Applicant: The Trustee for Mount Street 1 Unit Trust
Client: Landmark Group
Planner: Sutherland Associates

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Brisbane, Melbourne, Sydney
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Industrial Strata Complex Proposal

72 - 78 Box Road, Taren Point NSW 2229

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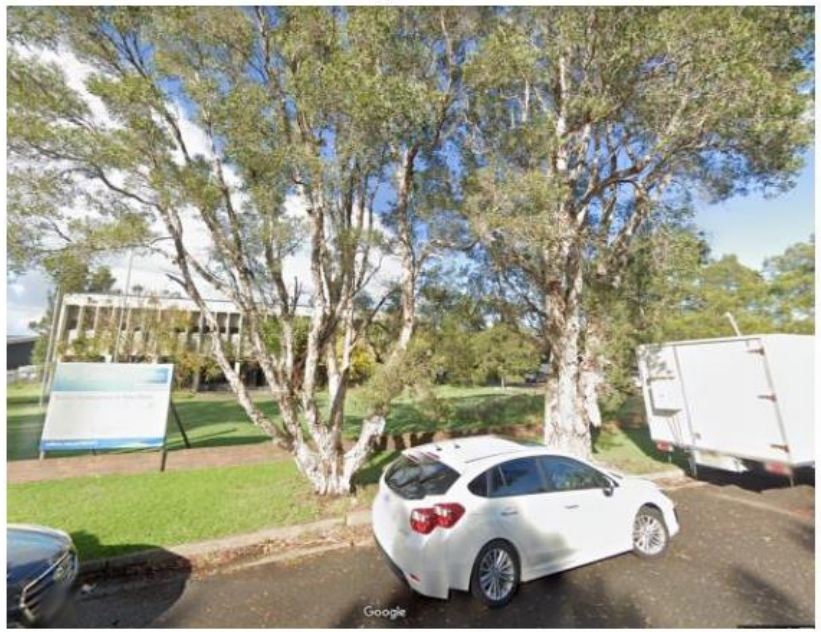
View 1 - Box Road corner of site

View 2 - Box Road street frontage



View 3 - Box Road end

Land Zoning

Zone

- B5 Business Development
- IN1 General Industrial
- R2 Low Density Residential
- RE1 Public Recreation
- RE2 Private Recreation
- SP1 Special Activities

Floor Space Ratio

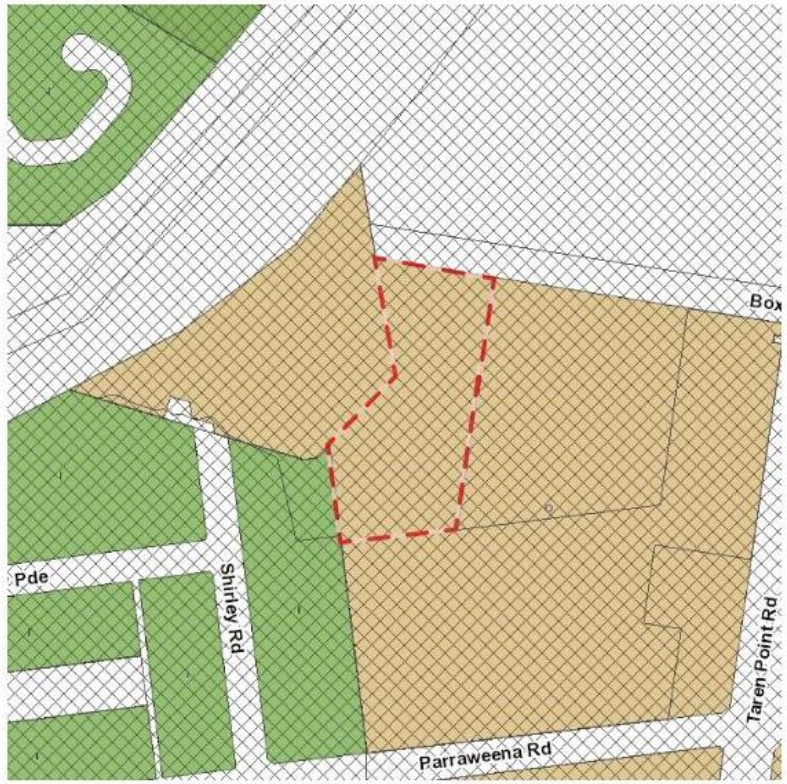
Zone

- Draft LEP15 Refresh
- Minor Amendment Heritage Items 2018

Maximum Floor Space Ratio (n:1)

- E 0.55
- S1 1.5

Height Zoning

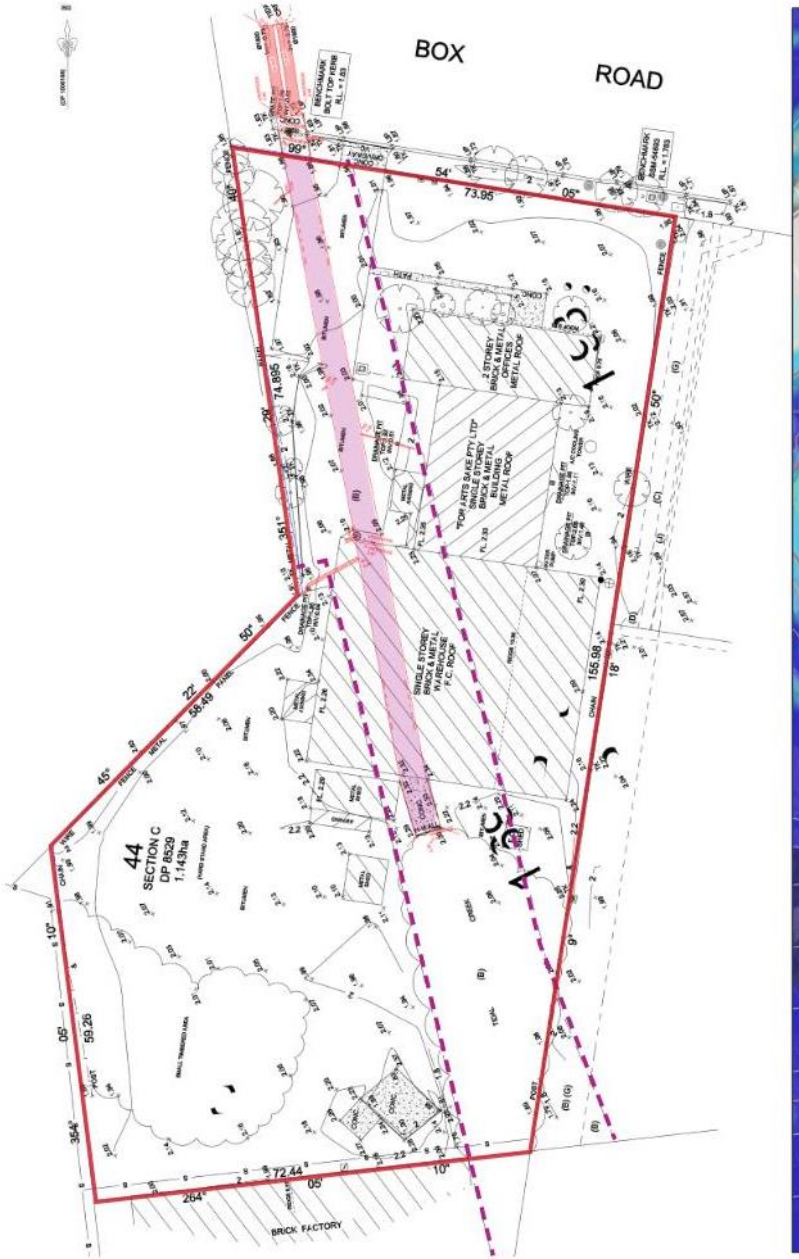


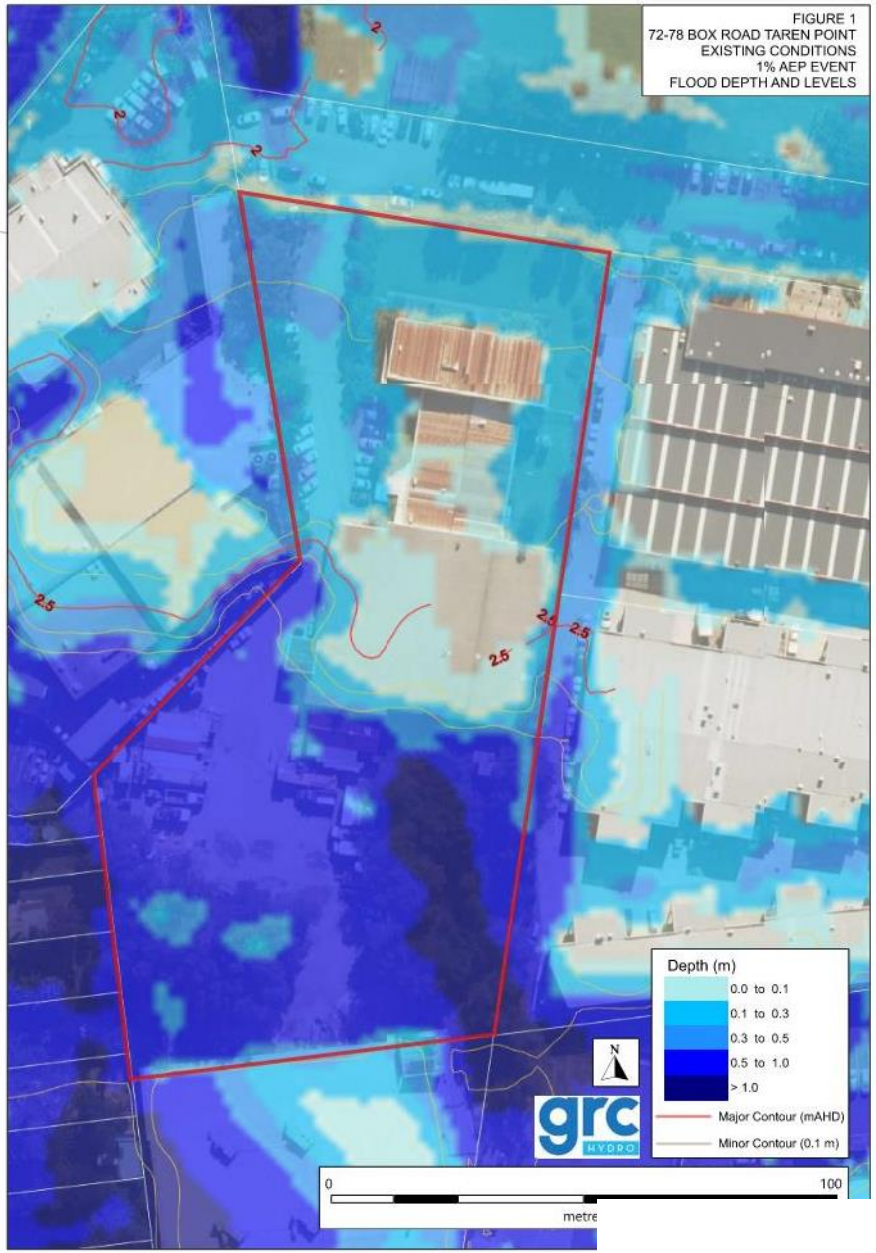
Zone

- Draft LEP15 Refresh
- Minor Amendment Heritage Items 2018

Maximum Building Height (m)

- I 8.5
- O 16





Existing Site Conditions Summary:

- The existing ground levels range from 1.9m AHD at the road frontage to RL 2m AHD at the rear boundary
- The 100 yr ARI flood levels range from RL 2.2m AHD at the front boundary to RL 2.8m AHD at the rear boundary
- The flood planning levels (FPL) for the site (100yr ARI flood level plus 500mm freeboard) are RL 2.7m AHD at the site frontage and RL 3.3m AHD at the rear of the site
- The Council drainage pipes have very limited flow capacity because of the invert levels are very low and are drowned by tidal levels from the bay
- The majority of flood flows on the site and in the surrounding area run overland
- It is estimated that these overland flood flows occur for minor floods above the 5yr ARI flood
- The existing buildings on the site are built over the Council drainage pipes and the 20m wide variable drainage easement
- The drainage easement has an excessive width given that the culvert/pipes are no more than 4m wide
- The existing buildings block 90% of the overland flood flow path on the site which increases flood levels on the site and other sites in the area
- The existing buildings have floor levels close to existing ground levels and as such, are inundated even in minor floods
- This causes extensive damages to goods, vehicles and disruption to operations onsite and in a large area around the site – there is also no opportunity for evacuation given this is flash flooding with limited warning times
- Council has conceded that amplification of the existing drainage pipes will not reduce flood levels as they would provide minimal extra flow capacity given the very low invert levels of the pipes.

1. Lifted slab

- Raising the Ground floor slab Underside RL 3.3. to rear, Underside RL3.0 to front.
- The proposed buildings on the site would have a suspended ground floor above the existing ground levels to provide an overland flood flow path across the entire site

2. No flooding to neighbours

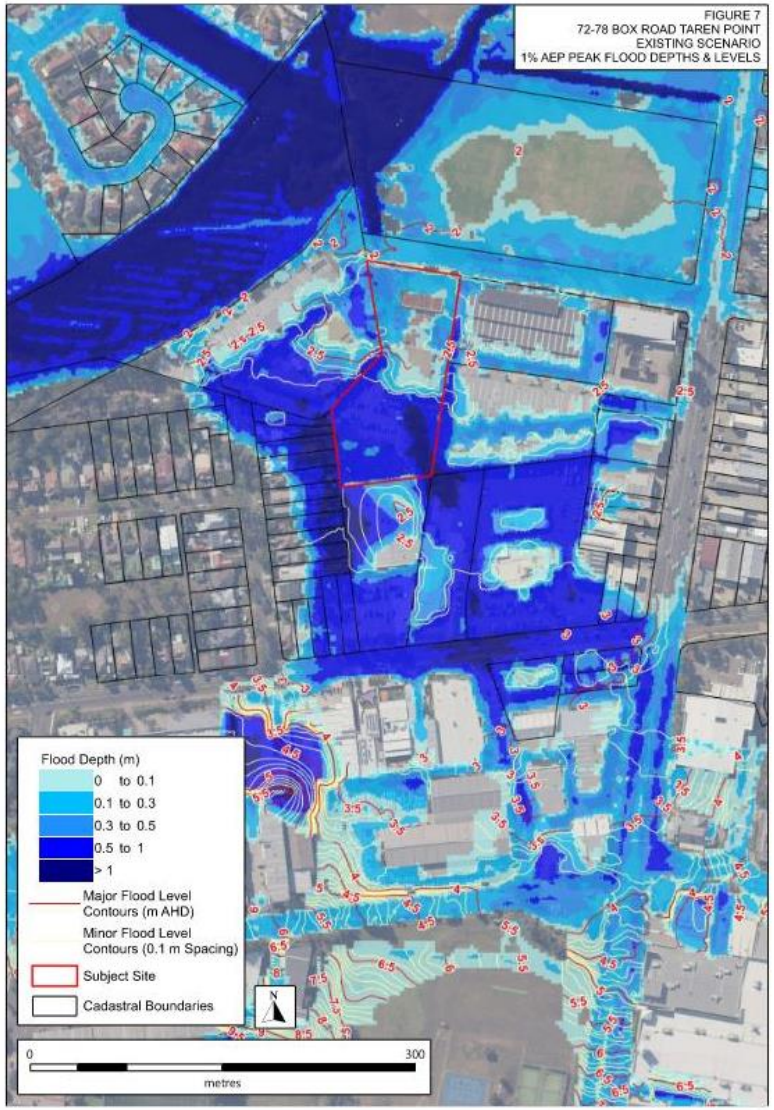
- Creates a preferred flood flow path

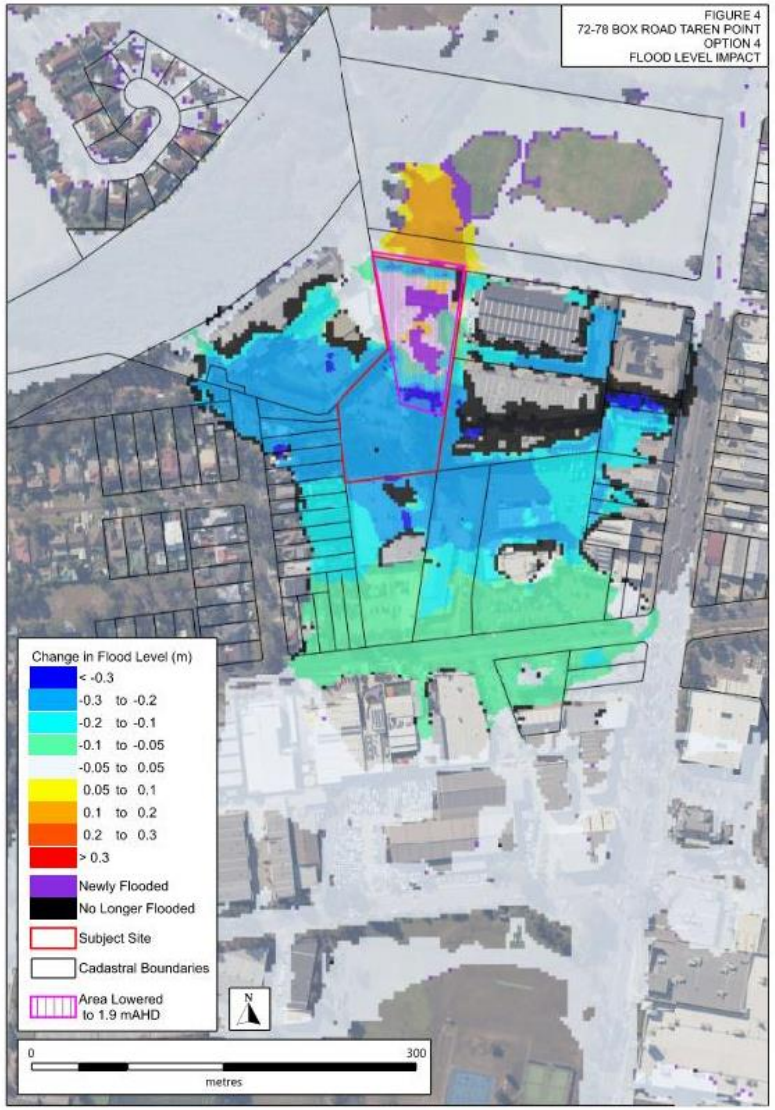
3. Access to Existing Culvert

- Access will still be available to both ends of the existing drainage culverts/pipes for Council maintenance purposes.
- The proposed development has removeable concrete panels along driveway located above the existing drainage culvert for maintenance and service

Development Proposal Summary:

- All existing buildings on site would be removed along with the floor slabs and the brick wall along the site frontage
- Raising the Ground floor slab Underside RL 3.3. to rear, Underside RL3.0 to front.
- The proposed buildings on the site would have a suspended ground floor above the existing ground levels to provide an overland flood flow path across the entire site
- The underside level of the ground floor would be RL 3m AHD over the front section of the site and RL 3.3m AHD over the rear section of the site
- This will provide a clear space for flood overland flows of 1.1m at the site frontage and 1.3m at the rear of the site
- The proposed finished floor levels would be RL 3.3m AHD over the front section of the site and RL 3.6m AHD over the rear section of the site
- These floor levels are 0.6m above the Council's required minimum levels at the FPL at the site frontage and 0.8m above the Council's required minimum levels at the FPL at the site rear boundary
- All site car parking will be at levels above the 100 yr ARI flood level as required by Council
- Council's sea level rise policy provides predicted rises up to year 2100. The life of the proposed building is 50 years and the predicted sea level rise over this period to 2070 would be 0.39m say 0.4m. This would increase the 100 yr ARI flood levels to RL 2.6m AHD at the site frontage and RL 3.2m AHD at the rear of the site. The proposed floor levels are above these flood levels and as such, comply with Council's sea level rise policy.
- The Council's predicted sea level rise up to 2100 is 0.72m. The proposed development finished floor levels are also above the 100 yr ARI flood level plus the 0.72m sea level rise.
- All floor levels in the proposed development will be above the PMF flood level and will be suitable for flood refuge.
- Access will still be available to both ends of the existing drainage culverts/pipes for Council maintenance purposes. The proposed development has the driveway located above the existing drainage pipeline with concrete panels which can be removed for Council maintenance on the culverts/pipelines.
- Even if the existing drainage culvert/pipes were totally blocked, there would still be major flood benefits as described in the next section





Flood Reduction Benefits:

- **9.4 Ha** of area will benefit
- **142 individual lots** will benefit of these:
  - 30 Residential Lots
  - 112 Industrial Lots
- **3 Local Roads** will benefit
  - Taren Point Road
  - Parraweena Road
  - Shirley Road
- Removes risk to property damage and risk to life during floods on the site and many properties in adjacent areas
- Removes significant cost of cleanup and loss of business during the regular flooding on this site
- Provides a remedy for Council, which otherwise would not be available, of the existing regular flood problems on this site and adjacent sites
- Flooding on adjacent residential properties is **lowered by up to 300mm**
- Lowers flood levels over the site and adjacent areas covering industrial and residential properties with an area of approximately **9.4 Ha**
- The following page is the schedule of all potential improved flooding impact on neighbouring properties

Regulated Design Record			
Project Address: 73-79 BOORAH, TAREN POINT			
Project Title: PROPOSED INDUSTRIAL DEVELOPMENT			
Consent No: XXXXXX		Body Corporate Reg No: XXXX	
Drawing Title:		Drawing No:	

Rev	Date (dd.mm.yy)	Description	DP Full Name	Reg No
P1	16.09.21	PRE-PRIMARY ISSUE	SAMER EL HAJBAQ	PRE0030972
P2	16.09.21	PRE-PRIMARY ISSUE	SAMER EL HAJBAQ	PRE0030972
A	23.09.21	ISSUED FOR DA	SAMER EL HAJBAQ	PRE0030972
B	30.09.21	ISSUED FOR DA	SAMER EL HAJBAQ	PRE0030972

SERVICES ON THIS DRAWING ARE SHOWN BELOW SLAB U.N.O.

(D/P 1006166)

STEP 1: PRECAST PANEL REMOVAL AND LOADING

FIGURE 1: HIRE TRUCK WITH CRANE

FIGURE 2: LIFTING PRECAST PANEL

FIGURE 1: HIRE TRUCK WITH CRANE

FIGURE 2: LIFTING PRECAST PANEL

Reference Coordination Drawing					
Discipline	Drawing Title and Number	Date	Rev.		
ARCH					
ARCH					
R ISSUED FOR DA	CK	ALW.21	2	170627	
A ISSUED FOR DA	CK	ZUM.21	1	ARCH	
P2 PRELIMINARY ISSUE	CK	ALW.21	1	CIVIL	
P1 PRELIMINARY ISSUE	CK	ALW.21	1	LAND	
Issue Last revision title	by	Date	Status	REC	
Issuer internal sequence and revision history				CLIENT	
1-preliminary 2-development application 3-construction certificate 4-tender				CIVIL	
				SURVEY	

QUALITY CONTROL			
DRAWN	CK	DATE	30.09.21
CHECKED	SH	DATE	30.09.21
DESIGNED	CK	DATE	30.09.21
VERIFIED	SH	DATE	30.09.21
APPROVED	SH	DATE	30.09.21

DIMENSIONS NOT TO BE SCALED ON THIS DRAWING. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE OF THE DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORK OR PREPARING SHOP DRAWINGS. ANY DISCREPANCIES TO BE REPORTED TO THE CONSULTING ENGINEER BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' DRAWINGS AND OTHER CONTRACT DOCUMENTS.

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SCALE 1:200 ON ORIGINAL SIZE

CLIENT: LANDMARK GROUP

ARCHITECT: ROTHELOWMAN

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PROJECT: PROPOSED INDUSTRIAL DEVELOPMENT

Drawing Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

Drawing Title: CULVERT REPLACEMENT WORKS

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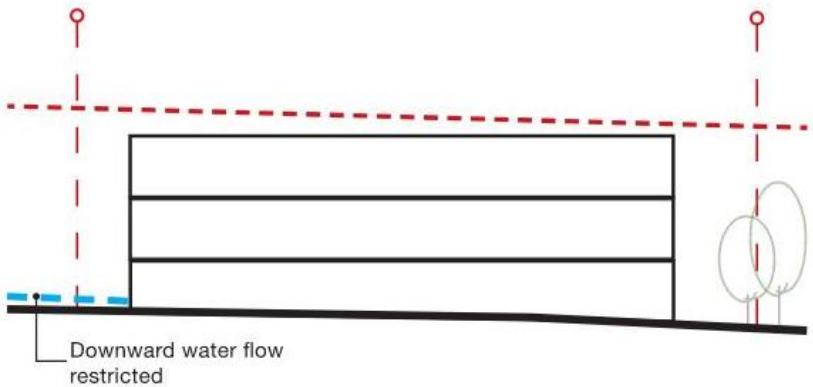
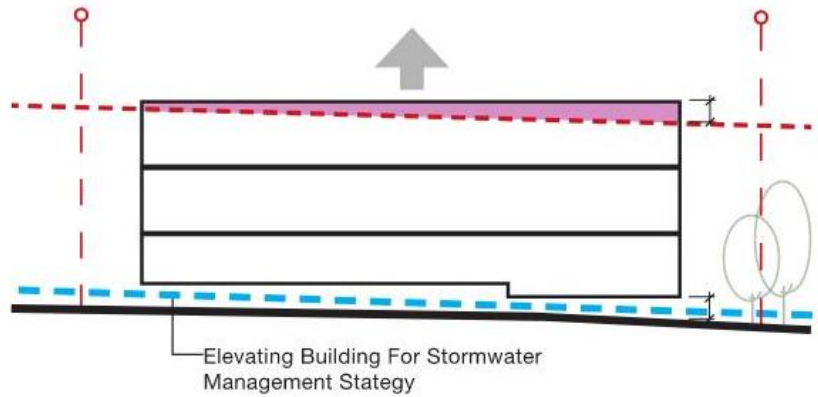


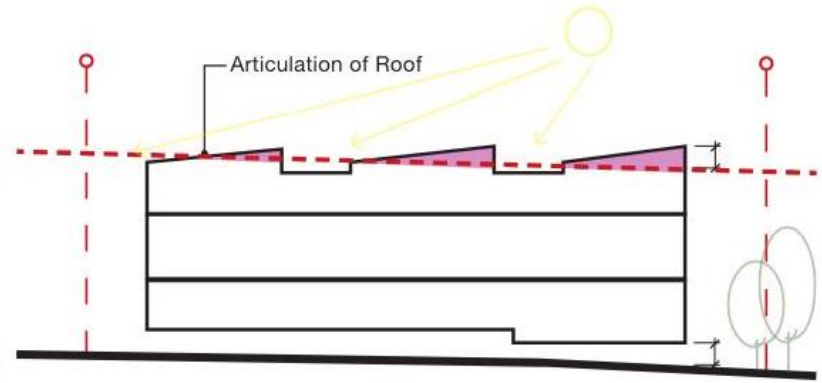
Existing Conditions

- Maximum building height of 16 metres
- Overland flow concerns of flooding to neighbouring developments and public spaces



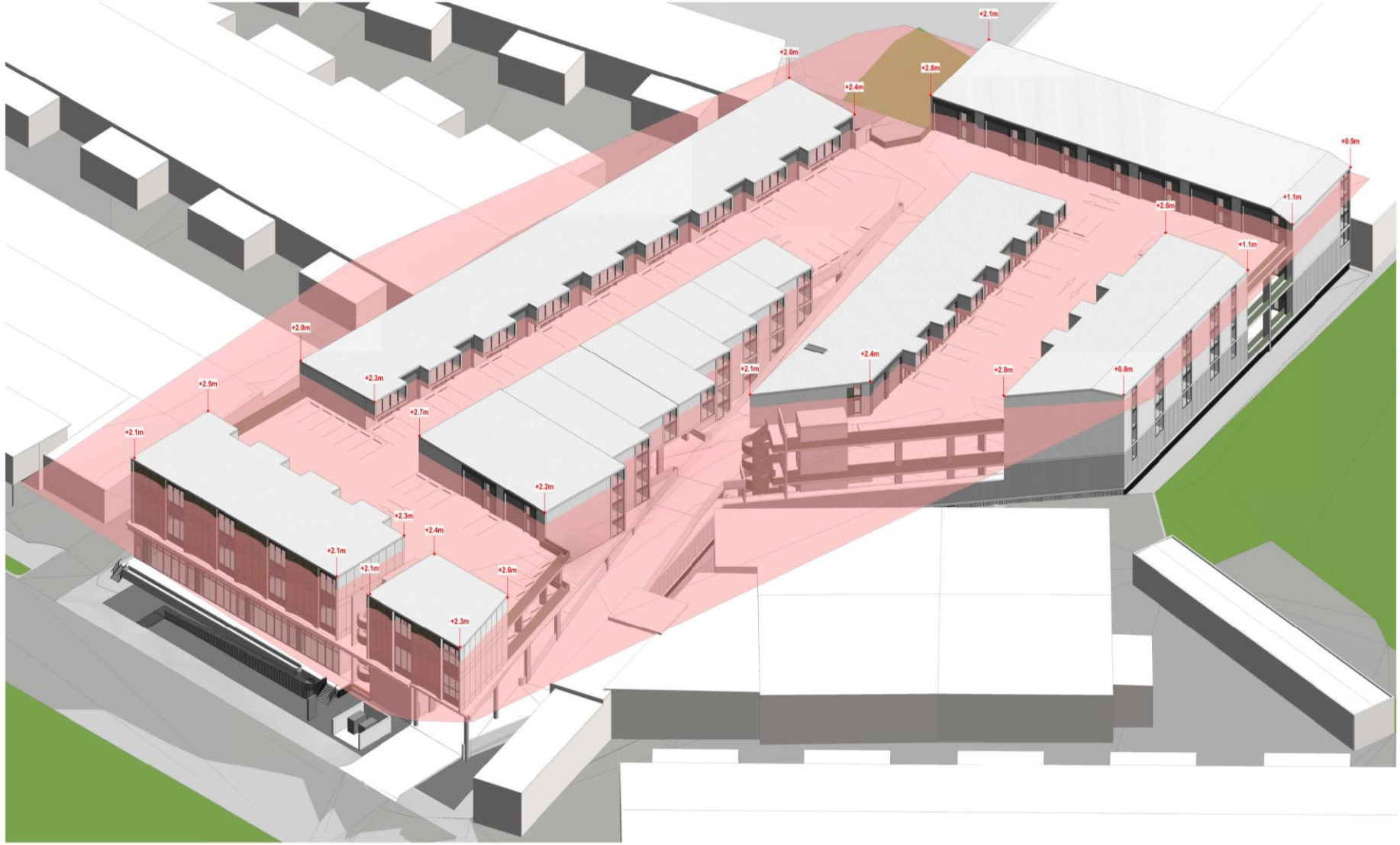
Water Management Strategies

- Elevate building to create basin
- Minor height breach



Design Articulation

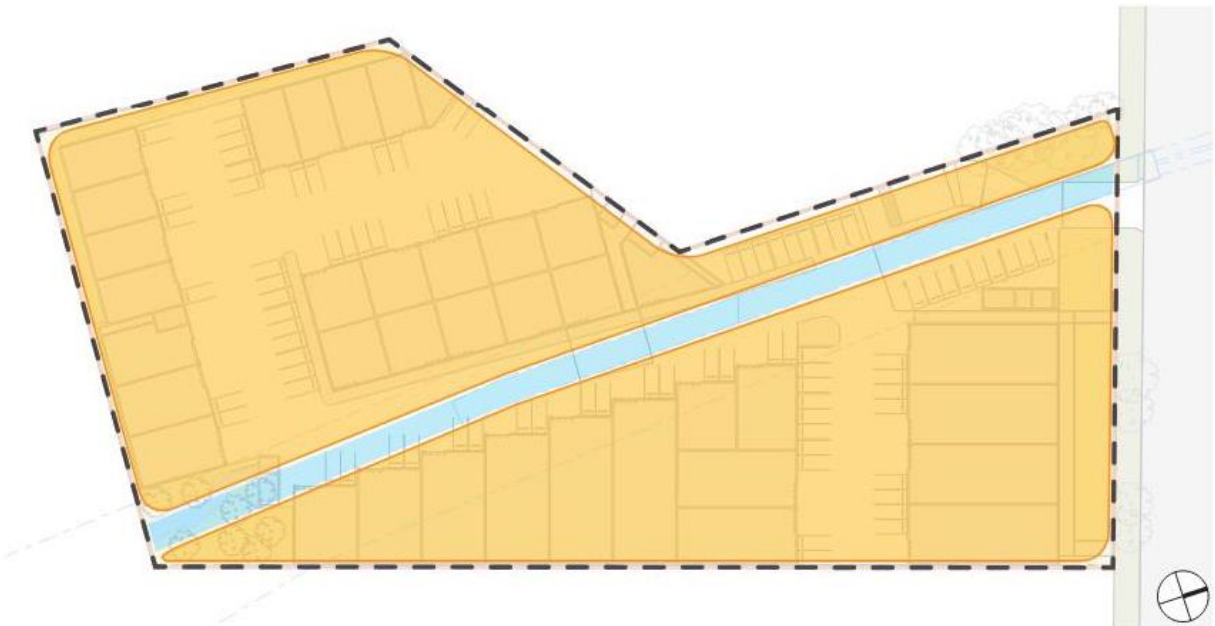
- Roof and elevations articulated to minimise height breach
- Maintain solar access to neighbours
- Increase daylight and ventilation to units



NOTE: THE GROUND FLOOR IS SUSPENDED ABOVE THE EXISTING GROUND LEVELS TO PROVIDE AN OVERLAND FLOOD FLOW PATH ACROSS THE ENTIRE SITE. THE BUILDING SITS ABOVE NATURAL GROUND LEVEL BY APPROX. 1.7M. THE PROPOSED ENVELOP PROTRUDES THE HEIGHT PLANE

Stormwater Management

The existing stormwater channel through the site is defined to create two separate and distinct stages.

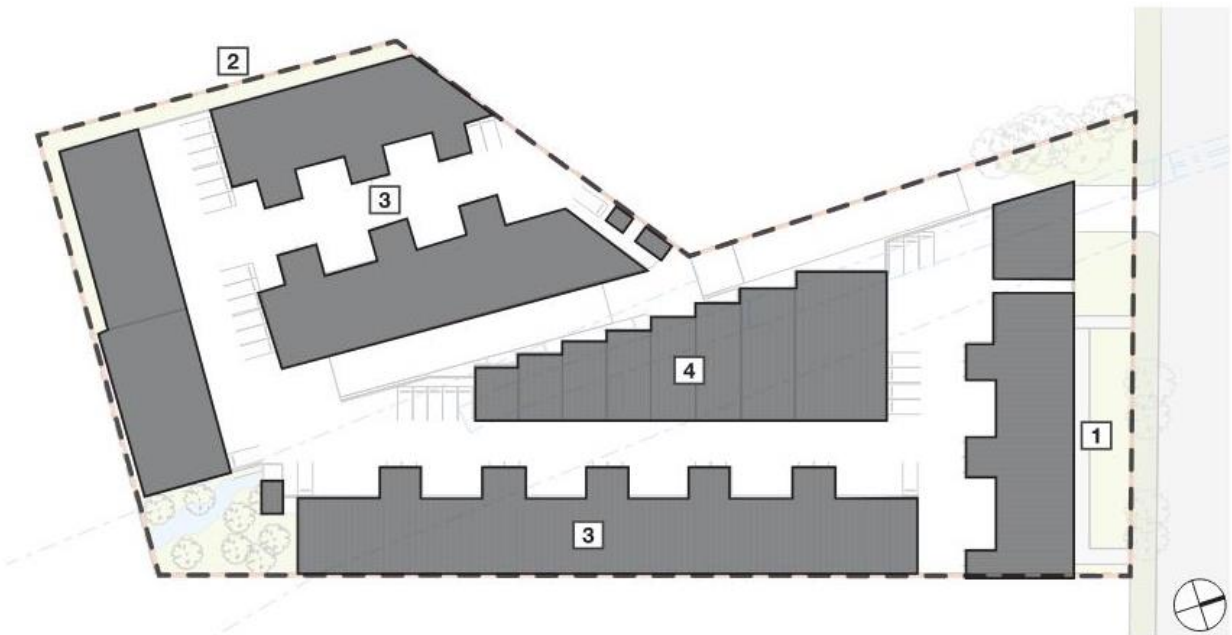


Landscape Strategy

1. Enhance the existing natural conditions prevalent at the Southern end of site
2. Setback building forms from street to maintain landscaped street character
3. Create a stong visual connection from the northern landscape setback
4. Establish a landscaped buffer to the adjacent residential housing
5. Protect existing trees to adjacent site

Built Form Address

1. Maximise address and presentation of activity to Box Road
2. Taper back building form to residential housing
3. Orientate main building forms to site boundaries
4. Accentuate the junction between two sites



Connectivity

1. Create an internal street environment to walkways
2. Vertical circulation spines adjacent main entry access way
3. Activate edges of circulation spaces