



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY



PROJECT TITLE:

**PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE
EXPANSION**

PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

PROJECT COMPONENTS:

1. PROPOSED 75mmØ PVC FEEDERLINE AT UCHAI, SINUNUC
2. PROPOSED 100mmØ PVC FEEDERLINE AT OUR LADY OF ASSUMPTION, TALISAYAN OLD HIGH WAY
3. PROPOSED 50mmØ P.E. TUBING FEEDERLINE AT AYALA GYM, AYALA
4. PROPOSED 100mmØ PVC FEEDERLINE AT PUROK 6DA, TALISAYAN
5. PROPOSED 75mmØ PVC FEEDERLINE AT LOBREGAT VILLAGE, UPPER CALARIAN
6. PROPOSED 100mmØ PVC FEEDERLINE AT OUR LADY OF ASSUMPTION, AYALA
7. PROPOSED 150mmØ PVC DISTRIBUTION LINE CONNECTING BUNGUIAO TOWA PROJECT & EXISTING LINE AT SANGALI



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY

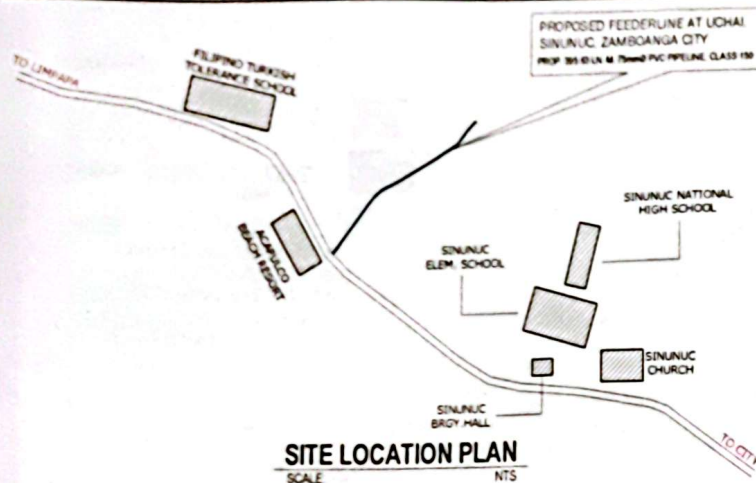


1. PROPOSED 75mmØ PVC FEEDERLINE AT UCHAI, SINUNUC

PROJECT LOCATION: ZAMBOANGA CITY

COMPONENTS :

SUPPLY/LAYING OF 395.63 LN.M. 75mmØ PVC PIPELINE, CLASS 150
SUPPLY/CONSTRUCTION OF 1.80 LINEAR METERS OF 75mm.Ø CLASS 150, PVC PIPELINE DRAINAGE CROSSING WITH CONCRETE ENCASEMENT
SUPPLY/INSTALLATION OF ONE (1) UNIT OF 25mmØ AIR RELEASE VALVE ASSEMBLY w/ CONCRETE BARRICADE



LEGEND:



PROP. 25mmØ AIR RELEASE VALVE

PROP. 395.63 LN. M. 75mmØ PVC PIPELINE, CLASS 150

PROP. 2-75mm Ø x 45° PVC BEND, CLASS 150

STA. 0+395.63
END OF PROP. 75mmØ PVC PIPELINE, CLASS 150

D2

STA. 0+350.00

STA. 0+320.00

STA. 0+300.00

STA. 0+250.00

STA. 0+200.00

STA. 0+150.00

STA. 0+100.00

STA. 0+050.00

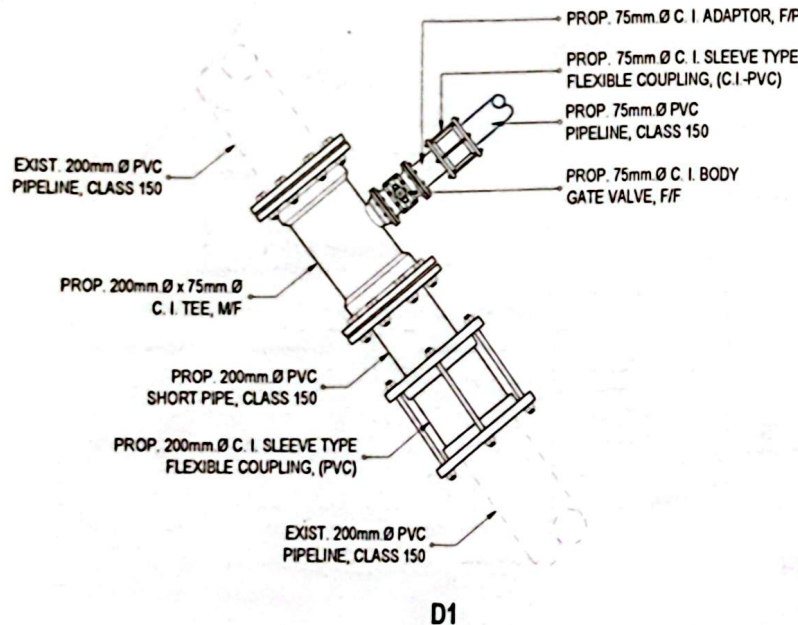
STA. 0+000.00
START OF PROP. 75mmØ PVC PIPELINE, CLASS 150

D1

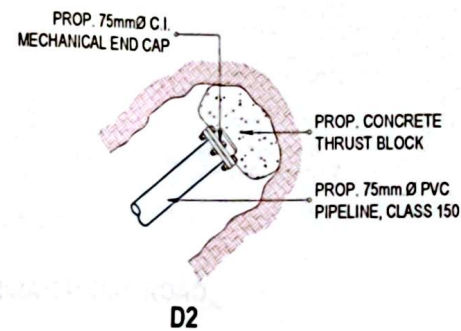
SEE CULVERT CROSSING DETAIL

SITE DEVELOPMENT PLAN

SCALE NTS



D1



D2

INTER-CONNECTION DETAILS

SCALE NTS

NOTE:

ALL PVC PIPES, BENDS, C.I. MATERIALS, BOLTS AND RUBBER GASKETS WILL BE PROVIDED BY ZCWD AND ALL PVC PIPE SIZES INDICATED HEREIN SHALL MEAN NOMINAL INSIDE DIAMETER.



REV.	DATE	BY	DESCRIPTION

DARRELL B. SANTIAGO
SENIOR ENGINEER A
DESIGN DIVISION

JOSEPH C. DAMPASCOS
SENIOR ENGINEER A
DESIGN DIVISION

REX D. SALE JR.
SUPERVISING ENGINEER A
DESIGN DIVISION

EDITH M. VILLALBA JR.
OFFICER IN CHARGE
ENGINEERING AND CONSTRUCTION DEPARTMENT

MICHAEL ANGELO M. CARBON
ASSISTANT GENERAL MANAGER
TECHNICAL SERVICES GROUP

APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
REYNALDO R. CABILIN
GENERAL MANAGER

PROJECT TITLE:
PROPOSED FEEDERLINE AT UHAI, SINUNUC, ZAMBOANGA CITY FOR WATER SERVICE EXPANSION
PROJECT COMPONENT:
PROPOSED 75mmØ PVC FEEDERLINE AT UHAI, SINUNUC
SHEET NUMBER:
AS INDICATED

COMPONENT NO.
1
SHEET NO.
1

LEGEND:

DOUBLE CONC. CUTTING

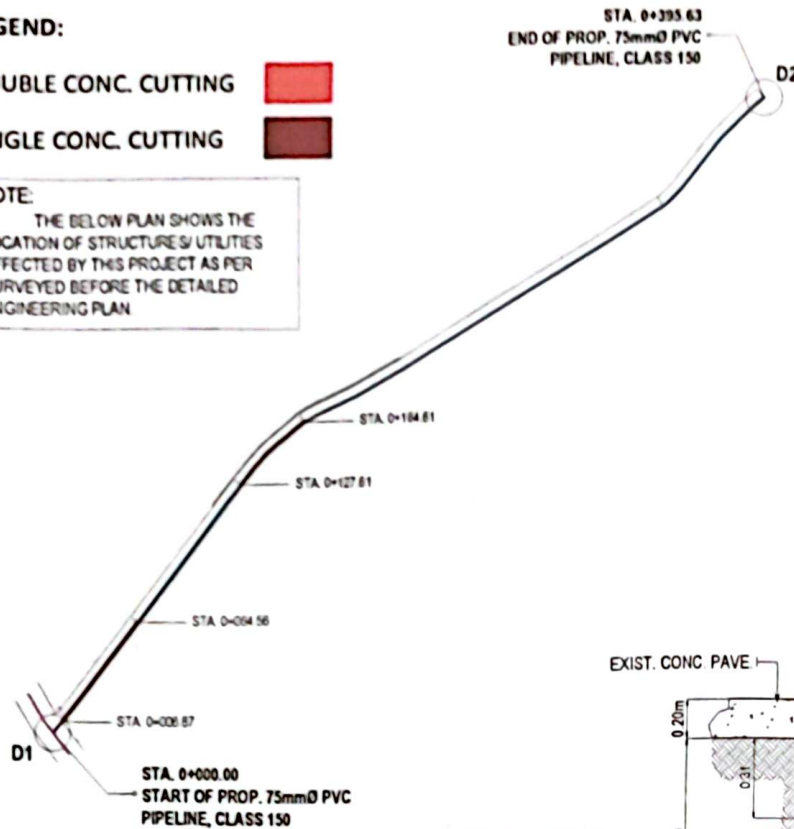


SINGLE CONC. CUTTING



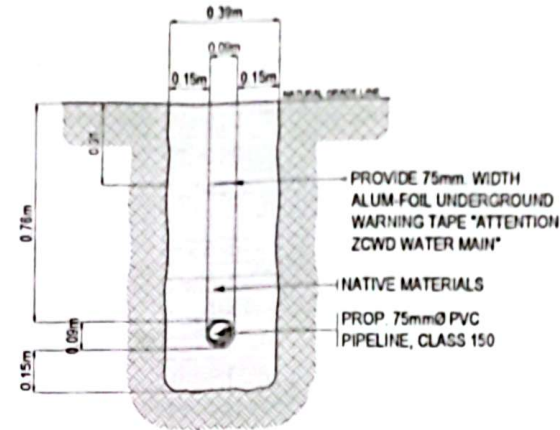
NOTE:

THE BELOW PLAN SHOWS THE LOCATION OF STRUCTURES/ UTILITIES AFFECTED BY THIS PROJECT AS PER SURVEYED BEFORE THE DETAILED ENGINEERING PLAN

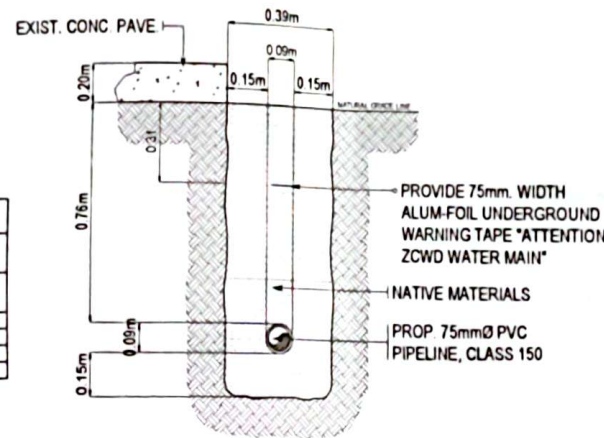


CONCRETE CUTTING AND DEMOLITION SCHEDULE						
START TO END OF PROJECT		CONCRETE CUTTING		CONCRETE DEMOLITION		
FROM STATION	TO STATION	TYPE OF CUTTING	LENGTH OF CUTTING (S.M.)	LENGTH OF DEMOLITION (S.M.)	AREA OF DEMOLITION (SQ. M.)	THICKNESS
0+000.00	0+026.87	DOUBLE CUTTING	13.14	6.87	6.87	0.23m
0+026.87	0+054.56	SINGLE CUTTING	67.69	67.69	22.56	0.23m
0+054.56	0+164.61	SINGLE CUTTING	67.69	67.69	18.43	0.23m
TOTAL			148.52	143.25	43.86	
ASPHALT CUTTING AND DEMOLITION SCHEDULE						
START TO END OF PROJECT		ASPHALT CUTTING		ASPHALT DEMOLITION		
FROM STATION	TO STATION	TYPE OF CUTTING	LENGTH OF CUTTING (S.M.)	LENGTH OF DEMOLITION (S.M.)	AREA OF DEMOLITION (SQ. M.)	
0+000.00	0+026.87	DOUBLE CUTTING	13.14	6.87	6.87	

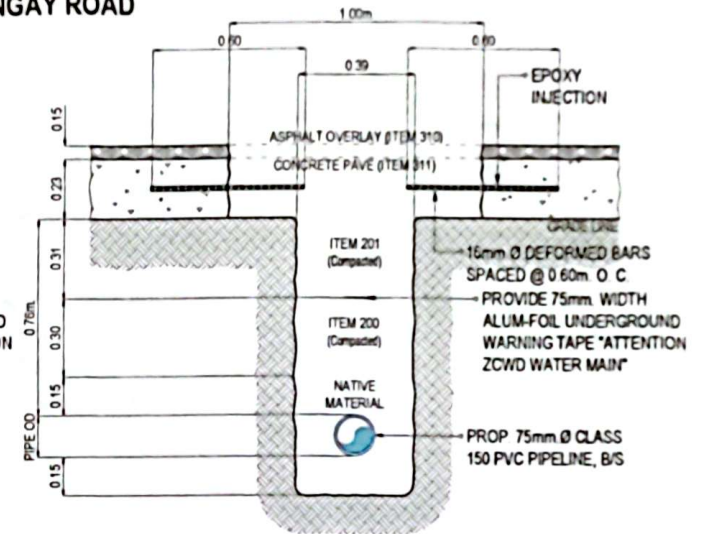
TRENCH LAYOUT PLAN
SCALE NTS



FOR BARANGAY ROAD



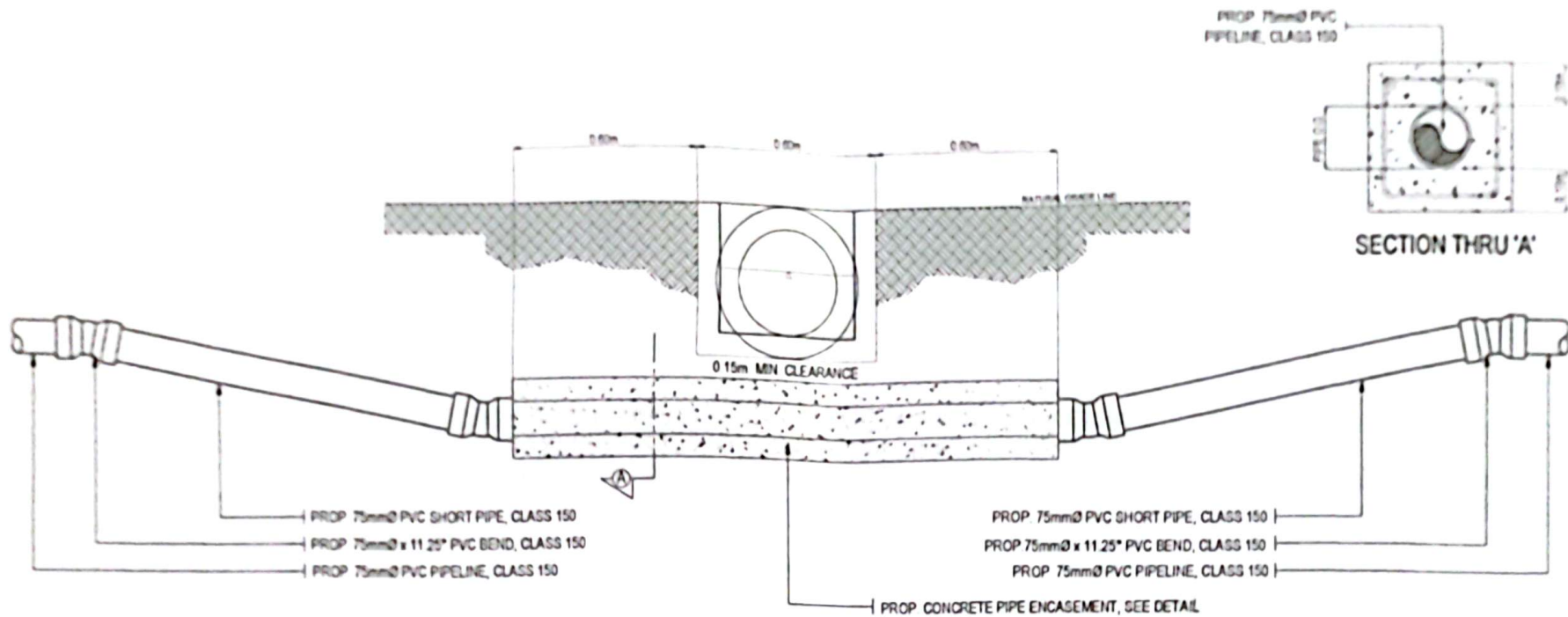
FOR BARANGAY ROAD



FOR NATIONAL ROAD

TYPICAL TRENCH FOR BARANGAY ROAD

	REVIEWED DATE: BY: DESCRIPTION:	DESIGNED BY DARRYL N. SALATAN SENIOR CIVIL ENGINEER DESIGN DIVISION	PREPARED BY J. DAMASO SENIOR ENGINEER DESIGN DIVISION	CHECKED BY REX D. SALE JR. SUPERVISING ENGINEER DESIGN DIVISION	SUBMITTED BY EDITOR M. BARTISTA JR. OFFICIAL IN CHARGE RECORDS AND CONTROL DIVISION	RECOMMENDING PROJECT IMPLEMENTATION MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT RICHARDO R. CABILIN GENERAL MANAGER	PROJECT TITLE PROPOSED RECONSTRUCTION OF VARIOUS LOCATIONS IN THE CITY FOR WATER SUPPLY DISTRIBUTION	SHEET NO. 1
	PROJECT COMMENTS PROPOSED 75mmØ PVC PIPELINE AT LOCAL DRAINAGE	SHEET CONTENT AS INDICATED	SHEET NO. 2						



TYPICAL DETAIL OF CULVERT CROSSING

SCALE: NTS

	REVISIONS			DESIGNED BY	CHECKED BY	APPROVED BY	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	PROJECT LOCATION	PROJECT NO.	SHEET NO.
	NO.	DATE	DESCRIPTION	DALE B. AMADOR	ALEX D. SALE JR.	MICHAEL ANGELO M. CARSON	ZAMBOANGA CITY WATER DISTRICT	PROPOSED RECONSTRUCTION OF WATER CONDUIT IN THE ZAMBOANGA CITY WATER DISTRICT	PROPOSED RECONSTRUCTION OF WATER CONDUIT	1	3



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY



**2. PROPOSED 100mmØ FEEDERLINE AT OUR LADY OF ASSUMPTION,
TALISAYAN OLD HIGH WAY**

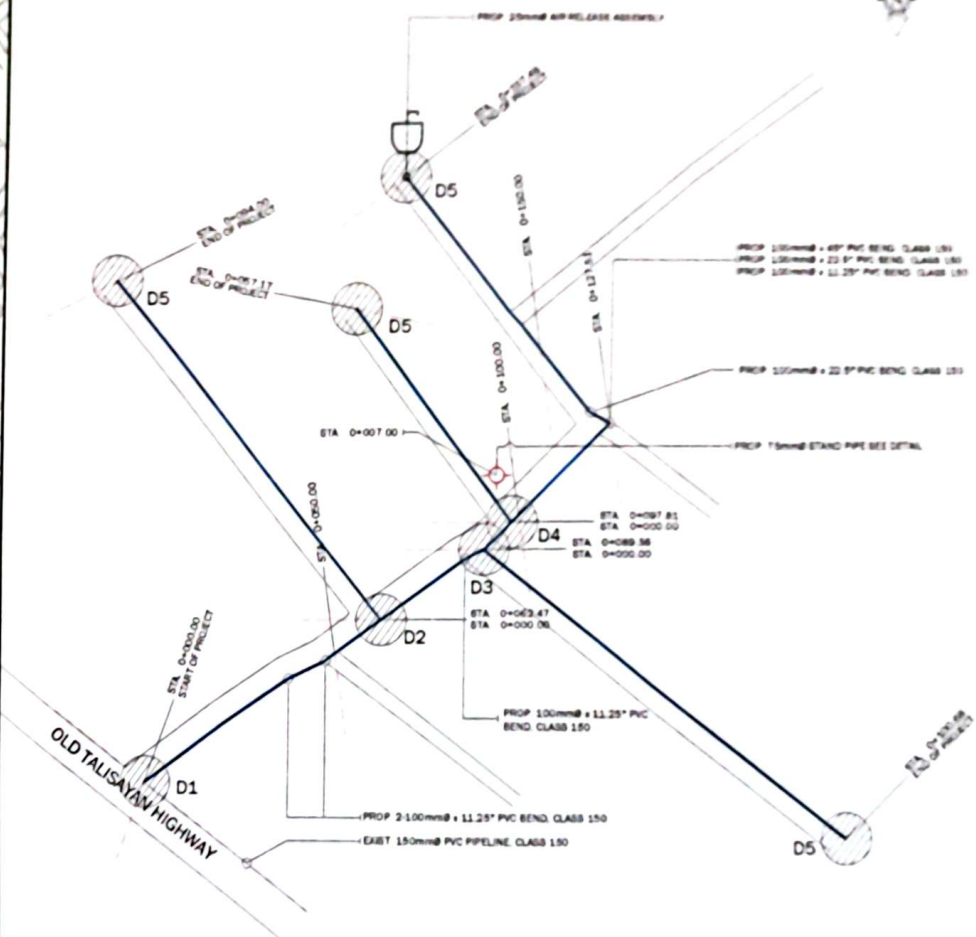
PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

COMPONENTS :

**SUPPLY/LAYING OF 449.33 LN. M. 100mm.Ø, PN16 PVC-O FEEDERLINE
SUPPLY/INSTALLATION OF ONE (1) UNIT 25mm.Ø AIR RELEASE ASSEMBLY
SUPPLY/INSTALLATION OF ONE (1) UNIT 75mm.Ø FIRE HYDRANT w/ CONCRETE BARRICADE**



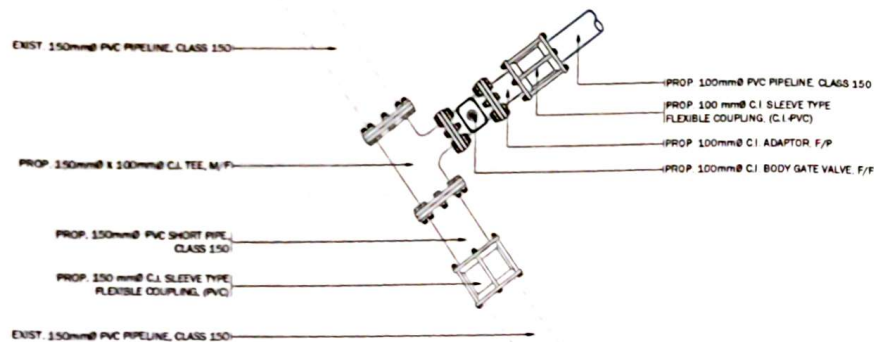
SITE LOCATION PLAN
SCALE: 1:9000m



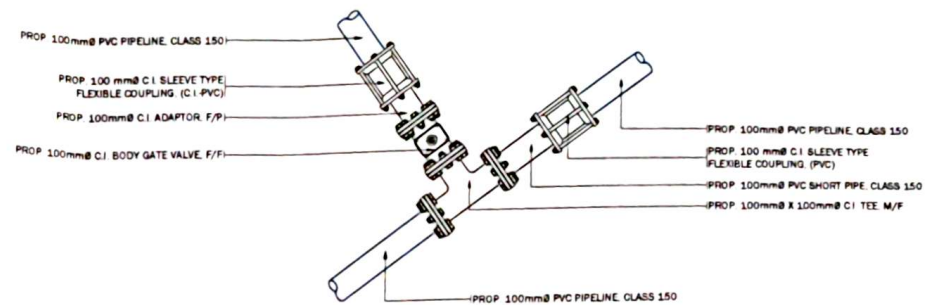
SITE DEVELOPMENT PLAN
SCALE: 1:1100m

NOTE:
ALL PVC PIPE SIZES INDICATED HEREIN
SHALL MEAN NOMINAL INSIDE DIAMETER.

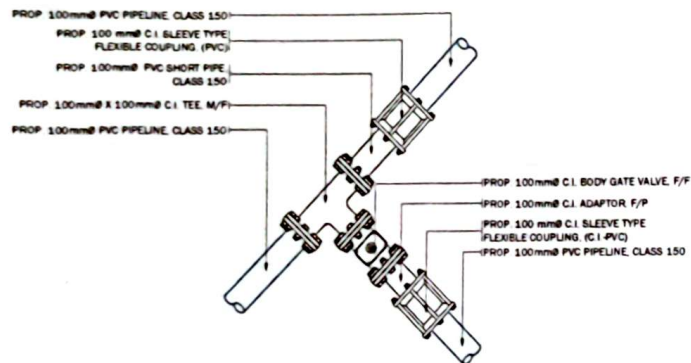
	REVISIONS				DESIGNED BY	PREPARED BY	CHECKED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	PROJECT LOCATION	PROJECT NO.	SHEET NO.
	REV.	DATE	BY	DESCRIPTION	DARRELL B. SALANTAN SENIOR ENGINEER DESIGN DIVISION	REX D. SALE JR. SUPERVISOR ENGINEER DESIGN DIVISION	EDITH M. SANTIAGO SUPERVISOR ENGINEER DESIGN DIVISION	MICHAEL ANGELO M. CARBON ASST. CHIEF GENERAL MANAGER TECHNICAL SERVICES GROUP	REYNALDO R. CABILIN GENERAL MANAGER	ZAMBOANGA CITY WATER DISTRICT	PROPOSED 100mm ID FEEDERLINE AT OUR LADY OF ASSUMPTION, TALISAYAN OLD HIGHWAY	2	4	



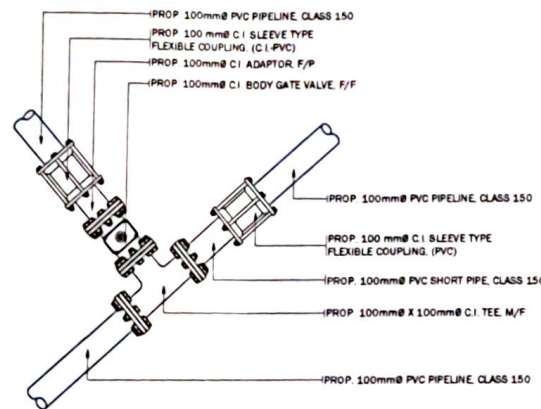
D1



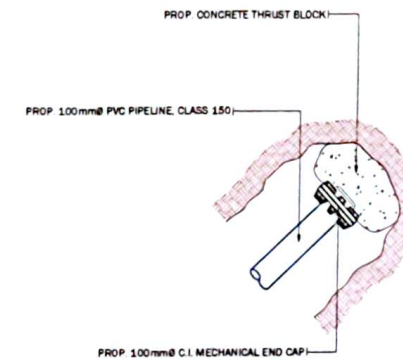
D2



D3



D4

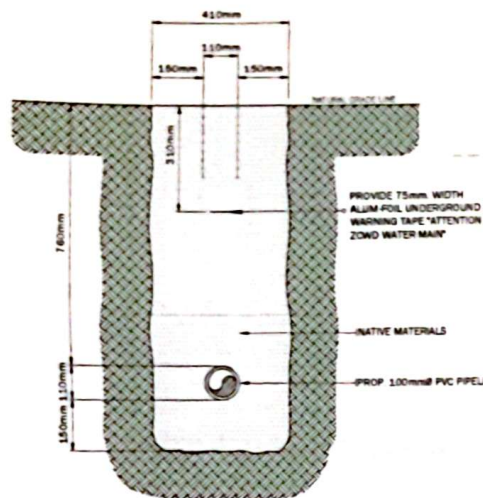


D5

NOTE:
ALL C.I. MATERIALS, BOLTS AND RUBBER GASKETS WILL BE PROVIDED BY ZCWD.

INTER-CONNECTION DETAIL
SCALE 1:20m

REVISIONS		DRAWN BY		PREPARED BY		CHECKED BY		SUBMITTED BY		RECOMMENDING PROJECT IMPLEMENTATION		APPROVED FOR PROJECT IMPLEMENTATION		PROJECT TITLE		COMPONENT NO.	
REV	DATE	BY	DESCRIPTION														SHEET NO.
				DARRELL B. SALARITAN	SEN. ENGINEER	REYNALDO R. CABILIN	GENERAL MANAGER	REX D. SALE JR.	SUPERVISING ENGINEER & DESIGN DIVISION	EDUARDO B. BATHISTA JR.	OFFICE CHARGE ENGINEERING AND CONSTRUCTION DEPARTMENT	MICHAEL ANGELO M. CARBON	ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	ZAMBOANGA CITY WATER DISTRICT	PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	2	5
															PROPOSED 100mm FEEDERLINE AT OUR LADY OF ASSUMPTION TALAGHAN OLD HIGHWAY		
															SHEET CONTENT	AS INDICATED	



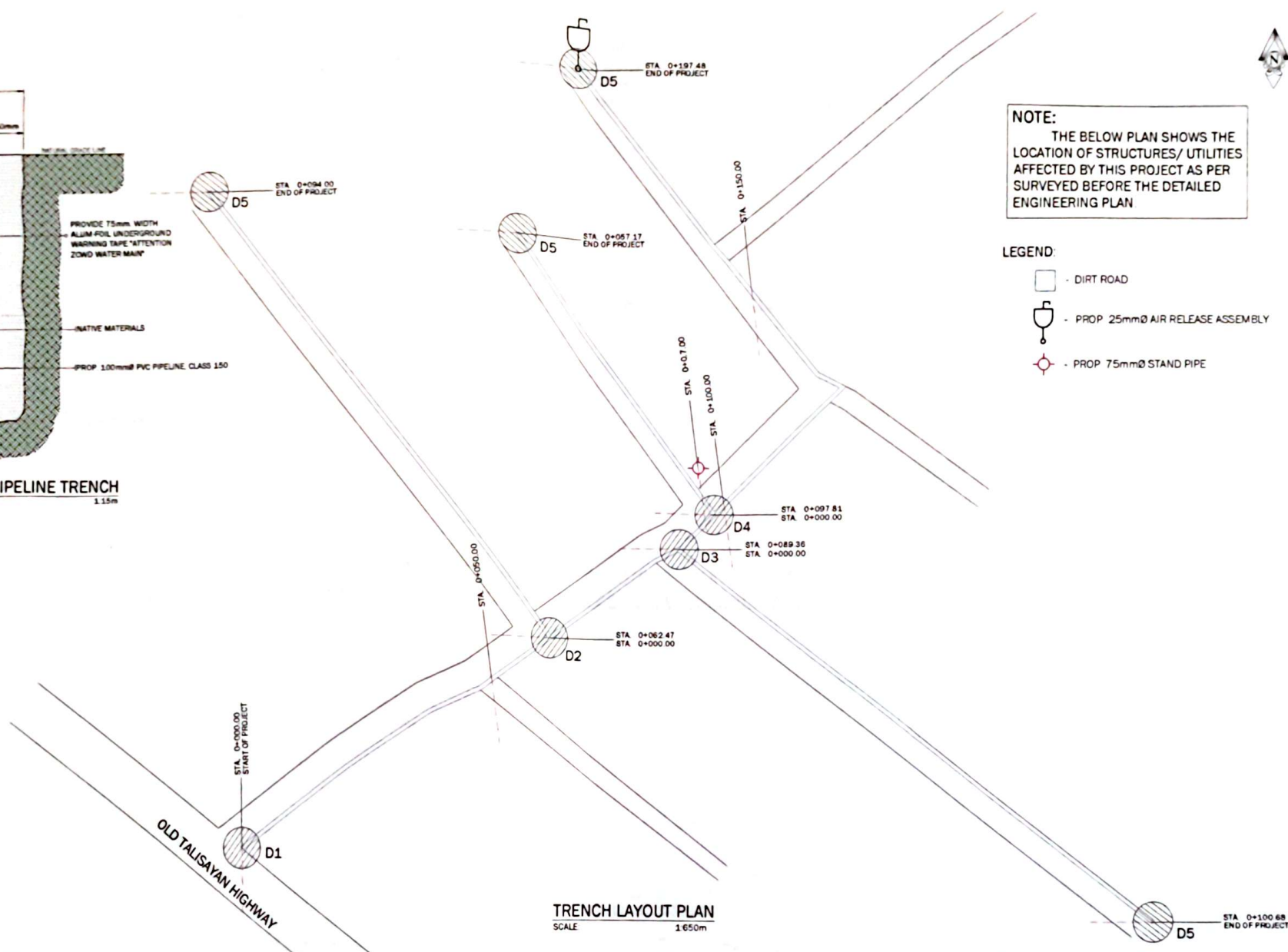
TYPICAL DETAIL OF PIPELINE TRENCH
SCALE 1:15m

LEGEND

NOTE:
THE BELOW PLAN SHOWS THE LOCATION OF STRUCTURES/ UTILITIES AFFECTED BY THIS PROJECT AS PER SURVEYED BEFORE THE DETAILED ENGINEERING PLAN.

LEGEND

- DIRT ROAD
- PROP. 25mmØ AIR RELEASE ASSEMBLY
- PROP. 75mmØ STAND PIPE



TRENCH LAYOUT PLAN
SCALE 1:650m

	REVISIONS			DRAWN BY	PREPARED BY	CHECKED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	COMPONENT NO.	
	REV	DATE	BY	DESCRIPTION						PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	SHEET NO.	
					DARRELL B. ALARITAN SENIOR CHIEF ENGINEER DESIGN DIVISION	RICHARD L. DAMASO SENIOR CHIEF ENGINEER DESIGN DIVISION	REX D. SALE JR. SUPERVISING ENGINEER & DESIGN DIVISION	EDYD M. BAUTISTA JR. OFFICIAL SECRETARY ENGINEERING AND CONSTRUCTION DEPARTMENT	MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	REYNALDO R. CABILUN GENERAL MANAGER	PROPOSED 100mmØ FEEDERLINE AT OUR LACK OF ASSUMPTION, TALISAYAN OLD HIGHWAY	2
	SHEET CONTENT										AS INDICATED	6



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY

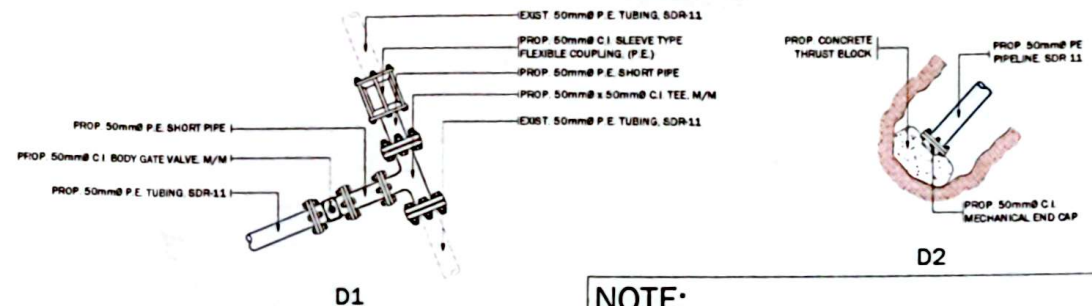
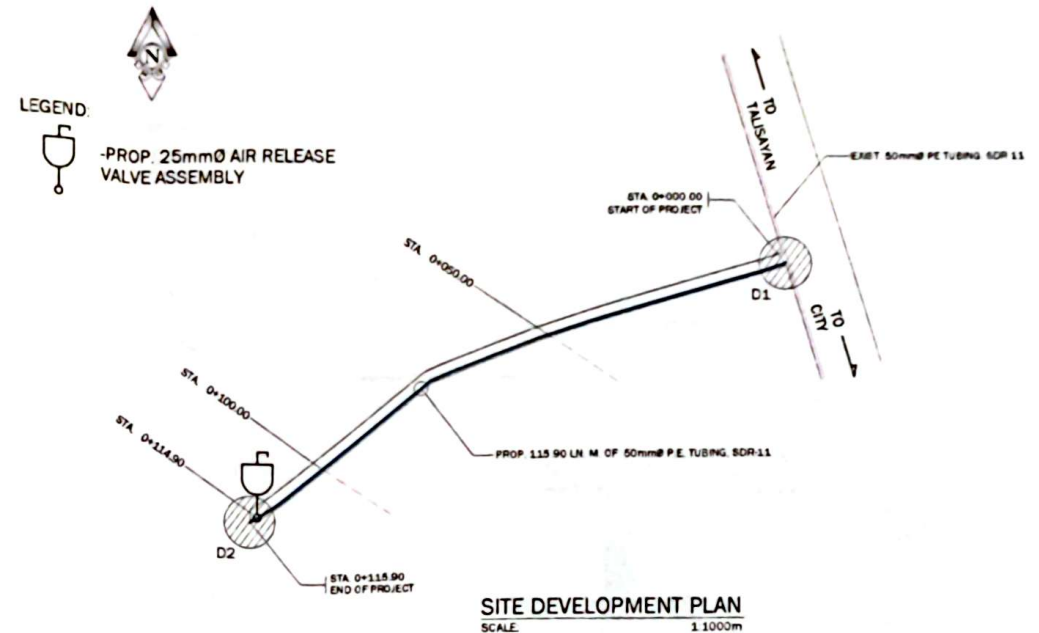
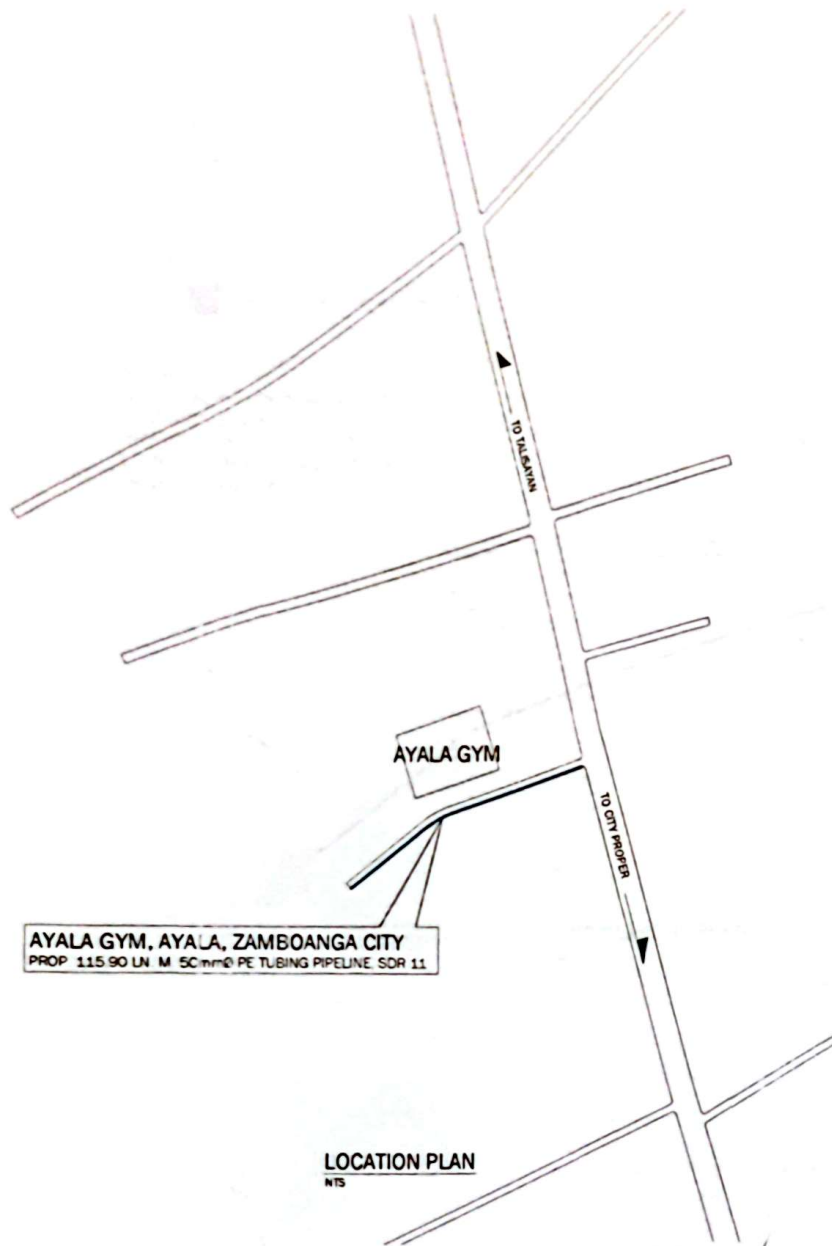


3. PROPOSED 50mmØ P.E. TUBING FEEDERLINE AT AYALA GYM, AYALA

PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

COMPONENTS :

SUPPLY/LAYING OF 115.90 LN. M. 50mm.Ø, PE PIPELINE, SDR-11
SUPPLY/INSTALLATION OF ONE (1) UNIT OF 25mmØ AIR RELEASE VALVE ASSEMBLY w/ CONCRETE BARRICADE



NOTE:
ALL C.I. MATERIALS WILL BE PROVIDED BY ZCWD AND ALL PVC PIPE SIZES INDICATED HEREIN SHALL MEAN NOMINAL INSIDE DIAMETER.

	REVISIONS REV. DATE BY DESCRIPTION 1 10/10/2018 BY [Signature] DESCRIPTION		DRAWN BY DARRELL B. SALATILAN DESIGNER	PREPARED BY [Signature] SENIOR ENGINEER & DESIGN CHIEF	CHECKED & REVIEWED BY [Signature] SUPERVISING ENGINEER & DESIGN CHIEF	SUBMITTED BY EDITO M. BAUTISTA JR. OFFICE CHIEF	RECOMMENDING PROJECT IMPLEMENTATION [Signature] MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT [Signature] REYNALDO R. CABILIN GENERAL MANAGER	PROJECT TITLE PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION PROJECT COMPONENT PROPOSED 50mm P.E. TUBING FEEDERLINE AT AYALA GYM, AYALA SHEET CONTENT AS INDICATED	COMPONENT NO. 3 SHEET NO. 7
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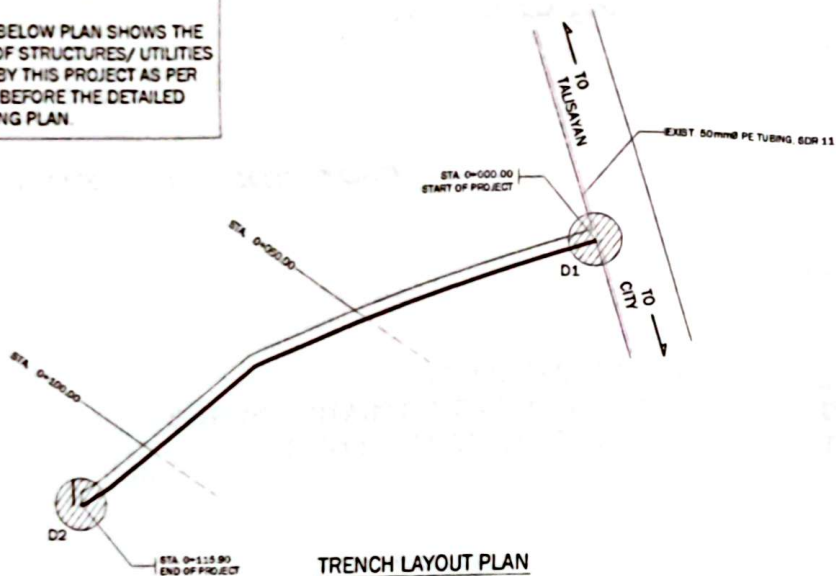


LEGEND

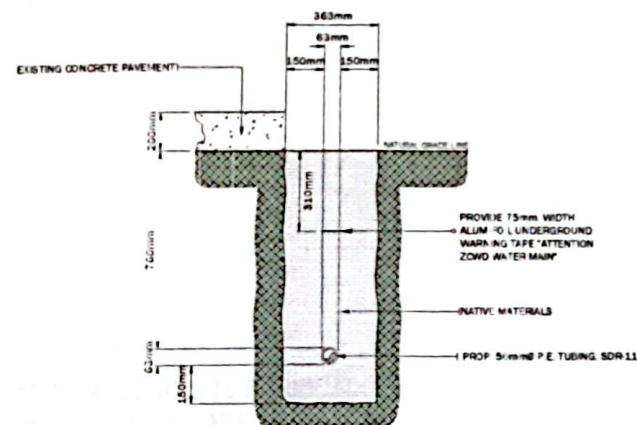
 SINGLE CUTTING FOR CONCRETE PAVEMENT

NOTE:

THE BELOW PLAN SHOWS THE LOCATION OF STRUCTURES/ UTILITIES AFFECTED BY THIS PROJECT AS PER SURVEYED BEFORE THE DETAILED ENGINEERING PLAN



TRENCH LAYOUT PLAN
SCALE 1:1000m



TYPICAL DETAIL OF PIPELINE TRENCH
SCALE 1:20m



REV	DATE	BY	DESCRIPTION

DESIGNED BY
DARRELL B. SULARITAN
SENIOR ENGINEER
DESIGN DIVISION

PREPARED BY
JOYNT C. DAMASCUS
SENIOR ENGINEER
DESIGN DIVISION

CHECKED & APPROVED BY
JOY D. SALLOR
SUPERVISOR
DESIGN DIVISION

SUBMITTED BY
EDITH M. BASTIA JR.
OFFICE ENGINEER
ENGINEERING AND CONSTRUCTION DEPARTMENT

RECOMMENDING PRIOR TO IMPLEMENTATION
MICHAEL ANGELO M. CARBON
ASST. CITY MGR. (GENERAL MANAGING IN TECHNICAL SERVICES GROUP)

APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
JOY D. SALLOR
CITY MANAGER

PROJECT TITLE
PROPOSED REVISIONS IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION
PROJECT OWNER
PROPOSED SUPPLY AND P.T. TUBING FEEDLINE AT P. M. (P. M. KALIA)
SHEET CONTENT
AS NOTED

SHEET NO.
3
8



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY

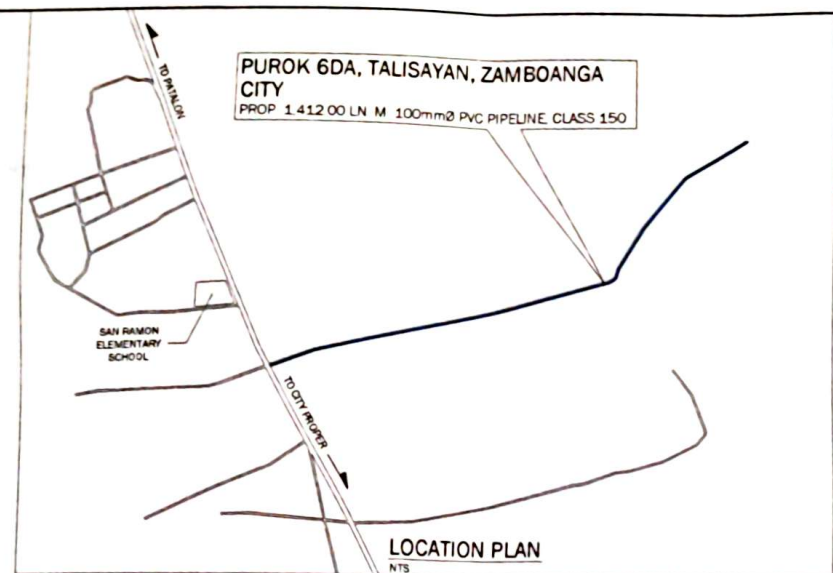


**4. PROPOSED 100mmØ PVC FEEDERLINE AT PUROK 6DA,
TALISAYAN**

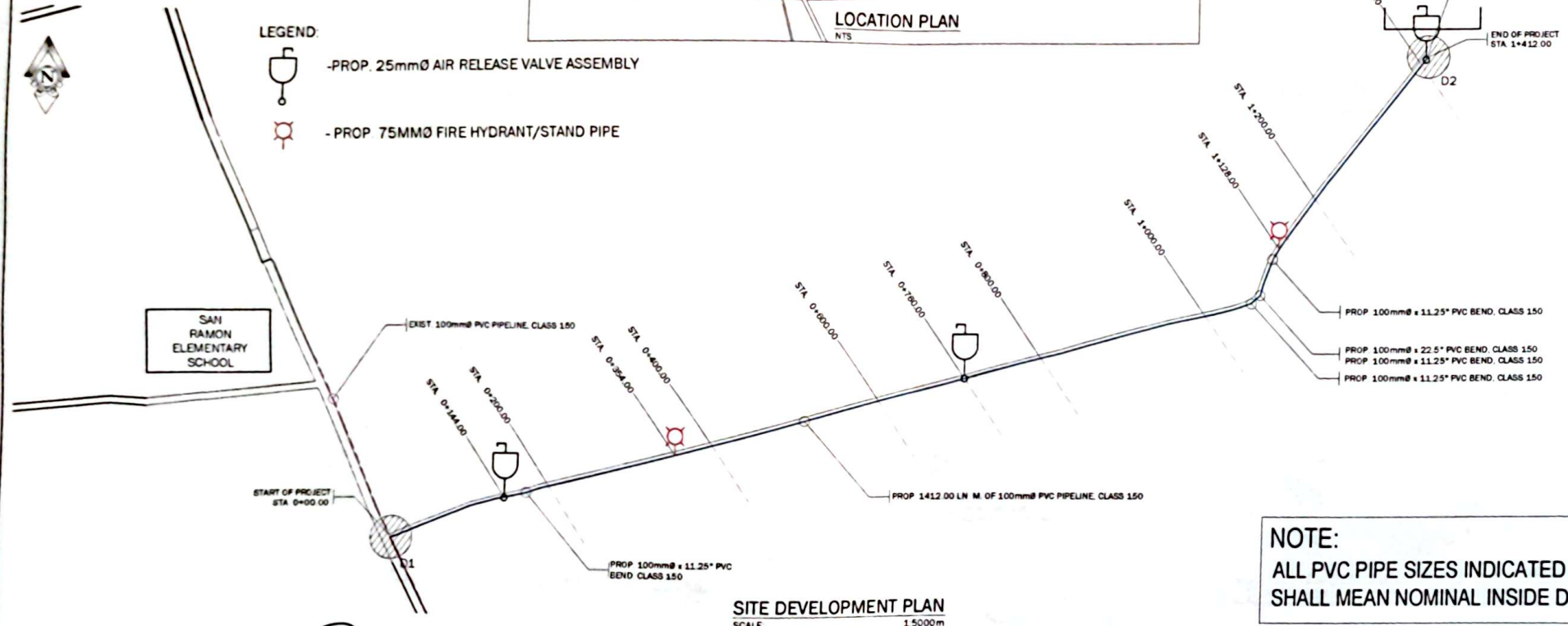
PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

COMPONENTS :

SUPPLY/LAYING OF 1,412.00 LN. M. 100mm.Ø, PVC PIPELINE, CLASS 150
SUPPLY/INSTALLATION OF THREE (3) UNITS OF 25mmØ AIR RELEASE VALVE ASSEMBLY w/ CONCRETE BARRICADE
SUPPLY/INSTALLATION OF TWO (2) UNITS 75mm.Ø FIRE HYDRANT w/ CONCRETE BARRICADE



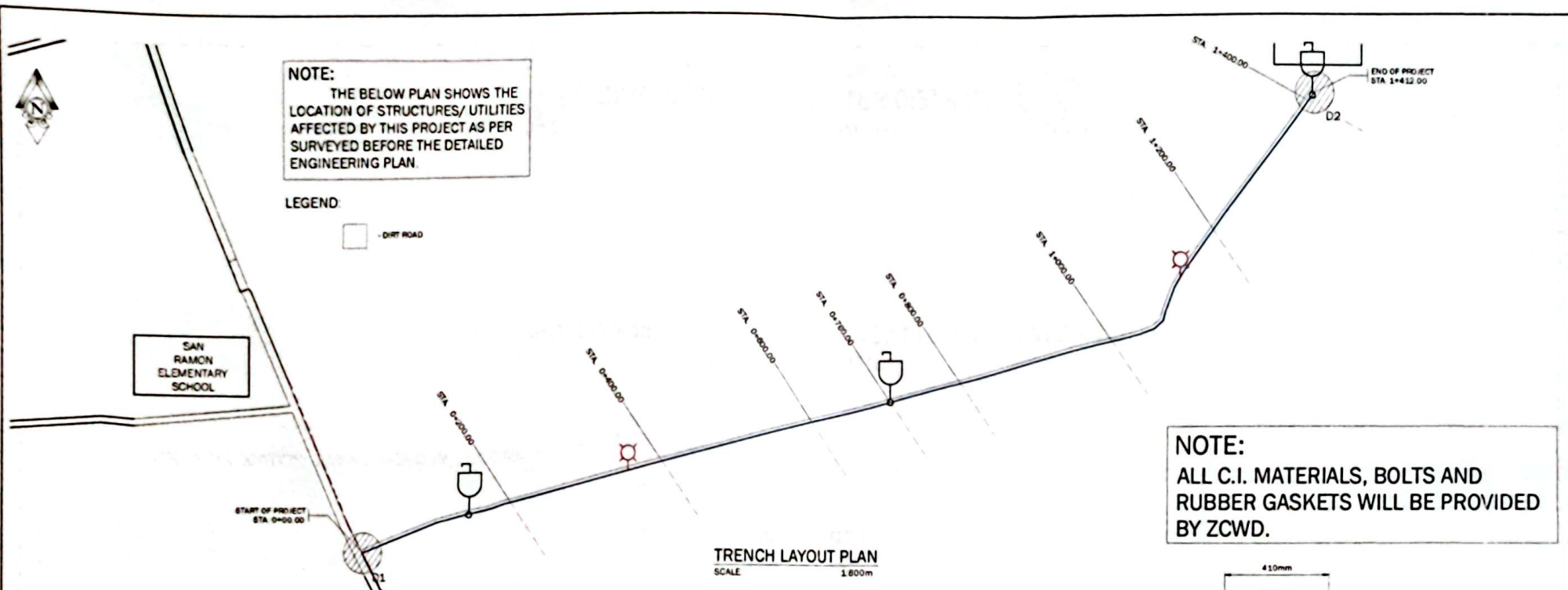
- LEGEND:**
- PROP. 25mmØ AIR RELEASE VALVE ASSEMBLY
 - PROP. 75MMØ FIRE HYDRANT/STAND PIPE



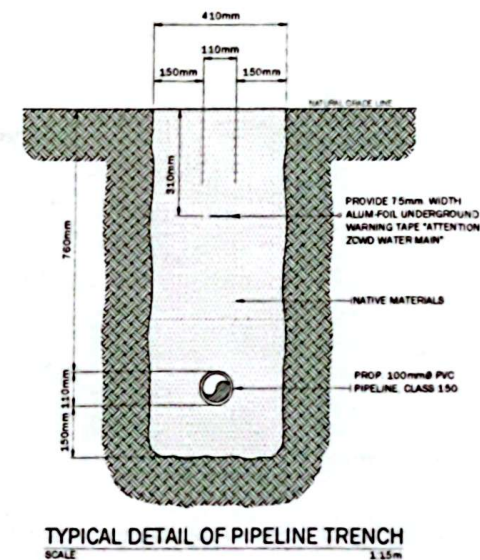
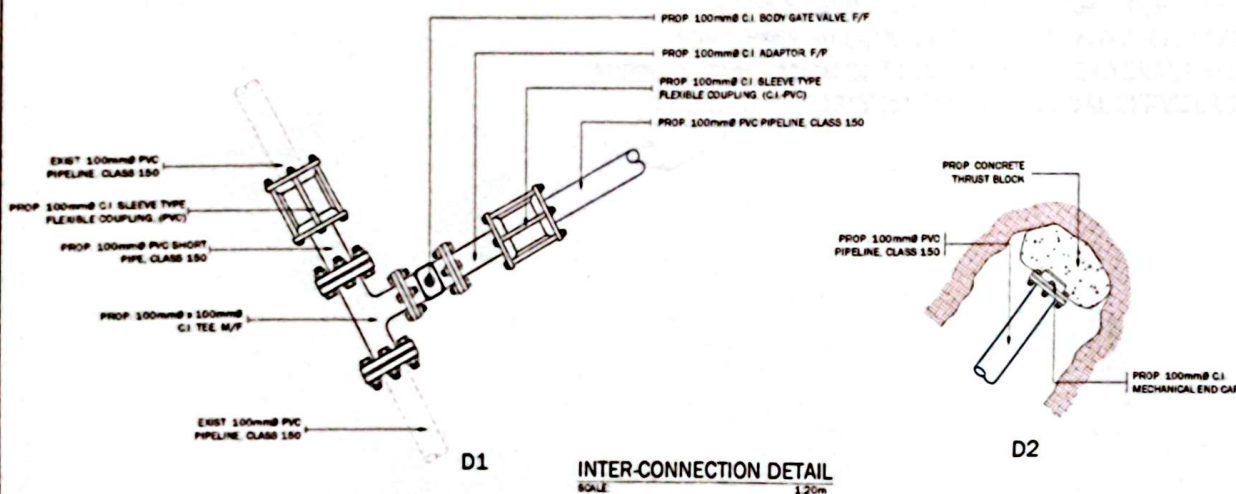
NOTE:
ALL PVC PIPE SIZES INDICATED HEREIN
SHALL MEAN NOMINAL INSIDE DIAMETER.

SITE DEVELOPMENT PLAN
SCALE 1:5000m

	REVISIONS <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV	DATE	BY	DESCRIPTION													DRAWN BY DARRELL B. SALAPITAN DESIGN DIVISION	PREPARED BY REMY C. CAMACHO DESIGN DIVISION	CHECKED BY REMY C. CAMACHO DESIGN DIVISION	DESIGNED BY REMY C. CAMACHO DESIGN DIVISION	APPROVED BY REMY C. CAMACHO DESIGN DIVISION	RECOMMENDING PROJECT IMPLEMENTATION MICHAEL ANGELO M. CARBON ASST. GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT REYNALDO R. DABILIN GENERAL MANAGER	PROJECT TITLE PROPOSED FEEDERLINES IN VARIOUS LOCAT. IN THE CITY FOR WATER SERVICE EXPANSION.	PROJECT COMPONENT PROPOSED 100mmØ PVC FEEDERLINE AT PUROK 6DA, TALISAYAN	SHEET NO. 4
	REV	DATE	BY	DESCRIPTION																							
PROJECT CONTENT AS INDICATED										SHEET NO. 4																	
PROJECT NO. 100mmØ PVC FEEDERLINE AT PUROK 6DA, TALISAYAN										SHEET NO. 4																	
PROJECT NO. 100mmØ PVC FEEDERLINE AT PUROK 6DA, TALISAYAN										SHEET NO. 4																	



NOTE:
ALL C.I. MATERIALS, BOLTS AND RUBBER GASKETS WILL BE PROVIDED BY ZCWD.



REV.	DATE	BY	DESCRIPTION	DESIGNED BY	PREPARED BY	CHECKED & REVIEWED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	PROJECT LOCATION	PROJECT COMPONENT	PROJECT CONTENT	PROJECT STATUS	PROJECT NO.	SHEET NO.
										ZAMBOANGA CITY WATER DISTRICT	PROPOSED RECONSTRUCTION IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	PROPOSED 100mm PVC PIPELINE AT PUNICAN, BULALATAN	AS INDICATED		4	10



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY



**5. PROPOSED 75mmØ PVC FEEDERLINE AT LOBREGAT VILLAGE,
UPPER CALARIAN**

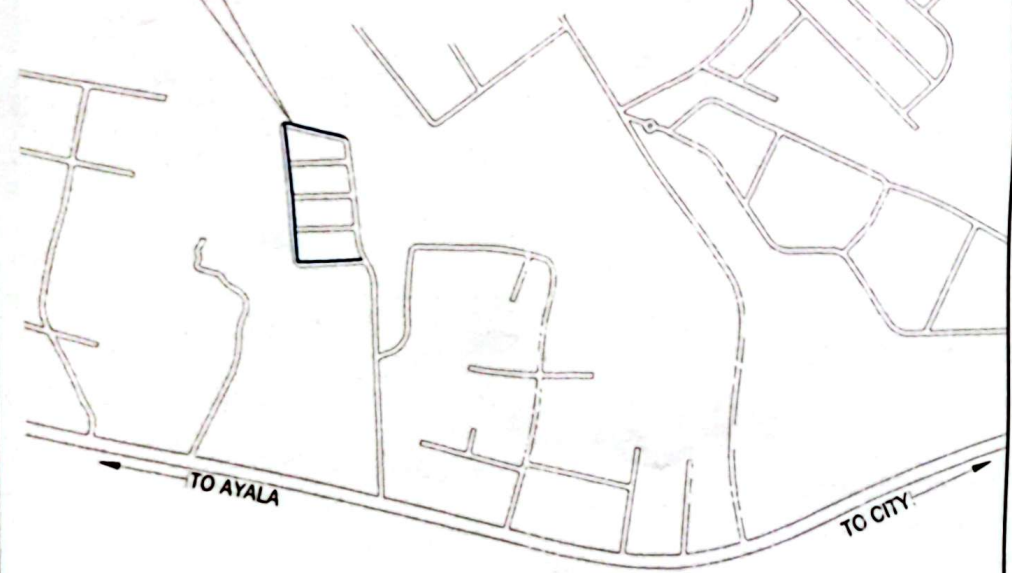
PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

COMPONENTS :

**SUPPLY/LAYING OF 204.13 LN. M. 75mm.Ø, PVC FEEDERLINE
SUPPLY/INSTALLATION OF 1 UNIT 25mm.Ø AIR RELEASE ASSEMBLY
SUPPLY/INSTALLATION OF 1 UNIT 75mm.Ø FIRE HYDRANT w/ CONCRETE BARRICADE
TRANSFER OF FORTY (40) UNITS INDIVIDUAL SERVICE LINE CONNECTION**

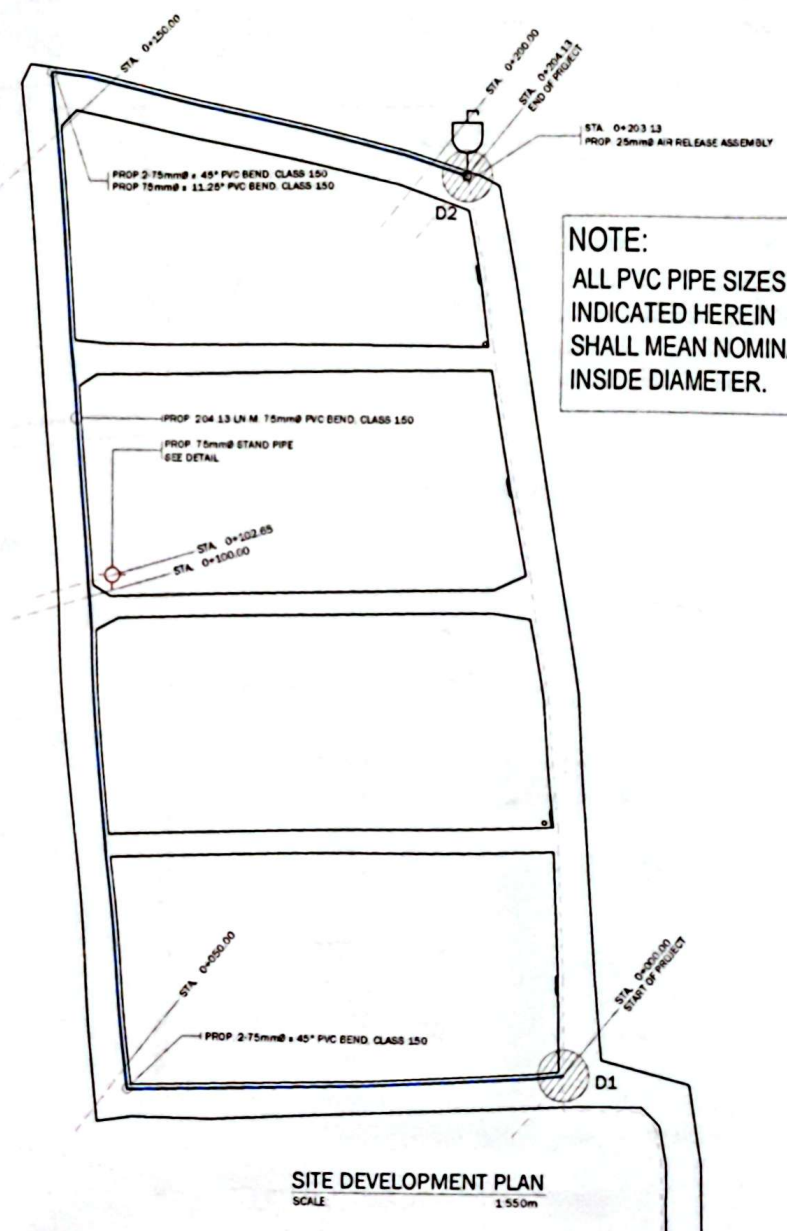


PROPOSED FEEDERLINE AT
LOBREGAT VILLAGE, UPPER CALARIAN
PROP. 204 13 LN M. 75mmØ
PVC PIPELINE, CLASS 150



EBENEZER BIBLE COLLEGE
AND SEMINARY

SITE LOCATION PLAN
SCALE 1:4000m



NOTE:
ALL PVC PIPE SIZES
INDICATED HEREIN
SHALL MEAN NOMINAL
INSIDE DIAMETER.

SITE DEVELOPMENT PLAN
SCALE 1:550m

	REVISIONS		DESIGNED BY	PREPARED BY	CHECKED BY	REVIEWED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	COMPLETION DATE
	REV	DATE	BY	DESCRIPTION					PROPOSED FEEDERLINE IN VARIOUS LOCATIONS IN THE CITY OF ZAMBOANGA	SHEET NO.
									PROPOSED FEEDERLINE AT LOBREGAT VILLAGE, UPPER CALARIAN	5
									AS INDICATED	11
DARRELL S. SALTARAN ENGINEER		EDITH B. SALE JR. SUPERVISOR		EDITH B. SALE JR. SUPERVISOR		MICHAEL ANGELO M. CARBON TECHNICAL SERVICES GROUP		REYNALDO R. CABLIN GENERAL MANAGER		

NOTE:

THE BELOW PLAN SHOWS THE LOCATION OF STRUCTURES/ UTILITIES AFFECTED BY THIS PROJECT AS PER SURVEYED BEFORE THE DETAILED ENGINEERING PLAN.

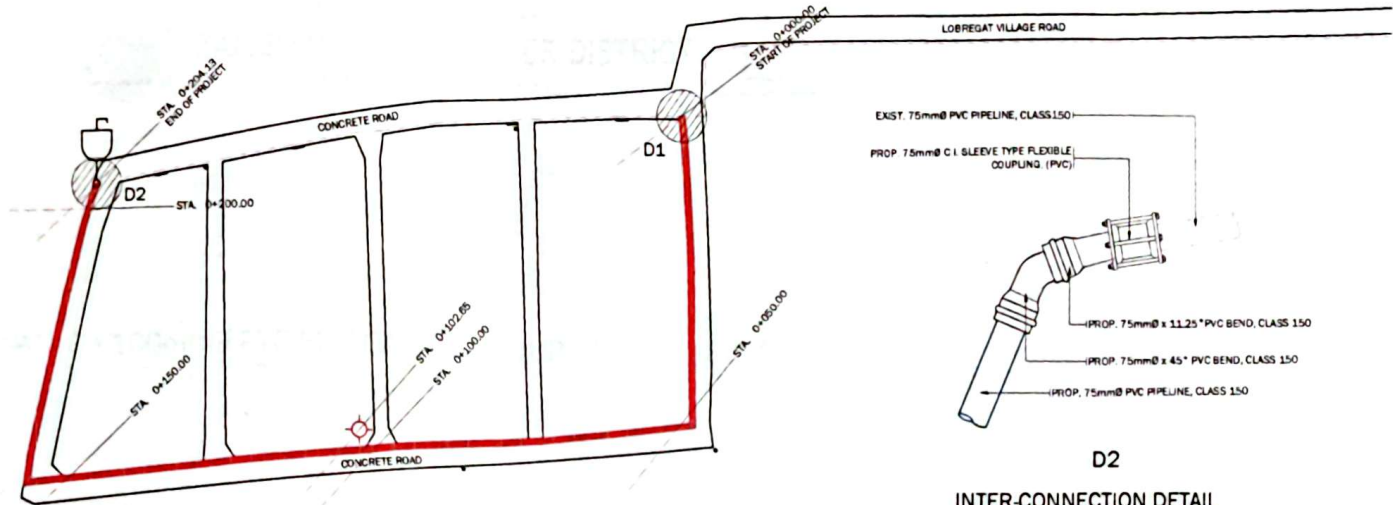
LEGEND:

-  - DOUBLE CUTTING FOR CONCRETE PAVEMENT
-  - PROP. 25mmØ AIR RELEASE ASSEMBLY
-  - PROP. 75mmØ STAND PIPE

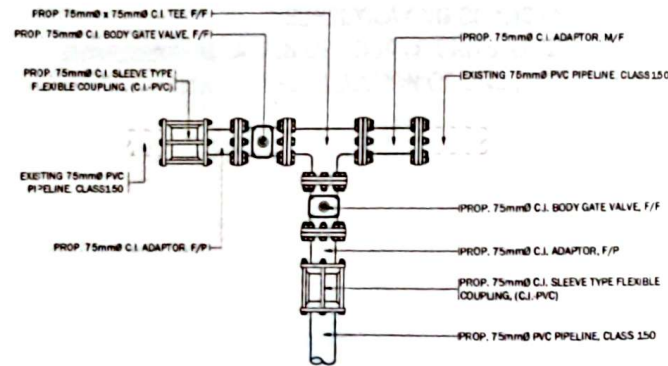
CONCRETE CUTTING AND DEMOLITION SCHEDULE

START TO END OF PROJECT		CONCRETE CUTTING		CONCRETE DEMOLITION	
FROM STATION	TO STATION	TYPE OF CUTTING	LENGTH OF CUTTING (IN M)	LENGTH OF DEMOLITION (IN M)	AREA OF DEMOLITION (SQ. M)
0+000.00	0+204.13	DOUBLE CUTTING	408.26	204.13	79.63

INSTALLATION/TRANSFER OF FORTY (40) UNITS OF INDIVIDUAL SERVICE CONNECTION

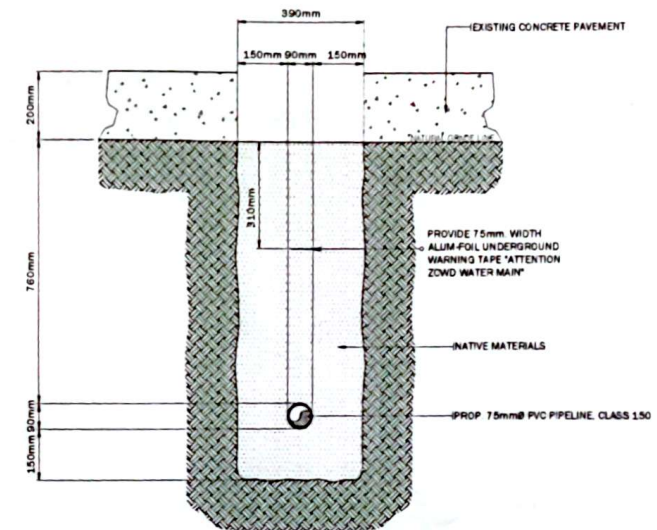


TRENCH LAYOUT PLAN
SCALE 1:800m



D1

INTER-CONNECTION DETAIL
SCALE 1:15m



TYPICAL DETAIL OF PIPELINE TRENCH
SCALE 1:15m

NOTE:

ALL C.I. MATERIALS, BOLTS AND RUBBER GASKETS WILL BE PROVIDED BY ZCWD.

REV	DATE	BY	DESCRIPTION	DESIGNED BY	PREPARED BY	CHECKED BY	REVIEWED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	PROJECT LOCATION	PROJECT COMPONENT	PROJECT CONTRACT	AS INDICATED	SHEET NO.
											ZAMBOANGA CITY WATER DISTRICT	PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	PROPOSED TRANSFER PVC FEEDERLINE AT LOBREGAT VILLAGE, LOBREGAT, ZAMBOANGA			5
											REYNALDO R. CARLIN	GENERAL MANAGER				12



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY



6. PROPOSED 100mmØ PVC FEEDERLINE AT OUR LADY OF ASSUMPTION, AYALA

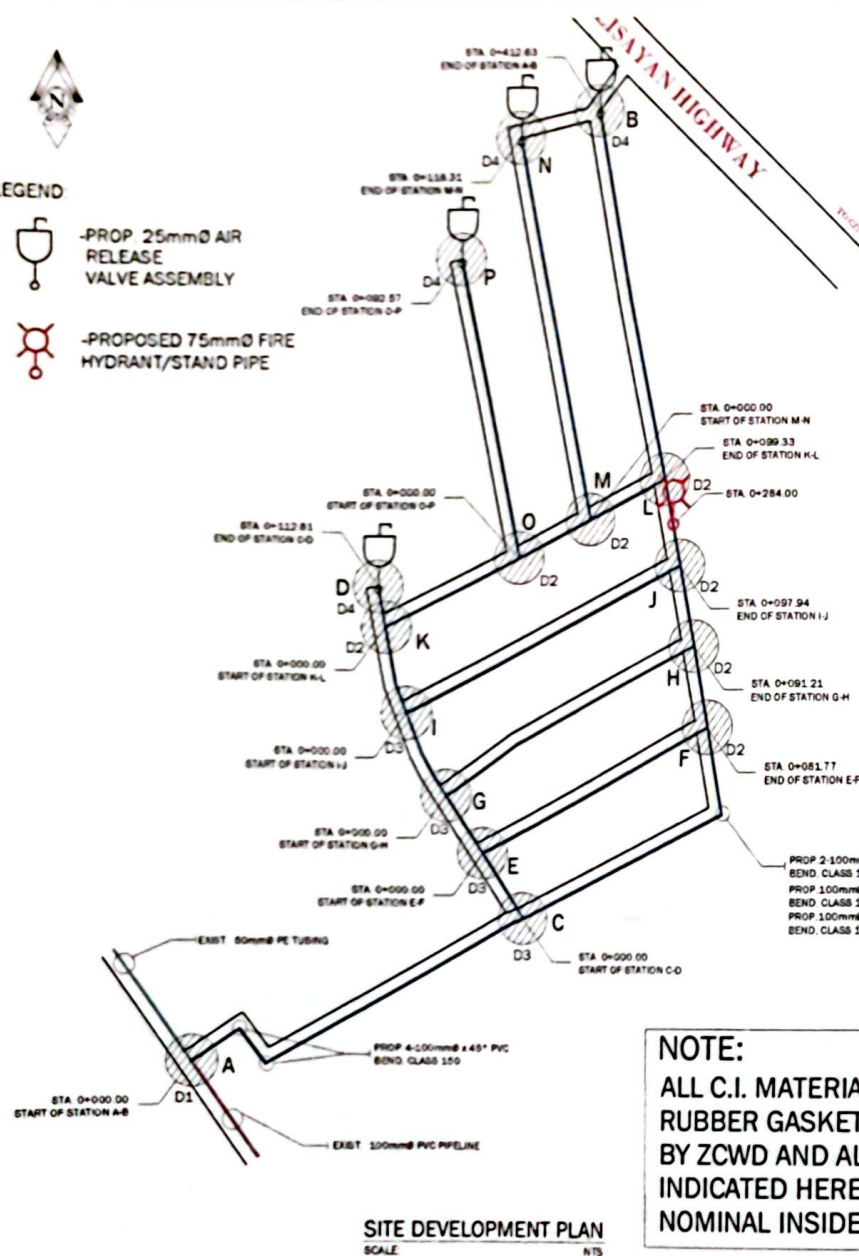
PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

SUPPLY/LAYING OF 1,106.57 LN. M. 100mm.Ø, PVC PIPELINE, CLASS 150
SUPPLY/INSTALLATION OF FOUR (4) UNITS OF 25mmØ AIR RELEASE VALVE ASSEMBLY w/ CONCRETE BARRICADE
SUPPLY/INSTALLATION OF ONE (1) UNIT 75mm.Ø FIRE HYDRANT w/ CONCRETE BARRICADE



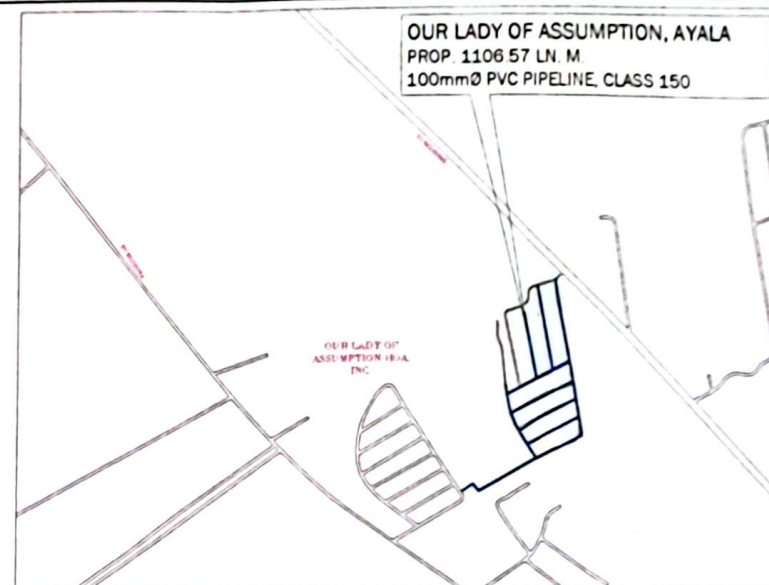
-PROP. 25mmØ AIR
RELEASE
VALVE ASSEMBLY

-PROPOSED 75mmØ FIRE
HYDRANT/STAND PIPE

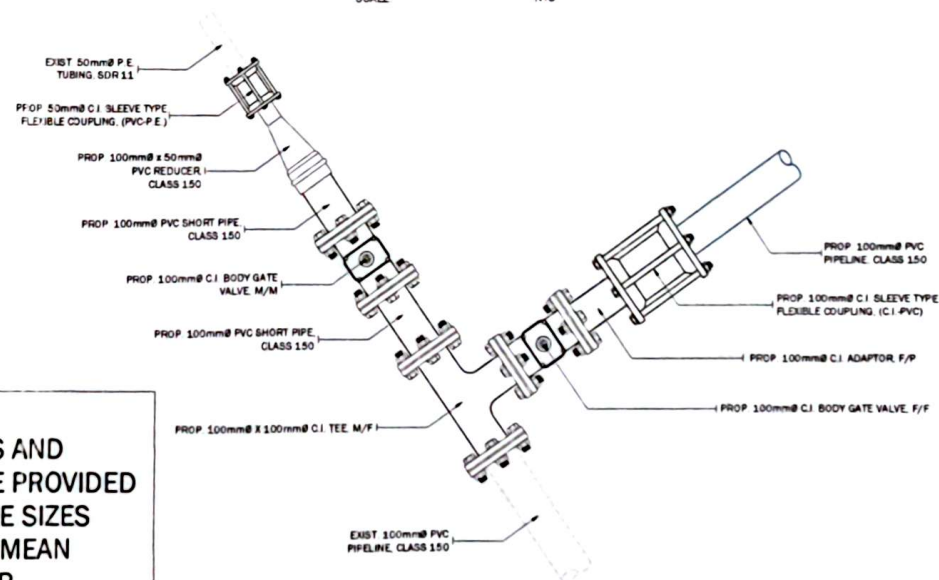


NOTE:
ALL C.I. MATERIALS, BOLTS AND RUBBER GASKETS WILL BE PROVIDED BY ZCWD AND ALL PVC PIPE SIZES INDICATED HEREIN SHALL MEAN NOMINAL INSIDE DIAMETER.

SITE DEVELOPMENT PLAN
SCALE _____ NTS _____



SITE LOCATION PLAN
SCALE: _____ NTS



D1
INTER-CONNECTION DETAIL
SCALE 1:15m

	REVISIONS REV. DATE BY DESCRIPTION			DRAWN BY DARRELL M. SALARITAN CHART ROOM DESIGN DIVISION	PREPARED BY EDWIN C. DAMPA SENIOR ENGINEER & DESIGN DIVISION	CHECKED & FIELD BY HEAD SALE JR. SUPERVISING ENGINEER & DESIGN DIVISION	SUBMITTED BY EDWIN M. BAUTISTA OFFICIAL ENGINEER	RECOMMENDING PROJECT IMPLEMENTATION MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT RETNALDO R. ABILIN GENERAL MANAGER	PROJECT TITLE PROPOSED FEEDLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	COMPONENT NO. 6	SHEET NO. 13
	PROJECT COMPONENT PROPOSED LOGGING PVC FEEDLINE AT OUR LACY OF ASSUMPTION AREA			SHEET CONTENT AS INDICATED								

**3 UNITS OF 100mmØ C.I. MECHANICAL
END CAP AND ALL OTHER C.I.
MATERIALS, BOLTS AND RUBBER
GASKETS WILL BE PROVIDED BY ZCWD.**

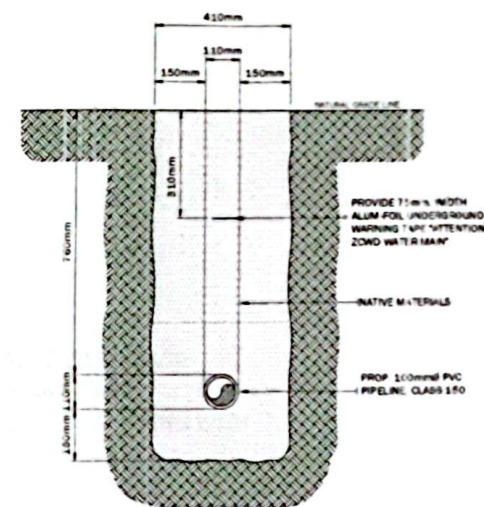
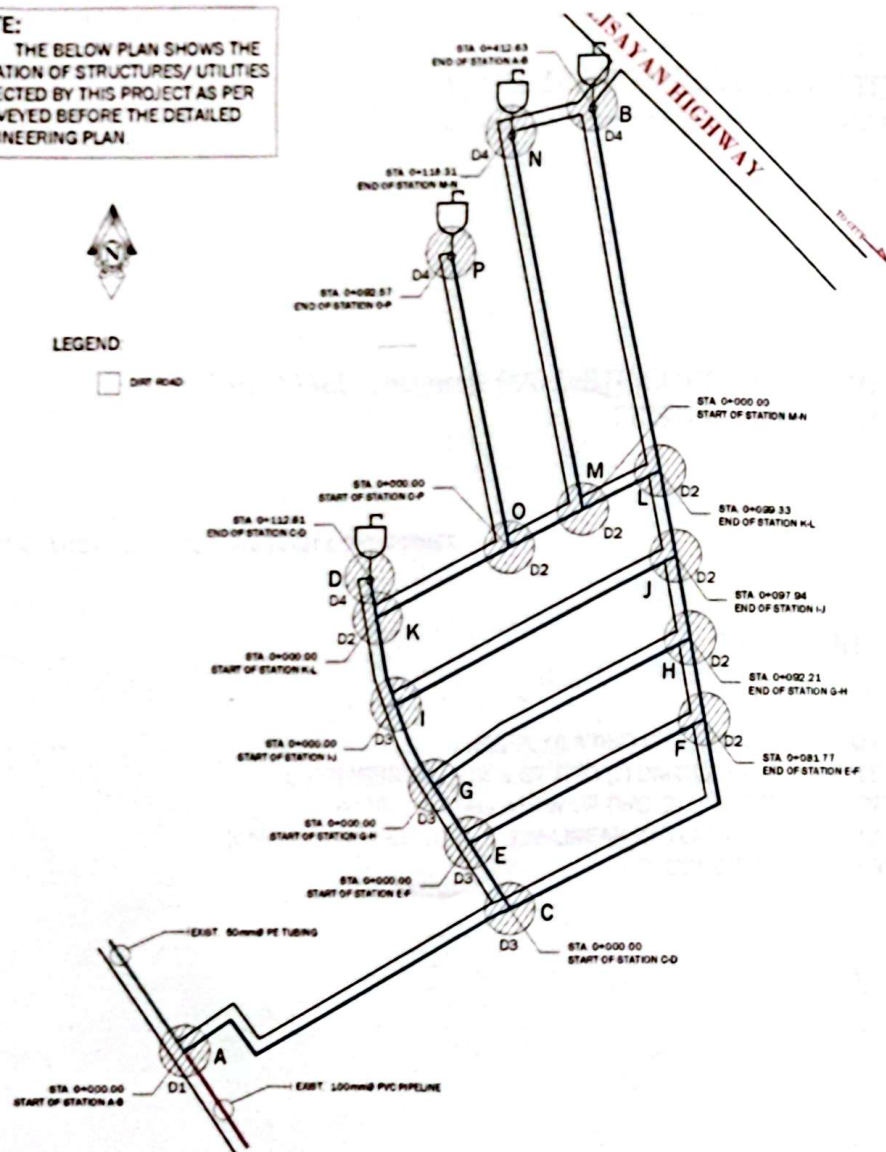


INTER-CONNECTION DETAIL
SCALE 1:20m

INTER-CONNECTION DETAIL
SCALE 1:20m

	REVISIONS REV. DATE BY (DESCRIPTION)				DRAWN BY DARRELL B. SALARITAN SENIOR CHIEF ENGINEER DESIGN DIVISION	PREPARED BY JOSEPH L. DAMASCENO SENIOR ENGINEER & DESIGN DIVISION	CHECKED & REVIEWED BY REX D. SALE JR. SUPERVISING ENGINEER & DESIGN DIVISION	SUBMITTED BY EDITH M. BARTERA JR. CORRESPONDENCE ENGINEERING AND CONSTRUCTION DEPARTMENT	RECOMMENDING OFFICE OF IMPLEMENTATION MICHAEL ANGELO M. CARBON ATL & ENVIRONMENTAL MANAGER ECONOMIC SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CASILUN GENERAL MANAGER	PROJECT TITLE PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER TREATMENT PLANT PROJECT COMPONENT PROPOSED 500MM PVC FEEDERLINE 1' FOUR LATCH OF ASSUMPTION A11.1A SHEET CONTENT AS INDICATED	COMPONENT NO. 6 SHEET NO. 14

NOTE:
THE BELOW PLAN SHOWS THE LOCATION OF STRUCTURES/ UTILITIES AFFECTED BY THIS PROJECT AS PER SURVEYED BEFORE THE DETAILED ENGINEERING PLAN.



TYPICAL DETAIL OF PIPELINE TRENCH
SCALE 1:15m

TRENCH LAYOUT PLAN
SCALE NTS

REV.	DATE	BY	DESCRIPTION	APPROVED BY	PREPARED BY	CHECKED BY	REVIEWED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	PROJECT LOCATION	PROJECT NO.
					DARRELL B. SALARITAN	REY D. SALE JR.	EDITH M. BARTOLINA	MICHAEL ANGELO M. CARBON	ZAMBOANGA CITY WATER DISTRICT	REY VILDO R. CASILIN	PROPOSED 100mm PVC PIPELINE IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	PROPOSED 100mm PVC PIPELINE IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	6
											PROPOSED 100mm PVC PIPELINE IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	PROPOSED 100mm PVC PIPELINE IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	15



REPUBLIC OF THE PHILIPPINES
ZAMBOANGA CITY WATER DISTRICT
PILAR STREET, ZAMBOANGA CITY



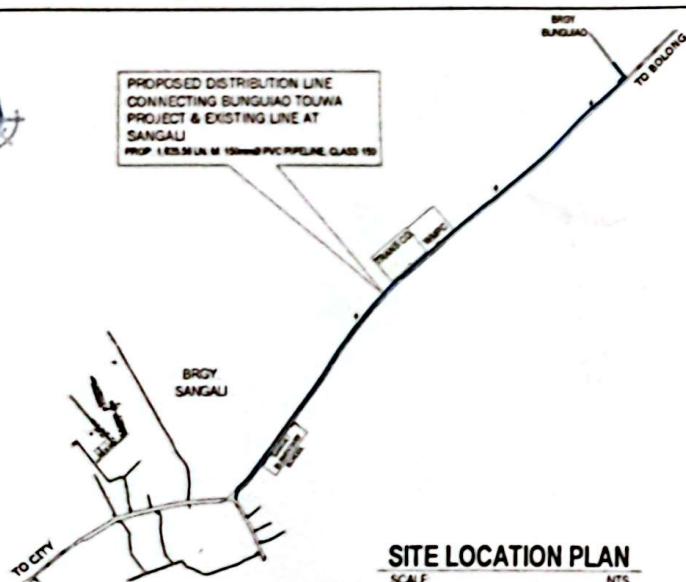
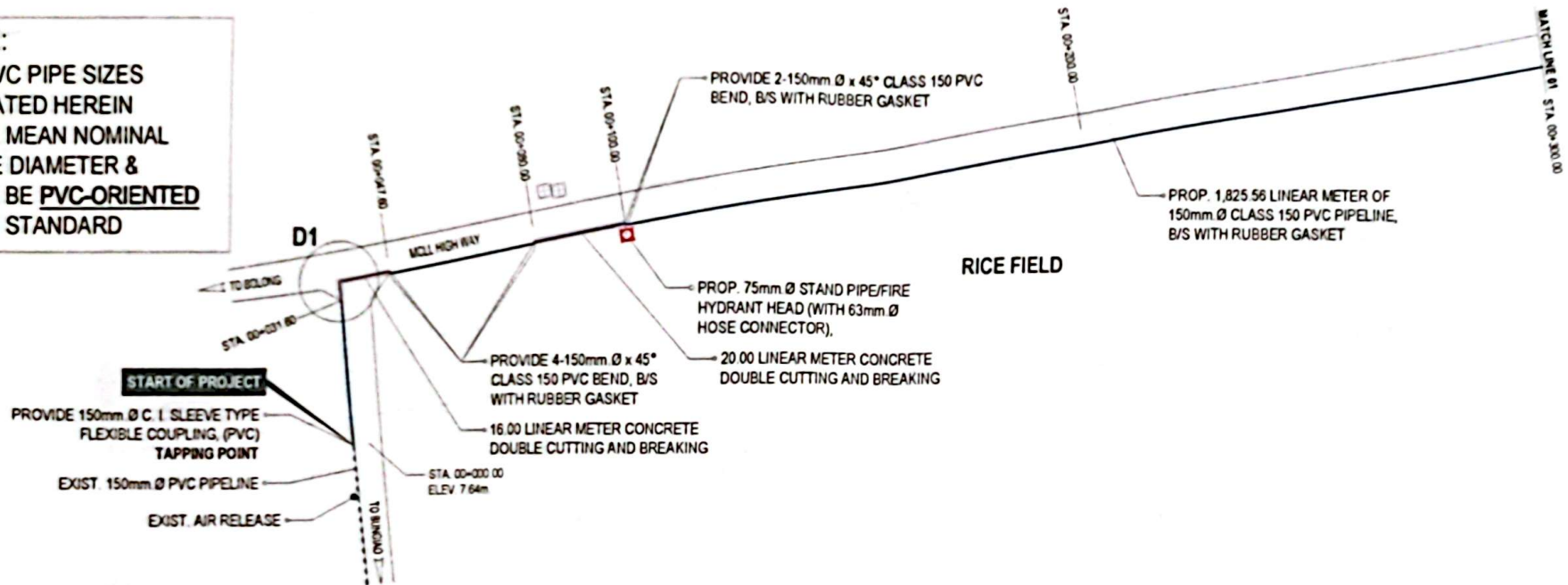
**7. PROPOSED 150mmØ PVC DISTRIBUTION LINE CONNECTING BUNGUIAO TOUWA PROJECT &
EXISTING LINE AT SANGALI**

PROJECT LOCATION: ZAMBOANGA CITY, PHILIPPINES

COMPONENTS :

SUPPLY/LAYING OF 1,825.56 LN. M. 150mm.Ø, PVC-O FEEDERLINE
SUPPLY/INSTALLATION OF TWO (2) UNITS 25mm.Ø AIR RELEASE ASSEMBLY w/ CONCRETE BARRICADE
SUPPLY/INSTALLATION OF TWO (2) UNITS 75mm.Ø FIRE HYDRANT w/ CONCRETE BARRICADE
SUPPLY/CONSTRUCTION OF 2.05 LINEAR METERS OF 75mm.Ø CLASS 150, PVC PIPELINE CULVERT CROSSING WITH
CONCRETE ENCASEMENT

NOTE:
ALL PVC PIPE SIZES
INDICATED HEREIN
SHALL MEAN NOMINAL
INSIDE DIAMETER &
SHALL BE PVC-ORIENTED
(PN16) STANDARD



PROP. PIPELINE LAYOUT PLAN
SCALE 1:1000 M



REV	DATE	BY	DESCRIPTION

DESIGNED BY
ARTHUR ANGEYES
PROJECT ENGINEER

PREPARED BY
EDDY L. LUNA
SENIOR ENGINEER

CHECKED BY
REX D. SALLER
SENIOR ENGINEER

SUBMIT TO
EDITH M. BALITAN
PROJECT ENGINEER

RECOMMENDING PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
ASSISTANT GENERAL MANAGER
TECHNICAL SERVICES GROUP

APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
REYNALDO R. CASILIN
GENERAL MANAGER

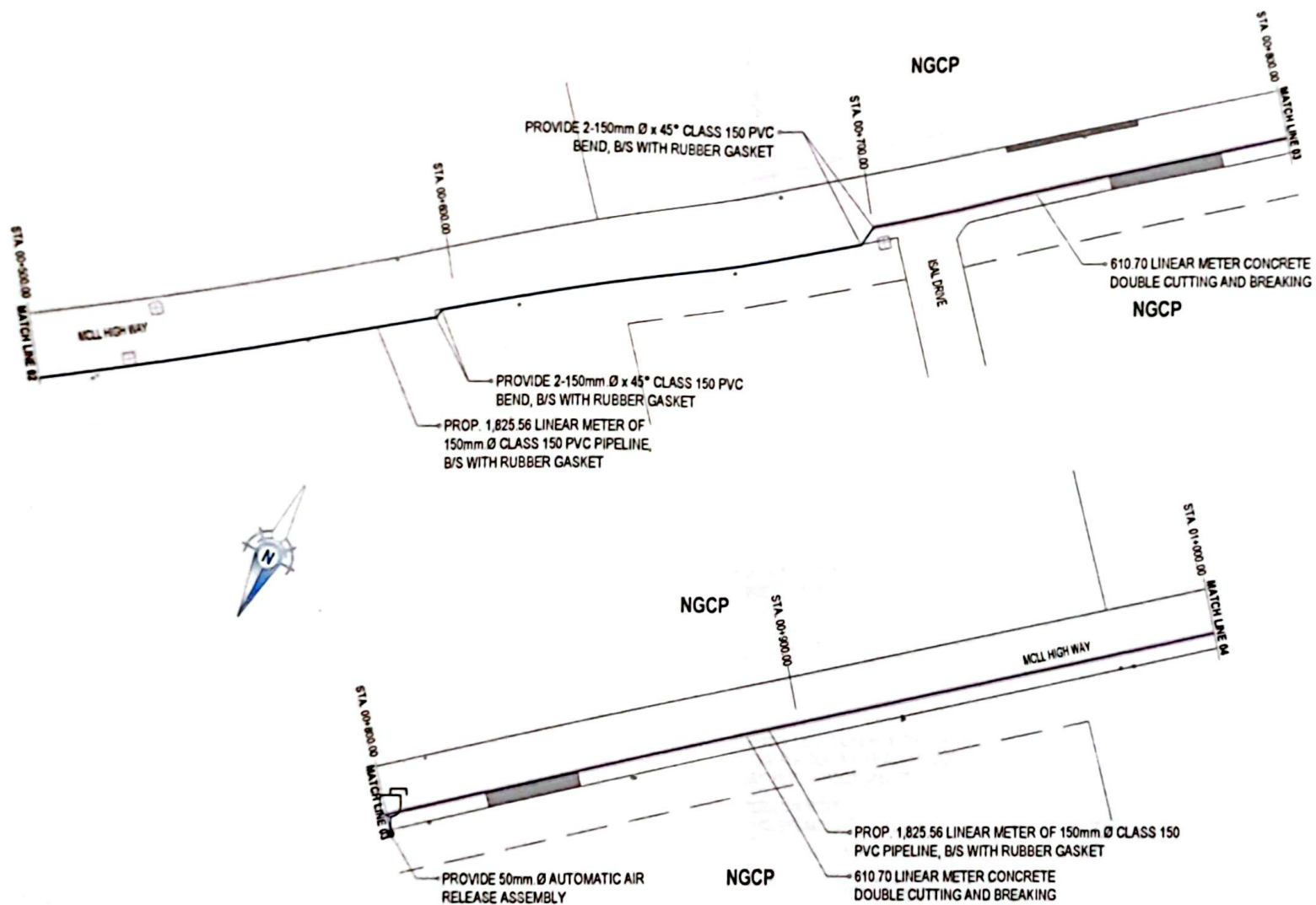
PROJECT TITLE
PROPOSED FEEDERLINE IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION

PROJECT LOCATION
PROPOSED FEEDERLINE FROM DISTRIBUTION LINE CONNECTING BUNGUAD TOUWA PROJECT & EXISTING LINE AT SANGAU

SHEET NUMBER
AS INDICATED

CONFIRMED BY
7

SHEET NO.
16



PROP. PIPELINE LAYOUT PLAN
SCALE 1:1000 M



REV	DATE	BY	DESCRIPTION

DESIGNED BY
ARTHUR A. REYES
PROJECT ENGINEER

CHECKED BY
EDWARD L. CARLOS
SENIOR ENGINEER & DESIGNER

APPROVED BY
REY D. SALE JR.
SUPERVISOR IN CHARGE & DESIGNER

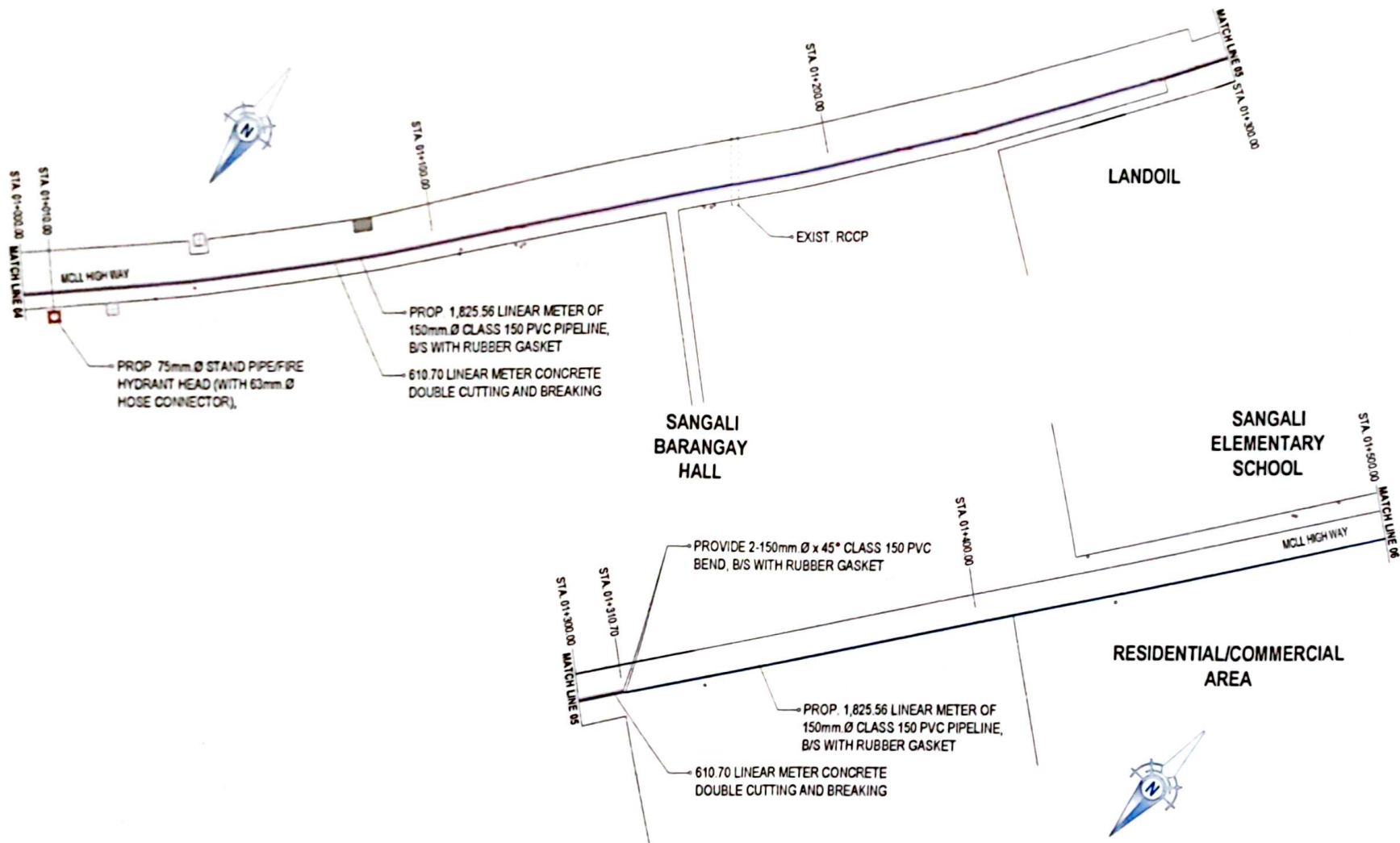
DESIGNED BY
EDWARD L. CARLOS
SENIOR ENGINEER & DESIGNER

RECOMMENDING PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
ASSISTANT GENERAL MANAGER
TECHNICAL SERVICES GROUP

APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
REYNALDO R. CULIN
GENERAL MANAGER

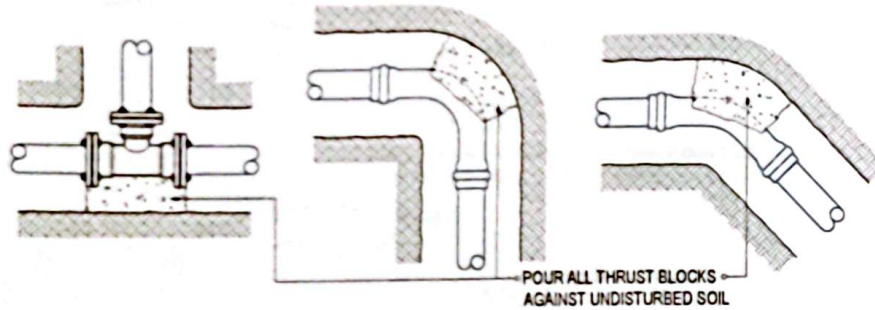
PROJECT TITLE
PROPOSED FEEDER MAINS IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION
PROJECT COMPONENT
PROPOSED 150mm PVC DISTRIBUTION LINE CONNECTING BUNGANG TOWN PROJECT 1 & 2 TO TRINELINE AT VANGALI
SHEET CONTENT
AS INDICATED

SHEET NO.
7
17



PROP. PIPELINE LAYOUT PLAN
SCALE 1:1000 M

	REVISIONS				DESIGNED BY	CHECKED BY	APPROVED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	COMPONENT NO.
	REV	DATE	BY	DESCRIPTION							PROPOSED REDESIGN IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	SHEET NO.
					ARTHUR A. REYES OFFICIAL ENGINEER DESIGN DIVISION	JOSEPH L. DAMASO SENIOR ENGINEER & DESIGNER DESIGN DIVISION	REX D. SALE JR. SUPERVISING ENGINEER & DESIGN DIVISION	EDITH M. BANTISTA JR. OFFICIAL ENGINEER ENGINEERING AND CONSTRUCTION DEPARTMENT	MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CABILIN GENERAL MANAGER	PROPOSED 150mm PVC DISTRIBUTION LINE CONNECTING BURELUND TO SAN PABLO PROJECT 1 & EXISTING LINE AT BURELUND	7
											SHEET CONTENT	18
											AS INDICATED	



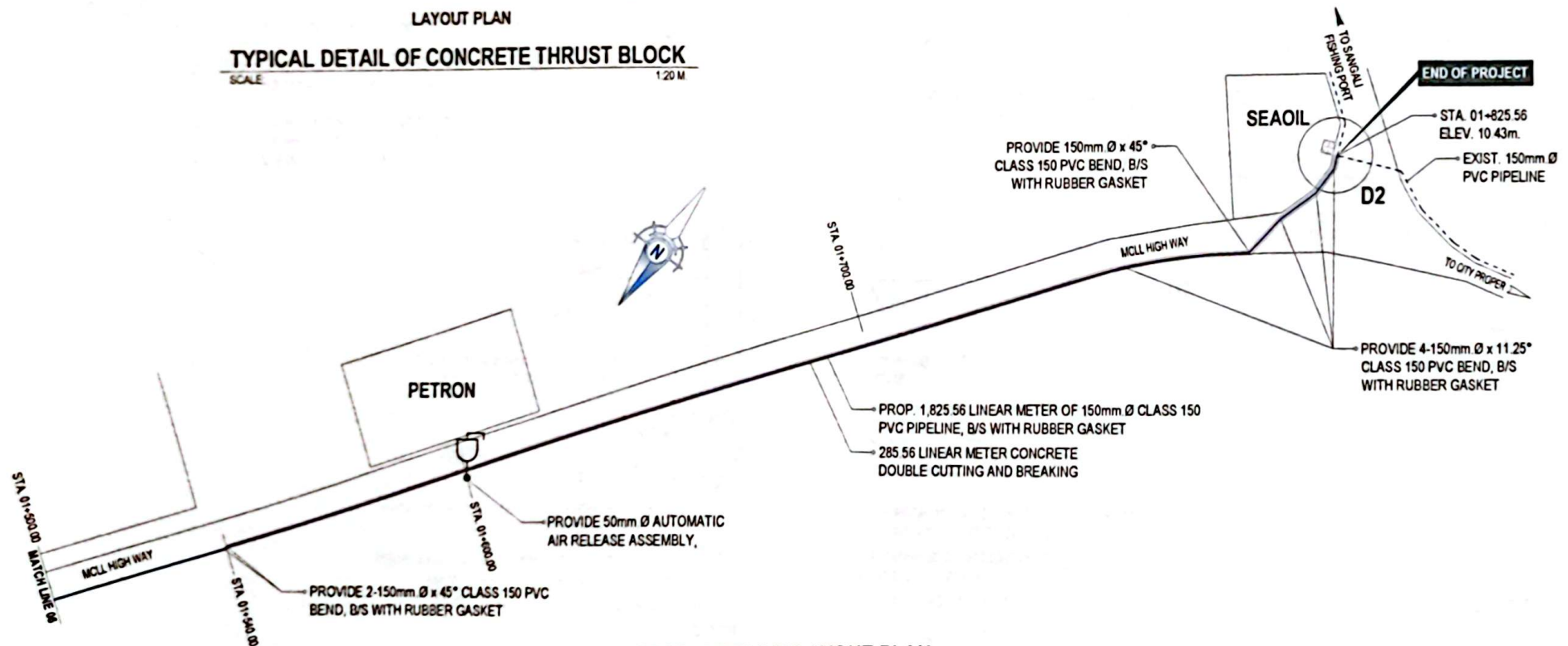
LAYOUT PLAN

TYPICAL DETAIL OF CONCRETE THRUST BLOCK

SCALE

1:20 M

CONCRETE CUTTING AND DEMOLITION SCHEDULE					
START TO END OF PROJECT		CONCRETE CUTTING		CONCRETE DEMOLITION	
FROM STATION	TO STATION	TYPE OF CUTTING	LENGTH OF CUTTING (S.M.)	LENGTH OF DEMOLITION (S.M.)	AREA OF DEMOLITION (SQ.M.)
0+001.00	0+047.00	DOUBLE CUTTING	32.00	16.00	16.00
0+080.00	0+180.00	DOUBLE CUTTING	40.00	20.00	20.00
0+190.00	1+310.70	DOUBLE CUTTING	1221.40	610.70	610.70
1+440.00	1+470.00	DOUBLE CUTTING	30.00	15.00	15.00
TOTAL			1323.40	661.70	661.70

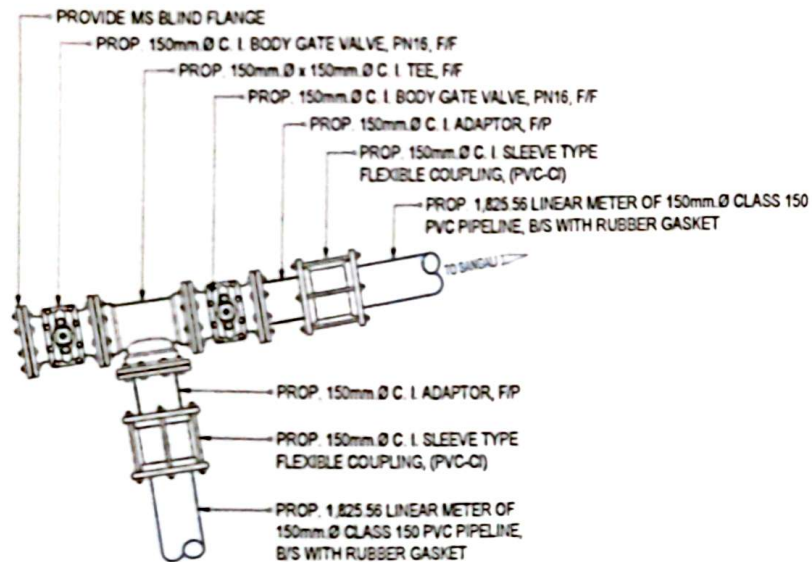


PROP. PIPELINE LAYOUT PLAN

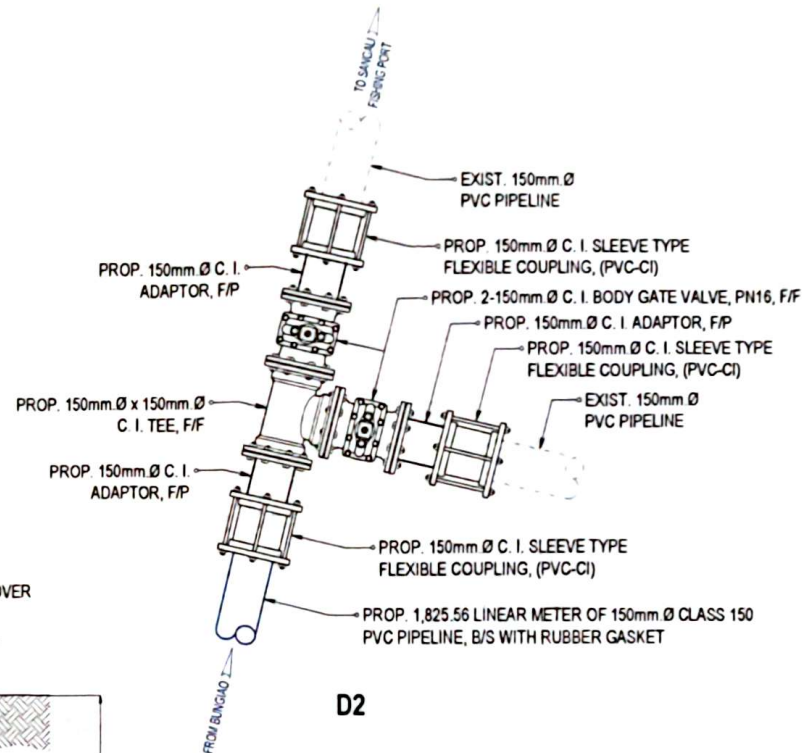
SCALE

1:1000 M

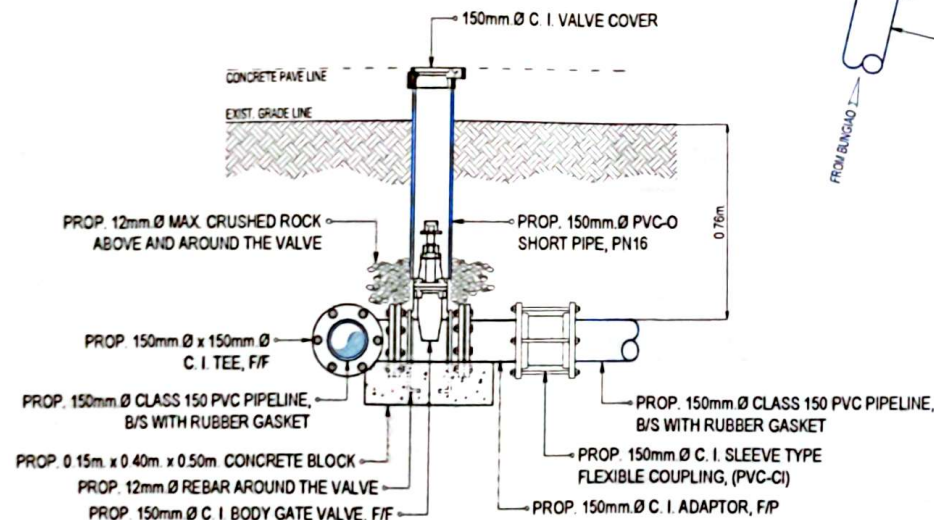
	REVISIONS REV. DATE BY DESCRIPTION		CHECKED BY ARTHUR A. REYES PROJECT ENGINEER	DESIGNED BY JERRY L. LARSEN SENIOR ENGINEER	REVIEWED BY REX D. SALE JR. SUPERVISING ENGINEER & DESIGN CHIEF	DRAWN BY EDITH M. BATHALAN PROJECT ENGINEER	RECOMMENDING PROJECT IMPLEMENTATION MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CABILIN GENERAL MANAGER	PROJECT TITLE PROPOSED PRELIMINARY VARIANTS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	PROJECT COMPONENT PROPOSED 150mm Ø CLASS 150 PVC PIPELINE CONNECTING BANGALUN TOWN PROJECT & EXISTING PIPELINE AT SANGAIL	SHEET NO. 7
	PROJECT NO.										19
	SHEET NO.										19
	SHEET NO.										19



D1



D2



SECTION

TYPICAL DETAIL OF BURIED GATE VALVE

SCALE 1:20 M



REV	DATE	BY	DESCRIPTION

DESIGNED BY
ARTHUR A. REYES
PROJECT ENGINEER

CHECKED BY
JOSE C. GARCIA JR.
SENIOR ENGINEER

APPROVED BY
REX D. SALE JR.
SUPERVISOR

DESIGNED BY
EDY M. BASTIEN
PROJECT ENGINEER

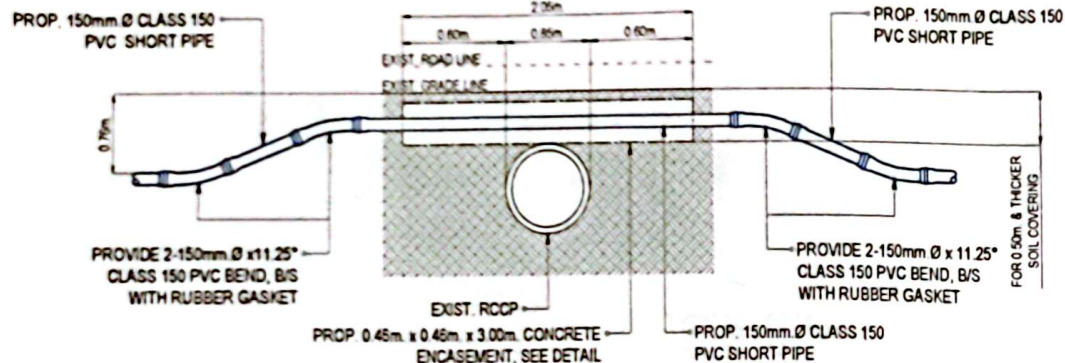
RECOMMENDING PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
ASSISTANT GENERAL MANAGER

APPROVED FOR PROJECT IMPLEMENTATION
REYNALDO R. CABILIN
GENERAL MANAGER

ZAMBOANGA CITY WATER DISTRICT

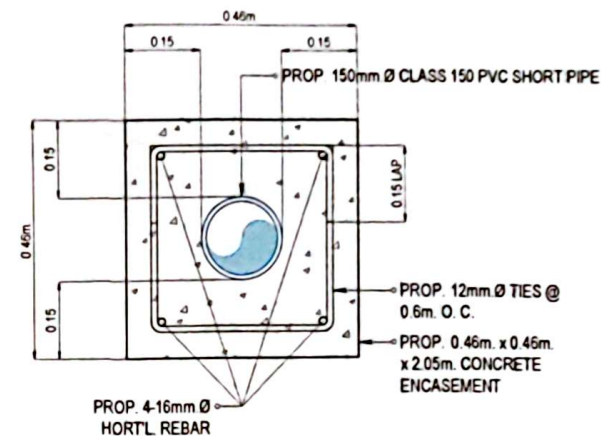
PROJECT TITLE
PROPOSED 100mm PVC DISTRIBUTION LINE CONNECTING
BLIND AND TO SANGAU PROJECT & EXISTING LINE AT SANGAU

LOCATION NO.
7
SHEET NO.
20



DETAIL OF CROSS DRAIN

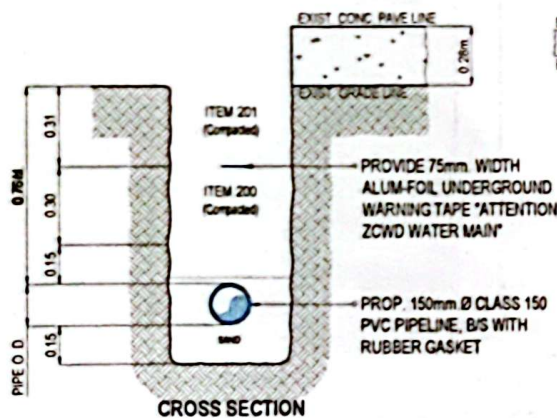
SCALE NTS



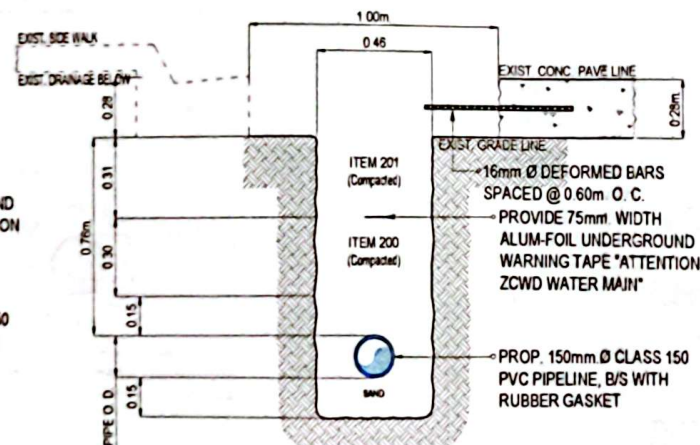
CROSS SECTION

DETAIL OF CONC. ENCASEMENT

SCALE 1:10 M



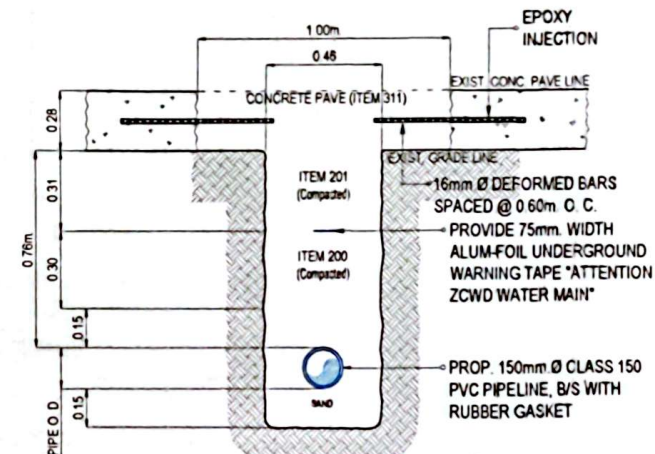
CROSS SECTION



CROSS SECTION

DETAIL OF PIPELINE INSTALLATION

SCALE 1:20 M



CROSS SECTION



REV	DATE	BY	DESCRIPTION

DESIGNED BY
ARTHUR REYES
DESIGNER

CHECKED BY
JOSE L. RAMOS
DESIGNER

PREPARED BY
PAUL D. SALE JR.
SUPERVISOR

ENGINEERED BY
EDWIN M. BASTIA
ENGINEER

RECOMMENDED FOR PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
TECHNICAL SERVICES GROUP

APPROVED FOR PROJECT IMPLEMENTATION
REYNALDO R. CABILIN
GENERAL MANAGER

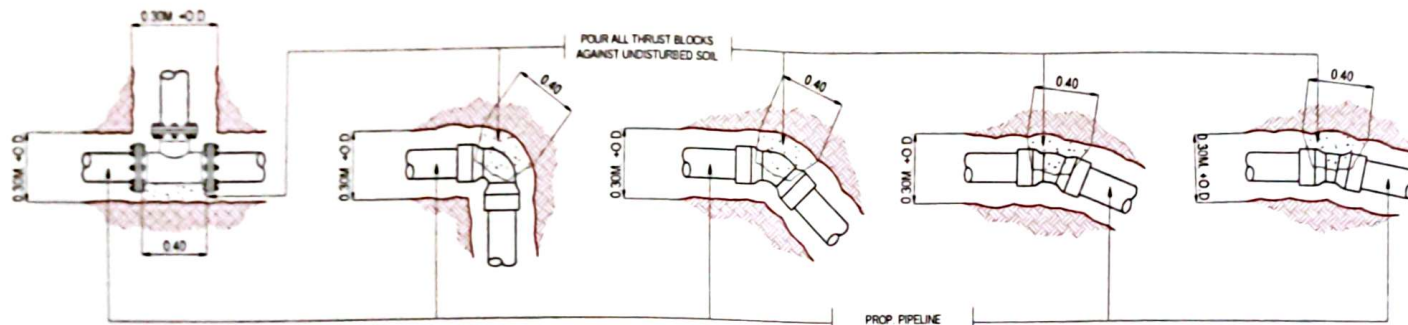
ZAMBOANGA CITY WATER DISTRICT

REYNALDO R. CABILIN
GENERAL MANAGER

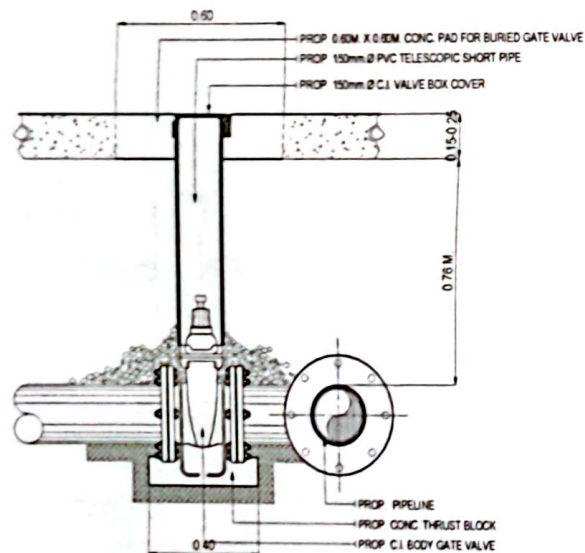
PROJECT TITLE
PROPOSED WATER MAINS IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION

PROJECT COMPONENT
PROPOSED 150mm PVC DISTRIBUTION LINE (CONNECTING BUND AND TOWNSHIP PROJECT) & EXISTING LINE AT TOWNSHIP

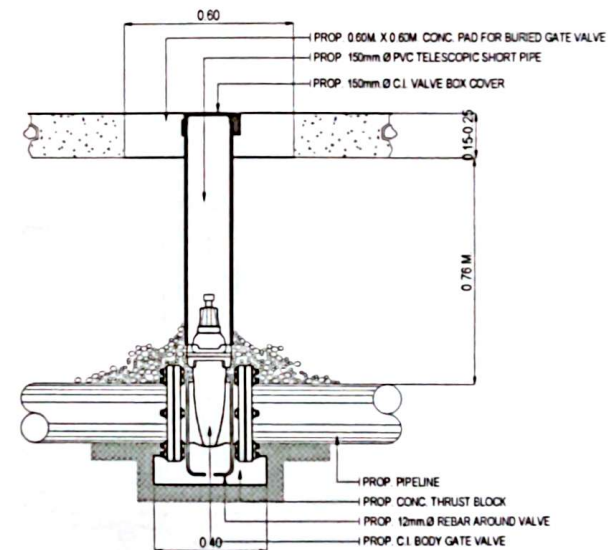
PROJECT NO.
7
SHEET NO.
21



TYPICAL DETAIL OF CONCRETE THRUST BLOCK
SCALE NTS



TYPICAL DETAIL OF BURIED
GATE VALVE IN PAVED AREA
SCALE NTS



TYPICAL DETAIL OF BURIED
GATE VALVE IN PAVED AREA
SCALE NTS



REV	DATE	BY	DESCRIPTION

DESIGNED BY
DARRELL B. CHARITAN
SENIOR CIVIL ENGINEER
ZAMBOANGA CITY WATER DISTRICT

PREPARED BY
EDITH D. AMORIN
SENIOR CIVIL ENGINEER
ZAMBOANGA CITY WATER DISTRICT

CHECKED & APPROVED BY
REY D. SALE JR.
SUPERVISOR/ENGINEER
ZAMBOANGA CITY WATER DISTRICT

SUBMITTED BY
EDITH D. AMORIN
OFFICE ASSISTANT
ZAMBOANGA CITY WATER DISTRICT

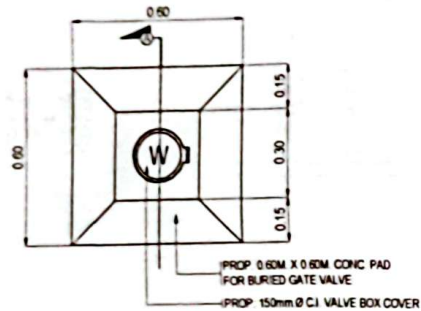
RECOMMENDING PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
PROJECT MGT. GENERAL MANAGER II
TECHNICAL SERVICES GROUP

APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
REYNALDO R. CABILIN
GENERAL MANAGER II

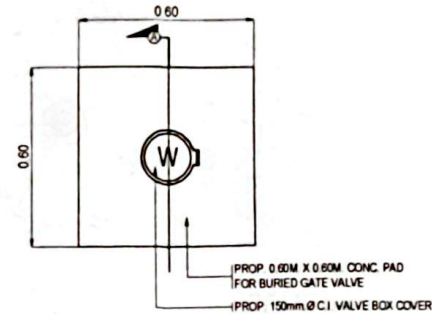
PROJECT TITLE
IMPROVED FEEDERLINES IN VARIOUS LOCATIONS
IN THE CITY FOR WATER SERVICE EXPANSION
SHEET CONTENT
AS INDICATED

SHEET NO.
22

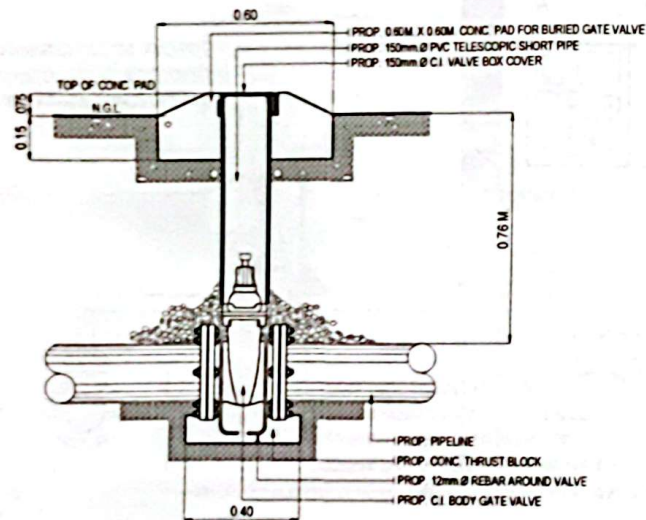
NOTE:
26 UNITS OF 150mm C.I. VALVE BOX COVER AND ALL
OTHER C.I. MATERIALS WILL BE PROVIDED BY ZCWD



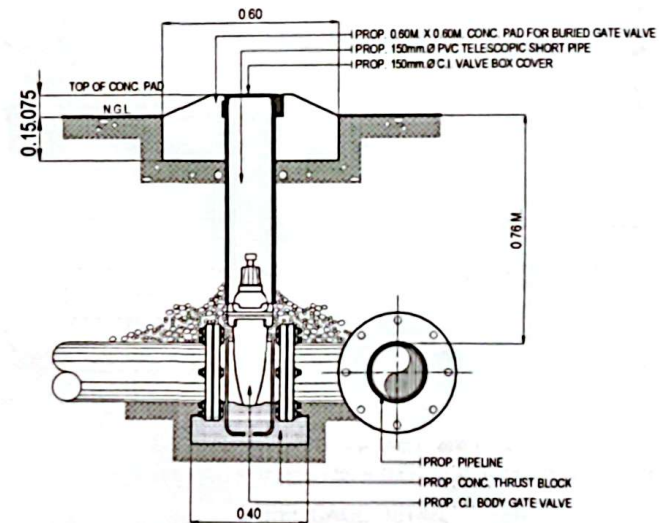
**TYPICAL DETAIL OF VALVE BOX
COVER FOR UNPAVED AREA**
SCALE: NTS



**TYPICAL DETAIL OF VALVE BOX
COVER FOR PAVED AREA**
SCALE: NTS

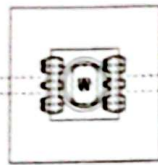


**TYPICAL DETAIL OF BURIED
GATE VALVE IN UNPAVED AREA**
SCALE: NTS

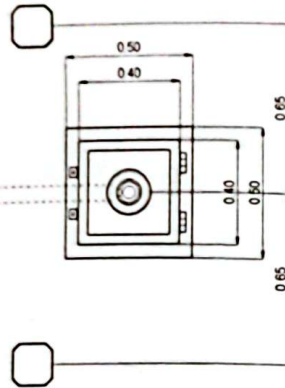


**TYPICAL DETAIL OF BURIED
GATE VALVE IN PAVED AREA**
SCALE: NTS

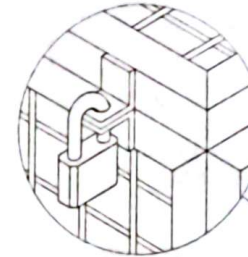
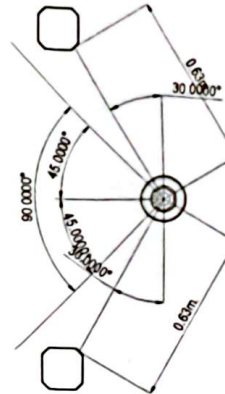
	REVISIONS				DESIGNED BY	PREPARED BY	CHECKED & APPROVED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	SHEET NO.
	REV	DATE	BY	DESCRIPTION	 DARRELL P. SALARTAN DESIGN DIVISION	 EDITH L. DAMPAG SENIOR ENGINEER A DESIGN DIVISION	 REX D. SALE JR. SUPERVISING ENGINEER A DESIGN DIVISION	 EDITH M. BAUTISTA JR. OFFICE IN CHARGE ENGINEERING AND CONSTRUCTION DIVISION	 MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	 ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CABILIN GENERAL MANAGER	PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	23
	SHEET CONTENT											AS INDICATED



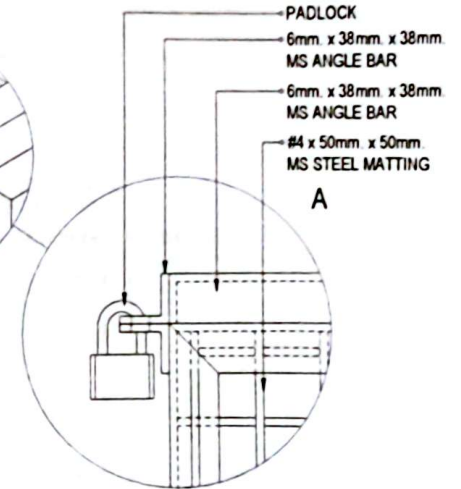
PLAN



PLAN FOR SETTING BARRICADE



ISOMETRIC



A

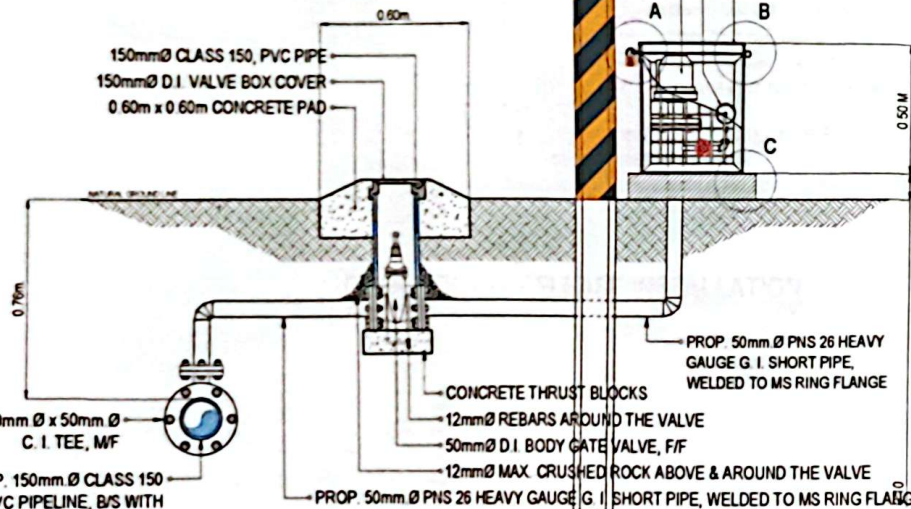
PROP 0.15m x 0.15m CONCRETE BARRICADE, SEE DETAIL

50mm Ø AUTOMATIC AIR RELEASE PRESSURE VALVE

PRESSURE GAUGE, SEE PRESSURE GAUGE DETAIL

0.40m x 0.40m x 0.50m STEEL CAGE, SEE DETAIL

150mm Ø CLASS 150, PVC PIPE
150mm Ø D.I. VALVE BOX COVER
0.60m x 0.60m CONCRETE PAD



SECTION

PROP. 150mm Ø x 50mm Ø C. I. TEE, MF

PROP. 150mm Ø CLASS 150 PVC PIPELINE, B/S WITH RUBBER GASKET

PROP. 50mm Ø PNS 26 HEAVY GAUGE G. I. SHORT PIPE, WELDED TO MS RING FLANGE

CONCRETE THRUST BLOCKS

12mm Ø REBARS AROUND THE VALVE

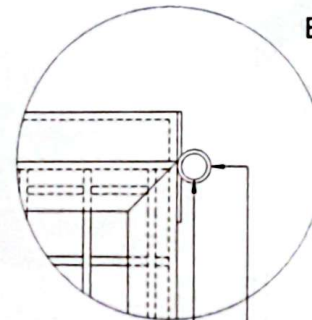
50mm Ø D.I. BODY GATE VALVE, F/F

12mm Ø MAX. CRUSHED ROCK ABOVE & AROUND THE VALVE

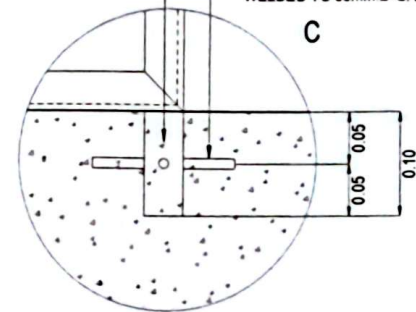
DETAIL OF AIR RELEASE INSTALLATION

SCALE

1:20 M



STEEL CAGE DETAIL



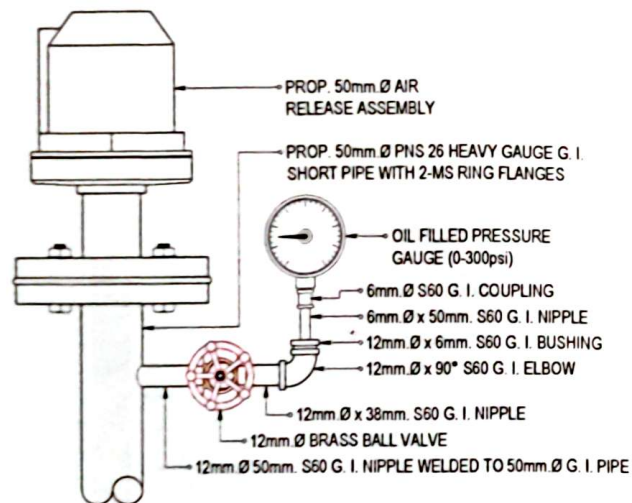
38mm Ø x 100mm G. I. PIPE WELDED TO 6mm THK. x 38mm x 38mm MS ANGLE BAR

4-10mm Ø x 50mm DEF. BAR DOWEL WELDED TO 38mm Ø G. I. PIPE

19mm Ø SCH. 40 G. I. PIN CASING

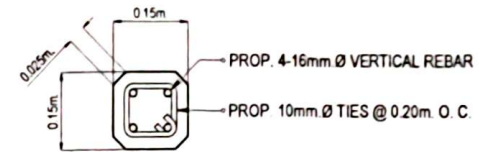
19mm Ø x 76mm MS PLAIN ROUND BAR, HINGE PIN

REV	DATE	BY	DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	SHEET NO.
				ARTHURA REYES	EDY L. DAMPICO	REX O. SALE JR.	EDY L. DAMPICO	MICHAEL ANGELO M. CARBON	REYNALDO R. CABILIN	ZAMBOANGA CITY WATER DISTRICT	24
										PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	
										SHEET CURRENT	AS INDICATED

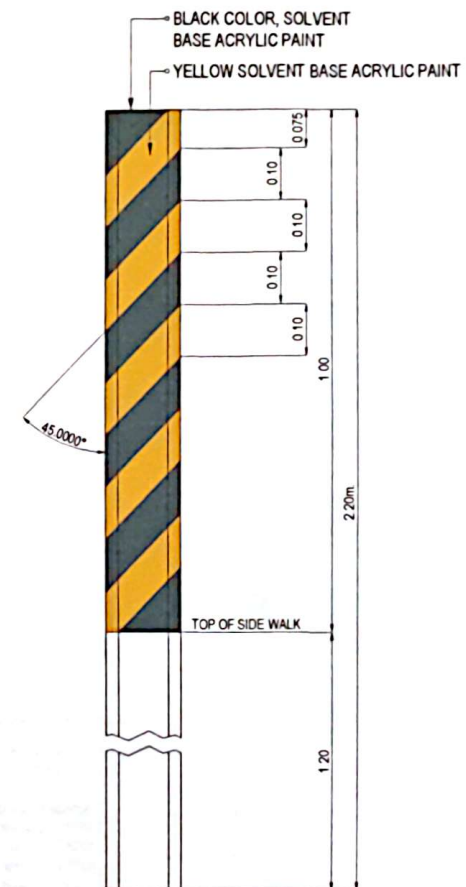


DETAIL OF AIR RELEASE INSTALLATION

SCALE 1:05 M



PLAN



ELEVATION

DETAIL OF CONCRETE BARRICADE

SCALE 1:10 M



REV	DATE	BY	DESCRIPTION

DESIGNED BY
ARTHURA REYES
PROFESSIONAL ENGINEER
REGISTERED PROFESSIONAL ENGINEER

PREPARED BY
EDITH M. BALISTIA JR.
OFFICIAL CHARGE
REGISTERED PROFESSIONAL ENGINEER

CHECKED & REVIEWED BY
REYD SALE JR.
SUPERVISING ENGINEER &
DESIGN ENGINEER

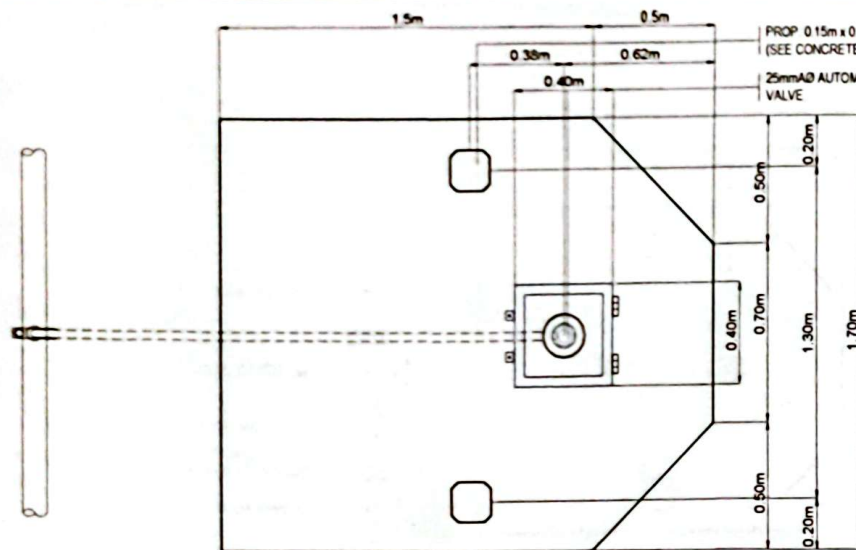
SUBMITTED BY
EDITH M. BALISTIA JR.
OFFICIAL CHARGE
REGISTERED PROFESSIONAL ENGINEER

RECOMMENDING PROJECT IMPLEMENTATION
MICHAEL ANGELO M. CARBON
ASSISTANT GENERAL MANAGER
TECHNICAL SERVICES GROUP

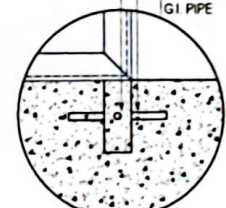
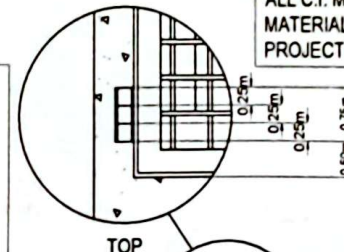
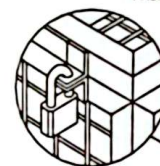
APPROVED FOR PROJECT IMPLEMENTATION
ZAMBOANGA CITY WATER DISTRICT
REYNALDO R. CABILIN
GENERAL MANAGER

PROJECT TITLE
PROPOSED FEEDERLINES IN VARIOUS LOCATIONS
IN THE CITY FOR WATER SERVICE EXPANSION
SHEET: DRAWING
AS INDICATED

SHEET NO.
25



NOTE:
ALL C.I. MATERIALS, PRESSURE GAUGE AND PAINT MATERIALS WILL BE PROVIDED BY ZCWD EXCEPT FOR PROJECT COMPONENT NO. 7 (BUNGUIAO TO SANGALI)



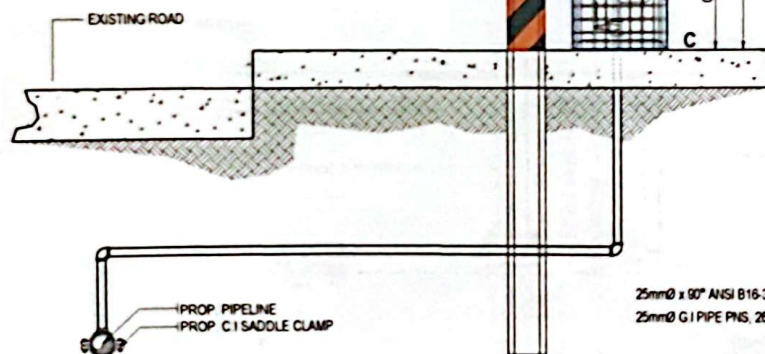
(SEE CONCRETE BARRICADE DETAIL)

0.38mm

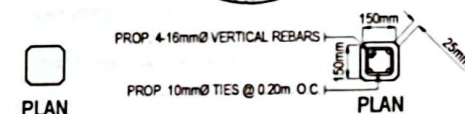
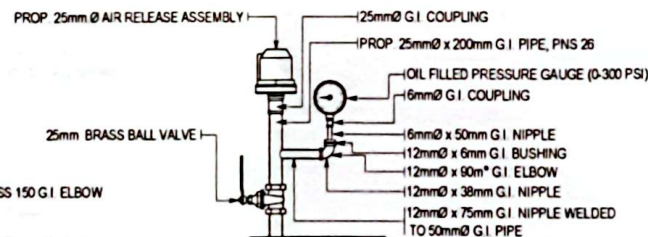
25mmØ AIR RELEASE PRESSURE VALVE

W/ PRESSURE GAUGE
SEE PRESSURE GAUGE DETAIL

0.40m x 0.40m x 0.50m STEEL CAGE (SEE DETAIL)



PLAN FOR SETTING BARRICADE



PLAN

BLACK (ACRYLIC SOLVENT BASED PAINT)
CATERPILLAR/HANSA YELLOW (ACRYLIC SOLVENT BASED PAINT)

ELEVATION

SECTION

TYPICAL DETAIL OF 25mmØ AIR RELEASE ASSEMBLY

SCALE: 1:250m

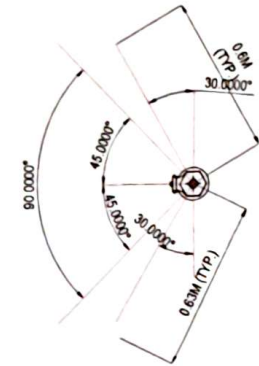
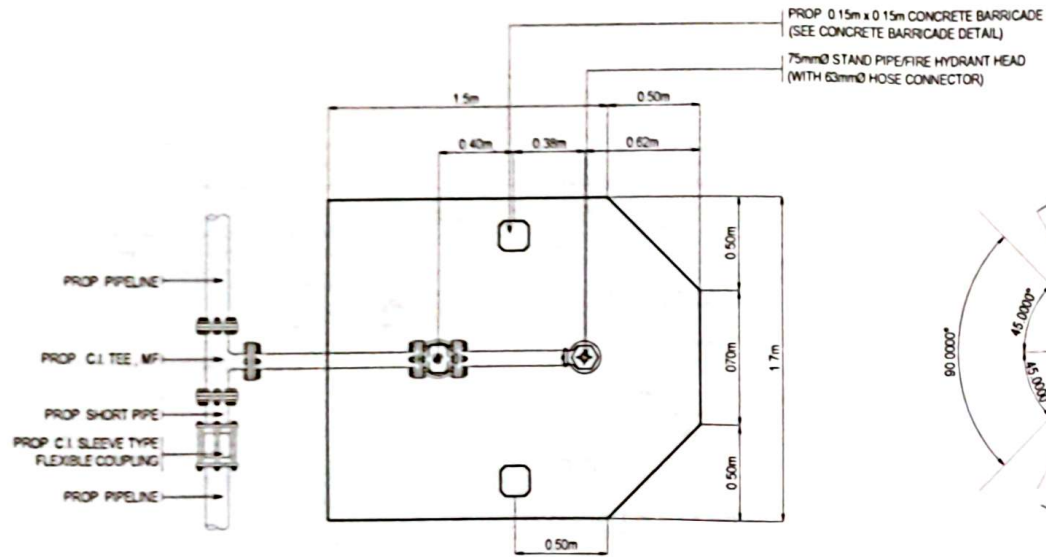
PRESSURE GAUGE DETAIL

SCALE: 1:10m

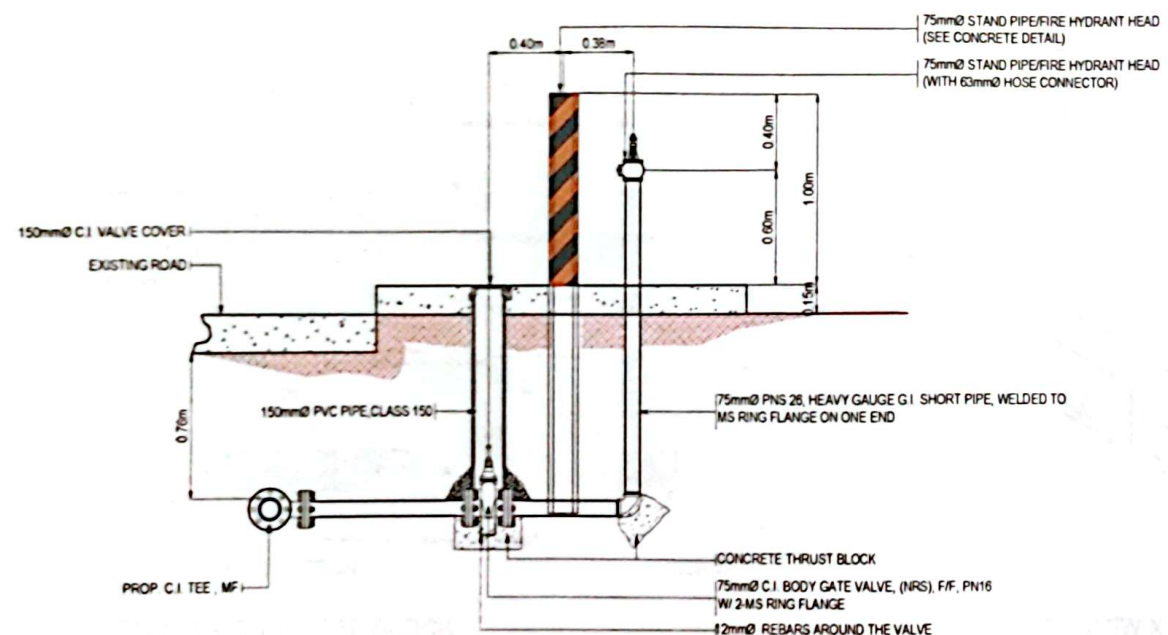
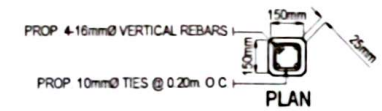
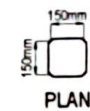
DETAIL OF CONCRETE BARRICADE

SCALE: 1:20m

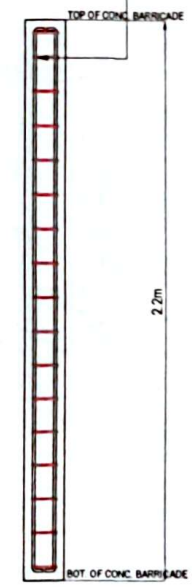
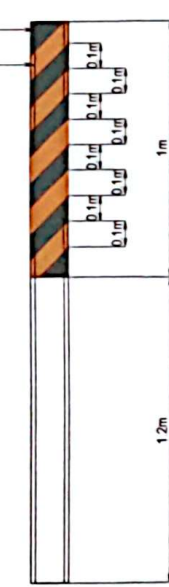
REV	DATE	BY	DESCRIPTION	DESIGNED BY	PREPARED BY	CHECKED & APPROVED BY	ALIGNED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	SHEET NO.
				DARRELL B. SACRITAN	REX D. SALE JR.	EDUARDO B. SANTANA JR.	MICHAEL ANGELO M. CARBON	REYNALDO R. CABILIN	ZAMBOANGA CITY WATER DISTRICT	PRIORITIZED FEEDBACK LINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	26



NOTE:
ALL C.I. MATERIALS, BRASS AND PAINT MATERIALS WILL BE PROVIDED BY ZCWD EXCEPT FOR PROJECT COMPONENT NO. 7 (BUNGUIAO TO SANGALI)



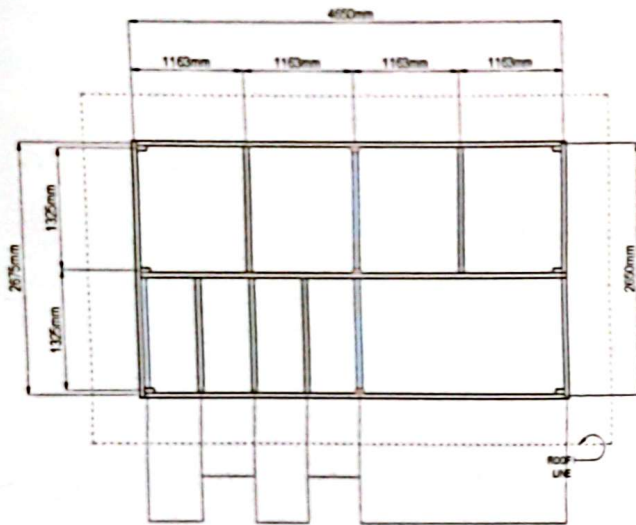
CATERPILLAR/HANSA YELLOW (ACRYLIC SOLVENT BASED PAINT)
BLACK (ACRYLIC SOLVENT BASED PAINT)
PROP 16mm REBARS W/ 10mm TIES @ 0.20 O.C.



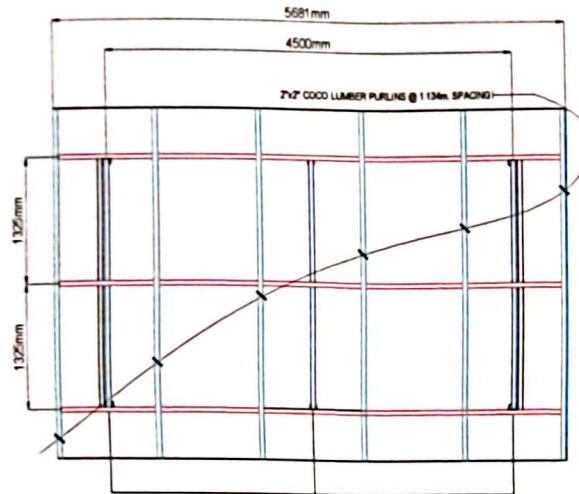
TYPICAL DETAIL OF FIRE HYDRANT TAPPED @ PVC PIPELINE
SCALE: 1:250

DETAIL OF CONCRETE BARRICADE
SCALE: 1:20m

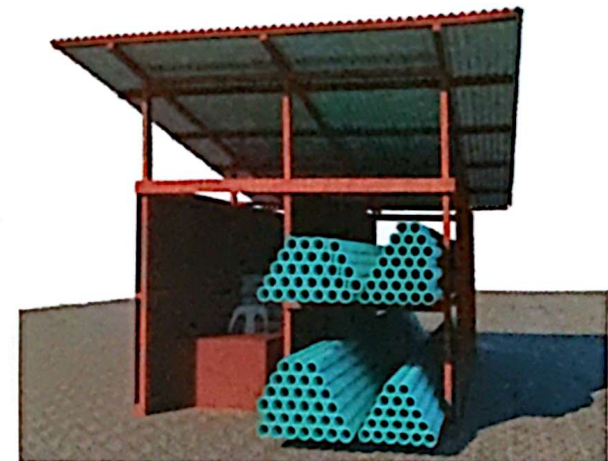
	REVISIONS				DESIGNED BY	REVIEWED BY	CHECKED & APPROVED BY	SUBMITTED BY	RECOMMENDING PROJECT IMPLEMENTATION	APPROVED FOR PROJECT IMPLEMENTATION	PROJECT TITLE	SHEET NO
	REV	DATE	BY	DESCRIPTION	 DARRELL B. SALARITAN SENIOR ENGINEER A DESIGN DIVISION	 [REDACTED] SENIOR ENGINEER A DESIGN DIVISION	 REX D. SALE JR. SUPERVISING ENGINEER A DESIGN DIVISION	 EDITH M. BAUTISTA JR. OFFICE IN CHARGE ENGINEERING AND CONSTRUCTION DIVISION	 MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	 ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CABILIN GENERAL MANAGER	PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	27
	SHEET: 1 OF 10000 AS INDICATED											



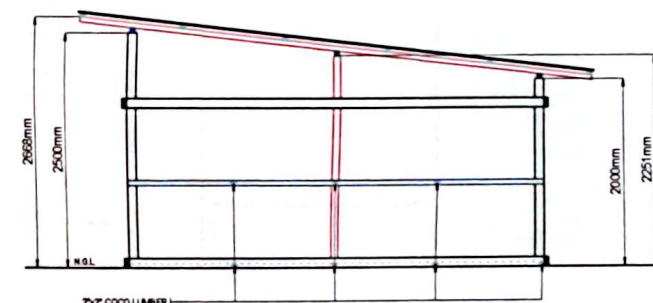
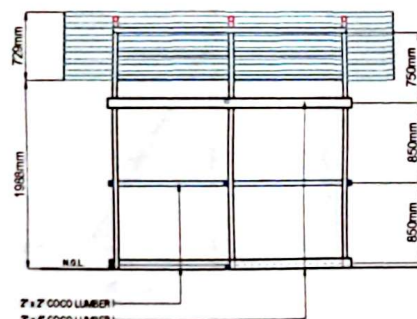
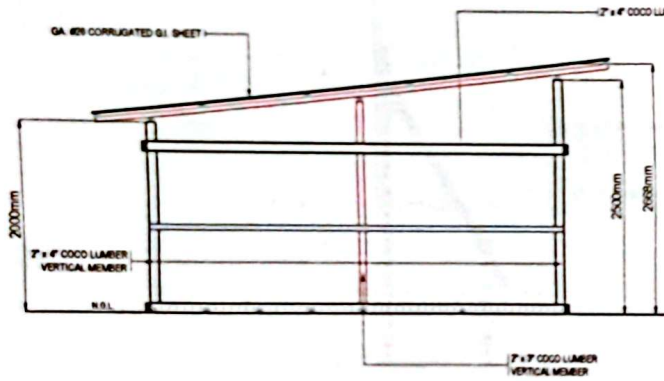
PLAN
SCALE 1:500



ROOF FRAMING PLAN
SCALE 1:500

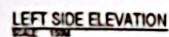
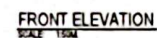


PERSPECTIVE



TEMPORARY FACILITY
SCALE NTS

	REVISIONS				DESIGNED BY DARRELL B. SORITAN GENERAL ENGINEER & DESIGNER	PREPARED BY EDY M. BAUTISTA JR. GENERAL ENGINEER & DESIGNER	CHECKED & REVIEWED BY REX D. SALE JR. SUPERVISING ENGINEER & DESIGN CHIEF	SUBMITTED BY EDY M. BAUTISTA JR. OFFICIALS CHARGE ENGINEERING AND CONSTRUCTION DEPARTMENT	RECOMMENDING PROJECT IMPLEMENTATION MICHAEL ANGELO M. CARBON ASSISTANT GENERAL MANAGER TECHNICAL SERVICES GROUP	APPROVED FOR PROJECT IMPLEMENTATION ZAMBOANGA CITY WATER DISTRICT REYNALDO R. CABILIN GENERAL MANAGER	PROJECT TITLE	SHEET NO. 29
	REV	DATE	BY	DESCRIPTION							PROPOSED FEEDERLINES IN VARIOUS LOCATIONS IN THE CITY FOR WATER SERVICE EXPANSION	
											SHEET CONTENT	

SHEET NO.