

Appendix H: Alternative Solution Conceptual Drawings



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK (TO REMAIN UNALTERED)

MINET'S POINT PARK

LISMER BLVD.

KEMPVIEW LN.

BRENNAN AVE.

BRENNAN AVE. CULVERT CROSSING:
3650mm x 1500mm CONC. BOX CULVERT
(CAPACITY = 10.4cms; 1:2 YEAR PEAK
FLOW)

THE BOULEVARD CULVERT CROSSING: 1800mm x 1070mm CSPA
CULVERT (CAPACITY = 3.4cms; < 1:2 YEAR PEAK FLOW)

WHITE OAKS RD.

THE BLVD.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ██████████ STUDY AREA
- 250.00 - EX CONTOUR
- ██████████ PROPOSED PROPERTY ACQUISITION
- ██████████ ROAD TO BE REMOVED
- ██████████ PROPOSED TRANSPORTATION LINKAGE
- ██████████ WHISKEY CREEK



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 1 – DO NOTHING ("EXISTING CONDITIONS")

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

DWG. No.

ALT-1

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: TO CONVEY
1:100-YEAR RETURN FREQUENCY
DESIGN STORM PEAK FLOW
(CAPACITY = 52.6cms)

MINET'S POINT PARK

REGRADE WHISKEY CREEK
@ 0.0% (INV. 218.00)

EXISTING WASHROOM/GENERATOR
BUILDING TO BE RELOCATED.

LISMER BLVD.

KEMPVIEW LN.

EXISTING ENTRANCE TO BE RELOCATED
TO LISMER BLVD.

BRENNAN AVE.

7 BRENNAN AVE

EXISTING RESIDENTIAL DWELLING TO
BE REMOVED.

REGRADE WHISKEY
CREEK @ 0.7%

BRENNAN AVE. CULVERT CROSSING:
REMOVE AND REPLACE EX. CULVERT
WITH A 11000mm x 2000mm CONC.
SPAN STRUCTURE DESIGNED TO
CONVEY THE 1:100-YEAR RETURN
FREQUENCY DESIGN STORM PEAK
FLOW (CAPACITY = 52.5cms)

THE BOULEVARD CULVERT CROSSING:
REMOVE AND REPLACE EX. CULVERT
WITH A 11000mm x 2400mm CONC.
SPAN STRUCTURE DESIGNED TO
CONVEY THE 1:100-YEAR RETURN
FREQUENCY DESIGN STORM PEAK
FLOW (CAPACITY = 52.3cms)

WHITE OAKS RD.

THE BLVD.

199 THE BOULEVARD

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ROAD TO BE REMOVED
- PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 2 – CULVERT/WATERCOURSE IMPROVEMENTS
TO CONVEY 1:100-YEAR DESIGN STORM

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

DWG. No.

ALT-2

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE IMPROVEMENTS: LOW FLOW CHANNEL WHERE FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL CHANNEL) USING NATURAL CHANNEL DESIGN PRINCIPLES TO CONVEY BASEFLOW AND FLOODPLAIN IMPROVEMENTS TO CONVEY 1:10-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (27.4 cms)

MINET'S POINT PARK

REGRADE WHISKEY CREEK @ 0.4%

MINET'S POINT PUMP STATION

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

7 BRENNAN AVE

EXISTING RESIDENTIAL DWELLING TO BE REMOVED

REGRADE WHISKEY CREEK @ 0.4%

199 THE BOULEVARD

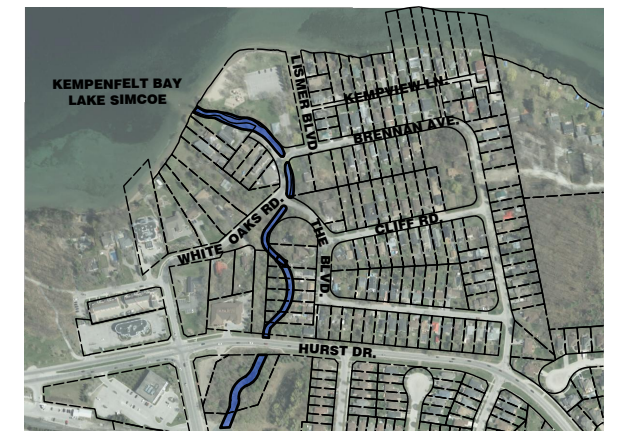
WHITE OAKS RD.

THE BLVD.

CLIFF RD.

BRENNAN AVE CULVERT CROSSING: REMOVE AND REPLACE EX. CULVERT WITH 9800 mm x 1650 mm CONC. SPAN STRUCTURE DESIGNED TO CONVEY 1:10-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (27.4 cms)

THE BOULEVARD CULVERT CROSSING: REMOVE AND REPLACE EX. CULVERT WITH 7300 mm x 1950 mm CONC. SPAN STRUCTURE DESIGNED TO CONVEY 1:10-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (27.3 cms)



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- STUDY AREA
- EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ROAD TO BE REMOVED
- PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 3 - CULVERT/WATERCOURSE IMPROVEMENTS TO CONVEY LESS THAN 1:100-YEAR DESIGN STORM

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

DWG. No.

ALT-3A

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE IMPROVEMENTS: LOW FLOW CHANNEL WHERE FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL CHANNEL) USING NATURAL CHANNEL DESIGN PRINCIPLES TO CONVEY BASEFLOW AND FLOODPLAIN IMPROVEMENTS TO CONVEY 1:50-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (42.3 cms)

REGRADE WHISKEY CREEK @ 0.4%

MINET'S POINT PUMP STATION

BRENNAN AVE CULVERT CROSSING: REMOVE AND REPLACE EX. CULVERT WITH 13400 mm x 1650 mm CONC. SPAN STRUCTURE DESIGNED TO CONVEY 1:50-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (42.1 cms)

THE BOULEVARD CULVERT CROSSING: REMOVE AND REPLACE EX. CULVERT WITH 11000 mm x 1950 mm CONC. SPAN STRUCTURE DESIGNED TO CONVEY 1:50-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (42.0 cms)

WHITE OAKS RD.

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

7 BRENNAN AVE

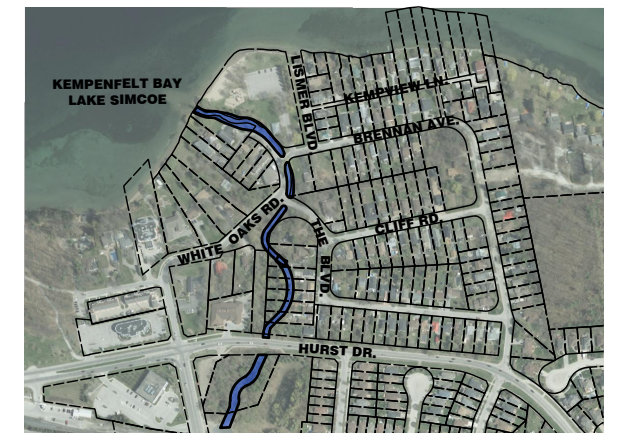
EXISTING RESIDENTIAL DWELLING TO BE REMOVED

REGRADE WHISKEY CREEK @ 0.4%

199 THE BOULEVARD

THE BLVD.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- █ STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- █ ROAD TO BE REMOVED
- █ PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 3 - CULVERT/WATERCOURSE IMPROVEMENTS TO CONVEY LESS THAN 1:100-YEAR DESIGN STORM

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

DWG. No.

ALT-3B

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE IMPROVEMENTS: LOW FLOW CHANNEL WHERE FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL CHANNEL) USING NATURAL CHANNEL DESIGN TO CONVEY BASEFLOW AND FLOODPLAIN IMPROVEMENTS TO CONVEY 1:10-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (27.4 cms)

MINET'S POINT PARK

REGRADE WHISKEY CREEK @ 0.4%

MINET'S POINT PUMP STATION

WHISKEY CREEK

REMOVE SECTION OF BRENNAN AVE. DAYLIGHTING WATERCOURSE

THE BOULEVARD CULVERT CROSSING: REMOVE AND REPLACE EX. CULVERT WITH 7300 mm x 1950 mm CONC. SPAN STRUCTURE DESIGNED TO CONVEY 1:10-YEAR RETURN FREQUENCY DESIGN STORM PEAK FLOW (27.3cms)

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

25m PEDESTRIAN BRIDGE

7 BRENNAN AVE

REGRADE WHISKEY CREEK @ 0.4%

199 THE BOULEVARD

WHITE OAKS RD.

THE BLVD.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ████████ STUDY AREA
- 250.00 - EX CONTOUR
- ████████ PROPOSED PROPERTY ACQUISITION
- ████████ ROAD TO BE REMOVED
- ████████ PROPOSED TRANSPORTATION LINKAGE
- ████████ WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



**WHISKEY CREEK
DRAINAGE IMPROVEMENTS**
ALTERNATIVE 4A – REMOVE BRENNAN AVENUE AT
WHISKEY CREEK

DWG. No.
ALT-4A
JOB NO. 120114

SCALE: 1:1500 DRAWN: JGH DATE: SEPT./20



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: LOW FLOW CHANNEL WHERE
FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL
CHANNEL) USING NATURAL CHANNEL DESIGN
TO CONVEY BASEFLOW AND FLOODPLAIN
IMPROVEMENTS TO CONVEY 1:10-YEAR
RETURN FREQUENCY DESIGN STORM PEAK
FLOW (27.4 cms)

MINET'S POINT PARK

REGRADE WHISKEY CREEK
@ 0.4%

MINET'S POINT
PUMP STATION

WHISKEY CREEK

10.0m

REMOVE SECTION OF BRENNAN AVE.
DAYLIGHTING WATERCOURSE

THE BOULEVARD CULVERT CROSSING:
REMOVE AND REPLACE EX. CULVERT
WITH 7300 mm x 1950 mm CONC.
SPAN STRUCTURE DESIGNED TO
CONVEY 1:10-YEAR RETURN
FREQUENCY DESIGN STORM PEAK FLOW
(27.3cms)

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

25m PEDESTRIAN BRIDGE

7 BRENNAN AVE

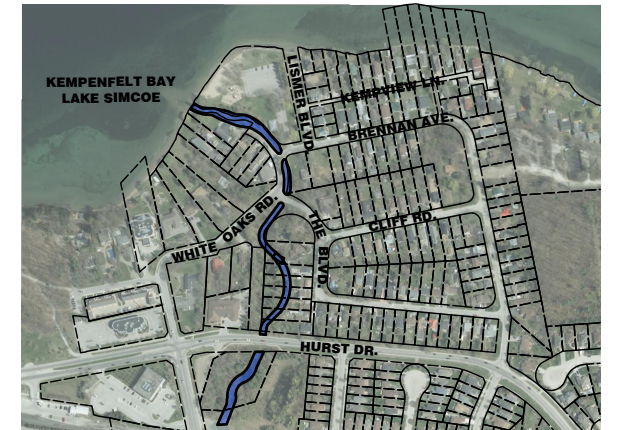
REGRADE WHISKEY CREEK
@ 0.4%

199 THE BOULEVARD

WHITE OAKS RD.

THE BLDV.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ROAD TO BE REMOVED
- PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 4B – REMOVE BRENNAN AVE. AT WHISKEY
CREEK AND CONNECT BRENNAN AVE. AND THE BOULEVARD

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

JOB NO. 120114

DWG. No.

ALT-4B



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: LOW FLOW CHANNEL WHERE
FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL
CHANNEL) USING NATURAL CHANNEL DESIGN
TO CONVEY BASEFLOW AND FLOODPLAIN
IMPROVEMENTS TO CONVEY 1:10-YEAR
RETURN FREQUENCY DESIGN STORM PEAK
FLOW (27.4 cms)

REGRADE WHISKEY CREEK
@ 0.4%

MINET'S POINT
PUMP STATION

WHISKEY CREEK

10.0m

BRENNAN AVE CULVERT CROSSING:
REMOVE AND REPLACE EX. CULVERT WITH
9800 mm x 1650 mm CONC. SPAN
STRUCTURE DESIGNED TO CONVEY
1:10-YEAR RETURN FREQUENCY DESIGN
STORM PEAK FLOW (27.4cms)

15m PEDESTRIAN BRIDGE

REMOVE SECTION OF THE BOULEVARD
DAYLIGHTING WATERCOURSE

7 BRENNAN AVE

EXISTING RESIDENTIAL DWELLING TO
BE REMOVED

REGRADE WHISKEY CREEK
@ 0.4%

199 THE BOULEVARD

VEHICLE TURN AROUND

WHITE OAKS RD.

LISMER BLVD.

KEMPVIEW LN.

BRENNAN AVE.

THE BLVD.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ████████ STUDY AREA
- 250.00 - EX CONTOUR
- ████████ PROPOSED PROPERTY ACQUISITION
- ████████ ROAD TO BE REMOVED
- ████████ PROPOSED TRANSPORTATION LINKAGE
- ████████ WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 5A - REMOVE THE BOULEVARD AT WHISKEY
CREEK

DWG. No.

ALT-5A

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: LOW FLOW CHANNEL WHERE
FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL
CHANNEL) USING NATURAL CHANNEL DESIGN
TO CONVEY BASEFLOW AND FLOODPLAIN
IMPROVEMENTS TO CONVEY 1:10-YEAR
RETURN FREQUENCY DESIGN STORM PEAK
FLOW (27.4 cms)

BRENNAN AVE CULVERT CROSSING:
REMOVE AND REPLACE EX. CULVERT WITH
9800 mm x 1650 mm CONC. SPAN
STRUCTURE DESIGNED TO CONVEY
1:10-YEAR RETURN FREQUENCY DESIGN
STORM PEAK FLOW (27.4cms)

REMOVE SECTION OF THE BOULEVARD
DAYLIGHTING WATERCOURSE

MINET'S POINT PARK

REGRADE WHISKEY CREEK
@ 0.4%

MINET'S POINT
PUMP STATION

WHISKEY CREEK

REGRADE WHISKEY CREEK
@ 0.4%

15m PEDESTRIAN BRIDGE

WHITE OAKS RD.

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

7 BRENNAN AVE

EXISTING RESIDENTIAL DWELLING TO
BE REMOVED

199 THE BOULEVARD

THE BLDV.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ████████ STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ████████ ROAD TO BE REMOVED
- ████████ PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 5B - REMOVE THE BOULEVARD AT WHISKEY
CREEK AND CONNECT BRENNAN AVE. AND THE BOULEVARD

SCALE: 1:1500 DRAWN: JGH DATE: SEPT./20 JOB NO. 120114

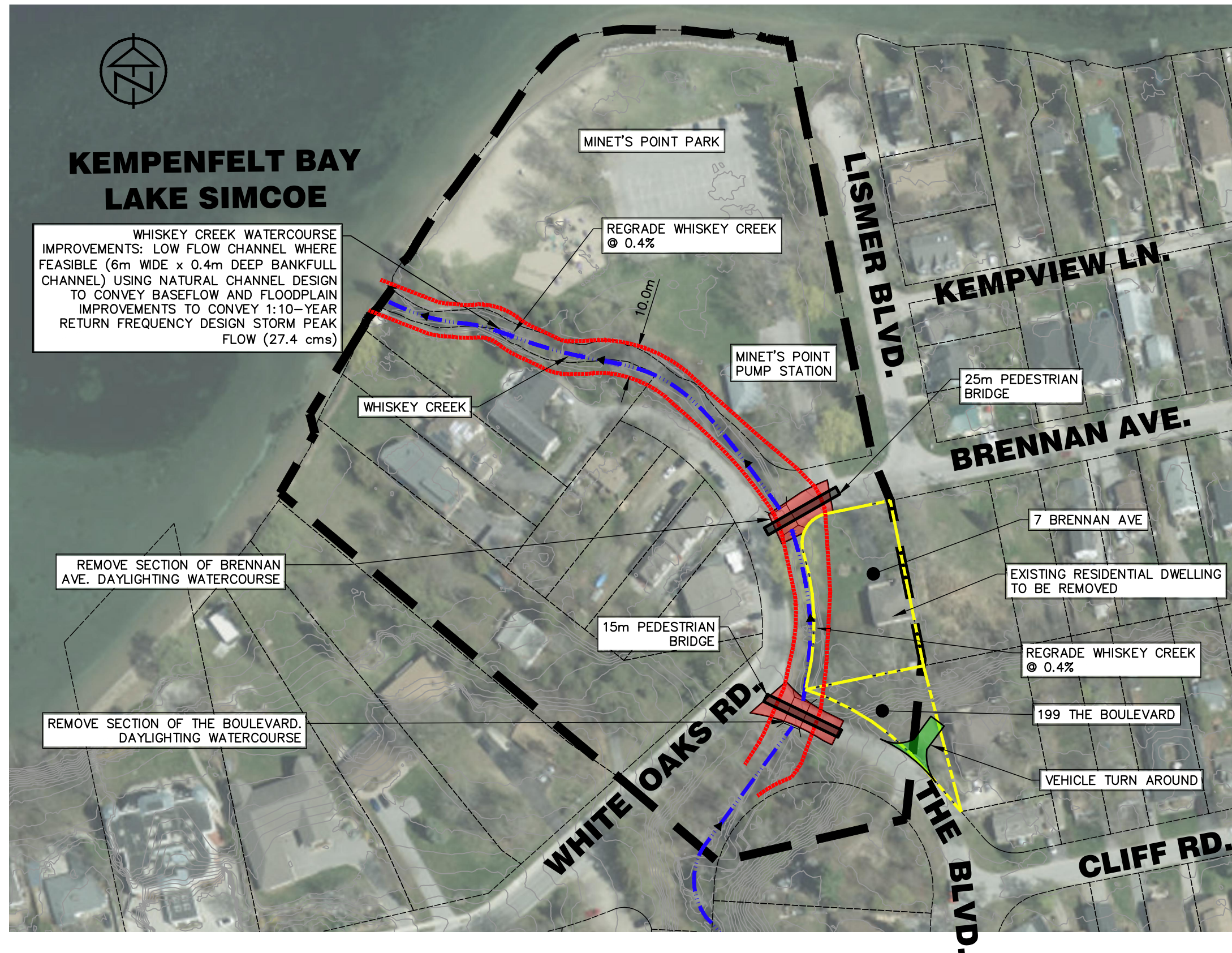
DWG. No.

ALT-5B



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: LOW FLOW CHANNEL WHERE
FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL
CHANNEL) USING NATURAL CHANNEL DESIGN
TO CONVEY BASEFLOW AND FLOODPLAIN
IMPROVEMENTS TO CONVEY 1:10-YEAR
RETURN FREQUENCY DESIGN STORM PEAK
FLOW (27.4 cms)



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ██████████ STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ██████████ ROAD TO BE REMOVED
- ██████████ PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



WHISKEY CREEK DRAINAGE IMPROVEMENTS

ALTERNATIVE 6A – REMOVE BRENNAN AVE. AND THE
BOULEVARD AT WHISKEY CREEK

DWG. No.

ALT-6A

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

JOB NO. 120114



KEMPENFELT BAY LAKE SIMCOE

WHISKEY CREEK WATERCOURSE
IMPROVEMENTS: LOW FLOW CHANNEL WHERE
FEASIBLE (6m WIDE x 0.4m DEEP BANKFULL
CHANNEL) USING NATURAL CHANNEL DESIGN
TO CONVEY BASEFLOW AND FLOODPLAIN
IMPROVEMENTS TO CONVEY 1:10-YEAR
RETURN FREQUENCY DESIGN STORM PEAK
FLOW (27.4 cms)

MINET'S POINT PARK

REGRADE WHISKEY CREEK
@ 0.4%

MINET'S POINT
PUMP STATION

WHISKEY CREEK

15m PEDESTRIAN
BRIDGE

REMOVE SECTION OF BRENNAN AVE.
DAYLIGHTING WATERCOURSE

REMOVE SECTION OF THE BOULEVARD
DAYLIGHTING WATERCOURSE

LISMER BLDV.

KEMPVIEW LN.

BRENNAN AVE.

7 BRENNAN AVE

EXISTING RESIDENTIAL DWELLING
TO BE REMOVED

REGRADE WHISKEY CREEK
@ 0.4%

199 THE BOULEVARD

WHITE OAKS RD.

THE BLDV.

CLIFF RD.



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ████████ STUDY AREA
- 250.00 - EX CONTOUR
- ████████ PROPOSED PROPERTY ACQUISITION
- ████████ ROAD TO BE REMOVED
- ████████ PROPOSED TRANSPORTATION LINKAGE
- ████████ WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)



**WHISKEY CREEK
DRAINAGE IMPROVEMENTS**
ALTERNATIVE 6B - REMOVE BRENNAN AVE. AND THE
BOULEVARD AT WHISKEY CREEK AND CONNECT BRENNAN
AVE. AND THE BOULEVARD

DWG. No.

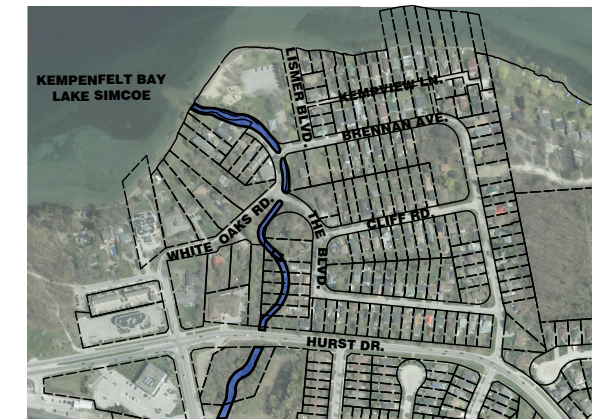
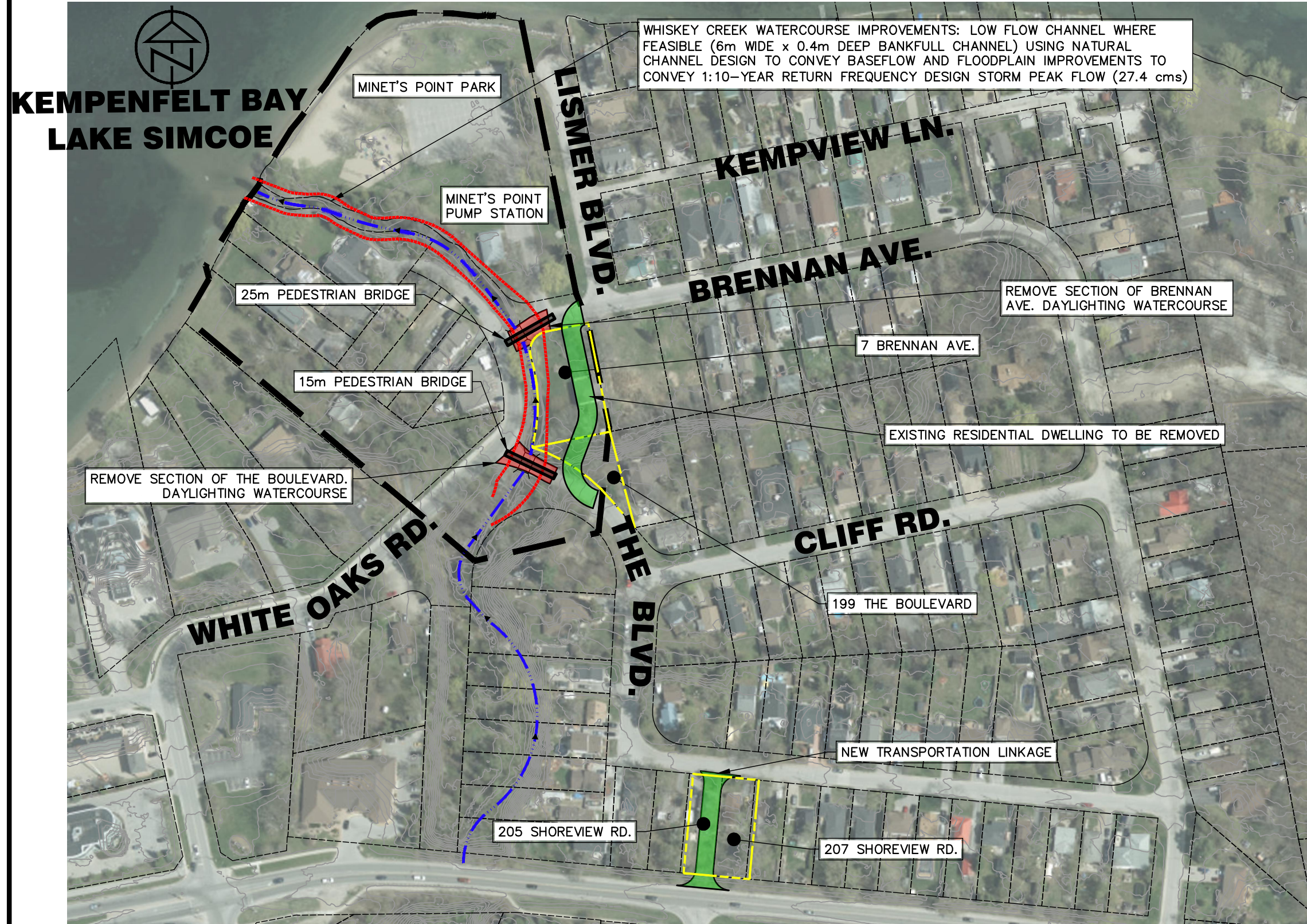
ALT-6B

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

JOB NO. 120114



KEY PLAN

LEGEND	
---	EX. PROPERTY LINE
█	STUDY AREA
- 250.00 -	EX CONTOUR
---	PROPOSED PROPERTY ACQUISITION
█	ROAD TO BE REMOVED
█	PROPOSED TRANSPORTATION LINKAGE
---	WHISKEY CREEK

PROPERTY ACQUISITION:

- A) 7 BRENNAN AVE.
- B) 199 THE BOULEVARD (PORTION OF)
- C) 207 SHOREVIEW RD.
- D) 205 SHOREVIEW RD.



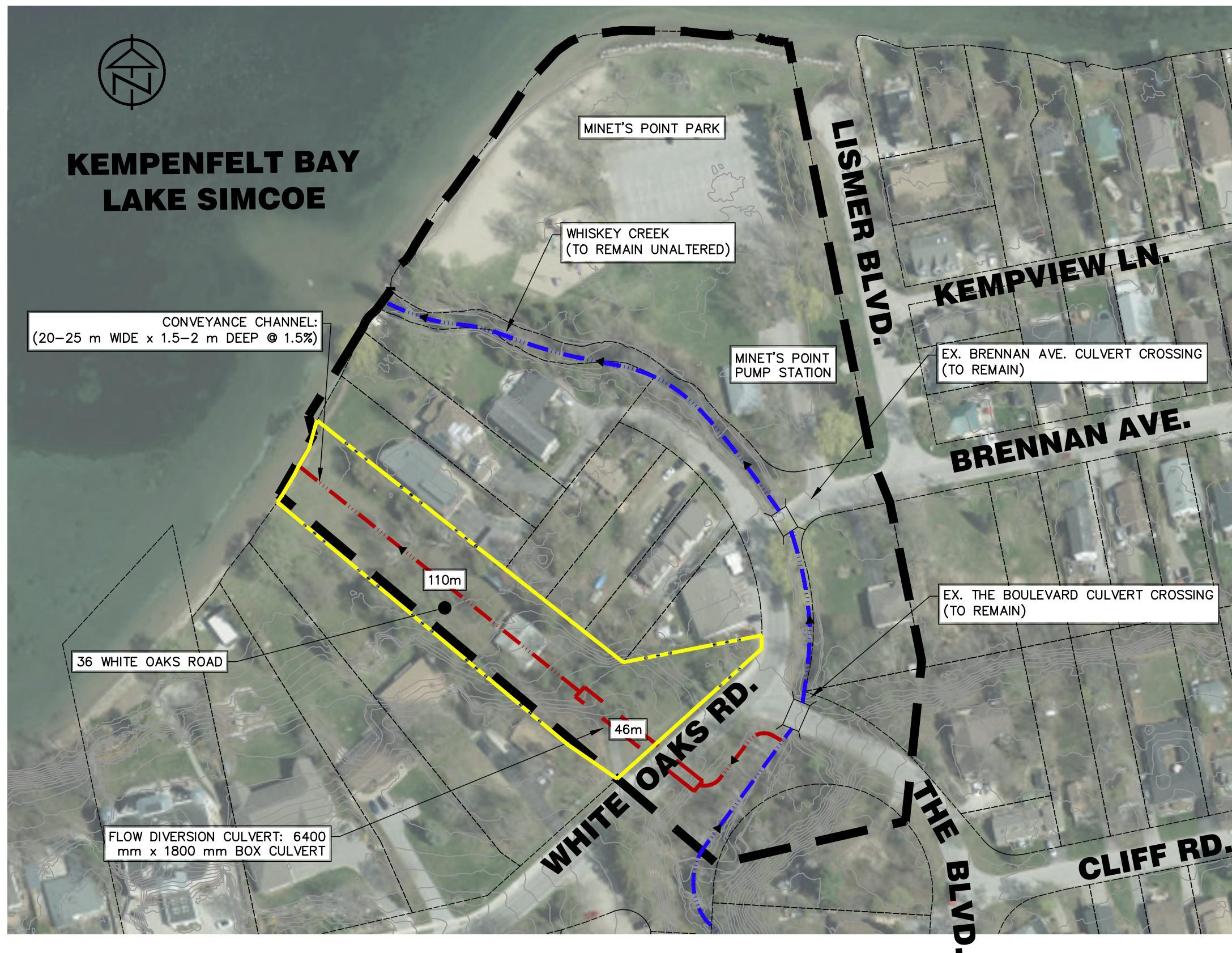
**WHISKEY CREEK
DRAINAGE IMPROVEMENTS**
ALTERNATIVE 6C – REMOVE BRENNAN AVE. AND THE BOULEVARD AT WHISKEY CREEK AND CONNECT BRENNAN AVE. AND THE BOULEVARD AND NEW CONNECTION TO

SCALE: 1:2000 DRAWN: JGH DATE: SEPT./20

DWG. No.

ALT-6C

JOB NO. 120114



KEY PLAN

LEGEND

- EX. PROPERTY LINE
- ██████████ STUDY AREA
- 250.00 - EX CONTOUR
- PROPOSED PROPERTY ACQUISITION
- ROAD TO BE REMOVED
- PROPOSED TRANSPORTATION LINKAGE
- WHISKEY CREEK

PROPERTY ACQUISITION:
A) 36 WHITE OAKS ROAD



**WHISKEY CREEK
 DRAINAGE IMPROVEMENTS**
 ALTERNATIVE 7 – ADDITIONAL CONVEYANCE ROUTE (FLOW
 DIVERSION) THROUGH 26 WHITE OAKS ROAD

DWG. No.

ALT-7

SCALE: 1:1500

DRAWN: JGH

DATE: SEPT./20

JOB NO. 120114