

# Office Warehouse Development 21 Oak Road, Wiri - Auckland Outline Specification

5 July 2019 - Rev 7.

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## 1. OUTLINE SCOPE OF WORK

### 1.1 The Site

The site is located at 21 Oak Road, Wiri, Auckland. Refer drawing SK 101-41 dated 05/07/2019.

### 1.2 Scope of Works

The works include:

- Two numbers of Office/Warehouse building, called Building A and Building B. The sizes are shown on SK 112-05 dated 05/07/2019 and SK 113-05 dated 05/07/2019.

This Outline Specification has been divided into four main sections with associated subsections, as follows:

- Building Works
- Building Services
- Site Works
- Exclusions

### 1.3 Material and Workmanship

The proposed works shall comply with the following requirements:

- a) Statutory laws and regulation
  - b) The Building Act
  - c) Local Authority Bylaws
  - d) New Zealand Building Code
  - e) Appropriate NZ Standards
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## 2. BUILDING WORKS

### 2.1 WAREHOUSE

#### 2.1.1 Structural Steel and Roof

- Structural steel members to have appropriate corrosion protection applied, consisting of a blast to Sa 2 ½ standard and apply epoxy shop primer to 75 microns DFT.
- Allow for 50-meter clear span Steltech portal frames for building A and 50.59-meter clear span Steltech portal frames for building B.

- Minimum clear operational height in the warehouse of 10.336m for building A and 10.49m for building B.
- The roof to be cladded with 0.55 BMT metal roof sheeting.
- Roofing underlay to be installed on the underside of the roof on galvanized safety netting.
- Translucent sheeting to 10% roof area to be provided to the roof.

### **2.1.2 Floor**

- The concrete floor slab will be a PT slab 35MPa with a nominal thickness of 175mm, design to carry a forklift with a maximum axle load of 16 tonnes or a reach truck with 2-tonne pallet load
- Racking loads (columns at 2700 x 900 mm nominal centres with 300mm clear between columns of back to back racking) with a maximum rack column load (G+Q)= 7 tonne
- Maximum uniformly distributed load = 45kPa
- Floor to be constructed level with minimum joints
- Floor flatness to be constructed in accordance with Eurocode EN15620 to meet the requirements of level FM2
- Slab quality: Burnished finish to U3 standard.
- Vapour barrier to the underside of the slab.
- Apply 1 coat surface seal to contain dusting. Sealer to be Ashford Formula or equivalent approved by the Lessor.
- Lesa system (or equivalent approved by Lessor) black steel plates to all construction joints.

### **2.1.3 Walls**

- The exterior perimeter walls of the proposed warehouse buildings to be 150mm thickness low height concrete panels and 180mm thickness FRR Concrete panels, as required by the Fire Report, with galvanized steel girts and metal cladding. All seals to be weather-proof and UV resistant.
- Precast concrete panels height to be a minimum of 2.4m high from FL. (2.8 total height which includes 400mm in-ground)
- No graffiti guard required to lower panels.
- The metal cladding to be 0.4 BMT metal sheeting prefinished.
- Foil is not required to walls.
- Steel PFC's to trim concrete panels at roller shutter door openings.
- Bird and vermin proofing at the interface with the roof to be installed.

### **2.1.4 Doors**

- Electrically operated powder coated roller doors will be installed in walls in locations and numbers shown on SK 402-10 for building A and SK 403-10 for building B. Doors to be 5mm wide x 5.5mm high.
- Conventional personnel doors will be installed for fire egress purposes to meet Building Code requirements.

### **2.1.5 Stormwater Runoff**

- Drainage of storm-water runoff from the roof will be provided by external and internal gutters and PVC downpipes, which will discharge directly into the Stormwater drainage system, via a detention system.
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## **2.2 OFFICE & AMENITIES**

### **2.2.1 General**

- Open plan office, toilet facilities to comply with building code requirements.

### **2.2.2 Structural Steel and Roof**

- Structure to consist of structural steel frame galvanized purlins and girts.
- Structural steel members to have appropriate corrosion protection applied, consisting of blast to St 2 standard and shop primer to 75 microns DFT and top coat to architects selection.
- The roof to be clad using a base metal thickness of 0.55mm Colorsteel or Colorcote
- Roofing underlay to be installed on the underside of the roof, insulation on galvanized safety netting.
- Drainage of Stormwater runoff from the roof will be provided by gutters and PVC downpipes, which will discharge directly into the Stormwater drainage system.

### **2.2.3 Floor**

- The floor slab will be in-situ reinforced concrete slab 100mm thick, over the damp proof membrane.

### **2.2.4 Walls**

- Exterior linings to perimeter walls are as per approved elevations. Allow for timber framing, Building paper, RAB, batten and Aluminium Composite Panels.
- All offices, amenities and toilets will be timber framed with GIB board lining to level 4 finish and paint finish.
- All perimeter walls to be insulated.

### **2.2.5 Windows and Doors**

- Windows to be selected colour powder coated commercial section aluminum joinery with tinted glass. Allow for curtain walling system.
- The front entry door to be framed glass.
- Internal doors to be painted standard size doors/with hardware.

### **2.2.6 Ceilings**

- Ceilings in the office to be exposed both ways prefinished aluminum grid suspended ceiling systems with tiles. Allow for Mineral fiber tiles with some NRC properties.
- Ceilings in toilets to be GIB board with level 4 finish painted.
- The floor to ceiling height will be 2.7m.

### **2.2.7 Floor Coverings**

- 2mm thick sheet vinyl flooring will be laid in all toilet and wet areas.
- Commercial grade carpet tiles to office areas.

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## **2.3 CANOPY**

- Semi-enclosed breezeway canopy with precast concrete panels wall on the boundary and open at either end of yard/driveway. Refer drawing SK 502-7 for Building A and SK 503-7 for Building B dated 5/7/2019.
- The canopy will be a mono-pitch structure of steel beams and purlins with an operational height of approx. 6.0m minimum within the canopy area.
- Structural steel members to have appropriate corrosion protection applied, consisting of a blast to Sa 2½ standard and apply zinc spray to 150 microns DFT and top coat to architects selection colour.
- The roof will be cladded with roof sheeting using a base metal thickness of 0.55mm.

### **2.3.1 Stormwater Run-off**

- The gutters and downpipes to include vermin protection.

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## **3. Building Services**

### **3.1 Stormwater Drainage**

- Stormwater drainage will be provided to drain all Stormwater runoff from the Warehouse and yard areas.

### **3.2 Electrical and Lighting**

- Power to roller shutter doors.
- Lighting to the warehouse office and yard.
- Allow high bay LED's to the warehouse and LED troffers to office.
- Emergency lighting to comply with building code requirements.

### **3.3 Mechanical Services**

#### **3.3.1 Warehouse Ventilation**

- Warehouse ventilation shall be by natural means through opening roller shutter doors and roof passive ventilators. Design to be confirmed by the mechanical engineer to comply with NZBC requirements.
- Allow for ventilation roof mounted fans to Warehouse.

### **3.3.2 Offices**

- The office is fully ducted HVAC with split units.

### **3.4 Hydraulic services**

- Plumbing and drainage to toilets and kitchenette.
- Stormwater drainage to all gutters, downpipes, roofs and runoff water from yards, ROW and road.

### **3.5 Fire Protection**

- The buildings to be sprinklered.

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## **4. SITE WORKS**

### **4.1 Yard**

- New yard areas to be formed for both Building A and Building B, as shown on SK 101-41.
- Concrete floor slab - 35MPa minimum CBR of 3% compacted GAP65, COMBI slab 160mm thick with 4D65/60BG Bosfa dramix fibre, 20kg/m<sup>3</sup> dosage and 661 mesh. Movement joint at max 25m crs. E.W. on 2 layers of DPC on 10mm sand blinding.
- Design load LTSA compliant capacity loaded "B-Double" truck, design to carry a forklift with a maximum axle load of 16 tonnes
- Truckloads as per bridge manual as 240KN axle load
- Maximum uniformly distributed load = 45kPa
  
- Carpark areas are 25mm thick hot-mix on 250mm hardfill.
- Car parking and landscape areas around the proposed warehouse office and yard to be formed as shown on SK 100-14 dated 05/07/2019.

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## **5. Exclusions**

The following items are excluded from the scope of works:

- Tenant hard and soft fit-out works including appliances
  - Specialist electrical reticulation
  - Security system, barriers and access gate automation
  - Data and telephone distribution cabling, hardware, hubs, racks, PABX etc.
  - Racking, shelving and storage units
  - Gas reticulation
  - Tenant signage
  - Specialist lighting
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