REPORT

Tonkin+Taylor

Civil Preliminary Design Report

188 Beaumont Street, Westhaven

Prepared for
Westhaven Residential Limited Partnership
Prepared by
Tonkin & Taylor Ltd
Date
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Job Number
1098609 v5

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Executive summary

Key Consideration	Key Outcome
Stormwater	The pre and post development site are both considered fully impervious. The only increase to stormwater flow into the network from the proposed development is from the impact of future climate change. Post-development flow is estimated at 115 L/s for a 1 in 10-year ARI event with a 2.1°C climate change allowance applied as required in the Auckland Council Stormwater Code of Practice (an increase of 17 L/s from pre-development flows of 98 L/s). The existing network has adequate capacity to service the development (including in a 2.1°C future climate change scenario). This approach was confirmed as acceptable by Healthy Waters at the pre-application meeting on 24 November 2025. Two stormwater connections are proposed to the existing public network on Jellicoe Street. The existing 300mm connection will be retained (conveying approximately 38 L/s to the 600mm main). A new 300mm connection to the 750mm main will be installed (conveying approximately 77 L/s). The connections will have non-return valves to prevent tidal ingress. A perimeter pipe (225mm PVC-U) is proposed along the eastern boundary to collect runoff from the canopies and threshold drains, and subsoil drainage is proposed for the western landscaped area. The development complies with Auckland Council NDC Schedule 4 requirements for Brownfield small sites, as the total developed area is less than 5000m^2 and 20 lots. Stormwater treatment requirements for a Brownfields small site that are not discharging to a degraded environment is limited to gross pollutant traps for waste storage areas, which will drain to the wastewater network in this site. There are no uncovered high contaminant generating areas for this site and therefore stormwater treatment is not required. Stormwater attenuation is not required as there is not a material increase in imperviousness and associated runoff, and the site is not within a SMAF overlay area. This approach was agreed with Healthy Waters in the pre-application meeting of 24 November 2025.
Wastewater	Watercare's feedback on the referral application identified that there is a potential capacity constraint in the public main where the 300mm pipe reduces to 150mm. Preliminary CCTV investigations and a site visit suggest there is not a capacity constraint as a 300mm pipe, not on Watercare's records, runs immediately adjacent to the 150mm pipe with shared manholes. Watercare has advised that the project must survey and CCTV inspect the parallel lines to confirm if the 300mm and 150mm pipes have capacity to accommodate the development. If the 300mm pipe does not have capacity to accommodate the development, WRLP will implement an appropriate solution (such as a diversion or upgrade) in consultation with Watercare, which will be conducted at the next stage of design. WRLP is proposing conditions of consent requiring the CCTV and survey investigation prior to construction and that there must be operational wastewater infrastructure with sufficient capacity to service the development. The project will increase wastewater discharge from the site. Peak wet weather flow is estimated at 6.9 L/s (comprising 6.2 L/s domestic and 0.7 L/s retail). The two existing wastewater connections to Jellicoe Street will be retained: 150mm diameter PVC-U (western connection carrying 1/3 of flow) and 225mm diameter VC (eastern connection carrying 2/3 of flow).
Water Supply	Watercare confirmed at the pre-application meeting on 24/11/2025 that the existing water network has adequate capacity to service the development. Peak potable water demand is estimated at 7.4 L/s (6.8 L/s residential and 0.5 L/s retail). The fire flow demand is 55 L/s for the combined sprinkler and hydrant system. Three new connections are proposed to the existing 250mm ductile iron water main on Jellicoe Street: two 40mm connections for retail potable supply, and one 150mm combined connection for residential potable water and fire supply. All connections will be PE100 SDR13.6 with ductile iron fittings. Backflow preventers on the 150mm connection will be located within the carpark.

	There are four hydrants within 100m of the site. Fire hydrant testing will be conducted at the next design stage to confirm the pressure available and associated storage requirements for the sprinkler and hydrant system within the building. A condition of consent is proposed to ensure this.
Dry Services	**Communications:** Chorus will service the development. A new pit is required outside to the property boundary on Jellicoe Street with a 100mm duct to the property boundary. **Gas:** Two 32mm gas connections are proposed for retail outlets from the existing MP4 network (50mm PE pipe) on Jellicoe Street. The project has engaged with Nova Energy and confirmed details in regard to the future gas connections. **Power:** A new 22kV power connection is proposed from Beaumont Street requiring two 150mm heavy duty PVC ducts (duct route within civil scope, installation by Vector). The existing LV connection within the site will be abandoned.

1 Introduction

1.1 Background and proposed development

This report has been prepared in relation to a substantive application submitted by Westhaven Residential Limited Partnership for a referred project under the Fast-track Approvals Act 2024 (FTAA) in respect of the 188 Beaumont Street project (the 'Project'). The Project is an urban development project in Auckland's city centre involving a residential-led mixed use building comprising approximately 210 residential apartments), ground floor retail and ancillary car parking. The location for the project is 188 Beaumont Street, Auckland Central.

My name is Andrew Hope. I confirm that, in my capacity as reviewer of this report, I have read and abided by the Environment Court of New Zealand's Code of Conduct for Expert Witnesses contained in the Practice Note 2023. I am a Principal Civil Engineer at Tonkin & Taylor Ltd (T+T), where my specialist areas include Civil Engineering Infrastructure Design. I have worked at T+T since 2008 and have 17 years of experience in civil engineering. I hold the following qualifications – BE(Hons), CPEng.

My name is Caitlin Cairncross. I confirm that, in my capacity as author of this report, I have read and abided by the Environment Court of New Zealand's Code of Conduct for Expert Witnesses, contained in the Practice Note 2023. I am a Senior Civil Engineer at Tonkin & Taylor (T+T), where my specialist area includes stormwater, wastewater, water supply and dry services infrastructure design. I have worked at T+T since 2015 and have 8 years of experience in civil engineering. I hold the following qualifications – BE(Hons), CPEng.

The site (LOT 1 DP 541270) is located at the corner of Jellicoe Street to the north, Beaumont Street to the east, Orams Boatyard and Marina to the south, and the coastal marine area to the west (refer Figure 1-1). The site is located on flat reclaimed land and is bordered by the sea along its western boundary where it immediately drops off into the harbour. The site is currently used as an at-grade non-accessory carpark.

Figure 1-1: Location of 188 Beaumont Street (boundary shown in red)

For a full set of architectural plans, refer to Warren and Mahoney's design documentation submitted

as part of the project application.

The current concept design proposal is summarised in Table 1-1 and illustrated in Figure 1-2 and Figure 1-3.

The total site area of the existing lot is 5,215m^2. A boundary adjustment will be conducted following the construction of the development to transfer some land from 188 Beaumont Street to the adjacent Orams Boatyard and Marina at 164 Beaumont Street. Following the boundary adjustment, the site area will be 4,937m^2 and therefore less than 5,000m^2.

Table 1-1: Summary of development. Sourced from WaM 188 Beaumont Street 100% Preliminary Design Report Rev A dated 19 December 2025

Structure Name	Ground Flood Area (m^2)	Residential Units	Commercial Floor Area (m^2)
Marina	4,483	18	337
Tower	19,126	126	0
Beaumont	8,189	66	287

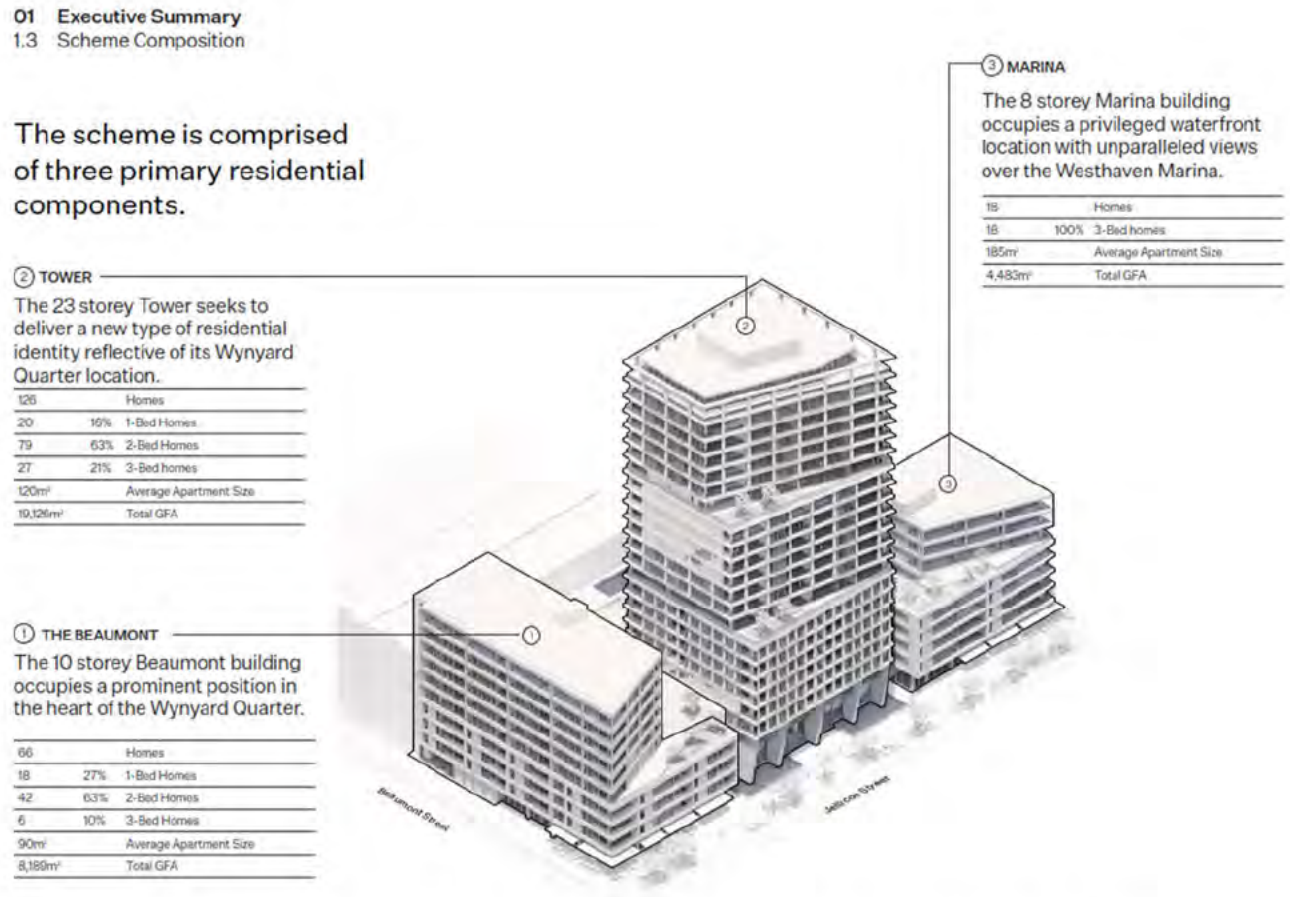

Figure 1-2: Development concept. Sourced from WaM 188 Beaumont Street 100% Preliminary Design Report Rev A dated 19 December 2025

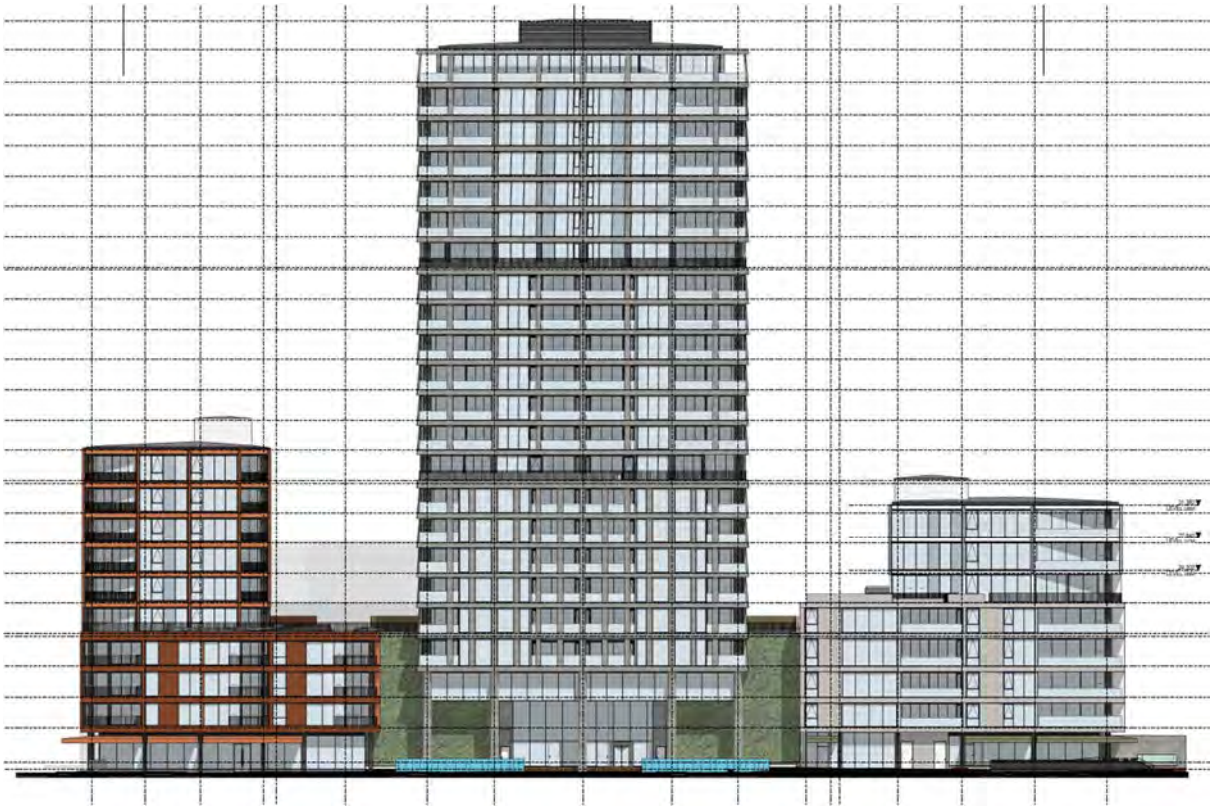

Figure 1-3: Typical long section profile. Sourced from WaM 188 Beaumont Street 100% Preliminary Design Appendix I Drawings Rev A dated 19 December 2025

T+T prepared an infrastructure assessment of the proposed development *Infrastructure assessment – 188 Beaumont Street, Westhaven (Job No: 1098609 v3)* which accompanied the referral application. This has been used to inform the preliminary design of civil services.

The proposed erosion and sediment controls and associated earthworks are reported on in T+T's report *Erosion and Sediment Control Plan – 188 Beaumont Street (1098609).*

The climate hazards assessment, including flooding from rainfall and coastal inundation, are reported on in T+T's report *188 Beaumont Street, Westhaven Coastal and flood hazard and risk assessment (1098609 v5).*

1.2 Summary of data collected

1.2.1 Infrastructure assessment data

- Information obtained from the Auckland Council (AC) GeoMaps[1] mapping service on the public stormwater, wastewater and water supply networks has been used to inform the wet services demand and capacity analysis and identify any relevant features in the network.
- Engagement has been conducted with Watercare, including receiving the initial feedback from the referral application and meetings on 21/11/2025 and 24/11/2025.
- Engagement has been conducted with Healthy Waters, including a pre-application meeting with Auckland Council on 24/11/2025

[1] Sourced from the Auckland Council link https://geomapspublic.aucklandcouncil.govt.nz/viewer/index.html, Viewer Release – 3.2.1.1 EXTERNAL (deployed 24 May 2016)

- Information from BeforeUDig was reviewed to identify features, limitations, layout, and supply of dry services (communications, power, and gas) to the Project site. This also informed the layout of services along Jellicoe Street and Beaumont Street.
- The following service providers were contacted: Chorus (by NDY) and Vector (by NDY) on the capacity of their existing networks and whether future upgrades were planned in the nearby vicinity.

The infrastructure assessment and preliminary design details for the proposed development are described in Sections 2 - 5.

2 Stormwater

2.1 Existing stormwater infrastructure

There are two separate existing stormwater networks within proximity of the site. The site is connected to the existing stormwater network on Jellicoe Street (north of the site). There is a stormwater network on Beaumont Street, which the site is not connected to. The existing networks can be seen in Figure 2-1.

The existing stormwater network north of the site is in the road carriageway of Jellicoe Street, directing stormwater westward. This network consists of 600 mm diameter concrete pipes that connect to a 750 mm diameter concrete pipe that discharges into the harbour.

At the northern boundary of the site there is an existing 300 mm diameter concrete pipe that serves as a connection to the site (SAP ID 3000220223) (refer to Pipe 5 in Figure 2-1). This existing 300 mm diameter concrete pipe connects to the existing Jellicoe Street network through an existing 1500 mm diameter manhole (MH 3000175264) (refer to Manhole 3 in Figure 2-1).

The stormwater network located east of the site consists of 300 mm diameter ceramic earthenware pipes which flows south down Beaumont Street. There is not a connection from the site to this network.

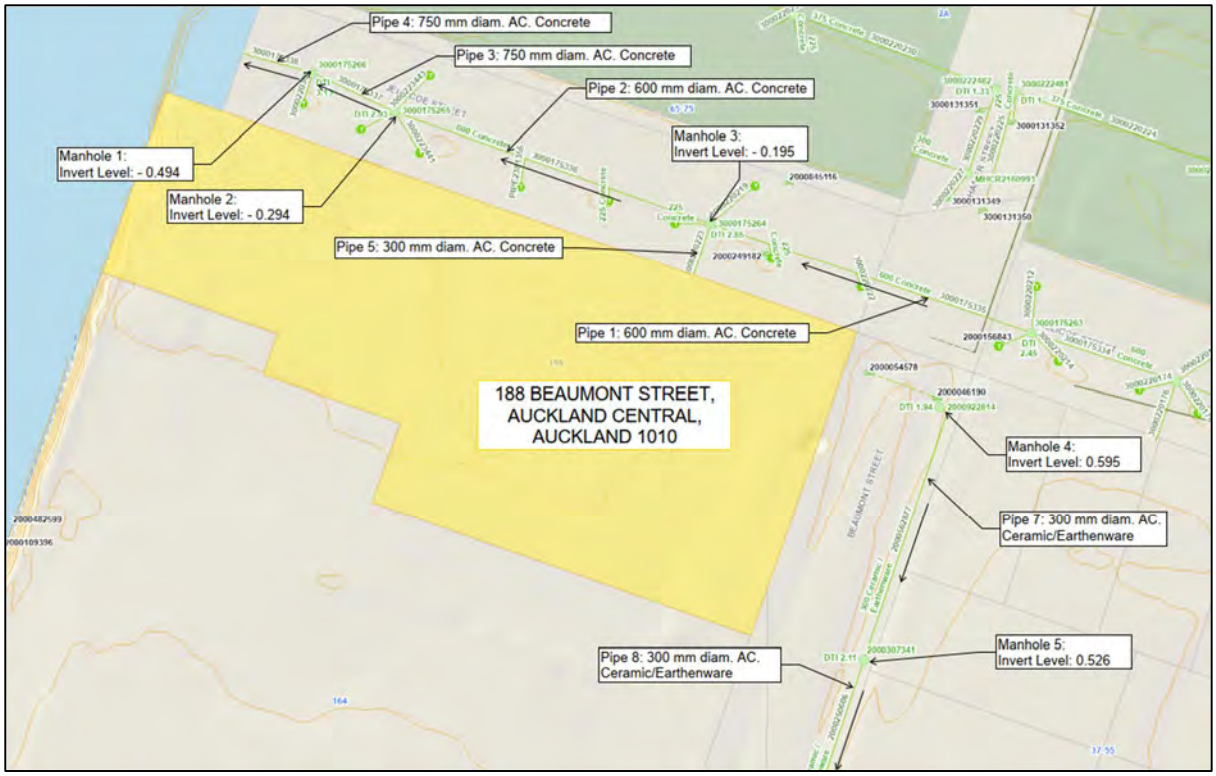

Figure 2-1: Existing stormwater networks in proximity of the site, existing lateral connections identified (sourced from Auckland Council GeoMaps).

For overall plans of the existing stormwater networks refer to Appendix C.

2.2 Existing runoff assessment

The site is currently occupied by a private open carpark with a parcel area of 5,215m^2. A boundary adjustment will be undertaken following construction to alter the boundaries between the Site with the adjoining Orams Marine site which will make the Site containing the development project smaller. The total developed area is 4,937m^2.

The site consists of predominately paved and sealed surfaces with an approximate 56 m^2 of permeable area of bare berm located at the eastern boundary of the site. The permeable area comprises approximately 1% of the total area and has been considered negligible for this assessment.

The stormwater runoff from the existing site has been estimated using the rational formula method. This has been estimated using Auckland Council's TP108 stormwater guideline[2] for a 1 in 10-year ARI storm event, in accordance with the design event for primary systems in the Auckland Council Stormwater Code of Practice[3].

The TP108 assessment has been conducted with the following assumptions:

- A weighted runoff curve number (CN) of 98 was adopted for the entirety of the site (i.e. 100% impervious).
- The rainfall data were retrieved from NIWA's High Intensity Rainfall Duration System (HIRDS).

[2] http://www.aucklandcity.govt.nz/council/documents/technicalpublications/TP108%20Part%20A.pdf
[3] https://www.aucklanddesignmanual.co.nz/content/dam/adm/adm-website/developing-infrastructure/infrastructure-codes-of-practice/chapter-4-stormwater/SWCoP%20V4%20Final%201%20July%202025.pdf

- Time of concentration is 10 minutes

The peak runoff from the site is presented in Table 2-1.

The stormwater runoff calculations can be found in Appendix B.

Table 2-1: Existing runoff assessment

Design ARI storm event	Pre-development demand (L/s)
1 in 10-year	98

2.3 Stormwater design flows

Given that the pre and post development scenarios are both considered fully impervious there is no increase to stormwater flow from the Project itself. The only increase to stormwater flow into the network from the proposed development is from the impact of future climate change.

A temperature increase of 2.1°C has been applied, in accordance with the allowances for climate change for the primary system specified in the Auckland Council Stormwater Code of Practice. The estimated runoffs from the site can be found below in Table 2-2. The flows in a 1 in 10-year ARI storm event is 115 L/s, which is an increase of 17 litres/second for the proposed development.

Table 2-2: Design runoff assessment

Design ARI Storm Event	Post-Development Demand 2.1°C climate adapted (L/s)
1 in 10-year	115

The effect of the development on flooding from rainfall is addressed in T+T's report *188 Beaumont Street, Westhaven Coastal and flood hazard and risk assessment (1098609 v5).*

2.4 Capacity assessment

The capacity assessment has been conducted with the following assumptions:

- Full flow capacity
- Pipe slope from Auckland Council Geomaps
- Mannings n of 0.013

The capacity of the 300 mm diameter stormwater connection pipe into the site is estimated to be 70 L/s (assumed slope of 0.53%). The existing stormwater pipe connection does not have adequate capacity to service the existing peak runoff (98 L/s) during a 1 in 10-year ARI storm event from the carpark site.

The capacity of the 600 mm diameter main pipe on Jellicoe Street is estimated to be 144.3 L/s (assumed slope of 0.055%). This pipe is constrained by the low slope shown in Auckland Council GeoMaps and the slope will be confirmed during the next design stage. This existing stormwater pipe does not have adequate capacity to convey the peak runoff of 98 L/s during a 1 in 10-year ARI storm event from the carpark site, as well the peak runoff (112 L/s) from the existing upstream catchment.

A summary of the existing stormwater network capacity is shown in Table 2-3 and Figure 2-2 below.

Figure 2-2: Existing stormwater network within proximity to site (sourced from Auckland Council GeoMaps)

Table 2-3: Existing stormwater network demand and capacity

#	Pipe ID	DN (mm)	Grade (%)	Capacity (L/s)	Upstream Demand (L/s)	Post Development Demand (L/s)	Spare Capacity (L/s)
1	3000175335	600	0.69	510	112	N/A	398
2	3000175336	600	0.06	144	112	115	-83
3	3000175337	750	0.14	410	112	115	183
4	3000175338	750	0.17	458	112	115	231
5	3000220223	300	0.53	70	N/A	115	-44

Minor surcharging may occur in pipes #2 and #5 resulting from the shallow grades shown in Auckland Council GeoMaps. Minor surcharging is unlikely to have material impact on the network's ability to convey flows from the development, as a 600mm pipe is appropriately sized for the catchment.

The existing stormwater network is considered to have adequate capacity to convey the runoff from the development. This approach, including minor surcharge, was agreed by Healthy Waters in the pre-application meeting of 6/11/2025 (refer Section 2.7 for details).

2.5 Proposed stormwater connections

The project is proposed to discharge to two stormwater connections. In general, the flow is to be distributed as far west as practicable to discharge to the existing 750 mm diameter pipe along Jellicoe Street and reduce the flow through the relatively flat 600 mm diameter pipe immediately upstream.

The existing 300mm diameter concrete connection to the relatively large 600 mm diameter pipe is proposed to be retained. Approximately 1/3rd of the stormwater runoff from the project is to be discharged to this connection (approx. 38 L/s).The 300mm pipe has capacity of 70 L/s (refer to Table 2-3 above) which is more than adequate to take the contributing development flow.

A new connection is proposed within the road corridor to connect to the manhole upstream of the existing 750mm diameter pipe (MH 300175265). The connection is to be a 300mm diameter Class 4 RCRRJ pipe at 1% minimum grade, with a full flow capacity of 96 L/s. Approximately 2/3^{rds} of the stormwater runoff from the project is to be discharged to this connection (approx. 77 L/s). If the existing manhole may not have space for a new connection pipe, it is proposed to install a new manhole on the connection pipe and reroute the existing catchpit connection to this manhole. The existing manhole is to be surveyed before detailed design to confirm if the additional manhole is required.

The existing stormwater network in Jellicoe Street is approximately 2.5m deep, and connections will pass beneath the building foundation.

It is not proposed to connect to the existing stormwater network in Beaumont Street.

Refer to Appendix A for the design drawings. Refer to NDY building services drawings for the stormwater network within the property boundary.

All stormwater connections will have a non-return valve installed within the downstream manhole to prevent tidal flows entering the connection pipe.

2.5.1 Perimeter pipe

A perimeter pipe is proposed along the eastern and north-eastern extents of the building to collect discharge from canopies and threshold drains. The channel drain for the carpark is proposed to be connected to the internal stormwater network and will not discharge to this pipe. Threshold drains within the property boundary will be addressed in the building services design.

The pipe is to be 225mm PVC-U with 1% grade. The pipe will be installed between the ground beam and the property boundary. It is noted that there are existing services adjacent to the property boundary which may require protection during pipe installation.

Service location (GPR and slot trench) will be required at the next design stage to confirm the pipe location.

The perimeter pipe is proposed to discharge to the eastern stormwater connection. A new manhole is proposed within the property boundary to connect to this pipe.

2.6 Stormwater management and treatment

Auckland Council holds the Regionwide Stormwater Network Discharge Consent (NDC), which authorises the diversion and discharge of stormwater from the current and future public stormwater network in the urban area. Stormwater diversion and discharge from development can be authorised under the council's consent if it meets the NDC requirements, instead of developers needing to obtain a private discharge consent[4].

Schedule 4 sets out the requirements under the NDC for varying development scales. The project classifies as a *Brownfields small* site as the site area (post boundary adjustment)it is less than 5000 m^2 and less than 20 lots, and the associated requirements are presented in Figure 2-3.

[4] https://www.aucklanddesignmanual.co.nz/en/developing-infrastructure/stormwater-network-discharge-consent-ndc.html

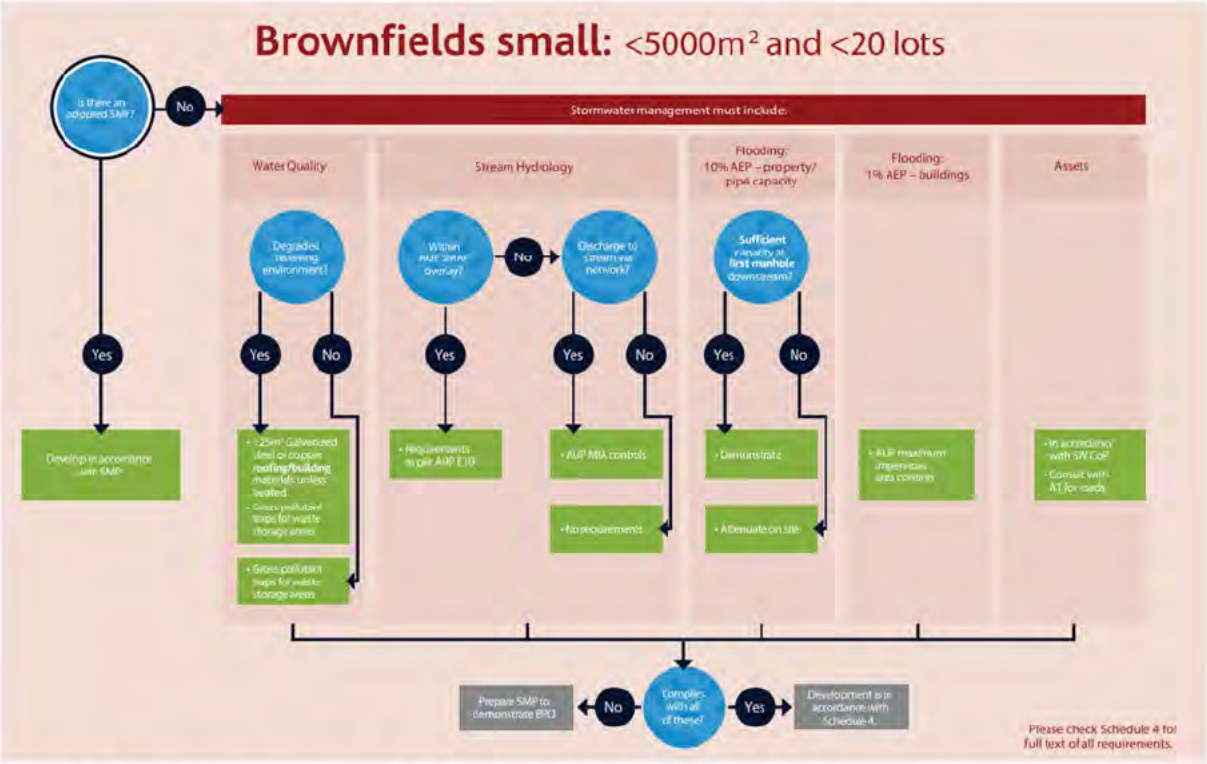

Figure 2-3: Requirements under the NDC for Brownfields small development[5]

Table 2-4: NDC Schedule 4 Brownfields small requirements for project

Stormwater management item	Development principle	Requirement
Water quality	Not degrade receiving environment	Gross pollutant traps (GPTs) for waste storage areas. Waste storage areas will discharge to the wastewater network, therefore stormwater treatment is not required. No treatment is required for the stormwater network as the site does not have high contaminant generating areas.
Stream hydrology	Not within AUP SMAF overlay Not discharging to stream via network	No requirements
Flooding (10% AEP – property/pipe capacity)	Is there sufficient capacity at first manhole downstream	Refer to Section 2.4 for network capacity. 750mm pipe has adequate capacity, noting discharge is two pipe sections from the outlet to sea. 600mm pipe is shown in GIS as very flat (0.05%) resulting in slightly less full pipe capacity than flow discharged to pipe, which may result in minor surcharging. This has been agreed with Auckland Council at the pre-application meeting as having minimal impact on the ability of the

[5] https://www.aucklanddesignmanual.co.nz/content/dam/adm/adm-website/developing-infrastructure/stormwater-network-discharge-consent-(ndc)/Healthy_Waters_NDC_Schedule_4-full_version%20(2).pdf

		public stormwater network to service this site (see Section 2.7). No attenuation requirements
Flooding – 1% AEP buildings	AUP maximum impervious area controls	Not applicable as site is not materially increasing in imperviousness
Assets	In accordance with SW CoP Consult with AT for roads	New connection pipes in road corridor to be in accordance with SW CoP Consultation with AT is required at the next design stage

The development complies with the requirements in Figure 2-3, and is in accordance with Schedule 4. As such, we understand that the site does not need a Stormwater Management Plan and this was agreed with Auckland Council at the pre-application meeting (refer Section 2.7).

2.6.1 Stormwater treatment

Under the Auckland Unitary Plan (AUP), treatment of stormwater runoff from High Contaminant Generating Activities (HCGAs) is required. HCGA's are land use activities that generate and discharge contaminants at a level where treatment will result in a substantial reduction in contaminant concentration and load. HCGAs are identified as:

- Parking areas and associated accessways that are exposed to rainfall and carry more than 50 vehicles per day[6].
- Building roofing, spouting, and external walls cladding and architectural features (with a surface area greater than 25 m^2) using materials with an:
  - Exposed surface or coating of metallic zinc or any alloy containing greater than 10% zinc.
  - Exposed surface or coating of metallic copper or any alloy containing greater than 10% copper.
  - Exposed treated timber surface or any roof material with a copper-containing or zinc-containing algaecide.

The proposed development does not include any uncovered parking or any of the above-mentioned building materials at this stage in design and therefore, treatment of stormwater runoff from the site is not required for the project.

2.7 Healthy Waters engagement

The project team met with Auckland Council and Healthy Waters representatives on 24/11/2025 for a preapplication meeting prior to lodgement of the substantive fast track application. The following was agreed in principle:

- The proposed stormwater management approach, as outlined in Section 2.6, is acceptable to Healthy Waters
- The proposed stormwater connections, as outlined in Section 2.5, are acceptable to Healthy Waters

2.8 Stormwater drainage of landscaped area

Tonkin and Taylor were requested to prepare the preliminary design of the stormwater drainage for the landscaped area west of the site.

[6] Auckland Council (August 2013), Auckland Unitary Plan – Stormwater Management Provisions, Technical Report 2013/035

Planted areas are to have subsoil drainage. The majority of planted areas are to be installed above existing ground, and the groundwater is expected to be contaminated (refer Williamson Water & Land Advisory Contamination report). The drains could be within the groundwater capillary fringe and there is a risk that they could collect contaminated groundwater.

At this stage of design, an impermeable liner is to be installed between subsoil drainage and the existing ground to prevent contaminated groundwater entering the stormwater system, as shown in Figure 2-4.

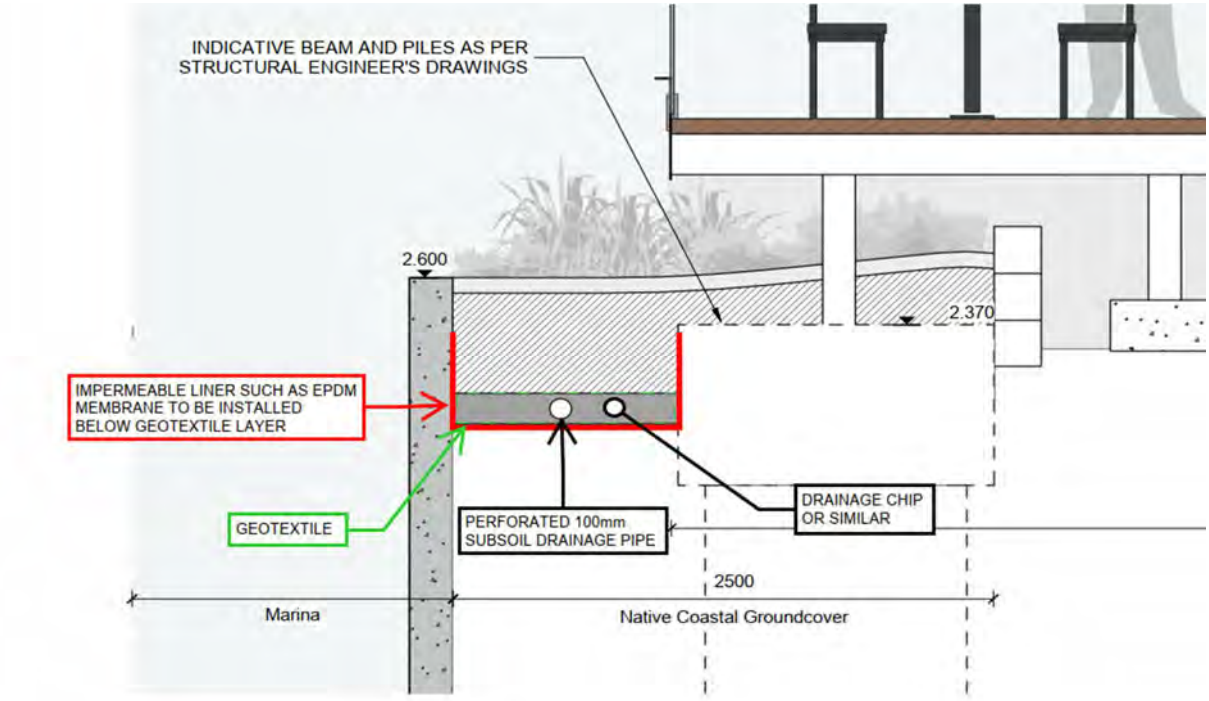

Figure 2-4: Preliminary design of subsoil drainage with impermeable liner

The decked area is expected to drain to a gravelled or concreted surface. The surface is to be shaped to discharge to two grated inlets beneath the decked area.

The concrete section is to spill to the coast. If this is not acceptable, the concrete slab is to be sloped to the east and a slot drain provided to collect runoff, such as ACO Drain KlassikDrain K100 Class B.

3 Wastewater

3.1 Existing wastewater network

A 225 mm vitrified clay (VC) wastewater network on Jellicoe Street carries flows east to a manhole at Jellicoe and Beaumont Streets, which also receives flow from Hammer Street to the north. There are two existing wastewater connections to the northern boundary of the site, a 150 mm diameter PVC-U pipe and a 225 mm diameter VC pipe.

From the manhole located at the intersection, the wastewater is directed further south down Beaumont Street through a 225 mm diameter VC then 300 mm diameter PVC-u pipe. The 300 mm diameter pipe discharges to a 150 mm diameter PVC-u pipe was identified by Watercare to have capacity constraints. Refer Section 3.4 for more detail.

The site plans for the existing wastewater network surrounding the site are presented in Figure 3-1 and Appendix C.

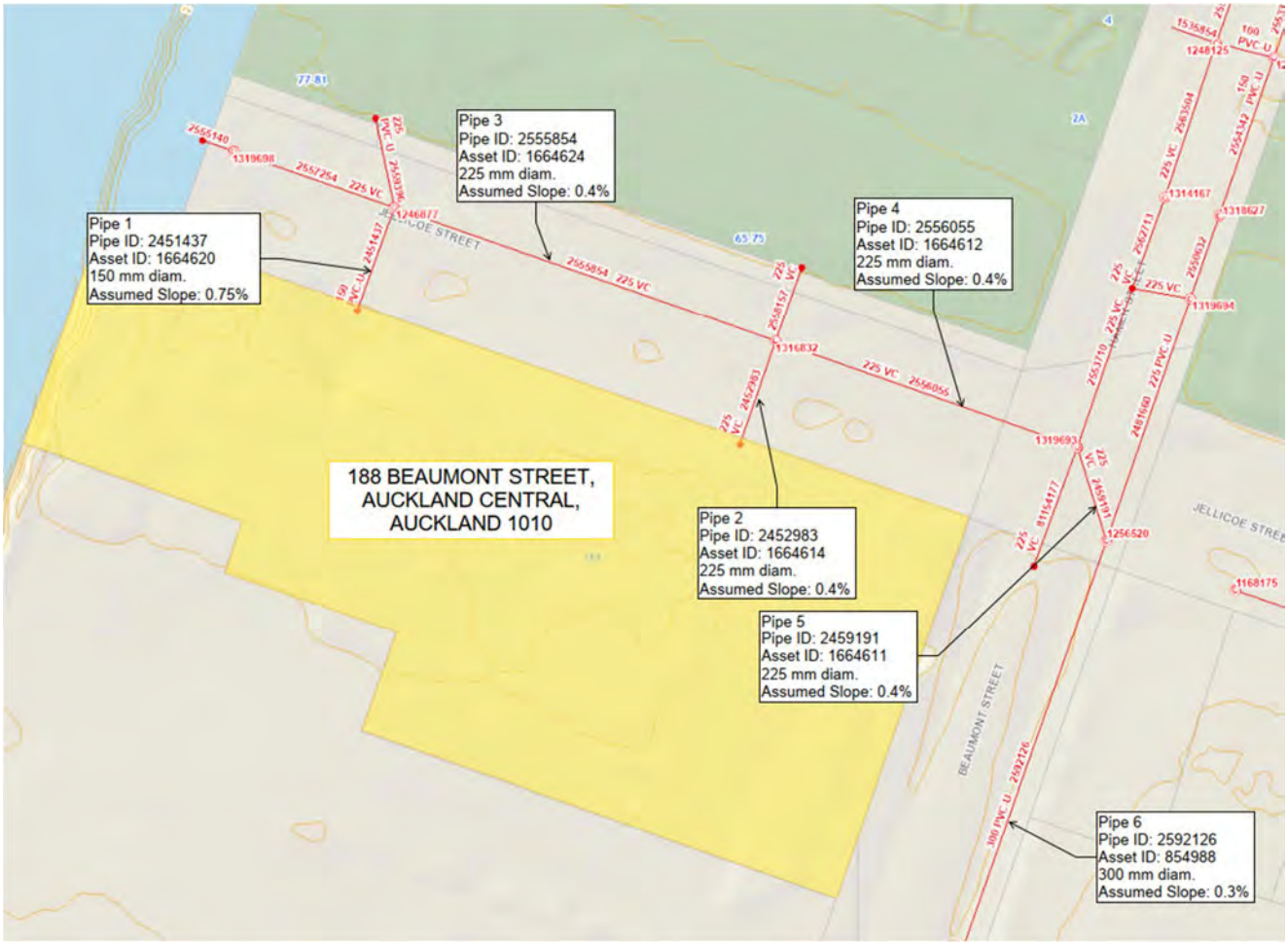

Figure 3-1: Existing wastewater network adjacent to the site (sourced from Auckland Council GeoMaps)

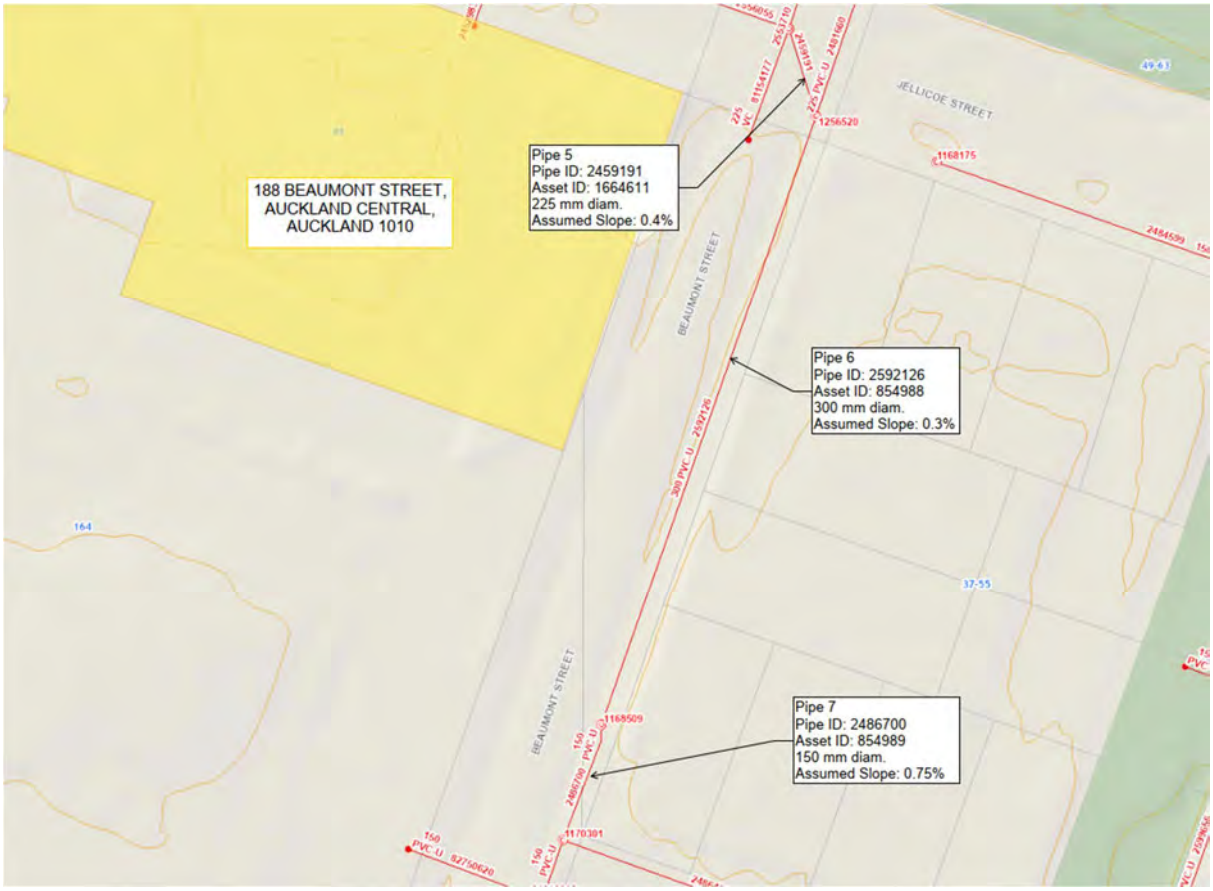

Figure 3-2: Downstream wastewater network (sourced from Auckland Council Geomaps)

3.2 Existing wastewater demands

Due to the current use of the site as a carpark, we have assumed that the existing site does not generate any wastewater flows.

A high-level capacity assessment of the existing upstream infrastructure was undertaken. The land use has been estimated from aerials and Google streetview, and the wastewater demands in accordance with Watercare Water and Wastewater Code of Practice for Land Development and Subdivision. Refer Section 3.4 for more detail.

3.3 Wastewater design flows

Wastewater demand for the proposed development was estimated based on floor plans and architectural drawings prepared by Warren and Mahoney Architects. Estimated flows are provided in Table 3-1 below and the calculations are presented in Appendix B.

The plans provided show a pool located on the fourth floor of the podium structure. This has not been included in wastewater generation calculations as there is not expected to be a continuous or regular discharge to the wastewater network.

Table 3-1: Wastewater demand estimates

	Average dry weather flow (ADWF) (L/s)	Peak dry weather flow (PDWF) (L/s)	Peak wet weather flow (PWWF) (L/s)	Discharge from fittings[7]
Domestic	1.2	3.7	6.2	15.4
Retail	0.1	0.2	0.7	N/A
Total	1.3	3.9	6.9	N/A

3.4 Capacity assessment

The capacity assessment has been conducted with the following assumptions:

- Full flow capacity
- Pipe slope from manhole invert levels in Watercare GIS, where available. Where this information is not available, the capacity has been assessed with the minimum pipe grade as per the Watercare Wastewater Code of Practice.
- Mannings n of 0.013

A summary of wastewater network capacity is presented in Table 3-2. The estimated post development demands are expected to constitute 44% of the overall capacity at the Jellicoe Street intersection (MH 1256520) with the upstream demand constituting 20%. Refer to Appendix B for wastewater calculations.

Table 3-2: Wastewater capacity assessment (upstream to downstream)

#	Pipe ID	Asset ID	Pipe diameter (mm)	Slope (%)	Full flow capacity (L/s)	Proposed development demand (L/s)	Upstream demand (L/s)	Spare capacity (L/s)
1	2451437	1664620	150	1.41	23.5	2.3	0	21.2
2	2452983	1664614	225	0.4*	14.8	4.6	0	10.2
3	2555854	1664624	225	0.54	17.2	2.3	0	14.9
4	2556055	1664612	225	0.56	17.5	2.9	0	10.5
5	2459191	1664611	225	0.4*	14.8	6.9	2.8	5.1
6	2592126	854988	300	0.28	66.5	6.9	2.8	56.8
7	2486700	854989	150	0.59	15.2	6.9	2.8	5.5

* Grade assumed as minimum slope required as per Section 5.3.5.5 of Watercare Wastewater Code of Practice, due to insufficient upstream and downstream invert values made available for these pipes from Watercare GIS.

The capacity assessment confirms that the existing public 225mm wastewater line within Jellicoe Street (pipes 3, 4 and 5), as well as its connection into the 300 mm diameter line (pipe 6) along Beaumont Street, is expected to be sufficient to accommodate wastewater flows generated by the proposed development.

Using the available pipe network data from Watercare's GIS and assumptions for wastewater generation for other users upstream in the network, the 150mm pipe downstream of the 300mm pipe is considered to have sufficient capacity for the proposed development. However, this is is highly dependent on the upstream wastewater discharge and asbuilt grade of the pipe, which will be surveyed by WRLP in accordance with the proposed conditions of consent. Watercare has identified that this pipe is a capacity constraint (refer Section 3.4.1).

[7] Email from J O'Sullivan, NDY to C Cairncross, T+T *RE: 188 Beaumont Civil – PD review,* sent 13/10/2025 3:20pm

3.4.1 Watercare engagement

Watercare provided commentary on the fast track referral application, which was received by the project team on 30/10/2025[8]. The assessment was based on an estimated PWWF demand of 8 to 9 L/s for residential and 1 L/s for commercial spaces. The feedback is included in Appendix D.

The assessment noted the following:

- Wynard Quarter generally has adequate wastewater capacity
- GIS analysis indicates a potential local constraint downstream of the proposed development. Specifically, the DN300 wastewater line (Asset ID: 854988) connects to a DN150 wastewater line (Asset ID: 854989) via wastewater manhole WWMH525170. The DN150 line continues southward beneath Beaumont Street. Based on current data in Watercare's local wastewater model (including flow data from upstream commercial sites not available to T+T), the DN150 wastewater line does not appear to have sufficient capacity to accommodate the proposed development.

The constraint identified is shown in Figure 3-3.

[8] Email from S Hussain, WSL, to A Hope, T+T, *RE: Development at 188 Beaumont Street*, sent 30/10/2025 8:55am

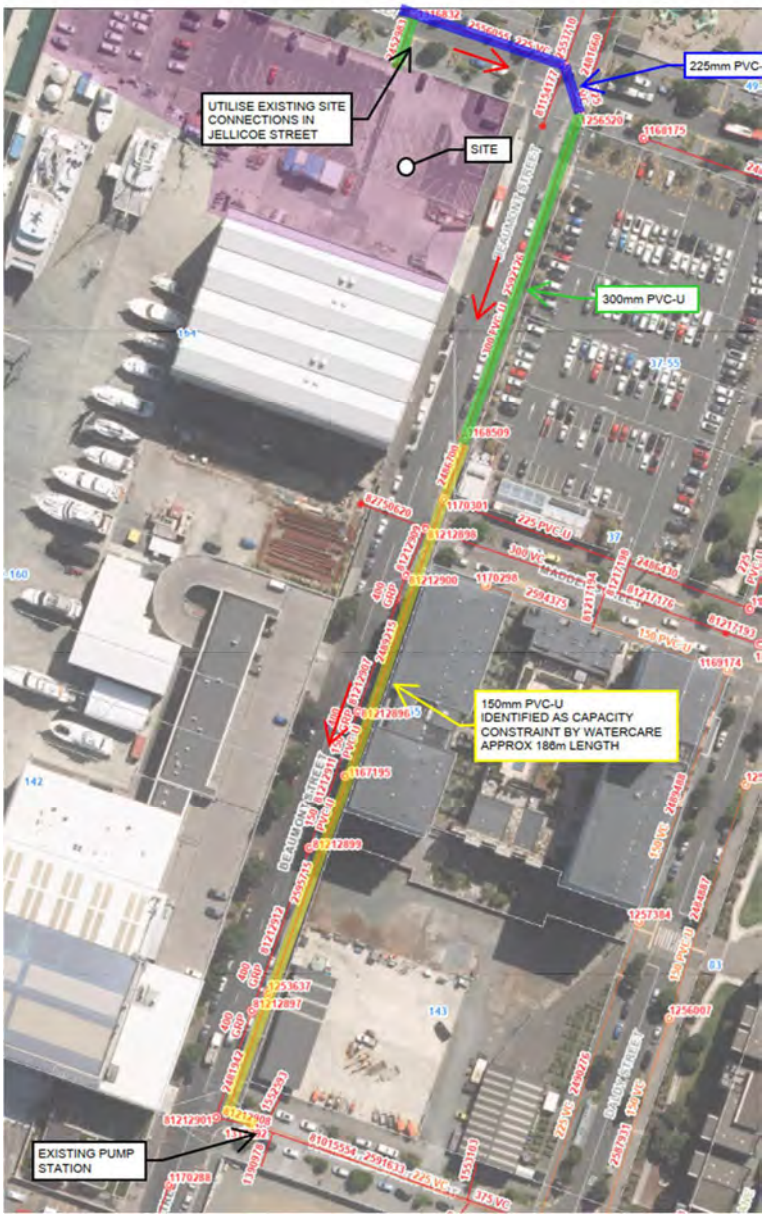

Figure 3-3: Wastewater downstream constraint

T+T commissioned an initial CCTV investigation to confirm the pipe size and orientation of the 150mm pipes on Beaumont Street, particularly at the intersection with Madden Street. The investigation was conducted on 13/11/2025.

The investigation identified that the infrastructure is old and non standard, with a second 300 mm wastewater pipe running in parallel with the 150mm wastewater pipe sharing the same manholes. The results are shown in Figure 3-4 and Figure 3-5. It is expected that there is adequate wastewater capacity for the proposed development flows and this will be confirmed through additional CCTV investigations required by conditions of consent.

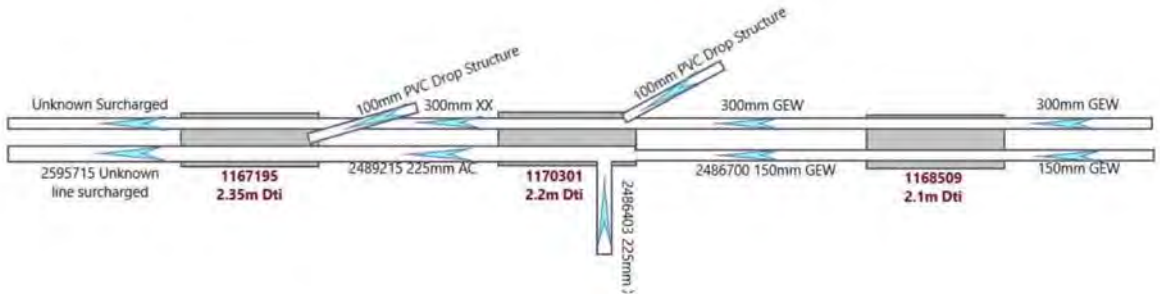

Figure 3-4: CCTV investigation results

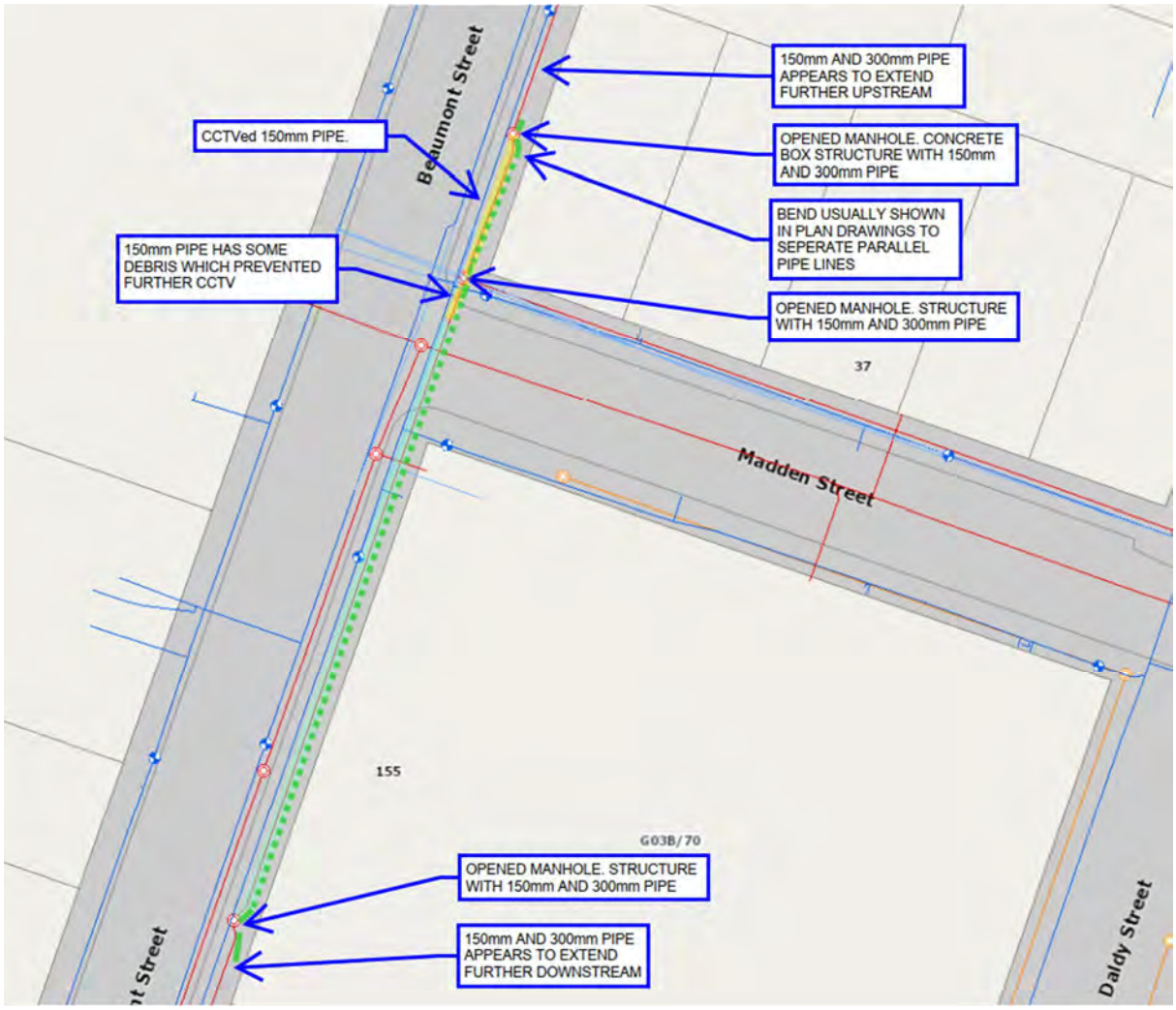

Figure 3-5: CCTV investigation results summary

Refer Appendix E for investigation results.

The project team met with Watercare on 21/11/2025. The project team has sought approval in principle that the public network within Beaumont Street can accommodate the increase in wastewater flows resulting from the development in the parallel 300mm and 150mm pipes, subject

to CCTV confirmation that the 300mm pipe has sufficient capacity. Watercare's planning team confirmed the below on 10/02/2026[9]:

'Developer to provide a site survey by a Licensed Cadastral Surveyor and CCTV at the RC stage. If the 300 mm existing wastewater line from the site to the Beaumont Street / Madden Street intersection cannot be proven to be in a serviceable condition and properly connected to the downstream network without constraint, it is the developer's responsibility to upgrade this section of the network. '

The project will organise detailed CCTV investigations and topographical survey of the 150mm and 300mm pipes (approx. 600m of pipe) to confirm whether there is sufficient capacity in the network to service the Project. These results will be submitted to Watercare for review. It is noted that the 300mm pipe appeared to have sufficient capacity for the Project when the manholes were opened.

If the existing network does not have adequate capacity to accommodate the Project, WRLP will implement an appropriate solution (such as a diversion or upgrade) in consultation with Watercare so that there is operational wastewater infrastructure with sufficient capacity to service the development.

3.5 Proposed wastewater connections

The existing wastewater connections to the site are proposed to be retained for the development. Approximately 2/3^{rds} of the flow will be directed to the eastern connection, with 1/3rd directed to the western connection.

The western connection is the existing 150 mm diameter PVC wastewater connection (ID 2451437), which is proposed to be retained.

The eastern connection is the existing 225 mm diameter VC pipe connection to the east of the northern site boundary (ID 2452983), which is also proposed to be retained. If the pipe condition is found to be inadequate following further investigation, it will be replaced with a PVC-U SN16 pipe.

This existing wastewater connection depth is unknown but is expected to be shallower than 1 m. The preliminary design notes that penetrations through the building foundations may be required for the internal network to connect to the public network.

Grease traps are proposed for the food and beverage properties (refer NDY building services design).

4 Water supply

4.1 Existing water supply network

There are two existing public potable water supply lines in the footpath adjacent to the site; a 125 mm diameter cast iron (CI) water pipe in the western side of Beaumont Street, and a 250 mm diameter ductile iron (DI) water pipe in the southern side of Jellicoe Street. These pipes are part of a substantial looped network within Jellicoe Street (150mm DI) and Beaumont Street (300mm AC and 150mm AC).

There are four hydrants within the vicinity of the site.

There are six existing connections into the site shown on Auckland Council GeoMaps.

The existing network is presented in Figure 4-1.

[9] Email from J. Shao (Watercare) to C. Cairncross (T+T) *Re: Development at 188 Beaumont Street_CON-301535*, Sent Tuesday 10/10/2026 10:25am

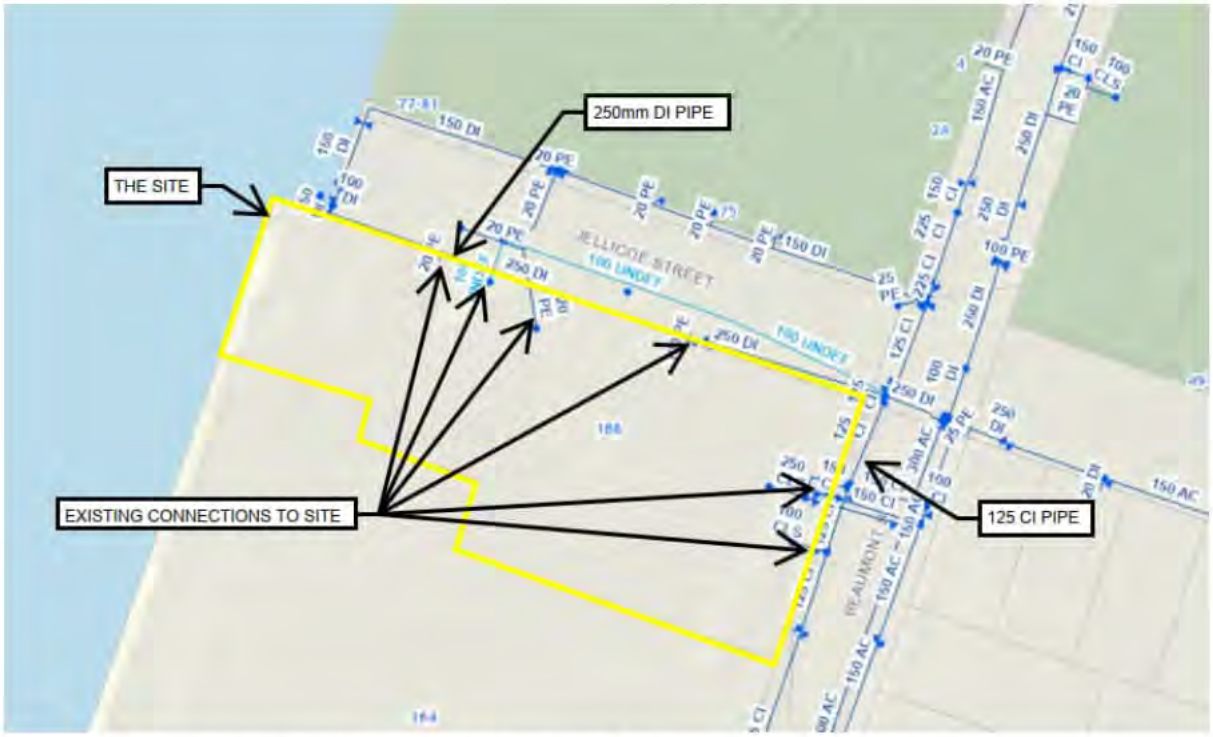

Figure 4-1: Existing water supply network (sourced from Auckland Council GeoMaps)

4.2 Potable water demand

The site is currently used as a ground-level public carpark and is assumed to have no potable water demand.

The potable water demand for the proposed development has been estimated in accordance with the Watercare Water Code of Practice for Land Development and Subdivision[10], based on the number of residential dwellings and retail floor area in the architectural drawings prepared by Warren and Mahoney Architects. Estimated potable water demand for the proposed development is summarised in Table 4-1 below.

The plans show a pool on the fourth floor of the podium structure. This has not been included in water supply demand calculations, as there is not expected to be a continuous or regular demand on the potable water network.

Table 4-1: Potable water supply demand

	Average Daily Demand (ADD) (L/s)	Peak Daily Demand (PDD) (L/s)	Peak Hourly Demand (PHD) (L/s)	Discharge from fittings[11]
Domestic	1.4	2.7	6.9	13.2
Retail	0.1	0.2	0.5	N/A
Total	1.5	3.0	7.4	N/A

[10] The Auckland Code of practice for Land Development and Subdivision, Water and Wastewater Code of practice for land Development and Subdivision. Chapter 6: Water Version 2.4.

[11] Email from J O'Sullivan, NDY to C Cairncross, T+T *RE: 188 Beaumont Civil – PD review,* sent 13/10/2025 3:20pm

4.3 Fire flow demand

The fire flow demand has been provided by the project Fire Engineer, Jensen Hughes[12].

The combined system (sprinkler and hydrant) has a combined flow rate of 55L/s. This consists of the simultaneous demand of 30 L/s from the sprinklers and 25 L/s from the hydrant outlets (FW2), that are connected to combined water supply and fire pumps.

There are 4 hydrants within 100 m of the vicinity of the Carpark site, the closest of which are 28 m and 70 m.

4.4 Capacity assessment

Based on the numerous water mains in the vicinity of the site with substantial pipe diameters and the nature of the surrounding Wynard Quarter district, it is expected that the existing wider area supply adequately services the potable and fire flow demands of the proposed development. As per Section 4.5 below, feedback from Watercare has confirmed that there is adequate capacity to service this development. Watercare has confirmed that there are no constraints on head loss in the area.

At the time of this assessment, no fire hydrant flow and pressure tests have been carried out, and no historical testing has been made available to us. Hydrant testing will be required before the building consent stage to confirm the pressure available for fire suppression and associated storage requirements. Fire hydrant testing will be undertaken in the nest stage of design.

4.5 Watercare engagement

Watercare provided commentary on the fast track referral application, which was received by the project team on 30/10/2025[13]. The assessment was based on an estimated peak hourly demand increase of 3.9 L/s, which is less than the calculated flow above.

The project team met with Auckland Council and Watercare representatives on 24/11/2025 for a preapplication meeting prior to lodgement of the substantive fast track application.

The feedback to date is summarised below:

- The referral feedback stated that existing network can support the potable water supply demand from this development. The assessment was based on increase of 3.9 L/s, rather than 6.6 L/s as calculated at this stage of design. This moderate increase in estimate flow was raised in the pre-application meeting with Watercare and Watercare's representative advised that the network can support the 6.6 L/s flow. It is noted that this has increased to 7.4 L/s since the engagement but this small increase is not expected to have a material impact on the ability of the network to service the development. .
- The referral feedback stated that there appears to be sufficient fire flow capacity to meet FW3 fire fighting requirements (50 L/s) in the area. Subsequent to the referral application, the fire flow demand has been calculated as 55 L/s, which is greater than the FW3 flow of 50 L/s assessed in the referral feedback. Watercare's representative expected that the water supply network could accommodate the proposed fire flow at the pre-application meeting of 24/11/2025.
- There are four hydrants within 100m of the site.

[12] Email from S Beatson, Jensen Hughes, to C Cairncross, T+T, *RE: 188 Beaumon Street - required fire flows*, sent 24/11/2025, 3:55pm

[13] Email from S Hussain, WSL, to A Hope, T+T, *RE: Development at 188 Beaumont Street*, sent 30/10/2025 8:55am

4.6 Proposed water supply connections

It is proposed that the existing potable water supply connections within the project boundaries are to be abandoned.

Three new potable water supply connections are proposed to the 250 mm diameter water supply main along the northern boundary of the site (southern side of Jellicoe Street).

A 40 mm diameter water connection is proposed for the potable water supply for each of the new retail sites. The connections are to have a water meter and backflow prevention device in accordance with Watercare standard detail WS20.

A 150 mm combined water connection is proposed for the building fire supply and residential potable water. The connection will be in accordance with Watercare standard detail WS25.

The 250mm water pipe in Jellicoe Street is in the road corridor but within 0.5m of the property boundary. At preliminary design it is proposed to install the meters on the northern side of the pipe, as there is not adequate space between the water supply pipe and the boundary. The connection pipe will cross over the 250mm water main to connect to the project.

It is proposed that the backflow preventers on the 150mm water connection will be within the carpark (refer NDY building services package).

At this stage of design, all pipes are assumed to be PE100 SDR13.6 with ductile iron fittings.

4.7 Pipe protection

The existing 250mm ductile iron water pipe on Jellicoe Street is recorded in GIS as very close to the property boundary (less than 0.5m). The installation date of the ductile iron pipe is recorded in Auckland Council Geomaps as 2011. The existing 125mm cast iron water pipe on Beaumont Street is recorded in GIS as fairly close to the property boundary (less than 5m). The installation date of the cast iron pipe is recorded as 1915. The cast iron pipe could be vulnerable to vibration from construction activities due to the age and historic jointing method use.

Slot trenching is to be conducted at the next stage of design to confirm the pipe location and associated protection or relocation requirements. The design team will engage with Watercare works over team to confirm the required protection or relocation following pipe location.

This was raised in the project team meeting with Auckland Council and Watercare representatives on 24/11/2025 and no issues were raised with the proposed approach.

5 Dry Services

5.1 General

This assessment is based on a review of the following information:

- Dry services plans (power, gas, telecommunications) local to the site, sourced from BeforeUdig
- Information provided by Chorus
- Information provided by Vector power
- Information provided by utility service providers

The following services and providers were identified around the site:

- EonFibre - Communications
- Chorus - Communications

- Vector - Communications
- Vector - Gas
- Vector - Electricity

Refer to Appendix C for plans showing the location of dry services within the site development area.

5.2 Communications

Table 5-1 summarises the communications services present within the area immediately surrounding the site, and they are shown in Figure 5-1 to Figure 5-3.

Table 5-1: Summary of communications networks

Location	Eon Fibre	Chorus	Vector
Beaumont Street	✓ (Two lines along western side of roadway)	✓ (Along western side of roadway)	✓ (Active service on eastern side of roadway)
Jellicoe Street	X	✓ (Along north and south side of roadway. One line extending along west side of site within boundary)	X (Inactive service on north and south sides of roadway)
Hammer Street	X	✓ (Along western side of roadway)	X

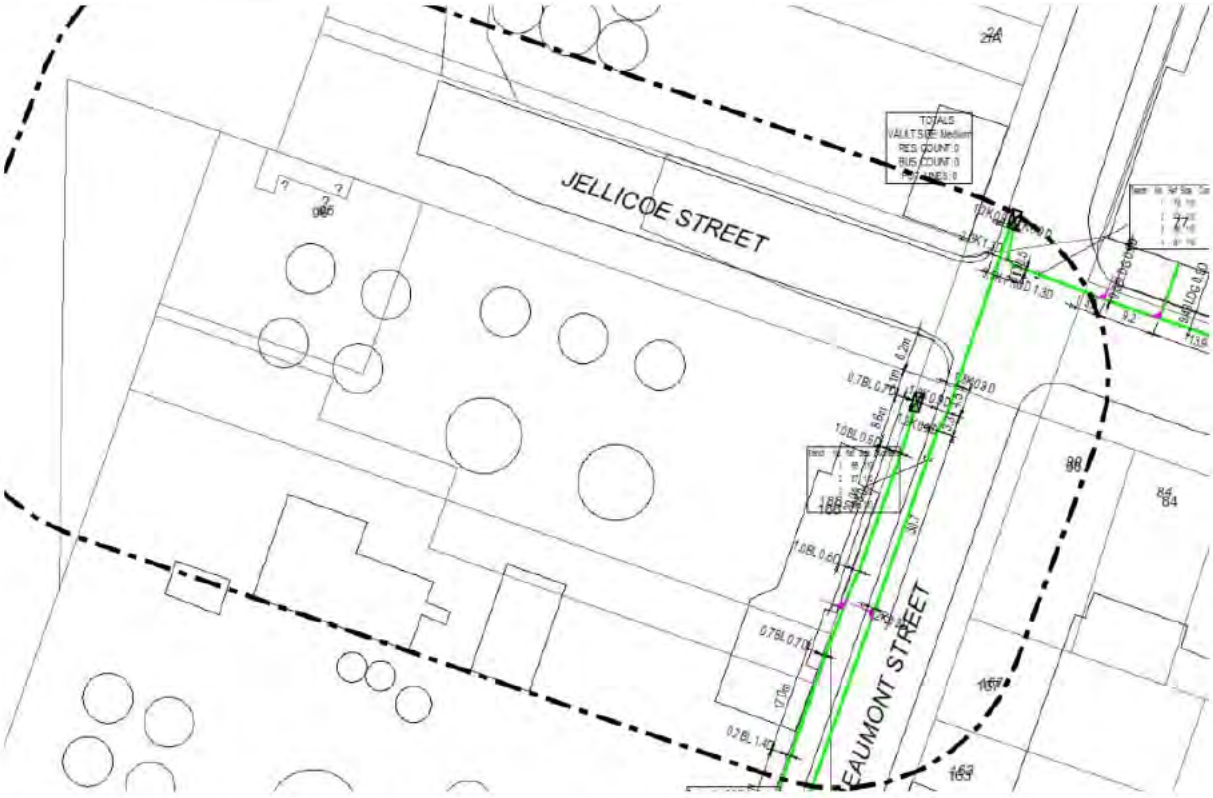

Figure 5-1: EonFibre network (in green) (sourced from BeforeUDig response)

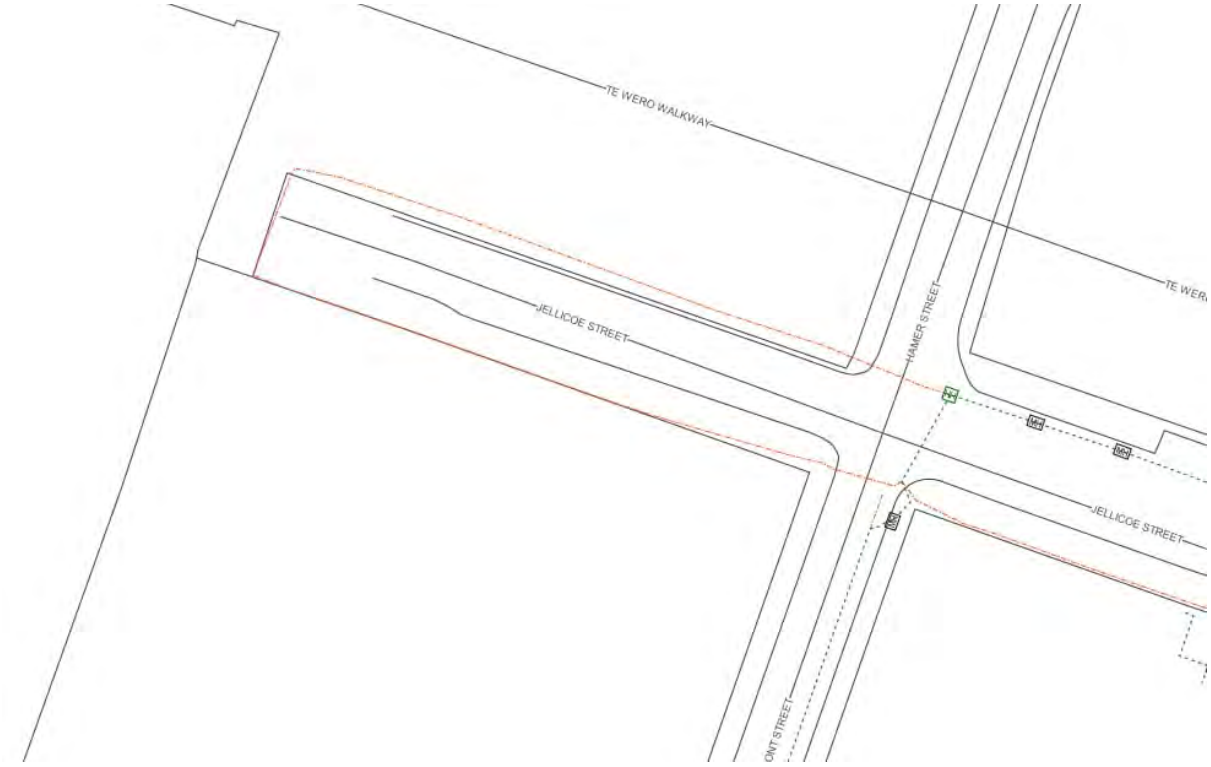

Figure 5-2: Vector Fibre network (active in green, inactive in orange) (sourced from BeforeUDig response).

Figure 5-3: Chorus fibre network (network in orange, property boundaries in green) (sourced from BeforeUDig response)

5.2.1 Proposed communications connection and works

Chorus has been contacted by NDY to confirm capacity of the network and the proposed communications connection and Chorus has confirmed they can service the development.

The preferred fibre route has been provided by Chorus[14] and is shown in Figure 5-4. For preliminary design, it is assumed that a new pit is required adjacent to the property boundary. The duct out of the pit is within NDY's building services scope. Refer to Appendix F for communications with Chorus.

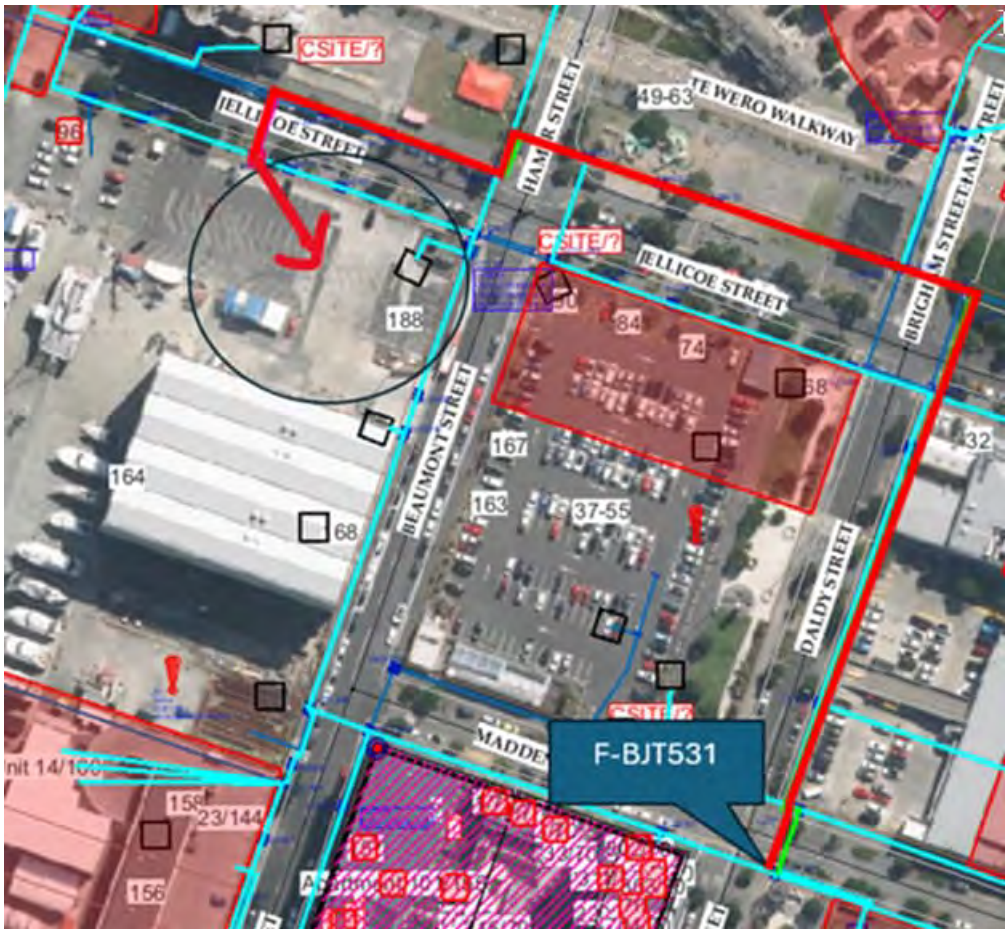

Figure 5-4: Preferred communications fibre route

The inactive Vector fibre line is shown as within 0.5m of the property boundary on Jellicoe Street. Slot trenching at the next design stage will be used to confirm the location of the service. Engagement with Vector Fibre will be conducted if required to protect or abandon the service as required.

5.3 Gas

The BeforeUdig plans received from Vector show an MP4 pressure level pipe gas main along both the site frontage on Beaumont and Jellicoe Streets. The pipe on Jellicoe Street is a 50mm PE pipe, and the pipe on Beaumont Street is a 32mm PE pipe through a 50mm NY service.

[14] Email from M. Tagaloa (Chorus) to D.Bintliff (NDY) *RE: Chorus request - 188 Beaumont Street , Auckland Central – 11417888*, sent 14/11/2025 10:50am

The existing network is shown in Figure 5-5.

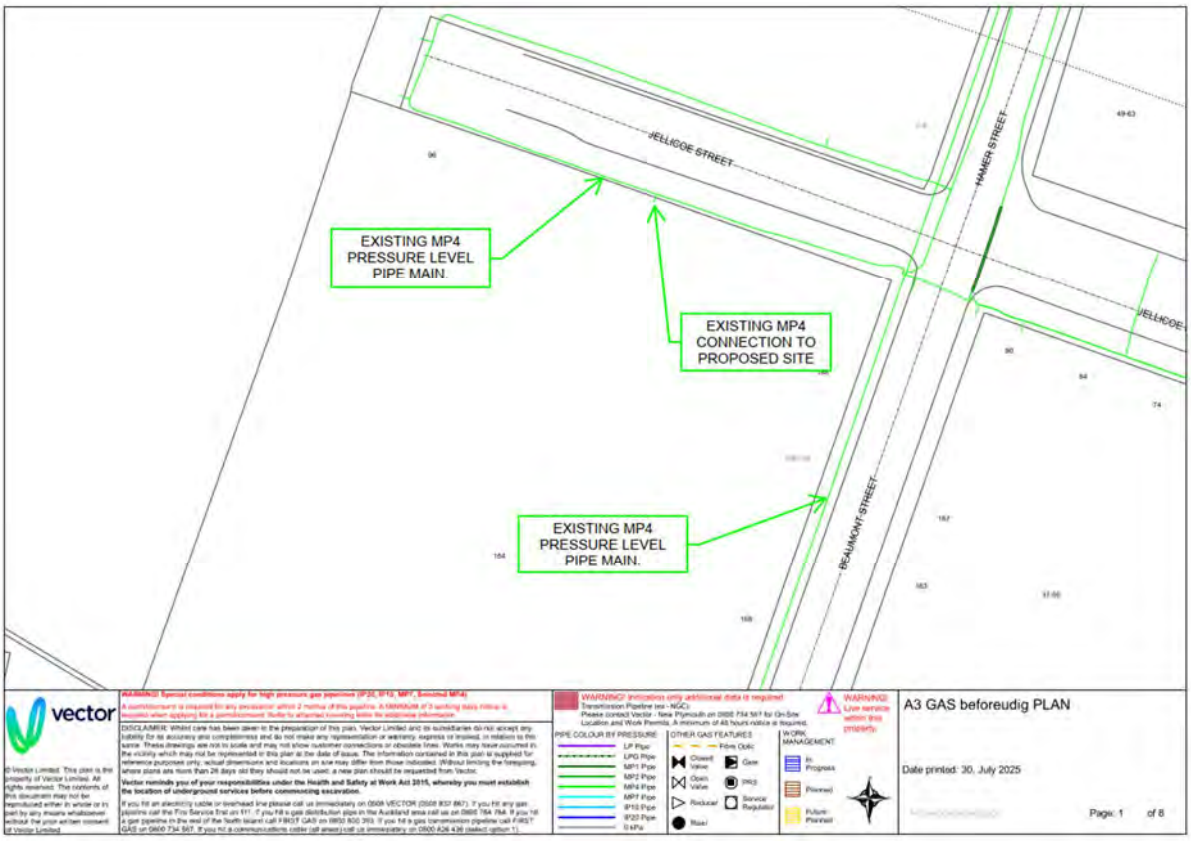

Figure 5-5: Gas Network (sourced from BeforeUDig response)

5.3.1 Proposed gas connections

It is proposed to provide a gas connection to each of the retail (food and beverage) outlets. The indicative connection size for both connections is 32mm (provided by NDY). The gas meter is to be installed within the property boundary and is outside of the scope of this report.

Liaison with Vector to confirm capacity to service the site is required at the next design stage, however it is not expected that there will be a supply constraint for this site given the substantial gas network in the area and engagement to date with Nova Energy by NDY.

The gas pipe is shown as within 0.5m of the property boundary on Jellicoe Street. There is a risk that protection measures or realignment may be required if the pipe is impacted by the proposed construction methodology. Slot trenching at the next design stage can be used to confirm the location of the pipe and therefore vulnerability at the next design stage.

5.4 Electricity

The existing power supply infrastructure from Vector is shown in Figure 5-6 and Figure 5-7.

The existing power network consists of 22 kV, 11 kV – 6 kV, and 0.4 kV underground cables. The 22 kV service runs along the centre of Beaumont Street, turning east at the Jellicoe intersection. The 11 kV – 6 kV service runs along the eastern side of Beaumont Street, connecting into a distribution substation on the north-east corner of the site and continues northwards towards Hammer Street. A 400 kV line extends from the distribution substation westwards under the site terminating within the boundary on the north-west corner.

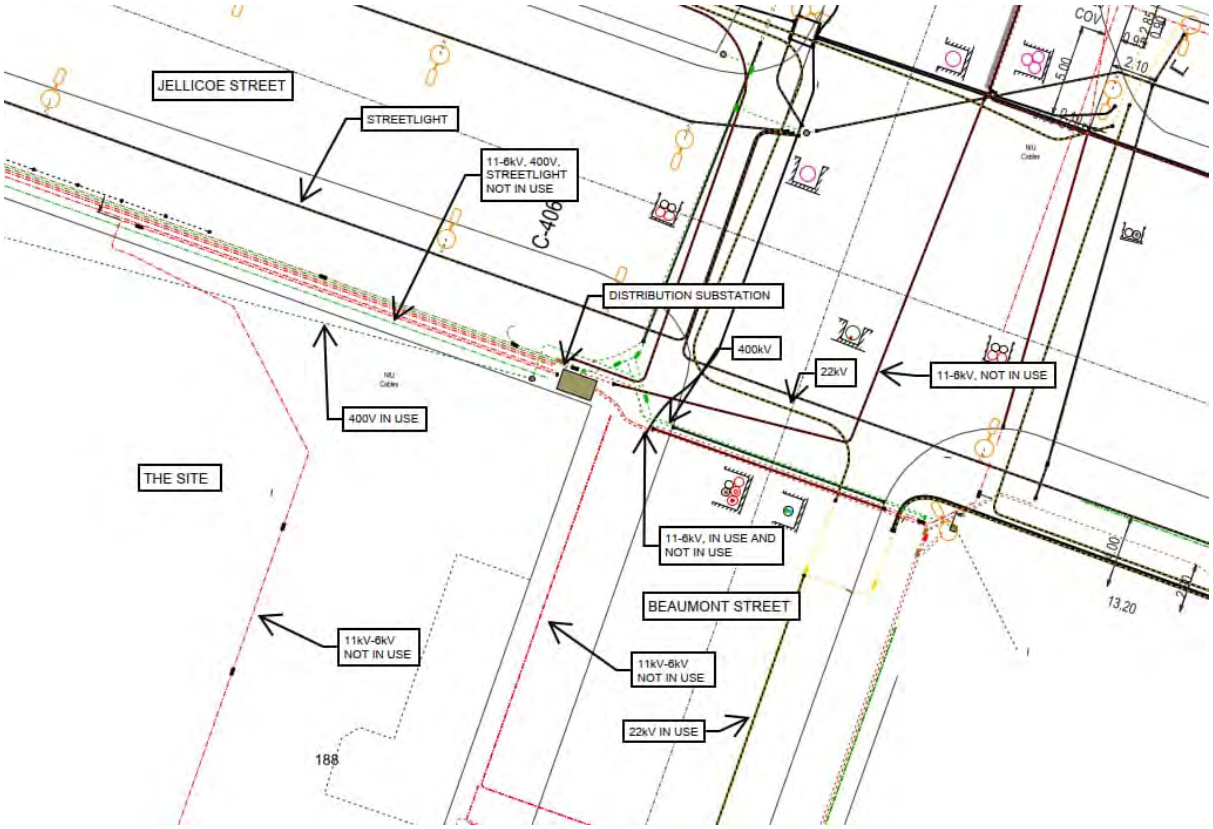

Figure 5-6: Vector power at Jellicoe Street intersection (sourced from BeforeUDig response)

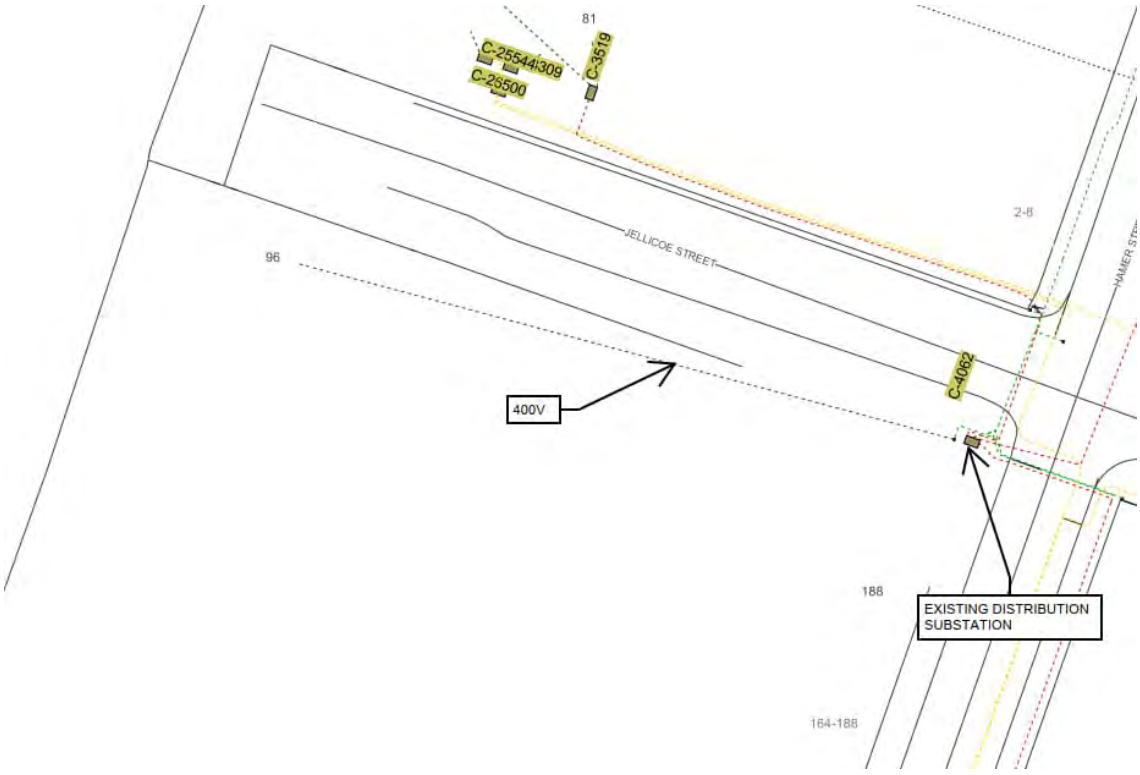

Figure 5-7: Vector power overview plan (400V shown in green, 11-6kV shown in red 22kV shown in yellow) (sourced from BeforeUDig response)

5.4.1 Proposed electricity connection

NDY has engaged with Vector to confirm the capacity of the electricity network and connection proposal. A new 22kV power line connection is proposed on the eastern boundary of the site from Beaumont Street. There are proposed to be two 150mm heavy duty PVC ducts, as advised by NDY building services. The ducts are to be installed by Vector but the duct route is within the civil services scope. Refer to Appendix F for communications with Vector.

There is an existing transformer on the corner of Beaumont and Jellicoe Street which is to be protected in place during works.

The existing LV connection within the site is to be abandoned.

6 Applicability

This report has been prepared for the exclusive use of our client Westhaven Residential Limited Partnership, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that our client will submit this report as part of an application under the Fast-track Approvals Act 2024 and that an Expert Panel as the consenting authority will use this report for the purpose of assessing that application. We understand and agree that this report will be used by the Expert Panel in undertaking its regulatory functions.

Tonkin & Taylor Ltd
Environmental and Engineering Consultants

Report prepared by:	Authorised for Tonkin & Taylor Ltd by:
	
.....	.....
Caitlin Cairncross	Andrew Hope
Civil Engineer	Project Director

CJC
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Appendix A Design drawings

DRAWING REGISTER

		DRAWING NUMBER	REV	TITLE
1	✓	1098609.2000-0010	2	DRAWING LIST AND LOCALITY PLAN
2	✓	1098609.2000-0020	3	EXISTING SERVICES LAYOUT PLAN
3	✓	1098609.2000-0110	2	EROSION AND SEDIMENT CONTROL PLAN
4	✓	1098609.2000-0120	1	PROPOSED CUT AND FILL PLAN
5	✓	1098609.2000-0210	2	PROPOSED STORMWATER LAYOUT PLAN
6	✓	1098609.2000-0310	2	PROPOSED WASTEWATER LAYOUT PLAN
7	✓	1098609.2000-0410	2	PROPOSED POTABLE WATER LAYOUT PLAN
8	✓	1098609.2000-0510	2	PROPOSED UTILITIES LAYOUT PLAN
	✓	DENOTES DRAWINGS IN THIS ISSUE: 17/12/2025		

NOTE: AERIAL IMAGE SOURCED FROM: LINZ DATA SERVICE < https://data.linz.govt.nz/layer/52343-nz-topo50-gridless-maps/ > LICENSED BY LINZ FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL

LOCATION PLAN
NOT TO SCALE

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REV	DESCRIPTION	CAD	CHK	DATE
1	DRAFT PRELIMINARY DESIGN ISSUE	ALPO	CJC	24.11.25
2	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

DESIGNED	CJC	NOV.25	DRAWING STATUS
DRAWN	ALPO	NOV.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS SIGNED AS APPROVED

APPROVED DATE

CLIENT WESTHAVEN RESIDENTIAL LTD PARTNERSHIP
PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN
TITLE GENERAL
DRAWING LIST AND LOCALITY PLAN
SCALE (A1) 1:250 DWG No. 1098609.2000-0010 REV 2

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
4. AERIAL IMAGERY SOURCE LINZ DATA SERVICE < https://data.linz.govt.nz/layer/121752-auckland-0075m-urban-aerial-photos-2024-2025/ > LICENSED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL.
5. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATA OCTOBER 2025.
6. EXISTING COMMUNICATIONS, POWER AND GAS SOURCED FROM BeforeUDig REQUEST RECIEVED 30/07/2025.
7. PRELIMINARY DESIGN FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
8. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025

EXISTING SERVICES LEGEND

GENERAL

- EXISTING PROPERTY BOUNDARY
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

EXISTING DRY SERVICES

- POWER BOX
- POWER DUCTS
- STREET LIGHTS
- 400V LV DUCTS
- 11kV
- 22kV
- COMMUNICATION
- VECTOR MP4 GAS
- DISTRIBUTION SUBSTATION

EXISTING STORMWATER

- STORMWATER PIPES
- STOMWATER CATCHPITS
- STOMWATER MANHOLE
- STOMWATER GRATE

EXISTING WASTEWATER

- WASTEWATER PIPE
- WASTEWATER MANHOLE

EXISTING POTABLE WATER

- POTABLE WATER PIPE
- WATER TOBY BOX
- FIRE HYDRANT
- VALVES

SECTION 7 SO 415995

SECTION 9 SO 415995

SECTION 9 SO 415995

SECTION 4 SO 415995

HAMER STREET

JELLICOE STREET

BEAUMONT STREET

ART LOT 1 DP 133386

LOT 1 BLOCK II DEEDS 226

LOT 2 BLOCK II DEEDS 226

LOT 1 DP 25871

LOT 3 DP 25871

RL 3200

RL 3700

0 6.25 12.5 m

1:250 (A1)
1:500 (A3)

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REV	DESCRIPTION	CAD	CHK	DATE
1	ISSUED 50% PRELIMINARY DESIGN	ABMO	CJC	17.10.25
2	DRAFT PRELIMINARY DESIGN ISSUE	ALPO	CJC	24.11.25
3	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

DESIGNED	CJC	OCT.25	DRAWING STATUS
DRAWN	ABMO	OCT.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS SIGNED AS APPROVED

APPROVED DATE

CLIENT **WESTHAVEN RESIDENTIAL LTD PARTNERSHIP**

PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE EXISTING LAYOUT
EXISTING SERVICES LAYOUT PLAN

SCALE (A1) 1:250 DWG No. 1098609.2000-0020 REV 3

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
4. ALL SEDIMENT CONTROL MEASURES TO BE BUILT IN ACCORDANCE WITH GD05.
5. TOTAL EXCAVATION AREA 5,000m^2.
6. AERIAL IMAGERY SOURCE FROM AUCKLAND COUNCIL GEMAP
7. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATA OCTOBER 2025.
8. EXISTING COMMUNICATIONS, POWER AND GAS SOURCED FROM BeforeUDig REQUEST RECIEVED 30/07/2025.
9. PRELIMINARY DESIGN FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.

PROPOSED LEGEND

- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXTENT OF 1.5m DEEP EARTHWORKS
- EXTENT OF 4m DEEP EARTHWORKS
- PERIMETER OF HOT MIX BUND
- STABILISED ENTRANCE WAY
- DEWATERING PUMP
- INLET PROTECTION

SECTION 7 SO 415995

SECTION 9 SO 415995

SECTION 9 SO 415995

SECTION 4 SO 415995

HAMER STREET

JELLICOE STREET

BEAUMONT STREET

DISCHARGE INTO STORMWATER SYSTEM ON JELICOE STREET THROUGH MANHOLE SAP ID 3000175264

DEWATERING MAY BE REQUIRED FOR 2.5m DEEP TRENCH FOR STORMWATER PIPE INSTALLATION. DEWATERING PIPE BE USED AND DISCHARGED TO GROUNDWATER TREATMENT

STABILISED ENTRANCE WAY SHOWN INDICATIVELY, CONTRACTOR TO CONFIRM ON SITE. PORTABLE TRAILER MOUNTED WATER BLASTER ON STAND-BY.

STABILISED ENTRANCE WAY SHOWN INDICATIVELY, CONTRACTOR TO CONFIRM ON SITE. PORTABLE TRAILER MOUNTED WATER BLASTER ON STAND-BY.

SECONDARY TREATMENT DEVICE

DOSING TANK

INLET PROTECTION TO EXISTING STREET CATCHPIT

PART LOT 1 DP 133386

DEWATERING PUMP AT EXCAVATION LOW POINT TO BE RELOCATED AS REQUIRED

DEWATERING PUMP AT EXCAVATION LOW POINT TO BE RELOCATED AS REQUIRED

DEWATERING PUMP AT EXCAVATION LOW POINT TO BE RELOCATED AS REQUIRED

DEWATERING PUMP AT EXCAVATION LOW POINT TO BE RELOCATED AS REQUIRED

SITE TO DRAIN TO SURFACE WATER INTERCEPTION TRENCH. RUNOFF TO BE PUMPED TO SECONDARY TREATMENT DEVICE

STABILISED ENTRANCE WAY SHOWN INDICATIVELY, CONTRACTOR TO CONFIRM ON SITE. PORTABLE TRAILER MOUNTED WATER BLASTER ON STAND-BY.

HOT MIX BUND AROUND THE PERIMETER OF THE SITE (AS REQUIRED).

RL 3.0
RL 3.2
RL 3.4
RL 3.7
RL 3.9

1:6
1:8
1:8
1:12

LOT 1 BLO DEEDS

LOT 3 DP 25871

0 5 10 m 1:200 (A1) 1:400 (A3)

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REV	DESCRIPTION	CAD	CHK	DATE
1	DRAFT PRELIMINARY DESIGN ISSUE	ALPO	CJC	24.11.25
2	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

DESIGNED	SL	NOV.25	DRAWING STATUS
DRAWN	ALPO	NOV.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

APPROVED DATE

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CLIENT **WESTHAVEN RESIDENTIAL LTD PARTNERSHIP**

PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE EARTHWORKS
EROSION AND SEDIMENT CONTROL PLAN

SCALE (A1) 1:200 DWG No. 1098609.2000-0110 REV 2

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
4. AERIAL IMAGERY SOURCE FROM AUCKLAND COUNCIL GEMAP
5. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATA OCTOBER 2025.
6. EXISTING COMMUNICATIONS, POWER AND GAS SOURCED FROM BeforeUDig REQUEST RECIEVED 30/07/2025.
7. PRELIMINARY DESIGN FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
8. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025.
9. LOCALISED CUT OF UP TO 1.5m EXPECTED TO REMOVE OBSTRUCTIONS TO PILING AND UNSUITABLE MATERIALS.
10. CUT DEPTHS BASED ON PRELIMINARY DESIGN.
11. FILL VOLUME IS THE REINSTATEMENT OF THE 1.5m EXCAVATION AND SERVICE TRENCHES , EXCLUDING PERMANENT PILES, GROUND BEAMS AND CORE CAPS.

LEGEND

- 1m DEPTH
- 1.5m DEPTH
- 2m DEPTH
- 3m DEPTH
- 4m DEPTH
- PILES 34m - 52m DEPTH
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPERTY BOUNDARY
- EXISTING STORMWATER PIPE
- EXISTING POTABLE WATER PIPE
- WASTEWATER PIPE

SECTION 7 SO 415995

SECTION 9 SO 415995

SECTION 9 SO 415995

SECTION 4 SO 415995

HAMER STREET

JELLICOE STREET

JELLICOE STREET

BEAUMONT STREET

PART LOT 1 DP 133386

LOT 1 BLOCK II DEEDS 226

LOT 2 BLOCK II DEEDS 226

LOT 1 DP 25871

LOT 3 DP 25871

LOT 2

225mm WASTEWATER LINE
AREA = 20m²
DEPTH OF EXCAVATION = 3m
VOLUME OF CUT = 60m³

300mm AND 225mm STORM WATER CONNECTION
AREA = 20 m²
DEPTH OF EXCAVATION = 3m
VOLUME OF CUT = 60m³

2 x 100mm COMMUNICATIONS CONNECTION AND PIT
AREA = 10 m²
DEPTH OF EXCAVATION = 1m
VOLUME OF CUT = 10m³

40mm POTABLE WATER CONNECTION WS19
AREA = 10 m²
DEPTH OF EXCAVATION = 2m
VOLUME OF CUT = 20m³

150mm POTABLE WATER CONNECTION (FOOTWAY CHAMBER) W24
AREA = 20m²
DEPTH OF EXCAVATION = 2m
VOLUME OF CUT = 40m³

32mm GAS CONNECTION
AREA = 10 m²
DEPTH OF EXCAVATION = 1m
VOLUME OF CUT = 10m³

40mm POTABLE WATER CONNECTION WS19
AREA = 10 m²
DEPTH OF EXCAVATION = 2m
VOLUME OF CUT = 20m³

32mm GAS CONNECTION
AREA = 10 m²
DEPTH OF EXCAVATION = 1m
VOLUME OF CUT = 10m³

FOR THE BUILDING PILES CUT VOLUME ANALAYSIS, REFER TO ESC REPORT.
TOTAL CUT VOLUME OF PILES: 4870m³

TOTAL EARTHWORK VOLUMES
TOTAL CUT: 13480m³
TOTAL FILL: 2040m³

CORE CAP
AREA = 120m²
DEPTH OF EXCAVATION = 4m
VOLUME OF CUT = 300m³ (ACCOUNTING FOR 1.5m OF THE SITE-WIDE CUT)

CORE CAP
AREA = 160m²
DEPTH OF EXCAVATION = 4m
VOLUME OF CUT = 400m³ (ACCOUNTING FOR 1.5m OF THE SITE-WIDE CUT)

CORE CAP
AREA = 60m²
DEPTH OF EXCAVATION = 4m
VOLUME OF CUT = 150m³ (ACCOUNTING FOR 1.5m OF THE SITE-WIDE CUT)

22kV POWER DUCT TRENCH
AREA = 20m²
DEPTH OF EXCAVATION = 1.5m
VOLUME OF CUT = 30m³

SITE-WIDE CUT (REFER NOTE 9)
AREA= 5000m²
DEPTH OF EXCAVATION = 1.5m
VOLUME OF CUT = 7500m³

0 6.25 12.5 m
1:250 (A1)
1:500 (A3)

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REV	DESCRIPTION	CAD	CHK	DATE
1	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

DESIGNED	CJC	NOV.25
DRAWN	ALPO	NOV.25
DESIGN CHECKED	CJC	17.12.25
DRAWING CHECKED	NSW	17.12.25

DRAWING STATUS: INFORMATION ONLY
PROJECT PHASE: PRELIMINARY DESIGN

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APPROVED DATE

CLIENT WESTHAVEN RESIDENTIAL LTD PARTNERSHIP
PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN
TITLE EARTHWORKS
PROPOSED CUT AND FILL PLAN
SCALE (A1) 1:250 DWG No. 1098609.2000-0120 REV 1

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
4. AERIAL IMAGERY SOURCE FROM AUCKLAND COUNCIL GEMAP.
5. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATED OCTOBER 2025.
6. CONCEPT FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
7. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025.
8. NO TREATMENT OR ATTENUATION DEVICES PROPOSED AS PART OF STORMWATER DESIGN
8. REFER TO AUCKLAND COUNCIL STORMWATER CODE OF PRACTICE DRAWINGS FOR DETAILS OF MANHOLES AND PIPES PROVIDED IN CIVIL SPECIFICATION.

EXISTING SERVICES LEGEND

GENERAL

- EXISTING PROPERTY BOUNDARY
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

EXISTING STORMWATER

- STORMWATER PIPES
- STOMWATER CATCHPITS
- STOMWATER MANHOLE
- STOMWATER GRATE

PROPOSED LEGEND

STORMWATER

- STORMWATER MANHOLE
- STORMWATER PIPE
- STORMWATER SUBSOIL DRAIN

HAMER STREET

JELLICOE STREET

BEAUMONT STREET

SECTION 9 SO 415995

SECTION 7 SO 415995

SECTION 4 SO 415995

375 Ø SW LINE (FCR)

300 Ø SW Line (FCR)

225 Ø SW LINE (FCR)

600 Ø SW LINE (FCR)

750 Ø SW LINE (FCR)

300 PE

REFER TO INSET 1

REFER TO INSET 2

2 x 45 DEGREE BENDS

RL 3200

LOT 1 BLOCK II DEEDS 226

LOT 2 BLOCK II DEEDS 226

LOT 1 DP 25871

LOT 3 DP 25871

NO STORMWATER CONNECTION PROPOSED TO PIPE NETWORK WITHIN BEAUMONT STREET

THRESHOLD DRAIN AT BUILDING ENTRANCES (BY OTHERS)

STORMWATER PERIMETER PIPE TO COLLECT DISCHARGE FROM CANOPIES AND THRESHOLD DRAINS. PIPE TO BE 225DN PVC-U SN16 WITH MIN. COVER 1m. ALIGNMENT AND SIZE IS INDICATIVE. FURTHER COORDINATION WITH EXISTING SERVICES AND PROPOSED BUILDING FOUNDATION REQUIIRED.

HEAVY DUTY (CLASS 4) CHANNEL DRAIN AT CARPARK ENTRANCE (BY OTHERS)

1050mm PRECAST CONCRETE MANHOLE WITH FLANGED BASE APPROX. 1m DEEP. LOCATION OF MANHOLE TO BE CONFIRMED AT NEXT DESIGN STAGE

PENETRATION THROUGH BOTTOM OF PLANTER TO DISCHARGE SUBSOIL DRAINAGE

CONCRETE DECK TO BE SLOPED TO DISCHARGE TO COAST. IF REQUIRED BY COUNCIL, COCNRETE DECK TO BE SLOPED TO EAST TO DISCHARGE TO CHANNEL DRAIN CONNECTED TO STORMWATER SYSTEM

100mm PERFORATED SUBSOIL PIPE IN 140mm DRAINAGE TRENCH. DRAINAGE TRENCH TO BE WRAPPED IN GEOTEXTILE. IMPERMEABLE LINER TO BE INSTALLED AROUND PLANTING AREA WHERE DRAINAGE TRENCH IS IN IN CONTACT WITH EXISTING GROUND . IMPERMEABLE LINER MAY BE REMOVED AT FUTURE DESIGN STAGE IF FUTURE GROUNDWATER TESTING SHOWS GROUNDWATER AND ASSOCIATED CONTAMINATED DISCHARGE WILL NOT DISCHARGE TO SUBSOILS.

TREE ROOT PIT TO BE SEPERATED FROM SUBSOIL DRAINAGE AND IMPERMEABLE LINER TO ENABLE ROOTS TO ENTER NATURAL GROUND. SUBSOIL DRAINAGE TO BE INSTALLED IF GROUNDWATER TESTING SHOWS GROUNDWATER WILL NOT DISCHARGE TO SUBSOILS.

150mm PVC-U SN16 PIPE

600mm PRECAST CONCRETE MANHOLE WITH GRATED LID AND 300mm SUMP APPROX. 1m DEEP

150mm PVC-U SN16 PIPE

600mm PRECAST CONCRETE MANHOLE WITH GRATED LID AND 300mm SUMP APPROX 1m DEEP

SURFACE BENEATH DECK TO BE GRADED TO DRAIN TO INLETS. PIPED NETWORK BENEATH DECK MAY BE REPLACED WITH SUBSOIL DRAINAGE IF FUTURE GROUNDWATER TESTING SHOWS GROUNDWATER AND ASSOCIATED CONTAMINATED DISCHARGE WILL NOT DISCHARGE TO SUBSOILS.

INSET 1: STORMWATER CONNECTION 1

SCALE (A1) 1:125
SCALE (A3) 1:250

ABANDON EXISTING DN225 RCRRJ PIPE FROM CATCHPIT TO MANHOLE

INSTALL BACKFLOW PREVENTER ON STORMWATER CONNECTION SUCH AS DN300 WASTOP VALVE WITH STAINLESS FITTINGS

NEW DN225 RCRRJ CLASS 4 STORMWATER PIPE TO EXISTING CATCHPIT. REINSTATE RAINGARDEN FOLLOWING INSTALLATION

NEW DN300 RCRRJ CLASS 4 STORMWATER PIPE

PROTECT EXISTING WASTEWATER CONNECTION

STORMWATER TIE-IN TO INTERNAL NETWORK. CONNECTION LOCATION AND LEVEL TO BE CONFIRMED AT FUTURE DESIGN STAGES. INDICATIVE INVERT LEVEL OF 0.2mRL BASED ON AUCKLAND COUNCIL GEOMAPS

NEW DN1050 FLANGED CONCRETE MANHOLE APPROX. 2.5m DEEP

NEW DN300 RCRRJ CLASS 4 STORMWATER PIPE

EXISTING SERVICES TO BE PROTECTED DURING CONSTRUCTION

0 3.125 6.25 m 1:125 (A1) 1:250 (A3)

0 6.25 12.5 m 1:250 (A1) 1:500 (A3)

INSET 2: STORMWATER CONNECTION 2

SCALE (A1) 1:125
SCALE (A3) 1:250

INSTALL BACKFLOW PREVENTER STORMWATER CONNECTION SUCH AS DN300 WASTOP VALVE WITH STAINLESS FITTINGS

EXISTING SERVICES TO BE PROTECTED DURING CONSTRUCTION

RETAIN EXISTING DN300 CONCRETE STORMWATER CONNECTION SUBJECT TO CONFIRMATION OF EXISTING PIPE CONDITION. APPROX 1/3rd PROJECT RUNOFF TO BE DIRECTED TO THIS CONNECTION. TO BE CONFIRMED AT DETAILED DESIGN.

INSTALL 1050DN PRECAST CONCRETE MANHOLE WITH FLANGED BASE, APPROX. 2.8m DEEP. CONNECT PERIMETER PIPE AND EXISTING OUTLET CONNECTION TO MANHOLE

STORMWATER TIE-IN TO INTERNAL NETWORK BY NDY. REFER BUILDING SERVICES DRAWINGS. EXISTING INVERT LEVEL TO BE CONFIRMED AT DETAILED DESIGN. AUCKLAND COUNCIL GEOMAPS SHOWS INVERT LEVEL OF 0.586 mRL.

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2	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25		

DESIGNED	CJC	OCT.25	DRAWING STATUS
DRAWN	ALPO	OCT.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

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CLIENT WESTHAVEN RESIDENTIAL LTD PARTNERSHIP

PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE STORMWATER PROPOSED STORMWATER LAYOUT PLAN

SCALE (A1) AS SHOWN DWG No. 1098609.2000-0210 REV 2

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
4. AERIAL IMAGERY SOURCE LINZ DATA SERVICE < https://data.linz.govt.nz/layer/121752-auckland-0075m-urban-aerial-photos-2024-2025/ > LICENSED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL.
5. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATA OCTOBER 2025.
6. EXISTING COMMUNICATIONS, POWER AND GAS SOURCED FROM BeforeUDig REQUEST RECIEVED 30/07/2025.
6. CONCEPT FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
7. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025.
8. REFER TO WATERCARE WASTEWATER CODE OF PRACTICE DRAWINGS FOR DETAILS OF MANHOLES AND PIPES PROVIDED IN CIVIL SPECIFICATION.

EXISTING SERVICES LEGEND

GENERAL

- EXISTING PROPERTY BOUNDARY
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

EXISTING WASTEWATER

- WASTEWATER PIPE
- WASTEWATER MANHOLE

PROPOSED LEGEND

WASTEWATER

- WASTEWATER MANHOLE
- WASTEWATER PIPE

SECTION 9 SO 415995

SECTION 7 SO 415995

SECTION 4 SO 415995

HAMER STREET

JELLICOE STREET

BEAUMONT STREET

REFER TO INSET 1

REFER TO INSET 2

225 Ø WW LINE (FCR)

WESTERN WASTEWATER CONNECTION

EASTERN WASTEWATER CONNECTION

RL 3200

PART LOT 1 DP 133386

LOT 1 BLOCK II DEEDS 226

LOT 1 DP 25871

LOT 3 DP 25871

INSET 1: WASTEWATER CONNECTION 1

SCALE (A1) 1:125
SCALE (A3) 1:250

EXISTING WASTEWATER CONNECTION DEPTH TO BE CONFIRMED AT DETAILED DESIGN AND LIKELY TO BE SHALLOWER THAN 1m. ALLOW FOR PENETRATION THROUGH FOUNDATION AND REPLACING DN150mm PVC CONNECTION THROUGH TO EXISTING MANHOLE

CONNECTION TO INTERNAL WASTEWATER NETWORK BY NDY. REFER TO BUILDING SERVICES DRAWINGS FOR DETAILS. UPSTREAM INVERT LEVEL SHOWN AS 1.89mRL IN WATERCARE GIS AND IS TO BE CONFIRMED AT NEXT DESIGN STAGE.

INSET 2: WASTEWATER CONNECTION 2

SCALE (A1) 1:125
SCALE (A3) 1:250

ALLOW FOR PENETRATION THROUGH FOUNDATION AS PIPE DEPTH IS LIKELY APPROX. 1m

RETAIN EXISTING WASTEWATER CONNECTION. INSPECT CONDITION OF EXISTING VC PIPE AND ALLOW FOR . ALLOW FOR REPLACEMENT OF 225 VC PIPE WITH DN225 PVC SN16 PIPE. PROTECT EXISTING SERVICES DURING CONSTRUCTION

CONNECTION TO INTERNAL WASTEWATER NETWORK BY NDY. REFER TO BUILDING SERVICES DRAWINGS FOR DETAILS. UPSTREAM INVERT LEVEL UNKNOWN BUT ESTIMATED AS 1.6mRL BASED ON WATERCARE GIS AND IS TO BE CONFIRMED AT THE NEXT DESIGN STAGE.

0 5 10 m 1:200 (A1) 1:400 (A3)

0 6.25 12.5 m 1:250 (A1) 1:500 (A3)

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2	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

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DRAWN	ALPO	NOV.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

NOT FOR CONSTRUCTION

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APPROVED DATE

CLIENT **WESTHAVEN RESIDENTIAL LTD PARTNERSHIP**

PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE WASTEWATER PROPOSED WASTEWATER LAYOUT PLAN

DRAFT

SCALE (A1) AS SHOWN DWG No. 1098609.2000-0310 REV 2

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NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. CO-ORDINATE DATUM: NZGD 2000, MT EDEN CIRCUIT.
3. LEVEL DATUM: NZVD 2016.
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5. EXISTING STORMWATER, WASTEWATER AND POTABLE WATER SOURCED FROM YEOMANS SURVEY DATA OCTOBER 2025.
6. EXISTING COMMUNICATIONS, POWER AND GAS SOURCED FROM BeforeUDig REQUEST RECIEVED 30/07/2025.
7. ALL PIPES TO BE PE100 SDR13.6. ALL FITTINGS TO BE DUCTILE IRON.
6. CONCEPT FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
7. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025.
8. REFER TO WATERCARE WATER SUPPLY CODE OF PRACTICE DRAWINGS FOR DETAILS OF PIPES AND CONNECTIONS PROVIDED IN CIVIL SPECIFICATION.

EXISTING SERVICES LEGEND

GENERAL

- EXISTING PROPERTY BOUNDARY
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

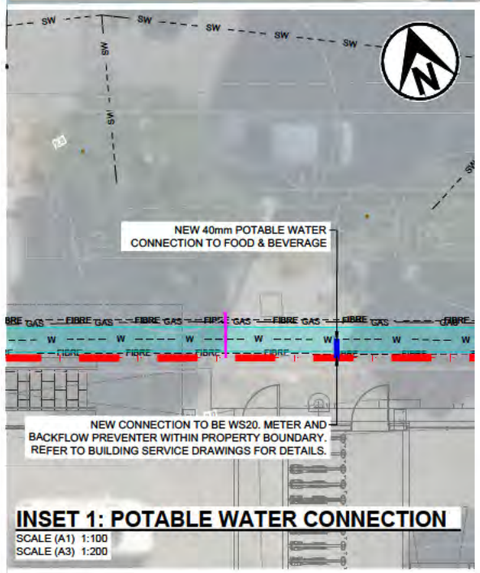
EXISTING POTABLE WATER

- POTABLE WATER PIPE
- WATER TOBY BOX
- FIRE HYDRANT
- VALVES

PROPOSED LEGEND

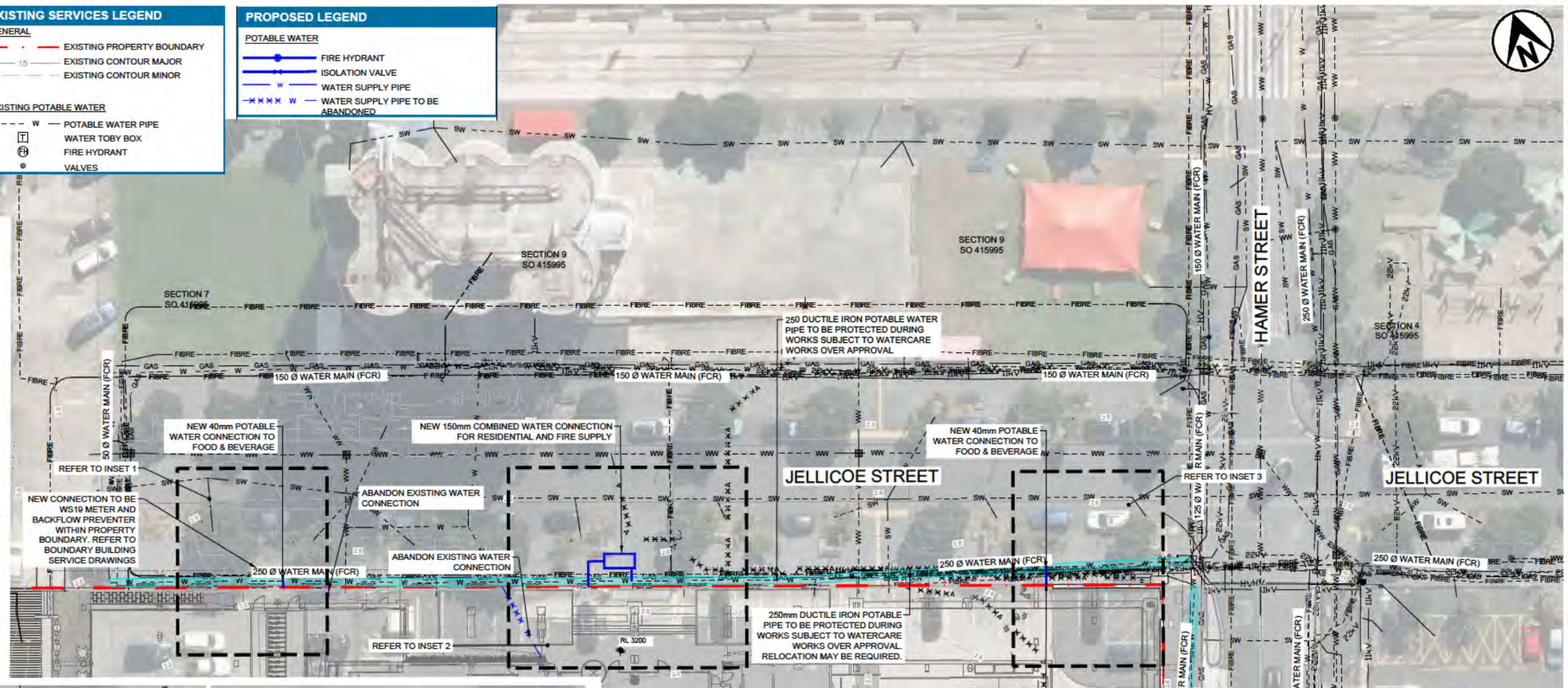
POTABLE WATER

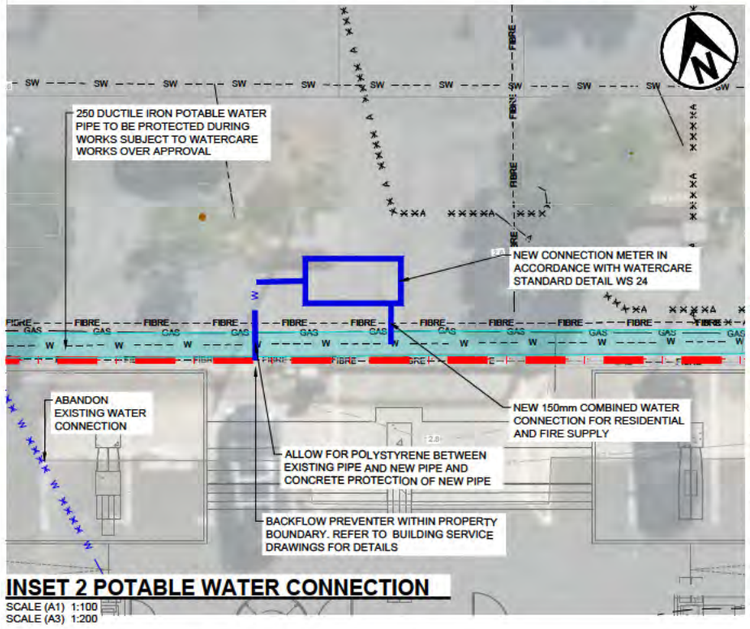
- FIRE HYDRANT
- ISOLATION VALVE
- WATER SUPPLY PIPE
- WATER SUPPLY PIPE TO BE ABANDONED



INSET 1: POTABLE WATER CONNECTION

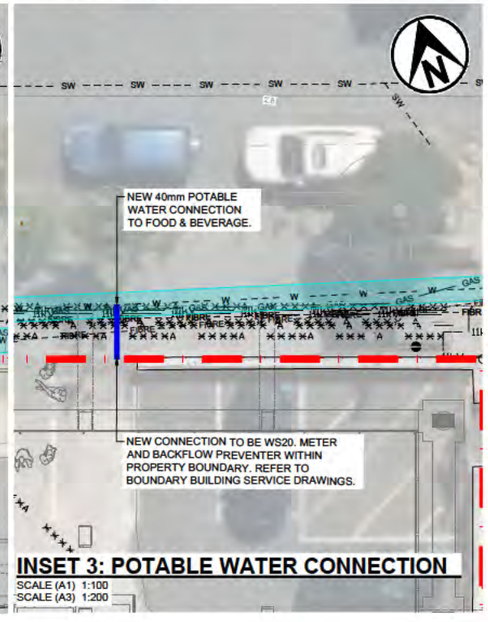
SCALE (A1) 1:100
SCALE (A3) 1:200





INSET 2 POTABLE WATER CONNECTION

SCALE (A1) 1:100
SCALE (A3) 1:200



INSET 3: POTABLE WATER CONNECTION

SCALE (A1) 1:100
SCALE (A3) 1:200

0 2.5 5 m — 1:100 (A1) 1:200 (A3)
0 6.25 12.5 m — 1:250 (A1) 1:500 (A3)

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PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE POTABLE WATER
PROPOSED POTABLE WATER LAYOUT PLAN

SCALE (A1) AS SHOWN DWG No. 1098609.2000-0410 REV 2

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NOTES

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6. CONCEPT FLOOR PLAN SUPPLIED BY WAM ON 3/12/2025.
7. PRELIMINARY DESIGN LANDSCAPED AREA SUPPLIED BY BOFFA MISKELL ON 15/12/2025.

PROPOSED LEGEND

UTILITES

- 22kV — 22 kV DUCT
- GAS — GAS MP4 32mm PE
- COMMUNICATIONS DUCT
- ABANDONED LV
- GAS — ABANDONED GAS LINE
- TEL — ABANDONED COMMUNICATIONS LINE

EXISTING SERVICES LEGEND

GENERAL

- EXISTING PROPERTY BOUNDARY
- 15 — EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR

EXISTING DRY SERVICES

- EXISTING POWER BOX
- HV — EXISTING HV DUCTS
- EXISTING STREET LIGHTS
- LV — EXISTING 400V LV DUCTS
- 11kV — EXISTING 11kV
- 22kV — EXISTING 22kV
- FIBRE — EXISTING COMMUNICATION NETWORK
- GAS — EXISTING VECTOR MP4 PIPE NETWORK
- EXISTING STREET LIGHTS

EXISTING DRY SERVICES (NOT IN USE)

- A — VECTOR 400 VOLTAGE

SECTION 9 SO 415995

SECTION 4 SO 415995

HAMER STREET

JELLICOE STREET

JELLICOE STREET

BEAUMONT STREET

REFER TO INSET 1

REFER TO INSET 2

REFER TO INSET 3

EXISTING GAS MP4 50mm PE CONNECTION TO BE ABANDONED

RL 3200

PART LOT 1 DP 133386

NEW GAS MP4 32mm PE CONNECTION TO FOOD AND BEVERAGE SITE

EXISTING FIBRE WITHIN PROPERTY BOUNDARY TO BE ABANDONED

EXISTING LV TO BE ABANDONED WITHIN PROJECT BOUNDARY

NEW COMMUNICATIONS DUCT. ASSUME 2x150mm PVC-U SN16 DUCTS. EXISTING PIT MAY REQUIRE REPLACEMENT

NEW GAS MP4 32mm PE CONNECTION TO FOOD AND BEVERAGE SITE

LOT 1 BLOCK II DEEDS 226

LOT 2 BLOCK II DEEDS 226

REFER TO INSET 4

NEW 22kV POWER CONNECTION.

LOT 1 DP 25871

LOT 3 DP 25871

LOT 7 BLOCK II DEEDS 226

1:12

1:12

0 5 10 m 1:200 (A1) 1:400 (A3)

0 6.25 12.5 m 1:250 (A1) 1:500 (A3)

INSET 1: GAS CONNECTION

SCALE (A1) 1:125
SCALE (A3) 1:250

NEW GAS MP4 32mm PE CONNECTION TO FOOD AND BEVERAGE SITE. GAS METER WITHIN PROPERTY BOUNDARY. REFER BUILDING SERVICES DRAWINGS FOR CONNECTION TO INTERNAL NETWORK.

INSET 2: COMMS CONNECTION

SCALE (A1) 1:125
SCALE (A3) 1:250

NEW COMMUNICATIONS 1200x800mm PIT

NEW COMMUNICATIONS CONNECTION. 2x100mm HEAVY DUTY PVC-U SN16 DUCTS IN ACCORDANCE WITH CHORUS REQUIREMENTS. CONNECTION AT PROPERTY BOUNDARY BY OTHERS.

EXISTING GAS MP4 50mm PE CONNECTION TO BE ABANDONED

EXISTING LV TO BE ABANDONED WITHIN PROJECT BOUNDARY

INSET 3: GAS CONNECTION

SCALE (A1) 1:125
SCALE (A3) 1:250

NEW GAS MP4 32mm PE CONNECTION TO FOOD AND BEVERAGE SITE. GAS METER WITHIN PROPERTY BOUNDARY. REFER BUILDING SERVICES DRAWINGS FOR CONNECTION TO INTERNAL NETWORK.

INSET 4: 22kV CONNECTION

SCALE (A1) 1:125
SCALE (A3) 1:250

NEW 22kV POWER CONNECTION. 2x DN150 HEAVY DUTY PVC-U DUCTS IN ACCORDANCE WITH VECTOR REQUIREMENTS. ROAD PAVEMENT TO BE REINSTATED IN ACCORDANCE WITH AT REQUIREMENTS. CABLING DESIGN BY OTHERS. CONNECTION AT PROPERTY BOUNDARY AND TO EXISTING 22kV BY OTHERS.

Tonkin+Taylor
www.tonkintaylor.co.nz

REV	DESCRIPTION	CAD	CHK	DATE
1	DRAFT PRELIMINARY DESIGN ISSUE	ALPO	CJC	24.11.25
2	100% PRELIMINARY DESIGN ISSUE	ABMO	CJC	17.12.25

DESIGNED	CJC	NOV.25	DRAWING STATUS
DRAWN	ALPO	NOV.25	INFORMATION ONLY
DESIGN CHECKED	CJC	17.12.25	PROJECT PHASE
DRAWING CHECKED	NSW	17.12.25	PRELIMINARY DESIGN

APPROVED DATE

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS SIGNED AS APPROVED

CLIENT WESTHAVEN RESIDENTIAL LTD PARTNERSHIP

PROJECT 188 BEAUMONT STREET CIVIL PRELIMINARY DESIGN

TITLE UTILITIES
PROPOSED UTILITIES LAYOUT PLAN

SCALE (A1) AS SHOWN DWG No. 1098609.2000-0510 REV 2

Appendix B Calculations

Project:	188 Beaumont Street	Calc by:	MATM
Project Number:	1098609.2000	Check by:	CJC
Client:	Precinct Properties	Date:	5/03/2026
File Path	rporate\Auckland\Projects\1098609\1098609.2000\WorkingMaterial\Civil\WW and WS\Development assessment application\[CJC_WW and WS CalculationsV2.xls		

Worksheet title

Description of worksheet functionality

References: *references to Standards, design guidelines used in this worksheet etc.*

Post-Development Wastewater Demand Assessment

The following assessment is undertaken to estimate the post development demand at 188 Beaumont Street.
Design requirements are based on Auckland COP for Land Development and Subdivision, Water and Wastewater Code of Practice, Chapter 6: Water dated 01/06/2021, Ver 2.4.

Commercial

[Activity Type]			
Wet Retail			
Area	624	m2	*User Input or link to created GFA Summary cell*
Wastewater generation	15	litres/day/m2	*Watercare Wastewater CoP Table 5.1.3 Commercial*
PDWF PF	2.00		*Watercare Wastewater CoP Table 5.1.3 Commercial*
PWWF PF	6.70		*Watercare Wastewater CoP Table 5.1.3 Commercial*
Average Dry Weather Flow (ADWF)	9360.00	litres/day	*Wastewater generation x Occupancy*
	0.108	litres/sec	*ADWF in L/s*
Self Cleansing Design Flow (PDWF)	0.217	litres/sec	*ADWF x PDWF PF*
Peak Design Flow (PWWF)	0.726	litres/sec	*ADWF x PWWF PF*

Residential

[Activity Type]			
Residential			
How many storeys are there ?	4 storeys and above		*Up to three storeys of residential development.* *Four storeys and above include high-rise residential and mixed use buildings.* *Watercare Wastewater CoP Table 5.1.1 Residential*
Total Occupancy	592	people	*User Input or link to created GFA Summary cell*
Wastewater generation	180	litres/person/day	
PDWF PF	3		*Watercare Wastewater CoP Table 5.1.1 Residential*
PWWF PF	5		*Watercare Wastewater CoP Table 5.1.1 Residential*
Average Dry Weather Flow (ADWF)	106560.00	litres/day	*Wastewater generation x Occupancy*
	1.233	litres/sec	*ADWF in L/s*
Self Cleansing Design Flow (PDWF)	3.700	litres/sec	*ADWF x PDWF PF*
Peak Design Flow (PWWF)	6.167	litres/sec	*ADWF x PWWF PF*

Wastewater Demand Summary

Total Average Dry Weather Flow (ADWF)	115920.00	litres/day
	1.34	litres/sec
Total Self Cleansing Design Flow (PDWF)	3.92	litres/sec
Total Peak Design Flow	6.89	litres/sec

Project:	188 Beaumont Street	Calc by:	MATM
Project Number:	1098609.2000	Check by:	CJC
Client:	Precinct Properties	Date:	5/03/2026
File Path	rporate\Auckland\Projects\1098609\1098609.2000\WorkingMaterial\Civil\WW and WS\Development assessment application\[CJC_WW and WS CalculationsV2.xls		

Worksheet title

Description of worksheet functionality

References: *references to Standards, design guidelines used in this worksheet etc.*

Post-Development Wastewater Demand Assessment

The following assessment is undertaken to estimate the post development demand at 188 Beaumont Street.
Design requirements are based on Auckland COP for Land Development and Subdivision, Water and Wastewater Code of Practice, Chapter 6: Water dated 01/06/2021, Ver 2.4.

Commercial

[Activity Type]			
Wet Retail			
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Wastewater generation	15	litres/day/m2	*Watercare Wastewater CoP Table 5.1.3 Commercial*
PDWF PF	2.00		*Watercare Wastewater CoP Table 5.1.3 Commercial*
PWWF PF	6.70		*Watercare Wastewater CoP Table 5.1.3 Commercial*
Average Dry Weather Flow (ADWF)	9360.00	litres/day	*Wastewater generation x Occupancy*
	0.108	litres/sec	*ADWF in L/s*
Self Cleansing Design Flow (PDWF)	0.217	litres/sec	*ADWF x PDWF PF*
Peak Design Flow (PWWF)	0.726	litres/sec	*ADWF x PWWF PF*

Residential

[Activity Type]			
Residential			
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Wastewater generation	180	litres/person/day	
PDWF PF	3		*Watercare Wastewater CoP Table 5.1.1 Residential*
PWWF PF	5		*Watercare Wastewater CoP Table 5.1.1 Residential*
Average Dry Weather Flow (ADWF)	106560.00	litres/day	*Wastewater generation x Occupancy*
	1.233	litres/sec	*ADWF in L/s*
Self Cleansing Design Flow (PDWF)	3.700	litres/sec	*ADWF x PDWF PF*
Peak Design Flow (PWWF)	6.167	litres/sec	*ADWF x PWWF PF*

Wastewater Demand Summary

Total Average Dry Weather Flow (ADWF)	115920.00	litres/day
	1.34	litres/sec
Total Self Cleansing Design Flow (PDWF)	3.92	litres/sec
Total Peak Design Flow	6.89	litres/sec

Project:	188 Beaumont Street	Calc by:	MATM
Project Number:	1098609.2000	Check by:	CJC
Client:	Precinct Properties	Date:	5/03/2026
File Path	orporate\Auckland\Projects\1098609\1098609.2000\WorkingMaterial\Civil\WW and WS\Development assessment application\[CJC_WW and WS CalculationsV2.xls		

Worksheet title

Description of worksheet functionality

References: *references to Standards, design guidelines used in this worksheet etc.*

Post-Development Water Supply Assessment

The following assessment is undertaken to estimate the post development demand at 188 Beaumont Street.
Design requirements are based on Auckland COP for Land Development and Subdivision, Water and Wastewater Code of Practice, Chapter 6: Water dated 01/06/2021, Ver 2.4.

Commercial

[Activity Type]				
Wet Retail				
Area	624	m2	*User Input or link to created GFA Summary cell*	
Water Design Flow Allowance	15	litres/day/m2	*Watercare Water CoP Table 6.1.c Commercial*	
	2.0		*If the PF cell reads 'FALSE' please use the 'PF interpolation Tool' and manually input PF. PF = 1.5 for populations above 10,000. PF = 2 for populations below 2,000. PF = interpolated between 1.5 and 2 for populations between 10,00 and 2,000.*	
Peak Flow Factor (day demand)			*Watercare Water CoP 6.3.5.3*	
Peak Flow Factor (hour demand)	2.5		*PF = 2.5 if unspecified*	*Watercare Water CoP 6.3.5.3*
Average Day Demand (ADD)	9360.00	litres/day	*Water Design Flow Allowance x Area*	
	0.11	litres/sec	*ADD in L/sec*	
Peak Day Demand	18720.00	litres/day	ADD x Peak Flow Factor	
	0.22	litres/sec		
Peak Hourly Demand	1950.00	litres/hour	*(Peak Day Demand / 24) x PF*	
	0.54	litres/sec		

Residential

[Activity Type]				
Residential				
How many storeys are there ?	4 storeys and above		*Up to three storeys of residential development. Four storeys and above include high-rise residential and mixed use buildings. Watercare Water CoP 6.3.5.6*	
Total Occupancy	592	people	*Occupancy for design Purposes refer to Watercare Water CoP Table 6.1.a*	
Water Design Flow Allowance	200	litres/person/day	*Watercare Water CoP 6.3.5.6*	
	2.0		*If the PF cell reads 'FALSE' please use the 'PF interpolation Tool' and manually input PF. PF = 1.5 for populations above 10,000. PF = 2 for populations below 2,000. PF = interpolated between 1.5 and 2 for populations between 10,00 and 2,000.*	
Peak Flow Factor (day demand)			*Watercare Water CoP 6.3.5.3*	
Peak Flow Factor (hour demand)	2.5		*PF = 2.5 if unspecified*	*Watercare Water CoP 6.3.5.3*
Average Day Demand (ADD)	118400.00	litres/day	*Water Design Flow Allowance x Area*	
	1.37	litres/sec	*ADD in L/sec*	
Peak Day Demand	236800.00	litres/day	ADD x Peak Flow Factor	
	2.74	litres/sec		
Peak Hourly Demand	24666.67	litres/hour	*(Peak Day Demand / 24) x PF*	
	6.85	litres/sec		

Potable Water Demand Summary

Total Average Day Demand	127760.00	litres/day
	1.48	litres/sec
Total Peak Day Demand	255520.00	litres/day
	2.96	litres/sec
Total Peak Hourly Demand	26616.67	litres/hour
	7.39	litres/sec

TP108 Stormwater Method

Drop down list | Input cell | Key results

Project:	1098609	By:	TEKR	Date:	29/07/2025
Work Package:	188 Beaumont Street	Checked:	PP	Date:	4/08/2025
Title:					
Location:	Auckland				
Stage #:	100000				

+ Pipe Capacity Summary

Pipe ID	Pipe Material	Upstream IL (m)	Downstream IL (m)	Pipe length (m)	Pipe Slope (m/m)	Pipe Dia. (mm)	Pipe Area (m^2)	Mannings (n)	Pipe Capacity (litre/sec)	Upstream Catchment Demand (litre/sec)	Post construction Demand (litre/sec)	Post Development Spare Capacity (l/s)
3000220223	Concrete	0.6	0.54	9.58	0.0053	300.000	0.07	0.01	70.556	N/A	115.01	-44.457
3000175335	Concrete	0.2	-0.18	55.01	0.0069	600.000	0.28	0.01	510.326	112	N/A	398.326
3000175336	Concrete	-0.19	-0.22	54.29	0.0006	600.000	0.28	0.01	144.337	112	115.01	-82.676
3000175337	Concrete	-0.3	-0.31	14.71	0.0014	750.000	0.44	0.01	410.499	112	115.01	183.486
3000175338	Concrete	-0.5	-0.51	11.84	0.0017	750.000	0.44	0.01	457.554	112	115.01	230.542

0.53235908

Reference: Auckland Regional Council TP108 - Guidelines for stormwater runoff modelling in the Auckland Region (1999)

Pre Development

+ Runoff Curve Number (CN) and Initial Abstraction (Ia)

Soil name and classification	Cover description (cover type, treatment and hydrologic condition)	Curve Number (CN)*	Area (hectares)	Product of CN x Area
Pervious Areas				
Soil Type B	*Open space, lawns parks, golf courses, cemeteries, etc. (poor condition)*	79	0.0056	0
		0		0
		0		0
		0		0
Impervious Areas	**Subtotal for Pervious Areas:**		0.0056	0
Soil Type B	*Paved parking lots, roofs, driveways, etc. (excl. right-of-way)*	98	0.5113	50
		0		0
		0		0
	Subtotal for Impervious Areas:		0.511	50
* from Table 3.3	**Totals:**	**0.516900**		51
				% Impervious
				98.9%

CN (weighted) : total product / total area = 51 / 0.52 = 98

Ia (weighted) : 5 x pervious area / total area = 5 x 0.006 / 0.52 = 0.1 mm

+ Time of Concentration (t_c) and Soil Storage (S)

Time of Concentration:

Channelisation Factor : C = 0.60 (from Table 4.2)

Catchment Length : L = 0.12 km (along drainage path)

Catchment Slope : S_c = 0.019 m/m (by equal area method)

Runoff Factor R : $\frac{CN}{200 - CN}$ = 0.96

Time of Concentration : $t_c = 0.14\ C\ L^{0.66}\ R^{0.02}\ Sc^{-0.30}$ = 0.17 hrs = 10.1 mins

SCS Lag for HEC-HMS : $t_p = 2/3\ t_c$ = 0.11 hrs = 6.7 mins

Soil Storage Parameter:

$S = \frac{(1000/CN) - 10}{25.4}$

Total = 6 mm

Pervious = 68 mm

Impervious = 5 mm

+ Runoff Volume (V_{24}) and Peak Flow Rate (q_p) Calculation

		Storm #1	Storm #2	Storm #3	Storm #4	Storm #5
Average Recurrence Interval, ARI (yr) :		EDV	WQV	2	10	100
24 hour Rainfall Depth, P_{24}(mm) :		34.5	25.2	75.6	115	175.0
Runoff Index, c* :	$\frac{P_{24} - 2Ia}{P_{24} - 2Ia + 2S}$	0.75	0.69	0.87	0.91	0.94
Specific Peak Flow Rate, q*, (from Figure 5.1)		0.157	0.151	0.164	0.165	0.166
Peak Flow Rate, q_p :	$q^* A P_{24}$ (m^3/s)	0.028	0.020	0.064	0.098	0.151
Runoff Depth, Q_{24} :	$\frac{(P_{24} - Ia)^2}{(P_{24} - Ia) + S}$ (mm) Pervious:	9.0	4.7	36.1	68.2	121.7
	Impervious:	30.0	20.9	70.7	110.0	170.0
Runoff Volume, V_{24} :	$1000 \times Q_{24} A$ (m^3) Pervious:	1	0	2	4	7
	Impervious:	153	107	362	563	869
	Total:	154	107	364	566	876
Peak Flow Rate, q_p :	$q^* A P_{24}$ (L/s)	28	20	64	98	151

+ SCS Guidelines for Runoff Curve Numbers

Cover description	Soil Type A	Soil Type B	Soil Type C	Soil Type D
Open space, lawns parks, golf courses, cer	68	79	86	89
Open space, lawns parks, golf courses, cer	49	69	79	84
Open space, lawns parks, golf courses, cer	39	61	74	80
Pasture grassland or range-continuous fo	68	79	86	89
Pasture, grassland, or range-continuous fo	49	67	79	84
Pasture, grassland, or range-continuous fo	39	61	74	80
Meadow-continuous grass, protected from	30	58	71	78
Brush-brush-weed-grass mixture (poor cor	48	67	77	83
Brush-brush-weed-grass mixture (fair cond	35	56	70	77
Brush-brush-weed-grass mixture (good cor	30	48	65	73
Woods-grass combination, orchard or tree	57	73	82	86
Woods-grass combination, orchard or tree	43	65	76	82
Woods-grass combination, orchard or tree	32	58	72	79
Woods (poor condition)	45	66	88	83
Woods (fair condition)	36	60	73	79
Woods (good condition)	30	55	70	77
Farmsteads-buildings, lanes, driveways, ar	59	74	82	86
Paved parking lots, roofs, driveways, etc (e	98	98	98	98
Paved; curbs and storm sewers (excl right-	98	98	98	98
Paved; open ditches (incl right-of-way)	83	89	92	93
Gravel (incl right-of-way)	76	85	89	91
Dirt (incl right-of-way)	72	82	87	89

Post Development

+ Runoff Curve Number (CN) and Initial Abstraction (Ia)

Soil name and classification	Cover description (cover type, treatment and hydrologic condition)	Curve Number (CN)*	Area (hectares)	Product of CN x Area
Pervious Areas				
Soil Type B		0		0
		0		0
		0		0
		0		0
Impervious Areas	**Subtotal for Pervious Areas:**		0.0000	0
Soil Type B	*Paved parking lots, roofs, driveways, etc. (excl. right-of-way)*	98	0.5169	50
		0		0
		0		0
	Subtotal for Impervious Areas:		0.5169	50
* from Table 3.3	**Totals:**	**0.5169**		51
				% Impervious
				100.0%

CN (weighted) : total product / total area = 51 / 0.52 = 98

Ia (weighted) : 5 x pervious area / total area = 5 x 0.000 / 0.52 = 0.0 mm

+ Time of Concentration (t_c) and Soil Storage (S)

Time of Concentration:

Channelisation Factor : C = 0.60 (from Table 4.2)

Catchment Length : L = 0.12 km (along drainage path)

Catchment Slope : S_c = 0.019 m/m (by equal area method)

Runoff Factor R : $\frac{CN}{200 - CN}$ = 0.96

Time of Concentration : $t_c = 0.14\ C\ L^{0.66}\ R^{0.02}\ Sc^{-0.30}$ = 0.17 hrs = 10.0 mins

SCS Lag for HEC-HMS : $t_p = 2/3\ t_c$ = 0.11 hrs = 6.7 mins

Soil Storage Parameter:

$S = \frac{(1000/CN) - 10}{25.4}$

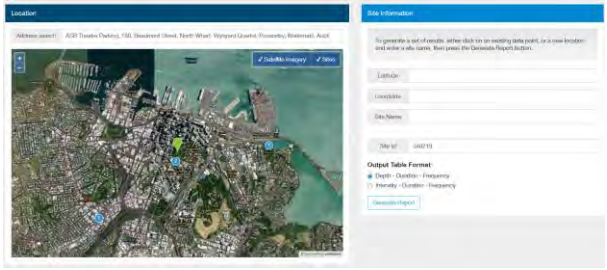
Total = 6 mm

Pervious = 0 mm

Impervious = 8 mm

+ Runoff Volume (V_{24}) and Peak Flow Rate (q_p) Calculation

		Storm #1	Storm #2	Storm #3	Storm #4	Storm #5
Average Recurrence Interval, ARI (yr) :		EDV	WQV	2	10	100
24 hour Rainfall Depth, P_{24}(mm) :		34.5	25.2	75.6	115	175.0
Runoff Index, c* :	$\frac{P_{24} - 2Ia}{P_{24} - 2Ia + 2S}$	0.75	0.69	0.87	0.91	0.94
Specific Peak Flow Rate, q*, (from Figure 5.1)		0.157	0.151	0.164	0.165	0.166
Peak Flow Rate, q_p :	$q^* A P_{24}$ (m^3/s)	0.028	0.020	0.064	0.098	0.151
Runoff Depth, Q_{24} :	$\frac{(P_{24} - Ia)^2}{(P_{24} - Ia) + S}$ (mm) Pervious:	9.0	4.7	36.1	68.2	121.7
	Impervious:	30.0	20.9	70.7	110.0	170.0
Runoff Volume, V_{24} :	$1000 \times Q_{24} A$ (m^3) Pervious:	1	0	2	4	7
	Impervious:	153	107	362	563	869
	Total:	154	107	364	566	876
Peak Flow Rate, q_p :	$q^* A P_{24}$ (L/s)	28	20	64	98	151
2.1C Climate adapted	$q_p * 1.17$ (L/s)	33	23	75	115.0	176
3.8C Climate adapted	$q_p * 1.308$ (L/s)	37	26	84	129	197



Appendix C Existing services information

vector fibre

DISCLAIMER: This information is supplied on the terms in the attached letter, and is provided for reference purposes only and must not be relied upon. Due to continuous expansion, these drawings are only valid for 28 days from the date the map was printed. Please contact Vector Fibre for updated copies after that date. These drawings are not to scale and may not show customer or obsolete lines. Actual dimensions and locations on site may differ from those indicated in these drawings. These drawings are only produced in colour and Vector Fibre is not liable for any difficulty in interpreting photocopies. Vector Fibre disclaims all applicable warranties to the fullest extent permitted by law, and is not liable to you for any damages, costs, losses or expenses suffered by you in using these drawings.

Vector Fibre reminds you of your responsibilities under the Health and Safety at Work Act 2015, whereby you must establish the location of underground services before commencing excavation.

If you hit an electricity cable or overhead line please call us immediately on 0508 VECTOR (0508 832 867). If you hit any gas pipeline call the Fire Service first on 111. If you hit a gas distribution pipe in the Auckland area call us on 0800 764 764. If you hit a gas pipeline in the rest of the North Island call FIRST GAS on 0800 800 393. If you hit a gas transmission pipeline call FIRST GAS on 0800 734 567. If you hit a communications cable (all areas) call us immediately on 0800 826 436 (select option 1).

Legend

Strand & Structure [Gis]

- Pole.Location Inact., T02
- Underground Route.Route Inact. - Installed In-Place

A3 FIBRE beforeudig PLAN

Date printed: 30/07/2025

Scale: 1:400

vector fibre

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Legend

Strand & Structure [Gis]

- Pole.Location Inact., T02
- Underground Route.Route Inact. - Installed In-Place

A3 FIBRE beforeudig PLAN

Date printed: 30/07/2025

Scale: 1:400

EonFibre
Backed by One NZ

Sequence No: 15624270
Job No: 2626647
Location: 188 Beaumont St, Auckland, 1010

beforeudig

Legend

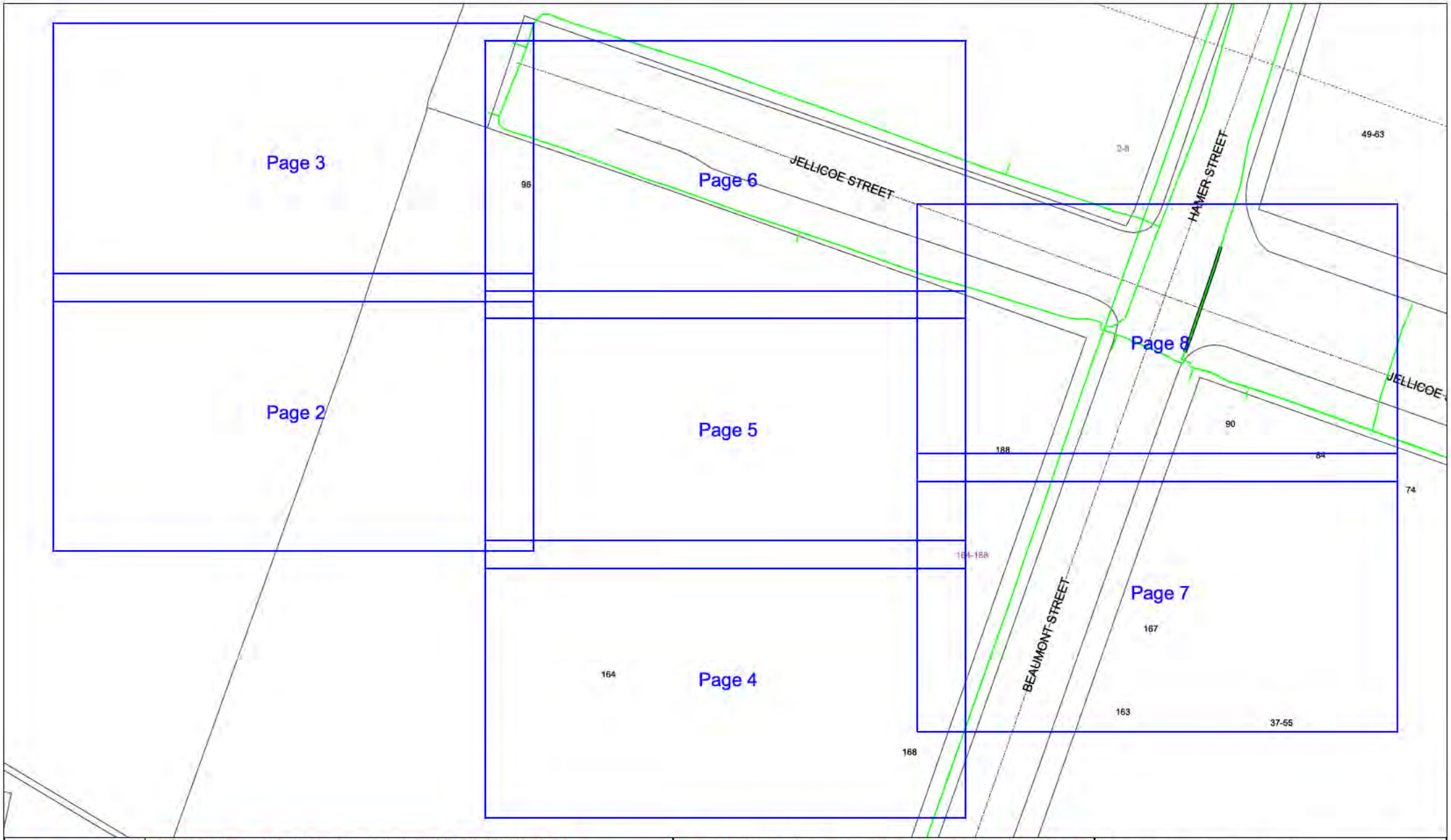
- Existing EonFibre network, marked as: "EonFibre", "One Nz", "ex Vodafone", "TelstraClear", "TelstraSaturn", "Clear", "Saturn"
- Propose, or "as stated"
- Infrastructure owned by others

Abbreviations Key

ES/EOS	Edge of Seal
PP	Power Pole
K	Kerb
F/L	Fence line

N

Scale: 1:1000
Expires: 27 Aug 2025



vector

WARNING! Special conditions apply for high pressure gas pipelines (IP20, IP10, MP7, Selected MP4)

A permit/consent is required for any excavation within 2 metres of this pipeline. A MINIMUM of 3 working days notice is required when applying for a permit/consent. Refer to attached covering letter for additional information.

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Transmission Pipeline (ex - NGC):
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WARNING! Live service within this property.

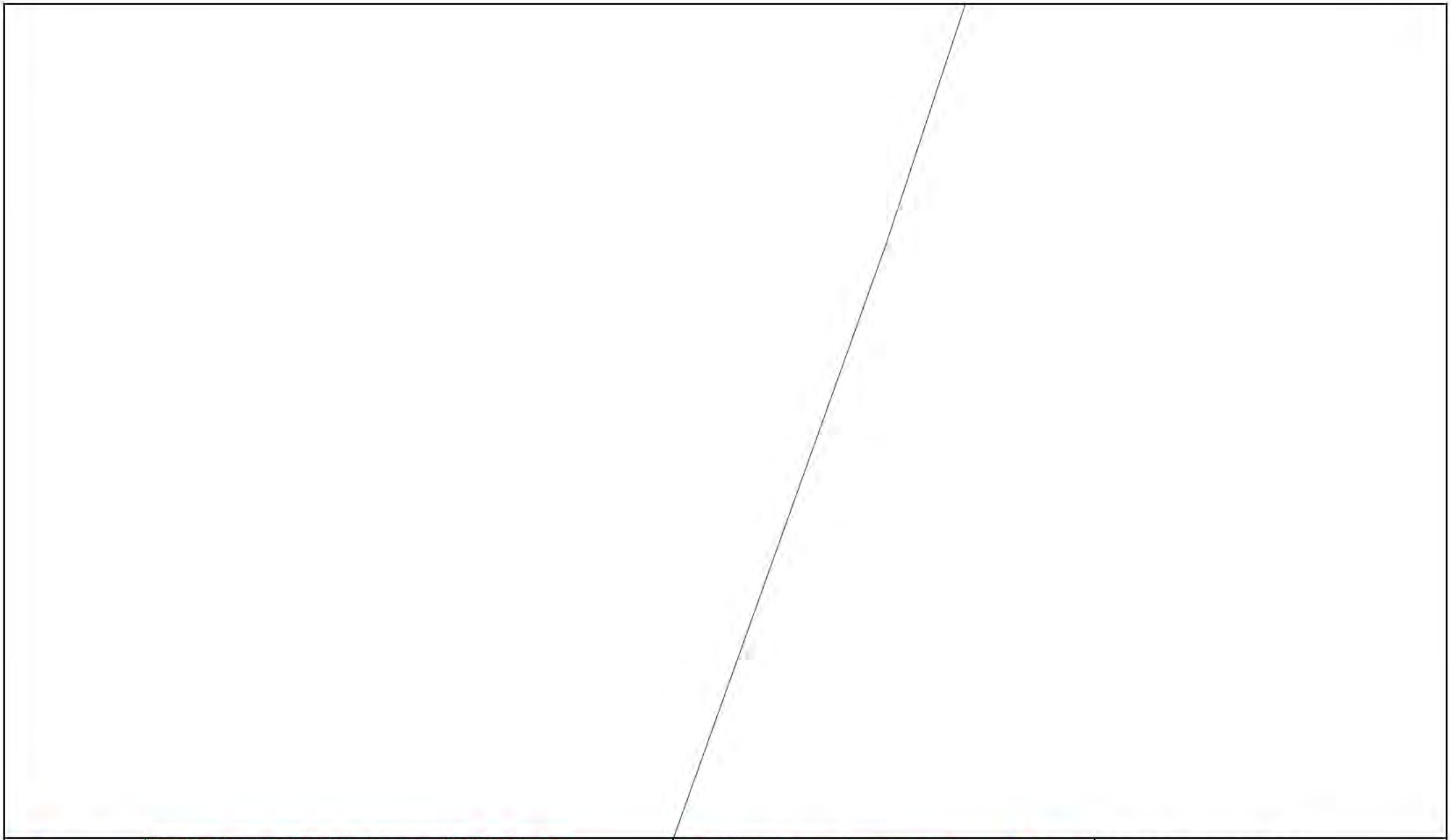
PIPE COLOUR BY PRESSURE
- LP Pipe
- LPG Pipe
- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
- 0 kPa

OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
- Open Valve
- PRS
- Reducer
- Service Regulator
- Riser

WORK MANAGEMENT
- In Progress
- Planned
- Future Planned

A3 GAS beforeudig PLAN

Date printed: 30. July 2025



vector

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- LP Pipe
- LPG Pipe
- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
- 0 kPa

OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
- Open Valve
- PRS
- Reducer
- Service Regulator
- Riser

WORK MANAGEMENT
- In Progress
- Planned
- Future Planned

A3 GAS beforeudig PLAN

Date printed: 30. July 2025

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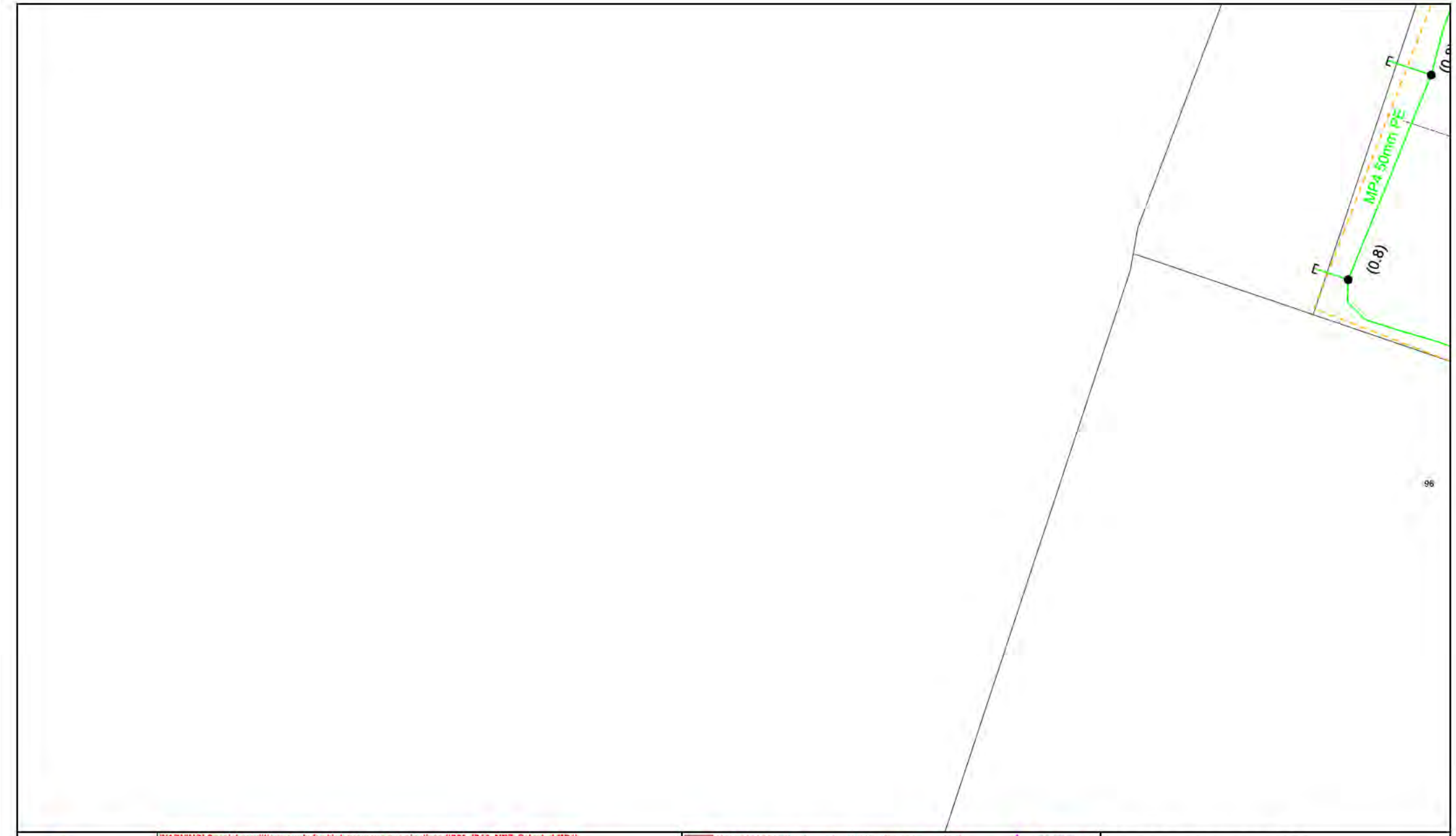

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- LP Pipe
- LPG Pipe
- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
- 0 kPa

OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
- Open Valve
- PRS
- Reducer
- Service Regulator
- Riser

WORK MANAGEMENT
- In Progress
- Planned
- Future Planned

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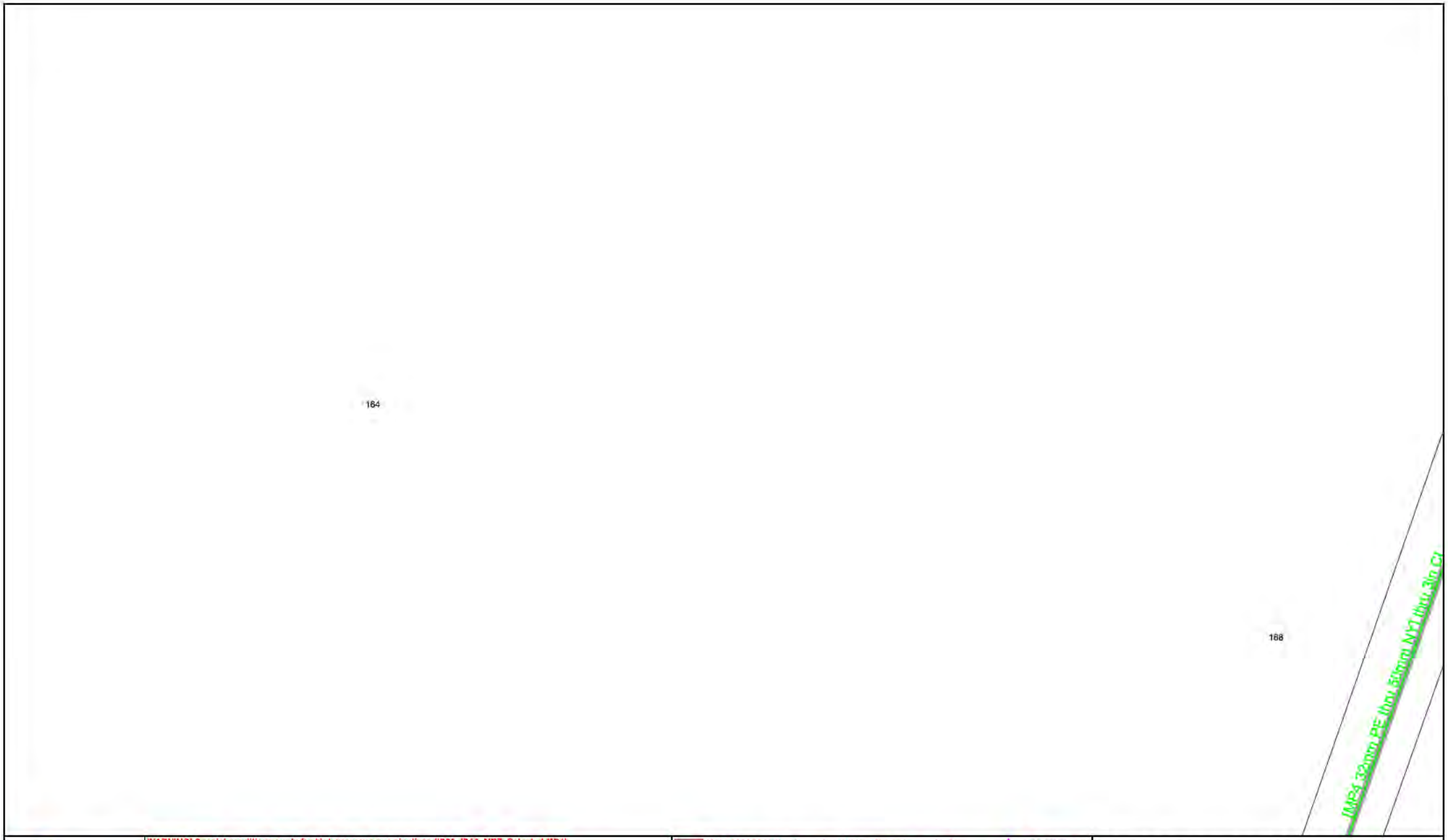

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- LP Pipe
- LPG Pipe
- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
- 0 kPa

OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
- Open Valve
- PRS
- Reducer
- Service Regulator
- Riser

WORK MANAGEMENT
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MOBIL OIL

vector

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- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
- 0 kPa

OTHER GAS FEATURES
- Fibre Optic
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- Gate
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WORK MANAGEMENT
- In Progress
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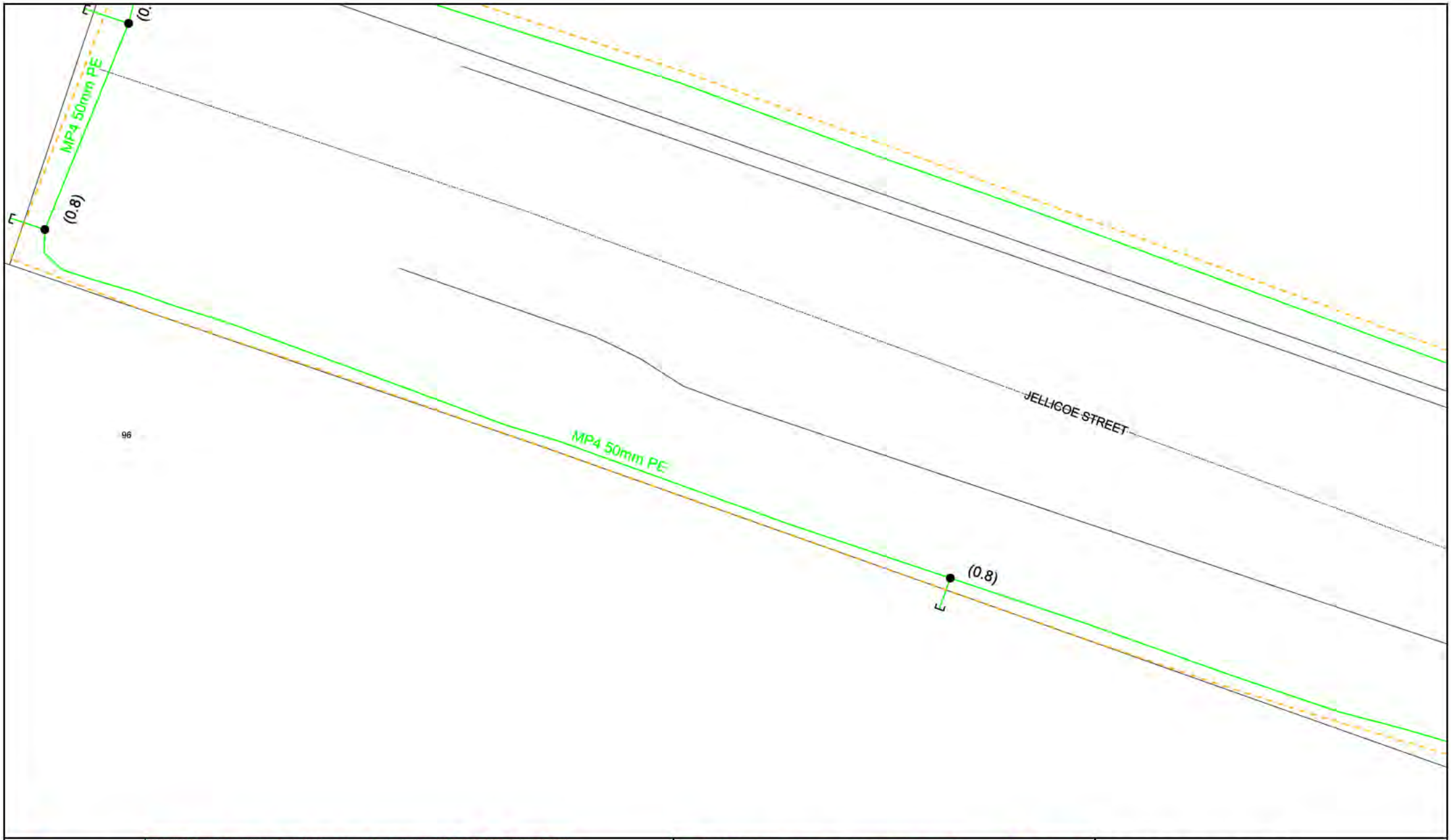

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- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
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OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
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WORK MANAGEMENT
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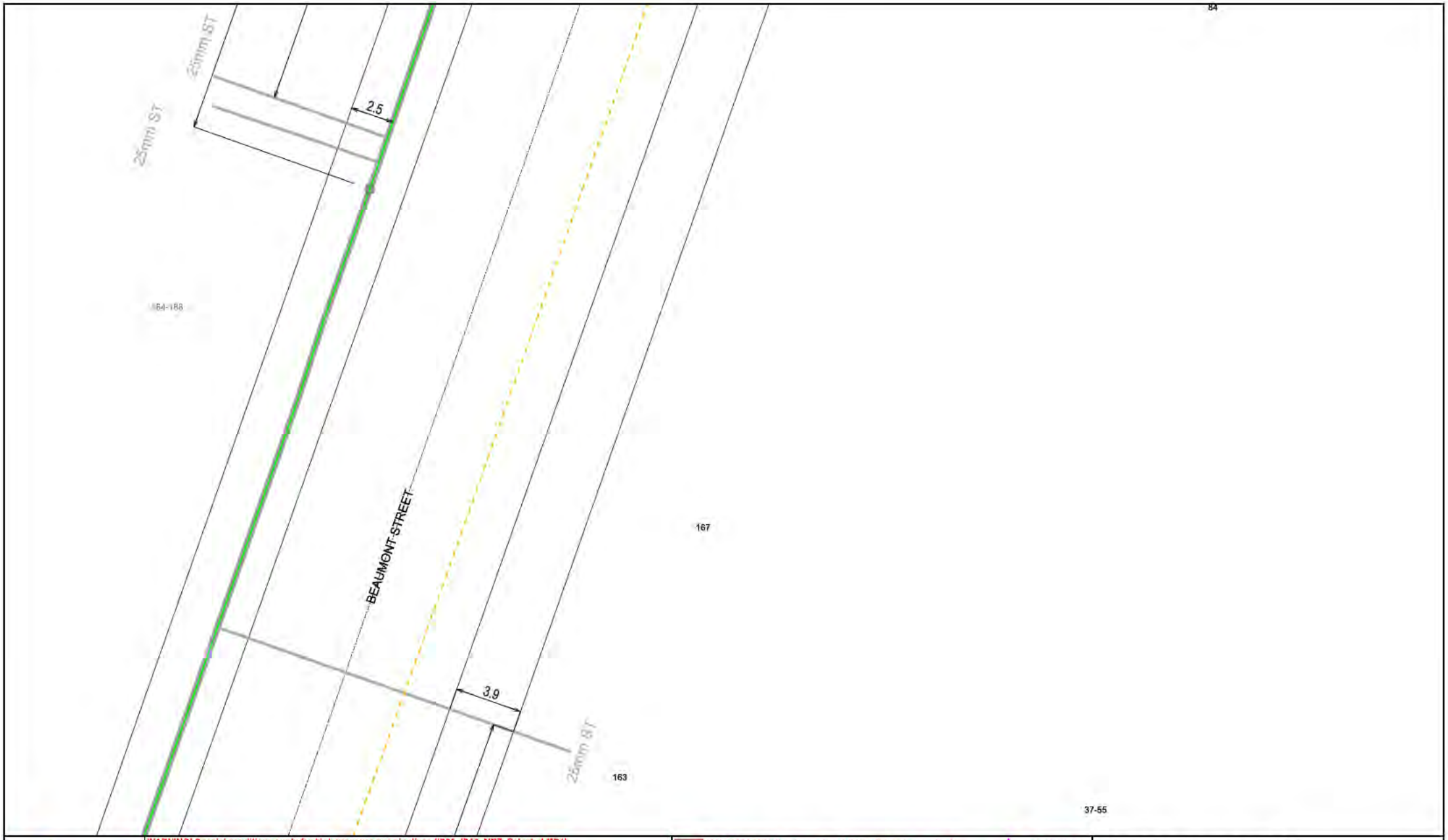

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- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
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OTHER GAS FEATURES
- Fibre Optic
- Closed Valve
- Gate
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WORK MANAGEMENT
- In Progress
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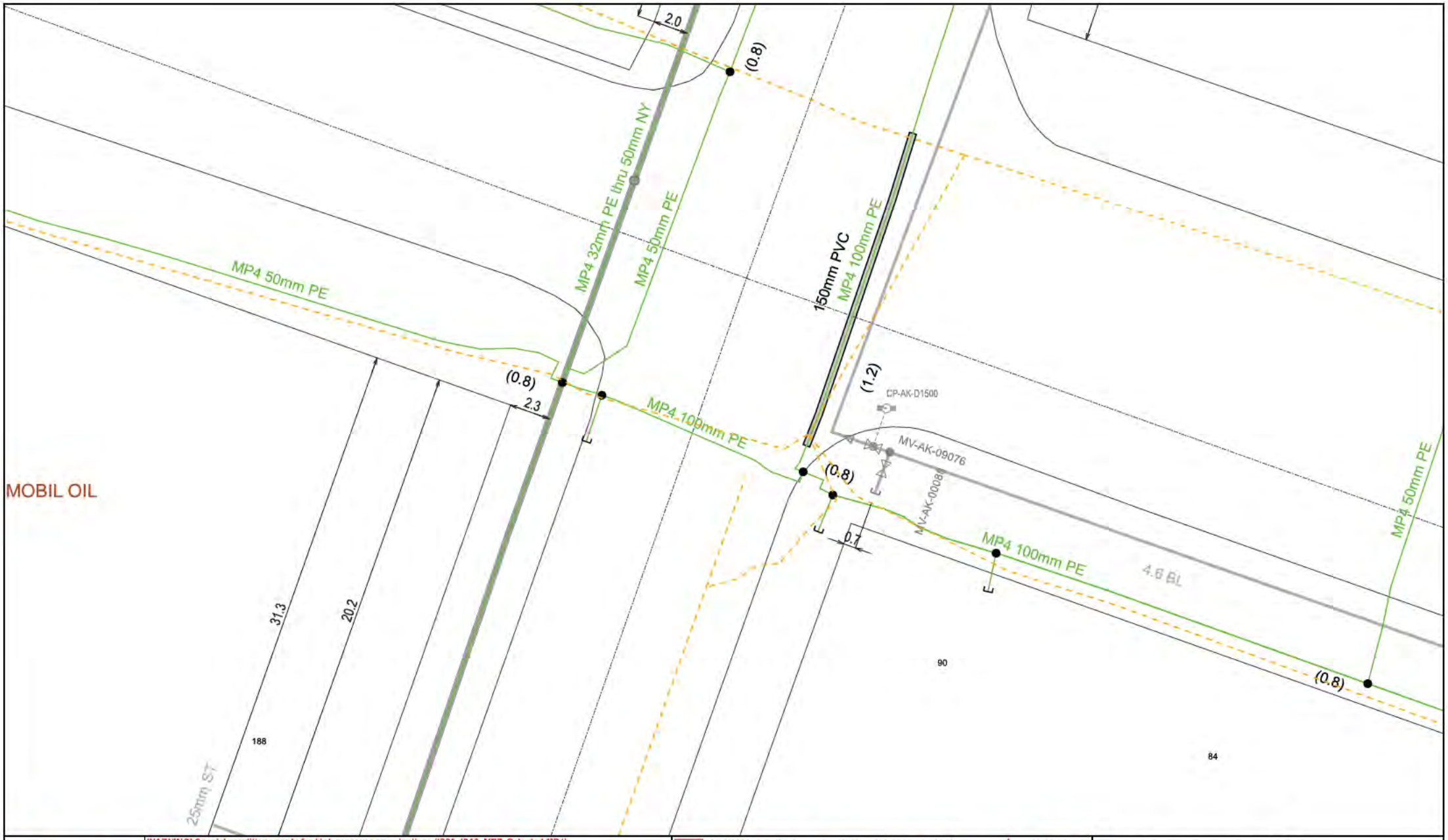

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- LPG Pipe
- MP1 Pipe
- MP2 Pipe
- MP4 Pipe
- MP7 Pipe
- IP10 Pipe
- IP20 Pipe
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OTHER GAS FEATURES
- Fibre Optic
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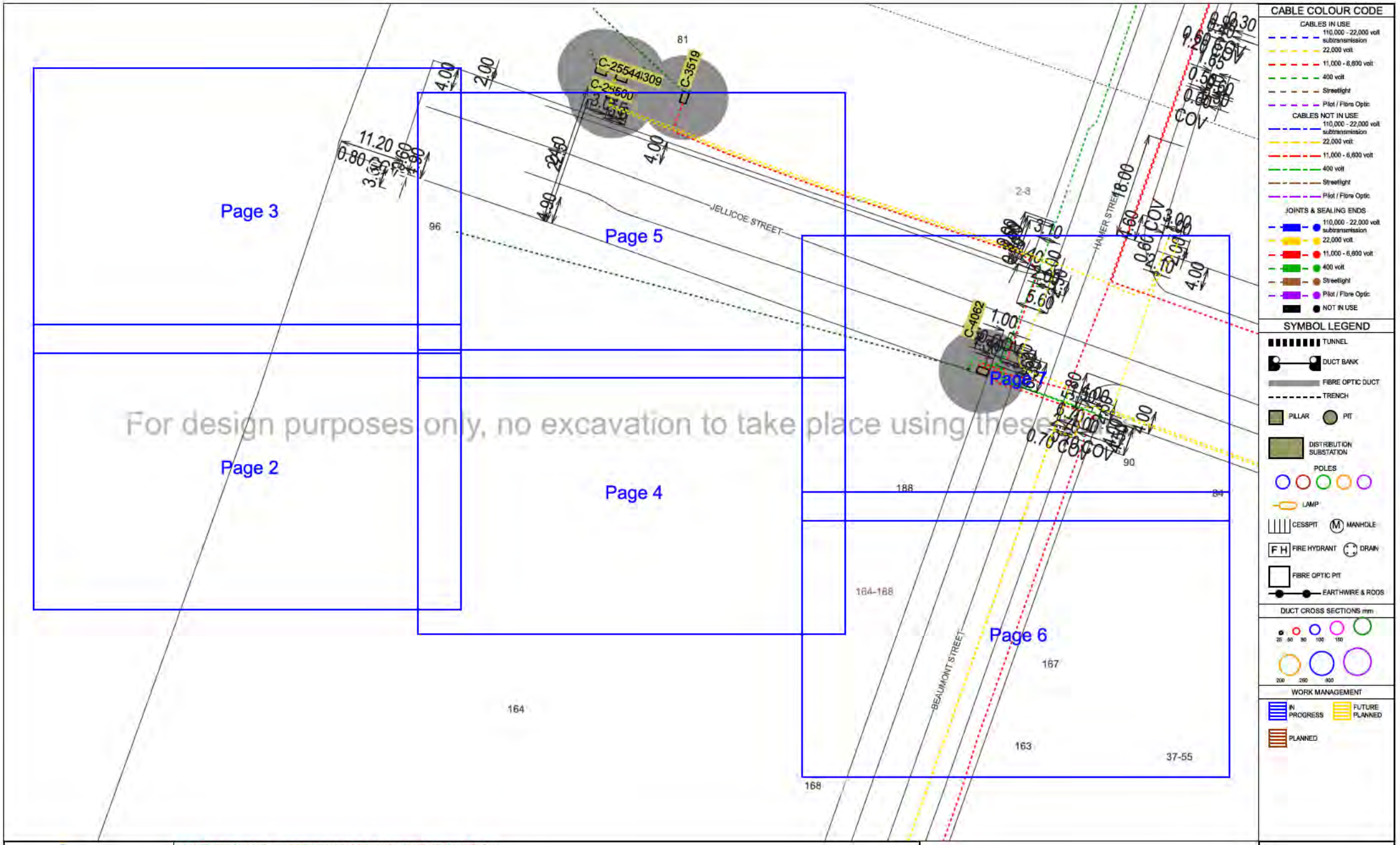

CABLE COLOUR CODE

CABLES IN USE
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic

CABLES NOT IN USE
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic

JOINTS & SEALING ENDS
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic
- NOT IN USE

SYMBOL LEGEND
- TUNNEL
- DUCT BANK
- FIBRE OPTIC DUCT
- TRENCH
- PILLAR
- PIT
- DISTRIBUTION SUBSTATION
- POLES
- LAMP
- CESSPIT
- MANHOLE
- FH FIRE HYDRANT
- DRAIN
- FIBRE OPTIC PIT
- EARTHWIRE & RODS

DUCT CROSS SECTIONS mm

WORK MANAGEMENT
- IN PROGRESS
- FUTURE PLANNED
- PLANNED

vector

22kV, 33kV, 110kV SUB TRANSMISSION CABLES-SPECIAL CONDITIONS APPLY:

Vector Limited provides a free standover service that requires 2 working days notice. Hand digging is required when excavating within 1 metre of the cable. Replacement trench backfill material must be the same as that removed and it must be replaced to the same level of compaction. Refer to attached covering letter for additional information.

A3 ELECTRICITY beforeudig PLAN

Date printed: 30. July 2025

N
W E
S

For design purposes only, no excavation to take place using these plans

CABLE COLOUR CODE

CABLES IN USE
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
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- DRAIN
- FIBRE OPTIC PIT
- EARTHWIRE & RODS

DUCT CROSS SECTIONS mm

20 50 80 100 150 200 250 800

WORK MANAGEMENT

- IN PROGRESS
- FUTURE PLANNED
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vector

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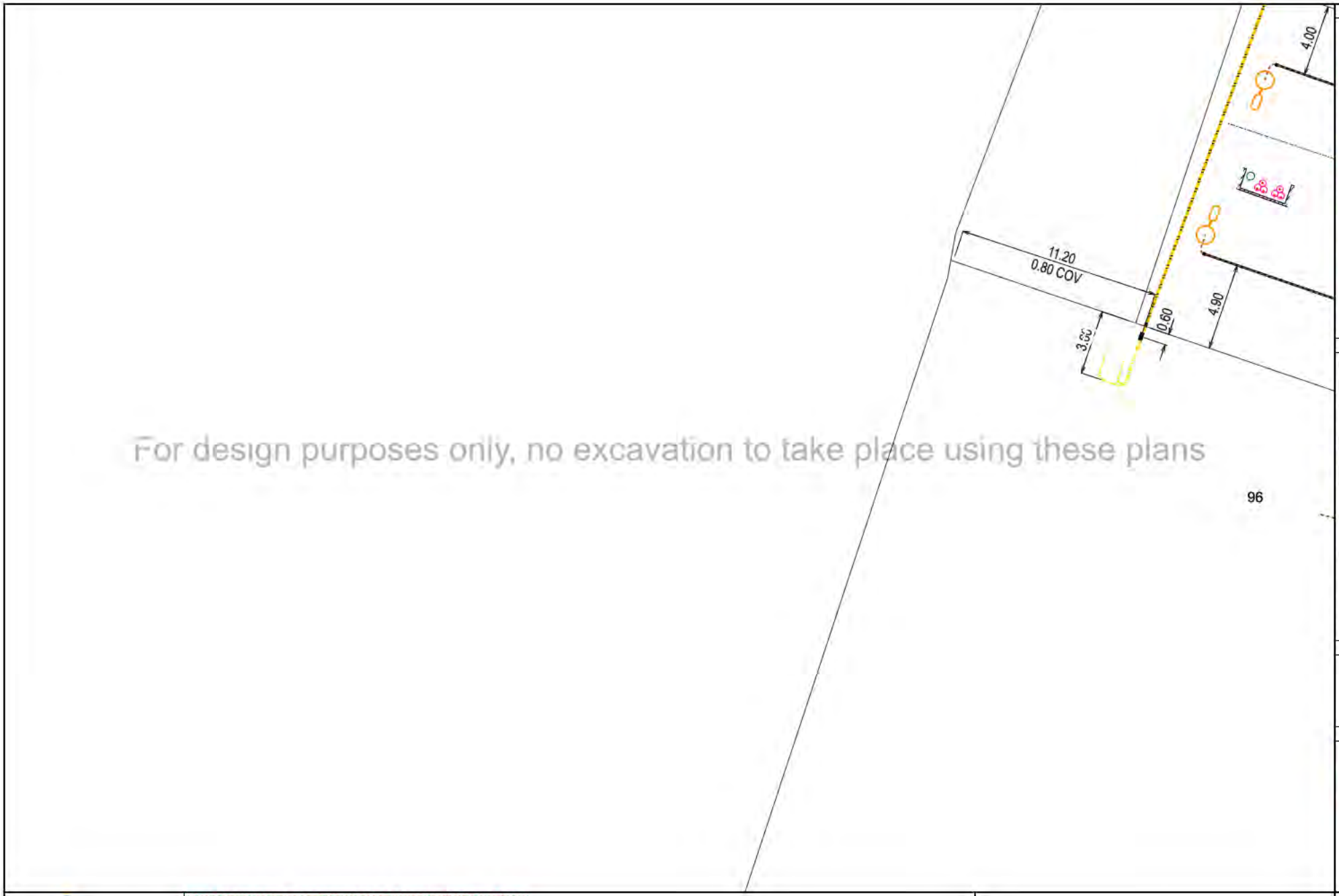

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CABLE COLOUR CODE

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- DRAIN
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DUCT CROSS SECTIONS mm

WORK MANAGEMENT
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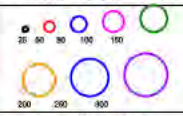

WORK MANAGEMENT
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vector

22kV, 33kV, 110kV SUB TRANSMISSION CABLES-SPECIAL CONDITIONS APPLY:

Vector Limited provides a free standover service that requires 2 working days notice. Hand digging is required when excavating within 1 metre of the cable. Replacement trench backfill material must be the same as that removed and it must be replaced to the same level of compaction. Refer to attached covering letter for additional information.

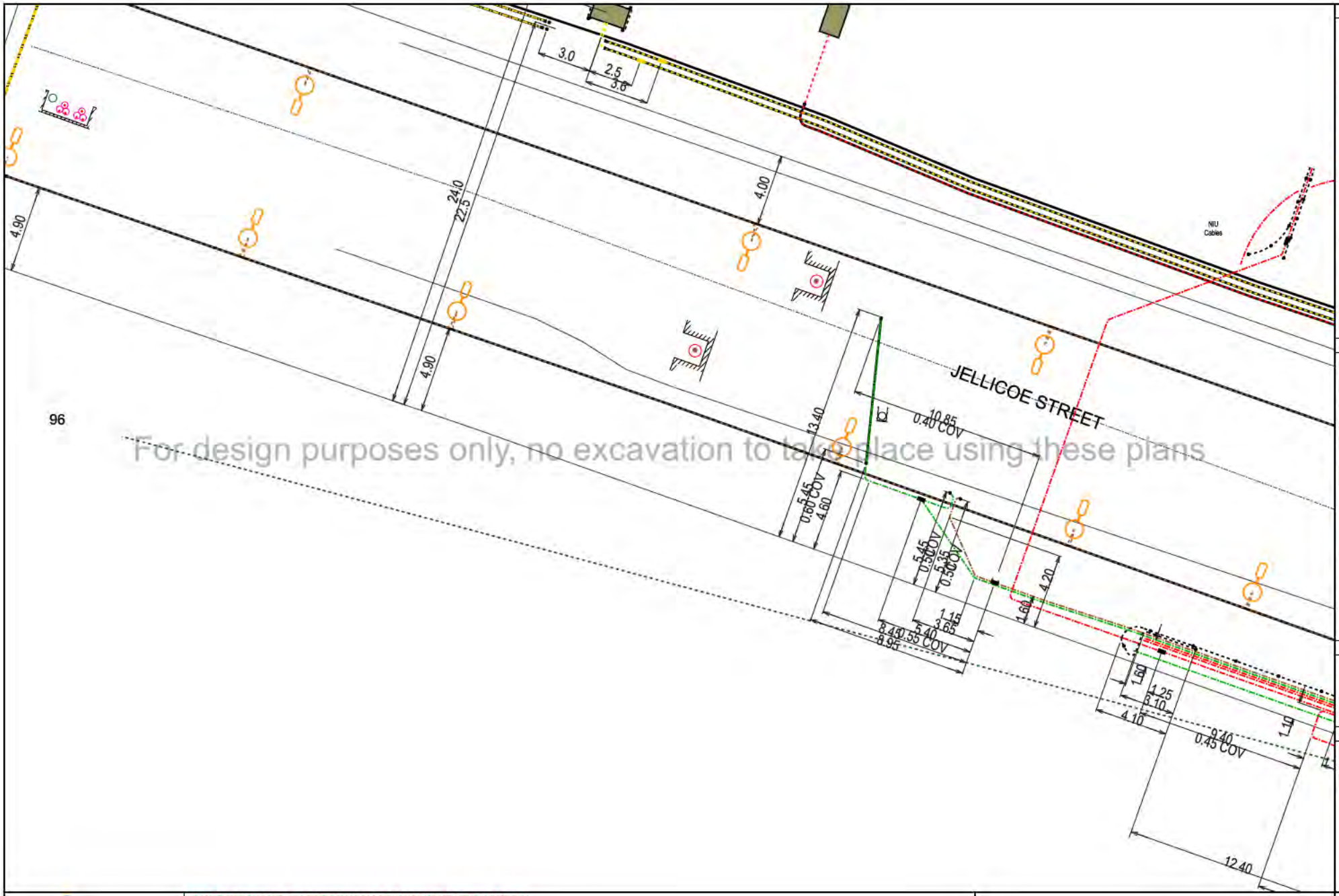
Vector reminds you of your responsibilities under the Health and Safety at Work Act 2015, whereby you must establish the location of underground services before commencing excavation.

If you hit an electricity cable or overhead line please call us immediately on 0508 VECTOR (0508 832 867). If you hit any gas pipeline call the Fire Service first on 111. If you hit a gas distribution pipe in the Auckland area call us on 0800 764 764. If you hit a gas pipeline in the rest of the North Island call FIRST GAS on 0800 800 393. If you hit a gas transmission pipeline call FIRST GAS on 0800 734 567. If you hit a communications cable (all areas) call us immediately on 0800 826 436 (select option 1).

A3 ELECTRICITY beforeudig PLAN

Date printed: 30. July 2025

Scale: 1:200



CABLE COLOUR CODE

CABLES IN USE
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic

CABLES NOT IN USE
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic

JOINTS & SEALING ENDS
- 110,000 - 22,000 volt subtransmission
- 22,000 volt
- 11,000 - 6,600 volt
- 400 volt
- Streetlight
- Pilot / Fibre Optic
- NOT IN USE

SYMBOL LEGEND
- TUNNEL
- DUCT BANK
- FIBRE OPTIC DUCT
- TRENCH
- PILLAR
- PIT
- DISTRIBUTION SUBSTATION
- POLES
- LAMP
- CESSPIT
- MANHOLE
- FH FIRE HYDRANT
- DRAIN
- FIBRE OPTIC PIT
- EARTHWIRE & RODS

DUCT CROSS SECTIONS mm

WORK MANAGEMENT
- IN PROGRESS
- FUTURE PLANNED
- PLANNED

22kV, 33kV, 110kV SUB TRANSMISSION CABLES-SPECIAL CONDITIONS APPLY:

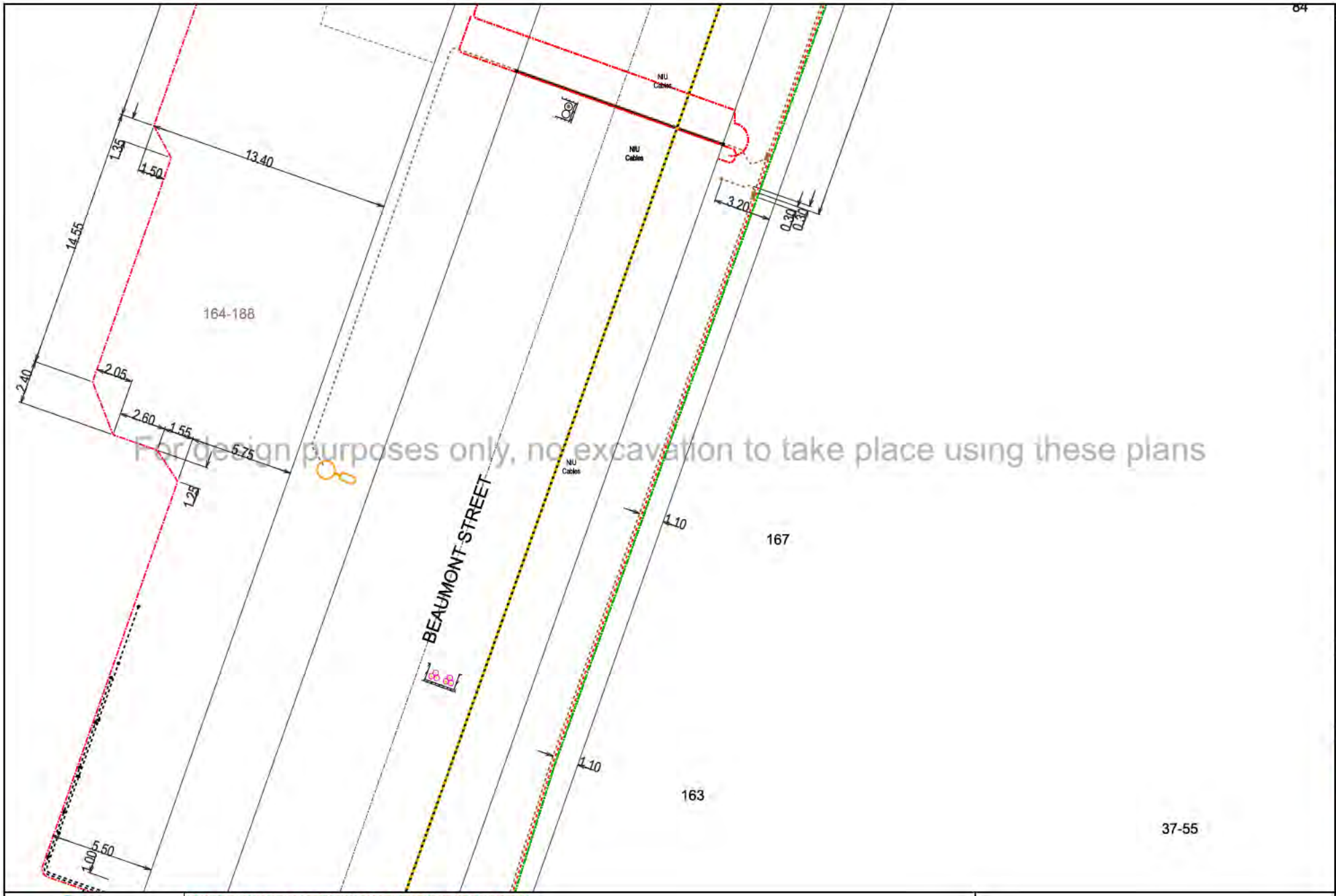
Vector Limited provides a free standover service that requires 2 working days notice. Hand digging is required when excavating within 1 metre of the cable. Replacement trench backfill material must be the same as that removed and it must be replaced to the same level of compaction. Refer to attached covering letter for additional information.

A3 ELECTRICITY beforeudig PLAN

Date printed: 30. July 2025

Scale: 1:200

N W E S



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- POLES
- LAMP
- CESSPIT
- MANHOLE
- FIRE HYDRANT
- DRAIN
- FIBRE OPTIC PIT
- EARTHWIRE & RODS

DUCT CROSS SECTIONS mm

WORK MANAGEMENT
- IN PROGRESS
- FUTURE PLANNED
- PLANNED

vector

22kV, 33kV, 110kV SUB TRANSMISSION CABLES-SPECIAL CONDITIONS APPLY:

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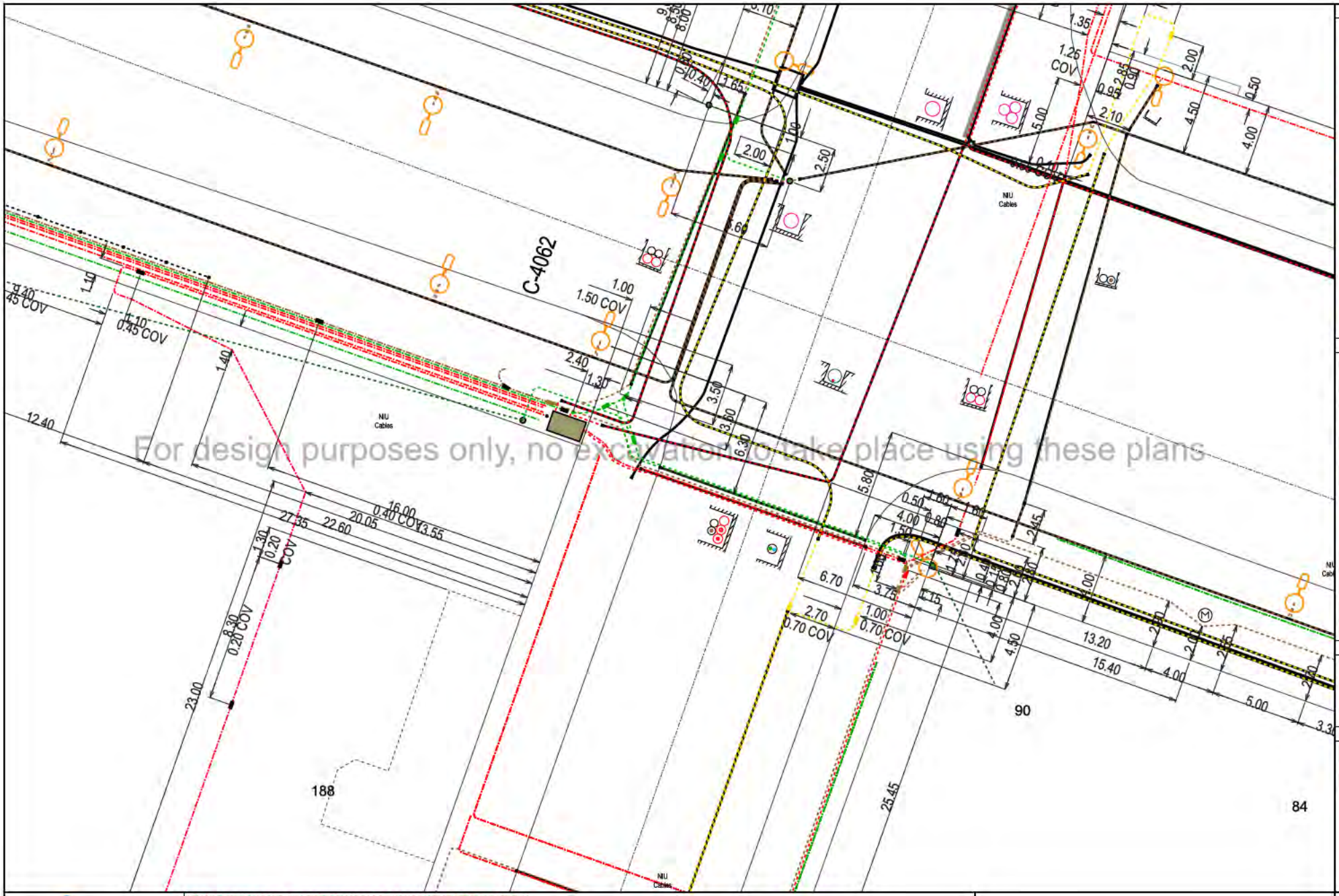
N W E S



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- POLES
- LAMP
- CESSPIT
- MANHOLE
- FH FIRE HYDRANT
- DRAIN
- FIBRE OPTIC PIT
- EARTHWIRE & RODS

DUCT CROSS SECTIONS mm

25 50 80 100 150 200 250 300

WORK MANAGEMENT
- IN PROGRESS
- FUTURE PLANNED
- PLANNED

vector

22kV, 33kV, 110kV SUB TRANSMISSION CABLES-SPECIAL CONDITIONS APPLY:

Vector Limited provides a free standover service that requires 2 working days notice. Hand digging is required when excavating within 1 metre of the cable. Replacement trench backfill material must be the same as that removed and it must be replaced to the same level of compaction. Refer to attached covering letter for additional information.

A3 ELECTRICITY beforeudig PLAN

Date printed: 30. July 2025

Scale: 1:200

N W E S

CHORUS

WARNING: Buried services are widespread and it should be assumed that they are present until it is proven otherwise.
Cables should be expected to be found at ANY depth. In most instances Chorus plans do NOT show house service feeds on private property.
Refer to cover letter provided with your request for additional information - use all plans provided in conjunction with each other
You are responsible for interpreting the information provided and should refer to Worksafe.govt.nz for the 'Guide for safety with underground services'
For assistance contact Chorus Network Protection on 0800 822 003 or if you suspect damage has occurred contact 0800 463 896 opt 2

Plan Name	DH19
Plan ID	642574
Version	GP
Current at	30/07/2025

DEL	CHKD	DATE	ISS	CHANGE	DEL	CHKD	DATE	ISS

AUCKLAND

UNDERGROUND TELEPHONE CABLE SYSTEM

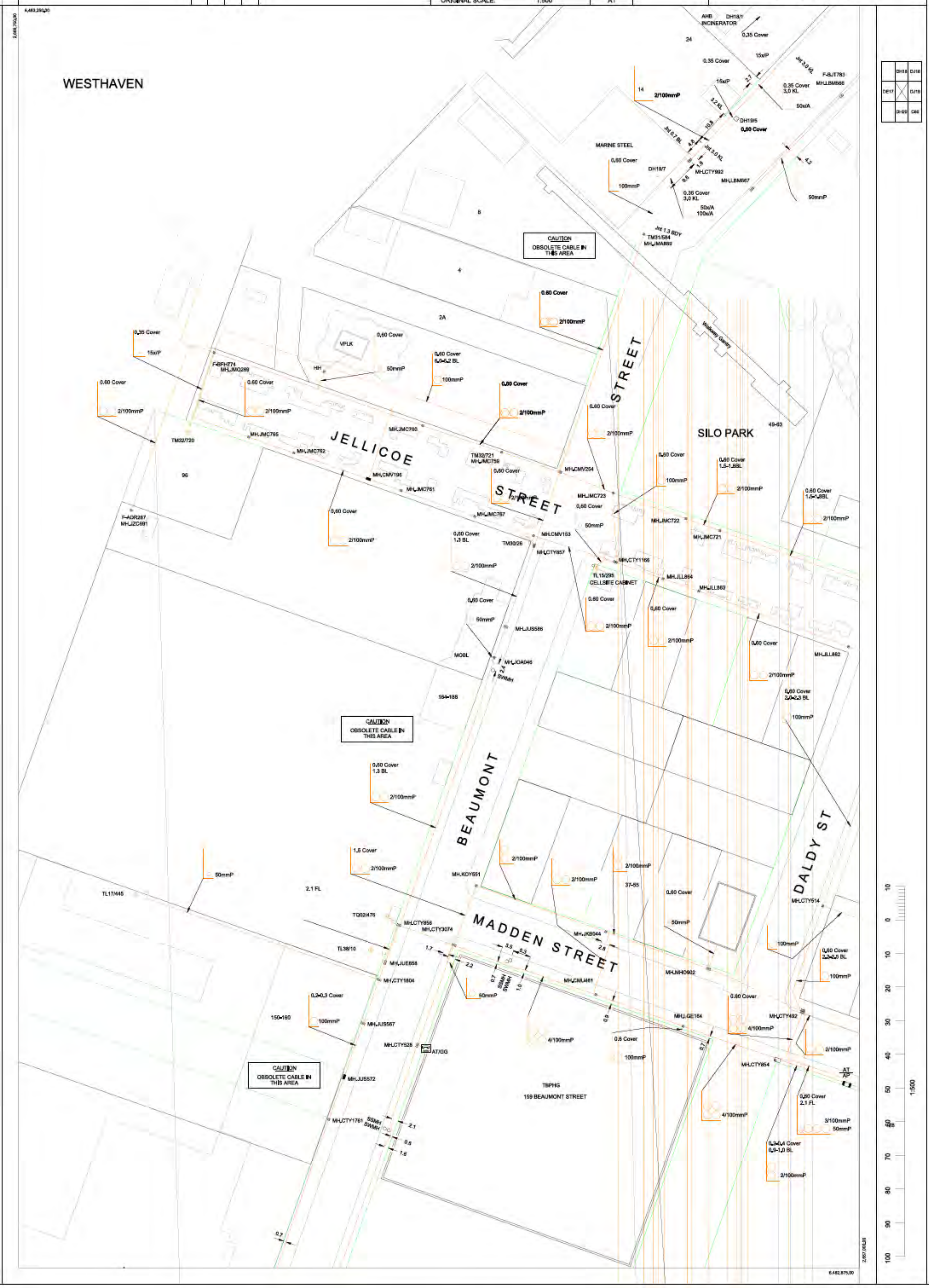
CAUTION

POSITIONAL MEASUREMENTS ARE SUBJECT TO REASONABLE TOLERANCE. COVER AT INSTALLATION WAS : ROADWAY 0.50m FOOTWAY 0.35m, UNLESS SHOWN OTHERWISE. NOTE: COVER MAY HAVE CHANGED AND MUST BE CHECKED ON SITE.

ORIGINAL SCALE: 1:500 A1

NZMG REF. R11-500/68.19

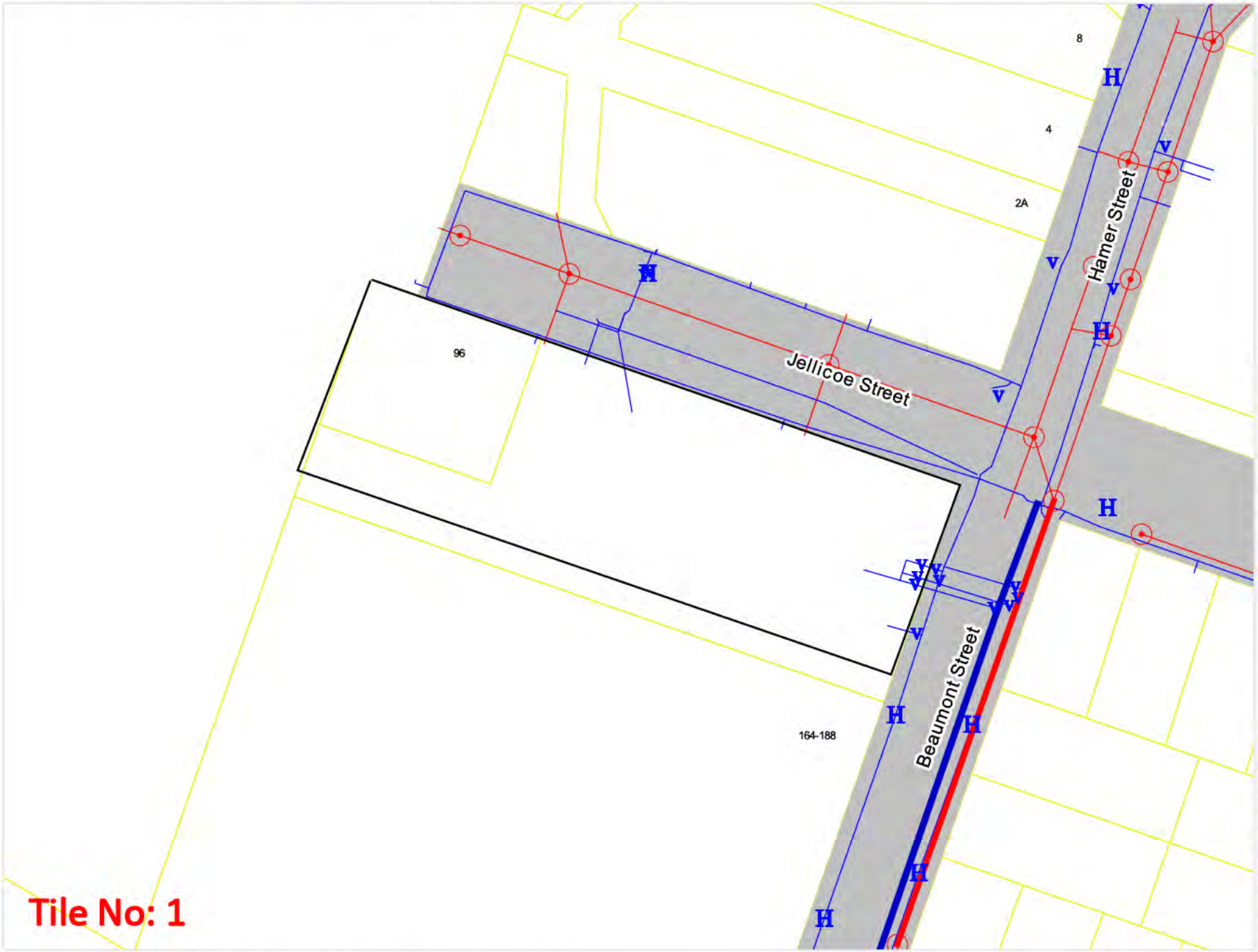
TCNZ SHT. No. DH19



Watercare
An Auckland Council Organisation

Sequence No: 15624271
Job No: 2626647
Location: 188 Beaumont St

beforeUdig .co.nz



Legend

- Waste Water
- Water
- Electrical/Cathodic Protection
- V Valve
- H Hydrant
- M Water Meter
- Manhole

Watercare Services Ltd accepts no responsibility for incomplete or inaccurate information contained on this map. Use of this data is subject to, and constitutes acceptance of the conditions set out in our disclaimer. Topographic information is derived from Land Information New Zealand, CROWN COPYRIGHT RESERVED.

N

Scale: 1:1000
Expires: 27 Aug 2025

DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Watercare nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

Tile No: 1

Appendix D Referral feedback from Watercare

Appendix E Referral feedback from Watercare

Referral Application Feedback Form

This form is to be used by Council agencies and departments members to provide feedback on referral applications under the Fast-track Approvals Act 2024 (FTAA), pursuant to section 17. Please complete the relevant sections below, considering the criteria set out in section 22 of the FTAA.

Respondent Information

Name: **James Shao**

Role: **Senior Development Engineer**

Agency / Department: **Watercare Services Limited / Developer Services**

Project Information

Project Name: 188 Beaumont Street, Auckland Central (Orams Marine site)

Reference: FTAA-2508-1098 / PRR00043340

General Support or Opposition to the Application Proceeding via fast-track

☐ Support

☐ Oppose

☐ Neutral

Agency/Department Response

Having considered the s22 assessment criteria, please explain your position and provide any other relevant details.

Watercare comment *(Date: 07 October 2025)*:

Wastewater

The application information pack supplied does not contain any information on wastewater upstream or downstream catchment studies.

Our high-level calculation of wastewater demand from this development proposal, which involves approximately 215 residential apartments, suggests that it is likely to increase the wastewater discharge flow (PWWF) to the existing network by 8 to 9 Litres per Second.

Wynyard Quarter generally has adequate wastewater capacity. However, GIS analysis indicates a potential local constraint downstream of the proposed development. Specifically, the DN300 wastewater line (Asset ID: 854988) connects to a DN150 wastewater line (Asset ID: 854989) via wastewater manhole WWMH 525170. The DN150 line continues southward beneath Beaumont Street.

Based on current data, the DN150 wastewater line does not appear to have sufficient capacity to accommodate the proposed development. To verify this, the developer should provide detailed survey data of the relevant section of the existing network. This will help confirm whether the local constraint identified in GIS is present.

If the survey confirms that the existing wastewater network lacks sufficient capacity, the developer will be responsible for upgrading the network to support the proposed development.

Additionally, the architectural concept plan indicates that there will be some commercial units on the ground floor. While detailed design information has not yet been provided, an allowance of 1 L/s of the peak wet weather flow (PWWF) has been made for these units. Should the detailed design propose a PWWF exceeding 1 L/s for the commercial component, Watercare Services Limited reserves the right to reassess the wastewater flow rate and review the proposal accordingly.

Water

The application information pack supplied does not contain any information on water demand assessment.

Our high-level calculation of water demand from this development proposal, which involves approximately 215 residential apartments, suggests that it is likely to increase the water consumption rate (peak hourly demand) to the existing water network by 3.9 Litres per Second.

Potable Water Supply:

- It is understood that the peak hourly demand from this development is set at 3.9 L/s.
- The proposed connections will connect directly to the 250mm DI main along the southern side of Jellicoe Street.

- Watercare has run an indicative model reflecting the estimated demands, and we can confirm at this stage that the existing network can support this development.

Fire Supply:

- In Section 5.4 of the document, it reads: "Assuming the proposed development is sprinklered, the indicative fire flow demand is up to 50 litres/sec for a water supply classification FW2." Please note this may be an error, as this should be the FW3 category.

- There appears to be sufficient fire flow capacity to meet FW3 in this area. However, since their sprinkler demand was not detailed in their report (specific flow rates), this is something they should clarify in the subsequent stages.

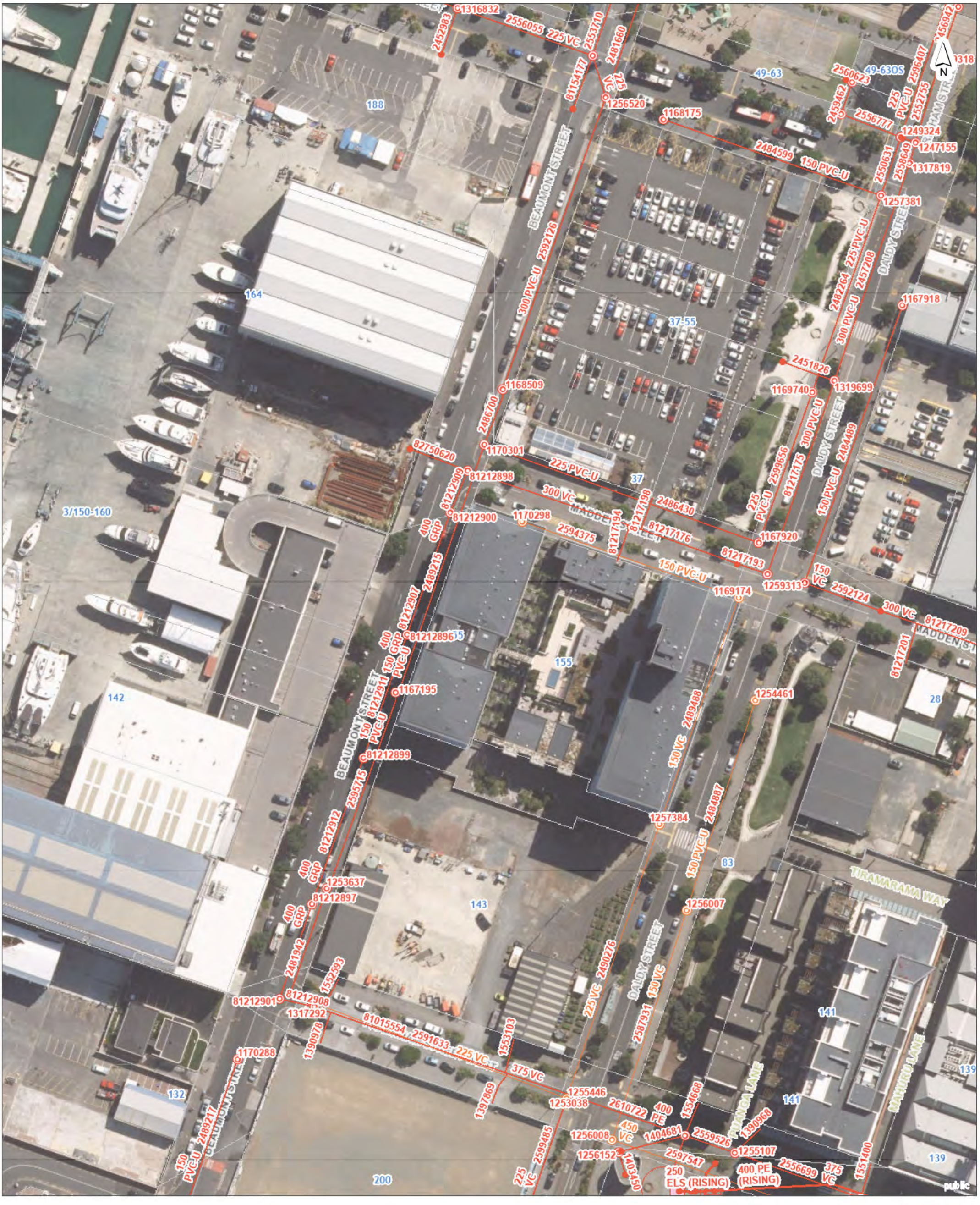
- There are four hydrants within 100m of the site. The developer will be required to conduct FH Tests as necessary.

Assessment Criteria (Section 22 FTAA)

Please consider the below assessment criteria in preparing your response:

- Does the project have significant regional or national benefits?
- Would referring the project facilitate its delivery in a more timely and cost-effective way?
- Is the referral unlikely to materially affect the efficient operation of the fast-track approvals process?
- Has the project been identified as a priority in any government or sector plan or strategy?
- Will the project deliver new or support existing regionally/nationally significant infrastructure?
- Will the project increase housing supply or contribute to a well-functioning urban environment?
- Will the project deliver significant economic benefits?
- Will the project support primary industries (e.g., aquaculture)?
- Will the project support development of natural resources (e.g., minerals, petroleum)?
- Will the project support climate change mitigation (e.g., reduce/remove greenhouse gas emissions)?
- Will the project support climate change adaptation or recovery from natural hazard events?
- Will the project address significant environmental issues?
- Is the project consistent with local or regional planning documents (e.g., spatial strategies)?
- Are there any other relevant matters to consider?

Appendix E Wastewater investigation results



DISCLAIMER:
This map/plan is illustrative only and all information should be independently verified on site before taking any action. Copyright Auckland Council. Land Parcel Boundary information from LINZ (Crown Copyright Reserved). Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and plan completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information. Height datum: NZVD 2016.

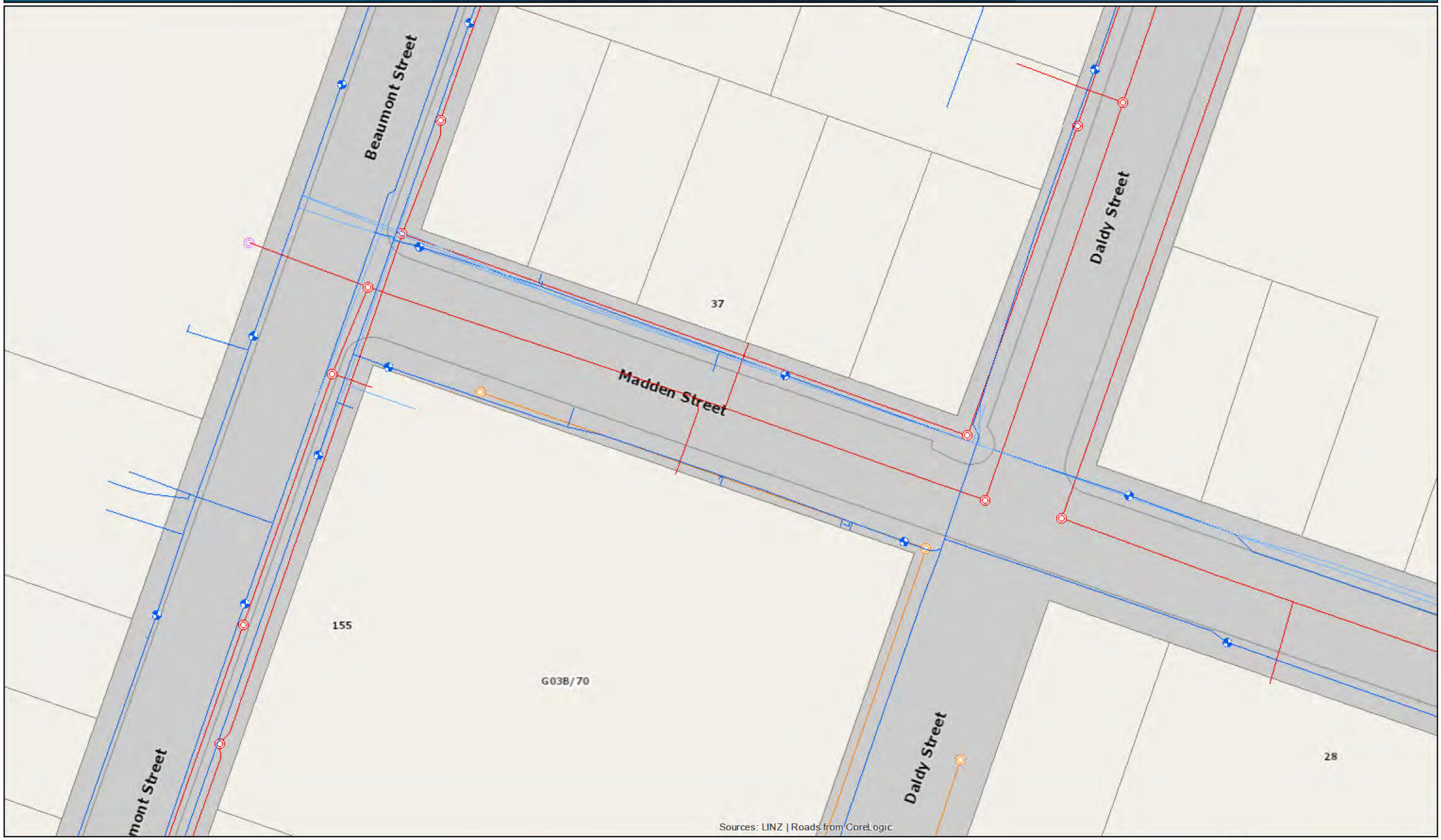
0 8.5 17 25.5
Meters

Scale @ A3
= 1:1,000

Date Printed:
31/10/2025

Auckland Council
Te Kaunihera o Tāmaki Makaurau

Watercare Services Limited



N

A3 Scale: 1:500
Created: 7/11/2025

0 0.006 0.012 0.018 km

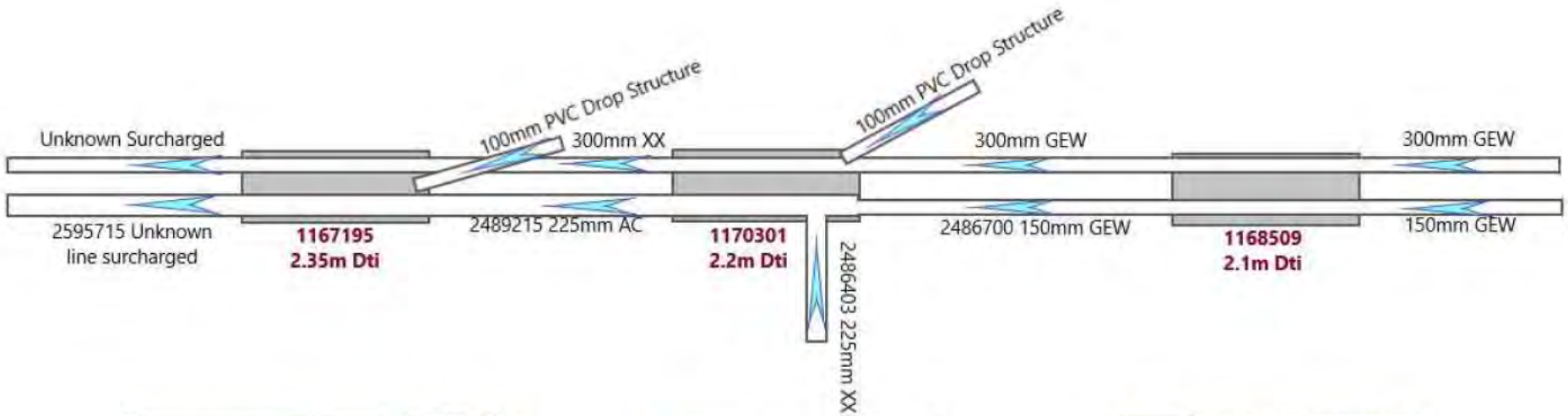
Watercare
An Auckland Council Organisation

NOTE: Where applicable, Water supply is shown in **BLUE**, Wastewater is shown in **RED** and Stormwater in **GREEN**

Hydro Specialists Limited
10 Southgate Place, Henderson, Auckland, 0612
Tel. 09-954 0040

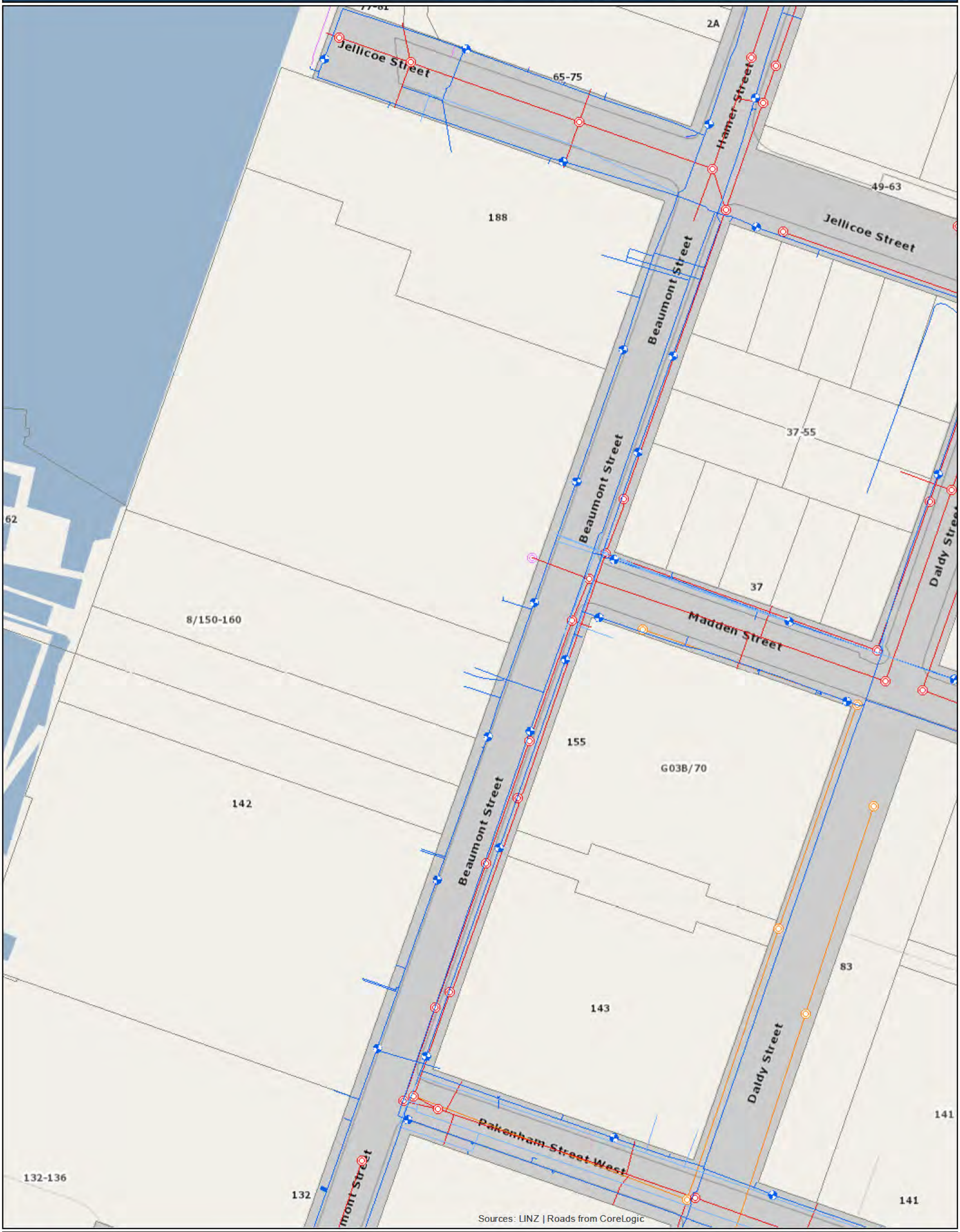
Project Pictures

Project Name	Project Date
208473_251112_Beaumont Street	**13/11/2025**



Beaumont Street_Mark-up

Watercare Services Limited



N

A3 Scale: 1:1000
Created: 21/11/2025

0 0.01 0.02 0.03 km

Watercare
An Auckland Council Organisation

NOTE: Where applicable, Water supply is shown in **BLUE**, Wastewater is shown in **RED** and Stormwater in **GREEN**

Appendix F Chorus and Vector feedback

Caitlin Cairncross

From: Bintliff, David [redacted]
Sent: Wednesday, 15 October 2025 3:14 pm
To: McCulloch, William; Caitlin Cairncross
Subject: FW: 1-6129143561, Jellicoe/Beaumont Street - Westhaven
Attachments: Indicative Offer Letter Jellicoe Rd Beaumount St.pdf

Will/Caitlin

Please see the attached indicative cost from Vector.

Suggest you temper this to Precinct with a 1.25 multiplier just because they can (and often do).. so it will be closer to NZ$600K

They also have us at a 900A feed and it will be 1600A so this will add cost.

Caitlin. Confirmed they intend to cut and pull across Beaumont. Feel free to cut/quote this but state its indicative as of now.

Next step will be to pay the 3000 fee and start the design.

Ngā Mihi | Kind regards

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David Bintliff CMEngNZ CPEng

Market Sector Lead Healthcare
Senior Associate

[redacted]

www.ndy.com

Level 1, AON Centre, 29 Customs Street West
Auckland 1010 New Zealand

We're part of something bigger.
Learn more: Tetra Tech High Performance Buildings Group

From: May Zhang [redacted]>
Sent: Wednesday, 15 October 2025 1:58 pm
To: Bintliff, David [redacted]
Subject: 1-6129143561, Jellicoe/Beaumont Street - Westhaven

Hi David

Attached, you'll find a letter outlining the Indicative Scope and Costing for your project at Jellicoe/Beaumount Street, Westheaven.

Please Note: The attached Indicative Cost has been prepared based on the information provided thus far. It serves to offer you a high-level understanding of the likely cost of the works. Further detailed design work is necessary to confirm the scope and finalise pricing.
Next Steps: Please confirm your intention to proceed by replying to this email and include your billing information.
We will then send you an invoice for the design fee of $3000 plus GST. Kindly follow the payment instructions provided with the invoice.
Timeframes: Detailed design typically requires 6-8 weeks from the payment of the design fee. However, this timeline may extend if multiple design changes are requested, necessary information is delayed, or other project-related delays occur.
If we have not heard back from you in writing within **55 days**, this project will be cancelled. You will need to submit a new application through our website https://orders.vector.co.nz/ or email customerdevelopments@vector.co.nz
Should you have any questions or require further clarification, please feel free to reach out to me.

Kind Regards,

May Zhang
Senior Customer Contracts Advisor

[redacted]
vector.co.nz
Follow us on

Please be advised that Vector offices will be closed from Wednesday, 24 December 2025, with staff returning on Monday 2026. Our Service Providers will be closed from Monday, 22 December 2025, and will resume work on Thursday, 8 Janu this period, only a skeleton crew will be available to manage emergency works only.

We will endeavour to design, contract, and commence build activities for your request within reasonable timeframes. Ple circumstances we are constrained by Auckland Council moratoriums, scheduling restrictions, supplier lead times, outage closures which may impact your project timeframes.

Only projects for which we have received the signed agreement and full payment prior to **Friday, 17th October 2025** wil for scheduling prior to the end of 2025 year shutdown period. This is subject to volumes and availability of our crews, and you informed of your project timeframes.

Caitlin Cairncross

From: Merita Tagaloa [redacted]
Sent: Wednesday, 3 December 2025 2:05 pm
To: Caitlin Cairncross
Cc: d.bintliff; Matty McGuire; Andrew Hope; Muhammad Hammad; Rojin Joseph
Subject: RE: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

No worries, Caitlin. Manhole to be 600x1200 indicatively.

Thanks!

Merita Tagaloa | Group Account Manager

C H ● R U S | **T** +6499752909 | **M** +64272238025

From: Caitlin Cairncross [redacted]
Sent: Wednesday, 3 December 2025 1:56 pm
To: Merita Tagaloa [redacted]
Cc: [redacted]
Subject: RE: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

Hi Merita,

Thank you for your quick response, really appreciate it!

Thank you for the feedback below, it is very helpful. For the manhole required – would it indicatively be 600x600, or 600x1200?

Thanks,
Caitlin

Ngā mihi | Kind regards,

Caitlin Cairncross | Civil Engineer
BE(Hons), CPEngNZ, CMEngNZ
Tonkin + Taylor - ***Together we create and sustain a better world***
1 Fanshawe Street, Auckland | PO Box 5271, Victoria Street West, Auckland 1142, New Zealand
[redacted].tonkintaylor.co.nz T+T profile my profile

Tonkin+Taylor
To send me large files you can use my **file drop**

From: Merita Tagaloa <[redacted]>
Sent: Wednesday, 3 December 2025 1:48 pm
To: Caitlin Cairncross [redacted]
Cc: [redacted]
Subject: RE: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

Hi Caitlin,

Thanks very much for reaching out it's great to hear from you.

Please see notes in red below – also note this is indicative only and that details cannot be confirmed until we have an official request in the system as it would be best provided by our Service Partner designer.

To ensure accuracy, the job would need to progress to our service company for confirmation post quote acceptance and payment made.

- *There is an existing pit in Jellicoe Street (MH.CMV196). Could you please confirm if this is adequate for the proposed works and can be retained? U-CMV196 is a BDD PIT (small oval pit) and we will utilize the existing duct across Jellicoe Street where U-CMV196 connected to. Most likely it will be upgraded to a bigger manhole.*
- *What is the estimated size and number of ducts required from the pit to the building? Assuming the 3 building is interconnected to each other. IE basement for each building is common. I believe 1x100mmP will be enough for us to haul proposed micronet.*
- *Based on your feedback, we assume that the existing duct network has adequate capacity for the development and doesn't require any excavation for new ducts (excluding the connection from MH.CMV196 to the building). Could you please confirm this assumption? As per our feeder plan, the entry going to the building will be via U-CMV196 so there will be just a small amount of civil works (approx.. 2.0m plus reinstatement)*

Please let me know if there's any further support required.

Cheers

Merita Tagaloa | Group Account Manager

CHORUS | T +6499752909 | M +64272238025

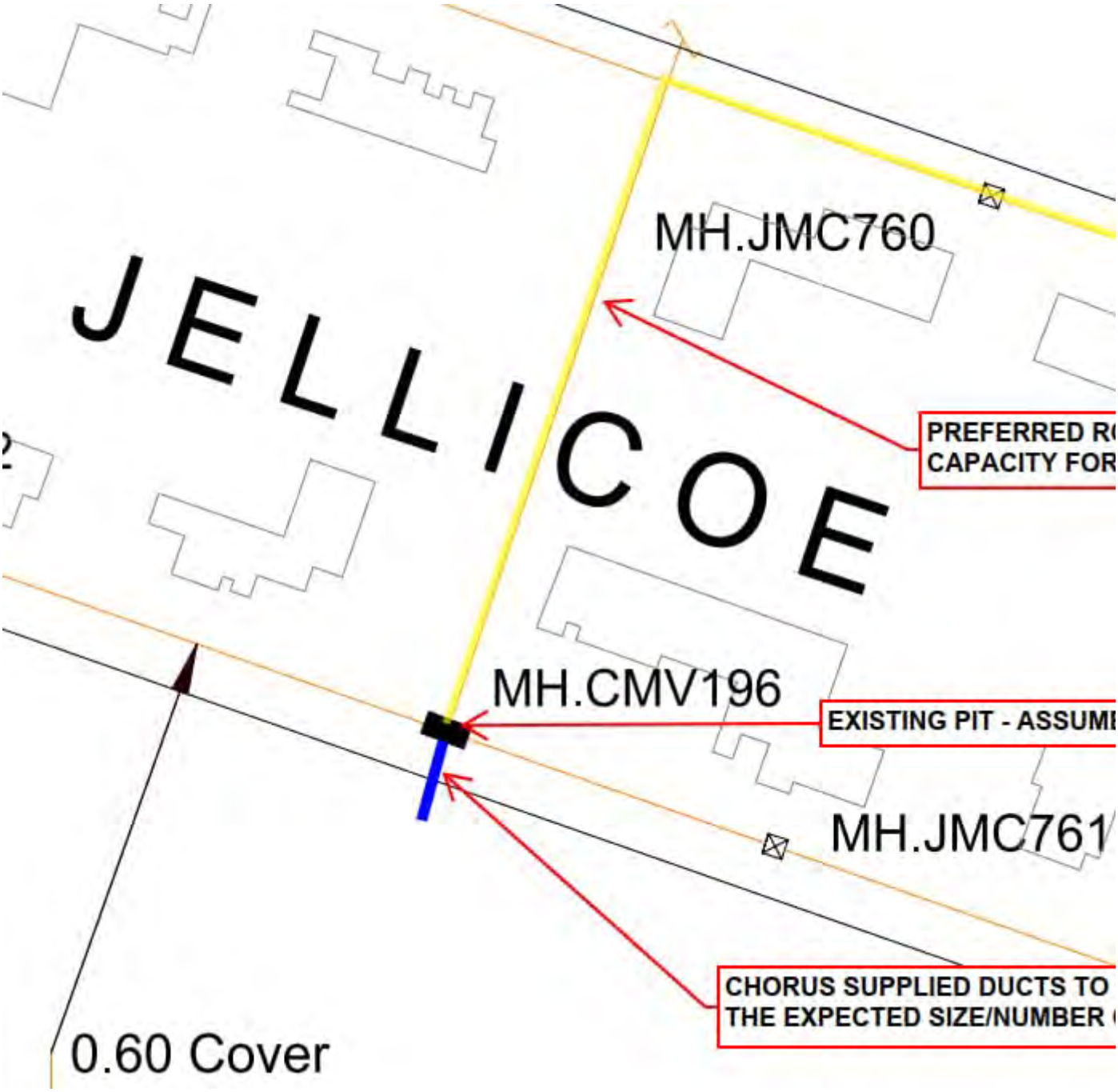
From: Caitlin Cairncross [redacted]
Sent: Wednesday, 3 December 2025 9:32 am
To: Merita Tagaloa [redacted]
Cc: d.bintliff [redacted]; Rojin Joseph [redacted]; Matty McGuire [redacted]; Andrew Hope [redacted]
Subject: FW: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

Hi Merita,

Thank you for your help with this development.

I am working on the civils works required outside of the property boundary. I have a couple of questions – would you please be able to help me with these?

- There is an existing pit in Jellicoe Street (MH.CMV196). Could you please confirm if this is adequate for the proposed works and can be retained?
- What is the estimated size and number of ducts required from the pit to the building?
- Based on your feedback, we assume that the existing duct network has adequate capacity for the development and doesn't require any excavation for new ducts (excluding the connection from MH.CMV196 to the building). Could you please confirm this assumption?



Please let me know if you have any questions or would like to discuss this.

Thanks,
Caitlin

Ngā mihi | Kind regards,

Caitlin Cairncross | Civil Engineer
BE(Hons), CPEngNZ, CMEngNZ
Tonkin + Taylor - ***Together we create and sustain a better world***
1 Fanshawe Street, Auckland | PO Box 5271, Victoria Street West, Auckland 1142, New Zealand
[redacted] www.tonkintaylor.co.nz T+T profile my profile

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To send me large files you can use my **file drop**

From: Bintliff, David [redacted]
Sent: Monday, 17 November 2025 2:43 pm
To: Caitlin Cairncross [redacted]>; [redacted]
Cc: Bintliff, David [redacted]; Leon Hewertson [redacted]; [redacted]
Subject: FW: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

Thanks, Merita,

Copying in Caitlin who is part of the Civils team working on this project.

She has some questions for you regarding the proposed way into to building. She will contact you directly for clarification.

Ngā Mihi | Kind regards

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COLLABORATION | KOTAHITANGA

David Bintliff CMEngNZ CPEng
Market Sector Lead Healthcare
Associate Director

[redacted]

www.ndy.com

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Auckland 1010 New Zealand

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From: Merita Tagaloa [redacted]
Sent: Monday, 17 November 2025 2:22 pm

To: [redacted]
Cc: [redacted]
Subject: RE: Chorus Fibre quote - 188 Beaumont Street , Auckland Central - 11418387

Hi David and Matt,
(looping in Leon as well as FYI)

Thanks for your patience. Please find quote letter attached and I am happy to present as below which is now ready to digitally review and accept here - Chorus Developer Portal

Fibre Network	Qty.	Discount Unit Cost (exc. GST)	Total (inc. GST)
Individual connections	220	$250.00	$55,000.00

Summary

- Contracts and Invoices will be made out to **Westhaven Residential Limited Partnership (NZBN: 9429052470653)**
- Payment is required upfront prior to us dispatching to our service partner to begin design.
- Covers all work outside the boundary of the development to feed, as well as the supply of all materials to be collected and installed inside the development.
- Optional Add-ons (Materials delivery, In-building cabling for Apartments) – if this is required, please let me know.
- Includes Pre-Built fibre – ensuring apartments are fibre ready and occupants can connect within a day.

I've also attached a document guideline which will assist with your design. I'd be happy to set up a virtual meeting if you have any questions on the above.

Hope to hear from you soon.

Cheers

Merita Tagaloa | Group Account Manager

CHORUS | T +6499752909 | M+64272238025

From: Bintliff, David [redacted]
Sent: Friday, 14 November 2025 11:48 am
To: Merita Tagaloa [redacted]
Cc: Muhammad Hammad [redacted]; Rojin Joseph [redacted]
McCulloch, William [redacted]
Subject: RE: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

Thanks Merita,

Question.. what is that? 188.. that's inside our plot.. is this an existing fibre? Would this not be the best route if its existing?

Ngā Mihi | Kind regards

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David Bintliff CMEngNZ CPEng

Market Sector Lead Healthcare
Associate Director

[redacted]

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Auckland 1010 New Zealand

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From: Merita Tagaloa [redacted]
Sent: Friday, 14 November 2025 10:50 am
To: Bintliff, David [redacted]
Cc: Muhammad Hammad [redacted]; Rojin Joseph [redacted]; McCulloch, William [redacted]
Subject: RE: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

Hi David,

Thanks for your patience on this – we are in the last stages of getting the quote finalised which I should be able to provide to you early next week.

Please see preferred Fibre route entering from Jellicoe Street below. Please note we have considered both options (from Jellicoe & Beaumont) however this is first preferred option.
Once the development is ready to begin design, our service partners will provide a full detail designed outlining this. Hopefully, this will help with your preliminary design in the meantime.

If you require any further support, please let me know otherwise, I will be in touch once the quote is ready.

Cheers

Merita Tagaloa | Group Account Manager

CHORUS | T +6499752909 | M +64272238025

From: Bintliff, David [redacted]
Sent: Tuesday, 11 November 2025 4:30 pm
To: Merita Tagaloa [redacted]
Cc: Muhammad Hammad [redacted]; Rojin Joseph [redacted]; McCulloch, William [redacted]
Subject: RE: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

Thanks, Merita,

Matt Heal is looking after this from Precinct.

Ngā Mihi | Kind regards

David Bintliff CMEngNZ CPEng

Market Sector Lead Healthcare
Associate Director

[redacted]

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From: Merita Tagaloa <Merita.Tagaloa@chorus.co.nz>
Sent: Tuesday, 11 November 2025 4:04 pm
To: Bintliff, David <d.bintliff@ndy.com>

Cc: Muhammad Hammad [redacted]; Rojin Joseph [redacted]
Subject: RE: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

Hi David

Many thanks for your time over the phone today. As discussed, I work closely with Precinct Properties across all their developments nationwide.
Feel free to send my details to anyone involved on your end on this project.

Currently I am working with our Network Scoping team to confirm the preferred Fibre route into the new development (Jellicoe vs Beaumont) and will outline this as soon as possible once available.

I am also reviewing the request in terms of pricing for the overall yield of 220 connections (I understand this number may change as this is only at preliminary stages). Once I have a finalised quote I will be in touch.

In the meantime, if you require any further assistance for the Beaumont Street project, please feel free to reach out to me directly.

Cheers

Merita Tagaloa | Group Account Manager

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From: Bintliff, David [redacted]
Sent: Wednesday, 5 November 2025 4:46 pm
To: Merita Tagaloa [redacted]
Subject: RE: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

I called you back. Give me a bell anytime.. happy to discuss.

Ngā Mihi | Kind regards

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David Bintliff CMEngNZ CPEng

Market Sector Lead Healthcare
Senior Associate

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From: Merita Tagaloa [redacted]
Sent: Wednesday, 5 November 2025 4:31 pm
To: Bintliff, David [redacted]
Subject: Chorus request - 188 Beaumont Street , Auckland Central - 11417888

Hi David,

Hope you are well.

I'm one of the Chorus Account Managers, dedicated to New Property Development projects nationwide (commercial & residential).
I have worked with NDY in the past on many projects and thought to reach out to you as I can see a new quote request was placed for Beaumont Street development. Could you let me know when free for a quick chat on this one?

Thanks David, hope to hear from you soon.

Cheers

Merita Tagaloa | Group Account Manager

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