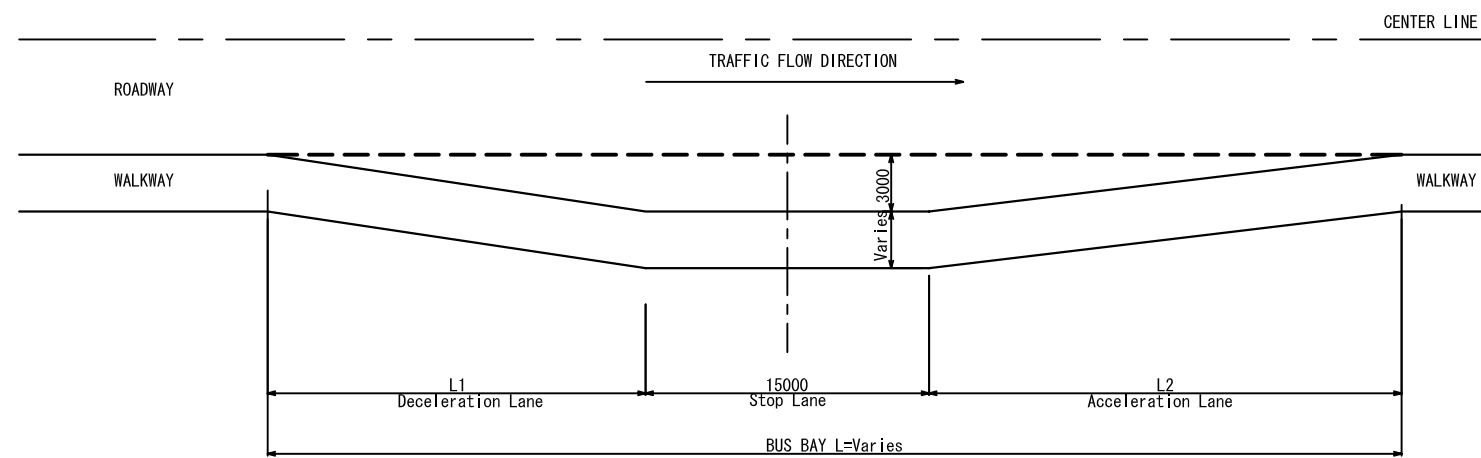


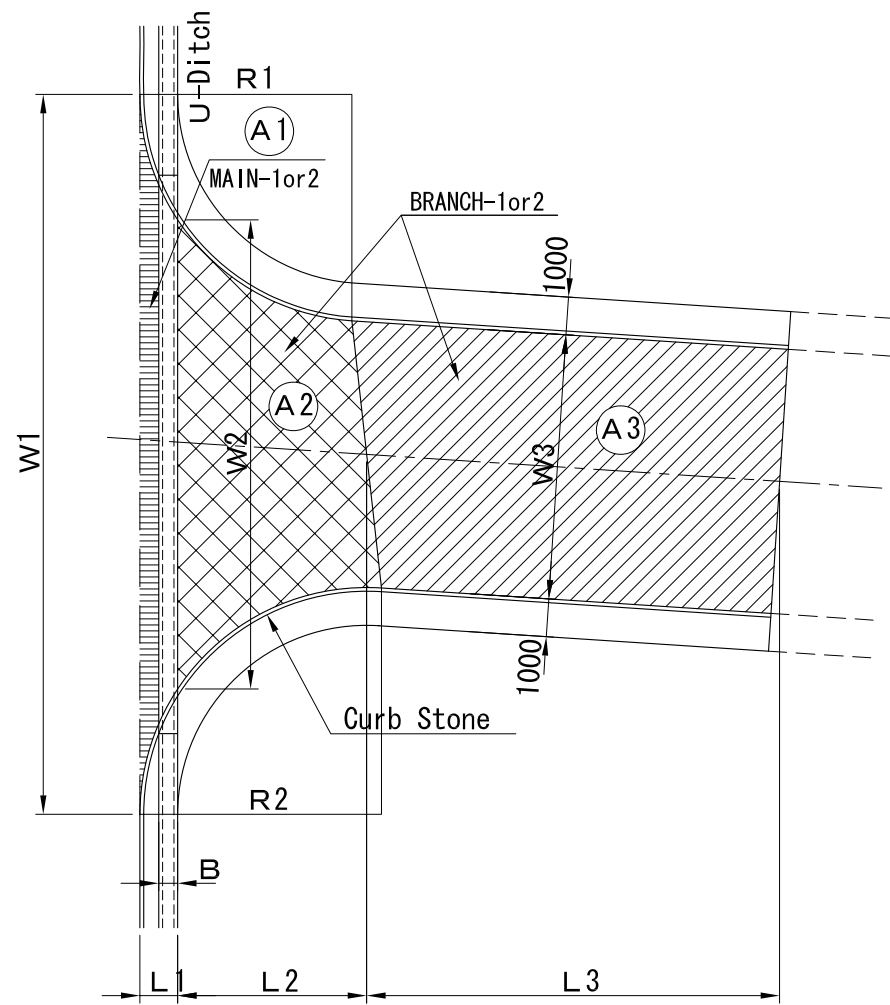
DETAILS OF PARKING SPACE S=1:200



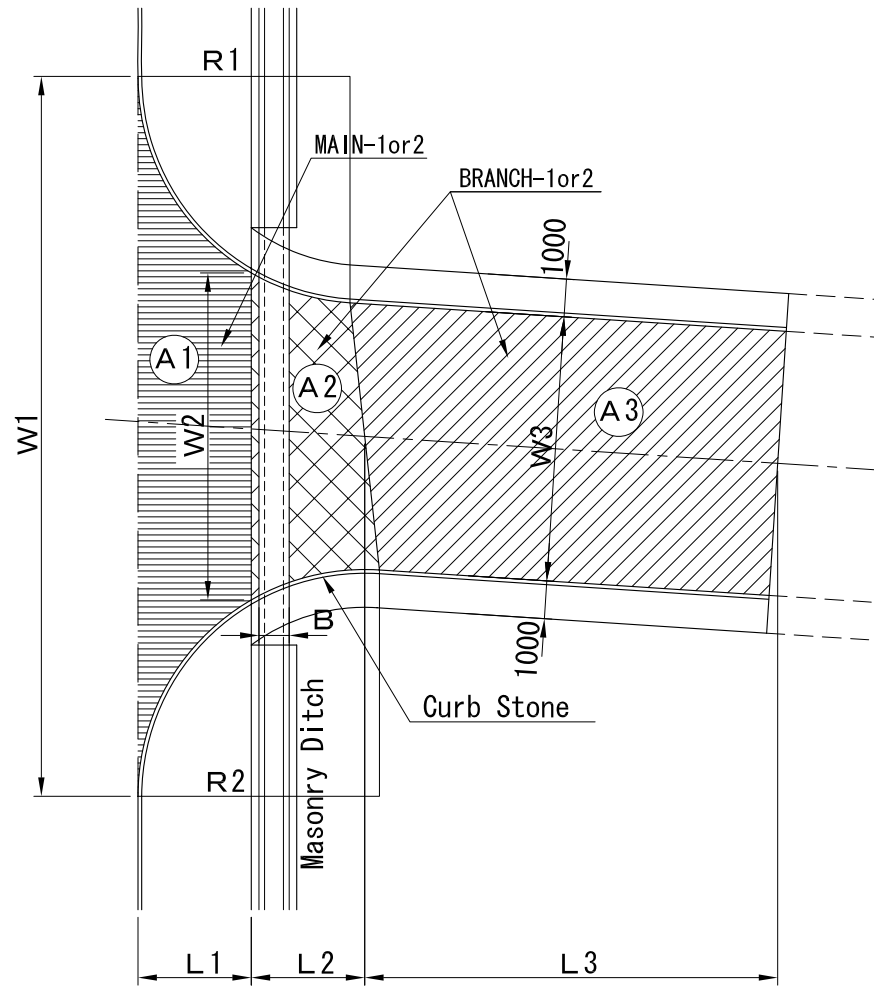
DETAILS OF BUS BAY 1:200

LIST OF PROPOSED BUS BAY LOCATIONS

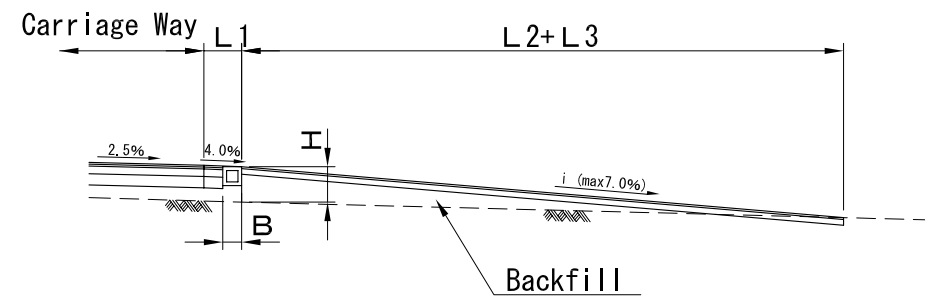
| No | STATION | SIDE | | DESIGN SPEED (km/h) | DIMENSION | | REMARKS |
|----|---------|------|---|---------------------|-----------|----|------------------|
| | | L | R | | L1 | L2 | |
| 1 | 0+037 | L | R | 40 | 12 | 13 | Ave. de Lac |
| 2 | 0+847 | | R | 40 | 20 | 25 | Ave. de la Plage |
| 3 | 0+851 | L | | 60 | 20 | 25 | ditto |
| 4 | 1+630 | L | | 60 | 20 | 25 | ditto |
| 5 | 1+652 | | R | 60 | 20 | 25 | ditto |
| 6 | 2+437 | L | | 60 | 20 | 25 | Ave. de Lac |
| 7 | 2+448 | | R | 60 | 20 | 25 | ditto |
| 8 | Y0+457 | L | | 50 | 15 | 20 | Bld. Yaranda |
| 9 | Y0+507 | | R | 50 | 15 | 20 | ditto |
| 10 | Y0+972 | | R | 50 | 15 | 20 | ditto |
| 11 | Y1+032 | L | | 50 | 15 | 20 | ditto |



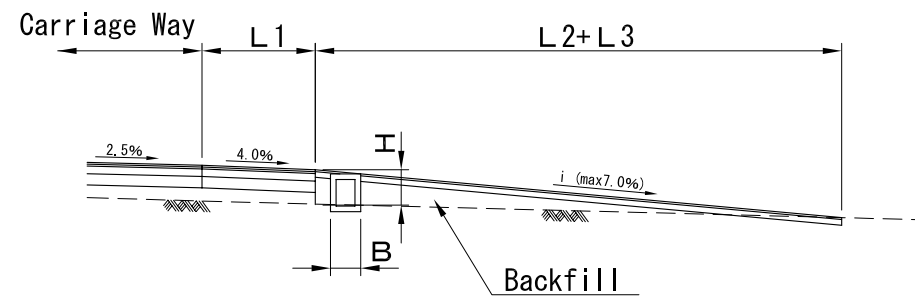
PLAN TYPE-1



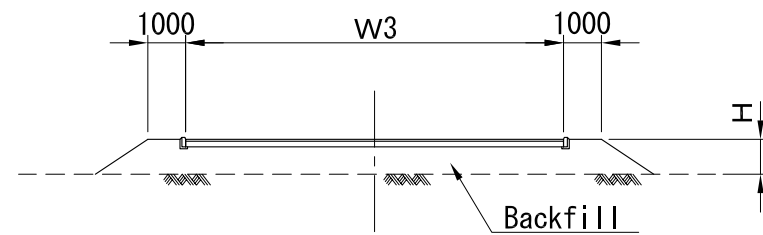
PLAN TYPE-2



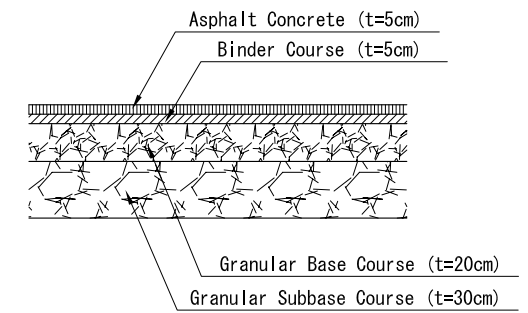
SECTION TYPE-1



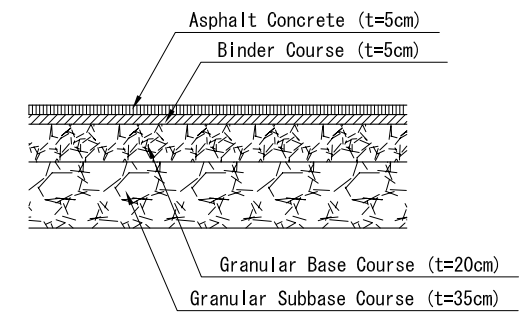
SECTION TYPE-2



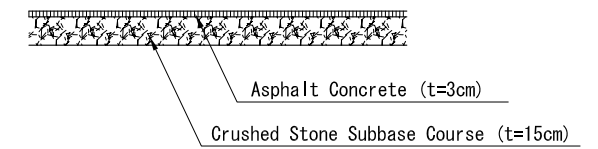
CROSS SECTION TYPE-1 & 2
INTERSECTION S=1:100



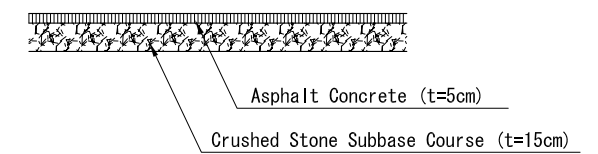
MAIN-1



MAIN-2



BRANCH-1

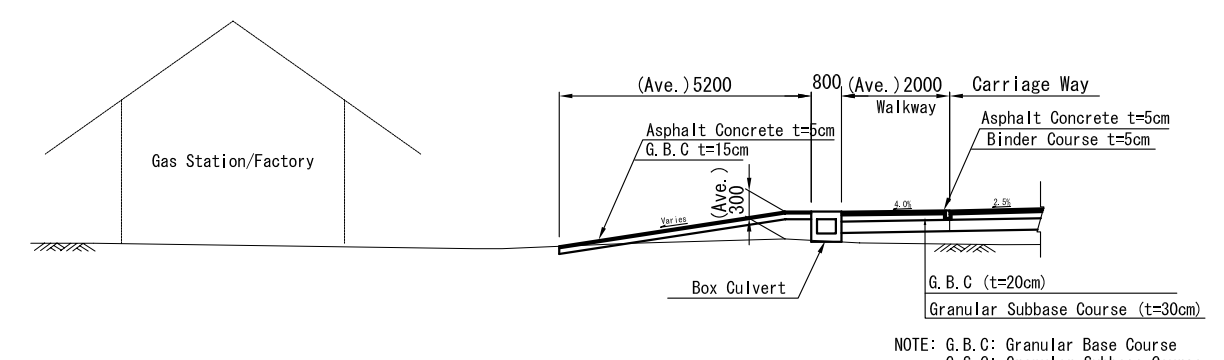
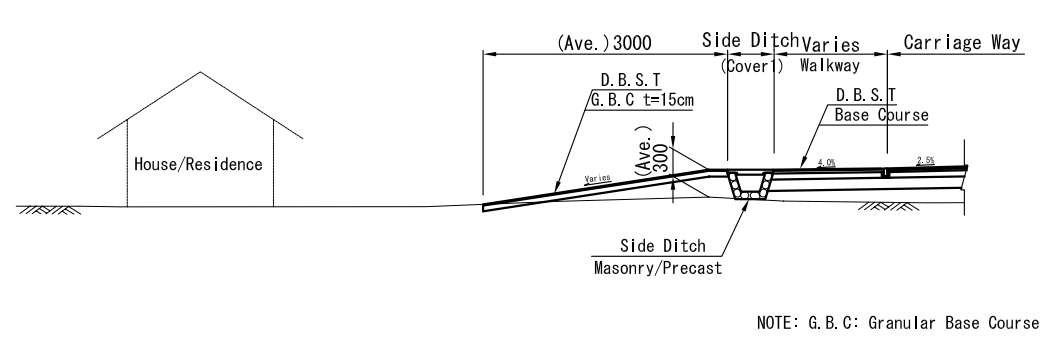
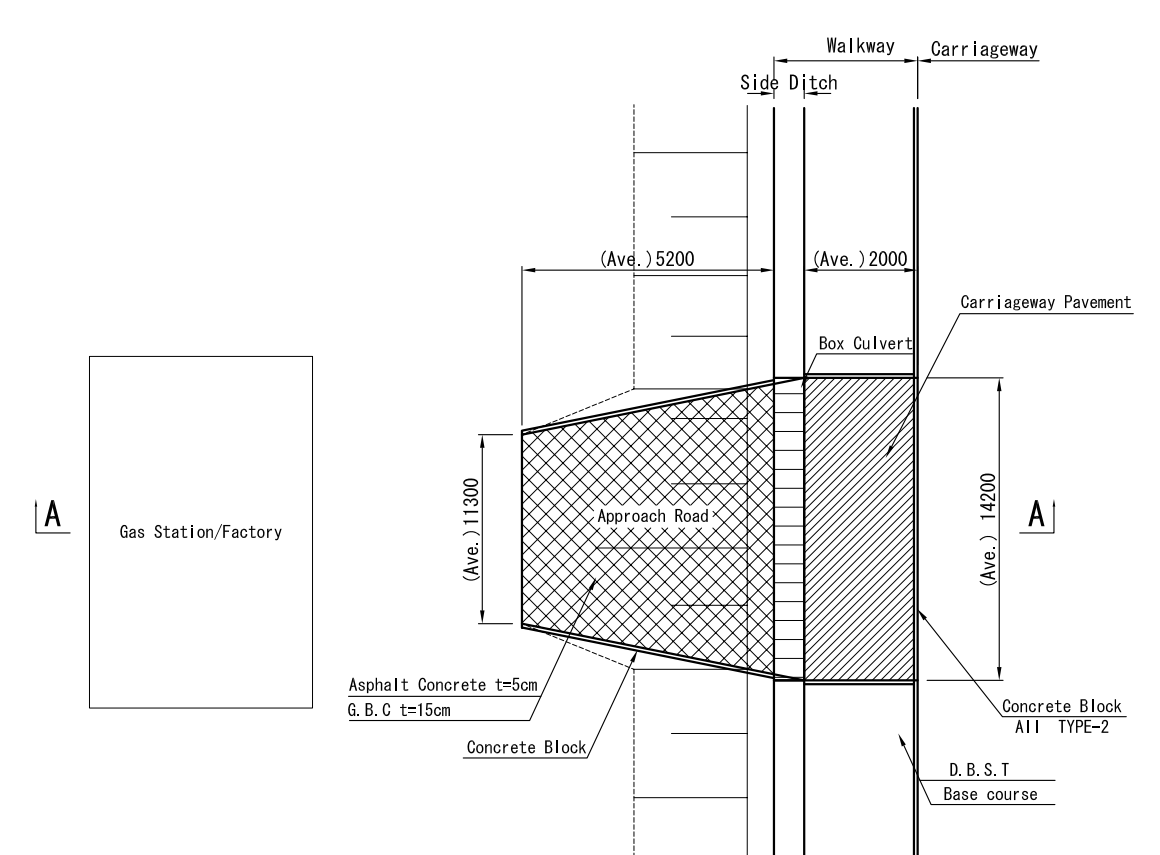
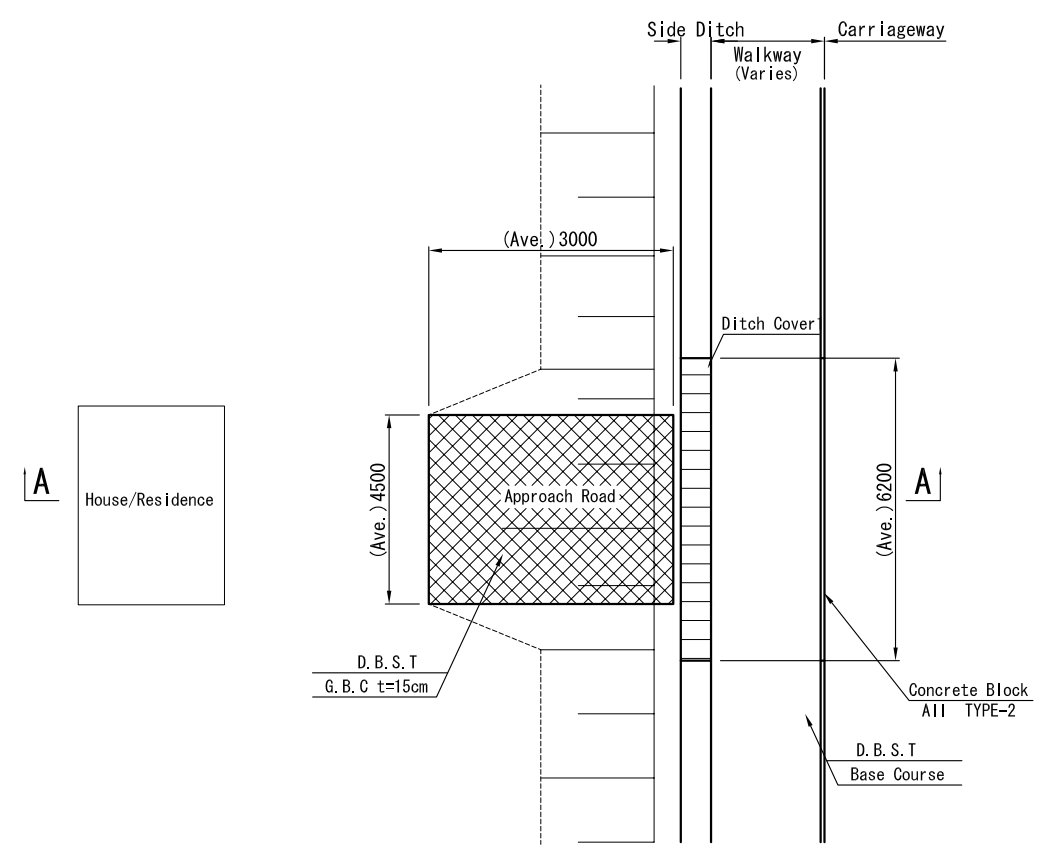


BRANCH-2

PAVEMENT SECTION S=1:20

| LIST OF INTERSECTION (ROUTE-1) | | | | | | | | | | | | | | | | |
|--------------------------------|---------------|--------|----------------------------------|------|-------|------|------|----------|--------|------|------|----------|----------|---------|-------------|--|
| STA | SIDE (L/R) | TYPE | RADIUS | | WIDTH | | | VERTICAL | LENGTH | | | PAVEMENT | | CULVERT | REMARKS | |
| | | | (m) | | (m) | | | INTERVAL | (m) | | | TYPE | | (m) | | |
| | | | R1 | R2 | W1 | W2 | W3 | H(m) | L1 | L2 | L3 | A1 | A2&A3 | B | | |
| 0+000 | | | Refer to Intersection 1 Drawing | | | | | | | | | | | | | |
| 0+187 | L | TYPE-1 | 6.0 | 9.0 | 44.2 | 36.8 | 9.5 | 0.87 | 1.0 | 22.0 | 4.7 | MAIN-1 | BRANCH-2 | 0.70 | BC400 × 400 | |
| 0+337 | L | TYPE-1 | 3.0 | 3.0 | 13.6 | 9.1 | 7.6 | 0.42 | 1.0 | 2.0 | 3.0 | MAIN-1 | BRANCH-1 | 0.60 | BC300 × 300 | |
| 0+454 | L | TYPE-1 | 15.0 | 13.0 | 37.8 | 27.4 | 9.5 | 0.87 | 1.0 | 14.4 | 16.0 | MAIN-1 | BRANCH-2 | — | | |
| | R | TYPE-1 | 6.5 | 13.0 | 27.7 | 20.9 | 9.9 | 0.87 | 1.0 | 10.7 | 21.1 | MAIN-1 | BRANCH-2 | — | | |
| 0+574 | L | TYPE-1 | 11.0 | 20.0 | 38.0 | 27.2 | 7.0 | 0.71 | 1.0 | 18.8 | 8.3 | MAIN-1 | BRANCH-2 | — | | |
| 0+794 | L | TYPE-1 | 3.0 | 3.0 | 11.6 | 7.1 | 5.6 | ▲0.25 | 1.0 | 2.0 | 5.8 | MAIN-1 | BRANCH-1 | 0.60 | BC300 × 300 | |
| 0+804 | | | Refer to Intersection 2 Drawing | | | | | | | | | | | | | |
| 0+927 | L | TYPE-1 | 9.0 | 6.0 | 23.0 | 15.7 | 7.2 | ▲0.24 | 1.0 | 10.4 | — | MAIN-1 | BRANCH-1 | 0.60 | BC300 × 300 | |
| 1+183 | L | TYPE-1 | 9.0 | 6.0 | 28.2 | 20.0 | 12.0 | ▲0.24 | 1.0 | 9.2 | — | MAIN-1 | BRANCH-1 | — | | |
| 1+381 | L | TYPE-1 | 6.0 | 3.0 | 19.2 | 13.6 | 10.5 | 0.15 | 1.0 | 3.2 | — | MAIN-1 | BRANCH-2 | — | | |
| 1+732 | R | TYPE-1 | 25.0 | — | 37.1 | 17.8 | 10.4 | 0.13 | 1.0 | 2.3 | 14.6 | MAIN-1 | BRANCH-1 | — | | |
| 1+859 | L | TYPE-1 | 3.0 | 3.0 | 12.8 | 8.3 | 6.8 | 0.15 | 1.0 | 2.0 | 3.0 | MAIN-1 | BRANCH-1 | 0.60 | BC300 × 300 | |
| 1+933 | L | TYPE-1 | 3.0 | 3.0 | 12.6 | 8.1 | 6.6 | 0.61 | 1.0 | 2.0 | 7.2 | MAIN-1 | BRANCH-1 | 0.60 | BC300 × 300 | |
| 2+000 | | | Refer to Intersection 3 Drawing | | | | | | | | | | | | | |
| 2+245 | L | TYPE-2 | 6.0 | 9.0 | 20.9 | 9.0 | 6.0 | ▲0.28 | 3.0 | 4.0 | 9.6 | MAIN-1 | BRANCH-2 | — | | |
| 2+359 | L | TYPE-2 | 6.0 | 6.0 | 18.0 | 8.3 | 5.7 | ▲0.14 | 3.0 | 3.5 | 3.4 | MAIN-1 | BRANCH-2 | — | | |
| 2+428 | L | TYPE-2 | 6.0 | 6.0 | 18.2 | 7.7 | 5.9 | 0.16 | 3.0 | 4.2 | — | MAIN-1 | BRANCH-2 | — | | |
| | R | TYPE-2 | 6.0 | 6.0 | 17.5 | 7.2 | 5.0 | ▲0.04 | 3.0 | 5.2 | — | MAIN-1 | BRANCH-1 | — | | |
| 2+545 | | | Refer to Intersection Y1 Drawing | | | | | | | | | | | | | |
| 2+659 | L | TYPE-2 | 6.0 | 6.0 | 20.7 | 10.4 | 8.4 | ▲0.53 | 3.0 | 2.8 | 12.1 | MAIN-1 | BRANCH-2 | — | | |
| 2+827 | L | TYPE-2 | 6.0 | 6.0 | 20.0 | 9.6 | 8.0 | 0.24 | 3.0 | 2.8 | 2.4 | MAIN-1 | BRANCH-2 | 0.80 | BC500 × 500 | |
| 2+896 | L | TYPE-2 | 6.0 | 3.0 | 15.3 | 7.7 | 6.5 | 0.31 | 3.0 | 3.7 | — | MAIN-1 | BRANCH-2 | — | | |
| 2+960 | R | TYPE-2 | 9.0 | 9.0 | 31.7 | 17.9 | 13.4 | ▲0.07 | 3.0 | 6.0 | — | MAIN-1 | BRANCH-1 | — | | |
| 2+980 | L | TYPE-2 | 5.3 | 4.8 | 16.0 | 8.9 | 6.0 | ▲0.15 | 1.5 | 3.7 | — | MAIN-1 | BRANCH-2 | — | | |

| LIST OF INTERSECTION (ROUTE-2) | | | | | | | | | | | | | | | | |
|--------------------------------|---------------|--------|--|-----|-------|------|-----|----------|--------|-----|------|----------|----------|---------|-------------|--|
| STA | SIDE (L/R) | TYPE | RADIUS | | WIDTH | | | VERTICAL | LENGTH | | | PAVEMENT | | CULVERT | REMARKS | |
| | | | (m) | | (m) | | | INTERVAL | (m) | | | TYPE | | (m) | | |
| | | | R1 | R2 | W1 | W2 | W3 | H(m) | L1 | L2 | L3 | A1 | A2&A3 | B | | |
| Y0+000 | | | Refer to Intersection Y1 Drawing | | | | | | | | | | | | | |
| Y0+058 | R | TYPE-2 | 3.0 | 3.0 | 10.5 | 5.3 | 4.5 | 0.53 | 1.5 | 1.7 | 7.3 | MAIN-1 | BRANCH-1 | 0.80 | BC500 × 500 | |
| Y0+139 | L | TYPE-2 | 6.0 | 6.0 | 19.3 | 10.3 | 7.3 | 0.17 | 3.0 | 3.1 | 7.0 | MAIN-1 | BRANCH-2 | — | | |
| | R | TYPE-2 | 6.0 | 6.0 | 19.6 | 10.6 | 7.7 | 0.03 | 3.0 | 3.0 | — | MAIN-1 | BRANCH-2 | — | | |
| Y0+395 | L | TYPE-2 | 6.0 | 6.0 | 19.0 | 8.6 | 7.0 | 0.10 | 3.0 | 3.0 | 8.1 | MAIN-1 | BRANCH-2 | — | | |
| | R | TYPE-2 | 6.0 | 6.0 | 19.0 | 8.6 | 7.0 | 0.31 | 3.0 | 3.0 | 4.0 | MAIN-1 | BRANCH-2 | — | | |
| Y0+563 | L | TYPE-2 | 6.0 | 6.0 | 20.7 | 10.4 | 8.7 | 0.18 | 3.0 | 3.0 | 3.0 | MAIN-1 | BRANCH-2 | — | | |
| | R | TYPE-2 | 6.0 | 6.0 | 19.3 | 8.9 | 7.2 | 0.01 | 3.0 | 3.0 | 5.7 | MAIN-1 | BRANCH-2 | — | | |
| Y0+714 | L | TYPE-2 | 6.0 | 6.0 | 21.7 | 10.9 | 8.9 | 0.19 | 3.0 | 3.0 | 12.8 | MAIN-1 | BRANCH-1 | — | | |
| | R | TYPE-2 | 6.0 | 6.0 | 18.5 | 7.6 | 6.9 | 0.06 | 3.0 | 3.0 | 12.0 | MAIN-1 | BRANCH-1 | — | | |
| Y0+824 | L | | Refer to Intersection Y2 (NR3) Drawing | | | | | | | | | | | | | |
| Y1+076 | L | TYPE-2 | 9.0 | 6.0 | 22.0 | 10.9 | 7.2 | ▲0.10 | 2.0 | 5.4 | — | MAIN-2 | BRANCH-1 | 0.80 | BC500 × 500 | |
| | R | TYPE-2 | 6.0 | 6.0 | 19.7 | 11.3 | 7.8 | 0.00 | 2.0 | 3.5 | — | MAIN-2 | BRANCH-1 | 0.80 | BC500 × 500 | |
| Y1+139 | L | TYPE-2 | 3.0 | 6.0 | 15.2 | 7.7 | 5.8 | ▲0.67 | 2.0 | 4.5 | 5.0 | MAIN-2 | BRANCH-1 | 0.80 | BC500 × 500 | |
| | R | TYPE-2 | 9.0 | 6.0 | 21.8 | 12.0 | 7.3 | 0.03 | 2.0 | 6.5 | — | MAIN-2 | BRANCH-1 | 0.80 | BC500 × 500 | |
| Y1+392 | | | Refer to Intersection Y3 Drawing | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |



NOTE: G.B.C: Granular Base Course

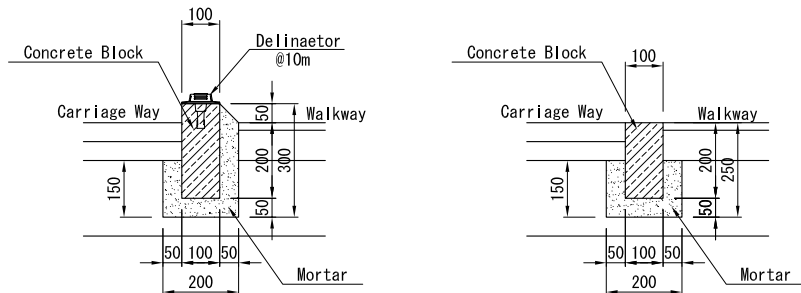
NOTE: G.B.C: Granular Base Course
G.S.C: Granular Subbase Course
B.C : Box Culvert

TYPE-1 (LIGHT VEHICLES)

TYPE-2 (HEAVY VEHICLES)

HOUSE ACCESS S=1:100

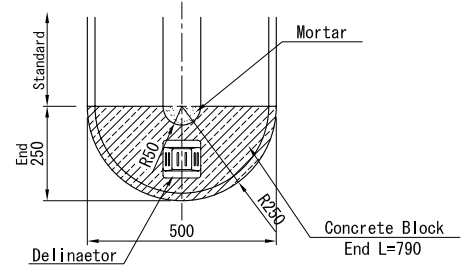
| | | | | | | |
|--|---|---|------------------------------------|-------------------|---------------------|---|
| L'OFFICE DES ROUTES THE REPUBLIC OF BURUNDI | THE BASIC DESIGN STUDY ON THE GRANT AID FOR REHABILITATION OF ROADS AND INFRASTRUCTURE FOR BUJUMBURA CITY IN THE REPUBLIC OF BURUNDI | JAPAN INTERNATIONAL COOPERATION AGENCY CTI ENGINEERING INTERNATIONAL CO., LTD. | TITLE : DETAILS OF HOUSE ACCESS | SCALE AS SHOWN | Drawing No. M-04 | / |
|--|---|---|------------------------------------|-------------------|---------------------|---|



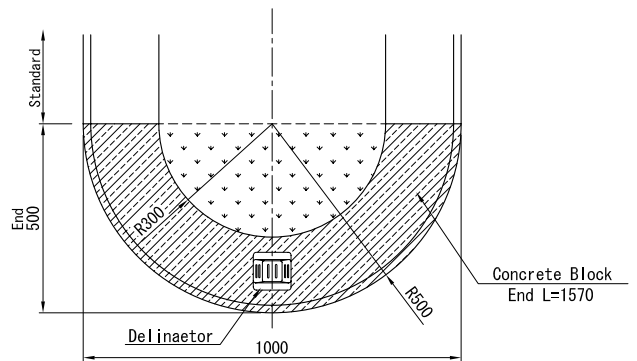
(TYPE-1)

(TYPE-2)

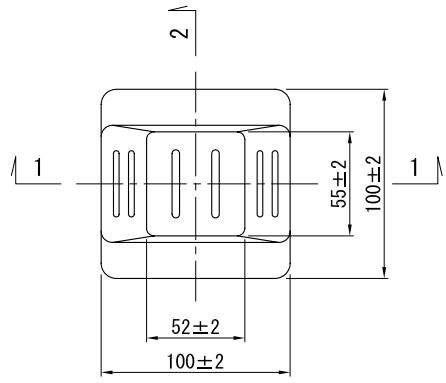
CURB STONE S=1:10



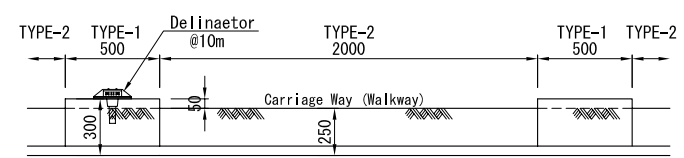
PLAN



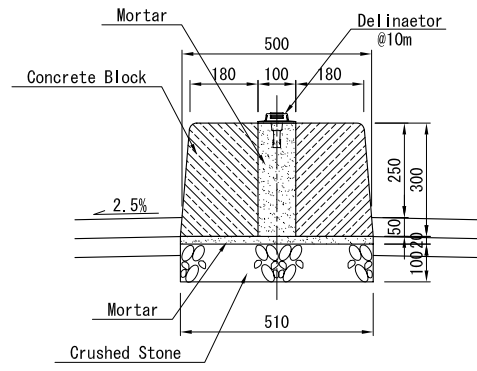
PLAN



PLAN

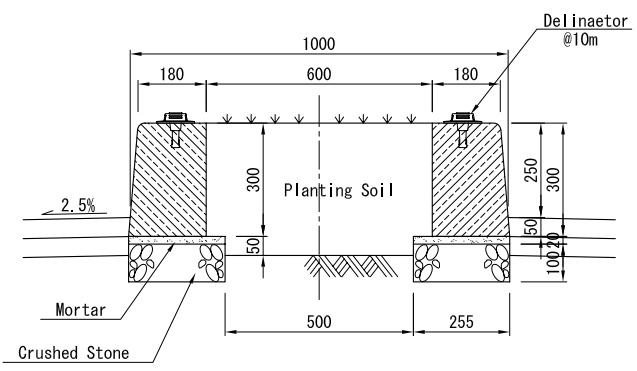


SIDE VIEW S=1:20



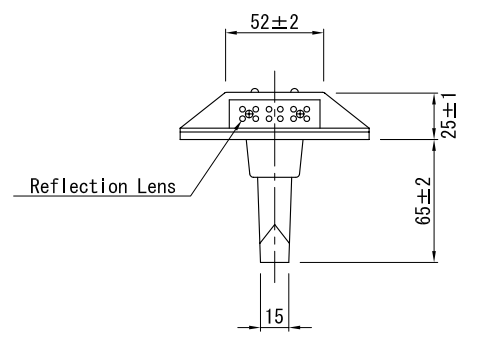
SECTION

MEDIAN (TYPE-1) S=1:10

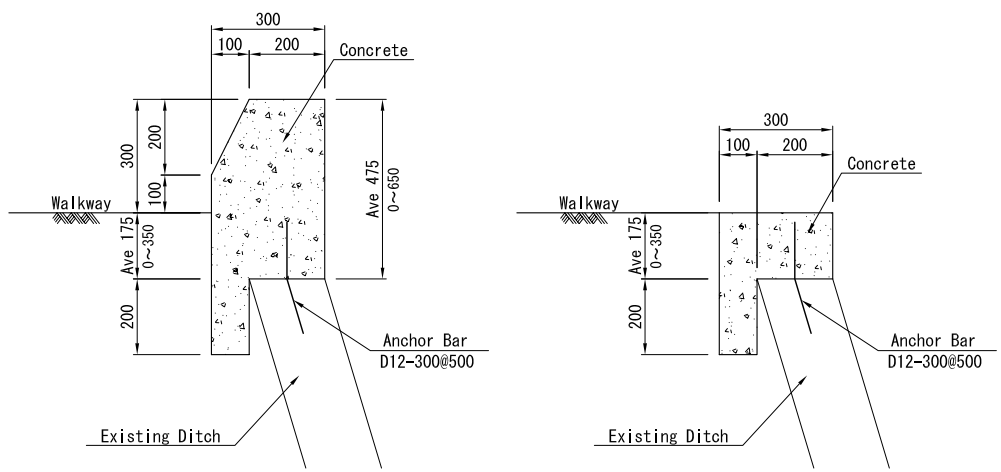


SECTION

MEDIAN (TYPE-2) S=1:10



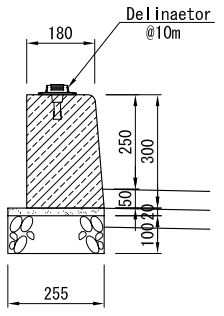
1-1 SECTION



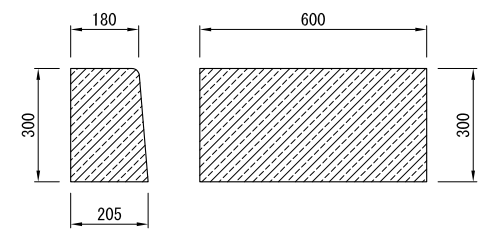
(TYPE-1)

(TYPE-2)

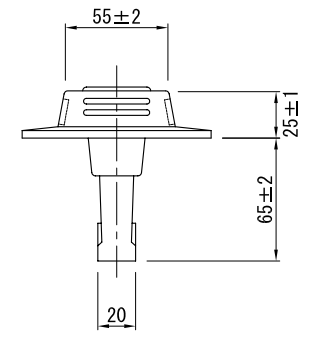
EDGE BLOCK S=1:10



TRAFFIC ISLAND BLOCK S=1:10

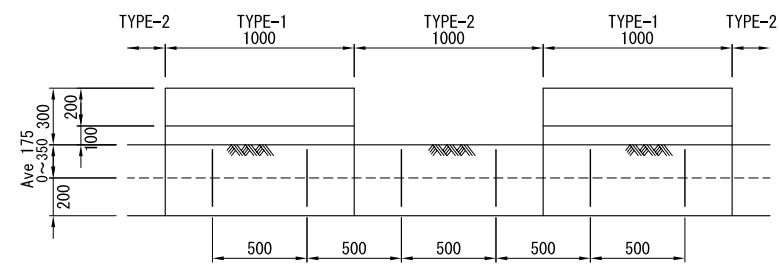


DETAIL OF CONCRETE BLOCK S=1:10



2-2 SECTION

DETAIL OF DELINAETOR S=1:2



SIDE VIEW S=1:20

L'OFFICE DES ROUTES
THE REPUBLIC OF BURUNDI

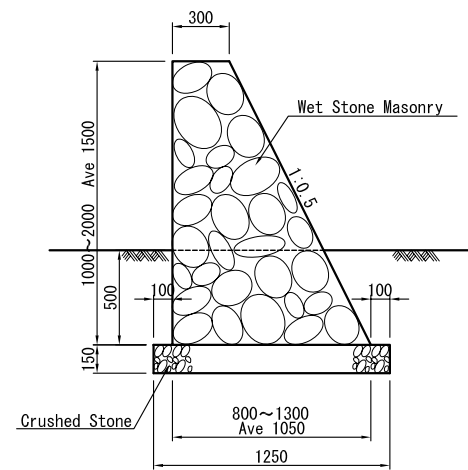
THE BASIC DESIGN STUDY
ON THE GRANT AID FOR REHABILITATION OF
ROADS AND INFRASTRUCTURE FOR BUJUMBURA CITY
IN THE REPUBLIC OF BURUNDI

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI ENGINEERING INTERNATIONAL CO., LTD.

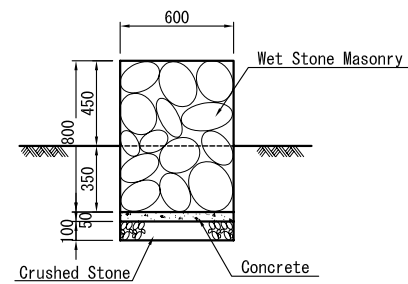
TITLE :
DETAILS OF CURB STONE AND BULOCK

SCALE
AS SHOWN

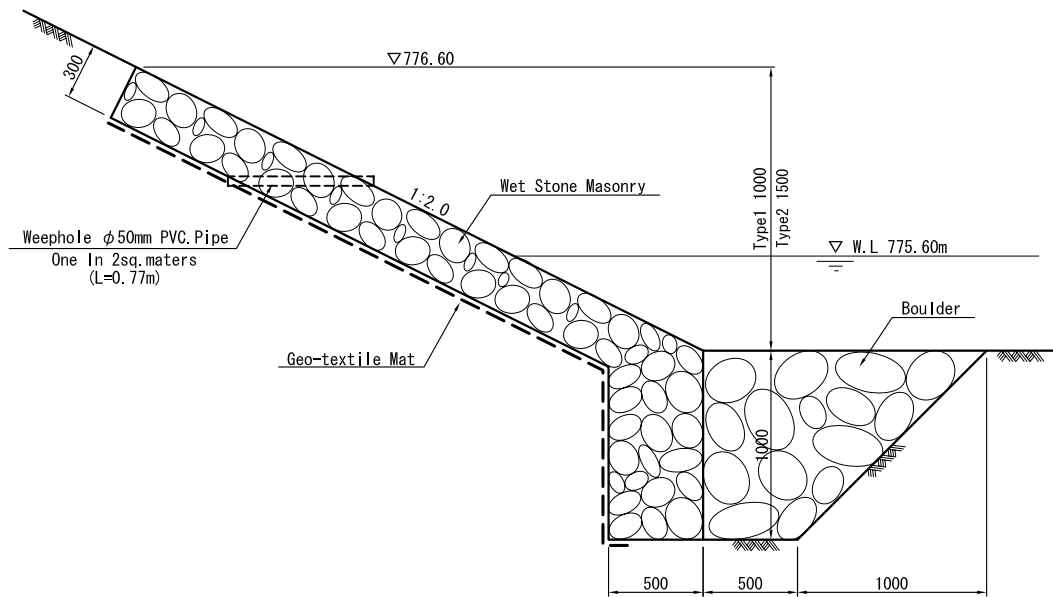
Drawing No.
M-05



GRAVITY WALL (MASONRY) S=1:20



MASONRY WALL S=1:20



RIPRAP REVETMENT S=1:20

L'OFFICE DES ROUTES
THE REPUBLIC OF BURUNDI

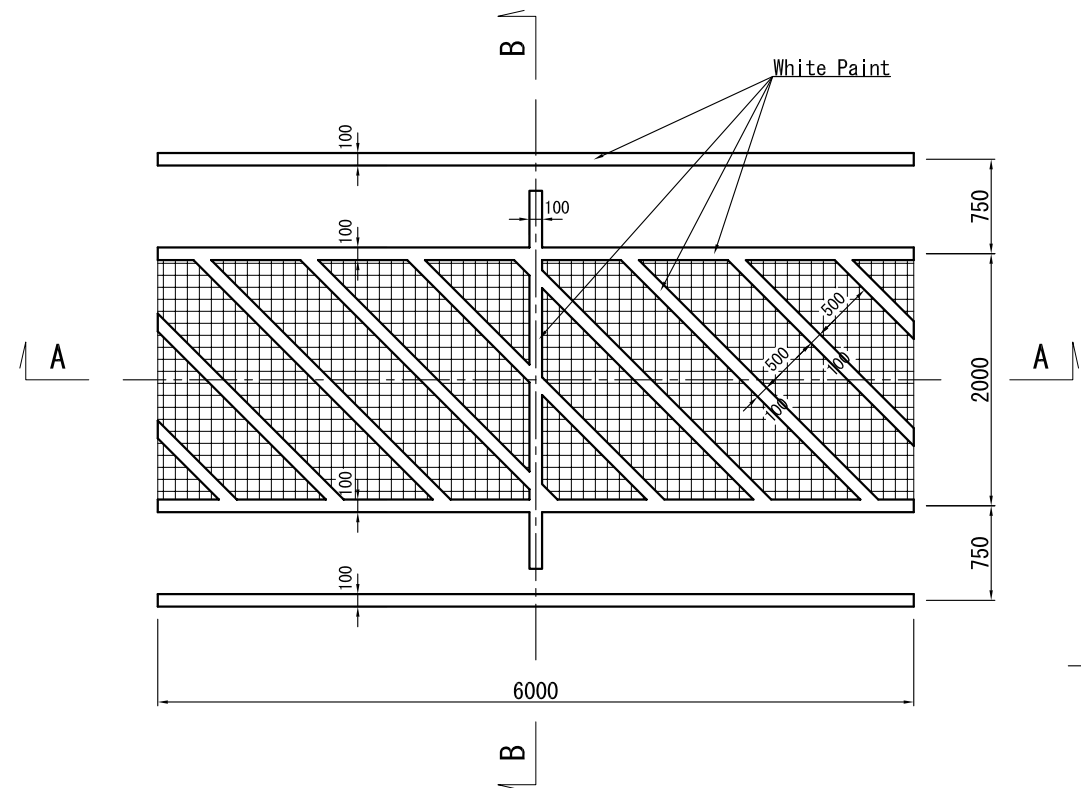
THE BASIC DESIGN STUDY
ON THE GRANT AID FOR REHABILITATION OF
ROADS AND INFRASTRUCTURE FOR BUJUMBURA CITY
IN THE REPUBLIC OF BURUNDI

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI ENGINEERING INTERNATIONAL CO., LTD.

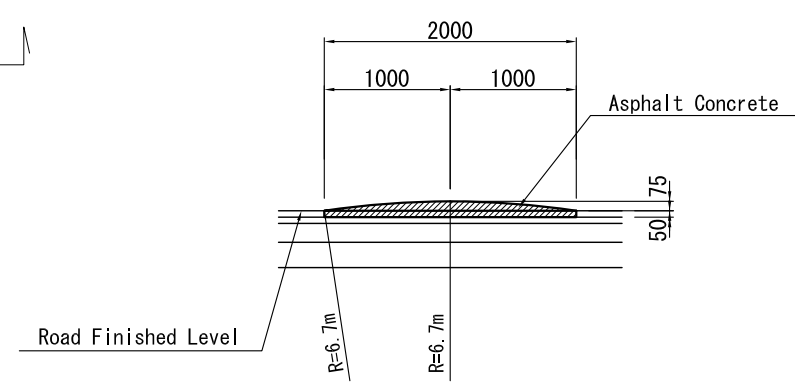
TITLE :
DETAILS OF WALLS AND
SLOPE PROTECTION

SCALE
AS SHOWN

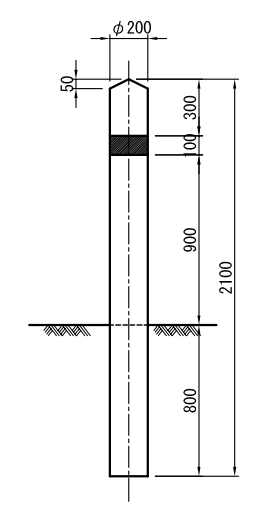
Drawing No.
M-06



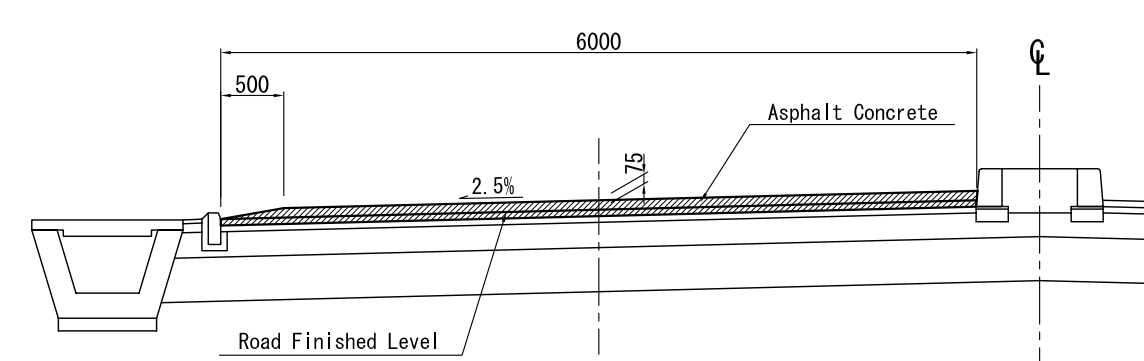
PLAN



B-B SECTION



GUARD POST S=1:20



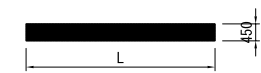
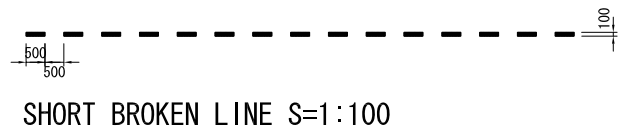
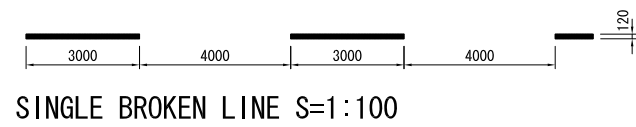
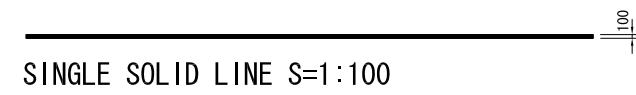
A-A SECTION

LIST OF HUMP

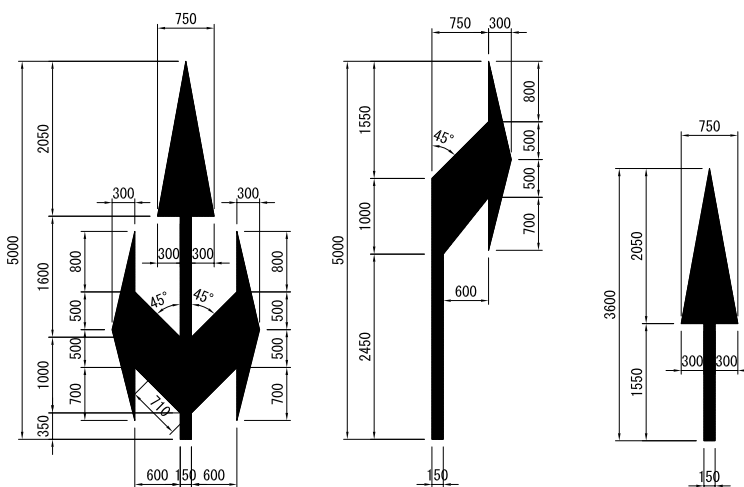
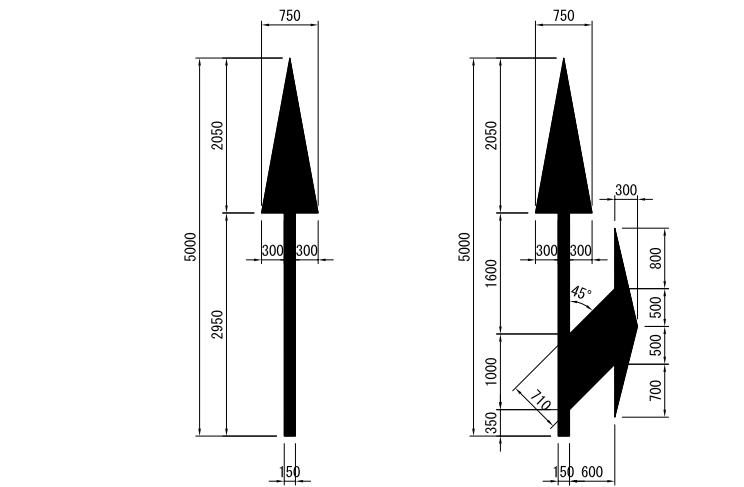
| STATION | NUMBER | REMARKS |
|---------|--------|----------------|
| 2+000 | 2 | INTERSECTION 3 |
| Y0+824 | 4 | NR3 CROSSING |
| TOTAL | 6 | |

DETAILS OF HUMP S=1:30

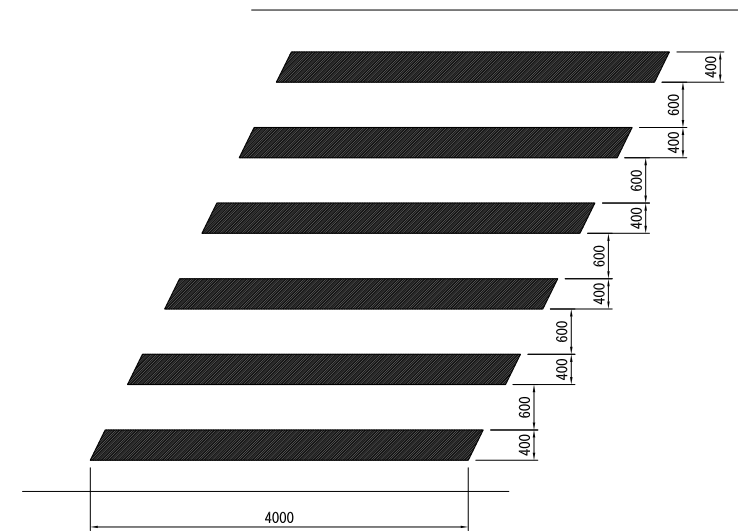
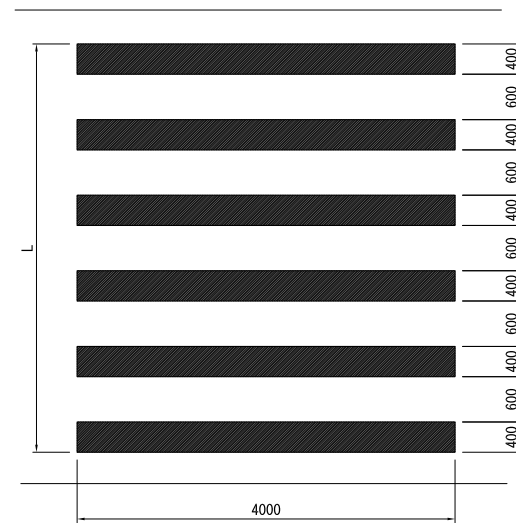
| | | | | | |
|--|---|---|--------------------------------|----------|-------------|
| L'OFFICE DES ROUTES THE REPUBLIC OF BURUNDI | THE BASIC DESIGN STUDY ON THE GRANT AID FOR REHABILITATION OF ROADS AND INFRASTRUCTURE FOR BUJUMBURA CITY IN THE REPUBLIC OF BURUNDI | JAPAN INTERNATIONAL COOPERATION AGENCY CTI ENGINEERING INTERNATIONAL CO., LTD. | TITLE : DETAILS OF HUMP | SCALE | Drawing No. |
| | | | | AS SHOWN | M-07 |



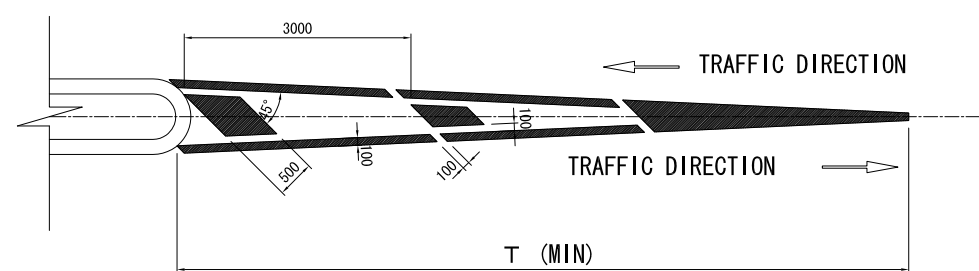
STOP LINE MARKING S=1:100



DIRECTIONAL ARROWS S=1:50



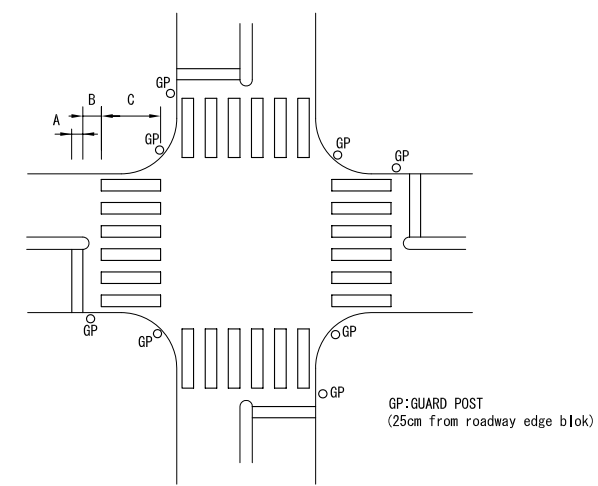
CROSS WALKS S=1:50



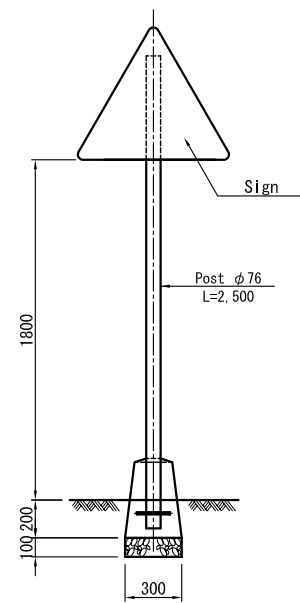
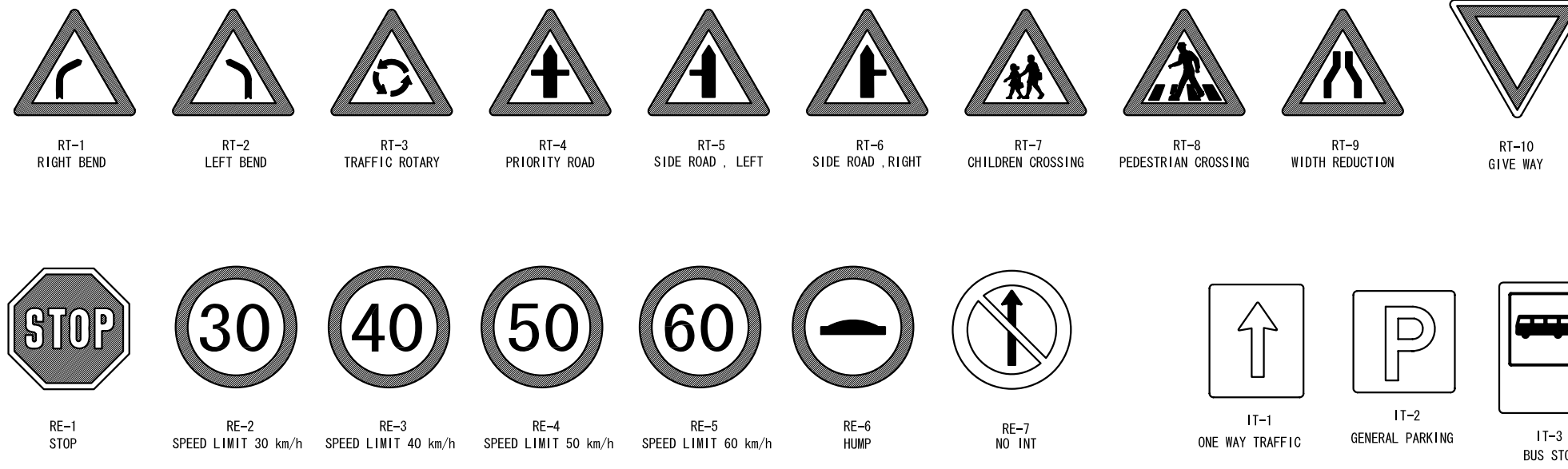
JUNCTION HATCHING MARKING S=1:50

URBAN

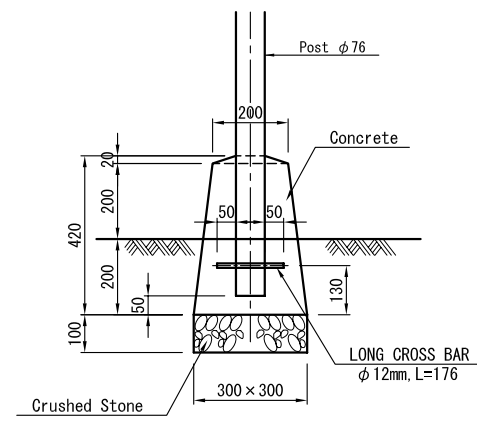
| DESIGN SPEED (Km/h) | T (m) |
|---------------------|---------|
| 20 | 10 |
| 30 | 10 |
| 40 | 15 |
| 50 | 20 |
| 60 | 30 |



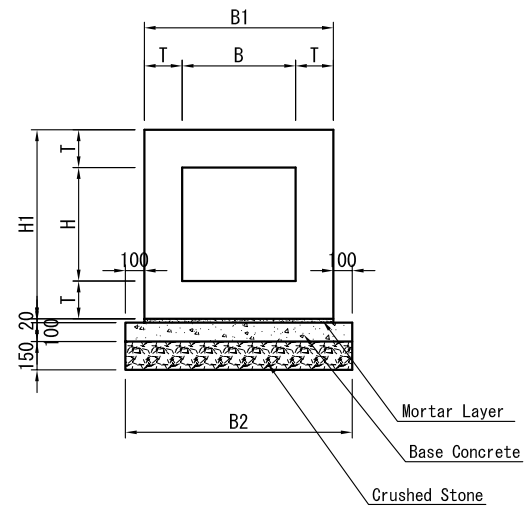
CROSS WALKS AT INTERSECTION



SIGN POST S=1:20



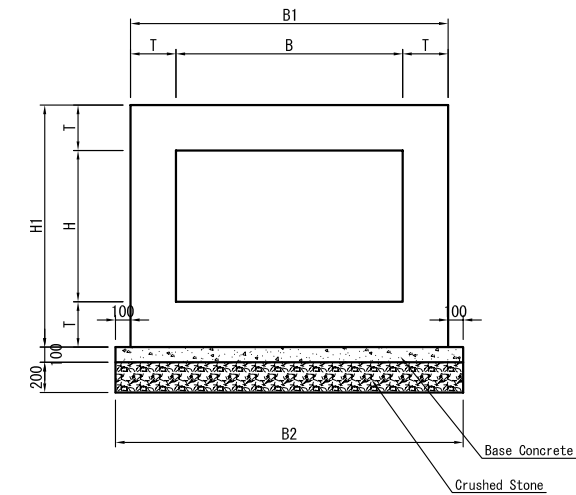
BASE S=1:10



GENERAL DRAWING OF BOX CULVERT (Type1~7) S=1:20

DIMENSION TABLE

| Type | B × H | B1 | B2 | H1 | T | b1 | b2 | b3 | n1 | h1 | h2 | h3 | n2 | t |
|------|-----------|------|------|------|-----|-----|-----|-----|----|-----|-----|-----|----|-----|
| 1 | 300 × 300 | 600 | 800 | 600 | 150 | 75 | 150 | - | - | 75 | 150 | - | - | 75 |
| 2 | 400 × 400 | 700 | 900 | 700 | 150 | 75 | 200 | - | - | 75 | 200 | - | - | 75 |
| 3 | 500 × 500 | 800 | 1000 | 800 | 150 | 75 | 250 | - | - | 75 | 250 | - | - | 75 |
| 4 | 700 × 600 | 1100 | 1300 | 1000 | 200 | 100 | 225 | 250 | 1 | 100 | 175 | 250 | 1 | 100 |
| 5 | 800 × 700 | 1200 | 1400 | 1100 | 200 | 100 | 150 | 500 | 2 | 100 | 225 | 250 | 1 | 100 |
| 6 | 900 × 700 | 1300 | 1500 | 1100 | 200 | 100 | 200 | 500 | 2 | 100 | 225 | 250 | 1 | 100 |
| 7 | 900 × 900 | 1300 | 1500 | 1300 | 200 | 100 | 200 | 500 | 2 | 100 | 200 | 500 | 2 | 100 |

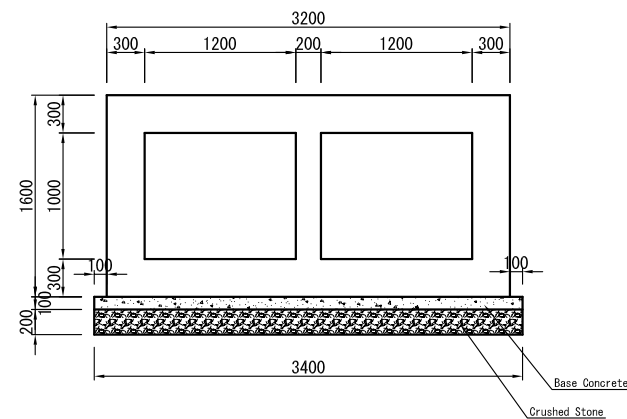


GENERAL DRAWING OF BOX CULVERT (Type8~12) S=1:25

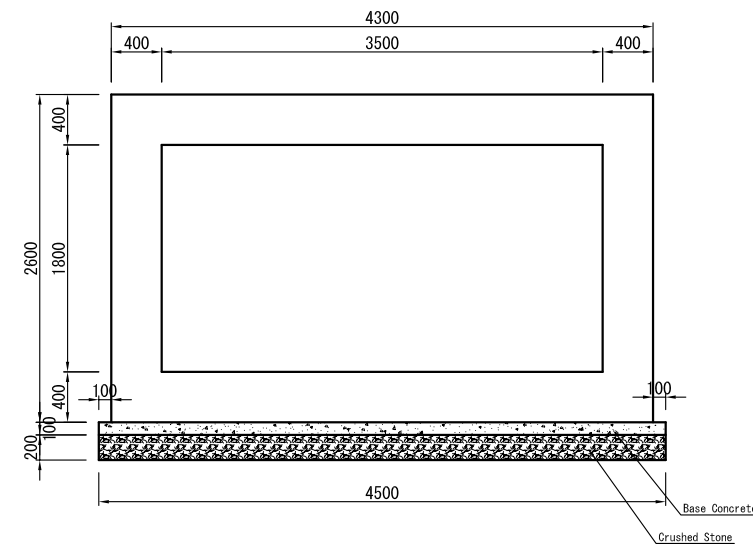
DIMENSION TABLE

| Type | B × H | B1 | B2 | H1 | T | b1 | b2 | b3 | n1 | h1 | h2 | h3 | n2 | t |
|------|------------------|------|------|------|-----|-----|-----|------|----|-----|-----|-----|----|----|
| 8 | 1000 × 600 | 1500 | 1700 | 1100 | 250 | 130 | 185 | 750 | 3 | 130 | 110 | 500 | 2 | 60 |
| 9 | 1000 × 1000 | 1500 | 1700 | 1500 | 250 | 130 | 185 | 750 | 3 | 130 | 185 | 750 | 3 | 60 |
| 10 | 1400 × 700 | 2000 | 2200 | 1300 | 300 | 140 | 155 | 1250 | 5 | 140 | 180 | 500 | 2 | 80 |
| 11 | 1500 × 1000 | 2100 | 2300 | 1600 | 300 | 140 | 205 | 1250 | 5 | 140 | 205 | 750 | 3 | 80 |
| 12 | 1500/2600 × 1000 | 2650 | 2850 | 1600 | 300 | 140 | 230 | 1750 | 7 | 140 | 205 | 750 | 3 | 80 |

※ No. 12 (1500/2600 × 1000) IS REPRESENTED BY ITS AVERAGE DIMENSIONS



GENERAL DRAWING OF BOX CULVERT (Type13) S=1:30



GENERAL DRAWING OF BOX CULVERT (Type14) S=1:30