

ANSI D (34.00 X 22.00 INCHES)

NOTES:

- 1. FOR EQUIPMENT LAYOUT PLAN, SEE DWG# 2350-E101.
- 2. FOR FOUNDATION DETAILS, SEE DWG# 2350-C02 TO 2350-C06.
- 3. FOR GRADING DRAWING, REFER TO DWG#2350-CXXX.

DESIGN PARAMETER:

- 1. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT FOR ALMONTE BESS BY GEI, REF.#2400227; DATED ON FEBRUARY 28,2024.
- 2. FOUNDATION DESIGN PARAMETERS:
- 1) RECOMMENDED BEARING CAPACITY FOR FOUNDATION ON BEDROCK IS 500kPa AT SLS AND A FACTORED GEOTECHNICAL RESISTANCE AT USL OF 500kPa.
- 2) FOR FOUNDATION PLACED ON GRANULAR BACKFILL, GRANULAR FILL SHALL BE GRANULAR A OR B COMPACTED TO 100% SPMDD WITH MAX. LIFT OF 200mm AND EXTEND 2m FROM ALL INFRASTRUCTURE AND SLOPE DOWN TO THE EXPOSED BEDROCK SURFACE AT AT 2H:1V SLOPE WITH ADEQUATE EROSION PORTECTION.
- 3) FROST DEPTH IS 1.2m BELOW GRADE.
- 4) WATER TABLE IS AT 0.44m BLG.
- 5) SITE CLASS IS CLASS 'B' IN ACCORDANCE WITH OBC LATEST VERSION.

MATERIAL & CONSTRUCTION NOTES:

- 1. CONCRETE MATERIAL DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CSA A23 SERIES, LATEST VERSION.
- 2. CONCRETE SPECIFICATION

 - SUPPLY AND DELIVERY OF CONCRETE SHALL BE AS FOLLOW: A) MINIMUM COMPRESSION STRENGTH: 30MPA AT 28 DAYS.
 - B) PORTLAND CEMENT: TYPE GU PORTLAND CEMENT, EXPOSURE CLASS F-1.

 - C) MAXIMUM SIZE OF AGGREGATE: 14mm TO 20mm.
 - D) 5%-8% AIR CONTENT.
 - E) SLUMP RANGE: 75mm±20mm.
- F) MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED.
- 3. UNLESS OTHERWISE SPECIFIED, MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS: - CONCRETE CAST AGAINST SOIL = 75mm(3")
 - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm(2")
 - CONCRETE SURFACE EXPOSED TO WEATHER = 50mm(2")
 - ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 25mm(1") CHAMFER UNLESS OTHERWISE NOTED.
- 4. REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400MPA(60KSI) AND CONFORMING TO CSA G30.18 GR.400.
- 5. MINIMUM SPLICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CSA A23.3-14.
- 6. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DEWATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
- 7. PRIOR TO THE PLACEMENT OF CONCRETE, BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES COMPLY WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- 8. BEFORE PLACING CONCRETE, CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
- 9. PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
- 10. CONCRETE AFTER POURING SHALL BE ADEQUATE CURED MIN. 7 DAYS BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL.
- 11. MIN. 200mm OF GRANULAR A COMPACTED TO 100% SPMDD SHALL BE PLACED BEFORE PLACING INSULATION AND SHALL BE PLACED UNDERNEATH THE SLAB-ON-GRADE FOUNDATION U.N.O.

| Α | ISSUED FOR 60% REVIEW | 14/05/24 | НВ | SB | KW | |
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| REV. | REMARKS | DATE | DRAWN | CHECKED | APPROVED | ĸ |

FOUNDATION T.O.C ELEVATION SCHEDULE

| FOUNDATION TYPE | TOTAL REQ'D | T.O.C. EL. | RELAVENT DRAWING NO. | RELATED STRUCTURE | | |
|--------------------|----------------|------------|----------------------|---|--|--|
| F01 | 4 | 139.95 | 2350-C02 | BATTERY RACK FOUNDATION (DOUBLE) | | |
| F02 | 1 | (140.00) | 2350-C03 | TRANSFORMER FOUNDATION | | |
| F03 | 1 | 40.00 | 2350-C03 | AUXILIARY PANELS SUPPORT FOUNDATION | | |
| F04 | 1 | 139.96 | 2350-C03 | 44kV 3ø L.A. & TERM. SUPPORT FOUNDATION | | |
| F05 | 1 | (139.96) | 2350-C04 | 44kV TRANS-RUPTER TRS. SUPPORT FOUNDATION | | |
| F06 | 1 | (139.90 | 2350-C04 | 44kV 3ø C.T. & V.T. COMBOS SUPPORT FOUNDATION | | |
| F07 | 1 | (139.90 | 2350-C04 | 44kV DISC. SWITCH SUPPORT FOUNDATION | | |
| FP01 | 1 | (139.43) | 2308-EC-02 | 45FT CLASS G CONCRETE POLE FOUNDATION | | |
| FP02 | 1 | 139.60 | 2308-EC-02 | 45FT CLASS G CONCRETE POLE FOUNDATION | | |
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ISSUE FOR REVIEW

COMPASS ENERGY CONSULTING

Black & McDonald

BLACK & McDONALD LTD. 31 PULLMAN CRT. SCARBOROUGH, ONT. M1X 1E4 TEL. (416) 291-8200 FAX (416) 291-2282

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TO BE CONFIRMED





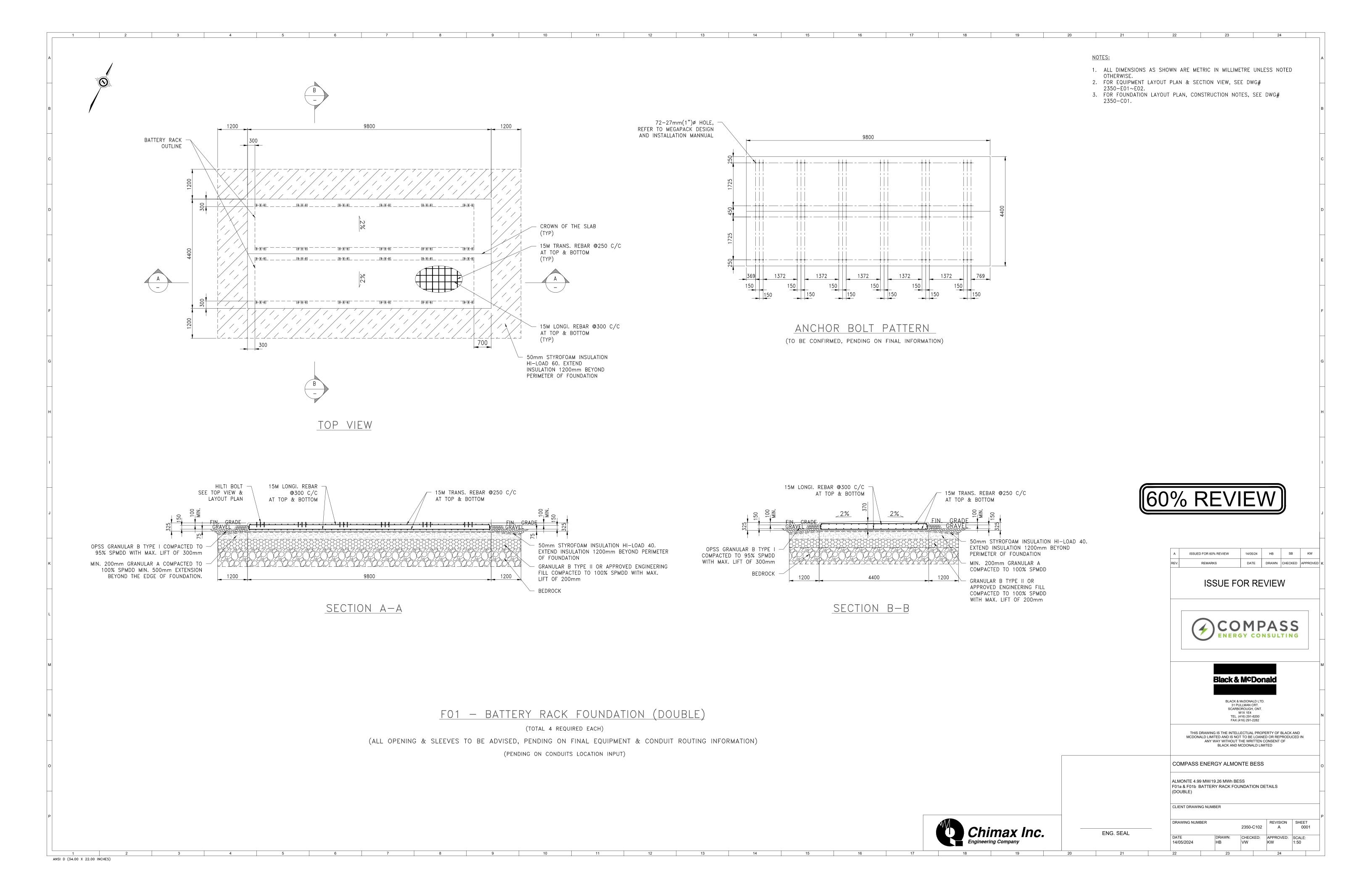
ALMONTE 4.99 MW/19.26 MWh BESS FOUNDATION LAYOUT PLAN

COMPASS ENERGY ALMONTE BESS

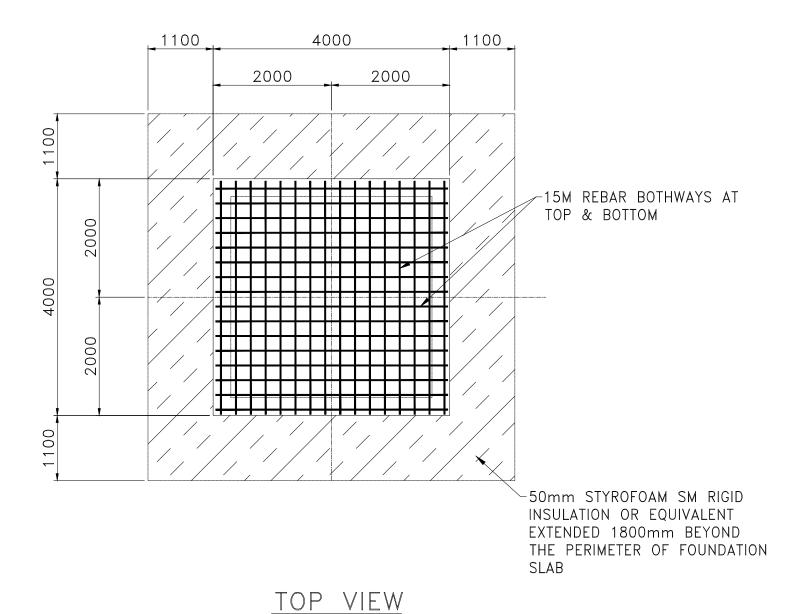
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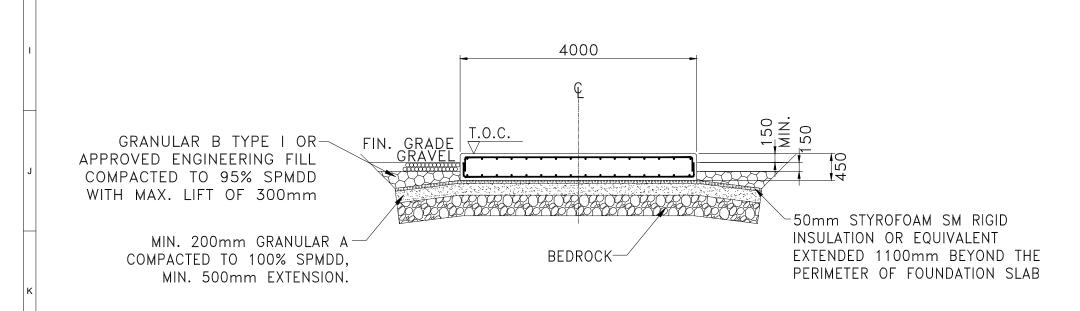
14/05/2024

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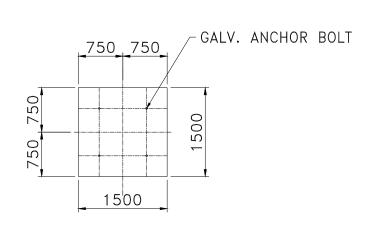


SECTION VIEW

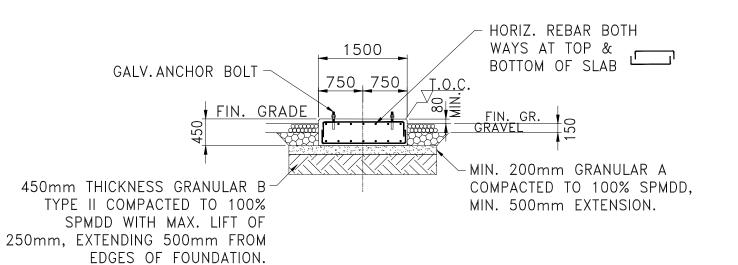
FO2 - TRANSFORMER FOUNDATION

(TOTAL 1 REQUIRED)

(PENDING ON FINAL EQUIPMENT INFORMATION)



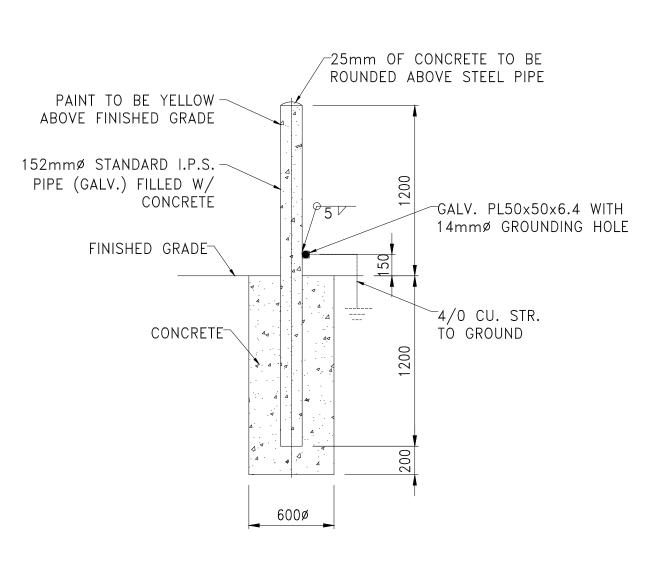
TOP VIEW



SECTION VIEW

FO3 — AUXILIARY PANELS SUPPORT FOUNDATION (TOTAL 1 REQUIRED)

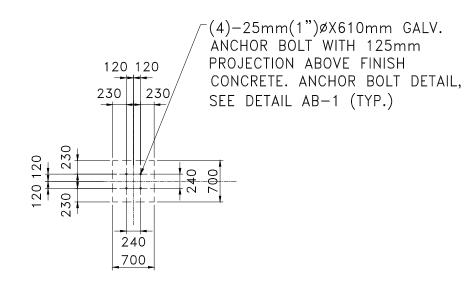
(PENDING ON FINAL EQUIPMENT INFORMATION)



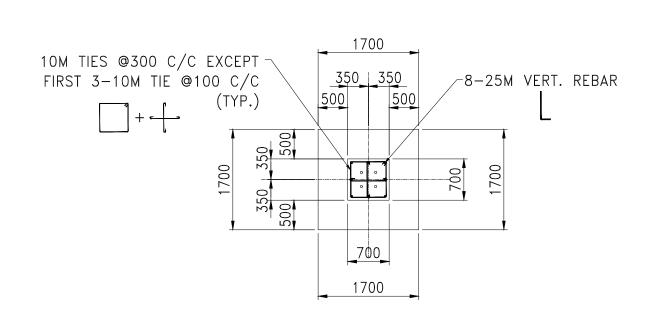
TYPICAL BOLLARD DETAIL (TOTAL 5 REQ'D)

NOTES:

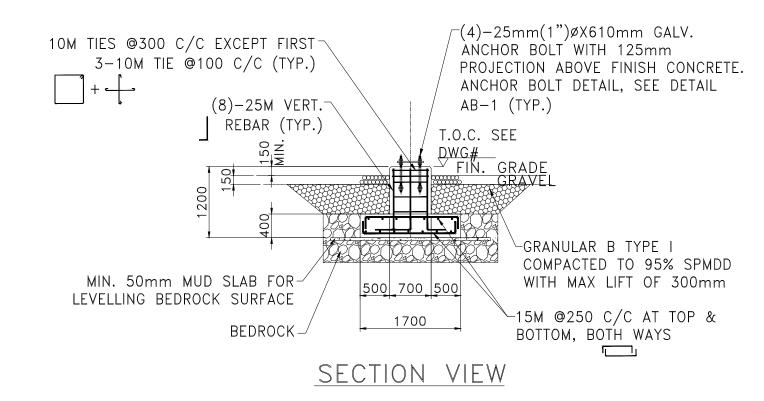
- 1. ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETRE UNLESS NOTED
- 2. FOR EQUIPMENT LAYOUT PLAN & SECTION VIEW, SEE DWG#
- 2350-E01~E02.
- 3. FOR FOUNDATION LAYOUT PLAN, CONSTRUCTION NOTES, SEE DWG# 2350-C01.



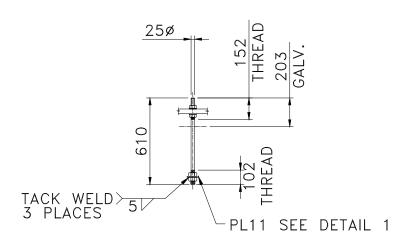
ANCHOR BOLT PATTERN



TOP VIEW



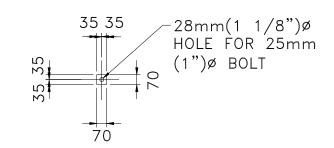
FO4 - 44KV 3Ø L.A. AND TERMINATION SUPPORT FOUNDATION (TOTAL 1 REQUIRED)



AB-1

25mm(1")øx610mm GAVL. ANCHOR BOLT

TOP THREAD LENGTH = 152mm(6")
TOP GALV. LENGTH = 203mm(8")
BOTTOM THREAD LENGTH = 102mm(4")
C/W 4 HEX NUTS & 2 FLAT WASHERS
ASTM F1554 GR.55 OR EQUIVALENT
MIN. YIELD STRENGTH = 379MPa
MIN. TENSILE STRENGTH = 517MPa
TOTAL 8 ANCHOR BOLT REQUIRED



PL11-7.9x70x70 <u>DETAIL 1</u>

| A | ISSUED FOR 60% REVIEW | 14/05/24 | НВ | SB | KW |
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60% REVIEW



ALMONTE 4.99 MW/19.26 MWh BESS
F03, F04, BOLLARD FOUNDATION DETAILS & ANCHOR BOLT DETAIL

14/05/2024

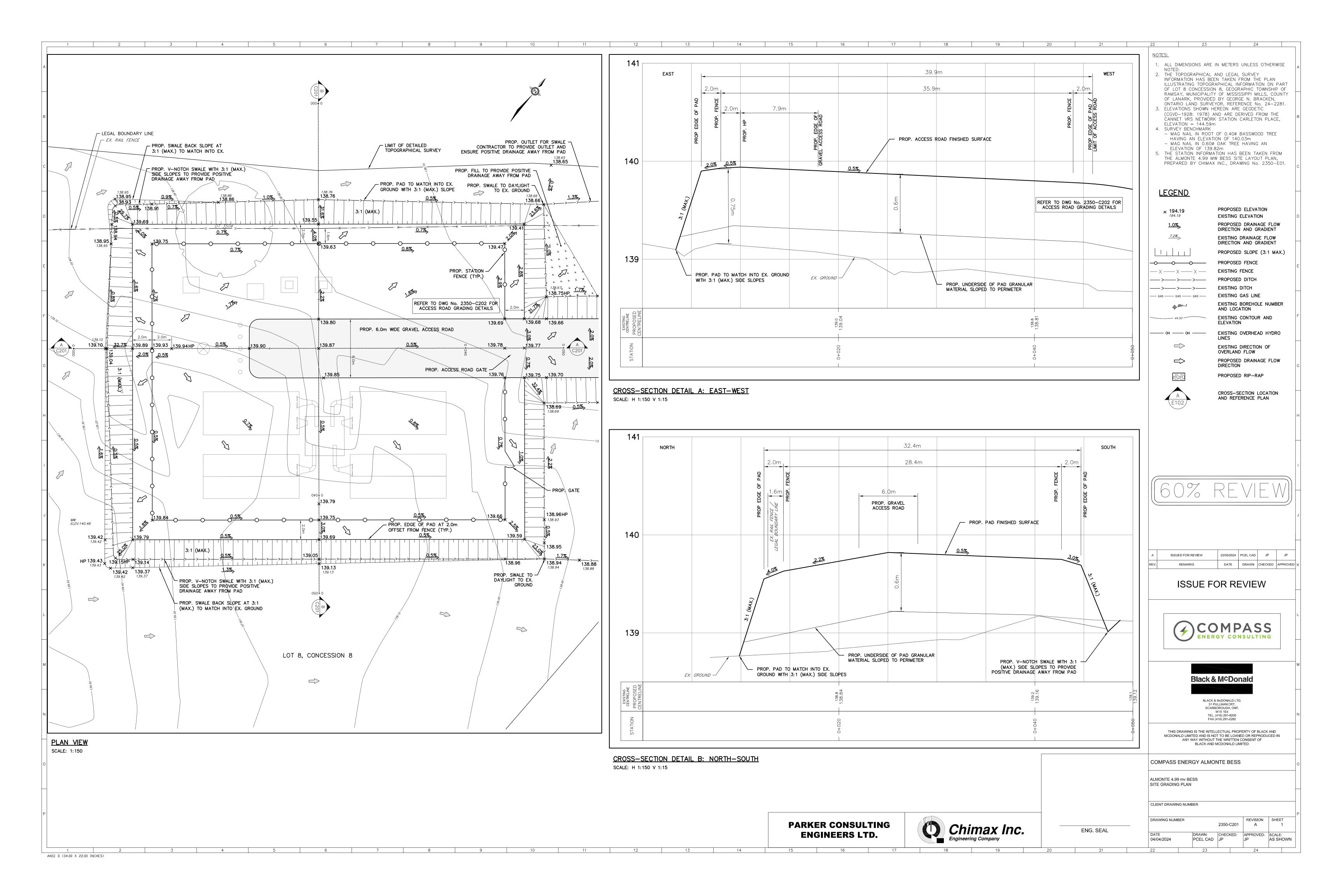
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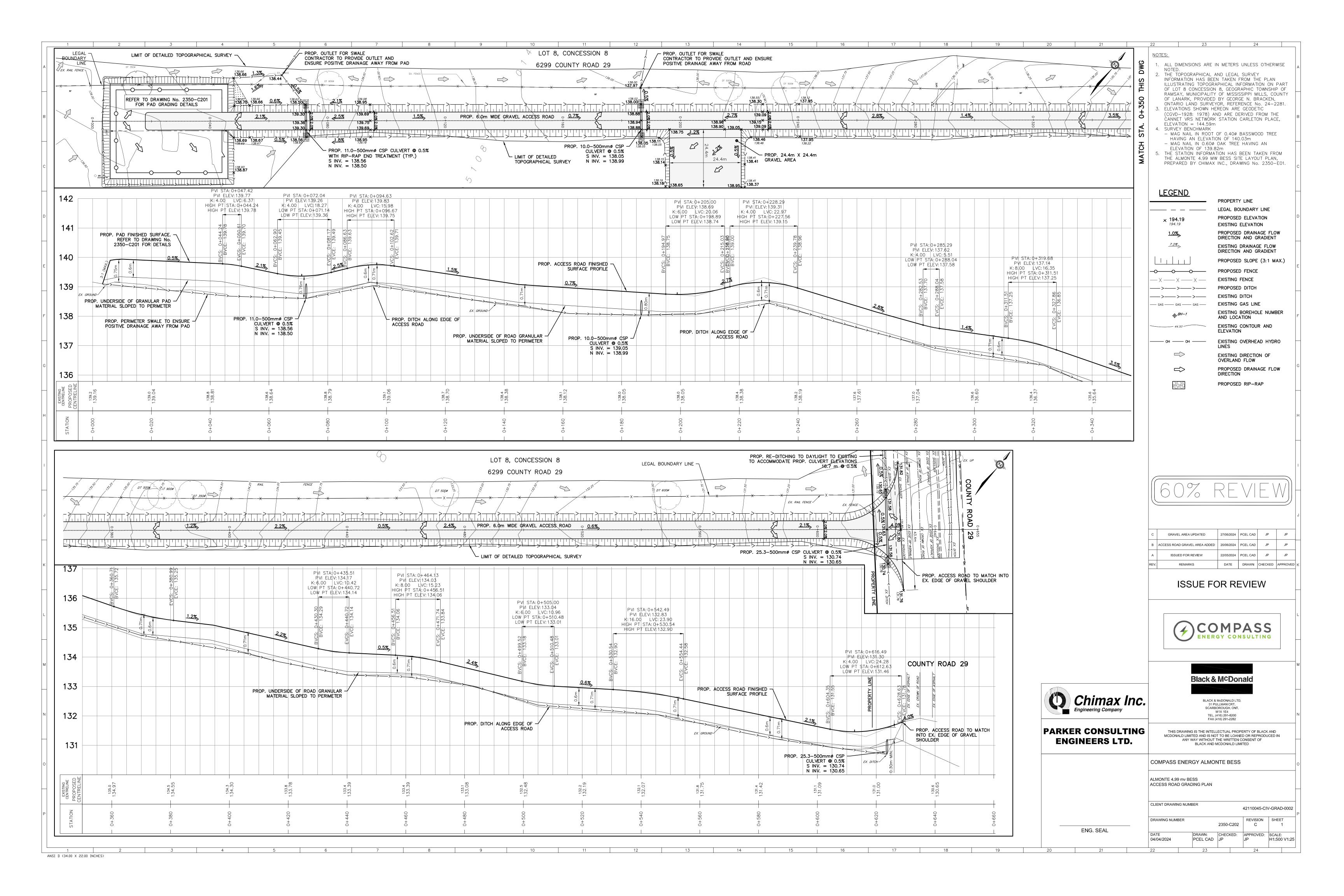
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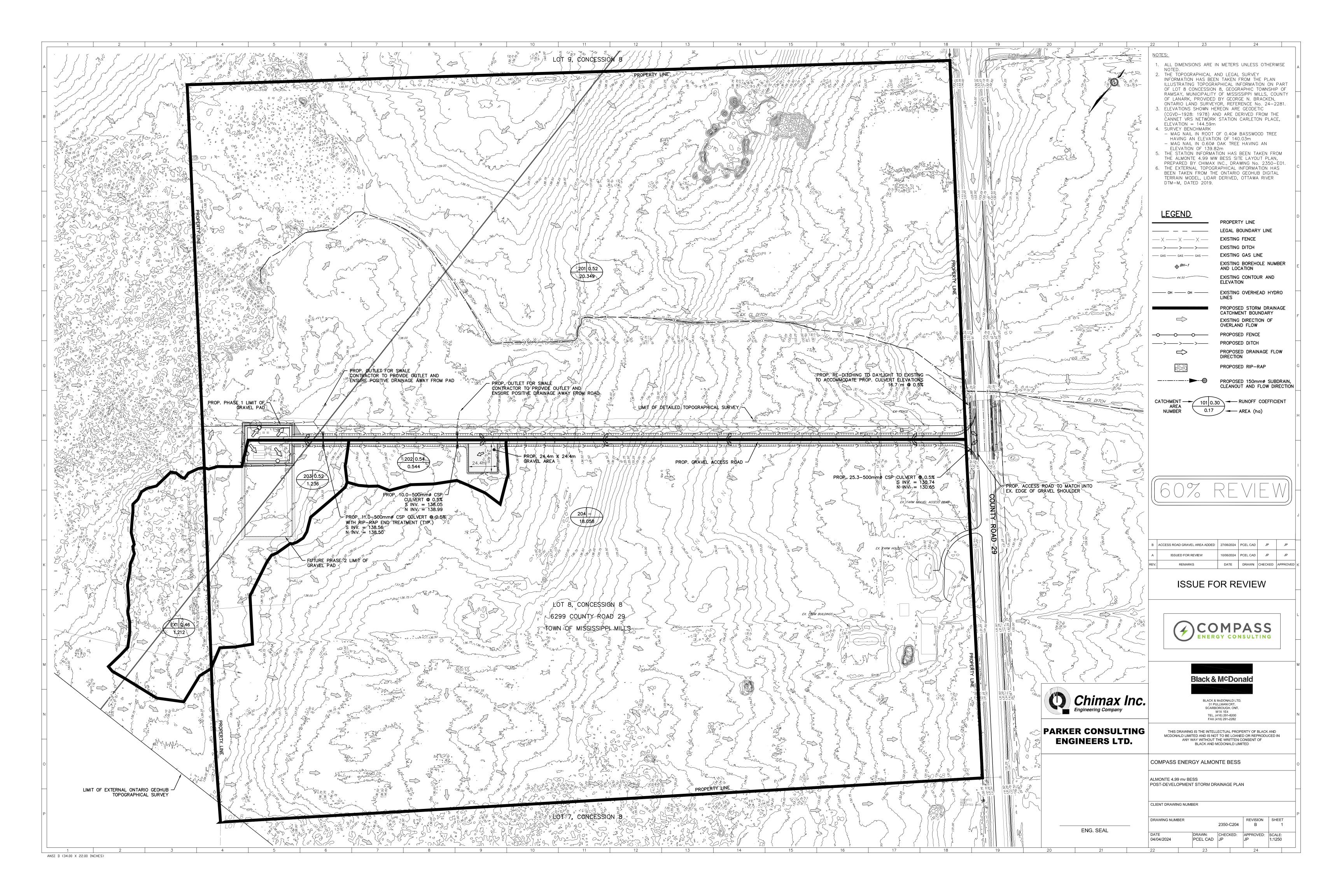
2350-C103

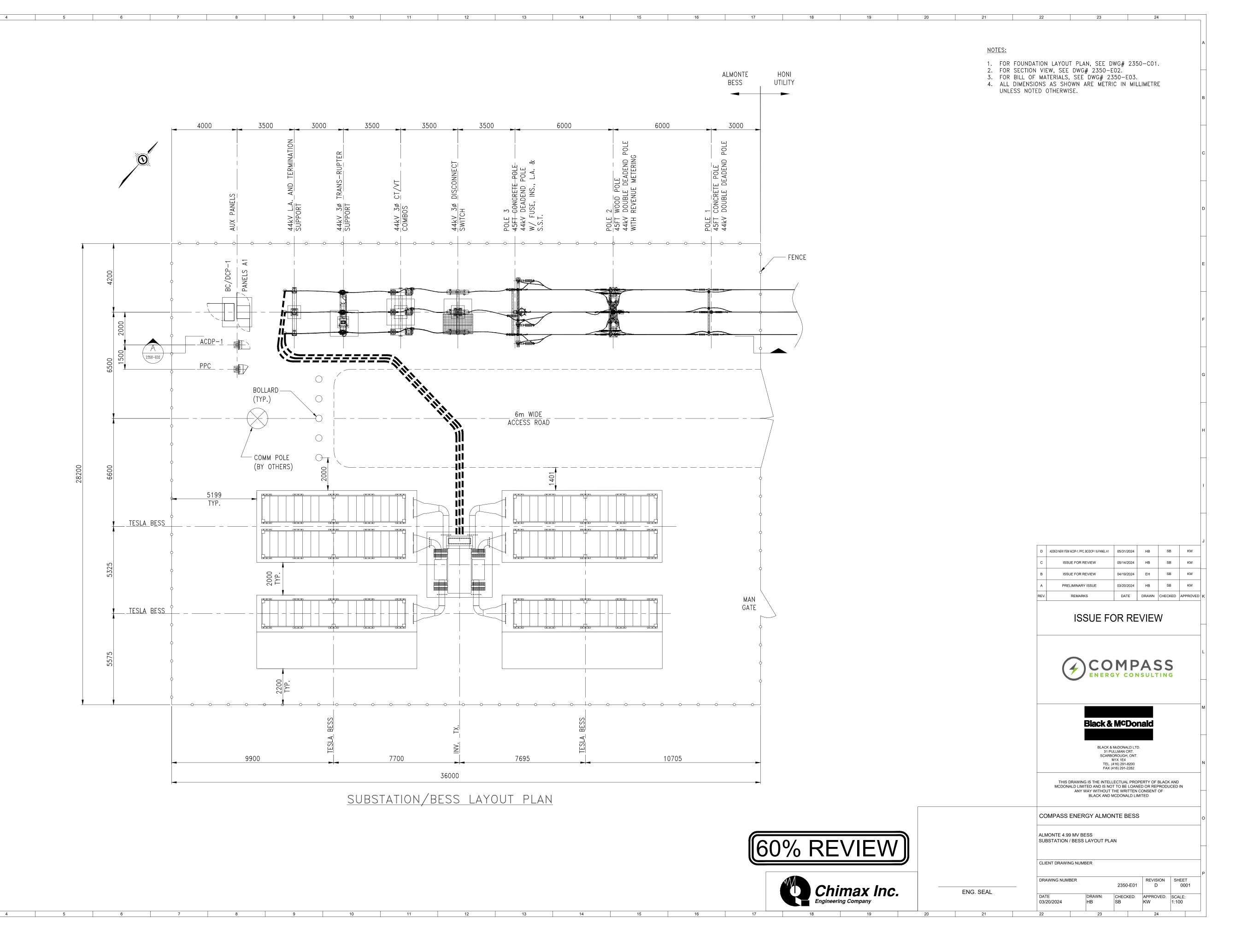
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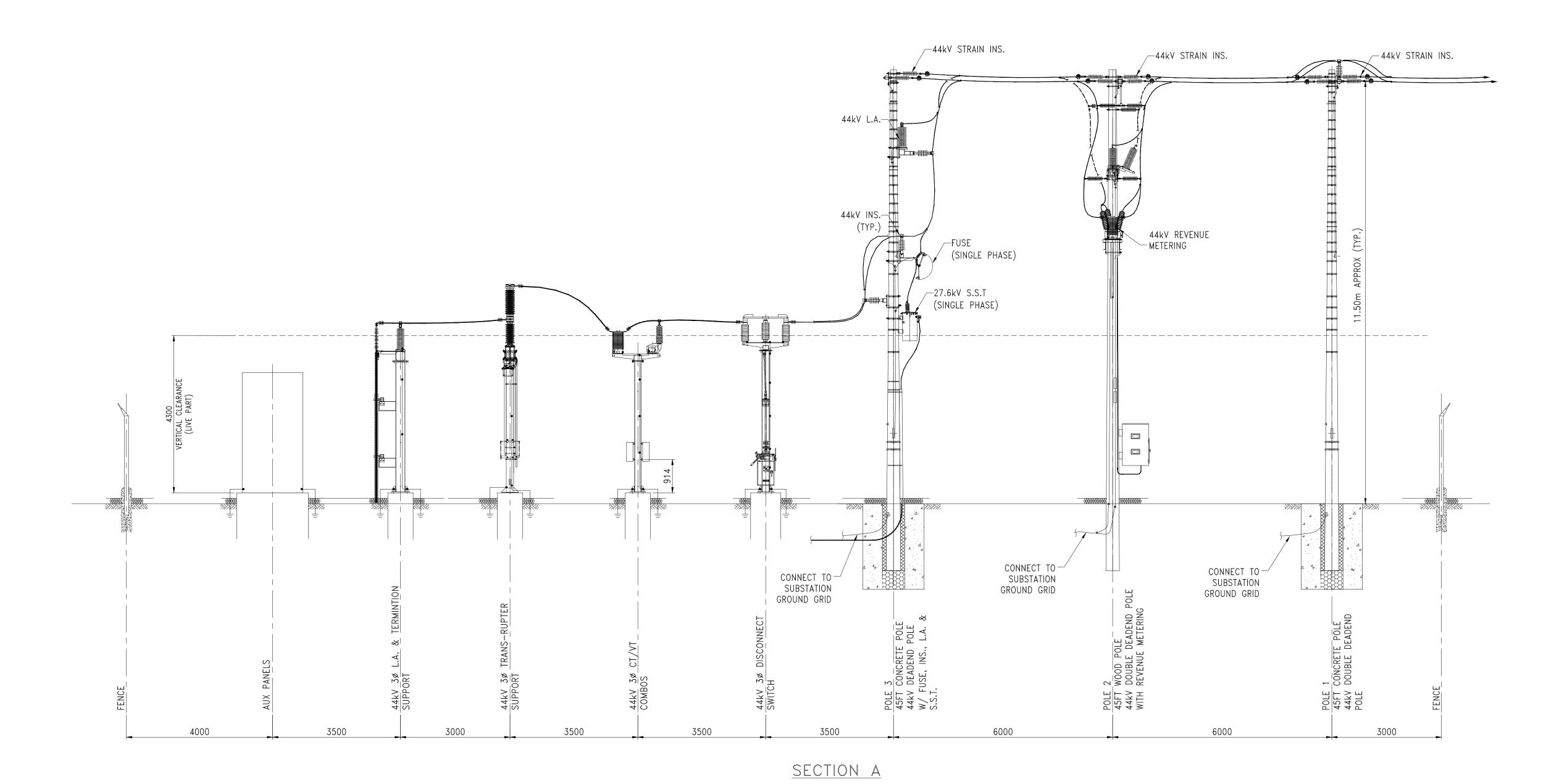




ANSI D (34.00 X 22.00 INCHES)

NOTES:

- FOR FOUNDATION LAYOUT PLAN, SEE DWG# 2350-C01.
 FOR EQUIPMENT LAYOUT PLAN, SEE DWG# 2350-E01.
- FOR BILL OF MATERIALS, SEE DWG# 2350-E03.
 ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETRE UNLESS NOTED OTHERWISE.



| С | ISSUE FOR REVIEW | 05/14/2024 | НВ | SB | KW |
|------|-------------------|------------|-------|---------|----------|
| В | ISSUE FOR REVIEW | 04/19/2024 | EH | SB | KW |
| Α | PRELIMINARY ISSUE | 03/20/2024 | НВ | SB | KW |
| REV. | REMARKS | DATE | DRAWN | CHECKED | APPROVED |

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[60% REVIEW]

Chimax Inc.
Engineering Company

COMPASS ENERGY ALMONTE BESS

ALMONTE 4.99 MV BESS SECTION VIEW A

CLIENT DRAWING NUMBER

0001 DATE 03/20/2024

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