

資 料



資料 1 調査団員・氏名

(1) 現地調査 I (2018 年 8 月 26 日～10 月 14 日)

|    | 氏名                 | 担当業務          | 所属                     |
|----|--------------------|---------------|------------------------|
| 1  | 徳田 由美              | 団長            | JICA 人間開発部<br>基礎教育グループ |
| 2  | 川田 耕造              | 協力企画          |                        |
| 3  | 杉浦 晃               | 業務主任／建築計画     | (株) 毛利建築設計事務所          |
| 4  | 設楽 知弘              | 副業務主任／自然条件調査  |                        |
| 5  | 荒又 多美子             | 建築設計 1／設備計画   |                        |
| 6  | 柿内 裕之              | 建築設計 2        |                        |
| 7  | 福島 健               | 施工計画／積算       |                        |
| 8  | 伊藤 幸代／<br>高橋 美奈子 * | 調達情報／実施体制構築支援 | インテムコンサルティング(株)        |
| 9  | 山内 伯文              | 機材計画          |                        |
| 10 | 中野 明子              | 教育計画          |                        |
| 11 | 藤川 朋子              | 建築設計 3 (自主補強) |                        |
|    |                    |               | (株) 毛利建築設計事務所          |

※ダイバーシティ枠

(2) 現地調査 I - 2 (2019 年 7 月 17 日～8 月 3 日)

|   | 氏名    | 担当業務    | 所属               |
|---|-------|---------|------------------|
| 1 | 福島 健  | 施工計画／積算 | (株) 毛利建築設計事務所    |
| 2 | 山内 伯文 | 機材計画    | インテムコンサルティング (株) |

(3) 現地調査 II (2020 年 2 月 9 日～2 月 15 日)

|   | 氏名     | 担当業務        | 所属                     |
|---|--------|-------------|------------------------|
| 1 | 徳田 由美  | 団長          | JICA 人間開発部<br>基礎教育グループ |
| 2 | 杉浦 晃   | 業務主任／建築計画   | (株) 毛利建築設計事務所          |
| 3 | 荒又 多美子 | 建築設計 1／設備計画 |                        |

資料 2 調査行程 (1) 現地調査 I (2018 年 8 月 26 日～10 月 14 日)

|    | A-1          |                    | A-2      |                    | B                       | C           | D           | E           | F       | G                  | H     | I     | J            |
|----|--------------|--------------------|----------|--------------------|-------------------------|-------------|-------------|-------------|---------|--------------------|-------|-------|--------------|
|    | 官民員 (団形)     | 官民員 (協力)           | 官民員 (協力) | 官民員 (協力)           | 調査主任/調査計画               | 建築設計/設備計画   | 調査主任/自治体有調査 | 建築設計2       | 施工計画/調査 | 調査計画/現場調査/設備       | 機材計画  | 教育計画  | 建築設計3 (自主調査) |
| 1  | 2018/8/26 日  | JICA人間開発部 基礎教育グループ | 山田 雄造    | JICA人間開発部 基礎教育グループ | 杉浦 基                    | 神毛有雄建築設計事務所 | 調査主任/自治体有調査 | 神毛有雄建築設計事務所 | 福島 健    | 伊藤 泰代 (Taka, Taka) | 山内 佑文 | 中野 明子 | 神毛有雄建築設計事務所  |
| 2  | 2018/8/27 日  |                    |          |                    | 東京⇒ピエンチャン               | 東京⇒ピエンチャン   |             |             |         |                    |       |       |              |
| 3  | 2018/8/28 火  |                    |          |                    | JICA基礎、M&E基礎            |             |             |             |         |                    |       |       |              |
| 4  | 2018/8/29 水  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 5  | 2018/8/30 木  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 6  | 2018/8/31 金  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 7  | 2018/9/01 土  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 8  | 2018/9/02 日  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 9  | 2018/9/03 月  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 10 | 2018/9/04 火  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 11 | 2018/9/05 水  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 12 | 2018/9/06 木  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 13 | 2018/9/07 金  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 14 | 2018/9/08 土  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 15 | 2018/9/09 日  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 16 | 2018/9/10 月  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 17 | 2018/9/11 火  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 18 | 2018/9/12 水  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 19 | 2018/9/13 木  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 20 | 2018/9/14 金  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 21 | 2018/9/15 土  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 22 | 2018/9/16 日  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 23 | 2018/9/17 月  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 24 | 2018/9/18 火  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 25 | 2018/9/19 水  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 26 | 2018/9/20 木  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 27 | 2018/9/21 金  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 28 | 2018/9/22 土  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 29 | 2018/9/23 日  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 30 | 2018/9/24 月  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 31 | 2018/9/25 火  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 32 | 2018/9/26 水  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 33 | 2018/9/27 木  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 34 | 2018/9/28 金  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 35 | 2018/9/29 土  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 36 | 2018/9/30 日  |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 37 | 2018/10/01 月 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 38 | 2018/10/02 火 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 39 | 2018/10/03 水 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 40 | 2018/10/04 木 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 41 | 2018/10/05 金 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 42 | 2018/10/06 土 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 43 | 2018/10/07 日 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 44 | 2018/10/08 月 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 45 | 2018/10/09 火 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 46 | 2018/10/10 水 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 47 | 2018/10/11 木 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 48 | 2018/10/12 金 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 49 | 2018/10/13 土 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |
| 50 | 2018/10/14 日 |                    |          |                    | インセンティブ・インセンティブ・インセンティブ |             |             |             |         |                    |       |       |              |



(2) 現地調査 I - 2 (2019 年 7 月 17 日～8 月 3 日)

|    |           |   | 施工計画／積算                                         | 機材計画                                         |
|----|-----------|---|-------------------------------------------------|----------------------------------------------|
|    |           |   | 福島 健<br>(株)毛利建築設計事務所                            | 山内 伯文<br>インテュムコンサルティング(株)                    |
| 1  | 2019/7/17 | 水 |                                                 | 成田0930 (VN301)→HCMC1330/1650 (VN607)→ハノイ1830 |
| 2  | 2019/7/18 | 木 |                                                 | 機材計画・積算関連調査 (@バンコク)                          |
| 3  | 2019/7/19 | 金 |                                                 | 同上                                           |
| 4  | 2019/7/20 | 土 |                                                 | 同上                                           |
| 5  | 2019/7/21 | 日 | 成田1000 (VN311)→ハノイ1350/1620 (VN2897)→ビエンチャン1730 | バンコク1735 (PG949)→ビエンチャン1850                  |
| 6  | 2019/7/22 | 月 | 午前：JICA事務所表敬、MOES表敬<br>午後：施工計画・積算関連調査           | 午前：JICA事務所表敬、MOES表敬<br>午後：機材計画・積算関連調査        |
| 7  | 2019/7/23 | 火 | 施工計画・積算関連調査                                     | 機材計画・積算関連調査                                  |
| 8  | 2019/7/24 | 水 | 同上                                              | 同上                                           |
| 9  | 2019/7/25 | 木 | 同上                                              | 同上                                           |
| 10 | 2019/7/26 | 金 | 同上                                              | 同上                                           |
| 11 | 2019/7/27 | 土 | 同上                                              | 同上                                           |
| 12 | 2019/7/28 | 日 | 資料整理                                            | 資料整理                                         |
| 13 | 2019/7/29 | 月 | 施工計画・積算関連調査                                     | 機材計画・積算関連調査<br>ビエンチャン1955 (VN920)→ハノイ2105    |
| 14 | 2019/7/30 | 火 | 同上                                              | ハノイ0020 (VN310)→0735成田                       |
| 15 | 2019/7/31 | 水 | 同上                                              |                                              |
| 16 | 2019/8/1  | 木 | 同上                                              |                                              |
| 17 | 2019/8/2  | 金 | 施工計画・積算関連調査<br>ビエンチャン1955 (VN920)→ハノイ2105       |                                              |
| 18 | 2019/8/3  | 土 | ハノイ0020 (VN310)→成田0735                          |                                              |

(3) 現地調査 II (2020 年 2 月 9 日～2 月 15 日)

| 日にち/団員 |       |     | 官団員 (団長)                                           | 業務主任/建築計画          | 建築設計1/設備計画           |
|--------|-------|-----|----------------------------------------------------|--------------------|----------------------|
|        |       |     | 徳田 由美<br>JICA人間開発部 基礎教育グループ                        | 杉浦 晃<br>㈱毛利建築設計事務所 | 荒又 多美子<br>㈱毛利建築設計事務所 |
| 1      | 2月9日  | Sun | 東京→ビエンチャン                                          |                    |                      |
| 2      | 2月10日 | 月   | JICA事務所打合せ<br>MOES打合せ                              |                    |                      |
| 3      | 2月11日 | Tue | MOES及びTTC代表者との協議                                   |                    |                      |
| 4      | 2月12日 | Wed | MOESとの協議<br>書類作成                                   |                    |                      |
| 5      | 2月13日 | Thu | MOESとの協議<br>ミニッツ署名                                 |                    |                      |
| 6      | 2月14日 | Fri | 財務省ヒアリング                                           |                    |                      |
|        |       |     | JICA事務所への報告<br>世界銀行からのインタビュー<br>日本大使館表敬<br>ビエンチャン→ |                    |                      |
| 7      | 2月15日 | Sat | →東京                                                |                    |                      |

資料３ 関係者（面会者）リスト

教育・スポーツ省（Ministry of Education and Sport）

| 氏名                            | 役職        | 所属              |
|-------------------------------|-----------|-----------------|
| Ms. Khanthaly Siriphongphanh  | 次官        | 大臣官房            |
| Dr. Daravone Kittiphanh       | 次官代理      | 大臣官房            |
| Mr. Thipphamonh Chanthalangsy | 副次官       | 大臣官房            |
| Mr. Vilavath Thepphithack     | 副次官       | 大臣官房            |
| Mr. Bounmixay Sommany         | 副課長       | 大臣官房            |
| Mr. Keth Phanlack             | 局長        | 教師教育局           |
| Mr. Khambai Khamsy            | 副局長       | 教師教育局           |
| Mr. Sengkeo PHANTHALATH       | 課長        | 教師教育局           |
| Mrs. Chompheng Vongsa         | 課長        | 教師教育局           |
| Mr. Bouaphet Inthavong        | テクニカルスタッフ | 教師教育局           |
| Mr. Sivixay Manivong          | 副課長       | 教師教育局／教員養成課     |
| Mr. Sengphet Soumphonphakdy   | 課長        | 財務局／学校デザイン建設管理課 |
| Ms. Khamla Lorvanxay          | テクニカルスタッフ | 財務局／学校デザイン建設管理課 |
| Mr. Bountong Santivong        | テクニカルスタッフ | 財務局／学校デザイン建設管理課 |
| Mrs. Malaylath                | テクニカルスタッフ | 財務局／学校デザイン建設管理課 |
| Mr. Sengthong Davone          | テクニカルスタッフ | 財務局／会計課         |
| Ms. Phetsourine Norasing      | 副課長       | 財務局／会計課         |
| Ms. Chanthone Thammathevo     | 課長        | 財務局／資産管理課       |
| Mr. Lueanglith Souvanhlasee   | テクニカルスタッフ | 財務局／資産管理課       |
| Mr. Inthavong Manithong       | 副局長       | 組織人事局           |
| Mr. Latsamee Thammavongsa     | 課長        | 組織人事局           |
| Ms. Khampaseauth Kitignavong  | 副局長       | 計画局             |
| Mr. Anoupheng Keovongsa       | 課長        | 計画局             |
| Mr. Khamphong SOMMALA         | 課長        | 計画局             |
| Mr. Souksamone Xaphouvong     | 副課長       | 計画局             |
| Mrs. Manila Chanthadeth       | テクニカルスタッフ | 計画局             |
| Mr. Khamphamai Thonlamy       | テクニカルスタッフ | 計画局             |
| Ms. Manola Mathmanysone       | 副課長       | 計画局／統計センター      |
| Ms. Syamphone Sengsulayvan    | テクニカルスタッフ | 計画局／統計センター      |
| Mr. Phouvanh Vong Soutthi     | 副局長       | 対外関係局           |
| Mr. Sisamout Saenbouttaraj    | 課長        | 対外関係局           |
| Mr. Bualaphanh                | 副課長       | 対外関係局           |
| Ms. Vatthanavanh Sayyasane    | テクニカルスタッフ | 対外関係局           |

|                             |           |               |
|-----------------------------|-----------|---------------|
| Mr. Banchong Latthavanh     | 副局長       | 普通教育局         |
| Mrs. Phouangsouk Xayyaboun  | 副課長       | 普通教育局         |
| Mr. At Vongphachan          | 副課長       | 普通教育局         |
| Mr. Simoungkhoun Vongchampa | テクニカルスタッフ | 普通教育局         |
| Dr. Mithong Souvanvixay     | 局長        | 就学前教育局        |
| Ms. Viengkeo Phommachack    | 副局長       | 就学前教育局        |
| Mrs. Bounhieng Singvongsa   | 副課長       | 就学前教育局        |
| Mr. Soukthavy Chanphilom    | テクニカルスタッフ | 就学前教育局        |
| Ms. Dara Khiemthammakhoun   | 副センター長    | インクルーシブ教育センター |
| Ms. Olady Chomlasy          | テクニカルスタッフ | インクルーシブ教育センター |
| Mr. Oimany Sypheng          | 副課長       | 教師開発センター      |

## TTC

| 氏名                            | 役職   | 所属         |
|-------------------------------|------|------------|
| Mr. Khamsouk Thongkan         | 校長   | ルアンナムタ TTC |
| Ms. Nouanchanh Thipphavong    | 副校長  | ルアンナムタ TTC |
| Mr. Nolasing Fongmisay        | 副校長  | ルアンナムタ TTC |
| Mr. Jab Vongthavy             | 副校長  | ルアンナムタ TTC |
| Mr. Bounsouvanh Lattana       | 校長   | ルアンパバン TTC |
| Mr. Sonepheth Sisaath         | 副校長  | ルアンパバン TTC |
| Mr. Houmphan Khonesavat       | 副校長  | ルアンパバン TTC |
| Mr. Thonglor Khounsavat       | 副校長  | ルアンパバン TTC |
| Mr. Vanny Yang Chia Moua      | 校長   | カンカイ TTC   |
| Mr. Soutchanthong Chanthavong | 副校長  | カンカイ TTC   |
| Ms. Chanmala Southammavong    | 校長   | バンクン TTC   |
| Mr. Payath Latana             | 副校長  | バンクン TTC   |
| Mr. Phouthachanh Latsavong    | 副校長  | バンクン TTC   |
| Mr. Outhai Phavatsady         | 副校長  | バンクン TTC   |
| Mr. Khoun Phommatha           | 副校長  | バンクン TTC   |
| Ms. Vila Sengsavang           | 校長   | ドンカムサ TTC  |
| Mr. Somphone Chantamaly       | 副校長  | ドンカムサ TTC  |
| Mr. Syphone Vannalath         | 副校長  | ドンカムサ TTC  |
| Mr. Bounleuth Singlattana     | 副校長  | ドンカムサ TTC  |
| Mr. Dalavong Nginsavong       | 財務課長 | ドンカムサ TTC  |
| Mr. Latsamee Phaxaysy         | 校長   | サバナケット TTC |
| Mr. Phomma Xayyavong          | 事務室長 | サバナケット TTC |

|                            |     |          |
|----------------------------|-----|----------|
| Mr. Soudone Vongsavanh     | 副校長 | サラワン TTC |
| Mrs. Phouvieng Inthasone   | 副校長 | サラワン TTC |
| Mr. Phone Phouvanhno       | 校長  | パクセ TTC  |
| Mr. Somxay Thepsombat      | 副校長 | パクセ TTC  |
| Mr. Sourichanh             | 副校長 | パクセ TTC  |
| Mr. Khonesavanh Nanthavong | 副校長 | パクセ TTC  |
| Mr. Bounpheng              | 副校長 | パクセ TTC  |

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| Mr. Bounchin Atphasouk         | テクニカルスタッフ | ルアンナムタ県教育・スポーツ局<br>建設開発援助課   |
| Mr. Saiysavan Chanmanit        | －         | ルアンプラバン県教育・スポーツ<br>局         |
| Mr. Phetthachan Chanthavong    | －         | シェンクワン県教育・スポーツ局<br>教員養成課     |
| Mr. Done Duouangphachanh       | 課長        | ビエンチャン県教育・スポーツ局<br>教員養成課     |
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| Mr. Phouviaksone Vongphouthone | －         | ビエンチャン特別市教育・スポー<br>ツ局建設開発援助課 |
| Mr. Bounnam Sysouthammavong    | テクニカルスタッフ | ビエンチャン特別市教育・スポー<br>ツ局        |
| Mr. Sansack Saytongvath        | テクニカルスタッフ | ビエンチャン特別市教育・スポー<br>ツ局        |
| Mr. Anorath Phomvohan          | 課長        | サバナケット県教育・スポーツ局              |
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| Mr. Kongkeo Xaychamphone       | テクニカルスタッフ | サバナケット県教育・スポーツ局<br>建設開発援助課   |
| Mr. Sounee Nammaboualy         | －         | サラワン県教育・スポーツ局                |
| Mr. Bounpakhong Khamphilay     | －         | サラワン県教育・スポーツ局                |
| Ms. Khamkhong Chanthavongsack  | －         | サラワン県教育・スポーツ局                |
| Mr. Hatthaboun Xaphakdy        | －         | パクセ県教育・スポーツ局<br>建設開発援助課      |

#### 教育機材公社

| 氏名                       | 役職 | 所属              |
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| Mr. Saymonolinh Sinbandith    | 課長        | 関税局   |
| Mr. Khampoun Inpenglasabout   | 課長        | 関税局   |
| Ms. Monekeo Dalavong          | 課長代理      | 関税局   |
| Mr. Phaivanh                  | テクニカルスタッフ | 関税局   |
| Mr. Chanthakhan Luanglath     | テクニカルスタッフ | 関税局   |
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| Ms. Dalaphone                 | テクニカルスタッフ | 主税局   |
| Mr. Khamsaveng                | テクニカルスタッフ | 主税局   |
| Mr. Vanphaxay Keosomphanh     | テクニカルスタッフ | 主税局   |
| Mr. Soukphaivanh Khammanivong | テクニカルスタッフ | 主税局   |
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| 氏名                     | 役職 | 所属        |
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| Mr. Thongbier Xingkhaophet | -   | UXO ラオ サラワン    |
| Mr. Boutsy Duangphanya     | -   | UXO ラオ サラワン    |
| Mr. Uttama Insoulivong     | -   | UXO ラオ サラワン    |
| Mr. Wanthong Khamdala      | -   | UXO ラオ サラワン    |
| Mr. Subin                  | -   | UXO サバナケット     |
| Mr. Amkha Thammasith       | 副局長 | ルアンナムタ県労働福祉局   |
| Mr. Saysengya Lueangvanna  | -   | ルアンナムタ県労働福祉局   |

#### ルアンパバン県公共事業交通局

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| Mr. Simon Khan Panyasavath | 副局長 | ルアンパバン県公共事業交通局 |

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| Ms. Corine Vis              | 初等教員カリキュラム専門家    | BEQUAL                       |
| Ms. Nantawan Hinds          | プログラムオフィサー       | UNESCO バンコク事務所               |
| Ms. Takaho Fukami           | 教育部門主任           | UNICEF ラオス事務所                |
| Mr. Phouvanh Phommangsy     | 教育部門専門家          | 世界銀行 ラオス事務所                  |
| Ms. Phetviengkhone Sayasane | 教育プロジェクト管理専門家    | USAID ラオス事務所                 |
| 玉利 清隆                       |                  | 公益社団法人シャンティ国際ボランティア会 ラオス事務所長 |

#### 在ラオス日本国大使館

| 氏名     | 役職    | 所属         |
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JICA ラオス事務所

| 氏名                        | 役職        | 所属          |
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| 作道 俊介                     | 次長        | JICA ラオス事務所 |
| 眞田 明子                     | 次長        | JICA ラオス事務所 |
| 石塚 裕子                     | 所員        | JICA ラオス事務所 |
| 鈴木 夢大                     | 所員        | JICA ラオス事務所 |
| Mr. Saiyavong Phommachack | ナショナルスタッフ | JICA ラオス事務所 |
| Ms. Kittiyapha Phimphe    | ナショナルスタッフ | JICA ラオス事務所 |



## 資料 4 討議議事録およびテクニカルノート



#### 4－1. 討議議事録（2018年9月21日署名）

**Minutes of Discussions**  
**on the Preparatory Survey on the Project for**  
**Improvement of Teacher Training Colleges in the Lao People's Democratic Republic**

In response to the request from the Government of the Lao People's Democratic Republic (hereinafter referred to as "Lao PDR"), the Government of Japan decided to conduct a Preparatory Survey on the Project for Improvement of Teacher Training Colleges (hereinafter referred to as "the Project"), and entrusted the Preparatory Survey to Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") to the Lao PDR, headed by Ms. Yumi Tokuda, Senior Deputy Director of Basic Education Team 1, Basic Education Group, Human Development Department, and is scheduled to stay in the country from August 26th to October 18th, 2018.

The Team held a series of discussions with the officials concerned of the Government of the Lao PDR and conducted field surveys in the Project sites. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Vientiane, September 21<sup>st</sup>, 2018



徳田 由美

Yumi TOKUDA

Leader

Preparatory Survey Team

Japan International Cooperation Agency

Japan



Khanthaly SIRIPHONGPHANH

Khanthaly SIRIPHONGPHANH

Permanent Secretary

Cabinet Office

Ministry of Education and Sports

Lao People's Democratic Republic

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to improve the quality of the teacher training environment for pre-primary, primary and secondary education in the Lao PDR, thereby contributing to the improvement of the quality of basic education in the nation.

### 2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey on the Project for Improvement of Teacher Training Colleges”.

### 3. Project Site

3-1. Both sides confirmed that the sites of the Project are eight Teacher Training Colleges (hereinafter referred to as “TTCs”), including their demonstration schools, namely Luang Nam Tha TTC, Luang Prabang TTC, Khang Khay TTC, Ban Keun TTC, Dong Kham Xang TTC, Savannakhet TTC, Saravan TTC and Pakse TTC in the Lao PDR which are shown in the Annex 1.

3-2. Both sides understood that, while it is desirable to include all the eight TTCs in the Project to avoid the regional gap and enhance the balanced development, it is not guaranteed that the Project includes all the eight TTCs in consideration of the budget allocated for the Project by the Government of Japan.

### 4. Responsible Authority for the Project

4-1. The Ministry of Education and Sports (hereinafter referred to as “MOES”) will be the executing agency for the Project (hereinafter referred to as the “Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be taken care by relevant authorities properly and on time. The organization chart of MOES is shown in the Annex 3.

4-2. The Lao PDR side agreed to establish the Project Management Unit (hereinafter referred to as the “PMU”) in MOES consists of Cabinet Office, Department of Teacher Education, Department of Organization and Personnel, Department of Planning, Department of Finance, Department of External Relations, Department of General Education and Department of Early Childhood Education. PMU works under the supervision of the Executing Agency to coordinate with the relevant authorities and the local authorities for the smooth and effective implementation of the Project.



5. Items requested by the Government of the Lao PDR

As a result of discussions, both sides confirmed that the items requested by the Government of Lao PDR are as shown in the Annex 2.

5-1. JICA will assess the feasibility of all the above requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.

5-2. The component of the Project will be designed based on the standards applicable in the Lao PDR with necessary modifications.

5-3. The Government of the Lao PDR shall submit an official request to the Government of Japan through a diplomatic channel by the end of January, 2019.

6. Procedures and Basic Principles of Japanese Grant Project

6-1. The Team explained and the Lao PDR side agreed that the procedures and basic principles of Japanese Grant as described in the Annex 4 to be applied to the Project.

6-2. The Lao PDR side agreed to undertake the necessary measures, as described in the Annex 5, for smooth implementation of the Project. The contents of the Annex 5 will be elaborated and refined during the survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report. The contents of Annex 5 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

6-3. Both side agreed that the eligible nationality of the prime construction firms and/or procurement firms, are nationals of the recipient country or other country(ies). The eligible nationality will be examined, and will be agreed at the Preparatory Survey for the explanation of the Draft Report. The Lao PDR side pointed out that the eligible nationality of the prime construction firms and/or procurement firms (suppliers) be prioritized for Lao nationals over other country(ies). Both sides confirmed that the eligible nationality will be finalized in the Grant Agreement.

6-4. The bidding/selection and conclusion of contracts of the products and services covered by the Project will be conducted in the Lao PDR based on the result of the Preparatory Survey. The Lao PDR side agreed that the products and services covered by the Project will be solely procured in accordance with “JICA’s Procurement Guidelines of the Japanese Grants (for Japanese consultant and local contractors) (Tentative Type-II)”.

6-5 The Lao PDR side agreed that the currency for contract of prime construction and/or procurement firms is internationally traded foreign currency acceptable to JICA, that is US dollar, which will be stipulated in the Grant Agreement. The Lao PDR side understood the flow of payment as shown in the Annex 4 and confirmed to take necessary measures for the payment in a timely manner. The Lao PDR side explained

that Bank of the Lao PDR as the “Recipient Bank” will conclude the banking arrangement (hereinafter referred to as the “Banking Arrangement”) with a bank in Japan (hereinafter referred to as the “Agent Bank”), which will be stipulated in the Grant Agreement.

6-6. The Lao PDR side agreed that procurement type of Japanese Project Grant and the feasibility of issues mentioned above in 6-3, 6-4, and 6-5 will be further examined by Japan side based on the result of this field survey and that the result of examination will be explained at the Preparatory Survey for the explanation of the Draft Preparatory Survey Report.

#### 7. Schedule of the Survey

7-1. The Team will proceed with further survey in the Lao PDR until October 18th, 2018.

7-2. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to the Lao PDR in order to explain its contents around April, 2019.

7-3. If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the Lao PDR side, JICA will finalize the Preparatory Survey Report in English and send it to the Lao PDR side around July, 2019.

7-4. The above schedule is tentative and subject to change.

#### 8. Environmental and Social Considerations

8-1. The Lao PDR side confirmed to give due environmental and social considerations during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as “C” from the following considerations:

Not located in a sensitive area, nor has it sensitive characteristics, nor falls it into sensitive sectors under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant.

#### 9. Other Relevant Issues

##### 9-1. Future Plan of the Number of TTC Students

MOES explained that the average number of students at each TTC will be maintained at around 1,000. MOES promised to provide the future plan of the number of students for each TTC by November, 2018 in order for Japan side to estimate the appropriate scale of the project components.

##### 9-2. Ministerial Document regarding the Function of Demonstration School

The Lao PDR side promised to provide a ministerial document by the end of October,

7

8



2018, which states that the specialized functions of the demonstration schools which are different from the network schools.

#### 9-3. Ministerial Document of the Establishment of Secondary Demonstration Schools

The Lao PDR side promised to issue a ministerial document by the end of December, 2018, which prescribes establishment of secondary demonstration schools for all the eight TTCs. The Team explained and the Lao PDR side understood that the Project may not cover the secondary demonstration schools if the decree is not issued by the deadline.

#### 9-4. Number of Classes per Grade in the Demonstration Schools

Both sides confirmed that the number of classes would be, in principle, one per grade in each demonstration school from N1 to M7<sup>1</sup>. The number of classrooms covered by the Project for each demonstration school will be determined based on the said principle, existing usable classrooms, demand in surrounding area, current number of classes per grade and the budget limitation.

#### 9-5. Multi-grade Classes

Both sides confirmed that classrooms specialized for multi-grade classes will not be covered by the Project.

#### 9-6. Land Certificate and UXO Clearance Certificate

The Lao PDR side agreed to provide land certificates and UXO clearance certificates necessary for the Project. The details of the documents will be confirmed in the technical notes which will be agreed and signed between the Team and the Lao PDR side at the end of the field survey.

#### 9-7. Exemption of Taxes, Duties and Levies

The Lao PDR side agreed to take necessary measures to ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Lao PDR with respect to the purchase of products and/or services to be exempted.

#### 9-8. Measures to be taken in case that problems arise

The Lao PDR side confirmed that when problems such as delay of construction works

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<sup>1</sup> The grades of demonstration schools are Nursery 1 to 3 (N1~3), Kindergarten 1 to 3 (K1~3), Primary 1 to 5 (P1~5), and Secondary 1 to 7 (M1~7).



or procurement of equipment by contractors/suppliers arise during the implementation of the Project, MOES will take necessary measures in accordance with technical opinion of the consultant in a timely manner.

9-9. Modification of the scope to be covered by the grant

The Lao PDR side agreed that in case of the amount of the grant, which includes the contingency, is not enough to cover the entire construction works and/or procurement of equipment on the implementation of the Project, the Lao PDR side will modify the scope of construction works and/or procurement of equipment so that they are covered by the grant, based on technical opinion of the consultant and be in charge of the other remaining scope by its own side.

Annex 1 Project Site

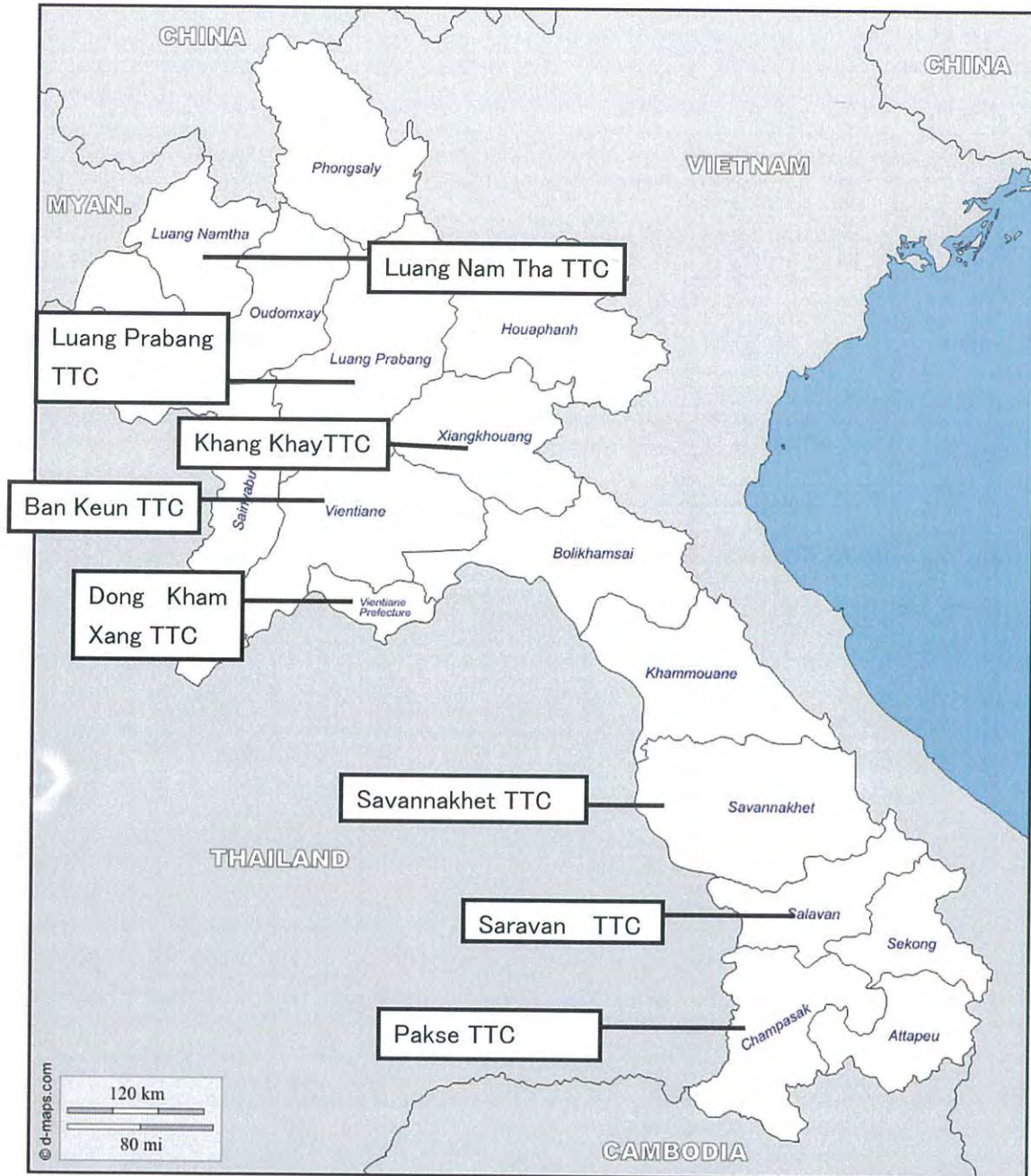
Annex 2 Requested Items with Priorities

Annex 3 Organization Chart

Annex 4 Japanese Grant

Annex 5 Major Undertakings to be taken by the Government of the Lao PDR

Map of 8 TTCs



## Annex 2

## Requested Items with Priorities

## 1. Facilities

## (1) Luang Nam Tha TTC

| Priority <sup>1</sup> | Item                                               |
|-----------------------|----------------------------------------------------|
| A                     | Reconstruction of Pre-primary Demonstration School |
| A                     | Reconstruction of Primary Demonstration School     |
| A                     | Reconstruction of Secondary Demonstration School   |
| C                     | Additional construction of Dormitory               |
| C                     | Reconstruction or rehabilitation of Library        |

## (2) Luang Prabang TTC

| Priority | Item                                                                                     |
|----------|------------------------------------------------------------------------------------------|
| A        | New construction of Secondary Demonstration School                                       |
| A        | Reconstruction of Toilet Building                                                        |
| B        | New construction of Complex Building containing library, laboratories and computer rooms |
| B        | Additional construction or reconstruction of Pre-primary Demonstration School            |
| B        | Reconstruction of Primary Demonstration School                                           |
| C        | Additional construction of Dormitory                                                     |

## (3) Khang Khay TTC

| Priority | Item                                                 |
|----------|------------------------------------------------------|
| A        | New construction of Pre-primary Demonstration School |
| A        | New construction of Primary Demonstration School     |
| A        | New construction of Secondary Demonstration School   |
| B        | Reconstruction of TTC Classroom Building             |
| C        | Additional construction of Dormitory                 |

<sup>1</sup> Legend for Priorities

A: To be covered by the Project with higher priority.

B: Considered to be covered by the Project, if the budget allocated for the Project allows.

C: Not to be covered by the Project in consideration of the budget allocated for the Project.



## (4) Ban Keun TTC

| Priority | Item                                               |
|----------|----------------------------------------------------|
| A        | Reconstruction of Pre-primary Demonstration School |
| A        | Reconstruction of Primary Demonstration School     |
| A        | Reconstruction of Secondary Demonstration School   |
| B        | Additional construction of TTC Classroom Building  |
| C        | Additional construction of Dormitory               |
| C        | Reconstruction of Library                          |

## (5) Dong Kham Xang TTC

| Priority | Item                                                            |
|----------|-----------------------------------------------------------------|
| A        | Additional construction of Pre-primary School                   |
| A        | Reconstruction of Primary Demonstration School                  |
| A        | New construction of Secondary Demonstration School <sup>2</sup> |
| A        | Reconstruction of TTC Classroom Building                        |
| C        | Additional construction of Dormitory                            |
| C        | Reconstruction or rehabilitation of Library                     |

## (6) Savannakhet TTC

| Priority | Item                                               |
|----------|----------------------------------------------------|
| A        | Reconstruction of Pre-primary Demonstration School |
| A        | Reconstruction of Primary Demonstration School     |
| A        | New construction of Secondary Demonstration School |
| A        | Reconstruction of Toilet Building                  |
| C        | Additional construction of Dormitory               |

## (7) Saravan TTC

| Priority | Item                                               |
|----------|----------------------------------------------------|
| A        | Reconstruction of Pre-primary Demonstration School |
| A        | New construction of Secondary Demonstration School |

<sup>2</sup> Only if necessity of establishment of a secondary demonstration school is justified through further analysis of the situation of secondary teacher training at Dong Kham Xang TTC as well as MOES's future strategies on secondary teacher training.

|   |                                                   |
|---|---------------------------------------------------|
| B | Reconstruction of Primary Demonstration School    |
| B | Additional construction of TTC Classroom Building |

(8) Pakse TTC

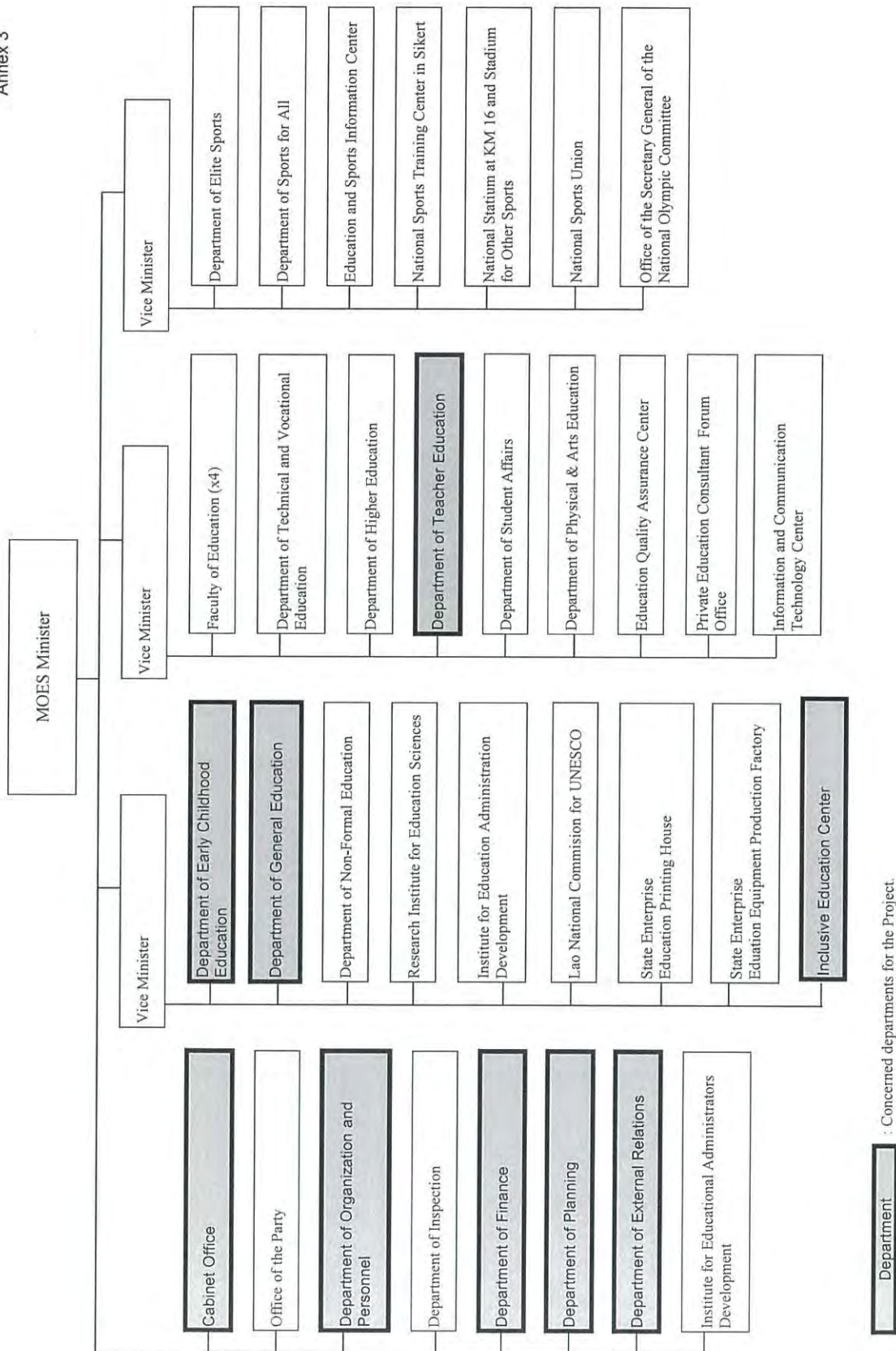
| Priority | Item                                                                        |
|----------|-----------------------------------------------------------------------------|
| A        | Reconstruction of Primary Demonstration School                              |
| A        | Reconstruction of Dormitory                                                 |
| A        | Reconstruction or additional construction of Secondary Demonstration School |
| B        | Reconstruction of TTC Classroom Building                                    |
| B        | Reconstruction of Pre-primary Demonstration School                          |

2. Equipment

| Priority | Item                                                                                                           |
|----------|----------------------------------------------------------------------------------------------------------------|
| A        | Equipment for Demonstration Schools:<br>MOES standard equipment for pre-primary, primary and secondary schools |
| B        | Equipment for TTC:<br>Only frequently used but missing equipment items which are necessary for TTC curricula   |

END

Annex 3



## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

### 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

#### (1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

#### (2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and Approval by the Japanese Cabinet

#### (3) Implementation

##### Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

##### Grant Agreement (hereinafter referred to as “the G/A”)

- Agreement concluded between JICA and the Recipient

##### Banking Arrangement (hereinafter referred to as “the B/A”)

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

##### Construction works/procurement

- Implementation of the project (hereinafter referred to as “the Project”) on the basis of the G/A

#### (4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

### 2. Preparatory Survey

#### (1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of



relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

## (2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

## (3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

# 3. Basic Principles of Project Grants (contract with Japanese consultant and local contractors)

## (1) Implementation Stage

### 1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as “the E/N”) will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the “General Terms and Conditions for Japanese Grant (January 2016).”



2) Banking Arrangements (B/A) (See “Financial Flow of Grant” for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) In case of Japanese consultant, the Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.
- c) In case of local contractors, the Japanese Grant will be disbursed when requests for disbursement are submitted by the Recipient to JICA.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", while the prime constructing firms, which enter into contracts with the Recipient, could be nationals of the recipient country or other country(ies) if deemed it necessary .

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the “Meeting”) will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client’s obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

Attachment 1 Procedures of Japanese Grant

Attachment 2 Financial Flow of Japanese Project Grant

## PROCEDURES OF JAPANESE GRANT

| Stage                              | Procedures                                                                                                 | Remarks                                                                                                                                        | Recipient Government | Japanese Government | JICA    | Consultants | Contractors | Agent Bank |
|------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------|-------------|-------------|------------|
| Official Request                   | Request for grants through diplomatic channel                                                              | Request shall be submitted before appraisal stage.                                                                                             | x                    | x                   |         |             |             |            |
| 1. Preparation                     | (1) Preparatory Survey<br>Preparation of outline design and cost estimate                                  |                                                                                                                                                | x                    |                     | x       | x           |             |            |
| 2. Appraisal                       | (2) Preparatory Survey<br>Explanation of draft outline design, including cost estimate, undertakings, etc. |                                                                                                                                                | x                    |                     | x       | x           |             |            |
|                                    | (3) Agreement on conditions for implementation                                                             | Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government. | x                    | x (E/N)             | x (G/A) |             |             |            |
|                                    | (4) Approval by the Japanese cabinet                                                                       |                                                                                                                                                |                      | x                   |         |             |             |            |
| 3. Implementation                  | (5) Exchange of Notes (E/N)                                                                                |                                                                                                                                                | x                    | x                   |         |             |             |            |
|                                    | (6) Signing of Grant Agreement (G/A)                                                                       |                                                                                                                                                | x                    |                     | x       |             |             |            |
|                                    | (7) Banking Arrangement (B/A)                                                                              | Need to be informed to JICA                                                                                                                    | x                    |                     |         |             |             | x          |
|                                    | (8) Contracting with consultant and issuance of Authorization to Pay (A/P)                                 | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           |             | x          |
|                                    | (9) Detail design (D/D)                                                                                    |                                                                                                                                                | x                    |                     |         | x           |             |            |
|                                    | (10) Preparation of bidding documents                                                                      | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           |             |            |
|                                    | (11) Bidding                                                                                               | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           | x           |            |
|                                    | (12) Contracting with contractor/supplier                                                                  | Concurrence by JICA is required<br>Request for disbursement shall be made by the Recipient, in case of local contractor.                       | x                    |                     | x       |             | x           | x          |
|                                    | (13) Construction works/procurement                                                                        | Concurrence by JICA is required for major modification of design and amendment of contracts.                                                   | x                    |                     |         | x           | x           |            |
|                                    | (14) Completion certificate                                                                                |                                                                                                                                                | x                    |                     |         | x           | x           |            |
| 4. Ex-post monitoring & evaluation | (15) Ex-post monitoring                                                                                    | To be implemented generally after 1, 3, 10 years of completion, subject to change                                                              | x                    |                     | x       |             |             |            |
|                                    | (16) Ex-post evaluation                                                                                    | To be implemented basically after 3 years of completion                                                                                        | x                    |                     | x       |             |             |            |

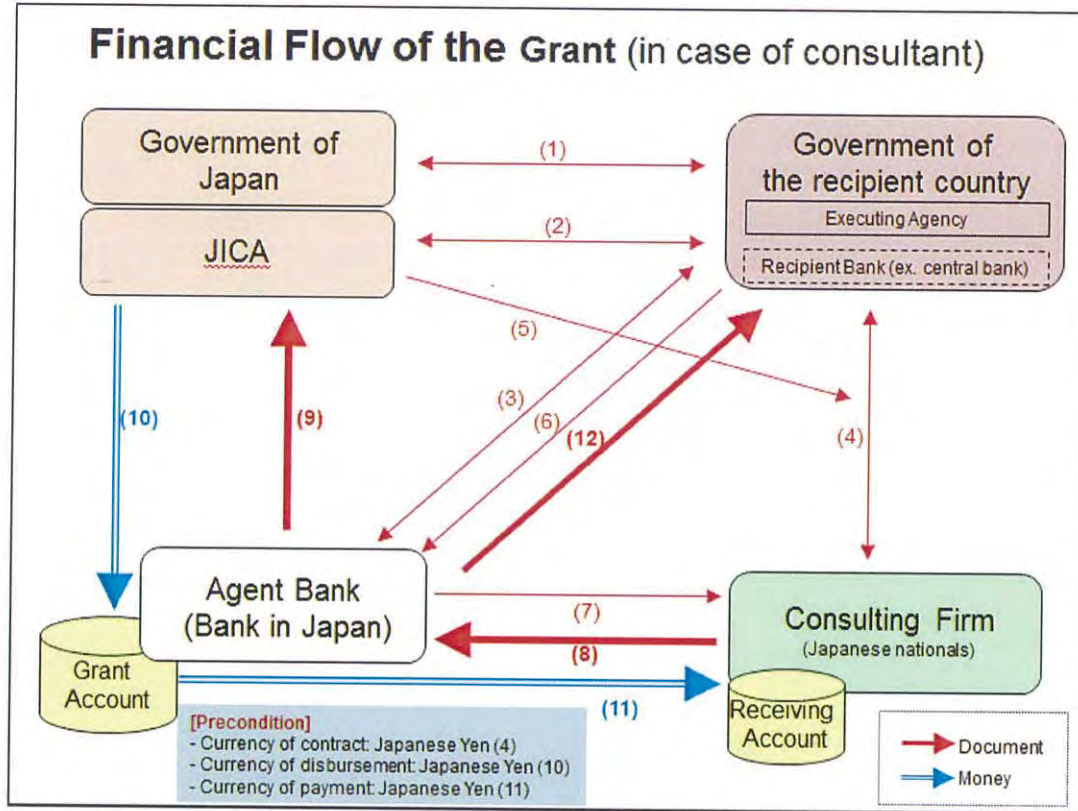
notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.

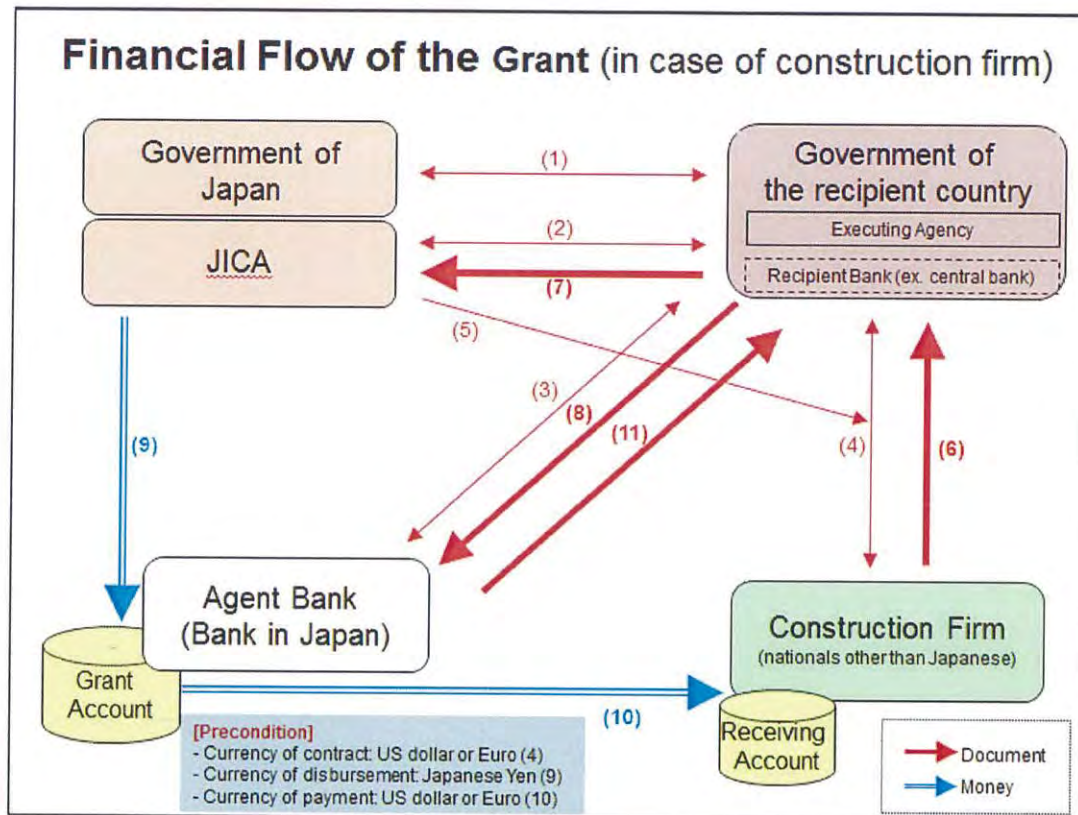
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.



**Financial Flow of Japanese Project Grant**  
(contract with Japanese consultant and local contractors)



- (1) E/N
- (2) G/A
- (3) Banking Arrangement/Opening an Grant Account
- (4) Contract
- (5) Concurrence and Verification of Contract
- (6) Issuing Authorization to Pay (A/P) upon contract
- (7) Notification of A/P
- (8) Request for Payment
- (9) Request for the Disbursement
- (10) Disbursement of the Grant
- (11) Payment
- (12) Statement of Account



(1) E/N

(2) G/A

Submission of Evidence of Authority and Specimen Signatures from the Recipient to JICA (prerequisite for the process of no. (7))

(3) Banking Arrangement/Opening an Grant Account

(4) Contract

(5) Concurrence and Verification of Contract

**(6) Request for Payment**

**(7) Request for Disbursement**

**(8) Transfer Instruction**

**(9) Disbursement of the Grant \***

**(10) Payment**

**(11) Statement of Account**

\* The amount of disbursement in Japanese Yen ((9) in above chart) shall be calculated at the Telegraphic Transfer Selling (TTS) rate quoted by the Bank in Japan two business days before the date on which the disbursement is made.



## Annex 5

## Major Undertakings to be taken by the Government of the Lao PDR

**1. Specific obligations of the Government of the Lao PDR which will not be funded with the Grant**

## (1) Before the Bidding

| NO | Items                                                                                                                                                                                                                                                                                                                                                                              | Deadline                                             | In charge | Estimated Cost | Ref. |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------|----------------|------|
| 1  | To open bank account (B/A)                                                                                                                                                                                                                                                                                                                                                         | within 1 month after the signing of the G/A          | BOL       |                |      |
| 2  | To issue A/P to a bank in Japan (the Agent Bank) for the payment to the consultant                                                                                                                                                                                                                                                                                                 | within 1 month after the signing of the contract     | BOL       |                |      |
| 3  | To secure and clear the following lands<br>1) project area at the 8 TTCs<br>2) temporary construction yard and stock yard within/near the project area                                                                                                                                                                                                                             | before the commencement of the detailed design works | MOES      |                |      |
| 4  | To obtain the UXO clearance certificates for the designated TTC sites                                                                                                                                                                                                                                                                                                              | before the commencement of the detailed design works |           |                |      |
| 5  | To clear and level the following sites<br>1) removing obstacles such as trees<br>2) removing existing facilities, if necessary<br>3) levelling the project area where necessary                                                                                                                                                                                                    | before the commencement of the detailed design works | MOES      |                |      |
| 6  | To obtain the building permits, if necessary                                                                                                                                                                                                                                                                                                                                       | during preparation of the bidding documents          | MOES      |                |      |
| 7  | To submit Project Monitoring Report (with the result of Detail Design)                                                                                                                                                                                                                                                                                                             | during preparation of the bidding documents          | MOES      |                |      |
| 8  | To secure alternative facilities to accommodate users of the existing buildings to be demolished for reconstruction                                                                                                                                                                                                                                                                | before the demolition works                          |           |                |      |
| 9  | To move and store necessary furniture and equipment from the existing buildings to be demolished for reconstruction                                                                                                                                                                                                                                                                | before the demolition works                          |           |                |      |
| 10 | To ensure smooth implementation of the bidding procedures and to bear necessary expenses relevant to the bidding procedures including, but not limited to, the following<br>- printing and binding of bidding documents<br>- bid notices on major newspapers<br>- securing places for pre-bid meeting<br>- securing places for bid opening<br>- securing places for bid evaluation | before the bid notice                                | MOES      |                |      |

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

## (2) During the Project Implementation

| NO | Items                                                                                                                                                                                                                                                                                                                 | Deadline                                                                                        | In charge   | Estimated Cost | Ref. |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------|----------------|------|
| 1  | To bear the following commissions to a bank in Japan for the banking services based upon the B/A                                                                                                                                                                                                                      |                                                                                                 |             |                |      |
| 2  | 1) Advising commission of A/P                                                                                                                                                                                                                                                                                         | within 1 month after the signing of the contract(s)                                             | MOES        |                |      |
|    | 2) Payment commission for A/P                                                                                                                                                                                                                                                                                         | every payment for consultant                                                                    | MOES        |                |      |
|    | 3) Remittance charge for local contractors and suppliers                                                                                                                                                                                                                                                              | every payment                                                                                   | MOES        |                |      |
| 3  | To conduct necessary procedures such as “Request for disbursement” to JICA (upon contract with construction firms and/or procurement firms (suppliers)), “Application of remittance” to Bank (upon contract with construction firms and/or procurement firms (suppliers))                                             | during the Project                                                                              | MOES        |                |      |
| 4  | to ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient                                                                                                                                                                                         | during the Project                                                                              | MOES<br>MOF |                |      |
| 5  | To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work | during the Project                                                                              | MOES        |                |      |
| 6  | To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted                                                                                                               | during the Project                                                                              | MOES<br>MOF |                |      |
| 7  | To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project                                                                                                                                                                                                      | during the Project                                                                              | MOES        |                |      |
| 8  | To bear necessary expense, including, but not limited to, transportation, per-diem and accommodation, for MOES, PESS and/or DESB personnel who join the site visits and inspections                                                                                                                                   | during the Project                                                                              | MOES        |                |      |
| 9  | (In case that the demolition works are done by Japan side)<br>To conduct UXO detection surveys and issuance of clearance certificates for the areas where the existing buildings are demolished, if necessary                                                                                                         | immediately after demolition works done by Japan side                                           | MOES        |                |      |
| 10 | To submit Project Monitoring Report                                                                                                                                                                                                                                                                                   | every month                                                                                     | MOES        |                |      |
| 11 | 1) To submit Project Monitoring Report (final)                                                                                                                                                                                                                                                                        | within one month after signing of Certificate of Completion for the works under the contract(s) | MOES        |                |      |
|    | 2) To submit a report concerning completion of the Project                                                                                                                                                                                                                                                            | within six months after completion of the Project                                               | MOES        |                |      |
| 12 | To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)                                                                                                                                  |                                                                                                 |             |                |      |
|    | 1) Electricity<br>The distributing line to the sites where necessary                                                                                                                                                                                                                                                  | before start of the construction                                                                | MOES        |                |      |
|    | 2) Water Supply<br>The city water distribution main to the sites where necessary                                                                                                                                                                                                                                      | 6 months before completion of the construction                                                  | MOES        |                |      |
|    | 3) Drainage<br>The city drainage main ( for storm, sewer and others ) to the sites where necessary                                                                                                                                                                                                                    | 6 months before completion of the construction                                                  | MOES        |                |      |
|    | 4) Furniture and Equipment<br>General furniture other than the ones procured by the Project                                                                                                                                                                                                                           | 1 month before completion of the construction                                                   | MOES        |                |      |



|    |                                                                                                                                                                  |                         |      |  |  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------|--|--|
| 13 | To take necessary measures for safety of construction<br>- vehicle and pedestrian traffic control within the TTC sites<br>- safety instructions to the TTC users | during the construction | MOES |  |  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------|--|--|

## (3) After the Project

| NO | Items                                                                                                                                                                                                                                     | Deadline                             | In charge | Estimated Cost | Ref. |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------|----------------|------|
| 1  | To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid<br>1) Allocation of maintenance cost<br>2) Operation and maintenance structure<br>3) Routine check/Periodic inspection | After completion of the construction |           |                |      |
| 2  | To allocate teachers and staffs required for school operation and management                                                                                                                                                              | After completion of the construction |           |                |      |

## 2. Other obligations of the Government of the Lao PDR funded with the Grant

| NO | Items                                                                                                                                                                                                                                                                   | Deadline | Amount<br>(Million Japanese Yen)* |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------|
| 1  | 1) To construct facilities with basic furniture<br><br>2) To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities within the project sites<br><br>3) To procure equipment and conduct internal transportation |          |                                   |
| 2  | To implement detailed design, bidding support and construction supervision<br>(Consulting Service)                                                                                                                                                                      |          |                                   |
| 3  | Contingencies                                                                                                                                                                                                                                                           |          |                                   |
|    | Total                                                                                                                                                                                                                                                                   |          | XXX                               |

\*The Amount is provisional. This is subject to the approval of the Government of Japan.



## 4－2. 討議議事録2（2020年2月13日署名）



**Minutes of Discussions  
on the Preparatory Survey on  
the Project for  
Improving of Teacher Training Colleges  
in the Lao People's Democratic Republic  
(Explanation on Draft Preparatory Survey Report)**

With reference to the minutes of discussions signed between the Ministry of Education and Sports and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 21 September, 2018 and in response to the request from the Government of Lao People's Democratic Republic (hereinafter referred to as "Lao PDR") dated 3 January, 2020, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Improving Teacher Training Colleges in the Lao People's Democratic Republic (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.



徳田 由美  
Yumi TOKUDA  
Leader  
Preparatory Survey Team  
Japan International Cooperation Agency  
Japan

 Vientiane, 13 February, 2020

Daravone KITTIPANH  
Acting Permanent Secretary  
Cabinet Office  
Ministry of Education and Sports  
Lao People's Democratic Republic

## ATTACHEMENT

### 1. Objective of the Project

The objective of the Project is to improve the quality of the teacher training environment for pre-primary, primary and secondary education in the Lao PDR, thereby contributing to improvement of the quality of basic education in the nation.

### 2. Title of the Preparatory Survey

Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey on the Project for Improvement of Teacher Training Colleges”.

### 3. Project site

Both sides confirmed that the sites of the Project are eight Teacher Training Colleges (hereinafter referred to as “TTCs”) including their demonstration schools, namely Luang Nam Tha TTC, Luang Prabang TTC, Khang Khay TTC, Ban Keun TTC, Dong Kham Xang TTC, Savannakhet TTC, Saravan TTC and Pakse TTC in the Lao PDR, which are shown in the Annex 1.

### 4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

4-1. Ministry of Education and Sports (hereinafter referred to as the “MOES”) will be the executing agency for the Project (hereinafter referred to as the “Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that undertakings for the Project shall be taken care by the relevant authorities properly and on time.

4-2 MOES will establish the project management unit (hereinafter referred to as “PMU”) for the Project, and Department of Teacher Education (hereinafter referred to as “DTE”) will be the responsible department of PMU, while Cabinet Office (hereinafter referred to as “CO”), Department of Finance (hereinafter referred to as “DOF”), Department of Planning (hereinafter referred to as “DP”) and Department of External Relations (hereinafter referred to as “DER”) will act as the key departments of PMU during the implementation of the Project. The other relevant departments of MOES<sup>1</sup>, 8 TTCs and PUCDAs concerned<sup>2</sup> will also be involved in PMU as committee members. MOES promised to establish PMU as a conclusion of ministerial

<sup>1</sup> The relevant departments of MOES as PMU committee members are; Department of Early Childhood Education (DECE), Department of General Education (DGE), Department of Organization and Personnel (DOP) and Inclusive Education Center (IEC).

<sup>2</sup> PUCDA (Provincial Unit Construction Development Assistance) concerned with each TTC will be involved during the construction period for the activities at the site level, including site handing-over, monthly progress inspection, technical inspection, completion inspection and final taking over.

agreement, and it shall be reported to JICA by end of May 2020. The tentative version of organization charts is shown in Annex 2.

5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Lao PDR side agreed to its contents.

6. Cost estimate

Both sides confirmed that the cost estimate explained by the Team is provisional and will be examined further by the Government of Japan for its approval.

Both sides confirmed that the cost estimate including the contingency explained by the Team is provisional and will be examined further by the Government of Japan for its approval. The contingency would cover the additional cost against natural disaster, unexpected natural conditions, fluctuation of exchange rate, etc.

7. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

8. Procedures and Basic Principles of Japanese Grant

8-1 The Lao PDR side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as "the Grant") as described in Annex 3 shall be applied to the Project. In addition, the Lao PDR side agreed to take necessary measures according to the procedures.

8-2 Eligible nationality

The eligible nationality of consultant shall be Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons, in the case of the consultant that will contract directly with the Recipient for the implementation of the Project.

The eligible nationality of the other Supplier(s) shall be nationals of the Lao PDR or juridical persons incorporated and registered in the Lao PDR who have their appropriate facilities for producing or providing the products and/or services in the Lao PDR and actually conduct their business there, in the case of the other Supplier(s) that will contract directly with the Recipient for the implementation of the Project.

8-3 Flow of payment and currency of payment to prime contractor(s)

The Lao PDR side understood the flow of payment as shown in Annex 4 and confirmed to take necessary measures for the payment in a timely manner. The Lao PDR explained that it will



nominate “Bank of Lao PDR” as the “Recipient Bank” that conclude the banking arrangement (hereinafter referred to as “the Banking Arrangement”) with a bank in Japan (hereinafter referred to as “the Agent Bank”).

The Lao PDR side agreed that the currency for contract of prime construction and/or procurement firms is internationally traded foreign currency acceptable to JICA, that is US dollar, which will be stipulated in the Grant Agreement.

The Lao PDR side understood flow of approval during the execution of the contract and required documents for payments to prime contractor(s)/supplier(s) as Annex 4.

#### 8-4 Bidding procedure and procurement guidelines

The bidding/selection and conclusion of contracts of the products and services covered by Grant of the Project will be conducted at the Lao PDR. The Lao PDR side understands that the products and services covered by Grant of the Project will be procured in accordance with JICA’s Procurement Guidelines for the Japanese Grants (for Japanese consultant and local contractor).

#### 9. Timeline for the project implementation

The Team explained to the Lao PDR side that the expected timeline for the project implementation is as attached in Annex 5.

#### 10. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows. The Lao PDR side will be responsible for the achievement of agreed key indicators targeted in year 2027 and shall monitor the progress by the Executing Agency based on those indicators.

##### [Quantitative indicators]

| Indicators                                                                                                                               |                       | Base value<br>(Actual value in<br>2018) | Target value<br>(Year 2027:<br>3 years after the<br>completion) |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------|-----------------------------------------------------------------|
| The number of TTC demonstration schools located inside of TTC sites with proper environment for teacher training and research activities | Pre-primary education | 1                                       | 8                                                               |
|                                                                                                                                          | Primary education     | 2                                       | 8                                                               |
|                                                                                                                                          | Secondary education   | 0                                       | 8                                                               |

##### [Qualitative indicators]

- By constructing TTC demonstration schools, the environment for (1) research of teaching method and curriculum, (2) teacher training, and (3) continuous professional development

(CPD) of in-service teachers and pedagogical advisors (PA) will be improved and the quality of education in the Lao PDR will be improved.

- The positive spreading effect at surrounding areas is expected by practicing model education at demonstration schools.

#### 11. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Lao PDR side is required to provide necessary support for the data collection.

#### 12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 6. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 1.(2) 6 of Annex 6, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by MOES during the implementation stage of the Project.

The Lao PDR side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

Both sides also confirmed that the Annex 6 will be used as an attachment of G/A.

#### 13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 7. The timing of submission of the PMR is described in Annex 6.

#### 14. Project completion

Both sides confirmed that the Project completes when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

#### 15. Items and measures to be considered for the smooth implementation of the Project

- 15-1 The Lao PDR side confirmed that when problems such as delay of construction works or procurement of equipment by contractor(s)/supplier(s) arises during the implementation of the Project, the MOES will take necessary measures in accordance with technical opinion of the consultant in a timely manner.



15-2 The Lao PDR side agreed that in case the amount of the Grant, which includes the contingency, is not enough to cover the entire cost of components as planned by the outline design, the Lao PDR side will take necessary measures such as revising specifications, reducing the Project scope, or absorbing the cost exceeding the amount of the Grant, based on technical analysis and opinions of the consultant.

#### 16. Schedule of the Study

JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Lao PDR side around June 2020.

#### 17. Environmental and Social Considerations

##### 17-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as C because the Project is likely to have minimal adverse impact on the environment under the Guidelines.

#### 18. Other Relevant Issues

##### 18-1 TTC secondary demonstration schools

MOES instructed that all 8 TTCs would have demonstration schools covering from N1 to M7 and confirmed that this policy will be mentioned in Education and Sports Sector Development Plan (2021-2025).

Regarding Dong Kham Xang TTC and Khang Khay TTC, MOES confirmed that secondary demonstration schools will operate from next school year (September 2020). Both sides agreed that these two secondary demonstration schools may be excluded from the Project component if they will not operate from next school year.

##### 18-2 Assignment of appropriate teachers

The Lao PDR side committed to assign appropriate teachers and school staff to the TTC demonstration schools for their proper operation.

##### 18-3 UXO clearance

The Team explained the areas where the UXO clearance have not been fully completed in the respective TTCs. The Lao PDR side promised to clear the areas by the end of July 2020. The current status of UXO clearance is described in Annex 8.

It is found that the proposed construction area for demonstration schools of KKY TTC shall be cut and leveled. The Lao PDR side promised that the following items shall be conducted by the

Lao PDR side, because the existing ground in wider areas needs to be cut and leveled, and because the previous UXO clearance was conducted 20 years ago.

- 1) Cutting and leveling of the proposed areas
- 2) Re-implementation of UXO clearance

#### 18-4 Eligible countries of origin for equipment

Both sides agreed that the Project will procure the equipment made in Thailand or OECD member countries. Besides, MOES agreed that educational posters in Lao, traditional Lao musical instrument, etc. which are exclusively manufactured by the Educational Equipment Production Factory Enterprise under MOES will be procured by the Lao PDR side.

#### 18-5 Implementation groups

The Team explained that the 8 TTCs are divided into two implementation groups as they are located nationwide. It is described in Annex 9.

#### 18-6 Demolition of the existing buildings

Assuming that the Project is approved by the Government of Japan in May 2020, the construction contracts for Group 1 between MOES and Contractors are likely to be signed around November 2021. It is no time for the Lao PDR side to secure budget to demolish the existing buildings. Therefore, for the sake of smooth implementation of the Project, the demolition of the existing buildings of Group 1 sites will be covered by the Japan side. In contrast, for Group 2 sites, because construction starts around November 2022, and the Lao PDR side may complete its undertakings before construction, the demolition of the existing buildings of Group 2 sites are undertaken by the Lao PDR side.

Annex 1 Project Site

Annex 2 Organization Chart

Annex 3 Japanese Grant

Annex 4 Tentative Approval flow and required documents

Annex 5 Project Implementation Schedule

Annex 6 Major Undertakings to be taken by the Lao PDR

Annex 7 Project Monitoring Report (template)

Annex 8 Status of UXO Clearance (as of 13 February 2020)

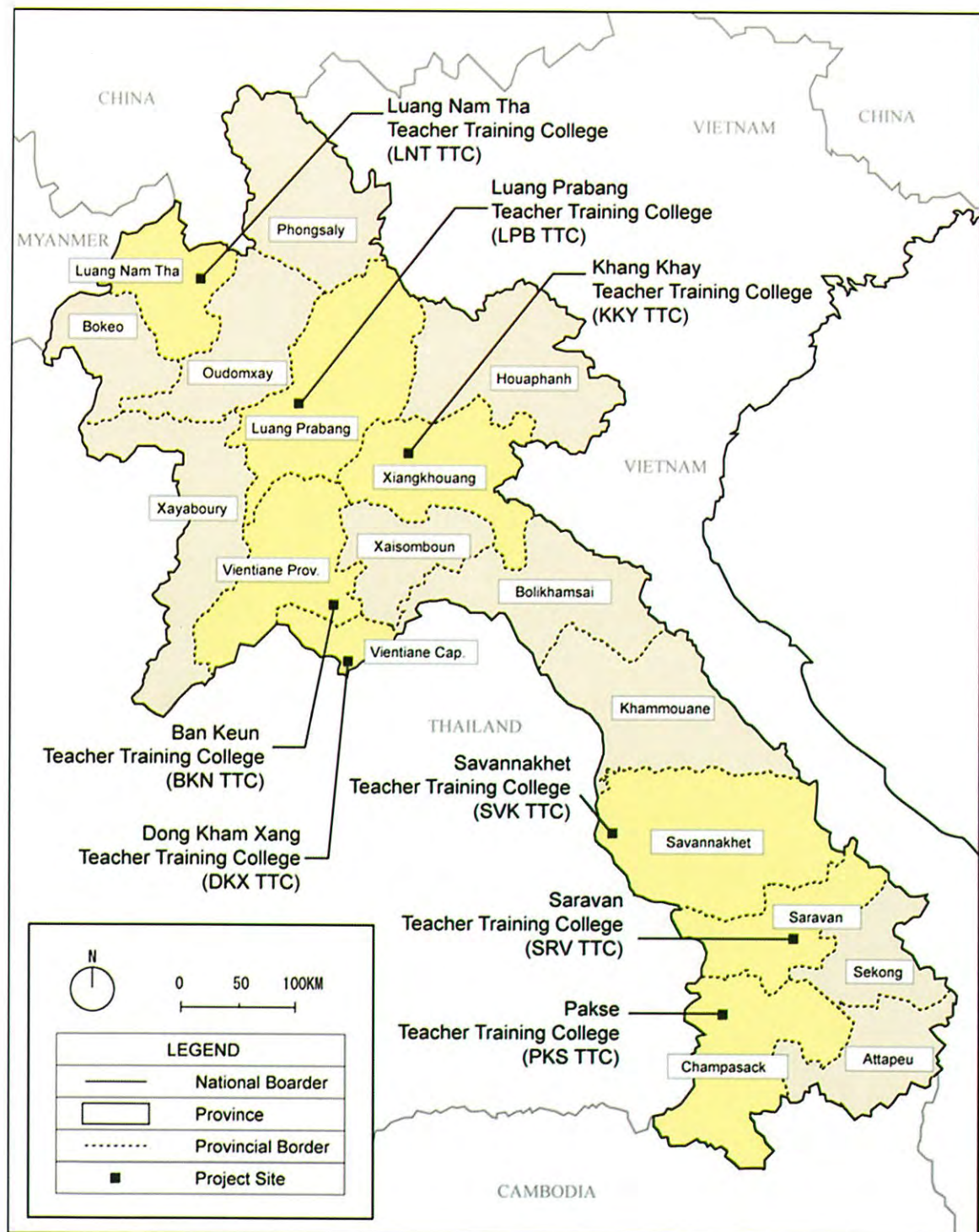
Annex 9 Implementation groups and bidding/ contract lots

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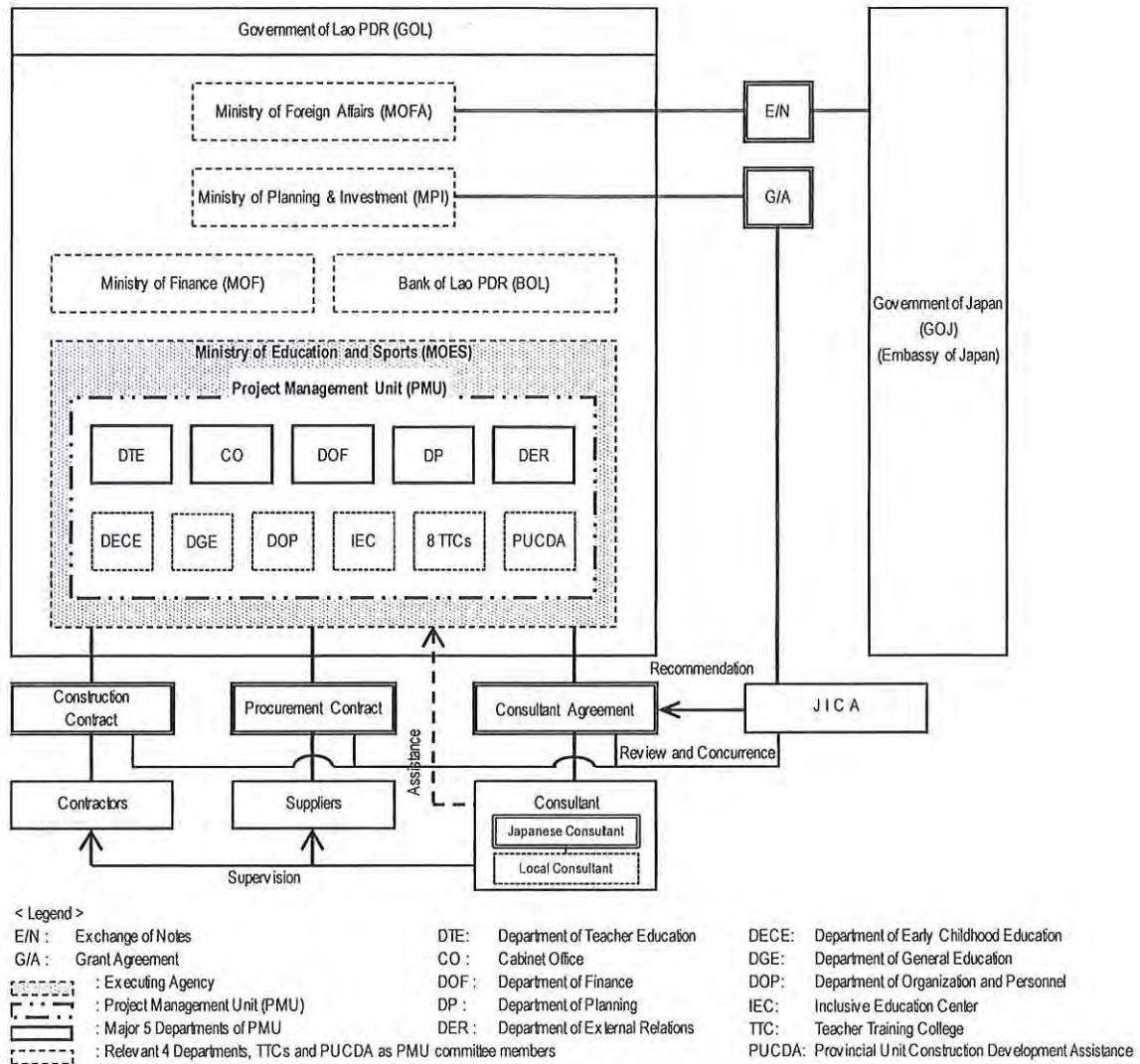


## ANNEX 1



Project Site Map

## ANNEX 2 Organization Chart





## JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

## 1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

## (1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

## (2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and Approval by the Japanese Cabinet

## (3) Implementation

## Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

## Grant Agreement (hereinafter referred to as “the G/A”)

- Agreement concluded between JICA and the Recipient

## Banking Arrangement (hereinafter referred to as “the B/A”)

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

## Construction works/procurement

- Implementation of the project (hereinafter referred to as “the Project”) on the basis of the G/A

## (4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

## 2. Preparatory Survey

## (1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

## (2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

## (3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

# 3. Basic Principles of Project Grants (contract with Japanese consultant and local contractors)

## (1) Implementation Stage

### 1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

## 2) Banking Arrangements (B/A) (See "Financial Flow of Grant" for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) In case of Japanese consultant, the Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.
- c) In case of local contractors, the Japanese Grant will be disbursed when requests for disbursement are submitted by the Recipient to JICA.

## 3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

## 4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

## 5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", while the prime constructing firm(s), which enter into contracts with the Recipient, could be nationals of the recipient country or other country(ies) if deemed it necessary .

## 6) Contracts and Concurrence by JICA

The Recipient will conclude the consultant contract() denominated in Japanese yen with Japanese nationals and the construction/supplier contracts dominated in other internationally traded foreign currency acceptable to JICA with the local contractors. Those contracts shall be verified by JICA in order to be eligible for the Japanese Grant.

## 7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

## 8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.



### 9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works, if necessary. The member of the Meeting will be composed by the Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

### (2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

### (3) Others

#### 1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

#### 2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

#### 3) Proper Use



The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

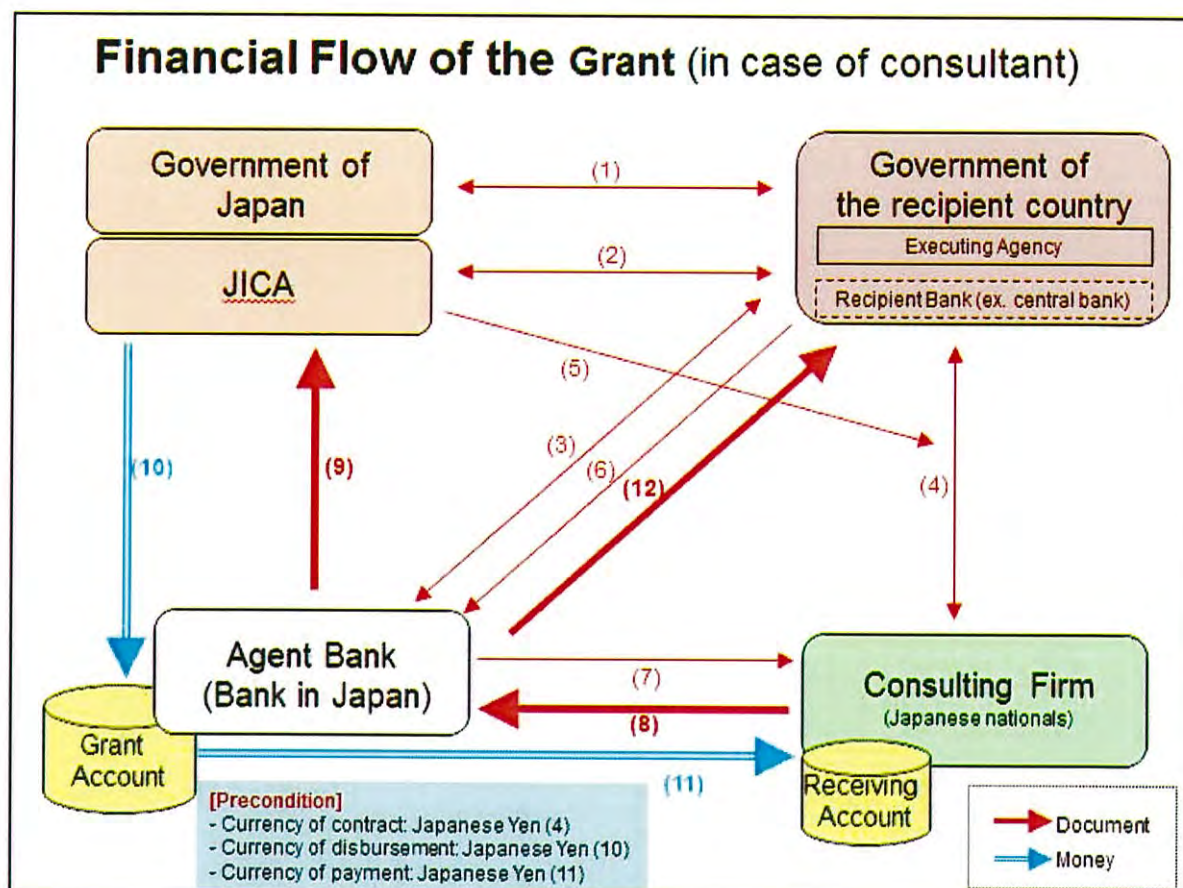
## PROCEDURES OF JAPANESE GRANT

| Stage                              | Procedures                                                                                                 | Remarks                                                                                                                                        | Recipient Government | Japanese Government | JICA    | Consultants | Contractors | Agent Bank |
|------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------|-------------|-------------|------------|
| Official Request                   | Request for grants through diplomatic channel                                                              | Request shall be submitted before appraisal stage.                                                                                             | x                    | x                   |         |             |             |            |
| 1. Preparation                     | (1) Preparatory Survey<br>Preparation of outline design and cost estimate                                  |                                                                                                                                                | x                    |                     | x       | x           |             |            |
| 2. Appraisal                       | (2) Preparatory Survey<br>Explanation of draft outline design, including cost estimate, undertakings, etc. |                                                                                                                                                | x                    |                     | x       | x           |             |            |
|                                    | (3) Agreement on conditions for implementation                                                             | Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government. | x                    | x (E/N)             | x (G/A) |             |             |            |
|                                    | (4) Approval by the Japanese cabinet                                                                       |                                                                                                                                                |                      | x                   |         |             |             |            |
| 3. Implementation                  | (5) Exchange of Notes (E/N)                                                                                |                                                                                                                                                | x                    | x                   |         |             |             |            |
|                                    | (6) Signing of Grant Agreement (G/A)                                                                       |                                                                                                                                                | x                    |                     | x       |             |             |            |
|                                    | (7) Banking Arrangement (B/A)                                                                              | Need to be informed to JICA                                                                                                                    | x                    |                     |         |             |             | x          |
|                                    | (8) Contracting with consultant and issuance of Authorization to Pay (A/P)                                 | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           |             | x          |
|                                    | (9) Detail design (D/D)                                                                                    |                                                                                                                                                | x                    |                     |         | x           |             |            |
|                                    | (10) Preparation of bidding documents                                                                      | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           |             |            |
|                                    | (11) Bidding                                                                                               | Concurrence by JICA is required                                                                                                                | x                    |                     |         | x           | x           |            |
|                                    | (12) Contracting with contractor/supplier                                                                  | Concurrence by JICA is required<br>Request for disbursement shall be made by the Recipient, in case of local contractor.                       | x                    |                     | x       |             | x           | x          |
|                                    | (13) Construction works/procurement                                                                        | Concurrence by JICA is required for major modification of design and amendment of contracts.                                                   | x                    |                     |         | x           | x           |            |
| 4. Ex-post monitoring & evaluation | (14) Completion certificate                                                                                |                                                                                                                                                | x                    |                     |         | x           | x           |            |
|                                    | (15) Ex-post monitoring                                                                                    | To be implemented generally after 1, 3, 10 years of completion, subject to change                                                              | x                    |                     | x       |             |             |            |
|                                    | (16) Ex-post evaluation                                                                                    | To be implemented basically after 3 years of completion                                                                                        | x                    |                     | x       |             |             |            |

notes:

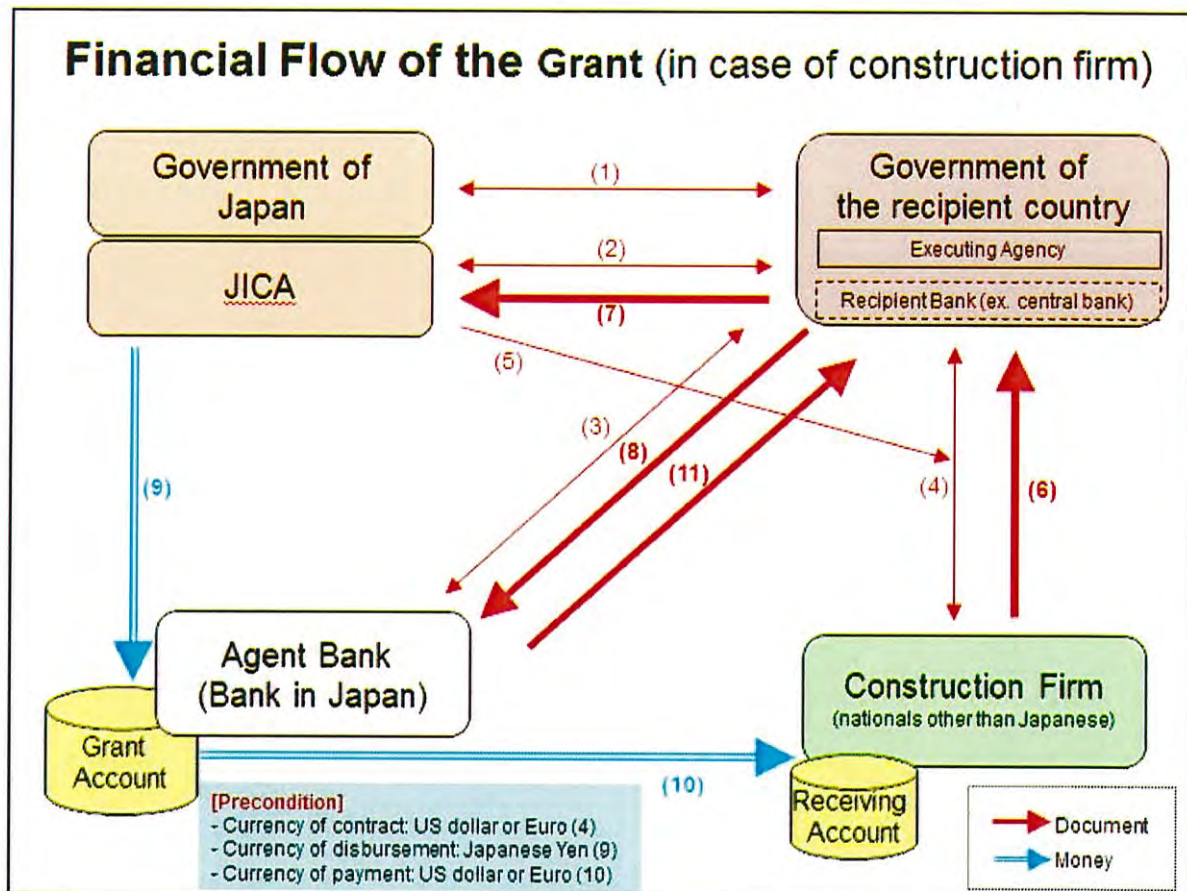
1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

Financial Flow of Japanese Project Grant  
(contract with Japanese consultant and local contractors)



- (1) E/N
- (2) G/A
- (3) Banking Arrangement/Opening an Grant Account
- (4) Contract
- (5) Concurrence and Verification of Contract
- (6) Issuing Authorization to Pay (A/P) upon contract
- (7) Notification of A/P
- (8) Request for Payment
- (9) Request for the Disbursement
- (10) Disbursement of the Grant
- (11) Payment
- (12) Statement of Account





(1) E/N

(2) G/A

Submission of Evidence of Authority and Specimen Signatures from the Recipient to JICA (prerequisite for the process of no. (7))

(3) Banking Arrangement/Opening an Grant Account

(4) Contract

(5) Concurrence and Verification of Contract

**(6) Request for Payment**

**(7) Request for Disbursement**

**(8) Transfer Instruction**

**(9) Disbursement of the Grant \***

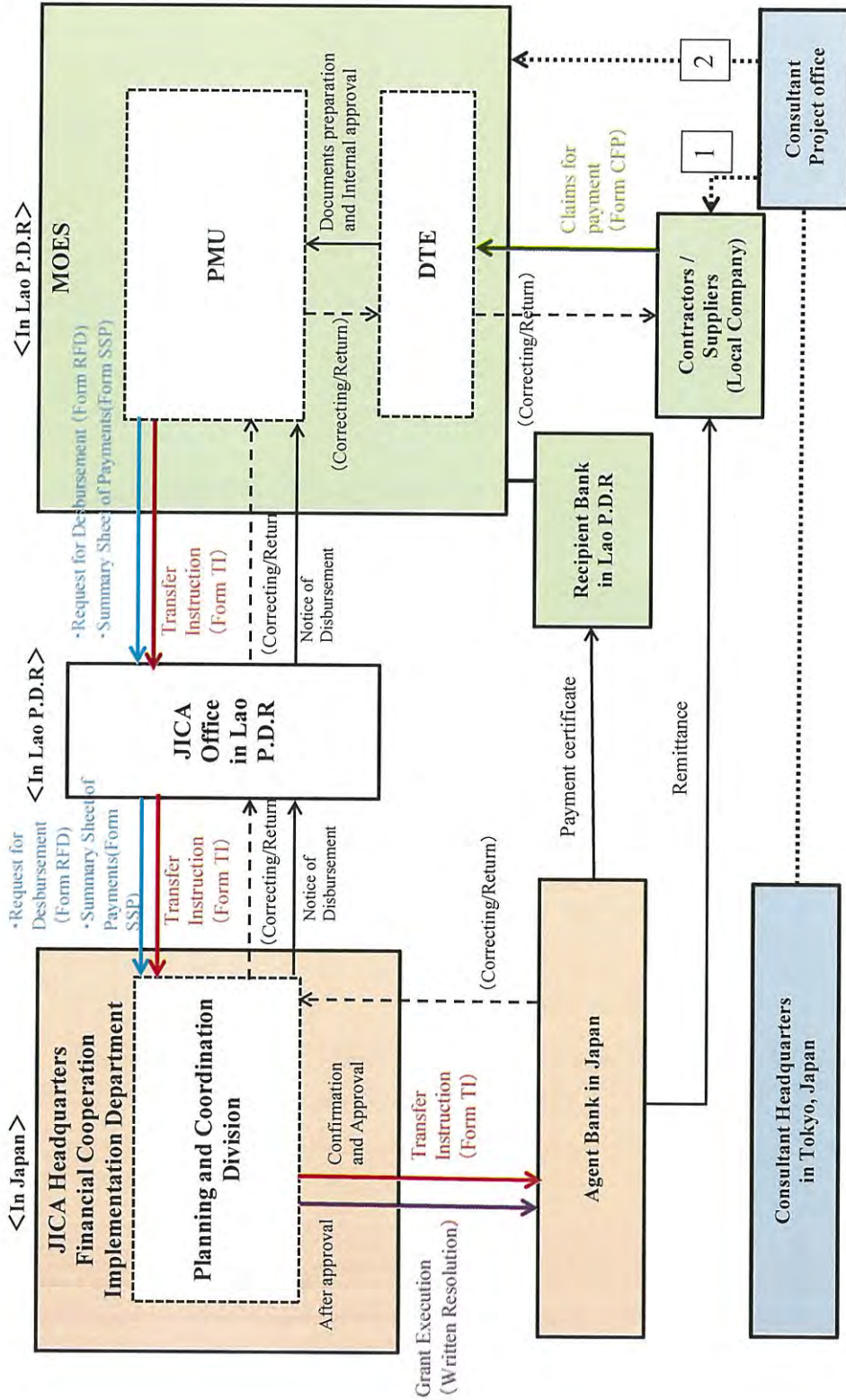
**(10) Payment**

**(11) Statement of Account**

\* The amount of disbursement in Japanese Yen ((9) in above chart) shall be calculated at the Telegraphic Transfer Selling (TTS) rate quoted by the Bank in Japan two business days before the date on which the disbursement is made.



## Tentative Approval flow and required documents for payments to the contractors/suppliers (local company)

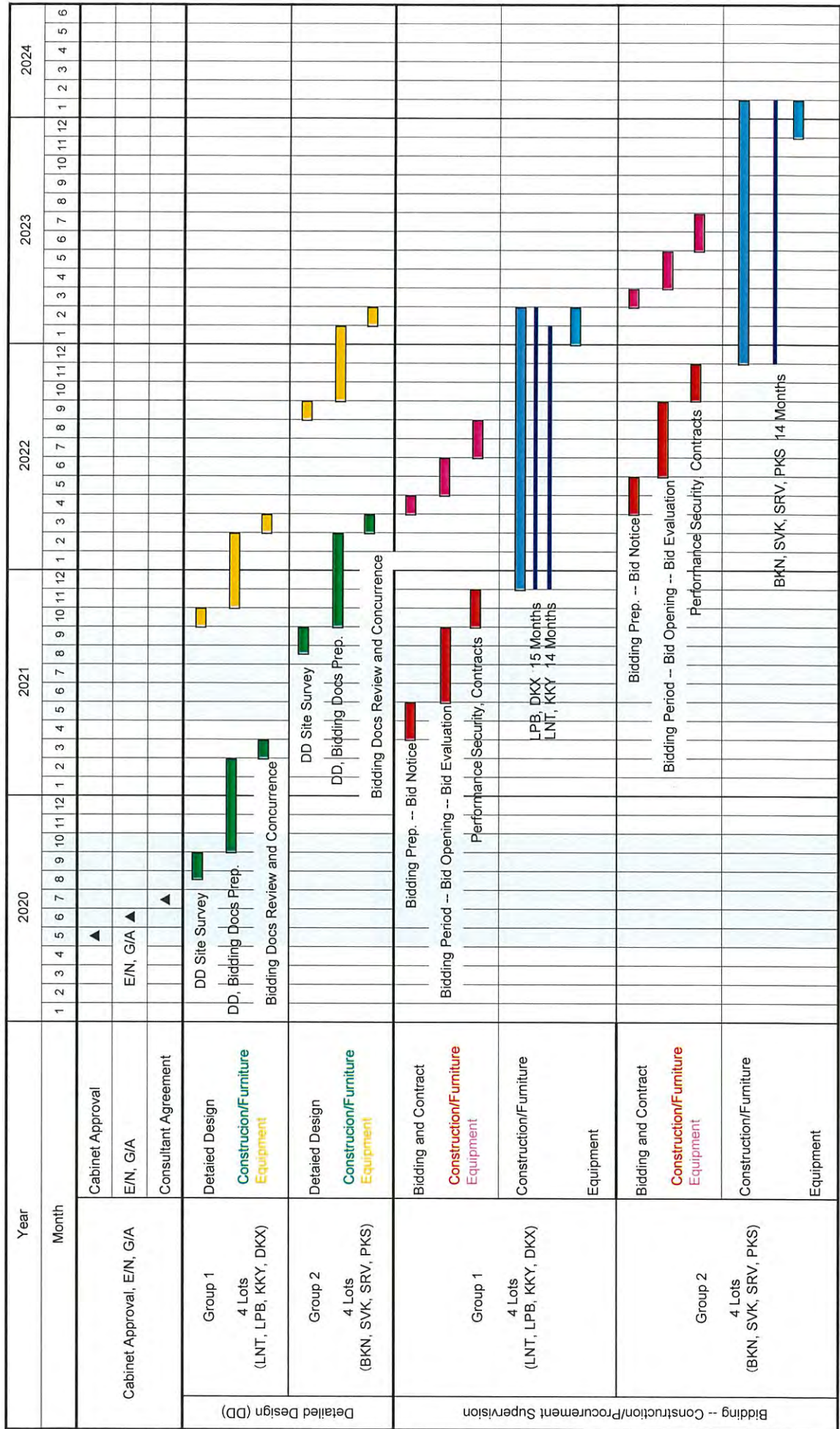


【Consultant's financial planning and payment support service】

1 Support for preparing invoice, pre-confirmation of documents, promotion of document preparation, support for revision documents etc.

2 Promotion of approval of the Ministry (MoET), support for Request for Disbursement / Transfer Instruction, pre-confirmation of documents, promotion of document preparation, support for revision documents, etc.

Project Implementation Schedule (Provisional)





## Major Undertakings to be taken by the Lao P.D.R

### 1. Specific obligations of the Recipient which will not be funded with the Grant

#### (1) Before the Bidding

| NO | Items                                                                                                                                                                                                                                           | Deadline                                          | In charge | Estimated Cost (USD) | Ref. |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------|----------------------|------|
| 1  | To open bank account (Banking Arrangement (B/A))                                                                                                                                                                                                | within 1 month after the signing of G/A           | BOL       | --                   |      |
| 2  | To secure the lots of land necessary for the implementation of the Project                                                                                                                                                                      |                                                   | MOES      | --                   |      |
| 3  | To carry out UXO clearance (at LNT TTC, LPB TTC, KKY TTC, SRV TTC, and PKS TTC)                                                                                                                                                                 | before the bid notice                             |           | --                   |      |
| 4  | To clear the sites including demolition and/or relocation of any obstacles and land cutting/levelling for the implementation of the Project (including land cutting/levelling at KKY TTC and existing bldg. demolition at BKN, SVK and PKS TTC) | before the bid notice                             | MOES      | 128,000              |      |
| 5  | To obtain the building permits (for LPB TTC)                                                                                                                                                                                                    | before the bid notice                             | MOES      | --                   |      |
| 6  | To secure temporary facilities for the construction period including classrooms for demonstration schools and a part of TTC facilities                                                                                                          | before the bid notice                             | MOES      | --                   |      |
| 7  | To move necessary furniture and equipment out from the buildings to be demolished by the Japan side and store them. (for LPB TTC and DKX TTC)                                                                                                   | before the bid notice                             | MOES      | --                   |      |
| 8  | To issue A/P (upon agreement between MOES and consulting firm)                                                                                                                                                                                  | within 1 month after the signing of the agreement | BOL       | --                   |      |
| 9  | To ensure smooth implementation of the bidding procedures and to bear necessary expenses relevant to the bidding procedures including, but not limited to, the following                                                                        |                                                   |           |                      |      |
|    | 1) Printing and binding of bidding documents                                                                                                                                                                                                    | every bidding lot                                 | MOES      | 2,500                |      |
|    | 2) Bid notices on major newspapers, governmental gazette and/or web site                                                                                                                                                                        | every bidding lot                                 | MOES      | 4,500                |      |
|    | 3) Securing places for pre-bid meetings                                                                                                                                                                                                         | every bidding lot                                 | MOES      | --                   |      |

|    |                                                                        |                                         |      |    |  |
|----|------------------------------------------------------------------------|-----------------------------------------|------|----|--|
| 10 | 4) Securing places for bid openings                                    | every bidding lot                       | MOES | -- |  |
|    | To submit Project Monitoring Report (with the result of Detail Design) | before preparation of bidding documents | MOES | -- |  |

(2) During the Project Implementation

| NO | Items                                                                                                                                                                                                                                                                                                                               | Deadline                                          | In charge    | Estimated Cost (USD)                                     | Ref. |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------|----------------------------------------------------------|------|
| 1  | To bear the following commissions to a bank in Japan for the banking services based upon the B/A                                                                                                                                                                                                                                    |                                                   |              |                                                          |      |
|    | 1) Advising commission of A/P                                                                                                                                                                                                                                                                                                       | within 1 month after the signing of the agreement | MOES         | 50~60 USD                                                |      |
|    | 2) Payment commission for A/P                                                                                                                                                                                                                                                                                                       | every payment for consultant                      | MOES         | 0.1% of amount of remittance (approx. 3,800USD in total) |      |
|    | 3) Remittance charge                                                                                                                                                                                                                                                                                                                | every payment for contractor                      | MOES         | 50~60 USD per remittance (approx. 5,300USD in total)     |      |
| 2  | To send a "Request for disbursement" to JICA (in case of contract with the Contractor(s)/the Supplier(s))                                                                                                                                                                                                                           | every request                                     | MOES         | --                                                       |      |
| 3  | To send a "Transfer Instruction" to the Agent Bank (in case of contract with the Contractor(s)/the Supplier(s))                                                                                                                                                                                                                     | every request                                     | MOES         | --                                                       |      |
| 4  | To ensure prompt customs clearance and to assist the Contractor(s)/the Supplier(s) with internal transportation in recipient country                                                                                                                                                                                                | during the Project                                | MOES<br>MOF  | --                                                       |      |
| 5  | To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work | during the Project                                | MOES         | --                                                       |      |
| 6  | To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the Products and/or the Services be exempted                                                                                                                             | during the Project                                | MOES,<br>MOF | --                                                       |      |



|    |                                                                                                                                                                                    |                                                                                                                |      |                           |  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------|---------------------------|--|
| 7  | To bear all the expenses, other than those covered by the Grant Aid, necessary for the implementation of the Project                                                               | during the Project                                                                                             | MOES | --                        |  |
| 8  | To bear necessary expense, including, but not limited to, transportation, per-diem and accommodation, for MOES, PESS and/or TTC personnel who join the site visits and inspections | during the construction                                                                                        | MOES | (to be estimated by MOES) |  |
| 9  | To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities                                                                  |                                                                                                                |      |                           |  |
|    | 1) Electricity<br>New electrical power connection for the buildings constructed by the Project                                                                                     | 3 months before completion of the construction                                                                 | MOES | 16,000                    |  |
|    | 2) Water Supply<br>New water supply connection for the buildings constructed by the Project                                                                                        | 3 months before completion of the construction                                                                 | MOES | 16,000                    |  |
| 10 | 1) To submit Project Monitoring Report<br>2) To submit Project Monitoring Report (final)                                                                                           | every month<br>within one month after signing of Certificate of Completion for the works under the contract(s) | MOES | --                        |  |

(3) After the Project

| NO | Items                                                                                                            | Deadline                                        | In charge | Estimated Cost (USD) | Ref. |
|----|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------|----------------------|------|
| 1  | To maintain and use properly and effectively the facilities constructed and equipment provided under the Project |                                                 |           |                      |      |
|    | 1) Facility maintenance costs                                                                                    | Every year after completion of the construction | MOES      | 32,000 (per year)    |      |
|    | 2) School operation costs                                                                                        | Every year after completion of the construction | MOES      | 342,000 (per year)   |      |
|    | 3) Establishment of maintenance structure for sustainable and proper use of the facilities                       | After completion of the construction            | MOES      | --                   |      |
| 2  | To procure of equipment which is undertaken by the Recipient                                                     | After completion of the construction            | MOES      | 5,000                |      |

(A/P: Authorization to Pay,

B/A: Banking Arrangement,

the Recipient: the Government of Lao People's Democratic Republic

## 2. Other obligations of the Recipient funded with the Grant

This part is closed due to the confidentiality.

**Project Monitoring Report**  
**on**  
**Project Name**  
**Grant Agreement No. XXXXXXXX**  
20XX, Month

**Organizational Information**

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Signer of the G/A<br/>(Recipient)</b> | <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Person in Charge (Designation)</div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;">Contacts</div> <div style="border-bottom: 1px solid black;">Address:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Phone/FAX:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Email:</div> </div> |
| <b>Executing<br/>Agency</b>              | <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Person in Charge (Designation)</div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;">Contacts</div> <div style="border-bottom: 1px solid black;">Address:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Phone/FAX:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Email:</div> </div> |
| <b>Line Ministry</b>                     | <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Person in Charge (Designation)</div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;">Contacts</div> <div style="border-bottom: 1px solid black;">Address:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Phone/FAX:</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 30%; border-bottom: 1px solid black;"></div> <div style="border-bottom: 1px solid black;">Email:</div> </div> |

**General Information:**

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| <b>Project Title</b>     |                                                                                   |
| <b>E/N</b>               | Signed date:<br>Duration:                                                         |
| <b>G/A</b>               | Signed date:<br>Duration:                                                         |
| <b>Source of Finance</b> | Government of Japan: Not exceeding JPY _____ mil.<br>Government of (_____): _____ |

|                               |  |
|-------------------------------|--|
| <b>1: Project Description</b> |  |
|-------------------------------|--|

**1-1 Project Objective**

|  |
|--|
|  |
|--|

**1-2 Project Rationale**

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

|  |
|--|
|  |
|--|

**1-3 Indicators for measurement of "Effectiveness"**

| Quantitative indicators to measure the attainment of project objectives |                     |                   |
|-------------------------------------------------------------------------|---------------------|-------------------|
| Indicators                                                              | Original (Yr      ) | Target (Yr      ) |
|                                                                         |                     |                   |
|                                                                         |                     |                   |
|                                                                         |                     |                   |
| Qualitative indicators to measure the attainment of project objectives  |                     |                   |
|                                                                         |                     |                   |

|                                  |
|----------------------------------|
| <b>2: Details of the Project</b> |
|----------------------------------|

**2-1 Location**

| Components | Original<br><i>(proposed in the outline design)</i> | Actual |
|------------|-----------------------------------------------------|--------|
| 1.         |                                                     |        |

**2-2 Scope of the work**

| Components | Original*<br><i>(proposed in the outline design)</i> | Actual* |
|------------|------------------------------------------------------|---------|
| 1.         |                                                      |         |
|            |                                                      |         |
|            |                                                      |         |
|            |                                                      |         |

Reasons for modification of scope (if any).

(PMR)

|  |
|--|
|  |
|--|



### 2-3 Implementation Schedule

| Items | Original                         |                                              | Actual |
|-------|----------------------------------|----------------------------------------------|--------|
|       | (proposed in the outline design) | (at the time of signing the Grant Agreement) |        |
|       |                                  |                                              |        |

Reasons for any changes of the schedule, and their effects on the project (if any)

|  |
|--|
|  |
|--|

### 2-4 Obligations by the Recipient

#### 2-4-1 Progress of Specific Obligations

See Attachment 2.

#### 2-4-2 Activities

See Attachment 3.

#### 2-4-3 Report on RD

See Attachment 11.

### 2-5 Project Cost

#### 2-5-1 Cost borne by the Grant(Confidential until the Bidding)

| Components |                                              |                                         | Cost<br>(Million Yen)                                         |        |
|------------|----------------------------------------------|-----------------------------------------|---------------------------------------------------------------|--------|
|            | Original<br>(proposed in the outline design) | Actual<br>(in case of any modification) | Original <sup>1),2)</sup><br>(proposed in the outline design) | Actual |
|            | 1.                                           |                                         |                                                               |        |
|            |                                              |                                         |                                                               |        |
|            |                                              |                                         |                                                               |        |
| Total      |                                              |                                         |                                                               |        |

Note: 1) Date of estimation:

2) Exchange rate: 1 US Dollar = Yen

#### 2-5-2 Cost borne by the Recipient

| Components |                                              |                                         | Cost<br>(1,000 Taka)                                          |        |
|------------|----------------------------------------------|-----------------------------------------|---------------------------------------------------------------|--------|
|            | Original<br>(proposed in the outline design) | Actual<br>(in case of any modification) | Original <sup>1),2)</sup><br>(proposed in the outline design) | Actual |
|            | 1.                                           |                                         |                                                               |        |
|            |                                              |                                         |                                                               |        |
|            |                                              |                                         |                                                               |        |
|            |                                              |                                         |                                                               |        |

Note: 1) Date of estimation:  
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

## 2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

**Original** (at the time of outline design)

name:

role:

financial situation:

institutional and organizational arrangement (organogram):

human resources (number and ability of staff):

**Actual** (PMR)

## 2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

## 3: Operation and Maintenance (O&M)

### 3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

**Original** (at the time of outline design)

**Actual** (PMR)

### 3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

**Original** (at the time of outline design)

Actual (PMR)

#### 4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

##### Assessment of Potential Risks (at the time of outline design)

| Potential Risks          | Assessment                                       |
|--------------------------|--------------------------------------------------|
| 1. (Description of Risk) | Probability: High/Moderate/Low                   |
|                          | Impact: High/Moderate/Low                        |
|                          | Analysis of Probability and Impact:              |
|                          |                                                  |
|                          | Mitigation Measures:                             |
|                          |                                                  |
|                          | Action required during the implementation stage: |
|                          |                                                  |
| 2. (Description of Risk) | Probability: High/Moderate/Low                   |
|                          | Impact: High/Moderate/Low                        |
|                          | Analysis of Probability and Impact:              |
|                          |                                                  |
|                          | Mitigation Measures:                             |
|                          |                                                  |
|                          | Action required during the implementation stage: |
|                          |                                                  |
| 3. (Description of Risk) | Probability: High/Moderate/Low                   |
|                          | Impact: High/Moderate/Low                        |
|                          | Analysis of Probability and Impact:              |
|                          |                                                  |
|                          | Mitigation Measures:                             |
|                          |                                                  |
|                          | Action required during the implementation stage: |
|                          |                                                  |



|                                             |                                   |
|---------------------------------------------|-----------------------------------|
|                                             | Contingency Plan (if applicable): |
|                                             |                                   |
| <b>Actual Situation and Countermeasures</b> |                                   |
| (PMR)                                       |                                   |

## **5: Evaluation and Monitoring Plan (after the work completion)**

### **5-1 Overall evaluation**

Please describe your overall evaluation on the project.

|  |
|--|
|  |
|--|

### **5-2 Lessons Learnt and Recommendations**

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

|  |
|--|
|  |
|--|

### **5-3 Monitoring Plan of the Indicators for Post-Evaluation**

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

|  |
|--|
|  |
|--|



Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
  - Consultant Member List
  - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

|   | Items of Specified Materials | Initial Volume<br>A | Initial Unit<br>Price (¥)<br>B | Initial total<br>Price<br>C=A×B | 1% of Contract<br>Price<br>D | Condition of payment            |                                 |
|---|------------------------------|---------------------|--------------------------------|---------------------------------|------------------------------|---------------------------------|---------------------------------|
|   |                              |                     |                                |                                 |                              | Price<br>(Decreased)<br>E=C - D | Price<br>(Increased)<br>F=C + D |
| 1 | Item 1                       | ●●t                 | ●                              | ●                               | ●                            | ●                               | ●                               |
| 2 | Item 2                       | ●●t                 | ●                              | ●                               | ●                            |                                 |                                 |
| 3 | Item 3                       |                     |                                |                                 |                              |                                 |                                 |
| 4 | Item 4                       |                     |                                |                                 |                              |                                 |                                 |
| 5 | Item 5                       |                     |                                |                                 |                              |                                 |                                 |

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

|   | Items of Specified Materials | 1st<br>month, 2015 | 2nd<br>month, 2015 | 3rd<br>month, 2015 | 4th | 5th | 6th |
|---|------------------------------|--------------------|--------------------|--------------------|-----|-----|-----|
| 1 | Item 1                       | ●                  | ●                  | ●                  |     |     |     |
| 2 | Item 2                       |                    |                    |                    |     |     |     |
| 3 | Item 3                       |                    |                    |                    |     |     |     |
| 4 | Item 4                       |                    |                    |                    |     |     |     |
| 5 | Item 5                       |                    |                    |                    |     |     |     |

(3) Summary of Discussion with Contractor (if necessary)

22

pk

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)  
(Actual Expenditure by Construction and Equipment each)

|                             | Domestic Procurement<br>(Recipient Country)<br>A | Foreign Procurement<br>(Japan)<br>B | Foreign Procurement<br>(Third Countries)<br>C | Total<br>D |
|-----------------------------|--------------------------------------------------|-------------------------------------|-----------------------------------------------|------------|
| Construction Cost           | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |
| Direct Construction Cost    | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |
| others                      | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |
| Equipment Cost              | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |
| Design and Supervision Cost | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |
| Total                       | (A/D%)                                           | (B/D%)                              | (C/D%)                                        |            |



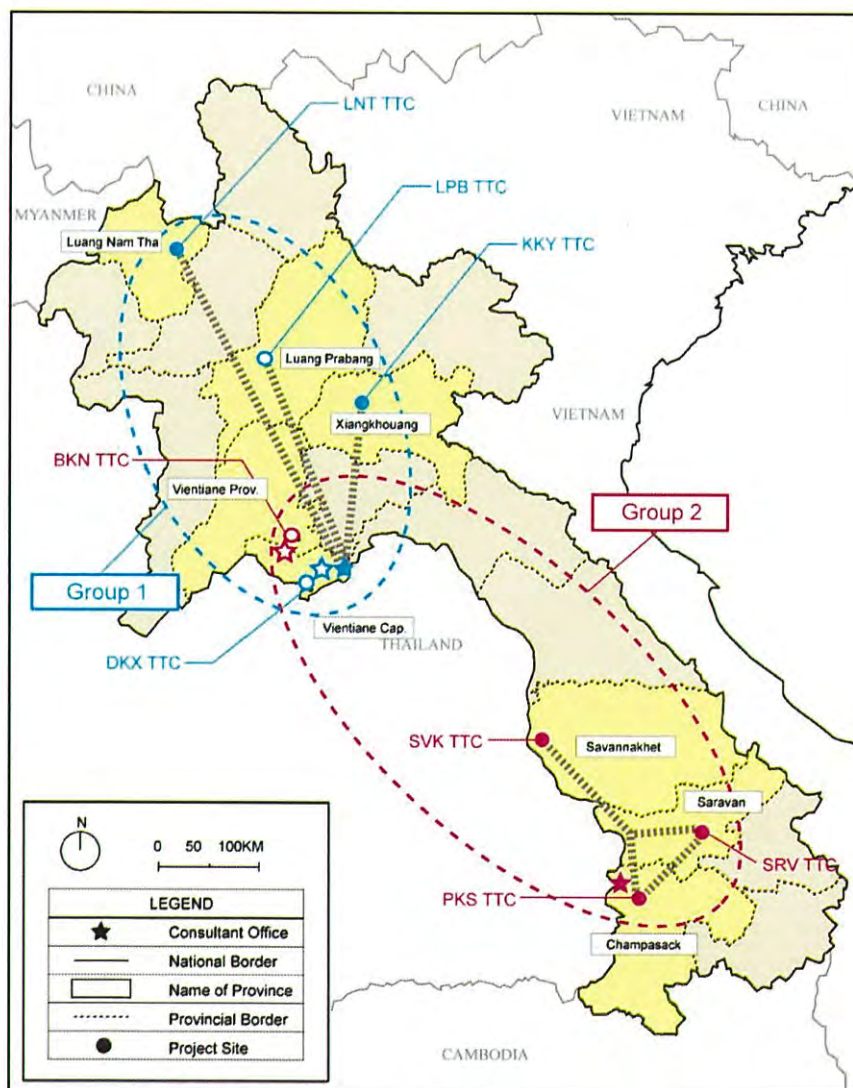
## Status of UXO Clearance (as of 13 February 2020)

| TTC        | Documents submitted by the Lao PDR side                                                                                                          | Discovered and Cleared UXOs (if any)                                                                                                       | Remarks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. LNT TTC | Certificate issued by NRA Vientiane (November 28, 2019)                                                                                          | 14 pcs of UXO including 4 pcs of the Mortars/60 mm                                                                                         | <ul style="list-style-type: none"> <li>A northern half part of the proposed area in the demonstration school site has been cleared.</li> <li><u>Clearance of the southern part of the proposed area is requested.</u></li> <li><u>The clearance completion report is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2. LPB TTC | UXO clearance certificate issued by UXO Lao (July 22, 2017)                                                                                      | No UXO                                                                                                                                     | <ul style="list-style-type: none"> <li>A western half part of the proposed area in the demonstration school site has been cleared.</li> <li><u>Clearance of the eastern part of the proposed area is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3. KKY TTC | UXO clearance completion report issued by UXO Lao (1999, 2000, 2001, 2005, 2011) and UXO clearance certificate issued by UXO Lao (July 31, 2019) | <p>(mentioned only the report in 2001)</p> <p>42 pcs of UXO including 9 pcs of submunition of cluster bombs and 3 pcs of mortar/60 mm.</p> | <ul style="list-style-type: none"> <li>During the Field Survey, it was explained to the survey team that clearance of the proposed area had not been carried out. However, later, it turned out that clearance was done in 2001.</li> <li><u>It is found that the proposed areas shall be cut and levelled as the result of topographic survey conducted after confirmation of UXO clearance. Because the existing ground in wider areas needs to be cut and levelled, and because the previous UXO clearance was conducted 20 years ago, the following items shall be conducted by the Lao PDR side.</u><br/> <u>1) Cutting and leveling of the proposed areas</u><br/> <u>2) Re-implementation of UXO clearance</u></li> </ul> |
| 4. BKN TTC | Certificate issued by NRA Vientiane (November 6, 2019)                                                                                           | No UXO                                                                                                                                     | <ul style="list-style-type: none"> <li>All proposed areas including the ones in the demonstration school site have been cleared.</li> <li><u>The clearance completion report is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5. DKX TTC | Certificate issued by NRA Vientiane (October 28, 2019)                                                                                           | No UXO                                                                                                                                     | <ul style="list-style-type: none"> <li>All proposed areas including the ones in the demonstration school site have been cleared.</li> <li><u>The clearance completion report is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6. SVK TTC | Certificate issued by UXO Lao (September 17, 2019)                                                                                               | No UXO                                                                                                                                     | <ul style="list-style-type: none"> <li>No search clearance was done, as the site has never been bombed.</li> <li>UXO Lao issued a certificate which states that no search clearance is necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 7. SRV TTC | A clearance completion report issued by UXO Lao (2018, 2019)                                                                                     | 1 pc of motor/60mm and 2pcs of bullets/20mm                                                                                                | <ul style="list-style-type: none"> <li>Most of the proposed areas of the demonstration school site have been cleared, but a small part of areas including temporary work area were not covered.</li> <li><u>Clearance of the remaining part of the proposed area is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 8. PKS TTC | A clearance completion report issued by UXO Lao (2019)                                                                                           | No UXO                                                                                                                                     | <ul style="list-style-type: none"> <li>Most of the proposed areas of the demonstration school site have been cleared.</li> <li><u>Clearance of the proposed dormitory area is requested.</u></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



## Implementation groups and bidding/contract lots

| Group | Site (Province)                  | Lot No.               |                       |
|-------|----------------------------------|-----------------------|-----------------------|
|       |                                  | Building Construction | Equipment Procurement |
| 1     | LNT TTC (Luang Nam Tha Province) | Construction-1        | Equipment-1           |
|       | LPB TTC (Luang Prabang Province) | Construction-2        |                       |
|       | KKY TTC (Xiangkhouang Province)  | Construction-3        |                       |
|       | DKX TTC (Vientiane Capital)      | Construction-4        |                       |
| 2     | BKN TTC (Vientiane Province)     | Construction-5        | Equipment-2           |
|       | SVK TTC (Savannakhet Province)   | Construction-6        |                       |
|       | SRV TTC (Saravan Province)       | Construction-7        |                       |
|       | PKS TTC (Champasack Province)    | Construction-8        |                       |



Map of Construction Groups and Lots (Provisional)



#### 4－3. テクニカルノート(2018年10月9日署名)

**TECHNICAL NOTES**  
**ON**  
**THE PREPARATORY SURVEY**  
**ON**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**IN**  
**THE LAO PEOPLE'S DEMOCRATIC REPUBLIC**

In August 2018, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the Preparatory Survey on the Project for Improvement of Teacher Training Colleges (hereinafter referred to as "the Project") to the Lao People's Democratic Republic (hereinafter referred to as "the Lao PDR").

After signing of the Minutes of Discussions dated on September 21, 2018 (hereinafter referred to as "the M/D") by and between JICA and the Ministry of Education and Sports of the Lao PDR (hereinafter referred to as "MOES"), the consultant team (hereinafter referred to as "the Consultant") of the Team is scheduled to stay in the country until October 13, 2018.

In the course of meetings and field survey, MOES and the Consultant have confirmed the main items described in the attached sheets.

Vientiane, October 9, 2018



**Daravone KITTIPHANH**  
Deputy Permanent Secretary  
Cabinet Office  
Ministry of Education and Sports  
Lao People's Democratic Republic

**Tamiko ARAMATA**  
Architectural Design 1/Service Utility Planning  
The Preparatory Survey Team  
Mohri, Architect & Associates, Inc.,  
PADECO Co. Ltd., and  
INTEM consulting, Inc.



## ATTACHMENT

**1. Future Plan and Ministerial Documents to be Provided**

The Consultant reminded and MOES promised that the following documents shall be provided as agreed on the M/D.

| Ref. No. <sup>1</sup> | Document to be Provided                                                                           | Agreed Deadline              |
|-----------------------|---------------------------------------------------------------------------------------------------|------------------------------|
| 9-1.                  | Future Plan of the Number of Teacher Training College (hereinafter referred to as "TTC") Students | Within November, 2018        |
| 9-2.                  | Ministerial Document regarding Function of Demonstration School                                   | By the end of October, 2018  |
| 9-3.                  | Ministerial Document of the Establishment of Secondary Demonstration Schools                      | By the end of December, 2018 |

**2. Further Schedule of the Site Surveys and Analysis in Japan****2-1. Topographic Surveys and Soil Investigations**

The Consultant explained and MOES understood that the Consultant will conduct the topographic surveys and soil investigations, by employing local consultants, at the seven TTC sites, excluding Khang Khay TTC, in order to obtain technical data necessary for the outline design works. Such surveys and investigations are scheduled to conduct in October and November, 2018. The Consultant promised to inform the actual survey/investigation schedule to MOES in writing at the earliest convenience. MOES agreed to coordinate with each TTC for smooth implementation of such surveys and investigations.

As for Khang Khay TTC, the Consultant explained and MOES agreed that the topographical survey and soil investigation for the TTC will be conducted after issuance of UXO clearance certificates due to higher possibility of UXO/landmines therein. Taking into account the required time period for UXO detection survey, it is decided that the topographical survey and soil investigation at the TTC may be conducted at the detailed design stage, but not at the Preparatory Survey stage.

**2-2. Further Analysis on the Results of Site Surveys**

The Consultant explained and MOES understood that the results of the site surveys shall be further studied and analyzed in Japan based on the contents of M/D signed and agreed on September 21, 2018 by and between JICA and MOES, in principle.

<sup>1</sup> Sub-clause No. of the M/D ATTACHEMENT

### 3. Basic Design Principles of Demonstration Schools

MOES requested and the Consultant agreed that the demonstration schools shall be designed taking into account students-friendliness as well as easy-access to class observation, action research, lesson study, etc. for TTC students and visitors. Through the several discussions, both sides understood about the basic design principles for demonstration schools as shown in Appendix-1. In addition to the principles, the following considerations shall be paid for scale setting, architectural planning and building design of the demonstration schools.

#### 3-1. General

- Number of staircase per building shall be determined in accordance with the applicable standards in Lao PDR and in reference to the ones in Japan.
- Expansion joint shall be provided when the building length is more than 45m.

#### 3-2. Pre-primary Demonstration School

- Maximum capacity of each classroom for pre-primary demonstration school, requested by MOES, are as shown in the following table.

| Grade <sup>2</sup> | Pupils' Age of    | No. of Pupils per Teacher | Max. Capacity of a Classroom | Required No. of Teachers per Classroom |
|--------------------|-------------------|---------------------------|------------------------------|----------------------------------------|
| N1                 | 3 months – 1 year | 3                         | 10                           | 4 <sup>3</sup>                         |
| N2                 | 1 year – 2 years  | 5                         | 10                           | 2                                      |
| N3                 | 2 years- 3 years  | 8                         | 10                           | 2                                      |
| K1                 | 3 years – 4 years | 15                        | 30                           | 2                                      |
| K2                 | 4 years – 5 years | 20                        | 30                           | 2                                      |
| K3                 | 5 years – 6 years | 25                        | 30                           | 2                                      |

- The size of classroom shall be determined as a result of further analysis in Japan, taking into account number of pupils to be accommodated.
- In principle, a pre-primary school shall have single story building for pupils' safety.
- Installation of air conditioners in addition to ceiling fans shall be discussed, especially for nursery classrooms, depending on the regional climate conditions of each TTC.
- Provision of a kitchen or food preparation corner may be considered through further study and analysis in Japan.
- Playground equipment shall not be provided by Japan side. The Lao PDR side

<sup>2</sup> The grade for pre-primary demonstration school are Nursery 1 to 3 (N1 to N3) and Kindergarten 1 to 3 (K1 to K3).

<sup>3</sup> MOES explained that two proper teachers and two assistant teachers (volunteer teachers) are to be allocated for N1.



shall be responsible for provision of appropriate size playground equipped with the playground equipment for each pre-primary school.

### 3-3. Primary Demonstration School

- Number of classrooms per grade shall be determined as a result of further analysis in Japan based on the statistics data and the findings obtained through the site surveys.
- Number of story will be determined depending on available construction area of each TTC.
- In principle, a first-aid room will be located in a primary school building for all students of demonstration schools at all levels. However, the location of first-aid room may be rearranged depending on the building layout plan of each TTC.

### 3-4. Secondary Demonstration School

- Number of classrooms per grade shall be determined as a result of further analysis in Japan based on the statistics data and the findings obtained through the site surveys.
- Number of story will be determined depending on available construction area of each TTC.

The provisional room layout plans for demonstration schools, prepared based on the basic design principles, are as shown in Appendix-2. Room layout and number of story may be rearranged through further study and analysis in Japan, together with technical considerations to site conditions at each TTC.

## 4. Unexploded Ordnance Clearance Certificates

The Consultant reported to MOES about the situation of unexploded ordnance (hereinafter referred to as "UXO") clearance of each TTC and the results of interviews from the relevant authorities and/or organizations, such as the National Regulatory Authority for the UXO/Mine Action Sector in the Lao PDR (hereinafter referred to as "NRA") and the UXO Lao. Through the discussions, both sides agreed that the UXO clearance certificates for the Project areas at all the eight TTCs shall be obtained as per the following schedule.

- The Consultant will provide information of the areas to be cleared from UXO and landmines by the end of December, 2018 to MOES.
- Immediately after information given by the Consultant, MOES will instruct each TTC to coordinate with the relevant authorities at provincial level, for implementation of UXO detection surveys in a timely manner. In case of any difficulties, MOES will support TTCs for the process, in consultation with NRA or

any other relevant authorities at central level.

- MOES will submit the copies of UXO clearance certificates obtained for the designated areas to Japan side, prior to the mission dispatched for explanation of a draft Preparatory Survey Report, which is scheduled in April, 2019.

## 5. Land Use Right Certificates

The Consultant reported to MOES that the land use right certificates have been submitted by TTCs, except for the demonstration school areas of Luang Prabang TTC and Ban Keun TTC. The Consultant requested and MOES promised to submit the missing certificates, prior to the mission dispatched for explanation of a draft Preparatory Survey Report, which is scheduled in April, 2019.

## 6. Building Permits

Both sides confirmed that building permits are not required for educational facilities, if the design drawings are approved by the Division of Education Construction, Design and Management, Department of Finance, MOES (hereinafter referred to as "ECDM") in accordance with the Ministerial Decision No. 1063/MOES issued on November 26, 2008, in general.

However, the Consultant reported and MOES understood that a building permit only for Luang Prabang TTC may be obtained from the Department of Public Works and Transportation at provincial level, in compliance with their own regulations.

## 7. Environmental and Social Considerations

The Consultant reported and MOES understood that Environmental and Social Impact Assessment (ESIA) and Initial Environmental Examination (IEE) will not be required for the Project, in accordance with the relevant laws, decrees, rules and regulations as well as the results of consultation with the Ministry of Natural Resources and Environment (MONRE).

## 8. Tax Exemption

MOES, JICA Laos Office and the Consultant had meetings with Tax Department and Customs Department of Ministry of Finance (hereinafter referred to as "MOF") to confirm the latest procedure for tax and customs duty exemption. MOF explained that the laws and regulations on tax exemption for ODA projects have not been changed at least within a year, and they provided information regarding the tax exemption procedure including the approval process of Master List. The information given by MOF will be examined in Japan, and it may be updated when the mission for explanation of a draft Preparatory Survey Report is dispatched in April, 2019.



#### 9. Major Undertakings to be taken by the Recipient

As agreed in the M/D, MOES understood that the contents of “Major Undertakings to be taken by the Recipient” (Annex 5 of the M/D) will be elaborated and refined during the survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

#### 10. Inclusive Education

The Consultant explained and MOES agreed that, as essential facilities in terms of inclusive education, slopes to the 1<sup>st</sup> floors will be provided at each building covered by the Project, and that each toilet building under the Project shall have a universally designed toilet booth per gender, for physically handicapped persons including wheelchair users.

In addition, installation of Pict signs for such slopes, toilets and any others relevant to inclusive education will be considered in order to enhance awareness of not only TTC users, including demonstration school students and parents, but also neighboring communities.

#### 11. Project Management Unit

The Consultant explained and MOES understood about importance of establishment of the Project Management Unit (hereinafter referred to as “PMU”) towards smooth implementation of the Project, from the experience of on-going Japanese Grant Aid “the Project for Improving Secondary School Environment in the Central and Southern Provinces”. Through the discussions, MOES explained about the concept of PMU organizational arrangements as follows.

- Project Manager: Director General of Department of Teacher Education (DTE)
- Deputy Project Managers:
  - Deputy Permanent Secretary of Cabinet Office (CO)
  - Deputy Director General of Department of Finance (DOF)
  - Deputy Director General of Department of Planning (DP)
  - Deputy Director General of Department of External Relations (DER)
- Committee Members:

In addition to the five key departments, namely DTE, CO, DOF, DP and DER, the following four departments will be involved as committee members.

- Department of Early Childhood Education (DECE)
- Department of General Education (DGE)



- Department of Organization and Personnel (DOP)
- Inclusive Education Center (IEC)
- Directors of TTCs

MOES promised to proceed ministerial arrangements and to assign personnel who are involved in the on-going Japanese Grant Aid project, as many as practical, in order for smooth implementation and for efficient management of the Project. MOES will issue a decree for establishment and activation of PMU, prior to the mission dispatched for explanation of a draft Preparatory Survey Report, which is scheduled in April, 2019.

END





**Appendix 1 Basic Design Principles for Demonstration Schools**

| Item                                   | Pre-primary School                                                                                                                                              | Primary School                                                                                                                                              | Secondary School                                                                                                |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Size of classroom                      | 7m x 8m = 56m <sup>2</sup> <sup>4</sup>                                                                                                                         | Regular classroom:<br>7m x 8m = 56m <sup>2</sup> <sup>5</sup><br>Large classroom:<br>9m x 8m = 72m <sup>2</sup>                                             | Same as primary school                                                                                          |
| Grades to be accommodated              | 6 grades<br>(N1 to N3 and K1 to K3)                                                                                                                             | 5 grades<br>(P1 to P5)                                                                                                                                      | 7 grades<br>(M1 to M7)                                                                                          |
| Capacity of classroom                  | N1 to N3: 10 pupils<br>K1 to K3: 30 pupils <sup>6</sup>                                                                                                         | 35 students <sup>7</sup>                                                                                                                                    | Same as primary school                                                                                          |
| Movable partition walls                | N/A                                                                                                                                                             | Between two classrooms <sup>8</sup>                                                                                                                         | Same as primary school                                                                                          |
| No. of doors for a classroom           | 4 <sup>9</sup>                                                                                                                                                  | 2 <sup>10</sup>                                                                                                                                             | Same as primary school                                                                                          |
| Type of windows                        | Aluminum sash sliding window <sup>11</sup>                                                                                                                      | Same as pre-primary school                                                                                                                                  | Same as pre-primary school                                                                                      |
| No. of students per toilet booths      | To be determined in reference to MOES conceptual drawings                                                                                                       | 45 students <sup>12</sup>                                                                                                                                   | Same as primary school                                                                                          |
| Rooms other than classrooms            | Multi-purpose room x 1<br>Teachers' office x 1<br>Toilet and shower <sup>13</sup><br>Space of pupils dining (Kitchen or food preparation corner <sup>14</sup> ) | Multi-purpose room with preparation room x 1<br>Reading room x 1<br>First aid room x 1 <sup>15</sup><br>Teachers' office x 1<br>Teaching materials room x 1 | Laboratory with preparation room x 1<br>Reading room x 1<br>Teachers' office x 1<br>Teaching materials room x 1 |
| Blackboards                            | Only for kindergarten classrooms                                                                                                                                | Two blackboards for a classroom (at one side wall)                                                                                                          | Same as primary school                                                                                          |
| School furniture for pupils / students | To be determined in reference to recommendation from DECE                                                                                                       | A set of single desk and chair (separate type) made of timber                                                                                               | Same as primary school                                                                                          |

<sup>4</sup> Standard size stipulated in the Ministerial Decision No.1374/MOES dated on March 30, 2015. The size of a classroom shall be determined as a result of further analysis in Japan, taking into account number of pupils to be accommodated.

<sup>5</sup> Standard size stipulated in MOES School Construction Guidelines (hereinafter referred to as "the Guidelines").

<sup>6</sup> Requested by MOES.

<sup>7</sup> The Guideline stipulates as "Maximum 36 pupils for single grade teaching are recommended."

<sup>8</sup> To have a large space occasionally needed for lesson study and post-lesson evaluation, etc.

<sup>9</sup> 2 doors along the front corridor and another 2 along the rear corridor, for easy class observation, action research and lesson study, etc.

<sup>10</sup> For easy class observation, action research and lesson study, etc.

<sup>11</sup> For easy class observation, action research and lesson study, etc.

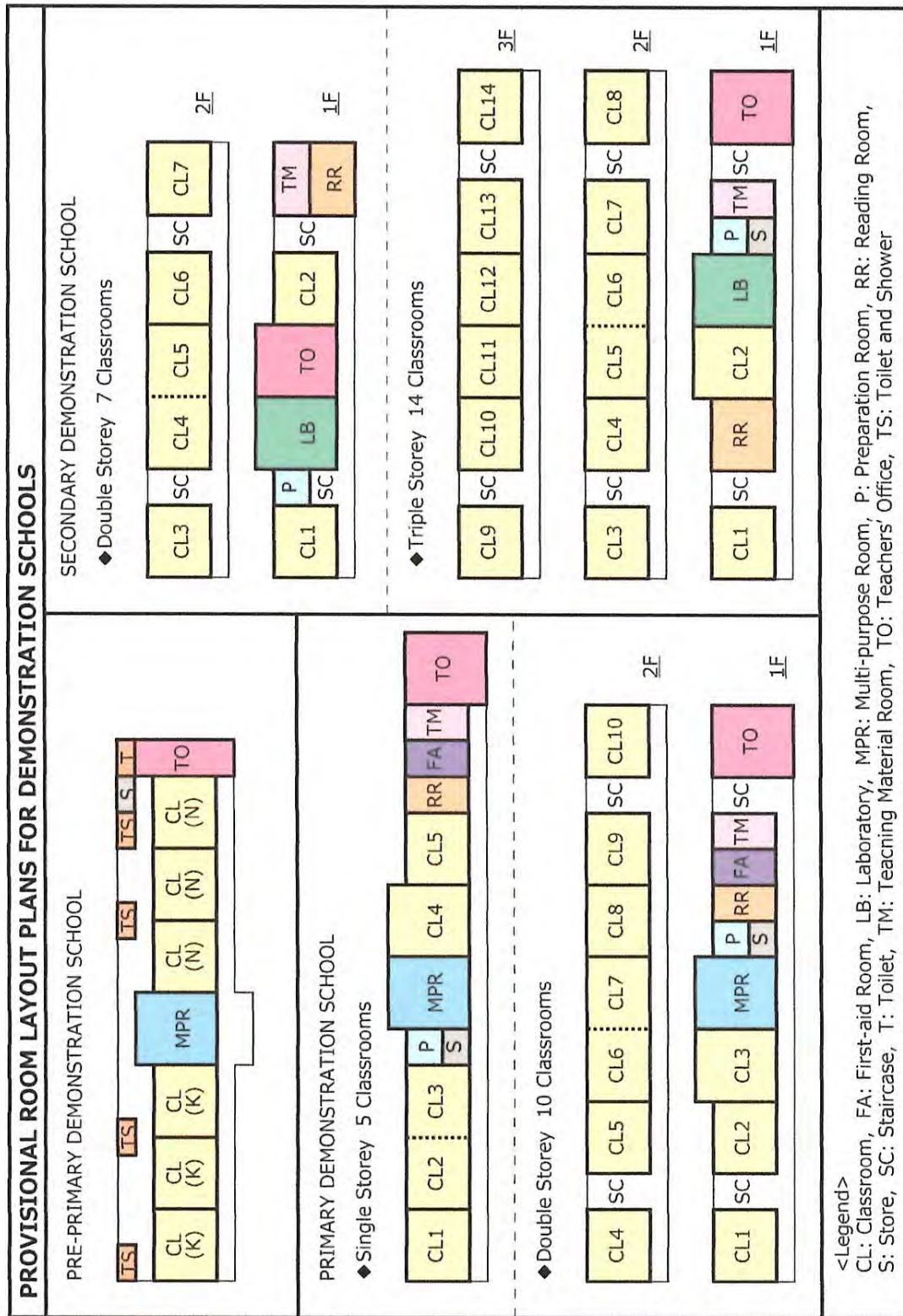
<sup>12</sup> The Guideline stipulate as "Each toilet/latrine should serve from 45 to a maximum 75 pupils."

<sup>13</sup> To be separately provided for nursery and kindergarten due to operational reasons.

<sup>14</sup> Requested by MOES but further discussion shall be made.

<sup>15</sup> A first-aid room is to be provided for a complete demonstration schools, possibly at a primary school, and it shall be shared by students at all levels.

Appendix 2



Notes: Toilet for primary and secondary demonstration schools will be provided as separate buildings. Number of toilet booths shall be calculated based on the MOES School Construction Guidelines.



## 資料 5. その他の資料・情報



5－1a. 計画対象サイトの概要、現況配置図、  
計画配置図（案）

## 1. ルアンナムタ TTC

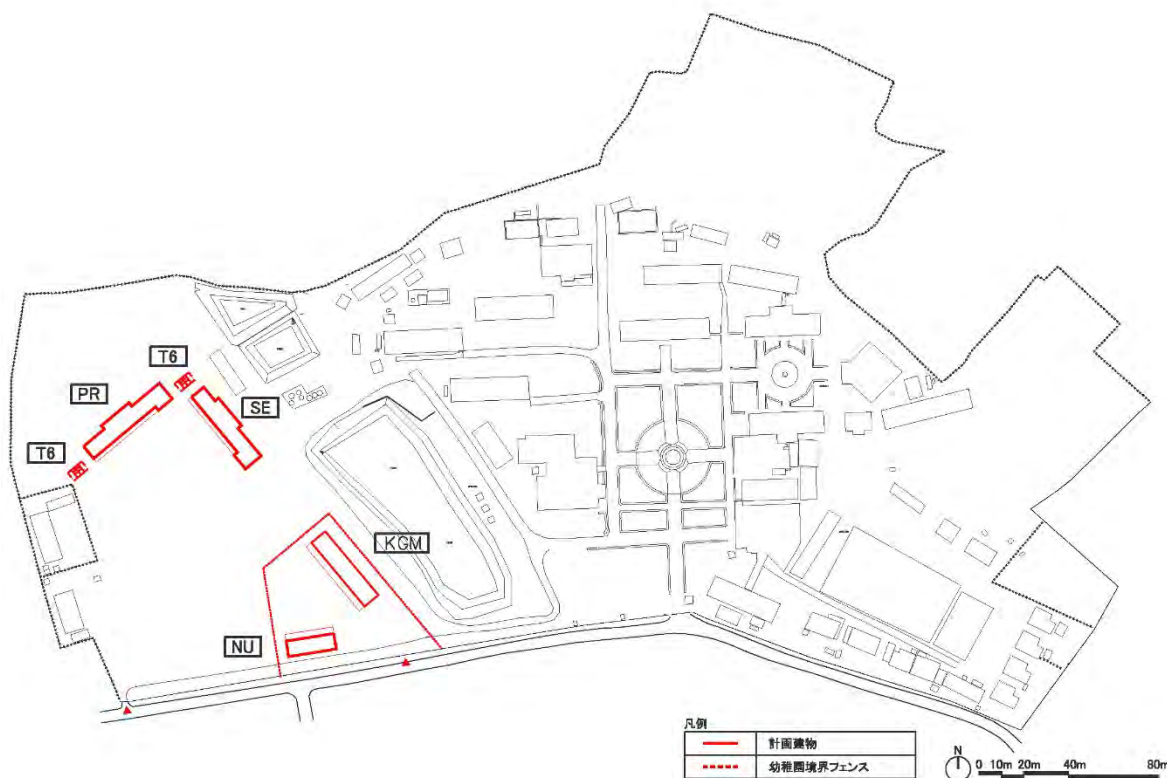
| 概要（2018 年 9-10 月時点）                                                                                                                                   |                                                                                                                                                                                                                                                                   |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|------|------|--------|----|------|----|------|----|----|----|----|----|----|
| 所在地                                                                                                                                                   | ルアンナムタ県ルアンナムタ郡ルアンナムタ                                                                                                                                                                                                                                              |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 開講コース                                                                                                                                                 | 就学前教育、初等教育、中等教育（化学、数学、英語、ICT）                                                                                                                                                                                                                                     |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| TTC 生徒数                                                                                                                                               | 1,010 人（2016/17 年度）                                                                                                                                                                                                                                               |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 付属校設置<br>状況と生徒<br>数                                                                                                                                   | 項目                                                                                                                                                                                                                                                                | 就学前 |    |    |    |    |      | 初等教育 |        |    |      |    | 中等教育 |    |    |    |    |    |    |
|                                                                                                                                                       |                                                                                                                                                                                                                                                                   | N1  | N2 | N3 | K1 | K2 | K3   | P1   | P2     | P3 | P4   | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                                                                                                                       | クラス数                                                                                                                                                                                                                                                              | 1   |    |    | 1  | 1  | 1    | 1    |        | 1  | 1    |    | 1    |    |    |    |    |    |    |
|                                                                                                                                                       | 生徒数                                                                                                                                                                                                                                                               | 18  |    |    | 32 | 24 | 23   | 12   | 16     | 14 | 10   | 11 | 15   |    |    |    |    |    |    |
| 現状と課題                                                                                                                                                 |                                                                                                                                                                                                                                                                   |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 敷地                                                                                                                                                    | <ul style="list-style-type: none"><li>ほぼ平坦な敷地（約 13ha）の中央部に TTC の教室棟、実験室棟、事務棟、学生寮などが配置され、大きな池を挟んだ西側には付属校の施設と TTC の大運動場が、東側には教員寮と小運動場が配置されている。</li></ul>                                                                                                            |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| TTC 本体施設                                                                                                                                              | <ul style="list-style-type: none"><li>教室棟、実験室棟、事務棟、学生寮は全て継続使用が可能である。</li><li>現在、教室棟（10 室）が教育省の予算により建設中である（敷地東側のコンピュータ室棟に隣接）。</li><li>学生寮の室数不足、図書館の改修の必要性が認められたが、緊急性は高くない。</li></ul>                                                                               |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 付属校                                                                                                                                                   | <ul style="list-style-type: none"><li>付属校施設はいずれも、構造面、教室サイズの観点から、継続使用が困難である。また、いずれも教室数が不足している。</li><li>付属幼稚園は教室が 4 教室のみであるため、N クラスは 1 室で 3 学年対応している。</li><li>付属小学校は古い木造棟で 3 教室しかない。複式学級にて授業運営している。</li><li>2018 年 9 月に開校した付属中学校は小学校の木造仮設校舎の 1 教室を利用している。</li></ul> |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 既存施設リスト                                                                                                                                               |                                                                                                                                                                                                                                                                   |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |
| 番号                                                                                                                                                    | 施設名                                                                                                                                                                                                                                                               |     |    |    |    |    | 建設年  |      | 建設資金   |    | 構造   |    | 階数   |    |    |    |    |    |    |
| 1                                                                                                                                                     | 教室棟                                                                                                                                                                                                                                                               |     |    |    |    |    | 2008 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 2                                                                                                                                                     | 教室棟                                                                                                                                                                                                                                                               |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 3                                                                                                                                                     | 教室棟                                                                                                                                                                                                                                                               |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 4                                                                                                                                                     | 教室棟（実験棟）                                                                                                                                                                                                                                                          |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 5                                                                                                                                                     | 事務棟                                                                                                                                                                                                                                                               |     |    |    |    |    | 1995 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 6                                                                                                                                                     | 事務棟                                                                                                                                                                                                                                                               |     |    |    |    |    | 2011 |      | 政府/ADB |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 7～8                                                                                                                                                   | 男子学生寮                                                                                                                                                                                                                                                             |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 9                                                                                                                                                     | 女子学生寮                                                                                                                                                                                                                                                             |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 10                                                                                                                                                    | 女子学生寮                                                                                                                                                                                                                                                             |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 11                                                                                                                                                    | 女子学生寮                                                                                                                                                                                                                                                             |     |    |    |    |    | 2011 |      | JAIF   |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 12～15                                                                                                                                                 | 教員宿舎（外国人エキスパート用）                                                                                                                                                                                                                                                  |     |    |    |    |    | 2004 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 16                                                                                                                                                    | 講堂                                                                                                                                                                                                                                                                |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 17                                                                                                                                                    | 図書館                                                                                                                                                                                                                                                               |     |    |    |    |    | 1996 |      | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 18                                                                                                                                                    | コンピュータ室                                                                                                                                                                                                                                                           |     |    |    |    |    | 2010 |      | 政府     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 19                                                                                                                                                    | 付属幼稚園                                                                                                                                                                                                                                                             |     |    |    |    |    | 2009 |      | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 20                                                                                                                                                    | 付属小学校                                                                                                                                                                                                                                                             |     |    |    |    |    | 2002 |      | 政府/ADB |    | 木造   |    | 1    |    |    |    |    |    |    |
| 21                                                                                                                                                    | 付属小・中学校                                                                                                                                                                                                                                                           |     |    |    |    |    | 不明   |      | 不明     |    | 木造   |    | 1    |    |    |    |    |    |    |
| 22                                                                                                                                                    | 教員宿舎                                                                                                                                                                                                                                                              |     |    |    |    |    | 不明   |      | 不明     |    | 木造   |    | 1    |    |    |    |    |    |    |
| 23                                                                                                                                                    | 新教室棟（建設中）                                                                                                                                                                                                                                                         |     |    |    |    |    | 2018 |      | 政府     |    | RC 造 |    | 2    |    |    |    |    |    |    |
| （その他の施設）<br>24. 駐車場、25. 駐輪場、26～30. 学生寮用トイレ・シャワー棟、31～33. 学生寮用キッチン棟、34. 非常用発電機室、35. 給水塔、36. 付属幼稚園用屋根付き遊び場、37. 付属幼稚園用トイレ棟、38. 付属小学校用トイレ棟、39. 付属小学校用キッチン棟 |                                                                                                                                                                                                                                                                   |     |    |    |    |    |      |      |        |    |      |    |      |    |    |    |    |    |    |



現況配置図



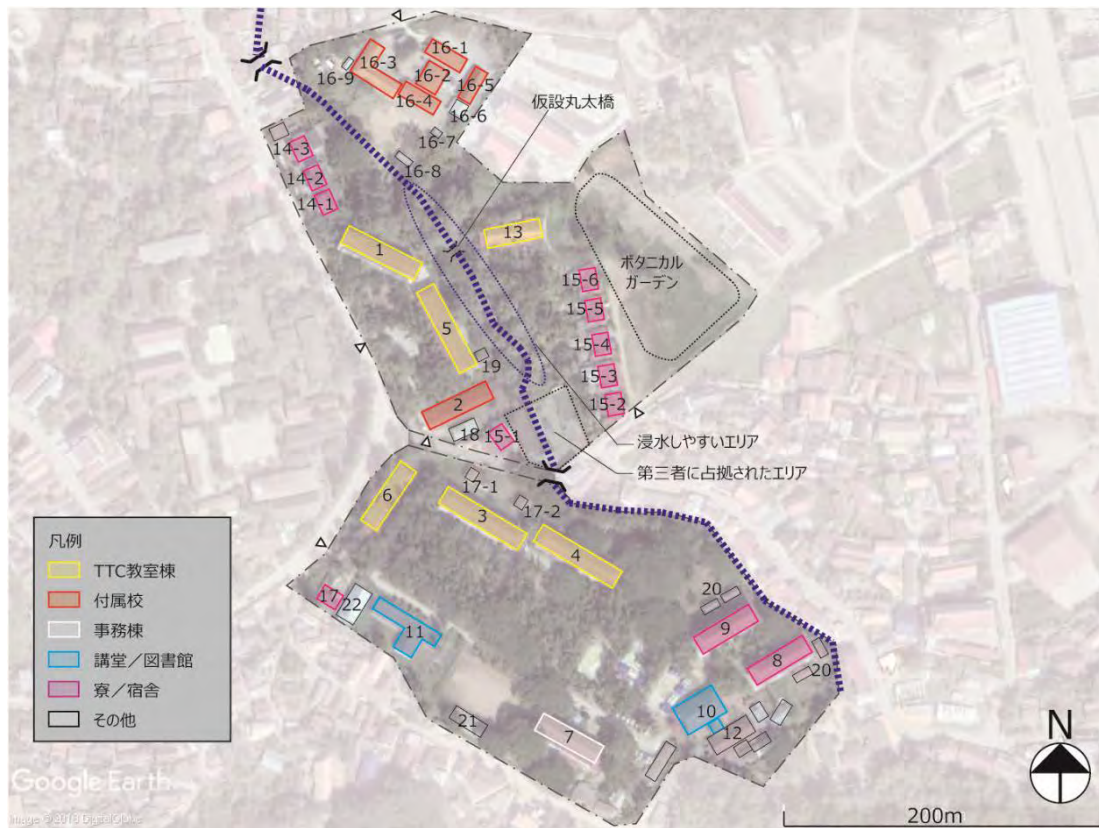
計画配置図（案）



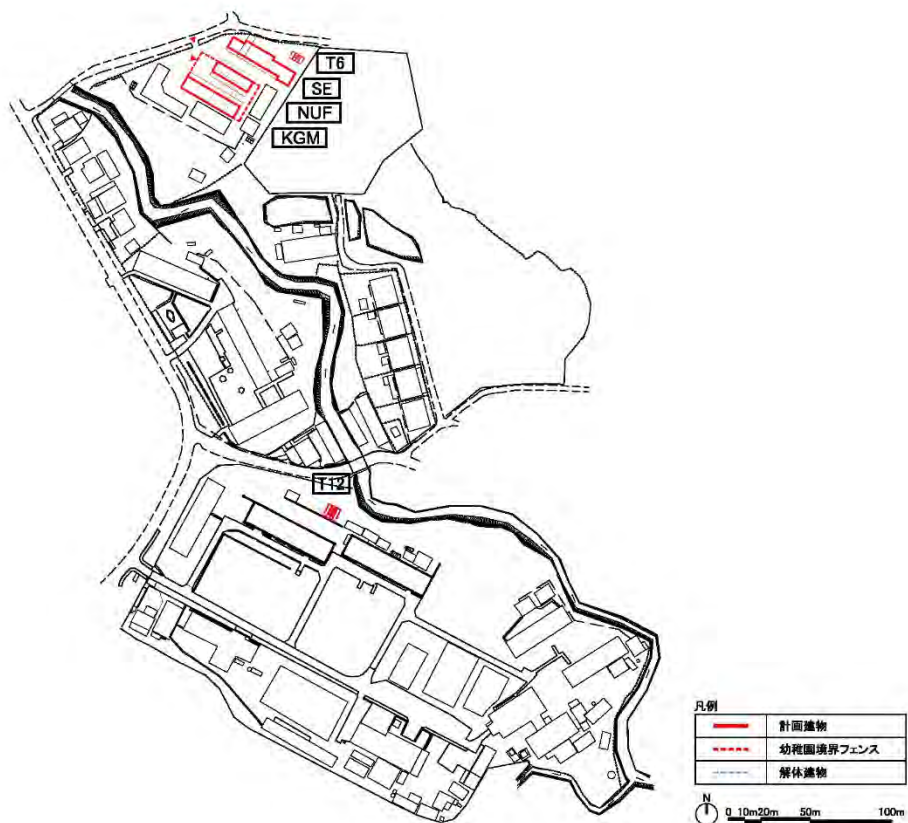
## 2. ルアンパバン TTC

| 概要（2018 年 9-10 月時点）                                                                  |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|------|----------|----|------|----|----|------|----|----|----|----|----|----|
| 所在地                                                                                  | ルアンパバン県ルアンパバン郡ルアンパバン                                                                                                                                                                                                                                                                                                             |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 開講コース                                                                                | 就学前教育、初等教育、中等教育（生物、化学、物理、歴史、英語、ICT、フランス語）                                                                                                                                                                                                                                                                                        |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| TTC 生徒数                                                                              | 1,387 人（2016/17 年度）                                                                                                                                                                                                                                                                                                              |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 付属校設置状況と生徒数                                                                          | 項目                                                                                                                                                                                                                                                                                                                               | 就学前 |    |    |    |    |      | 初等教育     |    |      |    |    | 中等教育 |    |    |    |    |    |    |
|                                                                                      |                                                                                                                                                                                                                                                                                                                                  | N1  | N2 | N3 | K1 | K2 | K3   | P1       | P2 | P3   | P4 | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                                                      | クラス数                                                                                                                                                                                                                                                                                                                             | 1   |    | 1  | 0  | 1  | 1    | 2        | 2  | 2    | 2  | 2  | 2    |    |    |    |    |    |    |
|                                                                                      | 生徒数                                                                                                                                                                                                                                                                                                                              | 10  |    | 12 | 0  | 22 | 23   | 39       | 69 | 67   | 66 | 53 | 58   |    |    |    |    |    |    |
| 現状と課題                                                                                |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 敷地                                                                                   | <ul style="list-style-type: none"><li>敷地（約 8.5ha）は公道を挟んで南北に分かれ、更に、北側敷地の中央には川が流れているため、全体としては 3 区画に分かれている。川を挟んで、傾斜がちである。</li><li>敷地形状や既存棟の配置状況から、建設用地の確保には制約がある。</li><li>南側敷地には、事務棟、TTC 教室棟、図書館、学生寮などがある。</li><li>北側敷地の西側には TTC 教室棟と TTC 教室を仮校舎とする付属中学校、教員住宅があり、川を挟んだ東側には教員住宅と教材製作室などがある。</li><li>敷地の北端の一面に付属幼稚園と小学校がある。</li></ul> |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| TTC 本体施設                                                                             | <ul style="list-style-type: none"><li>教室棟、実験室棟は平屋～4 階建であり、規模は大小様々である。</li><li>築後 50 年以上経過している建物もあるが、定期的に補修されており、継続使用は可能と考えられる。</li><li>教室棟用のトイレ棟が継続使用不可であり、建替の必要がある。</li><li>学生寮の増築ニーズはあるが、緊急性は高くない。</li></ul>                                                                                                                   |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 付属校                                                                                  | <ul style="list-style-type: none"><li>狭いく傾斜がちな付属校エリアには、平屋の施設群が立ち並んでいる。当該エリアで建設を行う場合は、既存棟の解体・撤去を検討する必要がある。</li><li>付属幼稚園は、K クラスが付属校エリアで運営されているが、N クラスは TTC 教室棟を間借りして運営されている。</li><li>付属小学校は 11 教室を有し、2 クラス/学年で運営されている。</li><li>2018 年 9 月に開校した付属中学校は TTC 教室棟を転用して運営されている。</li></ul>                                               |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 既存施設リスト                                                                              |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 番号                                                                                   | 施設名                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 建設年  | 建設資金     |    | 構造   |    | 階数 |      |    |    |    |    |    |    |
| 1                                                                                    | 教室棟（実験棟）                                                                                                                                                                                                                                                                                                                         |     |    |    |    |    | 1961 | 政府       |    | RC 造 |    | 3  |      |    |    |    |    |    |    |
| 2                                                                                    | 付属中学校（旧・TTC 教室棟）                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 1961 | 政府       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 3～4                                                                                  | 教室棟                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1965 | 政府       |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 5                                                                                    | 教室棟（一部付属幼稚園）                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    | 1961 | 政府       |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 6                                                                                    | 教室棟                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 2005 | 政府       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 7                                                                                    | 事務棟                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1972 | 政府       |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 8                                                                                    | 男子学生寮                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 1993 | ADB/SIDA |    | RC 造 |    | 4  |      |    |    |    |    |    |    |
| 9                                                                                    | 女子学生寮                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 1993 | ADB/SIDA |    | RC 造 |    | 4  |      |    |    |    |    |    |    |
| 10                                                                                   | 講堂                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 11                                                                                   | 図書館                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1965 | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 12                                                                                   | 食堂                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 13                                                                                   | 教材製作室                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 14～15                                                                                | 教員宿舎                                                                                                                                                                                                                                                                                                                             |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 16-1, 2                                                                              | 付属幼稚園                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 16-3, 4                                                                              | 付属小学校                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明       |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 16-5                                                                                 |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 2017 | SVA      |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| （その他の施設）                                                                             |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |
| 16-6. 付属校倉庫、16-7, 8, 8. 付属幼稚園/小学校用トイレ棟、17～19. 教室棟用トイレ棟、20. 学生寮用トイレ・シャワー棟、21, 22. 駐輪場 |                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |          |    |      |    |    |      |    |    |    |    |    |    |

現況配置図



計画配置図（案）



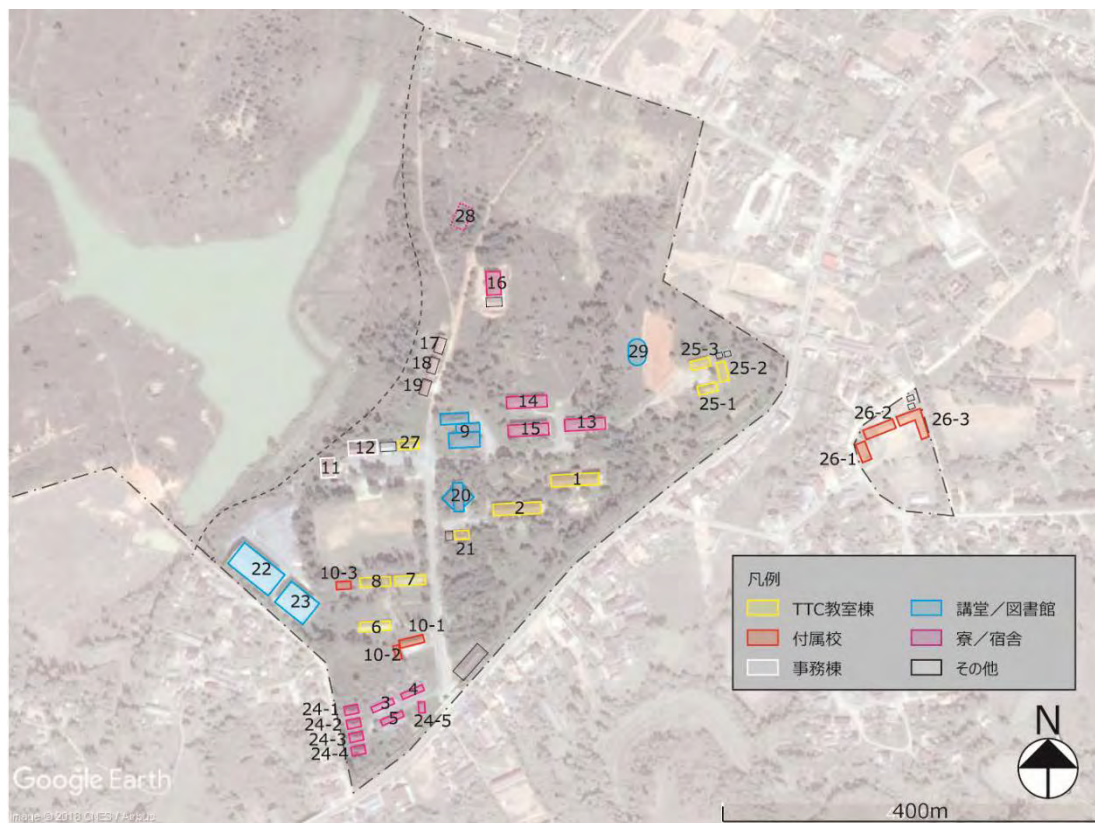


### 3. カンカイ TTC

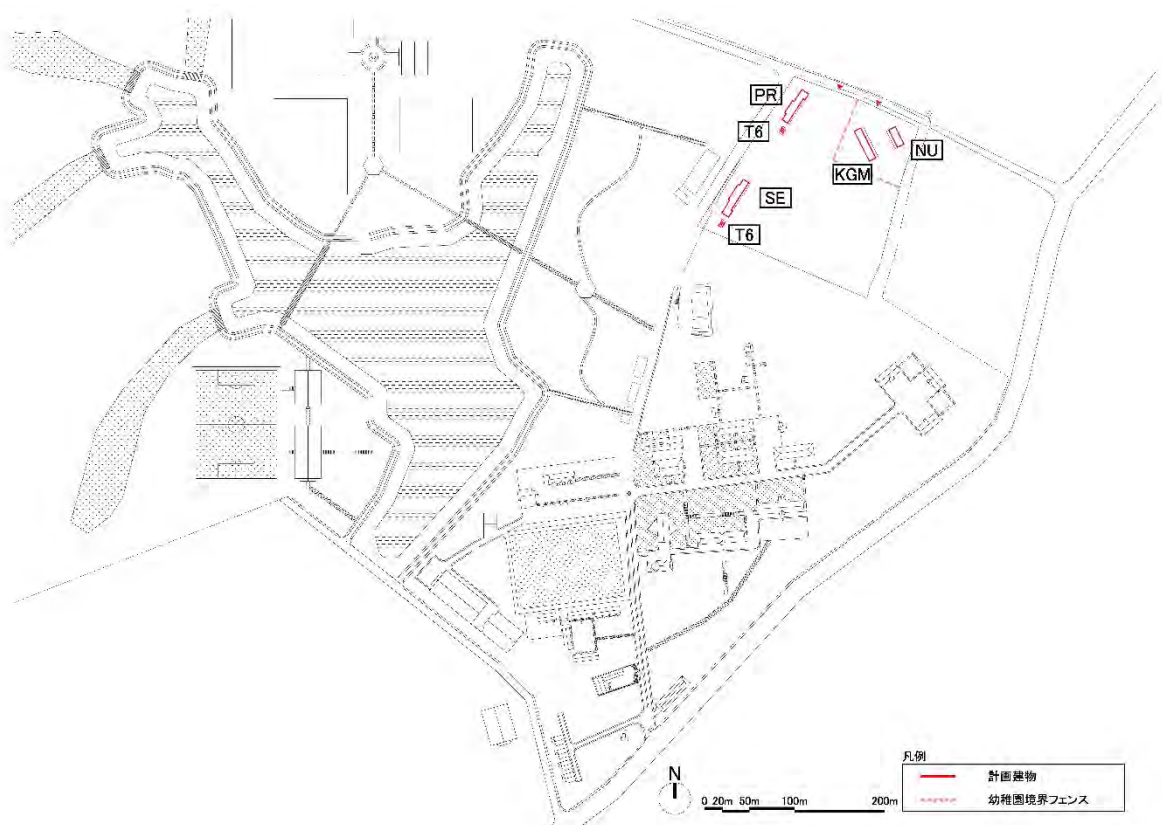
| 概要（2018 年 9-10 月時点）               |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|------|-------------|----|------|----|----|------|----|----|----|----|----|----|
| 所在地                               | シェンクワン県ベック郡ポーンスワン                                                                                                                                                                                                                                                                                                                                                                        |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 開講コース                             | 就学前教育、初等教育、中等教育（生物、化学、物理、地理、数学、ラオ語、歴史、英語、ICT）                                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| TTC 生徒数                           | 1,180 人（2016/17 年度）                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 付属校設置状況と生徒数                       | 項目                                                                                                                                                                                                                                                                                                                                                                                       | 就学前 |    |    |    |    |      | 初等教育        |    |      |    |    | 中等教育 |    |    |    |    |    |    |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                          | N1  | N2 | N3 | K1 | K2 | K3   | P1          | P2 | P3   | P4 | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                   | クラス数                                                                                                                                                                                                                                                                                                                                                                                     | 1   |    |    | 1  | 1  | 1    | 2           | 2  | 2    | 2  | 2  |      |    |    |    |    |    |    |
|                                   | 生徒数                                                                                                                                                                                                                                                                                                                                                                                      | 17  |    |    | 19 | 17 | 42   | 49          | 56 | 56   | 54 | 56 |      |    |    |    |    |    |    |
| 現状と課題                             |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 敷地                                | <ul style="list-style-type: none"><li>敷地（約 112ha）は広大で、中央に大きな池があり、傾斜がちなサイトである。</li><li>TTC 本体施設は全て東側敷地に配置され、付属幼稚園と小学校は TTC 敷地内および飛び地に配置されている。</li><li>UX0 リスクの高いサイトである。付属校の建設予定地については、2001 年に UX0 クリアランスが実施されたことを確認した。</li></ul>                                                                                                                                                          |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| TTC 本体施設                          | <ul style="list-style-type: none"><li>RC 造教室棟 1 棟と実験室棟 1 棟は構造上の問題も見られず、継続使用が可能である。</li><li>木造平屋建教室棟 6 棟は改修を重ねながら使用されている。</li><li>学生寮ニーズはあるが緊急性は高くない。ベトナム政府支援で留学生用学生寮を建設中。</li></ul>                                                                                                                                                                                                      |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 付属校                               | <ul style="list-style-type: none"><li>TTC 敷地内と飛び地の 2 か所に付属幼稚園と小学校の施設があるが、双方とも各 1 名の校長により一体的に運営されている。TTC 敷地内の小学校は、複式学級が行われている。</li><li>付属幼稚園、小学校の施設は全て継続使用困難な状態にあり、建替の必要がある。</li><li>付属小学校は、2 クラス/学年で運営されている。</li><li>付属中学校は 2019 年 9 月に開校予定であったが延期された。</li><li>TTC は、現状、付属校が 2 つの離れた敷地に分散している問題を解消するため、TTC 敷地内に一貫付属校を建設することを希望している。その場合、飛び地にある既存施設は、現職教員研修のための施設として活用される予定である。</li></ul> |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 既存施設リスト                           |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |
| 番号                                | 施設名                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 建設年  | 建設資金        |    | 構造   |    | 階数 |      |    |    |    |    |    |    |
| 1                                 | 教室棟                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1998 | 政府/ADB      |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 2                                 | 教室棟（実験棟）                                                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 1998 | 政府/ADB      |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 3～5                               | 教員宿舎（旧・教室棟）                                                                                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1988 | 政府/ADB      |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 6～8                               | 教室棟                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1998 | 政府/ADB      |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 9                                 | 講堂                                                                                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    | 1997 | 政府/ADB      |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 10-1                              | 付属幼稚園                                                                                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 不明   | 不明          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 10-2                              |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    | 不明   | 不明          |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 10-3                              | 付属小学校                                                                                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 2002 | 政府/ADB      |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 11                                | 事務棟                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 2008 | 政府          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 12                                | 事務棟                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1996 | 政府/ADB      |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 13～15                             | 女子学生寮                                                                                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 1996 | 政府/ADB      |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 16                                | 男子学生寮                                                                                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 2015 | JAIF        |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 17～19                             | 食堂・キッチン                                                                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 2015 | 政府          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 20                                | 図書館                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1998 | 政府/ADB      |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 21                                | コンピュータ室                                                                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 2010 | ベトナム        |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 22～23                             | 体育館                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 2013 | 政府          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 24                                | 教員宿舎                                                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    | 不明   | 不明          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 25-1, 2, 3                        | 教室棟                                                                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1995 | 政府          |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 26-1                              | 付属幼稚園                                                                                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 不明   | 不明          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 26-2                              |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    | 不明   | 不明          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 26-3                              |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    | 不明   | UNICEF/AEON |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 27                                | ダンス室                                                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    | 不明   | 不明          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 28                                | 留学生用学生寮（建設中）                                                                                                                                                                                                                                                                                                                                                                             |     |    |    |    |    | 2018 | ベトナム        |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 29                                | 展示施設（建設中）                                                                                                                                                                                                                                                                                                                                                                                |     |    |    |    |    | 2018 | 政府          |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| （その他の施設）トイレ棟、トイレ・シャワー棟、駐車場、駐輪場、など |                                                                                                                                                                                                                                                                                                                                                                                          |     |    |    |    |    |      |             |    |      |    |    |      |    |    |    |    |    |    |



現況配置図



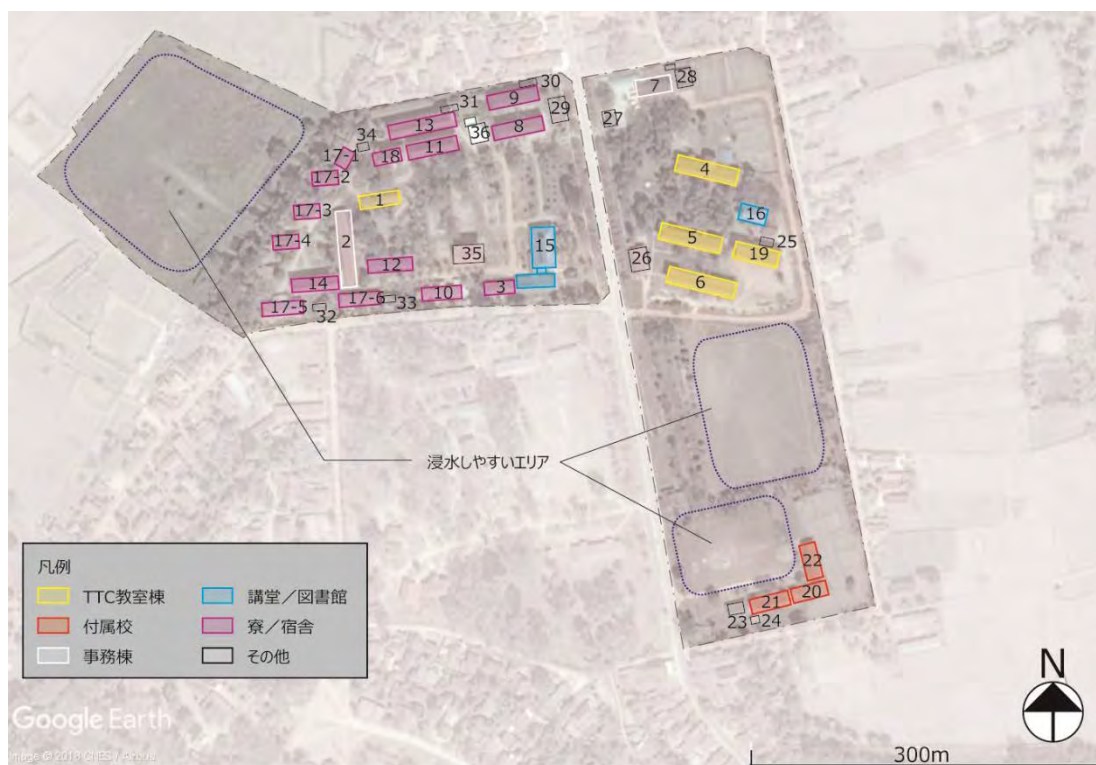
計画配置図（案）



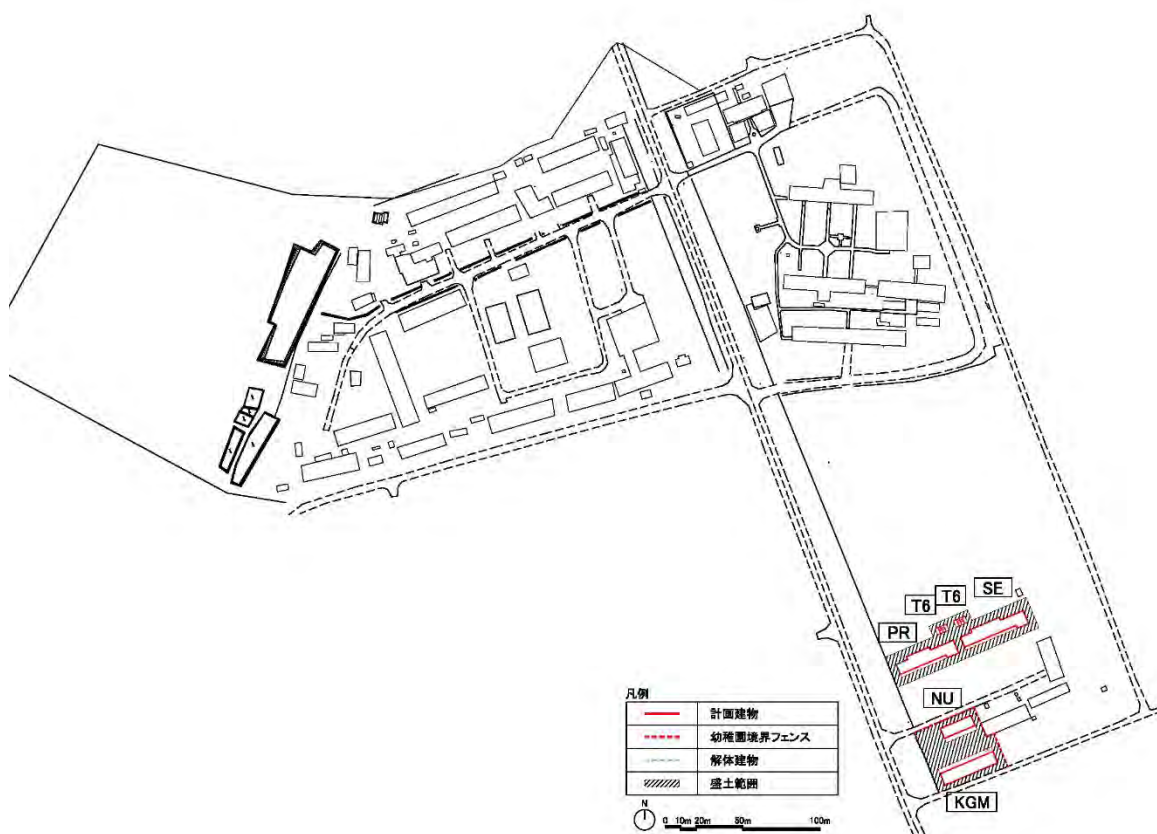
## 4. バンクン TTC

| 概要（2018 年 9-10 月時点）                                       |                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|----|------|--------|----|------|----|------|----|----|----|----|----|----|
| 所在地                                                       | ビエンチャン県トゥラコム郡バンクン                                                                                                                                                                                                                                                                                |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 開講コース                                                     | 就学前教育、初等教育、中等教育（生物、化学、数学、ラオ語、英語）                                                                                                                                                                                                                                                                 |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| TTC 生徒数                                                   | 1,643 人（2016/17 年度）                                                                                                                                                                                                                                                                              |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 付属校設置<br>状況と生徒<br>数                                       | 項目                                                                                                                                                                                                                                                                                               | 就学前 |    |    |    |    |    | 初等教育 |        |    |      |    | 中等教育 |    |    |    |    |    |    |
|                                                           |                                                                                                                                                                                                                                                                                                  | N1  | N2 | N3 | K1 | K2 | K3 | P1   | P2     | P3 | P4   | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                           | クラス数                                                                                                                                                                                                                                                                                             | なし  |    |    | 1  | 1  | 1  | 1    | 1      | 1  | 1    | 1  | 1    |    |    |    |    |    |    |
|                                                           | 生徒数                                                                                                                                                                                                                                                                                              | なし  |    |    | 10 | 15 | 22 | 24   | 30     | 21 | 25   | 19 | 24   |    |    |    |    |    |    |
| 現状と課題                                                     |                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 敷地                                                        | <ul style="list-style-type: none"><li>敷地（約 14ha）は公道を挟んで東西 2 つの敷地を持つ。</li><li>西側には TTC の学生寮と教員寮、東側には TTC の教室棟、実験室棟、付属校の施設が配置されている。</li><li>敷地から約 300m 南にナムグム川があり、豪雨や上流のナムグム・ダムの放流により付属校の施設が浸水被害を受けやすい。付属校周辺の床下浸水は毎年のように発生し、特に床レベルの低い付属小学校については、1990 年、1995 年、2018 年の 3 回に渡って床上浸水被害を受けた。</li></ul> |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| TTC<br>本体施設                                               | <ul style="list-style-type: none"><li>教室棟、実験室棟、事務棟、学生寮は全て継続使用が可能である。</li><li>TTC は教室不足を理由に教室棟の増築を希望しているが、必要教室数の検証が必要である。</li><li>学生寮の増築と図書館の建替の必要性は認められるが、緊急性は高くない。</li></ul>                                                                                                                    |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 付属校                                                       | <ul style="list-style-type: none"><li>付属幼稚園は 3 室しかなく、教室数が不足している。付属幼稚園の質の高い教育が評判となり、入学需要が高まっている。</li><li>付属小学校は築後 40 年以上経過した 2 階建棟である。1 階の床レベルが低く、過去数度にわたって床上浸水被害を受けた。</li><li>2018 年 9 月に開校した付属中学校は、従来 TTC 教室棟として利用された棟を用途転用した。教室サイズが基準より小さく、かつ部屋数も足りていない。</li></ul>                             |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 既存施設リスト                                                   |                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |
| 番号                                                        | 施設名                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 建設年  | 建設資金   |    | 構造   |    | 階数   |    |    |    |    |    |    |
| 1                                                         | 教室棟                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 1994 | 政府     |    | 木造   |    | 1    |    |    |    |    |    |    |
| 2                                                         | 倉庫（旧・教室棟）                                                                                                                                                                                                                                                                                        |     |    |    |    |    |    | 1994 | 政府     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 3                                                         | 教員宿舎（旧・教室棟）                                                                                                                                                                                                                                                                                      |     |    |    |    |    |    | 不明   | 政府     |    | 木造   |    | 1    |    |    |    |    |    |    |
| 4                                                         | 教室棟（実験棟）                                                                                                                                                                                                                                                                                         |     |    |    |    |    |    | 1996 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 5                                                         | 教室棟                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 1996 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 6                                                         | 教室棟                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 2010 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 7                                                         | 事務棟                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 2000 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 8～9                                                       | 男子学生寮                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 1996 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 10                                                        | 教員宿舎（旧・教室棟）                                                                                                                                                                                                                                                                                      |     |    |    |    |    |    | 1994 | 政府     |    | 木造   |    | 1    |    |    |    |    |    |    |
| 11                                                        | 女子学生寮                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 2008 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 12                                                        | 女子学生寮                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 1996 | 政府/ADB |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 13                                                        | 女子学生寮                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 2013 | 政府/ADB |    | RC 造 |    | 3    |    |    |    |    |    |    |
| 14                                                        | 女子学生寮                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 2015 | 政府     |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 15                                                        | 講堂                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 不明   | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 16                                                        | 図書館                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 1998 | タイ     |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 17                                                        | 教員宿舎                                                                                                                                                                                                                                                                                             |     |    |    |    |    |    | 不明   | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 18                                                        | ベトナム学生寮                                                                                                                                                                                                                                                                                          |     |    |    |    |    |    | 2014 | PESS   |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 19                                                        | 教室棟                                                                                                                                                                                                                                                                                              |     |    |    |    |    |    | 2016 | 政府     |    | RC 造 |    | 3    |    |    |    |    |    |    |
| 20                                                        | 付属幼稚園                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 1998 | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 21                                                        | 付属小学校                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 1973 | 不明     |    | RC 造 |    | 2    |    |    |    |    |    |    |
| 22                                                        | 付属中学校                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 2008 | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| 23                                                        | （未使用、旧・小学校）                                                                                                                                                                                                                                                                                      |     |    |    |    |    |    | 不明   | 不明     |    | RC 造 |    | 1    |    |    |    |    |    |    |
| （その他の施設）<br>トイレ棟、トイレ・シャワー棟、食堂、売店、屋根付きバレーボールコート、駐車場、駐輪場、など |                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |    |      |        |    |      |    |      |    |    |    |    |    |    |

現況配置図



計画配置図（案）





## 5. ドンカムサ TTC

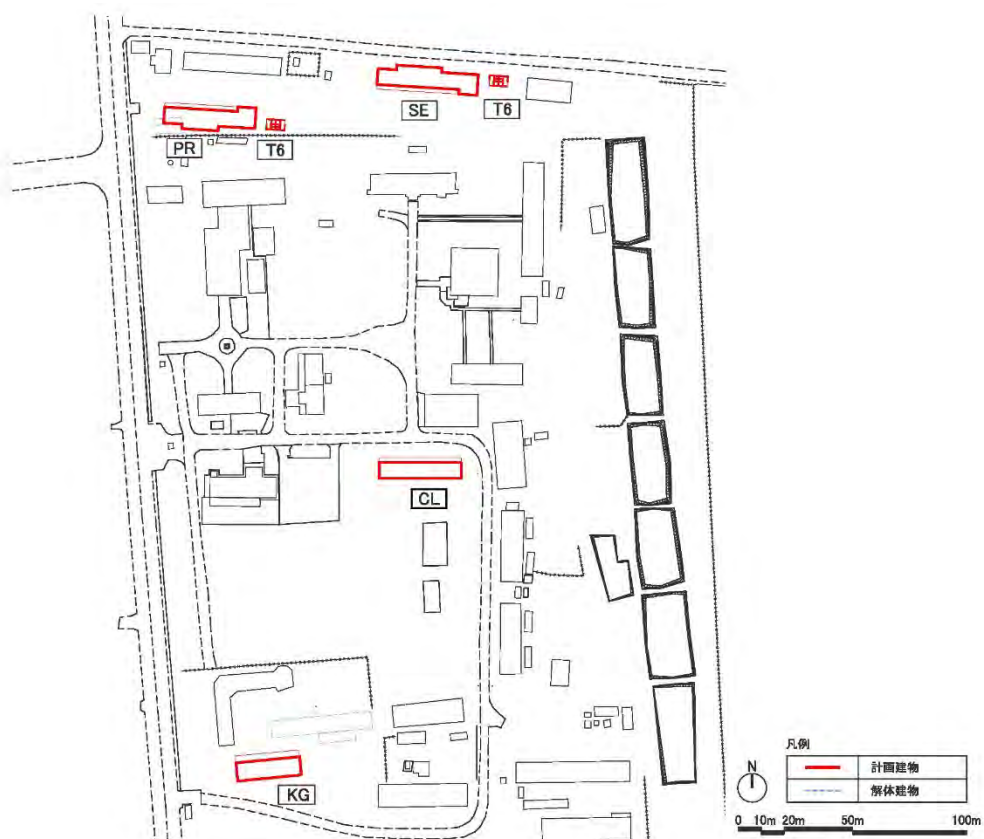
| 概要（2018 年 9-10 月時点）                                                |                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|------|------------|----|------|----|----|------|----|----|----|----|----|----|
| 所在地                                                                | ビエンチャン特別市                                                                                                                                                                                                                                                                        |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 開講コース                                                              | 就学前教育、初等教育、中等教育（生物、歴史、英語）                                                                                                                                                                                                                                                        |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| TTC 生徒数                                                            | 1,877 人（2016/17 年度）                                                                                                                                                                                                                                                              |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 付属校設置<br>状況と生徒<br>数                                                | 項目                                                                                                                                                                                                                                                                               | 就学前 |    |    |    |    |      | 初等教育       |    |      |    |    | 中等教育 |    |    |    |    |    |    |
|                                                                    |                                                                                                                                                                                                                                                                                  | N1  | N2 | N3 | K1 | K2 | K3   | P1         | P2 | P3   | P4 | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                                    | クラス数                                                                                                                                                                                                                                                                             | 1   | 1  | 1  | 1  | 2  | 1    | 1          | 1  | 2    | 2  | 1  |      |    |    |    |    |    |    |
|                                                                    | 生徒数                                                                                                                                                                                                                                                                              | 4   | 17 | 20 | 22 | 50 | 30   | 43         | 31 | 62   | 42 | 32 |      |    |    |    |    |    |    |
| 現状と課題                                                              |                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 敷地                                                                 | <ul style="list-style-type: none"><li>敷地（約 15ha）は首都ビエンチャン中心部から車で約 30 分の場所に位置しほぼ平坦である。</li><li>東側半分は全て水田として使用されている。</li><li>西側半分に TTC の教室棟、実験室棟、事務棟、学生寮、教員寮、付属校の施設が配置されている。</li></ul>                                                                                             |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| TTC 本体施設                                                           | <ul style="list-style-type: none"><li>教室棟、実験室棟、学生寮、事務棟など、TTC 本体施設は継続使用が可能である。</li><li>TTC は教室不足を理由に教室棟の増築を希望しているが、必要教室数の検証が必要である。</li><li>学生寮の室数不足、図書館の改修の必要性が認められたが、緊急性は高くない。</li></ul>                                                                                         |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 付属校                                                                | <ul style="list-style-type: none"><li>付属小学校は敷地北西角、付属幼稚園は敷地南西角に離れて配置されている。</li><li>付属幼稚園は日本の NGO により建設された。施設の状態は良好だが、教室数が不足しており、隣接する TTC 教室棟の 2 教室を幼稚園として使用している。</li><li>付属小学校は教室サイズが小さい上、教室数が不足している。老朽化した木造校舎も使用せざるを得ない状況である。</li><li>付属中学校は 2018 年 9 月段階ではまだ設立されていない。</li></ul> |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 既存施設リスト                                                            |                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 番号                                                                 | 施設名                                                                                                                                                                                                                                                                              |     |    |    |    |    | 建設年  | 建設資金       |    | 構造   |    | 階数 |      |    |    |    |    |    |    |
| 1                                                                  | 教室棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1996 | 政府/ADB     |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 2                                                                  | 教室棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 2012 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 3-1, 2                                                             | 教室棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1992 | 政府         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 4                                                                  | 教室棟（実験棟）                                                                                                                                                                                                                                                                         |     |    |    |    |    | 1996 | 政府/ADB     |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 5                                                                  | 教室棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1997 | 政府         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 6                                                                  | 教室棟（一部、付属幼稚園）                                                                                                                                                                                                                                                                    |     |    |    |    |    | 1993 | 政府         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 7                                                                  | 事務棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1998 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 8                                                                  | 事務棟                                                                                                                                                                                                                                                                              |     |    |    |    |    | 2014 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 9                                                                  | 男子学生寮                                                                                                                                                                                                                                                                            |     |    |    |    |    | 1997 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 10～11                                                              | 女子学生寮                                                                                                                                                                                                                                                                            |     |    |    |    |    | 1997 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 12                                                                 | 女子学生寮                                                                                                                                                                                                                                                                            |     |    |    |    |    | 2014 | 政府         |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 13                                                                 | 講堂                                                                                                                                                                                                                                                                               |     |    |    |    |    | 不明   | 不明         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 14                                                                 | 図書館                                                                                                                                                                                                                                                                              |     |    |    |    |    | 1996 | 政府/ADB     |    | RC 造 |    | 2  |      |    |    |    |    |    |    |
| 15                                                                 | 教員宿舎                                                                                                                                                                                                                                                                             |     |    |    |    |    | 不明   | 不明         |    | 不明   |    | 1  |      |    |    |    |    |    |    |
| 16                                                                 | 模擬授業室                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 17                                                                 | 教材展示室                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 18                                                                 | 付属幼稚園                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | SVA        |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 19-1                                                               | 付属小学校                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明         |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| 19-2                                                               |                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 不明   | 不明         |    | 木造   |    | 1  |      |    |    |    |    |    |    |
| 20                                                                 | 教室棟（実験棟）                                                                                                                                                                                                                                                                         |     |    |    |    |    | 不明   | /UNHABITAT |    | RC 造 |    | 1  |      |    |    |    |    |    |    |
| （その他の施設）                                                           |                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |
| 21. 食堂、22. 駐輪場、23, 24. 教室棟用トイレ棟、25, 26. 学生寮用トイレ・シャワー棟、27. 学生寮用キッチン |                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |            |    |      |    |    |      |    |    |    |    |    |    |



現況配置図



計画配置図（案）



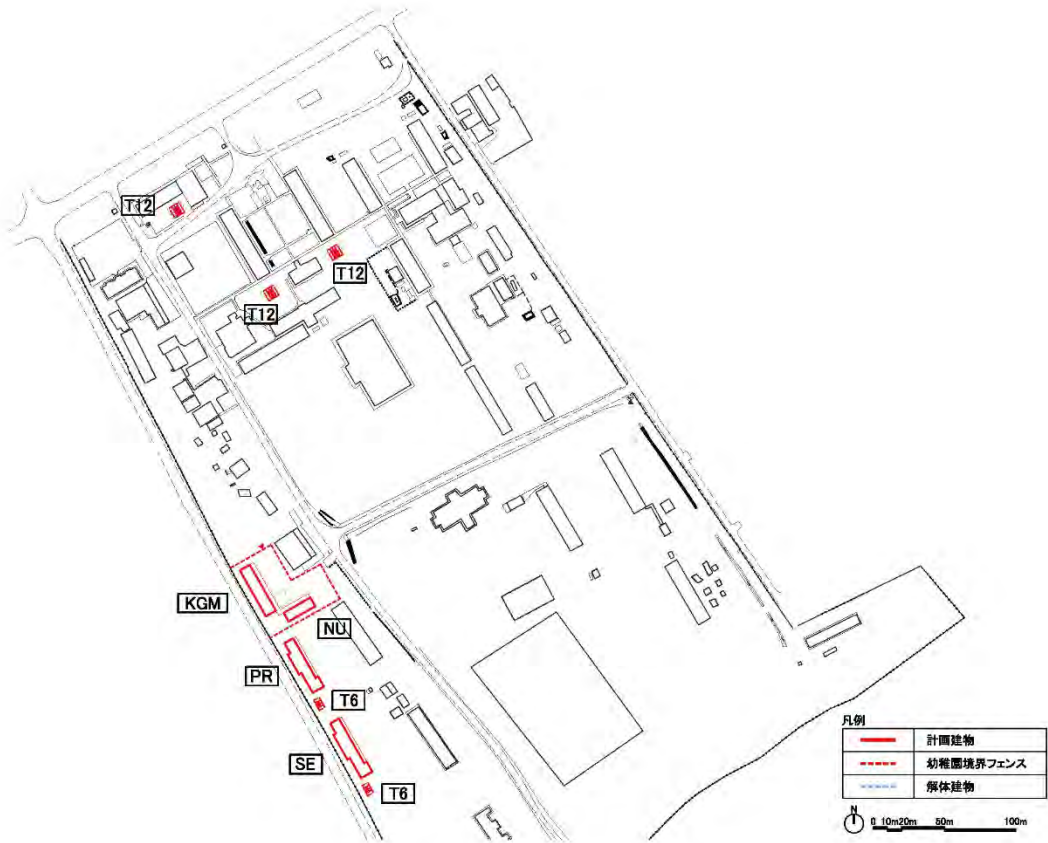
## 6. サバナケット TTC

| 概要（2018 年 9-10 月時点）                             |                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|------|--------|----|-------|----|----|------|----|----|----|----|----|----|
| 所在地                                             | サバナケット県カイソン・ポムウィハン郡サバナケット                                                                                                                                                                                                                                                                                             |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 開講コース                                           | 就学前教育、初等教育、中等教育（化学、物理、数学、ラオ語、英語、ICT）                                                                                                                                                                                                                                                                                  |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| TTC 生徒数                                         | 2,642 人（2016/17 年度）                                                                                                                                                                                                                                                                                                   |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 付属校設置<br>状況と生徒<br>数                             | 項目                                                                                                                                                                                                                                                                                                                    | 就学前 |    |    |    |    |      | 初等教育   |    |       |    |    | 中等教育 |    |    |    |    |    |    |
|                                                 |                                                                                                                                                                                                                                                                                                                       | N1  | N2 | N3 | K1 | K2 | K3   | P1     | P2 | P3    | P4 | P5 | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                 | クラス数                                                                                                                                                                                                                                                                                                                  | 1   | 1  |    | 1  | 1  | 1    | 1      | 1  | 1     | 1  | 1  | 2    |    |    |    |    |    |    |
|                                                 | 生徒数                                                                                                                                                                                                                                                                                                                   | 12  | 8  |    | 20 | 18 | 26   | 37     | 40 | 37    | 32 | 35 | 72   |    |    |    |    |    |    |
| 現状と課題                                           |                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 敷地                                              | <ul style="list-style-type: none"><li>敷地はサバナケットのタイ・ラオス友好橋から 3km 程の国道 9 号線沿いに位置する。</li><li>敷地面積は約 41ha で、概ね平坦である。</li><li>かつて敷地は林であり、降雨時に水はけの悪い場所もある。大きな自然災害被歴はない。</li></ul>                                                                                                                                           |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| TTC<br>本体施設                                     | <ul style="list-style-type: none"><li>教室棟、実験室棟、学生寮、事務棟には老朽化した建物も含まれるが、継続使用可能である。</li><li>老朽化した一部のトイレ棟は、現状使用されているが劣化が顕著で、継続的な使用は困難。</li><li>学生寮増築の必要性は認められたが、緊急性は高くない。</li></ul>                                                                                                                                       |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 付属校                                             | <ul style="list-style-type: none"><li>付属幼稚園は教員宿舎を改築した建物。不同沈下により外壁に構造クラックが見られた。</li><li>付属小学校は平屋建ての老朽校舎を改築して使用（調査時は改装のため別棟を間借り使用）。</li><li>付属中学校は、かつて敷地内で公立中学校が運営されていたが、学区改編などにより運営が中止され、校舎が学生寮に転用された経緯がある。2018 年 9 月より付属中学校として開校するにあたり、TTC の教室を間借り（No. 5）して運営が開始された。来年度からは転用された学生寮（No. 14）を中学校に戻し運営する方針である。</li></ul> |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 既存施設リスト                                         |                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |
| 番号                                              | 施設名                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 建設年  | 建設資金   |    | 構造    |    | 階数 |      |    |    |    |    |    |    |
| 1                                               | 教室棟（音楽室、旧・食堂/キッチン）                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 2002 | 政府/ADB |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 2～4                                             | 教室棟                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 1992 | 政府     |    | 木造    |    | 1  |      |    |    |    |    |    |    |
| 5                                               | 付属中学校（旧・TTC 教室棟）                                                                                                                                                                                                                                                                                                      |     |    |    |    |    | 1992 | 政府     |    | 木造    |    | 1  |      |    |    |    |    |    |    |
| 6                                               | 教室棟                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 1969 | 政府     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 7～8                                             | 教室棟                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 1969 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 9                                               | 教室棟（実験棟）                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 2002 | 政府/ADB |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 10                                              | 教室棟                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 2012 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 11-1                                            | コンピュータ室                                                                                                                                                                                                                                                                                                               |     |    |    |    |    | 1969 | 政府     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 11-2                                            | コンピュータ室                                                                                                                                                                                                                                                                                                               |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 12                                              | 事務棟                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 2002 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 13                                              | 男子学生寮                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 2005 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 14                                              | 男子学生寮（兼・教員宿舎）（旧・中学校）                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 不明   | 不明     |    | 木造    |    | 1  |      |    |    |    |    |    |    |
| 15                                              | 教室棟（模擬授業棟）（旧・学生寮）                                                                                                                                                                                                                                                                                                     |     |    |    |    |    | 1969 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 16～17                                           | 女子学生寮                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 1969 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 18                                              | 女子学生寮                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 2014 | JAIF   |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 19                                              | 講堂                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 2007 |        |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 20                                              | 講堂                                                                                                                                                                                                                                                                                                                    |     |    |    |    |    | 2002 | 政府/ADB |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 21                                              | 図書館                                                                                                                                                                                                                                                                                                                   |     |    |    |    |    | 2002 | 政府/ADB |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 22                                              | 付属小学校                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 23                                              | 付属幼稚園（旧・教員宿舎）                                                                                                                                                                                                                                                                                                         |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 24～25                                           | 教員宿舎                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 不明   | 不明     |    | RC＋木造 |    | 1  |      |    |    |    |    |    |    |
| 26                                              | 事務棟（新築）                                                                                                                                                                                                                                                                                                               |     |    |    |    |    | 2018 | 政府     |    | RC 造  |    | 2  |      |    |    |    |    |    |    |
| 27                                              | 事務棟（旧・教員宿舎）                                                                                                                                                                                                                                                                                                           |     |    |    |    |    | 不明   | 不明     |    | RC＋木造 |    | 1  |      |    |    |    |    |    |    |
| 28                                              | 事務棟（語学教員室）                                                                                                                                                                                                                                                                                                            |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 29                                              | 課外実習棟（調理、裁縫）                                                                                                                                                                                                                                                                                                          |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 30                                              | 課外実習棟（散髪）                                                                                                                                                                                                                                                                                                             |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 31～32                                           | 教員宿舎                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 不明   | 不明     |    | RC＋木造 |    | 1  |      |    |    |    |    |    |    |
| 33                                              | 教室棟用トイレ棟                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| 34                                              | 教員宿舎                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    | 不明   | 不明     |    | 木造    |    | 1  |      |    |    |    |    |    |    |
| 35                                              | 事務棟（会議室）                                                                                                                                                                                                                                                                                                              |     |    |    |    |    | 不明   | 不明     |    | RC 造  |    | 1  |      |    |    |    |    |    |    |
| （その他の施設）トイレ棟、トイレ・シャワー棟、食堂、売店、屋根付き運動場、駐車場、駐輪場、など |                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |      |        |    |       |    |    |      |    |    |    |    |    |    |

現況配置図



計画配置図（案）





## 7. サラワン TTC

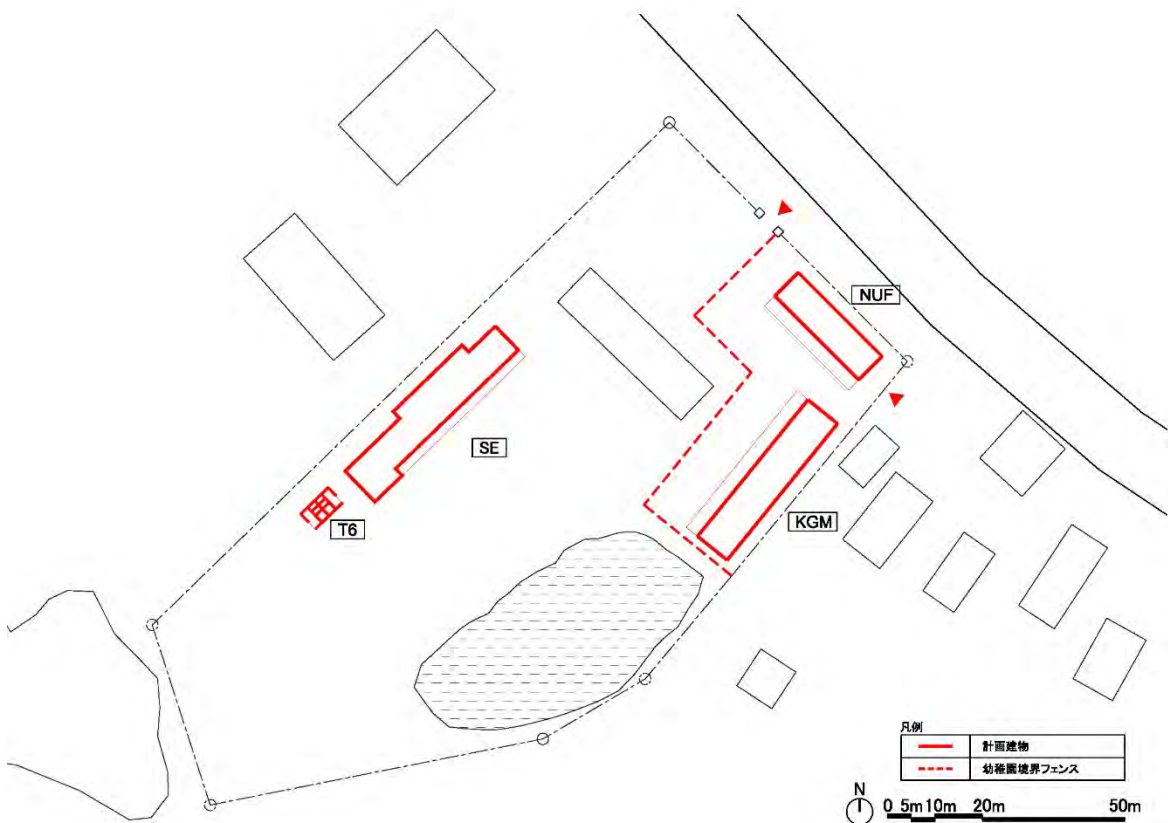
| 概要（2018 年 9-10 月時点）                                                                                                             |                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|----|------|--------------|----|----|------|------|----|----|----|----|----|----|
| 所在地                                                                                                                             | サラワン県サラワン郡サラワン                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 開講コース                                                                                                                           | 就学前教育、初等教育、中等教育（化学、物理、地理、ラオ語）                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| TTC 生徒数                                                                                                                         | 1, 431 人（2016/17 年度）                                                                                                                                                                                                                                                                                                                                |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 付属校設置<br>状況と生徒<br>数                                                                                                             | 項目                                                                                                                                                                                                                                                                                                                                                  | 就学前 |    |    |    |    |    | 初等教育 |              |    |    |      | 中等教育 |    |    |    |    |    |    |
|                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                     | N1  | N2 | N3 | K1 | K2 | K3 | P1   | P2           | P3 | P4 | P5   | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                                                                                                                 | クラス数                                                                                                                                                                                                                                                                                                                                                | 1   | 1  |    | 1  | 1  | 1  | 1    | 1            | 1  | 1  | 1    | 1    | 1  | 1  |    |    |    |    |
|                                                                                                                                 | 生徒数                                                                                                                                                                                                                                                                                                                                                 | 5   | 10 |    | 20 | 15 | 21 | 38   | 30           | 30 | 21 | 24   | 50   | 17 | 15 |    |    |    |    |
| 現状と課題                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 敷地                                                                                                                              | <ul style="list-style-type: none"><li>TTC 敷地（約 7.5ha）は、西側に TTC の大運動場と教員寮、東側に教室棟、実験室棟、事務棟、学生寮、付属幼稚園がある。</li><li>付属校敷地（約 1.1ha）は TTC 敷地から約 700m の距離にあり、付属小学校が配置されている。敷地内に池がある。</li><li>2 つの敷地共にほぼ平坦である。</li></ul>                                                                                                                                     |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| TTC 本体施設                                                                                                                        | <ul style="list-style-type: none"><li>教室棟、実験室棟、学生寮、事務棟には老朽化した建物も含まれるが、継続使用が可能である。</li><li>教室棟のうち 1 棟は、学生寮として建設された棟を用途転用しており、1 教室当たりのサイズが小さい。TTC は教室不足を理由に教室棟の増築を希望しているが、必要教室数の検証が必要である。</li></ul>                                                                                                                                                   |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 付属校                                                                                                                             | <ul style="list-style-type: none"><li>付属幼稚園は TTC 敷地東側に 2 棟ある。うち 1 棟は従来、付属小学校として使用されてきた 2 教室の老朽化した木造校舎だが、近隣小学校の付属校化に伴い、幼稚園として用途転用された。もう 1 棟も 2 教室しかないため、教室数が不足している。</li><li>付属小学校は飛び地に配置されている。建物の状態は比較的良好だが、教室サイズが基準よりも小さい。</li><li>2018 年 9 月に開校された中学校は、TTC 教室棟を間借りして運営している。</li><li>TTC 敷地は狭く、一貫付属校の建設用地を確保することは困難である。付属校は飛び地に建設する計画とする。</li></ul> |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 既存施設リスト                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |
| 番号                                                                                                                              | 施設名                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    |    | 建設年  | 建設資金         |    |    | 構造   |      |    | 階数 |    |    |    |    |
| 1                                                                                                                               | 教室棟                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    |    | 2009 | 政府           |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 2                                                                                                                               | 教室棟（実験棟）                                                                                                                                                                                                                                                                                                                                            |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 3                                                                                                                               | 教室棟（一部、付属中学校）                                                                                                                                                                                                                                                                                                                                       |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 4                                                                                                                               | 学生寮（男女共用）                                                                                                                                                                                                                                                                                                                                           |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 5                                                                                                                               | 男子学生寮                                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 6                                                                                                                               | 女子学生寮                                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 2014 | JAIF         |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 7                                                                                                                               | 女子学生寮                                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 8                                                                                                                               | 付属幼稚園（旧・付属小学校）                                                                                                                                                                                                                                                                                                                                      |     |    |    |    |    |    | 2005 | 政府/ADB       |    |    | 木造   |      |    | 1  |    |    |    |    |
| 9                                                                                                                               | 付属幼稚園                                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 1997 | Room to Read |    |    | RC 造 |      |    | 1  |    |    |    |    |
| 10                                                                                                                              | 事務棟                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 11                                                                                                                              | （欠番）                                                                                                                                                                                                                                                                                                                                                |     |    |    |    |    |    | --   | --           |    |    | --   |      |    | -- |    |    |    |    |
| 12                                                                                                                              | 講堂                                                                                                                                                                                                                                                                                                                                                  |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 1  |    |    |    |    |
| 13                                                                                                                              | 図書館                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    |    | 1997 | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 14                                                                                                                              | 教室棟                                                                                                                                                                                                                                                                                                                                                 |     |    |    |    |    |    | 2016 | 政府           |    |    | RC 造 |      |    | 3  |    |    |    |    |
| 15                                                                                                                              | 教員宿舍                                                                                                                                                                                                                                                                                                                                                |     |    |    |    |    |    | 不明   | 政府/ADB       |    |    | RC 造 |      |    | 2  |    |    |    |    |
| 101                                                                                                                             | 付属小学校                                                                                                                                                                                                                                                                                                                                               |     |    |    |    |    |    | 2006 | 不明           |    |    | RC 造 |      |    | 1  |    |    |    |    |
| 102                                                                                                                             | 付属小学校トイレ棟                                                                                                                                                                                                                                                                                                                                           |     |    |    |    |    |    | 不明   | 不明           |    |    | RC 造 |      |    | 1  |    |    |    |    |
| （その他の施設）<br>16. 課外実習棟（キッチン）、17, 18. 学生寮用キッチン、18, 19. 学生寮用シャワー棟、21-24. 学生寮用トイレ棟、25. 旧・音楽室、26. 倉庫、27. 屋根付き運動場、28, 29. 駐輪場、30. 駐車場 |                                                                                                                                                                                                                                                                                                                                                     |     |    |    |    |    |    |      |              |    |    |      |      |    |    |    |    |    |    |



現況配置図



計画配置図（案）



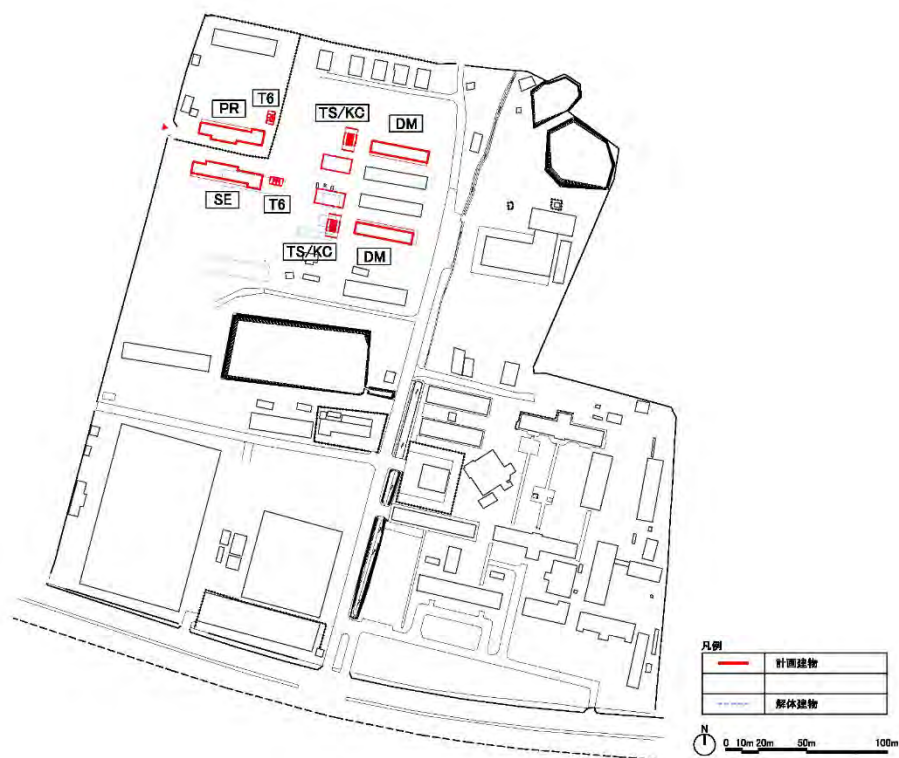
## 8. パクセ TTC

| 概要（2018 年 9-10 月時点）                   |                                                                                                                                                                                                                                                                                                     |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|----|----|----|-----------|-----------|----|------|----|-----|------|----|----|----|----|----|----|
| 所在地                                   | チャンパサック県パクセ郡パクセ                                                                                                                                                                                                                                                                                     |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 開講コース                                 | 就学前教育、初等教育、中等教育（物理、地理、数学、ラオ語、フランス語、体育）                                                                                                                                                                                                                                                              |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| TTC 生徒数                               | 1,391 人（2016/17 年度）                                                                                                                                                                                                                                                                                 |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 付属校設置状況と生徒数                           | 項目                                                                                                                                                                                                                                                                                                  | 就学前   |    |    |    |    |           | 初等教育      |    |      |    |     | 中等教育 |    |    |    |    |    |    |
|                                       |                                                                                                                                                                                                                                                                                                     | N1    | N2 | N3 | K1 | K2 | K3        | P1        | P2 | P3   | P4 | P5  | M1   | M2 | M3 | M4 | M5 | M6 | M7 |
|                                       | クラス数                                                                                                                                                                                                                                                                                                | 1     |    |    | 1  | 1  | 1         | 1         | 1  | 1    | 1  | 1   | 1    | 1  |    |    |    |    |    |
|                                       | 生徒数                                                                                                                                                                                                                                                                                                 | （未回答） |    |    | 20 | 35 | 38        | 37        | 29 | 26   | 30 | 34  | 34   | 7  |    |    |    |    |    |
| 現状と課題                                 |                                                                                                                                                                                                                                                                                                     |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 敷地                                    | <ul style="list-style-type: none"><li>敷地（約 13ha）には、敷地内道路を挟んで東側に TTC の教室棟、実験室棟、管理棟があり、西側には TTC の学生寮、運動場、付属校の施設が配置されている。</li><li>敷地内は平坦であるが既存棟が多く建ち並び、中央に池があり、樹木が多いため建設可能なエリアは限られる。建設にあたっては、既存施設の解体・撤去を検討する必要がある。</li><li>当該サイトは以前、池だったとの情報があり、地盤が軟弱であることが懸念されたが、地盤調査結果により杭基礎は不要であることが判明した。</li></ul> |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| TTC 本体施設                              | <ul style="list-style-type: none"><li>現在使用している教室棟、実験室棟、事務棟には老朽化した建物も含まれるが、継続使用が可能である。</li><li>木造教室棟の中には、白蟻被害被害による損傷で使用中止としている棟が複数ある。</li><li>木造の男子学生寮と RC 造の女子学生寮は老朽化や白蟻被害による損傷が激しい上、衛生状態が極めて劣悪である。既に使用を中止している棟もある。</li><li>TTC は教室不足を理由に教室棟の増築を希望しているが、必要教室数の検証が必要である。</li></ul>                   |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 付属校                                   | <ul style="list-style-type: none"><li>付属幼稚園、小学校、中学校はそれぞれ離れた位置に配置されている。</li><li>付属幼稚園は、建物としては継続使用可能だが、教室サイズが小さい。</li><li>付属小学校は、築後 40 年以上の木造であり老朽化が顕著である。</li><li>2018 年 9 月から開校した附属中学校は、老朽化により一時使用中止していた既存棟を改修した棟である。中等 7 学年を収容するには教室数が不足し、実験室もない。</li></ul>                                        |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 既存施設リスト                               |                                                                                                                                                                                                                                                                                                     |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |
| 番号                                    | 施設名                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 建設年       | 建設資金      |    | 構造   |    | 階数  |      |    |    |    |    |    |    |
| 1                                     | 教室棟（旧・食堂）                                                                                                                                                                                                                                                                                           |       |    |    |    |    | 1962      | 政府        |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 2                                     | 教室棟（現在未使用）                                                                                                                                                                                                                                                                                          |       |    |    |    |    | 1962      | 政府        |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 3                                     | 教室棟（現在未使用）                                                                                                                                                                                                                                                                                          |       |    |    |    |    | 1986      | UNICEF    |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 4                                     | 教室棟                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 2000      | 政府/ADB    |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 5～6                                   | 教室棟                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 1986      | 政府/ADB    |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 7                                     | 附属中学校                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 1962      | 政府        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| 8                                     | 教室棟                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 1962      | 政府        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| 9                                     | 教室棟（実験棟）                                                                                                                                                                                                                                                                                            |       |    |    |    |    | 2000      | 政府/ADB    |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 10                                    | 女子学生寮                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 1962      | 政府        |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 11                                    | 女子学生寮（現在未使用）                                                                                                                                                                                                                                                                                        |       |    |    |    |    | 1962      | 政府        |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 12                                    | 女子学生寮                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 1962      | 政府        |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 13～15                                 | 男子学生寮                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 1986      | 政府        |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 16                                    | 男子学生寮（現在未使用）                                                                                                                                                                                                                                                                                        |       |    |    |    |    | 1986      | 政府        |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 17                                    | 附属小学校                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 1962      | 政府        |    | 木造   |    | 1   |      |    |    |    |    |    |    |
| 18                                    | 附属幼稚園                                                                                                                                                                                                                                                                                               |       |    |    |    |    | 2000      | 不明        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| 19                                    | 事務棟                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 2014      | 政府        |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 20                                    | 事務棟                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 1964      | 政府        |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 21                                    | 講堂                                                                                                                                                                                                                                                                                                  |       |    |    |    |    | 2015      | 不明        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| 22                                    | 講堂                                                                                                                                                                                                                                                                                                  |       |    |    |    |    | 1986      | 政府        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| 23                                    | 図書館                                                                                                                                                                                                                                                                                                 |       |    |    |    |    | 2000      | 政府/ADB    |    | RC 造 |    | 2   |      |    |    |    |    |    |    |
| 24～26                                 | 教員開発センター施設群                                                                                                                                                                                                                                                                                         |       |    |    |    |    | 1997/2000 | パチカン/フランス |    | RC 造 |    | 1～2 |      |    |    |    |    |    |    |
| 27                                    | 教員宿舎                                                                                                                                                                                                                                                                                                |       |    |    |    |    | 不明        | 不明        |    | RC 造 |    | 1   |      |    |    |    |    |    |    |
| （その他の施設）<br>トイレ棟、トイレ・シャワー棟、駐車場、駐輪場、など |                                                                                                                                                                                                                                                                                                     |       |    |    |    |    |           |           |    |      |    |     |      |    |    |    |    |    |    |

現況配置図



計画配置図（案）







## 5－1b. 計画対象サイトの既存機材の概要

## 1. TTC 本体

| TTC     | 既存機材の現状と課題                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LNT TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材があり、ほぼ全て使用可能である。各実験室とも、整理は良好な状況。</li> <li>機材維持管理の予算は無いが、実験室の担当者を維持管理責任者とするシステムを構築しており、定期的に見視検査を中心とした検査を行っている。化学実験室の薬品保管庫が整備されていない。劇薬、毒薬指定の薬品もあるため、保管庫の整備が必要。</li> <li>電子ピアノ、パソコン、視聴覚機材も十分な数量が整備されている。</li> <li>教材の自主作成室を有しており、ドイツの NGO の支援を受けて帯鋸、ドリル、糸鋸、丸鋸、木工旋盤、カッター、バイス、作業台、カッター台などが整備されている。ここで作成された教材は付属小学校や幼稚園で有効に活用されている。</li> </ul> <div> </div> <div> </div> <div>教材製作室の機材</div> |
| LPB TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材があるが、埃が目立つなど、機材の保管状況は良好とは言えない。</li> <li>語学ラボは3室あり、ビデオライブラリーが室内に保管されており、教壇の後ろにあるモニターを利用してビデオの語学学習が随時できる状態にある。</li> <li>PC室は2室あり、各室約35台のパソコンを有する。更に図書館に併設されたPC室があり、学生の自由学習用に利用されている。PCは古い機種で、インターネットの動作も遅い。PC室は、隙間の多い鎧戸式の窓で、埃が室内に侵入し、パソコンの維持環境を悪くしている。</li> </ul> <div> </div> <div>PC室</div>                                                                                                                                          |
| KKY TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材がある。機材の在庫管理、保管が良好になされており、実験室も整理・整頓されている。保管棚には在庫品名のラベルが付されていた。</li> <li>PC室にはベトナム政府支援のパソコン35台がある。OSが古く、技術サポートが終了していることが課題。</li> <li>語学ラボの視聴覚機材も良好に維持管理されている。</li> </ul> <div> </div> <div>物理準備室 機材保管棚</div>                                                                                                                                                                                                                          |
| BKN TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材がある。一部故障しているものもあるが、授業運営上の大きな支障はない。</li> <li>キャビネット不足のためか、未使用の多くの機材が実験台の下に分別やラベルもつけられずに収納されている。既存機材は埃を被っており、維持管理状況は良好とは言えない。</li> <li>語学ラボは2室あり、各40台の視聴覚機材が整備されている。</li> <li>PC室のパソコンの整備状況は他TTCと同様。</li> </ul> <div> </div> <div>化学実験室<br/>(収納しきれない機材・教材)</div>                                                                                                                                                                      |

資料5－1b 計画対象サイトの既存機材の概要

|         |                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                     |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| DKX TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材があり、ほぼ全て使用可能である。機材は、キャビネットに整理されているが、収納しきれない機材や小物がある。機材の定期的な維持管理は行われておらず、不定期に学生に掃除をさせている程度である。</li> <li>PC室は2室あり、計90台程度のパソコンを有する。ネットワークに接続されており、インターネットの実習が可能である。</li> <li>音楽室には全21台の電子ピアノが設置されている。埃を被っており保管状況が悪い。室内の遮音は施されており、隣室の授業の妨げとなっている。</li> <li>語学ラボも2室あり、視聴覚機材が設置されている。</li> </ul> |  <p>展示を収納を兼ねた<br/>実験機材キャビネット</p> |
| SVK TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材がある。インベントリーは作成していないが、概ね良好に在庫管理している。</li> <li>PC室は3室あり、計230台のパソコンを有しているが、使用可能なものは約6割である。</li> <li>語学ラボは2室あり、各40台の視聴覚機材は良好に維持管理されているようである。</li> </ul>                                                                                                                                        |  <p>PC室（手前は故障したPC）</p>           |
| SRV TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材がある。未開封の箱に収納されたまま未使用の機材が多い。また、使用している機材でも、整理整頓せず山積みになっている状況が確認された。</li> <li>PC室、語学ラボの機材整備状況は、他のTTCと同様である。</li> <li>教室棟の中に音楽室を確保できず、寮の一室に仮設されている。埃をかぶっており、良好に維持管理されているとは言えない。</li> </ul>                                                                                                     |  <p>音楽室</p>                     |
| PKS TTC | <ul style="list-style-type: none"> <li>政府から支給された物理、化学、生物、地学用の機材がある。維持管理は、担当教官と学生が不定期に行っている。機材の収納スペース不足により、整理できない機材がある。</li> <li>化学実験で使用した薬品は、実験室外のタンクに貯留し、その後処理している。</li> <li>語学ラボは2室あり、各40台の視聴覚機材を有する。</li> <li>PC室は4室で、計140台のパソコンを有している。パソコンは学生の登録料・授業料を原資としてTTCが調達している。OSは全てWindows10である。</li> </ul>                                                   |  <p>薬品廃棄用タンク</p>               |

## 2. 付属校・就学前教育

| TTC     | 既存機材の現状と課題                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                          |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LNT TTC | <ul style="list-style-type: none"> <li>一部の屋外遊具（滑り台やブランコ等）を除き、MOES 標準機材リストの機材（室内遊具等）は整備されていない。</li> <li>室内壁には教員が手作りした知育用ポスターが掲示されている。</li> <li>TTC 本体の教材製作室で教材を作成可能だが、付属幼稚園では自作教材が活用されている様子は確認できなかった。</li> </ul>                                 |  <p>屋外遊具→</p>                                                                                                                                                                                                                                                         |
| LPB TTC | <ul style="list-style-type: none"> <li>屋外に古タイヤを利用した簡単な遊具と、室内に強化プラスチック製滑り台、教員が手作りした知育用ポスターがあるだけで、MOES 標準機材は整備されていない。</li> </ul>                                                                                                                  |  <p>幼稚園室内の知育用ポスター→</p>                                                                                                                                                                                                                                                |
| KKY TTC | <ul style="list-style-type: none"> <li>付属幼稚園は2つの敷地に分かれている。</li> <li>TTC 敷地内の幼稚園には、屋外遊具、屋内遊具が一定程度整備されているが、MOES 機材の全てが整備されているわけではない。知育機材としては、ポスターの他、拡声器、太鼓、知育カードなどがある。</li> <li>離れた敷地にある幼稚園は、屋外ブランコと屋内の手作り知育用ポスターがあるのみで、その他機材は一切ない。</li> </ul>    |    <p>TTC 敷地内の付属幼稚園→<br/> (上) 屋外遊具<br/> (中) 幼稚園室内（N2-3 クラス）の知育用ポスター<br/> 知育カード（人体のパーツ等）</p> |
| BKN TTC | <ul style="list-style-type: none"> <li>屋外遊具は雲梯とブランコのみ。</li> <li>屋内の壁は、様々な手作りの知育ポスターや教材がセンス良く飾られている。</li> <li>その他、知育教材、拡声器などもあるが、サイト調査当時はダム放流の影響による川の増水により浸水被害を受けた直後であったため、一時避難的にビニール袋に詰められるなどしていた。</li> <li>MOES 標準機材が整備されているわけではない。</li> </ul> |   <p>付属幼稚園室内→<br/> (上) 壁に掲示された知育用ポスターなど<br/> (下) 室内遊具や知育機材（浸水被害のため一時避難中）</p>                                                                                                   |



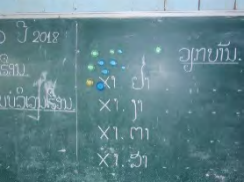
資料5－1b 計画対象サイトの既存機材の概要

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                   |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DKX TTC | <ul style="list-style-type: none"> <li>DKX TTC は就学前教員養成の中核的拠点であり、他の付属幼稚園に比して屋内遊具や教材が充実しているが、MOES 標準機材が全て整備されているわけではない。</li> <li>屋外には雲梯、滑り台、ブランコ、古タイヤ利用の遊具などがある。</li> <li>屋内には、ピアノ、スピーカー、ボール、フラフープなどの他、手作りの遊具（人形など）がある。</li> <li>教室不足により TTC 教室棟の 2 室を幼稚園の仮設教室として利用。仮設教室にも相応の室内遊具がある。</li> </ul> <p style="text-align: right;">付属幼稚園→</p> <p style="text-align: center;">（上）屋外遊具</p> <p style="text-align: center;">（下）本邦 NGO 建設棟のプレイルームにはピアノや遊具がある</p>                                                                             |                                                                                             |
| SVK TTC | <ul style="list-style-type: none"> <li>屋外遊具は充実しており、雲梯、ブランコ、滑り台、古タイヤ利用の遊具などがある。</li> <li>屋内遊具は、教員の手作り人形等がある他、N1（乳児）クラスにはハンモックがある。</li> <li>TTC 学生が製作した遊具や教材が倉庫内の棚に収納されているが、幼稚園で活用されている様子ではなかった。</li> <li>MOES 標準機材が整備されているわけではない。</li> </ul> <p style="text-align: right;">付属幼稚園室内→</p> <p style="text-align: center;">（上）乳児を対象とした N1 クラスにはハンモックがある</p> <p style="text-align: center;">（下）倉庫の棚には TTC 学生が製作した遊具や教材が多数あるが、幼稚園で活用されているわけではない。</p>                                                                                      |                                                                                            |
| SRV TTC | <ul style="list-style-type: none"> <li>SRV TTC は南部地域における就学前教員養成の中学的拠点であり、他の付属幼稚園に比して屋内遊具や教材が充実しているが、MOES 標準機材が全て整備されているわけではない。</li> <li>屋外遊具は、雲梯、ブランコ等の遊具に加え、砂場もある。</li> <li>知育教材としての絵本が充実して取り揃えられている。</li> <li>室内遊具は特に豊富とは言えないが、手作りの人形などがある。</li> <li>十分な棚が設置されており、備品・機材が整理・整頓されている。</li> <li>N クラスには、乳児用のベビーベッドが置かれている。</li> </ul> <p style="text-align: right;">付属幼稚園→</p> <p style="text-align: center;">（上）充実した屋外遊具</p> <p style="text-align: center;">（中）絵本室兼備品・機材保管室</p> <p style="text-align: center;">（下）N クラスのベビーベッド</p> |    |
| PKS TTC | <ul style="list-style-type: none"> <li>園庭は狭いが、屋外遊具として雲梯とブランコがある。</li> <li>教員による手作りの人形等と、数は少ないものの知育用ポスターが掲示されているが、その他の機材は無い。</li> <li>N クラスにはゆりかごがあるが、父母が自分の子供のために持ち込んだものであり、幼稚園の所有物ではない。</li> <li>MOES 標準機材は整備されていない。</li> </ul> <p style="text-align: right;">付属幼稚園室内→</p>                                                                                                                                                                                                                                                        |                                                                                                                                                                              |

## 3. 付属校・初等教育

| TTC     | 既存機材の現状と課題                                                                                                                                                                                                                                                                                                  |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LNT TTC | <ul style="list-style-type: none"> <li>MOES 標準機材リストの機材は整備されていない。</li> <li>TTC 本体の教材製作室で教材を作成可能だが、付属小学校では自作教育機材が活用されている様子は確認できなかった。</li> </ul> <p>教材製作室で製作された小学校用教材→<br/>(付属小学校で活用されているわけではない)</p>                        |
| LPB TTC | <ul style="list-style-type: none"> <li>MOES 標準機材リストの機材は整備されていない。</li> <li>JOCV 隊員が製作した演算指導用機材があった。</li> </ul> <p>JOCV 隊員が製作した演算指導用機材→</p>                                                                                |
| KKY TTC | <ul style="list-style-type: none"> <li>付属小学校は2つの敷地に分かれている。TTC 敷地内の小学校はマルチグレード(2教室)、離れた敷地の小学校はシングルグレード(9教室)である。</li> <li>いずれの小学校も、手作りの掲示物(時計のモデル等を含む)のみであり、MOES 標準機材は整備されていない。</li> </ul> <p>時計のモデルを含む、各種手作り教材→</p>      |
| BKN TTC | <ul style="list-style-type: none"> <li>MOES 標準機材は整備されていない。</li> <li>地図は政府から支給されたもの。</li> <li>様々な手作り学習用掲示物が壁に掲示されている。</li> </ul> <p>壁に掲示された手作り教材と、政府支給の地図→</p>                                                          |
| DKX TTC | <ul style="list-style-type: none"> <li>MOES 標準機材は整備されていない。</li> <li>ユネスコとタイの支援により指導用教材があるとの情報があったが、サイト調査時には、付属小学校内でそれら機材の確認はできなかった。</li> <li>手作り学習用掲示物以外の機材は無い。</li> </ul> <p>壁に掲示された手作り教材→</p>                        |
| SVK TTC | <ul style="list-style-type: none"> <li>MOES 標準機材は整備されていない。</li> <li>壁に掲示された手作り教材以外の機材はない。</li> </ul> <p>小学校(仮校舎)室内壁に掲示された手作り教材→</p>                                                                                    |
| SRV TTC | <ul style="list-style-type: none"> <li>MOES 標準機材は整備されていない。</li> <li>TTC から離れた敷地にある一般校を付属校化した。</li> <li>壁の掲示物は、手作りのものに加え、地図、国旗、ラオス文化などについての印刷製品が掲示されている。</li> <li>壁の掲示物以外の機材は無い。</li> </ul> <p>小学校室内壁に掲示された地図等の教材→</p>  |

資料5－1b 計画対象サイトの既存機材の概要

|         |                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                         |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PKS TTC | <ul style="list-style-type: none"> <li>MOES 標準機材は整備されていない。</li> <li>時計のモデルや木製三角定規などを有している。また、黒板は磁石を貼り付けることが出来るタイプであった。</li> <li>JOCV の公衆衛生隊員が供与した身長、体重、視力、聴力計がある。</li> <li>その他、ピアノと、教員による手作り教材・掲示物がある。</li> </ul> <p style="text-align: right;">付属小学校の機材→</p> <p>(上) 磁石を貼り付けることが出来る黒板</p> <p>(下) 面積計算公式を示したボード</p> |   |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 4. 付属校・中等教育

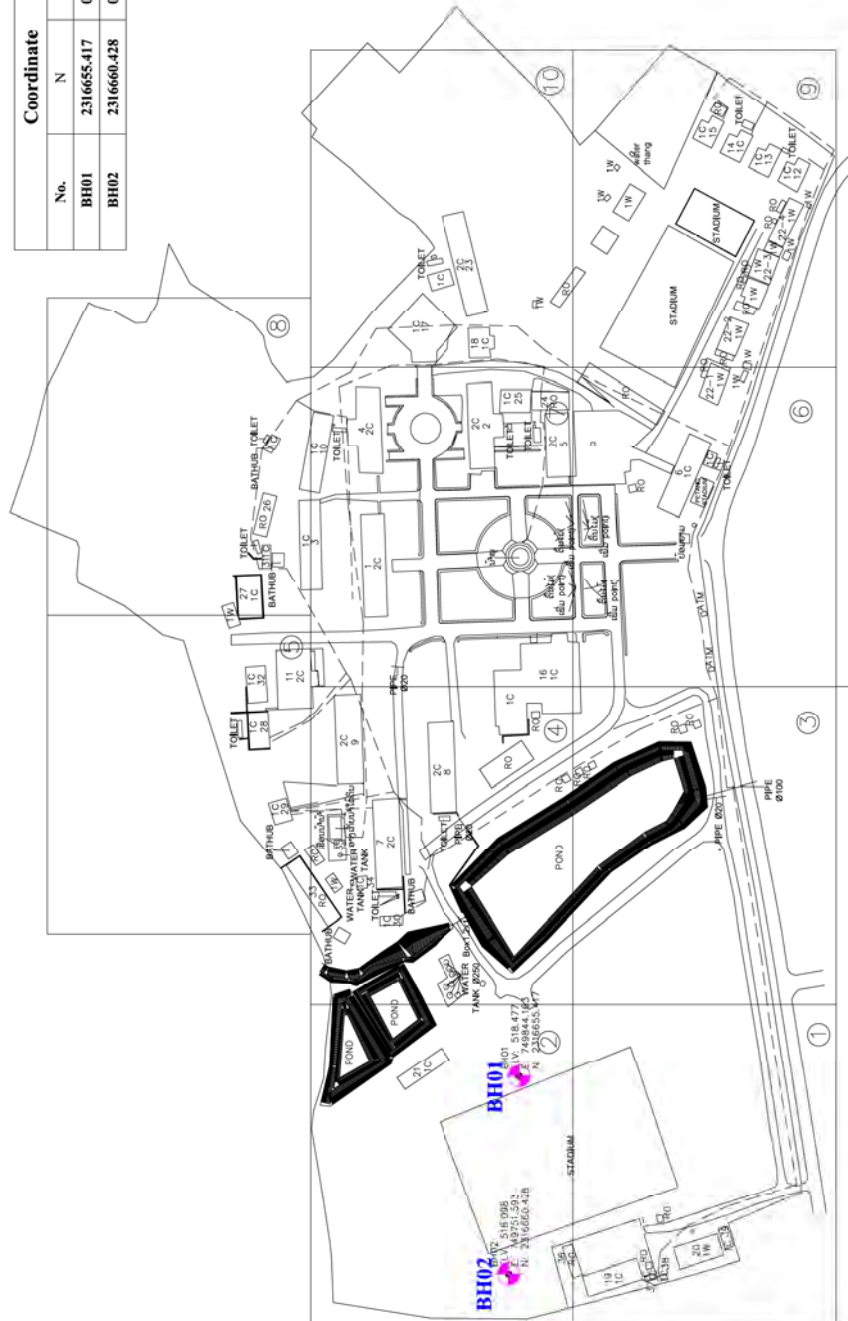
| TTC     | 既存機材の現状と課題                                                                                                                                                                                                                                |                                                                                       |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| LNT TTC | <ul style="list-style-type: none"> <li>・ サイト調査時は、木造仮設教室で開校準備が進められていたが、実際の授業は開始されていなかった。</li> <li>・ 機材は一切整備されていない。</li> </ul> <p>付属中学校仮設教室→</p>                                                                                            |    |
| LPB TTC | <ul style="list-style-type: none"> <li>・ 付属中学校は 2018 年 9 月に開校したばかりであり、保有する機材はプロジェクターとパソコン程度である。</li> <li>・ MOES 標準機材は整備されていない。</li> <li>・ TTC の学生が中学校・物理の展示教材を自作していたが、自作教育機材が付属校で活用されている様子は確認できなかった。</li> </ul> <p>プロジェクターを利用した数学の授業→</p> |    |
| KKY TTC | (現地調査時点で未開校)                                                                                                                                                                                                                              |                                                                                       |
| BKN TTC | <ul style="list-style-type: none"> <li>・ 従来、初等教員養成用教室として使われていた棟を、2018 年 9 月の中学校開校に合わせ転用したため、室内の掲示物は初等教育用である。</li> <li>・ 中学校としての機材は一切整備されていない。</li> </ul> <p>中学校としての機材は一切整備されていない→</p>                                                     |   |
| DKX TTC | (現地調査時点で未開校)                                                                                                                                                                                                                              |                                                                                       |
| SVK TTC | <ul style="list-style-type: none"> <li>・ 従来、TTC 教室棟として利用された棟を利用して 2018 年 9 月に開校。</li> <li>・ 地球儀や、手作りの壁の掲示物以外の教育機材は無い。</li> <li>・ 付属中学校教員によると、今後、中学校校舎内にコンピュータ室を設置する計画があるとのこと。</li> </ul> <p>中学校教室。地球儀を用いて太陽系に関する授業を行っていた。→</p>            |  |
| SRV TTC | <ul style="list-style-type: none"> <li>・ TTC 教室棟の一角を中学校の仮校舎として使用している。</li> <li>・ 2018 年 9 月に開校したばかりであり、壁の掲示物を含め、機材は一切ない。</li> </ul> <p>中学校（仮校舎）教室→</p>                                                                                    |  |
| PKS TTC | <ul style="list-style-type: none"> <li>・ 老朽化のため一時使用を中止していた棟を改修することにより、2018 年 9 月から中学校を開校した。</li> <li>・ 掲示物は地図のみであり、それ以外の教育機材は無い。</li> </ul> <p>中学校教室には、地図以外の教育機材は無い→</p>                                                                  |  |



## 5－2. 地盤調査結果（8校分）

**LOCATION PLAN OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Luang Nam Tha TTC, Vientiane Province**

| Coordinate |             |             |
|------------|-------------|-------------|
| No.        | N           | E           |
| BH01       | 2316655.417 | 0749844.163 |
| BH02       | 2316660.428 | 0749751.593 |



Symbol:  
 Borehole (BH)

Figure 2 Location Plan of Bore Hole

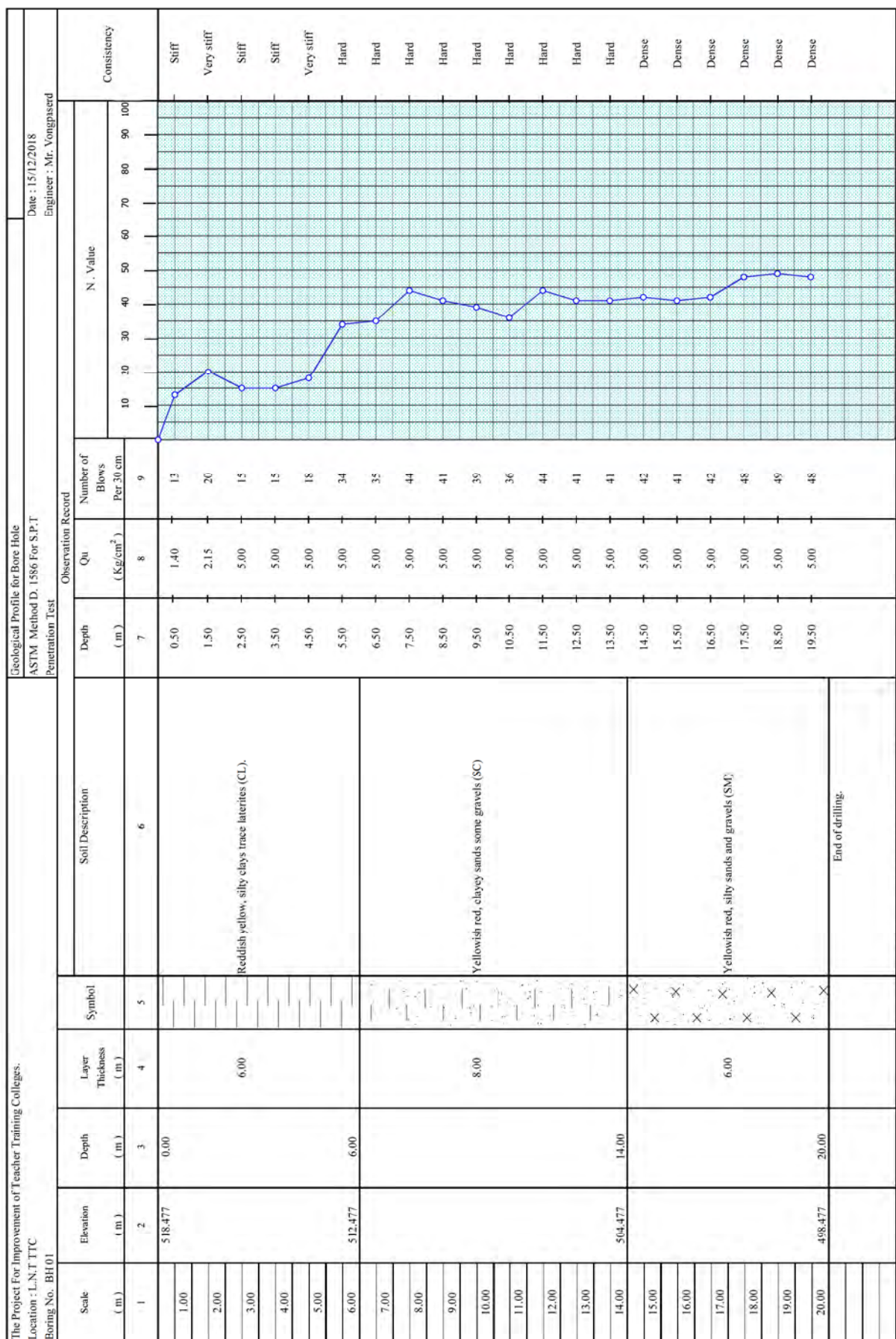


Figure A-1 Geological Profile for Bore Hole BH01

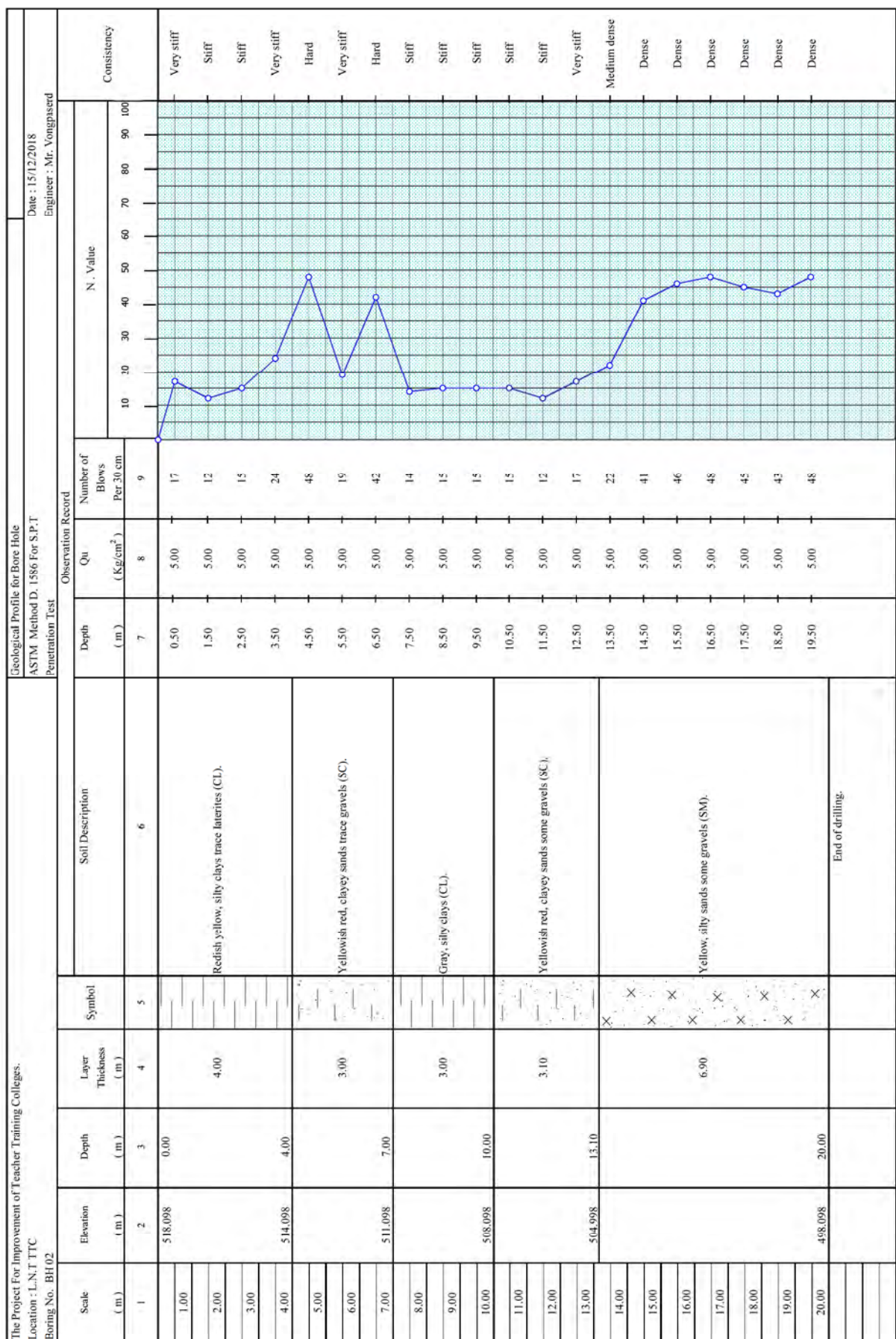
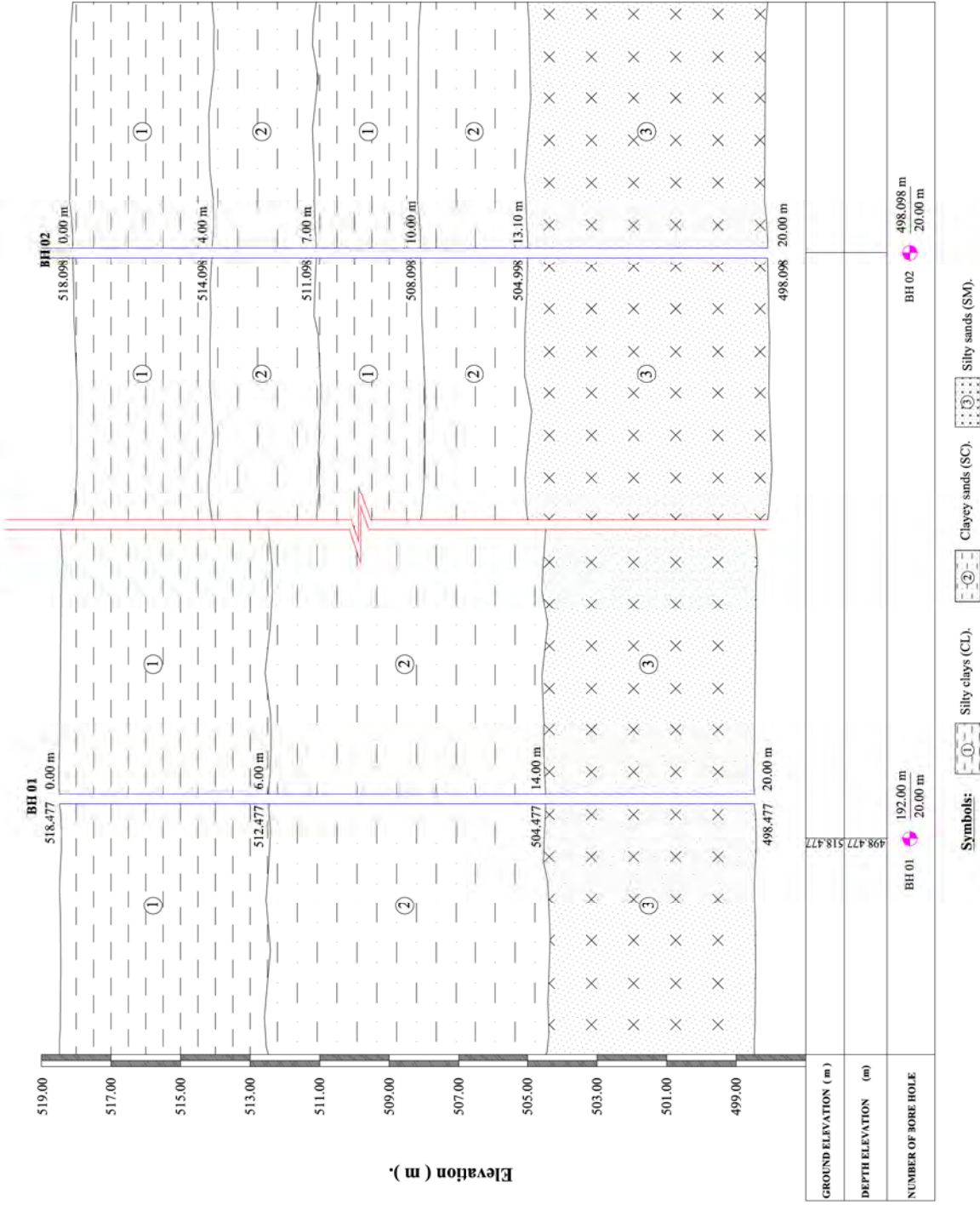


Figure A-2 Geological Profile for Bore Hole BH02



**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Luang Nam Tha TTC, Luang Nam Tha Province**



**Figure A-3 Geological Lithological Profile of Bore Hole**

NO SCALE

**LOCATION PLAN OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Luang Prabang TTC, Vientiane Province**

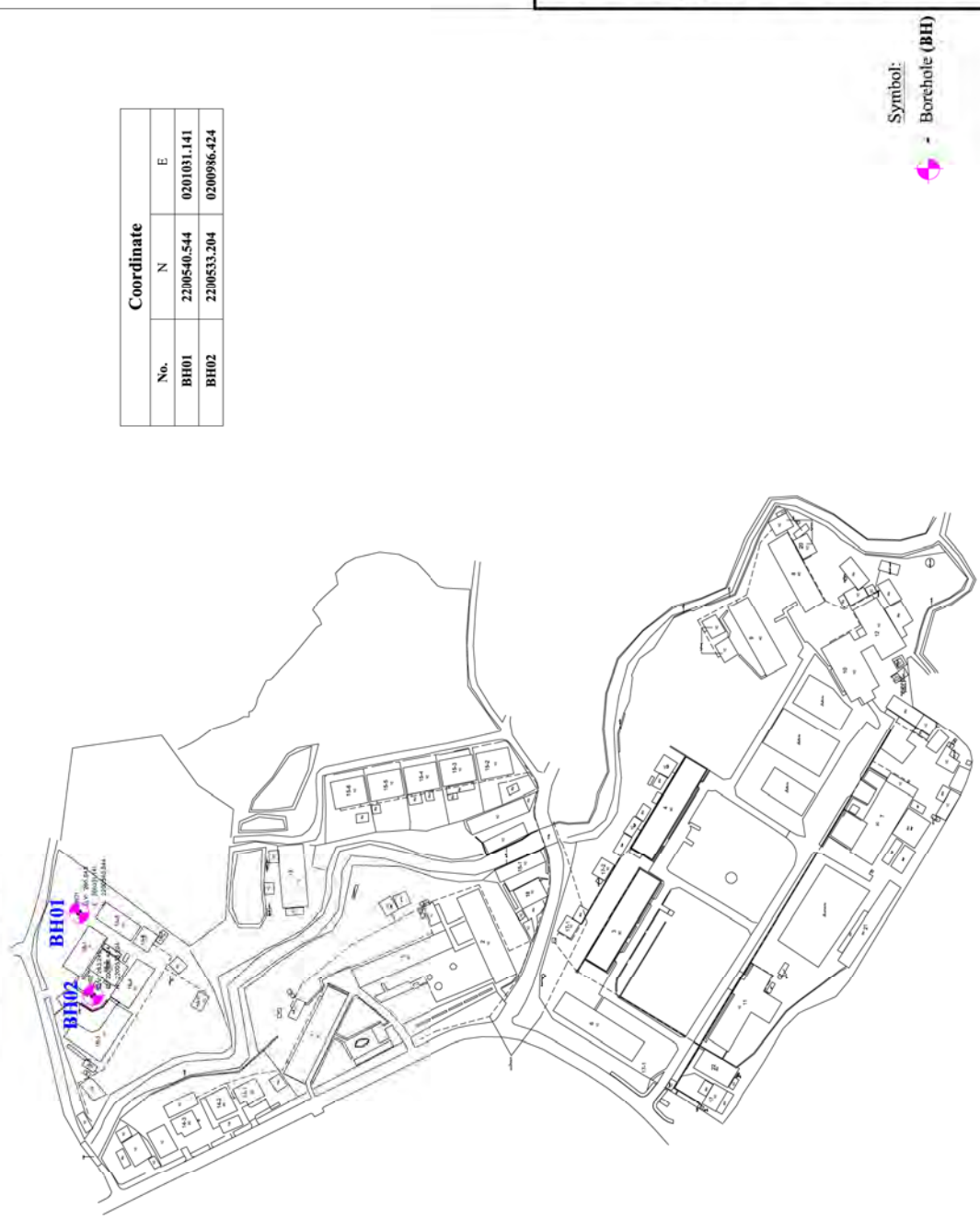
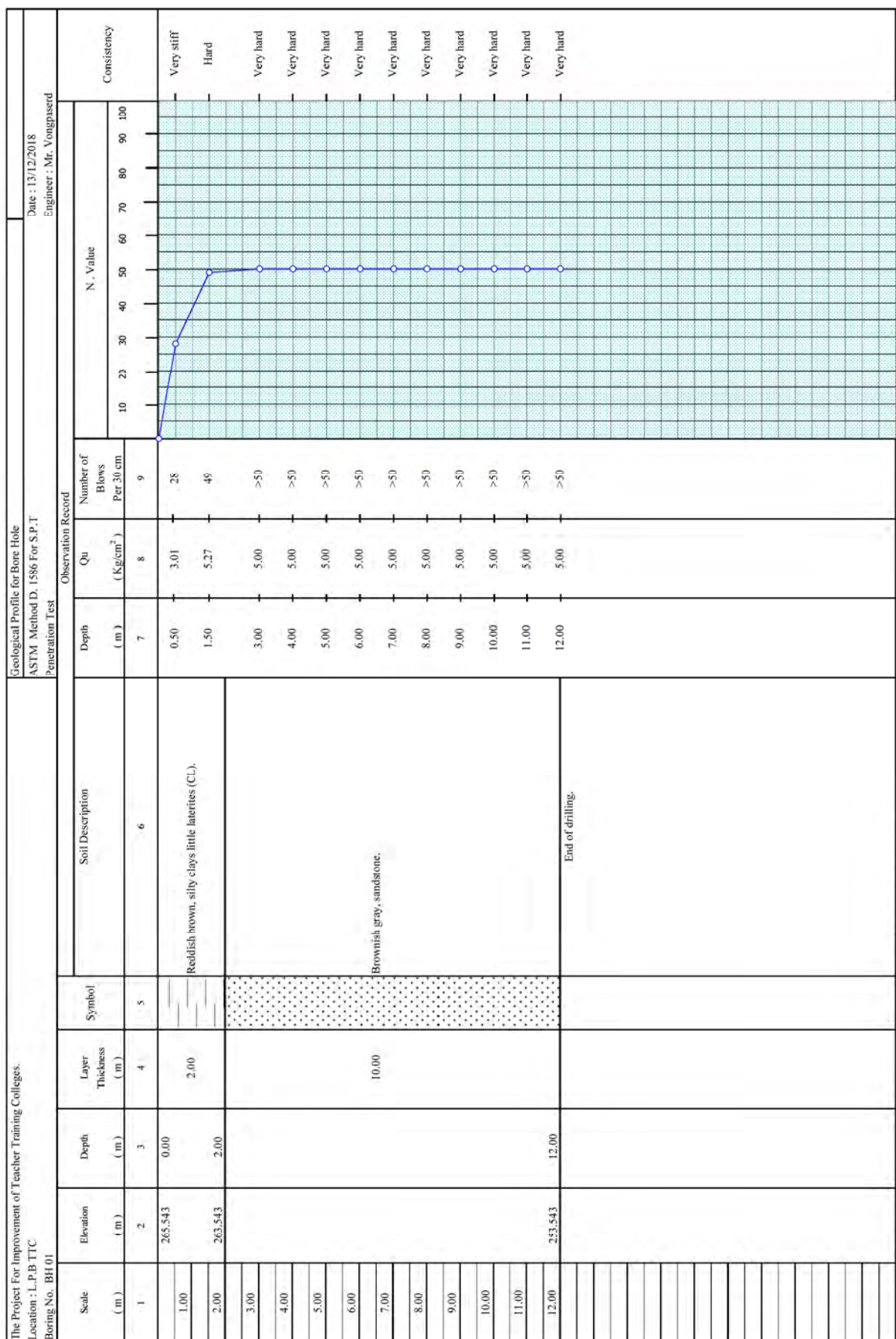


Figure 2 Location Plan of Bore Hole



Remarks :  
N : Blows Per 30 cm ( 63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler )  
Qu : Unconfined Compressive Strength ( Kg/cm<sup>2</sup> )

Figure A-1 Geological Profile for Bore Hole BH01



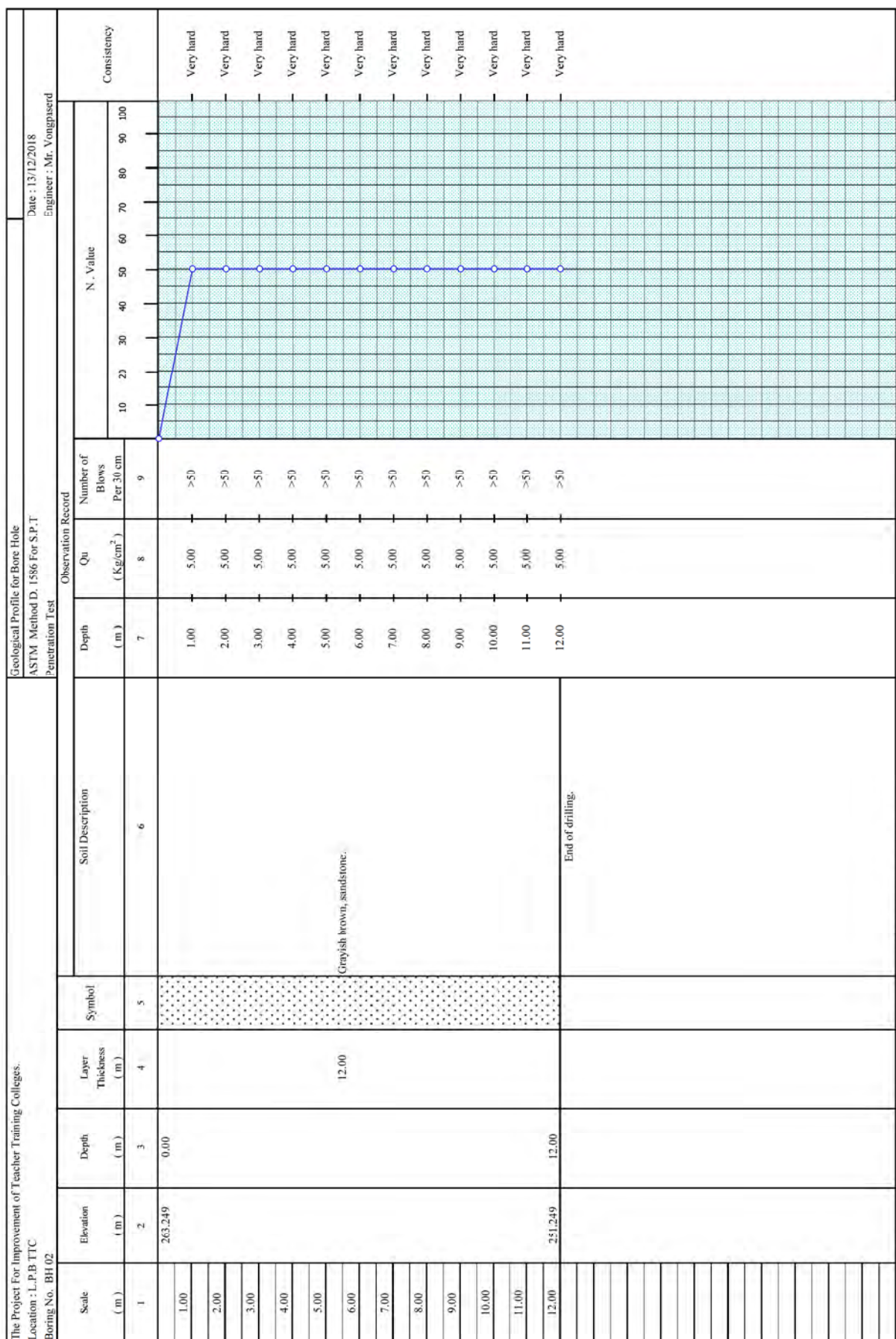
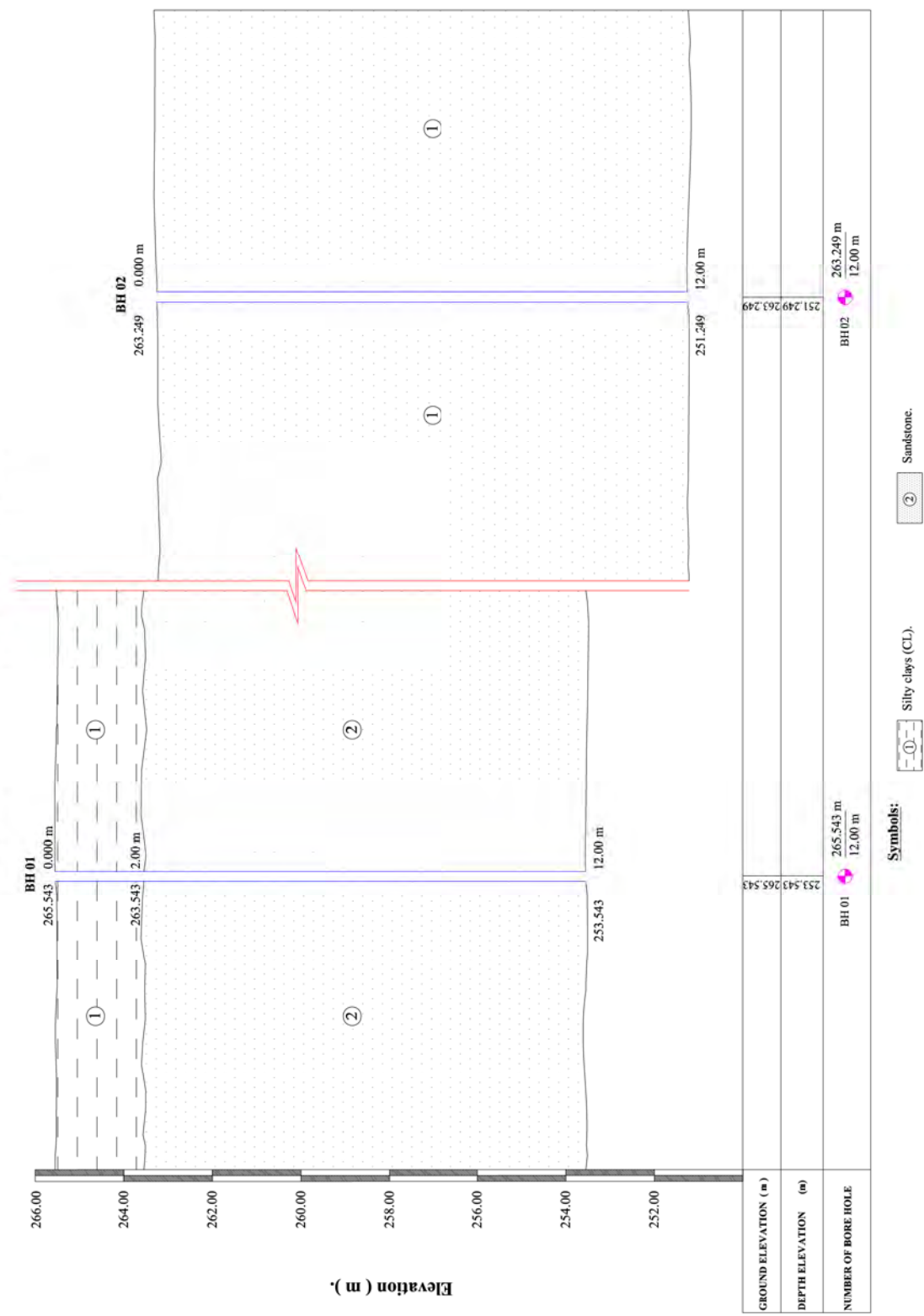


Figure A-2 Geological Profile for Bore Hole BH02



**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Luang Prabang TTC, Luang Prabang Province**



**Figure A-3 Geological Lithological Profile of Bore Hole**

NO SCALE

# LOCATION PLAN OF BORE HOLE

## THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES

Location : Khang K hay TTC (Xiangkhong Province)

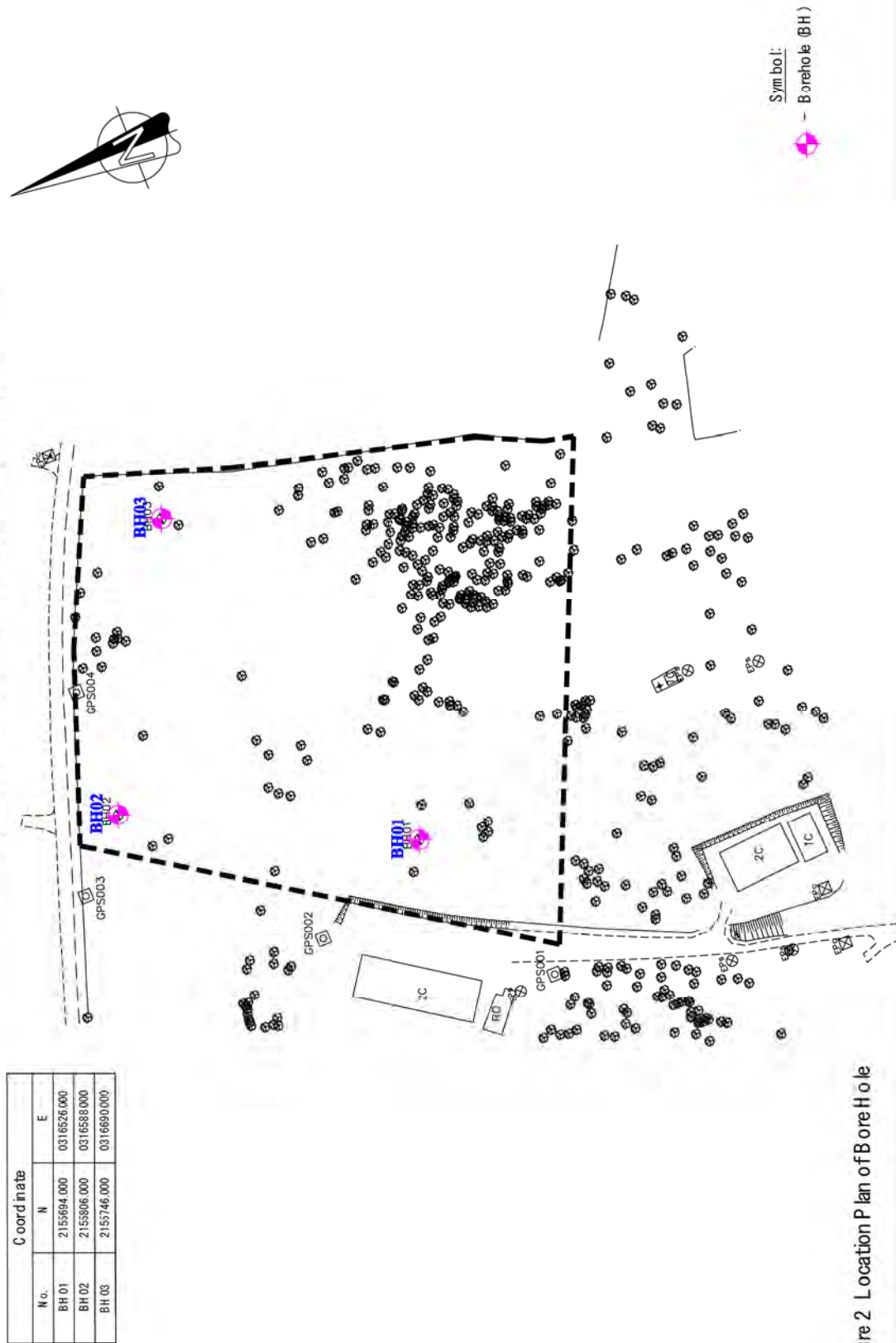


Figure 2 Location Plan of Bore Hole

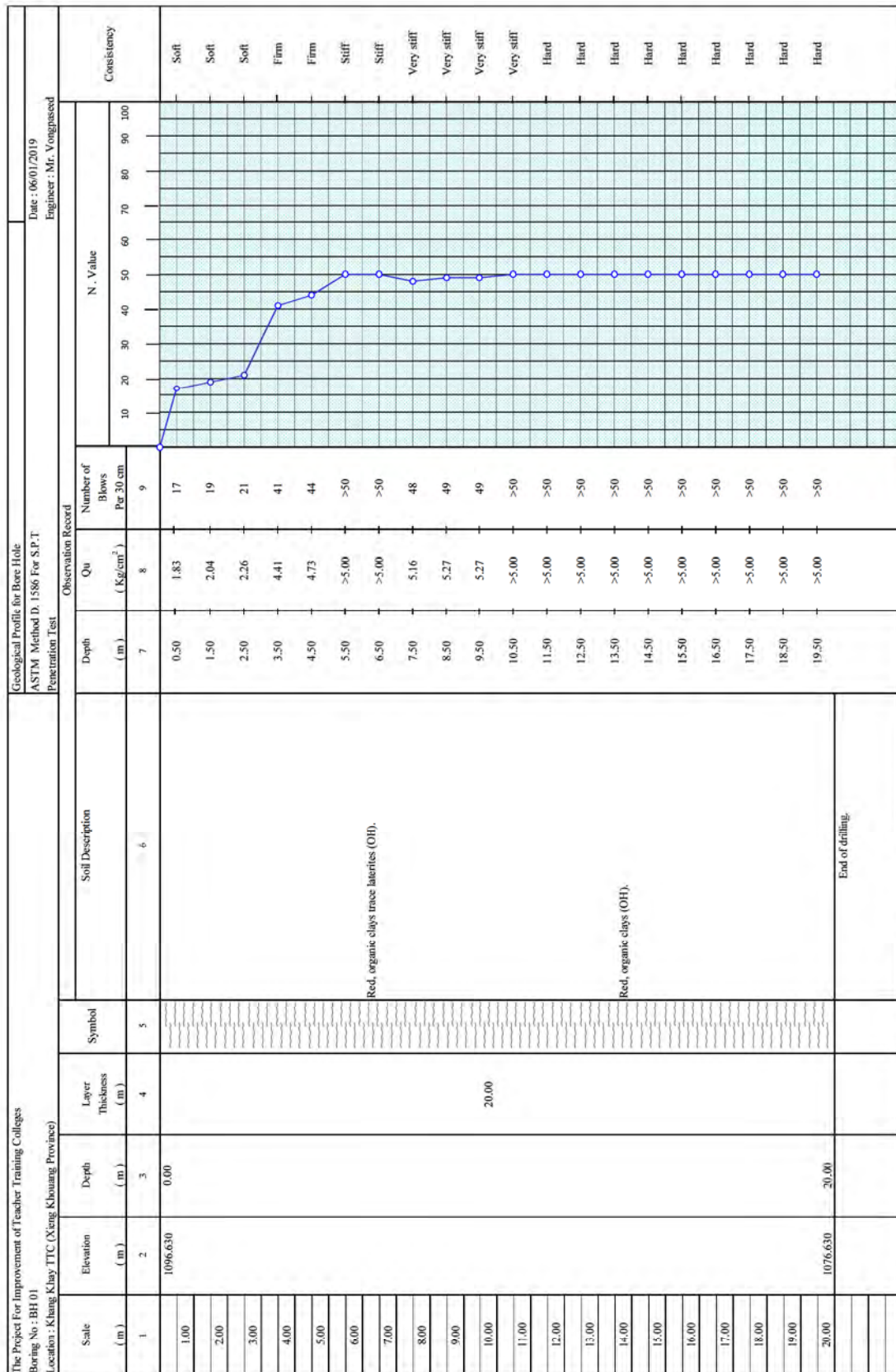


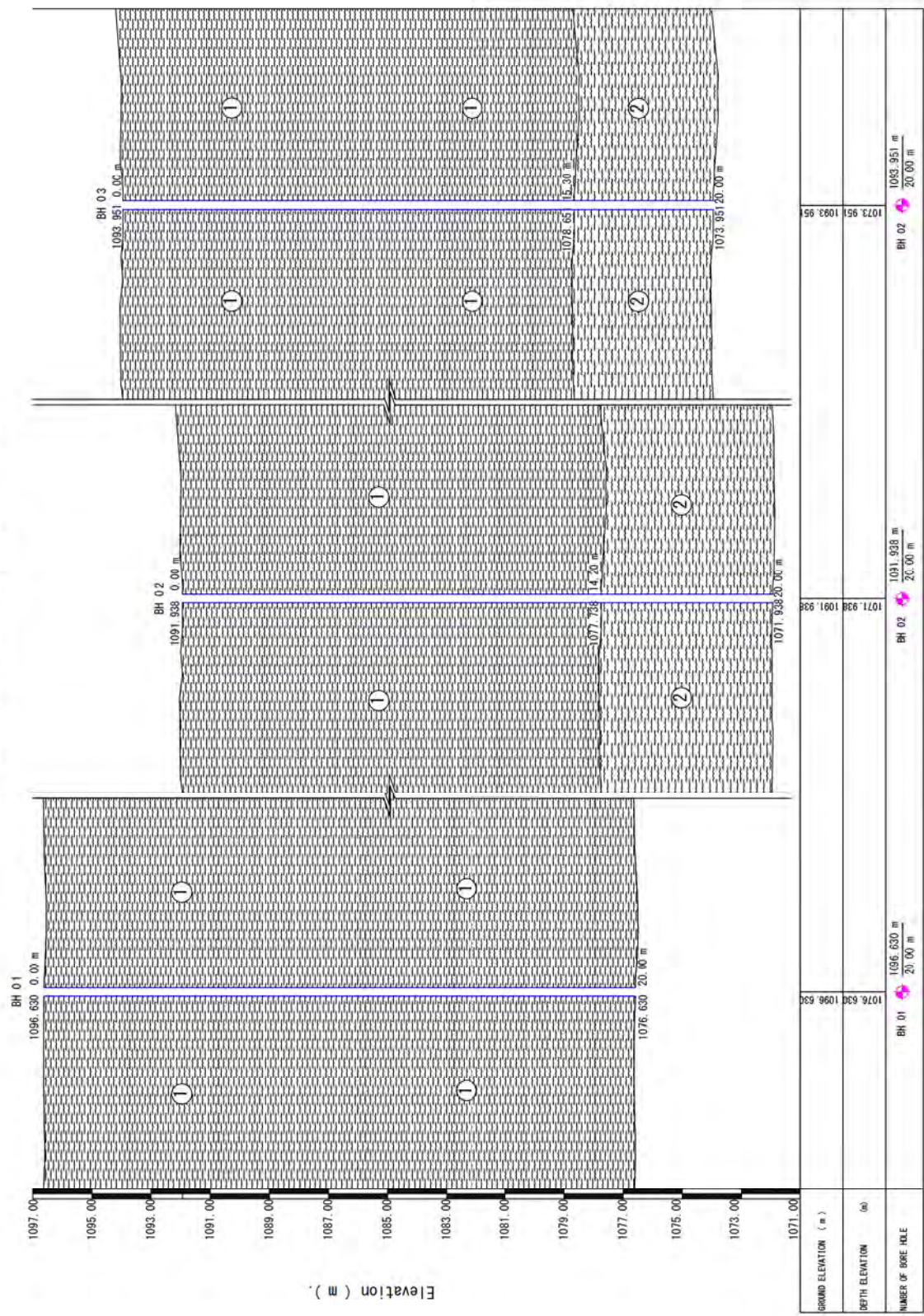
Figure A-1 Geological Profile for Bore Hole BH01







**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
 Location Khang Khay TTC (Xiangkhong Province)



Symbols:

Organic clays (OH)

Organic silty (OL)

Figure A-4 Geological Lithological Profile of Bore Hole

NO SCALE



**LOCATION PLAN OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
 Location : Ban Keun TTC, Vientiane Province



Figure 2 Location Plan of Bore Hole

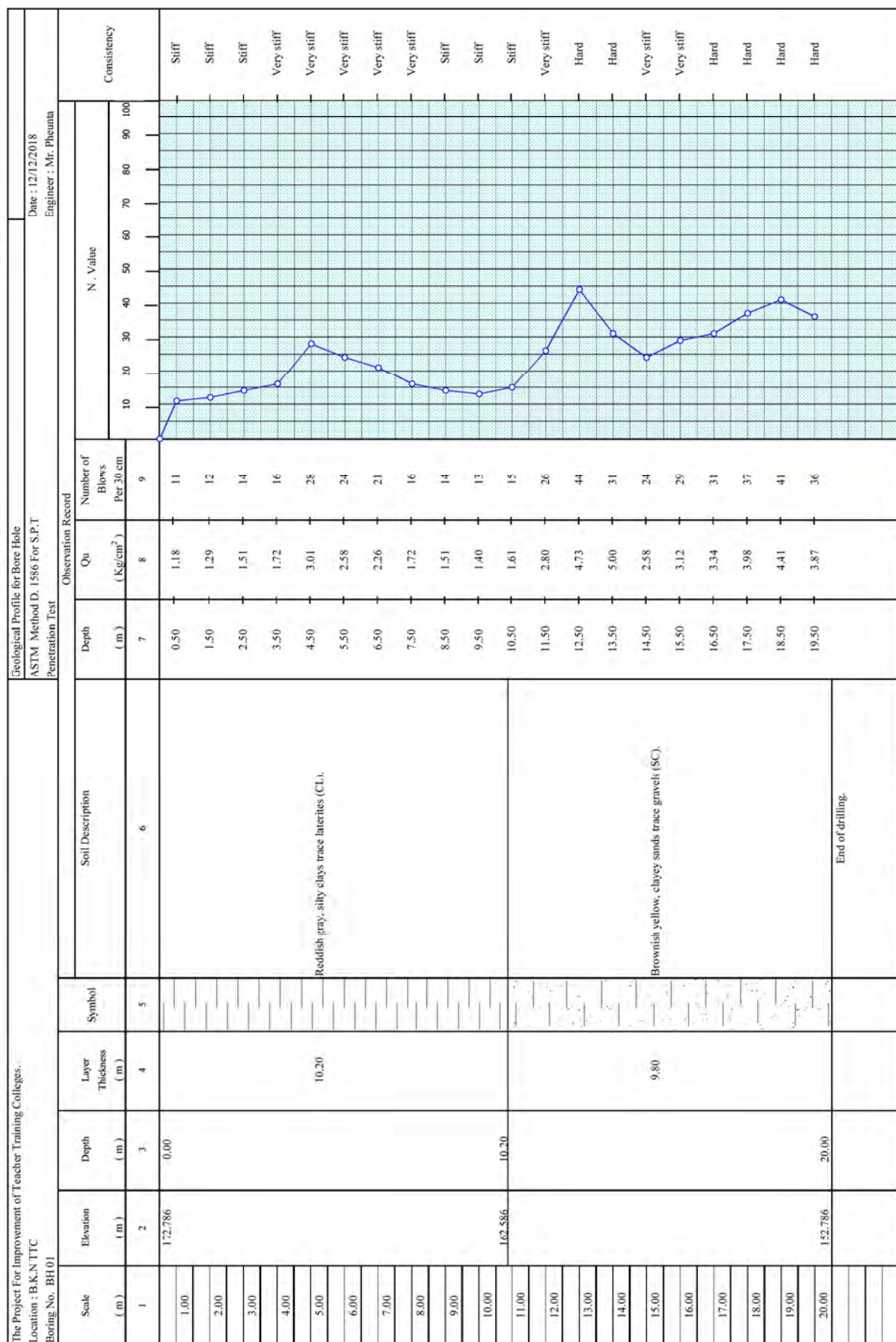


Figure A-1 Geological Profile for Bore Hole BH01



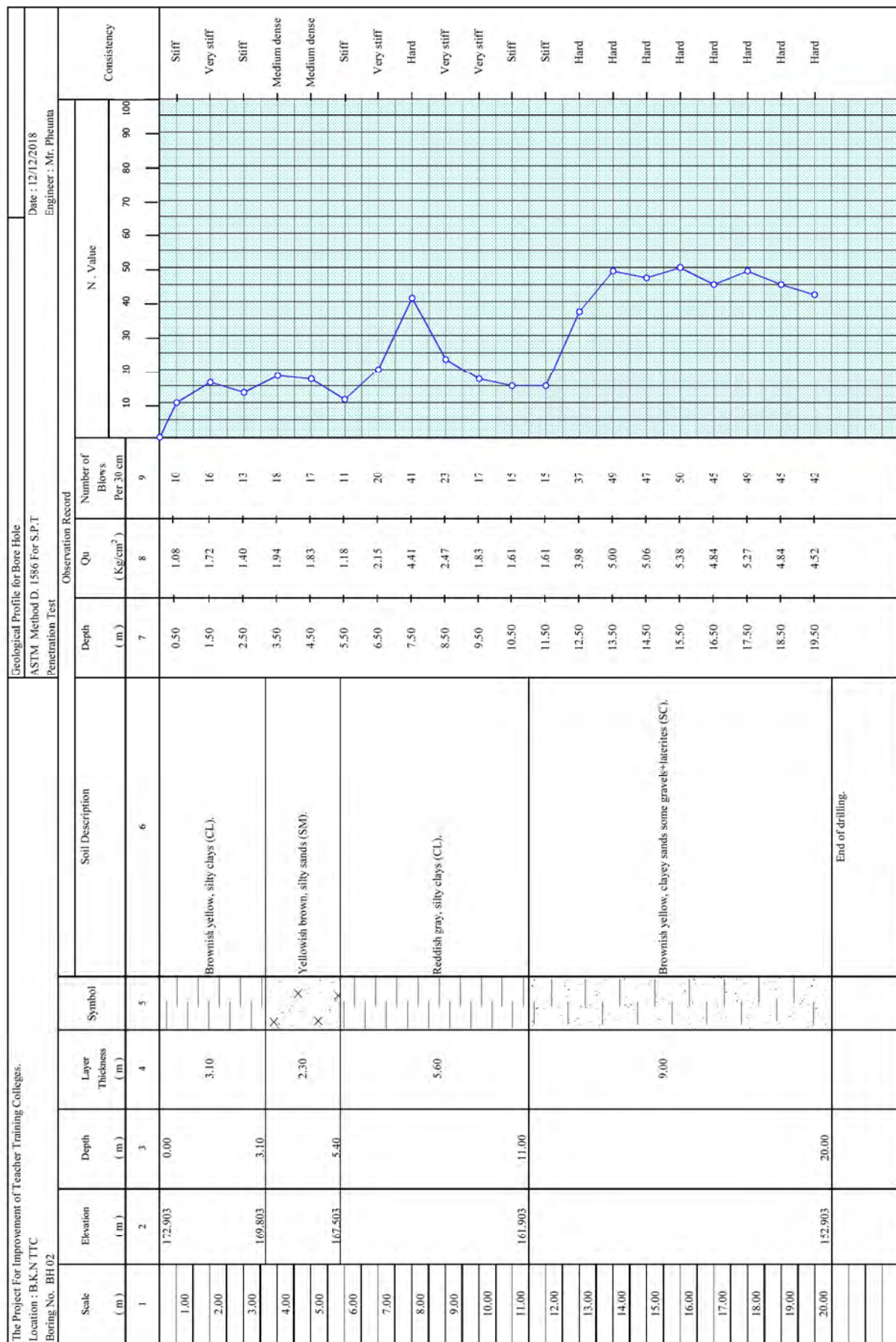


Figure A-2 Geological Profile for Bore Hole BH02

**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Ban Keun TTC, Vientiane Province**

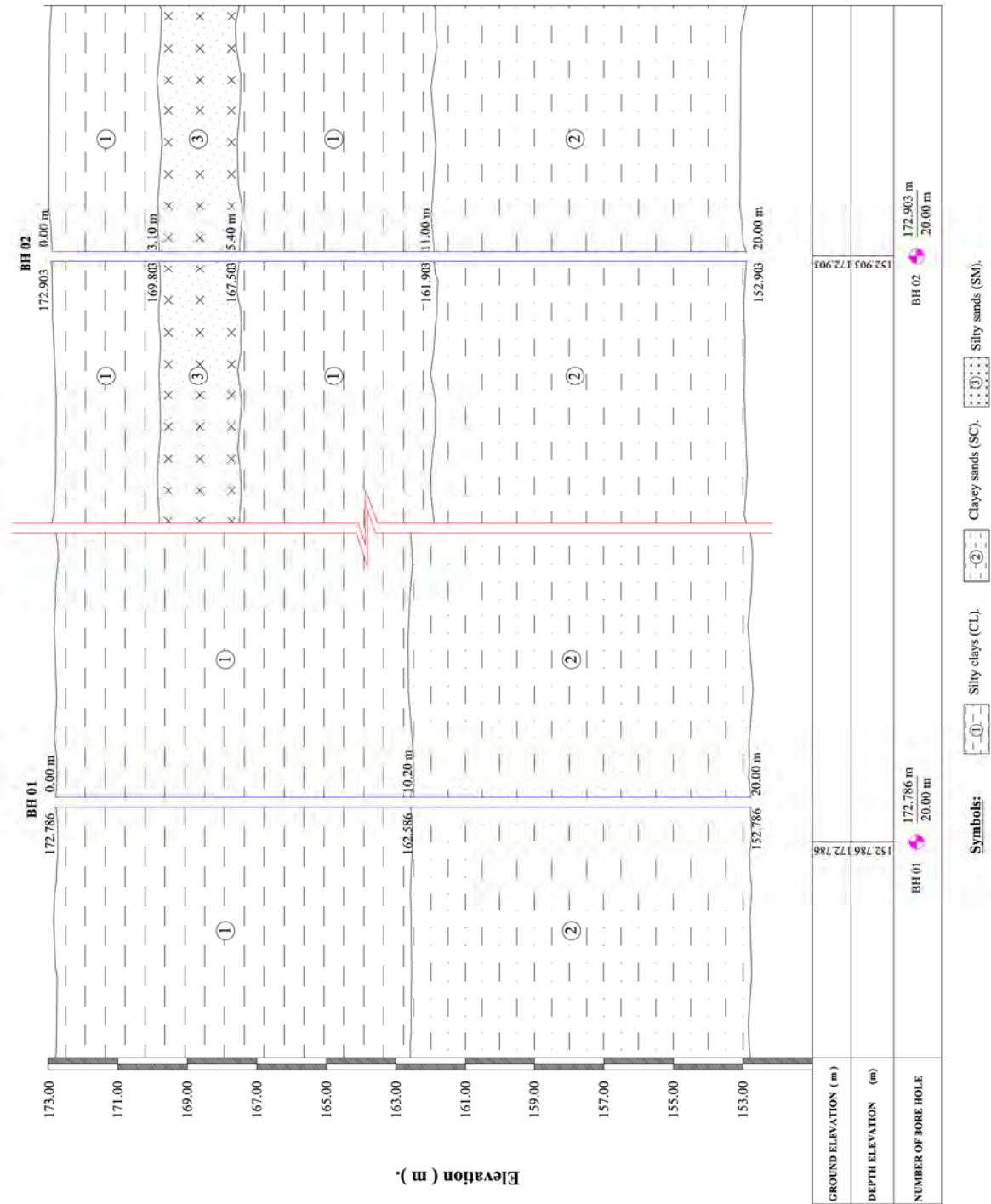


Figure A-3 Geological Lithological Profile of Bore Hole

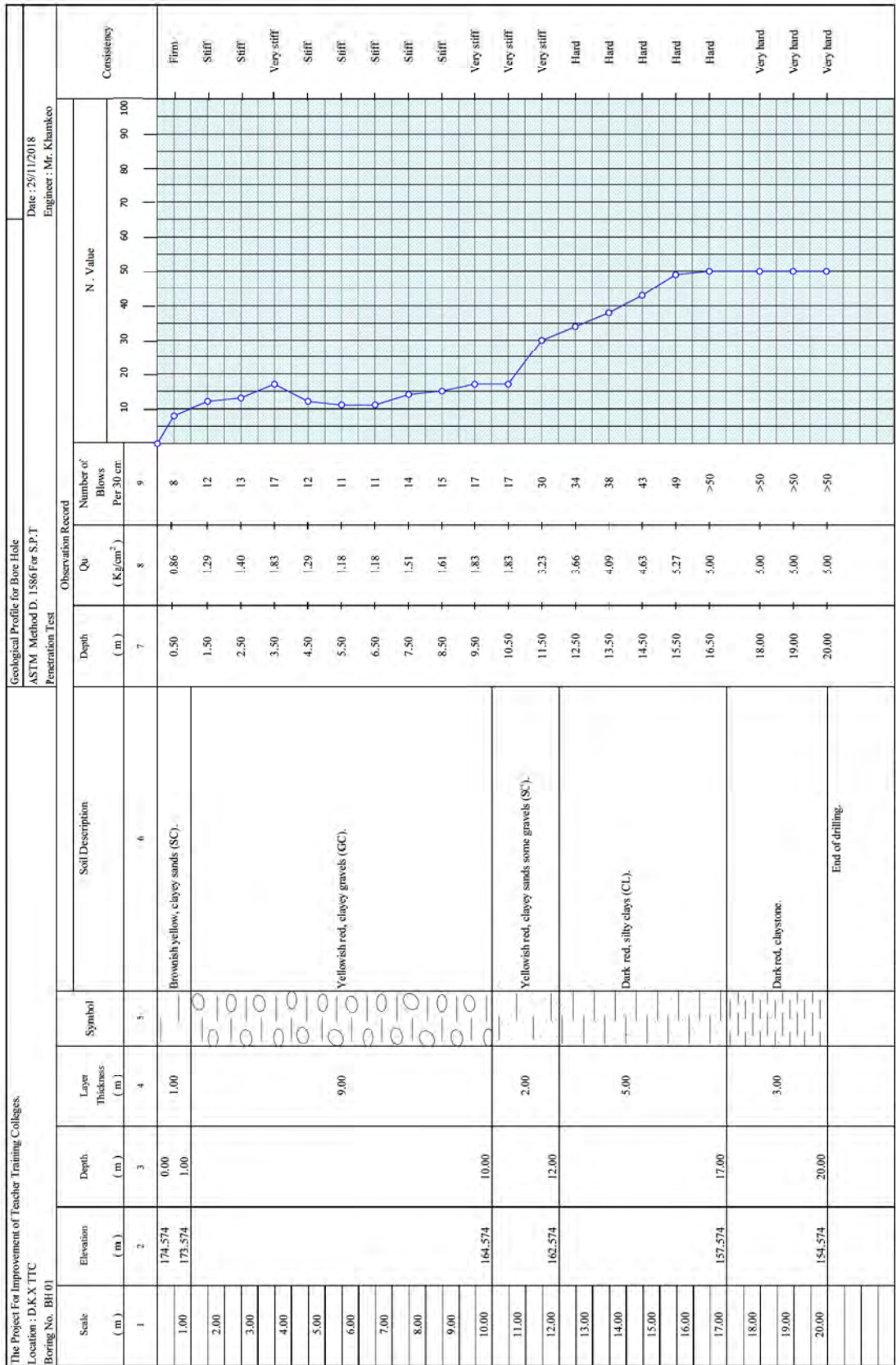
**LOCATION PLAN OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Dong Kham Xang TTC, Vientiane Capital**

| Coordinate |             |             |
|------------|-------------|-------------|
| No.        | N           | E           |
| BH01       | 1980837.556 | 0252566.142 |
| BH02       | 1980986.128 | 0252627.703 |
| BH03       | 1981144.900 | 0252631.101 |



Figure 2 Location Plan of Bore Hole

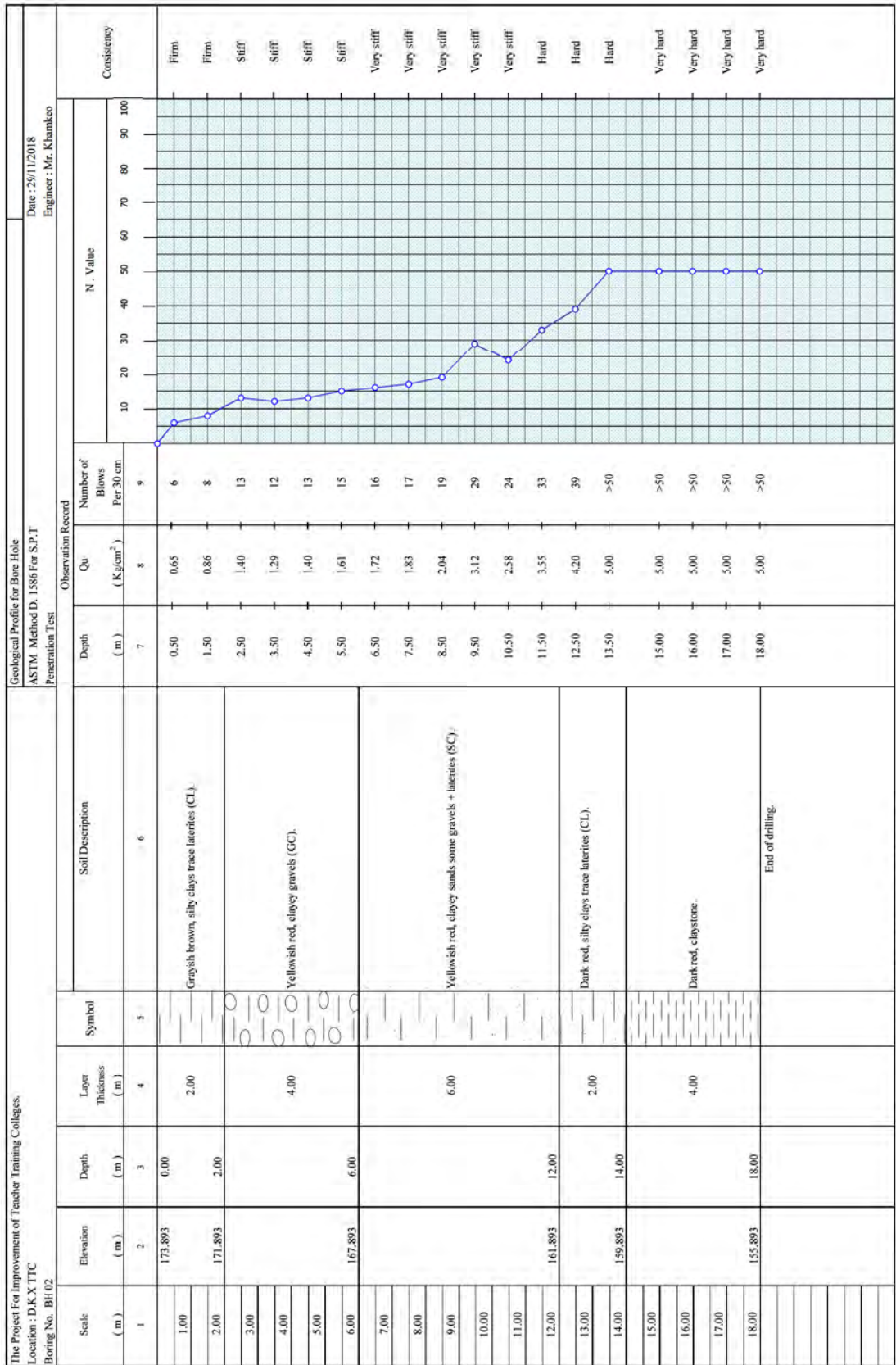




Remarks : N : Blows Per 30 cm (63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler )  
Qu : Unconfined Compressive Strength ( Kg/cm<sup>2</sup> )

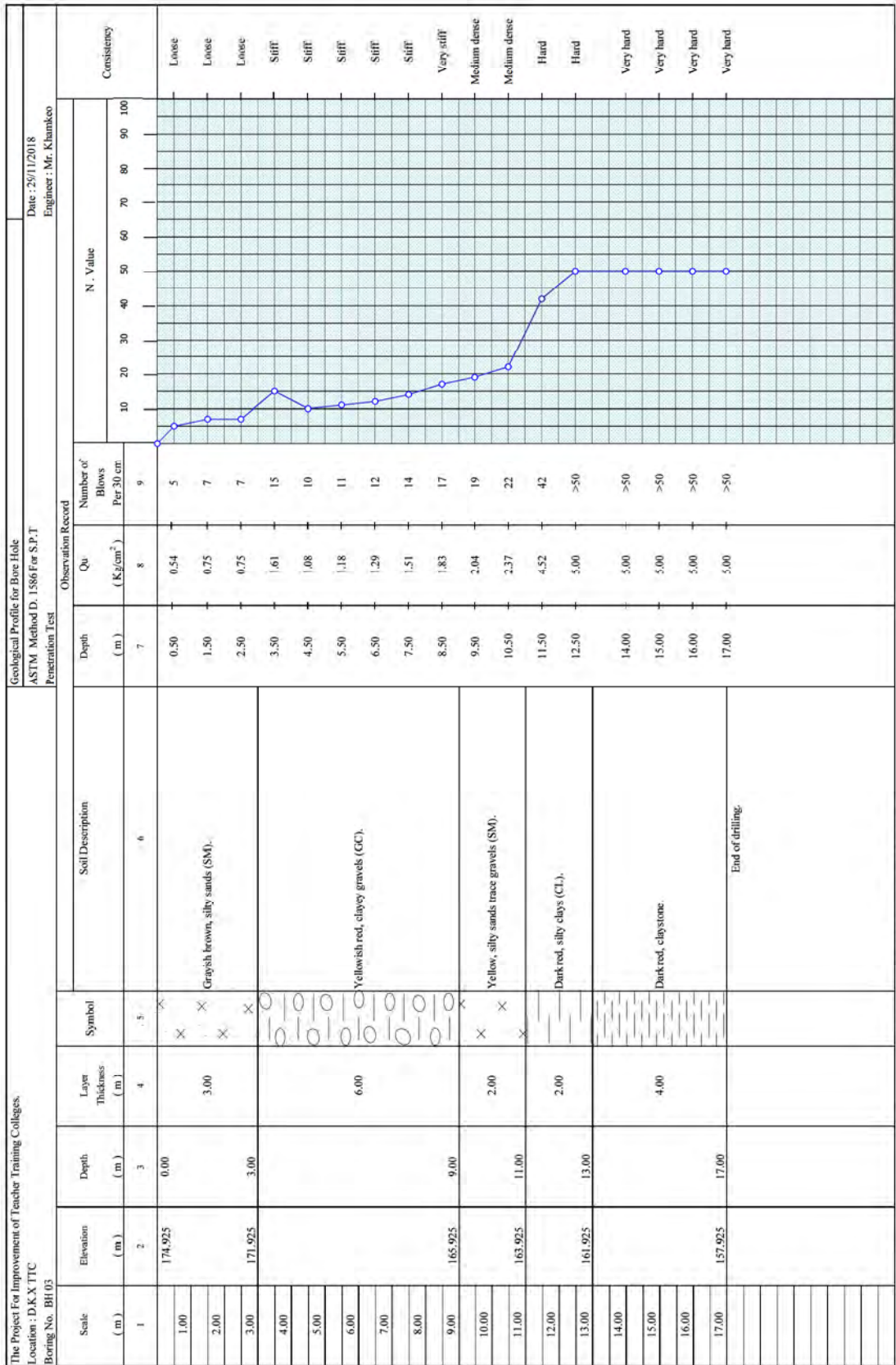
Figure A-1 Geological Profile for Bore Hole BH01





Remarks : N : Blows Per 30 cm (63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler)  
Qu : Unconfined Compressive Strength (Kg/cm<sup>2</sup>)

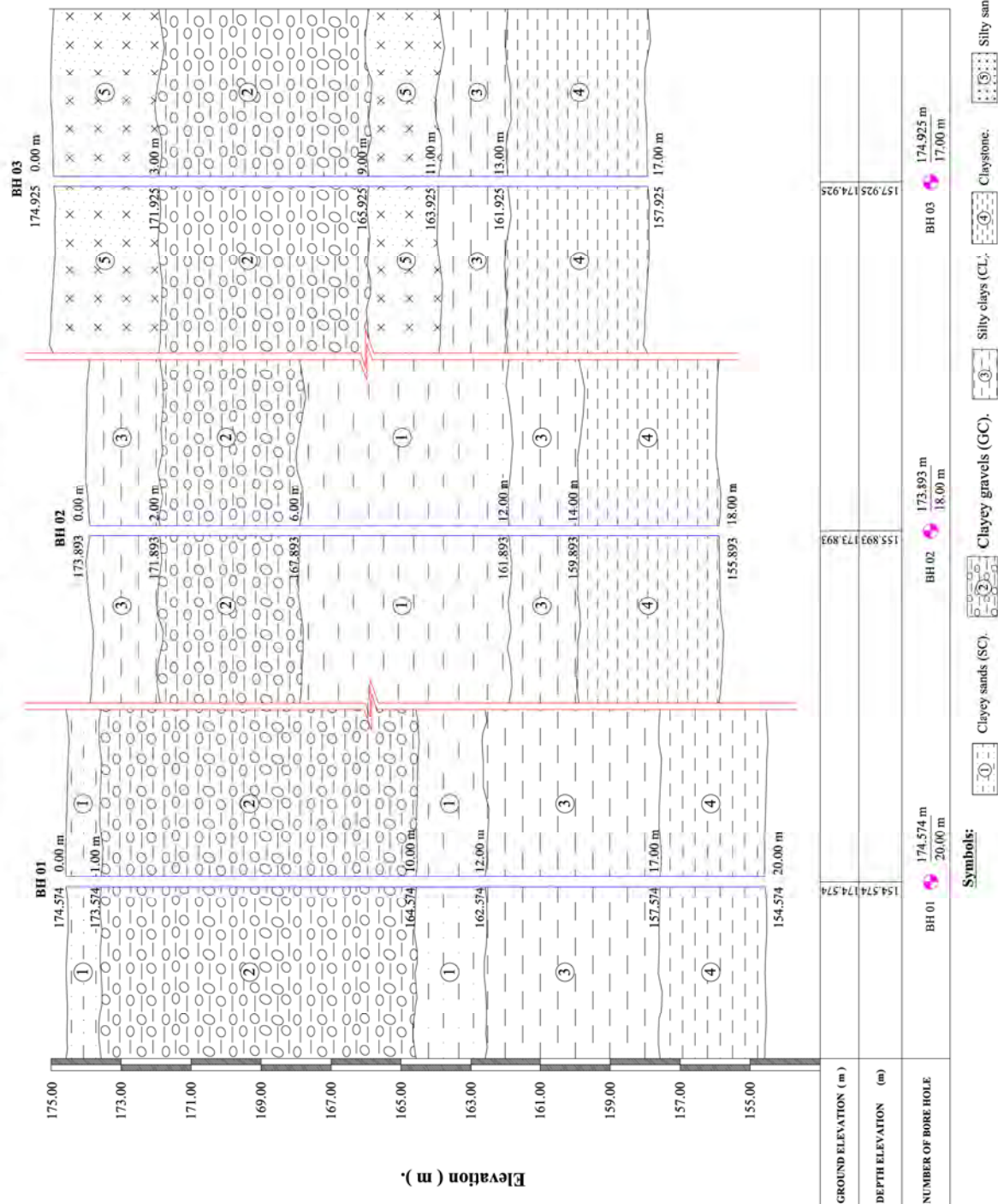
Figure A-2 Geological Profile for Bore Hole BH02



Remarks : N : Blows Per 30 cm (63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler)  
Qu : Unconfined Compressive Strength (Kg/cm<sup>2</sup>)

Figure A-3 Geological Profile for Bore Hole BH03

**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location : Dong Kham Xang TTC, Vientiane Capital**



**Figure A-4 Geological Lithological Profile of Bore Hole**

NO SCALE



LOCATION PLAN OF BORE HOLE

THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES

Location :Savannakhet TTC, Savannakhet Province

| Coordinate |             |             |
|------------|-------------|-------------|
| No.        | N           | E           |
| BH01       | 1835013.545 | 0476682.363 |
| BH02       | 1834924.791 | 0476736.117 |
| BH03       | 1834956.123 | 0476794.908 |



Figure2 Location Plan of Bore Hole



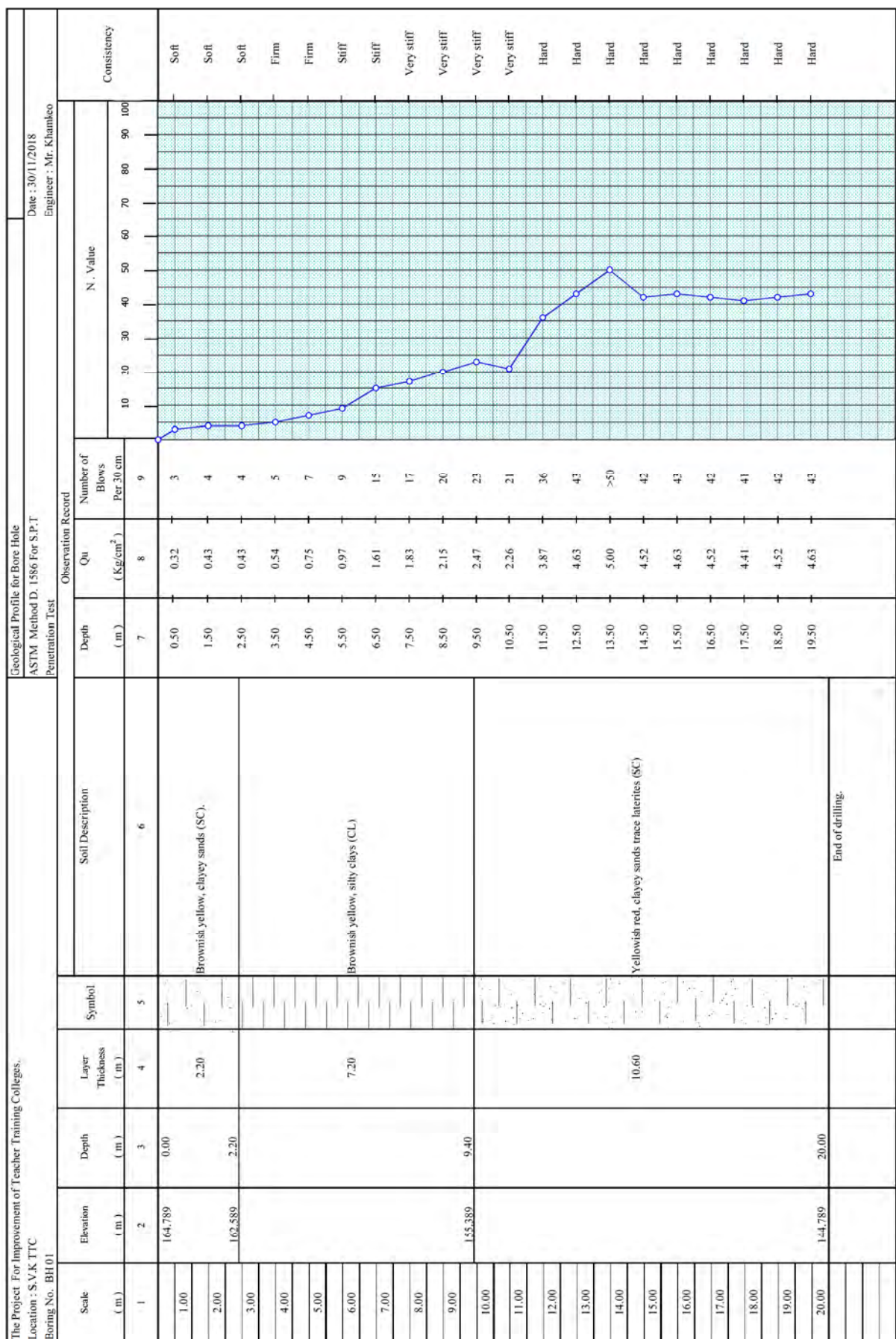


Figure A-1 Geological Profile for Bore Hole BH01

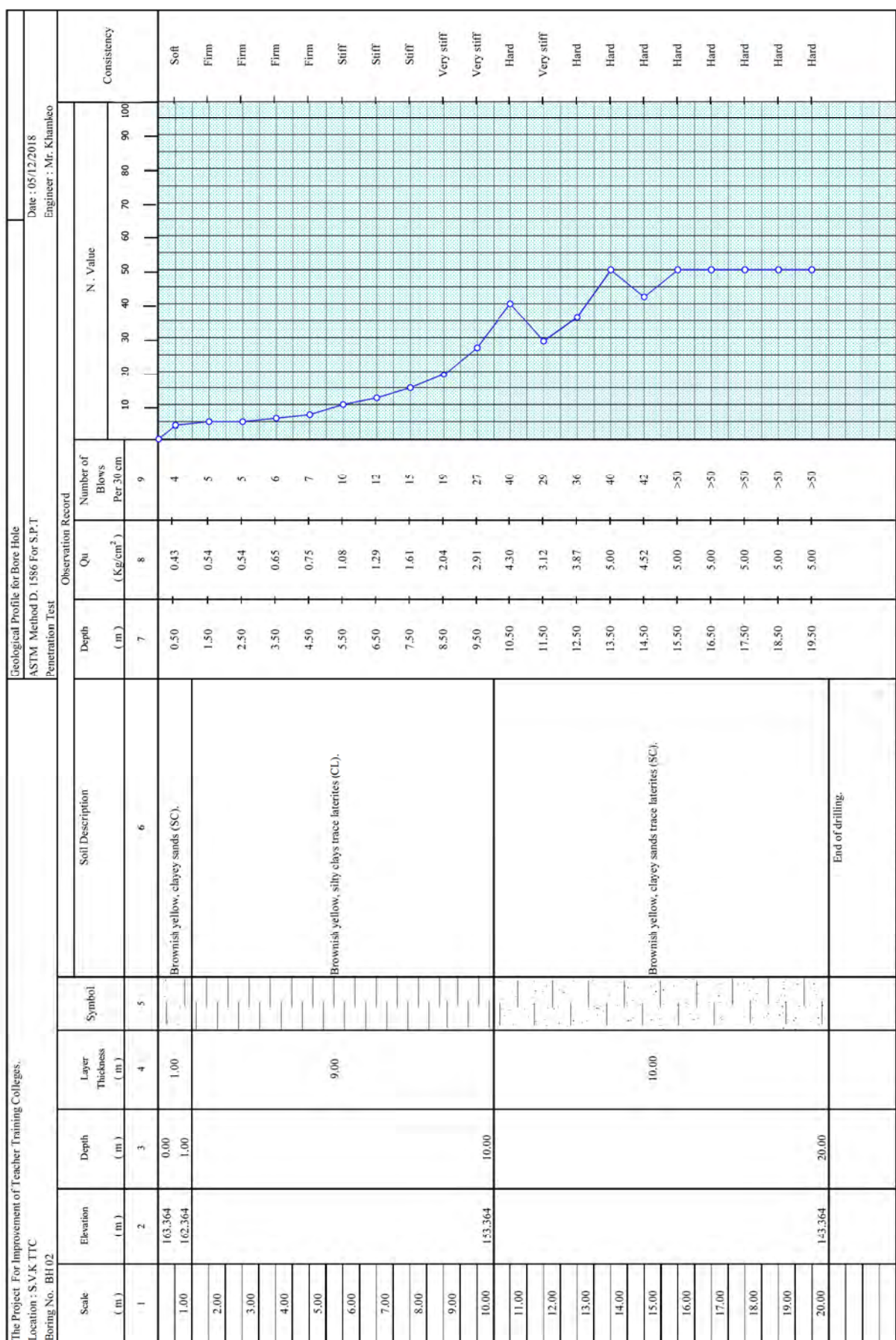


Figure A-2 Geological Profile for Bore Hole BH02



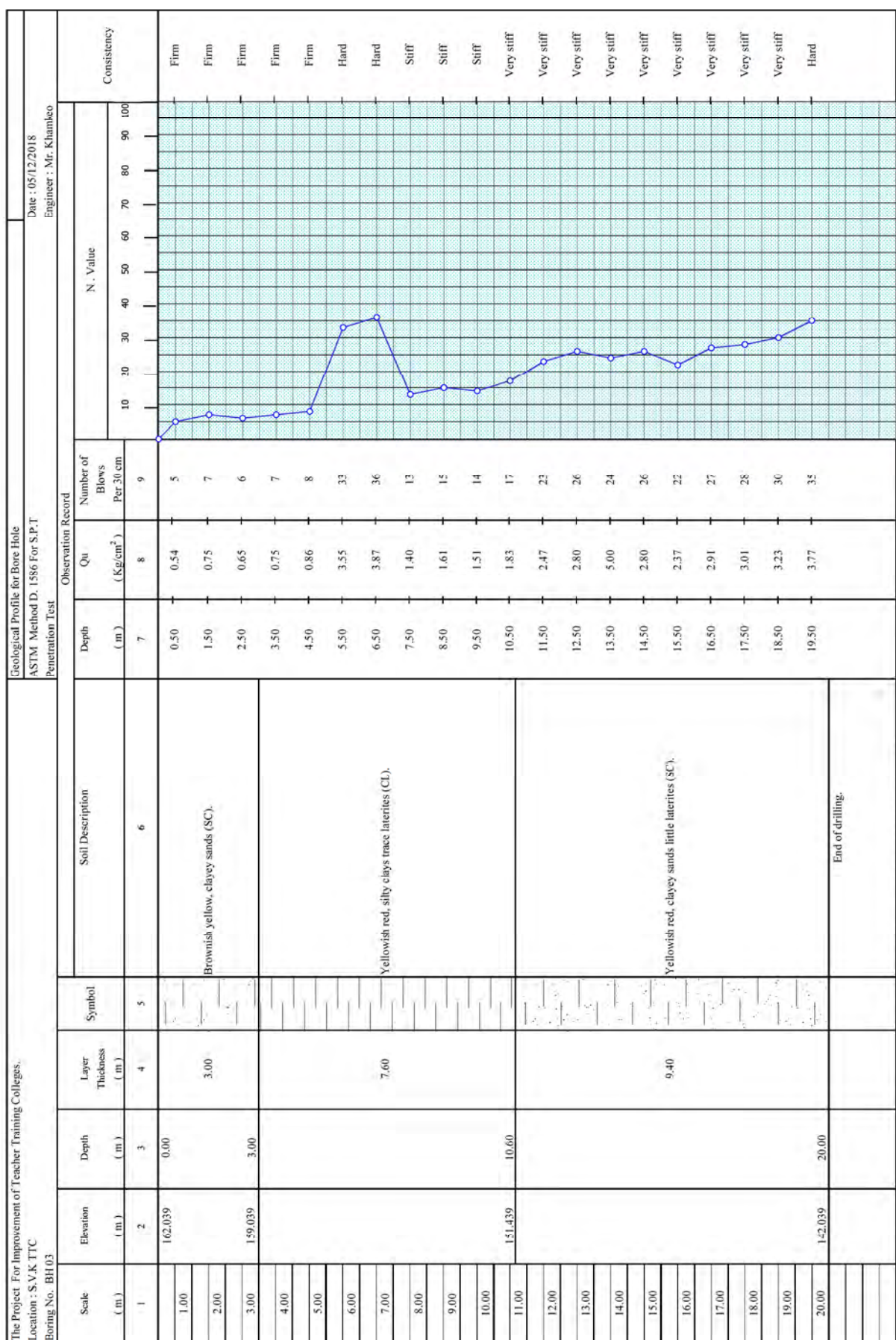


Figure A-3 Geological Profile for Bore Hole BH03

GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE  
THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES  
Location :Savannakhet TTC, Savannakhet Province

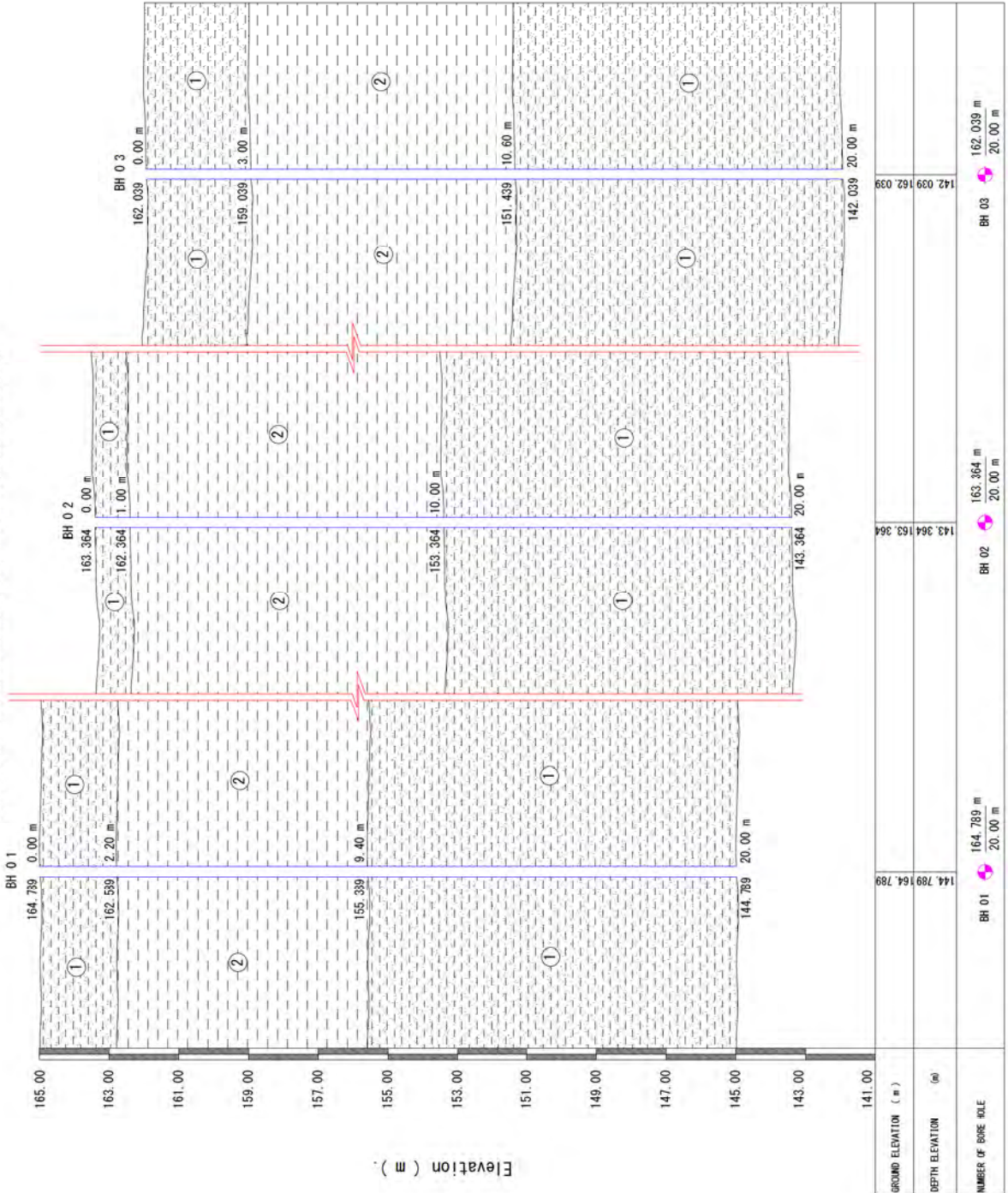


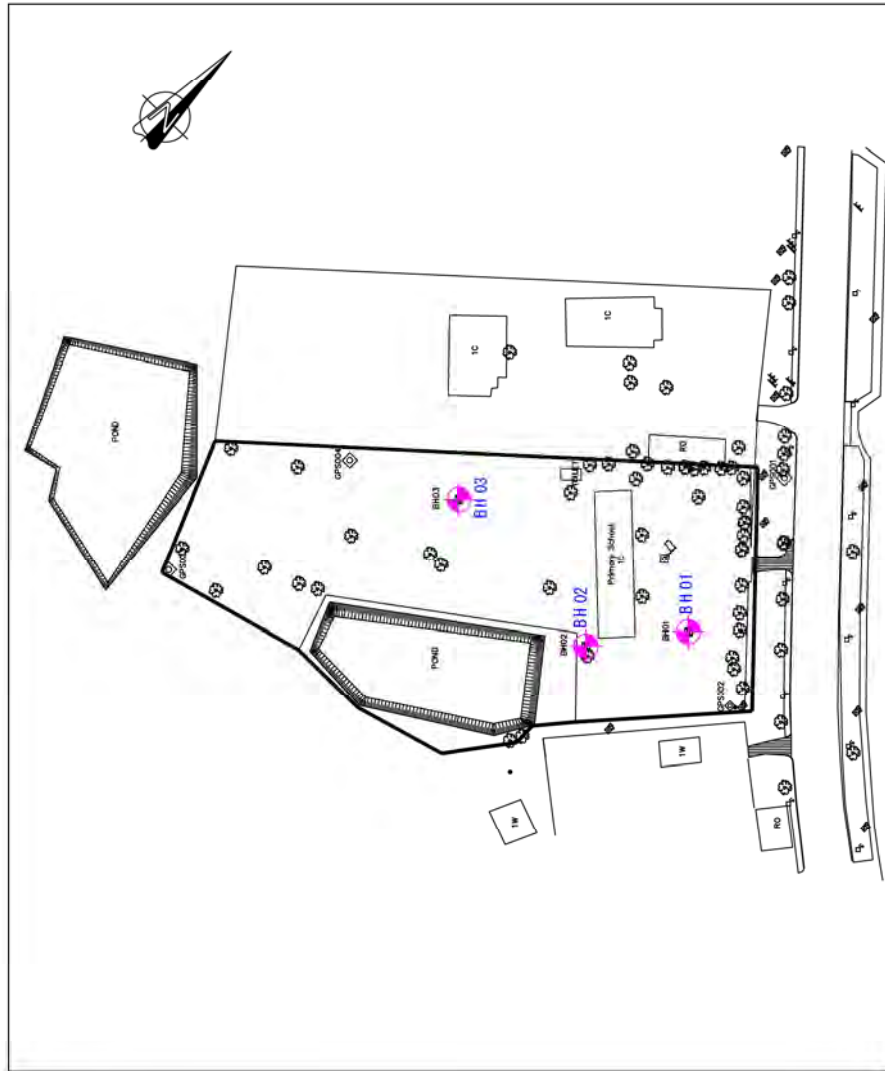
Figure A-4 Geological Lithological Profile of Bore Hole

NO SCALE



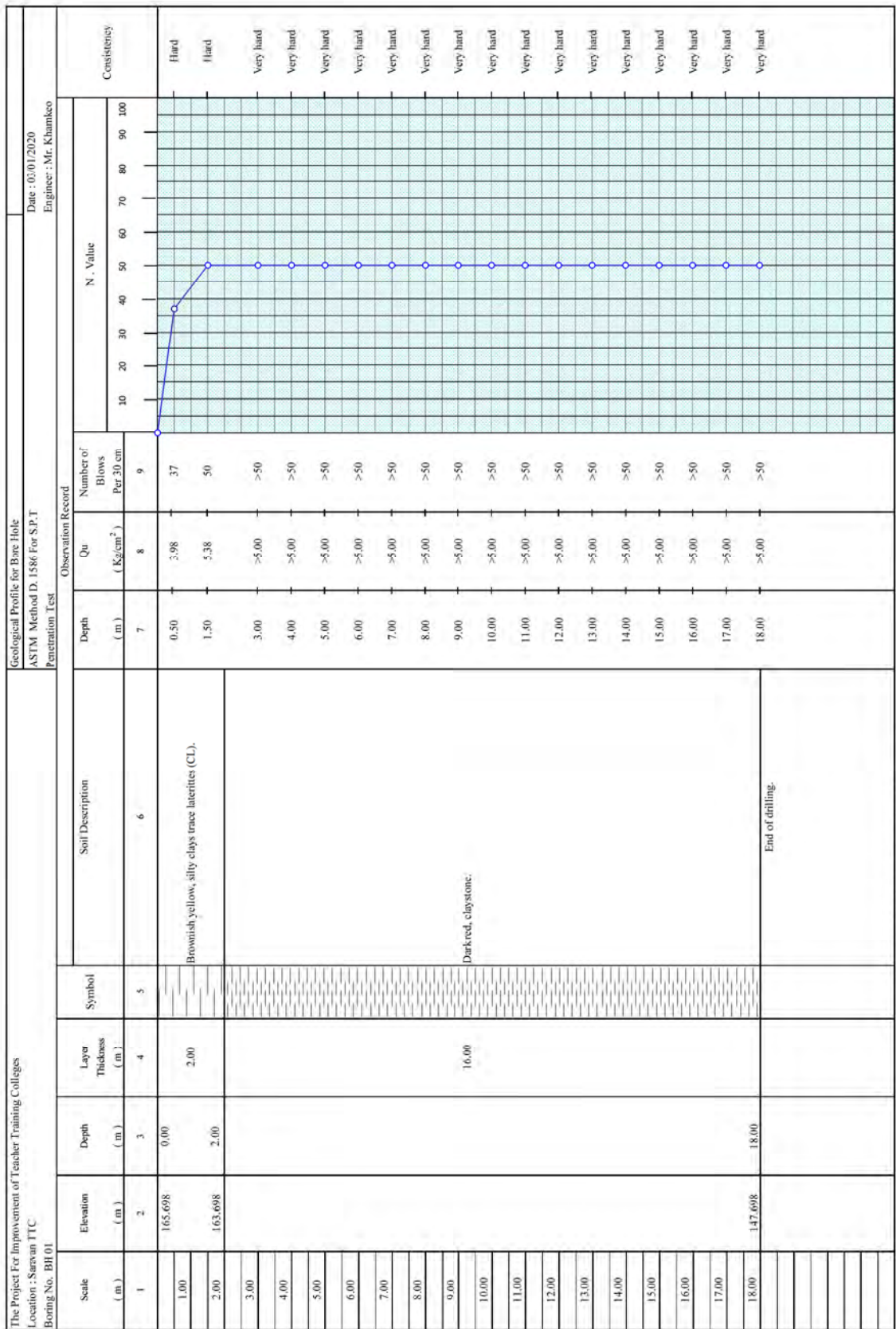
LOCATION PLAN OF BORE HOLE  
THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES  
Location Saravan TTC, Saravan Province

| No.  | Coordinate |            |
|------|------------|------------|
|      | N          | E          |
| BH01 | 1737829.00 | 0648817.00 |
| BH02 | 1737806.00 | 0648898.00 |
| BH03 | 1737810.00 | 0648844.00 |



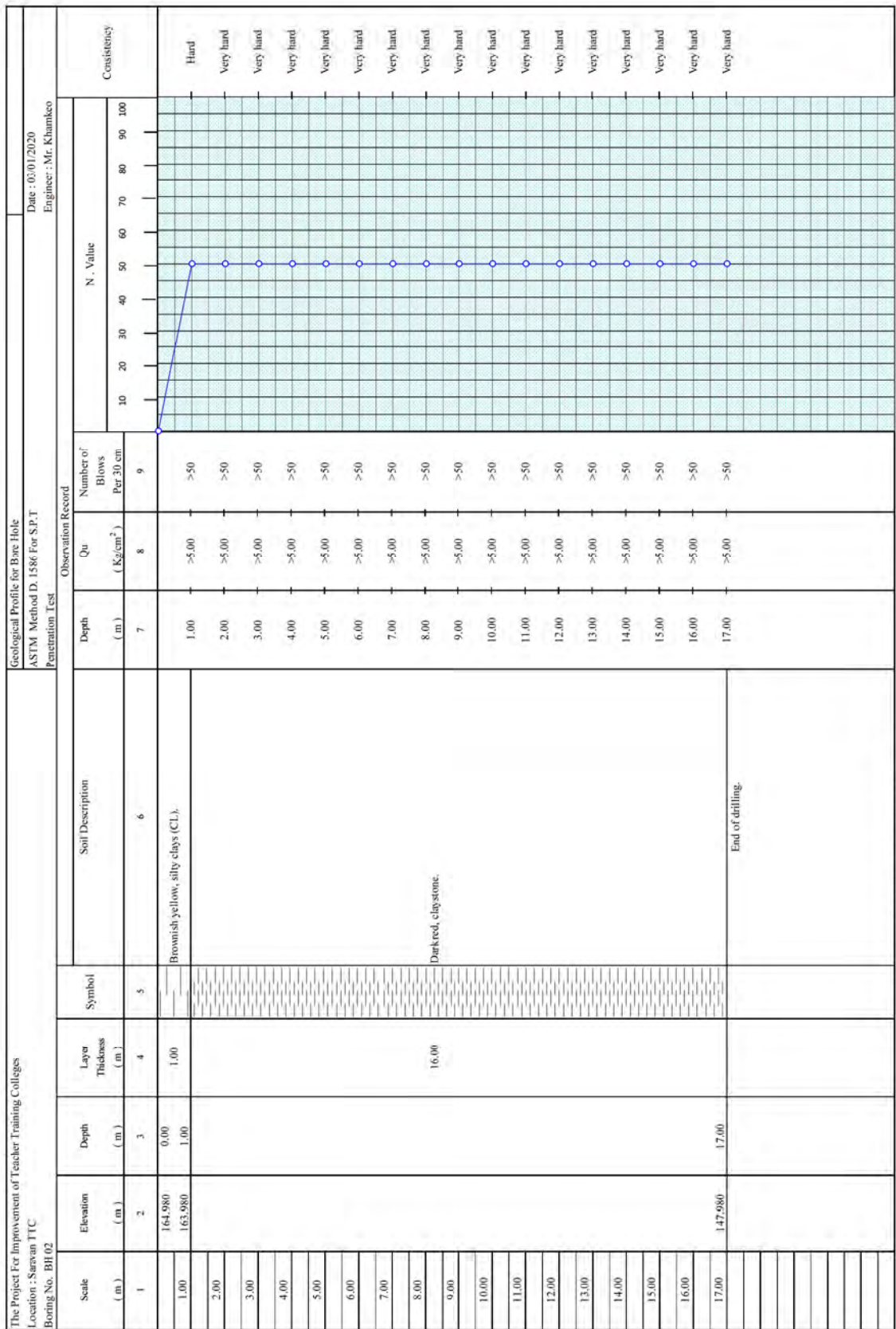
Symbol :  
Borehole

Figure2 Location Plan of Bore Hole



Remarks : N : Blows Per 30 cm ( 63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler )  
Qu : Unconfined Compressive Strength ( Kg/cm<sup>2</sup> )

Figure A-1 Geological Profile for Bore Hole BH01



Remarks :  
N : Blows Per 30 cm ( 63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler )  
Qu : Unconfined Compressive Strength ( Kg/cm<sup>2</sup> )

Figure A-2 Geological Profile for Bore Hole BH02



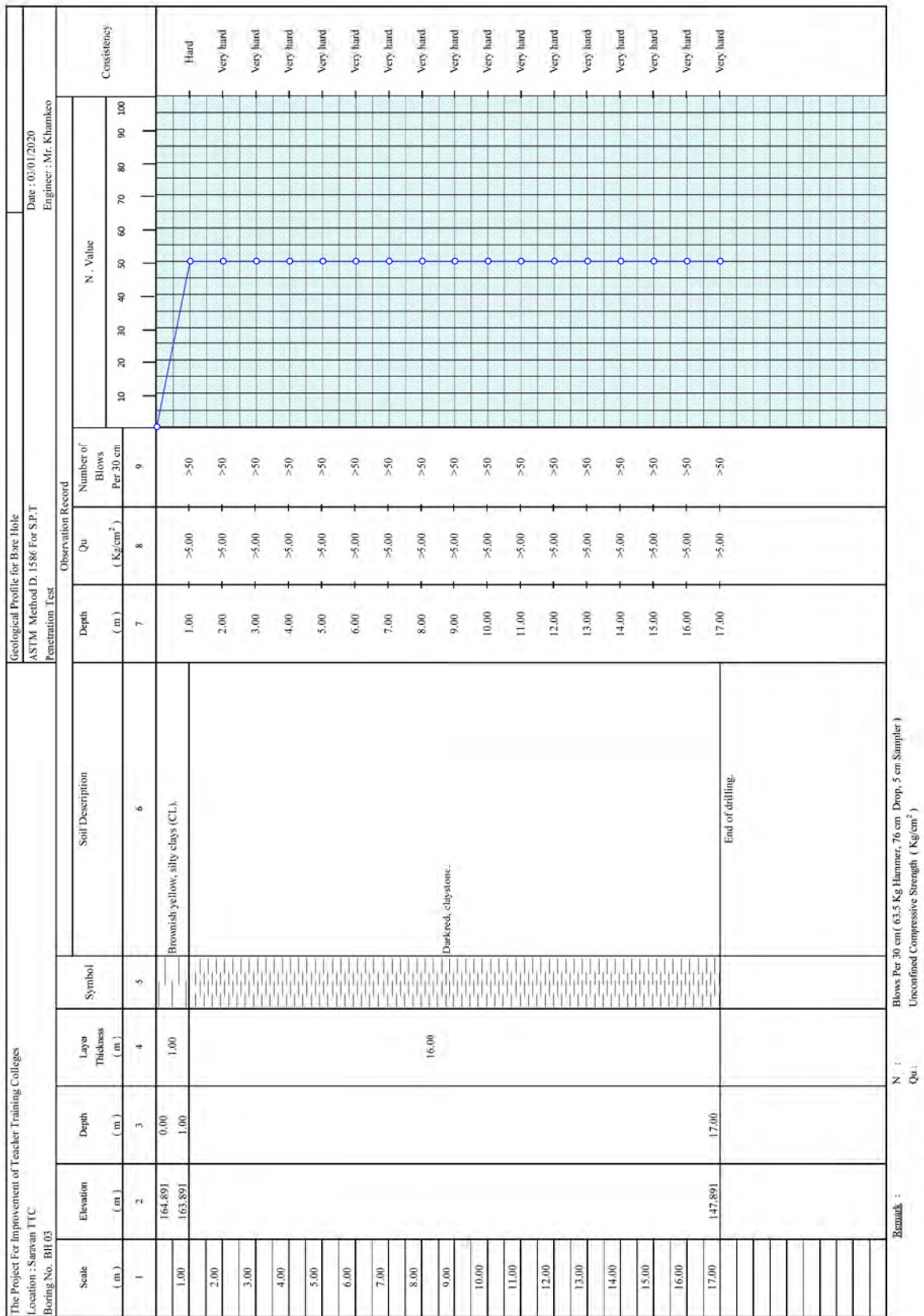


Figure A-3 Geological Profile for Bore Hole BH03

**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
 Location Saravan TTC, Saravan Province

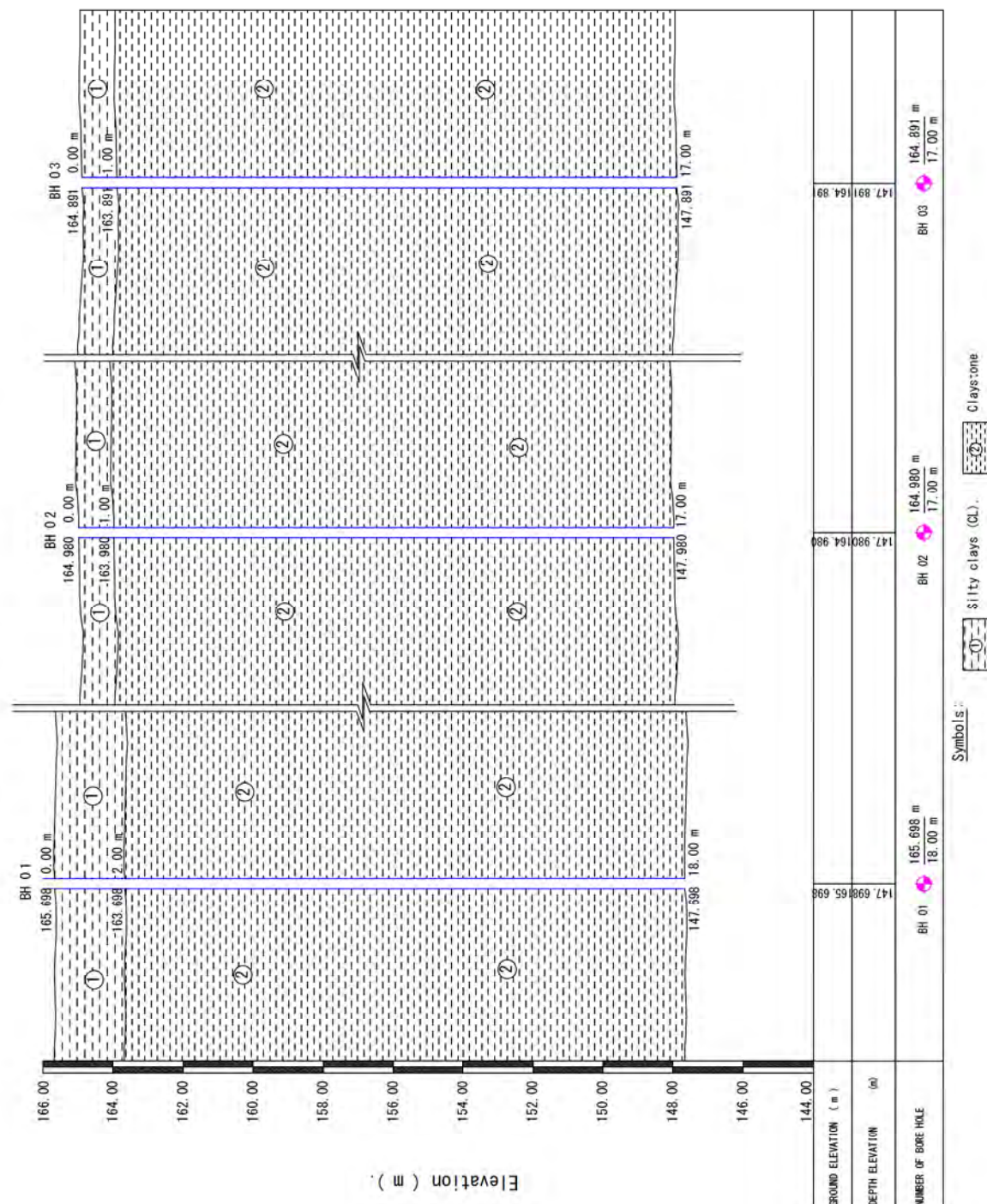


Figure A-4 Geological Lithological Profile of Bore Hole

NO SCALE

LOCATION PLAN OF BORE HOLE  
THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES  
Location :Pakse TTC, Champasack Province

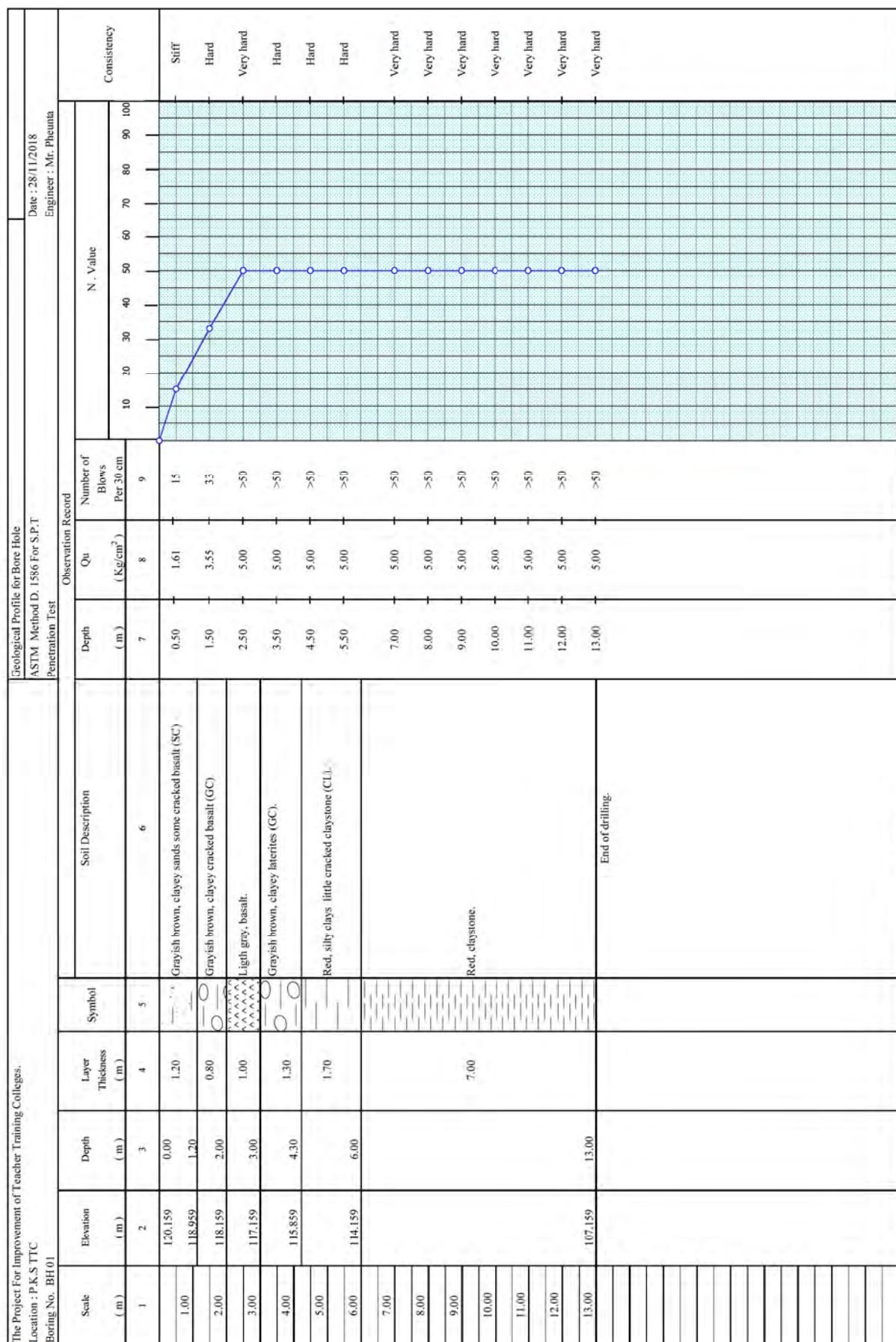
| Coordinate |             |             |
|------------|-------------|-------------|
| No.        | N           | E           |
| BH01       | 1671644.720 | 0588681.157 |
| BH02       | 1671753.210 | 0588711.815 |
| BH03       | 1671822.075 | 0589756.538 |
| BH04       | 1671681.388 | 0588823.510 |



Symbol :  
Borehole (BH)

Figure2 Location Plan of Bore Hole





Remarks :  
N : Blows Per 30 cm ( 63.5 Kg Hammer, 76 cm Drop, 5 cm Sampler )  
Qu : Unconfined Compressive Strength ( Kg/cm<sup>2</sup> )

Figure A-1 Geological Profile for Bore Hole BH01

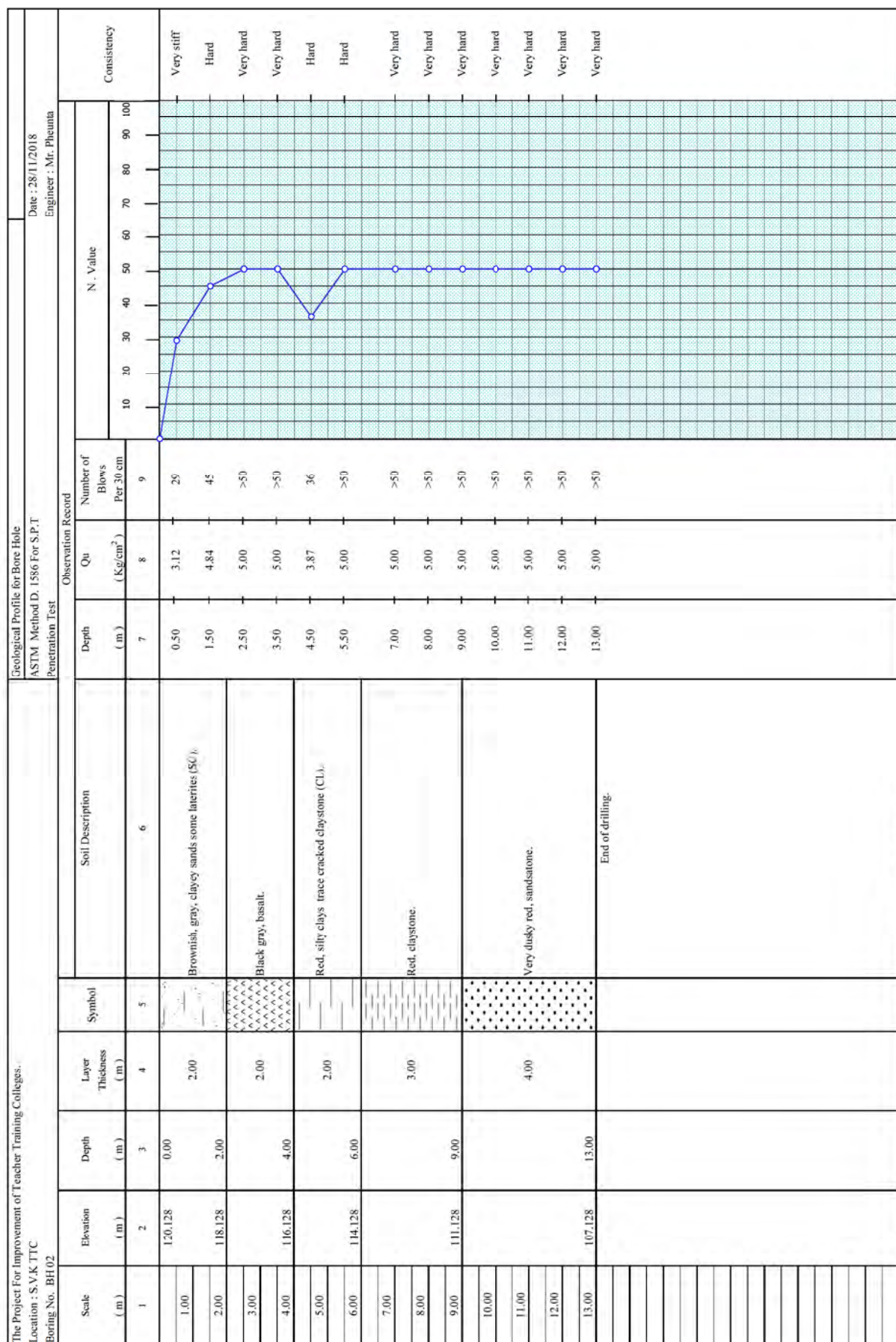


Figure A-2 Geological Profile for Bore Hole BH02



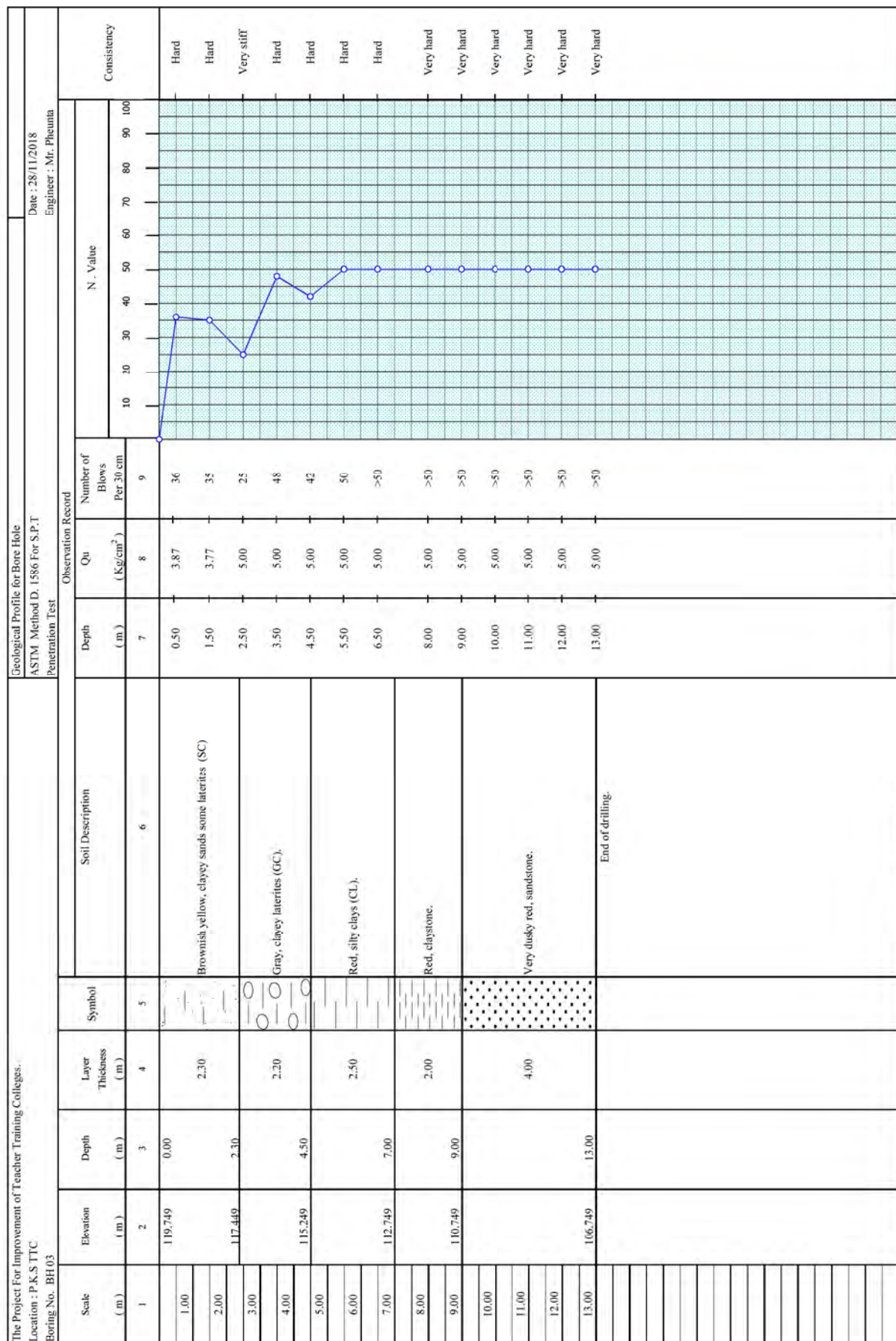


Figure A-3 Geological Profile for Bore Hole BH03



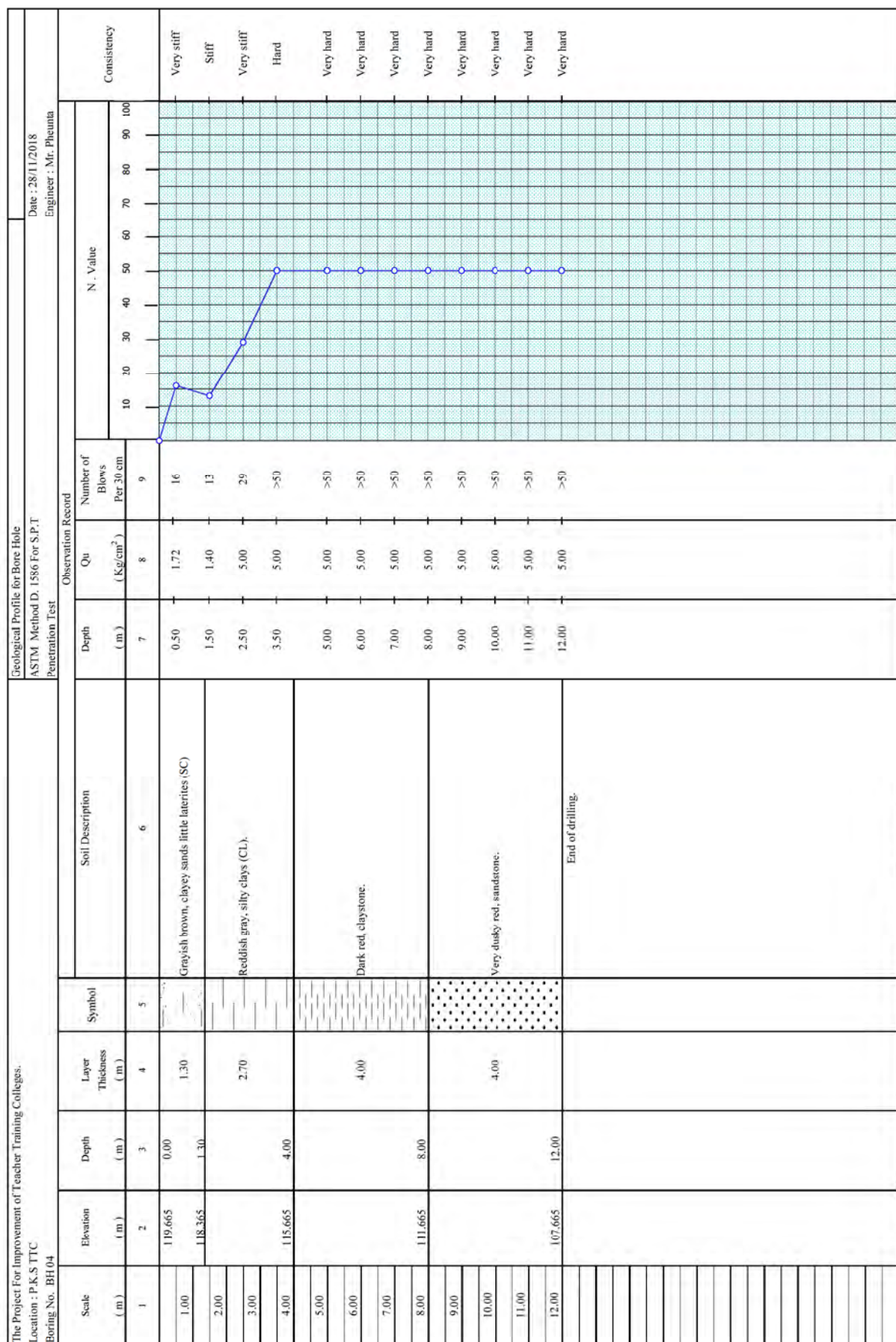


Figure A-4 Geological Profile for Bore Hole BH04

**GEOLOGICAL LITHOLOGICAL PROFILE OF BORE HOLE**  
**THE PROJECT FOR IMPROVEMENT OF TEACHER TRAINING COLLEGES**  
**Location :Pakse TTC, Champasack Province**

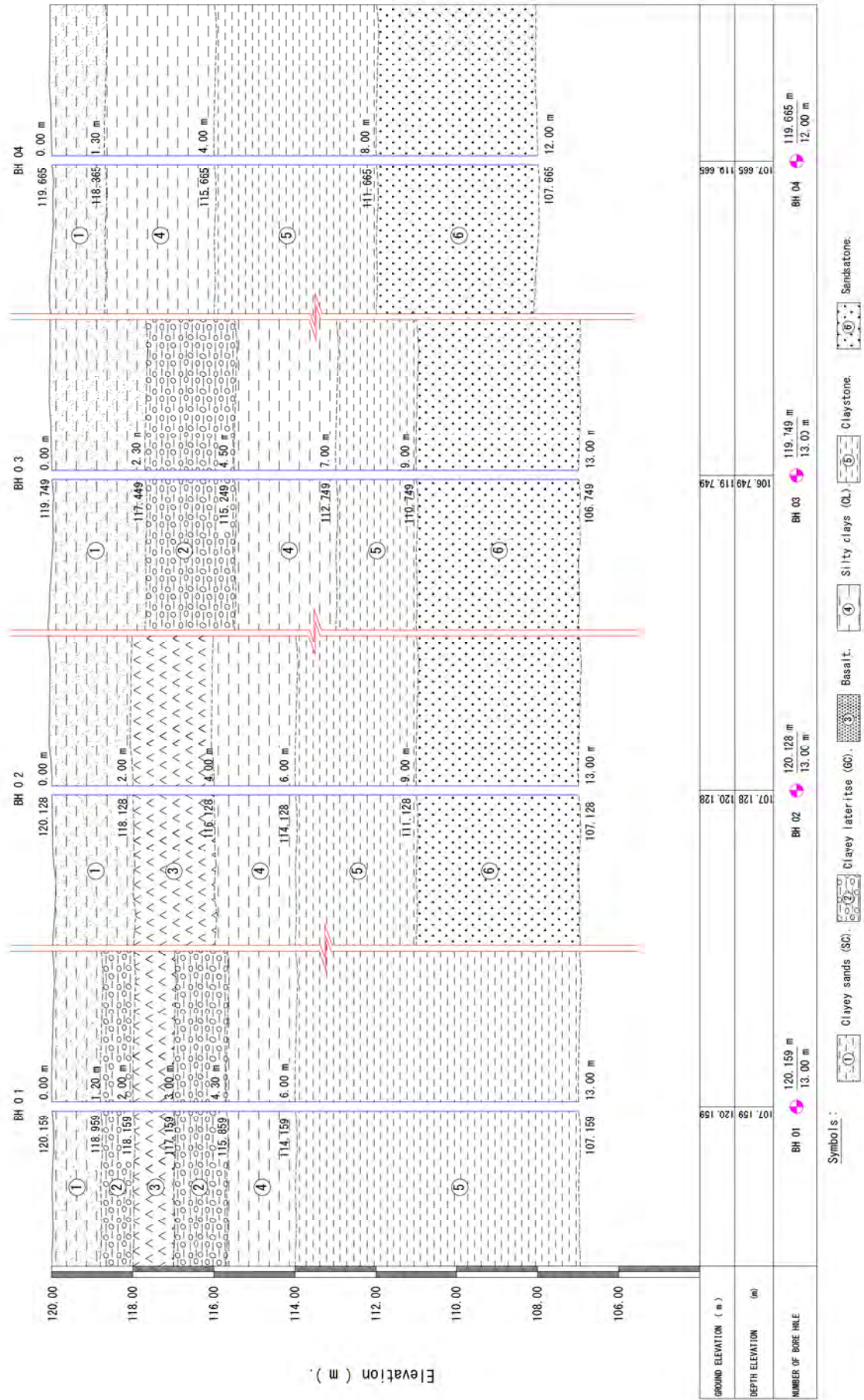


Figure A-5 Geological Lithological Profile of Bore Hole





### 5－3. 付属校教育機材選定表

## 1. 付属幼稚園用機材

| No.                                                       | MOES標準機材                                                                    | 単位      | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材                                       | 機材番号      |
|-----------------------------------------------------------|-----------------------------------------------------------------------------|---------|----------|---|---|---|---|---|---|---|---|----|--------------------------------------------|-----------|
|                                                           |                                                                             |         | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |                                            |           |
| Photo of Former/Current H.E Presidents and Prime Minister |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | H.E President Khaisone Phomvihane                                           | sheet   | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |                                            |           |
| 2                                                         | H.E President Souphanouvong                                                 | sheet   | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |                                            |           |
| 3                                                         | H.E President Choummaly Xayyasone                                           | sheet   | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |                                            |           |
| 4                                                         | H.E Mr. Thongsing Thammavong, Prime Minister                                | sheet   | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |                                            |           |
| 5                                                         | others                                                                      |         | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Lao Language                                              |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Word Cards                                                                  | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 2                                                         | Consonant Cards                                                             | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 3                                                         | Vowel Cards                                                                 | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 4                                                         | Alphabet Chart                                                              | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 5                                                         | Board Word Cards                                                            | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 6                                                         | Consonant Photo Cards                                                       | Set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 7                                                         | Watch Model                                                                 | Watch   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-24    |
| 8                                                         | Others                                                                      |         | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Activity Creativities Equipment                           |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Crayon (Big) 12 Colors                                                      | Box     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 2                                                         | Watercolor                                                                  | Box     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 3                                                         | Clay                                                                        | Dozen   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 4                                                         | White board (Small)                                                         | Board   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 5                                                         | Operating Scissor                                                           | Scissor | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 6                                                         | Ropes                                                                       | KG      | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 7                                                         | Flip Chart Paper (15 Sheets)                                                | Rolls   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 8                                                         | Paper Glue 250g                                                             | Can     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 9                                                         | Color Paper                                                                 | sheet   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |                                            |           |
| 10                                                        | Taps                                                                        | Roll    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | B  |                                            |           |
| 11                                                        | Black Pencil                                                                | Pencil  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | B  |                                            |           |
| 12                                                        | Strings                                                                     | Roll    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | B  |                                            |           |
| 13                                                        | Others                                                                      |         | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Music Instruments                                         |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Xylophone No. 8                                                             | Set     | ○        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | C  |                                            |           |
| 2                                                         | Lao Traditional Drum No. 5                                                  | Pcs     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 3                                                         | Dual Sides Drum (wood)                                                      | Pcs     | ○        | × | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |                                            |           |
| 4                                                         | Maracas/Tambourine                                                          | set     | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-17    |
| 5                                                         | Wooden rhythm clappers → Castanets                                          | set     | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-17    |
| 6                                                         | Lao Cymbal (Small)                                                          | set     | ○        | × | ○ | ○ | × | ○ | ○ | ○ | ○ | E  |                                            |           |
| 7                                                         | Guitar (Plastic)                                                            | pcs     | ○        | × | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |                                            |           |
| 8                                                         | Cymbal (Small)                                                              | set     | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-17    |
| 9                                                         | Khane Lao (Small)                                                           | Pcs     | ○        | × | ○ | ○ | × | ○ | ○ | ○ | ○ | E  |                                            |           |
| 10                                                        | others (Piano)                                                              | Unit    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-16    |
| Block Toys and Construction Toys                          |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Set of Block Model (Wood)                                                   | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-12    |
| 2                                                         | Set of Construction (Plastic or equivalent)                                 | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-11    |
| 3                                                         | Toy Set                                                                     | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-20    |
| 4                                                         | Trucks blocks (wood)                                                        | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-9     |
| 5                                                         | Trucks blocks decorate by National flags (wood)                             | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 6                                                         | watch models (wood)                                                         | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-24    |
|                                                           | Trucks models or equivalent educational toys (wood or safety material made) | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  |                                            |           |
| 7                                                         |                                                                             | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | combine to 1                               | Pre-4     |
| 8                                                         | others                                                                      | set     | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Science Learning Equipment                                |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Magnifying Glass (Small)                                                    | pcs     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-23    |
| 2                                                         | Compass                                                                     | Pcs     | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |                                            |           |
| 3                                                         | Weight Scales 2 Arms                                                        | set     | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |                                            |           |
| 4                                                         | Cup (Big, Plastic)                                                          | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 5                                                         | Water Equipment-Sand                                                        | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 6                                                         | Aquarium (Size: 20x 40 cm, Glass)                                           | pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 7                                                         | Bucket (Plastic)                                                            | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 8                                                         | basin (Plastic)                                                             | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 9                                                         | others                                                                      |         | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Classroom Equipment (Health)                              |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Wall Height Measure Meters for Student                                      | Pcs     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-25    |
| 2                                                         | Weight Scale (Based)                                                        | Pcs     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-26    |
| 3                                                         | Bucket (Plastic)                                                            | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 4                                                         | Soap                                                                        | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 5                                                         | Towel                                                                       | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 6                                                         | Glass and Food Tray (Plastic)                                               | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 7                                                         | Jug of water 1 Litre                                                        | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 8                                                         | Plastic glass                                                               | Pcs     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| 9                                                         | Others                                                                      |         | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | D  |                                            |           |
| Roleplay Equipment                                        |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | Kitchen Implements                                                          | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-10    |
| 2                                                         | Telephone or building blocks (Model)                                        | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-7     |
| 3                                                         | Medical Equipment (Model)                                                   | set     | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | C  |                                            |           |
| 4                                                         | Dolls, Glasses, Comb (Model)                                                | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-13,14 |
| 5                                                         | Tea Set (Model)                                                             | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | can be combined with 1: kitchen implements | Pre-10    |
| 6                                                         | Fruits (Model) or stuffed toys model                                        | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-11    |
| 7                                                         | Bowling Big (Model)                                                         | set     | ×        | × | ○ | × | ○ | ○ | ○ | ○ | ○ | D  |                                            |           |
| 8                                                         | Hand Puppets 6 Types (For Teacher): Can be converted to the similar         | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-11    |
| 9                                                         | Hand Puppets 6 Types (For Student) or balls                                 | set     | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○                                          | Pre-11    |
| 10                                                        | Others                                                                      |         | ×        | × | × | × | × | × | × | × | × | D  |                                            |           |
| Games and Puzzles                                         |                                                                             |         |          |   |   |   |   |   |   |   |   |    |                                            |           |
| 1                                                         | The first 4 years of Child's Growth Games/Chart (Laminate Paper)            | set     | ○        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | C  |                                            |           |
| 2                                                         | Lao Domino Game (Paper)                                                     | set     | ○        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | E  |                                            |           |
| 3                                                         | Jigsaw Consonants Lao (Foam)                                                | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |
| 4                                                         | Jigsaw Vowel (Form)                                                         | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○                                          | Pre-18    |
| 5                                                         | Jigsaw World Wide and Lao Number                                            | set     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |                                            |           |

| No.                 | MOES標準機材                                                | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材    | 機材番号    |
|---------------------|---------------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|----|---------|---------|
|                     |                                                         |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |         |         |
| 6                   | Animals Jigsaw (Foam)                                   | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-12  |
| 7                   | English Alphabet Jigsaw (Foam)                          | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 8                   | Foot Fingers Jigsaw (Plywood)                           | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 9                   | Hand Fingers Jigsaw (Plywood)                           | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 10                  | Lao Flag Jigsaw (Plywood)                               | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | E  |         |         |
| 11                  | Lao Map Jigsaw (Plywood)                                | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | E  |         |         |
| 12                  | others                                                  | set   | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| Toys - Touch        |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | Beading colorful strings                                | set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |         |         |
| 2                   | Embroidery board (Needle)                               | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |         |         |
| 3                   | Abacus 4 Colors                                         | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-19  |
| 4                   | Basket for Toys (Big)                                   | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | × | C  |         |         |
| 5                   | Plastic Balls for Pre-Primary Students Grade 1          | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | }       | Pre-5   |
| 6                   | Plastic Balls for Pre-Primary Students Grade 2 -3       | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  |         |         |
| 7                   | Double Sides whiteboard with stands Magnet Pin          | set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 8                   | Colorfull Cushion Seat Games                            | pcs   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 9                   | others                                                  |       | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| Classroom Equipment |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | Tray for Student Belonging                              | Tray  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 2                   | Tray for Student Shoes                                  | Tray  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 3                   | 6 Students Table & Chairs (Wood)                        | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 4                   | FD Black/White Board                                    | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 5                   | International Standard Green/White Board                | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 6                   | Teacher Table & Chairs (Wood)                           | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  |         |         |
| 7                   | Tray for Equipments                                     | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | D  |         |         |
| 8                   | Others                                                  |       | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| Playground Toys     |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | Sliders + house (Fiber)                                 | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-3   |
| 2                   | Tunnel                                                  | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-2   |
| 3                   | Stainless Steel Slider                                  | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 4                   | Stainless Steel Slider                                  | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 5                   | Stainless Steel Slider + Swing                          | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 6                   | Fiber Slinder + Swing                                   | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  | ○       | Pre-3   |
| 7                   | Fiber Slider + Bar (Fish)                               | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  | ○       | Pre-3   |
| 8                   | Ball Tanks + Plastic 5,000 Balls                        | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 9                   | Fiber Rocking Hourse                                    | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 10                  | Metal Swing A Big                                       | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 11                  | Metal Swing A Small                                     | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 12                  | Metal Big Round Swing                                   | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 13                  | Metal Small Round Swing                                 | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 14                  | Metal Single Seesaw                                     | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 15                  | Metal Double Seesaw                                     | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 16                  | Metal Single Bar                                        | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 17                  | Metal Double Bar                                        | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 18                  | Metal Horse Seesaw                                      | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 19                  | Metal Hoop                                              | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-6   |
| 20                  | Metal Train Swing                                       | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 21                  | Metal Bus Swing                                         | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 22                  | Metal Carousel Roundabout 3 Seats                       | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 23                  | Metal Carousel Roundabout 4 Seats                       | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 24                  | Metal Carousel Roundabout 6 Seats                       | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 25                  | Sliders + house (Fiber) & Swing Big Set                 | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  | ○       | Pre-3   |
| 26                  | Double Stainless Steel Sliders + Swing                  | Set   | ○        | × | ○ | ○ | ○ | ○ | ○ | ○ | × | C  |         |         |
| 27                  | Cages for kids                                          | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | × | B  | ○       | Pre-8   |
| 28                  | Others                                                  | Set   | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| Speakers            |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | Speaker 500W, 1,000W                                    | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-21  |
| 2                   | Mixture 500W, 1,000W                                    | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-21  |
| 3                   | Wireless Microphone, Microphone                         | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-21  |
| 4                   | CD, VCD & DVD Players                                   | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-15  |
| 5                   | Television                                              | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |         |         |
| 6                   | Computer                                                | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 7                   | Projector                                               | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 8                   | Radio/Casset Tap/MP3 Players                            | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-15  |
| 9                   | Other                                                   |       | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| English             |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | English Alphabet Posters                                | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 2                   | Poster of Vocabulary about House (or Kitchin implement) | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 3                   | Poster of Vocabulary about Fruits                       | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 4                   | Poster of Vocabulary about Body                         | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 5                   | Poster of Vocabulary about Tree                         | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 6                   | Poster of Vocabulary about Animals                      | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○       | Pre-22  |
| 7                   | Games & Puzzle about English Learning                   | Set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |         |         |
| 8                   | Other                                                   |       | ×        | × | × | × | × | × | × | × | × | D  |         |         |
| MOES標準機材にないもの       |                                                         |       |          |   |   |   |   |   |   |   |   |    |         |         |
| 1                   | Gymnastic mat                                           | Sheet | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | A  | ○       | Pre-1   |
|                     | 計 147 品目                                                |       |          |   |   |   |   |   |   |   |   |    | 計 42 品目 | 計 26 品目 |

<凡例>

### 選定クライテリア

判定

- ① カリキュラムの実施に不可欠である
- ② 機材設置に必要なスペース及び施設各室のスペースが確保されている
- ③ 維持管理が比較的容易である(調達困難な消耗品を必要としない)
- ④ 扱いが容易である(特殊技能を必要としない)
- ⑤ 使用頻度が高い
- ⑥ 調達が容易である
- ⑦ 他の機材で代用ができない
- ⑧ 消耗品ではない
- ⑨ 家具・施設ではない

- A 最優先機材  
B 優先度2位  
C 優先度3位  
D 不採用  
E ラオス側負担で整備



## 2. 付属小学校用機材

| No.                                                       | MOES標準機材                                               | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材 | 機材番号          |
|-----------------------------------------------------------|--------------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|----|------|---------------|
|                                                           |                                                        |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |      |               |
| Photo of Former/Current H.E Presidents and Prime Minister |                                                        |       |          |   |   |   |   |   |   |   |   |    |      |               |
| 1                                                         | H.E President Khaissone Phomvihane                     | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | E  |      |               |
| 2                                                         | H.E President Souphanouvong                            | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | E  |      |               |
| 3                                                         | H.E President Choummaly Xayyasone                      | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | E  |      |               |
| 4                                                         | H.E Mr. Thongsing Thammavong, Prime Minister           | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | E  |      |               |
| 5                                                         | H.E Ho Chi Minh                                        | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | E  |      |               |
| 6                                                         | others                                                 |       |          |   |   |   |   |   |   |   |   |    |      |               |
| Lao Language                                              |                                                        |       |          |   |   |   |   |   |   |   |   |    |      |               |
| 1                                                         | Word Cards                                             | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 2                                                         | Initial Consonant Cards                                | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 3                                                         | Combined Consonant Cards                               | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 4                                                         | Diphthong Consonant Cards                              | Set   | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | E  |      |               |
| 5                                                         | Vowel Cards                                            | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 6                                                         | Combined Vowel Cards 1                                 | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 7                                                         | Combined Vowel Cards 2                                 | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 8                                                         | Combined Vowel Cards 3                                 | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 9                                                         | Tonal Marks/Tonal Accent in Lao Writing (4 Marks)      | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 10                                                        | Alphabet Chart                                         | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 11                                                        | Board Word Cards                                       | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |      |               |
| 12                                                        | Consonant Photo Cards                                  | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 13                                                        | Photo Cards under Textbooks                            | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 14                                                        | Hexagon Paper Box                                      | Set   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |      |               |
| 15                                                        | Others                                                 | Set   | ×        | × | × | × | × | × | × | × | × | E  |      |               |
| Mathematic                                                |                                                        |       |          |   |   |   |   |   |   |   |   |    |      |               |
| 1                                                         | Finger Count 1-10                                      | Set   | ×        |   |   |   |   |   | × |   |   | C  |      |               |
| 1                                                         | Card Count 0-9 (10 Cards)                              | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | D  |      |               |
| 2                                                         | TickMark/Symbol Cards (8 Cards)                        | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | D  |      |               |
| 3                                                         | Card Count 1-10 (10 Cards)                             | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | D  |      |               |
| 4                                                         | Dice                                                   | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-7      |
| 5                                                         | Laminate Paper of Circle demonstrate fractional number | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | D  |      |               |
| 6                                                         | Wood Ruler length 1 meter, 60 cm use with Black Board  | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-5      |
| 7                                                         | Triangle ruler 45 Degree                               | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-2      |
| 8                                                         | Triangle ruler 60 Degree                               | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-1      |
| 9                                                         | Wood compass                                           | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-4      |
| 10                                                        | Geoboard+Plastic band Big + Small                      | pcs   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 11                                                        | Weight Scale 2 arms                                    | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-9      |
| 12                                                        | Descriptive Geometry Forms Model                       | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  |      |               |
| 13                                                        | Poster of Descriptive Geometry Forms                   | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 14                                                        | Projective Geometry Models                             | pcs   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 15                                                        | Poster of Projective Geometry Forms                    | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 16                                                        | Plus/Add "+" Table                                     | sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |      |               |
| 17                                                        | Multiply "x" Table                                     | sheet | ×        | ○ | ○ | ○ | × | ○ | × | ○ | × | D  |      |               |
| 18                                                        | Mass Table                                             | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | × | D  |      |               |
| 19                                                        | Volume Table                                           | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | × | D  |      |               |
| 20                                                        | Area Table                                             | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | × | D  |      |               |
| 21                                                        | Length Table                                           | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | × | D  |      |               |
| 22                                                        | Horizontal Abacus                                      | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-9      |
| 23                                                        | Vertical Abacus                                        | pcs   | ○        | ○ | ○ | ○ | ○ | × | × | ○ | ○ | C  |      |               |
| 24                                                        | Pin Board/Softboard                                    | set   | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | × | C  |      |               |
| 25                                                        | Watch Model                                            | watch | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-8      |
| 26                                                        | Corner Demonstration Equipment                         | pcs   | ○        | ○ | ○ | ○ | × | × | × | ○ | ○ | D  |      |               |
| 27                                                        | Volume Cube Demonstration Equipment                    | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-10     |
| 28                                                        | Sticks                                                 | set   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | × | D  |      |               |
| 29                                                        | Volume Demonstration Equipment                         | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriMat-11     |
| 30                                                        | Volume and Cylinder Demonstration Equipment            | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  |      | PriMat-12     |
| 31                                                        | Cone Demonstration Equipment                           | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  |      |               |
| 32                                                        | Relationtive surface and perimeter of Rectangle        | pcs   | ×        | ○ | ○ | ○ | × | × | ○ | ○ | ○ | D  |      |               |
| 33                                                        | Area of Circle and diameter                            | pcs   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 34                                                        | others                                                 |       | ×        | × | × | × | × | × | × | × | × | D  |      |               |
| Environment                                               |                                                        |       |          |   |   |   |   |   |   |   |   |    |      |               |
| 1                                                         | Body Model                                             | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-13     |
| 2                                                         | Heart Model                                            | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-14     |
| 3                                                         | Kidney Model                                           | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-13     |
| 4                                                         | Bonney Model                                           | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-15     |
| 5                                                         | Muscle Model                                           | set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-16     |
| 6                                                         | Human Evolution                                        | sheet | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |               |
| 7                                                         | Lane Xang Kingdom Map                                  | sheet | ○        | ○ | ○ | ○ | × | ○ | × | × | ○ | D  |      |               |
| 8                                                         | Geography and Economics Map of Lao PDR                 | sheet | ○        | ○ | ○ | ○ | × | ○ | × | × | ○ | E  |      |               |
| 9                                                         | Govern Map of Lao PDR                                  | sheet | ○        | ○ | ○ | ○ | × | ○ | × | × | ○ | E  |      |               |
| 10                                                        | Natural Map of Lao PDR                                 | sheet | ○        | ○ | ○ | ○ | × | ○ | × | × | ○ | E  |      |               |
| 11                                                        | World Map                                              | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-21     |
| 12                                                        | Magnifying Glass                                       | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-1,7,10 |
| 13                                                        | Compass                                                | pcs   | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | B  | ○    | PriSSS-11     |
| 14                                                        | Temperature Meter                                      | pcs   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriAux-5      |
| 15                                                        | Agricultural Poster                                    | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 16                                                        | Animal Dictionary Poster                               | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-5      |
| 17                                                        | Flona Dictionary Poster                                | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | PriSSS-4      |
| 18                                                        | Agricultural Area Map                                  | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 19                                                        | Production Agriculture/Farm Poster                     | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 20                                                        | Pattern of Shirts/Trousers/Skirts (Men & Lady)         | set   | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 21                                                        | Poster of Shirts/Trousers/Skirts (Men & Lady)          | sheet | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |               |
| 22                                                        | Yarn (Black, White)                                    | Roll  | ×        | ○ | ○ | ○ | × | ○ | ○ | × | ○ | C  |      |               |
| 23                                                        | Cissors                                                | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 24                                                        | Needle                                                 | set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 25                                                        | Pin                                                    | box   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 26                                                        | Ruller                                                 | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 27                                                        | Curve Ruler                                            | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 28                                                        | Chalk Writing Clothes                                  | box   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 29                                                        | Picture of Basketetworks: Baskets, Fishing Tools, etc  | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |
| 30                                                        | Kitchen Implement                                      | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |               |

| No.                        | MOES標準機材                                               | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材          | 機材番号       |
|----------------------------|--------------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|----|---------------|------------|
|                            |                                                        |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |               |            |
| 31                         | Picture of Dishes, spoons, etc Necessary use for Meals | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 32                         | Picture of Cleaning Tools                              | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 33                         | Roll Gauze bandage                                     | roll  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 34                         | Tourniquet                                             | bag   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 35                         | Battery                                                | pairs | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 36                         | Adapter Plug                                           | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 37                         | Tap                                                    | Roll  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 38                         | Twin Electric Wire                                     | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 39                         | Electrode 20A 600 W                                    | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 40                         | Fuse 3A                                                | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 41                         | Switch on/off                                          | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 42                         | Extension cord                                         | Pc    | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | C  |               |            |
| 43                         | Light (Spark plug) 2.5 V                               | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |               |            |
| 44                         | screw                                                  | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 45                         | Screwdriver                                            | Pc    | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | C  |               |            |
| 46                         | Lao Kip Notes Model                                    | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | E  |               |            |
| 47                         | Picture of Sanitary ware                               | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A |    | ○             | PriSSS-5   |
| 48                         | Poster of Sanitary ware                                | Pc    | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |               |            |
| 49                         | Traffic Sign and Transportation                        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A |    | ○             | PriAux-1   |
| 50                         | Others                                                 | Pc    | ×        | × | × | × | × | × | × | × | × | D  |               |            |
| <b>Arts</b>                |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | Crayon (Big) 12 Colors                                 | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 2                          | Watercolor                                             | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 3                          | Clay                                                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 4                          | White board (Small)                                    | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 5                          | Operating Scissor                                      | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 6                          | Ropes                                                  | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 7                          | Flip Chart Paper(15 Sheets)                            | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 8                          | Paper Glue 250g                                        | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 9                          | Paper Color                                            | sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 10                         | Taps                                                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 11                         | Balck Pencils                                          | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| 12                         | Others                                                 |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | D  |               |            |
| <b>Arts &amp; Musics</b>   |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | Xylophones No. 17(Lao)                                 | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  | ×             |            |
| 2                          | Drum (Lao Traditional Drum) No. 7                      | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriMus-4   |
| 3                          | Dual Sides Drump (wood)                                | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriMus-4   |
| 4                          | Maracas/Tambourine                                     | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriMus-2   |
| 5                          | Wooden rhythm clappers                                 | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | B  | ○             | PriMus-2   |
| 6                          | Lao Cymbal (Small)                                     | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriMus-3   |
| 7                          | Guitar (Wood)                                          | Unit  | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | B  | ×             |            |
| 8                          | Cymbal (Small)                                         | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | Combined to 5 | PriMus-2   |
| 9                          | Khane Lao (Medium)                                     | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | E  |               |            |
| 10                         | others                                                 |       | ×        | × | × | × | × | × | × | × | × | D  |               |            |
| <b>Sports</b>              |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | Medium Size Football Ball                              | Ball  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-1   |
| 2                          | Net of Football                                        | Pairs | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-1   |
| 3                          | Small Size Volleyball Ball                             | Ball  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-1   |
| 4                          | Net of Volleyball                                      | Net   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-1   |
| 5                          | Rope (Pull or Skipping Jumping Rope)                   | KG    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-1   |
| 6                          | Skipping Jumping Rope                                  | Rope  | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | B  | ○             | PriSpo-1   |
| 7                          | Big Plastic Band                                       | Bag   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | B  | ○             | PriSpo-1   |
| 8                          | Small Plastic Band                                     | Bag   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | B  | ○             | PriSpo-1   |
| 9                          | Table Tennis with Net                                  | Set   | ×        | × | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |               |            |
| 10                         | Racket 1 Pair with 1 Dozen of Balls                    | Set   | ×        | × | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |               |            |
| 11                         | Net of Batminton with 1 box of Shuttlecock             | Net   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-2   |
| 12                         | Racket 1 Pair with 1 Box of Shuttlecock                | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-2   |
| 13                         | Whistle                                                | PCS   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-2   |
| 14                         | Air Hand Pump for Balls                                | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriSpo-3   |
| 15                         | Stopwatch                                              | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriAux-5   |
| 16                         | Others                                                 |       | ×        | × | × | × | × | × | × | × | × | D  |               |            |
| <b>Audio Visual</b>        |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | Speaker 500W, 1,000W                                   | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | Pre-21     |
| 2                          | Mixture 500W, 1,000W                                   | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | Pre-21     |
| 3                          | Wireless Microphone, Microphone                        | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | Pre-21     |
| 4                          | CD, VCD & DVD Players                                  | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | PriLao-3   |
| 5                          | Television                                             | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |               |            |
| 6                          | Computer                                               | Set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | PriAux-3,4 |
| 7                          | Projector                                              | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B  | ○             | PriAux-2   |
| 8                          | Radio + MP 3                                           | PCS   | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |               |            |
| 9                          | Others                                                 |       | ×        | × | × | × | × | × | × | × | × | D  |               |            |
| <b>English</b>             |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | English Consonants Poster                              | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-5   |
| 2                          | Animal Dictionary Poster                               | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-6   |
| 3                          | Kitchen Implements Poster                              | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-7   |
| 4                          | Fruit Dictionary Poster                                | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-8   |
| 5                          | Body Dictionary Poster                                 | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-9   |
| 6                          | Tree Dictionary Poster                                 | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-10  |
| 7                          | Animal Dictionary Poster                               | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-6   |
| 8                          | Games & Puzzle English                                 | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○             | PriLao-3   |
| 9                          | Others                                                 |       |          |   |   |   |   |   |   |   |   |    |               |            |
| <b>Classroom Furniture</b> |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |
| 1                          | Activities Chart 2 Sides with Stand                    | Set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 2                          | Student Chairs and Table (Metal or Wood structure)     | Set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 3                          | FD Black/White Board                                   | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 4                          | International Standard Green/White Board               | sheet | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 5                          | Teacher Chair & Table                                  | Set   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 6                          | Cupboard                                               | pcs   | ×        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |               |            |
| 7                          | Others                                                 |       | ×        | × | × | × | × | × | × | × | × | D  |               |            |
| <b>MOES標準機材にないもの</b>       |                                                        |       |          |   |   |   |   |   |   |   |   |    |               |            |

| No.      | MOES標準機材                                                                           | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材    | 機材番号      |
|----------|------------------------------------------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|----|---------|-----------|
|          |                                                                                    |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |         |           |
| 1        | English Alphabet card                                                              | Set   |          |   |   |   |   |   |   |   |   | A  | ○       | PriLao-1  |
| 2        | English Alphabet Poster                                                            | Set   |          |   |   |   |   |   |   |   |   | A  | ○       | PriLao-4  |
| 3        | Teacher's magnetic protractor with a handle, more than 30cm                        | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMat-3  |
| 4        | Solid model (Cube, Cylindrical shape, Rectangular shape, Triangular prism, Sphere) | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMat-6  |
| 5        | Volume Demonstration Equipment                                                     | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMat-11 |
| 6        | Volume and Cylinder Demonstration Equipment                                        | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMat-12 |
| 7        | Volume learning set                                                                | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-2  |
| 8        | The solar system planet model                                                      | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-3  |
| 9        | Insect card/poster                                                                 | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-6  |
| 10       | Projector with Screen                                                              | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-8  |
| 11       | Human body poster                                                                  | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-12 |
| 12       | Globe                                                                              | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-20 |
| 13       | World Flag poster                                                                  | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriSSS-22 |
| 14       | Electric piano                                                                     | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMus-1  |
| 15       | CD player/recorder, movable, max output 2.5Wx2 or more                             | pcs   |          |   |   |   |   |   |   |   |   | A  | ○       | PriMus-5  |
| 16       | Cabinet for storage                                                                | Units |          |   |   |   |   |   |   |   |   | A  | ○       | PriMus-6  |
| 計 185 品目 |                                                                                    |       |          |   |   |   |   |   |   |   |   |    | 計 71 品目 | 計 54 品目   |

&lt; 凡例 &gt;

選定クライテリア

- ① カリキュラムの実施に不可欠である
- ② 機材設置に必要なスペース及び施設各室のスペースが確保されている
- ③ 維持管理が比較的容易である(調達困難な消耗品を必要としない)
- ④ 扱いが容易である(特殊技能を必要としない)
- ⑤ 使用頻度が高い
- ⑥ 調達が容易である
- ⑦ 他の機材で代用ができない
- ⑧ 消耗品ではない
- ⑨ 家具・施設ではない

判定

- A 最優先機材
- B 優先度2位
- C 優先度3位
- D 不採用

E フォス側負担で整備



## 3. 付属中学校用機材

| No.                  | MOBS標準機材                               | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   |   | 評価 | 計画機材     | 機材番号 |
|----------------------|----------------------------------------|-------|----------|---|---|---|---|---|---|---|---|---|----|----------|------|
|                      |                                        |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |   |    |          |      |
| 化学                   |                                        |       |          |   |   |   |   |   |   |   |   |   |    |          |      |
| Lecturing (L)        |                                        |       |          |   |   |   |   |   |   |   |   |   |    |          |      |
| 1                    | Chart on laboratory safety             | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-1  |      |
| 2                    | Chart on laboratory Techniques         | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-2  |      |
| 3                    | Diffusion of Gas with Stand            | Unit  | ○        | × | ○ | ○ | ○ | ○ | ○ | × | ○ | C |    |          |      |
| 4                    | Water still 4 liters/hr.               | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-4  |      |
| 5                    | Desiccator Vacuum                      | Unit  | ×        | ○ | ○ | × | × | ○ | ○ | ○ | ○ | D |    |          |      |
| 6                    | ph Digital Display                     | Unit  | ○        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | A | ○  | SecCh-6  |      |
| 7                    | Molecular Models                       | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-7  |      |
| 8                    | Periodic table of the elements         | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-8  |      |
| 9                    | Electrolysis                           | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-9  |      |
| 10                   | Electric conductivity apparatus        | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-10 |      |
| 11                   | Spectroscope                           | Unit  | ○        | ○ | ○ | × | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 12                   | Micro-voltmeter                        | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-12 |      |
| 13                   | Kipp apparatus                         | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-13 |      |
| 14                   | pH Checker 1 (Hanna Checker pH meter ) | ○     | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-6  |      |
| 15                   | pH Scan                                | Unit  | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 16                   | CYSCAN pH 500                          | Unit  | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 17                   | pH TOYO 0 - 14 (pH testing paper)      | Set   | ○        | ○ | ○ | ○ | × | ○ | × | × | ○ | D |    |          |      |
| 18                   | HI-9142, Dissolved Oxygen Meter        | Unit  | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 19                   | Hardness tester                        | Unit  | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D |    |          |      |
| 20                   | Hygro-check                            | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-14 |      |
| 21                   | Conductivity ID 1010                   | Unit  | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 22                   | pH-7 Monitor                           | Unit  | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 23                   | pH-10 Monitor                          | Unit  | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 24                   | pH 7 - 9                               | Unit  | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 25                   | Digital thermometer, CHECK TEMP        | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-15 |      |
| 26                   | TDS ID 1020 (Total Dissolved Solid)    | Unit  | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D |    |          |      |
| 27                   | Lab freezer/ Lab refrigerator          | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-16 |      |
| 28                   | Laboratory Safety Gloves               | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-17 |      |
| 29                   | Fractional Distillation Set            | Unit  | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 30                   | Diffusion of Gas with Stand            | Unit  | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 31                   | Chromatography Tank                    | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | C |    |          |      |
| 32                   | HP (core i5, 500G)                     | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○  | SecCh-18 |      |
| 33                   | LCD with screen                        | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○  | SecCh-19 |      |
| Group experiment(GE) |                                        |       |          |   |   |   |   |   |   |   |   |   |    |          |      |
| 1                    | Spoons                                 | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-22 |      |
| 2                    | Gown                                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-23 |      |
| 3                    | Safety Goggles                         | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-24 |      |
| 4                    | Electrolysis process                   | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-25 |      |
| 5                    | Test Tube Brush                        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 6                    | Filter Flasks                          | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-26 |      |
| 7                    | Funnels 90 mm                          | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 8                    | Funnels 110 mm                         | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 9                    | Solvent Dispenser                      | Pc    | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C |    |          |      |
| 10                   | Insulation (other than Asbestos)       | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-26 |      |
| 11                   | Spatula                                | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-22 |      |
| 12                   | Spatula 18cm                           | Pc    | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | C |    |          |      |
| 13                   | Spatula 15cm                           | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C |    |          |      |
| 14                   | Volumetric Flasks 1000ml               | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 15                   | Volumetric Flasks 500ml                | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 16                   | Volumetric Flasks 250ml                | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 17                   | Volumetric Flasks 100ml                | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 18                   | Dropper 10cm                           | Pc    | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | ○ | C |    |          |      |
| 19                   | Dropper 20cm                           | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 20                   | Beaker PYREX. 50 ml                    | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 21                   | Beaker PYREX. 100 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 22                   | Beaker PYREX. 250 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 23                   | Beaker PYREX. 600 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 24                   | Beaker PYREX. 1000 ml                  | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 25                   | Beaker DURAN, 50 ml                    | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 26                   | Beaker DURAN, 100 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 27                   | Beaker DURAN, 250 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 28                   | Beaker DURAN, 600 ml                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | A | ○  | SecCh-20 |      |
| 29                   | Beaker DURAN, 1000 ml                  | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 30                   | PP Beaker, plastic, 50 ml              | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 31                   | PP Beaker, plastic, 100 ml             | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 32                   | PP Beaker, plastic, 250 ml             | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 33                   | PP Beaker, plastic, 500 ml             | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 34                   | PP Beaker, plastic, 1000 ml            | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 35                   | WITEG Measuring Cylinders 50 ml        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 36                   | WITEG Measuring Cylinders 100 ml       | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 37                   | WITEG Measuring Cylinders 250 ml       | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 38                   | WITEG Measuring Cylinders 500 ml       | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 39                   | PP Measuring Cylinders, 250ml          | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 40                   | PP Measuring Cylinders, 500ml          | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 41                   | PP Measuring Cylinders, 1000,l         | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 42                   | Erlenmeyer Flasks PYREX 50 ml          | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 43                   | Erlenmeyer Flasks PYREX 125 ml         | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 44                   | Erlenmeyer Flasks PYREX 250 ml         | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 45                   | Erlenmeyer Flasks PYREX 500 ml         | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 46                   | Erlenmeyer Flasks PYREX 1000 ml        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 47                   | Erlenmeyer Flasks DURAN 50 ml          | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○  | SecCh-20 |      |
| 48                   | Erlenmeyer Flasks DURAN 100 ml         | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 49                   | Erlenmeyer Flasks DURAN 250 ml         | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 50                   | Erlenmeyer Flasks DURAN 500 ml         | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 51                   | Erlenmeyer Flasks DURAN 1000 ml        | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 52                   | Round bottomed Flask PYREX 250 ml      | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 53                   | Round bottomed Flask PYREX 500 ml      | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 54                   | Round bottomed Flask PYREX 1000 ml     | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |
| 55                   | Flat bottomed Flask PYREX 250 ml       | Pc    | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C |    |          |      |

| No.                   | MOBS標準機材                           | 単位   | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材 | 機材番号      |
|-----------------------|------------------------------------|------|----------|---|---|---|---|---|---|---|---|----|------|-----------|
|                       |                                    |      | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |      |           |
| 56                    | Flat bottomed Flask PYREX 500 ml   | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 57                    | Flat bottomed Flask PYREX 1000 ml  | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 58                    | Round bottomed Flask CHINA 500 ml  | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 59                    | Round bottomed Flask CHINA 1000 ml | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 60                    | Volumetric flask WITEG 10 ml       | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 61                    | Volumetric flask WITEG 25 ml       | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 62                    | Volumetric flask WITEG 50 ml       | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 63                    | Volumetric flask WITEG 100 ml      | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 64                    | Volumetric flask WITEG 250 ml      | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 65                    | Volumetric flask CHINA 50 ml       | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 66                    | Volumetric flask CHINA 100 ml      | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 67                    | Volumetric flask CHINA 250 ml      | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 68                    | Volumetric flask CHINA 1000 ml     | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 69                    | Pipette HBG 5 ml                   | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 70                    | Pipette HBG 10 ml                  | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 71                    | Pipette HBG 25 ml                  | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 72                    | Pipette HBG 50 ml                  | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 73                    | Burette WITEG 10 ml                | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 74                    | Burette WITEG 25 ml                | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 75                    | Burette WITEG 50 ml                | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 76                    | Test tube DURAN, 10 x 100mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 77                    | Test tube DURAN, 16 x 150mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 78                    | Test tube DURAN, 25 x 150mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 79                    | Test tube PYREX 12 x 100 mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 80                    | Test tube PYREX 16 x 150 mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 81                    | Test tube PYREX 25 x 150 mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 82                    | Test tube CHINA 12 x 100 mm        | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 83                    | Test tube CHINA 16 x 150 mm        | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 84                    | Test tube CHINA 25 x 150 mm        | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 85                    | Filter Funnel Glass, 75mm          | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-26  |
| 86                    | Filter Funnel Glass, 100 mm        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-26  |
| 87                    | PP Filter Funnel Plastic 80 mm     | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | A  | ○    | SecCh-26  |
| 88                    | PP Filter Funnel Plastic 120 mm    | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 89                    | PP Filter Funnel Plastic 150 mm    | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 90                    | Separating Funnel WITEG, 250 mm    | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 91                    | Separating Funnel, 250 mm          | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 92                    | Separating Funnel, 500 mm          | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 93                    | Evaporating porcelain, 75 mm       | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-27  |
| 94                    | Evaporating porcelain, 100 mm      | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-28  |
| 95                    | Glass Dropping Bottle, 15 cc       | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-20  |
| 96                    | Desiccator CHINA, 300 mm           | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-5   |
| 97                    | Triple beam CHINA                  | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-29  |
| 98                    | Hand Centrifuge                    | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-30  |
| 99                    | Condenser, CHINA, 300 mm           | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 100                   | Burner                             | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-21  |
| 101                   | Wire gauze                         | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-21  |
| 102                   | Stand                              | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-31  |
| 103                   | Burette clamp                      | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-32  |
| 104                   | Pipette bulbs                      | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 105                   | Stopper-rubber #3                  | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 106                   | Stopper-rubber #4                  | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 107                   | Stopper-rubber #7                  | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 108                   | Stopper-rubber #10                 | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 109                   | Stopper-rubber #12                 | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 110                   | Mortar and pestle, 130 mm          | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-33  |
| 111                   | Chromatography paper 45 x 75 cm    | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | ○ | C  |      |           |
| 112                   | WHATMAN Paper φ9 cm                | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 113                   | TOYO Paper, φ15 cm                 | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 114                   | Dispensing bottle, 250 ml          | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 115                   | White bottle narrow neck, 125 ml   | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 116                   | White bottle narrow neck 500 ml    | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 117                   | White bottle wide neck, 125 mm     | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 118                   | White bottle wide neck, 500 ml     | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 119                   | Test Tube Rack Stainless           | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-34  |
| 120                   | Test Tube Rack Plastic             | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-35  |
| 121                   | Test Tube Rack Plastic             | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 122                   | Test Tube Stand 55*65              | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 123                   | Wind Shield                        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-36  |
| 124                   | Thermometer Mercury 0-100°C        | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-37  |
| 125                   | Test Tube Holder                   | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecCh-36  |
| 126                   | PH meter beaker Glass              | Pc   | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 物理                    |                                    |      |          |   |   |   |   |   |   |   |   |    |      |           |
| Lecturing, Basic (LB) |                                    |      |          |   |   |   |   |   |   |   |   |    |      |           |
| 1                     | Whims Hurst                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-1  |
| 2                     | AC/DC voltage transformer          | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-2  |
| 3                     | Boy's Law                          | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-3  |
| 4                     | Electroscope                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-4  |
| 5                     | DC amplifier                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-5  |
| 6                     | electromagnet                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-6  |
| 7                     | Bulb holder 2.2 & 6.2 V            | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-7  |
| 8                     | Electric field demonstration       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-8  |
| 9                     | Electromagnetic kit                | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-9  |
| 10                    | Light Box                          | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-10 |
| 11                    | Force moment disc                  | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-11 |
| 12                    | Kinetics model apparatus           | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-12 |
| 13                    | Tangential escape apparatus        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-13 |
| 14                    | Motor with blower                  | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-14 |
| 15                    | Spectroscope                       | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |           |
| 16                    | Standing wave of sand              | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-16 |
| 17                    | Surface tension measurement        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-17 |
| 18                    | Newton meter                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-18 |
| 19                    | Solar system model                 | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-19 |

| No.                            | MOBS標準機材                                          | 単位   | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材 | 機材番号             |
|--------------------------------|---------------------------------------------------|------|----------|---|---|---|---|---|---|---|---|----|------|------------------|
|                                |                                                   |      | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |      |                  |
| 20                             | Photo resistance and coupler unit                 | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-20        |
| 21                             | Sky system model                                  | Unit | ○        | ○ | ○ | ○ | × | × | ○ | ○ | ○ | C  |      |                  |
| 22                             | Star movement model                               | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-22        |
| 23                             | Moon movement model                               | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-23        |
| 24                             | HP (core i5, 500G)                                | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-24        |
| 25                             | LCD with screen                                   | Unit | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | ○ | C  |      |                  |
| 26                             | Demonstration Dynamo Model/set                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-25        |
| 27                             | Laser Light Box                                   | Unit | ×        | ○ | ○ | × | ○ | ○ | ○ | × | ○ | D  |      |                  |
| 28                             | Lab coat (white)                                  | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-23        |
| 29                             | Triangular Prism 25cm                             | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-15,26     |
| 30                             | Work and Energy                                   | Unit | ○        | ○ | ○ | × | ○ | ○ | × | ○ | ○ | C  |      |                  |
| 31                             | Galvanometer Demonstration                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-27        |
| 32                             | Optical Bench Demonstration, 1 meter Length, 6-8V | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-28        |
| <b>Lecturing, advance (LA)</b> |                                                   |      |          |   |   |   |   |   |   |   |   |    |      |                  |
| 1                              | Projectile Apparatus                              | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-29        |
| 2                              | Regulated Power Supply AC/DC                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-30        |
| 3                              | Elastic Potential Energy                          | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-31        |
| 4                              | Power Cable and Plug on/off switch                | Unit | ×        | ○ | ○ | × | × | ○ | ○ | ○ | ○ | D  |      |                  |
| 5                              | Dynamo Demonstration Set                          | Set  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-32        |
| 6                              | High Voltage Power Supply                         | Unit | ×        | ○ | ○ | × | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 7                              | Demonstration of Ohm's Law                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-33        |
| 8                              | Electric Bell Kit                                 | Set  | ○        | ○ | ○ | × | × | ○ | × | ○ | ○ | D  |      |                  |
| 9                              | Rectifier Circuit                                 | Unit | ○        | ○ | ○ | × | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 10                             | Magnetic Field Demonstration                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-34        |
| 11                             | Short Circuit Demonstration                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-35        |
| 12                             | Electric Field Demonstration                      | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 13                             | Vacuum Pump 1/4 HP                                | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 14                             | High Voltage Electric Generator                   | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 15                             | Spectrum Thermometer                              | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 16                             | Digital Weight Scale                              | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 17                             | Diesel Engine 4 stroke                            | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 18                             | Benzine Engine 4 stroke                           | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 19                             | Digital Engine 2 stroke                           | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 20                             | Benzine Engine 2 stroke                           | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 21                             | Plasma Ball                                       | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 22                             | Elastic Potential Energy                          | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 23                             | Variance between anode cathode                    | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 24                             | Sample of Capacitors                              | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 25                             | Principal of Transformer                          | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 26                             | Set Optical Dist.                                 | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| 27                             | Power cable 45 meter length                       | Unit | ×        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | D  |      |                  |
| <b>Group experiment(GE)</b>    |                                                   |      |          |   |   |   |   |   |   |   |   |    |      |                  |
| 1                              | Voltmeter                                         | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-36        |
| 2                              | Ampere meter                                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-37        |
| 3                              | Multimeter                                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-38        |
| 4                              | Thermometer                                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-39        |
| 5                              | Burner Alcohol                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-40        |
| 6                              | Concave Lens Magnifying Glass                     | PC   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-41        |
| 7                              | Convex Lens Magnifying Glass                      | Pc   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-42        |
| 8                              | Lens set (6pcs/set)                               | Set  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-43        |
| 9                              | Solar Cells Kit                                   | Set  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-44        |
| 10                             | Solar cell                                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-45        |
| 11                             | Runway                                            | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-46        |
| 12                             | Weight                                            | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-47        |
| 13                             | Battery holder                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-48        |
| 14                             | One way switch                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-49        |
| 15                             | Two way switch                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-50        |
| 16                             | Ammeter                                           | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-48        |
| 17                             | Voltmeter                                         | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-36        |
| 18                             | Resistance                                        | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-51        |
| 19                             | Manometer                                         | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-52        |
| 20                             | Dynamic Cart                                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-53        |
| 21                             | Laser Diodes                                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-54        |
| 22                             | Force Table                                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-55        |
| 23                             | Calorimeter                                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-56        |
| 24                             | Transistor 337/715                                | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 25                             | Transistor 252458 (5pcs/set)                      | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 26                             | Low Voltage Generator                             | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecPhy-57        |
| <b>生物</b>                      |                                                   |      |          |   |   |   |   |   |   |   |   |    |      |                  |
| <b>Lecturing, Basic (LB)</b>   |                                                   |      |          |   |   |   |   |   |   |   |   |    |      |                  |
| 1                              | Microscope SME-F                                  | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-1,3,4,5,6 |
| 2                              | Human Skelton                                     | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-14        |
| 3                              | Skull, Human S                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-15        |
| 4                              | 1/10 Head model                                   | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-16        |
| 5                              | C.15 Model of brain                               | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-17        |
| 6                              | E.10 ear model                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-18        |
| 7                              | F.10 Eye model                                    | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-19        |
| 8                              | Heart model                                       | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-20        |
| 9                              | Kidney model                                      | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-21        |
| 10                             | Digital Alcohol tester                            | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 11                             | 100-Pro rotary evaporator                         | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 12                             | Spectrophotometer                                 | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 13                             | Anatomical Root tip model                         | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 14                             | Spinal Cord Model                                 | Unit | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | ○ | C  |      |                  |
| 15                             | Blastulation of flog                              | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-22        |
| 16                             | Hydrilla (黒藻)                                     | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 17                             | Plastic lung                                      | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 18                             | Photosynthesis apparatus                          | Unit | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A  | ○    | SecBio-23        |
| 19                             | Venus Flytrap                                     | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 20                             | Thallus Lichen                                    | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 21                             | Porifera re-production cell                       | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |
| 22                             | Cell Budding of Gene                              | Unit | ○        | ○ | ○ | ○ | × | ○ | × | ○ | ○ | C  |      |                  |

| No.                    | MOBS標準機材                                                                | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価            | 計画機材 | 機材番号         |
|------------------------|-------------------------------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|---------------|------|--------------|
|                        |                                                                         |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |               |      |              |
| 23                     | Lab Coats (white)                                                       | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecCh-23     |
| 24                     | Tripod                                                                  | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-24    |
| 25                     | Poster for human digestive system SP 0301                               | Sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 26                     | Poster of carbon dioxide cycle SP 0151                                  | Sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 27                     | Poster of human respiratory system SP 0302                              | Sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 28                     | Poster of human blood circulation SP 0306                               | Sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 29                     | Poster of plant anatomy rocks, bote, leave, flowers, truite, bud, photo | Sheet | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 30                     | Poster of food chain                                                    | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-25    |
| 31                     | Human Torso with interchangeable sex organ                              | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-26    |
| 32                     | DNA structure simulation kit Code: BM0103                               | Set   | ×        | ○ | ○ | × | ○ | ○ | × | ○ | D |               |      |              |
| 33                     | Typical plant cell                                                      | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-27    |
| 34                     | Animal Cell, Code: BM206                                                | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-28    |
| 35                     | Cell of plant slide                                                     | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-29    |
| 36                     | Plant tissue slide, Code: BL1011                                        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-30    |
| 37                     | Respiration apparatus BO 0462                                           | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-31,36 |
| Group experiment(GE)   |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Storage Bottle 75cc                                                     | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | B | ○             |      | SecBio-32    |
| 2                      | Storage Bottle 750cc                                                    | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | B | ○             |      | SecBio-33    |
| 3                      | Tissue Culture Bottle                                                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | B | ○             |      | SecBio-34    |
| 4                      | Tissue Culture Bottle                                                   | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | B | ○             |      | SecBio-35    |
| 5                      | Leaves collection Plate                                                 | Pc    | ×        | ○ | ○ | ○ | ○ | × | ○ | ○ | C |               |      |              |
| 6                      | Measuring Tape 50 meters                                                | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecBio-37    |
| 7                      | Color Chart                                                             | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-38    |
| 8                      | pH paper 0-14 pH range MERCK Brand                                      | Set   | ○        | ○ | ○ | ○ | ○ | ○ | × | × | C |               |      |              |
| 9                      | Life Surveyor set                                                       | Set   | ○        | ○ | ○ | × | ○ | ○ | × | ○ | C |               |      |              |
| 10                     | Set of Balance scales with weight 2000g                                 | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-39    |
| 11                     | Insect net Aluminum Handle                                              | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-40    |
| 12                     | Aquarium Net                                                            | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-41    |
| 13                     | Microscopes with accessories (rechargeable) motic BI 030                | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-42    |
| 14                     | Binoculars with accessories 10 x 15 EP 0415                             | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-43    |
| General equipment (GN) |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Steel cabinet for Microscope storage                                    | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-36    |
| 2                      | Basket for test tube                                                    | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-44    |
| 3                      | Stand for test tube                                                     | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecBio-45    |
| 音楽、体育                  |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| Music                  |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Electronic piano                                                        | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-9     |
| 2                      | Metronome                                                               | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-10    |
| 3                      | CD player                                                               | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-11    |
| 4                      | Drum                                                                    | Unit  | ○        | ○ | ○ | × | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-12    |
| 5                      | Guitar                                                                  | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-13    |
| 6                      | Xylophones No. 17                                                       |       | ×        | ○ | ○ | ○ | ○ | ○ | × | ○ | C |               |      |              |
| 7                      | Lao Traditional Drum No. 7                                              |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-15    |
| 8                      | Dual Side Drum (wood)                                                   | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-15    |
| 9                      | Maracas/Tambourine                                                      | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-16    |
| 10                     | Wooden rhythm clappers                                                  |       | ○        | ○ | ○ | × | ○ | × | ○ | ○ | C |               |      |              |
| 11                     | Lao Cymbal (Small)                                                      |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | combined to 7 |      | SecMis-12    |
| 12                     | Cymbal (Small)                                                          |       | ○        | ○ | ○ | × | ○ | × | ○ | ○ | C |               |      |              |
| 13                     | Khane Lao (Big)                                                         |       | ○        | ○ | ○ | × | ○ | × | ○ | ○ | C |               |      |              |
| 14                     | Guitar (Wood)                                                           |       | ○        | ○ | ○ | × | ○ | × | ○ | ○ | C |               |      |              |
| 15                     | others (Piano)                                                          | Unit  | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-10    |
| Sports                 |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Balls of Volley Ball                                                    | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-18    |
| 2                      | Balls for football game                                                 | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-19    |
| 3                      | Standard Net of Football                                                | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-20    |
| 4                      | Standard Net of Volley Ball                                             | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-21    |
| 5                      | Skipping Jumping Rope                                                   | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-22    |
| 6                      | Big Plastic Band                                                        |       | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | D |               |      |              |
| 7                      | Small Plastic Band                                                      |       | ○        | ○ | ○ | ○ | ○ | ○ | × | ○ | D |               |      |              |
| 8                      | Table Tennis Table with Net                                             |       | ×        | × | ○ | ○ | ○ | ○ | ○ | ○ | C |               |      |              |
| 9                      | Racket 1 Pair with 1 Dozen of Balls                                     |       | ×        | × | ○ | ○ | ○ | ○ | ○ | ○ | C |               |      |              |
| 10                     | Stopwatch                                                               | PC    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-23    |
| 11                     | Badminton Racket 1 Pair with 1 Dozen of shuttle                         | Set   | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-24    |
| 12                     | Net of Badminton                                                        | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-25    |
| 13                     | Whistle                                                                 | Pc    | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-26    |
| Lecturing (L)          |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Poster of Human Body                                                    | Sheet | ○        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | A | ○             |      | SecMis-27    |
| Measurement tools (MT) |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Height measurement instrument                                           | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-28    |
| 2                      | Weight measurement instrument                                           | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-29    |
| 3                      | Grip force meter                                                        | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-30    |
| 4                      | Measuring tape                                                          | Pc    | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-31    |
| Classroom Furniture    |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Black-white printing, copying and scanning machine                      | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-34    |
| 2                      | HP (core i5, 500G)                                                      | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-33    |
| 3                      | Activities Chart 2 Sides with Stand                                     |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 4                      | Student Chairs and Table (Metal or Wood structure)                      |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 5                      | Wood Chairs                                                             |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 6                      | FD Black/White Board                                                    |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 7                      | International Standard Green/White Board                                |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 8                      | White & Softboard                                                       |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 9                      | Teacher Chair & Table                                                   |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 10                     | Cupboard                                                                |       | ○        | ○ | ○ | ○ | ○ | ○ | ○ | × | D |               |      |              |
| 11                     | Others                                                                  |       | ×        | × | × | × | × | × | × | × | D |               |      |              |
| Audio Visual           |                                                                         |       |          |   |   |   |   |   |   |   |   |               |      |              |
| 1                      | Speaker 500W, 1,000W                                                    |       | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | C |               |      |              |
| 2                      | Mixture 500W, 1,000W                                                    |       | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | C |               |      |              |
| 3                      | Wireless Microphone, Microphone                                         |       | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | C |               |      |              |
| 4                      | CD, VCD & DVD Players                                                   |       | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | C |               |      |              |
| 5                      | Television                                                              |       | ×        | ○ | ○ | ○ | × | ○ | ○ | ○ | C |               |      |              |
| 6                      | Computer                                                                | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-33    |
| 7                      | Projector                                                               | Unit  | ×        | ○ | ○ | ○ | ○ | ○ | ○ | ○ | B | ○             |      | SecMis-35    |



| No.           | MOES標準機材                                         | 単位    | 選定クライテリア |   |   |   |   |   |   |   |   | 評価 | 計画機材     | 機材番号      |
|---------------|--------------------------------------------------|-------|----------|---|---|---|---|---|---|---|---|----|----------|-----------|
|               |                                                  |       | ①        | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ |    |          |           |
| 8             | Others                                           |       | ×        | × | × | × | × | × | × | × | × | D  |          |           |
| MOES標準機材にないもの |                                                  |       |          |   |   |   |   |   |   |   |   |    |          |           |
| 1             | Desiccator, approx. 8 inch diameter              | Unit  |          |   |   |   |   |   |   |   |   | A  | ○        | SecCh-3   |
| 2             | Triangular prism                                 | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecCh-11  |
| 3             | Binocular Microscope (100pcs/box)                | Set   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-2  |
| 4             | Dental model                                     | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-7  |
| 5             | Skin model                                       | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-8  |
| 6             | Urinary system (male and female)                 | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-9  |
| 7             | Dicotyledon model                                | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-10 |
| 8             | Mitosis cell division                            | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-11 |
| 9             | Meiosis Cell Division                            | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-12 |
| 10            | Monocyledon/Liliopsida Model                     | pcs   |          |   |   |   |   |   |   |   |   | A  | ○        | SecBio-13 |
| 11            | Lao Number, Roman Number and Arabi Number Poster | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-2  |
| 12            | English Consonants Poster                        | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-3  |
| 13            | Animal Dictionary Poster                         | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-4  |
| 14            | Kitchen Implements Poster                        | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-5  |
| 15            | Fruit Dictionary Poster                          | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-6  |
| 16            | Body Dictionary Poster                           | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-7  |
| 17            | Tree Dictionary Poster                           | sheet |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-8  |
| 18            | School first aid kit                             |       |          |   |   |   |   |   |   |   |   | A  | ○        | SecMis-32 |
| 計 368 品目      |                                                  |       |          |   |   |   |   |   |   |   |   |    | 計 222 品目 | 計 171 品目  |

< 凡例 >

選定クライテリア

- ① カリキュラムの実施に不可欠である
- ② 機材設置に必要なスペース及び施設各室のスペースが確保されている
- ③ 維持管理が比較的容易である(調達困難な消耗品を必要としない)
- ④ 扱いが容易である(特殊技能を必要としない)
- ⑤ 使用頻度が高い
- ⑥ 調達が容易である
- ⑦ 他の機材で代用ができない
- ⑧ 消耗品ではない
- ⑨ 家具・施設ではない

判定

- A 最優先機材
- B 優先度2位
- C 優先度3位
- D 不採用
- E ラオス側負担で整備

注) ガラス器具は、メーカーにより容量が異なるため、調達の可能性に準じ容量を変更する。

