

# QARAOUN – COMPOSTING STATION

## PROJECT BRIEF

### INTRODUCTION:

In Year I, DAWERR started developing sustainable composting value chains for organic waste and strengthening existing Recycling Value Chains (RVCs) for recyclable materials in seven selected municipalities, including QARAOUN, as solid waste diversion and valorization pilots (the “pilots”).

As part of the pilots, DAWERR will support QARAOUN Municipality and its local community to develop sustainable composting value chains for organic waste (representing 50% of the total municipal solid waste stream) including source separation, collection, and composting of organic waste through the construction of small-scale, low-tech (with spare parts available in the local market), low-cost (capital and O&M) composting stations, creating local demand for the compost produced for agricultural, landscaping, or other uses as soil conditioner/ fertilizer supplement. DAWERR also will facilitate linkages with existing material recovery facilities and engaging the private sector to strengthen value chains for other, non-organic recyclables.

DAWERR is providing targeted technical, financial, and business support to QARAOUN Municipality to design, implement, and manage the “pilot”.

### SUMMARY OF CONSTRUCTION ACTIVITIES AND PROVISION OF EQUIPMENT

DAWERR will construct a composting station - bunker composter (see details in the drawings below), and conduct training to the Municipality/Operator to operate and maintain the station and ensure its sustainability beyond the life of the Activity as follows:

#### 1. Construction Activities:

##### a. Municipality Contribution:

The municipality will be responsible for obtaining the necessary permits and approvals for the composting station (including establishment permit and construction permit) from the related authorities and will contribute to the construction works in the selected plot/site (plot#8135, QARAOUN) that will host the composting station including:

1. The topographic surveys during the project implementation, where needed.
2. Rehabilitation and asphaltting the access road leading to the project's site.
3. The construction of cyclopean concrete walls for the project's fence.
4. Planting trees all around the project's fence.

Municipality work contribution will be implemented under the design and supervision of DAWERR consultant engineer.

##### b. DAWERR Contribution:

DAWERR will be responsible for the following:

1. The earth works and land's preparation including Base coarse layer, excavation of the foundations, etc.
2. The reinforced concrete works including blinding concrete, foundations, tie beams, channels and pits, slab on grade, columns, retaining walls, cover slabs, etc.
3. The steel works including: the construction of Block A steel hangar, The steel fence, the project's gates, etc.
4. Finishing for the Block A, B and C (as shown in top of Roof Plan drawing) including partition - plastering - painting - doors, windows, tiling, etc.
5. Electrical installation including power, lighting and low current, networks, earthing, etc.
6. Mechanical installation including drainage and water supply networks, sanitary fixtures for the reception's toilet, etc.
7. Landscaping works including the asphaltting of the external yards, etc.

#### 2. Provision of Equipment:

Once the construction phase is completed, DAWERR will provide and install:

1. The bunkers' equipment.
2. One screening machine to screen the compost produced.
3. A new Solar Photovoltaic (PV) system or operating the existing one for the Electrical power supply. (To be confirmed; not included in this submission)

#### Important Note:

***This submission is an intermediary design and will be used by the municipality in the permit's acquisition process.***

***The detailed drawings, calculation notes, tests, etc., will be submitted after the permit issuance.***

### QARAOUN COMPOSTING FACILITY LIST OF ARCHITECTURAL INTERMEDIARY DESIGN DRAWINGS

Sheet Number	SHEET TITLE	SCALE
A-00	LIST OF DRAWINGS – PROJECT BRIEF	N.T.S.
A-01	MASS PLAN	1/1000
A-02	SCHEMATIC SANITARY PLAN	1/100
A-03	SCHEMATIC FOUNDATIONS PLAN	1/100
A-04	GROUND FLOOR PLAN	1/100
A-05	TOP OF ROOF PLAN	1/100
A-06	SECTIONS AA & BB	1/100
A-07	ELEVATIONS	1/100
A-08	PRODUCTION LINE AND EQUIPMENT	1/100



ACTIVITY:

DAWERR

PILOT:

QARAOUN MUNICIPALITY

ENGINEER:

ROY T. HELOU  
Civil Engineer  
Mobile : +961 (70) 169547  
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GENERAL NOTES:  
1-THE DRAWING IS NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.  
2-ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.  
3-ALL LEVELS ARE IN METERS.

KEY PLAN:

REV.	DATE	MODIFICATION	DRAWN	DESIGNED	CHECKED
2	30/06/2022	Rev2-INTERMEDIARY DESIGN	RM	CA	RHE
1	28/05/2022	Rev1-INTERMEDIARY DESIGN	RM	CA	RHE
0	22/04/2022	INTERMEDIARY DESIGN	RM	CA	RHE

LOT:

QARAOUN 8135

Project Name

COMPOSTING STATION  
QARAOUN – SOUTH

DRAWING TITLE:

LIST OF DRAWINGS –  
PROJECT BRIEF &  
GENERAL NOTES

DRAWING NUMBER A00

SCALE : N.T.S. DATE : 30/06/2022



ACTIVITY:

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LOT:

QARAOUN 8135

Project Name

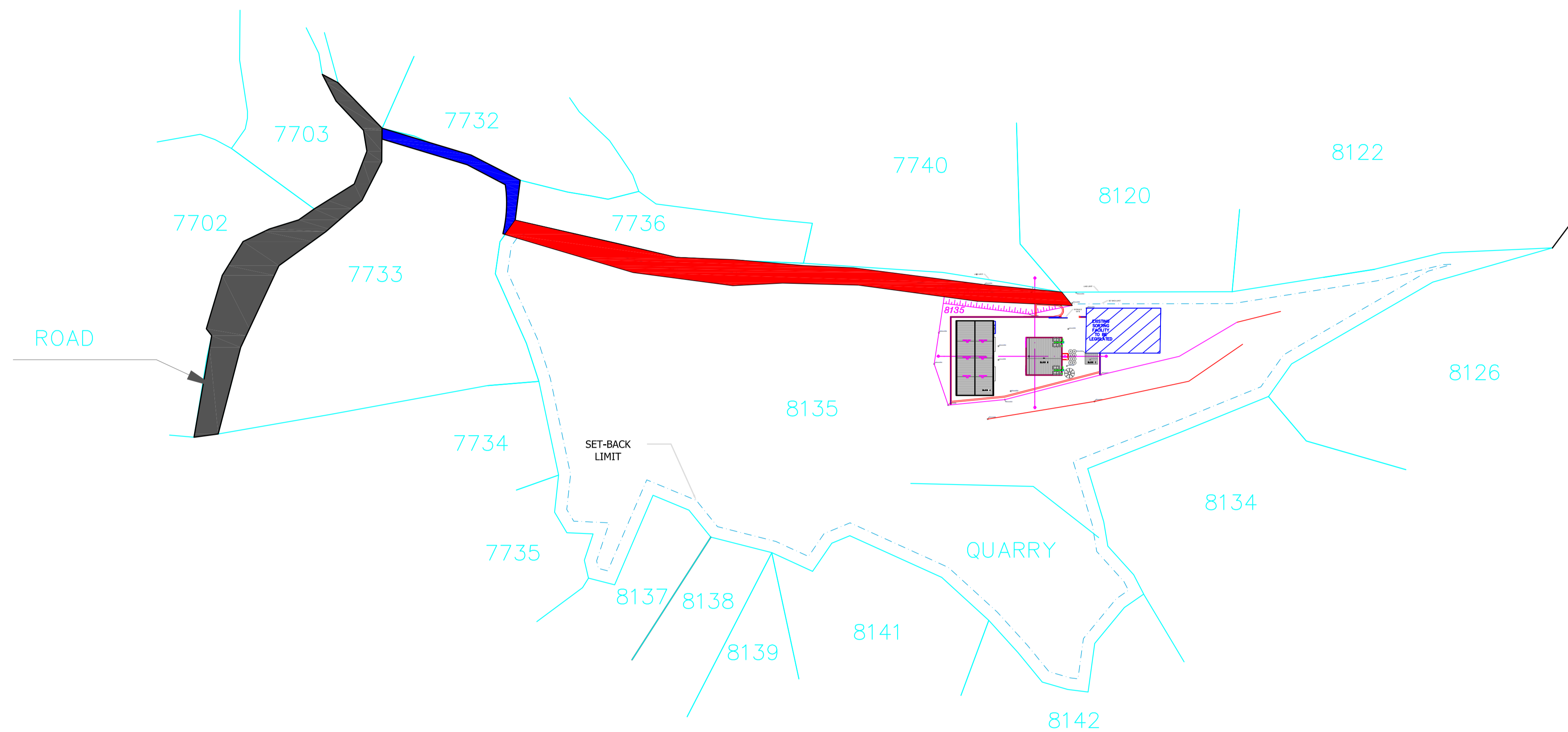
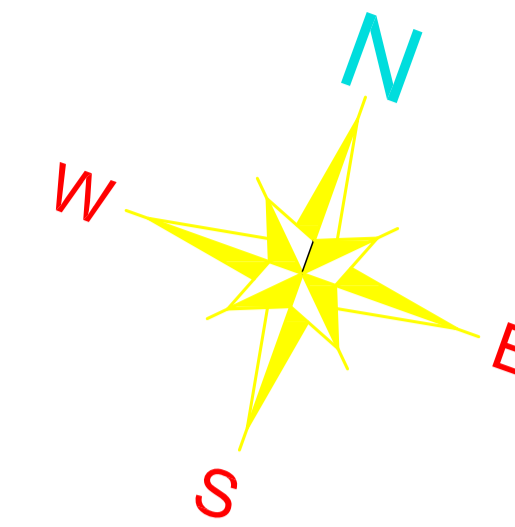
COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:

MASS PLAN

DRAWING NUMBER A01

SCALE : 1/1000 DATE : 30/06/2022

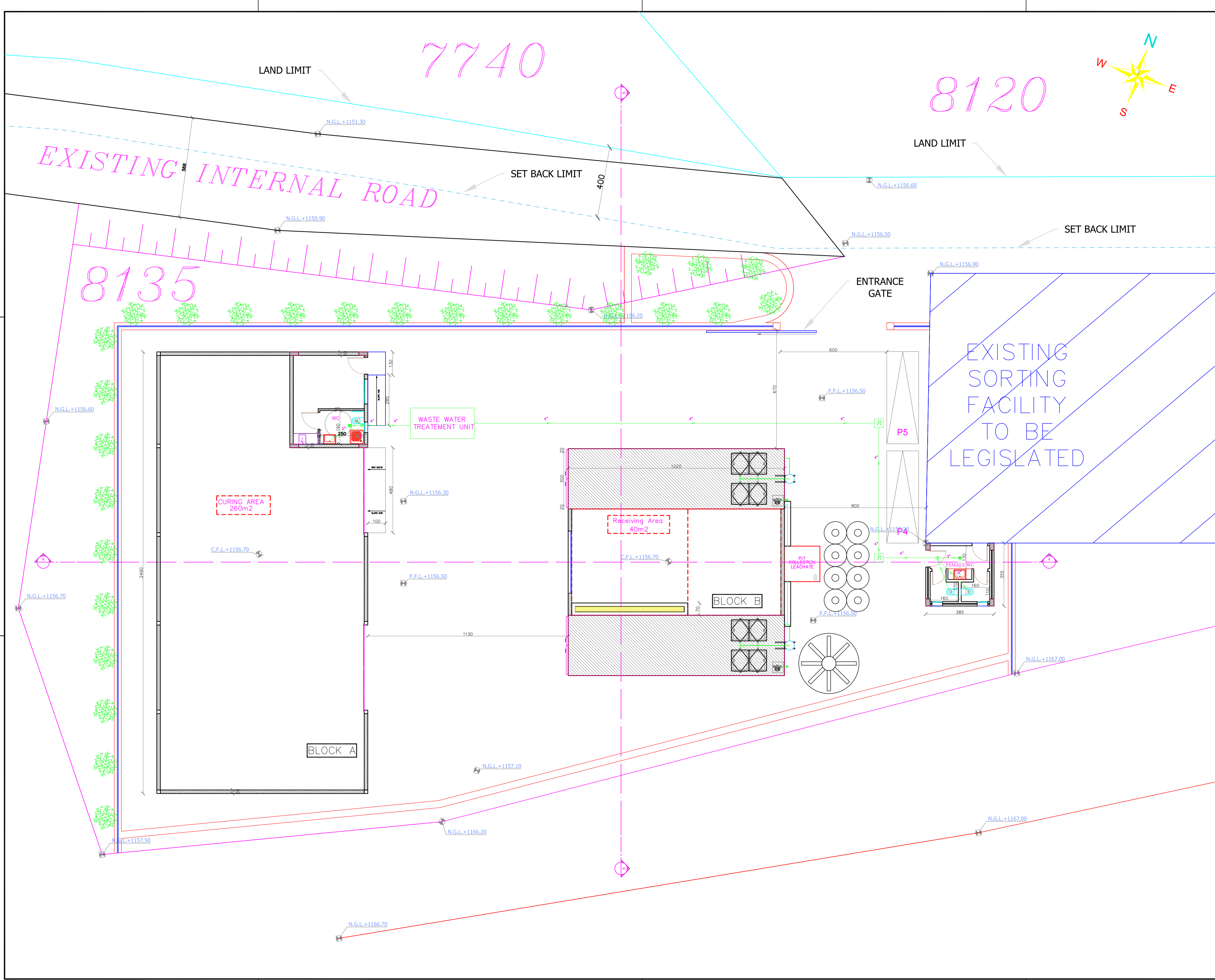


 D.P. ROAD

 EXISTING ROAD - TO BE LEGISLATED AS "RIGHT OF WAY" ON THE LOT #7733.

 EXISTING INTERNAL ROAD IN THE LOT # 8135

 EXISTING SORTING FACILITY TO BE LEGISLATED



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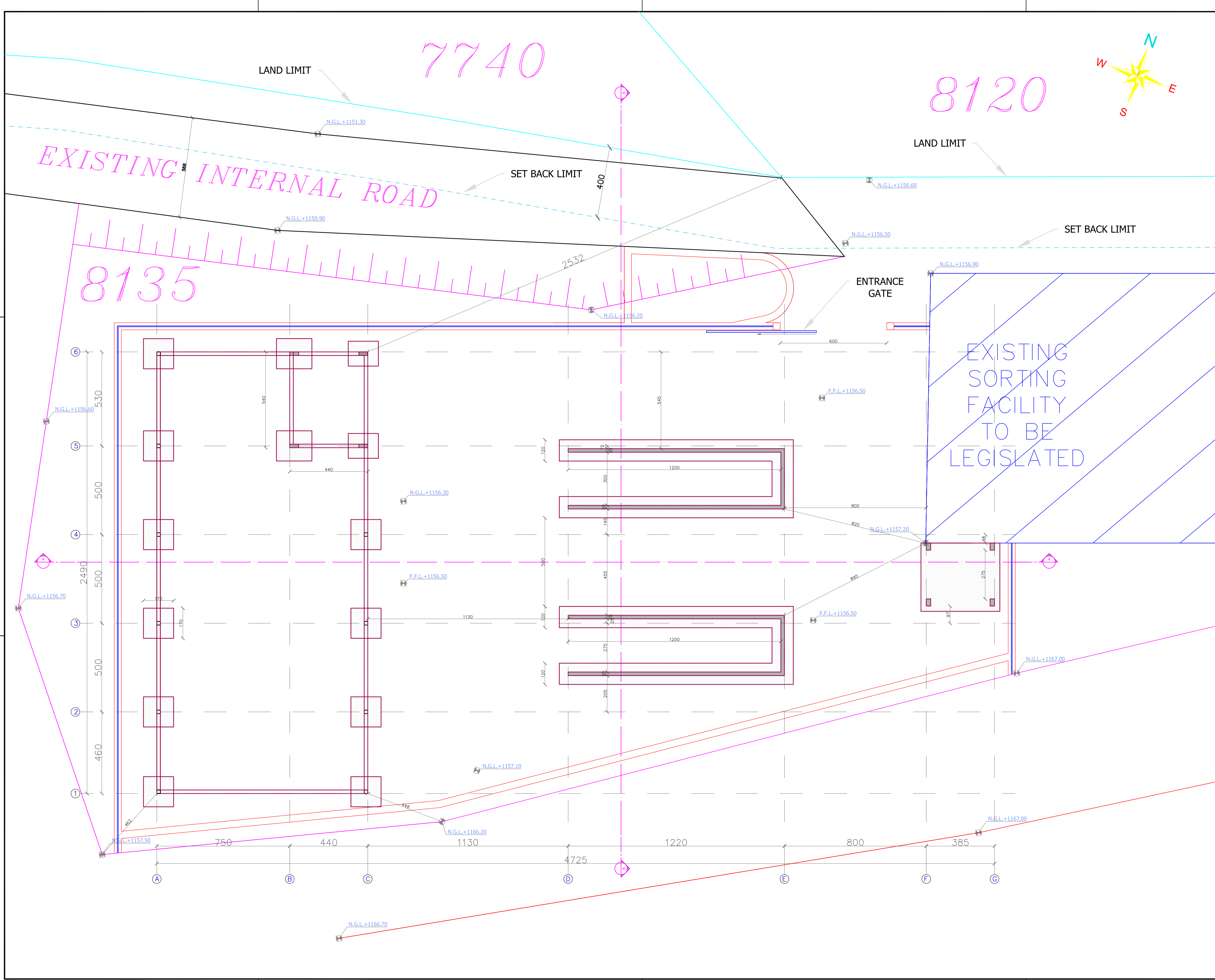
LOT:  
QARAOUN 8135

Project Name  
COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:  
SCHEMATIC SANITARY  
PLAN

DRAWING NUMBER A02

SCALE : 1/100 DATE : 30/06/2022



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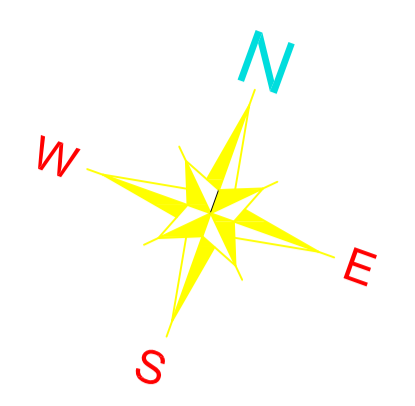
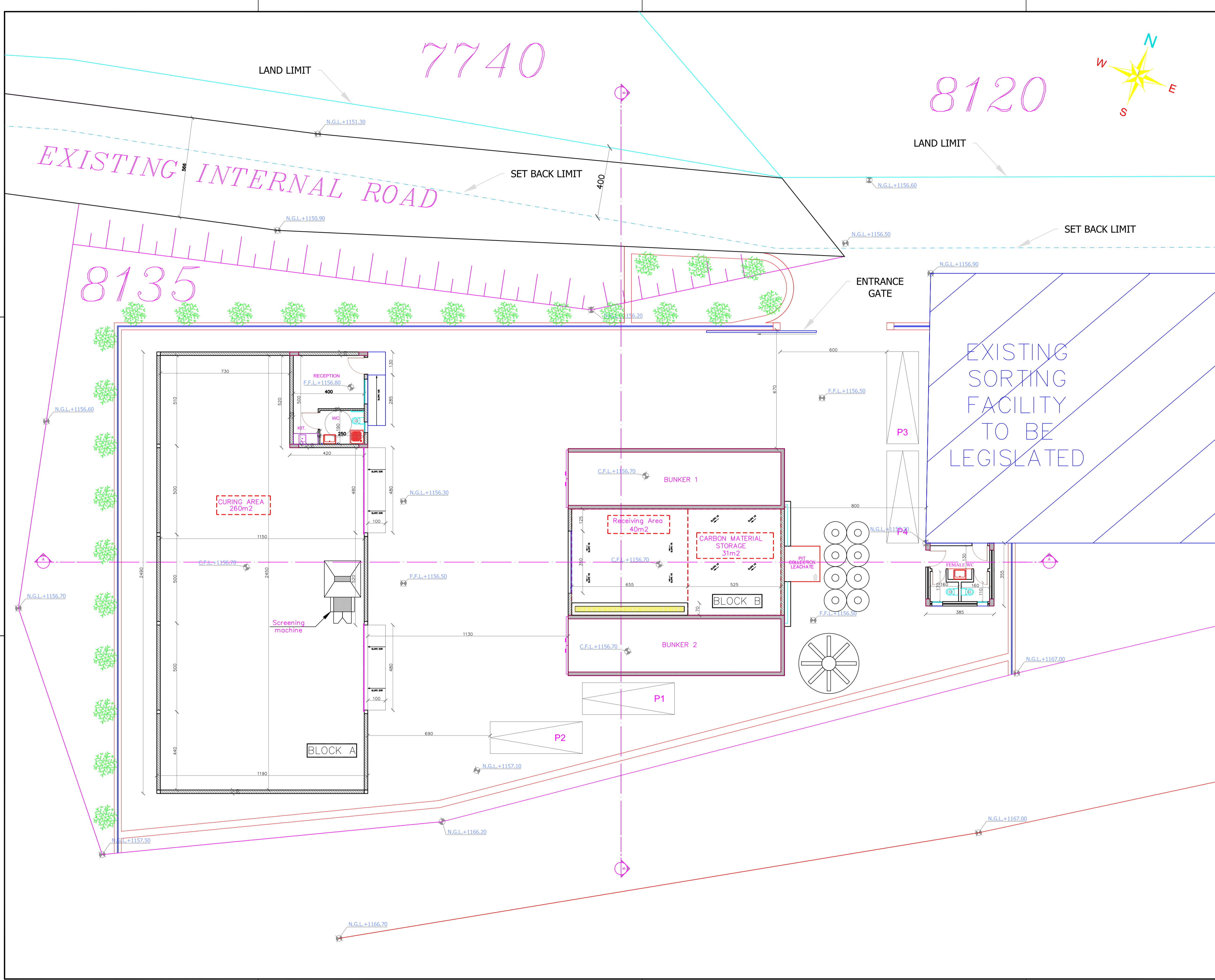
LOT:  
QARAOUN 8135

Project Name  
COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:  
SCHEMATIC  
FOUNDATION PLAN

DRAWING NUMBER A03

SCALE : 1/100 DATE : 30/06/2022



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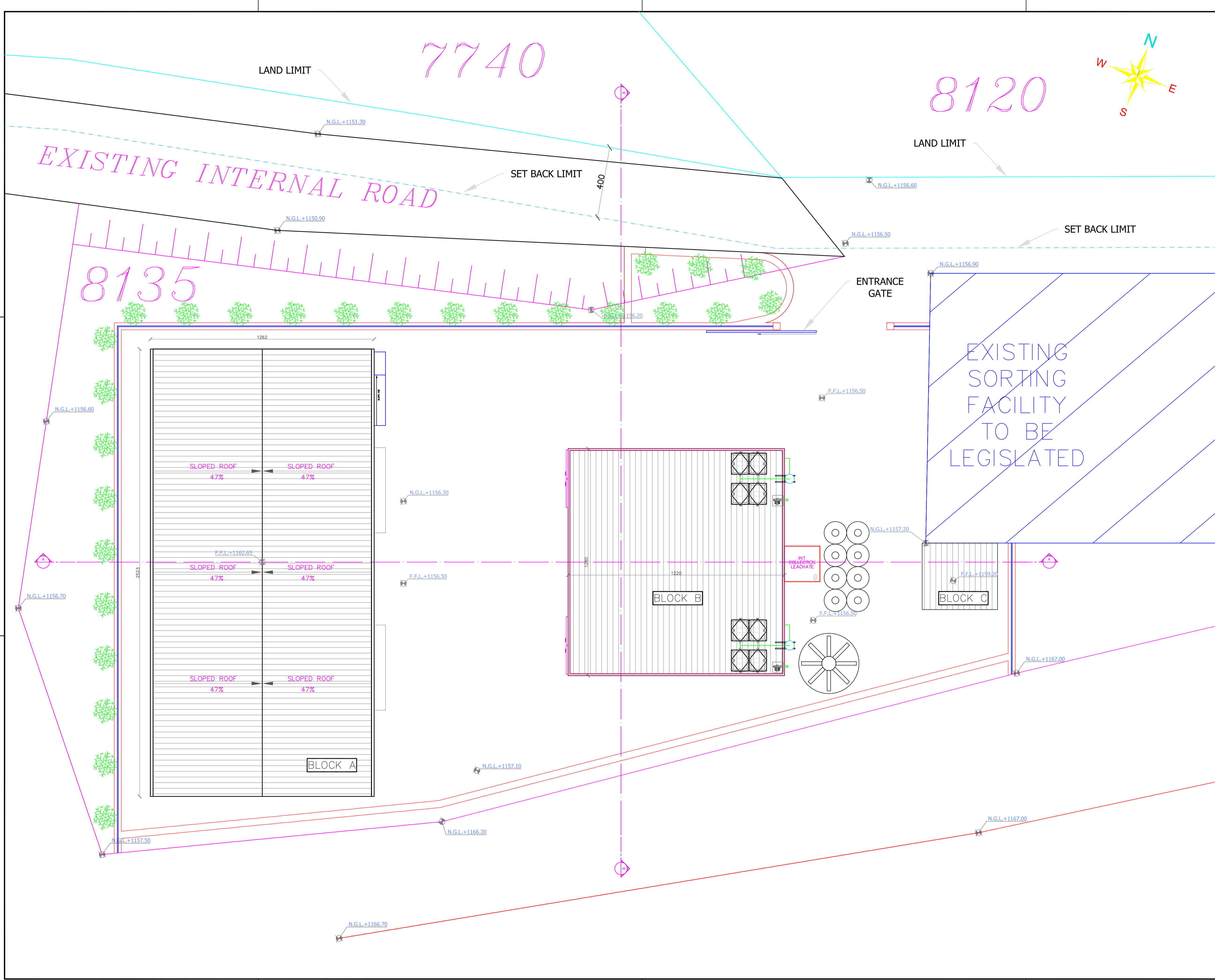
LOT:  
QARAOUN 8135

Project Name  
COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:  
GROUND FLOOR  
PLAN

DRAWING NUMBER A04

SCALE : 1/100 DATE : 30/06/2022



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QARAOUN 8135

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COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:  
TOP OF ROOF  
PLAN

DRAWING NUMBER A05  
SCALE : 1/100 DATE : 30/06/2022



USAID  
DIVERTING WASTE BY  
ENCOURAGING REUSE  
AND RECYCLING  
DAWERR

ACTIVITY:

DAWERR

PILOT:

QARAOUN MUNICIPALITY

ENGINEER:

ROY T. HELOU  
Civil Engineer

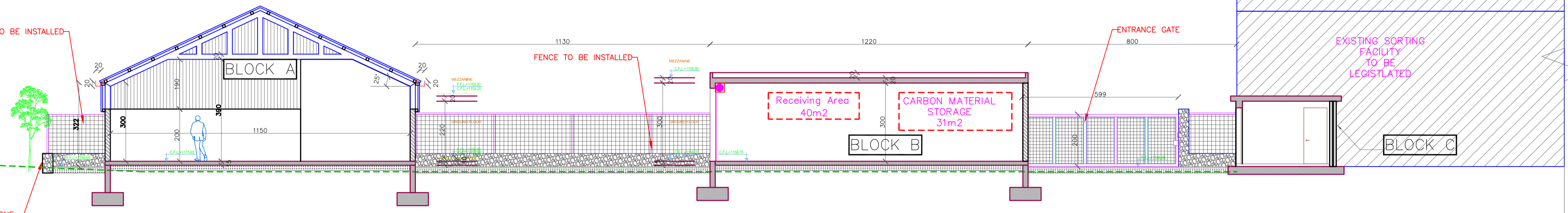
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FENCE TO BE INSTALLED

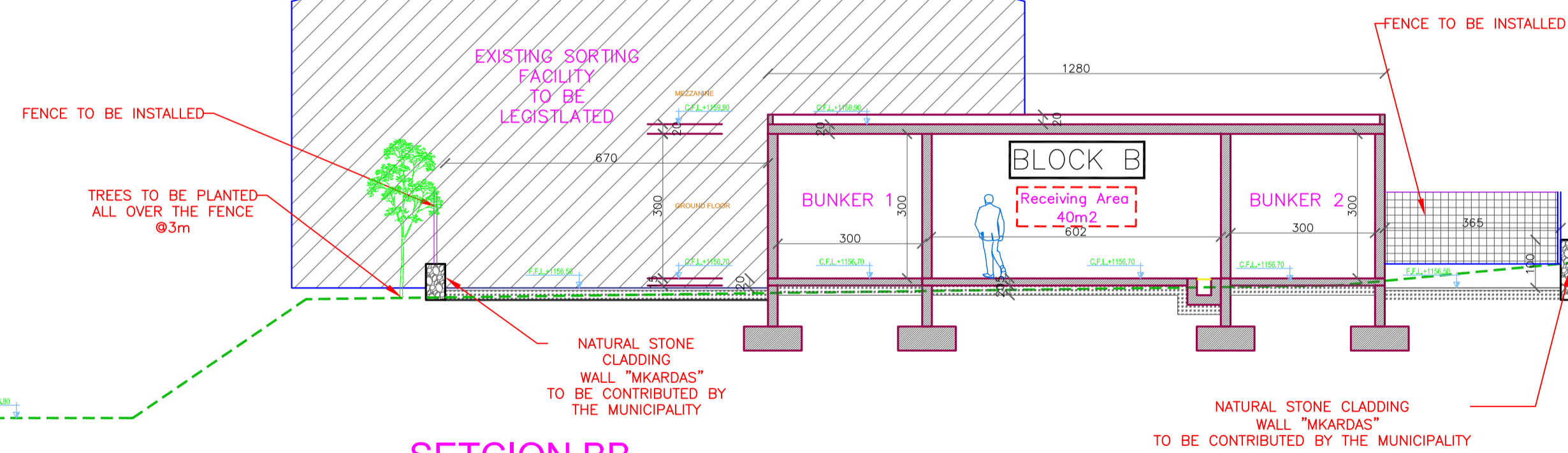
NATURAL STONE  
CLADDING  
WALL "MKARDAS"

SETCION AA



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KEY PLAN:



SETCION BB

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COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:

SECTIONS AA & BB

DRAWING NUMBER A06

SCALE : 1/100 DATE : 30/06/2022



USAID  
DIVERTING WASTE BY  
ENCOURAGING REUSE  
AND RECYCLING  
DAWERR

ACTIVITY:

DAWERR

PILOT:

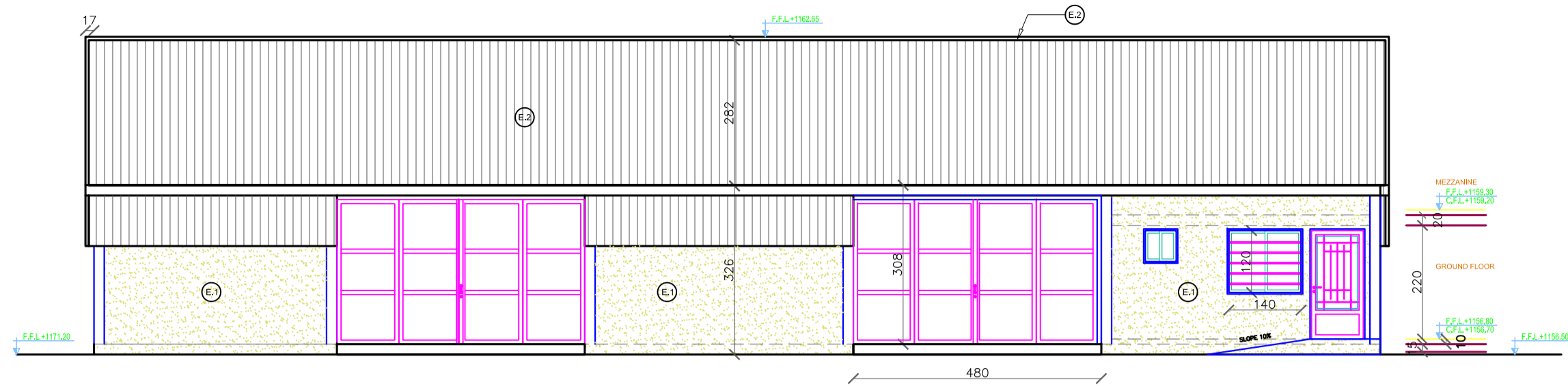
QARAOUN MUNICIPALITY

ENGINEER:

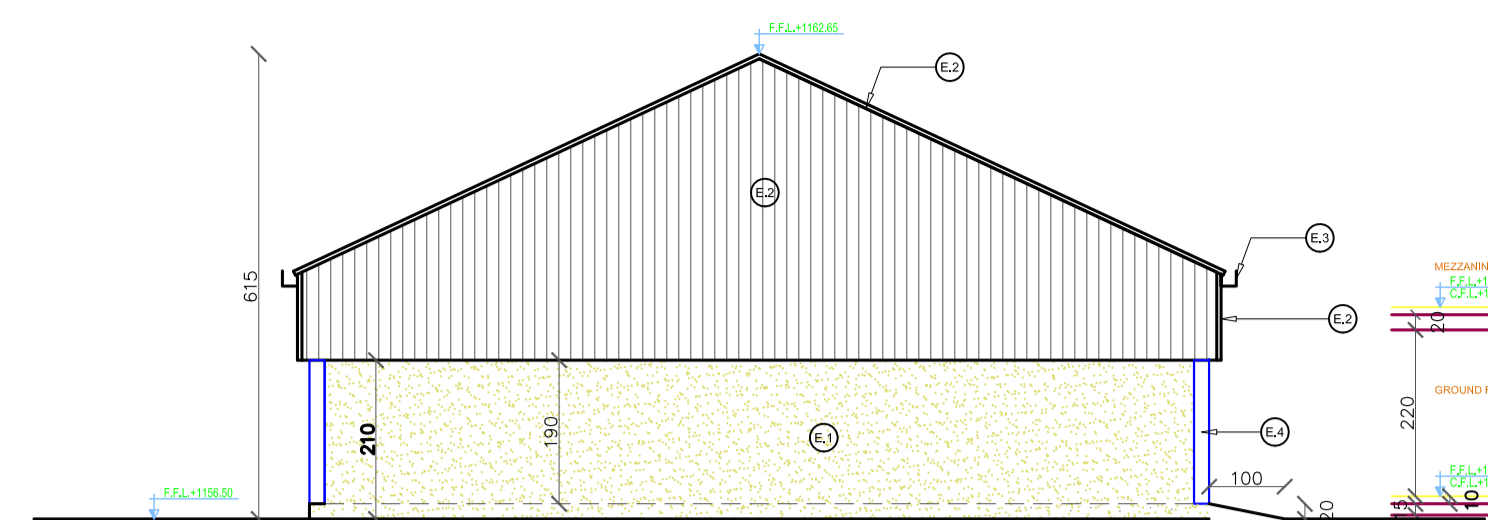
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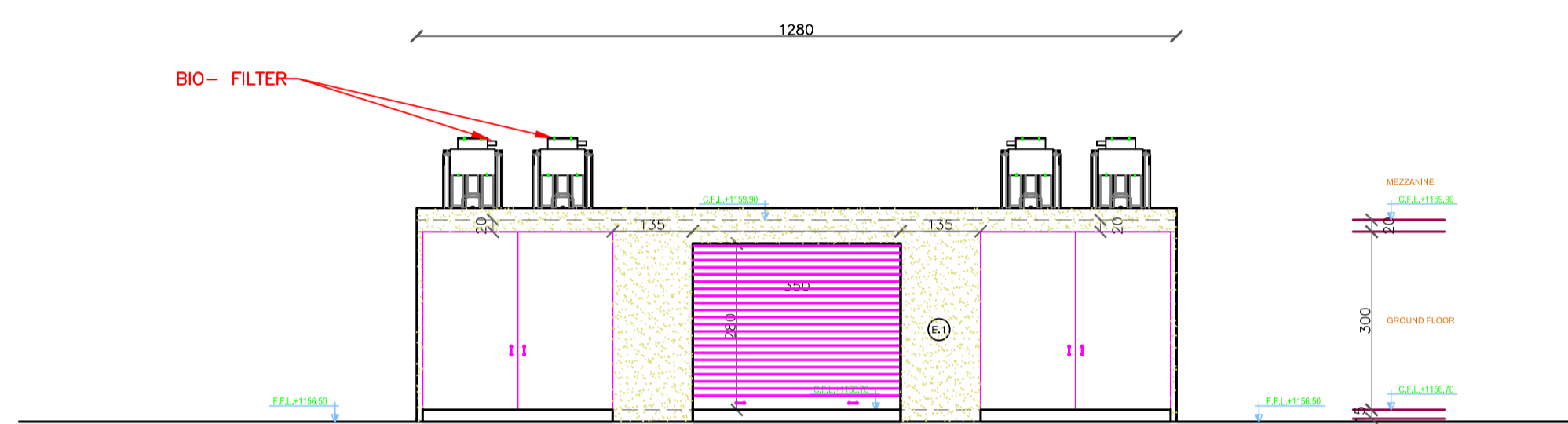
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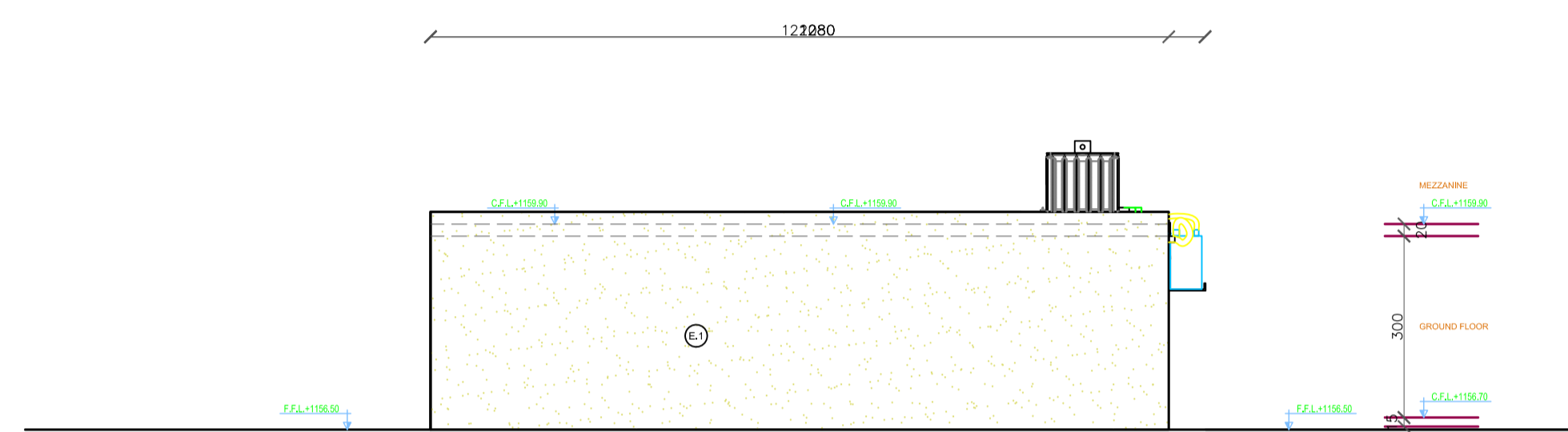
BLOCK A  
EAST ELEVATION



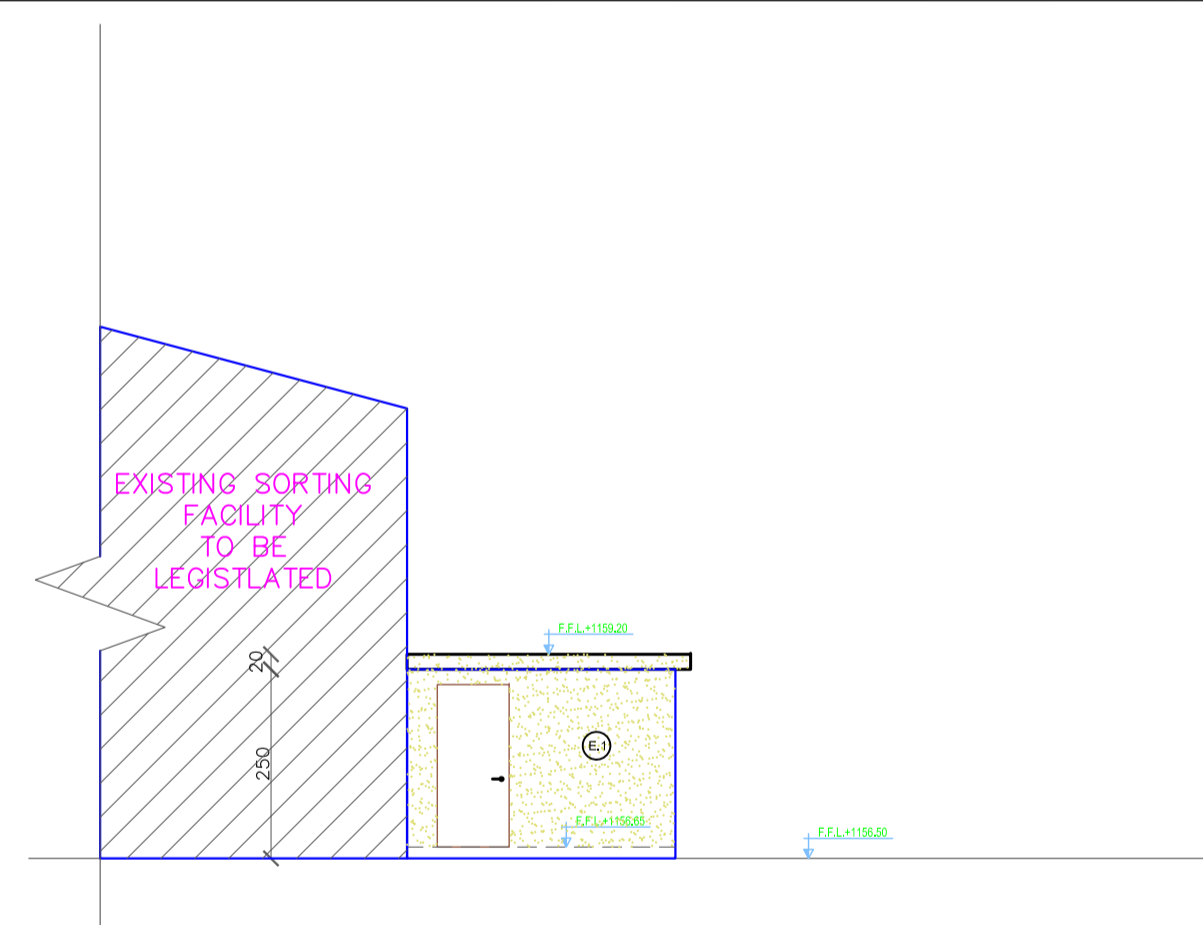
BLOCK A  
SOUTH ELEVATION



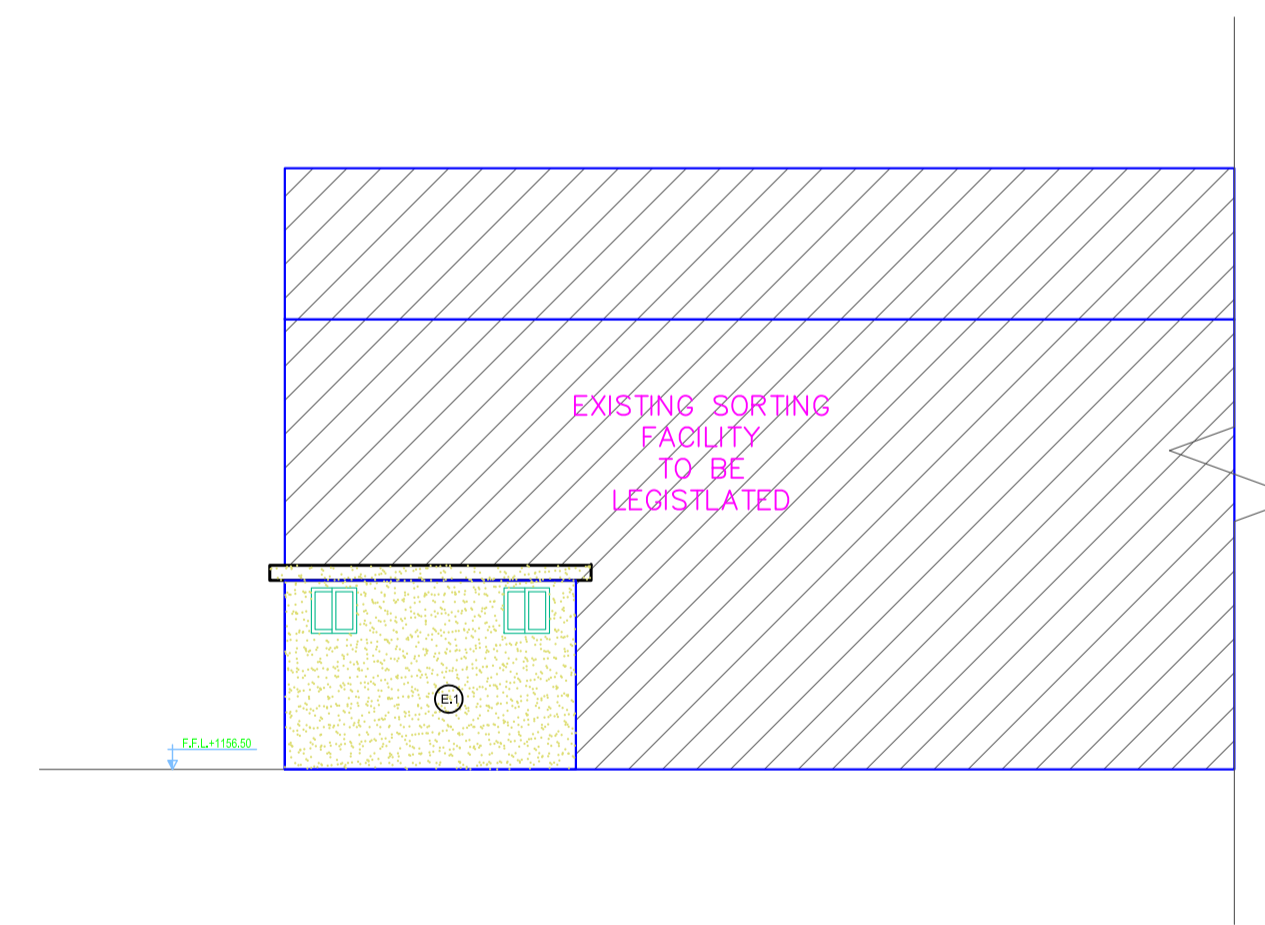
BLOCK B  
WEST ELEVATION



BLOCK B  
NORTH ELEVATION



BLOCK C  
WEST ELEVATION



BLOCK C  
SOUTH ELEVATION

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LOT:

QARAOUN 8135

Project Name

COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:

ELEVATIONS

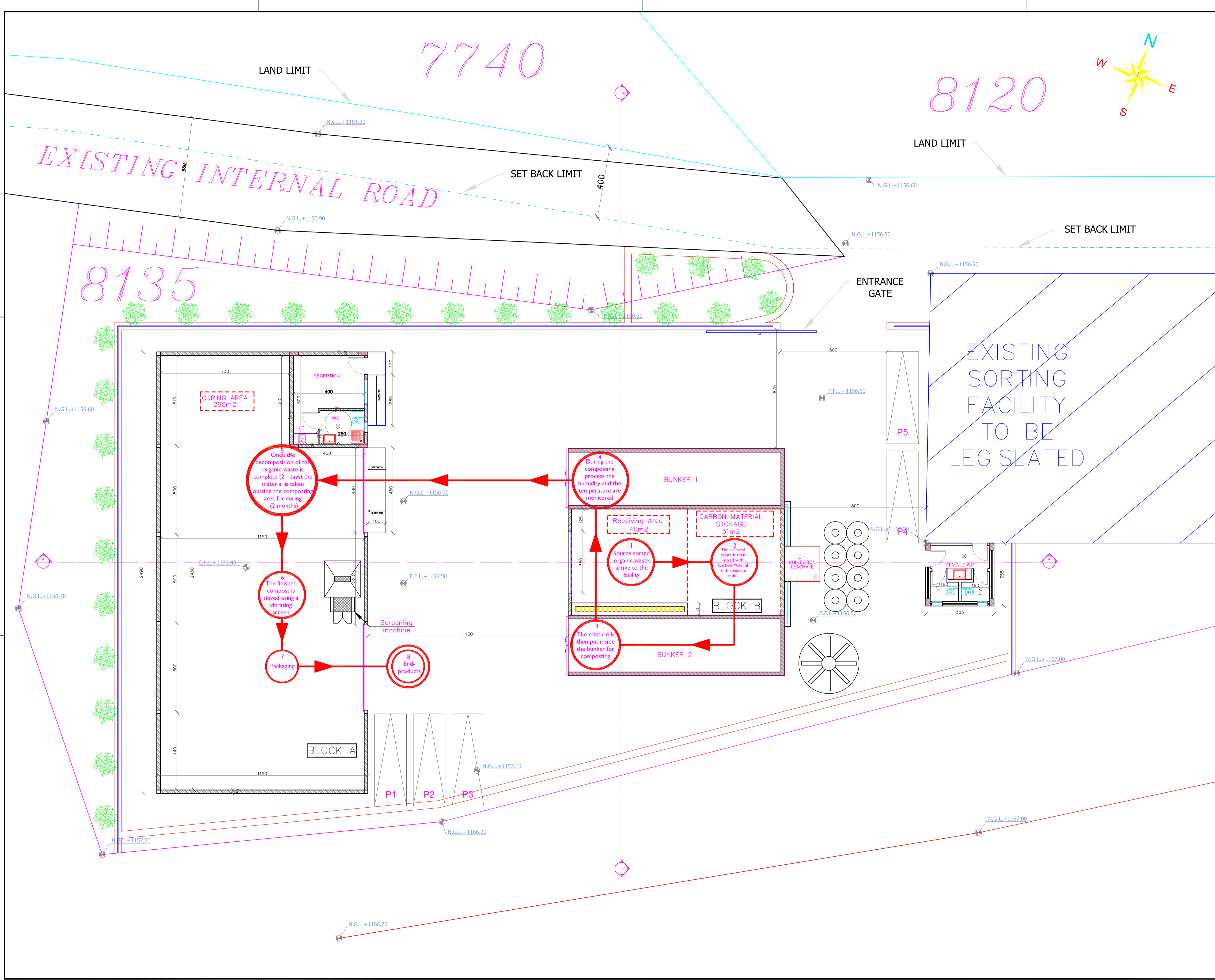
DRAWING NUMBER A07

SCALE : 1/100 DATE : 30/06/2022

EXTERNAL FINISHES LEGEND

- E.1 MONOCOUCHE PAINT ON CEMENT SAND PLASTERED LAYER
- E.2 CORRUGATED G.I. SHEET
- E.3 GALVANIZED STEEL SHEETS GUTTER 2.5MM THICK
- E.4 STEEL COLUMN - REFER TO THE STRUCTURAL DRAWINGS FOR PAINTING DETAILS





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LOT:  
QARAOUN 8135

Project Name  
COMPOSTING STATION  
QARAOUN - SOUTH

DRAWING TITLE:  
GROUND FLOOR  
PLAN

DRAWING NUMBER A04

SCALE : 1/100 DATE : 30/06/2022