E3-1 EXPRESSWAY (AL NASR ROAD)

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E3-1/L-01 LAND PLAN

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SHEET DWG.

DRAWING TITLE

## STRUCTURES

E3-1/S-01 E3-1 overall plan \& layout.
E3-1/s-02 Lumit of constructon at intal stace (begore connection to expresway eq)

E3-1/S-04 RAMP1 - WESTBOUNO APPRROCH EMBANKMEN LAYOUTS AND REAANNG WALL Detall
E3-1/S-05 Ramp1 - westbound abutment layout \& sections
E3-1/S-06 RAMP1 - WESTBOUND PIER LAYOUT \& SECTIONS
E3-1/S-07 RAMP1 - WESTBOUND SUPERSTRUCTURE LAYOUT \& SECTIONS
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-1/S-09 VAOUCT - SECTION A - WESTBOUND SUPERSTRUCTURE LAYOUT \& SECTONs
3-1/S-10 VIADUCT - SECTION B - SUMMARY OF qUANTTIES
E3-1/S-11 VIADUCT - SECTION c - westbound PIER LAYOUT \& SECTIONs. E3-1/S-12 vanuct - secton c - westround superstuvcture layut \& sections E3-1/s-13 VIADUCT - westbound ABuTtent layout \& SECTIONs
E3-1/S-14 vaduct - westrouno approach emeankuent layouts and retanng wall detals E3-1/s-15 VaAUCT - FUUURE CONSTRUCTON - WESTBOUND LATOUT \& SECTONS STA. O+700 TO $1+210$ E3-1/S-16 vanuct - future consiruction - westround larout $\&$ Sections Sti. $1+210$ To $1+521$ $3-1 /$ S-17 DEPRESSED STRUCTURE SECTIONS STA. $0+700$ To STA $1+200$ E-1/s-18 DEPRESSSED STRUCTURE SECTIONS STA. $1+200$ To STA $2+200$.
E3-1/S-19 DEPRESSED STRUCTURE SECTONS STA. $2+200$ TO STA $2+480$ STA. $2+850$ TO STA $3+060$ E3-1/S-19 $\quad$ OEPRESSED STRUCTUUE SECTONS STA. $2+200$ TO STA $2+880$ STA. $2+850$ TO STA $3+060 \cdots$ 3-1/S-21 DEPRESSED STRUCTURE SECTIONS STA. $3+530$ To STA $4+4180$ E3-1/S-22 DEPRESSED STRUCTURE SECTIONS STA. $4+180$ TO STA $5+010$. E3-1/S-23 DEPRESSED STRUCTURE SECTIONS STA. $5+010$ To STA $5+820$ 3-1/S-24 DEPRESSED STRUCTURE SECTIONS STA. $5+820$ TO STA $6+500$ E3-1/s-25 DEPRESSED STRUCTURE PSC PLANK DETALS
E3-1/S-26 DEPRESSED STRUCTURE SUMMMARY OF QUANTTIES
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| ROJECT AND LOCATION | SCALE | DRAMNG TITLE | DRAMNG No |
| :---: | :---: | :---: | :---: |
| FEASIBLITY STUDY ON HIGH PRIORITY URBAN TOLL EXPRESSWAYS IN CAIRO E3-1 EXPRESSWAY <br> (AL NASR ROAD) |  | ON / OFF RAMP NO. 2 (2/2) PLAN AND SECTION Sta. 2+620 - Sta. $3+540$ | E3-1/R-20 |
|  |  |  | SHEET No: |
|  |  |  | $20 / 22$ |

DRAWMG TITLE



SECTION STA. $0+950.00-$ STA. $1+210.00$

(some $)$ SECTION STA. $0+700.00-$ STA. $0+950.00$

(scALE PLAN ON INITIAL STAGE BEFORE CONNECTION TO E4

EASTBOUND DEPRESSED
(INTIAL STAGE)
$1 \begin{aligned} & \text { KATAHIRA \& ENGINEER } \\ & \text { INTERNATIOA }\end{aligned}$
INTERNATIONAL
INTIREER
CE WATERHOUSE COOPERS PD
ADVISORY CO., LTD.


| PROJECT AND LOCATION: |
| :--- |
| FEASIBLITY STUDY ON |
| HIGH PRIORITY URBAN TLLL EPRESSWWAYS IN CAIRO |
| E3-1 EXPRESSWAY | E3-1 L $\operatorname{\text {EXPRESSSWA}}$

(AL NASR ROAD)



PLAN LAYOUT ON RAMP 1 - WESTBOUND


3 (3CALE $\frac{\text { TYPICAL DETAIL }}{\text { NTS }}$
TYPICAL MSE WALL PANEL LAYOUT

MECHANICALLY STABILIZED EARTH WALL (MSE)


SUMMARYOFQUANTITIES - APPROACHEMBANKMENT


| Prooect And locaton | SCALE | Dramwg tite | Drawng no |
| :---: | :---: | :---: | :---: |
| FEASIBLTT STUDY ON <br> HIGH PRIORTT URBA TOLLEXPRRESSWAYS IN CARO <br> E3-1 EXPRESSWAY <br> (AL NASR ROAD) | : 100 | RAMP 1 - WESTBOUND APPROACH EMBANKMENTLAYOUT AND RETAIINING WALL DETALLS | E3-1/S-04 |
|  |  |  | SHEET No |
|  | fuls |  | 4/26 |



SIDE ELEVATION $\underset{1: 100}{100}$
SUMMARYOFQUANTITIES - ABUTMENT


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ADVISORYCO., LTD.
jica
japan international cooperation agency


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| SCALE : | DRAW |
| :---: | :---: |
| $1: 100$ |  |
| $1: 3000$ |  |
| fuul sit A3 |  |






2 (scALE $\frac{\text { TYPICAL SECTION }- \text { IN SPAN \& PIER SUPPORT }}{1: 100}$
( 3 SALE $\frac{\text { TYPICAL SECTION - AT END SUPPORT }}{1: 100}$

CALE


PLAN LAYOUT ON RAMP 1 - WESTBOUND

 $\square$
$\square$



( 2 TYPICAL SECTION - IN SPAN


3 ( 3 TYPICAL SECTION - AT PIER SUPPORT



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tahira \& engineers INTERNATIONA CE WATERHOUSE CO
ADVISORY CO., LTD.


Prouect and locaton :

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SECTION AT STA. $1+596.000$


PLAN LAYOUT VIADUCT - WESTBOUND

(2) SECTION AT STA. $1+696.000$

SUMMARY OF QUANTITIES - 100M OF DECK


SUMMARY OF QUANTITIES - 4 PIERS

$\square$
${ }^{\text {fulu size As }}$

$(1) \frac{\text { TYPICAL PIER ELEVATION }}{1: 125}$

PLAN ON PILE CAP



PLAN LAYOUT VIADUCT - WESTBOUND

(3) COLUMN SECTION

SUMMARYOFQUANTITIES - 15 PIERS


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ADVISORY CO., LTD.
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GENERAL AUTHORITY FOR ROADS
BRIDGES AND LAND TRANSPORT (GARBLT) BRIDGES AND LAND TRANS
MINSTRYOFTANSORT
ARAB REPUBLICAN OF EGYT
prouect and locaton:

HIGH PRIORITY VEABBAN TOLL STUPRESSSWAYS IN CAIRO
E3-1 EXPRESRSESA
(AL NASR ROAD)

- DRAMNG TTIE:
$\square$

(scALE $\frac{\text { PLAN ON TYPICAL FRAME }}{1: 500}$
 ( 2 SCALE $\frac{\text { TYPICAL SECTION }-I N \text { SPAN }}{1: 100}$


3 TYPICAL SECTION - AT PIER SUPPORTS


PLAN LAYOUT VIADUCT - WESTBOUND

SUMMARY OF QUANTITIES - 400M OF DECK



PROUECT AND LOCATON:

| SCALE |  |
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| 1 |  |
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|  |  |

D DRAMNG TTIE E-1 EXPRESSWWA E3-1 EXPRESSWAS
(AL NASR ROAD)



PLAN LAYOUT ON VIADUCT - WESTBOUND


TYPICAL MSE WALL PANEL LAYOUT

## SUMMARYOFQUANTITIES - APPROACH EMBANKMENT


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$И_{\text {e }}$
CE WATERHOUSE COO
ADVISORY CO., LTD.

| Prooect and locaton | SCALE : | Drawnc trie | DRAWNG No |
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| FEASIBILITY STUDY ON <br> URBAN TOLL EXPRESSWAYS IN CAIRO <br> E3-1 EXPRESSWAY <br> (AL NASR ROAD) | : 100 | VIADUCT - WESTBOUND APPROACH EMBANKMENTLAYOUT AND RETAIING WALL DETALS | E3-1/S-14 |
|  |  |  | SHEET No: |
|  | vut ste |  | 14/26 |



PLAN LAYOUT VIADUCT - WESTBOUND


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ADVISORY CO., LTD. $\qquad$


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PLAN LAYOUT VIADUCT - WESTBOUND




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|  | ful siz A3 |




TYPICAL SECTION - STA. $2+480.00$ TO $2+600.00$ (OFF RAMP)
TYPICAL SECTION - STA. $3+390.00$ TO $3+530.00$ (ON RAMP)


TYPICAL SECTION - STA. $2+600.00$ TO $2+850.00$ (OFF RAMP) TYPICAL SECTION - STA. $3+060.00$ TO $3+390.00$ (ON RAMP)

ADE WATERHOUSE COO
ADVISORY CO., LTD.

| Proolect And locaton | SCALE | drawng tre : | DRAMNG No |
| :---: | :---: | :---: | :---: |
| FEASIBILTY STUDY ON URBAN TOLL EXPRESSWAYS IN CAIRO E3-1 EXPRESSWAY (AL NASRROAD) | 1:200 | DEPRESSED STRUCTURE SECTIONS STA. $2+480$ TO $2+850$STA. $3+060$ TO $3+530$ STA. 3 -60 ${ }^{2}$ | E3-1/S-20 |
|  |  |  | SHEET No |
|  | ful ste as |  | 20/26 |


$\left(\frac{1}{\text { SCALE }} \frac{\text { TYPICAL SECTION - STA. } 3+530.00 \text { TO } 3+640.00}{1: 200}\right.$

( 2 TYPICAL SECTION - STA. $3+640.00$ TO $4+180.00$

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japan international cooperation agency

| Project Ano Locaton: | SCALE : | draming tile | ORAWNG NO |
| :---: | :---: | :---: | :---: |
| FEASIBIITY STUDY ON URBAN TOLL EXPRESSWAYS IN CAIRO E3-1 EXPRESSWAY (AL NASR ROAD) | 1:200 | DEPRESSED STRUCTURE <br> SECTIONS <br> STA. $3+530$ TO $4+180$ | E3-1/S-21 |
|  |  |  | SHEET N |
|  | ful siz A3 |  | 1/2 |



TYPICAL SECTION - STA. $4+180.00$ TO $4+460.00$ (ON RAMP) TYPICAL SECTION - STA. $4+760.00$ TO $5+010.00$ (OFF RAMP) ${ }_{1: 200}$

( 2 TYPICAL SECTION - STA. $4+460.00$ TO $4+760.00$

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ADVISORYCO.. LTD.

| 1:200 |
| :---: |

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 800|(10500 to 16500 ATES AT TOLL BOOTH) $\qquad$ $\stackrel{180}{180}$ (18150 VARIES 24150) $\xrightarrow{800}$


| Project and locaton : | SCALE : | draming tite: |
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|  | drawng no : |
| :---: | :---: |
| DEPRESSED STRUCTURE <br> SECTIONS <br> STA. 5+010 TO 5+820 | E3-1/S-23 |
|  | SHEET |
|  | 23/26 |




OFF RAMP SHOWN AS EXAMPLE

$$
\text { ( } 2 \text { TYPICAL PSC PLANK LAYOUT AT ON/OFF RAMP }
$$



TYPICAL SECTION
14 m SPAN UNIT
TYPICAL SECTION 26 m SPAN UNIT

$$
1 \text { PSC PLANK DETAILS }
$$



| Proolect and locaton | SCALE | DRAMNG TTILE | Draming no |
| :---: | :---: | :---: | :---: |
| HIGH PRIORITY URBAN TOLL EXPRESSWAYS IN CAIRO <br> E3-1 EXPRESSWAY <br> (AL NASR ROAD) | $1: 25$ $1: 50$ 1 | DEPRESSED STRUCTURE PSC PLANK DETAILS | E3-1/S-25 |
|  | 500 |  | SheEt No: |
|  | ful siz as |  | 25 |

SUMMARY OF QUANTITIES - DEPRESSED STRUCTURE


SUMMARYOFQUANTITIES - DEPRESSED STRUCTURE


## E3-2 EXPRESSWAY

