Appendix B

Preliminary Design Plans

PRELIMINARY

SIXTH LINE

TRAFALGAR ROAD

STEELES AVENUE

HIGHWAY 413

CONCEPTUAL TRANSITWAY

WINSTON CHURCHILL BLVD

407 ETR

WET POND 8

WET POND 9

WET POND 7

WET POND 1-1

WET POND 1-2

WET POND 3

HIGHWAY 401

WET POND 6

NINTH LINE

407 ETR

C.P. RAIL

DERRY ROAD

LEGEND

EXISTING M.T.O. RIGHT-OF-WAY

EXISTING LOT LINES

REQUIRED RIGHT-OF-WAY

PROPOSED DITCH

PROPOSED STRUCTURAL CULVERT

PROPOSED NON-STRUCTURAL CULVERT

PROPOSED BRIDGE

CONCEPT TRANSITWAY (BY OTHERS)

CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

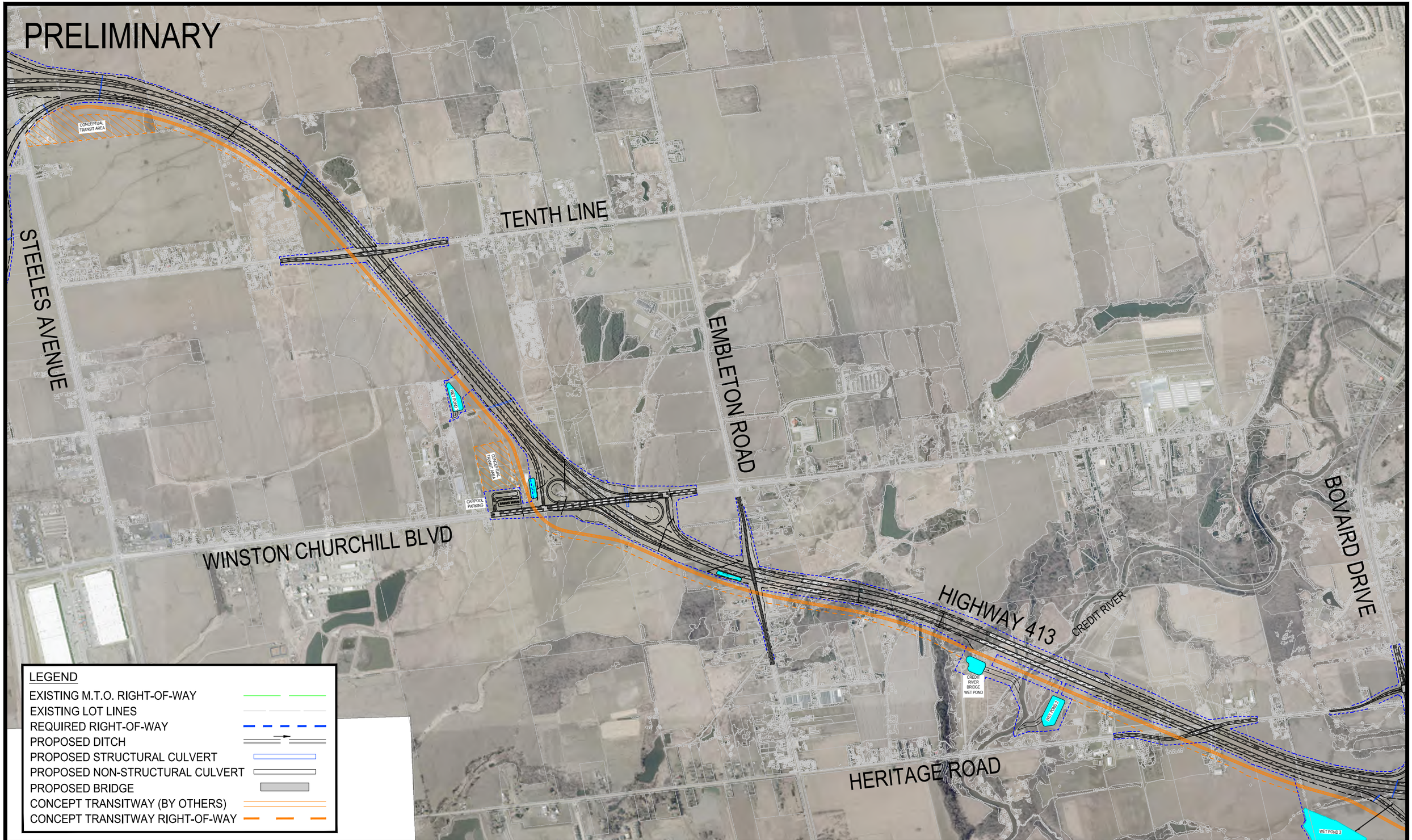
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design Segment
'A' - Highway 413/401/407ETR
Interchange

N.T.S.

PLATE
RF-A0

PRELIMINARY



LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

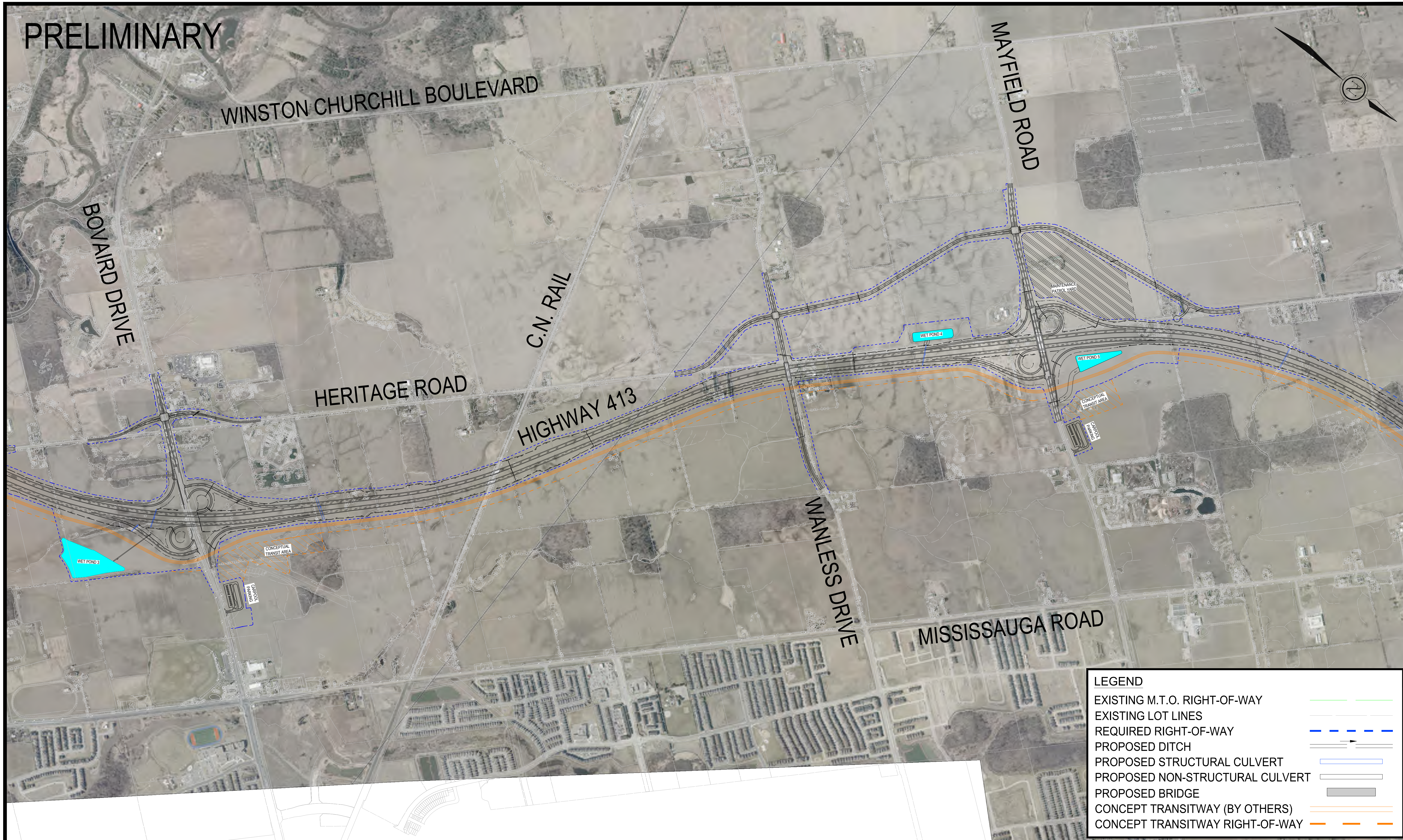
Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'B' - Steeles Avenue to Bovaird Drive

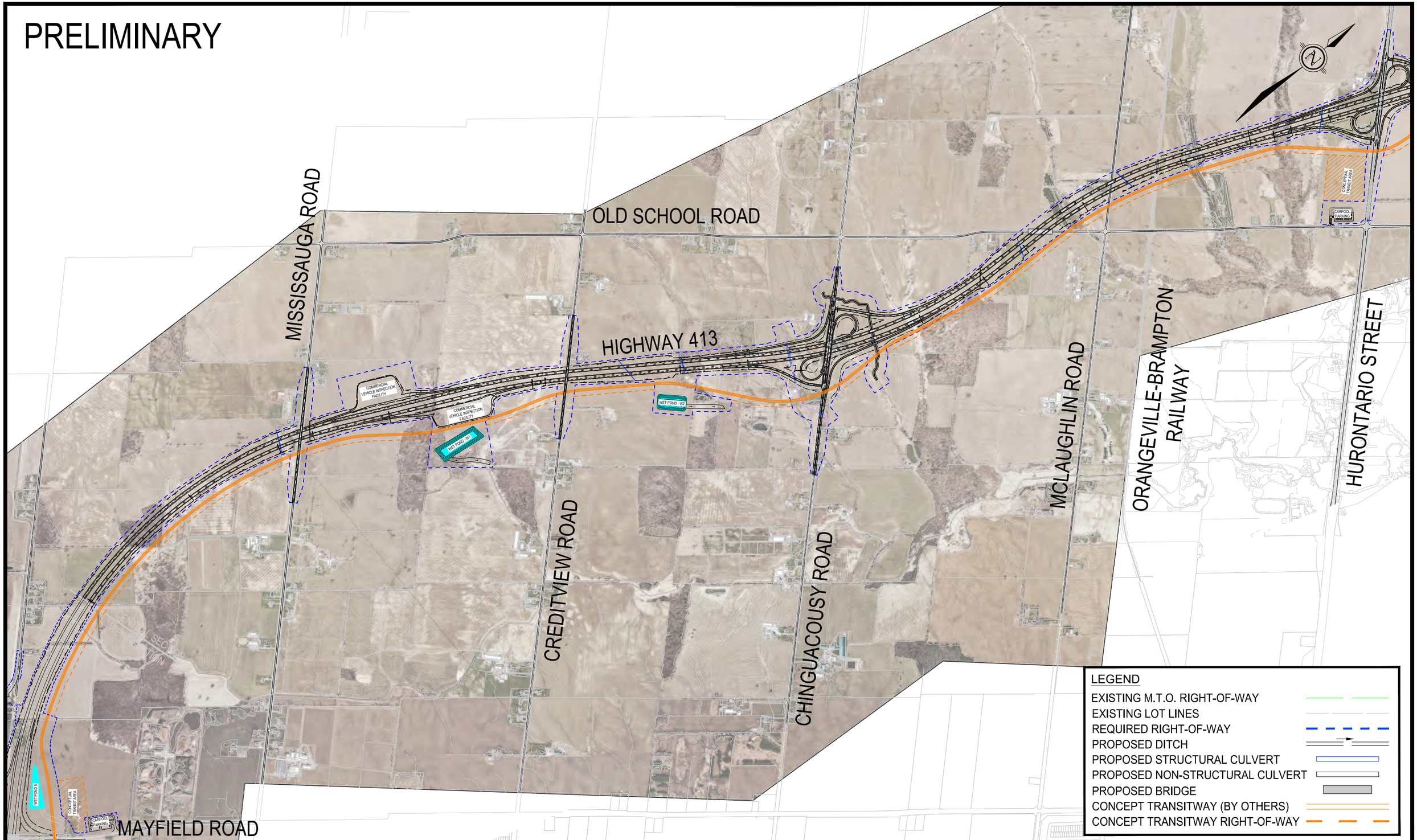
N.T.S.

PLATE
RF-B00



wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	Preliminary Design Segment 'B' - Bovaird Drive to Mayfield Road	N.T.S.	PLATE RF-B0

PRELIMINARY



WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		Preliminary Design Segment 'C' - Mayfield Road to Hurontario Street	N.T.S.	PLATE RF-C00

PRELIMINARY

HIGHWAY 413

OLD SCHOOL ROAD

BRAMALEA ROAD

HURONTARIO STREET

KENNEDY ROAD

HEART LAKE ROAD

HIGHWAY 410 EXTENSION

DIXIE ROAD

WET POND - W1

WET POND - W2

WET POND - W3

WET POND - W4

WET POND - W5

WET POND - W6

WET POND - W7

CARPOOL PARKING

CONCEPTUAL TRANSIT PIER

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'C' - Hurontario Street to Bramalea Road

N.T.S.

PLATE
RF-C0

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

KENNEDY ROAD

MAYFIELD ROAD

HIGHWAY 410

HEART LAKE ROAD

OLD SCHOOL ROAD

HIGHWAY 410 EXTENSION

WET POND - W9

WET POND - W8

WET POND - W10

WET POND - W5

WET POND - W6

HIGHWAY 413

COUNTRYSIDE DRIVE

MAYFIELD ROAD

DIXIE ROAD

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'D' - Highway 410 Extension

N.T.S.

PLATE
RF-D0

PRELIMINARY

INNIS LAKE RD.

AIRPORT RD.

TORBRAM RD.

HIGHWAY 413

THE GORE ROAD

HEALEY RD.

CENTREVILLE CREEK RD.

WEST HUMBER RIVER

WET POND - E1

DRY POND - E1

WET POND - E2

DRY POND - E2

WET POND - E3

DRY POND - E3

CONCEPTUAL TRANSIT AREA

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'E' - Torbram Road to The Gore Road

N.T.S

PLATE
RF-E01

wsp AECOM
Ontario Ministry of Transportation

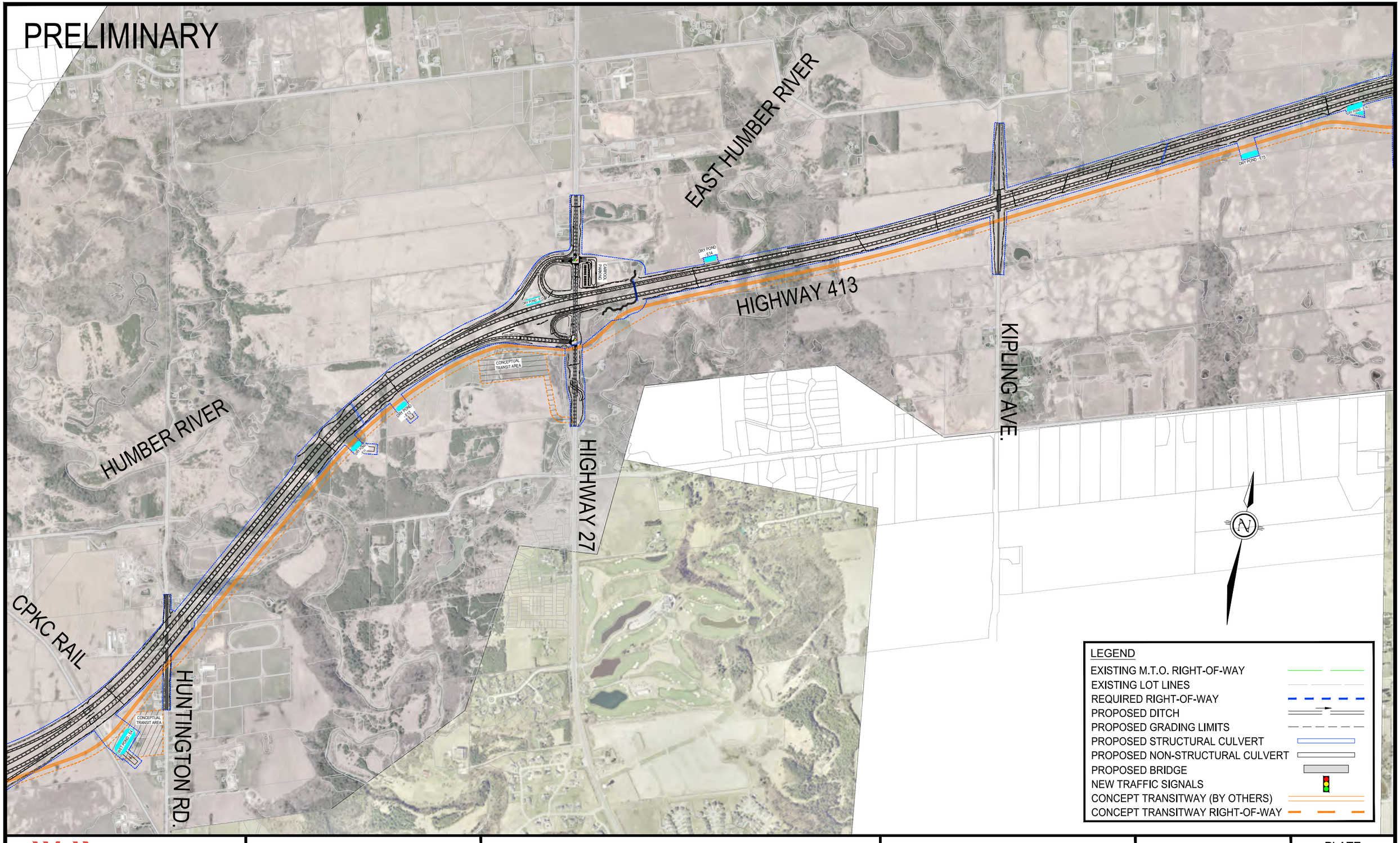
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'E' & 'F'- Humber Station Road to Huntington Road

N.T.S

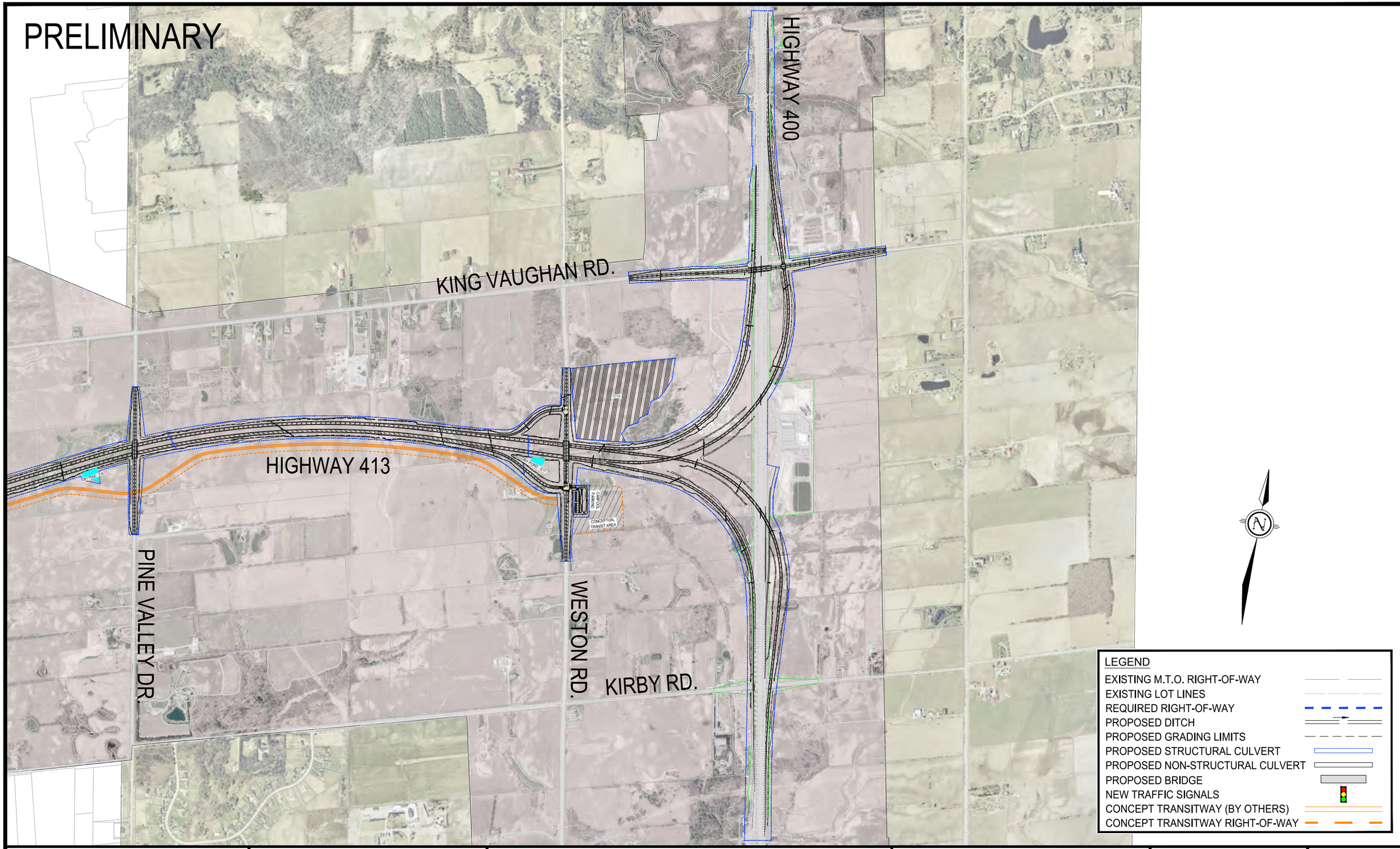
PLATE
RF-E02

PRELIMINARY



wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		Preliminary Design Segment 'E' - Huntington Road to Kipling Avenue	N.T.S	PLATE RF-E03

PRELIMINARY



LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

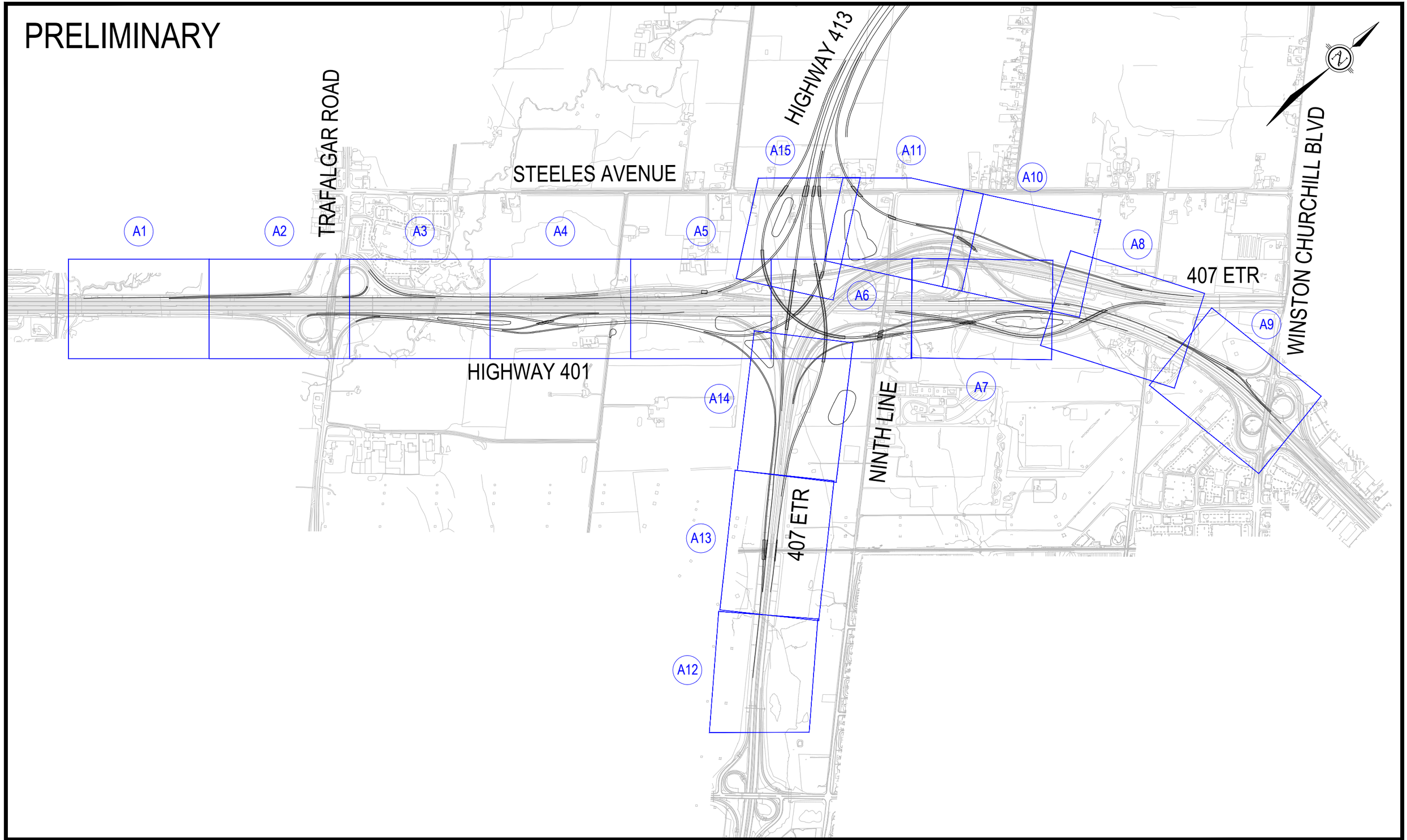
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

Preliminary Design
Segment 'E' & 'G' - Pine Valley Drive to Highway 400

N.T.S

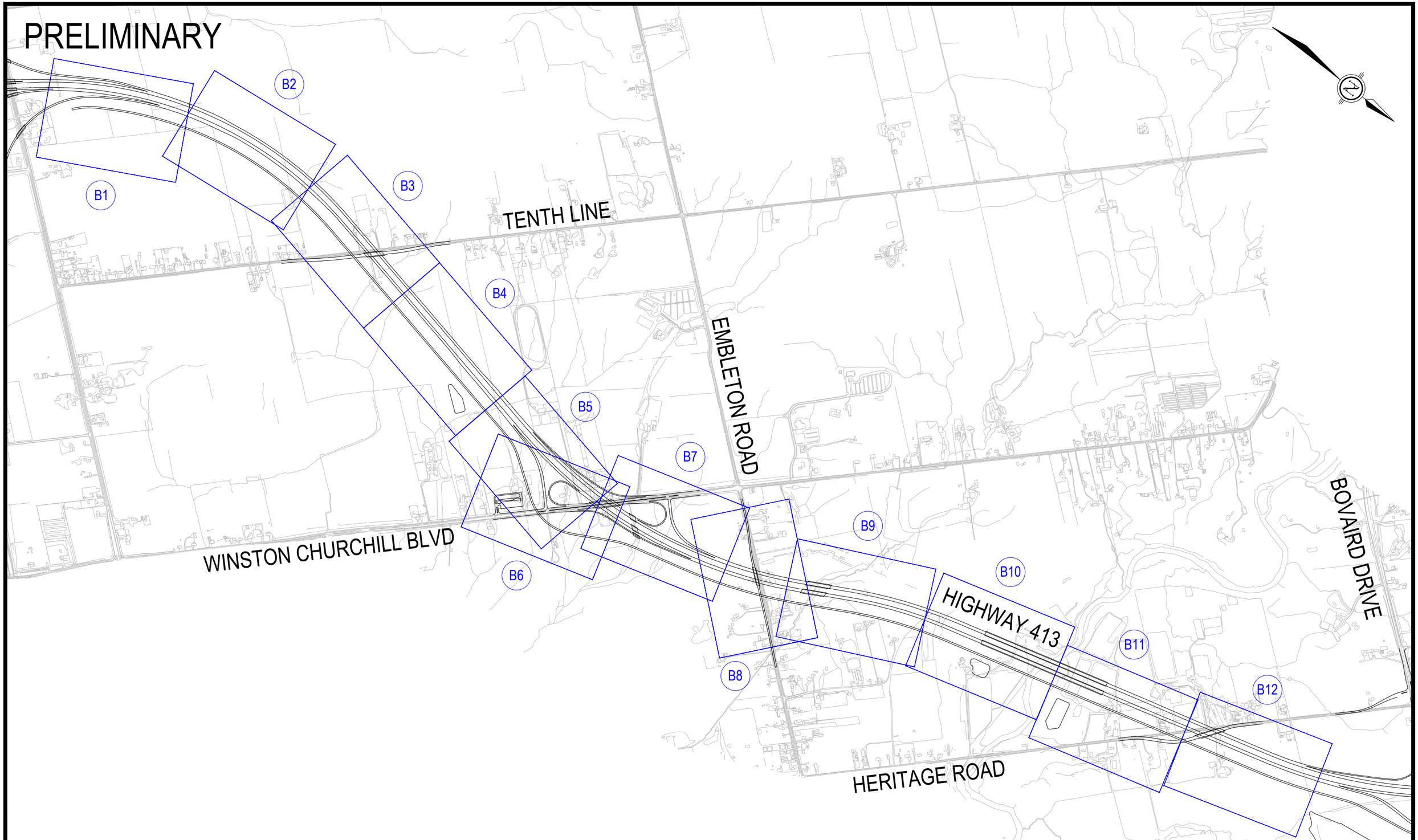
PLATE
RF-E04

PRELIMINARY



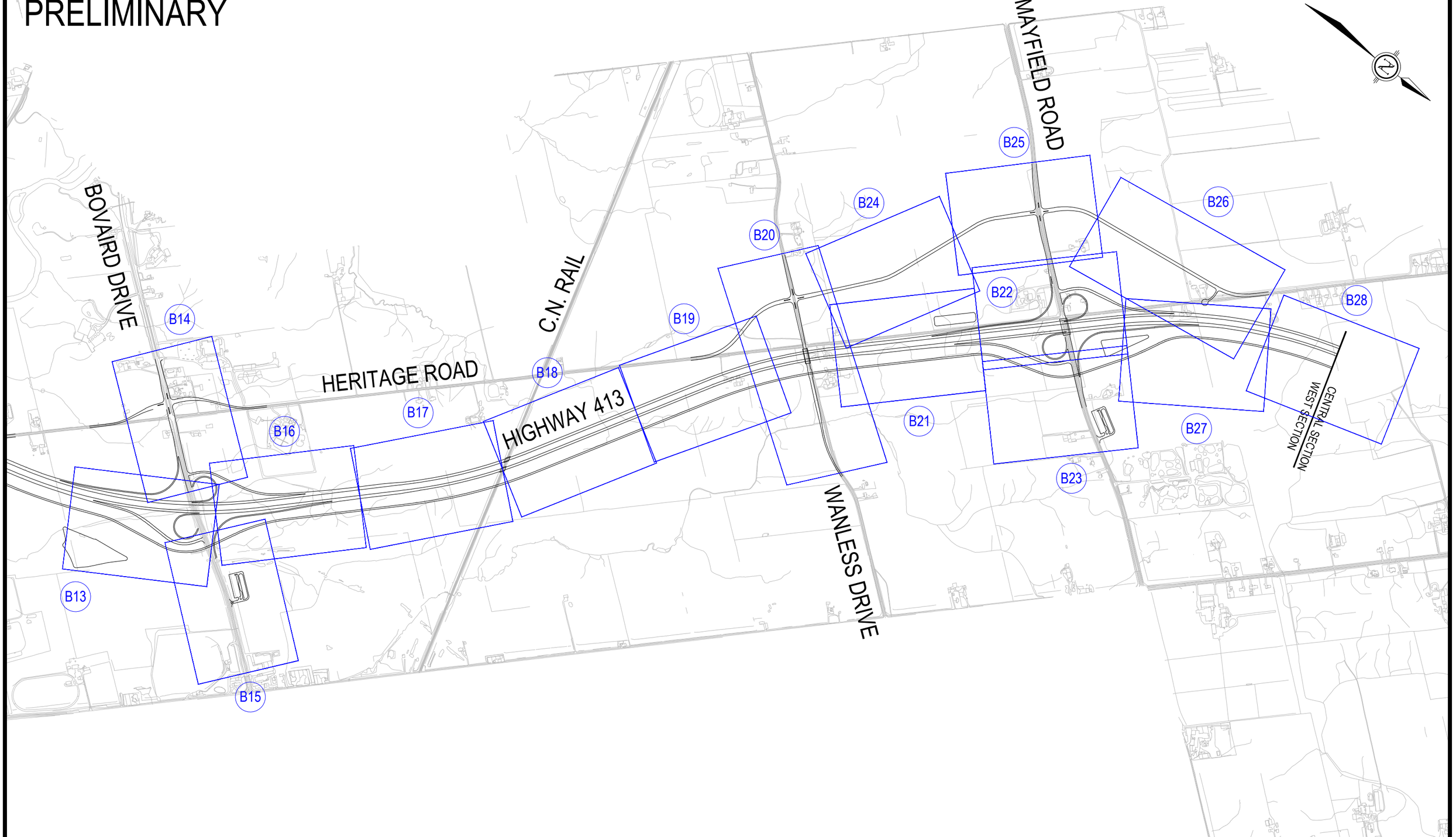
WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'A'	N.T.S.	PLATE A0

PRELIMINARY



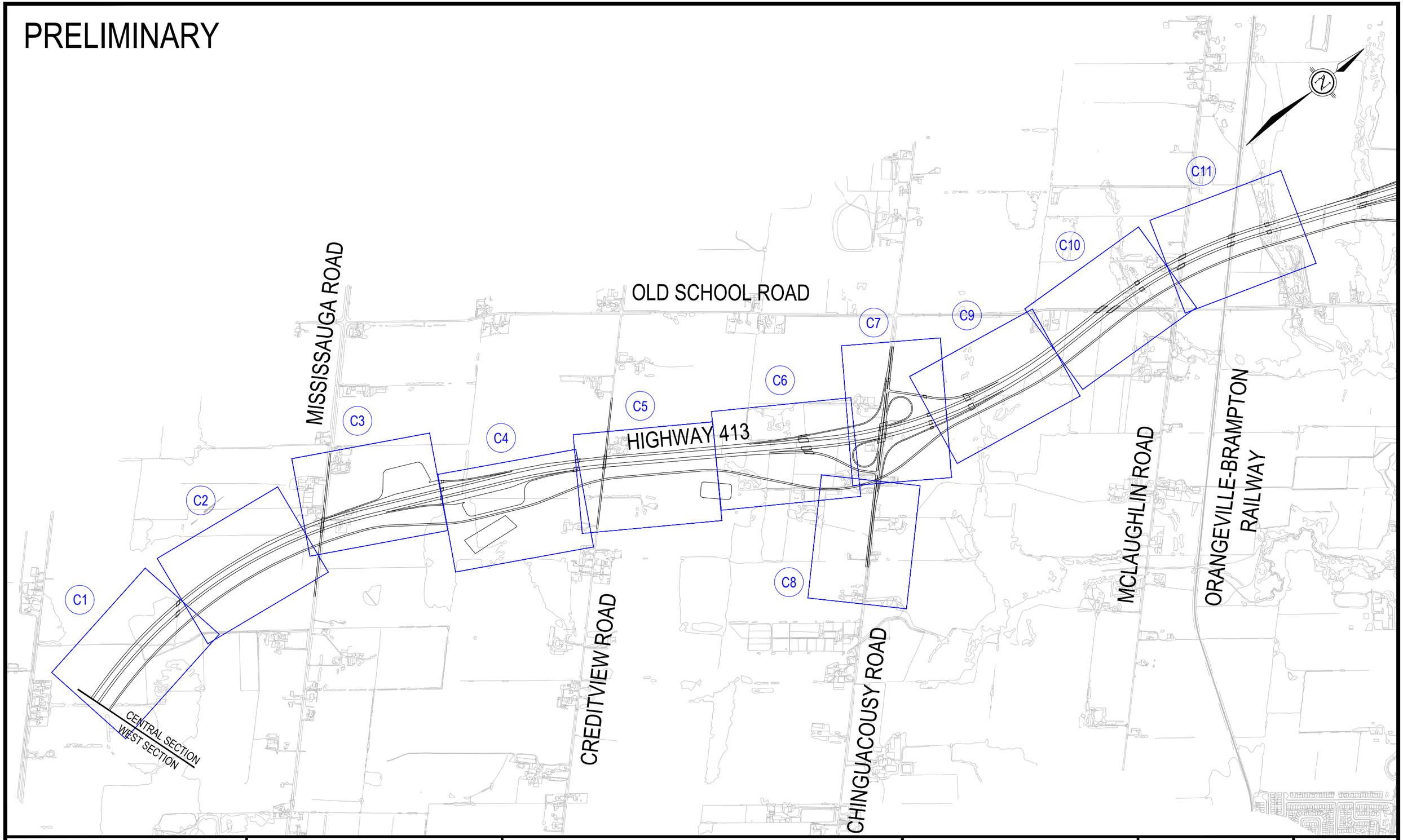
WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'B'	N.T.S.	PLATE B00

PRELIMINARY



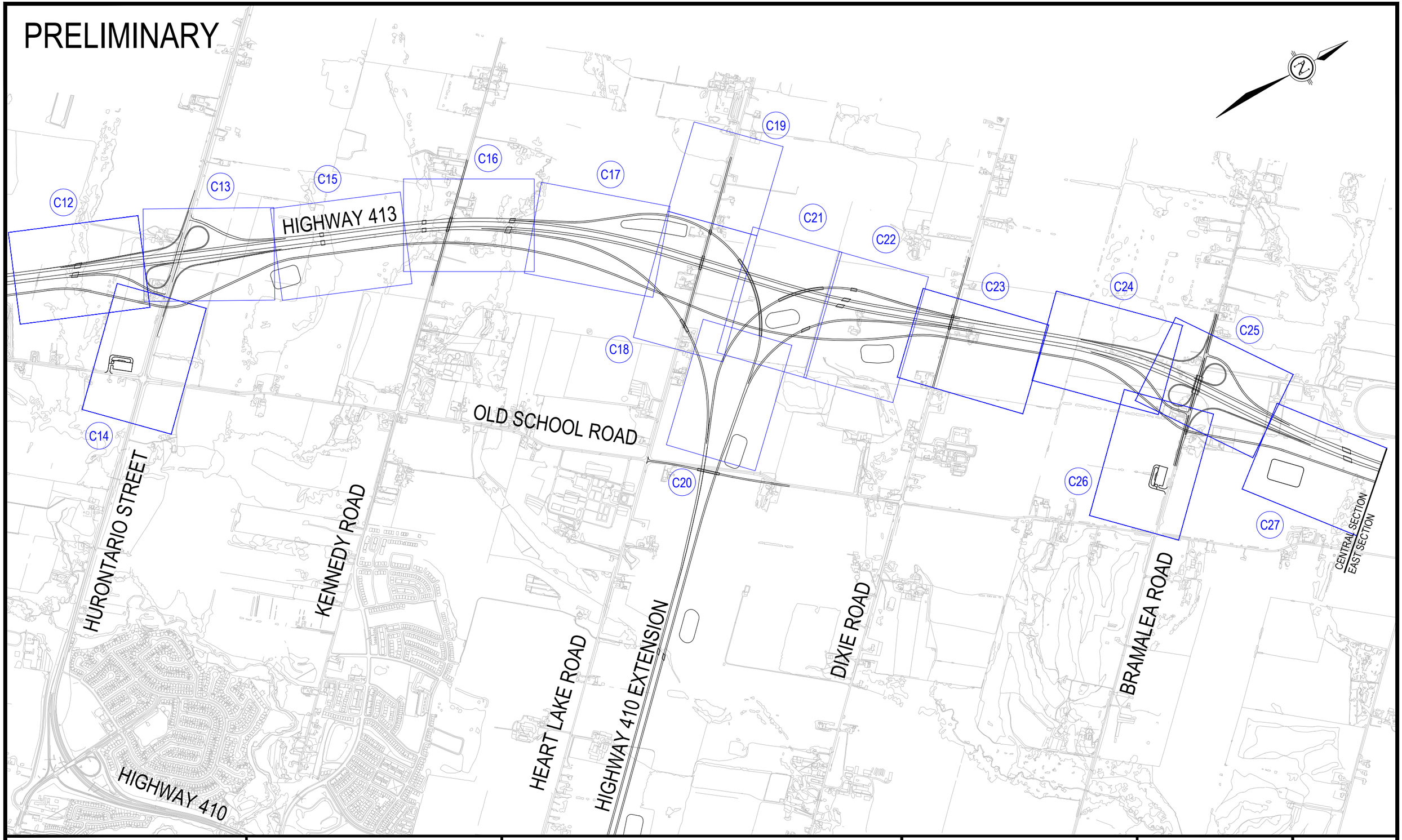
WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'B'	N.T.S.	PLATE B0

PRELIMINARY



wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'C'	N.T.S.	PLATE C00

PRELIMINARY



WSP AECOM

Ontario Ministry of Transportation

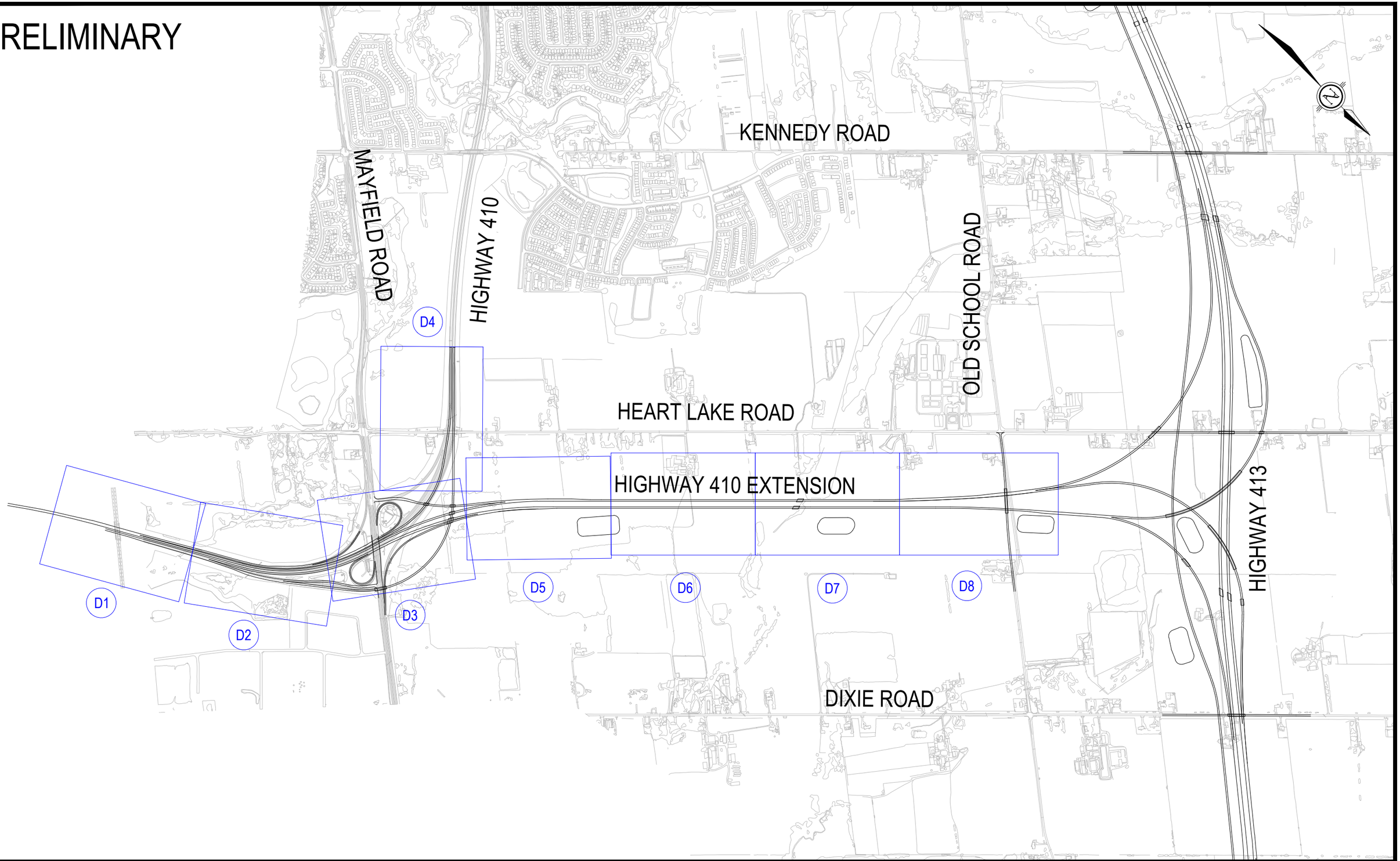
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

DRAWING SHEET INDEX
SEGMENT 'C'

N.T.S.

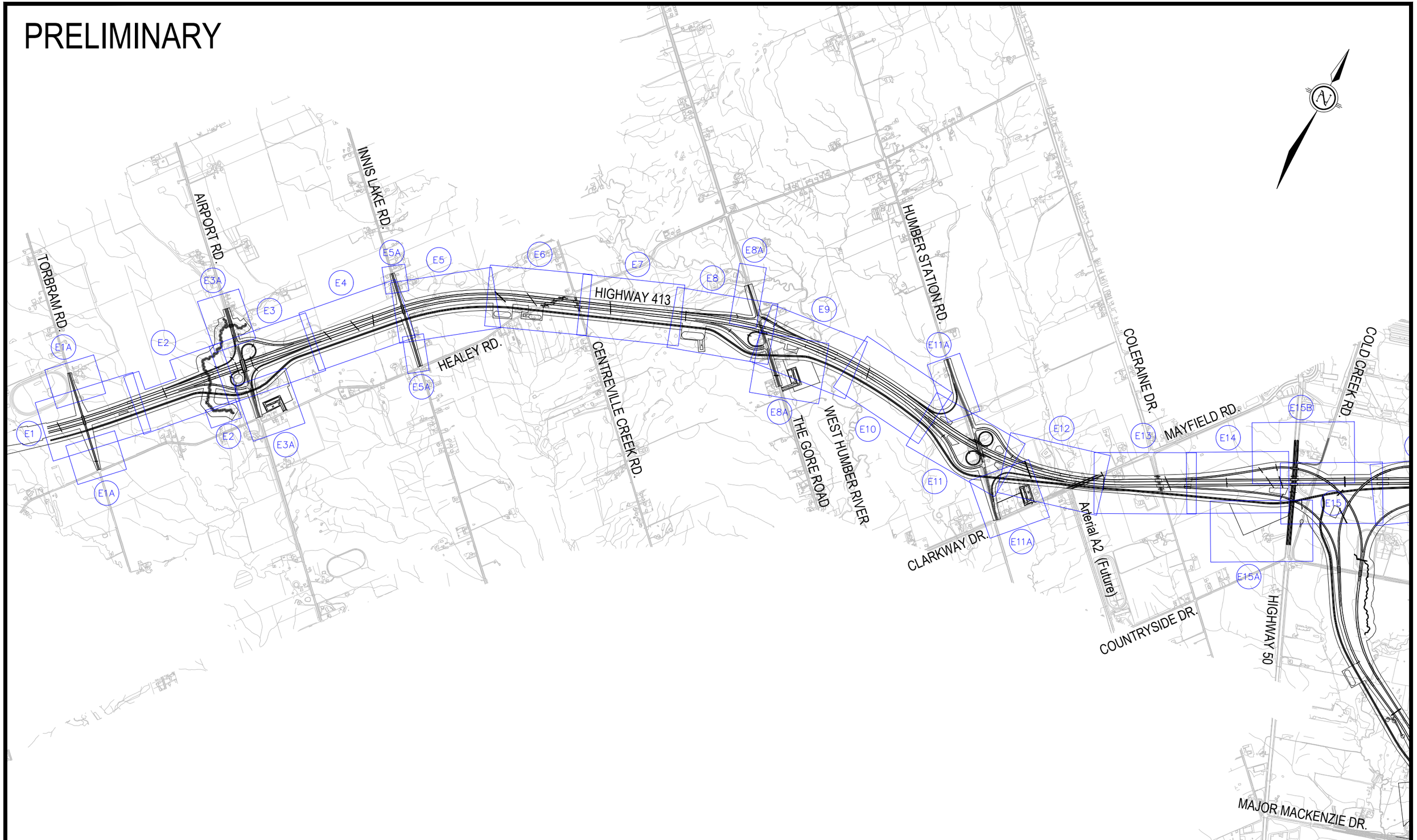
PLATE
C0

PRELIMINARY



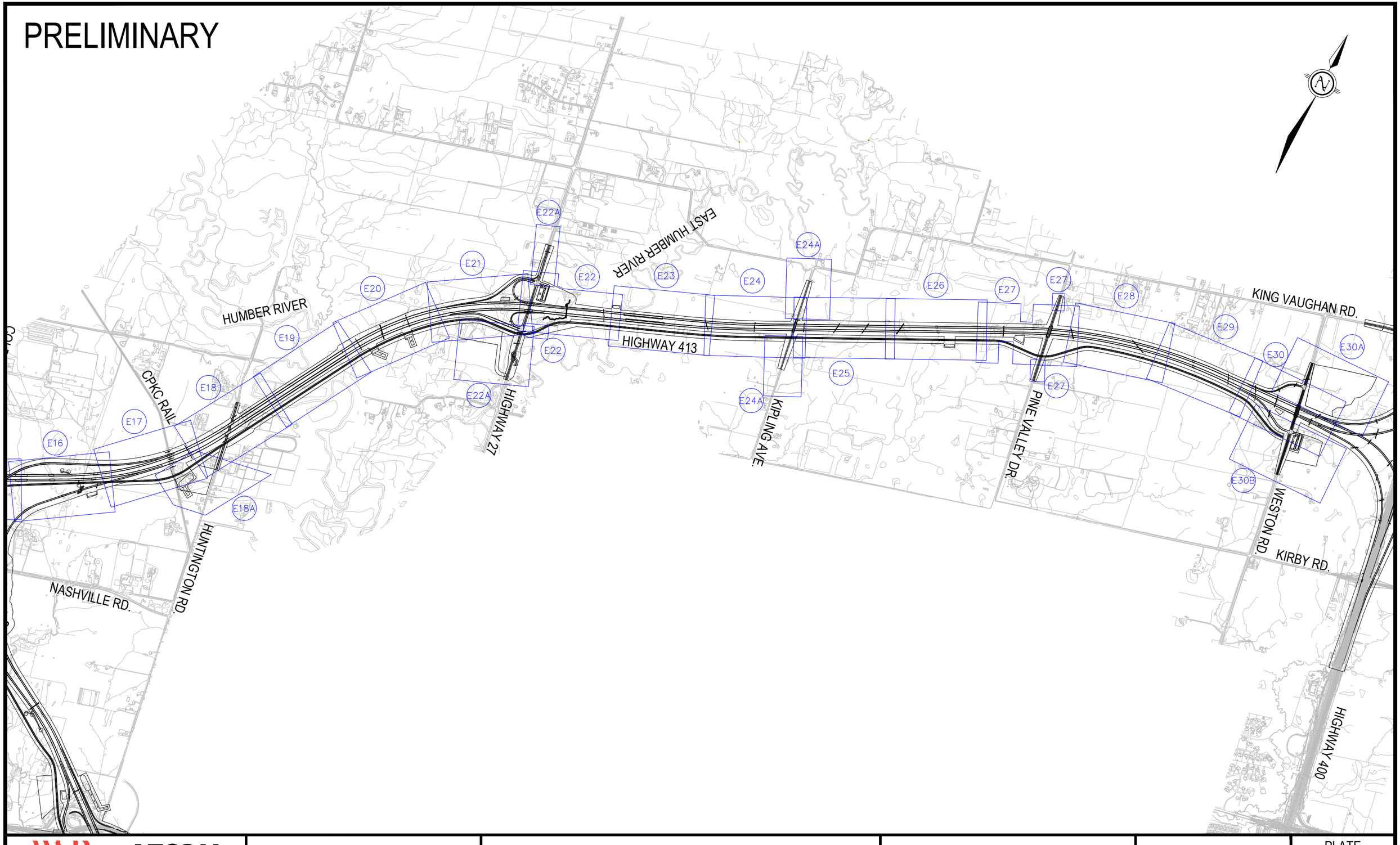
wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'D'	N.T.S.	PLATE D0

PRELIMINARY



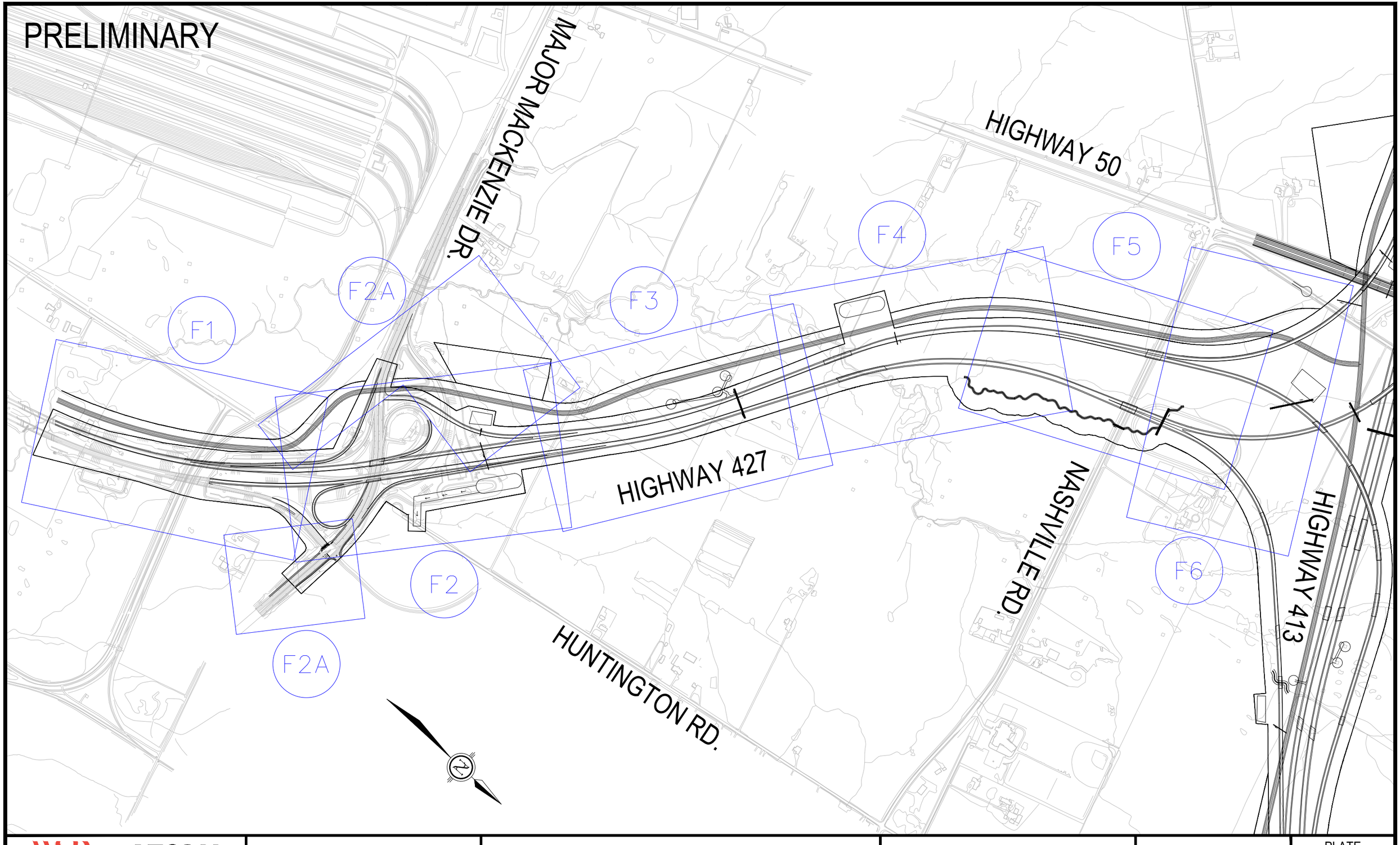
WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'E'	N.T.S.	PLATE E00

PRELIMINARY



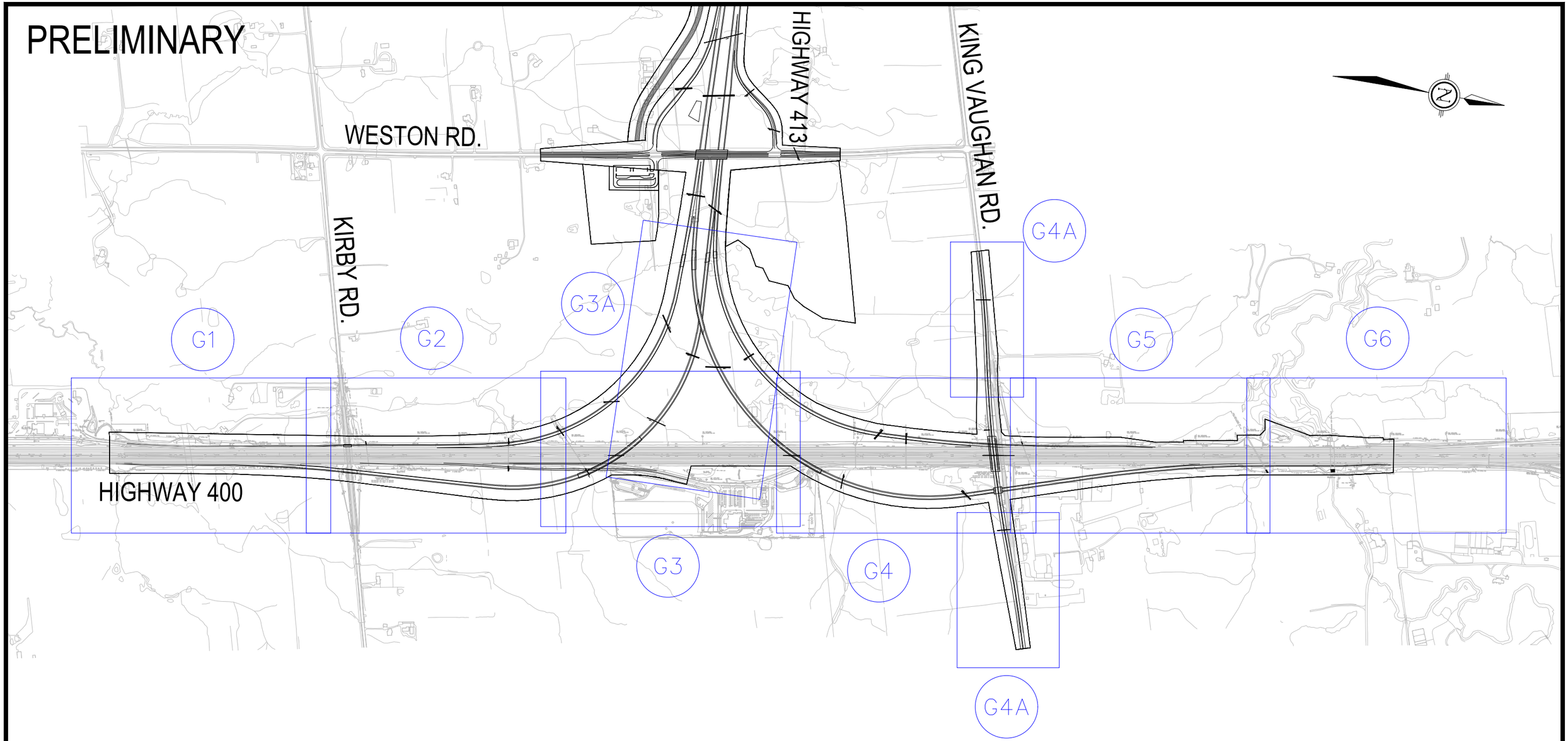
wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'E'	N.T.S.	PLATE E0

PRELIMINARY



WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'E'	N.T.S.	PLATE F0

PRELIMINARY



WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001		DRAWING SHEET INDEX SEGMENT 'E'	N.T.S.	PLATE G0

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

EAST SIXTEEN MILE
CREEK TRIBUTARY

CON 6
LOT 15

CON 6
LOT 14

RAMP N-W

R=4000m

RETAINING WALL

STA: 10+000

STA: 10+700

10+100 10+200 10+300 10+400 10+500 10+600 10+800

HIGHWAY 401

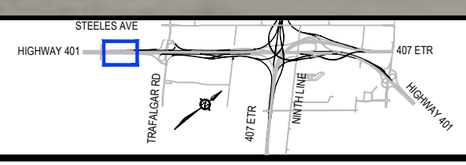
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 401

STATION 10+000 TO STATION 10+700

SCALE

25m 0m 50m

1:2000

PLATE

A1

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

STA: 9+880

RETAINING WALL

RAMP N-W

CON 7
LOT 15

9+800

9+700

9+600

9+500

R=4000m

MATCH
EXIST

CON 8
LOT 15

RAMP S-W

STA: 10+700

10+800

10+900

11+000

11+100

11+200

11+300

STA: 11+400

HIGHWAY 401

RAMP W-N/S

CON 7
LOT 14

MATCH
EXIST

A=61

RAMP N-E

R=4000m

STA: 8+820

8+700

TRAFALGAR ROAD

8+800

CON 8
LOT 14

RAMP S-E

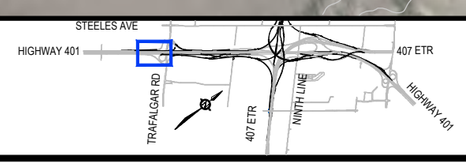
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 401

STATION 10+700 TO STATION 11+400

SCALE

25m 0m 50m

1:2000

PLATE

A2

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

TRAFALGAR ROAD

MATCH EXIST

RAMP E-N/S

RAMP S-W

MATCH EXIST

A=125

R=250m

A=50

R=85m

10+000

10+200

10+400

10+600

CON 8
LOT 15

STA: 11+400

11+500

11+600

11+700

11+800

11+900

12+000

STA: 12+100

HIGHWAY 401

STA: 8+820

RAMP N-E

A=192

R=4000m

MATCH EXIST

RAMP S-E

8+900

9+000

9+100

9+200

9+300

9+400

9+600

RAMP 401W - 413N / 407S

WET POND 7

STA: 9+500

CON 8
LOT 14

W-W4

EAST SIXTEEN MILE CREEK TRIBUTARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN
HIGHWAY 401
STATION 11+400 TO STATION 12+100

SCALE
25m 0m 50m
1:2000

PLATE
A3

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 8
LOT 15

EIGHTH LINE

401 WB COLLECTOR INITIATION

MATCH EXIST

R=4000m

STA: 12+100

STA: 12+800

HIGHWAY 401

RAMP 401W - 413N / 407S

WET POND 7

RAMP TRAFALGAR N/S- E

RETAINING WALL

W-10A

RAMP TRAFALGAR N/S - 413N / 407S

STA: 9+500

STA: 10+660

CON 8
LOT 14

AUBURN ROAD

W-W10

CON 9
LOT 14

WSP | AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN
HIGHWAY 401
STATION 12+100 TO STATION 12+800

SCALE
25m 0m 50m
1:2000

PLATE
A4

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

CON 9
LOT 15

W-10B

401 WB COLLECTOR INITIATION

R=1250m

RAMP 413N - 401W

RAMP 407E - 401W

A=190

R=440m

(SEE PLATE A15)
STA: 10+460

(SEE PLATE A15)
STA: 11+060

RAMP 413N - 401E / 407E

STA: 11+140

W-1

STA: 12+800

12+900

13+000

13+100

HIGHWAY 401

13+200

13+300

13+400

STA: 13+500

RAMP 401W - 413N / 407S

STA: 10+660

R=1000m

A=235

WET POND 1-1

W-W18

STA: 11+420

RAMP 401W - 413N

RAMP 401W - 407S

WET POND 1-2

P

CON 9
LOT 14

(SEE PLATE A14)
STA: 10+220

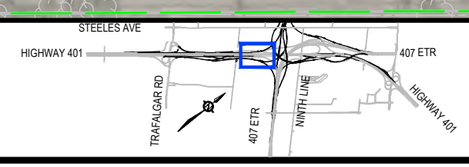
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN
HIGHWAY 401
STATION 12+800 TO STATION 13+500

SCALE
25m 0m 50m
1:2000

PLATE
A5

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 9+320 (SEE PLATE A15)
STA: 11+100 (SEE PLATE A15)
STA: 11+840 (SEE PLATE A15)
WET POND 9
EAST SIXTEEN MILE CREEK TRIBUTARY
RAMP 407E - 401W
RAMP 413 N - 407S
W-3
W-5
W-2
CON 9 LOT 15
HIGHWAY 407
CON 10 LOT 15
NINTH LINE
STA: 11+140
STA: 13+500
STA: 14+200
RAMP 407S - 413N
RAMP 401W - 413N
R=440m
W-4
HIGHWAY 401
RAMP 401W - 407E
A=290
STA: 10+060
CON 9 LOT 14
CON 10 LOT 14
RAMP 413N - 407E
STA: 11+960
STA: 10+240
RAMP 413N - 401E / 407E
STA: 11+420
R=750m
W-1
W11A-1
W11A-2
A=190
RAMP 413N / 407S - 401E
R=1940m
A=183
W11A-3
W-W27
WET POND 1-2
A=260
W-W21B
STA: 9+780 (SEE PLATE A14)
STA: 10+700 (SEE PLATE A14)
STA: 10+340 (SEE PLATE A14)
RAMP 407S - 401E
R=340m
GEOGRAPHIC TWP OF TRAFALGAR

wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	STEELES AVE, HIGHWAY 401, TRAFALGAR RD, 407 ETR, NINTH LINE, HIGHWAY 401 SEGMENT 'A'	PRELIMINARY DESIGN PLAN HIGHWAY 401 STATION 13+500 TO STATION 14+200	SCALE 25m 0m 50m 1:2000	PLATE A6

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

HIGHWAY 407

W-13

MATCH EXISTING

STA: 10+280 (SEE PLATE A10)

RAMP 401E - 413N

RAMP RECONSTRUCTION (BY OTHERS)

RAMP 407W - 401W

CON 10 LOT 15

HIGHWAY 401

STA: 14+200

STA: 14+900

RAMP 401W - 407E

RAMP 413N - 407E

RAMP 413N / 407S - 401E

STA: 10+060

STA: 11+960

STA: 10+240

STA: 10+800

R=440m

A=260

R=1200m

A=190

A=210

R=800m

A=210

A=220

R=500m

A=220

W-W35

WET POND 3

A=234

A=234

R=440m

W-6

W-W36

EAST SIXTEEN MILE CREEK TRIBUTARY

CON 10 LOT 14

GEOGRAPHIC TWP OF TRAFALGAR

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN
HIGHWAY 401
STATION 14+200 TO STATION 14+900

SCALE
25m 0m 50m
1:2000

PLATE
A7

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

CON 10
LOT 15

CON 10
LOT 14

HIGHWAY 407

HIGHWAY 401

RAMP 407E - 413N

RAMP 401W - 407E

WET POND 3

W-W39

W-7

W-W38

STA: 10+360
(SEE PLATE A10)

STA: 14+900

STA: 10+800

STA: 15+600

MATCH EXIST

MATCH EXIST

A=450

R=3521m

A=231

A=231

R=1183m

A=190

R=440m

A=190

R=440m

10+300

10+200

10+100

10+000

5+100

5+200

5+300

5+400

5+464

11+300

11+200

11+100

15+100

15+000

15+200

15+300

15+400

15+500

10+900

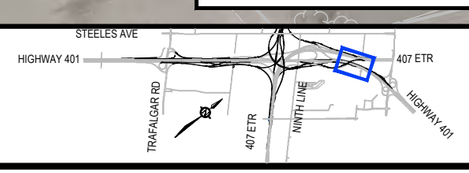
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 401

STATION 14+900 TO STATION 15+600

SCALE

25m 0m 50m

1:2000

PLATE

A8

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

GEOGRAPHIC TWP OF TORONTO

TRANSCANADA PIPELINE

CON 11
LOT 14

RAMP N-W

RAMP E-N/S

CON 6
LOT 14

RAMP S-W

MODIFICATIONS
TO EXISTING
CARPOOL LOT

MATCH
EXIST

RAMP WCB N/S-W

R=3000m

A=110

R=190m

A=110

A=140

R=400m

A=140

MATCH
EXIST

9+800

10+000

9+900

9+800

9+600

9+717

STA: 15+600

15+700

15+800

HIGHWAY 401

15+900

16+000

16+100

16+200

STA: 16+220

RAMP N-E

WINSTON CHURCHILL BOULEVARD

CON 6
LOT 13

RAMP W-N/S

CON 11
LOT 14

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 401

STATION 15+600 TO STATION 16+220

SCALE

25m 0m 50m

1:2000

PLATE

A9

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 10+840 (SEE PLATE A11)

STA: 10+500 (SEE PLATE A11)

STA: 10+360 (SEE PLATE A8)

STA: 10+280 (SEE PLATE A7)

RAMP 407E - 413N

RAMP 407E - 401W

HIGHWAY 407

HIGHWAY 401

CON 10
LOT 15

W-9

W-8

W-W37

R=600m

A=190

R=340m

A=235

R=1000m

A=235

10+800

10+700

10+600

10+500

10+400

10+300

10+100

10+000

wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	SEGMENT 'A'	PRELIMINARY DESIGN PLAN HIGHWAY 407 RAMPS STATION 10+360 TO STATION 10+840	SCALE 25m 0m 50m 1:2000	PLATE A10

PRELIMINARY

STA: 11+300
(SEE SEGMENT 'B' SHEETS FOR CONTINUATION)

W-W25

CONCEPTUAL TRANSIT STATION AREA

RAMP 401E - 413N

11+200

GEOGRAPHIC TWP OF ESQUESING

CON 10
LOT 1

STEELES AVENUE W

11+100

W-12-E

W-W26

R=440m

11+000

10+900

CON 9
LOT 15

GEOGRAPHIC TWP OF TRAFALGAR

CON 10
LOT 15

W-11B

W-W30

EAST SIXTEEN MILE CREEK TRIBUTARY

11+100

11+000

10+900

A=190

RAMP 401E - 413N

A=306

A=190

R=600m

STA: 10+840

RAMP 401E - 413N

A=160

10+800

10+700

10+600

W-9

R=340m

STA: 10+500

NINTH LINE

RAMP 407E - 401W

WET POND 9

EAST SIXTEEN MILE CREEK TRIBUTARY

HIGHWAY 407

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HWY 407 RAMPS

STATION 10+840 TO STATION 11+300

SCALE

25m 0m 50m

1:2000

PLATE

A11

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

CON 9
LOT 11

CON 9
LOT 12

TRANSCANADA PIPELINE

DERRY ROAD RAMP N-E/W

DERRY ROAD RAMP E-N

HIGHWAY 407

STA: 1+300

STA: 2+000

1+400 1+500 1+600 1+700 1+800 1+900

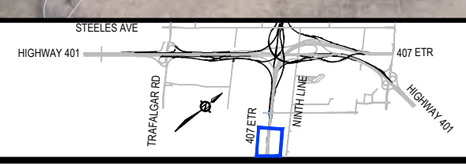
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 407

STATION 1+300 TO STATION 2+000

SCALE

25m 0m 50m

1:2000

PLATE

A12

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

CON 9
LOT 12

C.P. RAIL

CON 9
LOT 13

TRANSCANADA PIPELINE

W-15

RAMP 401W - 407S

STA: 10+800

HIGHWAY 407

STA: 2+700

STA: 2+000

RAMP 407S - 413N

STA: 10+000

W-14B

W-14A

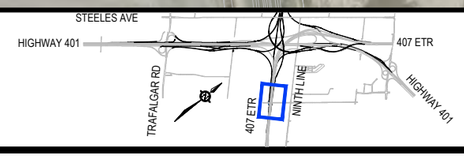
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'A'

PRELIMINARY DESIGN PLAN
HIGHWAY 407
STATION 2+000 TO STATION 2+700

SCALE
25m 0m 50m
1:2000

PLATE
A13

PRELIMINARY

INSERT

MATCH LINE

WET POND 6

GEOGRAPHIC TWP OF TRAFALGAR

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 9
LOT 14

CON 9
LOT 13

RAMP 401W - 407S

RAMP 413 N - 407S

RAMP 407S - 413N

RAMP 407S - 401E

WET POND 1-2

HIGHWAY 407

STA: 10+800

STA: 2+700

STA: 10+000

STA: 9+780
(SEE PLATE A6)

STA: 10+700
(SEE PLATE A6)

STA: 10+240
(SEE PLATE A6)

STA: 10+220
(SEE PLATE A5)

W-W21B

W-W21A

W-W23

R=10000m

R=440m

R=800m

R=750m

R=340m

A=206

A=261

A=260

A=160

EAST SIXTEEN MILE CREEK TRIBUTARY

POND CONNECTION TO EXISTING WATERCOURSE

WET POND 6

MATCH LINE - SEE INSERT

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 407

STATION 2+700 TO STATION 3+300

SCALE

25m 0m 50m

1:2000

PLATE

A14

PRELIMINARY

GEOGRAPHIC TWP OF TRAFALGAR

GEOGRAPHIC TWP OF TRAFALGAR

CON 9
LOT 15

CON 10
LOT 1

STEELES AVENUE W

STA: 10+460
(SEE PLATE A5)

STA: 11+060
(SEE PLATE A5)

W-1

W-W14

W-W15

W-12D

W-12B

W-12A

W-12C

RAMP 413N - 401E / 407E

RAMP 413N - 401W

RAMP 407S - 413N

RAMP 401W - 413N

HIGHWAY 413

WET POND 8

EAST SIXTEEN MILE CREEK TRIBUTARY

R=440m
R=600m
R=1600m
R=7000m
R=750m

A=190
A=220
A=375
A=260
A=203

STA: 9+320
(SEE PLATE A6)

STA: 11+100
(SEE PLATE A6)

STA: 11+840
(SEE PLATE A6)

STA: 10+340

STA: 110+240

REFER TO
SEGMENT 'B' FOR
CONTINUATION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'A'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 110+000 TO STATION 110+240

SCALE

25m 0m 50m

1:2000

PLATE

A15

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 10
LOT 1

CON 10
LOT 2

W-W24

RAMP 413N - 401W/407E

HIGHWAY 413

RAMP 401E - 413N

STA: 10+340

STA: 110+240

STA: 11+300

STA: 110+900

A=220

R=250m

10+100
10+200
10+300
10+400
110+300
110+400
110+500
110+600
110+700
110+800
11+400
11+500
11+600
11+700
7+500
7+600

REFER TO
SEGMENT 'A' FOR
CONTINUATION

CONCEPTUAL
TRANSIT STATION
AREA

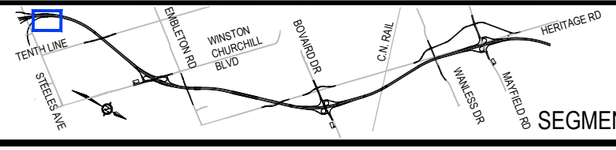
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 110+240 TO STATION 110+900

SCALE

25m 0m 50m

1:2000

PLATE

B1

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 10
LOT 2

CON 10
LOT 3

W-W40

HIGHWAY 413

STA: 110+900

STA: 111+600

R=1900m

111+000

111+100

111+200

111+300

111+400

111+500

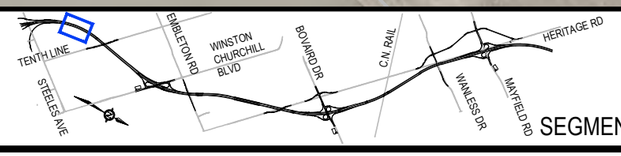
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 110+900 TO STATION 111+600

SCALE

25m 0m 50m

1:2000

PLATE

B2

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 10
LOT 3

CON 11
LOT 3

TENTH LINE

HIGHWAY 413

STA: 111+600

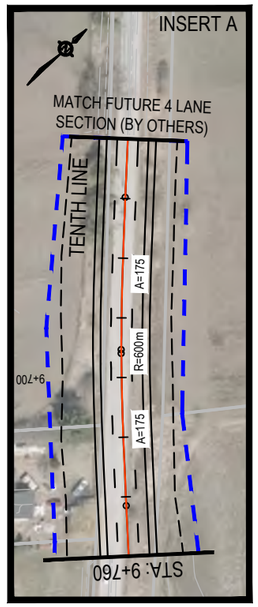
STA: 112+300

STA: 9+760
(SEE INSERT A)

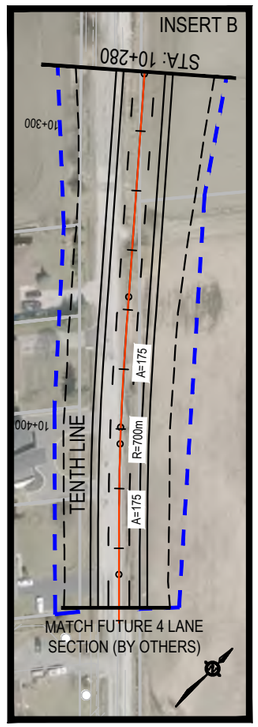
STA: 10+280
(SEE INSERT B)

W-16

INSERT A



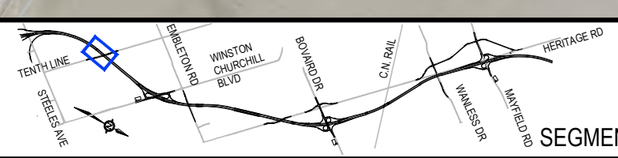
INSERT B



WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413 / TENTH LINE
STATION 111+600 TO STATION 112+300

SCALE
25m 0m 50m
1:2000

PLATE
B3

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 11
LOT 4

STA: 112+300

HIGHWAY 413

112+400 112+500 112+600 112+700 112+800 112+900

STA: 113+000

CON 11
LOT 3

WET POND 1

POND CONNECTION TO
EXISTING WATERCOURSE

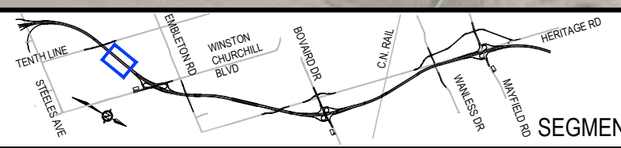
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 112+300 TO STATION 113+000

SCALE

25m 0m 50m

1:2000

PLATE

B4

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 11
LOT 4

W-W44

STA: 113+000

113+100

113+200

A=410

113+300

113+400

RAMP N-S

R=1600m

STA: 9+840

9+900

10+000

STA: 113+500

RAMP S-N/S

A=160

R=340m

10+000

10+100

STA: 10+200

WINSTON CHURCHILL BLVD

CONCEPTUAL
TRANSIT STATION
AREA

CON 11
LOT 3

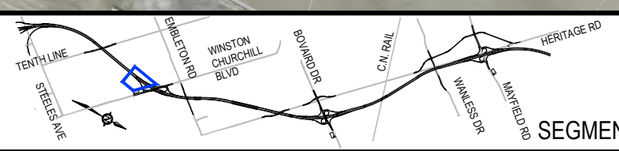
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 113+000 TO STATION 113+500

SCALE

25m 0m 50m

1:2000

PLATE

B5

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 11
LOT 5

STA: 9+840

STA: 113+500

STA: 9+560

HIGHWAY 413

RAMP N-S

A=125

R=250m

W-17

STA: 9+900

STA: 210+100

STA: 9+660

A=50

CON 11
LOT 4

R=55m

RAMP N-N

A=50

RAMP S-N

A=110

R=190m

A=110

STA: 10+200

DRY POND 1 LOCATION

A=160

RAMP S-N/S

CONCEPTUAL
TRANSIT STATION
AREA

CARPOOL PARKING

MATCH FUTURE
6 LANE SECTION
(BY OTHERS)

WINSTON CHURCHILL BLVD

CON 6
LOT 4

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413 / WINSTON CHURCHILL BOULEVARD
STATION 113+500 TO STATION 210+100

SCALE
25m 0m 50m
1:2000

PLATE
B6

PRELIMINARY

GEOGRAPHIC TWP OF ESQUESING

CON 11
LOT 5

MATCH FUTURE
6 LANE SECTION
(BY OTHERS)

WINSTON CHURCHILL BLVD

LEVI CREEK

W-W51

STA: 9+560

STA: 9+900

RAMP N-S

A=125

A=50

RAMP N-NS

A=110

CON 6
LOT 5

RAMP S-S

R=55m

R=190m

W-W50B

A=53

STA: 10+020

STA: 210+100

HIGHWAY 413

R=2300m

STA: 210+500

STA: 9+660

RAMP S-N

A=200

W-W50A

R=100m

W-W50C

A=200

CON 6
LOT 4

GEOGRAPHIC TWP OF CHINGUACOUSY

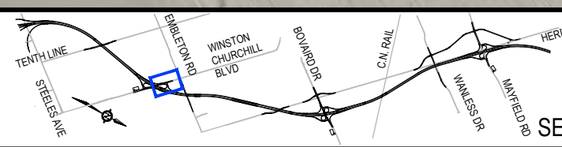
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



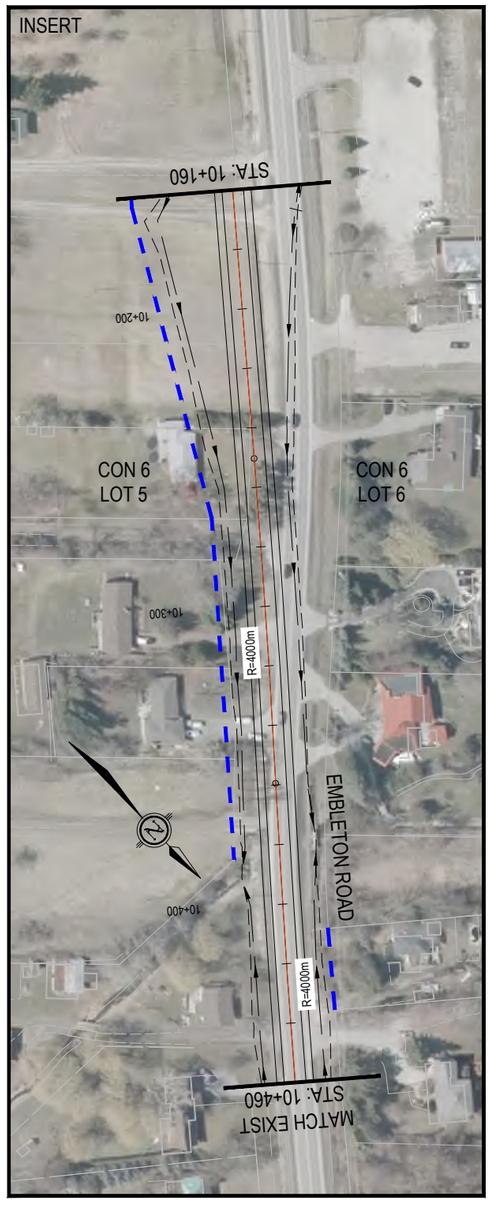
SEGMENT 'B'

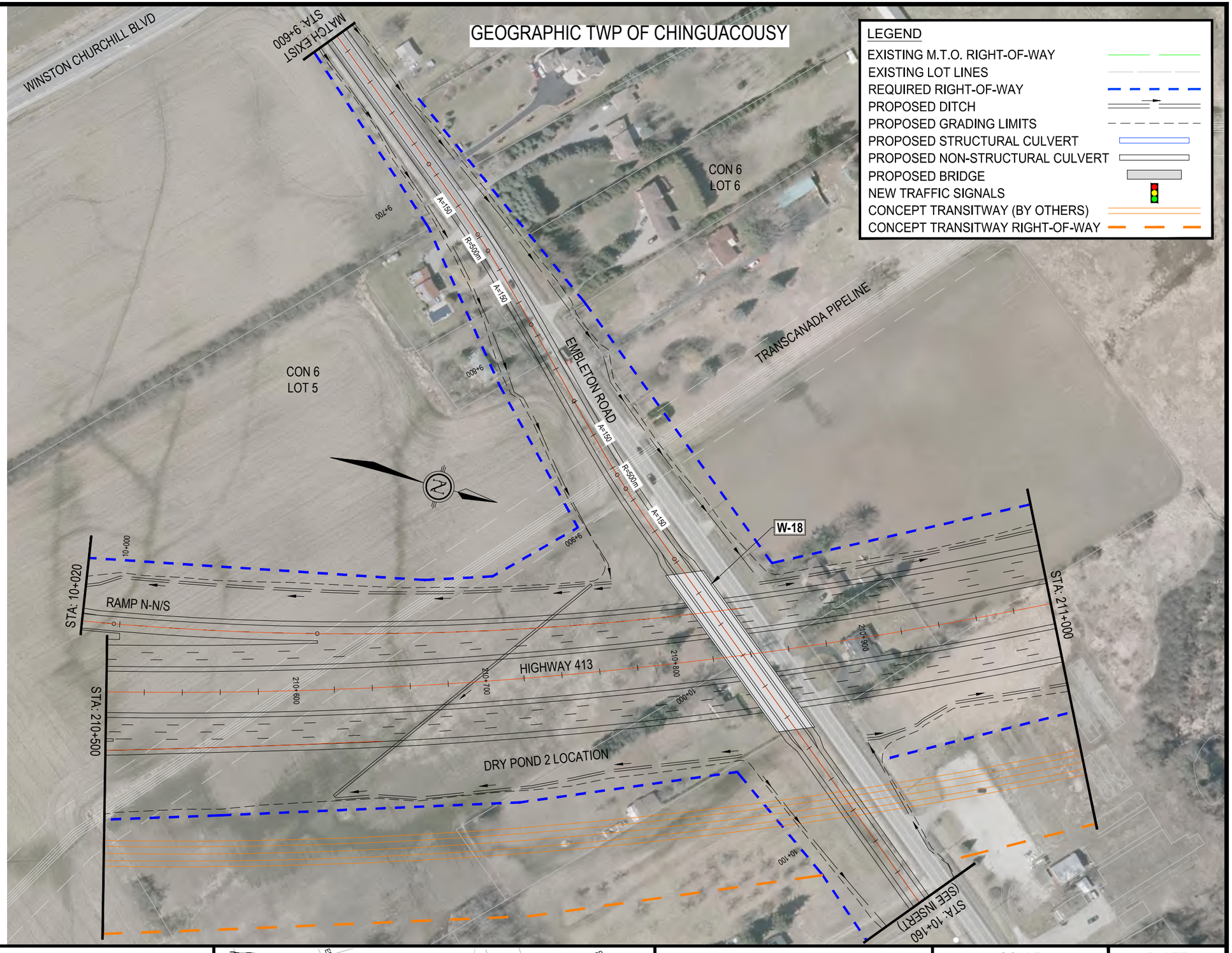
PRELIMINARY DESIGN PLAN
HIGHWAY 413 / WINSTON CHURCHILL BOULEVARD
STATION 210+100 TO STATION 210+500

SCALE
25m 0m 50m
1:2000

PLATE
B7

PRELIMINARY





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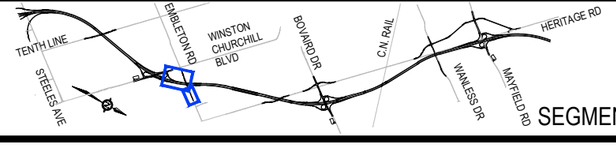
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 210+500 TO STATION 211+000

SCALE
25m 0m 50m
1:2000

PLATE
B8

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

TRANSCANADA PIPELINE

CON 6
LOT 6

CON 6
LOT 7

LEVI CREEK

W-W56B

W-W56A

HIGHWAY 413

STA: 211+000

STA: 211+700

A=410

211+100

211+200

211+300

A=410

211+400

211+500

R=2300m

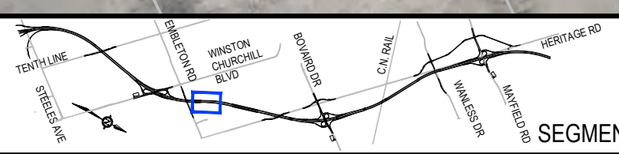
211+600

LEVI CREEK

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 211+000 TO STATION 211+700

SCALE

25m 0m 50m

1:2000

PLATE

B9

PRELIMINARY

TRANSCANADA PIPELINE

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 6
LOT 8

W-W59B

STA: 211+700

HIGHWAY 413

211+800

A=410

211+900

212+000

212+100

212+200

212+300

STA: 212+400

W-W59A

CREDIT RIVER
BRIDGE
WET POND

POND CONNECTION TO
EXISTING WATERCOURSE

CREDIT RIVER

CON 6
LOT 8

CON 6
LOT 7

CON 6
LOT 6

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

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HIGHWAY 413
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G.W.P. 13-20001

SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 211+700 TO STATION 212+400

SCALE

25m 0m 50m

1:2000

PLATE

B10

PRELIMINARY

TRANSCANADA PIPELINE

GEOGRAPHIC TWP OF CHINGUACOUSY

CREDIT RIVER

W-W59B

W-W59A

CON 6
LOT 9

CON 6
LOT 8

HIGHWAY 413

STA: 212+400

STA: 213+100

212+500

212+600

212+700

212+800

212+900

213+000

STA: 9+820

A=125

R=250m

A=125

A=125

9+800

9+700

9+600

HERITAGE ROAD

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

CON 5
LOT 8

WET
POND 2

CREDIT RIVER

CON 6
LOT 7

POND CONNECTION
TO EXISTING
WATERCOURSE

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

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HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 212+400 TO STATION 213+100

SCALE

25m 0m 50m

1:2000

PLATE

B11

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

TRANSCANADA PIPELINE

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

HERITAGE ROAD

A=140

R=350m

A=140

10+200

10+100

CON 6
LOT 9

LOT 10

STA: 213+100

STA: 10+000

STA: 213+800

213+200

213+300

213+400

A=410

HIGHWAY 413

213+500

213+600

213+700

10+050

W-19

A=125

R=250m

STA: 9+820

9+900

CON 5
LOT 9

CON 5
LOT 8

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

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HIGHWAY 413
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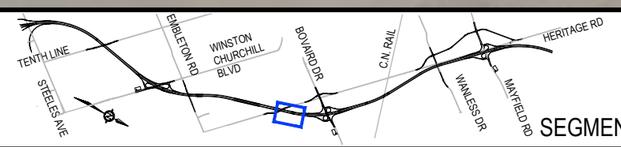

SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 213+100 TO STATION 213+800

SCALE

25m 0m 50m

1:2000

PLATE

B12

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 10

STA: 10+000

STA: 213+800

STA: 9+500

STA: 9+920

STA: 9+960

STA: 214+500

STA: 10+260

RAMP W-S

RAMP E-S

HIGHWAY 413

RAMP S-E/W

RAMP W-N

BOVAIRD DRIVE

INITIAL WIDENING
OF BOVAIRD DRIVE
BY OTHERS

W-W62

W-W63

W-20

A=484

A=484

R=2500m

A=85

R=130m

R=909m

R=2300m

A=160

R=340m

A=160

A=50

A=85

R=130m

A=85

9+600

9+700

9+800

9+900

10+000

10+100

10+200

10+300

10+400

10+492

9+730

213+900

214+000

214+100

214+200

214+300

214+400

WET POND 3

CON 5
LOT 9

TRANSCANADA PIPELINE

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

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HIGHWAY 413
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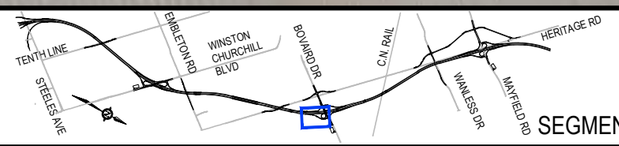
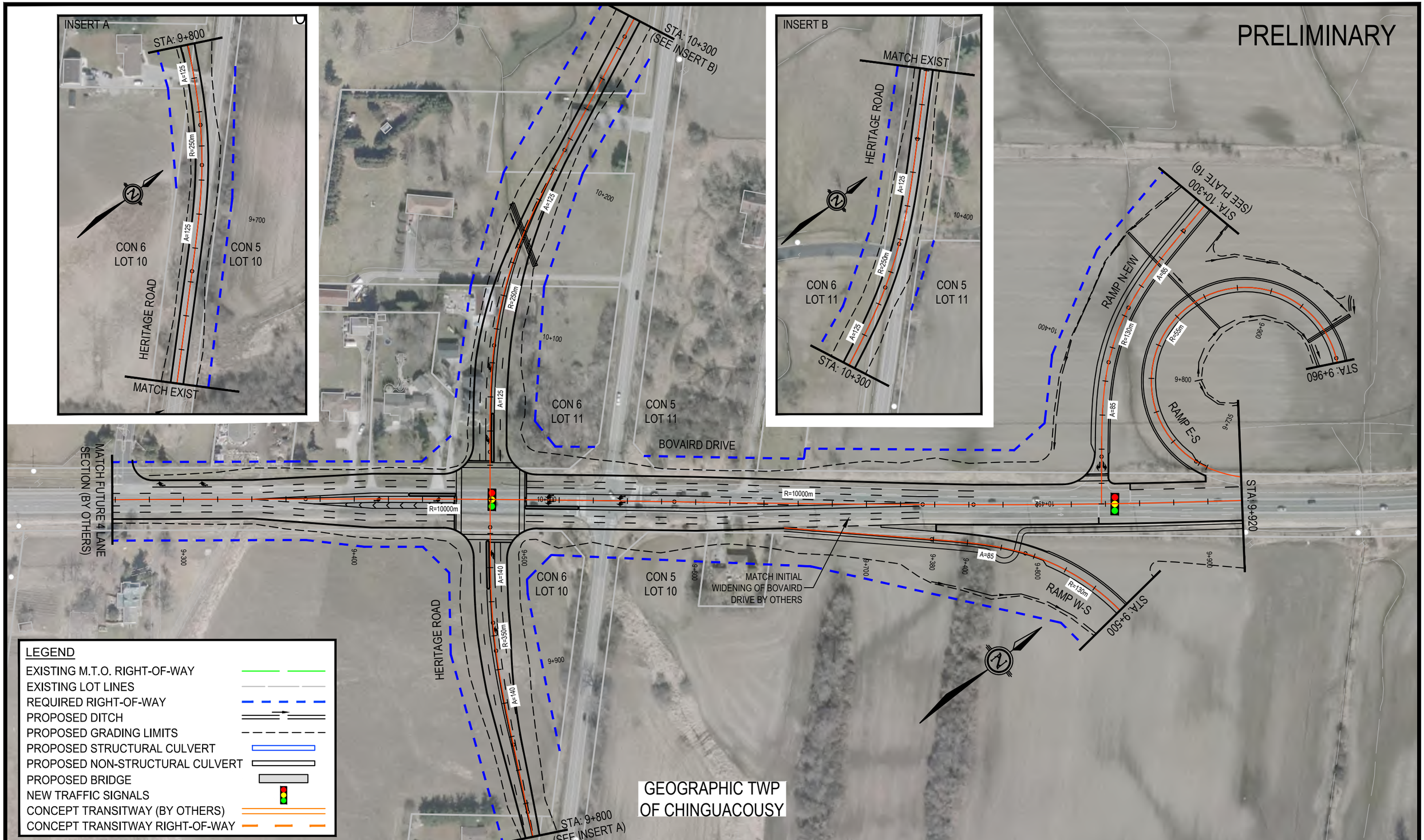


SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 213+800 TO STATION 214+500

SCALE
25m 0m 50m
1:2000

PLATE
B13



wsp AECOM

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HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

PRELIMINARY DESIGN PLAN

BOVAIRD DRIVE

STATION 9+258 TO STATION 9+920

SCALE

25m 0m 50m

1:2000

PLATE

B14

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 11

CONCEPTUAL
TRANSIT STATION
AREA

TRANSCANADA PIPELINE

CARPOOL PARKING

STA. 9+500

RAMP E-N

9+400

9+360

MATCH FUTURE 6 LANE
SECTION (BY OTHERS)

A=225

R=1200m

A=225

BOVAIRD DRIVE

10+400

10+500

10+599

STA: 10+260

INITIAL WIDENING
OF BOVAIRD DRIVE
BY OTHERS

CON 5
LOT 10

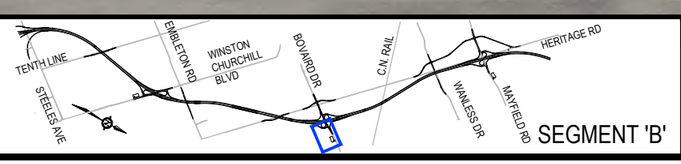
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

BOVAIRD DRIVE

STATION 10+260 TO STATION 10+375

SCALE

25m 0m 50m

1:2000

PLATE

B15

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 10+300
(SEE PLATE 14)

RAMP N-E/W

10+200

A=160

10+100

R=340m

10+000

A=160

CON 5
LOT 11

CON 5
LOT 12

W-W73

STA: 214+500

214+600

A=410

214+700

214+800

214+900

HIGHWAY 413

215+000

215+100

STA: 215+200

R=2000m

RAMP E-N

9+600

9+700

9+800

9+900

10+000

STA: 9+500

CONCEPTUAL
TRANSIT STATION
AREA

TRANSCANADA PIPELINE

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 214+500 TO STATION 215+200

SCALE

25m 0m 50m

1:2000

PLATE

B16

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 12

CON 5
LOT 13

STA: 215+200

HIGHWAY 413

215+300

215+400

A=410

215+500

215+600

215+700

R=2300m

215+800

STA: 215+900

W-21A

C.N. RAIL

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
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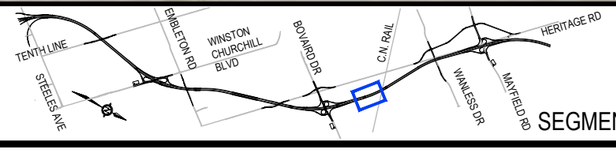

SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 215+200 TO STATION 215+900

SCALE

25m 0m 50m

1:2000

PLATE

B17

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 13

CON 5
LOT 14

C.N. RAIL

W-21B

STA: 215+900

STA: 216+600

A=410

216+000

216+100

216+200

HIGHWAY 413

216+300

216+400

216+500

DRY POND 3 LOCATION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

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HIGHWAY 413
PRELIMINARY DESIGN
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SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 215+900 TO STATION 216+600

SCALE

25m 0m 50m

1:2000

PLATE

B18

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

W-W76

STA: 5+400

CON 6
LOT 15

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

HERITAGE ROAD

A=125

R=250m

A=125

5+300

5+100

5+200

CON 5
LOT 14

CON 5
LOT 15

STA: 216+600

HIGHWAY 413

216+700

216+800

216+900

A=410

217+000

217+100

217+200

R=2300m

STA: 217+300

DRY POND 3 LOCATION

DRY POND 4 LOCATION

N

TENTH LINE
STEELES AVE
EMBLETON RD
WINSTON CHURCHILL BLVD
BOVAIRD DR
C.N. RAIL
WANLESS DR
MAYFIELD RD
HERITAGE RD

SEGMENT 'B'

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 216+600 TO STATION 217+300

SCALE

25m 0m 50m

1:2000

PLATE

B19

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 5+780
(SEE PLATE 24)

STA: 217+600

CON 6
LOT 16

CON 5
LOT 16

W-22

WANLESS DRIVE

MATCH FUTURE 4 LANE
SECTION (BY OTHERS)

STA: 10+240
(SEE INSERT)

R=5000m

A=410

A=125

HERITAGE ROAD

CON 6
LOT 15

HIGHWAY 413

DRY POND 4

CON 5
LOT 15

STA: 217+300

STA: 5+400

INSERT

CON 5
LOT 16

GEOGRAPHIC TWP
OF CHINGUACOUSY

WANLESS DRIVE

A=160

R=500m

EXIST
MATCH

CON 5
LOT 15

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

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HIGHWAY 413
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TENTH LINE · STEELES AVE · EMBLETON RD · WINSTON CHURCHILL BLVD · BOVAIRD DR · C.N. RAIL · WANLESS DR · MAYFIELD RD · HERITAGE RD

SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413 / WANLESS DRIVE
STATION 217+300 TO STATION 217+600

SCALE
25m 0m 50m
1:2000

PLATE
B20

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 6
LOT 16

CON 6
LOT 17

WET POND 4

9+900

POND CONNECTION
TO WATERCOURSE

10+000

STA: 9+840

STA: 217+600

217+700

217+800

217+900

HIGHWAY 413

218+000

218+100

218+200

STA: 218+300

A=160

STA: 10+040

DRY POND 5 LOCATION

W-W81

10+000

CON 5
LOT 16

CON 5
LOT 17

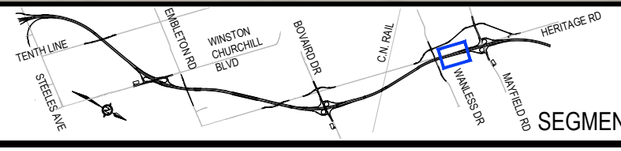
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 217+600 TO STATION 218+300

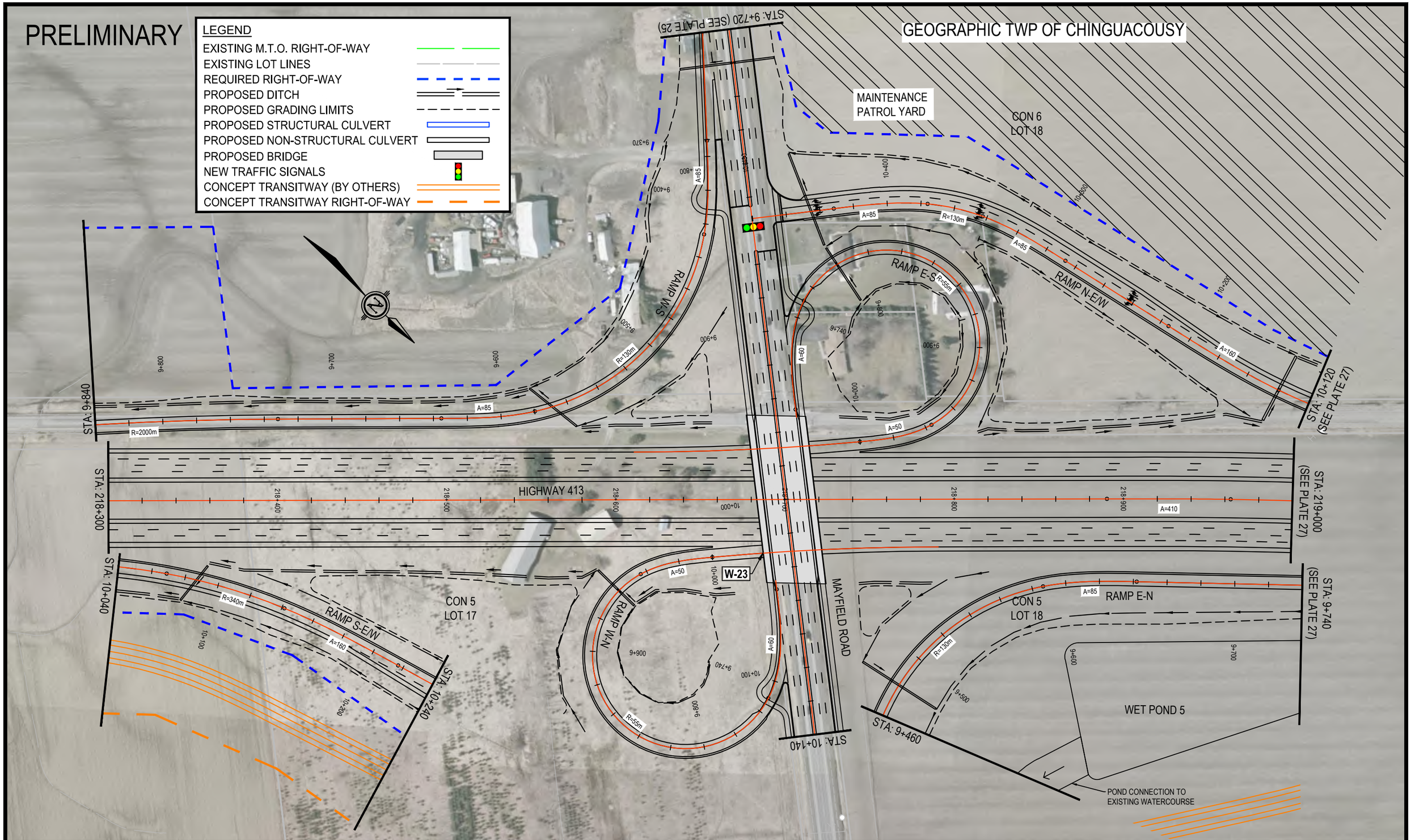
SCALE

25m 0m 50m

1:2000

PLATE

B21



wsp AECOM

Ontario Ministry of Transportation

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G.W.P. 13-20001

SEGMENT 'B'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 218+300 TO STATION 219+000

SCALE
25m 0m 50m
1:2000

PLATE
B22

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 10+240

STA: 10+140

STA: 9+460

A=90

R=130m

A=90

RAMP S-E/W

10+300

10+400

10+200

A=85

RAMP E-N

9+400

9+370

POND CONNECTION TO EXISTING WATERCOURSE

CONCEPTUAL TRANSIT STATION AREA

10+300

A=225

MAYFIELD ROAD

10+400

MATCH FUTURE 6 LANE SECTION (BY OTHERS)

CON 5
LOT 17

CON 5
LOT 18

CARPOOL PARKING

N

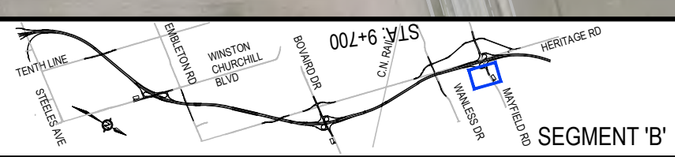
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

MAYFIELD ROAD

STATION 10+140 TO STATION 10+400

SCALE

25m 0m 50m

1:2000

PLATE

B23

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 6
LOT 16

CON 6
LOT 17

STA: 5+780
(SEE PLATE 20)

HERITAGE ROAD

A=125

R=250m

A=125

STA: 6+500

5+800

5+900

6+000

6+100

6+200

6+300

6+400

N

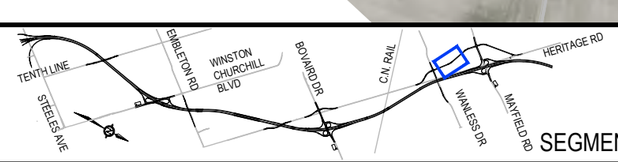
LEGEND

EXISTING M.T.O. RIGHT-OF-WAY
EXISTING LOT LINES
REQUIRED RIGHT-OF-WAY
PROPOSED DITCH
PROPOSED GRADING LIMITS
PROPOSED STRUCTURAL CULVERT
PROPOSED NON-STRUCTURAL CULVERT
PROPOSED BRIDGE
NEW TRAFFIC SIGNALS
CONCEPT TRANSITWAY (BY OTHERS)
CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HERITAGE ROAD

STATION 5+780 TO STATION 6+500

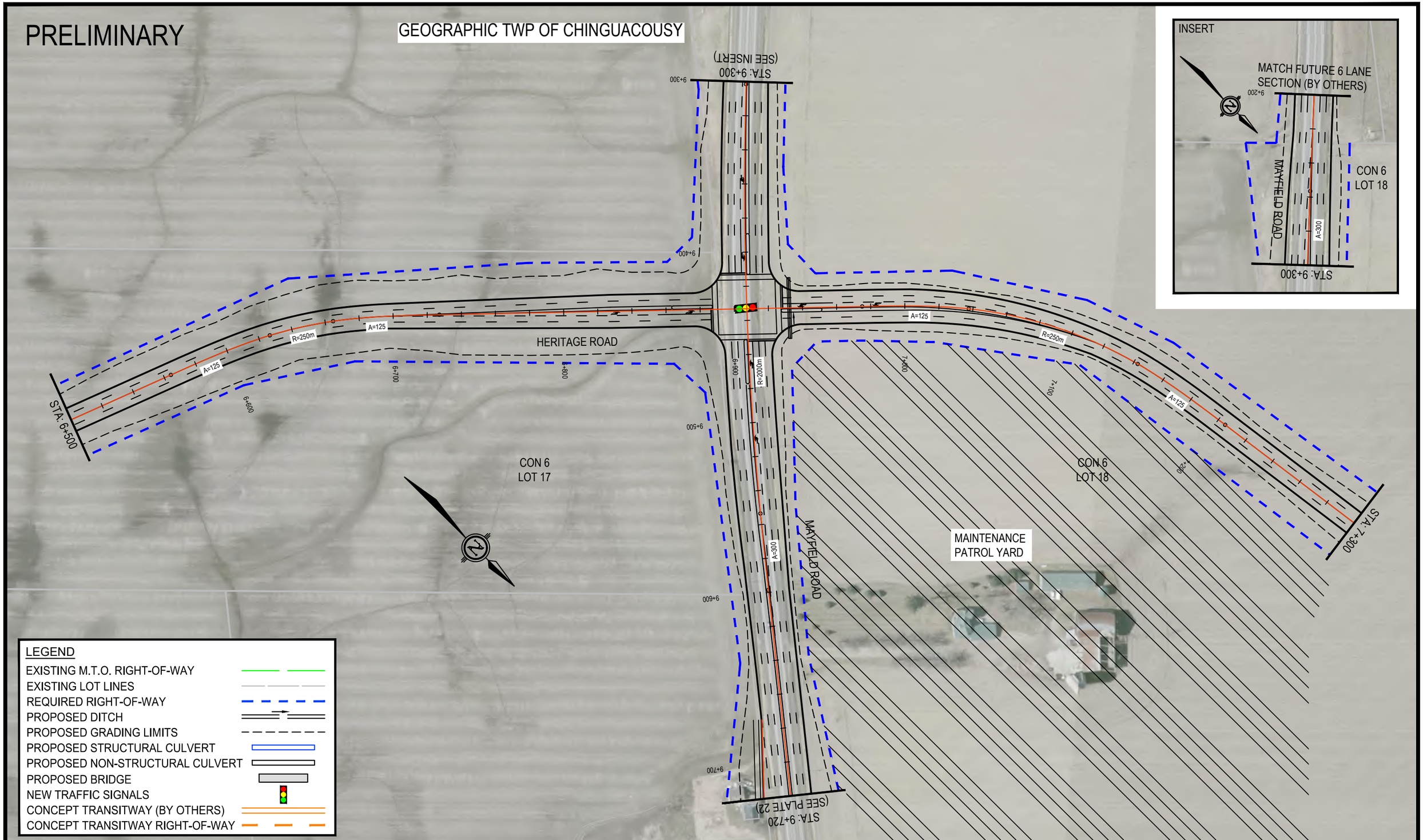
SCALE

25m 0m 50m

1:2000

PLATE

B24



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

PRELIMINARY DESIGN PLAN

HERITAGE ROAD

STATION 6+500 TO STATION 7+300

SCALE

25m 0m 50m

1:2000

PLATE

B25

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 6
LOT 19

CON 6
LOT 18

STA: 7+300

HERITAGE ROAD

STA: 7+800

7+400

7+500

7+600

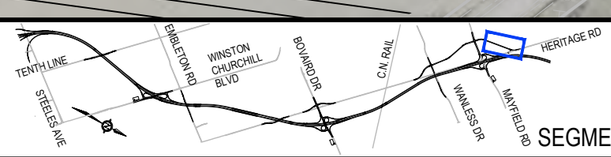
7+700

MAINTENANCE
PATROL YARD

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HERITAGE ROAD

STATION 7+300 TO STATION 8+000

SCALE

25m 0m 50m

1:2000

PLATE

B26

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

MAINTENANCE PATROL YARD

CON 6
LOT 18

CON 6
LOT 19
HERITAGE ROAD

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

CON 5
LOT 19

CON 5
LOT 18

STA 7+800

STA: 10+120
(SEE PLATE 22)

RAMP N-E/W
R=340m
A=160

RAMP E-N
R=5000m

R=250m
A=125

R=90m

HIGHWAY 413

STA: 219+000
(SEE PLATE 22)

STA: 219+700

STA: 9+740
(SEE PLATE 22)

WET POND 5

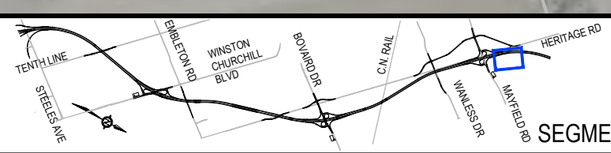
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 219+000 TO STATION 219+700

SCALE

25m 0m 50m

1:2000

PLATE

B27

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 20

CON 5
LOT 19

W-W99

STA: 219+700

219+800

HIGHWAY 413

219+900

220+000

STA: 220+040

REFER TO SEGMENT 'C'
FOR CONTINUATION

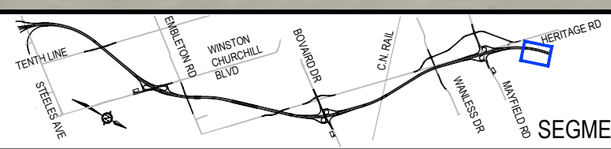
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'B'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 219+700 TO STATION 220+040

SCALE

25m 0m 50m

1:2000

PLATE

B28

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 5
LOT 20

CON 5
LOT 21

W-W100B

HIGHWAY 413

STA: 220+040

220+100

220+200

220+300

R=2300m

220+400

220+500

220+600

STA: 220+700

DRY POND W1 LOCATION

W-W100A

REFER TO
SEGMENT 'B' FOR
CONTINUATION

CON 5
LOT 19

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 220+040 TO STATION 220+700

SCALE
25m 0m 50m
1:2000

PLATE
C1

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 21

W-W101

HIGHWAY 413

STA: 220+700

220+800

220+900

221+000

221+100

R=2300m

221+200

221+300

STA: 221+400

DRY POND W2 LOCATION

CON 5
LOT 20

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 220+700 TO STATION 221+400

SCALE
25m 0m 50m
1:2000

PLATE
C2

PRELIMINARY

INSERT

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 5 LOT 21

CON 4 LOT 21

CON 4 LOT 22

CON 5 LOT 20

CON 4 LOT 20

MISSISSAUGA ROAD

MATCH EXISTING

STA: 10+120

(SEE INSERT)

W-24

W-W103D

COMMERCIAL VEHICLE INSPECTION FACILITY

WESTBOUND CVIF ENTRANCE RAMP

WESTBOUND CVIF EXIT RAMP

HIGHWAY 413

A=410

R=2300m

DRY POND W3 LOCATION

EASTBOUND CVIF EXIT RAMP

STA: 221+400

STA: 222+100

STA: 10+140

STA: 10+200

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

OLD SCHOOL RD · HERITAGE RD · MAYFIELD RD · MISSISSAUGA RD · CREDITVIEW RD · CHINGUACOUSY RD · MCLAUGHLIN RD · HURONTARIO ST · KENNEDY RD · HEART LAKE RD · HIGHWAY 410 EXT · DIXIE RD · BRAMALEA RD · TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 221+400 TO STATION 222+100

SCALE

25m 0m 50m

1:2000

PLATE

C3

PRELIMINARY

STA: 10+200

WESTBOUND CVIF RAMP

W-W104B

W-W103B

STA: 222+100

HIGHWAY 413

A=505

R=3500m

STA: 222+840

EASTBOUND CVIF RAMP

W-W103A

W-W104A

STA: 10+140

EASTBOUND CVIF RAMP

W-W103C

COMMERCIAL VEHICLE
INSPECTION FACILITY

CON 4
LOT 21

WET POND - W1

POND CONNECTION TO
EXISTING WATERCOURSE

CON 4
LOT 20

GEOGRAPHIC TWP OF CHINGUACOUSY

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 222+100 TO STATION 222+840

SCALE

25m 0m 50m

1:2000

PLATE

C4

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 22

CON 4
LOT 21

CON 3
LOT 21

W-W105

W-25

CREDITVIEW ROAD

STA: 9+860 (SEE INSERT)

STA: 222+840

STA: 223+500

HIGHWAY 413

R=3500m

A=505

222+900

223+000

223+100

223+200

223+300

223+400

9+900

10+000

10+100

10+200

10+300

MATCH EXISTING

INSERT

9+700

9+800

9+860

CON 4
LOT 22

CON 3
LOT 22

WET POND - W2

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

OLD SCHOOL RD · HERITAGE RD · MAYFIELD RD · MISSISSAUGA RD · CREDITVIEW RD · CHINGUACOUSY RD · MCLAUGHLIN RD · HURONTARIO ST · KENNEDY RD · HEART LAKE RD · HIGHWAY 410 EXT · DIXIE RD · BRAMALEA RD · TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 222+840 TO STATION 223+500

SCALE
25m 0m 50m
1:2000

PLATE
C5

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 22

CON 3
LOT 21

W-W106
W-W107D
W-W108A
W-W107B
W-W107A
W-W107C
W-W108B

STA: 223+500
STA: 9+600
STA: 224+200
STA: 10+340

RAMP N-W
RAMP W-NS
HIGHWAY 413
DRY POND W4 LOCATION

R=4000m
R=3000m
R=5000m
R=4000m
R=2300m
R=340m
R=190m
A=410
A=160
A=160
A=85

WET POND - W2
POND CONNECTION TO EXISTING WATERCOURSE
WATERCOURSE REALIGNMENT

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

MAYFIELD RD, HERITAGE RD, OLD SCHOOL RD, MISSISSAUGA RD, CREDITVIEW RD, CHINGUACOUSY RD, MCLAUGHLIN RD, HURONTARIO ST, KENNEDY RD, HEART LAKE RD, HIGHWAY 410 EXT, DIXIE RD, BRAMALEA RD, TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 223+500 TO STATION 224+200

SCALE
25m 0m 50m
1:2000

PLATE
C6

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 10+200

STA: 9+740

STA: 224+600

W-W111B

W-W111C

W-W111A

W-26

WATERCOURSE REALIGNMENT

RAMP E-NS

RAMP S-W

RAMP S-E

RAMP N-E

HIGHWAY 413

CHINGUACOUSY ROAD

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

CON 2 LOT 22

CON 2 LOT 21

CON 3 LOT 22

CON 3 LOT 21

STA: 9+600

STA: 224+200

STA: 10+340

STA: 10+260

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
CHINGUACOUSY ROAD
STATION 9+570 TO STATION 10+260

SCALE
25m 0m 50m
1:2000

PLATE
C7

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 2
LOT 21

CON 2
LOT 20

CON 3
LOT 21

CON 3
LOT 20

W-W108C

CHINGUACOUSY ROAD

STA: 10+260

MATCH FUTURE 4 LANE
SECTION (BY OTHERS)

9+880

10+300

10+400

10+500

10+600

WATERCOURSE
REALIGNMENT

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

CHINGUACOUSY ROAD

STATION 10+260 TO STATION 10+680

SCALE

25m 0m 50m

1:2000

PLATE

C8

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 2
LOT 22

CON 2
LOT 21

STA: 10+200
A=160
RAMP E-NS
R=340m
10+100
10+000
W-W114B
A=160
R=1450m
STA: 224+600
224+700
224+800
224+900
HIGHWAY 413
225+000
R=2300m
225+100
225+200
STA: 225+300
STA: 9+740
R=2000m
RAMP S-E
9+800
9+900
10+000
W-W114A

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 224+600 TO STATION 225+300

SCALE
25m 0m 50m
1:2000

PLATE
C9

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 2
LOT 23

W-W116

W-27B

W-W117B

HIGHWAY 413

STA: 225+300

A=410

225+400

225+500

225+600

A=410

225+700

225+800

R=2300m

225+900

STA: 226+000

W-27A

W-W117A

OLD SCHOOL ROAD

MCLAUGHLIN ROAD

CON 2
LOT 22

CON 1
LOT 23

CON 1
LOT 22

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 225+300 TO STATION 226+000

SCALE
25m 0m 50m
1:2000

PLATE
C10

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

N

CON 2
LOT 23

CON 1
LOT 23

MCLAUGHLIN ROAD

ORANGEVILLE-BRAMPTON RAILWAY

HIGHWAY 413

W-W118

W-28B

W-29B

W-W119B

W-28A

W-29A

W-W119A

STA: 226+000

STA: 226+700

226+100

226+200

226+300

R=2300m

226+400

A=410

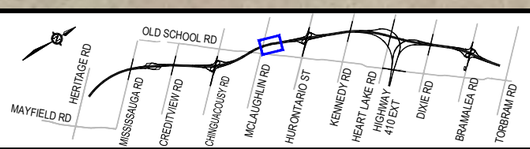
226+500

226+600

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 226+000 TO STATION 226+700

SCALE

25m 0m 50m

1:2000

PLATE

C11

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 1
LOT 23

CON 1
LOT 24

W-W121B

W-W122

W-W121A

STA: 226+700

STA: 227+400

STA: 9+680

HIGHWAY 413

R=4000m

R=4000m

A=160

R=340m

A=160

RAMP W-NS

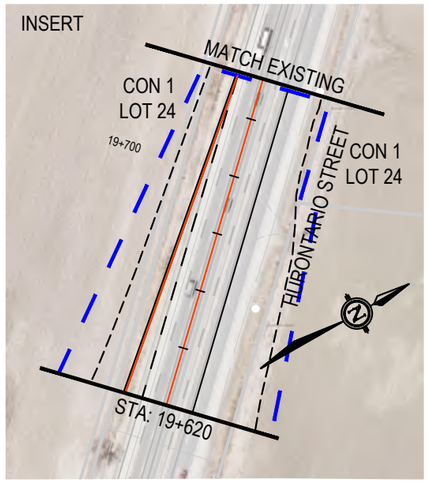
DRY POND W5 LOCATION

STA: 10+280

WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	OLD SCHOOL RD, HERITAGE RD, MAYFIELD RD, MISSISSAUGA RD, CREDITVIEW RD, CHINGUACOUSY RD, MCLAUGHLIN RD, HURONTARIO ST, KENNEDY RD, HEART LAKE RD, HIGHWAY 410 EXT, DIXIE RD, BRAMALEA RD, TORBRAM RD SEGMENT 'C'	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 226+700 TO STATION 227+400	SCALE 25m 0m 50m 1:2000	PLATE C12

PRELIMINARY

INSERT



GEOGRAPHIC TWP
OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 19+620 (SEE INSERT)
HURONTARIO STREET
CON 1
LOT 24
RAMP E-NS
RAMP S-W
RAMP N-W
RAMP S-E
RAMP N-E
RAMP W-NS
W-W123
W-30
HIGHWAY 413
STA: 9+680
STA: 228+040
STA: 227+400
STA: 10+280
STA: 19+140
STA: 9+420
CON 1
LOT 23

WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	SEGMENT 'C' MAYFIELD RD · HERITAGE RD · MISSISSAUGA RD · CREDITVIEW RD · CHINGUACOUSY RD · MCLAUGHLIN RD · HURONTARIO ST · KENNEDY RD · HEART LAKE RD · HIGHWAY 410 EXT · DIXIE RD · BRAMALEA RD · TORBRAM RD · OLD SCHOOL RD
PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 227+400 TO STATION 228+040	SCALE 25m 0m 50m 1:2000	PLATE C13

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF CHINGUACOUSY

CONCEPTUAL TRANSIT STATION AREA

CON 1
LOT 23

OLD SCHOOL ROAD

MATCH EXISTING

HURONTARIO STREET

RAMP S-E

STA: 19+140

STA: 9+420

19+000

19+100

9+370

9+480

CON 1
LOT 23

N

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HURONTARIO STREET
STATION 18+920 TO STATION 19+140

SCALE
25m 0m 50m
1:2000

PLATE
C14

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

W-W131B

W-W132

W-W131A

STA: 228+040

STA: 228+800

HIGHWAY 413

R=4000m

R=5000m

R=4000m

R=3500m

A=505

228+100

228+200

228+300

228+400

228+500

228+600

228+700

WET POND - W3

POND CONNECTION TO EXISTING WATERCOURSE

CON 1
LOT 24

CON 1
LOT 23

N

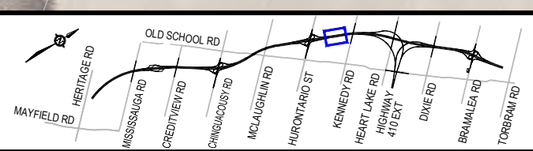
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 228+040 TO STATION 228+800

SCALE

25m 0m 50m

1:2000

PLATE

C15

PRELIMINARY

GEOGRAPHIC TWP
OF CHINGUACOUSY

LEGEND
- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

INSERT A

MATCH EXISTING

CON 1
LOT 25

CON 2
LOT 25

KENNEDY ROAD

STA: 9+760

CON 1
LOT 25

CON 1
LOT 24

STA: 9+760 (SEE INSERT A)

9+800

9+900

CON 2
LOT 24

POND CONNECTION TO
EXISTING WATERCOURSE

W-31

W-W133B

W-W141B

HIGHWAY 413

STA: 228+800

228+900

229+000

229+100

229+200

229+300

229+400

STA: 229+500

R=3500m

R=3475m

R=2034m

10+000

10+100

10+200

W-W133A

DRY POND W6
LOCATION

W-W141A

RAMP W-S

INSERT B

STA: 10+240

KENNEDY ROAD

10+300

MATCH EXISTING

STA: 10+240 (SEE INSERT B)

STA: 10+140

WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	OLD SCHOOL RD, HERITAGE RD, MAYFIELD RD, MISSISSAUGA RD, CREDITVIEW RD, CHINGUACOUSY RD, MCLAUGHLIN RD, HURONTARIO ST, KENNEDY RD, HEART LAKE RD, HIGHWAY 410 EXT, DIXIE RD, BRAMALEA RD, TORBRAM RD SEGMENT 'C'	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 228+800 TO STATION 229+500	SCALE 25m 0m 50m 1:2000	PLATE C16

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 2
LOT 25

CON 2
LOT 24

RAMP S-W

RAMP W-S

HIGHWAY 413

WET POND - W4

POND CONNECTION TO
EXISTING WATERCOURSE

STA: 11+560

STA: 229+500

STA: 230+200

STA: 10+140

STA: 10+860

R=600m

R=3500m

R=4000m

R=950m

A=220

A=240

11+600
11+700
11+800
11+900
12+000
12+100
12+200
229+600
229+700
229+800
229+900
230+000
230+100
10+200
10+300
10+400
10+500
10+600
10+700
10+800

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 229+500 TO STATION 230+200

SCALE
25m 0m 50m
1:2000

PLATE
C17

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 230+640
(SEE PLATE 21)

STA: 11+080
(SEE PLATE 21)

STA: 11+280
(SEE PLATE 20)

STA: 4+780
(SEE PLATE 19)

CON 3
LOT 25

CON 3
LOT 24

CON 2
LOT 25

CON 2
LOT 24

HIGHWAY 413

RAMP S-W

RAMP W-S

HEART LAKE ROAD

MATCH EXISTING

W-33

W-34

W-35

W-32

W-W144

W-W145

W-W143

WET POND - W4

R=600m

R=950m

A=505

STA: 230+200

STA: 11+560

STA: 10+860

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

OLD SCHOOL RD, HERITAGE RD, MAYFIELD RD, MISSISSAUGA RD, CREDITVIEW RD, CHINGUACOUSY RD, MCLAUGHLIN RD, HURONTARIO ST, KENNEDY RD, HEART LAKE RD, HIGHWAY 410 EXT, DIXIE RD, BRAMALEA RD, TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 230+200 TO STATION 230+640

SCALE
25m 0m 50m
1:2000

PLATE
C18

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 25

4+500

4+600

4+700

MATCH EXISTING

HEART LAKE ROAD

STA: 4+780

W-W145

CON 2
LOT 25

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HEART LAKE ROAD

STATION 4+420 TO STATION 4+780

SCALE

25m 0m 50m

1:2000

PLATE

C19

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

STA: 9+000 (SEE PLATE 21)

STA: 10+640 (SEE PLATE 21)

RAMP S-E

RAMP S-W

R=600m

A=220

STA: 10+160

CON 3
LOT 23

REFER TO SEGMENT 'D' FOR CONTINUATION

STA: 11+140 (SEE PLATE 21)

RAMP E-S

R=638m

A=240

STA: 11+740

RAMP W-S

R=950m

STA: 11+280 (SEE PLATE 18)

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

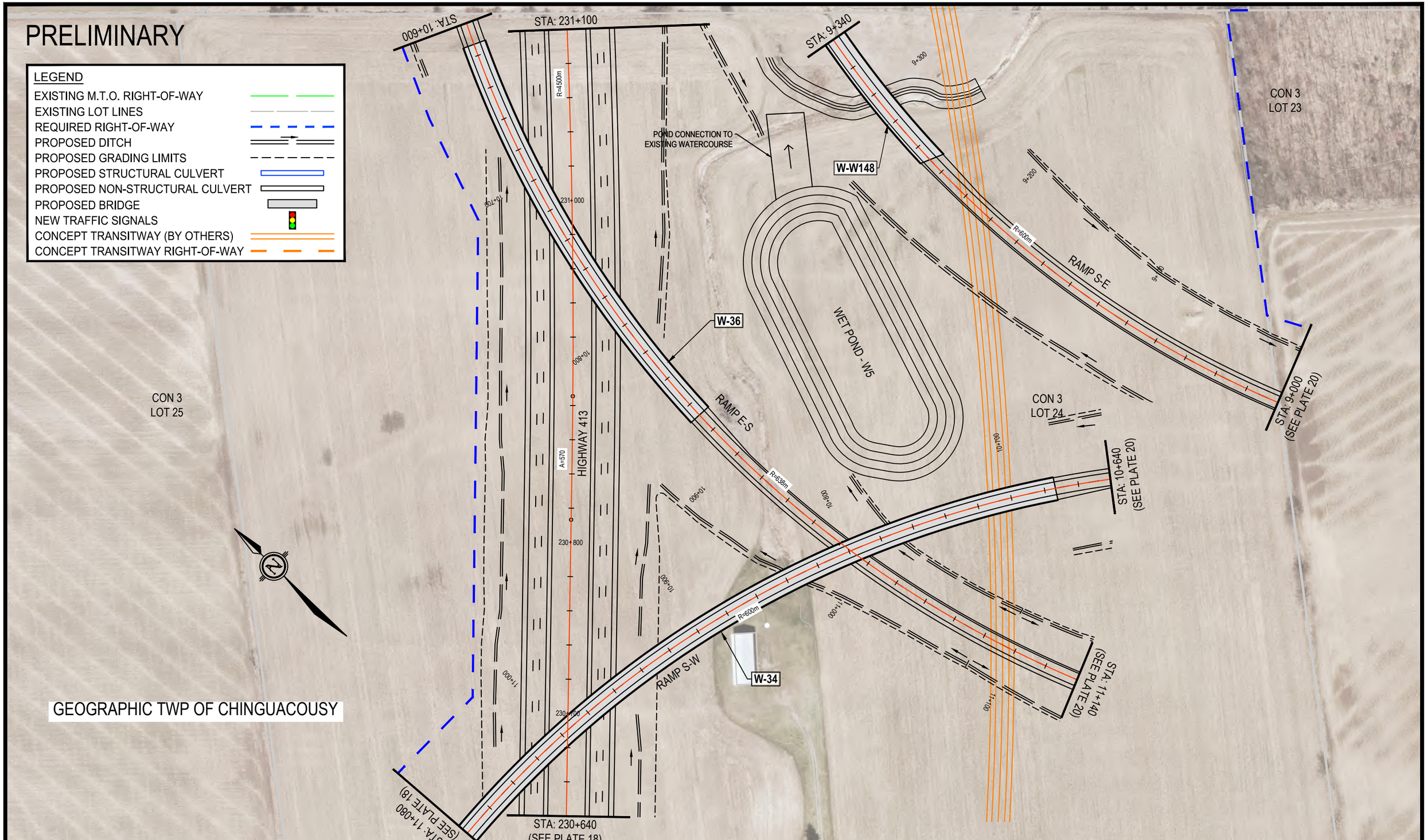
MAYFIELD RD, HERITAGE RD, OLD SCHOOL RD, MISSISSAUGA RD, CREDITVIEW RD, CHINGUACOUSY RD, MCLAUGHLIN RD, HURONTARIO ST, KENNEDY RD, HEART LAKE RD, HIGHWAY 410 EXT, DIXIE RD, BRAMALEA RD, TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HWY 410 S TO HWY 413 W RAMP
STATION 10+160 TO STATION 10+640

SCALE
25m 0m 50m
1:2000

PLATE
C20



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 230+640 TO STATION 231+100

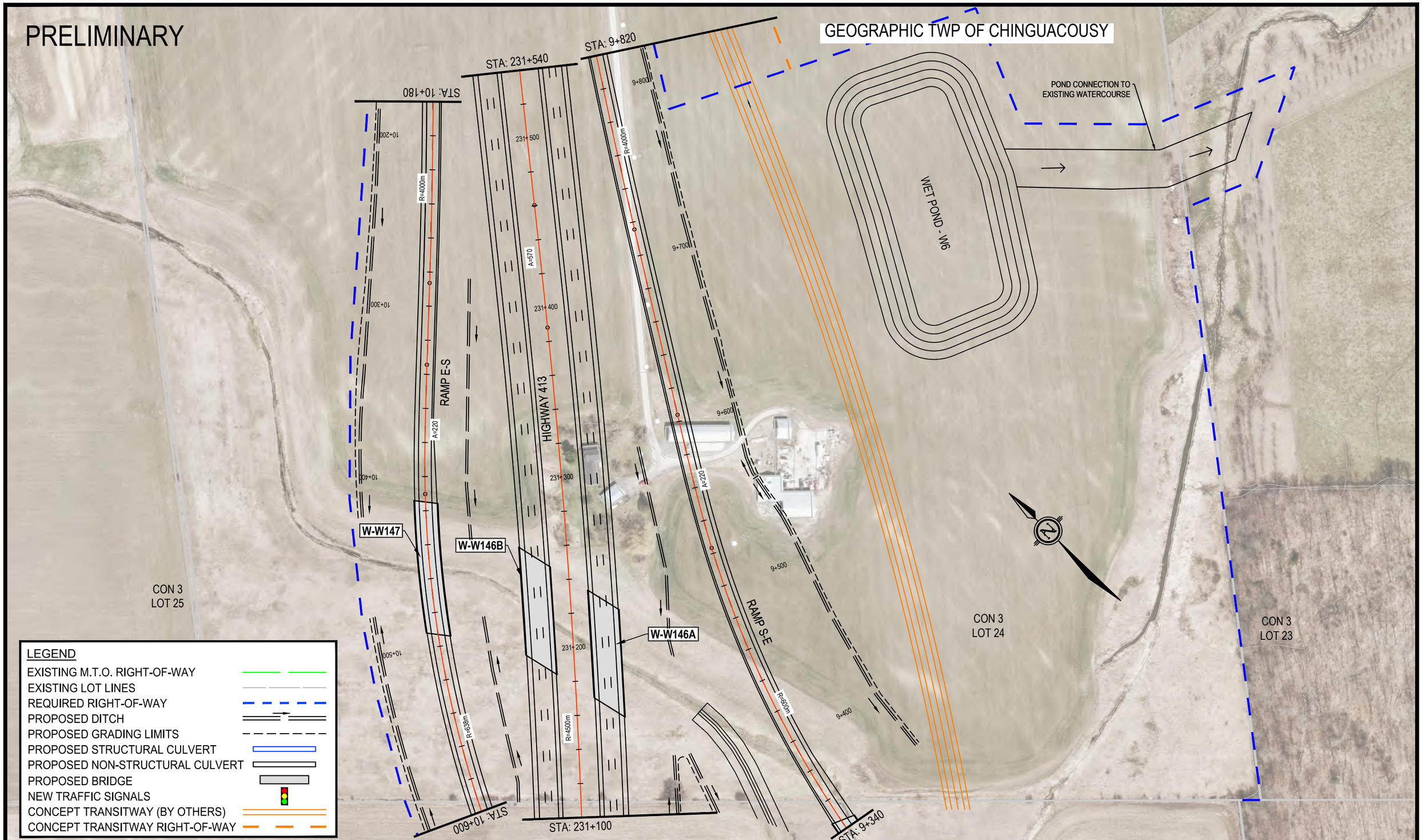
SCALE

25m 0m 50m

1:2000

PLATE

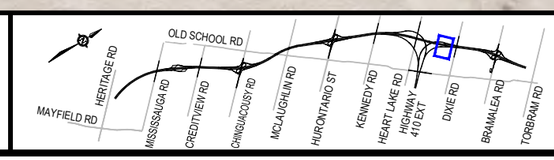
C21



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 231+100 TO STATION 231+540

SCALE

25m 0m 50m

1:2000

PLATE

C22

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

W-W149 W-W161 W-W150 W-42

STA: 10+180 STA: 231+540 STA: 9+820 STA: 232+300 STA: 9+900 (SEE INSERT)

RAMP E-S R=4000m R=5000m

RAMP S-E R=4000m

HIGHWAY 413

DIXIE ROAD

CON 3 LOT 24

CON 4 LOT 24

MATCH EXISTING

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

INSERT

MATCH EXISTING

CON 3 LOT 25

CON 4 LOT 25

CON 3 LOT 24

CON 4 LOT 24

DIXIE ROAD

STA: 9+900

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

MAYFIELD RD HERITAGE RD OLD SCHOOL RD MISSISSAUGA RD CREDITVIEW RD CHINGUACOUSY RD MCLAUGHLIN RD HURONTARIO ST KENNEDY RD HEART LAKE RD HIGHWAY 410 EXT DIXIE RD BRAMALEA RD TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 231+540 TO STATION 232+300

SCALE
25m 0m 50m
1:2000

PLATE
C23

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 4
LOT 24

W-W151

HIGHWAY 413

RAMP N-W

RAMP W-NS

STA: 232+300

STA: 233+000

STA: 9+600

STA: 10+300

A=425

A=160

A=85

R=2500m

R=2000m

R=340m

232+400 232+500 232+600 232+700 232+800 232+900

9+500 9+600 9+700 9+800

10+000 10+100 10+200

MAYFIELD RD HERITAGE RD MISSISSAUGA RD CREDITVIEW RD CHINGUACOUSY RD MCLAUGHLIN RD HURONTARIO ST KENNEDY RD HEART LAKE RD HIGHWAY 410 EXT DIXIE RD BRAMALEA RD TORBRAM RD OLD SCHOOL RD

SEGMENT 'C'

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 232+300 TO STATION 233+000

SCALE
25m 0m 50m
1:2000

PLATE
C24

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

INSERT

MATCH EXISTING

STA: 9+740 (SEE INSERT)

CON 5
LOT 24

CON 4
LOT 24

BRAMALEA ROAD

STA: 9+740

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

RAMP N-W

RAMP S-W

RAMP E-NS

RAMP N-E

RAMP W-NS

RAMP S-E

W-43

W-W156

STA: 9+600

STA: 233+000

STA: 233+600

STA: 9+860

STA: 10+300

STA: 9+420

STA: 10+200

HIGHWAY 413

DRY POND W7
LOCATION

CON 5
LOT 24

CON 4
LOT 24

CON 5
LOT 23

MAINTENANCE
PATROL YARD

PILE

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

MAYFIELD RD · HERITAGE RD · OLD SCHOOL RD · MISSISSAUGA RD · CREDITVIEW RD · CHINGUACOUSY RD · MCLAUGHLIN RD · HURONTARIO ST · KENNEDY RD · HEART LAKE RD · HIGHWAY 410 EXT · DIXIE RD · BRAMALEA RD · TORBRAM RD

SEGMENT 'C'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 233+000 TO STATION 233+600

SCALE
25m 0m 50m
1:2000

PLATE
C25

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

MAINTENANCE
PATROL YARD

CON 5
LOT 23

MATCH FUTURE 4
LANE SECTION
(BY OTHERS)

STA: 9+420

RAMP S-E

A=85

BRAMALEA ROAD

STA: 10+200

10+300

10+400

10+500

10+600

CONCEPTUAL
TRANSIT STATION
AREA

CON 4
LOT 23

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

BRAMALEA ROAD

STATION 10+200 TO STATION 10+450

SCALE

25m 0m 50m

1:2000

PLATE

C26

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 5
LOT 24

R=2299m

A=600

STA: 233+600

233+700

233+800

R=5000m

233+900

HIGHWAY 413

234+000

234+100

234+200

STA: 234+240

W-W160B

W-W160A

REFER TO
SEGMENT 'E' FOR
CONTINUATION

STA: 9+860

9+900

10+000

CON 5
LOT 23

WET POND - W7

POND CONNECTION TO
EXISTING WATERCOURSE

MAINTENANCE
PATROL YARD

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'C'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 233+600 TO STATION 234+240

SCALE

25m 0m 50m

1:2000

PLATE

C27

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 16

STA: 20+100
(SEE INSERT)

EXISTING HIGHWAY 410

20+114
20+200
20+300
20+400
20+500
20+600
20+700

R=5000m

STA: 20+800

COUNTRYSIDE DRIVE

INSERT

MATCH EXIST
STA: 19+876

EXISTING HIGHWAY 410

STA: 20+100

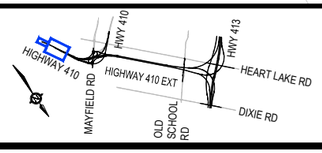
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXISTING)
STATION 19+876 TO STATION 20+800

SCALE
25m 0m 50m
1:2000

PLATE
D1

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 16

CON 3
LOT 17

STA: 20+800

STA: 20+800

EXISTING HIGHWAY 410

RAMP S-EW (MAYFIELD RD)

RAMP S-W (EXIST HWY 410)

STA: 21+500

STA: 21+500

STA: 10+480

STA: 10+480

A=256

A=260

A=250

A=125

R=4000m

R=1000m

R=560m

R=785m

R=800m

R=800m

R=300m

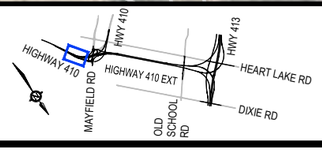
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXISTING)
STATION 20+800 TO STATION 21+500

SCALE
25m 0m 50m
1:2000

PLATE
D2

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 3 LOT 17

CON 3 LOT 18

MAYFIELD ROAD

HIGHWAY 410 EXTENSION

RAMP N-EW

RAMP E-S

RAMP W-S

RAMP E-N

RAMP S-W

RAMP S-EW

RAMP W-N

W-W162

W-W163

W-W134

W-W135

W-W137

W-W136

W-41

W-40

W-39B

W-39A

W-38

STA: 9+080

STA: 21+500

STA: 10+480

STA: 9+740 (EXIST)

STA: 9+700 (SEE PLATE 4)

STA: 11+400 (SEE PLATE 4)

STA: 10+080 (SEE PLATE 5)

STA: 22+200 (SEE PLATE 5)

STA: 10+225 (SEE INSERT)

GEOGRAPHIC TWP OF CHINGUACOUSY

INSERT

STA: 10+225

CON 3 LOT 17

MAYFIELD ROAD

CON 3 LOT 18

MATCH EXISTING

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

HIGHWAY 410
MAYFIELD RD
HWY 410
HIGHWAY 410 EXT
HWY 413
HEART LAKE RD
OLD SCHOOL RD
DIXIE RD

SEGMENT 'D'

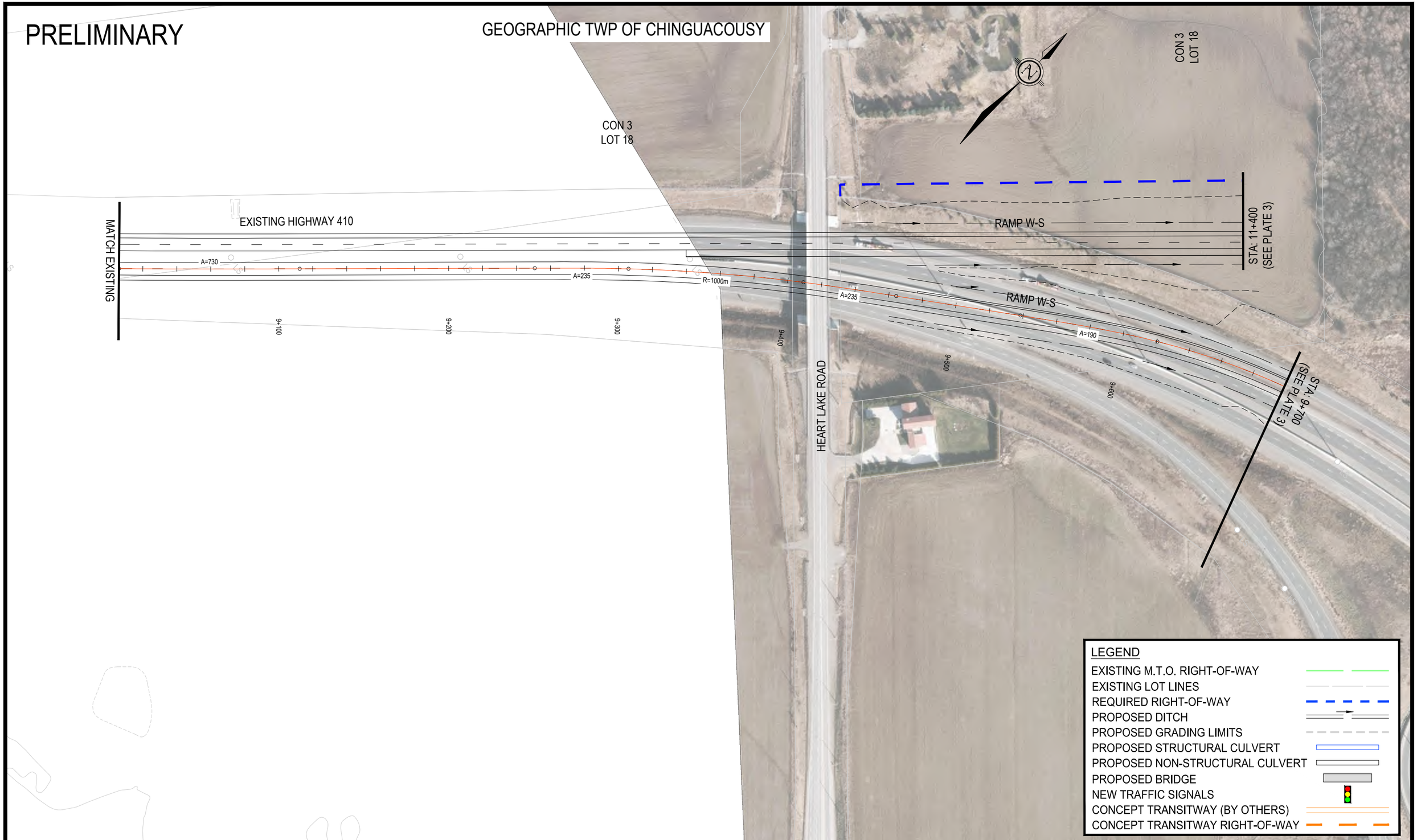
PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXTENSION)
STATION 21+500 TO STATION 22+200

SCALE
25m 0m 50m
1:2000

PLATE
D3

PRELIMINARY

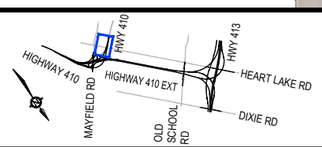
GEOGRAPHIC TWP OF CHINGUACOUSY



WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXISTING) RAMPS
STATIONS VARY

SCALE
25m 0m 50m
1:2000

PLATE
D4

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 18

CON 3
LOT 19

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

W-W134

STA: 10+080
(SEE PLATE 3)

RAMP N-EW (MAYFIELD RD)

DRY POND W8 LOCATION

A=175

A=350

A=350

HIGHWAY 410 EXTENSION

STA: 22+900

STA: 22+200
(SEE PLATE 3)

RAMP E-N (MAYFIELD RD)

STA: 22+200
(SEE PLATE 3)

POND CONNECTION TO
EXISTING WATERCOURSE

WET POND - W9

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXTENSION)
STATION 22+200 TO STATION 22+900

SCALE
25m 0m 50m
1:2000

PLATE
D5

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 19

CON 3
LOT 20

CON 3
LOT 21

STA: 22+900

23+000

23+100

23+200

23+300

HIGHWAY 410 EXTENSION

23+400

23+500

STA: 23+600

WET POND - W9

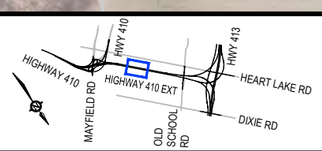
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN

HIGHWAY 410 (EXTENSION)

STATION 22+900 TO STATION 23+600

SCALE

25m 0m 50m

1:2000

PLATE

D6

PRELIMINARY

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 3
LOT 21

CON 3
LOT 22

W-W142B

W-W142A

STA: 23+600

STA: 12+440

STA: 9+380

RAMP E/W-S (HWY 413)

A=600

HIGHWAY 410 EXTENSION

23+700

23+800

23+900

24+000

24+100

24+200

12+600

RAMP S-E/W (HWY 413)

9+181

9+400

POND CONNECTION TO
EXISTING WATERCOURSE

WET POND - W8

CON 3
LOT 20

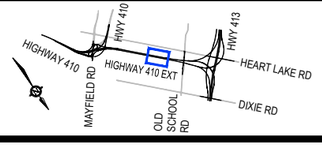
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410 (EXTENSION)
STATION 23+600 TO STATION 24+200

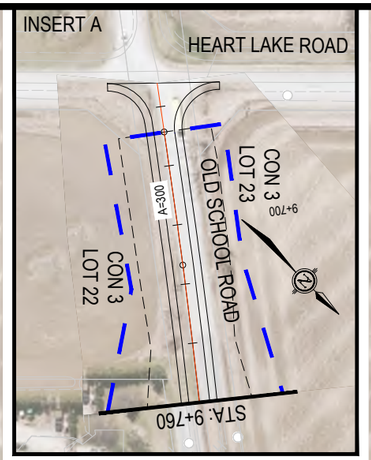
SCALE
25m 0m 50m
1:2000

PLATE
D7

PRELIMINARY

GEOGRAPHIC TWP
OF CHINGUACOUSY

INSERT A



LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 12+440

STA: 9+380

STA: 11+740

STA: 10+160

R=5000m

R=4000m

R=2000m

A=600

A=300

RAMP E/W-S (HWY 413)

RAMP S-E/W (HWY 413)

CON 3
LOT 22

CON 3
LOT 23

W-37

OLD SCHOOL ROAD

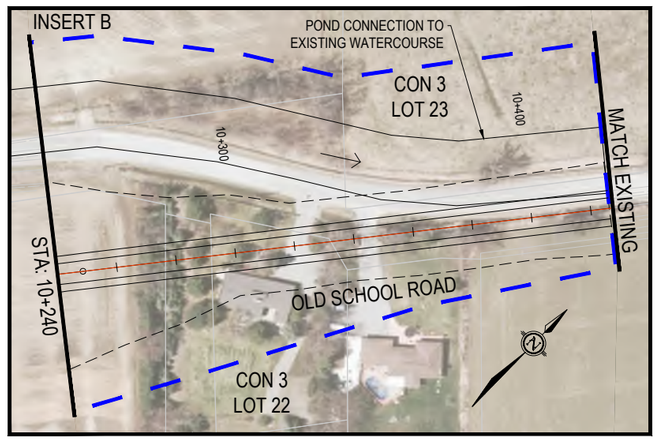
WET POND - W10

POND CONNECTION TO
EXISTING WATERCOURSE

STA: 10+240 (SEE INSERT B)

REFER TO
SEGMENT 'C' FOR
CONTINUATION

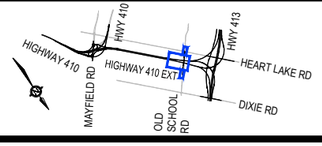
INSERT B



WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'D'

PRELIMINARY DESIGN PLAN
HIGHWAY 410/413 RAMPS
STATIONS VARY

SCALE
25m 0m 50m
1:2000

PLATE
D8

PRELIMINARY

CON 5
LOT 24

CON 6
LOT 24

CON 5
LOT 23

CON 6
LOT 23

STA: 9+800

TORBRAM RD

006+600

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

REFER TO SEGMENT 'C' FOR CONTINUATION

STA: 234+240

234+300

234+400

R=5000m

234+500

000+01

HIGHWAY 413

234+600

234+700

A=600

234+800

234+900

STA: 235+000

E-W1B

DRY POND - E1

E-W1A

E-1

10+100

STA: 10+200

GEOGRAPHIC TWP OF CHINGUACOUSY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 234+240 TO STATION 235+000

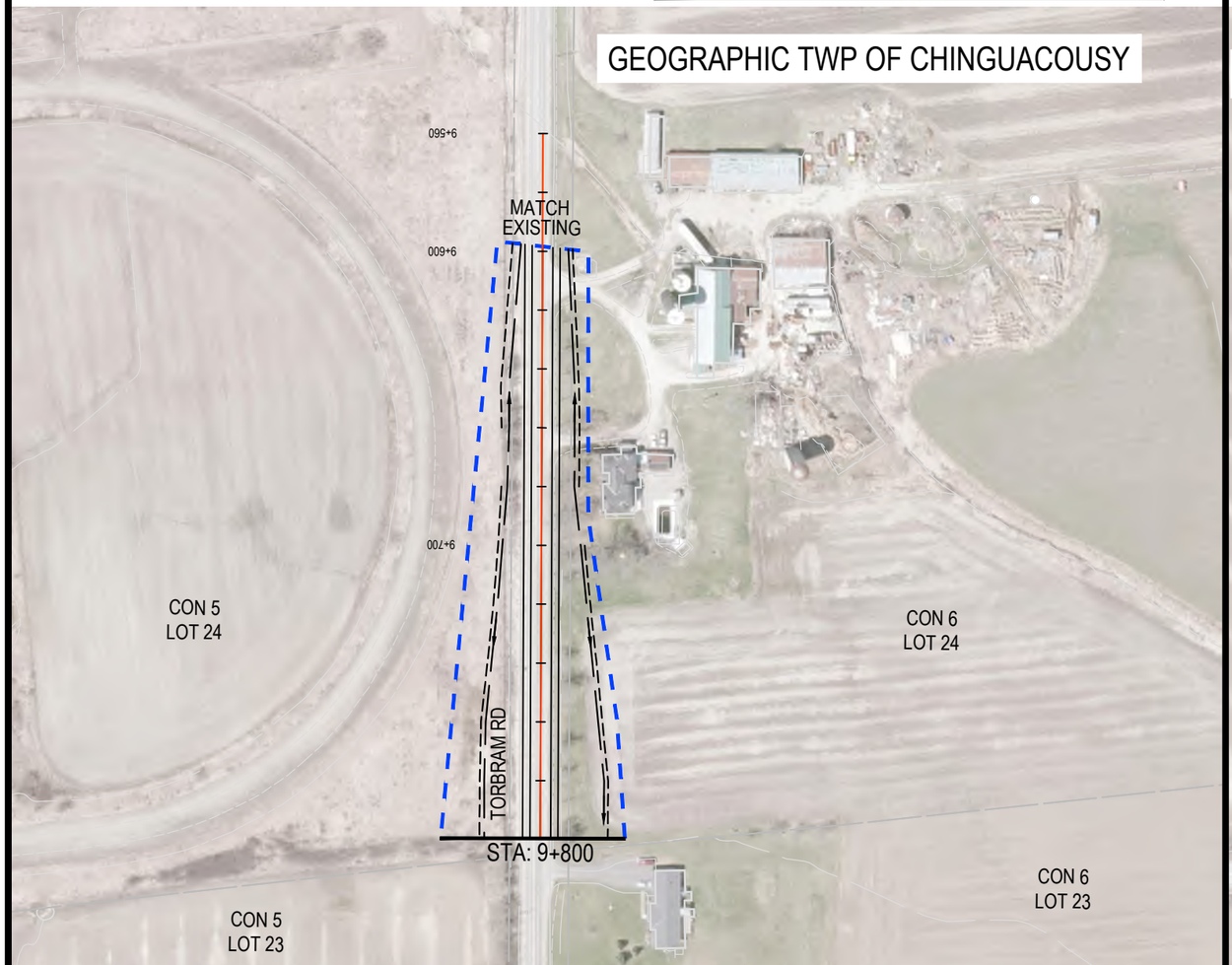
SCALE
25m 0m 50m
1:2000

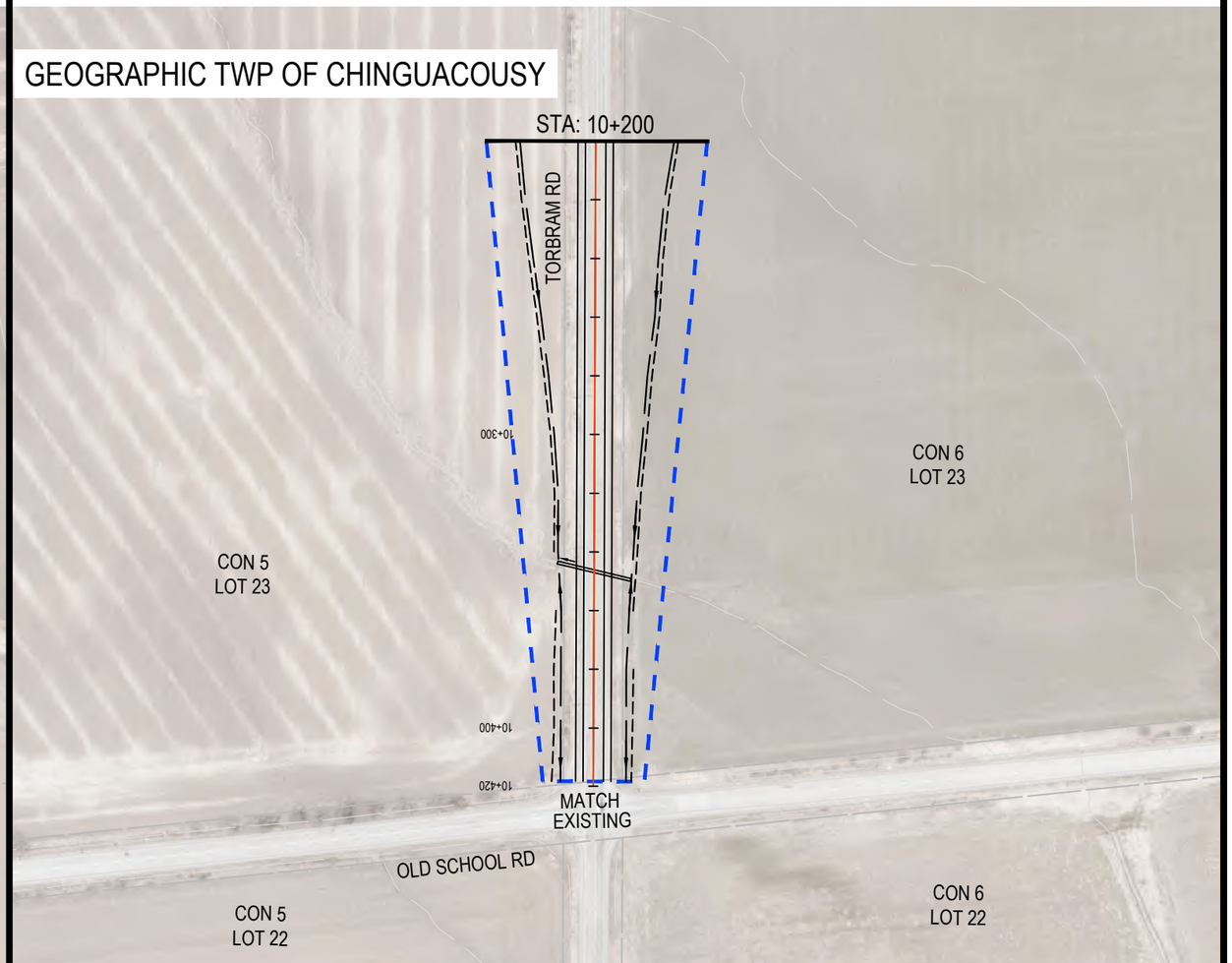
PLATE
E1

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY





wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

TORBRAM ROAD
STATION 9+560 TO STATION 9+800
STATION 10+200 TO STATION 10+420

SCALE
25m 0m 50m
1:2000

PLATE
E1A

PRELIMINARY

MATCH LINE A-A

WATERCOURSE REALIGNMENT

CON 6
LOT 23

INSERT

CON 6
LOT 24

GEOGRAPHIC TWP OF CHINGUACOUSY

CON 6
LOT 23

WATERCOURSE REALIGNMENT

E-W2B

E-W2C

E-W2A

E-W2D

RAMP N-W

RAMP W-N/S

STA: 9+620

STA: 235+000

STA: 235+750

STA: 10+300

HIGHWAY 413

R=4000m

R=5000m

R=4000m

A=160

R=340m

A=160

235+100

235+200

235+300

235+400

235+500

235+600

235+700

9+620.00

10+000

10+100

10+200

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

MATCH LINE A-A
(SEE INSERT)

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 235+000 TO STATION 235+750

SCALE

25m 0m 50m

1:2000

PLATE

E2

PRELIMINARY

GEOGRAPHIC TWP OF ALBION

GEOGRAPHIC TWP OF CHINGUACOUSY

LEGEND
- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 9+780
STA: 9+620
STA: 235+750
STA: 310+600
STA: 10+300
STA: 10+250
CON 6 LOT 24
CON 6 LOT 23
CON 1 LOT 7
CON 1 LOT 6
WATERCOURSE REALIGNMENT
AIRPORT RD
HIGHWAY 413
WET POND - E1
E-2
RAMP N-W
RAMP E-N/S
RAMP S-W
RAMP S-E
RAMP N-E
RAMP W-N/S
STA BACK = 235+808.23
STA AHEAD = 310+000.00
SEE PLATE E3A FOR CONCEPTUAL TRANSIT STATION

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

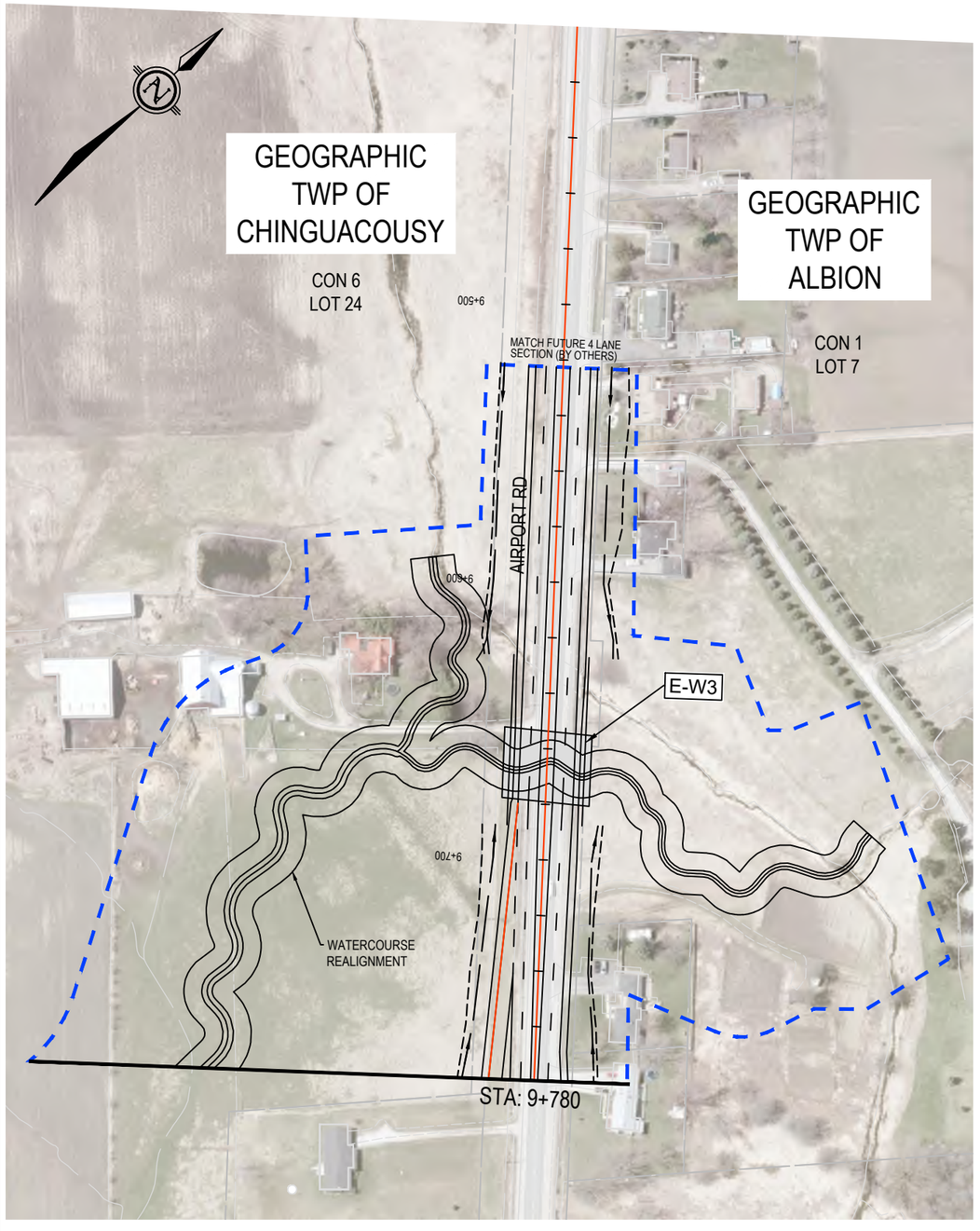
SEGMENT 'E'

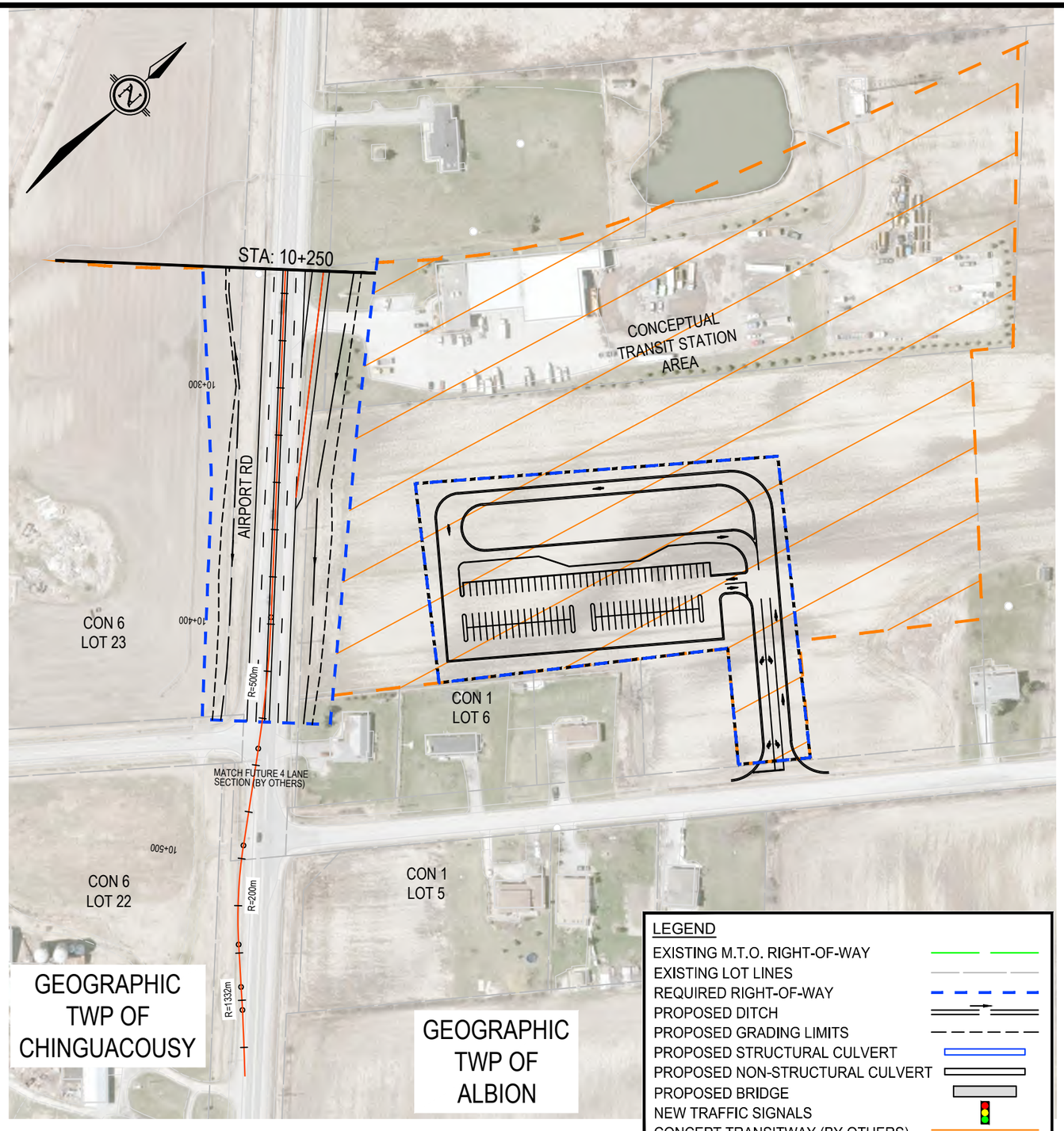
PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 235+750 TO STATION 310+600

SCALE
25m 0m 50m
1:2000

PLATE
E3

PRELIMINARY





wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

AIRPORT ROAD
STATION 9+400 TO STATION 9+780
STATION 10+250 TO STATION 10+600

SCALE
25m 0m 50m
1:2000

PLATE
E3A

PRELIMINARY

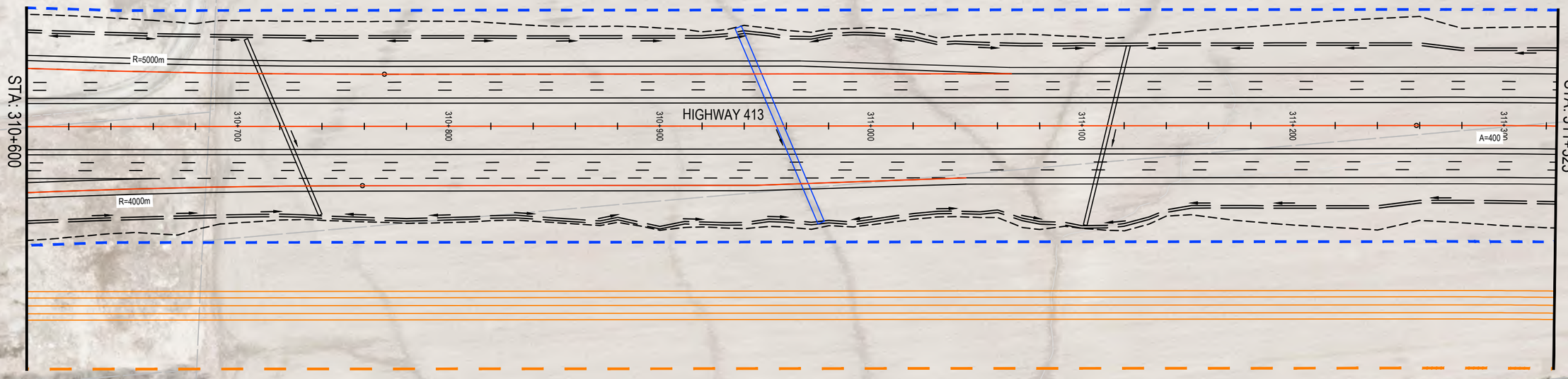
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF ALBION

CON 1
LOT 7

INNISLAKE RD



CON 1
LOT 6

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 310+600 TO STATION 311+325

SCALE
25m 0m 50m
1:2000

PLATE
E4

PRELIMINARY

GEOGRAPHIC TWP OF ALBION

CON 2
LOT 7

CON 2
LOT 6

CON 1
LOT 6

STA: 9+840

STA: 10+240

STA: 311+325

STA: 312+100

INNIS LAKE RD

HIGHWAY 413

E-3

R=2300m

006+600
010+000
010+100
010+200
311+400
311+500
311+600
311+700
311+800
311+900
312+000

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 311+325 TO STATION 312+100

SCALE

25m 0m 50m

1:2000

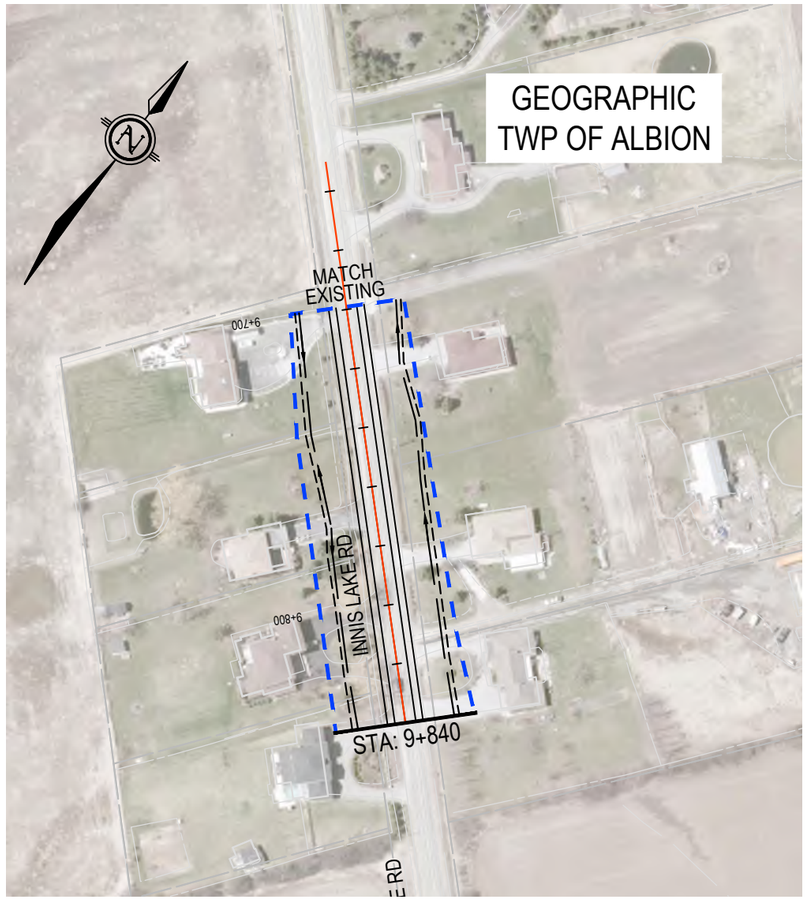
PLATE

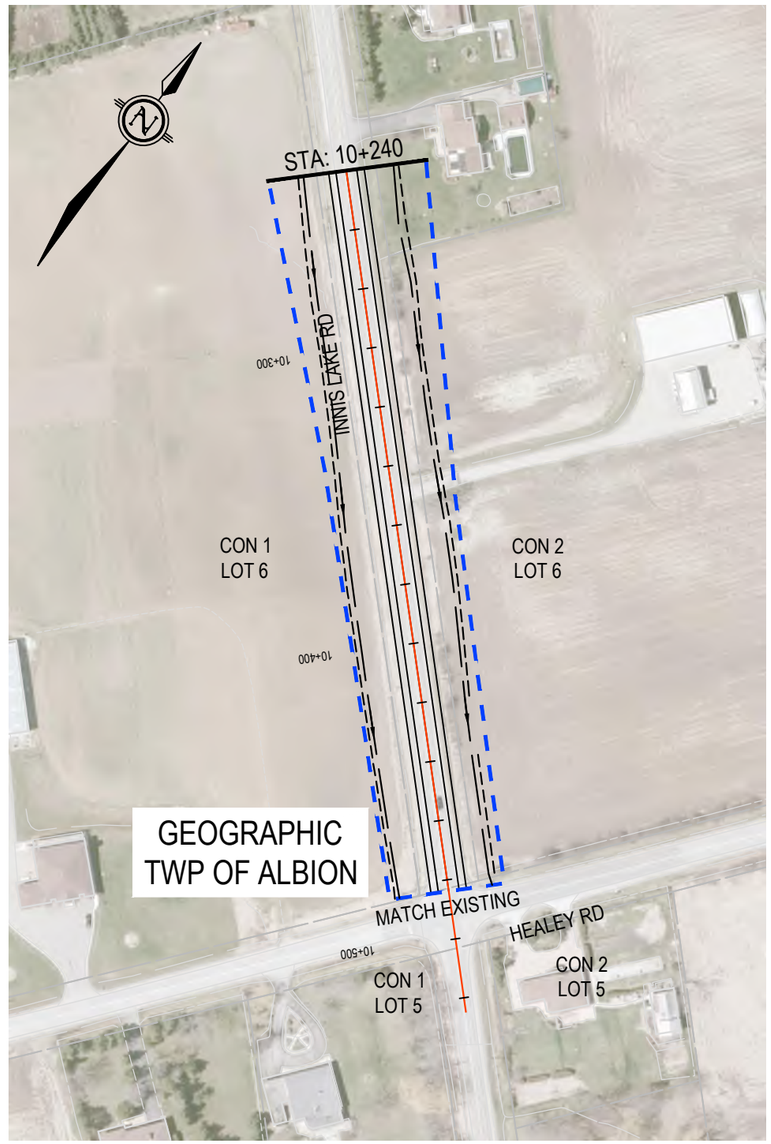
E5

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY





wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

PRELIMINARY DESIGN PLAN

INNIS LAKE ROAD
STATION 9+750 TO STATION 9+840
STATION 10+240 TO STATION 10+550

SCALE
25m 0m 50m
1:2000

PLATE
E5A

PRELIMINARY

GEOGRAPHIC TWP OF ALBION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 2
LOT 6

CON 3
LOT 6

CENTREVILLE CREEK RD

HEALEY RD

E-W4

E-4B

E-5B

E-4A

E-5A

STA: 312+100

STA: 312+850

HIGHWAY 413

312+200

312+300

312+400

A=400

312+500

312+600

312+700

312+800

9+800

9+900

10+000

10+100

10+200

WET POND - E2

DRY POND - E2

POND CONNECTION TO
EXISTING WATERCOURSE

CON 2
LOT 5

CON 3
LOT 5

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 312+100 TO STATION 312+850

SCALE

25m 0m 50m

1:2000

PLATE

E6

PRELIMINARY

CON 3
LOT 6

HEALEY RD

CON 3
LOT 5

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 312+850

312+900 313+000 313+100 313+200 HIGHWAY 413 313+300 313+400 313+500

STA: 313+600

GEOGRAPHIC TWP OF ALBION

CENTREVILLE CREEK RD

CON 2
LOT 5

CON 3
LOT 4

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 312+850 TO STATION 313+600

SCALE
25m 0m 50m
1:2000

PLATE
E7

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 3
LOT 5

CON 4
LOT 4

STA: 9+775

THE GORE RD

HIGHWAY 413

STA: 313+600

STA: 314+350

STA: 10+220

STA: 10+100

STA: 9+760

STA: 10+440

E-6B

E-6A

RAMP N/S-W

RAMP N/S-E

RAMP W-N/S

R=5000m
R=1500m
R=250m
R=3000m
R=340m
R=50m
R=55m
R=130m

A=125
A=450
A=500
A=160
A=45
A=50
A=85
A=60

313+700
313+800
313+900
314+000
314+100
314+200
314+300

9+600
9+700
9+800
9+900
10+000
10+100
10+200
10+300
10+400

WET POND - E3

POND CONNECTION TO
EXISTING WATERCOURSE

CON 3
LOT 4

GEOGRAPHIC TWP OF ALBION

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 313+600 TO STATION 314+350

SCALE
25m 0m 50m
1:2000

PLATE
E8

PRELIMINARY

GEOGRAPHIC TWP OF ALBION

THE GORE RD

MATCH EXISTING

STA: 9+775

CON 4 LOT 5

CON 4 LOT 4

CON 3 LOT 5

CON 3 LOT 4

9+600

9+700

GEOGRAPHIC TWP OF ALBION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF ALBION

STA: 10+100

STA: 9+760

STA: 10+440

RAMP N/S-E

RAMP W-N/S

A=85

MATCHLINE B-B

THE GORE RD

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

CONCEPTUAL TRANSIT STATION AREA

CON 4 LOT 4

CON 4 LOT 3

CON 3 LOT 4

CON 3 LOT 3

10+100

10+200

10+300

10+400

10+500

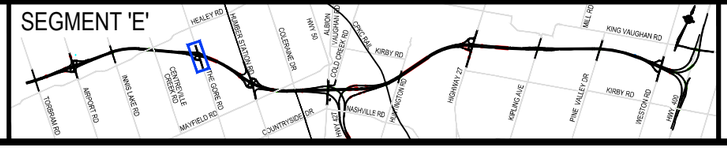
10+530

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'



PRELIMINARY DESIGN PLAN

GORE ROAD
STATION 9+500 TO STATION 9+775
STATION 10+100 TO STATION 10+530

SCALE

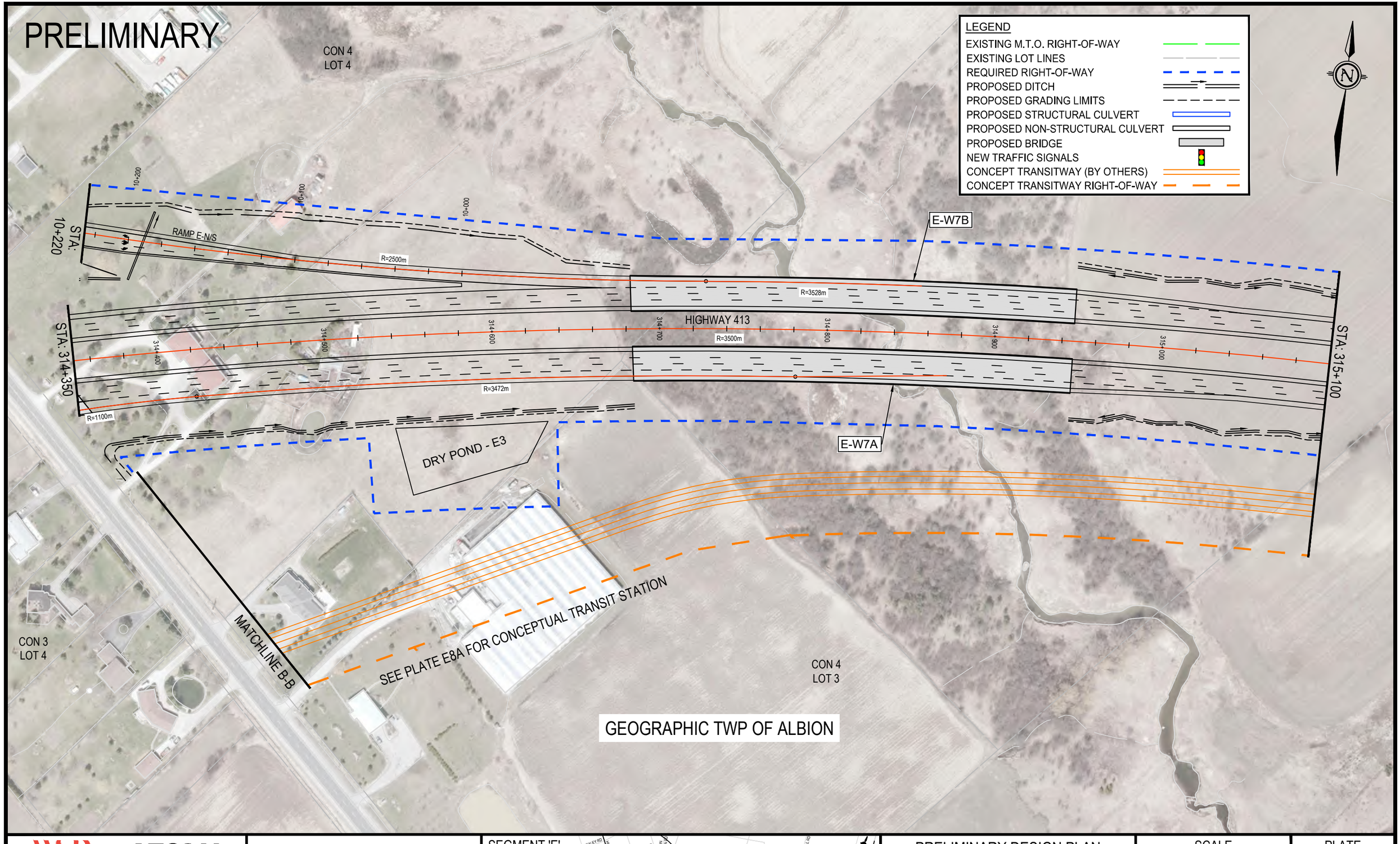
25m 0m 50m

1:2000

PLATE

E8A

PRELIMINARY



WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 314+350 TO STATION 315+100

SCALE
25m 0m 50m
1:2000

PLATE
E9

PRELIMINARY

GEOGRAPHIC TWP OF ALBION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 4
LOT 3

CON 4
LOT 2

CON 4
LOT 2

E-W9D

RAMP N-W

RAMP W-N/S

E-W9B

HIGHWAY 413

R=3528m

R=3475m

R=1900m

A=85

A=450

STA: 315+100

STA: 315+850

STA: 9+860

STA: 10+020

315+200 315+300 315+400 315+500 315+600 315+700 315+800

9+900 10+000 10+000

WSP AECOM

Ontario Ministry of Transportation

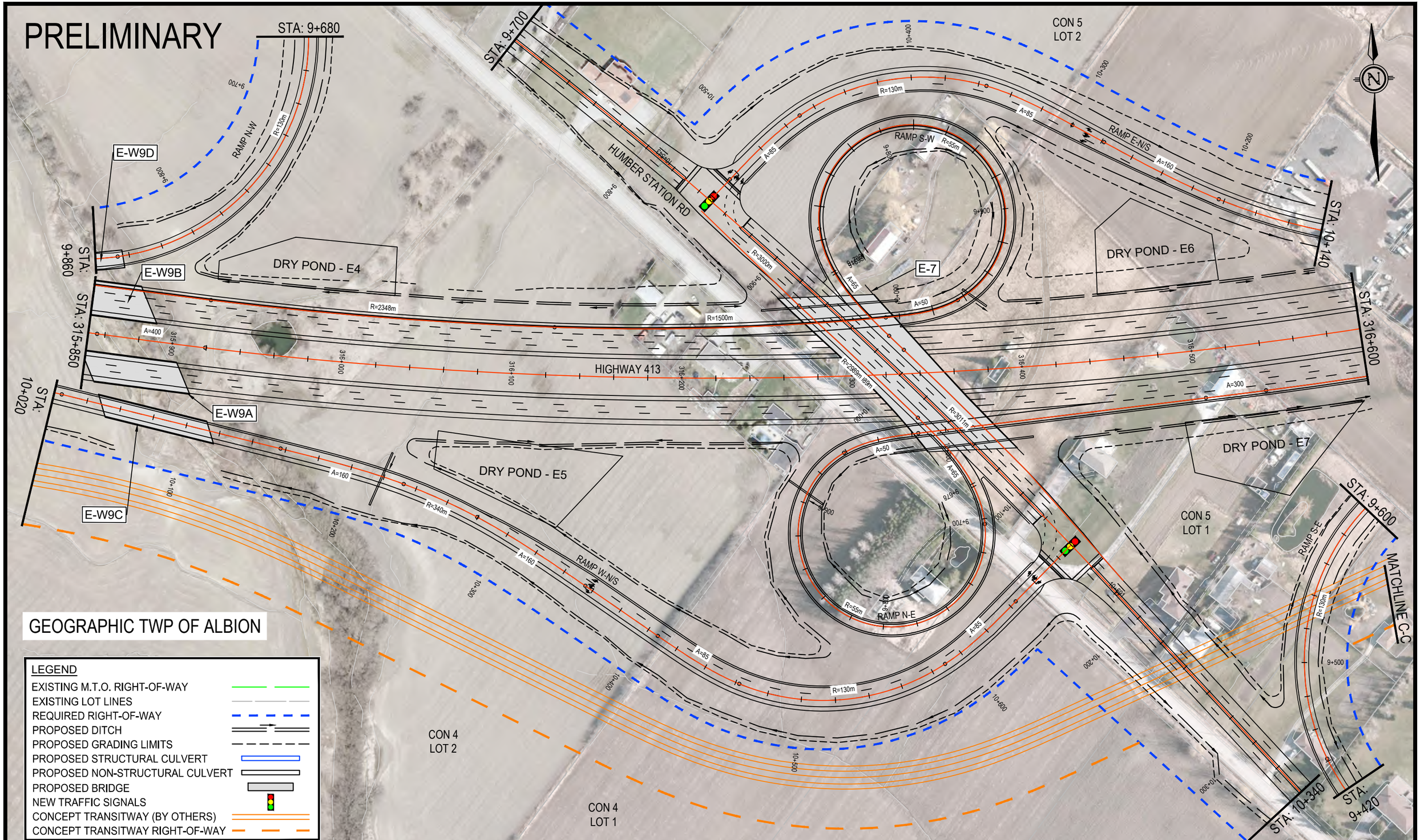
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 315+100 TO STATION 315+850

SCALE
25m 0m 50m
1:2000

PLATE
E10



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 315+850 TO STATION 316+600

SCALE

25m 0m 50m

1:2000

PLATE

E11

PRELIMINARY

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

CON 4
LOT 3

CON 5
LOT 3

HUMBER STATION RD

9+232
9+300
9+400
9+520
9+600
9+680
9+700

R=3000m

A=85

RAMP N-W

GEOGRAPHIC TWP
OF ALBION

CON 5
LOT 2

STA: 9+680

STA: 9+700

GEOGRAPHIC TWP
OF ALBION

STA: 10+340

STA: 9+420

A=85

9+400

9+386

10+400

CONCEPTUAL
TRANSIT STATION
AREA

CON 4
LOT 1

A=200

10+500

HUMBER STATION RD

R=1000m

CON 5
LOT 1

MAYFIELD RD

10+596

MATCH FUTURE 4 LANE
SECTION (BY OTHERS)

CON 10
LOT 17

CON 11
LOT 17

CLARKWAY DR

GEOGRAPHIC TWP
OF TORONTO GORE

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

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Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HUMBER STATION
STATION 9+232 TO STATION 9+700
STATION 10+340 TO STATION 10+596

SCALE

25m 0m 50m

1:2000

PLATE

E11A

PRELIMINARY

GEOGRAPHIC TWP
OF ALBION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

N

STA: 10+040
STA: 316+600
STA: 9+600
STA: 317+350
MATCHLINE C-C

E-W10
E-W11B
E-8B
E-W11A
E-8A

RAMP E-N/S
RAMP S-E
HIGHWAY 413
MAYFIELD RD
ARTERIAL A2 (FUTURE)

R=340m
A=160
R=1700m
R=2475m
R=2500m
R=2528m
A=85
A=375

CON 5
LOT 1

GEOGRAPHIC TWP
OF TORONTO GORE

CON 11
LOT 17

SEE PLATE E11A FOR CONCEPTUAL TRANSIT STATION

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 316+600 TO STATION 317+350

SCALE
25m 0m 50m
1:2000

PLATE
E12

PRELIMINARY

CON 5
LOT 1

GEOGRAPHIC TWP
OF ALBION

MAYFIELD RD

COLERAINE DR

CON 12
LOT 17

E-9B

E-W12B

RAMP S-W

STA: 9+960

STA: 317+350

STA: 410+500

HIGHWAY 413

A=400

A=403

R=2525m

R=5000m

R=4000m

RAMP W-S

STA: 10+060

E-W12C

E-W12A

E-9A

GEOGRAPHIC TWP
OF TORONTO GORE

CON 11
LOT 17

STA AHEAD = 410+000.00
STA BACK = 317+588.09

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 317+350 TO STATION 410+500

SCALE

25m 0m 50m

1:2000

PLATE

E13

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP
OF TORONTO GORE

CON 12
LOT 17

STA: 9+200
(SEE PLATE E15B)

RAMP S-W

R=4000m

A=220

STA: 9+960

STA: 410+500

HIGHWAY 413

STA: 411+250

STA: 10+060

RAMP W-S

R=4500m

DRY POND - E8

A=220

STA: 10+820

E-W12B

CON 12
LOT 16

SEE PLATE E15A FOR CONCEPTUAL TRANSIT STATION

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 410+500 TO STATION 411+250

SCALE
25m 0m 50m
1:2000

PLATE
E14

PRELIMINARY

CON 12
LOT 17

STA: 11+150
(SEE PLATE E15B)

HIGHWAY 50

STA: 9+050
(SEE PLATE E15B)

CON 10
LOT 28

E-W19B

E-12

E-W13

E-14

STA: 11+160

E-10B

STA: 411+250

HIGHWAY 413

STA: 510+700

E-10A

RAMP S-W

R=650m

RAMP E-S

R=600m

E-W19A

R=3180m

COLD CREEK RD

CON 11
LOT 27

STA: 10+820

STA BACK = 411+319.90

STA AHEAD = 510+400.00

E-13

RAMP W-S

E-W14

GEOGRAPHIC TWP
OF VAUGHAN

CON 10
LOT 27

E-14-1

DRY POND - E9

E-W15

MATCHLINE
T-T

STA: 11+120

STA: 11+640

STA: 8+460

CON 11
LOT 26

CON 12
LOT 16

STA: 10+775
(SEE PLATE E15A)

CON 10
LOT 26

REFER TO SEGMENT 'F' FOR CONTINUATION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 411+250 TO STATION 510+700

SCALE
25m 0m 50m
1:2000

PLATE
E15

PRELIMINARY

CONCEPTUAL TRANSIT STATION AREA

GEOGRAPHIC TWP OF TORONTO GORE

HIGHWAY 50

STA: 10+775

10+700

CON 11 LOT 26

10+600

MATCH FUTURE 6 LANE SECTION (BY OTHERS)

COLD CREEK RD

10+500

CON 10 LOT 26

GEOGRAPHIC TWP OF VAUGHAN

CON 12 LOT 16

COUNTRYSIDE DR

NASHVILLE RD

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 50
STATION 10+425 TO STATION 10+775

SCALE
25m 0m 50m
1:2000

PLATE
E15A

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF TORONTO GORE

GEOGRAPHIC TWP OF VAUGHAN

HIGHWAY 50

MATCH FUTURE 6 LANE SECTION (BY OTHERS)

11+400

R=3179m

CON 12
LOT 17

CON 11
LOT 28

10+300

11+300

CON 11
LOT 27

10+000

R=3180m

10+100

10+200

10+407

10+400

COLD CREEK RD

R=50m

9+100

11+200

E-11

STA: 9+200
(SEE PLATE E14)

RAMP S-W

STA: 11+150
(SEE PLATE E15)

STA: 9+050
(SEE PLATE E15)

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 50
STATION 11+150 TO STATION 11+450

SCALE
25m 0m 50m
1:2000

PLATE
E15B

PRELIMINARY

E-W18

E-W21

E-W24

STA: 11+160

RAMP E-S

A=220

A=335

STA: 10+420

CON 10
LOT 28

E-W19B

E-W22B

E-W25B

STA: 510+700

HIGHWAY 413

A=400

STA: 511+450

E-W19A

E-W22A

E-W25A

GRADING FOR HYDRO TOWERS ACCESS

STA: 9+740

GEOGRAPHIC TWP OF VAUGHAN

CON 10
LOT 27

RAMP S-E

R=3000m

A=190

DRY POND - E10

E-W23-1

E-W23-2

WATERCOURSE REALIGNMENT

STA: 8+980

E-W20

REFER TO SEGMENT 'F' FOR CONTINUATION

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 510+700 TO STATION 511+450

SCALE

25m 0m 50m

1:2000

PLATE

E16

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF VAUGHAN

CON 10 LOT 29

CON 10 LOT 28

CON 10 LOT 27

CPKC RAIL

STA: 10+420

STA: 511+450

STA: 9+740

STA: 512+200

RAMP E-S

RAMP S-E

HIGHWAY 413

R=1600m

R=2300m

R=5000m

R=2328m

E-16B

E-16A

SEE PLATE E18A FOR CONCEPTUAL TRANSIT STATION

WSP AECOM

Ontario Ministry of Transportation

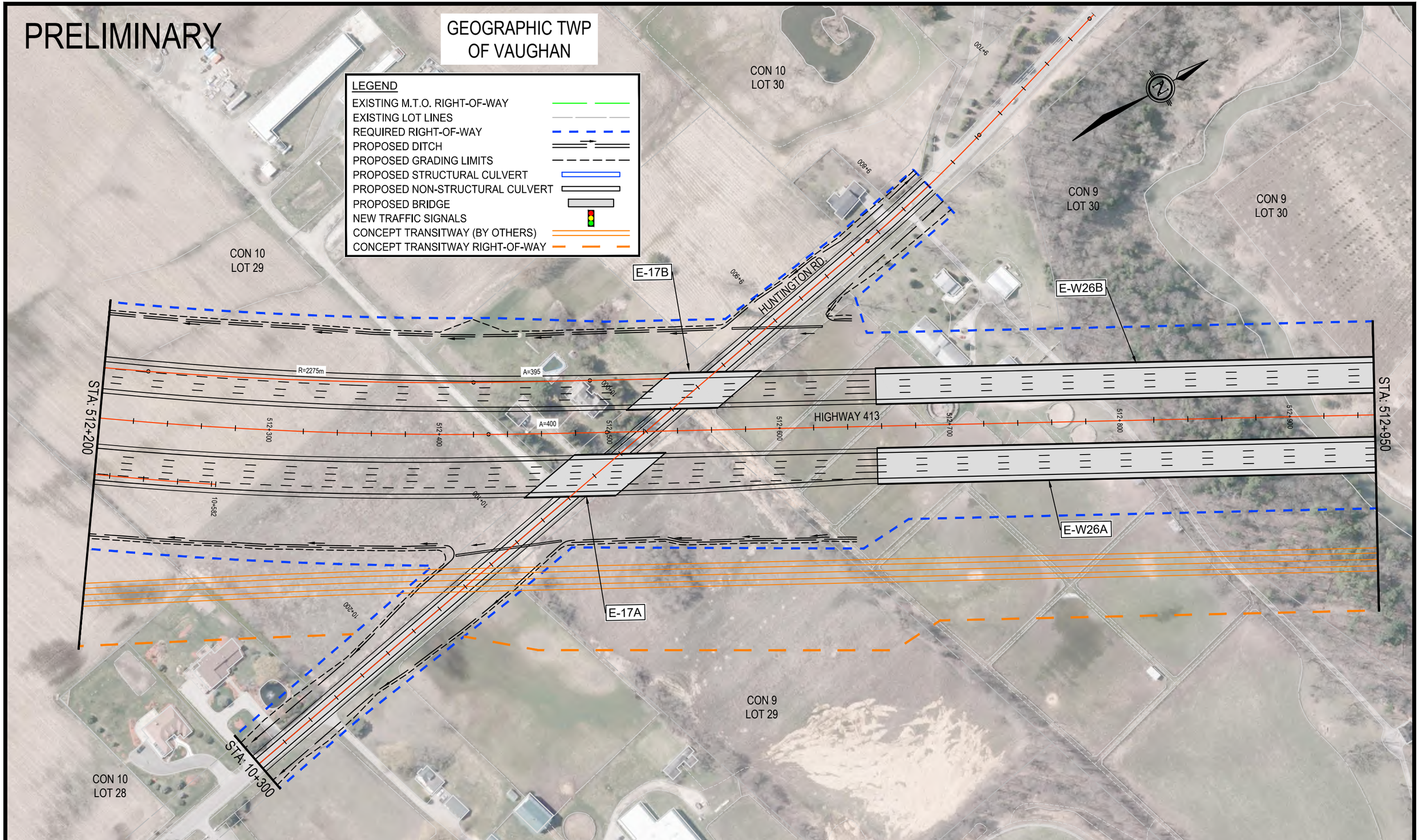
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 511+450 TO STATION 512+200

SCALE
25m 0m 50m
1:2000

PLATE
E17

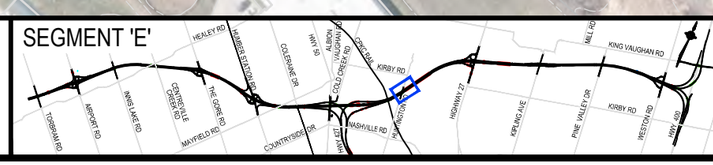


wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'



PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 512+200 TO STATION 512+950

SCALE
25m 0m 50m
1:2000

PLATE
E18

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

WET POND - E4

CONCEPTUAL
TRANSIT STATION
AREA

STA. 10+300

MATCH
EXISTING

10+400

10+500

10+600

POND CONNECTION TO
ING WATERCOURSE

CON 10
LOT 28

CON 10
LOT 27

CON 9
LOT 28

CON 9
LOT 29

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HUNTINGTON

STATION 10+300 TO STATION 10+700

SCALE

25m 0m 50m

1:2000

PLATE

E18A

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

CON 9
LOT 31

CON 9
LOT 31

HUMBER RIVER

CON 9
LOT 32

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

E-W26B

STA: 512+950

513+000 513+100 513+200 513+300 HIGHWAY 413 513+400 513+500 513+600 A=400

STA: 513+700

E-W26A

CON 9
LOT 30

CON 9
LOT 30

CON 9
LOT 31

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 512+950 TO STATION 513+700

SCALE

25m 0m 50m

1:2000

PLATE

E19

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 9
LOT 32

CON 9
LOT 33

GEOGRAPHIC TWP
OF VAUGHAN

E-W27

HIGHWAY 413

STA: 513+700

513+800

513+900

514+000

514+100

514+200

514+300

514+400

STA: 514+450

R=2204m

R=2604m

R=2265m

R=2300m

R=2269m

DRY POND
- E11

DRY POND
- E12

POND CONNECTION TO
EXISTING WATERCOURSE

POND CONNECTION TO
EXISTING WATERCOURSE

CON 9
LOT 31

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 513+700 TO STATION 514+450

SCALE

25m 0m 50m

1:2000

PLATE

E20

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP
OF VAUGHAN

CON 9
LOT 33

CON 9
LOT 32

CON 8
LOT 32

HIGHWAY 413

STA: 514+450

STA: 515+200

STA: 9+425

STA: 10+300

STA:10+100

STA:10+220

E-W28D

E-W28B

E-W28A

E-W28C

DRY POND - E13

RAMP N/S-W

RAMP E-N/S

RAMP W-N/S

RAMP S-E

HIGHWAY 27

R=4000m

R=1450m

R=340m

R=250m

R=130m

R=90m

R=55m

A=125

A=160

A=65

A=50

SEE PLATE E22A FOR CONCEPTUAL TRANSIT STATION

MATCHLINE D-D
(SEE PLATE E22A)

wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	SEGMENT 'E'	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 514+450 TO STATION 515+200	SCALE 25m 0m 50m 1:2000	PLATE E21

PRELIMINARY

INSERT

MATCHLINE E-E

MATCHLINE F-F

CON 8
LOT 32

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP
OF VAUGHAN

STA: 9+720

STA: 9+425

STA: 10+300

RAMP N/S-W

RAMP E-N/S

A=85

A=65

CON 8
LOT 33

CON 9
LOT 33

HIGHWAY 27

E-W30

DRY POND
- E14

E-18B

R=5000m

STA: 515+200

STA: 515+950

HIGHWAY 413

A=400

RAMP N/S-E

R=1600m

WATERCOURSE
REALIGNMENT

E-18A

E-18C

STA:10+100

MATCHLINE E-E
(SEE INSERT)

CON 8
LOT 32

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 515+200 TO STATION 515+950

SCALE

25m 0m 50m

1:2000

PLATE

E22

PRELIMINARY

CON 9
LOT 34

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

9+500

HIGHWAY 27

CON 8
LOT 34

9+600

CON 8
LOT 33

9+700

STA: 9+720

GEOGRAPHIC TWP
OF VAUGHAN

CONCEPTUAL
TRANSIT STATION
AREA

GEOGRAPHIC TWP
OF VAUGHAN

CON 9
LOT 32

CON 9
LOT 31

MATCHLINE D-D
(SEE PLATE E21)

STA: 10+220
(SEE PLATE E21)

MATCHLINE F-F

E-W29

E-W28E

WATERCOURSE
REALIGNMENT

10+400

10+500

HIGHWAY 27

10+600

CON 8
LOT 32

CON 8
LOT 31

MATCH FUTURE 4 LANE
SECTION (BY OTHERS)

LEGEND

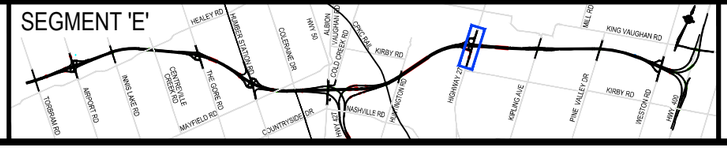
- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'



PRELIMINARY DESIGN PLAN

HIGHWAY 27
STATION 9+400 TO STATION 9+720
STATION 10+220 TO STATION 10+660

SCALE

25m 0m 50m

1:2000

PLATE

E22A

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

CON 8
LOT 33

EAST HUMBER RIVER

DRY
POND
- E14

E-W31B

E-W31A

HIGHWAY 413

STA: 515+950

STA: 516+700

516+000 516+100 516+200 516+300 516+400 516+500 516+600

CON 8
LOT 32

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

N

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 515+950 TO STATION 516+700

SCALE

25m 0m 50m

1:2000

PLATE

E23

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

LEGEND
- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 8
LOT 34

CON 8
LOT 33

CON 8
LOT 32

STA: 9+900

E-19

STA: 516+700

STA: 517+480

R=7000m

516+800

516+900

517+000

517+100

HIGHWAY 413

517+200

517+300

517+400

10+000

10+100

10+200

KIPLING AVE

STA: 10+240

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 516+700 TO STATION 517+480

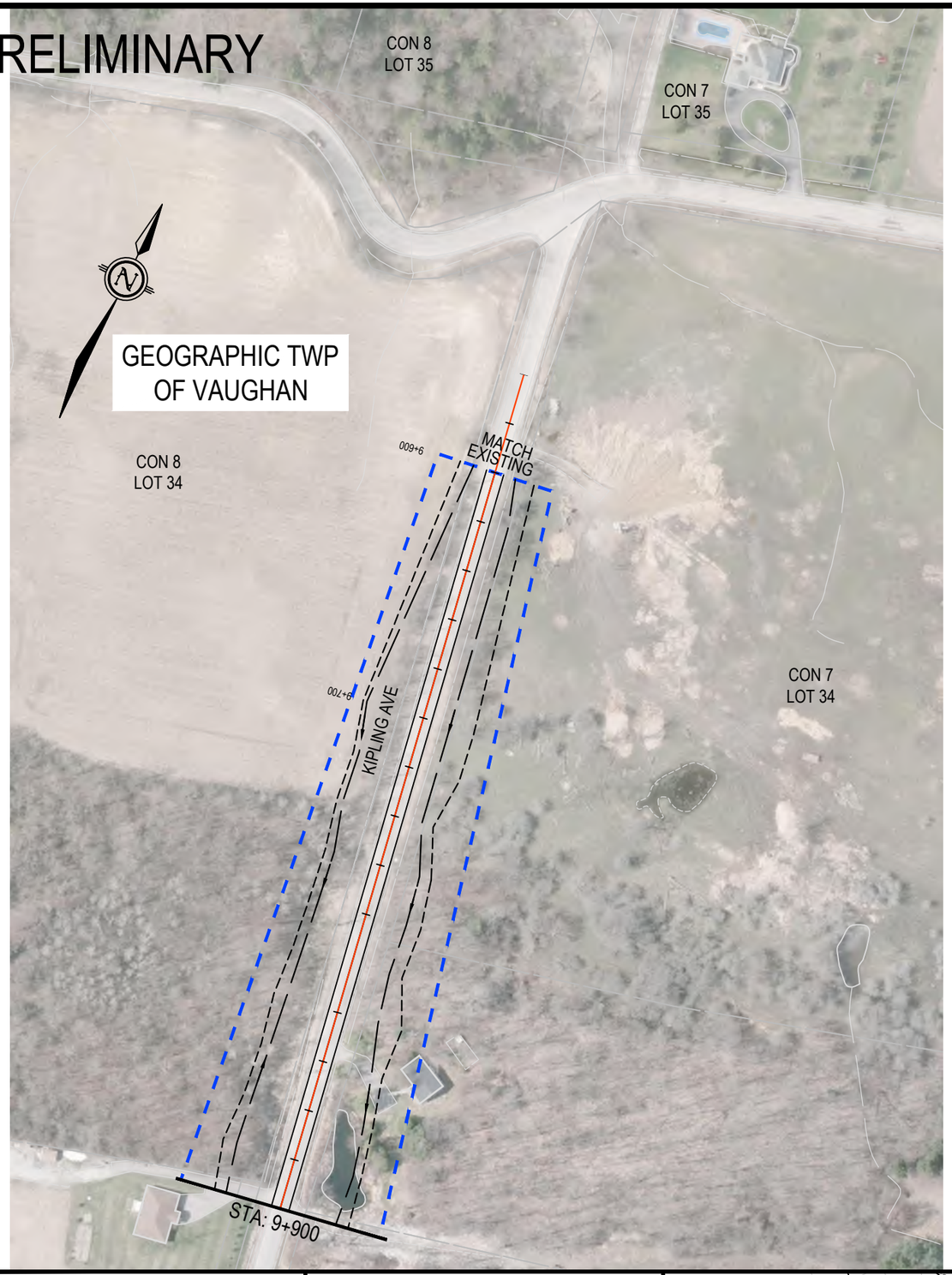
SCALE
25m 0m 50m
1:2000

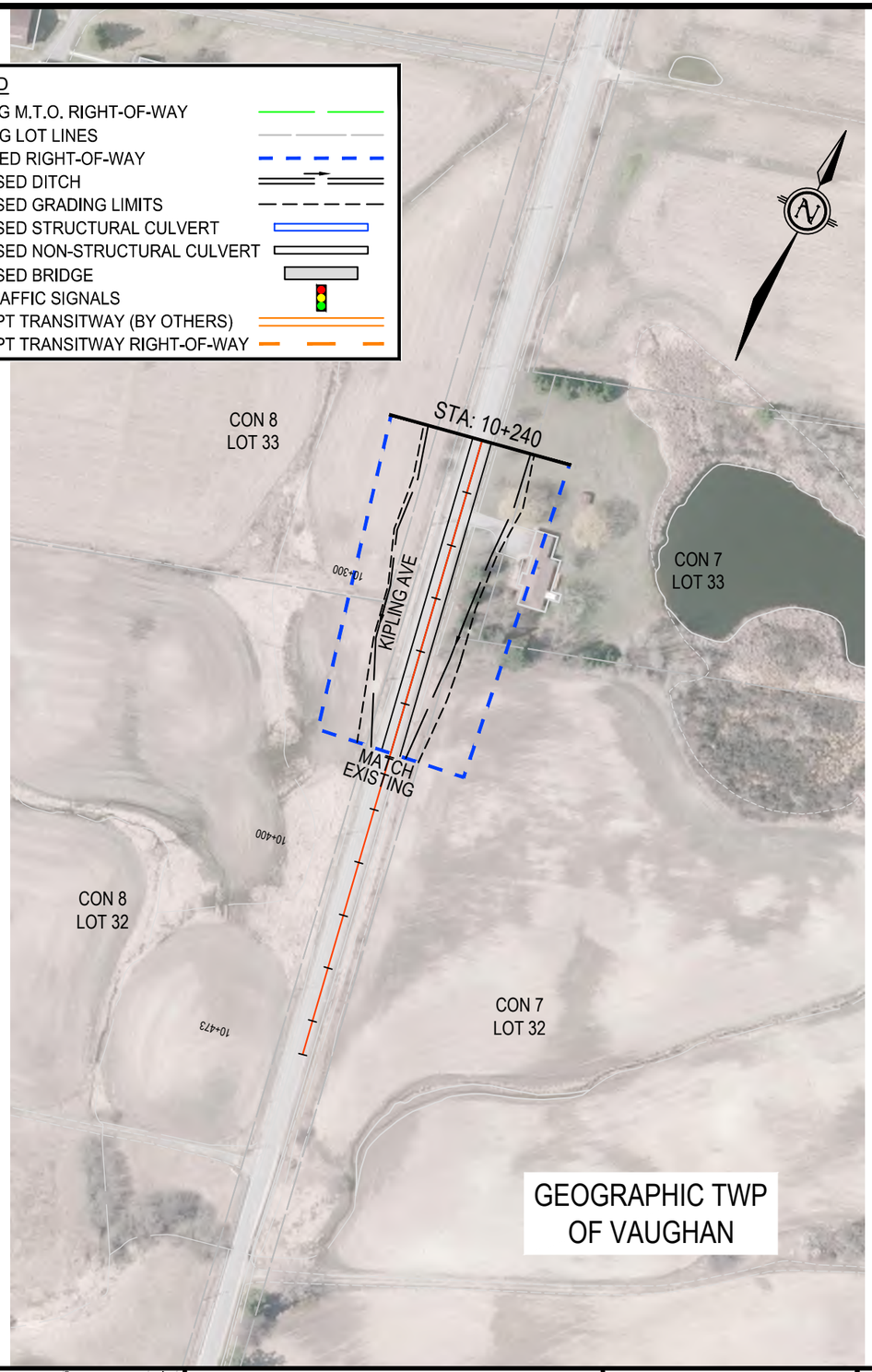
PLATE
E24

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

wsp AECOM
Ontario Ministry of Transportation

PRELIMINARY





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Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

KIPLING AVENUE
STATION 9+491 TO STATION 9+900
STATION 10+240 TO STATION 10+472

SCALE
25m 0m 50m
1:2000

PLATE
E24A

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

KIPLING AVE

CON 7
LOT 34

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

STA: 517+480

517+500 517+600 517+700 517+800 HIGHWAY 413 517+900 518+000 518+100

STA: 518+200

CON 7
LOT 33

wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	SEGMENT 'E'	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 517+480 TO STATION 518+200	SCALE 25m 0m 50m 1:2000	PLATE E25

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

CON 7
LOT 34

E-W32B

STA: 518+200

518+300 518+400 518+500 518+600 HIGHWAY 413 518+700 518+800 518+900

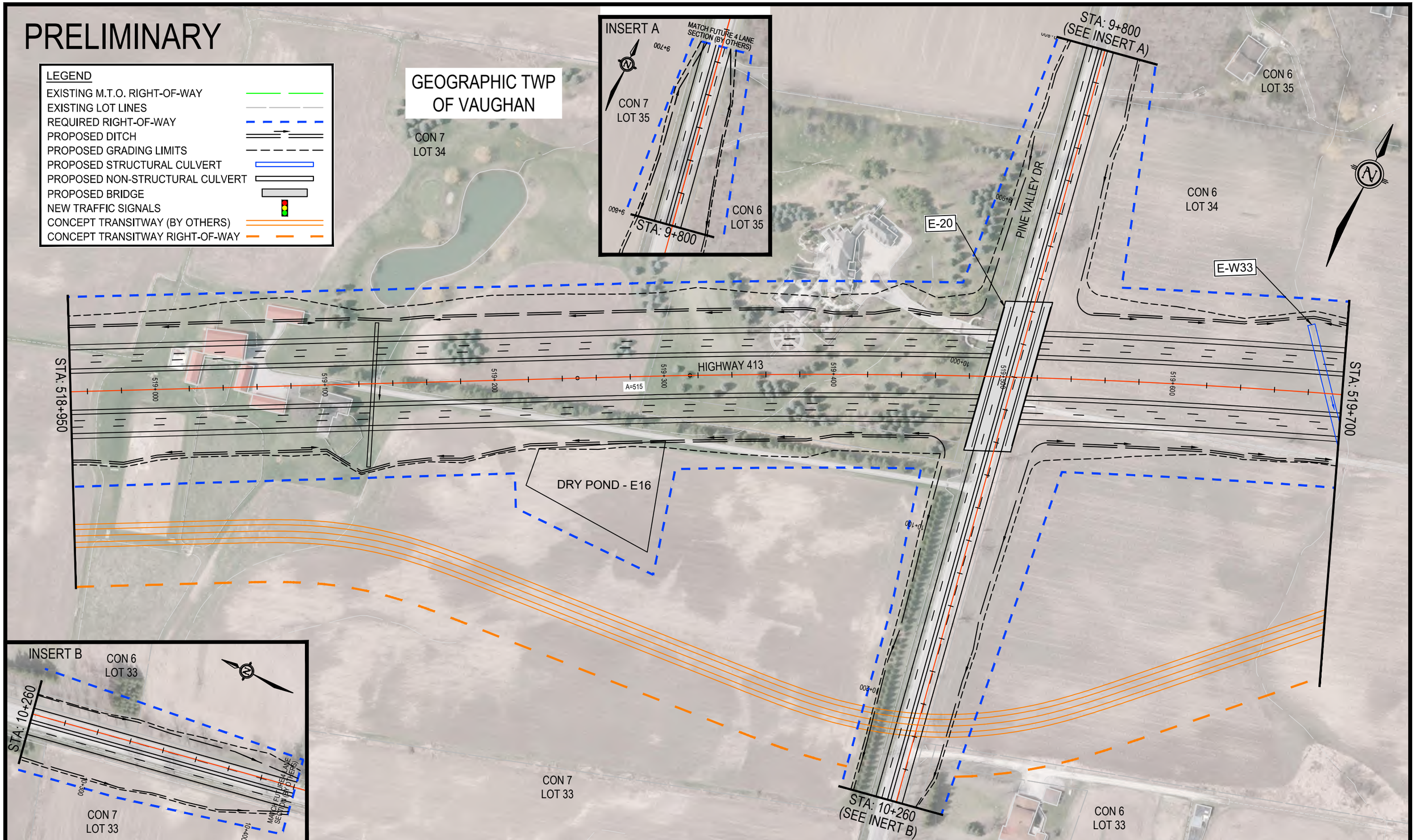
STA: 518+950

E-W32A

DRY POND - E15

CON 7
LOT 33

WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	SEGMENT 'E'	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 518+200 TO STATION 518+950	SCALE 25m 0m 50m 1:2000	PLATE E26



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN
HIGHWAY 413
STATION 518+950 TO STATION 519+700

SCALE
25m 0m 50m
1:2000

PLATE
E27

PRELIMINARY

CON 6
LOT 35

CON 6
LOT 34

GEOGRAPHIC TWP
OF VAUGHAN

HIGHWAY 413

STA: 519+700

STA: 520+450

519+800
519+900
520+000
520+100
R=4000m
520+200
520+300
520+379
520+400
520+300

E-W33

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 519+700 TO STATION 520+450

SCALE

25m 0m 50m

1:2000

PLATE

E28

PRELIMINARY

CON 6
LOT 35

GEOGRAPHIC TWP
OF VAUGHAN

CON 6
LOT 34

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

E-W34B

STA: 520+450

R=4017m

520+500 520+600 520+700 520+800 520+900 521+000 521+100

R=4028m

A=85

A=515

A=515

R=3975m

R=3000m

RAMP W-N/S

STA: 521+200

E-W34A

CON 6
LOT 33

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

HIGHWAY 413

STATION 520+450 TO STATION 521+200

SCALE

25m 0m 50m

1:2000

PLATE

E29

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP OF VAUGHAN

CON 5 LOT 34

CON 6 LOT 34

CON 5 LOT 33

CON 6 LOT 33

SEE PLATE E30A FOR MAINTENANCE PATROL YARD

SEE PLATE E30B FOR CONCEPTUAL TRANSIT STATION

REFER TO SEGMENT 'G' FOR CONTINUATION

STA: 9+760

STA: 521+200

STA: 10+220 (SEE PLATE E30B)

STA: 11+180

STA: 11+800

STA: 7+840

STA: 9+000

HIGHWAY 413

WESTON RD

RAMP N/S-W

RAMP W-N/S

RAMP N-W

RAMP S-W

RAMP W-S

DRY POND - E17

E-W35

E-21

E-W35C

MATCHLINE G-G (SEE PLATE E30B)

MATCHLINE S-S (SEE PLATE E30B)

R=4000m

R=7000m

R=340m

R=130m

A=85

A=160

A=220

SEGMENT 'E'

WSP AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	PRELIMINARY DESIGN PLAN HIGHWAY 413 STATION 521+200 TO STATION 521+602	SCALE 25m 0m 50m 1:2000	PLATE E30

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

CON 6
LOT 35

CON 5
LOT 35

CON 6
LOT 34

CON 5
LOT 34

CON 5
LOT 33

MATCH FUTURE 4 LANE
SECTION (BY OTHERS)

9+580

9+600

9+700

WESTON RD

STA: 9+760

MAINTENANCE
PATROL YARD

N

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

WESTON ROAD

STATION 9+580 TO STATION 9+760

SCALE

25m 0m 50m

1:2000

PLATE

E30A

PRELIMINARY

MATCHLINE G-G

MATCHLINE S-S

STA: 10+220

CONCEPTUAL TRANSIT STATION AREA

CON 5
LOT 33

CON 6
LOT 33

WESTON RD

10+300

10+400

10+500

CON 6
LOT 32

GEOGRAPHIC TWP
OF VAUGHAN

CON 5
LOT 32

MATCH FUTURE 4 LANE SECTION (BY OTHERS)

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'E'

PRELIMINARY DESIGN PLAN

WESTON ROAD

STATION 10+220 TO STATION 10+550

SCALE

25m 0m 50m

1:2000

PLATE

E30B

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

E-32

STA: 9+780

STA: 16+350

RAMP W-S

RAMP S-E/W

HIGHWAY 427

R=1672m

R=1679m

R=1200m

R=1700m

R=1721m

MCGIVILLIRAY RD

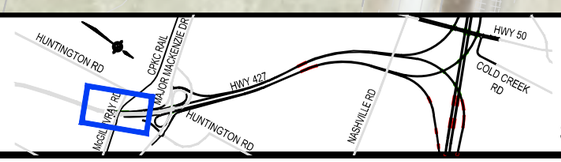
CKPC RAIL

MATCHLINE A-A

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN
HIGHWAY 427
STATION 15+548 TO STATION 16+350

SCALE
25m 0m 50m
1:2000

PLATE
F1

PRELIMINARY

STA: 9+760

SEE PLATE F2A FOR CONCEPTUAL TRANSIT STATION

DRY POND - E18

WET POND - E6

MAJOR MACKENZIE DR

HIGHWAY 427

RAMP W-S

RAMP N-EW

RAMP E-S

RAMP W-N

RAMP E-N

RAMP S-E/W

E-31B

E-31A

STA: 9+780

STA: 16+350

STA: 17+100

STA: 10+240

MATCHLINE A-A

MATCHLINE B-B

GEOGRAPHIC TWP
OF VAUGHAN

CON 10
LOT 21

CON 10
LOT 22

POND CONNECTION TO
EXISTING WATERCOURSE

HUNTINGTON RD

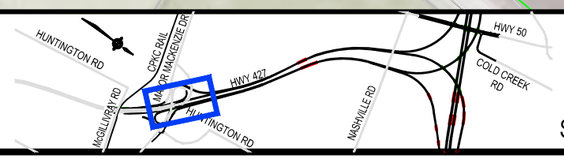
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN

HIGHWAY 427
STATION 16+350 TO STATION 17+100

SCALE

25m 0m 50m

1:2000

PLATE

F2

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP
OF VAUGHAN

STA: 9+760

STA: 10+240

MATCHLINE B-B

MAJOR MACKENZIE DR

CON 10
LOT 21

CONCEPTUAL
TRANSIT STATION
AREA

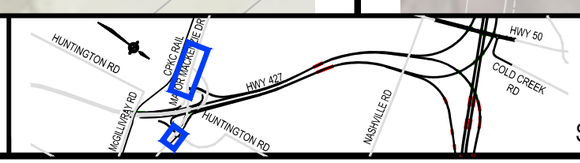
CON 10
LOT 22

GEOGRAPHIC TWP
OF VAUGHAN

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN

MAJOR MACKENZIE DRIVE
STATION 9+520 TO STATION 9+760
STATION 10+240 TO STATION 10+600

SCALE
25m 0m 50m
1:2000

PLATE
F2A

PRELIMINARY

GRADING FOR HYDRO TOWERS ACCESS

STA: 17+100

STA: 17+850

HIGHWAY 427

A=371 R=1677m A=375 R=1700m A=376 R=1722m R=1729m R=1680m A=372 A=375 A=367

E-W17C

GEOGRAPHIC TWP OF VAUGHAN

CON 10 LOT 22

CON 10 LOT 23

CON 10 LOT 24

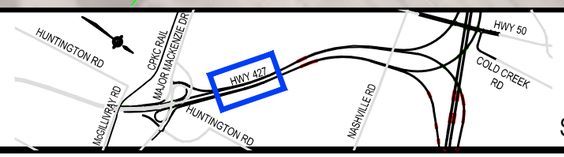
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN
HIGHWAY 427
STATION 17+100 TO STATION 17+850

SCALE
25m 0m 50m
1:2000

PLATE
F3

PRELIMINARY

WET POND - E5

CON 10
LOT 23

CON 10
LOT 24

GEOGRAPHIC TWP
OF VAUGHAN

E-W17B

E-W17A

HIGHWAY 427

STA: 17+850

STA: 18+600

A=481

A=295

A=245

R=1224m

R=1200m

R=1000m

WATERCOURSE
REALIGNMENT

CON 10
LOT 25

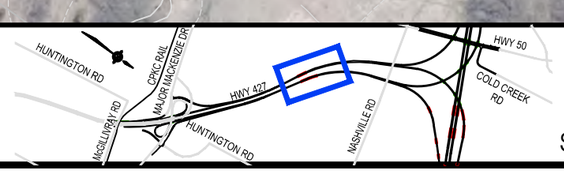
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN

HIGHWAY 427

STATION 17+850 TO STATION 18+600

SCALE

25m 0m 50m

1:2000

PLATE

F4

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

CON 10
LOT 24

CON 10
LOT 25

CON 10
LOT 26

HIGHWAY 427

NASHVILLE RD

STA: 18+600

STA: 11+450

STA: 11+900

STA: 8+150

STA: 8+625

A=375

A=320

A=295

A=220

A=270

A=245

E-30B

E-30A

E-W16

E-W16-1

WATERCOURSE
REALIGNMENT

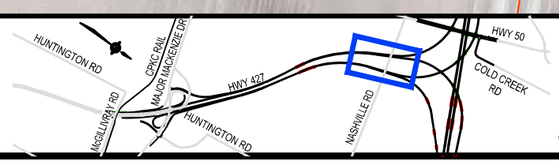
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'F'

PRELIMINARY DESIGN PLAN
HIGHWAY 427
STATION 18+600 TO STATION 19+000

SCALE
25m 0m 50m
1:2000

PLATE
F5

PRELIMINARY

GEOGRAPHIC TWP OF VAUGHAN

REFER TO SEGMENT 'E' FOR CONTINUATION

MATCHLINE T-T

STA: 11+120

STA: 11+640

STA: 8+460

STA: 8+980

R=600m

R=450m

RAMP W-S

RAMP E-S

RAMP S-W

RAMP S-E

E-W15

A=220

A=190

STA: 11+450

STA: 11+900

STA: 8+150

STA: 8+625

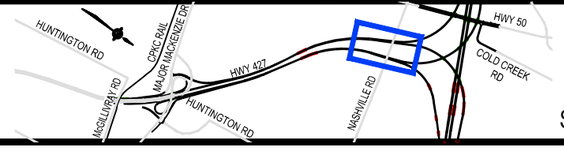
LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

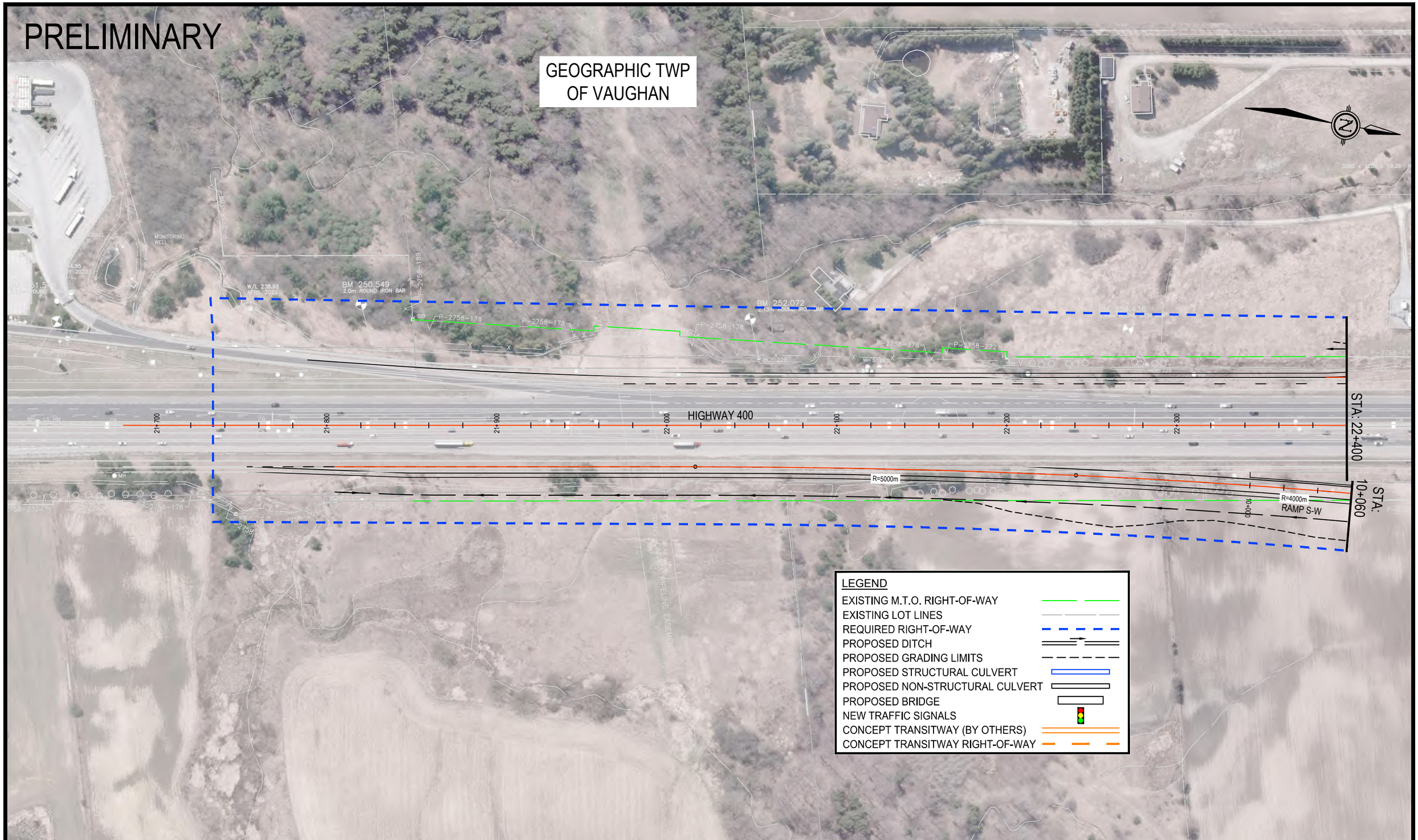


SEGMENT 'F'

PRELIMINARY DESIGN PLAN
HIGHWAY 413 - 427
INTERCHANGE RAMPS
STATIONS VARY

SCALE
25m 0m 50m
1:2000

PLATE
F6



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'G'

PRELIMINARY DESIGN PLAN
HIGHWAY 400
STATION 21+680 TO STATION 22+400

SCALE
25m 0m 50m
1:2000

PLATE
G1

PRELIMINARY

GEOGRAPHIC TWP
OF VAUGHAN

CON 5
LOT 31

KIRBY RD

E-22A

E-22B

HIGHWAY 400

STA: 22+400

STA: 10+060

STA: 9+800

STA: 23+150

STA: 10+800

RAMP W-S

RAMP S-W

R=4000m

A=220

CON 5
LOT 30

CON 5
LOT 32

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

WSP AECOM

Ontario Ministry of Transportation

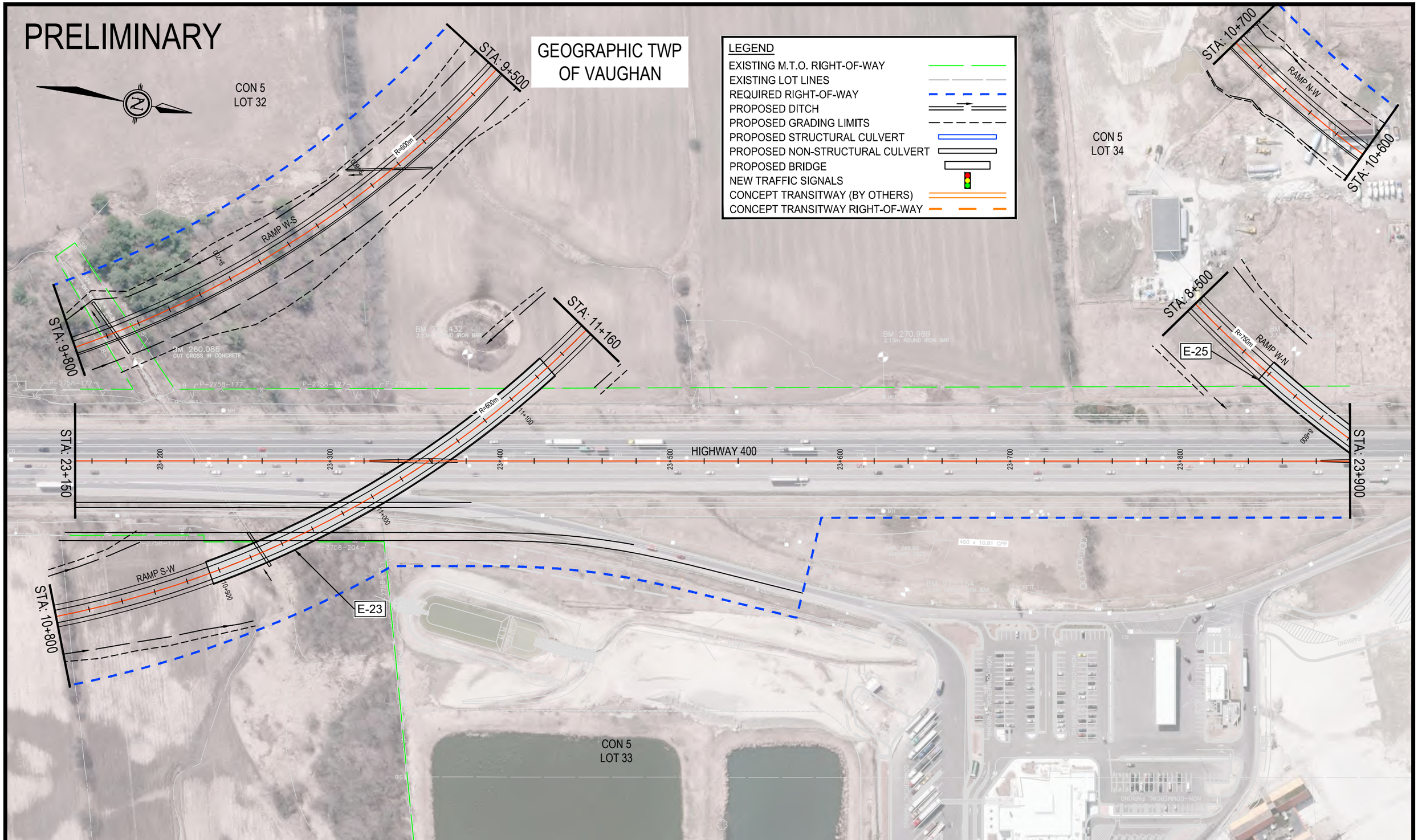
HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

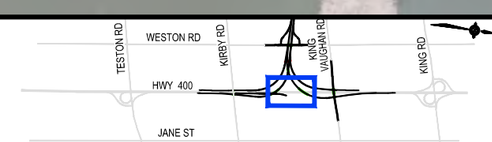
SEGMENT 'G'

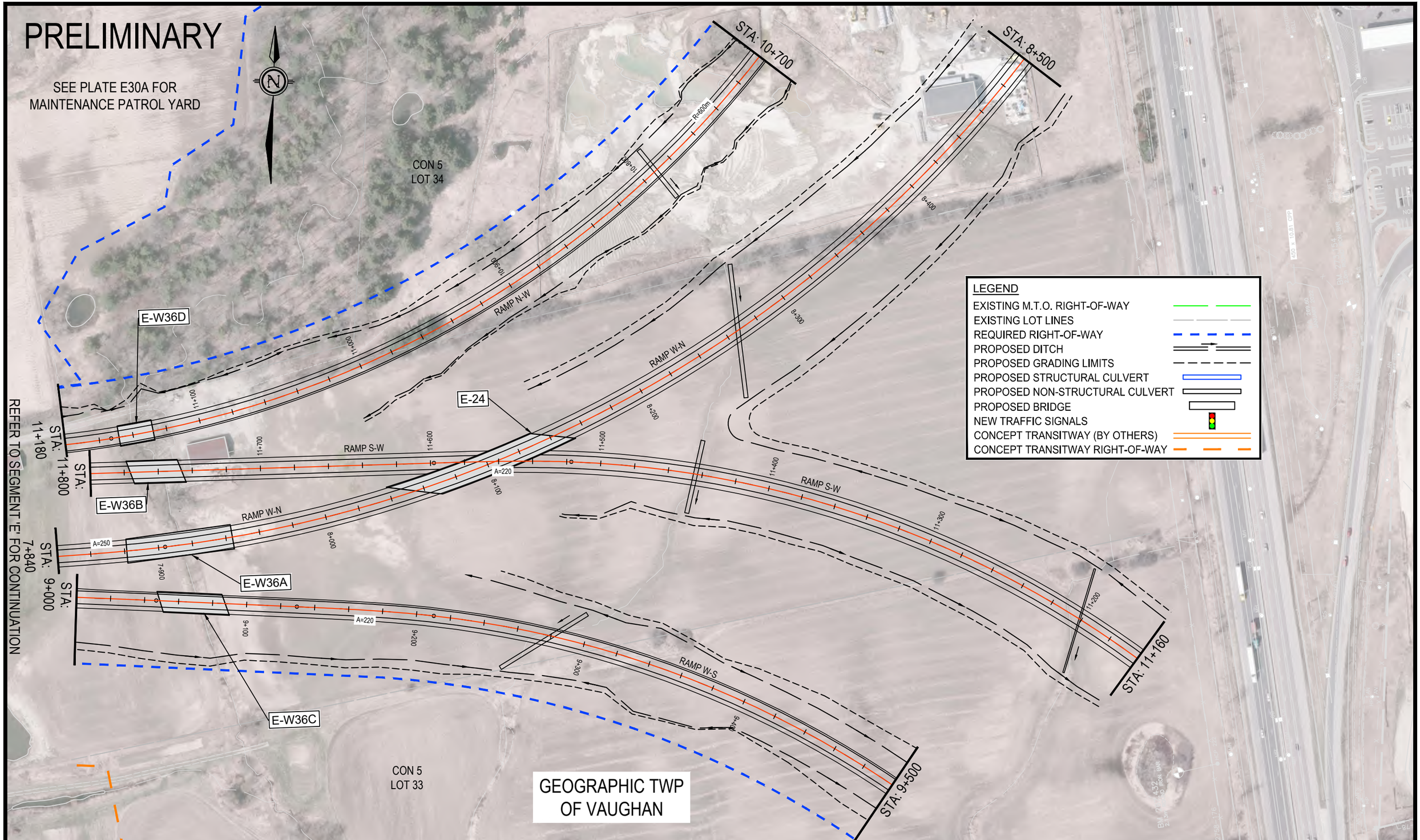
PRELIMINARY DESIGN PLAN
HIGHWAY 400
STATION 22+400 TO STATION 23+150

SCALE
25m 0m 50m
1:2000

PLATE
G2



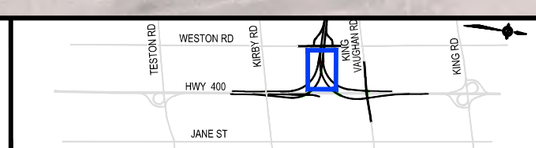
wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	 SEGMENT 'G'	PRELIMINARY DESIGN PLAN HIGHWAY 400 STATION 23+150 TO STATION 23+900	SCALE 25m 0m 50m 1:2000	PLATE G3



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

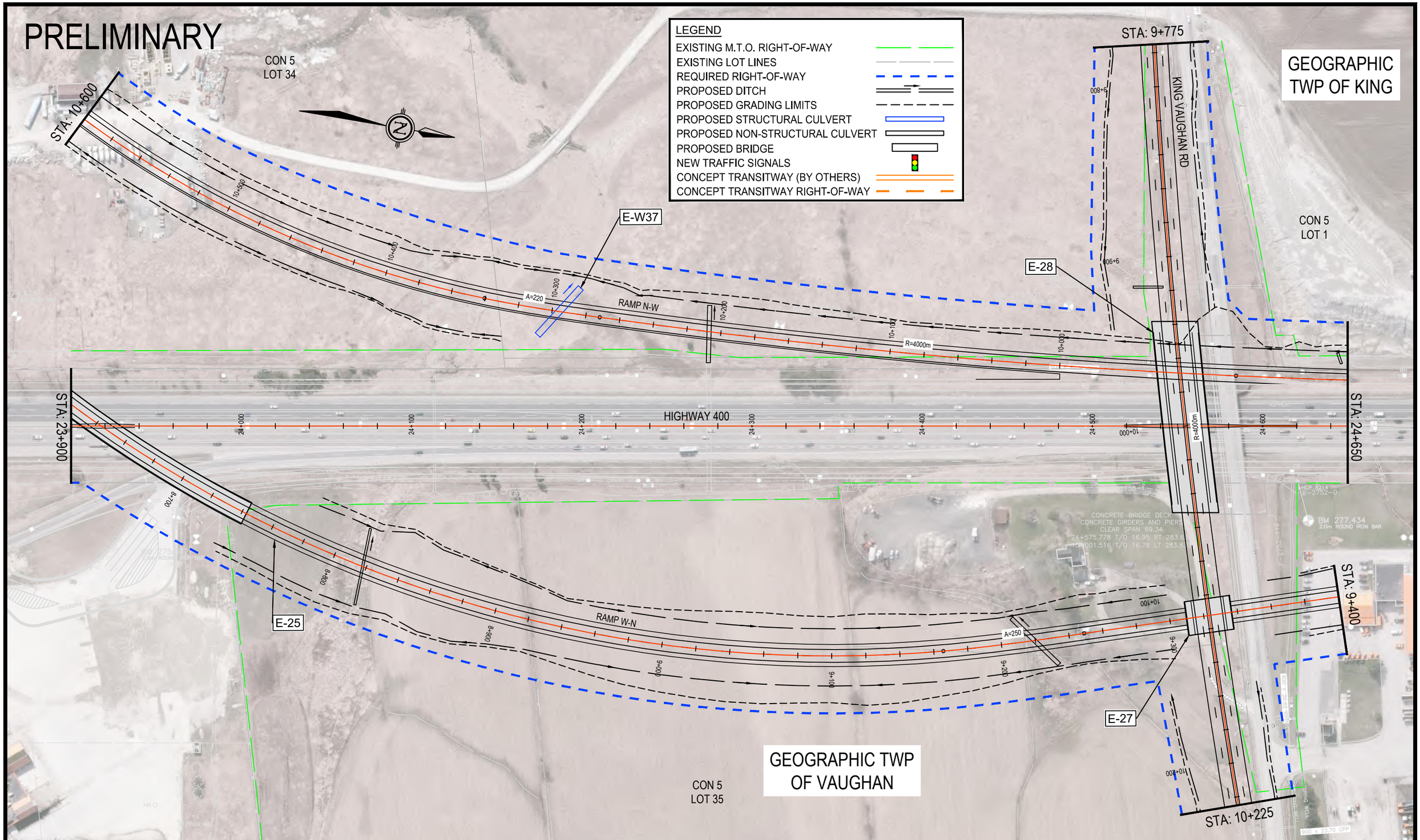


SEGMENT 'G'

PRELIMINARY DESIGN PLAN
HIGHWAY 400 INTERCHANGE RAMPS

SCALE
25m 0m 50m
1:2000

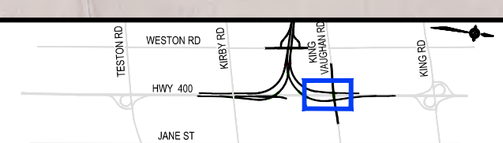
PLATE
G3A



wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'G'

PRELIMINARY DESIGN PLAN
HIGHWAY 400
STATION 23+900 TO STATION 24+650

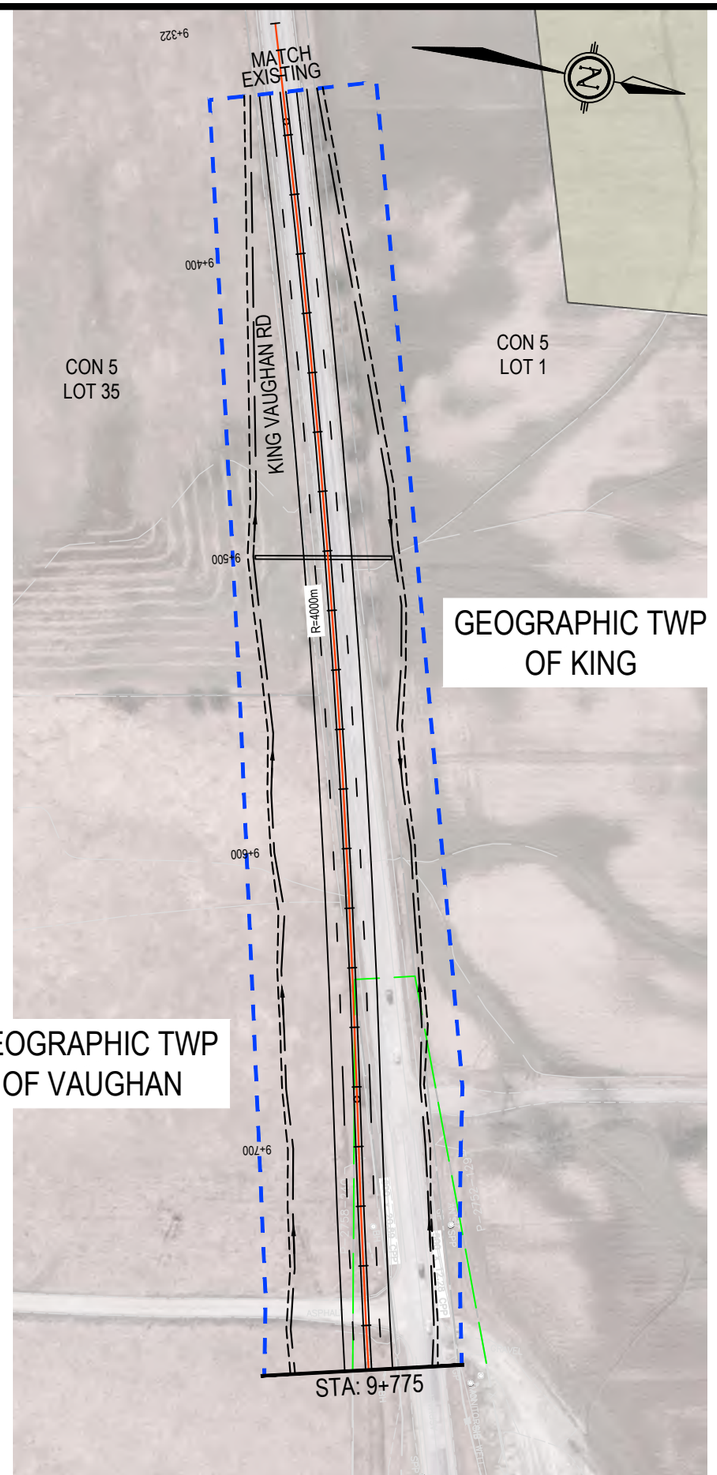
SCALE
25m 0m 50m
1:2000

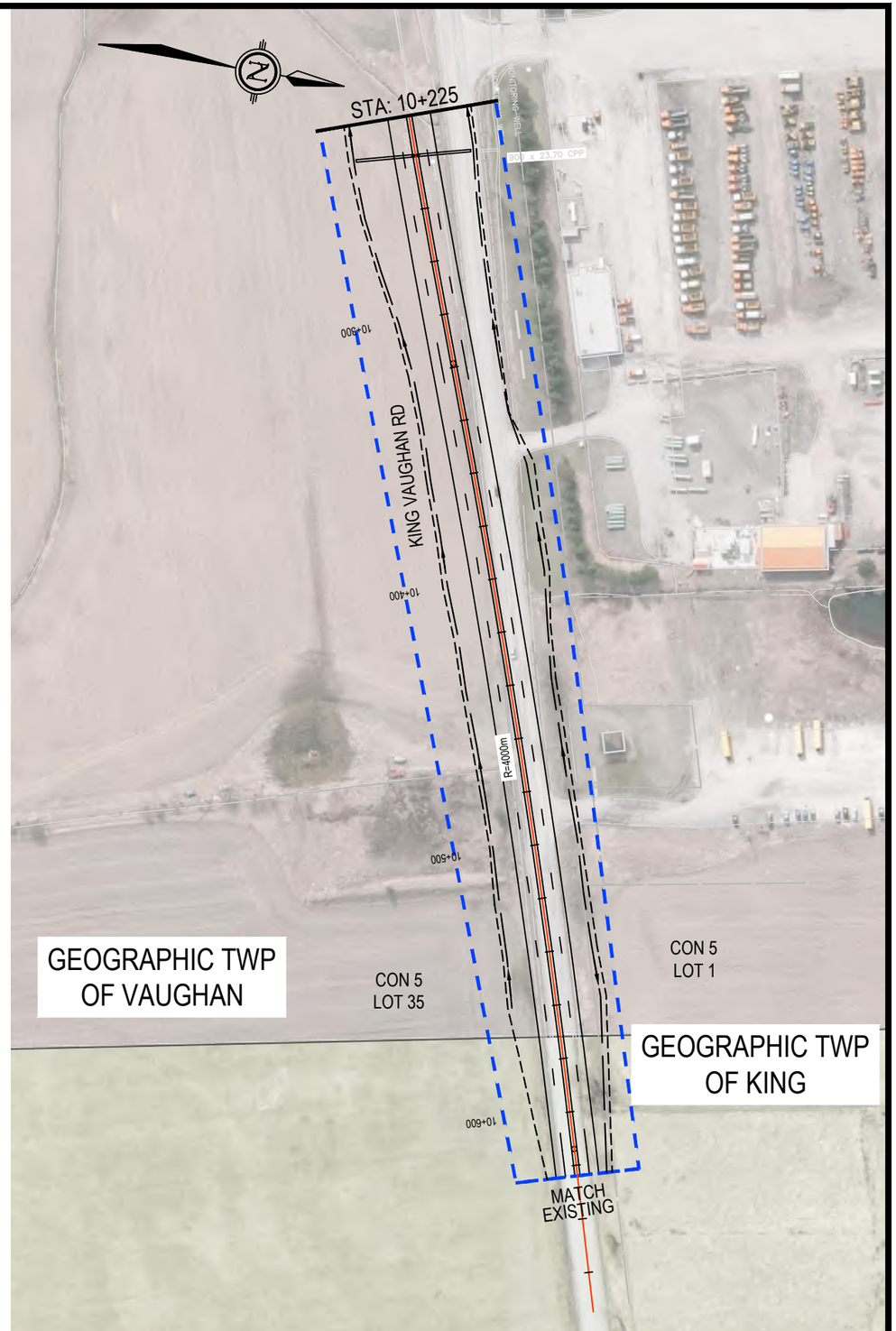
PLATE
G4

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY





WSP AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001

SEGMENT 'G'

PRELIMINARY DESIGN PLAN

KING VAUGHAN ROAD
STATION 9+322 TO STATION 9+775
STATION 10+225 TO STATION 10+675

SCALE
25m 0m 50m
1:2000

PLATE
G4A

PRELIMINARY

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
- PROPOSED BRIDGE
- NEW TRAFFIC SIGNALS
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

GEOGRAPHIC TWP
OF KING

CON 5
LOT 1

CON 5
LOT 2

HIGHWAY 400

RAMP W-N

STA: 24+650

STA: 25+400

STA: 9+400

R=5000m

R=4000m

24+700 24+800 24+900 25+000 25+100 25+200 25+300

9+500 9+600 9+700 9+800 9+900

BM 281.906
2.13m ROUND IRON BAR

BM 281.239
2.13m ROUND IRON BAR

BM 269.493
2.13m ROUND IRON BAR

BM 277.434
2.0m ROUND IRON BAR

wsp AECOM Ontario Ministry of Transportation	HIGHWAY 413 PRELIMINARY DESIGN G.W.P. 13-20001	TESTON RD, WESTON RD, KIRBY RD, KING VAUGHAN RD, KING RD, HWY 400, JANE ST SEGMENT 'G'	PRELIMINARY DESIGN PLAN HIGHWAY 400 STATION 24+850 TO STATION 25+400	SCALE 25m 0m 50m 1:2000	PLATE G5

PRELIMINARY

GEOGRAPHIC TWP
OF KING

HIGHWAY 400

STA: 25+400

STA: 26+150

E-W38

E-W39

LEGEND

- EXISTING M.T.O. RIGHT-OF-WAY
- EXISTING LOT LINES
- REQUIRED RIGHT-OF-WAY
- PROPOSED DITCH
- PROPOSED GRADING LIMITS
- PROPOSED STRUCTURAL CULVERT
- PROPOSED NON-STRUCTURAL CULVERT
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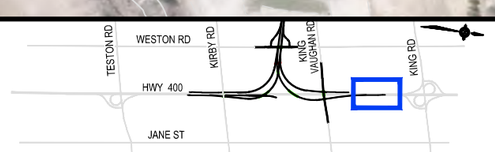
- CONCEPT TRANSITWAY (BY OTHERS)
- CONCEPT TRANSITWAY RIGHT-OF-WAY

wsp AECOM

Ontario Ministry of Transportation

HIGHWAY 413
PRELIMINARY DESIGN
G.W.P. 13-20001



SEGMENT 'G'

PRELIMINARY DESIGN PLAN

HIGHWAY 400

STATION 25+400 TO STATION 26+150

SCALE

25m 0m 50m

1:2000

PLATE

G6