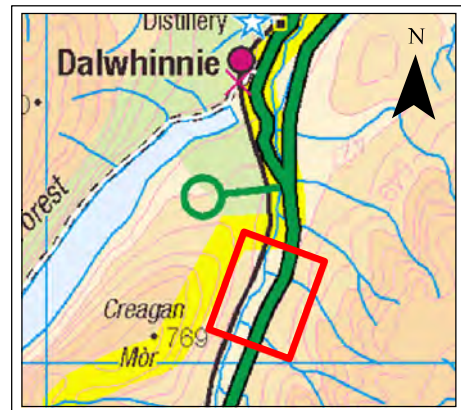
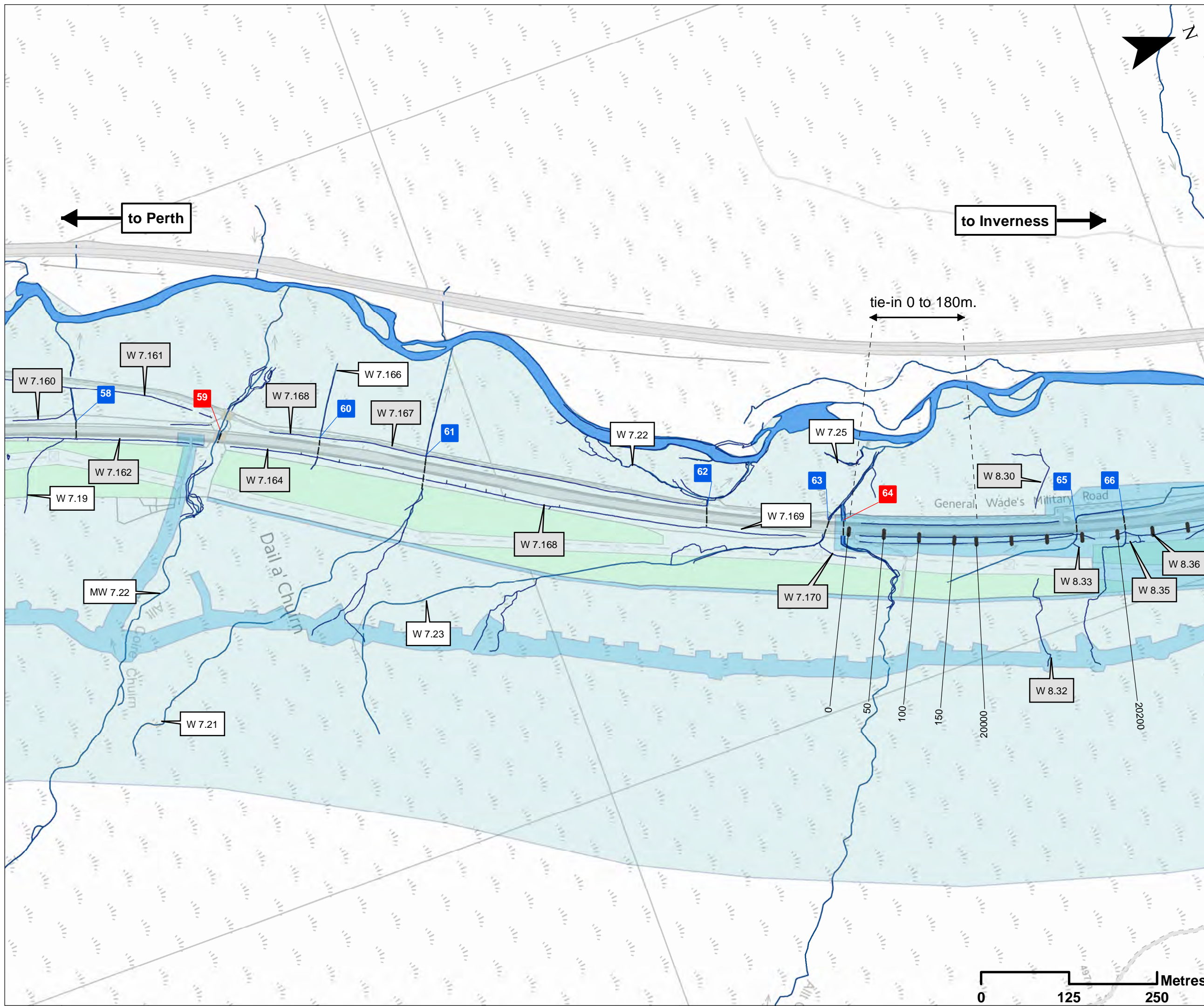


Road Drainage and the Water Environment

Drawing No.	Drawing Type	Drawing Title	Projectwise Drawing Reference	Software
11.1	BASELINE PLAN	WATER FEATURES SURVEY chainage 0 to 20000	A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0001	GIS
11.2	BASELINE PLAN	WATER FEATURES SURVEY chainage 20000 to 21400	A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0001	GIS
11.3	BASELINE PLAN	WATER FEATURES SURVEY chainage 21400 to 23000	A9P08-CFJ-EWE-J_ML214_ZZ-DR-EN-0001	GIS
11.4	BASELINE PLAN	WATER FEATURES SURVEY chainage 23000 to 24600	A9P08-CFJ-EWE-J_ML230_ZZ-DR-EN-0001	GIS
11.5	BASELINE PLAN	WATER FEATURES SURVEY chainage 24600 to 26000	A9P08-CFJ-EWE-J_ML246_ZZ-DR-EN-0001	GIS
11.6	BASELINE PLAN	WATER FEATURES SURVEY chainage 26000 to 27600	A9P08-CFJ-EWE-J_ML260_ZZ-DR-EN-0001	GIS
11.7	BASELINE PLAN	WATER FEATURES SURVEY chainage 27600 to 29000	A9P08-CFJ-EWE-J_ML276_ZZ-DR-EN-0001	GIS
11.8	BASELINE PLAN	WATER FEATURES SURVEY chainage 29000 to 30400	A9P08-CFJ-EWE-J_ML290_ZZ-DR-EN-0001	GIS
11.9	BASELINE PLAN	WATER FEATURES SURVEY chainage 30400 to 31050	A9P08-CFJ-EWE-J_ML304_ZZ-DR-EN-0001	GIS
11.10	BASELINE PLAN	CATCHMENT BOUNDARIES	A9P08-CFJ-EWE-J_ZZZZZ_ZZ-DR-EN-0001	GIS
11.11	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 0 to 20000	A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0002	GIS
11.12	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 20000 to 21400	A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0002	GIS
11.13	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 21400 to 23000	A9P08-CFJ-EWE-J_ML214_ZZ-DR-EN-0002	GIS
11.14	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 23000 to 24600	A9P08-CFJ-EWE-J_ML230_ZZ-DR-EN-0002	GIS
11.15	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 24600 to 26000	A9P08-CFJ-EWE-J_ML246_ZZ-DR-EN-0002	GIS
11.16	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 26000 to 27600	A9P08-CFJ-EWE-J_ML260_ZZ-DR-EN-0002	GIS
11.17	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 27600 to 29000	A9P08-CFJ-EWE-J_ML276_ZZ-DR-EN-0002	GIS
11.18	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 29000 to 30400	A9P08-CFJ-EWE-J_ML290_ZZ-DR-EN-0002	GIS
11.19	ASSESSMENT PLAN	FLOOD EXTENTS PLAN – EXISTING chainage 30400 TO 31050	A9P08-CFJ-EWE-J_ML304_ZZ-DR-EN-0002	GIS
11.20	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 0 to 20000	A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0003	GIS
11.21	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 20000 to 21400	A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0003	GIS
11.22	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 21400 to 23000	A9P08-CFJ-EWE-J_ML214_ZZ-DR-EN-0003	GIS
11.23	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 23000 to 24600	A9P08-CFJ-EWE-J_ML230_ZZ-DR-EN-0003	GIS
11.24	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 24600 to 26000	A9P08-CFJ-EWE-J_ML246_ZZ-DR-EN-0003	GIS
11.25	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 26000 to 27600	A9P08-CFJ-EWE-J_ML260_ZZ-DR-EN-0003	GIS
11.26	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 27600 to 29000	A9P08-CFJ-EWE-J_ML276_ZZ-DR-EN-0003	GIS

Drawing No.	Drawing Type	Drawing Title	Projectwise Drawing Reference	Software
11.27	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 29000 to 30400	A9P08-CFJ-EWE-J_ML290_ZZ-DR-EN-0003	GIS
11.28	ASSESSMENT PLAN	PROPOSED SCHEME MITIGATION chainage 30400 TO 31050	A9P08-CFJ-EWE-J_ML304_ZZ-DR-EN-0003	GIS



- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - MW Major Watercourse
 - W Minor Watercourse
 - Major Watercourse Crossing
 - Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

REV	SUIT	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



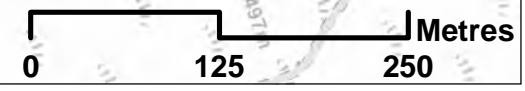
PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
BASELINE PLAN
DRAWING 11.1
WATER FEATURES SURVEY
 chainage 0 to 20000

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

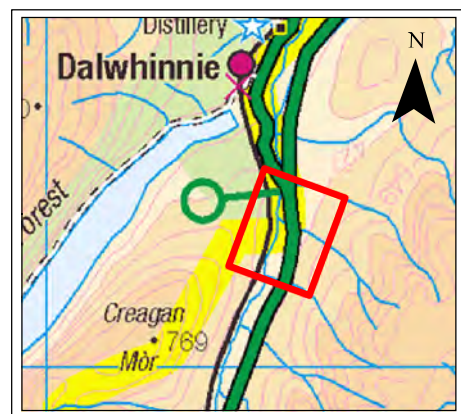
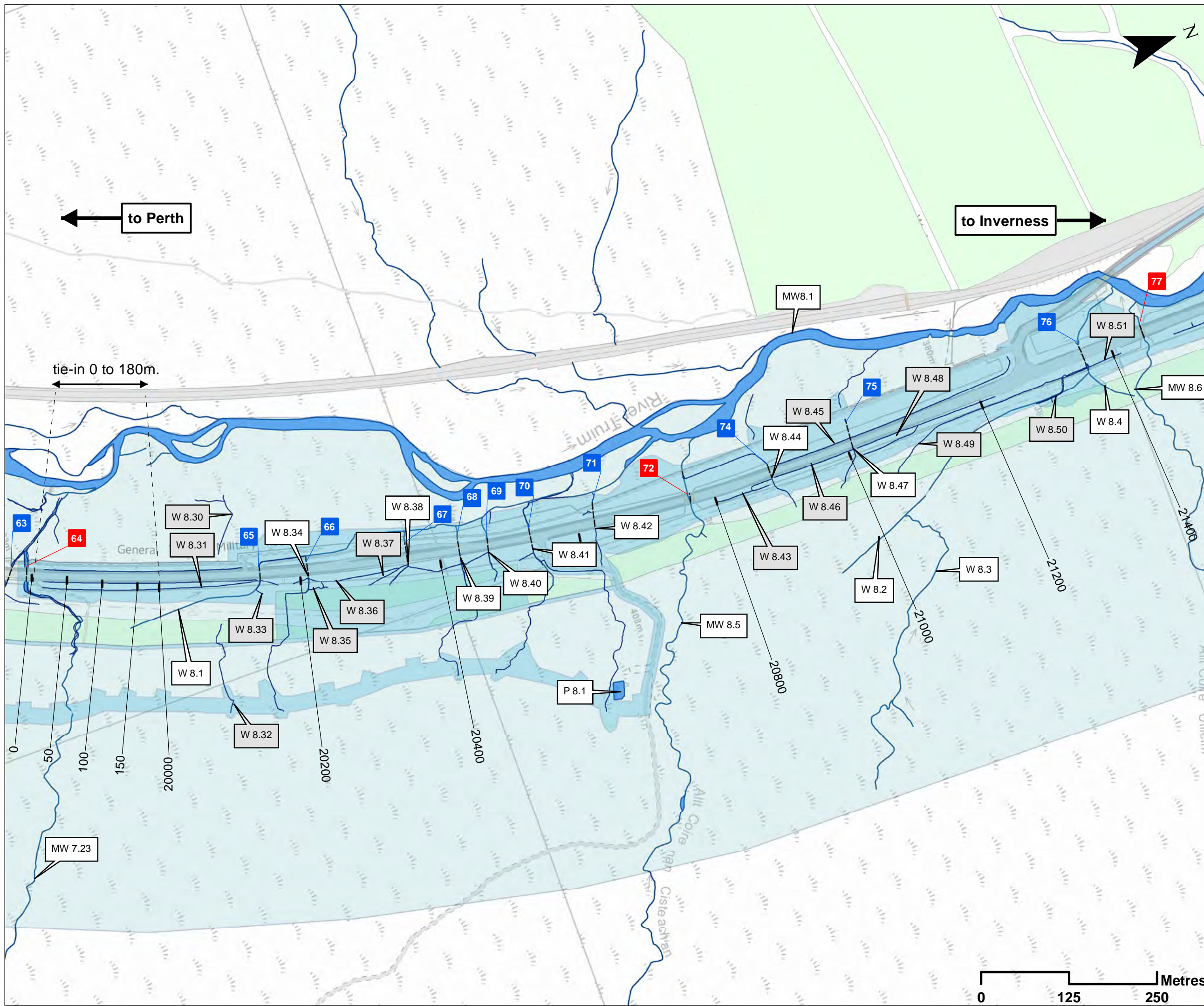
DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0001

SHEET: 1 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------



Document Path: L:\9136\CurrentDrawings\DWG\A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0001.dwg



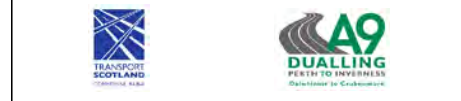
- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - P Pond
 - MW Major Watercourse
 - W Minor Watercourse
 - Major Watercourse Crossing
 - Minor Watercourse Crossing

Further Information
 Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.
 Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

REV	SUIT	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

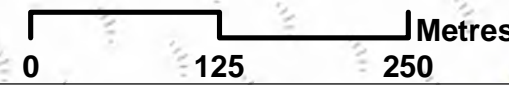


**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.2
 WATER FEATURES SURVEY
 chainage 20000 to 21400**

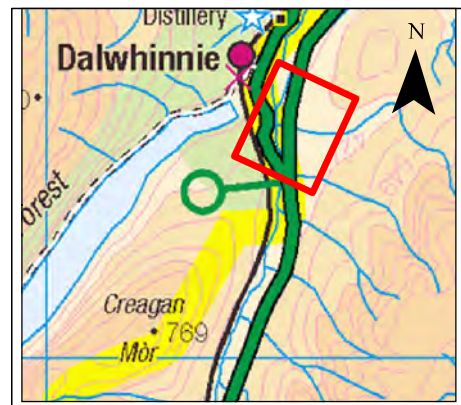
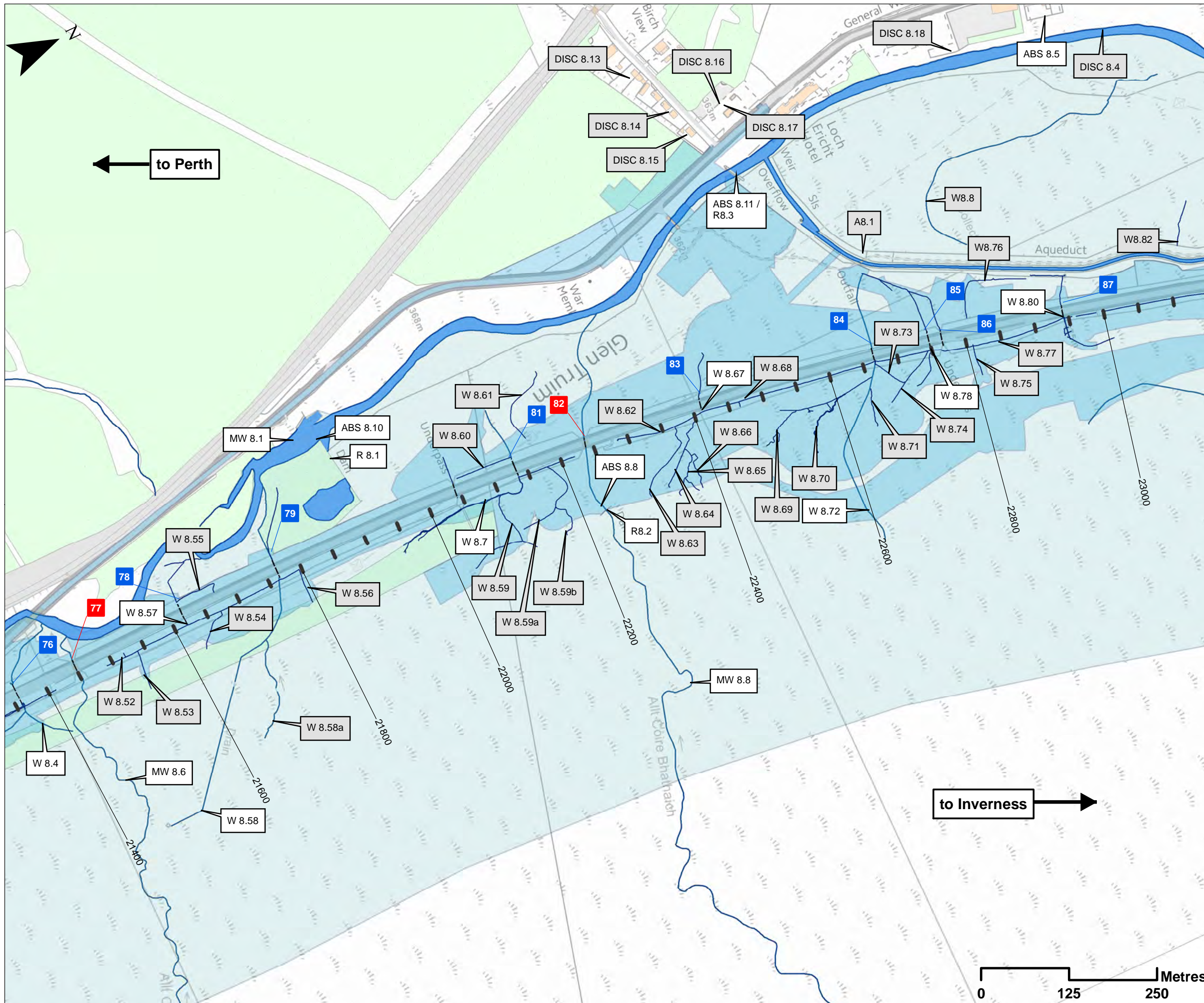
DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0001		
SHEET: 2 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\913\6\CurrentDrawings\DWG\A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0001.dwg



- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - A Aqueduct
 - ABS Abstraction
 - DISC Discharge
 - R Reservoir or Dam
 - MW Major Watercourse
 - W Minor Watercourse
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

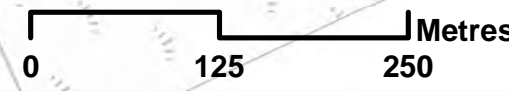
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUI	DATE	DESCRIPTION	BY	APP

ch2m: FAIRHURST

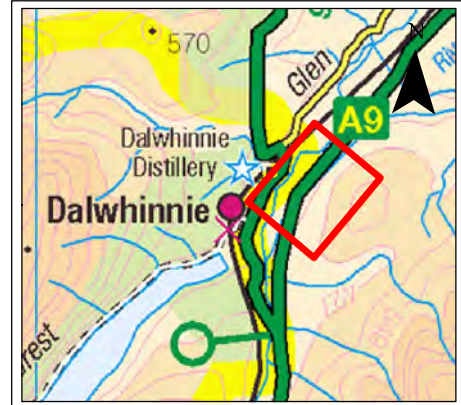
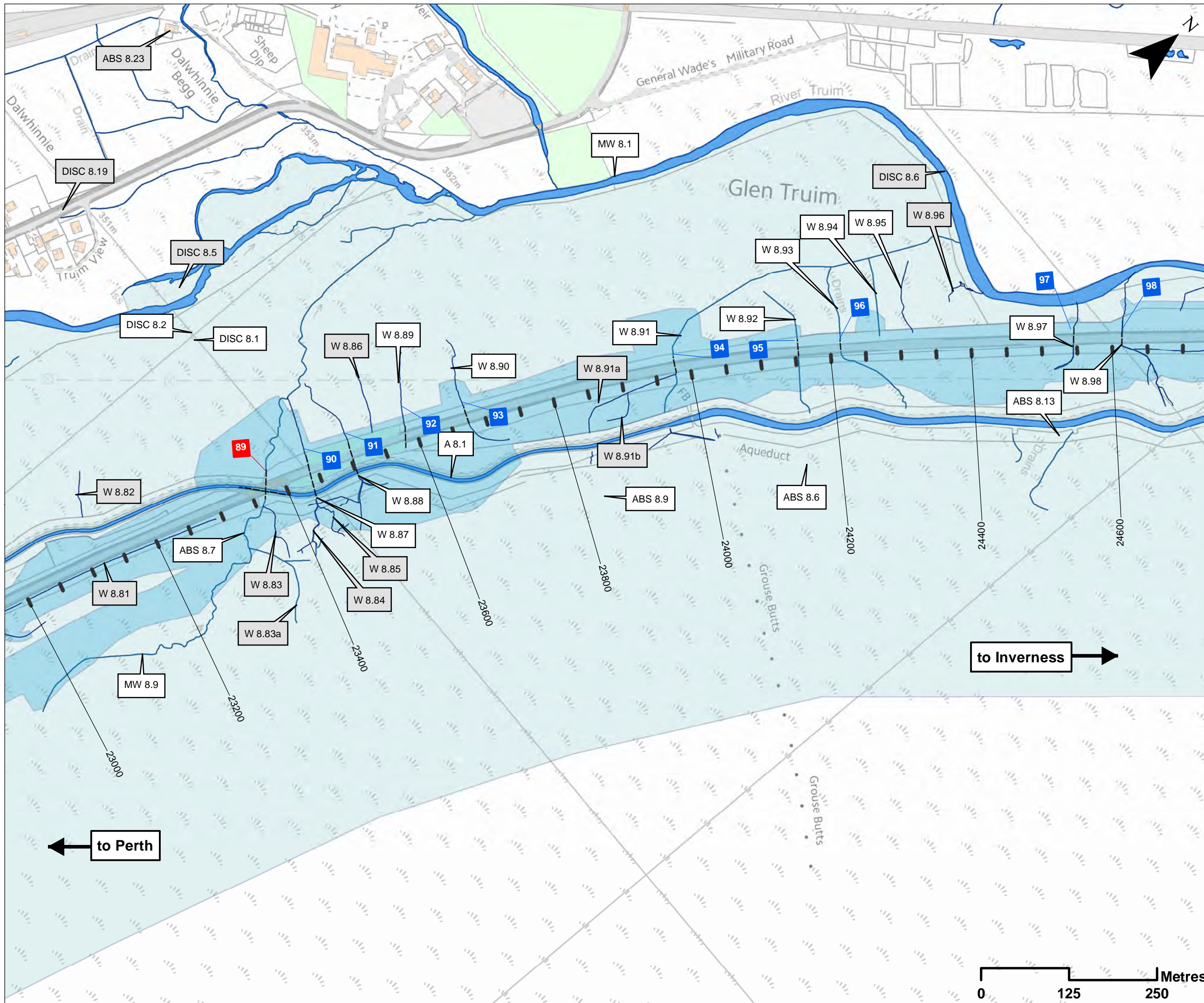
CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.3
 WATER FEATURES SURVEY
 chainage 21400 to 23000**

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
DATE: 07/12/2017			
PROJ: 495298			
DWG: A9P08-CFJ-EWE-J_ML214_ZZ-DR-EN-0001			
SHEET: 3 OF 9	REVISION: C01	SUITABILITY: A3	



Document Path: L:\9136\Drawings\Drawings\A9P08\Project 8 - Water Features Plans - T1 to T13\917-02-05 PUBLICATION\A9P08-WFS-11.3.mxd



- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - A Aqueduct
 - ABS Abstraction
 - DISC Discharge
 - MW Major Watercourse
 - W Minor Watercourse
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
- Further Information**
- Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.
- Assessed Features: White
Scoped-out Features: Grey

SCALE 1:5000

REV	SUIT	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

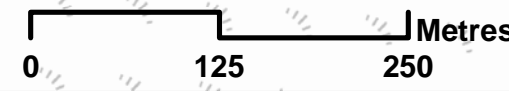


**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.4
 WATER FEATURES SURVEY
 chainage 23000 to 24600**

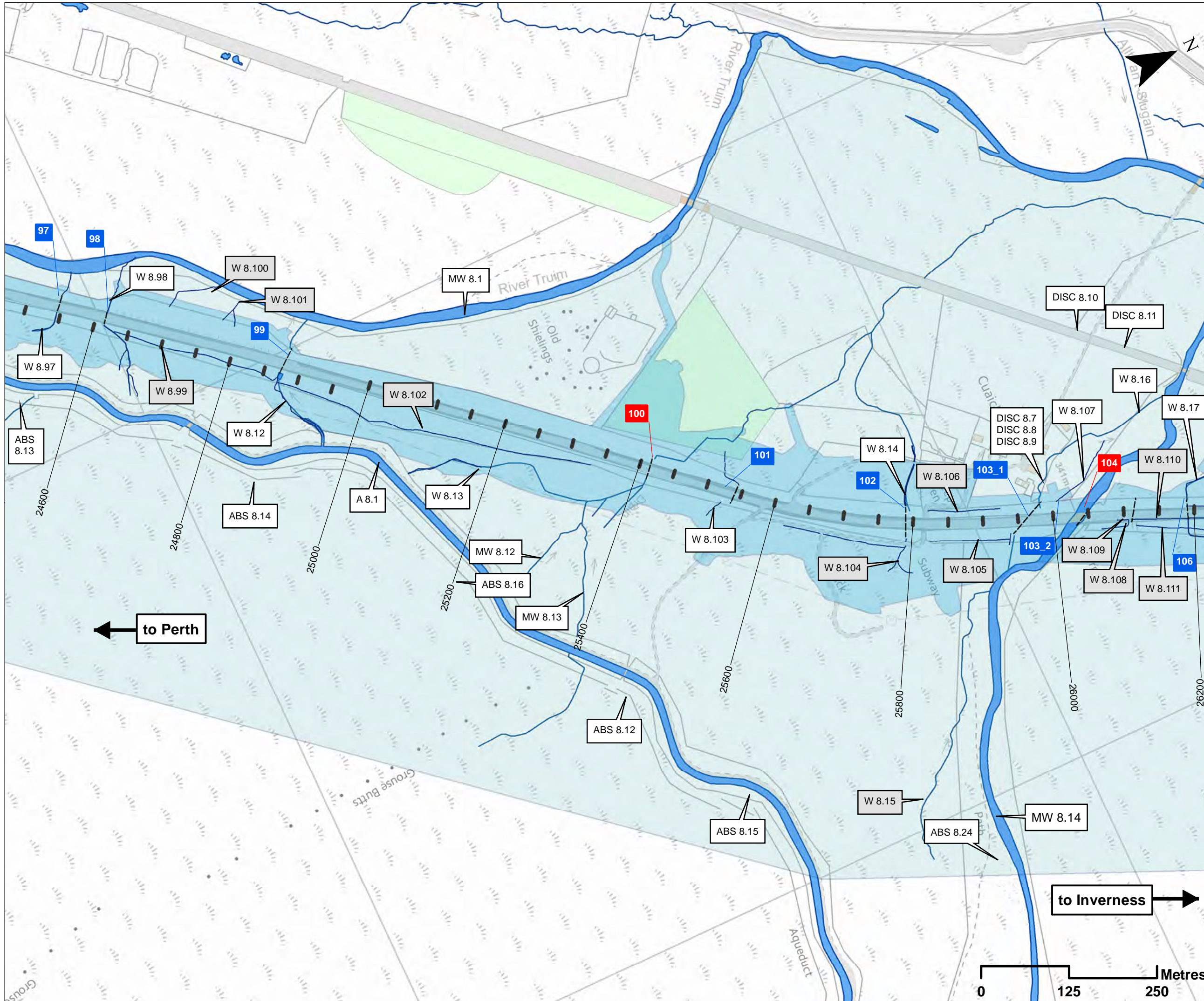
DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML230_ZZ-DR-EN-0001		
SHEET: 4 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\913\6\9136\Drawings\DWG\83\Project 8 - Water Features Plans - T1 to T11\917-02-05 PUBLICATION\A9P08-WFS-11.4.mxd



Legend

- Detailed Study Area
- Wider Study Area
- Surface Water Features
- Existing Crossing
- Aqueduct
- ABS Abstraction
- DISC Discharge
- MW Major Watercourse
- W Minor Watercourse
- 1 Major Watercourse Crossing
- 1 Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
Scoped-out Features: Grey

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST

CH2MHILL Fairhurst JV
C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
BASELINE PLAN
DRAWING 11.5
WATER FEATURES SURVEY
chainage 24600 to 26000**

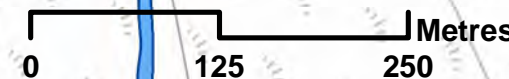
DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

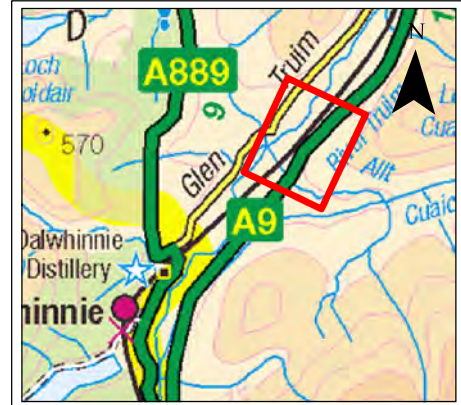
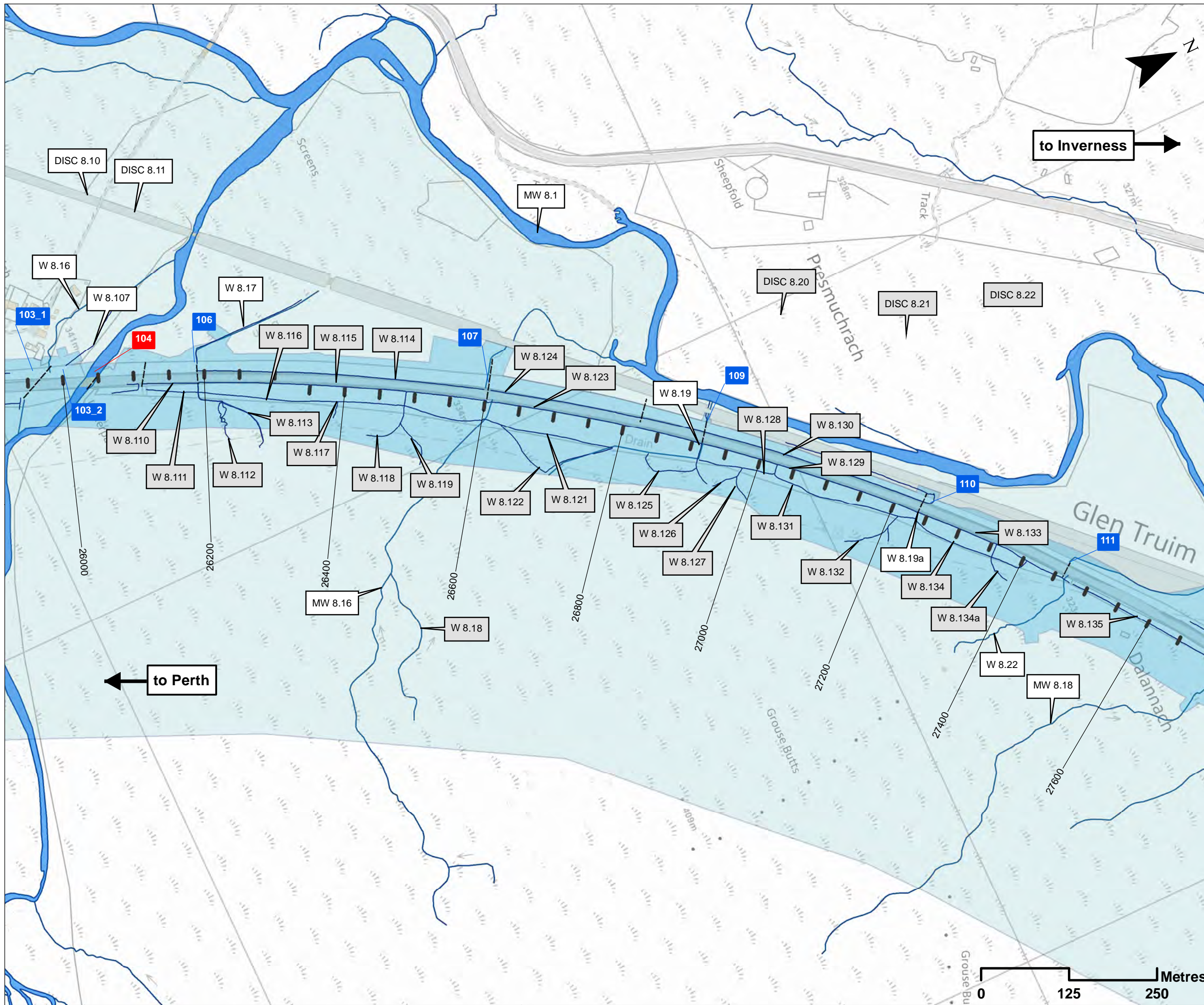
DATE: 07/12/2017

PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML246_ZZ-DR-EN-0001

SHEET: 5 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------





Legend

- Detailed Study Area
- Wider Study Area
- Surface Water Features
- Existing Crossing
- DISC Discharge
- MW Major Watercourse
- W Minor Watercourse
- Major Watercourse Crossing
- Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

REV	SU	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SU	DATE	DESCRIPTION	BY	APP

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



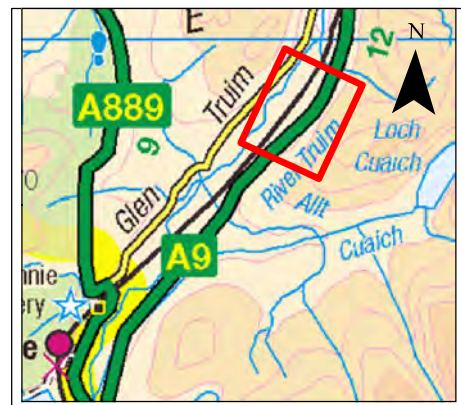
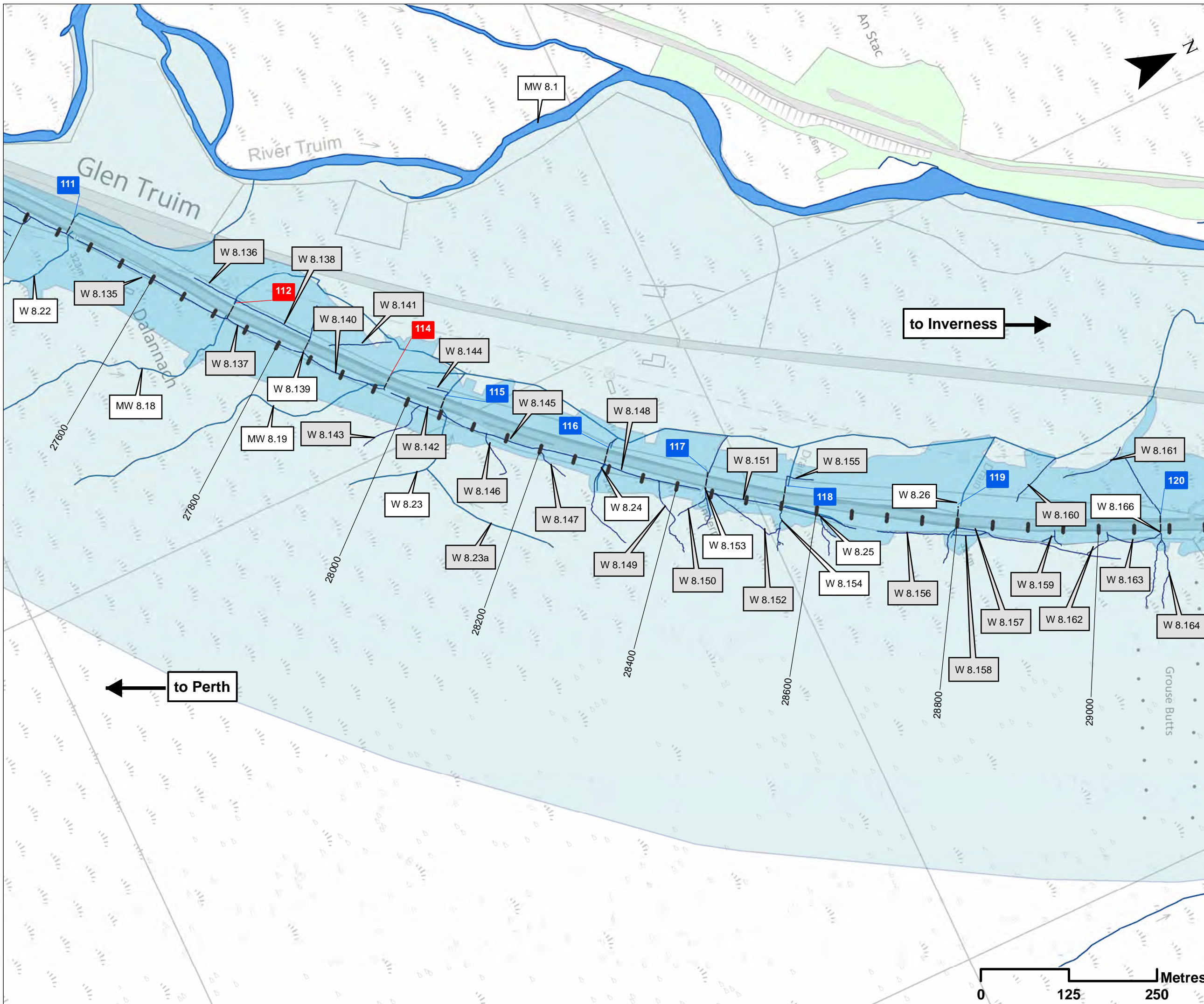
**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.6
 WATER FEATURES SURVEY
 chainage 26000 to 27600.**

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298
 DWG: A9P08-CFJ-EWE-J_ML260_ZZ-DR-EN-0001

SHEET: 6 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------

Document Path: L:\913\60\enr\Drawings\DIRS3\Project 8 - Water Features Plans - T1 to T11\917-02-05\Publication\A9P08-WFS-11.6.mxd



Legend

- Detailed Study Area
- Wider Study Area
- Surface Water Features
- Existing Crossing
- MW Major Watercourse
- W Minor Watercourse
- Major Watercourse Crossing
- Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
Scoped-out Features: Grey

SCALE 1:5000

P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUIT	DATE	DESCRIPTION	BY	APP

ch2m FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

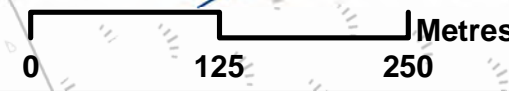


**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.7
 WATER FEATURES SURVEY
 chainage 27600 to 29000**

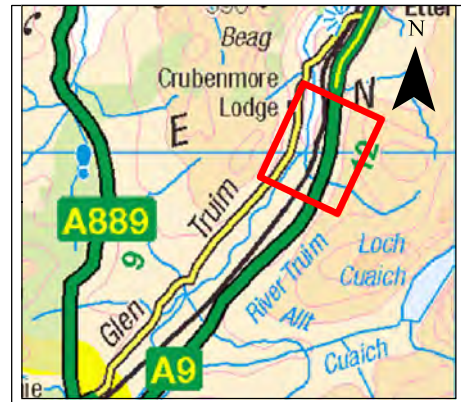
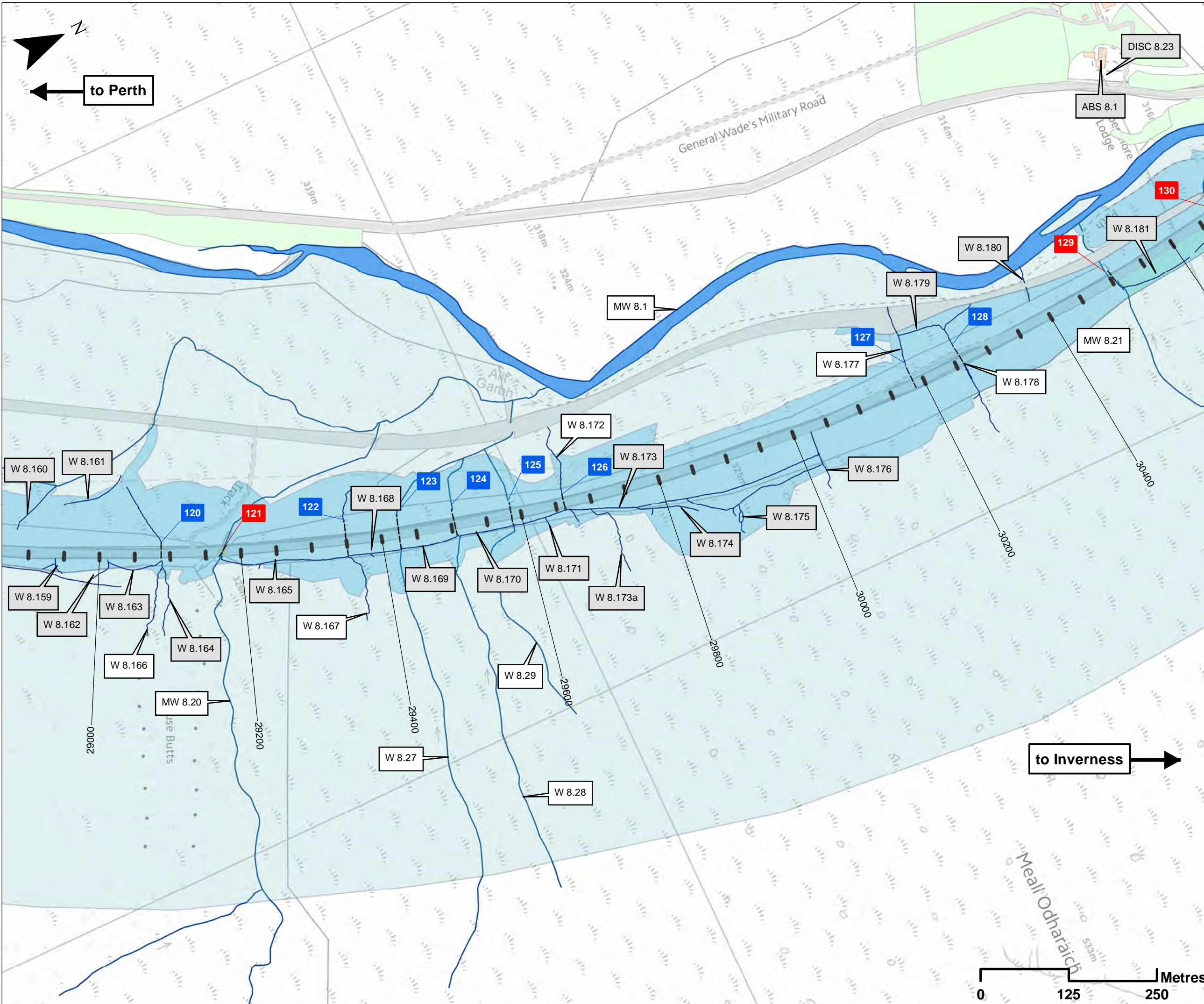
DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML276_ZZ-DR-EN-0001		
SHEET: 7 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\9\3\6\Currendrawings\DWG\83\Project 8 - 11.7\11.7-02-05\Publication\A9P08-WFS-11.7.mxd



- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - ABS Abstraction
 - MW Major Watercourse
 - W Minor Watercourse
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUIT	DATE	DESCRIPTION	BY	APP

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



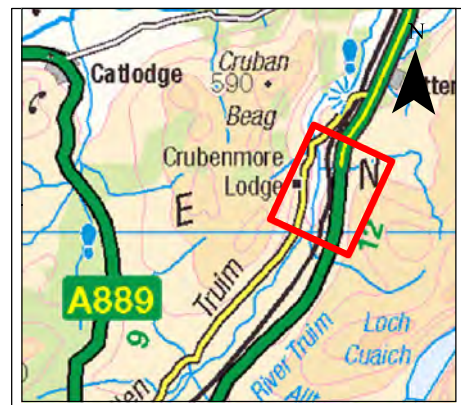
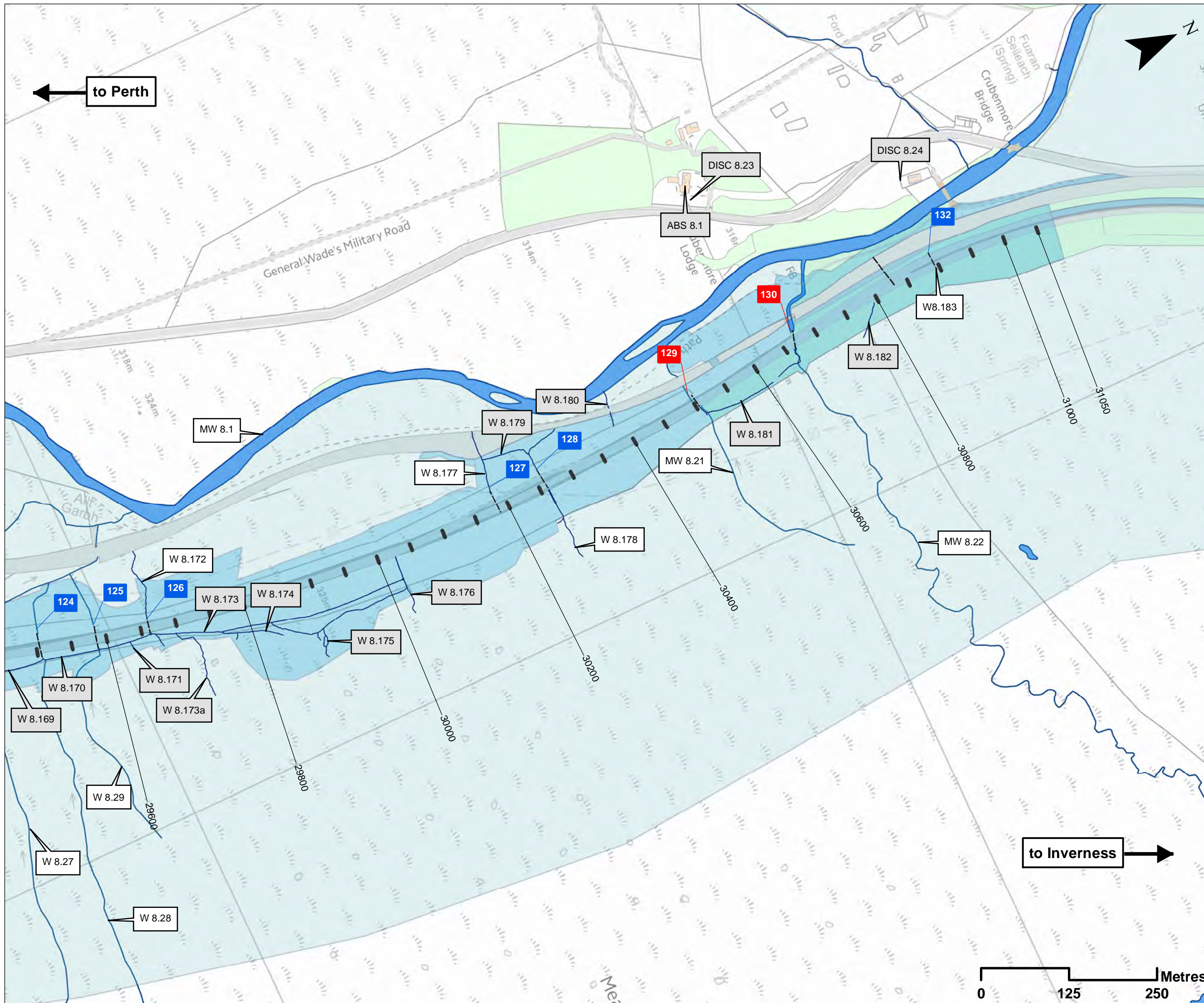
**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.8
 WATER FEATRES SURVEY
 chainage 29000 to 30400**

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML290_ZZ-DR-EN-0001		
SHEET: 8 OF 9	REVISION: C01	SUITABILITY: A3

Document Path: L:\9136\Drawings\Drawings\08\0803\Project 8 - Water Features Plans - T1 to T11\917-02-05\Publication\A9P08-WFS-11.8.mxd



- Legend**
- Detailed Study Area
 - Wider Study Area
 - Surface Water Features
 - Existing Crossing
 - ABS Abstraction
 - MW Major Watercourse
 - W Minor Watercourse
 - Major Watercourse Crossing
 - Minor Watercourse Crossing

Further Information

Reference should be made to the Water Features Schedule (WFS) for detailed information on watercourses scoped-out of the assessment.

Assessed Features: White
 Scoped-out Features: Grey

SCALE 1:5000

REV	SUIT	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUIT	DATE	DESCRIPTION	BY	APP

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

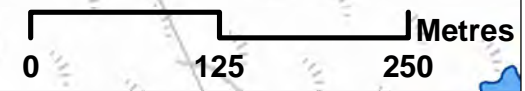


**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 BASELINE PLAN
 DRAWING 11.9
 WATER FEATURES SURVEY
 chainage 30400 to 31050**

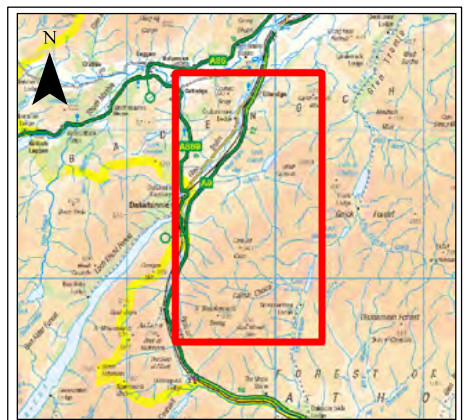
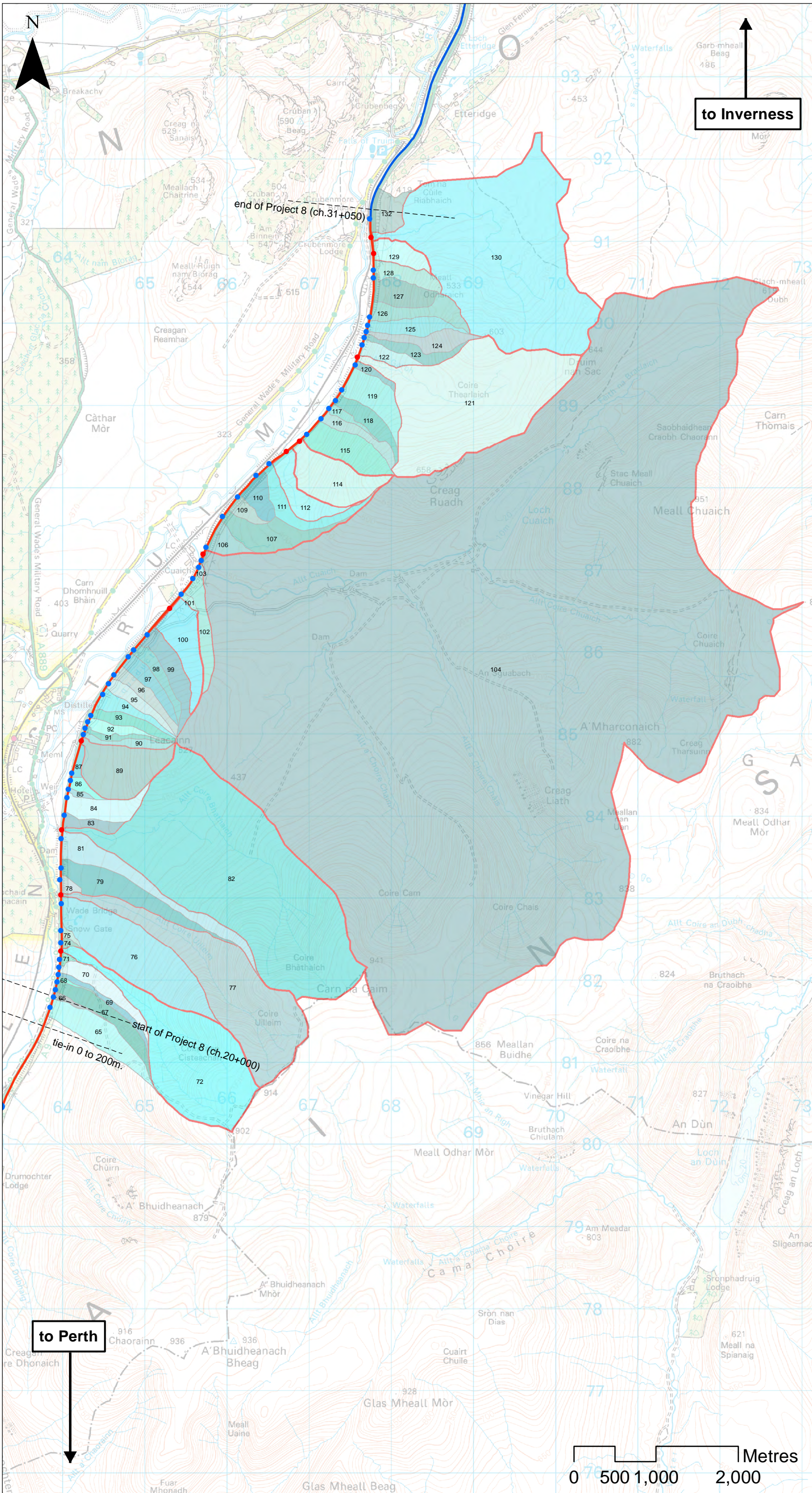
DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

SHEET: 9 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------



Document Path: L:\9136\Drawings\Drawings\DIRS3\project 8\11.9\11.917-02-05\Publication\A9P08-WFS-11.9.mxd



Legend

- Proposed Scheme Extents
- Existing Dualled
- Existing Single
- Major Watercourse Crossing
- Minor Watercourse Crossing

Catchments by Hydro ID

65	99
66	100
67	101
68	102
69	103
70	104
71	106
72	107
74	109
75	110
76	111
77	112
78	114
79	115
81	116
82	117
83	118
84	119
85	120
86	121
87	122
89	123
90	124
91	125
92	126
93	127
94	128
95	129
96	130
97	132
98	

*Red outline denotes a catchment of a Major Watercourse.
SCALE 1:45000

P04	S3	NOV 2017	FINAL REVISIONS	CP	VF
P03	S3	NOV 2017	INTERNAL REVISIONS	CP	VF
P02	S3	AUG 2017	DESIGN UPDATE	CP	VF
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	VF
REV	SUIT	DATE	DESCRIPTION	BY	APP

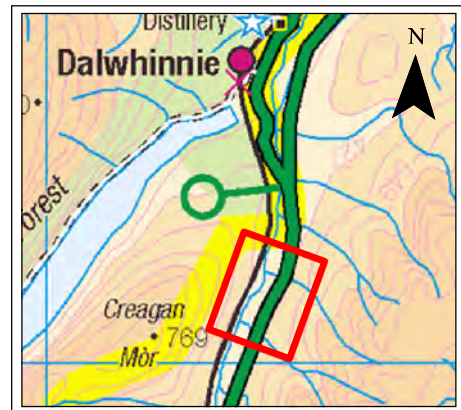
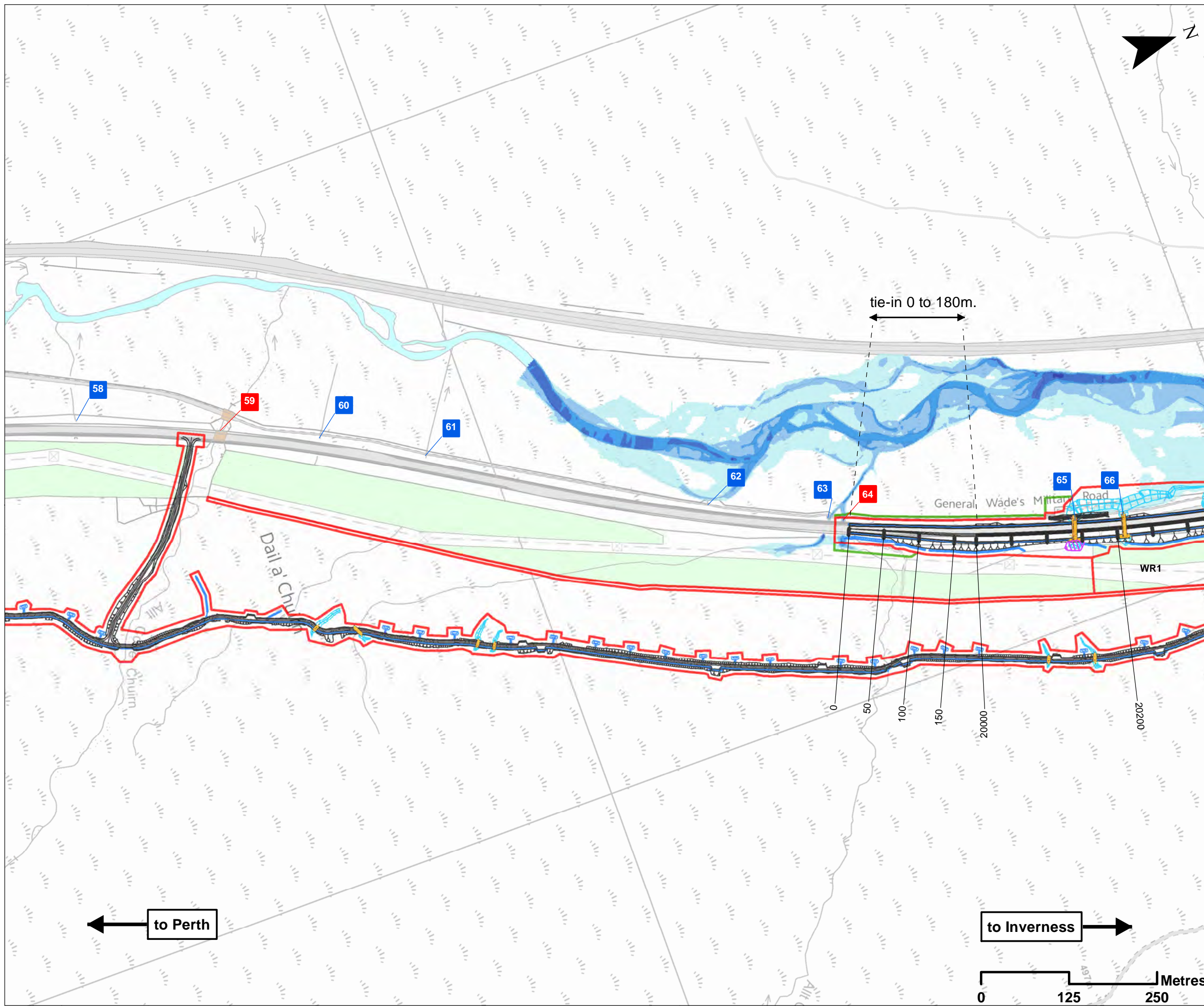
ch2m FAIRHURST
CH2MHILL Fairhurst JV
C/O: City Park, 368 Alexandra Parade Glasgow G31 3AU
Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
BASELINE PLAN
DRAWING 11.10
CATCHMENT BOUNDARIES**

DESIGN:	DRAWN:	CHK:	APP:
CP	CP	JMcN	VF

DATE:	07/12/2017
PROJ:	495298
DWG:	A9P08-CF3-EWE-J_ZZZZZ_ZZ-DR-EN-0001
SHEET:	1 OF 1
VERSION:	CO1
SUITABILITY:	A3



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 200 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

REV	SUJ	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

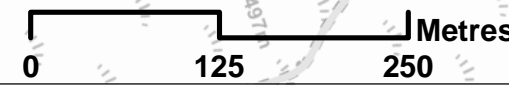


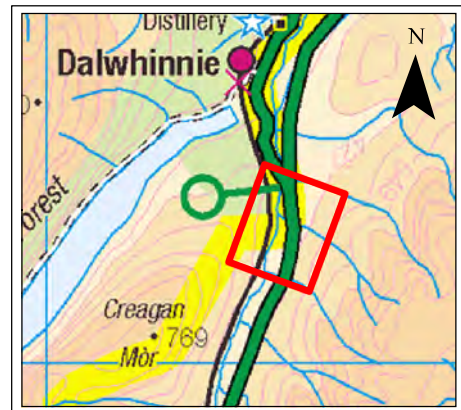
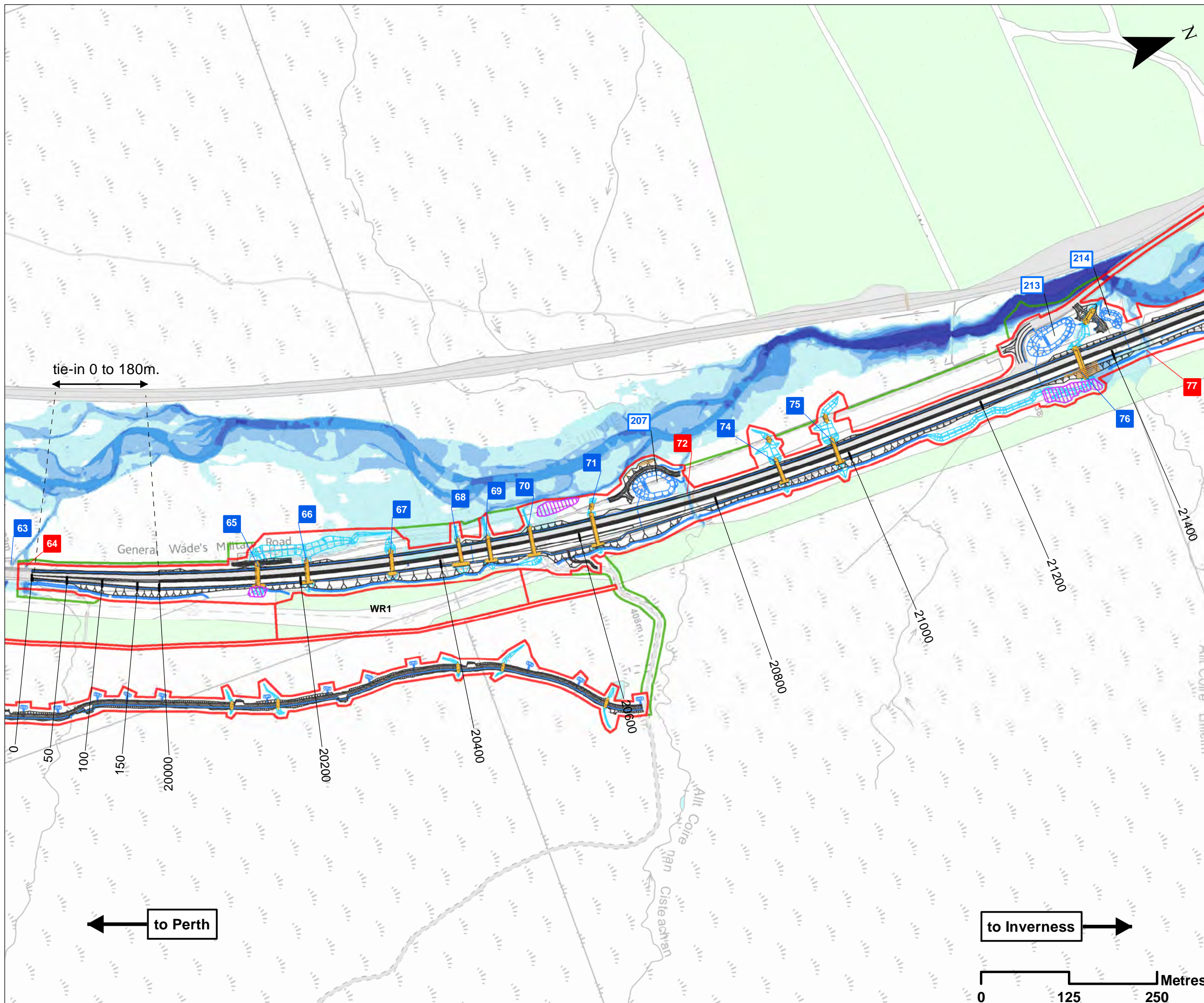
PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
 DRAWING 11.11
 FLOOD EXTENTS PLAN - EXISTING
 chainage 0 to 20000

DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0002	SHEET: 1 OF 9	REVISION: C01	SUITABILITY: A3
--	------------------	------------------	--------------------





- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 200 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUJ	DATE	DESCRIPTION	BY	APP

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



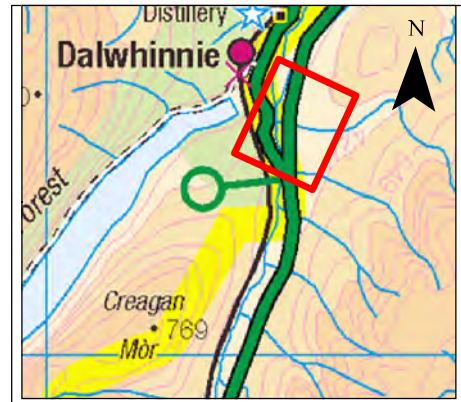
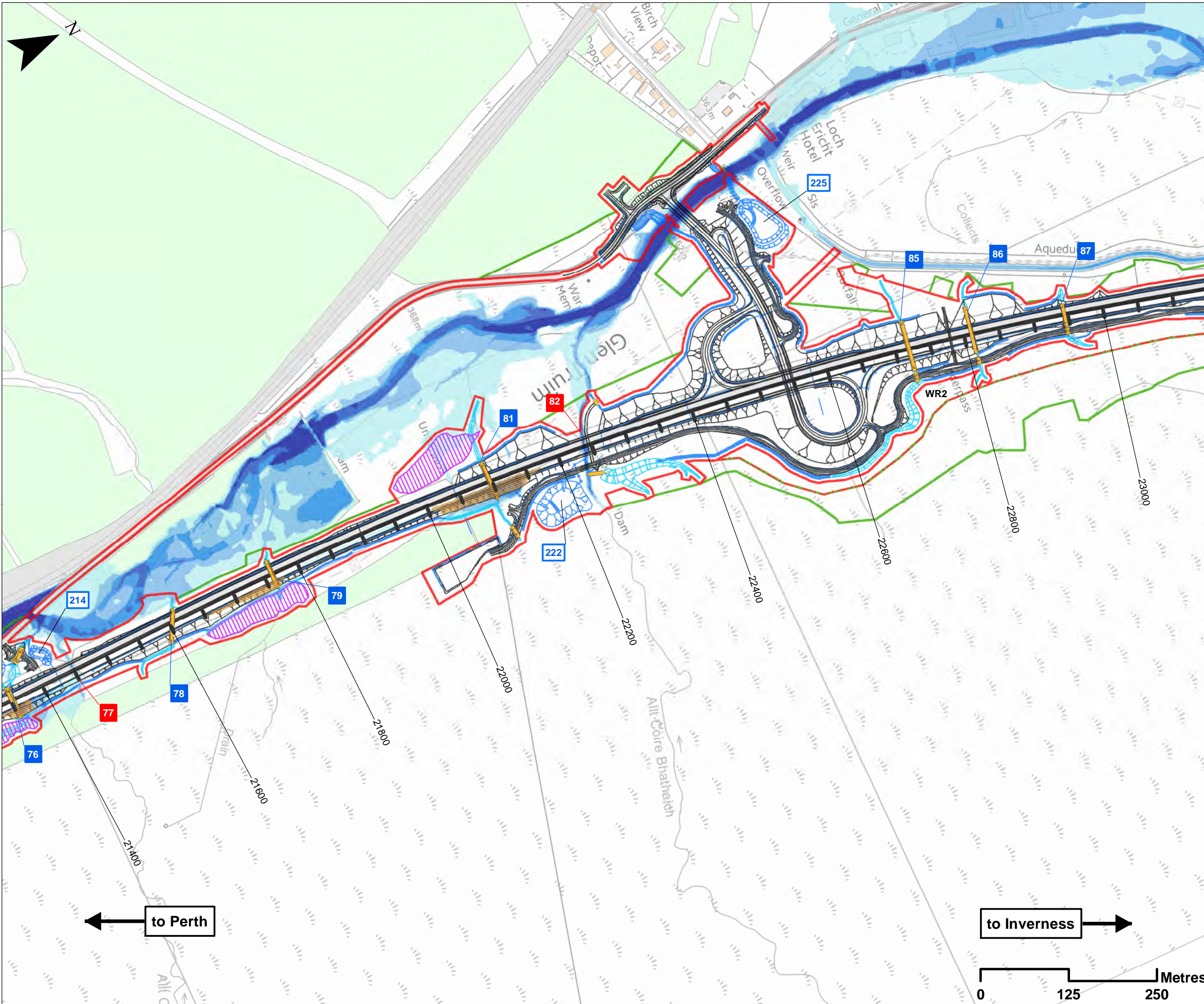
PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.12
FLOOD EXTENTS PLAN - EXISTING
 chainage 20000 to 21400

DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0002		
SHEET: 2 OF 9	REVISION: C01	SUITABILITY: A3

Document Path: L:\P\36\Crubren\Drawings\DMRB3\Project_8S_Flood_Extents_Plans - 11.12 to 11.18\17-02-15\PUBLIC\01\A9P08-FED-11.12.mxd



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.13
FLOOD EXTENTS PLAN - EXISTING
 chainage 21400 to 23000

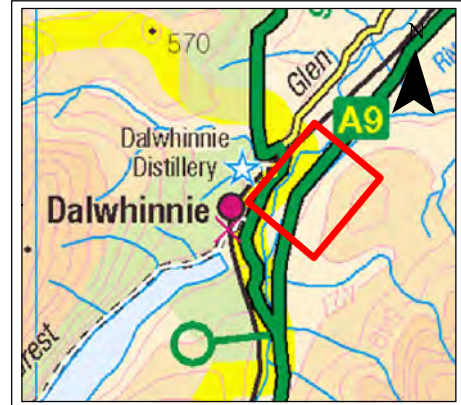
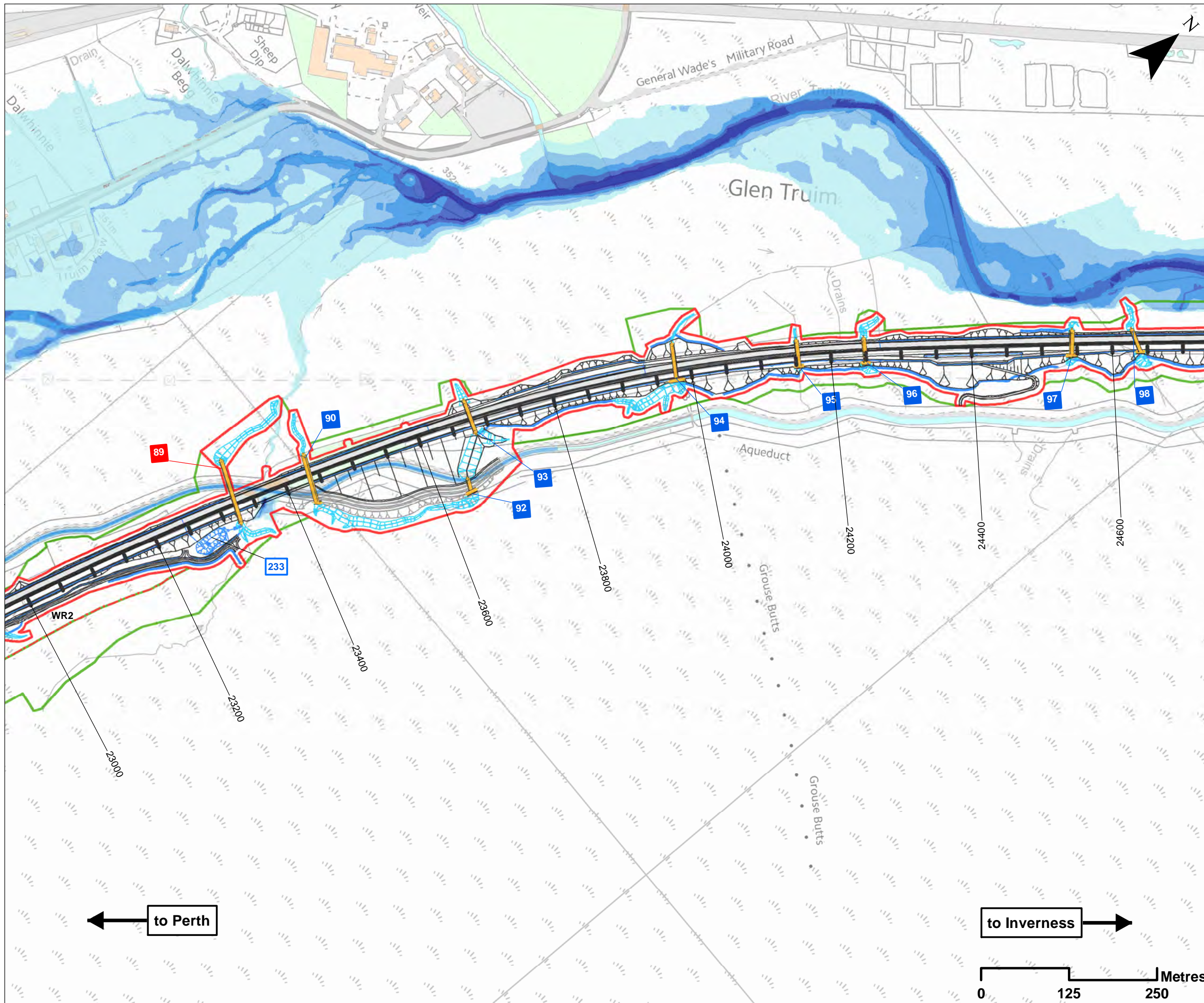
DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CF-J-EWE-J_ML214_ZZ-DR-EN-0002

SHEET: 3 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------





- Legend**
- Proposed Scheme Detail
 - Aqueduct Diversion
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - ▨ Compensatory Storage Areas
 - ▨ Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUIT	DATE	DESCRIPTION	BY	APP

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

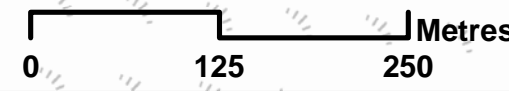


PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.14
FLOOD EXTENTS PLAN - EXISTING
 chainage 23000 to 24600

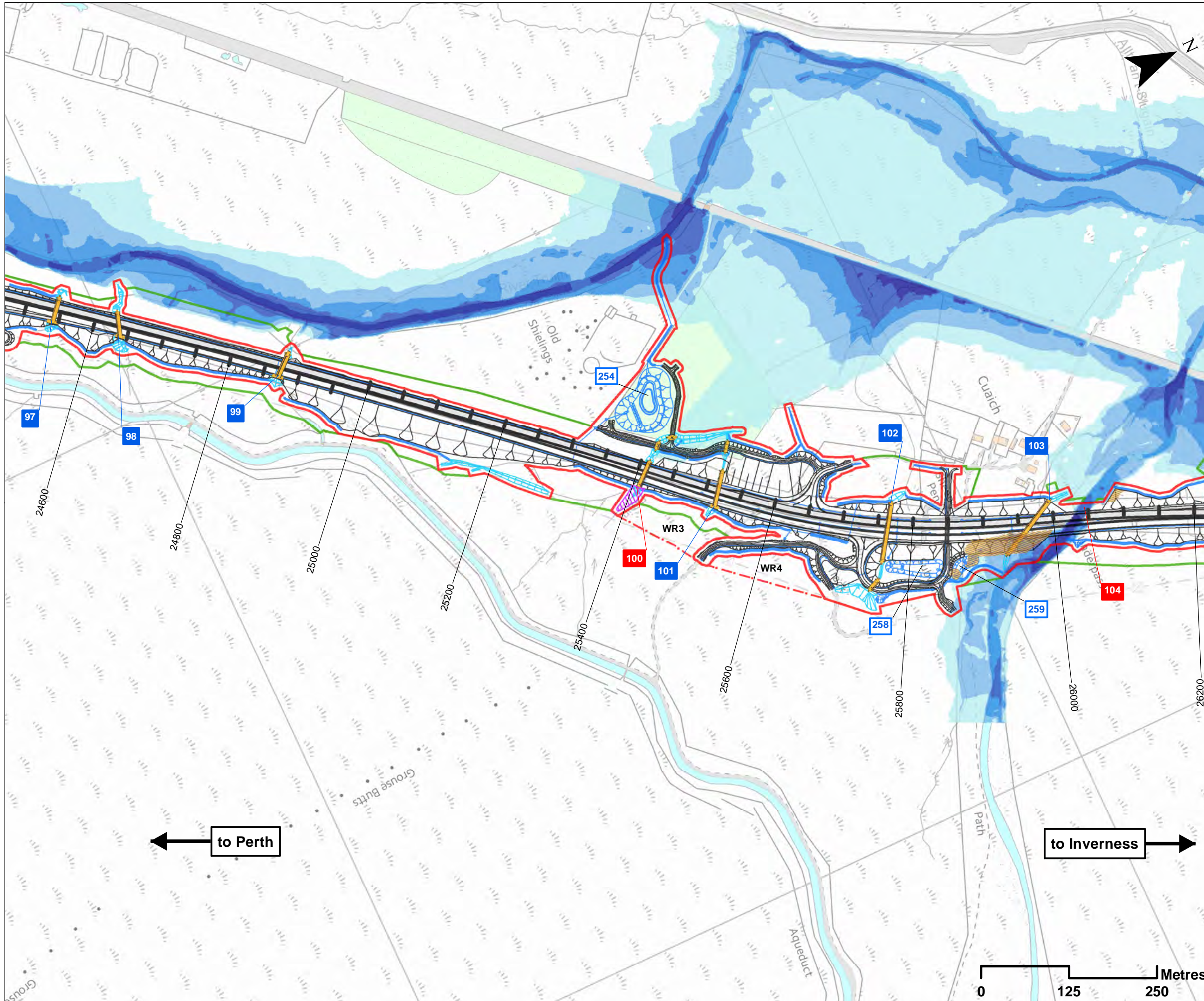
DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CF-J-EWE-J_ML230_ZZ-DR-EN-0002		
SHEET: 4 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\93\60\enr\Drawings\DMRB3\proj08_08_Flood Extent Plans - 11.14 to 11.18\11.14_Flood Extent Plans - 11.14.dwg



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

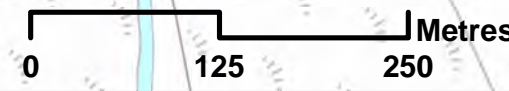


PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
ASSESSMENT PLAN
DRAWING 11.15
FLOOD EXTENTS PLAN - EXISTING
 chainage 24600 to 26000

DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

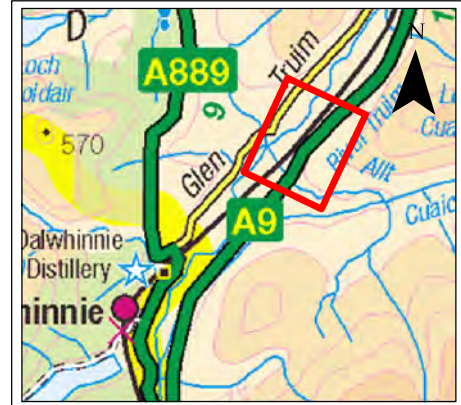
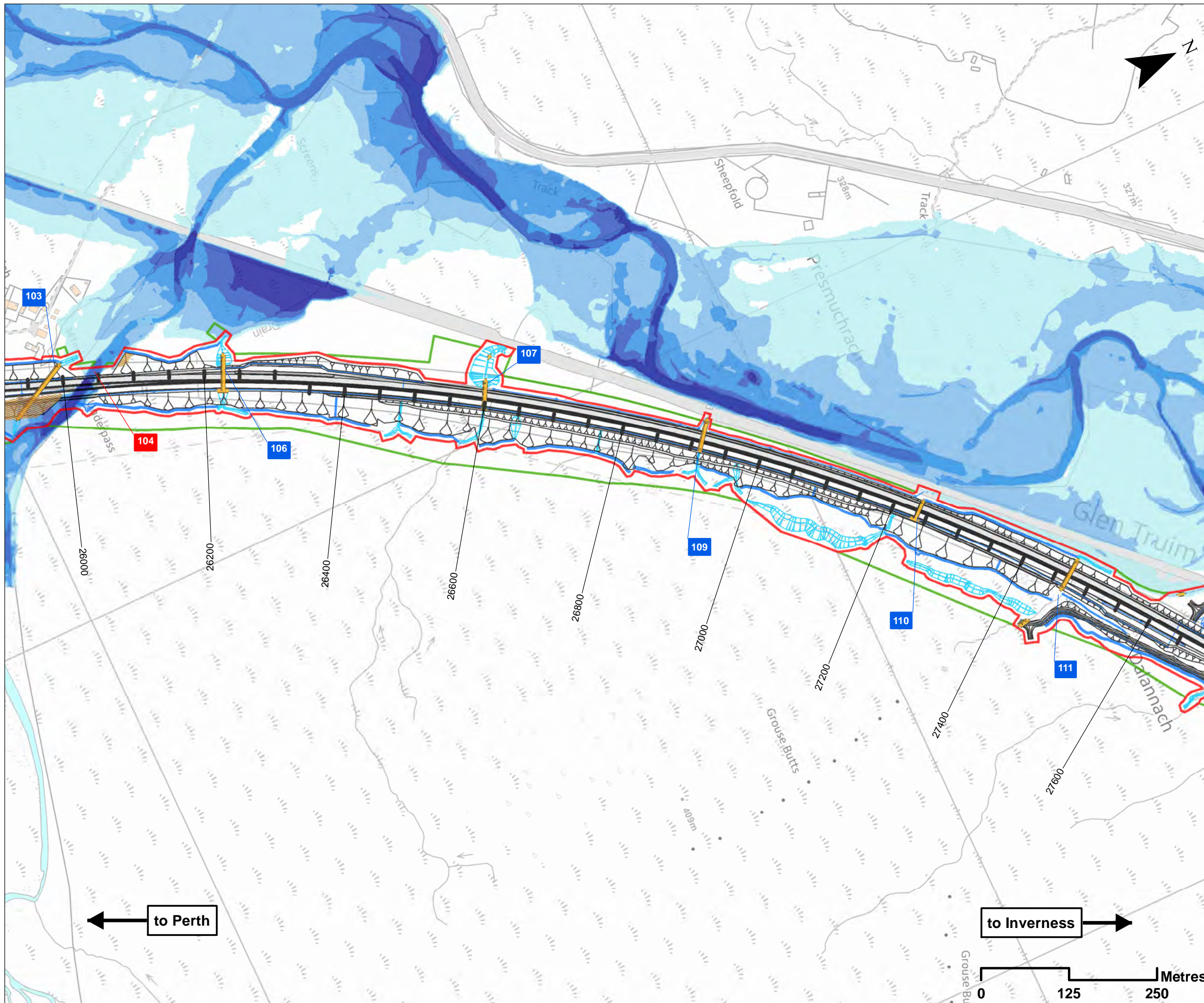
DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J ML246 ZZ-DR-EN-0002		
SHEET: 5 OF 9	REVISION: C01	SUITABILITY: A3



← to Perth

to Inverness →



Legend

- Proposed Scheme Detail
- Watercourse Diversions
- Drainage
- Proposed Culverts
- 1 Major Watercourse Crossing
- 1 Minor Watercourse Crossing
- 001 SuDS ID
- Assessment Boundary - Permanent Works
- Assessment Boundary - Temporary Works
- ▨ Compensatory Storage Areas
- ▨ Encroachment of Earthworks into Floodplain

Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)

- 0 - 0.5
- 0.5 - 1
- 1.0 - 1.5
- 1.5 - 2
- >2

SCALE: 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

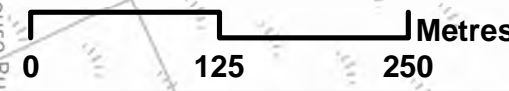
TRANSPORT SCOTLAND
A9 DUALLING
 PER THRU INVESTMENTS
 National to Grade 1

PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.16
FLOOD EXTENTS PLAN - EXISTING
 chainage 26000 to 27600

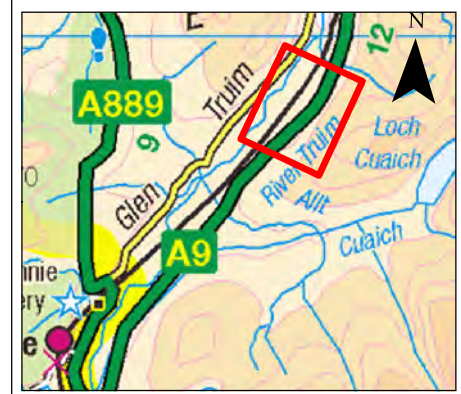
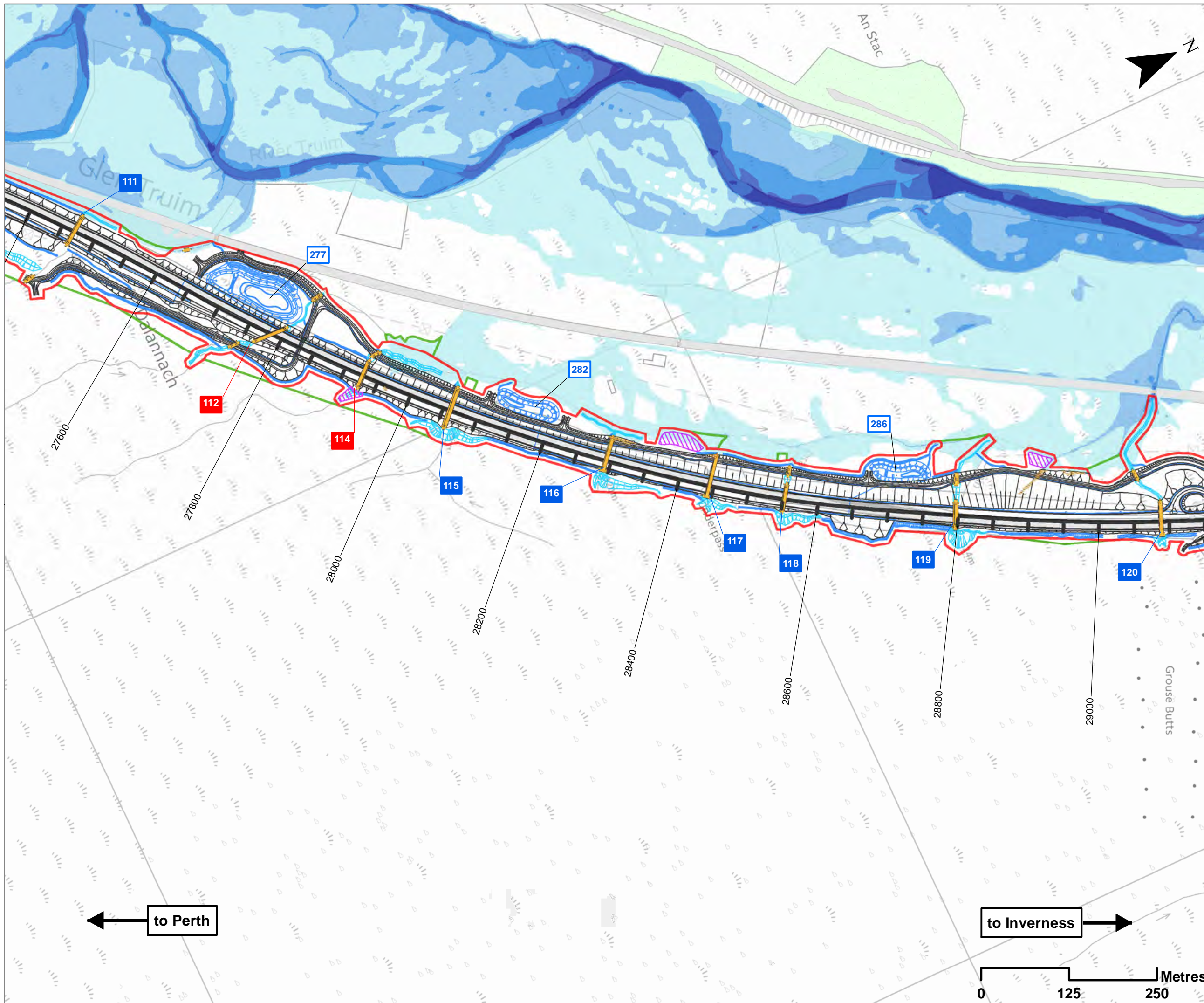
DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CF-J-EWE-J_ML260_ZZ-DR-EN-0002		
SHEET: 6 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\P3\60\Drawings\DMRB3\Project 8 - Flood Extent Plans - 11.16 to 11.18\17-02-15\PUBLIC\A9P08-FED-11.16.mxd



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - ▨ Compensatory Storage Areas
 - ▨ Encroachment of Earthworks into Floodplain
- Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)**
- 0 - 0.5
 - 0.5 - 1
 - 1.0 - 1.5
 - 1.5 - 2
 - >2

SCALE: 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.17
FLOOD EXTENTS PLAN - EXISTING
 chainage 27600 to 29000

DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

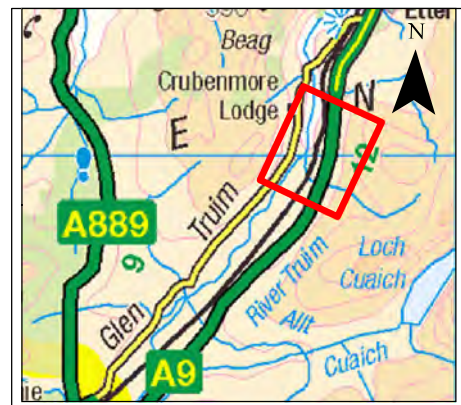
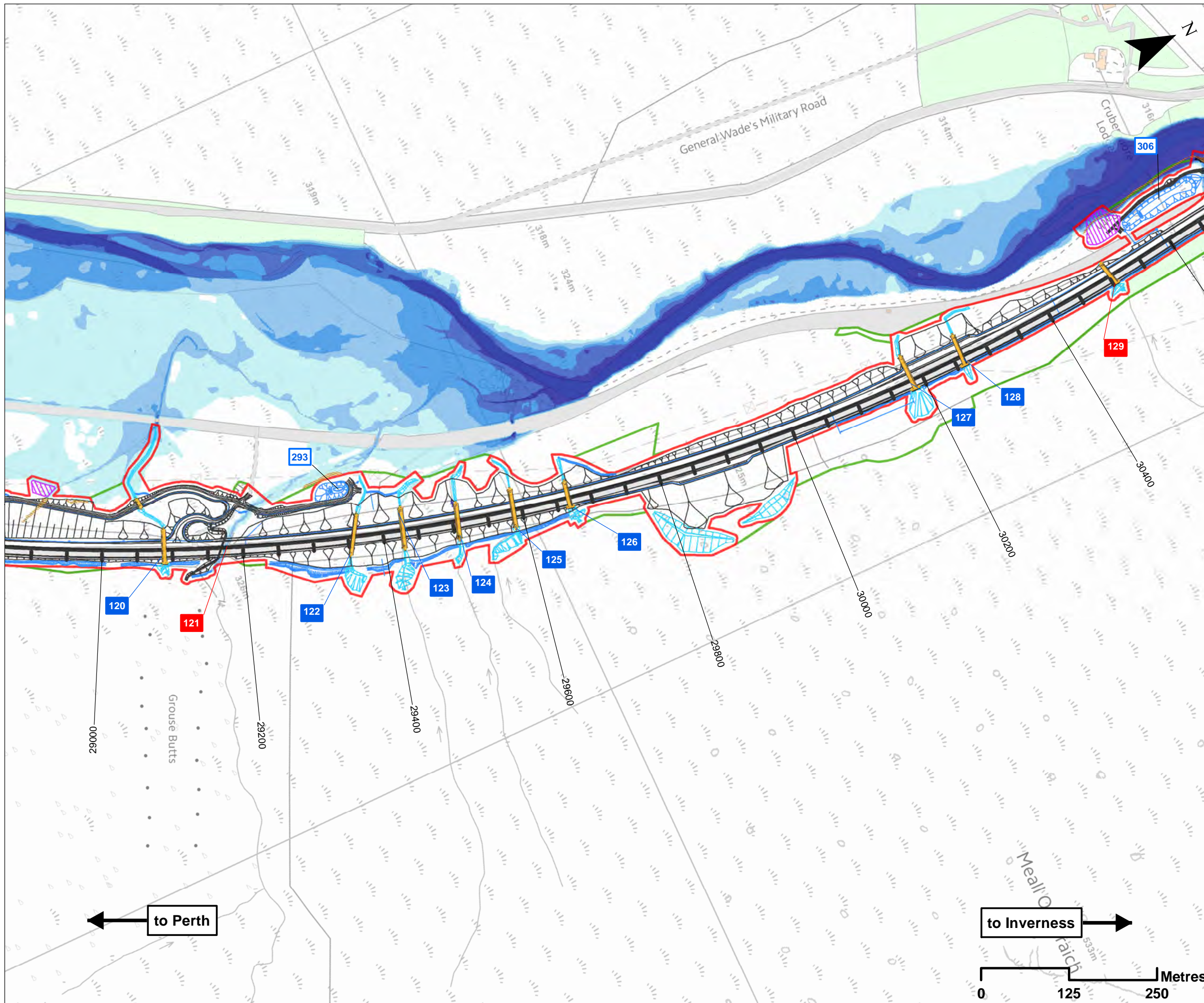
DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CF-J-EWE-J_ML276_ZZ-DR-EN-0002		
SHEET: 7 OF 9	REVISION: C01	SUITABILITY: A3

← to Perth

to Inverness →





Legend

- Proposed Scheme Detail
- Watercourse Diversions
- Drainage
- Proposed Culverts
- 1 Major Watercourse Crossing
- 1 Minor Watercourse Crossing
- 001 SuDS ID
- Assessment Boundary - Permanent Works
- Assessment Boundary - Temporary Works
- ▨ Compensatory Storage Areas
- ▨ Encroachment of Earthworks into Floodplain

Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 20 Year Flood Extent - Depth (m)

- 0 - 0.5
- 0.5 - 1
- 1.0 - 1.5
- 1.5 - 2
- >2

SCALE: 1:5000

REV	SUJ	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



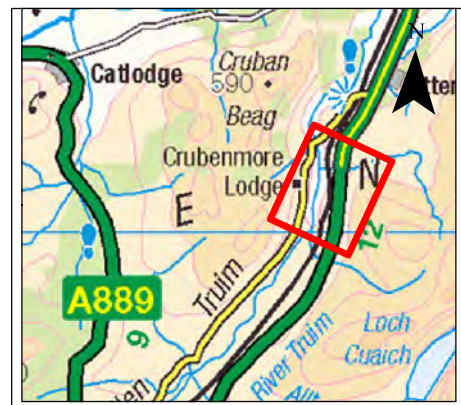
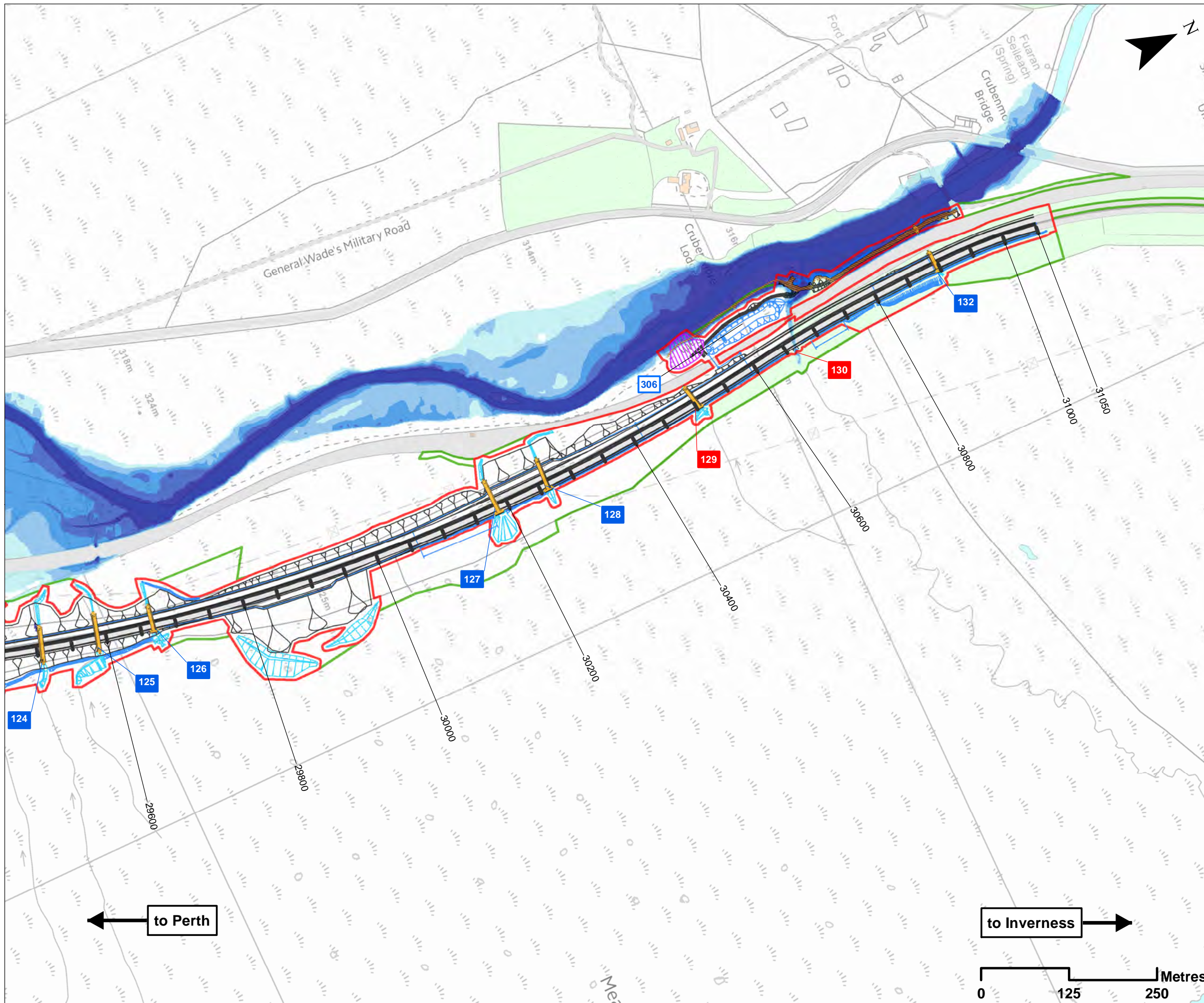
PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.18
FLOOD EXTENTS PLAN - EXISTING
 chainage 29000 to 30400

DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CF-J-EWE-J_ML290_ZZ-DR-EN-0002		
SHEET: 8 OF 9	REVISION: C01	SUITABILITY: A3





Legend

- Proposed Scheme Detail
- Watercourse Diversions
- Drainage
- Proposed Culverts
- 1 Major Watercourse Crossing
- 1 Minor Watercourse Crossing
- 001 SuDS ID
- Assessment Boundary - Permanent Works
- Assessment Boundary - Temporary Works
- Compensatory Storage Areas
- Encroachment of Earthworks into Floodplain

Design Manual for Roads and Bridges Stage 3 (DMRB3) 1 in 100 Year Flood Extent - Depth (m)

- 0 - 0.5
- 0.5 - 1
- 1.0 - 1.5
- 1.5 - 2
- >2

SCALE: 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525

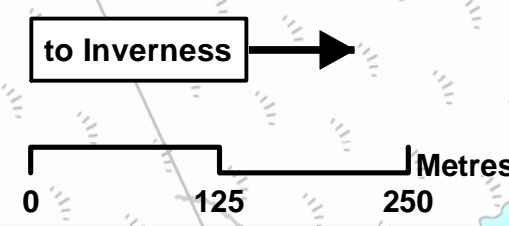


PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.19
FLOOD EXTENTS PLAN - EXISTING
 chainage 30400 to 31050

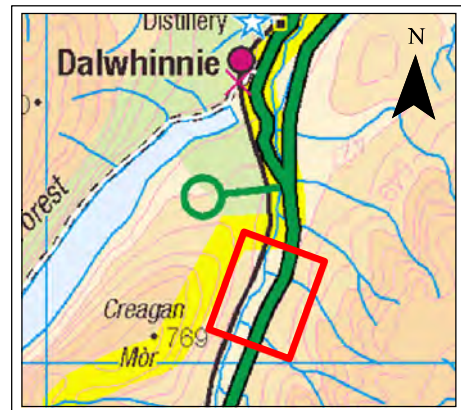
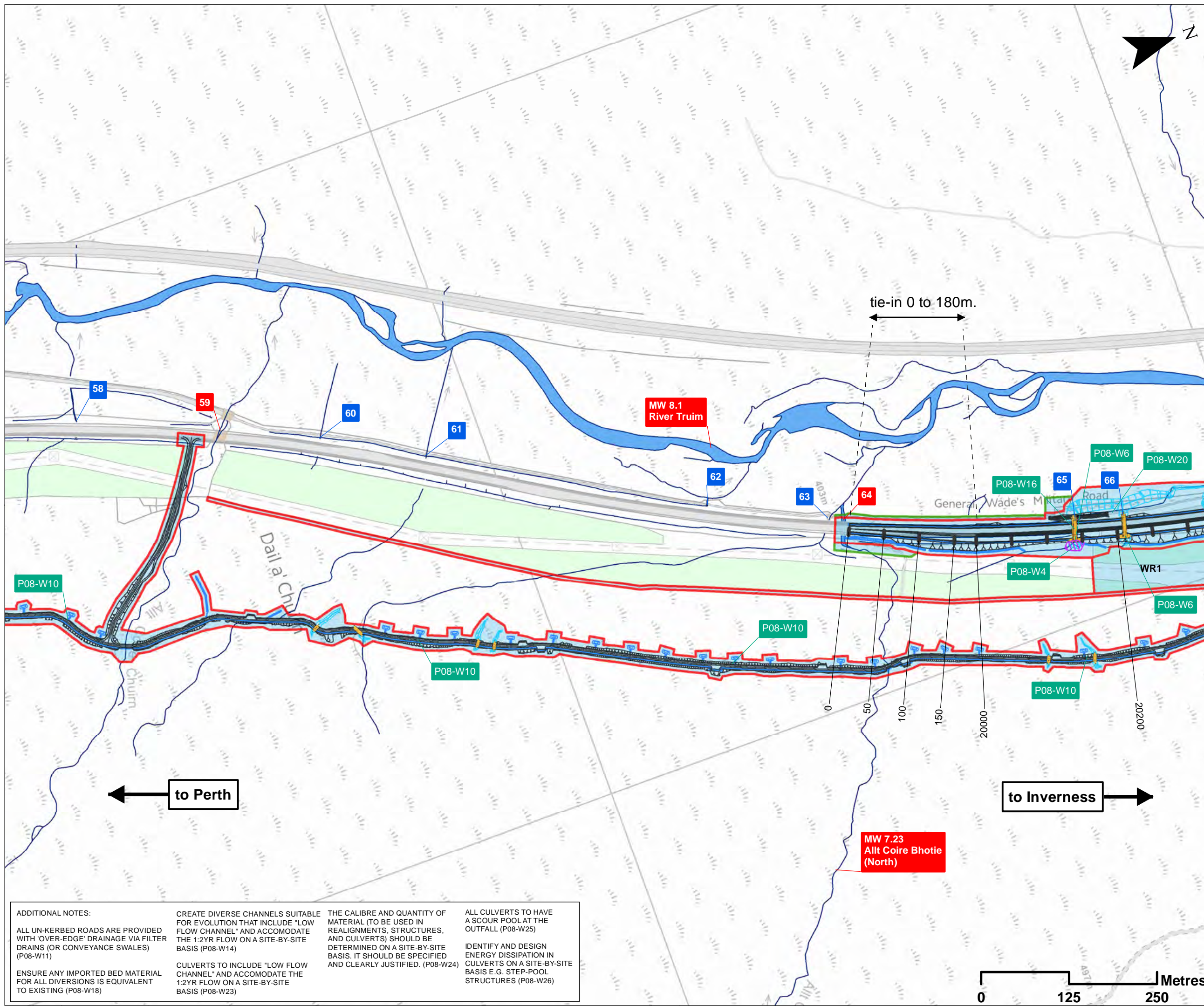
DESIGN: CP	DRAWN: CP	CHK: VF	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML304_ZZ-DR-EN-0002		
SHEET: 9 OF 9	REVISION: C01	SUITABILITY: A3



Document Path: L:\9136\Drawings\Drawings\DMRB3\Project 8 - Flood Extent Plans - 11.19 to 11.19\11.19-17-22-15\FLOOD EXTENTS PLAN - EXISTING - CHAINAGE 30400 TO 31050.DWG



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Detailed Study Area
 - Surface Water Features
- Further Information**
- Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



**PROJECT 8 DALWHINNIE TO CRUBENMORE EIA
 ASSESSMENT PLAN
 DRAWING 11.20
 PROPOSED SCHEME MITIGATION
 chainage 0 to 20000**

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
DATE: 07/12/2017			
PROJ: 495298			
DWG: A9P08-CFJ-EWE-J_ML000_ZZ-DR-EN-0003			
SHEET: 1 OF 9	REVISION: C01	SUITABILITY: A3	

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

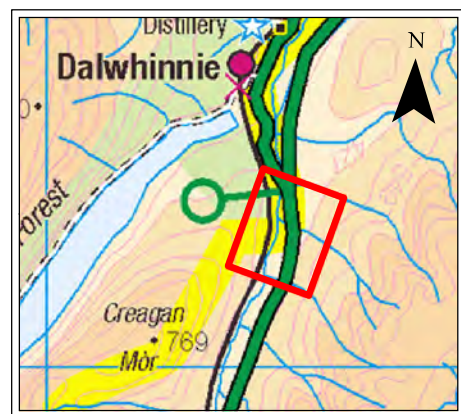
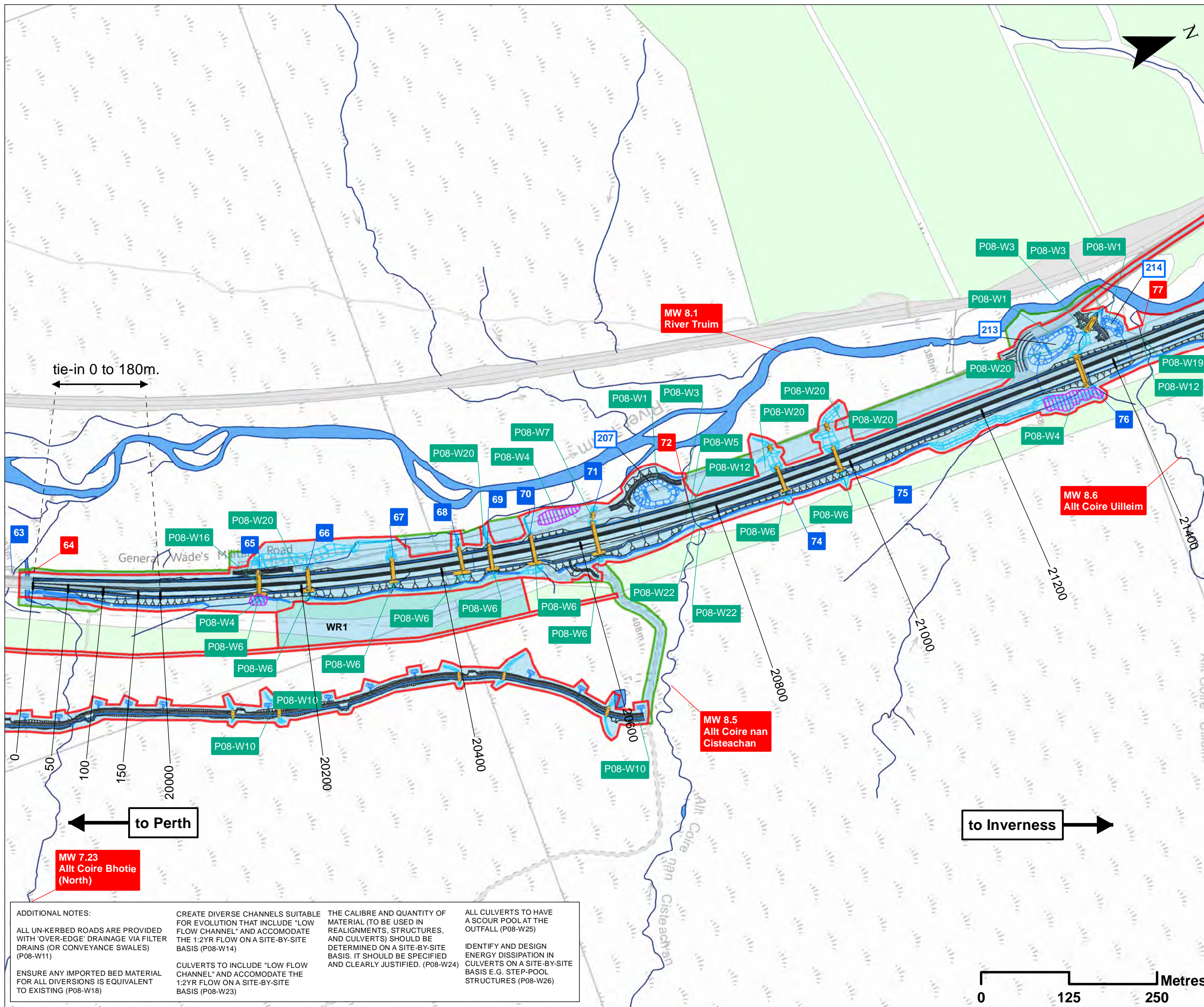
CULVERTS TO INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)

Document Path: L:\913\60\Drawings\DWG\0003\Project 8 - Water Mitigation Plans - 11.20 to 11.20\11.20 Final for Publication\A9P08-ML-11.20.mxd



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Detailed Study Area
 - Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUJ	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.21
PROPOSED SCHEME MITIGATION
 chainage 20000 to 21400

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
DATE: 07/12/2017			
PROJ: 495298			
DWG: A9P08-CFJ-EWE-J_ML200_ZZ-DR-EN-0003			
SHEET: 2 OF 9	REVISION: C01	SUITABILITY: A3	

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

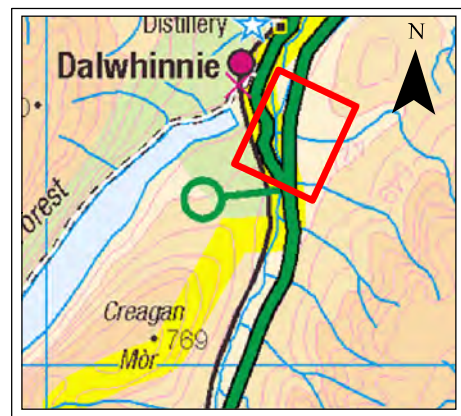
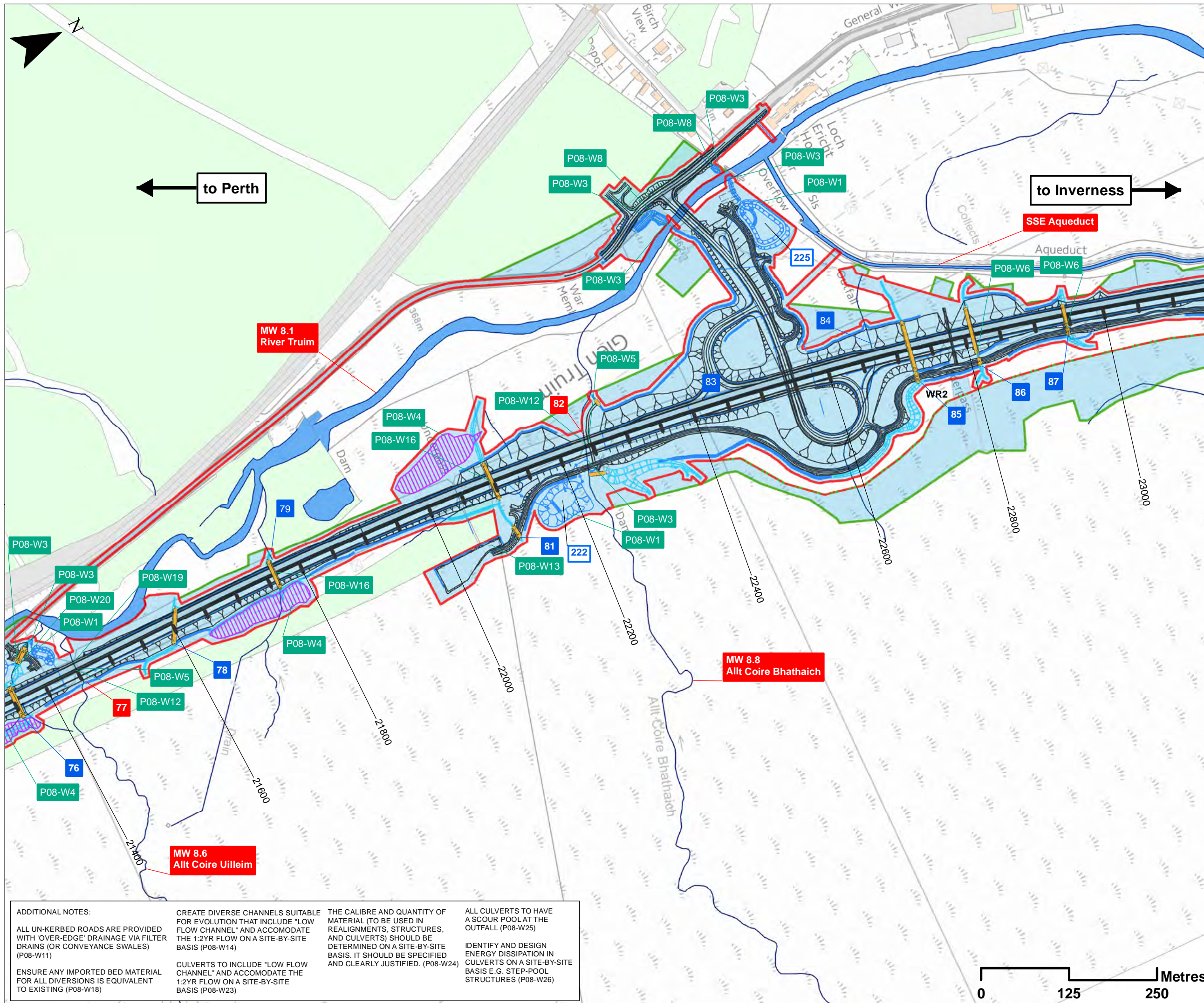
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

CULVERTS TO INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Detailed Study Area
 - Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC
REV	SUI	DATE	DESCRIPTION	BY	APP

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.22
PROPOSED SCHEME MITIGATION
 chainage 21400 to 23000

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML214_ZZ-DR-EN-0003		
SHEET: 3 OF 9	REVISION: C01	SUITABILITY: A3

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

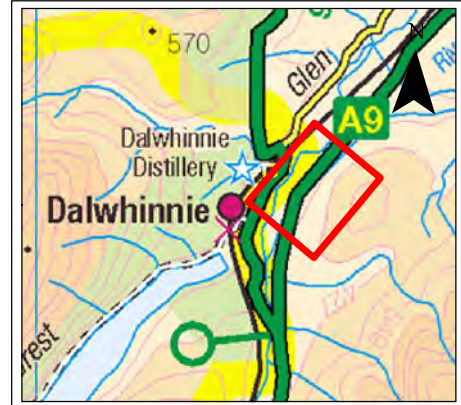
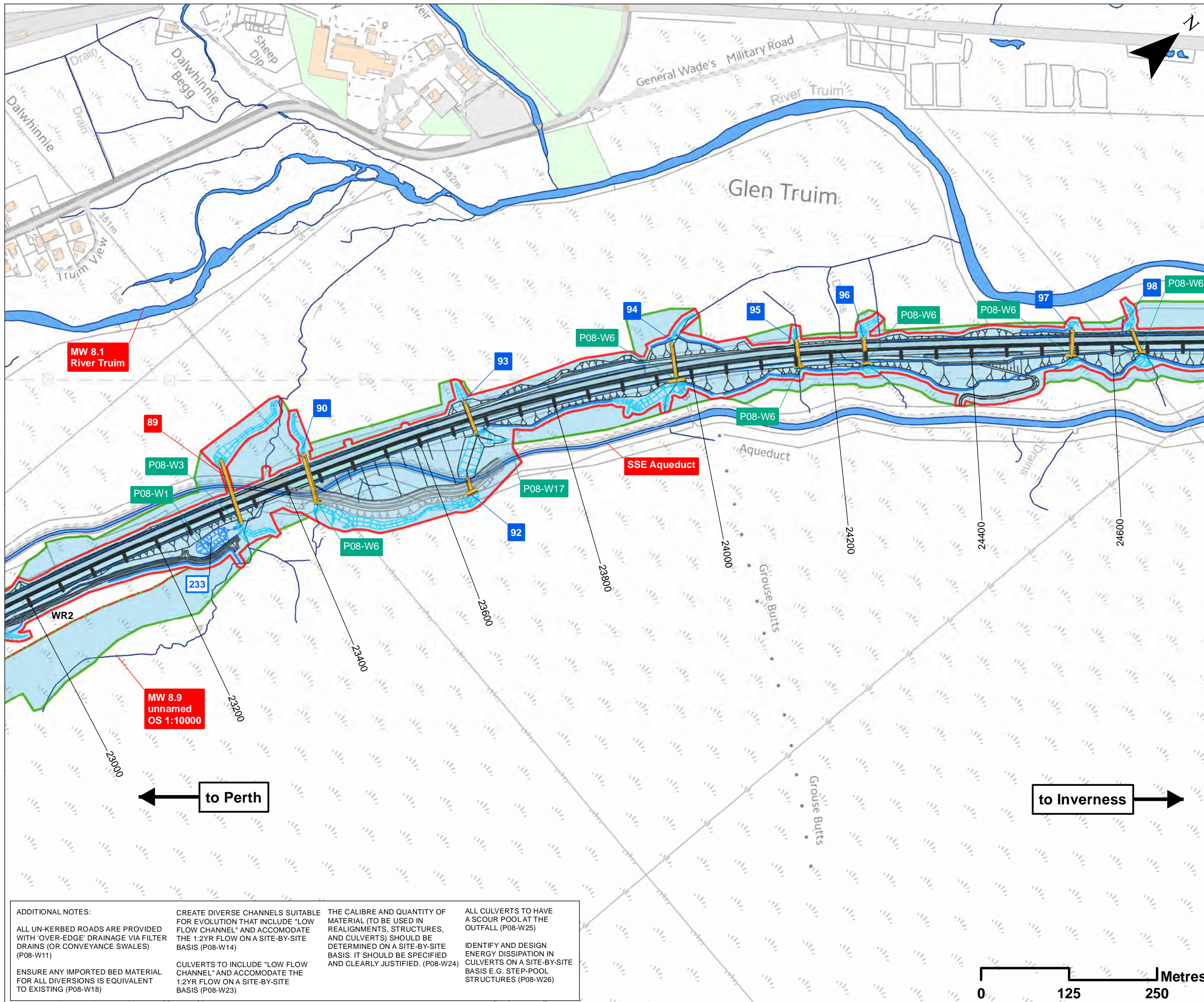
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

CULVERTS TO INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)



- Legend**
- Proposed Scheme Detail
 - Aqueduct Diversion
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Detailed Study Area
 - Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.23
PROPOSED SCHEME MITIGATION
 chainage 23000 to 24600

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
------------	-----------	---------	---------

DATE: 07/12/2017
 PROJ: 495298

SHEET: 4 OF 9	REVISION: C01	SUITABILITY: A3
---------------	---------------	-----------------

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

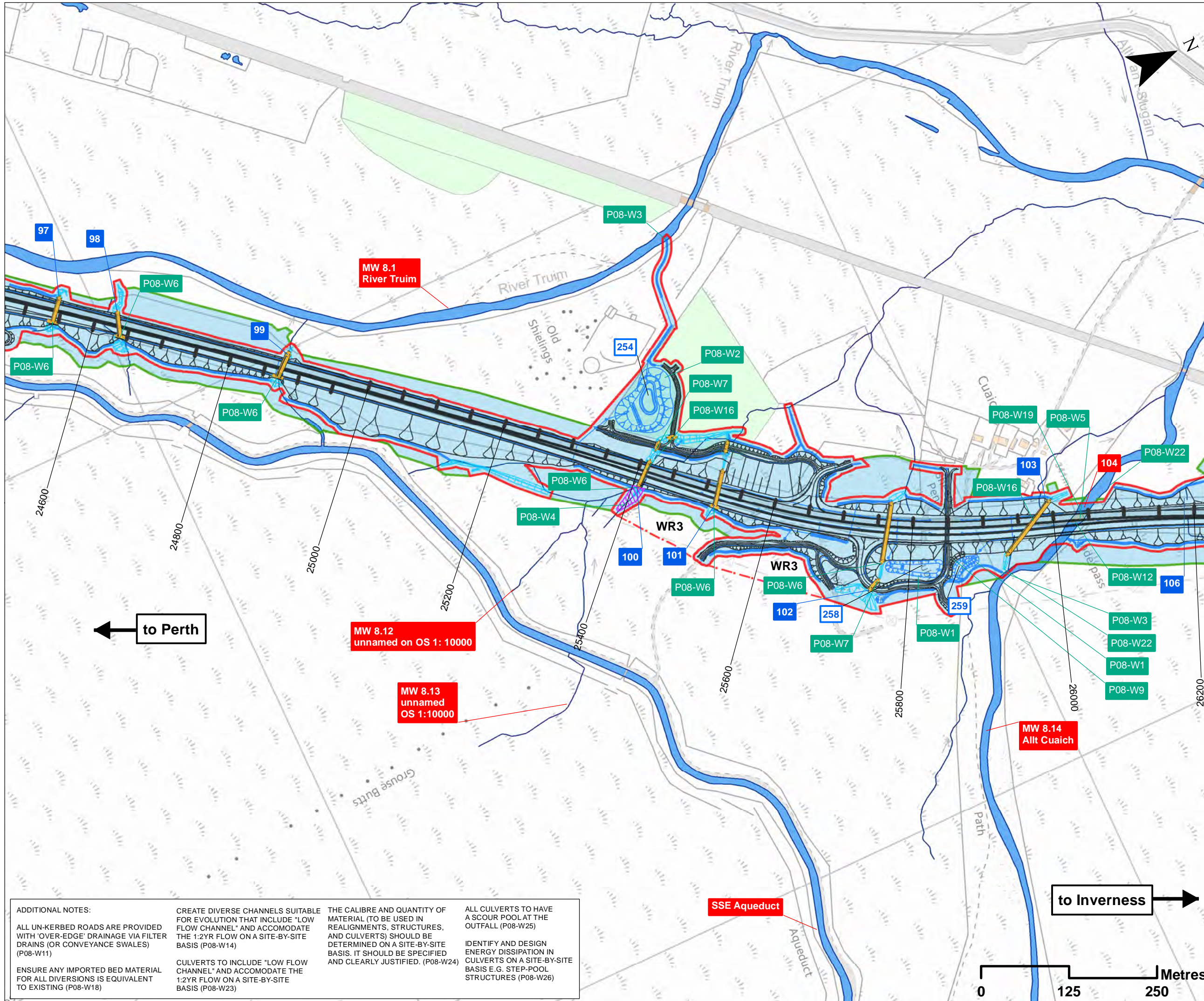
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

CULVERTS TO INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - WR1 Winter Resilience Tree Belt (Indicative)
 - Compensatory Storage Areas
 - Detailed Study Area
 - Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUJ	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
 DRAWING 11.24
 PROPOSED SCHEME MITIGATION
 chainage 24600 to 26000

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-JL_ML246_ZZ-DR-EN-0003		
SHEET: 5 OF 9	REVISION: C01	SUITABILITY: A3

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

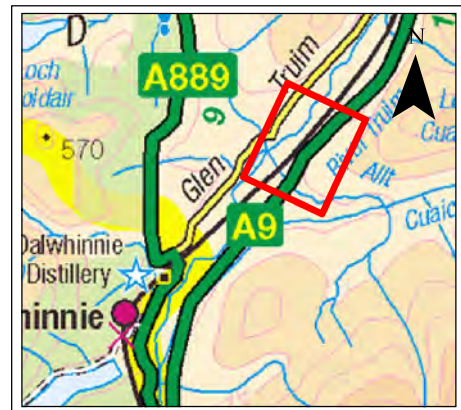
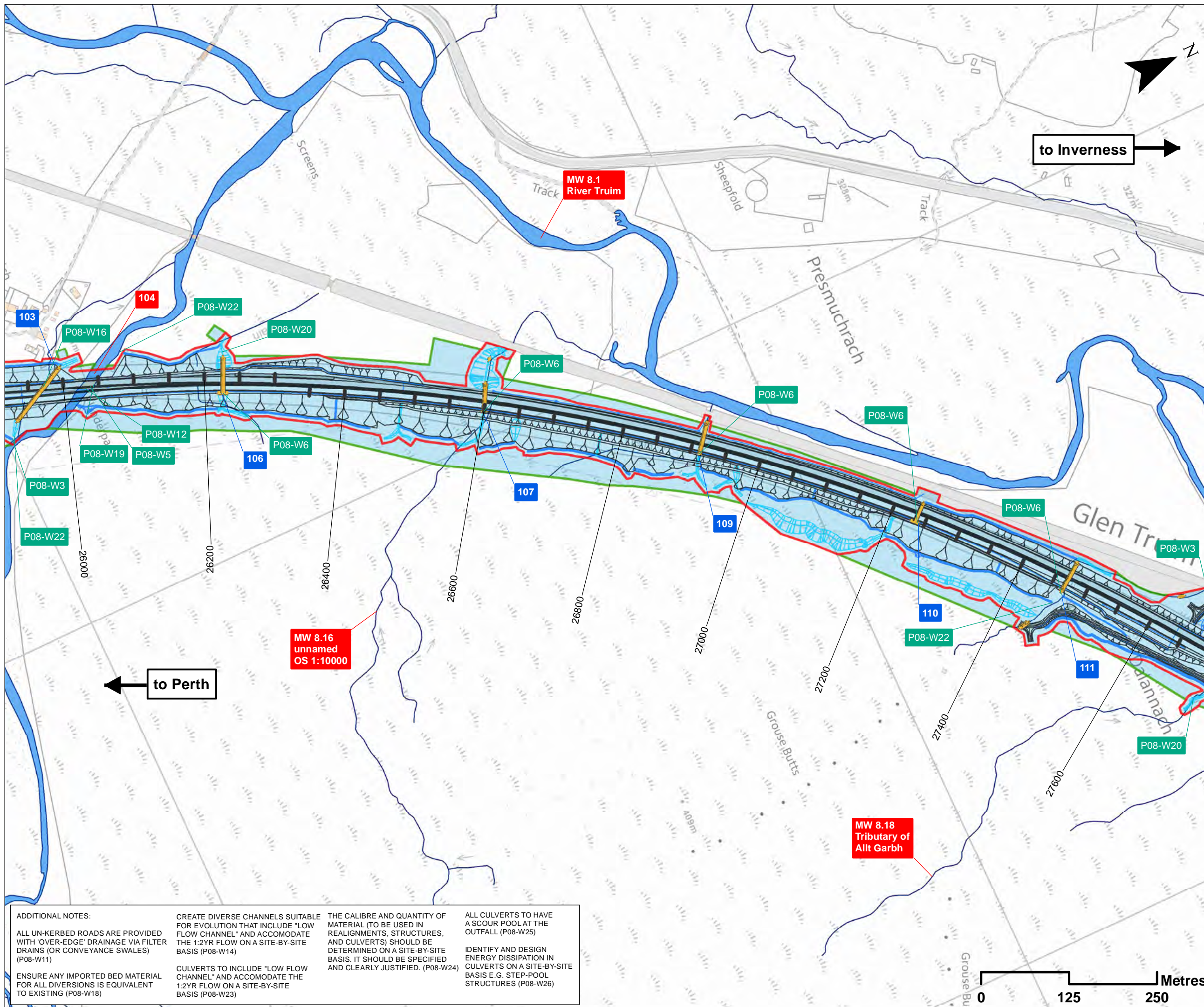
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

CULVERTS TO INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - Detailed Study Area
 - Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUJ	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
 DRAWING 11.25
 PROPOSED SCHEME MITIGATION
 chainage 26000 to 27600

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298
 DWG: A9P08-CFJ-EWE-J_ML260_ZZ-DR-EN-0003

SHEET: 6 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

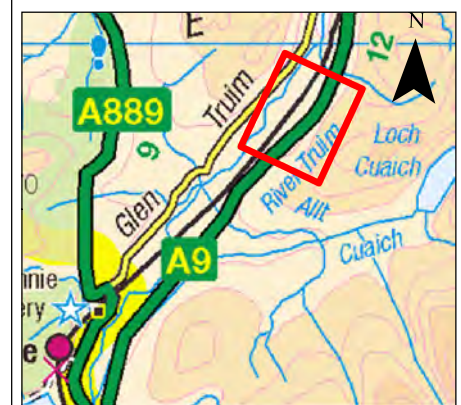
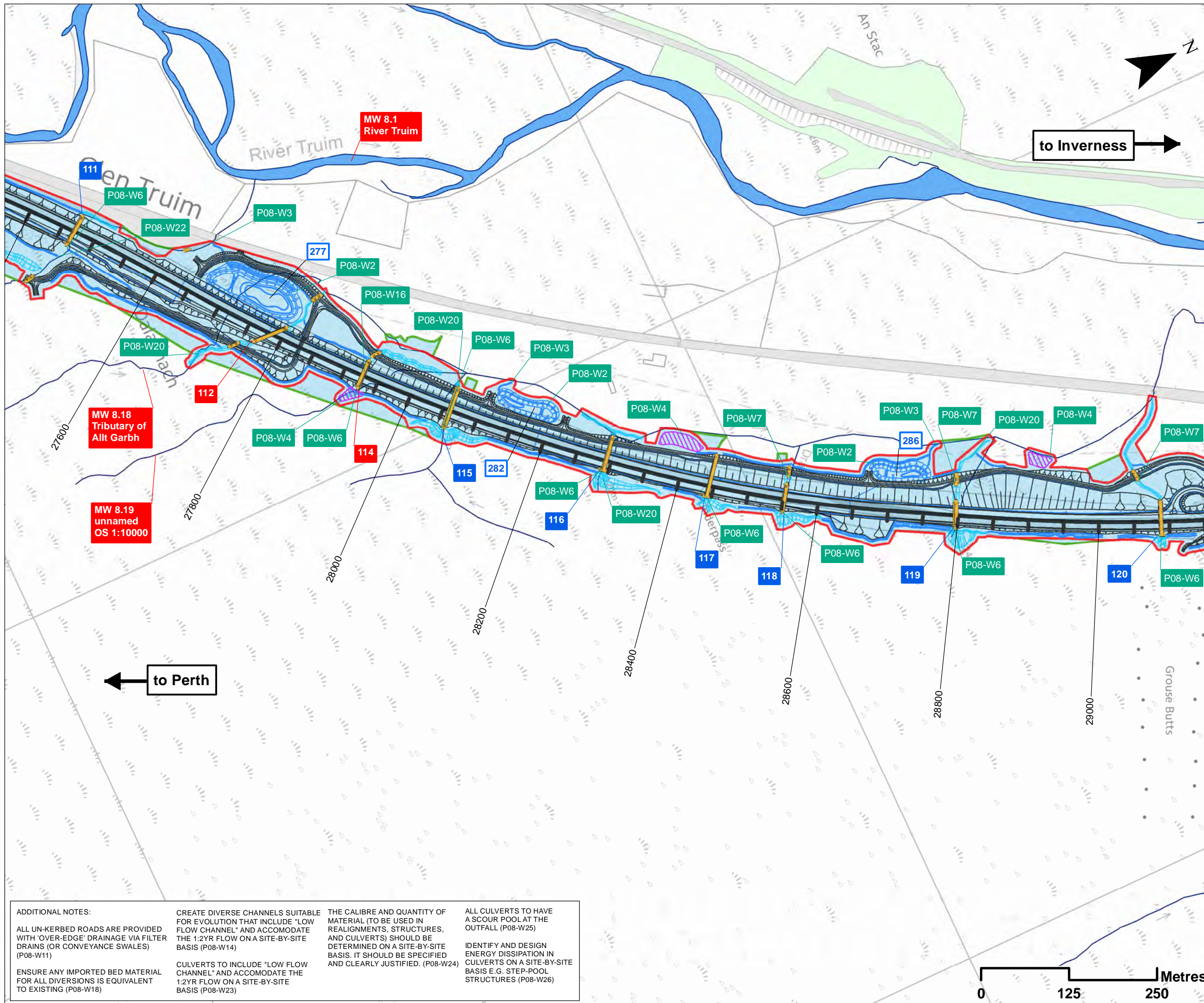
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

CULVERTS TO INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)



- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - ▨ Compensatory Storage Areas
 - ▭ Detailed Study Area
 - ▭ Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m. FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.26
PROPOSED SCHEME MITIGATION
 chainage 27600 to 29000

DESIGN:	DRAWN:	CHK:	APP:
CP	CP	IM	EC

DATE: 07/12/2017
 PROJ: 495298

DWG: A9P08-CFJ-EWE-J_ML276_ZZ-DR-EN-0003

SHEET:	REVISION:	SUITABILITY:
7 OF 9	C01	A3

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

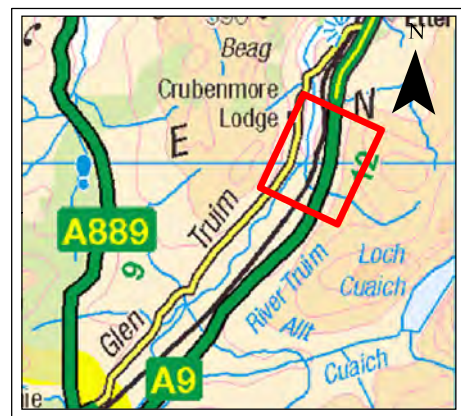
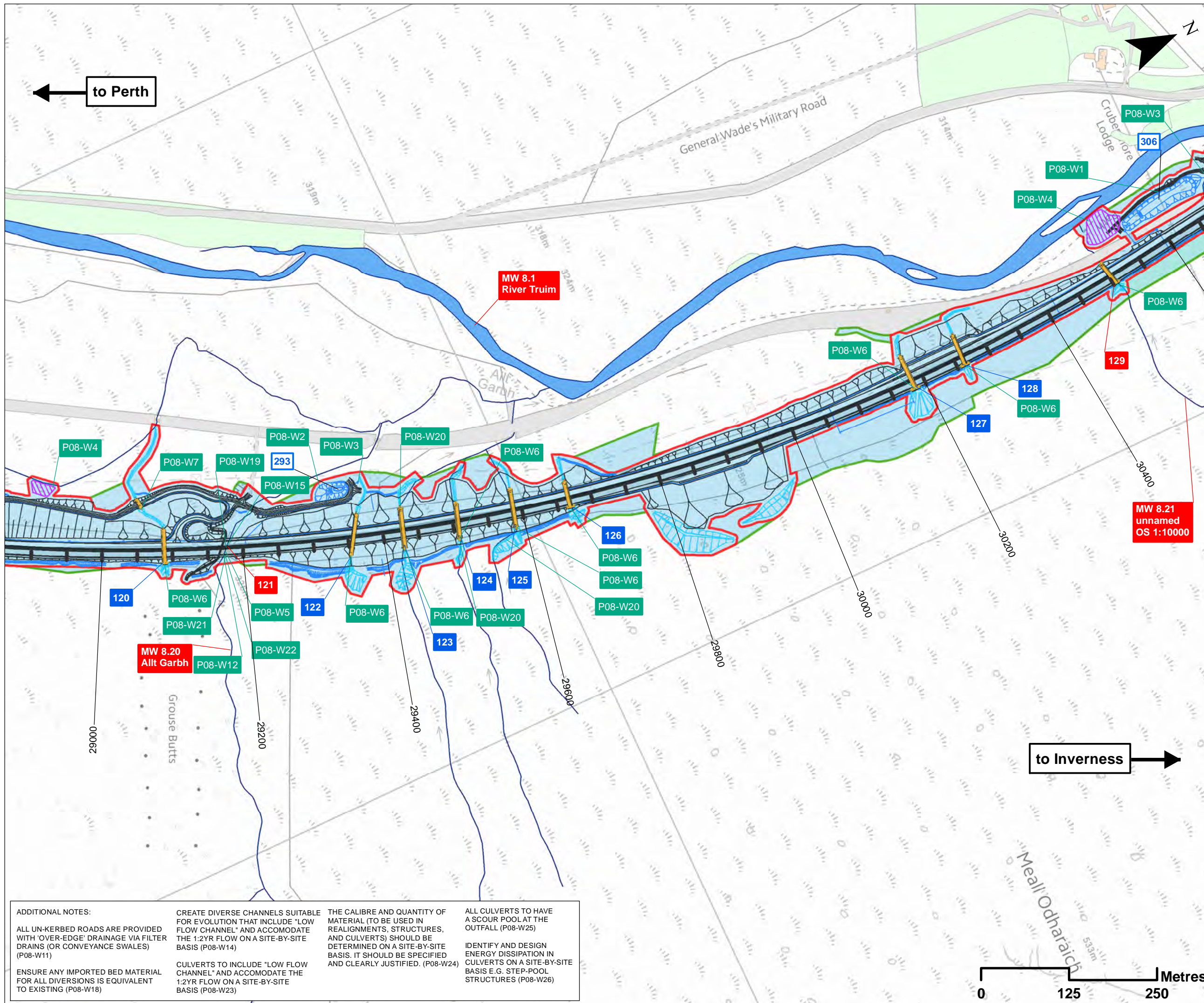
CULVERTS TO INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)





- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - ▨ Compensatory Storage Areas
 - ▭ Detailed Study Area
 - ▭ Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P04	S3	NOV 2017	FINAL REVISIONS	CP	EC
P03	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.27
PROPOSED SCHEME MITIGATION
 chainage 29000 to 30400

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

SHEET: 8 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------

ADDITIONAL NOTES:

ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)

ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)

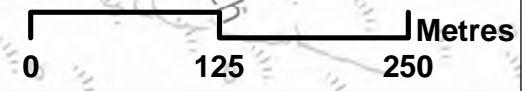
CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)

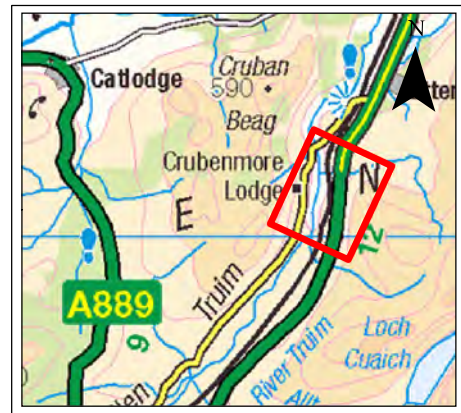
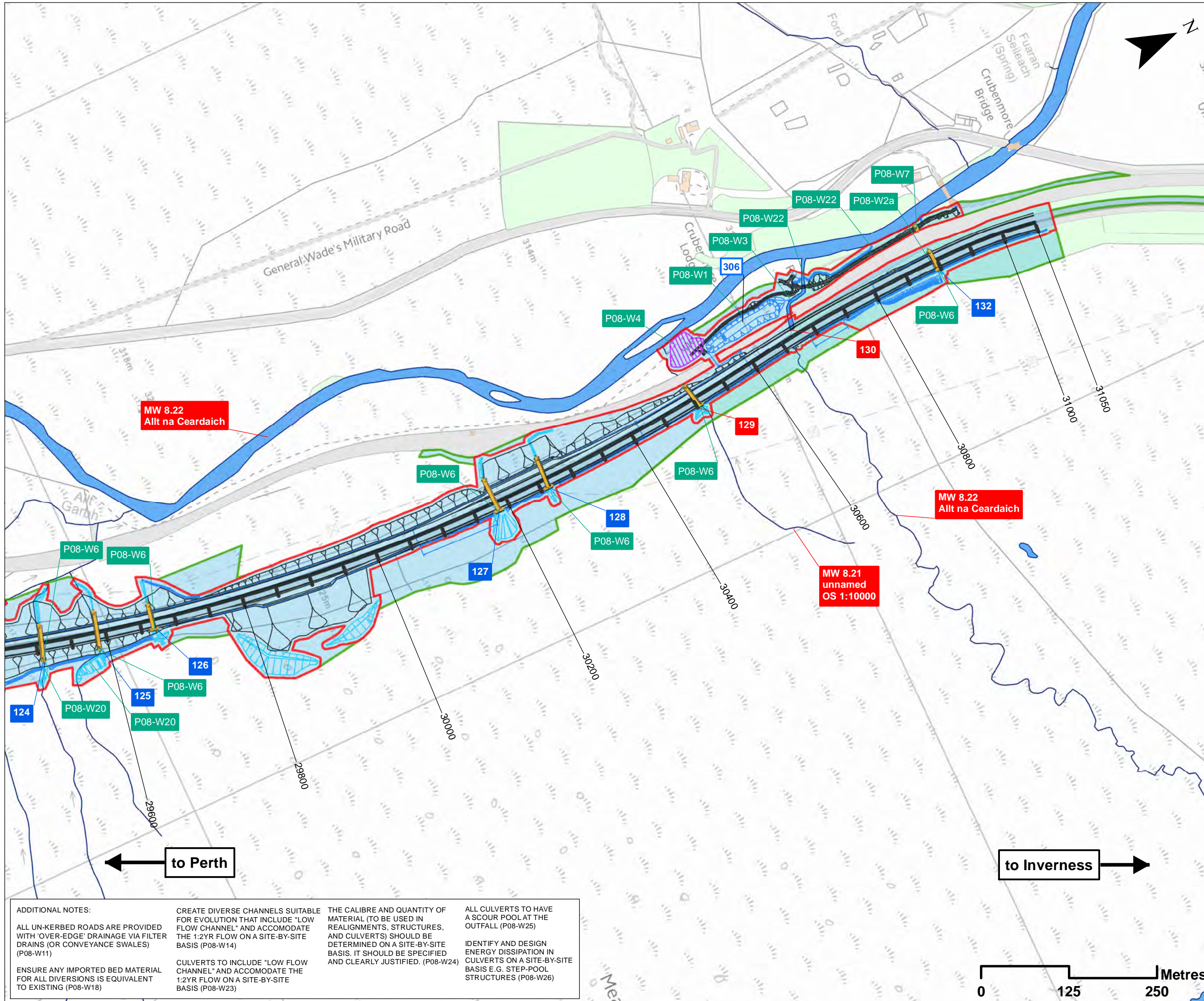
CULVERTS TO INCLUDE "LOW FLOW CHANNEL" AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)

THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)

ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)

IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)





- Legend**
- Proposed Scheme Detail
 - Watercourse Diversions
 - Drainage
 - Proposed Culverts
 - 1 Major Watercourse Crossing
 - 1 Minor Watercourse Crossing
 - 001 SuDS ID
 - P08 Mitigation Item
 - Assessment Boundary - Permanent Works
 - Assessment Boundary - Temporary Works
 - ▨ Compensatory Storage Areas
 - ▭ Detailed Study Area
 - ▭ Surface Water Features

Further Information
 Labels shown where there are no "Proposed Culverts" shown indicate the location of an existing major or minor watercourse crossing

SCALE 1:5000

REV	SUI	DATE	DESCRIPTION	BY	APP
P05	S3	NOV 2017	FINAL REVISIONS	CP	EC
P04	S3	SEP 2017	INTERNAL REVISIONS	CP	EC
P03	S3	AUG 2017	INTERNAL REVISIONS	CP	EC
P02	S3	AUG 2017	DESIGN UPDATE	CP	EC
P01	S3	MAR 2017	DRAFT FOR COMMENT	CP	EC

ch2m: FAIRHURST
 CH2MHILL Fairhurst JV
 C/O: City Park 368 Alexandra Parade Glasgow G31 3AU
 Tel + 44 (0) 141 552 2000 Fax +44 (0) 141 552 2525



PROJECT 8 DALWHINNIE TO CRUBENMORE EIA ASSESSMENT PLAN
DRAWING 11.28
PROPOSED SCHEME MITIGATION
 chainage 30400 to 31050

DESIGN: CP	DRAWN: CP	CHK: IM	APP: EC
---------------	--------------	------------	------------

DATE: 07/12/2017
 PROJ: 495298

SHEET: 9 OF 9	REVISION: C01	SUITABILITY: A3
------------------	------------------	--------------------

ADDITIONAL NOTES:

- ALL UN-KERBED ROADS ARE PROVIDED WITH 'OVER-EDGE' DRAINAGE VIA FILTER DRAINS (OR CONVEYANCE SWALES) (P08-W11)
- ENSURE ANY IMPORTED BED MATERIAL FOR ALL DIVERSIONS IS EQUIVALENT TO EXISTING (P08-W18)
- CREATE DIVERSE CHANNELS SUITABLE FOR EVOLUTION THAT INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W14)
- CULVERTS TO INCLUDE 'LOW FLOW CHANNEL' AND ACCOMMODATE THE 1:2YR FLOW ON A SITE-BY-SITE BASIS (P08-W23)
- THE CALIBRE AND QUANTITY OF MATERIAL (TO BE USED IN REALIGNMENTS, STRUCTURES, AND CULVERTS) SHOULD BE DETERMINED ON A SITE-BY-SITE BASIS. IT SHOULD BE SPECIFIED AND CLEARLY JUSTIFIED. (P08-W24)
- ALL CULVERTS TO HAVE A SCOUR POOL AT THE OUTFALL (P08-W25)
- IDENTIFY AND DESIGN ENERGY DISSIPATION IN CULVERTS ON A SITE-BY-SITE BASIS E.G. STEP-POOL STRUCTURES (P08-W26)