

Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila

## MAY 0 3 2011

17, 130PWH

05.04.2011

### DEPARTMENT ORDER) SUBJECT: POLICY ON DIGGINGS/EXCAVATIONS BY PRIVATE AND PUBLIC UTILITIES ON NATIONAL ROADS

It has been observed that the conduct of public utility agencies, companies or corporations, whether public or private (the "Utility Agency"), in undertaking excavations and/or haphazard restoration works on our national roads have caused their deplorable and dangerous condition. More often than not, the restoration/reconstruction takes place several months later, making the motoring and commuting public suffer inconveniences.

To ensure that future undertakings on road excavations and its restoration and/or reconstruction works are done properly, the following guidelines are hereby issued for the guidance of everyone concerned:

- 1. All applications for the issuance of Excavation Permit on National Roads (Annex "A") shall be processed only upon submission/compliance by the Utility Agency or its agent or contractor (collectively, the "Applicant"), of the following:
  - a. Sketch Plan/Map showing the exact location of the project, including the name of the road section, type of underground or aerial facility/structure to be installed, and other relative appurtenances;
  - Programs of work (POWs) with corresponding detailed estimates for the cost of excavations, including the cost of restoration, shall be submitted by the Utility Agency, to be approved by the DPWH;
  - c. Timetable of the proposed work in the form of Bar/Gantt Chart or PERT-CPM Chart showing the duration of excavation and restoration work activities;
  - d. Typical Section and Specifications, type and total area of pavement to be excavated, type and extent of work to be undertaken, and name and address of contractor (if by contract);
  - e. Accomplished Terms and Conditions signed by the duly authorized representative of the Applicant; ///

- f. Posting of a surety in the form of a Performance Bond, callable on demand, equivalent to 100% of the full restoration/reconstruction cost of the affected area, taking into consideration the type and class of pavement structure;
- g. Payment of a non-refundable amount to cover the Engineering and Administrative Overhead (the "Supervision Fee") of issuing office since said undertaking is not considered in the programmed budget allocation of the issuing office. The Supervision Fee shall be computed as follows:

Cost of Restoration	Supervision Fee
Below P50,000.00	3% of the cost of restoration
P50,000.00 and above	1.5% of the cost restoration

- h. Upon receipt of the application and determining that complete requirements have been complied with, the DPWH shall notify the applicant of the schedule of joint field inspection by the Regional and District Representatives together with the contractor, to determine the extent and actual location of the proposed work.
- 2. Road sections affected by an excavation shall be temporarily paved or patched with bituminous concrete surface course until it can be fully restored to its original condition. Final restoration woks shall commence immediately once the utilities installed are made operational, i.e., for water pipes, after it has passed hydro testing (pipe leakage test). Such work shall be done by the utility contractor under the close supervision of DPWH's authorized representatives.
- 3. The digging or excavation for the construction and/or installation of public utility facilities shall be done in harmony with the guidelines on tree planting along national roads, to avoid any overlap.
- 4. In the event that there will be a road expansion or improvement to be introduced in the national road which will affect existing utility facilities or structures located thereon, such utility facilities or structures shall be removed and/or relocated, and the cost for its relocation and removal shall be borne by the Utility Agency concerned. In this case, DPWH waives the payment of all fees, including deposits and bonds, with respect to the relocation and removal.
- 5. All requests for excavation permits, regardless of amount, will be processed by the concerned District Engineering Office who shall, in turn, recommend the approval thereof to the Regional Director.
- 6. The completed restoration works shall be monitored during the warranty period. A corresponding warranty bond equivalent to ten percent (10%) of the

M

actual restoration cost, callable on demand, shall be held in trust for a period of one (1) year from the date of issuance of a Certificate of Completion and can only be released upon the issuance of a Certificate of Acceptance by the issuing Office.

- 7. The program of work (POW) and/or detailed estimates for the restoration works shall be prepared by the District Office concerned for approval by the Regional Director.
- 8. All Diggings or Excavations, including restorations or reconstruction works shall be done in two (2) shifts (day and night), if practicable, in highly urbanized areas or traffic congested areas for early completion of restoration work.
- 9. Excavations for all types of underground utilities along national roads will only be allowed in accordance with the attached DPWH Typical Roadway Section for 20 meters, 30 meters, 40 meters and 60 meters road right of way. Deviation as to the location of structure/utility to be installed, as indicated in the Typical Roadway Section, will only be permitted in special cases. The Project Proponent, through its contractor, shall prepare the plans and detailed drawings of the proposed deviation and submit the same to the DPWH District Office concerned for evaluation/recommendation and subsequent approval of the Regional Director.
- 10. DPWH shall notify the Applicant of any reported violation of the conditions of the Digging/Excavation Permit, and shall give the latter a reasonable period to rectify such violation. Failure to rectify the violation within the period provided shall warrant the revocation or cancellation of the Permit.

This Order supersedes all previous issuances on digging/excavation, shall take effect immediately, and shall remain enforced until amended, revoked or superseded by another issuance.

my/t

PÓGELIO L. SINGSON Secretary



Attachment to : D.O. No. 26 S.2011 - P.01

#### Annex "A"

DPWH	I Form No.:			
<b>APPLICATION FOR ISSUANCE OF EXCAVATION PERMIT</b> (Per Department Order No, Series of 2011)				
Date o	f Filing:			
A.	NAME AND ADDRESS OF UTILITY/AGENCY			
В.	ADDRESS OF UTILITY			
C.	NAME OF PROJECT AND PROPOSED SERVICES CONNECTION:			
D.	NAME OF CONTRACTOR/SUB CONTRACTOR AND ADDRESS			
E.	LOCATION OF PROJECT			
F.	SCOPE OF WORK			
G.	DURATION OF WORK			

- H. ATTACHMENT (Please check the appropriate box)
  - /\_\_\_\_/ Authority of Signing Official of the Applicant (issued by the President of the Company or Board Resolution, whichever is applicable)
  - /\_\_\_\_/ Sketch Plan/Map showing the location of the project, type of underground or aerial facility/structure to be installed and other related appurtenances
  - /\_\_\_\_/ Timetable of the proposed work in the form of Bar/Gantt Chart or PERT-CPM Chart showing the duration of excavation and Restoration activities
  - /\_\_\_\_/ Typical Section & Specifications, type and total area of pavement to be excavated, type and extent of work to be undertaken and name and address of contractor (if by contract)
  - /\_\_\_\_/ Accomplished Terms and Conditions signed by the duly authorized representative of the Utility Agency or Applicant
  - /\_\_\_\_/ Payment of a non-refundable amount to cover the Engineering and Administrative Overhead (the "Supervision Fee") the issuing office since said undertaking is not considered in the programmed budget allocation of the issuing office. The Supervision Fee shall be computed as follows:

Cost of Restoration	Supervision Fee
Below P50,000.00	3% of the cost of restoration
P50,000.00 and above	1.5% of the cost restoration

Submitted By:

(Name & Signature of authorized Representative of the Applicant)

Reviewed and Evaluated by: \_\_\_\_

(Designation and Signature of DPWH official)

- ( ) Recommended for issuance of Permit for Digging/Excavation
- ( ) Recommended for further Evaluation/Inspection

#### EXCAVATION/DIGGING PERMIT Per Department Order No. \_\_\_\_\_ Series of 2011

Permit No. : Date Issued:
This is to certify that
Represented by, Nationality, (Name of Authorized officer)
With business address at has been granted an
EXCAVATION/DIGGING PERMIT, after a judicious review and evaluation of their Application to undertake excavations and diggings, and after complying all requirements, under the following conditions:
Purpose of the Excavation/Digging:
Location of Project:
Duration of Work:
This Permit shall be effective for a period ofdays, counted from the date of issuance by the DPWH office concerned, as may be extended upon (i) payment of the necessary fees and (ii) approval by DPWH of the extension.

Applicant shall be charged a non-refundable amount equivalent to 1% of the remaining restoration cost for every day of delay beyond the original or extended period, as liquidated damages, which no case shall exceed 15% of the total restoration cost as liquidated damages. Non-payment of the liquidated damages shall be a ground for the blacklisting of the Applicant.

Regional Director/District Engineer

#### TERMS AND CONDITIONS FOR EXCAVATION PERMIT ON NATIONAL ROADS

1. The with postal address at	
-------------------------------	--

(Utility Agency/Applicant)

and its \_\_\_\_\_\_ Contractor/Sub-Contractor \_\_\_\_\_\_

with postal Address at

who will undertake excavation works will be held liable for any traffic inconvenience, including damages to existing DPWH facilities and accidents that may occur as a result of the excavation works;

- 2. The Utility Agency concerned, or its contractor, shall submit to the DPWH the application for an Excavation/Digging Permit, with the following documents/ information:
  - a. Sketch plan/Map showing the exact location of the project, the type of underground or aerial facility/structure to be installed and other related appurtenances;
  - b. Programs of work (POWs) with corresponding Detailed Estimates for the cost of Excavations including the cost of Restoration shall be submitted by the Utility Agency, to be approved by DPWH;
  - c. Timetable of the proposed work in the form of Bar/Gantt or PERT/CMP Chart showing the duration of excavation including the restoration activities;
  - d. Typical Sections & Specifications, type and extent of work to be undertaken, and name and address of contractor (if by contract);
  - e. Accomplished Terms and Conditions signed by the duly authorized representative of the Utility Agency or Applicant;
  - f. Posting of a surety in the form of a Performance Bond, callable on demand, equivalent to 100% of the full restoration/reconstruction cost of the affected area, taking into consideration the type and class of pavement structure;
  - g. Payment of a non-refundable amount to cover the Engineering and Administrative Overhead (the "Supervision Fee") of the issuing office since said undertaking is not considered in the programmed budget allocation of the issuing office. The Supervision Fee shall be computed as follow:

Cost of Restoration	Supervision Fee
Below P50,000.00	3% of the cost of restoration
P50,000.00 and above	1.5% of the cost restoration

3. This Permit shall be effective for a period of \_\_\_\_\_ days, counted from the date of issuance by the DPWH office concerned, and may be extended upon (i)

payment of the necessary fees and (ii) approval by the DPWH of the extension. Applicant shall be charged a non-refundable amount equivalent to 1% of the remaining restoration cost for every day of delay beyond the original or extended period, as liquidated damages, which no case shall exceed 15% of the total restoration cost as liquidated damages. Non-payment of the liquidated damages shall be a ground for the blacklisting of the Applicant.

- a. For all programmed activities, the Utility Agency or authorized contractor shall post a Surety Bond, equivalent to 10% (if Cash Bond) or 30% (if it is in the form of Surety Bond) of the restoration/ reconstruction cost, and shall be held in trust for a period of one (1) year reckoned from the date of issuance of Certificate of Completion, and will only be released upon an issuance of a Certificate of Acceptance.
- b. For all unprogrammed works, such as water/gas pipeline leak repairs, closing of illegal/delinquent water service connections, water/gas line investigations and related activities which are urgent/emergency in nature, the Utility Agency may proceed with said works prior to securing an excavation/digging permit, provided that it shall apply for said permits on the next business day.
- c. Upon payment of the required fees and deposits, the Excavation/Digging permit shall be processed and issued by the DPWH within ten (10) working days.
- 4. Before the implementation of any excavation activity, all necessary traffic safety devices, including informative signs and billboards, appropriate lighting, notices and other relevant safety devices shall be installed in the vicinity of the work area. For the duration of the excavation and/or until the trench is satisfactorily backfilled, and the pavement is restored to its original configuration and design strength, signs with the names of the Utility Agency and its contractor (if any) shall be conspicuously displayed on the site. The signs shall be reflectorized and arranged in accordance with the DPWH Road Works Safety Manual.

When the project covers an extensive area or when considerable traffic disruption will be expected in the excavation of the project, advance notices in the mass or print media shall be made indicating the nature and coverage of the project, detours and/or possible alternate routes, the name of the Utility Agency and rationale behind and/or benefit of the proposed work. The working area shall be kept neat, safe and clean at all times. All traffic safety devices will only be removed once the restoration works of the said road section have been accepted by the DPWH.

Likewise, the applicant shall coordinate closely with other utility agencies whose lines may be affected by the excavation/diggings.

- 5. The diggings or excavations for the construction and/or installation of public utility facilities shall be done in harmony with the guidelines on tree planting along national roads, to avoid any overlap.
- 6. During excavation, the following standard procedures shall be done:
  - a. When excavation crosses DPWH facilities such as culverts, pipes and the like, the Applicant shall install facilities beyond 1.0 meter measured from the drainage invert elevation; or 0.60m below pavement on areas where there are no existing drainage.
  - b. A concrete saw shall be used in cutting the pavement, to obtain clean and smooth edges and if necessary, structural sheeting protection shall be provided to prevent scouring on adjacent areas. No excavation or trench shall be made unless the adequate materials for the underground utilities to be installed are available at project site.
  - c. Excavation for all types of underground utilities along national roads will only be allowed in accordance with the attached DPWH Typical Roadway Section for 20 meters, 30 meters, 40 meters, 60 meters road right of way. Deviation as to the location of structure/utility to be installed, as indicated in the Typical Roadway Section, will only be permitted in special cases. The project proponent, through its contractor, shall prepare the plans and detailed drawings of the proposed deviation and submit the same to the DPWH District Office concerned for evaluation, and for the recommendation and approval of the Regional Director.
  - d. Adequate access for pedestrians and disabled persons shall be provided on excavations along sidewalks or road shoulders. No open trench shall be left unfilled or uncovered after each day's work to prevent any accident or inconveniences to the commuters and traveling public.
  - e. No excavation which will completely close the roadway to vehicle use shall be done except on special cases where closure is necessary. Excavation shall be done by lane or portion of not more than fifty (50) percent of road width at a time, or the excavated sections may be covered by steel plate of sufficient thickness to allow vehicle passage. On cases where vehicular traffic could pass in only one direction at a time, traffic aides shall be assigned to direct traffic flow and minimize congestion. Where complete closure to vehicular passage is necessary, clearance shall be obtained from proper authorities and detours or alternate routes shall be indicated.
  - f. No dewatering shall be allowed directly to the roadway or alternate route. Dewatering shall be made only the nearest drainage inlet through a desilting chamber. The cleaning of drainage lines affected by the desilting activity shall be the responsibility of the Utility Agency concerned, which shall be done continuously during the progress of the work.
  - g. All construction equipment should not occupy the main carriageway outside the bounds of the construction area to prevent traffic congestions, inconvenience and hazards to traveling public.

- h. Stockpiling of excavated or other construction materials within the roadway is strictly prohibited. All good quality excavated materials like base course or other construction materials shall be stored in a yard not blocking vehicular nor pedestrian traffic or shall be deposited at the outer edge of the canal (if there is space) or stockpiled outside the RROW until these can be utilized in the work. The unsuitable materials and spoils shall be immediately disposed of and are not allowed to pile and serve as barricades. Safety along the excavation site shall be concern of the Utility Agency and/or its Contractor.
- i. All diggings/excavation up to restoration or Reconstruction Works shall be done in two (2) shifts (day and night), if practicable in highly urbanized areas or traffic congested areas for early completion of the restoration works.
- 7. The DPWH Inspector shall be allowed free access to the project site to inspect and monitor the excavation/restoration works at any time throughout the duration of the project, and where necessary, may issue notice of non-compliance to the Utility Agency concerned if any of these terms and conditions are violated. The DPWH or its authorized representative may temporarily suspend the work if after notification and within forty- eight (48) hours, the violation (s) is/are not corrected.
- 8. The Philippine National Police (PNP) Traffic Management Group, who has jurisdiction on the place of excavation, shall be authorized to (a) monitor the progress of work of the project, (b) recommend the suspension of the project to DPWH upon a showing that the project causes traffic congestion. Resumption of suspended work shall only be allowed after correction and compliance with the Terms and Conditions have been made, duly conformed by the DPWH.
- 9. In the Restoration of Excavation, the following guidelines shall be complied with:
  - a. The restoration/reconstruction of damage road section shall commence immediately upon completion of works. In the event the applicant fail to undertake the necessary restoration works within three (3) days upon completion of works, and upon notice to the Applicant, the DPWH reserves the right to proceed with the restoration works and the cost to be incurred thereon shall be charged to the Applicant.
  - b. The minimum width of pavement restoration shall be 1.00 meter both for asphalt and concrete pavement regardless of trench excavated.
  - c. All excavations that falls at the center of the concrete pavement, restoration shall be done in full width or the whole block. Further, no diagonal digging/excavation shall be allowed.
  - d. The pavement, either concrete or asphalt, shall be restored to its original design, strength and thickness. For concrete, use three (3) days curing

period for major thoroughfares and seven (7) days curing period for other national roads, both attaining flexural strength of 550 psi and comprehensive strength of 3,500 psi as shown in test results.

- e. The Base and sub-base of pavements shall be compacted with vibratory roller/compactor to conform to DPWH standard specifications. No pavement restoration shall be allowed unless actual Field Density Test (FDT) has been taken at random by the utility agency in the presence of DPWH representative, and test taken have passed the required density. In all cases, new base course materials shall be used in restoration works.
- f. For longitudinal excavations, the maximum length for open continuous excavation per street shall be 150 meters. This shall be fully backfilled and made passable to traffic and continuously maintained in good condition until fully restored before another strip of the same maximum length shall be excavated. For long projects extending to kilometers along a road, 150 meter excavated strips may be made at each end or at 300 meters distances.
- g. Epoxy shall be strictly used in concrete pavements less than 5 years old as well as roads subjected to constant heavy loading (use by heavy trucks, buses and container vans), to bond the restored pavement to the existing one and shall have specified strength of 8,000 – 15,000 psi for compression.
- h. All distributed and/or destroyed roadway structures which includes the pavement, curb and gutter, sidewalks, lane markings, road safety devices and sign, traffic signal facilities, drainage system facilities and other infrastructure shall be restored / replaced by the utility Agency concerned at its own expense, to be done under the supervision of the DPWH. Likewise, damages to both public and private properties resulting from the excavation/s shall be the sole responsibility of the Utility Agency. In addition, it shall be the duty of the Utility Agency concerned to coordinate with other Utility Agencies whose lines or facilities are affected by the excavation work.
- i. Final acceptance of completed restoration work shall be made by the DPWH in the presence of Utility Agency responsible official after all work has been inspected and found in accordance with the Terms and Conditions. Acceptance of the restoration works shall be deemed complete only when all officials involved have signed the Certificate of Accomplishment/Completion.
- j. DPWH shall issue a Certificate of Completion to the Utility Agency concerned, only upon completion of the restoration works and after the latter has posted a Surety Bond in the amount equivalent to the cost of restoration, made by a duly recognized Bonding firm, as guarantee to the restored portion for a period of one (1) year reckoned from the date of completion.
- k. After the elapse of the one (1) year warranty period and the restored portion was found stable with no evident defects, the DPWH shall issue a

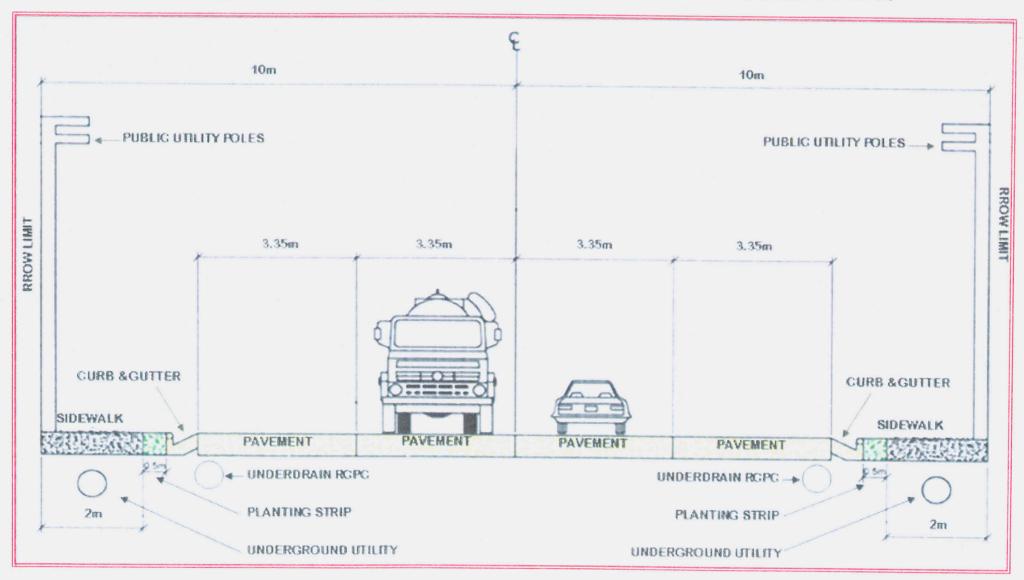
Certificate of Final Acceptance and release the posted Surety Bond to the Utility Agency concerned.

- 1. The Utility Agency concerned shall suspend from participating in any bidding for a period of one (1) to two (2) years, upon recommendation of the DPWH, any contractor of the Utility Agency violating any of the stipulations in these Terms and Conditions and failing to correct such deficiencies to the satisfaction of the DPWH as provided therein.
- 10. After completion of works, the Applicant shall submit a preliminary "AS BUILT PLAN" of the project prior to the conduct of the final inspection by Issuing DPWH office.
- 11.In the event there will be an expansion or improvement to be introduced along the national road with utility structure/facility constructed/installed, the Utility Agency concerned shall voluntarily remove/relocate said structures, the cost of removal shall be borne by them.
- 12. The DPWH shall notify the Applicant of any reported violation of the Terms and Conditions of the Digging/Excavation Permit, and shall give the latter a reasonable period to rectify such violation. Failure to rectify the violation within the period provided shall warrant the revocation or cancellation of the Permit.

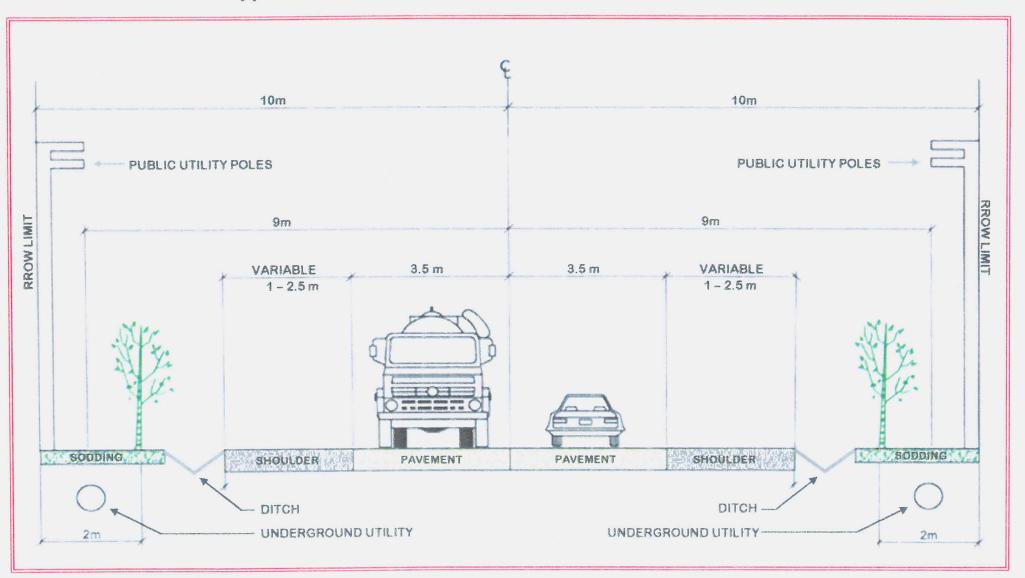
CONFORMEE:

Applicant's Authorized Representative

Date: \_\_\_\_\_

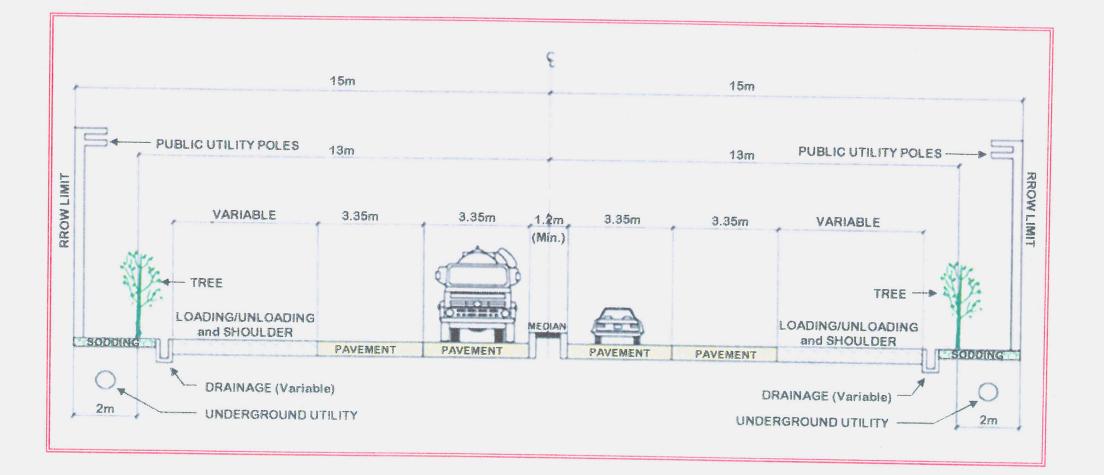


## "A1" - Typical Roadway Section for the 20.0m RROW in Urbanized Areas

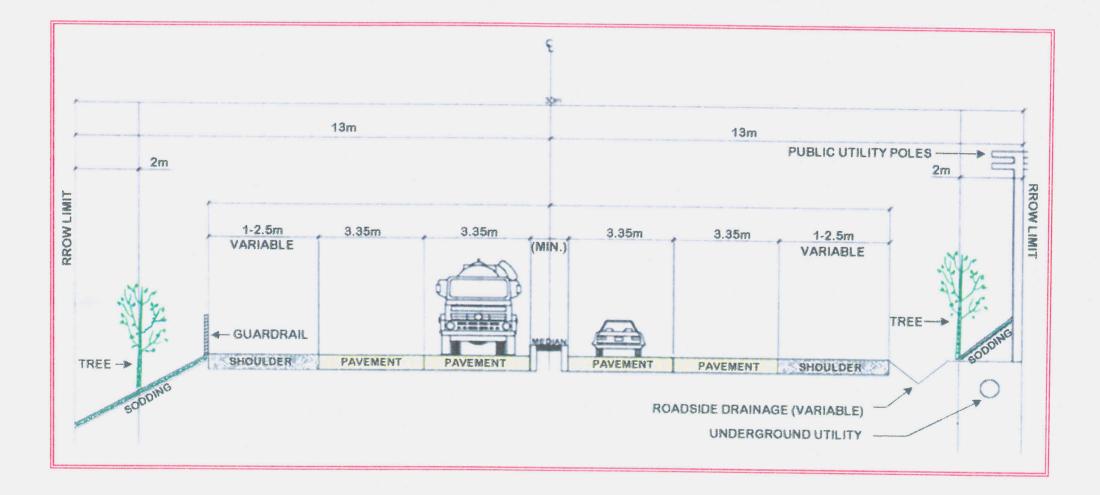


"A2" - Typical Roadway Section for the 20.0m RROW in Rural Areas

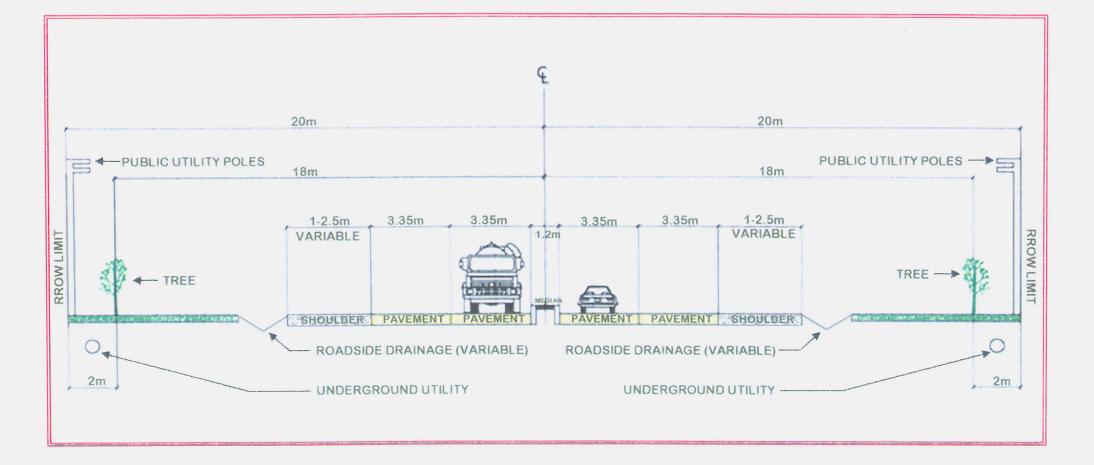




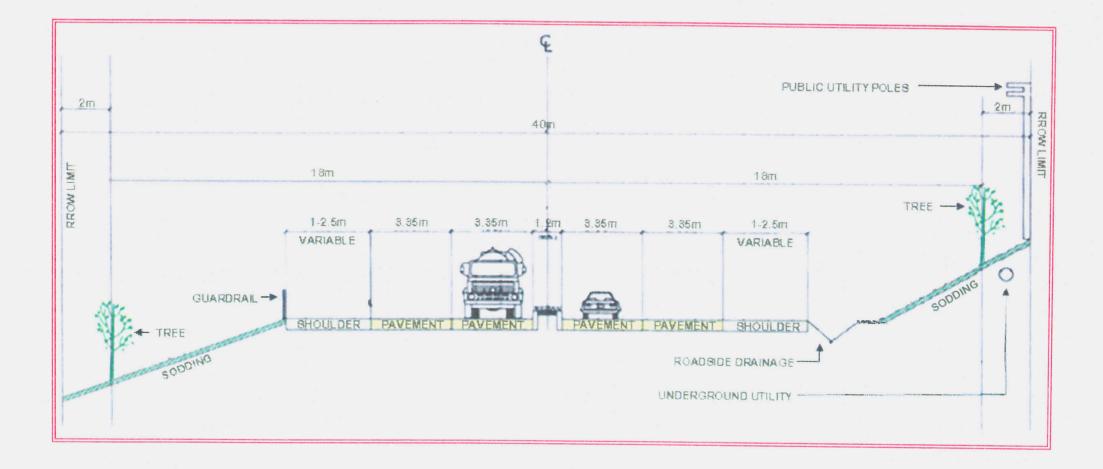
# "B2" - Typical Roadway Section for the 30.0m RROW (Cut & Fill) for Rural Areas



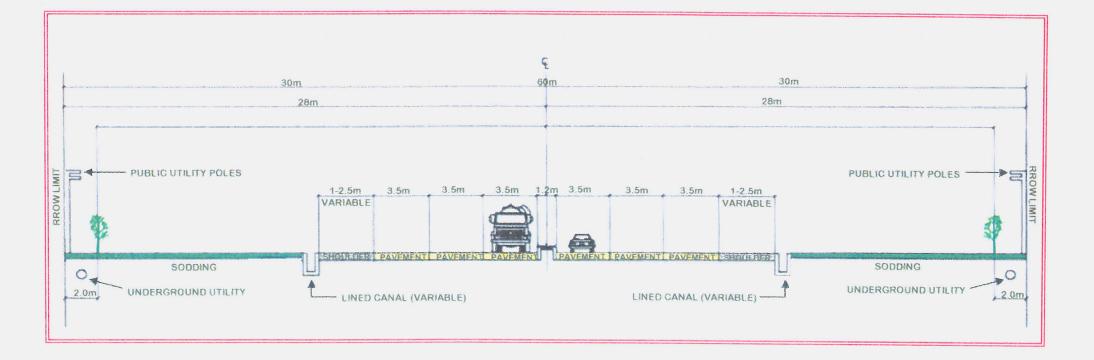
### "C1" - Typical Roadway Section for 40.0m RROW for Urbanized and Rural Areas



# "C2" - Typical Roadway Section for 40.0m RROW (Cut & Fill) for Rural Areas



## "D1" - Typical Roadway Section for 60.0m RROW for Urbanized and Rural Areas



ē

# "D2" - Typical Roadway Section for 60.0m RROW for (Cut & Fill) for Urbanized and Rural Areas

