

ເອກະສານຊ້ອນທ້າຍ 5-1 ແຜນແຕ້ມແບບການກໍ່ສ້າງ  
ໂຄງການຕົວແບບປ້ອງກັນຕະຝັງ  
ເຂດບ້ານປ່າອ້ອຍ ເມືອງຫ້ວຍຊາຍ  
ແຂວງບໍ່ແກ້ວ

ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ  
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນາຖາວອນ

໑໑໑000໑໑໑໑໑

ກະຊວງ ໂຍທາທິການ ແລະ ຂົນສົ່ງ

ກົມໂຍທາທິການທາງນໍ້າ

ໂຄງການຮ່ວມມືທາງດ້ານເຕັກນິກປ້ອງກັນຕາຝັ່ງເຈື່ອນ ລາວ-ຍີ່ປຸ່ນ ຊວງ II

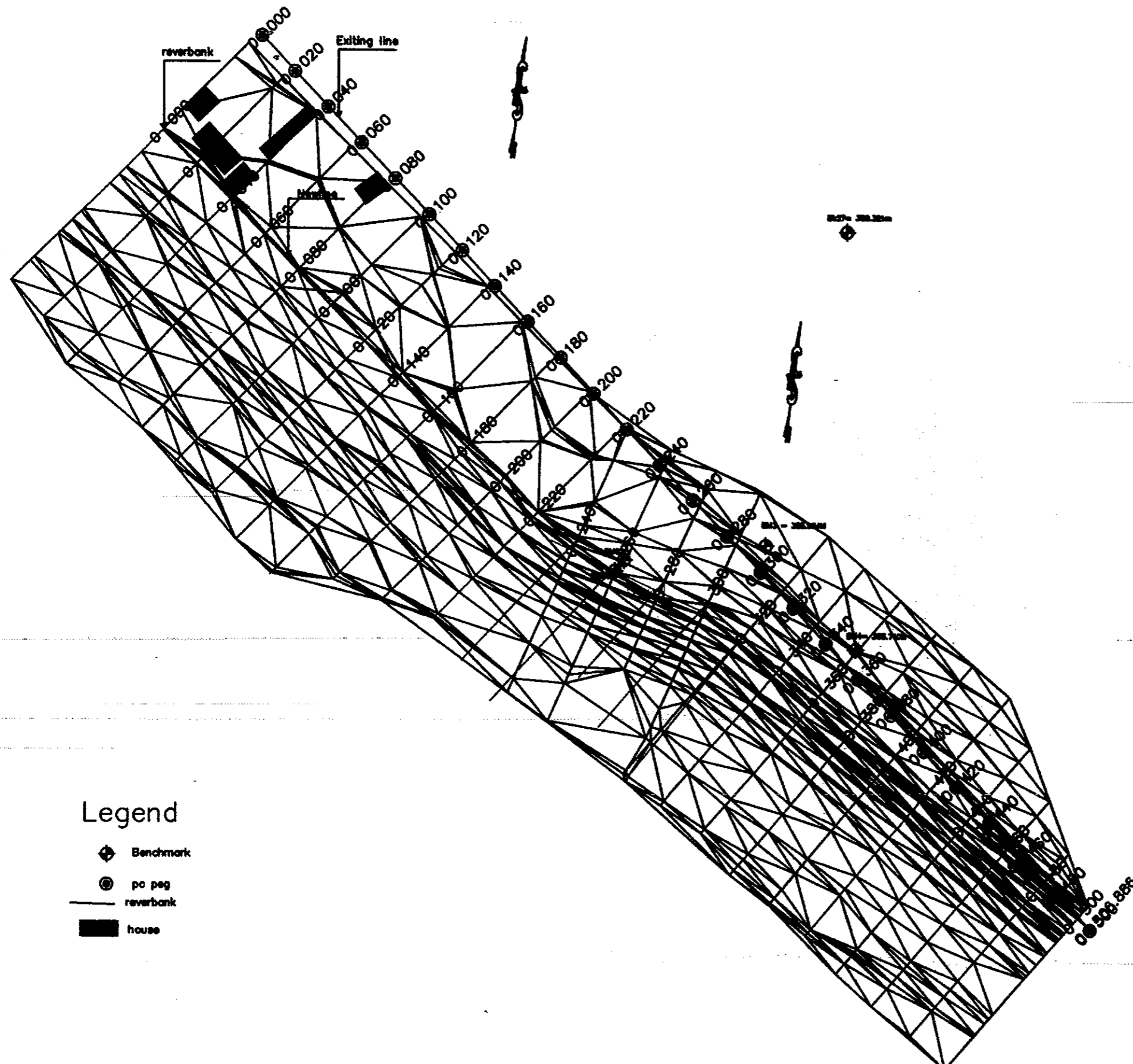
ໂຄງການກໍ່ສ້າງປ້ອງກັນຕາຝັ່ງເຈື່ອນ  
ເຂດບ້ານປ່າອ້ອຍ ເມືອງ ຫ້ວຍຊາຍ, ແຂວງບໍ່ແກ້ວ

ແຜນແຕ້ມ

ແຜນພຽງ ມ : 1/1000

ຕັດຂວາງແບບຢ່າງ ມ : 1/1000

ພະຈິກ (11) ປີ 2011



**Legend**

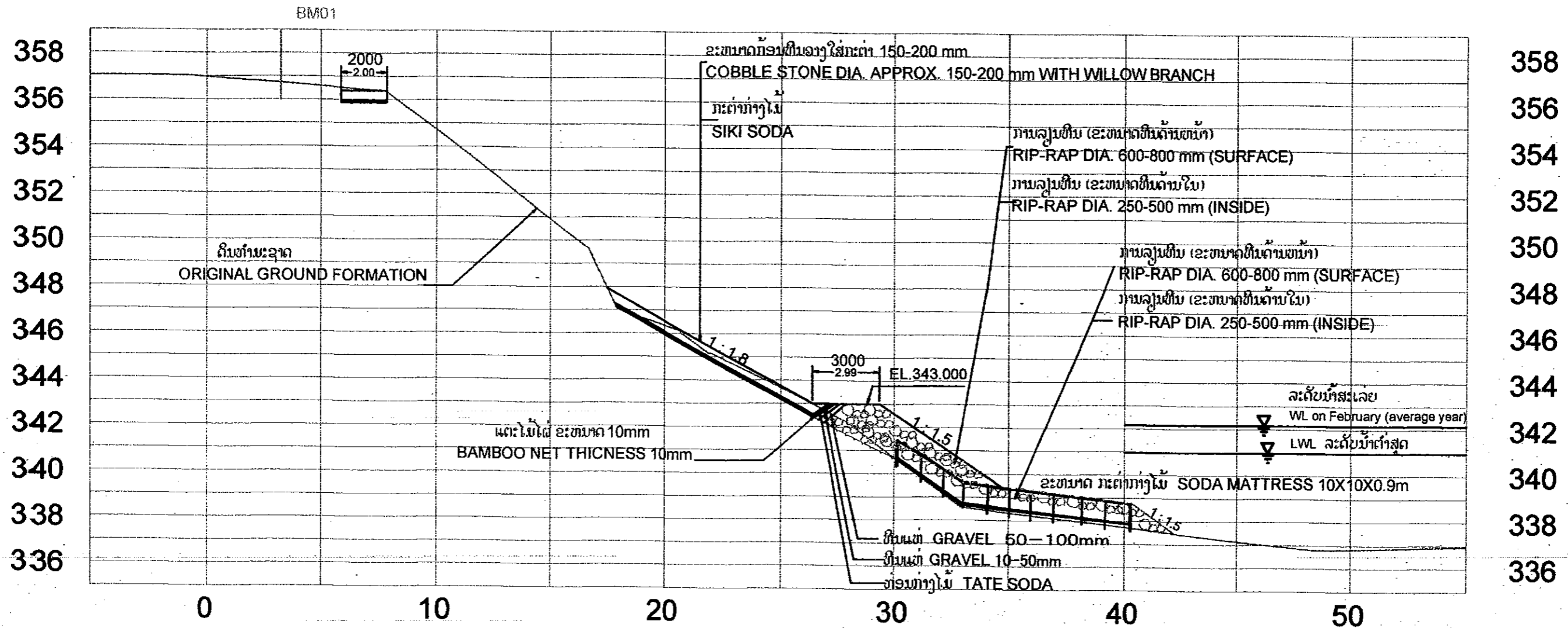
- ⊕ Benchmark
- ⊙ pc peg
- reverbank
- house

Station	Northing	Easting	ELEVEL
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BM04	2239626.00 2	649392.443	355.710
BM01	2239657.47 6	649292.303	357.266
BM02	2239662.01 4	649296.134	357.191
0+000	2239836.65 0	649104.979	356.882
0+020	2239822.52 2	649119.135	355.661
0+040	2239808.39 4	649133.291	355.582
0+060	2239794.26 6	649147.448	357.878
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0+160	2239723.62 7	649218.229	356.898
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0+220	2239681.24 3	649260.698	357.029
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0+260	2239661.60 1	649294.983	357.040
0+280	2239653.30 0	649313.179	357.254
0+300	2239645.00 0	649331.375	357.312
0+320	2239634.39 1	649348.096	357.017
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0+360	2239608.33 2	649378.443	356.488
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0+440	2239556.21 5	649439.137	355.386
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0+480	2239530.15 7	649469.485	354.039
0+500	2239517.12 8	649484.658	354.682

<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
SCALE: 1:200	DATE
DESIGNER: Saphone	28/03/2011
CHECKER: Saphone	28/03/2011
APPROVER: Phouong	01/04/2011
APPROVER: Katsana	05/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+200

## ການອາງຫີນໃສ່ກະຕ່າກ່າງໄມ້ COBBLE STONE WITH SODA WORK

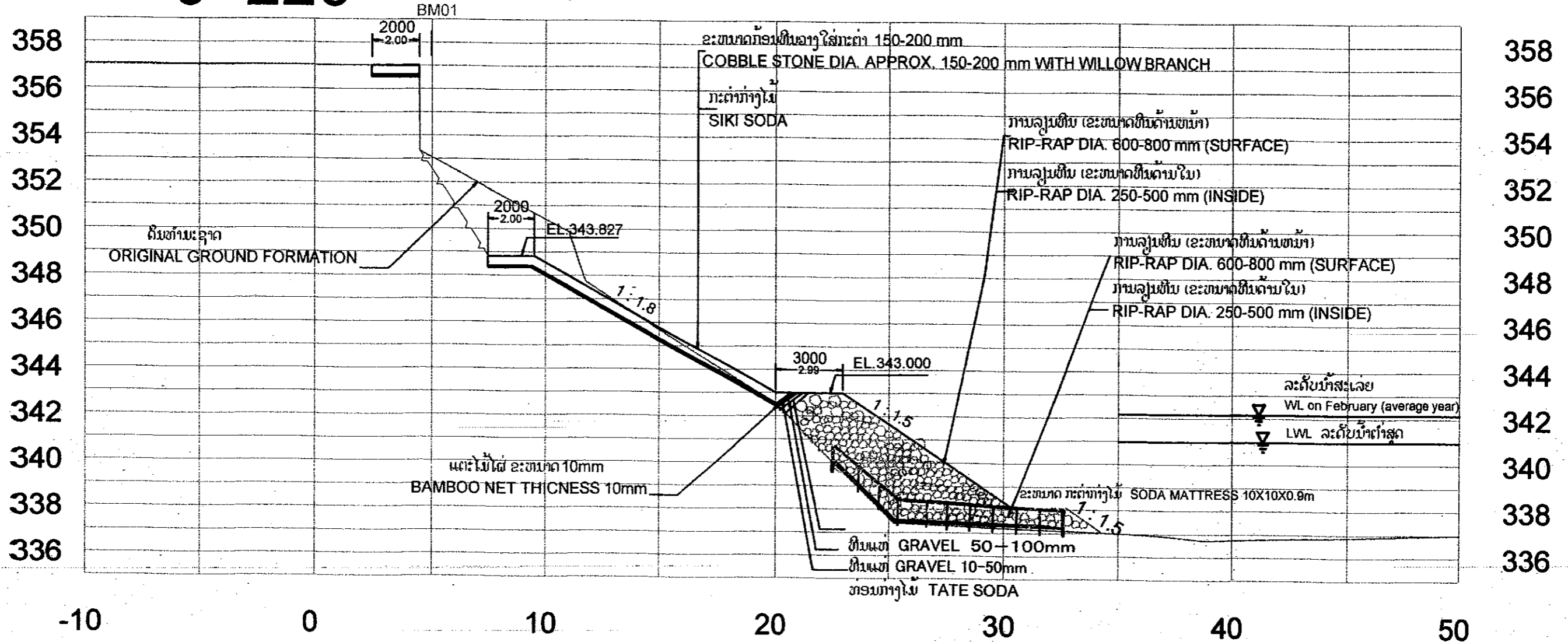


<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
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DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	



ການອາງຫີນໃສ່ກະຕ່າກ່າງໄມ້  
 COBBLE STONE WITH SODA WORK

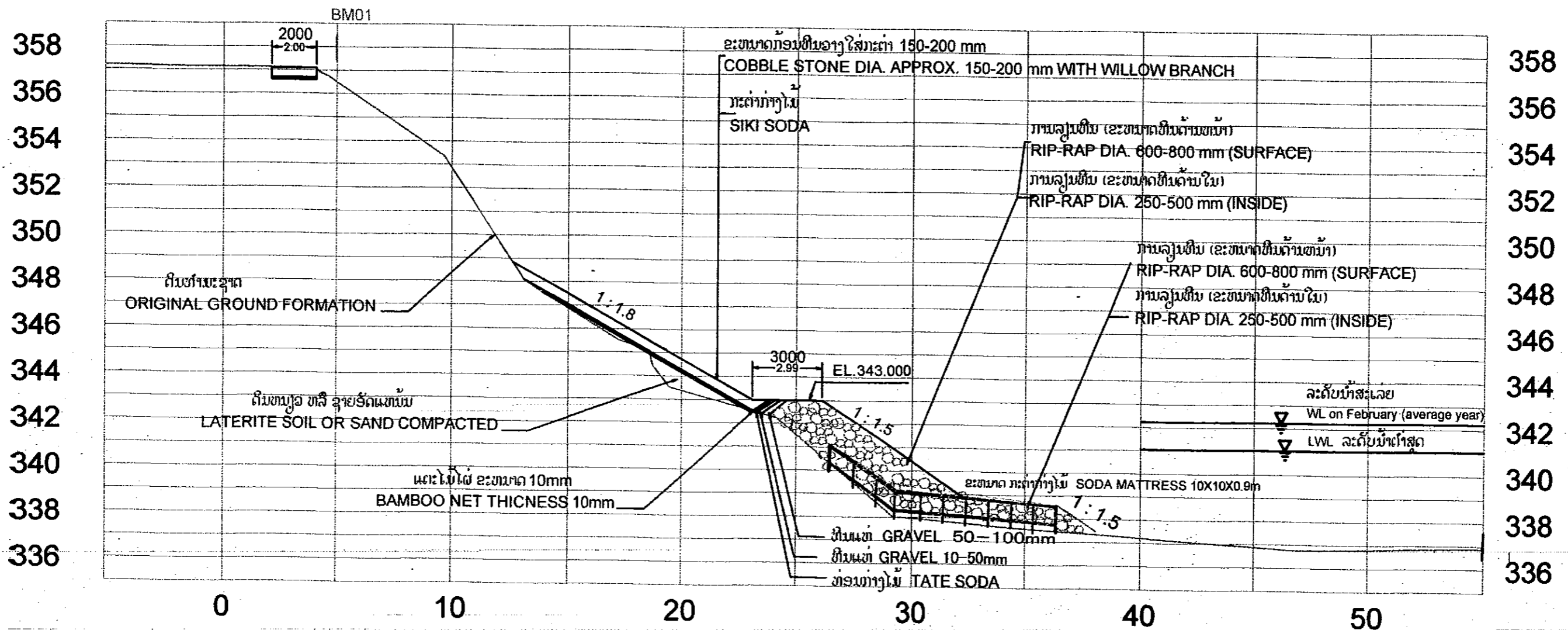
0+220



LAO PDR Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+080-Km 0+100	
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DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+240

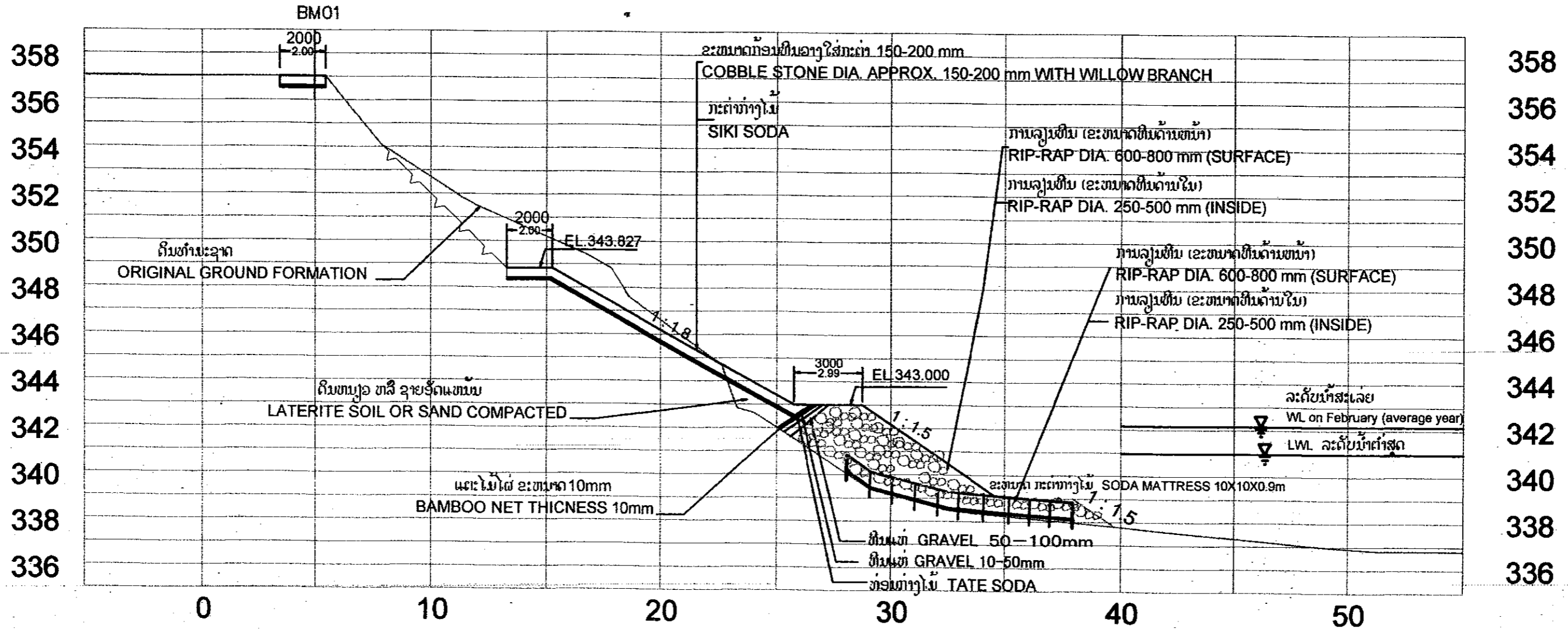
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
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DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

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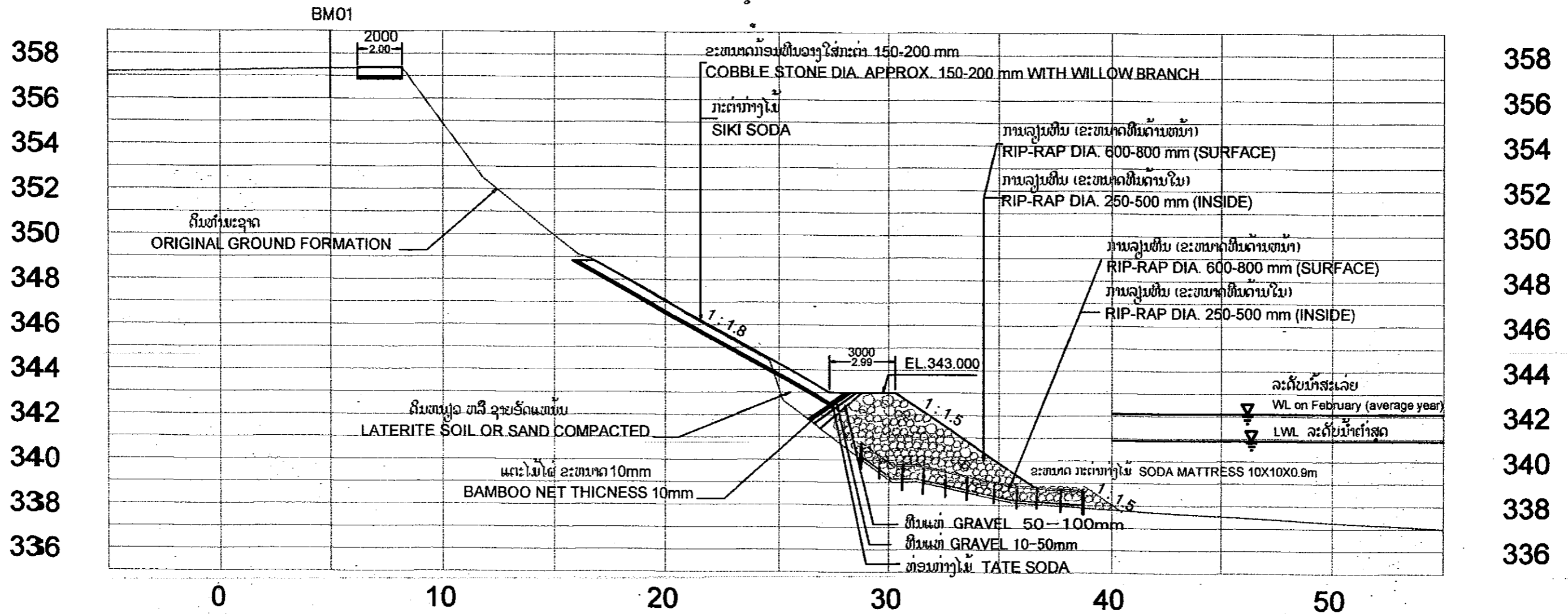
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
SCALE: 1:200	DATE
SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+280

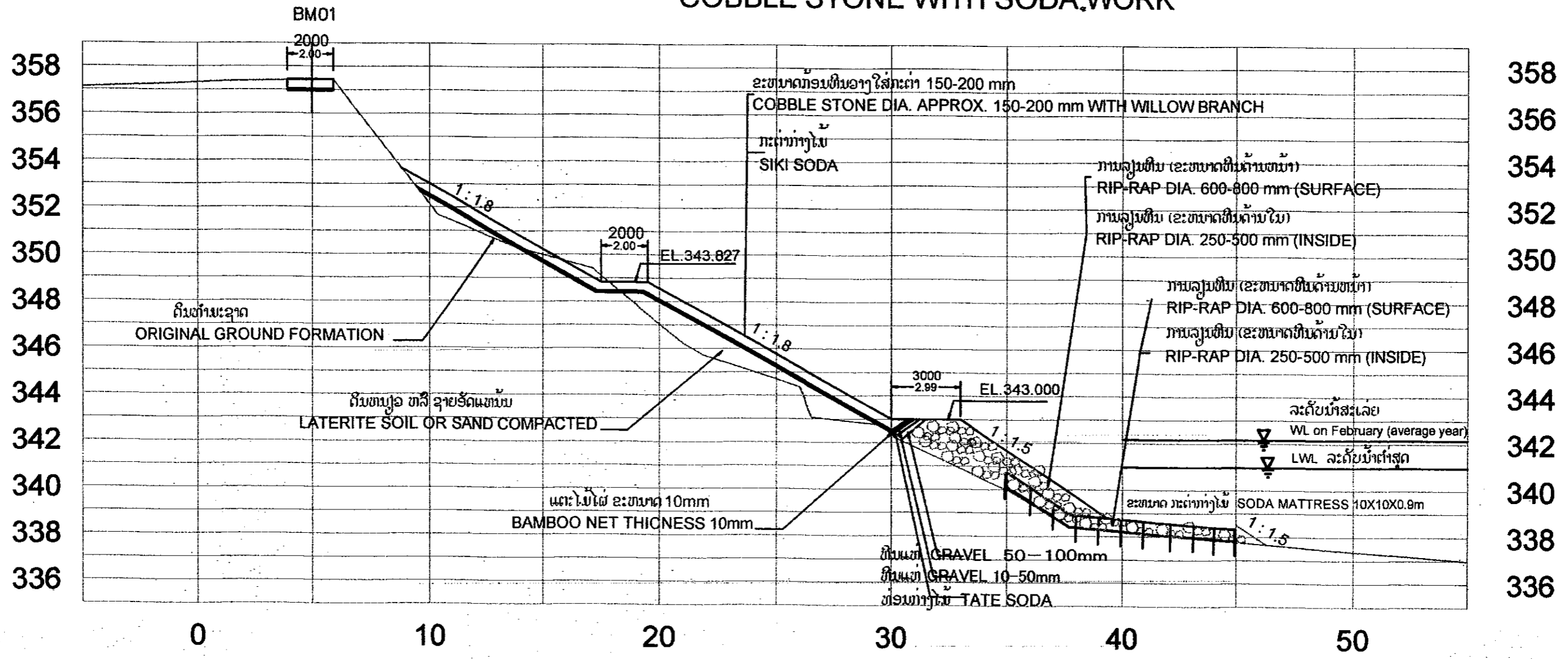
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
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Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
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SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+300

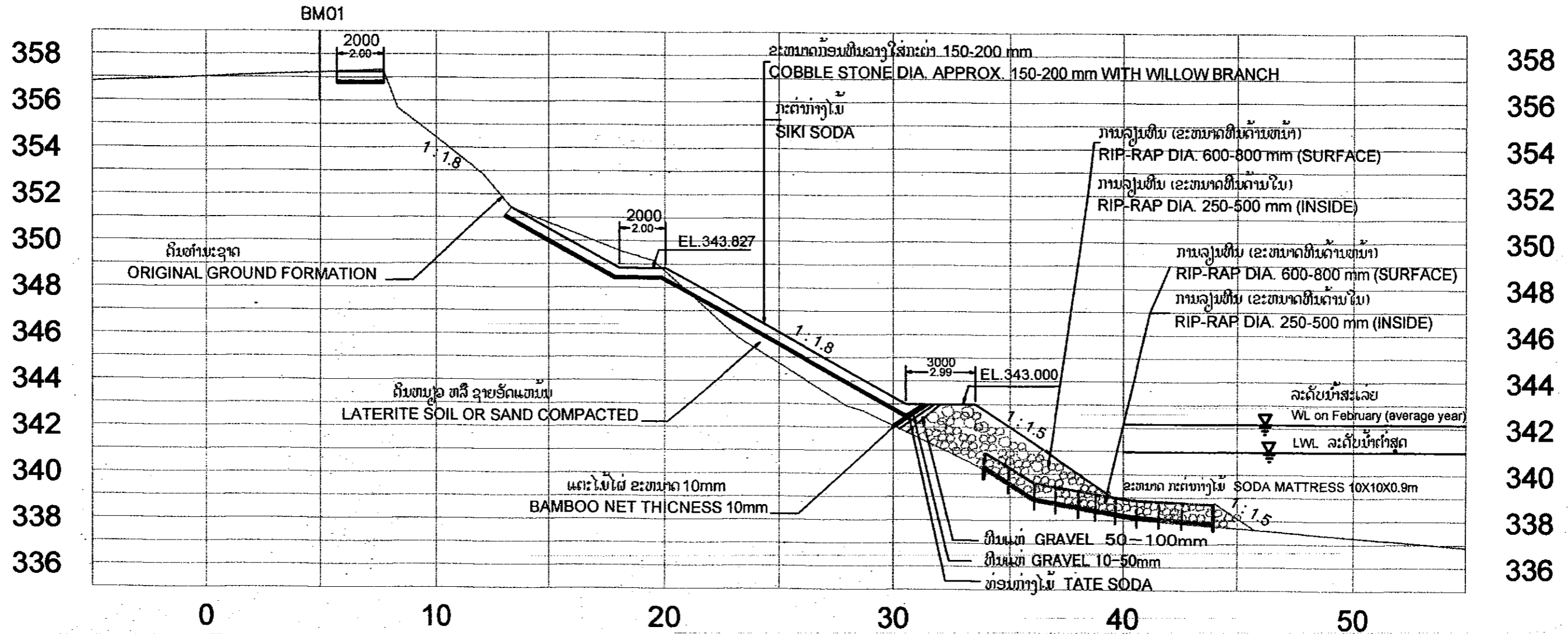
## ການອາງຫີນໃສ່ກະຕ່າກ່າງໄມ້ COBBLE STONE WITH SODA WORK



<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
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SCALE: 1:200	DATE
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APPROVED: Ketsana	03/04/2011
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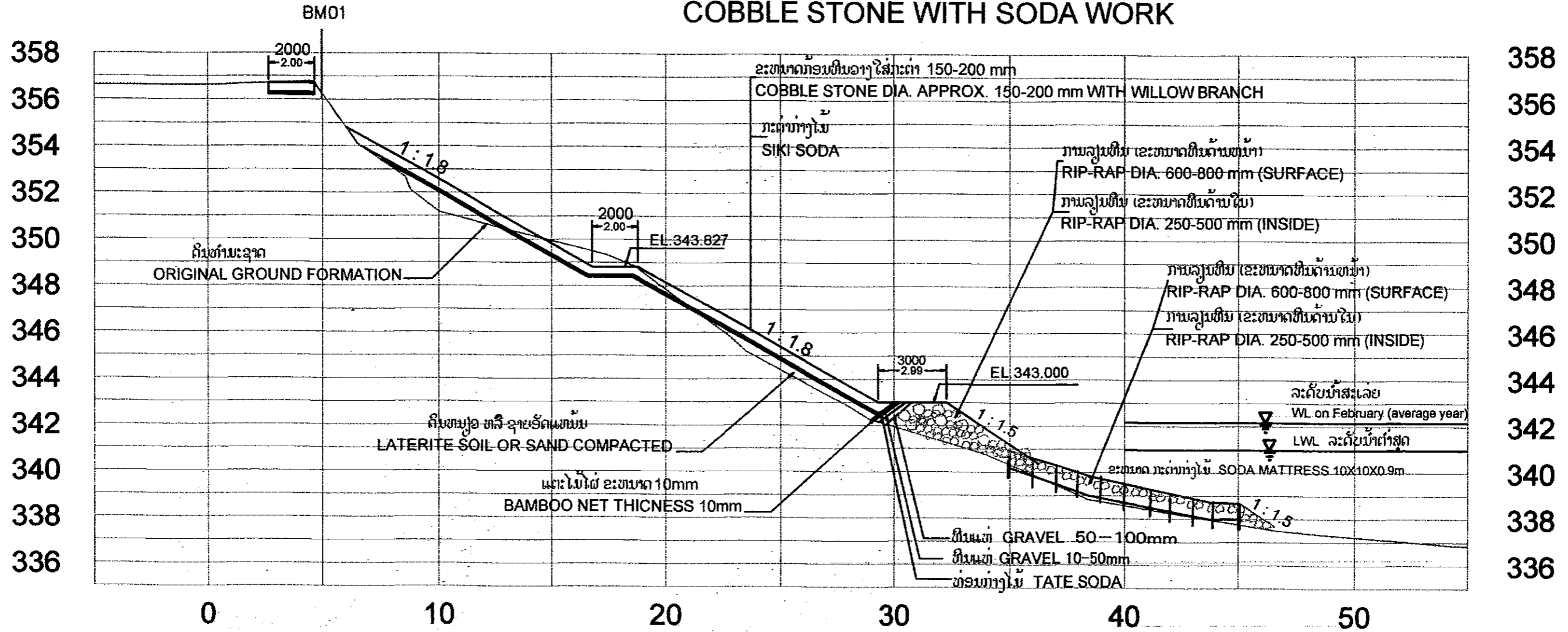
## ການວາງຫີນໃສ່ກະຕ່າກ່າງໄມ້ COBBLE STONE WITH SODA WORK



<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+080-Km 0+100	
SCALE: 1:200	DATE
SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+340

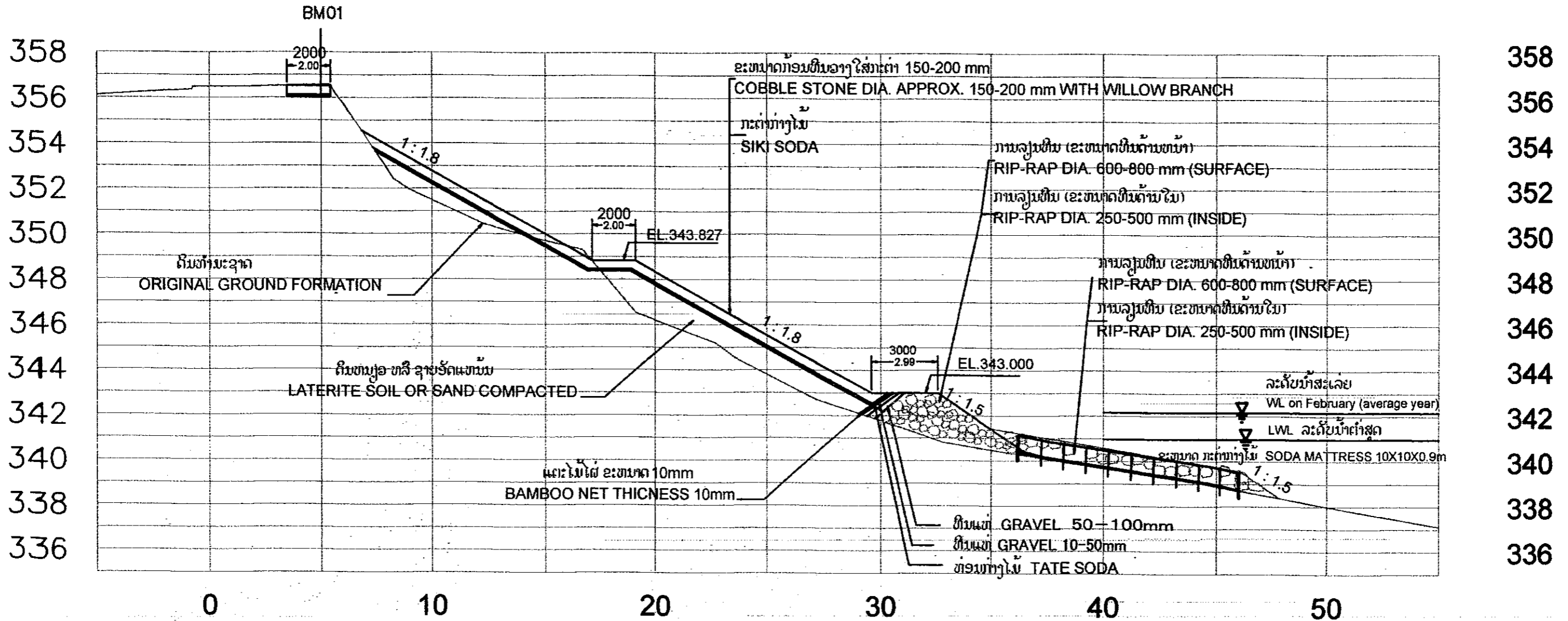
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
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SURVEYED: Saphone	20/03/2011
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CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+360

## ການວາງຫີນໃສ່ກະຕ່າກ່າງໄມ້ COBBLE STONE WITH SODA WORK

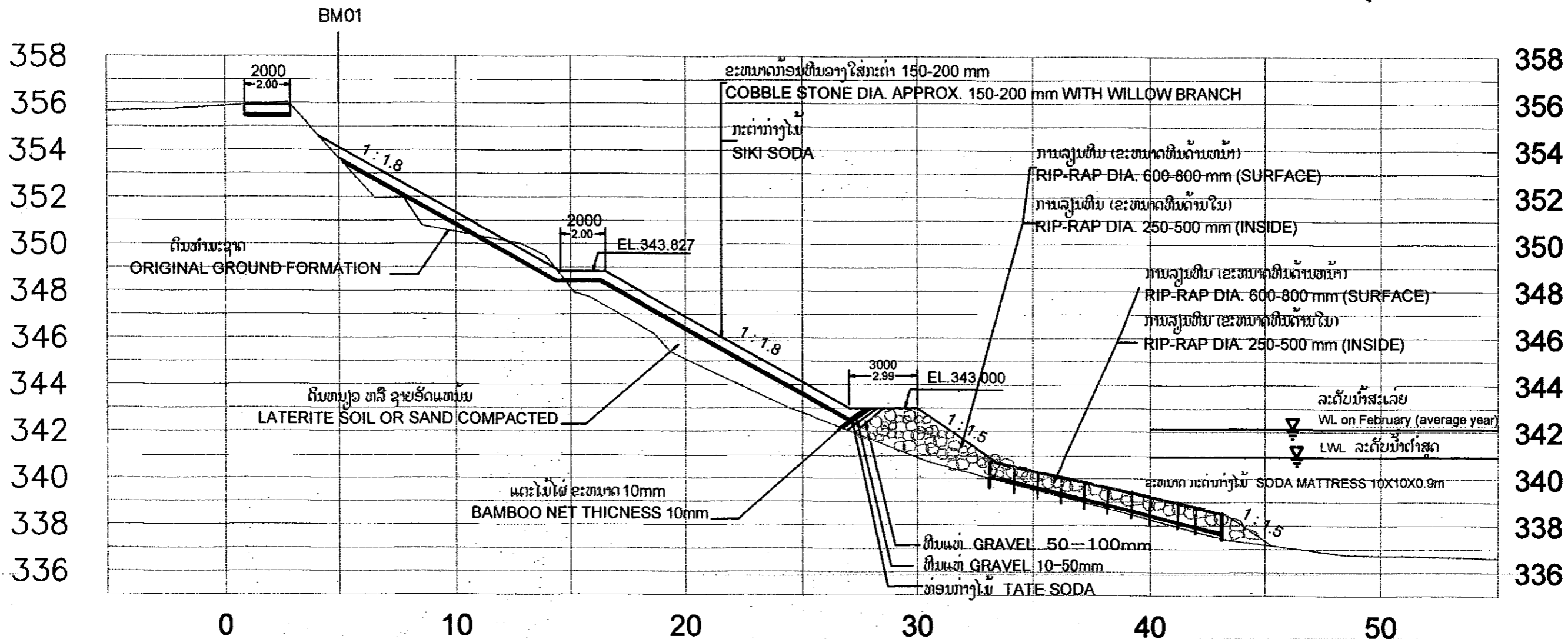


LAO PDR	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+000-Km 0+100	
SCALE: 1:200	DATE
SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	



# 0+380

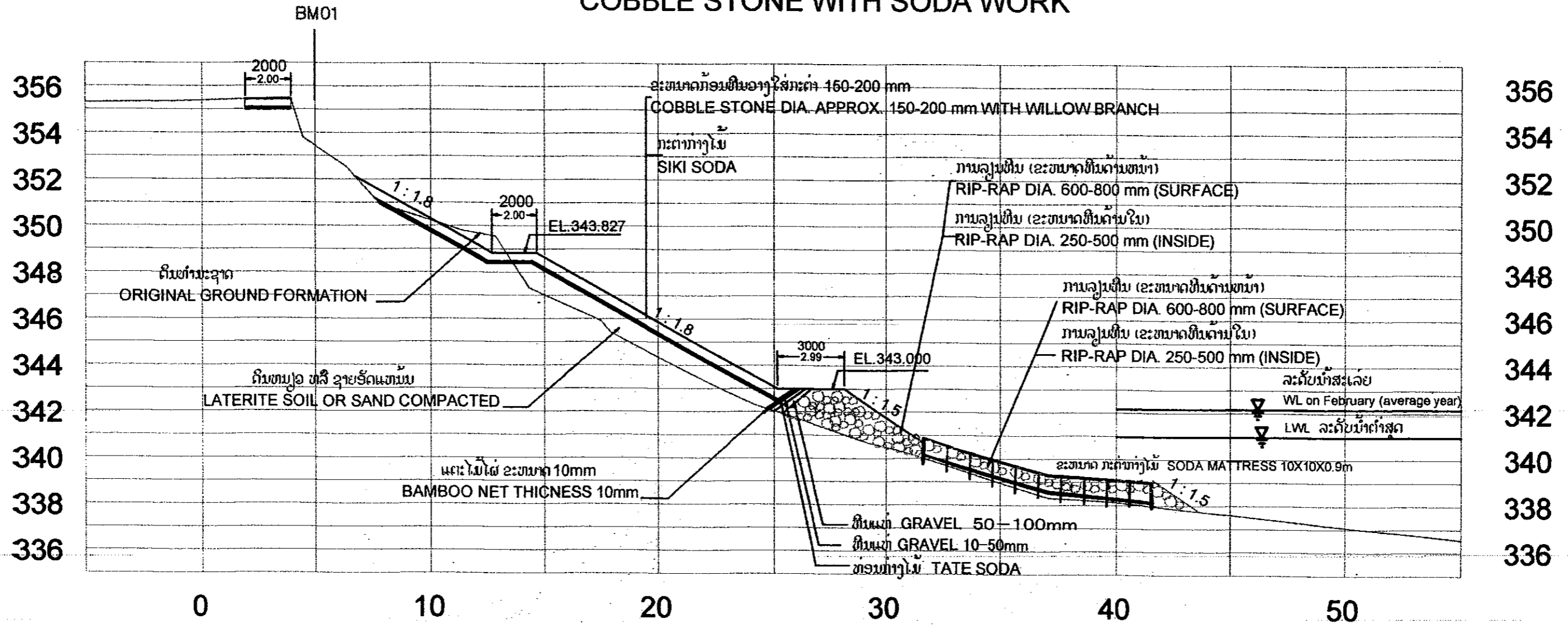
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+060-Km 0+100	
SCALE: 1:200	DATE
SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvang	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+400

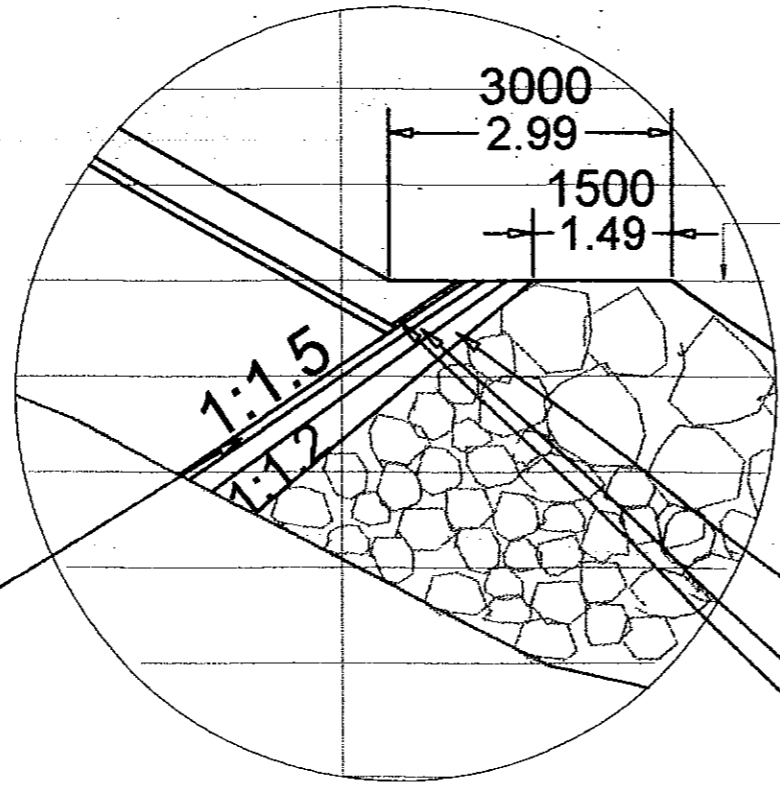
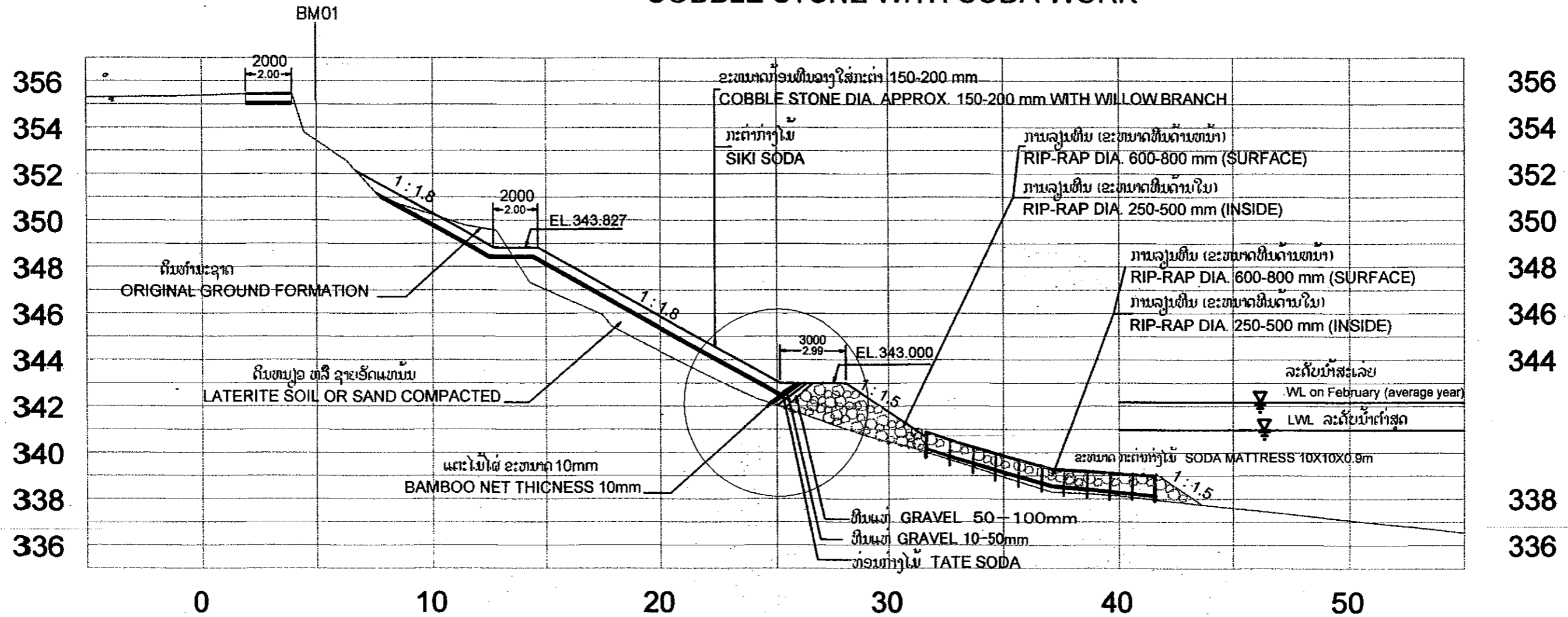
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<b>LAO PDR</b>	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asia-Survey Design and Consultant Co.,Ltd	
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APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

# 0+400

## ການອາງຫີນໃສ່ກະຕ່າກ່າງໄມ້ COBBLE STONE WITH SODA WORK



ແຕະໄມ້ໄຜ່ ຂະໜາດ 10mm  
BAMBOO NET THICKNESS 10mm

ຫີນແຫ້ ກະຕ່າກ່າງໄມ້ TATE SODA  
ຫີນແຫ້ GRAVEL 50-100mm  
ຫີນແຫ້ GRAVEL 10-50mm

LAO PDR	
Peace Independence Democracy Unity Prosperity	
Department of Public Works and Transport Vientiane Capital	
Asla-Survey Design and Consultant Co.,Ltd	
The Project on Riverbank Protection Works phase II Crosssection Km 0+080-Km 0+100	
SCALE: 1:200	DATE
SURVEYED: Saphone	20/03/2011
DRAWN: Saphone	30/03/2011
CHECKED: Phouvong	01/04/2011
APPROVED: Ketsana	03/04/2011
Drawing Number: Sites2-CR- No 02	

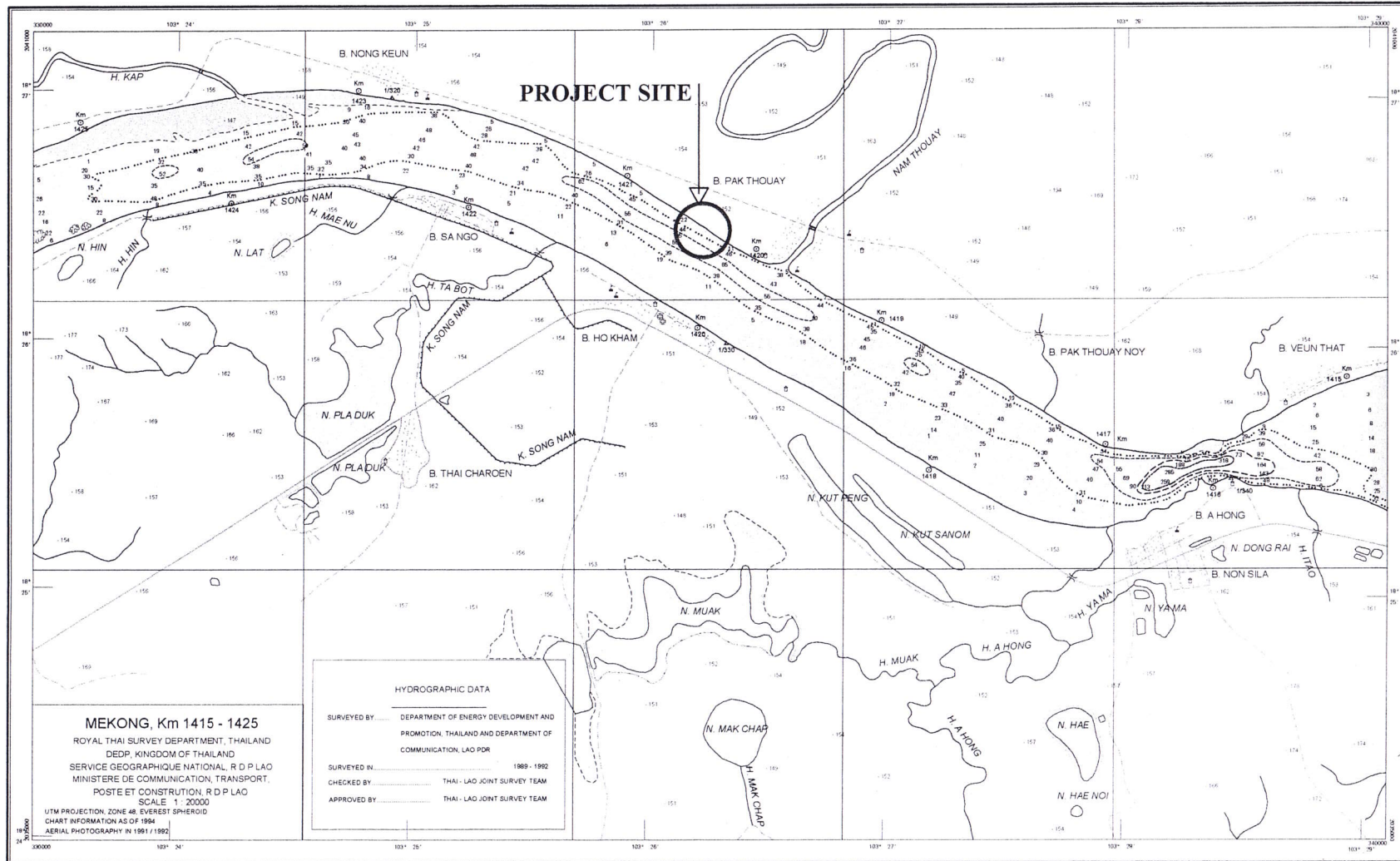
ເອກະສານຊ້ອນທ້າຍ 5-2 ແຜ່ນແຕ້ມ ແບບການກໍ່ສ້າງ  
ໂຄງການຕົວແບບປ້ອງກັນຕະຝັງ  
ເຂດບ້ານປາທວາຍ ເມືອງທ່າພະບາດ  
ແຂວງບໍລິຄໍາໄຊ

## LIST OF DRAWING

NO.	DRAWING TITLE	DRAWING NUMBER	PAGE NUMBER
<b>I.</b>	<b>GENERAL DRAWING</b>		
1	LIST OF DRAWINGS	LDW-01	01
2	LOCAL MAP OF THE PROJECT BOLIKHAMXAY PROVINCE	LMP-01	02
3	SYMBOLS AND ABBREVIATIONS	SB-01	03
<b>II</b>	<b>CROSS-SECTIONS</b>		
1	PLAN	PL-01	04
2	CROSS-SECTIONS KM 0 + 000	CR-01	05
3	CROSS-SECTIONS KM 0 + 018,0+020	CR-02	06
4	CROSS-SECTIONS KM 0 + 020	CR-03	07
5	CROSS-SECTIONS KM 0 + 040	CR-04	08
6	CROSS-SECTIONS KM 0 + 060	CR-05	09
7	CROSS-SECTIONS KM 0 + 080	CR-06	10
8	CROSS-SECTIONS KM 0 + 086	CR-07	11
9	CROSS-SECTIONS KM 0 + 095	CR-08	12
10	CROSS-SECTIONS KM 0 + 100	CR-09	13
11	CROSS-SECTIONS KM 0 + 120	CR-10	14
12	CROSS-SECTIONS KM 0 + 140	CR-11	15
13	CROSS-SECTIONS KM 0 + 160	CR-12	16
14	CROSS-SECTIONS KM 0 + 180	CR-13	17
15	CROSS-SECTIONS KM 0 + 200	CR-14	18
16	CROSS-SECTIONS KM 0 + 200, 0 + 202	CR-15	19

NO.	DRAWING TITLE	DRAWING NUMBER	PAGE NUMBER
<b>III</b>	<b>DETAIL</b>		
1	CROSS-SECTIONS (DETAIL 1)	DT-01	20
2	CROSS-SECTIONS (DETAIL 2)	DT-02	21
3	CROSS-SECTIONS (DETAIL 3)	DT-03	22
4	DETAIL (FOOTING)	DT-04	23
5	DETAIL (SIKI SODA)	DT-05	24
6	DETAIL (LADDER)	DT-06	25
7	DETAIL (LADDER)	DT-07	26
8	DETAIL (SAFETY POST)	DT-08	27
9	DETAIL (STAIR)	DT-09	28
10	DETAIL (STAIR)	DT-10	29
11	DETAIL (STAIR)	DT-11	30
12	DETAIL (STAIR)	DT-12	31

LAO PDR Peace Independence Democracy Unity Proeperity	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
Department of Public Works and Transport Bolikhamsay Province	C/P	<i>[Signature]</i>	Dec 18. 12
	Check by:		
The project on riverbank protection works phase II Japan international Cooperation Agency	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
LIST OF DRAWING	Chief Advisor	<i>[Signature]</i>	
	Approved by:	<i>[Signature]</i>	Dec 18. 12
	Project Manager	<i>[Signature]</i>	
	Drawing number	LDW-01	Page: 01



<b>LAO PDR</b> Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec 9, 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec 18, 12
Approved by:	<i>[Signature]</i>	Dec 18, 12	
Chief Advisor	<i>[Signature]</i>	Dec 18, 12	
Approved by:	<i>[Signature]</i>	Dec 18, 12	
Project Manager	<i>[Signature]</i>	Dec 18, 12	
Drawing number	LMP-01	Page: 02	

**LOCAL MAP OF THE PROJECT**



## SYMBOLS AND ABBREVIATIONS

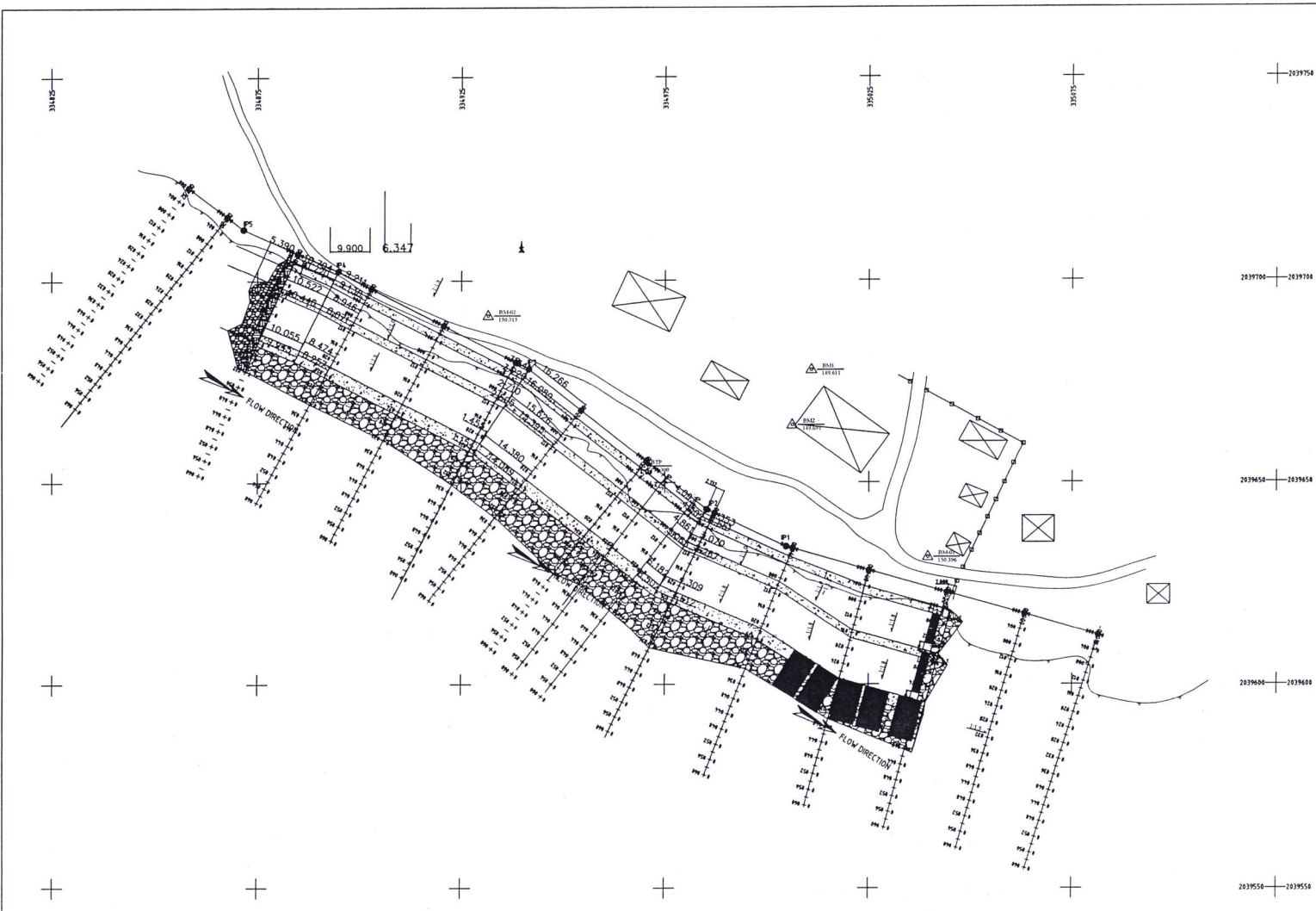
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
m <sup>2</sup>	SQUARE METER
m <sup>3</sup>	CUBIC METER
mm	MILLIMETER
mm <sup>2</sup>	SQUARE MILLIMETER
MPa	MEGAPASCAL
Kg	KILOGRAM
KM	KILOMETER
KN	KILONEWTON
m	METER
Cm	CENTIMETER
L	LENGTH
No.	NUMBER
BH	BORE HOLE
BM	BENCH MARK
DWG	DRAWING
ELEV.	ELEVATION
HC	HIGH OF CUTTING
HF	HIGH OF FILLING
H.W.L	HIGH WATER LEVEL
L.W.L	LOW WATER LEVEL
REIN.	REINFORCEMENT
I	GRADIENT
EP	END POINT
SP	START POINT
PI	POINT OF INTERSECTION FOR HORIZONTAL ALIGNMENT
HA	HORIZONTAL ALIGNMENT
R	RADIUS OF HORIZONTAL CIRCULAR CURVE
T	TANGENT LENGTH OF CIRCULAR CURVE
E	EXTERNAL DISTANCE
Lc	LENGTH OF CURVE
BC	BEGINNING OF CURVE
EC	END OF CURVE
PKT	CONNECTION POINT
PSC	PRESTRESS STEEL CONCRETE
PVC	POINT OF VERTICAL CURVE

PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
Pw	EXTRA WIDENING IN HORIZONTAL CURVE
Lvc	LENGTH OF VERTICAL CREST CURVE
Lvs	LENGTH OF VERTICAL SAG CURVE
V	DESIGN SPEED
R.L	ROAD LEVEL
RV	RADIUS OF VERTICAL CURVE
Se	SUPERELEVATION
X/E	EASTING COORDINATE IN METER
Y/N	NORTHING COORDINATE IN METER
Z /LEV.	VERTICAL COORDINATE IN METER (OR LEVEL)
FL	FLAGE
	FLAGE
	MARSH
	PADDY FIELD

	BENCH MARK
	POINT NUMBER
	PKT PICKET POINT
	BORE HOLE (BH)
	STATION POINT
	ROAD
	EXISTING BRIDGE
	DETOUR
	CONTOUR LINE
	PIPE CULVERT EXISTING
	ELECTRICITY PYLON
	MANHOLE

	CENTERLINE OF ROAD
	EXISTING ROAD ON PROPOSED FILL SLOPE ROAD
	TRAFFIC SIGNAL
	ROAD SIGN
	BOTTOM OF BANK
	HOUSE, HUT
	BUILDING, HOUSE, ONE STOREY WOOD
	HOUSE, TWO STOREY BRICK AND WOOD
	BUILDING, HOUSE, TWO STOREY CONCRETE / BRICK
	BAMBOO
	TREE, EXISTING
	GUIDE POST
	ELEVATION
	(HIGH) WATER LEVEL
	BENCH MARK
	GPS POINT
	FLOW
	TO M. TONPHEUNG
	SECTION A-A
	SLOPE
	BOTTOM OF BANK

LAO PDR Peace Independence Democracy Unity Prosperity  Department of Public Works and Transport Bolikhamxay Province	Name:	Signature	Date
	Design by:		
The project on riverbank protection works phase II Japan international Cooperation Agency	C/P		Dec 8, 12
	JICA Expert design		Dec 18, 12
<b>SYMBOLS AND ABBREVIATIONS</b>	Approved by:		Dec 18, 12
	Chief Advisor		Dec 18, 12
	Approved by:		Dec 18, 12
	Project Manager		Dec 18, 12
	Drawing number	SB-01	Page: 03



Legend

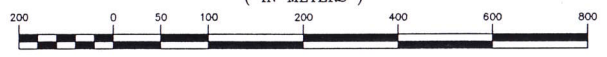
- BM-01 150.000 CONCRETE BENCH MARK
- BTP 150.363 WOODEN BENCH MARK
- CONTOUR LINE
- ROAD
- WALL
- TREE
- BANYOO
- SLOPE
- ELEMENT
- STRUCTURE
- POSTS ELECTRICITY

No	STA	Easting	Northing	LEVEL
1	BM-01	335017.674	2039603.440	150.396
2	BM-02	334909.579	2039663.237	150.015
3	0+018.7	335059.407	2039584.092	150.263
4	0+000	335041.441	2039589.408	150.834
5	0+020	335022.478	2039594.899	150.459
6	0+040	335003.073	2039600.135	150.187
7	0+060	334984.364	2039605.660	150.045
8	IP1	334982.787	2039606.042	150.080
9	0+080	334965.255	2039614.348	150.013
10	IP2	334963.310	2039615.220	149.995
11	0+100	334948.794	2039627.268	150.251
12	0+120	334932.750	2039639.921	149.941
13	IP3	334919.520	2039649.968	150.469
14	0+140	334916.296	2039651.662	150.183
15	0+160	334898.672	2039660.755	150.633
16	0+180	334880.964	2039669.945	150.690
17	IP4	334872.760	2039674.312	150.719
18	0+200	334862.808	2039678.688	150.760
19	IP5	334849.604	2039684.656	150.843
20	0+220	334845.679	2039687.712	150.974
21	0+232	334836.443	2039694.865	150.279



GRAPHIC SCALE

( IN METERS )

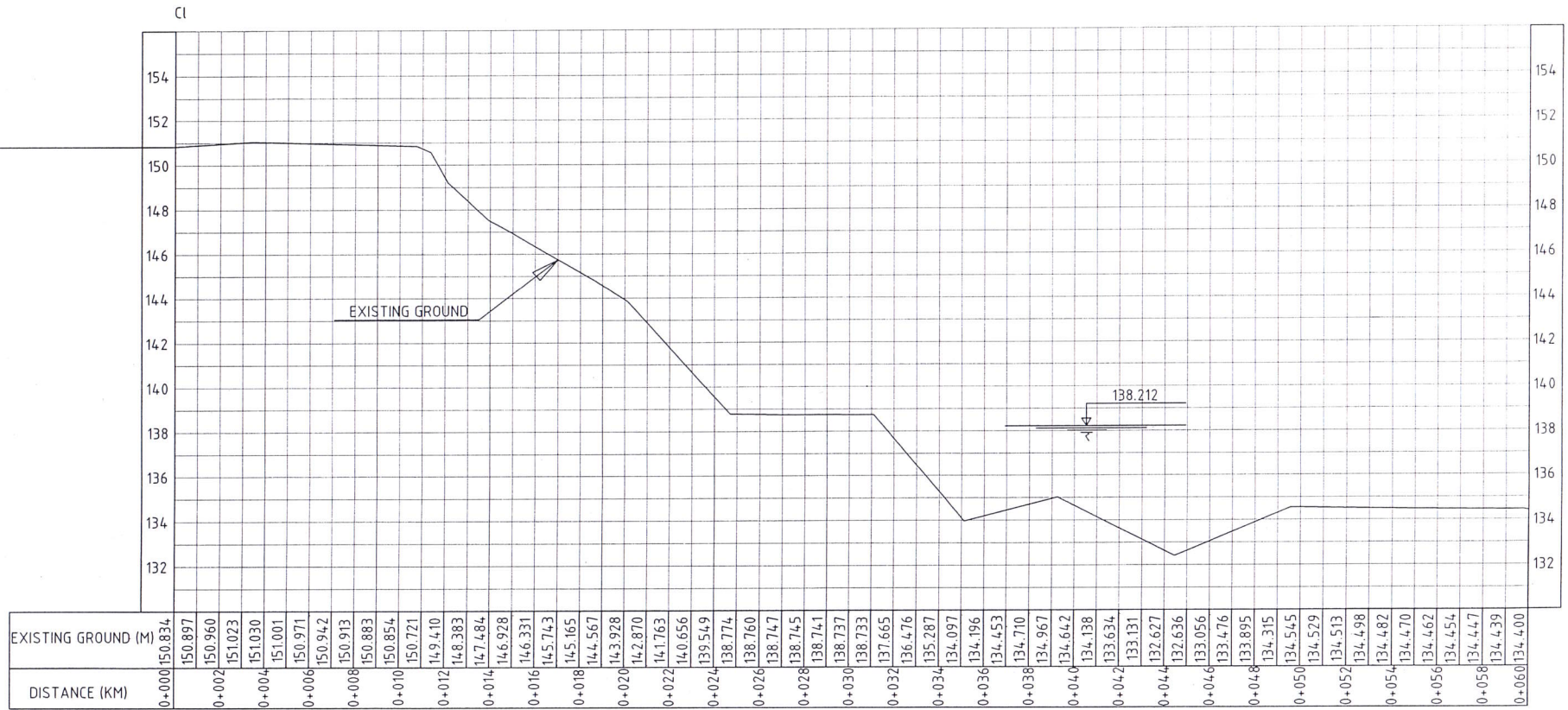


1 : 1000

<p>LAO PDR Peace Independence Democracy Unity Prosperity</p> <p>Department of Public Works and Transport Bolikhamxay Province</p> <p>The project on riverbank protection works phase II Japan international Cooperation Agency</p> <p><b>PLAN</b></p>	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec. 18. 12.
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12.
	Approved by:	<i>[Signature]</i>	Dec. 18. 12.
	Chief Advisor	<i>[Signature]</i>	Dec. 18. 12.
	Approved by:	<i>[Signature]</i>	Dec. 18. 12.
	Project Manager	<i>[Signature]</i>	Dec. 18. 12.
	Drawing number	PL-01	Page: 04



# CROSS SECTION KM (0+000)



GRAPHIC SCALE

( IN METERS )

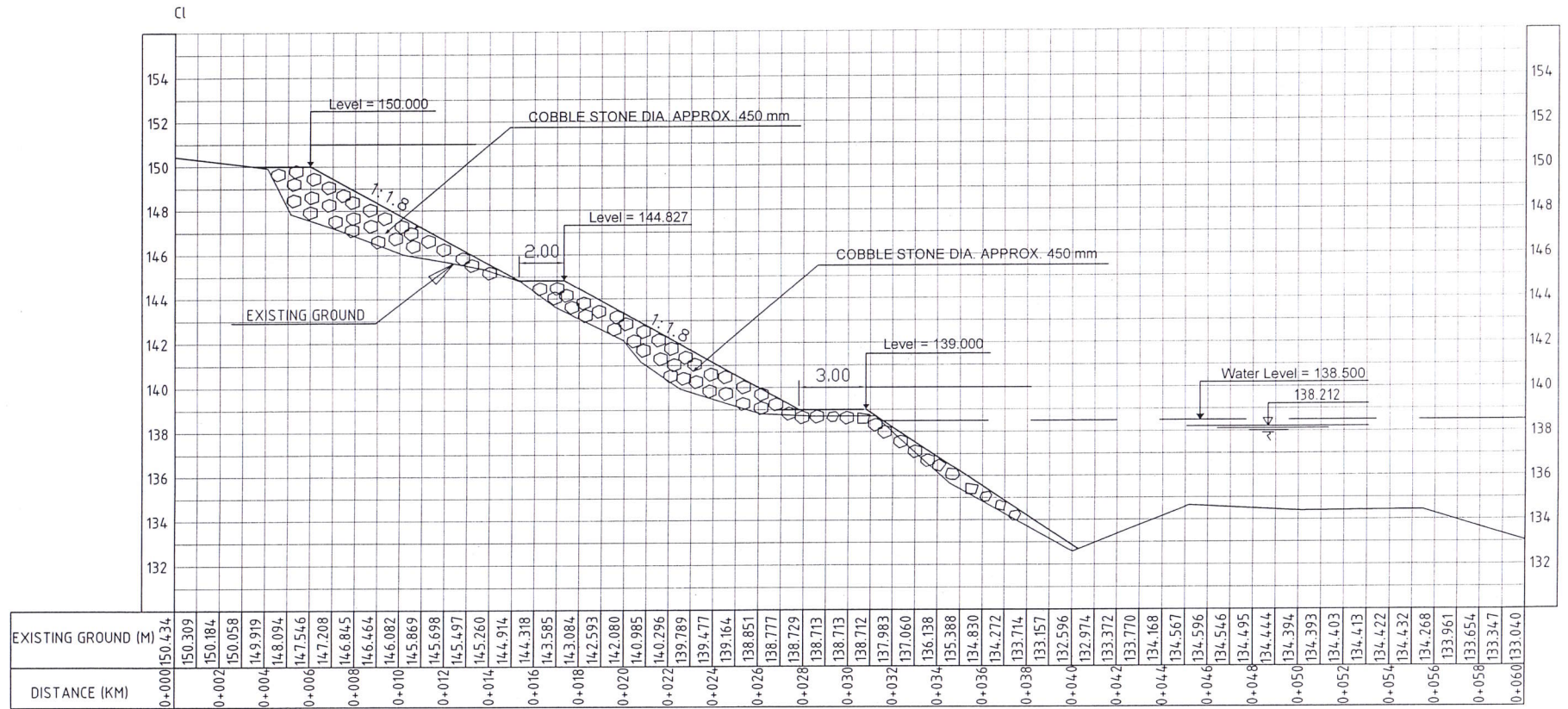


1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity  Department of Public Works and Transport Bolikhamxay Province  The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec 18, 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec 18, 12
	Approved by:	<i>[Signature]</i>	Dec 18, 12
Chief Advisor	<i>[Signature]</i>	Dec 18, 12	
Approved by:	<i>[Signature]</i>	Dec 18, 12	
Project Manager	<i>[Signature]</i>		
Drawing number	CR-01	Page: 05	

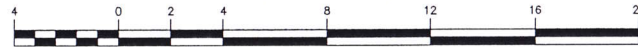
CROSS SECTION

# CROSS SECTION KM (0+018,0+020)



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( IN METERS )

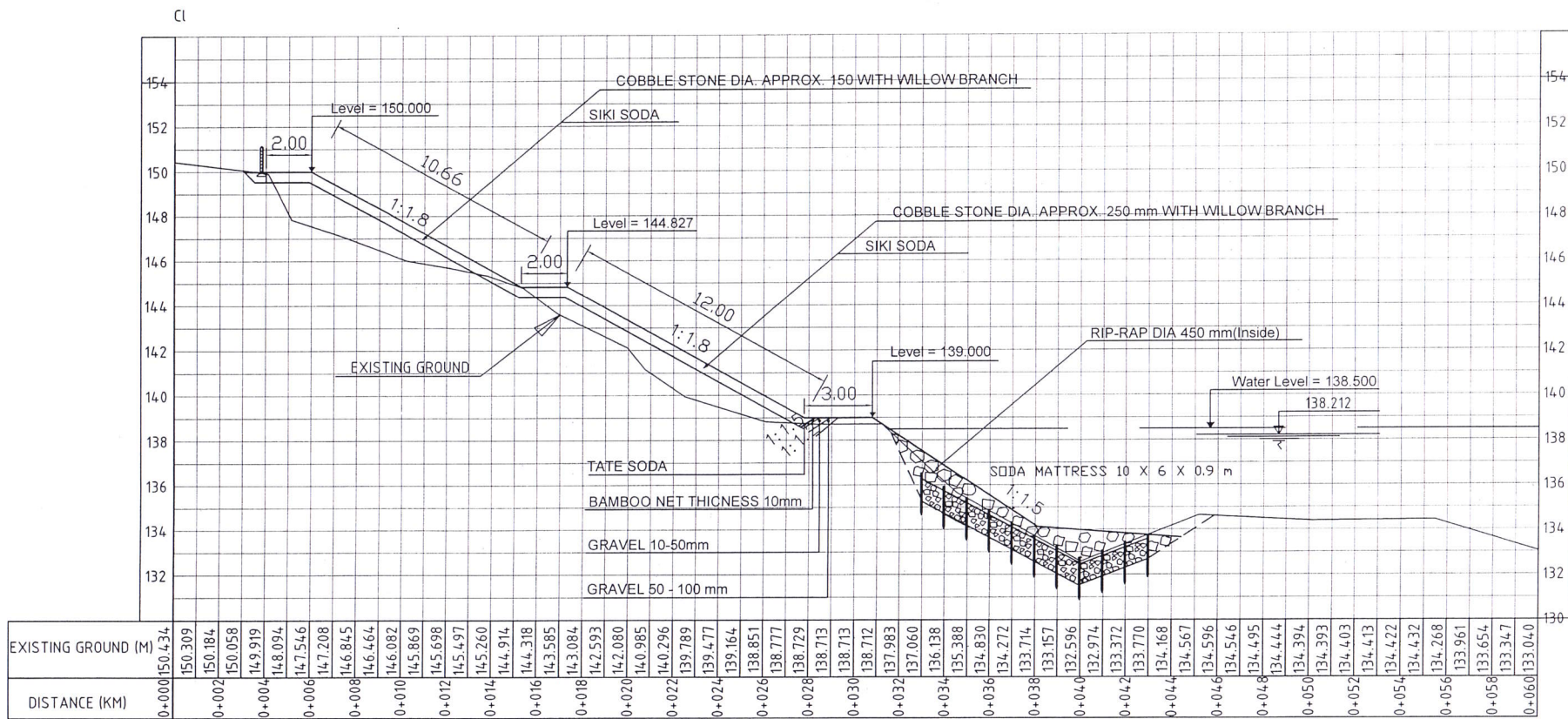


1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
Department of Public Works and Transport Bolikhamxay Province	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
The project on riverbank protection works phase II	JICA Expert design	<i>[Signature]</i>	Dec 18. 12
	Approved by:		
Japan international Cooperation Agency	Chief Advisor	<i>[Signature]</i>	Dec. 18. 12
	Approved by:		
CROSS SECTION	Project Manager	<i>[Signature]</i>	Dec 18. 12
	Drawing number	CR-02	Page: 06

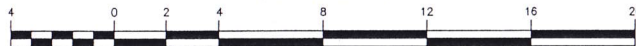


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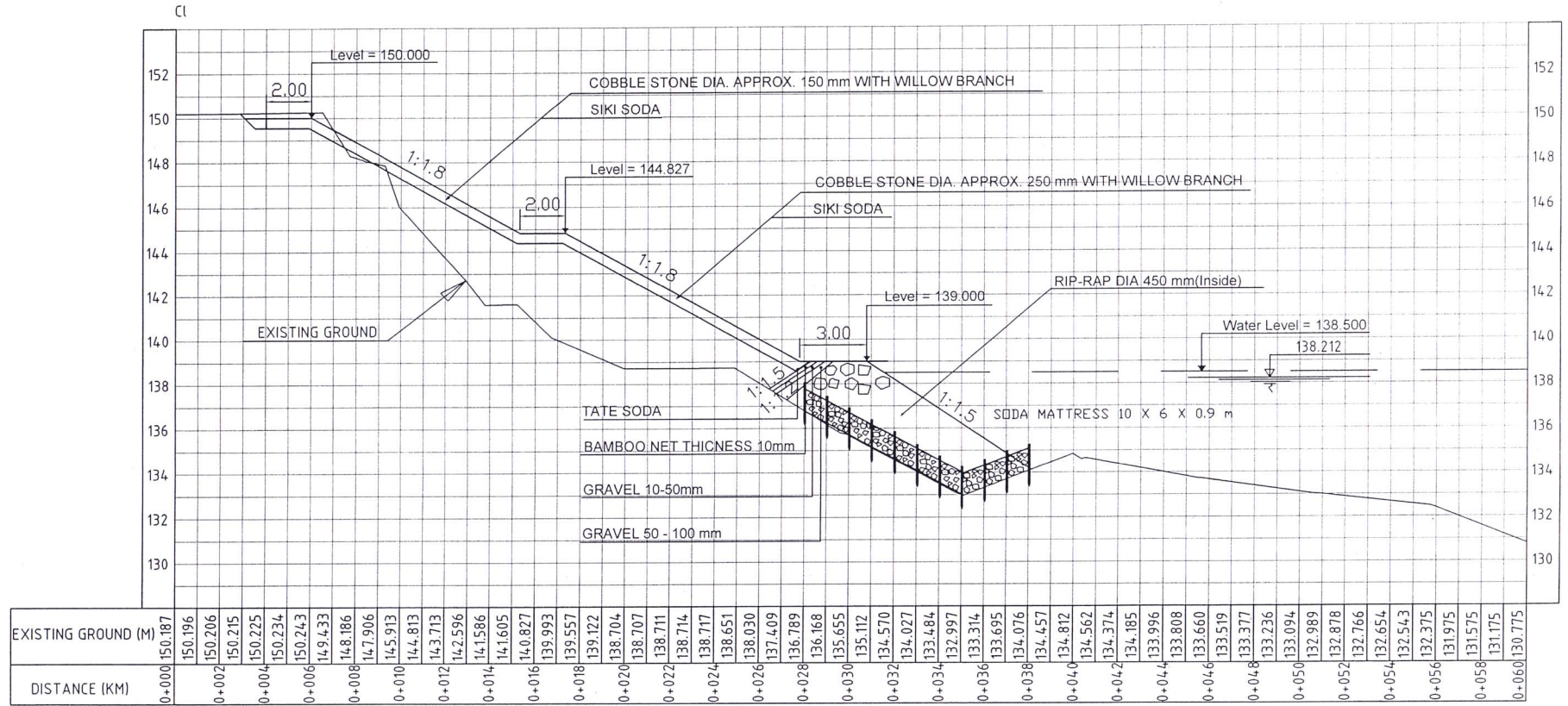
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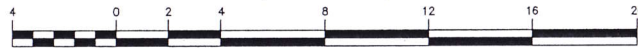
LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
The project on riverbank protection works phase II Japan international Cooperation Agency	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
CROSS SECTION	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
	Chief Advisor	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
	Project Manager	<i>[Signature]</i>	
	Drawing number	CR-03	Page: 07

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GRAPHIC SCALE

( IN METERS )

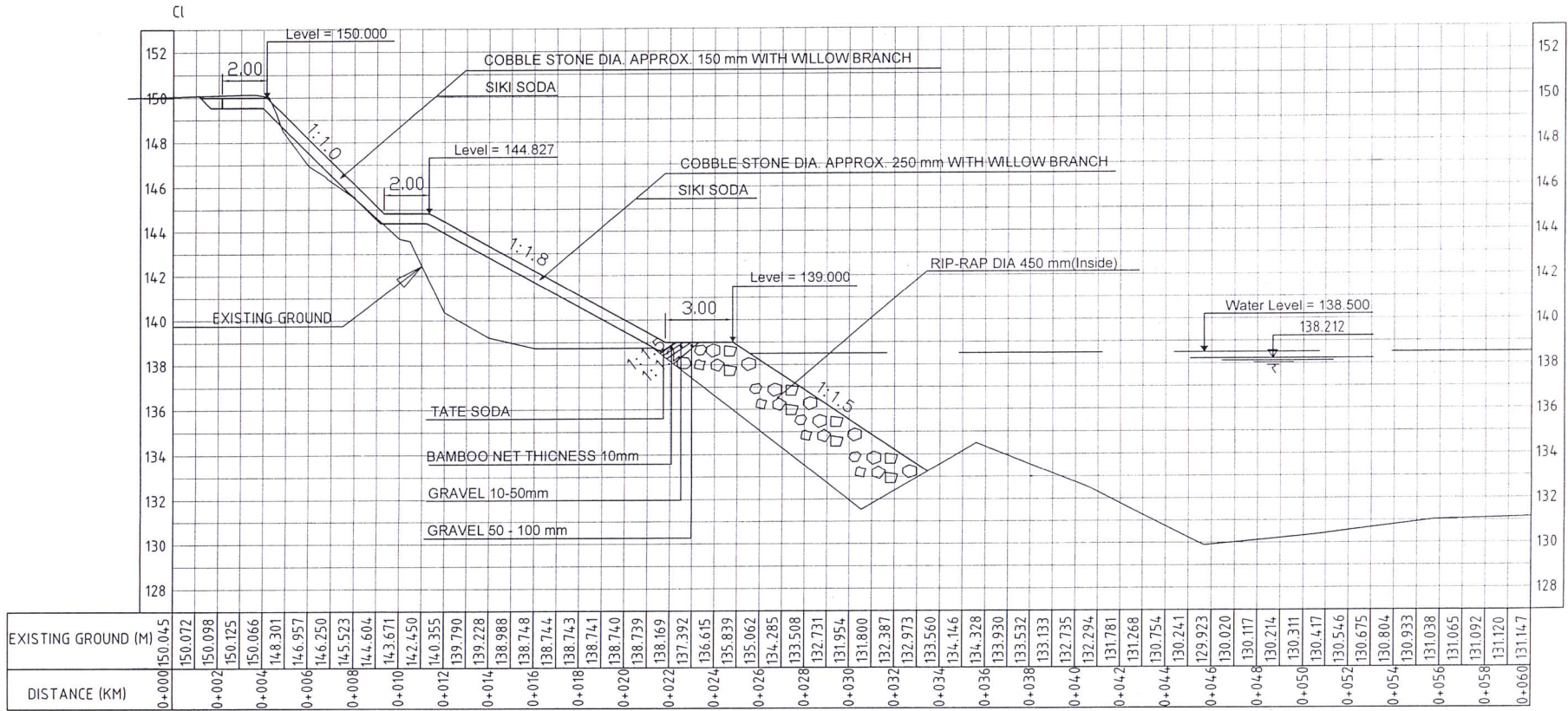


1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
Department of Public Works and Transport Bolikhamxay Province	C/P	<i>[Signature]</i>	Dec. 18. 12.
	Check by:		
The project on riverbank protection works phase II Japan international Cooperation Agency	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12.
	Approved by:	<i>[Signature]</i>	Dec. 18. 12.
CROSS SECTION	Chief Advisor	<i>[Signature]</i>	Dec. 18. 12.
	Approved by:	<i>[Signature]</i>	Dec. 18. 12.
	Project Manager	<i>[Signature]</i>	Dec. 18. 12.
	Drawing number	CR-04	Page: 08



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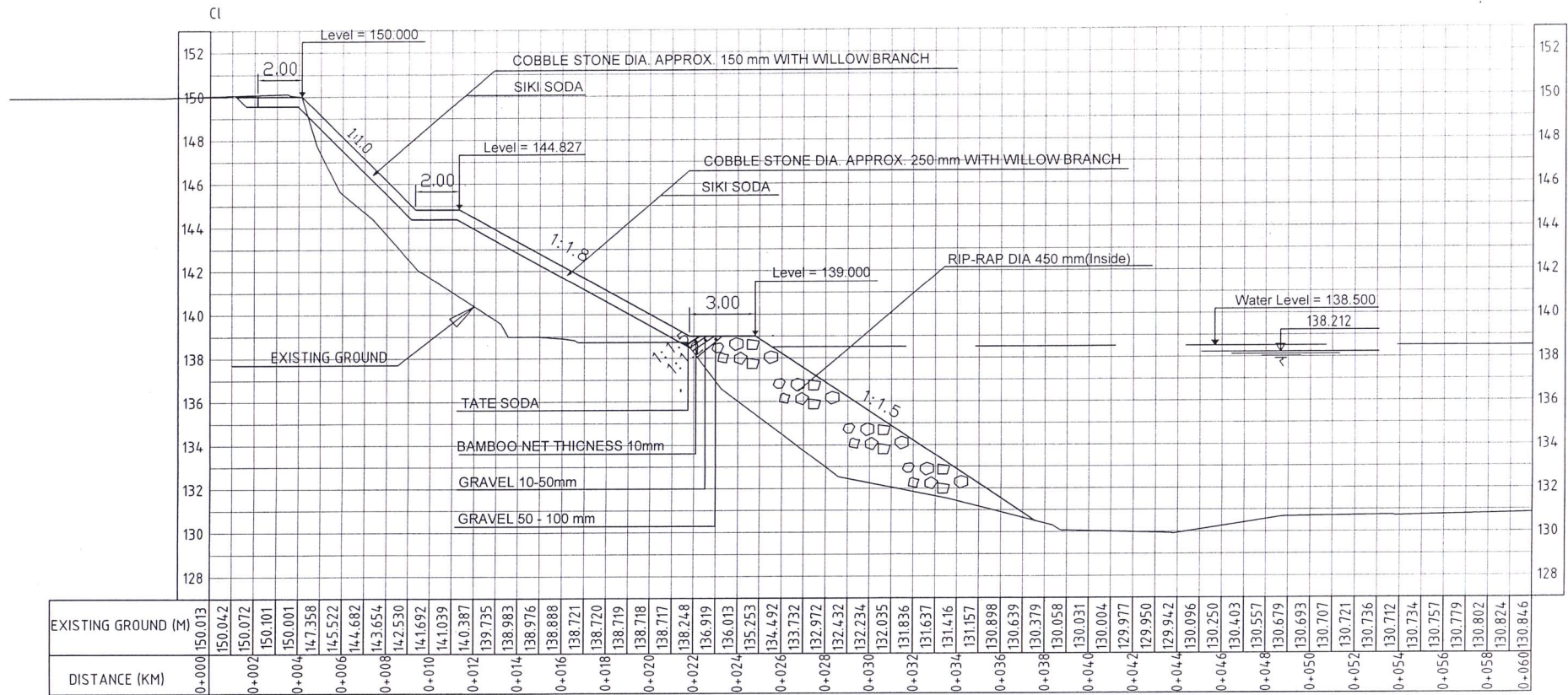
( IN METERS )



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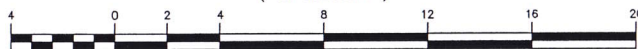
LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
Chief Advisor	<i>[Signature]</i>	Dec. 18. 12	
Approved by:	<i>[Signature]</i>	Dec. 18. 12	
Project Manager	<i>[Signature]</i>	Dec. 18. 12	
CROSS SECTION	Drawing number	CR-05	Page: 09

# CROSS SECTION KM (0+080)



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( IN METERS )

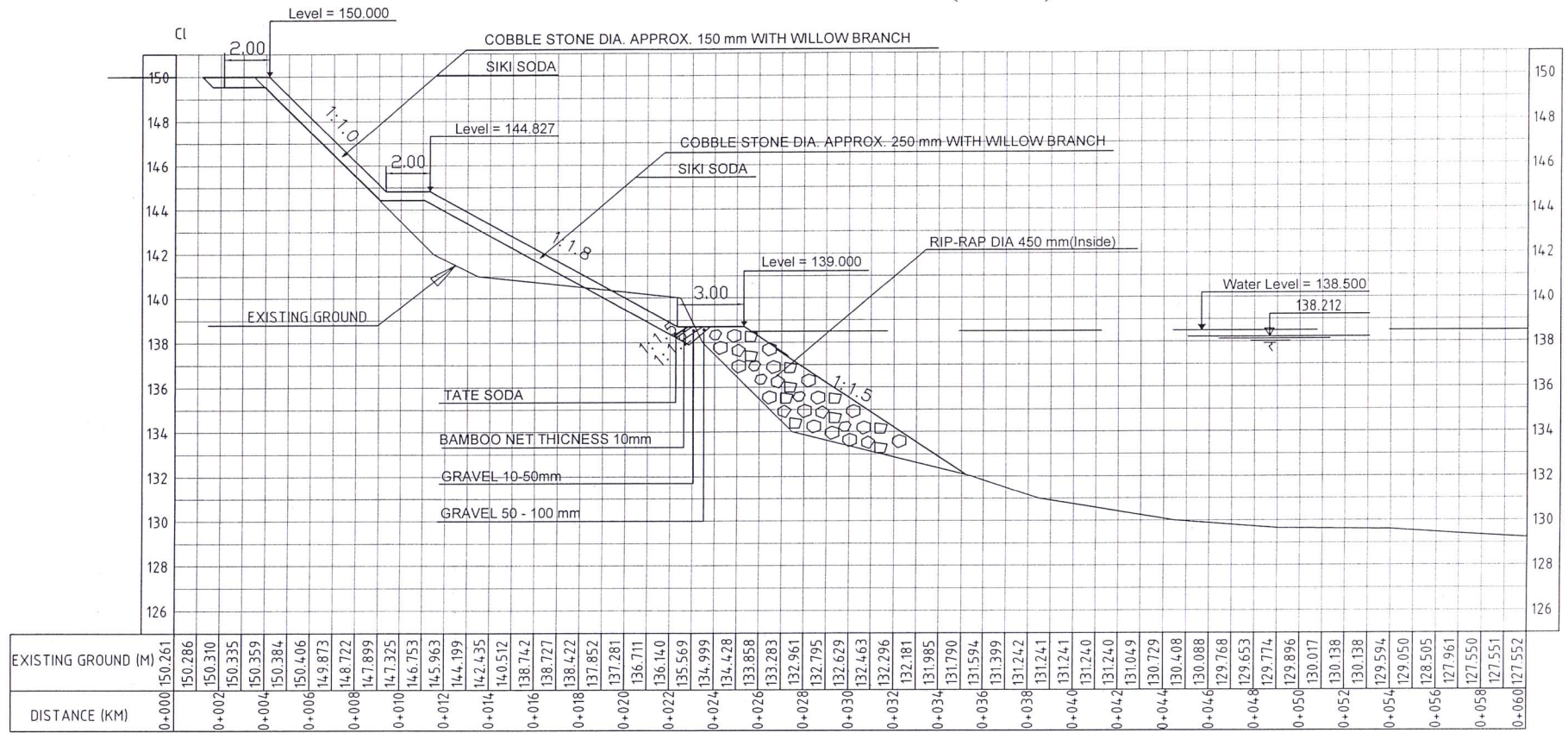


1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec 18, 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec 18, 12
Approved by: Chief Advisor	<i>[Signature]</i>	<i>[Signature]</i>	Dec 18, 12
	Approved by:	<i>[Signature]</i>	
	Project Manager	<i>[Signature]</i>	Dec 18, 12
CROSS SECTION	Drawing number	CR-06	Page: 10



# CROSS SECTION KM (0+086)



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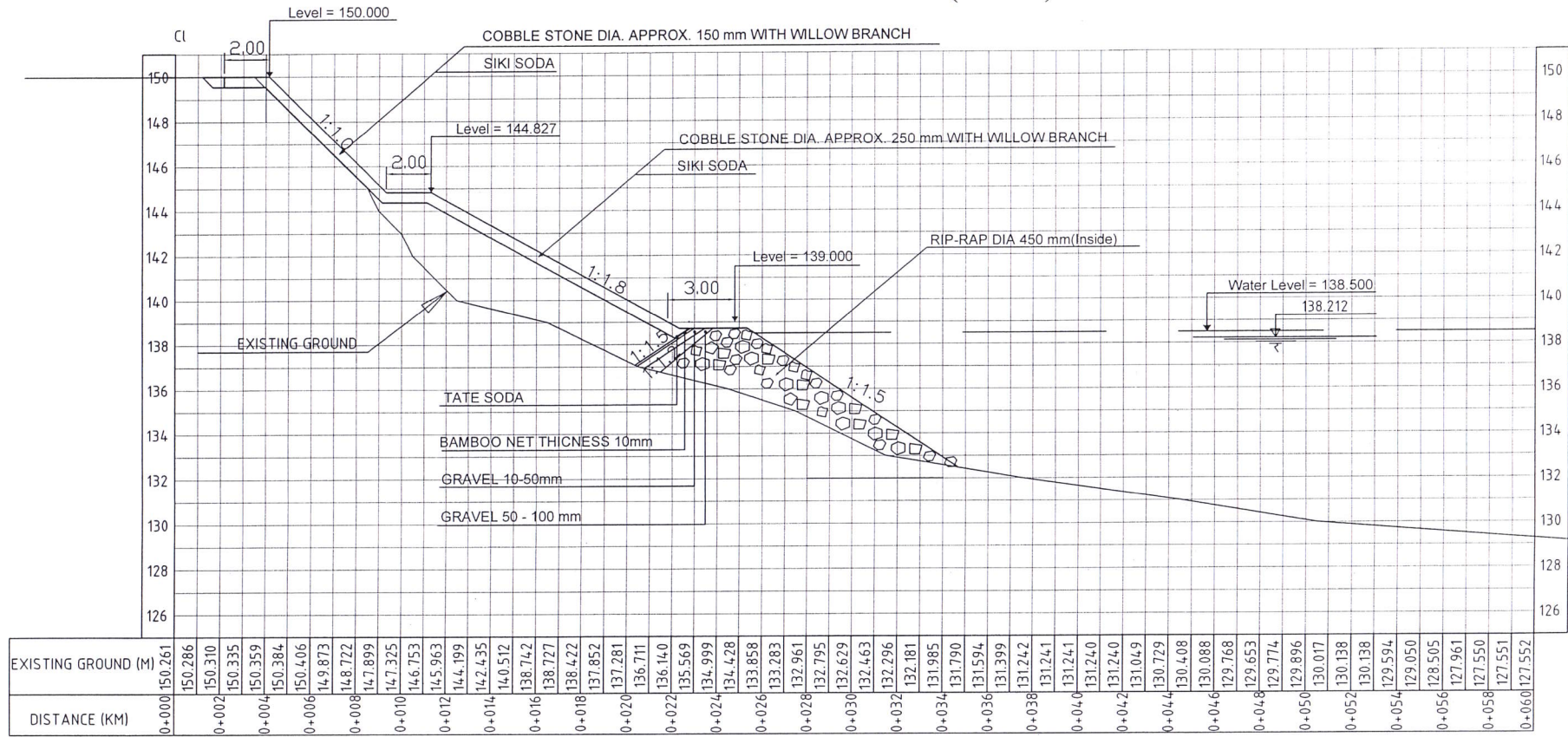
( IN METERS )



1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec 18, 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec 18, 12
	Approved by:	<i>[Signature]</i>	Dec 18, 12
	Chief Advisor	<i>[Signature]</i>	
	Approved by:	<i>[Signature]</i>	Dec 18, 12
	Project Manager	<i>[Signature]</i>	
<b>CROSS SECTION</b>	Drawing number	CR-07	Page: 11

# CROSS SECTION KM (0+095)



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( IN METERS )

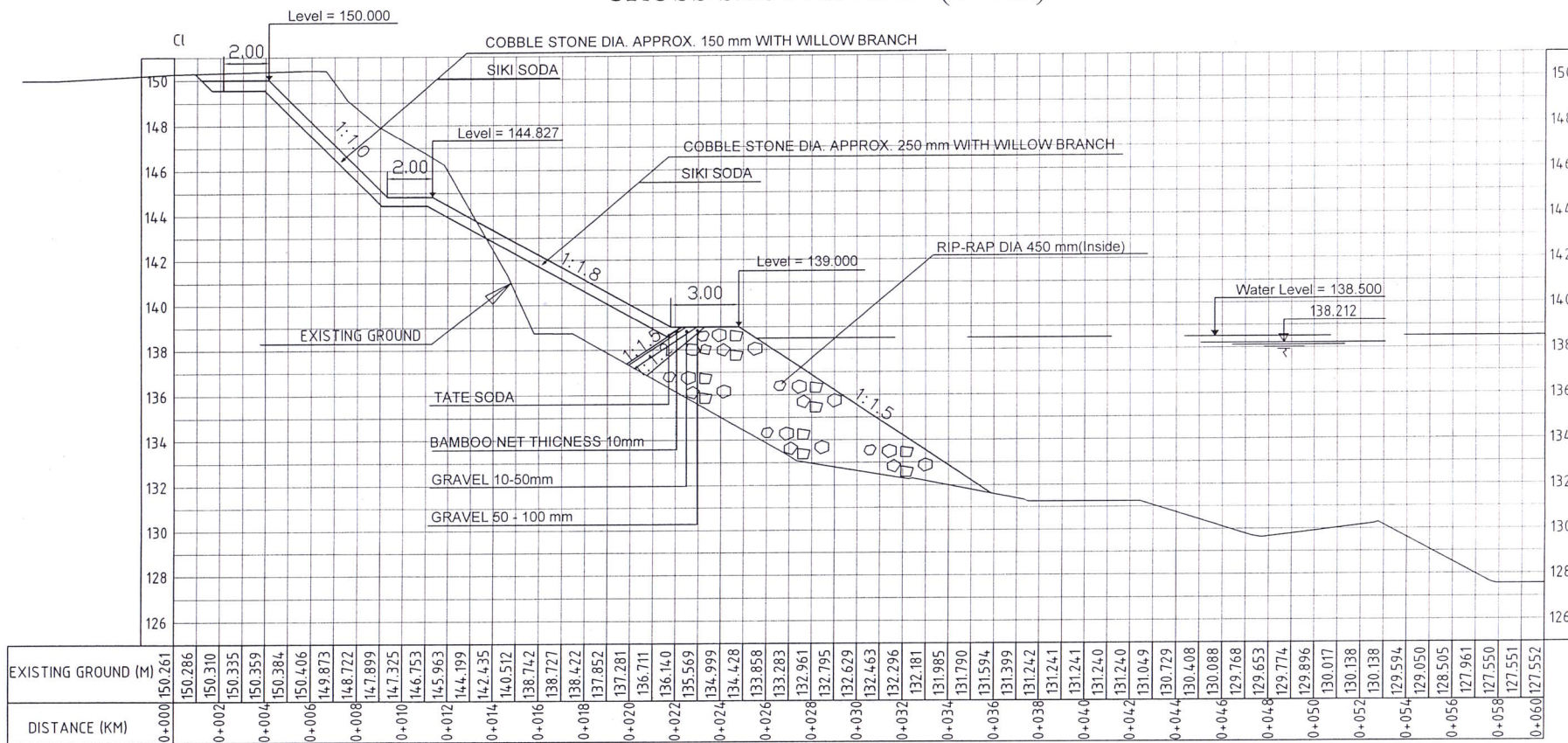


1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity	Name:		
	Design by:	<i>[Signature]</i>	
Department of Public Works and Transport Bolikhamxay Province	C/P	<i>[Signature]</i>	Dec. 18.12
	Check by:		
The project on riverbank protection works phase II	JICA Expert design	<i>[Signature]</i>	Dec. 18.12
	Approved by:	<i>[Signature]</i>	Dec. 18.12
Japan international Cooperation Agency	Chief Advisor	<i>[Signature]</i>	Dec. 18.12
	Approved by:	<i>[Signature]</i>	Dec. 18.12
CROSS SECTION	Project Manager	<i>[Signature]</i>	Dec. 18.12
	Drawing number	CR-08	Page: 12

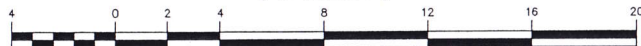


# CROSS SECTION KM (0+100)



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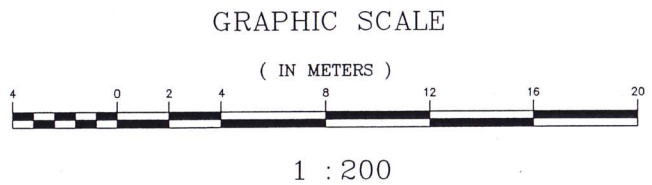
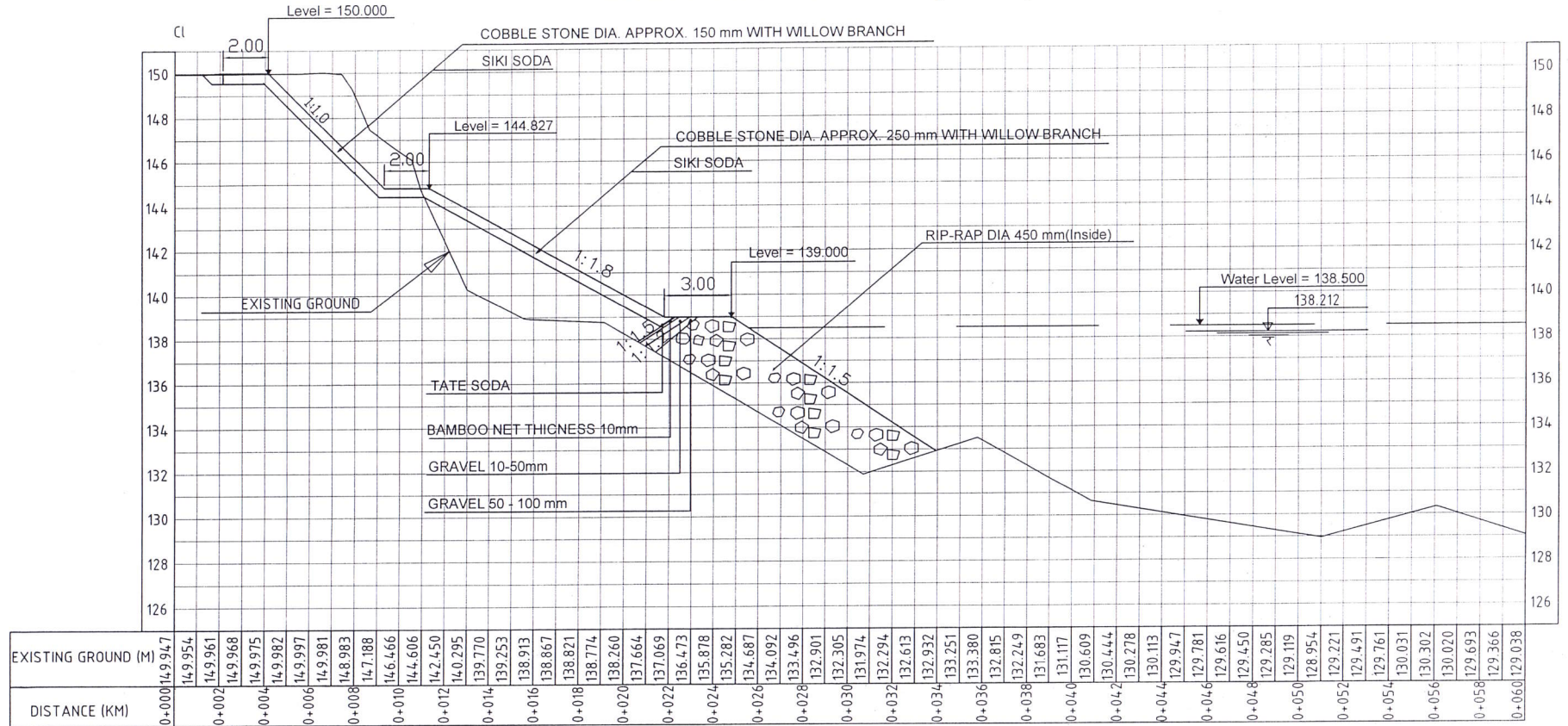
( IN METERS )



1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
Department of Public Works and Transport Bolikhamsay Province	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
The project on riverbank protection works phase II Japan international Cooperation Agency	JICA Expert design	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
CROSS SECTION	Chief Advisor	<i>[Signature]</i>	Dec. 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
	Project Manager	<i>[Signature]</i>	Dec. 18. 12
Drawing number	CR-09		Page: 13

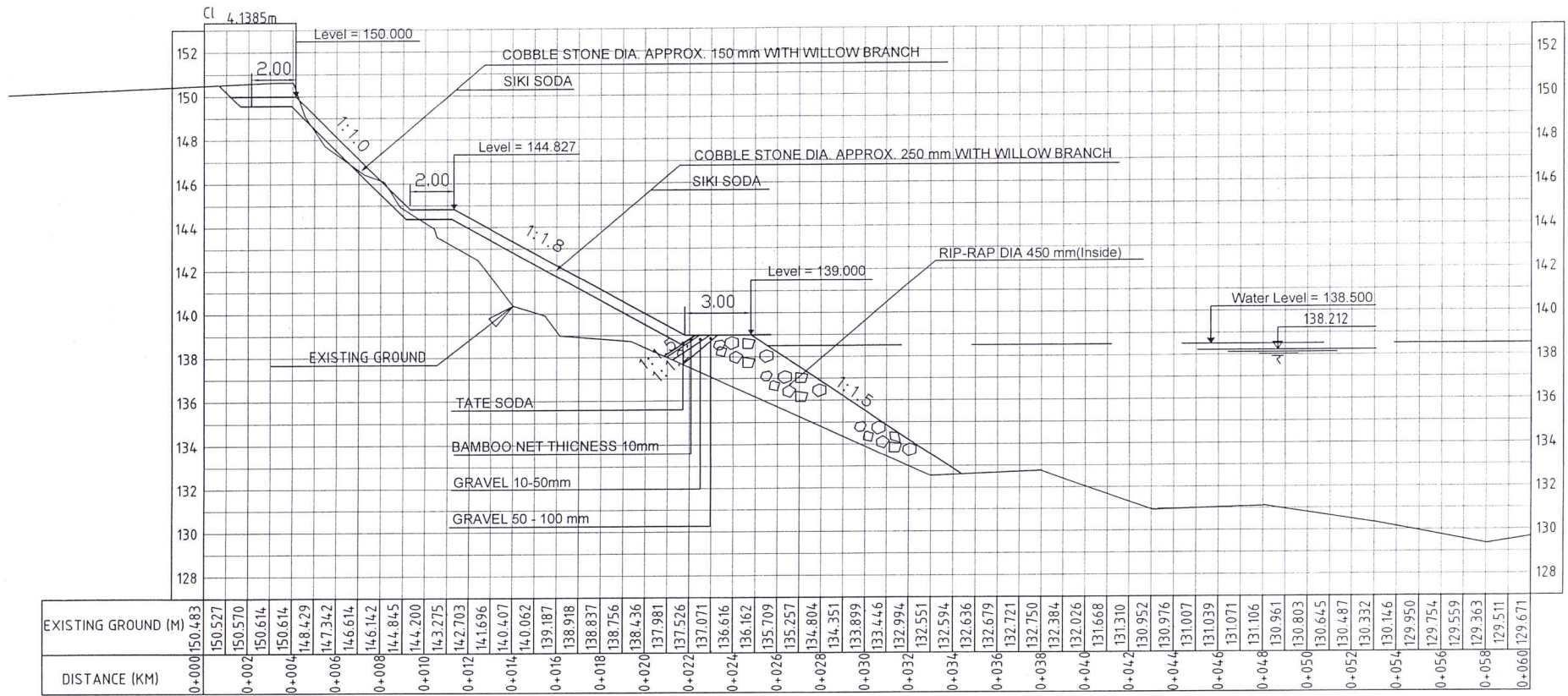
# CROSS SECTION KM (0+120)



LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Balikhamsay Province The project on riverbank protection works phase II Japan international Cooperation Agency  <b>CROSS SECTION</b>	Name:		Signature	Date
	Design by:		<i>[Signature]</i>	
	C/P		<i>[Signature]</i>	Dec. 19. 12
	Check by:			
	JICA Expert design		<i>[Signature]</i>	Dec. 18. 12
	Approved by:		<i>[Signature]</i>	Dec. 18. 12
	Chief Advisor			
	Approved by:		<i>[Signature]</i>	Dec. 18. 12
	Project Manager			
	Drawing number	CR-10		Page: 14



# CROSS SECTION KM (0+140)



GRAPHIC SCALE

( IN METERS )

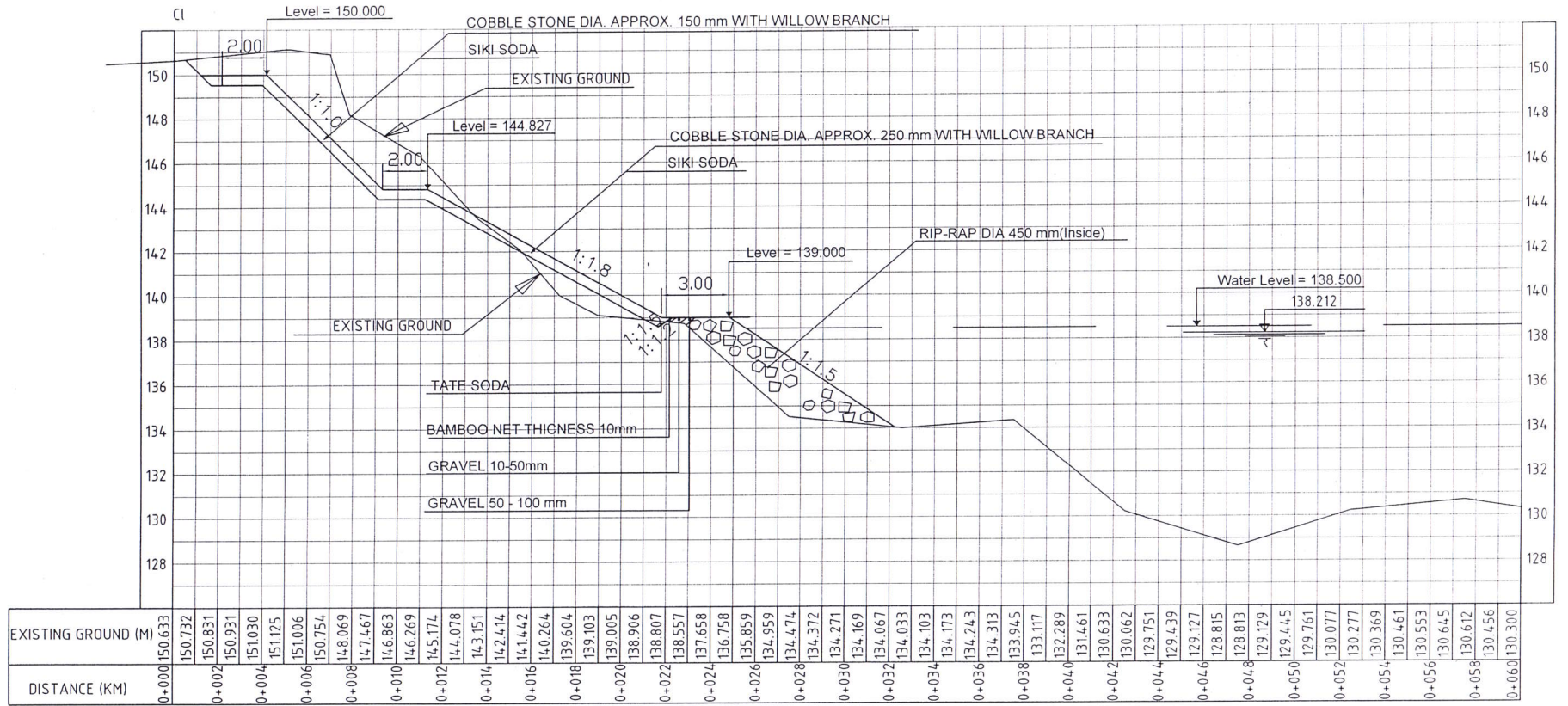


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LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:		Signature	Date
	Design by:		<i>[Signature]</i>	
	C/P		<i>[Signature]</i>	Dec. 18. 12.
	Check by:			
	JICA Expert design		Y. MIMAI	Dec. 18. 12.
	Approved by:		<i>[Signature]</i>	Dec. 18. 12.
Chief Advisor				
Approved by:		<i>[Signature]</i>	Dec 18. 12.	
Project Manager				
Drawing number		CR-11		Page: 15

CROSS SECTION

# CROSS SECTION KM (0+160)



GRAPHIC SCALE

( IN METERS )



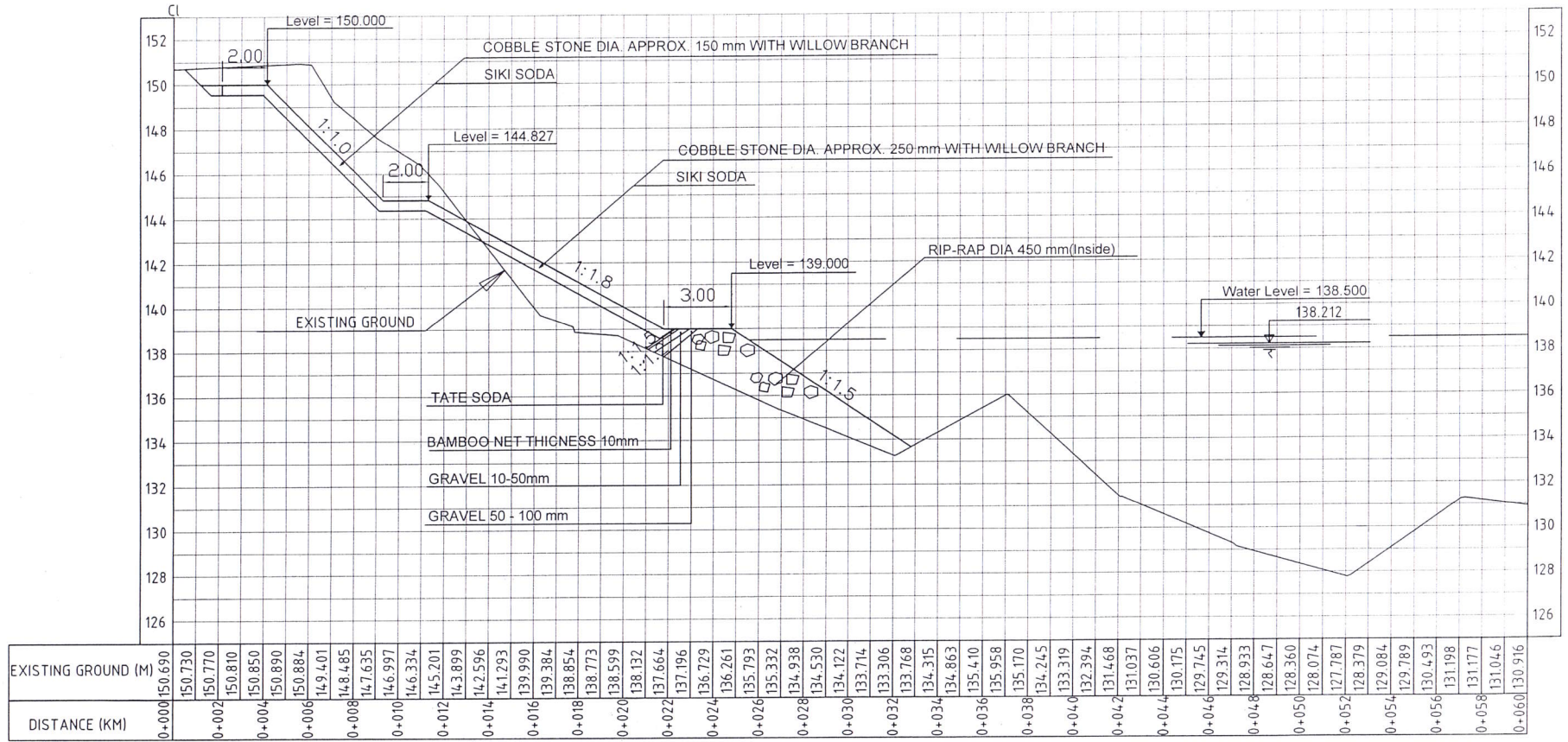
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LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:		Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
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	Approved by:	<i>[Signature]</i>	Dec. 18. 12
Chief Advisor	<i>[Signature]</i>		
Approved by:	<i>[Signature]</i>	Dec. 18. 12	
Project Manager	<i>[Signature]</i>		
Drawing number	CR-12		Page: 16

CROSS SECTION



# CROSS SECTION KM (0+180)



GRAPHIC SCALE

( IN METERS )



1 : 200

LAO PDR Peace Independence Democracy Unity Prosperity Department of Public Works and Transport Bolikhamxay Province The project on riverbank protection works phase II Japan international Cooperation Agency	Name:	Signature	Date
	Design by:	<i>[Signature]</i>	
	C/P	<i>[Signature]</i>	Dec. 18. 12
	Check by:		
	JICA Expert design	<i>[Signature]</i>	Dec 18. 12
	Approved by:	<i>[Signature]</i>	Dec. 18. 12
Chief Advisor	<i>[Signature]</i>		
Approved by:	<i>[Signature]</i>	Dec 18. 12	
Project Manager	<i>[Signature]</i>		
Drawing number	CR-13	Page: 17	

CROSS SECTION