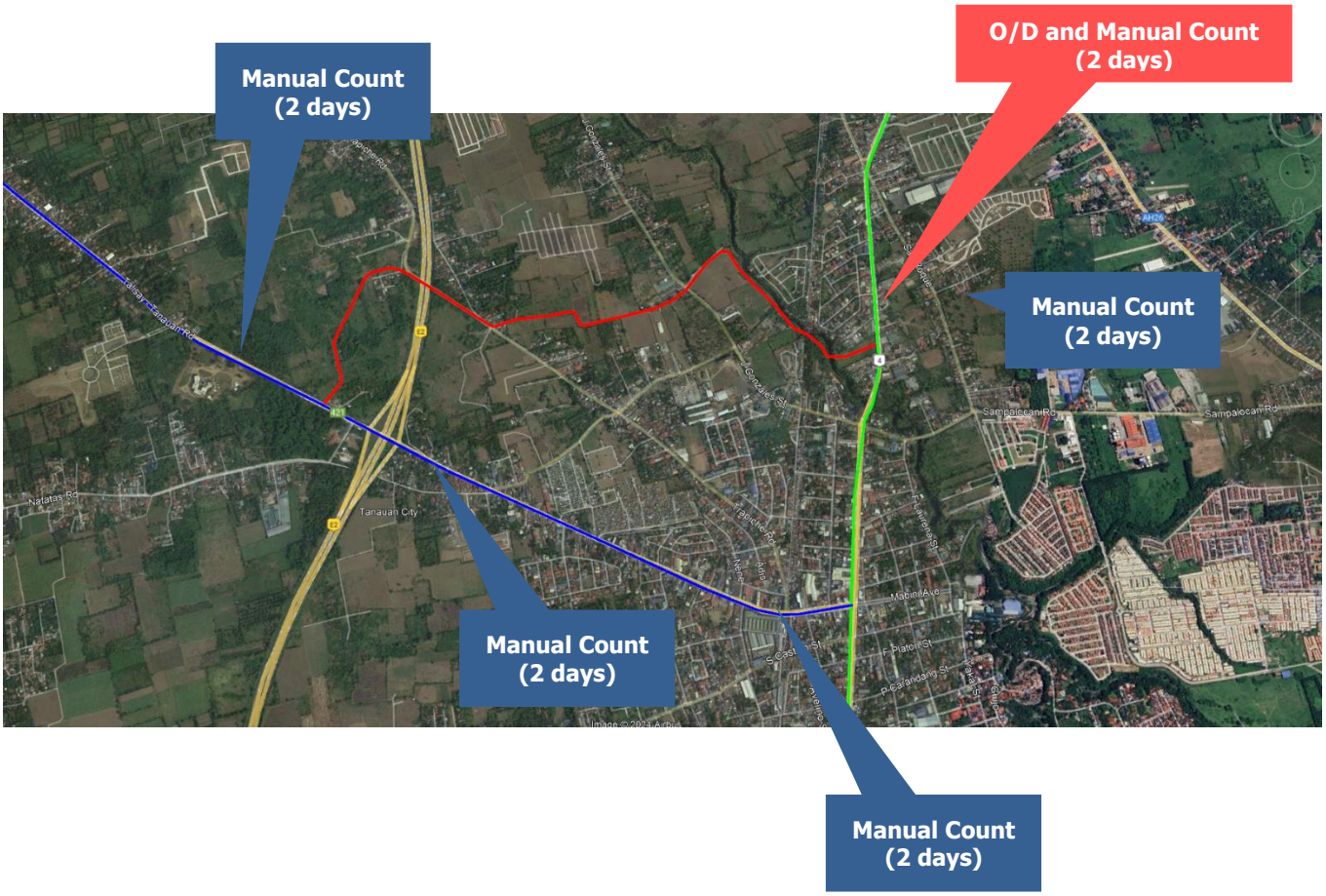
Annex 1: Locations of Traffic Survey Stations at Tanauan City Diversion Road



Annex 2: Summarized/processed Traffic Survey data sheet

TRAFFIC PROJECTION, EXISTING TRAFFIC												
Year	Cars/Taxi/Jeep	Passenger Utility	Goods Utility	Small Bus	Large Bus	Trk-2ax	Trk-3ax	Trk-4+ax	Motorcycle	Tricycle	AADT Total

Annex 3: Traffic Survey Data Sheets/Forms (Manual Count)

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

PLANNING SERVICE

PROJECT PREPARATION DIVISION

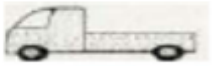
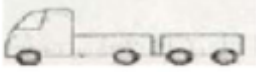
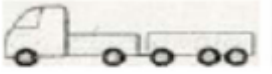
MANUAL CLASSIFIED TRAFFIC COUNT

Single Direction and Lane Count Form

PPD_SF - 001

SITE ID:	REGION:	DISTRICT:	SKETCH
ROAD SECTION ID:	ROAD NAME:		
KM STATIONS:	SITE DESCRIPTION:		
DIRECTION:			

DAY OF THE WEEK	DATE (MM / DD / YYYY)	WEATHER	TIME	
			START	END

1a. MOTOR - TRICYCLE 																	
1b. MOTORCYCLE 																	
2. PASSENGER CAR 																	
3. PASSENGER UTILITY 																	
4. GOODS UTILITY 																	
5. SMALL BUS 																	
6. LARGE BUS 																	
7. RIGID TRUCK (2 AXLES) 																	
8. RIGID TRUCK (3+ AXLES) 																	
9. SEMI - TRAILER TRUCK (3/4 AXLES) 																	
10. SEMI - TRAILER TRUCKS (5+ AXLES) 																	
10. TRAILER TRUCKS (4 AXLES) 																	
10. TRAILER TRUCKS (5+ AXLES) 																	

Annex 4: Traffic Survey Data Sheets/Forms (O-D Survey)

PPD_SF-004

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

PLANNING SERVICE

PROJECT PREPARATION DIVISION

O/D TRAFFIC SURVEY SHEET

STATION NAME		**PROJECT**			**LOCATION** (Road/ Municipality/ Region)	**SKETCH**
DIRECTION		**TIME**		**DATE**	**INTERVIEWER**	
FROM	**TO**	**FROM**	**TO**			

Record No.	**VEHICLE TYPE**														ORIGIN	**CODE**	DESTINATION	**CODE**	**TRIP PURPOSE**						
	1a. Motor - Tricycle	1b. Motorcycle	2. Passeneger Car	3. Passenger Utility	4. Goods Utility	5. Small Buses (13-30 seats)	6. Large Bus (>30 seats)	7. Rigid Truck 2-axles	8. Rigid Truck (3-axles)	9. Truck Semi-Trailer (3&4 axles)	10. Truck Semi-Trailer (5 axles)	11. Truck Trailer (4 axles)	12. Truck Trailer (5 axles)	**CODE**					1. Work	2. School	3. Business	4. Private Matter	5. Leisure	6. Others	**CODE**

VERSION 00

Annex 5: Traffic Survey Data Sheets/Forms (Travel Time Survey)

PPD_SF - 003

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
PLANNING SERVICE
PROJECT PREPARATION DIVISION

Travel Time and Delay Survey Field Sheet

Route:	Direction	Date:	
Trips started at: (time)		at (location)	
Trip ended at: (time)		at (location)	
Name of Surveyor:			

CONTROL POINT	KMS	STOPPED	STARTED	TOTAL DELAY	CAUSES OF DELAY						
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
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					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
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					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7
					1	2	3	4	5	6	7

Cause of Delay:

1 - Public Utility Vehicle Loading/Unloading
2 - Stop Sign/ Red Signal at Intersection
3 - Pedestrian Crossing
4 - Maneuvering vehicles such as parking, left turning or opposite turns
5 - Blocked by other vehicles such as heavy traffic ahead
6 - Road Construction/ Maintenance
7 - Others (explain)

Annex 6: Traffic Survey Methodologies

A. Intersection Traffic Count

1. Objectives

- Necessary traffic data acquisition for traffic impact study at intersection.

2. Outline of Works

The following four (4) types of survey will be carried out by the Consultant in accordance with the methodology set forth by the Project Preparation Division (PPD), Planning Service which will be commissioned purposely for this study.

a. Traffic Condition Survey
   - Intersection Traffic Flow Counts
   - Intersection Queuing Length Survey
   - Traffic Speed Survey
   - Traffic Signal and Signal Phasing Observation (including manual traffic control)

3. Scope of Works and Specifications

Survey shall be conducted in following manners:

3.1 Intersection Traffic Flow Counts

a. At intersections (locations shown in Annex C.1) in period of 14 hours on two consecutive week days **Wednesday** and **Thursday**.
b. At intersections (locations shown in and Annex C.1 an) in period of 12 hours on two consecutive week days **Wednesday** and **Thursday.**
c. Vehicles crossing the survey points will be counted according to mode classification and direction.
d. Traffic volume shall be counted and aggregated for each 15-minute period.
e. Mode classification will be; pedestrian including bicycle, motorcycle, tricycle, passenger car including taxi, passenger jeepney, goods utilities including pick-up and vans, medium bus (less than 50 passengers) and large bus (50 passengers or more), small truck (2 axles), large truck (3 axles or more) and semi-trailer trucks (see attached sample format of Intersection Traffic Count Survey Sheet).
f. Some intersections are large and complicated with many legs. So traffic survey shall be designed carefully to get accurate traffic data to/from the intersections.

4. Survey Results

4.1 Coding and Data entry

a. Coding. The data collected in the surveys will be coded after the field survey in accordance with the method shown in the survey manual.

b. Data. The survey results will be input to computers using Microsoft excel customized for each survey data. However, the final data will be input to traffic modelling software.

4.2 Submission of a brief report

Result of the survey will be summarized briefly using figures and tables and the details will be compiled in a report.

B. Manual Count Survey

Vehicle types are classified into the following categories:

i. passenger car including taxi
ii. passenger utility (PUV)/public utility jeepney
iii. goods utility (pick-up and delivery van)
iv. small buses
v. large buses
vi. rigid truck, 2 axle
vii. rigid truck, 3+ axle
viii. truck semi-trailer, 3& 4 axles
ix. truck semi-trailer, 5+ axles
x. truck trailers, 4 axles
xi. truck trailers, 5+ axles
xii. motor-tricycle, and
xiii. motorcycle

Traffic surveys shall be conducted following procedures enumerated below. The specific location of the survey station is presented in Annex 1.

Manual Count (MC) Surveys

a. At identified locations, traffic counts by directional flow in a period of fourteen (14) hours from 6:00AM to 8:00PM in two (2) days preferably on Tuesdays, Wednesdays or Thursdays.
b. Vehicles crossing the survey points will be counted according to mode classification and direction.
c. Traffic volume shall be counted and aggregated in every one (1) hour time interval.

TRAFFIC SURVEY DATA PROCESSING

Coding and data entry

a. Coding: The data collected in the surveys will be summarized and coded after the field survey in accordance with the standard method to be provided by the PPD.
b. Data: The survey results will be inputted to computers using Excel Spreadsheet application.
c. At identified stations close to the intersection, roadside interview by directional flow in a period of twelve (12) hours from 6:00AM to 6:00PM in one (1) day preferably on a Tuesday, Wednesday or Thursday.
d. At identified stations close to the intersection, roadside interview by directional flow in a period of twelve (12) hours from 6:00AM to 6:00PM in two (2) days preferably on Tuesdays, Wednesdays or Thursdays.
e. Vehicle crossing the survey points according to mode classification and direction will be interviewed to determine its origin and destination and other pertinent information required for the study.
f. Data of interviewed vehicle shall be collected, validated and aggregated in every one (1) hour time interval. Validated samples are samples compared with the actual count for the particular hour.
g. Establishment of the OD survey station will be located in a section where safety and sight distances are of primordial concern. Such undertaking will be coordinated with the Local Government Units (LGUs) and police in the area. Proper signage shall be considered.

TRAFFIC SURVEY DATA PROCESSING

Coding and data entry

a. Coding: The data collected in the surveys will be summarized and coded after the field survey in accordance with the standard method to be provided by the PPD.
b. Data: The survey results will be inputted to computers using Excel Spreadsheet application.

C. Travel Time and Delay Survey

This survey will be carried out by the Consultant in accordance with the methodology set forth by the Project Preparation Division (PPD), Planning Service which will be commissioned purposely for this study.

Travel Time and Delay Surveys

a. At major roads corridors during the following time periods: AM Peak, Off-Peak and PM Peak, on two weekdays excluding Friday, Saturday and Sunday.
b. Travel time shall be surveyed by floating car method for each route and in both directions. A minimum of two runs in each direction shall be conducted. Measurement shall be carried out on board passenger car (test vehicle) and public utility vehicles at each time period.

TRAFFIC SURVEY DATA PROCESSING

Coding and data entry

a. Coding: The data collected in the surveys will be summarized and coded after the field survey in accordance with the standard method to be provided by the PPD.
b. Data: The survey results will be inputted to computers using Excel Spreadsheet application.
c. Report: Results of the surveys will be summarized briefly using figures and tables and the details will be compiled in a report.

Annex 7: Proposed Preliminary RAP Report Outline

Executive Summary

(Brief Summary of the report with Summary of Compensation Cost)

1. INTRODUCTION
1.1. Rationale
1.2. Objectives
1.3. Methodology
1.4. Public Consultation Proceedings
1.5. Project Description

2. LEGAL FRAMEWORK
A short discussion on existing laws, policies and regulations on IROW Acquisition.
(Please refer to LARRIPP in accordance to RA 10752)

3. POLICY ON ELIGIBILITY FOR COMPENSATION AND OTHER ENTITLEMENTS
(Please refer to LARRIPP in accordance to RA 10752)

4. DESCRIPTION OF ADVERSE IMPACTS
A discussion on the estimated number of affected PAPs/PAFs and other assets such as land, structure, trees, crops and other improvements including the severity of the impacts.
4.1. Parameter on the Severity of Impacts
4.2. Adverse Impacts on Project Affected Families (PAFs)
4.3. Impact on Structures, Other Improvements and Trees
4.3.1. Impacts on PAFs per Municipality
4.3.2. PAFs by Classification of Impacts and Total Estimated Costs
4.3.3. Resettlement Options for Severely Affected Structures
4.4. Impacts on Land

5. SOCIO-ECONOMIC PROFILE OF PAFs
5.1. Basic Information
5.2. Household Structure

5.3. Access to Basic Social Services
5.4. Project Awareness
5.5. Type of Affected Structures
5.6. Profile of Landowners
5.7. Brief Profile of IPs (if any)

6. RELOCATION PLAN FOR INFORMAL SETTLERS (If there are ISF's)
6.1. Survey on PAP's willingness to relocate.
6.2. Proposed Relocation Site & Development Plan
6.3. Other Developmental activities to address the Informal Settlers Needs.

7. PUBLIC INFORMATION, CONSULTATION AND PARTICIPATION FRAMEWORK
7.1. Proceedings of Public Consultations
7.2. Information Campaign on Land Acquisition

8. ENTITLEMENT MATRIX
A short discussion on entitlement matrix for structure/other improvements shall also be presented in the Chapter.
Entitlement Matrix for Structures/Other Improvements/Trees and Perennials

9. BUDGET REQUIREMENT
A discussion on the estimated cost of ROW Acquisition of the project.
9.1. Funds for RAP Implementation
9.2. Resettlement Cost
9.3. Procedures for Flow of Funds
9.4. Unit Prices for Cost Estimation
9.5. Total Preliminary RAP Cost

10. GRIEVANCE REDRESSAL

11. INSTITUTIONAL ARRANGEMENT
(Please refer to LARRIPP in accordance to RA 10752 and relevant DPWH Department Orders)

12. MONITORING MECHANISM
12.1. Objective
12.2. Supervision and Internal Monitoring
12.3. External Monitoring and Evaluation
12.4. Stages of Monitoring
12.5. Reporting
12.6. Monitoring Indicators

13. INDIGENOUS PEOPLE ACTION PLAN (if necessary)

ANNEXES:
- List of PAFs for Structures/Other Improvements/Trees and Perennials
- List of PAFs with Affected Lots

- Memorandum of Understanding
- Minutes of Coordination Meeting with LGUs, Attendance Sheet and Photos
- Minutes of Public Consultation, Attendance Sheet and Photos
- PAFs Individual Detailed Estimated Cost, Photos and Sketch of Affected Properties/Assets
- BIR Zonal Value and Current Market Value by the Independent Property Appraiser (IPA) or by the Government Financial Institution (GFI)
- Valuation Report by the IPA or GFI
- Schedule of Prices of Construction Materials (Current Market Prices)
- Current Market Value of Fruit Bearing Trees
- Current Market Value of Timber Trees

Annex 8: Proposed Environmental and Social Impact Assessment Outline

I. Introduction
II. Environmental Regulatory Framework
III. Project Description
IV. Description of Environmental Setting and Receiving Environment/ Environmental Baseline
    a. Land
    b. Water
    c. Air/Noise
    d. People
    e. Future Environmental Conditions without the Project
    f. Future Environmental Conditions with the Project
V. Project Potential Key Impacts Assessment and Mitigation (per project Phase)
    a. Key Potential Impacts on Land
    b. Key Potential Impact on Water
    c. Key Potential Impact on Air and Noise
    d. Key Potential Impact on People
VI. Environmental Management Plan/ Impact Management Plan
VII. Recommendation