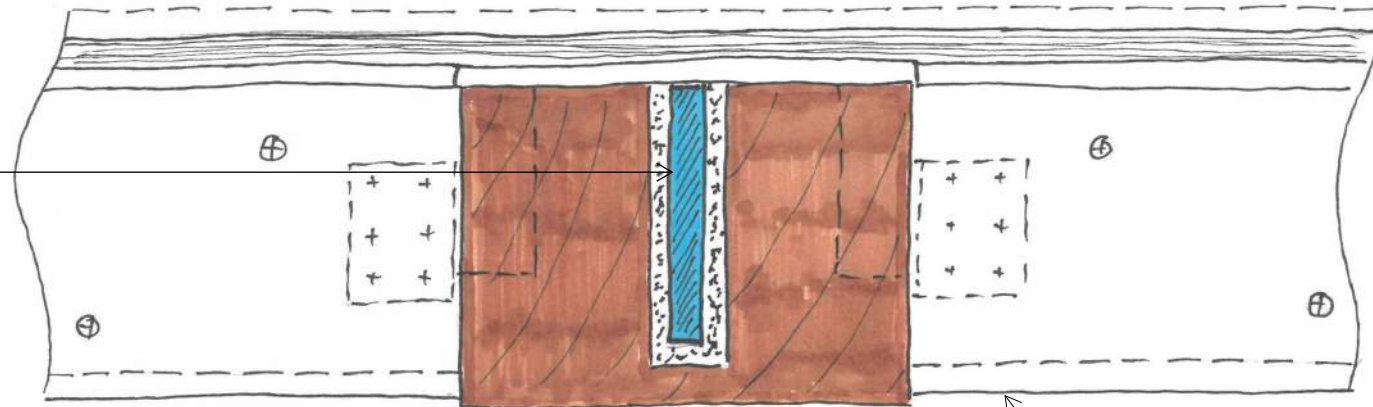
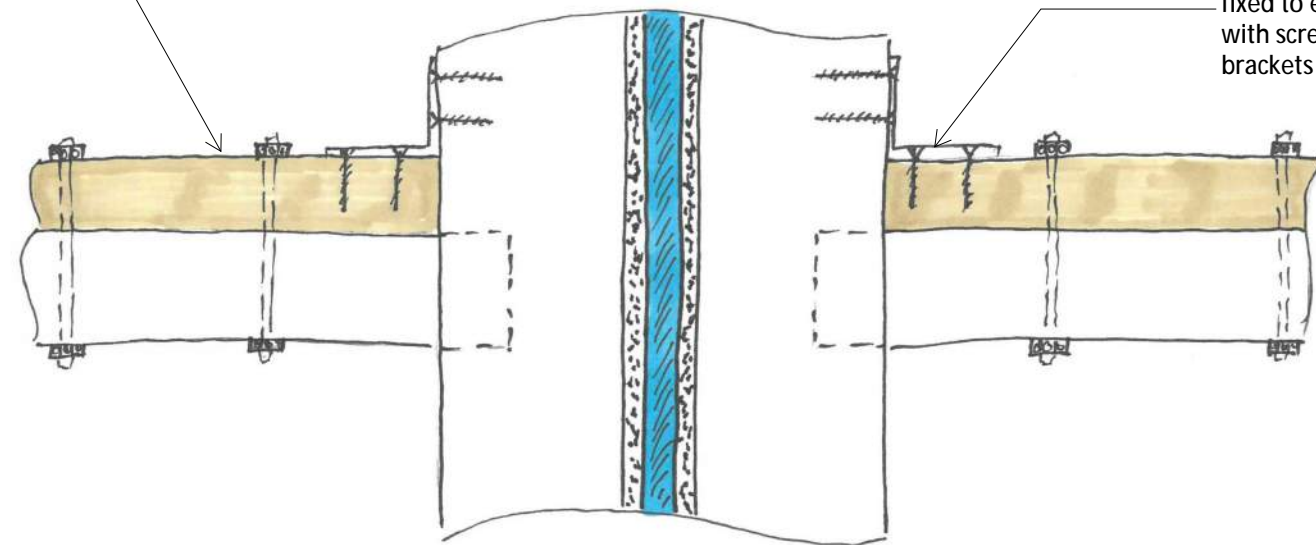


Steel strengthening plate
to be resin bonded into
slot cut into existing
timber floor beam



Detail 4: Section of Front Floor Beam To Be Strengthened, 1:10

Existing joists to be
strengthened with 200x50
C24 timber joists - bolted
together at 400mm
staggered c/c



Incoming floor joists

New timber joists to be
fixed to existing floor beam
with screw fixed angle
brackets

**Detail 5: Plan of Front Floor Beam To Be Strengthened, 1:10
Option A**

Structural Strengthening Requirements:

- The existing timber floor beam can not be justified for the required residential loadings to current standards and requires strengthening
- This solution offers the least impact to the existing floor joists



Figure 4, Front Floor Beam To Be Strengthened (Indicative)

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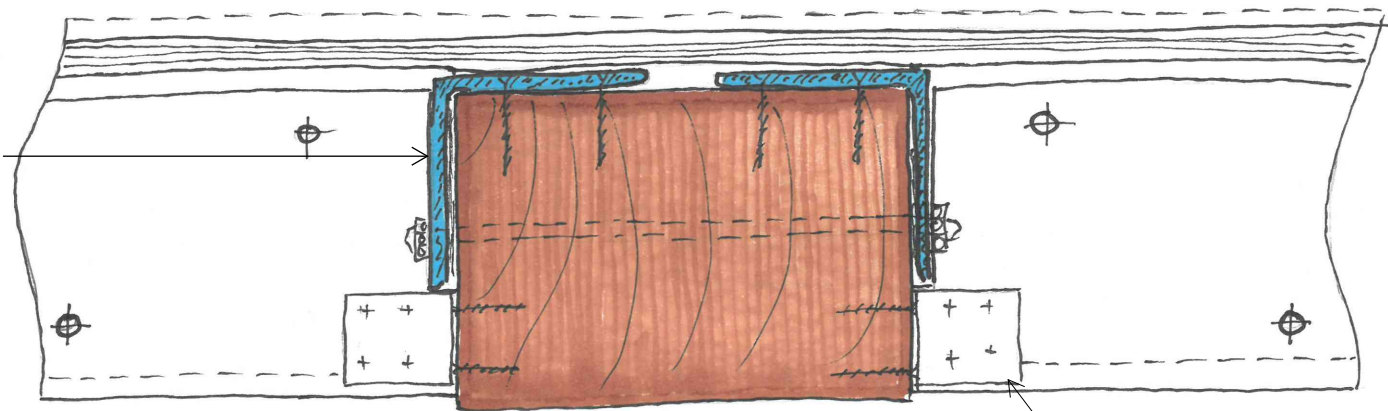
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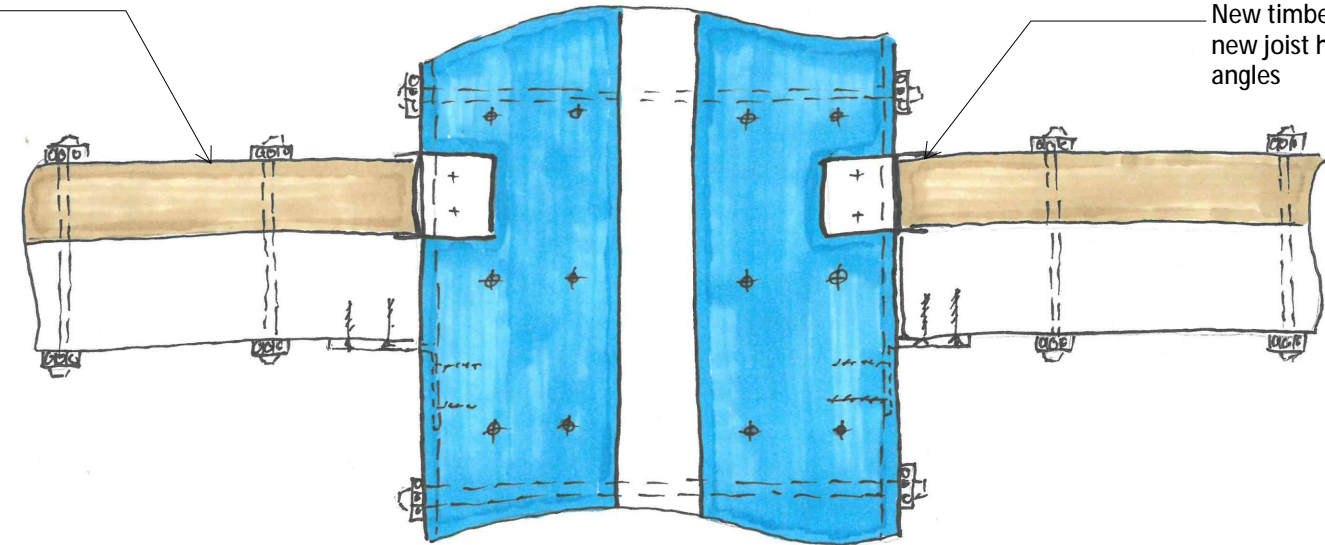
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Steel angles to be fixed to existing timber floor beam with through bolts and screw to top of beam



Detail 7: Section of Front Floor Beam To Be Strengthened, 1:10

Existing joists to be strengthened with 200x50 C24 timber joists - bolted together at 400mm staggered c/c



Incoming floor joists to be fixed to existing timber floor beam with screw fixed brackets to allow for the existing bearing to be cut back to allow for strengthening steel angles to be installed

New timber joists to be supported on new joist hangers fixed to top of steel angles

Detail 8: Plan of Front Floor Beam To Be Strengthened, 1:10 Option B

Structural Strengthening Requirements:

- The existing timber floor beam can not be justified for the required residential loadings to current standards and requires strengthening
- The proposed solution offers the least impact to the existing floor beam



Figure 5, Front Floor Beam To Be Strengthened

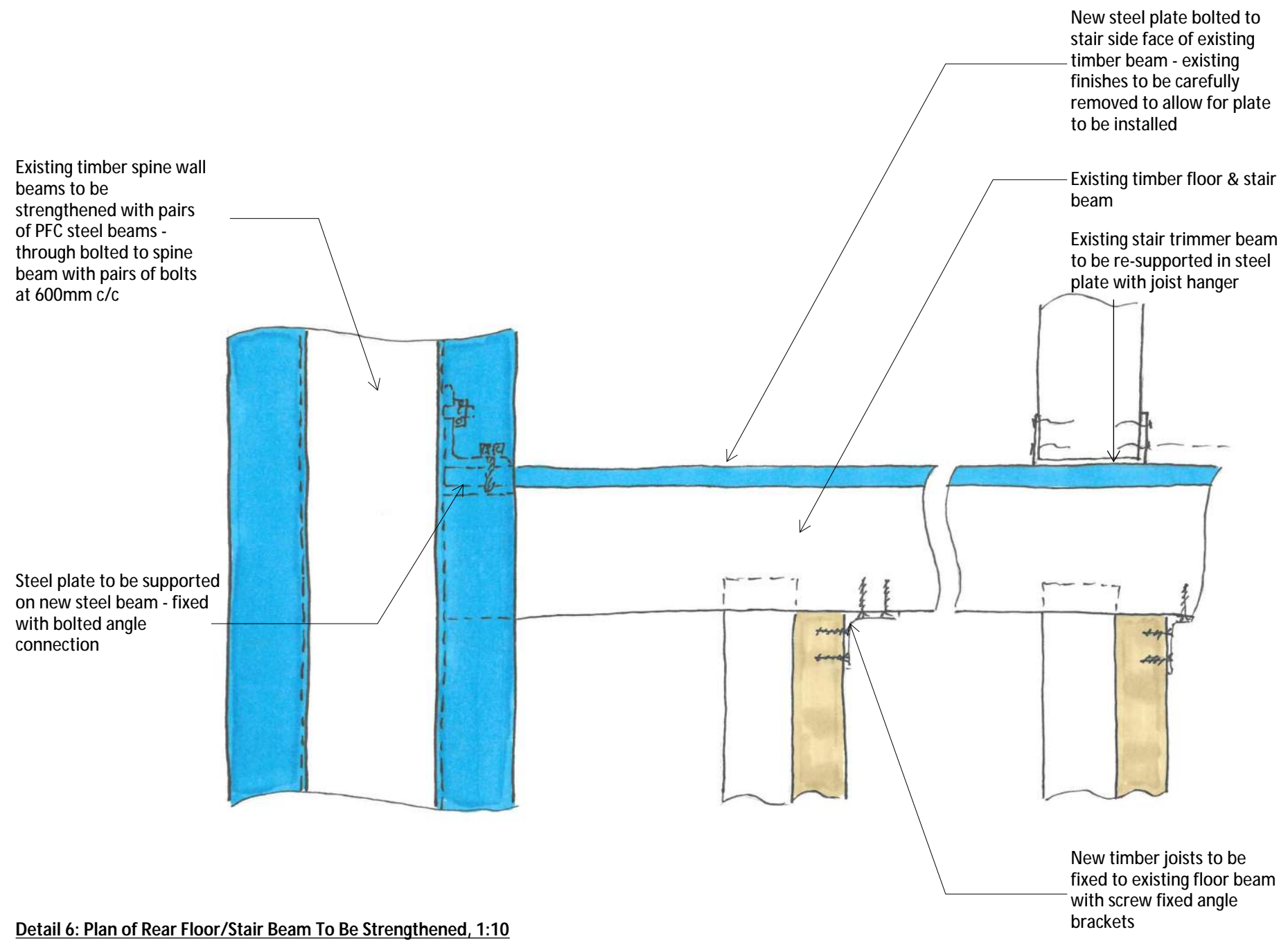
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Structural Strengthening Requirements:

- The existing timber floor beam can not be justified for the required residential loadings to current standards and requires strengthening
- The staircase shows signs of settlement due to the movement of the stair wall and the supporting beam line needs to be stabilised at each level
- The proposed solution offers the least impact to the existing floor structure as the floor joists will not require cutting back and re-supporting



Figure 5, Rear Floor Beam To Be Strengthened (Indicative)
Note: Strengthening to opposite side of wall shown

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