

Sheet 5

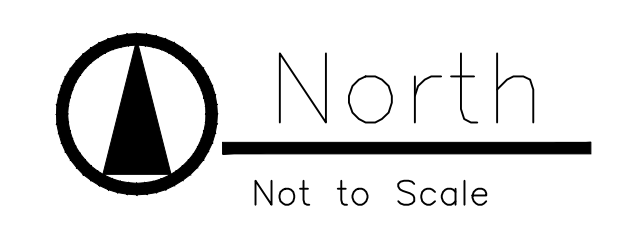
Sheet 6

Sheet 4

Sheet 3

Sheet 2

WORK ORDER CO-187			
FROM	TO	INNERDUCTS	SPAN
CITY BLDG	VAULT 1	2 Existing	285'
VAULT 1	VAULT 2	2 Existing	200'
VAULT 2	VAULT 3	2 New	45'
VAULT 3	LIBRARY	2 Existing	180'
VAULT 2	VAULT 4	2 Existing	190'
VAULT 4	AUDITORIUM	2 New	125'
VAULT 4	VAULT 5	2 New	1000'
VAULT 5	VAULT 6	2 New	1030'
VAULT 6	VAULT 7	2 New	1022'
VAULT 7	VAULT 8	2 New	760'
VAULT 8	VAULT 9	2 New	354'
VAULT 9	NDS	2 New	150'
NDS	VAULT 10	2 New	20'
VAULT 10	VAULT 11	2 New	1080'
VAULT 11	VAULT 12	2 New	607'
VAULT 12	WAREHOUSE	2 New	210'
COMBINED QUANTITIES			
ITEM	QTY		
VAULTS	12		
TEST STATIONS & ANODES	12		
TRACER WIRE (FT)	6,640		
INNERDUCT (FT)	13,000		



HASTINGS UTILITIES

New Fiber Optic Line Connecting North Denver Station with the City Building, the Public Library, the Auditorium, and the Warehouse

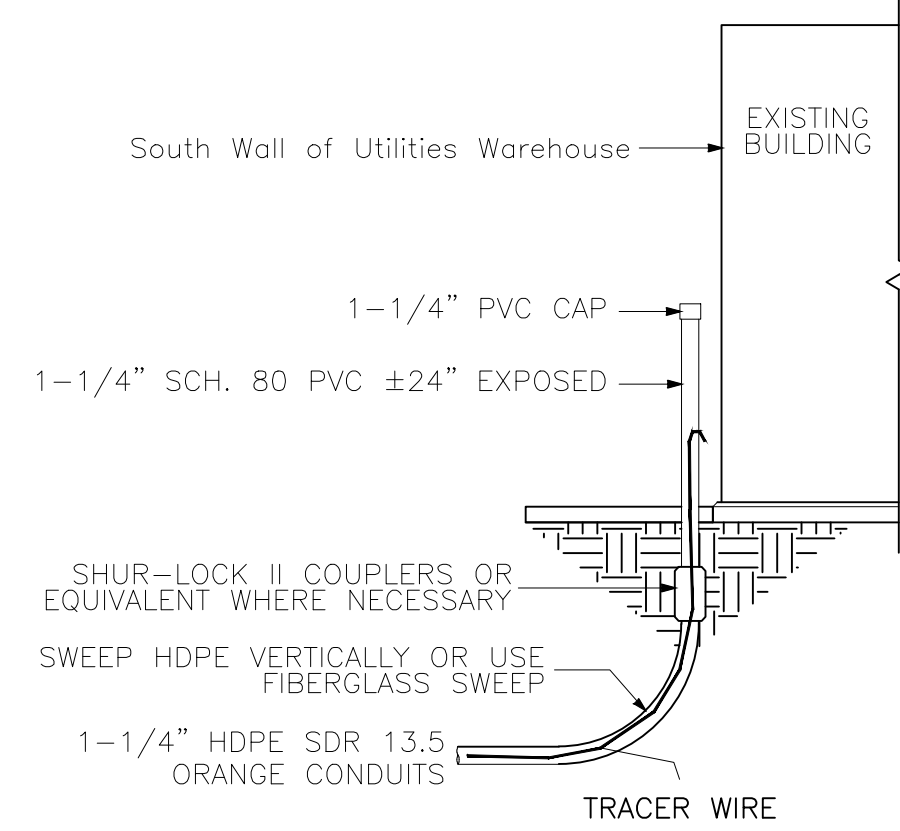
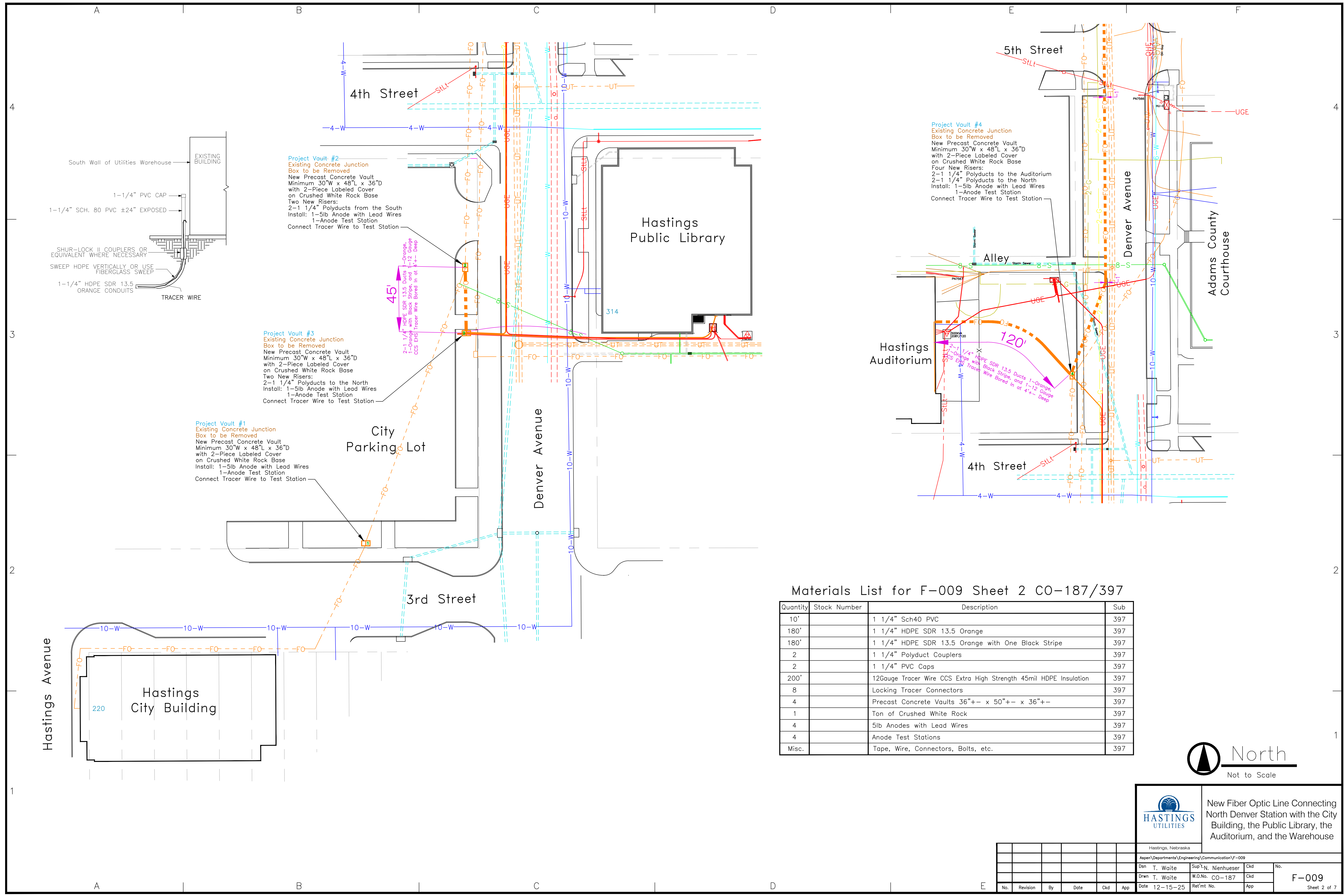
Hastings, Nebraska

Aspen\Departments\Engineering\Communication\F-009

Drwn T. Waite	Sup' N. Nienhueser	Ckd	No.
Date 10-21-25	Ret'mt No.	App	F-009

Cover: Sheet 1 of 7

No.	Revision	By	Date	Ckd	App



Project Vault #2
 Existing Concrete Junction Box to be Removed
 New Precast Concrete Vault Minimum 30"W x 48"L x 36"D with 2-Piece Labeled Cover on Crushed White Rock Base
 Two New Risers:
 2-1 1/4" Polyducts from the South
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

Project Vault #3
 Existing Concrete Junction Box to be Removed
 New Precast Concrete Vault Minimum 30"W x 48"L x 36"D with 2-Piece Labeled Cover on Crushed White Rock Base
 Two New Risers:
 2-1 1/4" Polyducts to the North
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

Project Vault #1
 Existing Concrete Junction Box to be Removed
 New Precast Concrete Vault Minimum 30"W x 48"L x 36"D with 2-Piece Labeled Cover on Crushed White Rock Base
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

45'
 2-1 1/4" HDPE SDR 13.5 Orange with Black Stripe and 1-12 Gauge CCS EHS Tracer Wire Bored in at 4'- Deep

Project Vault #4
 Existing Concrete Junction Box to be Removed
 New Precast Concrete Vault Minimum 30"W x 48"L x 36"D with 2-Piece Labeled Cover on Crushed White Rock Base
 Four New Risers:
 2-1 1/4" Polyducts to the Auditorium
 2-1 1/4" Polyducts to the North
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

Materials List for F-009 Sheet 2 CO-187/397

Quantity	Stock Number	Description	Sub
10'		1 1/4" Sch40 PVC	397
180'		1 1/4" HDPE SDR 13.5 Orange	397
180'		1 1/4" HDPE SDR 13.5 Orange with One Black Stripe	397
2		1 1/4" Polyduct Couplers	397
2		1 1/4" PVC Caps	397
200'		12Gauge Tracer Wire CCS Extra High Strength 45mil HDPE Insulation	397
8		Locking Tracer Connectors	397
4		Precast Concrete Vaults 36"+ x 50"+ x 36"+	397
1		Ton of Crushed White Rock	397
4		5lb Anodes with Lead Wires	397
4		Anode Test Stations	397
Misc.		Tape, Wire, Connectors, Bolts, etc.	397



HASTINGS UTILITIES

Hastings, Nebraska

Aspen\Departments\Engineering\Communication\F-009

Dsn T. Waite Sup^lN. Nienhueser Ckd No.

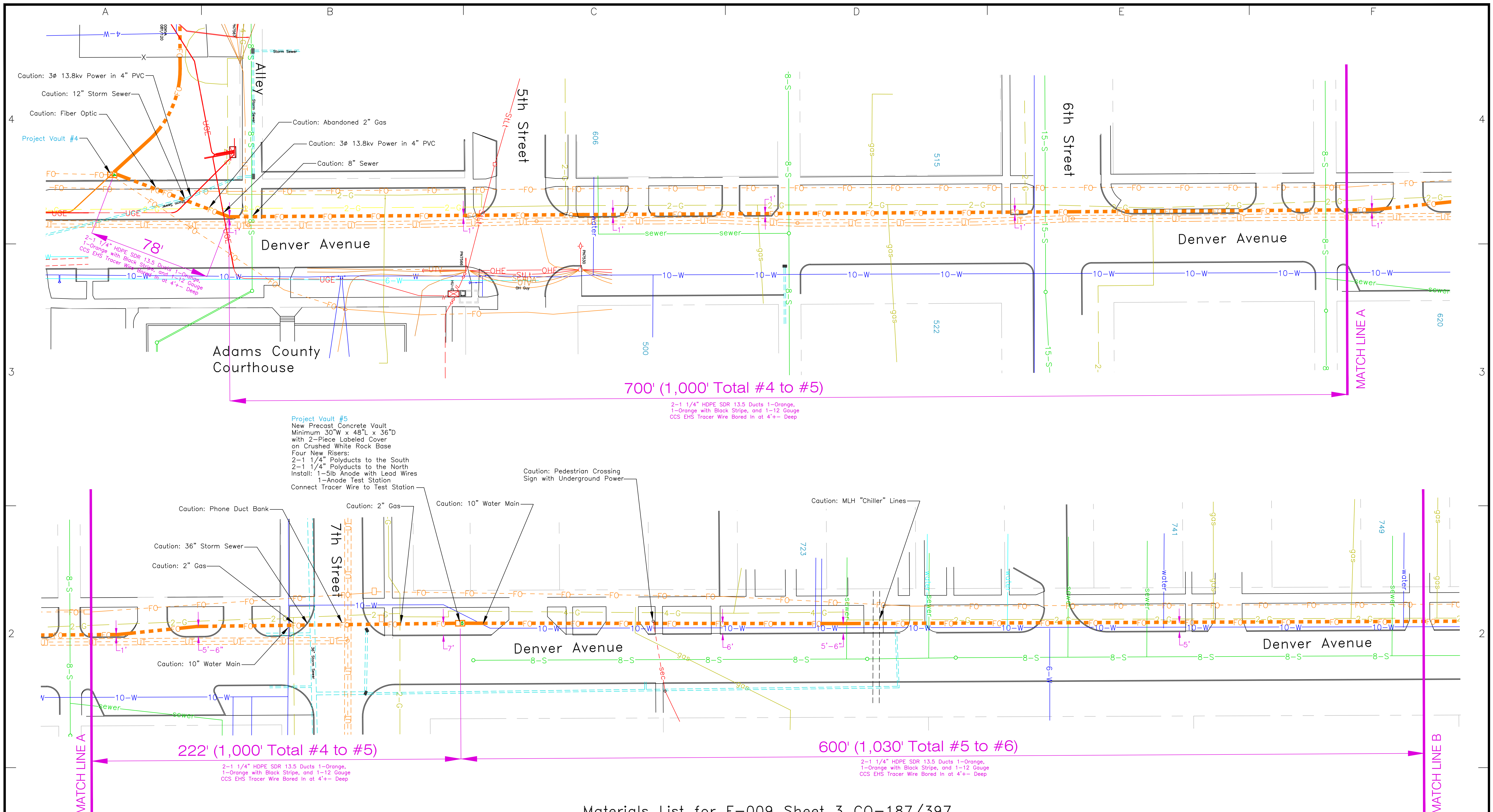
Drwn T. Waite W.O.No. CO-187 Ckd

Date 12-15-25 Ret'mt No. App

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No.	Revision	By	Date	Ckd	App



Project Vault #5
 New Precast Concrete Vault
 Minimum 30'W x 42'L x 36"D
 with 2-Piece Labeled Cover
 on Crushed White Rock Base
 Four New Risers:
 2-1 1/4" Polyducts to the South
 2-1 1/4" Polyducts to the North
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

700' (1,000' Total #4 to #5)

2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange,
 1-Orange with Black Stripe, and 1-12 Gauge
 CCS EHS Tracer Wire Bored In at 4'+- Deep

222' (1,000' Total #4 to #5)

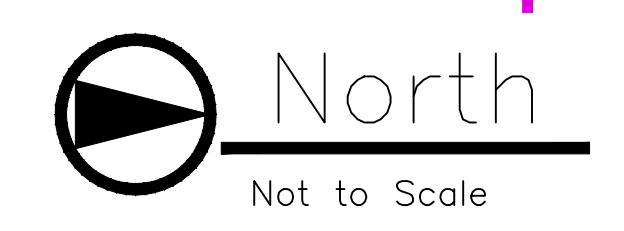
2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange,
 1-Orange with Black Stripe, and 1-12 Gauge
 CCS EHS Tracer Wire Bored In at 4'+- Deep

600' (1,030' Total #5 to #6)

2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange,
 1-Orange with Black Stripe, and 1-12 Gauge
 CCS EHS Tracer Wire Bored In at 4'+- Deep

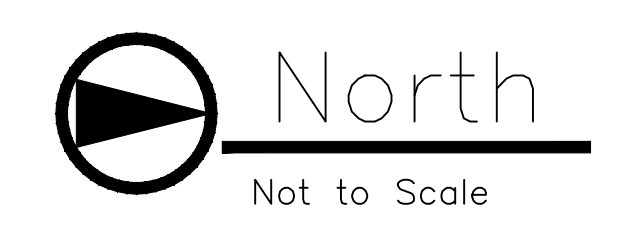
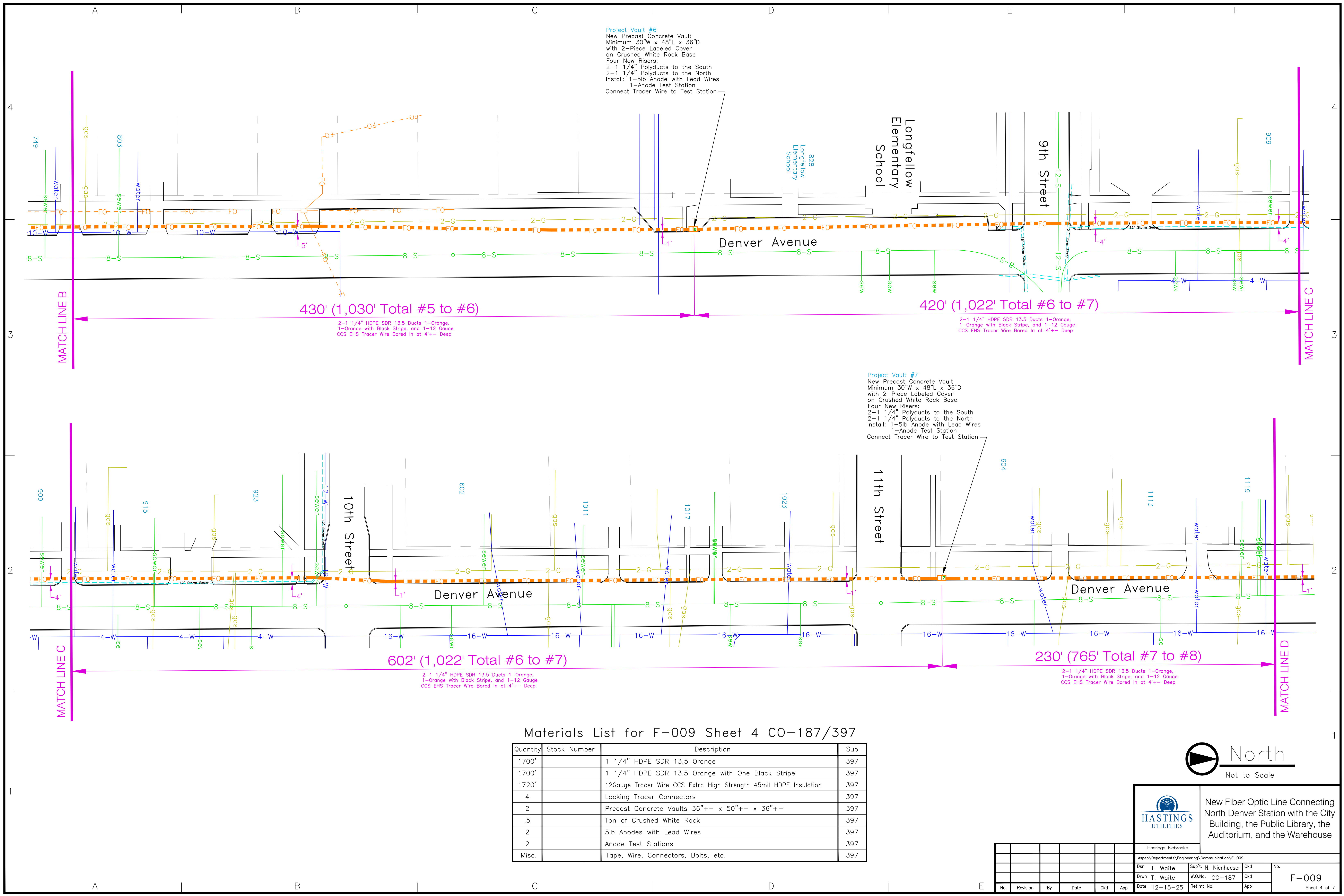
Materials List for F-009 Sheet 3 CO-187/397

Quantity	Stock Number	Description	Sub
1610'		1 1/4" HDPE SDR 13.5 Orange	397
1610'		1 1/4" HDPE SDR 13.5 Orange with One Black Stripe	397
1630'		12Gauge Tracer Wire CCS Extra High Strength 45mil HDPE Insulation	397
2		Locking Tracer Connectors	397
1		Precast Concrete Vault 36"+- x 50"+- x 36"+-	397
.25		Ton of Crushed White Rock	397
1		5lb Anodes with Lead Wire	397
1		Anode Test Station	397
Misc.		Tape, Wire, Connectors, Bolts, etc.	397



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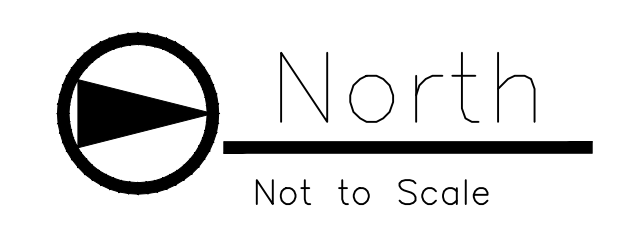
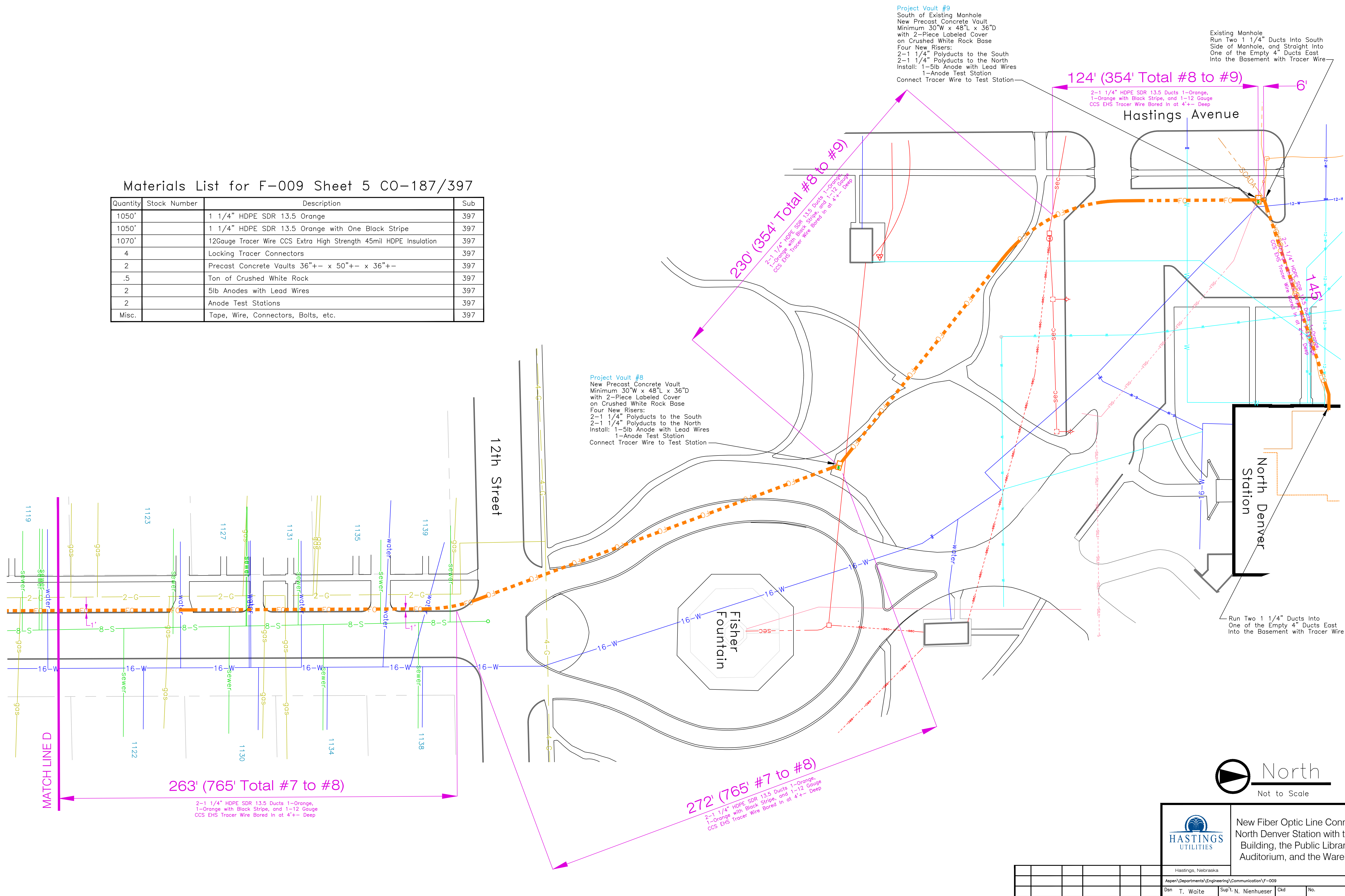
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Materials List for F-009 Sheet 5 CO-187/397

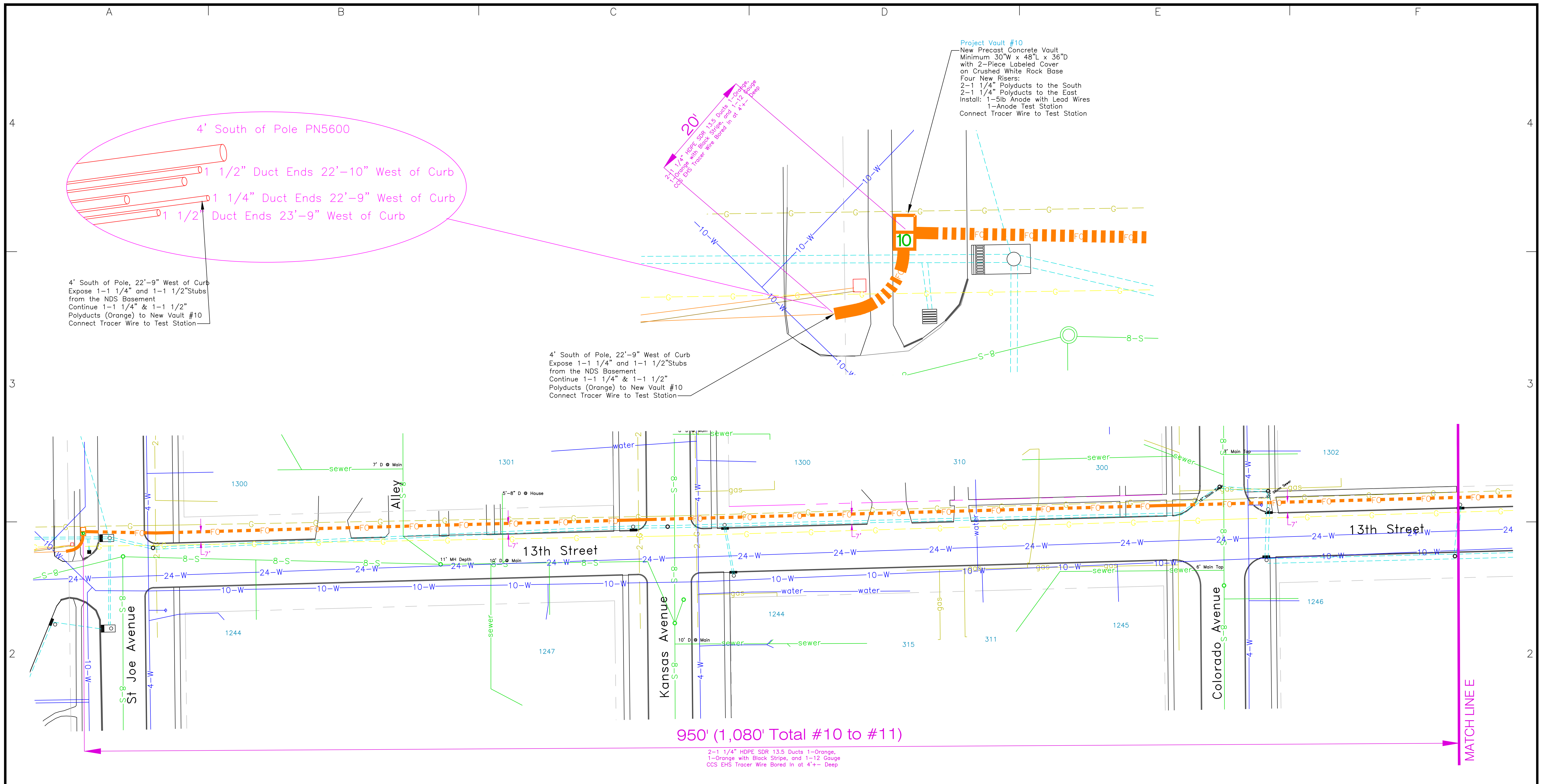
Quantity	Stock Number	Description	Sub
1050'		1 1/4" HDPE SDR 13.5 Orange	397
1050'		1 1/4" HDPE SDR 13.5 Orange with One Black Stripe	397
1070'		12Gauge Tracer Wire CCS Extra High Strength 45mil HDPE Insulation	397
4		Locking Tracer Connectors	397
2		Precast Concrete Vaults 36"+ x 50"+ x 36"+	397
.5		Ton of Crushed White Rock	397
2		5lb Anodes with Lead Wires	397
2		Anode Test Stations	397
Misc.		Tape, Wire, Connectors, Bolts, etc.	397



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Project Vault #10
 New Precast Concrete Vault
 Minimum 30"W x 48"L x 36"D
 with 2-Piece Labeled Cover
 on Crushed White Rock Base
 Four New Risers:
 2- 1 1/4" Polyducts to the South
 2- 1 1/4" Polyducts to the East
 Install: 1- 5lb Anode with Lead Wires
 1- Anode Test Station
 Connect Tracer Wire to Test Station

4' South of Pole PN5600
 1 1/2" Duct Ends 22'-10" West of Curb
 1 1/4" Duct Ends 22'-9" West of Curb
 1 1/2" Duct Ends 23'-9" West of Curb

4' South of Pole, 22'-9" West of Curb
 Expose 1- 1 1/4" and 1- 1 1/2" Stubs
 from the NDS Basement
 Continue 1- 1 1/4" & 1- 1 1/2"
 Polyducts (Orange) to New Vault #10
 Connect Tracer Wire to Test Station

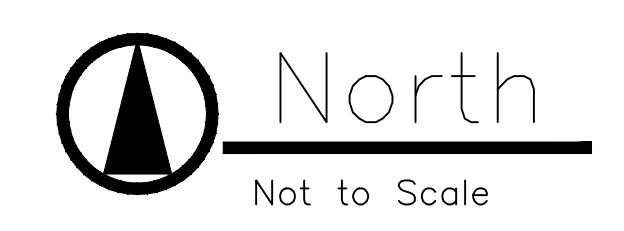
4' South of Pole, 22'-9" West of Curb
 Expose 1- 1 1/4" and 1- 1 1/2" Stubs
 from the NDS Basement
 Continue 1- 1 1/4" & 1- 1 1/2"
 Polyducts (Orange) to New Vault #10
 Connect Tracer Wire to Test Station

950' (1,080' Total #10 to #11)

2- 1 1/4" HDPE SDR 13.5 Ducts 1- Orange,
 1- Orange with Black Stripes, and 1- 12 Gauge
 CCS EHS Tracer Wire Bored In at 4'+- Deep

Materials List for F-009 Sheet 6 CO-187/397

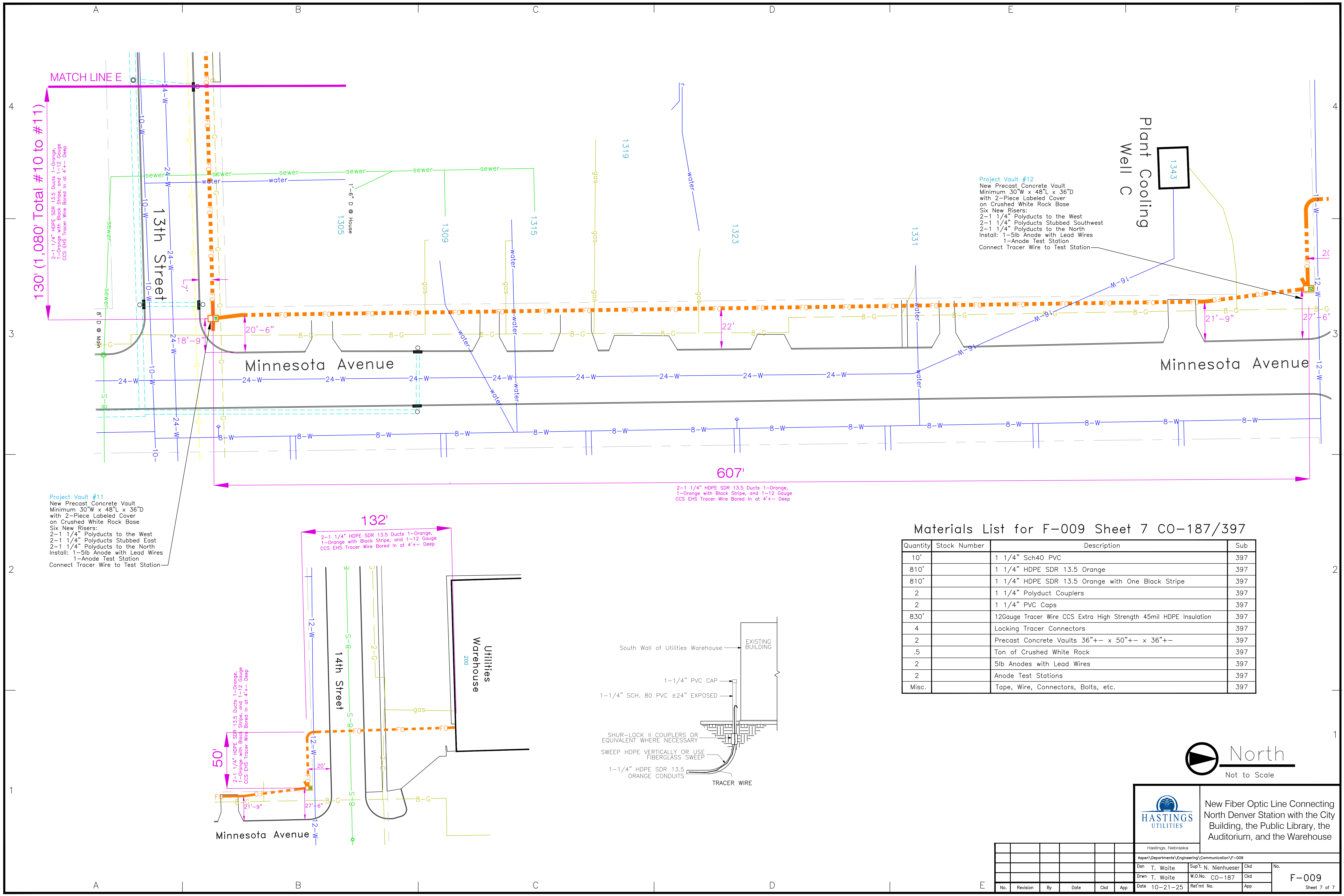
Quantity	Stock Number	Description	Sub
960'		1 1/4" HDPE SDR 13.5 Orange	397
960'		1 1/4" HDPE SDR 13.5 Orange with One Black Stripe	397
980'		12Gauge Tracer Wire CCS Extra High Strength 45mil HDPE Insulation	397
2		Locking Tracer Connectors	397
1		Precast Concrete Vault 36"+- x 50"+- x 36"+-	397
.25		Ton of Crushed White Rock	397
1		5lb Anode with Lead Wires	397
1		Anode Test Station	397
Misc.		Tape, Wire, Connectors, Bolts, etc.	397



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MATCH LINE E

130' (1,080' Total #10 to #11)

2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange, 1-Orange with Black Stripes, and 1-12 Gauge CCS EHS Tracer Wire Bored In at 4'-+ Deep

Project Vault #12
 New Precast Concrete Vault
 Minimum 30"W x 48"L x 36"D
 with 2-Piece Labeled Cover
 on Crushed White Rock Base
 Six New Risers:
 2-1 1/4" Polyducts to the West
 2-1 1/4" Polyducts Stubbed Southwest
 2-1 1/4" Polyducts to the North
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

Project Vault #11
 New Precast Concrete Vault
 Minimum 30"W x 48"L x 36"D
 with 2-Piece Labeled Cover
 on Crushed White Rock Base
 Six New Risers:
 2-1 1/4" Polyducts to the West
 2-1 1/4" Polyducts Stubbed East
 2-1 1/4" Polyducts to the North
 Install: 1-5lb Anode with Lead Wires
 1-Anode Test Station
 Connect Tracer Wire to Test Station

607'

2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange, 1-Orange with Black Stripes, and 1-12 Gauge CCS EHS Tracer Wire Bored In at 4'-+ Deep

132'

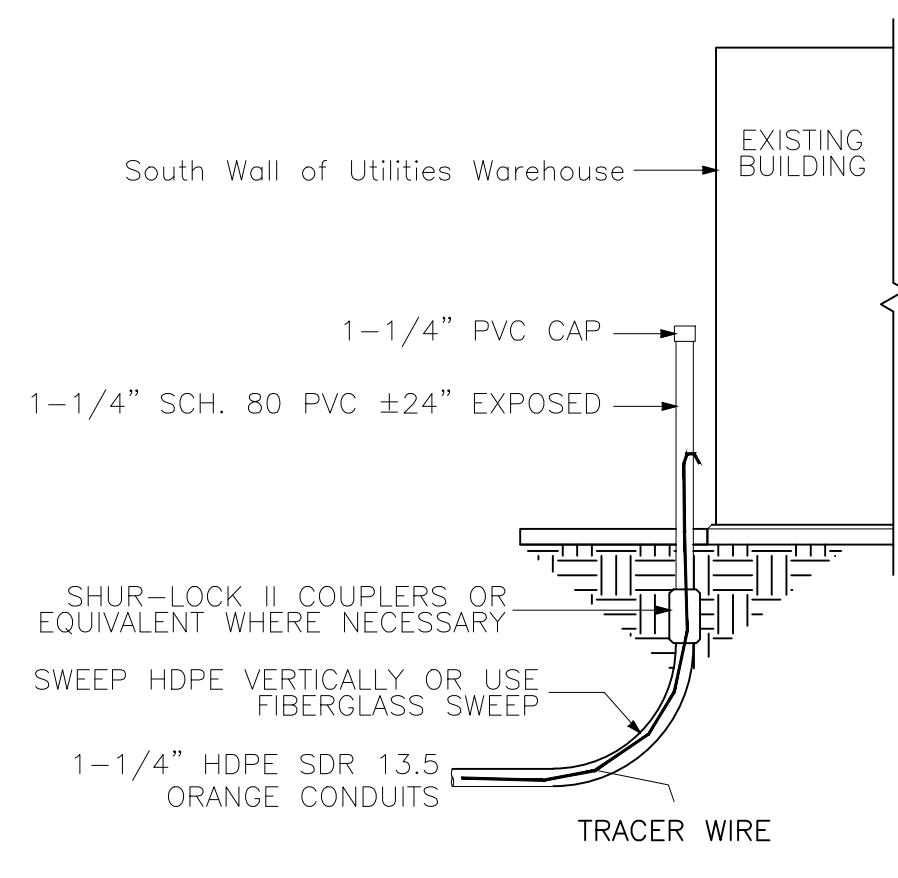
2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange, 1-Orange with Black Stripes, and 1-12 Gauge CCS EHS Tracer Wire Bored In at 4'-+ Deep

50'

2-1 1/4" HDPE SDR 13.5 Ducts 1-Orange, 1-Orange with Black Stripes, and 1-12 Gauge CCS EHS Tracer Wire Bored In at 4'-+ Deep

Materials List for F-009 Sheet 7 CO-187/397

Quantity	Stock Number	Description	Sub
10'		1 1/4" Sch40 PVC	397
810'		1 1/4" HDPE SDR 13.5 Orange	397
810'		1 1/4" HDPE SDR 13.5 Orange with One Black Stripe	397
2		1 1/4" Polyduct Couplers	397
2		1 1/4" PVC Caps	397
830'		12Gauge Tracer Wire CCS Extra High Strength 45mil HDPE Insulation	397
4		Locking Tracer Connectors	397
2		Precast Concrete Vaults 36"+- x 50"+- x 36"+-	397
.5		Ton of Crushed White Rock	397
2		5lb Anodes with Lead Wires	397
2		Anode Test Stations	397
Misc.		Tape, Wire, Connectors, Bolts, etc.	397



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