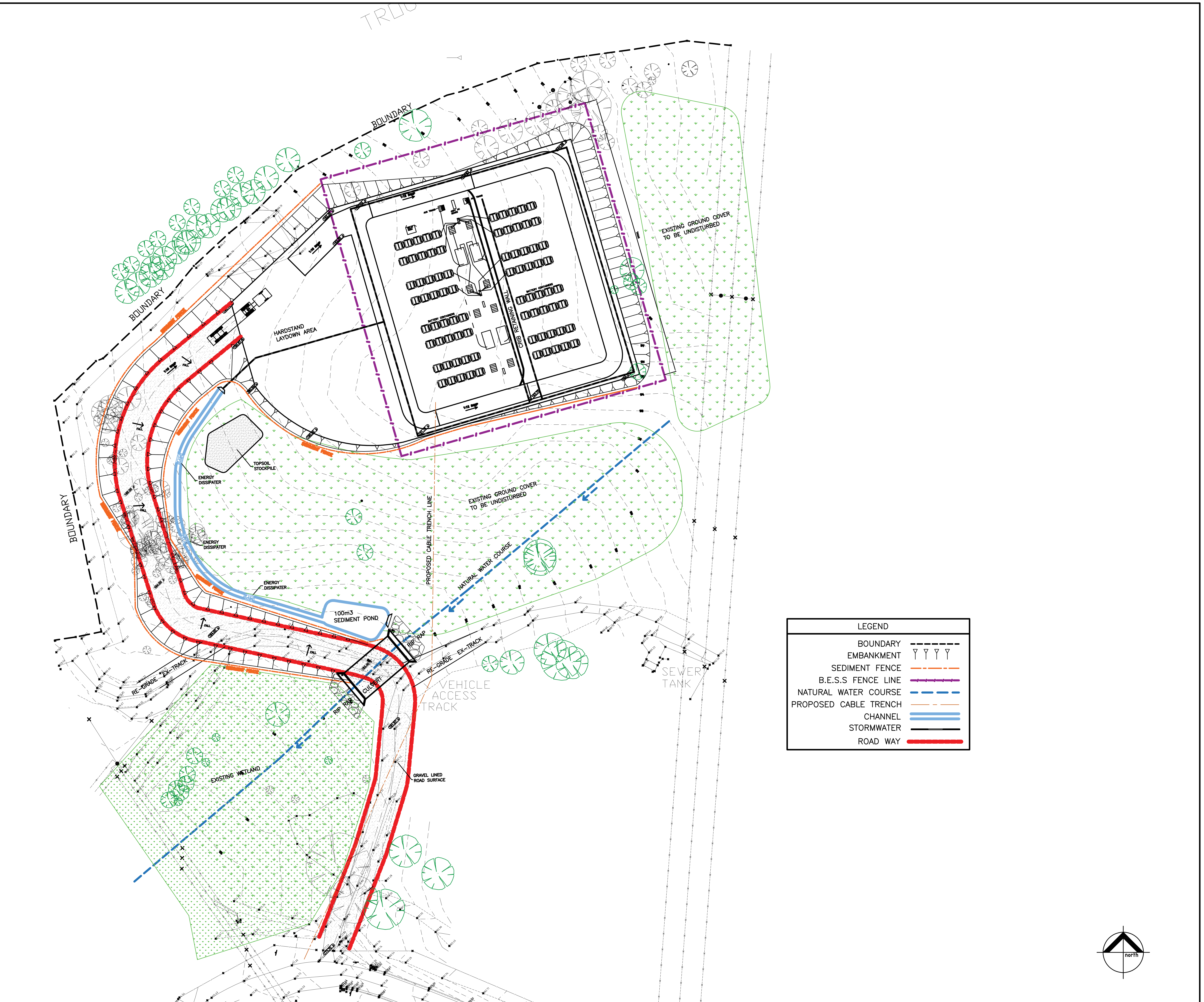
Appendix C. Design plans



LEGEND
BOUNDARY
EMBANKMENT
SEDIMENT FENCE
B.E.S.S FENCE LINE
NATURAL WATER COURSE
PROPOSED CABLE TRENCH
CHANNEL
STORMWATER
ROAD WAY

PROJECT.

PROPOSED B.E.S.S LAYOUT
EROSION AND SEDIMENT CONTROL
HUME WEIR

TITLE.

CONTEXT PLAN

CLIENT

FLUENCE ENERGY

REV.	DATE.	AMENDMENT	REV.	DATE.	AMENDMENT
0	26/06/20	FIRST ISSUE			

DATE.	26/06/20
DRAWN.	JT
DESIGNED.	RN
CHECKED.	RN
SCALE @ A1	1:500

MEMBER OF ASSOCIATION CONSULTING STRUCTURAL ENGINEERS VICTORIA
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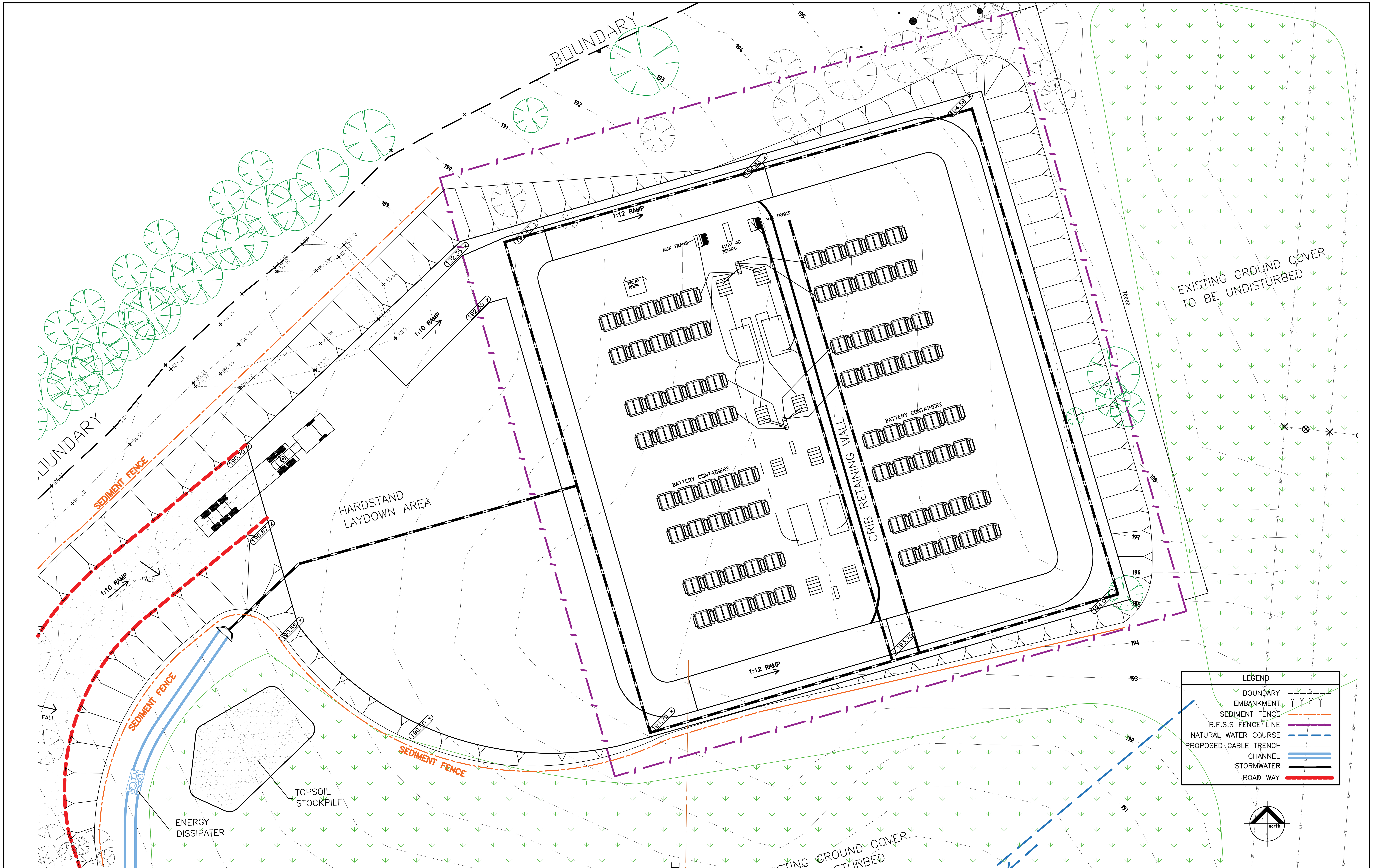
JOB No.	19207
DRAWING No.	S1
REVISION.	0



PROJECT.

PROPOSED B.E.S.S LAYOUT
EROSION AND SEDIMENT CONTROL
HUME WEIR

TITLE.

EROSION AND SEDIMENT CONTROL PLAN – PART A

CLIENT

FLUENCE ENERGY

REV.	DATE.	AMENDMENT	REV.	DATE.	AMENDMENT
0	28/06/20				

DATE.	26/06/20
DRAWN.	JT
DESIGNED.	RN
CHECKED.	RN
SCALE @ A1	1:200

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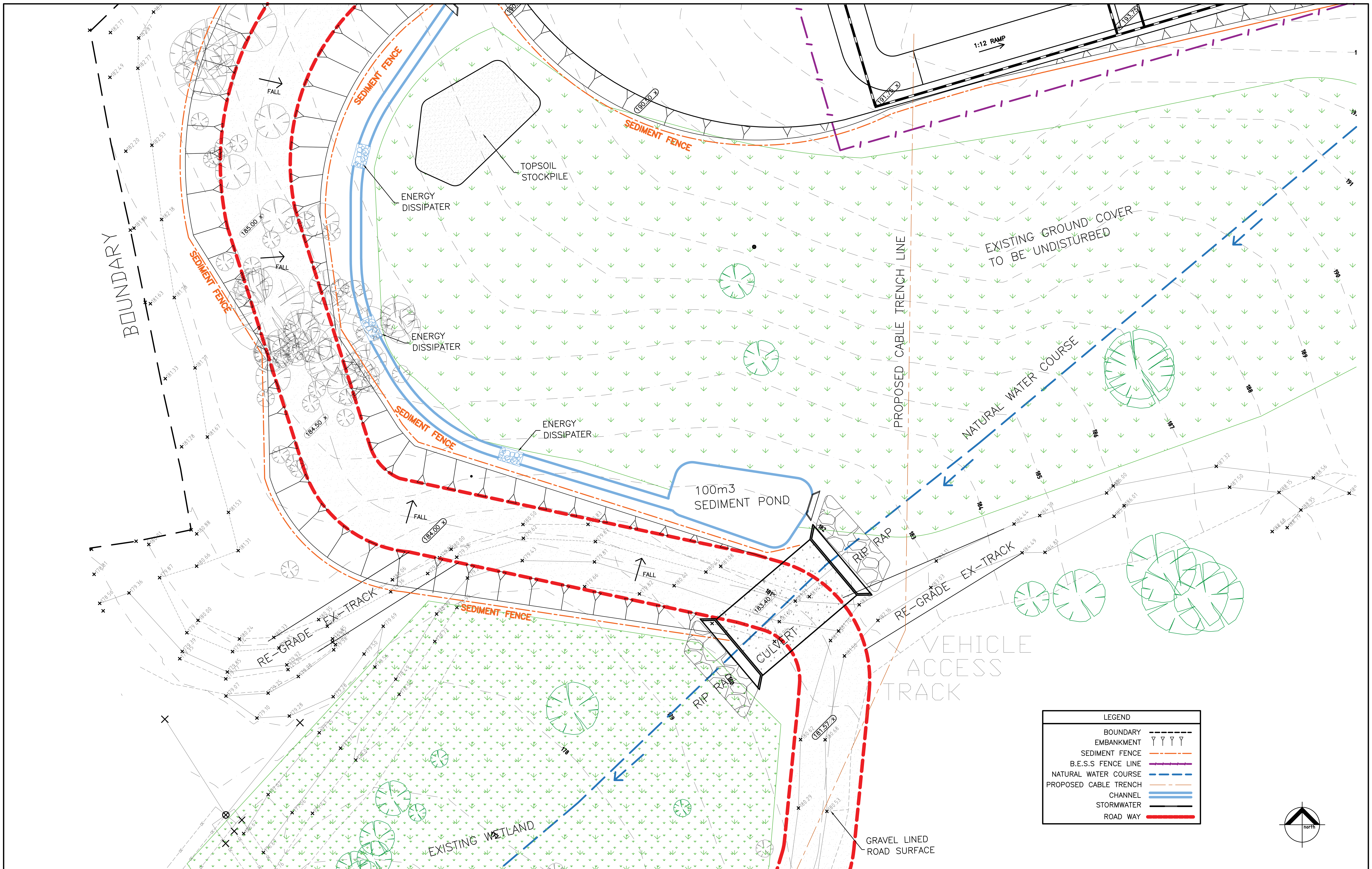
JOB No. 19207

DRAWING No. S2

REVISION. 0



PROJECT.

PROPOSED B.E.S.S LAYOUT
EROSION AND SEDIMENT CONTROL
HUME WEIR

TITLE.

EROSION AND SEDIMENT CONTROL PLAN – PART B

CLIENT

FLUENCE ENERGY

REV.	DATE.	AMENDMENT	REV.	DATE.	AMENDMENT
0	26/06/20	FIRST ISSUE			

DATE.	26/06/20
DRAWN.	JT
DESIGNED.	RN
CHECKED.	RN
SCALE @ A1	1:200

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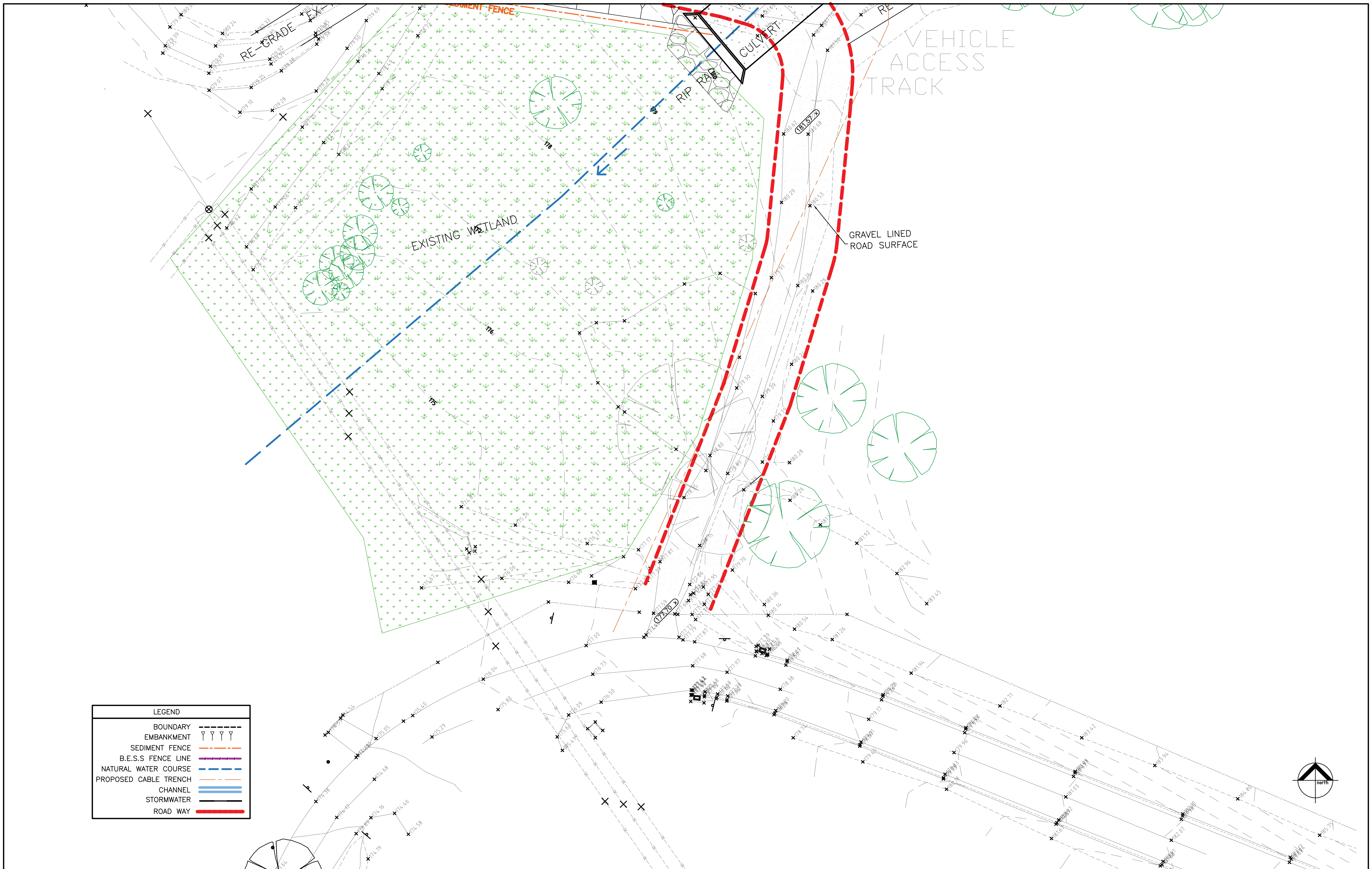
JOB No. 19207

DRAWING No. S3

REVISION. 0



PROJECT.

PROPOSED B.E.S.S LAYOUT
EROSION AND SEDIMENT CONTROL
HUME WEIR

TITLE.

EROSION AND SEDIMENT CONTROL
PLAN – PART C

CLIENT

FLUENCE ENERGY

REV.	DATE.	AMENDMENT	REV.	DATE.	AMENDMENT
0	26/06/20	FIRST ISSUE			

DATE.	26/06/20
DRAWN.	JT
DESIGNED.	RN
CHECKED.	RN
SCALE @ A1	1:200

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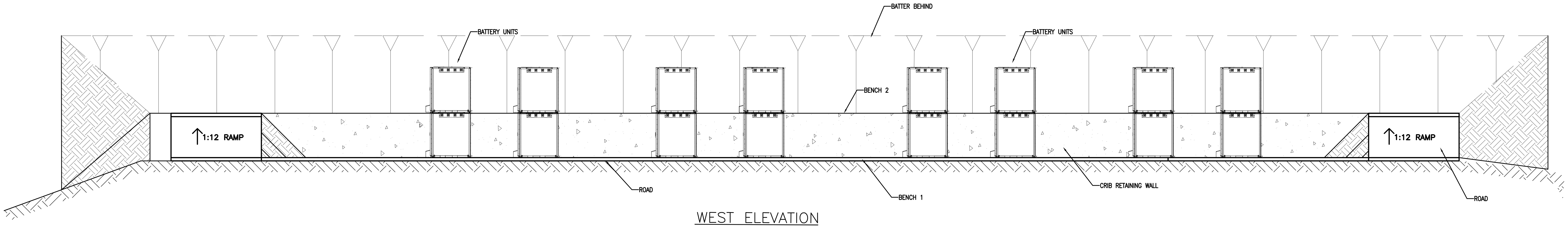
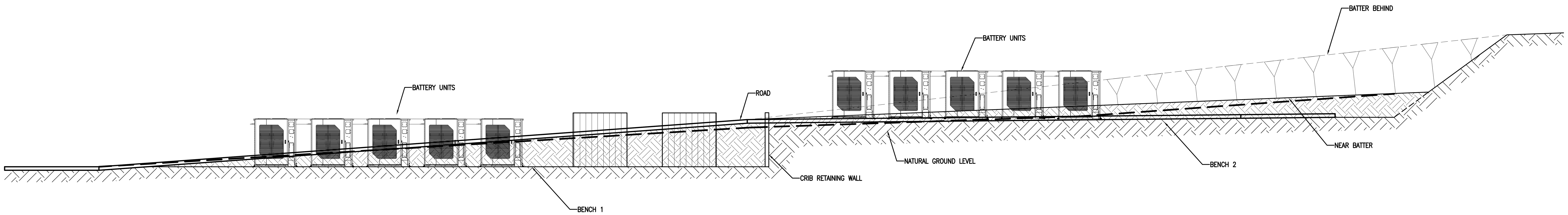
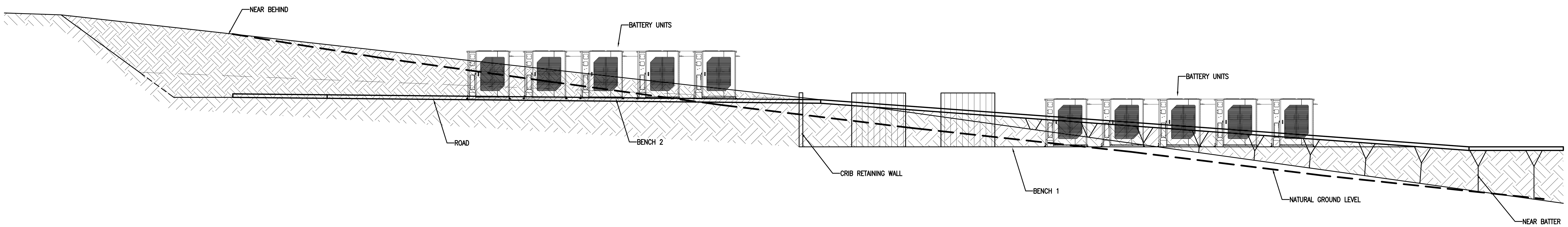
JOB No. 19207
DRAWING No. S4
REVISION. 0



WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

PROJECT.	TITLE.	REV.	DATE.	AMENDMENT		
PROPOSED B.E.S.S LAYOUT HUME WEIR	PROPOSED ELEVATIONS	0	03/07/20	FIRST ISSUE		
	CLIENT FLUENCE ENERGY					

DATE.	03/07/20
DRAWN.	JT
DESIGNED.	RN
CHECKED.	RN
SCALE @ A1	1:100

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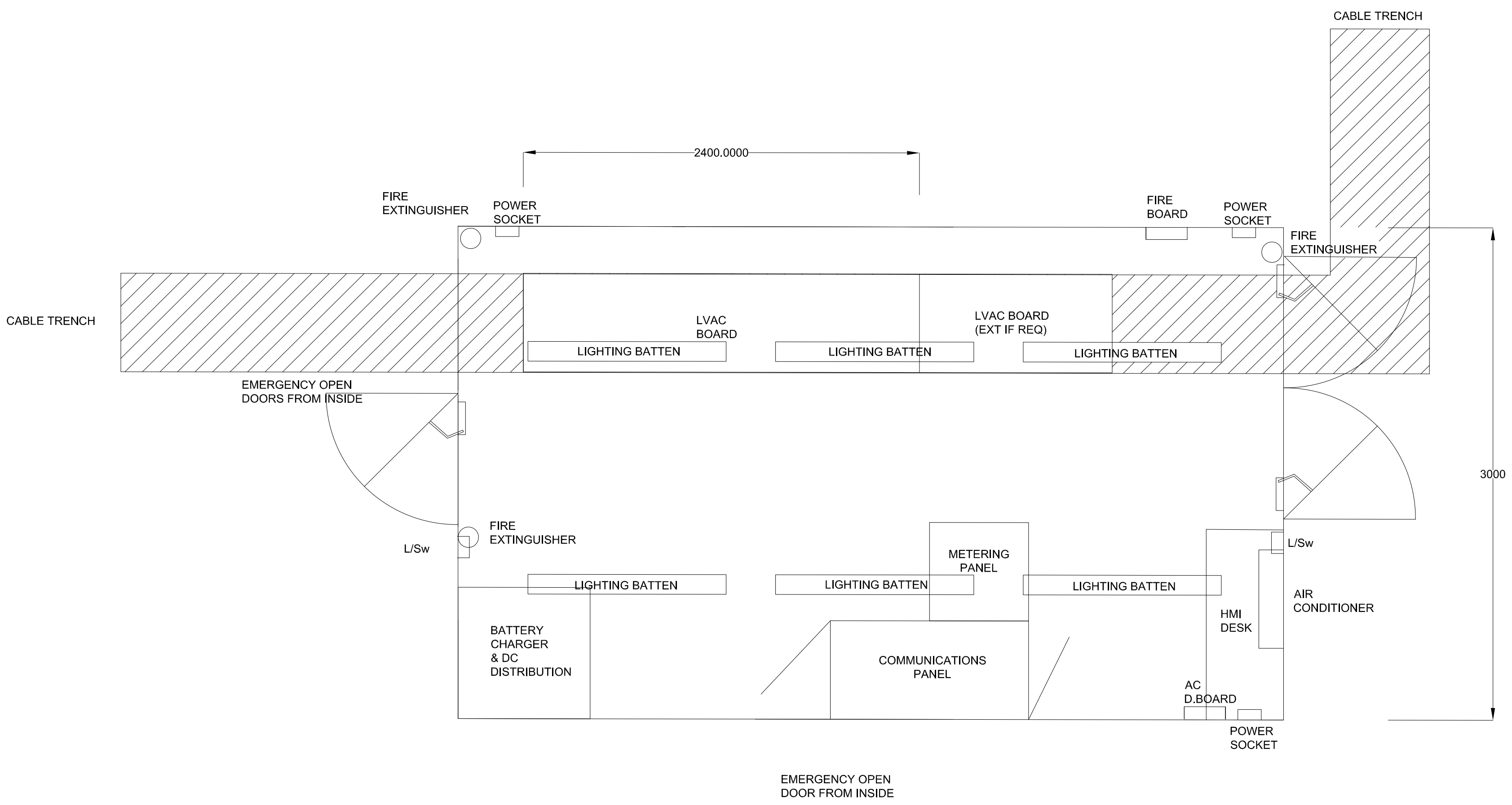
JOB No.	19207
DRAWING No.	S5
REVISION.	0



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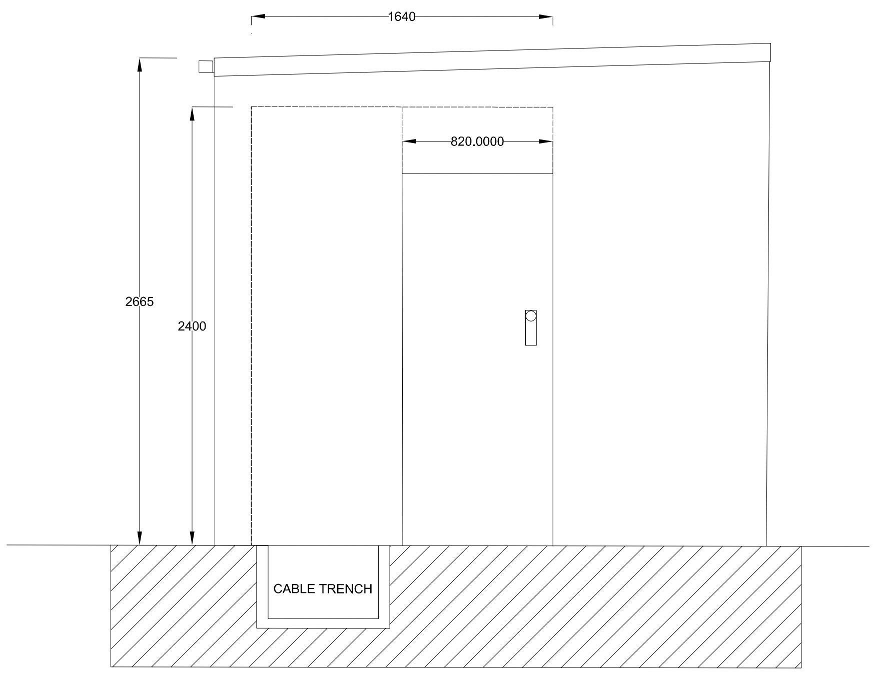


LEFT SIDE

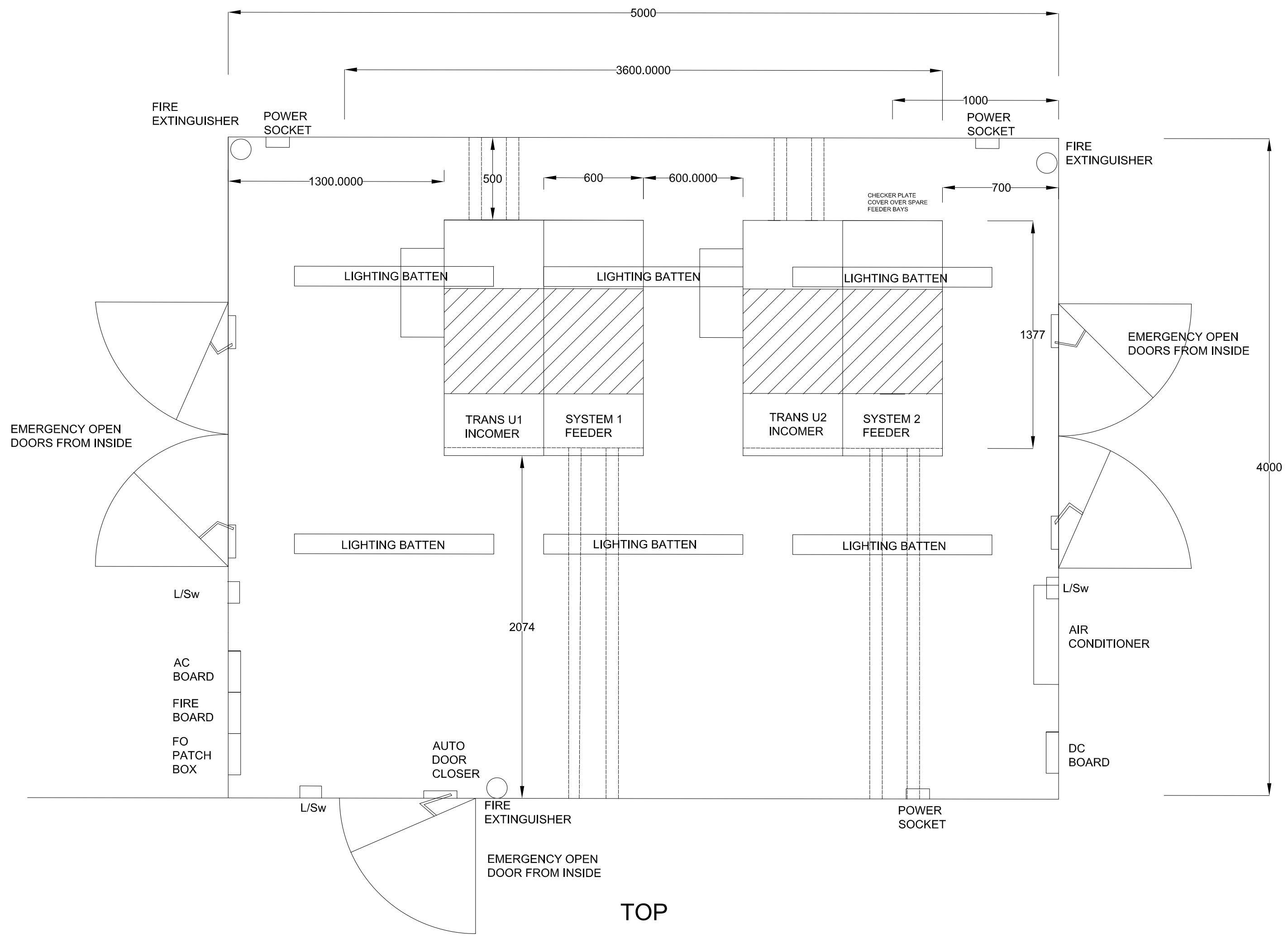
FRONT

ZONE	REV	DESCRIPTION	DATE	CHK BY	APV BY

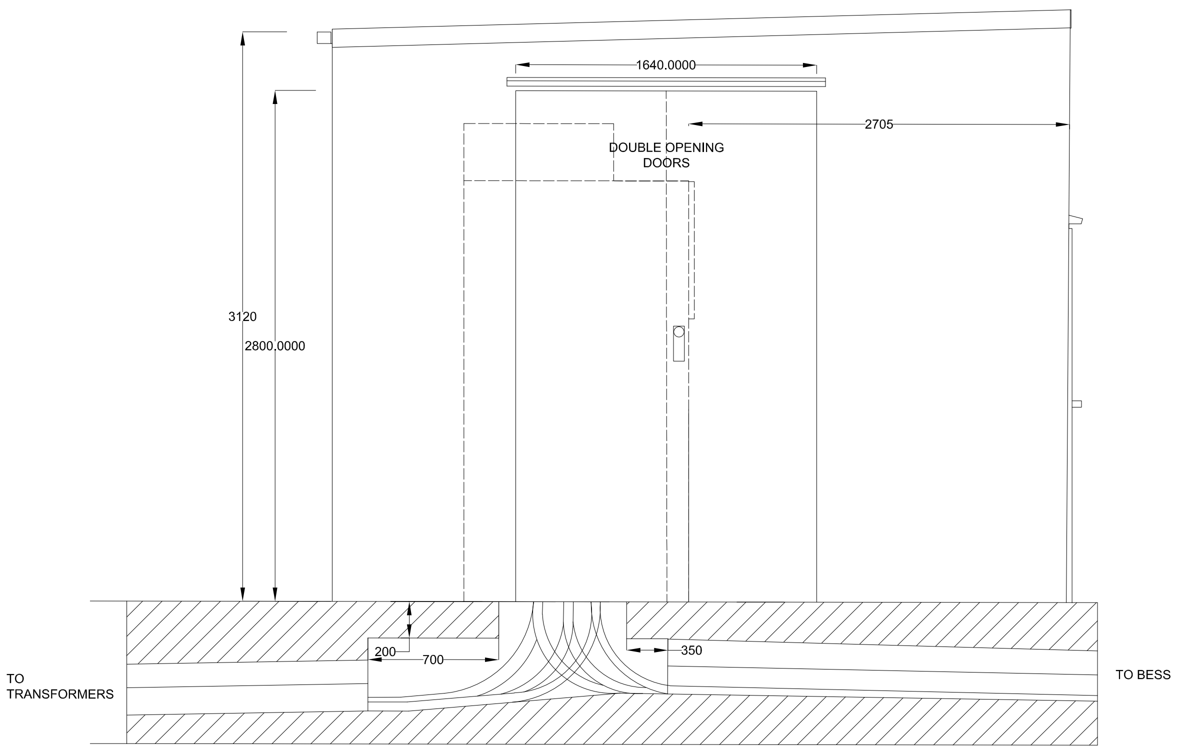
REVISIONS

FLUENCE CONFIDENTIAL & PROPRIETARY INFORMATION

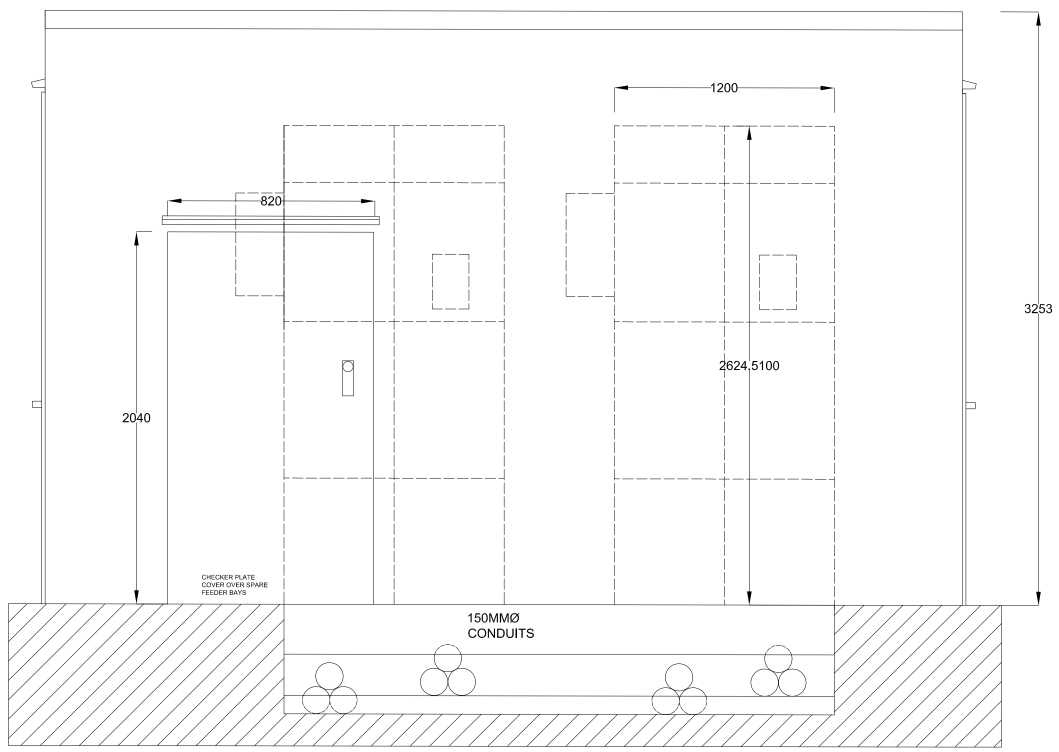
STATUS: FOR REVIEW
PROJECT: HUME WEIR BESS
TITLE: HUME WEIR BESS PROPOSED RELAY ROOM
DRAWN: GW DATE: 2020.27.04
REVIEW DATE
APPROVED DATE
DRAWING NO. HUW_20_40_XXX
REV 0
SHEET 1 0F 1



TOP



LEFT SIDE



FRONT

ZONE	REV	DESCRIPTION	DATE	CHK BY	APV BY
	1	REVISED FOR NX PLUS C SWITCHGEAR	7/7/20		

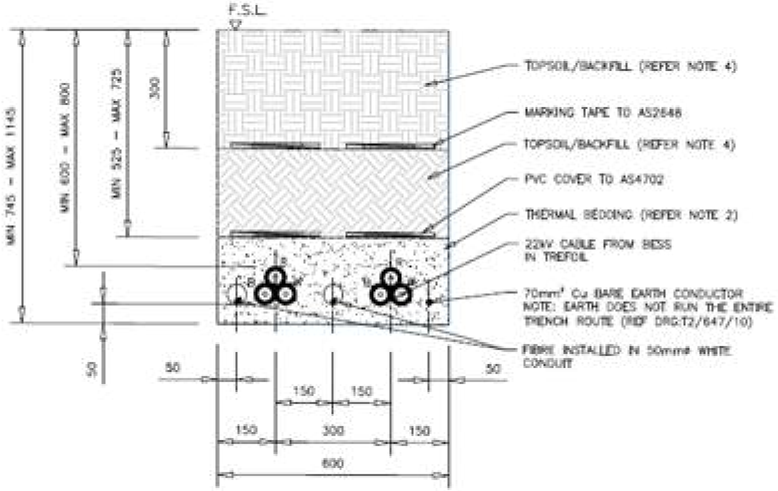
REVISIONS

FLUENCE CONFIDENTIAL & PROPRIETARY INFORMATION

STATUS: FOR REVIEW
PROJECT: HUME WEIR BESS
TITLE: HUME WEIR BESS PROPOSED SWITCHROOM
DRAWN: GW DATE: 2020.27.04
REVIEW DATE
APPROVED DATE
DRAWING NO.: HUW_20_40_XXX
REV: 1
SHEET: 1 0F 1

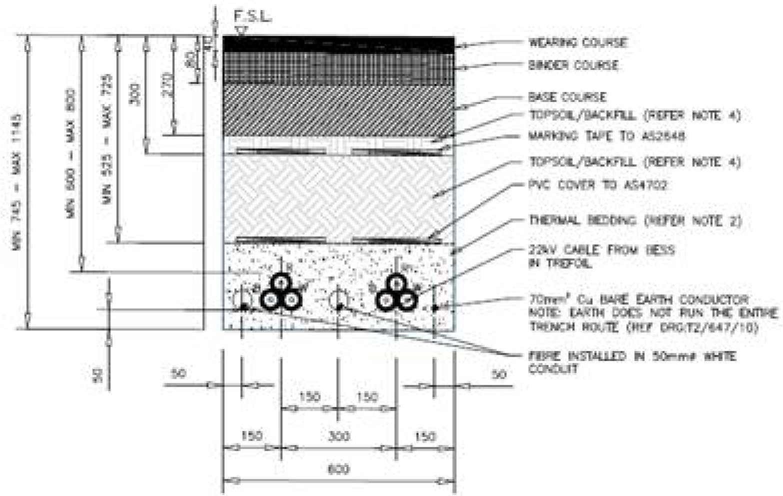
NOTES:

1. TRENCHES EXCAVATED FOR THE DIRECT BURIAL OF CABLES SHALL BE CAREFULLY CLEARED OF ROCKS PRIOR TO THE LAYING OF THE CABLE. CABLES SHALL BE BEDDED IN THERMAL BEDDING OF NOT LESS THAN 50mm THICK. AFTER LAYING THE CABLE, THE SAME THERMAL BEDDING MATERIAL SHALL BE INSTALLED OVER THE CABLE TO A MINIMUM THICKNESS OF 75mm ABOVE THE CABLE (NOTE BEDDING REQUIREMENTS)
2. THERMAL BEDDING SHALL HAVE A MINIMUM FULLY DRIED OUT TR VALUE OF 1.2km/W AT MINIMUM 85% COMPACTION, CARE SHALL BE TAKEN WHEN COMPACTING BEDDING SO THAT THE CABLE IS NOT DAMAGED.
3. SAND SHALL BE A WELL-GRADED MIXTURE WITH NO PARTICLE SIZE GREATER THAN 5mm. A GRADING CURVE SHALL BE SUPPLIED FROM THE QUARRY WHICH SHOULD INDICATE AN EVEN GRADING OF PARTICLE SIZES DOWN TO VERY FINE.
4. WASHED OR GRADED SANDS SHALL NOT BE USED.
5. ROCKS AND SHARP OBJECTS SHALL BE REMOVED FROM SUB SOIL PRIOR TO BACKFILL.
6. THE DRY THERMAL RESISTIVITY OF THE PROPOSED MIXTURE SHALL BE MEASURED PRIOR TO USE.
7. THE BACKFILL SHALL HAVE A DRY DENSITY OF APPROXIMATELY 1900 kg/m
8. BACKFILLING TO 85% SHALL BE DONE IN LAYERS NOT EXCEEDING 200mm AND EACH LAYER SHALL BE COMPACTED BEFORE THE NEXT LAYER IS APPLIED.
9. CUT CABLES THAT ARE NOT IMMEDIATELY JOINED SHALL BE CAPPED TO PREVENT MOISTURE INGRESS.
10. THE CABLE & FOC MANUFACTURES SPECIFIED MAXIMUM BENDING RADII AND PULLING TENSIONS SHALL BE ADHERED TO AT ALL TIMES.
11. CABLE CROSSINGS MUST BE AVOIDED, HOWEVER IF A CROSSING IS PRACTICALLY UNAVOIDABLE, CABLES SHALL BE CROSSED PERPENDICULAR TO EACH OTHER WITH SUFFICIENT GAP BETWEEN THEM TO PREVENT DERATING.
12. ALL CABLES COPPER WIRE SCREENS SHALL BE BONDED AT BOTH ENDS.



2 x 3 x 1 CORE Cu. 22kV XLPE 300mm²

SECTION A
CABLE TRENCH
CROSS SECTION



2 x 3 x 1 CORE Cu. 22kV XLPE 300mm²

SECTION B
CABLE TRENCH
CROSS SECTION