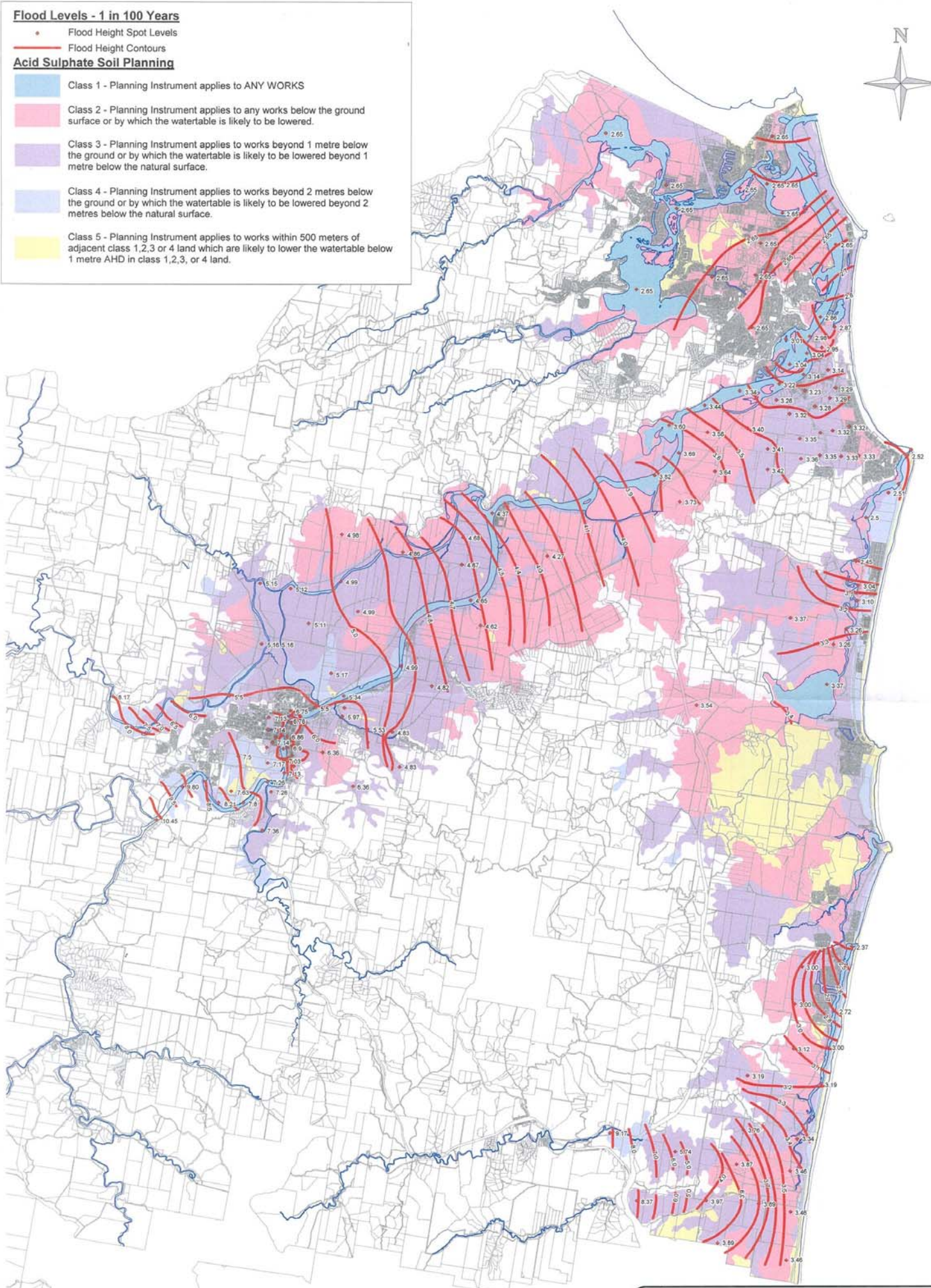



Flood Levels - 1 in 100 Years

- Flood Height Spot Levels
- Flood Height Contours

Acid Sulphate Soil Planning

- Class 1 - Planning Instrument applies to ANY WORKS
- Class 2 - Planning Instrument applies to any works below the ground surface or by which the watertable is likely to be lowered.
- Class 3 - Planning Instrument applies to works beyond 1 metre below the ground or by which the watertable is likely to be lowered beyond 1 metre below the natural surface.
- Class 4 - Planning Instrument applies to works beyond 2 metres below the ground or by which the watertable is likely to be lowered beyond 2 metres below the natural surface.
- Class 5 - Planning Instrument applies to works within 500 meters of adjacent class 1,2,3 or 4 land which are likely to lower the watertable below 1 metre AHD in class 1,2,3, or 4 land.



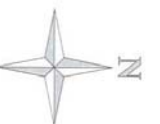
 TWEED ICM PLAN - CONTEXT STUDY FLOODING & ACID SULPHATE SOILS		EXHIBIT 1	A3
SCALE: 1:100 000 PROJECT No.: 2035			
DRN: D Mills	CHK: C.S	DATE: 6 JUL 2005	
FILENAME: Ex 1 Flooding & Acid Sulphate Soils		© Tweed Shire Council (2005) Hunter Water Australia Information	

TWEED IWCM PLAN - CONTEXT STUDY
 WATER SUPPLY SYSTEMS LAYOUT
 OVERALL

EXHIBIT 3 A3

SCALE: 1:120,000 PROJECT No.: 2035
 DATE: 6 JUL 2005
 CHK: C.S.
 FILENAME: Ex-3 Water Supply Systems Layout - Overall

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Water Service Legend

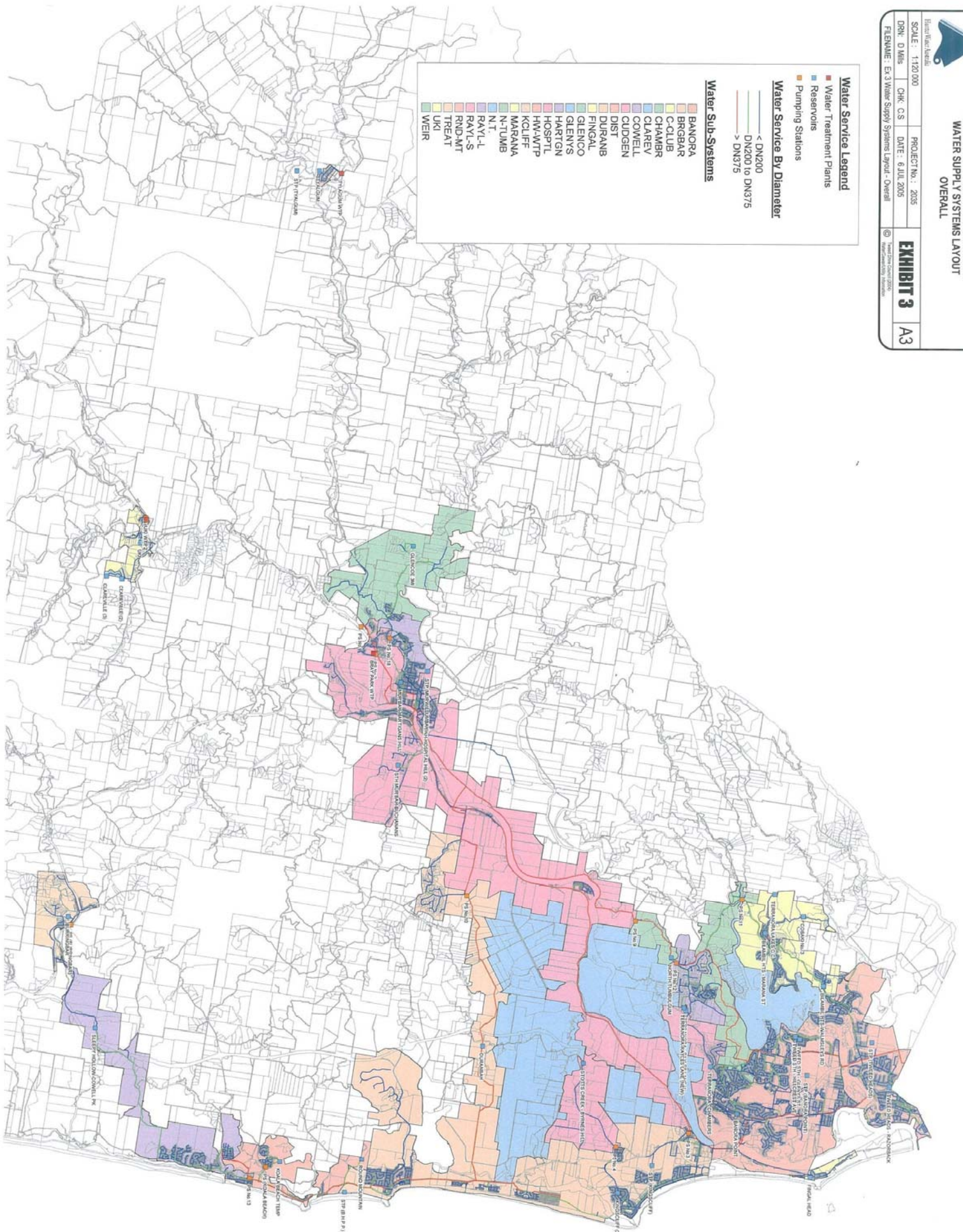
- Water Treatment Plants
- Reservoirs
- Pumping Stations

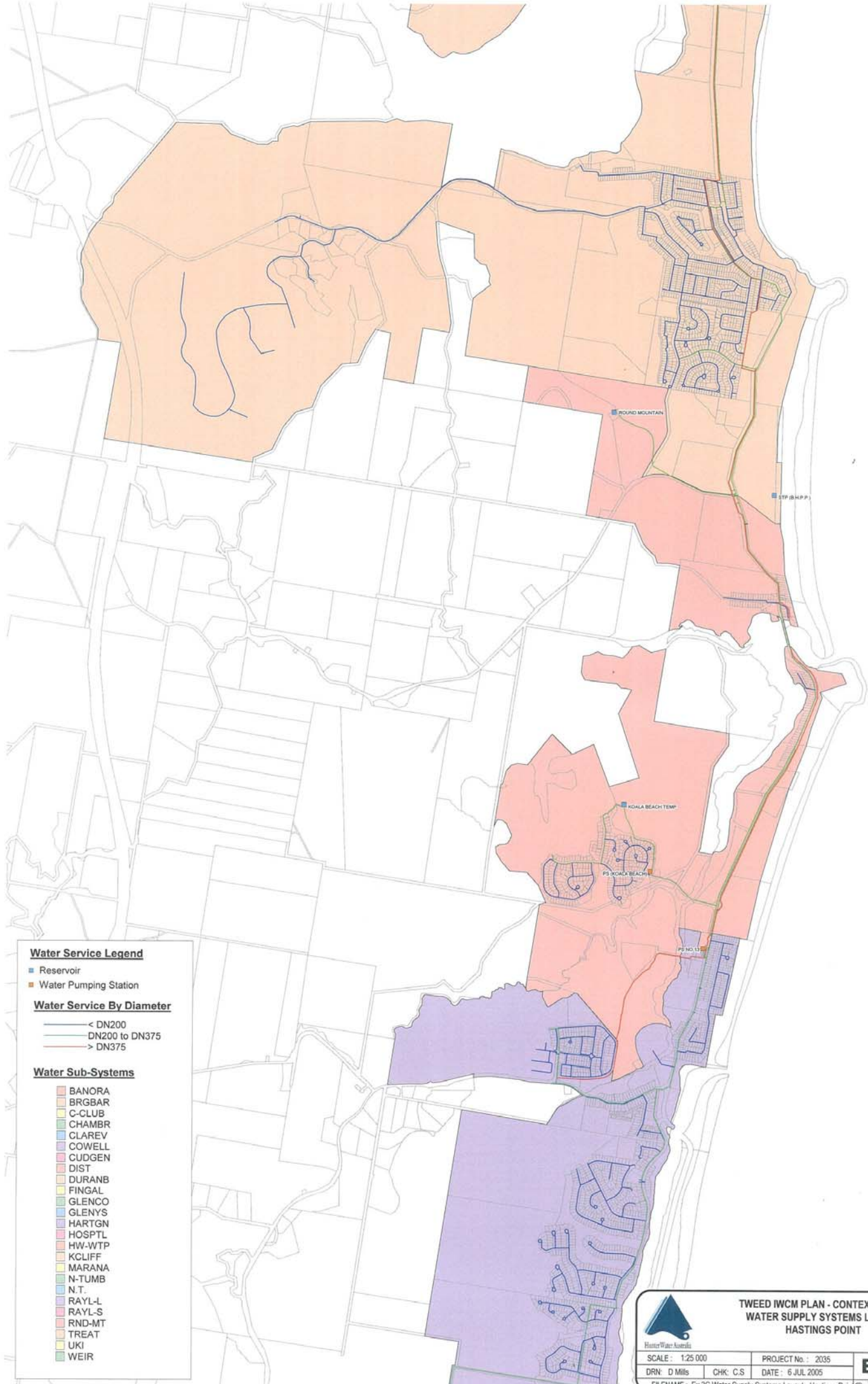
Water Service By Diameter

- < DN200
- DN200 to DN375
- > DN375

Water Sub-Systems

- BANORA
- BRGBAR
- C-CLUB
- CHAMBER
- CLAREV
- COWELL
- CUDGEN
- DIST
- DURANB
- FINCAL
- GLENGO
- GLEVYS
- HARTGN
- HOSP TL
- HW-WTP
- KCLIFF
- MARANBA
- N-TUMB
- N.T.
- RAYI-L
- RAYI-S
- RND-MT
- TREAT
- UKI
- WEIR





Water Service Legend

- Reservoir
- Water Pumping Station

Water Service By Diameter

- < DN200
- DN200 to DN375
- > DN375

Water Sub-Systems

- BANORA
- BRGBAR
- C-CLUB
- CHAMBR
- CLAREV
- COWELL
- CUDGEN
- DIST
- DURANB
- FINGAL
- GLENCO
- GLENYS
- HARTGN
- HOSPTL
- HW-WTP
- KLIFF
- MARANA
- N-TUMB
- N.T.
- RAYL-L
- RAYL-S
- RND-MT
- TREAT
- UKI
- WEIR



**TWEED IWC PLAN - CONTEXT STUDY
WATER SUPPLY SYSTEMS LAYOUT
HASTINGS POINT**

SCALE : 1:25 000

PROJECT No. : 2035

DRN : D Mills

CHK: C.S

DATE : 6 JUL 2005

FILENAME : Ex 3C Water Supply Systems Layout - Hastings Point

EXHIBIT 3C

A3

© 2005 WaterWorks Australia



**TWEED IWCM PLAN - CONTEXT STUDY
WATER SUPPLY SYSTEMS LAYOUT
KINGSCLIFF**

SCALE: 1:25 000 PROJECT No.: 2035
 DRN: D Mills CHK: C.S DATE: 6 JUL 2005
 FILENAME: Ex 3B Water Supply Systems Layout - Kingscliff

EXHIBIT 3B A3



Water Service Legend

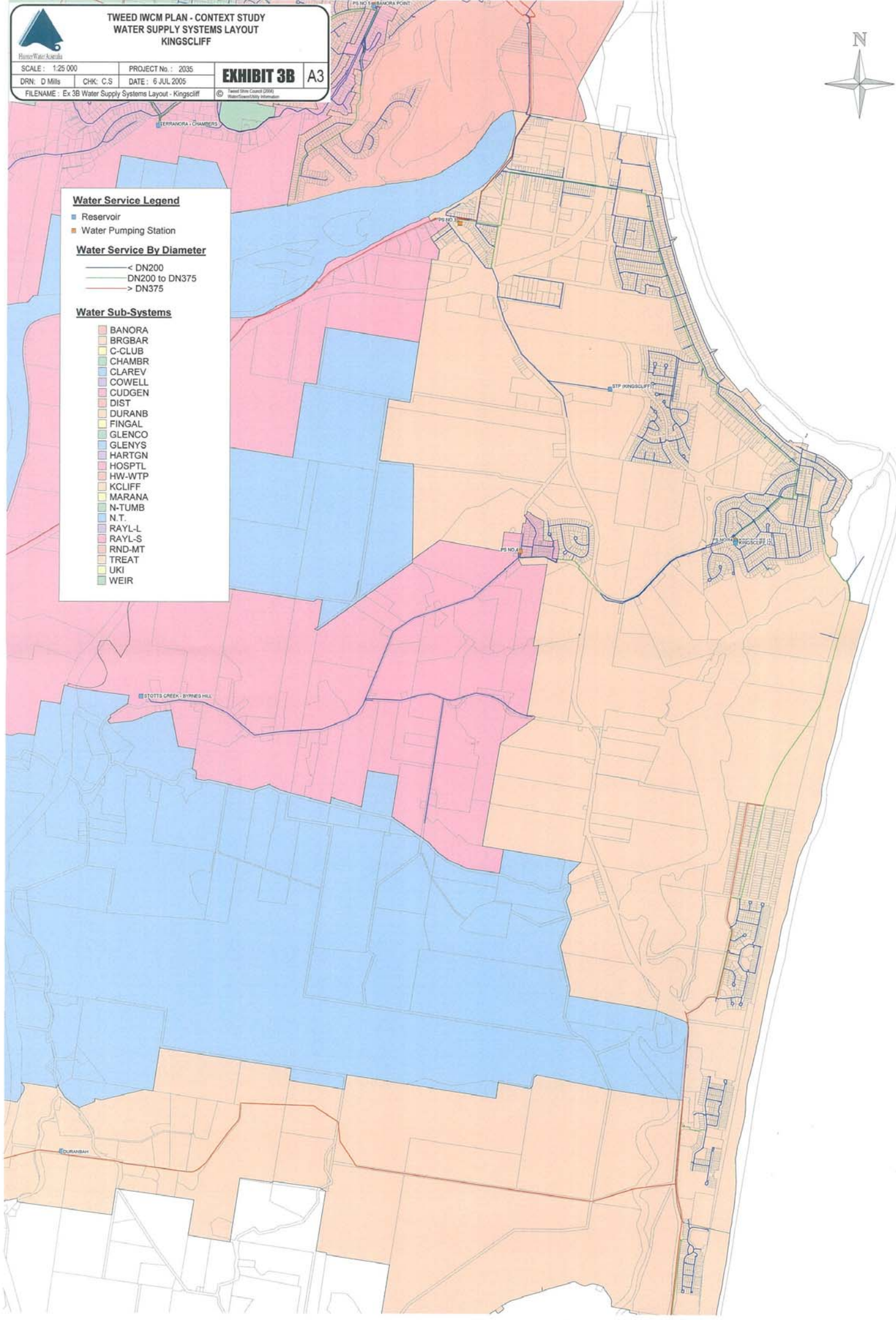
- Reservoir
- Water Pumping Station

Water Service By Diameter

- < DN200
- DN200 to DN375
- > DN375

Water Sub-Systems

- BANORA
- BRGBAR
- C-CLUB
- CHAMBR
- CLAREV
- COWELL
- CUDGEN
- DIST
- DURANB
- FINGAL
- GLENCO
- GLENYS
- HARTGN
- HOSPTL
- HW-WTP
- KCLIFF
- MARANA
- N-TUMB
- N.T.
- RAYL-L
- RAYL-S
- RND-MT
- TREAT
- UKI
- WEIR



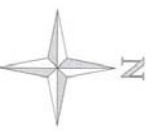


TWEED WCM PLAN - CONTEXT STUDY
WATER SUPPLY SYSTEMS LAYOUT
TWEED HEADS

SCALE: 1:25,000 PROJECT No.: 2035
 DWN: 0 WMS CHK: C.S DATE: 6 JUL 2005
 FILENAME: E:\34 Water Supply Systems - Tweed Heads

EXHIBIT 3A
A3

Hydro-Mechanics
 Water Supply Systems
 © 2005 Hydro-Mechanics



Water Service Legend

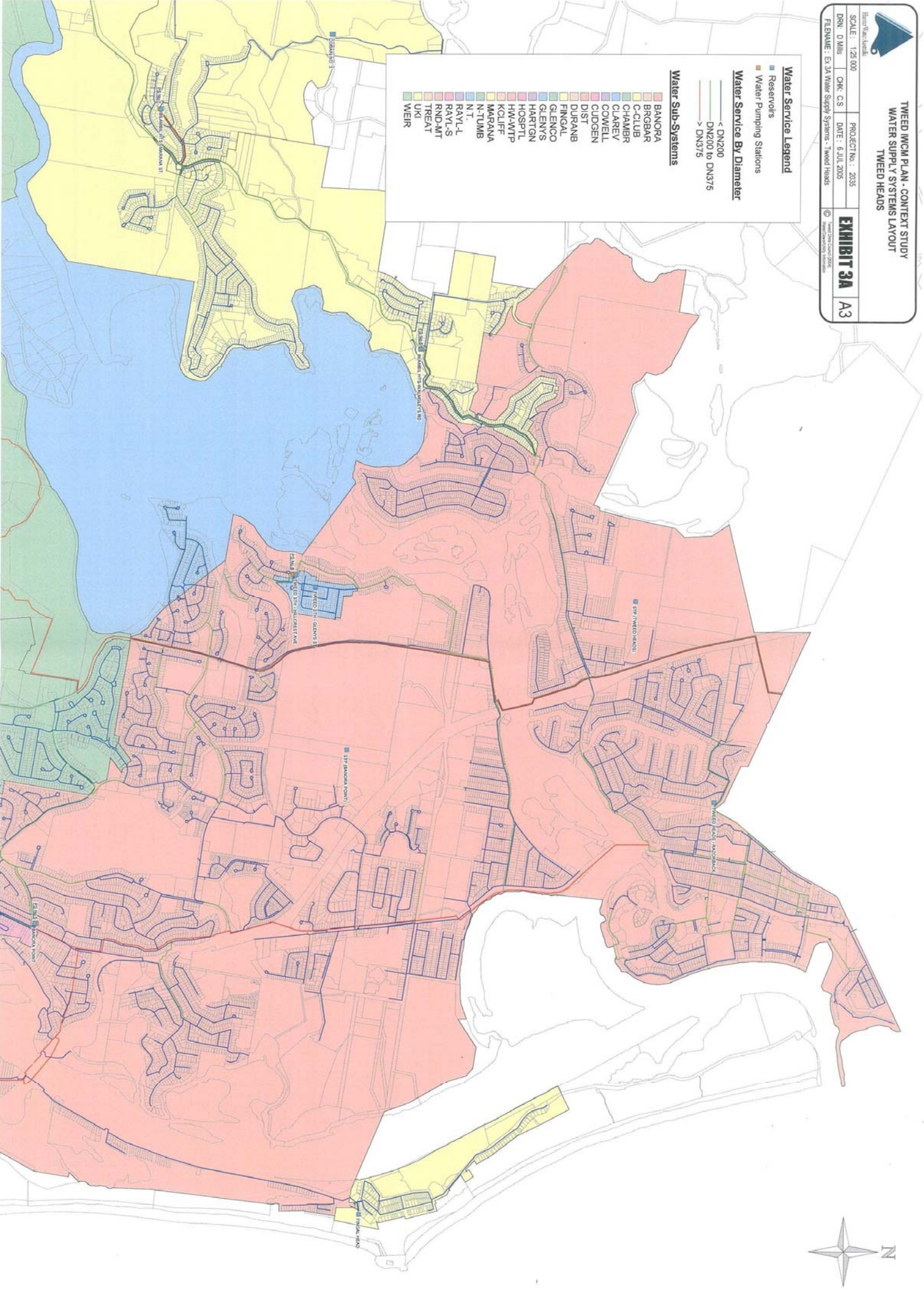
- Reservoirs
- Water Pumping Stations

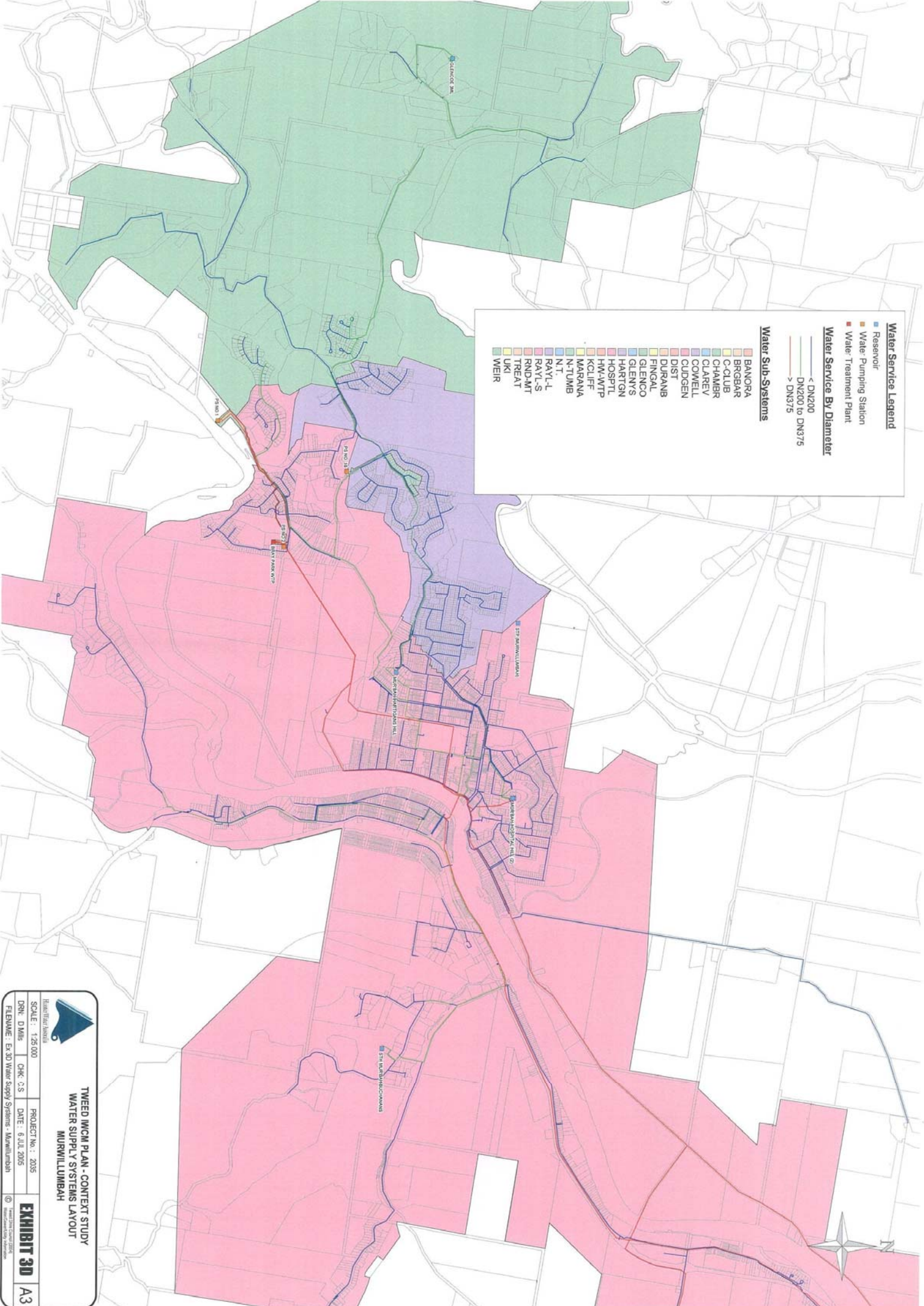
Water Service By Diameter


- < DN200
- DN200 to DN375
- > DN375

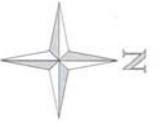
Water Sub-Systems

- BANORA
- BRGBAR
- C-CLUB
- CHAMBR
- CLAREV
- COWELL
- CUDGEN
- DIST
- DURAMB
- FINGAL
- GLENCO
- GLENYS
- HARTGN
- HOSPTL
- HWAJTP
- KLUFF
- MARANA
- N-TUMB
- N-T
- RAYL-L
- RAYL-S
- RND-MT
- TREAT
- UKI
- WEIR



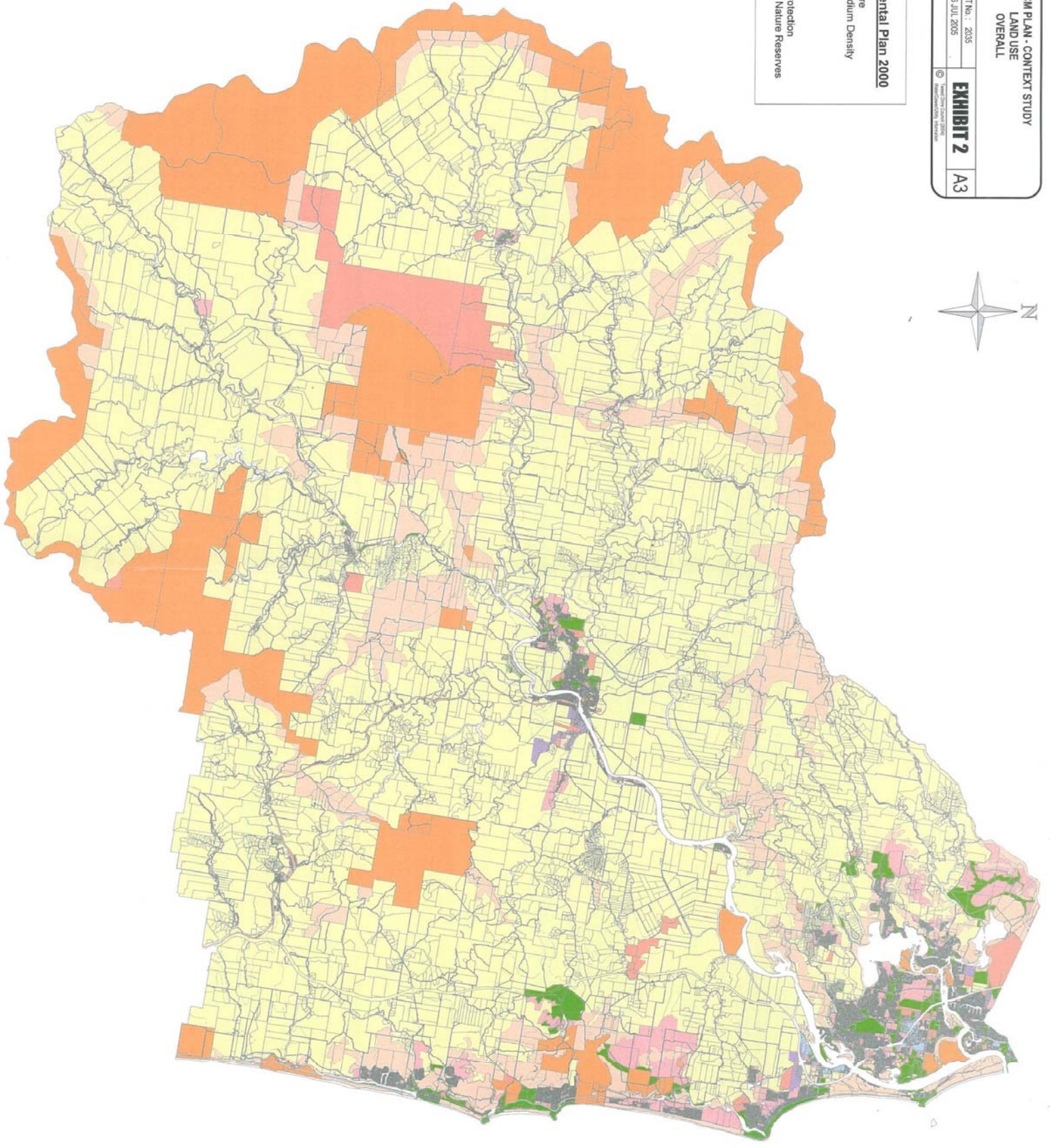


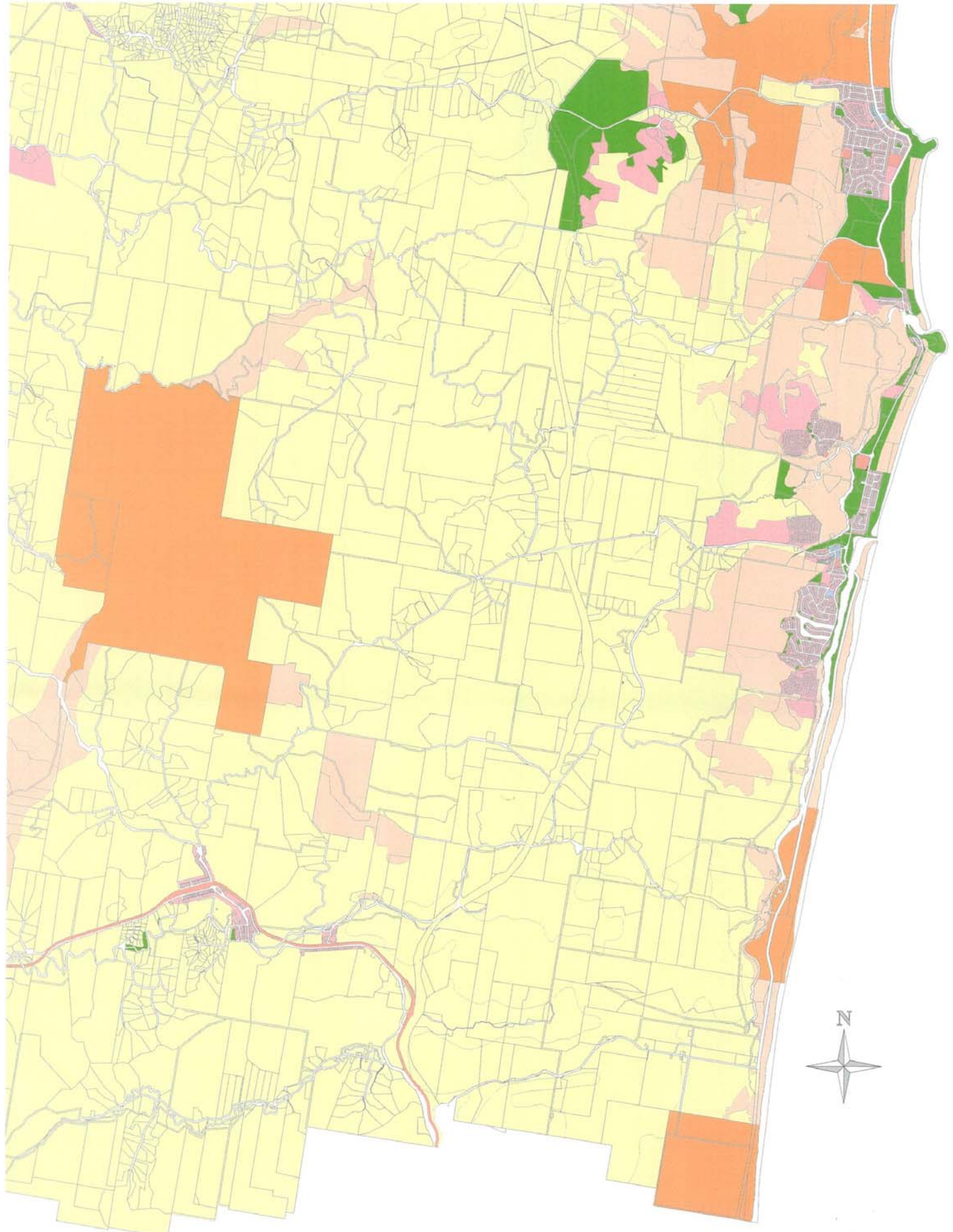
		TWEED WCM PLAN - CONTEXT STUDY WATER SUPPLY SYSTEMS LAYOUT MURWILLUMBAH	
SCALE : 1:25,000	PROJECT No. : 2035		
DRN : DMBS	CHK : C.S	DATE : 6 JUL 2005	
FILENAME : Ex_30 Water Supply Systems - Murwillumbah			
		EXHIBIT 3D A3	



Local Environmental Plan 2000

- Rural & Agriculture
- Residential & Medium Density
- Commercial
- Industrial
- Special Uses
- Open Space
- Environmental Protection
- National Parks & Nature Reserves





Local Environmental Plan 2000

- Rural & Agriculture
- Residential & Medium Density
- Commercial
- Industrial
- Special Uses
- Open Space
- Environmental Protection
- National Parks & Nature Reserves

		TWEED IWCW PLAN - CONTEXT STUDY	
		LAND USE	
KINGSCLIFF - HASTINGS POINT			
SCALE : 1:50 000	PROJECT No. : 2035	EXHIBIT 2B A3	
DRN: D Mills	CHK: C.S		
FILENAME : Ex 2b Land Use - Kingscliff-Hastings		© Tweed Shire Council 2005 WaterSmartNSW Initiative	

Local Environmental Plan 2000

- Rural & Agriculture
- Residential & Medium Density
- Commercial
- Industrial
- Special Uses
- Open Space
- Environmental Protection
- National Parks & Nature Reserves



SCALE: 1:50 000

PROJECT No.: 2035

DRN: D Mills

CHK: C.S

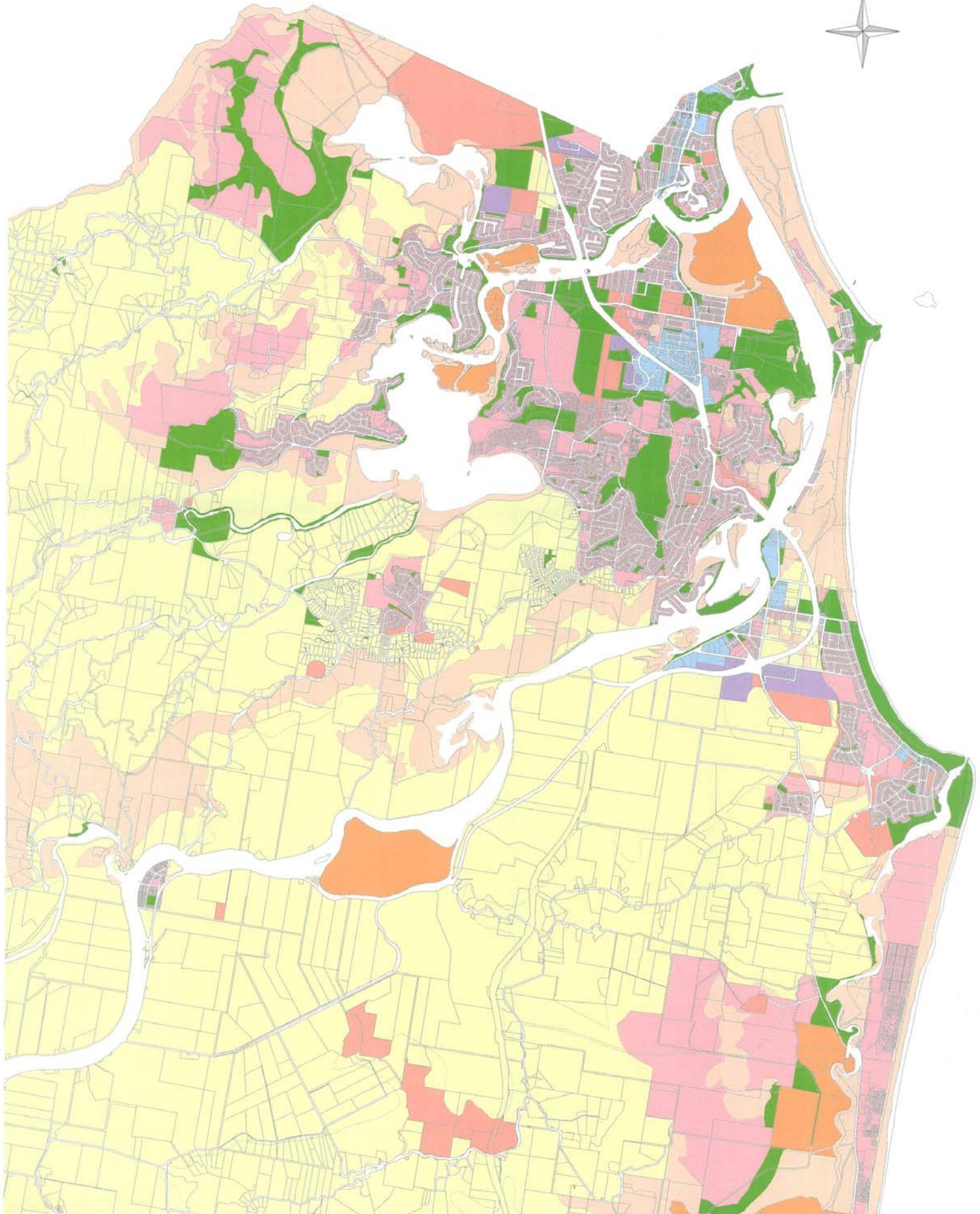
DATE: 6 JUL 2005

EXHIBIT 2A

A3

FILENAME: Ex 2A Land Use - Tweed-Kingscliff

© Tweed Shire Council (2004)
WaterConnectivity Information





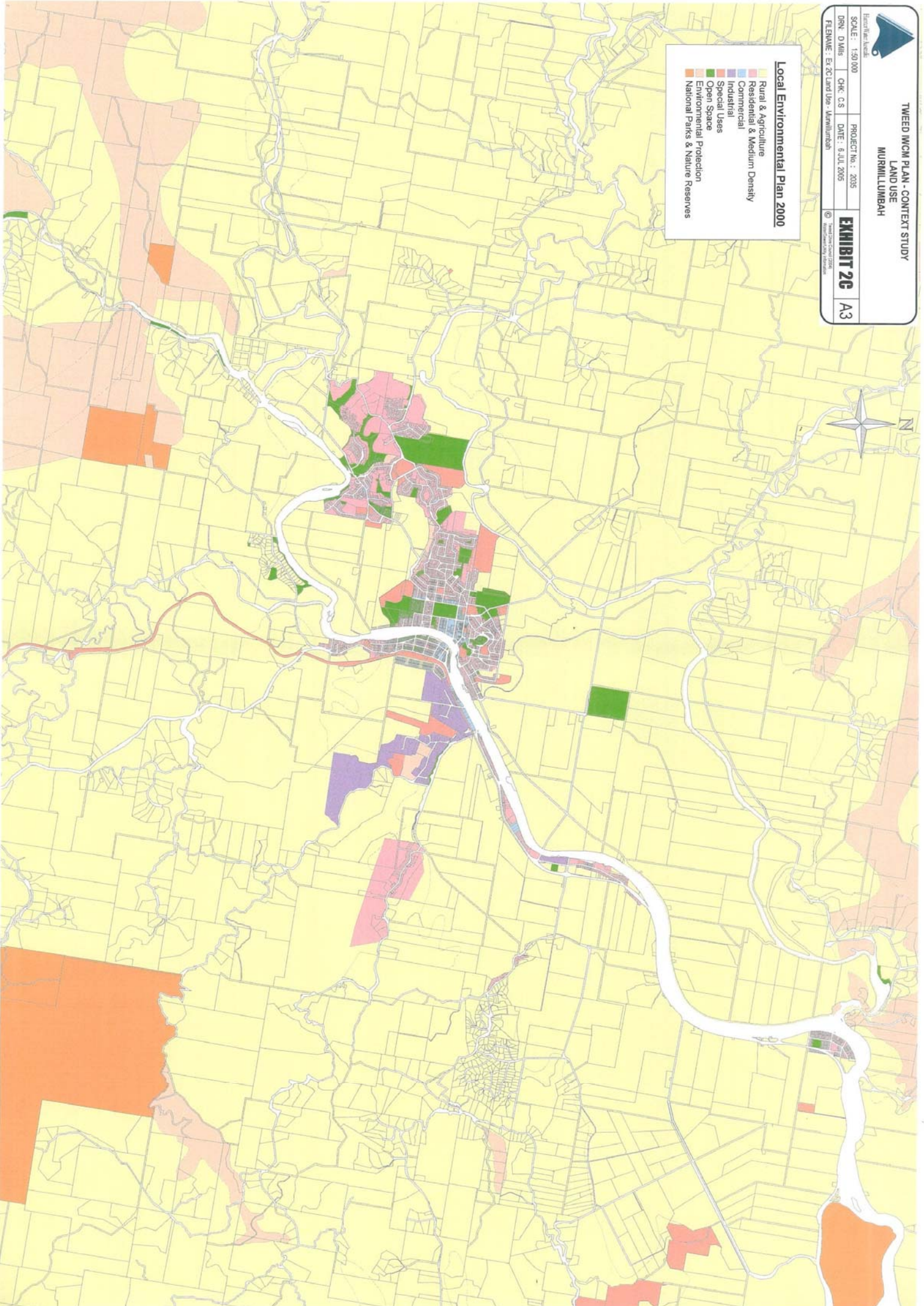
SCALE: 1:50 000 PROJECT No.: 2025
DRA: D Miles CHK: C S DATE: 6 JUL 2005
FILENAME: Ex 2C Land Use - Murmillumbah

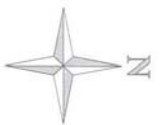
EXHIBIT 2C
A3



Local Environmental Plan 2000

- Rural & Agriculture
- Residential & Medium Density
- Commercial
- Industrial
- Special Uses
- Open Space
- Environmental Protection
- National Parks & Nature Reserves



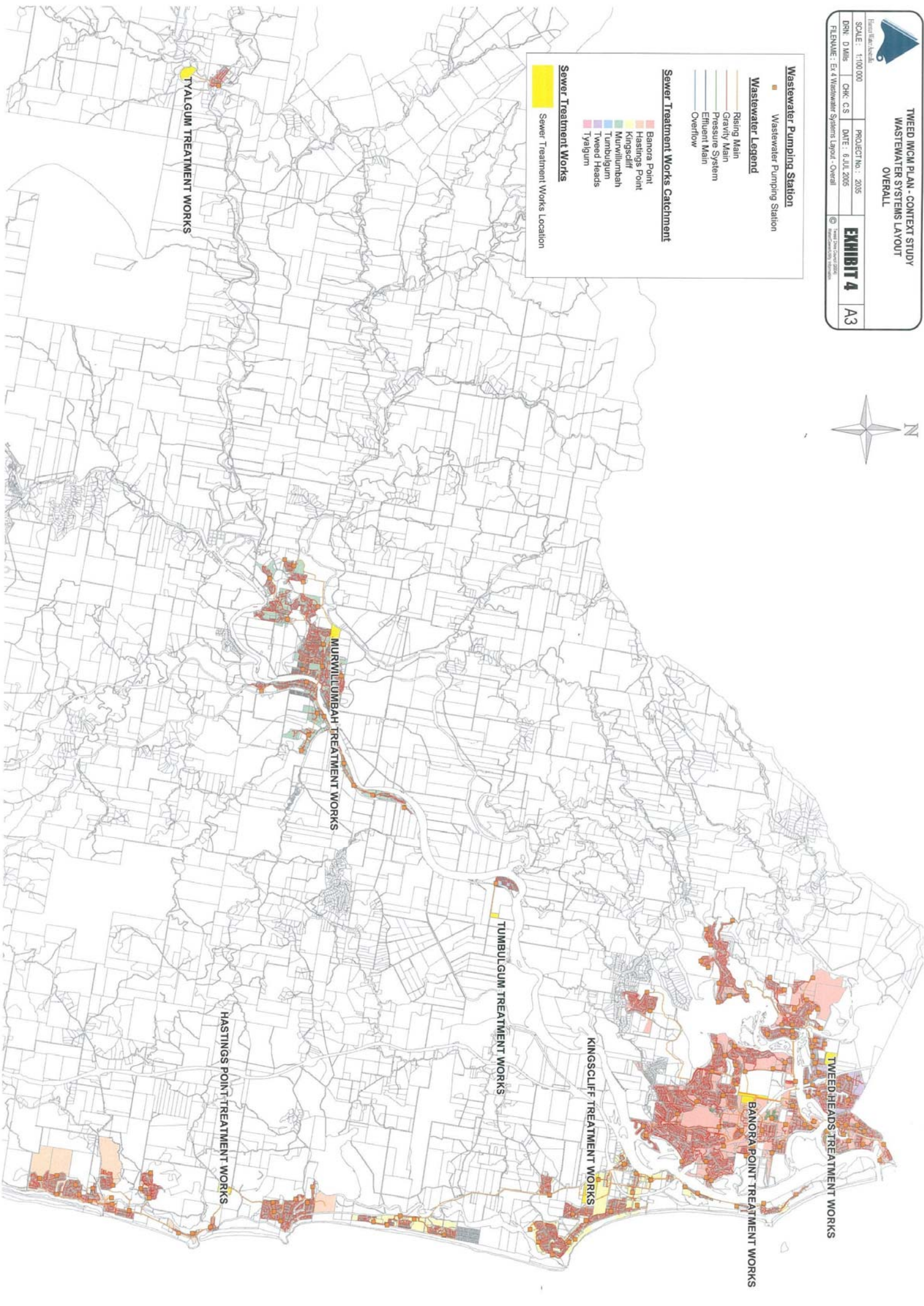


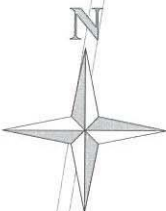
Wastewater Pumping Station
 Wastewater Pumping Station

Wastewater Legend
 Rising Main
 Gravity Main
 Pressure System
 Effluent Main
 Overflow

Sewer Treatment Works Catchment
 Banora Point
 Hastings Point
 Kingscliff
 Murwillumbah
 Tumbulgum
 Tweed Heads
 Tyalgum

Sewer Treatment Works
 Sewer Treatment Works Location





TUMBULGUM TREATMENT WORKS



Wastewater Pumping Station

- Wastewater Pumping Station

Sewer Material

- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

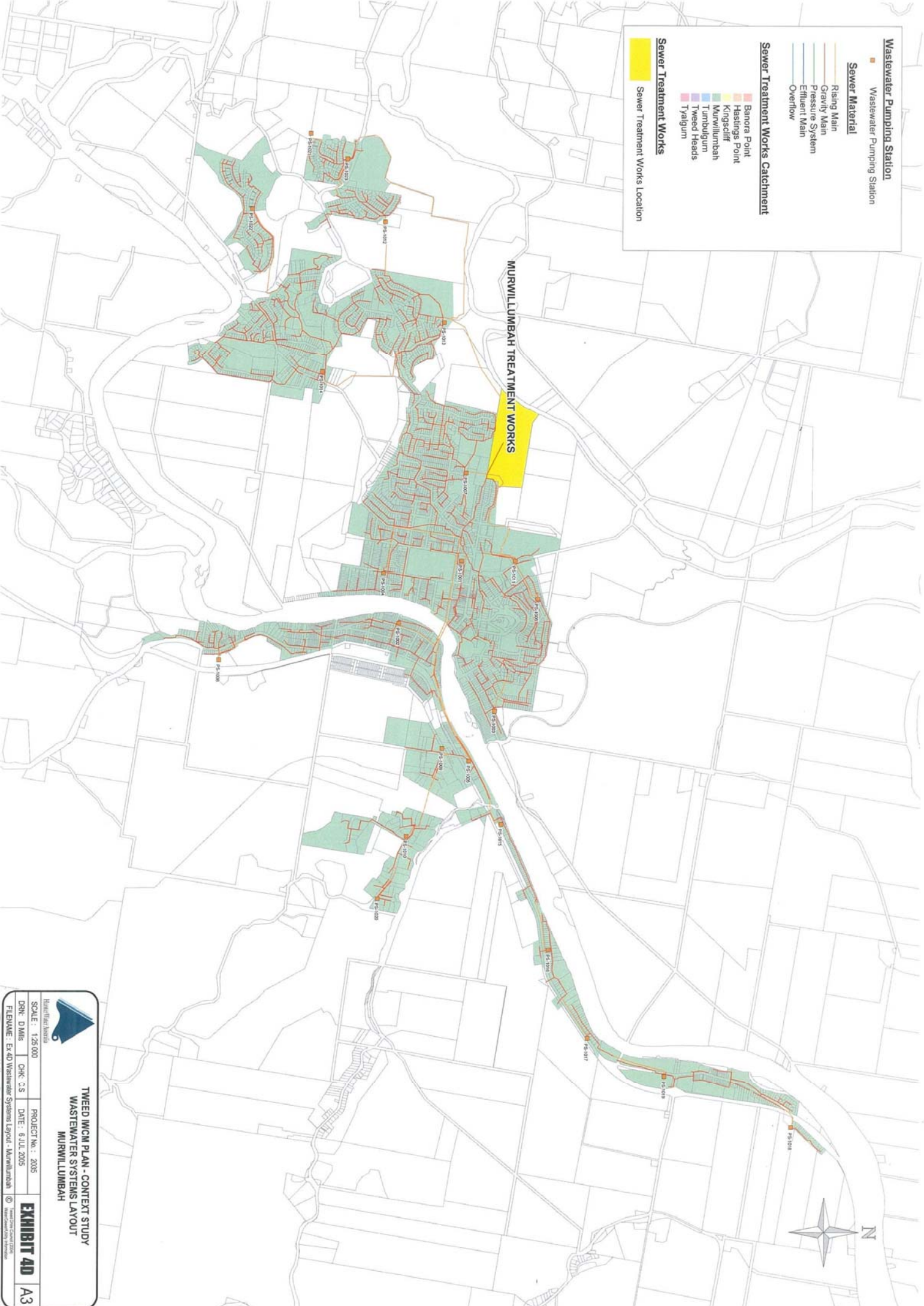
Sewer Treatment Works Catchment

- Banora Point
- Hastings Point
- Kingscliff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

Sewer Treatment Works

- Sewer Treatment Works Location

		TWEED IWCM PLAN - CONTEXT STUDY WASTEWATER SYSTEMS LAYOUT TUMBULGUM	
SCALE: 1:10 000	PROJECT No.: 2035	EXHIBIT 4E	
DRN: D Mills	CHK: C.S	DATE: 6 JUL 2005	A4
FILENAME: Ex 4E Wastewater Systems - Tumbulgum		© Tweed Shire Council (2004) Water/Sewer/Utility Information	



Wastewater Pumping Station

- Wastewater Pumping Station

Sewer Material

- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

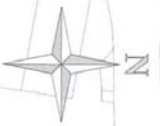
Sewer Treatment Works Catchment


- Banora Point
- Hastings Point
- Kingscliff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

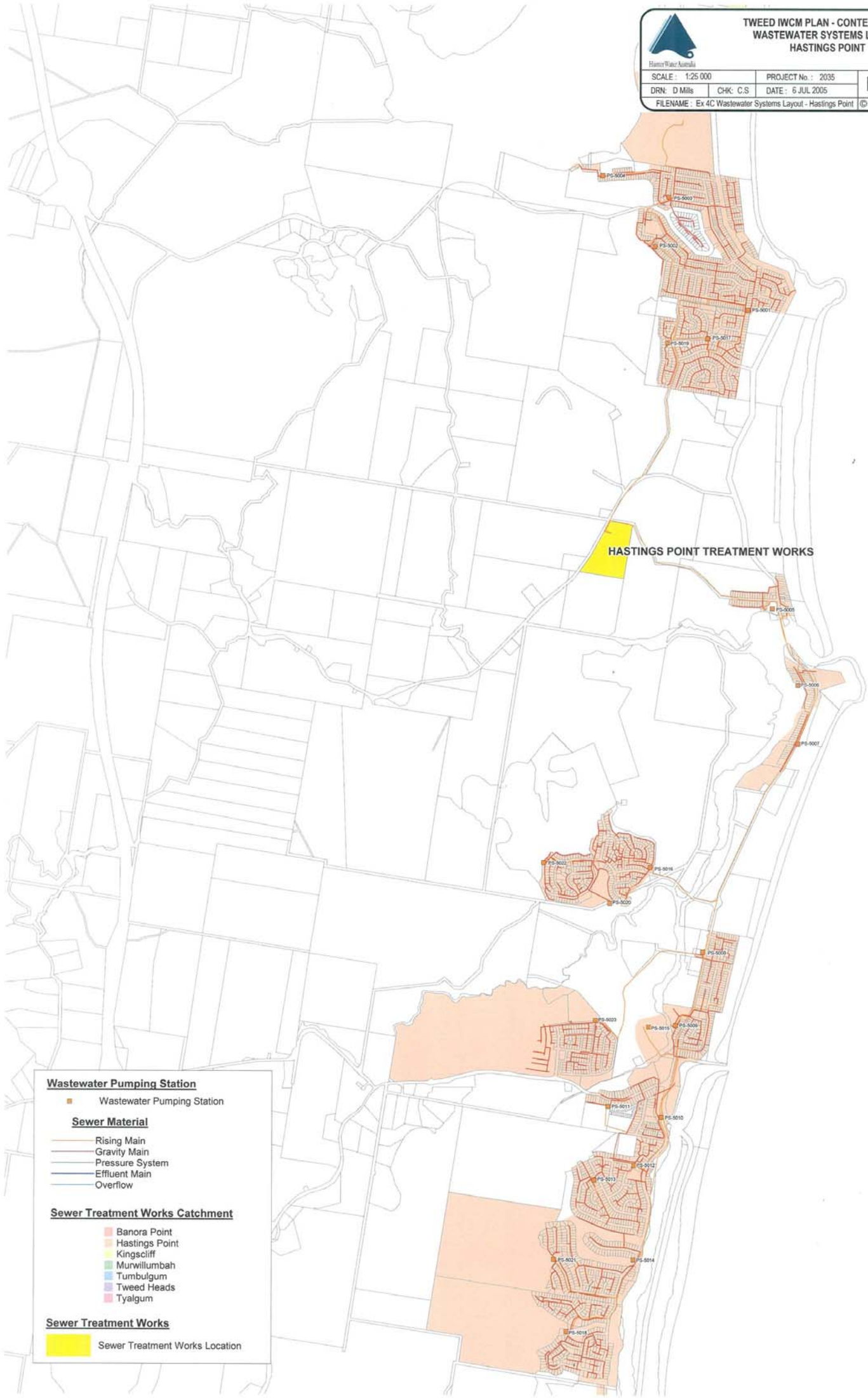
Sewer Treatment Works

- Sewer Treatment Works Location

MURWILLUMBAH TREATMENT WORKS



		TWEED WCM PLAN - CONTEXT STUDY WASTEWATER SYSTEMS LAYOUT MURWILLUMBAH	
SCALE : 1:25,000	PROJECT No. : 2035		
DRN : DIMS	CHK : C.S		
DATE : 6 JUL 2005			
FILENAME : Ex 4D Wastewater Systems Layout - Murwillumbah			
		EXHIBIT 4D A3	



Wastewater Pumping Station

- Wastewater Pumping Station

Sewer Material

- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

Sewer Treatment Works Catchment

- Banora Point
- Hastings Point
- Kingscliff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

Sewer Treatment Works

- Sewer Treatment Works Location



**TWEED IWM PLAN - CONTEXT STUDY
WASTEWATER SYSTEMS LAYOUT
KINGSLIFF**

SCALE: 1:25 000

PROJECT No.: 2035

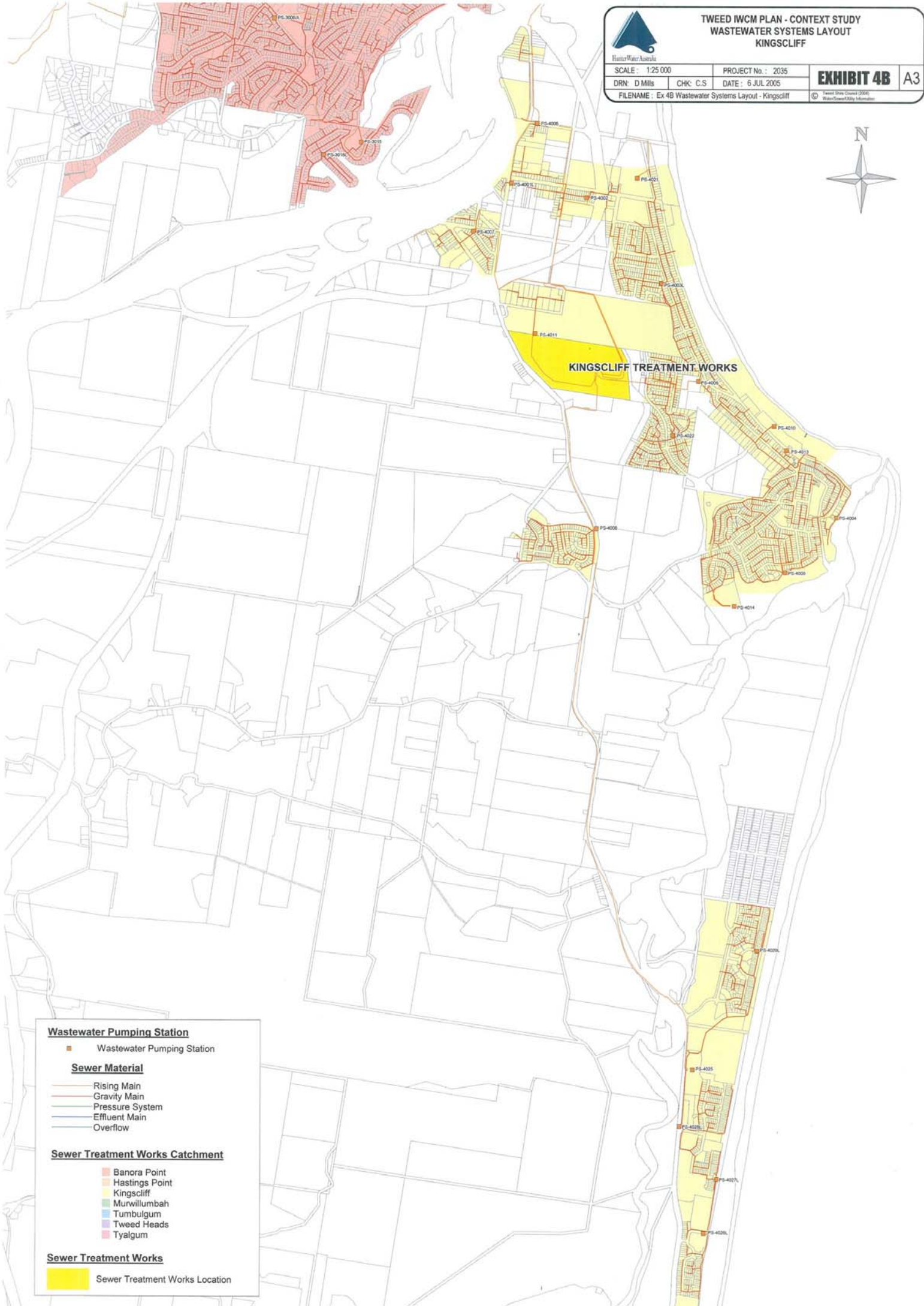
DRN: D Mills

CHK: C.S

DATE: 6 JUL 2005

FILENAME: Ex 4B Wastewater Systems Layout - Kingscliff

EXHIBIT 4B A3



Wastewater Pumping Station

- Wastewater Pumping Station

Sewer Material

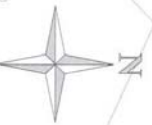
- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

Sewer Treatment Works Catchment

- Banora Point
- Hastings Point
- Kingscliff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

Sewer Treatment Works

- Sewer Treatment Works Location



Wastewater Pumping Station

- Wastewater Pumping Station

Wastewater Legend

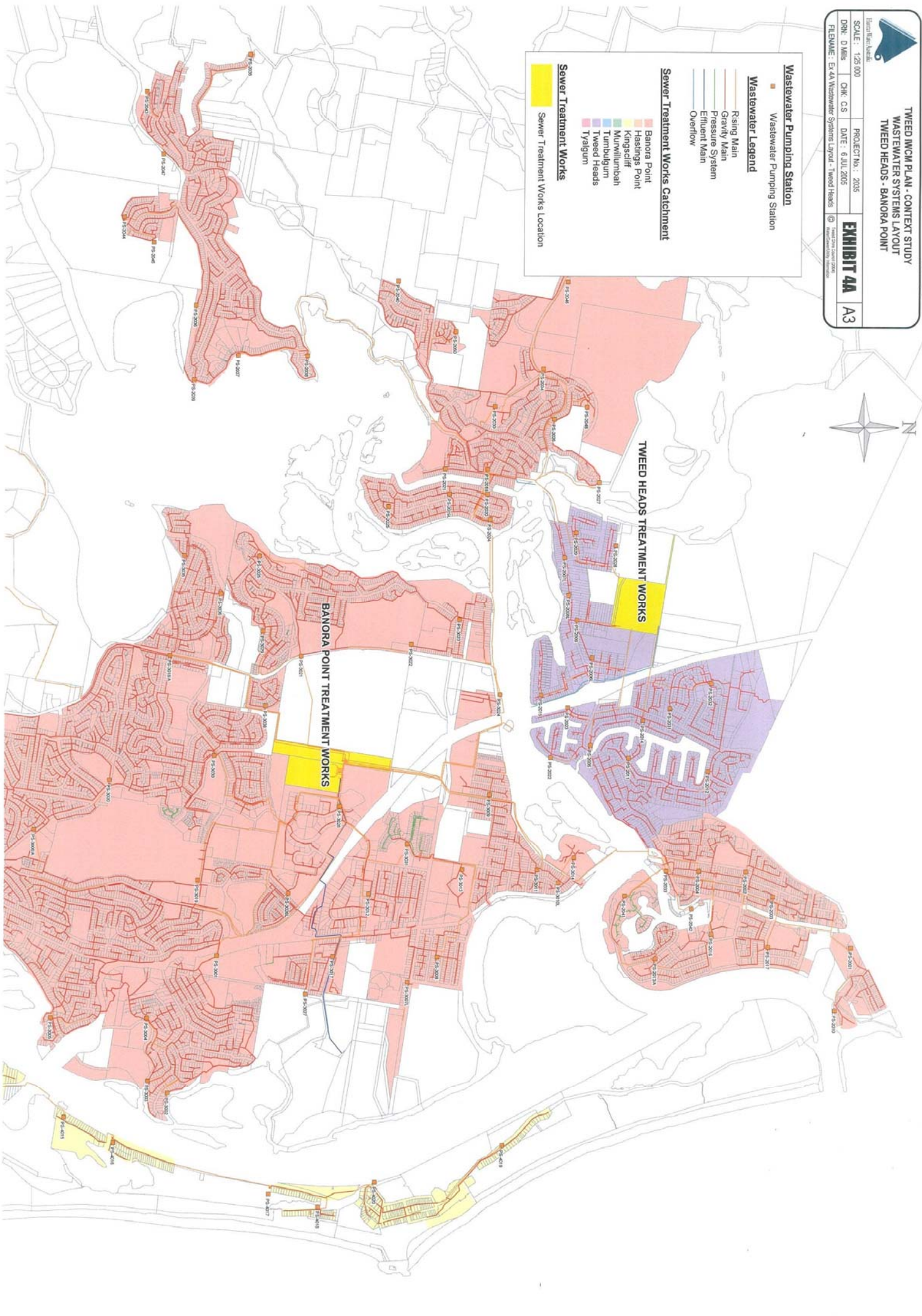
- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

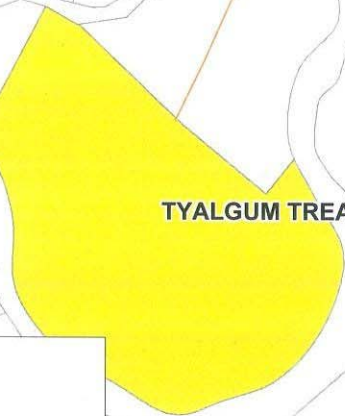
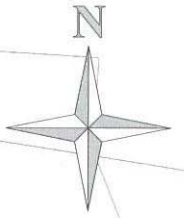
Sewer Treatment Works Catchment

- Banora Point
- Kingsciff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

Sewer Treatment Works

- Sewer Treatment Works Location





TYALGUM TREATMENT WORKS

Wastewater Pumping Station

- Wastewater Pumping Station

Sewer Material

- Rising Main
- Gravity Main
- Pressure System
- Effluent Main
- Overflow

Sewer Treatment Works Catchment

- Banora Point
- Hastings Point
- Kingscliff
- Murwillumbah
- Tumbulgum
- Tweed Heads
- Tyalgum

Sewer Treatment Works

- Sewer Treatment Works Location

 Hunter Water Australia		TWEED IWCN PLAN - CONTEXT STUDY WASTEWATER SYSTEMS LAYOUT TYALGUM	
SCALE: 1:10 000	PROJECT No.: 2035	EXHIBIT 4F	A4
DRN: D Mills	CHK: C.S		
FILENAME: Ex 4F Wastewater Systems - Tyalgum		© Tweed Shire Council (2004) Water/Sewer/Utility Information	