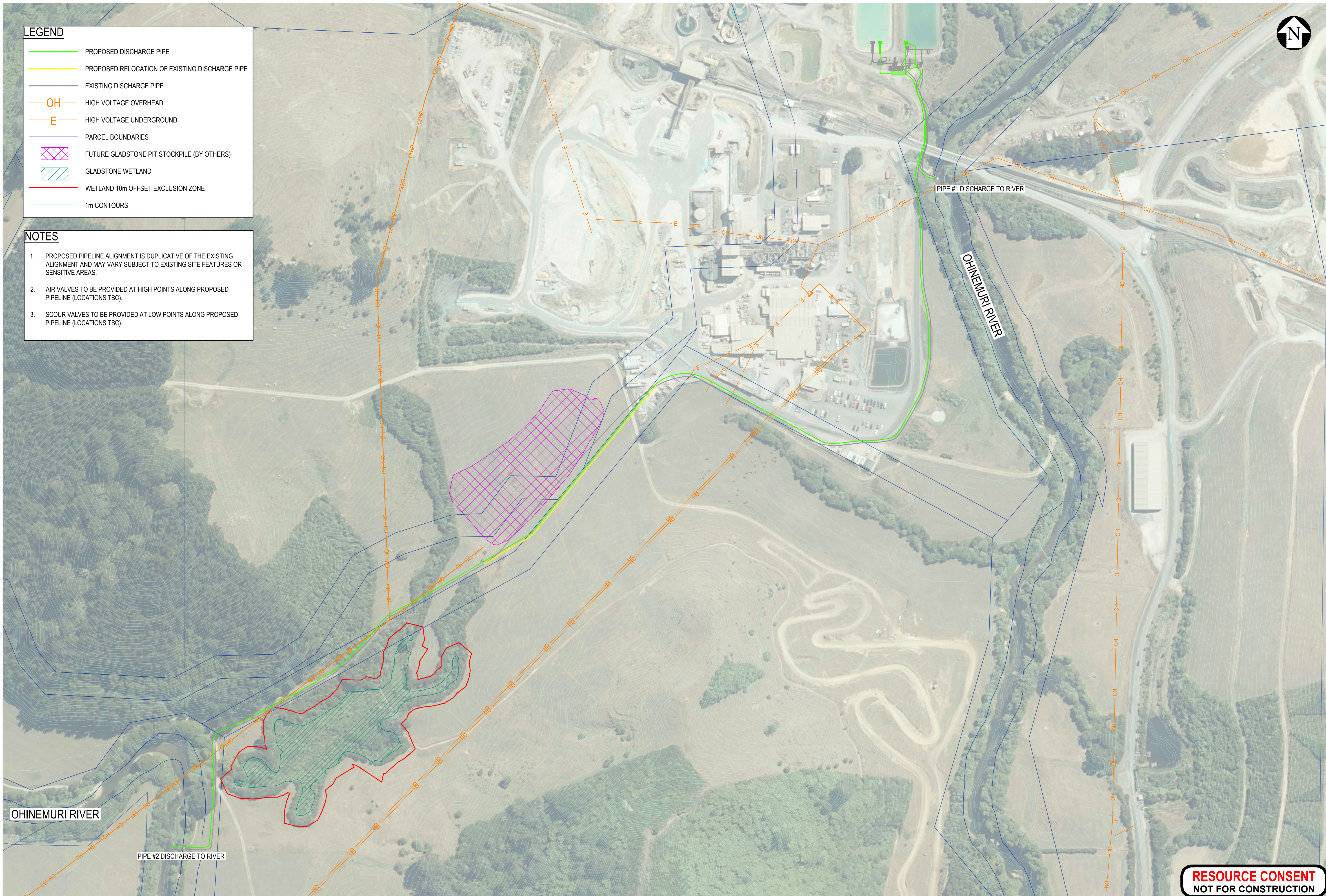


18. Water Treatment Discharge Outfall Upgrades



LEGEND

- PROPOSED DISCHARGE PIPE
- PROPOSED RELOCATION OF EXISTING DISCHARGE PIPE
- EXISTING DISCHARGE PIPE
- OH HIGH VOLTAGE OVERHEAD
- E HIGH VOLTAGE UNDERGROUND
- PARCEL BOUNDARIES
- FUTURE GLADSTONE PIT STOCKPILE (BY OTHERS)
- GLADSTONE WETLAND
- WETLAND 10m OFFSET EXCLUSION ZONE
- 1m CONTOURS

NOTES

- PROPOSED PIPELINE ALIGNMENT IS DUPLICATIVE OF THE EXISTING ALIGNMENT AND MAY VARY SUBJECT TO EXISTING SITE FEATURES OR SENSITIVE AREAS.
- AIR VALVES TO BE PROVIDED AT HIGH POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).
- SCOUR VALVES TO BE PROVIDED AT LOW POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
1:1500	Drawn	J.SPEEDY	15.03.22	
	Dwg Verifier	L.SUE	25.03.22	
Reduce Scale (A3)	Dwg Check	H.KERR	25.03.22	Date
1:3000				
	* Refer to Revision 1 for Original Signature			



Client:

Project: WAIHI NORTH WATER TREATMENT PLANT OUTFALL DISCHARGE UPGRADE

Title: CIVIL SITE LAYOUT OVERVIEW

Discipline	CIVIL	Rev.	0
Drawing No.	2210983-203-SK1		



LEGEND

PROPOSED DISCHARGE PIPE

PROPOSED RELOCATION OF EXISTING DISCHARGE PIPE

EXISTING DISCHARGE PIPE

OH

HIGH VOLTAGE OVERHEAD

E

HIGH VOLTAGE UNDERGROUND

PARCEL BOUNDARIES

FUTURE GLADSTONE PIT STOCKPILE (BY OTHERS)

GLADSTONE WETLAND

WETLAND 10m OFFSET EXCLUSION ZONE

1m CONTOURS

NOTES

1.

PROPOSED PIPELINE ALIGNMENT IS DUPLICATIVE OF THE EXISTING ALIGNMENT AND MAY VARY SUBJECT TO EXISTING SITE FEATURES OR SENSITIVE AREAS.

2.

AIR VALVES TO BE PROVIDED AT HIGH POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

3.

SCOUR VALVES TO BE PROVIDED AT LOW POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

0	FOR CONSENT		JS	LS	PR	25.03.22			
No.	Revision		By	Chk	Appd	Date			

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
1:500	Drawn	J.SPEEDY	15.03.22	
Reduced Scale (A3)	Dwg Verifier	L.SUE	25.03.22	Date
1:1000	Dwg Check	H.KERR	25.03.22	
	* Refer to Revision 1 for Original Signature			



Client:

Project:

WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title:

CIVIL SITE LAYOUT
SHEET 1

Discipline

CIVIL

Drawing No.

2210983-203-SK2

Rev.

0

RESOURCE CONSENT
NOT FOR CONSTRUCTION



REFER TO 2210983-203-SK2 FOR CONTINUATION

LEGEND

PROPOSED DISCHARGE PIPE

PROPOSED RELOCATION OF EXISTING DISCHARGE PIPE

EXISTING DISCHARGE PIPE

OH

HIGH VOLTAGE OVERHEAD

E

HIGH VOLTAGE UNDERGROUND

PARCEL BOUNDARIES

FUTURE GLADSTONE PIT STOCKPILE (BY OTHERS)

GLADSTONE WETLAND

WETLAND 10m OFFSET EXCLUSION ZONE

1m CONTOURS

NOTES

1. PROPOSED PIPELINE ALIGNMENT IS DUPLICATIVE OF THE EXISTING ALIGNMENT AND MAY VARY SUBJECT TO EXISTING SITE FEATURES OR SENSITIVE AREAS.

2. AIR VALVES TO BE PROVIDED AT HIGH POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

3. SCOUR VALVES TO BE PROVIDED AT LOW POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

PROPOSED DISCHARGE PIPE #2

EXISTING DISCHARGE PIPE #2

REFER TO 2210983-203-SK4 FOR CONTINUATION

RESOURCE CONSENT
NOT FOR CONSTRUCTION

0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
1:500	Drawn	J.SPEEDY	15.03.22	
	Dwg Verifier	L.SUE	25.03.22	
Reduced Scale (A3)	Dwg Check	H.KERR	25.03.22	Date
1:1000	* Refer to Revision 1 for Original Signature			



Client:

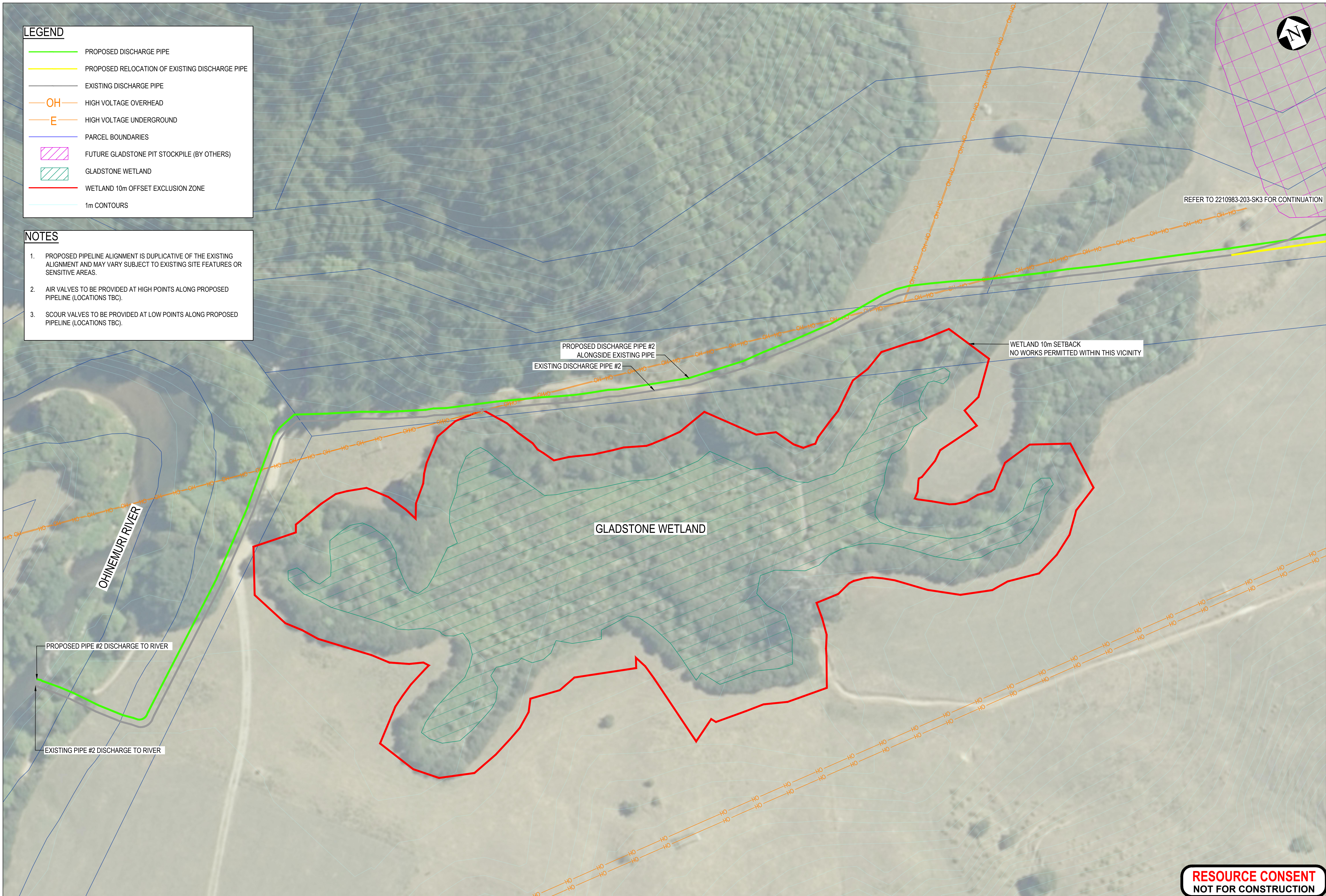
Project:

WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title:

CIVIL SITE LAYOUT
SHEET 2

Discipline	CIVIL
Drawing No.	2210983-203-SK3
Rev.	0



0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
1:500	Drawn	J.SPEEDY	15.03.22	
Reduced Scale (A3)	Dwg Verifier	L.SUE	25.03.22	Date
1:1000	Dwg Check	H.KERR	25.03.22	
	* Refer to Revision 1 for Original Signature			



Client: WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title: CIVIL SITE LAYOUT
SHEET 3

Discipline	CIVIL
Drawing No.	2210983-203-SK4
Rev.	0



LEGEND

- PROPOSED DISCHARGE PIPE
- PROPOSED RELOCATION OF EXISTING DISCHARGE PIPE
- EXISTING DISCHARGE PIPE
- OH HIGH VOLTAGE OVERHEAD
- E HIGH VOLTAGE UNDERGROUND
- PARCEL BOUNDARIES
- FUTURE GLADSTONE PIT STOCKPILE
- GLADSTONE WETLAND
- WETLAND 10m OFFSET EXCLUSION ZONE
- 1m CONTOURS

NOTES

- PROPOSED PIPELINE ALIGNMENT IS DUPLICATIVE OF THE EXISTING ALIGNMENT AND MAY VARY SUBJECT TO EXISTING SITE FEATURES OR SENSITIVE AREAS.
- AIR VALVES TO BE PROVIDED AT HIGH POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).
- SCOUR VALVES TO BE PROVIDED AT LOW POINTS ALONG PROPOSED PIPELINE (LOCATIONS TBC).

BRIDGE

EXISTING WEIR

FLOW

EXISTING SUPPLEMENTARY PIPE

PROPOSED DISCHARGE PIPE #1

EXISTING DISCHARGE PIPE #1

EXISTING DIFFUSER #1

PROPOSED DIFFUSER #1

OHINEMURI RIVER

PROPOSED DISCHARGE PIPE #2

EXISTING DISCHARGE PIPE #2

RESOURCE CONSENT
NOT FOR CONSTRUCTION

0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

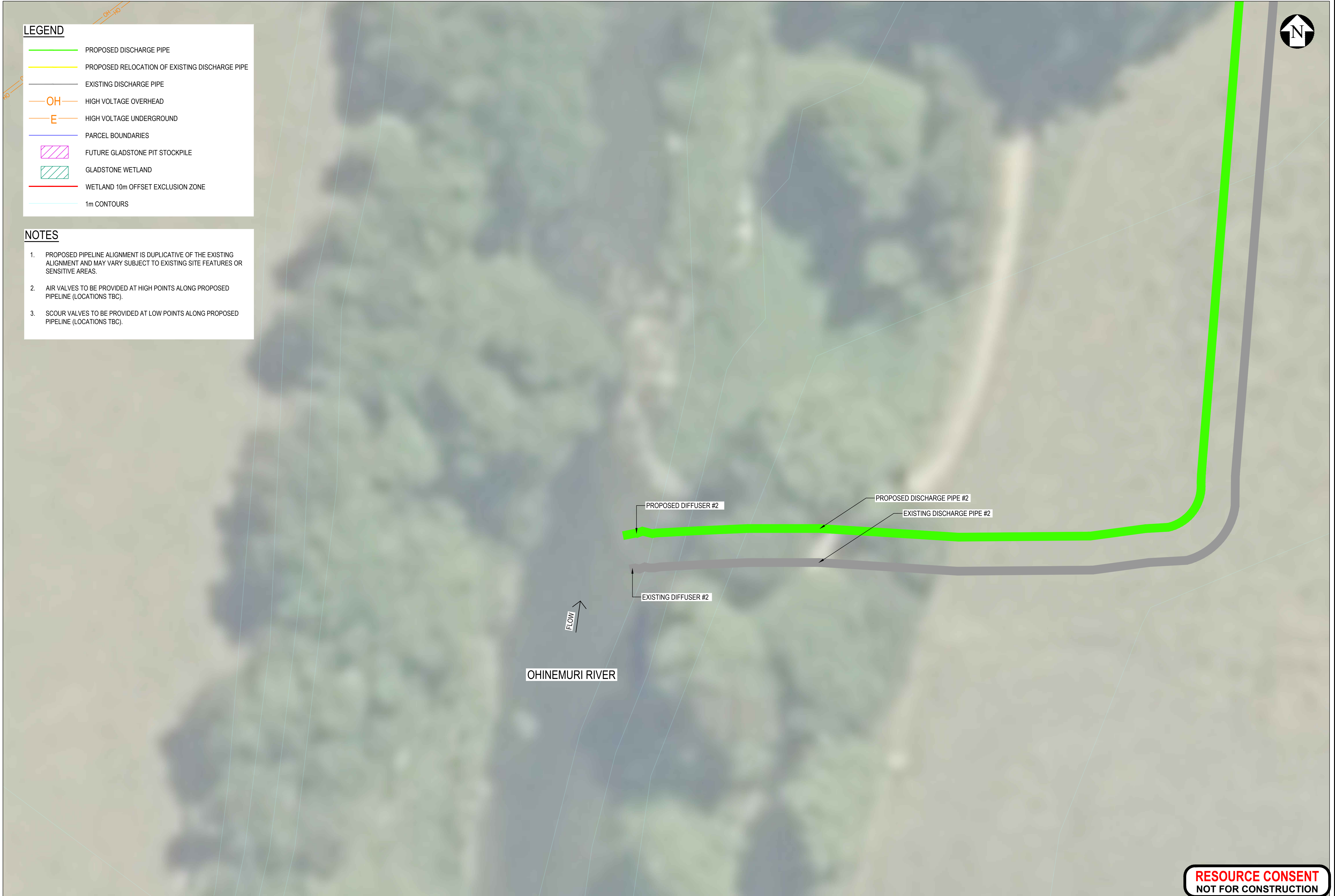
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Reduced Scale (A3)	Dwg Verifier	L.SUE	25.03.22	Date
1:200	Dwg Check	H.KERR	25.03.22	
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Project: WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title: DIFFUSER #1 LAYOUT

Discipline	CIVIL
Drawing No.	2210983-203-SK10
Rev.	0



0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1) 1:100	Design Drawn Dsg Verifier	P.JOHNSON J.SPEEDY L.SUE	15.03.22 15.03.22 25.03.22	Approved For Construction*
Reduced Scale (A3) 1:200	Drg Check	H.KERR	25.03.22	Date
* Refer to Revision 1 for Original Signature				

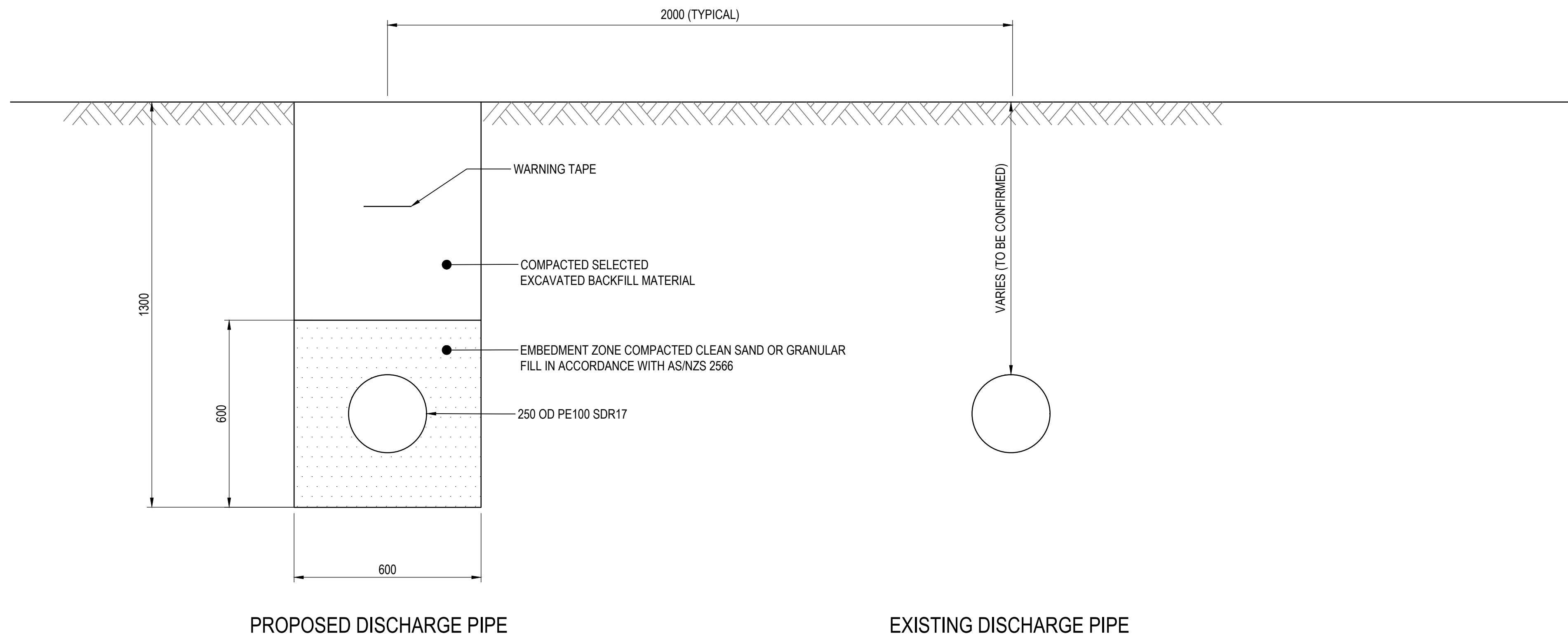


Client:

Project: WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title: DIFFUSER #2 LAYOUT

Discipline	CIVIL
Drawing No.	2210983-203-SK10
Rev.	0



TYPICAL DISCHARGE PIPE SECTION
NTS

RESOURCE CONSENT
NOT FOR CONSTRUCTION

0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
NTS	Drawn	J.SPEEDY	15.03.22	H.KERR
Reduced Scale (A3)	Dwg Verifier		25.03.22	
NTS	Dwg Check	L.SUE	25.03.22	Date
	* Refer to Revision 1 for Original Signature			

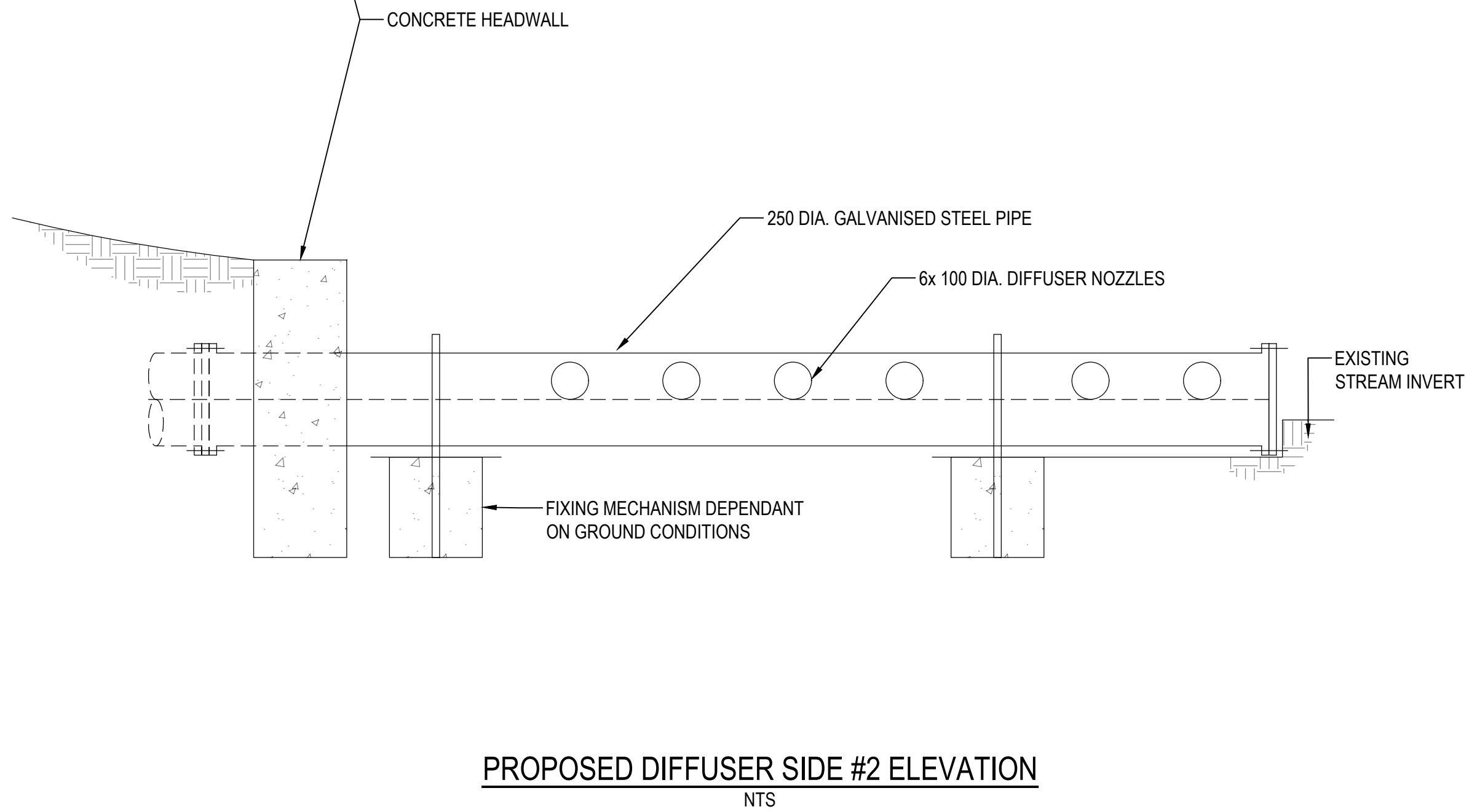
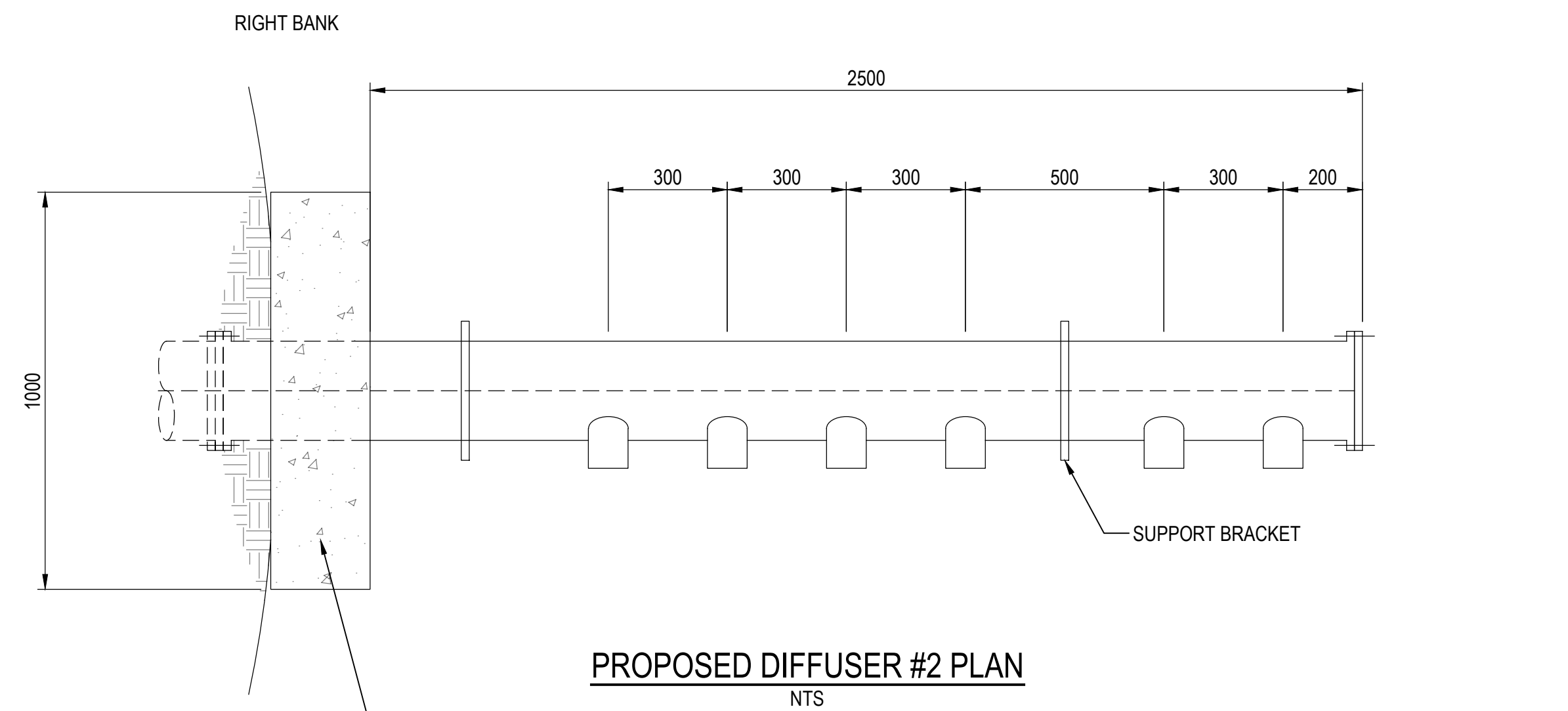
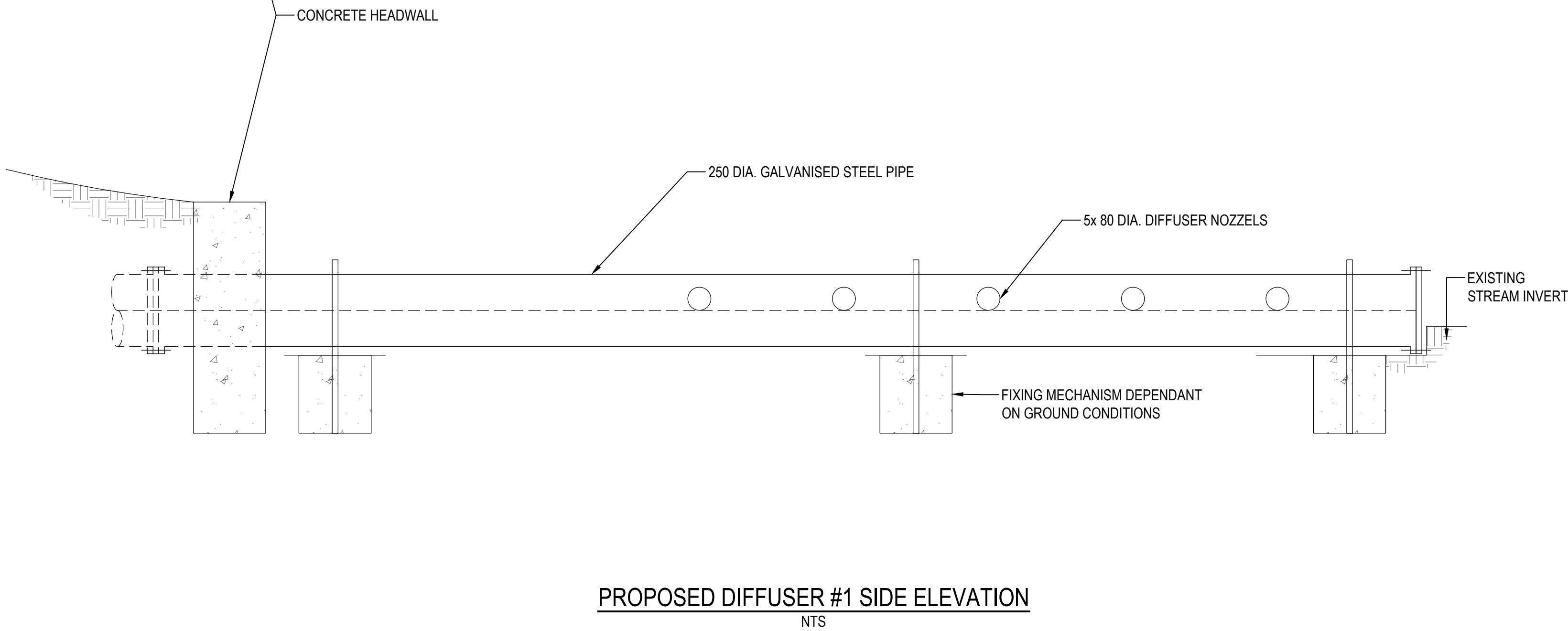
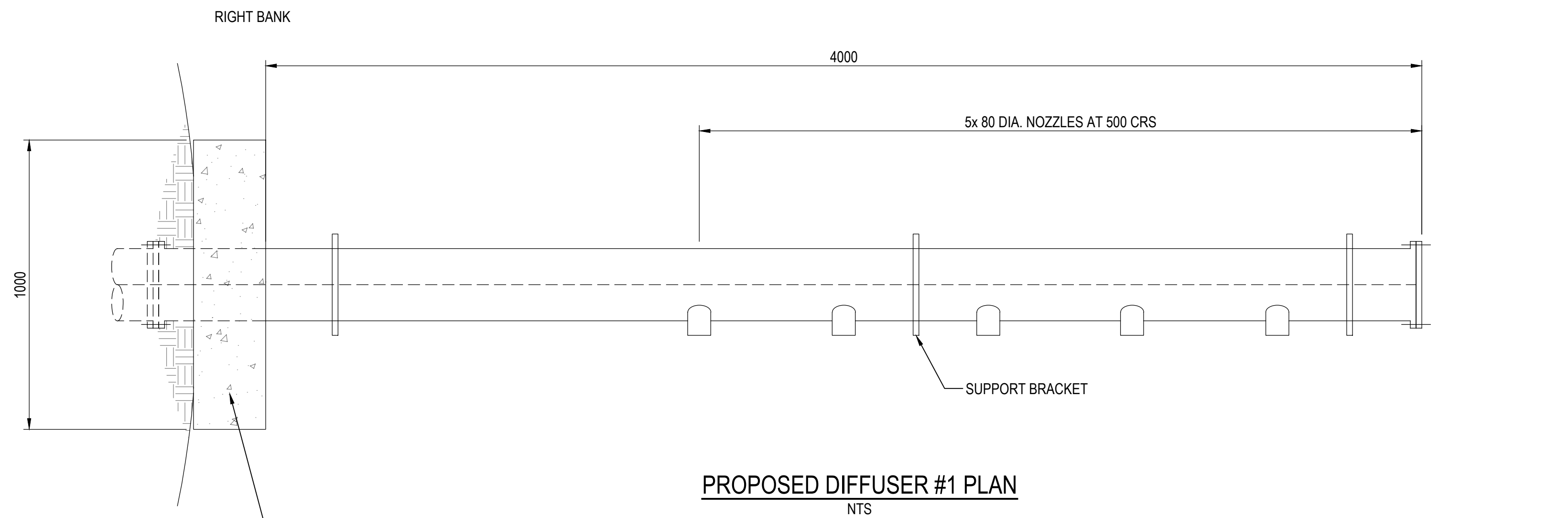


Client:

Project: WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title: CIVIL DETAILS
SHEET 1

Discipline	CIVIL
Drawing No.	Beca Project Number: 2210983-203-SK20
Rev.	0



RESOURCE CONSENT
NOT FOR CONSTRUCTION

0	FOR CONSENT	JS	LS	PR	25.03.22
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	P.JOHNSON	15.03.22	Approved For Construction*
NTS	Drawn	J.SPEEDY	15.03.22	
Reduced Scale (A3)	Dsg Verifier	L.SUE	25.03.22	Date
NTS	Drg Check	H.KERR	25.03.22	
	* Refer to Revision 1 for Original Signature			



Project: WAIHI NORTH
WATER TREATMENT PLANT
OUTFALL DISCHARGE UPGRADE

Title: CIVIL DETAILS
SHEET 2

Discipline	CIVIL
Drawing No.	Beca Project Number: 2210983-203-SK21
Rev.	0