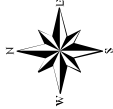


QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT

SURVEY EFFORT MAP 2.02 -
LOWER HUNTER VALLEY
(East Maitland - Largs)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort

- Fauna survey area
- Frog survey

- Herpetofauna habitat assessment

Flora Survey Effort

- Flora survey area
- Targeted Search
- Visual Assessment

- QHGP Mainline KPs Rev K

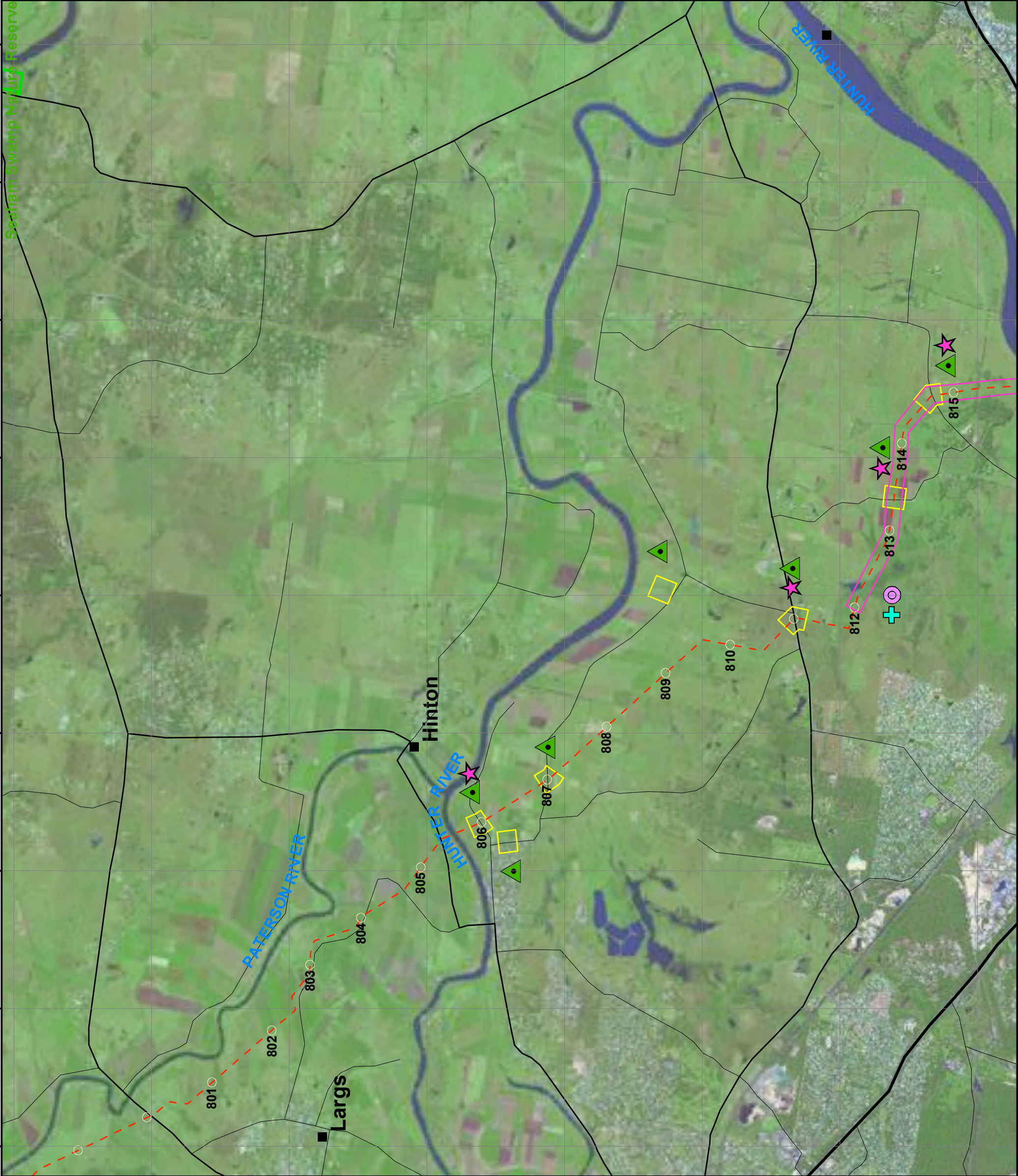
- QHGP Mainline Rev K

- NSW State Forests

- National Parks Estate (DECC)

Roads (250,000)

- Dual Carriageway
- Principal Road
- Secondary Road
- Minor Road
- Track



QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT

SURVEY EFFORT MAP 2.03 - BOLWARA AREA
(North of Maitland)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort

- Fauna survey area
- Fauna habitat assessment
- Spotlighting

Flora Survey Effort

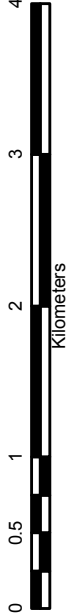
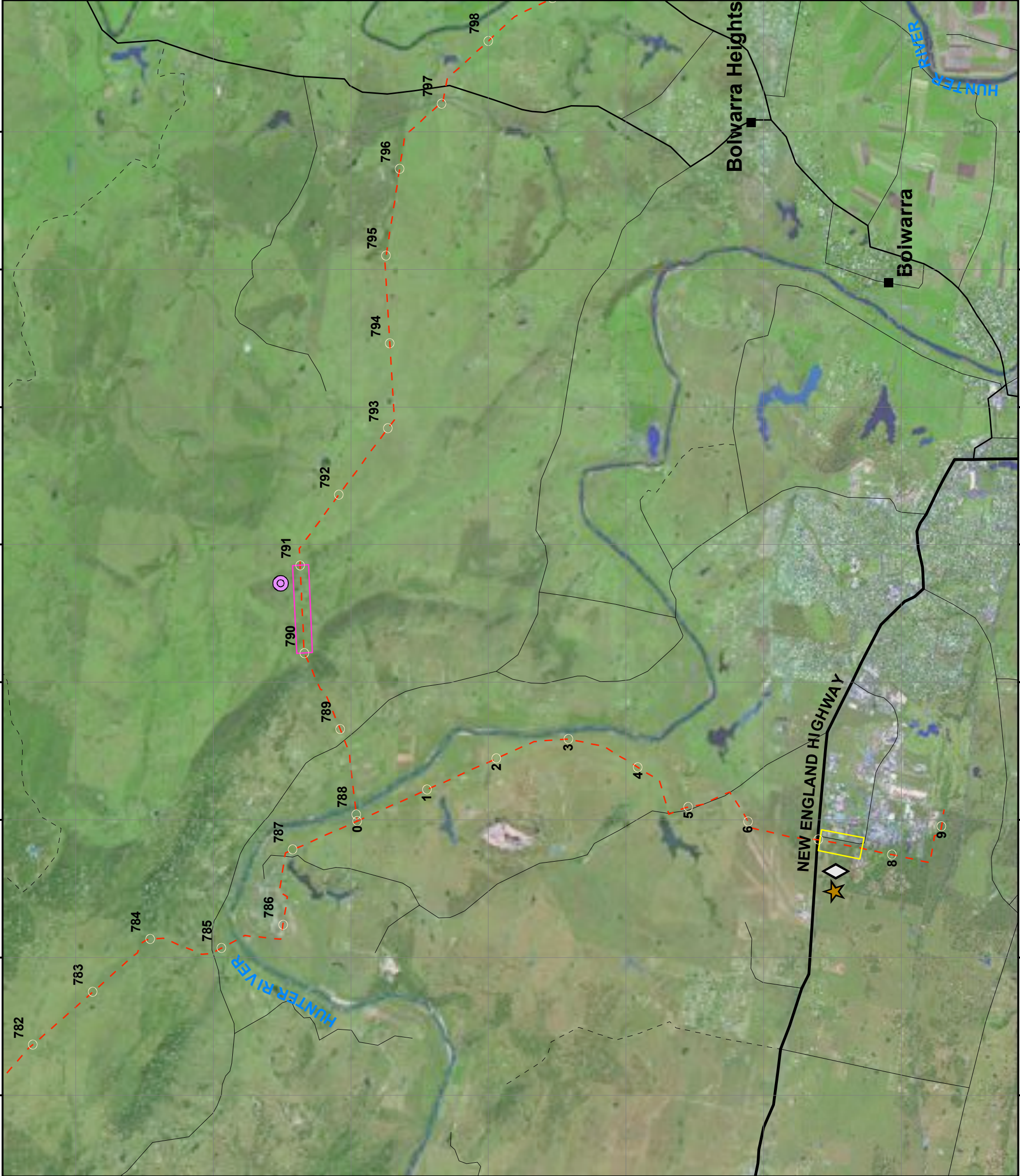
- Flora survey area
- Visual Assessment

QHGP Mainline KPs Rev K

- QHGP Mainline Rev K
- NSW State Forests
- National Parks Estate (DECC)

Roads (250,000)

- Dual Carriageway
- Principal Road
- Secondary Road
- Minor Road
- Track



QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT

SURVEY EFFORT MAP 2.04 - ELDERSLIE AREA

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort

- Fauna survey area
- Anabat
- Bird Survey
- Reptile survey
- Frog survey
- Fauna habitat assessment
- Herpetofauna habitat assessment
- Elliott line
- Hair tube line

Flora Survey Effort

- Flora survey area
- Targeted Search
- Visual Assessment

QHGP Mainline KPs Rev K

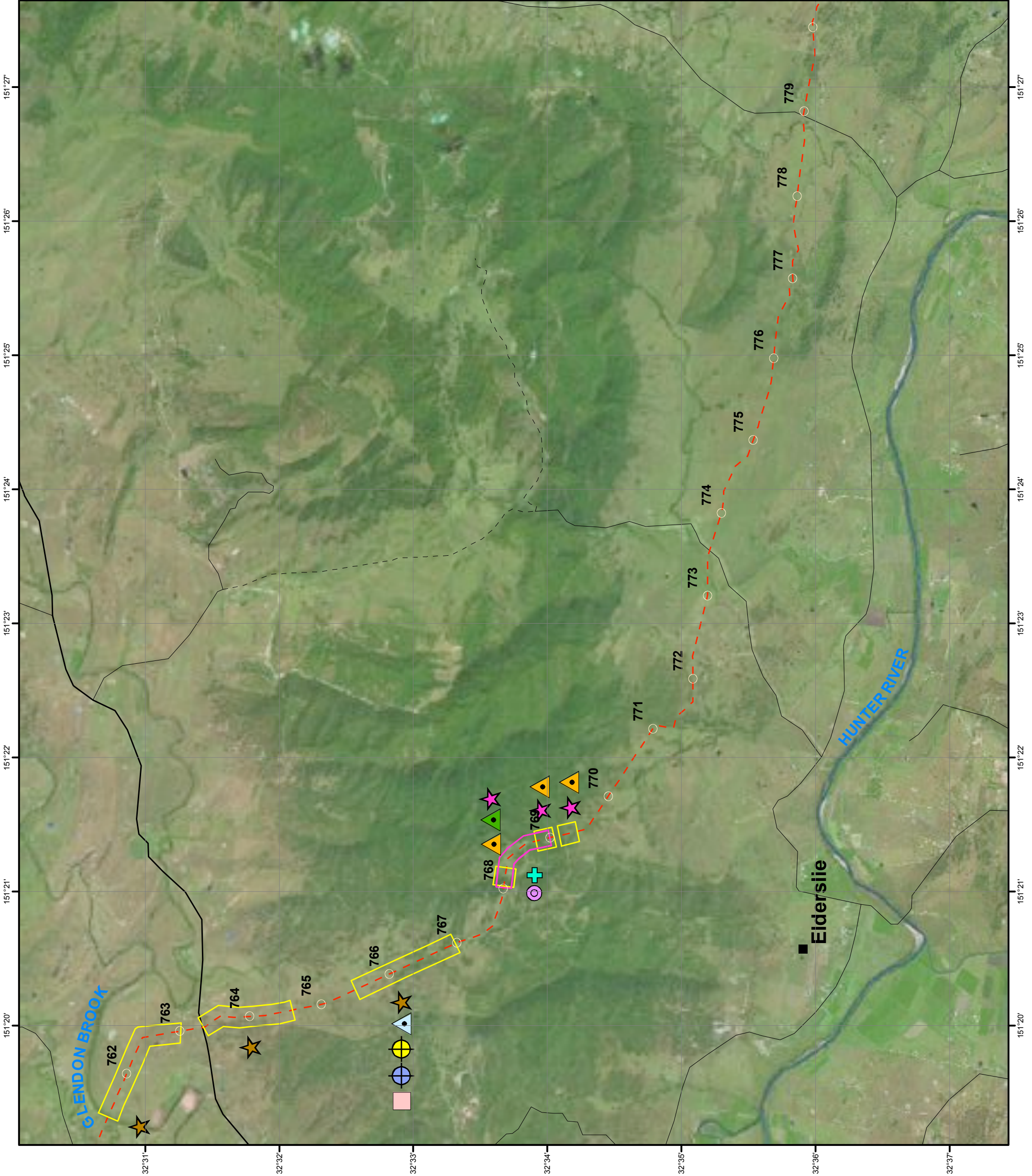
QHGP Mainline Rev K

NSW State Forests

National Parks Estate (DECC)

Roads (250,000)

- Dual Carriageway
- Principal Road
- Secondary Road
- Minor Road
- Track



QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT

SURVEY EFFORT MAP 2.05 - GLENDON BROOK
(North East of Singleton)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



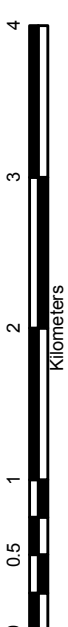
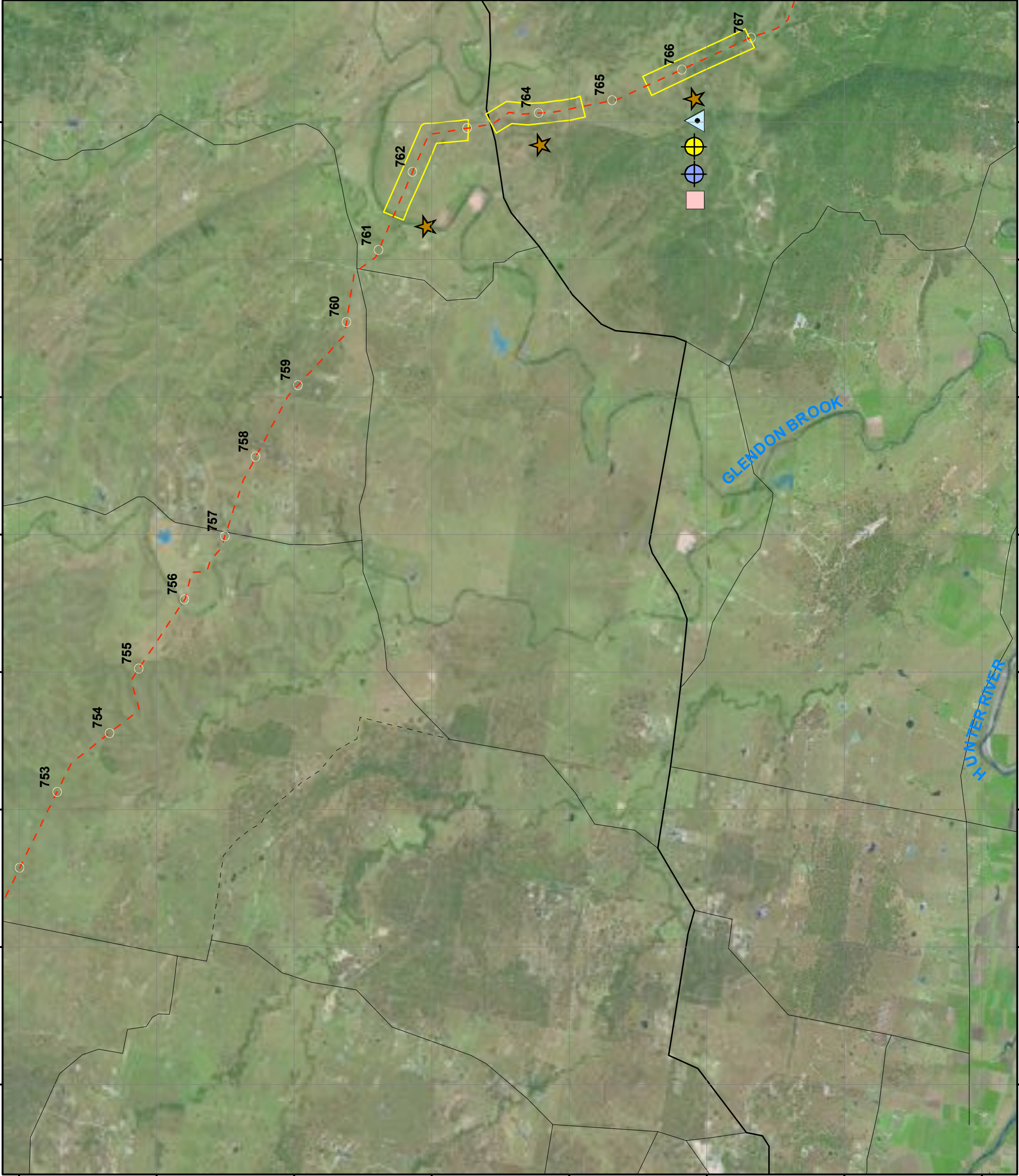
Fauna Survey Effort

- Fauna survey area
- Anabat
- Bird Survey
- Fauna habitat assessment
- Elliot line
- Hair tube line

- QHGP Mainline KPs Rev K
- QHGP Mainline Rev K
- NSW State Forests
- National Parks Estate (DECC)

Roads (250,000)

- Dual Carriageway
- Principal Road
- Secondary Road
- Minor Road
- Track



QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT

SURVEY EFFORT MAP 2.07 - LIDDELL AREA

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort

Fauna survey area

Aquatic Assessment

Anabat

Bird Survey

Reptile survey

Fauna habitat assessment

Herpetofauna habitat assessment

Hair tube line

Spotlighting

Call playback

Flora Survey Effort

Flora survey area

Targeted Search

Visual Assessment

QHGP Mainline KPs Rev K

QHGP Mainline Rev K

NSW State Forests

National Parks Estate (DECC)

Roads (250,000)

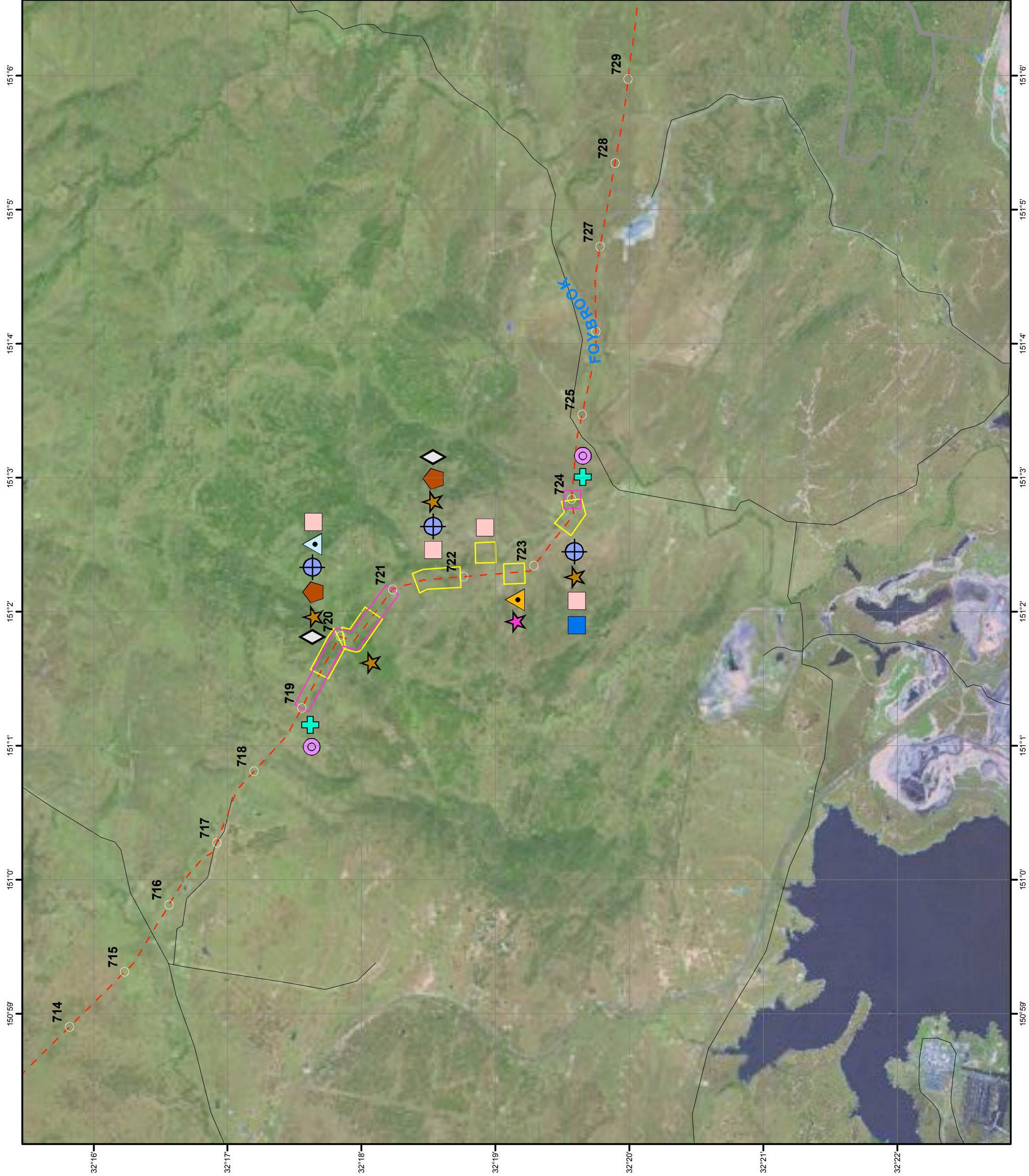
Dual Carriageway

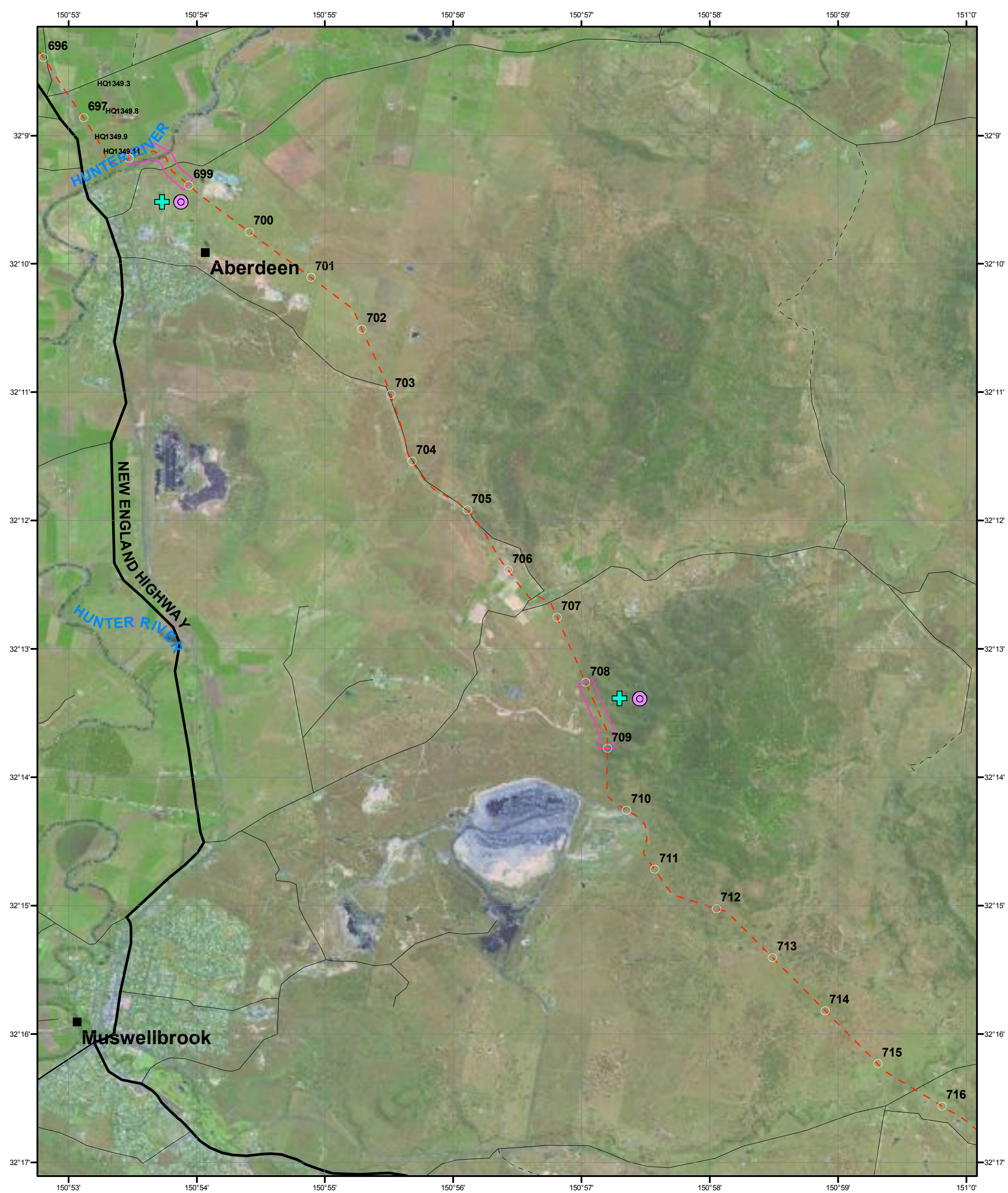
Principal Road

Secondary Road

Minor Road

Track

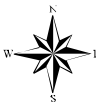




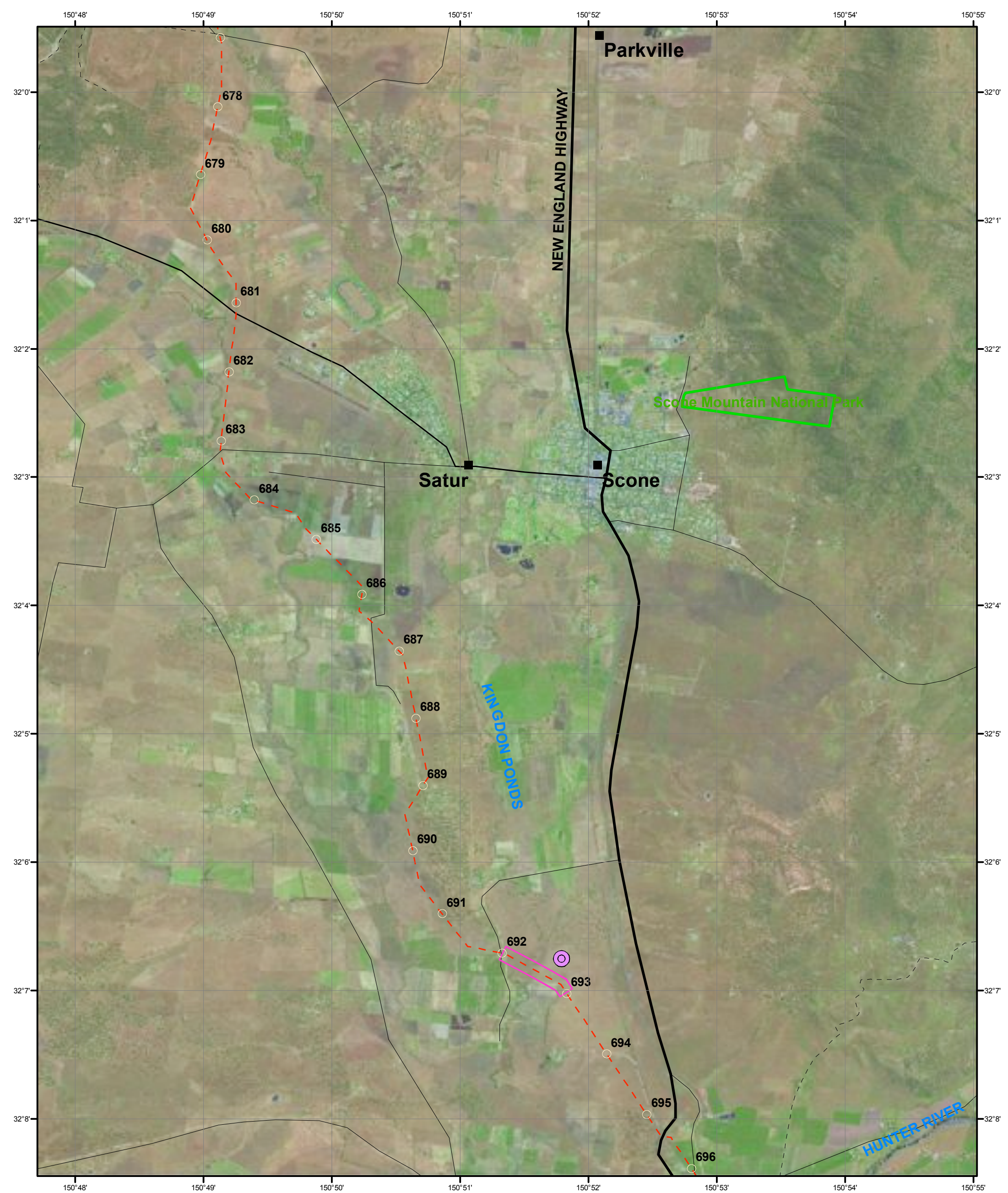
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

**SURVEY EFFORT MAP 2.08 - MUSSELBROOK
(Aberdeen Area)**

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



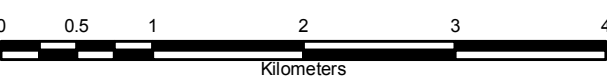
Flora Survey Effort		Roads (250,000)	
	Flora survey area		QHGP Mainline Rev K
	Targeted Search		Dual Carriageway
	Visual Assessment		Principal Road
	NSW State Forests		Secondary Road
	National Parks Estate (DECC)		Minor Road
			Track



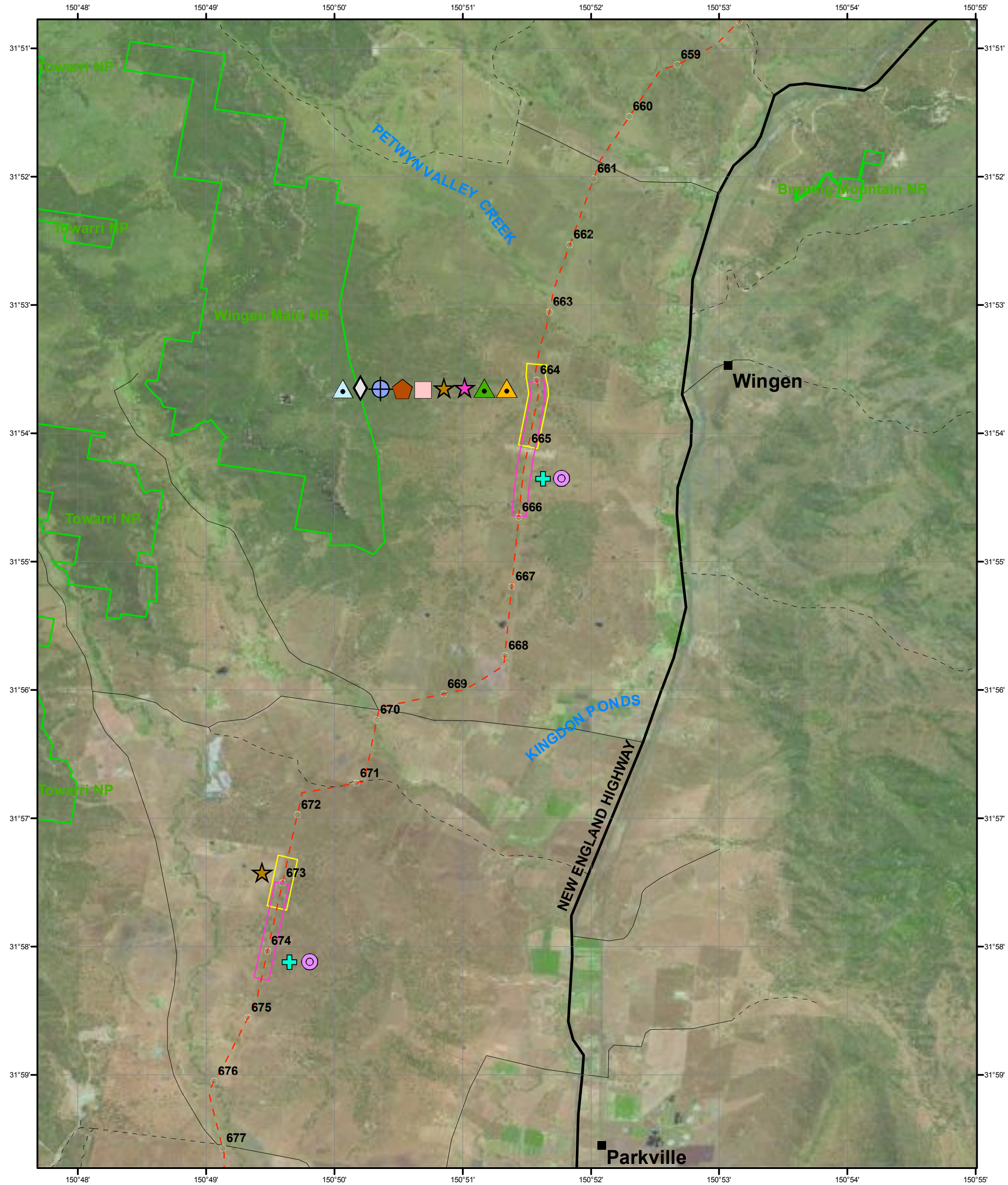
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.09 - SCONE AREA

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



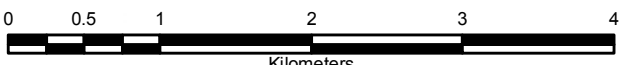
Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000) Dual Carriageway Principal Road Secondary Road Minor Road Track
Flora survey area	QHGP Mainline Rev K	
Visual Assessment	NSW State Forests	
	National Parks Estate (DECC)	



**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

**SURVEY EFFORT MAP 2.10 -
PARKVILLE - WINGEN AREA
(North of Scone)**

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort

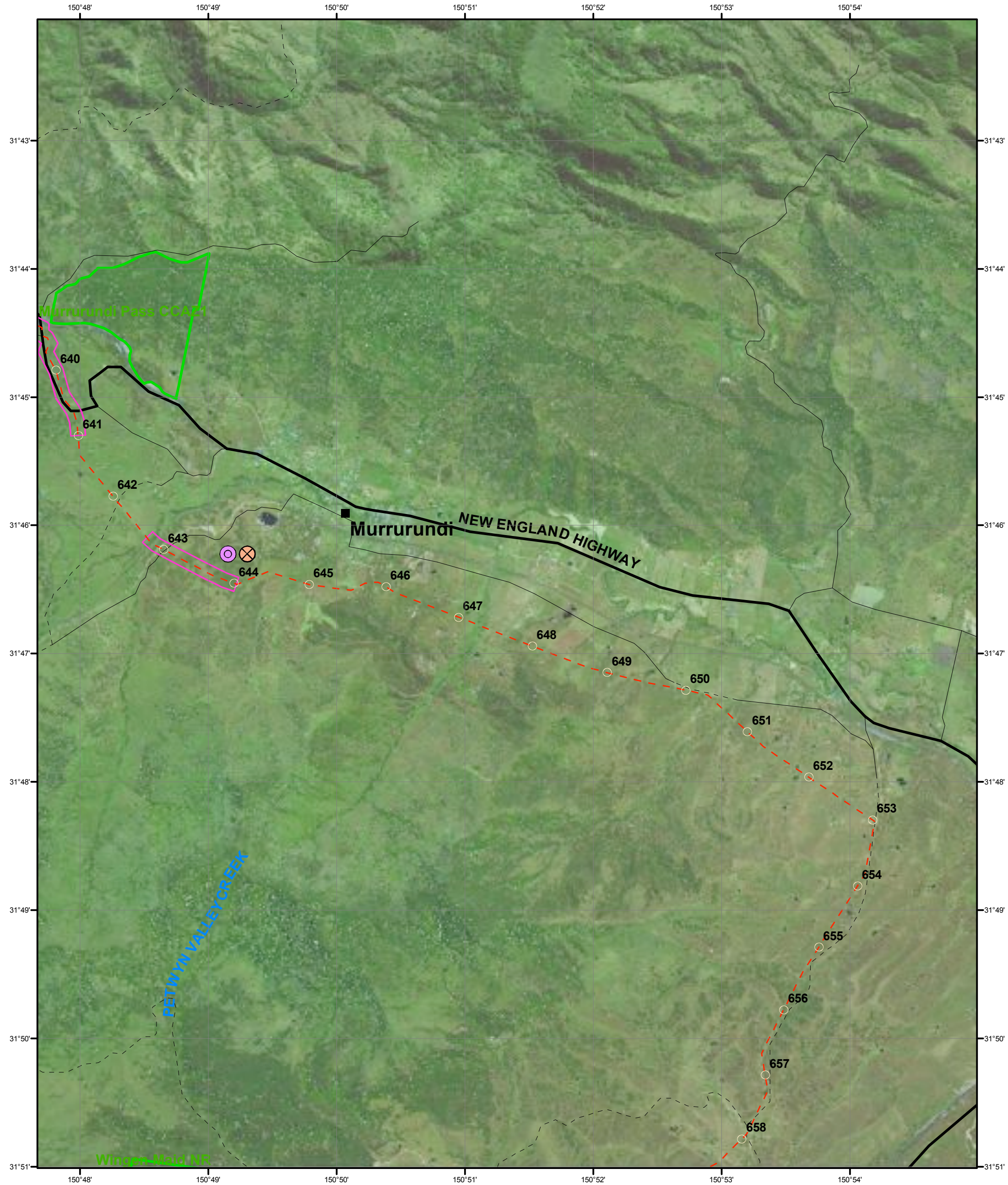
- Fauna survey area
- Anabat
- Bird Survey
- Reptile survey
- Frog survey
- Fauna habitat assessment
- Herpetofauna habitat assessment
- Hair tube line
- Spotlighting

Flora Survey Effort

- Flora survey area
- Visual Assessment
- Targeted Search
- QHGP Mainline KPs Rev K
- QHGP Mainline Rev K
- NSW State Forests
- National Parks Estate (DECC)

Roads (250,000)

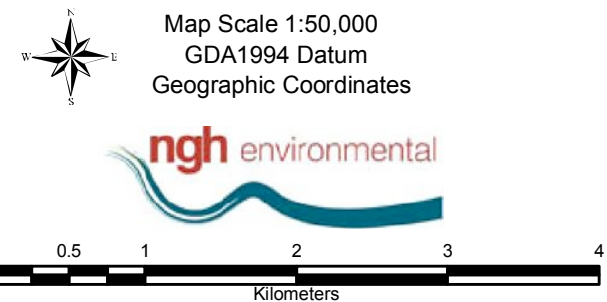
- Dual Carriageway
- Principal Road
- Secondary Road
- Minor Road
- Track



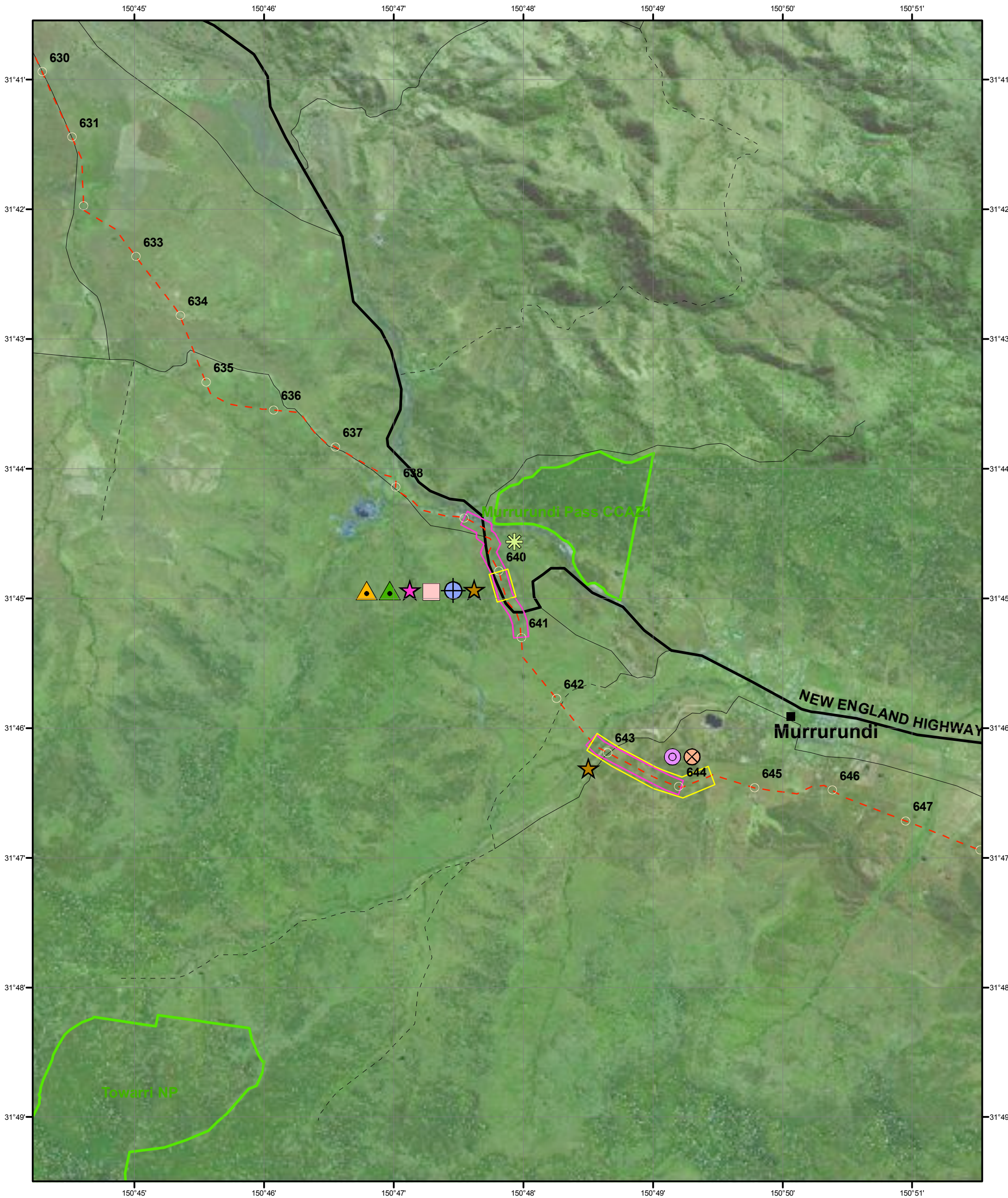
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.11 - MURRUNDI
(Liverpool Range - East)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



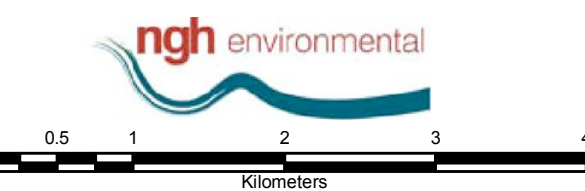
Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
Flora survey area	QHGP Mainline Rev K	Dual Carriageway
Random meander Survey	NSW State Forests	Principal Road
Visual Assessment	National Parks Estate (DECC)	Secondary Road
		Minor Road
		Track



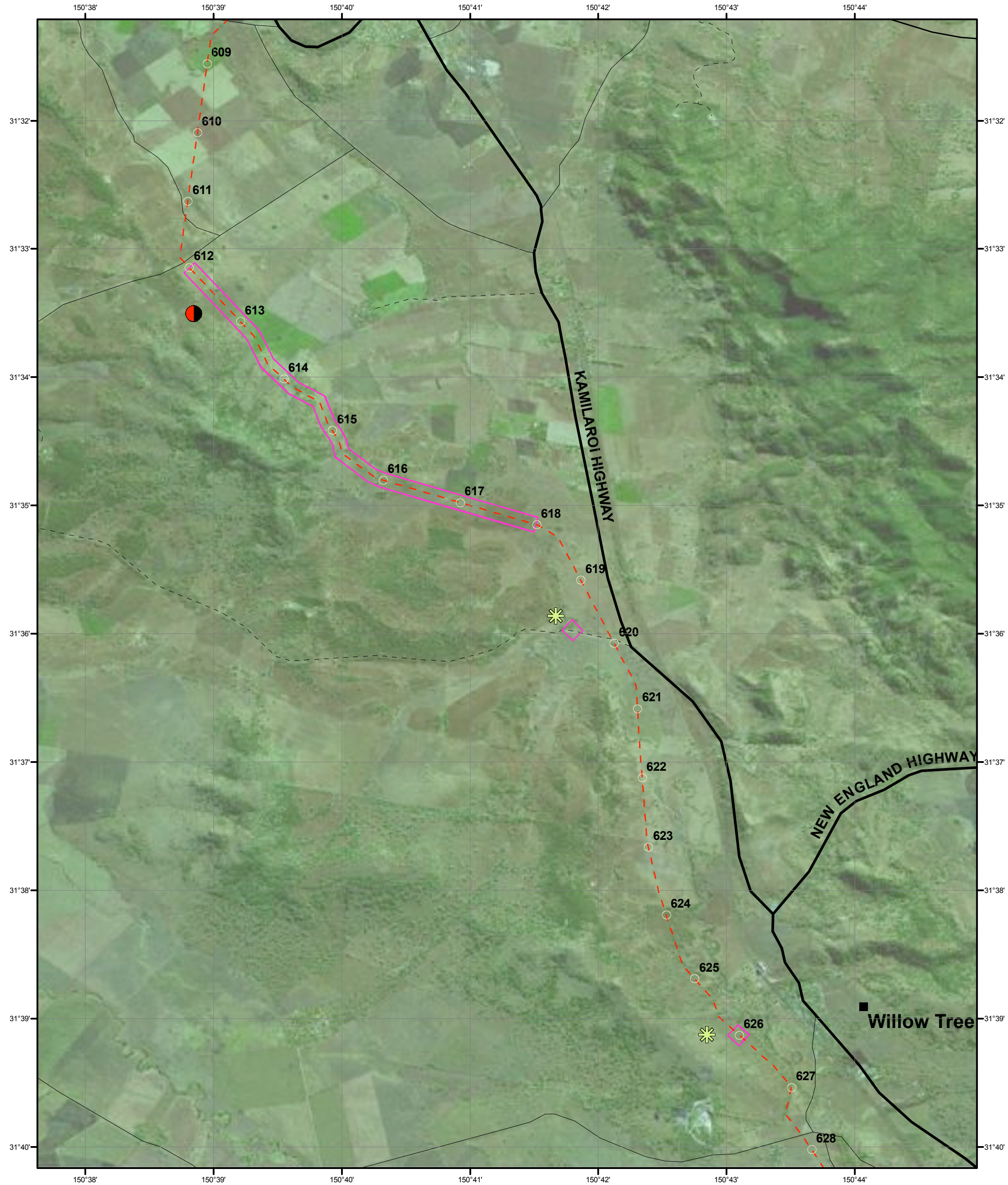
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

**SURVEY EFFORT MAP 2.12 - WILLOW TREE
(Liverpool Range - West)**

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



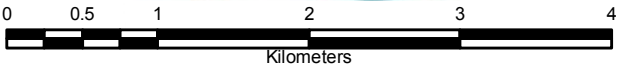
Fauna Survey Effort	Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
Fauna survey area	Flora survey area	QHGP Mainline Rev K	Dual Carriageway
Anabat	Random meander Survey	NSW State Forests	Principal Road
Reptile survey	Vegetation Assessment proforma	National Parks Estate (DECC)	Secondary Road
Frog survey	Visual Assessment		Minor Road
Fauna habitat assessment			Track
Herpetofauna habitat assessment			
Hair tube line			



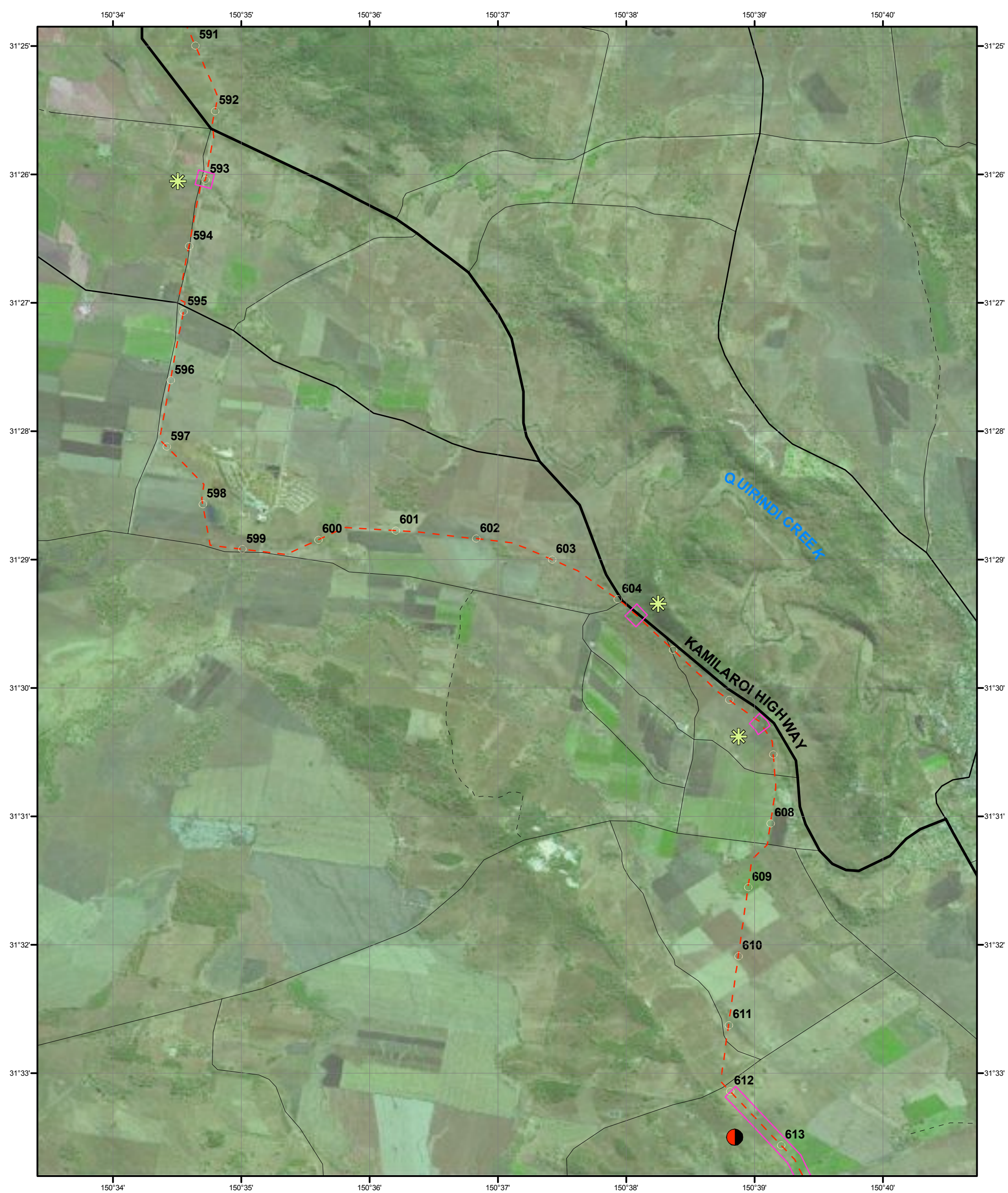
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

**SURVEY EFFORT MAP 2.13 - BORAMBIL CREEK
(South of Quirindi)**

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Flora Survey Effort	Flora survey area	QHGP Mainline KPs Rev K	QHGP Mainline Rev K	Restricted Access	NSW State Forests	National Parks Estate (DECC)	Roads (250,000)
Vegetation Assessment proforma							Dual Carriageway
							Principal Road
							Secondary Road
							Minor Road
							Track

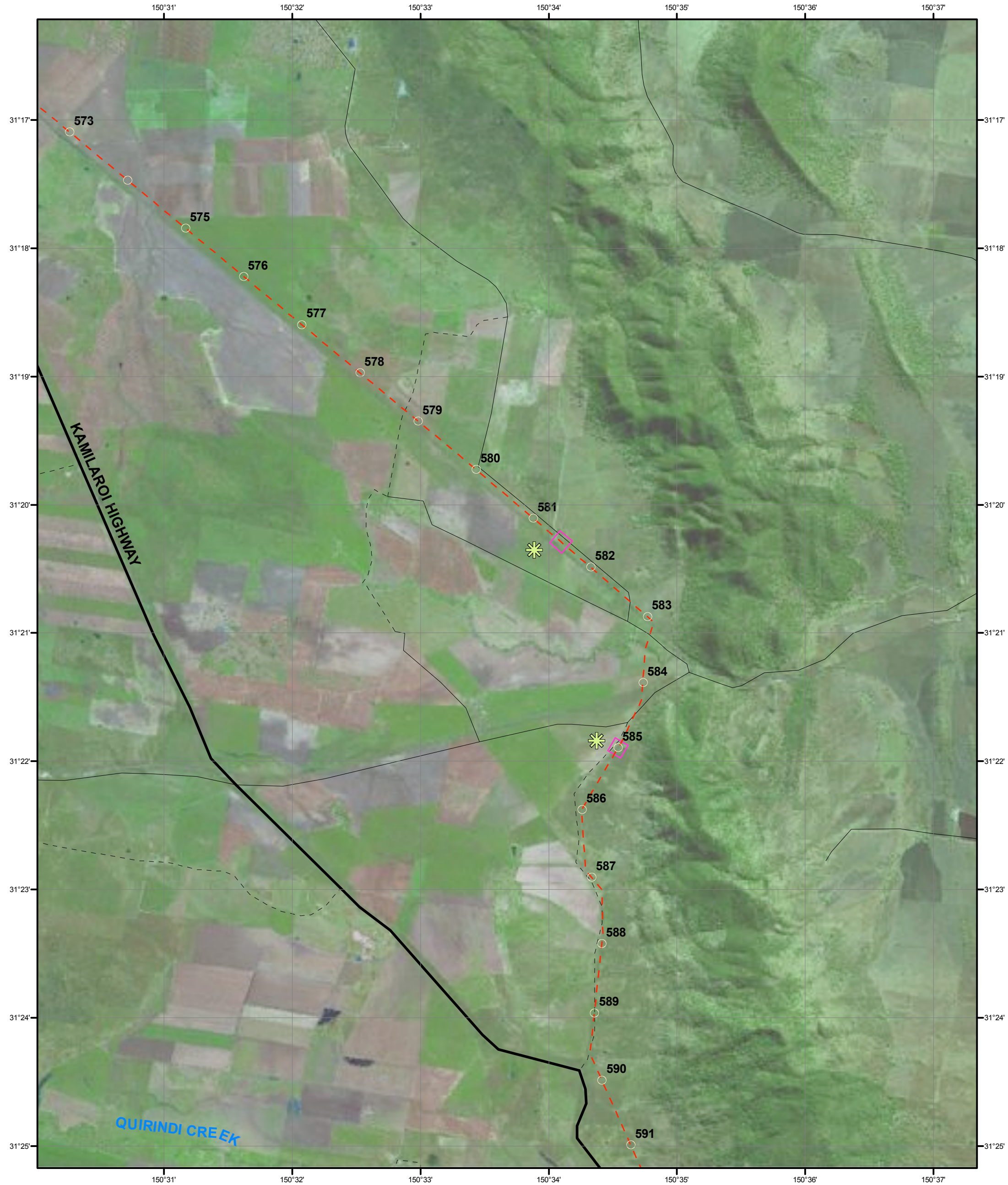


**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.14 - QUIRINDI

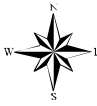
Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates

Flora Survey Effort	Flora survey area	QHGP Mainline KPs Rev K	Roads (250,000)
Restricted Access	Vegetation Assessment proforma	QHGP Mainline Rev K	Dual Carriageway
		NSW State Forests	Principal Road
		National Parks Estate (DECC)	Secondary Road
			Minor Road
			Track

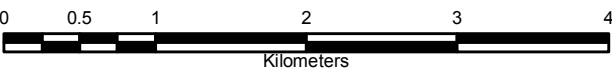


**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.15 - WERRIS CREEK



Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Flora Survey Effort

 Flora survey area



Vegetation Assessment proforma

 QHGP Mainline KPs Rev K

 QHGP Mainline Rev K

 NSW State Forests

 National Parks Estate (DECC)

Roads (250,000)

 Dual Carriageway

 Principal Road

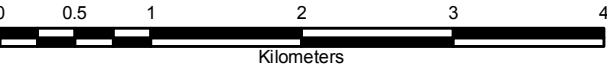
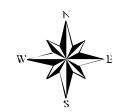
 Secondary Road

 Minor Road

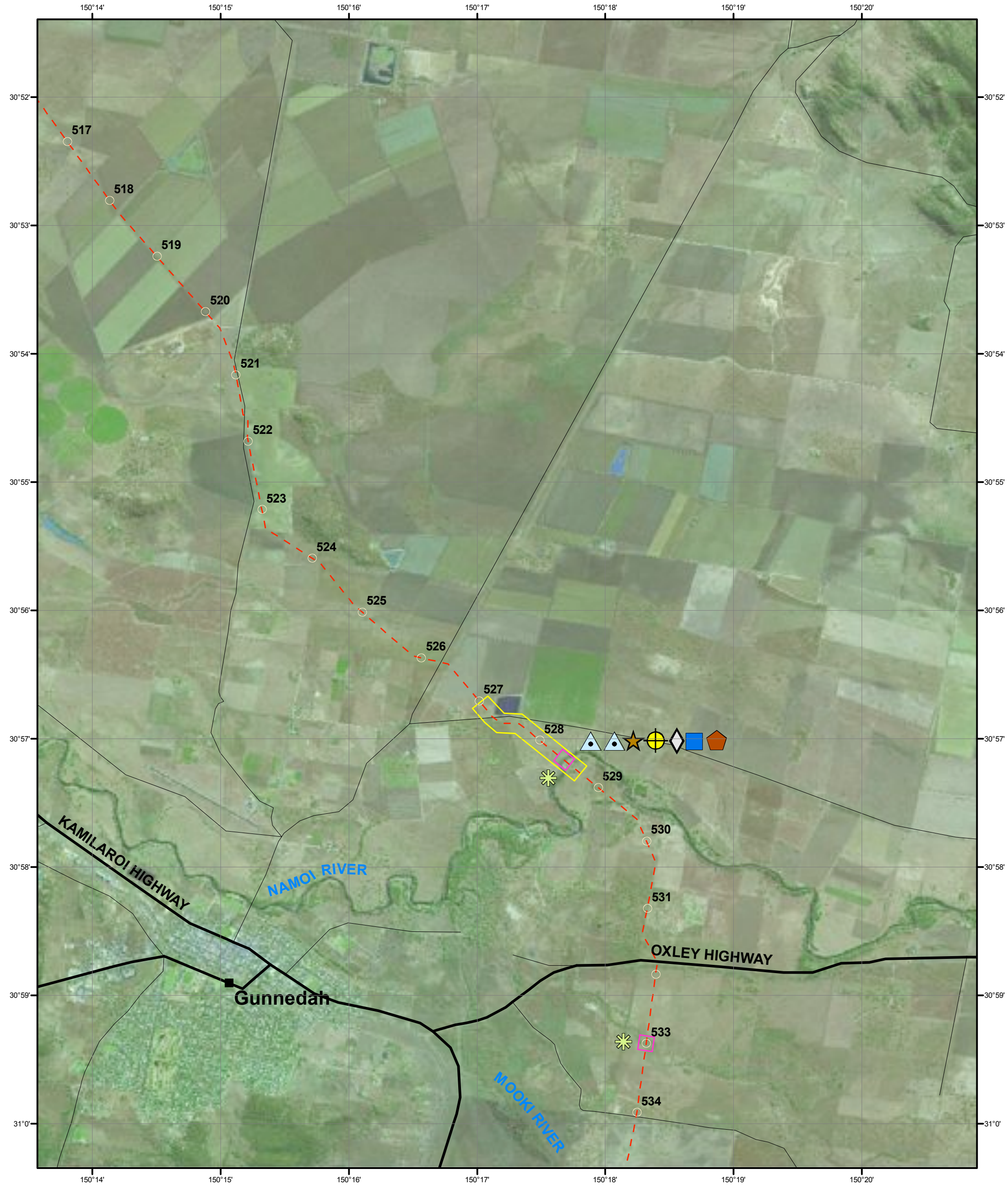
 Track



**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**
SURVEY EFFORT MAP 2.16 - BREEZA
(South of Gunnedah)
Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



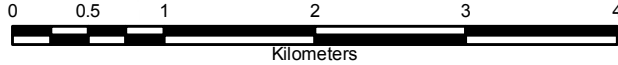
Fauna Survey Effort	Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
Fauna survey area	Flora survey area	QHGP Mainline Rev K	Dual Carriageway
Aquatic Assessment	Visual Assessment	NSW State Forests	Principal Road
Bird Survey		National Parks Estate (DECC)	Secondary Road
Frog survey			Minor Road
Fauna habitat assessment			Track
Spotlighting			



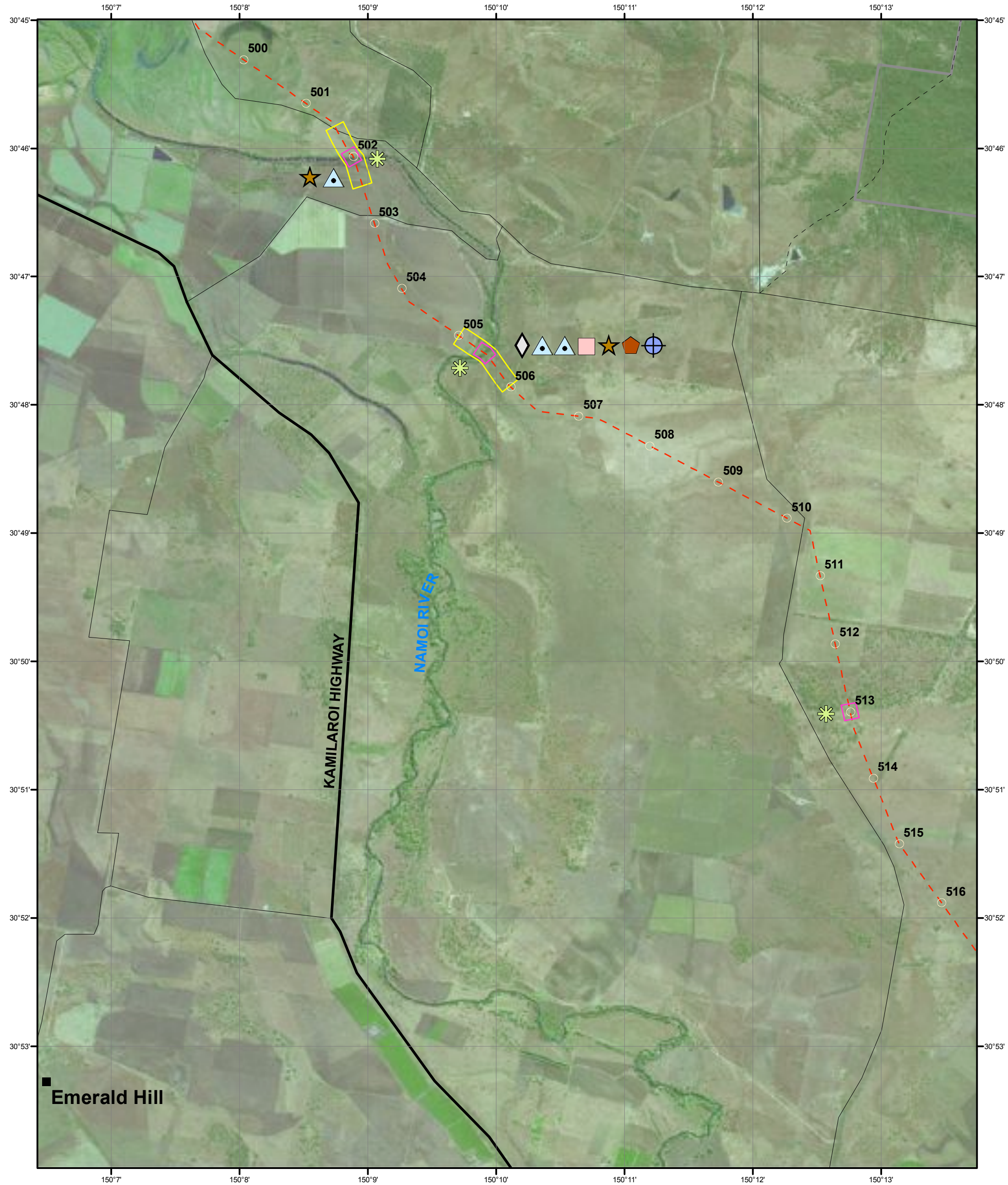
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.18 - GUNNEDAH

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort	Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
Fauna survey area	Flora survey area	QHGP Mainline Rev K	Dual Carriageway
Aquatic Assessment	Vegetation Assessment proforma	NSW State Forests	Principal Road
Bird Survey		National Parks Estate (DECC)	Secondary Road
Fauna habitat assessment			Minor Road
Elliot line			Track
Spotlighting			
Call playback			

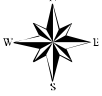


**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.19 - EMERALD HILL
(North of Gunnedah)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates





Fauna Survey Effort	Flora Survey Effort	 QHGP Mainline KPs Rev K	Roads (250,000)
 Fauna survey area	 Flora survey area	 QHGP Mainline Rev K	 Dual Carriageway
 Anabat	 Vegetation Assessment proforma	 NSW State Forests	 Principal Road
 Bird Survey		 National Parks Estate (DECC)	 Secondary Road
 Fauna habitat assessment			 Minor Road
 Spotlighting			 Track
 Hair tube line			
 Call playback			



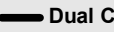
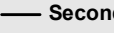
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

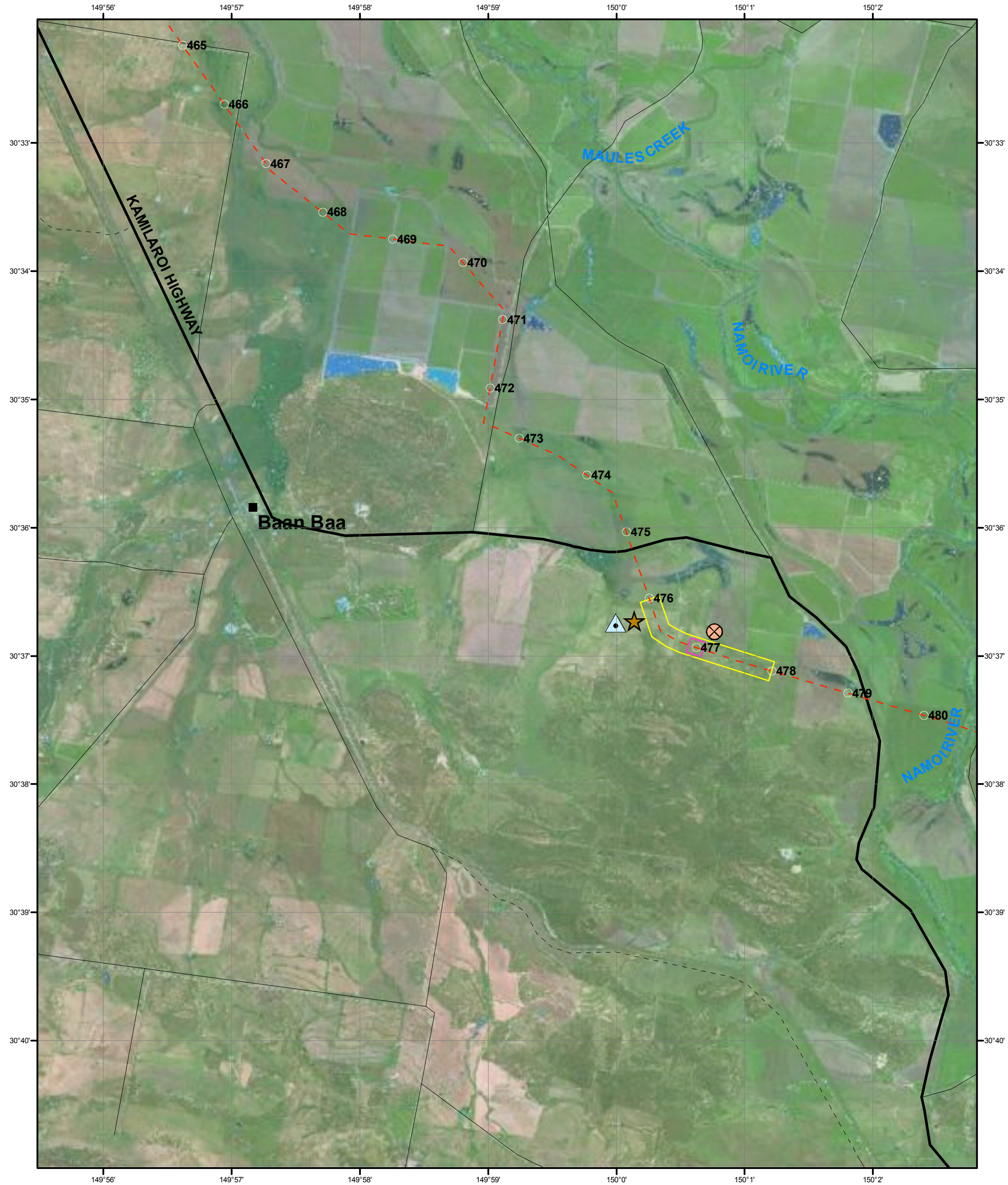
**SURVEY EFFORT MAP 2.20 - NAOMI VALLEY
(East of Boggabri)**



Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates

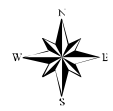


Flora Survey Effort		
	Flora survey area	 QHGP Mainline KPs Rev K
	Vegetation Assessment proforma	 QHGP Mainline Rev K
	Visual Assessment	 NSW State Forests
		 National Parks Estate (DECC)
Roads (250,000)		
		 Dual Carriageway
		 Principal Road
		 Secondary Road
		 Minor Road
		 Track

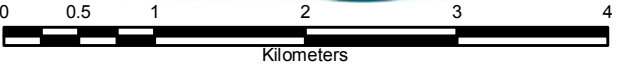


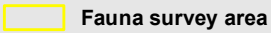
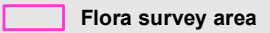
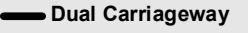
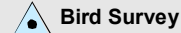
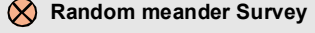
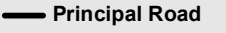
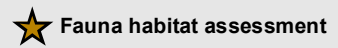
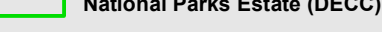
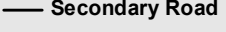
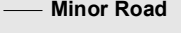
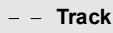
**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

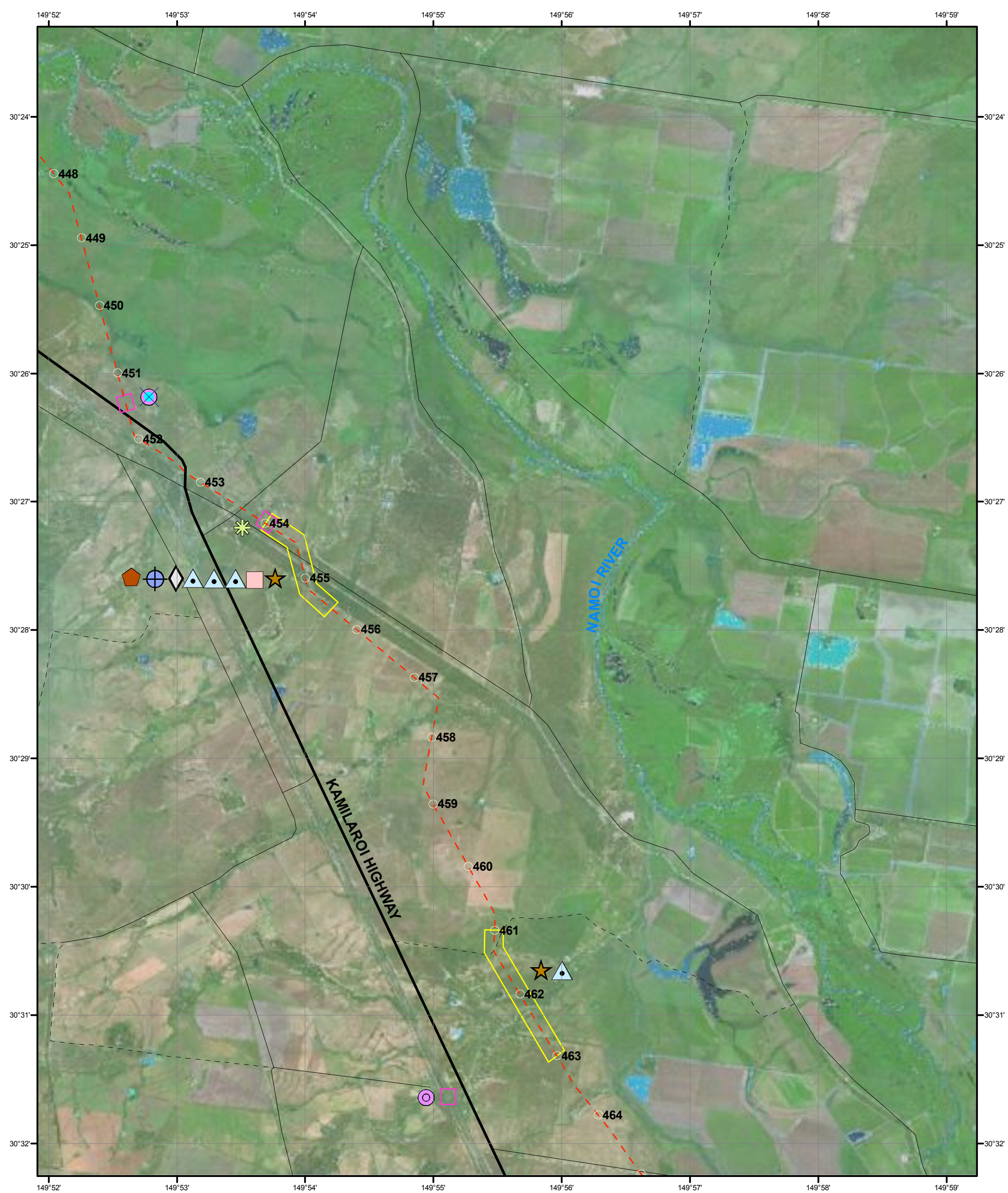
SURVEY EFFORT MAP 2.21 - BAAN BAA



Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort	Flora Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
 Fauna survey area	 Flora survey area	 QHGP Mainline Rev K	 Dual Carriageway
 Bird Survey	 Random meander Survey	 NSW State Forests	 Principal Road
 Fauna habitat assessment		 National Parks Estate (DECC)	 Secondary Road
			 Minor Road
			 Track

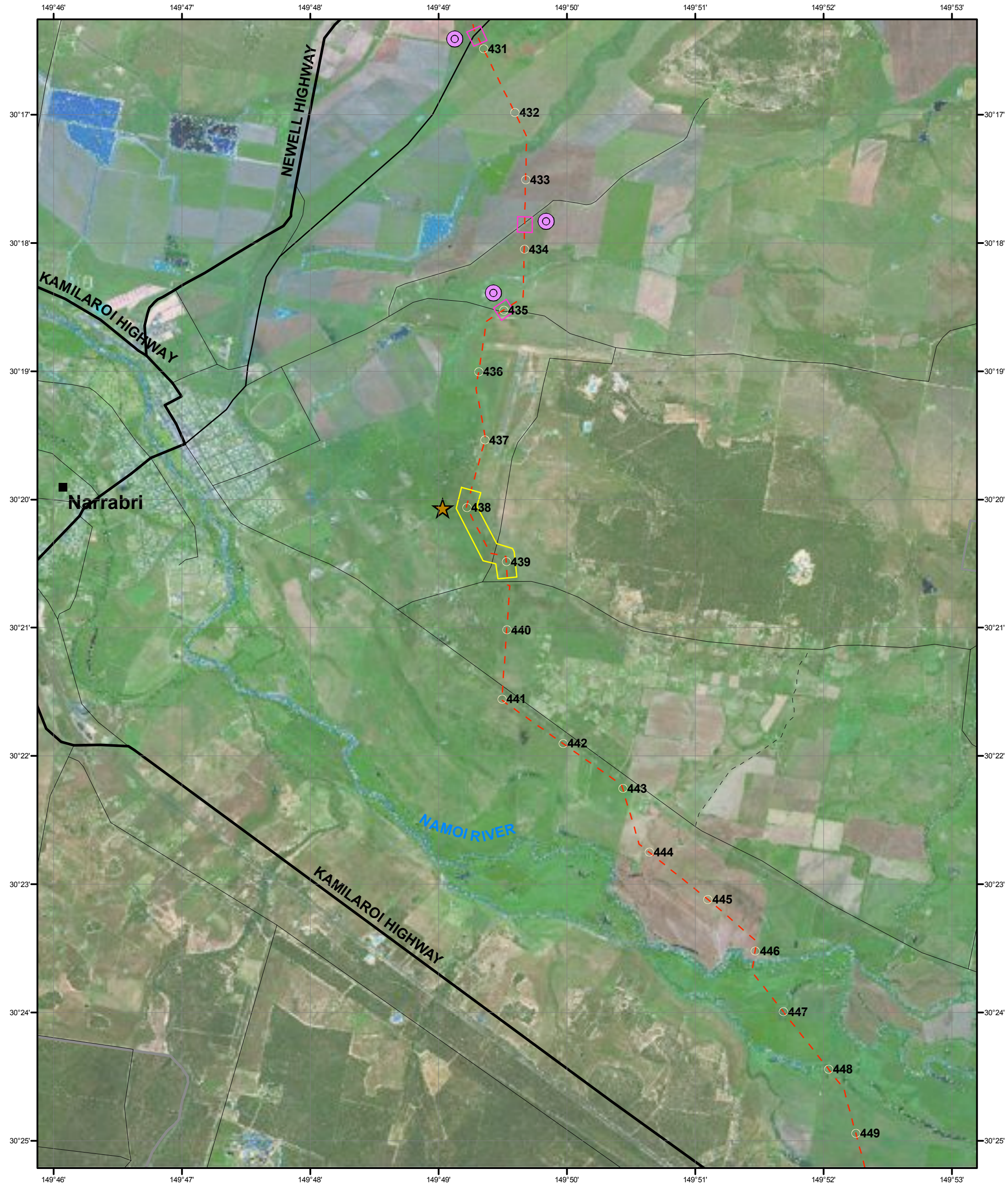


**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.22 - NAMOI VALLEY
(South East of Narrabri)

Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates

Fauna Survey Effort	Flora Survey Effort		Roads (250,000)
Fauna survey area	Flora survey area	QHGP Mainline KPs Rev K	Dual Carriageway
Anabat	Targeted Search	QHGP Mainline Rev K	Principal Road
Bird Survey	Visual Assessment	NSW State Forests	Secondary Road
Fauna habitat assessment		National Parks Estate (DECC)	Minor Road
Hair tube line			Track
Spotlighting			
Call playback			

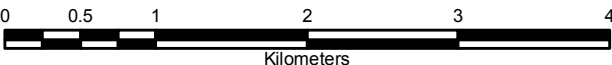


**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**

SURVEY EFFORT MAP 2.23 - NARRABRI



Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Fauna Survey Effort	QHGP Mainline KPs Rev K	Roads (250,000)
Fauna survey area	QHGP Mainline Rev K	Dual Carriageway
Fauna habitat assessment	NSW State Forests	Principal Road
Flora Survey Effort	National Parks Estate (DECC)	Secondary Road
Flora survey area		Minor Road
Visual Assessment		Track



**QUEENSLAND TO HUNTER
GAS PIPELINE PRELIMINARY
ENVIRONMENTAL ASSESSMENT**
SURVEY EFFORT MAP 2.24 - SPRING CREEK
(South of Edgeroi)



Map Scale 1:50,000
GDA1994 Datum
Geographic Coordinates



Flora Survey Effort	 Flora survey area	 Vegetation Assessment proforma	 Visual Assessment
		 QHGP Mainline KPs Rev K	 QHGP Mainline Rev K
		 NSW State Forests	 National Parks Estate (DECC)
			Roads (250,000)
			 Dual Carriageway
			 Principal Road
			 Secondary Road
			 Minor Road
			 Track