

Condition 4: Green Roofs

Species mix of the roof:

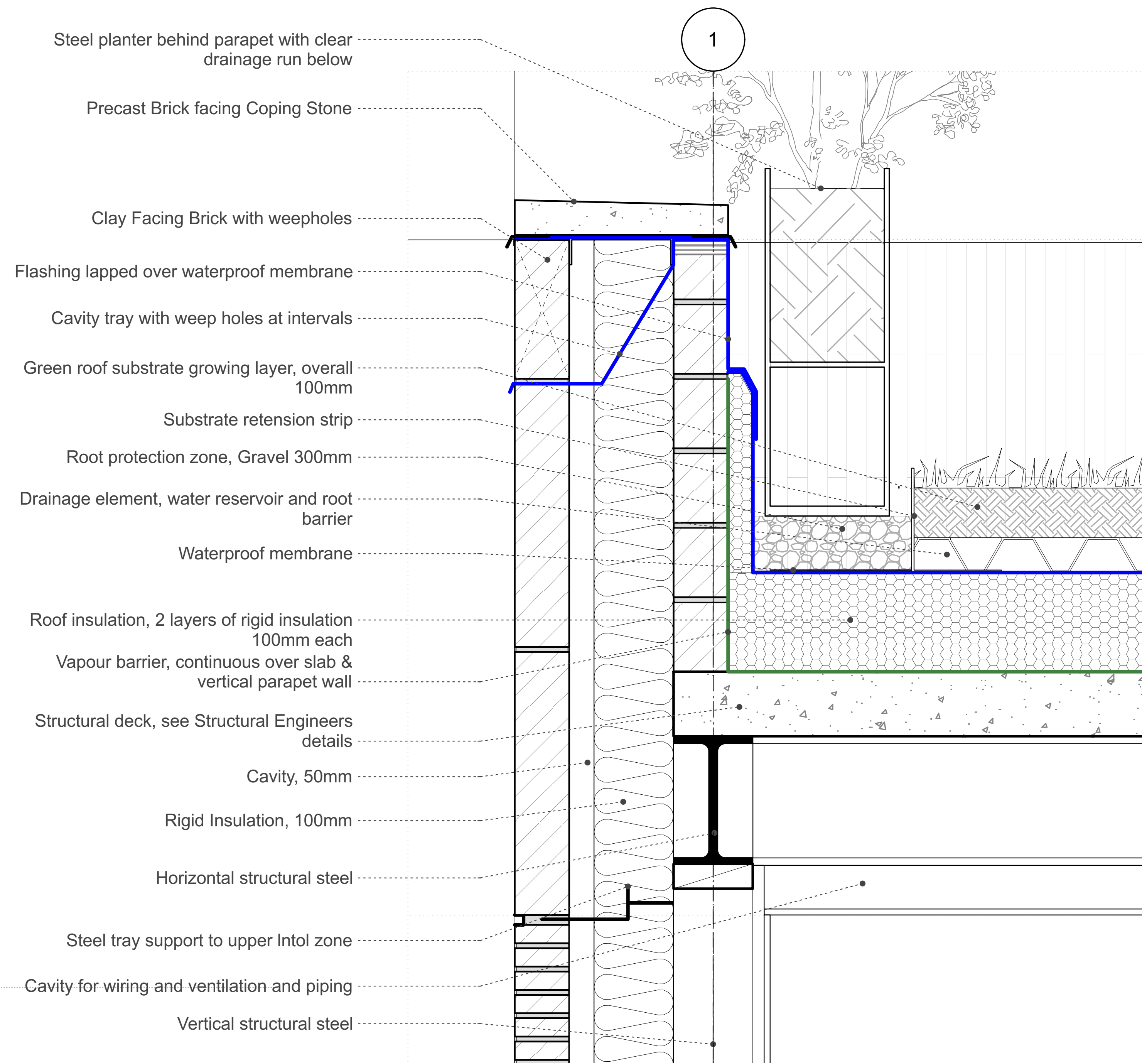
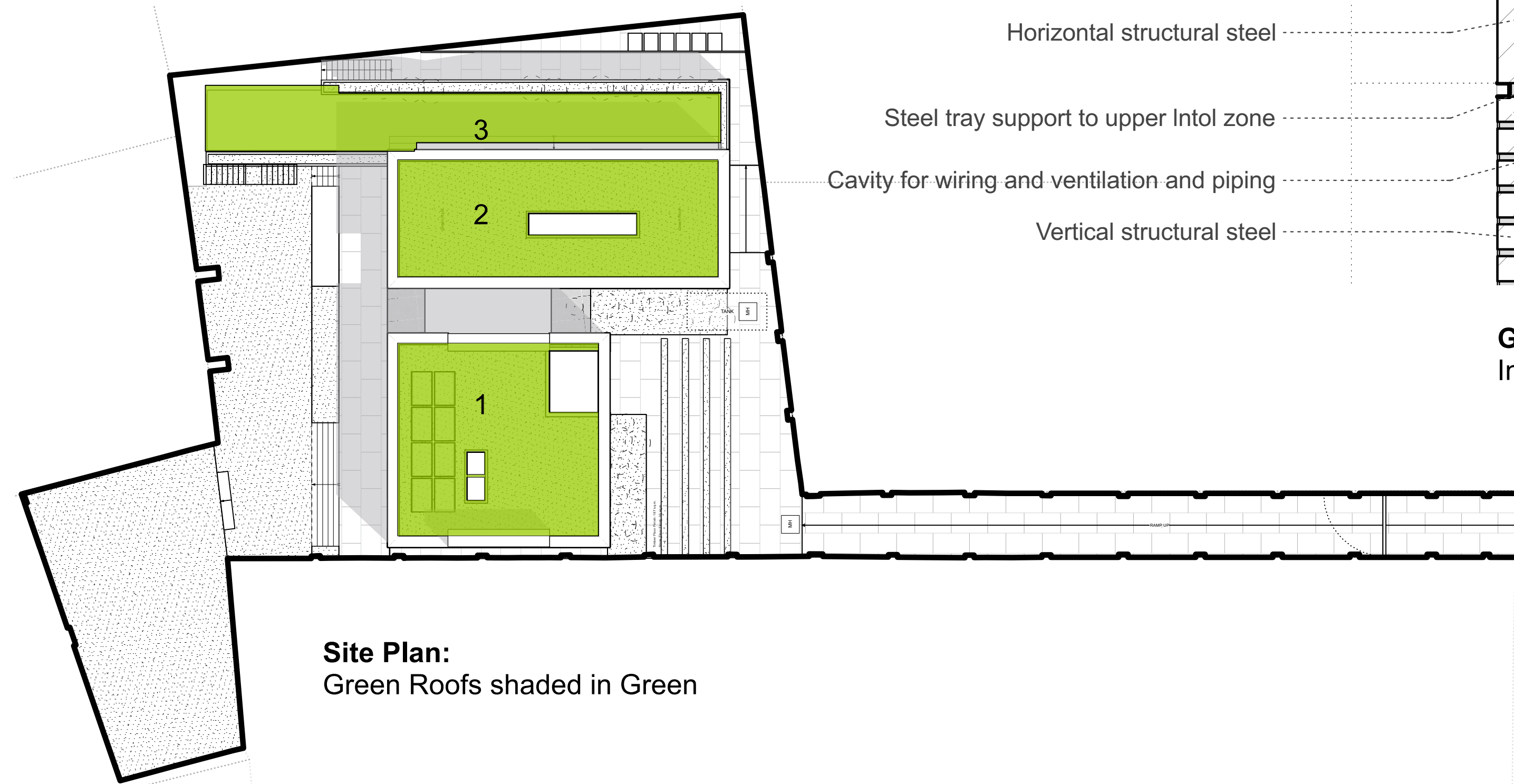
The vegetation will be a mix of species ie: Hypochaeris radicata, Allium schoenoprasum, Anthemis tinctoria, Leucanthemum vulgare, Carthusianorum, Echium vulgare, Gallium verum, Wild Marjorum, Thyme, Chamomil, and fescue grass varieties.,

Maintenance:

The overall objective in establishing a green roof is that it should be maintenance free, partly on safety grounds, and partly on grounds of sustainability (for example an irrigated green roof is antithetical to one of the primary objectives of having a green roof (water absorption). Even during establishment maintenance should therefore be kept to a minimum in order to avoid creating a system wherein the plants come to rely on a particular maintenance input. The greatest threat to green roofs is extreme drought. This is because the soil depth is not sufficient to retain moisture in cases of prolonged dry sunny weather. Drought is the primary cause in cases of green roof failure.

The Lindum water retention mat helps with this problem, but additionally increasing the substrate depth can help. In this case, as an extensive green roof the minimum manufacturers recommended substrate depth is 75mm. We have increased this to 150mm for the better establishment of the plants, and improved water retention. Additionally we would recommend that in case of a drought lasting longer than ten days (during the first year of establishment) and a fortnight (during the second year of establishment) and three weeks (thereafter) the roofs be watered with a hose for a sufficient length of time to achieve full depth saturation.

In the long term the roof should achieve a natural balance with the site conditions, but like any ecosystem it will tend to move towards climax – that is, self seeded larger plants will begin to colonise pushing out the smaller plants. Typically this will include Buddleja, Sycamore and Birch Saplings, all of which may ultimately cause damage to the underlying roof system and waterproofing. We therefore recommend an annual check for saplings which should be pulled if found.



Green Roof Types:

1. Bio-Solar Roof
Bauder green roof system with integral Solar panels



2. Green Roof:
Bauder green roof with diverse planting



3. Extensive Green Roof:
Bauder green roof system with greater depth planting substrate.

