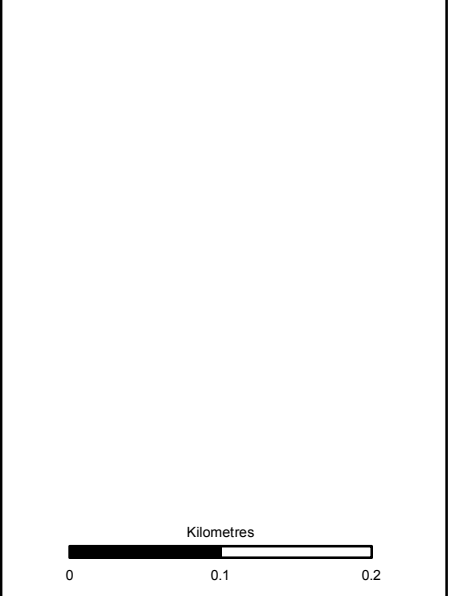


— Mainline Option 1 (Southbound Widening)

**Bedrock Geology**

MNDL1-GNP	MONADHLIATH PLUTON, PHASE 1 - GRANITE, PORPHYRITIC
MNDL2-MZGNB	MONADHLIATH PLUTON, PHASE 2 - MONZOGRANITE, BIOTITE
MNDL3-MCGN	MONADHLIATH PLUTON, PHASE 3 - MICROGRANITE
MNDL4-MCGNAP	MONADHLIATH PLUTON, PHASE 4 - MICROGRANITE, APLITIC-PORPHYRITIC
LLGN-PSAMI	LOCH LAGGAN PSAMMITE FORMATION - PSAMMITE, MICACEOUS



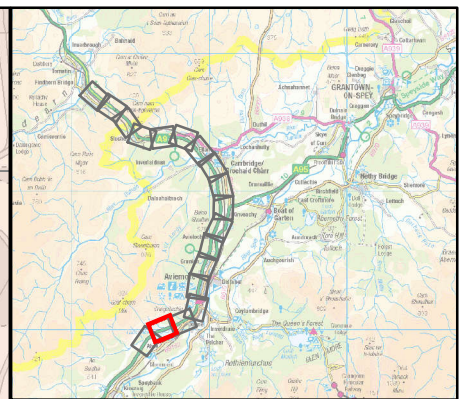
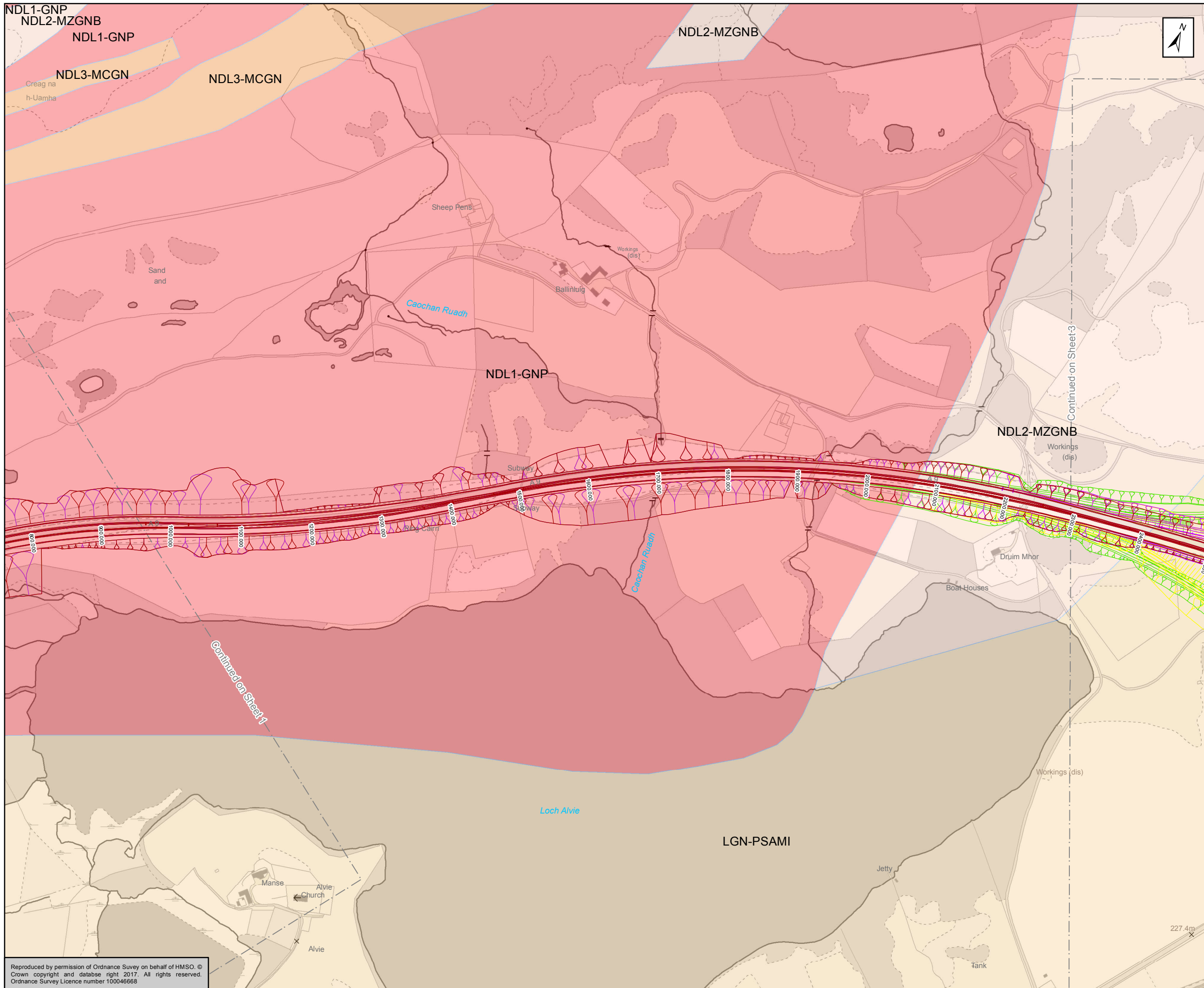
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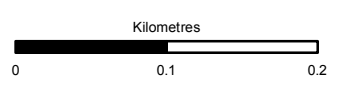
Figure 5.25a  
Mainline Alignment Option 1  
Solid Geology  
Sheet 1 of 17

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Project	Originator	Volume							
Location	Type	Role	Number						

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- Mainline Option 1 (Southbound Widening)
- Aviemore South Junction Options**
  - A02 - Half Cloverleaf - Quadrants 1 & 4
  - A09 - Diamond Left Right with Ghost Island
  - A18 - Left Right Stagger with B9152 Realigned
- Bedrock Geology**
  - MNDL1-GNP MONADHLIATH PLUTON, PHASE 1 - GRANITE, PORPHYRITIC
  - MNDL2-MZGNB MONADHLIATH PLUTON, PHASE 2 - MONZOGRANITE, BIOTITE
  - MNDL3-MCGN MONADHLIATH PLUTON, PHASE 3 - MICROGRANITE
  - LLGN-PSAMI LOCH LAGGAN PSAMMITE FORMATION - PSAMMITE, MICACEOUS



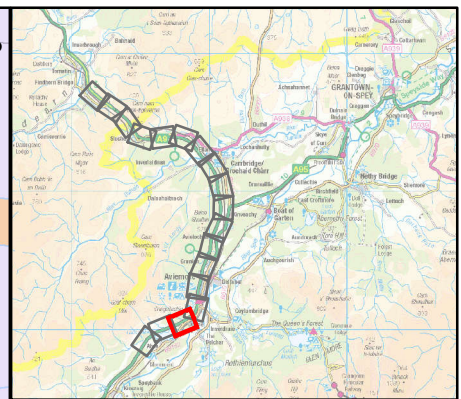
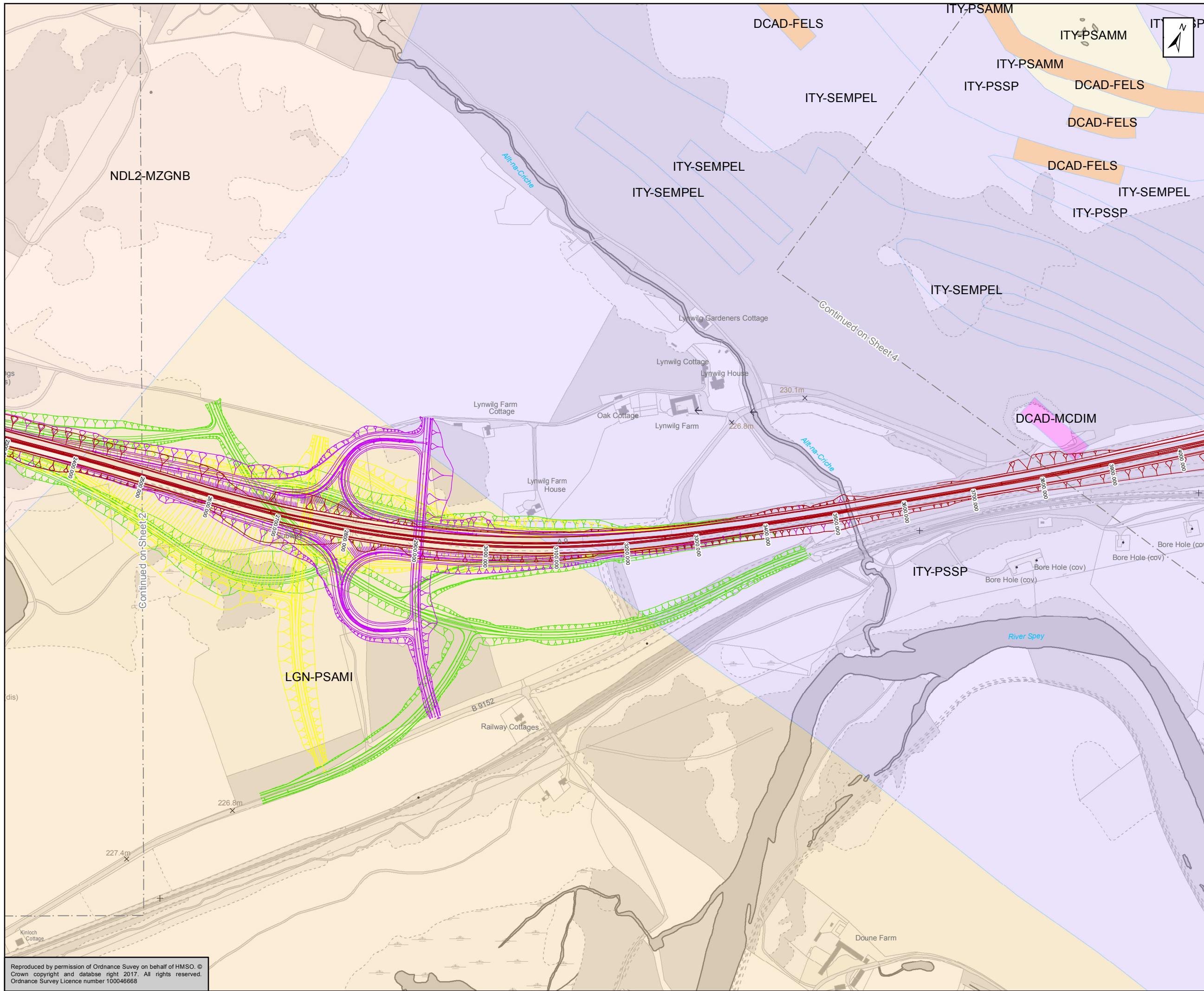
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Figure 5.25b  
Mainline Alignment Option 1  
Solid Geology  
Sheet 2 of 17

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**Mainline Option 1 (Southbound Widening)**

**Aviemore South Junction Options**

- A02 - Half Cloverleaf - Quadrants 1 & 4
- A09 - Diamond Left Right with Ghost Island
- A18 - Left Right Stagger with B9152 Realigned

**Bedrock Geology**

MNDL2-MZGNB	MONADHLIATH PLUTON, PHASE 2 - MONZOGRANITE, BIOTITE
SDCAD-FELS	NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - FELSITE
SDCAD-MCDIM	NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - MELAMICRODIORITE
LLGN-PSAMI	LOCH LAGGAN PSAMMITE FORMATION - PSAMMITE, MICACEOUS
PITY-PSAMM	PITYOULISH FORMATION - PSAMMITE
PITY-PSSP	PITYOULISH FORMATION - PSAMMITE AND SEMIPELITE
PITY-SEMPEL	PITYOULISH FORMATION - SEMIPELITE

Kilometres  
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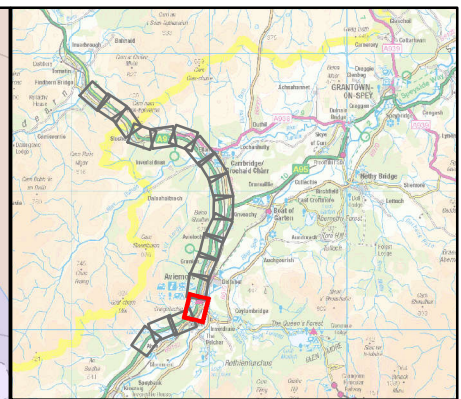
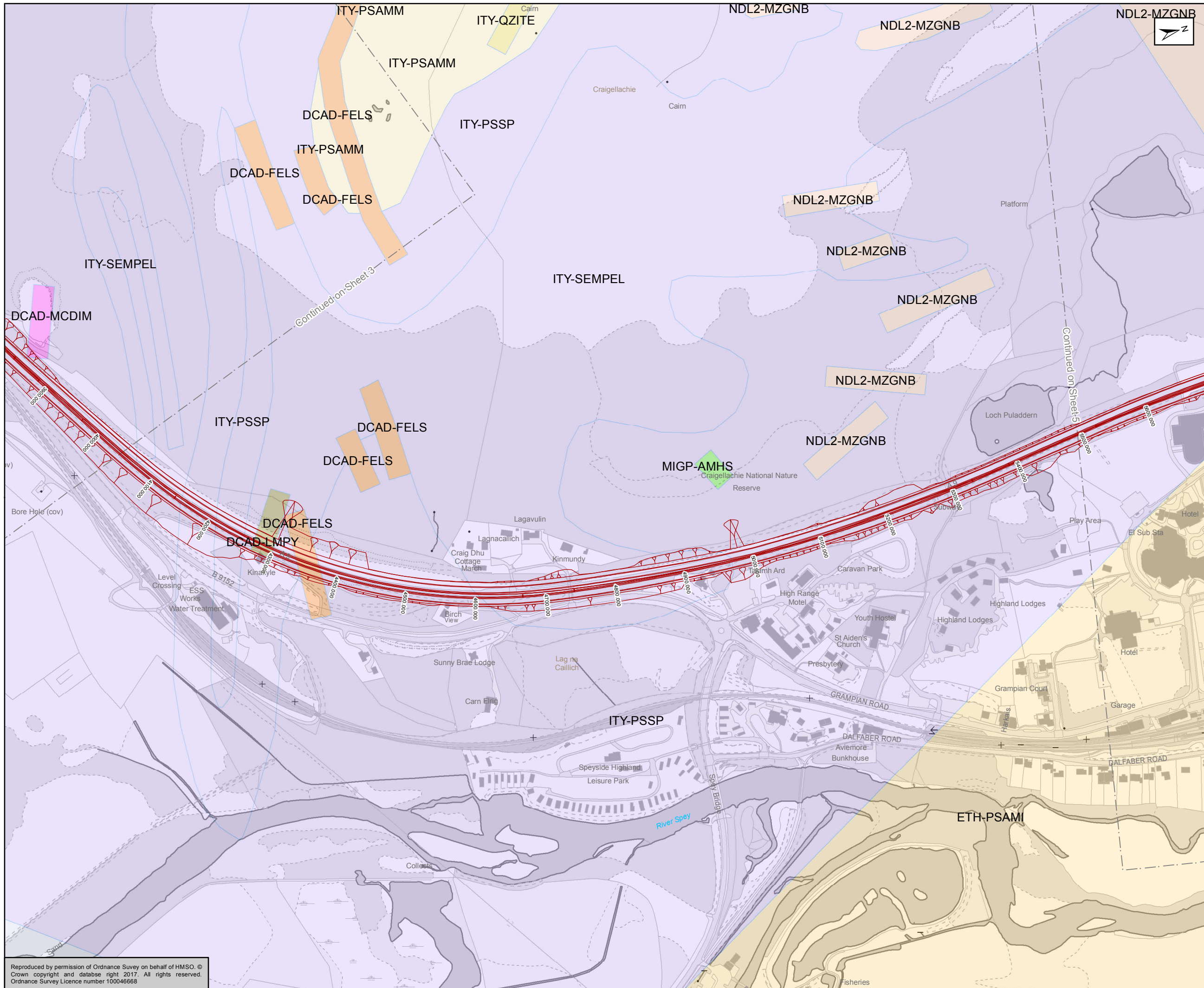
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Figure 5.25c  
Mainline Alignment Option 1  
Solid Geology  
Sheet 3 of 17

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Project	Originator	Volume							
Location	Type	Role	Number						

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**Mainline Option 1 (Southbound Widening)**

**Bedrock Geology**

- MNDL2-MZGNB MONADHLIATH PLUTON, PHASE 2 - MONZOGRANITE, BIOTITE
- SDCAD-FELS NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - FELSITE
- SDCAD-LMPY NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - LAMPROPHYRES
- SDCAD-MCDIM NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - MELAMICRODIORITE
- DAVA-GPSP DAVA SUBGROUP - GNEISSOSE PSAMMITE AND GNEISSOSE SEMIPELITE
- NETH-PSAMI NETHYBRIDGE PSAMMITE FORMATION - PSAMMITE, MICACEOUS
- PITY-PSAMM PITYOULISH FORMATION - PSAMMITE
- PITY-PSSP PITYOULISH FORMATION - PSAMMITE AND SEMIPELITE
- PITY-QZITE PITYOULISH FORMATION - QUARTZITE
- PITY-SEMPEL PITYOULISH FORMATION - SEMIPELITE
- UMIGP-AMHS UNNAMED METAMORPHOSED IGNEOUS ROCKS, PRE-CALEDONIAN TO CALEDONIAN - AMPHIBOLITE AND HORNBLLENDE SCHIST

Kilometres  
0 0.1 0.2

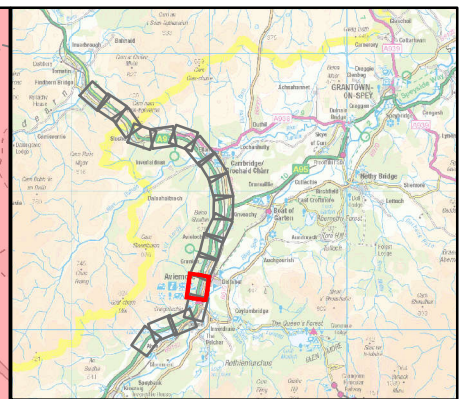
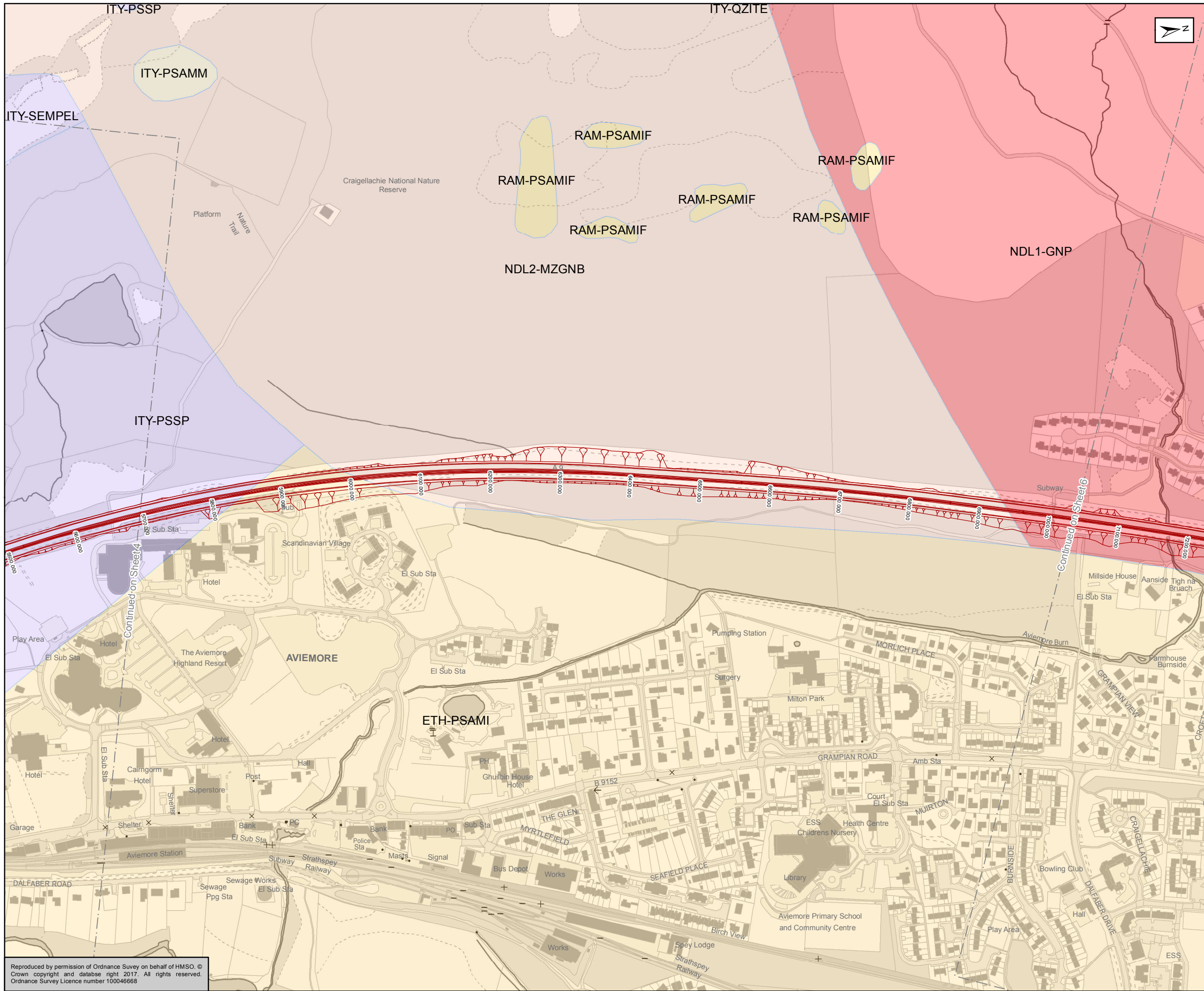
Status	Subsidiary
FINAL	B



**Figure 5.25d**  
Mainline Alignment Option 1  
Solid Geology  
Sheet 4 of 17

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A9P11-AMJ-EGT-E_ZZZZZ_XZ-DR-GI-0022				P03
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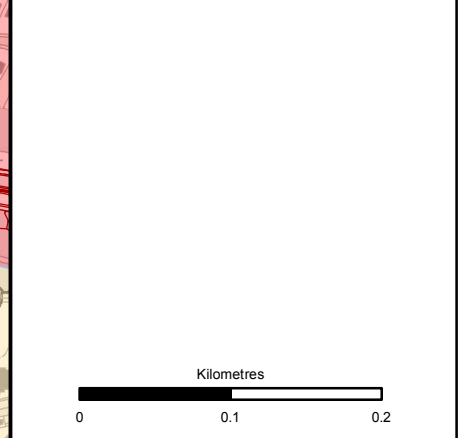
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**Mainline Option 1 (Southbound Widening)**

**Bedrock Geology**

MNDL1-GNP	MONADHLIATH PLUTON, PHASE 1 - GRANITE, PORPHYRITIC
MNDL2-MZGNB	MONADHLIATH PLUTON, PHASE 2 - MONZOGRANITE, BIOTITE
GRAM-PSAMIF	GRAMPIAN GROUP - PSAMMITE, MICACEOUS-FLAGGY
NETH-PSAMI	NETHYBRIDGE PSAMMITE FORMATION - PSAMMITE, MICACEOUS
PITY-PSAMM	PITYOULISH FORMATION - PSAMMITE
PITY-PSPP	PITYOULISH FORMATION - PSAMMITE AND SEMIPELITE
PITY-QZITE	PITYOULISH FORMATION - QUARTZITE
PITY-SEMPEL	PITYOULISH FORMATION - SEMIPELITE



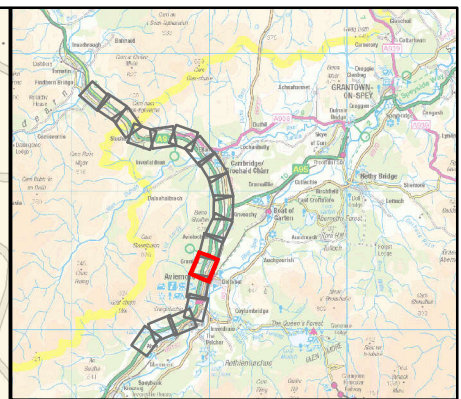
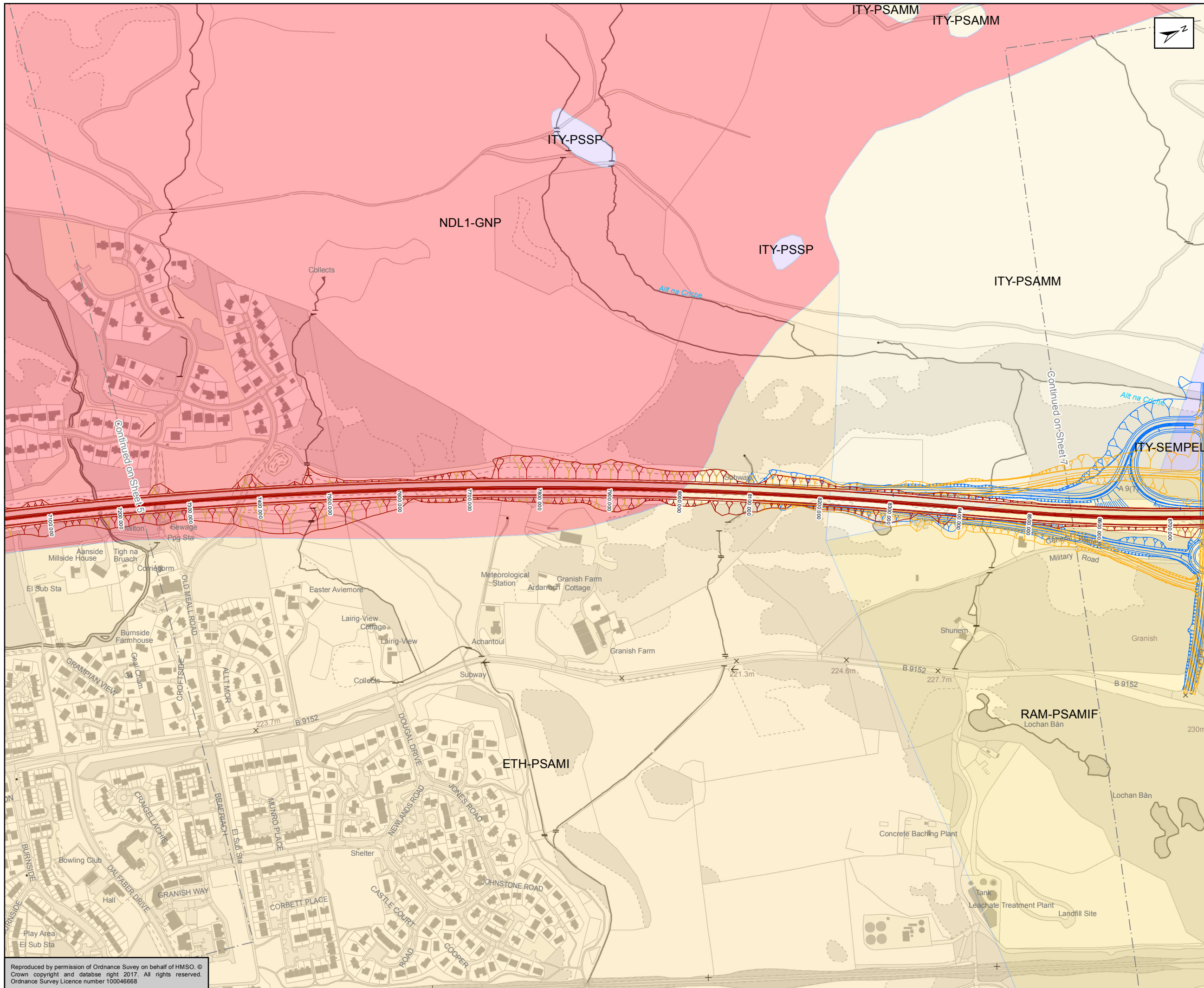
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Figure 5.25e  
 Mainline Alignment Option 1  
 Solid Geology  
 Sheet 5 of 17

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Document Number	A9P11-AMJ-EGT-E_ZZZZZ_XZ-DR-GI-0023			Revision	P03				
Project	Originator	Volume							
Location	Type	Role							

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**Mainline Option 1 (Southbound Widening)**

**Granish Southbound Junction Options**

- C31 - Diamond
- C34 - Half Dumbbell / Cloverleaf

**Bedrock Geology**

- NDL1-GNP: MONADHLIATH PLUTON, PHASE 1 - GRANITE, PORPHYRITIC
- GRAM-PSAMIF: GRAMPIAN GROUP - PSAMMITE, MICACEOUS-FLAGGY
- NETH-PSAMI: NETHYBRIDGE PSAMMITE FORMATION - PSAMMITE, MICACEOUS
- PITY-PSAMM: PITYOULISH FORMATION - PSAMMITE
- PITY-PSSP: PITYOULISH FORMATION - PSAMMITE AND SEMIPELITE
- PITY-SEMPEL: PITYOULISH FORMATION - SEMIPELITE

Kilometres

0 0.1 0.2

Status	FINAL	Subsidiary	B
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Client

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COMHDHAIL ALBA

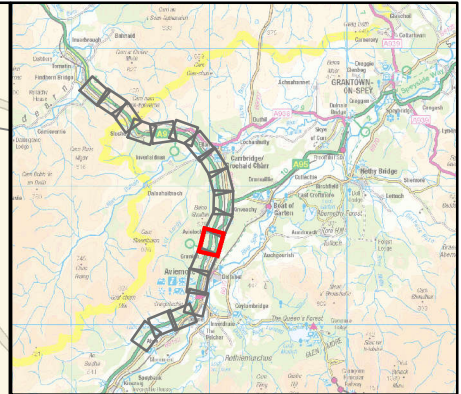
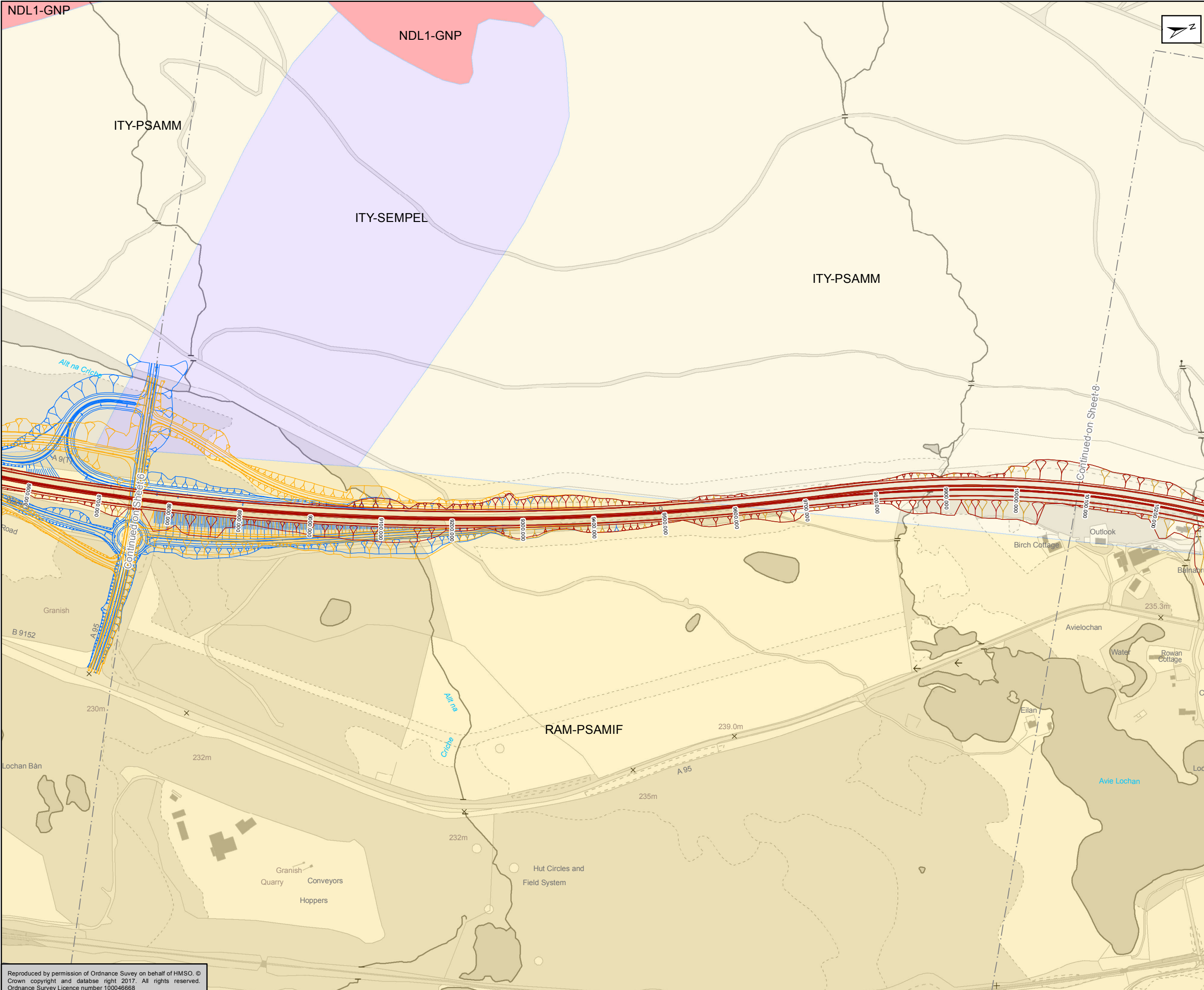
A9  
DUALLING  
PERTH TO INVERNESS  
Dalraddy to Stochd

ATKINS mouchel

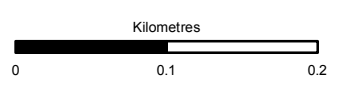
Figure 5.25f  
Mainline Alignment Option 1  
Solid Geology  
Sheet 6 of 17

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Location	Type	Role	Number						

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- Mainline Option 1 (Southbound Widening)
- Granish Southbound Junction Options**
- C31 - Diamond
- C34 - Half Dumbbell / Cloverleaf
- Bedrock Geology**
- MNDL1-GNP MONADHLIATH PLUTON, PHASE 1 - GRANITE, PORPHYRITIC
- GRAM-PSAMIF GRAMPIAN GROUP - PSAMMITE, MICACEOUS-FLAGGY
- PITY-PSAMM PITYOULISH FORMATION - PSAMMITE
- PITY-SEMPEL PITYOULISH FORMATION - SEMIPELITE



Status: FINAL Substudy: B

Client: **TRANSPORT SCOTLAND**  
COMHDHAIL ALBA

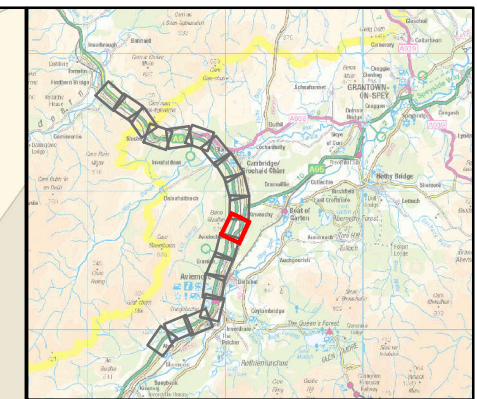
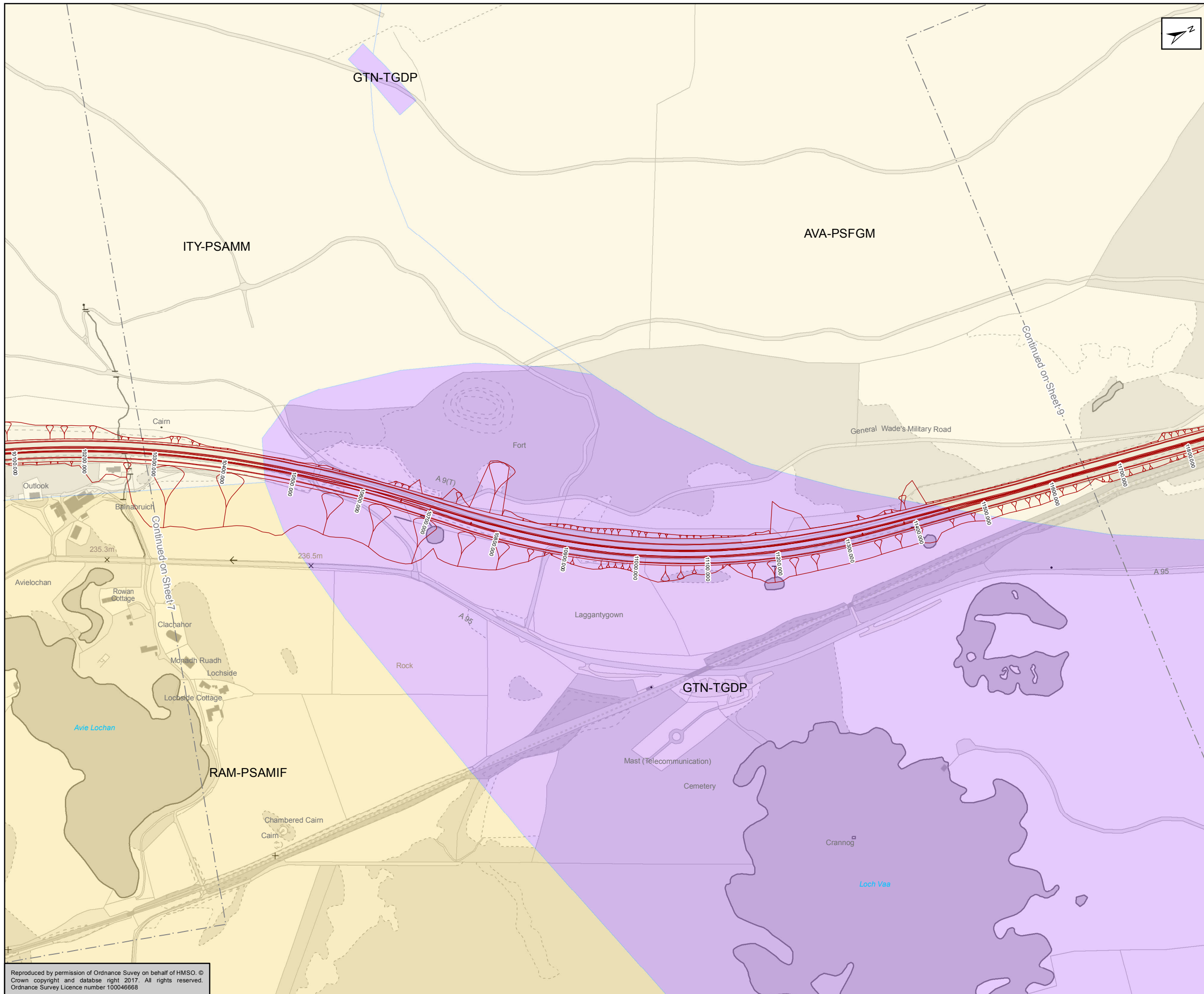


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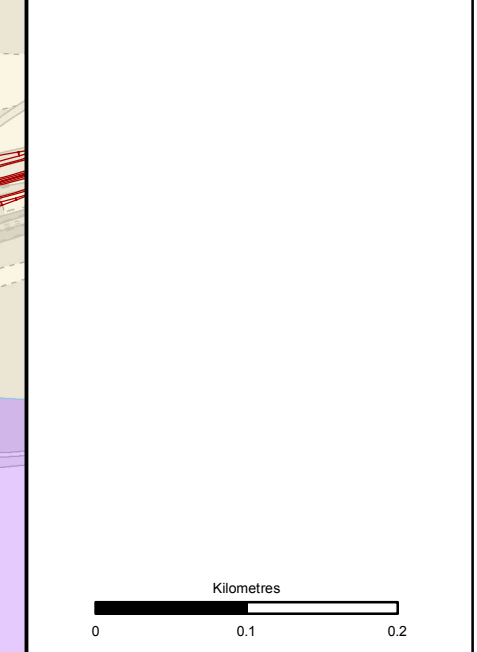
Figure 5.25g  
Mainline Alignment Option 1  
Solid Geology  
Sheet 7 of 17

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- Mainline Option 1 (Southbound Widening)**
- Bedrock Geology**
- BGTN-TGDP BOAT OF GARTEN PLUTON - PORPHYRITIC TONALITE AND PORPHYRITIC GRANODIORITE
  - DAVA-PSFGM DAVA SUBGROUP - PSAMMITE, FELDSPATHIC-GNEISSO...
  - GRAM-PSAMIF GRAMPIAN GROUP - PSAMMITE, MICACEOUS-FLAGGY
  - PITYOULISH FORMATION - PSAMMITE



Status: FINAL Substudy: B

Client: **TRANSPORT SCOTLAND**  
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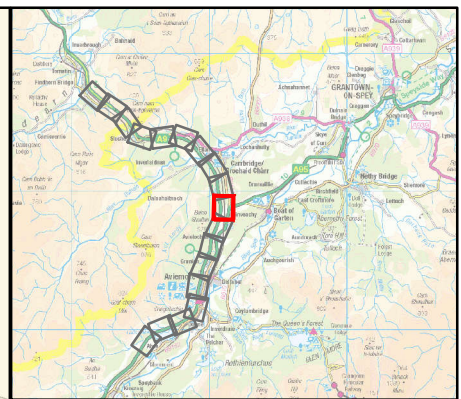
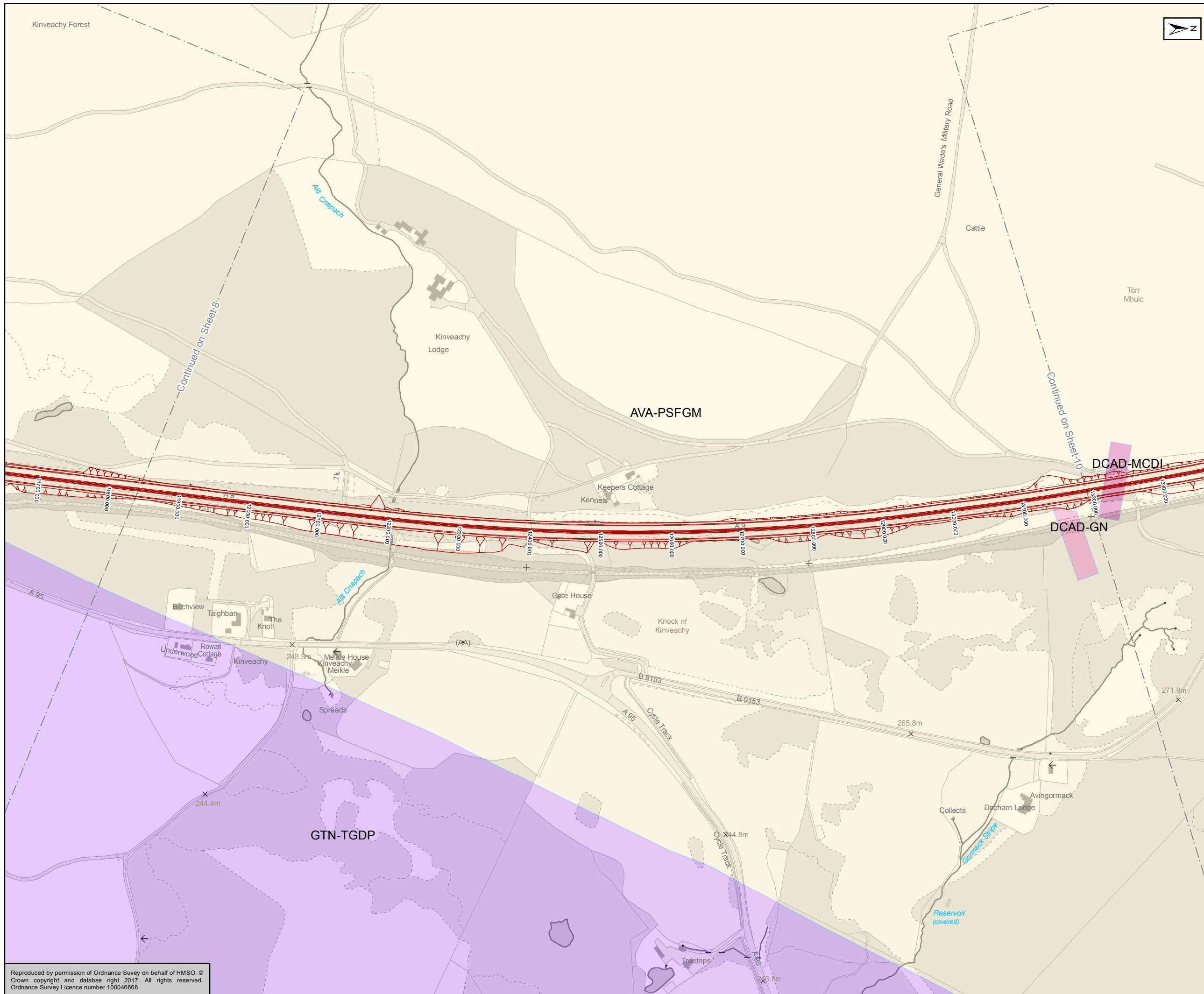
**ATKINS** mouchel

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Mainline Alignment Option 1  
Solid Geology  
Sheet 8 of 17**

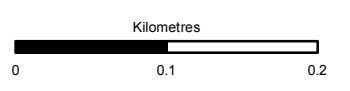
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Location	Type	Role	Number	

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- Mainline Option 1 (Southbound Widening)**
- Bedrock Geology**
- BGTN-TGDP  
BOAT OF GARTEN PLUTON - PORPHYRITIC TONALITE AND PORPHYRITIC GRANODIORITE
  - SDCAD-GN  
NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - GRANITE
  - SDCAD-MCDI  
NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - MICRODIORITE
  - DAVA-PSFGM  
DAVA SUBGROUP - PSAMMITE, FELDSPATHIC-GNEISSO...



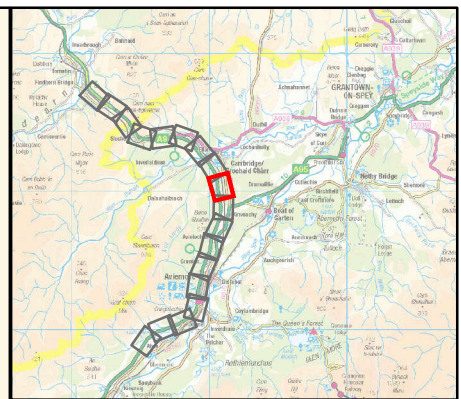
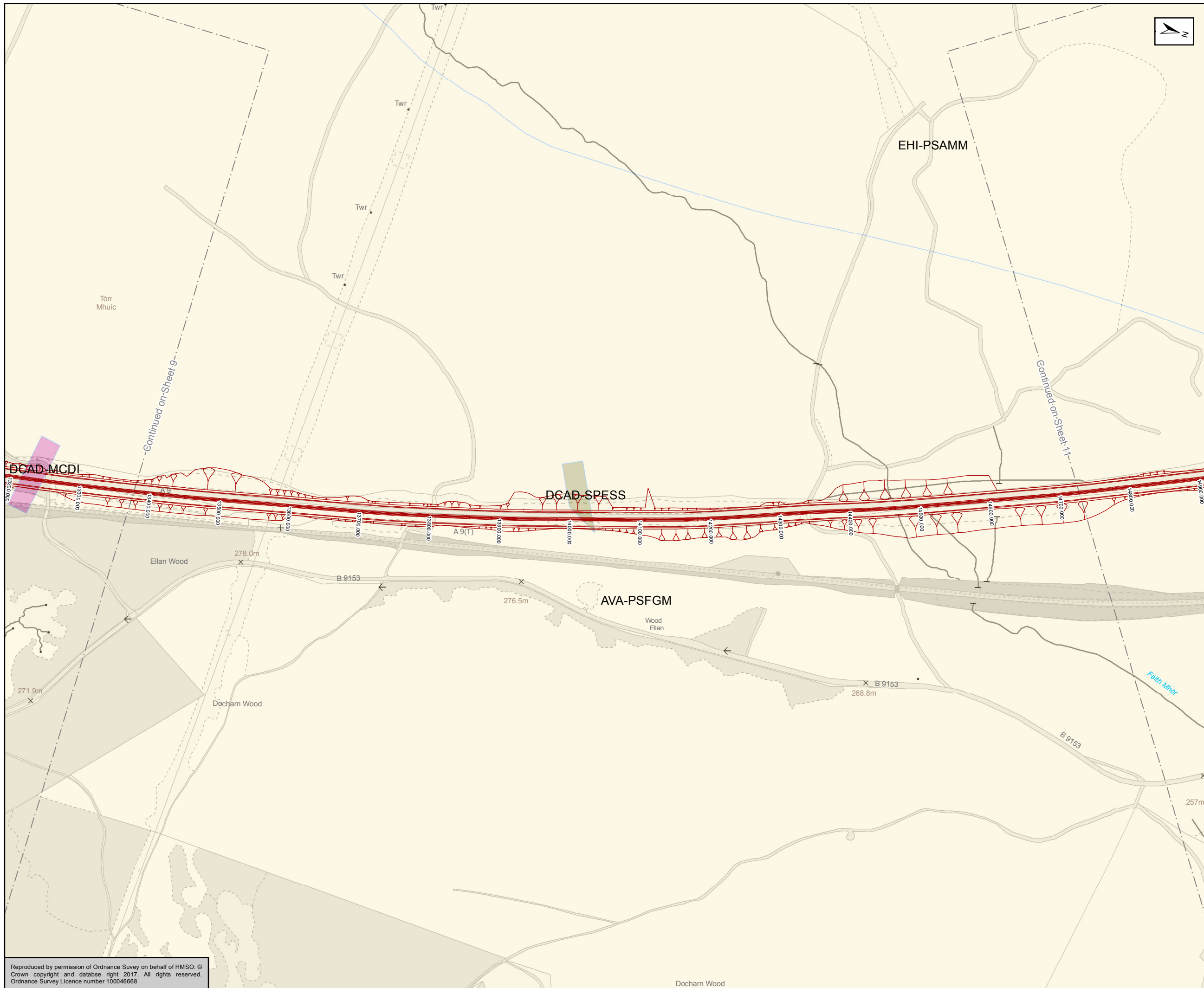
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Figure 5.25i  
Mainline Alignment Option 1  
Solid Geology  
Sheet 9 of 17

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Project	Originator	Volume							
Location	Type	Role	Number						

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**Mainline Option 1 (Southbound Widening)**

**Bedrock Geology**

- SDCAD-MCDI: NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - MICRODIORITE
- SDCAD-SPESS: NORTH BRITAIN SILURO-DEVONIAN CALC-ALKALINE DYKE SUITE - SPESSARTITE
- CEHI-PSAMM: CENTRAL HIGHLAND MIGMATITE COMPLEX - PSAMMITE
- DAVA-PSFGM: DAVA SUBGROUP - PSAMMITE, FELDSPATHIC-GNEISSO...

Kilometres  
0 0.1 0.2

Status	FINAL	Subsidiary	B
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Client  
**TRANSPORT SCOTLAND**  
COMHDHAIL ALBA

**A9**  
DUALLING  
PERTH TO INVERNESS  
Dalraddy to Slochd

**ATKINS** mouchel

Figure 5.25j  
Mainline Alignment Option 1  
Solid Geology  
Sheet 10 of 17

Scale	1:5,000	Drawn	JD	Checked	KP	Approved	MD	Authorised	RG
Document Number	A9P11-AMJ-EGT-E_ZZZZZ_XZ-DR-GI-0028							Revision	P03
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