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**TENDER ADDENDUM**

Tender: New Industrial Park Watermain and Sewermain Installation

Addendum #: 02

Issue Date of this Addendum: February 26, 2025

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**Addendum:**

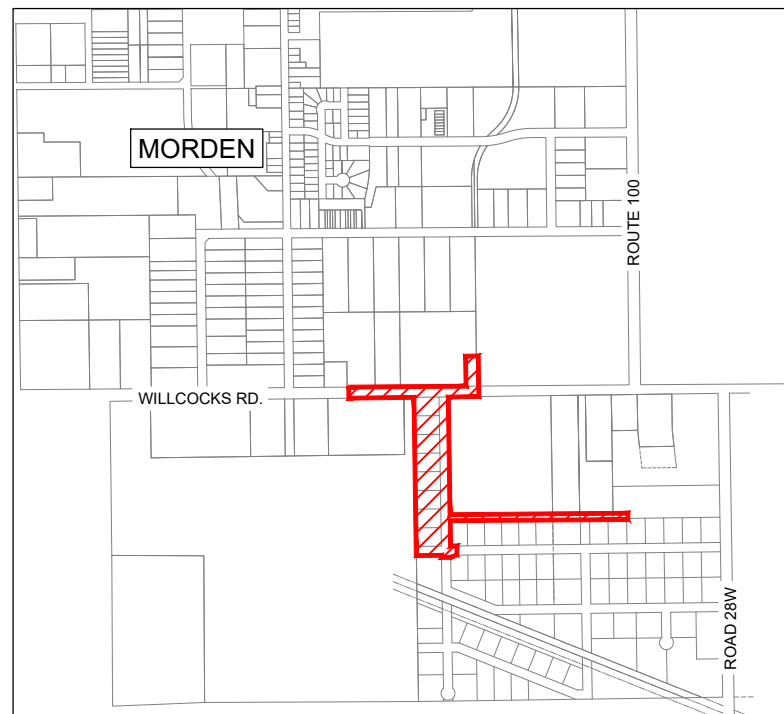
1. The Tender Documents are modified as set forth in this Addendum. The original Tender Documents and any previously issued addenda remain in full force and effect, except as modified by this Addendum, which is hereby made part of the Tender Documents.

Item	Section	Description of change
Revised Drawings	Section 8. Drawings	Elevation of the road's centerline has been lowered by an average of 0.296m, which affected the depth of utilities.  Please replace the original set of drawings with the set attached to this addendum.

END OF ADDENDUM # 02



# MORDEN INDUSTRIAL PARK PHASE 1



KEY PLAN

## PLAN INDEX

### PLAN AND PROFILE

SHEET C01	NORTHERN CONNECTIONS PLAN AND PROFILE VIEWS STA 1+000 TO 1+275
SHEET C02	WOLFE ENTERPRISES CONNECTION PLAN AND PROFILE VIEWS STA 1+000 TO 1+275
SHEET C03	ROAD 1 PLAN AND PROFILE VIEWS STA 1+025 TO 1+400
SHEET C04	ROAD 1 PLAN AND PROFILE VIEWS STA 1+400 TO 1+775
SHEET C05	ROAD 2 PLAN AND PROFILE VIEWS STA 1+025 TO 1+400

### LOT GRADING

SHEET LG01	LOT GRADING PLAN PHASE 1
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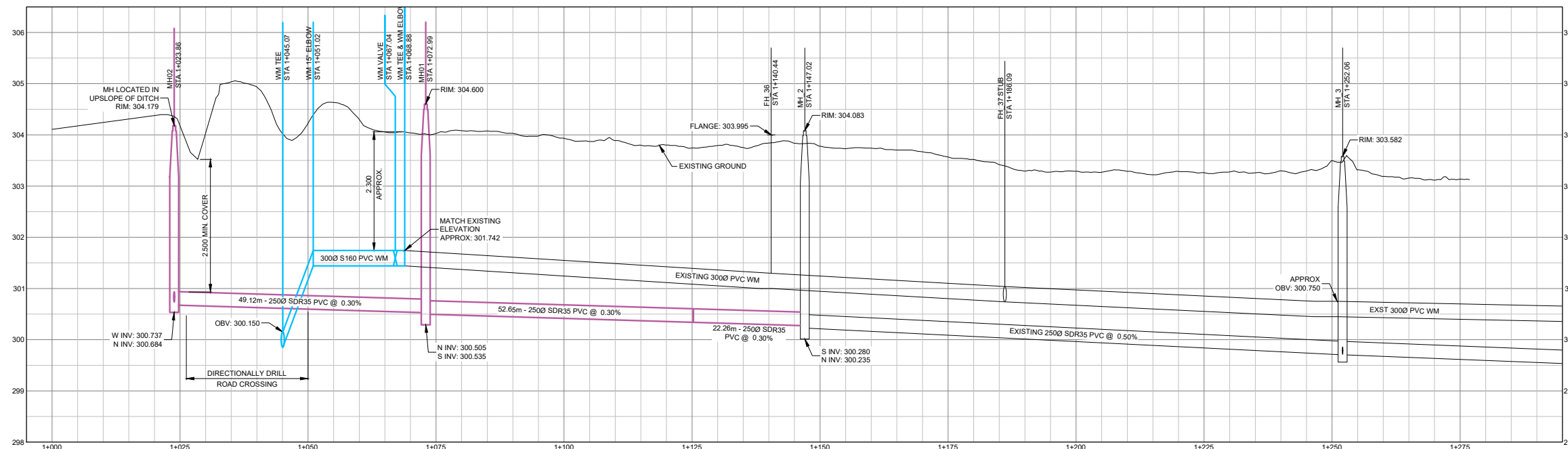
### DETAILS

SHEET D01	MISCELLANEOUS DETAILS
SHEET D02	ROADS AND CATCH BASIN DETAILS
SHEET D03	MISCELLANEOUS DETAILS
SHEET D04	MANHOLE MANUFACTURING & ROAD OUTLET DETAILS
SHEET D05	CONCRETE ROADWAY DETAILS

**jdb project engineering inc.**

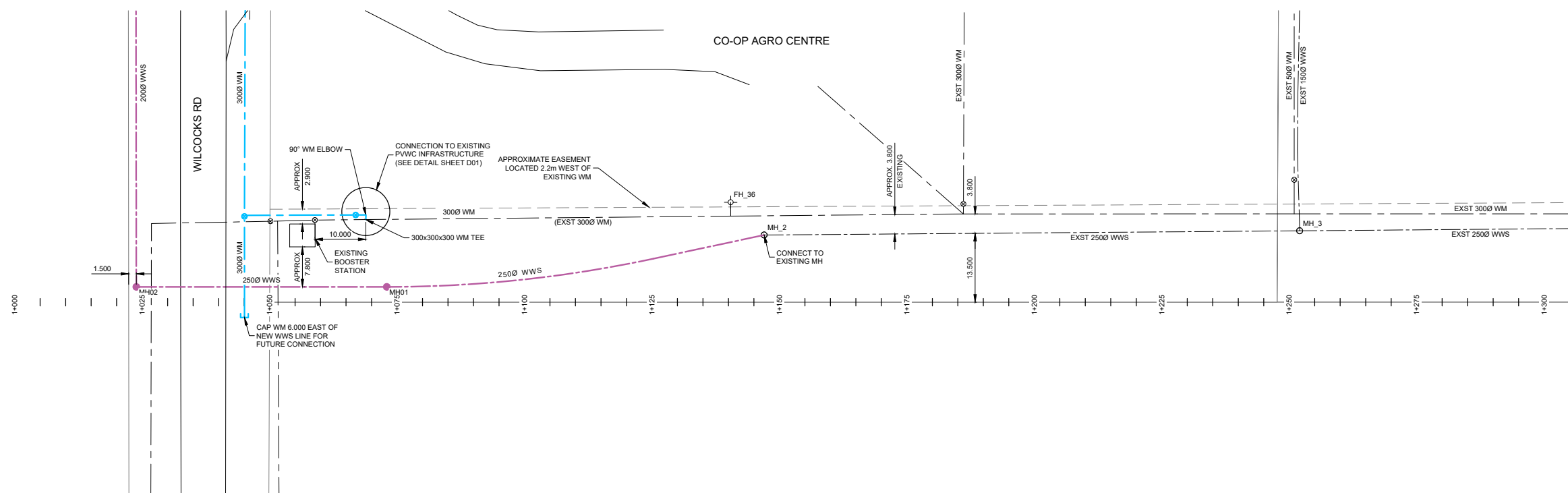
1-880L - 15TH STREET WINKLER, MB R6W 0H5  
PH: (204) 331-4440 EMAIL: jbotha@jdbprojects.ca





**PROFILE VIEW**

HORIZONTAL SCALE = 1:500  
VERTICAL SCALE = 1:50



**PLAN VIEW**

SCALE = 1:500

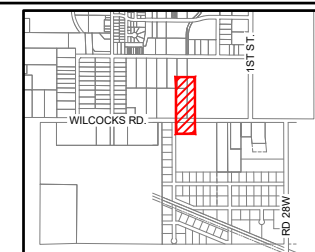
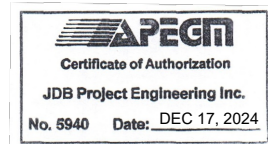
**LEGEND:**

- EXISTING WATERMAIN
- PROPOSED WATERMAIN
- EXISTING SEWERMAIN
- PROPOSED SEWERMAIN
- EXISTING GAS LINE
- EXISTING MTS LINE
- MATCH LINE
- ASPHALT

- FH (circle with cross) EXISTING FIRE HYDRANT
- FH (circle with cross) PROPOSED FIRE HYDRANT
- ⊕ EXISTING VALVE
- ⊕ PROPOSED VALVE
- MH (circle) EXISTING MANHOLE
- MH (circle) PROPOSED MANHOLE
- CB (square) EXISTING CURBSTOP
- CB (square) PROPOSED CURBSTOP
- CB (square) EXISTING CATCH BASIN
- CB (square) PROPOSED CATCH BASIN

- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- 100 --- CONTOURS - MAJOR INTERVALS
- 100.5 --- CONTOURS - MINOR INTERVALS
- × 100.00 EXISTING GROUND ELEVATION
- (100.00) PROPOSED GROUND ELEVATION
- (100.00) EXISTING ROAD ELEVATION
- (100.00) PROPOSED ROAD ELEVATION

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT  
HYDRANT ON WILCOCKS RD IN FRONT  
OF WOLFE ENTERPRISES



**KEY PLAN**

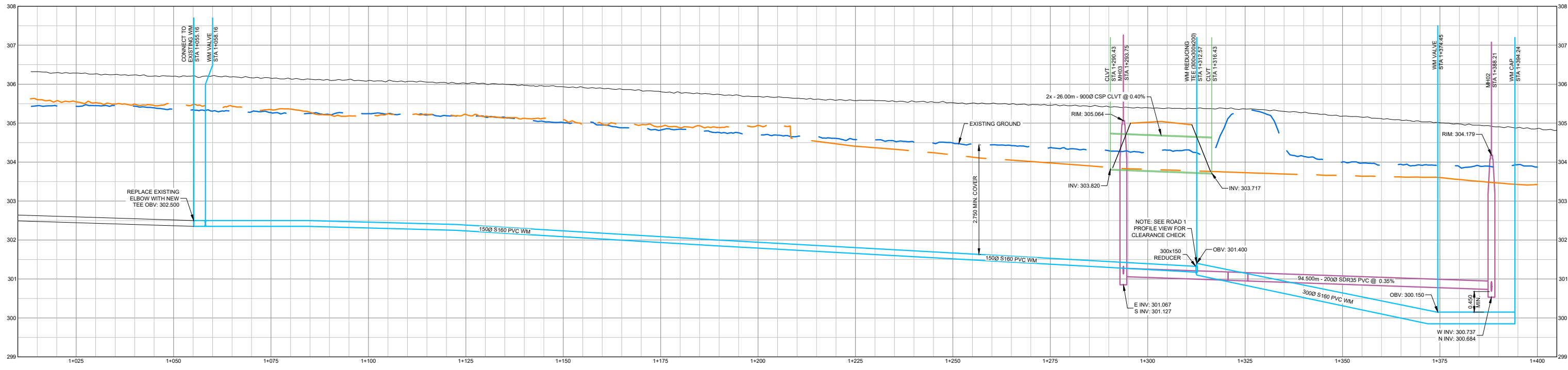
**jdb project engineering inc.**

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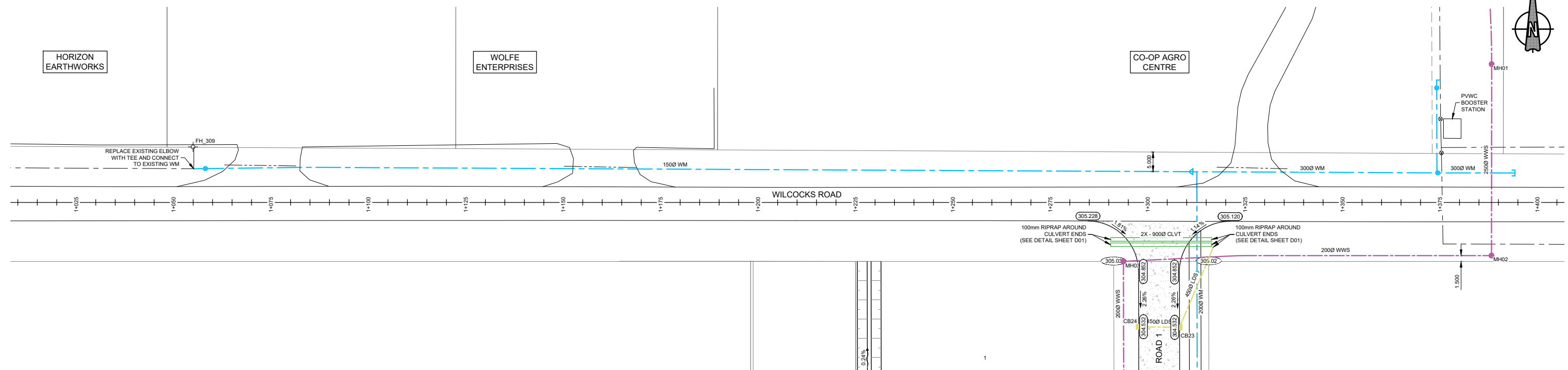
**Morden**  
100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
PHONE: (204) 822-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: PLAN AND PROFILE VIEWS NORTHERN CONNECTIONS STA 1+000 TO 1+275		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
SHOWN BY: NG	DATE: 2024.03.25	SCALE: 1:500
SHEET NO: C01	DRAWING NO: 204	



**PROFILE VIEW**

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VERTICAL SCALE = 1:50

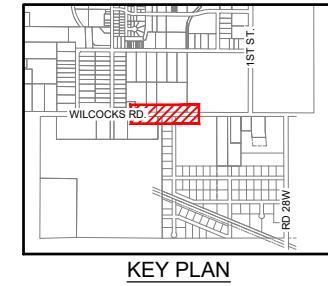
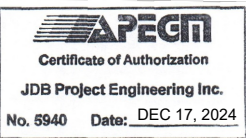
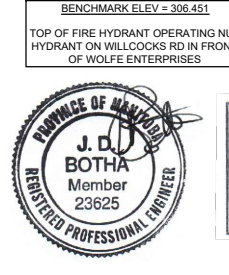


**PLAN VIEW**

SCALE = 1:500

**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		CONTOURS - MINOR INTERVALS
	EXISTING MTS LINE		PROPOSED MANHOLE		EXISTING GROUND ELEVATION
	MATCH LINE		EXISTING CURBSTOP		PROPOSED GROUND ELEVATION
	ASPHALT		PROPOSED CURBSTOP		EXISTING ROAD ELEVATION
			EXISTING CATCH BASIN		PROPOSED ROAD ELEVATION
			PROPOSED CATCH BASIN		



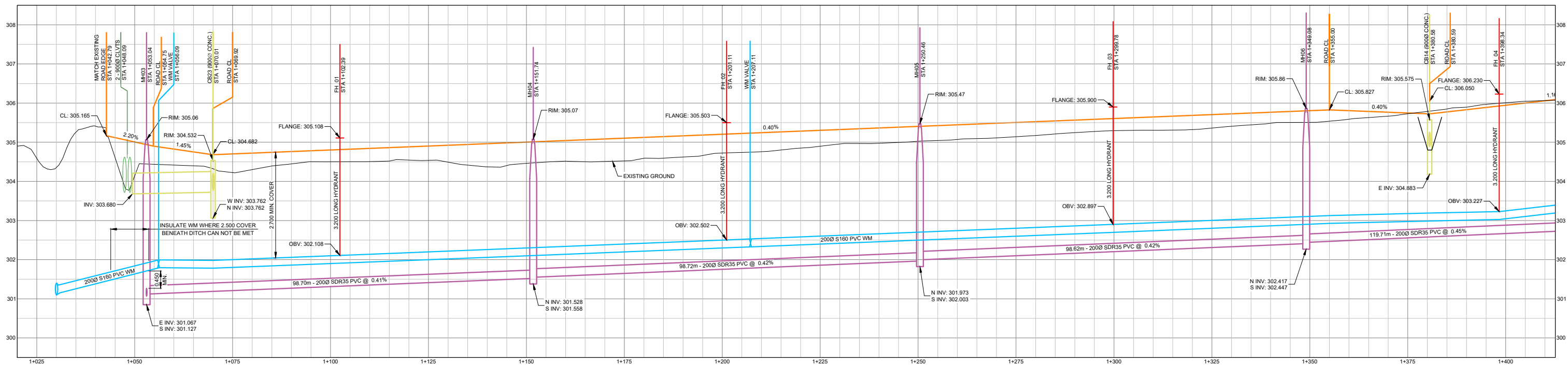
**jdb project engineering inc.**

1-880L - 15TH STREET WINKLER, MB R6W 0H5  
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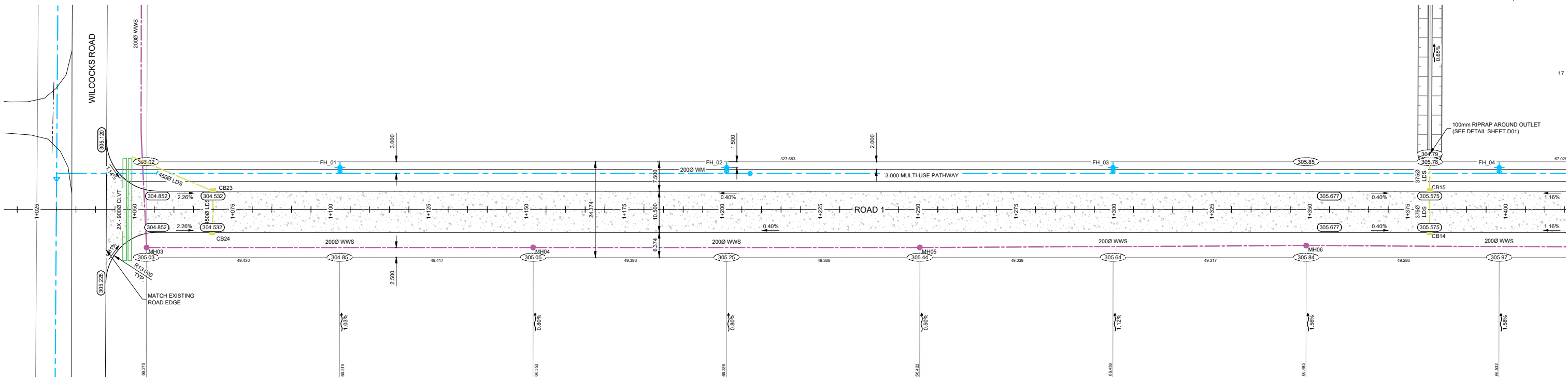
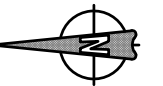
**Morden**  
100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
PHONE: (204) 822-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: PLAN AND PROFILE VIEWS WOLFE ENTERPRISES CONNECTION STA 1+000 TO 1+275		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SHEET NO: C02
	SCALE: 1:500	DRAWING NO: 204



**PROFILE VIEW**

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VERTICAL SCALE = 1:50



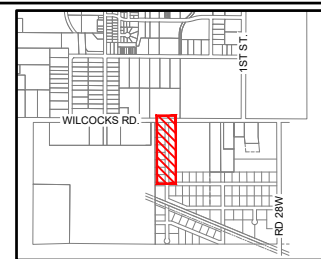
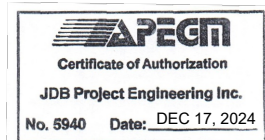
**PLAN VIEW**

SCALE = 1:500

**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		EXISTING GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED MANHOLE		PROPOSED GROUND ELEVATION
	MATCH LINE		EXISTING CURBSTOP		EXISTING ROAD ELEVATION
	ASPHALT		PROPOSED CURBSTOP		PROPOSED ROAD ELEVATION
			EXISTING CATCH BASIN		
			PROPOSED CATCH BASIN		

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT  
HYDRANT ON WILCOCKS RD IN FRONT  
OF WOLFE ENTERPRISES



**KEY PLAN**

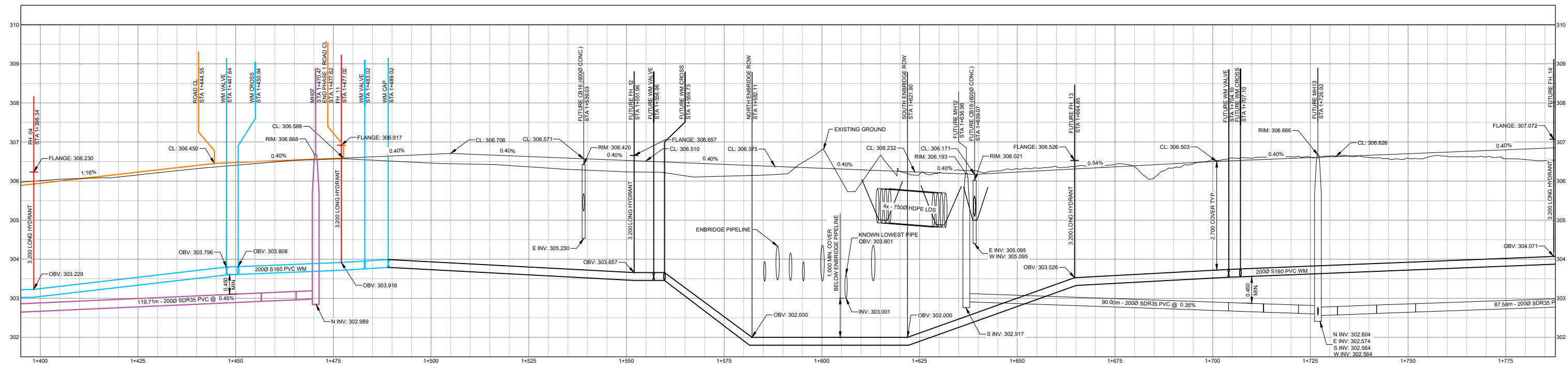
**jdb project engineering inc.**

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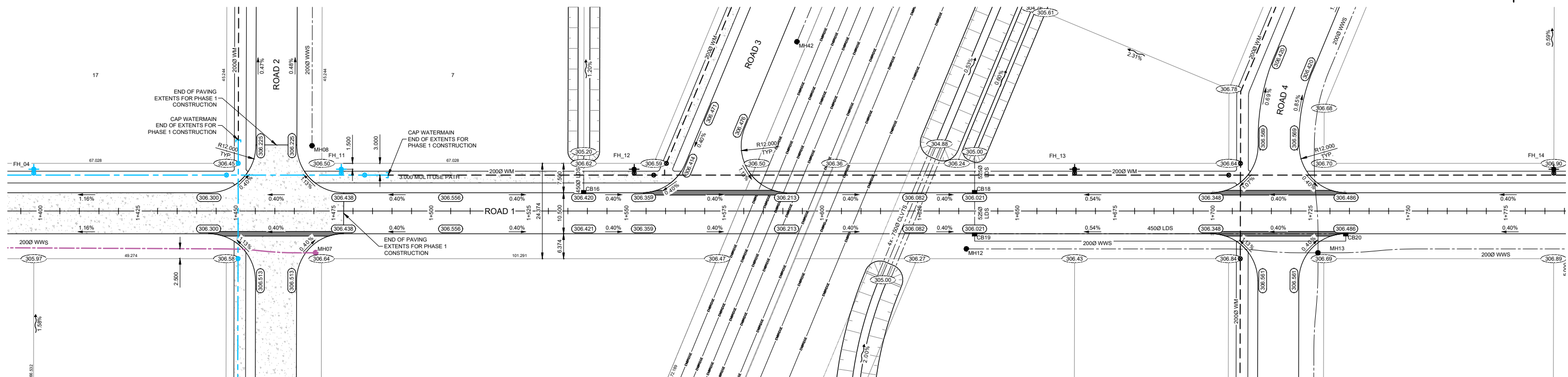
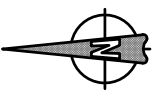
**Morden**  
100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
PHONE: (204) 822-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: PLAN AND PROFILE VIEWS ROAD 1 STA 1+025 TO 1+400		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DATE: 2024.03.25	SCALE: 1:500	SHEET NO: C03
DRAWN BY: NG		DRAWING NO: 204



**PROFILE VIEW**

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VERTICAL SCALE = 1:50



**PLAN VIEW**

SCALE = 1:500

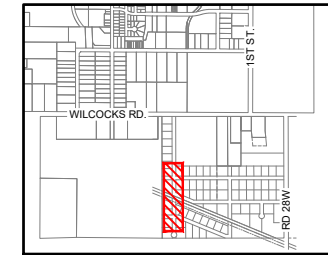
**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		CONTOURS - MINOR INTERVALS
	EXISTING MTS LINE		PROPOSED MANHOLE		CONTOURS - MINOR INTERVALS
	MATCH LINE		EXISTING CURBSTOP		CONTOURS - MINOR INTERVALS
	ASPHALT		PROPOSED CURBSTOP		CONTOURS - MINOR INTERVALS
			EXISTING CATCH BASIN		CONTOURS - MINOR INTERVALS
			PROPOSED CATCH BASIN		CONTOURS - MINOR INTERVALS

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT  
HYDRANT ON WILCOCKS RD IN FRONT  
OF WOLFE ENTERPRISES



**APEGM**  
Certificate of Authorization  
**JDB Project Engineering Inc.**  
No. 5940 Date: DEC 17, 2024



**KEY PLAN**

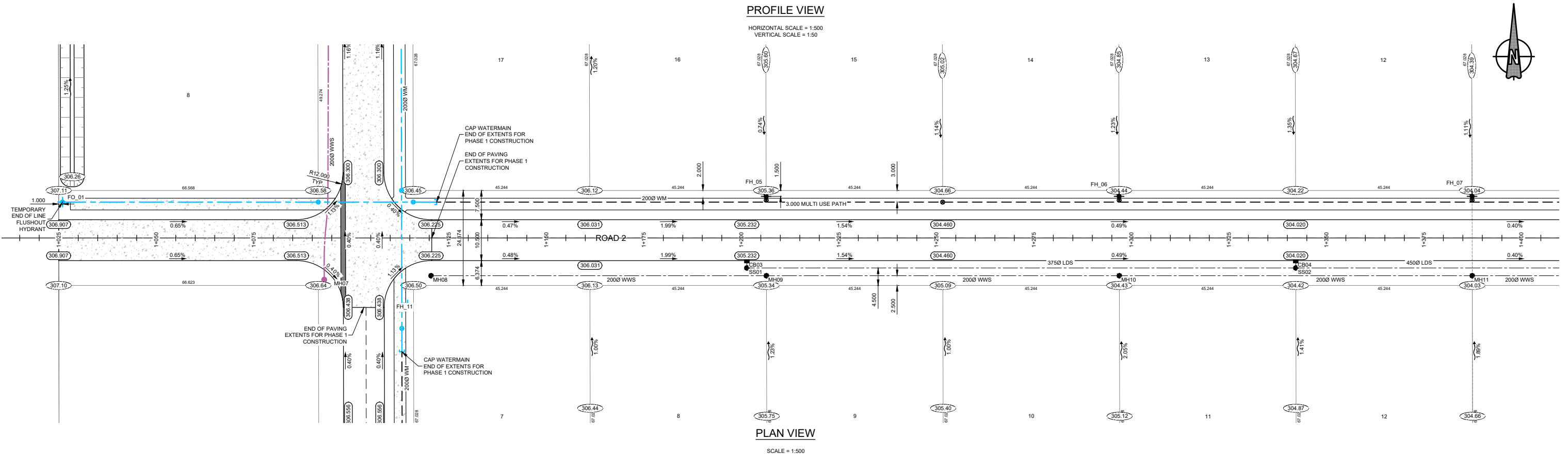
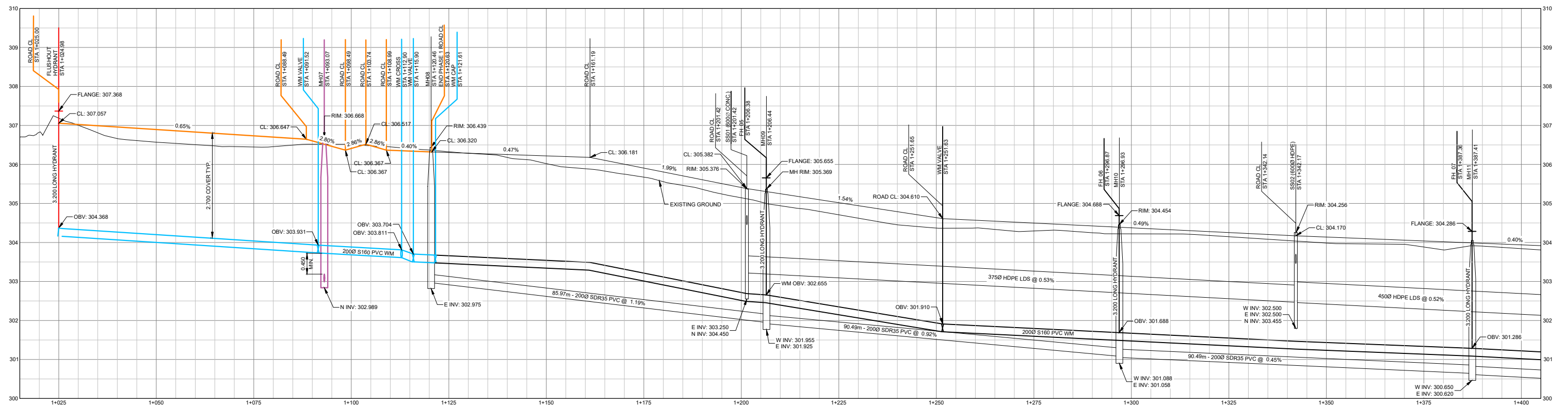
**jdb project engineering inc.**

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02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: PLAN AND PROFILE VIEWS ROAD 1 STA 1+400 TO 1+775		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SCALE: 1:500
		SHEET NO: C04
		DRAWING NO: 204



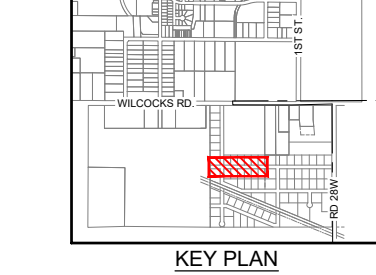
**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		EXISTING GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED MANHOLE		PROPOSED GROUND ELEVATION
	MATCH LINE		EXISTING CURBSTOP		EXISTING ROAD ELEVATION
	ASPHALT		PROPOSED CURBSTOP		PROPOSED ROAD ELEVATION
			EXISTING CATCH BASIN		
			PROPOSED CATCH BASIN		

BENCHMARK ELEV = 306.451  
 TOP OF FIRE HYDRANT OPERATING NUT  
 HYDRANT ON WILCOCKS RD IN FRONT  
 OF WOLFE ENTERPRISES

**PROVINCE OF MANITOBA**  
**J. D. BOTHA**  
 Member  
 23625  
 REGISTERED PROFESSIONAL ENGINEER

**APEGM**  
 Certificate of Authorization  
**JDB Project Engineering Inc.**  
 No. 5940 Date: DEC 17, 2024

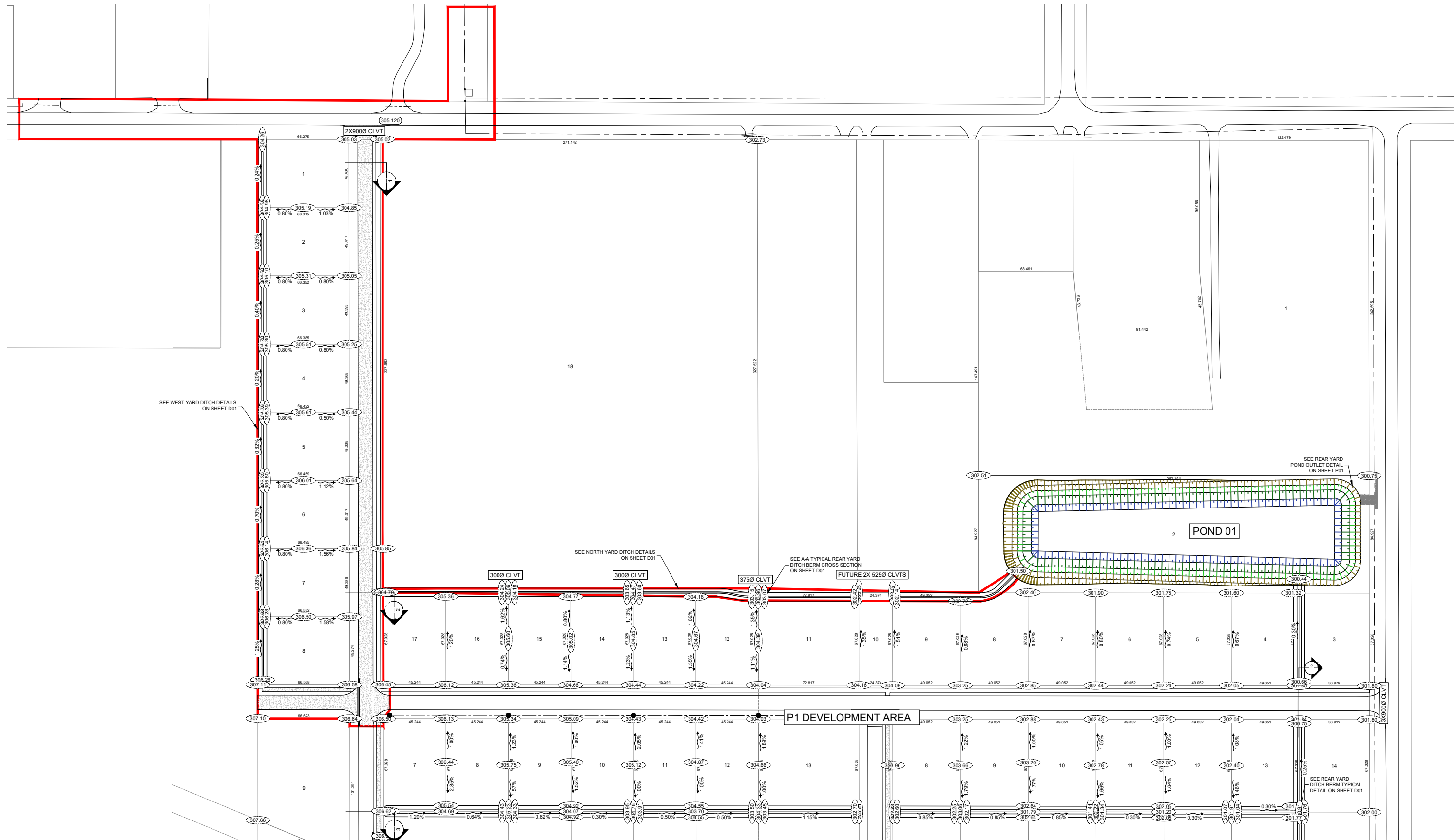


**jdb project engineering inc.**

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**Morden**  
 100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
 PHONE: (204) 922-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: PLAN AND PROFILE VIEWS ROAD 2 STA 1+025 TO 1+400		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SHEET NO: C05
	SCALE: 1:500	DRAWING NO: 204



**LEGEND:**

	EXISTING WATERMAIN
	PROPOSED WATERMAIN
	EXISTING SEWERMAIN
	PROPOSED SEWERMAIN
	EXISTING GAS LINE
	EXISTING M/S LINE
	ASPHALT

	FH	EXISTING FIRE HYDRANT
	FH	PROPOSED FIRE HYDRANT
		EXISTING VALVE
		PROPOSED VALVE
	MH	EXISTING MANHOLE
	MH	PROPOSED MANHOLE
		EXISTING CURBSTOP
		PROPOSED CURBSTOP
	CB	EXISTING CATCH BASIN
	CB	PROPOSED CATCH BASIN

	EXISTING DRAINAGE DIRECTION
	PROPOSED DRAINAGE DIRECTION
	CONTOURS - MAJOR INTERVALS
	CONTOURS - MINOR INTERVALS
	EXISTING GROUND ELEVATION
	PROPOSED GROUND ELEVATION
	EXISTING ROAD ELEVATION
	PROPOSED ROAD ELEVATION

BENCHMARK ELEV = 306.451  
 TOP OF FIRE HYDRANT OPERATING NUT  
 HYDRANT ON WILLOCKS RD IN FRONT  
 OF WOLFE ENTERPRISES

**APEGM**  
 Certificate of Authorization  
**JDB Project Engineering Inc.**  
 No. 5940 Date: DEC 17, 2024

**jdb project engineering inc.**

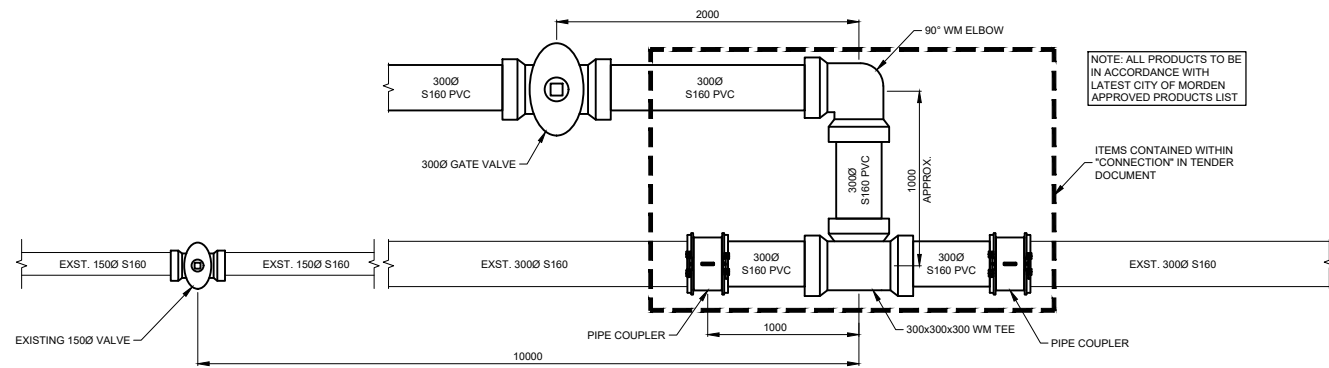
1-880L - 15TH STREET WINKLER, MB R6W 0H5  
 PH: (204) 331-4440 EMAIL: jbotha@jdbprojects.ca



*Morden*  
 100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
 PHONE: (204) 922-4434

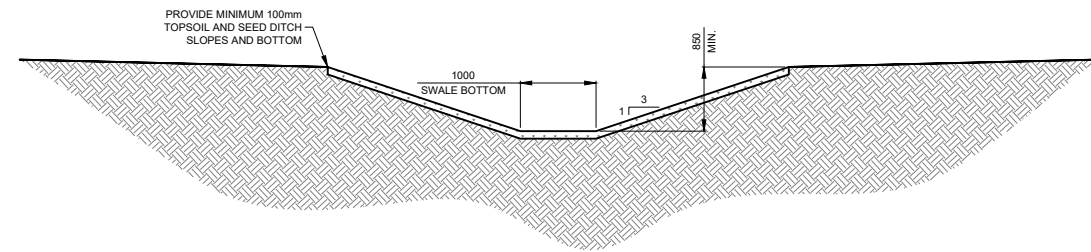
02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT:		
TITLE: LOT GRADING PHASE 1		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SHEET NO: LG01
	SCALE: AS SHOWN	DRAWING NO: 204





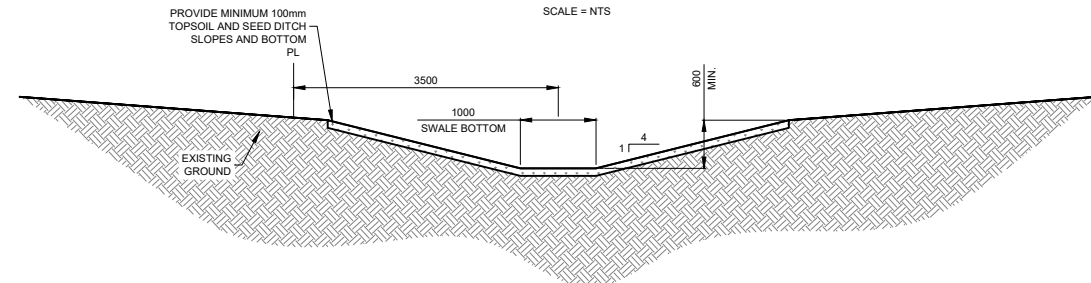
**PVWC WATERMAIN CONNECTION DETAIL**

SCALE = NTS



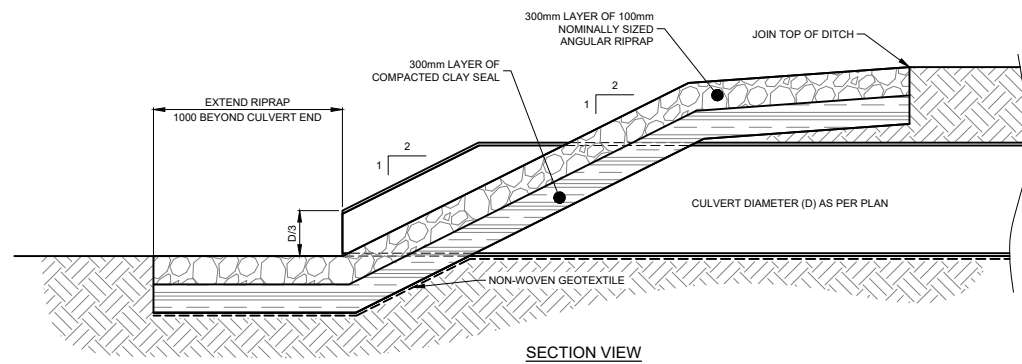
**NORTH YARD DETAILS**

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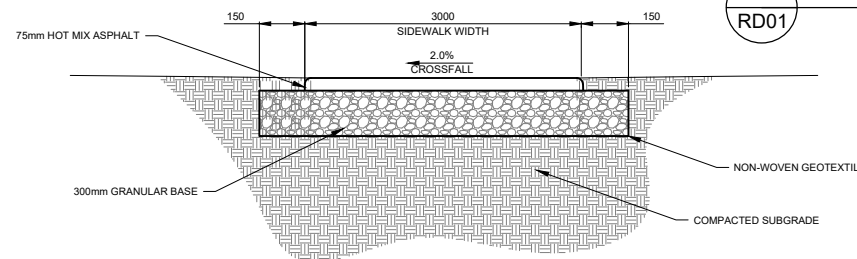
**WEST YARD DITCH DETAILS**

SCALE = NTS



**CULVERT END RIPRAP DETAIL**

SCALE = NTS

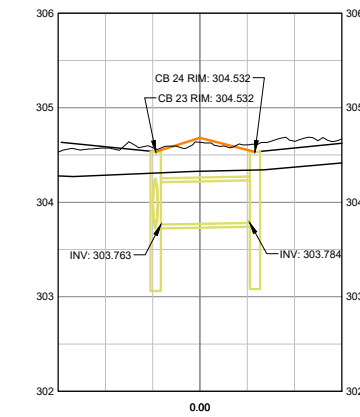


**TYPICAL ASPHALT SIDEWALK DETAILS**

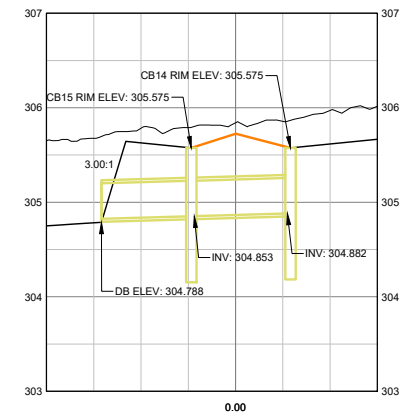
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**STANDARD PATHWAY SPECIFICATION**

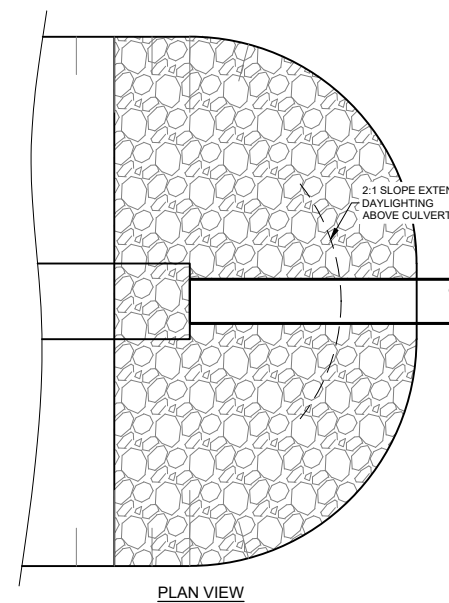
- 75mm (HOT MIX ASPHALT) WEARING COURSE COMPACTED TO MINIMUM 98% MARSHAL DENSITY.
- 300mm MECHANICALLY STABILIZED GRANULAR BASE (MORDEN'S DEVELOPMENT STANDARDS GRANULAR BASE SPECIFICATION) COMPACTED TO 98% OF STANDARD PROCTOR MODIFIED DRY DENSITY.
- ISOLATE BASE FROM SUBGRADE WITH HEAVY DUTY CLASS 1 NON-WOVEN GEOTEXTILE, SEWN SEAMS OR 600MM MINIMUM OVERLAP.
- MINIMUM CROSS FALL ON TOP OF SUBGRADE 3.5% - 4.0%.
- ALL GRANULAR MATERIAL SHOULD BE COMPACTED WITHIN ± 3% OF THE OPTIMUM MOISTURE CONTENT.



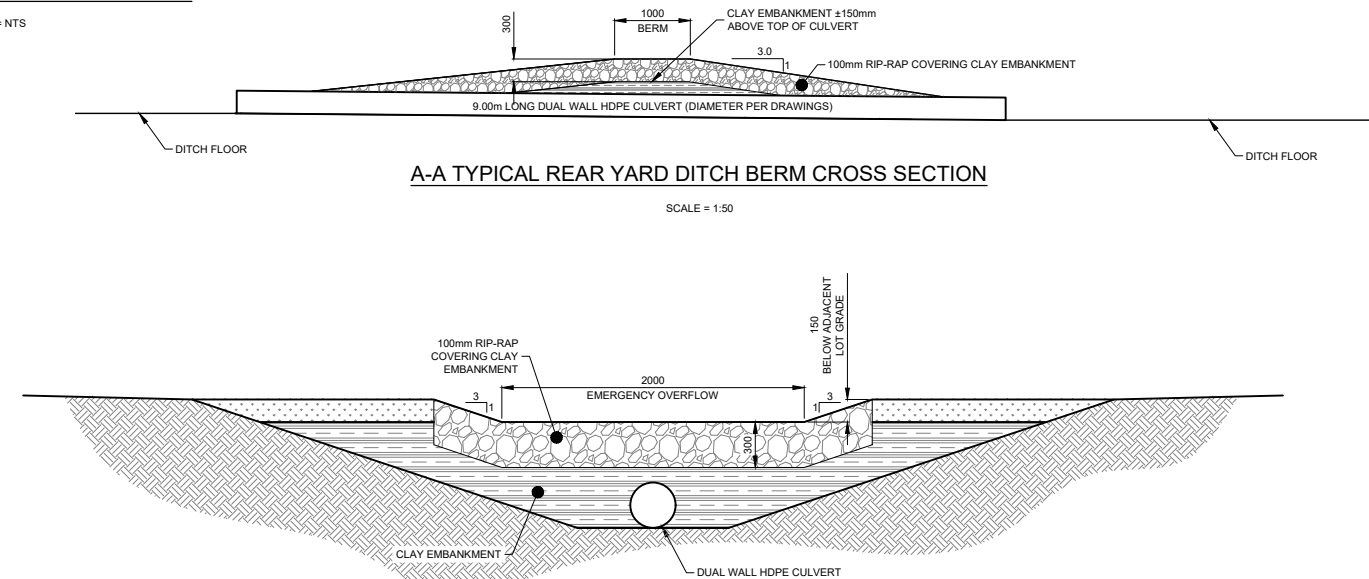
**CROSS SECTION @ STA 10+69.92**  
HORIZONTAL SCALE = 1:500  
VERTICAL SCALE = 1:50



**CROSS SECTION @ STA 13+80.58**  
HORIZONTAL SCALE = 1:500  
VERTICAL SCALE = 1:50



**PLAN VIEW**



**A-A TYPICAL REAR YARD DITCH BERM CROSS SECTION**

SCALE = 1:50

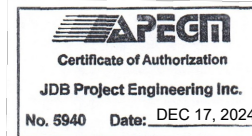
**B-B TYPICAL REAR YARD DITCH BERM CROSS SECTION**

SCALE = 1:50

**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		EXISTING GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED MANHOLE		PROPOSED GROUND ELEVATION
	MATCH LINE		EXISTING CURBSTOP		EXISTING ROAD ELEVATION
	ASPHALT		PROPOSED CURBSTOP		PROPOSED ROAD ELEVATION
			EXISTING CATCH BASIN		
			PROPOSED CATCH BASIN		

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT  
HYDRANT ON WILCOCKS RD IN FRONT  
OF WOLFE ENTERPRISES



**jdb project engineering inc.**

1-880L - 15TH STREET WINKLER, MB R6W 0H5  
PH: (204) 331-4440 EMAIL: jbotha@jdbprojects.ca



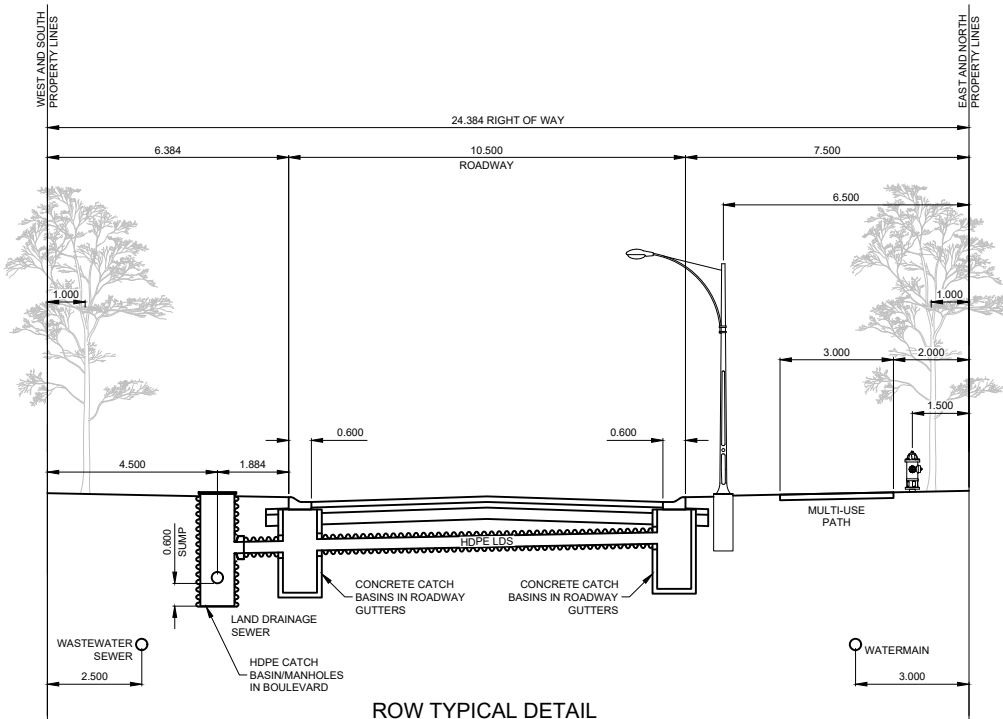
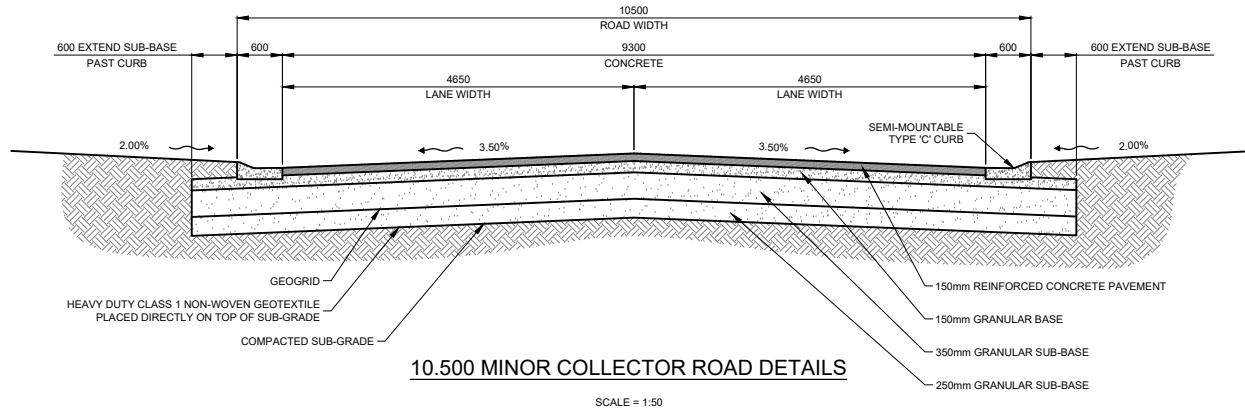
**Morden**  
100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
PHONE: (204) 922-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: MISCELLANEOUS DETAILS		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SHEET NO: D01
	SCALE: AS SHOWN	DRAWING NO: 204

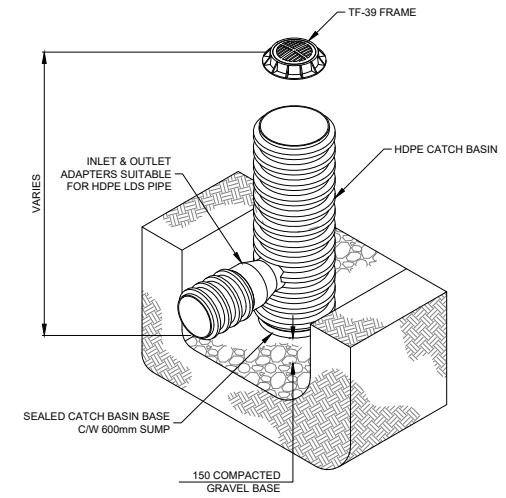
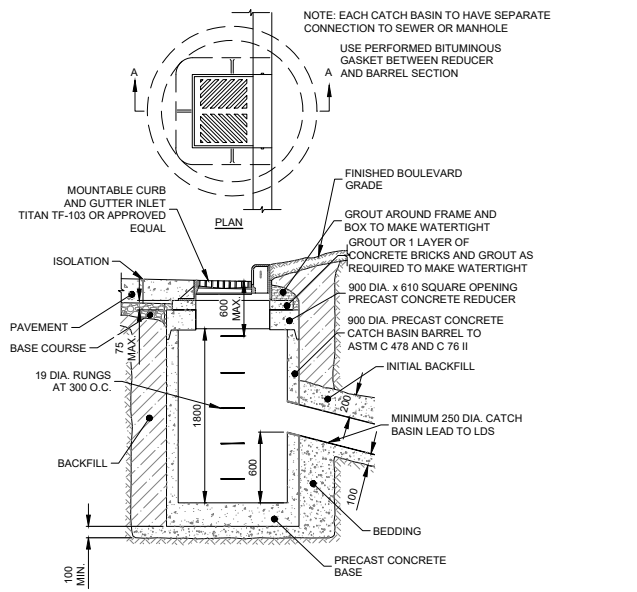
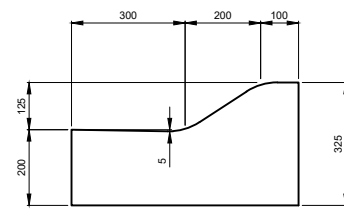
**STANDARD ROAD SPECIFICATION**

- 150mm Portland Cement Concrete wearing course installed in accordance with City of Winnipeg Specification CW 3310.
- 150mm Mechanically stabilized Granular Base (Morden's Development Standards) compacted to 98% of Standard Proctor Modified Dry Density.
- 350mm Granular Sub-Base (Morden's Development Standards) compacted to 98% of Standard Proctor Modified Dry Density in two lifts.
- Titan Geogrid (Earth Grid 24) placed between Granular Sub-base layers as shown.
- 250mm Granular Sub-Base (Morden's Development Standards) compacted to 98% of Standard Proctor Modified Dry Density in two lifts.
- Granular sub-base thickness specified should be minimum measure at road crown or inside of curve on super elevated sections.
- Isolate Sub-Base from Subgrade with Heavy Duty Class 1 Non-Woven geotextile Titan TE-12, sewn seams or 600mm minimum overlap.
- Minimum cross fall on top of subgrade 3.5% - 4.0%.
- All granular material should be compacted within  $\pm 3\%$  of the optimum moisture content.
- Curb and Gutter to be Semi Mountable Curbs (Type C).

CATCH BASIN DETAILS	
CATCH BASIN ID	Structure Details
CB14	MATERIAL = Reinforced Concrete DIAMETER = 900Ø RIM = 305.575 E INV (375Ø): 304.883
CB15	MATERIAL = Reinforced Concrete DIAMETER = 900Ø RIM = 305.575 W INV (375Ø): 304.852 E INV (375Ø): 304.852
CB23	MATERIAL = Reinforced Concrete DIAMETER = 900Ø RIM = 304.532 W INV (450Ø): 303.762 N INV (450Ø): 303.762
CB24	MATERIAL = Reinforced Concrete DIAMETER = 900Ø RIM = 304.532 E INV (450Ø): 303.762



**NOTE: ALL MATERIALS TO FOLLOW LATEST CITY OF MORDEN APPROVED PRODUCT LIST AND BE INSTALLED IN ACCORDANCE WITH LATEST CITY OF MORDEN STANDARD CONSTRUCTION SPECIFICATIONS**



**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		EXISTING GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED MANHOLE		PROPOSED GROUND ELEVATION
	MATCH LINE		EXISTING CURBSTOP		EXISTING ROAD ELEVATION
	ASPHALT		PROPOSED CURBSTOP		PROPOSED ROAD ELEVATION
			EXISTING CATCH BASIN		
			PROPOSED CATCH BASIN		

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT HYDRANT ON WILCOCKS RD IN FRONT OF WOLFE ENTERPRISES



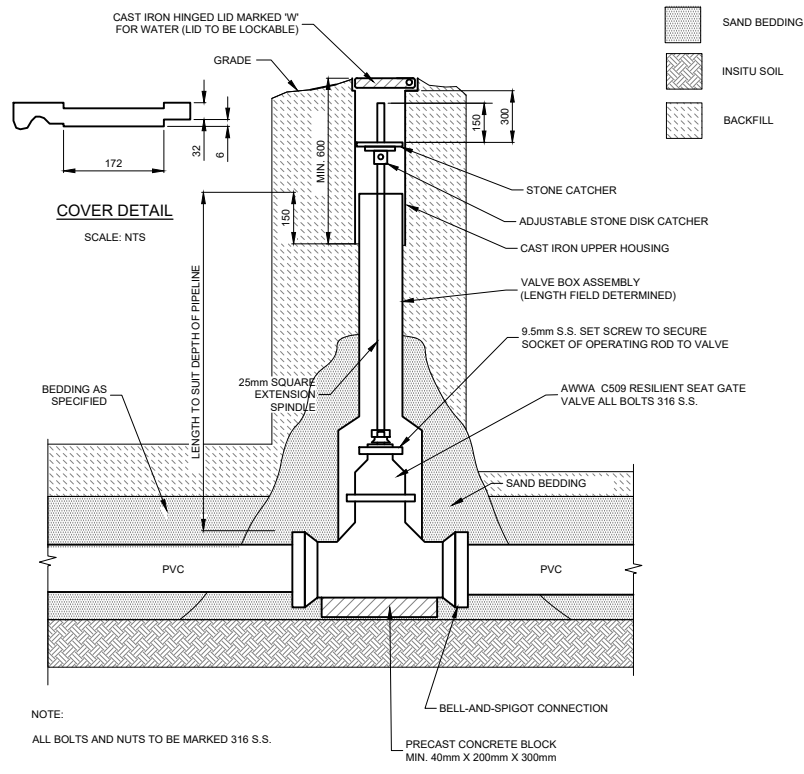
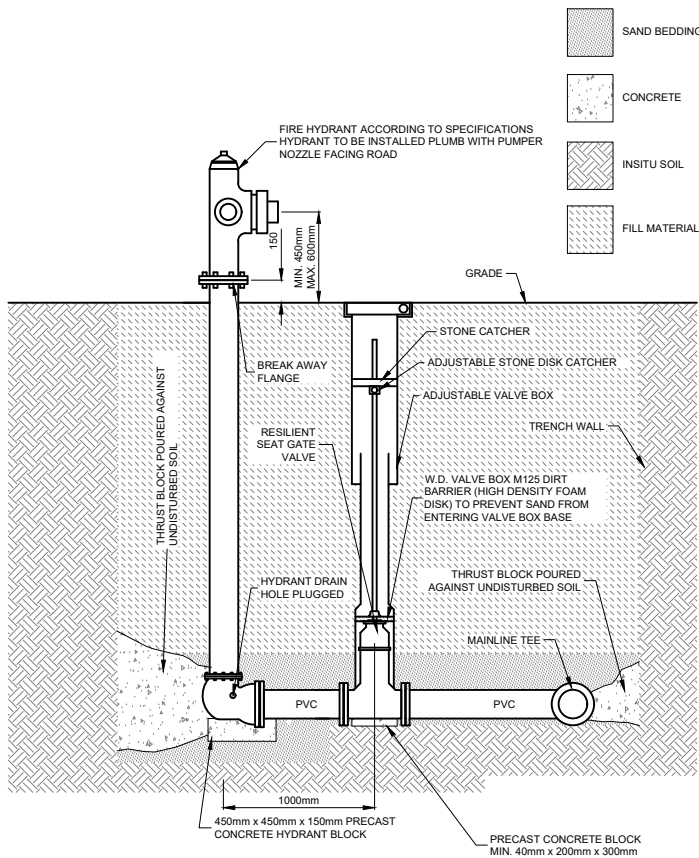
**jdb project engineering inc.**

1-880L - 15TH STREET WINKLER, MB R6W 0H5  
PH: (204) 331-4440 EMAIL: jbotha@jdbprojects.ca

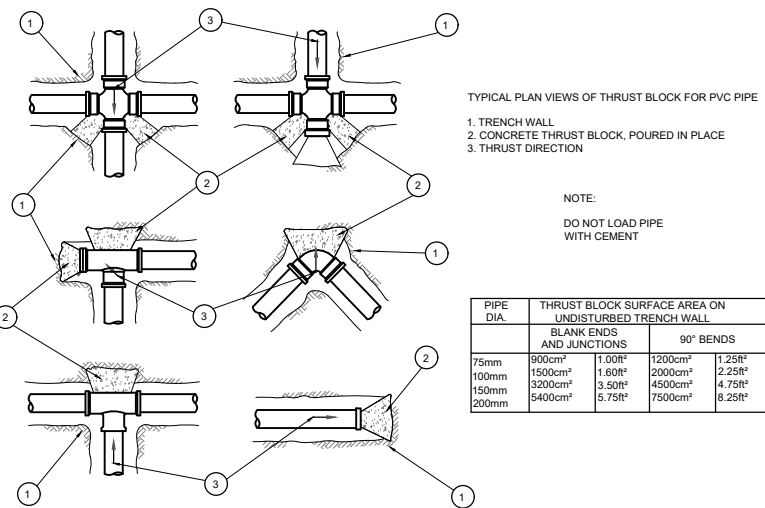
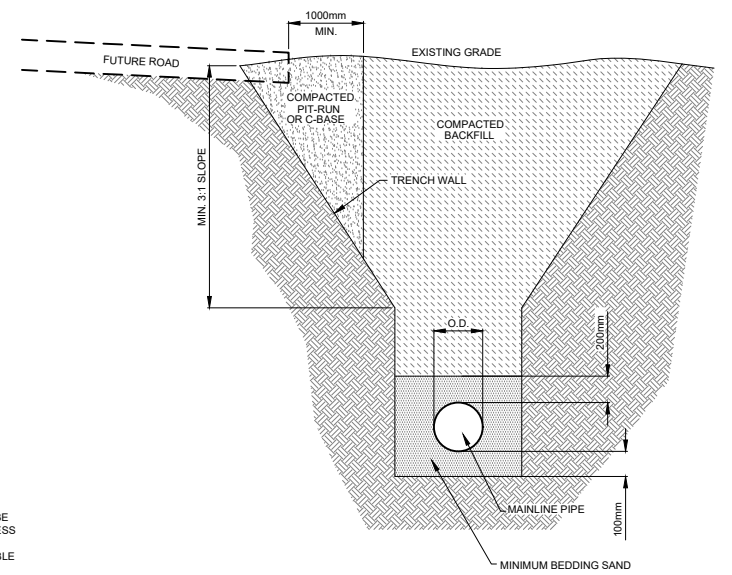
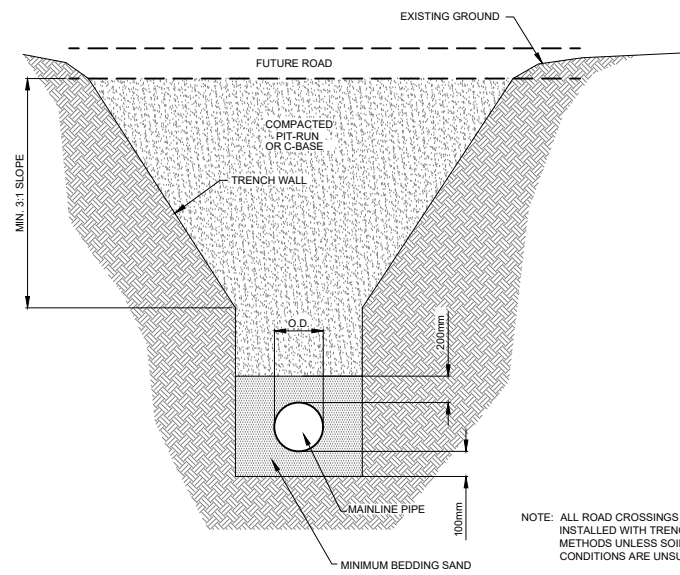


**Morden**  
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PHONE: (204) 922-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: ROADS AND CATCH BASIN DETAILS		
DESIGNED BY: NG	REVIEWED BY: JB	SHEET NO: D02
DRAWN BY: NG	DATE: 2024.03.25	SCALE: AS SHOWN
	FIELD BOOK: NONE	DRAWING NO: 204



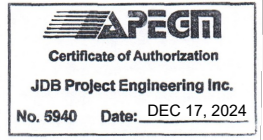
NOTE: ALL MATERIALS TO FOLLOW LATEST CITY OF MORDEN APPROVED PRODUCT LIST AND BE INSTALLED IN ACCORDANCE WITH LATEST CITY OF MORDEN STANDARD CONSTRUCTION SPECIFICATIONS



PIPE DIA.	THRUST BLOCK SURFACE AREA ON UNDISTURBED TRENCH WALL	
	BLANK ENDS AND JUNCTIONS	90° BENDS
75mm	900cm <sup>2</sup>	1,000cm <sup>2</sup>
100mm	1,500cm <sup>2</sup>	1,800cm <sup>2</sup>
150mm	3,200cm <sup>2</sup>	3,500cm <sup>2</sup>
200mm	5,400cm <sup>2</sup>	5,750cm <sup>2</sup>

LEGEND:	
	EXISTING WATERMAIN
	PROPOSED WATERMAIN
	EXISTING SEWERMAIN
	PROPOSED SEWERMAIN
	EXISTING GAS LINE
	EXISTING MTS LINE
	MATCH LINE
	ASPHALT
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING VALVE
	PROPOSED VALVE
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING CURBSTOP
	PROPOSED CURBSTOP
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	EXISTING DRAINAGE DIRECTION
	PROPOSED DRAINAGE DIRECTION
	CONTOURS - MAJOR INTERVALS
	CONTOURS - MINOR INTERVALS
	EXISTING GROUND ELEVATION
	PROPOSED GROUND ELEVATION
	EXISTING ROAD ELEVATION
	PROPOSED ROAD ELEVATION

BENCHMARK ELEV = 306.451  
TOP OF FIRE HYDRANT OPERATING NUT HYDRANT ON WILCOCKS RD IN FRONT OF WOLFE ENTERPRISES



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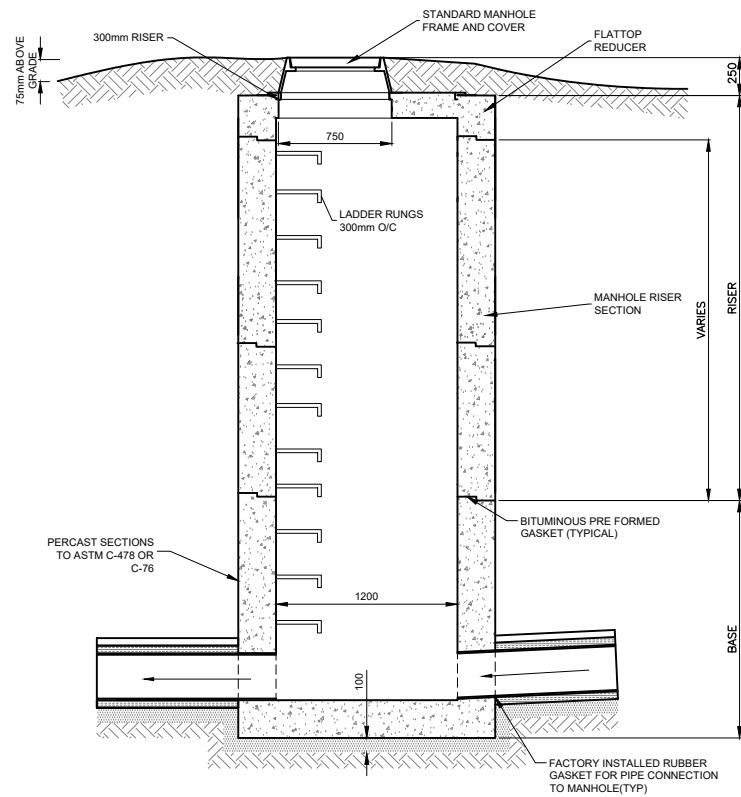
**Morden**  
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PHONE: (204) 822-4434

REVISION	ISSUED FOR	DATE
02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
	ISSUED FOR	DATE

PROJECT: MORDEN INDUSTRIAL PARK

TITLE: MISCELLANEOUS DETAILS

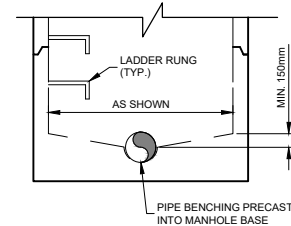
DESIGNED BY:	REVIEWED BY:	FIELD BOOK:	SHEET NO:
NG	JB	NONE	D03
DRAWN BY:	DATE:	SCALE:	DRAWING NO:
NG	2024.03.25	AS SHOWN	204



NOTE:  
 - MINIMIZE NUMBER OF MANHOLE JOINTS, BASE TO BE 1220mm LONG  
 - 30mm DROP ACROSS MANHOLE FOR 180° CONNECTIONS  
 - 60mm DROP ACROSS MANHOLE FOR 90° CONNECTIONS  
 - PROVIDE SHOP DRAWINGS OF ALL MANHOLES FOR REVIEW

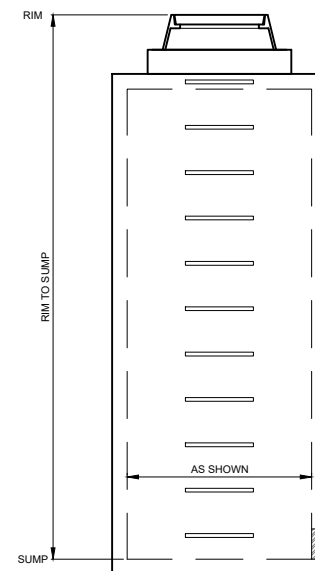
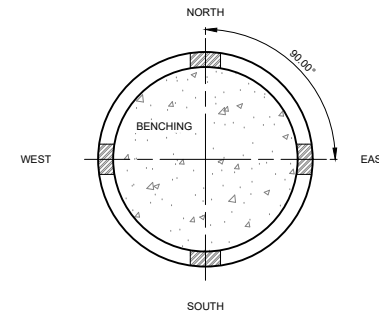
STANDARD MANHOLE DETAIL

SCALE = 1:2500



MANHOLE MANUFACTURING DETAIL

SCALE = NTS



1200Ø MANHOLE DETAILS

MANHOLE ID	Structure Details
MH01	RIM = 304.600 N INV: 300.505 S INV: 300.535
MH02	RIM = 304.179 W INV: 300.737 N INV: 300.684
MH03	RIM = 305.084 E INV: 301.067 S INV: 301.127
MH04	RIM = 305.075 N INV: 301.528 S INV: 301.558
MH05	RIM = 305.471 N INV: 301.973 S INV: 302.003
MH06	RIM = 305.862 N INV: 302.417 S INV: 302.447
MH07	RIM = 306.668 N INV: 302.989

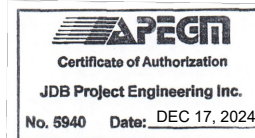
**LEGEND:**

	EXISTING WATERMAIN		EXISTING FIRE HYDRANT		EXISTING DRAINAGE DIRECTION
	PROPOSED WATERMAIN		PROPOSED FIRE HYDRANT		PROPOSED DRAINAGE DIRECTION
	EXISTING SEWERMAIN		EXISTING VALVE		CONTOURS - MAJOR INTERVALS
	PROPOSED SEWERMAIN		PROPOSED VALVE		CONTOURS - MINOR INTERVALS
	EXISTING GAS LINE		EXISTING MANHOLE		EXISTING GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED MANHOLE		EXISTING ROAD ELEVATION
	EXISTING GAS LINE		EXISTING CURBSTOP		PROPOSED GROUND ELEVATION
	EXISTING MTS LINE		PROPOSED CURBSTOP		EXISTING ROAD ELEVATION
	EXISTING GAS LINE		EXISTING CATCH BASIN		PROPOSED ROAD ELEVATION
	EXISTING MTS LINE		PROPOSED CATCH BASIN		
	ASPHALT				

	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING VALVE
	PROPOSED VALVE
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING CURBSTOP
	PROPOSED CURBSTOP
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN

	EXISTING DRAINAGE DIRECTION
	PROPOSED DRAINAGE DIRECTION
	CONTOURS - MAJOR INTERVALS
	CONTOURS - MINOR INTERVALS
	EXISTING GROUND ELEVATION
	PROPOSED GROUND ELEVATION
	EXISTING ROAD ELEVATION
	PROPOSED ROAD ELEVATION

BENCHMARK ELEV = 306.451  
 TOP OF FIRE HYDRANT OPERATING NUT  
 HYDRANT ON WILCOCKS RD IN FRONT  
 OF WOLFE ENTERPRISES



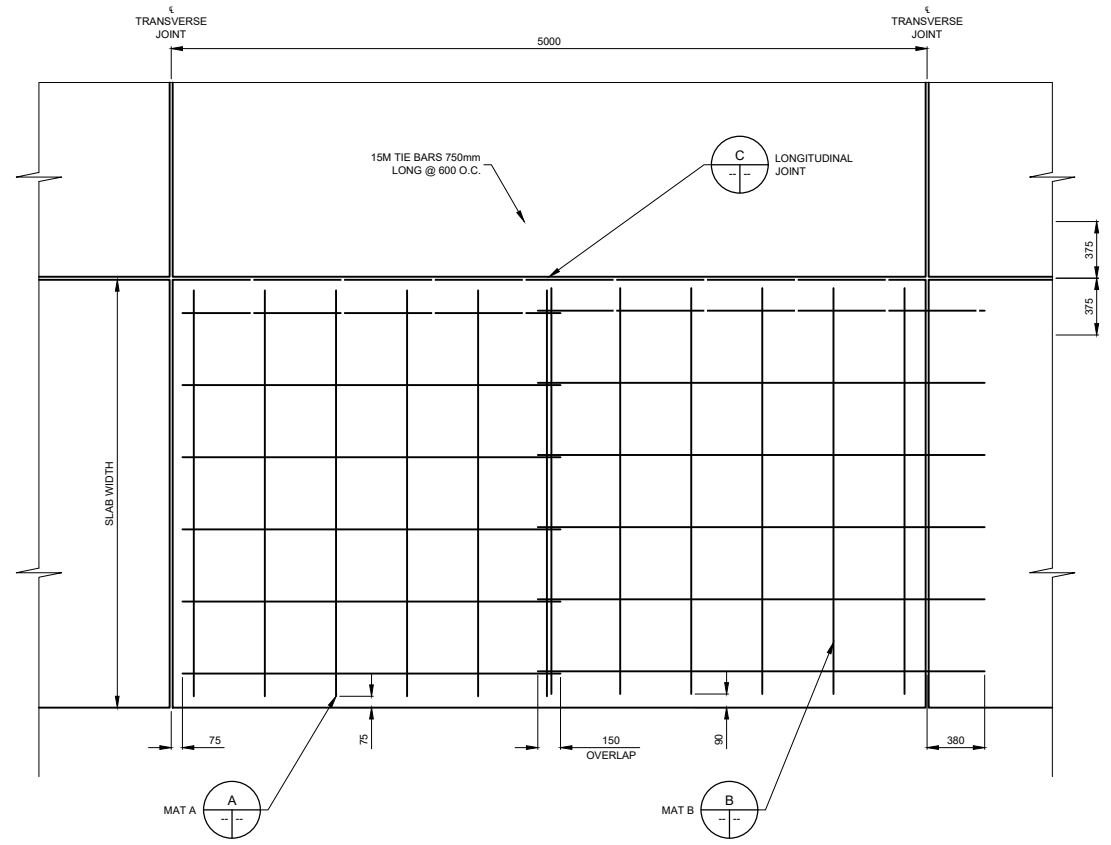
**jdb project engineering inc.**

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 PH: (204) 331-4440 EMAIL: jbotha@jdbprojects.ca



*Morden*  
 100-195 STEPHEN ST. MORDEN, MB. R6M 1V4  
 PHONE: (204) 822-4434

02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: MANHOLE MANUFACTURING DETAILS ROAD OUTLET DETAIL		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
SHOWN BY: NG	DATE: 2024.03.25	SCALE: AS SHOWN
SHEET NO: D04	DRAWING NO: 204	

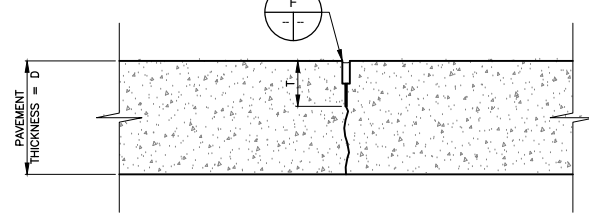


**PAVEMENT REINFORCEMENT PLAN**

SCALE = 1:25

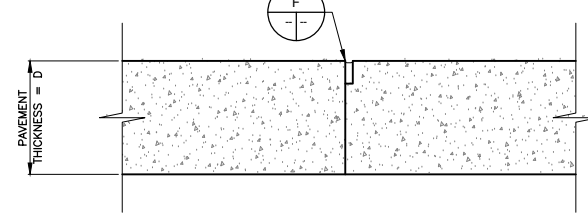
TRANSVERSE JOINT: T = D/3  
 LONGITUDINAL JOINT: T = D/3

NOTE:  
 1. SAWCUTS TO BE MADE IN 2 SEPARATE SAWING OPERATIONS



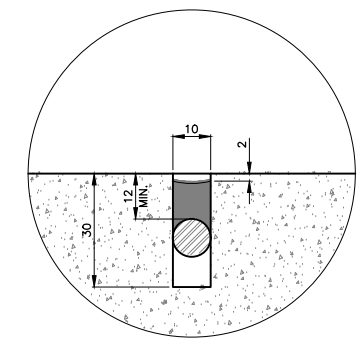
**E SAWN JOINT DETAIL**

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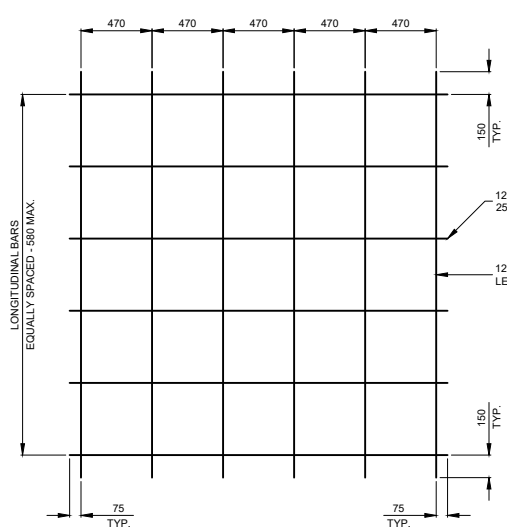
**D BUTT JOINT DETAIL**

SCALE = 1:5



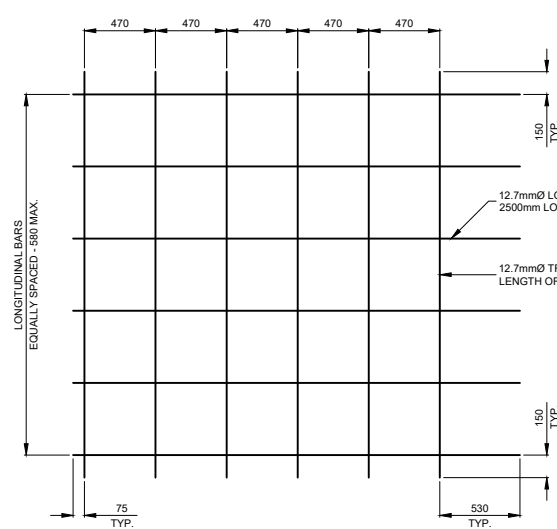
**F JOINT DETAIL**

SCALE = 1:1



**A MAT A DETAIL**

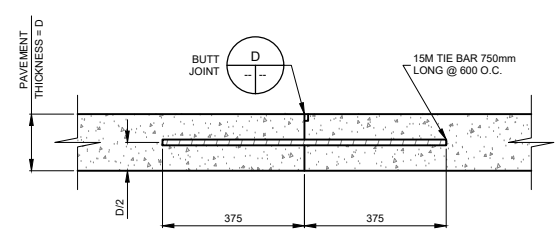
SCALE = 1:25



**B MAT B DETAIL**

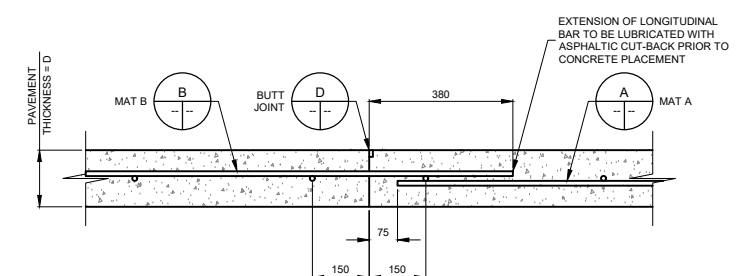
SCALE = 1:25

NOTE:  
 1. ALL BAR MAT JOINTS TO BE ELECTRICALLY SPOT WELDED  
 2. ALL DIMENSIONS ARE TO CENTRES OF BARS  
 3. STANDARD STEEL REINFORCEMENT CAN BE SUBSTITUTED WITH EQUIVALENTLY SIZED MST-BAR GRADE III GFRP REINFORCEMENT  
 4. ALL REINFORCEMENT STEEL TO BE IN ACCORDANCE WITH CITY OF WINNIPEG SPECS CW3310

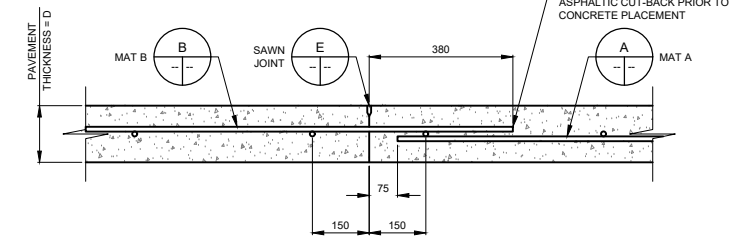


**C LONGITUDINAL JOINT DETAIL**

SCALE = 1:10



**CONSTRUCTION JOINT**



**CONTRACTION JOINT**

**TRANSVERSE JOINT DETAILS**

SCALE = 1:10

**LEGEND:**

---	EXISTING WATERMAIN	FH	EXISTING FIRE HYDRANT	---	EXISTING DRAINAGE DIRECTION
---	PROPOSED WATERMAIN	FH	PROPOSED FIRE HYDRANT	---	PROPOSED DRAINAGE DIRECTION
---	EXISTING SEWERMAIN	+	EXISTING VALVE	100	CONTOURS - MAJOR INTERVALS
---	PROPOSED SEWERMAIN	+	PROPOSED VALVE	100.5	CONTOURS - MINOR INTERVALS
---	EXISTING GAS LINE	MH	EXISTING MANHOLE	x 100.00	EXISTING GROUND ELEVATION
---	EXISTING MTS LINE	MH	PROPOSED MANHOLE	(100.00)	PROPOSED GROUND ELEVATION
---	MATCH LINE	CB	EXISTING CURBSTOP	(100.00)	EXISTING ROAD ELEVATION
---	ASPHALT	CB	PROPOSED CURBSTOP	(100.00)	PROPOSED ROAD ELEVATION
		CB	EXISTING CATCH BASIN		
		CB	PROPOSED CATCH BASIN		

BENCHMARK ELEV = 306.451  
 TOP OF FIRE HYDRANT OPERATING NUT  
 HYDRANT ON WILCOCKS RD IN FRONT  
 OF WOLFE ENTERPRISES



**jdb project engineering inc.**

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02	ISSUED FOR TENDER	2025/02/25
01	REVIEW	2024/06/06
REVISION	ISSUED FOR	DATE
PROJECT: MORDEN INDUSTRIAL PARK		
TITLE: CONCRETE ROADWAY DETAILS		
DESIGNED BY: NG	REVIEWED BY: JB	FIELD BOOK: NONE
DRAWN BY: NG	DATE: 2024.03.25	SCALE: AS SHOWN
		SHEET NO: D05
		DRAWING NO: 204