

A1

UTILITY ASSETS LEGEND	
ELECTRICITY	— EU — EU —
COMMS TELEPHONE LINE	— T — T —
COMMS OPTICAL FIBRE	— OU — OU —
COMMS HOUSE CONNECTION	— TH — TH —
WATER MAIN	— W — W —
RECYCLED WATER MAIN	— WR — WR —
WATER HOUSE CONNECTION	— WH — WH —
LOW PRESSURE GAS	— G — G —
GAS HOUSE CONNECTION	— GH — GH —
SEWER MAIN	— S — S —
STORMWATER PIPE	— ST — ST —
OVERHEAD ELECTRICITY	— OH — OH —

- UTILITY MAPPING NOTES:
- Subsurface utility investigation was undertaken by Atlas Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.
  - Positions are based on Astrea Class A & B point surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may still exist.
  - This plan shows a representation of the dwg model. This model should be viewed in a cad environment to interpret this information.
  - This utility plan is valid for 28 days starting from the date of the issue, as underground utility works are often updated.
  - Electricity cables are not necessarily enclosed in conduits and are not necessarily covered with markers, tape or other indicators of their presence.
  - All services have been electronically traced in the field and are shown here for diagrammatic purposes only. Depths shown are approximate only and should be verified prior to works.
  - This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.
- SUBSURFACE UTILITY INFORMATION (SUI) AS488 LOCATION CLASS
- Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be managed.

**CLASS A:** Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a on-destructive excavation (pot holing) technique. The vertical information for this locating method is to the top or shallowest part of the located service. The 3D location is recorded by survey as an X, Y, Z coordinate.

**CLASS B:** Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sondes or flexi-trace, ground penetrating radar and acoustic pulse equipment. This is the most common form of utility locating and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, soil conditions and multiple banks of cables affecting the locating signal.

**CLASS C:** Information is collected by correlating the survey of visible utility surface features such as marker plates or water hydrants and acquired Dial-Before-You-Dig plans to "draw" a string which shows the approximate position of services. This method does not usually show multiple banks of cables and does not always show three dimensional information. Electrically traced locate marks with poor scratchy signals are represented as QL-C.

**CLASS D:** Information is the most basic level of utility locations using only information based on existing Dial-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should always be treated as an indication of the presence of a service only and should not be used for design. GPR scans are also represented as QL-D as the GPR image cannot be confirmed to its origin point. Depths on GPR scan must be treated as indicative only.

GENERAL SURVEY LEGEND:

DP - DRAINAGE PIT  
DJM - DRAINAGE JUNCTION MANHOLE  
PSM - SEWER MANHOLE  
PWV - HYDRANT  
PVS - STOP VALVE  
PQL - GULLY PIT  
PQM - GAS MARKER  
POT - GAS TEST POINT  
PPL - POWER POLE  
PTSP - TELSTRA PIT  
TK - TOP OF KERB  
PO - PRAM RAMP  
PP - FOOTPATH  
LP - LIP OF GUTTER  
DW - DRIVEWAY

RENDERED TO DETECTION QUALITY LEVEL  
TNA 0.4 A100  
33 15

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GENERAL SURVEY NOTES:

- THIS TITLE BLOCK IS AN INTEGRAL PART OF THIS DWG AND SHOULD NOT BE REMOVED
- COORDINATE SYSTEM MGA 2020
- LEVEL DATUM IS AHD
- IT IS THE RESPONSIBILITY OF ANY USER OF THIS DATA TO ENSURE ANY OTHER DATA BEING INTEGRATED IS ON THE SAME COORDINATE SYSTEM
- REFER TO THE FACE OF THE PLAN FOR TITLE NOTATIONS
- DESKTOP EXERCISE ONLY
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- NO BOUNDARIES HAVE BEEN DEFINED BY SURVEY

SCALE 1:1000

0 10 20 30 40 50 60 70 80 90 100

ORIGIN  
ORIENTATION  
AHD ORIGIN

GDA 2020

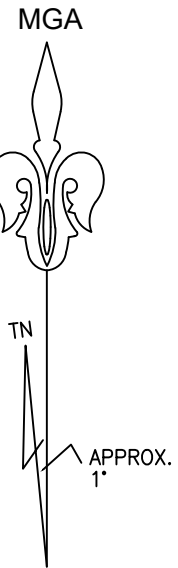
CLIENT : SCHOOLS INFRASTRUCTURE
PLAN IN RELATION TO : JORDAN SPRINGS
SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING IN ACCORDANCE WITH AS4588.1-2019
PURPOSE: ENGINEERING DESIGN
SHEET 01 OF 09

DIGITAL SURVEY SOLUTIONS  
UTILITY MAPPING

SUITE 6.01, TRINITY II, TRINITY BUSINESS PARK  
39 DELHI ROAD, NORTH RYDE 2113  
SCOTT DEVERIDGE 0425 285 270  
www.astrea.com.au

**Astrea**

JOB REFERENCE : A4307	I/D 7453
DWG No.: A4307 - TOPO&UTIL	
SURVEYOR: BD	SCOTT DEVERIDGE
DATE OF SURVEY: APR 2024	REGISTERED LAND SURVEYOR
UTILITY LOCATOR: TH	UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002
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REV	AMENDMENTS
	DATE







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COMMS HOUSE CONNECTION	— TH — TH —
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RECYCLED WATER MAIN	— WR — WR —
WATER HOUSE CONNECTION	— WH — WH —
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GAS HOUSE CONNECTION	— GH — GH —
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PWHV - HYDRANT  
PWSV - STOP VALVE  
PQUL - GULLY PIT  
PGPM - GAS MARKER  
PGTF - GAS TEST POINT  
PPPL - POWER POLE  
PTSP - TELSTRA PIT  
TK - TOP OF KERB  
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REFERENCE TO DETECTION QUALITY LEVEL:  
CLASSIFICATION OF SERVICES & SUI  
TNA 0.4 A100  
33.15

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**SCALE 1:200**

0 5 10 15 20

**GDA 2020**

ORIGIN  
ORIENTATION  
AHD ORIGIN

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PLAN IN RELATION TO : JORDAN SPRINGS
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SHEET 02 OF 09

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UTILITY LOCATOR: TH	
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REV	AMENDMENTS
	DATE









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**SCALE 1:200**

**GDA 2020**

ORIGIN  
ORIENTATION  
AHD ORIGIN

**CLIENT : SCHOOLS INFRASTRUCTURE**

**PLAN IN RELATION TO : JORDAN SPRINGS**

**SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING IN ACCORDANCE WITH AS4588.1-2019**

**PURPOSE: ENGINEERING DESIGN**

**SHEET 04 OF 09**

**DIGITAL SURVEY SOLUTIONS UTILITY MAPPING**

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39 DELHI ROAD, NORTH RYDE 2113  
SCOTT DEVERIDGE 0425 285 270  
www.astrea.com.au

**ASTREA**

**JOB REFERENCE : A4307**  
DWG No.: A4307-TOP&UTIL  
SURVEYOR: BD  
DATE OF SURVEY: APR 2024  
UTILITY LOCATOR: TH

**SCOTT DEVERIDGE**  
REGISTERED LAND SURVEYOR  
UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002

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REV	AMENDMENTS	DATE





A1

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ELECTRICITY	— EU — EU —
COMMS TELEPHONE LINE	— T — T —
COMMS OPTICAL FIBRE	— OU — OU —
COMMS HOUSE CONNECTION	— TH — TH —
WATER MAIN	— WR — WR —
RECYCLED WATER MAIN	— WR — WR —
WATER HOUSE CONNECTION	— WH — WH —
LOW PRESSURE GAS	— GH — GH —
GAS HOUSE CONNECTION	— GH — GH —
SEWER MAIN	— S — S —
STORMWATER PIPE	— S — S —
OVERHEAD ELECTRICITY	— OH — OH —

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REFERENCE TO DETECTION QUALITY LEVEL:  
TNA 0.4 A100  
33.15

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SCALE 1:200

0 5 10 15 20

GDA 2020

ORIGIN  
ORIENTATION  
AHD ORIGIN

CLIENT : SCHOOLS INFRASTRUCTURE

PLAN IN RELATION TO : JORDAN SPRINGS

SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING IN ACCORDANCE WITH AS4588.1-2019

PURPOSE: ENGINEERING DESIGN

SHEET 05 OF 09

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JOB REFERENCE : A4307  
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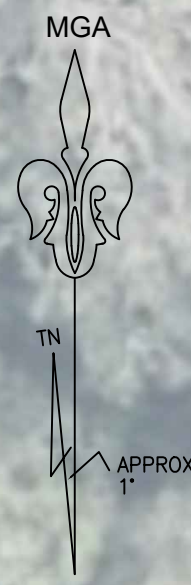
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REV AMENDMENTS DATE





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**REFERENCE TO DETECTION QUALITY LEVEL:**  
CLASSIFICATION OF DETECTION QUALITY LEVEL  
CLASS A: 0.4 A100  
CLASS B: 0.4 A100  
CLASS C: 0.4 A100  
CLASS D: 0.4 A100

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JOB REFERENCE : **A4307**  
DWG No.: A4307-TOP&UTIL

SURVEYOR: BD

DATE OF SURVEY: APR 2024

UTILITY LOCATOR: TH

I/D **7453**

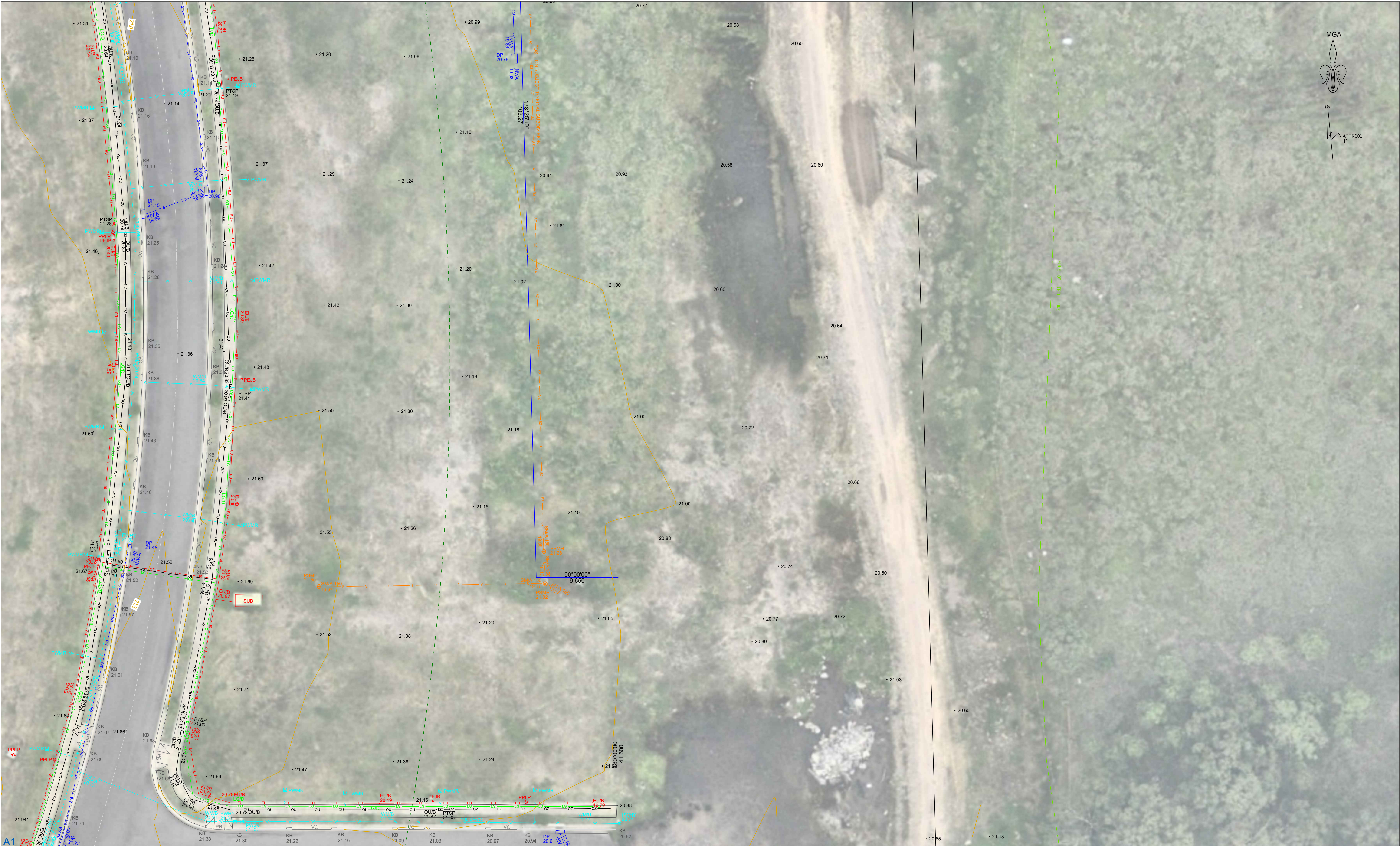
**SCOTT DEVERIDGE**  
REGISTERED LAND SURVEYOR  
UNDER THE SURVEYING AND SPATIAL INFORMATION ACT, 2002

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REV	AMENDMENTS	DATE







UTILITY ASSETS LEGEND

ELECTRICITY

— EU — EU —

COMMS TELEPHONE LINE

— T — T —

COMMS OPTICAL FIBRE

— OU — OU —

COMMS HOUSE CONNECTION

— TH — TH —

WATER MAIN

— WR — WR —

RECYCLED WATER MAIN

— WR — WR —

WATER HOUSE CONNECTION

— WH — WH —

LOW PRESSURE GAS

— GH — GH —

GAS HOUSE CONNECTION

— GH — GH —

SEWER MAIN

— S — S —

STORMWATER PIPE

— S — S —

OVERHEAD ELECTRICITY

— OH — OH —

UTILITY MAPPING NOTES:

1. Subsurface utility investigation was undertaken by Astrea Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.

2. Positions are based on Astrea Class A & B point surface indicator(s) located during field survey. Confirmation of the exact position should be made to the relevant authorities prior to any excavation work. Other services may still exist.

3. This plan shows a representation of the dwg model, this model should be viewed in a cadd environment to interpret this information.

4. This utility plan is valid for 28 days starting from the date of the issue, as underground utility works are often updated.

5. Electricity cables are not necessarily enclosed in conduits and are not necessarily covered with markers, tape or other indicators of their presence.

6. All services have been electronically traced in the field and are shown here for diagrammatic purposes only. Depths shown are approximate only and should be verified prior to works.

7. This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, we cannot guarantee that the plan is without flaw of any kind.

SUBSURFACE UTILITY INFORMATION (SUI) ASS488 LOCATION CLASS

Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be managed.

CLASS A: Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a on-destructive excavation (pot holing) technique. The vertical information for this locating method is to the top or shallowest part of the located service. The 3D location is recorded by survey as an X, Y, Z coordinate.

CLASS B: Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sondes or flexi-trace, ground penetrating radar and acoustic pulse equipment. This is the most common form of utility locating and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, soil conditions and multiple banks of cables affecting the locating signal.

CLASS C: Information is collected by correlating the survey of visible utility surface features such as marker plates or water hydrants and acquired Dial-Before-You-Dig plans to "draw" a string which shows the approximate position of services. This method does not usually show multiple banks of cables and does not always show three dimensional information. Electronically traced locate marks with poor scratchy signals are represented as QL-C.

CLASS D: Information is the most basic level of utility locations using only information based on existing Dial-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should always be treated as an indication of the presence of a service only and should not be used for design. GPR scans are also represented as QL-D as the GPR image cannot be confirmed to its origin point. Depths on GPR scan must be treated as indicative only.

GENERAL SURVEY LEGEND:

DP - DRAINAGE PIT

FQJM - DRAINAGE JUNCTION MANHOLE

PSMH - SEWER MANHOLE

PWHY - HYDRANT

PWSV - STOP VALVE

PQUL - GULLY PIT

POPM - GAS MARKER

POTTF - GAS TEST POINT

PPLP - POWER POLE

PTSP - TELSTRA PIT

TK - TOP OF KERB

LP - LIP OF GUTTER

PP - FOOTPATH

DW - DRIVEWAY

GENERAL SURVEY NOTES:

• THIS TITLER BLOCK IS AN INTEGRAL PART OF THIS DWG AND SHOULD NOT BE REMOVED

• COORDINATE SYSTEM MGA 2020

• LEVEL DATUM IS AHD

• IT IS THE RESPONSIBILITY OF ANY USER OF THIS DATA TO ENSURE ANY OTHER DATA BEING INTEGRATED IS ON THE SAME COORDINATE SYSTEM

• REFER TO THE FACE OF THE PLAN FOR TITLE NOTATIONS

• DESKTOP EXERCISE ONLY

• THE SITE HAS NOT BEEN VISITED

• NO BOUNDARIES HAVE BEEN DEFINED BY SURVEY

SCALE 1:200

0 5 10 15 20

ORIGIN

ORIENTATION

AHD ORIGIN

CLIENT : SCHOOLS INFRASTRUCTURE

PLAN IN RELATION TO : JORDAN SPRINGS

SHOWING : TOPOGRAPHICAL SURVEY AND UTILITY MAPPING IN ACCORDANCE WITH AS4588.1-2019

PURPOSE: ENGINEERING DESIGN

SHEET 07 OF 09

DIGITAL SURVEY SOLUTIONS

UTILITY MAPPING

SUITE 6.01, TRINITY II, TRINITY BUSINESS PARK  
39 DELHI ROAD, NORTH RYDE 2113  
SCOTT DEVERIDGE 0425 285 270  
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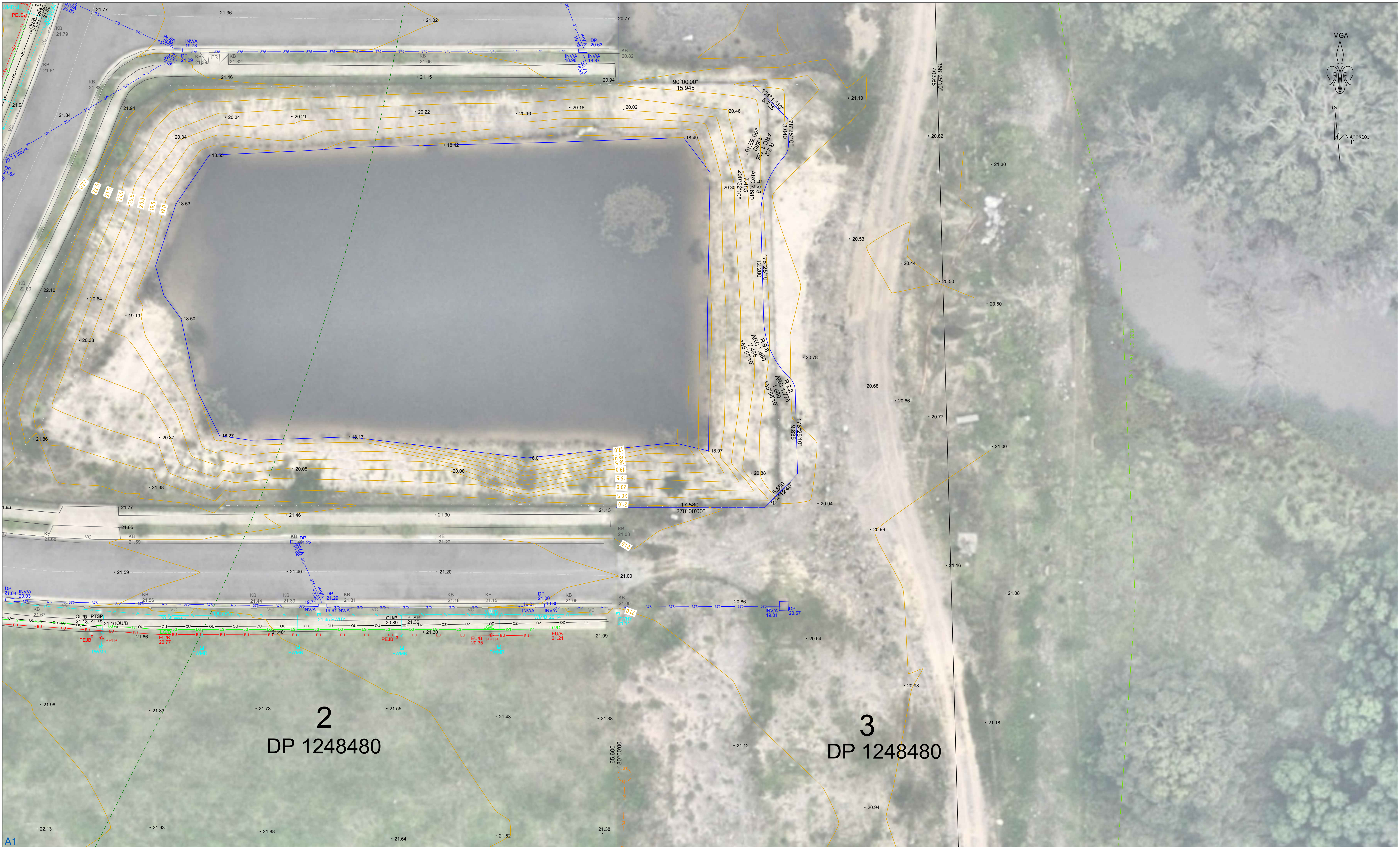
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**UTILITY ASSETS LEGEND**

**ELECTRICITY**

—EU—EU—

**COMMS TELEPHONE LINE**

—T—T—

**COMMS OPTICAL FIBRE**

—OU—OU—

**COMMS WATER CONNECTION**

—TH—TH—

**WATER MAIN**

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**RECYCLED WATER MAIN**

—WH—WH—

**WATER HOUSE CONNECTION**

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—S—S—

**STORMWATER PIPE**

—S—S—

**OVERHEAD ELECTRICITY**

—OH—OH—

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1. Subsurface utility investigation was undertaken by Atria Pty Ltd, the plan is to be read in conjunction with the subsurface utility investigation report.

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