

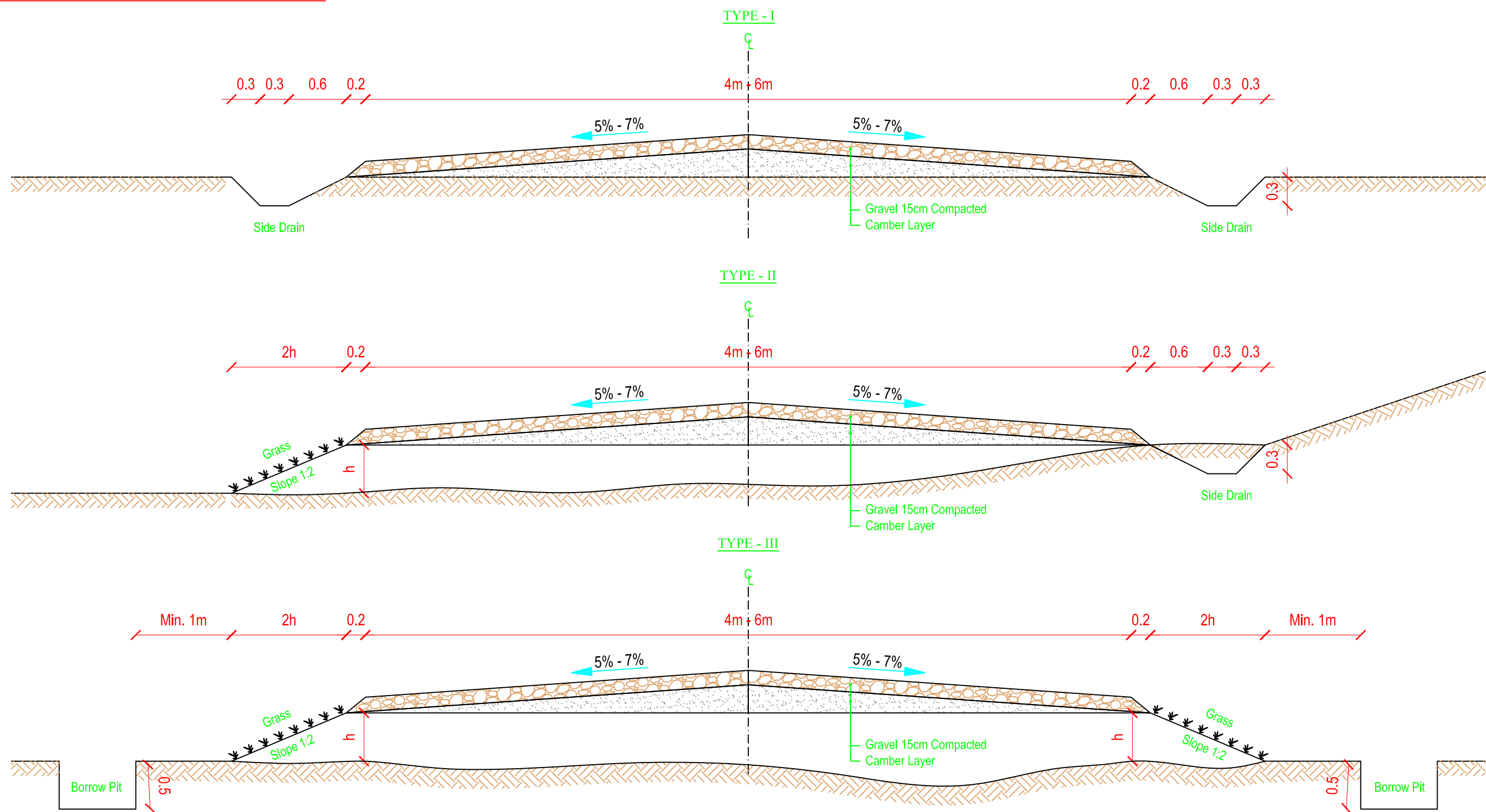
ANNEX III-C- DRAWINGS

(INCLUDING ROAD INVENTORY AND ROAD CROSS SECTIONS)

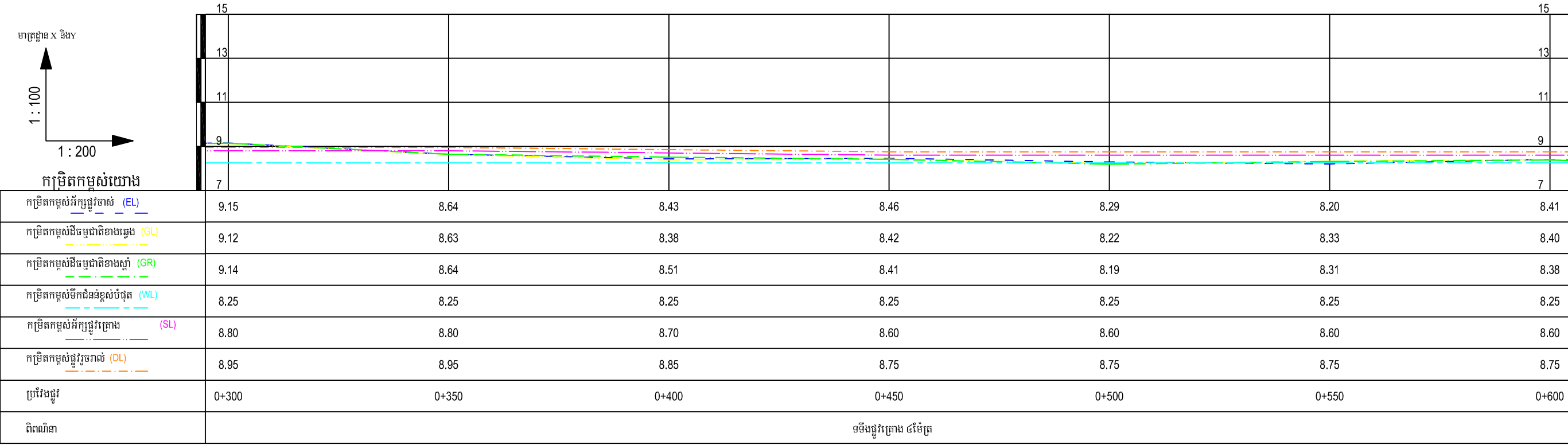
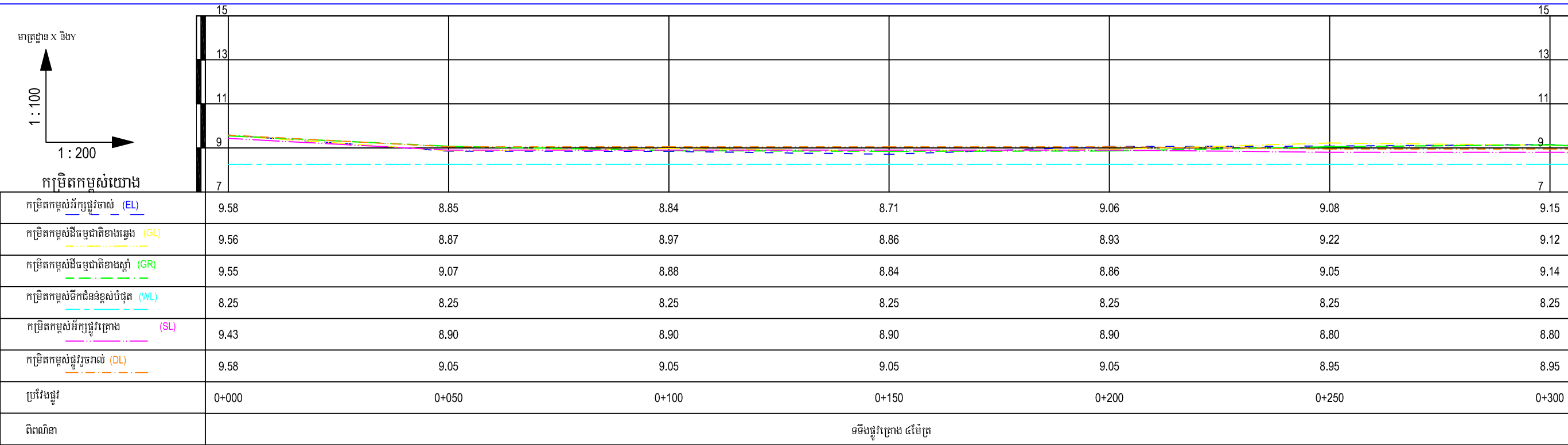
REHABILITATION OF RURAL ROADS IN RUKHA KIRI DISTRICT, BATTABMBANG PROVINCE

Cambodia, September 2022

TYPICAL ROAD CROSS SECTION



 International Labour Organization (ILO)	
COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia	
OUTPUT LOCATION: BATTAMBANG	
TYPICAL ROAD CROSS SECTION	
Section Views	
DRAW BY: NHEP SOPHARA	POSITION: FIELD ENGINEER
ORIGINAL SIZE: A3	SCALE: NTS
SHEET: 1 OF 1	DATE: 08 JUL 2022

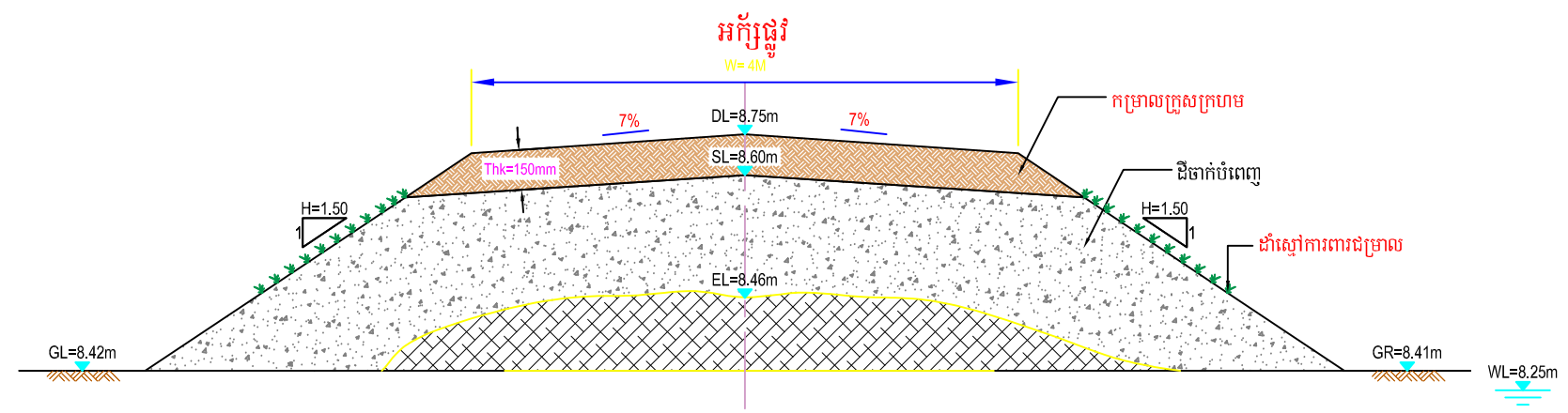


តំនុះកាត់ទទឹង ត្រង់ 0+450

សម្គាល់ :

- ១- រាស់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ សូមត្រួតពិនិត្យបង្ហាញ ។
- ២- រាស់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ សូមត្រួតពិនិត្យបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីជីកចេញ	
ដីចាក់បំពេញ	
គ្រួសក្រហម	
ដាំស្មៅ	





International Labour
Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning
Migrants and Host Communities in North West Cambodia

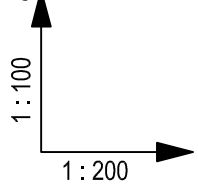
OUTPUT LOCATION: BATTAMBANG - Mukh Reah

LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA	POSITION: FIELD ENGINEER
ORIGINAL SIZE: A3	SCALE: NTS
SHEET: 1 OF 3	DATE: 04 August 2022

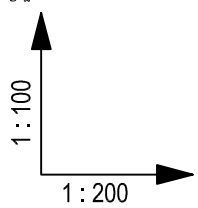
តំនុះកាត់បណ្តោយផ្លូវក្រុងក្រហម



កម្រិតកម្ពស់យោង

កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	8.41	8.24	8.28	8.34	8.63	8.39	8.23
កម្រិតកម្ពស់ដីមូលដ្ឋាន (GL)	8.40	8.16	8.29	8.22	8.60	8.37	8.22
កម្រិតកម្ពស់ដីមូលដ្ឋានស្តាំ (GR)	8.38	8.05	8.22	8.24	8.57	8.40	8.19
កម្រិតកម្ពស់ទឹកជំនន់បំផុត (WL)	8.25	8.25	8.25	8.25	8.25	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	8.60	8.60	8.60	8.60	8.60	8.60	8.60
កម្រិតកម្ពស់ផ្លូវចាស់ (DL)	8.75	8.75	8.75	8.75	8.75	8.75	8.75
ប្រវែងផ្លូវ	0+600	0+650	0+700	0+750	0+800	0+850	0+900
ពិពណ៌នា	ទម្រង់ផ្លូវគ្រោង ៤ម៉ែត្រ						

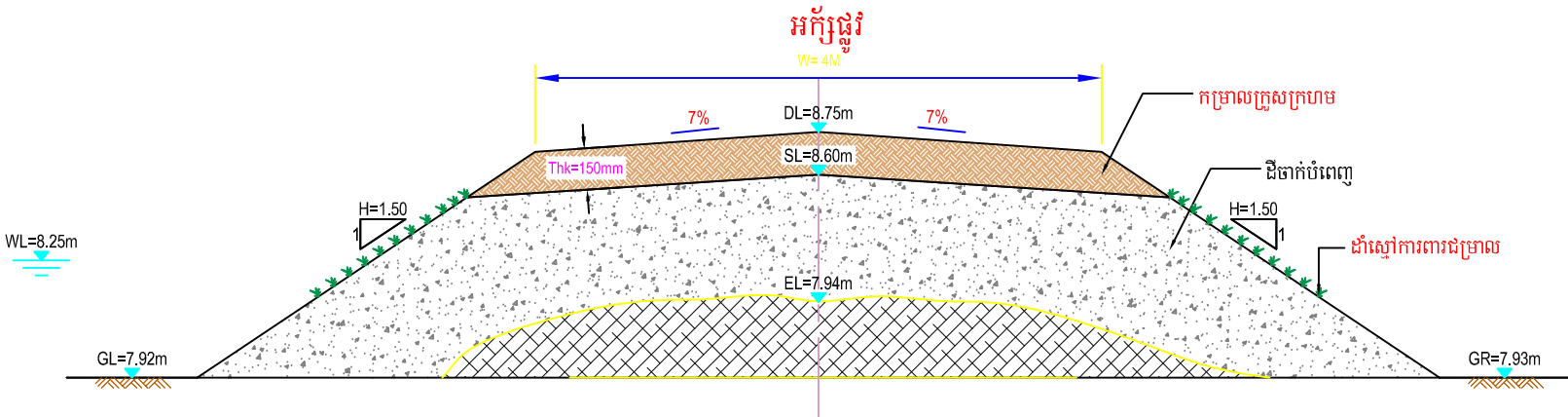
មាត្រដ្ឋាន X និង Y



កម្រិតកម្ពស់យោង

កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	8.23	8.28	8.21	8.22	8.27	8.02	7.93
កម្រិតកម្ពស់ដីមូលដ្ឋាន (GL)	8.22	8.26	8.17	8.23	8.23	8.04	7.90
កម្រិតកម្ពស់ដីមូលដ្ឋានស្តាំ (GR)	8.19	8.30	8.23	8.18	8.27	8.00	7.94
កម្រិតកម្ពស់ទឹកជំនន់បំផុត (WL)	8.25	8.25	8.25	8.25	8.25	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	8.60	8.60	8.60	8.60	8.60	8.60	8.60
កម្រិតកម្ពស់ផ្លូវចាស់ (DL)	8.75	8.75	8.75	8.75	8.75	8.75	8.75
ប្រវែងផ្លូវ	0+900	0+950	1+000	1+050	1+100	1+150	1+200
ពិពណ៌នា							

តំនុះកាត់ទម្រង់ ត្រង់ 0+750



សម្គាល់ :

- ១- រាល់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។
២- រាល់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីជីកចេញ	
ដីទាក់បំពេញ	
ក្រុងក្រហម	
ដីស្នៅ	



International Labour
Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning
Migrants and Host Communities in North West Cambodia

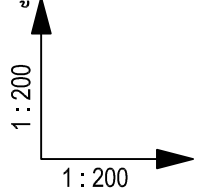
OUTPUT LOCATION: BATTAMBANG - Mukh Reah

LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA	POSITION: FIELD ENGINEER
ORIGINAL SIZE: A3	SCALE: NTS
SHEET: 2 OF 3	DATE: 04 August 2022

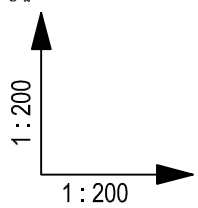
ព័ត៌មានបណ្តោះអាសន្នផ្លូវក្រហម



ក្រមិតកម្ពស់យោង

កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	7.93	7.94	7.91	7.87	7.85	7.78	7.77
កម្រិតកម្ពស់ដីមូលដ្ឋាន (GL)	7.90	7.92	7.92	7.85	7.84	7.76	7.83
កម្រិតកម្ពស់ដីមូលដ្ឋានស្តាំ (GR)	7.94	7.93	7.91	7.87	7.85	7.78	7.82
កម្រិតកម្ពស់ទឹកជំនន់បំផុត (WL)	8.25	8.25	8.25	8.25	8.25	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	8.60	8.60	8.60	8.60	8.60	8.60	8.60
កម្រិតកម្ពស់ផ្លូវចាស់ (DL)	8.75	8.75	8.75	8.75	8.75	8.75	8.75
ប្រវែងផ្លូវ	1+200	1+250	1+300	1+350	1+400	1+450	1+500
ព័ត៌មាន							

មាត្រដ្ឋាន X និង Y



ក្រមិតកម្ពស់យោង

កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	7.77	8.60
កម្រិតកម្ពស់ដីមូលដ្ឋាន (GL)	7.83	9.53
កម្រិតកម្ពស់ដីមូលដ្ឋានស្តាំ (GR)	7.82	9.53
កម្រិតកម្ពស់ទឹកជំនន់បំផុត (WL)	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	8.60	8.60
កម្រិតកម្ពស់ផ្លូវចាស់ (DL)	8.75	8.75
ប្រវែងផ្លូវ	1+500	1+550
ព័ត៌មាន		

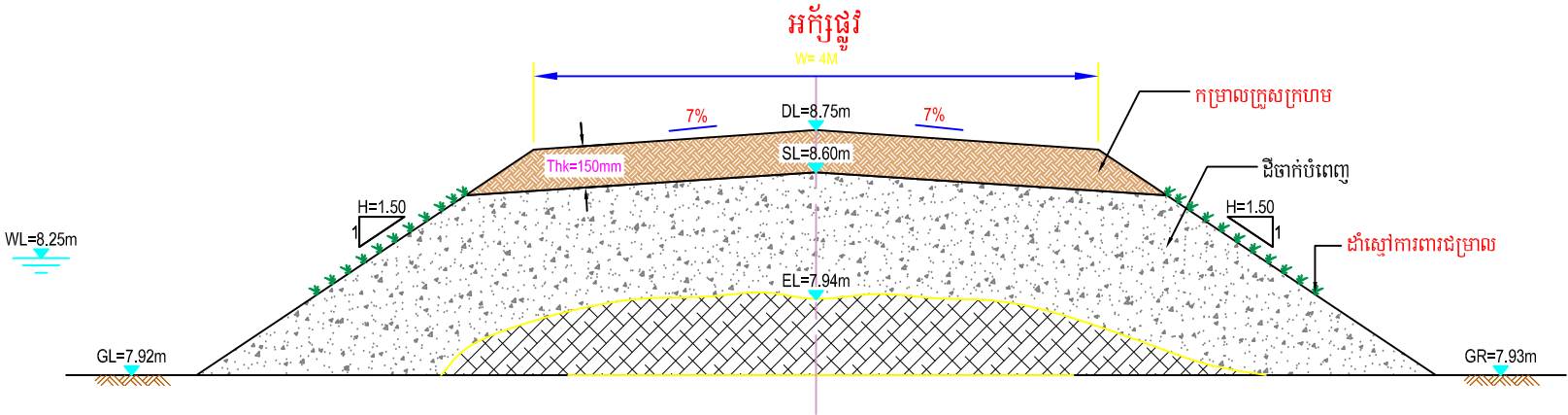
ព័ត៌មានកាត់ទទឹង ត្រង់ 1+250

សម្គាល់ :

១- រាល់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

២- រាល់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

ព័ត៌មាន	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីជីកចេញ	
ដីចាក់បំពេញ	
គ្រួសក្រហម	
ដាំស្មៅ	



International Labour Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG - Mukh Reah

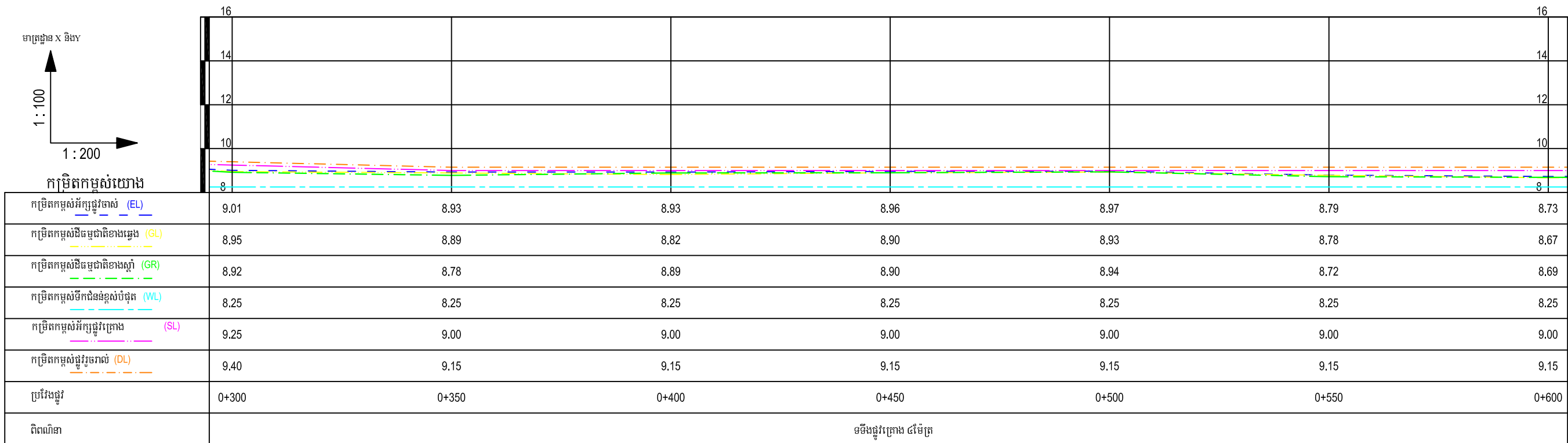
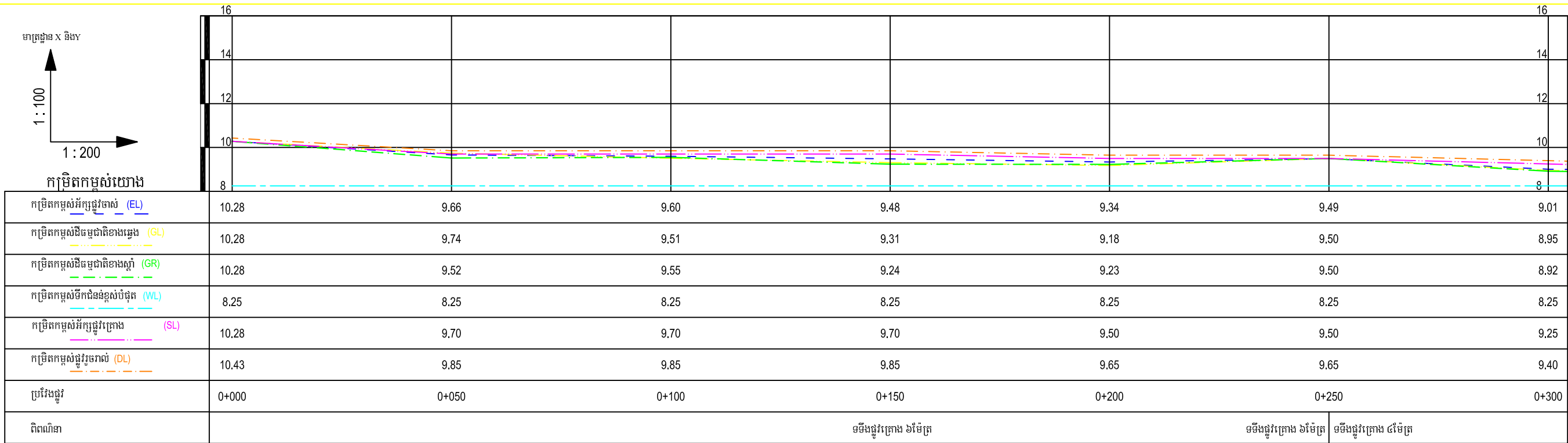
LATERITE ROAD REHABILITATION

Road Profile View

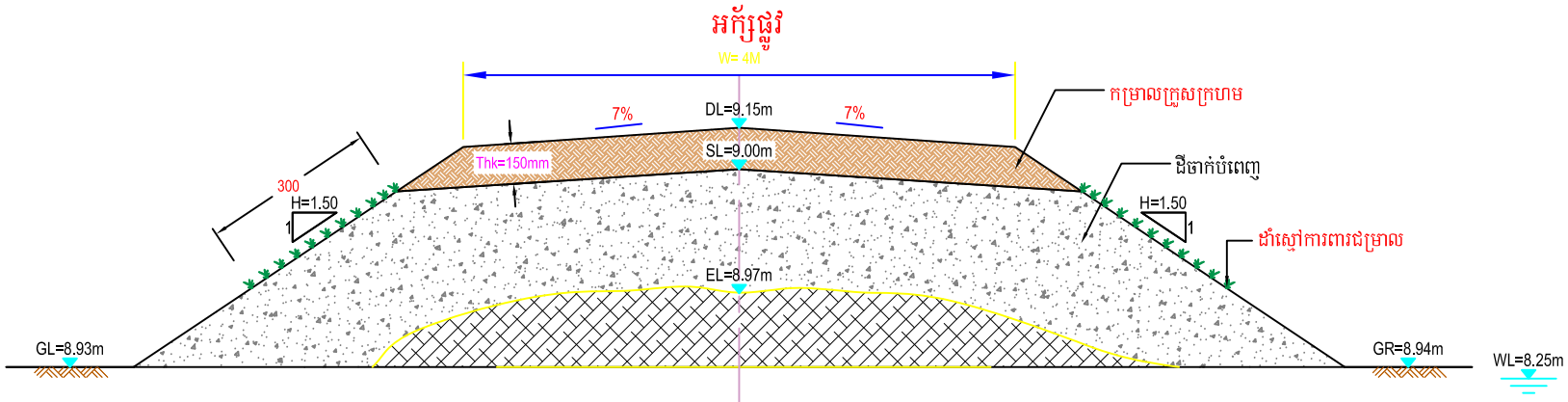
DRAW BY: NHEP SOPHARA POSITION: FIELD ENGINEER

ORIGINAL SIZE: A3 SCALE: NTS

SHEET: 3 OF 3 DATE: 04 August 2022



ព័ន្ធកាត់ទទឹង ត្រង់ 0+500



សម្គាល់ :

- ១- រាងទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។
- ២- រាងកម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីជីកចេញ	
ដីបាក់បំពេញ	
គ្រួសក្រហម	
ដាំស្លា	

International Labour Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG

LATERITE ROAD REHABILITATION

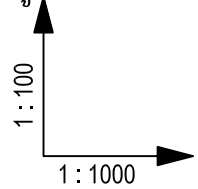
Road Profile View

DRAW BY: NHEP SOPHARA POSITION: FIELD ENGINEER

ORIGINAL SIZE: A3 SCALE: NTS

SHEET: 1 OF 2 DATE: 15 AUGUST 2022

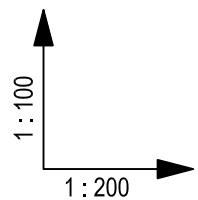
តំនុះកាត់បណ្តោយផ្លូវក្រុងក្រហម



កម្រិតកម្ពស់យោង

កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	8.73	8.76	8.77	8.82	8.95	8.96	8.95
កម្រិតកម្ពស់ដីធម្មជាតិខាងឆ្វេង (GL)	8.67	8.76	8.74	8.80	8.87	8.86	8.87
កម្រិតកម្ពស់ដីធម្មជាតិខាងស្តាំ (GR)	8.69	8.69	8.66	8.71	8.87	8.83	8.95
កម្រិតកម្ពស់ទឹកជំនន់ខ្ពស់បំផុត (WL)	8.25	8.25	8.25	8.25	8.25	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	9.00	9.00	9.00	9.00	9.00	9.00	9.00
កម្រិតកម្ពស់ផ្លូវរួចរាល់ (DL)	9.15	9.15	9.15	9.15	9.15	9.15	9.15
ប្រវែងផ្លូវ	0+600	0+650	0+700	0+750	0+800	0+850	0+900
ពិពណ៌នា	ទទឹងផ្លូវគ្រោង ៤ម៉ែត្រ						

មាត្រដ្ឋាន X និង Y



កម្រិតកម្ពស់យោង

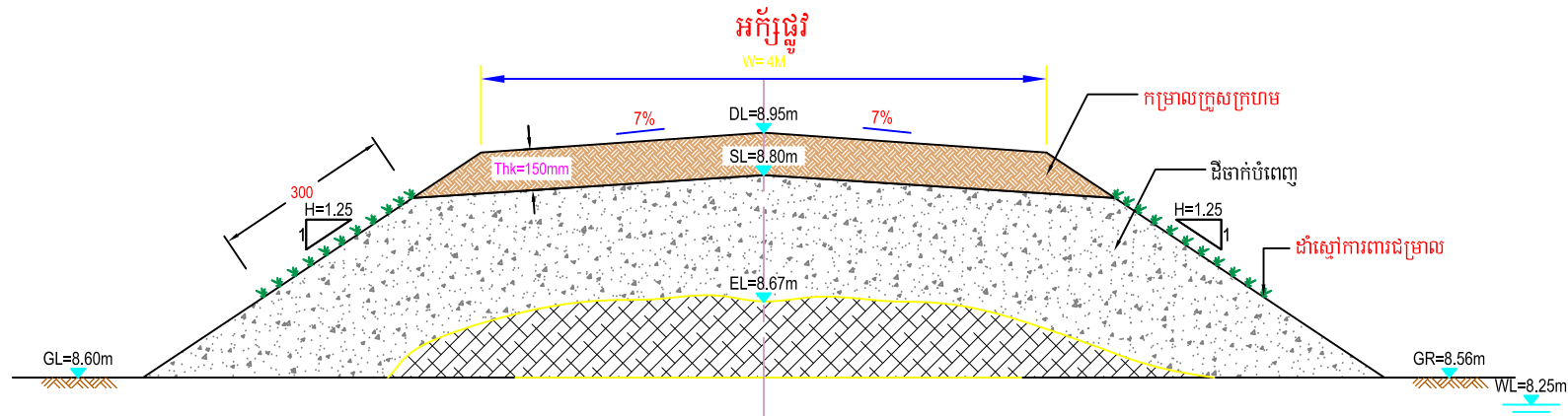
កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	8.95	8.64	8.67	8.46	8.81	8.40	8.57
កម្រិតកម្ពស់ដីធម្មជាតិខាងឆ្វេង (GL)	8.87	8.71	8.60	8.47	8.66	8.43	8.62
កម្រិតកម្ពស់ដីធម្មជាតិខាងស្តាំ (GR)	8.95	8.56	8.56	8.42	8.75	8.37	8.62
កម្រិតកម្ពស់ទឹកជំនន់ខ្ពស់បំផុត (WL)	8.25	8.25	8.25	8.25	8.25	8.25	8.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	9.00	8.80	8.80	8.80	8.80	8.80	8.80
កម្រិតកម្ពស់ផ្លូវរួចរាល់ (DL)	9.15	8.95	8.95	8.95	8.95	8.95	8.95
ប្រវែងផ្លូវ	0+900	0+950	1+000	1+050	1+100	1+150	1+200
ពិពណ៌នា							

តំនុះកាត់ទទឹង ត្រង់ 0+650

សម្គាល់ :

- ១- រាល់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។
 ២- រាល់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីជីកចេញ	
ដីចាក់បំពេញ	
គ្រួសក្រហម	
ដាំស្មៅ	



International Labour
Organization (ILO)

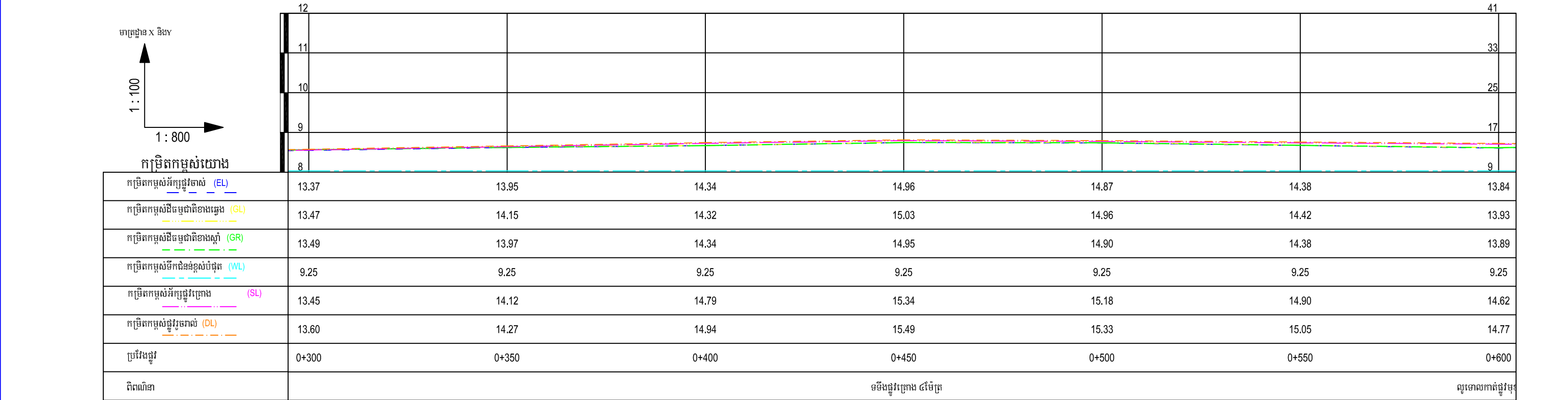
COVID-19 Socio-Economic Recovery For Returning
Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG

LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA	POSITION: FIELD ENGINEER
ORIGINAL SIZE: A3	SCALE: NTS
SHEET: 2 OF 2	DATE: 15 AUGUST 2022

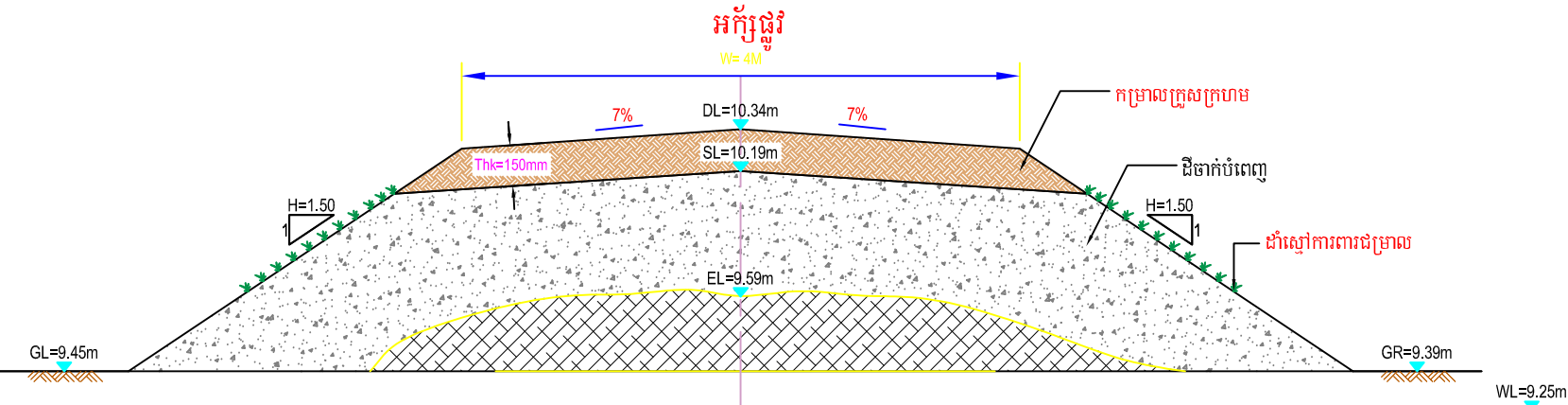


ព័ន្ធកាត់ទទឹង ត្រង់ 0+050

សម្គាល់ :

- ១- រាល់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ សូមត្រួតពិនិត្យបង្ហាញ ។
- ២- រាល់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ សូមត្រួតពិនិត្យបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីដីកចេញ	
ដីចាក់បំពេញ	
គ្រួសក្រហម	
ដាំស្មៅ	



International Labour
Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning
Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG - Basak

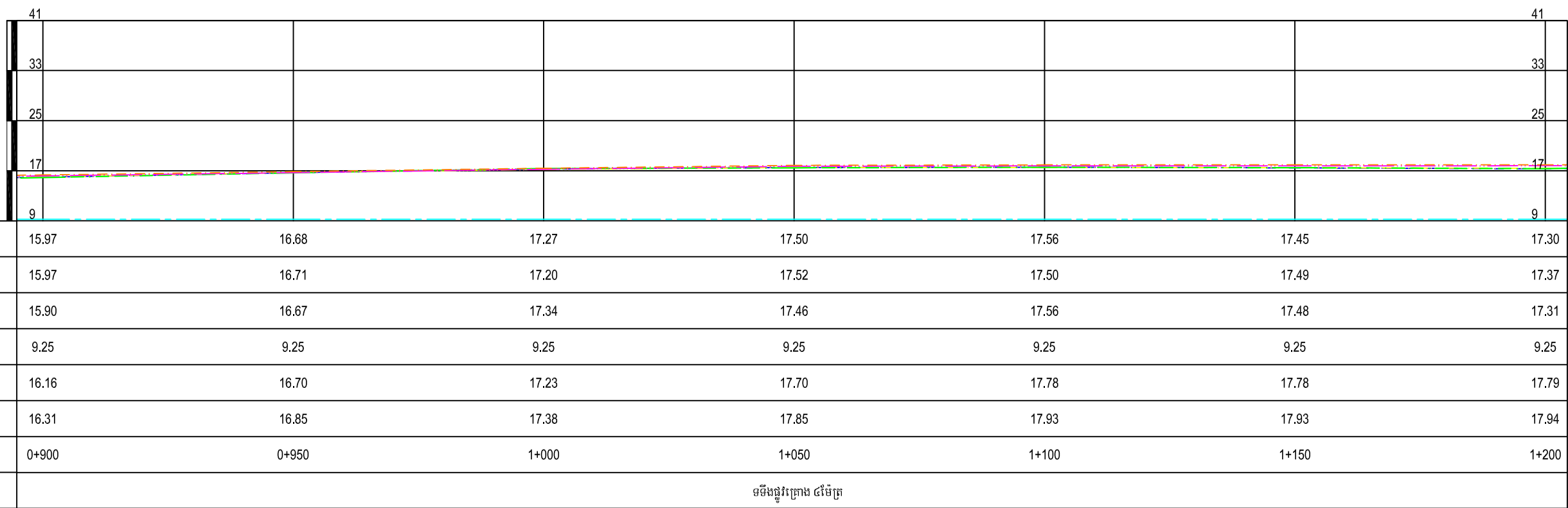
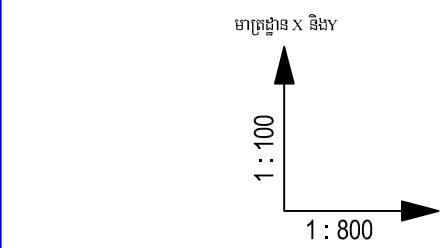
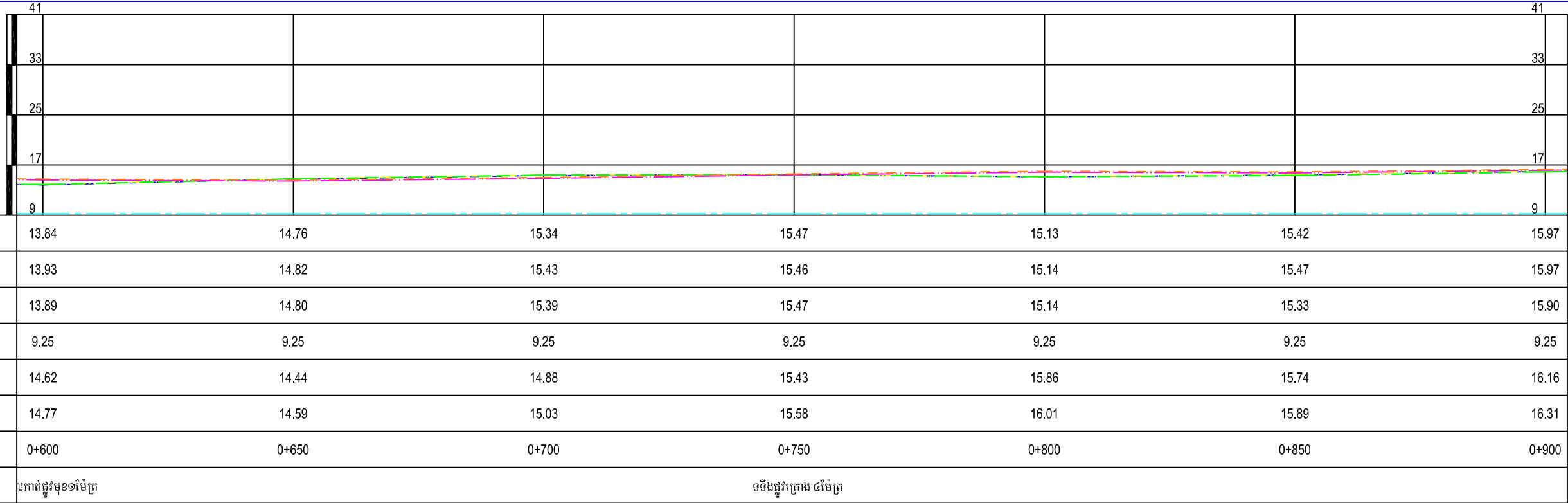
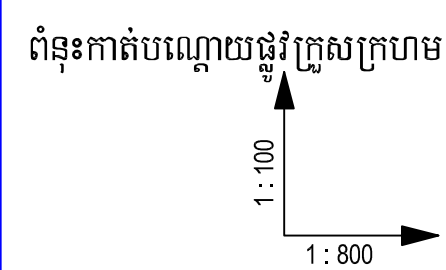
LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA POSITION: FIELD ENGINEER

ORIGINAL SIZE: A3 SCALE: NTS

SHEET: 1 OF 4 DATE: 05 AUGUST 2022



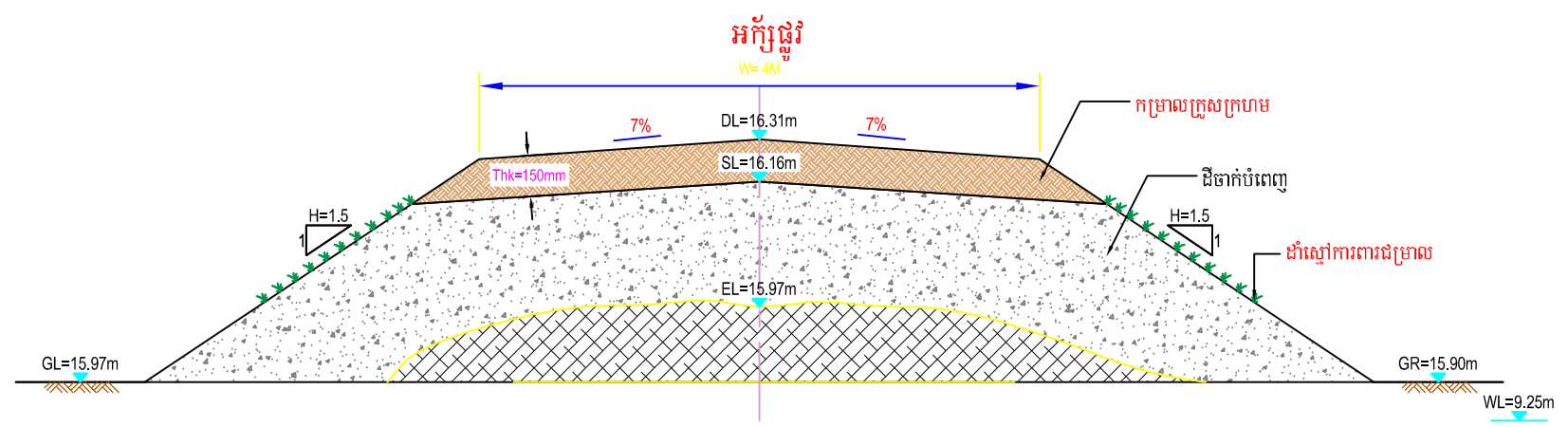
សម្គាល់ :

១- រាល់ទំហំខ្នាតទាំងអស់គិតជា មីលីម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

២- រាល់កម្រិតកម្ពស់ទាំងអស់គិតជា ម៉ែត្រ លុះត្រាតែបានបង្ហាញ ។

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីដីកចេញ	
ដីចាក់បំពេញ	
ក្រសក្រហម	
ដាំស្មៅ	

តំនុះកាត់ទទឹង ត្រង់ 0+900





International Labour Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG - Basak

LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA

POSITION: FIELD ENGINEER

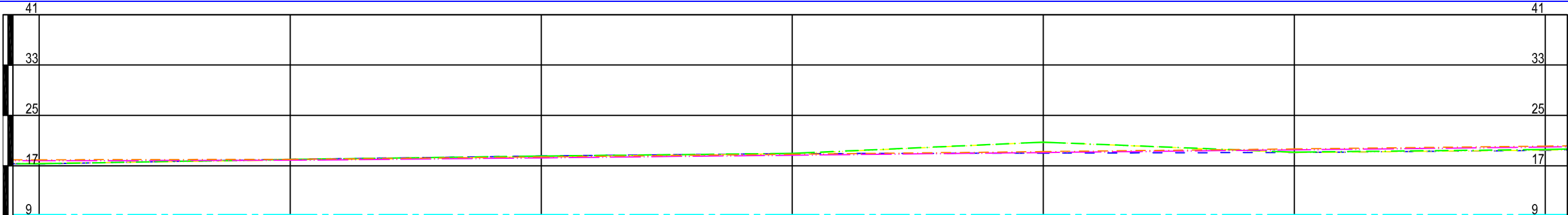
ORIGINAL SIZE: A3

SCALE: NTS

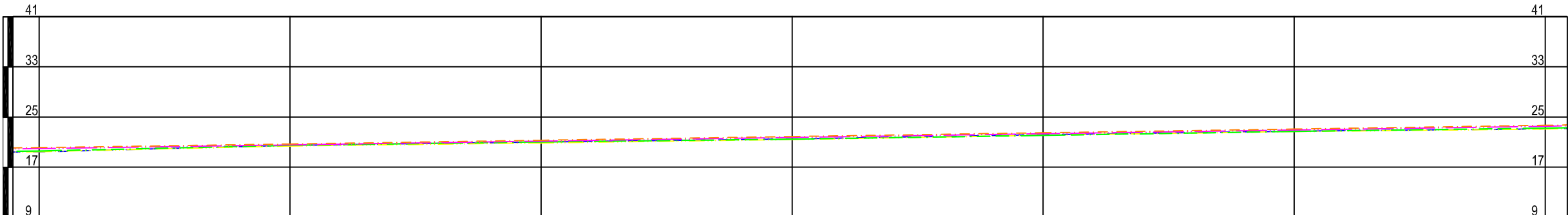
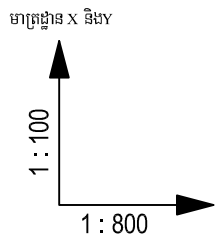
SHEET: 2 OF 4

DATE: 05 AUGUST 2022

ផ្ទៃក្រឡា ១៖១០០
១៖៨០០



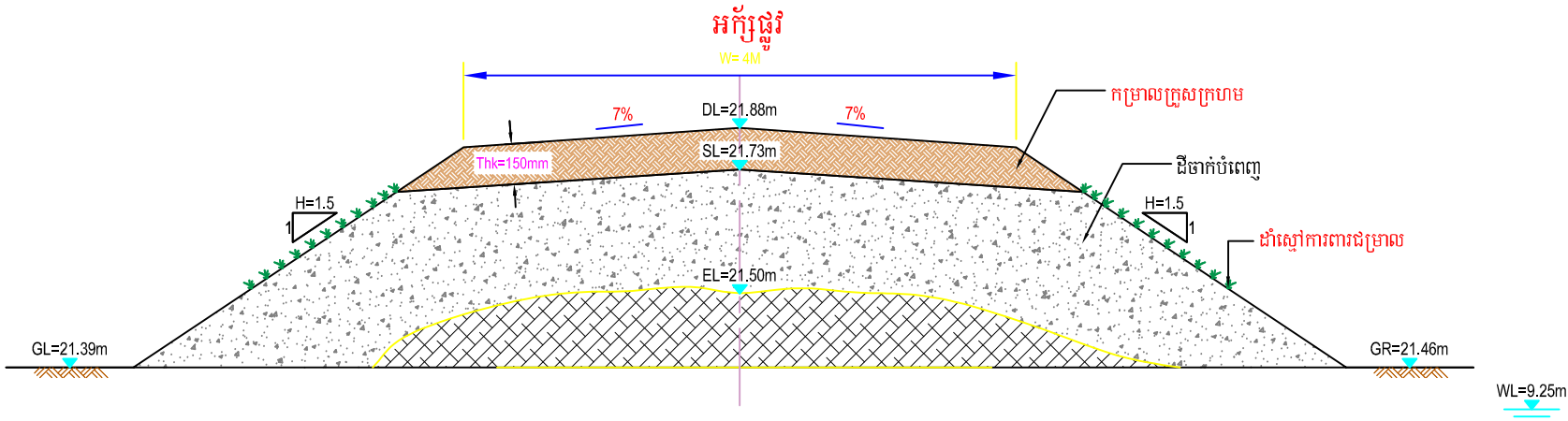
កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	17.30	18.01	18.55	18.92	19.00	19.10	19.43
កម្រិតកម្ពស់ដីធម្មជាតិខាងឆ្វេង (GL)	17.37	17.90	18.41	18.90	20.74	19.09	19.47
កម្រិតកម្ពស់ដីធម្មជាតិខាងស្តាំ (GR)	17.31	18.00	18.53	18.96	20.74	19.16	19.57
កម្រិតកម្ពស់ទឹកជំនន់ខ្ពស់បំផុត (WL)	9.25	9.25	9.25	9.25	9.25	9.25	9.25
កម្រិតកម្ពស់អ័ក្សផ្លូវគ្រោង (SL)	17.79	17.86	18.24	18.67	19.09	19.52	19.96
កម្រិតកម្ពស់ផ្លូវរួចរាល់ (DL)	17.94	18.01	18.39	18.82	19.24	19.67	20.11
ប្រវែងផ្លូវ	1+200	1+250	1+300	1+350	1+400	1+450	1+500
ពិពណ៌នា	ទម្រង់ផ្លូវគ្រោង ៤ម៉ែត្រ ចំនុចតម្លៃផ្លូវថ្មី						



កម្រិតកម្ពស់អ័ក្សផ្លូវចាស់ (EL)	19.43	20.47	21.00	21.50	22.17	22.73	23.10
កម្រិតកម្ពស់ដីធម្មជាតិខាងឆ្វេង (GL)	19.47	20.37	20.86	21.39	22.08	22.67	23.07
កម្រិតកម្ពស់ដីធម្មជាតិខាងស្តាំ (GR)	19.57	20.48	21.01	21.46	22.06	22.70	23.22
កម្រិតកម្ពស់ទឹកជំនន់ខ្ពស់បំផុត (WL)	9.25	9.25	9.25	9.25	9.25	9.25	9.25
កម្រិតកម្ពស់អ័ក្សផ្លូវច្រក (SL)	19.96	20.54	21.13	21.73	22.32	22.92	23.52
កម្រិតកម្ពស់ផ្លូវរថភ្លើង (DL)	20.11	20.69	21.28	21.88	22.47	23.07	23.67
ប្រវែងផ្លូវ	1+500	1+550	1+600	1+650	1+700	1+750	1+800
ពិពណ៌នា	លូភ្លាងកាត់ផ្លូវមុខ១ម៉ែត្រ			ទម្ងន់ផ្លូវច្រក ៤ម៉ែត្រ		លូទោលកាត់ផ្លូវមុខ១ម៉ែត្រ	

សម្ភាសៈ :

- | ពិពណ៌នា | សញ្ញាសម្គាល់ |
|-------------|--------------|
| ផ្លូវចាស់ | |
| ជិតទេពញី | |
| ជិតកាំបំពេញ | |
| គ្រួសក្រហម | |
| ដាំស្ពៅ | |



International Labour Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: BATTAMBANG - Basak

LATERITE ROAD REHABILITATION

Road Profile View

DRAW BY: NHEP SOPHARA

POSITION: FIELD ENGINEER

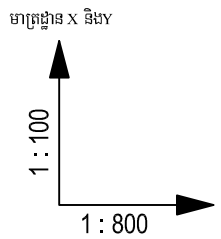
ORIGINAL SIZE: A3

SCALE: NTS






SHEET: 3 OF 4

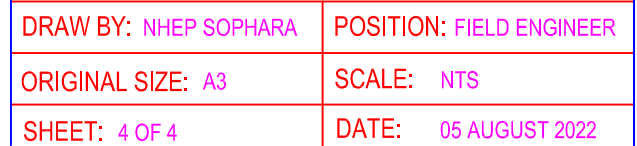
DATE: 05 AUGUST 2022

កម្រិតកម្ពស់ឈោង



កម្រិតកម្មសំយោង

ពិពណ៌នា	សញ្ញាសម្គាល់
ផ្លូវចាស់	
ដីដឹកធើញ	
ដីចាក់បំពេញ	
ក្រសក្រហម	
ដាំស្មៅ	

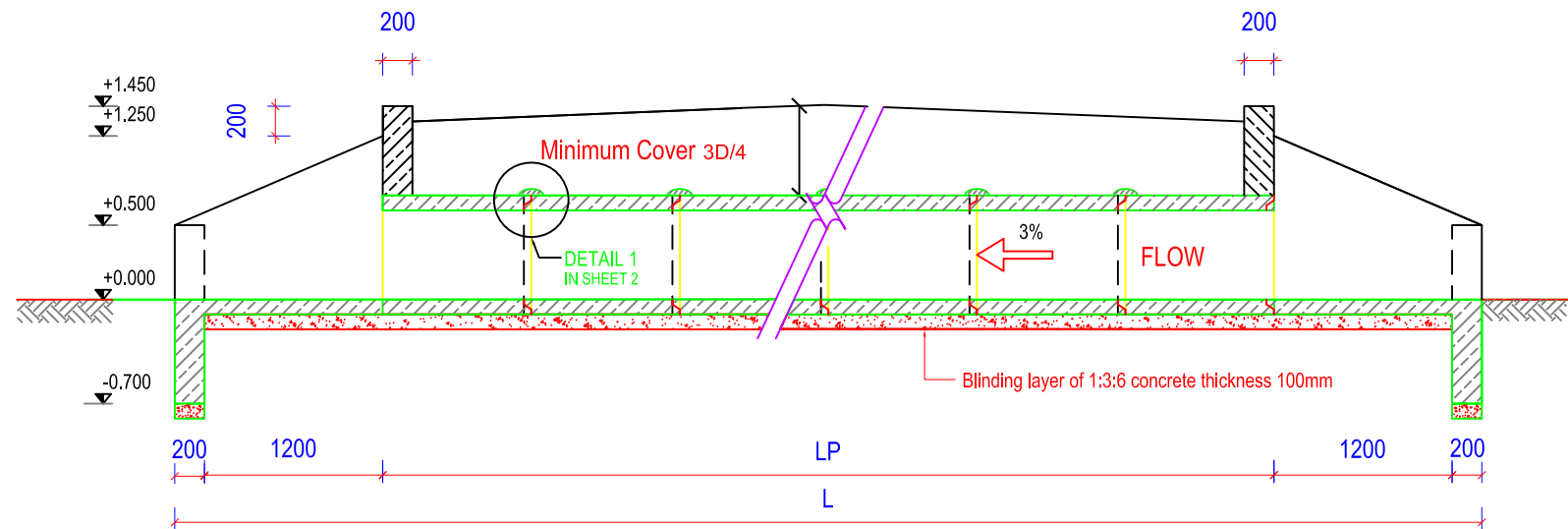


NZ FUNDING PROJECT																											Starting chainage this page				m	
ROAD CONDITION SURVEY																											0				0	
Road Name: Rehabilitation of Rural road in Toul Svay Village						Chainage start: 0+000						Road Length: 1.55 km						Surveyed by: Nhep Sopha						Page: 1								
Contract No: 0						Chainage end: 1+550						District: Rukh Kiri						Date: 0-Jan-00														
Existing road	Chainage		0 + 0		0 + 250		0 + 500		0 + 750		1 + 0		1 + 250		1 + 500		1 + 750		2 + 0		2 + 250		2 + 500		Total this page							
	Description																															
	Longitudinal Gradient	(%:/-)																														
	Surfacing material (C1/C2/C3)	(Type)	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2														
	Surrounding material (C1/C2/C3)	(Type)	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2														
	Carriage way width	(m)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0														
	Road formation width	(m)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0														
Existing free clearance width	(m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5															
Design	Proposed cross section Type	(I / II / III)																														
	Required free clearance	(m)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0															
	Carriageway width	(m)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0															
	Gravel thickness	(cm)	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0															
	Base course thickness	(cm)																														
	Concrete surface thickness	(cm)																														
Proposed works and bill items	2.0 Site Preparation																															
	2.1 Light bushes and grass clearing	(m2/50m)	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0	125.0									4,700 m2						
	2.2 Heavy bushes clearing	(m2/50m)	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0									1,030 m2						
	2.3 Removal of unsuitable soil from road width	(m3/50m)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0									450 m2						
	2.4 Tree removal from road formation	(Tree/50m)																								- No						
	2.5 Stump removal from road formation	Stump/50m)																								- No						
	3.0 Earth work and Road Works																															
	3.1 Excavation to spoil/level	(m3/50m)																								- m3						
	3.2 Excavate to widern road formation	(m3/50m)																								- m3						
	3.3 Excavate, haul to filling embankment from surrounding soil	(m3/50m)																								1,300 m3						
	3.4 Filling embankment from transpoted soil	(m3/50m)	6.9	28.7	43.6	18.6																				2,076 m3						
	3.5 Excavate, haul and fill to widen embankment from surrounding soil	(m3/50m)																								- m3						
	3.6 Widening embankment from transpoted soil	(m3/50m)																								- m3						
	3.7 Excavate side drain left	(m/50m)	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3									56 m3						
	3.8 Excavate side drain right	(m/50m)	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3									56 m3						
	3.9 Excavate mitre drain	(m/50m)																								11 m3						
	3.10 Spread, level to form road camber	(m2/50m)																								- m2						
	3.11 Laterite wearing course	(m3/50m)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0									930 m3						
	3.12 Construction of concrete surface	(m2/50m)																								- m2						
	3.13 Construction of other surface	(m2/50m)																								- m2						
3.14 Construction of concrete surface	(m2/50m)																								- m2							
3.15 Planting grass	(m2/50m)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0									3,100 m2							
3.18 Extra filling	(m3/50m)																								- m3							
3.19 Planting trees	No/50m	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0									620 m3							

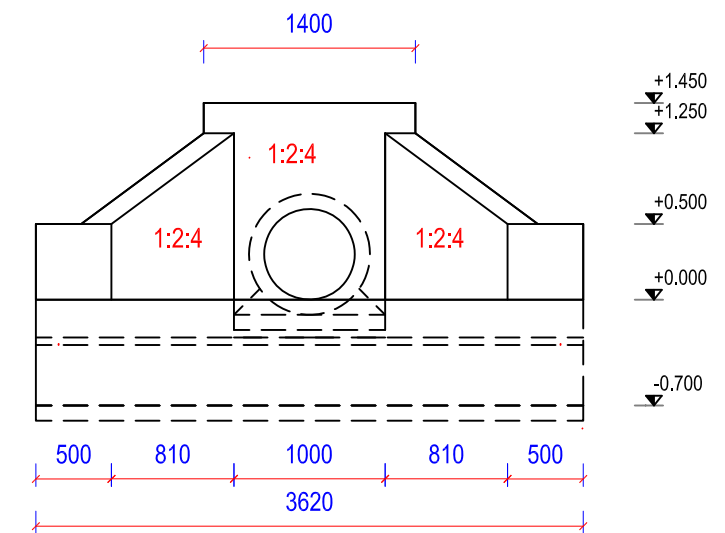
[illegible]

NZ FUNDING PROJECT																											Starting chainage this page					m								
ROAD CONDITION SURVEY																																0								
Road Name: Rehabilitation of Rural road in Basak Village							Chainage start: 0+000							Road Length: 2.3 km							Surveyed by: Nhep Sopara						Page: 1													
Contract No: 0							Chainage end: 2+300							District: Basak							Date: 0-Jan-00																			
Existing road	Chainage		0 + 0		0 + 250		0 + 500		0 + 750		1 + 0		1 + 250		1 + 500		1 + 750		2 + 0		2 + 250		2 + 500		Total this page															
	Description																																							
	Longitudinal Gradient		(%;+/-)																																					
	Surfacing material (C1/C2/C3)		(Type)		C2		C2		C2		C2		C2		C2		C2		C2		C2		C2																	
	Surrounding material (C1/C2/C3)		(Type)		C2		C2		C2		C2		C2		C2		C2		C2		C2		C2																	
	Carriage way width		(m)		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0																	
	Road formation width		(m)		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0																	
Existing free clearance width		(m)		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0																		
Design	Proposed cross section Type		(I / II / III)		I		I		I		I		I		I		I		I		I		I																	
	Required free clearance		(m)		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0																	
	Carriageway width		(m)		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0																	
	Gravel thickness		(cm)		15.0		15.0		15.0		15.0		15.0		15.0		15.0		15.0		15.0		15.0																	
	Base course thickness		(cm)																																					
	Concrete surface thickness		(cm)																																					
Proposed works and bill items	2.0 Site Preparation																																							
	2.1 Light bushes and grass clearing		(m2/50m)		1000		1000		1000		1000		1000		1000		1000		1000		1000		1000		4,600 m2															
	2.2 Heavy bushes clearing		(m2/50m)		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		25.0		2,175 m2															
	2.3 Removal of unsuitable soil from road width		(m3/50m)																						- m2															
	2.4 Tree removal from road formation		(Tree/50m)																						- No															
	2.5 Stump removal from road formation		Stump/50m)																						- No															
	3.0 Earth work and Road Works																																							
	3.1 Excavation to spoil/level		(m3/50m)																						- m3															
	3.2 Excavate to widern road formation		(m3/50m)																						- m3															
	3.3 Excavate, haul to filling embankment from surrounding soil		(m3/50m)																						- m3															
	3.4 Filling embankment from transpoted soil		(m3/50m)		1127		800		61		386		617		437		623		1278		386		219		99		202		614		86		360		770		664		1,691 m3	
	3.5 Excavate, haul and fill to widen embankment from surrounding soil		(m3/50m)																								- m3													
	3.6 Widening embankment from transpoted soil		(m3/50m)																								- m3													
	3.7 Excavate side drain left		(m/50m)		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		518 m3													
	3.8 Excavate side drain right		(m/50m)		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		11.3		518 m3													
	3.9 Excavate miter drain		(m/50m)																								104 m3													
	3.10 Spread, level to form road camber		(m2/50m)																								- m2													
	3.11 Laterite wearing course		(m3/50m)		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		30.0		1,380 m3													
	3.12 Construction of concrete surface		(m2/50m)																								- m2													
	3.13 Construction of other surface		(m2/50m)																								- m2													
3.14 Construction of concrete surface		(m2/50m)																								- m2														
3.15 Planting grass		(m2/50m)		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		4,600 m2														
3.18 Extra filling		(m3/50m)																								- m3														
3.19 Planting trees		No/50m		20.0		20.0		20.0		20.0		20.0		20.0		20.0		20.0		20.0		20.0		20.0		920 m3														

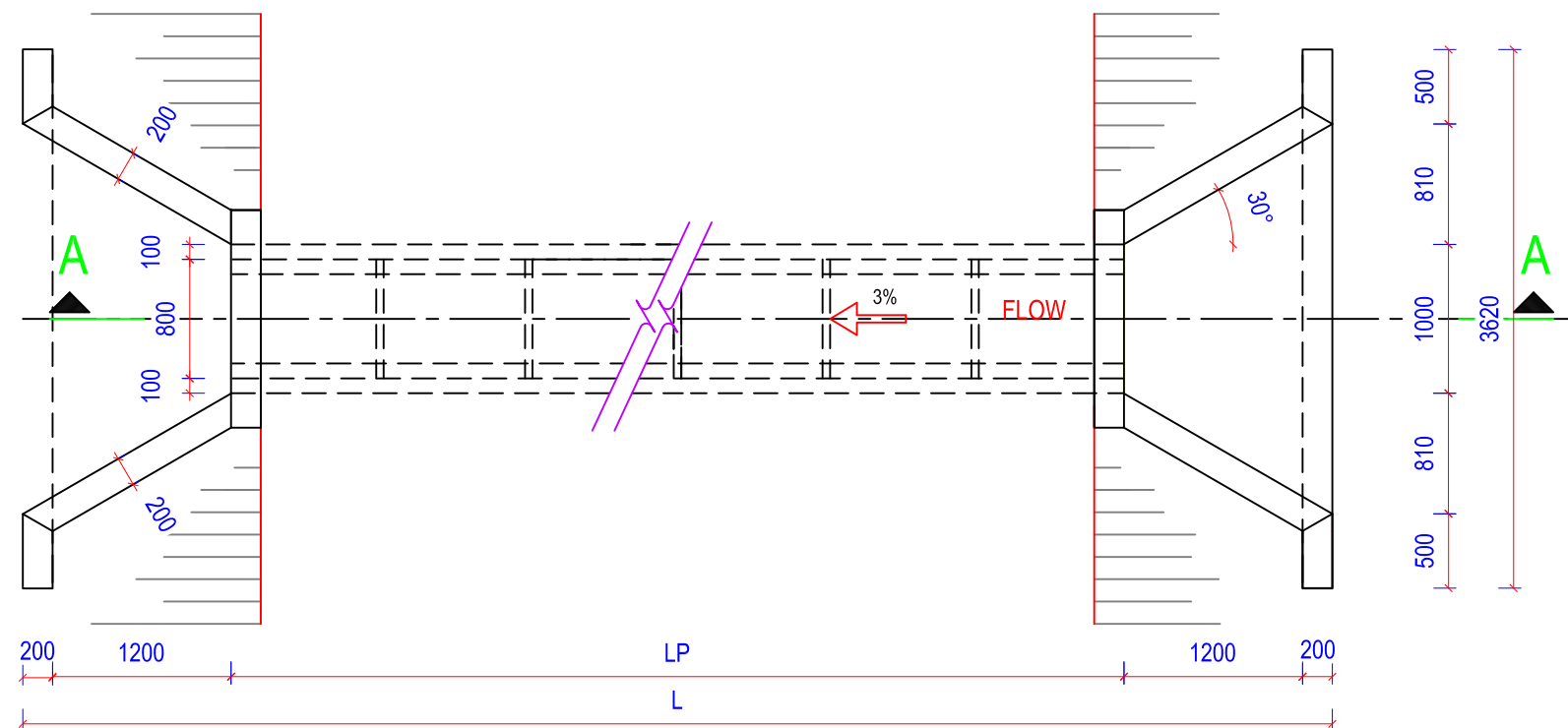
SECTION A-A



ELEVATION



PLAN VIEW

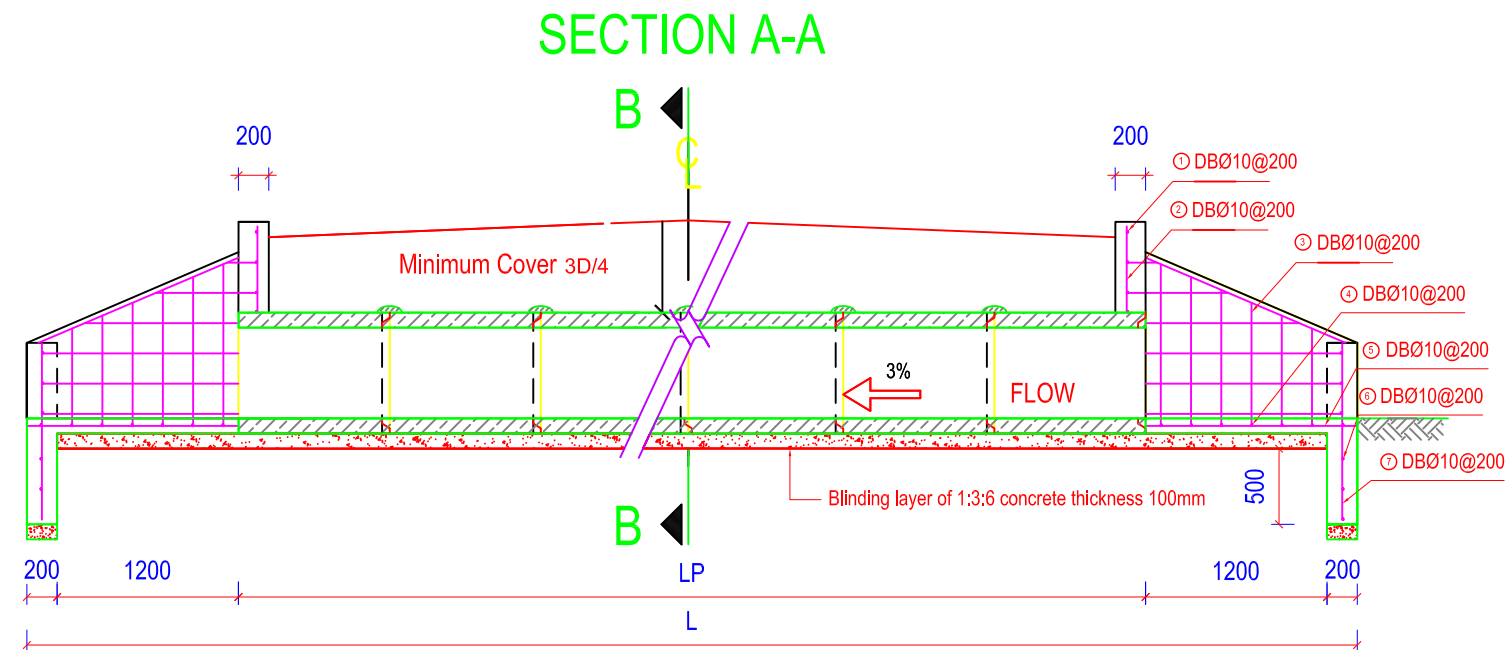
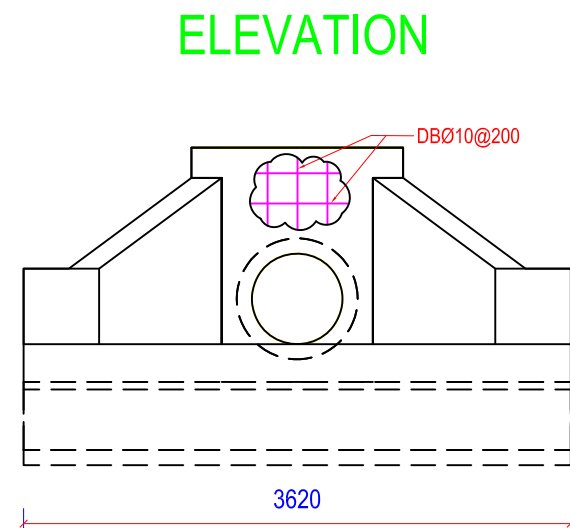


Notes:

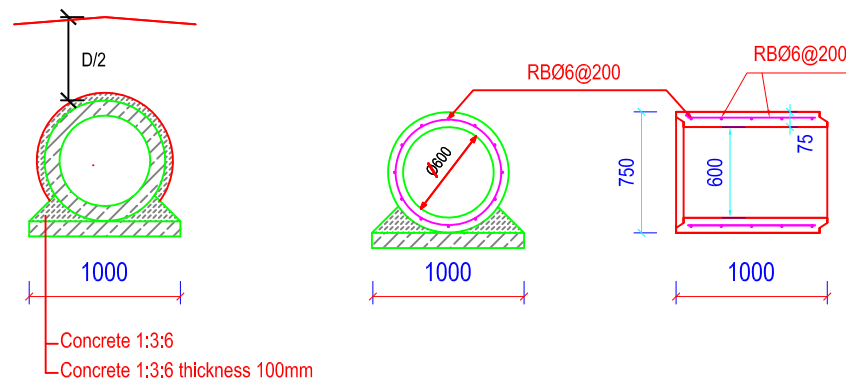
1. All dimensions are in millimeters unless otherwise indicated.
2. All levels are in meters.
3. The drawing shows the embankment for minimum pipe cover 3D/4. For higher embankments the number of pipes and length of culvert shall be increased.
4. SETTING OUT: The culvert invert level 0.000 shall be set at the existing downstream bed level
5. LP is the length of total reinforcement concrete pipes.
6. L is the length of pipe culvert.



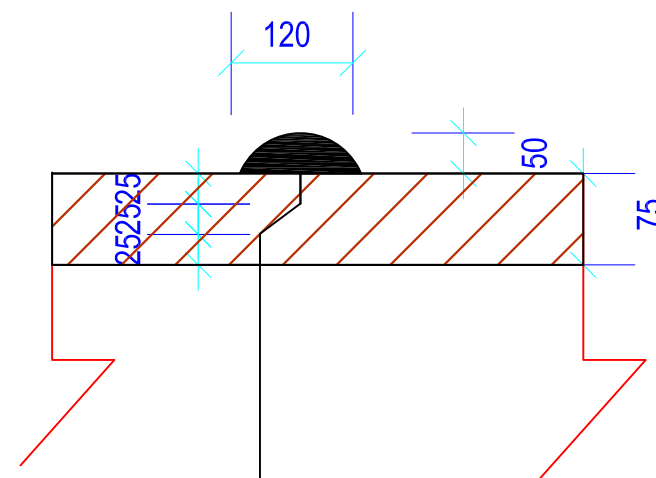
	International Labour Organization (ILO)
COVID-19 Socio-Economic Recovery For Returning Migrants and Host Communities in North West Cambodia	
OUTPUT LOCATION: PREY SVAY VILLAGE	
SINGLE PIPE CULVERT, Ø 0.6m	
Plan View, Elevation View and Section View	
DRAW BY: NHEP SOPHARA	POSITION: FIELD ENGINEER
ORIGINAL SIZE: A3	SCALE: 1:50
SHEET: 1 OF 2	DATE: 15 AUG 2022



SECTION B-B PIPE REINFORCEMENT

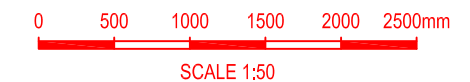


DETAIL 1

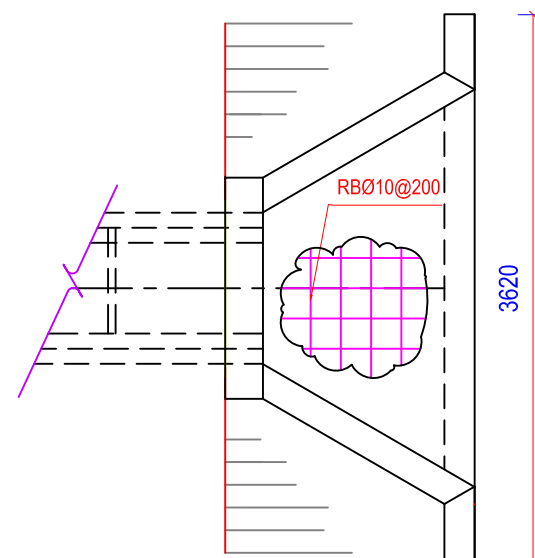


Notes:

1. All dimensions are in millimeters unless otherwise indicated.
2. All levels are in meters.
3. The drawing shows the embankment for minimum pipe cover 3D/4. For higher embankments the number of pipes and length of culvert shall be increased.
4. SETTING OUT: The culvert invert level 0.000 shall be set at the existing downstream bed level
5. LP is the length of total reinforcement concrete pipes.
6. L is the length of pipe culvert.



PLAN VIEW



REINFORCEMENT TABLE

ID	TYPE	SHAPE	LENGTH (m)	QUANTITY	TOTAL LENGTH	WEIGHT (kg)
1	DBØ10@200	1340	1.340	8	10.72	6.646
2	DBØ10@200	600...1300 200	1.150	14	16.100	9.982
3	DBØ10@200	550...1070 200	1.010	28	28.28	17.534
4	DBØ10@200	1350...2510	1.930	12	23.16	14.360
5	DBØ10@200	655...1300	0.9775	36	35.19	21.818
6	DBØ10@200	3616	3.616	8	28.93	17.937
7	DBØ10@200	200 650	0.425	36	15.30	9.486
TOTAL WEIGHT (kg)						97.763

International Labour
Organization (ILO)

COVID-19 Socio-Economic Recovery For Returning
Migrants and Host Communities in North West Cambodia

OUTPUT LOCATION: PREY SVAY VILLAGE

SINGLE PIPE CULVERT, Ø 0.6m

Reinforcement Plan, Section View and Reinforcement Table

DRAW BY: NHEP SOPHARA

POSITION: FIELD ENGINEER

ORIGINAL SIZE: A3

SCALE: 1:50

SHEET: 2 OF 2

DATE: 15 AUG 2022

In Khmer
Covid-19 socio-economic recovery for returning migrants and host communities in North West Cambodia



International
Labour
Organization



ព្រះរាជាណាចក្រកម្ពុជា
Ministry of Interior



In Khmer

Project: Construction of concrete culverts inCommune, Pouk District

Khmer

Funded by: Ministry of Foreign Affairs and Trades (MFAT), Government of New Zealand

Khmer

Government Partners: Ministry of interior & Ministry of Labour and Vocational Training Labour,

Khmer

Implemented by: International Labour Organization

Contractor:
Year: 2022

Logo of Contractor

