

## 付属資料3. 対処方針

### フィリピン国北部バラワン持続可能型観光開発計画調査 事前調査 (I/A協議) 対処方針案

#### I. 事前調査の目的

以下の通り整理し説明する。

1. 先方政府の要請背景、内容及び意向の確認
2. 本格調査の実施方針及びI/Aの協議
3. 先方受け入れ体制の確認
  - 先方政府の実施すべき事項
  - 先方カウンターパート機関 (観光省: DOT)
  - 調整等を目的とする委員会 (ステアリング・コミティー) の設置の必要性の確認
  - 環境保全・開発関連の既存の法・制度・機構との調整
  - 本件調査実施中の開発計画・実施 (公共・民間) への対処
  - NGO、地域住民等への対応
  - その他
4. 本格調査に必要な事項の確認

#### II. 要請内容及び意向の確認

##### 1. 全般

当方の本件調査に関する考え方 (特に、持続可能型観光の概念) を説明し確認するとともに、合意事項については、先方と事前調査団がS/W、M/Mに署名し、確認する。

##### 2. 調査の目的

フィリピン国北部バラワンにおいて、無秩序な環境破壊を防止するため、環境保全を基本とし、地域社会に寄与する持続可能型観光開発計画 (マスタープラン) 及び優先ゾーンにおける開発計画 (フィージビリティ調査) を策定すること。

#### III. 本格調査の前提条件の確認

##### 1. 開発規模・範囲の設定の基本的考え方

本件調査は、従来の観光開発調査のような、観光客を呼び寄せることによる経済的収入の増加をめざし、そのためのインフラ及び施設を整備し、民間投資を促進する観光と、目的や開発・実施形態が全く異なる。

即ち、本件調査では、北部バラワン地域の保護すべき自然環境及び社会環境に基づき、環境保全目標を前提とし、この保全目標を達しうる開発規模・範囲・程度 (例えば、インフラの種類、規模等) を明らかにし、その中での観光 (持続可能型観光) 開発・実施形態を明示するものである。なお、本件プロジェクトによる地元への経済波及効果については調査のスコープに含まれており、その点は配慮されるが、加えて地元の社会インフラ開発についても本件調査の中で補足的に検討し提言していくこととする。[M/Mに記載]

また、日本のODAによる社会インフラ整備の可能性に関する言及についてはあくまでノンコミットルベースで、外務省・日本大使館の了解のもとに、行うこととする。

## 2. 重大な環境影響が予想され大規模観光につながる可能性の高い開発計画について

将来、対象地域の自然・社会環境に重大な影響を与える可能性の高いプロジェクト、また将来の大規模な観光開発を招来することが予想されるプロジェクトの計画については、本件調査の基本的考え方、すなわち開発規模・範囲の設定、ゾーニング等に大きく影響する。従って、上述のような開発計画については、計画を凍結し、本件調査により策定されるマスタープランに従って開発規模・位置等を計画し直すこと並びに建設中及び供用時の環境影響軽減策を確実に施すことを本件調査実施の前提条件として示し、フィリピン側の理解を求める。〔M/Mに記載〕

上記に関連するプロジェクトのうち、現時点で計画の存在が確認されているもので、大規模な観光開発につながりかねないと判断されるプロジェクトについては、事前調査団が、可能な限り現地視察を行い、事実関係と現状を確認する。（具体的にはサンドバル空港拡張計画、北部パラワン道路計画等）  
〔現地調査のアレンジ、飛行機・ヘリコプターの手配〕

現在既に建設されている空港・道路等のインフラやその他のプロジェクトについては、JICA事前調査団として具体的な対応はしないが、周辺環境に与える影響が特に甚大で問題ありと判断される場合は、東京に連絡をとった上で、次のように対応する。当該インフラの施工方法及び供用において環境影響軽減策をとることをフィリピン側に勧告する。併せて、本件調査の中でも現状の評価とともに対策を提言する。〔M/Mに記載〕

フィリピン側との協議結果如何により、次のような措置をとることとする。

1) 上記に含まれると判断されるプロジェクトが既に承認され、実施が決定されている場合及び計画の凍結に関し合意を得られない場合は、請訓したうえ、本件調査団を第2次コンタクトミッションに変更する（即ち、I/Aを締結しない）こととし、今後の方針については日本に持ち帰り検討することとする。（場合によっては、本件調査を実施しないことを事前調査団から東京に提案することも有り得る。）フィリピン側には、現地の状況が本件調査開始の前提条件を満たしていないことから、日本側の対応方針を一時保留にすると旨説明し、M/Mで確認する。

2) 上記に含まれると判断されるプロジェクトの凍結が本格調査実施中に解除された（約束がほごにされた）場合は、その時点で調査を中止する旨提案し確認する。〔M/Mに記載〕

## 3. JICAの観光開発調査プロジェクトにおける公共性の担保

本件調査における公共性の担保条件は、第2フェーズにおける優先ゾーンの設定に際して慎重に検討されなければならない。この点については、本格調査の後半に問題を残さないように、事前調査の段階でフィリピン側の合意を取り付けておく必要がある。〔以下の主旨の要約をM/Mで確認し合意する〕

本件について合意を得られない場合は、請訓し指示を仰ぐ。

JICA開発調査は日本の公的な援助による事業であり、特定の個人・法人の利益を目的としたプロジェクトは実施することはできない。しかし、プロジェクトの目的

が当該対象地域の経済・社会の発展に寄与することであって、その実施主体に一部民間企業や第三セクターを含む場合については、実施の妥当性を必ずしも否定していない。

観光開発事業は、その実施主体は民間企業であるが、観光開発を通じて当該国に外貨収入がもたらされること、経済波及効果により地元雇用機会や所得向上機会が提供されること、関連インフラの整備により地域の産業・生活のレベルが向上すること自体は、JICA事業の目的として認められるものと判断している。更に、JICAプロジェクトのうち、ハードの計画については、個々の民間企業が行う観光事業までは対象としておらず、観光投資を促進するための基本的なインフラ整備までを対象とするものである。ソフトの部分についても、対象地域の観光資源の価値の評価と、その価値による観光客導入を拡大させるための一般的な方法論の検討までを調査範囲としており、特定の観光事業者にのみひびく性格のものではない。

JICA調査において公共性が担保されるか否かは、当該プロジェクトの便益対象(beneficiaries)の問題に帰着するものである。

本件調査における公共性の担保条件は、第2フェーズにおける優先ゾーンの設定に際して慎重に検討されなければならない。

北部パラワン環境の性質、観光資源の分布、主要産業である農業(稲作)地域の分布を考慮すると、特に希少性の高く従って価値の高い海洋性リゾートの分布と住民居住区の分布はあまり重なりあわない特徴がある。それらの観光スポットは、珊瑚礁等の存在により海からのアクセスも制限され、陸上も原生林が分布していることから道路整備がこれまで制限されてきたためアクセスしにくい。一部の先住民居住区を除き、そのような観光スポットに近い地域での住民居住は一般的に希薄である。

この点から、本件対象地域では、環境的・観光的価値の高い観光スポットへのアクセス施設は公共性が低く、個別の観光事業に付随する性格のものであることが予想できる。(外部経済性は低いので、いわゆるインフラストラクチャーの定義からはずれずる。) また、自然環境保全目標から導出される開発許容量の制約から、個々の観光スポットへのアクセス能力は中小規模のもので十分であると予想される。

観光開発優先ゾーンを設定する場合のポイントは、おおよそ次のようになるであろう。

- ・北部パラワンへのメインのGatewayはPuerto Princesaとなろう。個々の観光スポットへのアクセスは、Puerto Princesaからのフィーダーラインとして位置づけられる。即ち、2000m級空港はPuerto Princesa空港が既に存在しており、そこを起点として個々の観光スポットの近傍に1000m以下の規模の空港が配置される形が妥当であろう。

- ・環境保全目標から、環境的な希少性が低く、環境への負荷が比較的小さいと考えられる地域が対象となろう。

  - ：スールー海側よりは南シナ海側
  - ：既に開発された地域に近い地域

- ・計画対象となるインフラの公共性(F/S対象施設としての妥当性)の観点から、地域の産業活動の領域に比較的近く、観光スポットへのアクセス施設が公共にもひびく比率が高い地域が対象となろう。

- ・観光産業による地元への経済波及効果の観点から、地元住民が雇用され通勤できる範囲の地域が妥当であろう。

- ・以上のような条件を満たす地域では、第1級の自然環境を観光で消費する活動ではなく、第2級の自然環境を利用しながら観光事業としてのサービスの質の高さと観光客を引きつける高い娯楽性等のノウハウによって事業の採算性を確保し

ていくような事業が想定される。そのような観光事業を公的なスキームで支援していくことが妥当であると思われる。

#### 4. 制度的枠組みの確立について

本件対象地域には、すでに中小規模のリゾートが存在し、様々の開発が進みつつある。しかし、環境保全保護のための規制が充分機能しておらず、環境を破壊する大規模開発の懸念がある。従って、無秩序な開発による環境の消失を防止するための機構づくりが必要であり、本件調査によりその枠組みの確立をめざす。即ち、現在重複している、あるいは統一されていない開発規制のための法・基準・ガイドライン、また、それらの実施体制等を見直し、環境保全と環境保全が可能な開発のための法・基準・ガイドラインの整備、その実施体制の権限・任務等を示す。また、そのための中央・地方関係機関の権限・任務を調整する方法・機構についての提言も含む。さらに、政府による規制のみでなく、民間の開発・保全へのイニシアティブを誘導する仕組みづくりの検討にも重点を置く。[M/Mに記載]

#### I.V. 本格調査の実施方針及びI/A内容の協議

あらかじめ作成したI/A案をもとに説明、協議。合意後、双方の代表者が署名。

##### 1. 本格調査の目的

- (1) フィリピン国北部バラワンにおける、環境保全を基本とし、地域社会に寄与する持続可能型観光開発計画（マスタープラン）の策定
- (2) 優先ゾーンにおける開発計画の策定

##### 2. 本格調査の対象地域

プエルトプリンセサ市を除き、その北側に位置するバラワン本島及び小諸島  
プエルトプリンセサ市については北部バラワンへのGatewayとして調査地域に含む。  
Cuyo Islands 及びTubbataha Reefsについては（バラワン州ではあるが）バラワン本島から遠隔に位置するため調査対象地域から除外する。[I/Aに記載]

##### 3. 優先ゾーンにおける開発計画：

持続可能型観光開発計画（マスタープラン）対象地域よりF/S対象プロジェクトとして選定する。その場合は、対象プロジェクトの公共性に十分配慮することとする。  
[M/Mに記載]

##### 4. 目標年次

フィリピン側と協議の上、各計画毎に以下の年次を目途として設定する。[M/Mに記載]

- (1) 持続可能型観光開発マスタープラン：2010年
- (2) 優先ゾーンにおける開発計画：2005年

##### 5. DOTからのTOR案への要望（1995年1月11日付）への対処

###### (1) 対象地域：

DOTは、WTO及びEUによる調査で設定された通り、プエルト・プリンセサ市を対象地域に含めることを要望しているが、上記の通り対処する。

(2) 目的1 (2ページ目) :

本件調査及びDOTによる開発に対する規制の限界を考慮し、DOTの要望通り、control  
に変え、directにする。[I/A修正済み]

(3) 持続的開発のための戦略 (第3ページ) :

DOTの要望は、「計画のあらゆる段階において、コミュニティからの意見聴取と対  
話を行うこと」を第4項目として追加することである。これは、DOTが、地元住民に本  
件調査の状況を伝え、彼らの考えを述べる機会を与えるべきであると考えているためとし  
ている。

日本側は、本件調査の状況を地元住民・コミュニティに伝え、彼らの考えを述べ  
る機会を与えることは必要であると考えており、適宜コミュニティ及びNGOへの説明  
会を行う予定である。しかし、日本側が公式にコミュニティからの意見聴取と対話  
を行うことは、当事国の内政に関わる事項であり、要請政府 (DOT) が行うのが適当あ  
ると述べ、以下のように記載、確認、署名する。

[I/Aにおける記載]

I/AにSpecial Consideration (Strategiesを含む) を記載しない。

[M/Mにおいて、具体的に記載]

計画段階におけるコミュニティからの意見聴取と対話は、要請政府 (DOT及び/  
または調整等のための委員会) の責任の下に行い、日本側は、そのための活動に適  
宜助言及び援助を行う。その一貫として日本側は、計画段階において、コミュニテ  
ィー、NGO等関係団体・個人に対し、調査状況について適宜 (非公式に) 説明会を行  
う。

(4) 観光開発による社会・文化的影響の考慮

DOTは、「観光開発による社会・文化的影響の考慮」を要望している。「観光開発に  
よる社会・文化的影響」は、TOR案のScope of Work 3 (1) (2) (4) 及び 4 (4)  
において考慮しているが、明確にするために、I/A 4 (4) において次の通り下線部分  
を変更・追加する: socio-economic analysis (including the consideration of imp  
acts on income distribution and the socio-cultural impacts)

(5) 地域住民等の意向の取込み

DOTは、3 (7) (第6ページ) の「地域住民、NGO、学術研究機関・個人及び民間関連  
企業の意向の取込み」において、並列して「地方政府及び政府関係機関の包括」を加  
えることを要望している。

日本側は、カウンターパートであるDOTと政府関係機関及び地方政府との調整及び協  
力は本件調査、環境保全型観光開発において必須と考えている。「地方政府及び政府  
関係機関の包括」については、TOR案のS/W 3 (2) の the identification of enforc  
ing and responsible bodies 及び 3 (4) 観光開発プログラム、(5) 環境管理プログ  
ラムにおいて、具体的に、地方政府及び政府関係機関の協力体制と各機関の役割分担  
の確認を行う。また、計画段階においては、調整等のための委員会 (ステアリングコ  
ミティー) をDOTの責任の下に設立することを提言し、日本側は、委員会に適宜助言と  
援助を行うと述べる。I/A及びM/Mにおいて以下の通り記載し、確認、署名する。

[I/Aにおける記載]

TOR案に示したScope of Workと同様

[M/Mにおける記載]

計画段階における中央・地方政府関係機関の調整等のために、フィリピン側 (DO  
T) は委員会 (ステアリング・コミティー) を組織する。その組織、構成、権限及び運  
営後の委員会の協議等について、日本側は適宜助言及びコメントし、必要であれば参  
加する。

(6) 環境影響評価について

DOTは、4 (5) environmental impact assessment (EIA) をenvironmental impact assessment/environmental compliance certificateに変更することを提案している。現在、environmental compliance certificateは、DENR/PCSD (パラワン評議会) により出されている。本件調査は、日本側がフィリピン政府側の要請により行うものであり、certificateはEIAの結果に基づき、DENR/PCSD、あるいは委員会 (ステアリング・コミティー) 等フィリピン政府側が決めたその権限のある機関が発行するのが適当であると考えたと述べる。I/A及びM/Mにおいて以下の通り記載し、確認、署名する。

[I/Aにおける記載]

TOR案に示したScope of Workと同様

[M/Mにおける記載]

environmental compliance certificateは、DENR/PCSD (パラワン評議会) あるいは委員会 (ステアリング・コミティー) 等フィリピン政府側が決めたその権限のある機関が、本件調査EIAの結果に基づき発行する。

(7) 技術移転について

DOTは、DOT職員への何らかの形での技術移転を要望している。日本側は、本格調査の期間中、調査に参画するフィリピン側カウンターパートに対し、セミナー、カウンターパート研修等を通じた技術移転の可能性を述べる。セミナー、カウンターパート研修等具体的な要請があった場合、その内容を伝達する旨M/Mに記載する。

6. 本格調査の内容と項目

1. 現状分析

- (1) 関係資料・情報の収集
- (2) 現況調査・評価 (自然環境、社会環境、土地保有等)

2. 持続可能型観光開発戦略の策定

- (1) 環境保全目標
- (2) 観光開発目標
- (3) 観光開発戦略の策定 (インフラ整備許容限度の検討)

3. 持続可能型観光開発計画 (マスタープラン) の策定

- (1) 観光政策
- (2) 基準・ガイドライン・法及び実施体制 (環境、観光)
- (3) マーケット調査
- (4) 観光管理運営 (政府、民間)
- (5) 環境保全管理
- (6) 観光施設・サービス、交通ネットワーク
- (7) 地域住民・NGO・学術関係・観光関連企業の協力体制
- (8) 初期環境調査 (IEE)
- (9) 概算事業費積算
- (10) 予備的経済分析
- (11) 総合評価及び優先ゾーンの選定

4. 優先ゾーンにおける持続可能型観光開発計画の策定

- (1) 適正規模の設定
- (2) 観光活動形態
- (3) 施設整備計画
- (4) 経済・財務分析及び社会・経済分析
- (5) 環境影響評価 (EIA)
- (6) 優先ゾーンにおける観光開発計画の評価

5. アクション・プログラムの策定

6. 総合評価及び事業実施に必要な制度・機構に関する提言

7. 調査期間

着手からF/R提出まで、17カ月程度

8. 報告書

部数については、先方政府の要望確認の上、事前調査団の判断で変更できるものとする。

1. インセプションレポート (30部)  
本格調査開始時  
調査実施方針、スケジュール等を記載
2. プロGRESSレポート (1) (30部)  
調査開始後5カ月以内  
現地調査結果概要 (開発戦略の策定まで)
3. インテリムレポート (30部)  
調査開始後10カ月以内  
持続可能型観光開発マスタープランの概要
4. ドラフトファイナルレポート (50部)  
調査開始後15カ月以内  
全結果
5. ファイナルレポート (50部)  
ドラフトファイナルレポートに対するコメント受領後2カ月以内

V. その他本格調査に必要な確認事項

[主として、質問書で対応する]

1. 対象地域に進行中、計画中の民間による開発の現状と対応、本件調査との調整  
(例：台湾系資本によるプエルト・プリンセサ市の「環境」プロジェクト、天然ガス・パイプライン・プロジェクト)
2. 対象地域に進行中、計画中の中央・地方政府関連プロジェクト等との関係 (例：サンドバル空港及び道路建設プロジェクト)
3. 他国機関及び国際機関の援助動向と本件調査との調整  
(例：ADB、USAID、EU、オランダ)
4. 予算措置の現状
5. 地域住民、NGO、学術研究関係機関等関係する団体・個人への対応及びその意向
6. 優先ゾーンについての意向
7. 既存情報・資料入手、保持、存在状況
8. 環境保全及び観光その他開発規制に関する法・制度、その実施・責任機関及び  
(これまでに資料・情報の提供があったが、実際に機能しているか等現状についての情報が必要)
9. 先方受入体制の確認
  - (1) 先方の実施すべき事項  
I/A案のUndertaking of GOPをもとに協議する。
  - (2) 先方カウンターパート機関
    - (2-1) カウンターパート機関の確認 [DOT]
    - (2-2) 関連機関の協力体制の確認

- (2-3) 調整等を目的とする委員会（ステアリング・コミティー）の設置を強く求める。設置について合意されれば、その役割・権限及び日本側との関係を確認する。設置について合意が認められない場合、各機関において、実施調査団が情報収集・意見交換等を行う際に対応できる担当者の選定を先方政府側にて本格調査までに行っておく旨M/Mに記載する。

## V.I. 請訓事項

現地にて協議の結果、調査内容について本質的な変更を求められた場合、Undertakingの内容に係わる事項である場合は、必要に応じ請訓する。事業実施段階における資金調達に関しては、基本的には調査団の権限の範囲外である旨伝えることとするが、地元には益するBHNインフラ整備について取り組みたい旨、ノンコミットルベースで発言することとする。

具体的な請訓事項として予定している事項は以下の通り。

- (1) 対象地域において重大な環境影響が予想され大規模観光につながる可能性の高い開発計画の本格調査終了まで（実質的にはマスタープラン策定までか？）の凍結並びに、本件調査により策定されるマスタープランに従って開発規模・位置等を計画し直すこと、並びに建設中及び供用時の環境影響軽減策を確実に施すことに関しフィリピン側の合意が得られない場合、本件調査団を第2次コンタクトミッションに変更する（即ち、I/Aを締結しない）ことに関して請訓する。
- (2) 現在建設が進行中の観光開発プロジェクト（サンドバル空港を含む）が既に環境に甚大な影響を与えていると判断された場合、請訓または報告する。
- (3) 本件調査における優先ゾーンの選定の基本的考え方、即ち公共性の担保について、合意が得られない場合、請訓し指示を仰ぐ。

## V.I.I. 合意議事録により確認する事項

現時点で合意議事録において確認することを予定している具体的事項は以下の通りである。なお、以下の事項については、フィリピン側との協議において我が方の見解を明確に示す目的から、AIDE MEMOIRの形で成文化したものを先方に提示することを予定している。

### 1. 本格調査の前提条件

- (1) 開発規模・範囲の設定の基本的考え方
- (2) 対象地域において重大な環境影響が予想され大規模観光につながる可能性の高い開発計画の本格調査終了までの凍結、並びに、本件調査により策定されるマスタープランに従って開発規模・位置等を計画し直すこと、並びに、建設中及び供用時の環境影響軽減策を確実に施すこと
- (3) 上記の計画の凍結が日本側に事前協議なく解除された場合の調査中止
- (4) 現在進行中の観光開発プロジェクトの環境破壊が甚大であると判断した場合の善処策
- (5) 優先プロジェクトの絞り込みの規範（公共性の担保）
- (6) 制度的枠組の確立について

### 2. 本格調査の戦略について

予備調査の時点で先方に提示したTOR案のうちStrategiesの部分

### 3. 本格調査の対象地域

I/Aにおいて記載することとするが、より詳細な記述が必要な場合

### 4. DOTのTOR案に対する意見の反映



- (1) 持続的観光開発のための戦略：計画段階からのコミュニティとの対話・意見交換
- (2) 地域住民等の意向の取り込み
- (3) 環境影響評価について
- (4) 技術移転について

## 5. 目標年次について

TERMS OF REFERENCE  
ON ECO-TOURISM MASTER PLAN  
FOR NORTHERN PALAWAN

BACKGROUND AND JUSTIFICATION

Tourism development is an important element of regional development, specially in an archipelagic country endowed with rich natural and cultural resources like the Philippines. The Department of Tourism (DOT) has been playing a vital role in contributing to the balanced socio-economic development of various regions of the country through developing the tourism sector. In 1992, the tourism sector generated over 84 billion pesos in gross revenues, accounted for 5.2% of GDP, employed approximately 680,000 people and generated US\$1.5 billion in net foreign exchange for the country. In view of the economic and social significance of the sector, the Government intends to further develop and promote the tourism sector.

The current development policy was determined by the Tourism Master Plan in 1991. In this master plan, the tourism development is based on a policy of creating the following three (3) tourism development clusters which comprise the international gateways linked to a variety of satellite destinations:

- o Luzon cluster including Palawan, Mindoro, and Marinduque
- o Visayas cluster including Cebu, Bohol, Samar, Leyte, Negros Occidental and Oriental, and Panay
- o Mindanao cluster including Davao, Zamboanga del Sur and Norte, Misamis Oriental and Occidental

While Metro Manila, Cebu and Davao are intended for mass tourism, DOT intends to look into in detail opportunities of eco-tourism development where rich and sensitive natural environment is a primary attraction for tourists. Thus, careful development is needed. Northern Palawan, Bohol Island and Northern Luzon were selected as potential eco-tourism development areas. Since the concept of eco-tourism has not been specifically defined and development guidelines have not been clearly delineated, it is strongly recommended that a full-scale development study be undertaken before ad hoc developments take place.

Northern Palawan, an area identified by the WTO/UNDP Tourism Master Plan for the Philippines will be the focus of the study.

The Northern Palawan area represents one of the most environmentally and culturally sensitive areas in the Philippines. Its natural heritage is of world heritage importance while its ethnic communities still cling to traditional ways of life that are unique and of great anthropological interest. Tourism, if it is to receive long-term acceptance as a serious factor in the Palawan community, must contribute to the preservation of both the environment and cultural heritage.

From ecological point of view, Northern Palawan extends far beyond its boundaries into the surrounding marine environment. It contains pristine terrestrial and marine habitats that are regarded as being of world importance.

Taking into account the fact that Japan has an extensive experience in eco-tourism or environment-sensitive development and the fact that it is also a major tourists generating country, it is considered appropriate to request assistance from the Japanese Government through JICA.

### OBJECTIVES

The basic objective of the Project is to provide a framework for the orderly development of tourism that will ensure the sustainability of the environment and other resources. The objectives are more specifically as follows:

- o to formulate a long term tourism master plan for Northern Palawan;
- o to conduct feasibility studies on the identified priority infrastructure projects and/or priority development areas; and
- o to formulate development guidelines and necessary institutional framework to achieve envisioned eco-tourism development.

### III. STUDY AREA

The localities in Northern Palawan which are of specific concern to the study include:

- o municipalities in the main land - Puerto Princesa City, San Vicente, El Nido, Roxas and Taytay;
- o embayments and related features - Imuran Bay, St. Paul Underground River, Masampaya Sound, Honda Bay, Bacuit Bay, bays at eastern coast; and
- o island groups - Calamian group of islands, e.g., Coron, Busuanga, Calauit, and the Cuyo group of islands.

## 1. PALAWAN PROFILE

The Province of Palawan is the largest in the Philippines but one of the least populated. It contains some 1,768 islands and has a total land area of 1.5 million hectares which is about 5 per cent of that of the Philippines.

The main island of Palawan is the largest occupying 80 per cent of the total land area and with about 70 per cent of the population. The other islands fall into three main groups: the Calamian group in the north, Dumarang-Cuyo group in the northeast, and Balabac-Bugsuk group in the southwest.

Palawan has a tropical monsoon climate with monthly temperature ranging between 27 and 29 degrees Celsius, with relative humidity between 70 and 86 per cent. The dry season is generally from January to April, with rains from May to December. Typhoon seldom occurs specially in the southern portion.

The main island of Palawan is 425 km. long, 40 km wide at its widest at Brooke's Point and 8.5 km at its narrowest at Bahile, Puerto Princesa. A chain of mountains, averaging 1,100 m. but reaching 2,086 at the highest point runs along almost the whole length of the island, creating a major barrier to communications between the east and the west.

About 30 per cent of the total land area of Palawan has agricultural potential, but only one quarter of this is currently farmed, leaving over 300,000 has. currently unproductive. The most suitable areas of the island for both cultivation and settlement are the coastal plains of southeast, while the north and the west coasts have virtually no flat land except for narrow

valleys. Many of the smaller islands consist of narrow coastal plains with mountainous interiors and offer relatively little area for development. Major constraints with regards to agricultural development includes difficulties in obtaining title to land, the concentration of ownership of workable land, poor availability of labor and draft power, and the low level of support services and infrastructure.

Much of the mountain and upland area is covered with forest which accounts for over 700,000 has. of land. Almost one third of this total forest resource has been allocated to three logging companies.

Palawan, also has rich fishing grounds and important mineral reserves. It can boast of striking physical features and a rich variety of flora and fauna for tourism-based development.

The current population of the province is estimated to be between 500,000 and 600,000. Population increase is mainly attributed to immigration rather than by birth. In 1985 household income was P20,740 per annum, almost 50 per cent below the national average. The prime pockets of poverty are in the upland areas, where agriculture is difficult and access to markets, services and facilities poor.

The rich environment of Palawan is subjected to a number of major threats including excessive mining activities, logging and "slash-and-burn" agriculture with resultant damage to the soil and residual trees, overfishing and unregulated migration from other parts of the Philippines. A fundamental issue in all of these sectors is the enforcement of control procedures. In tourism for example, the province is controlled from Manila or even overseas, and does little to promote the local economy, while preventing local access to prime areas.

## 2. SECTOR PROFILE

### 2.1 Infrastructure Situation

#### 2.1.1 Roads

Palawan with its 14,869.55 square kilometers of land area is served by a road system of only 4,022.337 kilometers.

Of these, only 366.526 kilometers of 9.11% are paved roads (concrete and asphalt).

Approximately, 45% of all roads are gravel-finished which earth-surfaced roads account 45%.

<sup>among (?)</sup>

#### 2.1.2 Ports and Piers

At present, there are 50 ports existing in the province, of which six (6) are national, 19 municipal and 25 are private.

#### 2.1.3 Airports and Airstrips

There are, at present, three (3) national, three military and 10 privately-operated airports in the province.

#### 2.1.4 Power and Communication

The National Power Corporation has energized seven (7) municipalities, 104 barangays with 25,163 household connections.

The Provincial Radio Communication System (PRCS) has established 17 operational radio stations in the province. Four (4) private telegraph companies have also established 14 stations in the entire province. The Filipino Telephone Corporation has established 774 stations located in the City of Puerto Princesa.

#### 2.1.5 Water Supply

There are 524 units of waterworks system in the entire province: Level I - 456 units; Level III - 18 systems.

### 2.2 Population and Demography

In 1990, the province of Palawan has an estimated population of 528,287 with an average growth rate of 3.58% per annum.

Population density was estimated to 33 persons per square kilometer.

### 2.3 Agriculture and Fisheries

Total cultivated area is estimated to 239,018.3 hectares planted to various crops.

Rice production in 1990 was estimated to 63,178 m.t. with a production surplus of 5,669.81 m.t., and 98,366 m.t. for coconut.

Total fish production in 1990 was estimated to 57,860,273 m.t. both commercial and municipal fisheries.

### 2.4 Natural Resources Situation

#### 2.4.1 Forestry

Sixty per cent (750,000 hectares) of the area of mainland Palawan is forested. Some 360,000 has. are classified as non-commercial forest, being chiefly as watershed. Several minor products are also being harvested from the province' forest, among which are almaciga, rattan, buho, and others.

Palawan forests are also host to some 1,670 species of flora and diverse fauna species, some of which are considered rare.

A law was enacted as Republic Act 7611 adopting a Strategic Environmental Plan for Palawan towards Sustainable Development implemented by the Palawan Council for Sustainable Development led by the Governor of the province.

Supportive to this program is the Provincial Government, National Government Agencies and the Non-government Organizations implementing the Bantay Palawan Program for the protection and conservation of the forest and marine resources.

## 2.4.2 Mineral Resources

The metallic minerals found in the province are: nickel, chromite, manganese and laterite iron. Non-metallic minerals are also found in the province are clay, limestone, sulfur and cement ore.

### Project Areas

Among the areas in Northern Palawan, the following were identified as the major tourism potentials for private investments:

<u>Island Special Interest</u>	<u>Hectares</u>	<u>Rooms</u>	<u>Rooms/Ha</u>
Linapacan, East El Nido, Shark's Fin Bay & Taytay Bay	330	1,000	3.0
El Nido Municipality:			
Bacuit Bay	650	1,500	2.3
Barotoan	500	3,000	6.0
San Vicente	1,000	5,000	5.0
Cuyo	150	200	1.3
Roxas	200	400	2.0
Coron	300	900	3.0
Busuanga	200	600	3.0
Puerto Princesa City	300	900	3.0
Total	3,330	13,500	4.0



Population Distribution and Average Annual Growth Rate by Municipality 1980, 1988, 1990

Population MUNICIPALITY	Growth Rate				
	1980	1988	1990	1980-1988	1980-1990
Puerto Princesa City	60,234	82,058	92,147	3.94	434
Busuanga	10,348	10,875	11,007	0.62	0.62
Coron	25,129	31,440	33,228	2.84	2.83
Cuyo	14,692	15,294	15,595	0.41	0.40
El Nido	11,657	15,991	18,832	4.03	4.91
Roxas	24,890	33,894	36,604	3.94	3.93
San Vicente	10,097	16,501	17,795	6.33	5.83
Taytay	22,980	34,370	38,435	5.16	5.28
<b>TOTAL</b>	<b>180,027</b>	<b>240,423</b>	<b>241,643</b>	<b>27.27</b>	<b>28.14</b>

IV. SCOPE OF WORK

The entire study will be composed of two (2) phases:

PHASE I - MASTER PLAN STUDY

1. Assessment of Existing Conditions and Resources
  - 1.1 conduct of necessary field surveys;
  - 1.2 inventory of natural and eco-tourism resources;
  - 1.3 existing infrastructure and its management covering transportation, telecommunications, power, utilities, etc;

- 1.4 socio-economic activities covering agriculture, forestry, fishery, industry, commerce, community service, etc.; and
  - 1.5 local government administration.
2. Identification of Development Opportunities and Directions
    - 2.1 review of existing regional and tourism development plans/policies;
    - 2.2 elaboration of eco-tourism concept;
    - 2.3 assessment of existing ecosystem; and
    - 2.4 demand analysis and forecast (market study).
  3. Formulation of Development Plans
    - 3.1 preparation of alternative development scenario;
    - 3.2 establishment of development standards and guidelines;
    - 3.3 determination of appropriate infrastructure facilities and services;
    - 3.4 formulation of physical development plans;
    - 3.5 establishment of suitable marketing and financing strategies;
    - 3.6 establishment of environmental management program;
    - 3.7 assessment of socio-cultural impact; and
    - 3.8 formulation of administrative framework to manage development activities of the areas.
  4. Selection of Priority Development Areas for Feasibility Study
  5. Recommendations

## PHASE II - FEASIBILITY STUDY

For Selected Priority Areas, feasibility studies will be conducted:

1. assessment of existing conditions and resources;
2. identification of development opportunities and directions;
3. formulation of development plans;
4. conduct of necessary engineering studies;
5. estimate of construction costs and other inputs;
6. preparation of implementation plans; and
7. conclusion and recommendations.

## V. STUDY SCHEDULE

The study will be completed within 1.5 years after commencement of the project. One (1) year is allocated for the preparation of the Master Plan and five (5) months for the preparation of feasibility studies of the identified components of the Plan.

## VI. EXPECTED MAJOR OUTPUTS OF THE STUDY

The study, upon completion shall be required to have the following:

- o Final Report
- o Maps in the scale of 1:50,000 for all areas identified for development including the overlays of the proposed development
- o Marketing study incorporating demand forecasts and the appropriate strategies to support the same
- o Environmental management programs incorporating development standards and guidelines including enforcement procedures; and designs for proposed structures and facilities in the study area
- o Socio-cultural impact study of the effects of tourism in the study area and recommendations to mitigate identified problems attributable to the proposed activities
- o Feasibility studies of proposed projects required for the study area.

## VII. IMPLEMENTATION ARRANGEMENT

Participatory planning processes shall be the methodology in the preparation of the Master Plan. The provincial Government, municipal government units and the constituents shall be consulted to ensure that the Plan is responsive to both the protection and enhancement of the environment and rural development. This would further ensure the protection of the communities' welfare relating to values, labor and settlement displacement, livelihood/employment opportunities and other social services.

## VIII. FACILITIES AND INFORMATION

An inter-agency counterpart staff from the Department of Tourism, Department of Environment and Natural Resources, Department of Transportation and Communication, Palawan Council for Sustainable Development Staff and the Provincial Government of Palawan

(Provincial Engineer's Office, Provincial Agriculture Office, Provincial Planning and Development Office) shall be organized for the planning period.

The following are the specialist counterpart committed to the Project:

- Infrastructure Planner (2)
- Forestry Specialist (1)
- Coastal Resources Management Specialist (1)
- Agriculture Development Planner (1)
- Economist (1)
- Financial Analyst (1)
- Sociologist (1)
- Environmental Planner (1)
- Marketing Specialist (1)
- Institutional Development Planner (1)
- Administrative Staff

Pertinent data are available at the Department of Tourism, Provincial Government, Palawan Council for Sustainable Development and other concerned agencies.

## 付属資料5. 本件予備調査結果資料

### 1. 要請の背景

フィリピン国北部パラワンは、貴重な環境資源が残る同国最後の場所の一つとされており、同地域の地域開発の方向として、自然環境及び社会環境を基本とした観光開発の可能性の検討が必要と考えられるようになった。現地では、エコツーリズムの志向を掲げる民間企業が存在するが、自然環境保全のための規制が充分機能していない現状であることに加え、エコツーリズムの概念が不明確であることも相伴って、エコツーリズムの名目のもとに、実態は環境に悪影響を与える大規模開発が行われる懸念がある。このような状況の中、フィリピン国政府は、同地域のエコツーリズム開発マスタープランの策定と、インフラ整備等を含むフィージビリティ調査の要請を行ったが、その内容は、大規模観光に結び付く可能性の大きいものであった。日本政府は、フィリピン国の要請に基づき、北部パラワンの環境保全の重要性及び同地域の経済・社会発展の必要性を鑑みたところ、大規模観光開発の可能性を排除し、北部パラワンの自然環境及び社会環境保全を基本とした地域開発促進の可能性としての持続可能型観光開発が必要であるとし、この必要性を同国政府に対し提言することとした。

なお、同国政府の意向の確認が必要であることに加え、地域開発促進の可能性としての環境保全型観光開発計画調査は、同国・我が国両国にとって新しい分野の協力であり、慎重な計画を要する。このため、1994年11月23日より12月2日の10日間、外務省経済協力局開発協力課斎藤貢首席事務官を団長とする予備調査団を派遣したものである。(調査団員リスト及び日程は別添資料参照のこと)

### 2. 予備調査の目的

今回の予備調査においては、本調査に係る日本側の対案である、持続可能型観光開発調査のTOR案を、先方政府に提示すると共に、その考え方・内容について協議し、当調査の確固たる方向づけを行う。更に、要請背景及び内容の確認・把握と現地調査を含む情報収集を行い、我が国の協力の可能性の検討を踏まえ、本格調査のS/W協議のための予備的調査を実施することを目的とした。

### 3. フィリピン側関係機関・企業・住民等との協議結果

本件調査は、フィリピン側政府機関以外に、観光事業への参加が期待されるNGO、住民、企業等の意向の確認と開発・保全の基本方針の調整が重要であることに鑑み、それらとの協議を行った。

#### (1) フィリピン政府との協議

当初、フィリピン国より提出のあったTORは、エコツーリズムという言葉を用いながら、大規模観光開発を目指したものと考えられたが、今回の協議により、フィリピン国より提出のあったTORは、環境に十分な配慮のない、通常の観光開発型に近い、European Unionの資金援助によるマスタープランを基にしてまとめられたものであることが明確になった。しかし、フィリピン国関係者は、環境保全の必要性を認識しており、日本側の提示した、環境保全を基本とした枠組みの中で、地域社会経済発展に寄与する観光開発という概念について、両国の方向性は一致した。また、フィリピン国政府・地方政府側は、持続可能型観光開発という概念を明確にするために、「エコツーリズム開発」から「持続可能型観光開発」へのタイトルを変更するという日本側の提案に同意した。

## (2) NGO及び地元住民との協議

NGO及び住民運動が活発なフィリピンにおいては、NGO・地元住民の意向の事前聴取が重要と思われる。

マニラ、プエルト・プリンセサにおいてはNGO、エル・ニドにおいては、NGOと地元住民に対する説明会を行った。参加者は、日本側の説明した、「環境保全を基本とした枠組みの中で、地域社会経済開発に寄与する観光開発」及び、日本企業やフィリピン支配階級のためでない、NGO・地域住民の意向を聞く日本ODAの姿勢を高く評価し、今後もNGO・地域住民に適宜報告を行っていくことを要望した。

NGO及び地元住民の意向を取り込むことは、調査にとり「諸刃の剣」となる可能性があるが、本案件においては、調査の過程で、適宜説明会等を行うことにより、NGO等の協力を取り付けることは可能と思われる。

## (3) 日系民間観光関連企業との協議

観光開発は、基本的に民間の企業活動によることを考慮し、北部パラワンにおいて既にリゾートを営んでいる日系二社より、事業内容等につきヒアリングを行い、「本案件調査は、あくまでもフィリピン政府の要請に基づき、フィリピン国民の利益のために行われるものであって、特定企業の利益のために行われるものではない。」ことも明確に伝えた。日系二社は、エコ・ツーリズムをめざし、環境保全及び地元住民の生活向上への貢献を考慮しており、フィリピン政府関係者のみならず、NGOも一定の評価を与えていることが判明した。

## (4) 他国援助機関との協議

北部パラワン地域を対象とした関連プロジェクトを計画、実施している、USAID及びヨーロッパ共同体の二他国機関現地事務所からのヒアリングを行った。二機関とも、地域一体型の環境管理プロジェクトを実施計画しており、二機関は、日本側の説明した、「環境保全を基本とした枠組みの中で、地域社会経済開発に寄与する観光開発」を高く評価すると共に、日本側とのプロジェクトとの相補の可能性について、今後、意見交換していくことで、日本側と一致した。

## (5) 合意議事録

調査団団長の齋藤開協課首席と、観光省のエリザベス・ネレ計画・生産物開発調整課長との間で締結した、ミニッツの概要は以下の通りである。

1. 北部パラワンは、世界的にも評価される、自然環境及び社会環境を有し、環境保全は観光開発にとって重要である。本調査においては、地域住民の環境保全への意識向上及び教育という点を考慮した環境保全を基本とする枠組みの中で、観光開発の規模及び内容の検討を行う。
2. 観光省より当初提出されたTORのタイトルである「エコツーリズム」を、「環境的に持続可能型観光」に変更する。これは、環境的に持続可能であり、経済的に実施可能な観光開発という形態の開発調査であることを明確にするためである。
3. Europe Union (EU) の資金援助による「北部パラワン観光開発予備調査」は、苦心の成果であり、本案件調査の貴重な一参考資料とする。

4. 北部パラワン地域が、無秩序な開発による環境破壊に直面するという事実を考慮すると、本案件調査の早急の開始は必要であるといえる。他方、環境保全型の観光開発調査は、新しいタイプの開発調査であるため、最大限の慎重な手順・方法を取り、実施するべきである。

#### 4. 今後の対応方針

##### (1) S/W協議

今回の合意内容及びTOR案を基に、Scope of Workを作成し、平成7年3月をめどに事前調査団（S/W協議）を派遣する。

##### (2) 他のスキームとの連携

観光開発に対してODAの行えることは、極めて限られているが、本案件については、対象地域の開発が遅れていることを考慮すると、住民のBHN向上のみならず、環境保全に寄与する援助、例えば、海洋環境保護につながる、無償資金協力による上下水道整備等、他のスキームとの連携の可能性の検討が可能と思われる。

添付資料

1. 事前（予備）調査団員名簿

Member of Preparatory Study (Contact Mission)  
Team

氏名	分野	現職
斎藤貢 SAITO, Mitsugu	総括 Leader	外務省経済協力局経済協力課首席事務官(Deputy Director of Development Cooperation Division, Development Cooperation Bureau, MOFA)
中村義宗 NAKAMURA, Yoshimune	観光政策 Tourism Policy	運輸省運輸政策局観光部企画課コンベンション振興指導官 (Senior Officer for Convention Promotion, Planning Division, Tourism Department, Transport Policy Bureau, MOT)
伊藤まり ITO, Mari	調査企画 Study Plan	国際協力事業団 社会開発調査部第一課 ジュニア専門員 (Associate Specialist, First Division, Social Development Study Dept., JICA)



## 2. 調査日程

日付	行程
1 11/23 (水)	東京 - マニラ (JL741) 大使館・JICA事務所表敬・打合せ
2 11/24 (木)	観光省との協議 関係政府機関との協議 (参加団体次頁)
3 11/25 (金)	日系民間観光関連企業からのヒアリング (参加団体次頁) NGOからのヒアリング (参加団体次頁)
4 11/26 (土)	マニラ - エルニド (チャーター機) 北部パラワン調査
5 11/27 (日)	北部パラワン調査 (チャーター機)
6 11/28 (月)	エルニド市関係者からのヒアリング (エルニド市各部局、テン・ノット社、木材業者、バンカーボート団体、ツアーオペレーター協会、NGOs、地域住民、他)  エルニド - プエルトプリンセサ (チャーター機)
7 11/29 (火)	ソクラテス知事、地方政府関係機関との協議 NGOからのヒアリング プエルトプリンセサ - マニラ (PR296)
8 11/30 (水)	ミニッツ準備
9 12/1 (木)	関係政府機関、民間企業、NGOとの全体会議 (参加団体次頁)  ミニッツ協議・署名  USAIDとの協議 (Dr. John Aron Grayzel (Chief, ONRAD)、 Dr. Ronald S. Senykoff (Chief, Natural Resources Division))
10 12/2 (金)	EUからのヒアリング 大使館・JICA事務所へ報告 マニラ - 東京 (JL742)

11月24日 午前 観光省との協議  
観光省

午後 政府関係機関との協議  
観光省

天然資源省 (DENR) Protected Areas and Wildlife Bureau  
天然資源省IV-B  
フィリピン観光局 (PTA)  
フィリピン・スポーツ・スキューバ・ダイビング・コミッション  
(Philippine Commission on Sports Scuba Diving)

11月25日 午前 民間観光関連企業からのヒアリング

- (1) テンノット開発社  
日新製糖
- (2) クラブ・ノア

午後 NGOからのヒアリング

ハリボン基金  
世界野性生物基金 (WWF) フィリピン  
地方政府開発基金 (Local Government Development Foundation Inc.)  
ツバタハ基金/コンサーベーション・インターナショナル  
バラワン州政府 (計画担当)

12月1日 全体会議

観光省 (DOT)  
天然資源省 (DENR) Protected Areas and Wildlife Bureau  
フィリピン観光局 (PTA)

バラワン州政府 (計画担当)

テンノット開発社  
ソリアノ・コーポレーション  
クラブ・ノア  
アマンプロ・リゾート  
ダンフィル・エクスプレス (グレイ・ライン)  
東南アジア文化・環境研究所  
(South East Asian Institute of Culture and Environment)

フィリピン・ツアー・オペレーター協会 (Association)

テンノット開発社/バラワン統合保護地域のためのNGO

### 3. 主要面会者リスト

#### フィリピン政府・地方政府関係機関（主な）出席者

##### Department of Tourism (DOT)

Vincente J. Carlos	Secretary
Ramona Lopez - Ty	Undersecretary
Elizabeth F. Nelle	Officer - in - Charge, Planning, Product Development and Coordination Sector
Martin S. Valera	Chief, Regional Development Planning Division, Office of Tourism Development Planning
Benito C. Bengzon, Jr.	Officer - in - Charge (Director), Investment Promotion Unit / Office of Tourism Coordination

##### Department of Environment and Natural Resources (DENR)

Prescila N. Calimag	OIC, Chief, Recreation and Other Uses Division, Protected Areas and Wildlife Bureau
Mary June F. Maypa	IV - B

##### Philippine Tourism Authority (PTA)

Adel L. Oriondo	Manager, Financial Services Department and Acting DGM for Finance
Reynald D. Dela Rosa	Estate Manager, PTMP, Operations Sector
Oscar P. Anota	Dep. Gen. Manager, Operations

##### Philippine Commission on Sports Scuba Diving

Nick Miralles

##### Provincial Government of Palawan (LGU)

Socrates	Governor, Province of Palawan
Nelson P. Devanadera	Planning Officer, Province of Palawan

在フィリピン日本側出席者

久米秀俊 在フィリピン日本国大使館第一等書記官

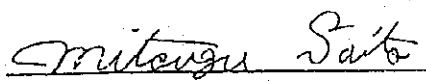
町田 哲 JICAフィリピン事務所次長

落合直之 JICAフィリピン事務所職員

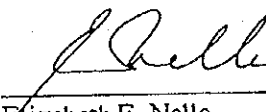
予備調査Minutes of Meeting( M / M)

Minutes of Meeting  
between  
Japan International Cooperation Agency  
and  
Department of Tourism of the Philippines  
on  
Master Plan  
for  
Environmentally Sustainable Tourism Development  
in Northern Palawan

Signed in Manila, Philippines on December 1, 1994.



Mitsugu Saito  
Leader of Contact Mission  
Japan International  
Cooperation Agency



Elizabeth F. Nelle  
Officer-in-Charge  
Planning, Product Development  
and Coordination Sector  
Department of Tourism

During the visit to the Republic of the Philippines from November 23 to December 2, 1994, the Japan International Cooperation Agency (JICA) Contract Mission Team (hereinafter referred to as "the Mission") headed by Mr. Mitsugu Saito, Deputy Director of Development Cooperation Division, Ministry of Foreign Affairs, had a series of discussions with Mr. Vicente J. Carlos, Secretary of Department of Tourism of the Philippines (hereinafter referred to as "DOT"), other officials of DOT, the officials of the related agencies, and the representatives from the related organizations and groups. The Mission also conducted the field survey on selected sites of Northern Palawan. The list of the participants is attached in Annex.

The Mission and DOT shared the views on the following points:

1. Northern Palawan represents one of the most environmentally sensitive areas of world importance and the most culturally unique areas of great anthropological interest. The protection of such pristine, natural and cultural environment is the key for the tourism development in Northern Palawan because the rich environment of the target area is the very resource of tourism. Therefore, in the proposed study, the emphasis will be placed on the protection of the natural and cultural environment in Northern Palawan with an attention to the improvement in public awareness and education for environmental conservation. Within this framework, the allowable scale and scheme of tourism development will be examined.
2. The term, "Eco-tourism," in the title of the Term of Reference originally submitted by DOT is changed to "Environmentally Sustainable Tourism" in order to clearly indicate the aimed type of tourism development which is environmentally sustainable and economically feasible.
3. The study, 'Preliminary Tourism Development for Northern Palawan,' funded by the European Union (the EU), is considered as a laborious study and would be one of the valuable references of JICA study.
4. Taking into account the fact that Northern Palawan area is facing and is anticipating to face the environmental crises resulting from uncontrolled development activities, a prompt initiation of the requested study for environmentally sustainable tourism development is of a great need. On the other hand, the study should be conducted in a most careful and deliberate manner since this environment-oriented study is a new type of tourism development study.

*M. S.*

*[Signature]*

## List of Participants

### The Philippines

- Ms. Elizabeth F. Nelle      Officer-in-Charge, Planning, Product Development and Coordination Sector, Department of Tourism (DOT)
- Ms. Jocelyn A. Sevilla      Chief Tourism Operations Officer, Office of Tourism Coordination, DOT
- Ms. Basilisa A. Mendoza      Senior Tourism Operations Officer, DOT
- Ms. Verna C. Bnensnceso      Officer-in-Charge, Luzon Division, Office of Product Research and Development (OPRD), DOT
- Ms. Cheryl L. Hulleza      Supervising Tourism Operations Officer, OPRD, DOT

### Japan

- Mr. Mitsugu Saito      Japan International Cooperation Agency (JICA) Team leader, Deputy Director, Development Cooperation Division, Development Cooperation Bureau, Ministry of Foreign Affairs
- Mr. Yoshimune Nakamura      JICA Team member, Senior Officer, Planning Division, Department of Tourism, Ministry of Transport
- Mr. Hidetoshi Kume      First Secretary, Embassy of Japan
- Mr. Naoyuki Ochiai      Assistant Resident Representative, JICA Philippine Office
- Ms. Mari Ito      JICA Team member, Associate Specialist, JICA Headquarters

付属資料 6. 日本側 TOR 案及びフィリピン側コメント

(1) 日本側 TOR 案

Terms of Reference  
on Master Plan  
for  
Environmentally Sustainable Tourism Development  
in Northern Palawan

(TENTATIVE)

Background and Justification

Northern Palawan represents one of the most environmentally and culturally sensitive areas in the Philippines. Its natural heritage is of world importance while its ethnic communities still cling to traditional ways of life that are unique and of great anthropological interest. From ecological point of view, Northern Palawan extends far beyond its boundaries into the surrounding marine environment. It contains pristine terrestrial and marine habitats that are regarded as being of world importance. Taking these facts into account, it has been recognized that the protection of the environment is the key factor to meet the need for the regional development of the target area, which will be sustainable in the medium and long term.

Environmentally sustainable tourism is a relatively new category of tourism. The concept of this type of tourism has been shaped in the course of recent recognition of environmental and social implications of tourism. The concern about undesirable consequences of tourism has raised the need of tourism which is carefully designed, minimizing the impacts on the environment and local culture. With a long-term economic perspective, environmentally sustainable tourism reinforces the conservation of environmental and cultural legacy, which is also the very resource for this tourism form, and heightens in tourists and local people the appreciation of the values of such heritage.

The Department of Tourism (DOT) has been playing a vital role in contributing to the balanced socio-economic development of various regions of the Philippines through developing the tourism sector. In 1992, the tourism sector generated over 84 billion pesos in gross revenues, accounted for 5.2% of GDP, employed approximately 680,000 people and generated US\$1.5 billion in net foreign exchange for the country. In view of the economic and social significance of the sector, the Government intends to further develop and promote the tourism sector.

The current development policy was determined by the Tourism Master Plan in 1991. In this master plan, tourism development is based on a policy of creating the following three tourism development clusters which compromise the international gateways linked to a variety of satellite destinations:

1. Luzon cluster including Palawan, Mindoro, and Marinduque
2. Visayas cluster including Cebu, Bohol, Samar, Leyte, Negros Occidental and Oriental, and Panay
3. Mindanao cluster including Davao, Zamboanga del Sur and Norte, Misamis Oriental and Occidental

While Metro Manila, Cebu and Davao are intended for mass tourism, the concern about the rich and sensitive natural environment of Palawan has led to the search for another scheme of development.



Because tourism is an important source of foreign exchange and generator of employment in the country, environmentally sustainable tourism, which bases its success on undamaged nature, has become an attractive form of industry suitable for Northern Palawan.

For the present, however, some of the on-going and planned tourism and other development activities in the region have a high potential for large-scale development, which could pose serious, adverse impacts on the precious environment. Due to various factors, such as administrative, technical, or financial reasons, development guidelines have not been clearly delineated, the mechanisms to control and monitor undesirable development have not yet successfully implemented or demonstrated satisfactory results. Some uncontrolled tourists' activities and physical changes for tourism development could deteriorate the value or quality of natural and cultural resources, risking the sustainability of tourism itself and subsequently the economic and social development of the region.

The government of Japan has envisaged a tourism development plan with a firm basis on the protection of the environment and the respect for local culture, excluding any possibility for large-scale development. The plan is classified as a type of environmentally sustainable tourism aimed at economic growth of the region in the long term, considering the equal distribution of benefits from tourism. To reverse the present situation described above and to orient the development activities to the sustainable goal which could protect the environment and benefit the local community, the government of the Philippines requests the government of Japan for technical assistance for environmentally sustainable tourism development.

#### Objectives

The objectives of the project is to provide a framework for the tourism development which is both environmentally sustainable and economically feasible, assuring the betterment of local welfare. More specifically, two goals are aimed as follows:

1. to control the on-going and future tourism and other development activities in the target area with a view to ensuring the environmental quality of the area; and
2. to formulate a master plan for Northern Palawan and to conduct a feasibility study in priority area(s) for environmentally sustainable tourism development which could provide the local community with a financial base.

#### Special Consideration

In this study, the emphasis is placed on the protection of the rich and sensitive environment of Northern Palawan. The analysis of the results of survey to be conducted and the information to be collected would reveal the level of environmental quality at which the environmental system could fully function and be maintained. Consequently, this critical level of environmental quality would suggest the allowable area in which, and scale on which, infrastructure facilities could be established, services be provided, and tourists' activities be enjoyed.

An innovative aspect of the project is, therefore, the very approach by which the allowable scale and area for the infrastructure facilities are examined through the study. The infrastructure facilities will not be planned according to the standard process, for example, based on the number of

the visitors to be accommodated. The area and scale for such structure will be restricted, together with the services for, and activities of, tourists, within the level at which the environmental quality could be assured and maintained.

In addition, the following strategies will be taken to ensure that the development plan is environmentally sustainable and integrates the local community, that is: (1) the establishment and enforcement of regulatory and managerial measures and the identification and strengthening of enforcing/responsible bodies and institutional building; (2) the introduction of market mechanism to control the scale and area of development within the allowable level; and (3) public awareness and educational and informational system for environmental conservation.

### Study Area

Northern Palawan to be selected for the project encompass northern part of the mainland of Palawan including the city of Puerto Princesa and the islands located north of the city. The area includes Puerto Princesa city and the municipalities of San Vicente, Roxas, Taytay and El Nido in the mainland and the island municipalities of Busuanga, Coron, Culion, Calauit, Cuyo Islands, Dumarán Islands, and other islands north of Puerto Princesa.

#### (1) Palawan profile

Palawan, which occupy five percent of the national territory, is the largest province in the Philippines. Twenty-one municipalities, 419 Barangays, 1 city and 1,769 islands and islets make up the land area for a total of 1,489,655 hectares in Region IV. Palawan's coastline has a total length of 1,959 kilometers.

The main island of Palawan is the largest occupying 80 percent of the land area and with about 70 percent of the population. The other islands fall into three main groups: the Calamian group in the north, Dumarán-Cuyo group in the northeast, and Balabac-Bugsuk group in the southwest.

Palawan has a tropical monsoon climate with monthly temperature ranging between 27 and 29 degrees Celsius, with relative humidity between 70 and 86 percent. The dry season is generally from January to April, with rains from May to December. Typhoon seldom occurs specially in the southern portion.

The main island of Palawan is 425 km long, 40 km wide at its widest at Brooke's Point and 8.5 km at its narrowest at Bahile, Puerto Princesa. A chain of mountains, averaging 1,100 m but reaching 2,086 at the highest point runs along almost the whole length of the island, creating a major barrier to communications between the east of the west.

About 30 percent of the total land area of Palawan has agricultural potential, but only one quarter of this is currently farmed, leaving over 300,000 has currently unproductive. The most suitable areas of the island for both cultivation and settlement are the coastal plains of southeast, while the north and the west coasts have virtually no flat land except for narrow valleys. Many of the smaller islands consist of narrow coastal plains with mountainous interiors and offer relatively little area for development. Major constraint with regards to agricultural development includes difficulties in obtaining title to land, the concentration of ownership of workable land, poor availability of labor and draft power, and the low level of support services and infrastructure.

Much of the mountain and upland area is covered with forest which accounts for over 700,000 has. of land. Almost one third of this total forest resource has been allocated to three logging companies.

Palawan, also has rich fishing grounds and important mineral reserves. It can boast of striking physical features and a rich variety of flora and fauna for tourism-based development.

The population in all of Palawan in 1985 was 438,801 inhabitants, with a growth rate of 3.6 percent and a density of 29.46 persons per square kilometer. In 1990, the population of the province was estimated to be 528,287 with an average growth rate of 3.58 per annum. Population density was estimated to 33 persons per square kilometer. The majority of the population (332,457 people in 1985) is distributed in rural areas. Population increase is mainly attributed to immigration rather than by birth. In 1985 household income was P20,740 per annum, almost 50 percent below the national average. The prime pockets of poverty are in the upland areas, where agriculture is difficult and access to markets, services and facilities poor.

The rich environment of Palawan is subjected to a number of major threats including excessive mining activities, logging and "slash-and-burn" agriculture with resultant damage to the soil and residual trees, overfishing and unregulated migration from other parts of the Philippines. A fundamental issue in all of these sectors is the enforcement of control procedures. In tourism for example, the province is controlled from Manila or even overseas, and does little to promote the local economy, while preventing local access to prime areas.

## (2) Sector profile

### 2.1 Infrastructure situation

#### 2.1.1. Roads

Palawan with its 14,869.55 square kilometers of land area is served by a road system of only 4,022.377 kilometers. Of these, only 366.526 kilometers or 9.11% are paved roads (concrete and asphalt). Approximately, 45% of all roads are gravel-finished while earth-surfaced roads account 45%.

#### 2.1.2 Ports and piers

At present, there are 50 ports existing in the province, of which six are national, 19 municipal and 25 are private.

#### 2.1.3 Airports and airstrips

There are, at present, three national, three military and 10 privately-operated airports in the province.

#### 2.1.4 Power and communication

The National Power Corporation has energized seven municipalities, 104 barangays with 25,163 household connections.

The Provincial Radio Communication System (PRCS) has established 17 operational radio stations in the province. Four private telegraph companies have also established 774 stations located in the City of Puerto Princesa.

#### 2.1.5. Water supply

There are 524 units of waterworks system in the entire province: Level I - 456 units; Level III - 18 systems.

### 2.2. Agriculture, fisheries, and industry

The main economic activities are agriculture and fishing. Total cultivated area is estimated to 239,018.3 hectares planted to various crops. Rice production in 1990 was estimated to 63,178 m.t. with a production surplus of 5,669.81 m.t. and 98,366 m.t. for coconut. Total fish production in 1990 was estimated to 57,860,273 m.t. both commercial and municipal fisheries.

One of the non-agricultural economic activities of the province is tourism. Tourist accommodations are predominantly located within Puerto Princesa and in other major tourist areas such as El Nido and Busuanga.

### 2.3. Natural resources situation

#### 2.3.1. Forestry

Sixty percent (750,000 hectares) of the area of mainland Palawan is forested. some 360,000 has. are classified as non-commercial forest, being chiefly as watershed. Several minor products are also being harvested from the province's forest, among which are almaciga, rattan, buho, and others.

Palawan forest are also host to some 1,670 species of flora and diverse fauna species, some of which are considered rare.

A law was enacted as Republic Act 7611 adopting a Strategic Environmental Plan for Palawan towards sustainable Development implemented by the Palawan Council for Sustainable Development led by the Governor of the Province.

Supportive to this programs is the provincial government, National government agencies and the non-government organizations implementing the Bantay Palawan Program for the protection and conservation of the forest and marine resources.

#### 2.3.2. Marine Resources

The metallic minerals found in the province are: nickel, chromite, manganese and laterite iron. Non-metallic minerals are also found in the province are clay, limestone, sulfur and cement ore.

### Scope of Work

#### 1. Assessment of present/existing conditions and resources

- (1) the collection and analyses of the information
  - (2) field survey
2. establishment of the strategies for environmentally sustainable tourism development
- (1) the goal for environmental conservation;
  - (2) the goal for environmentally sustainable tourism development; and
  - (3) the strategies for environmentally sustainable tourism development (including the examination of the appropriate scale and area of infrastructure facilities and services and tourists' activities).
3. establishment of a master plan for environmentally sustainable tourism development
- (1) policy for environmentally sustainable tourism development;
  - (2) legislations, regulation, standard and/or guidelines for environmental conservation and tourism development and the identification of enforcing and responsible bodies;
  - (3) market study;
  - (4) tourism development program;
  - (5) environmental management program;
  - (6) examination of the appropriate scale for tourism development (including infrastructure facilities and services);
  - (7) the system/measures to integrate local community, NGOs, academic institutions and individuals, and private enterprise;
  - (8) initial environmental evaluation;
  - (9) preliminary estimate of costs;
  - (10) preparatory economic analysis; and
  - (11) evaluation of master plan and the identification of priority zones.
4. conduct of feasibility studies for environmentally sustainable tourism in priority area(s)
- (1) examination of the appropriate scale for tourism development (including infrastructure facilities and services);
  - (2) activities for environmentally sustainable tourism (including the system for exchange and distribution of information, the enhancement of public awareness and the provision of educational and training opportunities);
  - (3) infrastructure facilities and services;
  - (4) economic and financial analysis and socio-economic analysis (including the consideration of the equal distribution of costs and benefits)
  - (5) environmental impact assessment (for natural and social environment)
  - (6) evaluation of development plan for environmentally sustainable tourism in a priority area
5. implementation plan
6. conclusions and recommendations

(2) 日本側TOR案に対するフィリピン側コメント



GENERAL

By and large, the TOR is in order and basically reflects our tourism development philosophy for Northern Palawan. In particular, the study puts emphasis on the protection of the rich and sensitive environment as a basis for the sustained development of tourism in Northern Palawan.

In terms of geographical scope, the TOR adheres to the study area defined in the WTO and EC studies which comprises Puerto Princesa and all municipalities north thereof including the island groups.

SPECIFIC

1. On page 2, under objective no. 1, we prefer to use the word "direct" instead of "control" as the latter connotes a very restrictive approach.
2. Under strategies listed on page 3, we wish to include as the 4th strategy - "community consultation and dialogues at all levels of the planning process." We strongly feel that the locals, being the major stakeholders, should be apprised of all activities and given the chance to voice their comments.
3. The study should also consider the socio-cultural impact of tourism development in Northern Palawan.
4. On page 6, under item 3.7, we also recommend the inclusion of the local government unit and other government agencies in the integration process.  
  
Still on the last page, under item 4.5, we recommend the revision as follows:  
Environmental Impact Assessment/Environmental Compliance Certificate.
6. Lastly, we also urge the consultants to effect some type of technology transfer to DOT personnel by way of a counterpart team.

The abovementioned comments on your tentative TOR are at best also tentative and do not preclude DOT from further commenting or revising portions thereof during our formal interaction with the preliminary inspection team from Japan.

付屬資料 7. 質問状 (Questionnaire) 回答

QUESTIONNAIRE

OF

JICA PREPARATORY STUDY TEAM

FOR

MASTER PLAN FOR ENVIRONMENTALLY SUSTAINABLE TOURISM DEVELOPMENT

FOR

NORTHERN PALAWAN

FEB, 1994

JAPAN INTERNATIONAL COOPERATION AGENCY

This questionnaire is prepared by the Japanese Preliminary Study Team for the Master Plan on Environmentally Sustainable Tourism Development for Northern Palawan (hereinafter referred to as the Study) so as to obtain basic information and data needed for the Study. Please answer all questions in English and attach materials requested in this questionnaire. Answers need not be too much in detail but should be brief and precise.

It should be recognized that, because the questionnaire is not yet in the final form, the Study Team would ask for additional data/information during the discussions with the Philippine side.

Thank you for your cooperation.

#### I. GENERAL

1. The Preliminary Study Team would like to know the brief explanation and obtain the related information, if any, on the followings:

- (1) Possible actions to be taken by the Philippine side based upon the outputs of the Master Plan Study.
- (2) Relevant documents (at least those listed below) for nationwide and regional development, tourism plans and other plans.

- a) WTO/UNDP Tourism Master Plan for the Philippines (if any other than(b))
- b) European Technical Assistance Project for the Tourism Sector (already obtained)
- c) EC/ADB Palawan Integrated Area Development Program
- d) Second Palawan Integrated Area Development Program
- e) USAID Coastal Resources Management Plan
- f) 6th ADB Project and Road Pavement Project between Roxas and Taytay
- g) Road Development Plan between Taytay and El Nido
- h) Dutch Project in El Nido Area
- i) Power Distribution Project between Taytay and South Palawan (funded by Spain)
- j) Sandval Airport Development Plan and EIA Report
- k) West Coast Environmental Development Project in Puerto Princesa by Taiwanese Group



- l) ADB Rural Electrification Project
- m) ADB Island Provinces Rural Water Supply Sector Project
- n) Others

- (3) Present budget allocation for tourism-related administration.
- (4) Present road(s) of Puerto Princesa, El Nido and Calauag Airports.
- (5) Present problems of Puerto Princesa, El Nido and Calauag Airports.
- (6) Background of, and necessity for, the Study related to the proposed Sandval Airport Development.
- (7) Present Status and/or future role(s) of Sandval Airport.
- (8) Action having been taken/being taken by the Philippine side for the construction and/or expansion/development of Sandval Airport.

## II. INSTITUTIONAL FRAMEWORK FOR TOURISM-RELATED ADMINISTRATION (PLANNING, FINANCING, CONSTRUCTION, AND OPERATION)

1. The Preliminary Study Team would like to know about the governmental organization concerning with this Study. Please provide with the organization chart with brief description of the jurisdictional responsibilities of each department, division, section, and office, etc.

### Central Government

- 1) Department of Tourism and Philippine Tourism Authority
- 2) Department of Agriculture
- 3) Department of Agrarian Reform
- 4) Department of Public Works and Highway

- 5) Department of Environment and Natural Resources; Environmental Management Bureau ( EMB ) , Environment and Natural Resource Office ( ENRD )
- 6) Department of Transportation and Communication

Local Government

- 1) Palawan Council for Sustainable Development ( PCSD ) and its staff ( PCSDS ):

2. Brief explanation/documents on the relevant laws, regulations, and guidelines ( at least listed below ) are needed.

The information should include their enforcing/responsible bodies, the degree in implementation/enforcement, the relation to the relevant/similar laws, regulations and guidelines.

- a) Strategic Environmental Plan ( SEP ) ( already obtained )
- b) Environmental Critical Area Network ( ECAN ) ( if any other than the description included in SEP )
- c) National Integrated Protected Area System ( NIPAS )
- d) Bantay Palawan Program ( BPP ) ( already obtained )

III. NECESSARY DATA

The Preliminary Study Team would like to collect documents or maps listed in the attached table, during the Study team's stay in Philippines.

Note;

- Please mark  for the Data/Item in the "Availability" if it is available
- Please mark  for the Data/Item in the "Availability" if it is not available

## ABBREVIATION

○ BOI	—	Board of Investments
○ DA	—	Department of Agriculture
—	—	BEAR : Bureau of Fisheries and Aquatic Resources
○ DBM	—	Department of Budget & Management
○ DENR	—	Department of Environment and Natural Resources
—	—	PAWB : Protected Area & Wildlife Bureau
—	—	EMB : Environmental Management Bureau
—	—	NAMRIA : National Mapping & Resources Information Authority
○ DOST	—	Department of Science & Technology
—	—	PAGASA : Philippine Atmospheric Geophysical & Astronomical Services Administration
○ DOT	—	Department of Tourism
—	—	OPRD : Office of Product Research and Development
—	—	OTDP : Office of Tourism Development Planning
—	—	OTS : Office of Tourism Standards
○ DOTC	—	Department of Transportation & Communication
—	—	ATO : Air Transportation Office
—	—	PPA : Philippine Ports Authority
○ DPWH	—	Department of Public Works and Highways
○ HLURB	—	Housing & Land Use Regulatory Board

- HRAP — Hotel & Restaurant Association of the Philippines
- NEA — National Electrification
- NEDA — National Economic and Development Authority
- NSO — National Statistics Office
- NPC — National Power Corporation
- OSCC — Office of Southern Cultural Communities
- PCSD — Palawan Council for Sustainable Development
- PCVC — Philippine Convention & Visitors Corporation
- PHILTOA — Philippine Tour Operators Association
- PTA — Philippine Tourism Authority
- PTAA — Philippine Travel Agencies Association
- UP — University of the Philippines
- MSI — Marine Science Institute
- PPDO — Provincial Planning & Development Office
- PEP — Provincial Engineer's Office

THE LIST OF NECESSARY DATA / INFORMATION

I. NATURAL CONDITIONS (1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Topography	(1) Topographic Maps (1:250,000 and 1:50,000)	<input type="radio"/>	NAMRIA, PPDO, PCSDS	Topography Maps of the Phil.
	(2) Geographic Maps (1:250,000 and 1:50,000)	<input type="radio"/>	NAMRIA	
	(3) Charts of Sea area	<input type="radio"/>	NAMRIA	
	(4) Aerial Photos	<input type="radio"/>	DENR, PCSDS	
2. Land Use	(1) Land Use Maps	<input type="radio"/>	Municipal Gov't, PCSDS	Land Use Condition
	(2) Town planning maps	<input type="radio"/>	Municipal Gov't	
	(3) Land use guidelines	<input type="radio"/>	HLURB, PPDO, NEDA	
	(4) Building control guidelines	<input type="radio"/>	Municipal Gov't, City Engineer's Office	
	(5) Design guidelines	<input type="radio"/>	Engineer's Office, DPWH,	
	(6) Land ownership in the area (Land availability)	<input type="radio"/>	Municipal Gov't Prv'l Assessor	
	(7) Laws and Regulations of land use and development	<input type="radio"/>	HLURB, NEDA	

I . NATURAL CONDITIONS (2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
3.Climate	(1) Temperature/Humidity (Monthly variations)	0	DOST - PAGASA	
	(2) Periods, durations and intensities of rainfalls	0	PCSDS	
	(3) Seasonal Variation	0		
	(4) Mean duration of sunshine	0		
4.Oceanography	(1) Tidal current maps and tide levels	0	DOST - PAGASA	
	(2) Wave statistics			
	(3) Water quality			
5.Natural Resources	(1) Water resources (coastal, lakes and rivers, waterfalls,underground river)	0	DENR, PCSDS	
	(2) Mountain resources (highlands, hills and valleys)	0	DENR, PCSDS	
	(3) Wildlife resources (national parks, reserves and conservation area)	0	DENR - PAWB, PCSDS	
	(4) Vegetation Maps (Characteristics species)	0	DENR, PCSDS	
	(5) Wildlife Maps	0	DENR - PAWB, PCSDS	
	(6) Map of coral reef conditions	0	UP - MSI ; DENR ; DOST	

II. SOCIO-ECONOMIC CONDITIONS (1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Administration	(1) Administrative boundary maps (National and local government)	<input type="radio"/>	NAMRIA, Prov'l / Municipal Gov't	
	(2) Hierarchy of main towns and resorts centers (Decision-making authorities)	<input type="radio"/>	Prov'l Attorney Prov'l Attorney	
2. Population	(1) Population, land area and population density	<input type="radio"/>	NEDA ; Provincial and /or Municipal Gov'ts ;	Socio - Economic Profile
	(2) Distribution map of tribe groups in the area and population of groups	<input type="radio"/>	OSSC, PPDO	
	(3) Main economic activities	<input type="radio"/>	PPDO	- do -
	(4) Population by age and by sex	<input type="radio"/>	PPDO	- do -
	(5) Inter-regional migration/emigration	<input checked="" type="radio"/>		
	(6) Number of household	<input type="radio"/>	PPDO	- do -
	(7) Number of workers by the industrial group	<input type="radio"/>	PPDO	- do -

II. SOCIO-ECONOMIC CONDITIONS (2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
3. Economy	(1) Gross domestic product (National and local government)	<input type="radio"/>	NEDA	NEDA Statistical Reports
	(2) Gross product by the industrial group	<input type="radio"/>		
	(3) Average family income and expenditures	<input type="radio"/>	PPDO	SOCIO-ECONOMIC PROFILE
	(4) Distribution of families by income class	<input type="radio"/>	PPDO	- do -
	(5) Wholesale price index and consumer price index			
	(6) Leisure time trends and annual paid holidays			
	(7) Type of fishery			
4. Expenditures and receipts	(1) Balance of tourist expenditures and receipts (1985-94)	<input type="radio"/>	NEDA	- do -
	(1) Employment generated by tourism (on hotels and travel trade only)	<input type="radio"/>	DOT - OTDP	Study on Regional Travel in the Philippines
5. Employment	(1) Revenues of the central and local governments from tourism (taxes, rates, duties, etc.)	<input checked="" type="checkbox"/>		
6. Revenue of the government				



II. SOCIO-ECONOMIC CONDITIONS (3)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
7. Transportation	(1) Networks of road, air, coastal and inter-island shipping	0	DOTC, DPWH, PPDO, PEO	
	(2) Time-table of air, ship, boat and bus services	0	Prov'l Tourism Office, PPDO	FLIER
	(3) Passenger-Kilometers of road, air and water transport	0	DPWH, DOTC Prov'l Tourism Office, PPDO	FLIER
	(4) Geological distribution of facilities and capacities with operational conditions:	0		
	• Roads	0	DOTC	
	• Ports, Marina	0	PPA	
	• Airports (Length of Runways)	0	ATO	
	• Airtraffic Control	0	ATO	
	• Ferries, Boats and Aircrafts	0	ATO, PPA	
	(5) Car ownership	0	LTO Bureau of Land Transportation Puerto Princesa City	

III. REGIONAL DEVELOPMENT (1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Present situation	(1) Telecommunication networks (Availability, Reliability, Quality, Total Capacity)	O	DOTC, PILTEL, PPDO	
	(2) Energy supply Electricity Gas	O	NKPOCOR, PPDO PEVECO, BISELCO	
	(3) Water Supply	O	Provincial or Municipal Government, PPDO,	
	(4) Sewerage and refuse disposal (Means of control, standards, effectiveness)	x		
	(5) Existing and Proposed National (Marine) Parks (Reserves and conservation Areas)	O	DENR - PAWB ; PCSD	
	(6) Activities polluting air , water and soil	x		
	(7) Removal of industrial dereliction	x		
	(8) Laws, regulations and guidelines for regional development	O	NEDA	
	(9) Land ownership of the area	O	Provincial/ Municipal Gov'ts, Provincial Assessor	

III. REGIONAL DEVELOPMENT (2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
2. Future plans	(1) Future development projects of ; • transportation facilities • telecommunications • energy supply • water supply • Sewerage and disposal facilities • Medical facilities (2) Airport expansion and construction plan with airport layout map ,EIA report and inventory of facilities (3) Resort development plan (4) Expansion and construction of parks and green zones	<input type="radio"/>	DOTC, PPDO, PCSPS	Feasibility Study, Puerto Princesa Airport Expansion
		<input type="radio"/>	do	
		<input type="radio"/>	NPC/NEA	
		<input type="radio"/>	Prov'l Gov't	
		<input checked="" type="radio"/>		
		<input type="radio"/>	--do--	
		<input type="radio"/>	DOTC,	
		<input type="radio"/>	Air Transportation Office , PEO	
		<input type="radio"/>	BOI, Private Sectors	
		<input type="radio"/>	DENR, PPDO	
3. Construction and operation cost	(1) Publication (list,table,etc.) on the cost of materials at present (2) Publication (list,table,etc.) on construction equipment price at present (3) Publication (list,table,etc.) on the minimum wage at present	<input type="radio"/>	DPWH	
		<input type="radio"/>	DPWH	
		<input type="radio"/>	DPWH	

IV. TOURISM CONDITIONS (1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
I. Resources	(1) Distribution map of tourist resources and facilities (Visitor attractions, unique coastal zone, animals, spectacular features and dramatic landscape etc.)	O	Palawan - Provincial Tourism Office	Tourist Map of Palawan
	(2) Accessibility to main sites for tourists/recreation	O	Prov'l Tourism Office	Brochure "The Last Frontier" Flier "How to go"
	(3) Capacities of main sites for tourists/recreation	x		
	(4) Diving area/spots and facilities	O	Palawan Rrovincial Tourism Office ;PCSSD	
	(5) Tradition (incl. trival groups)	O	OSCC, Provincial Tourism Office	
	(6) Cyclical attractions (festivals, carnivals, etc.)	O	. do	
	(7) Fishing / hunting areas	O	DENR, PCSO, PCSSD	
	(8) Recreational facilities	O	Palawan Provincial Tourism Office	
	(9) Catering facilities	x		
	(10) Sports facilities	x		
	(11) Manpower availability for tourism services and training facilities	x		

IV. TOURISM CONDITIONS (2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
2. Industries	<p>(1) Accommodation</p> <ul style="list-style-type: none"> <li>• No. of Hotels and lodges (1988-1994)</li> <li>• Capacities (1988-1994)</li> <li>• Room rates (1988-1994)</li> <li>• Occupancy rates (1988-1994)</li> <li>• List of accommodation (1994 or 1993)</li> <li>• Projected supply and its occupancy rates (1994-2000)</li> </ul> <p>• No of guests per year (1988-1994)</p> <p>(2) Air carriers, Bus and Shipping companies</p> <ul style="list-style-type: none"> <li>• List</li> <li>• Main routes</li> <li>• Fare (Normal and promotional)</li> <li>• Policies</li> <li>• Turnover (last 5 years)</li> <li>• No. of passengers (last 5 years)</li> <li>• Passenger-kilometers (Last 5 years)</li> <li>• No of flight by airline and chartered flight (last 5 years)</li> </ul> <p>(3) Tour operators, Travel agents, Ground handlers</p> <ul style="list-style-type: none"> <li>• Numbers</li> <li>• List</li> <li>• No. of Staff and offices</li> <li>• Turnover</li> <li>• No. of tourist guides</li> <li>• Distribution by location and language</li> <li>• Guide fee (1986-1994)</li> </ul>	0	DOT-OTDP, Prov'l Tourism Office, City Tourism Office DOT - OTS	Study on Regional Travel in the Phil. List of Accredited Hotels(1988-94)
		0	DOTC, ATO, Private Sector Prov'l Tourism Office	The Last Frontier (Brochure, Flier "How to go to Palawan" )
		0	DOT - OTS, City Tourism Office	List of Accredited Tourism - related Establishments

IV. TOURISM CONDITIONS (3)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
3. Tourism condition both in the Philippines and (northern) Palawan	<p>(1) Foreign arrivals (Last 10 years)</p> <ul style="list-style-type: none"> <li>• No. of foreign arrivals</li> <li>• By country of origin</li> <li>• By Main motivations</li> <li>• By range of expenditure</li> <li>• By type of travel</li> <li>• By main destinations</li> <li>• By main facilities used</li> <li>• By means of transport</li> <li>• By duration of stay</li> <li>• By month</li> <li>• Projected no. of foreign arrivals (Next decade)</li> <li>• No of travellers arrival by major tourism site (Last 10 years)</li> </ul> <p>(2) Domestic travellers ( Last 10 years)</p> <ul style="list-style-type: none"> <li>• No. of domestic travelers</li> <li>• By main motivations</li> <li>• By range of expenditure</li> <li>• By type of travel</li> <li>• By main destinations</li> <li>• By main facilities used</li> <li>• By means of transport</li> <li>• By duration of stay</li> <li>• Projected no. of Domestic travelers (Next decade)</li> </ul>	<p>○</p> <p>○</p> <p>○</p>	<p>DOT-OTDP, Prov Tourism Office, City Tourism Palawan Provincial Tourism Office</p> <p>DOT - OTDP</p>	<p>Statistical Report on Travel &amp; Tourism, Tourist, Annual Report</p> <p>Study on Regional Travel in the PHIL</p>

IV. TOURISM CONDITIONS (4)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
4. Marketing	(3) Phillipino travellers (Last 10 years)	0	DOT - OTDP;	Study on Regional Travel in the Phil.
	<ul style="list-style-type: none"> <li>• No. of Phillipino travellers</li> <li>• By main motivations</li> <li>• By range of expenditure</li> <li>• By type of travel</li> <li>• By main destinations</li> <li>• By main facilities used</li> <li>• By means of transport</li> <li>• By duration of stay</li> <li>• Projected no. of Phillipino travellers (Next decade)</li> </ul>		UP - AIT	
	(1) Marketing and promotion of tourism in Phillipines	0	DOT - PCVC	
	(2) Tourism policies of the central and local governments	0	. do .	
5. Market information	(3) DOT & PTA priority projects	0	DOT-OPRD/OTDP PTACorplan/Engineering	
	(4) DOT & PTA budgets and resources	0	. do .	
	(1) Analyses of the situation of the successful resorts in other countries	x		
	(2) Authorities in charge of tourism development	0	DOT, PTA	

IV. TOURISM CONDITIONS (5)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
6. Others	(3) Laws, regulations and guidelines of tourist development	0	DOT, PMS	
	(4) Projects of tourism and recreational development	0	DOT, PTA	
	(1) Governmental policies of tourism development (Administration, budget, subsidies etc.)	0	DBM, PMS	
	(2) Incentive to the private sector	0	BOI	Investment Priorities Plan
	(3) List of major constructors (Name, address, capital)			
	(4) List of major consulting companies for tourism development including civil engineering and environment (Name, address, no. of staff and consulting fees by class)	0	DOT - PEAC; PTA - Engineering	
	(5) Promotion Pamphlets	0	DOT, Prov'l Tourism, City Tourism PCVC, DOT	Brochures, Fliers
(6) Number of promotion office in foreign countries	0			
(7) Manpower training scheme, if any by type of training	0	DOT - OTS		



V. TOURISM ADMINISTRATION / POLICY

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Tourism Administration / Policy	<p>(1) Organization of Tourism Administration (Outline, organizational chart)</p> <p>(2) Outline of DOT &amp; PTA (Organization, functions, budget, etc.)</p> <p>(3) Tourism Development Corporation/Fund at national/provincial level, if any</p> <p>(4) Organization/System for Tourism development/operation (other than DOT)</p> <p>(5) Organization/System for Tourism Promotion (other than DOT)</p> <p>(6) Laws and regulations for tourism (Ex. Tourism Basic Law, Travel Agency Law, Law for Improvement of International Tourist Hotel Facilities, if any)</p> <p>(7) Laws and regulations concerning tourism development</p> <p>(8) Incentive measures/preferential treatment concerning tourism development/promotion (tax reduction, subsidy, etc.)</p>	<p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p> <p>0</p>	<p>DOT, Prov'l Tourism</p> <p>DOT, PTA</p> <p>DOT, PTA</p> <p>PTAA, HRAP, PHLTOA</p> <p>DOT - OTS</p> <p>DOT, DENR, Prov'l Tourism Office, PCSD</p> <p>BOI</p>	<p>Organization Chart</p> <p>Guidelines for Tourism Related Establishments</p> <p>Tourism Master Plan</p> <p>Guideline for Tourism Oriented Establishment Investment Priorities Plan</p>

VI TOURISM DEVELOPMENT PLAN

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Tourist Development Plan.	(1) National Economic and Social Development Plans  (2) Existing tourism development plans (Outline, executing body, etc.)	O	NEDA, PPDO	Tourism Sector Plan
		O	DOT, PTA, PPDO Provincial Gov't	

VI. ENVIRONMENTAL ISSUES (1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
1. Legislation	<ul style="list-style-type: none"> <li>(1) Laws/guidelines on environmental impact assessment</li> <li>(2) Quality standards</li> <li>(3) Responsible ministry or agent</li> <li>(4) Procedure for IEE/EIA, if any</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/></li> <li><input type="radio"/></li> <li><input type="radio"/></li> <li><input type="radio"/></li> </ul>	<ul style="list-style-type: none"> <li>DENR, PCSD</li> <li>DENR</li> <li>DENR</li> <li>PCSD, DENR</li> </ul>	Primer on EIA, SEP
2. International conventions on environmental conservation	<ul style="list-style-type: none"> <li>(1) Bilateral convention</li> <li>(2) Multilateral convention</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/></li> </ul>	<ul style="list-style-type: none"> <li>DENR</li> </ul>	
3. Present situation of the project area	<ul style="list-style-type: none"> <li>(1) Socio-economic environment                             <ul style="list-style-type: none"> <li>• Number of people to be resettled and plan of resettlement or compensation</li> <li>• Experience of resettlement in previous projects</li> <li>• Main industry or source of income of the residents</li> </ul> </li> <li>• Number and distribution of schools, hospitals, religious facilities</li> <li>• Location of the community which might be split by the project</li> <li>• Cultural property or archaeological site</li> <li>• Use of river/coralreef, i.e. domestic industrial and agricultural</li> <li>• Existence of common land</li> <li>• History of epidemic disease</li> <li>• Right of fishery (coastal and river)</li> <li>• Coverage of water supply system and sewerage system</li> <li>• Solid waste collection and disposal system</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/></li> <li><input type="radio"/></li> <li><input type="radio"/></li> <li><input type="radio"/></li> </ul>	<ul style="list-style-type: none"> <li>PCSD</li> <li>Provincial Gov't, PCSD</li> <li>• do •</li> <li>• do •</li> </ul>	
		<ul style="list-style-type: none"> <li><input type="radio"/></li> </ul>	<ul style="list-style-type: none"> <li>• do •</li> </ul>	

VI. ENVIRONMENTAL ISSUES (2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
	<p>(2) Natural environment</p> <ul style="list-style-type: none"> <li>• Availability of meteorological data</li> <li>• Availability of land use and vegetation map</li> <li>• History of natural disaster, landslide earthquake and flood</li> <li>• Areas affected by soil erosion</li> <li>• Change of water level of rivers and lakes in recent years</li> <li>• Location map of environmentally vulnerable areas such as mangrove forest, coral reef, wetland, tideland</li> <li>• Availability of oceanological data such as current, oceanological map</li> <li>• Species of valuable animals and plants living in the project area</li> <li>• Location of particular areas officially protected such as national parks and natural parks</li> <li>• Distribution of important landscape or scenery for tourism</li> </ul>	<p>0</p> <p>0</p> <p>0</p> <p>0</p>	<p>PCSDS</p> <p>PCSD, DENR</p> <p>PCSD, DENR</p> <p>PCSD, DENR</p>	

W. ENVIRONMENTAL ISSUES (3)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
	<p>(3) Quality of life</p> <ul style="list-style-type: none"> <li>• Present air quality</li> <li>• Regulation on the emission of gas</li> <li>• Present water quality</li> <li>• Regulation on effluent</li> <li>• Present condition of soil contamination</li> <li>• Regulation for prevention of soil contamination</li> <li>• Present condition of noise and vibration</li> <li>• Regulation for the prevention of noise and vibration</li> <li>• Aircraft noise standards</li> </ul>			

VII. OTHER INFORMATION(1)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
<p>1. Future budgetary plan for the implementation of the project</p> <p>2. Any specific restrictions related to the Study</p> <p>3. Availability of the Government's equipment/instruments/apparatus for the Study</p>	<p>(1) List up equipment/instruments/apparatus which are available for the Study by the following category with the following information ;</p> <p>a) Category</p> <ul style="list-style-type: none"> <li>- Instrument for geodetic survey</li> <li>- Apparatus for geological/soil investigation</li> <li>- Apparatus for traffic survey</li> <li>- Computer</li> <li>- Service vehicle</li> <li>- Others</li> </ul> <p>b) Information</p> <ul style="list-style-type: none"> <li>- Name</li> <li>- Type (or model/maker)</li> <li>- Characteristics (or capacity)</li> <li>- Number of units</li> <li>- Condition</li> </ul>	<p>0</p> <p>0</p> <p>0</p>	<p>PPDO, PEO</p> <p>PPDO, PEO</p> <p>PPDO, PEO</p>	

V. OTHER INFORMATION(2)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
4-Airport Development	<p>(1) Air route network in and to/from Palawan</p> <p>a) International Gateway  b) Domestic (scheduled and non scheduled)  c) Future plan/policy for air route network</p> <p>(2) Air traffic control</p> <p>a) ALP  b) Control area map  c) Distribution of navigational facilities  d) Control method  e) Responsible body</p> <p>(3) Existing/planned airports in (northern) Palawan (including private airports)</p> <p>a) Geographical distribution of airports  b) Major facilities of each airport  c) Function and service area of each airport  d) Access conditions  e) Future development plan and size of design aircraft (by airport)  f) Design and planning criteria  g) Number of takeoffs and landings by airport  h) Number of passengers by airport for the last 5 years  i) Present and future fleet</p>	<p>○</p> <p>○</p> <p>○</p>	<p>DOTC, ATO, Puerto Prinscesa City</p> <p>DOTC, ATO</p> <p>DOTC, ATO, AIR Transportation Office, Puerto Purinsesa City</p>	

VII. OTHER INFORMATION(3)

ITEM	DESCRIPTION	AVAILABILITY		NAME OF MATERIALS
		YES/NO	PLACE OF DATA AVAILABLE	
	j) Maintenance and fuel facilities by airport (4) Proposed Sandvul Airport a) Airport layout map with obstacle limitation surface b) Inventory of facilities c) Construction history of airport d) Cross section of runway e) Actual strength of runway and apron f) Actual supply/disposal volume of followinfs Water supply Electric supply Sewage Fuel supply g) Future Extension Plan h) Record of wind speed and direction i) Location and conditions of access road	0	Provincial Government Prov'l Engineer's Office PRDO, PEO	



付属資料 8. 収集資料リスト  
収集資料リスト

区分	資料番号	資料名	発行年	発行機関	資料概要	別記
1. DOT	1	ANNUAL REPORT 1993	1994	DOT	DOT Annual Report	別記
	2	1995 DOT 予算資料			1995 DOT 予算資料	別記
2. 全国観光関連計画	3	Tourism Master Plan	1991	UNDP/WTO	全国観光開発M/P	別記
	4	Appendix 1. Inventory of Tourism Resources 2. Infrastructure and Transportation Policies 3. Environmental Impact	1991	UNDP/WTO	全国観光開発M/P	別記
	5	Appendix Area Plan for Northern Palawan	1991	UNDP/WTO	全国観光開発M/P	別記
	6	Civil Aviation Masterplan	1992	UNDP/ICAO	全国航空計画M/P	別記
3. 環境(DENR出版)	7	1992 Annual Report, Protected Areas And Willedlife Bureau	1993	DENR		
	8	Protected Area and Willedlife Resources	1993	DENR	保護区と自然環境	別記
	9	SAGIP Willedlife Program		DENR	国際協定と絶滅種	別記

	10	National Protected Area System Act	1992	DENR	国立自然保護区に関する法律	ポリネシア
	11	Management Plan for the Turtle Island and Marine Natural Park	1992	DENR	パラワン島南部海洋公園の管理と海亀	北-
	12	First Asean Symposium on Marine Turtle Conservation P105-122	1993	WWF	インドネシアにおける海亀の産卵地に関する研究論文	北-
	13	Philippine Deer - Debt for Nature Swap Project	1993	DENR/WWF USAID	フィリピン鹿のスワッププロジェクト	ポリネシア
4.	7. イミト・プリンセサ市	Social Economic Profile City of Puerto Princesa	1992	City of Puerto Princesa	7. イミト・プリンセサ市社会経済概要	ポリネシア
	15	Tourism Master Plan for Puerto Princesa City	1993	City Government	7. イミト・プリンセサ市観光 M/P	北-
5.	パラワン開発計画	Palawan General Information		Provincial Government	パラワン州の一般概要 社会経済及び計画概要	北-
	17	Office of the President Palawan council for Sustainable Development	1994	PCSD	PCSD組織に関する法律	ポリネシア

18	Palawan Integrated Area Development Programme Integrated Environmental Programme Final Report Vol. I Environmental Plan	1983	EC/ADB	3E-
19	Review of the 1st Palawan Integrated Area Development Project (PIADP-I)		ADB	3E-
20	Palawan Integrated Area Development Project Phase-II, Feasibility Study Draft Final Report Vo. III Infrastructure Component	1990	EC	3E- PIADP-II Road, Port Hydropower F/S Report
21	Palawan Integrated Area Development Project Phase-II, Vol. -IV	1990	EC	3E-
22	Six -Year Program for the implementation of the Strategic Environmental Plan for Palawan 93-98	1993		
23	Preliminary Tourism Development Plan for Northern Palawan	1994	EC	
24	Infrastructure Support Project in	1995		

		Northern Palawan (Eco-Tourism)				
	25	Infrastructure Map of Northern Palawan	1995			
	26	Sandval Airport Development Plan & Detailed Engineering Design	1995			
	27	IBRD-assisted SECOND Rural Road Improvement Project Palawan Vol.III	1993	IBRD		
	28	Water Supply, Sewerage and Sanitation Development Plan 1994-2010 Vol.1 Main Report	1994	ADB		
	29	Water Supply, Sewerage and Sanitation Development Plan 1994-2010 Vol.2 Standard Annexes	1994	ADB		
	30	Project Implementation Details and Loan Covenants		ADB		
6. パラワン社会自然環境	31	Environmental Office in Palawan	1995	Provincial Government	パラワン州の環境行政組織とDENRとの関係	北-
	32	The Strategic Environmental Plan for Palawan Summary	1987	EC		北-
	33	Strategic Environmental Plan for Palawan	1987	EC		北-

	34	IEE Report on El Nido-Lamoro-New Ibajay-San Fernando-Pasadena Road						オリシナル
	35	IEE Report on Liminangcong Cataban-Busybees-Sandoval Road	1994					オリシナル
	36	The Palawan Botanical Expedition Final Report						コビ-
	37	Tagbanuwa	1982	Robert Fox				オリシナル
	38	Palawan Ethnographic Catalogue	1985	Nat. Museum				コビ-
	39	パラワンにおける1994年 先住民人口データ	1995	Dr Peralta				コビ-
7. NGO	40	NGO Program in Palawan 1.El Nido Marine Reserve 2.St.Paul River National Park 3.Tubbataha Reefs National Park						コビ-
8. 現地コンサルタント	41	Council of Engineering Consultants of Philippines CECOPHIL Directory 1994	1995	CECOPHIL				オリシナル
	42	SEASTEMS,INC	1995	SEASTEMS				オリシナル

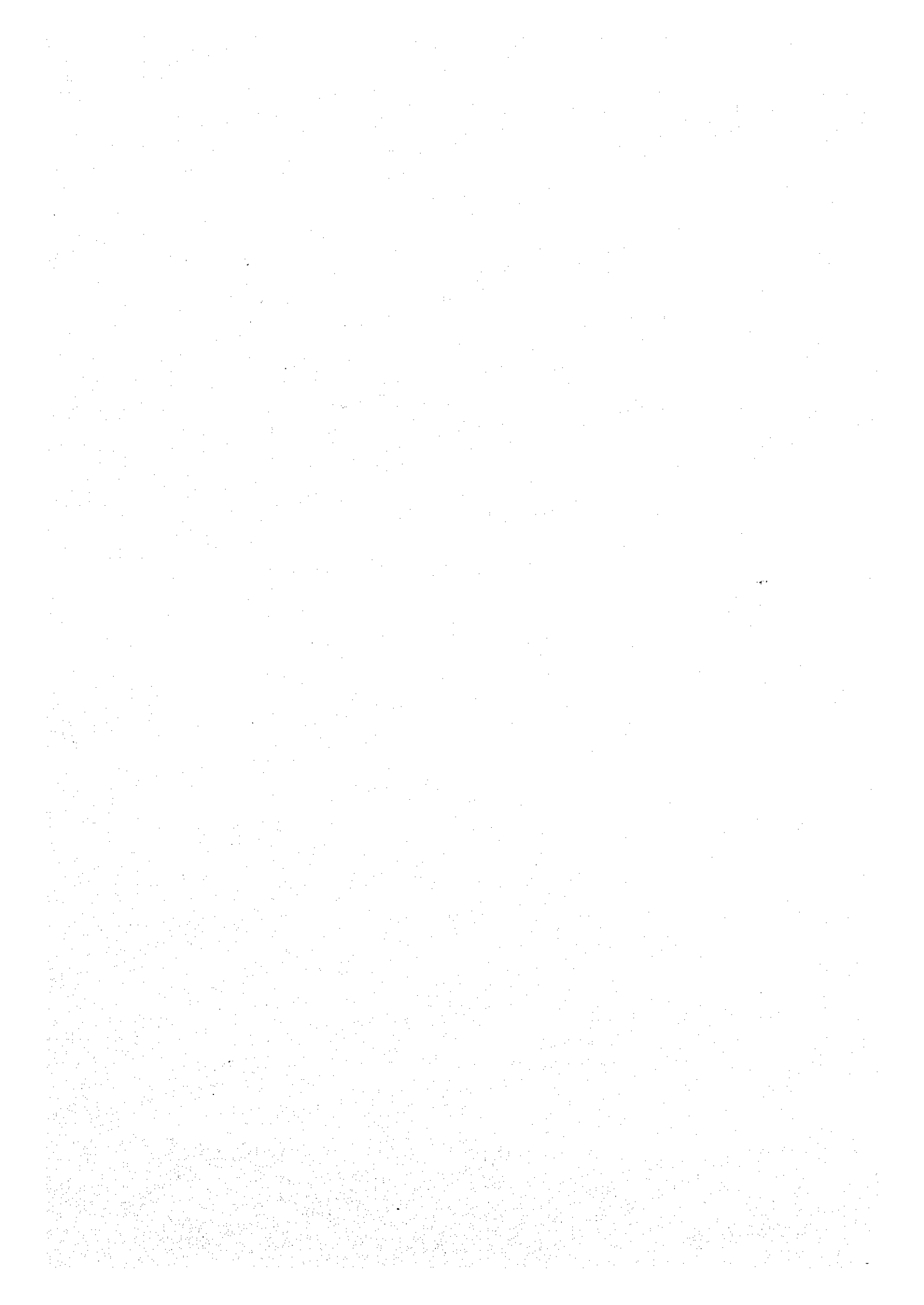
9. 日本企業観光開発	43	開発関連ファイル 1. エルニド 2. イザベル							北
10. 地形図	44	1/250,000地形図 17.SanJose 21.El Nido 22.Coron Island 26.Taytay 31.Puerto Purincesa	1961 1965	National Defence					オリジナル
	45	1/50,000地形図 2749-4 Bacungan 2750-1 Caruray 2750-3 Kaydungon Beach 2850-1 Roxas 2850-4 Caramay 2851-1 Alemanguan 2851-2 Tumarbong 2851-3 Itaytay 2851-4 Boayan Island 2852-1 Pancol 2852-2 Guinlo 2852-3 Minon Bay 2854-2 Labutaya Island 2951-1 Dumarán 2951-3 Capayas 2951-4 Danleo 2952-3 Taytay	1961	National Defence					オリジナル

					2952-4 Calabadian Island				
					2953-4 Dipnay				
					2954-1 Dicabaito				
					2954-2 San Miguel				
					2955-2 Halsey Harbor				
					2956-2 Busuanga				
					2957-2 Dimipac Island				
					3054-4 Canipo Island				
					3055-1 Cabugao				
					3055-3 Calumbagan				
					3055-4 Culion				
					3056-1 Tara Island				
					3056-2 Marcilla				
					3056-3 Coron				
					3056-4 Minuit				

#### 付属資料9. ローカルコンサルタントリスト

DOTにおいては、コンサルタント登録システムを有していないため、DOTからローカルコンサルタントの推薦はなかった。したがって、フィリピンにおける FIDIC の会員で、エンジニアリング・コンサルタント協会である、Council of Engineering Consultants of the Philippines (CECOPHIL) の Directory, 1994 より、地域計画調査、環境計画調査、観光計画調査及び交通計画調査のコンサルティング・サービスを行っている会社のリストアップを、次のローカルコンサルタントリストに示す。









付属資料10. 環境及び開発関連資料情報

a. 環境関連の諸基準

国家環境大気質基準

汚染物質	濃度(Microgram/scm)	PPM	測定時間(時)
浮遊粒子物質	180	—	24
	250	—	1
二酸化硫黄	369	0.14	24
	850	0.30	1
光化学オキシダント	120	0.06	1
	190	0.10	1
二酸化窒素	10	9.00	8
一酸化炭素	35	30.00	1

(出所) NPCC規則(1978年)62条,表2より。

特定汚染物質の大気質最大基準

汚染物質	濃度(mg/Cu.M.S.T.P.)	Parts/Million By Volume
アンモニア	0.200	0.28
アンチモン	0.020	—
砒素	0.020	—
アスベスト	2×10**	—
カドミウム	0.010	—
二酸化炭素	0.030	0.10
銅煙	0.010	—
塩素	0.300	0.10
ホルムアルデヒド	0.200	—
塩酸	0.200	0.14
鉛	0.020	—
二酸化窒素	0.300	0.16
硝酸	0.400	0.15
オキシダント(O <sup>3</sup> )	0.200	0.10
フェノール	0.100	0.026
煤煙, カーボンブラック	0.020	—
硫酸酸	0.300	—

(注) \* par toulates/scm(5micrometer以上の大きさのもの)。

(出所) NPCC(1978年)規則62条,表3より(この基準は30分単位のサンプルに適用される)。

可視排出物質および浮遊物質についての排出許容限度基準

カテゴリー	測定単位	基準
(a)オイル燃焼施設と産業プラント	既存排出源 Ringelmann Chart (color of emissions)	No darker than Shade 2
	新規排出源 同上	No darker than Shade 1
(b)煉瓦・タイル・パイプ・陶器・反射炉 を使用した炉	既存排出源 Total Mass of Solids	500 mg/scm*
	新規排出源 同上	300 mg/scm
(c)ボイラーまたは焼却炉	既存排出源 同上	500 mg/scm
	新規排出源 同上	300 mg/scm
(d)その他オイル焼却施設	既存排出源 同上	500 mg/scm
	新規排出源 同上	300 mg/scm

(注) \* mg/scmは, milligrams/standard cubic meterである。  
(出所) NPCC規則(1978年)58条より。

特定大気汚染物質の許容排出基準

汚 染 物 質	基準適用対象排出源	許容排出基準
アソチモン, アソチモン化合物	すべての排出源	10mg/scm
アソモニア	すべての排出源	400mg/scm
砒素, 砒素化合物	すべての排出源	100mg/scm
カドミウム, カドミウム化合物	すべての排出源	100mg/scm
アソチモン, 砒素, カドミウム, 鉛, 水銀, これらの化合物のトータル	すべての産業排出源	10mg/scm
二酸化炭素	すべての排出源	100mg/scm
一酸化炭素	すべての産業排出源	500mg/scm
銅, 銅化合物	すべての排出源	100mg/scm
塩素, 塩素ガス	すべての排出源	60mg/scm
ホルムアルデヒド	すべての排出源	600mg/scm
フッ化水素酸, フッ素化合物	アルミニウム還元その他の産業排出源	20mg/scm
塩化水素, 塩化合物	すべての排出源	200mg/scm
硫化水素ガス	すべての排出源	15mg/scm
鉛, 鉛化合物	すべての排出源	10mg/scm
水銀, 水銀化合物	すべての排出源	5mg/scm
ニッケル, ニッケル化合物	ニッケルカルボニルを除くすべての排出源	20mg/scm
硝酸または窒素オキサイド	すべての排出源	NO <sub>x</sub> につき 2g/scm
フェノール	すべての排出源	400mg/scm
五酸化燐	すべての排出源	200mg/scm
硫酸酸, 二酸化硫酸, 三酸化硫酸	硫酸酸製造業を除くすべての業種, 産業, 及び工程	二酸化硫酸につき 200mg/scm ただし硫酸酸製造業は 2g/scm
酸化物トータル	すべての燃料使用プラント	二酸化硫酸につき 250mg/scm
亜鉛, 亜鉛化合物	すべての排出源	100mg/scm

(出所) NPCC規則 (1978年) 59条, 表1より。ただし, この基準を経済的, 技術的理由により達成できない場合, 国家環境大気質基準に従う。

自動車排気ガス基準

(1)登録ガソリン自動車の排気ガス基準 (2)未登録軽ガソリン自動車の排気ガス基準

モデル年	一酸化炭素の割合(%)	炭化水素濃度(ppm)	重量(GW.kg)	一酸化炭素量(g/km)	炭化水素量(g/m)
1976 ~ 81	4.5	1,000	1,000以下	25	2.5
1971 ~ 75	5.0	1,000	1,001~1,500	30	3.0
1965 ~ 70	5.5	2,000	1,501~3,000	35	3.5
1964以前	6.0	2,000			
2ストロークエンジン	6.0	7,800			

(注) 1981年1月1日以後、軽ガソリン自動車は登録時点のモデル年において設けられた基準に合致しなければならない。

(出所) NPCC規則19条より。

(注) (1)1982年1月1日の排気ガス基準、(2)定義

「登録」とは、土地輸送委員会で適法に登録されていることをいう。

「軽自動車」とは、クロスで3000kg以下の自動車をいう。

「モデル年」とは、製造者の定める年度製造期間をいう。製造者がそのような年度を定めていないときは、暦による1年間をいう。

(出所) 左表に同じ。

一般地域における騒音基準

(単位：デシベル)

地域の分類	昼間	朝・夕	夜
AA	50	45	40
A	55	50	45
B	65	60	55
C	70	65	60
D	75	70	65

(出所) NPCC規則(1978年)78条、表1より。

4車線道路に面している地域の騒音基準

(単位：デシベル)

地域の分類	昼間	朝・夕	夜
AA	55	50	45
A	60	55	50
B	70	65	60
C	75	70	65
D	80	75	70

(出所) NPCCメモランダム・サーキュラー2号(1980年5月12日)。

- (注) (1) 朝：5:00~9:00、昼間：9:00~18:00、夕：18:00~22:00、夜：22:00~5:00。  
 (2) 定義——「AA」とは、学校、看護学校、病院、老人ホームの周囲100mの地域のように静穏を求められる地区あるいはそれに接する地域。  
 「A」とは、居住専用目的の地区あるいはそれに接する地域。  
 「B」とは、商業専用目的の地区あるいはそれに接する地域。  
 「C」とは、軽産業地域として決められている地区。  
 (3) 上記基準は、各地域の最大騒音レベル地点における少なくとも七つの測定値における等差中央値に対して適用される。

建設作業に対する騒音最大基準

作業内容	最大騒音レベル(デシベル)	作業実施が認められる時間	地域
クラス1	90	7:00~19:00	AA, A, B
クラス2	85	7:00~17:00	AA, A, B
クラス3-4	75	7:00~19:00	AA, A, B

- (注) 定義 「クラス1」：手作業を除くバイルドライバー、フェイル換気装置、リベティング・ハンマーを用いる作業。  
 「クラス2」：ロックドリルや、ジャックハンマー・舗装道路破壊機と同様の装置を用いる作業  
 「クラス3」：エア・コンプレッサーを用いる作業(15kWの出力を伴う電動以外のコンプレッサーに限定される。ただし、ロック・ドリルや、ジャックハンマー・舗装道路破壊機の動力源は除く)。  
 「クラス4」：パッチングプラント(0.5以上のミキサー・キャパシティーを持つものに限定される)、アスファルトプラント(200KG以上のミキサー・キャパシティーを持つものに限定される)を含む作業。モルタルのためのパッチングプラントは除く。

(出所) 同じ。

水質基準

	淡水地上水					湧水および河口水					地下水	
	公衆給水用 (A)	一定処理を要する給水用 (A)	身体に接触するレクリエーション用 (B)	農林業等用 (C)	農業・家畜・産業冷却および処理用 (D)	飲用用 (E)	レクリエーション用 (S B)	農林業等用 (S C)	産業冷却および処理用 (S D)	飲用用 (S E)	家庭用 (G A)	灌漑等用 (G B)
色、ユニット 濁度 (採氏)		75	50	50			50					50
透明度		30	30	3(e)				3(e)	3(e)			
濁度係数		5	(c)	(c)	3		(c)	(c)				
生物学的酸素要求量 (20°C, 5day)		10	5	5		2	5	5	3	2		
溶解固形全体量	(a)			1,000	1,000		1,000	1,000				1,000
固形全体量	(a)											
PR	(a)	6.5~8.5	6.5~8.5	6.5~8.5	6.0~8.5	5.0~9.0	6.5~8.5	6.0~8.5	6.0~8.5	5.0~9.0	(a)	6.0~8.5
大腸菌含有率 (NPR/100ml)	(a)	5,000	1,000	5,000			1,000	5,000			(a)	
フェノール類	(a)		0.002	0.02			0.002	0.02			(a)	
〔放射性物質〕 Ra-226 μCi/L Sr-90 μCi/L Beta Emitter (μCi/L)	(a)	(a)									(a)	
(Trace Elements)												
アルミニウム				5	0.1							5
砒素	0.05	0.05	0.05	0.05	0.05		0.05	0.05				0.05
バリウム	(a)	(a)										0.1
ベリリウム				0.1	0.1							0.1
ほう素				0.75	0.75							0.75
カドミウム	(a)	(a)	0.01	0.01	0.01		0.01	0.01			(a)	0.01
コバルト				0.05	0.05							0.05
クロム	(a)	(a)	0.05	0.05	0.10		0.05	0.05			(a)	0.10
銅	(a)	(a)	0.02	0.02	0.20		0.05	0.05			(a)	0.20
シアン化合物	0.05	0.05	0.05	0.05								0.05
フッ化物	(a)	(a)			1		0.05	0.05				5
鉄	(a)	(a)			5							5
鉛	0.05	0.05	0.05	0.05	5		0.05	0.05				0.05
リチウム					2.5 (d)							2.5 (d)
マンガン	(a)	(a)			0.2							0.2
水銀	0.002	0.002	0.002	0.002			0.002	0.002				0.002
モリブデン					0.01							0.01
ニッケル					0.2							0.2
セレンウム	0.05	0.05	0.05	0.05	0.02		0.05	0.05				0.05
銀	0.05	0.05	0.05	0.05			0.05	0.05				0.05
バナジウム					0.1							0.1
亜鉛	(a)	(a)		2	2						(a)	2

〔ナトリウム〕 硬度比(SAR) 有機化合物 (含炭水化合物-MABS) 油、グリース	nil	0.5	0.5	0.5	8~18		0.5	0.5			nil	8~18
〔不活性酸素〕												
アルドリン	0.001	0.001	0.001	0.01 μg/L			0.001	0.01 μg/L				0.001
DDT	0.05	0.05	0.05	0.02 μg/L			0.05	0.02 μg/L				0.05
ジルドリン	0.001	0.001	0.001	0.005 μg/L			0.001	0.005 μg/L				0.001
タロルゲン	0.003	0.003	0.003	0.04 μg/L			0.003	0.04 μg/L				0.003
エンドリン	0.0002	0.0002	0.002	0.002 μg/L			0.0002	0.002 μg/L				0.0002
ヘプタクロル	0.0001	0.0001	0.0001	0.01 μg/L			0.0001	0.01 μg/L				0.0001
リンゲン	0.004	0.004	0.004	0.02 μg/L			0.004	0.02 μg/L				0.004
トキサフェン	0.005	0.005	0.005	0.01 μg/L			0.005	0.01 μg/L				0.005
メトキシクロル	0.1	0.1	0.1	0.05 μg/L			0.1	0.05 μg/L				0.1
2, 4-D	0.1	0.1	0.1	4.0 μg/L			0.1	4.0 μg/L				0.1
2, 4, 5-T P	0.01	0.01	0.01				0.01					0.01
PCB	nil	0.001	0.001				0.001					nil
〔他の化学物質〕												
アンモニア	(a)	0.01										(a)
カルシウム	(a)	(a)										(a)
塩化物	(a)	(a)										(a)
マグネシウム	(a)	(a)										(a)
硝酸塩	(a)	(a)										(a)
硫酸塩	(a)	(a)										(a)
栄養素		(b)	(b)	(b)	(b)		(b)	(b)	(b)			

(注) (a)は、フィリピンの国家飲料水基準(National Standards for Drinking Water in the Philippines)をいう。

(b)は、有害で異常な生物学的成長を原因として濃縮されているような場合には適用されない。

(c)は、Secchi Diskは最低1メートルの深度での可視可能性である。

(d)は、0.075mg/Lが望ましい。

(e)は、上昇温度である。

(出所) NPCC規則(1978年)表1より作成。

産業排水その他の排水（金属・化学物質）における許容最大限

物質	淡水	海水および 河口水	淡水	海水および 河口水
	一定処理を要する給水用(A) 身体に接触するレクリエーション用(B)	レクリエーション(SB) 国立公園内の水(NP)	魚介類等飼育等用(C) 農業・家畜・産業冷房および処理用(D)	魚介類等飼育等用(SC) 産業冷房および処理用(SD)
ベリウム (Ba)	2	2	2	5
カドミウム (Cd)	0.01	0.02	0.05	0.1
銅 (Cu)	1	1	1	1
六価クロム (Cr <sup>6+</sup> )	0.05	0.05	0.1	0.05
鉄 (Fe)	1	5	10	20
鉛 (Pb)	0.1	0.1	0.5	0.5
リチウム (Li)	0.5	0.5	1	1
マンガン (Mn)	1	1	1	5
水銀 (Hg)	0.002	0.002	0.002	0.002
モリブデン (Mo)	0.1	0.1	0.1	0.5
ニッケル (Ni)	0.5	0.5	0.5	1
セレンウム (Se)	0.05	0.1	0.2	1
銀 (Ag)	0.1	0.1	0.5	1
亜鉛 (Zn)	5	5	5	10
砒素 (As)	0.1	0.1	0.1	0.5
ほう素 (B)	—	—	2	—
ベリリウム (Be)	0.5	0.5	0.5	1
塩素 (Cl <sub>2</sub> )	1	1	1	1
シアン化合物(CN)	0.1	0.1	0.1	0.5
フッ化物 (F)	3	3	6	10
PCB (PCB)	0.003	0.003	0.003	0.003

(出所) NPCC規則 (1982年) 2条より。

国内排水処理プラントと産業プラントの容量最大限 (有機化学物質)

物質	淡水	海水および 河口水	淡水	海水および 河口水
	一定処理を要する給水用(A) 身体に接触するレクリエーション用(B)	レクリエーション用(SB) 国立公園内の水(NP)	魚介類等飼育等用(C) 農業・家畜・産業冷房および処理用(D)	魚介類等飼育等用(SC) 産業冷房および処理用(SD)
プラチナ・コバルト ユニット内の色	100	100	100	100
PH	6~8.5	6~8.5	6~8.5	5.5~9
温度 (摂氏)	40	40	40	40
フェノール類の含有 量 (mg/l)	0.05	0.05	0.1	1
固定固形量 (mg/l)	30	50	80	200
生物学的酸素要求量 (BOD, mg/l)	30	50	80	250
油・グリース量 (mg/l)	5	5	10	15
洗剤量 (mg/l)	1	1	5	10

(注) BODは排水や地上水にあるバクテリアによって有機物を安定させるのに必要な溶解酸素の量をいう。

(出所) NPCC規則 (1982年) 5条より。

高度産業廃棄物の排水許容最大限

物質	淡水	海水および河口水
	魚介類等飼育等用(C) 農業・家畜・産業冷房および処理用(D)	魚介類等飼育等用(SC)
プラチナ・コバルトユニット内の色	150	300
PH	6~9	5~9
温度 (摂氏)	40	40
フェノール類の含有量 (mg/l)	1	10
固定固形量 (mg/l)	100	400
生物学的酸素要求量 (BOD, mg/l)	150	500
油・グリース量 (mg/l)	10	15

(注) 本表にいう排出は300mg/l以上のBODを含む製造プラント、コナック工場、皮なめし、タピオカ、でんぷん製造プラント、屠殺場、食肉精製プラント、石油精製プラント、からの排水をいう。

(出所) NPCC規則 (1982年) 5条より。



## b. 北部パラワン開発許可

### (1) 建築物の規制

“National Building Code of the Philippines” 及びその “Implementing Rules and Regulations” に、各々建築物についての規制や、行政組織、Building Permit の手続きについては、説明されている。

フィリピン国においては、いかなる建設工事においても、まず Building Permit をその建設地域の Building Official より受けなければならないと規定されている。

Building Permit を受けるについての概略は次に示す通りである。

#### 1) Building Permits の申請

Building Permit を受けるためには、Building Official の事務所で、法により規定されたフォームに則って申請をしなければならない。総ての申請は、最低下記の情報を提供しなければならない。

- ① Building Permit の適用がカバーする仕事 (Work) の説明。
- ② 申請仕事 (Work) が施工される敷地の所有権とその記述を、T C T 又はその敷地が申請者の正当な所有物でない場合は、その敷地を申請者がリースするという契約書のコピーで立証する。
- ③ 申請仕事 (Work) に予定されている使用方法又は適用。
- ④ 申請仕事 (Work) の見積金額

この申請をするためには、最低下記に示すような図面や仕様書が5セット申請書と共に必要となる。(ここで、この Code に則って Building Official が必要無しと考えたものは除く)

- a) 建築及び構造計画について、正当に免許を受けた建築家及び Civil Engenear のサイン及びシールされた図面及び仕様書。
- b) 機械設備計画の場合、登録された機械設備技師のサインとシールのある図面と仕様書。
- c) 電気計画の場合、登録された電気技師のサインとシールのある図面と仕様書。
- d) 配管、衛生設備の場合、免許のある衛生設備技師又はマスタープランナーのサインとシールのある図面と仕様書。

#### 2) Building Permits の審査

Building permits の申請後の進行は、Building Official とその資格ある専門家である技術スタッフの管制下の共で行われる。Building Official 及び、その技術スタッフは、申請が、本 Code の各条項に規定されている規制や規定に則って満足されているものであるかを確認する。

その各々とは、Zoning and Land use, lines and grades、構造設計、衛生・排水、環境衛生、電気及び機械の安全性等。

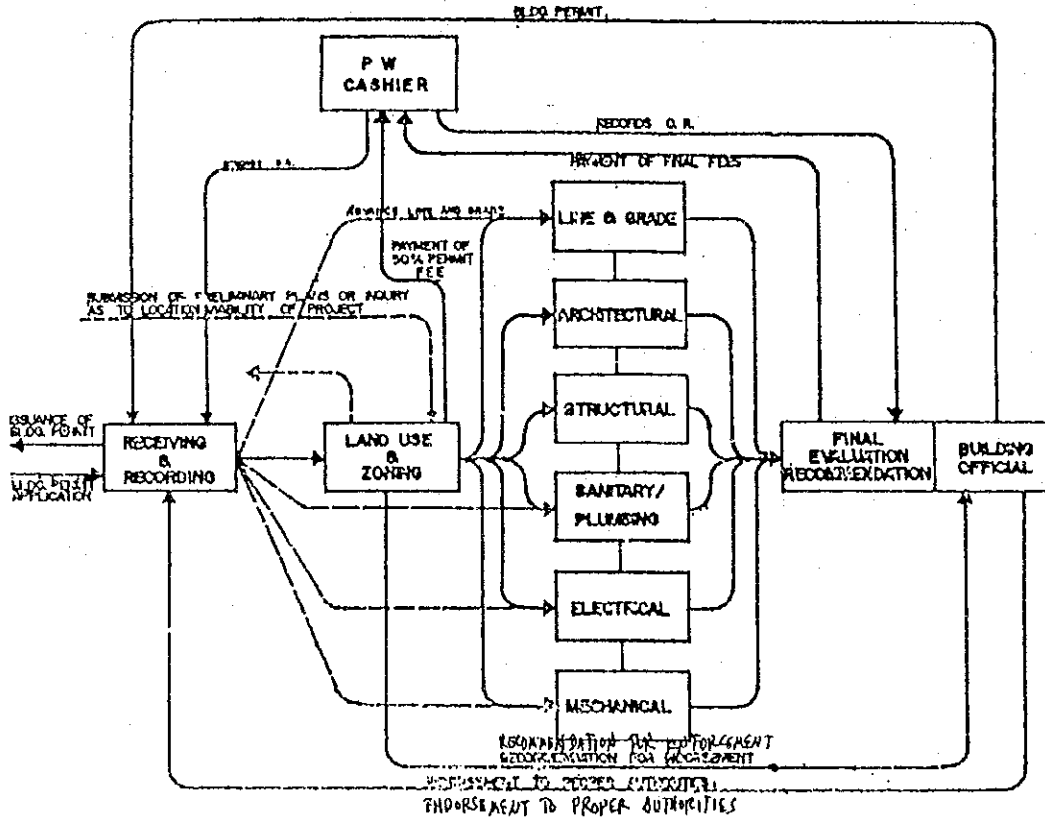
### 3) Building Permits の発行

Building Official は、Building Permits の申請書及び、添付されている各々の図面や仕様書が、本 Code や、その他関連する規制・規定を満足するものであるとき、申請者が規定の料金を支払い終ってから15日以内に、当 Building Permit を発行しなければならない。

Building Permit の手続きに関するフローチャート及び、申請書類を、次に掲載する。

図 2.1 建築許可申請フローチャート

PROCESSING OF BUILDING PERMIT APPLICATION  
FLOW CHART



SECTIONAL PERMIT FLOW  
(FOR SANITARY, ELECTRICAL &  
MECHANICAL INSTALLATIONS)

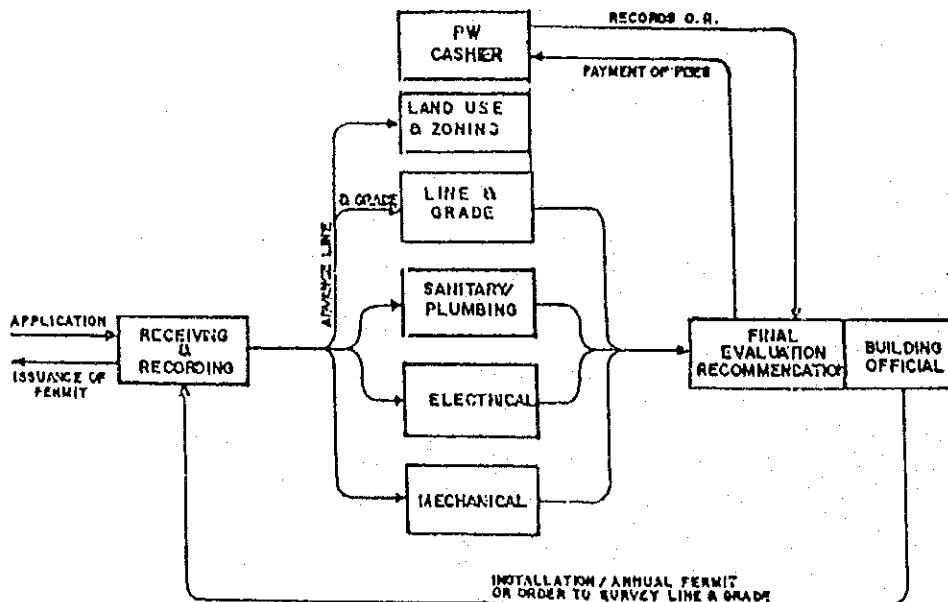
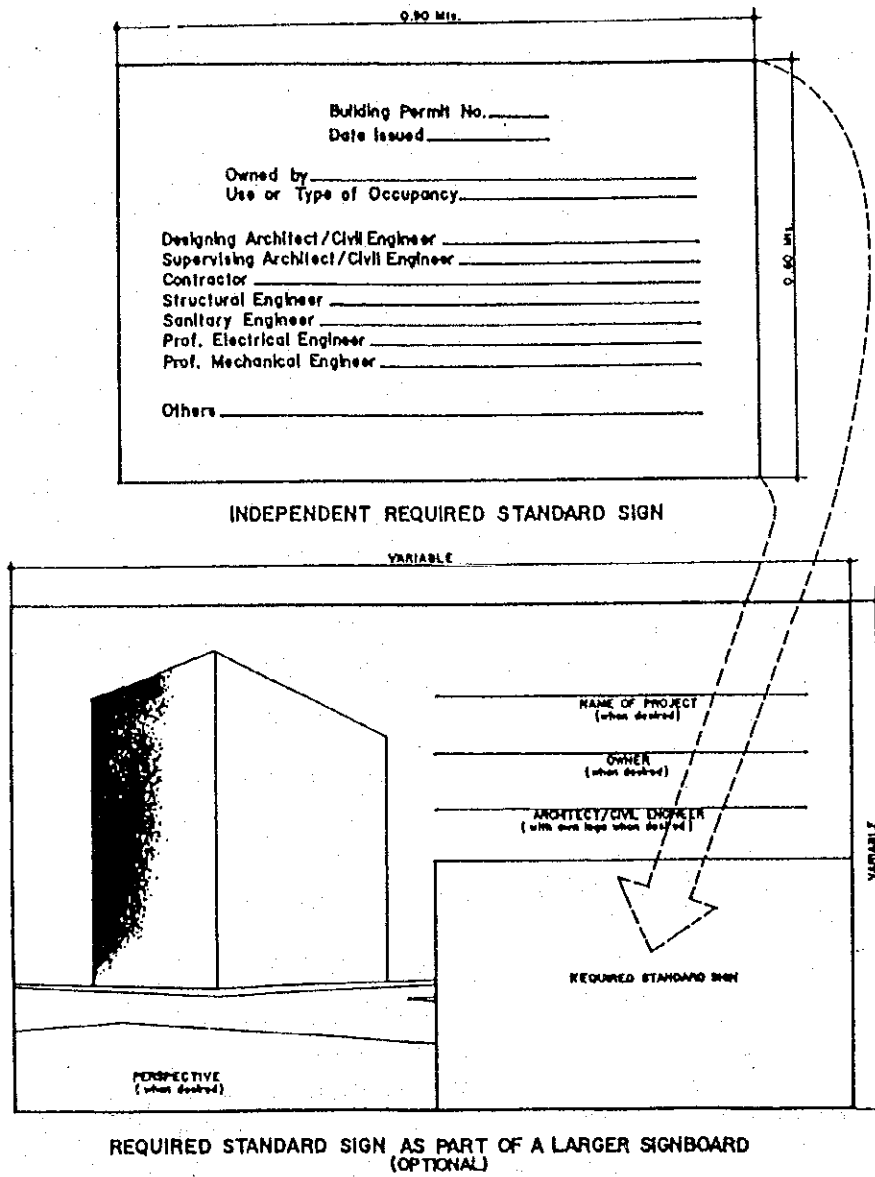


圖 2.2 申請用圖



REPUBLIC OF THE PHILIPPINES  
**MINISTRY OF PUBLIC WORKS**  
**METROPOLITAN MANILA COMMISSION**  
**OFFICE OF THE BUILDING OFFICIAL**

APPLICANT'S COPY

No 0001001-Q

APPLICATION NO.  

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DISTRICT/CITY/MUNICIPALITY  
 AREA CODE  
**BUILDING PERMIT**  
 ORIGINAL      RENEWAL

PERMIT  

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 DATE ISSUED

**BOX 1 (TO BE ACCOMPLISHED BY DESIGNING ARCHITECT/CIVIL ENGINEER IN PRINT)**

NAME OF OWNER/APPLICANT		LAST NAME, FIRST NAME, M.I.		TAX ACCT. NO.
FOR CONSTRUCTION OWNED BY AN ENTERPRISE		FORM OF OWNERSHIP		MAIN ECONOMIC ACTIVITY/ KIND OF BUSINESS
ADDRESS		NO., STREET, BARANGAY, CITY/MUNICIPALITY		TELEPHONE NO.
LOCATION OF CONSTRUCTION		NO., STREET, BARANGAY, CITY/MUNICIPALITY		
SCOPE OF WORK				
1 <input type="checkbox"/> NEW CONSTRUCTION		2 <input type="checkbox"/> ADDITION OF _____		OTHERS (SPECIFY) _____
		3 <input type="checkbox"/> REPAIR OF _____		
		4 <input type="checkbox"/> RENOVATION OF _____		6 <input type="checkbox"/> _____ OF _____
		5 <input type="checkbox"/> INSTALLATION OF _____		7 <input type="checkbox"/> _____ OF _____
USE OR TYPE OF OCCUPANCY				
<b>RESIDENTIAL</b>				
11 <input type="checkbox"/> SINGLE		INDUSTRIAL		30 <input type="checkbox"/> OTHERS (SPECIFY) _____
12 <input type="checkbox"/> DUPLEX		31 <input type="checkbox"/> FACTORY/PLANT		
13 <input type="checkbox"/> ROWHOUSE/ACCESSORIA		32 <input type="checkbox"/> REPAIR SHOP, MACHINE SHOP		
14 <input type="checkbox"/> OTHERS (SPECIFY) _____		33 <input type="checkbox"/> REFINERY		
<b>COMMERCIAL</b>				
15 <input type="checkbox"/> BANK		34 <input type="checkbox"/> PRINTING PRESS		
16 <input type="checkbox"/> STORE		35 <input type="checkbox"/> WAREHOUSE		
17 <input type="checkbox"/> HOTEL/MOTEL, ETC.		<b>INSTITUTIONAL</b>		
18 <input type="checkbox"/> OFFICE CONDOMINIUM/BUSINESS OFFICE BUILDING		41 <input type="checkbox"/> SCHOOL		
19 <input type="checkbox"/> RESTAURANT, ETC.		42 <input type="checkbox"/> CHURCH AND OTHER RELIGIOUS STRUCTURES		
20 <input type="checkbox"/> SHOP (e.g. DRESS SHOP, TAILORING SHOP, BARBER SHOP, ETC.)		43 <input type="checkbox"/> HOSPITAL OR SIMILAR STRUCTURES		
21 <input type="checkbox"/> GASOLINE STATION		44 <input type="checkbox"/> WELFARE AND CHARITABLE STRUCTURES		
22 <input type="checkbox"/> MARKET		45 <input type="checkbox"/> THEATER, AUDITORIUM, GYMNASIUM, COURT		
23 <input type="checkbox"/> DORMITORY or OTHER LODGING HOUSE		46 <input type="checkbox"/> OTHERS (SPECIFY) _____		
24 <input type="checkbox"/> OTHERS (SPECIFY) _____		<b>AGRICULTURAL</b>		
<b>OTHER CONSTRUCTION</b>				
40 <input type="checkbox"/> (SPECIFY) _____		51 <input type="checkbox"/> BARN(S), POULTRY HOUSING, ETC.		
		52 <input type="checkbox"/> GRAIN MILL		
		53 <input type="checkbox"/> OTHERS (SPECIFY) _____		
<b>STREET FURNITURE, LANDSCAPING &amp; SIGNBOARDS</b>				
71 <input type="checkbox"/> PARKS, PLAZAS, MONUMENTS, POOLS, PLANT BOXES, ETC.				
72 <input type="checkbox"/> SIDEWALKS, PROMENADES, TERRACES, LAMPPOSTS, ELECTRIC POLES, TELEPHONE POLES, ETC.				
73 <input type="checkbox"/> OUTDOOR ADS, SIGNBOARDS, ETC.				
74 <input type="checkbox"/> FENCE ENCLOSURE				

**BOX 2 (TO BE ACCOMPLISHED BY THE RECEIVING & RECORDING SECTION)**

**BUILDING DOCUMENTS (FIVE SETS EACH)**

<input type="checkbox"/> SITE DEVELOPMENT AND LOCATION PLAN	<input type="checkbox"/> MECHANICAL PLANS & SPECIFICATIONS
<input type="checkbox"/> ARCHITECTURAL PLAN & SPECIFICATIONS	<input type="checkbox"/> LOGBOOK (1 COPY)
<input type="checkbox"/> STRUCTURAL DESIGNS & COMPUTATIONS	<input type="checkbox"/> OTHERS (SPECIFY) _____
<input type="checkbox"/> SANITARY/PLUMBING PLANS & SPECIFICATIONS	
<input type="checkbox"/> ELECTRICAL PLANS & SPECIFICATIONS	

**BOX 3 (TO BE ACCOMPLISHED BY THE BUILDING OFFICIAL)**

**ACTION TAKEN:**

PERMIT IS HEREBY GRANTED SUBJECT TO THE FOLLOWING CONDITIONS:

1. THAT THE PROPOSED CONSTRUCTION/ADDITION/REPAIR/RENOVATION/DEMOLITION/INSTALLATION, ETC., SHALL BE IN CONFORMITY WITH THE "NATIONAL BUILDING CODE" (P.D. 1096) AND ITS CORRESPONDING IMPLEMENTING RULES AND REGULATIONS
2. THAT A DULY LICENSED ARCHITECT/CIVIL ENGINEER HAS BEEN ENGAGED TO PREPARE PLANS & SPECIFICATIONS AND TO UNDERTAKE THE SUPERVISION/INSPECTION OF THE CONSTRUCTION OF THE PROJECT.
3. THAT A CERTIFICATE OF COMPLETION DULY SIGNED AND SEALED BY THE DESIGNING ARCHITECT/CIVIL ENGINEER AND THE ARCHITECT/CIVIL ENGINEER IN CHARGE OF CONSTRUCTION SHALL BE SUBMITTED NOT LATER THAN SEVEN (7) DAYS AFTER COMPLETION OF THE CONSTRUCTION OF THE PROJECT.
4. THAT A "CERTIFICATE" OF OCCUPANCY SHALL BE SECURED PRIOR TO ACTUAL OCCUPANCY OF THE BUILDING.

_____ BUILDING OFFICIAL	
	_____ DATE

**NOTE:**  
 THIS PERMIT MAY BE CANCELLED OR REVOKED PURSUANT TO SECTIONS 305 & 306 OF THE "NATIONAL BUILDING CODE"

BOX 3 (TO BE ACCOMPLISHED BY DESIGNING ARCHITECT/CIVIL ENGINEER IN PRINT)

TOTAL ESTIMATED COST		COST OF EQUIPMENT INSTALLED	NUMBER OF STOREYS: _____
BUILDING	₹ _____		
ELECTRICAL	₹ _____	₹ _____	PROPOSED DATE OF CONSTRUCTION: _____
MECHANICAL	₹ _____	₹ _____	EXPECTED DATE OF COMPLETION: _____
MUMBING	₹ _____	₹ _____	MATERIAL OF CONSTRUCTION: _____ (WOODEN, CONCRETE, STEEL, MIXED)
OTHERS	₹ _____		
TOTAL CONSTRUCTION COST ₹ _____			

BOX 4 (TO BE ACCOMPLISHED BY THE DIVISION/SECTION CONCERNED)

ASSESSED FEES				
	AMOUNT DUE	ASSESSED BY	O.R. NUMBER	DATE PAID
<input type="checkbox"/> LAND USE/ZONING				
<input type="checkbox"/> LINE and GRADE				
<input type="checkbox"/> BUILDING				
<input type="checkbox"/> MUMBING				
<input type="checkbox"/> ELECTRICAL				
<input type="checkbox"/> MECHANICAL				
OTHERS:				
TOTAL				

REVIEWED BY: \_\_\_\_\_  
CHIEF, PROCESSING DIVISION/SECTION

BOX 5 (TO BE ACCOMPLISHED BY THE DIVISION/SECTION CONCERNED)

PROGRESS FLOW						
NOTED: CHIEF, PROCESSING DIVISION/SECTION	IN		OUT		ACTION/ REMARKS	PROCESSED BY
	TIME	DATE	TIME	DATE		
RECEIVING AND RECORDING						
LAND USE and ZONING						
GEODETIC (LINE and GRADE)						
ARCHITECTURAL						
STRUCTURAL						
SANITARY						
ELECTRICAL						
MECHANICAL						

WE HEREBY AFFIX OUR HANDS SIGNIFYING OUR CONFORMITY TO THE INFORMATION HEREIN ABOVE SET FORTH

BOX 6

ARCHITECT/CIVIL ENGINEER SIGNED AND SEALED PLANS & SPECIFICATIONS		PRC REG. NO.
PRINT NAME		
ADDRESS		
P.T.E. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN.

BOX 8

SIGNATURE		
APPLICANT		
RES. CERT. NO.	DATE ISSUED	PLACE ISSUED

BOX 7

ARCHITECT/CIVIL ENGINEER IN CHARGE OF CONSTRUCTION		PRC REG. NO.
PRINT NAME		
ADDRESS		
P.T.E. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN.

WITH MY CONSENT:  
BOX 9 (TO BE ACCOMPLISHED BY LOT OWNER)

TCT/DCI NO.	TAX DECLARATION NO.	
PRINT NAME OF LOT OWNER		
ADDRESS		
RES. CERT. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN.

REPUBLIC OF THE PHILIPPINES  
 MINISTRY OF PUBLIC WORKS  
 METROPOLITAN MANILA COMMISSION  
 OFFICE OF THE BUILDING OFFICIAL

APPLICANT'S COPY

APPLICATION NO.  

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DISTRICT/CITY/MUNICIPALITY  
 AREA CODE

**APPLICATION FOR  
 ELECTRICAL PERMIT**

DATE OF APPLICATION \_\_\_\_\_

BOX 1 (TO BE ACCOMPLISHED BY PROFESSIONAL ELECTRICAL ENGINEER/MASTER ELECTRICIAN IN PRINT)

NAME OF OWNER/APPLICANT		LAST NAME, FIRST NAME, M. I.		TAX ACCT. NO.
ADDRESS		NO., STREET, BARANGAY, CITY/MUNICIPALITY		TELEPHONE NO.
LOCATION OF INSTALLATION		NO., STREET, BARANGAY, CITY/MUNICIPALITY		
SCOPE OF WORK		OTHERS (SPECIFY)		
<input type="checkbox"/> NEW INSTALLATION <input type="checkbox"/> ANNUAL INSPECTION		<input type="checkbox"/> ADDITION OF _____ <input type="checkbox"/> REPAIR OF _____ <input type="checkbox"/> REMOVAL OF _____		
USE OR TYPE OF OCCUPANCY				
<input type="checkbox"/> RESIDENTIAL _____ <input type="checkbox"/> COMMERCIAL _____ <input type="checkbox"/> INDUSTRIAL _____ <input type="checkbox"/> INSTITUTIONAL _____		<input type="checkbox"/> AGRICULTURAL _____ <input type="checkbox"/> SHEET FURNITURE, LANDSCAPING _____ <input type="checkbox"/> SIGNBOARDS _____ <input type="checkbox"/> OTHERS (SPECIFY) _____		
NUMBER OF OUTLETS AND EQUIPMENT TO BE INSTALLED				
<input type="checkbox"/> LIGHTS _____ <input type="checkbox"/> SWITCHES _____ <input type="checkbox"/> CONV. OUTLETS _____ <input type="checkbox"/> BELL SYSTEM _____ <input type="checkbox"/> ELECTRIC RANGE: _____ K.W. <input type="checkbox"/> WATER HEATER _____ K.W. <input type="checkbox"/> AIRCONDITIONING SYSTEM _____ <input type="checkbox"/> TELEPHONE _____ <input type="checkbox"/> MOTORS _____ <input type="checkbox"/> OTHERS (SPECIFY) _____				
DATE OF PROPOSED START OF CONSTRUCTION _____		ESTIMATED COST OF ELECTRICAL INSTALLATION _____		
EXPECTED DATE OF COMPLETION _____		PREPARED BY _____		

BOX 2 (TO BE ACCOMPLISHED BY RECEIVING & RECORDING SECTION)

ELECTRICAL DOCUMENTS (FIVE (5) SETS EACH)	
<input type="checkbox"/> ELECTRICAL PLAN & SPECIFICATIONS	<input type="checkbox"/> BILL OF MATERIALS
<input type="checkbox"/> COST ESTIMATES	<input type="checkbox"/> OTHERS (SPECIFY) _____

WE HEREBY AFFIX OUR HANDS SIGNIFYING OUR CONFORMITY TO THE INFORMATION HEREIN ABOVE SET FORTH.

BOX 3 (PERSON WHO SIGNED AND SEALED) PLANS & SPECIFICATION			BOX 3 (PERSON IN CHARGE OF THE INSTALLATIONS)		
ELECTRICAL ENGINEER/ MASTER ELECTRICIAN		PRC REG. NO.	ELECTRICAL ENGINEER/ MASTER ELECTRICIAN		PRC REG. NO.
PRINT NAME			PRINT NAME		
ADDRESS			ADDRESS		
P.T.R. NO.	DATE ISSUED	PLACE ISSUED	P.T.R. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN	SIGNATURE		TAN
BOX 4					
SIGNATURE (OWNER)		TAN	RES. CERT. NO.	DATE ISSUED	PLACE ISSUED

REPUBLIC OF THE PHILIPPINES  
 MINISTRY OF PUBLIC WORKS  
 METROPOLITAN MANILA COMMISSION  
 OFFICE OF THE BUILDING OFFICIAL

PERMIT NO. 

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DISTRICT/CITY/MUNICIPALITY \_\_\_\_\_  
 AREA CODE \_\_\_\_\_

APPLICATION NO. 

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## ELECTRICAL PERMIT

DATE ISSUED \_\_\_\_\_

**BOX 5 TO BE ACCOMPLISHED BY PROFESSIONAL ELECTRICAL ENGINEER/MASTER ELECTRICIAN IN PRINT**

NAME OF OWNER/APPLICANT	LAST NAME, FIRST NAME, M. I.	TAX ACCT. NO.
ADDRESS	NO., STREET, BARANGAY, CITY/MUNICIPALITY	TELEPHONE NO.
LOCATION OF INSTALLATION	NO., STREET, BARANGAY, CITY/MUNICIPALITY	

**BOX 6 (TO BE ACCOMPLISHED BY DIVISION/SECTION CONCERNED)**

NOTED:	PROGRESS FLOW				ACTION/REMARK	PROCESSED BY
	IN		OUT			
	TIME	DATE	TIME	DATE		
CHIEF, PROCESSING DIVISION/SECTION						
RECEIVING and RECORDING						
ELECTRICAL						

**BOX 7 (TO BE ACCOMPLISHED BY DIVISION/SECTION CONCERNED)**

ASSESSED FEES			
AMOUNT DUE	ASSESSED BY	O. R. NUMBER	DATE PAID

REVIEWED:  
 \_\_\_\_\_  
 Chief, Processing Division/Section

**BOX 8 (TO BE ACCOMPLISHED BY THE BUILDING OFFICIAL)**

**ACTION TAKEN:**

PERMIT IS HEREBY GRANTED TO INSTALL THE ELECTRICAL WIRING AND EQUIPMENT ENUMERATED HEREIN SUBJECT TO THE FOLLOWING CONDITIONS:

1. THAT THE PROPOSED INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED PLANS FILED WITH THIS OFFICE AND IN CONFORMITY WITH THE NATIONAL BUILDING CODE.
2. THAT A DULY LICENSED ELECTRICAL ENGINEER/MASTER ELECTRICIAN BE ENGAGED TO UNDERTAKE THE INSTALLATION/CONSTRUCTION.
3. THAT A CERTIFICATE OF COMPLETION DULY SIGNED BY THE ELECTRICAL ENGINEER/MASTER ELECTRICIAN IN CHARGE OF INSTALLATION SHALL BE SUBMITTED NOT LATER THAN SEVEN (7) DAYS AFTER COMPLETION OF THE INSTALLATION.
4. THAT A CERTIFICATE OF FINAL INSPECTION AND A CERTIFICATE OF OCCUPANCY BE SECURED PRIOR TO THE ACTUAL OCCUPANCY OF THE BUILDING.

\_\_\_\_\_  
BUILDING OFFICIAL

\_\_\_\_\_  
DATE

**NOTE:**  
 THIS PERMIT MAY BE CANCELLED OR REVOKED PURSUANT TO SECTIONS 305 & 306 OF THE "NATIONAL BUILDING CODE"



APPLICATION NO. 

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DISTRICT/CITY/MUNICIPALITY \_\_\_\_\_  
 AREA CODE \_\_\_\_\_

PERMIT NO. 

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## MECHANICAL PERMIT

DATE OF APPLICATION \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

Box 1 (TO BE ACCOMPLISHED BY PROFESSIONAL MECHANICAL ENGINEER IN PRINT)

NAME OF OWNER/APPLICANT	LAST NAME, FIRST NAME, M.I.	TAX ACC. NO.
ADDRESS	NO., STREET, BARANGAY, CITY/MUNICIPALITY	TELEPHONE NO.
LOCATION OF INSTALLATION	NO., STREET, BARANGAY, CITY/MUNICIPALITY	
SCOPE OF WORK	<input type="checkbox"/> ADDITION OF _____ <input type="checkbox"/> REMOVAL OF _____ <input type="checkbox"/> OTHERS (SPECIFY) _____	BUILDING PERMIT NO. _____ CERTIFICATE OF OCCUPANCY NO. _____
USE OR TYPE OF OCCUPANCY <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> INSTITUTIONAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> LANDSCAPING <input type="checkbox"/> OTHERS (SPECIFY) _____		
INSTALLATION AND OPERATION OF <input type="checkbox"/> BOILER <input type="checkbox"/> PRESSURE VESSELS <input type="checkbox"/> INTERNAL COMBUSTION ENGINE <input type="checkbox"/> REFRIGERATION & ICE-MAKING <input type="checkbox"/> WINDOW TYPE AIR-CONDITIONING <input type="checkbox"/> PACKAGE AIR-CONDITIONING UNIT <input type="checkbox"/> OTHERS (SPECIFY) _____		
<input type="checkbox"/> CENTRAL AIR-CONDITIONING <input type="checkbox"/> MECHANICAL VENTILATION <input type="checkbox"/> ESCALATOR <input type="checkbox"/> MOVING SIDEWALK <input type="checkbox"/> FREIGHT ELEVATOR <input type="checkbox"/> PASSENGER ELEVATOR		
<input type="checkbox"/> DUMPWATER <input type="checkbox"/> PUMPS <input type="checkbox"/> COMPRESSED AIR, VACUUM, INSTITUTIONAL and/or INDUSTRIAL GAS <input type="checkbox"/> PNEUMATIC TUBES, CONVEYORS and/or MONORAILS		
PROPOSED DATE OF INSTALLATION _____	EXPECTED DATE OF COMPLETION _____	PREPARED BY _____
TOTAL INSTALLATION COST _____		

Box 2 (TO BE ACCOMPLISHED BY THE BUILDING OFFICIAL)

<p><b>ACTION TAKEN</b></p> <p>PERMIT IS HEREBY GRANTED TO INSTALL THE MECHANICAL EQUIPMENT ENUMERATED HEREIN SUBJECT TO THE FOLLOWING CONDITIONS:</p> <ol style="list-style-type: none"> <li>1. THAT THE PROPOSED INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED PLANS FILED WITH THIS OFFICE AND IN CONFORMITY WITH THE "NATIONAL BUILDING CODE".</li> <li>2. THAT A DULY LICENSED PROFESSIONAL MECHANICAL ENGINEER BE ENGAGED TO UNDERTAKE THE INSTALLATION/CONSTRUCTION.</li> <li>3. THAT A CERTIFICATE OF COMPLETION DULY SIGNED BY THE PROFESSIONAL MECHANICAL ENGINEER IN-CHARGE OF INSTALLATION SHALL BE SUBMITTED NOT LATER THAN SEVEN (7) DAYS AFTER COMPLETION OF THE INSTALLATION.</li> <li>4. THAT A CERTIFICATE OF FINAL INSPECTION AND A CERTIFICATE OF OCCUPANCY BE SECURED PRIOR TO THE ACTUAL OCCUPANCY OF THE BUILDING.</li> <li>5. THAT AN ANNUAL CERTIFICATE OF INSPECTION SHALL BE SECURED FOR THE CONTINUOUS OPERATION OF THE MECHANICAL EQUIPMENT INSTALLED.</li> </ol> <p><b>NOTE:</b>                  THIS PERMIT MAY BE CANCELLED OR REVOKED PURSUANT TO SECTIONS 503 &amp; 506 OF THE "NATIONAL BUILDING CODE"</p>	_____ BUILDING OFFICIAL  _____ DATE
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BOX 3 (TO BE ACCOMPLISHED BY THE RECEIVING AND RECORDING SECTION)

BUILDING DOCUMENTS (FIVE (5) SETS EACH)	
<input type="checkbox"/> MECHANICAL PLANS & SPECIFICATIONS <input type="checkbox"/> COST ESTIMATES	<input type="checkbox"/> BILL OF MATERIALS <input type="checkbox"/> OTHERS (SPECIFY) _____

BOX 4 (TO BE ACCOMPLISHED BY THE DIVISION/SECTION CONCERNED)

ASSESSED FEES				
	AMOUNT DUE	ASSESSED BY	O. R. NUMBER	DATE PAID
MECHANICAL				
			REVIEWED: CHIEF, PROCESSING DIV./SEC.	

BOX 5 (TO BE ACCOMPLISHED BY DIVISION/SECTION CONCERNED)

PROGRESS FLOW						
NOTICE CHIEF, PROCESSING DIVISION/SECTION RECEIVING AND RECORDING MECHANICAL	IN		OUT		ACTION/REMARKS	PROCESSED BY
	DATE	TIME	DATE	TIME		

WE HEREBY AFFIX OUR HANDS SIGNIFYING OUR CONFORMITY TO THE INFORMATION HEREIN ABOVE SET FORTH

BOX 6		
<b>PROF. MECH. ENGINEER</b> SIGNED AND SEALED PLANS & SPECIFICATIONS		PRC REG. NO.
PRINT NAME		
ADDRESS		
P.T.R. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN

BOX 8		
SIGNATURE		
APPLICANT		
REG. CERT. NO.	DATE ISSUED	PLACE ISSUED

BOX 7		
<b>PROF. MECH. ENGINEER</b> IN-CHARGE OF INSTALLATION		PRC REG. NO.
PRINT NAME		
ADDRESS		
P.T.R. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAN

APPLICATION NO. 

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DISTRICT/CITY/MUNICIPALITY  
AREA CODE \_\_\_\_\_

PERMIT NO. 

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### SANITARY/PLUMBING PERMIT

DATE OF APPLICATION  
BOX 1 (TO BE ACCOMPLISHED BY SANITARY ENGINEER/MASTER PLUMBER IN PRINT)

DATE ISSUED

NAME OF OWNER/APPLICANT	LAST NAME, FIRST NAME, M.I.	TAX ACCT. NO.
ADDRESS	NO., STREET, BARANGAY, CITY/MUNICIPALITY	TELEPHONE NO.

LOCATION OF INSTALLATION NO., STREET, BARANGAY, CITY/MUNICIPALITY

SCOPE OF WORK

NEW INSTALLATION       ADDITION OF \_\_\_\_\_       OTHERS (SPECIFY) \_\_\_\_\_

REPAIR OF \_\_\_\_\_       OF \_\_\_\_\_

REMOVAL OF \_\_\_\_\_       OF \_\_\_\_\_

USE OR TYPE OF OCCUPANCY

RESIDENTIAL \_\_\_\_\_       AGRICULTURAL \_\_\_\_\_

COMMERCIAL \_\_\_\_\_       PARKS, PLAZAS, MONUMENTS \_\_\_\_\_

INDUSTRIAL \_\_\_\_\_       RECREATIONAL \_\_\_\_\_

INSTITUTIONAL \_\_\_\_\_       OTHERS (SPECIFY) \_\_\_\_\_

FIXTURES TO BE INSTALLED:											
QTY.	NEW FIXTURES	EXISTING FIXTURES	KIND OF FIXTURES	QTY.	NEW FIXTURES	EXISTING FIXTURES	KIND OF FIXTURES	QTY.	NEW FIXTURES	EXISTING FIXTURES	KIND OF FIXTURES
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> WATER CLOSET	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BIDETTE	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> LAUNDRY TRAYS
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> FLOOR DRAIN	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DENTAL CUBICLOR	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> GAS HEATER
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> LAVATORIES	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ELECTRIC HEATER	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> WATER BOILER
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> KITCHEN SINK	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DRINKING FOUNTAIN	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BATH SINK
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> FAUCET	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> SODA FOUNTAIN SINK	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> LABORATORY SINK
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> SHOWER HEAD	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> STERILIZER	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> SWIMMING POOL
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> WATER METER	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> OTHERS (SPECIFY) _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> GREASE TRAP	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> BATH TUBS	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> SLOP SINK	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> URINAL	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> AIR CONDITIONING UNIT	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> WATER TANK/RESERVOIR	_____	<input type="checkbox"/>	<input type="checkbox"/>		_____	<input type="checkbox"/>	<input type="checkbox"/>	
_____	<input type="checkbox"/>	<input type="checkbox"/>	TOTAL	_____	<input type="checkbox"/>	<input type="checkbox"/>	TOTAL	_____	<input type="checkbox"/>	<input type="checkbox"/>	TOTAL

WATER DISTRIBUTION SYSTEM       SANITARY SEWER SYSTEM       STORM DRAINAGE SYSTEM

<b>WATER SUPPLY:</b> <input type="checkbox"/> SHALLOW WELL <input type="checkbox"/> DEEP WELL & PUMP SET <input type="checkbox"/> CITY/MUNICIPAL WATER SYSTEM <input type="checkbox"/> OTHERS _____	<b>SYSTEM OF DISPOSAL:</b> <input type="checkbox"/> WASTE WATER TREATMENT PLANT <input type="checkbox"/> SEPTIC VAULT/IMHOFF TANK <input type="checkbox"/> SANITARY SEWER CONNECTION <input type="checkbox"/> SUB-SURFACE SAND FILTER	<input type="checkbox"/> SURFACE DRAINAGE <input type="checkbox"/> STREET CANAL <input type="checkbox"/> WATER COURSE
NUMBER OF STOREYS OF BUILDING _____	TOTAL AREA OF BUILDING/SUBDIVISION _____ SQ.M.	
PROPOSED DATE _____	TOTAL COST OF INSTALLATION ₱ _____	
START OF INSTALLATION _____	PREPARED BY _____	
EXPECTED DATE OF COMPLETION _____		

BOX 2 (TO BE ACCOMPLISHED BY THE BUILDING OFFICIAL)

**ACTION TAKEN:**

PERMIT IS HEREBY GRANTED TO INSTALL THE SANITARY/PLUMBING FIXTURES ENUMERATED HEREIN SUBJECT TO THE FOLLOWING CONDITIONS:

1. THAT THE PROPOSED INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED PLANS FILED WITH THIS OFFICE AND IN CONFORMITY WITH THE NATIONAL BUILDING CODE.
2. THAT A DULY LICENSED SANITARY ENGINEER/MASTER PLUMBER BE ENGAGED TO UNDERTAKE THE INSTALLATION/CONSTRUCTION.
3. THAT A CERTIFICATE OF COMPLETION DULY SIGNED BY AN SANITARY ENGINEER/MASTER PLUMBER IN-CHARGE OF INSTALLATION SHALL BE SUBMITTED NOT LATER THAN SEVEN (7) DAYS AFTER COMPLETION OF THE INSTALLATION.
4. THAT A CERTIFICATE OF FINAL INSPECTION AND A CERTIFICATE OF OCCUPANCY BE SECURED PRIOR TO THE ACTUAL OCCUPANCY OF THE BUILDING.

\_\_\_\_\_  
BUILDING OFFICIAL

\_\_\_\_\_  
DATE

**NOTE:**  
THIS PERMIT MAY BE CANCELLED OR REVOKED PURSUANT TO SECTIONS 305 & 306 OF THE "NATIONAL BUILDING CODE"

BOX 3 (TO BE ACCOMPLISHED BY THE RECEIVING & RECORDING SECTION)

BUILDING DOCUMENTS	
<input type="checkbox"/> SANITARY PLUMBING PLANS & SPECIFICATIONS <input type="checkbox"/> BILL OF MATERIALS	<input type="checkbox"/> COST ESTIMATES <input type="checkbox"/> OTHERS (SPECIFY) _____ _____

BOX 4 (TO BE ACCOMPLISHED BY THE DIVISION/SECTION CONCERNED)

ASSESSED FEES				
AMOUNT DUE	ASSESSED BY	O. R. NUMBER	DATE PAID	

BOX 5 (TO BE ACCOMPLISHED BY DIVISION/SECTION CONCERNED)

PROGRESS FLOW						
NOTED: CHIEF, PROCESSING DIVISION/SECTION	IN		OUT		ACTION/ REMARKS	PROCESSED BY
	TIME	DATE	TIME	DATE		
RECEIVING AND RECORDING						
MECHANICAL (PIPE and GRADE)						
SANITARY						

WE HEREBY AFFIX OUR HANDS SIGNIFYING OUR CONFORMITY TO THE INFORMATION HEREIN ABOVE SET FORTH

BOX 6

<b>SANITARY ENGINEER/MASTER PLUMBER</b> PRC. REG. NO. _____ SIGNED AND SEALED PLANS & SPECIFICATIONS		
PRINT NAME		
ADDRESS		
P.T.R. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAX

BOX 6

SIGNATURE		
APPLICANT		
RES. CERT. NO.	DATE ISSUED	PLACE ISSUED

BOX 7

<b>SANITARY ENGINEER/MASTER PLUMBER</b> PRC. REG. NO. _____ IN-CHARGE OF INSTALLATION		
PRINT NAME		
ADDRESS		
P.T.R. NO.	DATE ISSUED	PLACE ISSUED
SIGNATURE		TAX

MPW FORM No. 77-005-B

CERTIFICATE OF FINAL INSPECTION

Dist. of Construction  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Number  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Date Submitted

Date Issued

OWNER/APPLICANT

BLDG. PERMIT No.

DATE ISSUED

LOCATION OF CONSTRUCTION

USE OR TYPE OF OCCUPANCY

DATE OF COMPLETION

CERT. AS BUILT

Submitted the following documents as required:

LOGBOOK  AS-BUILT PLANS/SPEC'S

Inspected as to the following requirements:

LAND USE & AMOYL

LINE & GRADE

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL

The construction of the above-described building has been found to be in order and therefore the "Certificate of Occupancy" is hereby recommended for approval.

Chief Enforcement Division

Building Official

MPW FORM No. 77-007-B

REPUBLIC OF THE PHILIPPINES  
MINISTRY OF PUBLIC WORKS  
OFFICE OF THE BUILDING OFFICIAL

DISTRICT/CITY/MUNICIPALITY  
AREA CODE



Number  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Date Issued

This certifies that the building/structure which has been designed and constructed as \_\_\_\_\_ under Bldg. Permit No. \_\_\_\_\_

USE OR TYPE OF OCCUPANCY

dated \_\_\_\_\_ issued under the name of \_\_\_\_\_ has been inspected and found to be in conformity with the approved plans and specifications on file in this office and the provisions of the National Building Code (P.D. 1096) and its implementing rules and regulations and therefore the building/structure may now be occupied or used.

The owner shall properly maintain this building to enhance its architectural well-being, structural stability, sanitation and fire-protective properties and shall not be occupied or used for purposes other than its intended use as stated above.

This Certificate is issued in accordance with Section 309, Chapter 3 of P.D. 1096.

Building Official

NOTE

A certified copy hereof shall be posted within the premises of the building and shall not be removed without authority from the Building Official. The official number(s) assigned to the building/structure.

METROPOLITAN MANILA COMMISSION  
 OFFICE OF THE GOVERNOR  
 PLAN ENFORCEMENT and REGULATION CENTER  
**CERTIFICATE OF COMPLETION**

THE BUILDING OFFICIAL \_\_\_\_\_

AREA CODE NO \_\_\_\_\_

THIS IS TO CERTIFY THAT THE CONSTRUCTION OF THE BUILDING COVERED BY BUILDING PERMIT NO. \_\_\_\_\_ ISSUED ON \_\_\_\_\_ HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS ON FILE WITH THE OFFICE OF THE BUILDING OFFICIAL AND THE "NATIONAL BUILDING CODE" (P.D. 1096).

THAT THE SAID BUILDING AND/OR STRUCTURE IS READY FOR FINAL INSPECTION FOR THE ISSUANCE OF THE "CERTIFICATE OF OCCUPANCY"

NAME OF OWNER \_\_\_\_\_  
 (LAST NAME) (GIVEN) (MIDDLE)

ADDRESS OF OWNER \_\_\_\_\_

LOCATION OF CONSTRUCTION \_\_\_\_\_

USE OR TYPE OF OCCUPANCY \_\_\_\_\_

DATE OF START OF CONSTRUCTION: PROPOSED \_\_\_\_\_ ACTUAL \_\_\_\_\_

DATE OF COMPLETION: EXPECTED \_\_\_\_\_ ACTUAL \_\_\_\_\_

TOTAL FLOOR AREA (sq. meters) ESTIMATED \_\_\_\_\_ ACTUAL \_\_\_\_\_

NO. OF STOREYS \_\_\_\_\_ ACTUAL HEIGHT \_\_\_\_\_

ESTIMATED COST P \_\_\_\_\_

ACTUAL COST P \_\_\_\_\_ IF FOR STATISTICAL PURPOSES ONLY

- a) MATERIALS (TOTAL COST) P \_\_\_\_\_
  - 1. CEMENT (bags) \_\_\_\_\_
  - 2. LUMBER (cubic meter) \_\_\_\_\_
  - 3. REINFORCING BARS (kg.) \_\_\_\_\_
  - 4. NO. OF G.I. SHEETS \_\_\_\_\_
  - 5. PREFAB STRUCTURAL STEEL (kg.) \_\_\_\_\_

b) DIRECT LABOR (TOTAL COST) P \_\_\_\_\_  
THIS INCLUDES COMPENSATION WHETHER BY SALARY OR CONTRACT FOR PROJECT ARCHITECT/ENGINEER DOWN TO LABORERS.

c) RENTAL OF EQUIPMENT (IF ANY) \_\_\_\_\_

d) OTHER COSTS P \_\_\_\_\_  
THIS INCLUDES PROFESSIONAL SERVICE FEES, PERMITS AND OTHER FEES.

IF CONSTRUCTION IS UNDERTAKEN BY CONTRACT

CONFORME:

ARCHITECT/CIVIL ENGINEER  
(IN CHARGE OF CONSTRUCTION)

OWNER/APPLICANT

CONTRACTOR  
 PRC REG. NO. \_\_\_\_\_ CLASS \_\_\_\_\_  
 TAX \_\_\_\_\_ RES. CERT \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

NCSO COPY

CHECKLIST : RE : LOCATIONAL CLEARANCE

Requirements to be submitted in applying for Locational Clearance

1. Properly accomplished application form in triplicate.
2. Official Receipt of clearance/ processing fee (Xerox copy only)
3. Vicinity Map showing the following:
  - a. Orientation
  - b. Main road
  - c. Nearest land Mark (e.g. Church, School, name of establishment or description of the building at both sides of the proposed site.)
4. Certificate of Ownership of the land or contract of lease/sale.
5. Three (3) sets of site development plan (Scale 1:100 or 1:50 mts.) showing the following:
  - a. existing tree/plant (if any)
  - b. sidewalk plan showing dimensions and landscaping
  - c. vehicular traffic flow plan showing entrance/exit loading and unloading area
  - d. no. of parking stalls (with dimensions)
  - e. setback dimensions
  - f. future expansion (if any)
6. Floor Plans if proposed project is a market, supermarket, shopping center, motel, hotel or multi-storey building with four storeys or more.
7. For all industrial projects, the following additional documents must be submitted together with the above-mentioned requirements:
  - a. Description of the which among others, cites:
    - - - types of raw Materials to be used
    - - - products to be manufactured or stored
    - - - average production output
    - - - size of employment
    - - - industrial wastes ( solid, liquid and/or gaseous)
  - b. Description of the flow or manufacturing process.
8. Authorization of person allowed to follow-up and claim clearance.
9. In case the project has been issued a clearance, the proponent shall post a visible signboard at the project site with a standard size of .60 X 1.20 mts. as shown in the drawing below.

ON THIS SITE WILL RISE:	
PROJECT:	_____
OWNER :	_____
L.C. No:	_____
DATE :	_____

Note: Put all documents in a long folder.

Checklist of Requirements on Application for  
AUTHORITY TO CONSTRUCT

1. Application Form No. PCS-1 (Applications for Dev. Project/Program;  
Plan)
2. Application Form No. PCS-4 (Application for Authority to Construct  
WTF)
3. Form No. PCS-5 (Details of Requirements for A/C and (or P/O for WTF)
4. Engineer's report including pertinent plans about the proposed  
waste treatment processes and operations. Report must indicate  
explicitly design criteria, waste characterization, design  
calculations and treatment efficiency.
5. Flowcharts
  - a) Manufacturing flowchart indicating  
sources of wastes.
  - b) Waste treatment flowchart indicating  
expected inputs and outputs, in each  
stage.
6. Plans must be signed by a sanitary or chemical engineer or both.
7. Liaison officers must have an authorization letter from the  
executive officer to file and follow-up papers.
8. Construction Timetable.
9. Fees.



Republic of the Philippines  
 METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM  
 Katipunan, Road, Balara, Quezon City

WATER SERVICE CONNECTION AND METER SECTION

( DATE )

APPLICANT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 Plumbing Permit # \_\_\_\_\_

<u>QTY</u>	<u>FIXTURE</u>	<u>FIXTURE UNITS</u>	<u>Number of FIXTURE UNITS</u>
_____	Water Closet	3	_____
_____	Urinal	2	_____
_____	Slop Sink	2	_____
_____	Bath Tub	2	_____
_____	Shower Head	1.5	_____
_____	Drinking Fountain	1	_____
_____	Kitchen Sink	1	_____
_____	Lavatory	1	_____
_____	Faucet	1	_____
_____	Hose Bibb	1	_____
T O T A L - - - - -			_____ F. U.

Recommended for \_\_\_\_\_  $\phi$  W.S. with \_\_\_\_\_  $\phi$  Water Meter

PREPARED BY: \_\_\_\_\_

NOTED BY: \_\_\_\_\_  
 Chief, W S C & M Section

SUBJECT TO THE APPROVAL OF THE GENERAL MANAGER

/eden



Republic of the Philippines  
 Ministry of Human Settlements  
**PAMBANGKONG KOMISYON SA PAGSALINGPAG SA POLUSYON**  
 (National Pollution Control Commission)  
 777 Pedro Gil St., cor. Taft Avenue  
 Ermita, Manila

**APPLICATION FOR A PERMIT TO CONNECT WASTEWATER TREATMENT WORK**

Nature of Construction: New  Improvement  Expansion  Alteration

1. Name of Firm

2. Address: (Office)  
 (Plant)

3. Name of Pollution Control Officer or responsible official to be constructed on pollution matters:

4. Location as to Land Use:  
 Industrial  Commercial  Residential  Agricultural

5. Area Presently Occupied: Company Owned  Lease  If lease, Date of Expiration: \_\_\_\_\_  
 Meters(s)

6. Capital Investment: Authorized: \_\_\_\_\_ Paid-up: \_\_\_\_\_

7. Number of Employees: Office: \_\_\_\_\_ Plant: \_\_\_\_\_

8. Plant Operation- hrs/day: \_\_\_\_\_ Days/wk: \_\_\_\_\_ Shifts/day: \_\_\_\_\_

9. Type of Manufacturing Process(es)  
 (continuous, batch, others,)

10. Type of Industry (General Nature of Business)

11. Raw Material/Capacity: \_\_\_\_\_ Product/Capacity: \_\_\_\_\_

12. Volume of Discharge (Cubic Meters/Day):

13. Name of Consultant:

Filing Fee:

O.R. No.: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Printed Name and Signature of Applicant

**SUPPORTING DOCUMENTS REQUIRED FOR A PERMIT TO CONNECT WASTEWATER TREATMENT PLANT**

1. WPCD Form No. WPCD-W-303
2. Engineer's report to include but not limited to:
  - a) One week wastewater characterization and flow measurement.
  - b) In-plant control to reduce volume of wastewater to be treated
  - c) Water Balance Sheet
  - d) Proposed wastewater treatment system, treatment alternatives and recommended address
  - e) Design criteria, computations and expected performance efficiency of the proposed wastewater treatment system
  - f) Flow sheet and description of the Manufacturing Process(es)
3. Locality Map adequately identifying the street address(es)
4. Plant and drainage layout indicating the source(s) of wastewater discharge(s), waste, line and point of disposal (river, sea, others)
5. Plans, elevations and detailed drawings of each unit/stage of treatment systems. The plans shall clearly show in adequate details the proposed arrangement, location and size of the treatment system. The plans shall be in standard size of 50 cm by 70 cm and duly signed and sealed by appropriate designing engineer(s).
6. Schematic Flow Diagram of the proposed wastewater treatment system
7. FSEC/CFR or timetable of construction of WTR.

REPUBLIC OF THE PHILIPPINES  
LAGUNA LAKE DEVELOPMENT AUTHORITY  
RIZAL PROVINCIAL CAPITOL  
PASIG, METRO MANILA

APPLICATION FOR CLEARANCE FOR DEVELOPMENT PLAN, PROGRAM/  
PROJECT IN THE LAGUNA LAKE REGION

PART I - APPLICANT DESCRIPTION

1. Applicant's Registered Business Name \_\_\_\_\_
2. Business Address \_\_\_\_\_  
Number and Street \_\_\_\_\_ City/Town \_\_\_\_\_  
Province and Zip Code \_\_\_\_\_ Telephone \_\_\_\_\_
3. Address of Premise Discharging Wastewater \_\_\_\_\_  
Number and Street \_\_\_\_\_ City/Town \_\_\_\_\_  
Province and Zip Code \_\_\_\_\_
4. Chief Executive Officer of the Establishment  
Name \_\_\_\_\_ Title \_\_\_\_\_  
Number and Street \_\_\_\_\_ City/Town \_\_\_\_\_  
Province and Zip Code \_\_\_\_\_ Telephone \_\_\_\_\_
5. Applicant's Authorized Agent  
Name \_\_\_\_\_ Title \_\_\_\_\_  
Number and Street \_\_\_\_\_ City/Town \_\_\_\_\_  
Province and Zip Code \_\_\_\_\_ Telephone \_\_\_\_\_

I certify that the information above and on the following parts is true, complete and accurate to the best of my knowledge.

Signature of Agent \_\_\_\_\_ Title \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_

All information contained in this application form will be held strictly confidential.

PART II - BUSINESS OR ACTIVITY DESCRIPTION

Business Activity - Complete a separate form for each major business activity occurring on the premises.

- a. Industrial  
Manufacture of \_\_\_\_\_ ISIC \_\_\_\_\_  
Capital Investment: ₱ \_\_\_\_\_  
Product \_\_\_\_\_ Per Calendar Month \_\_\_\_\_  
Min. \_\_\_\_\_ Max. \_\_\_\_\_ Units \_\_\_\_\_  
Raw Materials \_\_\_\_\_  
Proposed Expansion: Year \_\_\_\_\_ Percent Increase \_\_\_\_\_
  - b. Agricultural  
Type: \_\_\_\_\_ Piggery ( ) Poultry Farm ( ) Duck Farm ( )  
Others, specify \_\_\_\_\_  
Capacity: Minimum \_\_\_\_\_ heads Maximum \_\_\_\_\_ heads  
Area: \_\_\_\_\_ has.
  - c. Subdivision  
Proposed Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Area: \_\_\_\_\_ has.  
No. of Units: \_\_\_\_\_  
NHA Clearance No. \_\_\_\_\_ dated \_\_\_\_\_
  - d. Other Projects  
Type \_\_\_\_\_  
Area/Capacity \_\_\_\_\_
2. Description of Activity - Prepare in a separate sheet ( size: 8 1/2 x 11 )  
Location as to Land Use: \_\_\_\_\_  
Industrial ( ) Commercial ( ) Residential ( ) Agricultural  
3. Attach locational clearance from the Human Settlements Regulatory Commission (HSRC) or from the Metro Manila Commission, if project site is within the Metro Manila area.  
Location: Clearance No. \_\_\_\_\_ dated \_\_\_\_\_

4. Number of Employees

No.	OFFICE			PRODUCTION					
	Hours	Day Shift	Swing Shift	Hours	No.	Hours	No.	Hours	No.
Weekday	_____	_____	_____	_____	_____	_____	_____	_____	_____
Saturday	_____	_____	_____	_____	_____	_____	_____	_____	_____
Sunday	_____	_____	_____	_____	_____	_____	_____	_____	_____

PART III - SCHEMATIC FLOW DIAGRAM REPRESENTING ACTIVITY OR MANUFACTURING PROCESS

Indicate pattern of products through the facility and the various sources of wastewater by means of schematic diagram(s).

PART IV - SITE PLAN, SEWER PLAN, PLANT LAYOUT, DRAINAGE LAYOUT

1. Site Plan - Show exact location of project indicating nearest body of water, neighboring establishments and geographical elevation based on actual land surveys.
2. Drainage Plan - Show exact location of rain water drainage system and the points of discharge to the existing storm water drainage in the municipality. Rain water must not discharge into the sanitary sewer.
3. Sewer Plan - Indicate the wastewater(s) collection system for the whole and tie-up (if any) to an existing or proposed wastewater treatment facility. Storm water drainage must be separated from the wastewater collection system.
4. Plant or Project Layout - Show the exact location of structures to be constructed including equipment and wastewater treatment plant layout.

Note: Plans should be drawn on paper about 50 cm. x 90 cm. and signed by the owner.

PART V - WATER SUPPLY AND DISPOSAL

Indicate average quantity of water received and wastewater discharged daily. Use the following codes:

For water supply	For water discharged
D - deepwell	MS - municipal sewer/drainage
R - river	R - river

For water supply

- C - creek
- M - municipal water supply system

For water discharged

- C - creek
- L - lake
- CD - Close discharge or impoundment

Water Usage	Cu.m./day	Source	Treatment		Discharged To
			Kind	Quantity	
Sanitary Processes	_____	_____	_____	_____	_____
Boiler	_____	_____	_____	_____	_____
Cooling	_____	_____	_____	_____	_____
Washing	_____	_____	_____	_____	_____
Other(s)	_____	_____	_____	_____	_____
T O T A L					

PART VI - POLLUTION ABATEMENT METHODS

1. Engineering report - Prepare a report containing discussions of studies conducted on wastewater characterization, pilot scale studies on wastewater treatment, the design criteria, and the expected efficiency of the proposed facility. Report should include relevant assumptions and calculations.
2. Solid waste management - Describe existing or proposed solid waste disposal methods.
3. All plans and reports must be duly signed by a licensed sanitary or chemical engineer or both.

PART VII - CONSTRUCTION TIMETABLE

Prepare a timetable indicating the various steps necessary to complete the construction. A network diagram is preferable.

Checklist of Requirements on Application for  
LLDA CLEARANCE

1. Application Form No. PCS-1 (Application for Dev. Project/Program/  
Plan)
2. HSRC Location Clearance
3. IEE Form No. PCS-2 (to be forwarded to NEPD as may be  
necessary)
4. SEC Articles of Incorporation (for manufacturing industries)
5. Plans
  - a) Site and/or vicinity plan(s)
  - b) Drainage plan.
  - c) Sewer plan (if applicable)
6. Engineer's report (if applicable) including plans pertinent  
to waste treatment. Report must indicate explicitly design  
criteria, waste characterization, design calculations and  
treatment efficiency.
7. All plans must be signed by the owner in addition to the  
civil/sanitary engineer who made the plans. For No. 6,  
plans must be signed by a Sanitary or Chemical Engineer or  
both.
8. Liaison officers must have an authorization letter from the  
executive officer to file and follow-up papers.
9. Construction Timetable.
10. Fees.

Note: All documents submitted in triplicate

Republic of the Philippines  
 NATIONAL POLLUTION CONTROL COMMISSION  
 and LAGUNA LAKE DEVELOPMENT AUTHORITY  
 3rd Floor, Rizal Provincial Capitol Bldg.  
 Pasig, Metro Manila

PCS-4

APPLICATION FOR "AUTHORITY TO CONSTRUCT" WASTEWATER TREATMENT WORKS

Nature of Construction: New ( ) Expansion ( )  
 Improvement ( ) Alteration ( )

1. Name of Firm: \_\_\_\_\_
  2. Address (Office) \_\_\_\_\_  
 (Plant) \_\_\_\_\_
  3. Name of Pollution Control Officer or Responsible Official to be contacted on  
 pollution matters: \_\_\_\_\_ Telephone No. \_\_\_\_\_
  4. Location as to Land Use:  
 Industrial ( ) Commercial ( ) Residential ( ) Agricultural ( )
  5. Area Presently Occupied: Company Owned \_\_\_\_\_ Leased \_\_\_\_\_ Hectare(s) \_\_\_\_\_  
 If under lease, date of expiration \_\_\_\_\_
  6. Capital Investment (Authorized) \_\_\_\_\_ (Paid-Up) \_\_\_\_\_
  7. No. of Employees (Office) \_\_\_\_\_ (Plant) \_\_\_\_\_
  8. Plant Operation (hrs/day) \_\_\_\_\_ (days/wk) \_\_\_\_\_ (shift/day) \_\_\_\_\_  
 (hours/shift) \_\_\_\_\_
  9. Type of Manufacturing Process(es):  
 (Continuous/Batch) \_\_\_\_\_  
 (Others, specify) \_\_\_\_\_
  10. Type of Industry (General Nature of Business):\*  
 \_\_\_\_\_  
 \_\_\_\_\_
  11. Raw Material/Capacity:\* \_\_\_\_\_ Product/Capacity:\* \_\_\_\_\_  
 \_\_\_\_\_
  12. Volume of Discharge (Cubic Meter/Day) \_\_\_\_\_
  13. Proposed Wastewater Treatment Works (Indicate unit operations and/or processes  
 involved)\*  
 \_\_\_\_\_  
 \_\_\_\_\_
  14. Point of Disposal (name of river, creek, others specify) \_\_\_\_\_
  15. Name of Consultant: \_\_\_\_\_
- Filing Fee P \_\_\_\_\_  
 O. R. No. \_\_\_\_\_  
 Date \_\_\_\_\_  
 A/C Fee P \_\_\_\_\_  
 O. R. No. \_\_\_\_\_  
 Date \_\_\_\_\_
- \_\_\_\_\_  
 Printed Name and Signature of Applicant  
 \_\_\_\_\_  
 Designation

\* Please use a separate sheet of paper for additional information. (Size: 8½x13)

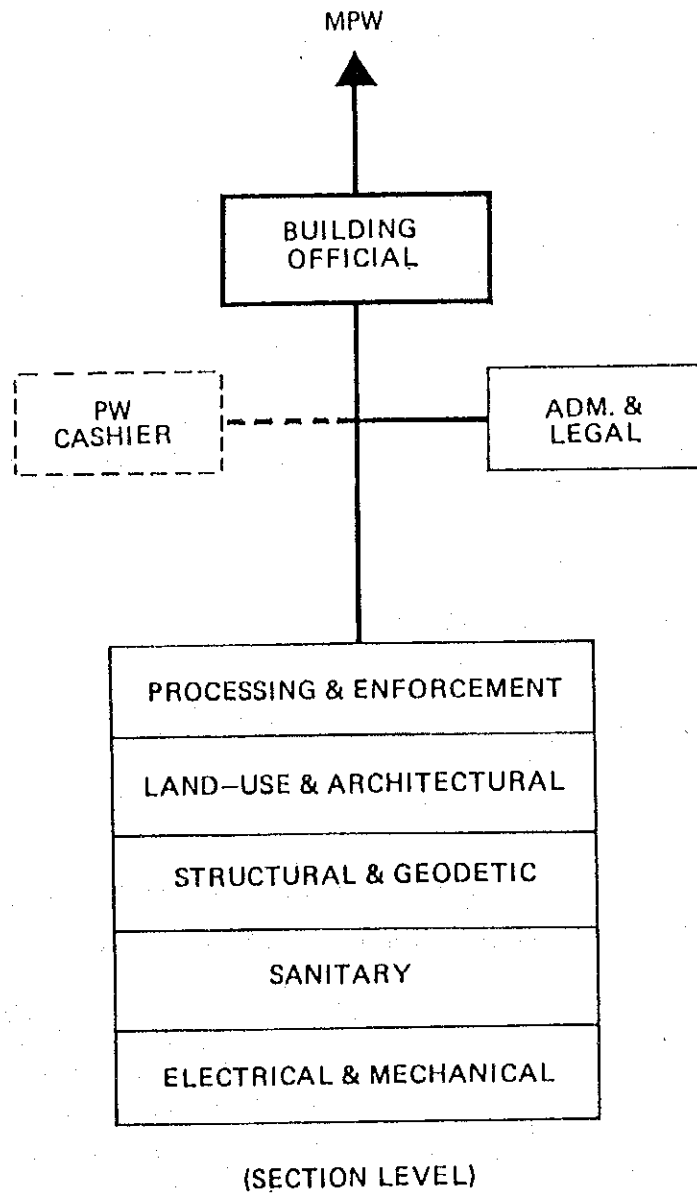
プエルト・プリンセサ市は、その歳入による区分でグループⅢに分類されているが、その「OFFICE OF THE BUILDING OFFICIAL ORGANIZATION CHART」は次頁の通りである。

BUILDING OFFICIAL は CITY ENGINEER である Engineer RAFAEL VALENCIA である。

プエルト・プリンセサ市では、市内の開発プロジェクトの総てについて、事前に、City Planning and Development Board が市長を議長として、プロジェクトの審査を行っている。メンバーは議長である市長のほかに、City Government の各セクションのチーフ等約14名で構成されている。

図 2.3 プエルトプリンセサ市の OFFICE OF THE BUILDING OFFICIAL ORGANIZATION CHART

**GROUP III**  
(MINIMUM REQUIREMENT FOR CITIES/MUNICIPALITIES)  
WITH INCOME FROM P 2.99 M AND BELOW)  
OFFICE OF THE BUILDING OFFICIAL  
ORGANIZATION CHART





(2) 建築技術者の規制

フィリピンにおいては、建築関連技術者の資格的規制、営業的規制、手続き等については、かなり細かく規定されている。

根拠法令として、下記のものがある。

Architects National Code

Civil Engineering Law

Mechanical Engineering Law

Electrical Engineering Law

Sanitary Engineering Law

Electronics and Communications Engineering Law

Architecture Law

Environmental Planning Law

Law on Specialization in Air Conditioning and Refrigeration

Plumbing Law

等である。

(3) 建設業の規制

建設業に関しては、Contractors License Law に、手続き、営業要件、建設業の営業許可等について、規定されている。

(4) 建築物を媒体とする営業行為等に対する規制

これに関しては、National Building Code の Chapter 7 Classification and General Requirement of all Buildings by Use or Occupancy. で詳しく説明されている。

(5) 環境保全に関する規制

“PHILIPPINE ENVIRONMENTAL LAW” が、Ministry of Human Settlements の THE NATIONAL ENVIRONMENTAL PROTECTION COUNCIL より発行されている。

c. 道路の設計基準

Geometric Standards

	Terrain		
	Flat	Rolling	Mountainous
a. National Road			
Design Speed (kph)	70	60	50
Pavement Width (m)	6.0	6.0	6.0
Shoulder Width (m)	1.50	1.50	1.50
Min. Hor. Radius (m)	150	90	50
Max. Gradient (%)	3	5	7
Stop Sight Distance (m)	70	60	50
Passing Sight Distance (m)	350	300	200
Right - of - Way (m)	30	30	30
b. Feeder Road			
Design Speed (kph)	60	40	30
Payment Width (m)	4.0	4.0	4.0
Shoulder Width (m)	1.0	1.0	0.50
Min. Hor. Radius (m)	120	80	50
Max. Gradient (%)	6	8	10
Stop Sight Distance (m)	70	50	30
Passing Sight Distance (m)	250	200	150
Right - of - Way (m)	20	20	20

Source : Palawan North Road Network Study.

February 1985

d. パラワンの動物相リスト

BIRDS AND MAMMALS OF PALAWAN INCLUDING BALABAC,  
CALAMIANES, CAGAYAN SULU, CAGAYAN AND CUYO

GROUP

B I R D S

COMMON NAMES

SCIENTIFIC NAMES

I. FAMILY ACCIPITRIDAE

Hawks  
(Lawin)

- |                                    |  |
|------------------------------------|--|
| 1. Crested Goshawk v               | <u>Accipiter trivirgatus</u> subsp.            |
| 2. Asiatic Sparrow Hawk v          | <u>A. virgatus gularis</u>                     |
| 3. Crested Lizard Hawk             | <u>Aviceda jerdoni magnirostris</u> (Palawan)  |
| 4. Gray-faced or Tic-wee Buzzard v | <u>Buteo indicus</u>                           |
| 5. Marsh Harrier v                 | <u>Circus aeruginosus spilonotus</u>           |
| 6. Black-winged Kite               | <u>Elaeetus caeruleus hypoleucus</u> (Calamia) |
| 7. White-breasted Sea Eagle        | <u>Haliaeetus leucogaster</u>                  |
| 8. Braminy Kite                    | <u>Haliastur indus intermedius</u>             |
| 9. Gray-headed Fishing Eagle       | <u>Ichthyophaga i. ichthyaetus</u> (Calamia)   |
| 10. Asiatic Honey Buzzard v        | <u>Pernis ptilorhynchus orientalis</u>         |
| 11. Palawan Honey Buzzard          | <u>P. ptilorhynchus palawanensis</u> end.      |
| 12. Serpent Eagle                  | <u>Spilornis cheela palawanensis</u> end.      |
| 13. Changeable Hawk Eagle          | <u>Spizaetus cirrhatus limnaeetus</u> (Ca)     |
| 14. Philippine Hawk Eagle          | <u>S. philippensis</u> (Pal.)                  |

II. FAMILY AEGITHINIDAE  
Leafbirds and Fairy Bluebirds  
(Canario)

- |                            |   |
|----------------------------|---|
| 15. Black-winged Iora      | <u>Aegithina tiphia nequanimis</u> (Pal.) |
| 16. Palawan Leafbird       | <u>Chloropsis palawanensis</u> end.       |
| 17. Palawan Fairy Bluebird | <u>Irena puella tweeddalei</u>            |

III. FAMILY ALCEDINIDAE  
Kingfishers  
(Binti, Kikik, Salalo)

- |                               |                                    |
|-------------------------------|------------------------------------|
| 18. River Kingfisher (v)      | <u>Alcedo atthis bengalensis</u>   |
| 19. Malaysian Kingfisher      | <u>A. meninting</u> subsp.         |
| 20. Malay Forest Kingfisher   | <u>Ceyx r. rufidorsus</u>          |
| 21. White-collared Kingfisher | <u>Halcyon chloris collaris</u>    |
| 22. Ruddy Kingfisher          | <u>H. coromanda minor</u> . (Pal.) |
| 23. Black-capped Kingfisher   | <u>H. pileata</u>                  |
| 24. Stork-billed Kingfisher   | <u>Pelargopsis capensis gouldi</u> |

IV. FAMILY ANATIDAE  
Ducks  
(Dulumpapa)

25. Tufted Duck (v) Aythya fuligula

V. FAMILY APODIDAE  
Swifts  
(Sibad, balinsasayaw)

26. Malaysian Spine-tailed Swift Chaetura g. gigantea (Cal., Pal.)  
27. Glossy Swiftlet Collocalia esculenta subsp. (Pal.)  
28. Edible-Nest Swiftlet C. inexpectata germaini (Pal., Cag., Sulu)  
29. Low's Swiftlet C. lowi palawanensis (Pal.) end.  
30. Pygmy Swiftlet C. troglodytes (Pal.)  
31. Gray Swiftlet C. vestita subsp. (Pal.)  
32. Whitehead's Swiftlet C. whiteheadi tsubame (Pal.) end.

VI. FAMILY ARDEIDAE  
Bitterns, Egret, Herons  
(Sacaw, tagac, kandangaok)

33. Purple Heron Ardea purpurea manilensis  
34. Giant Heron A. sumatrana sumatrana  
35. Cattle Egret Bubulcus ibis coromandus  
36. Little Mangroove Heron Butorides striatus oarcinophilus  
37. Snowy Egret Egretta garzetta nigripes (Cag.)  
38. Lesser Egret E. intermedia intermedia  
39. Reef Egret E. sacra sacra  
40. Malay Bittern Gorsachius melanolophus rufolineatus  
41. Cinnamon Least Bittern Ixobrychus cinnamomeus  
42. Rufous Night Heron Nycticorax caledonicus manillensis

VII. FAMILY ARTAMIDAE  
Wood Swallows  
(Layang-layang)

43. White-breasted Wood Swallow Artamus l. leucorhynchus (Cal., Pal.)

VIII. FAMILY BUCEROTIDAE  
Hornbills  
(Talusi)

44. Palawan Hornbill Anthracoceros marchei end.

IX. FAMILY BURHINIDAE  
Thick Knee or Stone Curlew  
(Balankawitan)

45. Reef Thick Knee Esacus magnirostris

X. FAMILY CAMPEPHAGIDAE

Cuckoo-Shrikes  
(Baboy-bayan)

- |                     |   |
|---------------------|---|
| 46. Barred Graybird | <u>Coracina striata difficilis</u> end. |
| 47. Pied Triller    | <u>Lalage nigra chilensis</u>           |
| 48. Fiery Minivet   | <u>Pericrocotus i. igneus</u> (Pal.)    |

XI. FAMILY CAPRIMULGIDAE

Nightjars  
(Patortor)

- |                          |                                 |
|--------------------------|---------------------------------|
| 49. Japanese Nightjar v  | <u>Caprimulgus indicus jota</u> |
| 50. Long-tailed Nightjar | <u>C. m. macrurus</u>           |

XII. FAMILY CHARADRIIDAE

Flovers and Lapwings  
(Talingting)

- |                             |  |
|-----------------------------|--|
| 51. Kentish Plover v        | <u>Charadrius alexandrinus dealbatus</u> |
| 52. Eastern Dotterel v      | <u>C. asiaticus veredus</u>              |
| 53. Ring-necked Plover      | <u>C. dubius</u> subsp.                  |
| 54. Large Sand Plover v     | <u>C. leschenaulti</u>                   |
| 55. Mongolian Plover v      | <u>C. mongolus</u>                       |
| 56. Malay Plover            | <u>C. peroni</u>                         |
| 57. Pacific Golden Plover v | <u>Pluvialis dominica fulva</u>          |
| 58. Black-bellied Plover    | <u>P. squatarola</u>                     |

XIII. FAMILY COLUMBIDAE

Pigeons and Doves  
(Balud, Punay, Bato-bato)

- |                                |  |
|--------------------------------|--|
| 59. Nicobar Pigeon             | <u>Caloenas nicobarica</u>                                   |
| 60. Green-winged Ground Dove   | <u>Chalcophaps indica indica</u>                             |
| 61. Metallic Wood Pigeon       | <u>Columba vitiensis griseogularis</u><br>(Cag., Sulu)       |
| 62. Green Imperial Pigeon      | <u>Ducula aenea palawanensis</u> end.                        |
| 63. Nutmeg Imperial Pigeon     | <u>Ducula b. bicolor</u>                                     |
| 64. Gray Imperial Pigeon       | <u>D. pickeringi pickeringi</u> (Cag.,<br>Sulu, Cagayanillo) |
| 65. Slender-billed Cuckoo Dove | <u>Macropygia phasianella tenuirostris</u>                   |
| 66. Black-chinned Fruit Dove   | <u>Ptilinopus leclancheri gironieri</u><br>end. (Pal., Cal.) |
| 67. Black-naped Fruit Dove     | <u>P. melanopsilla banguoyensis</u><br>(Pal., Cag., Sulu)    |
| 68. Philippine Turtle Dove     | <u>Streptopelia bitorquata dussumieri</u>                    |
| 69. Tigrine Dove               | <u>S. chinensis tigrina</u>                                  |
| 70. Thick-billed Green Pigeon  | <u>Treron curvirostra erimacra</u>                           |
| 71. White-necked Green Pigeon  | <u>E. vernalis vernalis</u>                                  |

- XIV. FAMILY CORACIIDAE  
Rollers  
(Salok-sokan)
72. Dollar Bird Eurystomus o. orientalis
- XV. FAMILY CORVIDAE  
Crows  
(Uwak)
73. Little Crow Corvus enca pusillus
- XVI. FAMILY CUCULIDAE  
Cuckoos  
(Kalakck)
74. Common Cuckoo v Cacomantis canorus telephonus
75. Gray-breasted Brush Cuckoo C. merulinus merulinus
76. Banded Bay Cuckoo C. sonnerati fasciolatus
77. Lesser Coucal Centropus bengalensis javanen
78. Common Coucal C. sinensis bubutus
79. Philippine Coucal C. viridis viridis (Cag.)
80. Violet Cuckoo Chalcites xanthorhynchus bangueyensis
81. Red-winged Crested Cuckoo v Clamator coromandus
82. Oriental Cuckoo v Cuculus saturatus
83. Large Hawk Cuckoo C. sparveriooides sparverioide
84. Koel Eudynamis scolopacea paraguayen  
(Pal., end.)
85. Palawan Malcoha Phoenicophaeus curvirostris harringtoni (Pal., Cal., Balaba end.)
86. Drongo Cuckoo Surniculus lugubris minimus o
- XVII. FAMILY DICAEDIDAE  
Flowerpeckers  
(Pipit)
87. Palawan Yellow-rumped Flowerpecker Anagmus johanna (Pal.) end.
88. Striped Flowerpecker Dicaeum agile affine (Pal.) en
89. Pygmy Flowerpecker D. pygmaeum palawanorum end.
- XVIII. FAMILY FALCONIDAE  
Falcons  
(Dumagit)
90. Foregrine Falcon v Falco peregrinus calidus
91. Oriental Hobby F. severus severus (Cal., Pal.)
92. Kestrel v F. tinnunculus japonensis

XIX. FAMILY FREGATIDAE

Frigate Birds  
(S-nayus)

93. Least Man-of-War Fregata ariel ariel  
 94. Pacific Man-of-War F. minor minor

XX. FAMILY GLAREOLIDAE

Pratincoles  
(Talingting)

95. Swallow Plover v Glareola pratincola maldivari

XXI. FAMILY HIRUNDINIDAE

Swallows  
(Layang-layang)

96. Barn Swallow v Hirundo rustica gutturalis  
 97. Pacific Swallow H. tahitica javanica

XXII. FAMILY LANIDAE

Shrikes  
(Cabesote)

98. Brown Shrike v Lanius cristatus lucionensis  
 99. Schach Shrike L. schach nasutus (Cal.)

XXIII. FAMILY LARIDAE

Gulls and Terns  
(Golondrinas del Mar)

100. Common Noddy Ancus stolidus pileatus  
 101. Whiskered Tern v Chlidonias hybrida  
 102. Gull-billed Tern v Gelochelidon nilotica nilotic  
 103. Little Tern Sterna albifrons sinensis  
 104. Roseate Tern S. dougalli bangsi  
 105. Black-naped Tern S. sumatrana sumatrana  
 106. Crested Tern Thalasseus bergii cristatus

XXIV. FAMILY MEGAPODIIDAE

Megapodes  
(Tabon)

107. Incubator Bird Megapodius freycinet cumingi  
(Pal., Balabac)

XXV. FAMILY MEROPIIDAE

Beo-eaters  
(Pirik-pirik)

108. Chestnut-headed Beo-eater Megops viridis americanus

XXVI. FAMILY MOTACILLIDAE  
 Pipits and Wagtails  
 (Gigiot, Kamansiw, Bayug)

109. Red-throated Pipit	<u>Anthus cervinus</u>
110. Petchera Pipit v	<u>A. gustavi</u>
111. Oriental Trac Pipit v	<u>A. hodgsoni</u>
112. Richard's Pipit v	<u>A. novaezeelandiae lugubi</u>
113. Pied Wagtail v	<u>Motacilla alba ocularis</u>
114. Gray Wagtail v	<u>M. cinerea caspica</u>
115. Yellow Wagtail v	<u>M. flava similima</u>
116. Forest Wagtail v	<u>M. indica</u>

XXVII. FAMILY MUSCICAPINAE  
 Thrushes and Robins.  
 (Fipit-tuleg, Dominico)

117. Palawan Black Shama	<u>Copsychus niger</u> end.
118. Blue Rock Thrush v	<u>Monticola solitaria philippensis</u>

Subfamily - Muscicapinae  
 Flycatchers  
 (Luclao)

119. Gray-headed Canary Flycatcher	<u>Culicicapa ceylonensis</u> (F)
120. Citrine Canary Flycatcher	<u>Culicicapa helianthea panayensis</u> (Pal.)
121. Black-naped Blue Monarch	<u>Hypothymis azurea azurea</u> (Cal., Pal.)
122. Hill Blue Flycatcher	<u>Muscicapa banyunas lemprieri</u> end.
123. Ferruginous Flycatcher v	<u>M. cinericeps</u>
124. Japanese Blue Flycatcher v	<u>M. cyanomelana</u>
125. Gray-spotted Flycatcher v	<u>M. griseisticta</u>
126. Palawan Flycatcher **	<u>M. platenae</u> (Pal.) end.
127. Mangrove Blue Flycatcher	<u>M. rufigaster literalis</u> (Pal.) end.
128. Siberian or Sooty Flycatcher v	<u>M. sibirica</u> (Pal.)
129. New Palawan Flycatcher	<u>M. westermanni palawanensis</u> (nov. subs.)
130. Malayan Fantail	<u>Rhipidura javanica nigritorquis</u>
131. Blue Paradise Flycatcher	<u>Terpsiphone cyanescens</u> (Pal., Cal.) end.



Subfamily Tachycephalinae  
Whistlers

132. White-bellied Whistler Tachycephala w. whitheadi (Fal.)

Subfamily - Sylviinae  
Warblers  
(Bayug)

133. Great Reed Warbler v Acrocephalus arundinaceus orientalis  
134. Palawan Warbler Cettia montana palawana (nov. subsp.) (Sulu Is.)  
135. Common Fantail Warbler Cisticola juncidis tinnabulaps (Pal., Cal.)  
136. Asiatic Grasshopper Warbler v Locustella certhiola ochotonpis  
137. Ashy Tailor Bird Orthotomus sepium cagayanensis  
138. Rufous-crowned Tailor-Bird O. sericeus huntius (Pal., Cag. Sulu)  
139. Arctic Willow Warbler v Phylloscopus borealis borealis  
140. Arctic Willow Warbler v F. b. xanthodryas  
141. Yellow-breasted Flycatcher Warbler Seicercus montis xanthopygius (Fal.) end

Subfamily Timaliinae  
Babbler  
(Parlaros)

142. Gray-faced Tit-Babbler Macronus flavicollis woodi (Bal., Pal.) end.  
143. Striated Tit-Babbler Macronus gularis cagayensis (Cag., Sulu) end.  
144. Ashy-headed Ground Babbler Malaccocincla cinereiceps (Bal., Pal.) end.  
145. Red-headed Tree Babbler Malacopteron magnum palawanense (Bal., Pal.) end.  
146. Falcated Ground Warbler Ptilocichla falcata (Bal., Pal.) end.

XXVIII. FAMILY NECTARINIDAE  
Sunbirds  
(Ramasit)

147. Lovely Sunbird Aethopyga shelleyi shelleyi end.  
148. Plain-throated Sunbird Anthreptes malacensis cagayensis (Cag., Sulu)  
149. Plain-throated Sunbird A. malacensis parague end.  
150. Red-shouldered Sunbird A. rhodolaema (Pal.)

151. Little Spider Hunter Arachnothera longirostris  
dilatator end.
152. Macklot's Sunbird Nectarinia c. chalcostatha  
(Bal., Pal.)
153. Olive-backed Sunbird N. jugularis aurora
154. Van Hasselt's Sunbird N. s. sperata (Pal., Cal.)

XXIX. FAMILY ORIOLIDAE  
Orioles  
(Tutulyaw)

155. Black-naped Oriole Oriolus chinensis palawan-  
ensis end.
156. Black-throated Oriole O. xanthonotus consobrinus  
(N. Borneo, Pal., Cal.)

XXX. FAMILY PARIDAE  
Titmice

157. Palawan Tit Parus amabilis end.

XXXI. FAMILY PANDIONIDAE  
Ospreys  
(Aguila Marina)

158. Osprey Pandion haliaetus haliaetus
159. Osprey P. h. melvillensis

XXXII. FAMILY PHASIANIDAE.  
(Pheasants and Quails  
(Pugo, Labuyo, Batandikan)

160. Painted Quail Coturnix chinensis lineata
161. Red Jungle Fowl Gallus gallus gallus
162. Napoleon Peacock Pheasant Polyplectron emphanum (Pal.) end

XXXIII. FAMILY PICIDAE  
Woodpecker  
(Carpintero)

163. Crimson-backed Woodpecker\*\* Chrysocolaptes lucidus  
erythrocephalus end.
164. Three-toed Woodpecker Dinopium javanense everetti
165. White-bellied Black Wood-  
pecker Dryocopus javensis hargitti  
(Pal.) end.
166. Great Slaty Woodpecker Mulleripicus p. pulverulentus  
(Bal., Pal.)

XXXIV. FAMILY PITTIDAE  
Pittas  
(Liaoc Yawa)

167. Red-breasted Pitta Pitta erythrogaster propinque  
(Br. I., Pal.) end.
168. Black-headed Pitta Pitta sordida sordida

XXXV. FAMILY PLOCEIDAE

Weavers  
(Maya)

169. Chestnut Mannikin Lonchura ferruginosa jagori  
 170. Dusky Mannikin L. fuscans (Cag., Sulu)  
 171. ~~White-breasted~~ Mannikin L. leucogaster everetti  
 172. New Palawan white-breasted Mannikin L. leucogaster palawan (nov. subsp.)  
 173. Nutmeg Mannikin L. punctulata cabanisi

XXXVI. FAMILY PODARGIDAE

Frogmouths  
(Pico de Ranas)

174. Java Frogmouth Batrachostomus javensis chaseni (Pal.) end.

XXXVII. FAMILY PSITTACIDAE

Parrots  
(Loro, Picoy, Abucay, Kilit)

175. Philippine Cockatoo Casatua haematuropygia  
 176. Blue-headed Racket-tailed Parrot Prioniturus discurus platenae  
 177. Blue-naped Parrot Tanygnathus l. lucionensis

XXXVIII. FAMILY PYCNONOTIDAE

Bulbuls  
(Luclac)

178. White-throated Bulbul Criniger tephrogenys frater  
 179. Olive Bulbul Microscelis charlottae palawanensis (Pal.) end.  
 180. Black-headed Bulbul Pycnonotus a. atriceps (Pal.)  
 181. Olive-brown Bulbul P. plumosus cinereifrons (Cal. Pal.) end.

XXXIX. FAMILY RALLIDAE

Rails, Gallinules, Coots  
(Tikling, Aobag, Ulok)

182. White-breasted Swamphen Amaurornis phoeniceus javanicus (Cal., Pal., Cag., Sulu)  
 183. Malay-Banded Crane Rallina fasciata (Pal., Bal.)  
 184. Slaty-breasted Rail Rallus s. striatus (Cal., Pal.)

XI. FAMILY SCOLOPACIDAE  
Curlews, Godwits, Sandpipers and Tattlers  
(Balankawitan, Tnad-twad, Talingting)

Subfamily - Arenariinae  
Turnstones

185. Turnstone v Arenaria interpres

Subfamily - Calidriinae  
Stint Sandpipers

186. Little Stint v Ereunotos minutus ruficollis  
187. Broad-billed Sandpiper v Limicola falcinellus

Subfamily - Scolopacinae  
Snipes  
(Kanduro)

188. Marsh Snipes v Gallinago megala  
189. Pintail Snipe v Gallinago stenura

Subfamily - Tringinae  
Curlews, Sandpipers, Tattlers  
(Balantawitan, Tuad-tuad, Talingting)

190. Common Sandpiper v Actitis hypoleucos  
191. Gray-tailed Tattler v Heteroscolus incanus brevipes  
192. Common Curlew v Numenius arquata orientalis  
193. Phimbrel v Numenius phaeopus variegatus  
194. Wood Sandpiper v Tringa glareola  
195. Redshank v Tringa totanus eurhinus  
196. Terek Sandpiper v Zonus cinereus

XLI. FAMILY SITTIDAE  
Nuthatches  
(Picamadonas)

197. Velvet-fronted Nuthatch Sitta frontalis palawana (Bal., Pal.) end.

XLII. FAMILY STRIGIDAE  
Owls  
(Kuwago)

198. Bornean Hawk Owl Ninox scutulata borneensis  
(Borneo, Pal.)  
199. Japanese Hawk Owl v Ninox scutulata japonica  
200. Palawan Hawk Owl Ninox s. palawanensis (nov. subsp)  
201. Oriental Screech Owl Otus bakkamoona fuliginosus  
(Pal.,) end.  
202. Soloputo Owl Strix acleputo wiepkeni (Pal.) end.

XLIII. FAMILY STURNIDAE  
Starlings  
(Mandyang; Miyao)

203. Philippine Glossy Starling Aplonis p. panayensis  
204. Talking Myna Gracula religiosa palawanensis end.  
205. Violet-backed Starlet v Sturnus philippensis

XLIV. FAMILY SULIDAE  
Boobies  
(Bubias)

206. Brown Booby Sula leucogaster plotus  
207. Red-footed Booby S. sula rubripes

XLV. FAMILY TURNICIDAE  
Button Quails  
(Pugong-gubat)

208. Barred Button Quail Turnix suscitator fasciata (Cal., Pal)

XLVI. FAMILY TYTONIDAE  
Barn Owls  
(Kuwago)

209. Grass Owl Tyto longimembris amaurota (Cal.)

M A M M A L S

COMMON NAMES	LOCAL NAMES	SCIENTIFIC NAMES
1. Flying Squirrels*	Tapilac, Palatuca Pal. Boyatat	<u>Hylapetes sp.</u>
2. Tree Squirrels *	Alalacsin (Vis) Bising, Visin (Cu) Cagsi (Min.)	<u>Callosciurus sp.</u>
3. Wild Pig*	Baboy Domo (Tag.) Talonon (Tab.)	<u>Sus sp.</u>
4. Chevrotain or "Mousodoer"	Pilandok (Pal.)	<u>Tragulus nigricans</u>
5. Common Shrews	Bubuit, bulilit, eoclo, langam, pasi- mundot, sangio, tag- banuas (Pal.)	<u>Crocidura sp.</u> and <u>Suncus sp.</u>
6. Palawan Tree Shrews	Vilic, visin (Vis.)	<u>Tupaia sp.</u>
7. Scaly Anteater or Palawan pangolin	Kalintong, balintong, (Pal.) Balcoon (Cu.)	<u>Paramania culionensis</u>
8. Porcupine	Balat-na-matinik, Durian, Dungian	<u>Tricurus pumilus</u>
9. Palawan Mongooses	(Unknown)	<u>Parpestos brachyurus</u>
10. Malay Civet	Dingalong, Mungang (Tag.) Singalong, (Vis.) Sinyarong (Pal.)	<u>Livorra tangalunga</u>
11. Palawan "Bear-Civet" or Binturongs	Manturon, Miro (Pal.)	<u>Arctictis whitei</u>
12. Palm Civet	Alanid, Tag., Ilo,	<u>Paradoxurus philippinensis</u>
13. Leopard Cat	Tamaral Maral (Vis.) Mito	<u>Felis minuta</u>

- |                            |                         |   |
|----------------------------|-------------------------|---|
| 14. Palawan Stink Badger   | Pantot (Pal.)           | <u>Suillotaxus</u> <u>marchei</u>             |
| 15. Palawan Clawless Otter | Dinguin, Dinuin         | <u>Amblonyx</u> <u>cinerea</u> <u>cinerea</u> |
| 16. Deer                   | Usa (Coron, Culion Is.) | <u>Rusa</u> <u>sp.</u>                        |
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N O T E :

Mammals like Monkeys, insectivorous and fruit bats, common house rats and palm civets are also found in Palawan.

- \* Game species as defined under Republic Act No. 2590 as amended.
- \*\* Rare species
- v Species that do not breed in the Philippines
- (v) Species of which part of the population consist of breeding birds
- ( ) Localities where the species was found and is likely to occur only there.  
Localities are not added to species known from all major islands of the Palawan Group like Palawan, Balabac and Calamianes, or can occur in all islands.

end. Endemic or native of the locality

Nov. subsp. New subspecies

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