



KARACHI WATER & SEWERAGE BOARD

ADDITIONAL 65 MGD WATER SUPPLY SCHEME
FROM HALEJI TO PIPRI, KARACHI

PACKAGE # 03
LAYING OF 72" DIA MILD STEEL PIPE (RISING MAIN)
FROM GHARO PUMPING STATION TO HIGH POINT (FOREBAY)

VOLUME-IV
TENDER DRAWINGS
APRIL, 2018

CONSULTANT:



EA Consulting (Pvt.) Limited

(Formerly Engineering Associates)

CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:






Jers Engineering Consultant

LIST OF DRAWINGS

LIST OF DRAWING

S.NO	DRAWING TITLE	DRAWING NO.
PACKAGE-III		
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14	PLAN & PROFILE (STA = 6+750 TO 7+500)	EA-942-65M-PIII-U-PP11
15	PLAN & PROFILE (STA = 7+500 TO 8+100)	EA-942-65M-PIII-U-PP12
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24	BUTTERFLY VALVE CHAMBER	EA-942-65M-PIII-U-W402
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37	FIRST FLOOR SMALL POWER LIGHTING PLAN OF ENGINEERS OFFICE BLD.	EA-942-65M-PIII-E-1004
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						CLIENT:-		<div></div> <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:-				ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.			
						CONSULTANT:-				IN ASSOCIATION WITH:-		DRAWN	SAIF	TITLE		PACKAGE # 03	
												DESIGNED	SIDRA				
												0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
						ED.NO	DATE			DESCRIPTION	BY	CKD	APR	APPROVED	ALI ASGHAR	Scale / Sheet (A1)	Drawing No. EA-942-65M-PIII-U-LS01
						<div></div> <div>EA Consulting (Pvt.) Limited CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</div>		<div></div> <div>Jers Engineering Consultant</div>									


LOCATION PLAN




NOTE:-
1. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

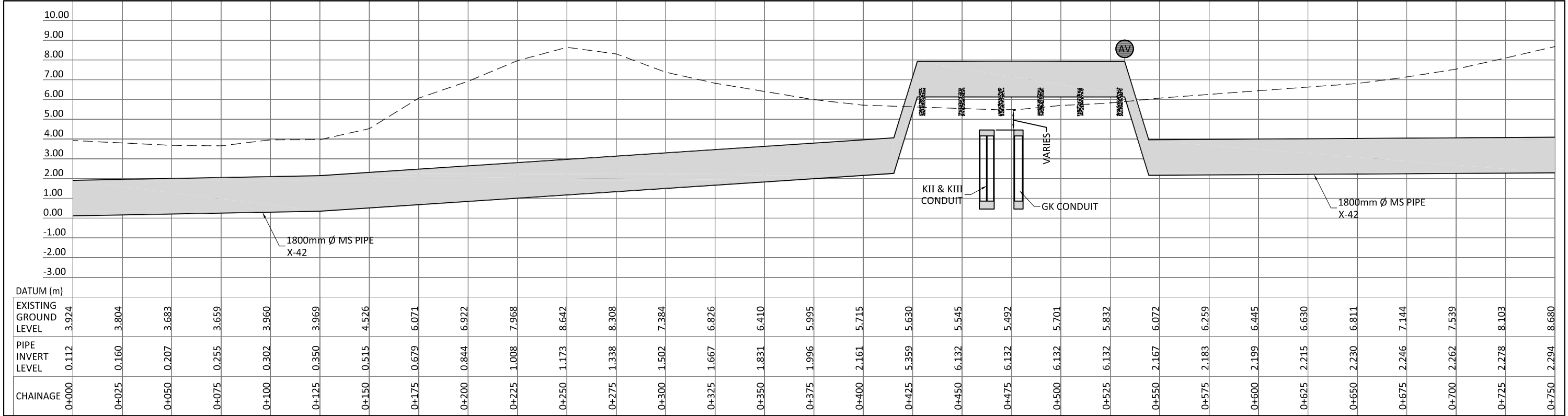
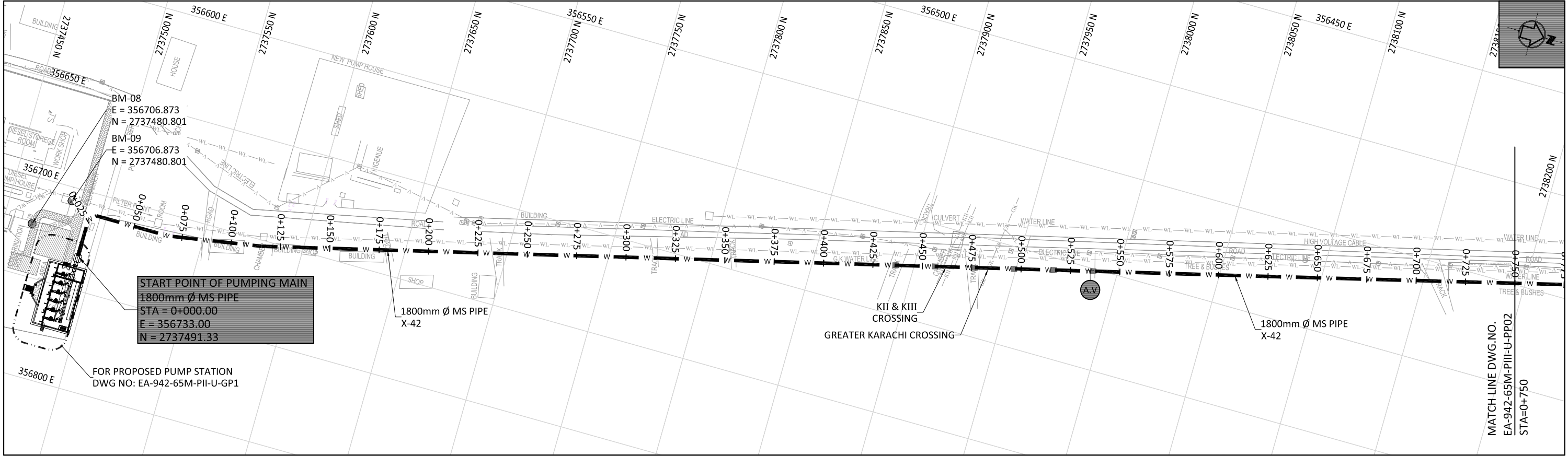
CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-
 **EA Consulting (Pvt.) Limited**
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-
 **Jers Engineering Consultant**

PROJECT:-				ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.	
DRAWN	SAIF	TITLE		PACKAGE # 03	
DESIGNED	SIDRA			LOCATION PLAN GHARO PUMPING STATION TO FOREBAY CHAMBER	
CHECKED	MUNAWAR				
APPROVED	ALI ASGHAR	Scale / Sheet (A1)	Drawing No. EA-942-65M-PIII-U-LP01		

PLAN & PROFILE



NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

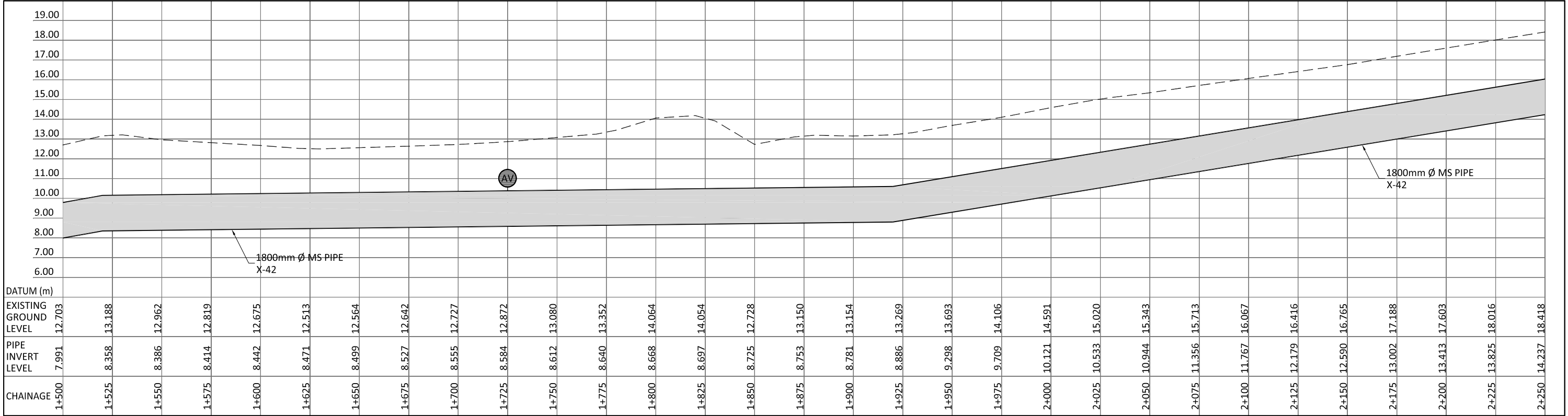
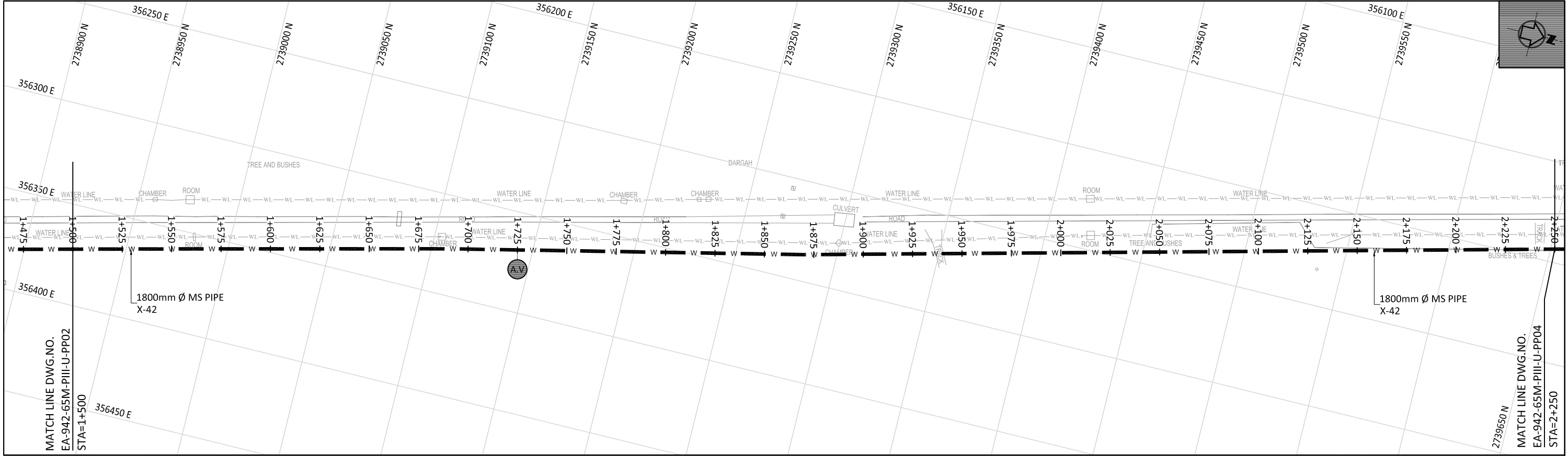
PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PACKAGE # 03 PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 0+000 TO 0+750)
DESIGNED	SIDRA		
CHECKED	MUNAWAR		
APPROVED	ALI ASGHAR		

Scale / Sheet	Drawing No.
H=1:1000 V=1:100 (A1)	EA-942-65M-PIII-U-PP01

ED.NO	DATE	DESCRIPTION	BY	CKD	APR
	0 APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A



NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
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- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

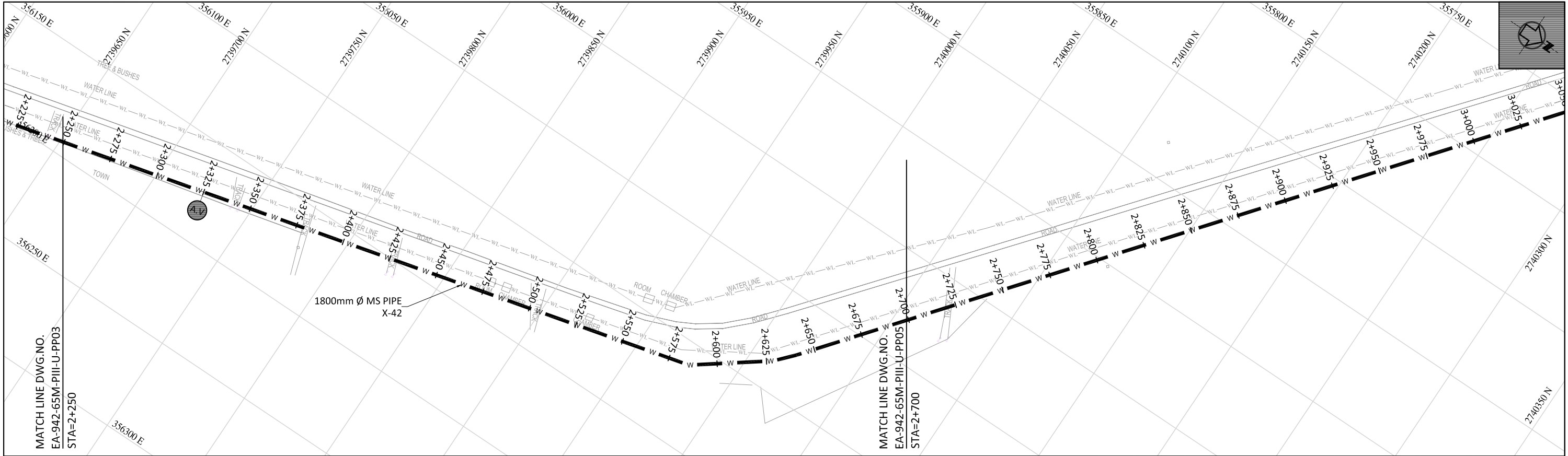
Jers Engineering Consultant

PROJECT:-

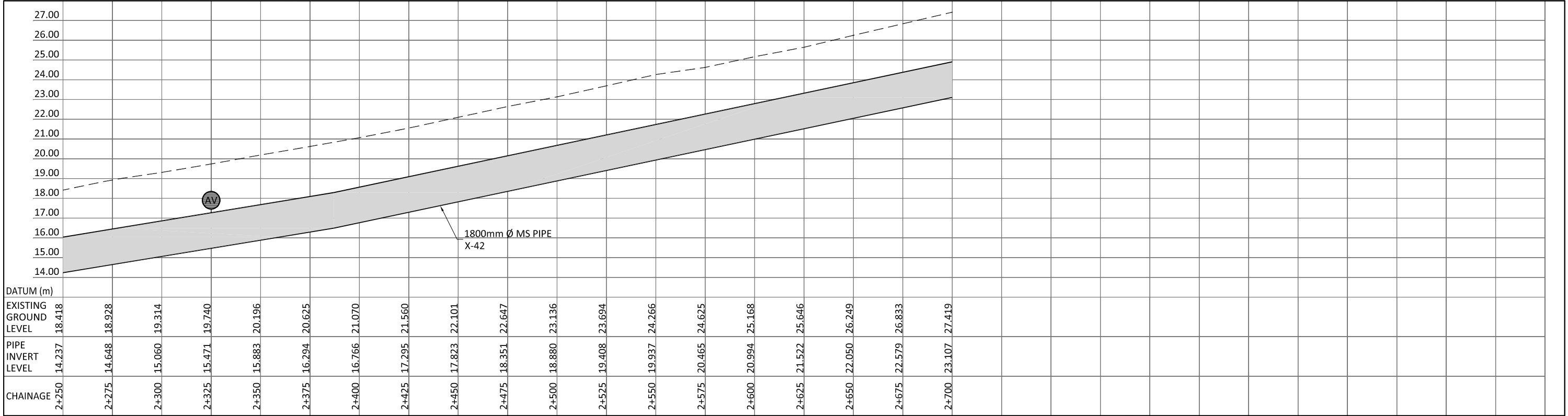
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 1+500 TO 2+250)	PACKAGE # 03
DESIGNED	SIDRA			
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	EA-942-65M-PIII-U-PP03
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)		

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR



PLAN
STA. 2+250 TO 2+700



PROFILE
STA. 2+250 TO 2+700

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
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- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

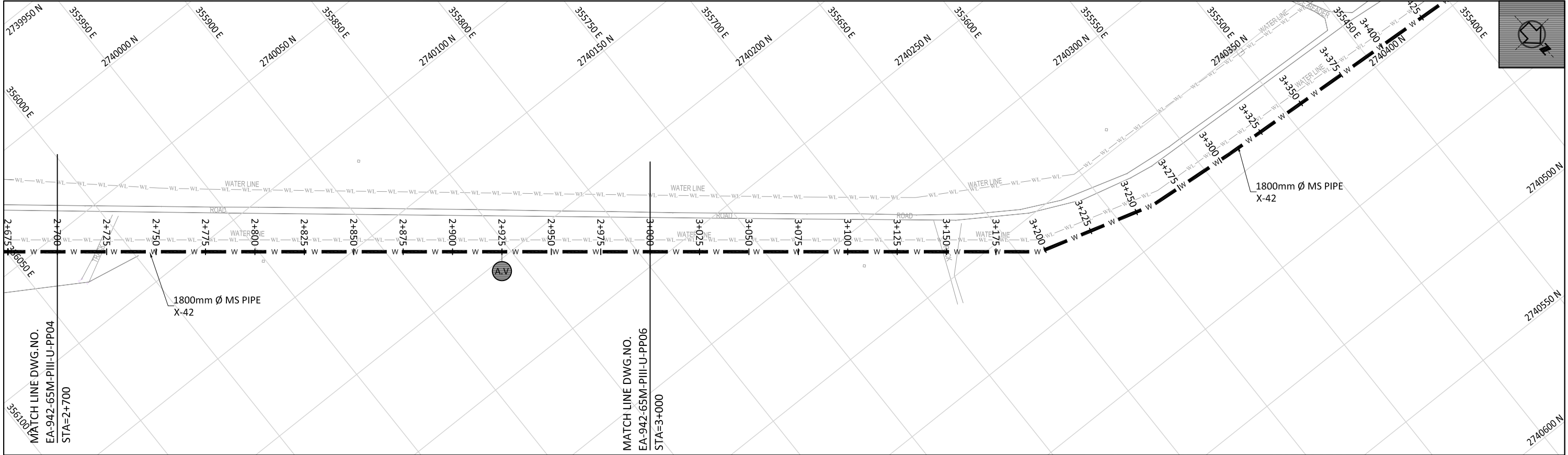
Jers Engineering Consultant

PROJECT:-

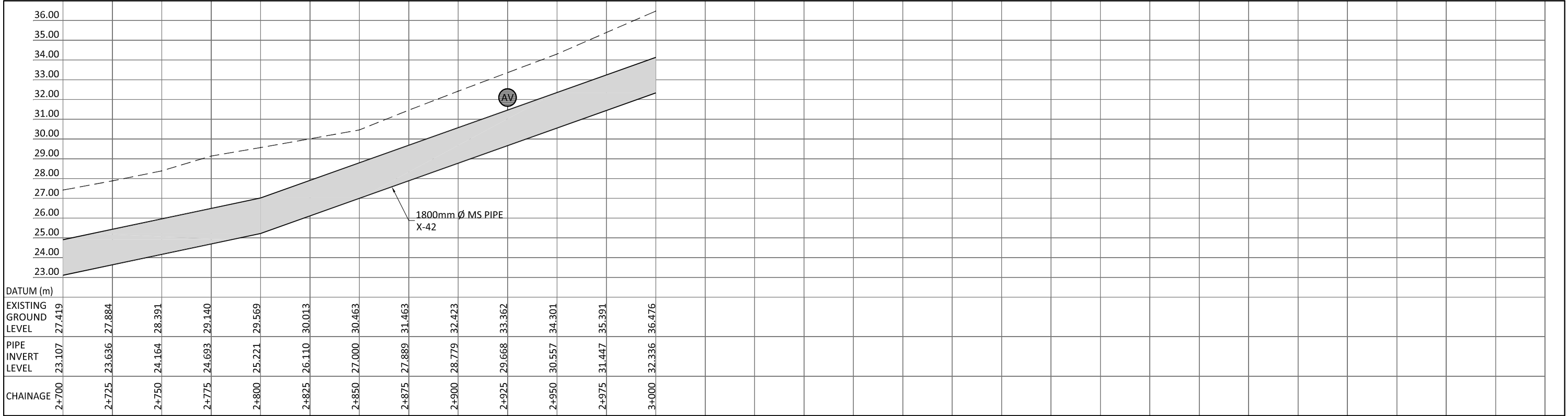
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 2+250 TO 2+700)
DESIGNED	SIDRA		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)	EA-942-65M-PIII-U-PP04

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR



PLAN
STA. 2+700 TO 3+000



PROFILE
STA. 2+700 TO 3+000

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
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- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

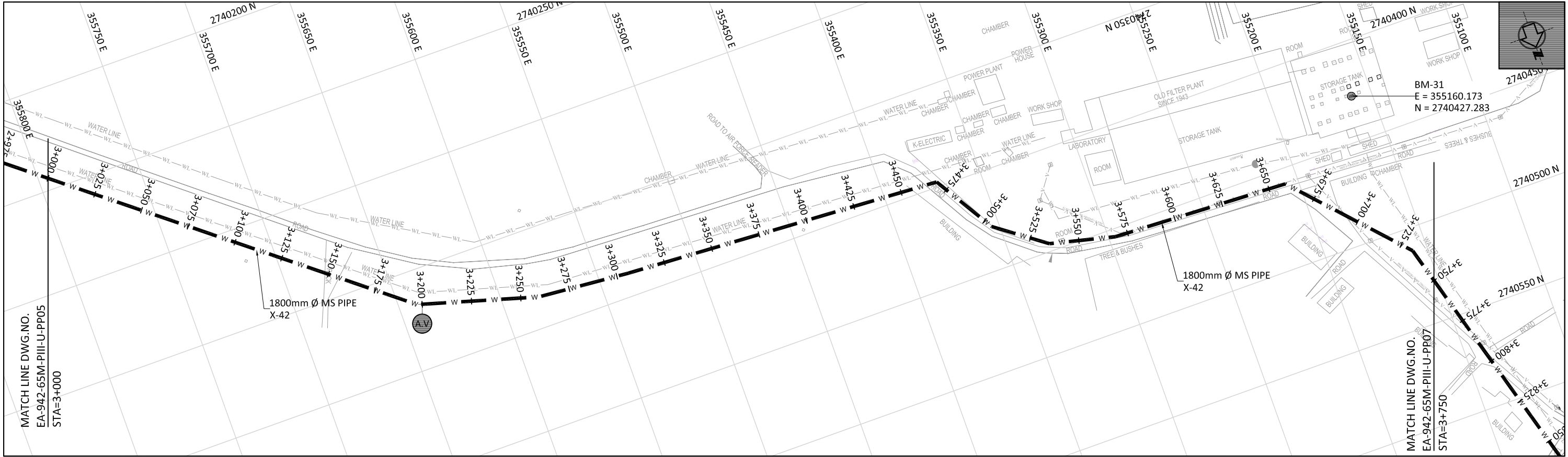
PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

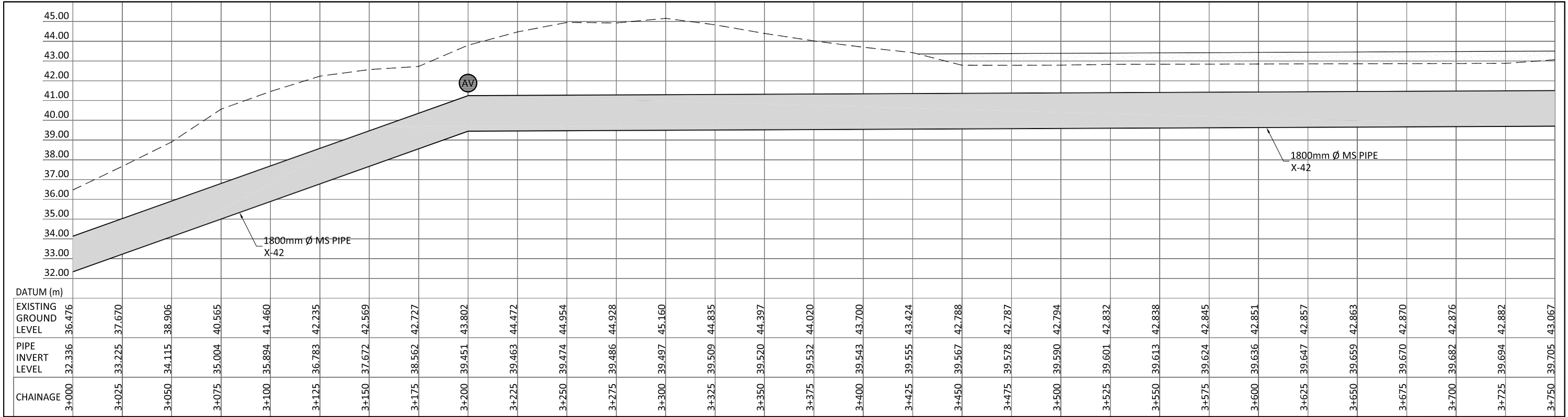
DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 2+700 TO 3+000)
DESIGNED	SIDRA		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)	EA-942-65M-PIII-U-PP05

ED.NO	DATE	DESCRIPTION	BY	CKD	APR

PACKAGE # 03



PLAN
STA. 3+000 TO 3+750



PROFILE
STA. 3+000 TO 3+750

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
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- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

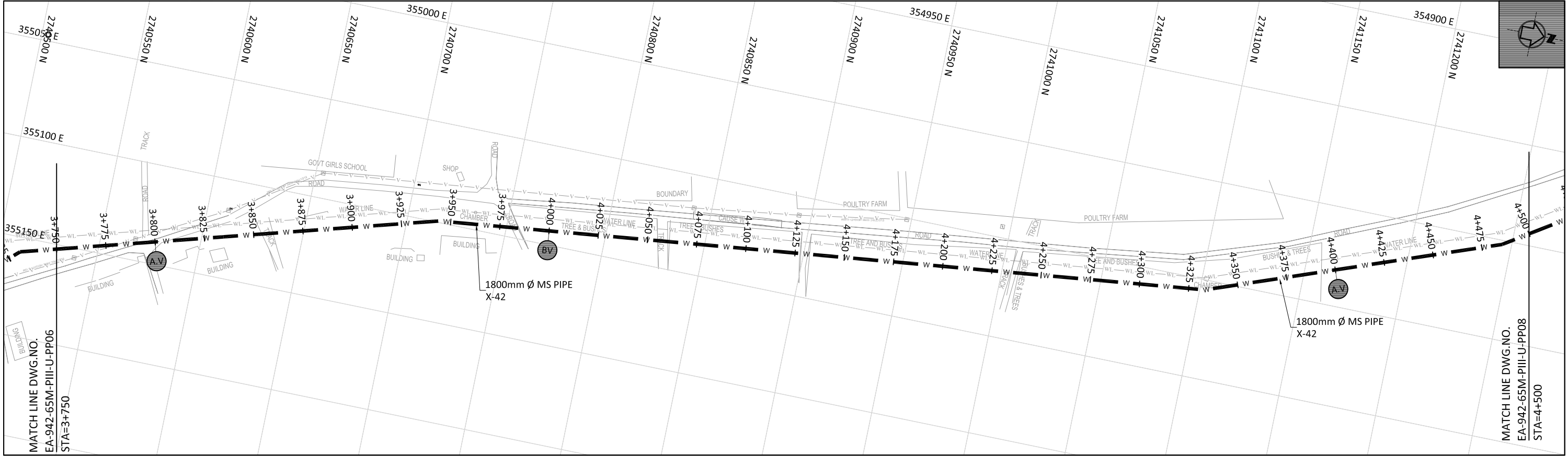
Jers Engineering Consultant

PROJECT:-

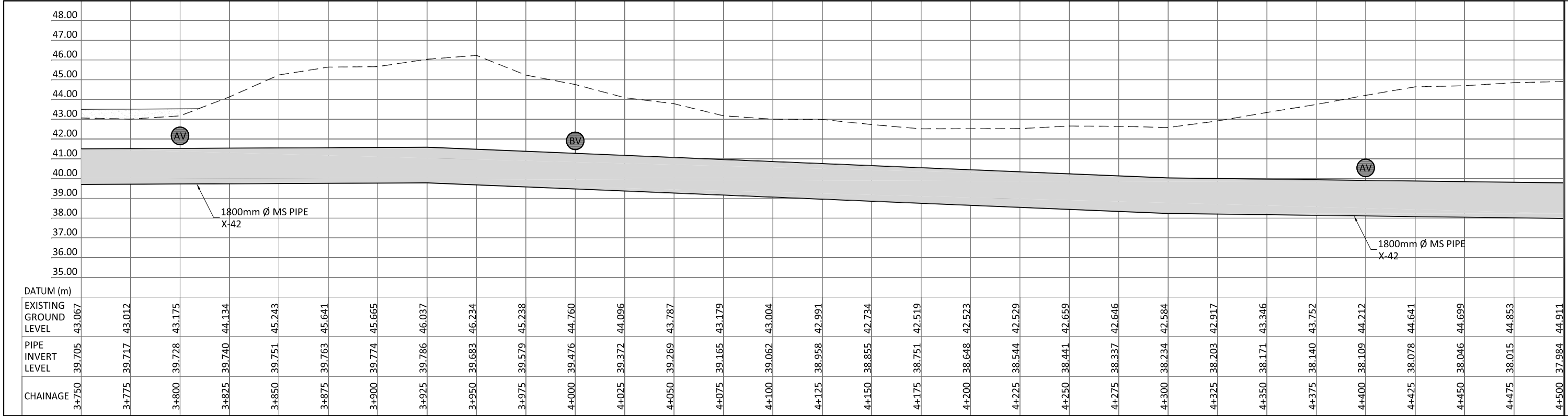
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 3+000 TO 3+750)	PACKAGE # 03
DESIGNED	SIDRA			
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	EA-942-65M-PIII-U-PP06
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)		

ED.NO	DATE	DESCRIPTION	BY	CKD	APR
0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A



PLAN
STA. 3+750 TO 4+500



PROFILE
STA. 3+750 TO 4+500

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
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- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

KARACHI WATER II

KARACHI WATER III

ELECTRIC LINE

SUI SOUTHERN GAS

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN

DESIGNED

CHECKED

APPROVED

SAIF

SIDRA

MUNAWAR

ALI ASGHAR

TITLE

PUMPING MAIN MS PIPE Ø 1800mm

PLAN & PROFILE

(STA = 3+750 TO 4+500)

Scale / Sheet

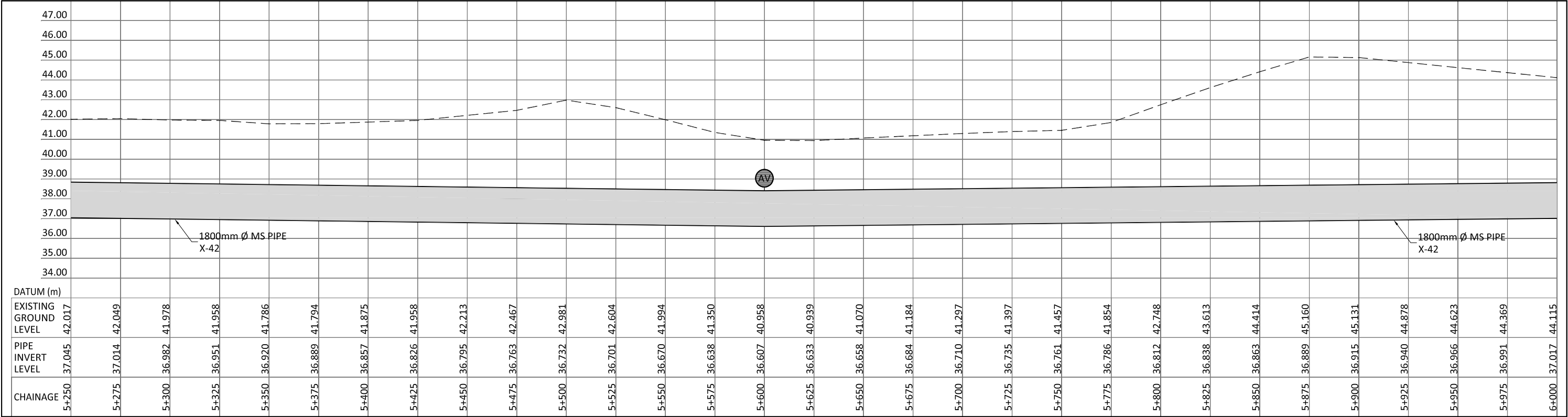
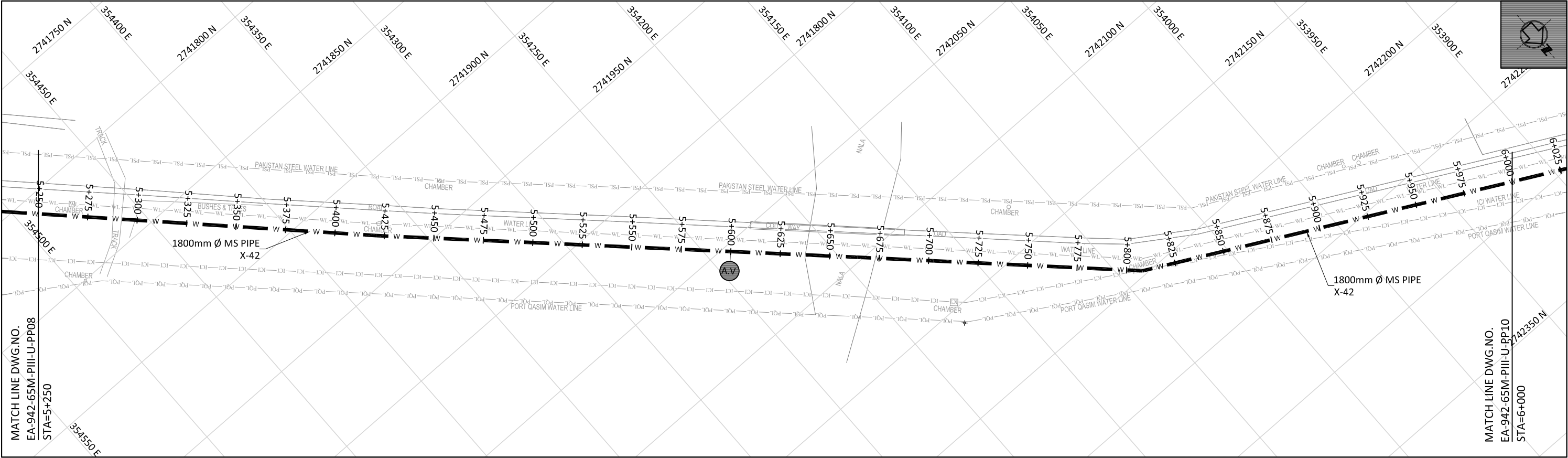
H=1:1000

V=1:100

Drawing No.

EA-942-65M-PIII-U-PP07

PACKAGE # 03



NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.

2. MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.

3. FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400

4. FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401

5. FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402

6. FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403

7. FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404

8. FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405

9. FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406

10. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407

11. FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408

12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

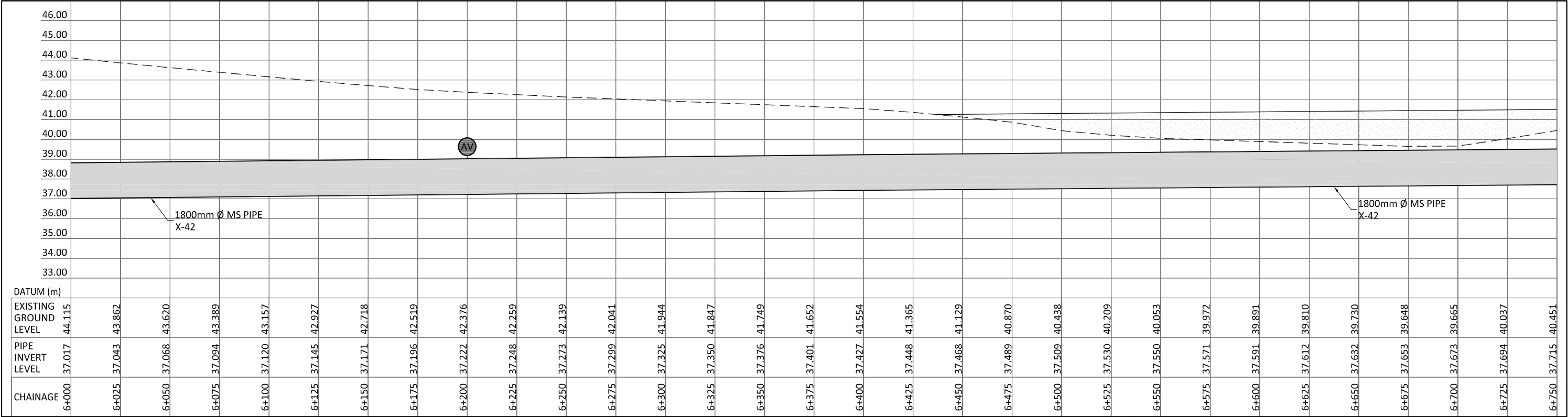
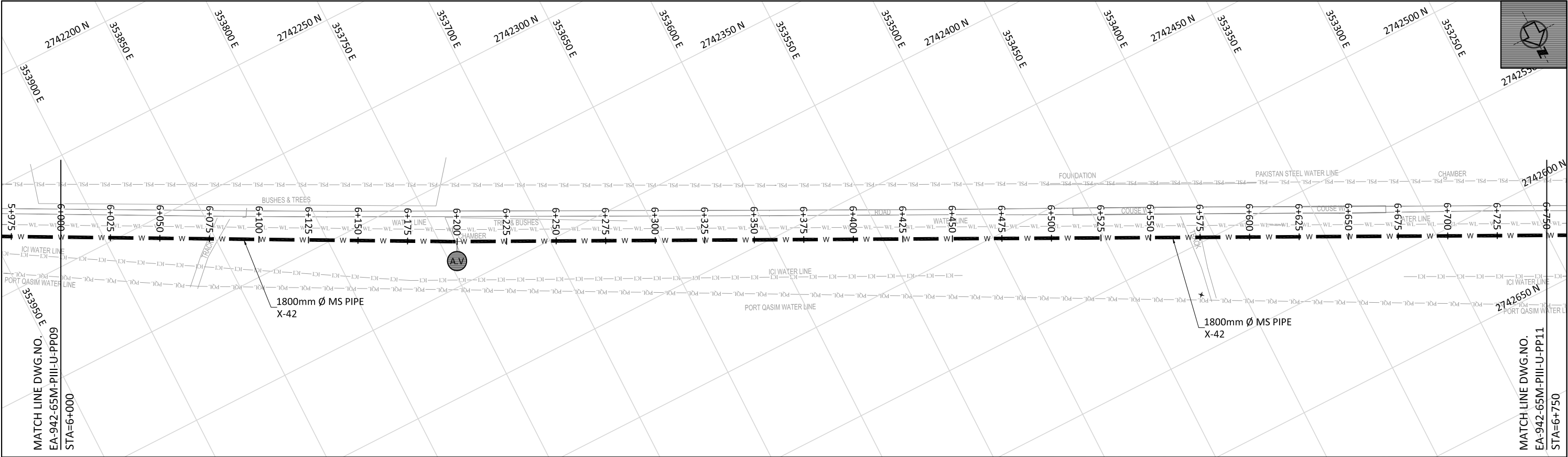
Jers Engineering Consultant

PROJECT:-

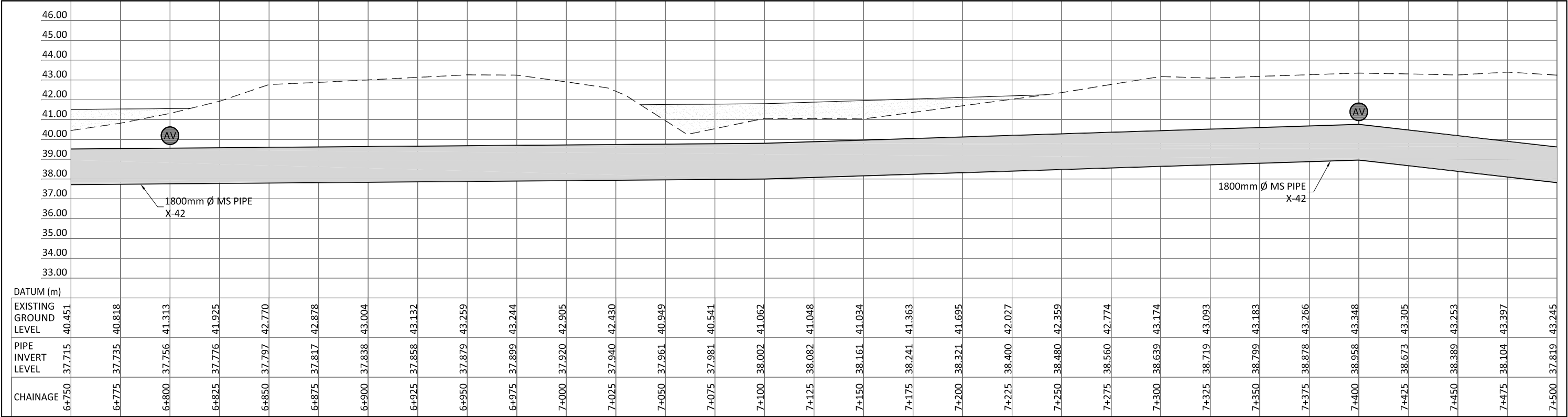
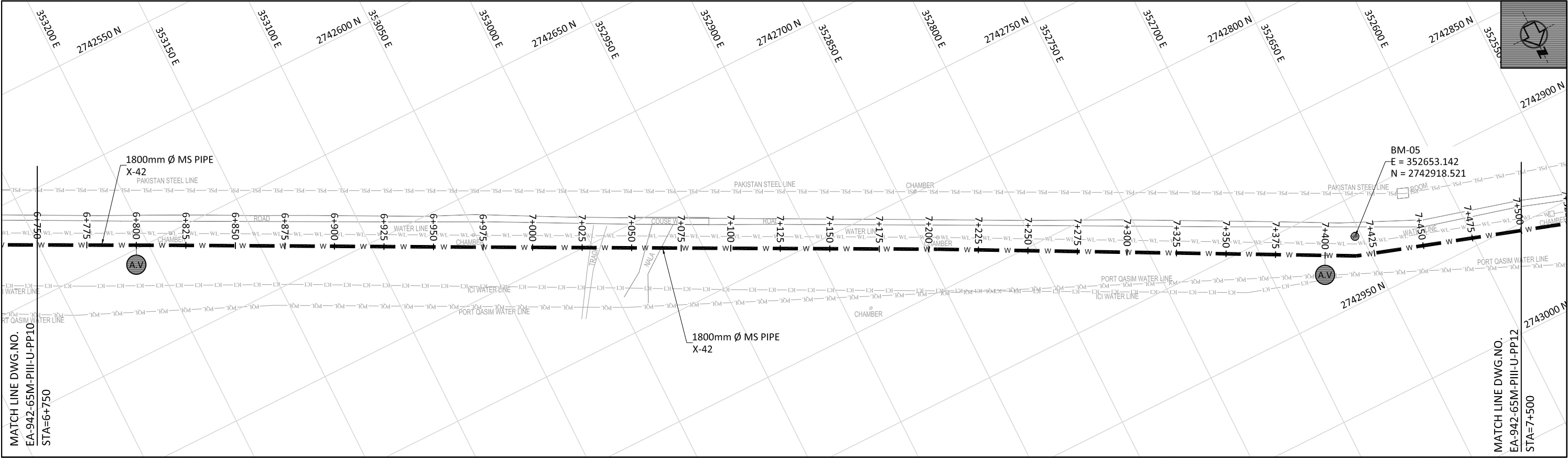
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 5+250 TO 6+000)
DESIGNED	SIDRA		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)	EA-942-65M-PIII-U-PP09

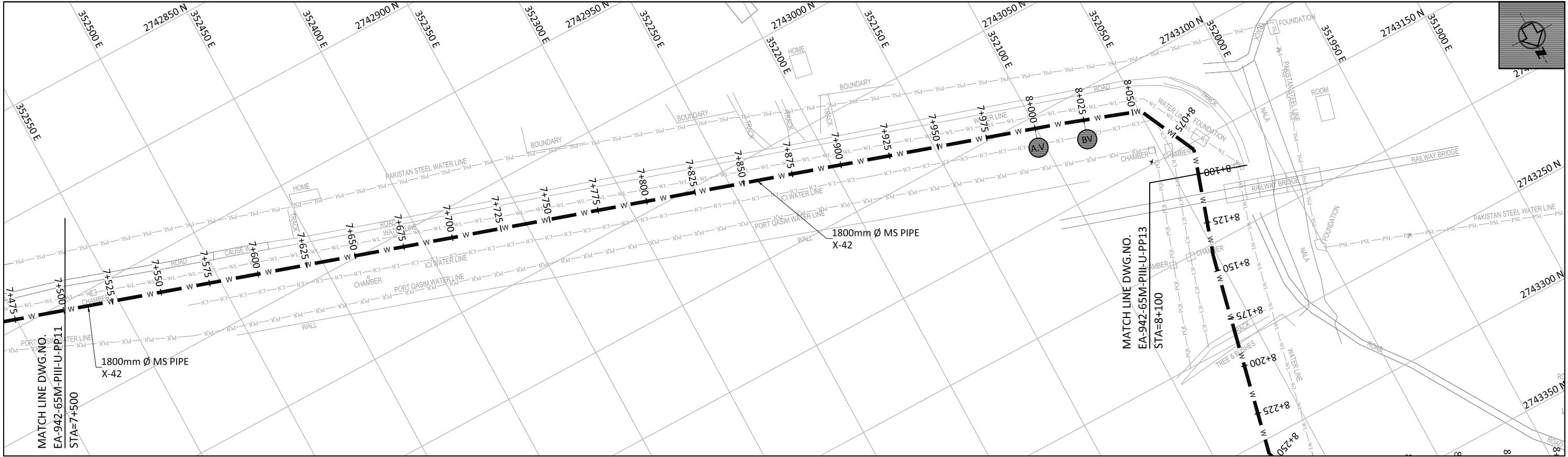
PACKAGE # 03



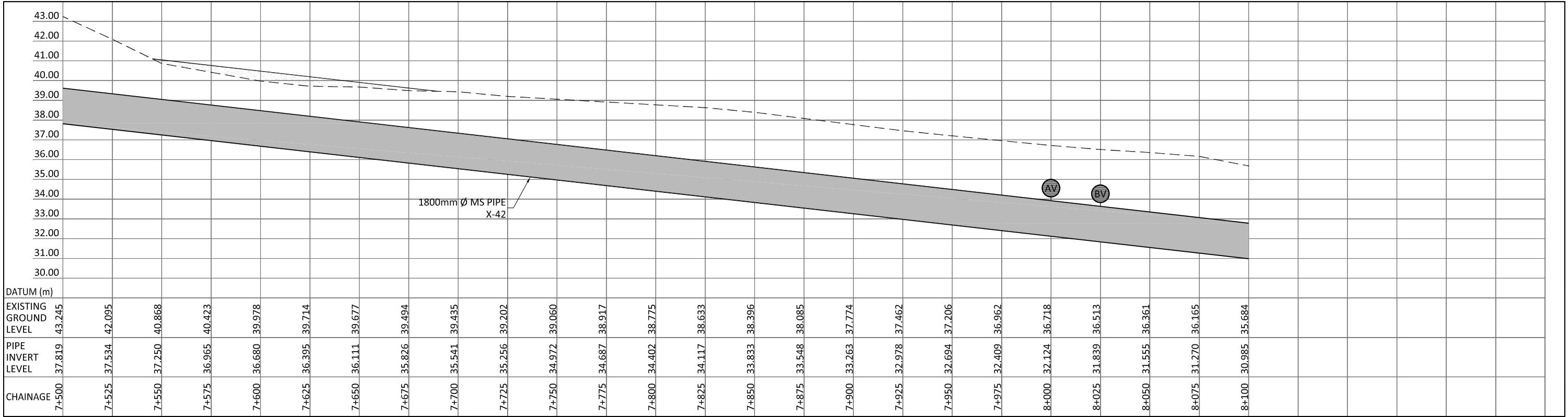
NOTE:- 1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED. 2. MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED. 3. FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400 4. FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401 5. FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402 6. FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403 7. FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404 8. FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405 9. FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406 10. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407 11. FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.	LEGEND FOR PLAN:- PROPOSED PIPE LINE		 KARACHI WATER II KARACHI WATER III ELECTRIC LINE SUI SOUTHERN GAS		CLIENT:-	KARACHI WATER & SEWERAGE BOARD	PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.	PACKAGE # 03					
	AIR RELEASE VALVE												
	WASHOUT VALVE												
	BUTTERFLY VALVE												
	EXISTING SERVICES: WATER LINE ICI WATER PORT QASIM WATER PAKISTAN STEEL WATER GREATER KARACHI	 —WL— WL— —ICI— ICI— —PQW— PQW— —PSL— PSL— —GK— GK—	AIR RELEASE VALVE WASHOUT VALVE BUTTERFLY VALVE 										
	0	APR,18	TENDER DRAWINGS	S.A.S	M.Z			A.A	 EA Consulting (Pvt.) Limited <small>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</small>	 Jers Engineering Consultant	DRAWN	SAIF	TITLE PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 6+000 TO 6+750)
											DESIGNED	SIDRA	
											CHECKED	MUNAWAR	
											APPROVED	ALI ASGHAR	
		ED.NO	DATE	DESCRIPTION	BY			CKD	APR			Scale / Sheet H=1:1000 V=1:100 (A1)	Drawing No. EA-942-65M-PIII-U-PP10



<div>NOTE:-</div> <div>1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.</div> <div>2. MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.</div> <div>3. FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400</div> <div>4. FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401</div> <div>5. FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402</div> <div>6. FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403</div> <div>7. FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404</div> <div>8. FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405</div> <div>9. FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406</div> <div>10. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407</div> <div>11. FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408</div> <div>12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.</div>	<div>LEGEND FOR PLAN:-</div> <div>PROPOSED PIPE LINE</div> <div>AIR RELEASE VALVE</div> <div>WASHOUT VALVE</div> <div>BUTTERFLY VALVE</div> <div>EXISTING SERVICES:</div> <div>WATER LINE</div> <div>ICI WATER</div> <div>PORT QASIM WATER</div> <div>PAKISTAN STEEL WATER</div> <div>GREATER KARACHI</div>	<div>W</div> <div>AV</div> <div>WV</div> <div>BV</div> <div>WL</div> <div>ICL</div> <div>POL</div> <div>PSL</div> <div>CK</div>	<div>KII</div> <div>KIII</div> <div>V</div> <div>GAS</div> <div>LEGEND FOR PROFILE:-</div> <div>NATURAL GROUND</div> <div>PROPOSED PIPE</div> <div>AIR RELEASE VALVE</div> <div>WASHOUT VALVE</div> <div>BUTTERFLY VALVE</div>	<div>0</div> <div>ED.NO</div> <div>DATE</div> <div>DESCRIPTION</div> <div>BY</div> <div>CKD</div> <div>APR</div>	<div>TENDER DRAWINGS</div> <div>S.A.S</div> <div>M.Z</div> <div>A.A</div>	<div>CLIENT:-</div> <div>KARACHI WATER & SEWERAGE BOARD</div> <div>CONSULTANT:-</div> <div>EA Consulting (Pvt.) Limited</div> <div>IN ASSOCIATION WITH:-</div> <div>Jers Engineering Consultant</div>	<div>PROJECT:-</div> <div>ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.</div> <div>DRAWN</div> <div>SAIF</div> <div>DESIGNED</div> <div>SIDRA</div> <div>CHECKED</div> <div>MUNAWAR</div> <div>APPROVED</div> <div>ALI ASGHAR</div> <div>TITLE</div> <div>PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 6+750 TO 7+500)</div> <div>Scale / Sheet</div> <div>H=1:1000 (A1) V=1:100</div> <div>Drawing No.</div> <div>EA-942-65M-PIII-U-PP11</div> <div>PACKAGE # 03</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										



PLAN
STA. 7+500 TO 8+100



PROFILE
STA. 7+500 TO 8+100

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE — W —

AIR RELEASE VALVE (AV)

WASHOUT VALVE (BV)

BUTTERFLY VALVE (BV)

EXISTING SERVICES:

WATER LINE — WL — WL —

ICI WATER — ICI — ICI —

PORT QASIM WATER — POL — POL —

PAKISTAN STEEL WATER — PSL — PSL —

GREATER KARACHI — GK — GK —

KARACHI WATER II

KARACHI WATER III

ELECTRIC LINE

SUI SOUTHERN GAS

LEGEND FOR PROFILE:-

NATURAL GROUND ———

PROPOSED PIPE ———

AIR RELEASE VALVE (AV)

WASHOUT VALVE (BV)

BUTTERFLY VALVE (BV)

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

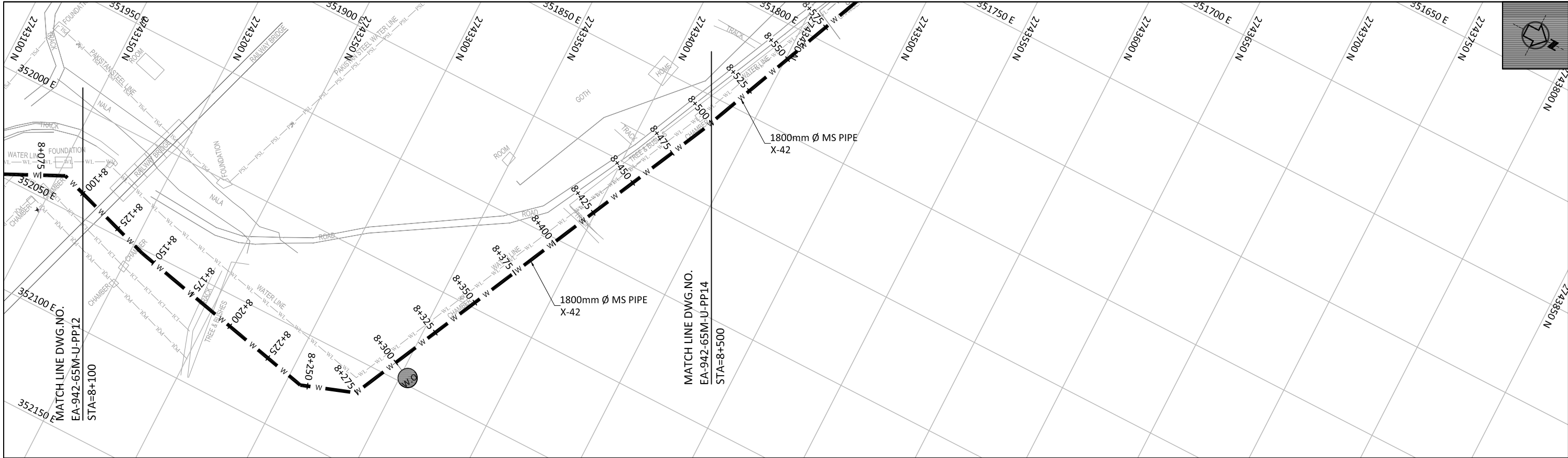
Jers Engineering Consultant

PROJECT:-

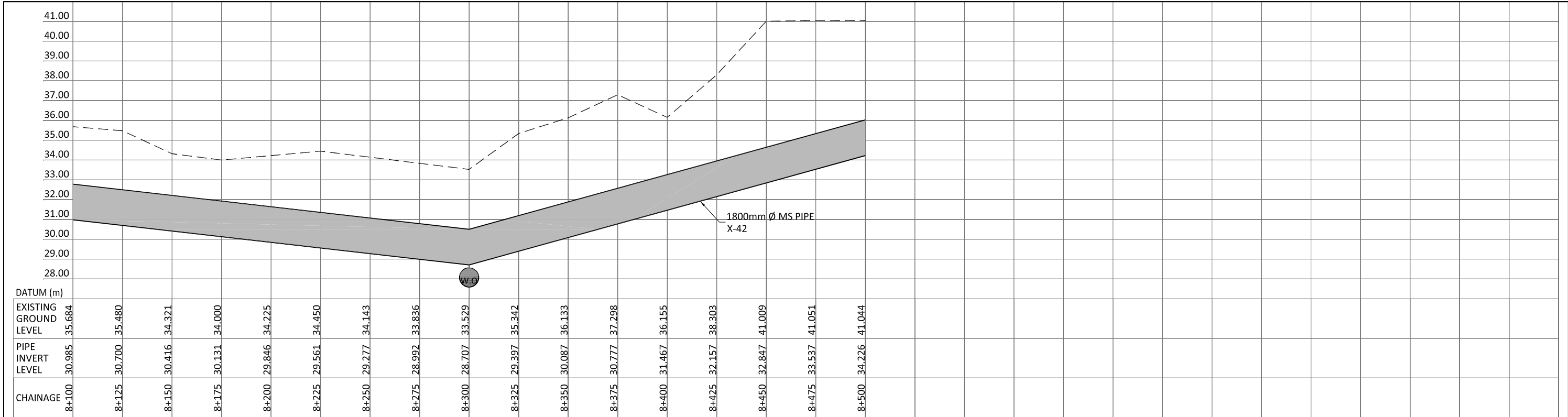
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 7+500 TO 8+100)
DESIGNED	SIDRA		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No. EA-942-65M-PIII-U-PP12
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)	

PACKAGE # 03



PLAN
STA. 8+100 TO 8+500



PROFILE
STA. 8+100 TO 8+500

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

KARACHI WATER II

KARACHI WATER III

ELECTRIC LINE

SUI SOUTHERN GAS

0 APR,18

TENDER DRAWINGS

S.A.S

M.Z

A.A

ED.NO

DATE

DESCRIPTION

BY

CKD

APR

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN

SAIF

DESIGNED

SIDRA

CHECKED

MUNAWAR

APPROVED

ALI ASGHAR

TITLE

PUMPING MAIN MS PIPE Ø 1800mm

PLAN & PROFILE

(STA = 8+100 TO 8+500)

Scale / Sheet

H=1:1000

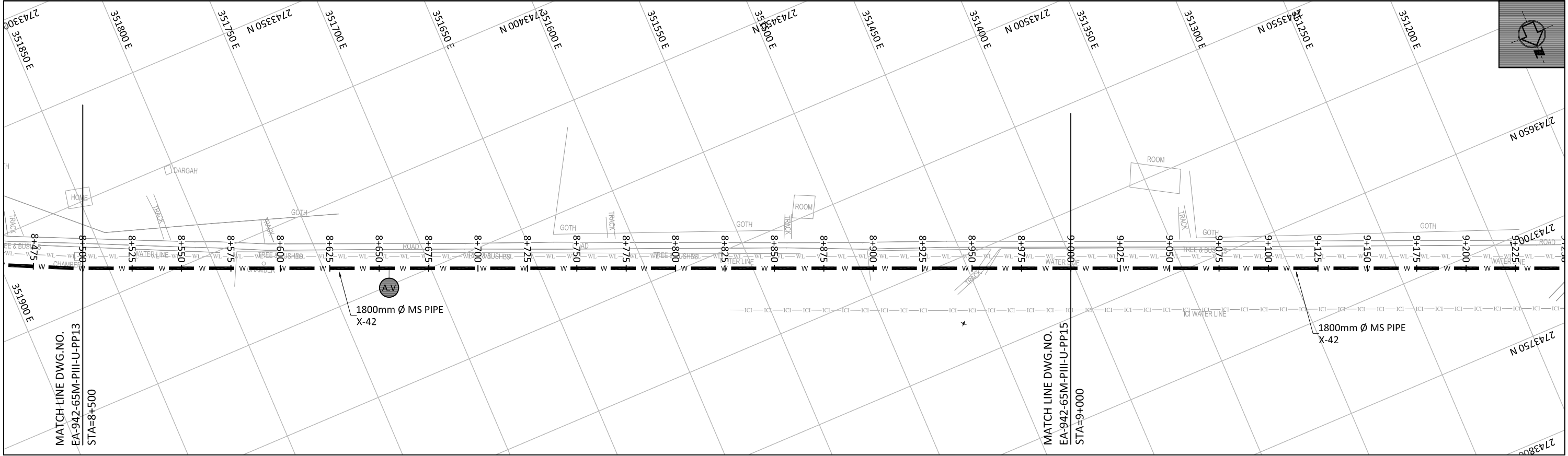
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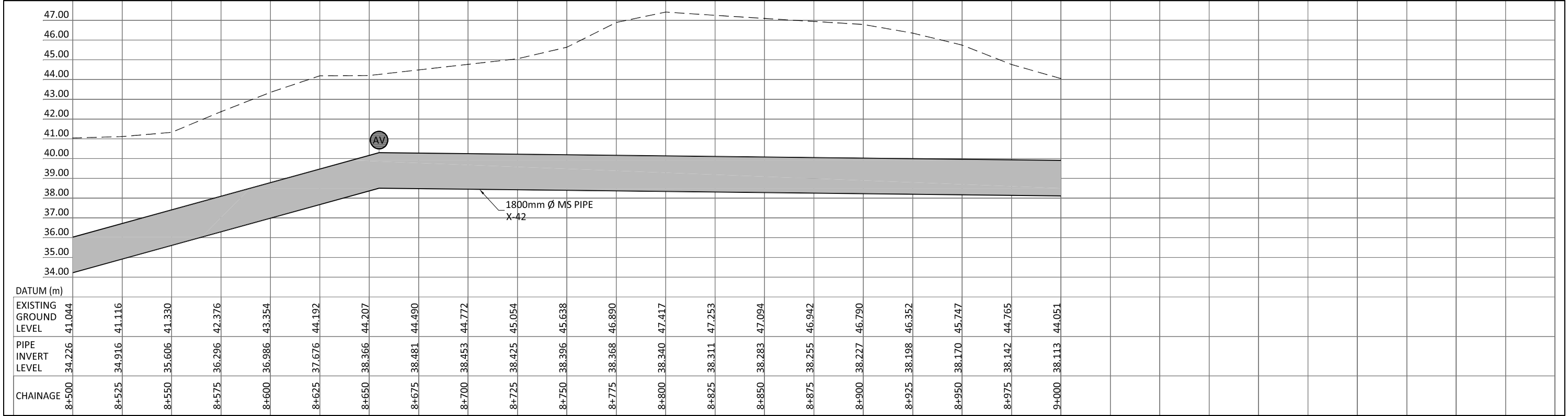
Drawing No.

EA-942-65M-PIII-U-PP13

PACKAGE # 03



PLAN
STA. 8+500 TO 9+000



PROFILE
STA. 8+500 TO 9+000

NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
3. FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
4. FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
5. FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
6. FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
7. FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
8. FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
9. FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
10. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
11. FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

KARACHI WATER II

KARACHI WATER III

ELECTRIC LINE

SUI SOUTHERN GAS

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN: SAIF

DESIGNED: SIDRA

CHECKED: MUNAWAR

APPROVED: ALI ASGHAR

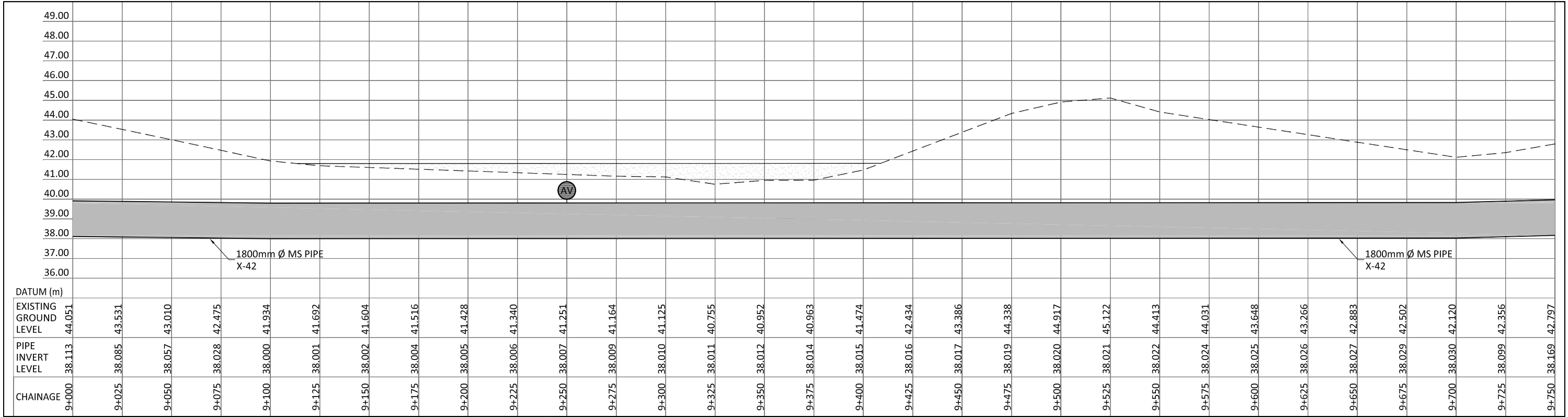
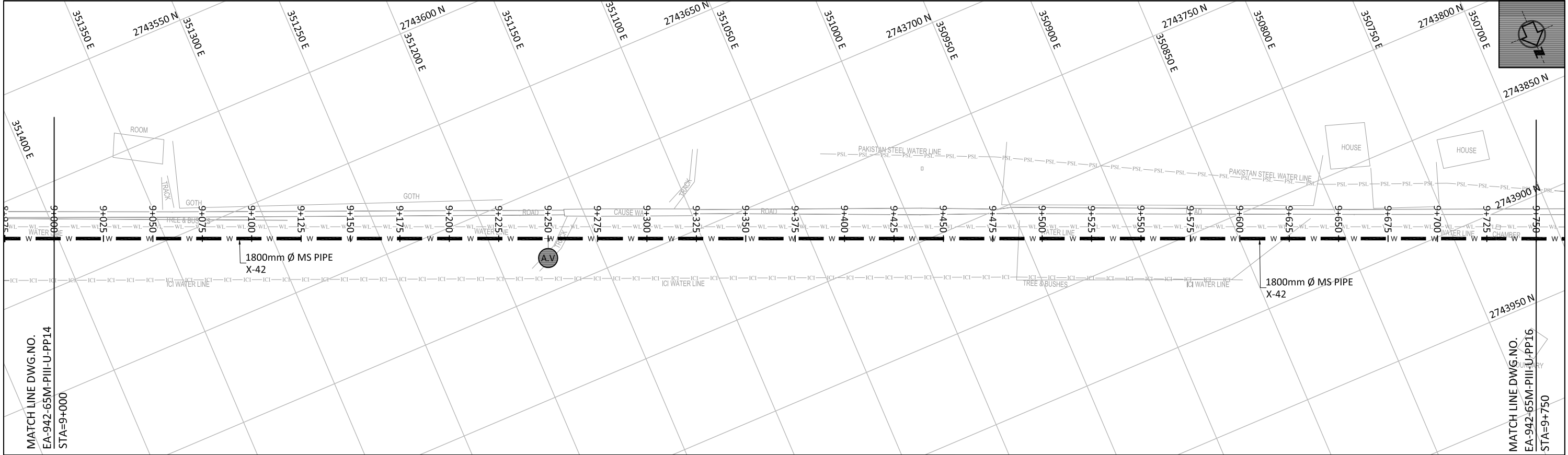
TITLE: PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 8+500 TO 9+000)

Scale / Sheet: H=1:1000 (A1) V=1:100

Drawing No.: EA-942-65M-PIII-U-PP14

PACKAGE # 03

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR



NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.**

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

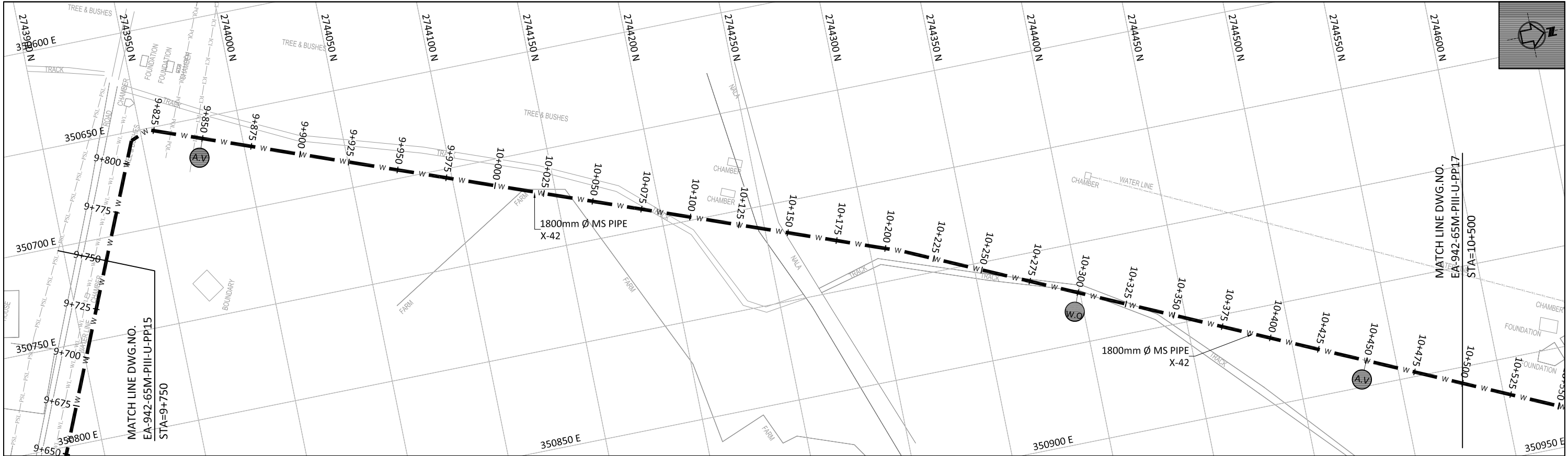
Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

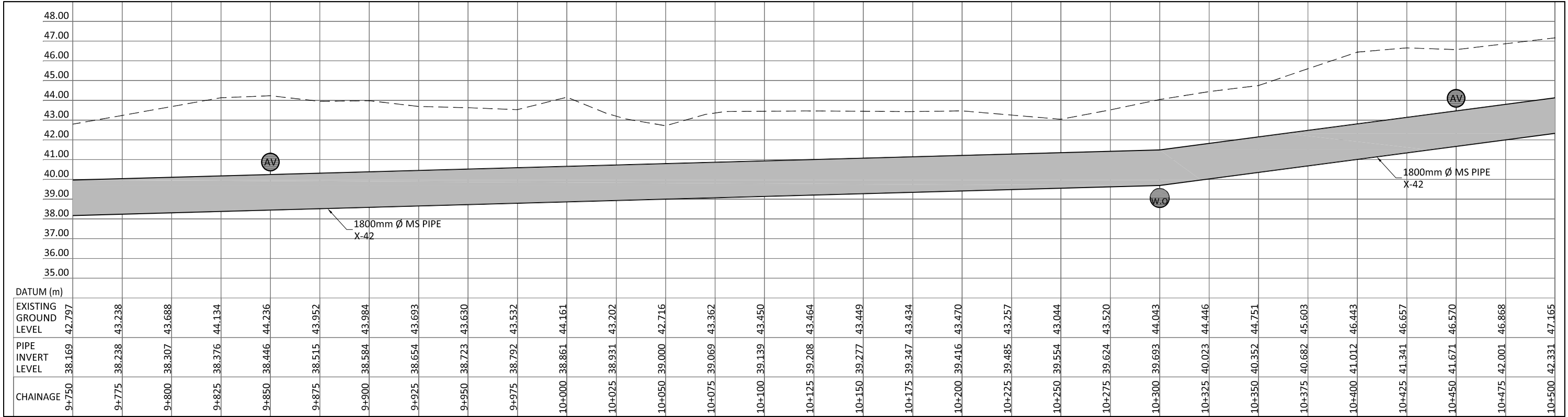
DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 9+000 TO 9+750)	PACKAGE # 03
DESIGNED	SIDRA			
CHECKED	MUNAWAR	Scale / Sheet H=1:1000 V=1:100	Drawing No. EA-942-65M-PIII-U-PP15	
APPROVED	ALI ASGHAR			

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR



PLAN

STA. 9+750 TO 10+500



PROFILE

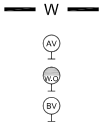
STA. 9+750 TO 10+500

NOTE:-

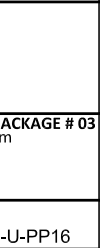
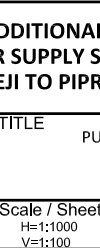
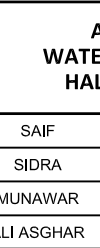
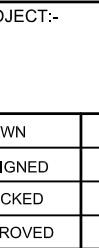
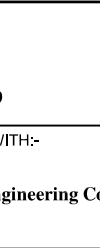
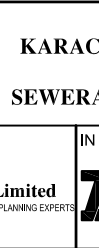
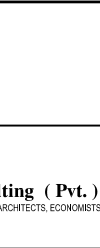
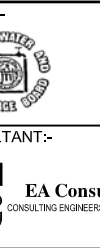
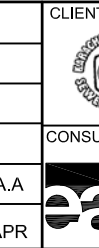
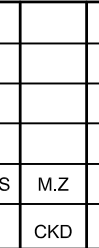
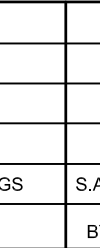
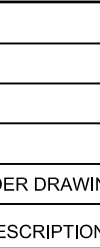
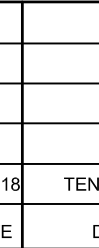
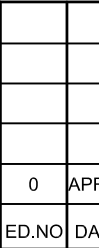
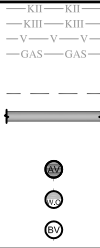
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
3. FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
4. FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
5. FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
6. FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
7. FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
8. FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
9. FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
10. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
11. FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
12. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

- PROPOSED PIPE LINE
- AIR RELEASE VALVE
- WASHOUT VALVE
- BUTTERFLY VALVE
- EXISTING SERVICES:
- WATER LINE
- ICI WATER
- PORT QASIM WATER
- PAKISTAN STEEL WATER
- GREATER KARACHI



- KARACHI WATER II
- KARACHI WATER III
- ELECTRIC LINE
- SUI SOUTHERN GAS
- LEGEND FOR PROFILE:-
- NATURAL GROUND
- PROPOSED PIPE
- AIR RELEASE VALVE
- WASHOUT VALVE
- BUTTERFLY VALVE



CLIENT:-



KARACHI WATER
&
SEWERAGE BOARD

CONSULTANT:-



EA Consulting (Pvt.) Limited

CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-



Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.

DRAWN

SAIF

DESIGNED

SIDRA

CHECKED

MUNAWAR

APPROVED

ALI ASGHAR

TITLE

PUMPING MAIN MS PIPE Ø 1800mm

PLAN & PROFILE

(STA = 9+750 TO 10+500)

Scale / Sheet

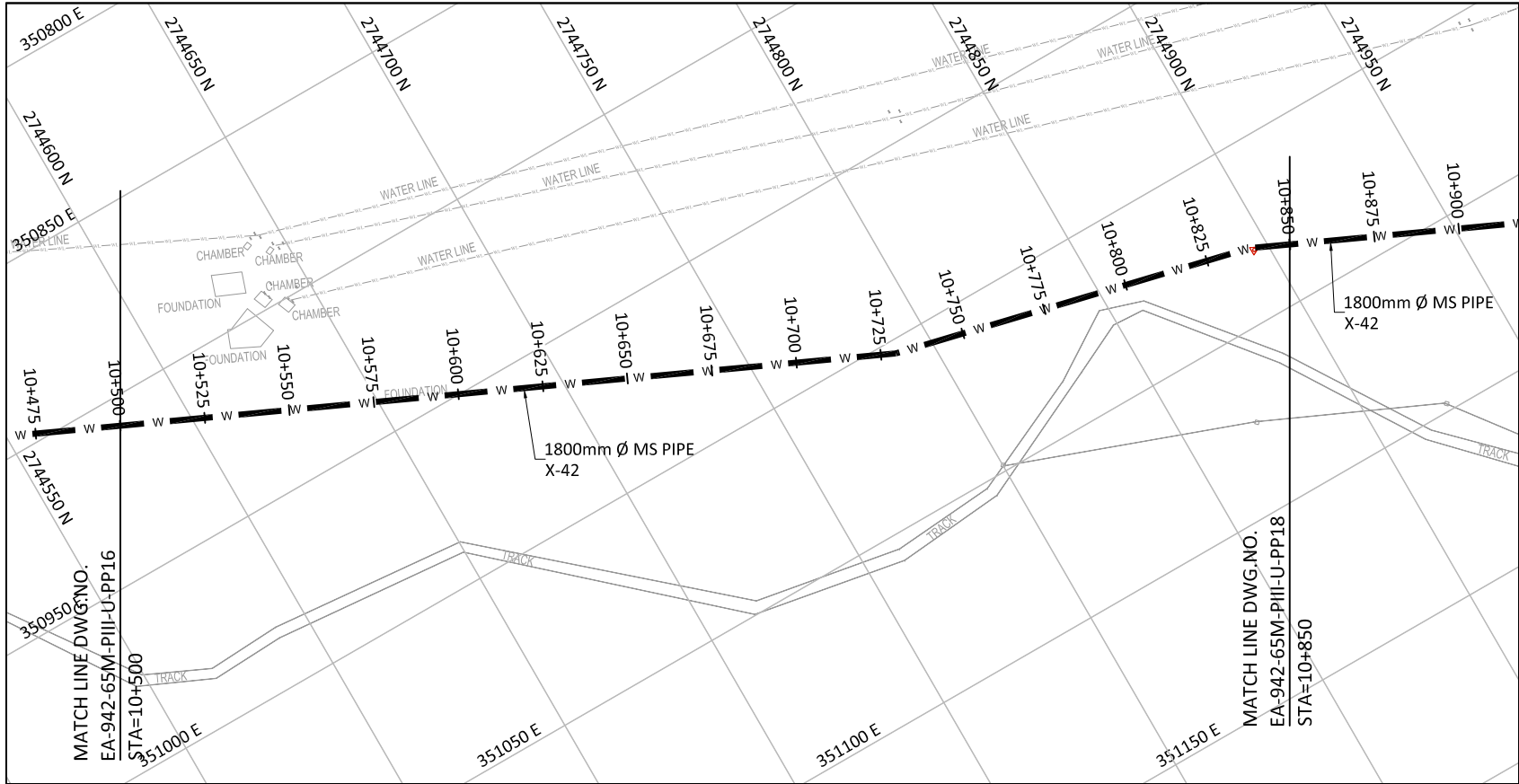
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V=1:100

(A1)

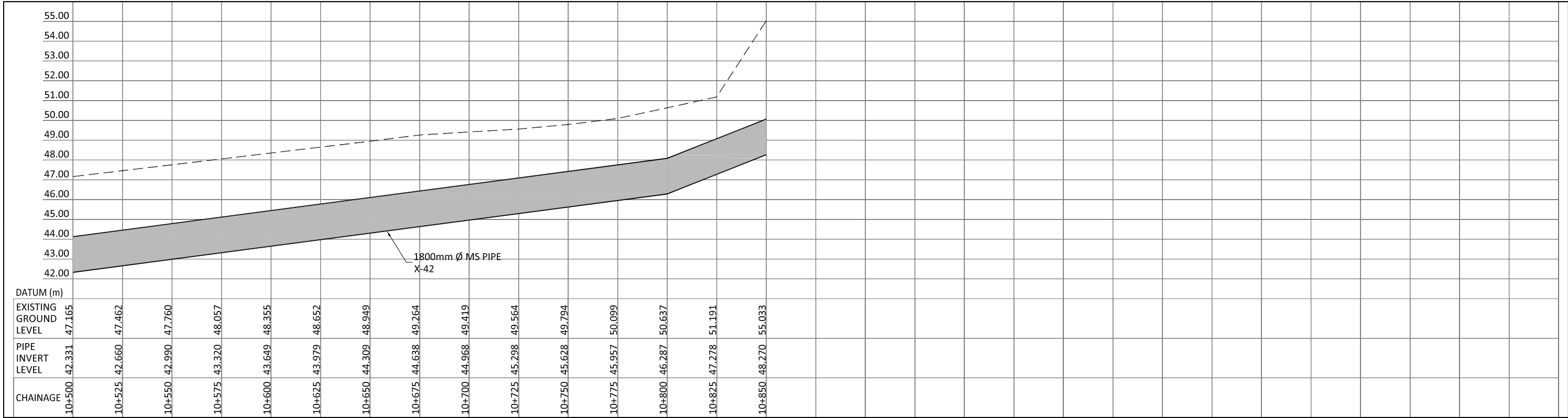
Drawing No.

EA-942-65M-PIII-U-PP16

PACKAGE # 03



PLAN
STA. 10+500 TO 10+850



PROFILE
STA. 10+500 TO 10+850

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

KARACHI WATER II

KARACHI WATER III

ELECTRIC LINE

SUI SOUTHERN GAS

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

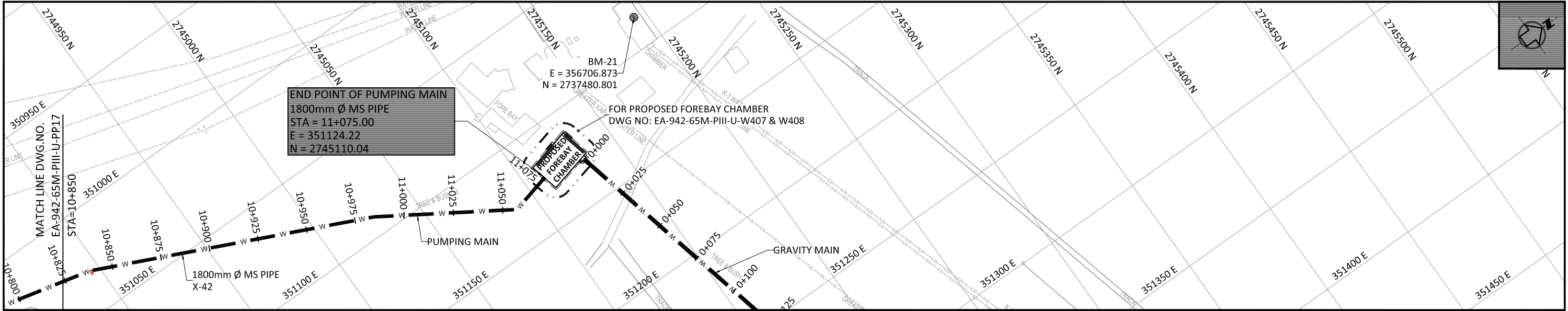
Jers Engineering Consultant

PROJECT:-

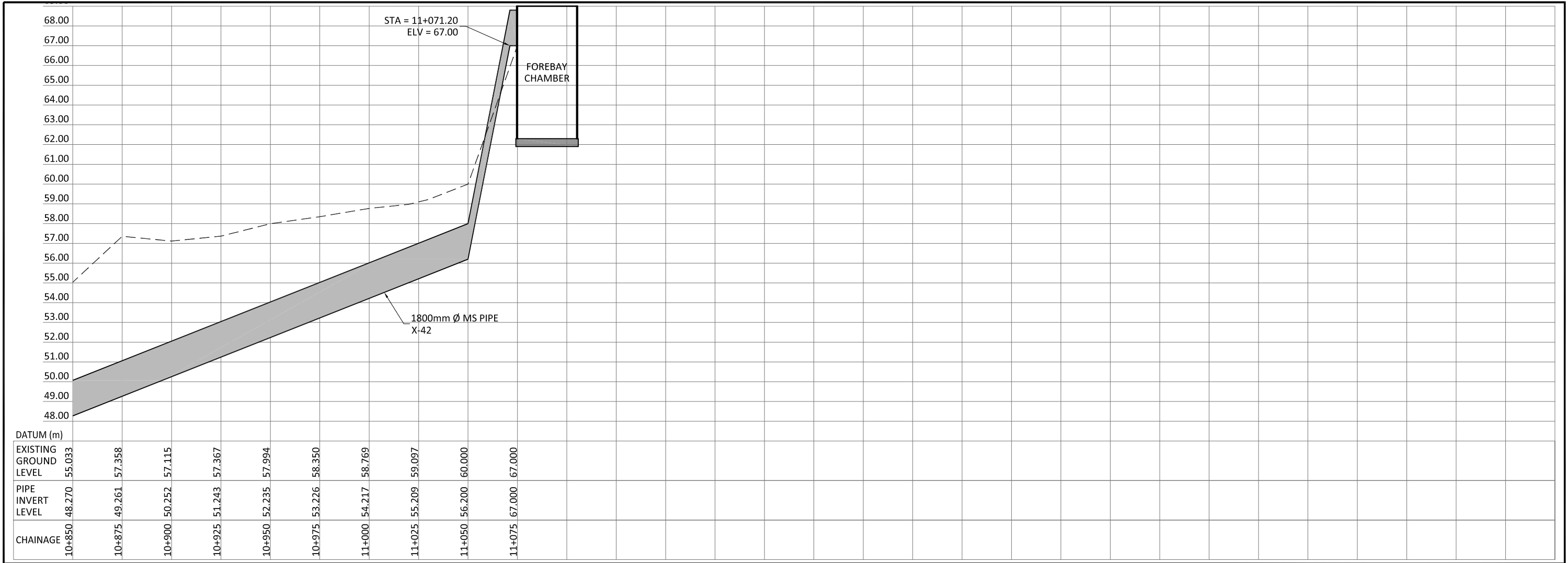
ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 10+500 TO 10+850)	PACKAGE # 03
DESIGNED	SIDRA			
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)	EA-942-65M-PIII-U-PP17	

0	APR, 18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR



PLAN
STA. 10+850 TO 11+075.00



PROFILE
STA. 10+850 TO 11+075.00

NOTE:-

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
- MIN COVER SHALL BE OF 2m UNLESS OTHERWISE PIPE SHALL BE ENCASED.
- FOR PIPE TRENCH REFER DWG.NO.EA-942-65M-PIII-U-W400
- FOR THRUST BLOCK REFER DWG.NO.EA-942-65M-PIII-U-W401
- FOR BUTTERFLY VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W402
- FOR AIR RELEASE VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W403
- FOR WASHOUT VALVE CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-W404
- FOR DETAIL TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W405
- FOR RAILWAY CROSSING REFER DWG.NO.EA-942-65M-PIII-U-W406
- FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407
- FOR FOREBAY CHAMBER SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
- 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

LEGEND FOR PLAN:-

PROPOSED PIPE LINE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

EXISTING SERVICES:

WATER LINE

ICI WATER

PORT QASIM WATER

PAKISTAN STEEL WATER

GREATER KARACHI

LEGEND FOR PROFILE:-

NATURAL GROUND

PROPOSED PIPE

AIR RELEASE VALVE

WASHOUT VALVE

BUTTERFLY VALVE

CLIENT:-

KARACHI WATER & SEWERAGE BOARD

CONSULTANT:-

EA Consulting (Pvt.) Limited

IN ASSOCIATION WITH:-

Jers Engineering Consultant

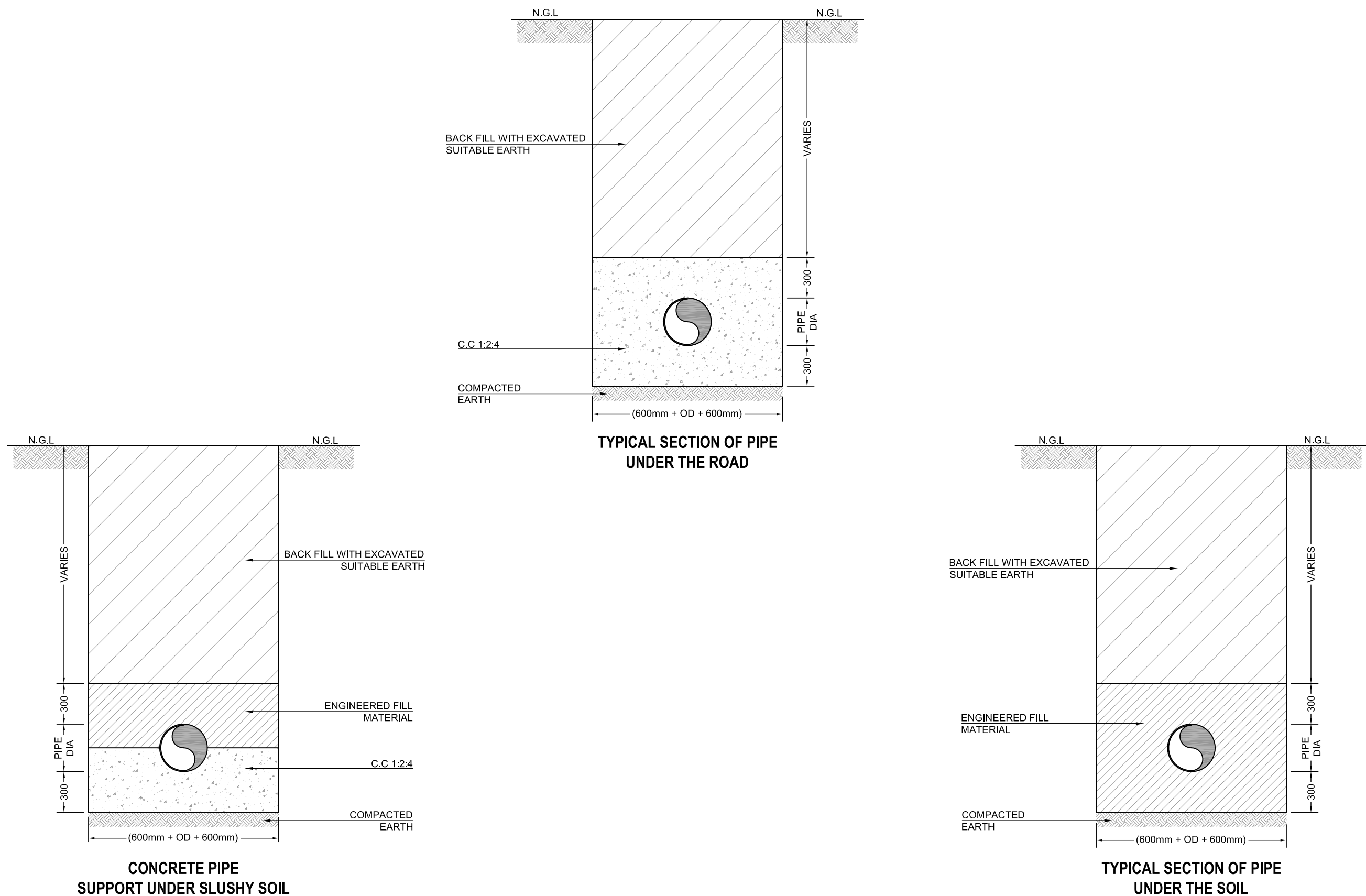
PROJECT:-

ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.

DRAWN	SAIF	TITLE	PUMPING MAIN MS PIPE Ø 1800mm PLAN & PROFILE (STA = 10+850 TO 11+075.00)	PACKAGE # 03
DESIGNED	SIDRA			
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	EA-942-65M-PIII-U-PP18
APPROVED	ALI ASGHAR	H=1:1000 V=1:100 (A1)		




0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

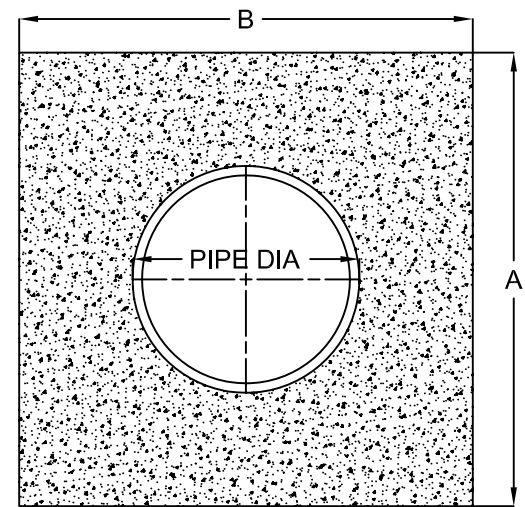
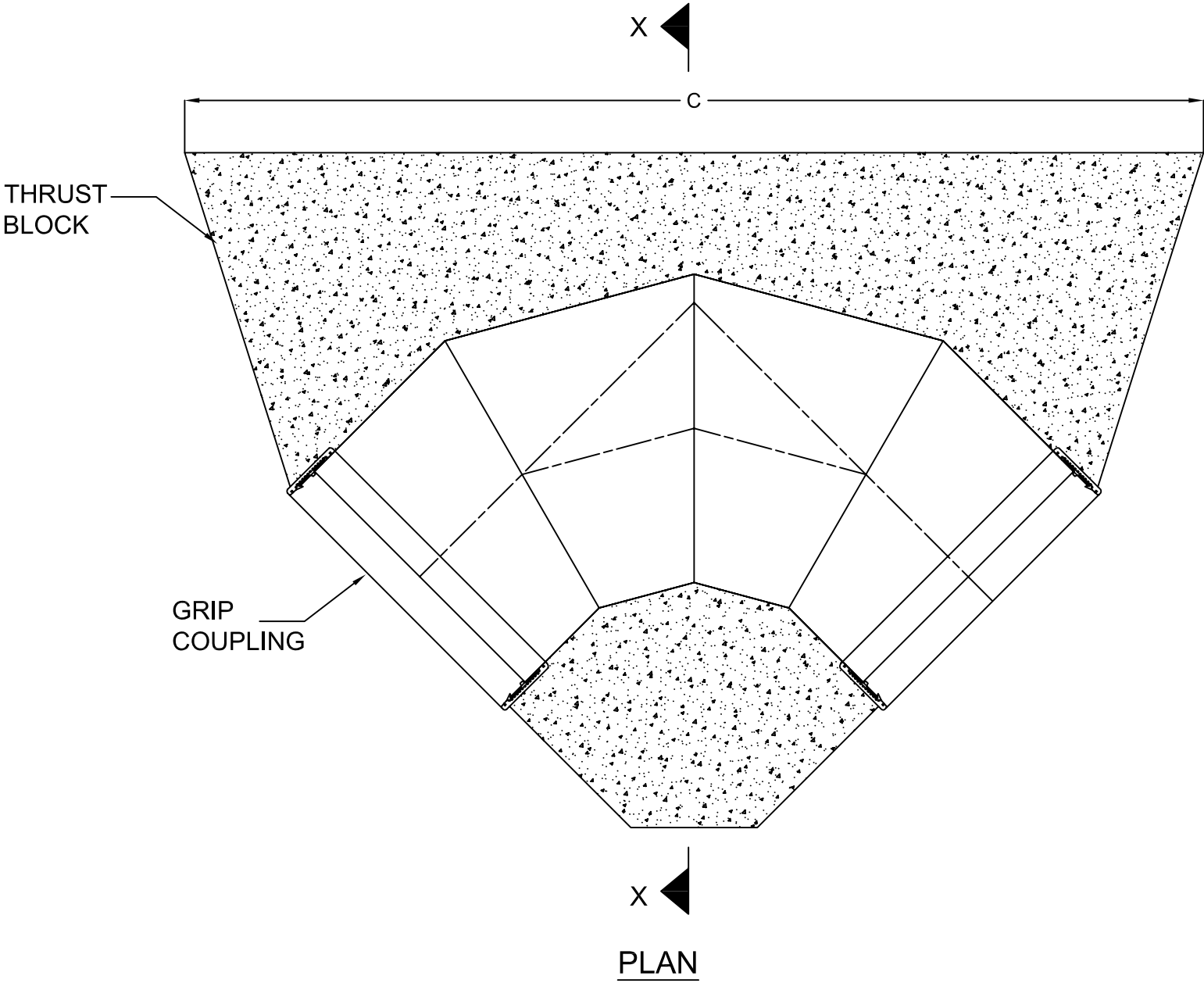
DETAIL DRAWINGS






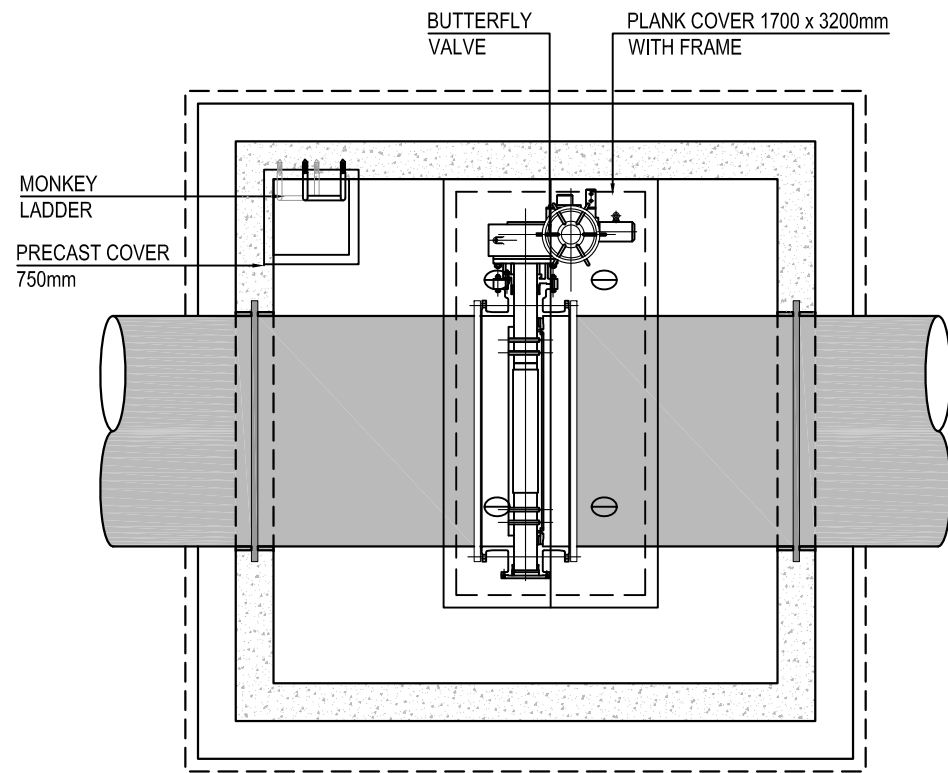
NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. BEDDING SHALL BE FINALIZED ACCORDING TO MANUFACTURE'S INSTRUCTION.

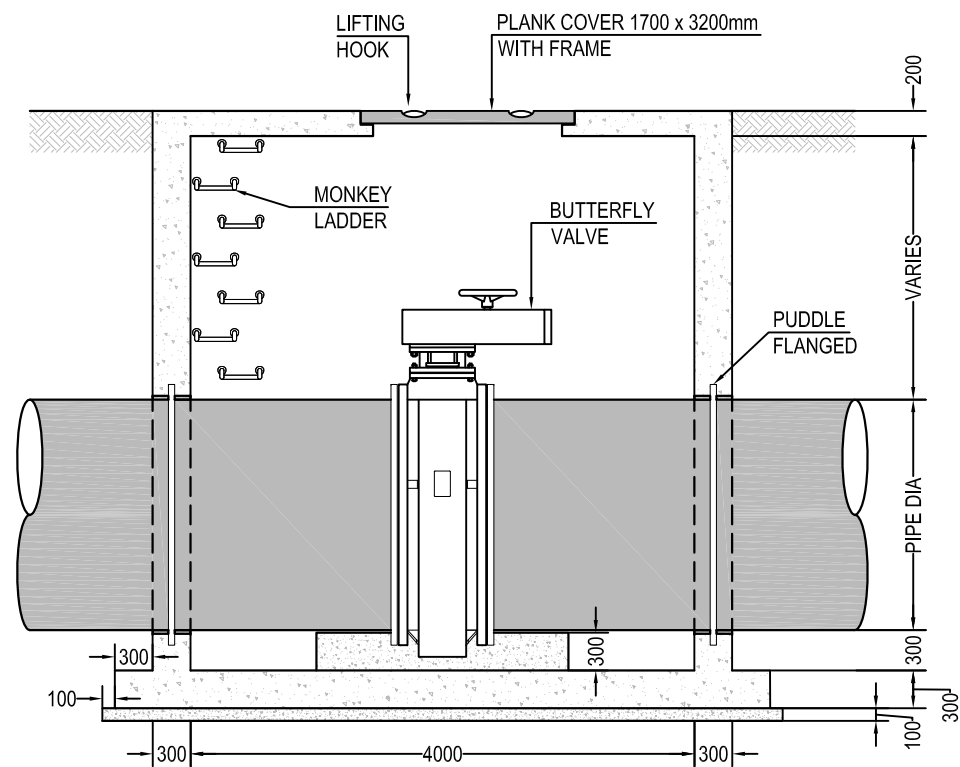
						CLIENT:-		<div></div> <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:-				ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.			
						CONSULTANT:-				IN ASSOCIATION WITH:-		DRAWN	SAIF	TITLE		PACKAGE # 03	
						<div></div> <div>EA Consulting (Pvt.) Limited</div> <div>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</div>				<div></div> <div>Jers Engineering Consultant</div>		DESIGNED	SIDRA	PIPE TRENCH			
0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A							CHECKED	MUNAWAR	Scale / Sheet		Drawing No.	
ED.NO	DATE	DESCRIPTION	BY	CKD	APR					APPROVED	ALI ASGHAR	N.T.S (A1)	EA-942-65M-PIII-U-W400				



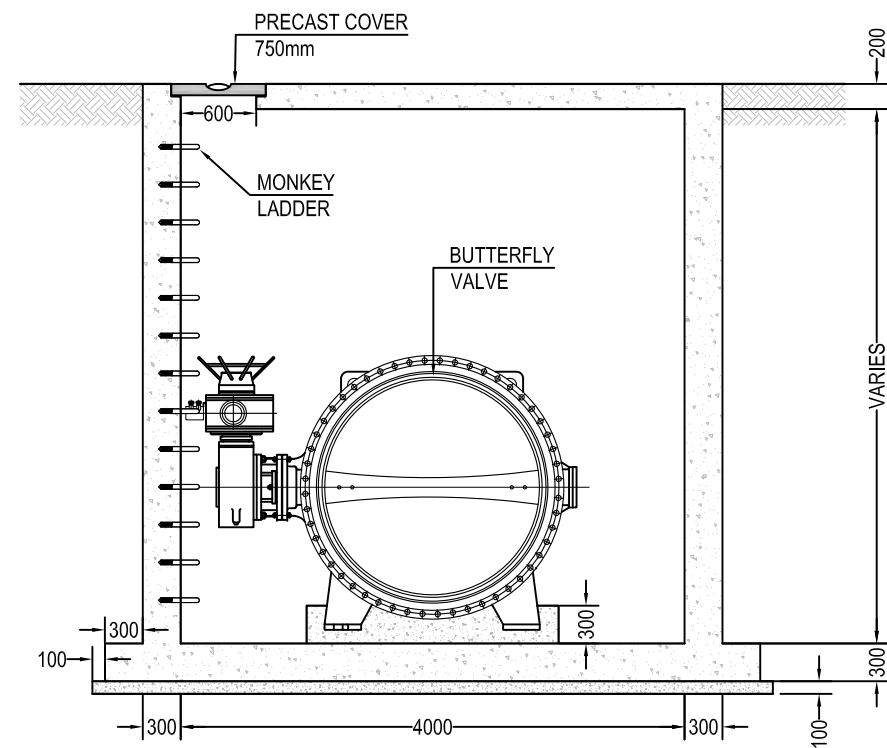
<div>NOTE:-</div> <div>1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.</div>																	CLIENT:-		<div></div> <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:-				ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.									
																							DRAWN						SAIF		TITLE		PACKAGE # 03	
																																	THRUST BLOCK	
							0		APR,18		TENDER DRAWINGS		S.A.S		M.Z		A.A				EA Consulting (Pvt.) Limited CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS				Jers Engineering Consultant		DESIGNED		SIDRA		Scale / Sheet		Drawing No.	
							ED.NO		DATE		DESCRIPTION		BY		CKD		APR										CHECKED		MUNAWAR					
																												EA-942-65M-PIII-U-W401						



BUTTERFLY VALVE CHAMBER



SECTION A



SECTION B

NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR STRUCTURE REFER DWG.NO.EA-942-65M-PIII-S-1001
3. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



**KARACHI WATER
&
SEWERAGE BOARD**

CONSULTANT:-



EA Consulting (Pvt.) Limited
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-

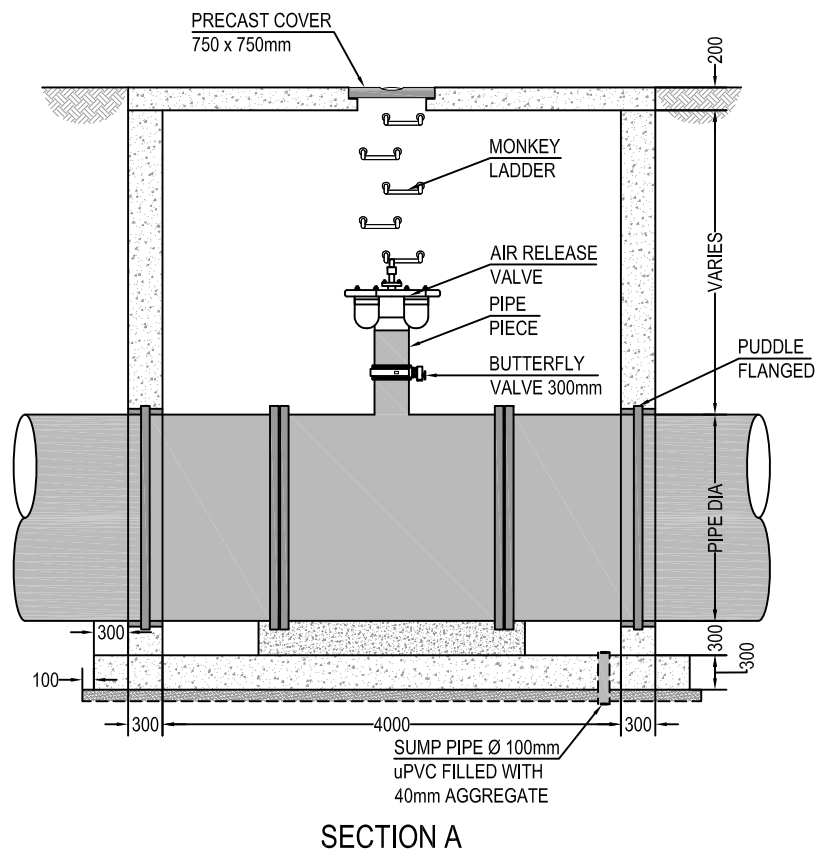
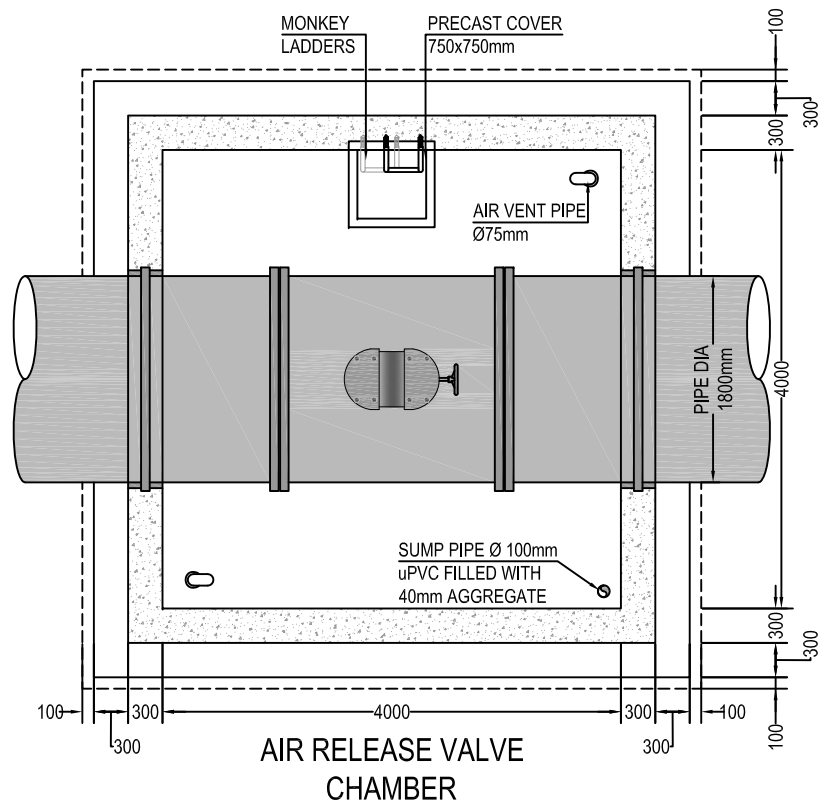


Jers Engineering Consultant

PROJECT:-




**ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.**

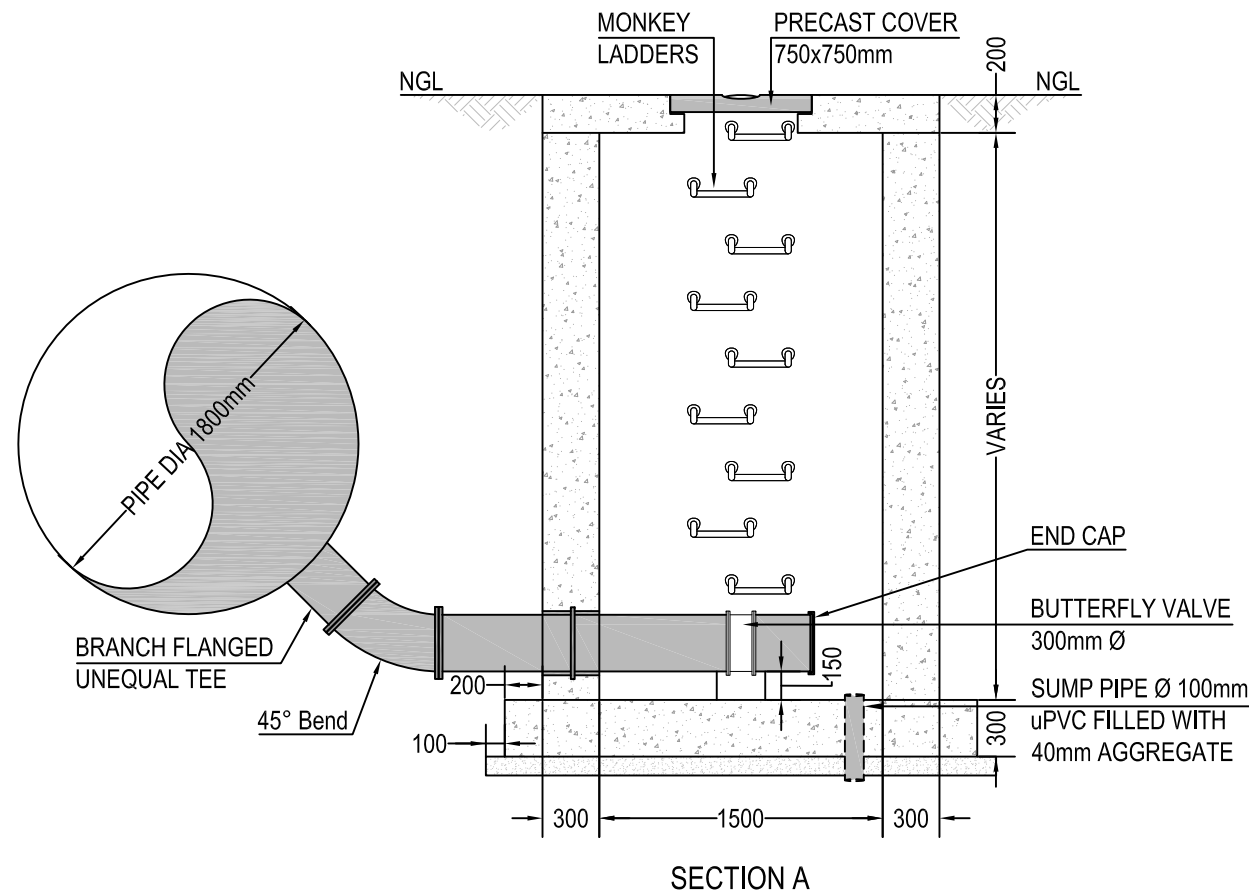
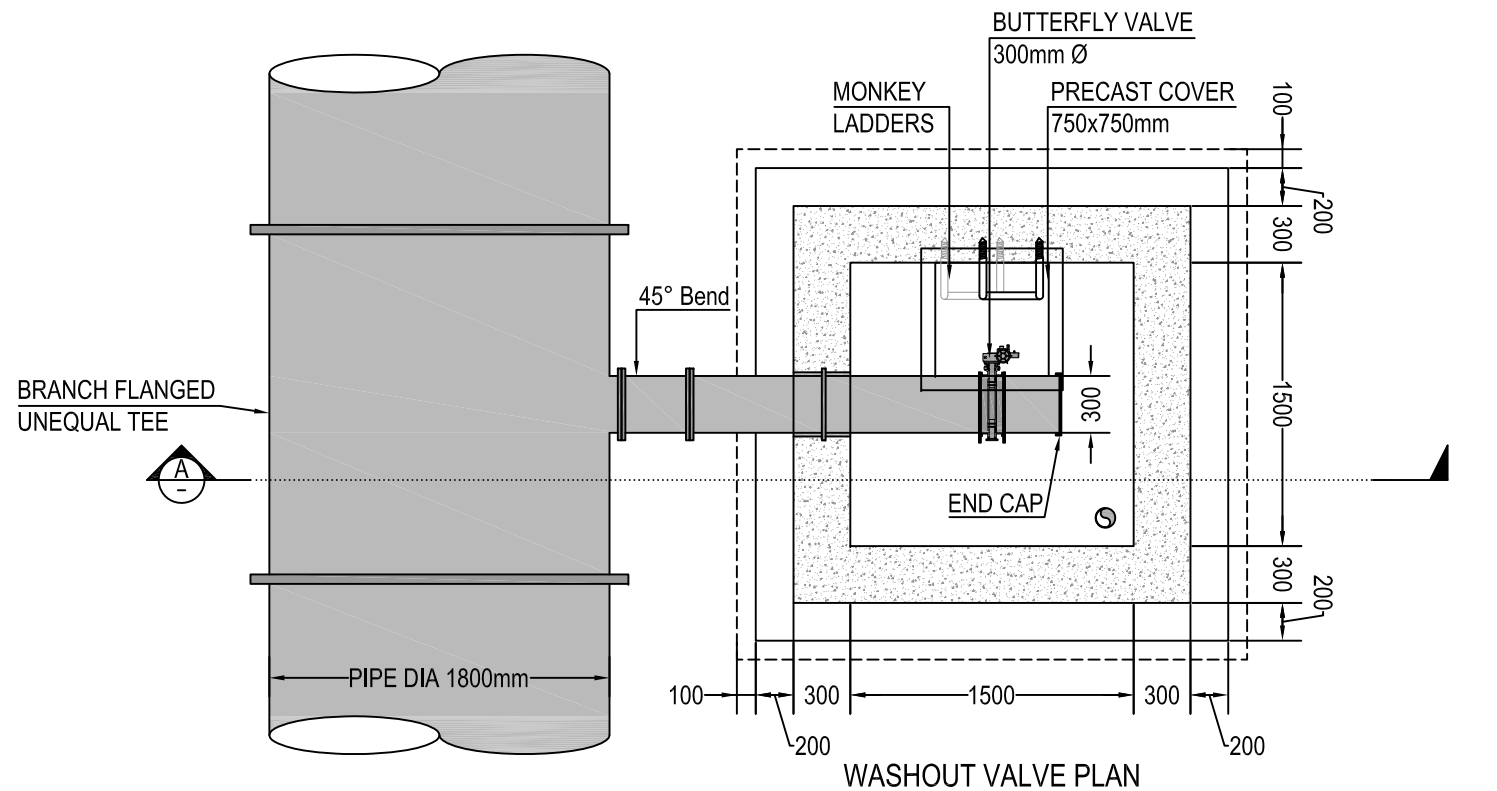
DRAWN	SAIF	TITLE		PACKAGE # 03
DESIGNED	SIDRA	BUTTERFLY VALVE CHAMBER		
CHECKED	MUNAWAR			
APPROVED	ALI ASGHAR	Scale / Sheet	Drawing No.	
		N.T.S (A1)	EA-942-65M-PIII-U-W402	



NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. FOR STRUCTURE REFER DWG.NO.EA-942-65M-PIII-S-1002
3. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

						CLIENT:-  KARACHI WATER & SEWERAGE BOARD		PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.							
						CONSULTANT:-  EA Consulting (Pvt.) Limited <small>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</small>		IN ASSOCIATION WITH:-  Jers Engineering Consultant		DRAWN	SAIF	TITLE AIR RELEASE VALVE CHAMBER		PACKAGE # 03	
0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A			DESIGNED	SIDRA						
ED.NO	DATE	DESCRIPTION	BY	CKD	APR					CHECKED	MUNAWAR	Scale / Sheet		Drawing No.	
										APPROVED	ALI ASGHAR	N.T.S	(A1)	EA-942-65M-PIII-U-W403	



NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR STRUCTURE REFER DWG.NO.EA-942-65M-PIII-S-1003
3. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



**KARACHI WATER
&
SEWERAGE BOARD**

CONSULTANT:-



EA Consulting (Pvt.) Limited
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-



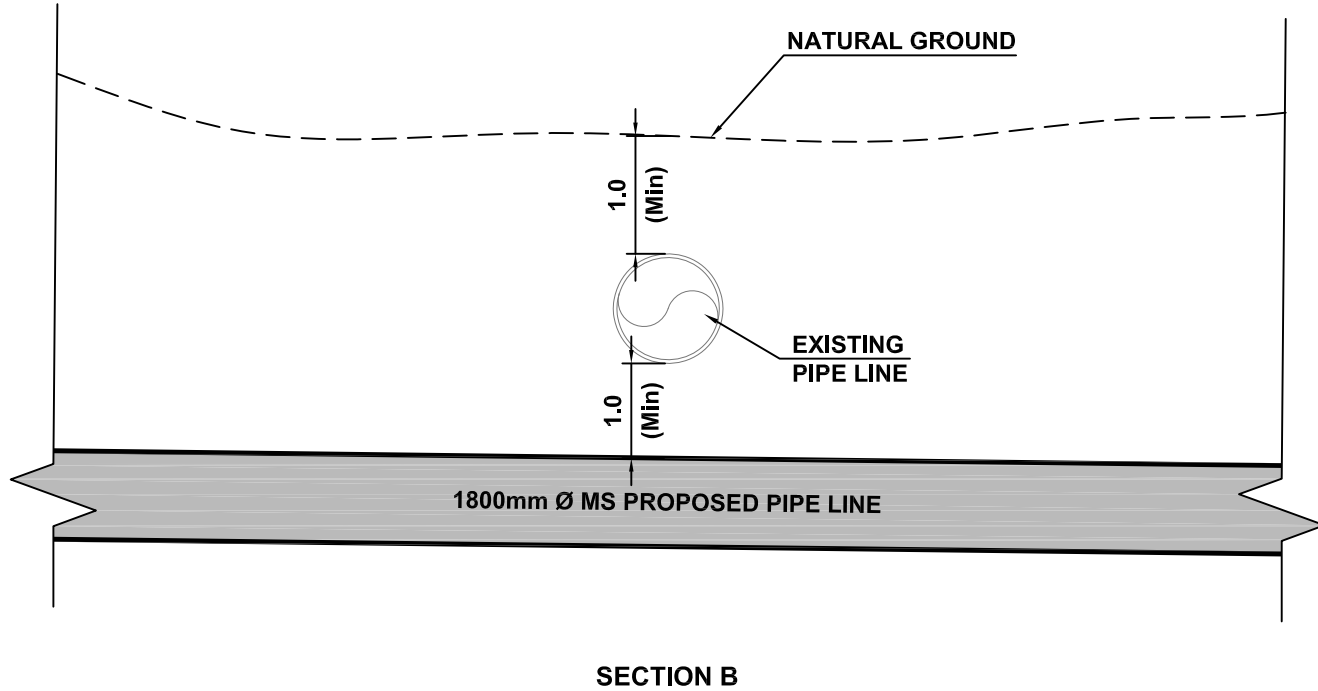
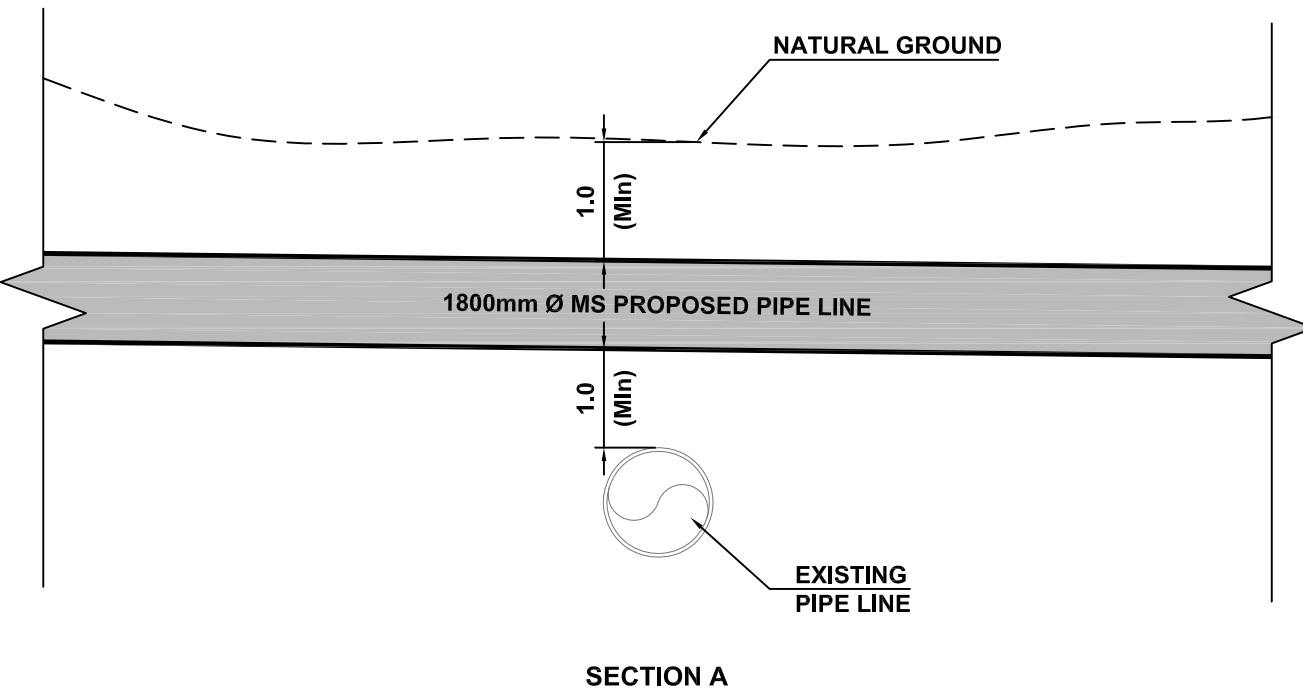
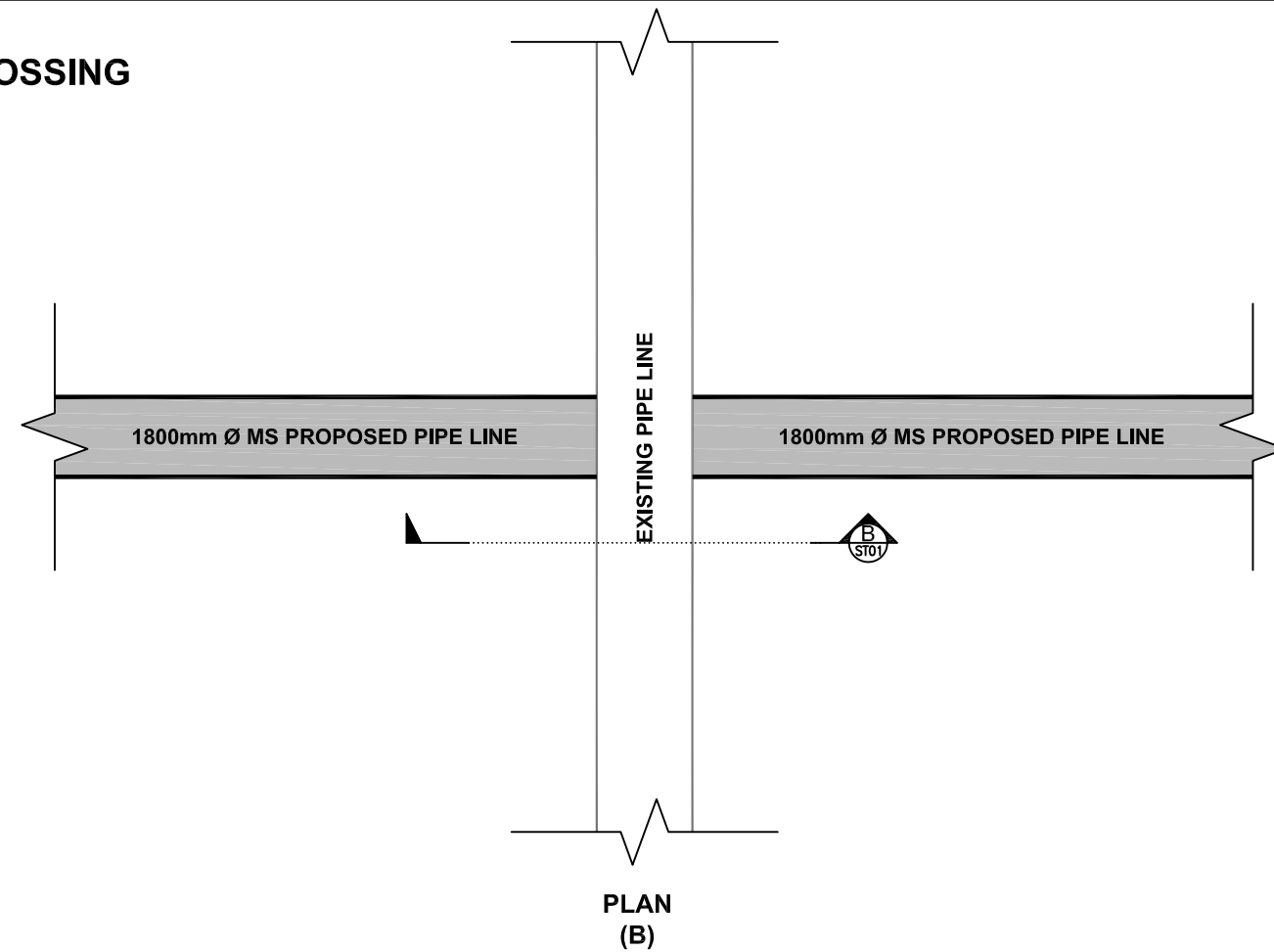
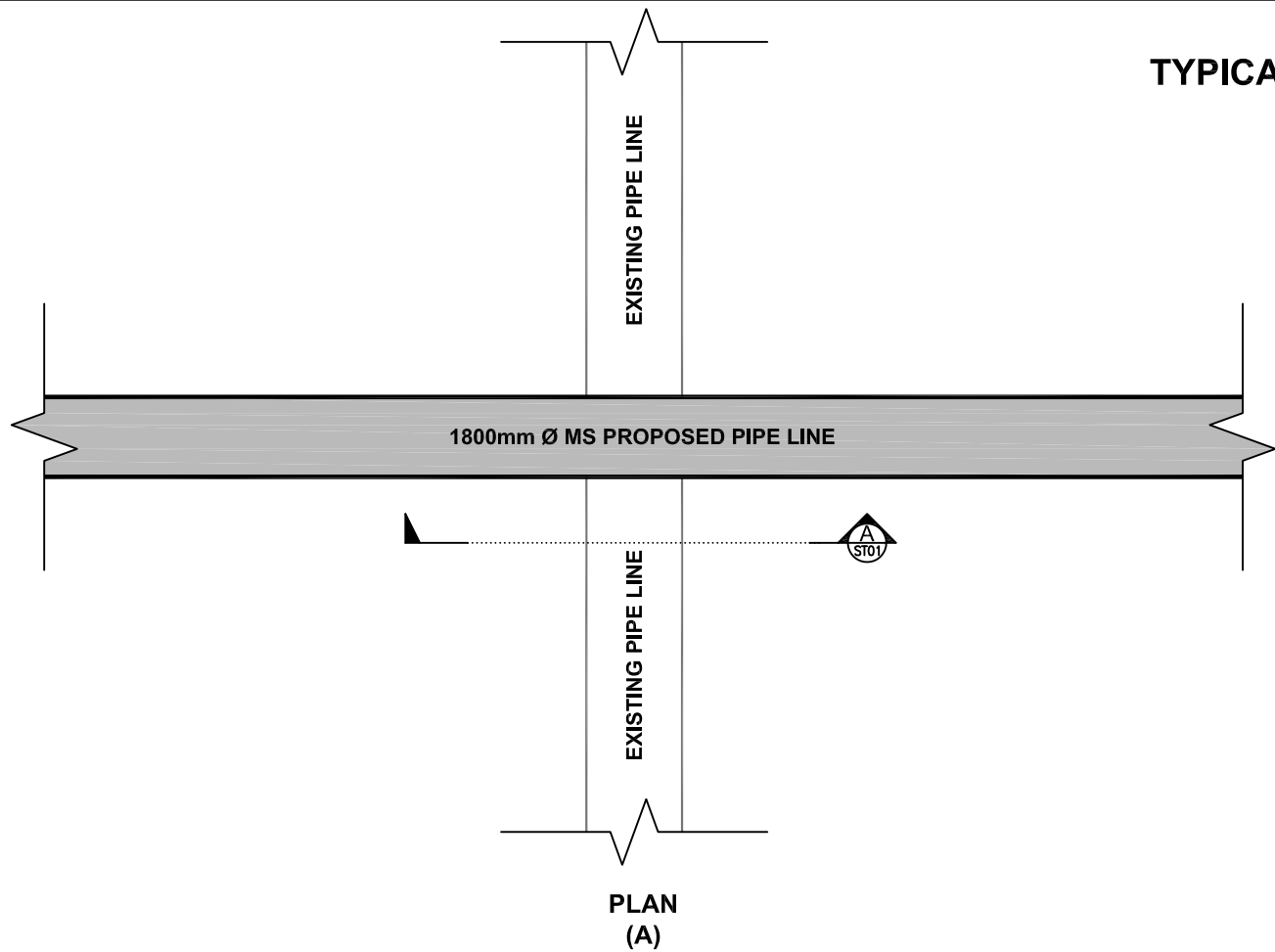
Jers Engineering Consultant

PROJECT:-

**ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.**

DRAWN	SAIF	TITLE		PACKAGE # 03
DESIGNED	SIDRA	WASHOUT VALVE CHAMBER		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	
APPROVED	ALI ASGHAR	N.T.S (A1)	EA-942-65M-PIII-U-W404	

TYPICAL PIPE CROSSING



NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. JOINTS IN PROPOSED PIPE SHOULD BE AVOIDED BELOW /ABOVE EXISTING PIPE LINE.
3. CROSSING DRAWING SHOULD BE PROVIDED / GENERATED IN SHOP DRAWINGS AND IT BE APPROVED BEFORE CONSTRUCTION.
4. FOR SEE TYPICAL PIPE CROSSING REFER DWG.NO.EA-942-65M-PIII-U-PP01 TO PP18
5. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



KARACHI WATER
&
SEWERAGE BOARD

CONSULTANT:-



EA Consulting (Pvt.) Limited

CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-

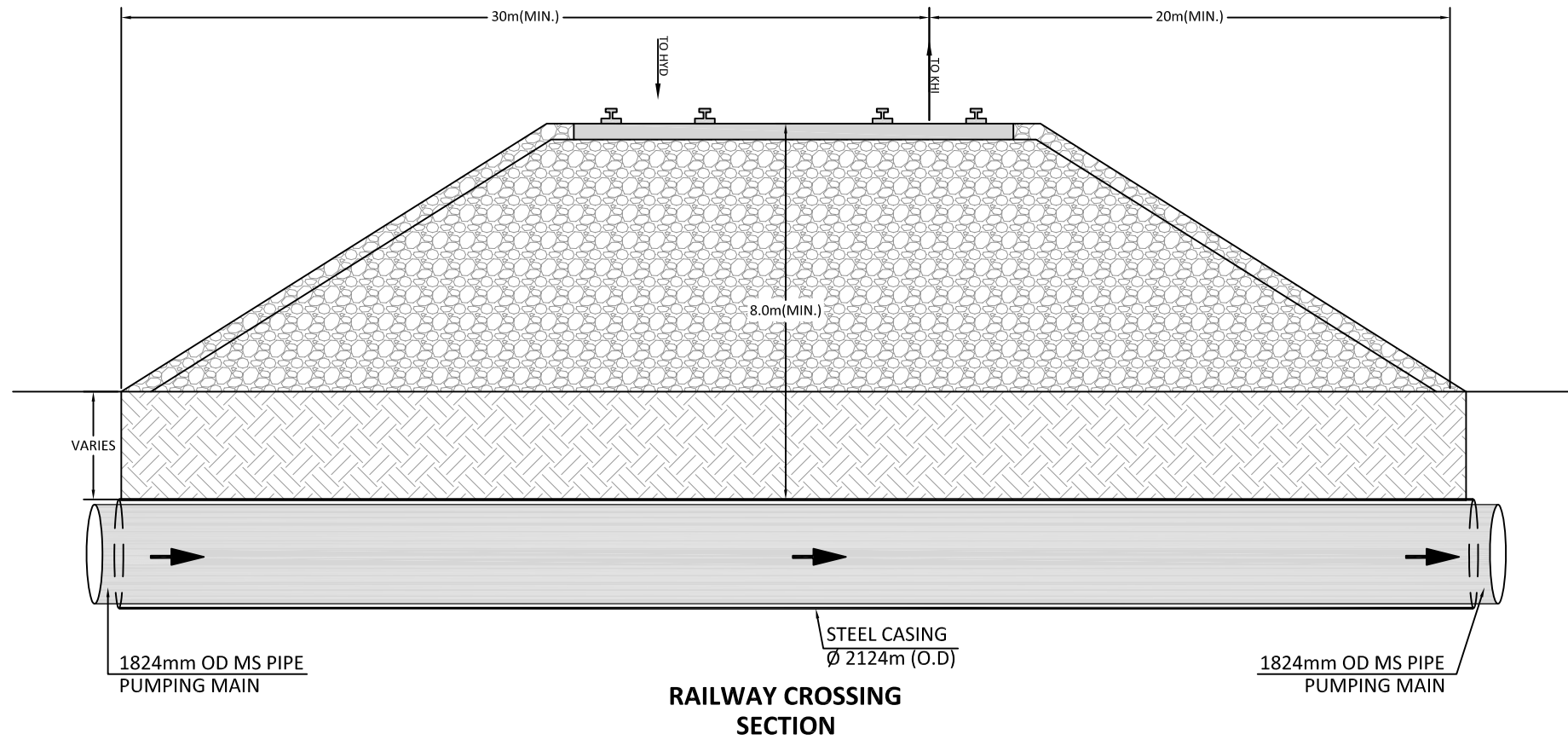
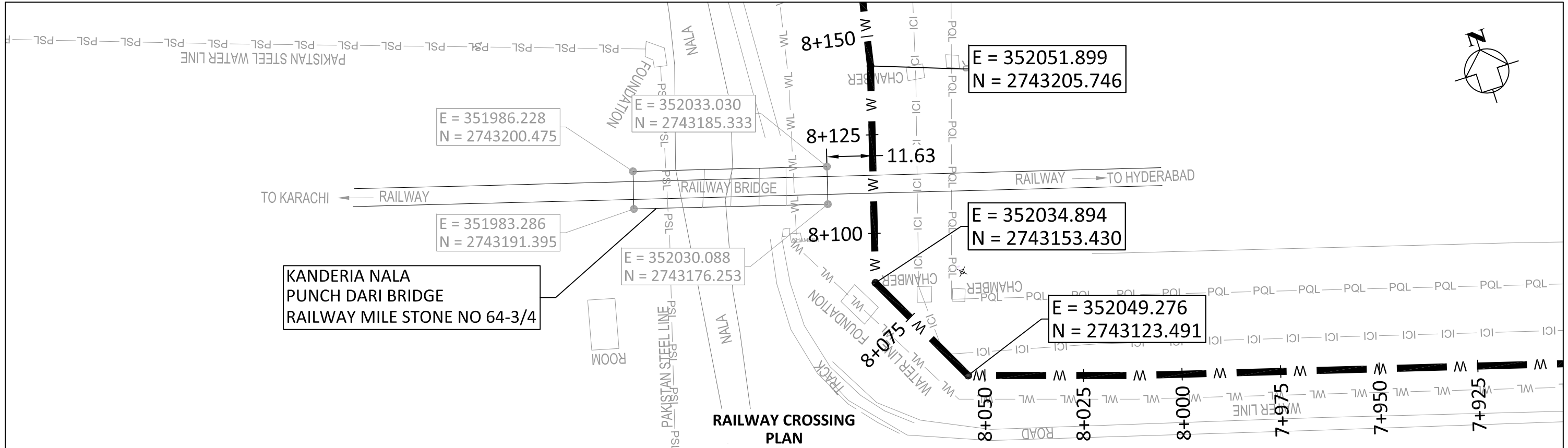


Jers Engineering Consultant

PROJECT:-




ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.

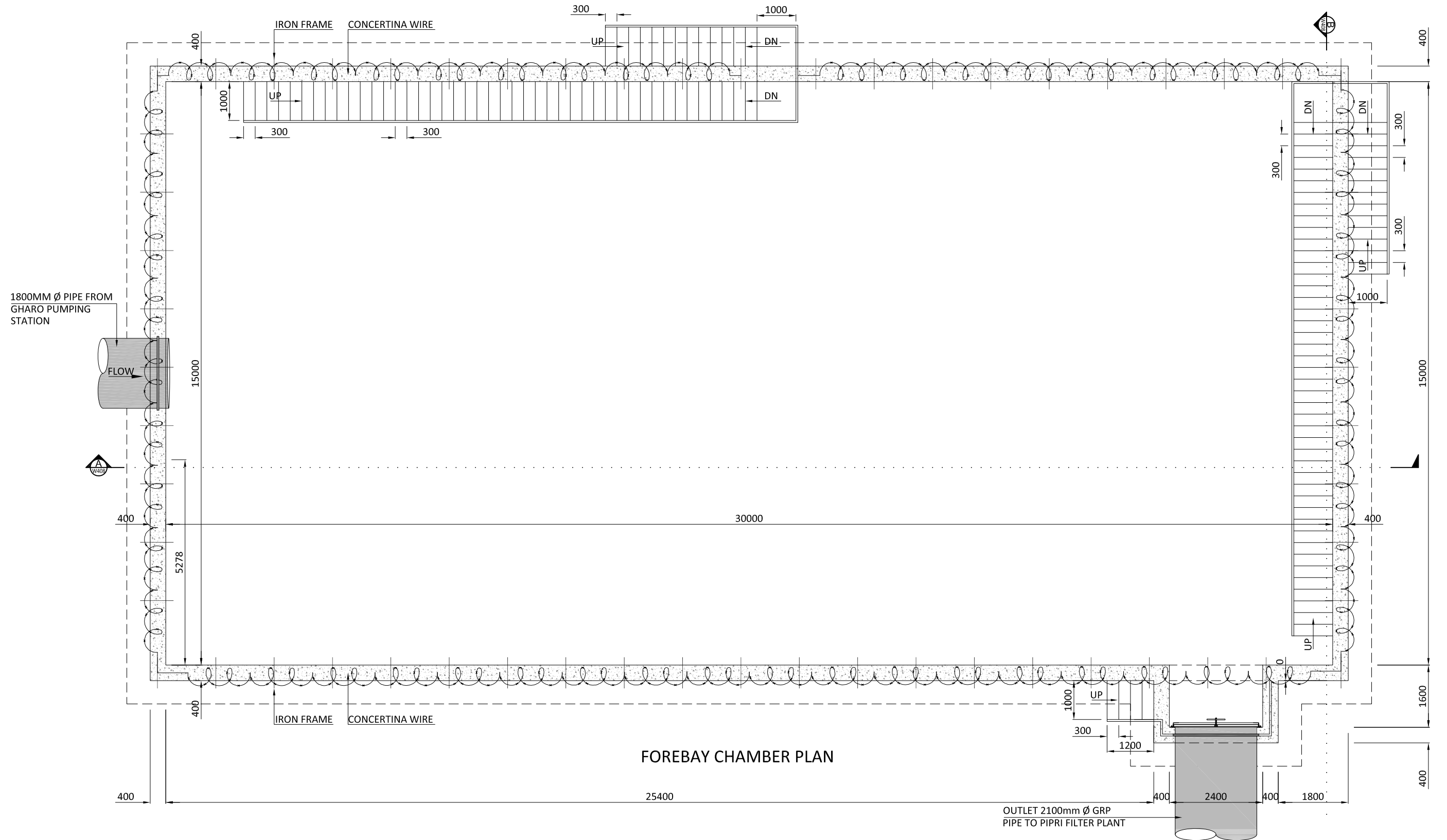
DRAWN	SAIF	TITLE		PACKAGE # 03
DESIGNED	SIDRA	TYPICAL PIPE CROSSING		
CHECKED	MUNAWAR			
APPROVED	ALI ASGHAR	Scale / Sheet	Drawing No.	
		N.T.S (A1)	EA-942-65M-PIII-U-W405	



NOTE:-

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
2. FOR SEE PLAN & PROFILE REFER DWG.NO.EA-942-65M-PIII-U-PP11.
3. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

						CLIENT:-  KARACHI WATER & SEWERAGE BOARD	PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.
						CONSULTANT:-  EA Consulting (Pvt.) Limited <small>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</small>	PACKAGE # 03 TITLE DETAIL OF RAILWAY CROSSING
						IN ASSOCIATION WITH:-  Jers Engineering Consultant	DRAWN DESIGNED CHECKED APPROVED
							SAIF SIDRA MUNAWAR ALI ASGHAR
							Scale / Sheet (A1)
							Drawing No. EA-942-65M-PIII-U-W406
ED.NO	DATE	DESCRIPTION	BY	CKD	APR		
0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A		



NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR LOCATION OF FROEBAY CHAMBER REFER DWG.NO.EA-942-65M-PIII-U-PP18
3. FOR SECTION REFER DWG.NO.EA-942-65M-PIII-U-W408
4. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



KARACHI WATER
&
SEWERAGE BOARD

CONSULTANT:-



EA Consulting (Pvt.) Limited
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-

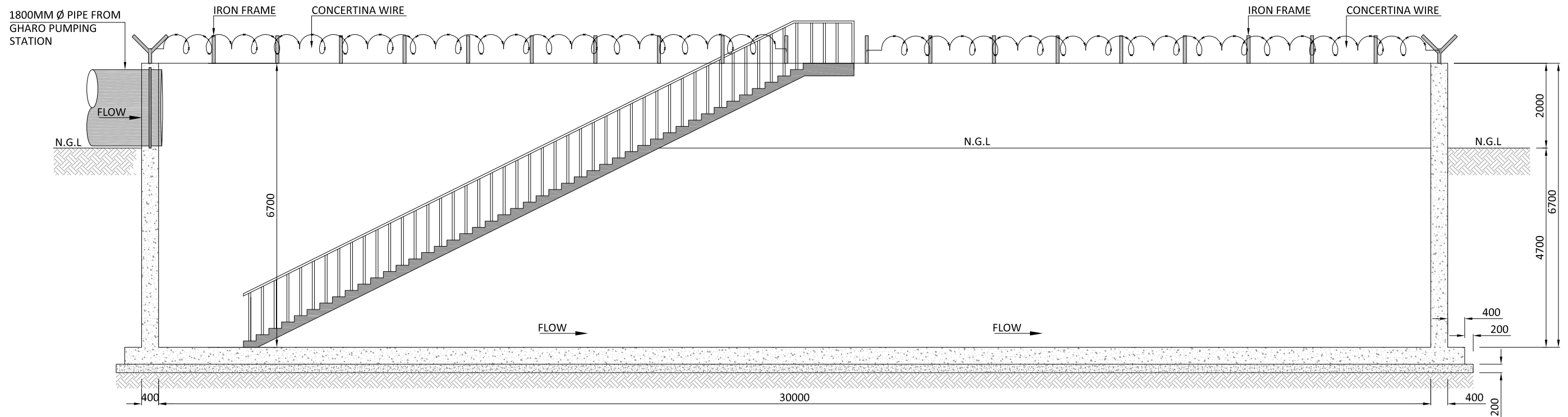


Jers Engineering Consultant

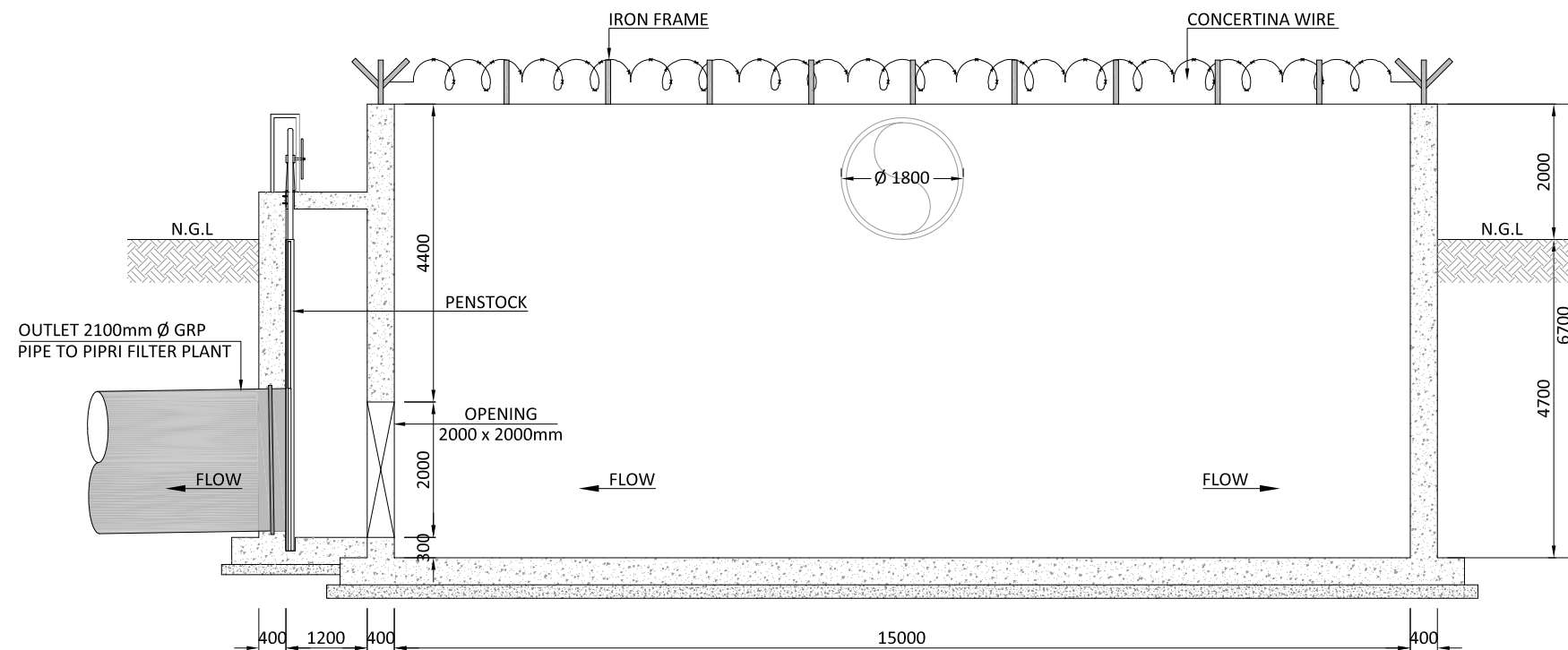
PROJECT:-

ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.

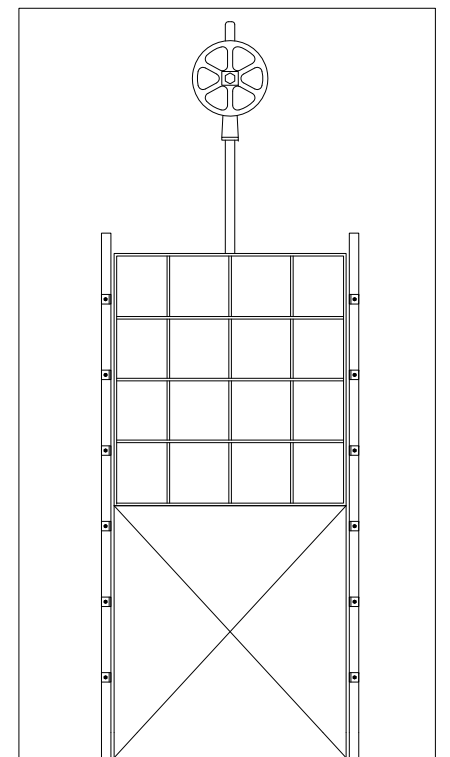
DRAWN	SAIF	TITLE		PACKAGE # 03
DESIGNED	SIDRA	FOREBAY CHAMBER PLAN		
CHECKED	MUNAWAR	Scale / Sheet	Drawing No.	
APPROVED	ALI ASGHAR	N.T.S (A1)	EA-942-65M-PIII-U-W407	



SECTION A




SECTION B



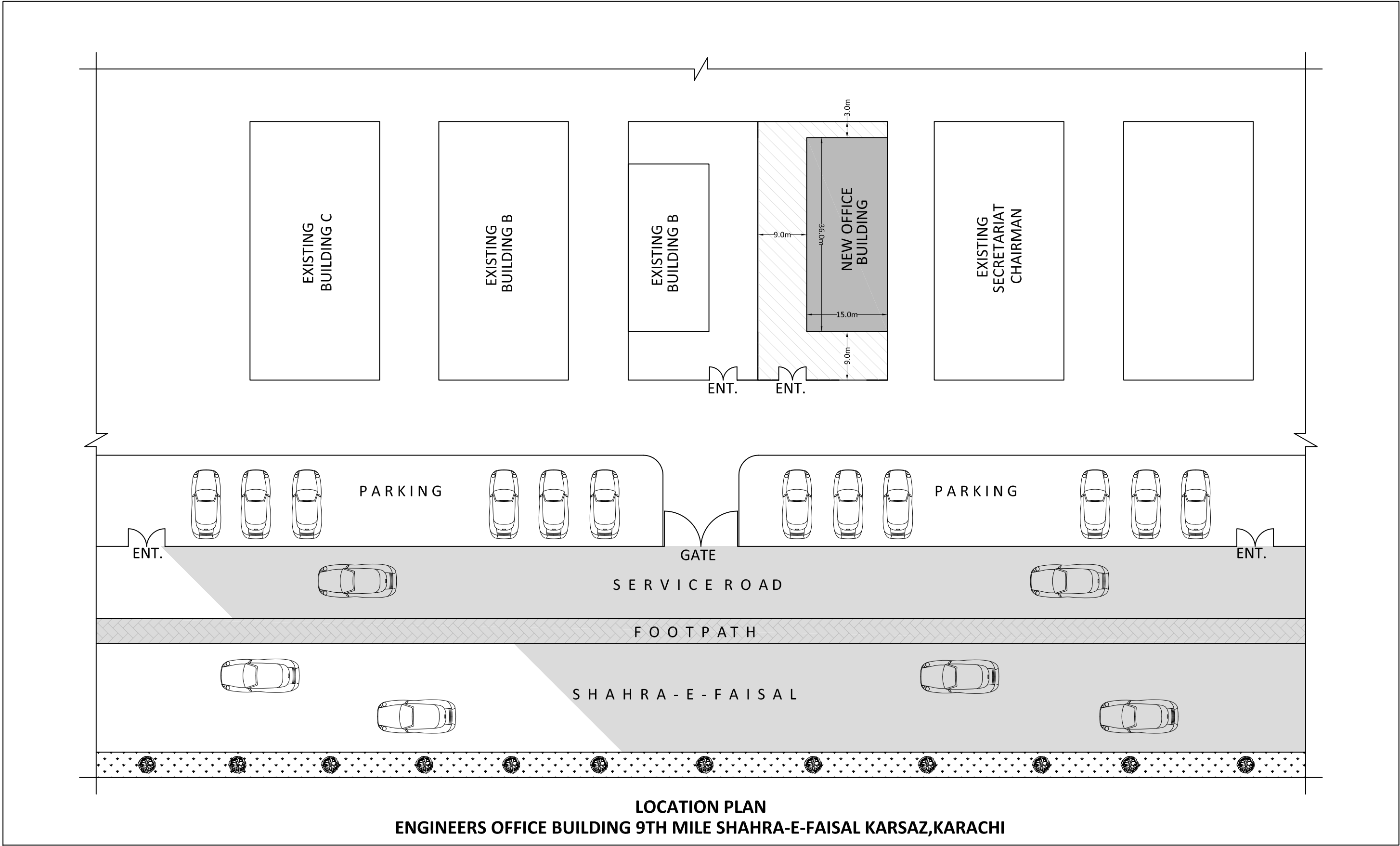
DETAIL OF PENSTOCK

NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR FOREBAY CHAMBER PLAN REFER DWG.NO.EA-942-65M-PIII-U-W407.
3. 1800mm INNER DIAMETER TO BE PROVIDED WITH 12MM THICKNESS.

							CLIENT:-  KARACHI WATER & SEWERAGE BOARD		PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.						
							CONSULTANT:-		IN ASSOCIATION WITH:-		DRAWN	SAIF	TITLE		PACKAGE # 03
							EA Consulting (Pvt.) Limited  CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS		Jers Engineering Consultant 		DESIGNED	SIDRA	FOREBAY CHAMBER SECTIONS		
0	APR,18	TENDER DRAWINGS	S.A.S	M.Z	A.A						CHECKED	MUNAWAR	Scale / Sheet		Drawing No.
ED.NO	DATE	DESCRIPTION	BY	CKD	APR						APPROVED	ALI ASGHAR	N.T.S (A1)		EA-942-65M-PIII-U-W408

ENGINEERS OFFICE BUILDING



LOCATION PLAN
ENGINEERS OFFICE BUILDING 9TH MILE SHAHRA-E-FAISAL KARSAZ,KARACHI

0	APR,18	TENDER DRAWINGS	A.R	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



KARACHI WATER
&
SEWERAGE BOARD

CONSULTANT:-



EA Consulting (Pvt.) Limited
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-



Jers Engineering Consultant

PROJECT:-

ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.

DRAWN

FURQAN

DESIGNED

A.RAWOOF

CHECKED

MUNAWAR

APPROVED

ALI ASGHAR

TITLE

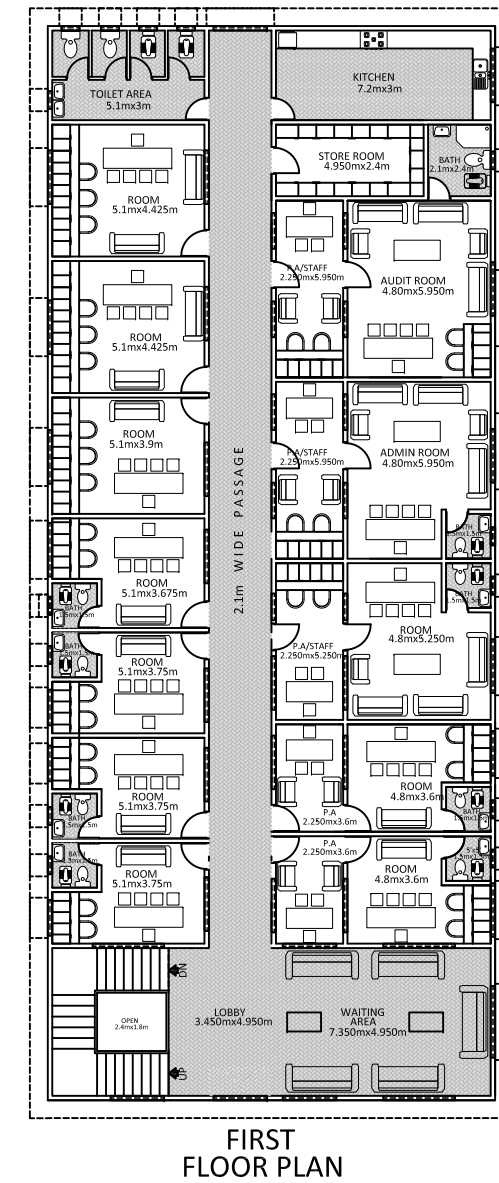
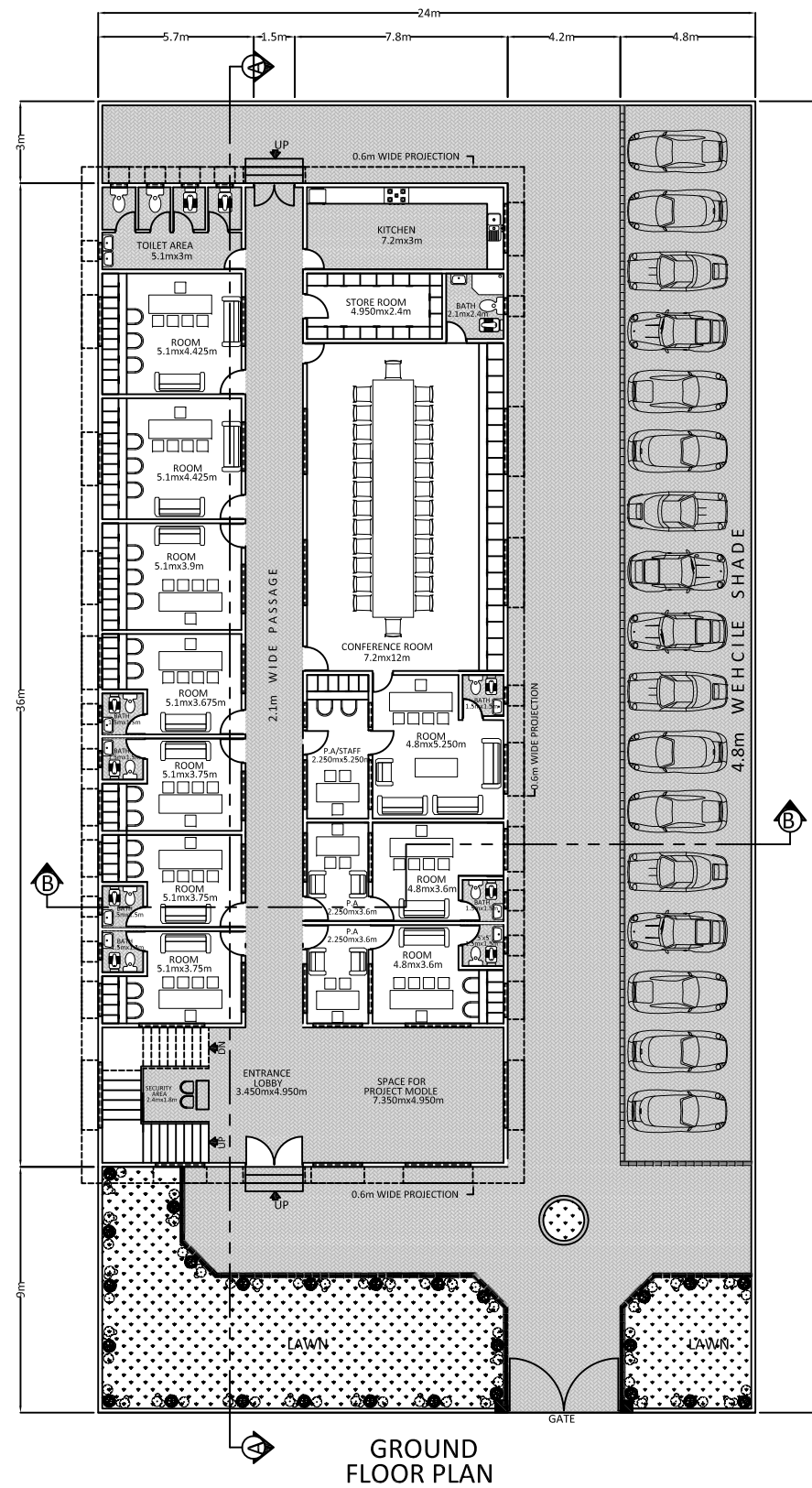
LOCATION PLAN OF
ENGINEERS OFFICE BUILDING

Scale / Sheet
N.T.S

Drawing No.
(A1)

EA-942-65M-PIII-U-EF01

PACKAGE # 03



0	APR,18	TENDER DRAWINGS	A.R	M.Z	A.A
ED.NO	DATE	DESCRIPTION	BY	CKD	APR

CLIENT:-



**KARACHI WATER
&
SEWERAGE BOARD**

CONSULTANT:-



EA Consulting (Pvt.) Limited
CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS

IN ASSOCIATION WITH:-

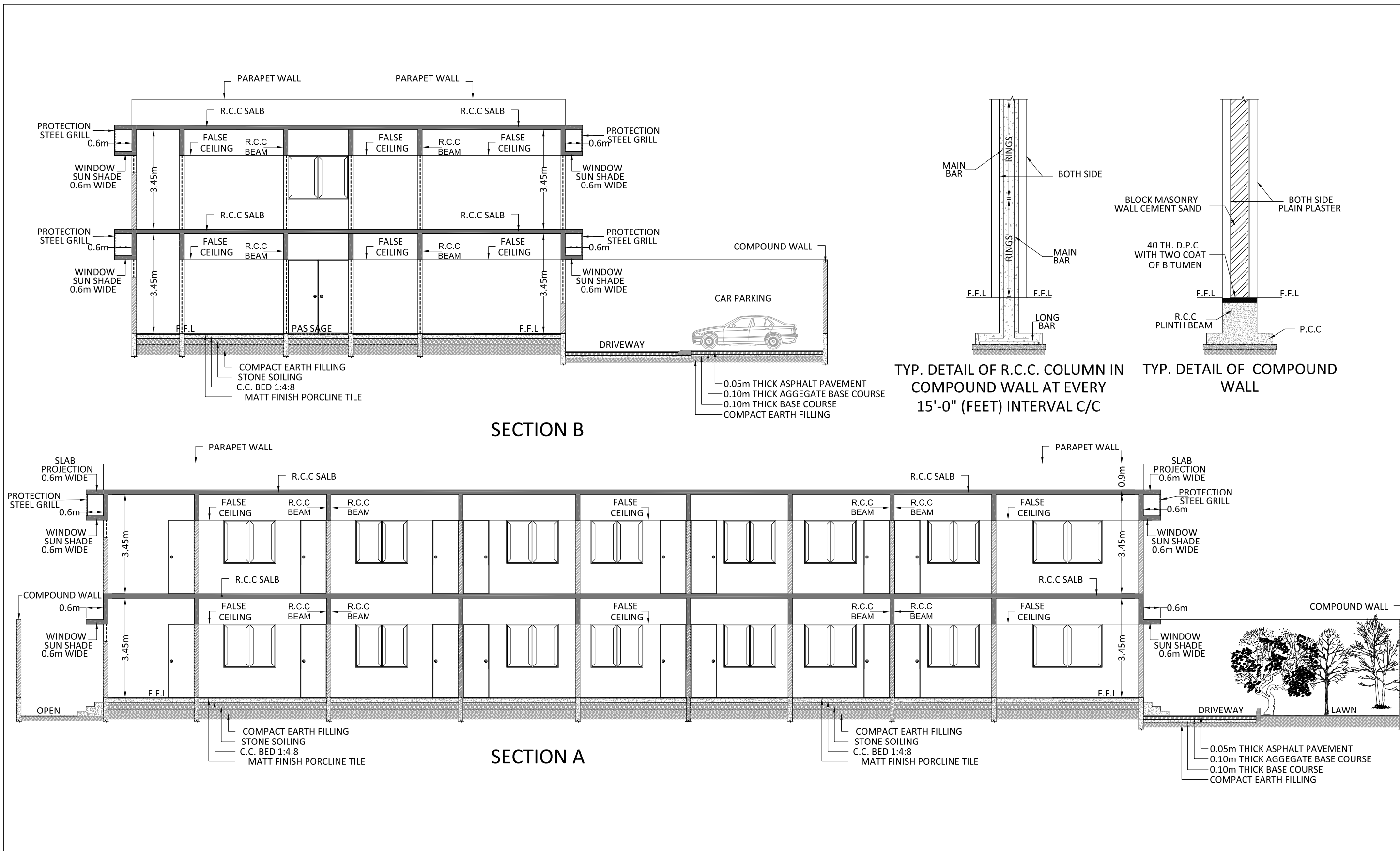





Jers Engineering Consultant

PROJECT:-

**ADDITIONAL 65 MGD
WATER SUPPLY SCHEME FROM
HALEJI TO PIPRI, KARACHI.**

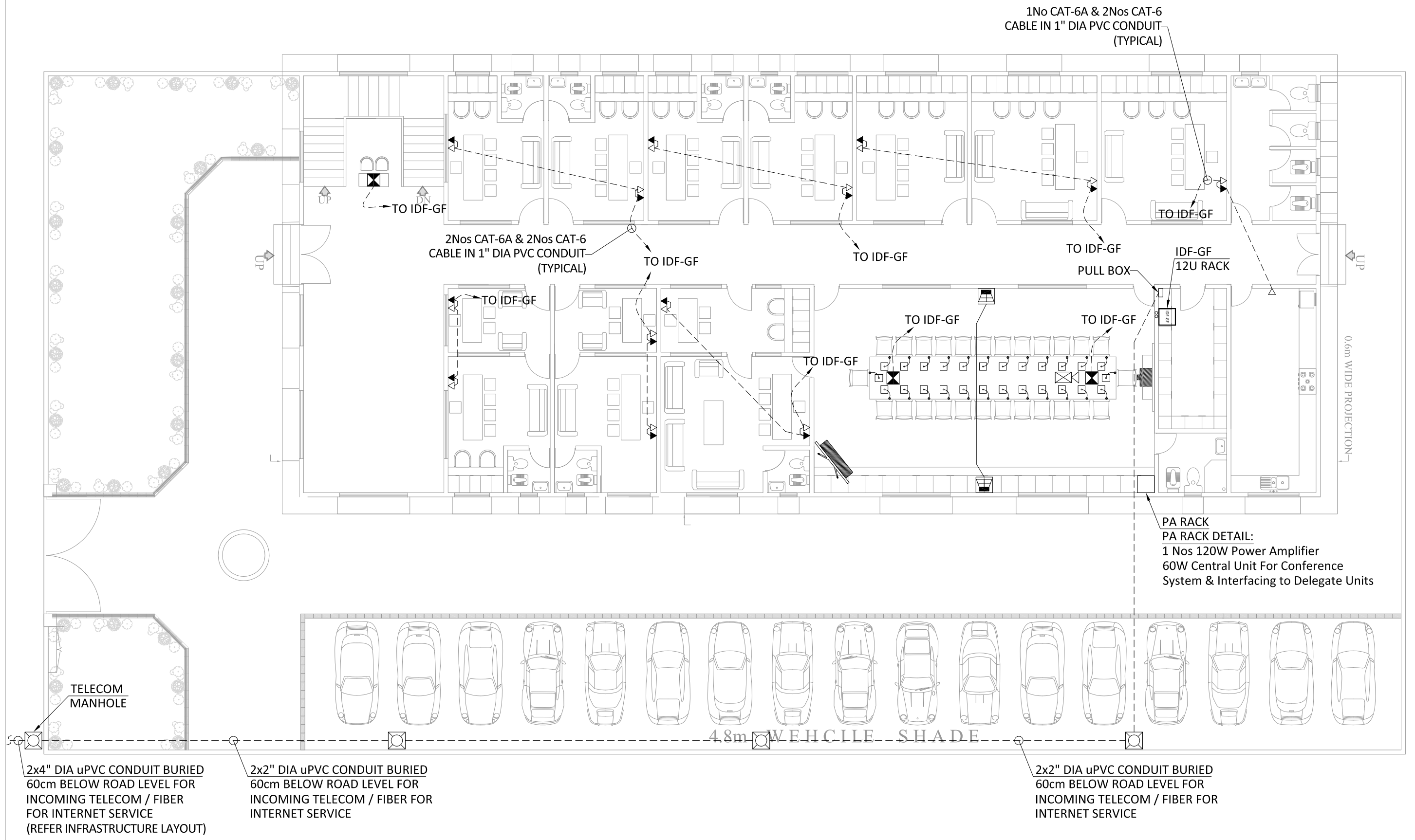
		PACKAGE # 03	
	DRAWN	FURQAN	ENGINEERS OFFICE BUILDING PLAN
	DESIGNED	A.RAWOOF	
	CHECKED	MUNAWAR	
	APPROVED	ALI ASGHAR	
	Scale / Sheet		Drawing No.
	N.T.S (A1)		EA-942-65M-PIII-U-EF02



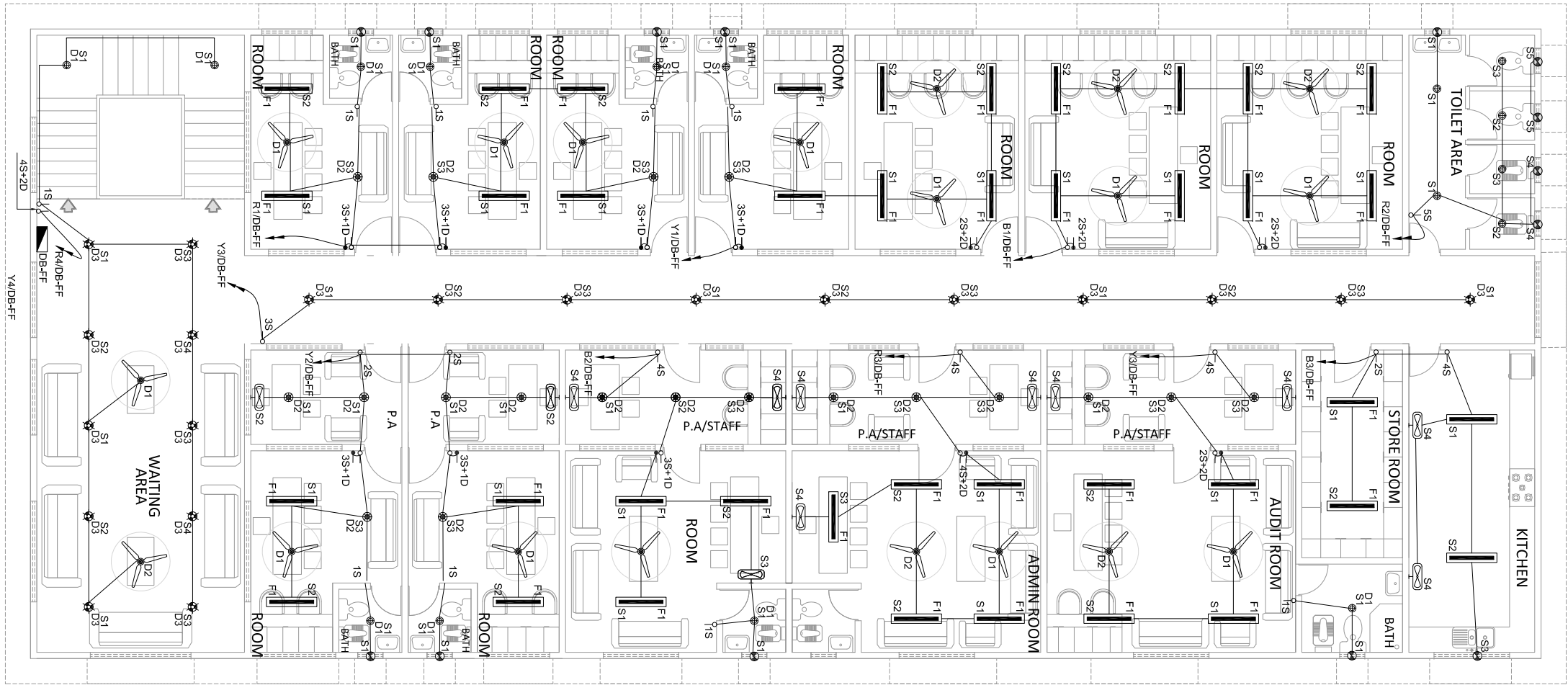
						CLIENT:-		 <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:-				ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.							
						CONSULTANT:-		IN ASSOCIATION WITH:-		DRAWN	FURQAN	TITLE				PACKAGE # 03					
0						APR,18	TENDER DRAWINGS		A.R	M.Z	A.A	 <div>EA Consulting (Pvt.) Limited CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</div>		 <div>Jers Engineering Consultant</div>		DESIGNED	A.RAWOOF	ENGINEERS OFFICE BUILDING CROSS SECTION & COMPOUND WALL DETAIL			
												CHECKED	MUNAWAR	Scale / Sheet		Drawing No.					
ED.NO						DATE	DESCRIPTION		BY	CKD	APR			APPROVED		ALI ASGHAR	N.T.S	(A1)	EA-942-65M-PIII-U-EF03		

ELECTRICAL DRAWINGS

IT & SECURITY DRAWINGS



						CLIENT:-		PROJECT:-	
						KARACHI WATER & SEWERAGE BOARD		ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.	
						CONSULTANT:-		PACKAGE # 03	
						EA Consulting (Pvt.) Limited		Jers Engineering Consultant	
						IN ASSOCIATION WITH:-		TITLE	
								GROUND FLOOR IT & SECURITY PLAN OF ENGINEERS OFFICE BUILDING	
0	APR,18	TENDER DRAWINGS	ZN	AJ	JIS	DRAWN	Z.N	Scale / Sheet	
ED.NO	DATE	DESCRIPTION	BY	CKD	APR	DESIGNED	A.J	N.T.S (A1)	
						CHECKED	A.J	Drawing No.	
						APPROVED	J.I.S	EA-942-65M-PIII-IT-1001	





LEGEND FOR LIGHTING				
S.No.	SYMBOL	DESCRIPTION	LAMP	MOUNTING
1		DOWNLIGHT FIXTURE (IP-44)	1x13W CFL	CEILING SURFACE
2		DOWNLIGHT FIXTURE (IP-44)	1x23W CFL	CEILING SURFACE
3		DOWNLIGHT FIXTURE (IP-20)	1x18W LED	RECESSED

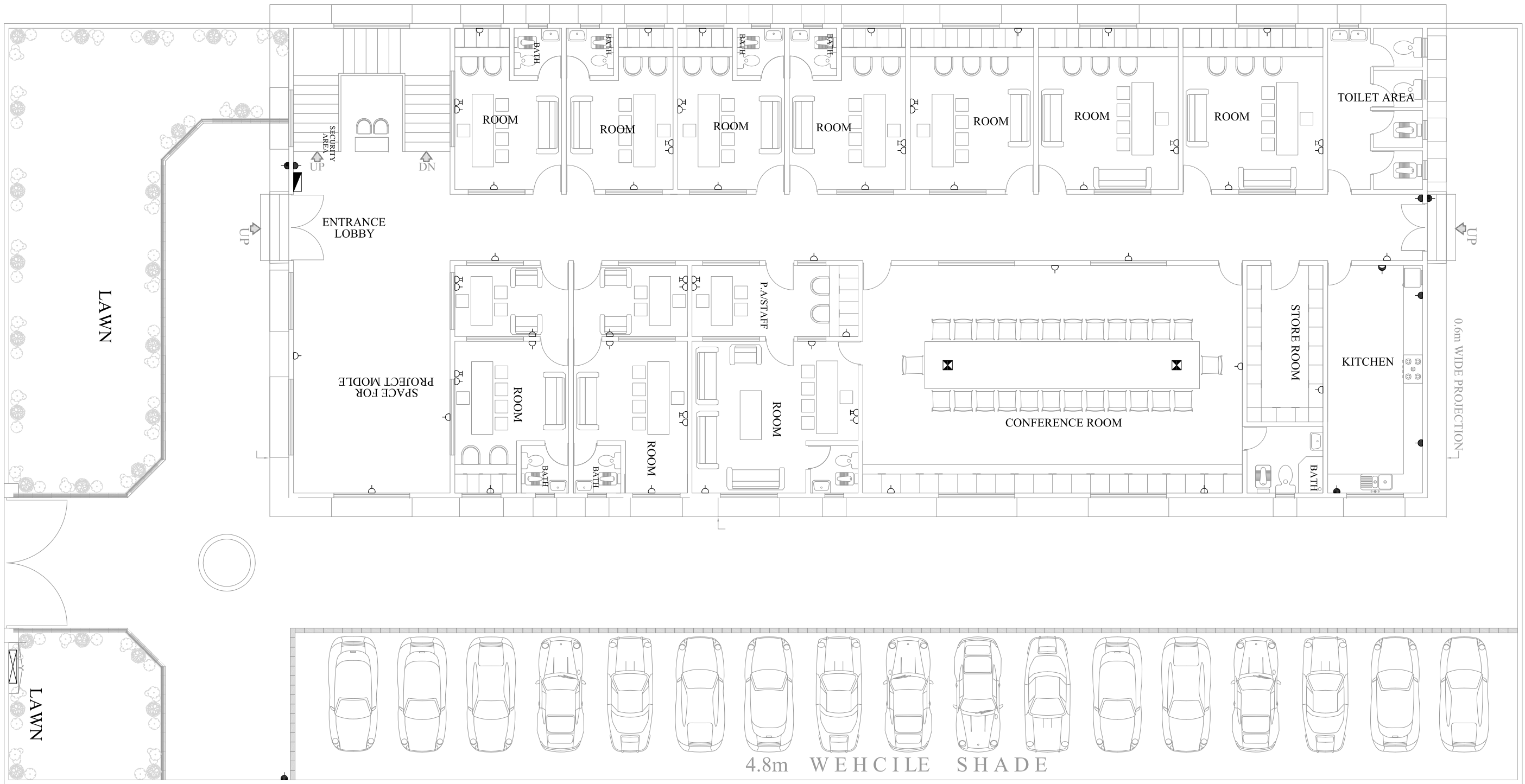
LEGEND FOR LIGHTING				
S.No.	SYMBOL	DESCRIPTION	LAMP	MOUNTING
4		DOWNLIGHT FIXTURE (IP-20)	1x18W LED	CEILING SURFACE
5		4' BATTEN LIGHT FIXTURE (IP-20)	1x30W LED	SURFACE
7		WALL LIGHT FIXTURE (IP-54)	1x13W CFL	WALL

LEGEND FOR LIGHTING				
S.No.	SYMBOL	DESCRIPTION	LAMP	MOUNTING
8		CEILING FAN 56"		CEILING SURFACE
9		WALL BRACKET FAN		WALL
10		EXHAUST FAN (BY OTHERS)		WALL




LEGEND FOR LIGHTING				
S.No.	SYMBOL	DESCRIPTION	LAMP	MOUNTING
11		LIGHTING CONTROL SWITCH (N GANG)		WALL
12		FAN DIMMER (N GANG)		WALL
13		DISTRIBUTION BOARD		

NOTES:- 1. ALL FINISHES OF LIGHT FIXTURES AND COLOUR TEMPERATURE OF LAMPS SHALL BE SUBJECT TO ARCHITECT'S APPROVAL .

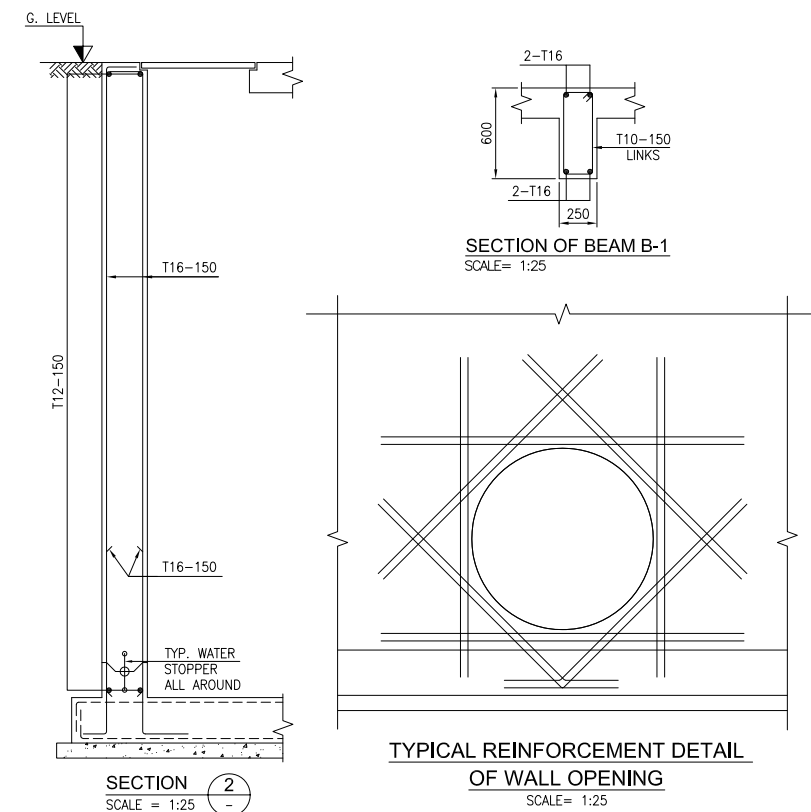
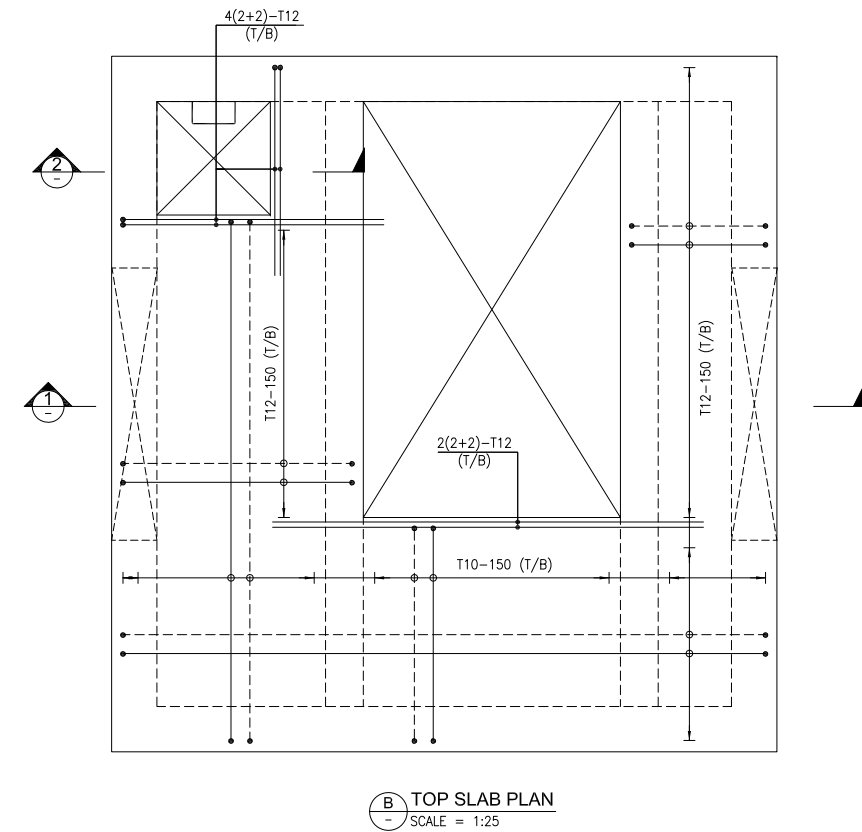
						CLIENT:- <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.					
						CONSULTANT:- <div>EA Consulting (Pvt.) Limited <small>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</small></div>		IN ASSOCIATION WITH:- <div>Jers Engineering Consultant</div>		DRAWN	M.A	TITLE PACKAGE # 03 FIRST FLOOR LIGHTING PLAN OF ENGINEERS OFFICE BUILDING	
								DESIGNED	A.H				
										CHECKED	A.H	Scale / Sheet	
										APPROVED	J.I.S	N.T.S (A1)	Drawing No. EA-942-65M-PIII-E-1002



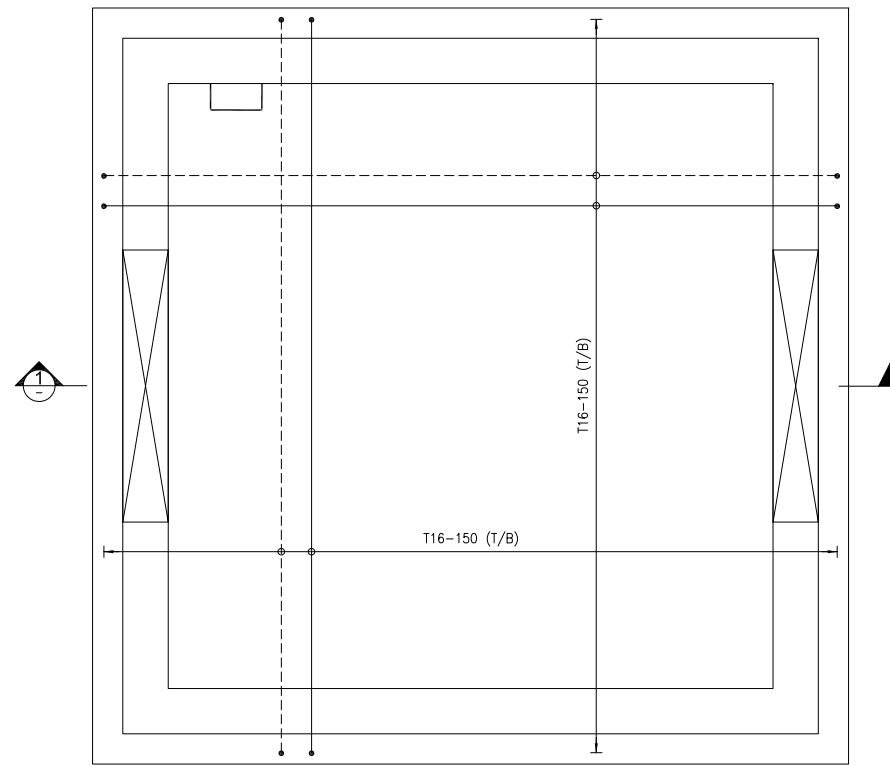
NOTE:-
1 - EACH ROOM WILL HAVE ONE A/C UNIT.
2 - CONFERENCE ROOM WILL HAVE FOUR A/C UNITS.

						CLIENT:-  KARACHI WATER & SEWERAGE BOARD		PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.				PACKAGE # 03	
						CONSULTANT:-  EA Consulting (Pvt.) Limited <small>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</small>		IN ASSOCIATION WITH:-  Jers Engineering Consultant		DRAWN	S.D	TITLE GROUND FLOOR SMALL POWER PLAN OF ENGINEERS OFFICE BUILDING	
										DESIGNED	A.H		
										CHECKED	A.H	Scale / Sheet N.T.S (A1)	
										APPROVED	J.I.S	Drawing No. EA-942-65M-PIII-E-1003	
ED.NO	DATE	DESCRIPTION	BY	CKD	APR								
0	APR,18	TENDER DRAWINGS	MA	AH	JIS								

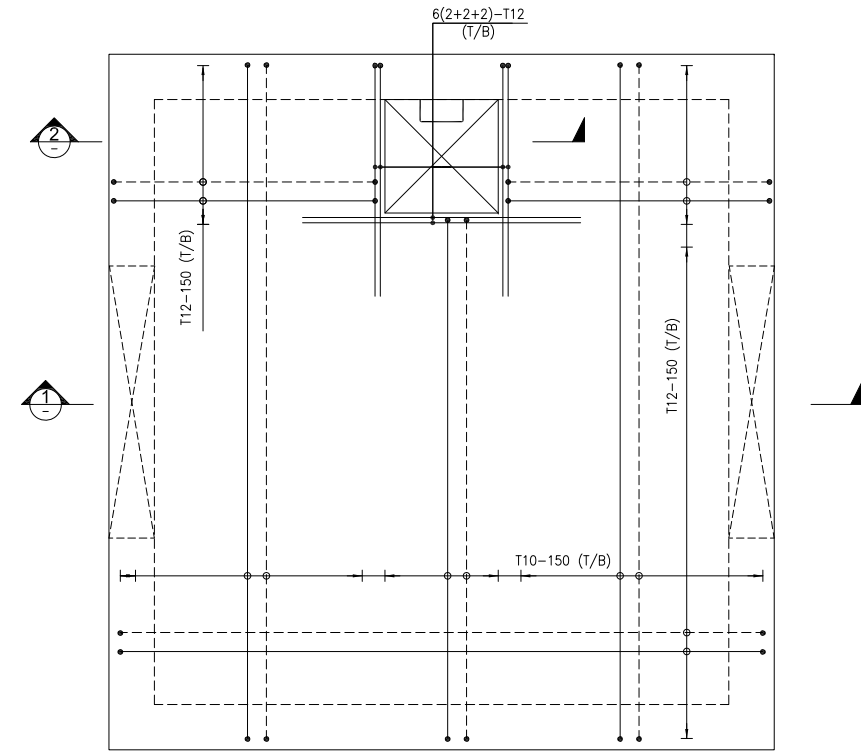
STRUCTURE DRAWINGS



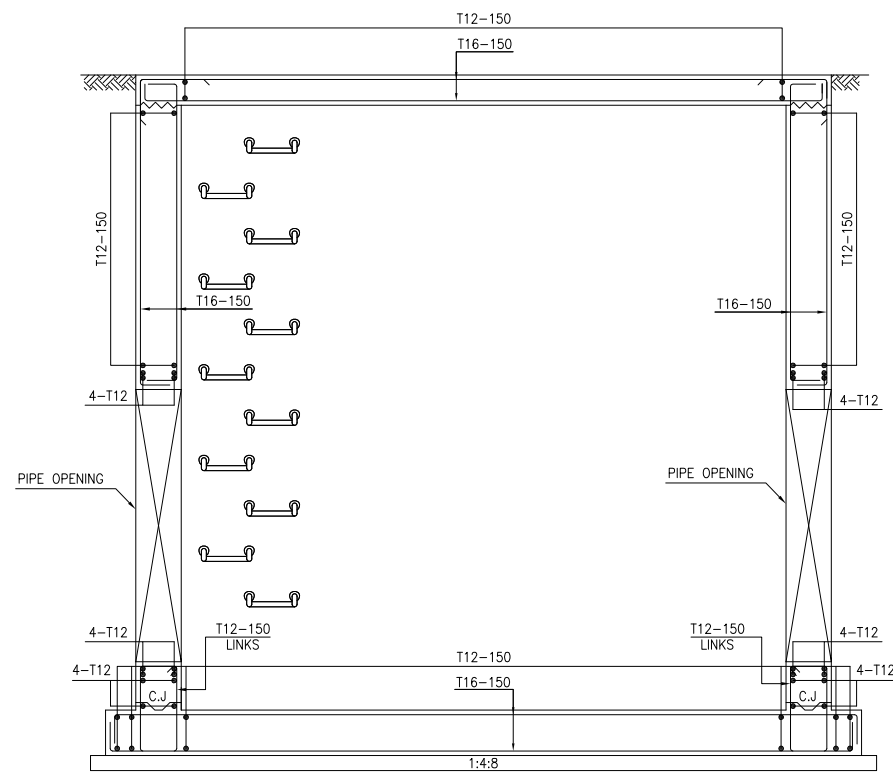
PROJECT:-		ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.	
DRAWN	AJ	PACKAGE # 03 BUTTERFLY VALVE CHAMBER REINFORCEMENT PLANS AND SECTIONS	
DESIGNED	MS		
CHECKED	MS		
APPROVED	AKM	Scale / Sheet AS SHOWN (A1)	Drawing No. EA-942-65M-PIII-S-1001



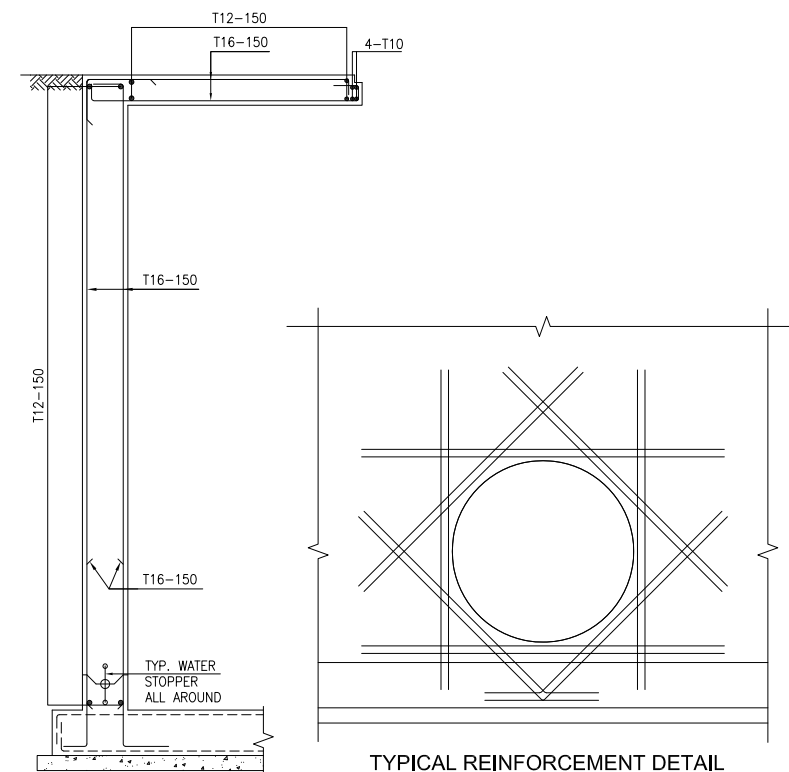
A BOTTOM SLAB PLAN
SCALE = 1:25



B TOP SLAB PLAN
SCALE = 1:25



SECTION 1
SCALE = 1:25



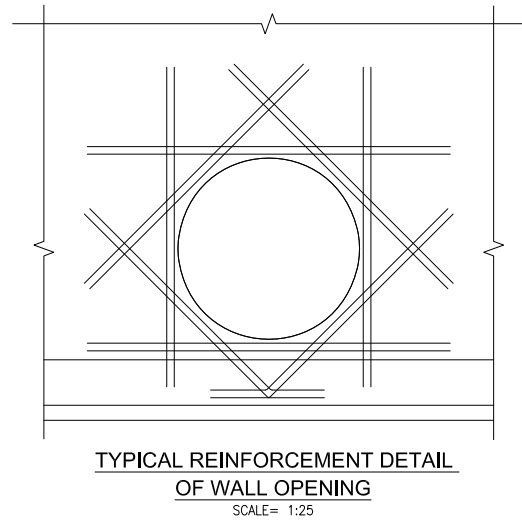
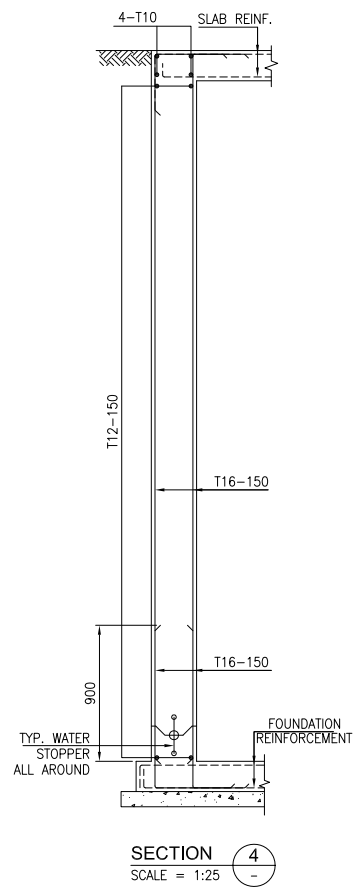
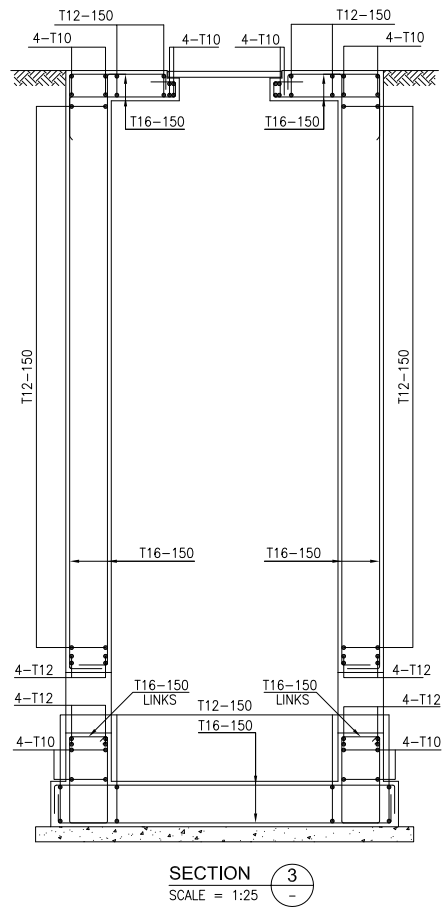
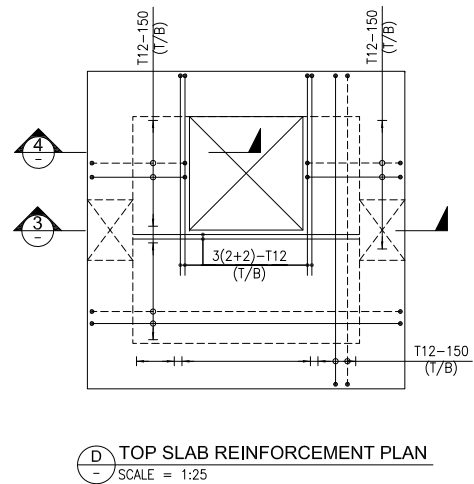
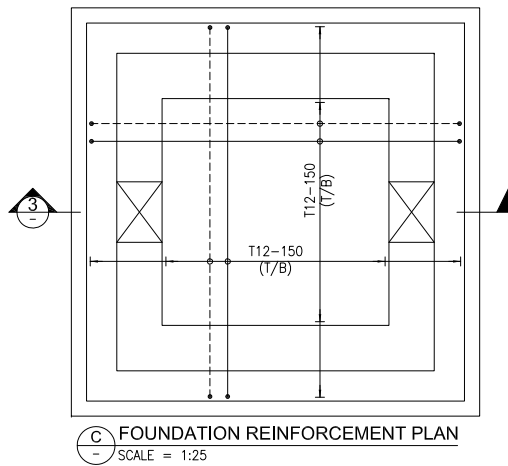
SECTION 2
SCALE = 1:25

TYPICAL REINFORCEMENT DETAIL OF WALL OPENING
SCALE= 1:25

NOTE:-




1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR CONJUNCTIONS REFER DWG.NO.EA-942-65M-U-W403.

						CLIENT:-		<div></div> <div>KARACHI WATER & SEWERAGE BOARD</div>		PROJECT:- ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.				
						CONSULTANT:-		IN ASSOCIATION WITH:-		DRAWN	AJ	TITLE		PACKAGE # 03
0	APR,18	TENDER DRAWINGS	AJ	MS	AKM	<div></div> <div>EA Consulting (Pvt.) Limited</div> <div>CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</div>		<div></div> <div>Jers Engineering Consultant</div>		DESIGNED	MS	AIR RELEASE VALVE CHAMBER REINFORCEMENT PLANS AND SECTIONS		
										CHECKED	MS			
ED.NO	DATE	DESCRIPTION	BY	CKD	APR					APPROVED	AKM	Scale / Sheet AS SHOWN (A1)	Drawing No. EA-942-65M-PIII-S-1002	



NOTE:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR CONJUNCTIONS REFER DWG.NO.EA-942-65M-U-W404.

						<div>CLIENT:-</div> <div></div> <div>KARACHI WATER & SEWERAGE BOARD</div>	<div>PROJECT:-</div> <div>ADDITIONAL 65 MGD WATER SUPPLY SCHEME FROM HALEJI TO PIPRI, KARACHI.</div>							
0	APR,18	TENDER DRAWINGS	AJ	MS	AKM	<div>CONSULTANT:-</div> <div><div>EA Consulting (Pvt.) Limited CONSULTING ENGINEERS, ARCHITECTS, ECONOMISTS & PLANNING EXPERTS</div></div>	<div>IN ASSOCIATION WITH:-</div> <div><div>Jers Engineering Consultant</div></div>	DRAWN	AJ	<div>TITLE</div> <div>WASHOUT VALVE CHAMBER REINFORCEMENT PLANS AND SECTIONS</div> <div>PACKAGE # 03</div>				
							DESIGNED	MS						
							CHECKED	MS						
ED.NO	DATE	DESCRIPTION	BY	CKD	APR			APPROVED	AKM	Scale / Sheet AS SHOWN (A1)	Drawing No. EA-942-65M-PIII-S-1003			