(a sizeable service corridor must be maintained in order to allow for drainage and sewerage to be retroactively installed)

the housing grows adjacent to the soccer field in order to ensure the proximity to the train station and the factory
RAILING & FLOOR DETAIL

SPECIFICATIONS
1. Grout (as specified by client)
2. Ceramic tile- sourced and specified by client
3. Latex Portland cement mortar
4. 20 Mortar bed
5. 10 ø Re-bar reinforcement of precast concrete element anchoring the division panel as well as the railing for the second storey
6. In-situ concrete fill
7. Precast concrete floor panels
8. 38 x 144 sawn timber bracing plate connected to 2 x 38 x 38 battens
9. Prefabricated reed separation panel
10. Prefabricated reed panel finished with 10 mm Warrior Skimming Plaster bagged onto secured panels in order to finish the façade
11. 38 x 144 sawn timber bracing plate
12. 200 x 3 steel plate in order to form a cross beam
13. 30 bedding fill
14. 150 open graded base course
15. 27 x 75 timber gutter boards
16. 0,6 galvanised corrugated steel roof sheet
17. Continuous membrane roof and gutter lining

GUTTER DETAIL

SPECIFICATIONS
1. Continuous membrane roof and gutter lining the facade
2. 0,6 galvanised corrugated steel roof sheet
3. Custom built zinc box gutter to engineer’s specification
4. 43 ø steel bar purlins at 300 centres, bedded in the courses with M16 bolts to engineer’s specification
5. Modified U-bolt sandwiching the lining, shelving and gutter together
6. Custom built steel cooling bracket
7. 27 x 75 sawn timber cooling button
8. 100 x 100 x 3 galvanised steel equal angle cross stabilizer
9. 16 x 220 composite finishing panel
10. 17 x 75 timber gutter boards
11. 150x150x250 steel cored formed lip channel bolted to 200x10 steel plate in order to form a cross beam
12. Prefabricated reed partition panel
13. 38 x 144 sawn timber bracing plate
14. Prefabricated reed partition panel

BEAM & PANEL DETAIL

SPECIFICATIONS
1. Continuous membrane roof and gutter lining the facade
2. 0,6 galvanised corrugated steel roof sheet
3. Custom built zinc box gutter to engineer’s specification
4. 43 ø steel bar purlins at 300 centres, bedded in the courses with M16 bolts to engineer’s specification
5. Modified U-bolt sandwiching the lining, shelving and gutter together
6. Custom built steel cooling bracket
7. 27 x 75 sawn timber cooling button
8. 100 x 100 x 3 galvanised steel equal angle cross stabilizer
9. 16 x 220 composite finishing panel
10. 17 x 75 timber gutter boards
11. 150x150x250 steel cored formed lip channel bolted to 200x10 steel plate in order to form a cross beam
12. Prefabricated reed partition panel
13. 38 x 144 sawn timber bracing plate
14. Prefabricated reed partition panel
FACTORY FUNCTIONS
1. Reed collection & cleaning
   - Reed must be sorted, cleaned, and ready for curving.
2. Reed drying
   - Reed must be dried for 30 days.
3. Reed curving
   - Reed is curved and stored for 24 hours.
4. Reed drying (two)
   - Reed is dried for another 30 days.
5. Workshop
   - Workshops are equipped with tools and a cutting template.
6. Welding workshop
   - Welding for trusses is performed here.
7. Long-term panel storage
   - Panels are stored here for distribution.
8. Short-term panel storage
   - Panels are stored here for distribution within a week.
9. Distribution zone
   - Panels are distributed here for end-users.
10. Cart Storage
    - Carts are stored here for collection or delivery.

PUBLIC FUNCTIONS
a. Male WC
   - Existing WCs are refurbished.
b. Ladies WC
   - Existing WCs are refurbished.
c. Cleaning storage
   - Cleaning storage is provided for bathrooms.
d. Elias’ Fish & Chips
   - Elias’ shop is given a permanent space.
e. Public cooking area
   - An outdoor cooking area is provided.
f. Sipho’s Meat & Tongue
   - Another food shop is provided.
g. Vegetable garden
   - A vegetable garden is provided for residents.

FACTORY PLAN
- TO UNION AVENUE (SETTLEMENT)
- TO TSOENE STREET (MAIN ROAD)
The community is involved in the everyday functioning of the factory as well as in the construction of the building. Hours worked amount to material earned for their own houses. The community directs its own upgrade process, supported by NGOs and government, and the proceeds of a productive factory will be lead by a community panel appointed to manage the development of the site.

**Formation of PPP** to fund the project and a housing saving scheme for the dwellers.

**Planning** permission

**TIMELINE & STAKEHOLDERS**

**Johannesburg Social Housing Company Social housing**

NUSP Basic service, Security of tenure, Community empowerment

**Johannesburg Development Agency**

City-wide development, Economic growth, Access to jobs and markets, Sustainable energy consumption and land use

**Nemai Consulting**

Environmental and social consultant, Appointed to draw up the rehabilitation framework

**Soweto Municipality** Disaster risk management, Electricity, Water

**JOZI@WORK** Work packages, Employment, Socio-economic transformation

**COMMUNITY BUILDERS**

**SLUM DWELLERS**

Phindi Better housing

Betty Access to kerosene, Needs and income

Elias More business opportunity, Wants to expand to R200/day

Octavia Access to electricity, Insulation, Water, Sanitation

Bonginkosi Maduna Increased quality of housing, Sealed housing, Insulation, Safety, Drug addicts, Toilets

Ratebe Theft of laundry, Illegal electricity, Winter cold

Kliptown Concerned Residents Forum Development & Housing, Social Development

The Holy Redeemer Kliptown Community Development Religion, Community development

Soweto Kliptown Youth Youth programs, Care for the aged & sick, Visitors & tourism

Kliptown Youth Program Youth programs, Skill development, Education

**POLITICIANS**

Dan Bovu Allocation of funds

Government: ANC Allocation of funds

**LOCAL FUNDERS**

**INTERNATIONAL FUNDERS**

**SDG's**