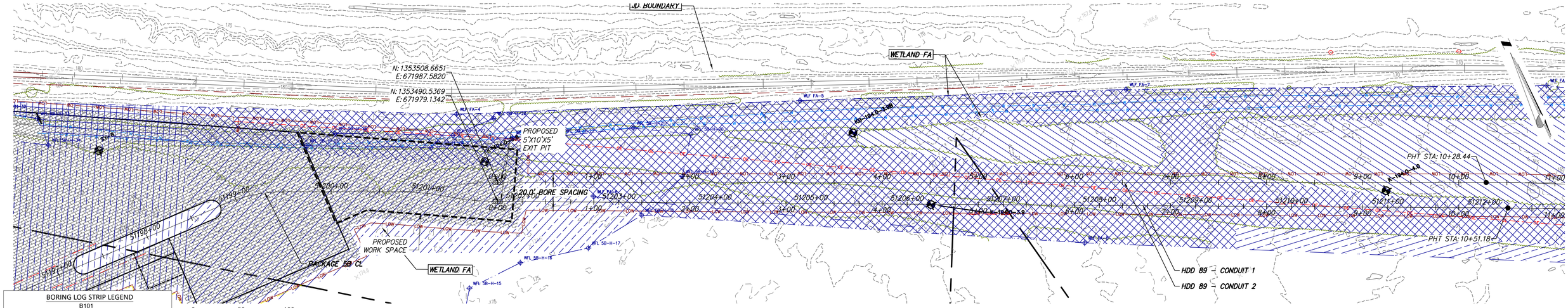
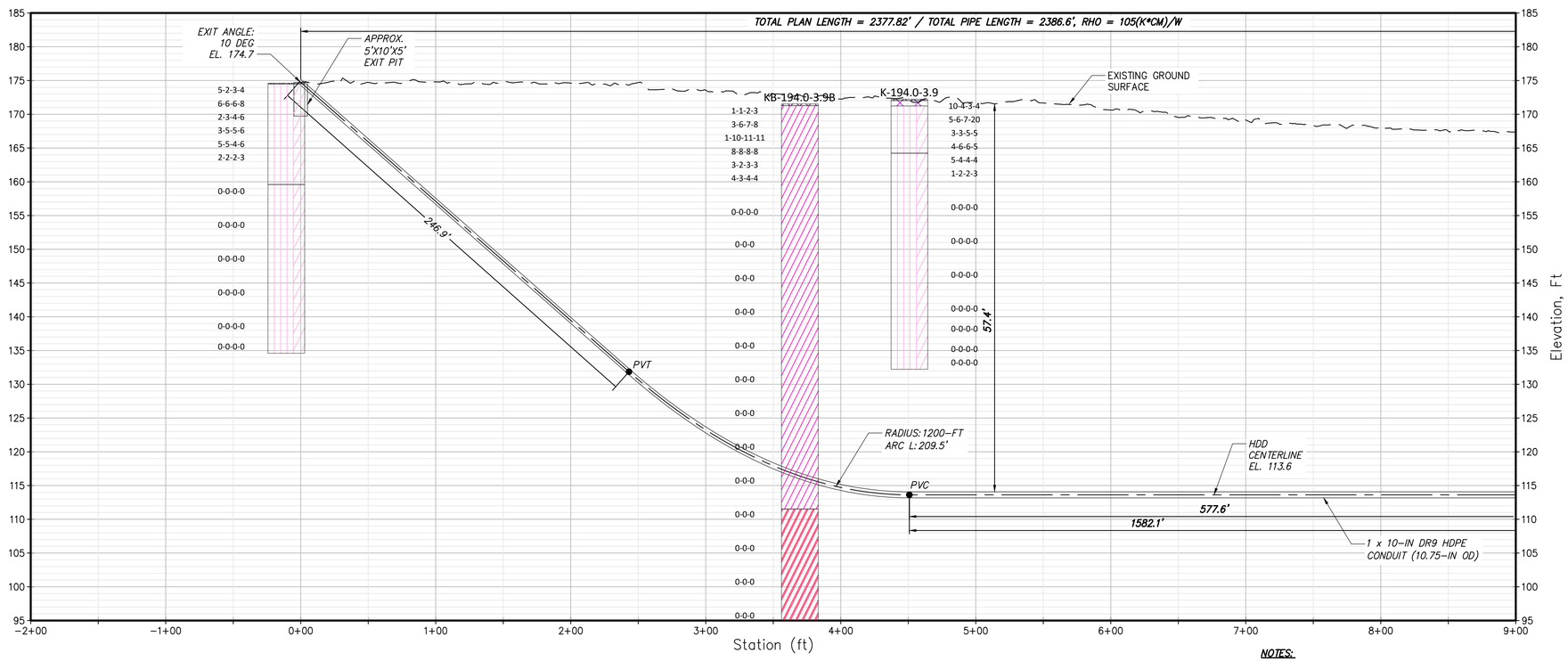
LastSavedBy: bconnelly



PROPOSED HDD 89, CONDUIT 2 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 89, CONDUIT 2 – PROFILE

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 89

STREAM CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE: AS SHOWN | REV. NO. 0

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-312**
DATE 06/09/2023
SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:54:58 PM Current User: Brian Connelly
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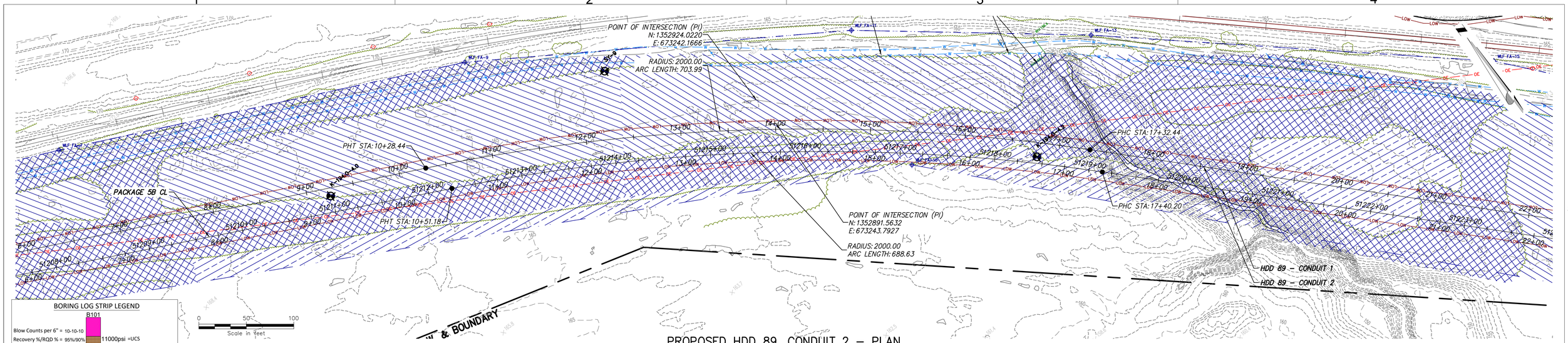
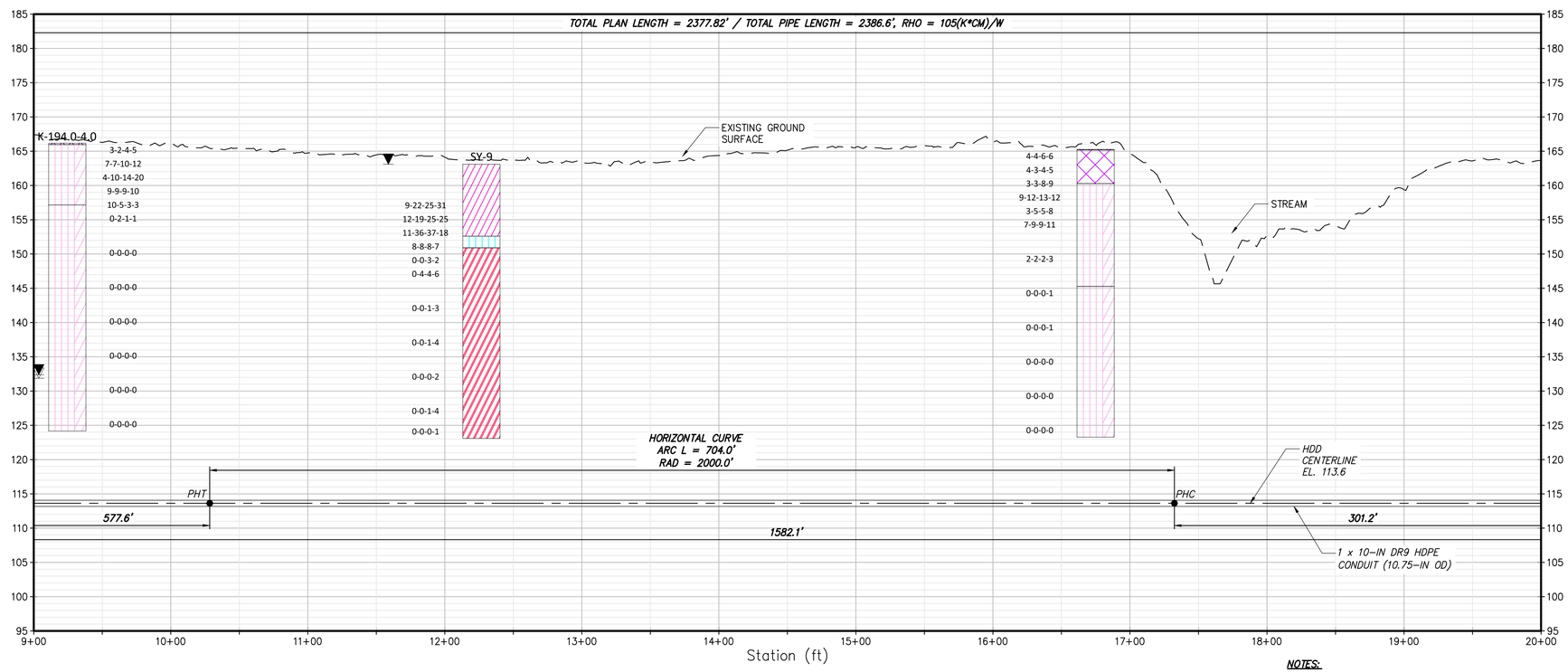


PROPOSED HDD 89, CONDUIT 2 – PLAN

SCALE: 1" = 50'



PROPOSED HDD 89, CONDUIT 2 – PROFILE

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Scale in feet

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 89

STREAM CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-313**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA-HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:55:51 PM Current User: Brian Connelly
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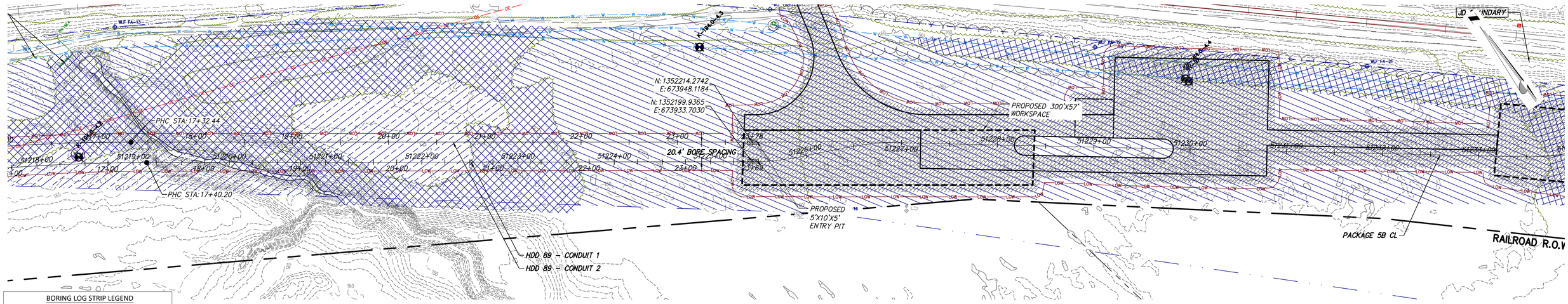

0 50 100
Scale in feet

PROPOSED HDD 89, CONDUIT 2 – PLAN

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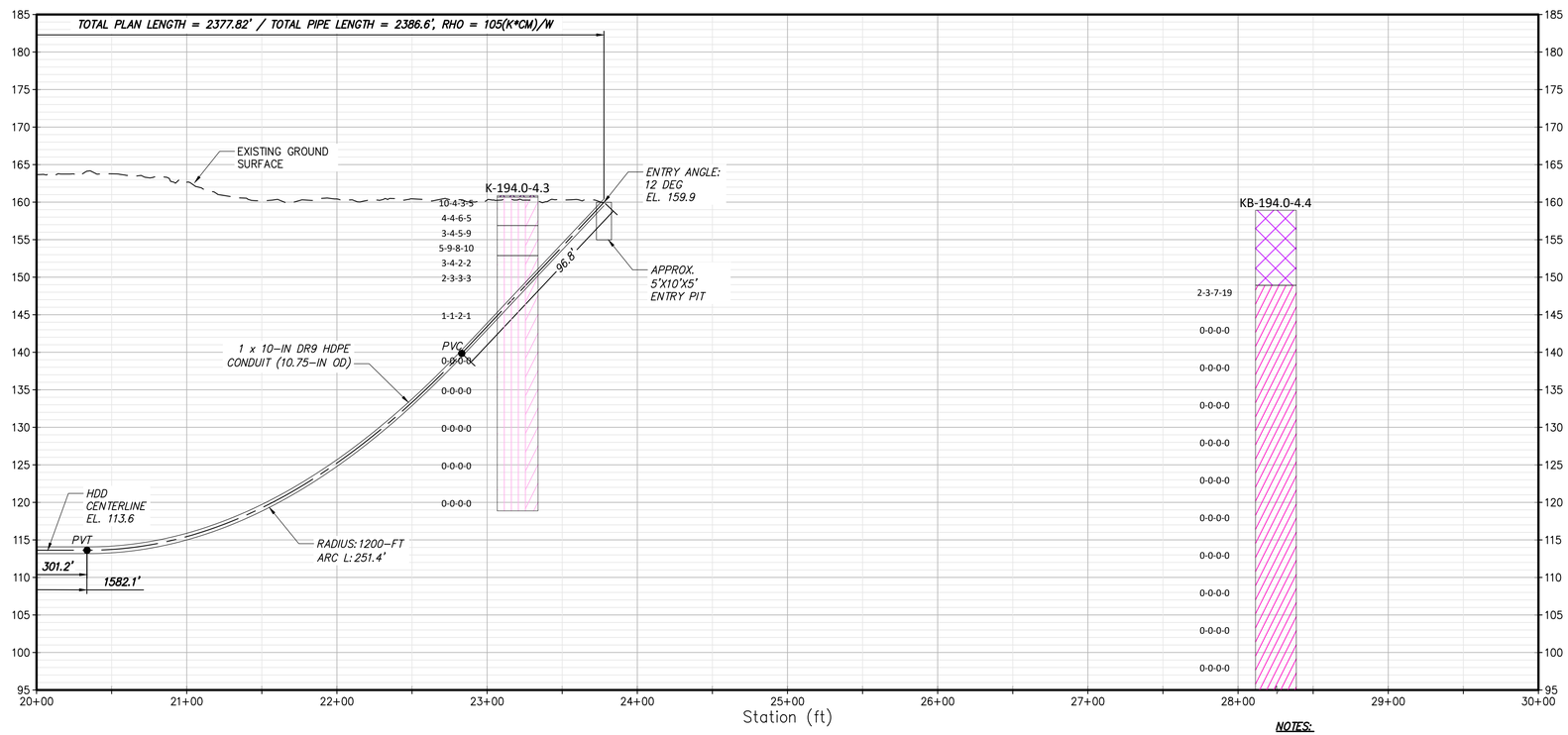

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Scale in feet

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 89

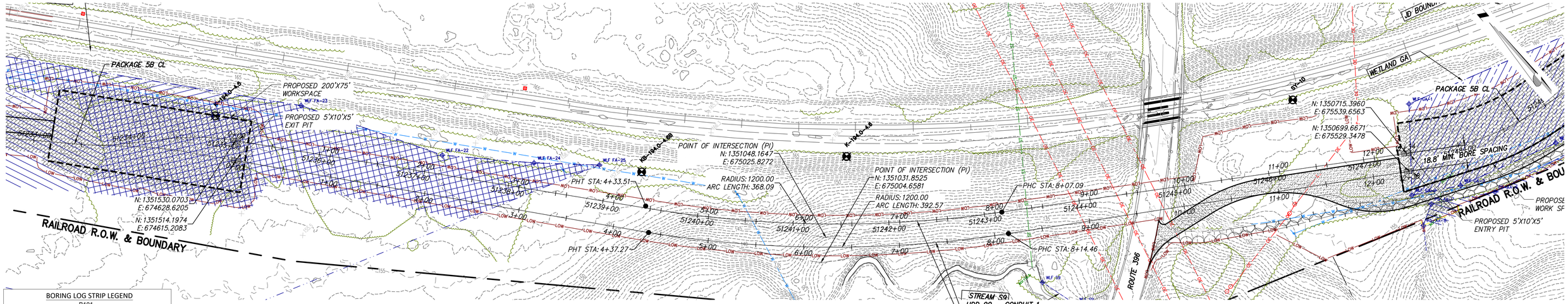
STREAM CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE: AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

KIEWIT PROJECT NO. 21162
BRIERLEY PROJECT NO. 322004-000
DRAWING NO. **C-314**

File: C:\USERS\BCONNELL\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:56:37 PM Current User: Brian Connelly
LastSavedBy: bconnelly



PROPOSED HDD 90, CONDUIT 1 – PLAN

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

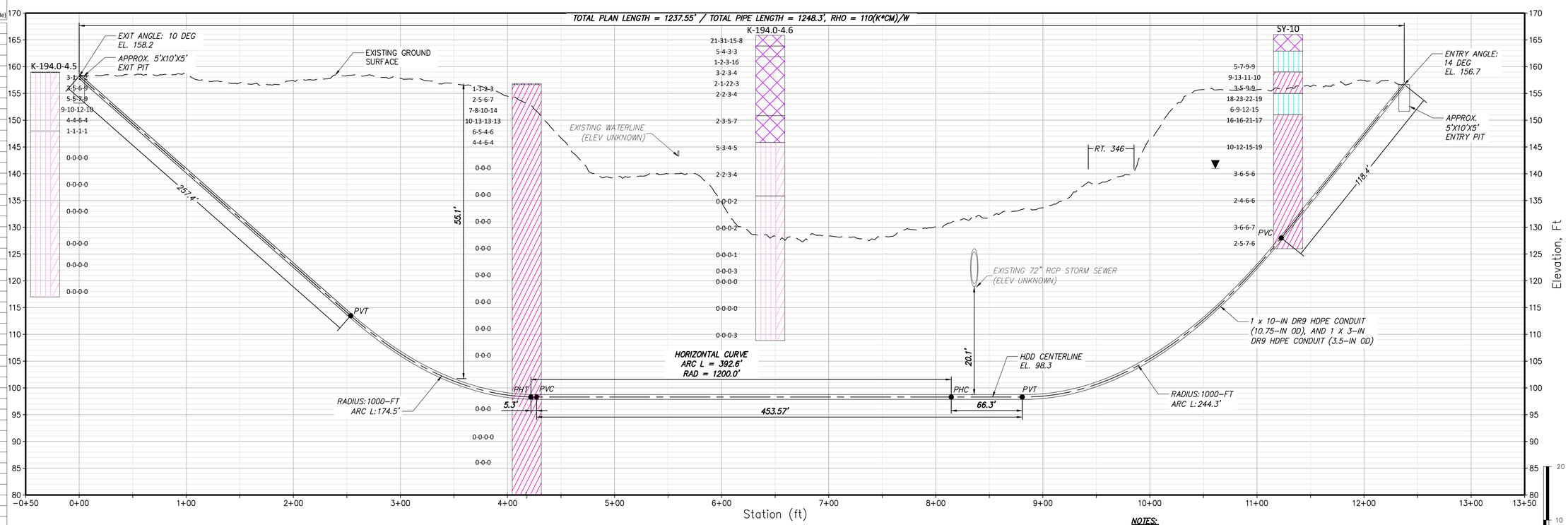
11000psi =UCS

2D strip logs shown at 10x exaggeration

3D strip logs have no exaggeration

Boring ground elevations are from survey data and topo maps (or approximated from Google Earth when topo or survey aren't available)

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
CH	Fat CLAY
CH–MH	SILTY Fat CLAY
CL	Lean CLAY
CL–ML	SILTY CLAY
CONCRETE	Concrete
Fill	Fill
GC	CLAYEY GRAVEL
GC–GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
GP–GC	Poorly Graded Gravel with CLAY
GP–GM	Poorly Graded GRAVEL with SILT
GW	Well Graded GRAVEL
GW–GC	Well Graded GRAVEL with CLAY
GW–GM	Well Graded GRAVEL with SILT
Limestone	Limestone
MH	Elastic SILT
ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC–SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
SM	SILTY SAND
SP	Poorly Graded SAND
SP–SC	Poorly Graded SAND with CLAY
SP–SM	Poorly Graded SAND with SILT
SW	Well graded SAND
SW–SC	Well Graded SAND with CLAY
SW–SM	Well Graded SAND with SILT
Topsoil	Topsoil
USGS 601	Gravel or Conglomerate 1
USGS 654	Subgraywacke
USGS 670	Interbedded Sandstone and Shale
USGS 702	Quartzite
USGS 705	Schist
USGS 705	Schist
USGS 708	Gneiss
USGS 708	Gneiss
USGS 718	Granite 1
Void	Void
Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
Delayed Water Table	Water Table after drilling



PROPOSED HDD 90, CONDUIT 1 – PROFILE

SCALE: 1" = 50'

NOTES:

1. ALL BURIED LINE DEPTHS ARE APPROXIMATE. PRIOR TO ANY EXCAVATION OR EXPLORATORY BORING, CONTRACTOR MUST CONTACT 811 AND ABIDE BY ALL STATE EXCAVATION REQUIREMENTS.
2. CSX SHALL BE CONTACTED WHENEVER WORK IS BEING PERFORMED WITHIN THE RAILROAD RIGHT OF WAY.

CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
26 Smith Pl, Ste 2, Cambridge, MA 02138
PHONE: 617.714.5784

6/7/2023

STATE OF NEW YORK · BRIAN C. DORWART · 080342 · LICENSED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	NS	BD

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 90

ROUTE 96 CROSSING, CONDUIT 1

SCHENECTADY COUNTY, NY

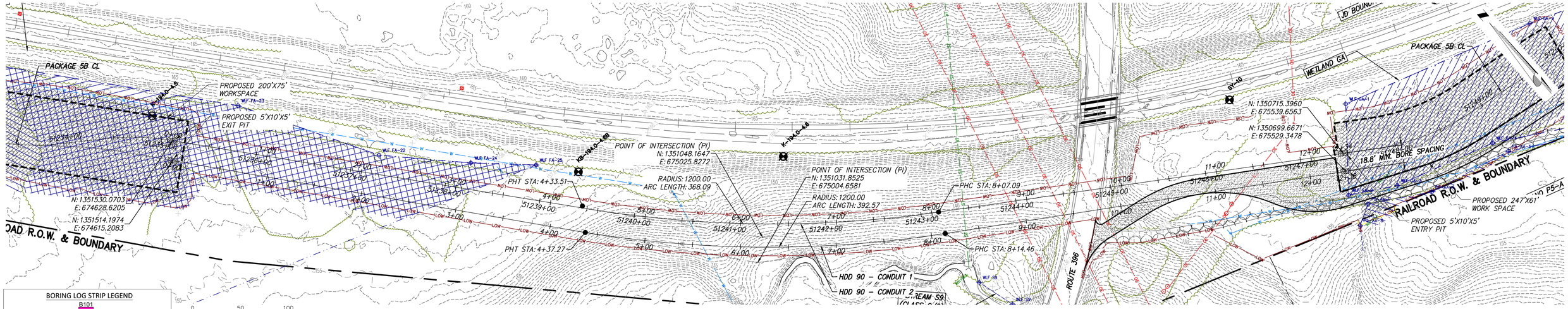
KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

DRAWING NO. **C-315**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELL\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:57:32 PM Current User: Brian Connelly LastSavedBy: bconnelly



PROPOSED HDD 90, CONDUIT 2 – PLAN

SCALE: 1" = 50'

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

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3D strip logs have no exaggeration

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Legend

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CH–MH	SILTY Fat CLAY
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CL–ML	SILTY CLAY
CONCRETE	Concrete
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GC–GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
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SW–SC	Well Graded SAND with CLAY
SW–SM	Well Graded SAND with SILT
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USGS 670	Interbedded Sandstone and Shale
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USGS 708	Gneiss
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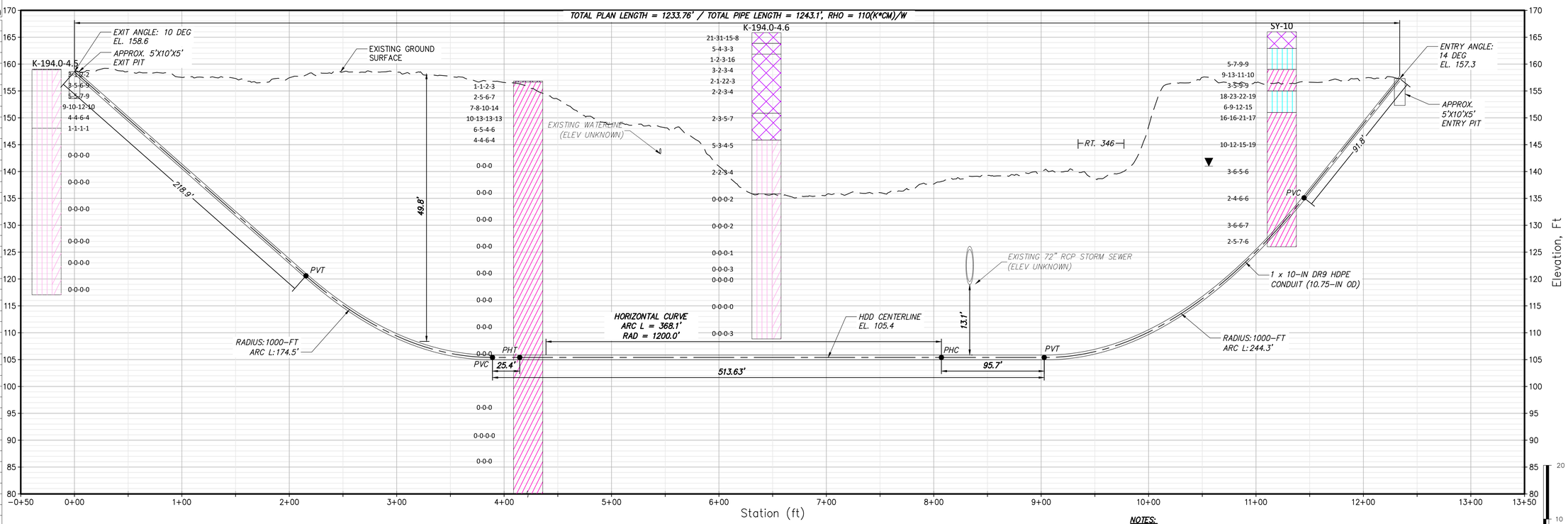

PROPOSED HDD 90, CONDUIT 2 – PROFILE

SCALE: 1" = 50'

NOTES:

1. ALL BURIED LINE DEPTHS ARE APPROXIMATE. PRIOR TO ANY EXCAVATION OR EXPLORATORY BORING, CONTRACTOR MUST CONTACT 811 AND ABIDE BY ALL STATE EXCAVATION REQUIREMENTS.
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Scale in feet

CHPE Champlain Hudson Power Express

Kiewit

BRIERLEY ASSOCIATES
Creating Space Underground
26 Smith Pl, Ste 2, Cambridge, MA 02138
PHONE: 617.714.5784

6/7/2023 STATE OF NEW YORK BRIAN C DORWART 080342 LICENSED PROFESSIONAL ENGINEER

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0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	NS	BD

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

PROPOSED PLAN AND PROFILE - HDD 90

ROUTE 96 CROSSING, CONDUIT 2

SCHENECTADY COUNTY, NY

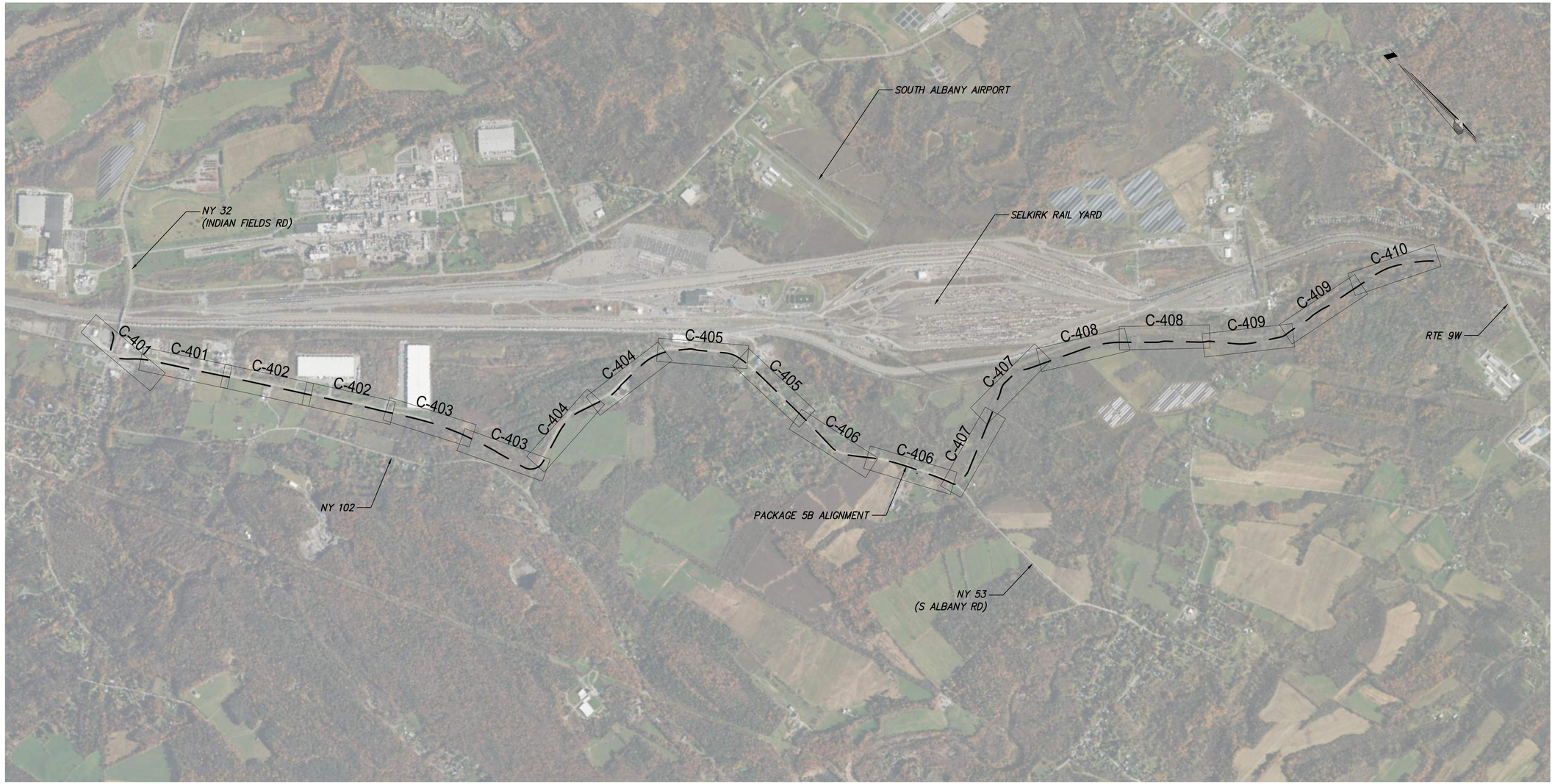
KIEWIT PROJECT NO. 21162

BRIERLEY PROJECT NO. 322004-000

DRAWING NO. **C-316**

DRAWN BY: BC | DESIGNED BY: NS | APPROVED BY: BD | SCALE AS SHOWN | REV. NO. 0 | DATE 06/09/2023 | SH.NO.

File: C:\USERS\BCONNELLY\DC\ACCDOCS\BRIERLEY ASSOCIATES\322004-000 CHAMPLAIN HUDSON POWER EXPRESS\PROJECT FILES\40 DESIGN ENG\PACKAGE 5\5B_BA-HDD CIVIL SHEETS\5B_BA_HDD-SHEETS.DWG Saved: 6/6/2023 4:43:19 PM Plotted: 6/6/2023 5:58:25 PM Current User: Brian Connelly
LastSavedBy: bconnelly



E&SC KEY PLAN

SCALE: 1" = 1000'

CHPE Champlain Hudson Power Express

Kiewit

Engineering and Land Surveying, P.C.

STATE OF NEW YORK · NATHANIEL DALE HAVENER · 103692 · LICENSED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MK/AT	NH

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 9 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS

E&SC KEY PLAN

DRAWN BY: | DESIGNED BY: MK | APPROVED BY: NH | SCALE AS SHOWN | REV. NO. 0

KIEWIT PROJECT NO. 21162

KC PROJECT NO. 120174

DRAWING NO. **C-400**

DATE 6/2/2023

SH.NO.

File: P:\120174-CHPE_CABLE_INSTALL-KIEWIT\60_CAD\20_ENGINEERING_CAD_FILES\PACKAGE_5B\NY_ENVIRONMENTAL_(EROSION_CONTROL)\01_ICE\SHEET_FILES\21162_5B_C400.DWG Saved: 6/1/2023 6:29:31 PM Plotted: 6/2/2023 11:35:05 AM Current User: Tianning Hao LastSavedBy: thao