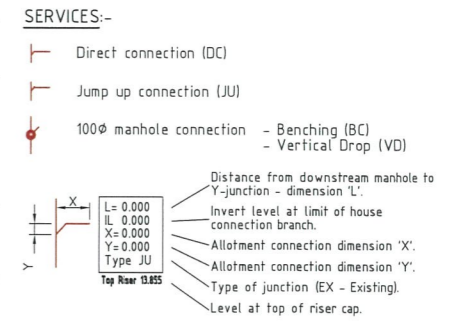
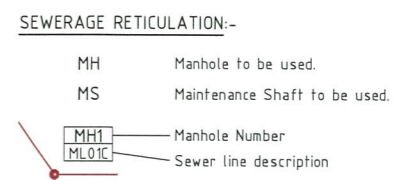
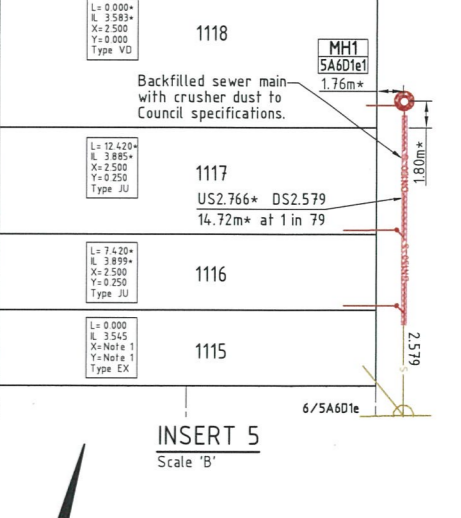
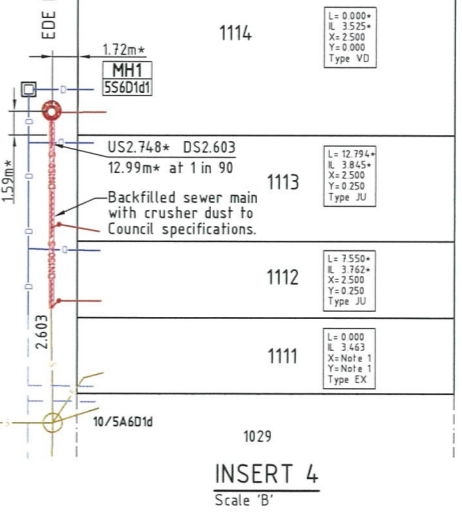
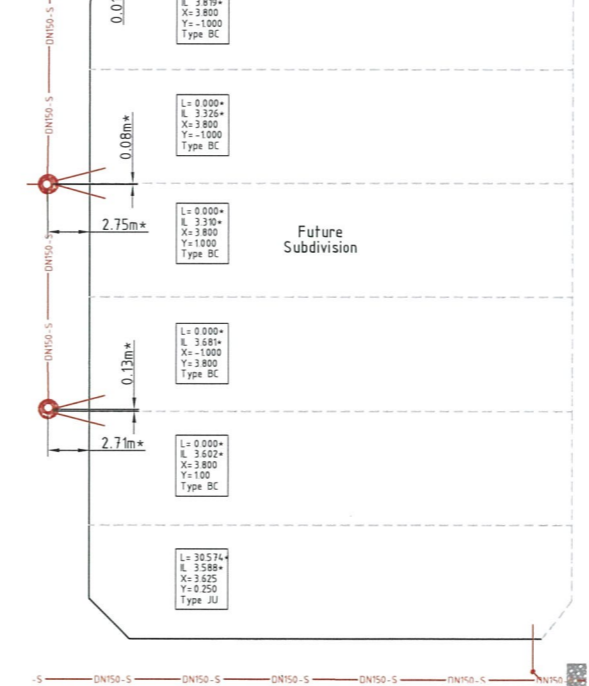
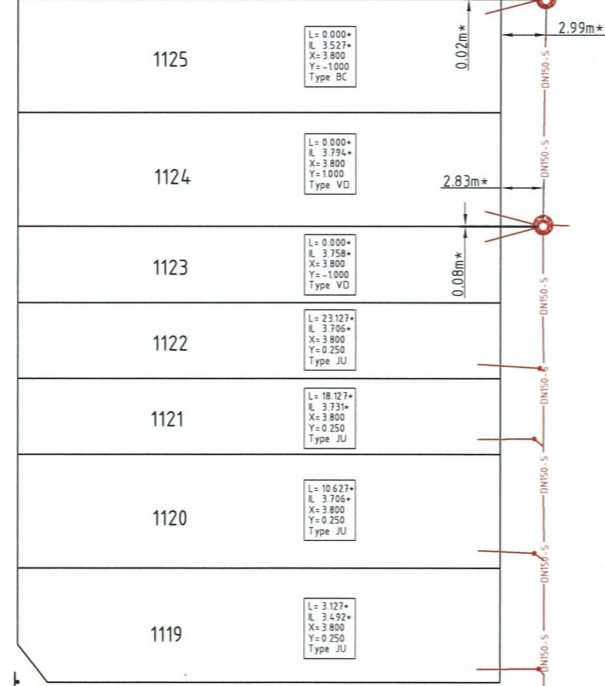
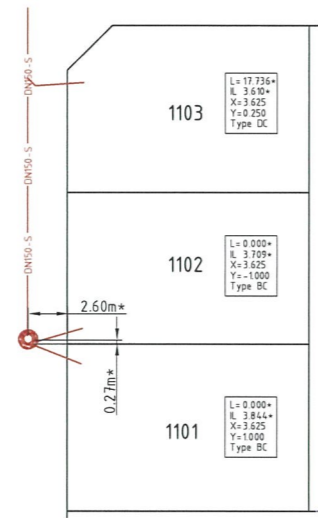


- NOTES:**
1. House connection X&Y dimensions as per Council Standard drawings.
 2. All sewer manholes are 1050φ as per Council details U.N.O.
 3. All sewer manhole tops are type 2 class 'D' bolt down covers U.N.O.
 4. All 225φ & 150φ sewer mains & fittings uPVC class SN8.
 5. All 100φ sewer mains & fittings uPVC class SN10.
 6. Cored connection to maintenance shaft as per Council Standard drawing SD-411.
 7. Road crossings backfilled with crusher dust to underside of pavement.
 8. Manholes 1/5A6D1d1 & 1/5A6D1e1 have Class 'D' bolt down access lid and finished flush with concrete slab.
 9. Refer to 29060/730 & 731 for sewer details.
 10. All sewerage mains are located on 2.625m ±0.1m alignment offset from the property boundary. U.N.O.



LAYOUT PLAN
Scale 'A'

- LEGEND**
- Existing RP boundary.
 - Top of batter.
 - Toe of batter.
 - Change of grade.
 - DN150 uPVC SN8 sewer main.
 - DN225 uPVC SN8 sewer main.
 - Sewer manhole.
 - DN100 uPVC PN16 water main.
 - DN150 uPVC PN16 water main.
 - OD63 PN16 poly water main.
 - Stormwater drain line.
 - Subsoil drainage.
 - Existing stormwater drain line.
 - Existing subsoil drainage.
 - Existing sewer main.
 - Existing sewer manhole.
 - Existing water main.
 - Existing poly water main.



AS CONSTRUCTED
Northern Consulting Engineers hereby certify that the works shown on the as constructed drawing reflect any changes that were made during the course of construction.

Derek Robert Conley Saw RPEQ 7363 Date:

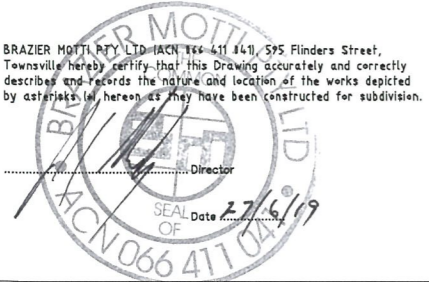
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A	24/06/19	AS-CONSTRUCTED ISSUE	
B	27/06/19	HOUSE CONNECTIONS UPDATED	

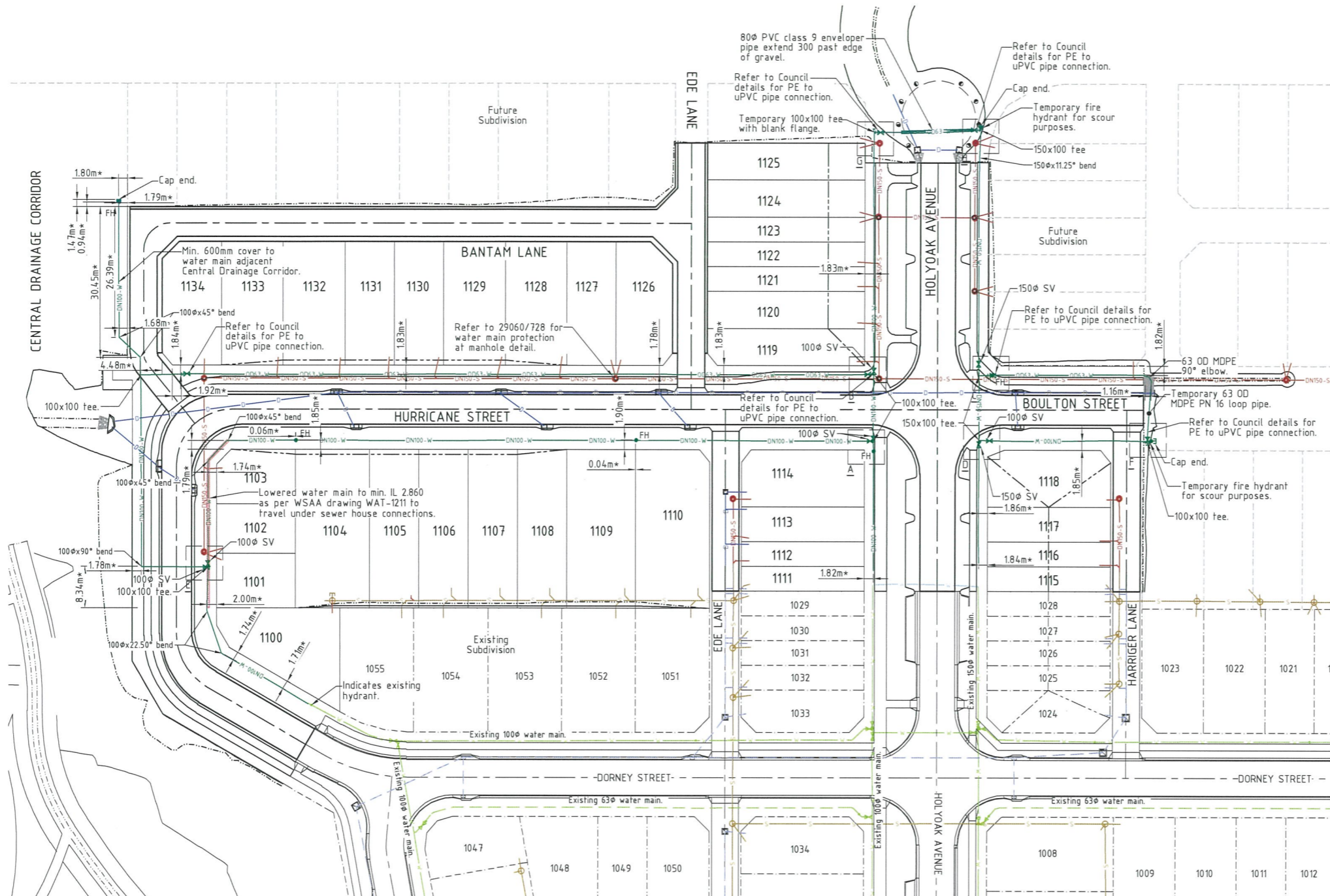
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 Contour Interval:
 Job No: 29060-118-01
 File No: 29060_729B.dwg
 Surveyed by: BM
 Drawn: MIM
 Approved:

CLIENT: ECONOMIC DEVELOPMENT QUEENSLAND
Project: THE VILLAGE - STAGE 11
 HOLYOAK AVENUE - OONOOMBA
 SEWERAGE RETICULATION PLAN
 Parish of: ... County of: ...
 Local Authority: Townsville City Council
 Locality: Townsville

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1300 267 878
 www.braziermott.com.au
 Date: 24th June, 2019
 Sheet 1 of 1 Sheets
 Scale: AS SHOWN
 Plan No: 29060/729 B
 Surveying | Town planning | Project management | Mapping and GIS





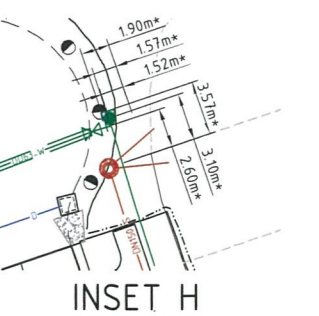
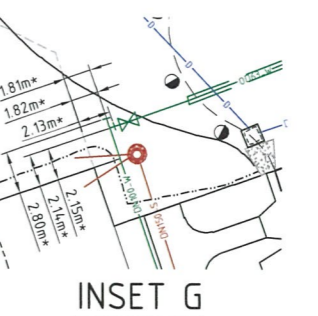
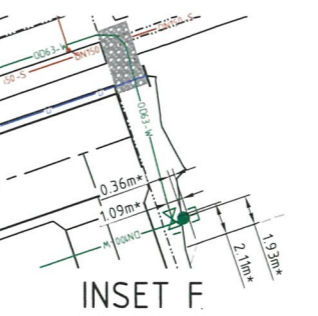
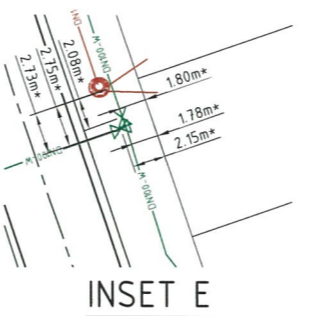
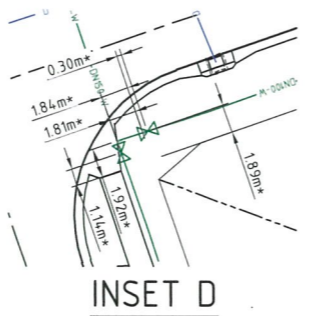
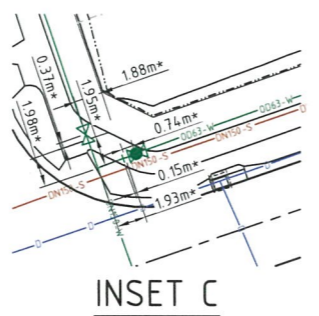
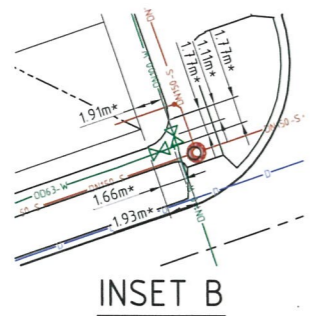
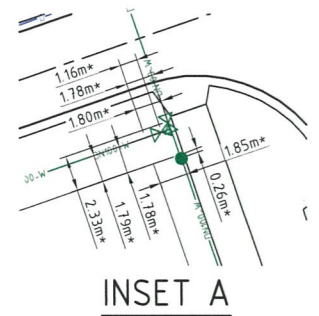
- ### LEGEND
- - - Existing RP boundary.
 - Top of batter.
 - Toe of batter.
 - Change of grade.
 - DN150-S - DN150 uPVC SN8 sewer main.
 - DN225-S - DN225 uPVC SN8 sewer main.
 - DN100-W - DN100 uPVC PN16 water main.
 - DN150-W - DN150 uPVC PN16 water main.
 - OD63-W - OD63 PN16 poly water main.
 - Stormwater drain line.
 - Existing stormwater drain line.
 - Existing sewer manhole.
 - Existing sewer manhole.
 - Existing water main.
 - Existing poly water main.

- ### NOTES:
1. Water mains are constructed on a 1.8m ±100mm alignment from property boundaries unless shown otherwise.
 2. All uPVC & PE water mains & fittings are Class 16 cast iron outside diameter compatible unless shown otherwise.
 3. Cover to water mains are as follows:
 - 450mm min. general
 - 600mm min. under roads & open drains.
 - At valve locations the water main lowered to obtain required cover to valve.
 4. Road crossings backfilled with crusher dust to underside of pavement.
 5. All fittings socket end unless shown otherwise.
 6. Valves & hydrants located directly opposite property boundary pegs unless shown otherwise.
 7. uPVC pipe may be deflected to achieve minor alignment changes in property boundaries. For maximum deflections refer to manufacturer's specification.
 8. Refer to W.S.A.A. standard drawings WAT-1205 & 1207 for sizes & requirements for all thrust blocks.
 9. Refer to 29060/728 for water main protection at manhole detail at sewer manholes.

- ### WATER RETICULATION:-
- FH Fire Hydrant.
 - SV Stop Valve.



LAYOUT PLAN



AS CONSTRUCTED
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Date: 27/06/19
 Derek Robert Conley Saw RPEQ 7363

No.	Date	Details	Check
A	24/06/19	AS-CONSTRUCTED ISSUE	
B	27/06/19	INSET F UPDATED	

Level Datum: AHD (DERIVED)
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 Meridian:
 Map Reference:
 Contour Interval:
 Job No: 29060-118-01
 File No: 29060_7328.dwg
 Surveyed by: BM

CLIENT: **ECONOMIC DEVELOPMENT QUEENSLAND**
 Project: **THE VILLAGE - STAGE 11
 HOLYOAK AVENUE - OONOOMBA
 WATER RETICULATION PLAN**
 Parish of: _____ County of: _____
 Local Authority: Townsville City Council Locality: Townsville

Scale 1:500 @ A1

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 1300 267 878 Date: 24th June, 2019
 www.braziermotti.com.au Sheet: 1 of 1 Sheets
 TOWNVILLE | AYR Scale: AS SHOWN
 CAIRNS | MACKAY Plan No: 29060/732 B
 surveying | town planning | project management | mapping and GIS

Director
 Date: 27/06/19