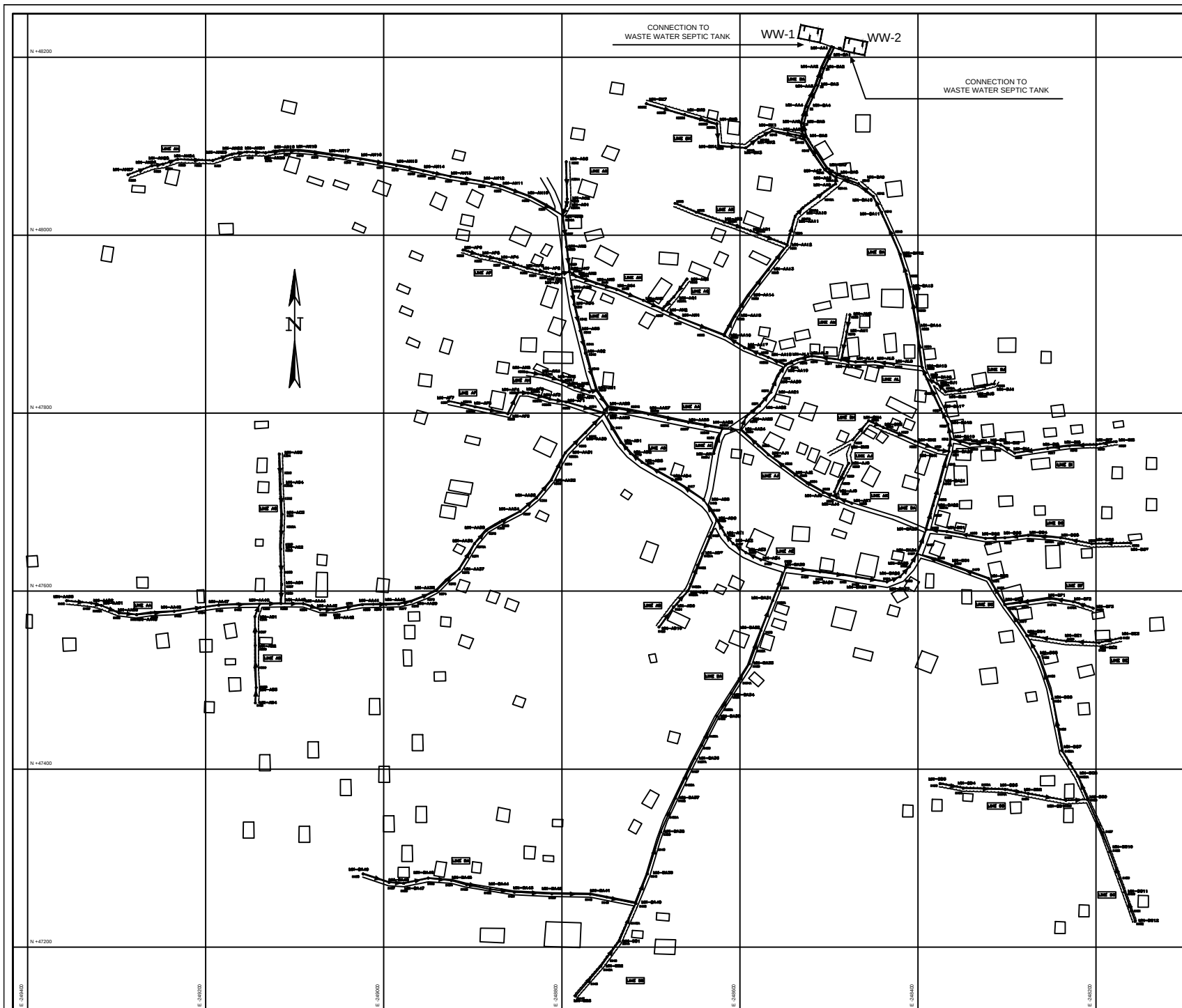
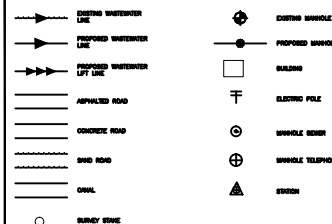


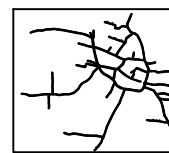


- NOTES:**
- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
 - 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR, AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW.
 - 3- WHERE THE PIPE COVER IS LESS THAN 80cm AND MORE THAN 4m, A CONCRETE SURROUND WILL BE EXECUTED.
 - 4- WHEREVER THERE IS AN INTERSECTION WITH A WATER SUPPLY LINE A CONCRETE SURROUND WILL BE EXECUTED.
 - 5- THE PROPOSED PIPES SHOULD BE Laid BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
 - 6- ALL PIPES SHOULD BE EXECUTED IN PUBLIC OR EXPROPRIATED ROAD.

PLAN LEGEND
SEWER NETWORK



KEY PLAN



Rev.	Date	By	Rev.	Date	By

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

BD BUREAU TECHNIQUE POUR LE DEVELOPPEMENT
JUL ED DB - HAJAL Bldg PHONE:(04) 712157/712158 (03) 291016
P.O.BOX70492 - ANTILIS FAX : (04) 712159

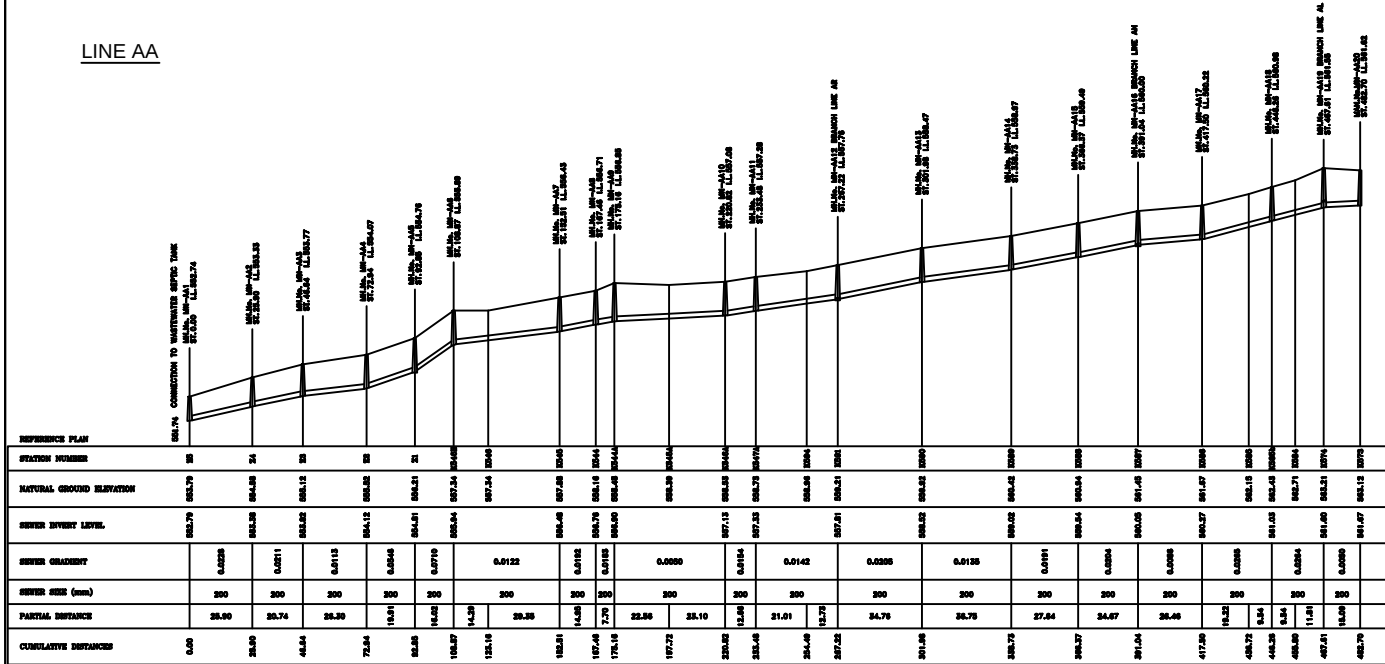
**WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISSE-QARHA**

KNAISSE WASTEWATER NETWORK	SYSTEM A & B PLAN
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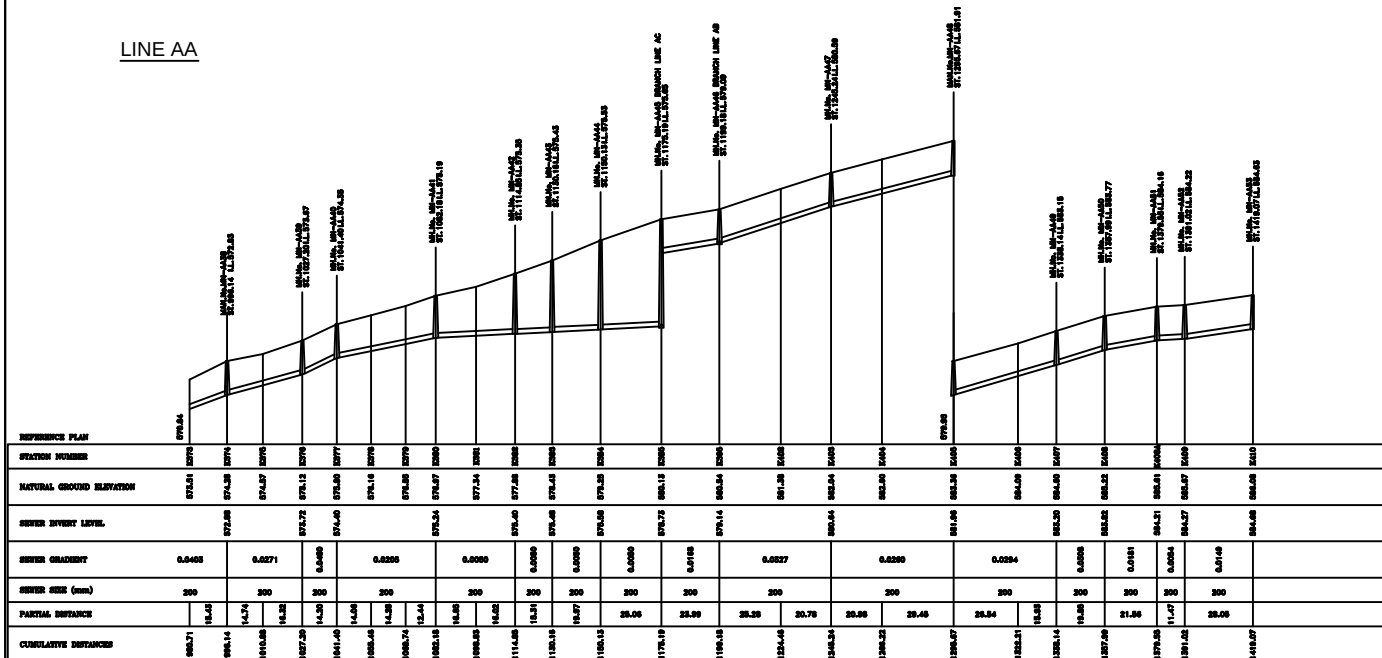
FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACHK	M. DIMACHK	N. HOSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	1:2000	1/1	447WW-SN-01

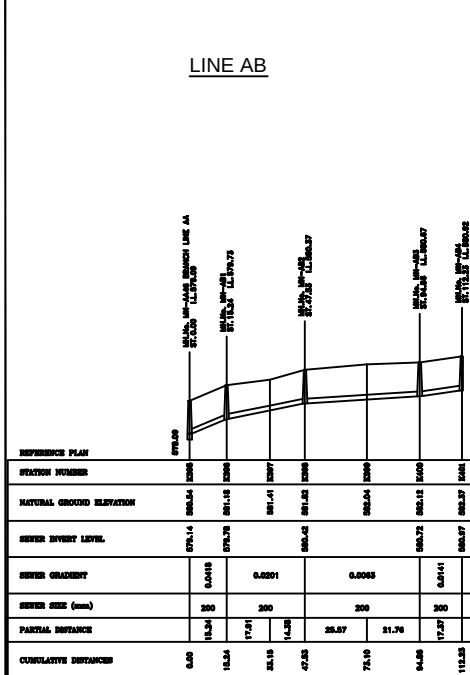
LINE AA



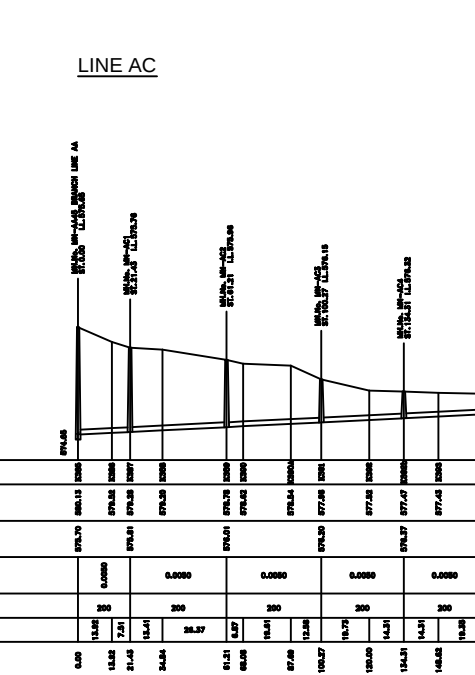
LINE AA



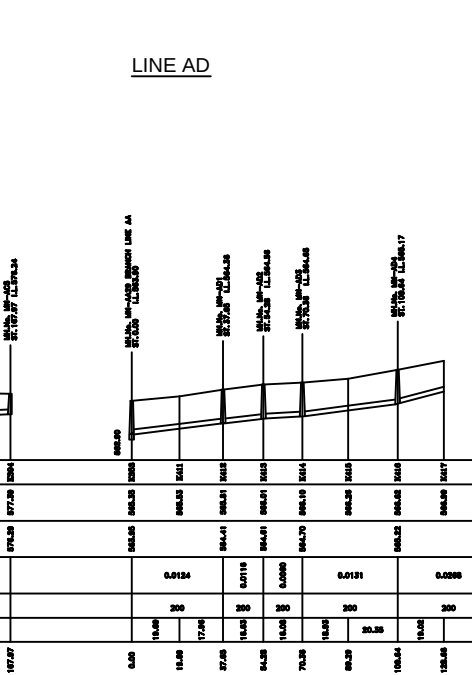
LINE AB



LINE AC



LINE AD



- NOTES:**
- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
 - 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT OF THE NEW MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW AFTER GETTING THE APPROVAL FROM THE ENGINEER.
 - 3- MINIMUM PIPE COVER SHALL BE 1.0 METRE AND MORE THAN 4M, A CONCRETE SURROUND SHALL BE EXECUTED.
 - 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUND SHALL BE EXECUTED.
 - 5- FOR MANHOLES DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
 - 6- FOR STANDARD DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
 - 7- FOR THE LATERAL CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
 - 8- THE PROPOSED PIPES SHALL BE LAYED BY SLOPE INTO CONSIDERATION THE PROFILES OF THE EXISTING PIPES AND UTILITIES.
 - 9- FOR PLAN DETAILS REFER TO DRAWING NO. 4/2079-3/2011

PROFILE LEGEND
SEWER NETWORK

	EXISTING MANHOLE		PROPOSED MANHOLE
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE
<i>Revs.</i>	<i>Dates</i>	<i>Drawn</i>	<i>Checked</i>

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

ED BUREAU TECHNIQUE POUR LE DEVELOPPEMENT

JALL ED DIB - HAJAL Bldg PHONE:(04) 712157/712158 (03) 291016
P.O.BOX:70482 - ANTELAS FAX :(04) 712159

WASTEWATER MANAGEMENT SYSTEM IN AL AMAYER-WADI KHALED HNAIDER-KNAISSE-QARHA

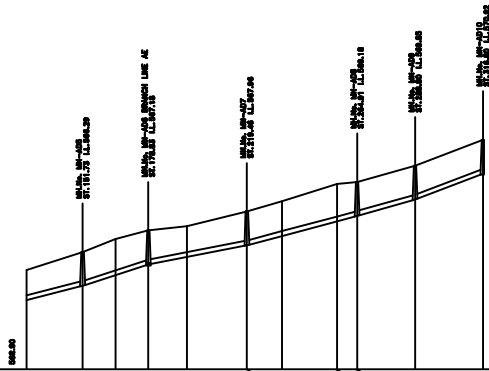
**KNAISSE
WASTEWATER NETWORK**

LINES AA,AB,AC
 PROFILES

FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACHK	M. DIMACHK	N. HOUSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	2/9	447WW-SN-0

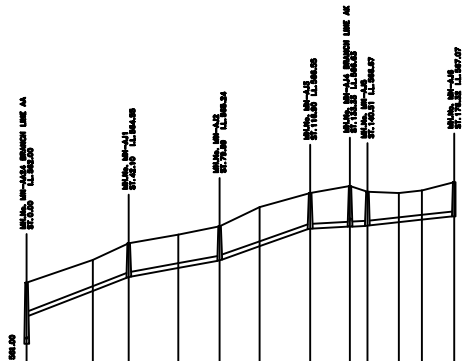
LINE AD



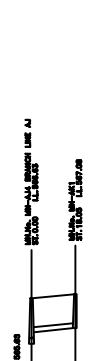
REFERENCE PLAN

STATION 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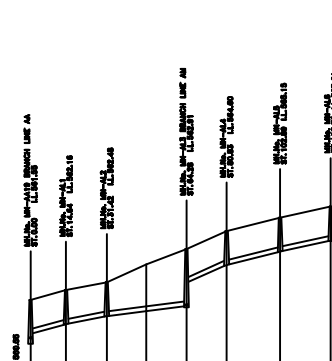
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LINE AK



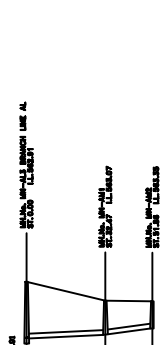
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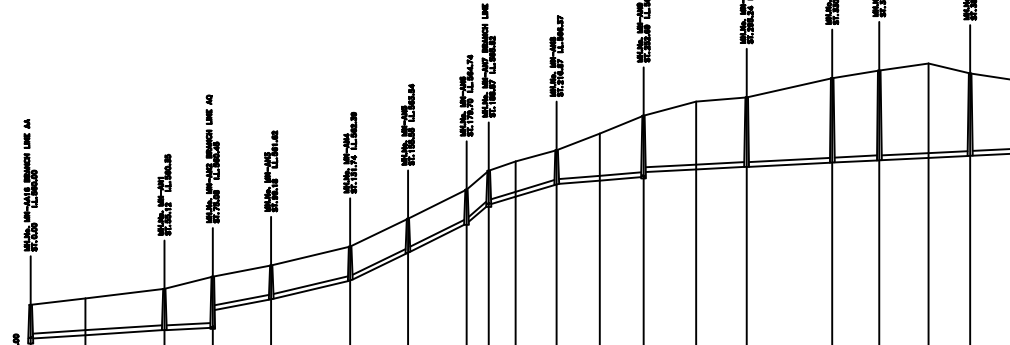
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STATION NUMBER	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509
NATURAL GROUND ELEVATION	562.27	562.31	562.30	562.29	562.28	562.27	562.26	562.25	562.24	562.23
SEWER INVERT LEVEL	562.27	562.31	562.30	562.29	562.28	562.27	562.26	562.25	562.24	562.23
SEWER GRADIENT		0.0088		0.0184		0.0382		0.0090		0.0111
SEWER SIZE (mm)	300	300	300	300	300	300	300	300	300	300
PARTIAL DISTANCE	27.28	14.81	20.46	17.84	14.82	30.79	16.43	7.18	12.88	5.67
CUMULATIVE DISTANCES	0.00	27.28	42.10	62.56	79.39	94.11	114.90	122.08	134.96	140.63

LINE AM



LINE AN



REFERENCE PLAN

STATION NUMBER	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520
NATURAL GROUND ELEVATION	562.31	562.30	562.29	562.28	562.27	562.26	562.25	562.24	562.23	562.22	562.21
SEWER INVERT LEVEL	562.31	562.30	562.29	562.28	562.27	562.26	562.25	562.24	562.23	562.22	562.21
SEWER GRADIENT		0.0080		0.0141		0.0084		0.0080		0.0191	
SEWER SIZE (mm)	300	300	300	300	300	300	300	300	300	300	300
PARTIAL DISTANCE	22.47	18.30	31.28	23.36	22.87	24.10	32.86	33.81	34.18	17.79	18.02
CUMULATIVE DISTANCES	0.00	22.47	40.77	64.13	87.50	111.60	144.46	178.27	212.45	230.24	248.26

ORIGINAL DRAWING SIZE A1

NOTES

- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
- 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR, AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW AFTER GETTING THE APPROVAL FROM THE ENGINEER.
- 3- WHERE THE PIPE COVER IS LESS THAN 80cm AND MORE THAN 4m, A CONCRETE SURROUND WILL BE EXECUTED.
- 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUND SHOULD BE EXECUTED.
- 5- FOR MANHOLES DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 6- FOR TRENCH DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 7- FOR THE LATERAL CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 8- THE PROPOSED PIPES SHOULD BE Laid BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
- 9- FOR PLAN DETAILS SEE DWG 447WW-SN-01

PROFILE LEGEND
SEWER NETWORK

	EXISTING MANHOLE		PROPOSED MANHOLE
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE
Rev.	Date	Drawn	Checked

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

ED BUREAU TECHNIQUE POUR LE DEVELOPPEMENT
JALL ED DB - HAM, Bldg PHONE:(04) 712157/712158 (03) 291016
P.O.BOX70482 - ANTILUS FAX : (04) 712159

WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISE-QARHA

KNAISE
WASTEWATER NETWORK

LINES AJ,AK,AL,AM,AN
PROFILES

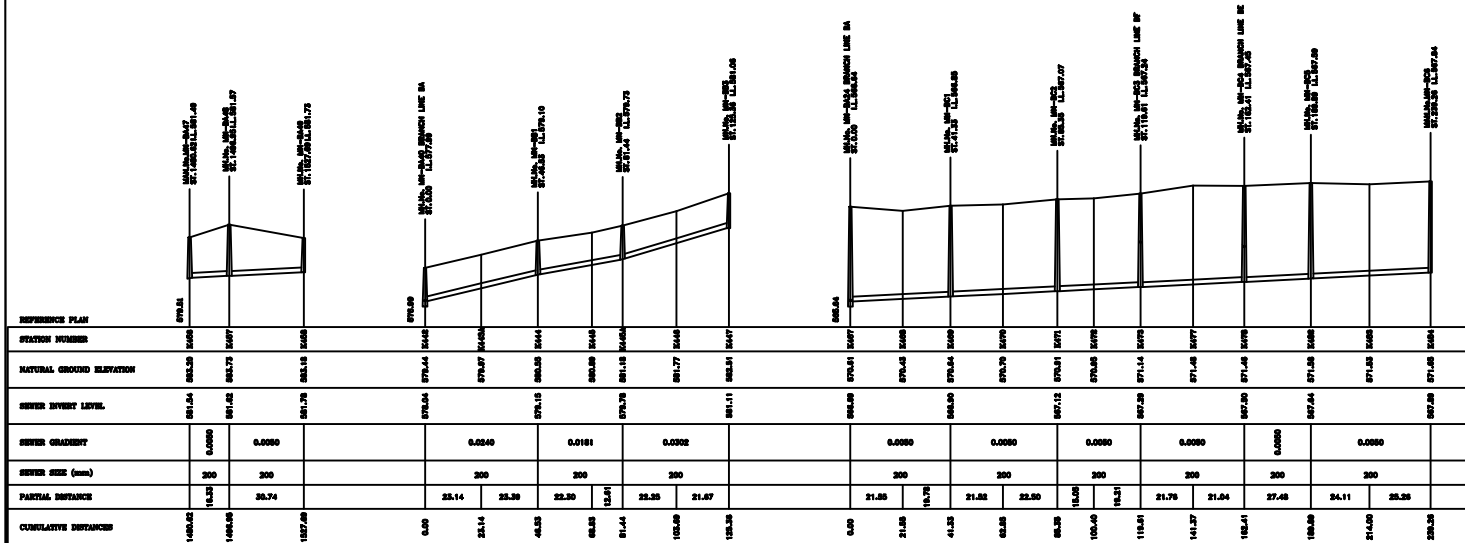
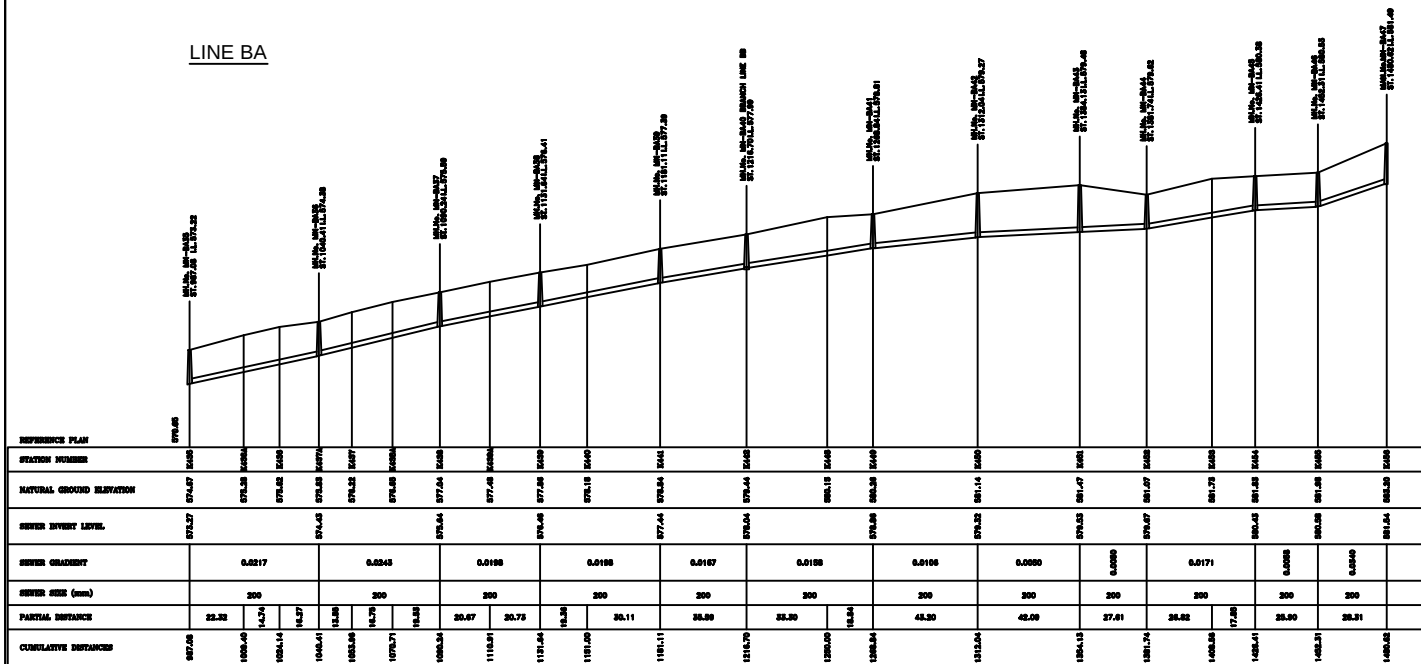
FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACK	M. DIMACK	N. HOUSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	4/9	447WW-SN-05

LINE BA

REFERENCE PLAN

STATION 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NOTES:

- 1- THE CONDITION OF THE EXISTING WASTEWATER LINE IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
- 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT AT THE CONNECTION SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH ANY VARIATION BEFORE THE APPROVAL FROM THE ENGINEER.
- 3- WHERE THE PIPE COVER IS LESS THAN 900mm AND MORE THAN 4m, CONCRETE SURROUND SHOULD BE EXISTING.
- 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUND SHOULD BE DESIGNED.
- 5- FOR MANHOLE DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 6- FOR TRENCH DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 7- FOR LAY-ON CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 8- FOR PROPOSED PIPES SHOULD BE LAY BY TAKING INTO CONSIDERATION THE PRICES OF THE EXISTING PIPES AND UTILITIES.
- 9- THE PLANNED DETAILS SEE DRGS IN 4475W-SM-01.

PROFILE LEGEND					
SEWER NETWORK					
	EXISTING MANHOLE		PROPOSED MANHOLE		
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE		
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE		
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE		
Rev.	Date	Dwn	Dwn	Ch'd	Appr'

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

BUREAU TECHNIQUE POUR LE DEVELOPPEMENT

JALL ED DIB - HAJAL Bldg
P.O.BOX:70402 - ANTELJAS

PHONE:(04) 712157/712158 (03) 291016
FAX : (04) 712159

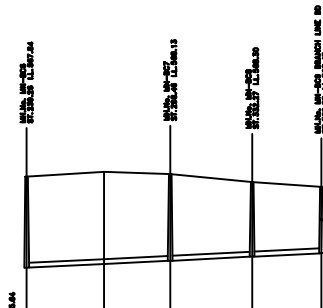
WASTEWATER MANAGEMENT SYSTEM IN AL AMAYER-WADI KHALED HNAIDER-KNAISSE-QARHA

KNAISSE WASTEWATER NETWORK	LINES BA,BB,BC PROFILES
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FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACHK	M. DIMACHK	N. HOUSNI

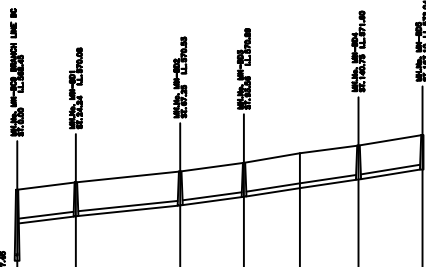
DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	7/9	447WW-SN-0

LINE BC

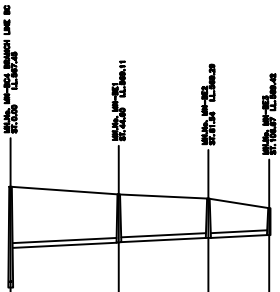


REFERENCE PLAN									
STATION NUMBER	569.04	569.04	569.04	569.04	569.04	569.04	569.04	569.04	569.04
NATURAL GROUND ELEVATION	571.00	571.00	571.00	571.00	571.00	571.00	571.00	571.00	571.00
SEWER INVERT LEVEL	569.04	569.04	569.04	569.04	569.04	569.04	569.04	569.04	569.04
SEWER GRADIENT	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SEWER SIZE (mm)	300	300	300	300	300	300	300	300	300
PARTIAL DISTANCE	51.00	27.00	25.01	25.00	41.00	23.77	30.00	15.00	23.67
CUMULATIVE DISTANCES	51.00	78.00	103.01	128.01	169.01	192.78	222.78	237.78	261.45

LINE BD

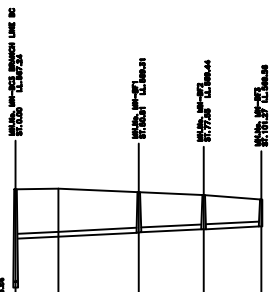


LINE BE

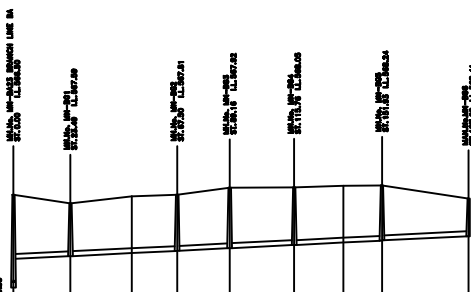


REFERENCE PLAN									
STATION NUMBER	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00
NATURAL GROUND ELEVATION	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00
SEWER INVERT LEVEL	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00	572.00
SEWER GRADIENT	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SEWER SIZE (mm)	300	300	300	300	300	300	300	300	300
PARTIAL DISTANCE	44.00	28.04	28.15	28.15	28.15	28.15	28.15	28.15	28.15
CUMULATIVE DISTANCES	44.00	72.04	100.19	128.34	156.49	184.64	212.79	240.94	269.09

LINE BF



LINE BG



NOTES

- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
- 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR, AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW AFTER GETTING THE APPROVAL FROM THE ENGINEER.
- 3- WHERE THE PIPE COVER IS LESS THAN 80cm AND MORE THAN 4m, A CONCRETE SURROUND WILL BE EXECUTED.
- 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUND SHOULD BE EXECUTED.
- 5- FOR MANHOLES DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 6- FOR TRENCH DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 7- FOR THE LATERAL CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 8- THE PROPOSED PIPES SHOULD BE Laid BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
- 9- FOR PLAN DETAILS SEE DRAWG NO 447WW-SN-01

PROFILE LEGEND
SEWER NETWORK

	EXISTING MANHOLE		PROPOSED MANHOLE
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE
Rev.	Date	Drawn	Checked

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

BD BUREAU TECHNIQUE POUR LE DEVELOPPEMENT
JALL ED DIB - HAM, Bldg. PHONE:(04) 712157/712158 (03) 291016
P.O.BOX:70482 - ANTILAS FAX : (04) 712159

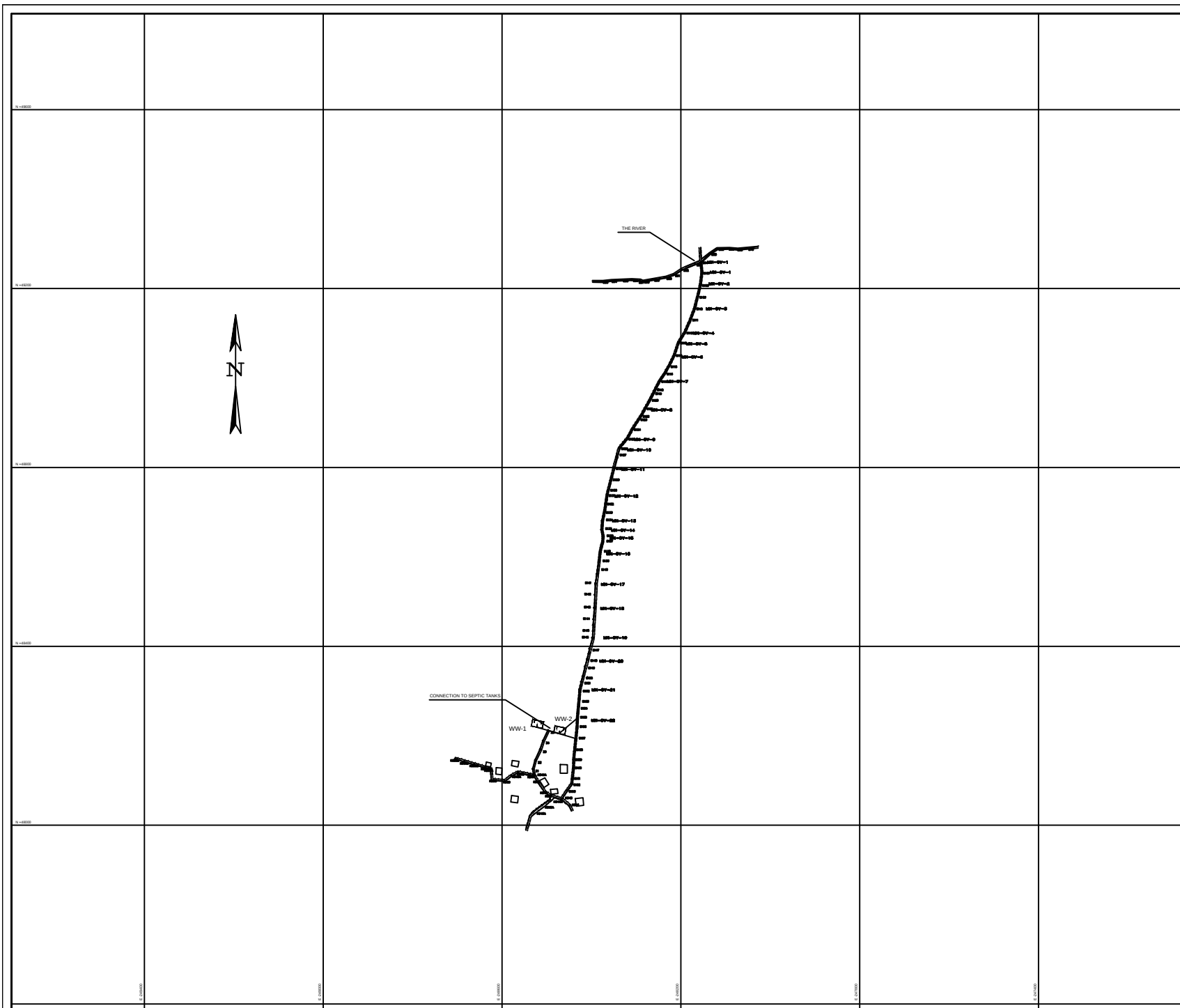
**WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISE-QARHA**

**KNAISE
WASTEWATER NETWORK**

**LINE BC,BD,BE,BF,BG
PROFILES**

FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACK	M. DIMACK	N. HOUSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	8/9	447WW-SN-09



- NOTES:**
- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
 - 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE , THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR , AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW.
 - 3- WHERE THE PIPE COVER IS LESS THAN 80cm AND MORE THAN 4m, A CONCRETE SURROUND WILL BE EXECUTED.
 - 4- WHEREVER THERE IS AN INTERSECTION WITH A WATER SUPPLY LINE A CONCRETE SURROUND WILL BE EXECUTED.
 - 5- THE PROPOSED PIPES SHOULD BE Laid BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
 - 6- ALL PIPES SHOULD BE EXECUTED IN PUBLIC OR EXPROPRIATED ROAD.

PLAN LEGEND	
SEWER NETWORK	
	EXISTING WASTEWATER LINE
	PROPOSED WASTEWATER LINE
	PROPOSED WASTEWATER LIFT LINE
	ASPHALTED ROAD
	CONCRETE ROAD
	SAND ROAD
	GRAVEL
	SURVEY STAKE
	EXISTING MANHOLE
	PROPOSED MANHOLE
	BUILDING
	ELECTRIC POLE
	MANHOLE SEWER
	MANHOLE TELEPHONE
	STATION

Rev.	Date	Design	Drawn	Chk'd	App'd

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

BD BUREAU TECHNIQUE POUR LE DEVELOPEMENT
JALL ED DIB - HAJAL Bldg PHONE:(04) 712157/712158 (03) 291016
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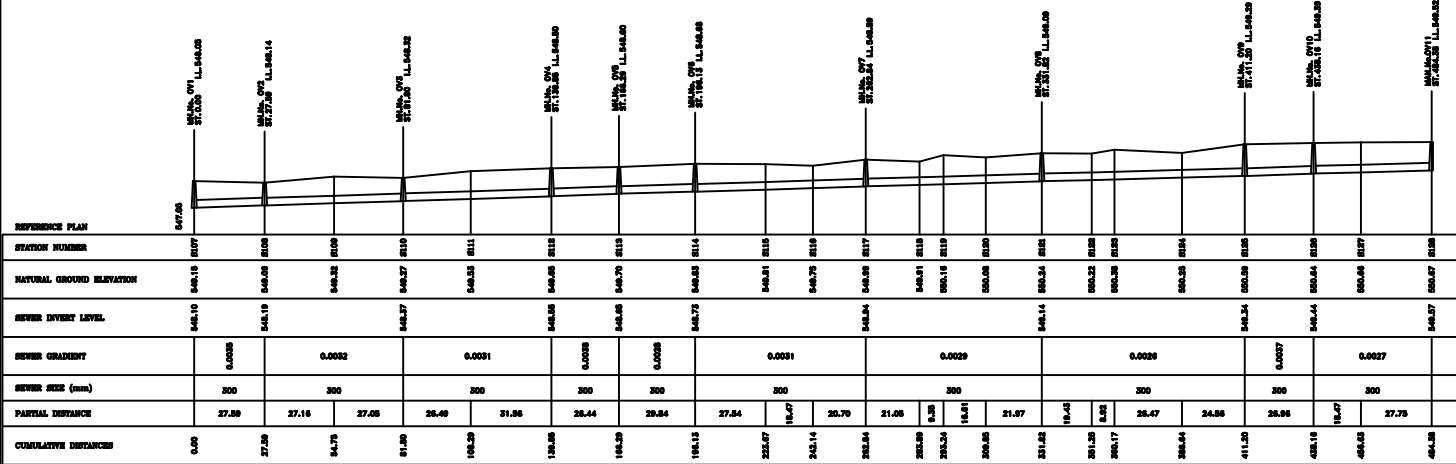
WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISSE-QARHA

KNAISSE-OVER FLOW PIPE WASTEWATER NETWORK	LINE OV PLAN
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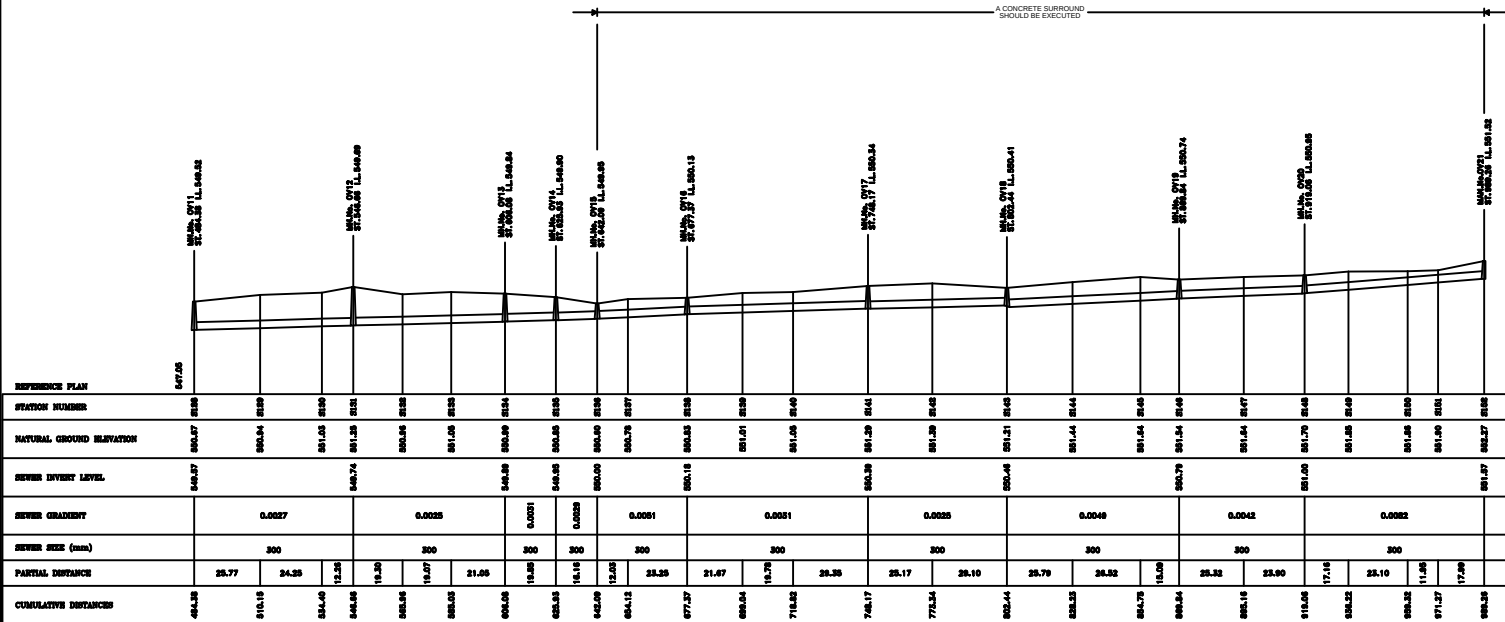
FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACHK	M. DIMACHK	N. HOUSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	1:4000	1/1	447WW-SN-11

LINE OV



LINE OV



NOTES:

- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
- 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR, AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW AFTER GETTING THE APPROVAL FROM THE ENGINEER.
- 3- WHERE THE PIPE COVER IS LESS THAN 800mm AND MORE THAN 4m, A CONCRETE SURROUNDING WILL BE EXECUTED.
- 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUNDING SHOULD BE EXECUTED.
- 5- FOR MANHOLES DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 6- FOR TRENCH DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 7- FOR THE LATERAL CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 8- THE PROPOSED PIPES SHOULD BE LAID BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
- 9- FOR PLAN DETAILS SEE DWGS N° 447WN-SN-11

PROFILE LEGEND

SEWER NETWORK			
	EXISTING MANHOLE		PROPOSED MANHOLE
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE
Rev.	Date	Sign.	Appr'd

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME

BD BUREAU TECHNIQUE POUR LE DEVELOPPEMENT
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WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISSE-QARHA

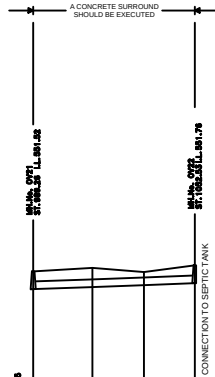
KNAISSE - OVER FLOW PIPE
WASTEWATER NETWORK

LINE OV
PROFILES

FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WN	M. DIMACK	M. DIMACK	N. HOSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	1/2	447WN-SN-12

LINE OV



REFERENCE PLAN				
STATION NUMBER	0+00	0+10	0+24	0+25
NATURAL GROUND ELEVATION	885.37	885.41	885.34	885.31
SEWER INVERT LEVEL	885.37			885.31
SEWER GRADIENT	0.0057			
SEWER SIZE (mm)	300			
PARTIAL DISTANCE		33.16	20.18	16.83
CUMULATIVE DISTANCES	0+00.00	1032.42	1032.40	1032.35

NOTES:

- 1- THE CONDITION OF THE EXISTING WASTEWATER LINES IS TO BE VERIFIED ON SITE BY THE CONTRACTOR.
- 2- WHERE A NEW LINE IS CONNECTED TO AN EXISTING MANHOLE, THE INVERT LEVEL OF THE MANHOLE SHOULD BE VERIFIED ON SITE BY THE CONTRACTOR, AND THE CONTRACTOR WILL TAKE ALL THE MEASURES TO DEAL WITH FLOW AFTER GETTING THE APPROVAL FROM THE ENGINEER.
- 3- WHERE THE PIPE COVER IS LESS THAN 900mm AND MORE THAN 4m, A CONCRETE SURROUNDING WILL BE EXECUTED.
- 4- WHERE THERE IS A CROSSING WITH A WATER SUPPLY LINE, A CONCRETE SURROUND SHOULD BE EXECUTED.
- 5- FOR MANHOLES DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 6- FOR TRENCH DETAILS REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 7- FOR THE LATERAL CONNECTIONS, REFER TO THE PARTICULAR SPECIFICATIONS AND STANDARD DRAWINGS.
- 8- THE PROPOSED PIPES SHOULD BE LAID BY TAKING INTO CONSIDERATION THE PRESENCE OF THE EXISTING PIPES AND UTILITIES.
- 9- FOR PLAN DETAILS SEE DWGS N° 447WW-SN-11

PROFILE LEGEND SEWER NETWORK

	EXISTING MANHOLE		PROPOSED MANHOLE
	EXISTING SEWER PIPE		PROPOSED SEWER PIPE
	EXISTING DROP MANHOLE		PROPOSED DROP MANHOLE
	EXISTING MANHOLE WITH BRANCH LINE		PROPOSED MANHOLE WITH BRANCH LINE
<i>Rev.</i>	<i>Date</i>	<i>Desn.</i>	<i>Drawn</i>
		<i>Chk'd</i>	<i>App'd</i>

REPUBLIC OF LEBANON
MINISTRY OF ENERGY AND WATER
UNITED NATIONS DEVELOPMENT PROGRAMME



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**WASTEWATER MANAGEMENT SYSTEM
IN AL AMAYER-WADI KHALED
HNAIDER-KNAISSE-QARHA**

**KNAISSE - OVER FLOW PIPE
WASTEWATER NETWORK**

**LINE OV
PROFILES**

FILE	DESIGNED BY	DRAWN BY	CHECKED BY
447WW	M. DIMACHK	M. DIMACHK	N. HOUSNI

DATE	SCALE	SHEET No.	DRAWING No.
APRIL 2016	V=1/100 H=1/1000	2/2	447WW-SN-13