

MITIGATING FLOODING RISKS IN BAR ELIAS

Site Location

GOVERNORATE	BEKAA
DISTRICT	ZAHLE
CITY	BAR ELIAS
GPS N	33.772701
GPS E	35.900962
ALTITUDE	900 MTS

List of Drawings

T-C-G-001	RETAINING WALLS BAR ELIAS RIVER KEY PLAN
T-C-G-002	RETAINING WALLS BAR ELIAS RIVER LAYOUT 1/3
T-C-G-003	RETAINING WALLS BAR ELIAS RIVER LAYOUT 2/3
T-C-G-004	RETAINING WALLS BAR ELIAS RIVER LAYOUT 3/3
T-C-G-005	RETAINING WALLS LEVELS
T-C-G-006	RETAINING WALLS- WALL SECTION DETAIL 1/2
T-C-G-007	RETAINING WALLS- WALL SECTION DETAIL 2/2


Key Plan



REV	BY	APP	DESCRIPTION	DATE

Revisions

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UNDP Lebanon
Social and Local Development Programme
P.O.Box: 11-3216 Beirut, Lebanon Tel: 961 1 962491

 Lebanese Host Communities
Support Programme

CONSULTANT:

BOYADJIAN & ASSOCIATES
PROJECT FINANCE AND MANAGEMENT CONSULTANTS
P.O.Box: 175 293 Beirut, Lebanon Tel: 961 1 980138

PROJECT:

MITIGATING FLOODING RISKS IN BAR ELIAS

PLOT NO.:	-	BLOCK:	-
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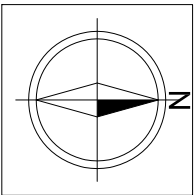
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SECTOR	-	
BUILDING	-	
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CHECKED	VB	
APPROVED	VB	
DATE	28.08.2014	
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SHEET SIZE	A3	

Sheet Title

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Phase	Discipline	Floor Area	Drawing Number	Revision
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Key Plan

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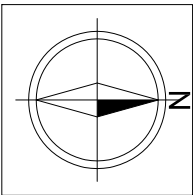
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DATE	28.08.2014	
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Sheet Title
RETAINING WALLS
BAR ELIAS RIVER KEY PLAN

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T - C - G - 001 - R00

Phase	Discipline	Floor Area	Drawing Number	Revision
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NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT SERVICES SEPARATIONS AND STANDARD DETAILS. THE CONTRACTORS SHALL COMPLY WITH ALL UTILITIES REQUIREMENTS AND PROVIDE ALL NECESSARY NOTICE AND ATTENDANCE TO THE CONCERNED AUTHORITIES PRIOR TO COMMENCEMENT OF ANY WORK ON THE SITE.
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5. DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS ONLY.
6. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

LEGEND:

- PLOT LIMIT
- WALLS

Key Plan



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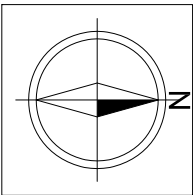
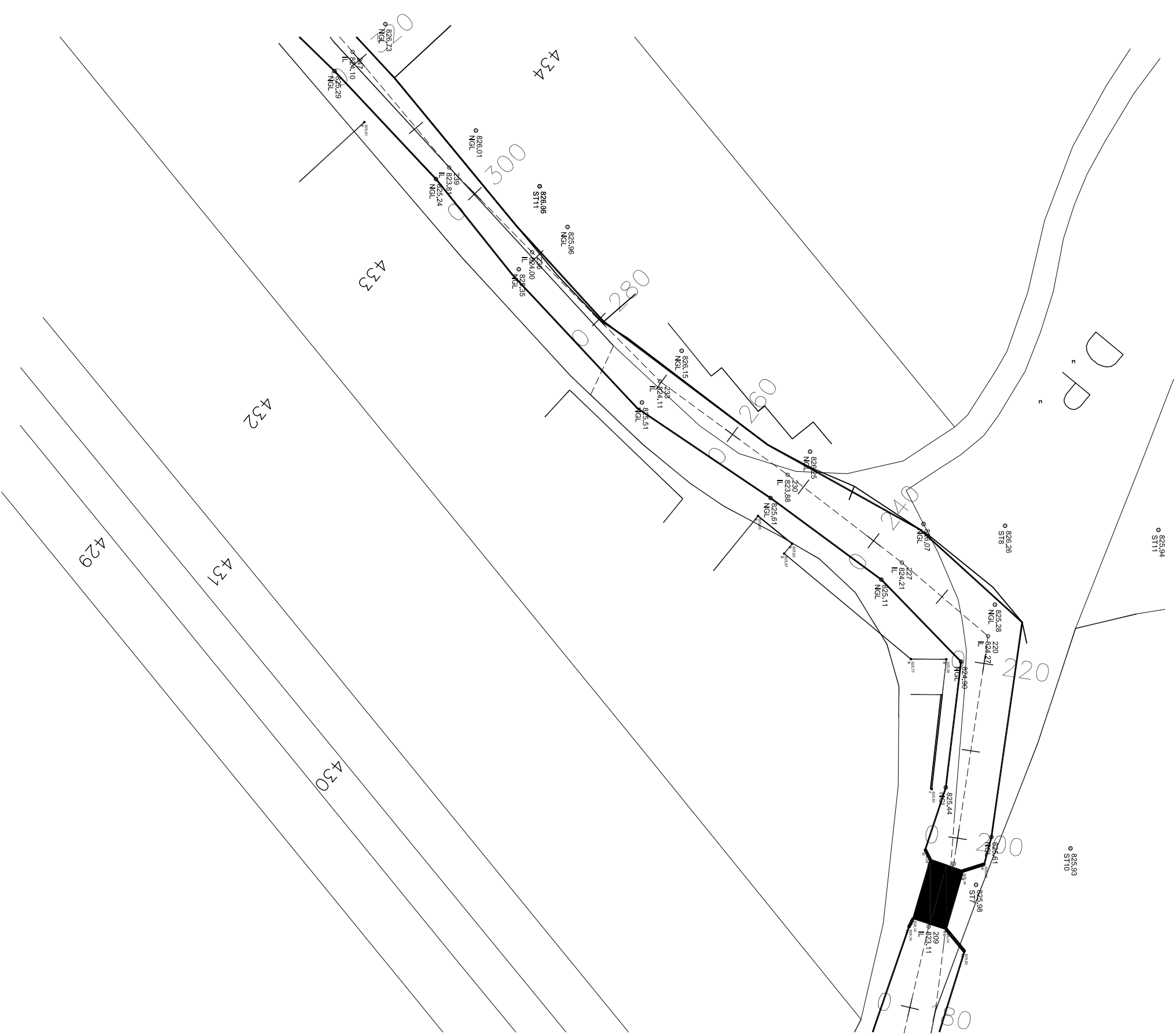
RETAINING WALLS

BAR ELIAS RIVER LAYOUT 1/3

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T - C - G - 002 - R00

Phase	Discipline	Floor Area	Drawing Number	Revision

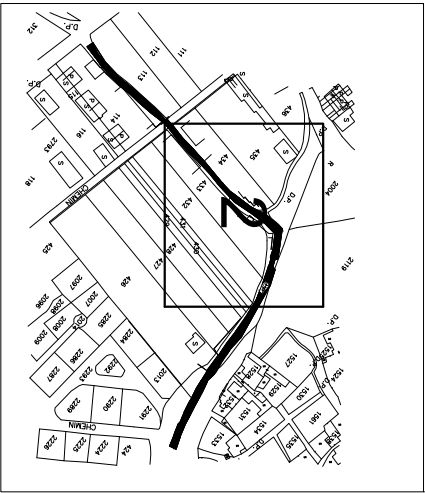


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LEGEND:

- PLOT LIMIT
- WALLS




Key Plan



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 Lebanese Host Communities
Support Programme

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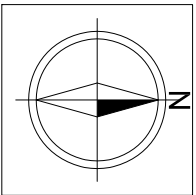
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RETAINING WALLS
BAR ELIAS RIVER LAYOUT 2/3

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Phase	Discipline	Floor Area	Drawing Number	Revision

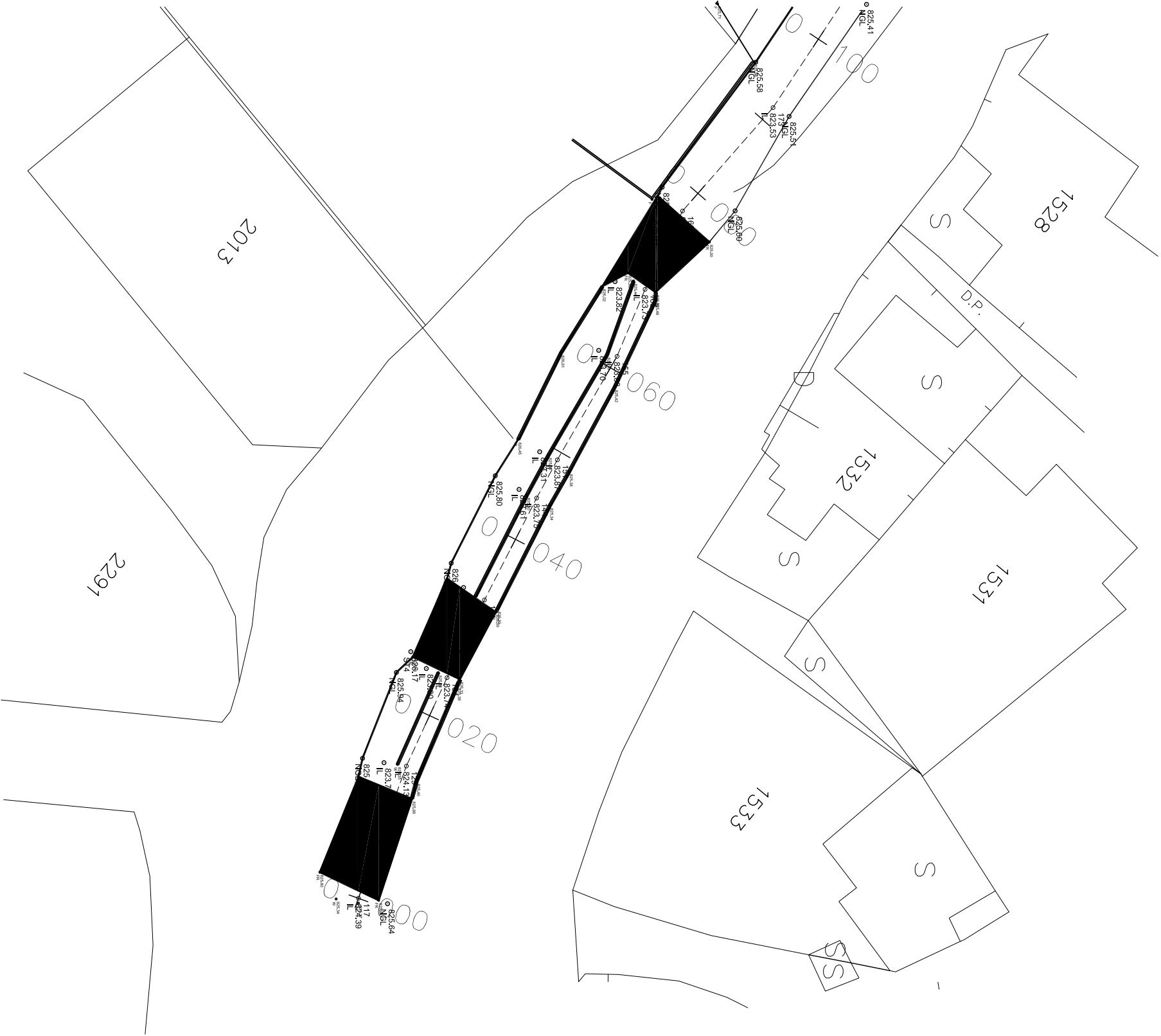


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LEGEND:

- PLOT LIMIT
- WALLS



Key Plan



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PROGRAMME:

Lebanese Host Communities
Support Programme

CONSULTANT:
BOYADJIAN & ASSOCIATES
PROJECT FINANCE AND MANAGEMENT CONSULTANTS
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MITIGATING FLOODING RISKS IN BAR ELIAS

PLOT NO.:
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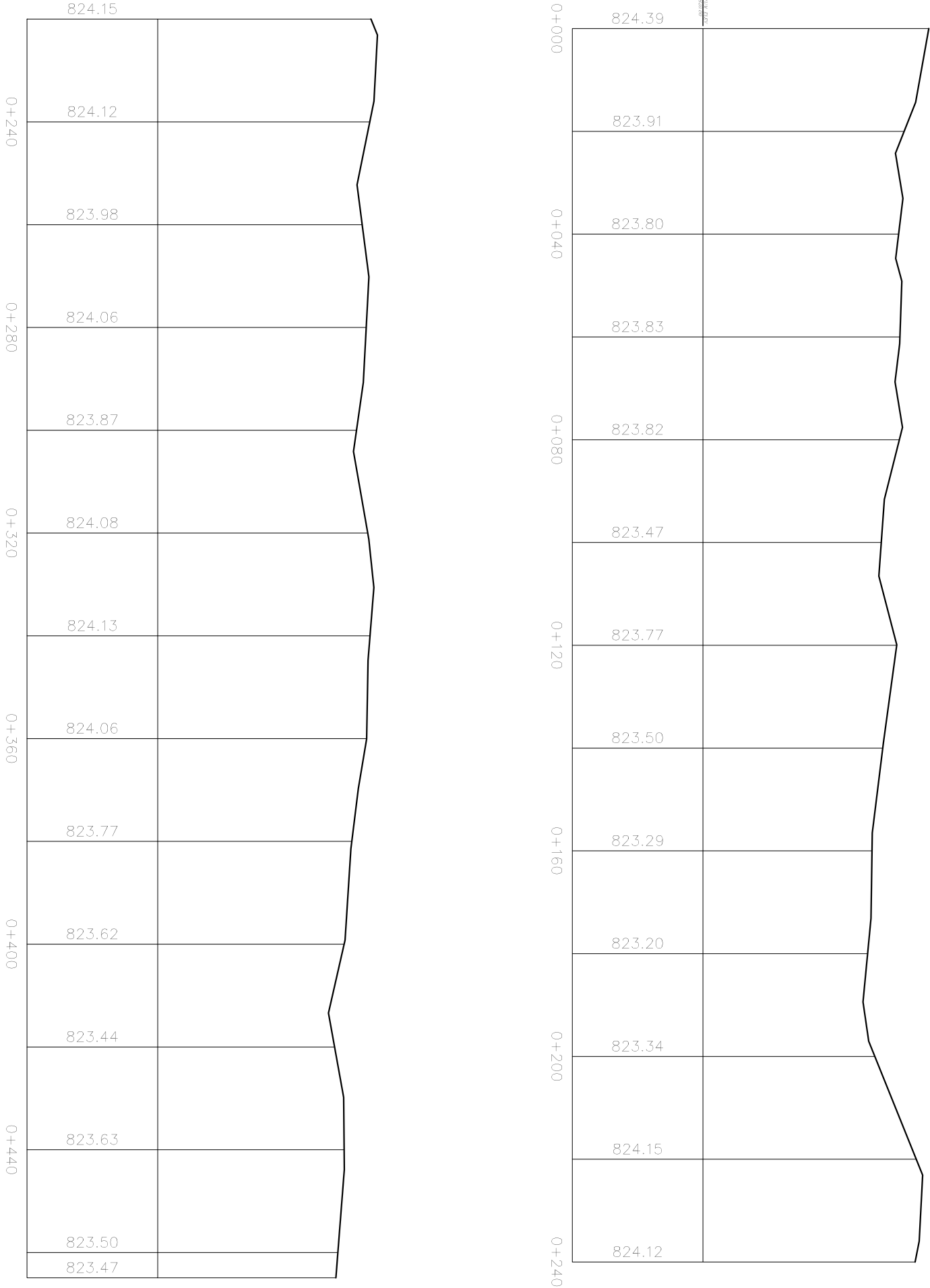
RETAINING WALLS
LEVELS

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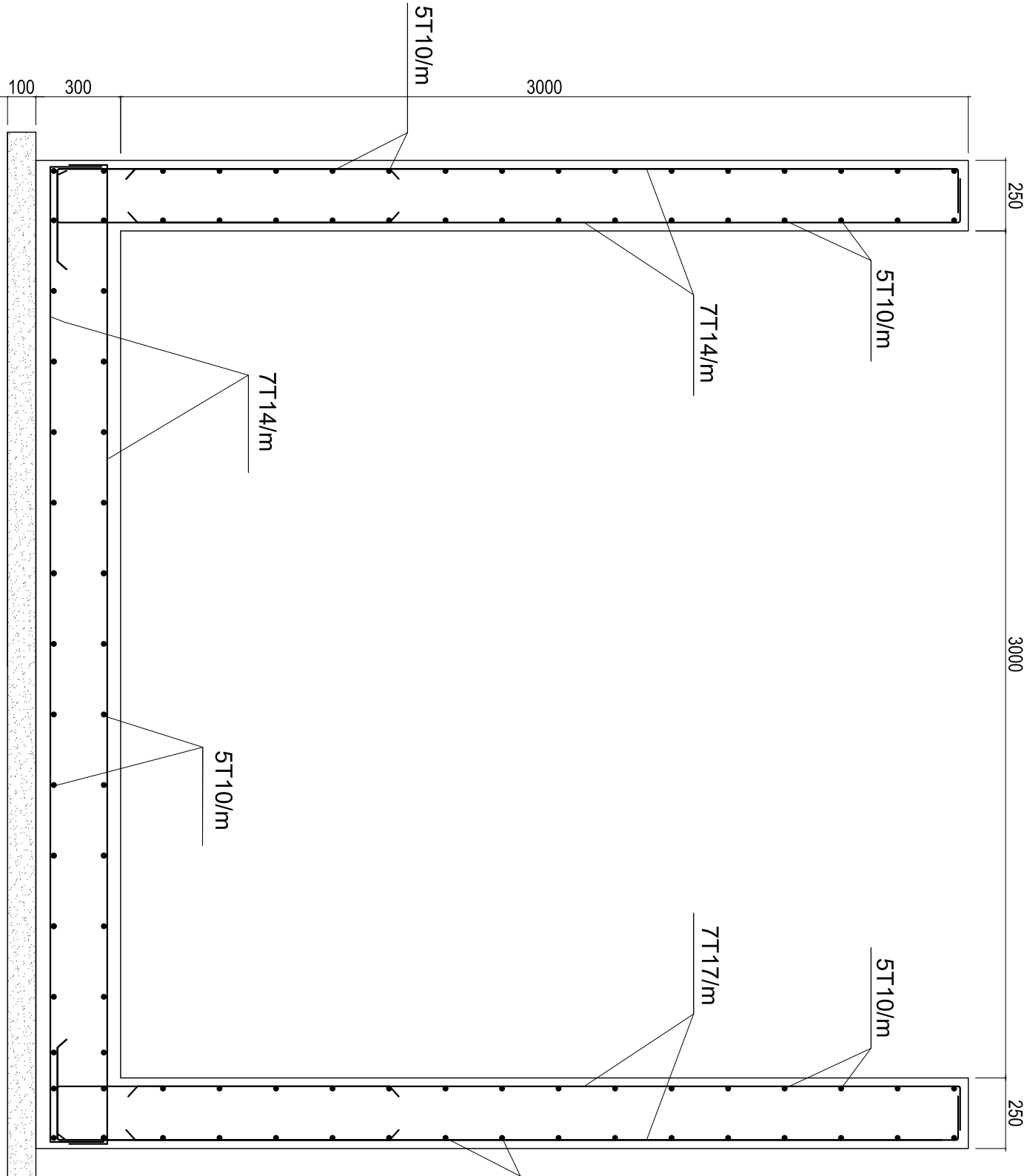
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Phase	Discipline	Floor Area	Drawing Number	Revision
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RIVER LEVELS



WALL SECTION DETAIL - WALL 3 M



NOTES:

- ALL DIMENSIONS ARE IN CENTIMETERS, ALL LEVELS ARE IN METERS UNLESS OTHERWISE INDICATED.
- DO NOT SCALE THE DRAWINGS FOLLOW THE WRITTEN DIMENSIONS.
- STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER TRADE DRAWINGS.
- C.L: CONCRETE TOP LEVEL.
- MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS USING STANDARD CYLINDER TEST SHOULD BE AS FOLLOWS :
 - $f'c = 35$ MPa FOR FOUNDATIONS & WALLS
 - $f'c = 35$ MPa FOR ALL OTHER STRUCTURAL ELEMENTS
 - $f'c = 25$ MPa FOR BLINDING CONCRETE
- ALL REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ASTM A-615 WITH THE FOLLOWING MINIMUM YIELD 420MPa FOR DEFORMED HOT ROLLED HIGH TENSILE .
- CLEAR COVER TO OUTER REINFORCEMENT SHALL BE AS FOLLOWS :
 - FOUNDATIONS 6cm
 - WALLS 6cm
- BEARING CAPACITY OF THE SOIL 200 KPa


Key Plan



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Support Programme

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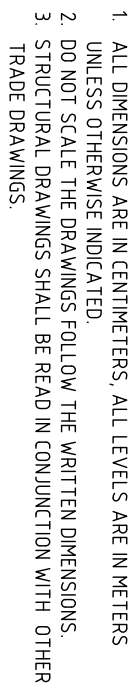
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RETAINING WALLS
WALL SECTION DETAIL 1/2

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T - C - G - 006 - R00

Phase	Discipline	Floor Area	Drawing Number	Revision



4. C.L.: CONCRETE TOP LEVEL.
5. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS USING STANDARD CYLINDER TEST SHOULD BE AS FOLLOWS :
 - 5.1. $f'c = 35$ MPA FOR FOUNDATIONS & WALLS
 - 5.2. $f'c = 35$ MPA FOR ALL OTHER STRUCTURAL ELEMENTS
 - 5.3. $f'c = 25$ MPA FOR BLINDING CONCRETE
6. ALL REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ASTM A-615 WITH THE FOLLOWING MINIMUM YIELD 420MPa FOR DEFORMED HOT ROLLED HIGH TENSILE .
7. CLEAR COVER TO OUTER REINFORCEMENT SHALL BE AS FOLLOWS :


(a) FOUNDATIONS	6cm
(b) WALLS	6cm
8. BEARING CAPACITY OF THE SOIL 200 KPA

REV	BY	APP	DESCRIPTION	DATE



PROGRAMME:

Lebanese Host Communities
Support Programme



Support and Cooperation

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SECTOR	-
BUILDING	-
DESIGNED	VB
DRAWN	GB
CHECKED	VB
APPROVED	VB
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SCALE	-
SHEET SIZE	A3

Sheet Title

RETAINING WALLS

WALL SECTION DETAIL 2/2

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