DESIGN DATA				
Traffic	Average Daily			
Current 2014	Pass: 665	Trucks: 145	Total: 810	
Forecast 2034	Pass: 815	Trucks: 200	Total: 1015	
Clear Zone Distance: 20'		Design Speed: 65		
Minimum Sight Dist. for Stopping: 645'		Bridges: none		
Sight Dist. for No Passing Zone: 1100'				
Pavement Design Life 20 (years)				
Design Accumulated One-way Flexible ESALs: 464,208				

STATE	PROJECT NO.	PCN	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	17707	1	1

JOB # 19
NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

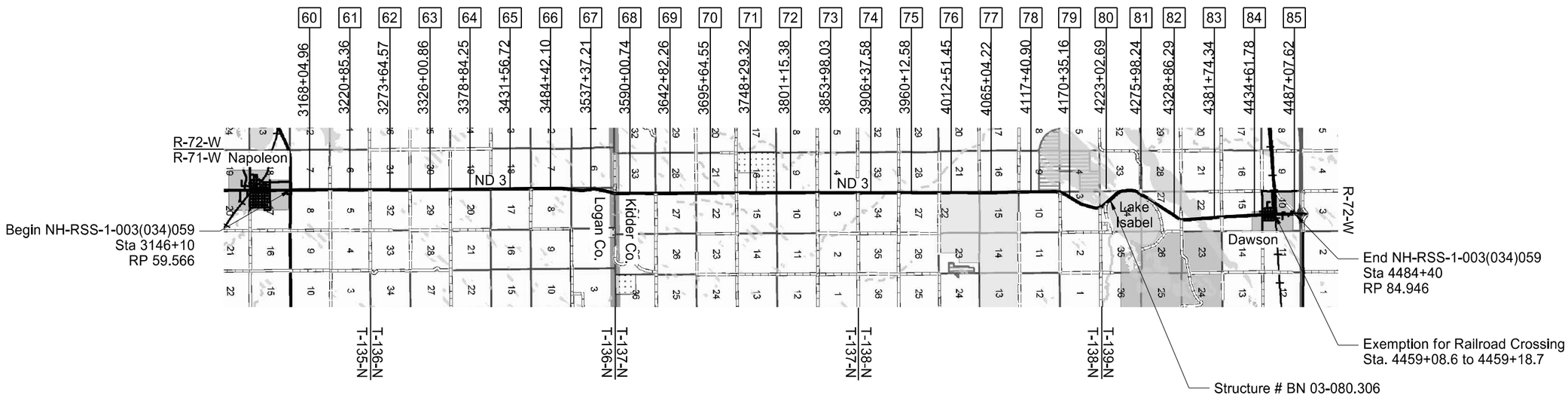
NH-RSS-1-003(034)059

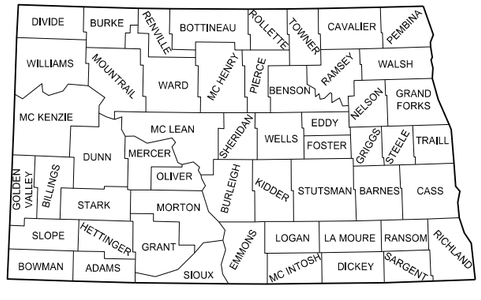
FHWA Project of Division Interest (PODI)
Kidder & Logan County
Jct 34 North to I-94 Dawson

Hot Bituminous Pavement, Aggr Shoulders, Culvert Extensions,
Widening, Curb & Gutter, Sidewalk, Driveways,
ADA Improvements and Incidentals

GOVERNING SPECIFICATIONS:
2014 Standard Specifications adopted by the North Dakota Department of Transportation and the Supplemental Specifications effective on the date the project is advertised.

PROJECT NUMBER \ DESCRIPTION	NET MILES	GROSS MILES
NH-RSS-1-003(034)059	25.378	25.380





STATE COUNTY MAP

DESIGNERS

Gary Brennan, PE

William Doerr, PE

APPROVED DATE 9/3/14

Roger Weigel /s/
OFFICE OF PROJECT DEVELOPMENT
ND DEPARTMENT OF TRANSPORTATION

I hereby certify that the attached plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the state of ND.

APPROVED DATE 08/25/14

William Doerr /s/
NDDOT DIV-DIST OR CONSULTANT FIRM

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TABLE OF CONTENTS

Section No.	Sheet No.	Description
1	1	Title Sheet
2	1	Table of Contents
	2	List of Standard Drawings
4	1-2	Scope of Work
6	1-3	Notes
	4-9	Environmental Commitments
8	1-3	Quantities
10	1-3	Basis of Estimate
11	1	Earthwork Summary
	2-11	Mass Haul Diagram
	12-22	Earthwork Values
	23	Right of Way Markers
	24	Core Data
20	1-2	Approach Details
	3	Approach Slope Flattening Detail
	4	Ditch Block Slope Flattening Detail
	5-6	Culvert End Protection
	7	Mainline Pipe Extension Detail
	8-9	Subcut Details
	10	Milling Transitions
	11	Concrete Erosion Control Blanket
	12-13	Cattle Pass Details
	14	Flotation Silt Curtain Detail
30	1-3	Existing Typical Sections
	4-7	Proposed Typical Sections
50	1	Hydraulic Data
51	1-9	Allowable Pipe List
60	1-76	Plan & Profile Sheets
75	1-32	Wetlands, Mitigation, and Environmental
76	1-32	Temporary Sediment and Erosion Control
	33	Temporary Sediment and Erosion Control Summary
77	1-32	Permanent Sediment and Erosion Control
	33-34	Permanent Sediment and Erosion Control Summary
80	1-5	Superelevation Transitions
81	1-5	Coordinate Data
90	1-5	City of Dawson Layout
100	1	Work Zone Traffic Control Device List
	2-4	Work Zone Traffic Control – Signing Layouts
110	1-4	Sign Summary
	5-37	Sign Layout
	38-41	Sign Details
120	1	Pavement Marking
180	1-3	Pit Plats
	1-73	Standard Drawings
200	1-516	Mainline Cross Sections

LIST OF SPECIAL PROVISIONS (SP)

SP #	Description
SP 3(14)	Temporary Erosion and Sediment Best Management Practices
SP 25(14)	Flexible Pavement Surface Tolerance SO
SP 27(14)	Concrete Erosion Control Blanket
SP 5014(14)	Permits and Environmental Considerations

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	2	2

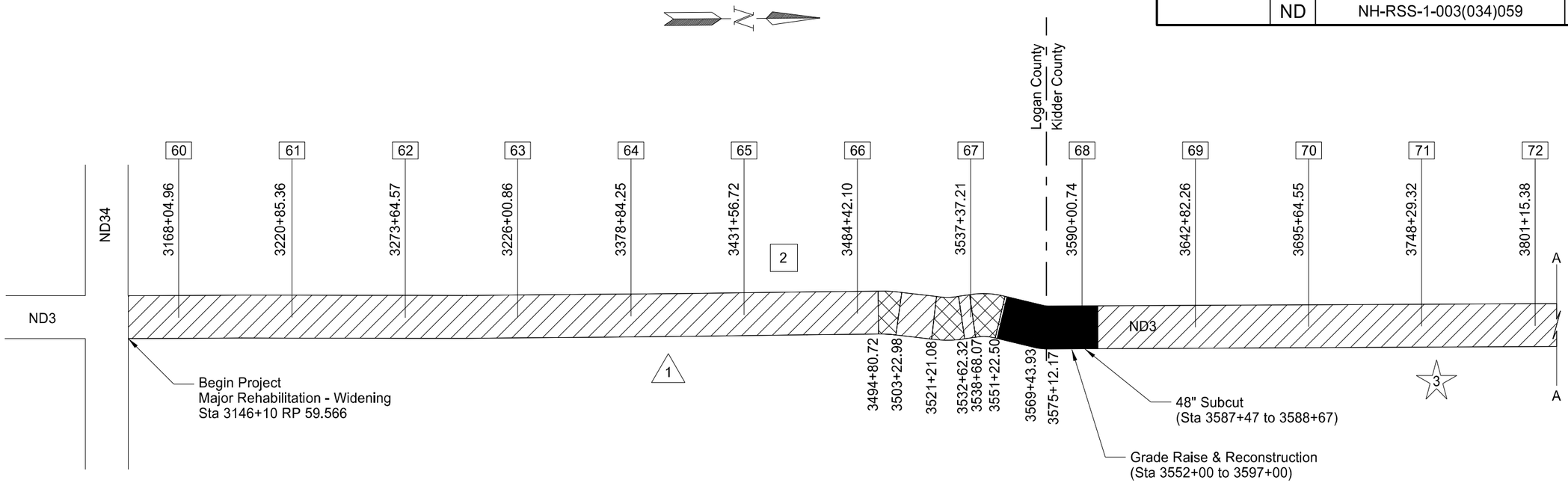
LIST OF STANDARD DRAWINGS

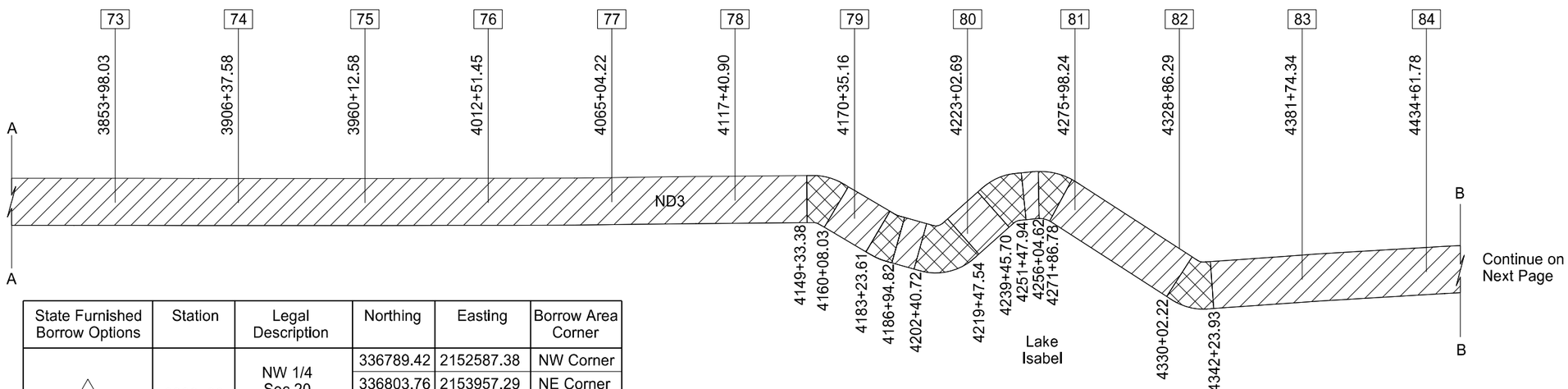
Standard No.	Description
D-101-1	NDDOT Abbreviations
D-101-2	NDDOT Abbreviations
D-101-3	NDDOT Abbreviations
D-101-10	NDDOT Utility Company and Organization Abbreviations
D-101-20	Line Styles
D-101-21	Line Styles
D-101-30	Symbols
D-101-31	Symbols
D-101-32	Symbols
D-203-7	Recovery Approaches at T-Intersections
D-203-8	Standard Rural Approaches
D-255-02	Erosion & Siltation Control Blanket Installation
D-256-1	Erosion and Siltation Controls
D-260-1	Erosion and Siltation Controls – Silt Fence
D-261-1	Erosion Control - Fiber Roll Placement Details
D-704-2	Traffic Control For Coring of Hot Bituminous Pavement
D-704-5	Contractor Sign Detail
D-704-7	Breakaway Systems For Construction Zone Signs-Perforated Tube
D-704-8	Breakaway Systems For Construction Zone Signs-U Channel Post
D-704-9, 10, 11, 12	Construction Sign Details
D-704-13	Barricade & Channelizing Details
D-704-14, 15, 20, 22	Construction Sign Layout
D-704-24, 25, 26	Construction Sign Layout
D-704-27	Traffic Control for Moving Operations
D-704-50	Portable Sign Support Assembly
D-706-1	Bituminous Laboratory
D-708-6	Erosion and Siltation Controls – Median or Ditch Inlet Protection
D-714-1	Reinforced Concrete Pipe Culvert & End Sections
D-714-4	Round Corrugated Steel Pipe Culverts & End Sections
D-714-5	Corrugated Steel Pipe Arch Culverts & End Sections
D-714-8	4'x6' Standard Sectional Concrete Cattle Pass (W/ Steel Fabric Reinf)

LIST OF STANDARD DRAWINGS

Standard No.	Description
D-714-11	Traversable End Sections for Corrugated Steel Pipe Culverts
D-714-22	Concrete Pipe or Precast Concrete Box Culvert Ties
D-714-25	Trans Mainline Pipe Backfill For Pipes > 4 Feet Below Proposed Base
D-714-26	Trans Mainline Pipe Backfill-Pipes 4 Feet Or Less Below Proposed Base
D-714-28	Transverse Mainline Fill For New Pipe Laid On Existing Ground In Embankment Areas
D-720-1	Standard Monuments and Right Of Way Markers
D-748-1	Curb & Gutter and Valley Gutter
D-750-1	Concrete Driveway - Urban
D-750-2	Sidewalk
D-750-3	Curb Ramp Detail
D-754-9	Letter And Arrow Details For Variable Length Signs
D-754-19	(Conventional Use) Reference Markers
D-754-21	Reflectorized Delineators
D-754-23	Perforated Tube Assembly Details
D-754-24, 25	Mounting Detail Perforated Tube
D-754-24A	Mounting Details Perforated Tube
D-754-26, 27	Sign Punching, Stringer & Support Location Details Reg, Warn, & Guide Signs
D-754- 29, 32, 37,41	Sign Punching, Stringer & Support Location Details Reg, Warn, & Guide Signs
D-754-47, 48, 49, 50	Sign Punching, Stringer & Support Location Details For Var Length Signs
D-754-51	Sign Punching, Stringer & Support Location Details – Route Markers
D-754-57, 58	Sign Punching, Stringer & Support Location Details – Route Markers
D-754-83	Object Markers - Culverts
D-754-86	911 Support Information and Sign Details
D-754-87	Sign Punching, Stringer & Support Location Details – Street Name & 911 Signs
D-760-04	Rumble Strips Undivided Highways (Shoulders Less Than 4')
D-762-4	Pavement Marking
D-762-6	Short Term Pavement Marking
D-766-1	Mail Box Location Details

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	4	1





State Furnished Borrow Options	Station	Legal Description	Northing	Easting	Borrow Area Corner
1	3396+00	NW 1/4 Sec 20 T136N R72W	336789.42	2152587.38	NW Corner
			336803.76	2153957.29	NE Corner
			335736.80	2153967.36	SE Corner
			335722.46	2152867.44	SW Corner
2	3451+00	NE1/4 Sec 18 T136N R72W	341581.51	2150744.87	NW Corner
			341581.51	2151844.96	NE Corner
			340481.51	2151859.30	SE Corner
			340481.51	2150759.20	SW Corner
3	3750+00	NW1/4 Sec 15 T137N R72W	374134.73	2153376.05	NW Corner
			374155.93	2155710.95	NE Corner
			371985.02	2155730.96	SE Corner
			371963.82	2153396.06	SW Corner

Major Rehabilitation - Widening - 3½" Overlay

Correct Superelevation

Grade Raise (Sta 3552+00 to 3597+00)

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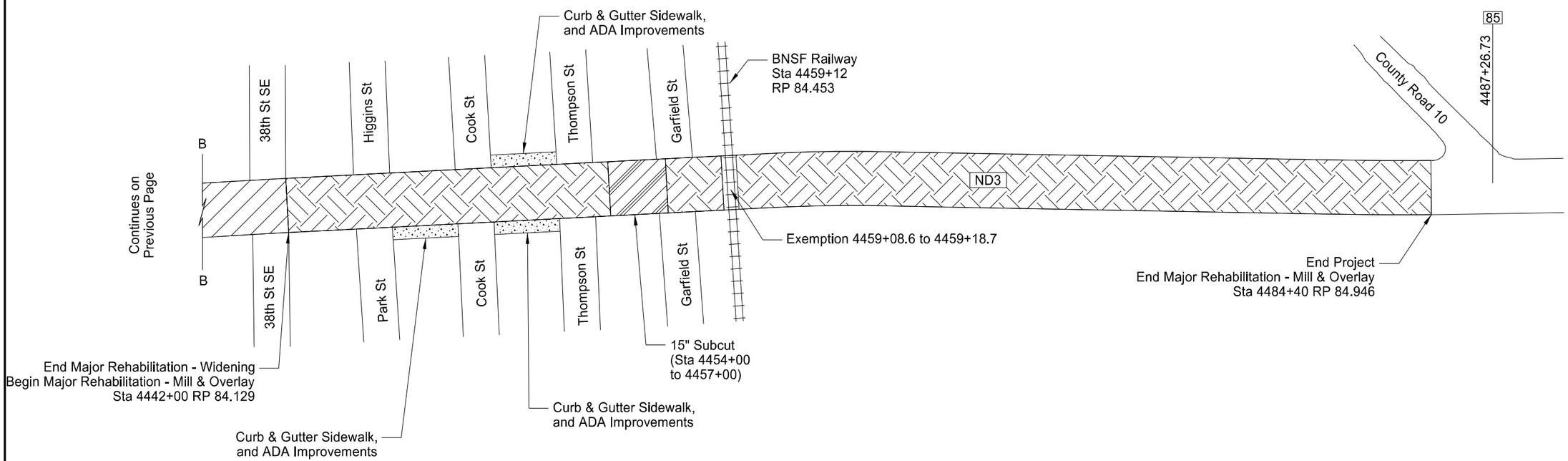
Scope of Work

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	4	2

City of Dawson



Major Rehabilitation - Widening - 3½" Overlay

Major Rehabilitation - Mill & Overlay

Subcut

Curb & Gutter,
Sidewalk and ADA Improvements

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Scope of Work

ND 3

Jct 34 N to I-94 Dawson

NOTES

100-P01 WEEKLY PLANNING/REPORTING MEETING:

Organize the weekly meeting to coordinate efforts between subcontractors, utilities, local authorities, and others.

Send a knowledgeable representative to conduct the weekly reporting/planning meeting. Prepare minutes for each meeting and make the appropriate distribution of the minutes. Have the minutes approved by the Engineer before distribution.

Provide a written schedule of the next week's work and a tentative schedule of the following week. Include a discussion of problems encountered during the current week; also include information of interest to local authorities, subcontractors, and utilities.

Invite interested agencies to the meeting. Include the following agencies and any other agencies that are necessary:

a. North Dakota Department of Transportation
b. Local Government Agencies
c. Police department
d. Fire department
e. Ambulance service
f. Telephone Co.
g. Power Co.
h. Cable T.V.
i. Gas Co.
j. Railroad Co.
k. Subcontractors
l. Chamber of Commerce
m. FHWA

105-200 UTILITY COORDINATION: The Contractor shall arrange a Post Bid Utility Coordination Meeting with affected Utility Companies, NDDOT Bismarck District Office, and the Project Engineer. This meeting shall be in addition to the preconstruction meeting. The Post Bid Utility Coordination Meeting shall be held near the project area or at the District office and shall be held no later than two weeks after the Department and the Contractor have executed the contract, as approved by the Engineer. The Contractor shall provide an agenda for the meeting, and be prepared to discuss the items on it. Items to discuss shall include, but not be limited to; plan for constructing the project, work schedule, utility adjustment/relocates needed prior to project start, utility adjustment/relocates that can be done concurrent with project, utility locates and site access. The contractor shall publish meeting minutes and distribute the minutes to all attendees and the NDDOT Utilities Engineer within one week after the meeting.

107-115 RAILROAD PROTECTIVE LIABILITY INSURANCE: This project crosses the BNSF Railway Company at Station 4459+14 (RP 84.461). The type of work that will be performed within the railroad right of way is milling and hot bituminous pavement overlay. Inquiries for protective liability insurance should be directed to:

Rosa Martinez
Marsh Co.
Texas
214-303-8519

Information on crossing number DOT 087704B may be obtained from the Federal Railroad Administration website: http://safetydata.fra.dot.gov/Officeofsafety/.

107-P01 RAILROAD NOTIFICATION: The Contractor shall notify the BNSF Railway Company Roadmaster Craig Kemmet (Telephone 701-253-3535) a minimum of 48 hours prior to performing work on or adjacent to the railroad right-of-way.

107-P02 HAUL ROAD RESTRICTIONS: The Contractor shall contact the appropriate County, Township or City officials to determine if there are any “No Haul Routes” prior to preparing a bid for this project. No paved County or Township roads shall be used as haul roads.

108-P01 WORK SCHEDULE: No construction activities below the water level will be allowed during the fish spawning period from March 1 to June 1 in Lake Isabel and Alkaline Lake.

200-010 SHRINKAGE: 25 percent additional volume is included for shrinkage in earth embankment.

200-381 BORROW HAUL: The average haul shown on the plans does not include the dead haul from the borrow areas to the point of entry into the mass.

201-P01 REMOVAL OF TREES: There are 2 large trees located near Station 4196+28 in the east ditch that are to be removed and disposed of. All costs associated with this work shall be included in the price bid per each for “Removal of Trees 30IN”.

202-P01 CONCRETE REMOVAL: Removal of concrete sidewalks, driveways and curb and gutter will be paid for as "Removal of Concrete."

203-P01 COMMON EXCAVATION – TYPE A: All costs associated with the widening and flattening of ditch blocks and approaches shall not be bid separately but included in the unit price bid for “Common Excavation-Type A.”

203-P02 WETLAND EXCAVATION: The excavation for wetland mitigation will be paid for under the bid item “Common Excavation-Type A.”

203-P03 BORROW EXCAVATION: 260,000 CY of borrow material has been secured and cleared as State Furnished Borrow Options. The remaining quantity of borrow material needed on the project shall be furnished by the Contractor.

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NOTES

230-P01 RESHAPING DITCH: There are four ditches within the city limits of Dawson that are designated in the plans for reshaping. The station ranges are provided on the plans between each of the pipe locations. The ditches shall be reshaped in these locations to provide a straight grade from one pipe culvert to the next that will match into the inverts of the pipe. The reshaping shall daylight into the existing ditch 100' beyond the last pipe on each end of the section designated for reshaping. All costs associated with this work shall be included in the unit price bid per mile for "Reshaping Ditch."

256-P01 RIPRAP GRADE II: At the Contractor's option, the existing riprap along the roadway may be salvaged for reuse, provided it meets the specifications and will be paid at the unit price bid for "Riprap Grade II."

602-P01 CONCRETE HEADWALL: A concrete headwall shall be installed at both the inlet and outlet end of the cattle pass at Station 4180+39. The cattle pass end sections shall be tied to the headwall according to the plan details. The cost of installing the concrete headwall and fastening the end section to the headwall by way of drilling and epoxy dowels as shown in Section 20 shall be included in the contract unit price per cubic yard for "Class AE-3 Concrete".

704-016 TRAFFIC CONTROL SUPERVISOR: Traffic control supervisor shall be provided on this project.

704-P01 TRAFFIC CONTROL: The traffic control plan requires flagging during working hours. The Contractor shall leave the work area free of all hazards during nonworking hours. The traffic control devices shall be removed at the end of each day and reinstalled when work commences. If a hazard exists after working hours, the Contractor shall leave the required traffic control devices and provide flag persons at his own expense until the hazard has been eliminated. Hazards are drop-offs greater than 2" and slopes steeper than 4:1.

704-P02 TRAFFIC CONTROL DEVICES: The traffic control devices list has been developed using the layouts shown in the plans and the following layouts shown on the Standard Drawings.

D-704-15 Layout Type A for Flagging Operation

D-704-20 Layout Type G for Intersecting Routes

D-704-22 and D-704-26, Layouts Type K, Type L and Type Y for Construction Truck Hauling Material

D-704-24 Layouts Type U, Type R and Type S for Shoulder Work

D-704-26 Layouts Type BB, EE, FF and GG as needed

D-704-27 Traffic Control for Moving Operations on Conventional Highways

704-P03 TRAFFIC CONTROL FOR CENTERLINE PIPE REPLACEMENT: The Contractor shall have one lane open to traffic during daytime hours for the centerline pipe replacement work. If the centerline pipe replacement work is not completed and the roadway opened to two-way traffic at the end of each day, the flagging and traffic control required after normal working hours shall be at the Contractor's expense. Traffic control required shall meet nighttime operations and NDDOT standards. These areas shall not have a drop-off of more than 2 inches and inslopes shall be 4:1 or flatter. Uneven lanes shall be marked with tubular markers. The Contractor shall install uneven lanes and bump signs at these locations as per the standard drawings.

704-P04 TRAFFIC CONTROL FOR SHOULDER DROP-OFF: The Contractor has the option of placing the aggregate shoulder adjacent to the driving lane or providing a slough and signing for the shoulder drop off as follows: Install Shoulder Drop Off signs (Sign No. W8-9a-48) and a supplemental plate (Sign No. W20-52-54), identifying the distance, in advance of the beginning of the shoulder drop off, each mile thereafter, and at major intersections. A major intersection shall be defined as a CMC, State, US highway or Interstate ramp. If the Contractor is unable to make the driving lane and shoulder even at the end of the day, the Contractor shall sign the shoulder drop off as specified above. The slough shall be a 4:1 slope. No slough will be required for drop-offs of 2 inches or less in depth.

These traffic control signs shall be in place until the shoulder is even. These signs are included in the Traffic Control Devices List and will be measured and paid for at the contract unit price for each device. Relocation due to work progression will be at the Contractor's expense.

704-P05 SUBCUT EXCAVATION: Subcut operations shall be segmented into a length of roadway capable of being completed in one day. If the subcut operation is not completed and the roadway opened to traffic, the traffic control required shall be at the Contractor's expense. Traffic control required shall meet nighttime operations and NDDOT standards.

714-P01 CENTERLINE AND APPROACH PIPES: At locations designated for centerline and approach pipe installations or extensions, the Contractor shall provide dewatering if necessary. All costs associated with dewatering shall be included in the price bid for centerline and approach pipe.

714-P02 PIPE CLEANOUT: All centerline culverts designated in the plans for extension must be cleaned out before extending them. When necessary, material shall also be removed 50 feet beyond the end of the pipe, unless otherwise directed by the Engineer. The cost of removing the material shall be included in the price bid for centerline pipe.

714-P03 REMOVE & RELAY CONC CATTLE PASS: The precast cattle pass segmental units at Station 4180+39 need to be removed and relayed including 3 sections plus the end section on the west end and 2 sections plus the end section on the east end. The precast barrel sections shall be tied together with tie bolts with exception of the last 5'-6" precast section that will be connected to the existing cast-in-place box culvert by way of a grouted joint. Tie bolt holes shall be field drilled to accommodate the installation of tie bolts. See Standard Drawing D-714-22 for fastener and tie bolt details. The cost of field drilling holes and providing and installing tie bolts and fasteners shall be included in the contract unit price for "Remove & Relay Concrete Cattle Pass".

752-P01 REMOVE & RESET FENCE: The Contractor shall coordinate his activities with the adjacent landowners for the fence to be removed and reset. The Contractor shall give the landowners a minimum of 14 days advance notice prior to impacting any fence. As soon as construction permits, the Contractor shall reinstall the fence near its original location reusing the salvaged fence material.

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STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	6	3

NOTES

754-P01 DELINEATORS: There are approximately 81 existing delineators within the construction area, including the low profile delineators adjacent to Alkali Lake. The cost of the removal of the delineators shall not be bid separately but shall be included in the price bid for the item "Diamond Grade Delineators - Type A".

754-P02 TEMPORARY RESET OF STOP SIGNS DURING CONSTRUCTION: All existing STOP signs with Street Name signs and supports that are to be replaced as part of this project shall be removed along with their supports and reset outside the Construction Limits. Once the new permanent signing is in place, these reset signs and supports should be removed from the project. The cost of resetting the STOP signs with Street Name signs and supports, removing the signs and supports and delivering to the District Maintenance Yard shall not be bid separately but shall be included in the price bid for the various signing items.

754-P03 REMOVAL OF SIGNS: Of the signs to be removed, ten stop signs shall be salvaged and delivered to the City of Dawson. The Engineer will determine which 10 signs shall be salvaged for the City. The Contractor shall contact the City Auditor, Pat Zimmerman, prior to the delivery of the signs to coordinate their delivery.

754-P04 VERTICAL PANELS: There are approximately 26 vertical panels in the grade raise area. The Contractor shall coordinate their work with the Bismarck District to allow for the District to remove the panels from the project when necessary.

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ENVIRONMENTAL COMMITMENTS

ENVIRONMENTAL COMMITMENTS (EC): The North Dakota Department of Transportation and the Federal Highway Administration have made environmental commitments to secure approval of this project. The environmental commitments are as follows:

EC-1: Unavoidable impacts to wetlands will be mitigated onsite, adjacent to the project, or at a NDDOT approved mitigation site or bank.

ACTION REQUIRED /TAKEN: 0.92 acres of permanent impacts to jurisdictional waters and 3.25 acres of permanent impacts to *natural/non-jurisdictional* wetlands will require mitigation. The NDDOT proposes to mitigate 1.40 acres onsite and 3.29 at FHWA EO 11990 Mitigation Bank Vollrath 16/17.

Wetland Impact Table

Wetland Number	Location	Cowardin Class.	Wetland Type	Wetland Size Ac.	Wetland Feature	USACE Jurisdictional Wetlands*	Wetland Impacts (acres)		USFWS Easement Impacts		Wetland Mitigation				
											Mitigation Required			Location; Acreage; Wetland#; Ratio	Onsite Mitigation Acres
							Temp. Ac.	Perm. Ac.	Temp.	Perm.	EO 11990	USACE	USFWS		
1	Sec. 10, T139N, R72W	PEMCx	Ditch	0.01	Artificial	No	0.00	0.00			No	No	No	None	
2-E	Sec. 15, T139N, R72W	PEMC	Basin	0.33	Natural	No	0.08	0.04			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.04 Acres (1:1)	
2-W	Sec. 15, T139N, R72W	PEMC	Basin	0.46	Natural	No	0.09	0.03			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.03 Acres (1:1)	
4a	Sec. 22, T139N, R72W	PEMCx	Ditch	0.34	Artificial	Yes	0.18	0.09			No	Yes	No	Onsite: 0.09 Acres will be Mitigated at WL 19-E at a 1:1 Ratio	
4b	Sec. 22, T139N, R72W	PEMC	Fringe	0.79	Natural	Yes	0.01	0.01			Yes	Yes	No	Onsite: 0.01 Acres will be Mitigated at WL 4d at a 1:1 Ratio	
4c	Sec. 22, T139N, R72W	PEMC	Fringe	0.28	Natural	Yes	0.04	0.02			Yes	Yes	No	Onsite: 0.02 Acres will be Mitigated at WL 4d at a 1:1 Ratio	
4d	Sec. 22, T139N, R72W	PEMCx	Ditch	0.20	Artificial	Yes	0.04	0.17			No	Yes	No	Onsite: 0.17 Acres will be Mitigated at WL 15 at a 1:1 Ratio	0.09
4f	Sec. 22, T139N, R72W	PEMC	Fringe	0.94	Natural	Yes	0.22	0.46			Yes	Yes	No	Onsite Mitigation at a 1:1 Ratio: 0.06 Acres at WL4d and 0.07 Acres at WL4h; Onsite Mitigation at a 2:1 Ratio: 0.04 Acres at WL14-C, 0.17 Acres at WL14-D, 0.05 Acres at WL15, 0.03 Acres at WL23W and 0.19 Acres at WL30-E; Remaining Mitigation Required is 0.09 Acres if Mitigated Adjacent to WL4a-h (1:1 Ratio) or 0.18 Acres if Mitigated at Another Location	
4g	Sec. 22, T139N, R72W	PEMC	Fringe	0.60	Natural	Yes	0.10	0.07			Yes	Yes	No	Onsite: 0.07 Acres will be Mitigated at WL 4h a 1:1 Ratio	
4h	Sec. 22, T139N, R72W	PEMCx	Ditch	0.25	Artificial	Yes	0.13	0.11			No	Yes	No	Onsite: 0.11 Acres will be Mitigated at WL 30-E at a 1:1 Ratio	0.14
5	Sec. 22, T139N, R72 W	PEMCx	Ditch	0.06	Artificial	No	0.05	0.02			No	No	No	None	

ENVIRONMENTAL COMMITMENTS

Wetland Impact Table

Wetland Number	Location	Cowardin Class.	Wetland Type	Wetland Size Ac.	Wetland Feature	USACE Jurisdictional Wetlands*	Wetland Impacts (acres)		USFWS Easement Impacts		Wetland Mitigation				
											Mitigation Required			Location; Acreage; Wetland#; Ratio	Onsite Mitigation Acres
							Temp. Ac.	Perm. Ac.	Temp.	Perm.	EO 11990	USACE	USFWS		
6	Sec. 27, T139N, R72 W	PEMCx	Ditch	0.12	Artificial	No	0.03	0.01			No	No	No	None	
7-W	Sec. 34, T139N, R72 W	PEMC	Basin	10.70	Natural	Yes	0.02	0.00			No	No	No	None	
8-W	Sec. 3, T138N, R72 W	PEMC	Slope	0.04	Natural	Yes	0.01	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
8-E	Sec. 3, T138N, R72 W	PEMC	Slope	0.05	Natural	Yes	0.01	0.02			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.02 Acres (1:1)	
8.5	Sec. 3, T138N, R72 W	PEMA	Basin	0.19	Natural	Yes	0.01	0.00			No	No	No	None	
9	Sec. 9, T138N, R72 W	PEMC	Slope	0.04	Natural	Yes	0.01	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
10-W	Sec. 9, T138N, R72 W	PEMC	Slope/Basin	0.45	Natural	No	0.12	0.03			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.03 Acres (1:1)	
10-E	Sec. 10, T138N, R72 W	PEMCx	Ditch	0.22	Artificial	No	0.07	0.04			No	No	No	None	
11-W	Sec. 9, T138N, R72 W	PEMC	Basin	0.41	Natural	No	0.06	0.04			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.04 Acres (1:1)	
11-E	Sec. 10, T138N, R72 W	PEMC	Basin	0.12	Natural	No	0.04	0.03			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.03 Acres (1:1)	
12	Sec. 16, T138N, R72 W	PEMCx	Ditch	0.07	Artificial	No	0.02	0.00			No	No	No	None	
13	Sec. 16, T138N, R72 W	PEMCx	Ditch	0.13	Artificial	No	0.06	0.01			No	No	No	None	
14-A	Sec. 28, T138N, R72 W	PEMC	Slope/Basin	1.40	Natural	Yes	0.34	0.14			Yes	Yes	No	Onsite: 0.14 Acres will be Mitigated at WL 14-C at a 1:1 Ratio	
14-B	Sec. 28, T138N, R72 W	PEMC	Slope/Basin	0.46	Natural	Yes	0.13	0.06			Yes	Yes	No	Onsite: 0.06 Acres will be Mitigated at WL 14-C at a 1:1 Ratio	
14-C	Sec. 33, T138N, R72 W	PEMC	Slope	0.27	Natural	Yes	0.23	0.03			Yes	Yes	No	Onsite: 0.03 Acres will be Mitigated at WL 14-C at a 1:1 Ratio	0.27
14-D	Sec. 27, T138N, R72 W	PEMC	Slope	0.51	Natural	Yes	0.37	0.09			Yes	Yes	No	Onsite: 0.09 Acres will be Mitigated at WL 14-D at a 1:1 Ratio	0.26

ENVIRONMENTAL COMMITMENTS

Wetland Impact Table

Wetland Number	Location	Cowardin Class.	Wetland Type	Wetland Size Ac.	Wetland Feature	USACE Jurisdictional Wetlands*	Wetland Impacts (acres)		USFWS Easement Impacts		Wetland Mitigation				
											Mitigation Required			Location; Acreage; Wetland#; Ratio	Onsite Mitigation Acres
							Temp. Ac.	Perm. Ac.	Temp.	Perm.	EO 11990	USACE	USFWS		
15	Sec. 33, T138N, R72 W	PEMA	Slope/Basin	0.31	Natural	No	0.27	0.04			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.04 Acres (1:1)	0.22
16	Sec. 33, T138N, R72 W	PEMC	Basin	0.46	Natural	No	0.02	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
17-W	Sec. 4, T137N, R72 W	PEMC	Basin	0.10	Natural	No	0.00	0.00			No	No	No	None	
17-E	Sec. 3, T137N, R72 W	PEMCx	Ditch	0.02	Artificial	No	0.02	0.01			No	No	No	None	
18	Sec. 4, T137N, R72 W	PEMC	Basin	0.34	Natural	No	0.04	0.00			No	No	No	None	
19-W	Sec. 3, T137N, R72 W	PEMA	Basin	0.35	Natural	No	0.05	0.02			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.02 Acres (1:1)	
19-E	Sec. 3, T137N, R72 W	PEMAx	Ditch	0.14	Artificial	No	0.07	0.02			No	No	No	None	0.09
20	Sec. 9, T137N, R72 W	PEMA	Basin	0.31	Natural	No	0.01	0.00			No	No	No	None	
21-NW	Sec. 16, T137N, R72W	PEMC	Basin	1.45	Natural	No	0.01	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
21-SW	Sec. 21, T137N, R72W	PEMC	Basin	2.38	Natural	No	0.02	0.02			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.02 Acres (1:1)	
21-SE	Sec. 22, T137N, R72W	PEMC	Basin	2.18	Natural	No	0.00	0.00			No	No	No	None	
21-NE	Sec. 15, T137N, R72W	PEMC	Basin	0.81	Natural	No	0.00	0.00			No	No	No	None	
22	Sec. 28, T137N, R72W	PEMC	Basin	0.29	Natural	No	0.00	0.00			No	No	No	None	
23 W	Sec. 33, T137N, R72W	PEMC	Basin	1.69	Natural	No	0.30	0.35			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.35 Acres (1:1)	0.03
23 E	Sec. 34, T137N, R72W	PEMC	Basin	1.35	Natural	No	0.18	0.35			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.35 Acres (1:1)	
24 W	Sec. 33, T137N, R72W	PEMC	Basin	1.72	Natural	No	0.22	1.17			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 1.17 Acres (1:1)	

ENVIRONMENTAL COMMITMENTS

Wetland Impact Table

Wetland Number	Location	Cowardin Class.	Wetland Type	Wetland Size Ac.	Wetland Feature	USACE Jurisdictional Wetlands*	Wetland Impacts (acres)		USFWS Easement Impacts		Wetland Mitigation				
											Mitigation Required			Location; Acreage; Wetland#; Ratio	Onsite Mitigation Acres
							Temp. Ac.	Perm. Ac.	Temp.	Perm.	EO 11990	USACE	USFWS		
24 E	Sec. 34, T137N, R72W	PEMC	Basin	1.15	Natural	No	0.15	0.58			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.58 Acres (1:1)	
25	Sec. 5, T136N, R72W	PEMC	Basin	0.87	Natural	No	0.12	0.18			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.18 Acres (1:1)	
26	Sec. 5, T136N, R72W	PEMAx	Ditch	0.12	Artificial	No	0.00	0.00			No	No	No	None	
27	Sec. 7, T136N, R72W	PEMC	Basin	0.14	Natural	No	0.00	0.00			No	No	No	None	
28-W	Sec. 17, T136N, R72W	PEMC	Basin	1.18	Natural	No	0.11	0.10			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.10 Acres (1:1)	
28-E	Sec. 18, T136N, R72W	PEMC	Basin	1.06	Natural	No	0.07	0.06			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.06 Acres (1:1)	
29	Sec. 18, T136N, R72W	PEMA	Basin	0.15	Natural	No	0.00	0.00			No	No	No	None	
30-W	Sec. 6, T135N, R72W	PEMA	Basin	0.64	Natural	No	0.05	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
30-E	Sec. 5, T135N, R72W	PEMA	Basin	0.35	Natural	No	0.20	0.15			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.15 Acres (1:1)	0.30
31	Sec. 6, T135N, R72W	PEMC	Basin	0.39	Natural	No	0.03	0.00			No	No	No	None	
32	Sec. 32, T136N, R72W	PEMA	Basin	0.11	Natural	No	0.02	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
33	Sec. 18, T136N, R72W	PEMCx	Ditch	0.08	Artificial	No	0.02	0.04			No	No	No	None	
34	Sec. 8, T136N, R72W	PEMC	Basin	0.30	Natural	No	0.01	0.00			No	No	No	None	
35	Sec. 15, T137N, R72W	PEMC	Basin	0.13	Natural	No	0.01	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
36	Sec. 10, T137N, R72W	PEMC	Basin	0.10	Natural	No	0.01	0.00			No	No	No	None	
37	Sec. 3, T137N, R72 W	PEMAx	Ditch	0.11	Artificial	No	0.00	0.00			No	No	No	None	

ENVIRONMENTAL COMMITMENTS

Wetland Impact Table

Wetland Number	Location	Cowardin Class.	Wetland Type	Wetland Size Ac.	Wetland Feature	USACE Jurisdictional Wetlands*	Wetland Impacts (acres)		USFWS Easement Impacts		Wetland Mitigation				
											Mitigation Required			Location; Acreage; Wetland#; Ratio	Onsite Mitigation Acres
							Temp. Ac.	Perm. Ac.	Temp.	Perm.	EO 11990	USACE	USFWS		
38	Sec. 34, T138N, R72 W	PEMAx	Ditch	0.12	Artificial	No	0.01	0.00			No	No	No	None	
39	Sec. 34, T138N, R72 W	PEMF	Basin	0.41	Natural	No	0.06	0.01			Yes	No	No	11990 NDDOT Bank Vollrath 16/17 0.01 Acres (1:1)	
40	Sec. 34, T138N, R72 W	PEMAx	Ditch	0.13	Artificial	No	0.09	0.02			No	No	No	None	
41	Sec. 27, T138N, R72 W	PEMCx	Ditch	0.01	Artificial	No	0.01	0.01			No	No	No	None	
42	Sec. 10, T138N, R72 W	PEMCx	Ditch	0.71	Artificial	No	0.25	0.06			No	No	No	None	
43	Sec. 3/10, T136N, R72 W	PEMCx	Ditch	0.25	Artificial	Yes	0.11	0.10			No	No	No	None	
			Totals	**41.85**			**5.01**	**4.88**	**0.00**	**0.00**					**1.40**

* A wetland Jurisdictional Determination was issued by the USACE on 08/10/2010; NWO-2010-01527-BIS.

**All impacts to natural wetlands (natural/jurisdictional and natural/non-jurisdictional), regardless of size, as well as impacts greater than 0.10 acre to artificial/jurisdictional wetlands require mitigation.

***All artificial/non-jurisdictional, deep water (impacts greater than 6.6 feet), Other Waters less than 300 linear feet (determined by the USACE on a case by case), Preamble Wetlands, and temporary impacts do not require mitigation.

Other Waters Impact Table

Other Waters											Other Water Mitigation				
			Size			USACE Jurisdictional *	Impacts to Other Waters				Mitigation Required				
							Acres		Linear Feet						
Number	Location	Type	Acres	Linear Feet	Feature		Temp	Perm	Temp	Perm	EO 11990	USACE	USFWS	Location	Method
OW 4-W	Sec. 22, T139N, R72 W	Alkaline Lake	0.81	908.01	Natural	Yes	0.18	0.11	1050.00	898.00	No	No	No	None	
OW 4-E	Sec. 22, T139N, R72 W	Alkaline Lake	0.41	567.83	Natural	Yes	0.01	0.01	1798.00	1788.00	No	No	No	None	
OW 7-E	Sec. 34, T139N, R72W	Lake Isabel	0.65	1092.42	Natural	Yes	0.01	0.01	60.00	28.00	No	No	No	None	
		Totals	**1.87**	**2568.26**			**0.20**	**0.13**	**2908.00**	**2714.00**					

* A wetland Jurisdictional Determination was issued by the USACE on 08/10/2010; NWO-2010-01527-BIS.

ENVIRONMENTAL COMMITMENTS

Summary Impact Table			
Total Permanent Impact Summary		Temporary Impacts and additional information	
Wetland Type	Total (Acres)	Wetland Type	Total (Acres/Lf)
Natural/JD	0.92	Temporary JD	1.96
Natural/Non-JD	3.25	Non-JD Temporary	3.05
Artificial/JD	0.47	Permanent JD > 0.10	0.88
Artificial /Non-JD	0.24	Permanent OW	0.13 ac/2714 ft.
Total	4.88	Temporary OW	0.20 ac/2908 ft

Compensation Requirements by Agency and Water Type		
Water Type	USACE Mitigation	EO 11990 Mitigation
Natural/JD Wetland	> 0.1acre	All
Natural/Non-JD Wetland	No mitigation required	All
Artificial/JD Wetland	> 0.1acre	No mitigation required
Artificial/Non-JD Wetland	No mitigation required	No mitigation required
Deep Water (> than 6.6 feet)	No mitigation required	No mitigation required
Other Water	> 300 linear feet	No mitigation required
Preamble	No mitigation required	No mitigation required

EC-2: The Contractor shall prevent the introduction of ANS into North Dakota waters, or transport of aquatic vegetation to or from any waters of the state, or transport of any aquatic vegetation into the state.

ACTION TAKEN/REQUIRED: The contractor shall follow the North Dakota Game and Fish Department's (NDGFD) Administrative Rules 30-3-06 for compliance with ND Century Code Chapter 20.1-17 on Aquatic Nuisance Species (ANS). Contractor shall notify the NDGFD at least 72 hours prior to the placement IN or ON the waters of the State of North Dakota of any and all vehicles, vessels, pumps and equipment that will be used in the project, to allow the Department sufficient time to inspect any and all such equipment for ANS. The NDGFD ANS Coordinator, Fred Ryckman, shall be contacted by phone (701.770.0920) or e-mail fryckman@nd.gov for equipment inspections, or any additional information regarding ANS prevention protocol.

STATE	PROJECT NO.	SECTION	SHEET
ND	NH-RSS-1-003(034)059	8	1

ESTIMATE OF QUANTITIES

SPEC	CODE	ITEM DESCRIPTION	UNIT	MAINLINE	CPM	TOTAL
103	0100	CONTRACT BOND	L SUM	1		1
107	0100	RAILWAY PROTECTION INSURANCE	L SUM	1		1
201	0390	REMOVAL OF TREES 30IN	EA	2		2
202	0112	REMOVAL OF CONCRETE	SY		838	838
202	0119	SAW CONCRETE	LF		54	54
202	0121	REMOVE & SALVAGE BITUMINOUS SURFACING	TON	9,734		9,734
202	0153	SAW BITUMINOUS SURFACING-FULL DEPTH	LF	290		290
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES	EA	24		24
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	4,107		4,107
203	0101	COMMON EXCAVATION-TYPE A	CY	107,984		107,984
203	0108	TOPSOIL-BORROW AREA	CY	31,149		31,149
203	0109	TOPSOIL	CY	83,871		83,871
203	0121	TOPSOIL-WETLAND	CY	4,033		4,033
203	0138	COMMON EXCAVATION-SUBCUT	CY	1,111		1,111
203	0140	BORROW-EXCAVATION	CY	311,490		311,490
203	0204	FLATTEN DITCH BLOCK SLOPES	EA	36		36
210	0111	CLASS 2 EXCAVATION	LSUM	1		1
210	0201	FOUNDATION PREPARATION	EA	1		1
210	0210	FOUNDATION FILL	CY	20		20
216	0100	WATER	M GAL	7,323		7,323
230	0107	RESHAPING DITCH	MILE	0.22		0.22
251	0100	SEEDING CLASS I	ACRE	1		1
251	0200	SEEDING CLASS II	ACRE	239		239
251	1000	WETLAND SEED	ACRE	10		10
251	2000	TEMPORARY COVER CROP	ACRE	250		250
253	0101	STRAW MULCH	ACRE	500		500
255	0103	ECB TYPE 3	SY	1,484		1,484
255	0300	CONCRETE EROSION CONTROL BLANKET	SY	3,911		3,911
256	0200	RIPRAP GRADE II	CY	4,964		4,964
260	0200	SILT FENCE SUPPORTED	LF	45,850		45,850
260	0201	REMOVAL SILT FENCE SUPPORTED	LF	45,850		45,850
261	0112	FIBER ROLLS 12IN	LF	18,405		18,405
261	0113	REMOVAL FIBER ROLLS 12IN	LF	9,210		9,210
261	0120	FIBER ROLLS 20IN	LF	53,365		53,365
262	0100	FLOTATION SILT CURTAIN	LF	5,765		5,765
262	0101	REMOVAL FLOTATION SILT CURTAIN	LF	5,765		5,765
302	0115	AGGREGATE BASE COURSE CL 4	TON	10,116		10,116
302	0120	AGGREGATE BASE COURSE CL 5	TON	131,031	273	131,304
401	0050	TACK COAT	GAL	40,983		40,983
411	0105	MILLING PAVEMENT SURFACE	SY	4,783		4,783
430	0042	SUPERPAVE FAA 42	TON	89,479		89,479
430	5828	PG 58-28 ASPHALT CEMENT	TON	5,276		5,276
430	1000	CORED SAMPLE	EA	562		562
602	1130	CLASS AE-3 CONCRETE	CY	1.1		1.1
702	0100	MOBILIZATION	L SUM	1		1
704	0100	FLAGGING	MHR	6,000		6,000
704	1000	TRAFFIC CONTROL SIGNS	UNIT	3,764		3,764

STATE	PROJECT NO.	SECTION	SHEET
ND	NH-RSS-1-003(034)059	8	2

ESTIMATE OF QUANTITIES

SPEC	CODE	ITEM DESCRIPTION	UNIT	MAINLINE	CPM	TOTAL
704	1052	TYPE III BARRICADE	EA	14		14
704	1060	DELINEATOR DRUMS	EA	21		21
704	1065	TRAFFIC CONES	EA	30		30
704	1067	TUBULAR MARKERS	EA	200		200
704	1080	STACKABLE VERTICAL PANELS	EA	1,000		1,000
704	1081	VERTICAL PANELS-BACK TO BACK	EA	40		40
704	1185	PILOT CAR	HR	3,000		3,000
704	1500	OBLITERATION OF PVMT MK	SF	120		120
706	0550	BITUMINOUS LABORATORY	EA	1		1
706	0600	CONTRACTOR'S LABORATORY	EA	1		1
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	4,328		4,328
709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	12,551		12,551
714	0615	PIPE CONC REINF 24IN CL III	LF	492		492
714	0820	PIPE CONC REINF 30IN CL III	LF	276		276
714	0905	PIPE CONC REINF 36IN CL III	LF	176		176
714	1005	PIPE CONC REINF 42IN CL III	LF	14		14
714	3023	END SECT-TRAVERSABLE REINF. CONC.24IN	EA	6		6
714	3033	END SECT-TRAVERSABLE REINF. CONC.30IN	EA	9		9
714	3036	END SECT-TRAVERSABLE REINF. CONC.36IN	EA	3		3
714	4099	PIPE CONDUIT 18IN-APPROACH	LF	2,504		2,504
714	4105	PIPE CONDUIT 24IN	LF	56		56
714	4106	PIPE CONDUIT 24IN-APPROACH	LF	1,566		1,566
714	4110	PIPE CONDUIT 30IN	LF	70		70
714	4113	PIPE CONDUIT 30IN-APPROACH	LF	1,604		1,604
714	4115	PIPE CONDUIT 36IN	LF	62		62
714	4116	PIPE CONDUIT 36IN-APPROACH	LF	108		108
714	5128	PIPE CORR STEEL .064IN ARCH 35IN X 24IN	LF	108		108
714	5133	PIPE CORR STEEL .064IN ARCH 42IN X 29IN	LF	108		108
714	9200	CATTLE PASS CONC INTERMED SECTION	LF	48		48
714	9601	REMOVE & RELAY CONC CATTLE PASS	LF	42		42
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION	EA	5		5
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES	EA	78		78
720	0110	RIGHT OF WAY MARKERS	EA	207		207
720	0125	ALIGNMENT MONUMENTS	EA	80		80
720	0130	IRON PIN R/W MONUMENTS	EA	86		86
720	0135	IRON PIN REFERENCE MONUMENTS	EA	130		130
722	6200	ADJUST MANHOLE	EA	1		1
748	0140	CURB & GUTTER-TYPE 1	LF		1,312	1,312
748	0520	CURB-TYPE 1	LF		191	191
748	1020	VALLEY GUTTER-36IN	SY		142	142
750	0100	SIDEWALK CONCRETE	SY		944	944
750	1000	DRIVEWAY CONCRETE	SY		32	32
750	1021	DRIVEWAY CONCRETE 8IN REINFORCED	SY		70	70
750	2115	DETECTABLE WARNING PANEL	SF	70		70
752	0922	FENCE REMOVE & RESET	LF	491		491
754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	LF	550		550
754	0112	FLAT SHEET FOR SIGNS-TYPE IV REFL SHEETING	LF	222		222
754	0195	DIAMOND GRADE DELINEATORS-TYPE A	EA	40		40

STATE	PROJECT NO.	SECTION	SHEET
ND	NH-RSS-1-003(034)059	8	3

ESTIMATE OF QUANTITIES

SPEC	CODE	ITEM DESCRIPTION	UNIT	MAINLINE	CPM	TOTAL
754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	2,009		2,009
754	0562	REFERENCE MARKER-TYPE B	EA	25		25
754	0592	RESET SIGN PANEL	EA	28		28
754	0805	OBJECT MARKERS - CULVERTS	EA	292		292
760	0005	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	47.5		47.5
760	0007	RUMBLE STRIPS - ASPHALT CENTERLINE	MILE	23.7		23.7
762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	469,463		469,463
762	1104	PVMT MK PAINTED 4IN LINE	LF	117,366		117,366
762	1106	PVMT MK PAINTED 6IN LINE	LF	165		165
762	1124	PVMT MK PAINTED 24IN LINE	LF	36		36
762	1140	PVMT MK PAINTED CURB TOP & FACE	LF	225		225
766	0100	MAILBOX - ALL TYPES	EA	35		35

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	10	1

Widening & Overlay (Tangent)		Widening & Overlay (Curve)		Grade Raise (Tangent)		Grade Raise (Curve)		32' Widened Tangent (with Concrete ECB)		28' Wide		64' Wide (1 Curb)		64' Wide (2 Curbs)		64' Wide Subcut		40' Wide		38' Wide	
Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station	Begin Station	End Station
3146+10.00	3494+80.72	3494+80.72	3503+22.98	3552+00.00	3569+43.93	3569+43.93	3575+12.17	4350+00.00	4362+00.00	4442+00.00	4450+00.00	4450+00.00	4452+50.00	4452+50.00	4454+00.00	4454+00.00	4457+00.00	4457+00.00	4465+00.00	4465+00.00	4484+40.00
3503+22.98	3521+21.08	3521+21.08	3532+62.32	3575+12.17	3597+00.00																
3532+62.32	3538+68.07	3538+68.07	3551+22.50																		
3551+22.50	3552+00.00	4149+33.38	4160+08.03																		
3597+00.00	4149+33.38	4183+23.61	4186+94.82																		
4160+08.03	4183+23.61	4202+40.72	4219+47.54																		
4186+94.82	4202+40.72	4239+45.70	4251+47.94																		
4219+47.54	4239+45.70	4256+04.62	4271+86.78																		
4251+47.94	4256+04.62	4330+02.22	4342+23.93																		
4271+86.78	4330+02.22																				
4342+23.93	4350+00.00																				
4362+00.00	4442+00.00																				
Total Stations =	1,134.93	Total Stations =	103.97	Total Stations =	39.32	Total Stations =	5.68	Total Stations =	12.00	Total Stations =	8.00	Total Stations =	2.50	Total Stations =	1.50	Total Stations =	3.00	Total Stations =	8.00	Total Stations =	19.40

Material	Unit	Widening & Overlay (Tangent) Width (ft)	Quantity Per Station	Widening & Overlay (Curve) Width (ft) Low	High	Quantity Per Station Low Side	High Side	Total	Grade Raise (Tangent) Width (ft)	Quantity Per Station	Grade Raise (Curve) Width (ft) Low	High	Quantity Per Station Low Side	High Side	Total	32' Widened Tangent (with Concrete ECB) Width (ft)	Quantity Per Station	28' Wide Width (ft)	Quantity Per Station	64' Wide (1 Curb) Width (ft)	Quantity Per Station	64' Wide (2 Curbs) Width (ft)	Quantity Per Station	64' Wide Subcut Width (ft)	Quantity Per Station	40' Wide Width (ft)	Quantity Per Station	38' Wide Width (ft)	Quantity Per Station
Aggregate Base Course CL 5 @ 1.875 Ton/CY	Ton	-	78.06	-	-	41.32	31.60	72.92	-	400.07	-	-	220.28	177.15	397.43	-	93.06							64	555.90				
Tack Coat @ 0.05 Gal/SY	Gal	28	31.11	15	17	8.33	9.44	17.78	30	33.33	15	17	16.67	18.89	35.56	32	35.56	30	16.67	72	40.00	64	35.56	64	35.56	38	21.11	34	18.89
Hot Bituminous Pavement Superpave @ 2 Ton/CY	Ton	28	63.26	14	16	32.00	35.63	67.63	28	82.30	14	16	41.63	46.74	88.37	32	72.44	28	61.48	72	135.04	64	138.30	64	177.93	38	82.15	33	76.52
Asphalt Cement PG 58-28 (AC Content @ 5.9%)	Ton	28	3.73	14	16	1.89	2.10	3.99	28	4.86	14	16	2.46	2.76	5.21	32	4.27	28	3.63	72	7.97	64	8.16	64	10.50	38	4.85	33	4.51
Aggregate Base Course Cl 4 for the Aggregate Shoulder @1.875 Ton/CY	Ton	4	8.06	2	-	4.03	-	4.03	2	12.92	2	-	7.22	-	7.22	0	0.00												

Topsoil

4" Removal and Replacement Depth

Water

20 Gal/Ton for Aggregates
10 Gal/Ton for Embankment
50 MGal/Mile for Dust Palliative

Rumble Strips

Rumble Strips - Asphalt Shoulder

Sta 3176+07 to 4429+18 (x2) 47.466 Miles

Rumble Strips - Centerline

Sta 3176+07 to 4429+18 23.733 Miles

CORED SAMPLE	Density Cores			
Location	Length	Lifts	Lanes	Sublots
Driving Lanes	133,830	2	2	267.66
		Density Cores:		536

Full-Depth Core Samples	
Length (miles)	Cores/mile
25.38	1
Full-Depth Cores:	26

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Basis of Estimate

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	10	2

Temporary Pavement Marking

Short Term 4In Line - Type NR

Location	Type	Measured Length	Painted Length
Yellow Centerline First Lift of HBP Overlay	Single Barrier @ 1.25 ft/ft	48,175	60,219
	Double Barrier @2.0 ft/ft	20,270	40,540
	Skips @ 0.25 ft/ft	66,428	16,607
Yellow Centerline Top Lift of HBP Overlay	Single Barrier @ 1.25 ft/ft	48,175	60,219
	Double Barrier @2.0 ft/ft	20,270	40,540
	Skips @ 0.25 ft/ft	66,428	16,607
Yellow Centerline Rumble Strip Grinding	Single Barrier @ 1.25 ft/ft	48,175	60,219
	Double Barrier @2.0 ft/ft	20,270	40,540
	Skips @ 0.25 ft/ft	66,428	16,607
Yellow Centerline Rumble Strip Fog Seal	Single Barrier @ 1.25 ft/ft	48,175	60,219
	Double Barrier @2.0 ft/ft	20,270	40,540
	Skips @ 0.25 ft/ft	66,428	16,607
		Total	**469,463**

Permanent Pavement Marking

Short Term 4In Line - Type NR

Type	Measured Length	Painted Length
Single Barrier @ 1.25 ft/ft	48,175	60,219
Double Barrier @2.0 ft/ft	20,270	40,540
Skips @ 0.25 ft/ft	66,428	16,607
Total		**117,366**

Mailboxes

Station	Type of Support	Work
3162+89 Rt	Single	Replace
3195+30 Lt	Single	Replace
3231+32 Rt	Single	Replace
3261+35 Rt	Single	Replace
3302+11 Rt	Double	Replace
3381+24 Rt	Double	Replace
3407+91 Rt	Single	Replace
3455+04 Lt	Single	Replace
3455+15 Rt	Single	Replace
3460+07 Rt	Single	Replace
3588+00 Rt	Single	Replace
3677+87 Lt	Single	Replace
3680+40 Rt	Single	Replace
3718+51 Rt	Single	Replace
3870+00 Lt	Single	Replace
4042+04 Lt	Single	Replace
4154+51 Rt	Single	Replace
4176+48 Rt	Single	Replace
4212+00 Rt	Single	Replace
4221+60 Rt	Single	Replace
4223+61 Rt	Single	Replace
4265+54 Rt	Single	Replace
4266+81 Rt	Double	Replace
4285+15 Rt	5	Replace
4299+17 Rt	Single	Replace
4306+40 Rt	Double	Replace
4336+28 Rt	Single	Replace
4442+65 Lt	Double	Replace
4443+40 Rt	Single	Replace
4449+28 Rt	4	Replace
4454+88 Lt	Single	Replace
4461+25 Rt	Single	Replace
4474+72 Rt	Single	Replace
4476+41 Lt	Single	Replace
4484+03 Rt	Single	Replace
Total Locations =		35

Barrier Locations

NORTHBOUND BARRIERS		SOUTHBOUND BARRIERS	
BEGIN	END	BEGIN	END
3160+25	3171+86	3146+10	3154+75
3206+46	3215+86	3171+86	3187+28
3267+26	3272+76	3217+61	3226+95
3294+46	3301+69	3277+40	3284+03
3316+03	3323+21	3305+86	3312+18
3335+96	3372+87	3326+72	3335+96
3386+30	3401+08	3345+37	3383+34
3443+52	3448+56	3396+69	3413+10
3471+81	3486+94	3454+28	3462+34
3501+64	3520+11	3482+19	3495+42
3525+94	3564+89	3515+74	3560+98
3593+69	3603+54	3568+86	3581+30
3617+35	3628+53	3602+78	3615+35
3636+01	3648+22	3626+69	3638+77
3656+82	3669+08	3647+42	3658+35
3679+62	3689+32	3666+89	3679+62
3699+87	3708+77	3689+32	3699+87
3737+04	3748+64	3708+77	3718+37
3754+93	3762+54	3747+73	3759+72
3769+24	3789+84	3764+24	3770+24
3892+08	3899+08	3778+41	3800+27
4143+86	4152+36	3899+08	3906+48
4158+73	4170+94	3906+46	3911+54
4175+09	4186+53	4153+37	4161+00
4196+68	4214+18	4170+94	4180+78
4235+02	4271+45	4188+33	4197+08
4332+92	4341+21	4205+42	4223+64
4365+35	4373+20	4244+08	4269+87
4440+43	4487+27	4343+00	4351+92
		4375+90	4383+97
		4440+43	4493+13

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Basis of Estimate

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	10	3

Approach Summary

(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
Section Line - Gravel		Private Drive - Paved		Private Drive - Gravel		Field Drive		Private Drive - Special		Private Drive - Urban		Street - Gravel		Recovery Approach	
42 Total		2 Total		38 Total		64 Total		2 Total		19 Total		6 Total		3 Total	
Sta	Lt / Rt	Sta	Lt/Rt	Sta	Lt / Rt	Sta	Lt / Rt	Sta	Lt / Rt	Sta	Lt/Rt	Sta	Lt / Rt	Sta	Lt / Rt
3197+47	Lt	4294+60	Rt	3163+24	Rt	3187+21	Lt	3167+41	Rt	4443+54	Rt	4449+61	Lt	4049+37	Rt
3197+47	Rt	4306+34	Lt	3171+10	Lt	3187+21	Rt	3171+10	Rt	4445+87	Lt	4449+61	Rt	4151+81	Lt
3249+40	Lt			3175+79	Rt	3227+26	Rt			4445+87	Rt	4453+40	Lt	4211+95	Lt
3249+40	Rt			3212+07	Lt	3227+36	Lt			4460+90	Lt	4453+40	Rt		
3302+33	Lt			3217+03	Rt	3261+60	Lt			4461+39	Rt	4457+10	Lt		
3302+33	Rt			3231+48	Lt	3275+75	Lt			4462+02	Rt	4457+10	Rt		
3354+87	Lt			3236+42	Rt	3295+25	Lt			4463+36	Lt				
3354+87	Rt			3236+42	Lt	3295+25	Rt			4464+31	Lt				
3408+09	Lt			3261+60	Rt	3311+95	Rt			4464+77	Lt				
3408+09	Rt			3275+75	Rt	3331+23	Rt			4468+48	Lt				
3460+79	Lt			3381+47	Lt	3331+23	Lt			4468+55	Rt				
3460+79	Rt			3381+47	Rt	3345+21	Rt			4472+35	Rt				
3513+55	Lt			3452+14	Lt	3345+21	Lt			4474+16	Lt				
3513+55	Rt			3455+13	Lt	3434+14	Lt			4474+86	Rt				
3572+12	Lt			3559+30	Lt	3434+14	Rt			4476+18	Lt				
3572+32	Rt			3588+13	Rt	3452+14	Rt			4476+18	Rt				
3625+22	Lt			3673+99	Lt	3455+13	Rt			4479+87	Lt				
3625+22	Rt			3681+59	Rt	3466+18	Lt			4480+87	Rt				
3678+07	Lt			3706+74	Lt	3466+18	Rt			4483+87	Rt				
3678+07	Rt			3708+44	Lt	3487+10	Lt								
3731+15	Lt			3718+39	Rt	3487+10	Rt								
3731+15	Rt			3795+62	Rt	3503+98	Rt								
3836+56	Lt			3870+18	Rt	3530+15	Rt								
3836+56	Rt			4041+88	Lt	3537+15	Rt								
3889+54	Lt			4176+82	Rt	3588+13	Lt								
3889+54	Rt			4187+43	Rt	3614+33	Lt								
3943+13	Lt			4193+01	Rt	3623+18	Rt								
3943+13	Rt			4221+54	Rt	3648+85	Lt								
3996+13	Lt			4224+02	Rt	3683+15	Lt								
3996+13	Rt			4243+86	Rt	3695+56	Rt								
4049+30	Lt			4246+51	Rt	3706+74	Rt								
4100+88	Lt			4265+46	Lt	3719+06	Lt								
4100+88	Rt			4267+08	Rt	3757+62	Rt								
4154+80	Rt			4284+90	Rt	3791+76	Rt								
4211+80	Rt			4299+26	Lt	3795+62	Lt								
4273+05	Lt			4395+15	Rt	3810+23	Rt								
4335+85	Lt			4423+90	Lt	3863+13	Lt								
4336+10	Rt			4428+29	Rt	3870+18	Lt								
4389+08	Lt					3884+27	Lt								
4389+08	Rt					3884+27	Rt								
4442+10	Lt					3916+51	Lt								
4442+10	Rt					3916+51	Rt								
						3950+18	Rt								
						3950+27	Lt								
						3969+50	Lt								
						3969+50	Rt								
						4022+40	Lt								
						4040+08	Rt								
						4054+45	Lt								
						4077+84	Rt								
						4113+21	Rt								
						4118+98	Lt								
						4152+75	Lt								
						4222+39	Lt								
						4230+40	Rt								
						4248+82	Lt								
						4309+04	Rt								
						4345+63	Rt								
						4371+75	Rt								
						4382+13	Lt								
						4382+13	Rt								
						4411+45	Lt								
						4411+45	Rt								
						4440+87	Lt								

Remove & Salvage Bituminous Surfacing (1.9 TON/CY)

Item	Location	TON
Centerline Pipe Replacement	3197+05	42.0
	3804+85	103.0
	4130+29	42.0
Milling Locations	3146+10 to 3147+35	35.9
	4450+75 to 4454+00 Rt	36.6
	4452+25 to 4454+00 Lt	9.8
	4457+00 to 4459+09	152.5
	4459+19 to 4460+44	35.6
	4460+44 to 4465+00 Rt	26.2
	4460+44 to 4465+00 Lt	26.8
	4483+15 to 4484+40	43.6
Grade Raise	3552+00 to 3597+00	7,547.0
Urban Subcut	4454+00 to 4457+00	1,633.0
	Total	**9,734**

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Basis of Estimate

ND 3

Jct 34 N to I-94 Dawson

Alignment	Common Excavation Type A (CY) Pay Item	Embankment (CY)	Borrow Excavation (CY) Pay Item	Topsoil (CY) Pay Item
Logan County ND 3 Mainline	44,112	124,348	80,000	29,916
Kidder County ND 3 Mainline	63,872	295,126	231,490	57,988
Totals=	**107,984**	**419,474**	**311,490**	**87,904**

Note: 25 percent additional volume is included for shrinkage in earth embankment.

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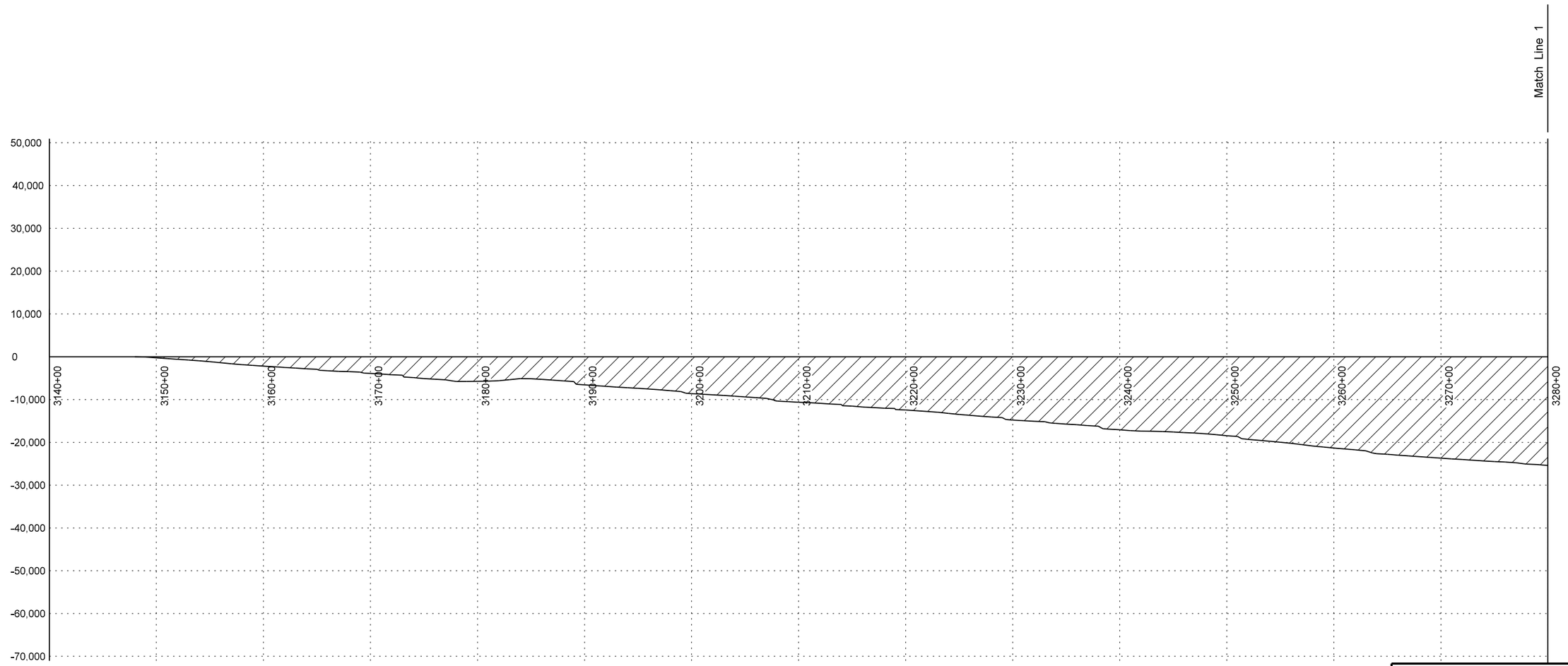
Earthwork Summary

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	2



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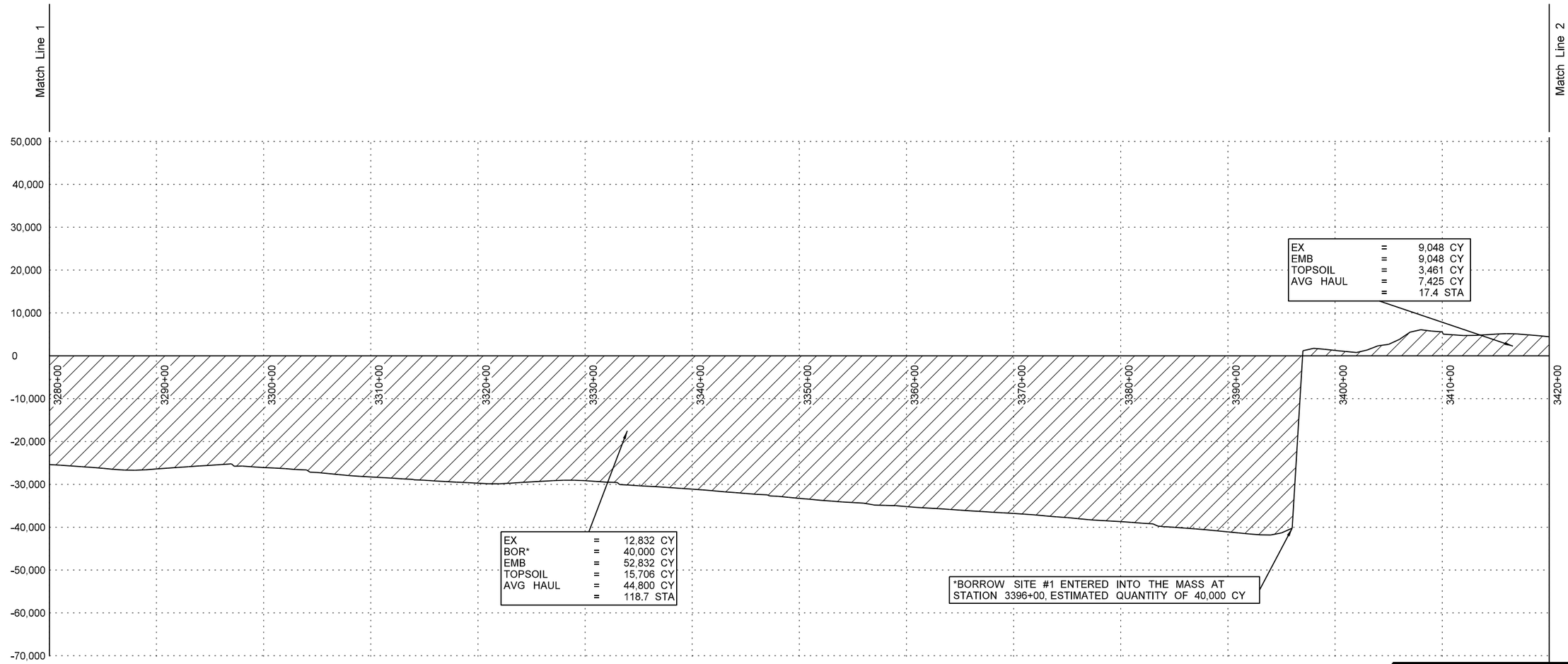
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	3



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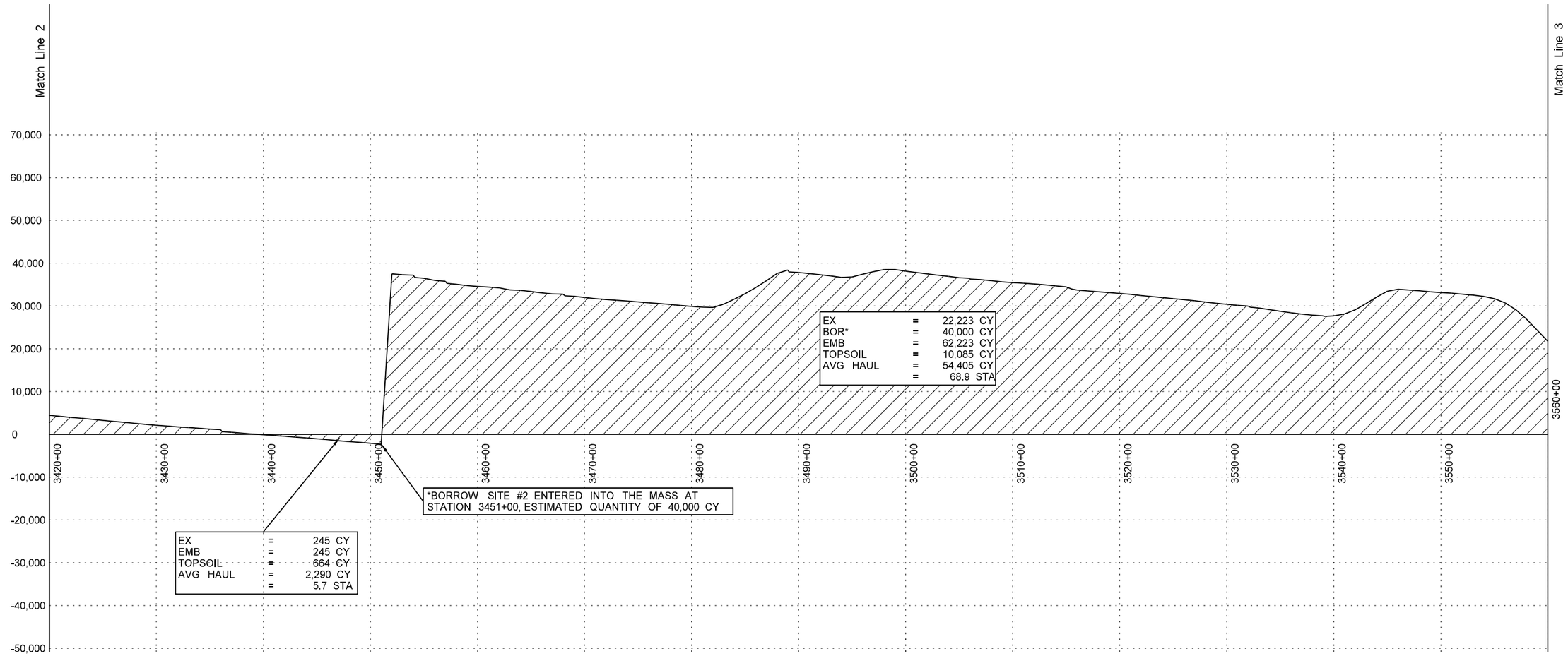
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	4



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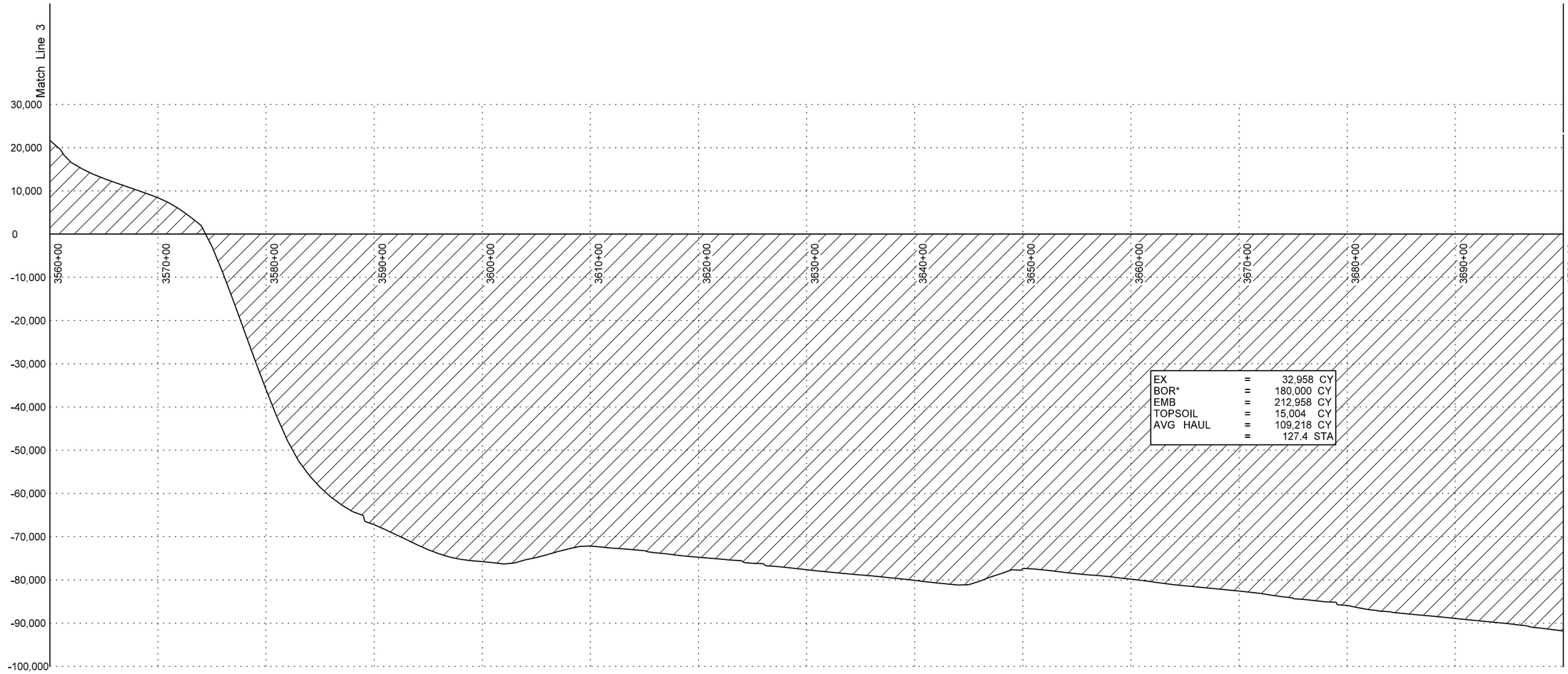
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	5



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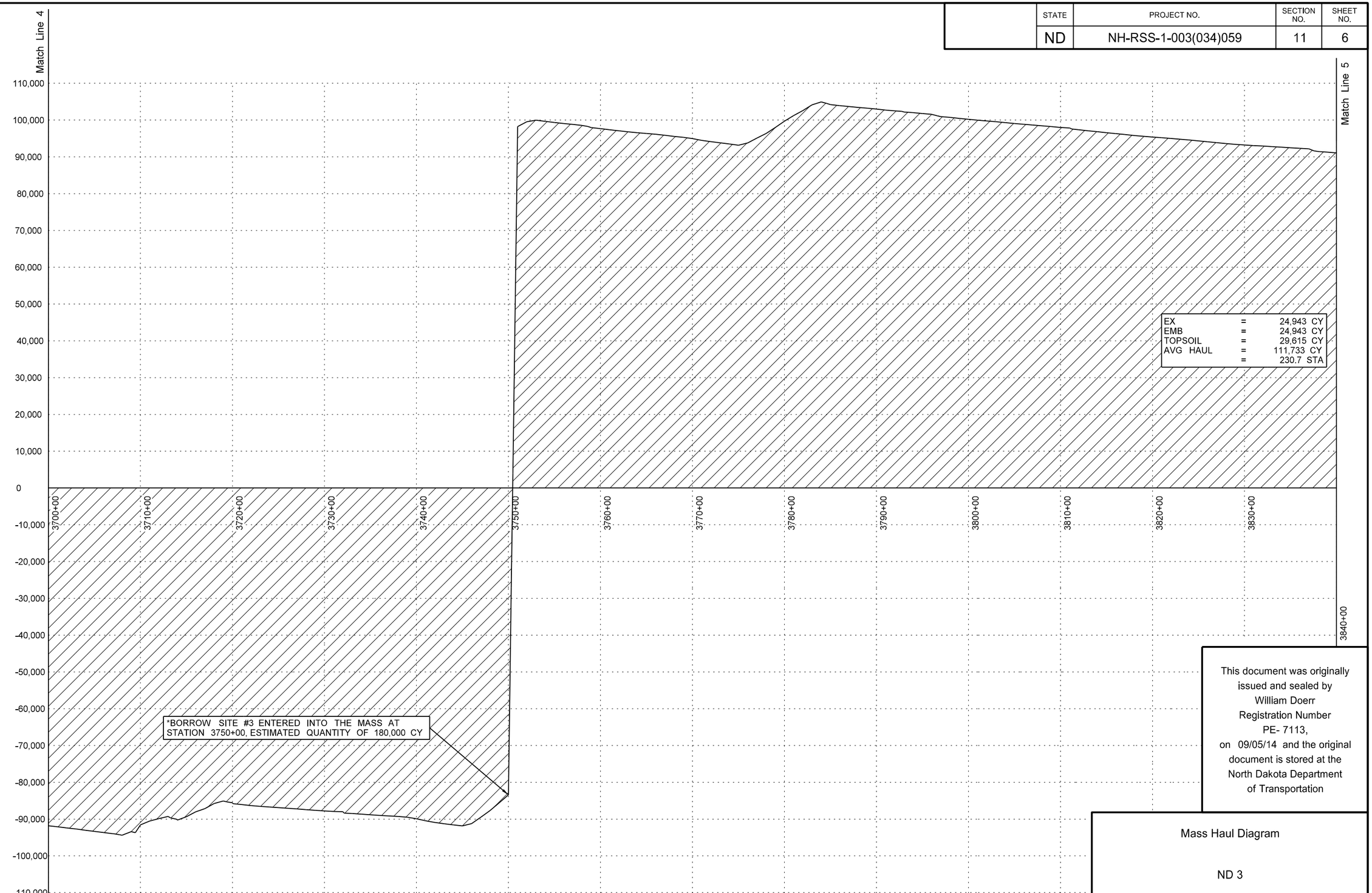
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	6



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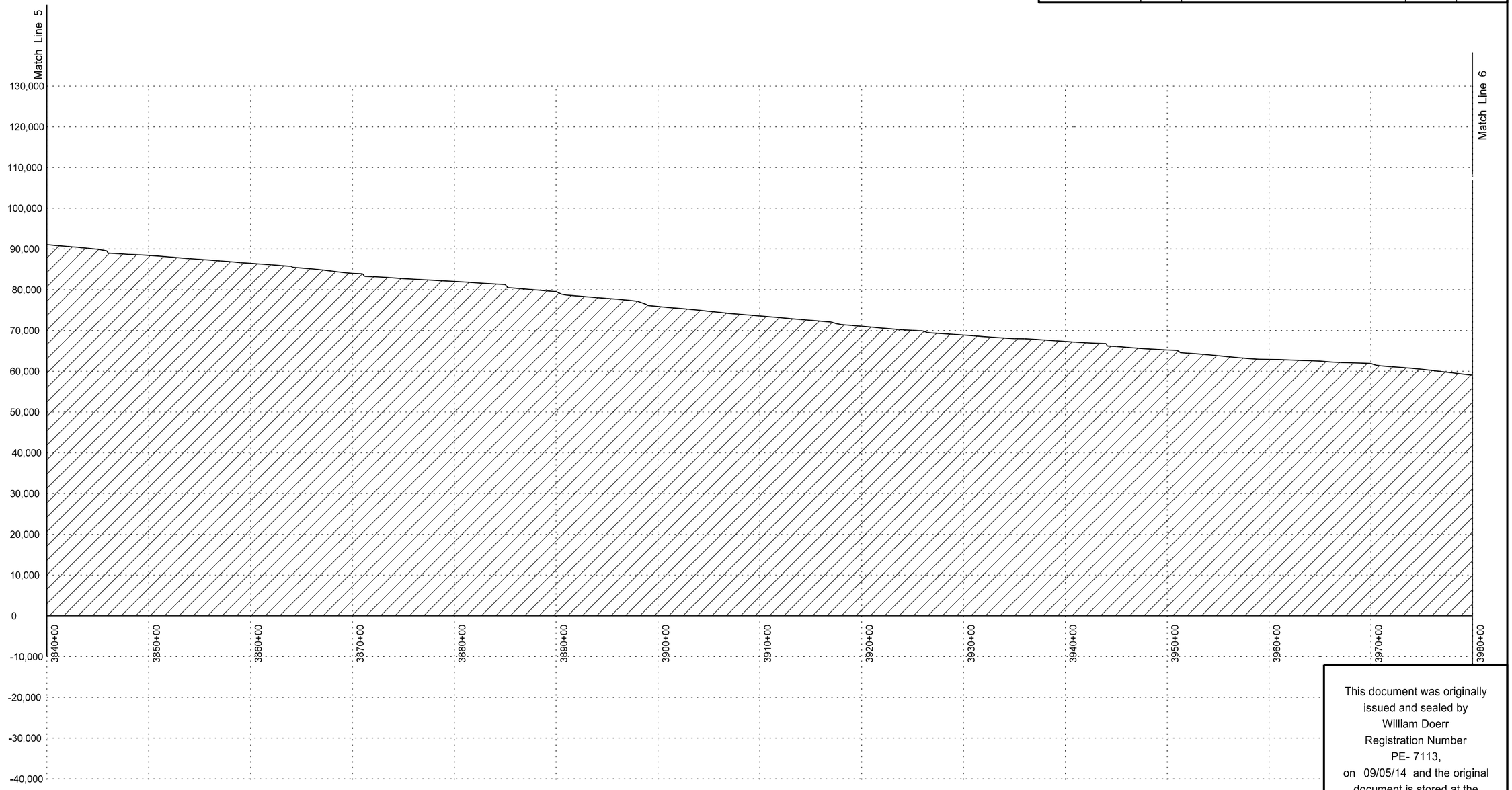
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	7



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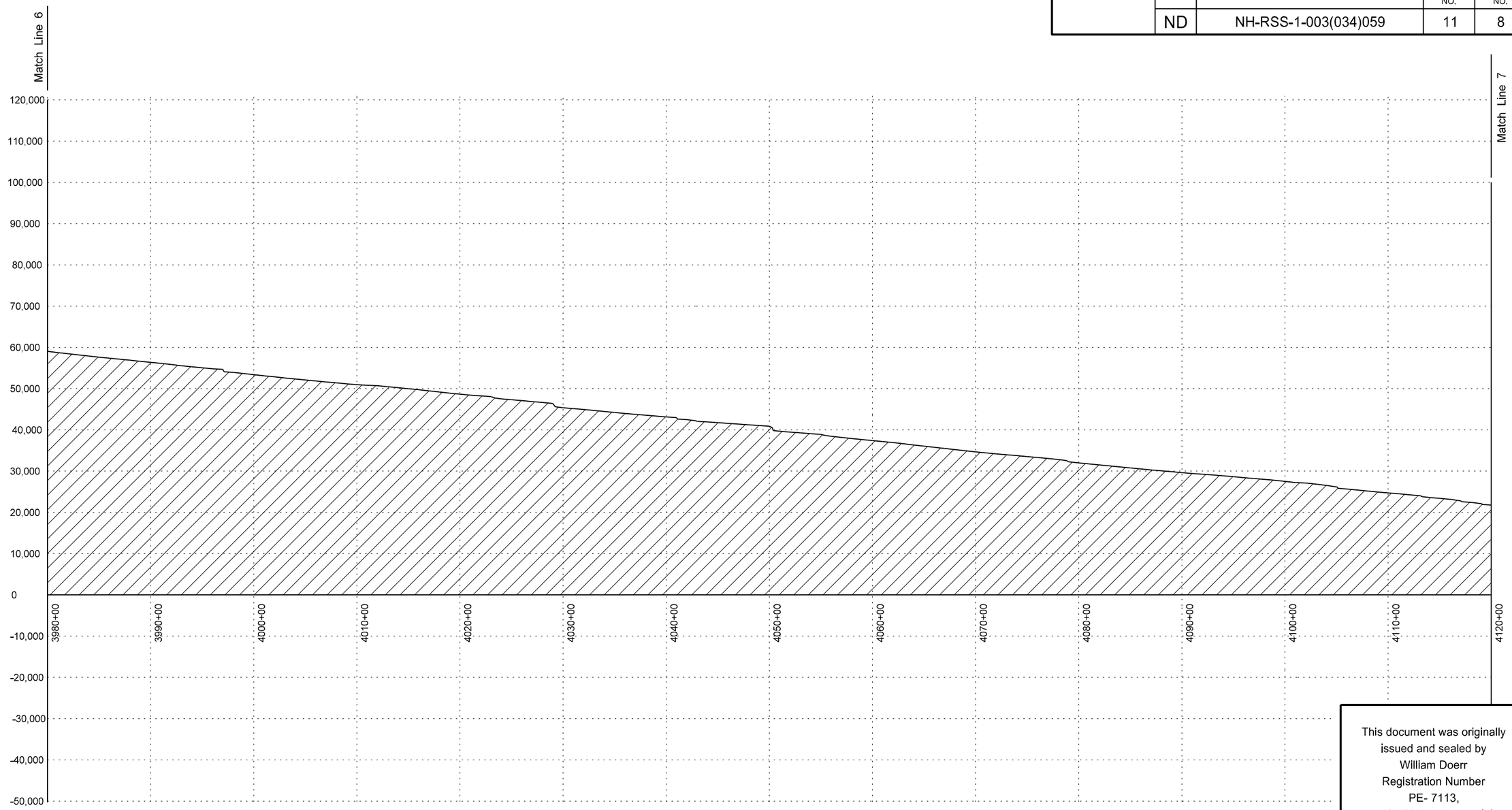
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	8



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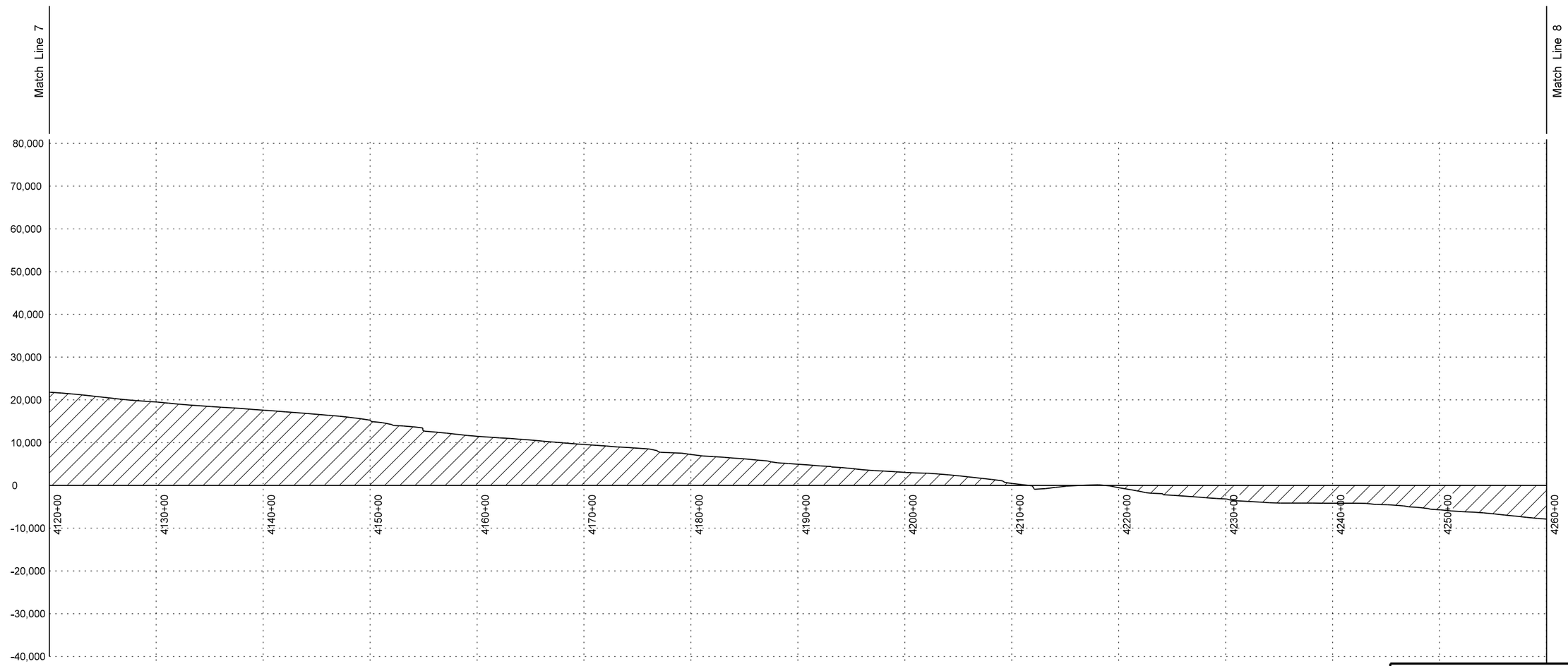
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	9



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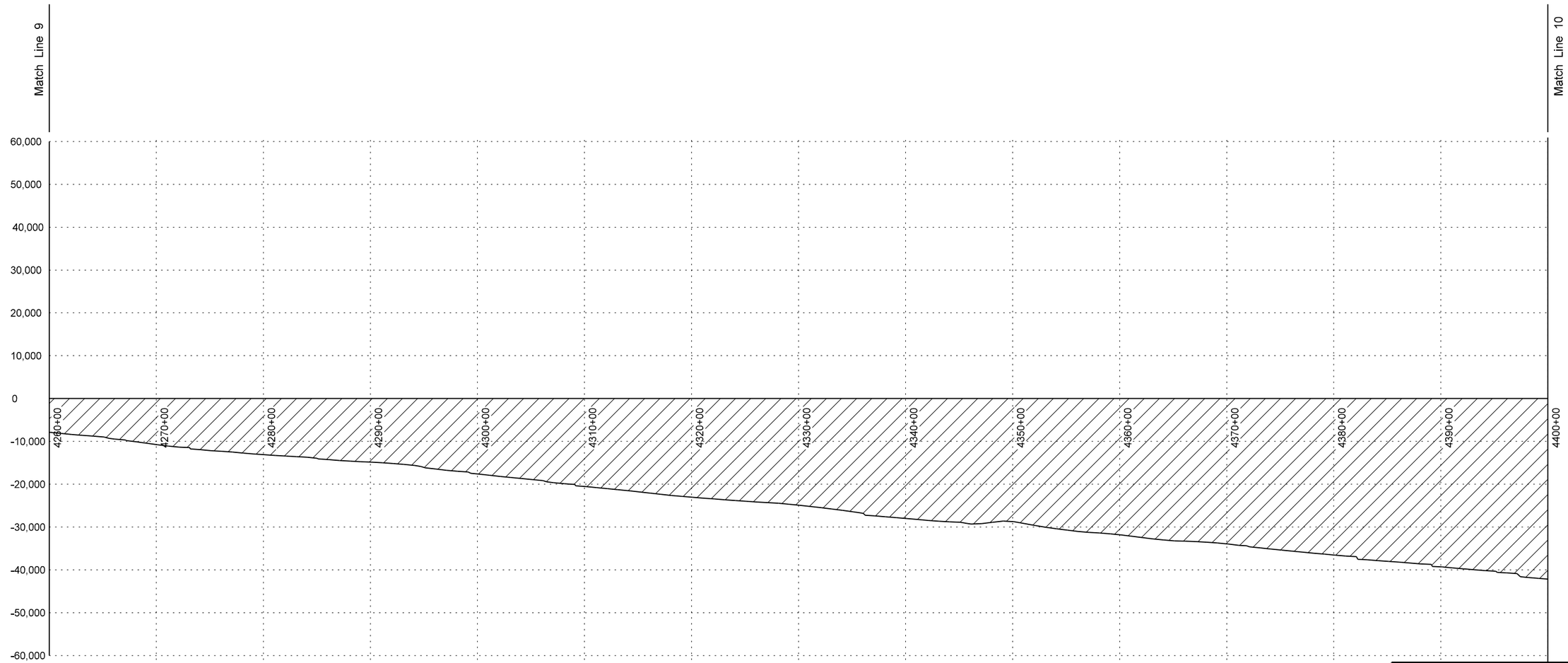
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	10



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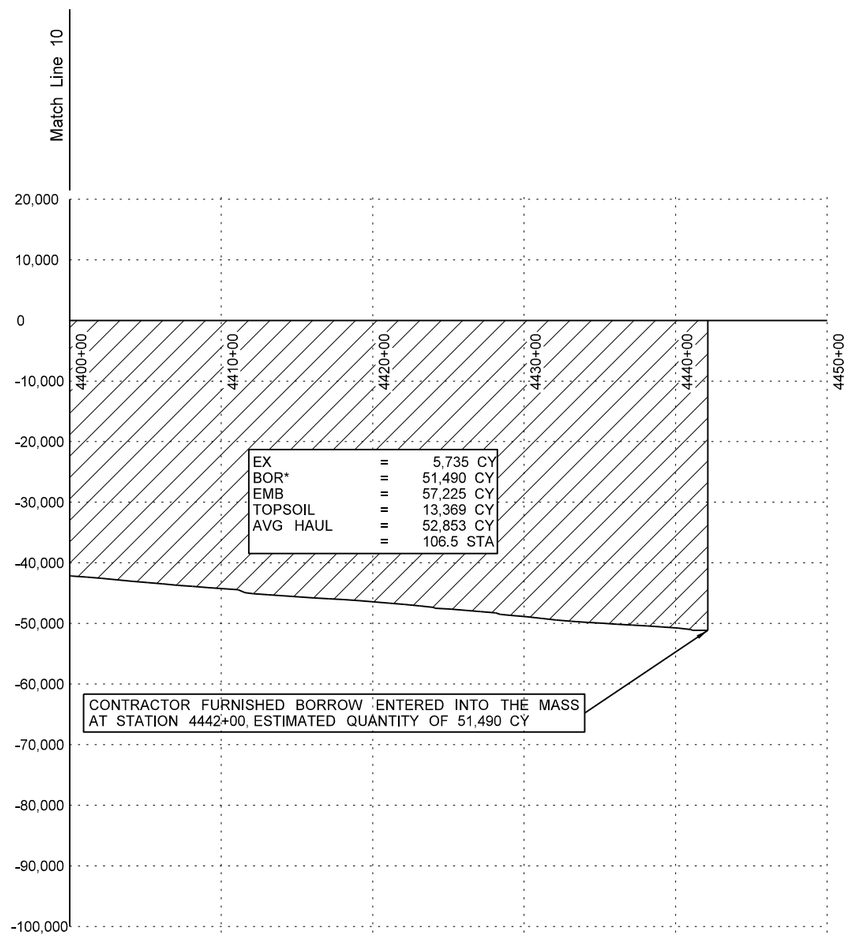
Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	11



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Mass Haul Diagram

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	12

	End Areas (SF)		Volume (CY)		
	Exca	Fill	Exca	Fill	Mass Ordinate
3146+00	1.6	1.2	0.0	0.00	0
3147+00	0.0	34.3	3.0	82.34	-79
3148+00	0.3	41.7	0.7	176.06	-255
3149+00	0.6	32.7	1.7	172.36	-425
3150+00	0.4	36.0	1.8	159.17	-583
3151+00	0.1	40.9	0.9	178.10	-760
3152+00	0.0	42.3	0.2	192.59	-952
3153+00	0.4	44.2	0.8	200.21	-1152
3154+00	0.2	53.5	1.2	226.06	-1377
3155+00	0.1	52.7	0.5	245.74	-1622
3156+00	0.2	42.8	0.6	221.11	-1842
3157+00	0.2	36.1	0.7	182.69	-2024
3158+00	0.2	34.3	0.7	162.96	-2187
3159+00	0.3	33.1	0.9	155.97	-2342
3160+00	0.8	37.8	2.0	164.10	-2504
3161+00	0.8	30.7	2.9	158.59	-2659
3162+00	1.3	33.8	3.9	149.40	-2805
3163+00	3.5	20.6	9.0	376.00	-3172
3164+00	1.4	32.1	9.1	121.92	-3285
3165+00	2.3	21.1	6.8	122.96	-3401
3166+00	2.5	21.7	9.0	98.89	-3491
3167+00	4.1	16.6	12.3	338.54	-3817
3168+00	1.8	28.6	10.9	104.49	-3911
3169+00	1.3	34.7	5.7	146.50	-4052
3170+00	0.2	37.2	2.6	166.60	-4216
3171+00	1.3	1.6	2.7	528.00	-4741
3172+00	0.6	60.0	3.5	142.73	-4880
3173+00	0.4	39.9	1.9	231.34	-5110
3174+00	0.9	26.1	2.3	152.87	-5260
3175+00	0.7	25.1	2.8	118.50	-5376
3176+00	2.7	12.0	6.2	398.76	-5768
3177+00	44.5	32.3	87.3	102.48	-5784
3178+00	57.4	35.3	188.6	156.53	-5752
3179+00	65.2	35.3	226.9	163.40	-5688
3180+00	71.1	29.5	252.3	150.00	-5586
3181+00	130.7	29.9	373.5	137.55	-5350
3182+00	71.6	31.9	374.6	143.06	-5118
3183+00	0.1	33.4	132.9	151.20	-5137
3184+00	0.0	35.9	0.3	160.44	-5297
3185+00	0.3	33.4	0.5	160.39	-5457
3186+00	0.8	47.5	2.0	187.11	-5642
3187+00	0.5	29.9	2.4	804.10	-6443
3188+00	0.6	33.1	2.0	145.88	-6587
3189+00	0.6	39.8	2.2	168.80	-6754
3190+00	0.2	35.6	1.5	174.58	-6927
3191+00	0.0	30.8	0.4	153.61	-7080
3192+00	0.4	31.9	0.7	144.98	-7224
3193+00	0.4	34.8	1.4	154.40	-7377
3194+00	0.3	38.2	1.2	169.14	-7545
3195+00	0.8	40.7	2.0	182.66	-7726
3196+00	0.2	51.5	1.8	213.38	-7938
3197+00	1.4	31.3	2.8	566.71	-8502
3198+00	2.6	23.4	7.4	126.64	-8621
3199+00	1.1	34.4	6.8	133.75	-8748
3200+00	0.8	32.2	3.4	154.03	-8898
3201+00	0.7	35.3	2.7	156.06	-9052
3202+00	1.0	35.0	3.1	162.52	-9211
3203+00	0.5	36.6	2.7	165.65	-9374
3204+00	0.2	41.0	1.3	179.68	-9552
3205+00	0.6	35.8	1.6	552.82	-10104
3206+00	1.8	22.8	4.5	135.60	-10235
3207+00	0.5	34.5	4.3	132.45	-10363
3208+00	1.4	25.2	3.6	138.15	-10498
3209+00	2.1	27.8	6.5	122.73	-10614
3210+00	0.0	33.8	3.9	142.57	-10753
3211+00	0.0	37.7	0.0	165.56	-10918
3212+00	6.8	22.3	12.6	389.00	-11294
3213+00	0.6	41.8	13.7	148.50	-11429
3214+00	0.0	40.6	1.1	190.67	-11619
3215+00	1.4	26.9	2.7	156.02	-11772
3216+00	1.4	29.6	5.2	130.65	-11898
3217+00	7.1	4.0	15.6	327.73	-12210
3218+00	0.0	43.9	13.1	110.88	-12308
3219+00	1.1	37.8	2.0	189.12	-12495
3220+00	0.0	30.5	2.0	158.15	-12651
3221+00	0.3	53.5	0.6	194.42	-12845
3222+00	0.0	58.5	0.6	259.05	-13103
3223+00	0.0	49.5	0.0	249.81	-13353
3224+00	0.5	43.6	1.0	215.39	-13567
3225+00	0.6	46.6	2.1	208.70	-13774
3226+00	1.1	32.4	3.2	182.73	-13954
3227+00	0.9	30.0	3.8	582.38	-14532
3228+00	0.7	32.0	3.0	143.43	-14673
3229+00	1.4	34.4	3.9	153.59	-14822
3230+00	1.4	25.1	5.1	137.82	-14955
3231+00	2.6	29.6	7.2	376.60	-15325
3232+00	1.7	30.0	7.8	137.87	-15455
3233+00	1.6	36.4	6.1	153.73	-15602
3234+00	1.5	37.7	5.9	171.46	-15768
3235+00	1.1	44.2	4.8	189.42	-15952
3236+00	1.4	29.1	4.5	732.51	-16680
3237+00	1.0	24.2	4.3	123.31	-16800
3238+00	1.1	34.9	3.8	136.74	-16932
3239+00	0.1	51.5	2.3	199.91	-17130
3240+00	60.3	49.7	111.9	234.19	-17252
3241+00	49.1	51.3	202.5	233.75	-17284
3242+00	47.1	51.0	178.1	236.78	-17342
3243+00	8.2	45.1	102.3	222.48	-17462
3244+00	27.5	47.0	66.1	213.29	-17610
3245+00	31.2	42.7	108.7	207.62	-17709
3246+00	0.2	52.7	58.2	220.74	-17871
3247+00	0.2	46.5	0.8	229.63	-18100
3248+00	0.1	47.4	0.4	217.29	-18317
3249+00	1.3	35.0	2.5	690.60	-19005
3250+00	0.3	48.5	3.0	193.29	-19195
3251+00	0.1	43.0	0.8	211.83	-19406
3252+00	0.1	47.7	0.4	209.81	-19616
3253+00	0.0	54.3	0.2	235.88	-19851
3254+00	0.5	57.0	1.0	257.45	-20108
3255+00	0.1	75.5	1.2	306.64	-20413

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	13

3256+00	0.2	53.0	0.6	297.36	-20710
3257+00	0.2	53.5	0.7	246.44	-20956
3258+00	0.3	49.7	0.8	238.94	-21194
3259+00	0.1	48.4	0.6	227.22	-21421
3260+00	0.0	43.5	0.1	212.82	-21634
3261+00	0.1	51.0	0.2	718.73	-22352
3262+00	0.6	19.0	1.4	162.04	-22513
3263+00	0.2	46.9	1.6	152.57	-22664
3264+00	0.0	41.6	0.4	204.79	-22868
3265+00	0.1	40.3	0.2	189.44	-23057
3266+00	0.5	32.0	1.0	167.36	-23224
3267+00	0.2	39.3	1.2	165.12	-23388
3268+00	0.0	37.6	0.3	177.89	-23565
3269+00	0.3	34.1	0.6	165.83	-23730
3270+00	0.2	33.9	1.1	157.27	-23887
3271+00	0.1	39.6	0.7	169.98	-24056
3272+00	0.2	32.4	0.7	166.64	-24222
3273+00	0.1	25.0	0.7	132.92	-24354
3274+00	0.1	33.9	0.4	136.44	-24490
3275+00	0.1	31.8	0.3	402.11	-24892
3276+00	3.5	2.4	6.6	79.07	-24964
3277+00	0.6	47.4	7.5	115.32	-25072
3278+00	0.4	33.0	1.7	186.13	-25256
3279+00	0.2	33.7	1.1	154.26	-25410
3280+00	0.7	41.0	1.7	172.78	-25581
3281+00	0.3	38.1	1.9	183.10	-25762
3282+00	0.3	40.2	1.1	181.39	-25942
3283+00	0.2	52.4	1.0	214.40	-26156
3284+00	0.3	44.6	1.0	224.47	-26379
3285+00	0.3	31.6	1.2	176.30	-26554
3286+00	65.2	43.2	121.3	173.19	-26606
3287+00	108.4	44.1	321.5	202.25	-26487
3288+00	101.4	39.0	388.6	192.38	-26291
3289+00	108.1	45.7	387.9	196.04	-26099
3290+00	101.4	52.5	387.9	227.41	-25938
3291+00	110.7	46.2	392.9	228.43	-25774
3292+00	94.4	43.0	379.9	206.41	-25600
3293+00	99.4	40.2	358.9	192.59	-25434
3294+00	98.6	47.8	366.7	203.75	-25271
3295+00	71.4	9.0	314.7	694.67	-25651
3296+00	0.7	36.6	133.4	105.60	-25623
3297+00	0.7	40.0	2.6	177.18	-25798
3298+00	0.7	31.2	2.5	164.77	-25960
3299+00	0.6	24.0	2.3	127.85	-26086
3300+00	0.1	33.2	1.2	132.52	-26217
3301+00	0.6	52.4	1.4	198.29	-26414
3302+00	3.0	0.9	6.6	623.31	-27031
3303+00	0.6	38.2	6.6	90.46	-27115
3304+00	0.5	60.5	2.0	228.52	-27341
3305+00	0.4	58.0	1.5	274.33	-27614
3306+00	0.6	43.4	1.7	234.81	-27847
3307+00	0.4	34.4	1.7	180.09	-28025
3308+00	0.6	28.8	1.9	146.34	-28170
3309+00	0.6	29.9	2.2	136.02	-28304
3310+00	0.7	31.3	2.4	141.64	-28443
3311+00	0.5	35.3	2.3	279.17	-28720
3312+00	3.5	14.2	7.4	114.56	-28827
3313+00	0.1	29.2	6.7	100.37	-28921
3314+00	0.0	40.1	0.3	160.35	-29081
3315+00	0.0	29.4	0.1	160.86	-29241
3316+00	0.0	25.2	0.1	126.46	-29368
3317+00	0.5	24.6	0.9	115.25	-29482
3318+00	0.4	29.5	1.7	125.23	-29606
3319+00	0.4	34.8	1.5	148.84	-29753
3320+00	91.4	39.6	169.9	172.25	-29755
3321+00	93.2	41.9	341.7	188.61	-29602
3322+00	88.2	39.5	335.8	188.29	-29455
3323+00	86.1	36.9	322.6	176.88	-29309
3324+00	81.6	36.3	310.5	169.47	-29168
3325+00	83.9	40.2	306.5	177.06	-29039
3326+00	85.6	44.0	313.8	194.79	-28920
3327+00	0.3	25.8	159.0	161.37	-28922
3328+00	0.2	23.7	0.8	114.54	-29036
3329+00	0.3	42.1	0.8	152.45	-29187
3330+00	0.7	31.8	1.8	171.16	-29357
3331+00	1.7	1.6	4.4	577.27	-29929
3332+00	0.3	43.8	3.8	105.09	-30031
3333+00	0.2	30.9	1.1	172.99	-30203
3334+00	0.3	31.4	1.0	144.33	-30346
3335+00	0.5	35.8	1.4	155.58	-30500
3336+00	0.0	37.4	0.8	169.44	-30669
3337+00	0.0	34.9	0.0	167.52	-30836
3338+00	0.0	37.6	0.0	167.94	-31004
3339+00	0.1	41.0	0.2	181.87	-31186
3340+00	0.1	49.7	0.3	209.75	-31395
3341+00	0.1	46.9	0.3	223.40	-31618
3342+00	0.1	40.1	0.3	201.20	-31819
3343+00	0.0	47.6	0.2	202.82	-32022
3344+00	0.1	42.1	0.1	207.59	-32229
3345+00	1.9	1.3	3.7	350.60	-32576
3346+00	0.0	47.1	3.6	112.06	-32685
3347+00	0.0	55.3	0.1	236.90	-32922
3348+00	0.2	46.9	0.3	236.41	-33158
3349+00	0.0	50.1	0.3	224.38	-33382
3350+00	0.0	44.0	0.1	217.80	-33600
3351+00	0.1	41.1	0.2	196.92	-33796
3352+00	0.1	39.0	0.4	185.21	-33981
3353+00	1.1	33.0	2.2	166.62	-34146
3354+00	2.3	19.2	6.3	495.88	-34635
3355+00	0.0	15.5	4.2	80.21	-34711
3356+00	5.0	16.5	9.3	74.03	-34776
3357+00	0.8	28.9	10.7	105.16	-34870
3358+00	0.0	54.4	1.4	192.82	-35062
3359+00	0.0	34.4	0.0	205.53	-35267
3360+00	0.2	33.5	0.4	157.06	-35424
3361+00	0.6	28.5	1.4	143.31	-35566
3362+00	1.0	40.1	2.9	158.73	-35722
3363+00	0.7	41.5	3.1	188.89	-35907
3364+00	0.2	24.0	1.6	151.50	-36057
3365+00	0.1	41.1	0.6	150.51	-36207
3366+00	0.6	35.0	1.3	176.02	-36382
3367+00	0.3	28.4	1.6	146.76	-36527
3368+00	0.2	38.2	0.8	154.24	-36681
3369+00	0.1	32.5	0.4	163.75	-36844

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	14

3370+00	0.1	47.7	0.3	185.79	-37029
3371+00	0.0	48.2	0.2	222.06	-37251
3372+00	0.1	36.4	0.2	195.74	-37447
3373+00	0.1	45.0	0.4	188.29	-37635
3374+00	0.4	60.8	0.9	244.82	-37879
3375+00	0.0	41.2	0.7	236.13	-38114
3376+00	0.0	42.6	0.0	194.07	-38308
3377+00	0.5	19.6	0.9	144.10	-38451
3378+00	0.5	36.9	1.9	130.95	-38580
3379+00	0.2	40.6	1.3	179.37	-38758
3380+00	0.9	40.3	2.0	187.08	-38944
3381+00	1.2	31.5	3.9	666.11	-39606
3382+00	0.2	31.0	2.5	144.70	-39748
3383+00	0.4	37.7	1.0	159.00	-39906
3384+00	0.3	39.9	1.3	179.47	-40084
3385+00	0.2	44.6	0.9	195.49	-40279
3386+00	0.2	48.9	0.7	216.48	-40495
3387+00	0.0	56.0	0.3	242.80	-40737
3388+00	0.4	51.8	0.7	249.49	-40986
3389+00	0.0	51.2	0.7	238.45	-41224
3390+00	0.0	45.9	0.1	224.72	-41448
3391+00	0.2	49.3	0.4	220.39	-41668
3392+00	121.4	53.7	225.2	238.40	-41681
3393+00	272.5	65.9	729.4	276.76	-41229
3394+00	482.8	57.1	1398.7	284.77	-40115
3395+00	425.8	52.2	1682.6	253.17	-38685
3396+00	0.0	47.2	788.5	230.25	1873
3397+00	0.1	55.5	0.1	237.80	1635
3398+00	0.1	56.7	0.2	259.77	1376
3399+00	0.2	47.2	0.4	240.62	1135
3400+00	0.0	56.5	0.3	240.21	895
3401+00	439.0	43.0	812.9	230.46	1478
3402+00	192.7	50.5	1169.8	216.41	2431
3403+00	112.5	39.1	565.2	207.34	2789
3404+00	603.8	41.4	1326.5	186.44	3929
3405+00	429.6	41.4	1913.7	191.78	5651
3406+00	0.0	68.2	795.6	253.77	6193
3407+00	0.0	71.8	0.0	324.10	5869
3408+00	0.0	4.5	0.0	676.69	5192
3409+00	0.1	69.8	0.1	172.13	5020
3410+00	81.9	71.7	151.7	327.52	4844
3411+00	99.6	61.8	336.0	308.96	4871
3412+00	106.9	41.3	382.4	238.66	5015
3413+00	98.6	44.8	380.7	199.35	5197
3414+00	61.1	42.4	295.8	201.88	5290
3415+00	0.0	43.1	113.2	197.80	5206
3416+00	0.1	46.2	0.2	206.69	4999
3417+00	0.4	43.8	0.9	208.40	4792
3418+00	0.4	52.3	1.4	222.34	4571
3419+00	0.0	50.1	0.7	236.92	4335
3420+00	0.0	53.2	0.0	239.21	4095
3421+00	0.0	50.6	0.0	240.44	3855
3422+00	0.0	47.9	0.0	228.13	3627
3423+00	0.0	52.6	0.0	232.69	3394
3424+00	0.0	53.2	0.1	244.81	3149
3425+00	0.1	46.9	0.3	231.53	2918
3426+00	0.0	52.8	0.2	230.63	2688
3427+00	0.0	44.9	0.0	226.16	2462
3428+00	0.4	44.0	0.7	205.81	2256
3429+00	0.1	44.1	0.8	203.89	2053
3430+00	0.6	36.6	1.2	186.85	1868
3431+00	0.1	32.6	1.3	160.19	1709
3432+00	0.1	42.3	0.4	173.40	1536
3433+00	0.1	44.2	0.5	200.30	1336
3434+00	1.6	1.8	3.1	606.57	733
3435+00	0.0	48.7	2.9	116.99	619
3436+00	0.1	46.3	0.2	220.00	399
3437+00	0.0	40.6	0.2	201.27	198
3438+00	0.3	37.6	0.6	180.97	17
3439+00	0.1	42.1	0.8	184.31	-166
3440+00	0.1	36.3	0.5	181.32	-347
3441+00	0.3	40.6	0.7	177.92	-524
3442+00	0.1	40.8	0.7	188.29	-712
3443+00	0.1	44.8	0.4	198.06	-909
3444+00	0.3	51.9	0.7	223.77	-1133
3445+00	0.0	47.3	0.5	229.61	-1362
3446+00	0.1	44.7	0.1	213.06	-1575
3447+00	0.3	40.0	0.6	196.11	-1770
3448+00	0.2	44.1	0.9	194.56	-1964
3449+00	0.4	45.9	1.1	208.13	-2171
3450+00	0.1	44.2	0.8	208.47	-2378
3451+00	0.1	45.9	0.4	208.52	37414
3452+00	2.3	2.8	4.5	612.75	36805
3453+00	0.0	98.6	4.2	234.81	36575
3454+00	0.0	98.0	0.0	455.00	36120
3455+00	3.1	2.5	5.7	732.57	35393
3456+00	0.1	80.9	5.9	193.01	35206
3457+00	0.0	51.0	0.2	305.30	34901
3458+00	0.0	38.4	0.0	207.04	34694
3459+00	0.2	33.0	0.4	165.21	34529
3460+00	0.7	40.6	1.7	545.37	33985
3461+00	2.5	2.3	5.9	99.28	33892
3462+00	0.2	54.9	5.0	132.20	33764
3463+00	0.0	58.3	0.4	261.92	33503
3464+00	0.5	74.8	0.9	308.06	33196
3465+00	0.9	34.8	2.6	253.70	32945
3466+00	2.3	2.2	5.9	460.74	32490
3467+00	0.4	49.5	5.0	119.84	32375
3468+00	0.1	63.2	1.0	260.86	32115
3469+00	0.1	52.7	0.4	268.13	31847
3470+00	0.9	41.5	1.7	217.94	31631
3471+00	0.4	39.5	2.3	187.45	31446
3472+00	0.7	35.7	2.1	174.14	31274
3473+00	0.1	47.8	1.5	193.43	31082
3474+00	0.2	46.7	0.4	218.87	30863
3475+00	0.0	32.9	0.3	184.21	30680
3476+00	0.5	52.7	0.9	198.06	30482
3477+00	0.7	50.9	2.2	239.84	30245
3478+00	0.2	43.2	1.7	217.82	30029
3479+00	1.0	36.5	2.2	184.44	29846
3480+00	66.4	47.3	124.7	193.89	29777
3481+00	485.8	61.2	1022.6	251.13	30549
3482+00	322.6	70.6	1497.0	305.05	31741
3483+00	497.3	45.1	1518.2	267.66	32991

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	15

3484+00	402.8	43.4	1666.8	204.70	34453
3485+00	551.7	40.6	1767.5	194.38	36026
3486+00	484.4	46.3	1918.6	201.30	37744
3487+00	1.9	2.3	900.6	550.69	38094
3488+00	0.0	56.7	3.6	136.62	37961
3489+00	0.0	57.0	0.0	263.15	37697
3490+00	0.0	57.6	0.0	265.28	37432
3491+00	0.0	62.8	0.0	278.75	37153
3492+00	0.0	83.3	0.0	338.15	36815
3493+00	231.2	61.0	428.2	333.84	36910
3494+00	268.7	57.9	925.7	275.19	37560
3495+00	218.4	70.1	902.0	296.32	38166
3496+00	209.4	70.7	792.3	325.95	38632
3497+00	0.0	93.0	387.8	379.03	38641
3498+00	0.3	75.1	0.6	389.17	38252
3499+00	0.9	58.6	2.3	309.56	37945
3500+00	0.9	77.6	3.5	315.35	37633
3501+00	0.8	56.8	3.3	311.06	37326
3502+00	0.0	70.8	1.5	295.35	37032
3503+00	0.3	64.4	0.5	437.87	36594
3504+00	2.0	18.3	4.2	191.30	36407
3505+00	0.5	34.6	4.7	122.48	36289
3506+00	0.1	83.5	1.2	273.45	36017
3507+00	0.2	35.0	0.6	274.21	35743
3508+00	0.5	31.0	1.3	152.73	35592
3509+00	0.5	29.8	1.7	140.76	35453
3510+00	0.5	44.3	1.7	171.44	35283
3511+00	0.6	48.3	1.9	214.31	35071
3512+00	0.0	54.1	1.0	237.01	34835
3513+00	0.0	61.6	0.0	767.68	34067
3514+00	0.5	39.7	1.0	234.40	33834
3515+00	0.4	45.7	1.7	197.73	33638
3516+00	0.0	38.8	0.7	195.65	33443
3517+00	0.7	44.9	1.3	193.80	33250
3518+00	0.1	38.3	1.5	192.69	33059
3519+00	0.2	61.8	0.6	231.85	32828
3520+00	0.3	59.3	0.9	280.49	32548
3521+00	0.6	46.4	1.7	244.72	32305
3522+00	0.4	53.3	1.9	230.65	32076
3523+00	0.3	52.6	1.4	245.02	31833
3524+00	0.2	52.3	1.0	242.89	31591
3525+00	0.3	60.2	1.0	260.53	31331
3526+00	0.1	68.2	0.7	297.25	31035
3527+00	0.5	51.8	1.0	277.78	30758
3528+00	0.7	52.3	2.1	240.93	30519
3529+00	0.3	57.5	1.8	254.03	30267
3530+00	0.8	22.8	1.9	435.74	29833
3531+00	0.3	66.5	2.0	206.67	29628
3532+00	0.0	95.1	0.6	374.17	29255
3533+00	0.8	76.0	1.5	396.25	28860
3534+00	0.5	75.3	2.5	350.25	28512
3535+00	0.5	55.9	1.9	303.63	28211
3536+00	0.0	46.6	0.9	237.20	27974
3537+00	2.1	25.7	3.8	292.20	27686
3538+00	175.4	64.0	328.7	207.55	27807
3539+00	234.0	69.1	758.2	308.10	28257
3540+00	473.2	81.3	1309.6	348.22	29218
3541+00	490.0	63.4	1783.7	334.98	30667
3542+00	499.8	54.8	1833.1	273.59	32227
3543+00	344.3	45.1	1563.1	231.18	33559
3544+00	0.6	38.1	638.7	192.57	34005
3545+00	1.2	30.7	3.3	159.28	33849
3546+00	0.0	44.5	2.2	173.94	33677
3547+00	0.0	56.9	0.1	234.68	33442
3548+00	0.0	20.5	0.1	179.26	33263
3549+00	0.1	46.9	0.2	156.06	33107
3550+00	0.1	49.8	0.4	223.89	32884
3551+00	0.3	50.9	0.7	233.24	32651
3552+00	3.8	84.0	7.5	312.41	32346
3553+00	0.0	149.3	7.0	539.98	31813
3554+00	0.0	263.6	0.0	955.69	30858
3555+00	0.0	426.1	0.0	1596.50	29261
3556+00	0.0	524.0	0.0	2199.19	27062
3557+00	0.0	594.3	0.0	2588.56	24473
3558+00	0.0	537.6	0.0	2620.21	21853
3559+00	0.0	408.1	0.0	3439.14	18414
3560+00	0.0	347.6	0.0	1749.19	16665
3561+00	0.0	290.4	0.0	1476.78	15188
3562+00	0.0	234.2	0.0	1214.42	13974
3563+00	0.0	201.2	0.0	1008.01	12966
3564+00	0.0	188.5	0.0	902.18	12063
3565+00	0.0	187.2	0.0	869.70	11194
3566+00	0.0	184.5	0.0	860.49	10333
3567+00	0.0	186.8	0.0	859.54	9474
3568+00	0.0	212.9	0.0	925.14	8549
3569+00	0.0	291.1	0.0	1166.69	7382
3570+00	0.0	354.4	0.0	1494.17	5888
3571+00	0.0	417.4	0.0	1786.44	4101
3572+00	0.0	441.0	0.0	3862.06	239
3573+00	0.0	824.9	0.0	0.0	239
3574+00	0.0	1122.3	0.0	4868.0	-4629
3575+00	0.0	1298.0	0.0	6050.7	-10680
3576+00	0.0	1371.0	0.0	6672.6	-17352
3577+00	0.0	1381.8	0.0	6882.1	-24234
3578+00	0.0	1360.0	0.0	6854.5	-31089
3579+00	0.0	1301.3	0.0	6653.1	-37742
3580+00	0.0	1209.0	0.0	6275.7	-44018
3581+00	0.0	1042.2	0.0	5628.1	-49646
3582+00	0.0	771.0	0.0	4533.0	-54179
3583+00	0.0	597.2	0.0	3420.3	-57599
3584+00	0.0	494.0	0.0	2727.9	-60327
3585+00	0.0	415.3	0.0	2273.3	-62600
3586+00	0.0	323.6	0.0	1847.4	-64448
3587+00	0.0	278.7	0.0	1505.9	-65953
3588+00	2.3	88.4	4.2	2167.9	-68117
3589+00	0.0	217.0	4.2	763.7	-68877
3590+00	0.0	234.0	0.0	1127.5	-70004
3591+00	0.0	236.6	0.0	1176.4	-71181
3592+00	0.0	242.1	0.0	1196.8	-72377
3593+00	0.0	231.5	0.0	1184.2	-73562
3594+00	0.0	214.3	0.0	1114.6	-74676
3595+00	0.0	165.2	0.0	948.6	-75625
3596+00	0.5	138.4	1.0	758.9	-76383
3597+00	17.2	89.4	32.9	569.4	-76919
3598+00	0.0	42.8	32.0	330.4	-77218
3599+00	0.1	40.8	0.2	208.9	-77426
3600+00	0.1	58.9	0.3	249.2	-77675
3601+00	0.0	65.2	0.1	310.1	-77985
3602+00	289.5	48.5	536.1	284.2	-77733

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	16

3603+00	244.8	57.3	989.3	264.6	-77008
3604+00	178.0	44.2	782.9	253.9	-76479
3605+00	281.9	42.8	851.7	217.7	-75845
3606+00	242.0	54.2	970.1	242.7	-75118
3607+00	238.0	43.9	888.9	245.3	-74474
3608+00	205.6	57.3	821.5	253.1	-73906
3609+00	0.0	55.7	380.7	282.4	-73808
3610+00	0.0	49.7	0.0	263.5	-74071
3611+00	0.4	36.6	0.8	215.8	-74286
3612+00	0.5	39.7	1.7	190.7	-74475
3613+00	0.4	43.7	1.6	208.5	-74682
3614+00	0.3	39.5	1.2	458.0	-75139
3615+00	0.3	52.7	1.1	230.4	-75368
3616+00	0.1	45.1	0.8	244.3	-75612
3617+00	1.0	71.7	2.1	291.8	-75901
3618+00	0.7	41.4	3.1	282.6	-76181
3619+00	0.3	43.7	1.8	212.8	-76392
3620+00	0.4	40.1	1.2	209.5	-76600
3621+00	0.1	49.0	0.8	222.6	-76822
3622+00	1.1	43.8	2.1	232.0	-77052
3623+00	1.6	17.5	4.9	528.3	-77575
3624+00	0.9	53.9	4.7	178.5	-77749
3625+00	7.3	1.8	15.3	577.3	-78311
3626+00	0.2	42.3	14.0	110.3	-78407
3627+00	0.0	60.5	0.5	256.8	-78664
3628+00	0.0	55.0	0.1	288.7	-78952
3629+00	0.0	56.5	0.0	278.8	-79231
3630+00	0.1	52.3	0.1	272.1	-79503
3631+00	0.2	46.7	0.5	247.5	-79750
3632+00	0.0	49.7	0.4	240.9	-79991
3633+00	0.2	50.2	0.4	249.6	-80240
3634+00	0.5	34.3	1.4	211.0	-80449
3635+00	0.8	43.3	2.3	193.8	-80641
3636+00	0.0	51.4	1.4	236.7	-80876
3637+00	0.0	59.3	0.0	276.7	-81153
3638+00	0.2	47.8	0.4	267.6	-81420
3639+00	0.0	59.2	0.4	267.5	-81687
3640+00	0.1	59.1	0.1	295.9	-81983
3641+00	0.0	52.3	0.1	278.6	-82262
3642+00	0.0	46.3	0.0	246.5	-82508
3643+00	0.3	60.0	0.5	265.7	-82773
3644+00	178.3	42.4	330.7	256.0	-82698
3645+00	376.6	48.3	1027.6	226.8	-81898
3646+00	263.8	42.3	1185.9	226.6	-80938
3647+00	304.0	51.1	1051.5	233.7	-80120
3648+00	321.7	50.6	1158.7	379.3	-79341
3649+00	2.4	14.7	600.2	163.1	-78904
3650+00	1.1	44.5	6.5	147.9	-79045
3651+00	0.4	55.3	2.8	249.5	-79292
3652+00	0.0	57.5	0.8	281.9	-79573

3653+00	0.5	60.6	0.9	295.1	-79867
3654+00	0.0	57.1	0.9	294.1	-80160
3655+00	0.5	32.6	1.0	224.2	-80384
3656+00	0.5	38.5	1.9	177.7	-80559
3657+00	0.4	64.0	1.7	256.2	-80814
3658+00	0.0	57.4	0.8	303.6	-81117
3659+00	0.4	54.2	0.7	278.9	-81395
3660+00	0.0	55.1	0.7	273.2	-81667
3661+00	0.1	87.1	0.2	355.5	-82023
3662+00	1.1	58.4	2.2	363.7	-82384
3663+00	1.0	61.1	3.9	298.7	-82679
3664+00	0.7	42.7	3.2	259.4	-82935
3665+00	0.4	51.9	1.9	236.4	-83169
3666+00	0.5	47.5	1.6	248.4	-83416
3667+00	0.5	50.8	1.9	245.7	-83660
3668+00	0.4	48.6	1.7	248.4	-83907
3669+00	0.4	50.9	1.4	248.8	-84154
3670+00	0.0	49.6	0.7	251.4	-84405
3671+00	0.0	72.2	0.0	304.5	-84710
3672+00	0.0	86.4	0.0	396.5	-85106
3673+00	0.0	54.0	0.0	601.1	-85707
3674+00	11.5	25.6	21.2	199.0	-85885
3675+00	1.4	57.3	23.8	207.1	-86068
3676+00	0.8	57.6	4.1	287.1	-86351
3677+00	0.9	51.7	3.1	273.2	-86621
3678+00	9.2	2.6	18.6	635.9	-87239
3679+00	0.0	76.8	17.0	198.5	-87420
3680+00	0.0	132.3	0.1	522.7	-87943
3681+00	0.0	43.5	0.1	564.6	-88507
3682+00	0.5	39.6	0.9	207.7	-88714
3683+00	1.2	28.6	3.2	295.3	-89006
3684+00	0.0	50.2	2.3	197.0	-89201
3685+00	0.0	47.7	0.0	244.8	-89446
3686+00	0.0	47.3	0.0	237.6	-89683
3687+00	0.0	43.9	0.0	228.2	-89911
3688+00	0.0	51.5	0.0	238.6	-90150
3689+00	0.0	51.7	0.0	258.1	-90408
3690+00	0.2	50.0	0.4	254.4	-90662
3691+00	0.0	49.1	0.4	247.7	-90909
3692+00	0.0	45.9	0.0	237.3	-91147
3693+00	0.0	46.0	0.0	229.8	-91377
3694+00	0.0	61.5	0.0	269.0	-91645
3695+00	0.2	65.3	0.3	442.1	-92087
3696+00	0.1	56.1	0.5	303.5	-92390
3697+00	0.3	59.4	0.6	288.6	-92678
3698+00	0.1	62.0	0.6	303.5	-92981
3699+00	0.3	62.6	0.6	311.6	-93292
3700+00	0.1	54.7	0.7	293.4	-93585
3701+00	0.3	58.9	0.8	284.2	-93868
3702+00	0.1	65.5	0.7	311.0	-94179

3703+00	0.0	62.9	0.2	321.0	-94499
3704+00	0.0	64.7	0.1	319.1	-94818
3705+00	0.1	67.0	0.3	329.4	-95147
3706+00	0.2	50.8	0.7	544.6	-95691
3707+00	0.6	11.7	1.6	156.4	-95846
3708+00	622.2	60.6	1153.4	430.8	-95124
3709+00	692.7	67.0	2435.0	319.0	-93008
3710+00	0.0	27.4	1282.7	236.0	-91961
3711+00	529.2	104.4	980.0	329.4	-91310
3712+00	0.3	47.4	980.6	1129.5	-91459
3713+00	0.1	34.0	0.8	203.5	-91662
3714+00	636.5	63.2	1178.9	243.0	-90726
3715+00	267.1	74.5	1673.4	344.4	-89397
3716+00	405.6	82.4	1245.7	392.2	-88543
3717+00	555.0	72.8	1778.8	387.9	-87153
3718+00	0.2	54.8	1028.1	569.0	-86694
3719+00	0.2	33.0	0.7	469.5	-87162
3720+00	0.0	63.4	0.4	240.9	-87403
3721+00	0.1	45.0	0.1	270.8	-87674
3722+00	0.0	33.1	0.1	195.2	-87869
3723+00	0.0	36.1	0.0	173.0	-88042
3724+00	0.1	32.8	0.1	172.1	-88214
3725+00	0.0	34.2	0.1	167.3	-88381
3726+00	0.0	41.5	0.0	189.0	-88570
3727+00	0.0	38.5	0.1	199.8	-88770
3728+00	0.1	37.6	0.2	190.1	-88960
3729+00	0.1	32.9	0.3	176.2	-89135
3730+00	0.2	22.4	0.6	138.2	-89273
3731+00	7.9	2.2	15.0	436.5	-89695
3732+00	0.1	41.2	14.7	108.6	-89788
3733+00	0.2	31.3	0.4	181.2	-89969
3734+00	0.2	36.0	0.7	168.2	-90137
3735+00	0.0	33.0	0.4	172.5	-90309

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	17

3736+00	0.0	28.0	0.0	152.4	-90461
3737+00	0.0	26.4	0.0	136.0	-90597
3738+00	0.6	50.6	1.2	192.6	-90788
3739+00	0.0	118.2	1.2	422.1	-91209
3740+00	0.4	105.3	0.8	558.7	-91767
3741+00	0.2	73.2	1.2	446.1	-92212
3742+00	0.4	65.0	1.2	345.3	-92556
3743+00	0.0	58.0	0.8	307.4	-92863
3744+00	0.0	60.5	0.0	296.2	-93159
3745+00	498.8	55.0	923.8	288.8	-92524
3746+00	575.4	55.1	1989.3	275.3	-90810
3747+00	554.1	49.2	2091.7	260.8	-88979
3748+00	698.4	35.5	2319.5	211.9	-86872
3749+00	578.7	50.9	2364.9	216.1	-84723
3750+00	462.4	49.4	1927.9	250.8	96954
3751+00	363.9	42.4	1530.2	229.5	98255
3752+00	0.0	63.4	673.9	264.4	98665
3753+00	0.0	58.4	0.0	304.6	98360
3754+00	0.0	60.5	0.0	297.2	98063
3755+00	0.0	55.2	0.0	289.1	97774
3756+00	0.3	46.1	0.5	253.3	97521
3757+00	0.0	64.0	0.5	525.4	96996
3758+00	0.0	59.3	0.0	308.4	96688
3759+00	0.3	56.8	0.5	290.3	96398
3760+00	0.0	65.0	0.5	304.4	96094
3761+00	0.0	51.1	0.0	290.1	95804
3762+00	0.0	52.1	0.0	258.0	95546
3763+00	0.0	44.2	0.0	240.9	95305
3764+00	0.0	45.7	0.0	224.9	95080
3765+00	0.8	36.2	1.4	204.9	94877
3766+00	0.0	71.4	1.4	269.1	94609
3767+00	0.0	52.3	0.0	309.3	94300
3768+00	0.6	46.8	1.0	247.7	94053
3769+00	0.2	101.1	1.4	369.7	93685
3770+00	0.0	92.1	0.4	483.0	93202
3771+00	0.0	50.1	0.0	355.6	92847
3772+00	0.0	65.2	0.0	288.2	92558
3773+00	0.0	59.5	0.0	311.6	92247
3774+00	0.4	81.7	0.7	352.9	91895
3775+00	510.3	50.4	945.7	330.3	92510
3776+00	332.6	44.9	1561.0	238.3	93833
3777+00	473.8	52.2	1493.3	242.6	95083
3778+00	558.1	64.0	1910.8	290.4	96704
3779+00	514.9	46.3	1986.9	275.6	98415
3780+00	437.4	43.6	1763.4	224.6	99954
3781+00	423.9	55.1	1595.1	246.7	101302
3782+00	582.3	62.2	1863.5	293.2	102873
3783+00	0.2	53.4	1078.8	664.1	103287
3784+00	0.2	70.8	0.8	310.5	102978
3785+00	0.4	45.9	1.2	291.6	102687

3786+00	0.0	53.4	0.8	248.2	102440
3787+00	0.1	46.2	0.1	249.1	102191
3788+00	0.7	39.7	1.4	214.9	101977
3789+00	0.1	55.9	1.4	239.1	101740
3790+00	0.3	46.0	0.6	254.8	101485
3791+00	0.0	47.7	0.5	359.3	101127
3792+00	5.4	22.6	10.0	175.8	100961
3793+00	0.4	49.3	10.7	179.7	100792
3794+00	0.6	48.8	1.8	245.2	100549
3795+00	0.8	40.1	2.5	597.3	99954
3796+00	0.6	39.5	2.5	199.1	99757
3797+00	0.0	52.3	1.1	229.5	99529
3798+00	0.2	52.9	0.4	263.1	99266
3799+00	0.0	54.1	0.4	267.6	98999
3800+00	0.0	41.4	0.0	238.6	98760
3801+00	0.1	39.9	0.1	203.1	98557
3802+00	0.0	49.0	0.1	222.1	98335
3803+00	0.1	45.1	0.2	235.1	98101
3804+00	0.0	48.8	0.2	234.7	97866
3805+00	0.6	39.2	1.1	220.1	97647
3806+00	0.1	44.2	1.2	208.6	97440
3807+00	0.0	42.2	0.2	216.1	97224
3808+00	0.2	41.1	0.4	208.4	97016
3809+00	0.0	44.7	0.3	214.6	96802
3810+00	2.2	17.6	4.1	405.7	96400
3811+00	0.0	65.0	4.1	206.4	96198
3812+00	0.0	49.3	0.0	285.8	95912
3813+00	0.0	52.5	0.0	254.7	95657
3814+00	0.0	50.9	0.0	258.5	95399
3815+00	0.1	52.8	0.2	259.2	95140
3816+00	0.2	49.7	0.5	256.4	94884
3817+00	0.1	52.2	0.5	255.0	94629
3818+00	0.1	36.8	0.4	222.6	94407
3819+00	0.2	41.8	0.6	196.5	94211
3820+00	0.6	35.5	1.4	193.2	94019
3821+00	0.2	44.6	1.5	200.0	93821
3822+00	0.2	39.4	0.8	209.8	93612
3823+00	0.0	44.0	0.4	208.3	93404
3824+00	0.1	52.5	0.2	241.1	93163
3825+00	0.1	50.2	0.4	256.6	92907
3826+00	0.4	48.0	0.9	245.5	92662
3827+00	0.1	45.8	0.9	234.6	92429
3828+00	0.5	39.3	1.0	212.8	92217
3829+00	0.8	33.1	2.3	181.0	92038
3830+00	0.9	26.3	3.2	148.4	91893
3831+00	1.3	26.0	4.1	130.6	91766
3832+00	0.9	34.9	4.2	152.2	91619
3833+00	0.5	33.8	2.7	171.8	91449
3834+00	1.0	28.5	2.8	156.0	91296
3835+00	0.6	31.2	2.9	149.3	91150

3836+00	0.6	30.6	2.3	654.5	90498
3837+00	0.0	36.3	1.2	167.3	90332
3838+00	0.2	41.1	0.4	193.5	90139
3839+00	0.1	41.4	0.5	206.3	89933
3840+00	0.0	45.8	0.1	217.9	89715
3841+00	0.5	41.9	1.0	219.2	89497
3842+00	0.0	47.4	1.0	223.3	89274
3843+00	0.0	51.0	0.0	246.1	89028
3844+00	0.1	41.2	0.2	980.7	88048
3845+00	19.0	24.1	35.4	163.4	87920
3846+00	4.6	45.1	43.8	173.0	87791
3847+00	19.2	40.6	44.1	214.3	87620
3848+00	0.6	28.5	36.6	172.7	87484
3849+00	1.3	27.6	3.6	140.2	87348
3850+00	0.8	37.2	3.9	162.1	87190
3851+00	0.6	41.3	2.6	196.4	86996
3852+00	1.1	43.5	3.1	212.1	86787
3853+00	0.9	42.1	3.6	214.0	86576
3854+00	0.8	36.2	3.0	195.7	86384
3855+00	0.9	37.6	3.0	184.7	86202
3856+00	1.2	37.8	3.8	188.7	86017
3857+00	0.6	43.2	3.4	202.4	85818
3858+00	1.0	42.3	3.0	213.7	85607
3859+00	1.2	34.7	4.0	192.6	85419
3860+00	1.5	36.3	5.0	177.5	85246
3861+00	0.7	37.0	4.1	183.2	85067
3862+00	1.0	44.1	3.1	202.6	84868
3863+00	1.6	26.2	4.7	425.6	84447
3864+00	1.1	37.8	4.9	160.1	84292
3865+00	0.3	44.9	2.5	206.8	84087
3866+00	0.2	58.5	1.0	258.4	83830
3867+00	0.4	64.1	1.2	306.3	83525
3868+00	0.4	60.9	1.5	312.4	83214

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	18

3869+00	0.4	43.8	1.6	261.8	82954
3870+00	6.3	1.5	12.4	676.3	82290
3871+00	0.0	28.5	11.7	75.0	82226
3872+00	0.4	33.1	0.7	154.0	82073
3873+00	0.5	34.8	1.7	169.7	81905
3874+00	1.3	32.4	3.3	168.0	81741
3875+00	0.2	29.1	2.8	153.8	81590
3876+00	0.4	28.9	1.1	144.9	81446
3877+00	0.5	25.4	1.5	135.8	81312
3878+00	0.0	28.7	0.9	135.4	81177
3879+00	0.2	30.5	0.4	148.1	81029
3880+00	0.9	27.2	2.1	144.3	80887
3881+00	0.7	35.9	3.0	157.7	80732
3882+00	0.0	32.1	1.2	170.1	80564
3883+00	0.4	30.3	0.8	156.1	80408
3884+00	1.3	28.4	3.2	834.7	79577
3885+00	0.3	39.3	2.9	169.4	79410
3886+00	0.3	41.6	1.1	202.2	79209
3887+00	0.0	40.0	0.6	203.9	79006
3888+00	0.0	42.6	0.0	206.4	78799
3889+00	0.8	44.6	1.5	781.0	78020
3890+00	0.0	38.6	1.5	208.1	77813
3891+00	0.1	44.3	0.2	207.2	77606
3892+00	0.5	41.6	1.2	214.7	77393
3893+00	0.5	42.3	1.8	209.7	77185
3894+00	0.4	39.3	1.7	203.9	76983
3895+00	0.6	40.1	1.9	198.5	76786
3896+00	0.1	54.6	1.2	236.9	76551
3897+00	0.0	54.0	0.2	1021.5	75529
3898+00	0.3	45.7	0.6	249.1	75281
3899+00	0.0	51.7	0.5	243.4	75038
3900+00	0.4	39.6	0.8	228.4	74810
3901+00	0.3	42.3	1.3	204.9	74607
3902+00	0.0	41.5	0.6	209.6	74398
3903+00	0.0	56.8	0.0	245.8	74152
3904+00	0.0	52.1	0.0	272.1	73880
3905+00	0.0	54.7	0.0	266.9	73613
3906+00	0.2	49.8	0.3	261.3	73352
3907+00	0.2	43.1	0.7	232.3	73120
3908+00	0.0	39.1	0.4	205.6	72915
3909+00	0.6	39.3	1.2	196.1	72720
3910+00	0.0	43.3	1.2	206.5	72515
3911+00	0.4	45.4	0.7	221.6	72294
3912+00	0.0	44.6	0.7	224.9	72070
3913+00	0.0	40.6	0.0	212.8	71857
3914+00	0.4	42.2	0.7	206.8	71651
3915+00	0.0	42.9	0.7	212.8	71439
3916+00	0.4	39.1	0.7	580.1	70859
3917+00	0.0	47.6	0.7	216.6	70643
3918+00	0.1	41.1	0.3	221.6	70422

3919+00	0.0	43.1	0.2	210.5	70212
3920+00	0.2	42.7	0.4	214.5	69998
3921+00	0.1	47.5	0.6	225.4	69773
3922+00	0.2	40.5	0.5	220.1	69553
3923+00	0.0	38.8	0.4	198.4	69355
3924+00	17.2	37.7	31.9	191.2	69196
3925+00	13.1	33.5	56.1	552.8	68700
3926+00	16.0	42.0	54.0	188.7	68565
3927+00	20.2	38.7	67.0	201.9	68430
3928+00	17.3	48.2	69.4	217.4	68282
3929+00	17.6	52.0	64.7	250.6	68096
3930+00	18.8	50.3	67.4	255.9	67908
3931+00	19.4	53.1	70.7	258.7	67720
3932+00	22.2	46.8	77.0	249.8	67547
3933+00	0.0	44.3	41.2	227.7	67360
3934+00	53.8	44.5	99.7	221.9	67238
3935+00	35.6	47.6	165.6	230.1	67174
3936+00	24.4	49.2	111.2	241.8	67043
3937+00	19.2	47.7	80.7	242.3	66881
3938+00	18.6	51.3	69.9	247.7	66704
3939+00	15.2	46.1	62.4	243.6	66522
3940+00	20.9	49.2	66.8	238.2	66351
3941+00	20.9	40.3	77.4	223.6	66205
3942+00	18.4	39.0	72.8	198.1	66080
3943+00	6.6	2.4	46.3	666.5	65459
3944+00	0.0	44.9	12.3	118.4	65353
3945+00	0.0	42.9	0.1	219.4	65134
3946+00	0.0	32.6	0.1	188.7	64945
3947+00	0.1	32.0	0.2	161.6	64784
3948+00	0.1	29.7	0.4	154.2	64630
3949+00	0.2	30.0	0.7	149.3	64482
3950+00	0.1	13.9	0.7	609.9	63872
3951+00	0.3	36.1	0.8	125.0	63748
3952+00	0.2	38.8	0.9	187.2	63562
3953+00	0.1	45.1	0.5	209.8	63352
3954+00	0.0	50.7	0.2	239.5	63113
3955+00	0.0	48.5	0.0	247.9	62865
3956+00	0.0	48.4	0.0	242.2	62623
3957+00	0.0	42.5	0.0	227.3	62396
3958+00	34.9	41.3	64.6	209.5	62251
3959+00	42.8	34.7	143.8	190.0	62205
3960+00	40.6	47.7	154.3	206.0	62153
3961+00	35.7	46.7	141.3	236.0	62058
3962+00	38.7	45.2	137.9	229.8	61966
3963+00	39.0	45.2	143.9	226.1	61884
3964+00	34.2	51.7	135.6	242.3	61777
3965+00	0.0	50.0	63.4	254.3	61586
3966+00	31.1	36.5	57.6	216.2	61428
3967+00	41.9	41.1	135.2	194.0	61369
3968+00	30.3	46.5	133.6	219.0	61284

3969+00	40.7	46.8	131.4	608.1	60807
3970+00	0.0	47.9	75.3	236.8	60645
3971+00	0.1	38.7	0.1	216.6	60429
3972+00	0.0	37.8	0.1	191.3	60238
3973+00	0.1	45.7	0.2	208.6	60029
3974+00	0.0	50.8	0.2	241.2	59788
3975+00	0.0	56.0	0.0	267.0	59521
3976+00	0.0	62.8	0.0	296.9	59224
3977+00	0.0	58.2	0.0	302.4	58922
3978+00	0.0	56.0	0.0	285.4	58636
3979+00	0.0	59.3	0.0	288.2	58348
3980+00	0.0	56.6	0.0	289.8	58058
3981+00	0.0	60.9	0.0	293.9	57764
3982+00	0.0	53.3	0.0	285.6	57479
3983+00	0.0	55.2	0.0	271.3	57207
3984+00	0.1	53.1	0.2	270.7	56937
3985+00	0.0	46.3	0.2	248.3	56689
3986+00	0.0	44.6	0.0	227.1	56462
3987+00	0.0	56.3	0.0	252.3	56210
3988+00	0.0	54.2	0.0	276.2	55933
3989+00	0.0	47.6	0.1	254.4	55679
3990+00	0.0	49.7	0.1	243.3	55436
3991+00	0.1	58.2	0.1	269.9	55166
3992+00	0.0	61.2	0.1	298.5	54868
3993+00	0.0	44.6	0.0	264.4	54603
3994+00	0.1	46.1	0.2	226.7	54377
3995+00	0.0	53.7	0.2	249.4	54128
3996+00	2.4	1.5	4.4	701.1	53431
3997+00	0.0	50.4	4.4	129.8	53305
3998+00	0.0	57.9	0.0	270.7	53035
3999+00	0.0	56.6	0.0	286.3	52748
4000+00	0.0	52.5	0.0	272.8	52476
4001+00	0.0	52.8	0.0	263.3	52212

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	19

4002+00	0.0	49.7	0.0	256.3	51956
4003+00	0.0	50.7	0.0	250.9	51705
4004+00	0.0	47.8	0.0	246.3	51459
4005+00	0.0	46.5	0.0	235.8	51223
4006+00	0.0	47.8	0.0	235.7	50988
4007+00	0.0	44.4	0.0	230.5	50757
4008+00	0.0	44.4	0.0	221.9	50535
4009+00	0.0	47.1	0.0	228.6	50307
4010+00	0.0	1.0	0.0	120.2	50186
4011+00	0.0	48.3	0.0	123.2	50063
4012+00	0.0	46.4	0.0	236.6	49827
4013+00	0.0	48.9	0.0	238.3	49588
4014+00	0.0	42.3	0.0	228.2	49360
4015+00	0.0	57.8	0.0	250.2	49110
4016+00	0.0	54.8	0.0	281.3	48829
4017+00	0.0	58.8	0.0	284.0	48545
4018+00	0.0	50.4	0.0	273.1	48271
4019+00	0.0	54.4	0.1	262.1	48009
4020+00	0.0	37.9	0.1	230.8	47779
4021+00	0.0	38.0	0.0	189.7	47589
4022+00	0.0	31.6	0.0	487.0	47102
4023+00	0.0	44.7	0.0	190.9	46911
4024+00	0.0	44.3	0.0	222.6	46689
4025+00	0.0	43.6	0.0	219.9	46469
4026+00	0.0	46.4	0.0	224.9	46244
4027+00	0.0	43.8	0.0	225.3	46018
4028+00	0.0	47.9	0.0	979.1	45039
4029+00	0.1	42.7	0.1	226.5	44813
4030+00	0.0	42.1	0.1	212.1	44601
4031+00	0.0	44.4	0.0	216.2	44385
4032+00	0.0	46.6	0.0	227.4	44157
4033+00	0.0	50.9	0.0	243.7	43914
4034+00	0.0	48.8	0.0	249.4	43664
4035+00	0.2	44.4	0.3	233.2	43431
4036+00	0.1	45.0	0.5	223.6	43208
4037+00	0.1	40.4	0.4	213.5	42995
4038+00	0.0	39.9	0.2	200.7	42795
4039+00	0.1	46.0	0.2	214.7	42580
4040+00	1.7	19.9	3.2	477.8	42105
4041+00	0.3	44.0	3.6	409.7	41699
4042+00	3.3	16.9	6.6	152.1	41554
4043+00	0.3	43.7	6.7	151.4	41409
4044+00	0.3	30.5	1.2	185.4	41225
4045+00	0.3	33.9	1.1	160.8	41065
4046+00	0.5	31.8	1.4	164.1	40903
4047+00	0.2	37.6	1.3	173.4	40730
4048+00	0.0	40.6	0.5	195.5	40535
4049+00	0.1	30.6	0.3	1116.1	39420
4050+00	0.0	44.1	0.3	186.8	39233
4051+00	0.3	40.0	0.5	210.2	39024

4052+00	0.2	36.5	0.9	191.0	38833
4053+00	0.2	36.0	0.7	181.1	38653
4054+00	0.2	34.5	0.7	426.3	38227
4055+00	0.1	49.0	0.5	208.9	38019
4056+00	0.2	55.7	0.5	261.7	37758
4057+00	0.3	49.0	0.9	261.6	37497
4058+00	0.0	53.4	0.6	255.9	37242
4059+00	0.4	46.0	0.7	248.6	36994
4060+00	0.1	51.4	0.8	243.6	36751
4061+00	0.2	52.3	0.4	259.3	36492
4062+00	0.2	58.7	0.7	277.7	36215
4063+00	0.1	58.4	0.6	292.9	35923
4064+00	0.0	59.0	0.2	293.5	35630
4065+00	0.1	50.9	0.3	274.6	35356
4066+00	0.3	57.1	0.7	269.9	35086
4067+00	0.0	55.7	0.5	281.9	34805
4068+00	0.0	53.8	0.0	273.7	34531
4069+00	0.0	53.4	0.1	268.0	34263
4070+00	0.0	48.4	0.1	254.3	34009
4071+00	0.0	44.7	0.0	232.6	33777
4072+00	0.0	45.4	0.0	225.3	33551
4073+00	0.0	43.3	0.0	221.9	33329
4074+00	0.0	45.7	0.0	222.7	33107
4075+00	0.0	42.4	0.0	220.4	32886
4076+00	0.0	47.5	0.0	224.8	32662
4077+00	0.0	52.6	0.0	500.2	32162
4078+00	1.8	61.3	3.4	284.6	31880
4079+00	0.1	49.9	3.5	277.9	31606
4080+00	0.0	49.3	0.1	247.9	31358
4081+00	0.0	51.3	0.0	251.4	31107
4082+00	0.1	50.2	0.2	253.8	30853
4083+00	0.6	48.8	1.2	247.5	30607
4084+00	0.3	47.8	1.6	241.5	30367
4085+00	0.1	49.3	0.6	242.8	30125
4086+00	0.0	46.9	0.1	240.5	29885
4087+00	0.0	39.0	0.0	214.9	29670
4088+00	0.1	40.0	0.3	197.6	29472
4089+00	0.0	52.2	0.3	230.5	29242
4090+00	0.0	34.4	0.0	216.6	29026
4091+00	0.0	35.1	0.0	173.8	28852
4092+00	0.0	41.1	0.0	190.4	28661
4093+00	0.3	37.7	0.5	196.8	28465
4094+00	0.0	48.1	0.5	214.3	28251
4095+00	0.0	42.8	0.0	227.2	28024
4096+00	0.0	44.0	0.0	217.0	27807
4097+00	0.0	40.5	0.0	211.3	27596
4098+00	0.0	45.7	0.0	215.4	27381
4099+00	0.0	55.4	0.0	252.8	27128
4100+00	0.0	59.6	0.0	787.6	26340
4101+00	3.0	2.4	0.0	0.0	26340

4102+00	0.0	58.9	5.6	141.7	26204
4103+00	0.0	62.5	0.0	280.8	25923
4104+00	0.0	74.4	0.0	691.7	25232
4105+00	0.0	44.3	0.0	274.7	24957
4106+00	0.3	48.7	0.6	215.2	24742
4107+00	0.0	56.3	0.6	242.9	24500
4108+00	0.0	51.1	0.0	248.5	24251
4109+00	0.5	50.4	0.9	234.9	24017
4110+00	0.4	44.0	1.6	218.4	23801
4111+00	0.0	50.7	0.7	219.0	23582
4112+00	0.0	53.9	0.0	241.9	23340
4113+00	0.2	31.3	0.4	447.1	22894
4114+00	0.0	51.2	0.4	190.8	22703
4115+00	0.1	50.8	0.2	236.1	22467
4116+00	0.0	40.6	0.2	586.6	21881
4117+00	0.1	38.4	0.1	182.9	21698
4118+00	0.0	49.7	0.1	517.0	21181
4119+00	0.7	23.8	1.4	170.1	21013
4120+00	0.7	36.9	2.6	140.4	20875
4121+00	0.4	38.3	2.1	174.0	20703
4122+00	0.0	47.2	0.8	197.9	20506
4123+00	0.0	61.4	0.0	251.4	20254
4124+00	0.0	59.4	0.0	279.7	19975
4125+00	0.0	60.7	0.0	278.1	19696
4126+00	0.0	59.4	0.0	278.0	19418
4127+00	0.0	51.7	0.0	257.1	19161
4128+00	0.1	47.6	0.2	229.9	18932
4129+00	0.0	20.9	0.2	158.5	18773
4130+00	0.0	59.8	0.1	186.6	18587
4131+00	0.0	47.4	0.1	248.0	18339
4132+00	0.0	47.4	0.1	219.4	18120
4133+00	0.0	40.6	0.0	203.6	17916
4134+00	0.0	35.4	0.1	175.8	17740

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	20

4135+00	0.0	39.0	0.1	172.2	17568
4136+00	0.4	36.6	0.8	175.2	17394
4137+00	0.0	35.4	0.8	166.7	17228
4138+00	0.0	38.0	0.0	169.9	17058
4139+00	0.0	43.7	0.0	189.1	16869
4140+00	0.0	37.2	0.0	187.2	16682
4141+00	0.0	38.5	0.0	175.1	16507
4142+00	0.0	43.3	0.0	189.3	16317
4143+00	0.0	44.1	0.0	202.3	16115
4144+00	0.0	45.0	0.0	206.3	15909
4145+00	0.0	41.3	0.0	199.8	15709
4146+00	0.0	43.4	0.0	196.1	15513
4147+00	0.0	51.3	0.0	219.2	15294
4148+00	0.0	64.4	0.0	267.8	15026
4149+00	0.0	67.2	0.0	679.7	14346
4150+00	0.0	60.7	0.0	296.2	14050
4151+00	0.3	44.8	0.6	244.2	13807
4152+00	0.0	21.0	0.6	652.2	13155
4153+00	0.0	43.9	0.0	150.2	13005
4154+00	0.0	44.4	0.0	1079.4	11925
4155+00	14.5	33.5	26.8	180.2	11772
4156+00	0.0	57.6	26.8	210.7	11588
4157+00	0.1	56.4	0.2	263.9	11324
4158+00	0.5	63.2	1.0	277.0	11048
4159+00	0.8	52.7	2.3	268.5	10782
4160+00	0.1	44.4	1.6	224.8	10559
4161+00	0.6	30.5	1.3	173.2	10387
4162+00	0.9	35.4	2.8	152.5	10237
4163+00	0.5	38.4	2.5	170.7	10069
4164+00	0.3	41.3	1.3	184.4	9886
4165+00	0.0	43.7	0.5	196.9	9689
4166+00	0.1	53.5	0.1	225.0	9465
4167+00	0.7	44.9	1.5	227.7	9238
4168+00	0.3	44.5	1.8	206.9	9033
4169+00	0.6	36.4	1.6	187.1	8848
4170+00	0.0	37.1	1.2	170.1	8679
4171+00	0.3	43.2	0.5	186.0	8493
4172+00	0.4	40.7	1.1	194.3	8300
4173+00	0.0	35.9	0.7	177.2	8124
4174+00	0.3	32.6	0.6	158.4	7966
4175+00	0.0	41.1	0.6	170.4	7796
4176+00	0.0	38.9	0.0	810.1	6986
4177+00	2.2	14.8	4.0	124.3	6865
4178+00	0.1	30.4	4.2	104.6	6765
4179+00	0.5	27.8	1.1	134.8	6631
4180+00	0.1	116.0	1.1	332.9	6300
4181+00	0.4	22.6	0.9	320.8	5980
4182+00	2.2	38.2	4.7	140.6	5844
4183+00	1.0	38.0	5.8	176.3	5673
4184+00	2.0	48.1	5.5	199.3	5480

4185+00	0.8	41.7	5.2	207.9	5277
4186+00	0.6	51.7	2.6	216.2	5063
4187+00	0.8	43.3	2.7	469.9	4596
4188+00	1.0	42.9	3.3	199.5	4400
4189+00	0.4	41.4	2.6	195.1	4207
4190+00	0.4	32.2	1.5	170.3	4038
4191+00	0.0	39.5	0.7	166.0	3873
4192+00	0.0	48.2	0.0	203.0	3670
4193+00	10.4	18.8	19.2	280.0	3409
4194+00	0.0	45.4	19.2	148.5	3280
4195+00	0.0	58.3	0.0	239.8	3040
4196+00	0.0	62.7	0.0	280.1	2760
4197+00	0.7	20.0	1.2	191.5	2570
4198+00	0.0	31.4	1.2	119.1	2452
4199+00	0.0	38.9	0.0	162.8	2289
4200+00	0.2	32.9	0.5	166.3	2124
4201+00	0.7	7.8	1.7	94.3	2031
4202+00	0.8	30.6	2.8	88.8	1945
4203+00	0.0	40.7	1.5	165.1	1781
4204+00	0.0	46.1	0.0	201.1	1580
4205+00	0.0	60.5	0.0	246.9	1334
4206+00	0.0	58.5	0.1	275.5	1058
4207+00	0.0	60.9	0.1	276.3	782
4208+00	0.1	67.6	0.2	297.4	485
4209+00	0.3	61.4	0.8	673.6	-188
4210+00	0.3	63.4	1.0	288.9	-476
4211+00	0.1	56.6	0.7	1152.8	-1628
4212+00	7.4	14.9	14.0	165.5	-1780
4213+00	149.8	59.3	291.2	171.9	-1660
4214+00	161.2	57.5	575.9	270.5	-1355
4215+00	172.0	85.2	617.0	330.3	-1068
4216+00	157.5	113.1	610.3	458.8	-917
4217+00	154.0	96.2	576.9	484.4	-824
4218+00	120.0	99.2	507.3	452.2	-769
4219+00	0.5	98.2	223.0	456.7	-1003
4220+00	0.3	111.4	1.5	485.1	-1486
4221+00	0.6	68.8	1.7	667.2	-2152
4222+00	3.9	25.2	8.3	467.7	-2611
4223+00	0.0	25.0	7.2	116.4	-2721
4224+00	2.1	22.1	3.8	359.2	-3076
4225+00	1.2	39.4	6.0	142.5	-3212
4226+00	0.8	40.3	3.7	184.5	-3393
4227+00	0.7	43.0	2.8	192.9	-3583
4228+00	0.3	40.0	1.7	192.1	-3774
4229+00	0.6	35.5	1.5	174.8	-3947
4230+00	0.6	33.7	2.2	410.2	-4355
4231+00	0.3	31.2	1.7	150.1	-4503
4232+00	0.1	32.5	0.8	147.4	-4650
4233+00	0.2	29.3	0.6	143.0	-4793
4234+00	0.0	36.7	0.3	152.8	-4945

4235+00	0.2	1.1	0.3	87.6	-5032
4236+00	0.2	1.1	0.6	5.2	-5037
4237+00	1.0	1.2	2.2	5.3	-5040
4238+00	0.0	1.5	1.8	6.1	-5044
4239+00	0.0	1.4	0.0	6.6	-5051
4240+00	0.0	1.3	0.0	6.3	-5057
4241+00	0.2	1.5	0.4	6.6	-5063
4242+00	0.8	1.9	1.8	7.9	-5069
4243+00	0.0	4.7	1.4	265.3	-5333
4244+00	0.4	1.5	0.8	14.3	-5347
4245+00	1.9	31.4	4.4	76.1	-5418
4246+00	0.9	37.9	5.2	285.4	-5699
4247+00	0.6	44.8	2.8	191.5	-5887
4248+00	1.2	39.3	3.3	444.6	-6329
4249+00	0.0	22.4	2.2	142.8	-6469
4250+00	0.0	52.6	0.0	173.5	-6643
4251+00	0.0	39.9	0.0	214.0	-6857
4252+00	0.0	40.2	0.0	185.4	-7042
4253+00	0.0	8.3	0.0	112.3	-7154
4254+00	0.0	60.9	0.0	160.2	-7315
4255+00	0.4	55.0	0.7	268.2	-7582
4256+00	0.5	54.0	1.7	252.3	-7832
4257+00	0.2	60.7	1.3	265.5	-8097
4258+00	0.4	53.6	1.0	264.7	-8360
4259+00	0.8	49.7	2.2	239.2	-8597
4260+00	0.5	49.1	2.4	228.8	-8824
4261+00	0.0	56.2	0.9	243.8	-9067
4262+00	0.2	48.1	0.4	241.3	-9308
4263+00	1.0	37.8	2.2	198.7	-9504
4264+00	0.0	43.8	1.9	188.7	-9691
4265+00	0.4	35.6	0.7	496.6	-10187
4266+00	0.4	42.5	1.5	180.8	-10366
4267+00	1.0	53.8	2.5	348.1	-10712

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	21

4268+00	0.4	67.0	2.6	279.6	-10989
4269+00	0.4	82.6	1.4	346.3	-11334
4270+00	0.2	68.9	1.0	350.7	-11683
4271+00	0.1	69.3	0.5	319.9	-12003
4272+00	0.2	33.0	0.6	236.7	-12239
4273+00	2.2	24.3	4.4	445.5	-12680
4274+00	0.3	52.7	4.6	178.1	-12853
4275+00	0.8	41.7	2.0	218.5	-13070
4276+00	0.7	30.1	2.7	166.4	-13234
4277+00	0.2	48.4	1.6	181.9	-13414
4278+00	0.0	44.9	0.4	216.0	-13630
4279+00	0.2	46.7	0.4	212.0	-13841
4280+00	0.3	37.5	1.0	194.9	-14035
4281+00	0.4	32.3	1.3	161.6	-14195
4282+00	0.2	28.1	1.0	140.0	-14334
4283+00	0.4	26.8	1.0	127.1	-14460
4284+00	0.2	37.6	1.1	398.9	-14858
4285+00	2.4	23.8	4.8	141.9	-14995
4286+00	0.0	47.2	4.4	164.1	-15155
4287+00	0.0	41.4	0.0	205.0	-15360
4288+00	0.0	29.5	0.0	164.1	-15524
4289+00	0.0	25.3	0.0	126.7	-15651
4290+00	0.4	22.8	0.7	111.3	-15761
4291+00	0.0	38.6	0.7	142.1	-15903
4292+00	0.5	36.9	0.9	174.8	-16077
4293+00	0.3	43.8	1.3	187.0	-16262
4294+00	0.0	70.1	0.5	513.6	-16775
4295+00	0.3	57.7	0.6	295.6	-17071
4296+00	0.0	70.5	0.5	296.7	-17367
4297+00	0.0	55.6	0.0	292.1	-17659
4298+00	0.6	45.9	1.1	235.1	-17893
4299+00	2.2	26.2	5.2	479.9	-18367
4300+00	0.3	54.9	4.6	187.8	-18551
4301+00	0.0	64.1	0.5	275.5	-18826
4302+00	0.1	55.7	0.2	277.3	-19103
4303+00	0.0	50.7	0.2	246.4	-19349
4304+00	0.5	51.4	0.9	236.3	-19584
4305+00	0.0	58.3	1.0	253.8	-19837
4306+00	0.3	47.6	0.7	495.0	-20331
4307+00	0.0	52.3	0.6	231.3	-20562
4308+00	0.0	47.7	0.0	231.4	-20793
4309+00	1.7	28.7	3.2	489.6	-21280
4310+00	0.0	49.6	3.2	181.1	-21458
4311+00	0.0	53.1	0.0	237.7	-21695
4312+00	0.0	49.5	0.0	237.5	-21933
4313+00	0.0	53.1	0.0	237.5	-22170
4314+00	0.0	62.1	0.0	266.6	-22437
4315+00	0.0	55.9	0.0	273.1	-22710
4316+00	0.0	58.7	0.0	265.4	-22975
4317+00	0.0	62.9	0.0	281.6	-23257

4318+00	0.0	53.0	0.0	268.3	-23525
4319+00	0.0	49.9	0.0	238.1	-23763
4320+00	0.4	39.3	0.7	206.5	-23969
4321+00	0.3	41.0	1.2	185.9	-24154
4322+00	0.5	42.8	1.4	193.9	-24346
4323+00	0.7	39.0	2.2	189.4	-24533
4324+00	0.3	39.4	1.9	181.6	-24713
4325+00	0.2	40.0	1.0	183.9	-24896
4326+00	0.3	35.3	0.9	174.3	-25069
4327+00	0.4	18.7	1.3	124.9	-25193
4328+00	0.1	50.0	0.9	159.1	-25351
4329+00	0.2	54.9	0.5	242.9	-25594
4330+00	0.1	57.0	0.6	258.9	-25852
4331+00	0.1	62.4	0.4	276.3	-26128
4332+00	0.1	54.3	0.4	270.1	-26398
4333+00	0.0	73.2	0.1	295.0	-26693
4334+00	0.2	67.3	0.4	325.2	-27017
4335+00	0.2	84.0	0.7	663.2	-27680
4336+00	6.1	1.2	11.6	510.2	-28179
4337+00	0.0	53.8	11.2	127.3	-28295
4338+00	0.5	40.7	0.9	218.7	-28512
4339+00	0.2	47.8	1.4	204.8	-28716
4340+00	0.2	44.1	0.9	212.8	-28928
4341+00	0.3	49.1	1.0	215.7	-29142
4342+00	0.2	47.7	1.0	224.0	-29365
4343+00	0.3	32.3	1.0	185.1	-29550
4344+00	0.3	23.3	1.1	128.6	-29677
4345+00	0.2	33.3	0.8	380.9	-30057
4346+00	0.1	31.3	0.4	149.3	-30206
4347+00	138.8	43.2	257.1	172.3	-30121
4348+00	147.9	41.9	530.9	197.0	-29787
4349+00	101.1	37.7	461.1	184.1	-29510
4350+00	0.0	103.3	187.2	326.3	-29649
4351+00	0.0	100.2	0.0	471.0	-30120
4352+00	0.0	92.5	0.0	445.9	-30566
4353+00	0.3	87.8	0.6	417.2	-30983
4354+00	0.1	62.5	0.7	347.7	-31330
4355+00	0.0	71.6	0.2	310.3	-31640
4356+00	0.2	65.5	0.4	317.5	-31957
4357+00	0.6	13.9	1.5	183.8	-32139
4358+00	0.8	59.8	2.6	170.5	-32307
4359+00	0.2	19.5	1.8	183.4	-32489
4360+00	0.1	89.0	0.5	251.0	-32739
4361+00	0.2	56.6	0.5	337.0	-33076
4362+00	0.0	73.6	0.4	301.3	-33377
4363+00	0.0	57.5	0.0	303.4	-33680
4364+00	0.0	54.4	0.0	258.9	-33939
4365+00	34.3	54.3	63.5	251.6	-34127
4366+00	40.9	45.1	139.3	230.2	-34218
4367+00	38.8	63.5	147.6	251.5	-34322

4368+00	50.6	60.5	165.6	287.0	-34443
4369+00	0.0	53.7	93.7	264.2	-34614
4370+00	0.0	62.5	0.0	268.9	-34883
4371+00	0.0	58.8	0.0	405.9	-35289
4372+00	0.0	46.7	0.0	244.2	-35533
4373+00	0.0	62.8	0.0	253.3	-35786
4374+00	0.0	48.7	0.0	258.1	-36044
4375+00	0.0	51.8	0.0	232.7	-36277
4376+00	0.0	54.9	0.0	247.0	-36524
4377+00	0.0	50.7	0.0	244.3	-36768
4378+00	0.0	53.0	0.0	240.0	-37008
4379+00	0.1	48.1	0.3	234.1	-37242
4380+00	0.0	49.6	0.3	226.3	-37468
4381+00	0.0	47.1	0.0	224.0	-37692
4382+00	0.4	3.0	0.7	741.0	-38432
4383+00	0.0	50.5	0.7	123.8	-38555
4384+00	0.0	38.2	0.0	205.2	-38761
4385+00	0.0	34.6	0.0	168.5	-38929
4386+00	0.0	43.2	0.0	180.2	-39109
4387+00	0.4	48.8	0.7	213.0	-39322
4388+00	0.2	43.3	1.1	213.2	-39534
4389+00	10.0	1.4	18.9	603.5	-40118
4390+00	0.0	51.1	18.5	121.6	-40221
4391+00	0.0	45.6	0.0	223.9	-40445
4392+00	0.1	49.5	0.2	220.2	-40665
4393+00	0.0	46.1	0.2	221.4	-40886
4394+00	0.0	44.6	0.0	210.0	-41096
4395+00	0.9	16.2	1.7	140.8	-41235
4396+00	0.0	36.8	1.7	122.7	-41356
4397+00	0.0	32.6	0.0	910.5	-42267
4398+00	0.0	39.6	0.0	167.2	-42434
4399+00	0.0	44.9	0.0	195.8	-42630
4400+00	0.0	39.7	0.0	195.9	-42826

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

4401+00	0.1	37.5	0.2	178.6	-43004
4402+00	0.0	52.8	0.2	208.9	-43213
4403+00	0.0	54.9	0.0	249.3	-43462
4404+00	0.0	46.4	0.0	234.4	-43696
4405+00	0.0	43.6	0.0	208.2	-43905
4406+00	0.0	55.3	0.0	228.9	-44134
4407+00	0.0	42.4	0.0	226.1	-44360
4408+00	0.0	40.5	0.0	191.8	-44551
4409+00	0.0	37.0	0.1	179.4	-44731
4410+00	0.0	39.1	0.1	176.3	-44907
4411+00	0.1	36.3	0.1	674.5	-45581
4412+00	0.0	42.8	0.2	183.1	-45764
4413+00	0.0	35.1	0.1	180.4	-45945
4414+00	0.0	37.4	0.0	167.8	-46112
4415+00	0.6	39.4	1.1	177.8	-46289
4416+00	0.1	37.0	1.3	176.8	-46465
4417+00	0.0	23.2	0.2	139.4	-46604
4418+00	0.0	31.7	0.0	127.1	-46731
4419+00	0.0	42.9	0.0	172.6	-46903
4420+00	0.0	40.1	0.0	191.9	-47095
4421+00	0.0	49.4	0.0	207.1	-47303
4422+00	0.0	46.2	0.0	221.3	-47524
4423+00	0.0	52.6	0.0	478.7	-48002
4424+00	3.4	19.9	6.4	167.8	-48164
4425+00	0.0	40.1	6.4	138.9	-48296
4426+00	0.0	46.8	0.0	201.2	-48498
4427+00	0.0	48.8	0.0	221.1	-48719
4428+00	0.3	35.5	0.5	445.1	-49163
4429+00	0.0	33.8	0.5	160.5	-49323
4430+00	0.0	55.9	0.0	207.8	-49531
4431+00	0.0	62.5	0.0	274.3	-49805
4432+00	0.0	58.1	0.1	279.2	-50084
4433+00	0.1	43.4	0.2	234.8	-50319
4434+00	0.3	29.2	0.7	167.9	-50486
4435+00	0.0	27.4	0.6	130.9	-50617
4436+00	0.0	41.3	0.1	159.0	-50776
4437+00	0.1	29.9	0.3	164.9	-50940
4438+00	0.0	31.3	0.3	141.9	-51082
4439+00	0.1	36.3	0.2	156.5	-51238
4440+00	0.0	40.3	0.2	427.2	-51665
4441+00	0.8	12.9	1.6	123.0	-51786
4442+00	5.5	1.7	11.7	533.8	-52309
4442+50	27.9	0.4	0.0	0.0	-52309
4443+00	28.8	0.4	52.5	0.9	-52257
4443+50	55.7	0.2	78.3	0.7	-52179
4444+00	38.5	1.2	87.2	1.6	-52094
4444+50	34.9	1.8	67.9	3.5	-52029
4445+00	27.0	0.9	57.3	3.1	-51975
4445+50	24.1	0.4	47.3	1.5	-51929
4446+50	38.9	0.0	116.5	0.9	-51814
4447+00	38.4	0.0	71.5	0.0	-51742
4447+50	36.6	0.0	69.4	0.0	-51673
4448+00	33.4	0.0	64.7	0.0	-51608
4448+50	30.6	0.0	59.2	0.0	-51549
4449+00	33.1	0.0	58.9	0.0	-51490
			Volume (CY)		
			Exca	Fill	Mass Ordinate
Totals			107,984	419,474	

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Earthwork Values

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	11	23

Right of Way / Reference Monuments & Markers

Station	Offset	Iron Pin R/W Monument	R/W Marker (Witness Post)	Iron Pin Reference Monument
3146+17.88	-348.00	X	X	
3148+63.80	-100.02	X	X	
3169+93.82	-100.00		X	X
3169+93.83	100.00		X	X
3171+93.83	-100.00		X	X
3171+93.87	100.00		X	X
3196+48.18	-100.00		X	X
3196+48.17	100.00		X	X
3198+46.85	-100.00		X	X
3198+49.56	100.00		X	X
3223+53.63	-100.01		X	X
3223+53.63	100.01		X	X
3248+40.03	-100.00		X	X
3248+40.03	100.00		X	X
3250+40.07	-100.00		X	X
3250+40.05	100.00		X	X
3274+82.68	-100.00		X	X
3274+82.68	100.00		X	X
3276+82.63	-100.00		X	X
3276+82.78	100.00		X	X
3301+31.97	-100.00		X	X
3301+31.97	100.00		X	X
3303+34.30	-100.00		X	X
3328+79.28	-100.01		X	X
3328+79.28	100.01		X	X
3339+21.28	-120.02	X	X	
3339+21.28	-100.01	X	X	
3339+21.28	100.01	X	X	
3339+21.28	120.02	X	X	
3353+67.68	-120.02		X	X
3353+67.68	120.02		X	X
3355+87.68	-100.01		X	X
3355+87.74	100.01		X	X
3380+45.57	-100.01		X	X
3380+45.57	100.01		X	X
3382+45.61	-100.01		X	X
3382+45.58	100.01		X	X
3388+19.58	100.01	X	X	
3388+19.58	150.02	X	X	
3393+18.87	-150.02	X	X	
3393+18.87	-100.01	X	X	
3406+63.85	-150.02		X	X
3406+63.85	150.02		X	X
3409+14.60	-100.01		X	X
3409+13.16	100.01		X	X
3434+35.06	-100.01		X	X
3434+35.06	100.01		X	X
3459+75.35	-100.01		X	X
3459+75.35	100.01		X	X
3461+74.84	-100.01		X	X
3461+75.91	100.01		X	X
3480+17.96	100.01	X		
3480+17.96	150.02	X		
3486+09.67	-100.01		X	X
3485+59.55	150.02		X	X
3487+10.60	-100.01	X	X	
3487+11.12	-150.02	X	X	
3488+59.96	-150.02		X	X
3488+59.32	150.02		X	X
3495+36.53	-150.02	X	X	
3495+36.53	150.02	X	X	
3502+67.17	-149.66	X	X	
3512+01.69	150.47		X	X
3514+71.69	-119.53		X	X
3514+72.66	120.50		X	X
3521+97.36	120.57	X	X	
3531+86.04	-119.91	X	X	
3539+59.23	-120.00	X	X	
3539+59.23	120.28	X	X	
3539+85.62	120.17	X	X	
3539+81.39	150.26	X	X	
3550+31.34	-151.36	X	X	
3550+31.34	148.68	X	X	

Right of Way / Reference Monuments & Markers

Station	Offset	Iron Pin R/W Monument	R/W Marker (Witness Post)	Iron Pin Reference Monument
3553+08.74	-151.19	X	X	
3553+08.74	-101.18	X	X	
3553+08.74	98.84	X	X	
3553+08.74	148.85	X	X	
3570+55.56	-100.12	X	X	
3570+55.56	99.91	X	X	
3574+00.55	-120.02	X	X	
3598+67.23	-120.03		X	X
3598+67.23	120.01		X	X
3608+79.01	-120.02	X	X	
3608+79.28	-100.02	X	X	
3608+81.99	100.01		X	
3608+82.27	120.01		X	
3620+81.90	-150.02	X	X	
3620+81.90	-100.02	X	X	
3623+72.84	-150.02		X	X
3624+22.85	100.02		X	X
3626+72.28	-150.02		X	X
3633+08.77	-150.02	X	X	
3633+08.77	-120.02	X	X	
3640+08.77	100.02	X	X	
3640+08.70	120.02	X		
3651+65.20	-120.02		X	X
3651+65.20	120.02		X	X
3676+87.52	-120.02		X	X
3676+87.52	120.02		X	X
3679+82.18	-175.02		X	X
3692+96.23	-175.02	X	X	
3703+58.73	-100.01		X	X
3703+58.73	100.02		X	X
3704+58.59	-150.02	X	X	
3704+58.65	-100.01	X	X	
3704+59.09	100.02	X	X	
3704+59.26	150.02	X	X	
3706+07.56	-150.02		X	X
3706+09.99	150.02		X	X
3714+97.45	-150.02	X	X	
3714+97.45	-100.01	X	X	
3717+97.45	100.02	X		
3717+97.45	150.02	X	X	
3730+15.44	-100.02		X	X
3730+15.44	100.01		X	X
3732+15.47	-100.02		X	X
3732+15.47	100.01		X	X
3738+80.29	-100.01	X	X	
3738+80.29	100.01	X	X	
3738+80.29	150.02	X	X	
3751+97.05	-100.01	X	X	
3756+62.07	-100.01		X	X
3756+12.06	150.02		X	X
3758+63.73	-100.01		X	X
3759+09.70	150.02		X	X
3760+96.49	-100.01	X		
3782+10.76	150.02		X	X
3784+41.23	-82.01		X	X
3810+08.56	-82.01		X	X
3810+08.56	75.01		X	X
3835+81.32	75.01		X	X
3837+38.24	-82.01		X	X
3862+19.04	-82.01		X	X
3862+26.04	75.01		X	X
3863+83.06	-82.01		X	X
3863+76.07	75.01		X	X
3888+71.71	-82.01		X	X
3888+78.70	75.01		X	X
3890+35.93	-82.01		X	X
3915+51.21	-82.01		X	X
3915+58.21	75.01		X	X
3917+15.23	-82.01		X	X
3917+08.24	75.01		X	X
3942+30.72	-82.01			X
3942+37.72	75.01		X	X
3943+95.00	-82.01		X	X

Right of Way / Reference Monuments & Markers

Station	Offset	Iron Pin R/W Monument	R/W Marker (Witness Post)	Iron Pin Reference Monument
3968+80.97	-82.01		X	X
3968+87.97	75.01		X	X
3970+44.99	-82.01		X	X
3970+37.99	75.01		X	X
3995+38.21	75.01		X	X
3996+95.42	-82.01		X	X
3996+73.19	60.01		X	X
4022+75.06	-82.01		X	X
4022+75.06	60.01		X	X
4048+76.90	60.01		X	X
4050+20.63	-82.01		X	X
4049+95.69	60.01		X	X
4075+12.74	-82.01		X	X
4075+12.74	60.01		X	X
4100+06.57	-82.01			X
4100+28.57	60.01		X	X
4101+69.95	-82.01		X	X
4101+64.19	75.01		X	X
4127+74.64	-82.01		X	X
4127+74.64	75.01		X	X
4149+33.38	-82.01	X	X	
4149+33.38	75.01	X	X	
4160+08.03	-75.01	X	X	
4160+08.03	75.01	X	X	
4183+23.61	-75.01	X	X	
4189+94.82	75.01	X	X	
4202+40.72	-75.01	X	X	
4202+40.72	75.01	X	X	
4219+74.54	-75.01	X	X	
4239+45.70	-75.01	X	X	
4239+45.70	75.01	X		
4251+47.94	-75.01	X	X	
4251+47.94	75.00	X	X	
4256+04.62	-75.01	X	X	
4256+04.62	75.00	X	X	
4271+86.78	-75.01	X	X	
4271+86.78	75.01	X	X	
4305+05.23	-75.01		X	X
4305+05.23	75.01		X	X
4315+12.43	-75.01		X	X
4315+12.43	75.01		X	X
4330+02.22	-75.01	X		
4330+02.22	75.01	X	X	
4342+23.93	-75.01	X		
4342+23.93	75.01	X		
4346+68.93	100.01	X	X	
4350+68.93	75.01	X	X	
4350+68.93	100.01	X	X	
4362+61.45	-75.01		X	X
4362+61.45	75.01		X	X
4388+33.54	-75.01		X	X
4388+33.54	75.01		X	X
4389+82.09	-75.00		X	X
4389+85.06	75.01		X	X
4415+59.87	-75.00		X	X
4415+59.87	75.01		X	X
4441+70.78	-40.01		X	X
4441+35.78	75.01		X	X
4442+50.15	-40.01		X	X
4442+51.45	40.01		X	X
4460+63.69	-40.01	X	X	
4460+63.69	40.01	X	X	
4464+65.89	-58.02	X	X	
4464+65.89	32.95	X	X	
4467+84.22	-83.12		X	X
4468+34.39	32.95		X	X
4469+52.35	-85.01		X	X
4469+07.34	40.01		X	X
4480+65.41	-60.16	X	X	
4480+65.41	70.00	X	X	
4482+54.13	70.00	X	X	
4485+82.09	70.01	X	X	
Total		**86**	**207**	**130**

Alignment Monuments

Station	Offset	Description	Monument per Standard D-720-1	Point Number
3145+07.39	0.00	POT - Intersection	X	
3170+93.84	0.00	QTR COR		1256
3197+48.19	0.00	SEC COR	X	1013
3223+53.63	0.00	QTR COR	X	1016
3249+40.05	0.00	SEC COR	X	1021
3275+82.69	0.00	QTR COR		1024
3302+31.99	0.00	SEC COR	X	1031
3328+79.28	0.00	QTR COR	X	1034
3354+87.70	0.00	SEC COR	X	1039
3381+45.58	0.00	QTR COR		1042
3408+13.87	0.00	SEC COR	X	1047
3434+35.06	0.00	QTR COR	X	1050
3460+75.36	0.00	SEC COR	X	1054
3487+09.57	0.00	QTR COR		1268
3495+36.53	0.00	PC	X	
3499+02.35	-11.67	PI - C1	X	1275
3502+67.17	0.00	PT	X	
3513+52.16	0.00	SEC XING	X	
3521+97.36	0.00	PC	X	
3526+94.48	32.21	PI - C2	X	1304
3531+86.04	0.00	PT	X	
3539+59.23	0.00	PC	X	
3540+01.65				
Bk Tan Sta	-0.31	SEC - TAN XING	X	
3544+95.29	-50.90	PI - C3	X	1311
3550+31.34	0.00	PT	X	
3570+55.56	0.00	PC	X	
3572+12.23				
Bk Tan Sta	8.61	SEC - TAN XING	X	
3572+28.89	10.45	PI - C4	X	1075
3574+00.54	0.00	PT	X	
3598+67.23	0.00	QTR XING	X	
3625+22.87	0.00	SEC XING	X	
3651+65.20	0.00	QTR XING	X	
3678+07.54	0.00	SEC XING	X	
3704+58.75	0.00	QTR XING		
3731+15.45	0.00	SEC XING	X	
3757+62.08	0.00	QTR XING		
3783+60.78	0.00	SEC XING	X	
3810+08.56	0.00	QTR XING	X	
3836+56.33	0.00	SEC XING	X	
3863+01.05	0.00	QTR XING		
3889+53.72	0.00	TWP XING	X	
3916+33.22	0.00	QTR XING		
3943+12.73	0.00	SEC XING	X	
3969+62.98	0.00	QTR XING		
3996+13.22	0.00	SEC XING	X	
4022+75.06	0.00	QTR XING	X	
4049+36.91	0.00	SEC XING	X	
4075+12.74	0.00	QTR XING	X	
4100+88.58	0.00	SEC XING	X	
4127+74.64	0.00	QTR XING	X	

Alignment Monuments

Station	Offset	Description	Monument per Standard D-720-1	Point Number
4149+33.38	0.00	TS	X	
4154+51.94				
Bk Tan Sta	-49.20	SEC - TAN XING	X	
4154+81.10	-56.73	PI - SCS1	X	
4160+08.03	0.00	ST	X	
4183+23.61	0.00	TS	X	
4184+84.36				
Bk Tan Sta	1.61	QTR - TAN XING	X	
4186+60.55	14.75	PI - SCS2	X	
4189+94.82	0.00	ST	X	
4202+40.72	0.00	TS	X	
4211+75.54	203.24	PI - SCS3	X	1341
4211+55.47	174.78	TWP - TAN XING	X	
4219+74.54	0.00	ST	X	
4239+45.70	0.00	TS	X	
4245+63.15	-76.85	PI - SCS4	X	1359
4245+98.61	-60.25	QTR - TAN XING	X	
4249+31.03	-3.96	SEC - TAN XING	X	
4251+47.94	0.00	ST	X	
4256+04.62	0.00	TS	X	
4264+21.57	-114.97	PI - SCS5	X	
4266+16.51	-49.20	SEC - TAN XING	X	
4271+86.78	0.00	TS	X	
4305+05.23	0.00	QTR XING	X	
4315+12.43	0.00	QTR XING	X	
4330+02.22	0.00	TS	X	
4336+30.48	80.23	PI - SCS6	X	1206
4336+29.50	74.57	SEC - TAN XING	X	
4342+23.93	0.00	ST	X	
4362+61.45	0.00	QTR XING	X	
4389+08.55	0.00	SEC XING	X	
4415+59.87	0.00	QTR XING	X	
4442+10.79	0.00	SEC XING	X	
4460+63.69	0.00	PC	X	
4462+64.87	-3.53	PI - C5	X	
4464+65.89	0.00	PT	X	
4468+67.34	0.00	QTR XING		
4480+65.41	0.00	PI	X	1390
4482+54.13	0.00	PC	X	
4484+18.12	1.17	PI - C6	X	1389
4485+82.09	0.00	PT	X	
Total			**80**	

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Right of Way Markers

ND 3

Jct 34 N to I-94 Dawson

ND Hwy 3 - Existing Asphalt Core Depths Taken by the Bismarck District

REFERENCE POINT	DEPTH INCHES	REFERENCE POINT	DEPTH INCHES	REFERENCE POINT	DEPTH INCHES	REFERENCE POINT	DEPTH INCHES
59.75	6.00	66.00	5.50	73.25	4.00	79.50	5.00
60.00	6.00	66.25	6.75	73.50	5.00	79.75	7.75
60.25	4.00	66.50	5.75	73.75	5.00	80.00	7.25
60.50	4.75	66.75	6.25	74.00	4.50	80.25	4.25
60.75	4.75	67.00	5.25	74.25	4.50	80.50	6.00
61.00	4.50	67.25	6.00	74.50	4.25	80.75	4.25
61.25	4.25	67.50	5.25	74.75	5.00	81.00	4.25
61.50	5.00	67.75	5.00	75.00	4.75	81.25	4.75
61.75	5.50	68.00	5.50	75.25	4.75	81.50	4.50
62.00	4.75	68.25	6.00	75.50	4.50	81.75	6.00
62.25	5.25	69.00	5.25	75.75	5.00	82.00	4.50
62.50	5.25	69.25	6.00	76.00	4.50	82.25	5.25
62.75	7.50	69.50	5.25	76.25	5.00	82.50	4.25
63.00	4.75	69.75	5.00	76.50	4.25	82.75	4.75
63.25	5.50	70.00	5.00	76.75	4.50	83.00	4.25
63.50	6.50	70.25	6.50	77.00	4.50	83.25	4.50
63.75	5.25	70.50	4.75	77.25	4.75	83.50	5.25
64.00	6.25	70.75	4.75	77.50	4.50	83.75	5.00
64.25	5.50	71.00	4.75	77.75	5.00	84.00	4.75
64.50	5.25	71.25	4.75	78.00	4.50	84.25	7.50
64.75	6.00	71.75	4.50	78.25	5.25	84.50	9.00
65.00	5.50	72.00	4.25	78.50	4.50	84.75	4.00
65.25	5.50	72.25	7.75	78.75	7.50		
65.50	5.00	72.75	4.25	79.00	7.75	Avg. =	5.23
65.75	5.50	73.00	4.00	79.25	4.50		

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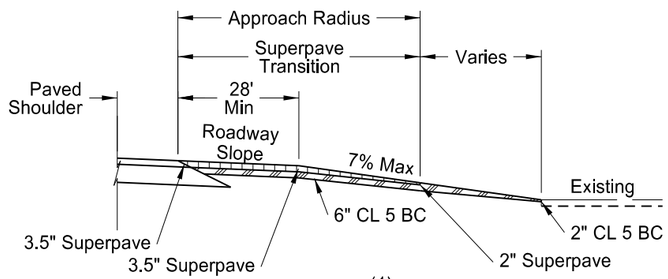
Core Data

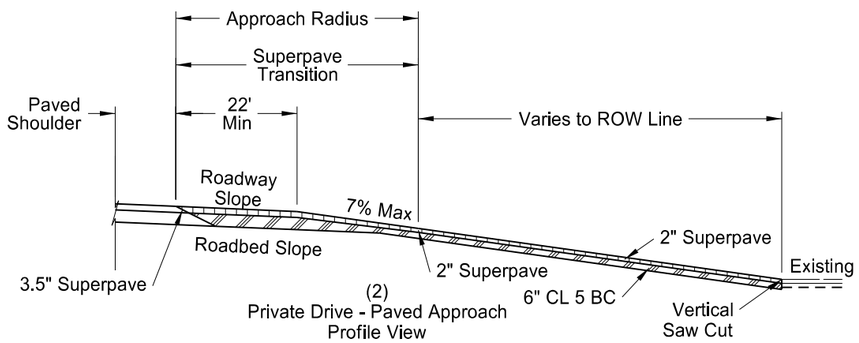
ND 3

Jct 34 N to I-94 Dawson

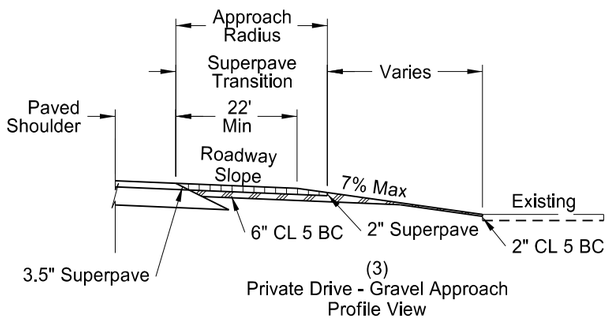
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	1



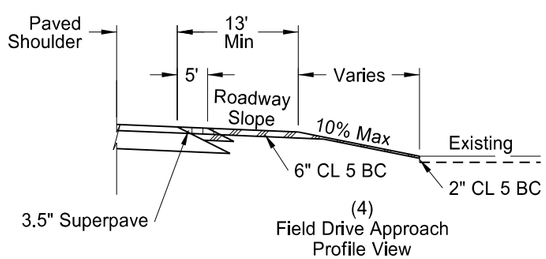
(1)
Section Line - Gravel Approach
Profile View



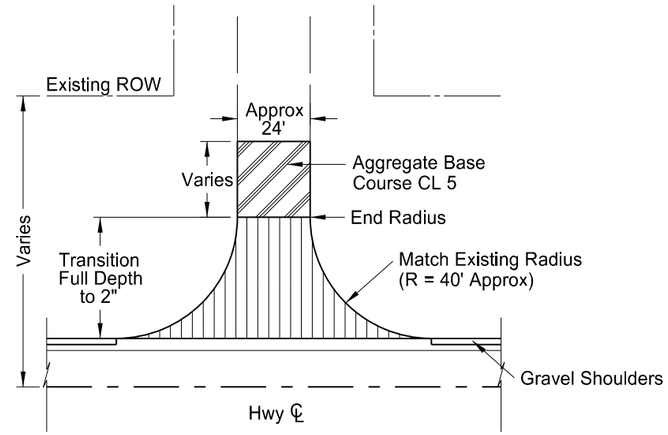
(2)
Private Drive - Paved Approach
Profile View



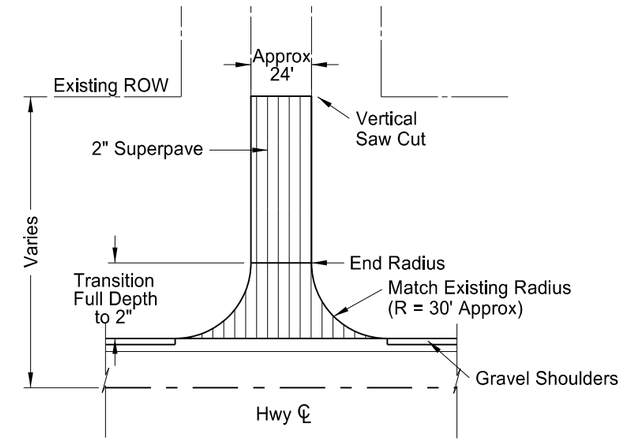
(3)
Private Drive - Gravel Approach
Profile View



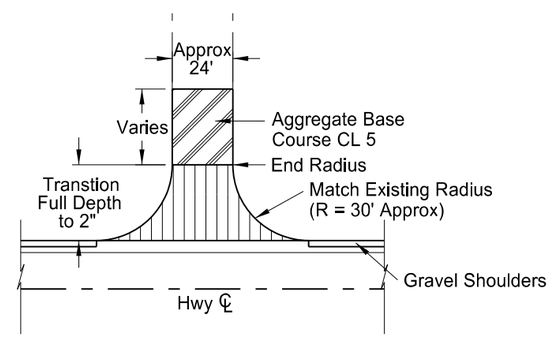
(4)
Field Drive Approach
Profile View



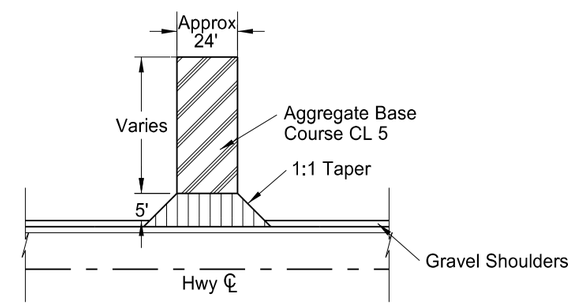
(1)
Section Line - Gravel Approach
Plan View



(2)
Private Drive - Paved
Plan View



(3)
Private Drive - Gravel Approach
Plan View



(4)
Field Drive - Approach
Plan View

Approaches									
Basis of Estimate	(1) Section Line - Gravel		(2) Private Drive - Paved		(3) Private Drive - Gravel		(4) Field Drive		Total
Number of Locations	42		2		38		64		146
Desription	Average	Total	Average	Total	Average	Total	Average	Total	
CL5 BC 1.875 TON/CY	81.89	3439.39	87.95	175.90	49.27	1872.36	41.20	2637.04	8125
Tack Coat 0.05 Gal/SY	11.10	466.39	9.25	18.50	5.58	212.21	1.28	82.13	779
Superpave 2 TON/CY	27.77	1166.53	22.19	44.39	13.86	526.65	2.31	148.15	1886
AC 5.9%	1.64	68.83	1.31	2.62	0.82	31.07	0.14	8.74	111

Notes:

1. This detail sheet is to be used with Standard Drawing D-203-8.

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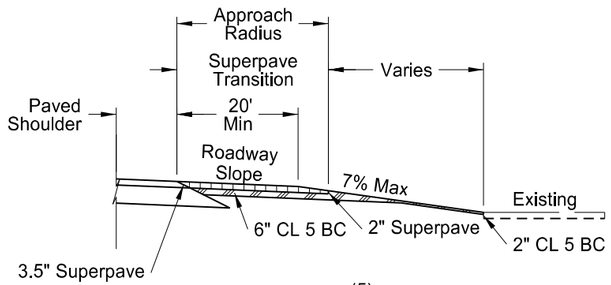
Approach Paving Details

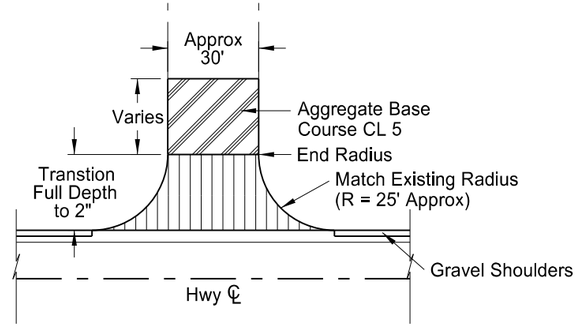
ND 3

Jct 34 N to I-94 Dawson

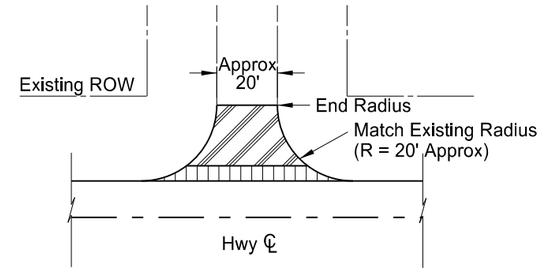
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	2



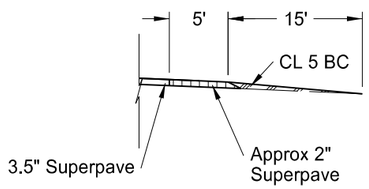
(5)
Private Drive - Special Approach
Profile View



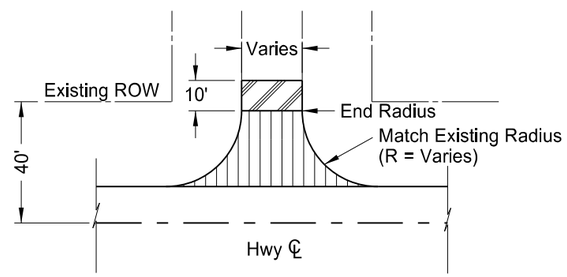
(5)
Private Drive - Special Approach
Plan View



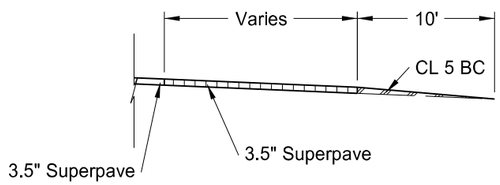
(6)
Private Drive - Urban Approach
Plan View



(6)
Private Drive - Urban Approach
Profile View



(7)
Street - Gravel Approach
Plan View



(7)
Street - Gravel Approach
Profile View

Approaches							
Basis of Estimate	(5) Private Drive - Special		(6) Private Drive - Urban		(7) Gravel Street Approach		Total
Number of Locations	2		19		6		27
Desription	Average	Total	Average	Total	Average	Total	
CL 5 BC 1.875 TON/CY	65.51	131	6.02	114	2.89	17	263
Tack Coat 0.05 Gal/SY	7.14	14	1.67	32	4.56	27	73
Superpave 2 TON/CY	17.95	36	1.93	37	5.93	36	108
AC 5.9%	1.06	2	0.11	2	0.35	2	6

Notes:

1. This detail sheet is to be used with Standard Drawing D-203-8.

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Approach Details

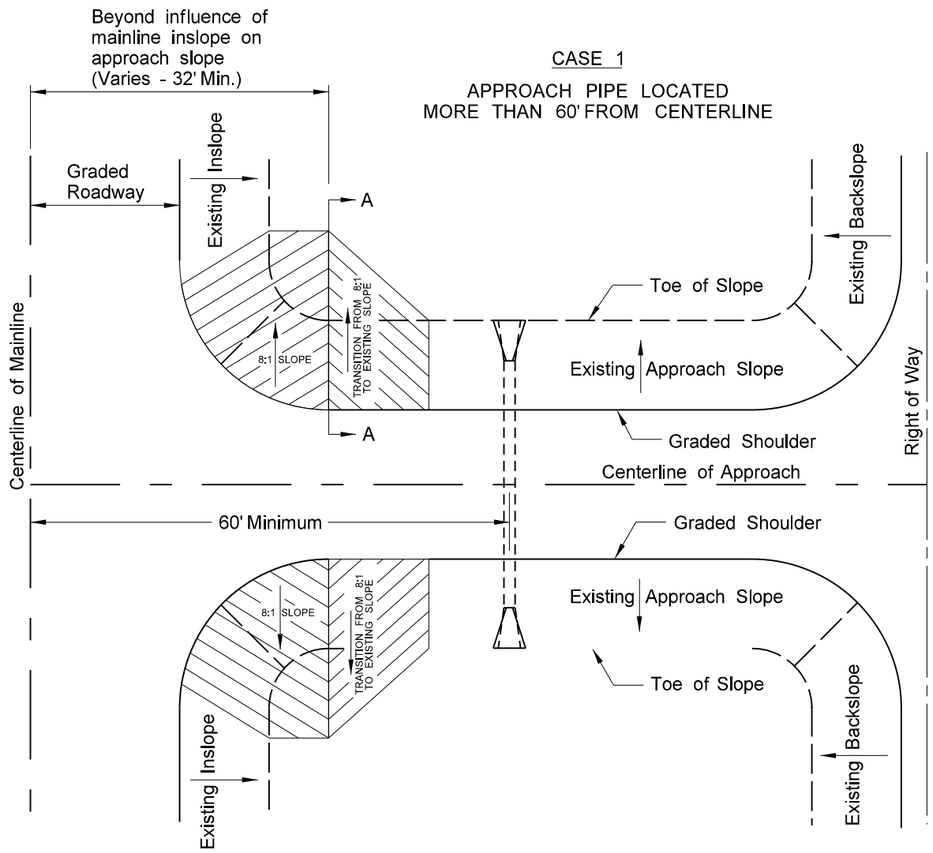
ND 3

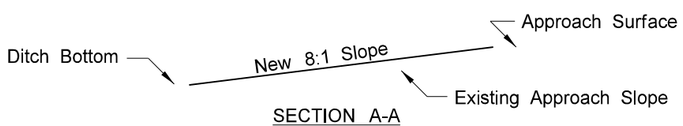
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	3

CASE 1

APPROACH PIPE LOCATED MORE THAN 60' FROM CENTERLINE

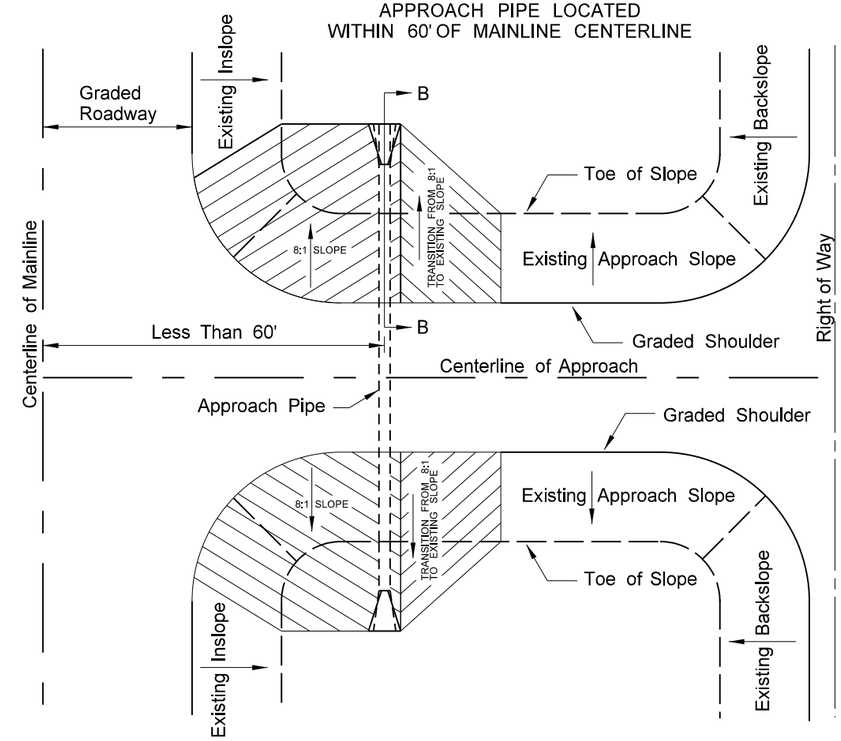


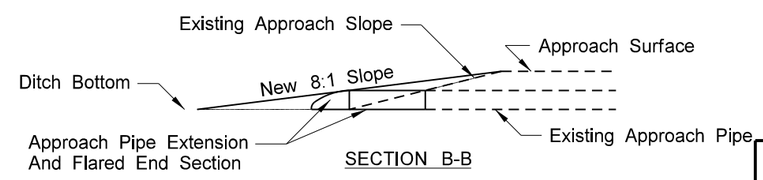


SECTION A-A

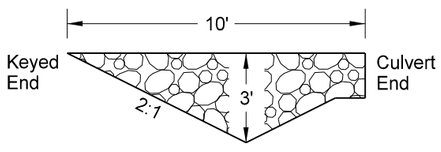
CASE 2

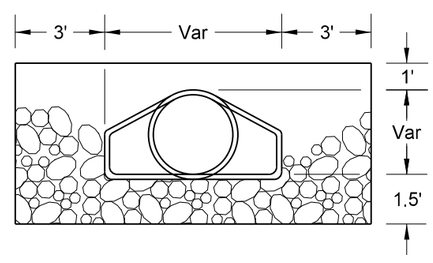
APPROACH PIPE LOCATED WITHIN 60' OF MAINLINE CENTERLINE





SECTION B-B





LOOSE ROCK RIPRAP
At Pipe Ends

NOTE: Approach pipe out 60' or more from centerline does not have to be extended.

NOTE: The approach slope shall be measured outside the area of mainline inslope influence.

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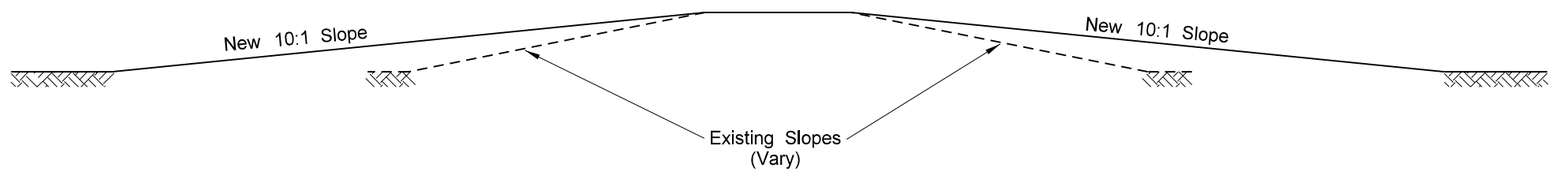
Approach Slope Flattening Detail

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	4



Note: The cost of the labor, equipment and materials to perform the following work will be included in the price bid for "Flatten Ditch Block Slopes."

1. Strip and stockpile three inches of topsoil from the embankment and excavation areas.

2. Flatten the ditch blocks steeper than 8:1 to 10:1. The material used to flatten the slope will be compacted in accordance with Section 203.02I of the Standard Specifications. The contractor shall furnish the borrow. The cost to obtain the site and the borrow shall be included in the price bid for "Flatten Ditch Block Slopes."

3. Replace the topsoil on the embankemnt areas and seed with Class VI and Class II seed mixtures in accordance with Section 708.02 of the Standard Specifications.

Payment will be made for each approach slope that is flattened. For example, if both inslopes of a ditch block are flattened, two units will be measured and paid for.

Flatten Ditch Blocks

Quantity		
Location	AHD	BK
3205+69 LT	1	1
3712+26 LT	1	1
3712+98 RT	1	1
3783+61 LT	1	1
3844+90 LT	1	1
3844+96 RT	1	1
3897+89 LT	1	1
3897+89 RT	1	1
3925+47 RT	1	1
4028+24 LT	1	1
4028+24 RT	1	1
4104+98 RT	1	1
4116+94 RT	1	1
4149+89 RT	1	1
4176+71 LT	1	1
4209+24 LT	1	1
4397+31 LT	1	1
4397+31 RT	1	1

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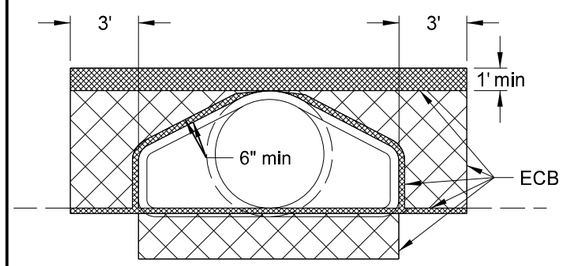
Ditch Block Slope Flattening Detail

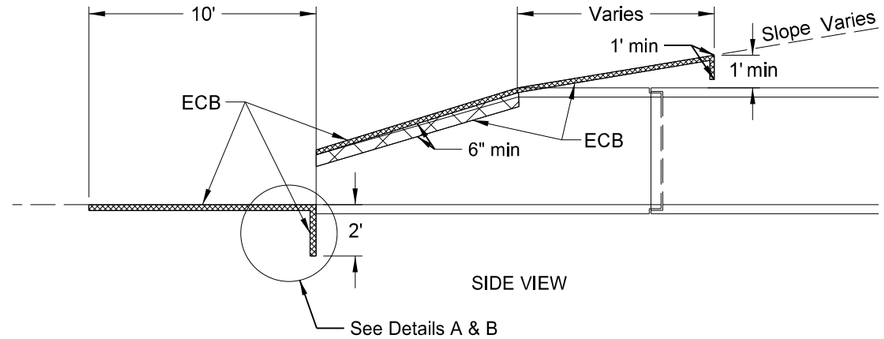
ND 3

Jct 34 N to I-94 Dawson

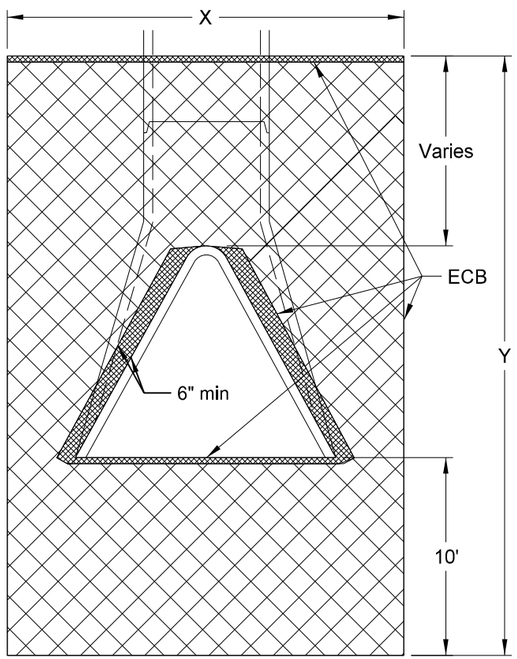
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	5



FRONT VIEW



SIDE VIEW

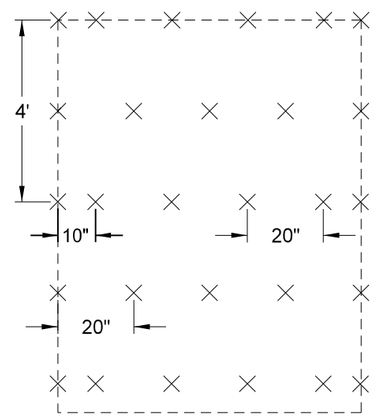


TOP VIEW

NOTE: The ECB shall be tucked a minimum of 1' into the embankment above the flared end section, a minimum of 6" into the embankment (against the flared end section) around the opening of the flared end section, and 2' into the ground at the end of the flared end section.

DIA	X	Y	Surface area to be protected	ECB
In	Ft	Ft	SF	SY
18	9.5	20.7	190.7	22
21	9.5	21.0	190.9	22
24	10.5	21.6	214.1	24
30	11.6	22.5	241.5	27
36	12.7	23.3	268.8	30
42	13.3	23.3	279.7	31
48	13.8	24.0	293.2	33
54	14.5	23.4	300.6	34
60	15.0	23.0	307.5	35
66	15.6	24.0	325.6	37
72	16.2	24.5	340.6	38

Note: Quantities based on 8:1 slope.



STAPLE PATTERN: 3.8 staples per square yard using 8-inch 11 gauge wire "u" staples

Erosion Control Blanket (ECB Type 3)

Location of Surface Area to be Protected		Pipe Diam.	Sides	Inlet End	Outlet End	Unit Quantity	Total Quantity
Station		Inches				SY	SY
3154+24	RT	30	1	✓		27	27
3186+23	RT	24	1	✓		24	24
3204+42	RT	42	1	✓		31	31
3245+89	RT & LT	36	2	✓	✓	30	60
3255+23	RT	36	1	✓		30	30
3283+56	RT	36	1	✓		30	30
3295+57	RT & LT	24	2	✓	✓	24	48
3314+60	RT	30	1	✓		27	27
3331+58	RT & LT	24	2	✓	✓	24	48
3416+83	RT & LT	24	2	✓	✓	24	48
3428+79	RT & LT	24	2	✓	✓	24	48
3434+87	RT	24	1	✓		24	24
3500+17	LT	24	1	✓		24	24
3534+09	RT	24	1	✓		24	24
3557+27	RT	24	1	✓		24	24
3590+10	RT & LT	24	2	✓	✓	24	48
3616+90	LT	36	1	✓		30	30
3639+55	LT	30	1	✓		27	27
3680+10	LT	30	1	✓		27	27
3705+17	RT & LT	24	2	✓	✓	24	48
3711+25	LT	36	1	✓		30	30
3760+28	RT & LT	24	2	✓	✓	24	48
3768+92	RT	30	1	✓		27	27
3784+55	RT	30	1	✓		27	27
3804+85	RT	36	1	✓		30	30
3843+26	RT & LT	24	2	✓	✓	24	48
3866+16	RT & LT	24	2	✓	✓	24	48
3896+46	RT & LT	24	2	✓	✓	24	48
3960+91	RT	30	1	✓		27	27
3965+92	RT	30	1	✓		27	27
3990+92	RT	24	1	✓		27	27
4027+93	RT & LT	24	2	✓	✓	24	48
4042+93	RT	24	1	✓		24	24
4088+92	RT & LT	30	2	✓	✓	27	54
4103+96	RT	30	1	✓		27	27
4114+80	RT	24	1	✓		24	24
4130+29	RT	30	1	✓		27	27
4148+78	RT	24	1	✓		24	24
4158+82	RT	24	1	✓		24	24
4293+86	RT	24	1	✓		24	24
4334+70	RT & LT	24	2	✓	✓	24	48
Total							1408

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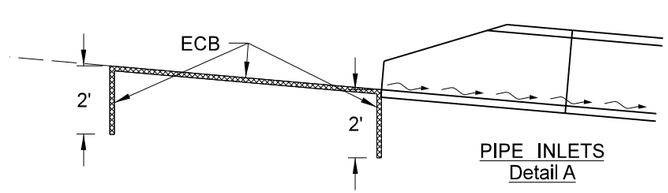
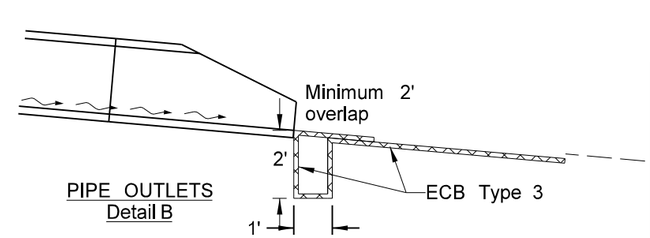


PIPE INLETS
Detail A



PIPE OUTLETS
Detail B

Culvert End Protection - ECB

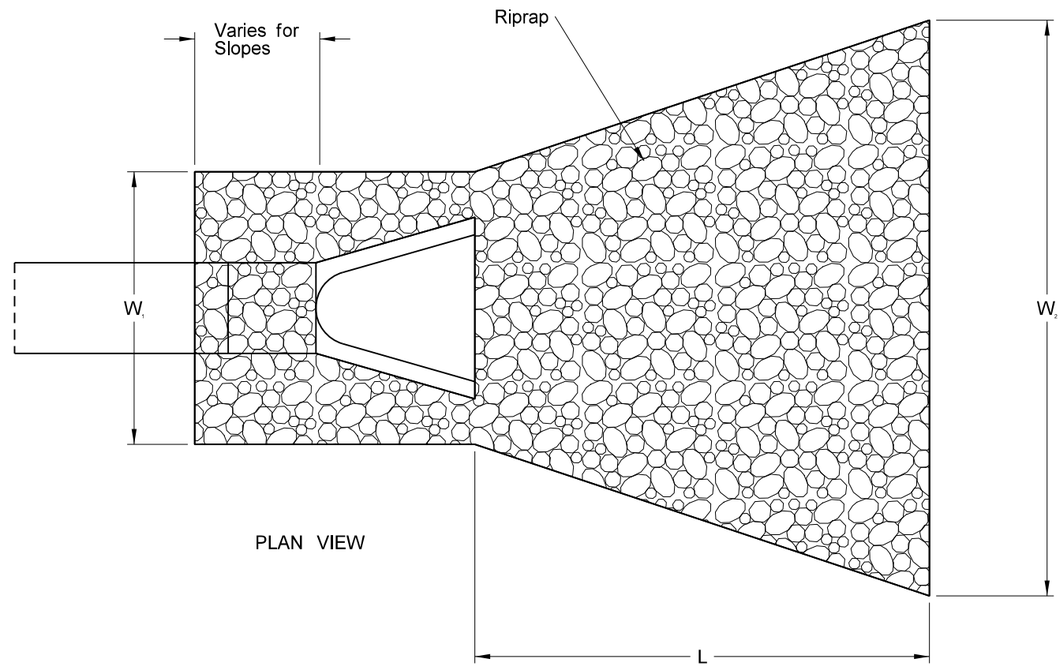
ND 3

Jct 34 N to I-94 Dawson

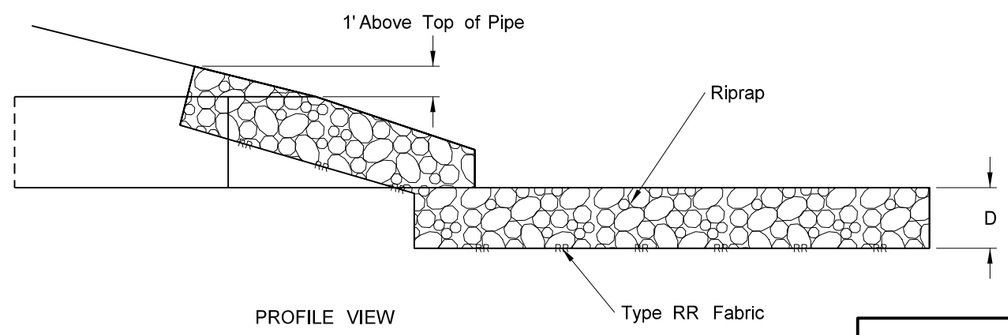
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	6

Riprap Dimensions						
Culvert Diameter (inches)	L (feet)	W_1 (feet)	W_2 (feet)	Riprap Depth, D (feet)	RR Fabric (SY)	Riprap (CY)
24	11	6	14	3	32	19
30	18	8	19	4	63	48
36	12	9	17	2	42	20
42	21	11	24	4	104	79
48	19	12	25	3	88	55

Location of Surface Area to be Protected		Culvert Diameter	Sides	Inlet End	Outlet End	RR Fabric	Riprap
Station		(inches)				(SY)	(CY)
3154+24	LT	30"	1		✓	63	48
3186+23	LT	24"	1		✓	32	19
3204+42	LT	42"	1		✓	104	79
3255+23	LT	36"	1		✓	42	20
3283+56	LT	36"	1		✓	42	20
3314+60	LT	30"	1		✓	63	48
3434+87	LT	24"	1		✓	32	19
3500+17	RT	24"	1		✓	32	19
3534+09	LT	24"	1		✓	32	19
3557+27	LT	24"	1		✓	32	19
3616+90	RT	36"	1		✓	42	20
3639+55	RT	30"	1		✓	63	48
3680+10	RT	30"	1		✓	63	48
3711+25	RT	36"	1		✓	42	20
3768+92	LT	30"	1		✓	63	48
3784+22	LT	30"	1		✓	63	48
3804+85	LT	36"	1		✓	42	20
3960+91	LT	30"	1		✓	63	48
3965+92	LT	30"	1		✓	63	48
3990+92	LT	24"	1		✓	32	19
4042+93	LT	24"	1		✓	32	19
4103+96	LT	30"	1		✓	63	48
4114+80	LT	24"	1		✓	32	19
4130+29	LT	30"	1		✓	63	48
4148+78	LT	24"	1		✓	32	19
4158+82	LT	24"	1		✓	32	19
4293+86	LT	24"	1		✓	32	19
Totals						1296	868



PLAN VIEW



PROFILE VIEW

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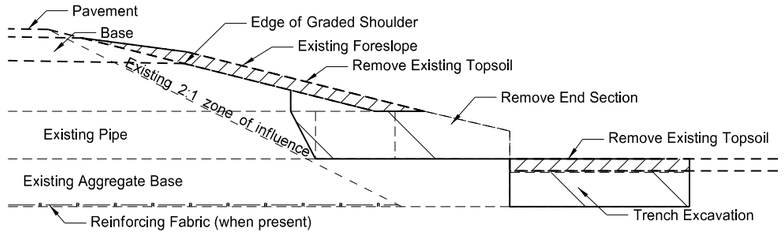
Culvert End Protection - Riprap

ND 3

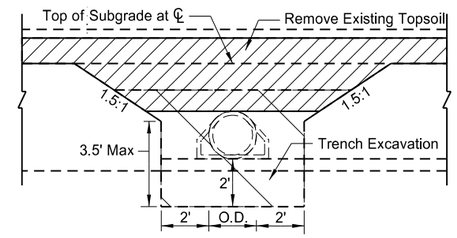
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	7



Removal Section

Cross Section View

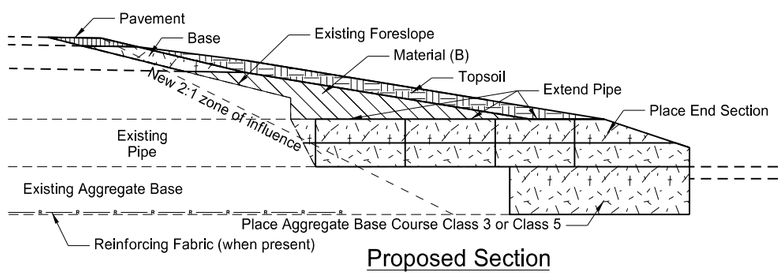


Removal Detail

Side View

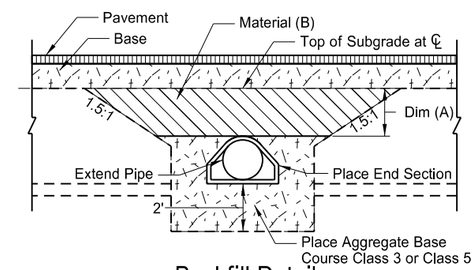
Pay Items
1) Pipe*
2) Remove & Relay Pipe - All Types & Sizes (when required)
3) Remove & Reset End Section or new End Section
4) Borrow Excavation (Compaction Control Type A) or Common Excavation-Type A
5) Topsoil
6) Seeding
7) Mulching

*Included in Pipe Pay Item
1) Pipe
2) Trench excavation
3) Aggregate Base Course Class 3 or Class 5



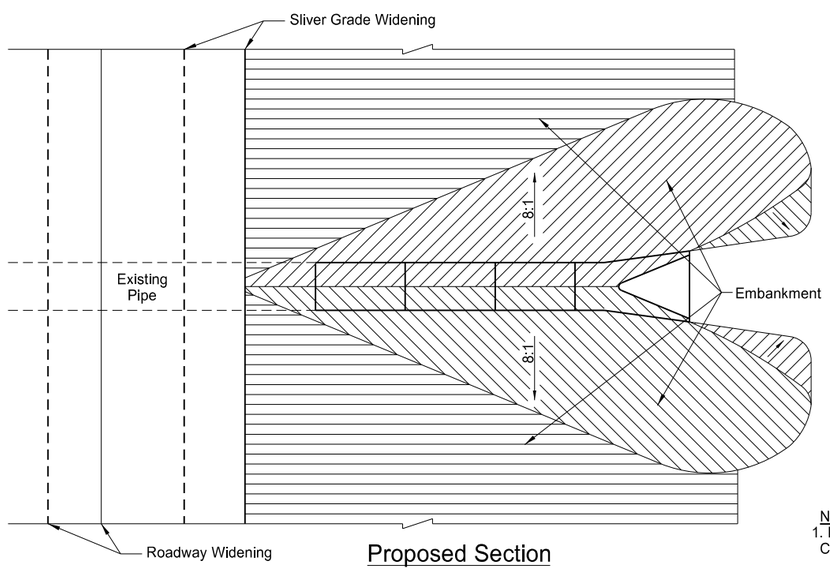
Proposed Section

Cross Section View



Backfill Detail

Side View (Topsoil not shown)



Proposed Section

Plan View

Pipe Materials	Dim (A)<=4 Feet Material (B)	Dim (A)>4 Feet Material (B)
Concrete	Embank or Aggr	Embank or Aggr
Metal	Embank or Aggr	Embank or Aggr

NOTES:
1. Embankment may be either Borrow Excavation (Compaction Control - Type A) or Common Excavation - Type A.

2. Aggregate may be either Class 3 or Class 5 Aggregate Base Course.

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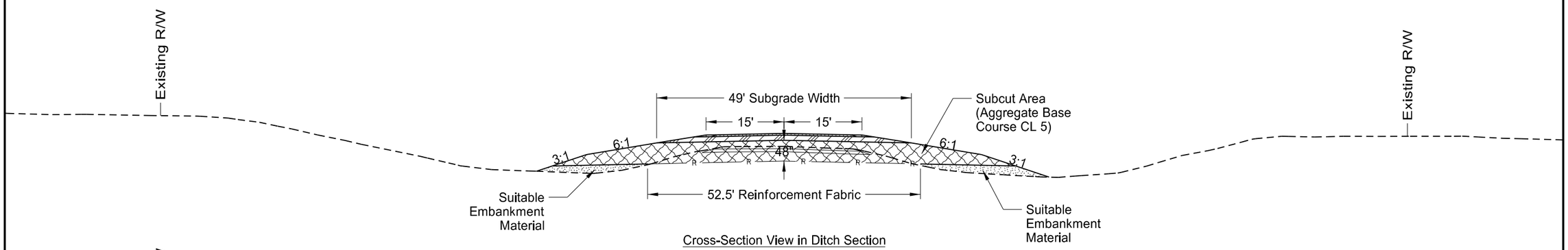
Mainline ℄ Pipe Extension Detail

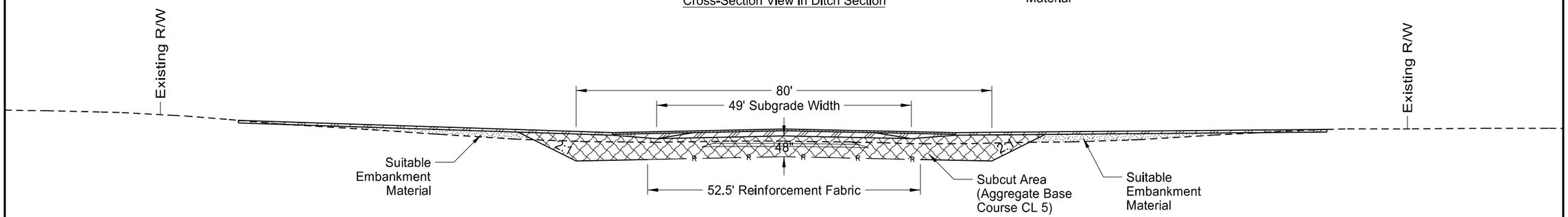
ND 3

Jct 34 N to I-94 Dawson

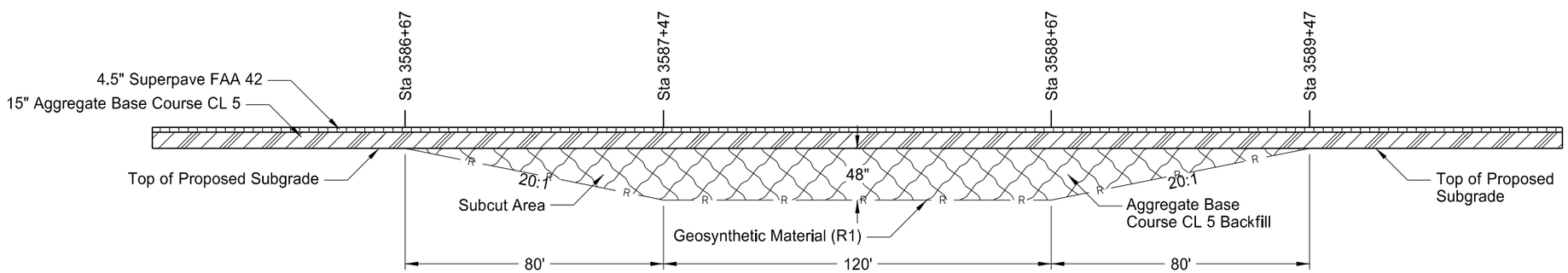
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	8



Cross-Section View in Ditch Section



Cross-Section View at Approach



Profile View

DESCRIPTION	UNIT	STATION 3587+47 TO 3588+67
Common Excavation - Subcut	CY	1,111
Geosynthetic Material - Type R1	SY	1,633
Aggregate Base Course CL 5 @ 1.875 Ton/CY	Ton	4,167

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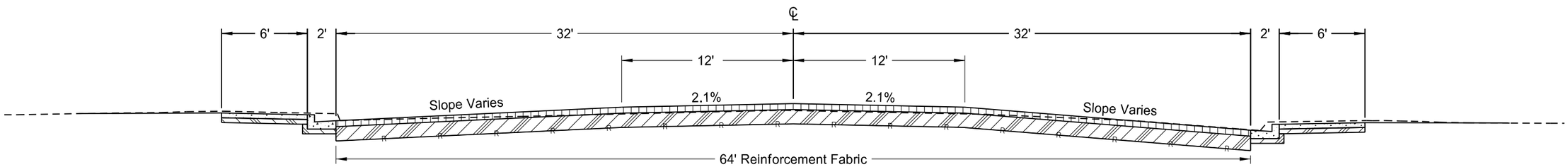
48" Subcut Details
Sta 3586+67 to 3589+47

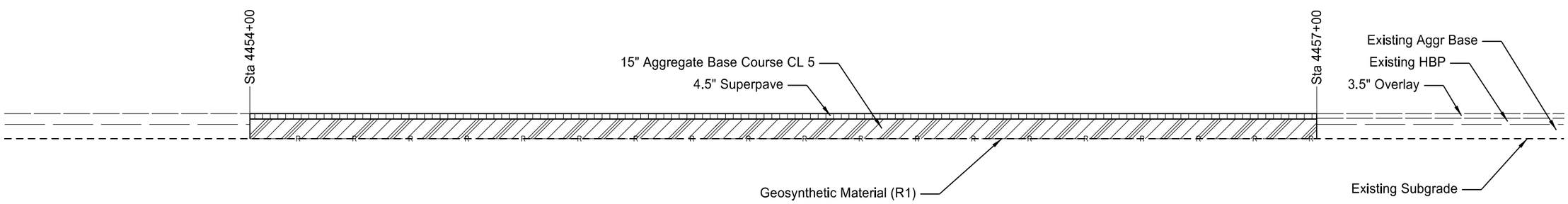
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	9



Cross-Section View



Profile View

DESCRIPTION	UNIT	STATION 4454+00 TO 4457+00
Saw Bituminous Surfacing - Full Depth	LF	134
Remove & Salvage Bituminous Surfacing @ 1.9 Ton/CY	Ton	1,633
Common Excavation - Type A	CY	899
Geosynthetic Material Type R1	SY	2,133
Aggregate Base Course CL 5 @ 1.875 Ton/CY	Ton	1,333
Tack Coat @ 0.05 Gal/SY	Gal	107
Superpave FAA 42 @ 2 Ton/CY	Ton	296
PG 58-28 Asphalt Cement @ 5.9%	Ton	17

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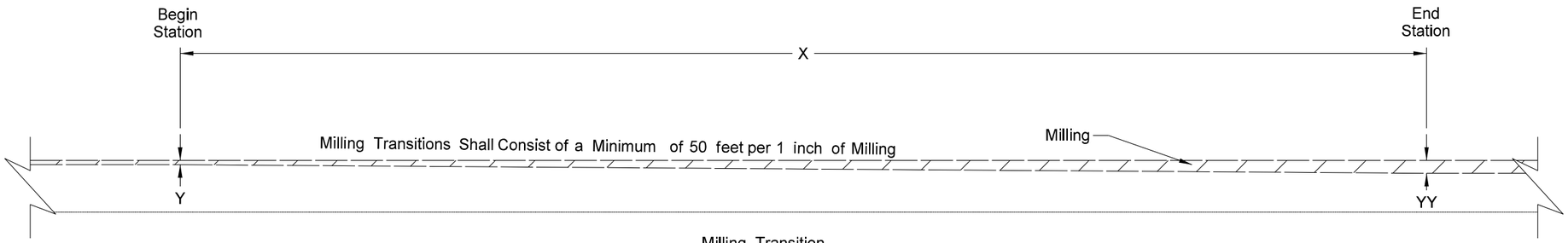
Urban Subcut Details
Sta 4454+00 to 4457+00

ND 3

Jct 34 N to I-94 Dawson

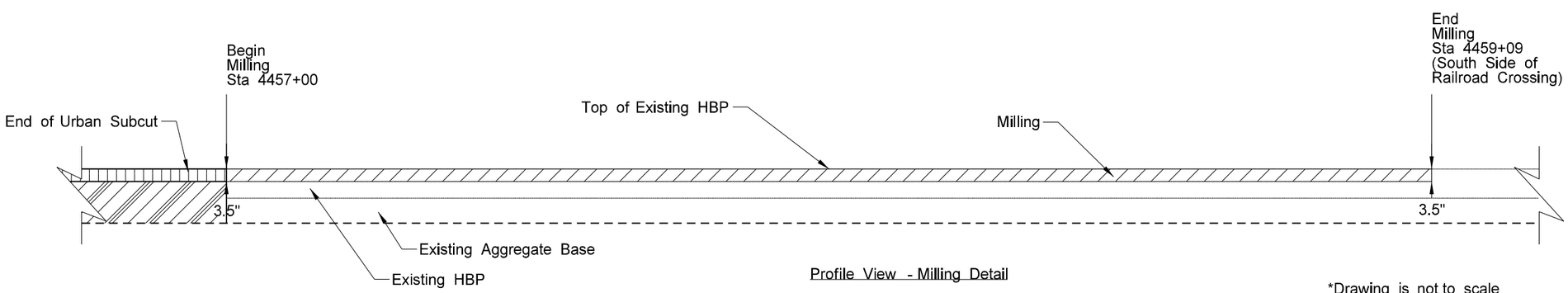
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	10



Milling Transition

Milling Transitions

X	Begin Station	Y	End Station	YY
175 ft	3146+10.0	3.5 in	3147+85.0	0 in
175 ft	4459+19.0	0 in	4460+94.0	3.5 in
175 ft	4482+65.0	0 in	4484+40.0	3.5 in



Profile View - Milling Detail

4457+00 - 4459+09

*Drawing is not to scale

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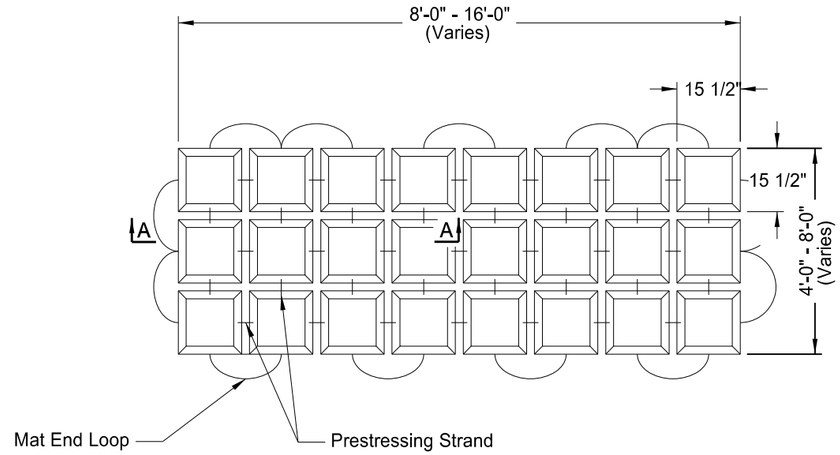
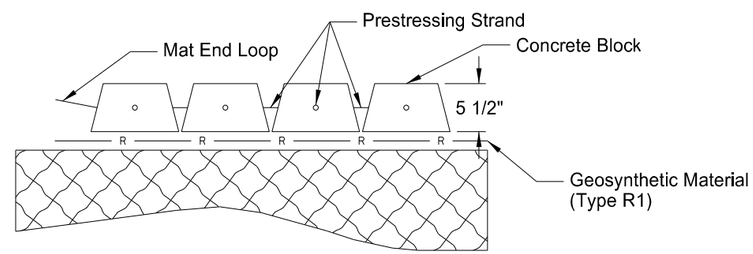
Milling Transitions

ND 3

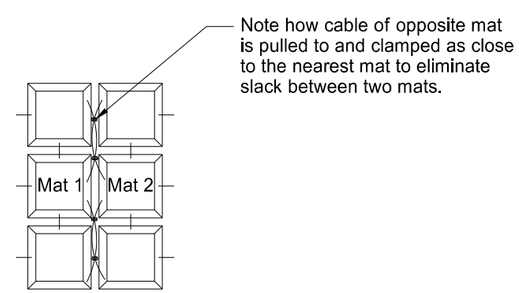
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	11





SECTION A-A



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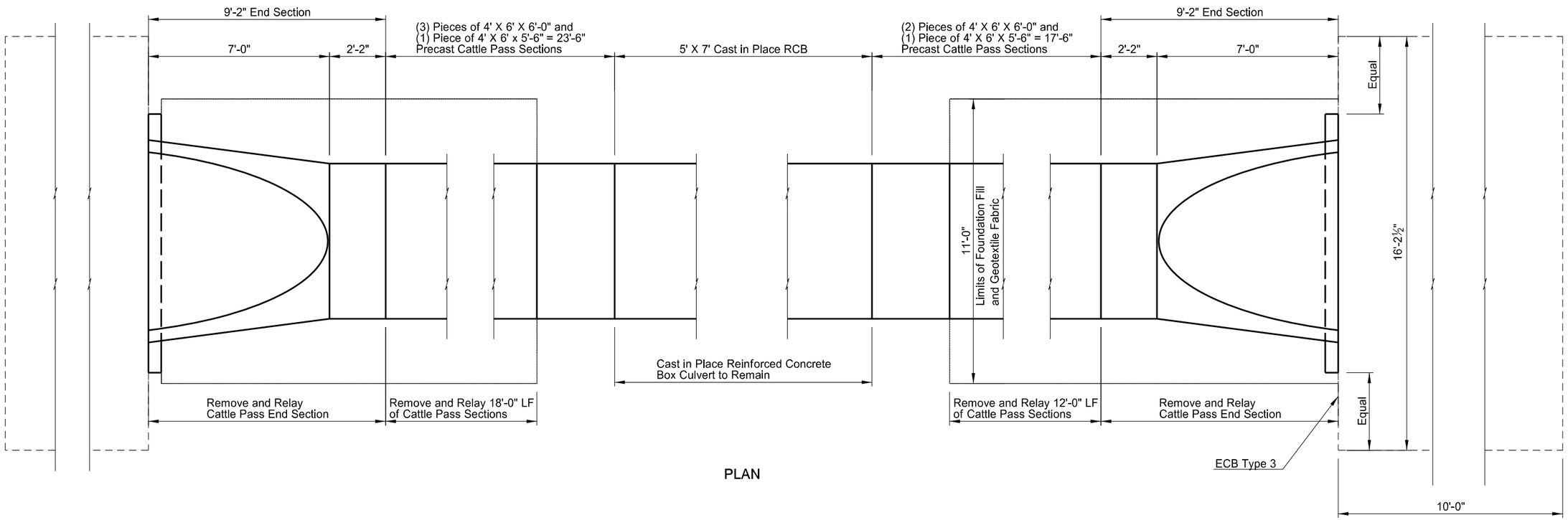
Concrete Erosion Control Blanket

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	12



PLAN

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CATTLE PASS BID ITEMS - Station 4180+39

SPEC	CODE	ITEM DESCRIPTION	UNIT	QUANTITY
210	0111	CLASS 2 EXCAVATION	LSUM	1
210	0201	FOUNDATION PREPARATION	EA	1
210	0210	FOUNDATION FILL	CY	20
602	1130	*CLASS AE-3 CONCRETE	CY	1.1
708	5652	ECB TYPE 3	SY	76
709	0151	GEOSYNTHETIC MATERIAL TYPE R1	SY	59
714	9601	REMOVE & RELAY CONC CATTLE PASS	LF	42
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION	EA	2

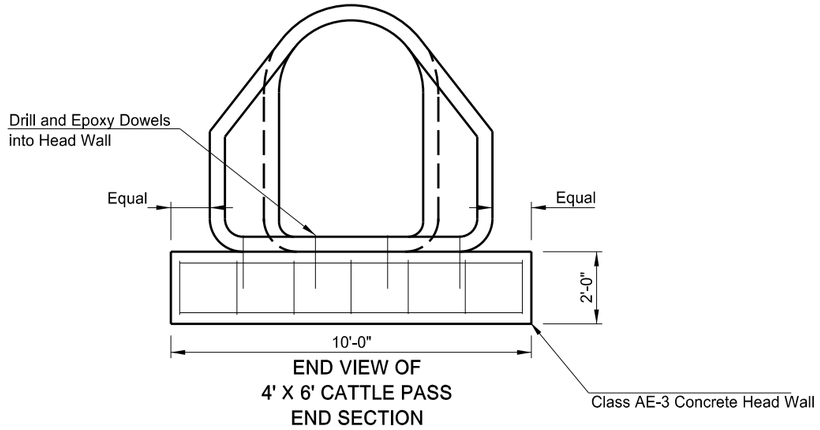
* Reinforcing Steel will be Incidental to bid item "Class AE-3 Concrete"

Concrete Cattle Pass Relay
Sta 4180+39

ND 3

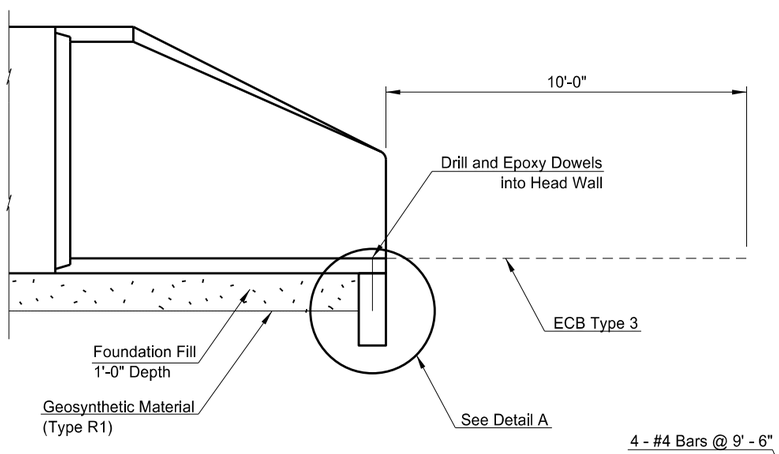
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	13

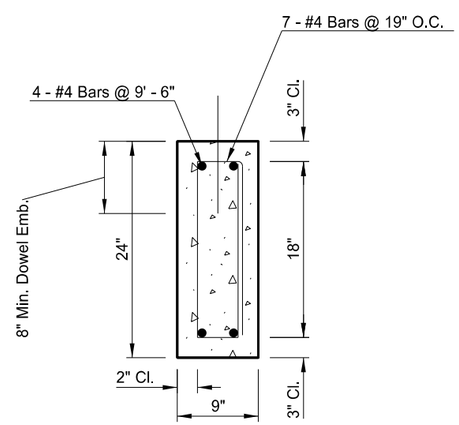


END VIEW OF
4' X 6' CATTLE PASS
END SECTION

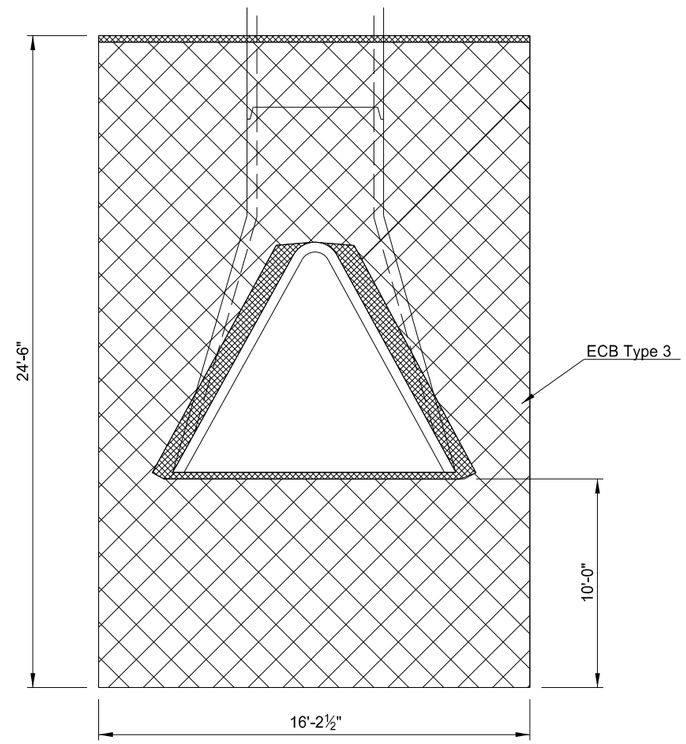
Note:
- The head walls are to be centered on the cattle pass end sections to be relaid.
- Reinforcing steel will be #4 bar on 19" centers, incidental to Class AE-3 Concrete.



ELEVATION VIEW OF
CATTLE PASS END SECTION



CONCRETE HEADWALL
DETAIL A



PLAN VIEW OF ECB LAYOUT

Note:
- See Section 20 Sheet 5 for installation details of the ECB around the cattle pass end sections, see measurements for the 72" diameter pipe.

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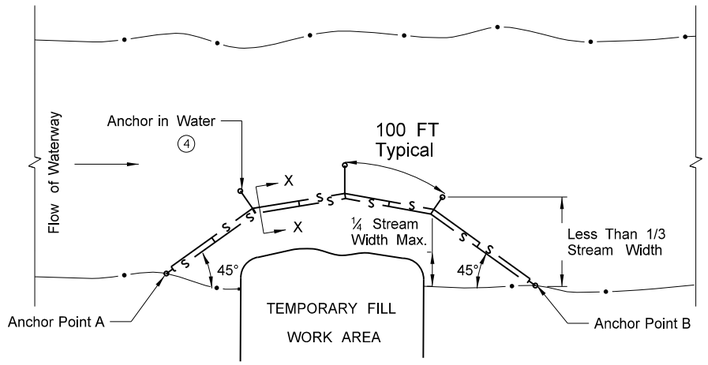
Cattle Pass End Section & Headwall Details
Sta 4180+39

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	20	14

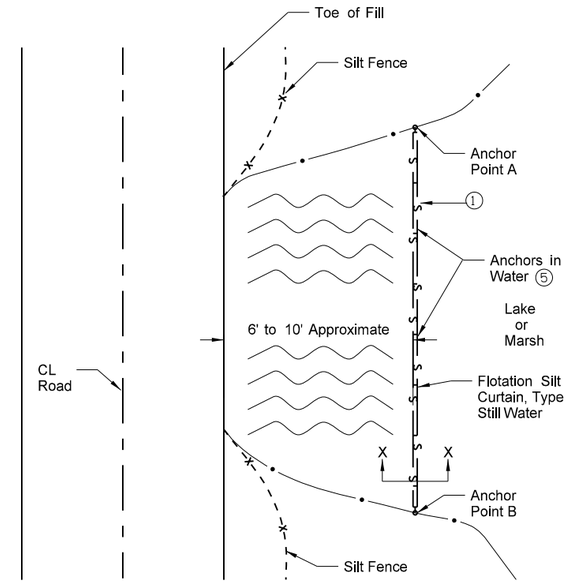


PLAN VIEW

FLOTATION SILT CURTAIN - TYPE WORK AREA

FOR CONTAINING OVERFLOWS FROM WEIRS, STANDPIPES, SETTLING PONDS

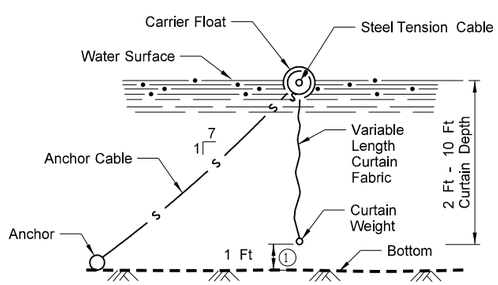
DESIGN GUIDELINES:
WHEN TEMPORARY FILL ENCROACHES LESS THAN 1/4 OF THE WIDTH OF STREAM.
MAXIMUM WATER VELOCITY: 5 FT./SEC.
MAXIMUM WATER DEPTH: 11 FT.



PLAN VIEW

FLOTATION SILT CURTAIN - TYPE STILL WATER

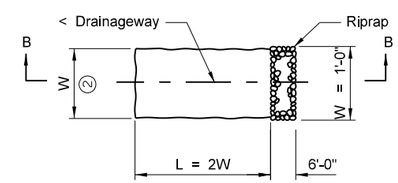
DESIGN GUIDELINES:
MAXIMUM WATER DEPTH: 11 FT. 1
MINIMUM WATER DEPTH: 3 FT.



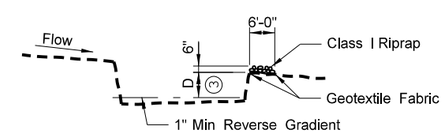
SECTION X-X
FLOTATION SILT CURTAINS

Notes:

1. Curtain 1 FT from Bottom
2. W = 10 FT Min, 20 FT Max
3. D = 2 FT
4. 100 FT Max Spacing Between Anchors, Min 40 LBS
5. Use enough Anchors to Hold Silt Curtain in Place



PLAN



SECTION B-B
SEDIMENT TRAP DETAIL

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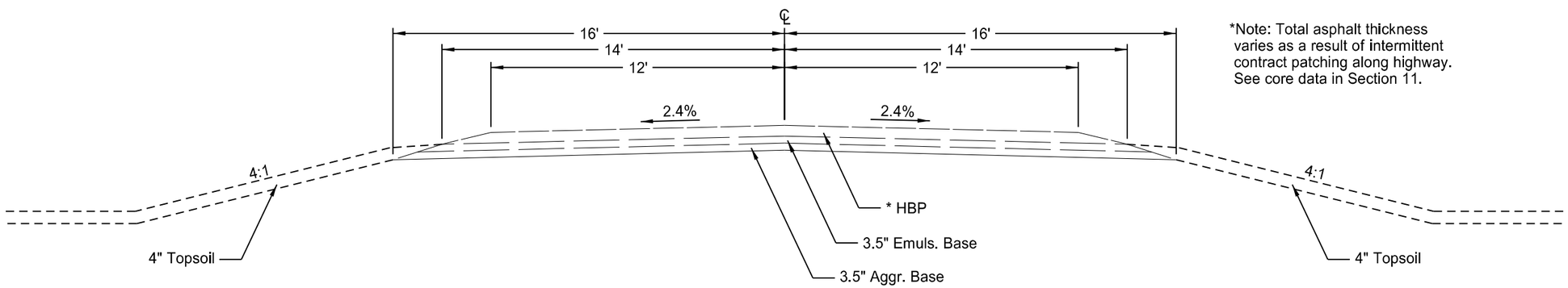
Flotation Silt Curtain Detail

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	1



*Note: Total asphalt thickness varies as a result of intermittent contract patching along highway. See core data in Section 11.

Existing Tangent Section
Sta 3146+10 to Sta 4442+00

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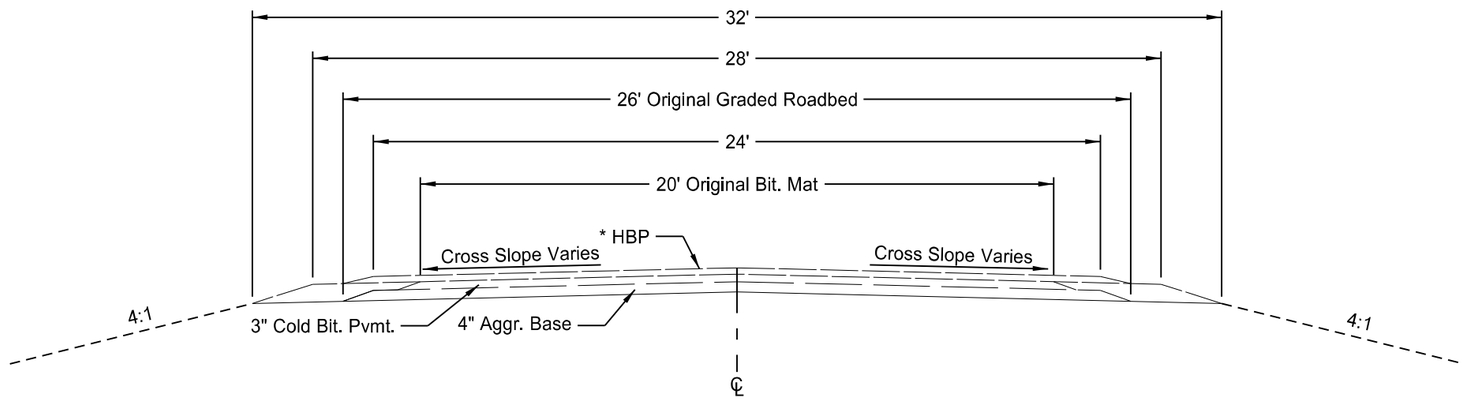
Existing Typical Section

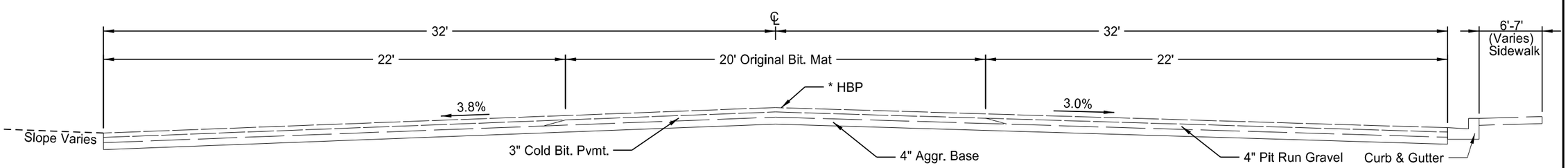
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	2



Existing Typical Section
Sta 4442+00 to Sta 4450+00



Existing Typical Section
Sta 4450+00 to Sta 4452+50

*Note: Total asphalt thickness varies as a result of intermittent contract patching along highway. See core data in Section 11.

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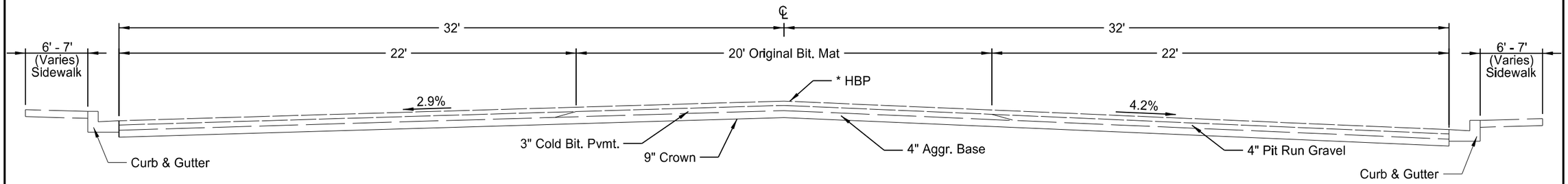
Existing Typical Section

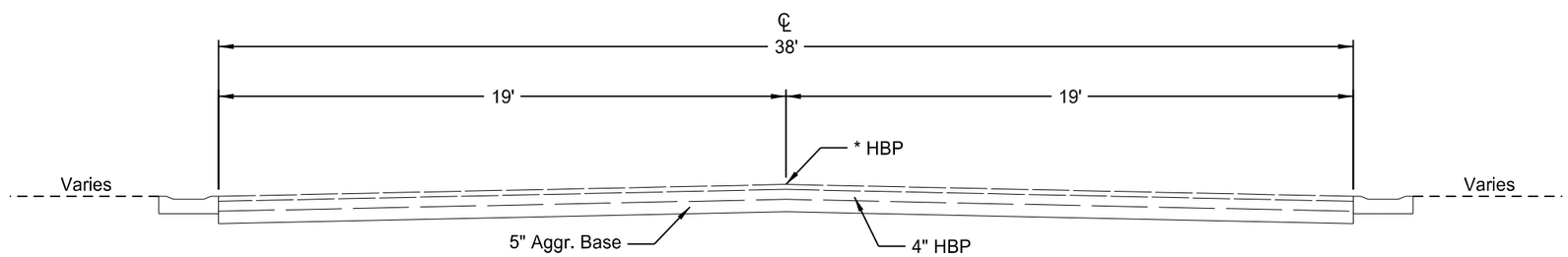
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	3

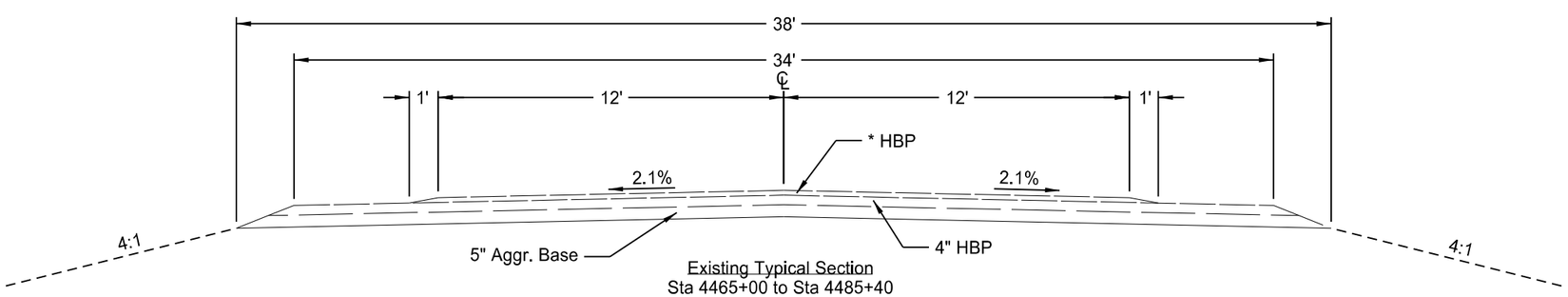


Existing Typical Section
Sta 4452+50 to Sta 4457+00



Existing Typical Section
Sta 4457+00 to Sta 4465+00

*Note: Total asphalt thickness varies as a result of intermittent contract patching along highway. See core data in Section 11.



Existing Typical Section
Sta 4465+00 to Sta 4485+40

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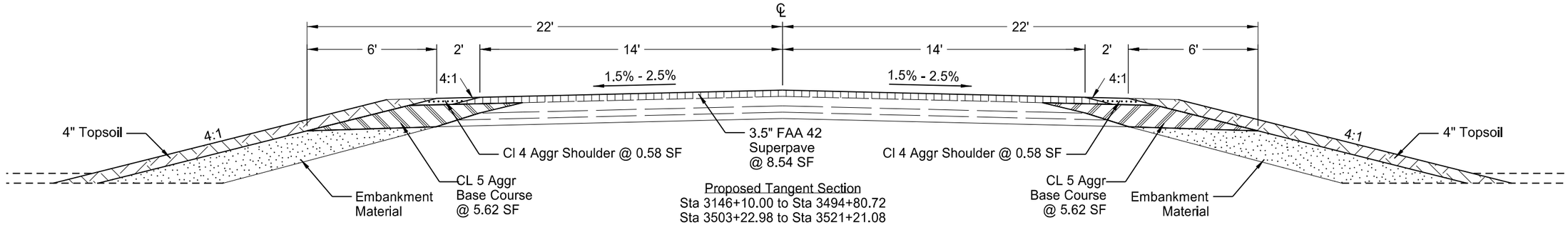
Existing Typical Section

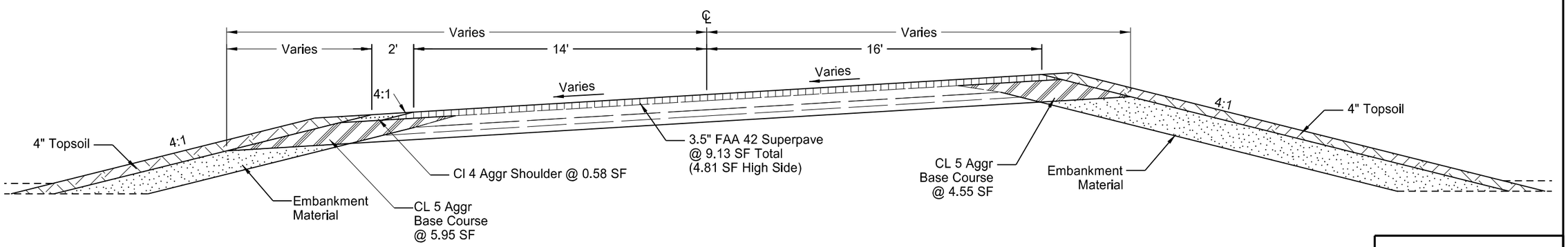
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	4



Proposed Tangent Section
Sta 3146+10.00 to Sta 3494+80.72
Sta 3503+22.98 to Sta 3521+21.08
Sta 3532+62.32 to Sta 3538+68.07
Sta 3551+22.50 to Sta 3552+00.00
Sta 3597+00.00 to Sta 4149+33.38
Sta 4160+08.03 to Sta 4183+23.61
Sta 4186+94.82 to Sta 4202+40.72
Sta 4219+47.54 to Sta 4239+45.70
Sta 4251+47.94 to Sta 4256+04.62
Sta 4271+86.78 to Sta 4330+02.22
Sta 4342+23.93 to Sta 4350+00.00
Sta 4362+00.00 to Sta 4442+00.00



Proposed Superelevated Section
Sta 3494+80.72 to Sta 3503+22.98
Sta 3521+21.08 to Sta 3532+62.32
Sta 3538+68.07 to Sta 3551+22.50
Sta 4149+33.38 to Sta 4160+08.03
Sta 4183+23.61 to Sta 4186+94.82
Sta 4202+40.72 to Sta 4219+47.54
Sta 4239+45.70 to Sta 4251+47.94
Sta 4256+04.62 to Sta 4271+86.78
Sta 4330+02.22 to Sta 4342+23.93

Note: Refer to Section 80 for the superelevation transitions.

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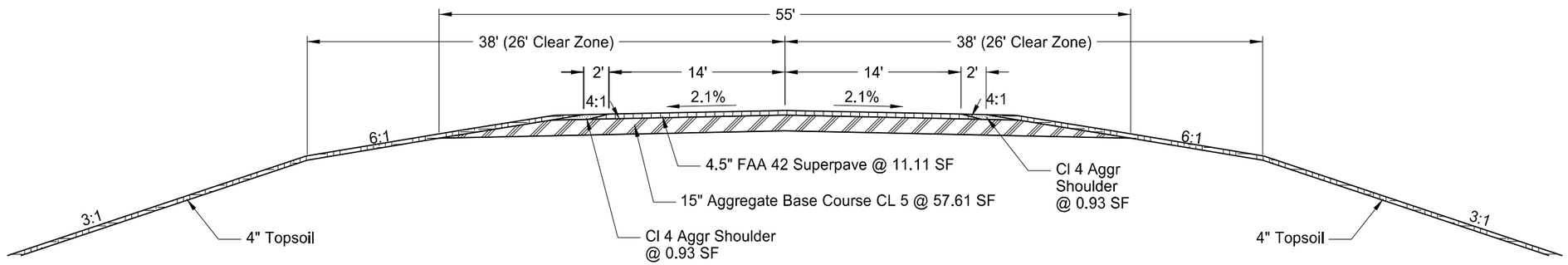
Proposed Typical Section

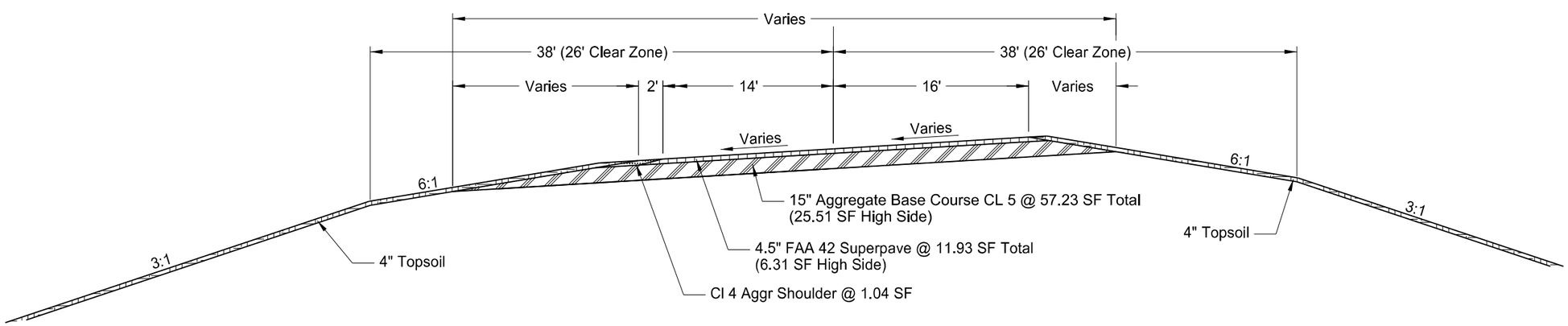
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	5



Proposed Grade Raise Typical Section
Sta 3552+00.00 to 3569+43.93
Sta 3575+12.17 to 3597+00.00



Proposed Grade Raise Superelevated Typical Section
Sta 3569+43.93 to 3575+12.17

Note: Refer to Section 80 for the superelevation transitions.

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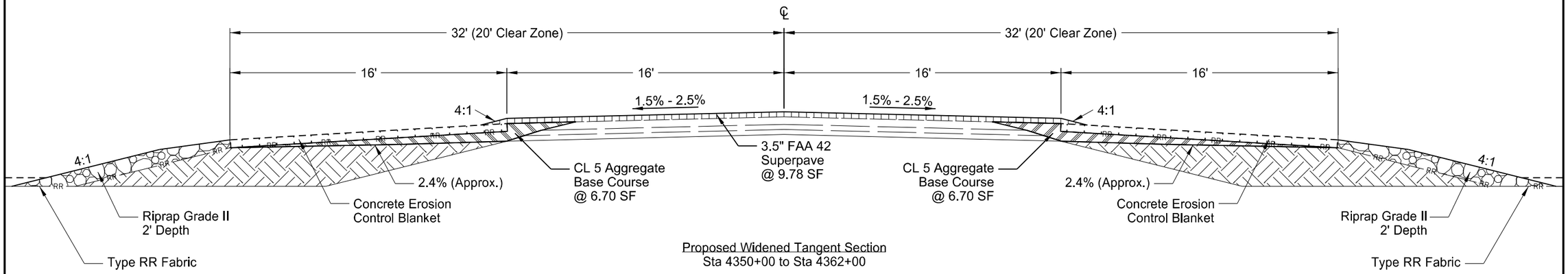
Grade Raise Typical Section

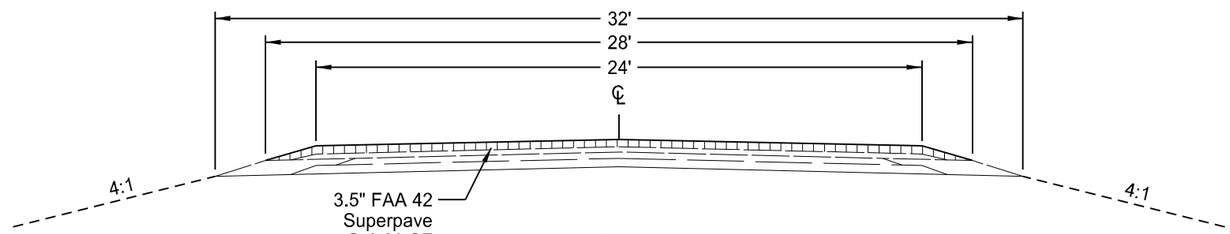
ND 3

Jct 34 N to I-94 Dawson

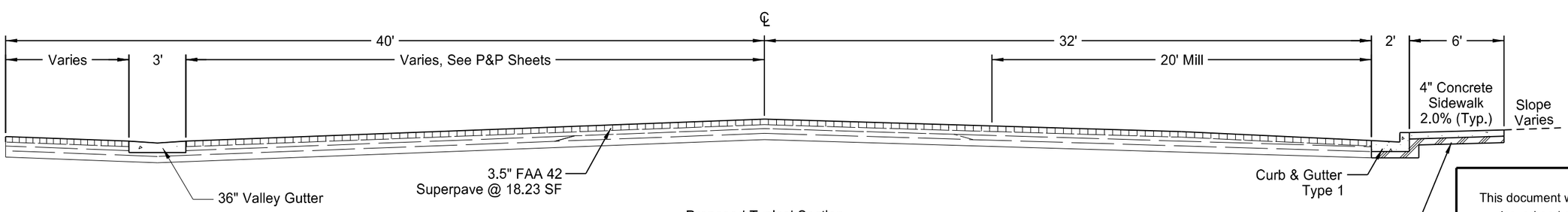
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	6



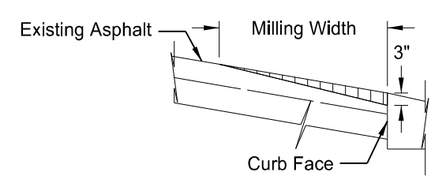
Proposed Widened Tangent Section
Sta 4350+00 to Sta 4362+00



Proposed Typical Section
Sta 4442+00 to Sta 4450+00



Proposed Typical Section
Sta 4450+00 to Sta 4452+50



Milling Detail

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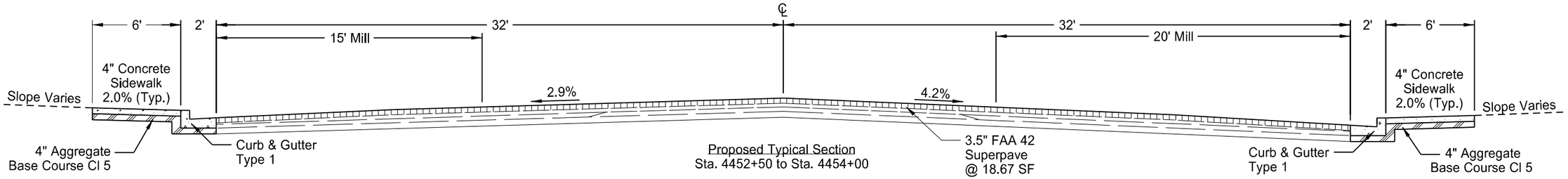
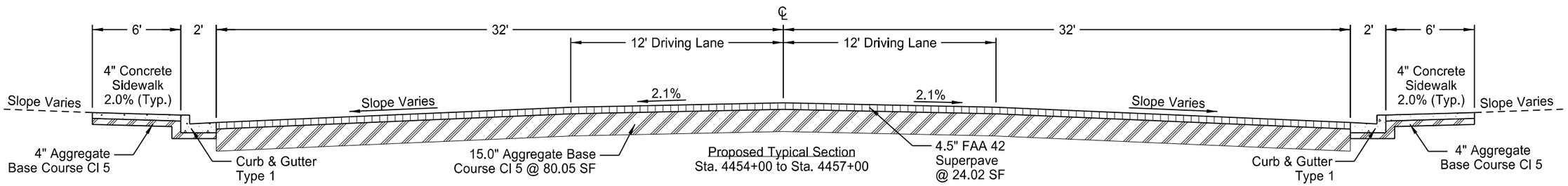
Proposed Typical Section

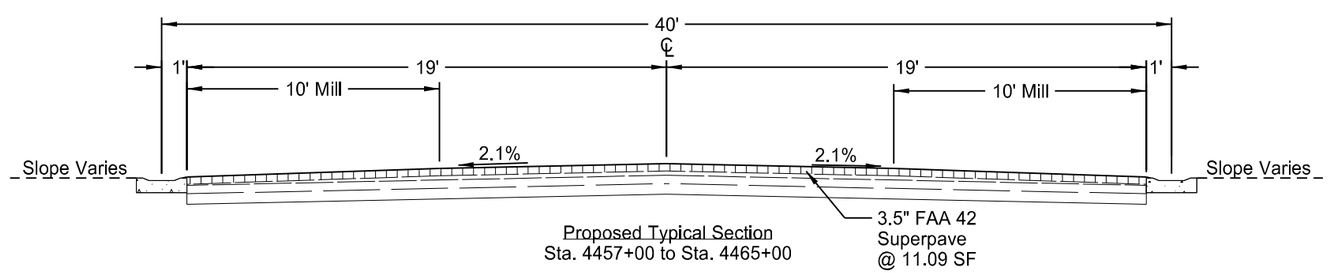
ND 3

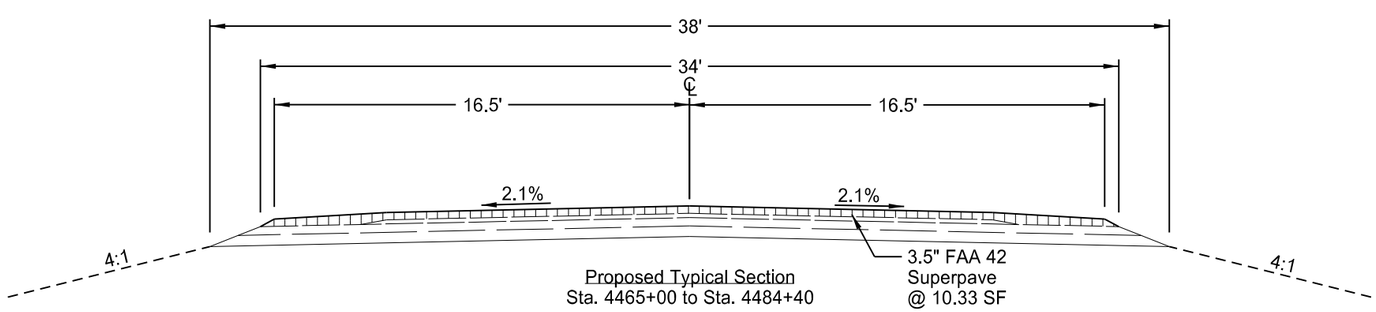
Jct 34 N to I-94 Dawson

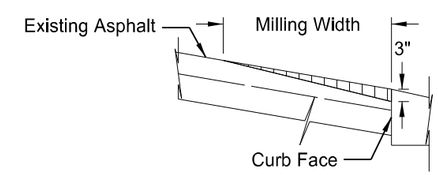
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	30	7











Milling Detail

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Proposed Typical Section

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	50	1

HYDRAULIC DATA FOR SS-1-003(034)059 (A)

STATION	EXISTING PIPE	PROPOSED PIPE SIZE	DRAINAGE AREA (ACRES)	25-YEAR DATA DESIGN DISCHARGE (CFS)	DESIGN HEADWATER (FT)	DESIGN VELOCITY (FPS)	DESIGN STAGE (NAVD 88)	100-YEAR DATA 100-YEAR DISCHARGE (CFS)	100-YEAR STAGE (NAVD 88)
3154+24	30	30	206.50	47.23	5.01	10.11	1969.45	80.22	1971.86
3186+23	24	24	80.80	26.42	5.67	12.61	1969.89	44.53	1972.10
3197+05	18	24	10.10	9.19	2.32	6.20	1961.92	14.81	1963.70
3204+42	42	42	345.80	74.03	4.85	10.12	1959.34	124.28	1962.05
3226+54	24	24	27.60	13.46	2.24	6.11	1963.76	22.54	1964.83
3245+89	36	36	224.00	61.20	4.66	9.65	1952.65	101.50	1954.26
3255+23	36	36	521.00	85.60	6.79	12.42	1953.76	146.00	1954.80
3283+56	36	36	428.00	80.00	6.35	12.01	1966.46	135.00	1967.43
3295+57	24	24	51.50	22.80	3.33	7.74	1969.73	37.69	1969.99
3314+60	30	30	56.90	28.84	4.29	11.01	1973.40	46.72	1974.44
3331+58	24	24	23.90	12.76	3.53	9.50	1994.89	21.23	1995.69
3379+49	30	30		17.71	3.86	10.13	2018.12	29.36	2023.21
3416+83	24	24	97.10	41.74	3.22	7.57	2014.99	67.59	2017.38
3428+79	24	24			3.23	7.59			
3434+87	24	24	91.20	34.13	5.69	11.03	2017.30	56.34	2018.01
3500+17	24	24	8.00	6.90	5.44	11.19	2051.22	11.29	2051.67
3534+09	24	24	107.73	32.30	6.27	10.50	2054.63	54.42	2056.00
3557+27	24	24	12.10	8.87	4.74	11.12	2045.84	14.57	2046.39
3575+85	30	30	40.10	17.00	1.99	6.04	2039.71	28.00	2040.50
3590+10	24	24	56.10	28.00	4.43	9.30	2050.32	46.00	2052.10
3616+90	36	36	95.30	40.00	4.09	10.26	2054.21	65.00	2055.56
3639+55	30	30	13.40	11.00	6.73	13.34	2050.82	17.00	2051.27
3680+10	30	30	32.50	19.00	5.61	12.63	2037.22	31.00	2038.02
3705+17	24	24	40.30	22.00	3.45	7.83	1999.41	36.00	1999.78
3711+25	36	36	270.00	70.00	5.73	10.57	1986.96	116.00	1987.42
3760+28	24	24	35.50	17.00	3.00	7.72	1978.25	29.00	1979.89
3768+92	30	30	193.00	48.00	5.58	10.24	1957.89	80.00	1963.63
3784+22	30	30	15.10	14.00	6.59	12.65	1973.54	22.00	1974.11
3804+85	24	36	295.00	65.00	4.95	10.03	1943.65	110.00	1945.18
3843+26	24	24	66.80	21.00	3.17	7.61	1924.88	36.00	1927.05
3866+16	24	24	65.60	21.00	3.34	7.61	1907.24	36.00	1910.40
3883+91	24	24	7.80	5.00	1.25	4.35	1897.51	8.00	1897.86
3896+46	24	24	24.00	13.00	3.08	8.48	1880.04	22.00	1880.91
3915+92	30	30	24.90	13.00	2.37	7.12	1851.77	22.00	1852.41
3960+91	30	30	1,163.00	118.00	5.53	11.06	1831.92	207.00	1832.50
3965+92	30	30			5.10	10.37			
3990+92	24	24	149.80	37.00	6.14	11.79	1826.26	62.00	1826.44
4027+93	24	24	69.70	22.00	3.33	7.83	1803.93	38.00	1807.01
4042+93	24	24	119.50	33.00	5.32	10.68	1800.00	56.00	1800.18
4088+92	30	30	110.30	26.00	3.20	8.37	1783.29	46.00	1784.80
4103+96	30	30	230.20	47.00	5.00	10.08	1766.15	81.00	1768.16
4114+80	24	24	124.50	32.00	5.24	10.41	1762.39	54.00	1763.16
4130+29	24	30	258.50	53.00	5.89	11.11	1756.14	90.00	1757.70
4148+78	24	24	13.60	8.00	7.75	13.47	1751.51	13.00	1752.00
4158+82	24	24	64.90	25.00	7.63	15.74	1744.98	42.00	1747.78
4270+38	24	24	8.50	5.00	2.24	5.95	1741.73	9.00	1742.18
4293+86	24	24	26.50	26.50	5.57	12.48	1746.22	33.00	1747.17
4334+70	24	24	68.20	22.00	3.38	7.83	1751.82	38.00	1755.00
4353+20	36	36	16,000.00	44.65	2.83	7.96	1725.95	117.00	1728.27
4359+73	36	36			3.24	7.47			
4415+84	24	24	37.70	14.00	2.50	6.69	1752.87	23.00	1753.80
4432+23	24	24	58.8	16.00	2.48	6.60	1753.19	28.00	1755.01

(A) Hydraulic data provided is for smooth-walled type conduits
(B) Culvert diameter given at this location is the NDDOT Policy minimum diameter and exceeds hydraulic requirements.

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Hydraulic Data

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	1

Begin Station	Begin Offset	End Station	End Offset	Pay Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3154+24	33.6 Lt	3154+24	23.6 Lt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30					1		Sec-20 Sht-5
3154+24	32.6 Rt	3154+24	24.6 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3162+84	48.7 Rt	3163+52	48.7 Rt	68		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3167+07	53.2 Rt	3167+71	51.0 Rt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3175+47	60.0 Rt	3176+17	60.0 Rt	70		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3186+23	41.1 Lt	3186+23	31.1 Lt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
3186+23	31.1 Rt	3186+23	25.1 Rt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3197+05	27.5 Lt	3197+05	26.5 Rt	56	24		RCP	Reinforced Concrete Pipe - Class III **(barrell length = 54 LF)**	24		195	1 (Trav.)	1 (Trav.)			Sec-20 Sht-5
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
3204+41	29.9 Rt	3204+41	21.9 Rt	8	42		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	42					1		Sec-20 Sht-5
3204+42	30.3 Lt	3204+42	24.3 Lt	6	42		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	42					1		Sec-20 Sht-5
3211+72	57.5 Lt	3212+34	56.6 Lt	62		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 60 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3226+54	29.5 Lt	3226+54	23.5 Lt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3226+54	30.3 Rt	3226+54	22.3 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3236+10	49.4 Rt	3236+82	48.2 Rt	72		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3245+89	30.4 Lt	3245+89	18.4 Lt	12	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	36						1 (Trav.)	Sec-20 Sht-5
3245+90	30.3 Rt	3245+90	18.3 Rt	12	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	36						1 (Trav.)	Sec-20 Sht-5
3248+98	48.0 Rt	3249+76	48.9 Rt	78		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 76 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3249+17	75.0 Lt	3249+65	75.0 Lt	48		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 46 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3255+23	33.4 Lt	3255+23	23.4 Lt	10	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36					1		Sec-20 Sht-5
3255+24	33.4 Rt	3255+24	23.4 Rt	10	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36					1		Sec-20 Sht-5
3261+21	58.3 Rt	3261+87	61.2 Rt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3261+36	60.3 Lt	3261+84	59.8 Lt	48		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 46 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							

(A) Not paid for separately, to be included in the bid price for Pipe Conduit.

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	2

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3283+55	31.7 Lt	3283+55	19.7 Lt	12	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	36					1		Sec-20 Sht-5
3283+56	28.5 Rt	3283+56	18.5 Rt	10	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36						1 (Trav.)	Sec-20 Sht-5
3295+57	30.7 Lt	3295+57	22.7 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24						1 (Trav.)	Sec-20 Sht-5
3295+57	31.0 Rt	3295+57	23.0 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24						1 (Trav.)	Sec-20 Sht-5
3314+60	31.7 Rt	3314+60	21.7 Rt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30						1 (Trav.)	Sec-20 Sht-5
3314+61	36.5 Lt	3314+61	28.5 Lt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3331+58	37.1 Lt	3331+58	29.1 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3331+58	33.0 Rt	3331+58	25.0 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3354+41	88.9 Rt	3355+12	90.7 Rt	76		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 74 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3354+40	64.0 Lt	3355+12	62.8 Lt	72		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3379+49	36.7 Rt	3379+49	28.7 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3379+49	39.3 Lt	3379+49	35.3 Lt	4	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	30					1		Sec-20 Sht-5
3381+19	52.5 Rt	3381+73	53.1 Rt	54		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 52 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3381+21	47.0 Lt	3381+67	46.7 Lt	46		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 44 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3407+73	87.7 Lt	3408+59	87.7 Lt	86		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 84 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3407+78	52.3 Rt	3408+74	52.9 Rt	96		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 94 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3416+83	30.7 Lt	3416+83	22.7 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24						1 (Trav.)	Sec-20 Sht-5
3416+84	33.1 Rt	3416+84	23.1 Rt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24						1 (Trav.)	Sec-20 Sht-5
3428+78	31.5 Lt	3428+78	23.5 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3428+79	30.6 Rt	3428+79	22.6 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3433+86	44.4 Lt	3434+42	44.0 Lt	56		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 54 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3434+86	31.1 Lt	3434+86	23.1 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3434+88	30.7 Rt	3434+88	22.7 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3454+72	50.5 Rt	3455+58	49.3 Rt	86		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 84 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3454+76	46.3 Lt	3455+54	44.8 Lt	78		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 76 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	3

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3460+21	55.7 Rt	3461+17	54.5 Rt	98		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 96 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3500+16	43.2 Rt	3500+16	37.2 Rt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3500+17	34.8 Lt	3500+17	26.8 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3513+11	40.9 Rt	3513+87	41.7 Rt	76		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 74 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3513+13	43.8 Lt	3513+87	43.3 Lt	74		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3529+87	41.3 Rt	3530+60	46.6 Rt	74		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3534+09	45.3 Lt	3534+09	35.3 Lt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
3534+09	40.3 Rt	3534+09	34.3 Rt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3557+27	60.6 Lt	3557+27	34.6 Lt	26	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 26 LF)	24					1		Sec-20 Sht-5
3557+27	48.8 Rt	3557+27	22.8 Rt	26	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 26 LF)	24					1		Sec-20 Sht-5
3571+88	72.2 Rt	3572+87	70.7 Rt	104		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 102 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3575+85	83.3 Lt	3575+85	35.3 Lt	48	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 48 LF)	30					1		Sec-20 Sht-5
3575+85	63.6 Rt	3575+85	23.6 Rt	40	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 40 LF)	30					1		Sec-20 Sht-5
3587+72	64.7 Rt	3588+52	64.7 Rt	80		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 78 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3590+09	39.0 Rt	3590+09	21.0 Rt	18	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	24					1		Sec-20 Sht-5
3590+11	39.2 Lt	3590+11	23.2 Lt	16	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 16 LF)	24					1		Sec-20 Sht-5
3614+03	48.0 Lt	3614+69	47.0 Lt	66		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3616+89	37.2 Rt	3616+89	31.2 Rt	6	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	36					1		Sec-20 Sht-5
3616+90	34.0 Lt	3616+90	24.0 Lt	10	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36					1		Sec-20 Sht-5
3624+73	51.4 Lt	3625+55	50.2 Lt	82		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 80 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3639+55	48.6 Lt	3639+55	38.6 Lt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30					1		Sec-20 Sht-5
3673+58	51.4 Lt	3674+66	51.4 Lt	108		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 106 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3677+76	56.1 Lt	3678+50	57.2 Lt	74		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	4

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3677+80	79.7 Rt	3678+47	79.7 Rt	66		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3680+10	41.0 Lt	3680+10	31.0 Lt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30					1		Sec-20 Sht-5
3680+10	55.5 Rt	3680+10	41.5 Rt	14	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 14 LF)	30					1		Sec-20 Sht-5
3695+29	67.0 Rt	3695+97	68.7 Rt	68		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	18						1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3705+16	33.1 Lt	3705+16	25.1 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3705+17	35.6 Rt	3705+17	29.6 Rt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3708+12	50.2 Lt	3708+94	49.5 Lt	82		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 80 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3711+23	48.0 Rt	3711+23	38.0 Rt	10	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	36					1		Sec-20 Sht-5
3711+26	46.9 Lt	3711+26	34.9 Lt	12	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	36					1		Sec-20 Sht-5
3718+09	51.2 Rt	3718+83	51.7 Rt	74		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3718+76	55.0 Lt	3719+48	53.7 Lt	72		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3757+42	60.0 Rt	3757+85	60.6 Rt	44		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 42 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3760+28	35.1 Lt	3760+28	29.1 Lt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3760+28	33.3 Rt	3760+28	25.3 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3768+91	53.9 Lt	3768+91	45.9 Lt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3768+92	50.1 Rt	3768+92	42.1 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3784+22	49.2 Rt	3784+22	43.2 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
3791+50	47.3 Rt	3792+18	48.9 Rt	68		30	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3795+36	51.2 Rt	3796+10	51.9 Rt	74		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3795+42	50.1 Lt	3795+96	49.9 Lt	54		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 52 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3804+85	31.2 Lt	3804+85	28.8 Rt	62	36		RCP	Reinforced Concrete Pipe - Class III **(barrell length = 60 LF)**	36		252	1 (Trav.)	1 (Trav.)			Sec-20 Sht-5
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	36	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	36	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	36	0.064						

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	5

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3809+93	43.6 Rt	3810+53	44.8 Rt	60		24	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 58 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3836+21	47.8 Rt	3836+97	48.9 Rt	76		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 74 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3836+25	60.7 Lt	3836+94	59.2 Lt	70		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3843+26	33.6 Lt	3843+26	25.6 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3843+26	32.4 Rt	3843+26	24.4 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3862+86	54.9 Lt	3863+36	55.8 Lt	50		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 48 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3866+15	41.3 Rt	3866+15	33.3 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3866+16	42.9 Lt	3866+16	36.9 Lt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
3883+91	31.2 Lt	3883+91	23.2 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3883+91	30.7 Rt	3883+91	22.7 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3889+22	49.7 Lt	3889+96	48.1 Lt	74		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3889+25	44.2 Rt	3889+97	44.1 Rt	72		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
3896+46	38.8 Lt	3896+46	30.8 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3896+46	35.1 Rt	3896+46	27.1 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3915+91	31.0 Lt	3915+91	23.0 Lt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30						1 (Trav.)	Sec-20 Sht-5
3915+92	28.9 Rt	3915+92	22.9 Rt	6	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	30						1 (Trav.)	Sec-20 Sht-5
3942+80	48.7 Lt	3943+48	47.9 Lt	68		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3942+87	39.9 Rt	3943+41	39.8 Rt	54		36	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 52 LF)**	36			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	36	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	36	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	36	0.064						
								High-Density Polyethylene (HDPE)	36							
3942+87	44.5 Rt	3943+41	44.4 Rt	54		36	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 52 LF)**	36			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	36	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	36	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	36	0.064						
								High-Density Polyethylene (HDPE)	36							
3949+93	39.2 Rt	3950+47	40.1 Rt	54		42 X 29 Arch	CMP					1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	42 X 29	0.064						
								Corrugated Steel Arch Pipe 42" X 29"								

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	6

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
3949+93	44.1 Rt	3950+47	44.9 Rt	54		42 X 29 Arch	CMP	Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	42 X 29	0.064		1 (Trav.)	1 (Trav.)			N/A
								Corrugated Steel Arch Pipe 42" X 29"								
3950+00	48.2 Lt	3950+54	46.9 Lt	54		35 X 24 Arch	CMP	Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	35 X 24	0.064		1 (Trav.)	1 (Trav.)			N/A
								Corrugated Steel Arch Pipe 35" x 24"	35 X 24							
3950+00	53.0 Lt	3950+54	51.6 Lt	54		35 X 24 Arch	CMP	Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	35 X 24	0.064		1 (Trav.)	1 (Trav.)			N/A
								Corrugated Steel Arch Pipe 35" X 24"	35 X 24							
3960+91	31.2 Lt	3960+91	21.2 Lt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30						1 (Trav.)	Sec-20 Sht-5
3960+91	30.5 Rt	3960+91	22.5 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30						1 (Trav.)	Sec-20 Sht-5
3965+92	31.3 Lt	3965+92	23.3 Lt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30						1 (Trav.)	Sec-20 Sht-5
3965+92	30.9 Rt	3965+92	22.9 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30						1 (Trav.)	Sec-20 Sht-5
3969+16	42.5 Rt	3969+82	43.3 Rt	66		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
3990+91	33.2 Rt	3990+91	25.2 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
3990+92	30.8 Lt	3990+92	22.8 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24						1 (Trav.)	Sec-20 Sht-5
3995+75	42.7 Rt	3996+47	41.4 Rt	72		24	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
3995+79	51.0 Lt	3996+45	50.4 Lt	66		24	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4022+10	56.1 Lt	4022+74	55.9 Lt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4027+93	33.1 Lt	4027+93	23.1 Lt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
4027+93	30.2 Rt	4027+93	22.2 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4039+75	44.5 Rt	4040+43	44.5 Rt	68		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4041+60	60.5 Lt	4042+18	59.7 Lt	58		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 56 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4042+93	32.7 Lt	4042+93	24.7 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4042+93	31.2 Rt	4042+93	23.2 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4054+14	60.9 Lt	4054+82	60.7 Lt	68		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	7

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
4077+54	43.0 Rt	4078+16	42.3 Rt	62		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 60 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4088+92	30.6 Lt	4088+92	20.6 Lt	10	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	30						1 (Trav.)	Sec-20 Sht-5
4088+92	27.0 Rt	4088+92	19.0 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30						1 (Trav.)	Sec-20 Sht-5
4100+54	43.5 Rt	4101+27	44.2 Rt	72		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
4100+57	60.3 Lt	4101+26	59.8 Lt	70		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4103+95	35.5 Lt	4103+95	27.5 Lt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
4103+96	33.6 Rt	4103+96	25.6 Rt	8	30		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	30					1		Sec-20 Sht-5
4112+97	47.5 Rt	4113+47	48.3 Rt	50		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 48 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
4114+79	35.5 Rt	4114+79	27.5 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4114+80	35.7 Lt	4114+80	29.7 Lt	6	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	24					1		Sec-20 Sht-5
4130+29	34.7 Lt	4130+29	31.3 Rt	70	30		RCP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	30		251	1 (Trav.)	1 (Trav.)			Sec-20 Sht-5
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
4148+77	54.2 Lt	4148+77	46.2 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4148+78	33.4 Rt	4148+78	29.4 Rt	4	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	24					1		Sec-20 Sht-5
4154+47	42.7 Rt	4155+23	43.0 Rt	74		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4154+40	42.1 Lt	4155+09	45.8 Lt	72		18	NA	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4158+82	48.4 Lt	4158+82	40.4 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4158+82	29.7 Rt	4158+82	25.7 Rt	4	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	24					1		Sec-20 Sht-5
4176+51	41.4 Rt	4177+23	42.3 Rt	72		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4192+62	39.4 Rt	4193+40	37.6 Rt	78		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 76 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4211+50	44.3 Rt	4212+21	42.9 Rt	74		30	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	8

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
4211+80	49.6 Lt	4212+46	46.9 Lt	64		18	NA	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4221+15	51.9 Rt	4221+58	66.1 Rt	46		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 44 LF)**	24			1 (Trav.)	1 (Trav.)		1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4223+63	41.2 Rt	4224+37	44.8 Rt	74		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	24			1 (Trav.)	1 (Trav.)		1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4246+20	41.1 Rt	4246+80	42.4 Rt	58		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 56 LF)**	18			1 (Trav.)	1 (Trav.)		1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4248+48	46.6 Lt	4249+10	47.4 Lt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4266+70	38.2 Rt	4267+54	38.7 Rt	82		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 80 LF)**	24			1 (Trav.)	1 (Trav.)		1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4270+38	53.7 Lt	4270+38	43.7 Lt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
4270+38	48.0 Rt	4270+38	44.0 Rt	4	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 4 LF)	24					1		Sec-20 Sht-5
4284+58	40.9 Rt	4285+28	40.7 Rt	70		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4293+86	44.0 Lt	4293+86	36.0 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4293+86	35.6 Rt	4293+86	25.6 Rt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
4294+24	52.9 Rt	4294+94	54.0 Rt	70		24	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4298+87	51.4 Lt	4299+61	51.6 Lt	74		30	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
4334+69	31.4 Lt	4334+69	23.4 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4334+70	40.7 Rt	4334+70	28.7 Rt	12	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 12 LF)	24					1		Sec-20 Sht-5
4345+33	46.1 Rt	4346+01	45.1 Rt	68		24	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4353+19	43.6 Lt	4353+19	25.6 Lt	18	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	36					1		Sec-20 Sht-5
4353+21	37.9 Rt	4353+21	19.9 Rt	18	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 18 LF)	36					1		Sec-20 Sht-5
4359+72	43.6 Rt	4359+72	23.6 Rt	20	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 20 LF)	36					1		Sec-20 Sht-5
4359+73	43.0 Lt	4359+73	27.0 Lt	16	36		RCP	Reinforced Concrete Pipe - Class III (barrel length = 16 LF)	36					1		Sec-20 Sht-5

(A) Not paid for separately, to be included in the bid price for Pipe Conduit.

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Allowable Pipe List

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	51	9

Begin Station	Begin Offset	End Station	End Offset	Length LF	Pipe Conduit Pay Size Inches	Pipe Conduit Approach Pay Size Inches	Existing Material	Allowable Material	Required Diameter In	Minimum Thickness In	R1 Fabric (Pay Item) SY	End Sections (A) Begin EA	End Sections (A) End EA	End Sections Remove & Relay EA	End Sections Install New EA	Applicable Backfill Detail
4371+32	41.6 Rt	4372+06	42.6 Rt	74		18	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 72 LF)**	18			1 (Trav.)	1 (Trav.)		1 (Trav.)	N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4381+79	43.4 Rt	4382+45	43.2 Rt	66		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4381+80	52.2 Lt	4382+44	52.0 Lt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4388+73	46.3 Rt	4389+43	46.1 Rt	70		24	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 68 LF)**	24			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	24	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	24	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	24	0.064						
								High-Density Polyethylene (HDPE)	24							
4388+78	47.0 Lt	4389+49	48.6 Lt	72		30	RCP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	30			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	30	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	30	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	30	0.064						
								High-Density Polyethylene (HDPE)	30							
4411+12	53.1 Lt	4411+80	53.7 Lt	68		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 66 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4411+21	45.4 Rt	4411+79	44.8 Rt	58		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 56 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4415+84	29.6 Lt	4415+84	21.6 Lt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24						1 (Trav.)	Sec-20 Sht-5
4415+84	31.7 Rt	4415+84	23.7 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4427+95	43.0 Rt	4428+66	41.7 Rt	72		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 70 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4432+23	29.9 Lt	4432+23	19.9 Lt	10	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 10 LF)	24					1		Sec-20 Sht-5
4432+23	29.6 Rt	4432+23	21.6 Rt	8	24		RCP	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24					1		Sec-20 Sht-5
4440+58	28.1 Lt	4441+16	26.3 Lt	58		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 56 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4441+74	33.2 Rt	4442+38	30.5 Rt	64		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 62 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4441+75	29.3 Lt	4442+41	27.6 Lt	66		18	CMP	Reinforced Concrete Pipe - Class III **(barrell length = 64 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							
4443+31	31.4 Rt	4443+85	31.4 Rt	54		18		Reinforced Concrete Pipe - Class III **(barrell length = 52 LF)**	18			1 (Trav.)	1 (Trav.)			N/A
								Zinc Coated Corrugated Steel (2-2/3" x 1/2" Ribs)	18	0.064						
								Aluminum Coated Corrugated Steel (Type 2)	18	0.060						
								Polymeric Coated Steel (over zinc or aluminum coated steel)	18	0.064						
								High-Density Polyethylene (HDPE)	18							

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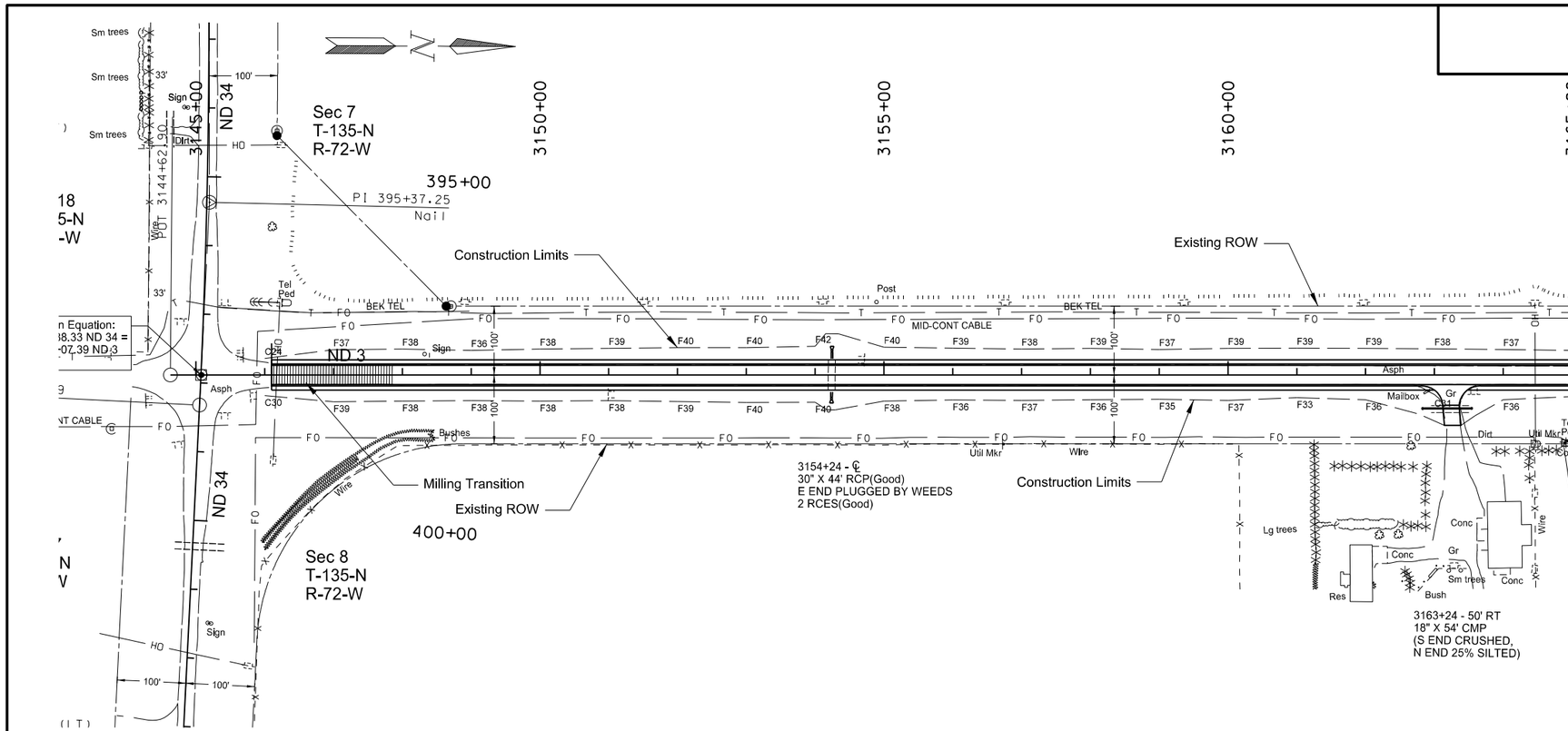
Allowable Pipe List

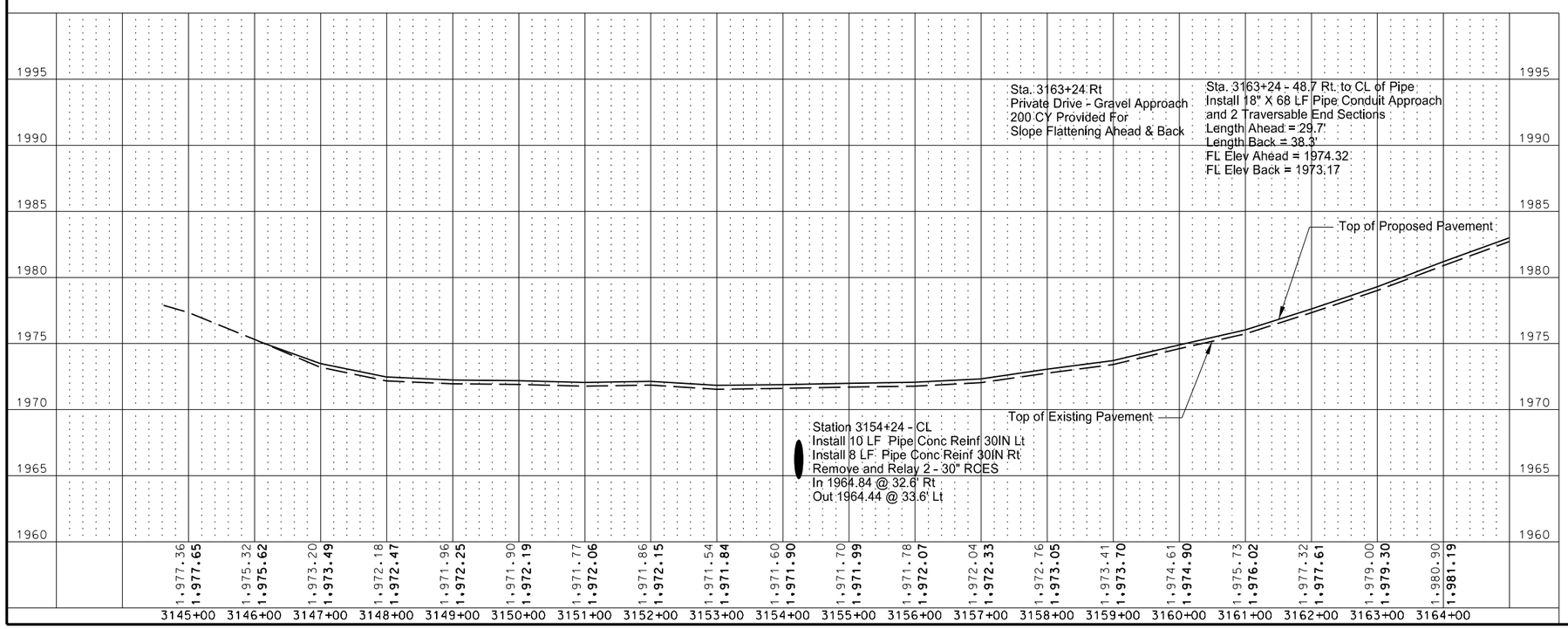
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	1



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3163+24	54	LF
411	0105	MILLLING PAVEMENT SURFACE		
		3146+10 to 3147+85	544	SY
714	0820	PIPE CONC REINF 30IN CL III		
		3154+24 ℄ - Lt	10	EA
		3154+24 ℄ - Rt	8	EA
714	4099	PIPE CONDUIT 18IN APPROACH		
		3163+24 Rt	68	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3154+24 ℄ - Lt	1	EA
		3154+24 ℄ - Rt	1	EA



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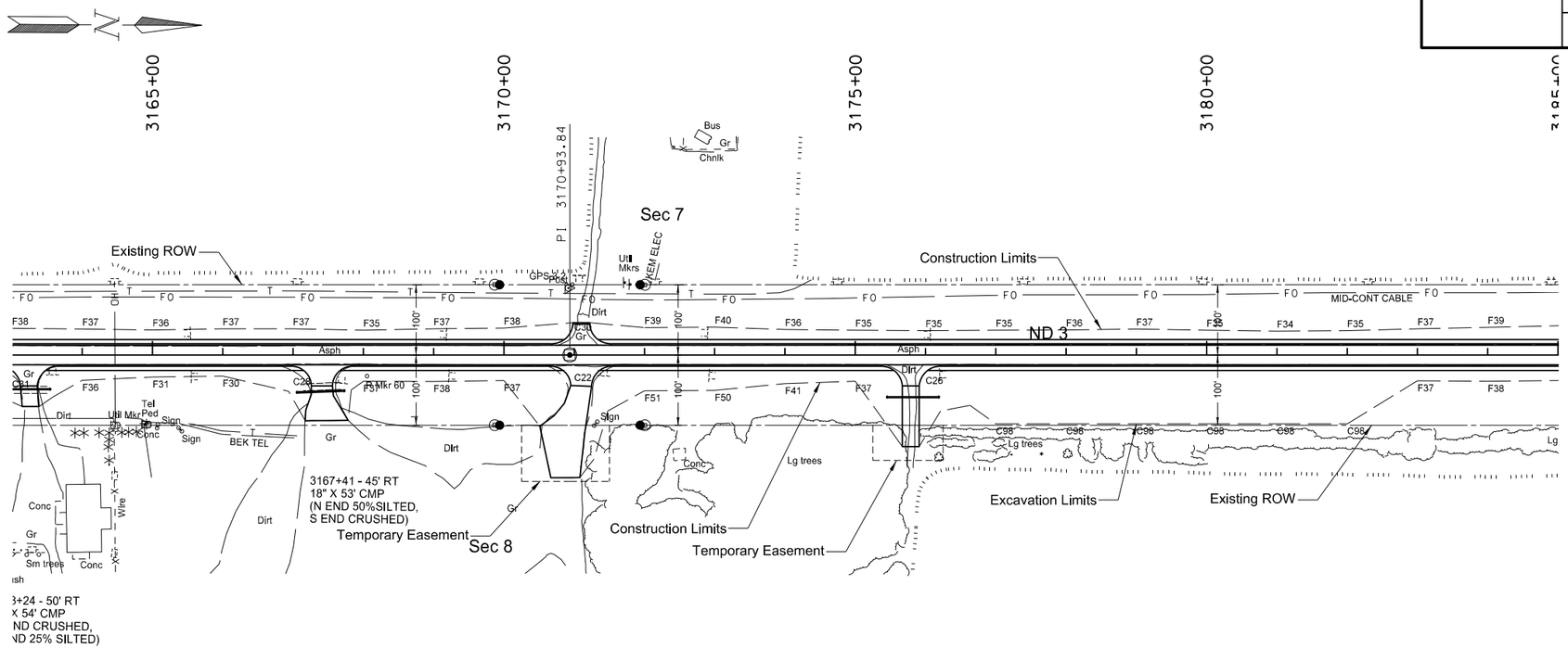
Plan & Profile

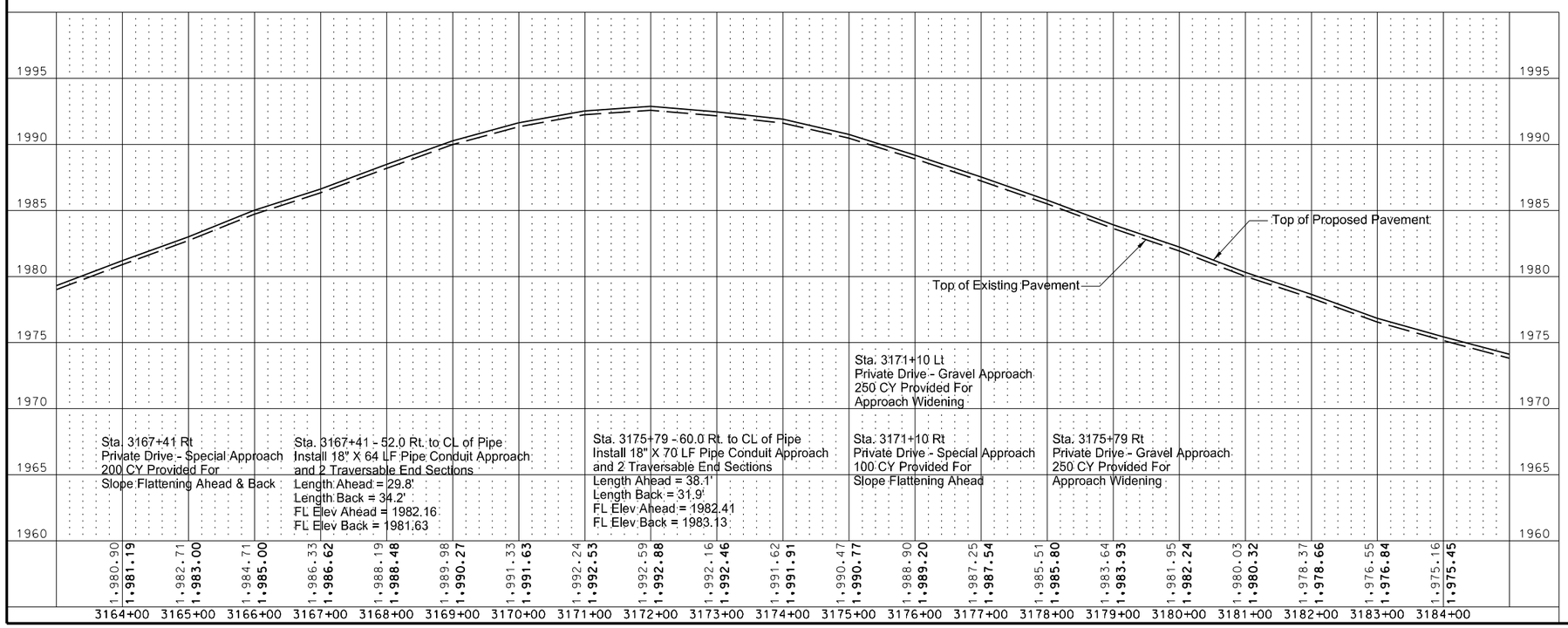
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	2

SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3167+41 Rt	53	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3167+41 Rt	64	LF
		3175+79 Rt	70	LF





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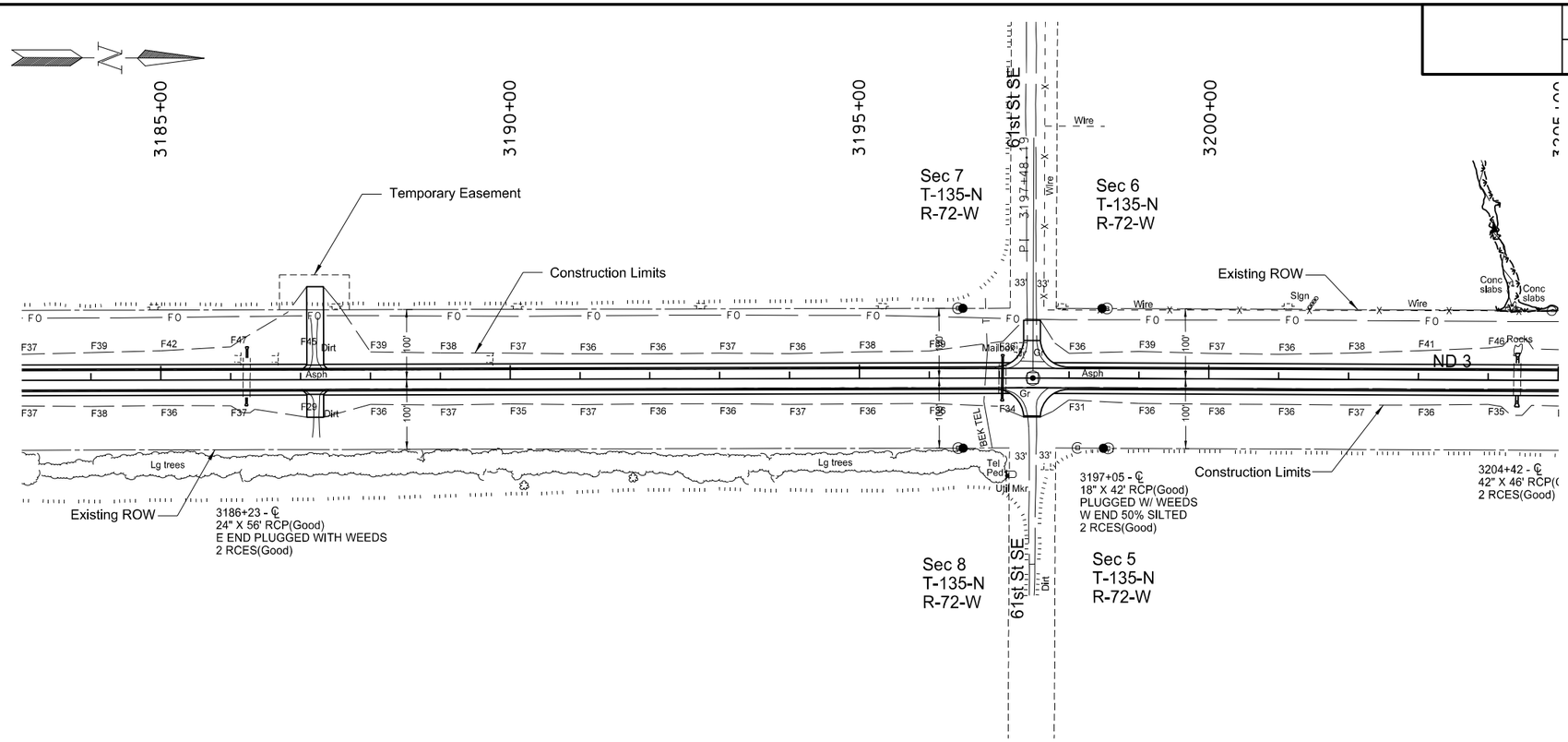
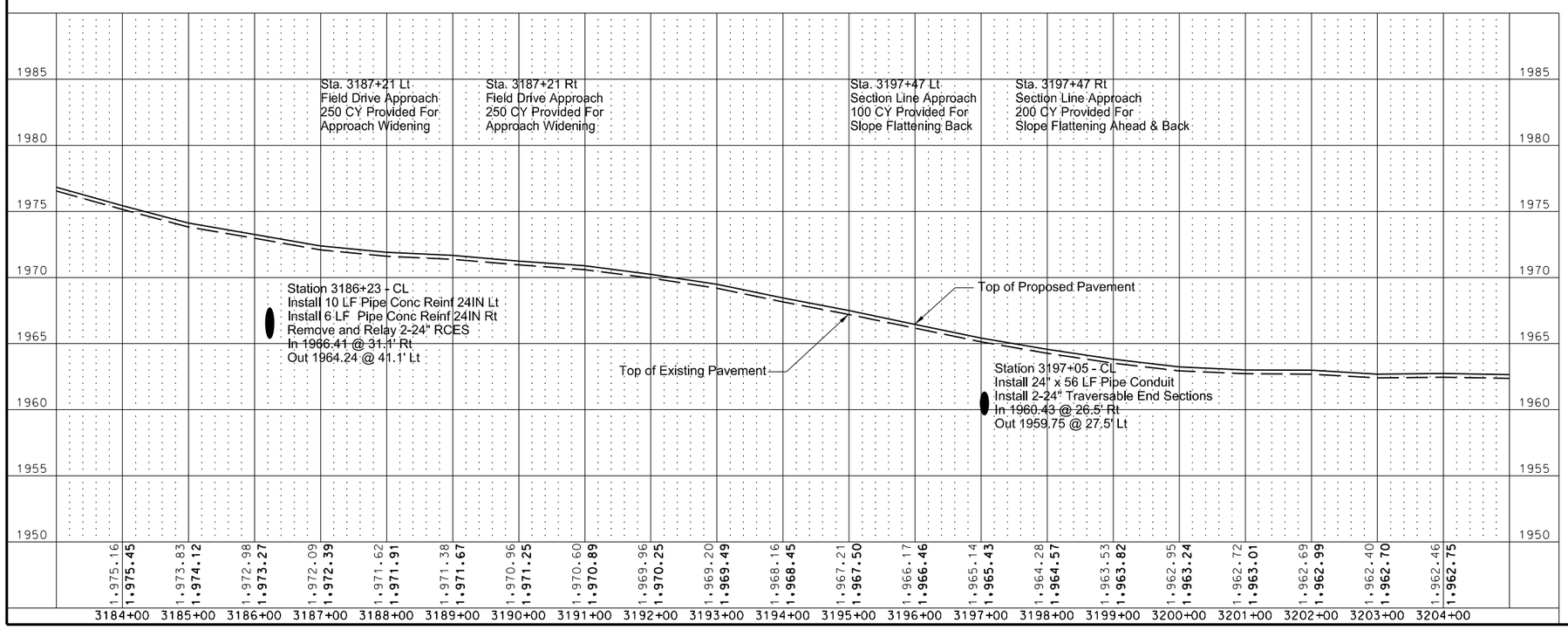
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	3





SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0121	REMOVE & SALVAGE BITUMINOUS SURFACING		
		3197+05 ℄	42	TON
202	0153	SAW BITUMINOUS SURFACING - FULL DEPTH		
		3196+93 ℄	26	LF
		3197+17 ℄	26	LF
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3197+05 ℄ - Lt	1	EA
		3197+05 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES & SIZES		
		3197+05 ℄ - Lt	42	LF
302	0120	AGGREGATE BASE COURSE CL 5		
		3197+05 ℄ (15" Depth)	44	TON
430	0042	SUPERPAVE FAA 42		
		3197+05 ℄ (2" Depth)	9	TON
430	5828	PG 58-28 ASPHALT CEMENT		
		3197+05 ℄	1	TON
714	0615	PIPE CONC REINF 24IN CL III		
		3186+23 ℄ - Lt	10	LF
		3186+23 ℄ - Rt	6	LF
714	4105	PIPE CONDUIT 24IN		
		3197+05 ℄	56	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3186+23 ℄ - Lt	1	EA
		3186+23 ℄ - Rt	1	EA

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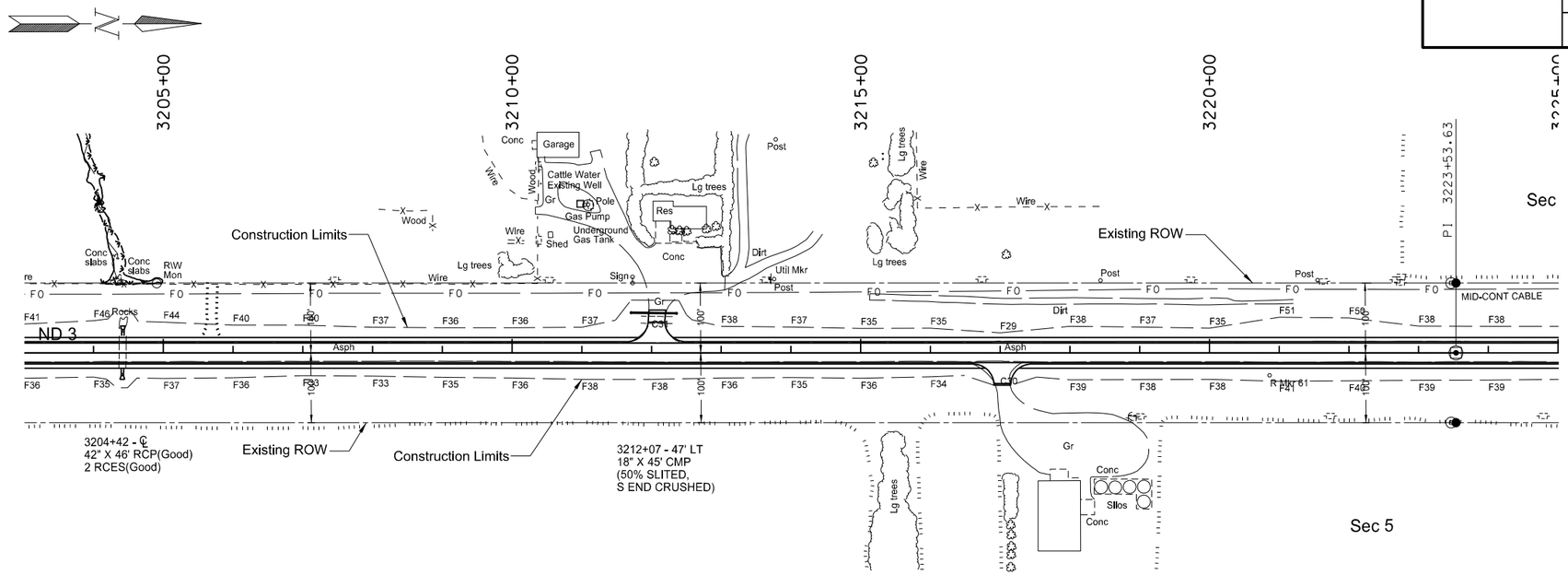
Plan & Profile

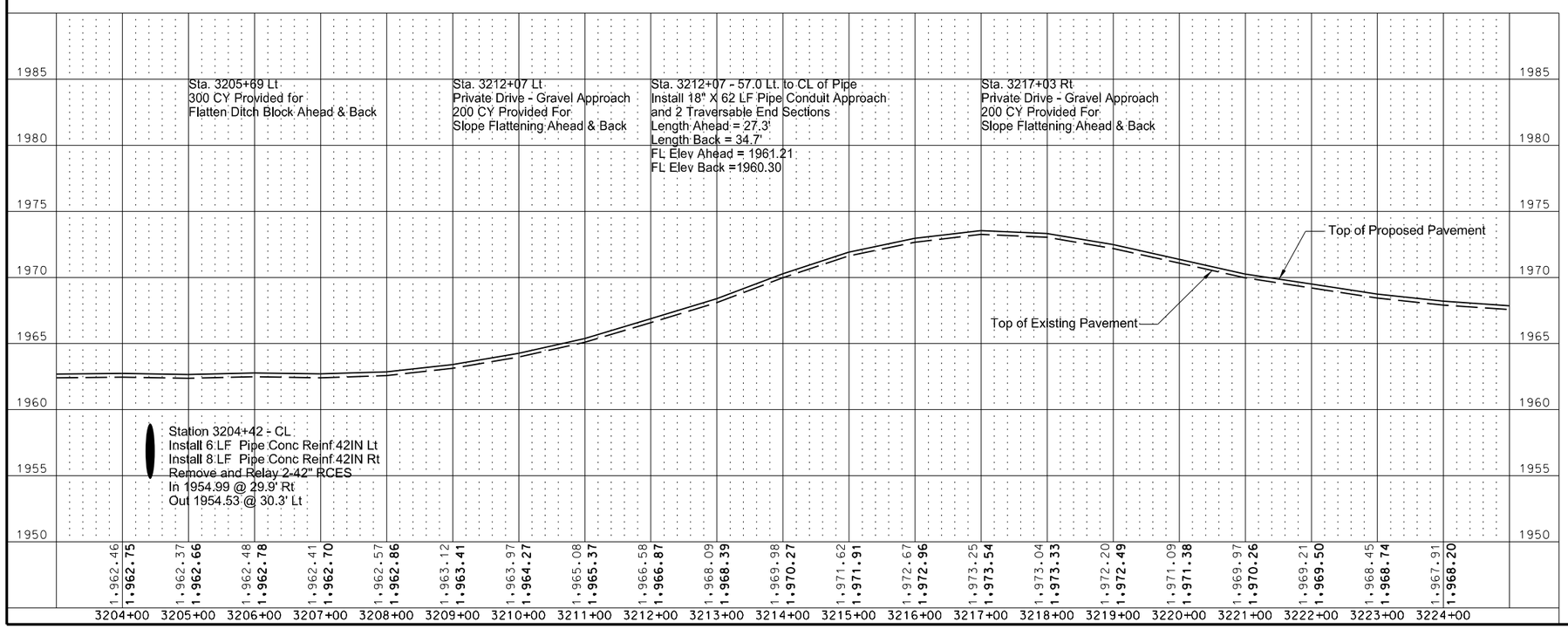
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	4



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES & SIZES		
		3212+07 Lt	45	LF
714	1005	PIPE CONC REINF 42IN CL III		
		3204+42 ℄ - Lt	6	LF
		3204+42 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3212+07 Lt	62	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3204+42 ℄ - Lt	1	EA
		3204+42 ℄ - Rt	1	EA



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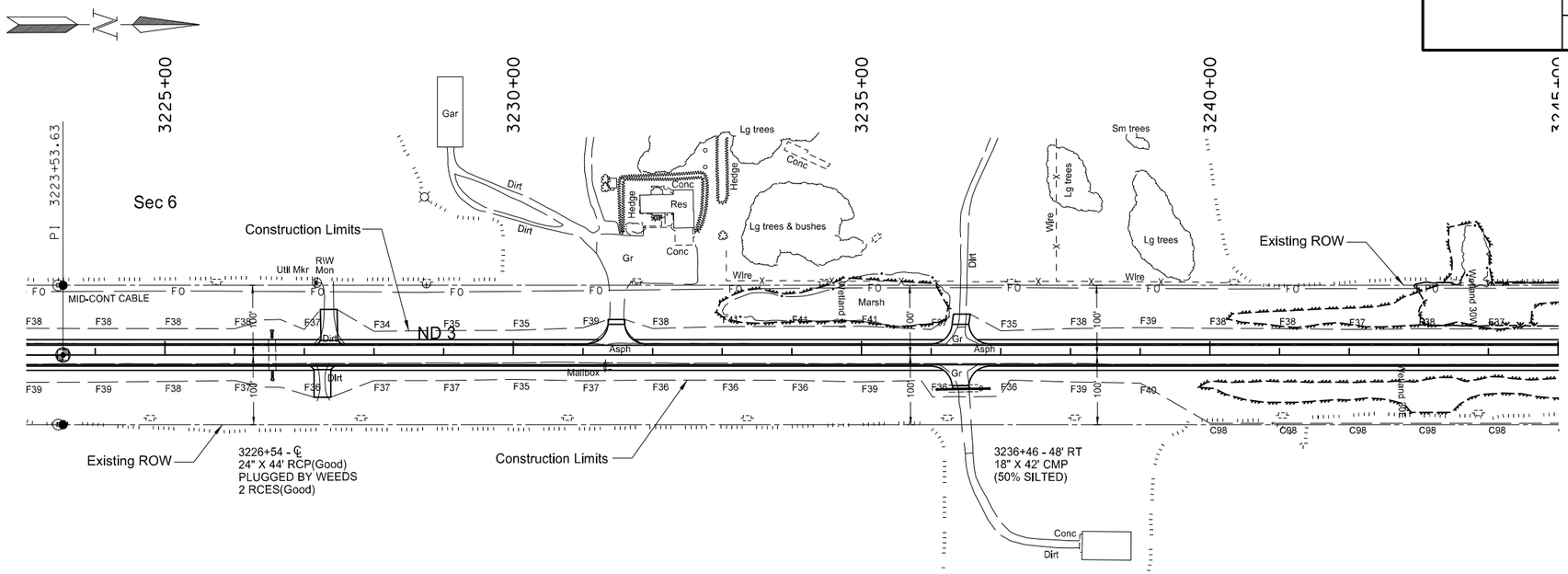
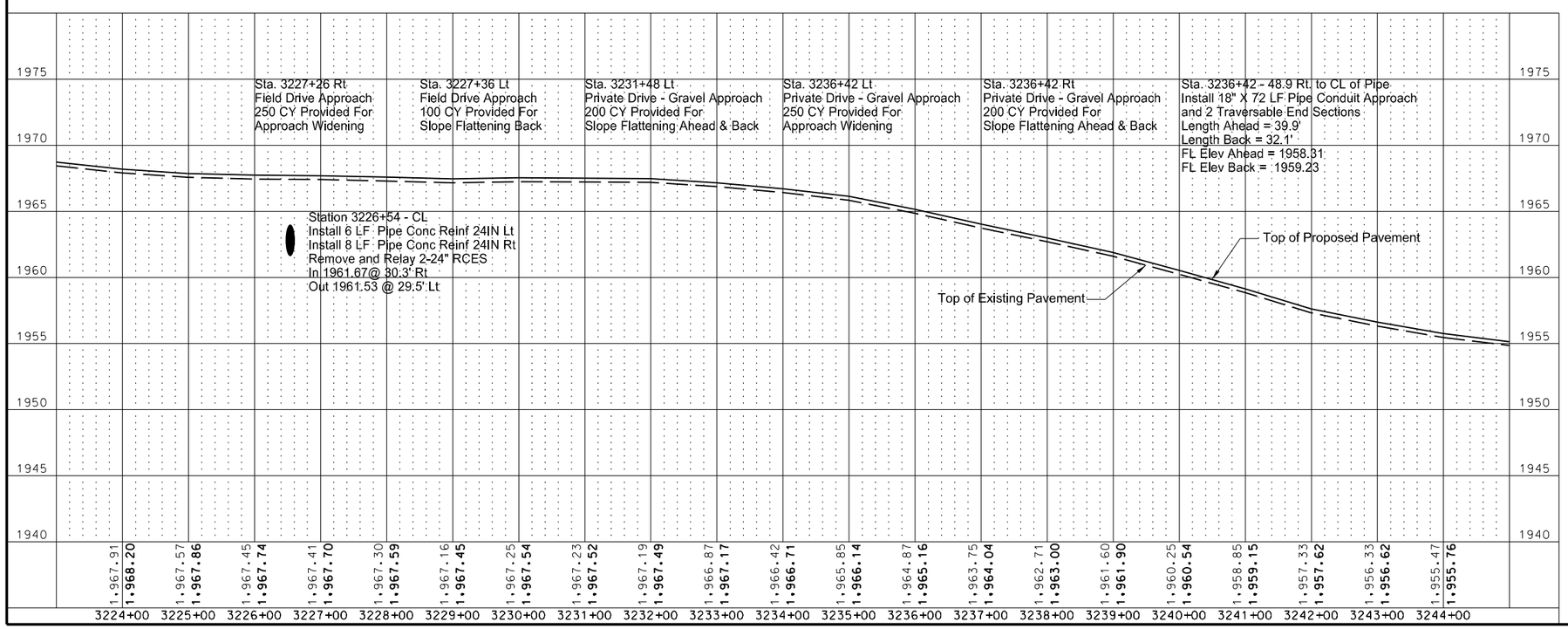
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	5



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES & SIZES		
		3236+42 Rt	42	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3226+54 ℄ - Lt	6	LF
		3226+54 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3236+42 Rt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3226+54 ℄ - Lt	1	EA
		3226+54 ℄ - Rt	1	EA



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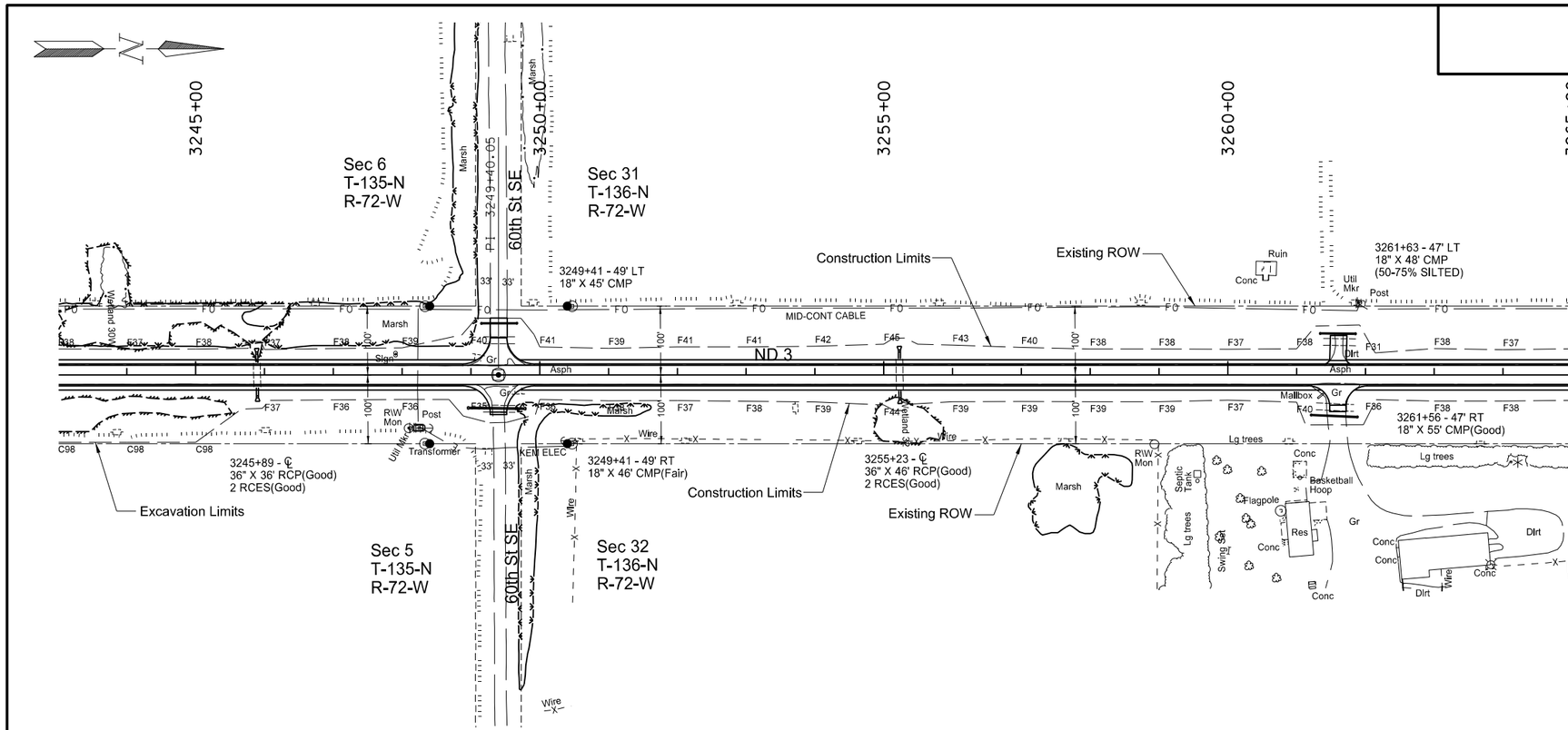
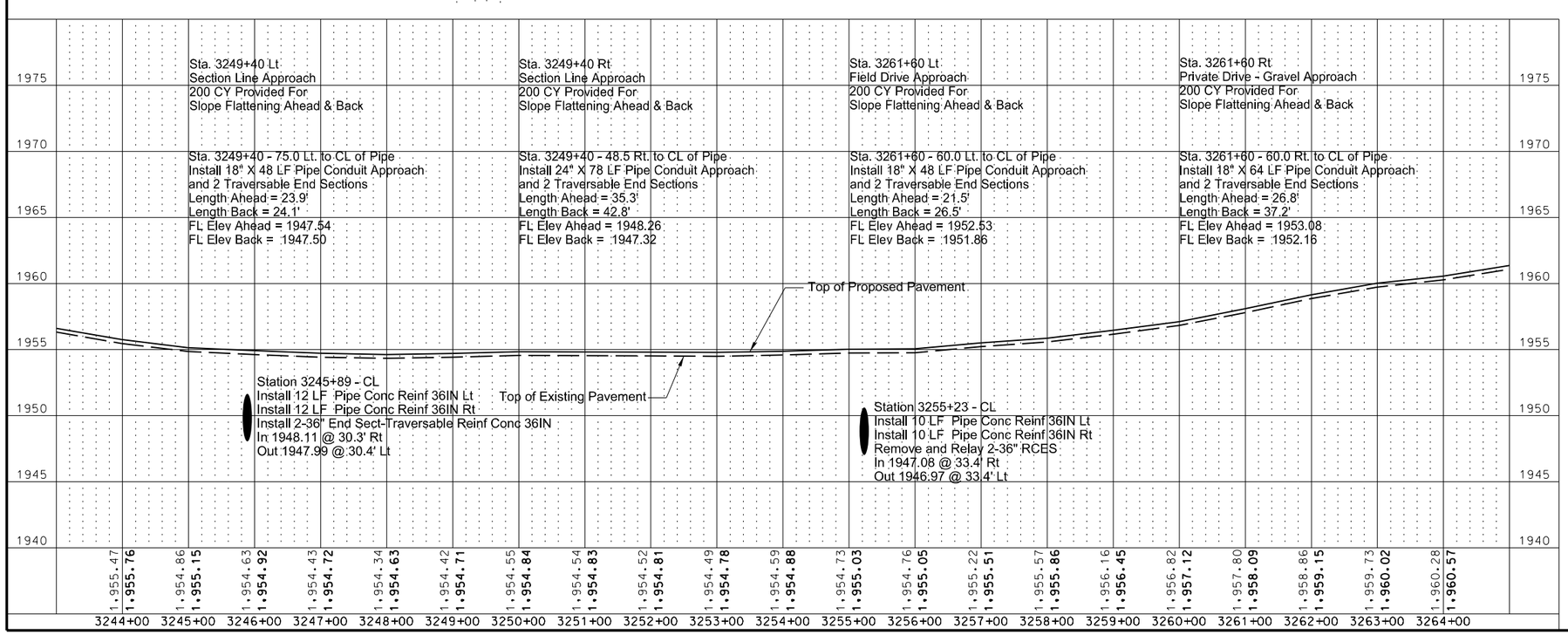
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	6



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3245+89 ℄ - Lt	1	EA
		3245+89 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES & SIZES		
		3249+40 Lt	45	LF
		3249+40 Rt	46	LF
		3261+60 Lt	48	LF
		3261+60 Rt	55	LF
714	0905	PIPE CONC REINF 36IN CL III		
		3245+89 ℄ - Lt	12	LF
		3245+89 ℄ - Rt	12	LF
		3255+23 ℄ - Lt	10	LF
		3255+23 ℄ - Rt	10	LF
714	3036	END SECT-TRAVERSABLE REINF. CONC. 36IN		
		3245+89 ℄ - Lt	1	EA
		3245+89 ℄ - Rt	1	EA
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3249+40 Lt	48	LF
		3261+60 Lt	48	LF
		3261+60 Rt	64	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3249+40 Rt	78	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3255+23 ℄ - Lt	1	EA
		3255+23 ℄ - Rt	1	EA



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Plan & Profile

ND 3

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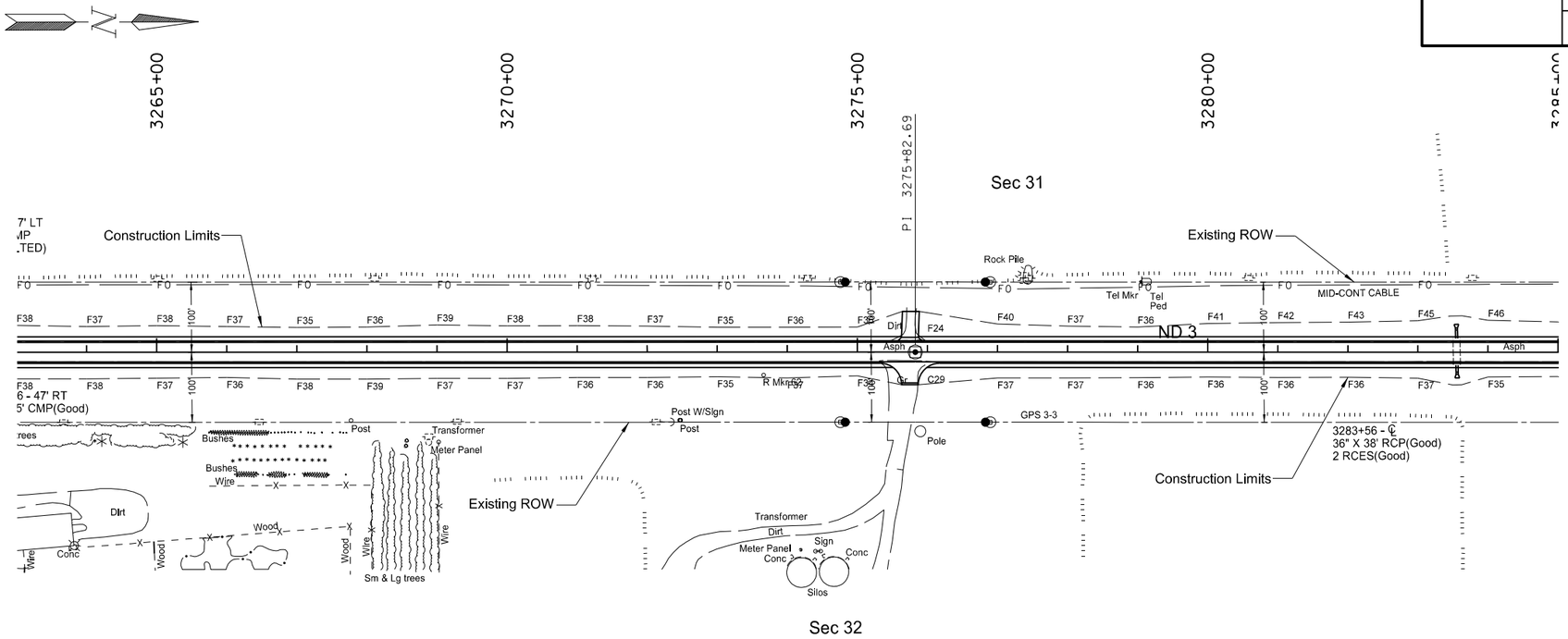
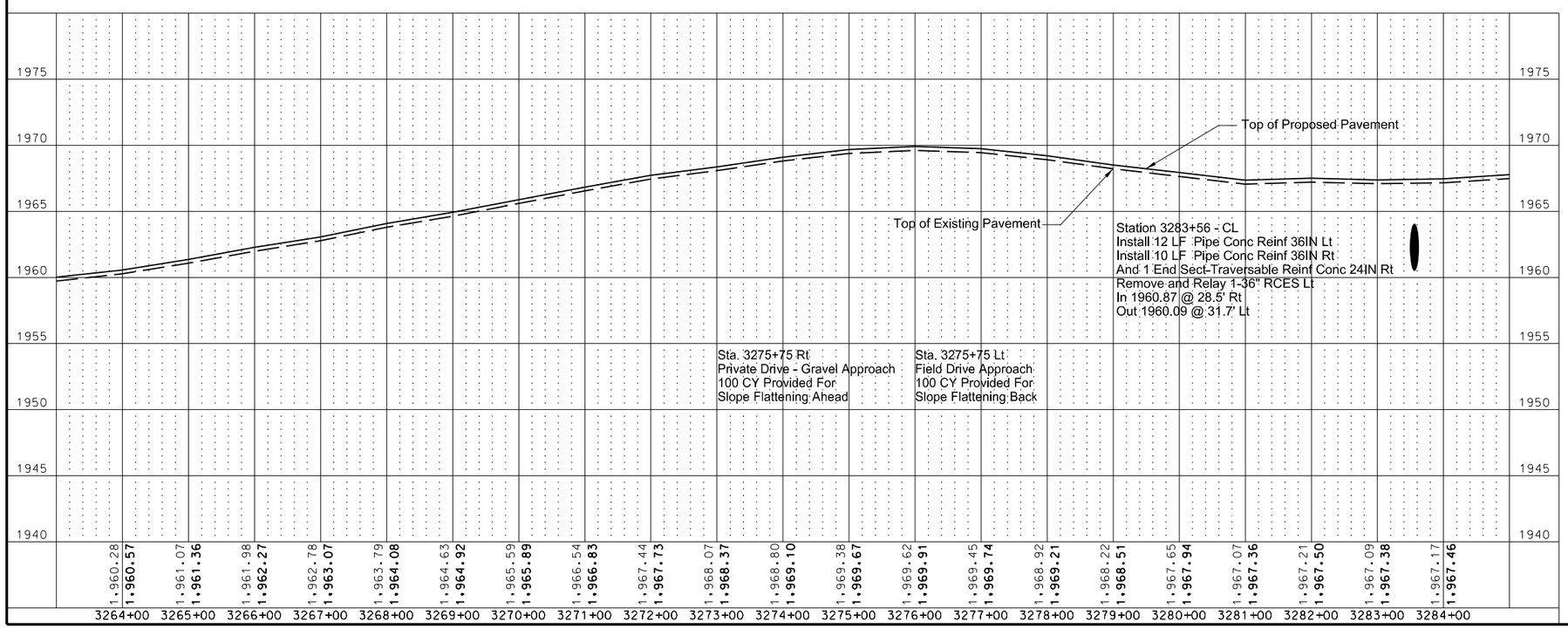
ND	NH-RSS-1-003(034)059	60	7



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3283+56 ℄ - Rt	1	EA
714	0905	PIPE CONC REINF 36IN CL III		
		3283+56 ℄ - Lt	12	LF
		3283+56 ℄ - Rt	10	LF
714	3036	END SECT-TRAVERSABLE REINF. CONC. 36IN		
		3283+56 ℄ - Rt	1	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3283+56 ℄ - Lt	1	EA



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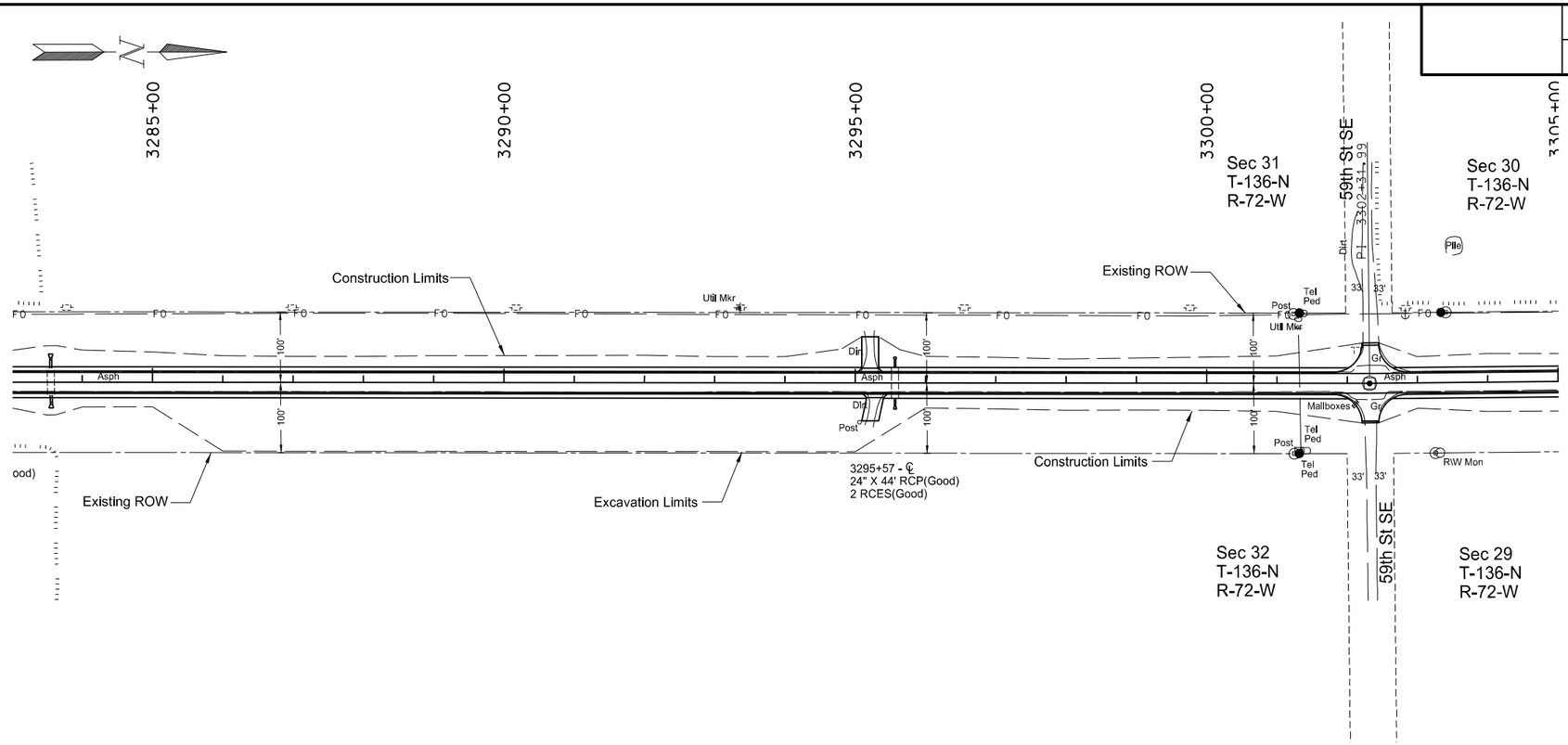
Plan & Profile

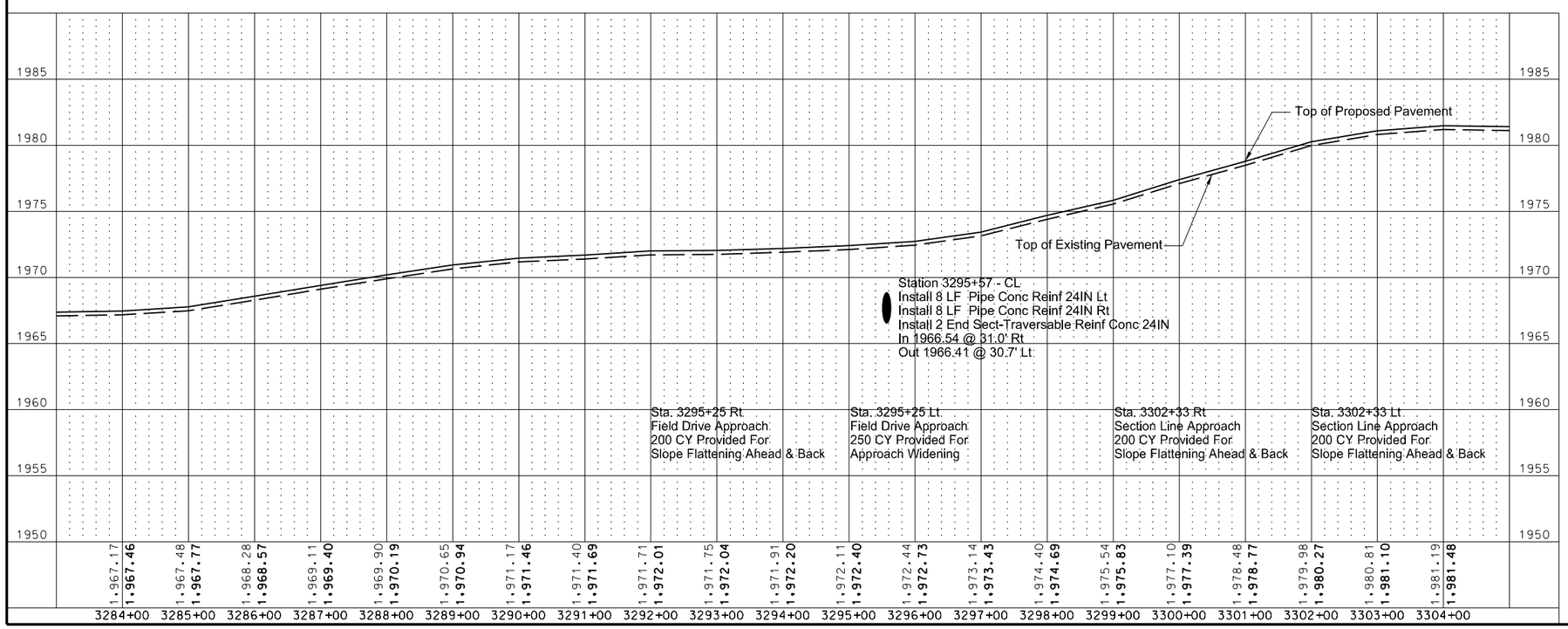
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	8



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3295+57 ℄ - Lt	1	EA
		3295+57 ℄ - Rt	1	EA
714	0615	PIPE CONC REINF 24IN CL III		
		3295+57 ℄ - Lt	8	LF
		3295+57 ℄ - Rt	8	LF
714	3023	END SECT-TRAVERSABLE REINF. CONC. 24IN		
		3295+57 ℄ - Lt	1	EA
		3295+57 ℄ - Rt	1	EA



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Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

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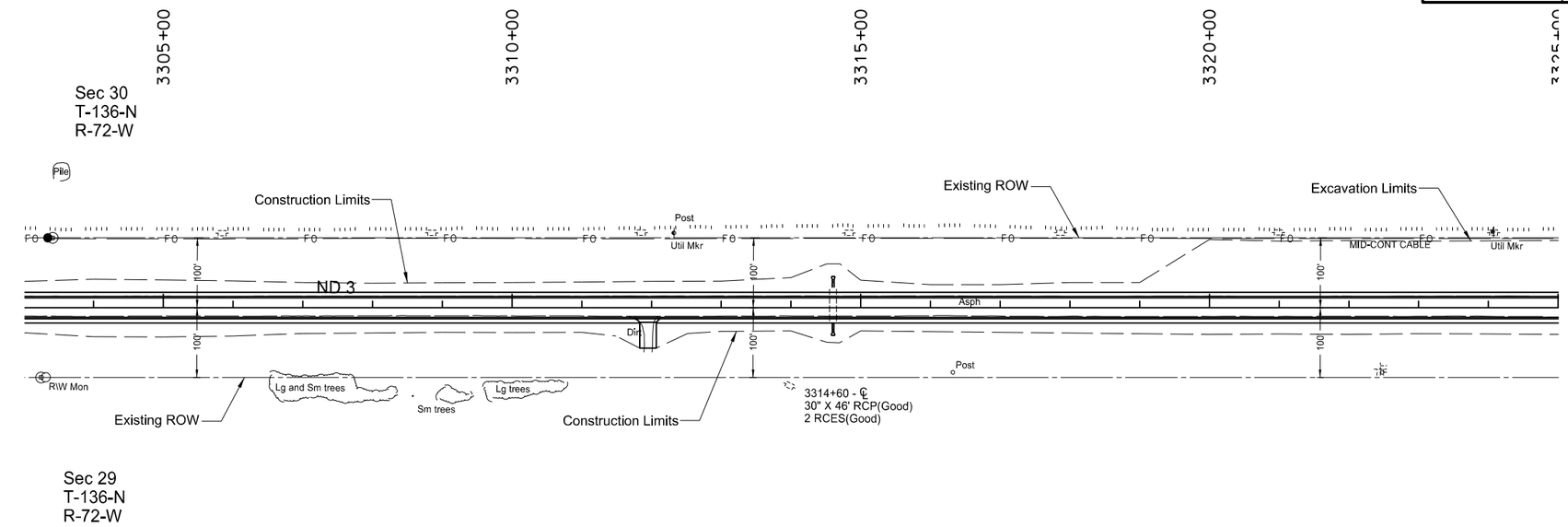
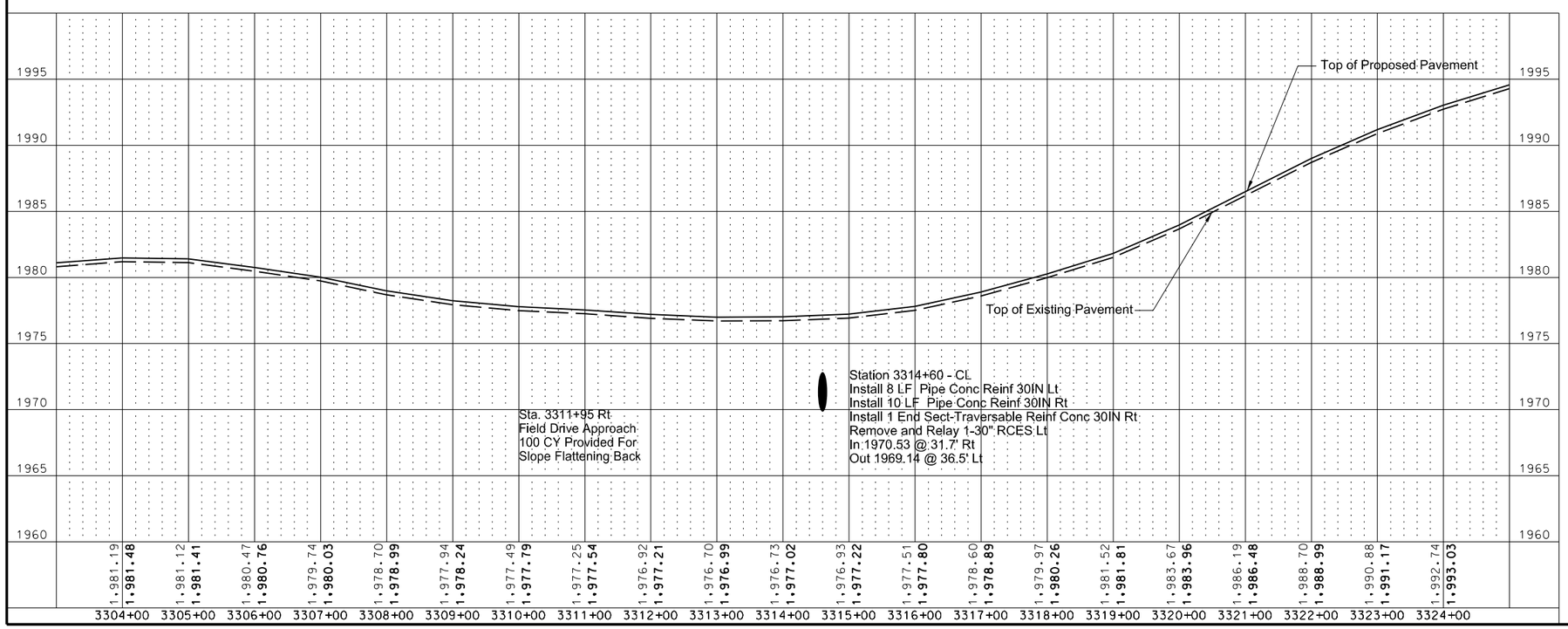
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	9



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3314+60 ℄ - Rt	1	EA
714	0820	PIPE CONC REINF 30IN CL III		
		3314+60 ℄ - Lt	8	LF
		3314+60 ℄ - Rt	10	LF
714	3033	END SECT-TRAVERSABLE REINF. CONC. 30IN		
		3314+60 ℄ - Rt	1	EA
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3314+60 ℄ - Lt	1	EA



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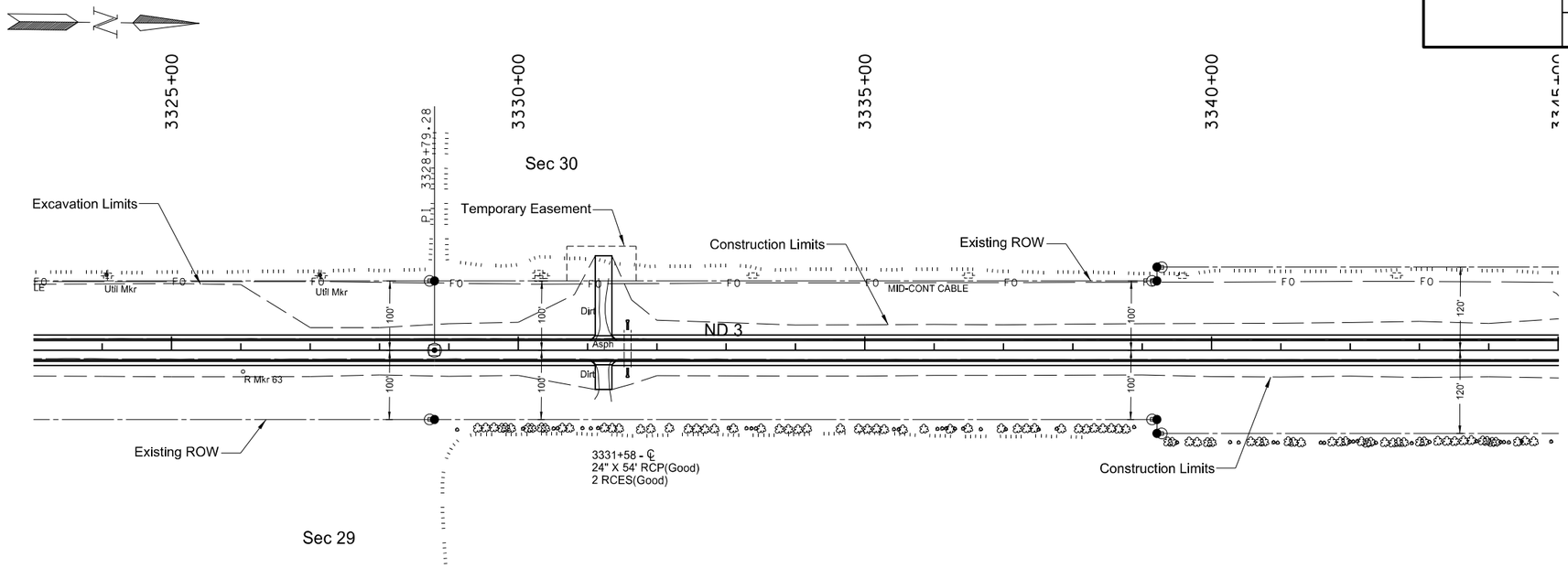
Plan & Profile

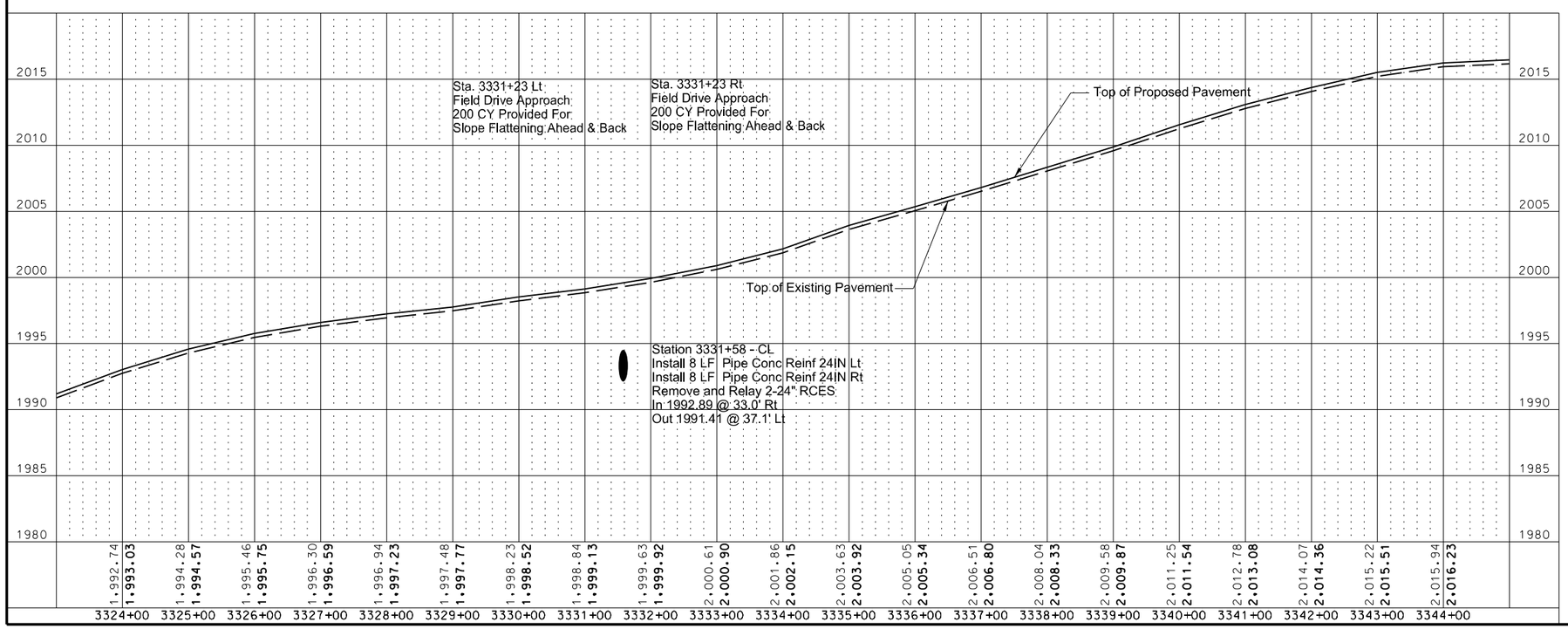
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	10



SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		3331+58 ℄ - Lt	8	LF
		3331+58 ℄ - Rt	8	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3331+58 ℄ - Lt	1	EA
		3331+58 ℄ - Rt	1	EA



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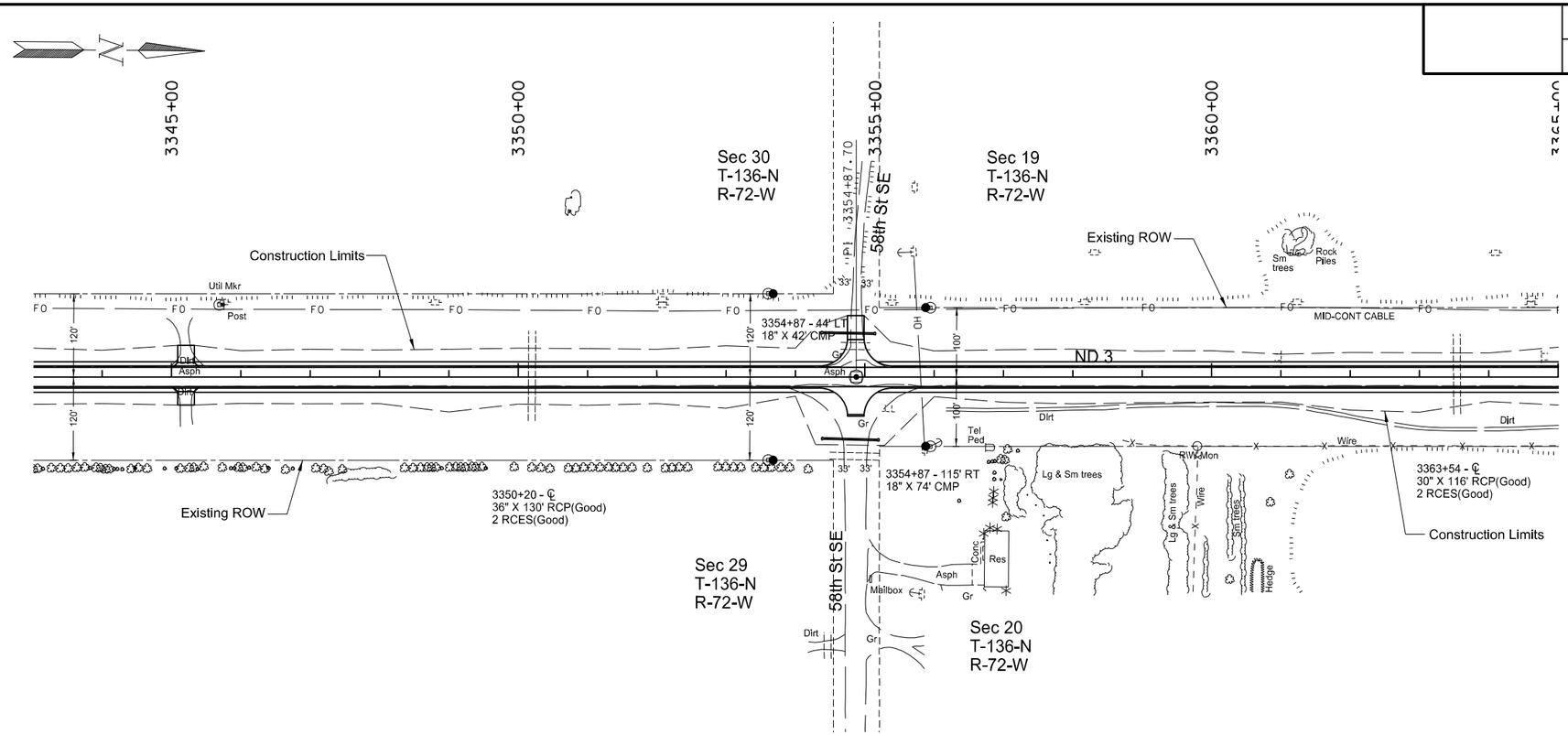
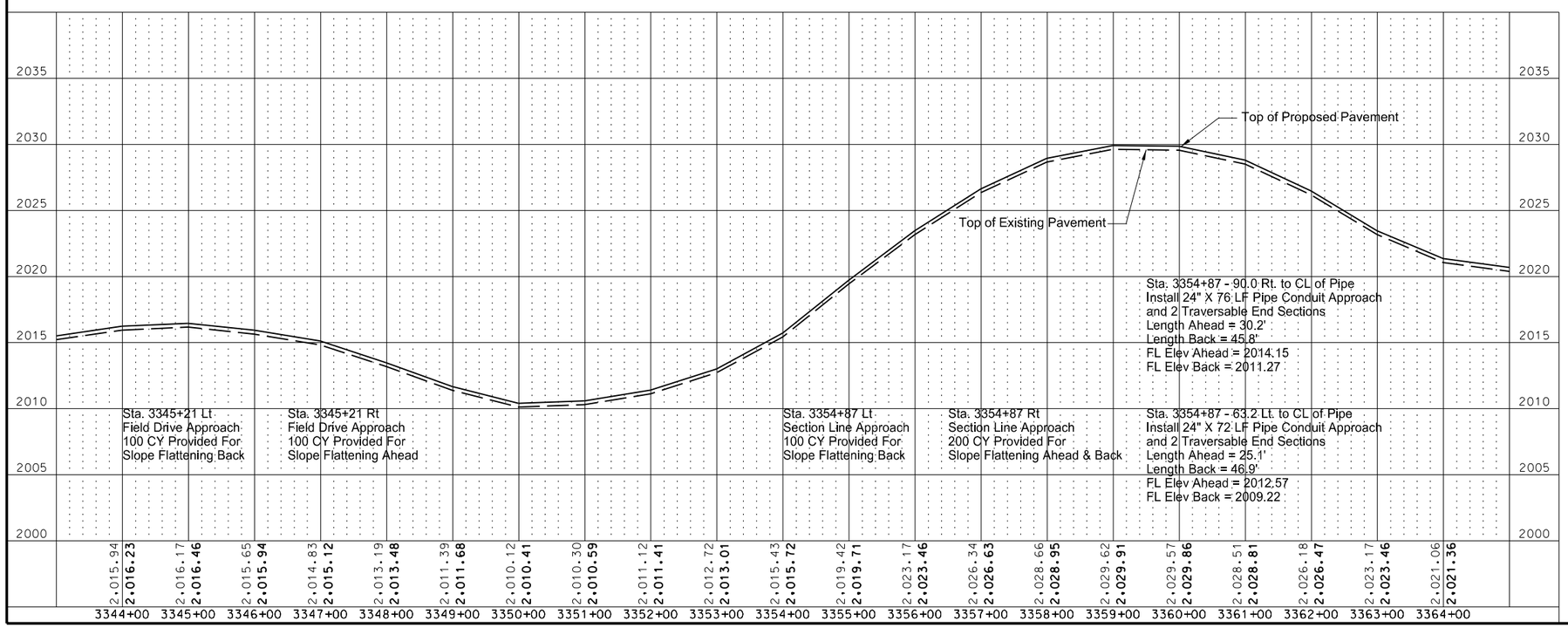
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	11



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES & SIZES		
		3354+87 Lt	42	LF
		3354+87 Rt	74	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3354+87 Lt	72	LF
		3354+87 Rt	76	LF



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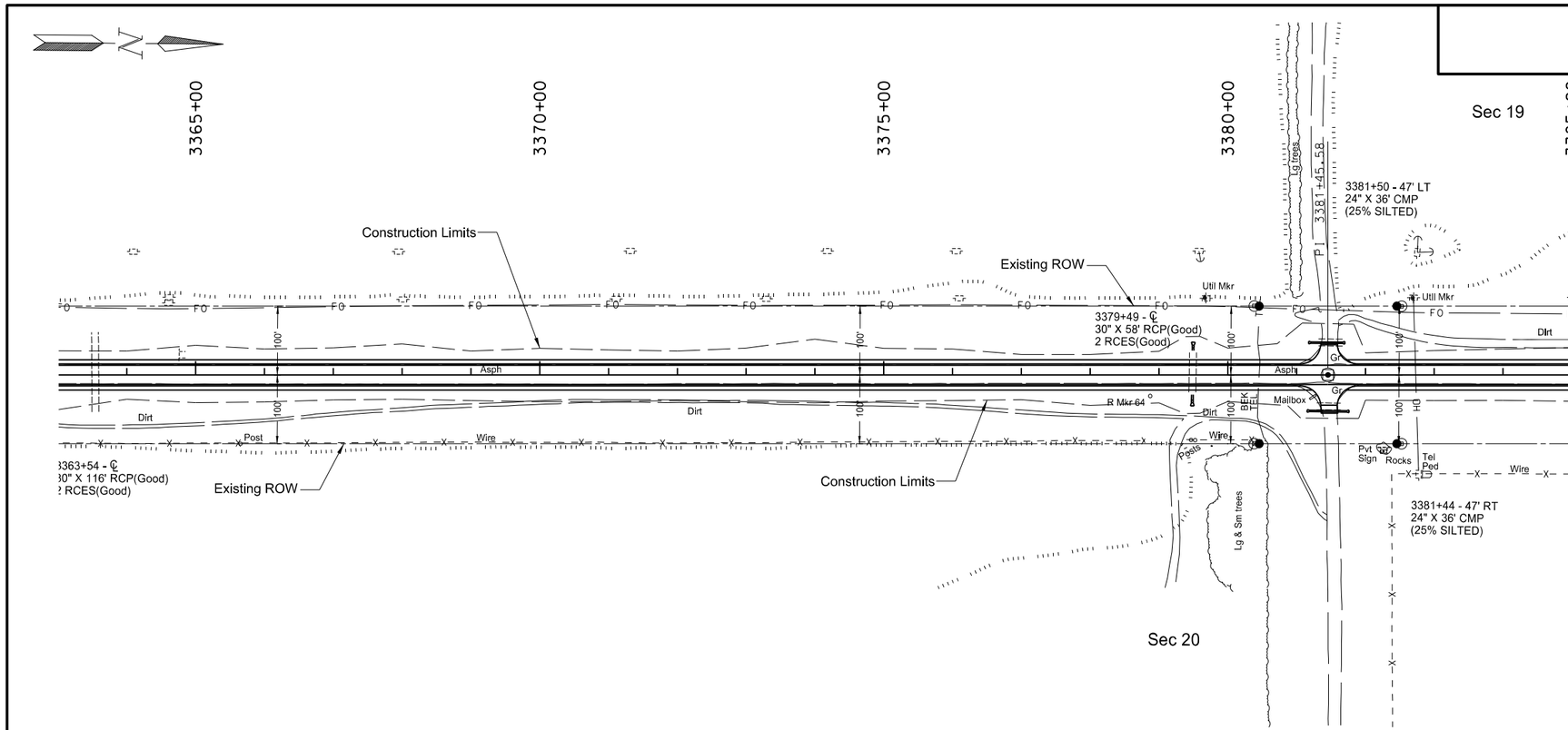
Plan & Profile

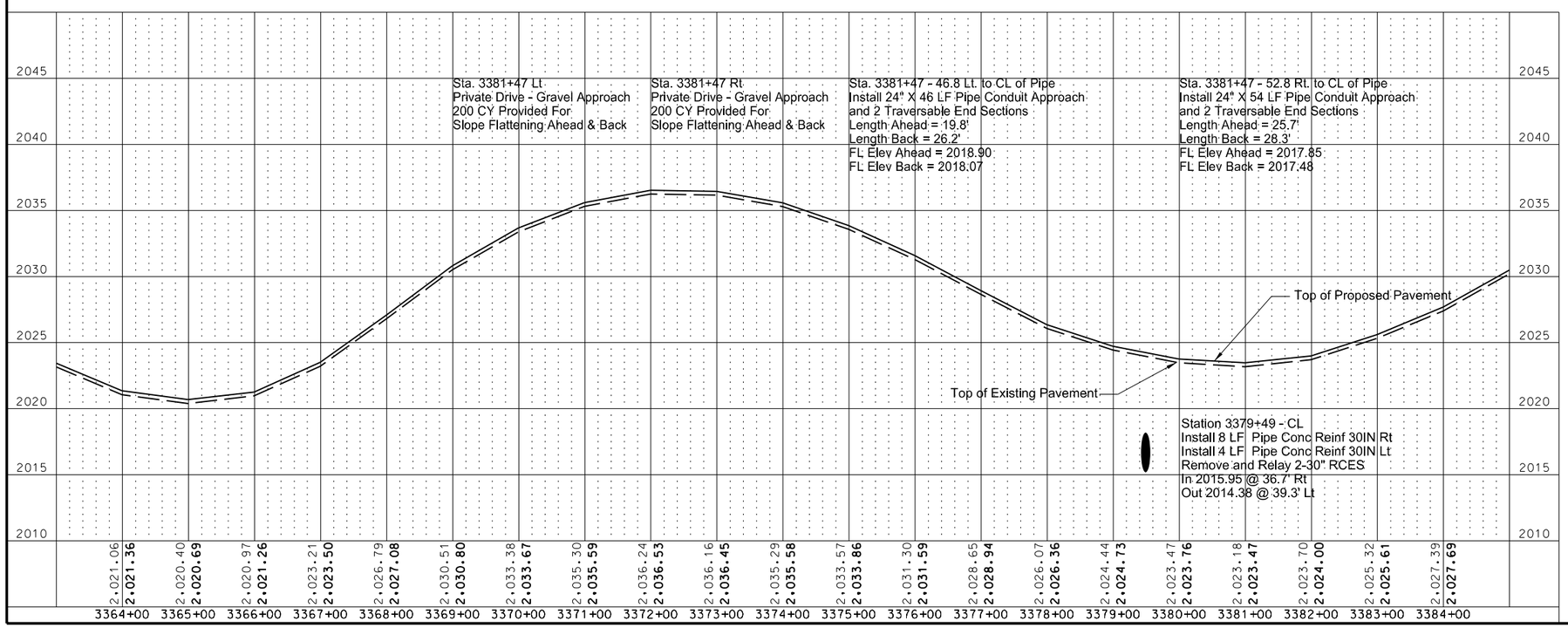
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	12



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3381+47 Lt	36	LF
		3381+44 Rt	36	LF
714	0820	PIPE CONC REINF 30IN CL III		
		3379+49 ℄ - Lt	4	LF
		3379+49 ℄ - Rt	8	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3381+47 Lt	46	LF
		3381+47 Rt	54	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3379+49 ℄ - Lt	1	EA
		3379+49 ℄ - Rt	1	EA



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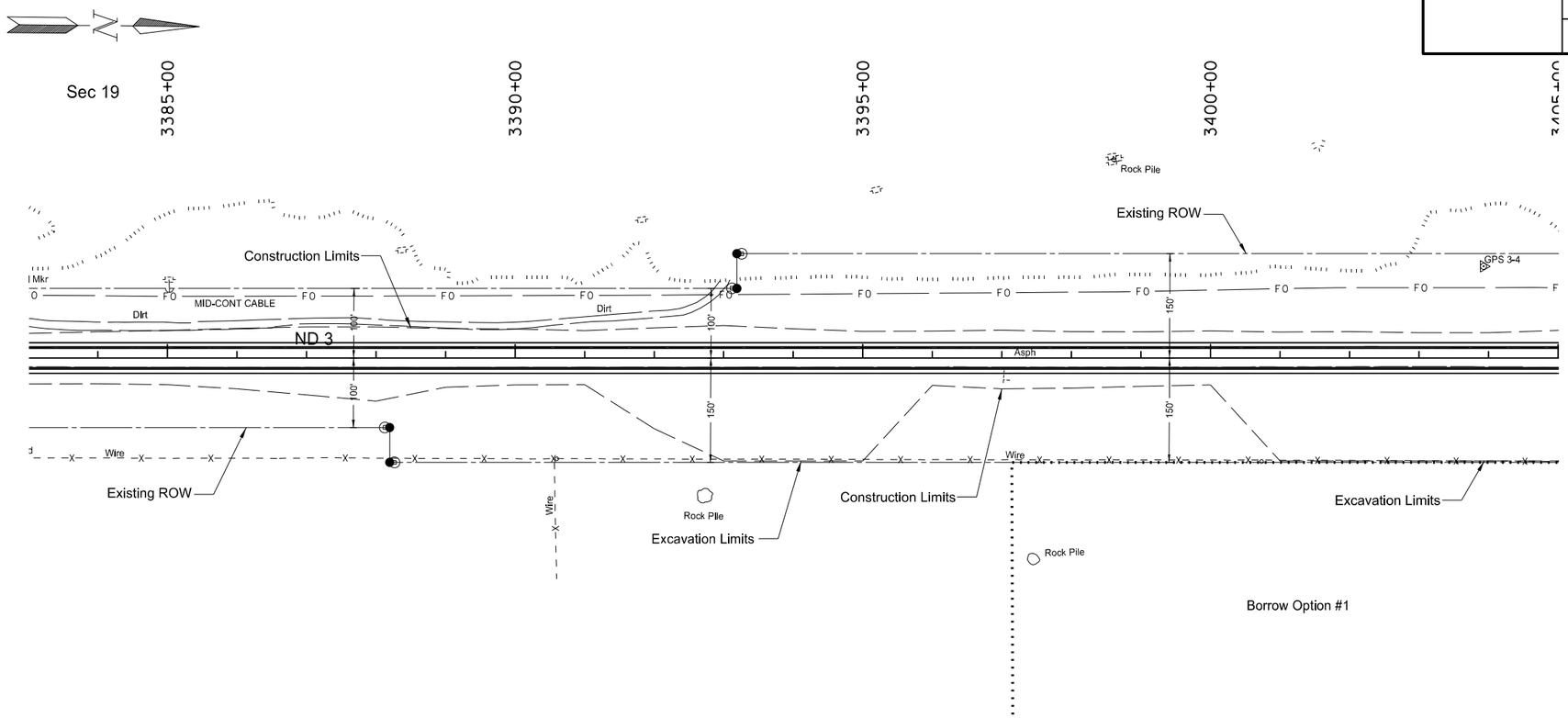
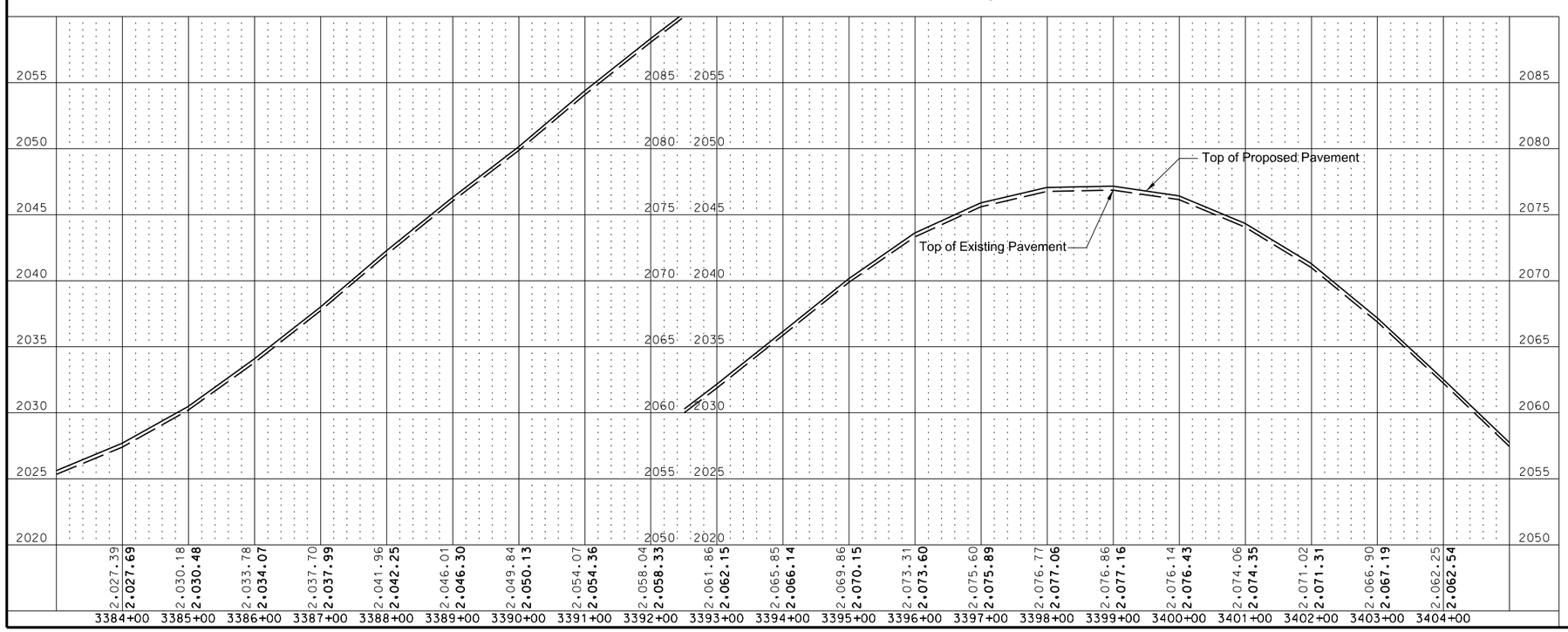
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	13





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Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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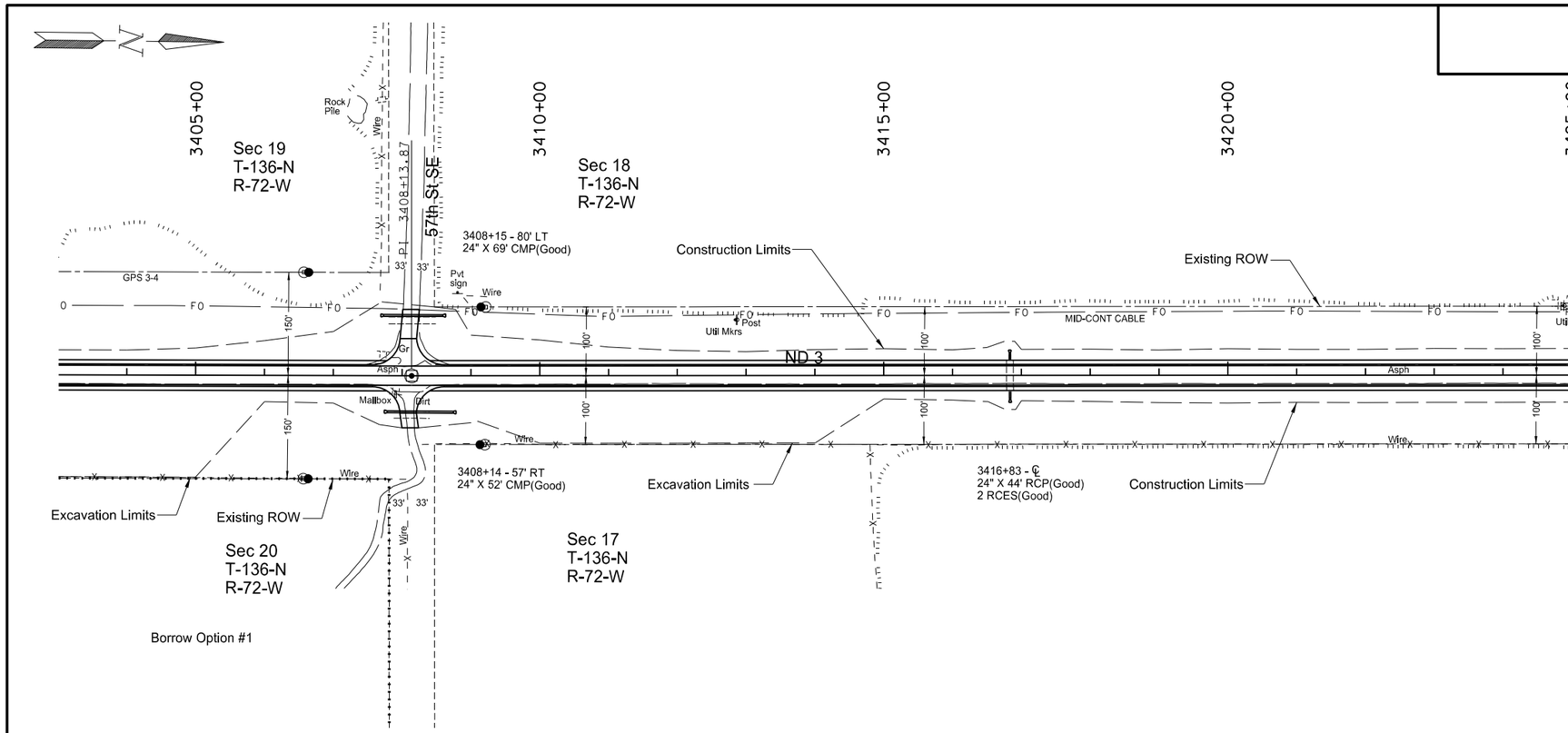
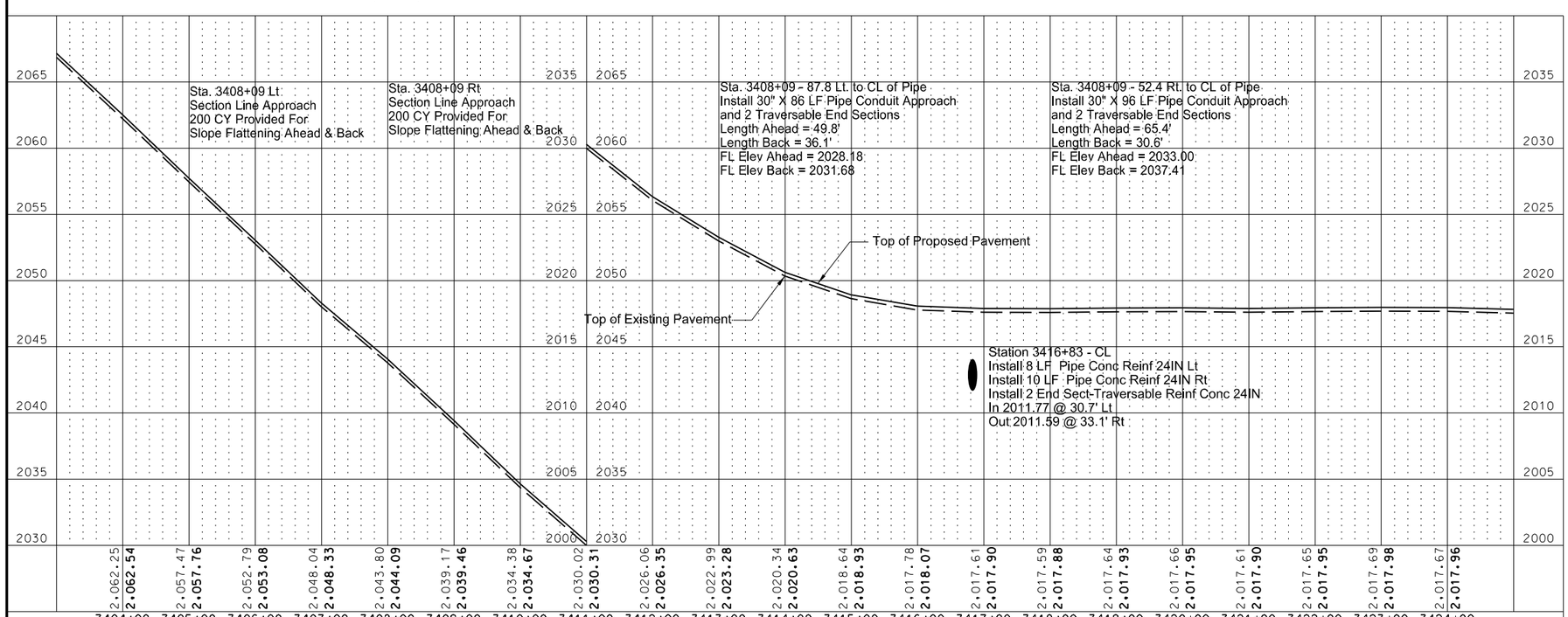


SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVALOF END SECTION-ALL TYPES & SIZES		
		3416+83 ℄ - Lt	1	EA
		3416+83 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3408+15 Lt	69	LF
		3408+14 Rt	52	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3416+83 ℄ - Lt	8	LF
		3416+83 ℄ - Rt	10	LF
714	3023	END SECT-TRAVERSABLE REINF. CONC. 24IN		
		3416+83 ℄ - Lt	1	EA
		3416+83 ℄ - Rt	1	EA
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3408+09 Lt	86	LF
		3408+09 Rt	96	LF



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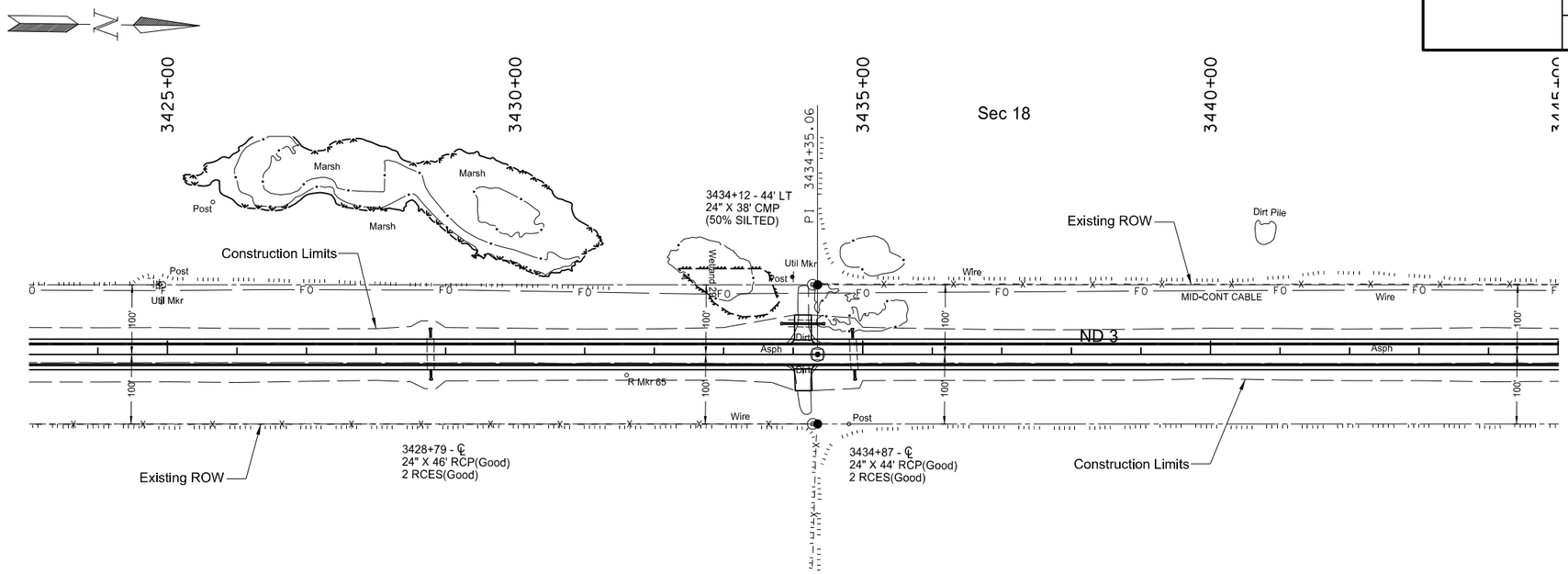
Plan & Profile

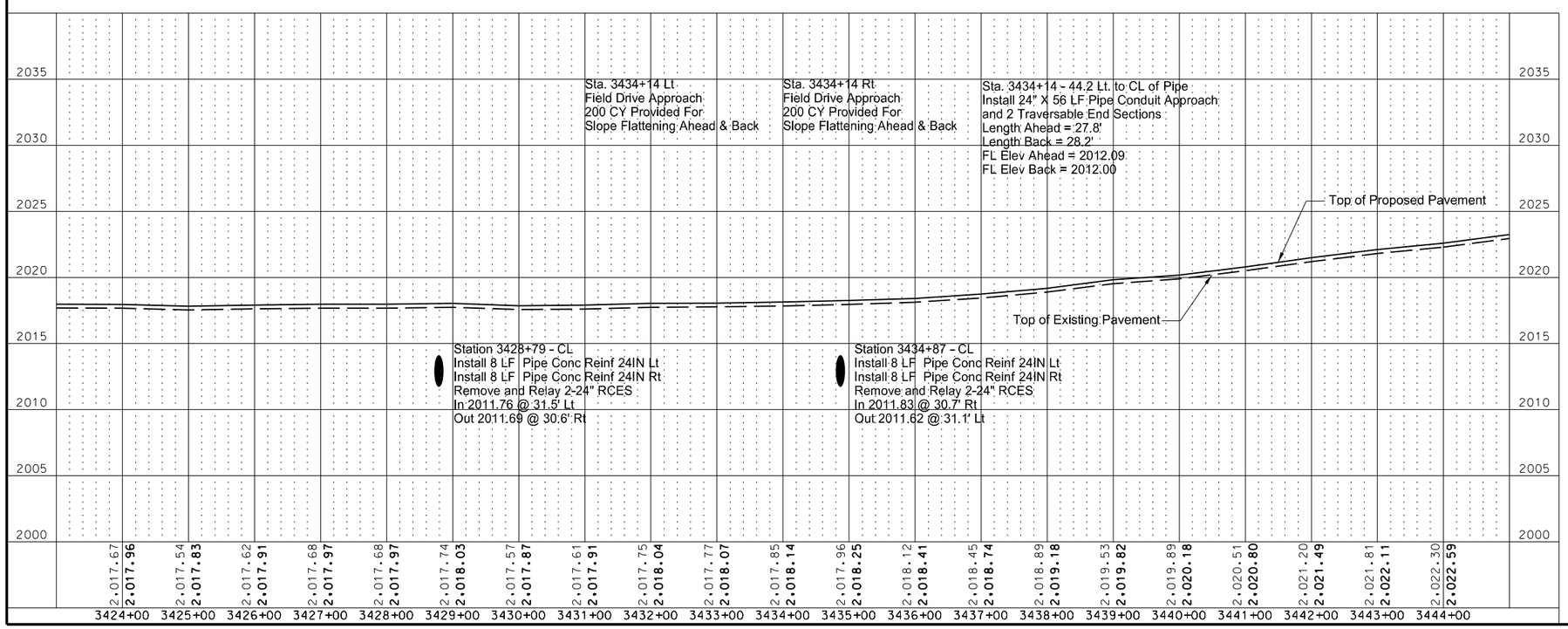
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	15



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3434+12 Lt	38	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3428+79 ℄ - Lt	8	LF
		3428+79 ℄ - Rt	8	LF
		3434+87 ℄ - Lt	8	LF
		3434+87 ℄ - Rt	8	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3434+14 Lt	56	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3428+79 ℄ - Lt	1	EA
		3428+79 ℄ - Rt	1	EA
		3434+87 ℄ - Lt	1	EA
		3434+87 ℄ - Rt	1	EA



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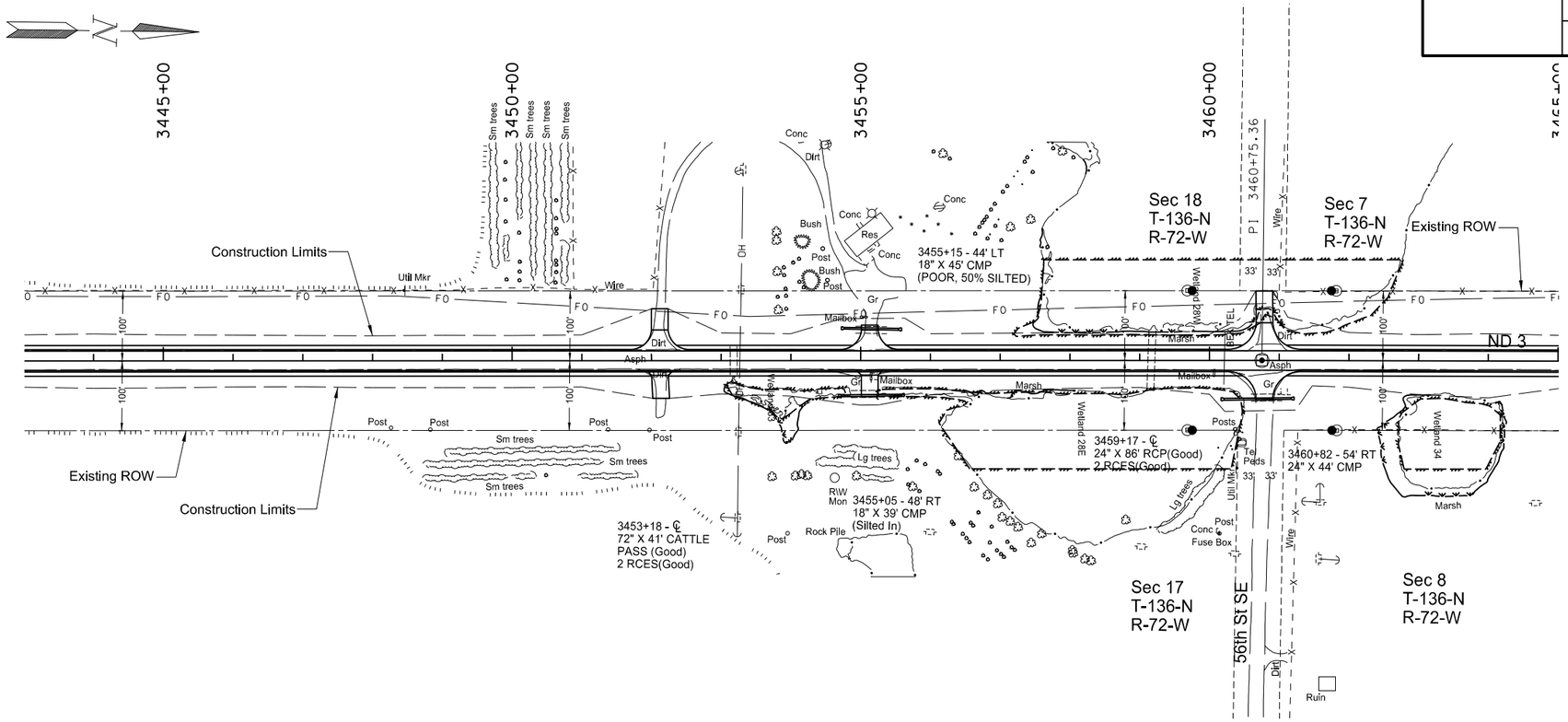
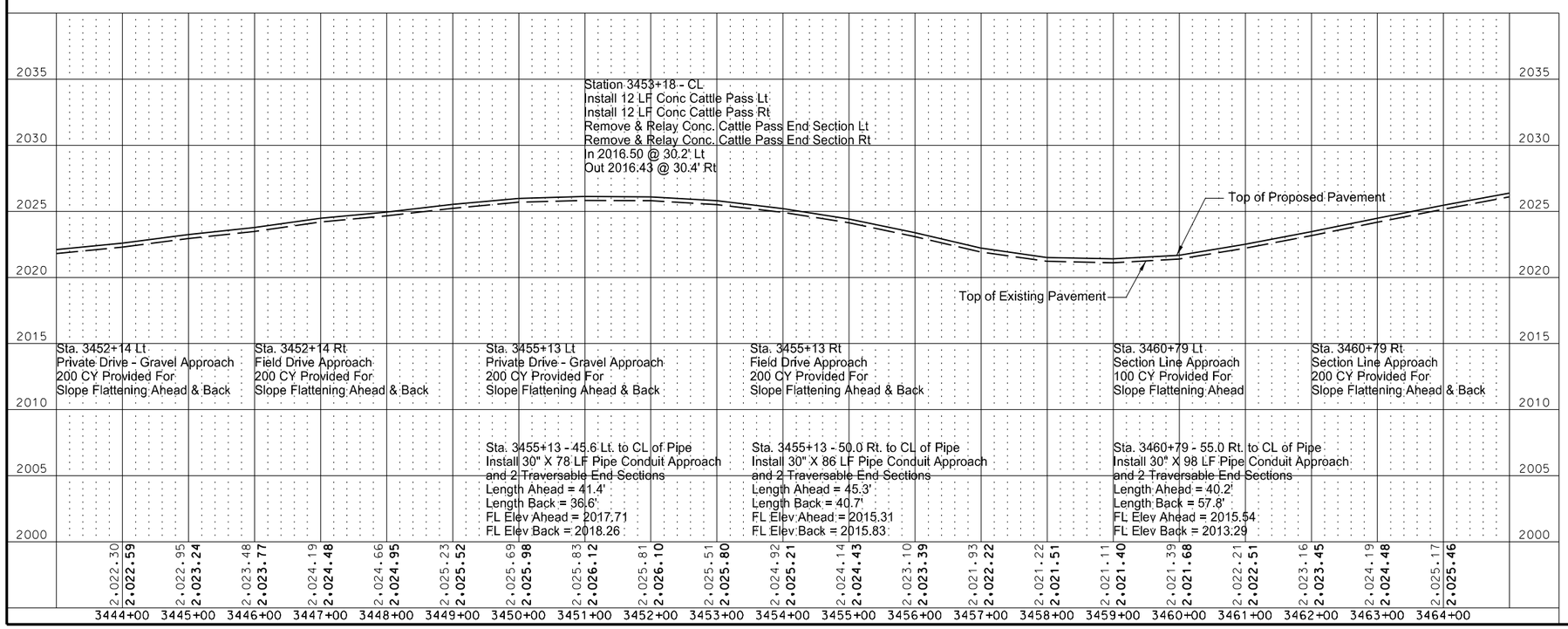
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	16



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3455+15 Lt	45	LF
		3455+05 Rt	39	LF
		3460+82 Rt	44	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3455+13 Lt	78	LF
		3455+13 Rt	86	LF
		3460+79 Rt	98	LF
714	9200	CATTLE PASS CONC INTERMED SECTION		
		3453+18 ℄ - Lt	12	LF
		3453+18 ℄ - Rt	12	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION		
		3453+18 ℄ - Lt	1	EA
		3453+18 ℄ - Rt	1	EA



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ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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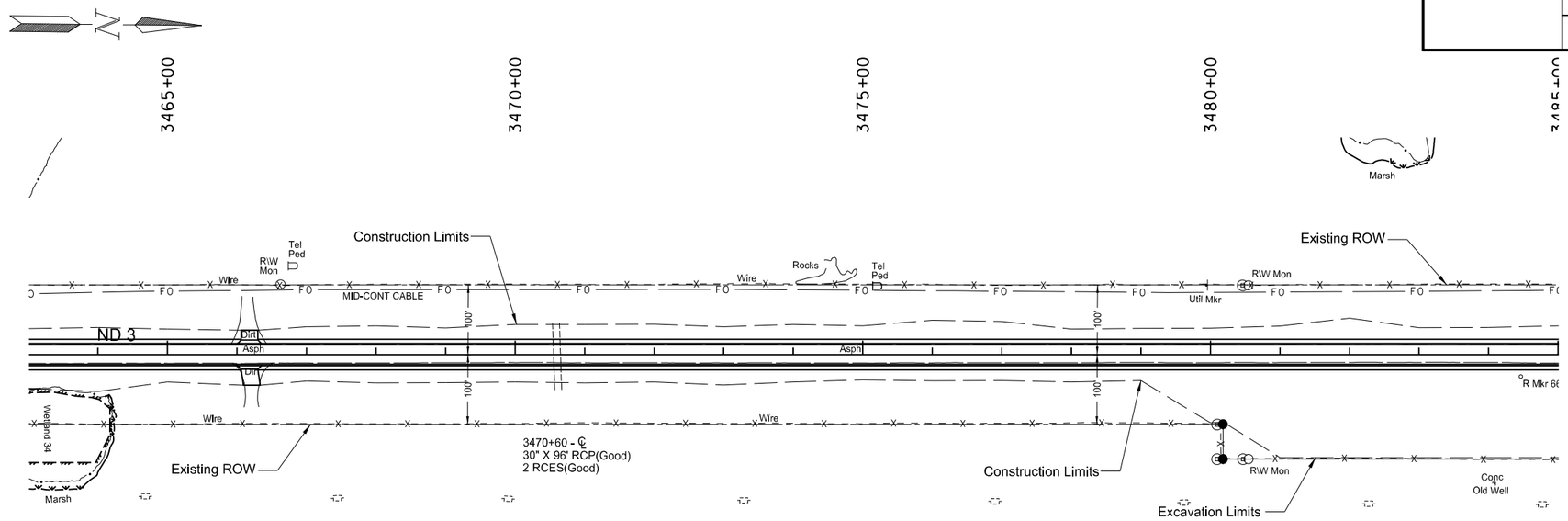

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136-N
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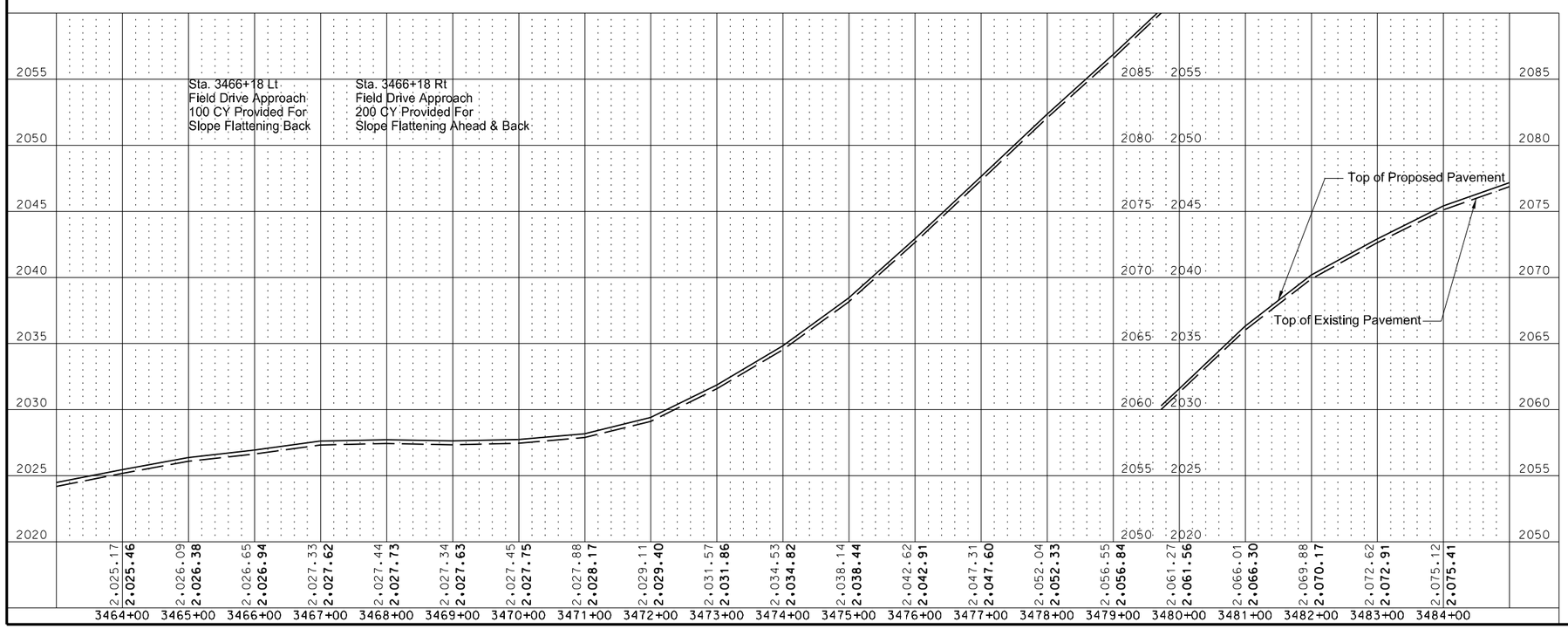

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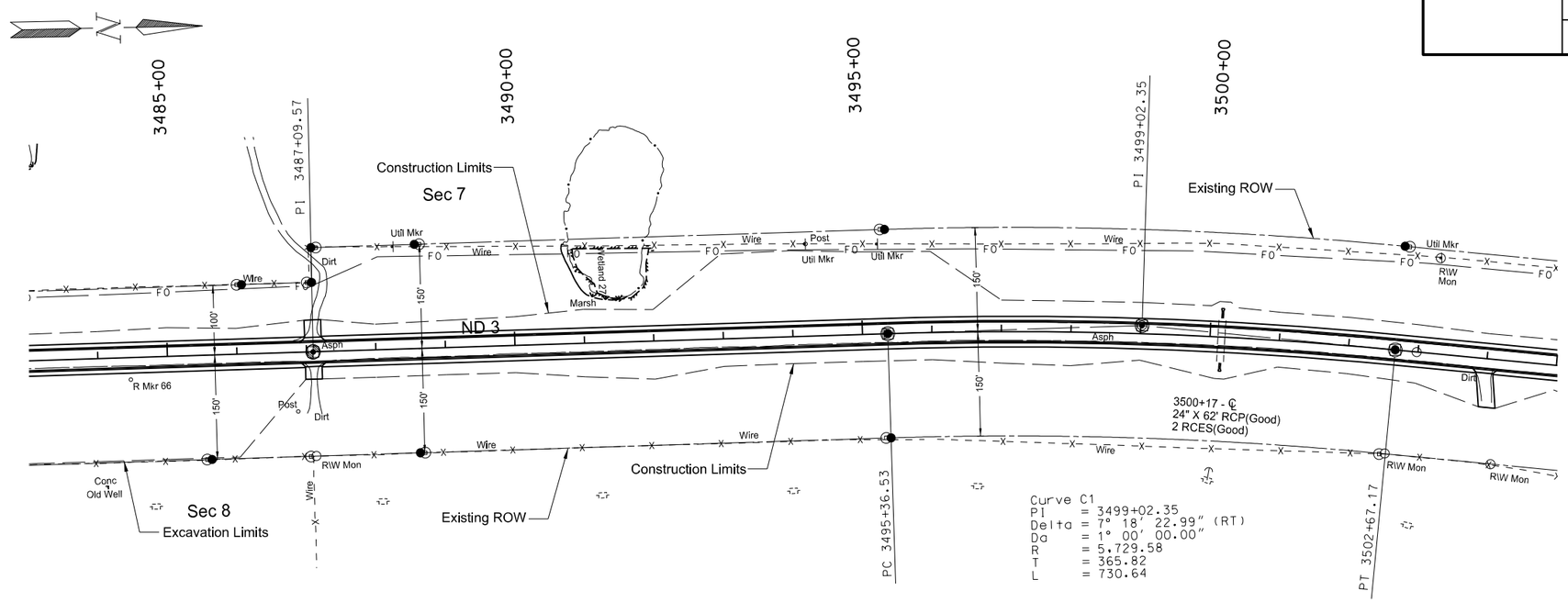
Plan & Profile

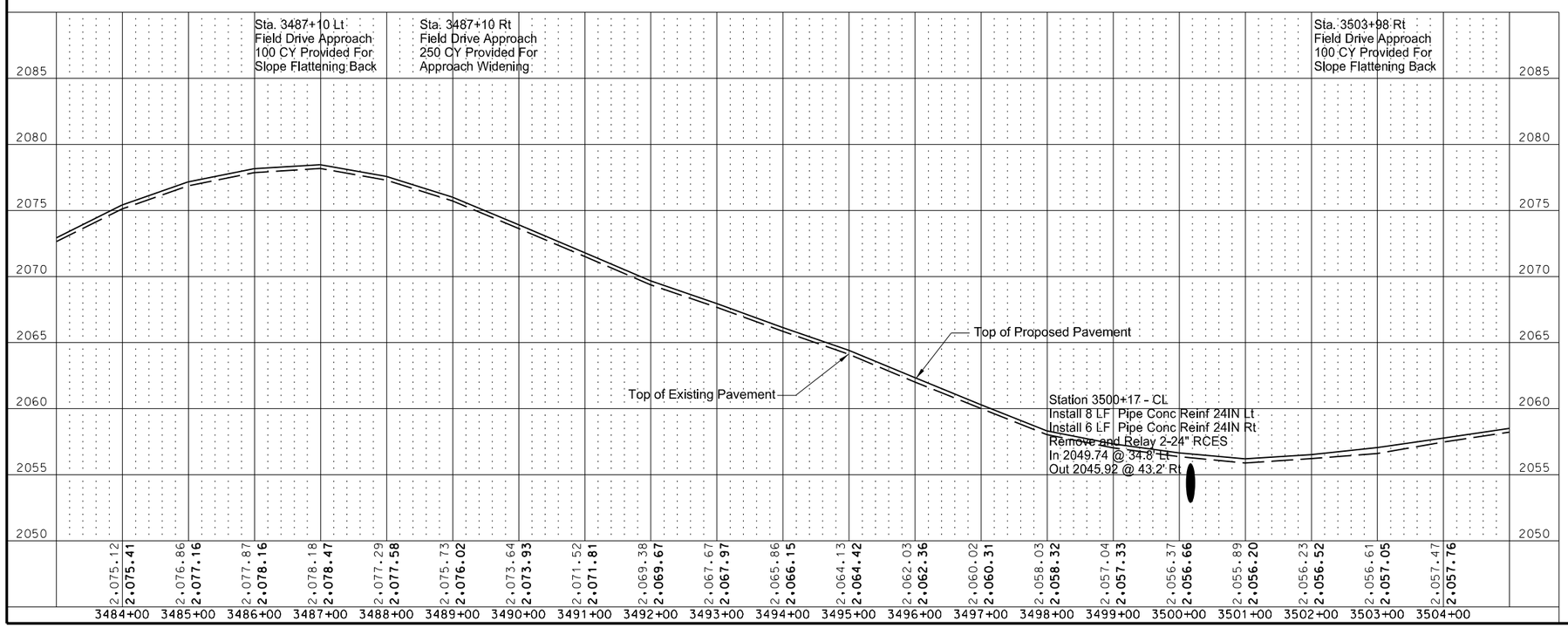
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	18

SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		3500+17 ℄ - Lt	8	LF
		3500+17 ℄ - Rt	6	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3500+17 ℄ - Lt	1	EA
		3500+17 ℄ - Rt	1	EA





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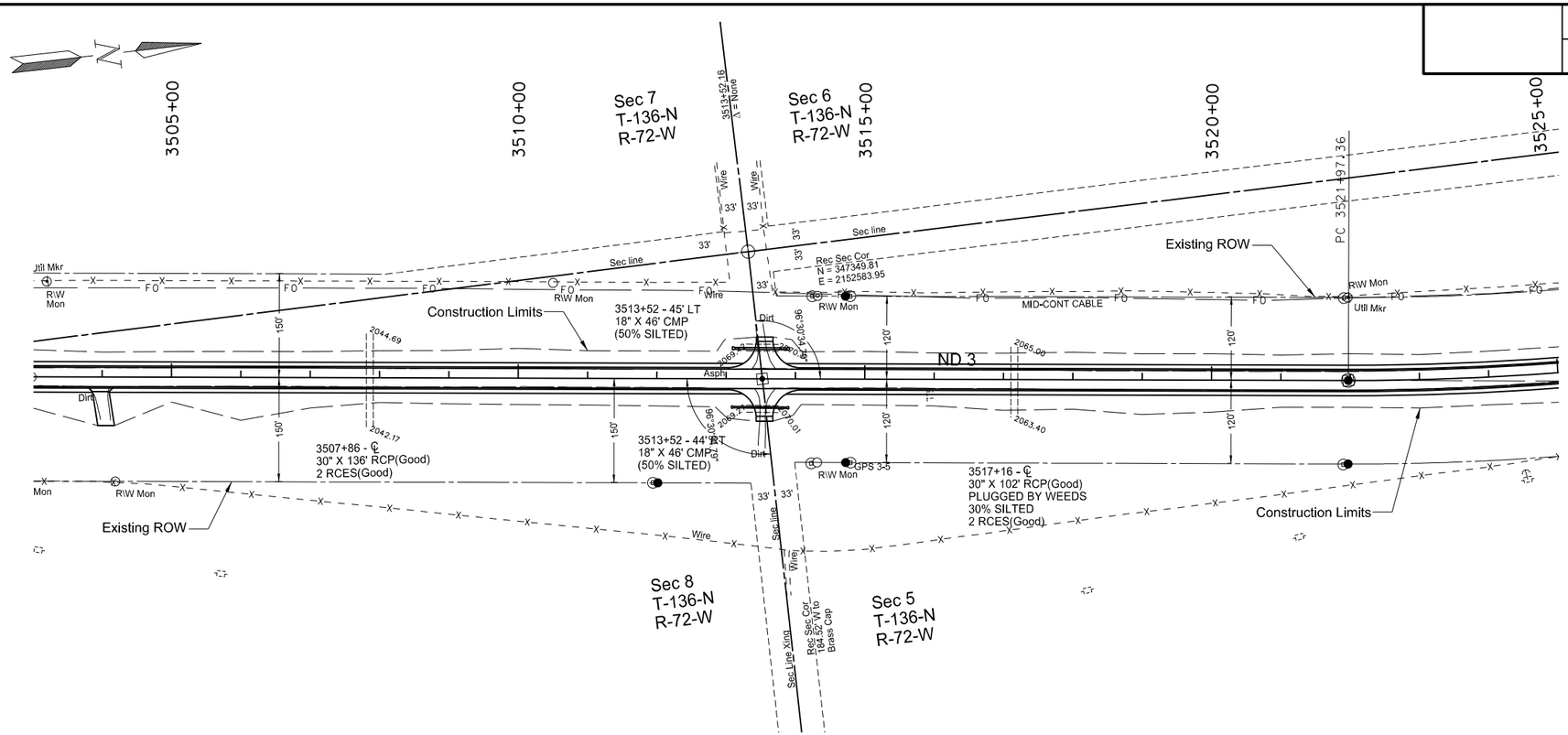
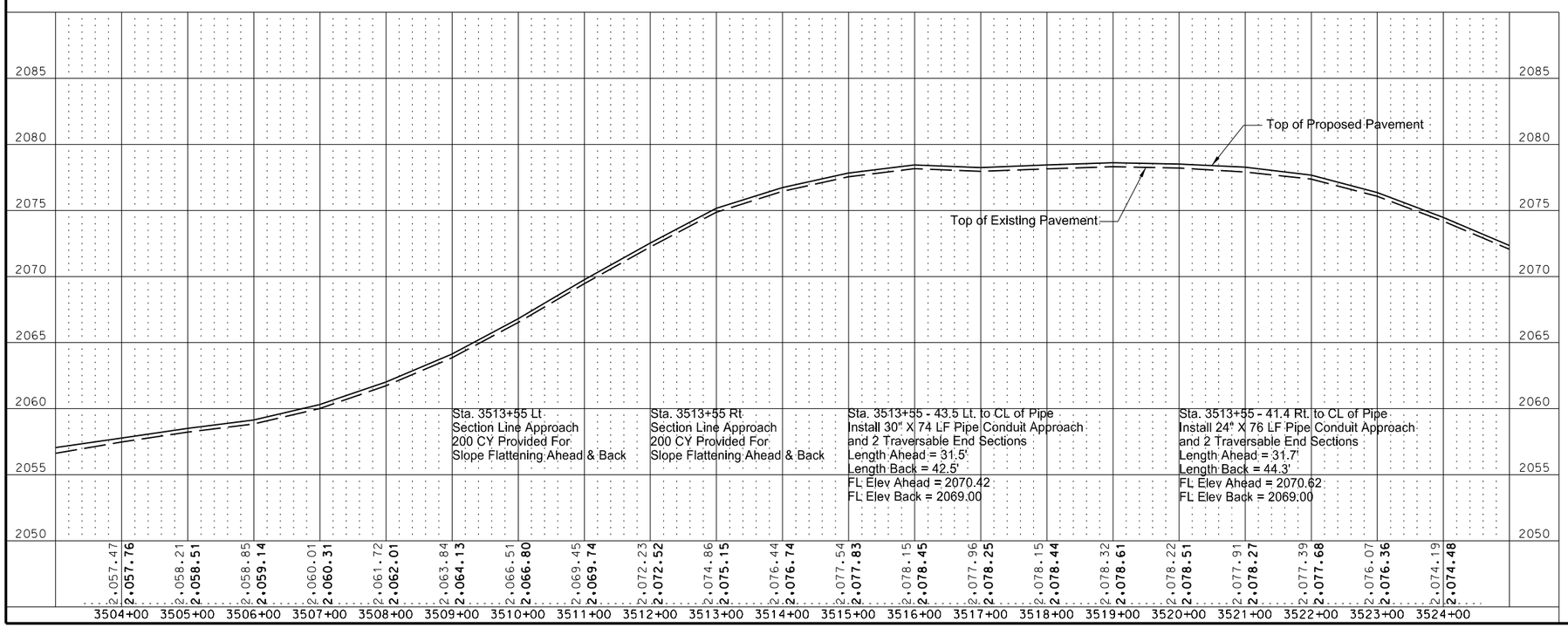
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	19



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3513+52 Lt	46	LF
		3513+52 Rt	46	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3513+55 Rt	76	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3513+55 Lt	74	LF



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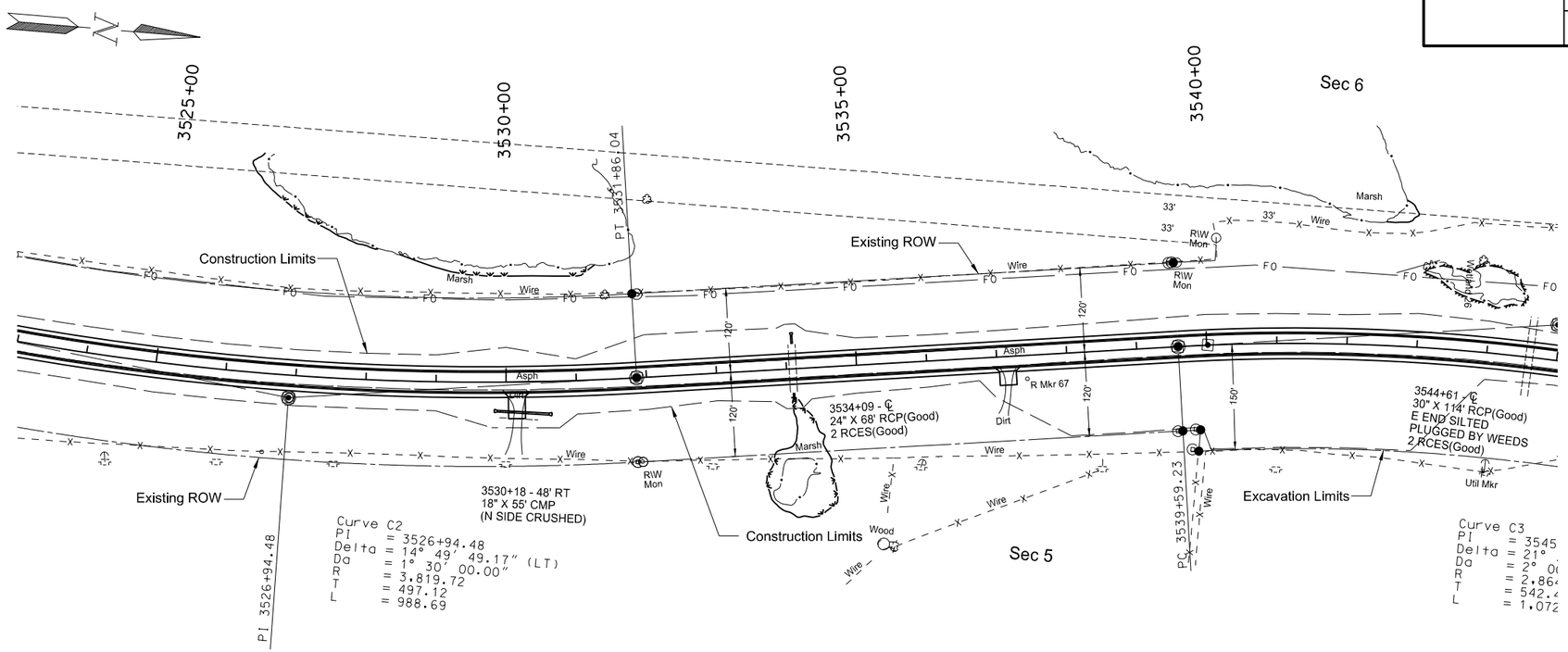
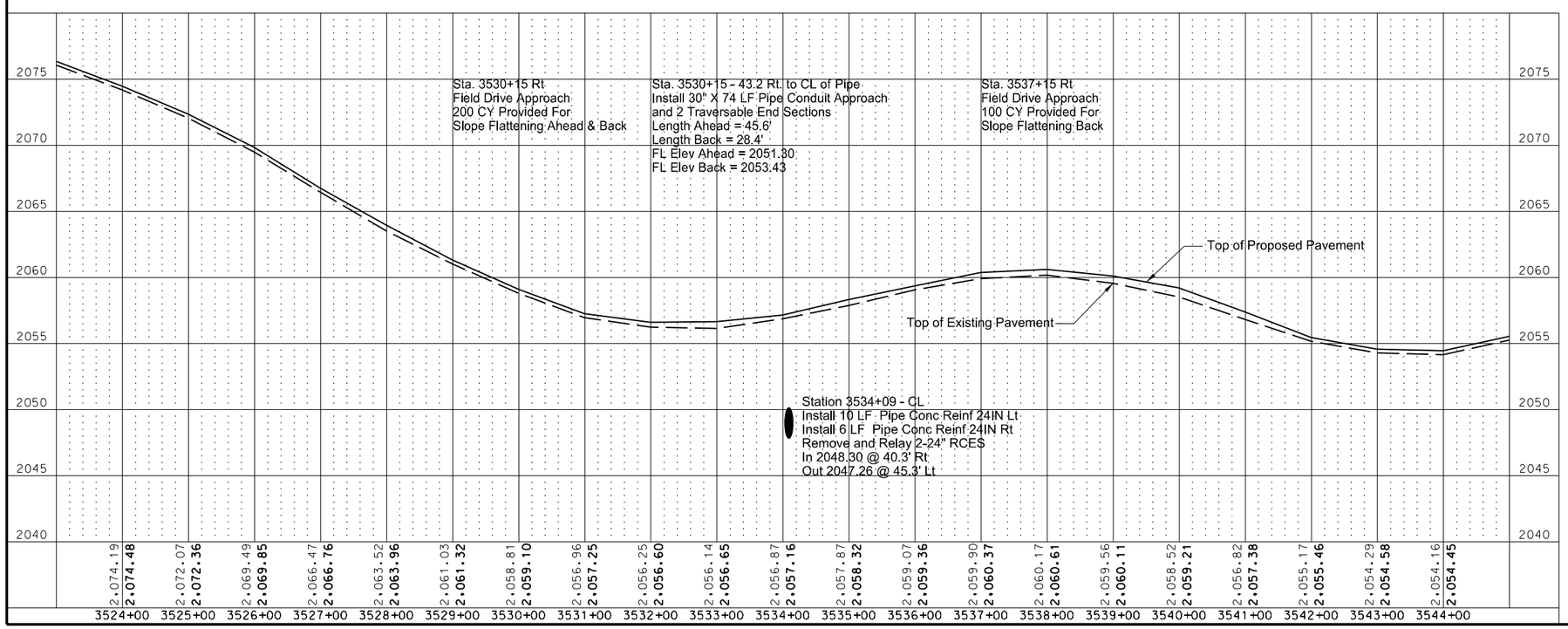
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	20



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3530+18 Rt	55	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3534+09 ℄ - Lt	10	LF
		3435+09 ℄ - Rt	6	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3530+15 Rt	74	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3534+09 ℄ - Lt	1	EA
		3435+09 ℄ - Rt	1	EA



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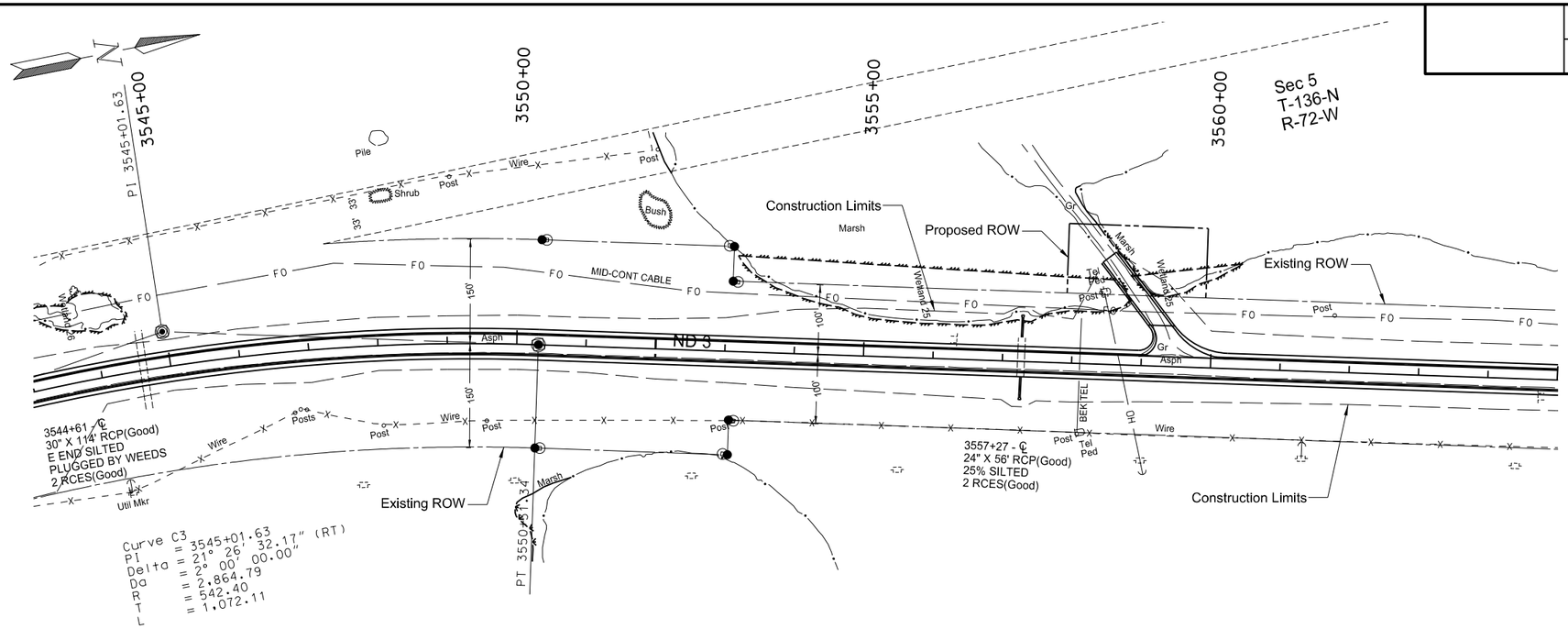
Plan & Profile

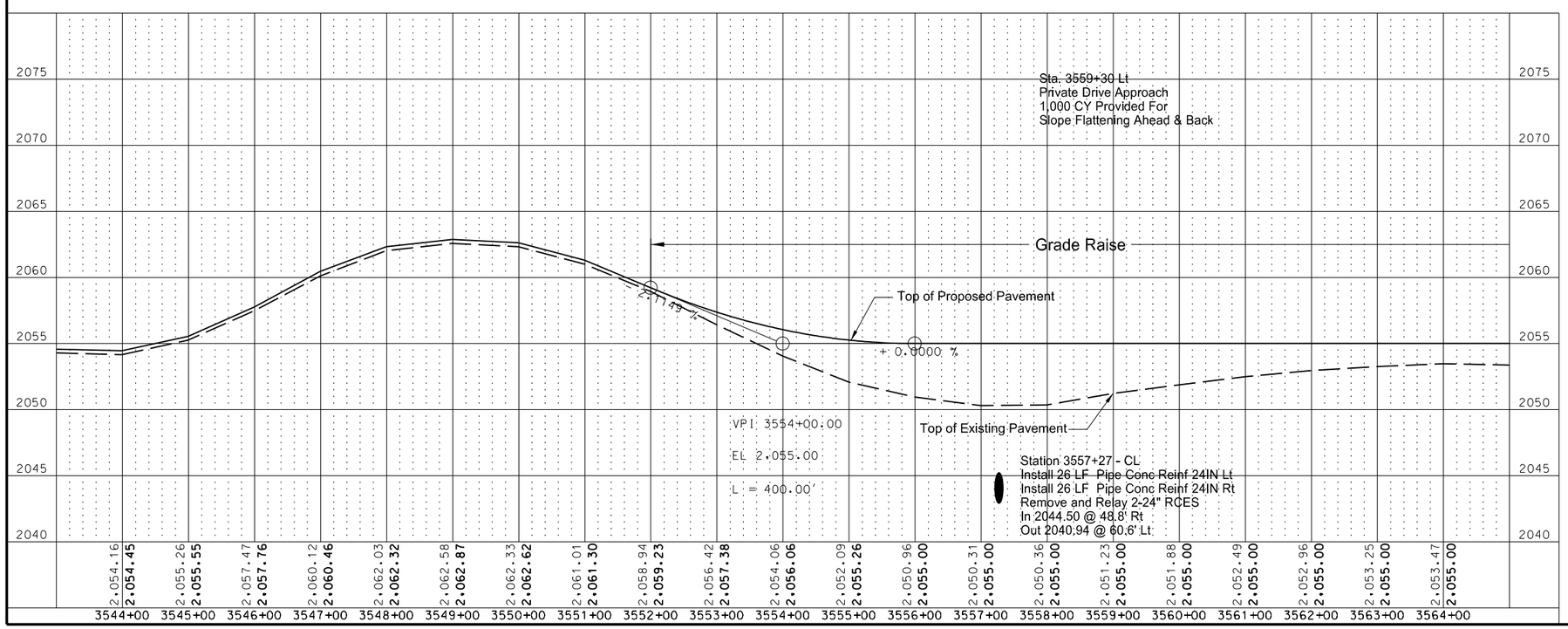
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	21



SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		3557+27 ℄ - Lt	26	LF
		3557+27 ℄ - Rt	26	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		3557+27 ℄ - Lt	1	EA
		3557+27 ℄ - Rt	1	EA



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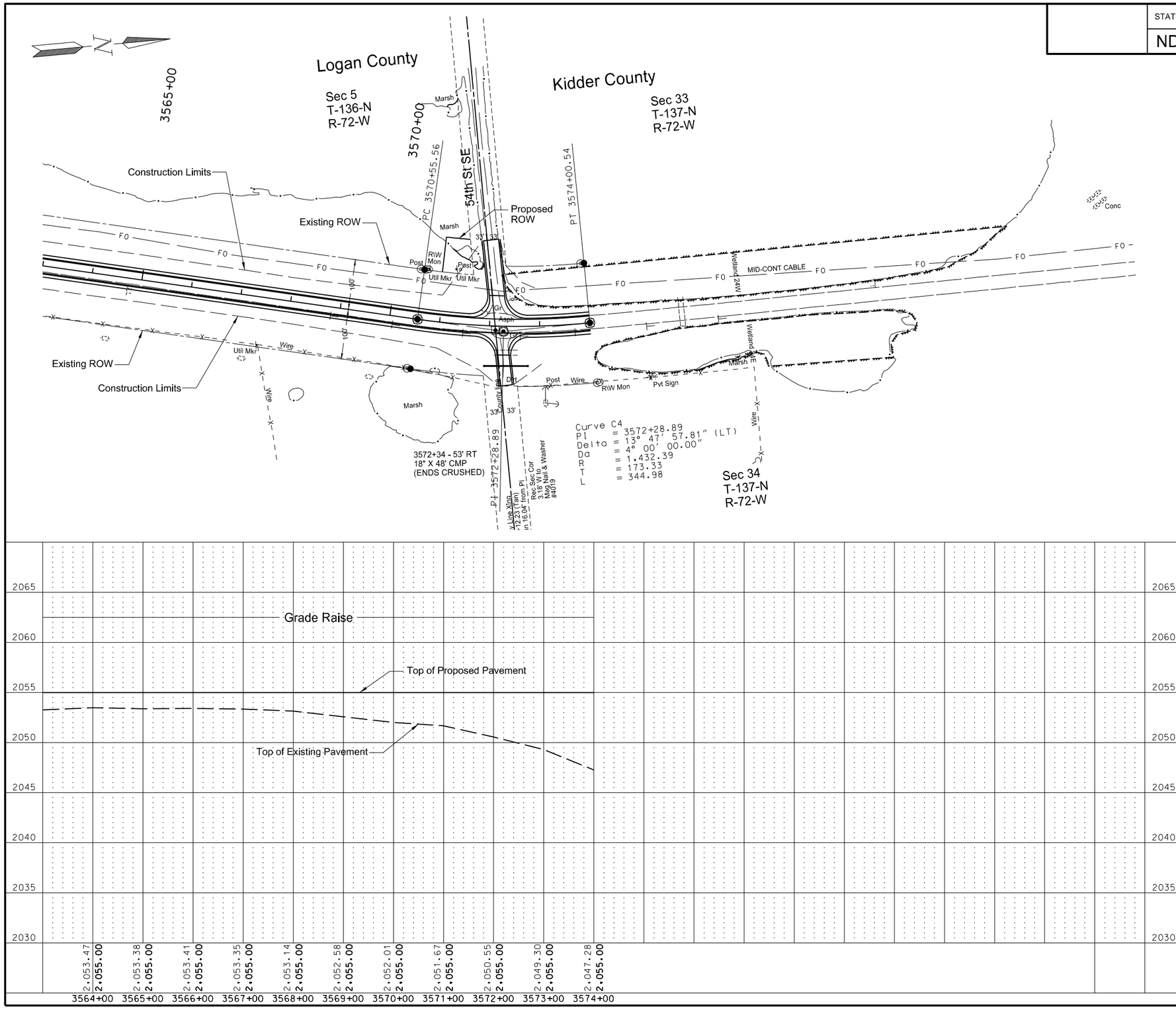
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	22



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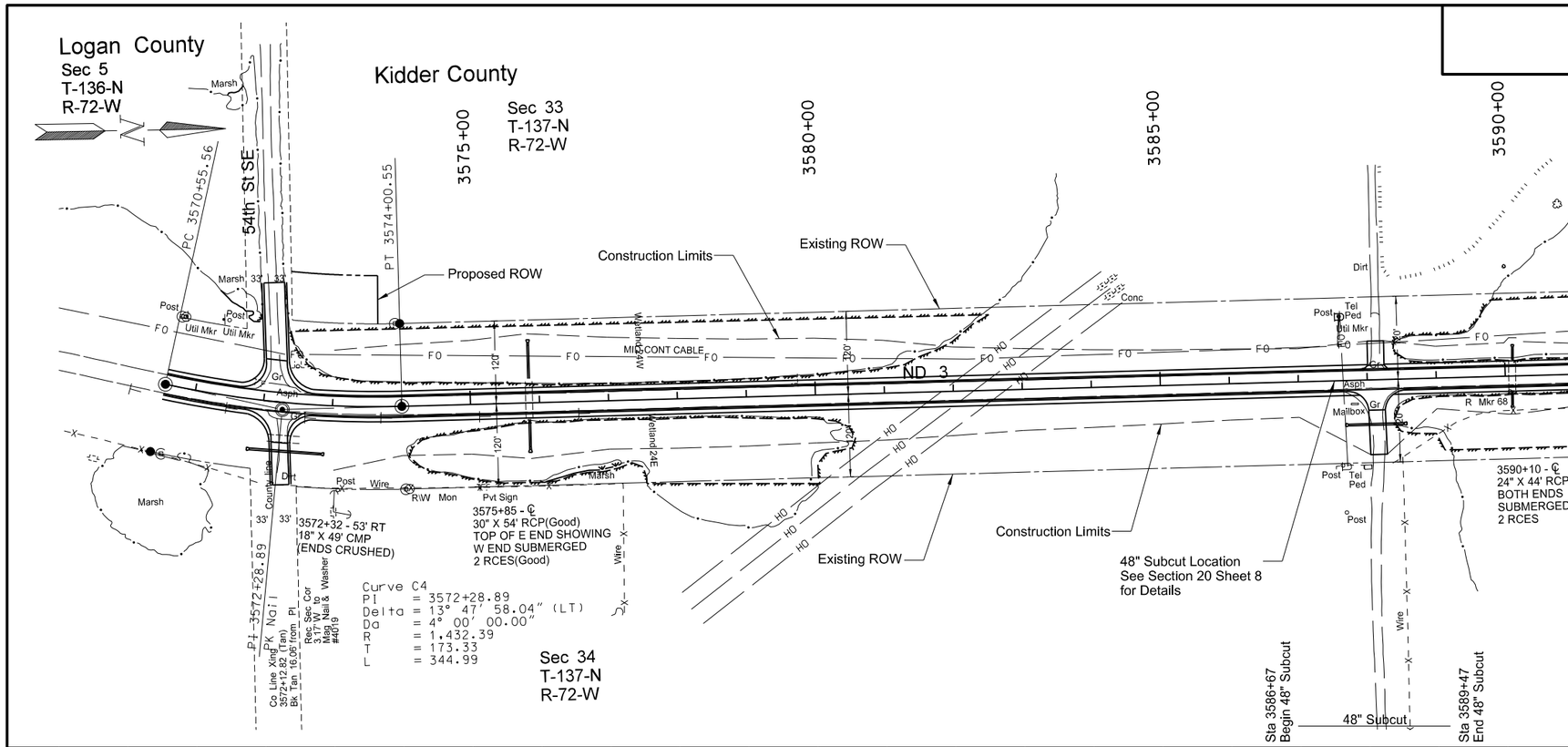
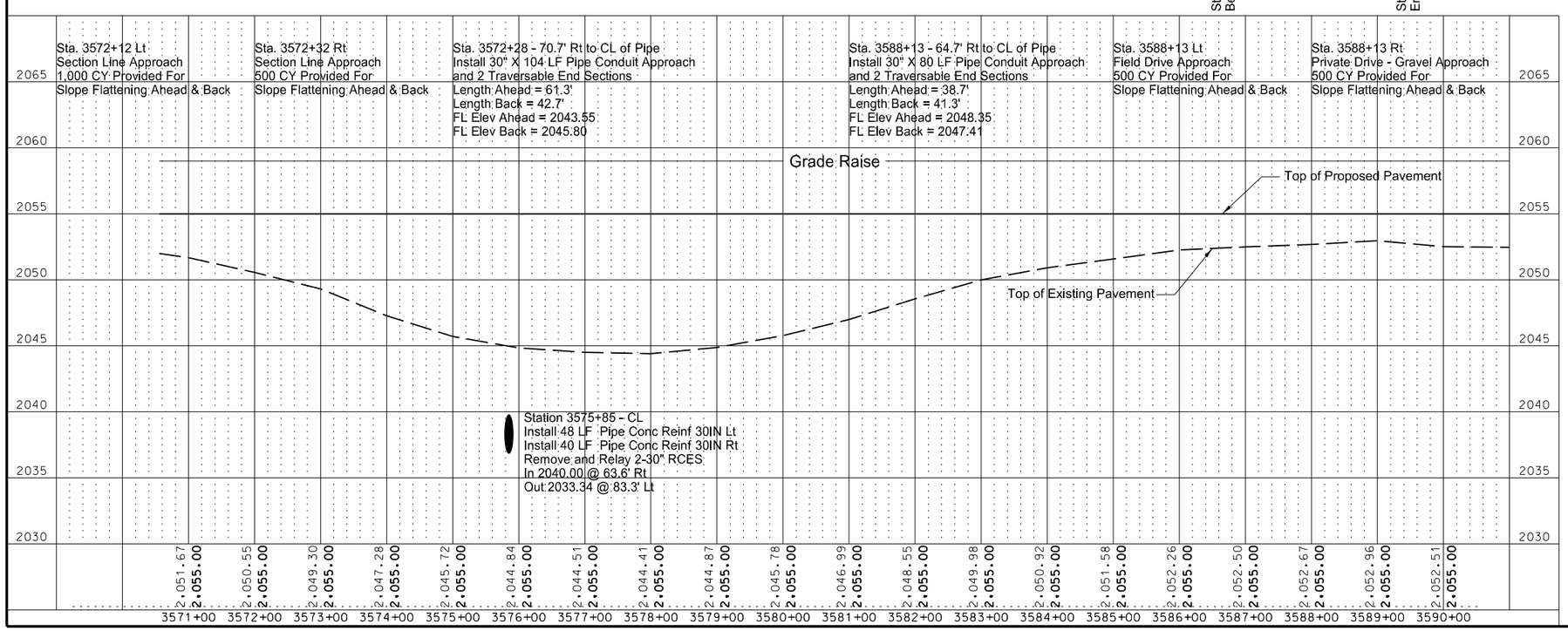
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	23



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3572+32 Rt	49	LF
714	0820	PIPE CONC REINF 30IN		
		3575+85 ℄ - Lt	48	LF
		3575+85 ℄ - Rt	40	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3572+28 Rt	104	LF
		3588+13 Rt	80	LF
714	9660	REMOVE & RELAY END SECTION ALL SIZES & TYPES		
		3575+85 ℄ - Lt	1	EA
		3575+85 ℄ - Rt	1	EA



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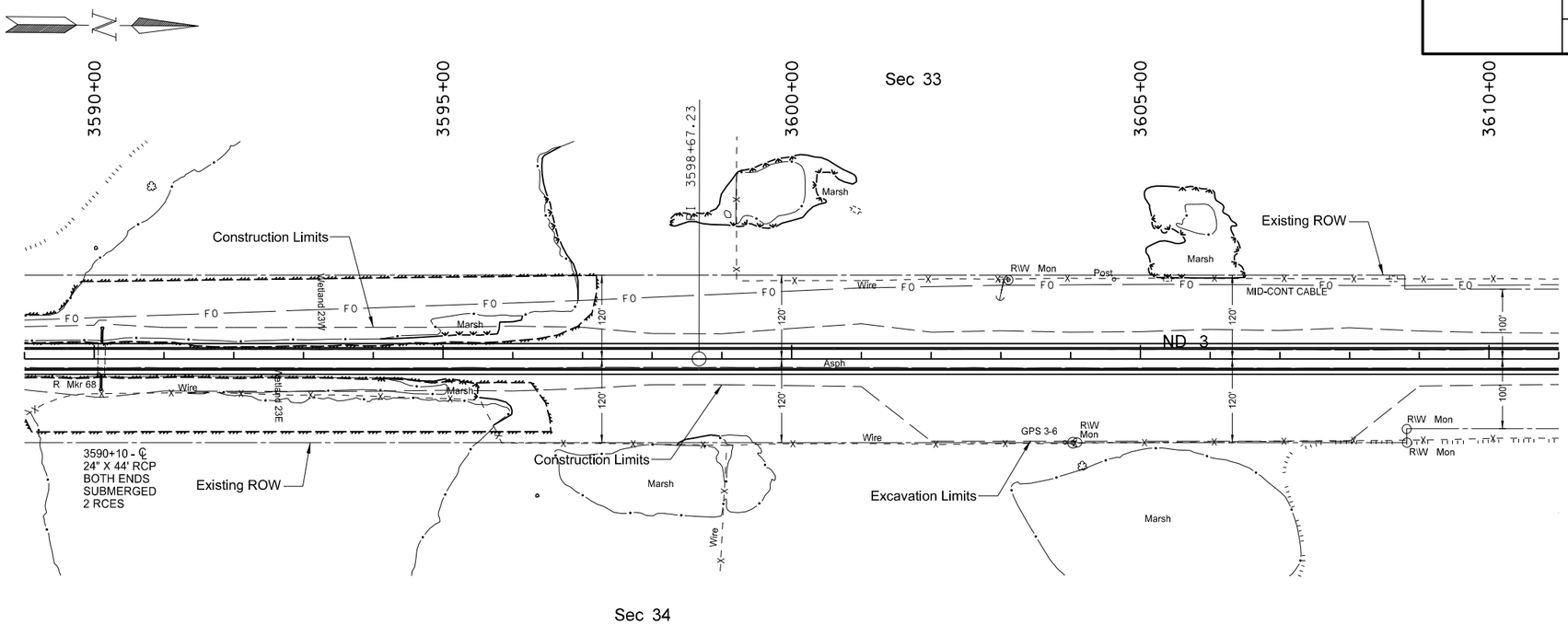
Plan & Profile

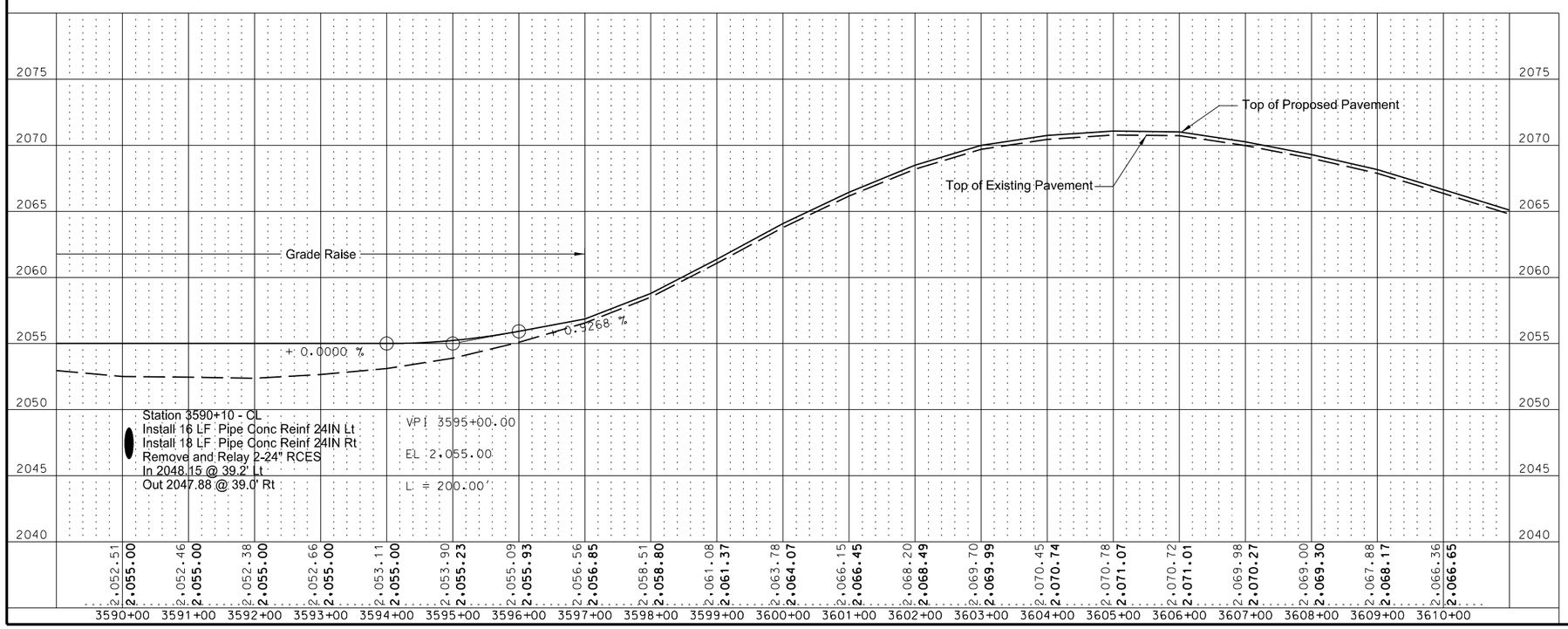
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	24



SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		3590+10 ℄ - Lt	16	LF
		3590+10 ℄ - Rt	18	LF
714	9660	REMOVE & RELAY END SECTION-ALL SIZES & TYPES		
		3590+10 ℄ - Lt	1	EA
		3590+10 ℄ - Rt	1	EA



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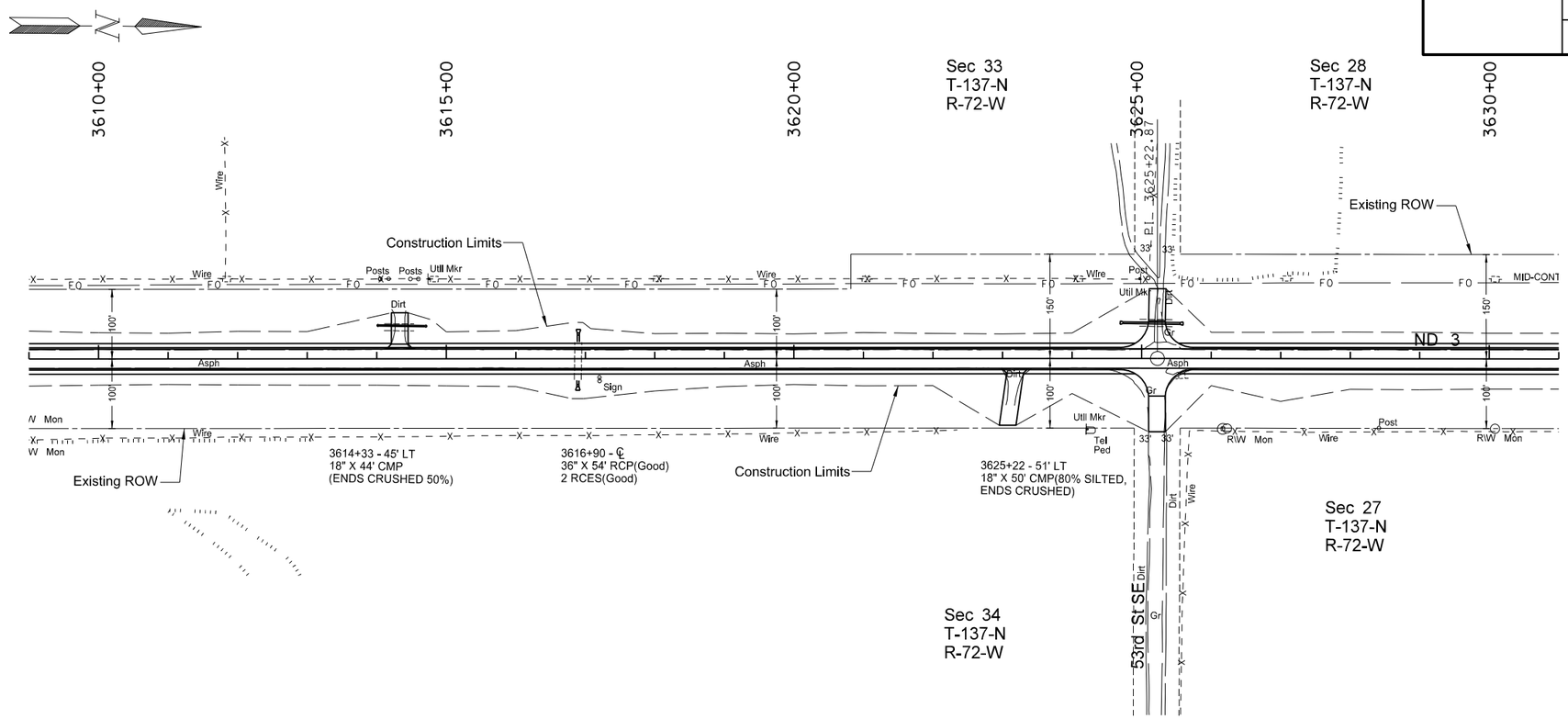
Plan & Profile

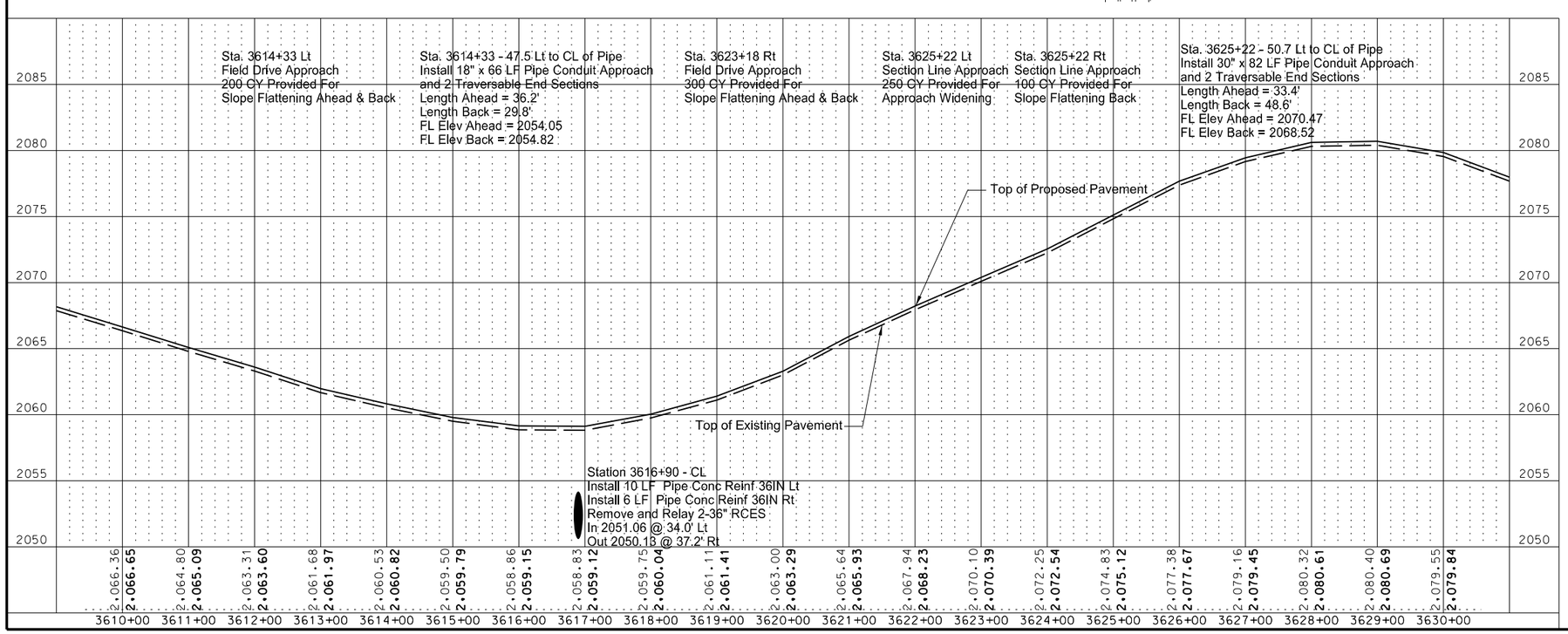
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	25



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3614+33 Lt	44	LF
		3625+22 Lt	50	LF
714	0905	PIPE CONC REINF 36IN CL III		
		3616+90 ℄ - Lt	10	EA
		3616+90 ℄ - Rt	6	EA
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3614+33 Lt	66	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3625+22 Lt	82	LF
714	9660	REMOVE & RELAY END SECTION-ALL SIZES & TYPES		
		3616+90 ℄ - Lt	1	EA
		3616+90 ℄ - Rt	1	EA



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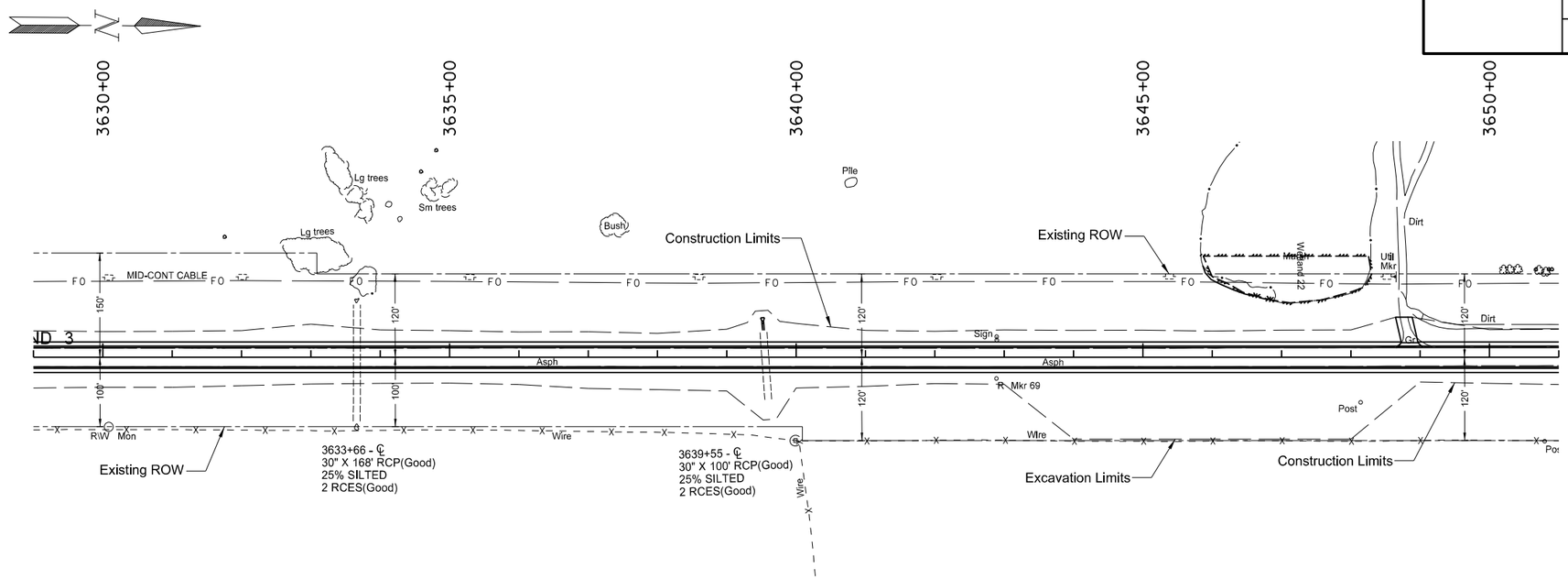
Plan & Profile

ND 3

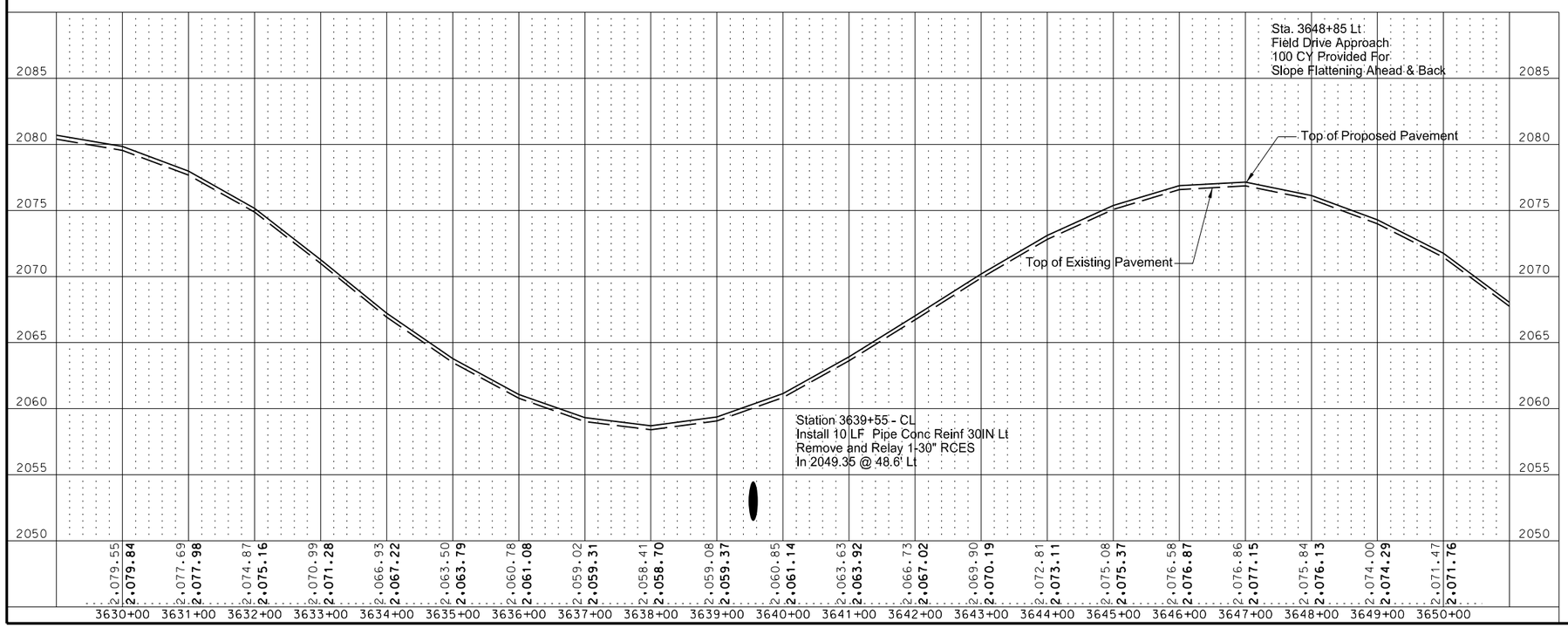
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	26

SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0820	PIPE CONC REINF 30IN CL III		
		3639+55 ℄ - Lt	10	LF
714	9660	REMOVE & RELAY END SECTION-ALL SIZES & TYPES		
		3639+55 ℄ - Lt	1	EA



Sec 27



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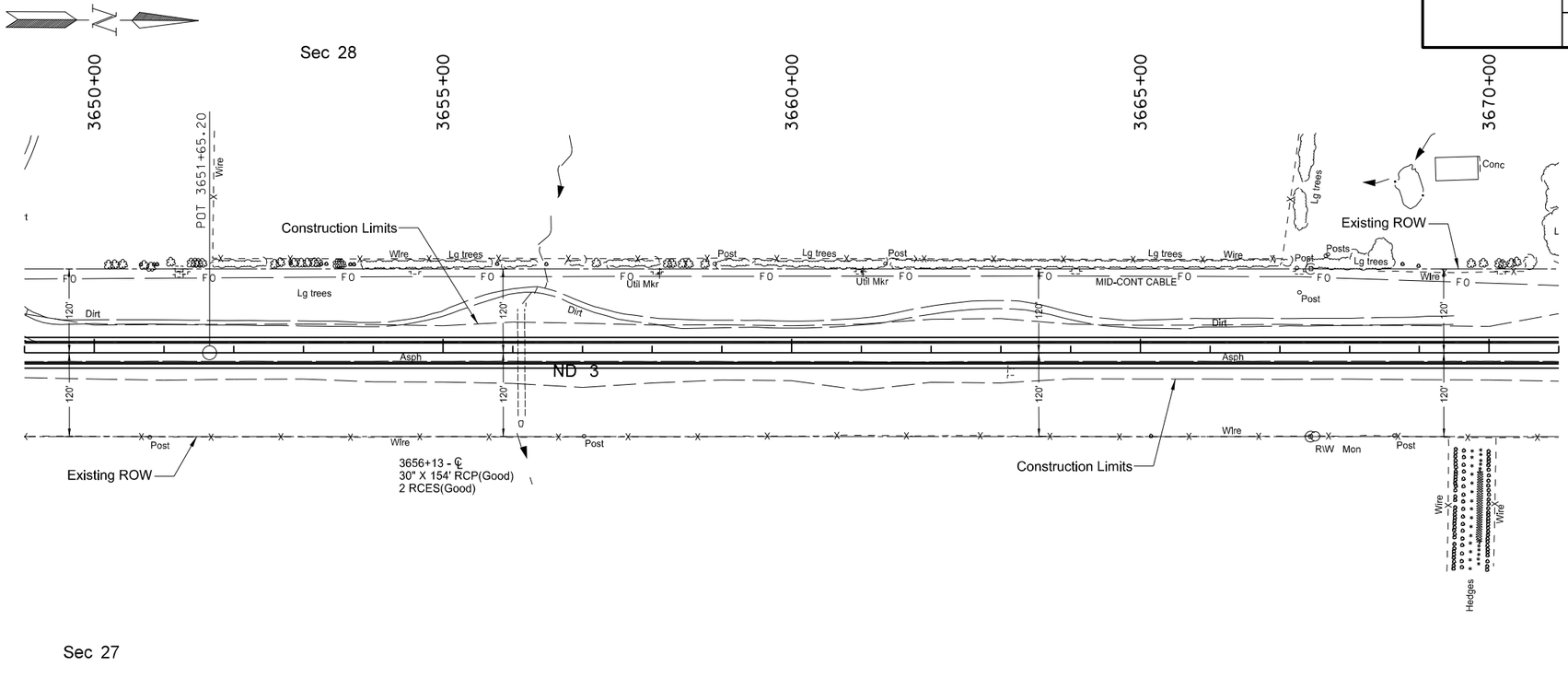
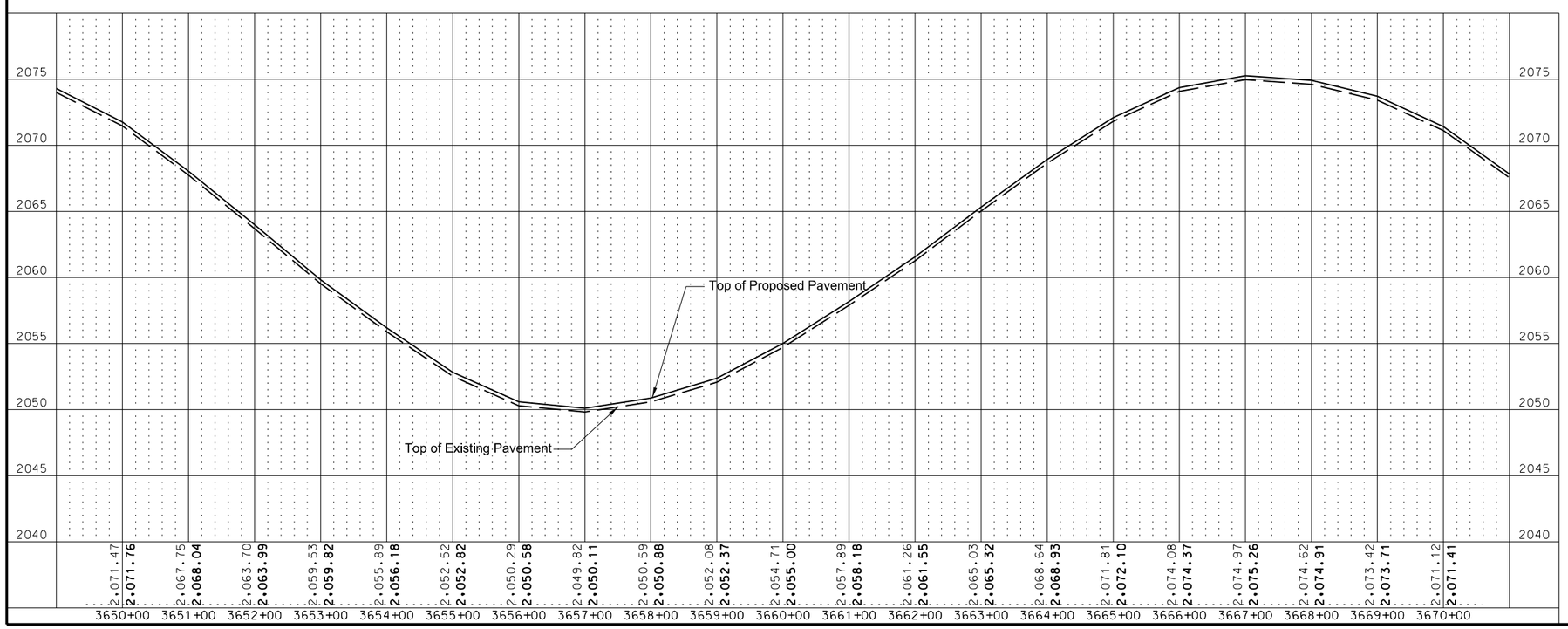
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	27





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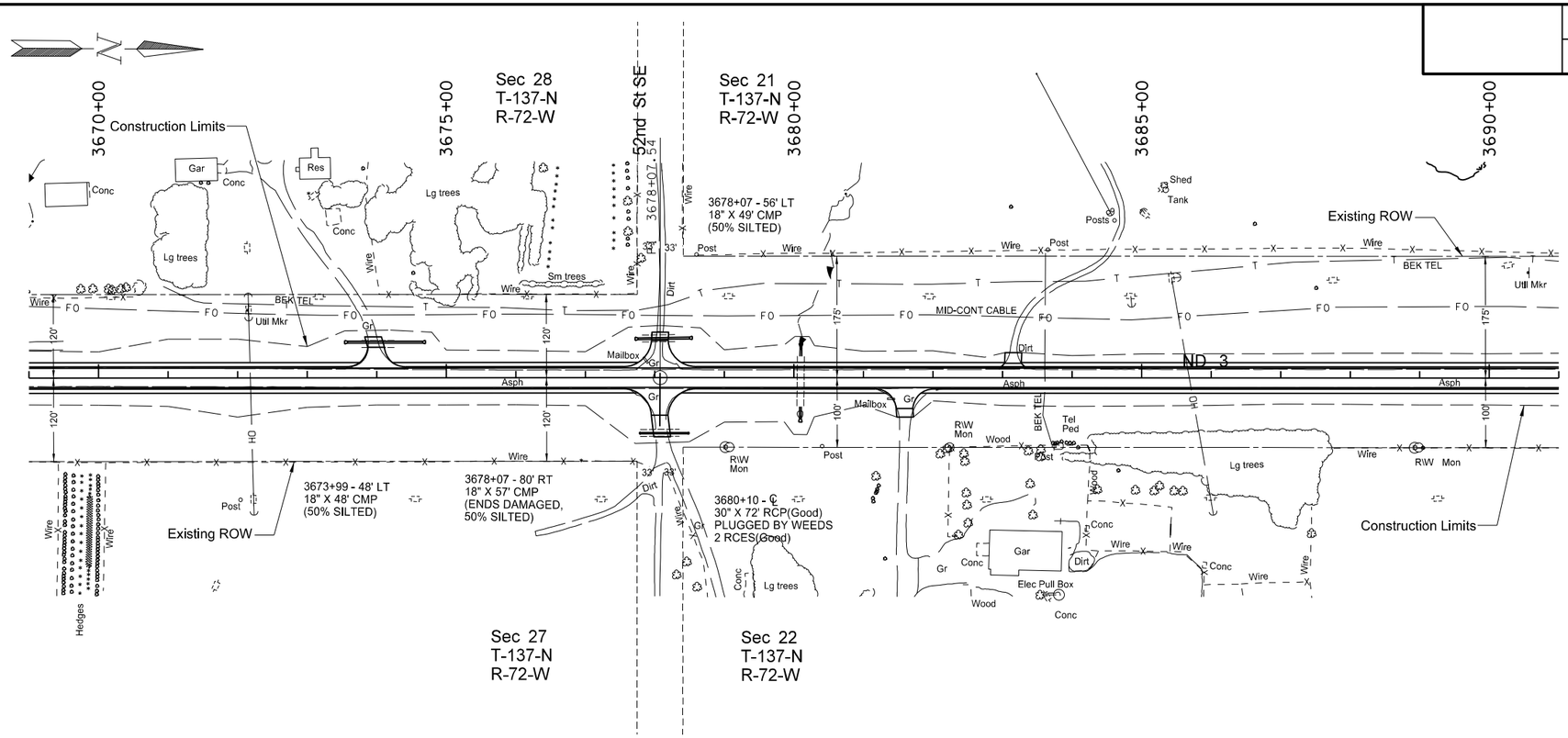
Plan & Profile

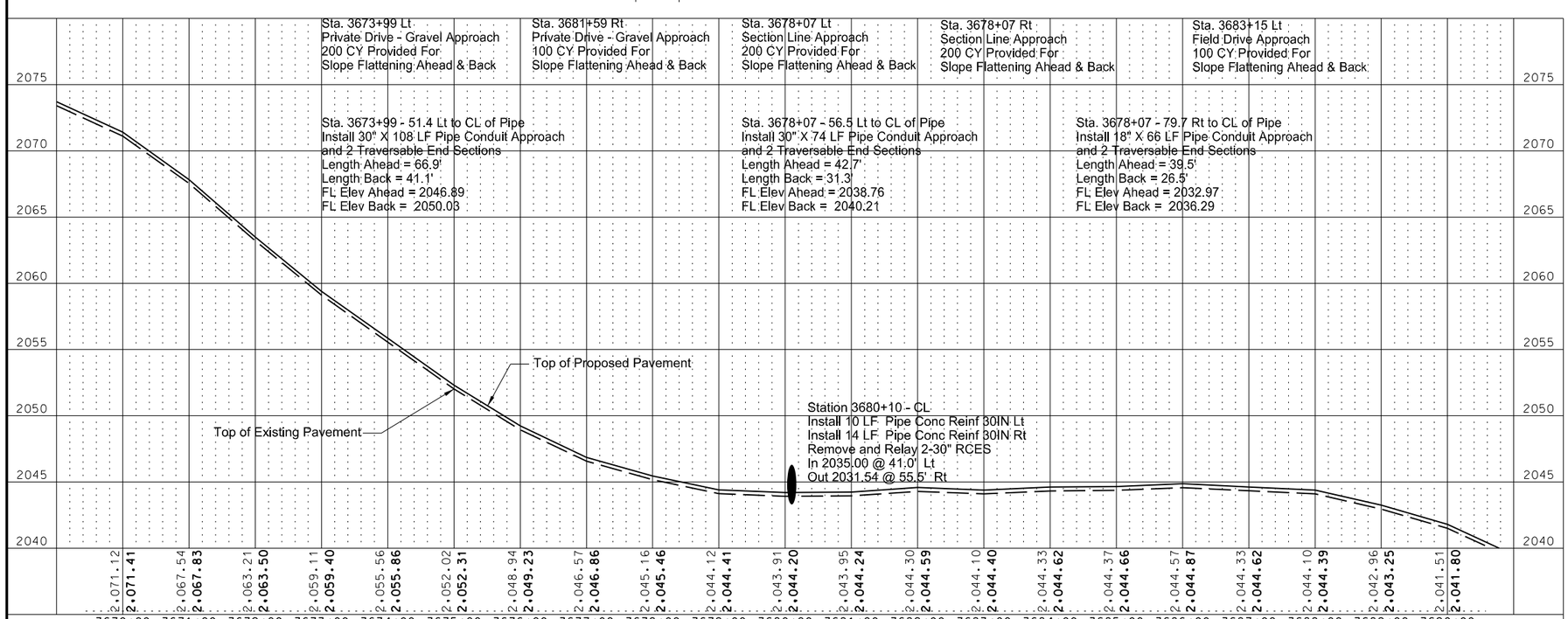
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	28



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3673+99 Lt	48	LF
		3678+07 Lt	49	LF
		3678+07 Rt	57	LF
714	0820	PIPE CONC REINF 30IN CL III		
		3680+10 ℄ - Lt	10	LF
		3680+10 ℄ - Rt	14	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3678+07 Rt	66	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3673+99 Lt	108	LF
		3678+07 Lt	74	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3680+10 ℄ - Lt	1	EA
		3680+10 ℄ - Rt	1	EA



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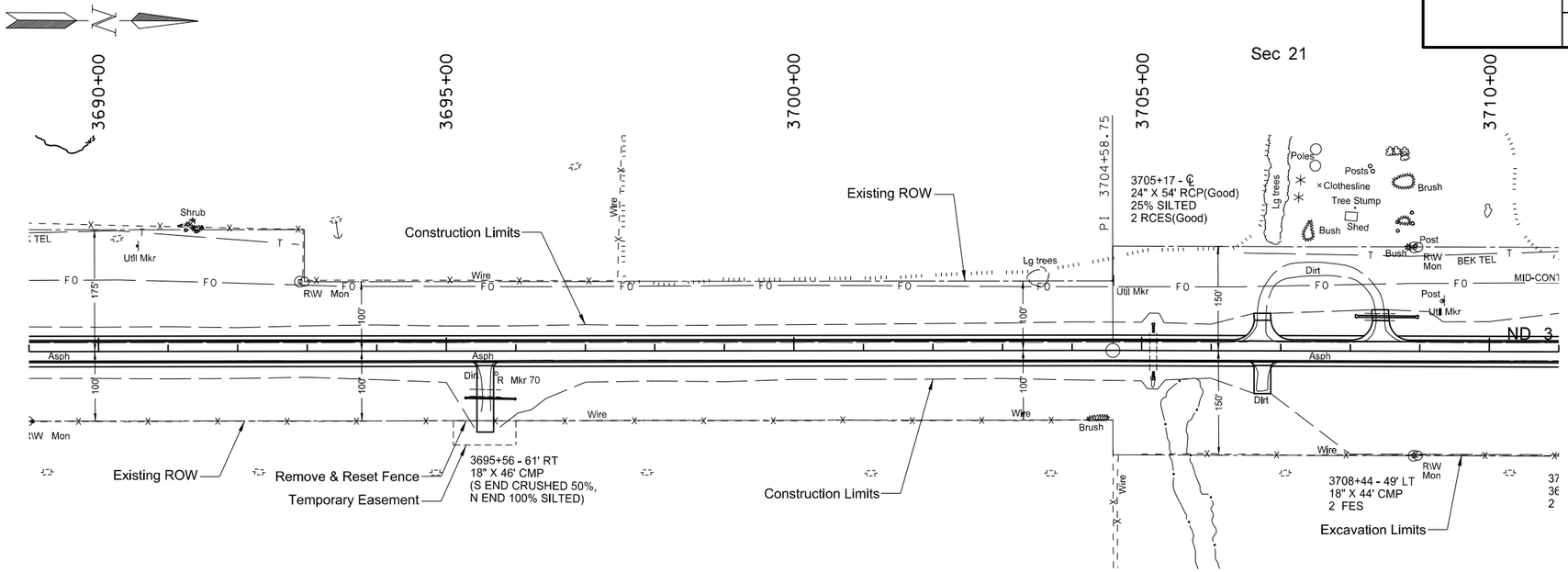
Plan & Profile

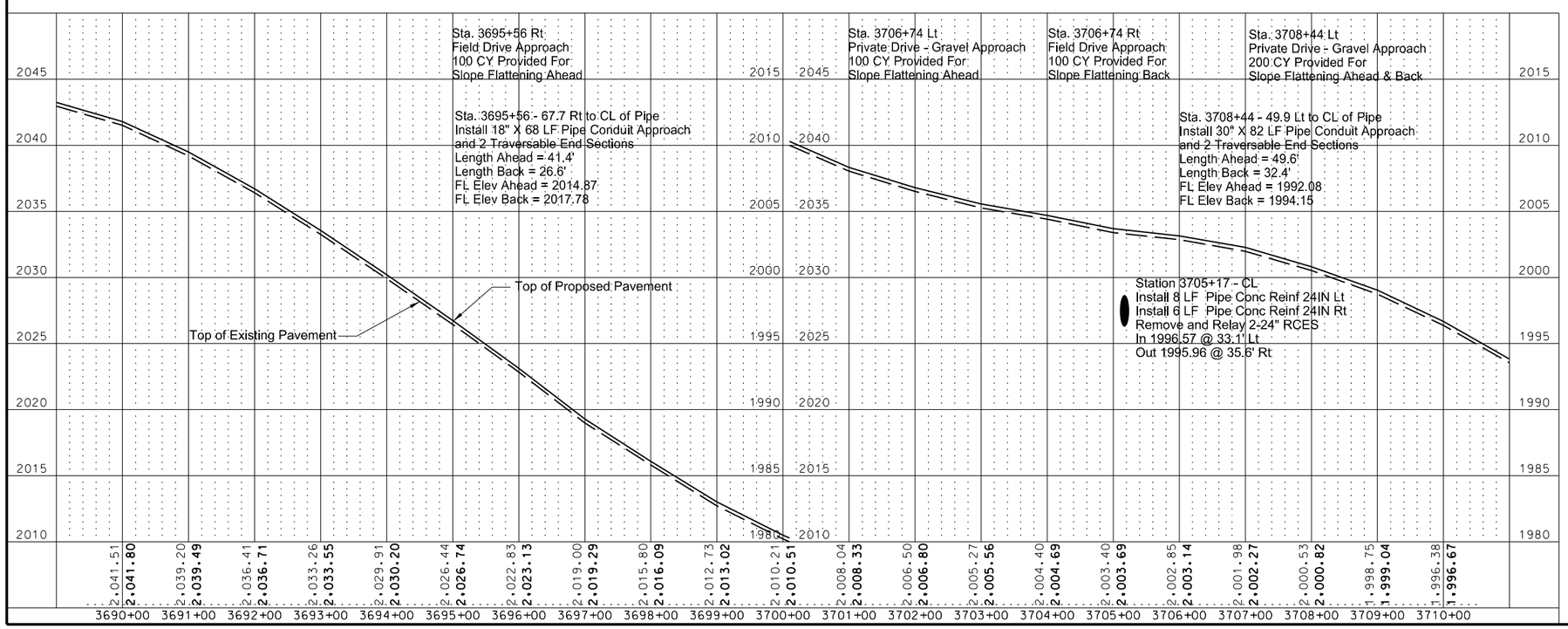
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	29



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3695+56 Rt	46	LF
		3708+44 Lt	44	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3705+17 ℄ - Lt	8	LF
		3705+17 ℄ - Rt	6	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3695+56 Rt	68	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3708+44 Lt	82	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3705+17 ℄ - Lt	1	EA
		3705+17 ℄ - Rt	1	EA
752	0922	FENCE REMOVE & RESET		
		3695+10 Rt to 3696+00 Rt	90	LF



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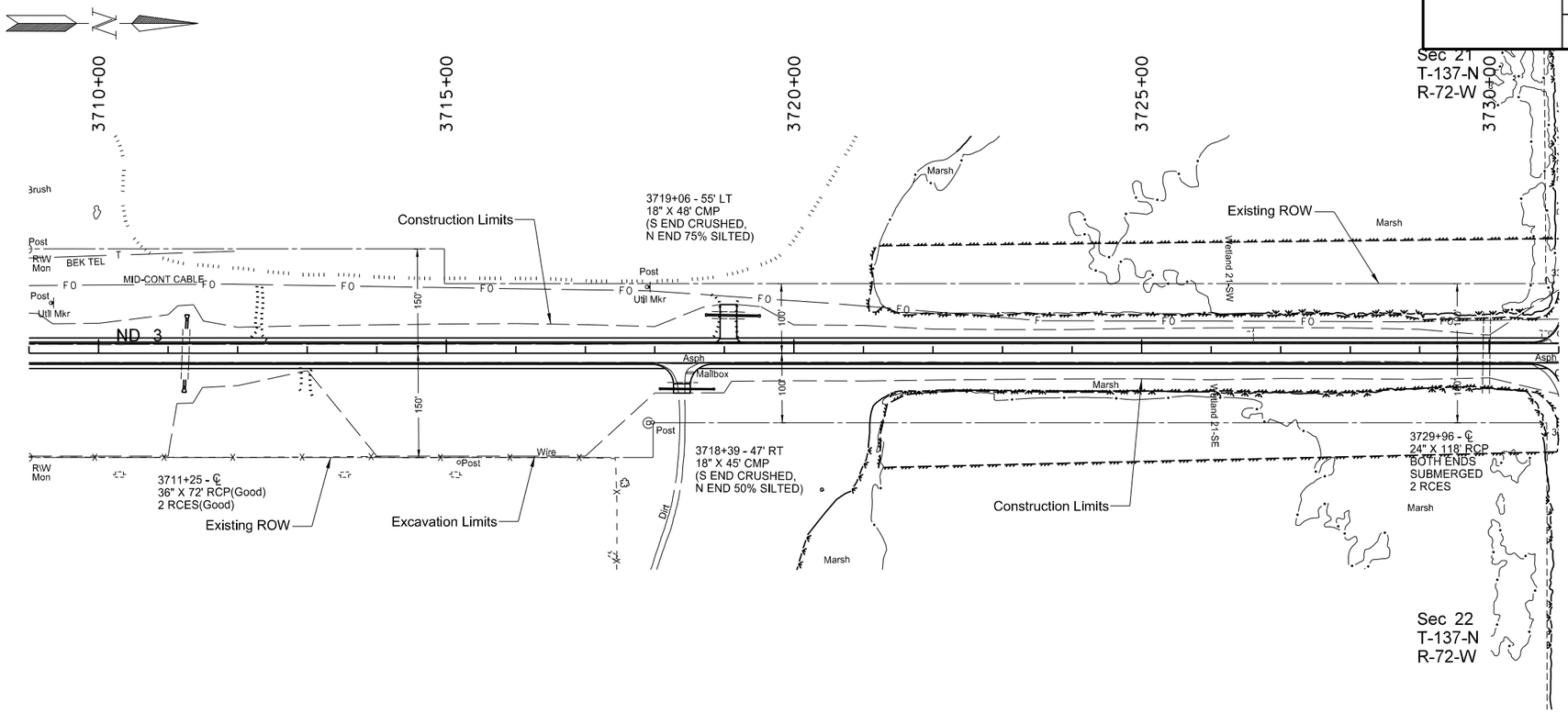
Plan & Profile

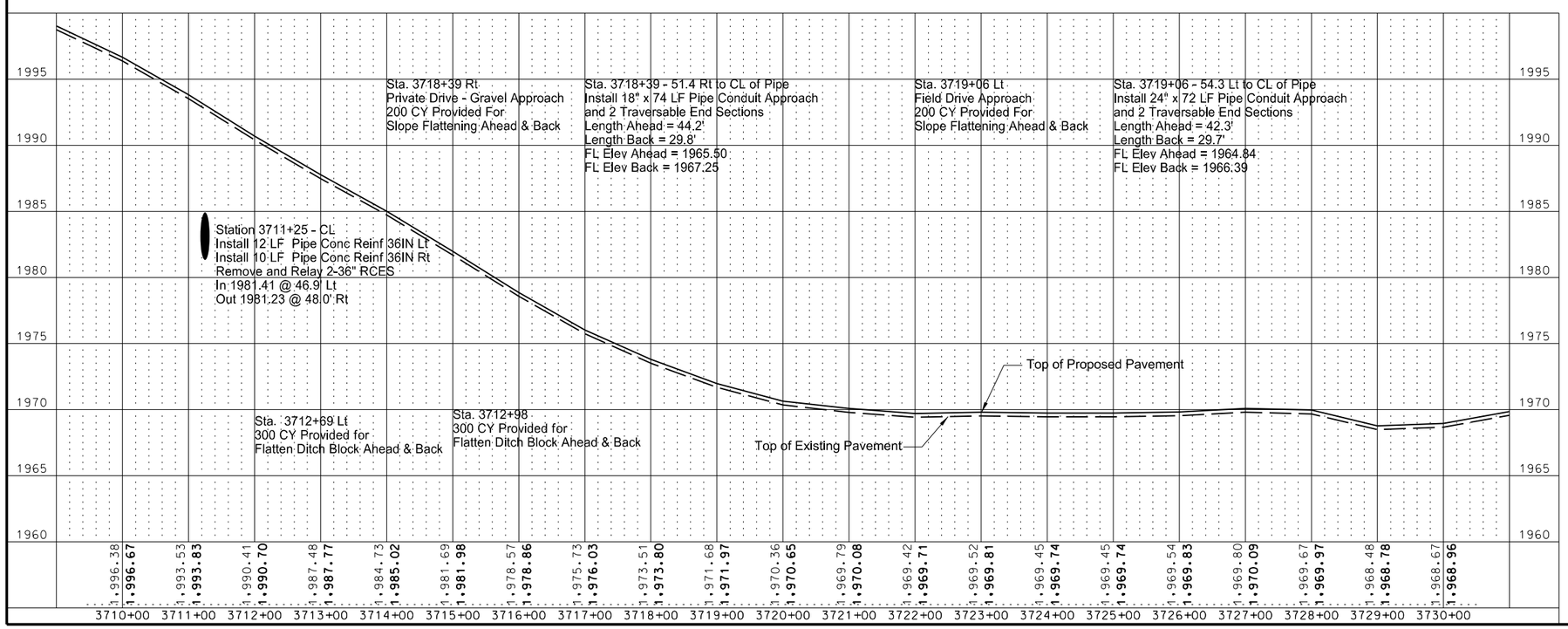
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	30



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3718+39 Rt	45	LF
		3719+06 Lt	48	LF
714	0905	PIPE CONC REINF 36IN CL III		
		3711+25 ℄ - Lt	12	LF
		3711+25 ℄ - Rt	10	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3718+39 Rt	74	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3719+06 Lt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3711+25 ℄ - Lt	1	EA
		3711+25 ℄ - Rt	1	EA



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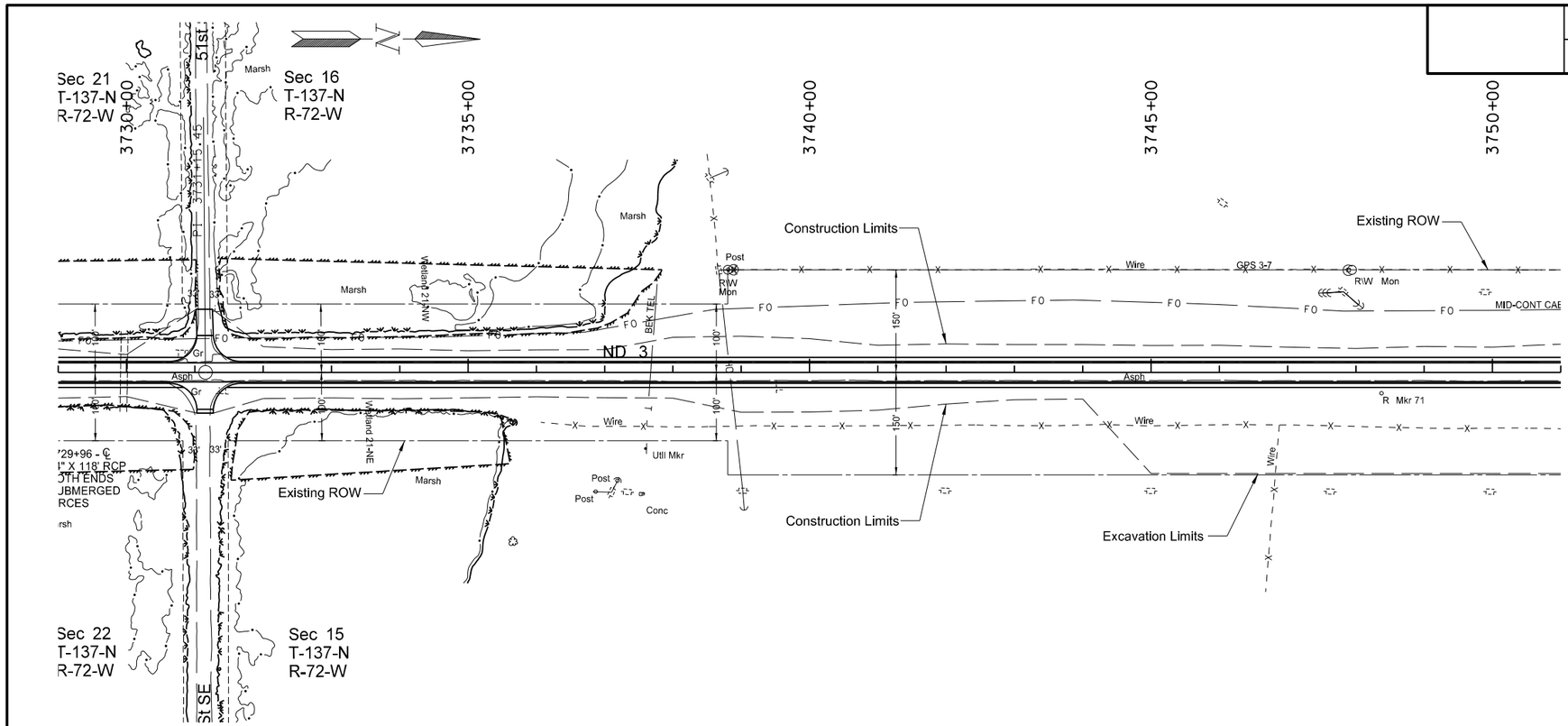
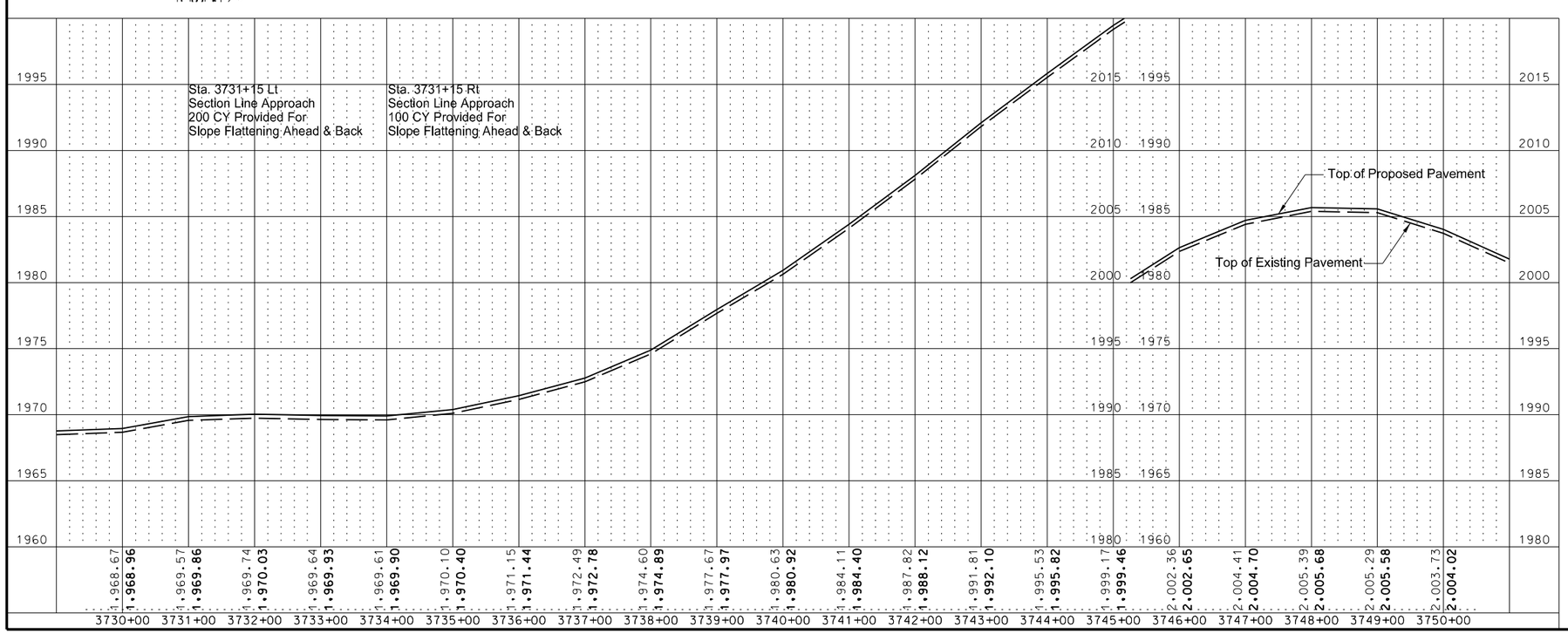
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	31





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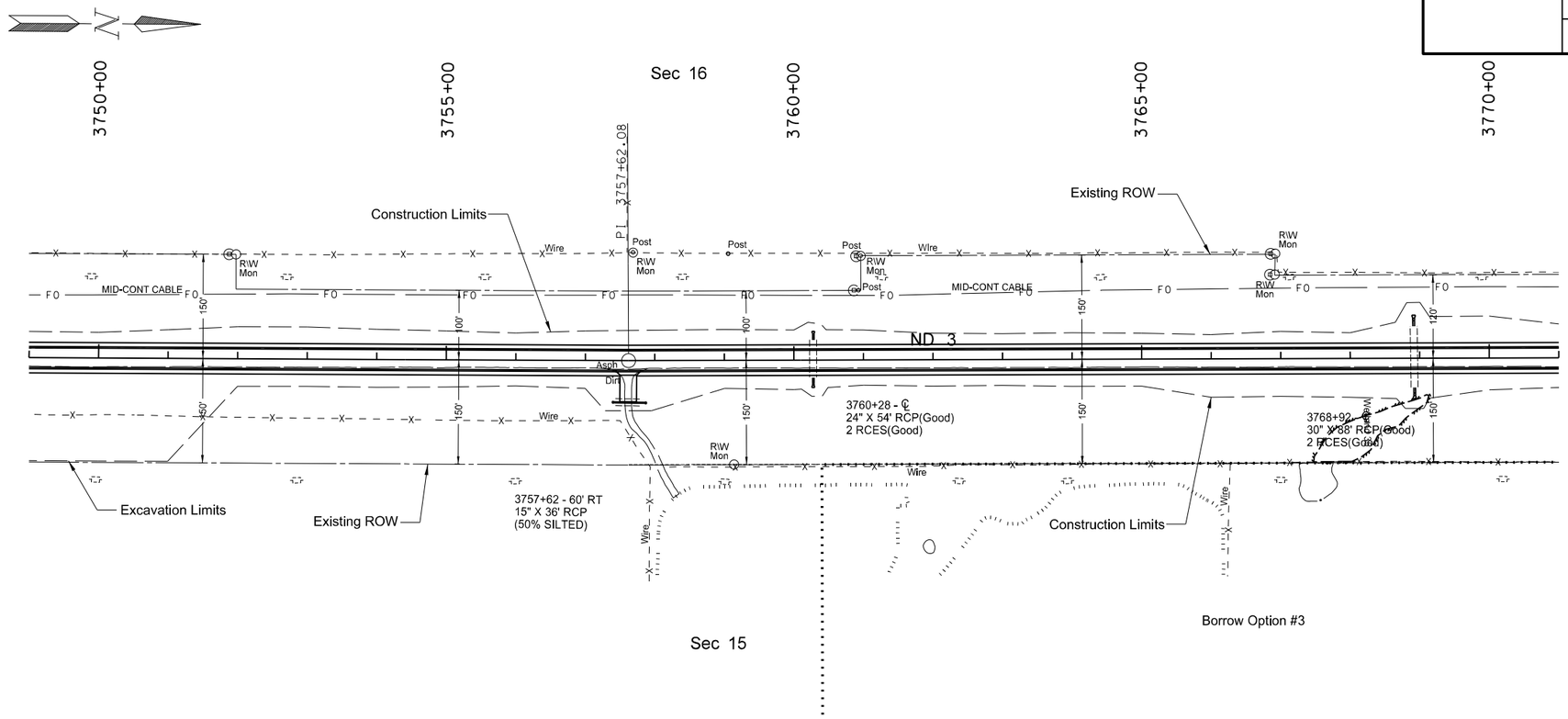
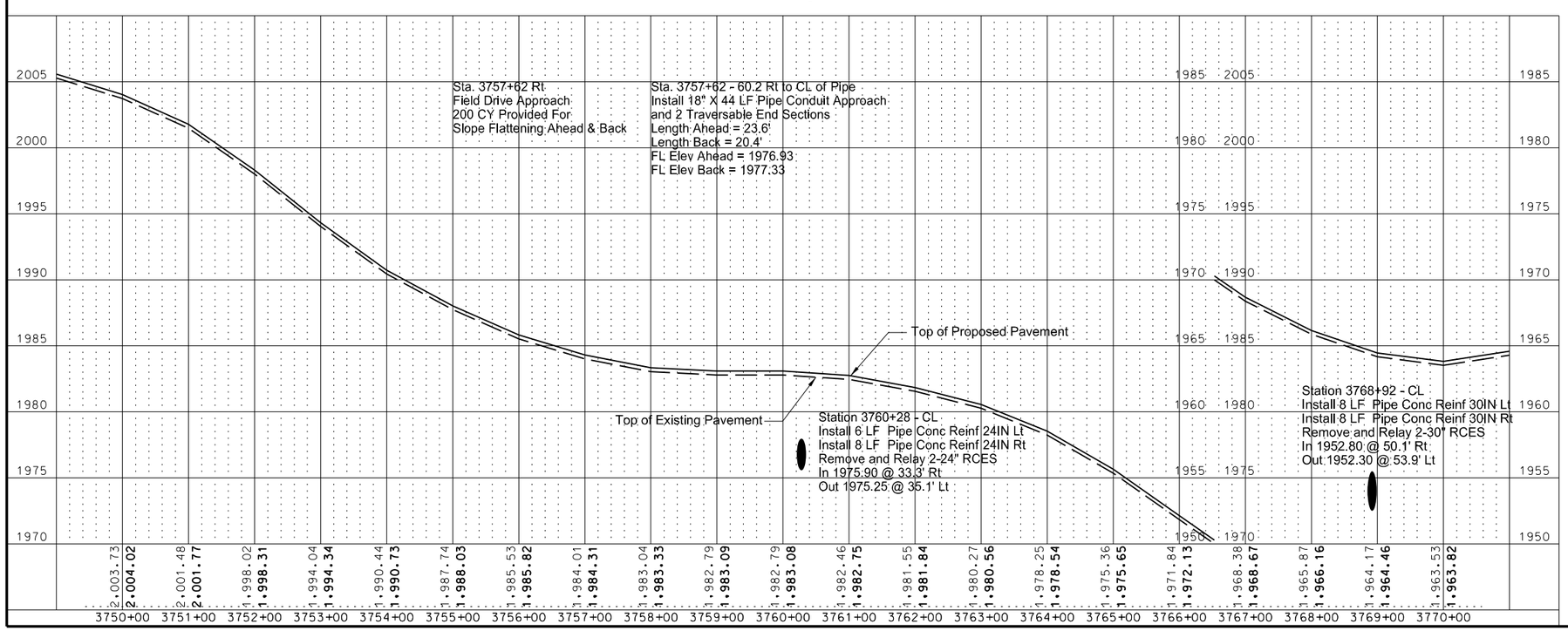
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	32



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3757+62 Rt	37	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3760+28 ℄ - Lt	6	LF
		3760+28 ℄ - Rt	8	LF
714	0820	PIPE CONC REINF 30IN CL III		
		3768+92 ℄ - Lt	8	LF
		3768+92 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3757+62 Rt	44	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3760+28 ℄ - Lt	1	EA
		3760+28 ℄ - Rt	1	EA
		3768+92 ℄ - Lt	1	EA
		3768+92 ℄ - Rt	1	EA



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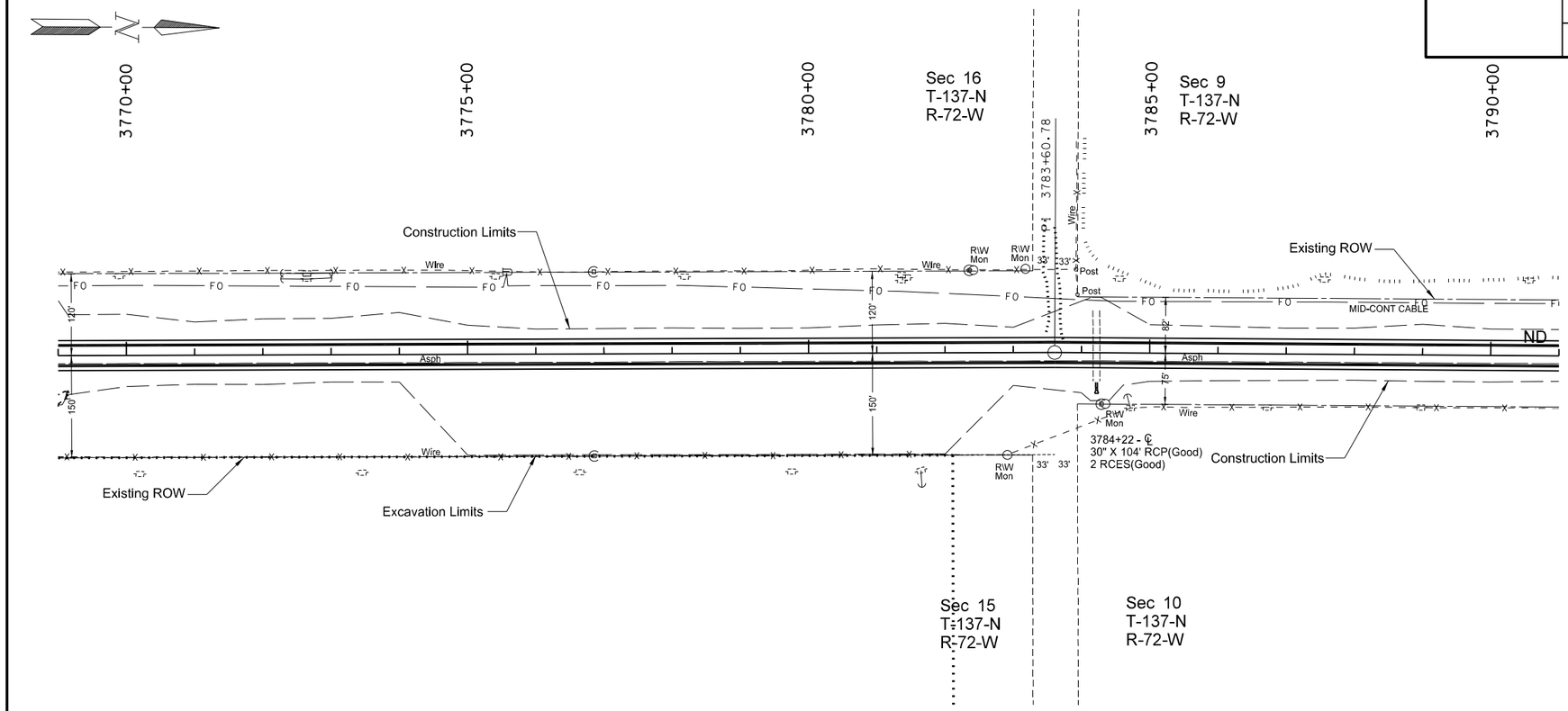
Plan & Profile

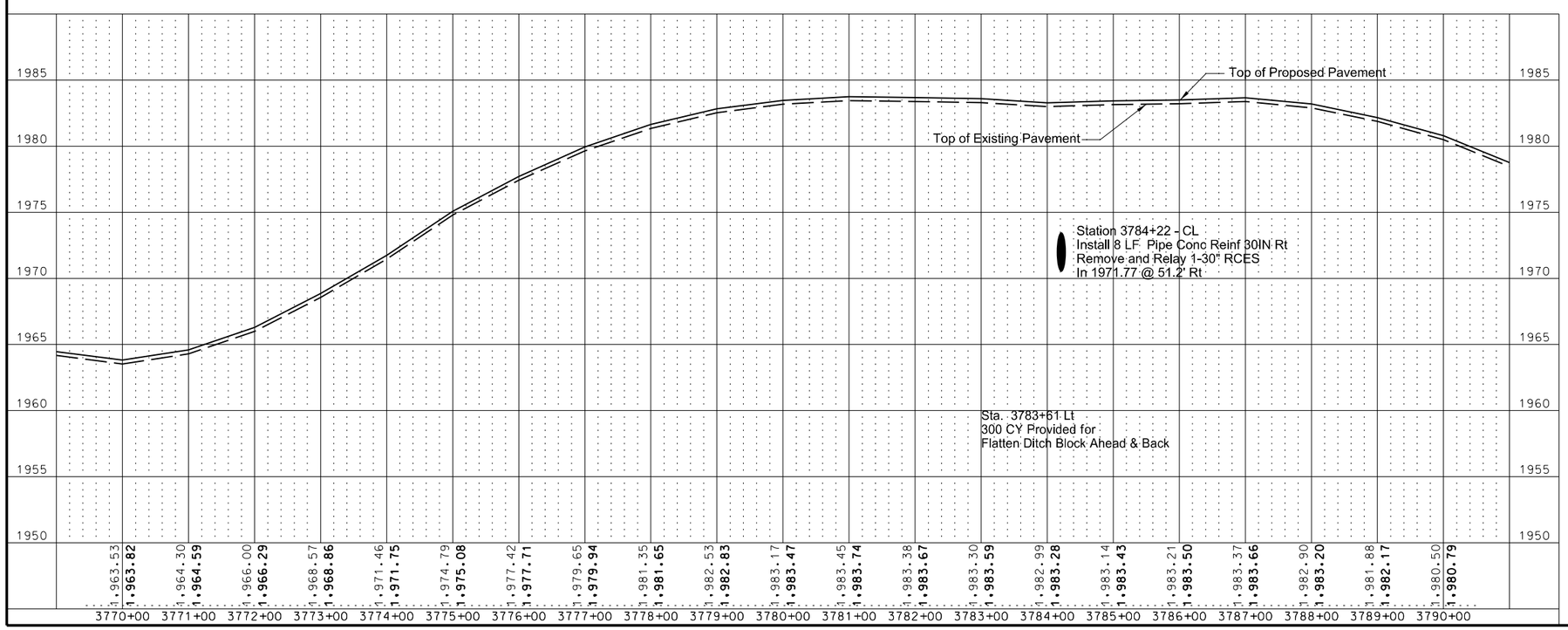
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	33

SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0820	PIPE CONC REINF 30IN 3784+22 ℄ - Rt	8	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES 3784+22 ℄ - Rt	1	EA





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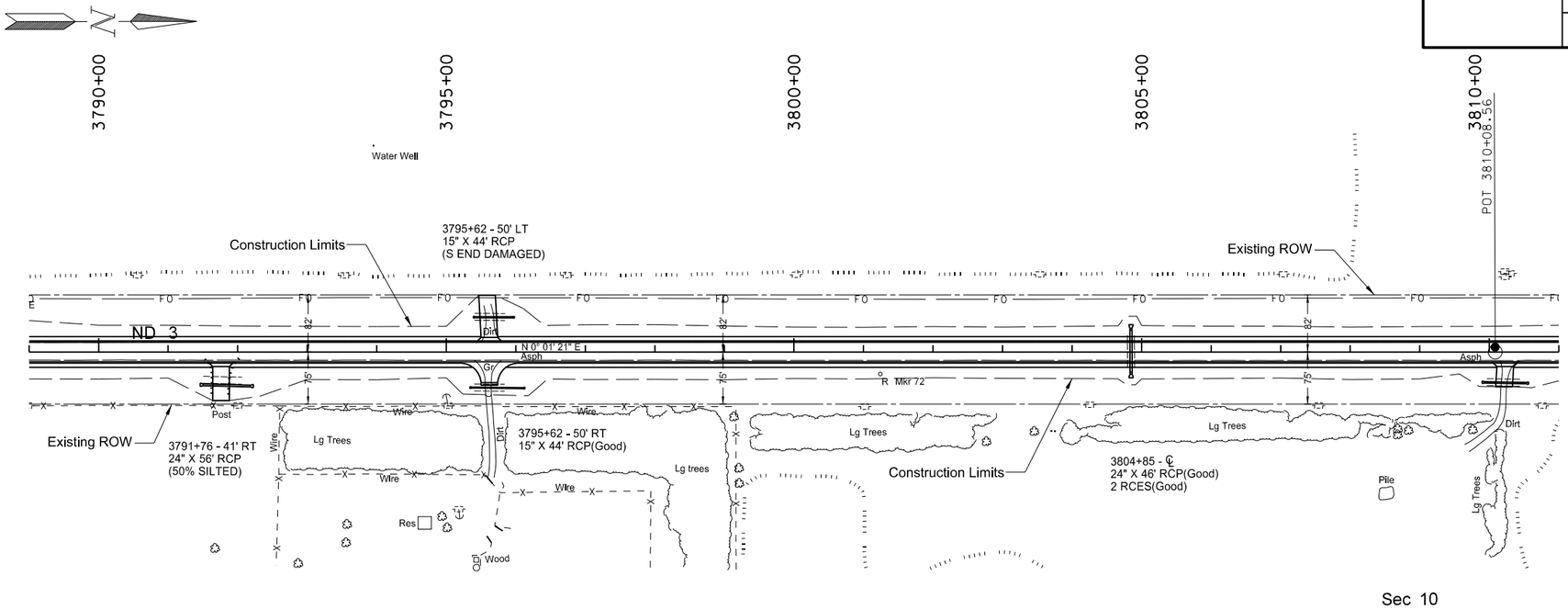
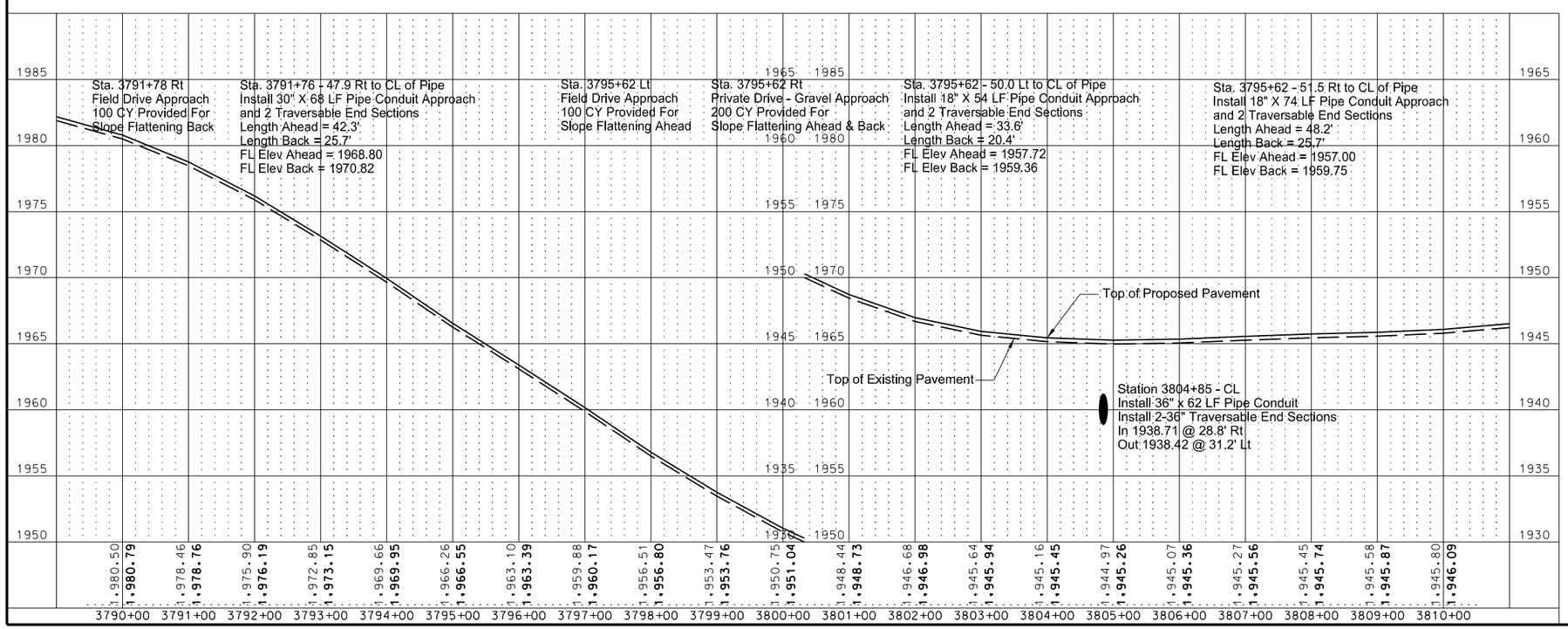
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	34



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0121	REMOVAL & SALVAGE BITUMINOUS SURFACING		
		3804+85 ℄	103	TON
202	0153	SAW BITUMINOUS SURFACTING-FULL DEPTH		
		3408+76 ℄	26	LF
		3408+94 ℄	26	LF
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3804+85 ℄ - Lt	1	EA
		3804+85 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3791+76 Rt	58	LF
		3795+62 Lt	45	LF
		3795+62 Rt	45	LF
		3408+85 ℄	53	LF
302	0120	AGGREGATE BASE COURSE CL 5		
		3408+85 ℄ - Lt	108	TON
430	0042	SUPERPAVE FAA 42		
		3408+85 ℄	24	TON
430	5828	PG 58-28 ASPHALT CEMENT		
		3408+85 ℄	1	TON
709	0151	GEOSYNTHETIC MATERIAL TYPE R1		
		3804+85 ℄	252	SY
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3795+62 Lt	54	LF
		3795+62 Rt	74	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3791+76 Rt	68	LF
714	4115	PIPE CONDUIT 36IN		
		3804+85 ℄	62	LF



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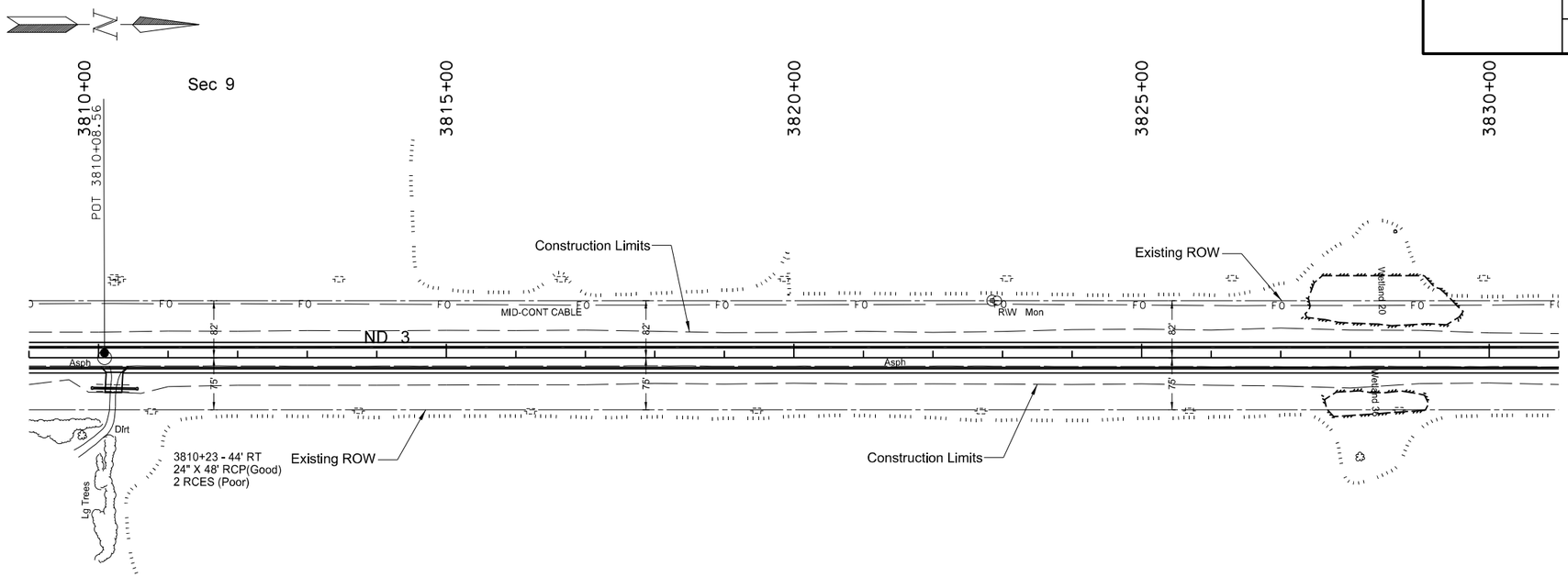
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	35

SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3810+23 Rt	53	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3810+23 Rt	60	LF



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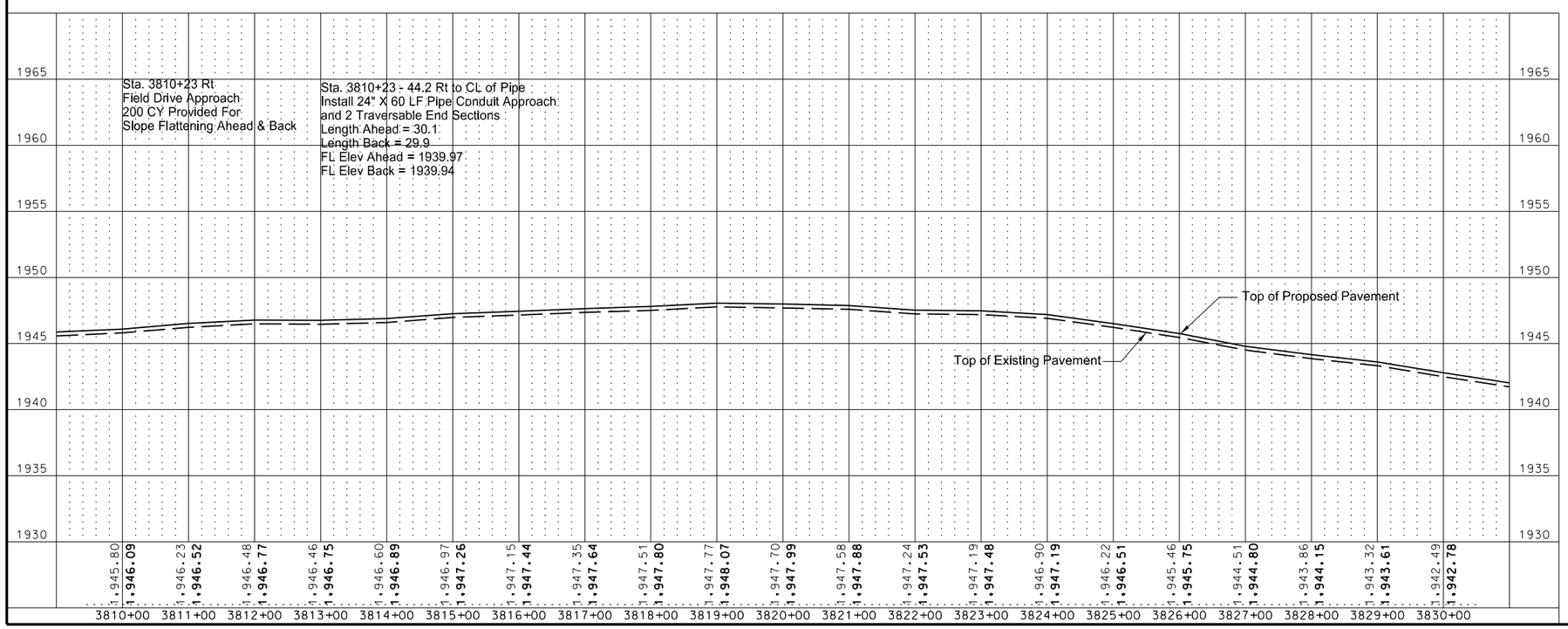

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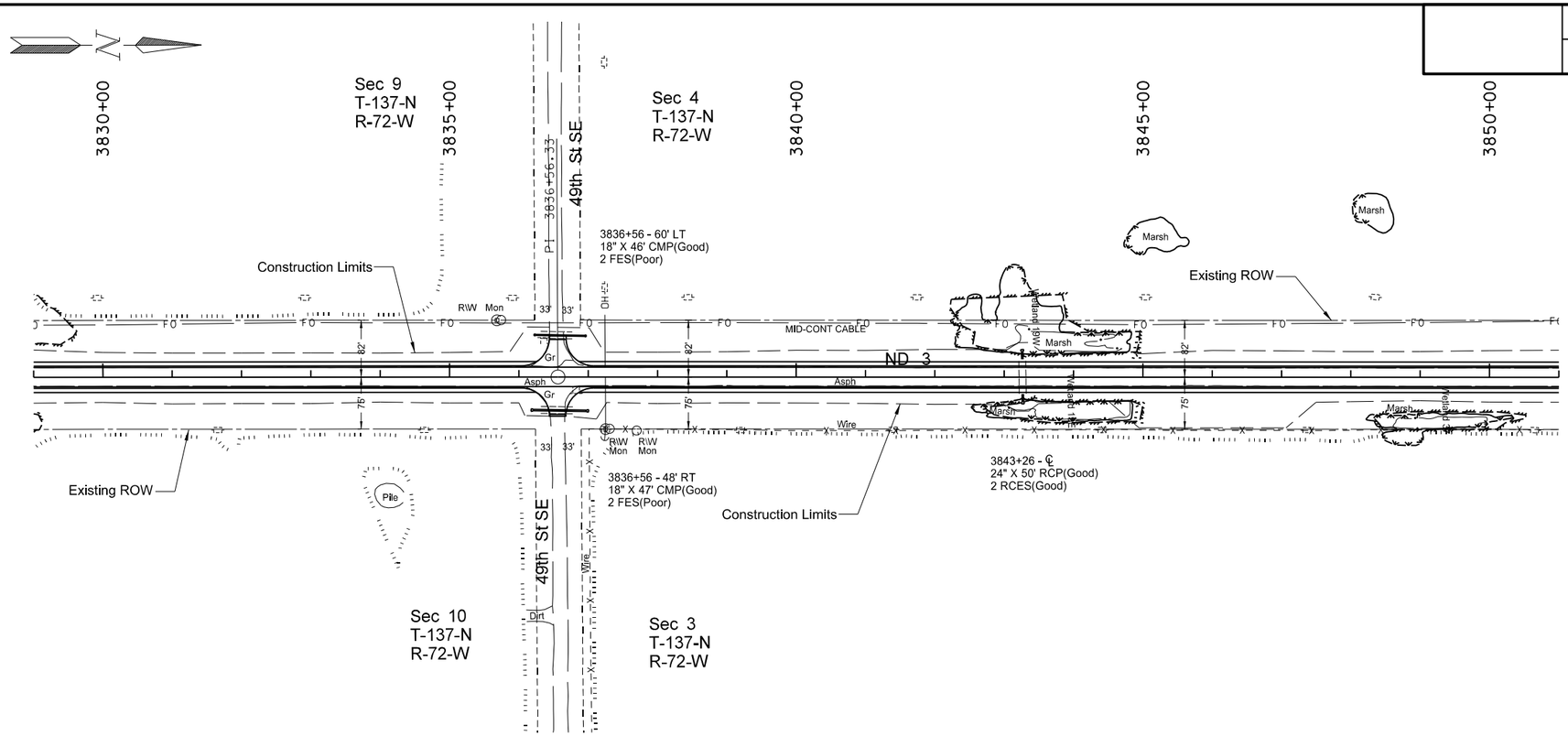
Plan & Profile

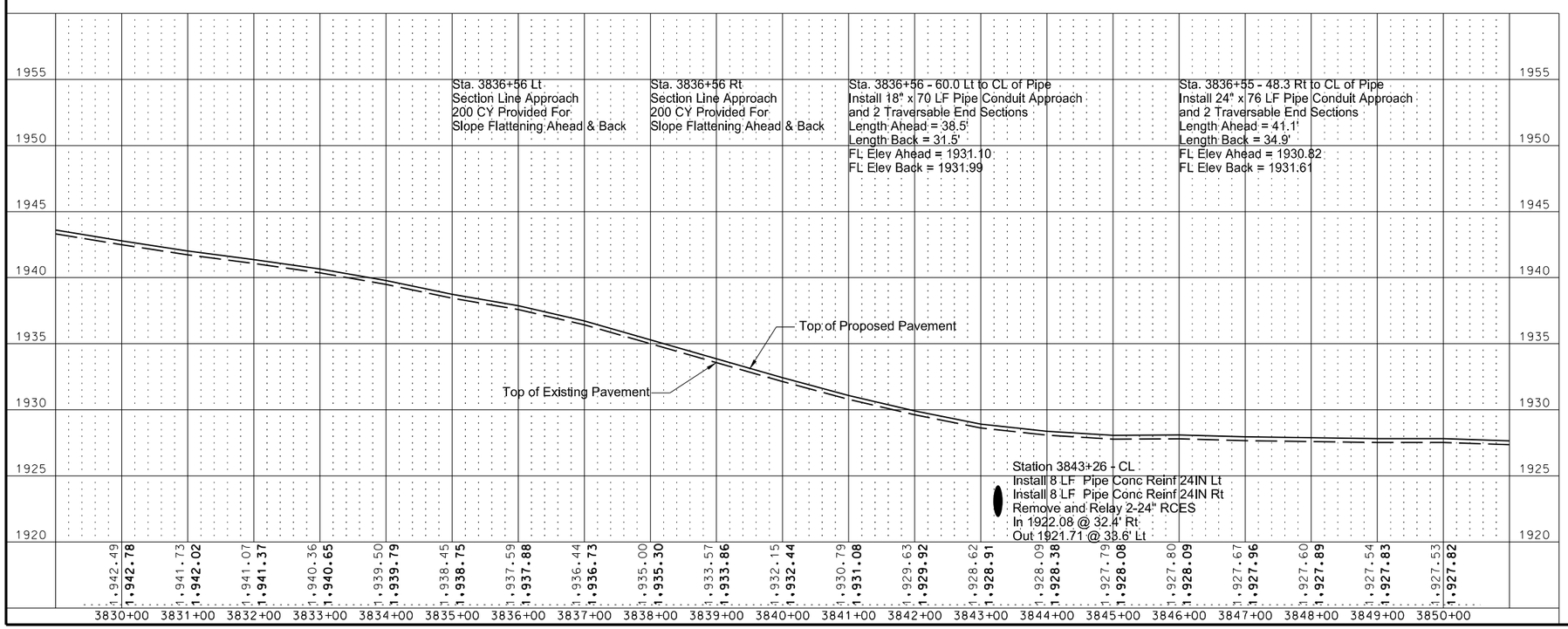
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	36



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3836+56 Lt	46	LF
		3836+56 Rt	47	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3843+26 ℄ - Lt	8	LF
		3843+26 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3836+56 Lt	70	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3836+55 Rt	76	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3843+26 ℄ - Lt	1	EA
		3843+26 ℄ - Rt	1	EA



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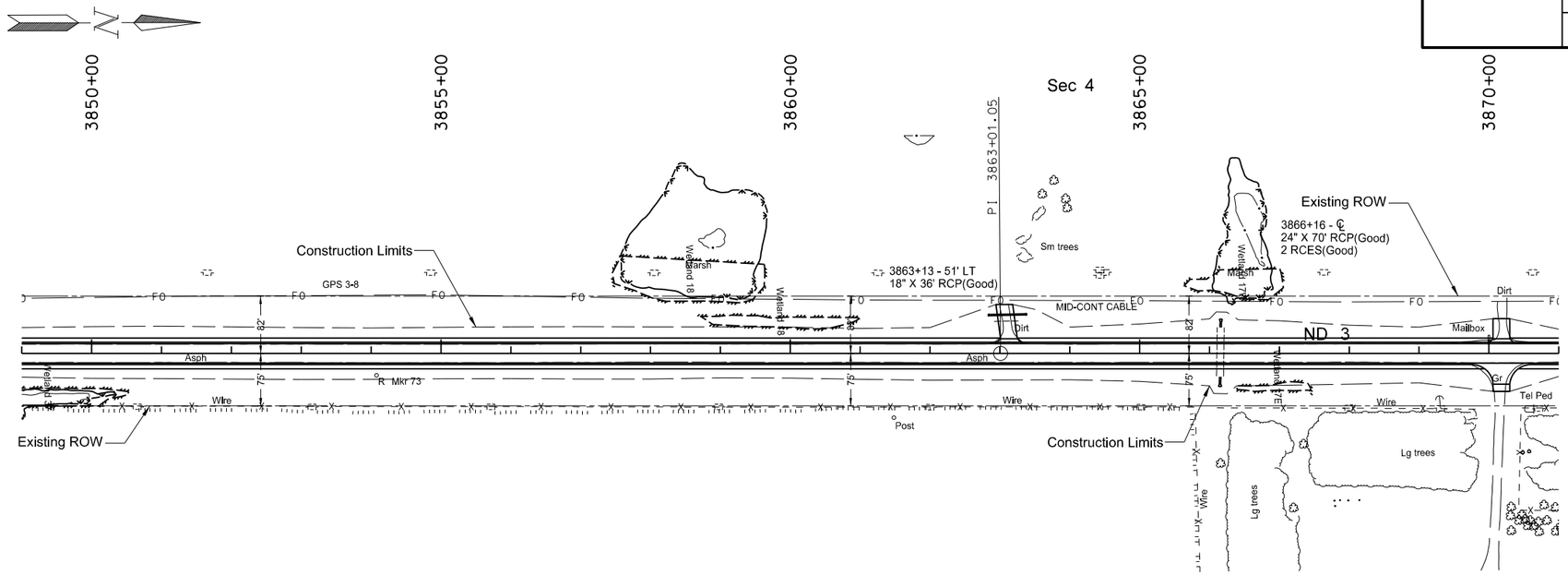
Plan & Profile

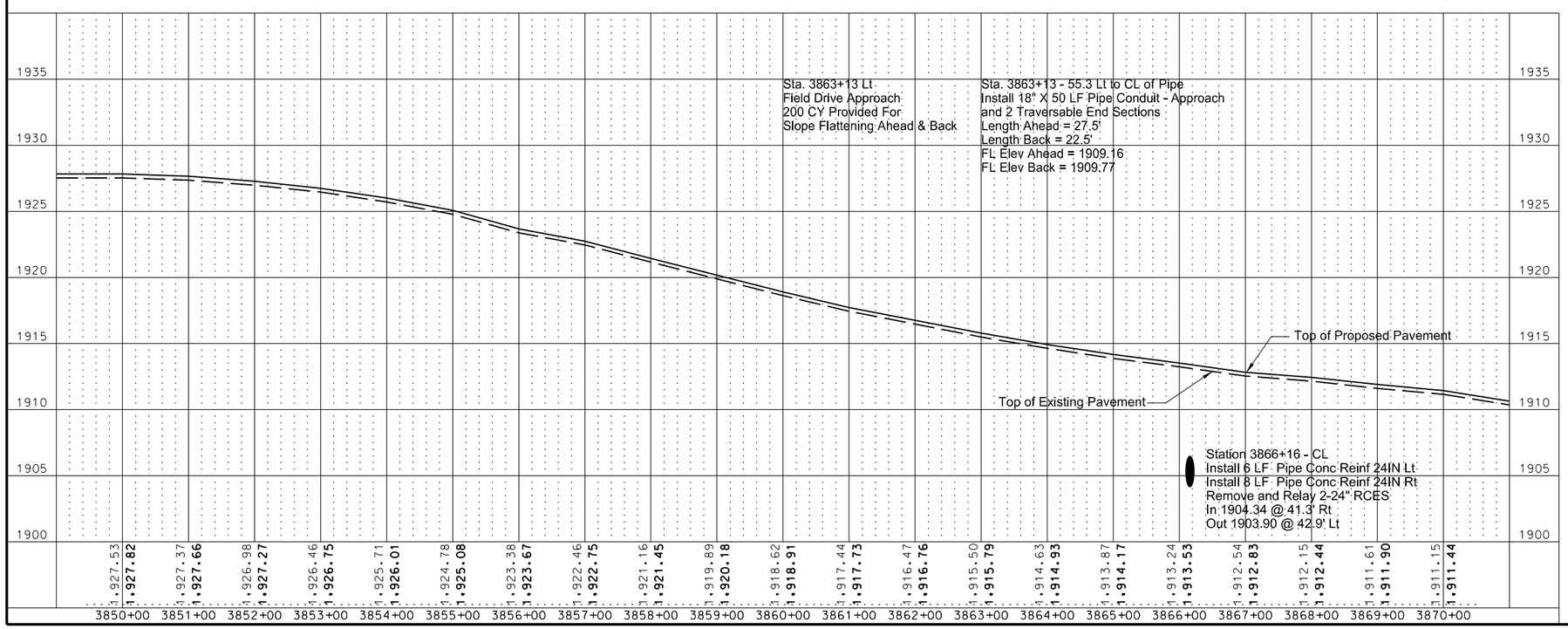
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	37



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3863+13 Lt	37	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3866+16 ℄ - Lt	6	LF
		3866+16 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3863+13 Lt	50	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3866+16 ℄ - Lt	1	EA
		3866+16 ℄ - Rt	1	EA



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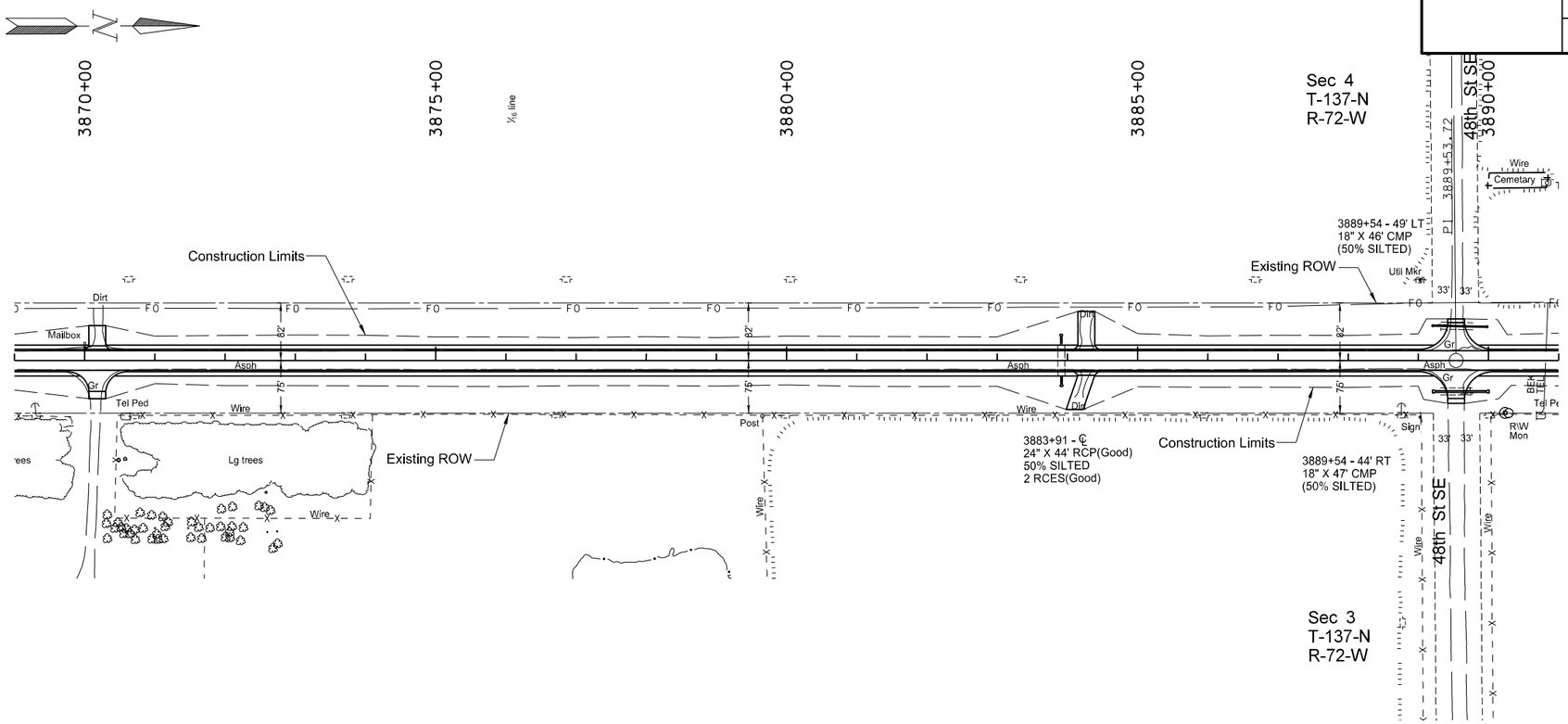
Plan & Profile

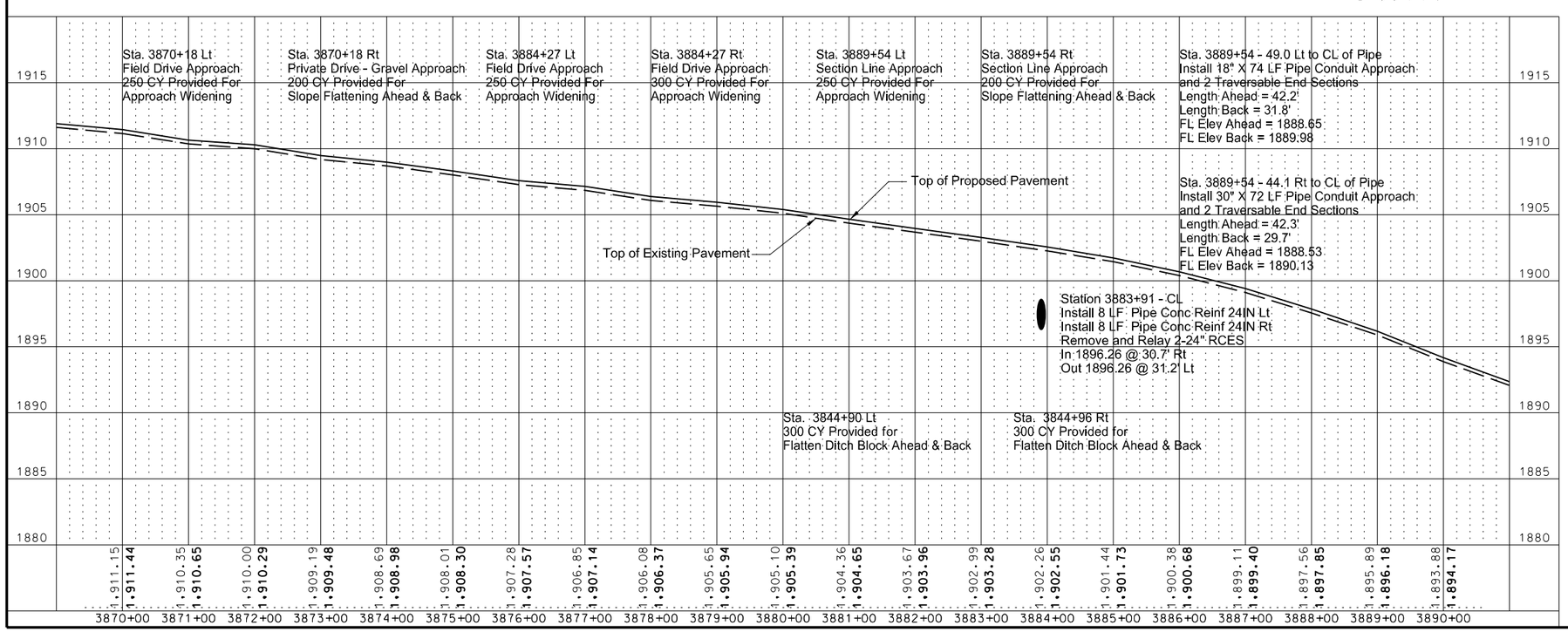
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	38



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3889+54 Lt	46	LF
		3889+54 Rt	47	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3883+91 ℄ - Lt	8	LF
		3883+91 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN- APPROACH		
		3889+54 Lt	74	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		3889+54 Rt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3883+91 ℄ - Lt	1	EA
		3883+91 ℄ - Rt	1	EA



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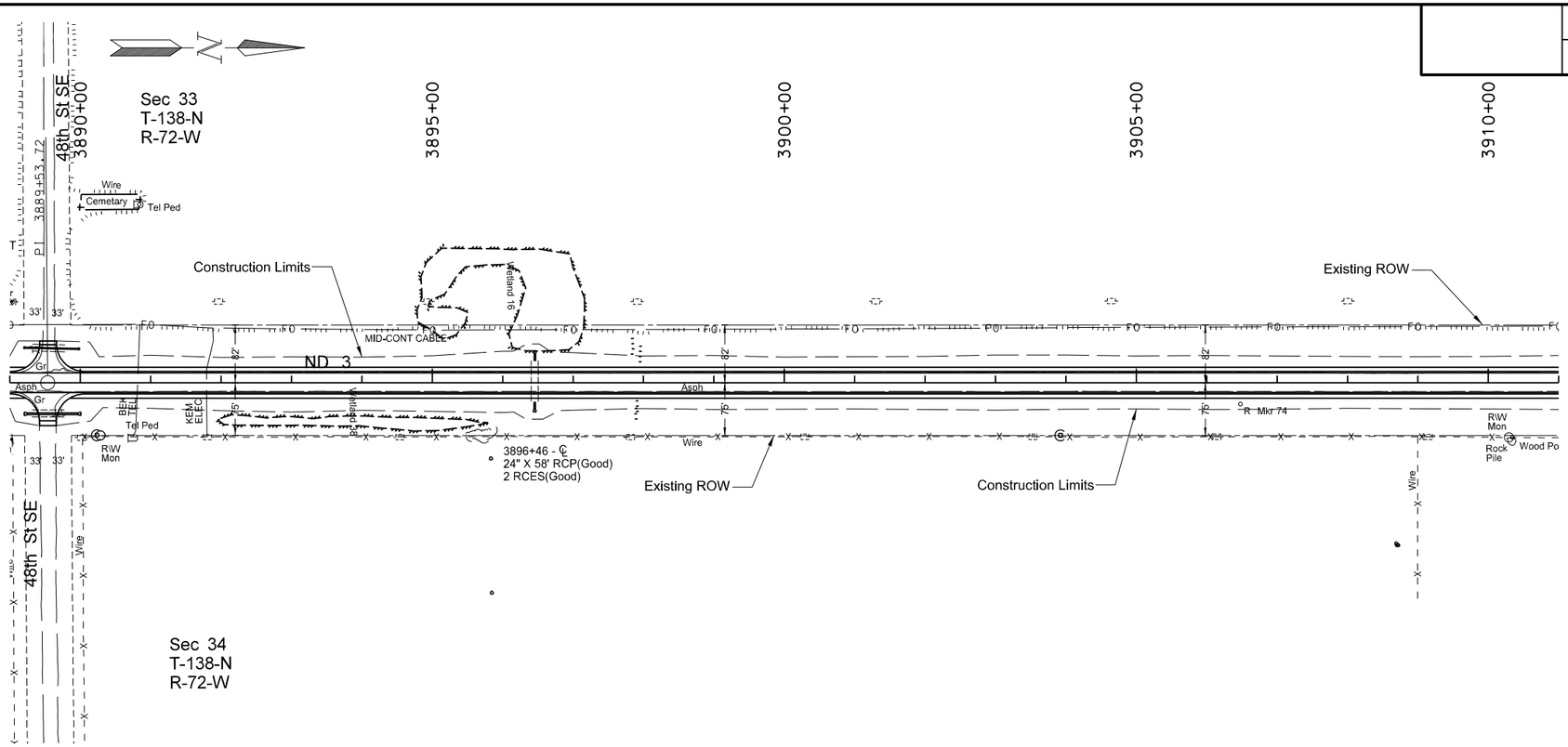
Plan & Profile

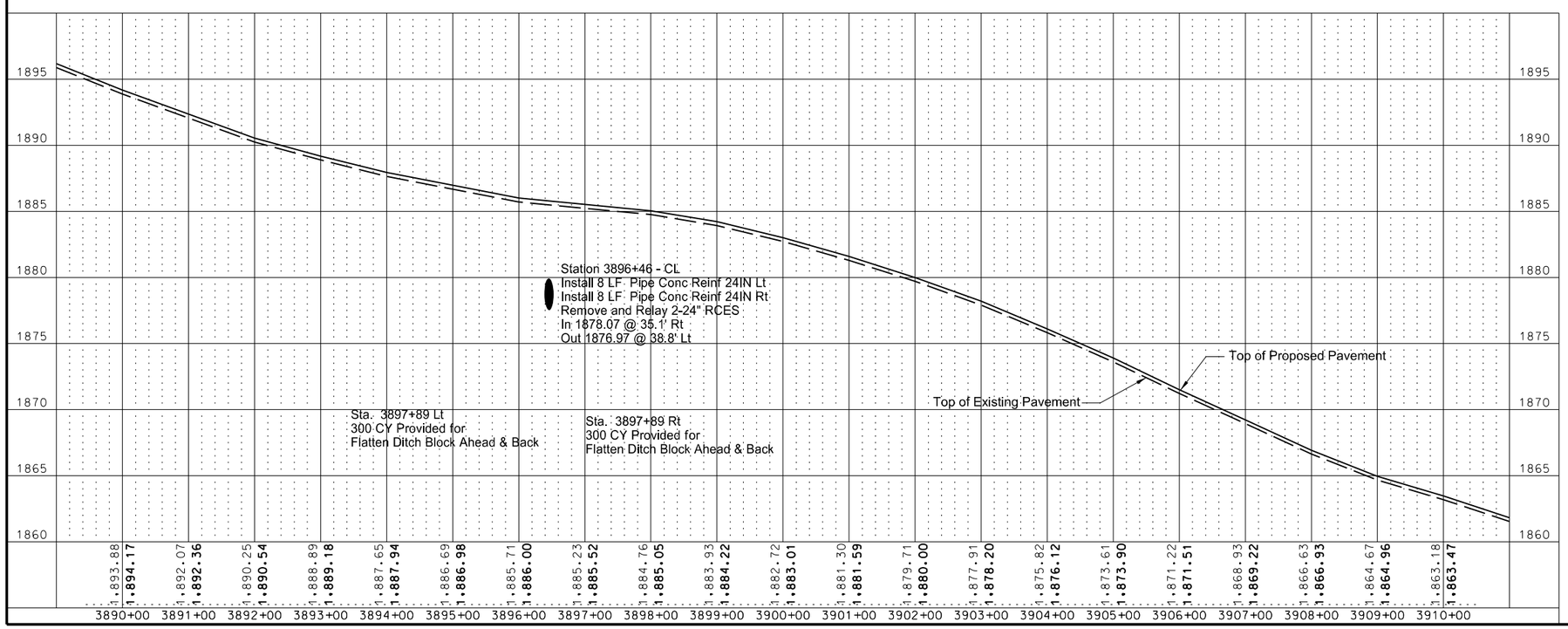
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	39

SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0615	PIPE CONC REINF 24IN CL III		
		3896+46 ℄ - Lt	8	LF
		3896+46 ℄ - Rt	8	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3896+46 ℄ - Lt	1	EA
		3896+46 ℄ - Rt	1	EA





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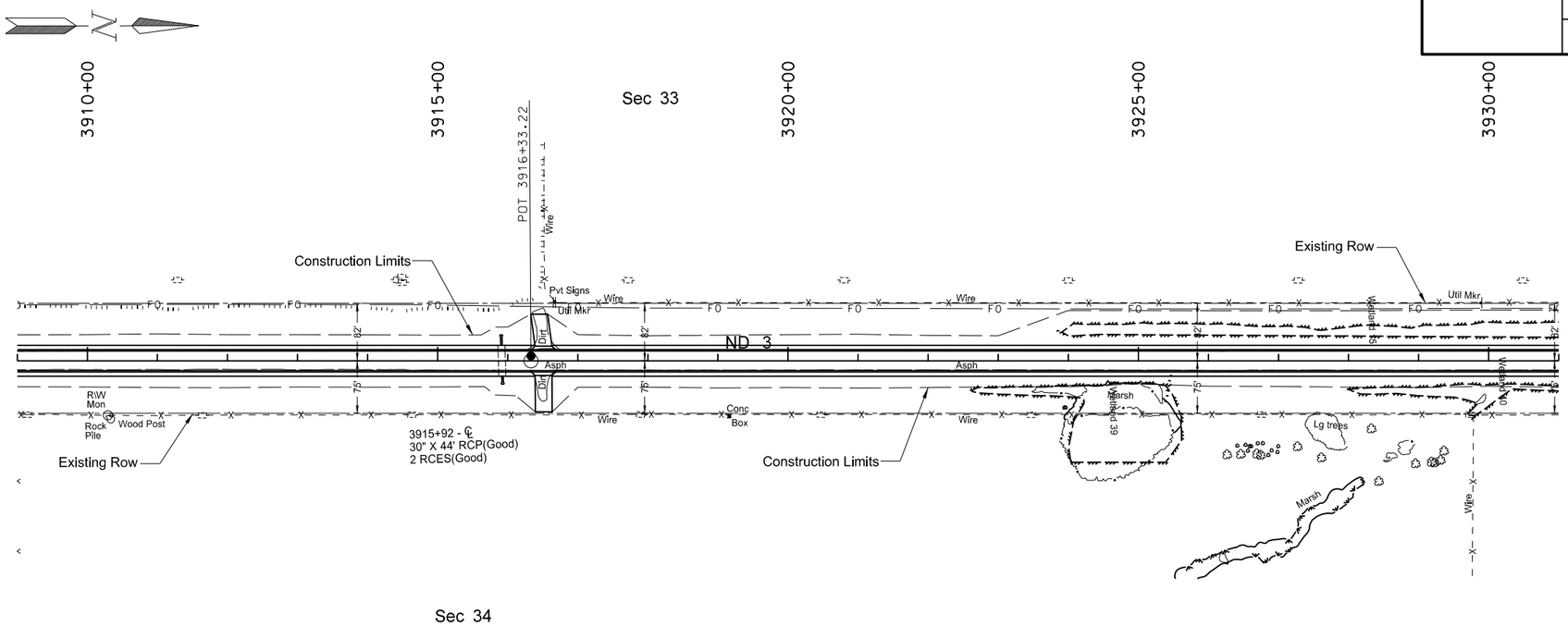
Plan & Profile

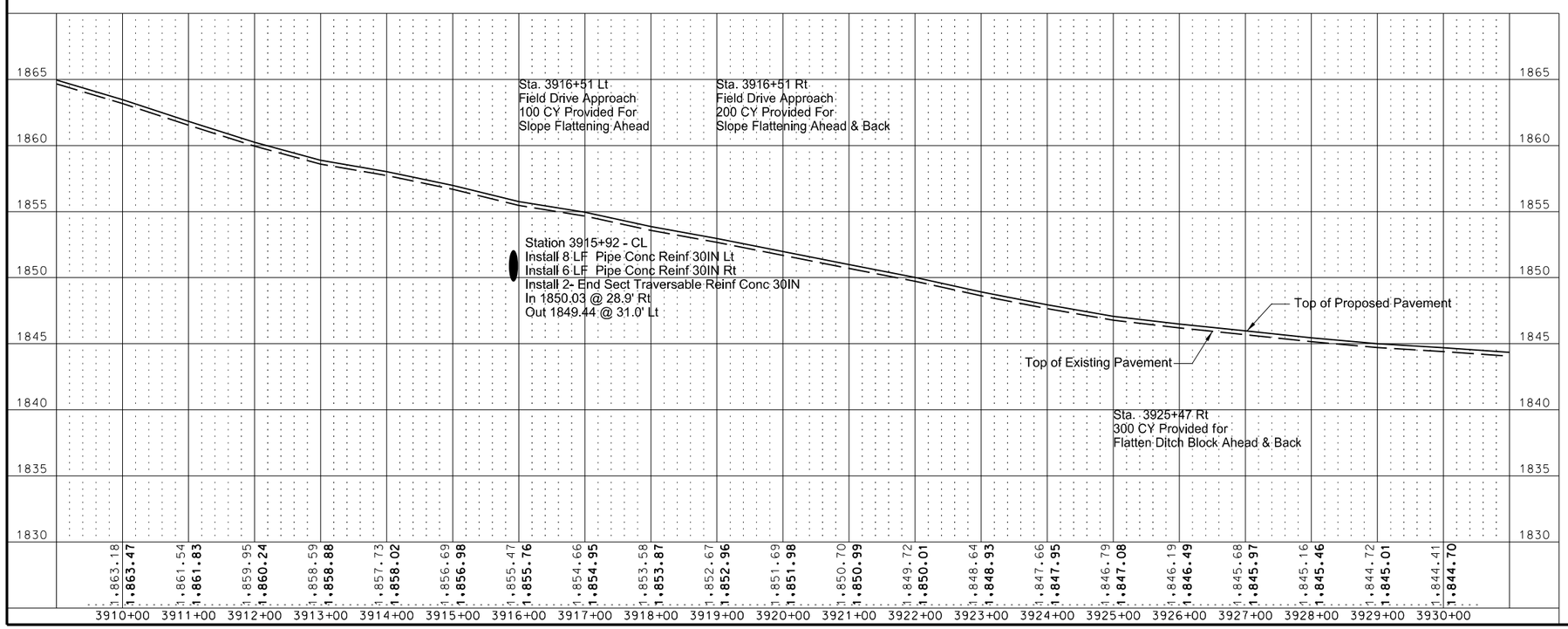
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	40



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3915+92 ℄ - Lt	1	EA
		3915+92 ℄ - Rt	1	EA
714	0820	PIPE CONC REINF 30IN CL III		
		3915+92 ℄ - Lt	8	LF
		3915+92 ℄ - Rt	6	LF
714	3033	END SECT-TRAVERSABLE REINF. CONC. 30IN		
		3915+92 ℄ - Lt	1	EA
		3915+92 ℄ - Rt	1	EA



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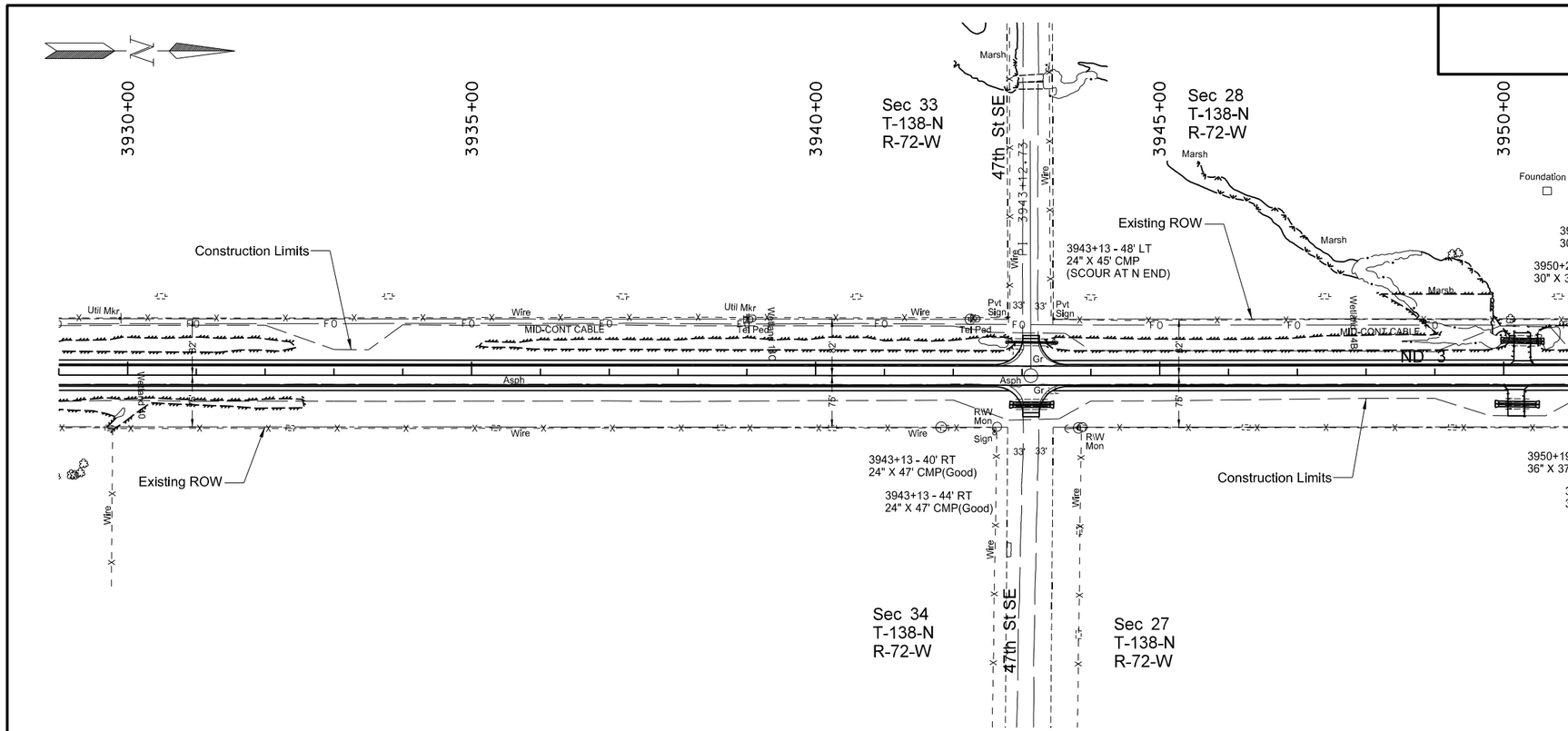
Plan & Profile

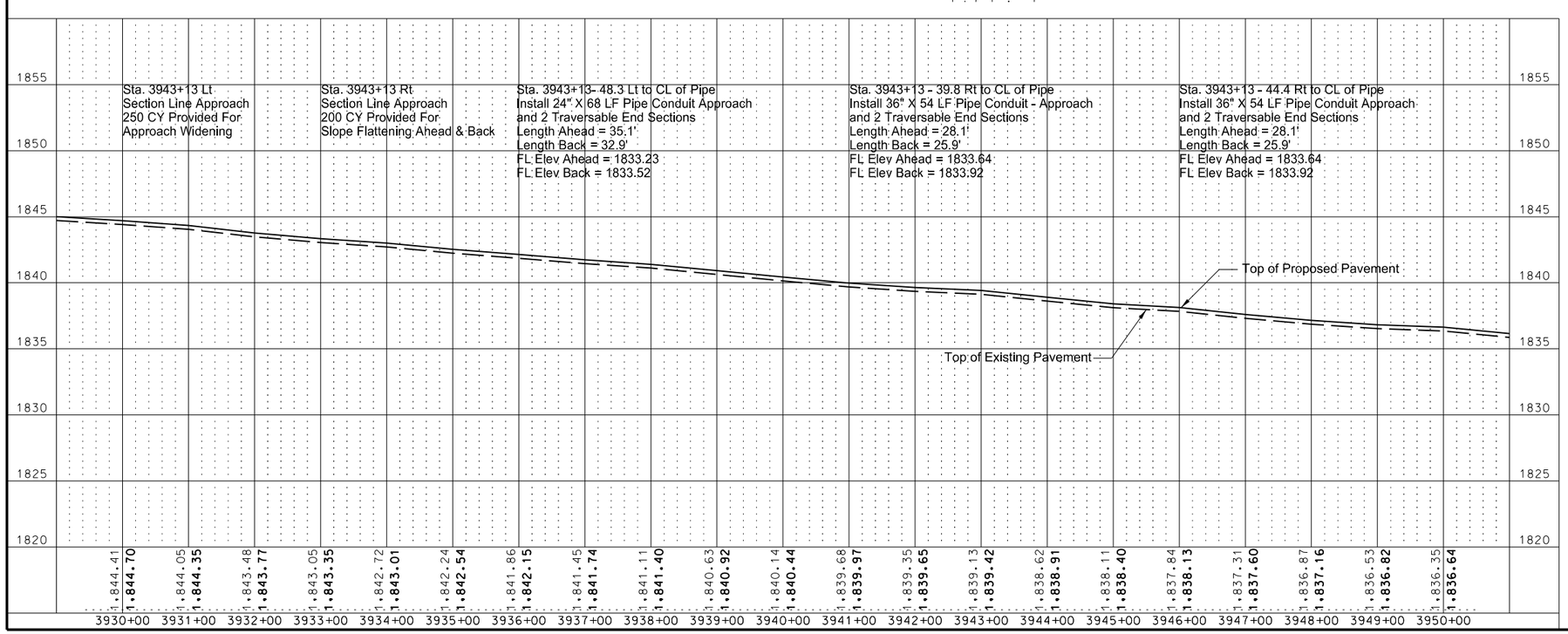
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	41



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3943+13 Lt	45	LF
		3943+13 Rt	47	LF
		3943+13 Rt	47	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3943+13 Lt	68	LF
714	4116	PIPE CONDUIT 36IN-APPROACH		
		3943+13 Rt	54	LF
		3943+13 Rt	54	LF



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ND 3

Jct 34 N to I-94 Dawson

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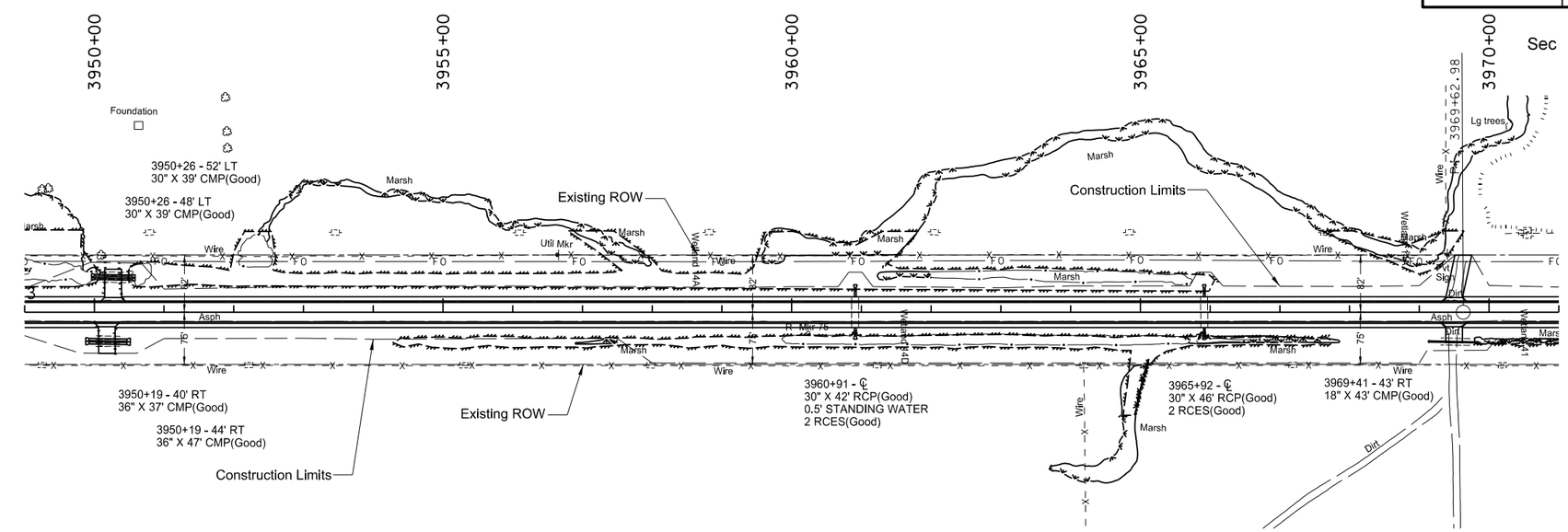
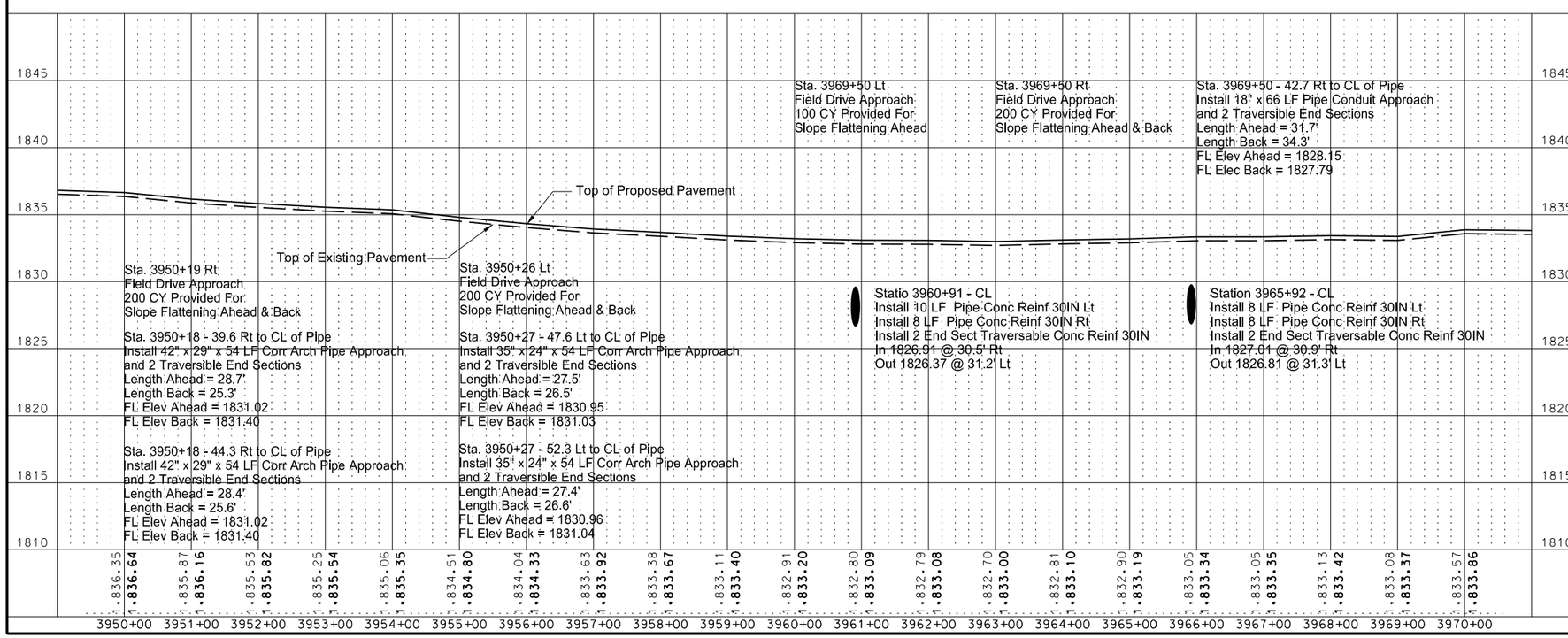
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	42



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		3960+91 ℄ - Lt	1	EA
		3960+91 ℄ - Rt	1	EA
		3965+92 ℄ - Lt	1	EA
		3965+92 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3950+19 Rt	37	LF
		3950+19 Rt	47	LF
		3950+26 Lt	39	LF
		3950+26 Lt	39	LF
		3969+41 Rt	43	LF
714	0820	PIPE CONC REINF 30IN CL III		
		3960+91 ℄ - Lt	10	LF
		3960+91 ℄ - Rt	8	LF
		3965+92 ℄ - Lt	8	LF
		3965+92 ℄ - Rt	8	LF
714	3033	END SECT-TRAVERSABLE REINF. CONC. 30IN		
		3960+91 ℄ - Lt	1	EA
		3960+91 ℄ - Rt	1	EA
		3965+92 ℄ - Lt	1	EA
		3965+92 ℄ - Rt	1	EA
714	4099	PIPE CONDUIT 18IN-APPROACH		
		3969+50 Rt	66	LF
714	5128	PIPE CORR STEEL .064IN ARCH 35IN X 24IN		
		3950+27 Lt	54	LF
		3950+27 Lt	54	LF
714	5133	PIPE CORR STEEL 0.64IN ARCH 42IN X 29IN		
		3950+18 Rt	54	LF
		3950+18 Rt	54	LF



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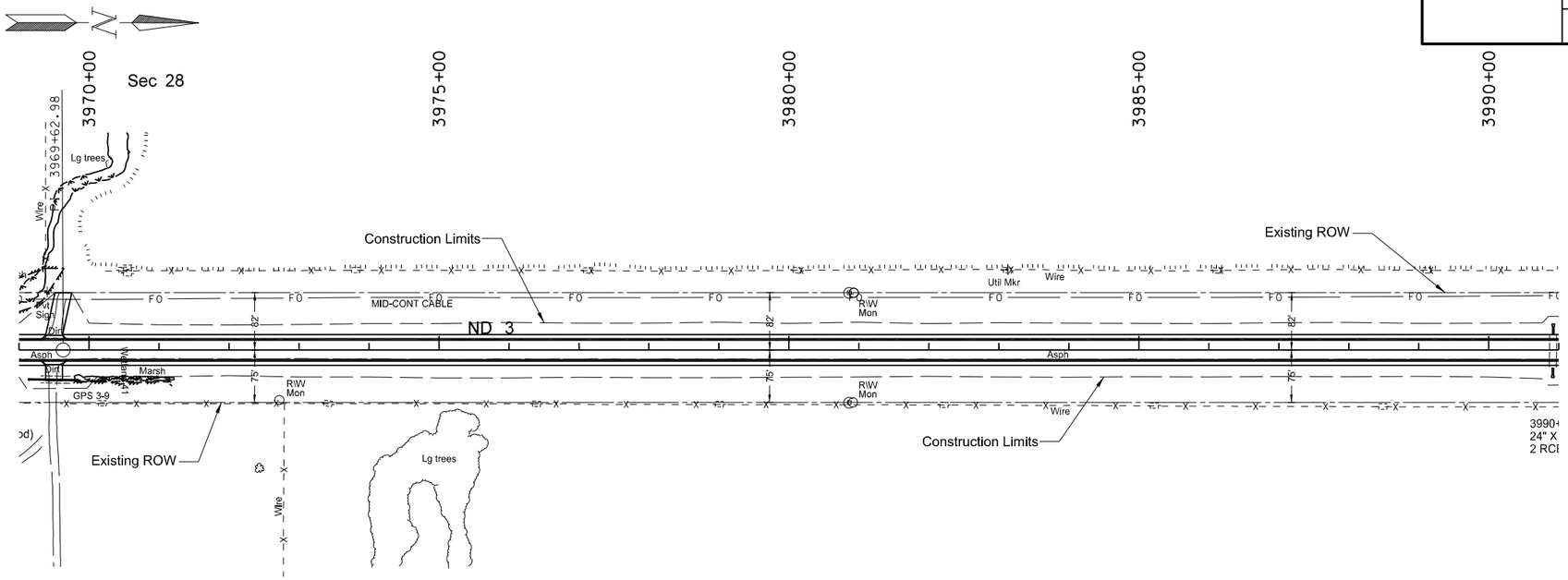
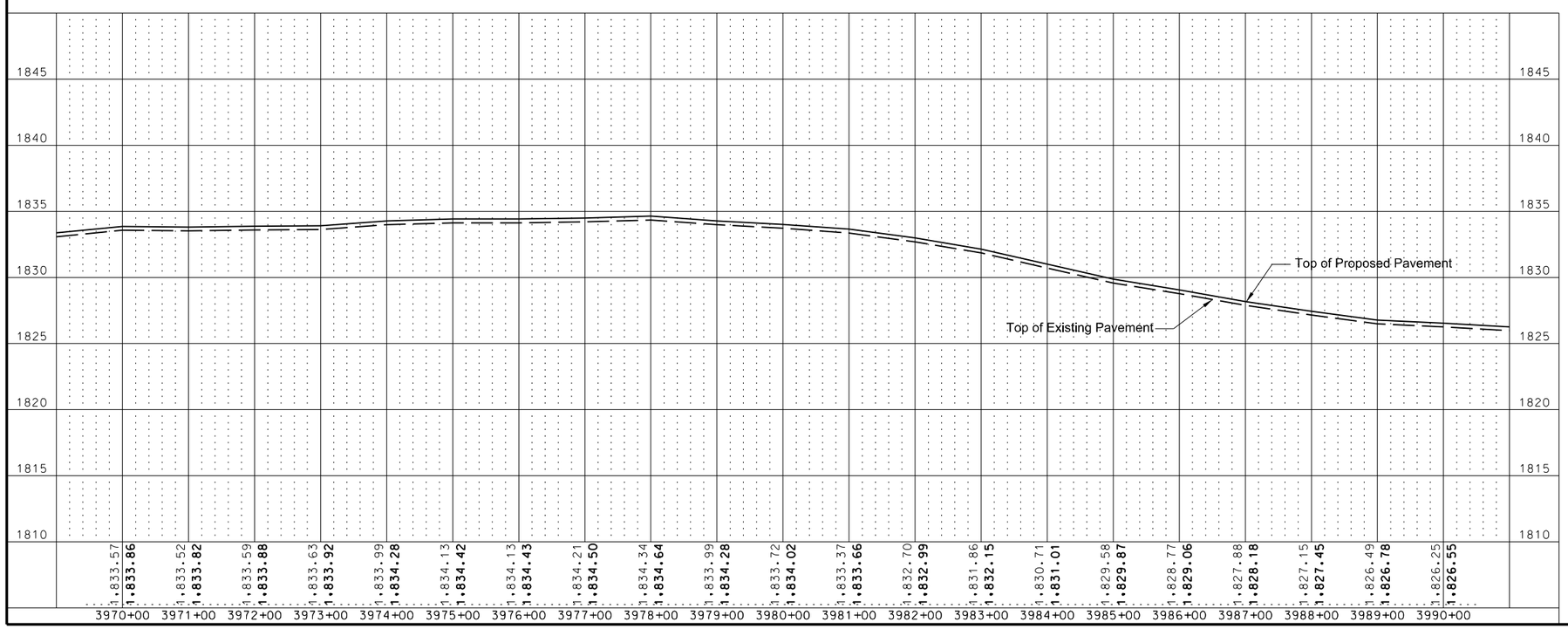
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	43





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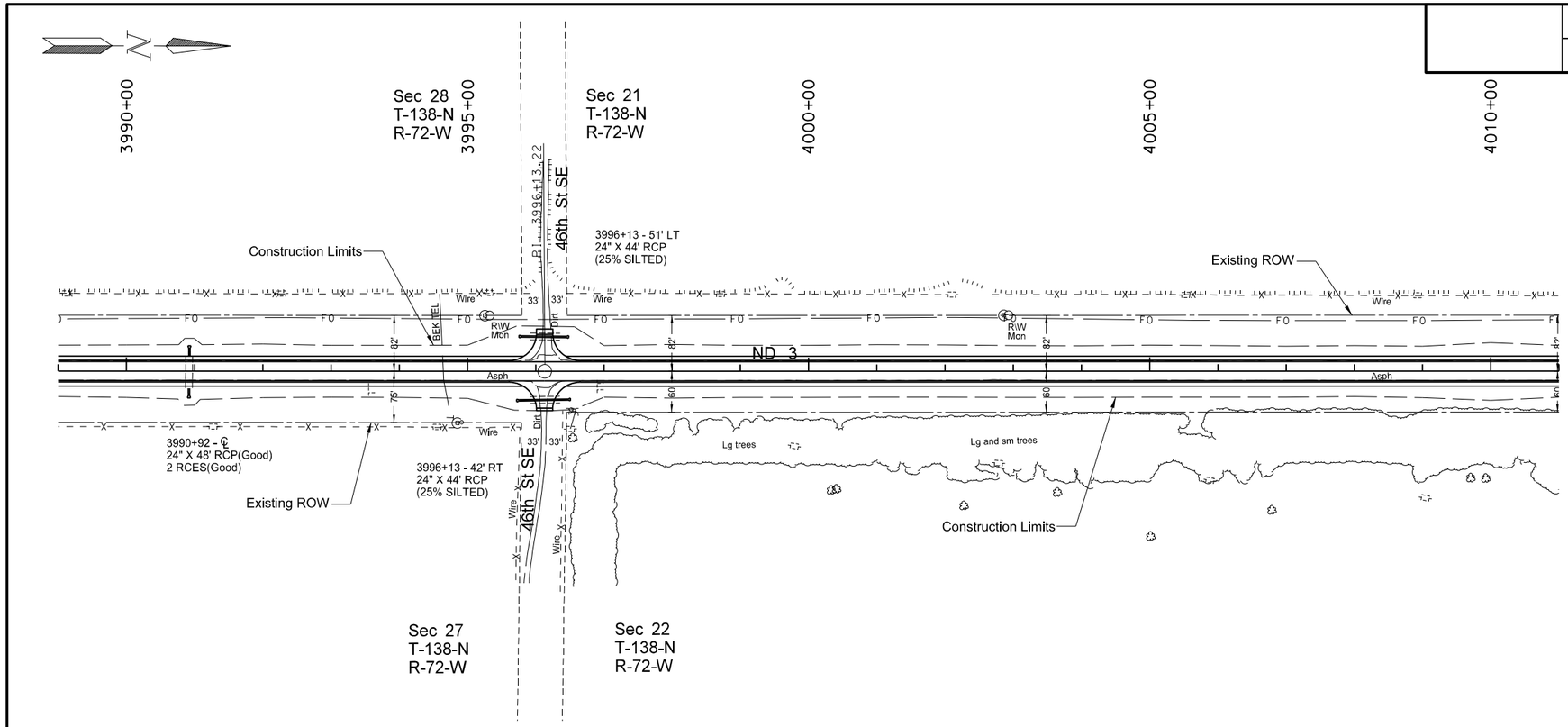
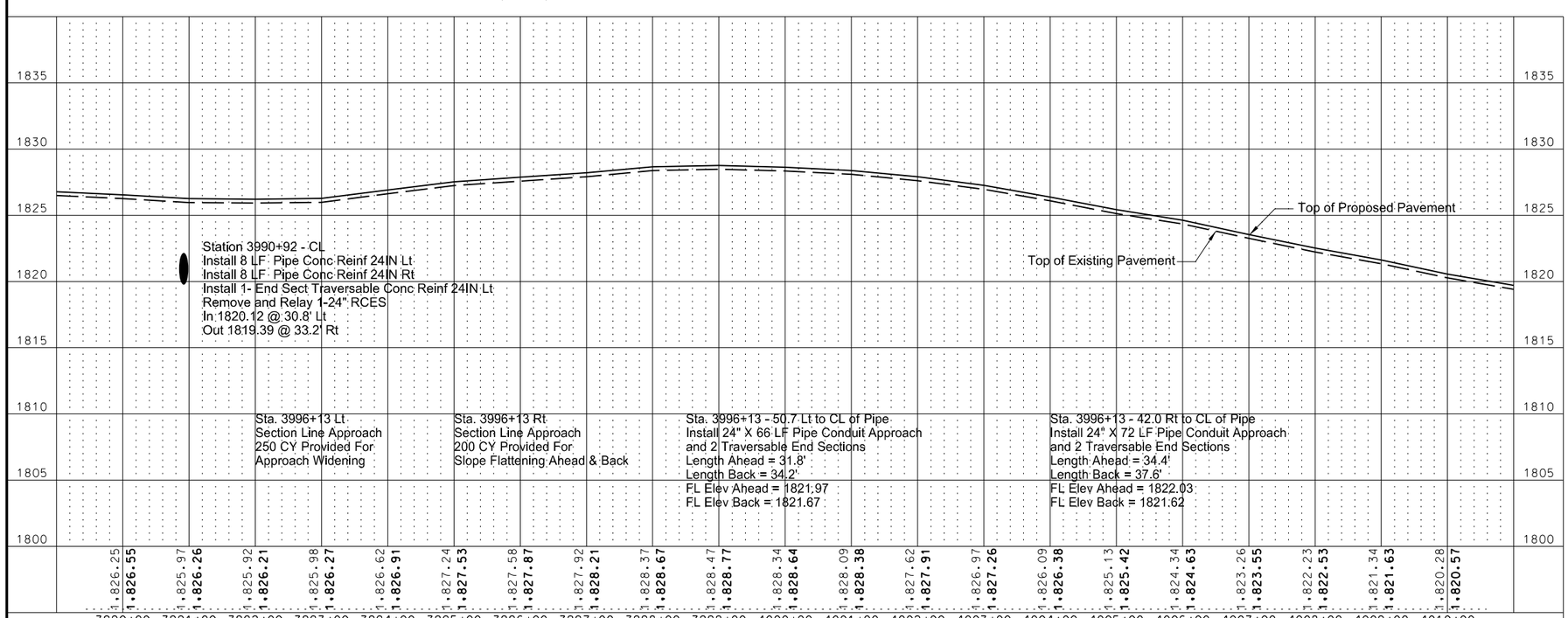
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	44



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES AND SIZES		
		3990+92 ℄ - Lt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		3996+13 Lt	45	LF
		3996+13 Rt	45	LF
714	0615	PIPE CONC REINF 24IN CL III		
		3990+92 ℄ - Lt	8	LF
		3990+92 ℄ - Rt	8	LF
714	3023	END SECT-TRAVERSABLE REINF. CONC. 24IN		
		3990+92 ℄ - Lt	1	EA
714	4106	PIPE CONDUIT 24IN-APPROACH		
		3996+13 Lt	66	LF
		3996+13 Rt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		3990+92 ℄ - Rt	1	EA



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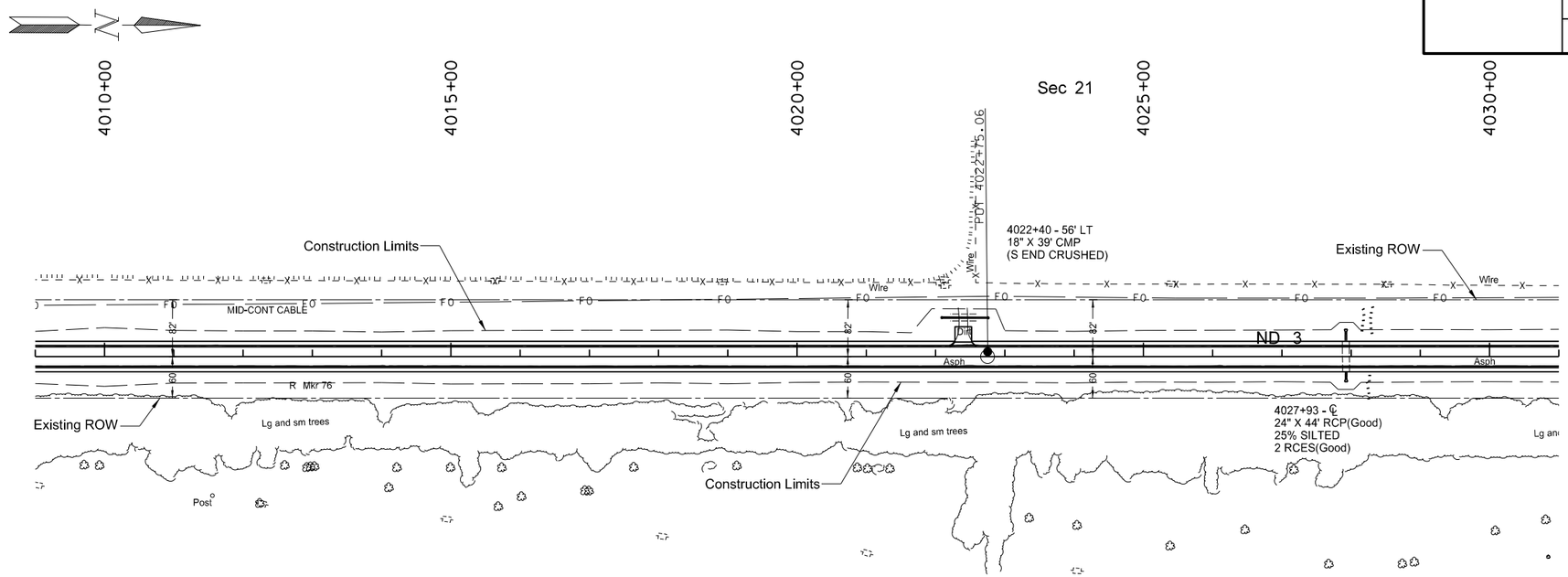
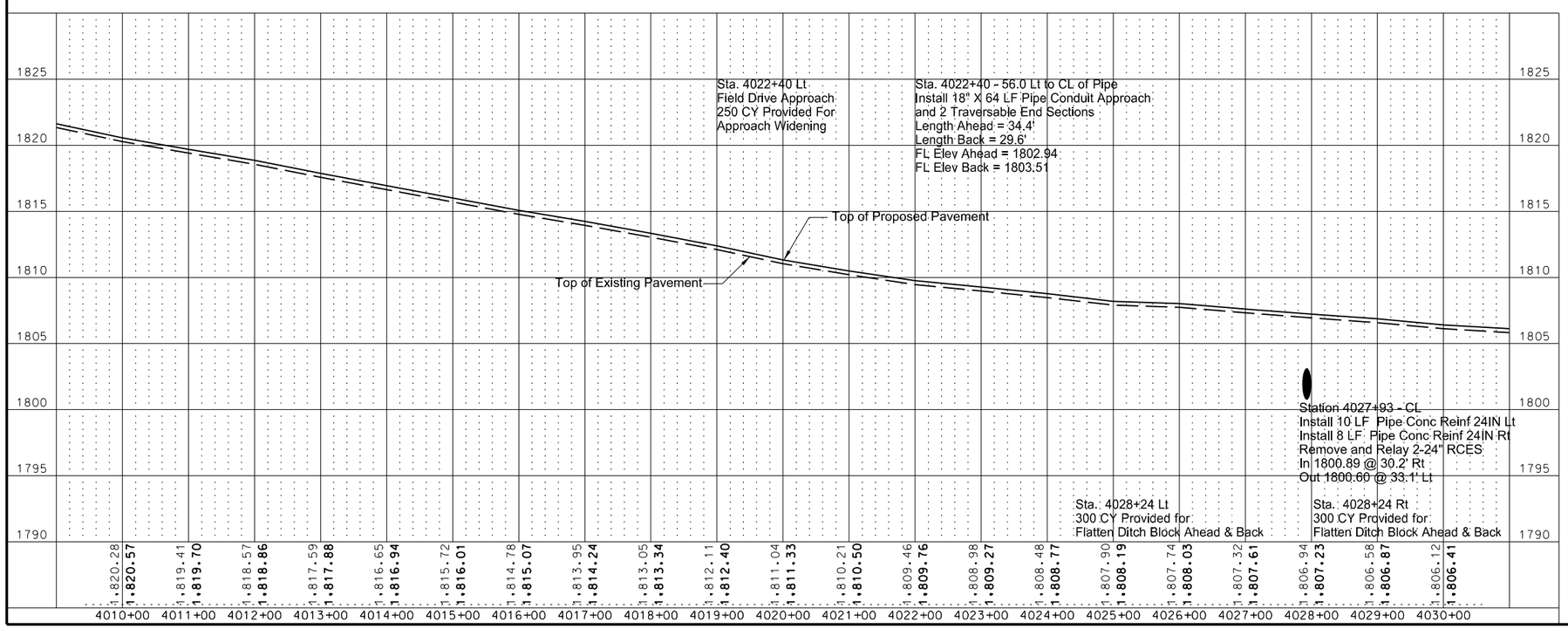
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	45



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4022+40 Lt	39	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4027+93 ℄ - Lt	10	LF
		4027+93 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4022+40 Lt	64	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4027+93 ℄ - Lt	1	EA
		4027+93 ℄ - Rt	1	EA



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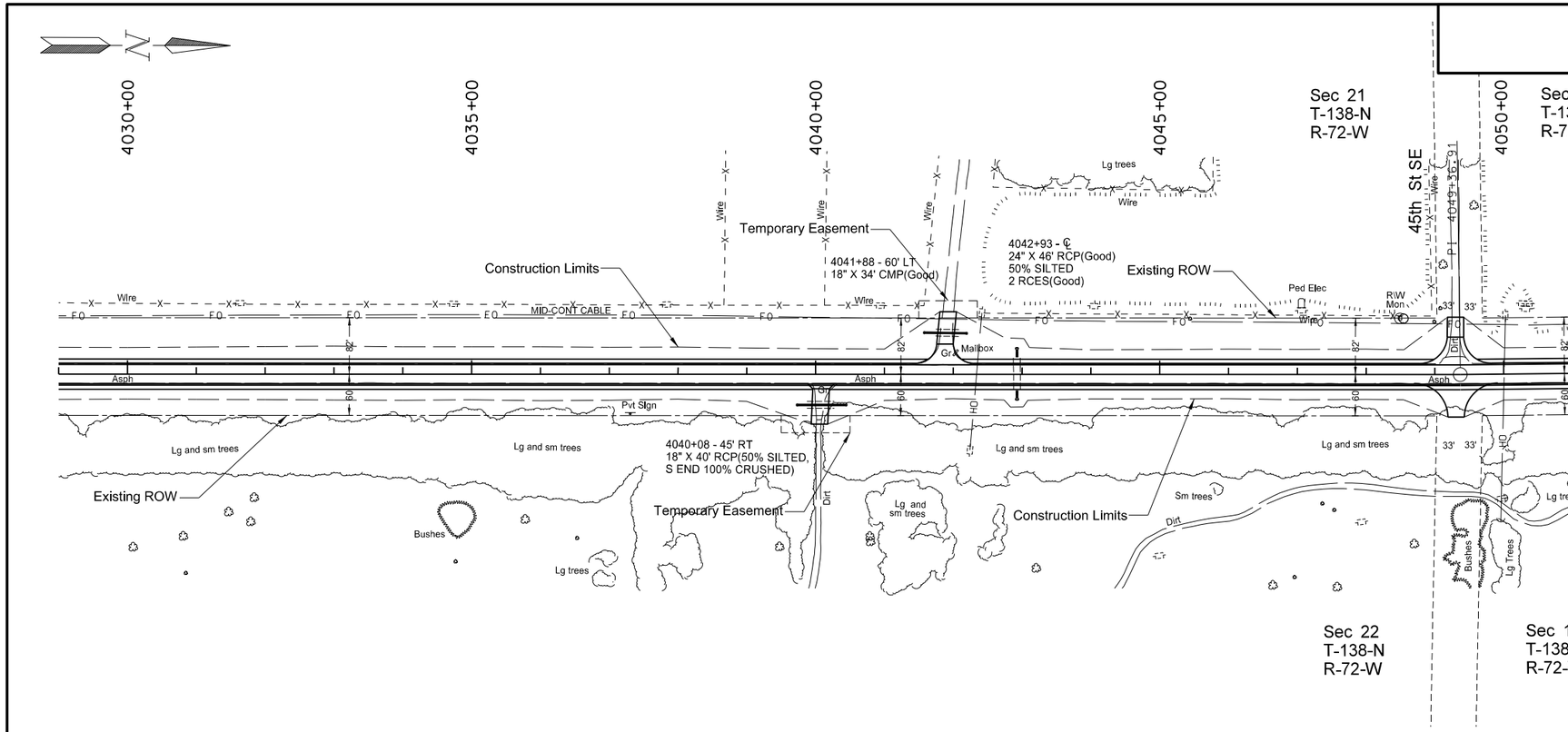
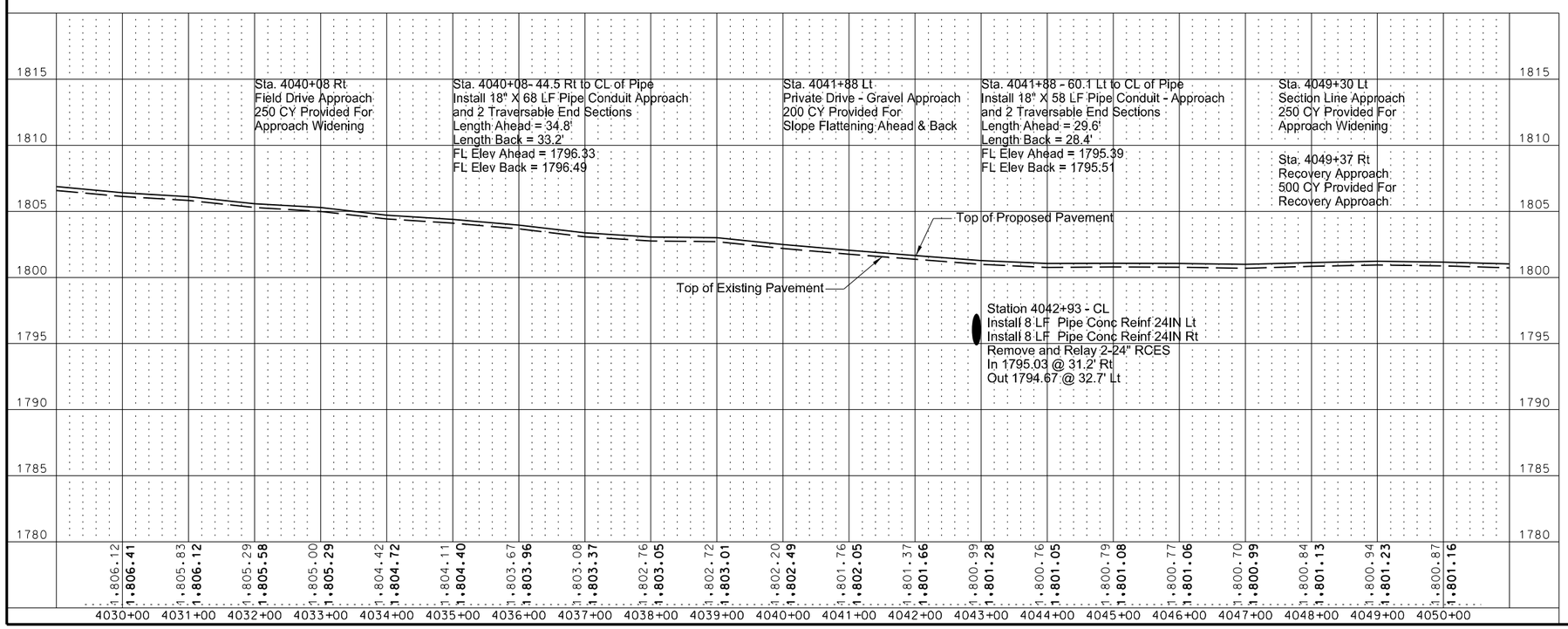
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	46



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4040+08 Rt	40	LF
		4041+88 Lt	34	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4042+93 ℄ - Lt	8	LF
		4042+93 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4040+08 Rt	68	LF
		4041+88 Lt	58	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4042+93 ℄ - Lt	1	EA
		4042+93 ℄ - Rt	1	EA



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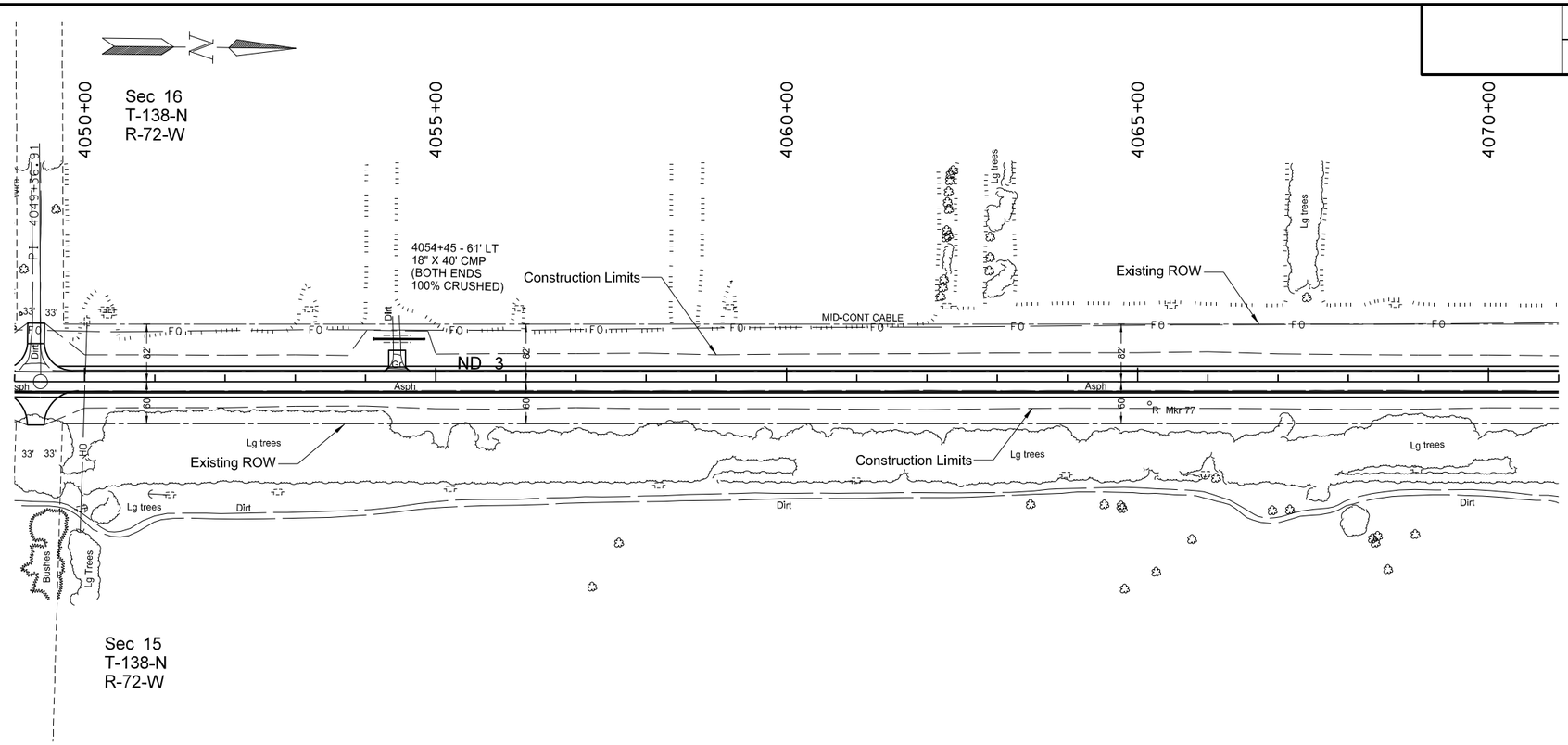
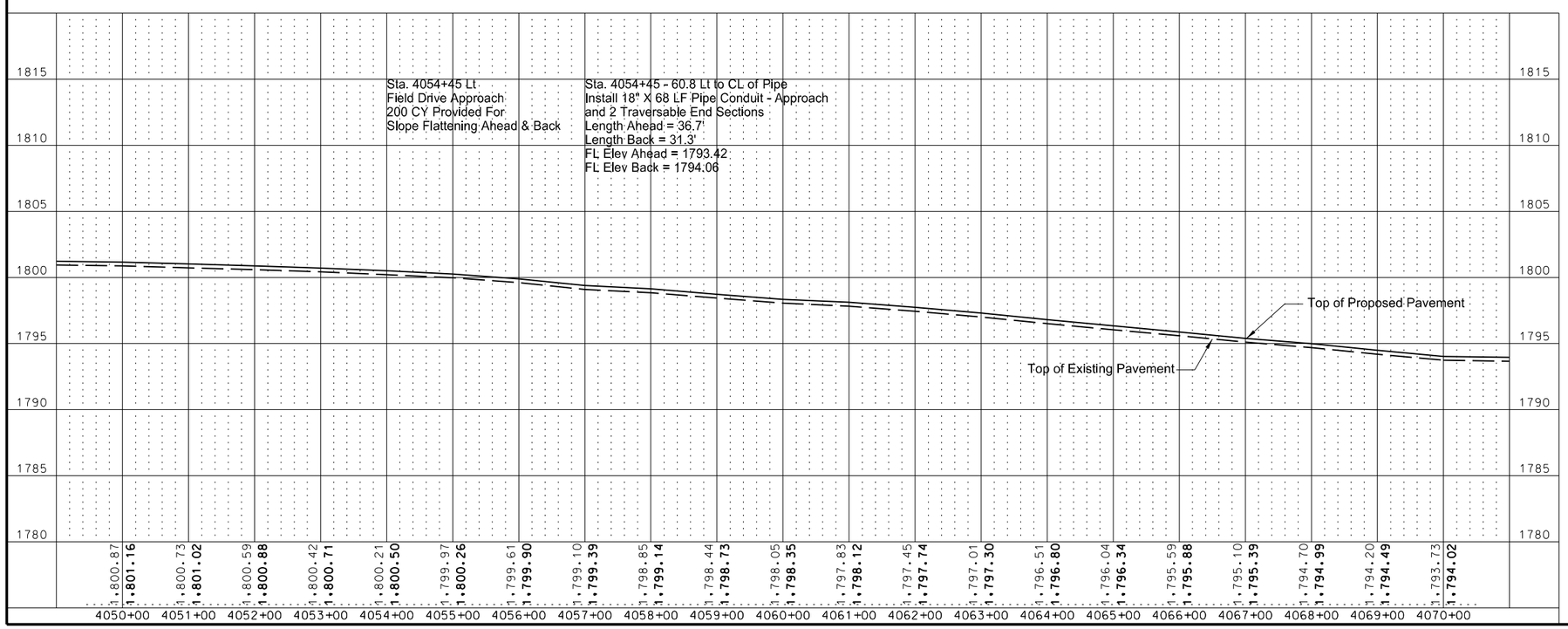
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	47





SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4054+45 Lt	40	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4054+45 Lt	68	LF

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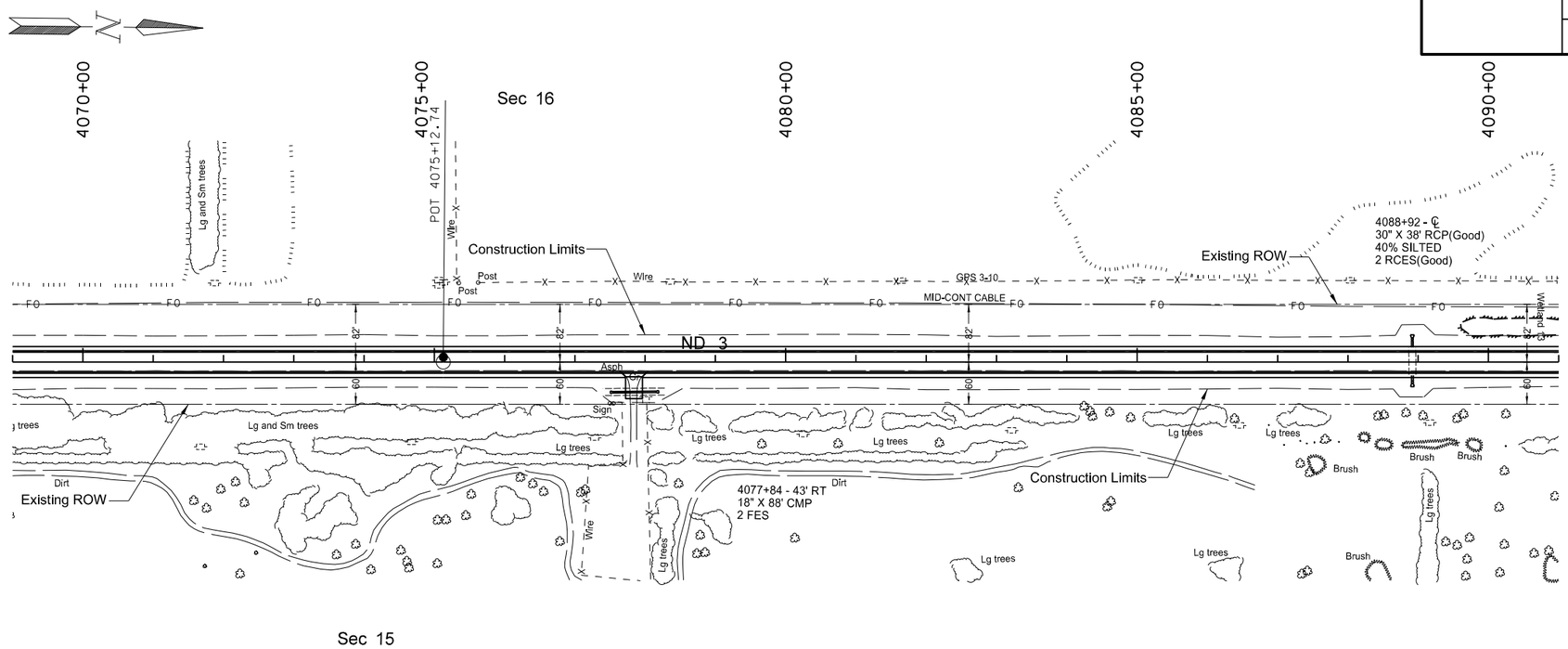
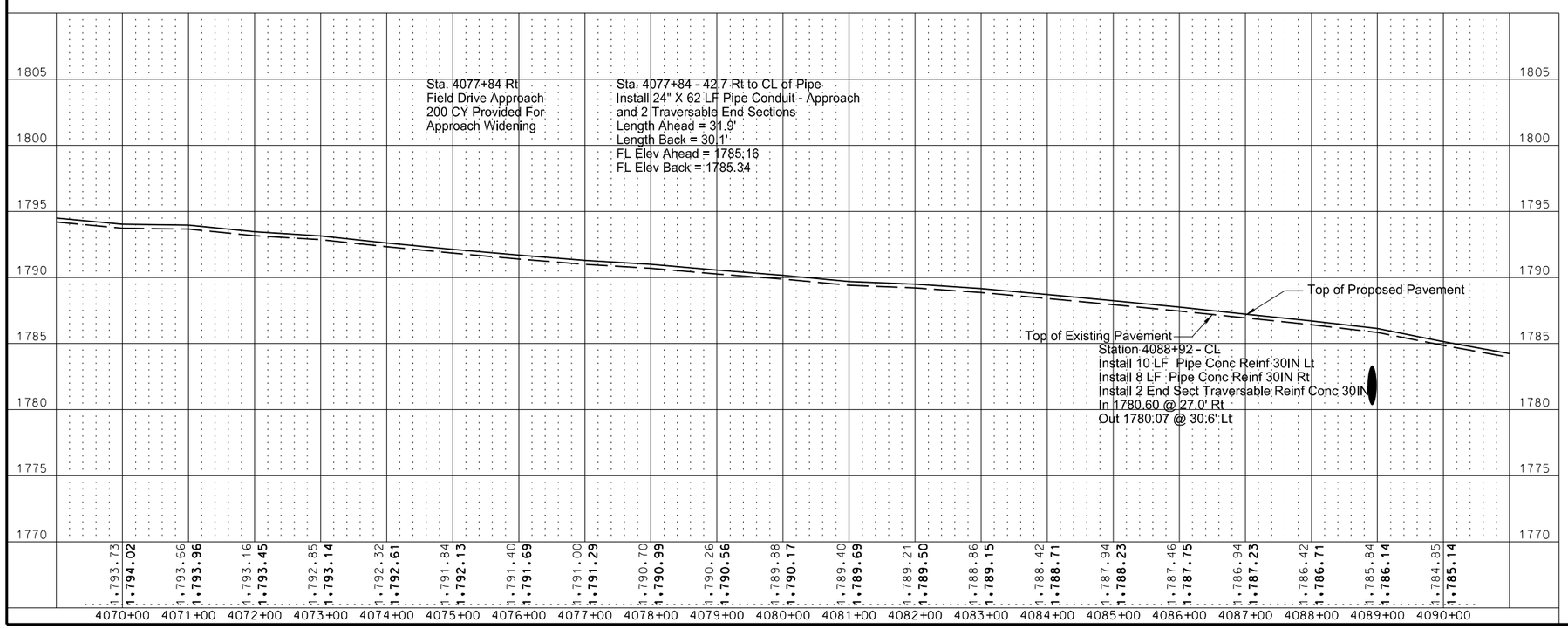
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	48



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		4088+92 ℄ - Lt	1	EA
		4088+92 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4077+84 Rt	88	LF
714	0820	PIPE CONC REINF 30IN CL III		
		4088+92 ℄ - Lt	10	LF
		4088+92 ℄ - Rt	8	LF
714	3033	END SECT-TRAVERSABLE REINF. CONC. 30IN		
		4088+92 ℄ - Lt	1	EA
		4088+92 ℄ - Rt	1	EA
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4077+84 Rt	62	LF



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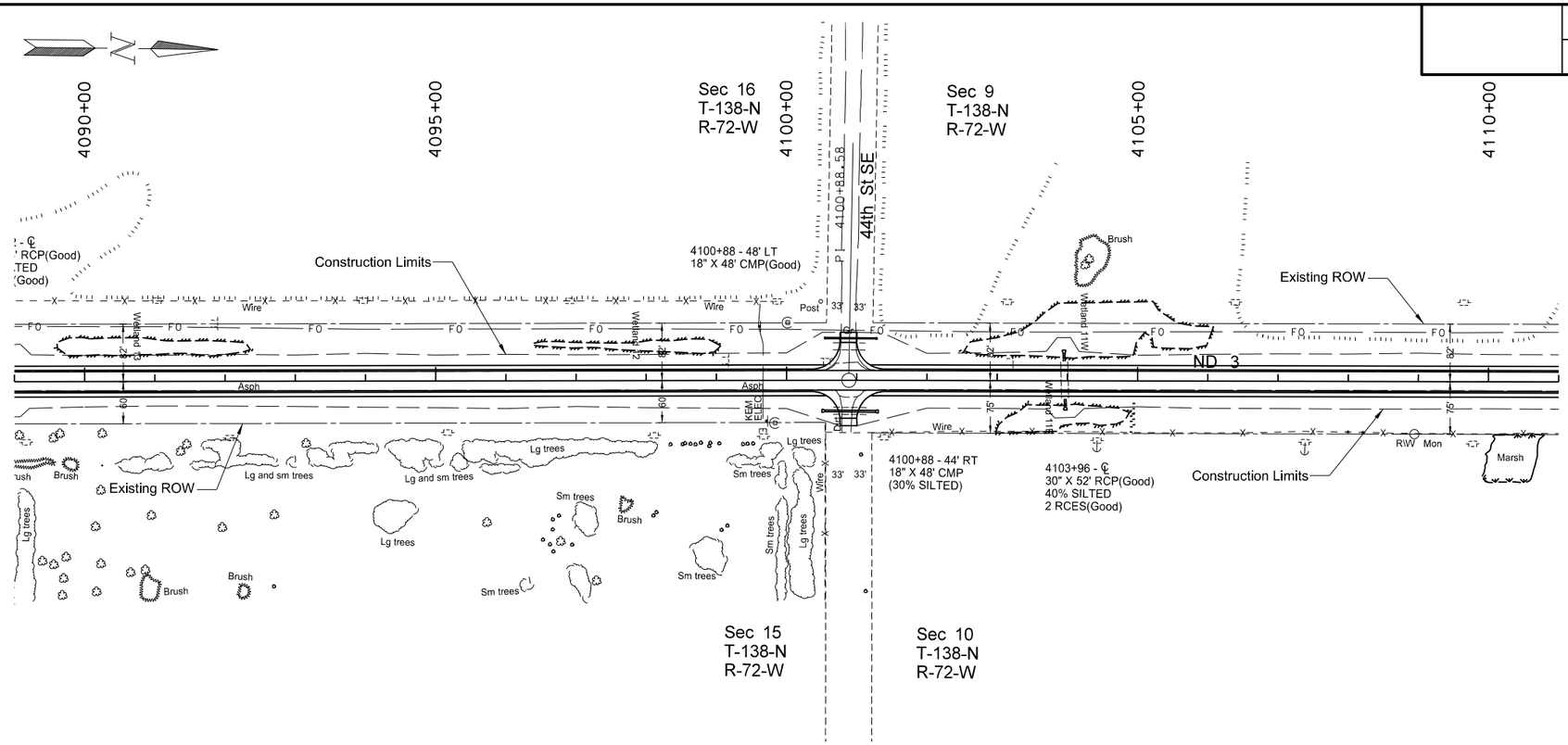
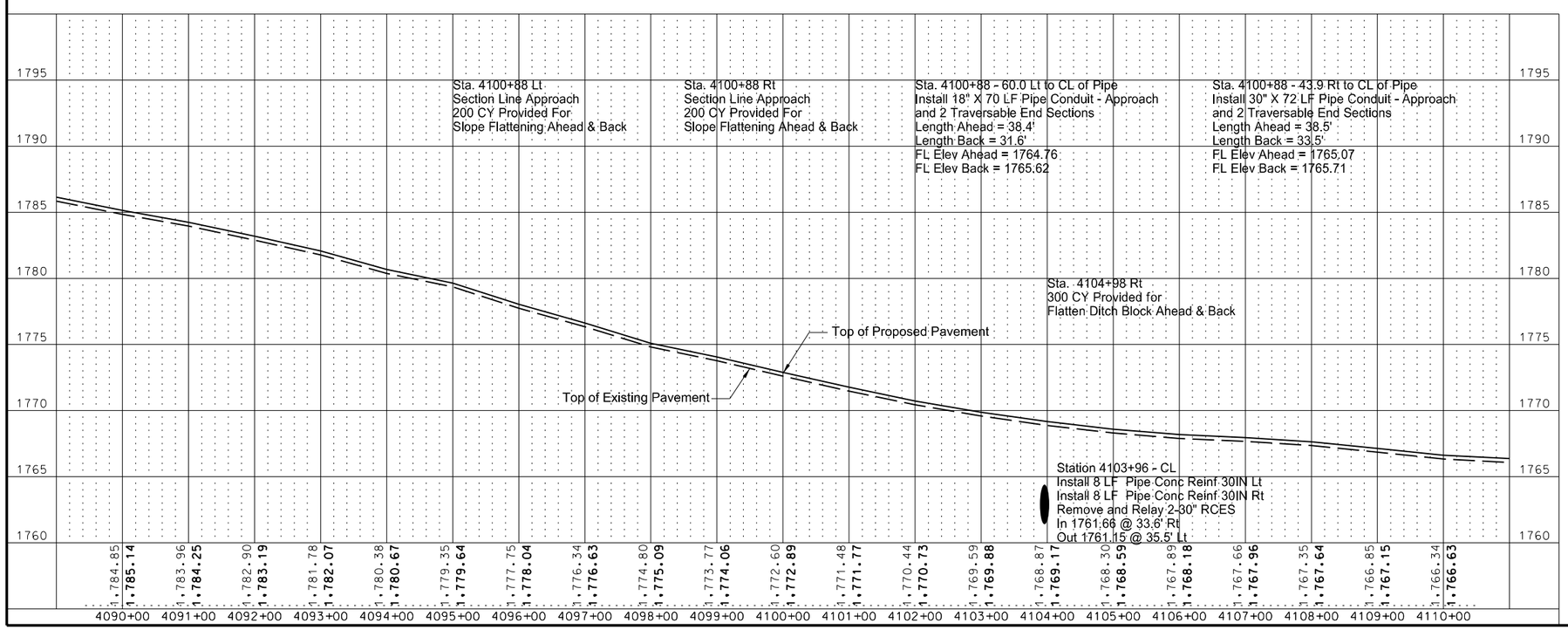
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	49



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4100+88 Lt	48	LF
		4100+88 Rt	48	LF
714	0820	PIPE CONC REINF 30IN CL III		
		4103+96 ℄ - Lt	8	LF
		4103+96 ℄ - Rt	8	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4100+88 Lt	70	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		4100+88 Rt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4103+96 ℄ - Lt	1	EA
		4103+96 ℄ - Rt	1	EA



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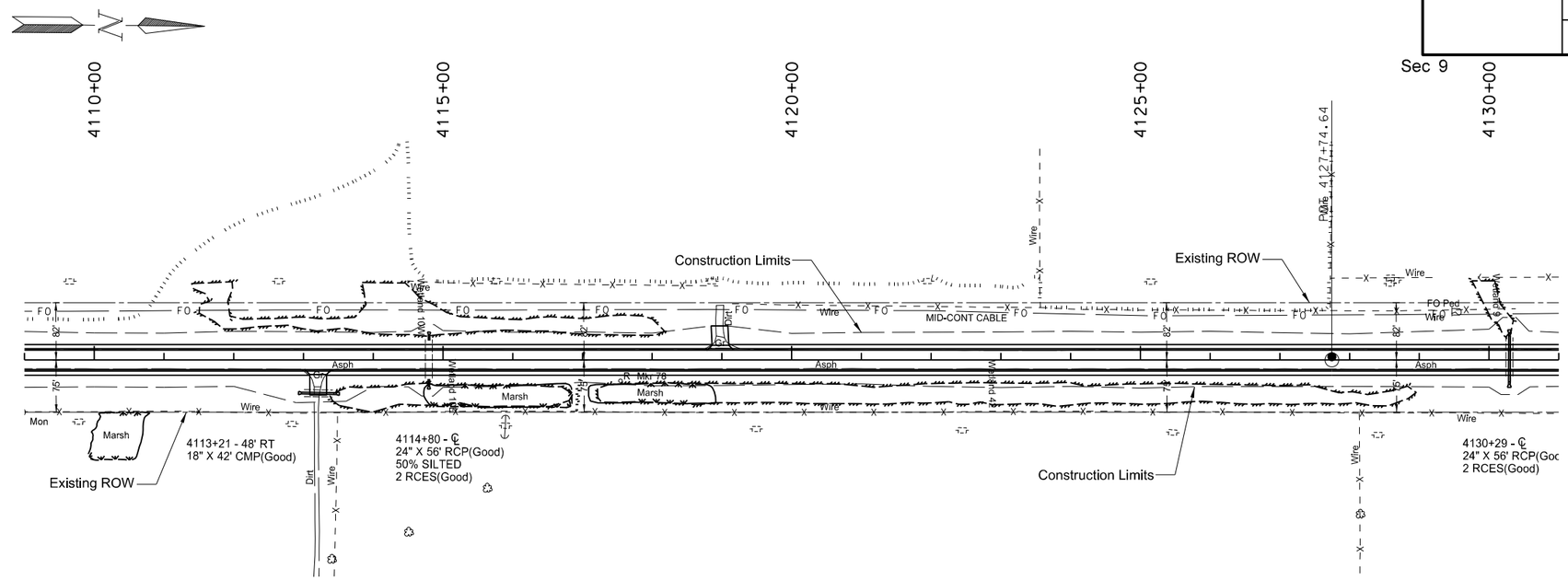
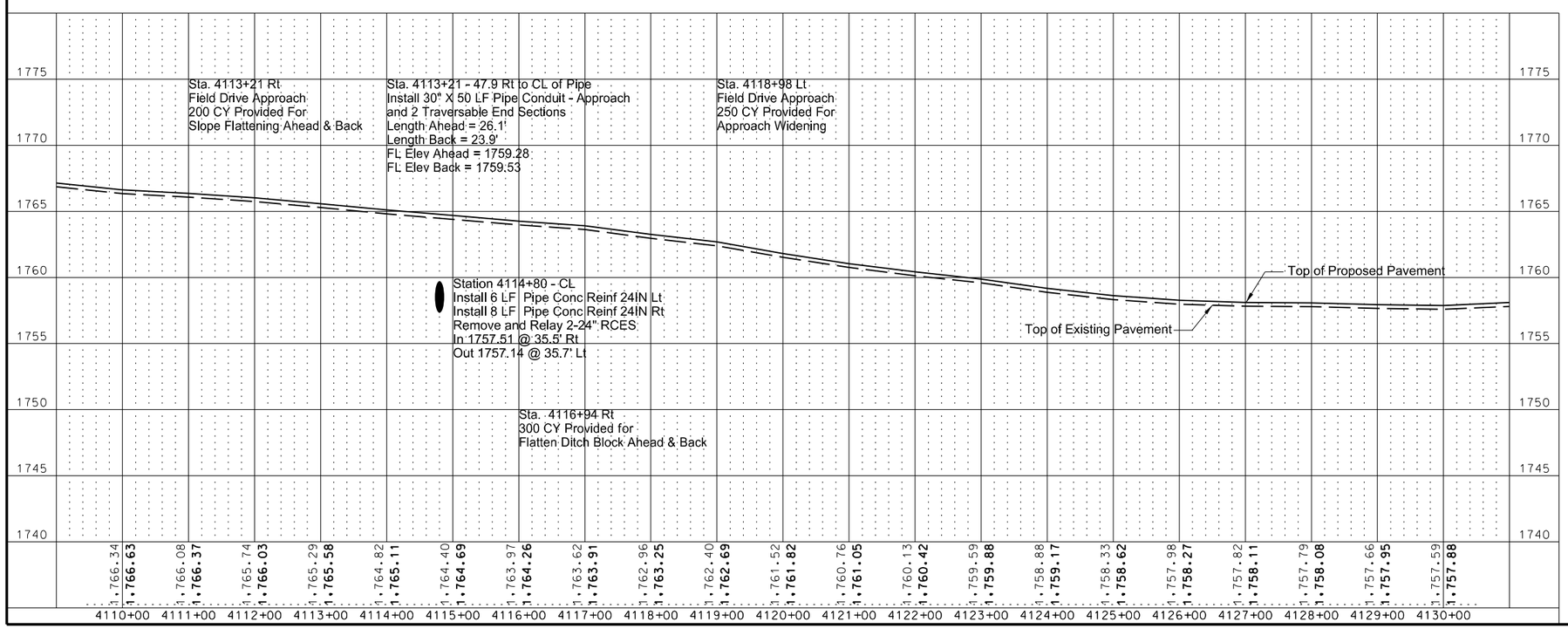
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	50



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4113+21 Rt	42	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4114+80 ℄ - Lt	6	LF
		4114+80 ℄ - Rt	8	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		4113+21 Rt	50	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4114+80 ℄ - Lt	1	EA
		4114+80 ℄ - Rt	1	EA



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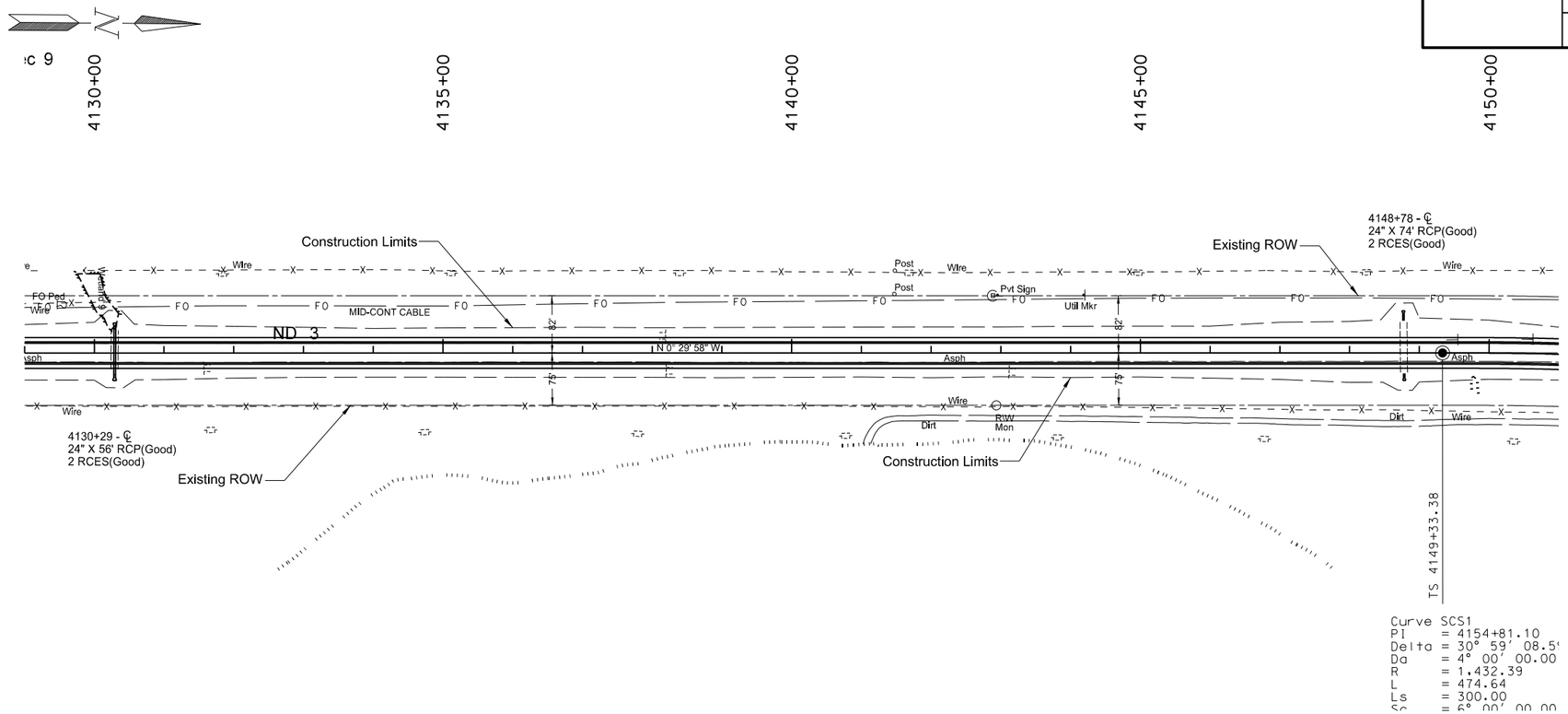
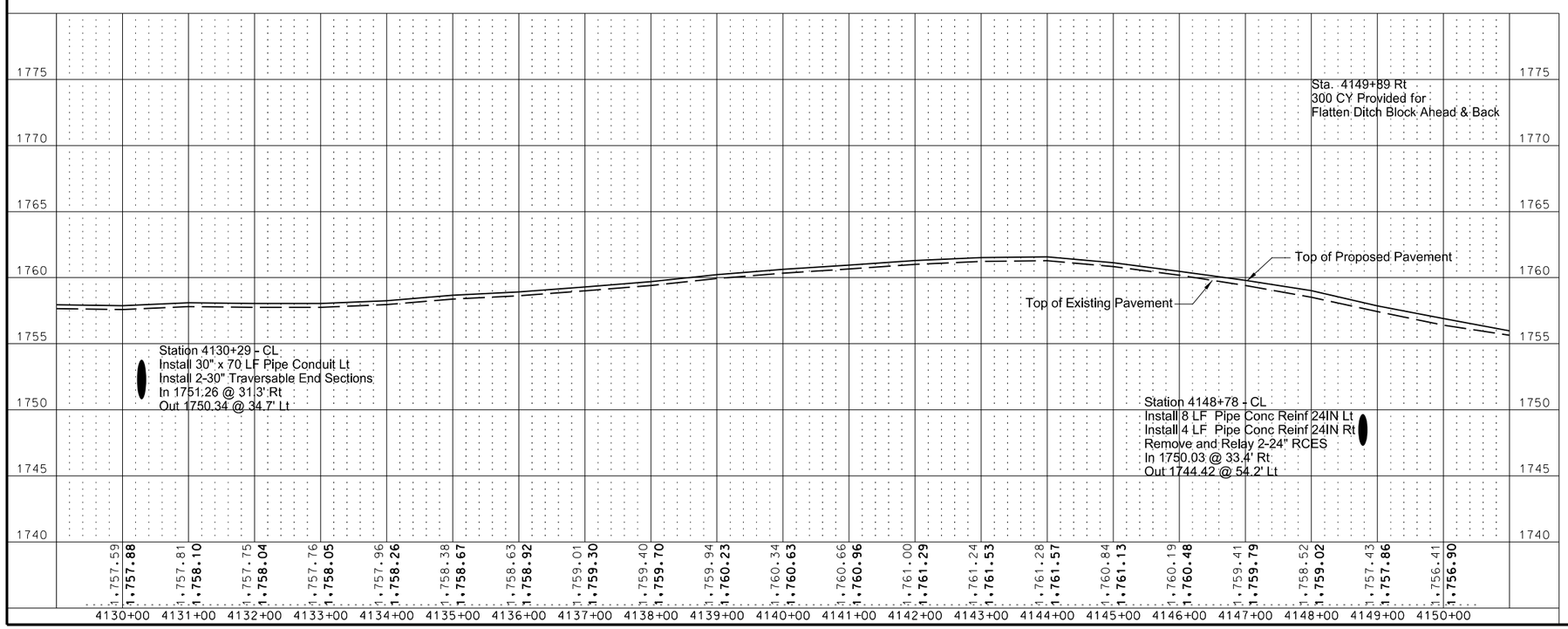
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	51



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0121	REMOVE & SALVAGE BITUMINOUS SURFACING		
		4130+29 ℄	42	TON
202	0153	SAW BITUMINOUS SURFACING-FULL DEPTH		
		4130+17 ℄	26	LF
		4130+41 ℄	26	LF
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		4130+29 ℄ - Lt	1	EA
		4130+29 ℄ - Rt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4130+29 ℄	60	LF
302	0120	AGGREGATE BASE COURSE CL 5		
		4130+29 ℄ (15" Depth)	44	TON
430	0042	SUPERPAVE FAA 42		
		4130+29 ℄ (2" Depth)	9	TON
430	5828	PG 58-28 ASPHALT CEMENT		
		4130+29 ℄	1	TON
709	0151	GEOSYNTHETIC MATERIAL TYPE R1		
		4130+29 ℄	251	SY
714	0615	PIPE CONC REINF 24IN CL III		
		4148+78 ℄ - Lt	8	LF
		4148+78 ℄ - Rt	4	LF
714	4110	PIPE CONDUIT 30IN		
		4130+29 ℄	70	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4148+78 ℄ - Lt	1	EA
		4148+78 ℄ - Rt	1	EA

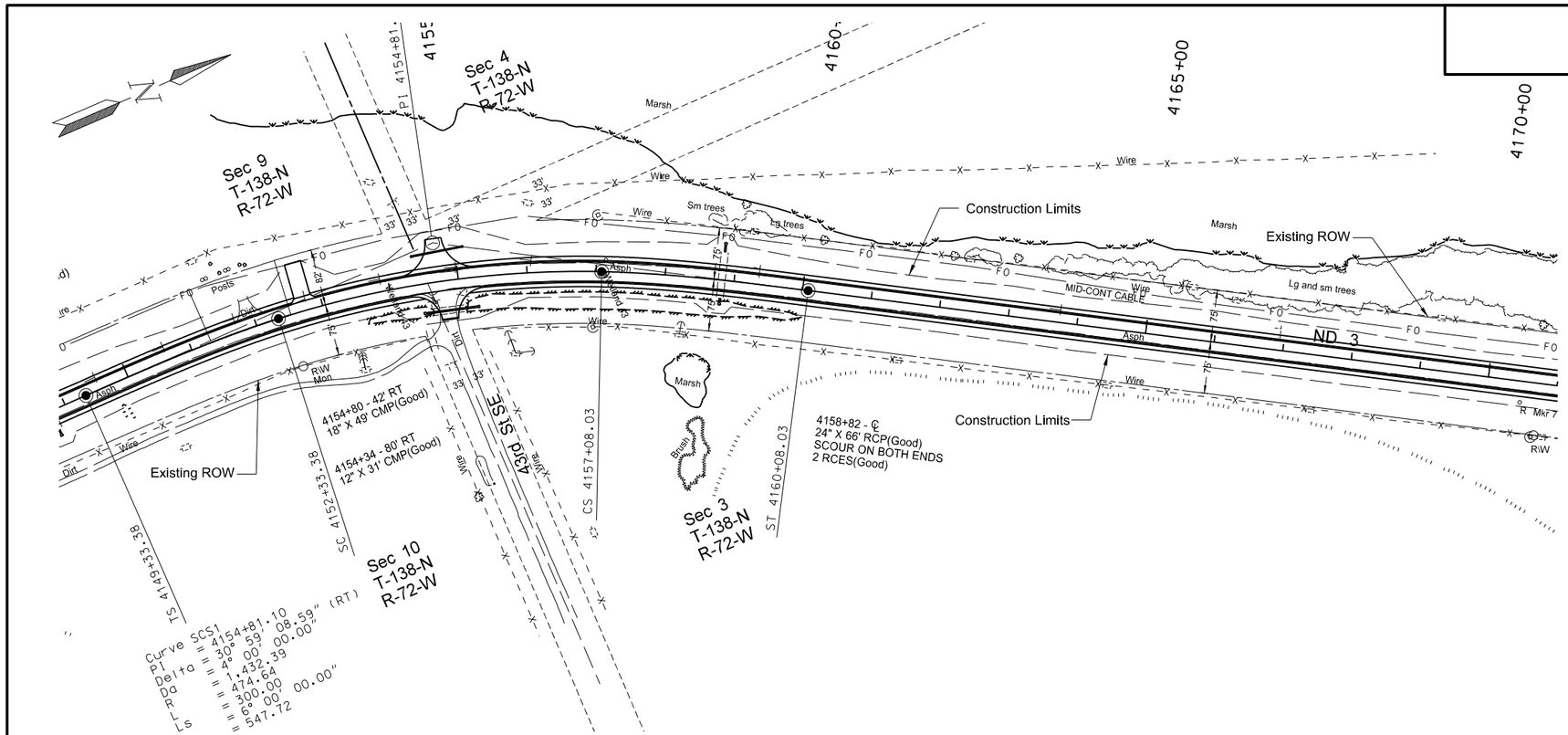


Plan & Profile

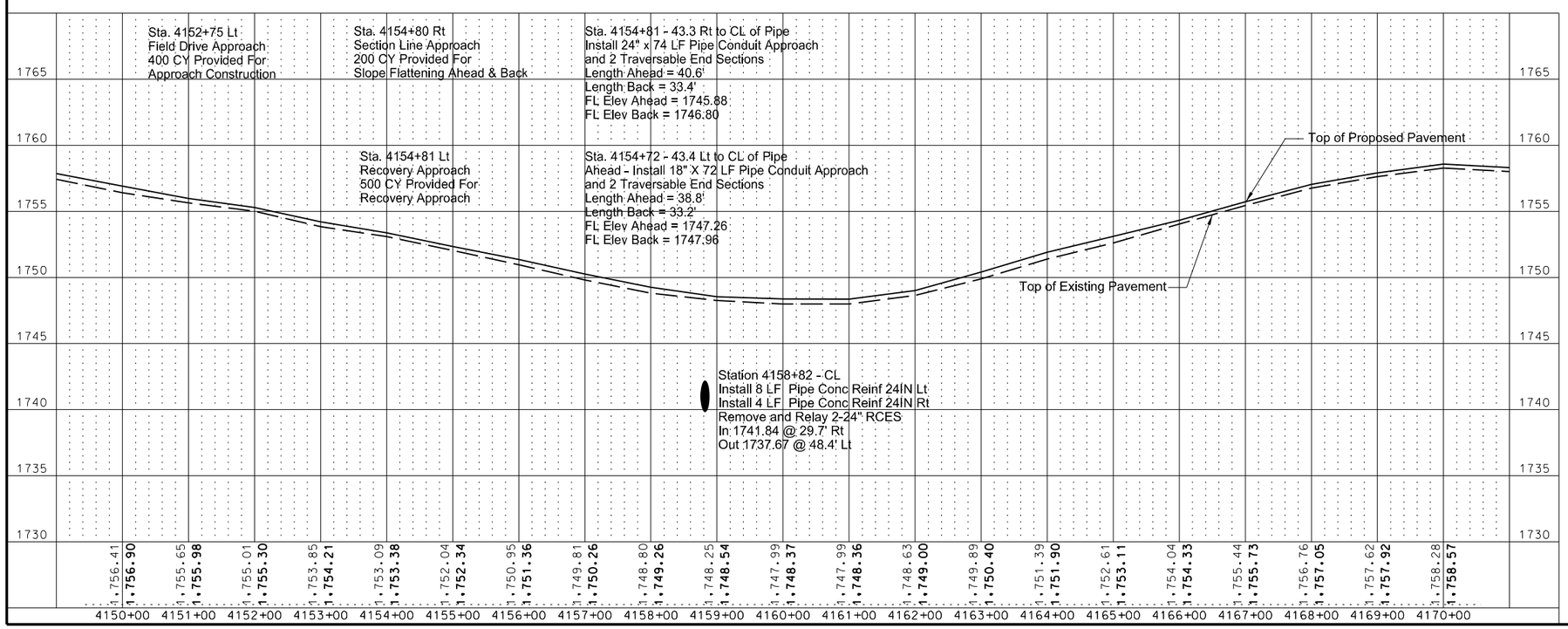
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	52



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4154+80 Rt	49	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4158+82 ℄ - Lt	8	LF
		4158+82 ℄ - Rt	4	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4154+72 Lt	72	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4154+81 Rt	74	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4158+82 ℄ - Lt	1	EA
		4158+82 ℄ - Rt	1	EA



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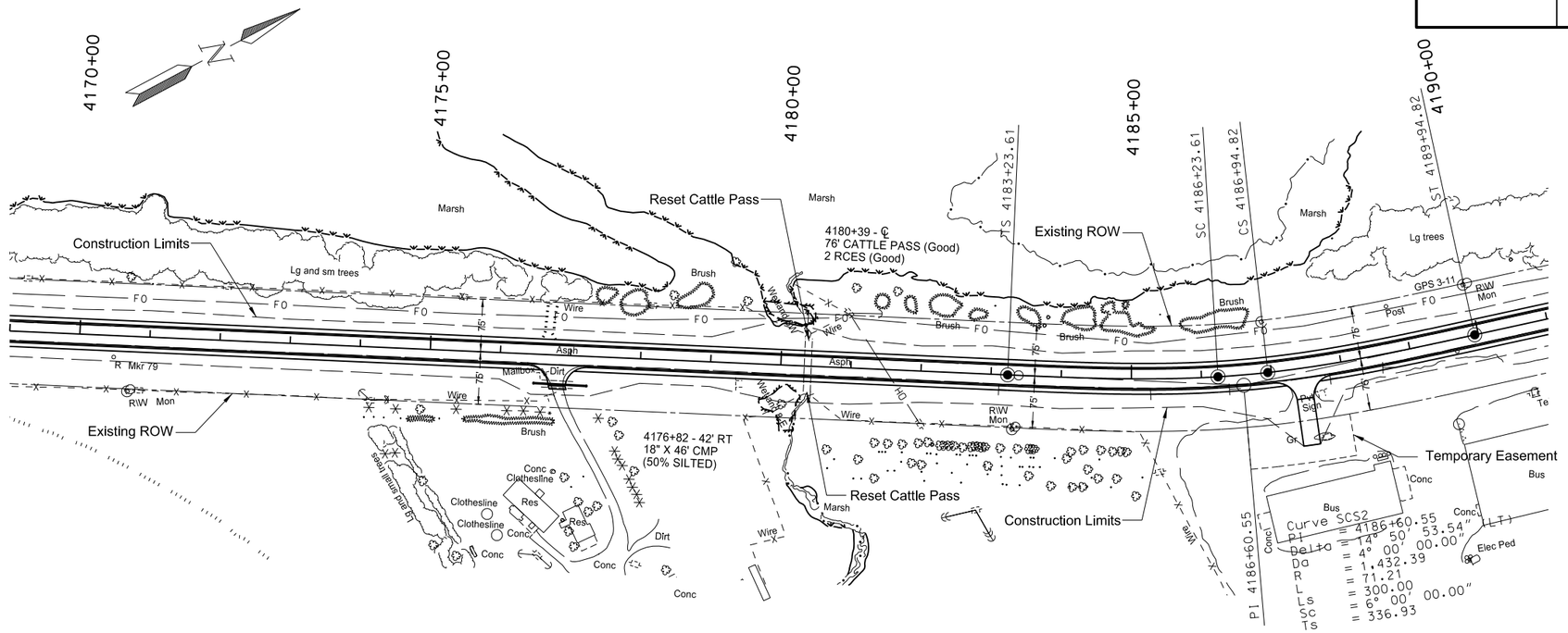
Plan & Profile

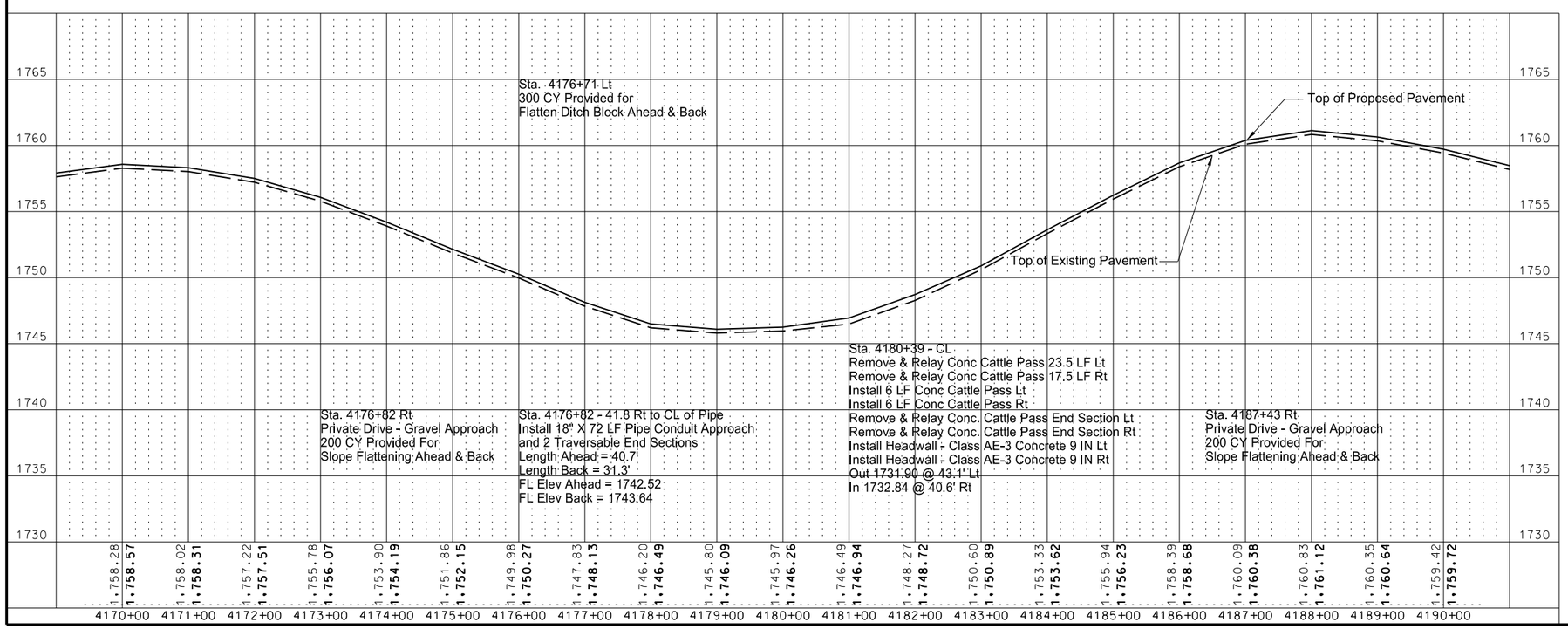
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	53



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4176+82 Rt	46	LF
602	1130	CLASS AE-3 CONCRETE		
		4180+39 ℄ - Lt	0.56	CY
		4180+39 ℄ - Rt	0.56	CY
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4176+82 Rt	72	LF
714	9200	CATTLE PASS CONC INTERMED SECTION		
		4180+39 ℄ - Lt	6	LF
		4180+39 ℄ - Rt	6	LF
714	9601	REMOVE & RELAY CONC CATTLE PASS		
		4180+39 ℄ - Lt	24	LF
		4180+39 ℄ - Rt	18	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION		
		4180+39 ℄ - Lt	1	EA
		4180+39 ℄ - Rt	1	EA



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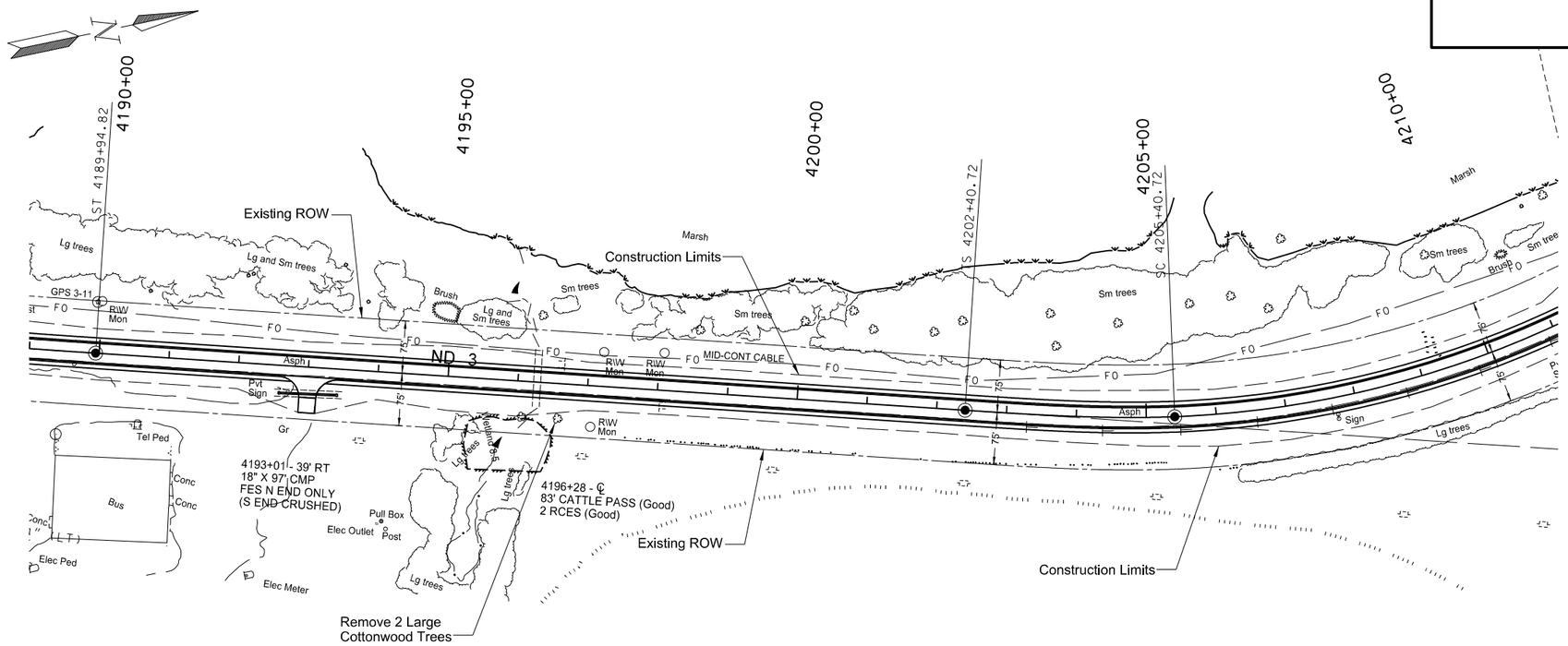
Plan & Profile

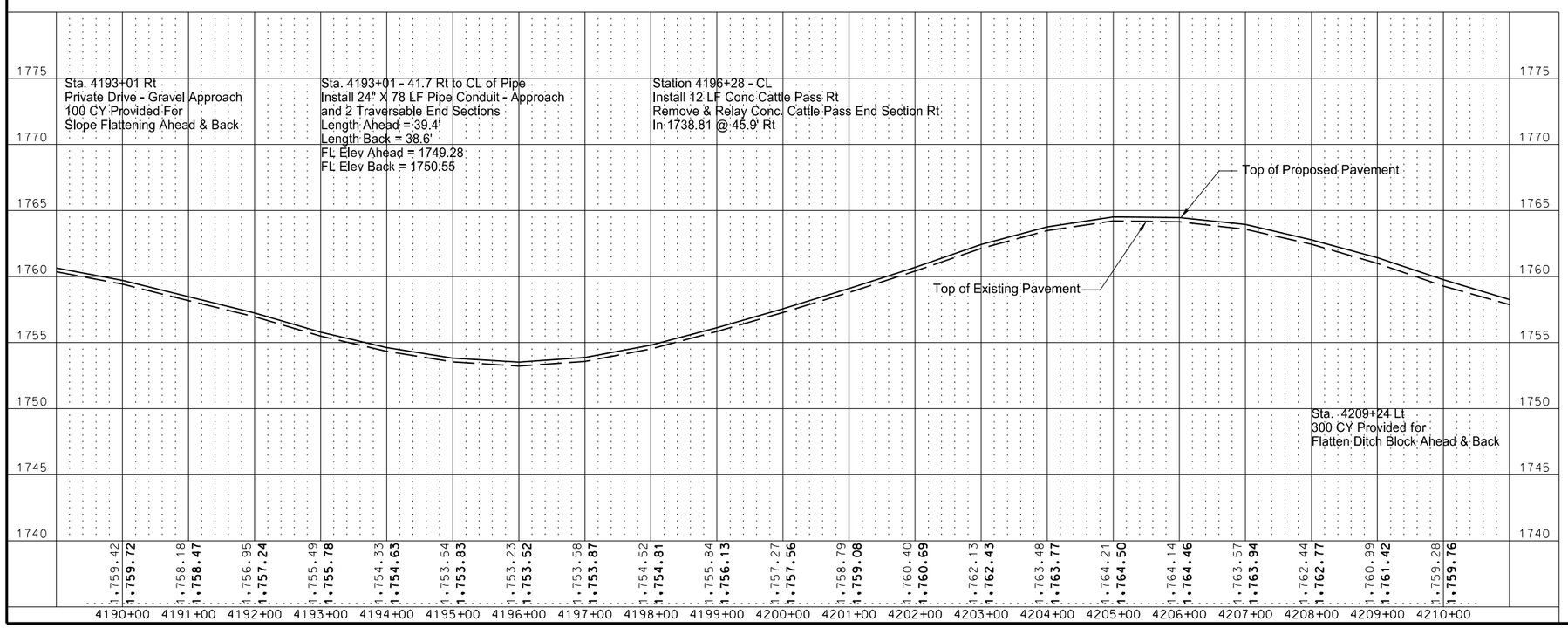
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	54

SPEC	CODE	BID ITEM	QUANTITY	UNIT
201	0390	REMOVAL OF TREES 30IN		
		4196+28 Rt	2	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4193+01 Rt	97	LF
714	4106	PIPE CONC REINF 24IN-APPROACH		
		4193+01 Rt	78	LF
714	9200	CATTLE PASS CONC INTERMED SECTION		
		4196+28 ℄ - Rt	12	LF
714	9611	REMOVE & RELAY CONC CATTLE PASS END SECTION		
		4196+28 ℄ - Rt	1	EA





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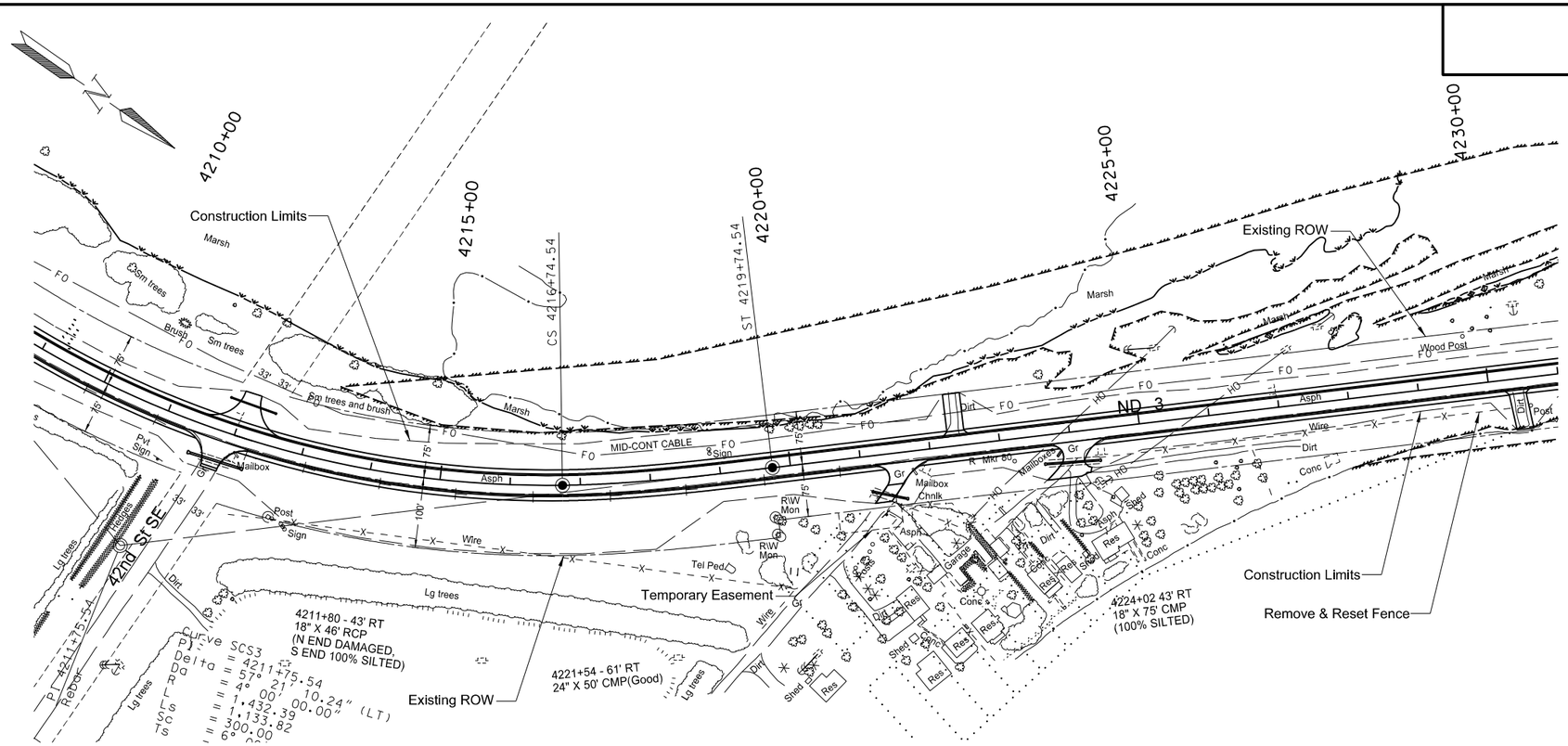
Plan & Profile

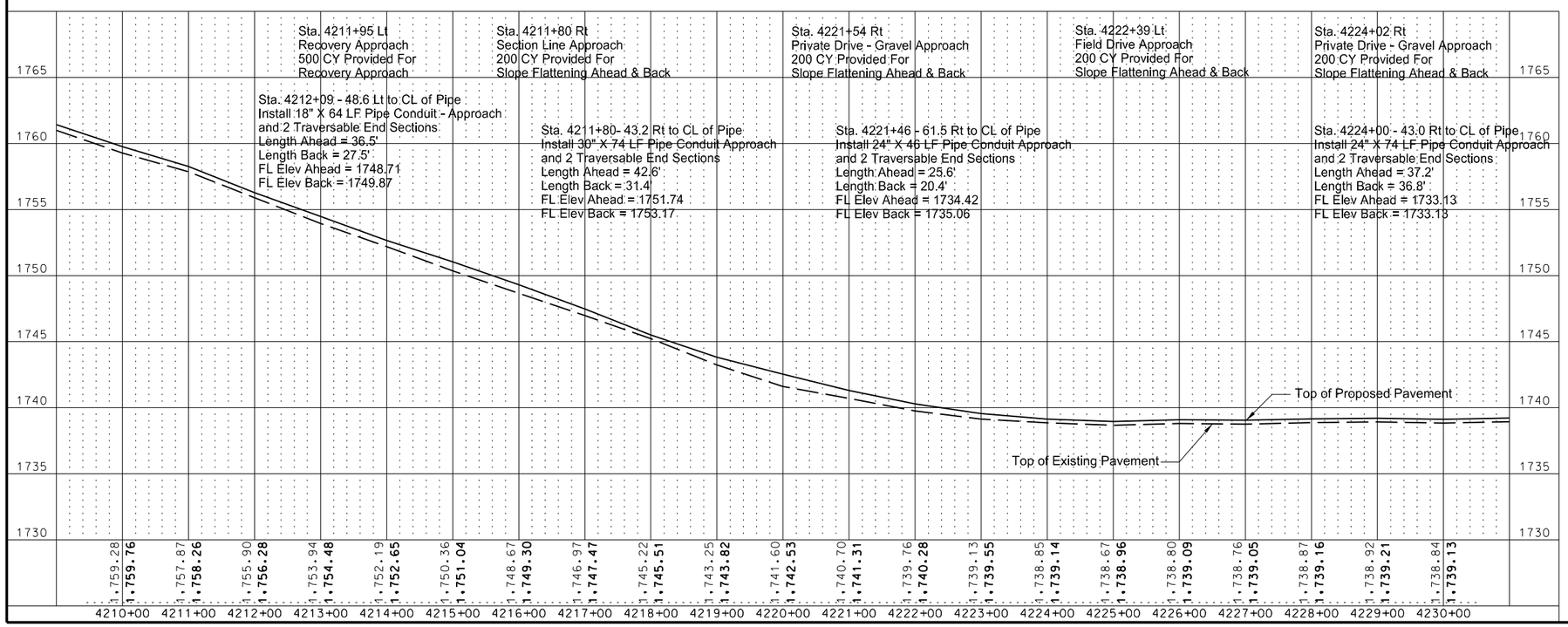
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	55



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4211+80 Rt	48	LF
		4221+54 Rt	50	LF
		4224+02 Rt	75	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4212+09 Lt	64	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4221+46 Rt	46	LF
		4224+00 Rt	74	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		4211+80 Rt	74	LF
752	0922	FENCE REMOVE & RESET		
		4229+29 Rt to 4230+29 Rt	100	LF



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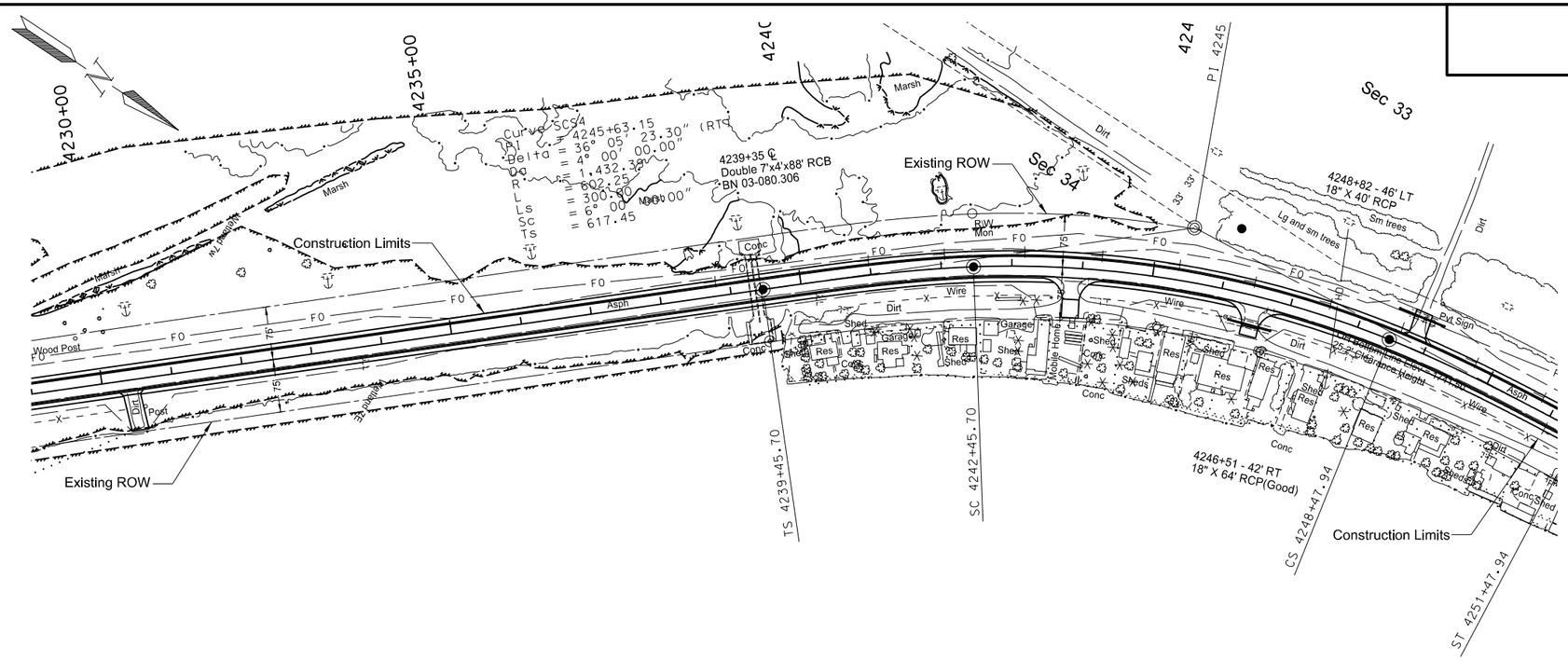
Plan & Profile

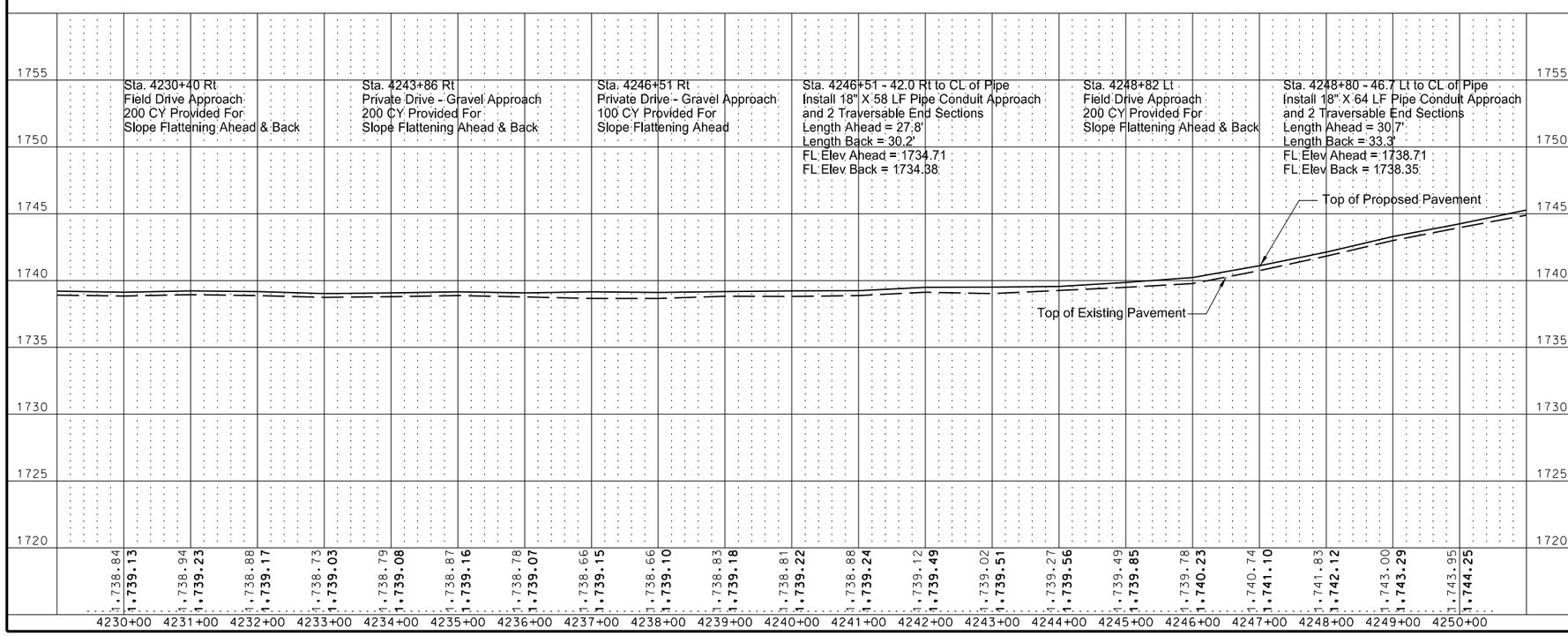
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	56



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4246+51 Rt	66	LF
		4248+82 Lt	40	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4246+51 Rt	58	LF
		4248+80 Lt	64	LF



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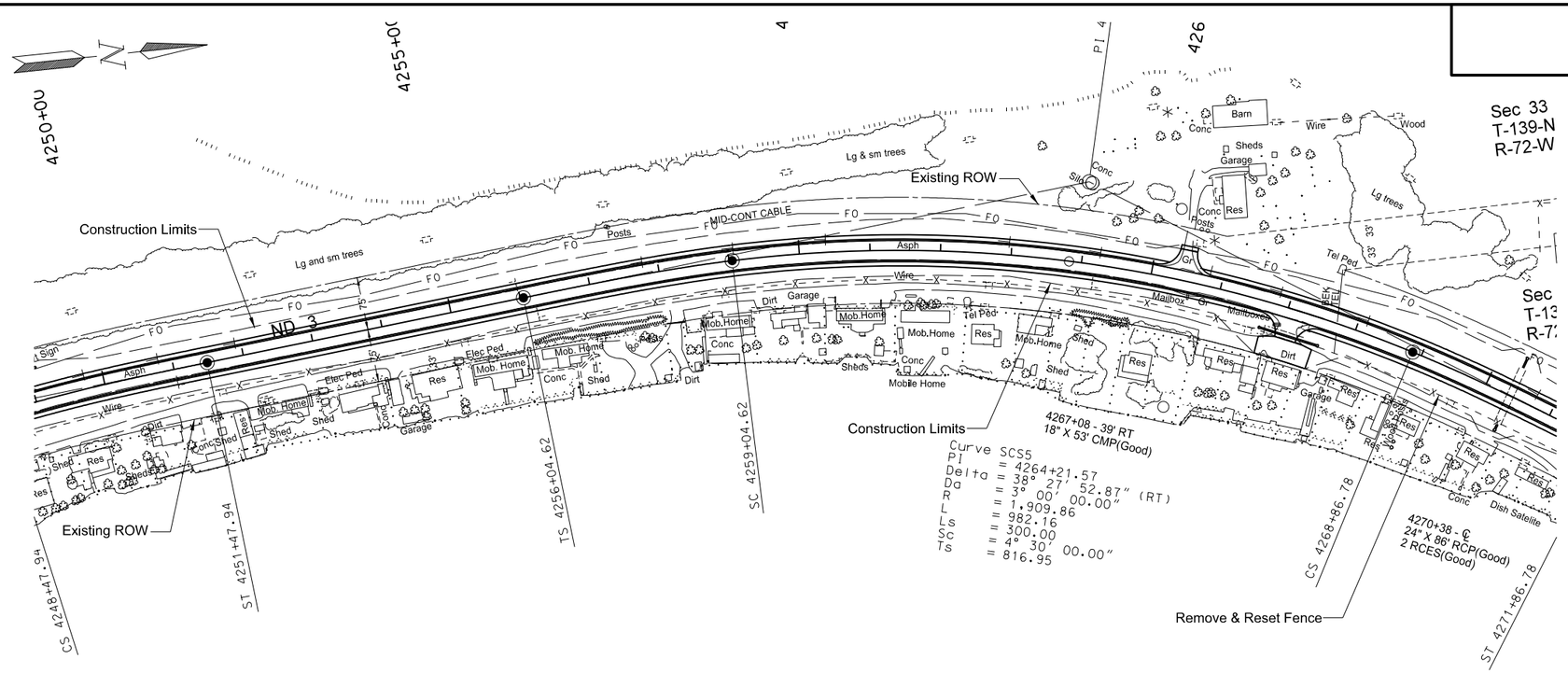
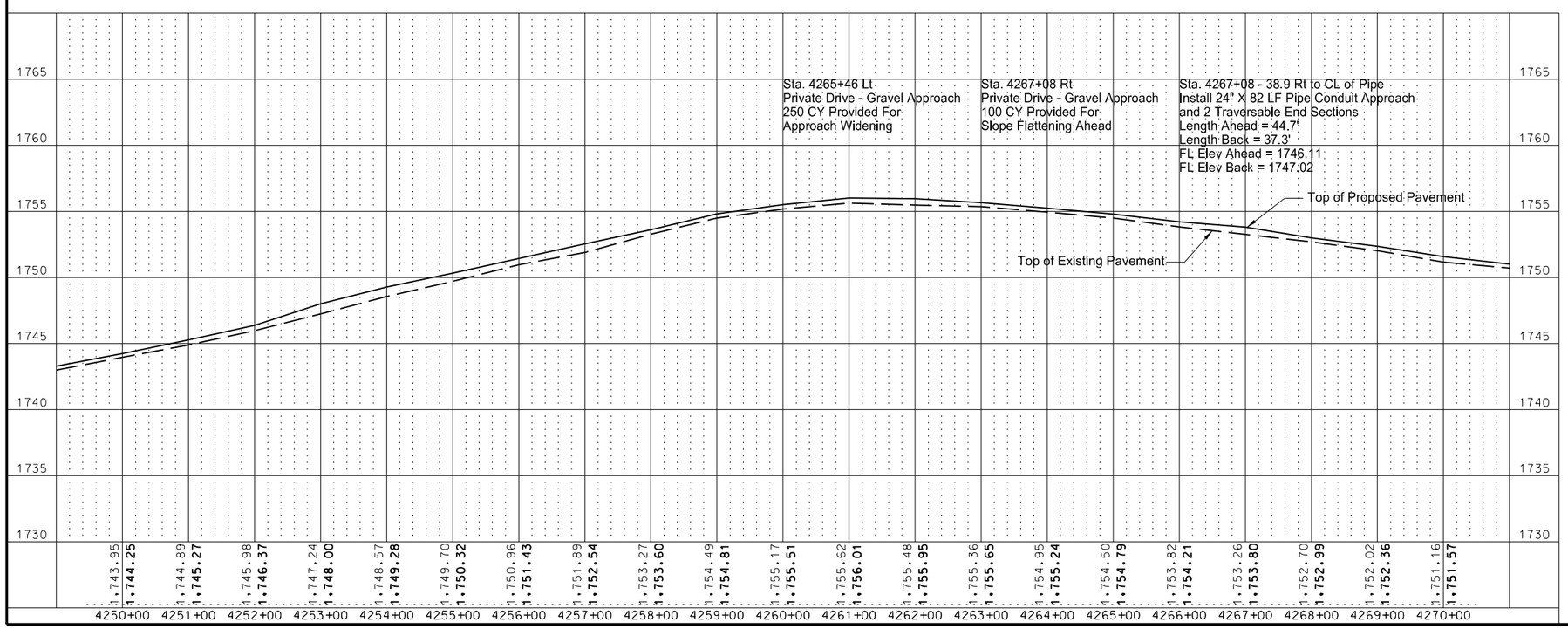
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	57



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4267+08 Rt	53	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4267+08 Rt	82	LF
752	0922	FENCE REMOVE & RESET		
		4268+38 Rt to 4271+39 Rt	301	LF



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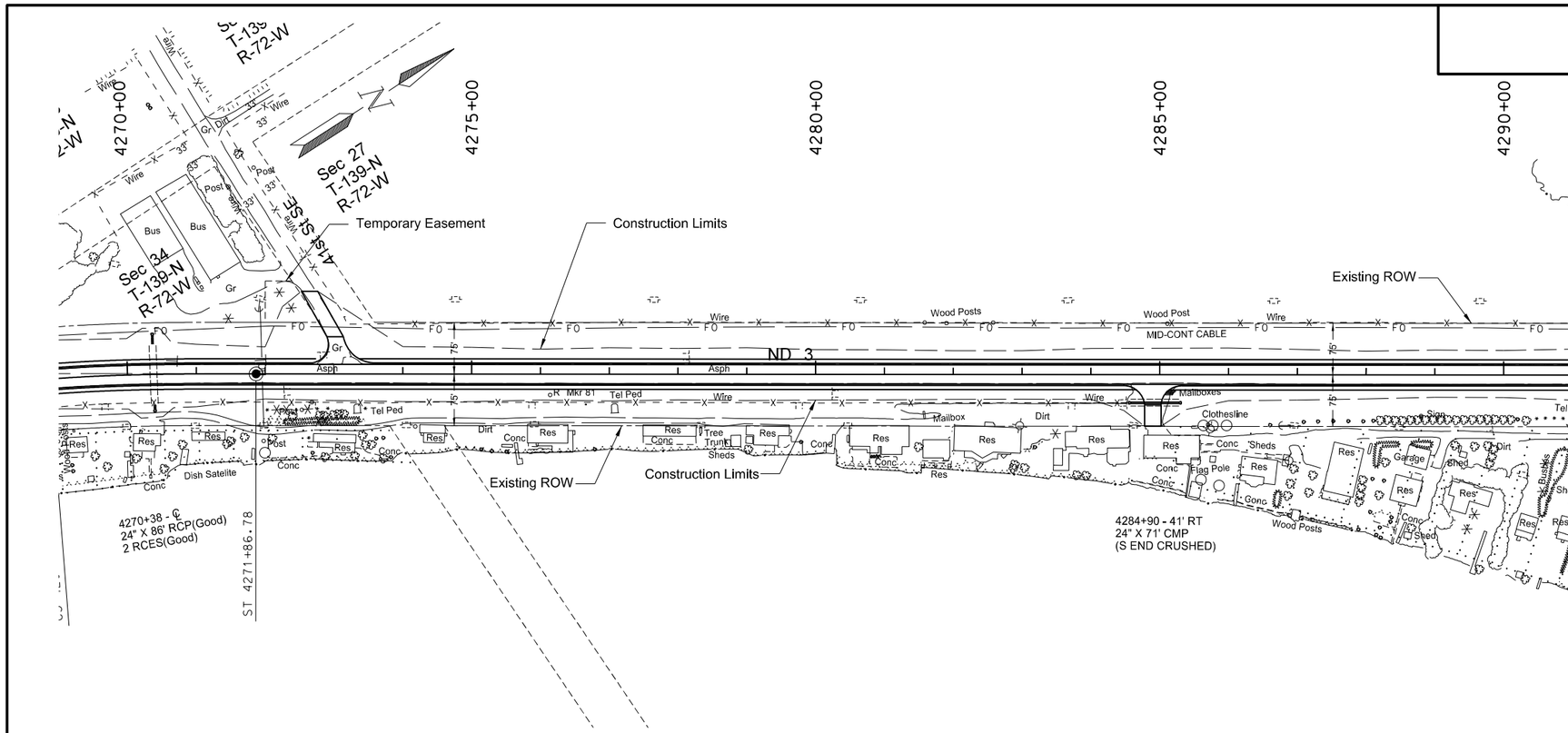
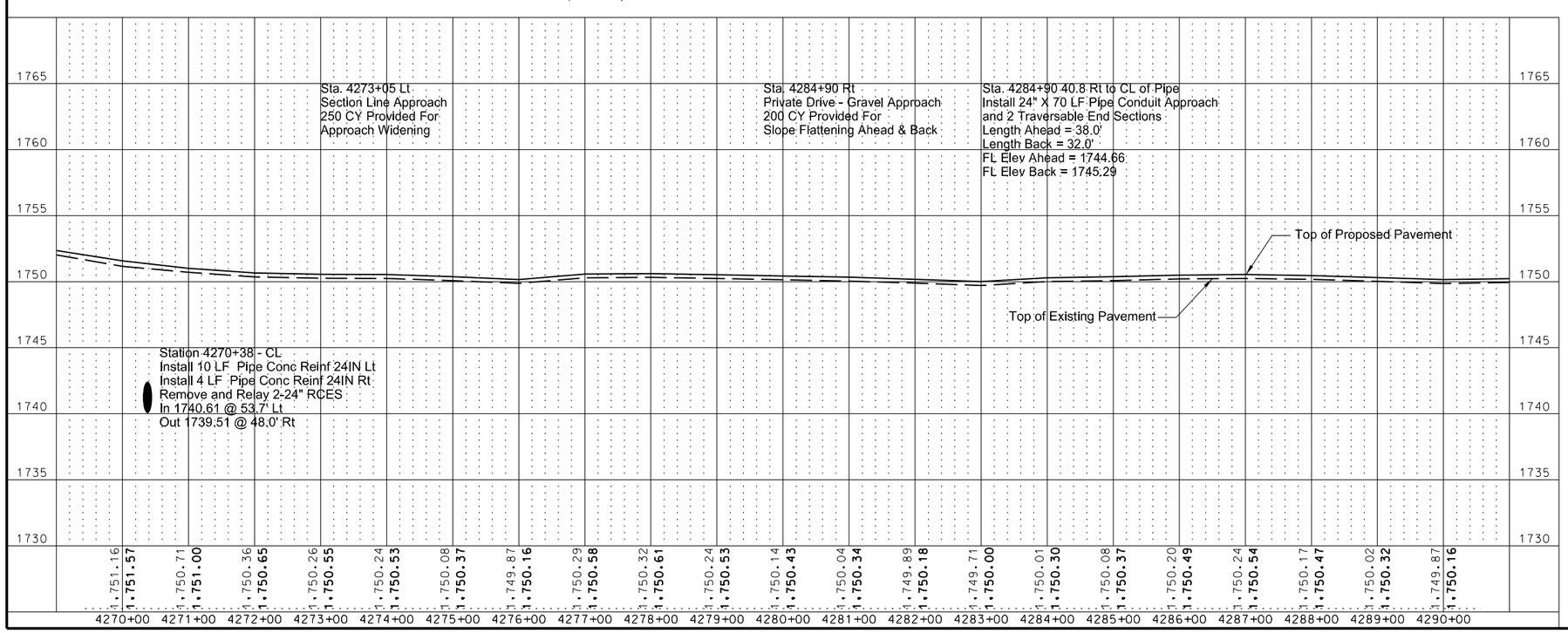
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	58



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4284+90 Rt	71	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4270+38 ℄ - Lt	10	LF
		4270+38 ℄ - Rt	4	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4284+90 Rt	70	LF
714	9660	REMOVE & RELAY END SECTIONS-ALL TYPE & SIZES		
		4270+38 ℄ - Lt	1	EA
		4270+38 ℄ - Rt	1	EA



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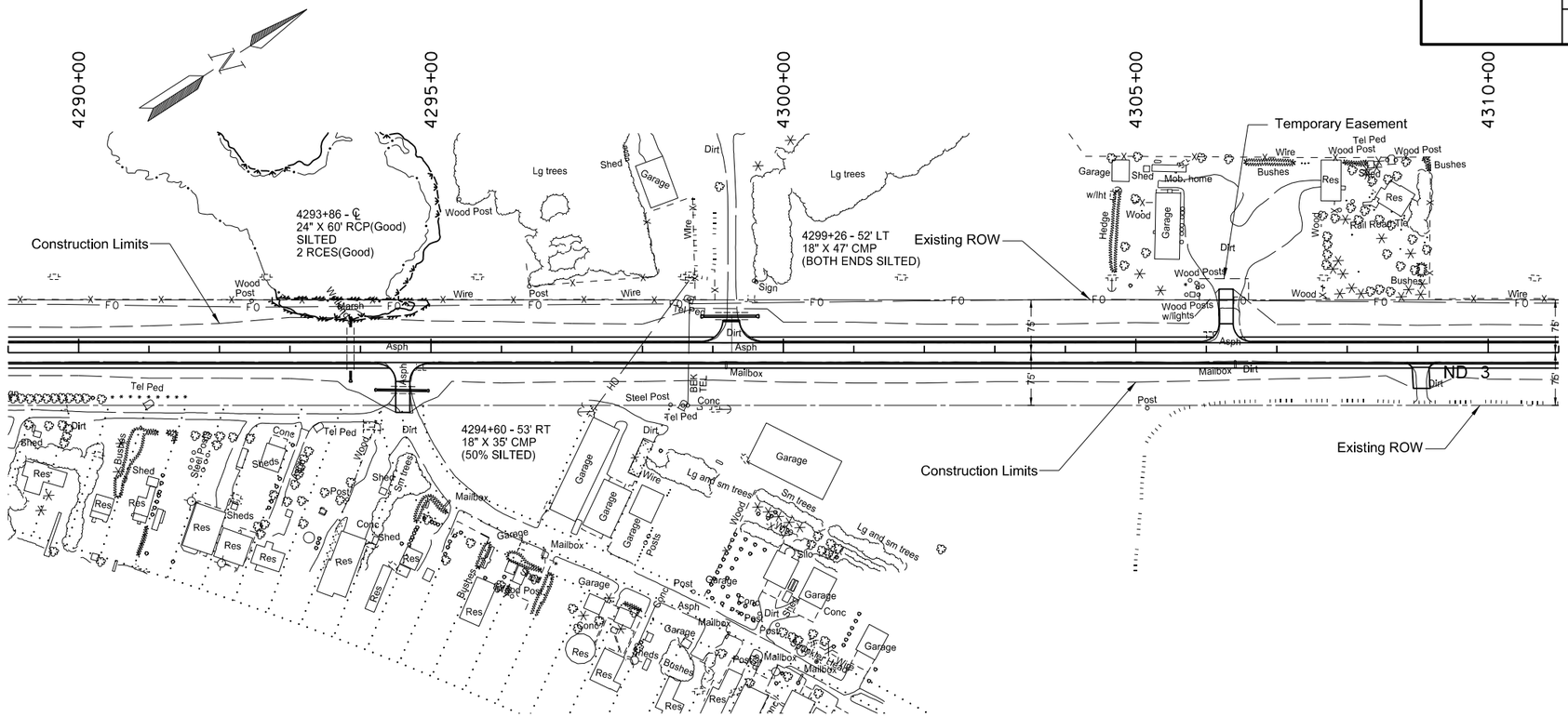
Plan & Profile

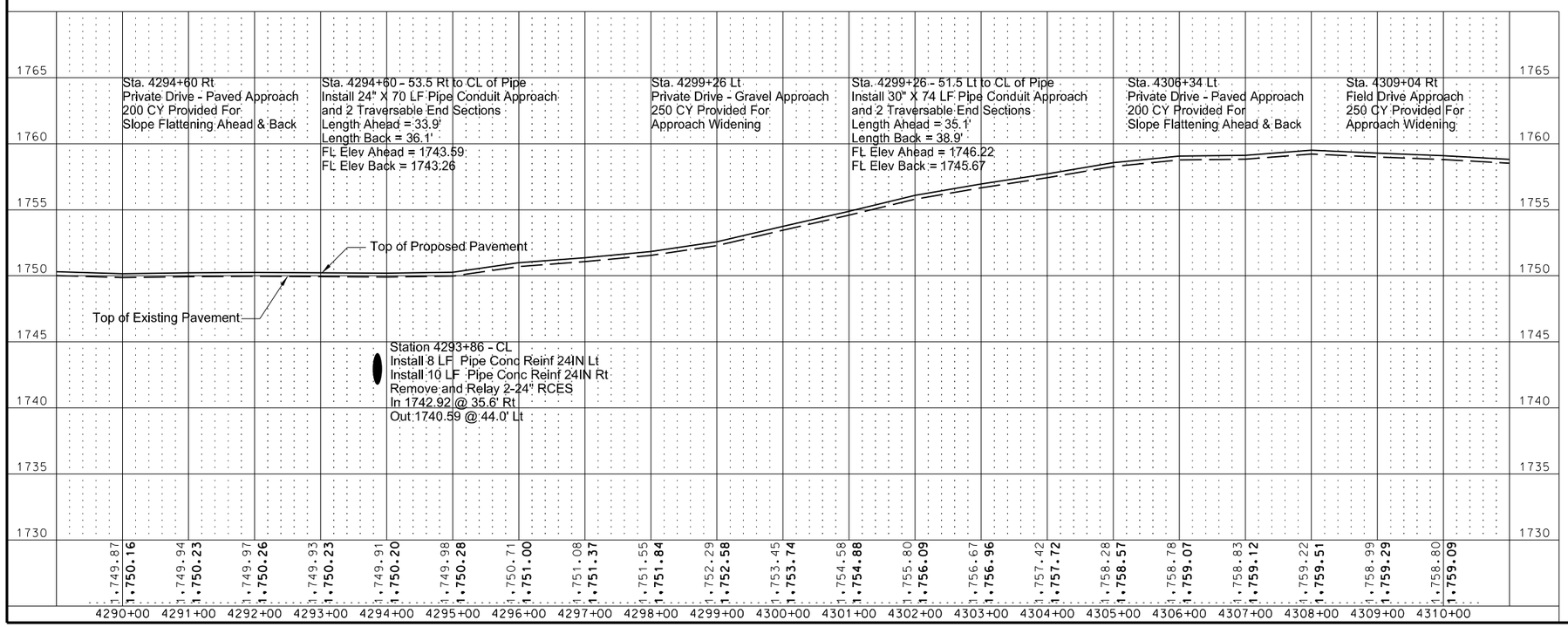
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	59



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4294+60 Rt	35	LF
		4299+26 Lt	47	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4293+86 ℄ - Lt	8	LF
		4293+86 ℄ - Rt	10	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4294+60 Rt	70	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		4299+26 Lt	74	LF
714	9660	REMOVE & RELAY END SECTIONS-ALL TYPE & SIZES		
		4293+86 ℄ - Lt	1	EA
		4293+86 ℄ - Rt	1	EA



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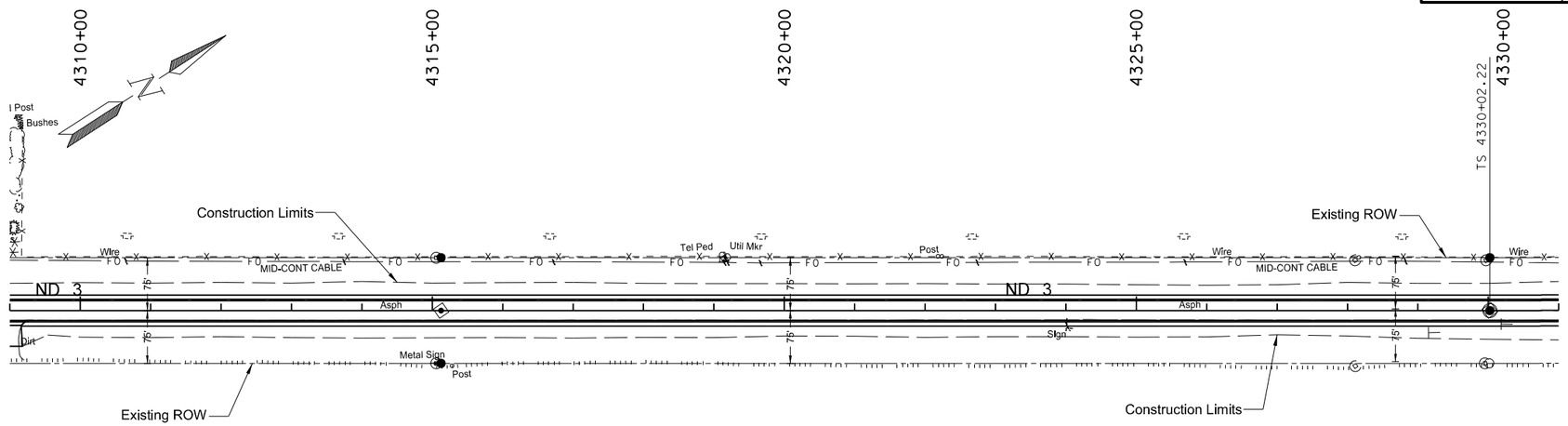
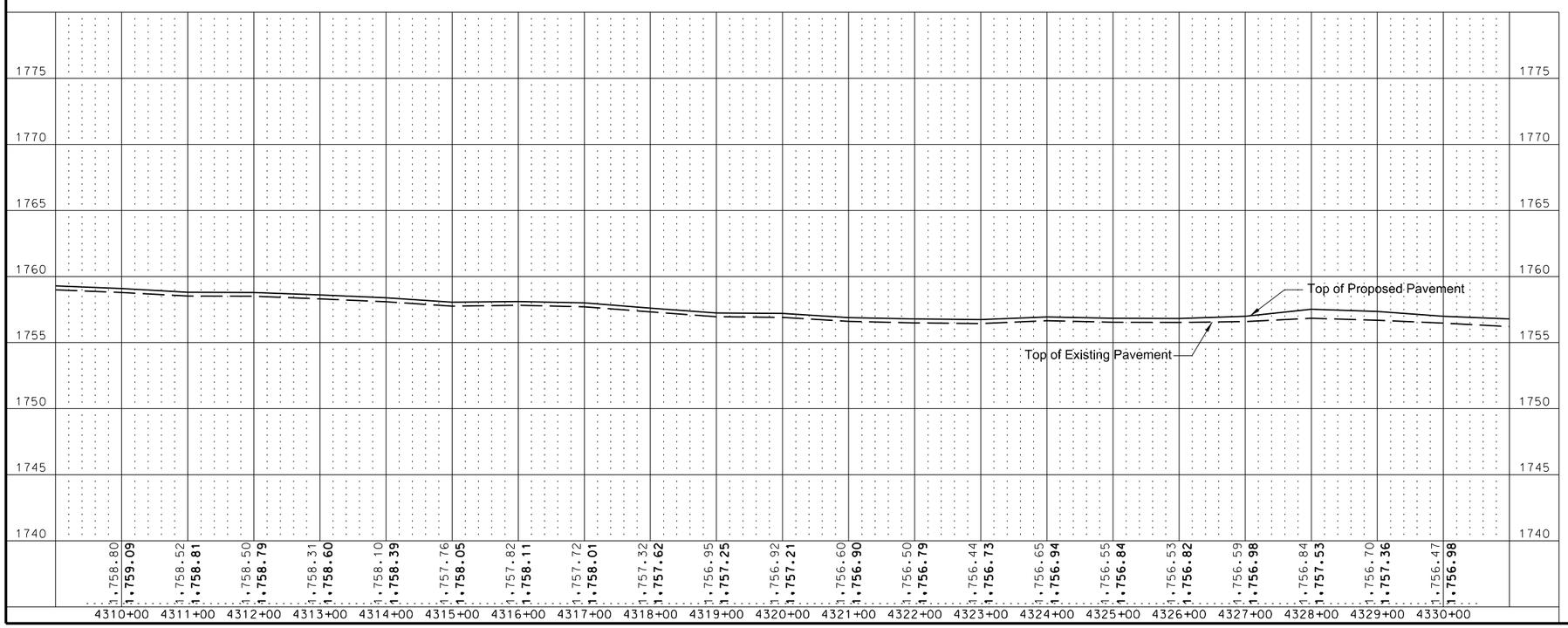
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	60





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ND 3

Jct 34 N to I-94 Dawson

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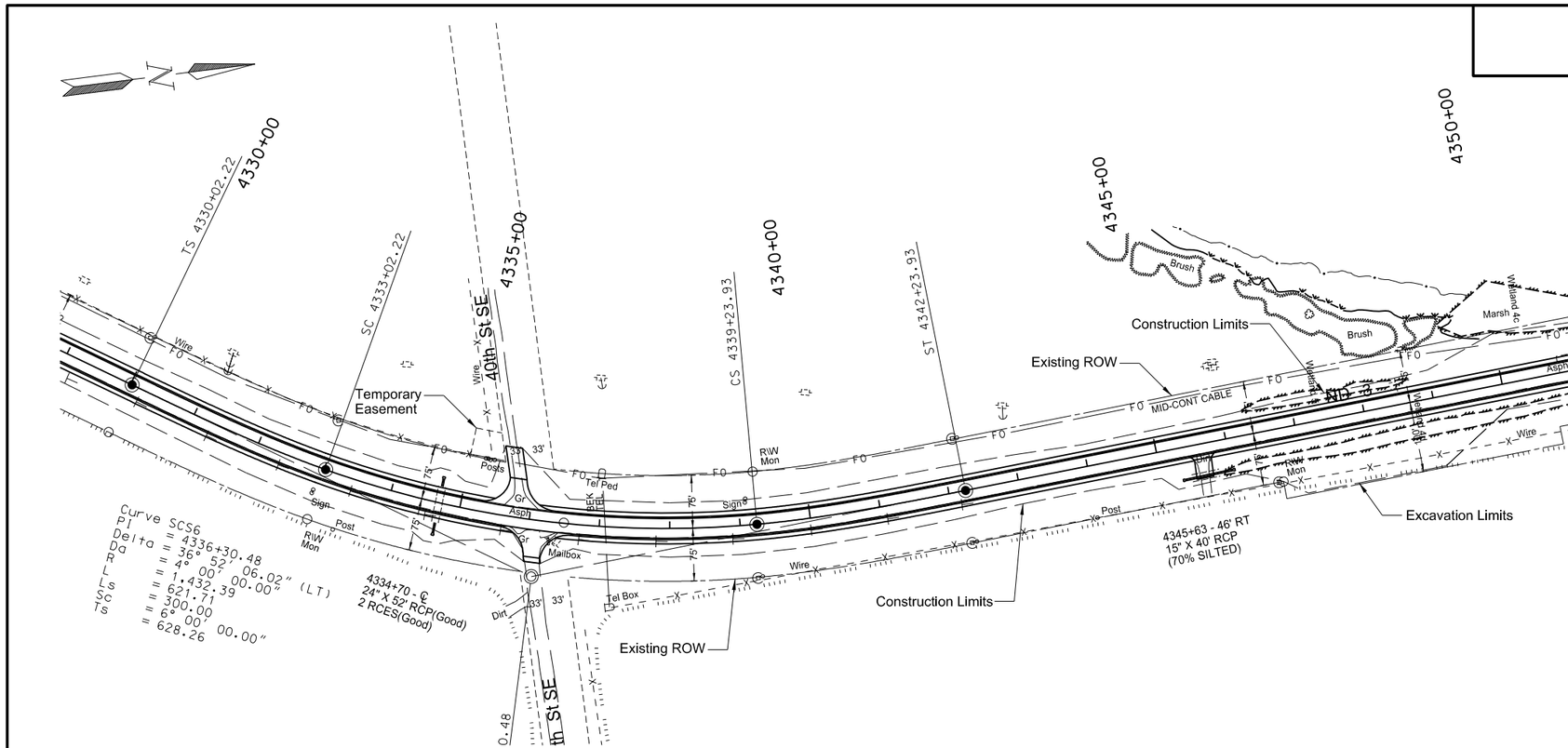
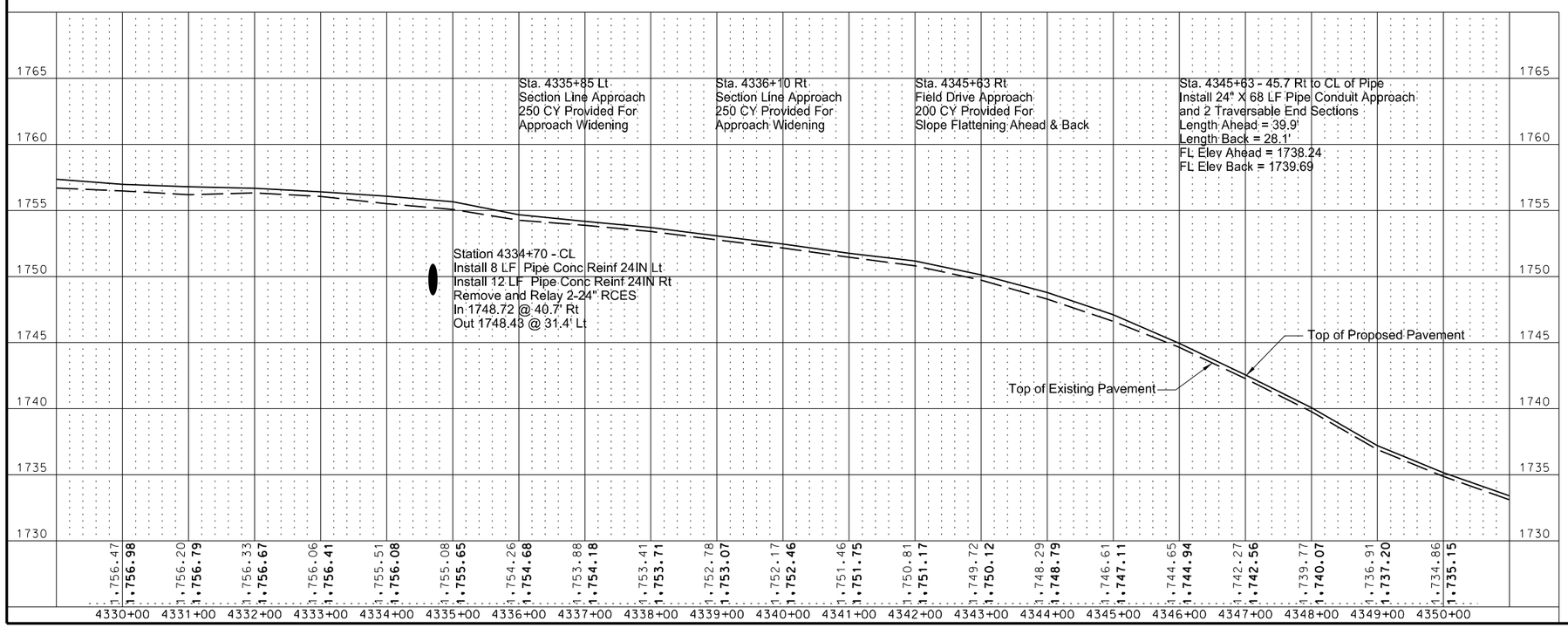
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	61



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4345+63 Rt	42	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4334+70 ℄ - Lt	8	LF
		4334+70 ℄ - Rt	12	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4345+63 Rt	68	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4334+70 ℄ - Lt	1	EA
		4334+70 ℄ - Rt	1	EA



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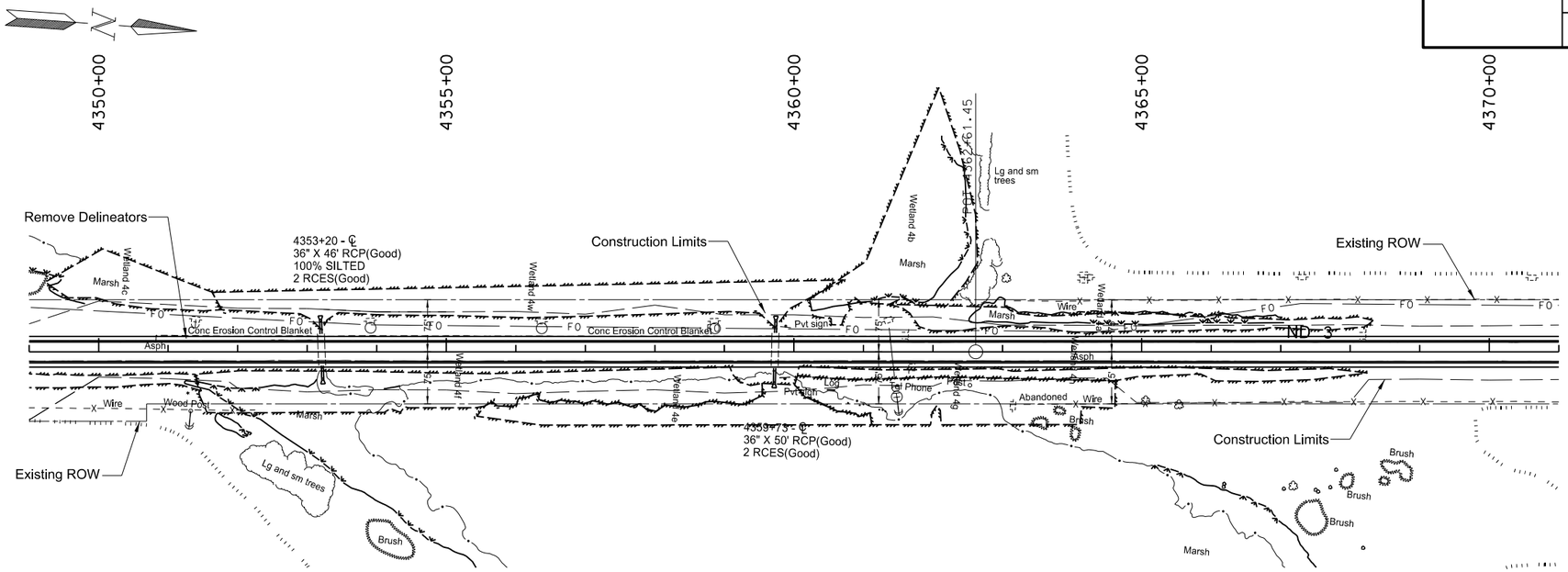
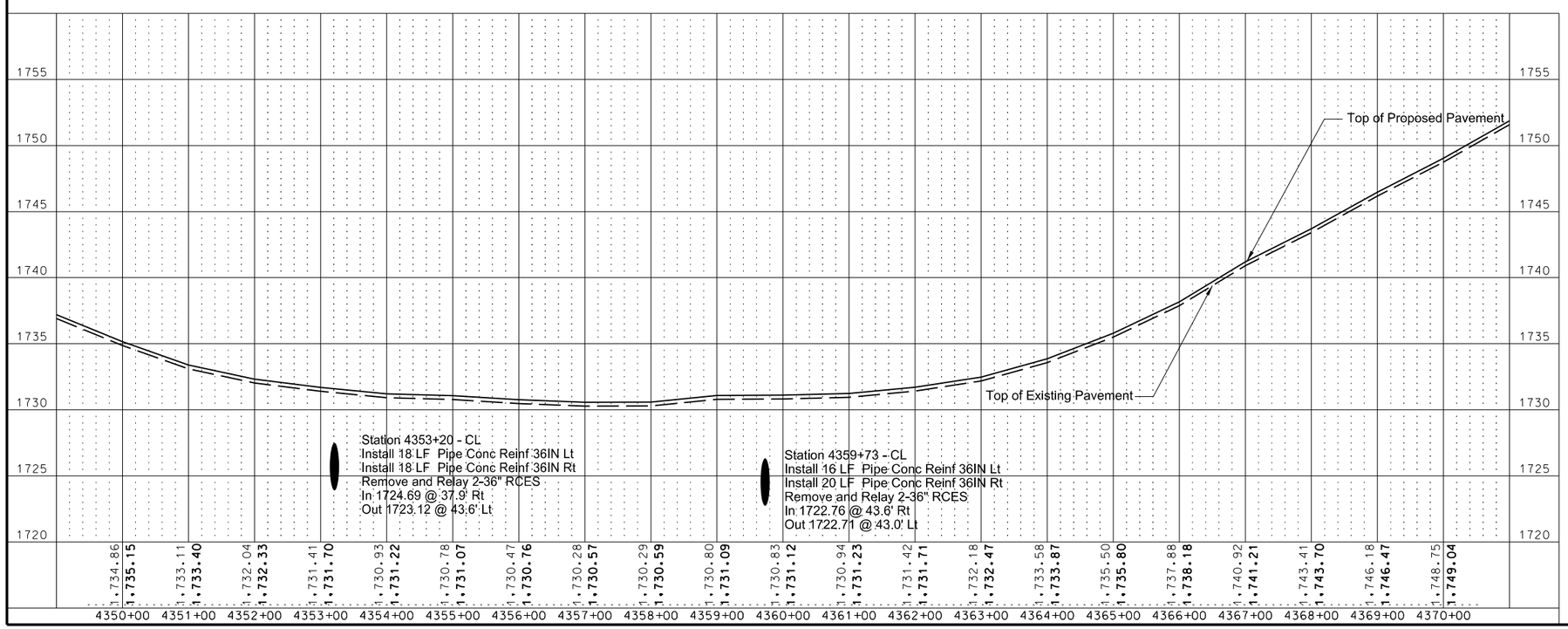
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	62



SPEC	CODE	BID ITEM	QUANTITY	UNIT
714	0905	PIPE CONC REINF 36IN CL III		
		4353+20 ℄ - Lt	18	LF
		4353+20 ℄ - Rt	18	LF
		4359+73 ℄ - Lt	16	LF
		4359+73 ℄ - Rt	20	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4353+20 ℄ - Lt	1	EA
		4353+20 ℄ - Rt	1	EA
		4359+73 ℄ - Lt	1	EA
		4359+73 ℄ - Rt	1	EA



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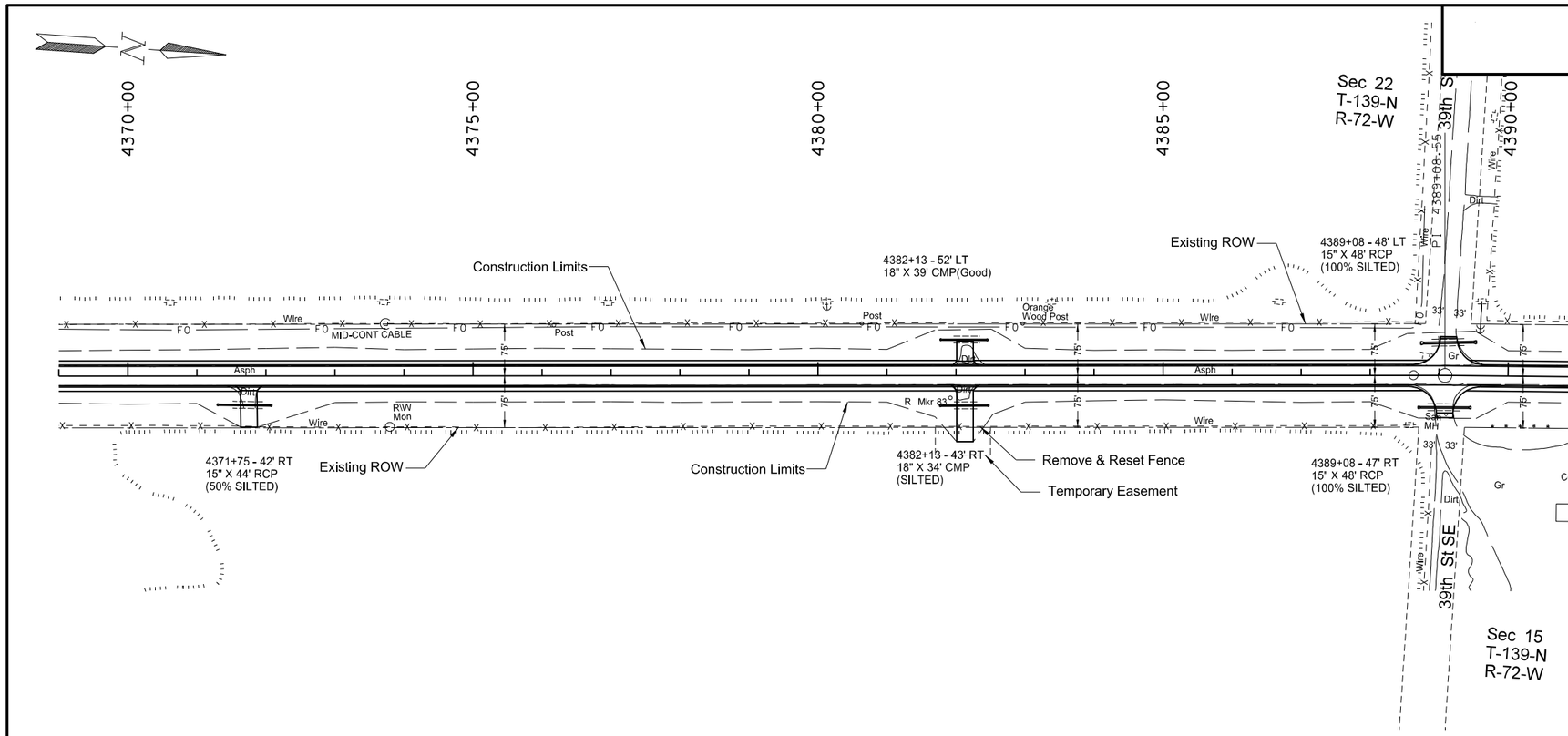
Plan & Profile

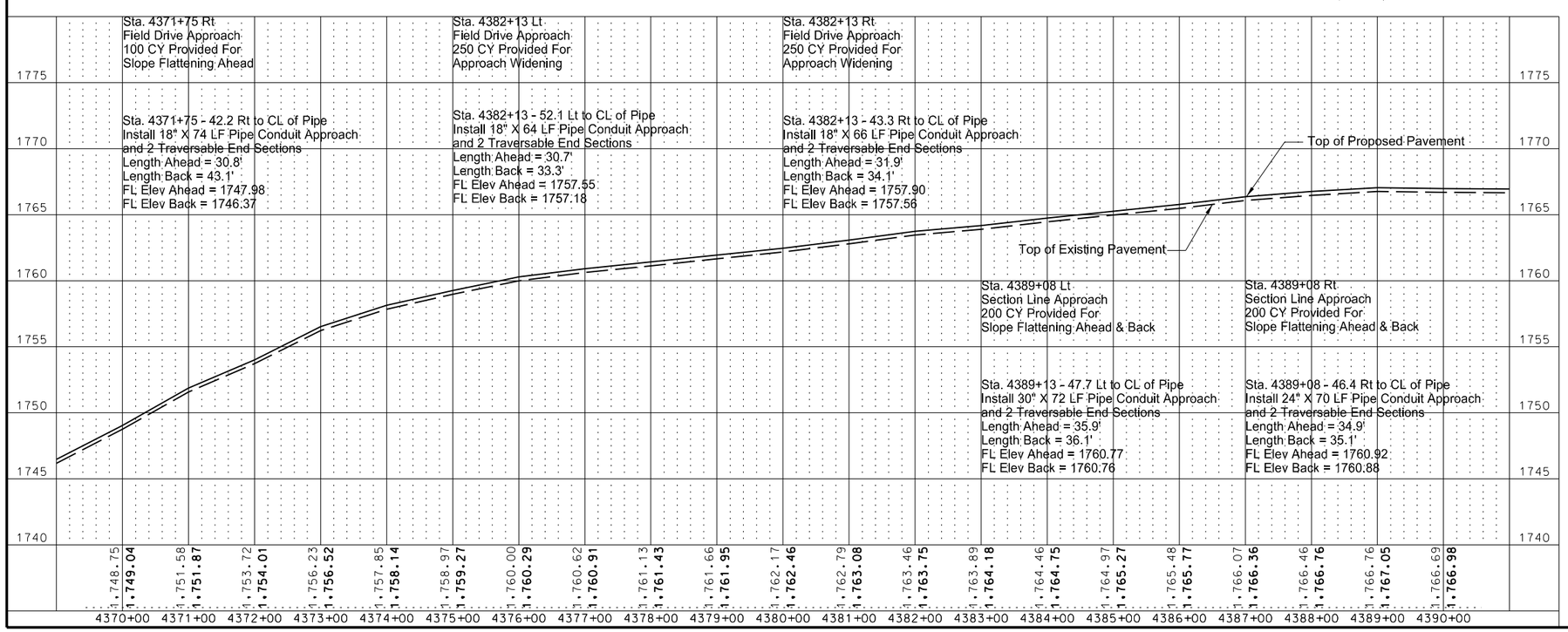
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	63



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4371+75 Rt	45	LF
		4382+13 Lt	39	LF
		4382+13 Rt	34	LF
		4389+08 Lt	50	LF
		4389+08 Rt	49	LF
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4371+75 Rt	74	LF
		4382+13 Lt	64	LF
		4382+13 Rt	66	LF
714	4106	PIPE CONDUIT 24IN-APPROACH		
		4389+08 Rt	70	LF
714	4113	PIPE CONDUIT 30IN-APPROACH		
		4389+13 Lt	72	LF



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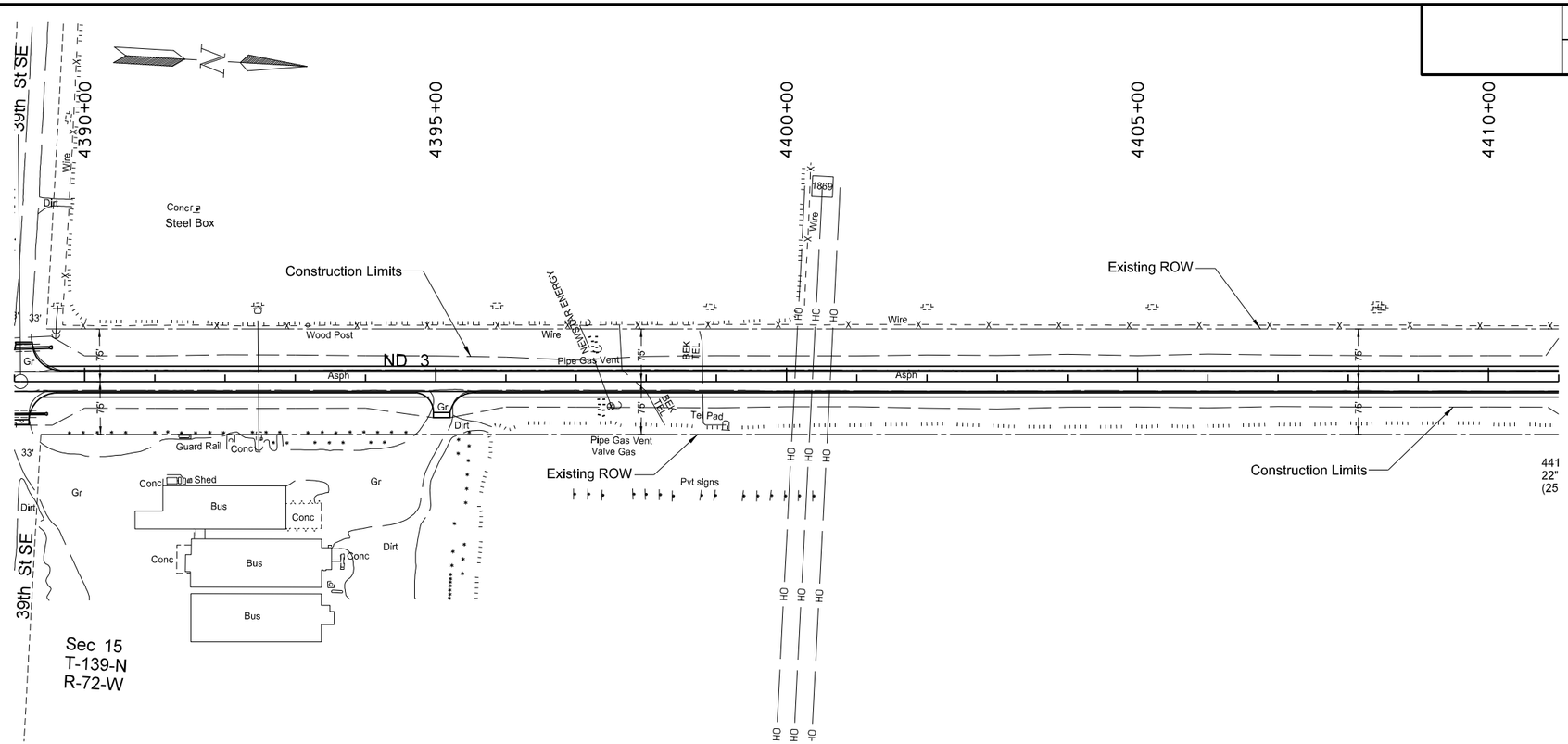
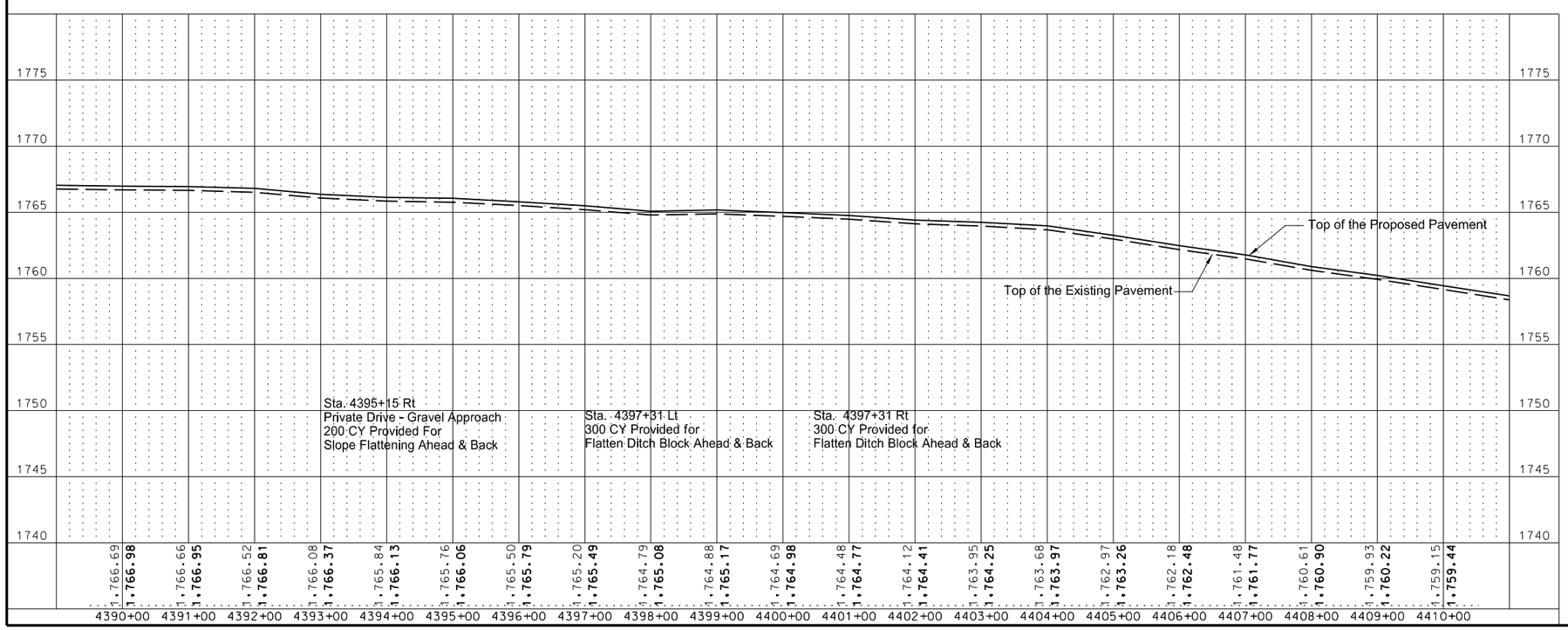
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	64





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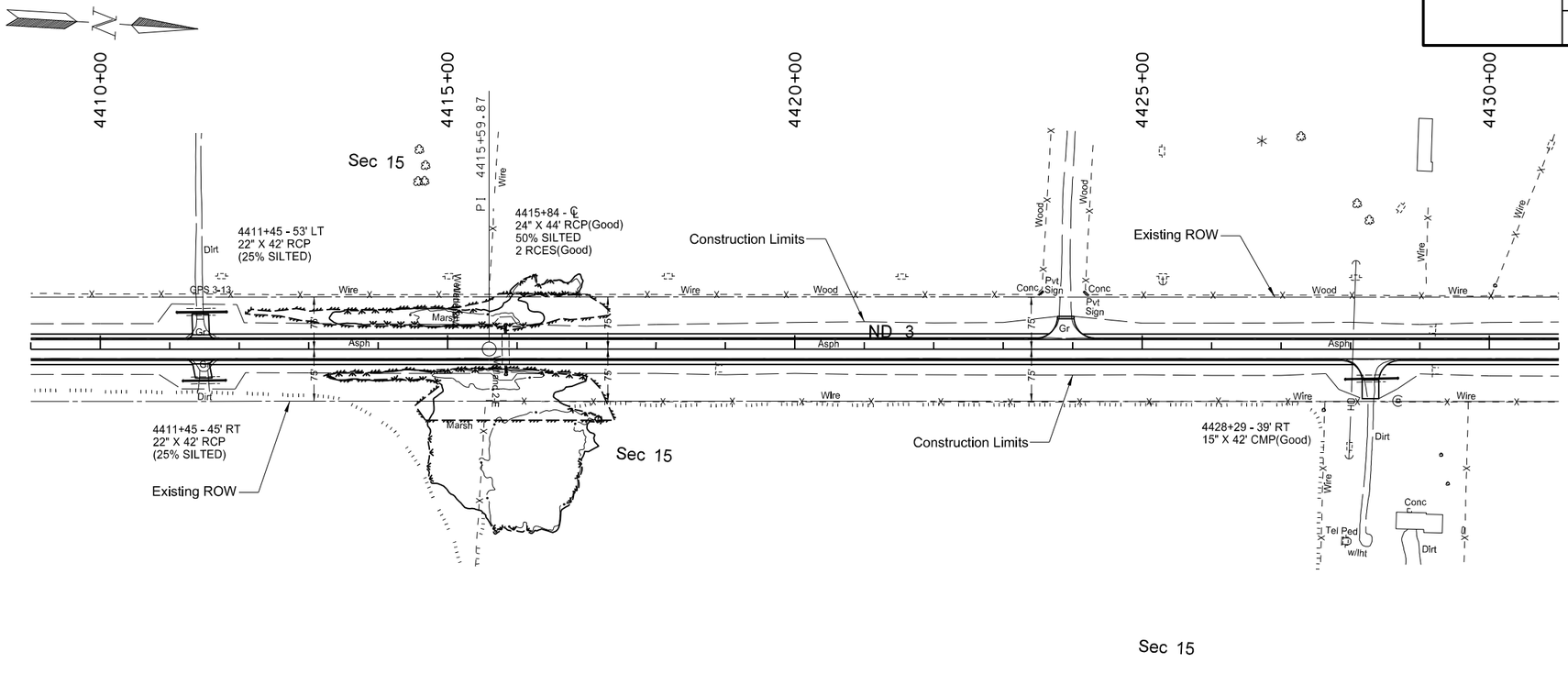
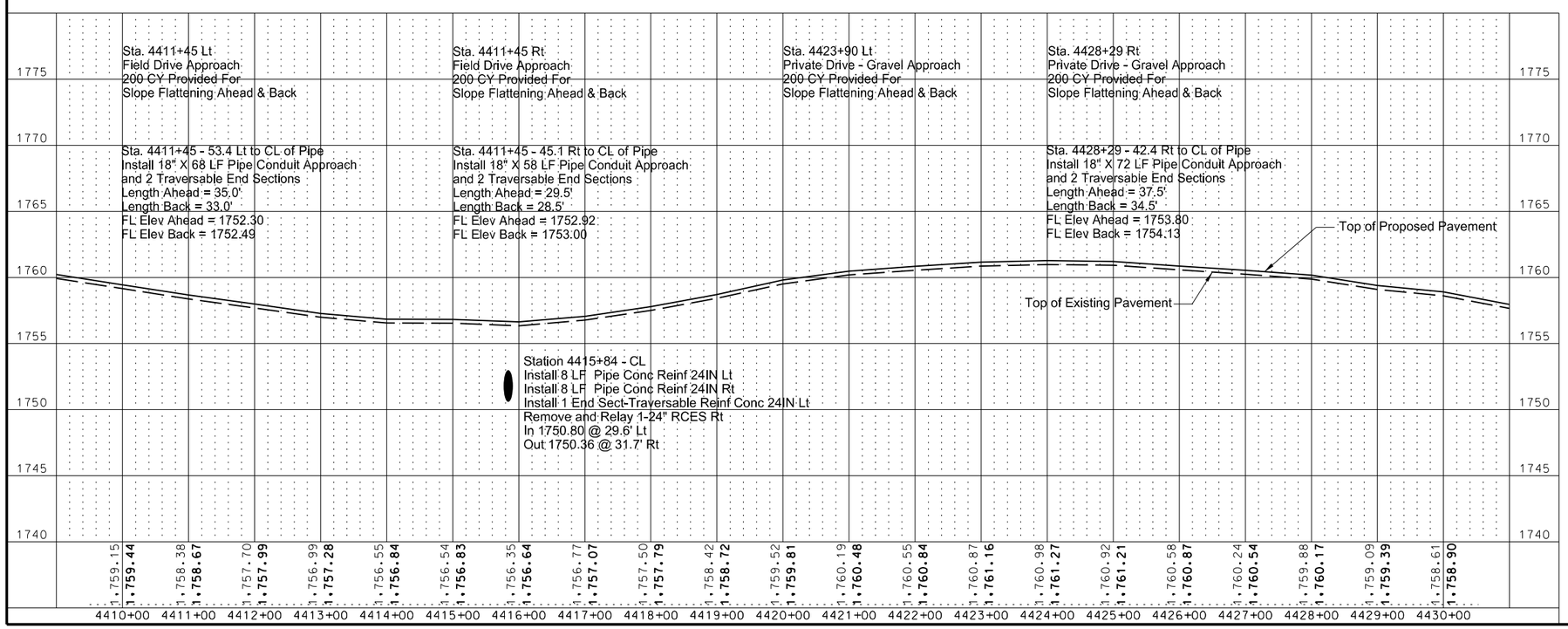
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	65



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0169	REMOVAL OF END SECTION-ALL TYPES & SIZES		
		4415+84 ℄ Lt	1	EA
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4411+45 Lt	42	LF
		4411+45 Rt	42	LF
		4428+29 Rt	42	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4415+84 ℄ - Lt	8	EA
		4415+84 ℄ - Rt	8	EA
714	3023	END SECT-TRAVERSABLE REINF. CONC. 24IN		
		4415+84 ℄ - Lt	1	EA
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4411+45 Lt	68	LF
		4411+45 Rt	58	LF
		4428+29 Rt	72	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPE & SIZES		
		4415+84 ℄ - Rt	1	EA



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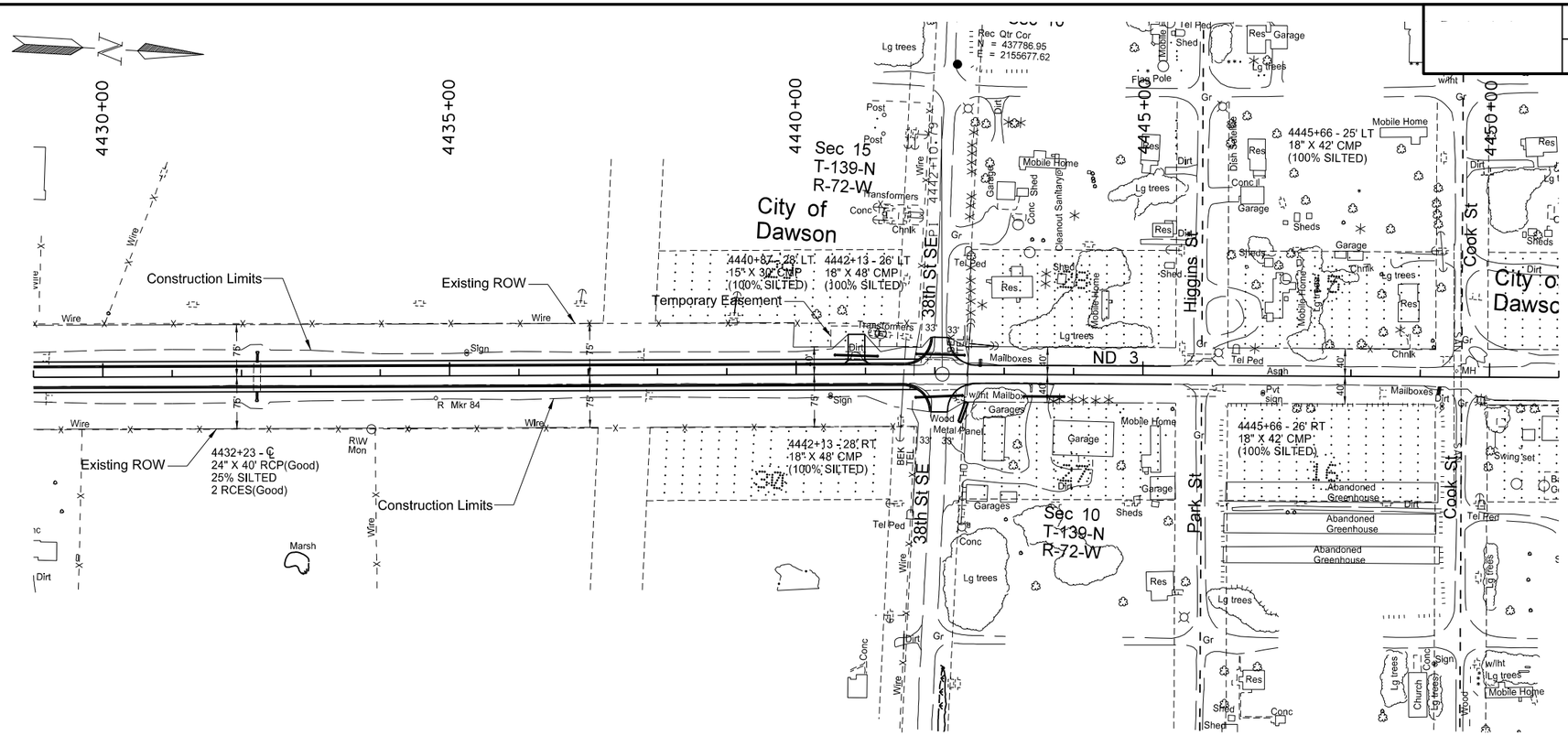
Plan & Profile

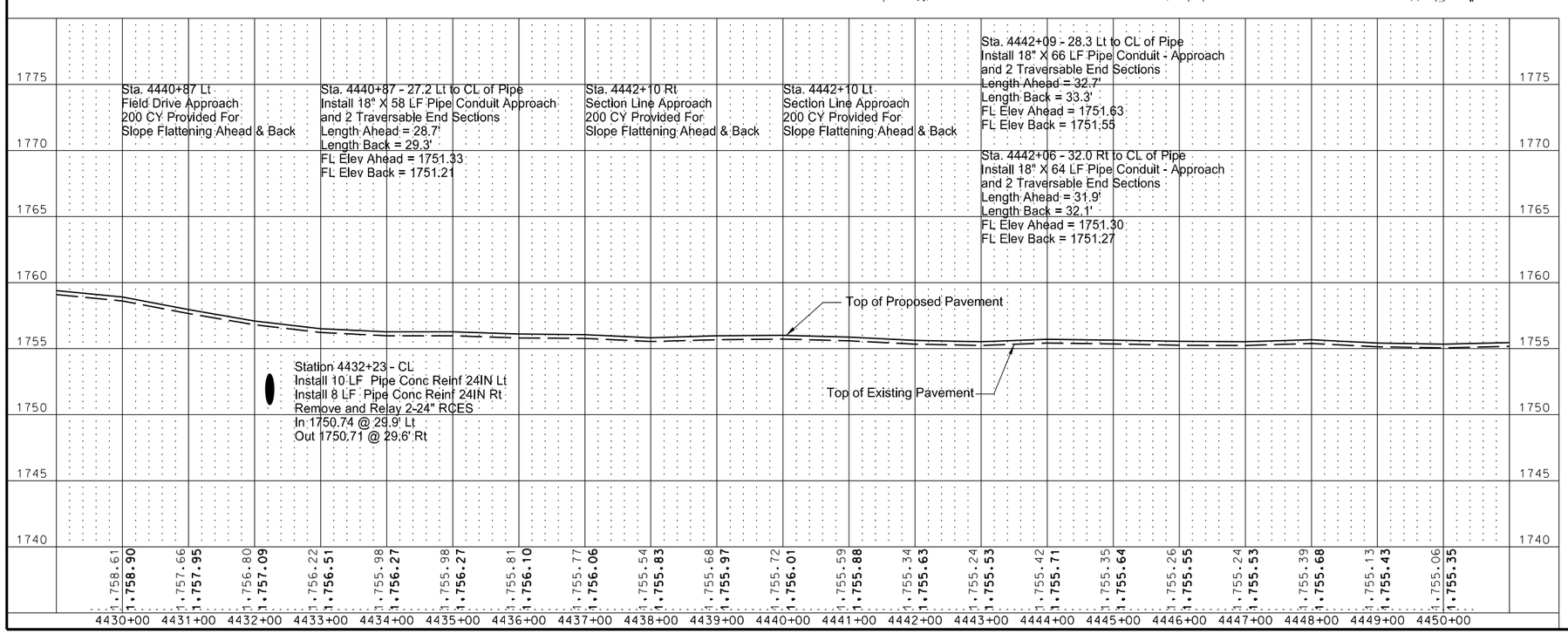
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	66



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0174	REMOVAL OF PIPE ALL TYPES AND SIZES		
		4440+87 Lt	30	LF
		4442+13 Lt	48	LF
		4442+13 Rt	48	LF
714	0615	PIPE CONC REINF 24IN CL III		
		4432+23 ℄ - Lt	10	EA
		4432+23 ℄ - Rt	8	EA
714	4099	PIPE CONDUIT 18IN APPROACH		
		4440+87 Lt	58	LF
		4442+09 Lt	66	LF
		4442+06 Rt	64	LF
714	9660	REMOVE & RELAY END SECTION-ALL TYPES & SIZES		
		4432+23 ℄ - Lt	1	EA
		4432+23 ℄ - Rt	1	EA



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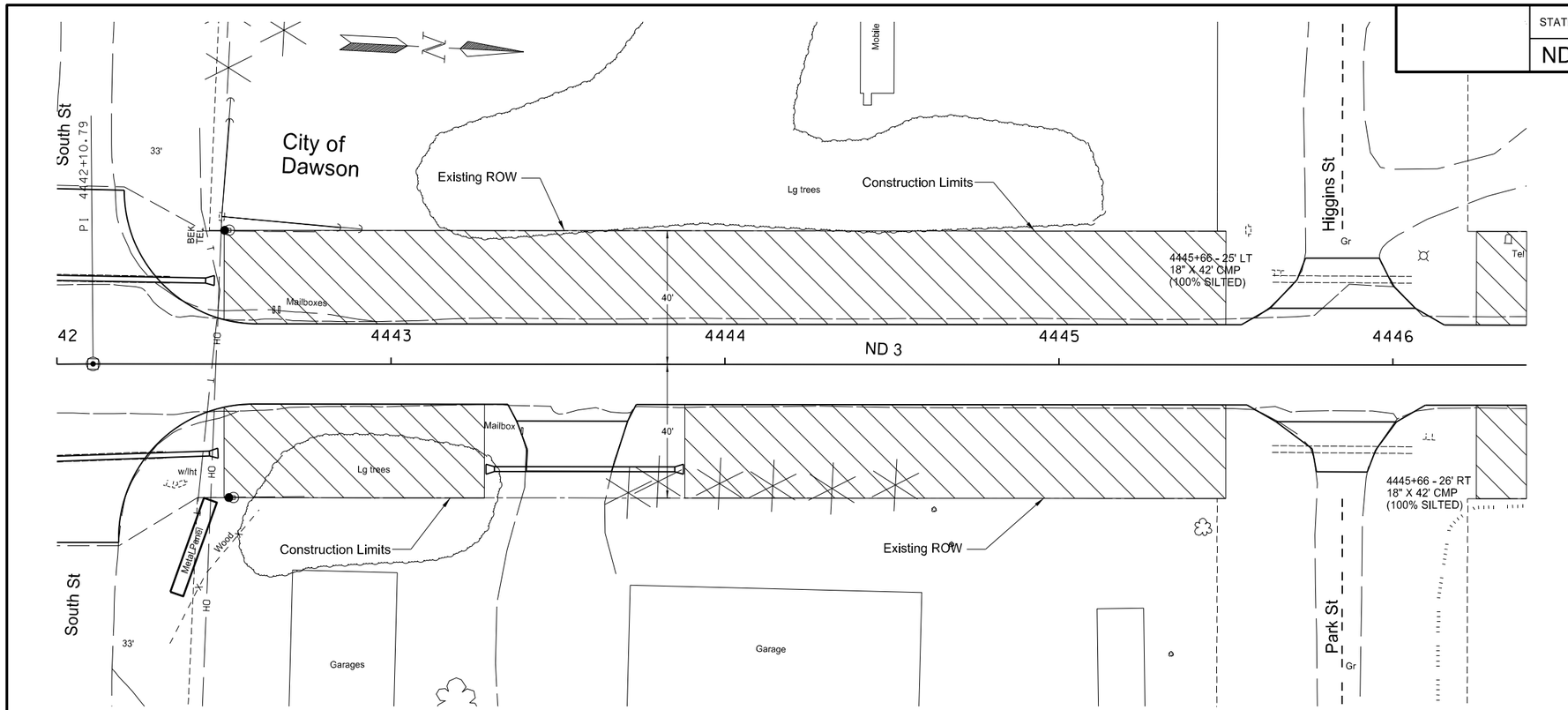
Plan & Profile

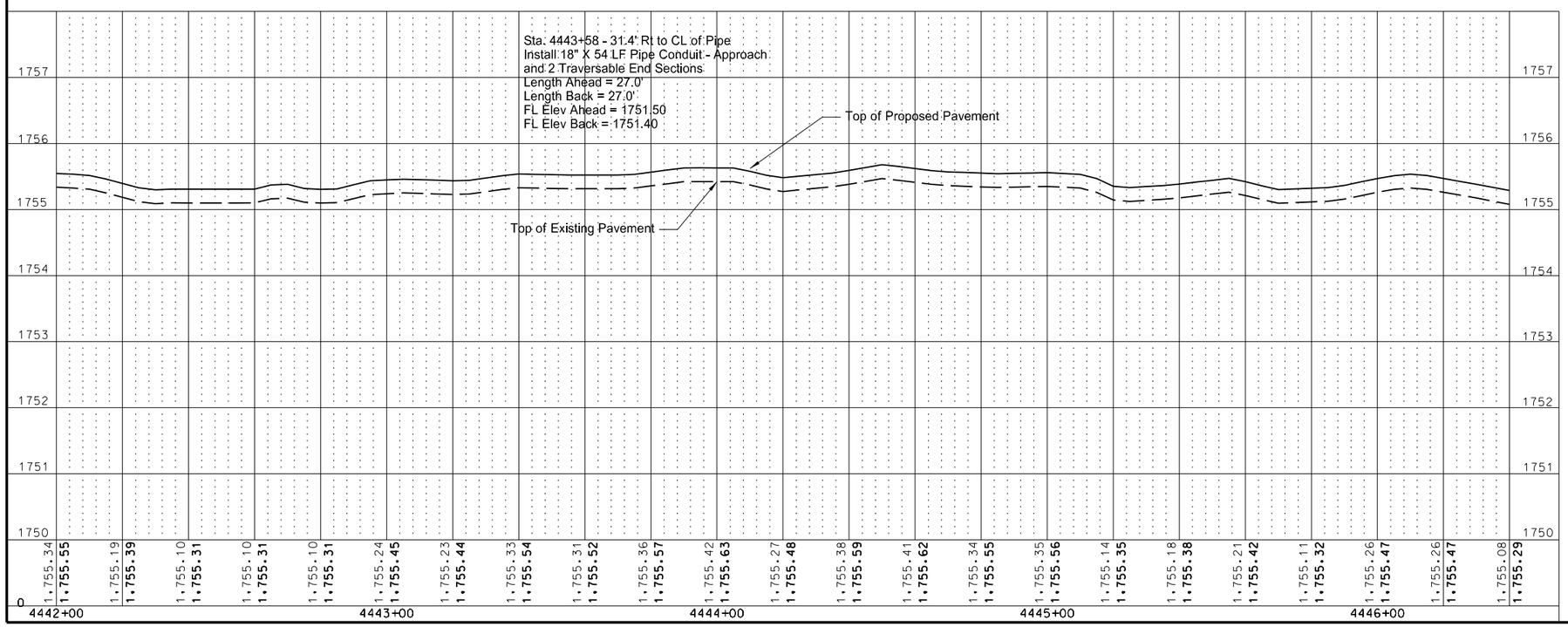
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	67



SPEC	CODE	BID ITEM	QUANTITY	UNIT
230	0170	RESHAPING DITCH		
		4442+50 to 4445+50 Lt	0.06	MI
		4442+50 to 4443+28 Rt	0.01	MI
		4443+88 to 4445+50 Rt	0.03	MI
714	4099	PIPE CONDUIT 18IN-APPROACH		
		4443+58 Rt	54	LF



Reshaping Ditch
(See Cross Sections)

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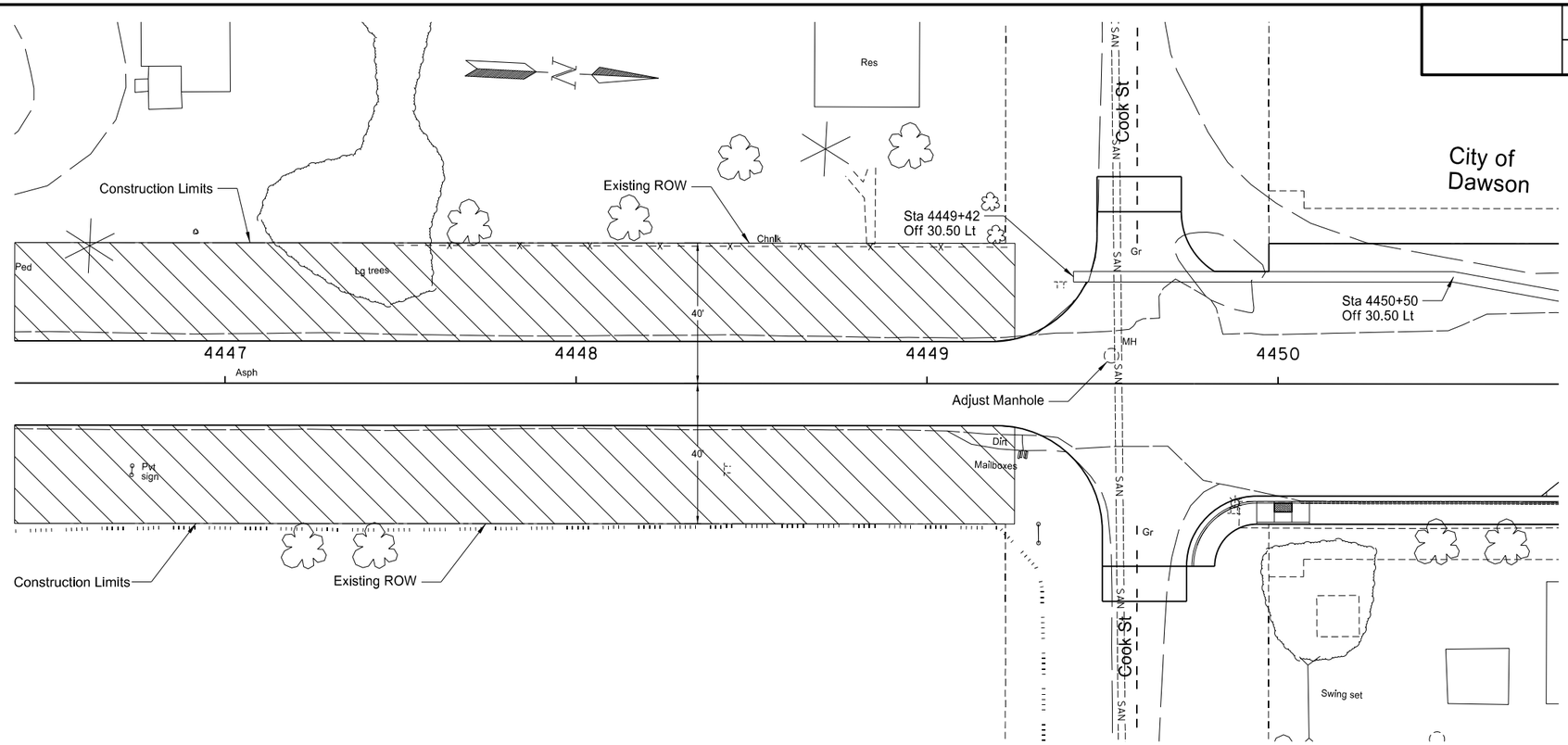
Plan & Profile

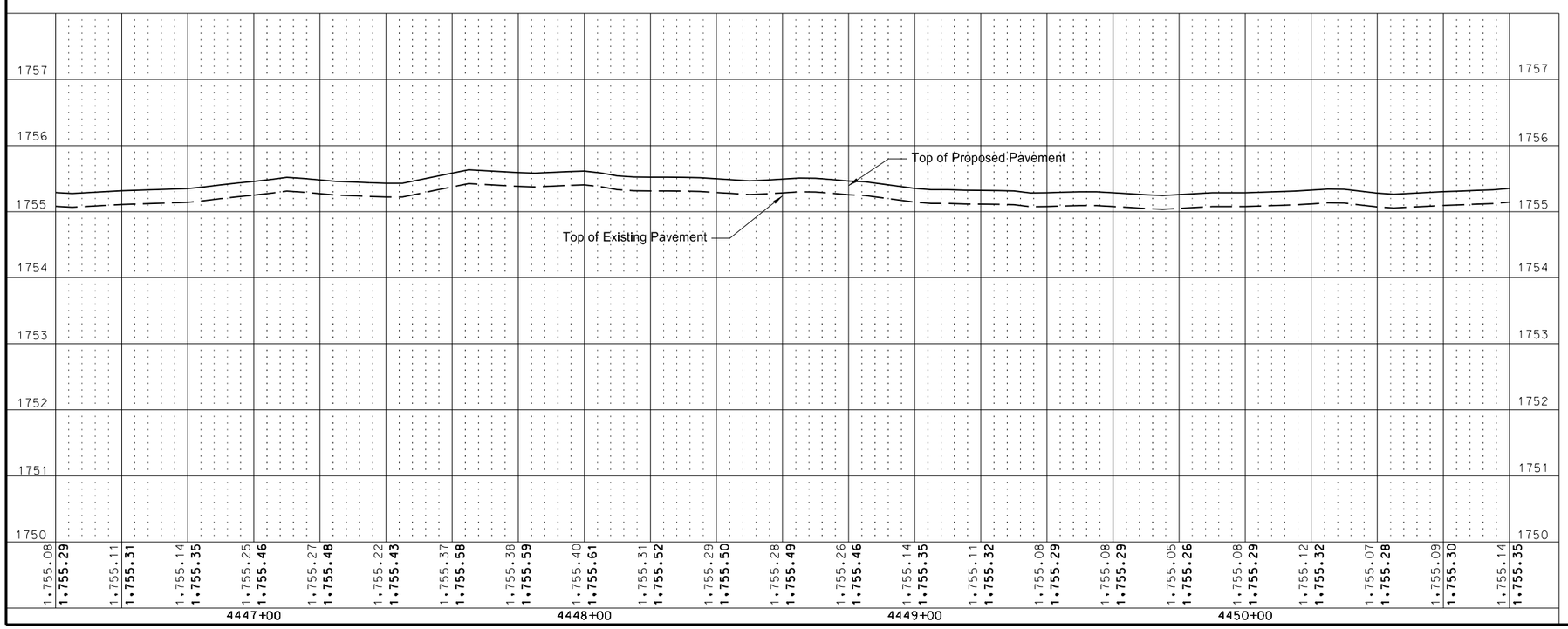
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	68



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0112	REMOVAL OF CONCRETE		
		4449+89 to 4450+80 Rt	75	SY
230	0107	RESHAPING DITCH		
		4446+25 to 4449+25 Lt	0.06	MI
		4446+25 to 4449+25 Rt	0.06	MI
302	0120	AGGREGATE BASE COURSE CL 5		
		4449+74 to 4450+80 Rt	34	CY
722	6200	ADJUST MANHOLE		
		4449+52 Lt	1	EA
748	0140	CURB & GUTTER-TYPE 1		
		4449+74 to 4450+80 Rt	118	LF
748	0520	CURB-TYPE 1		
		4449+94 to 4450+09 Rt	17	LF
748	1020	VALLEY GUTTER 36IN		
		4449+42 to 4450+80 Lt	46	SY
750	0100	SIDEWALK CONCRETE		
		4449+74 to 4450+80 Rt	79	SY
750	2115	DETECTABLE WARNING PANEL		
		4450+02 Rt	8	SF



Reshaping Ditch
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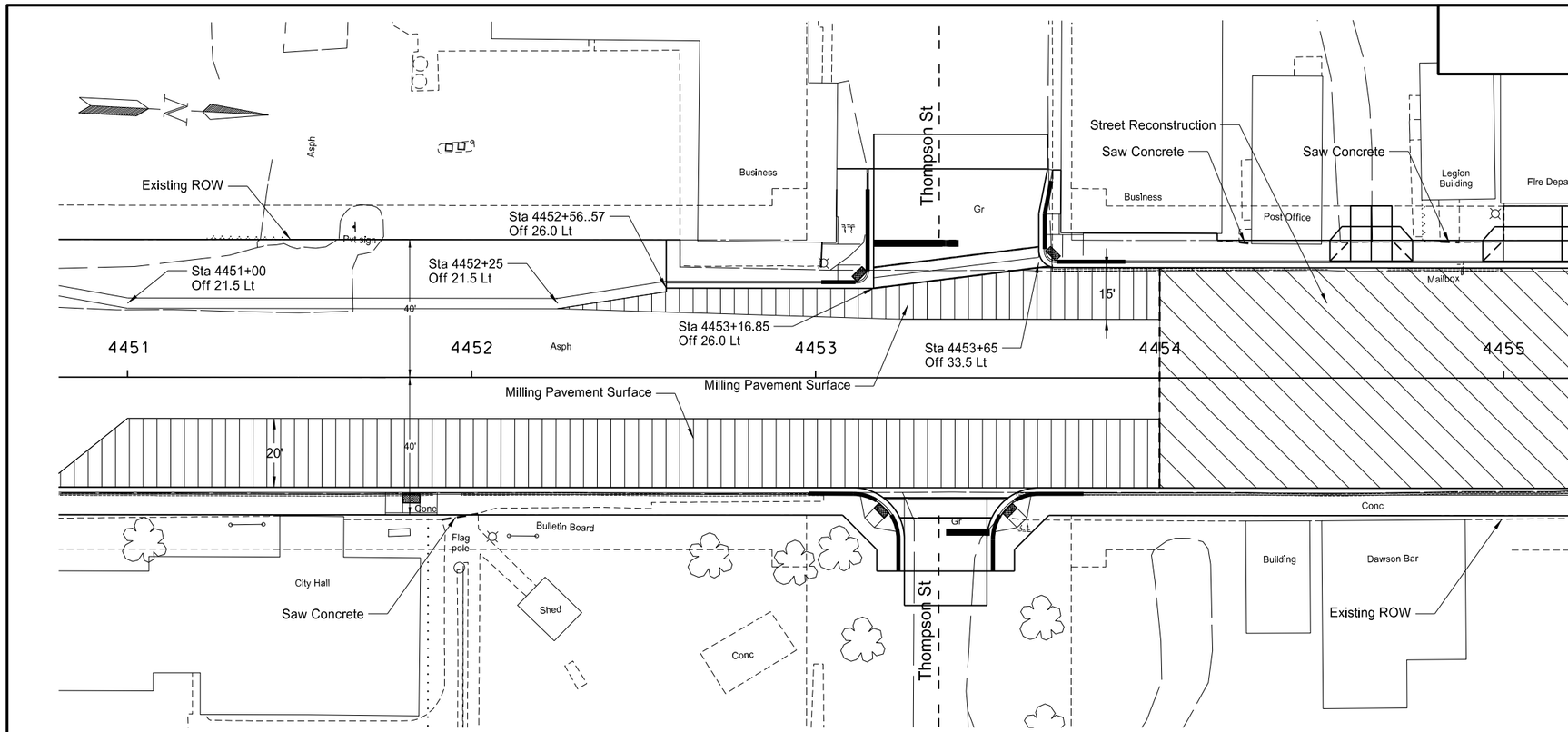
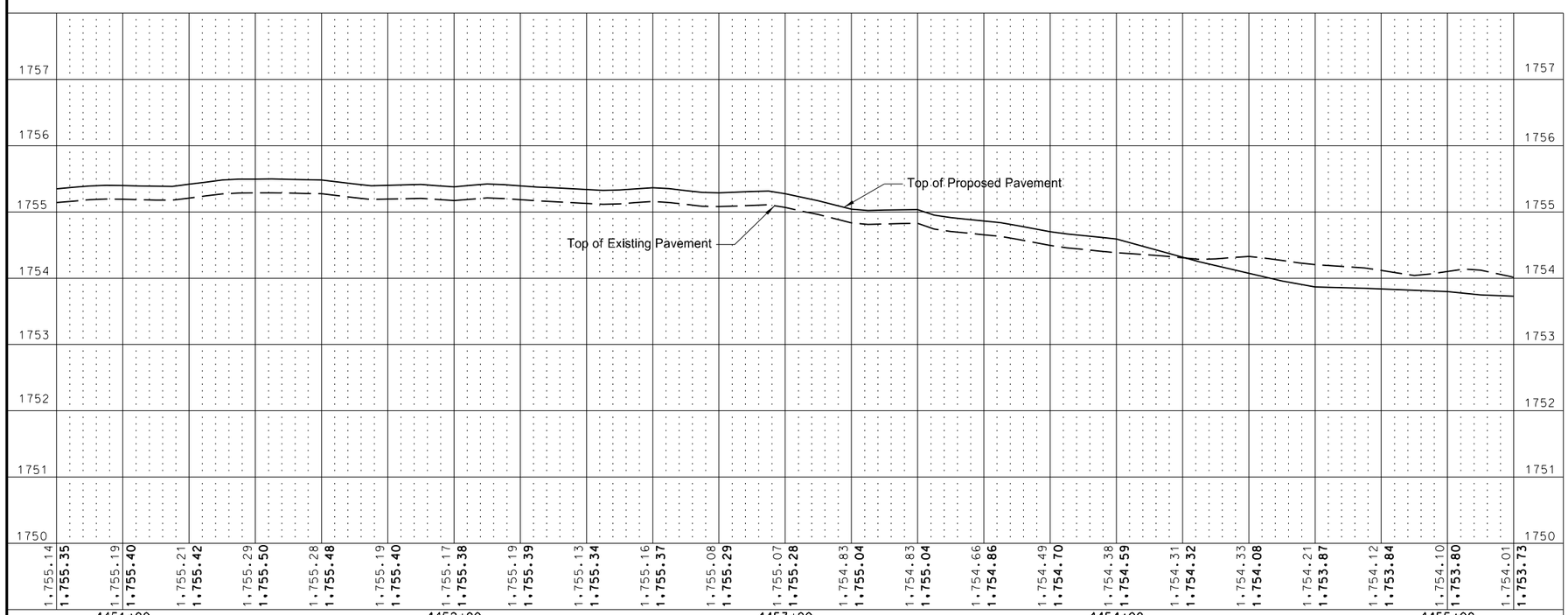
Plan & Profile

ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	69





SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0112	REMOVAL OF CONCRETE		
		4450+80 to 4453+24 Rt	132	SY
		4453+52 to 4455+20 Rt	144	SY
		4453+66 to 4455+20 Lt	182	SY
202	0119	SAW CONCRETE		
		4451+91 to 4452+03 Rt	11	LF
		4453+68 to 4453+71 Lt	3	LF
		4454+23 to 4454+27 Lt	4	LF
		4454+82 to 4454+87 Lt	5	LF
		4455+00 to 4455+20 Lt	20	LF
302	0120	AGGREGATE BASE COURSE CL 5		
		4450+80 to 4453+24 Rt	60	CY
		4453+01 to 4453+15 Lt	8	CY
		4453+52 to 4455+20 Rt	35	CY
		4453+66 to 4455+20 Lt	50	CY
411	0105	MILLING PAVEMENT SURFACE		
		4450+75 to 4454+00 Rt	694	SY
		4452+25 to 4454+00 Lt	185	SY
748	0140	CURB & GUTTER-TYPE 1		
		4450+80 to 4453+24 Rt	354	LF
		4452+56 to 4453+17 Lt	95	LF
		4453+52 to 4455+20 Rt	188	LF
		4453+66 to 4455+20 Lt	181	LF
748	0520	CURB-TYPE 1		
		4451+75 to 4451+90 Rt	17	LF
		4453+03 to 4453+07 Lt	12	LF
		4453+70 to 4453+77 Lt	13	LF
748	1020	VALLEY GUTTER 36IN		
		4450+80 to 4452+56 Lt	60	SY
		4453+17 to 4453+65 Lt	17	SY
		4453+14 to 4453+62 Rt	19	LF
750	0100	SIDEWALK CONCRETE		
		4450+80 to 4453+24 Rt	208	SY
		4453+01 to 4453+15 Lt	28	SY
		4453+52 to 4455+20 Rt	124	SY
		4453+66 to 4454+50 Lt	73	SY
		4454+74 to 4454+94 Lt	14	SY
750	1000	DRIVEWAY CONCRETE		
		4454+50 to 4454+74 Lt	32	SY
750	1021	DRIVEWAY CONCRETE 8IN REINFORCED		
		4454+94 to 4455+20 Lt	40	SY
750	2115	DETECTABLE WARNING PANEL		
		4451+83 Rt	10	SF
		4453+14 Lt	8	SF
		4453+19 Rt	8	SF
		4453+56 Rt	8	SF
		4453+69 Lt	8	SF

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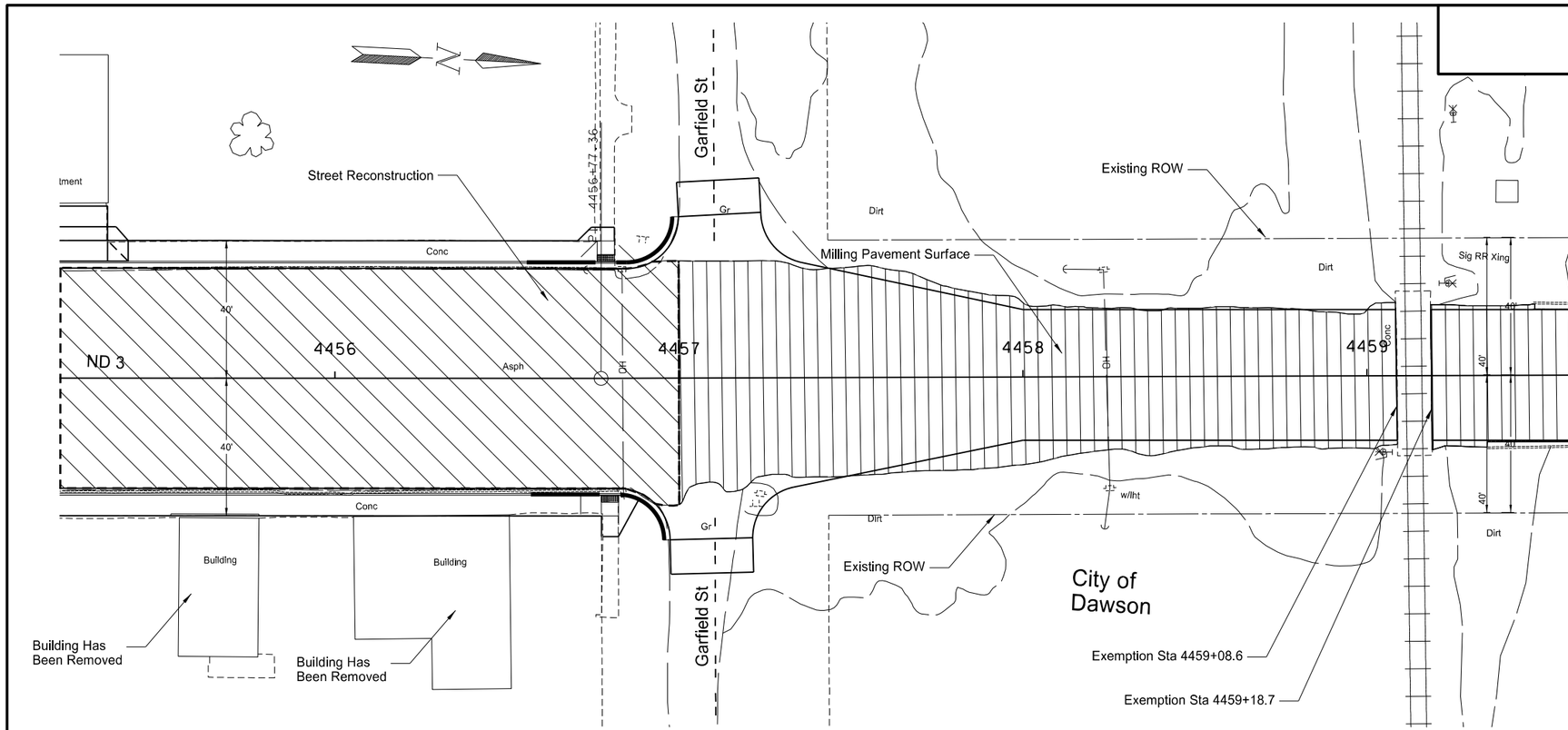
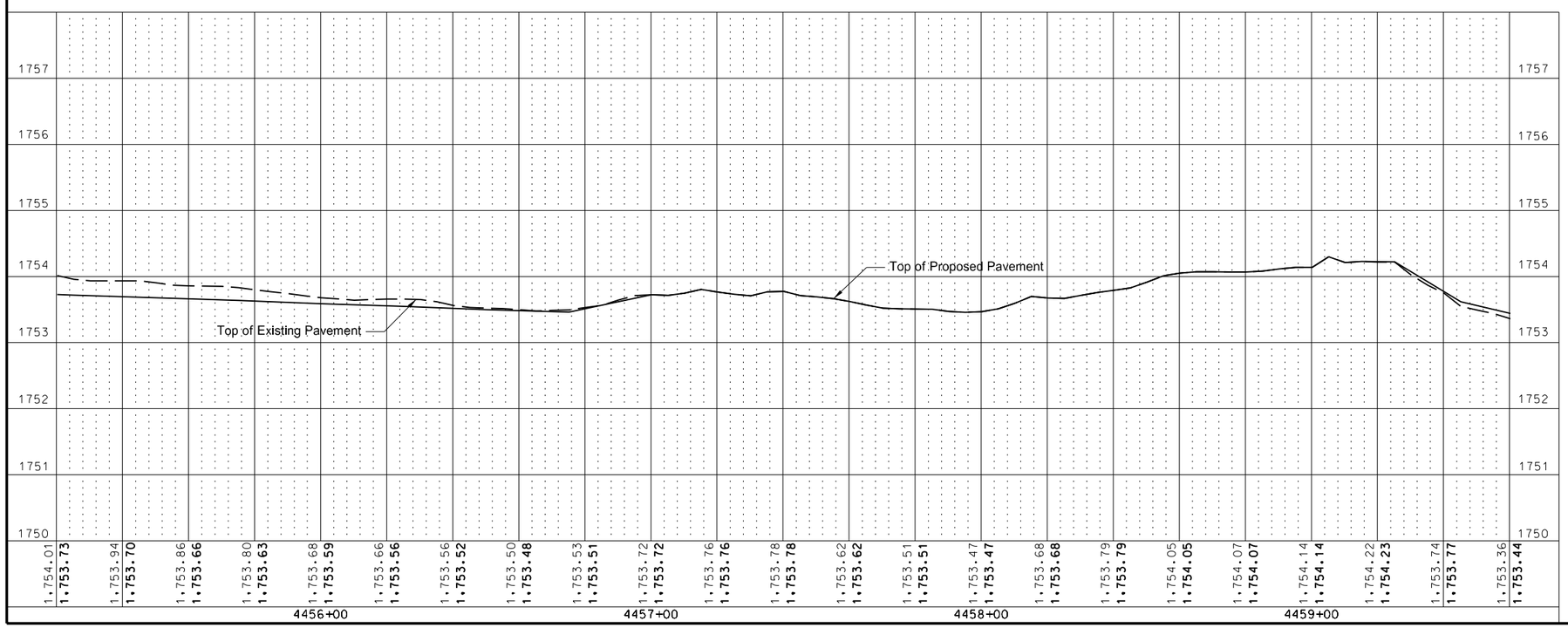
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	70



SPEC	CODE	BID ITEM	QUANTITY	UNIT
202	0112	REMOVAL OF CONCRETE		
		4455+20 to 4457+00 Rt	137	SY
		4455202 to 4457+00 Lt	168	SY
202	0119	SAW CONCRETE		
		4456+77 to 4456+82 Rt	5	LF
		4456+76 to 4456+82 Lt	6	LF
302	0120	AGGREGATE BASE COURSE CL 5		
		4455+20 to 4457+00 Rt	41	CY
		4455+20 to 4457+00 Lt	45	CY
411	0105	MILLING PAVEMENT SURFACE		
		4457+00 to 4459+09 ℄	1156	SY
748	0140	CURB & GUTTER TYPE 1		
		4455+20 to 4457+00 Rt	186	LF
		4455+20 to 4457+00 Lt	190	LF
748	0520	CURB-TYPE 1		
		4455+52 to 4456+78 Rt	132	LF
750	0100	SIDEWALK CONCRETE		
		4455+20 to 4457+00 Rt	115	SY
		4455+40 to 4457+00 Lt	103	SY
750	1021	DRIVEWAY CONCRETE 8IN REINFORCED		
		4455+20 to 4455+40 Lt	30	SY
750	2115	DETECTABLE WARNING PANEL		
		4456+80 Rt	10	SF
		4456+80 Lt	10	SF



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Jct 34 N to I-94 Dawson

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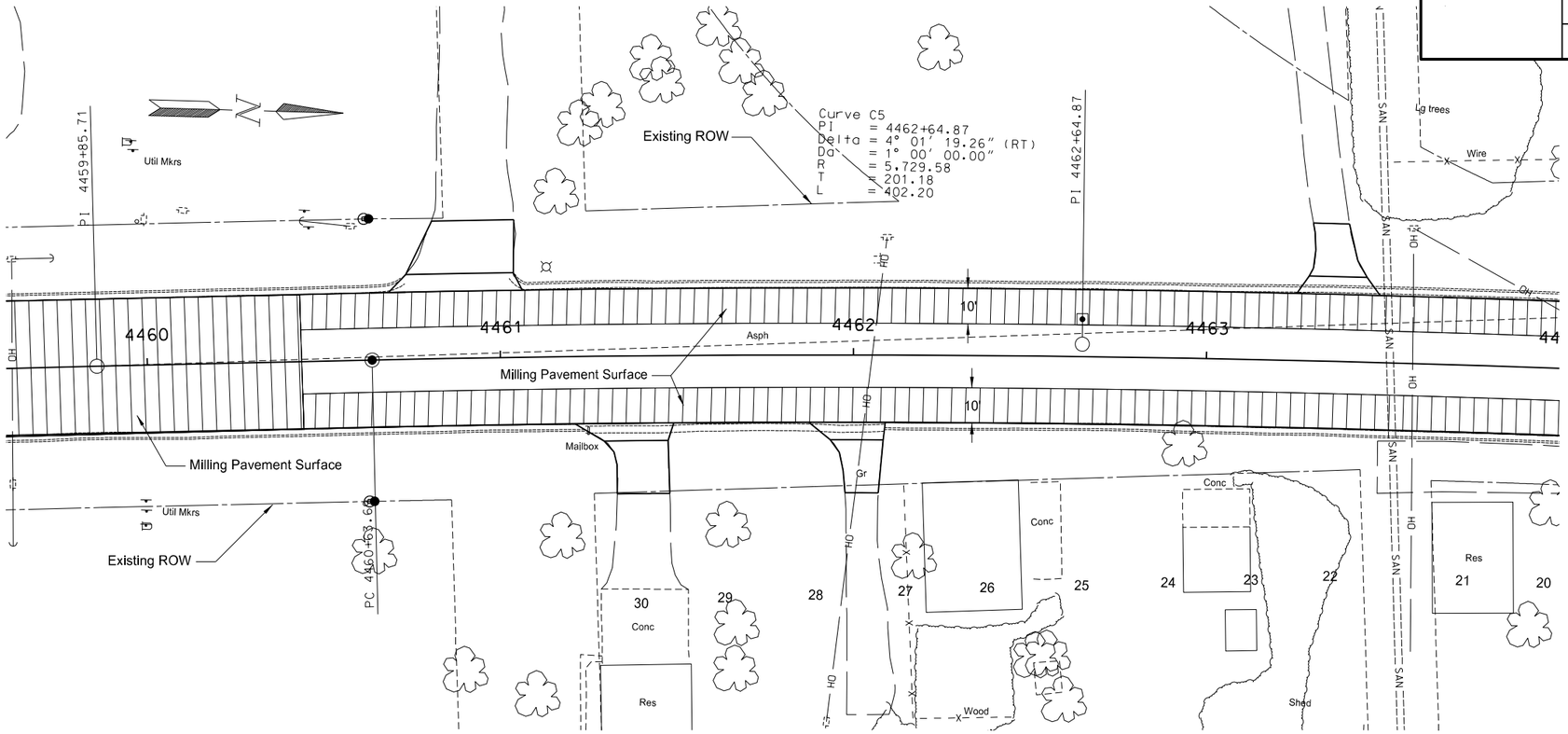
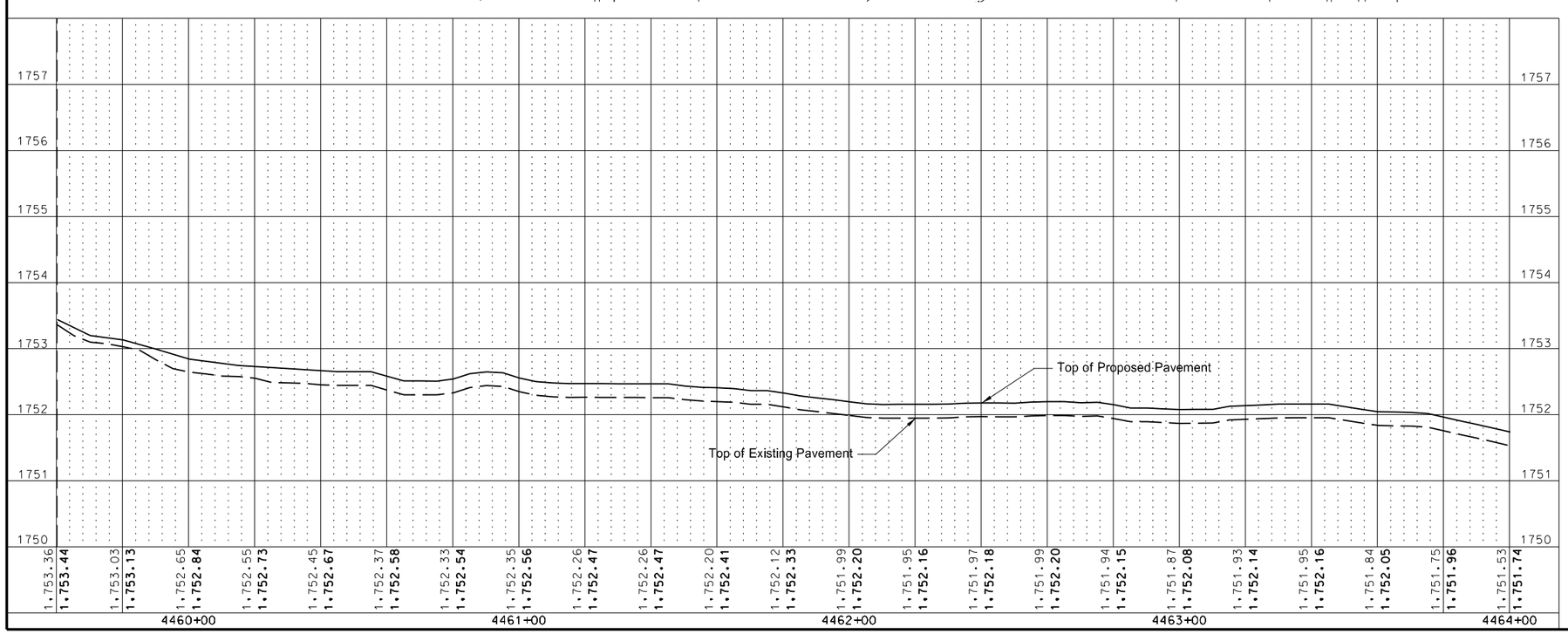
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	71

SPEC	CODE	BID ITEM	QUANTITY	UNIT
411	0105	MILLING PAVEMENT SURFACE		
		4459+19 to 4460+44 ℄	540	SY
		4460+44 to 4464+00 Lt	397	SY
		4460+44 to 4464+00 Rt	388	SY





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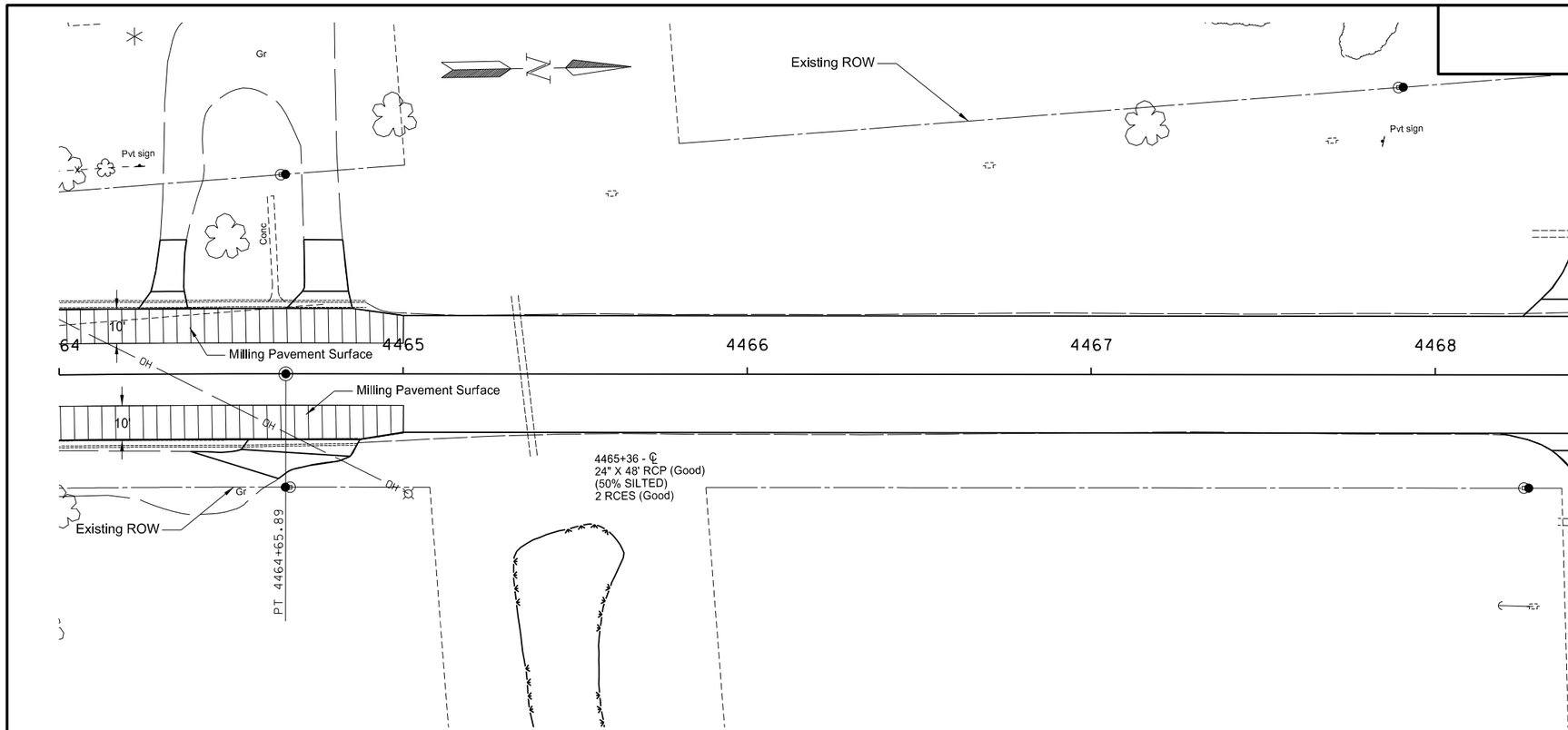
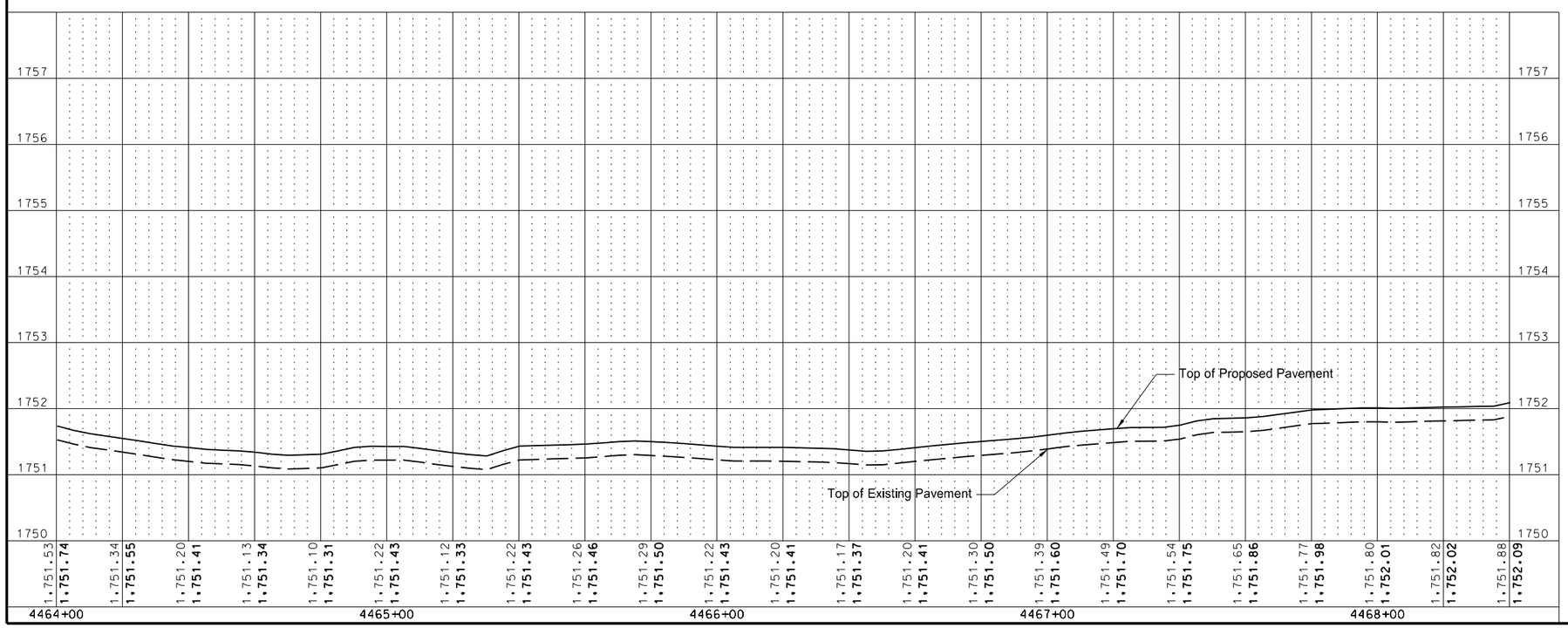
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	72

SPEC	CODE	BID ITEM	QUANTITY	UNIT
411	0105	MILLING PAVEMENT SURFACE		
		4464+00 to 4465+00 Rt	108	SY
		4464+00 to 4465+00 Lt	110	SY





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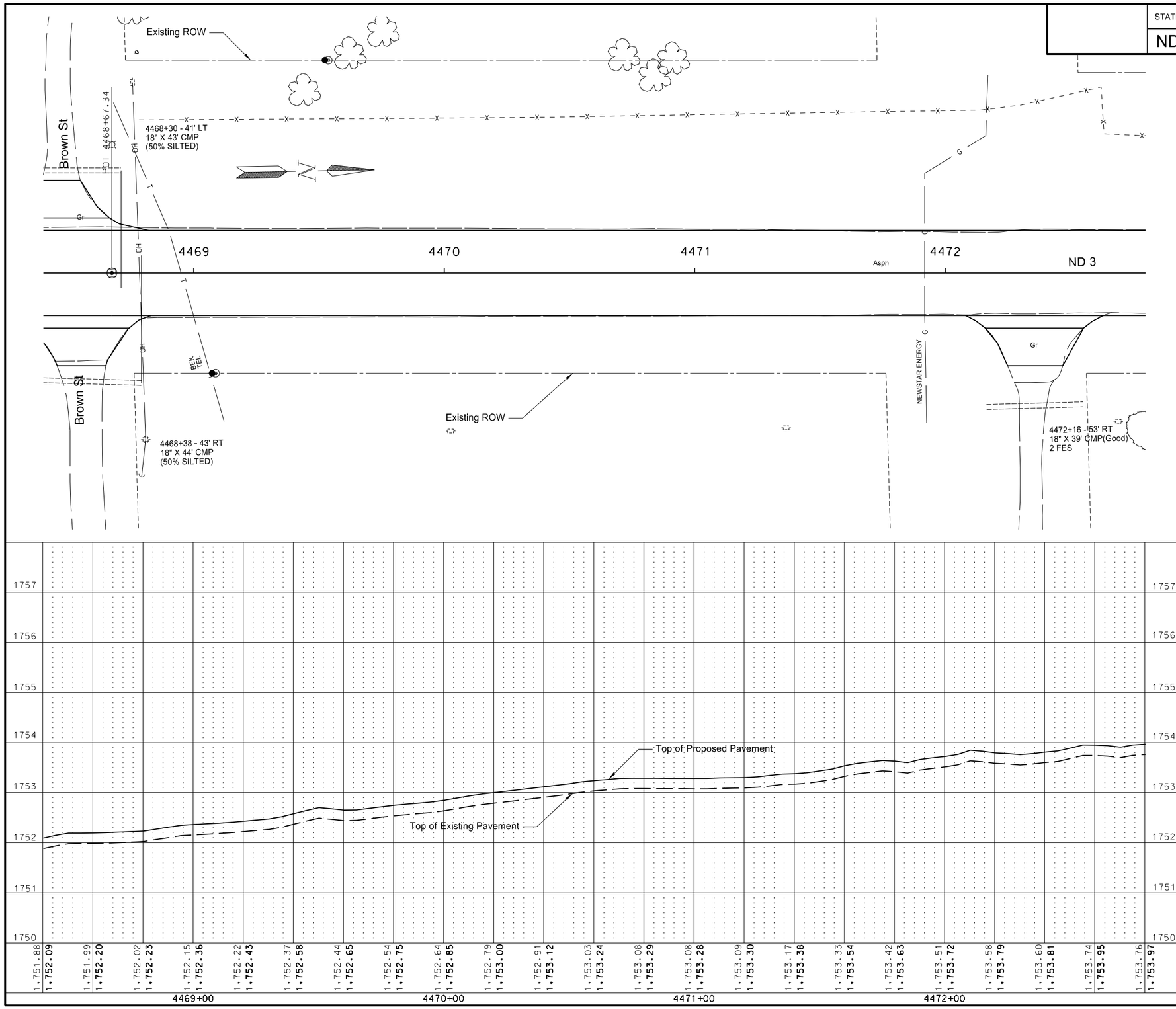
ND 3

Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	73



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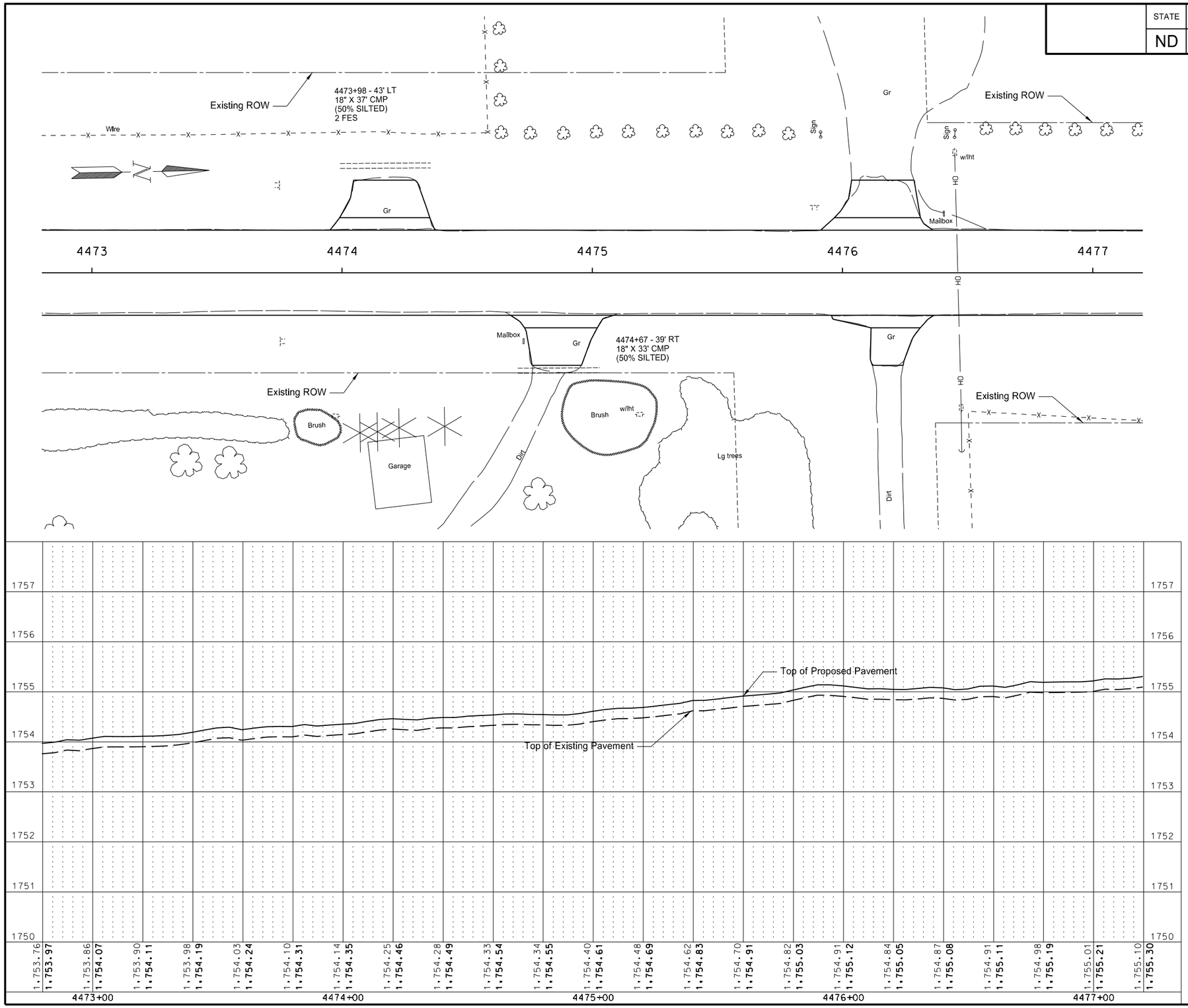
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	74



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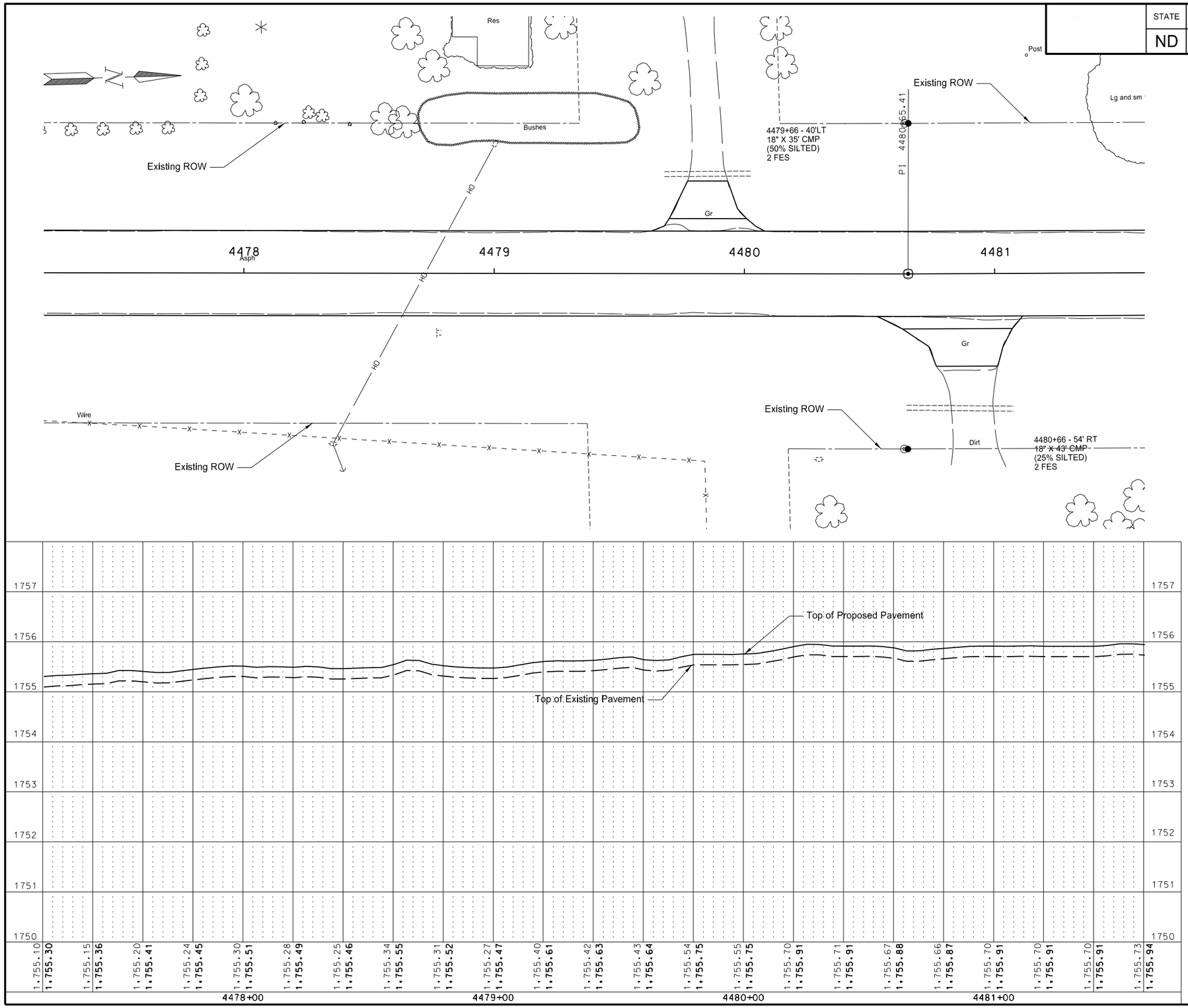
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	75



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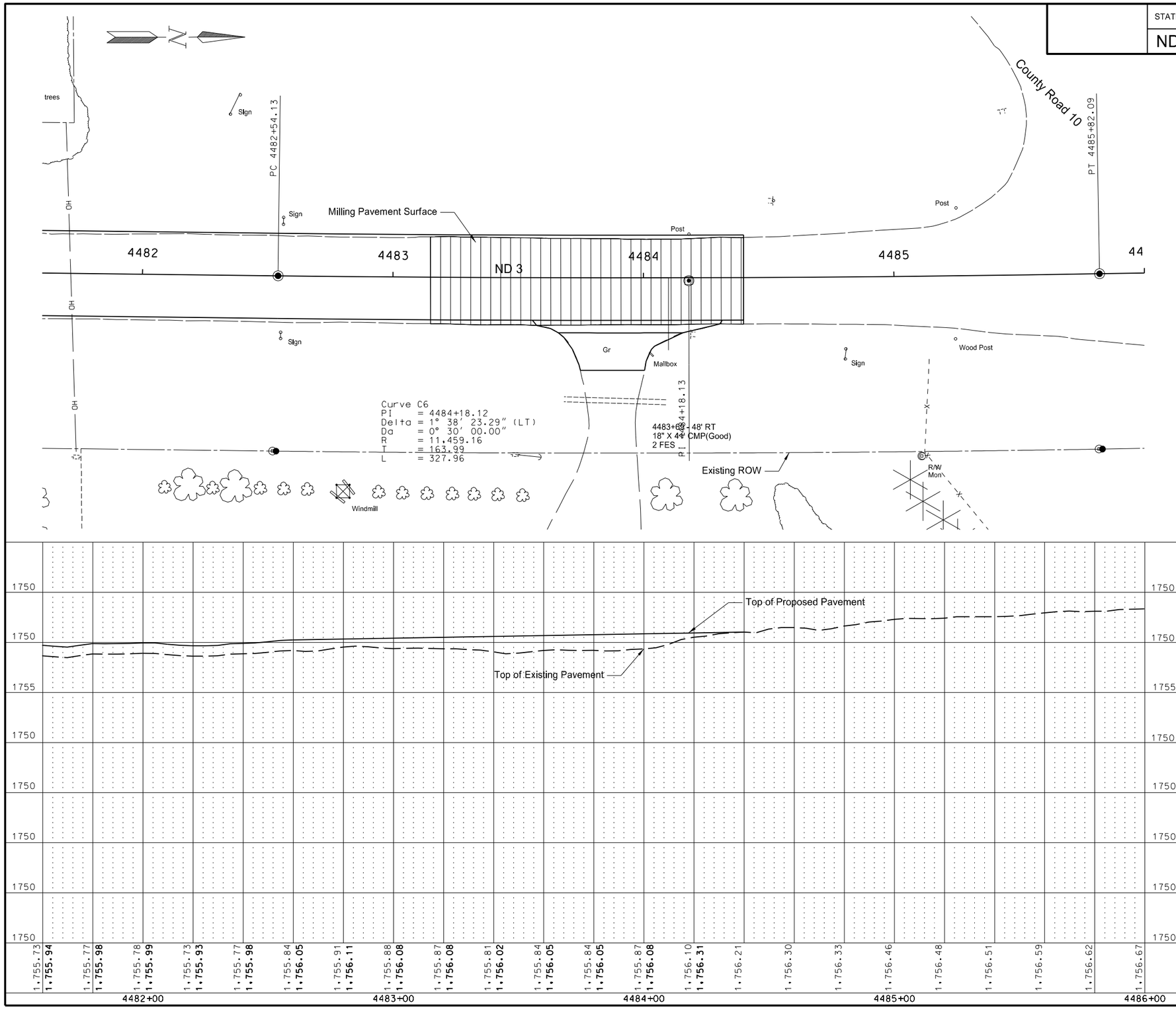
Jct 34 N to I-94 Dawson

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	NH-RSS-1-003(034)059	60	76

SPEC	CODE	BID ITEM	QUANTITY	UNIT
411	0105	MILLING PAVEMENT SURFACE 4482+65 to 4484+40 ℄	661	SY



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