



Republic of the Philippines  
**SOUTHERN LUZON STATE UNIVERSITY**  
Lucban, Quezon

**REQUEST FOR QUOTATION**

**GEOTECHNICAL INVESTIGATION (PDO)**

**Purchase Request No. 2024-09-2017**

**Approved Budget for the Contract: ₱ 350,000.00**

The Southern Luzon State University through the Bids and Awards Committee invites interested firms/supplier to submit quotation for the procurement of **Geotechnical Investigation (PDO)** to apply the sum of **Three Hundred Fifty Thousand Pesos Only (₱ 350,000.00)** inclusive of VAT, being the **Approved Budget for the Contract (ABC)**, details as follows:

Qty.	Unit	ITEM/S DESCRIPTION
1	lot	Geotechnical Investigation for Lot 1247 Proposed Location of College of Allied Medicine Annex (1 borehole)
1	lot	Geotechnical Investigation for Lot 1239 (1 borehole)
1	lot	Geotechnical Investigation for SLSU Main Annex (Piis) Lot (2 boreholes)
1	lot	Geotechnical Investigation for Lot C at SLSU Ayuti Campus (1 borehole)
1	lot	Geotechnical Investigation for SLSU Tayabas Lot (1 borehole)
1	lot	Geotechnical Investigation for SLSU Tiaong Lot (1 borehole)
		*see attached document for specifications

1. The quotation must be submitted (can also be send thru email at the contact details listed below) or to the Office of the Procurement Office/Bids and Awards Committee, Southern Luzon State University, 2<sup>nd</sup> Flr. Hermano Puli Building, and shall be received by the Committee.

E-mail : [slsuprourement@slsu.edu.ph](mailto:slsuprourement@slsu.edu.ph)

2. The SLSU reserves the right to reject any or all quotations and/or proposals and waive any formalities/ informalities therein and to accept such bids it may consider as most advantageous to the agency and to the government. Southern Luzon State University SLSU neither assumes any obligation for whatsoever losses that may be incurred in the preparation of bids, nor does it guarantee that an award will be made.

**MARIDEL C. ZABELLA**  
Head, Procurement Office  
Southern Luzon State University  
Lucban, Quezon  
Tel. No.: (042)540-6519





Republic of the Philippines  
SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR LOT 1247 PROPOSED LOCATION OF COLLEGE OF ALLIED  
MEDICINE ANNEX (1 BOREHOLE)

PROJECT LOCATION: SLSU MAIN CAMPUS, LUCBAN, QUEZON

OWNER : Southern Luzon State University

ABC : P 50,000.00

MODE OF IMPLEMENTATION : by Contract

PROJECT DURATION: 45 Calendar Days

SUMMARY

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
II	1	lot	Drilling		
III	1	lot	Laboratory Testing		
IV	1	lot	Geotechnical Evaluation		
V	1	lot	Report Preparation		
				<b>TOTAL ESTIMATED DIRECT COST</b>	<b>P</b>
				<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>
<b>INDIRECT COST</b>				<b>CONTRACTOR'S PROFIT</b>	<b>P</b>
				<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>
				<b>TOTAL PROJECT COST</b>	<b>P</b>

TOTAL PROJECT COST IN WORDS: \_\_\_\_\_

CONTRACTOR / BIDDER : \_\_\_\_\_



Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for Lot 1247 Proposed Location of College of Allied Medicine Annex (1 borehole)

**PROJECT LOCATION :** SLSU Main Campus, Lucban, Quezon

**OWNER :** Southern Luzon State University

**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

- A. Field Works
- B. Laboratory Testing
- C. Soil Investigation and Preparation of Report

The Consultant shall be held solely responsible for the result of this boring/drilling exploration and other activities under this Terms of Reference.

**DETAILED EXPLORATION REQUIREMENTS/SPECIFICATIONS**

**A. FIELD WORKS**

Drilling shall be performed utilizing the Standard Penetration Test (SPT) through ordinary soil encountered using an Auto-trip Hammer to the depths specified above. Standard penetration test shall be performed using 5.0 cm. (2.0 in.) outside diameter split spoon sampler, driven by a 63.6 kg. (140 lbs.) Hammer freely falling at 76.0 cm. (30 in.). The sampling interval shall be at 1.0 meters for the first 6.0m and 1.5m thereafter or as specified by the Client. Undisturbed soil samples, if permissible using a 6.35 cm. (2.50 in) I.D. thin wall tube sampler shall be obtained encountered in all cohesive materials. The undisturbed soil samples shall be taken such that a minimum amount of disturbance in the natural condition of the samples has been caused through drilling, sampling, preserving, storing, and transporting the samples. These undisturbed samples will be brought to the laboratory for special testing or as specified by the Client. Core diameter shall not be less than 45 mm in diameter. An "NMLC" geotechnical core barrel shall be used for core sampling. All measurements, observations, and field test results shall be recorded in appropriate boring logs including a groundwater table if any.

**B. LABORATORY TESTING**

The preparation of samples for testing shall be made in accordance with AASHIO. The following tests shall be conducted but are not limited to:

- a. Standard penetration test (SPT) at maximum interval of 1.5 m at every change in soil stratum
- b. Laboratory Tests

1	Visual Identification of Soil
2	Index Properties
2.1	<i>Moisture Content</i>
2.2	<i>Specific Gravity</i>
2.3	<i>Sieve Analysis</i>
2.4	<i>Hydrometer Analysis</i>
2.5	<i>Atterberg Limits</i>
2.6	<i>Soil Classification</i>
3	Moisture-Density Relation
4	California Bearing Ratio (CBR)
5	Strength Tests
5.1	<i>Triaxial Test</i>
5.2	<i>Direct Shear Test</i>
6	Consolidation Test (if soft soils are encountered)
6.1	<i>One-Dimensional Consolidation</i>
6.2	<i>Swell-Potential of Clays</i>
6.3	<i>Collapse Potential of Soils</i>

### C. SOIL INVESTIGATION AND PREPARATION OF REPORT

The Consultant shall prepare the following reports and deliverables:

#### Final Report

The Consultant shall prepare the geotechnical report and analysis in three (3) bound copies in a form and substance to be submitted to Southern Luzon State University within Forty-Five (45) calendar days upon receipt of the Notice to Proceed. The final report shall not be limited to the following:

- a. Field Investigation and Methodology
- b. Borehole Drilling and Sampling
- c. Laboratory Testing
- d. Final Boring Logs (BL)
- e. Final Laboratory Tests Results (FLTR)
- f. Borehole Location Plan
- g. Soil Profile along structures showing boring/drilling logs
- h. Soil Liquefaction Investigation Report
- i. Soil Bearing Capacity
- j. Recommendation if called for such as type of measure/structure of work

#### OTHER DATA TO BE SUBMITTED

##### A. Boring Logs

1. Job, boring, hole number, date, time, boring/drilling, foreman, supervisor
2. Weather condition
3. Depth of boring at start of day
4. Water level in casing at start of day
5. Method of penetration and flushing system
6. Description of soil strata encountered
7. Depth of soil boundaries



8. Size, type and depth of samples and sample number
9. Type and depth of in-situ tests
10. Standard Penetration Tests Resistance, "N" Value
11. Recovery ratios of samples
12. Detailed notes on boring/drilling procedure, casing sizes and resistance to driving, description of wash water or spoil from boring/drilling tools
13. Depth of boring at end of day
14. Other relevant information such RQD, percent core recovery, angle of friction etc.

**B. Photographs**

Photographs showing the borehole drilling and sampling at each proposed sites shall be taken by the Contractor and incorporated in the report. Photographs shall be taken at each borehole location depicting the following:

1. Equipment used
2. Core drilling operation
3. Water level measurements
4. Performance of SPT and Shelby tube sampling
5. All cores in the core boxes, SPT and Shelby tube samples
6. Date photographs was taken

Prepared by:

  
Engr. Princess Camille Rondilla  
Asst. Planning Engineer

Approved by:

  
Engr. Melvin A. Makipagay  
Director – Planning and Development Office

Republic of the Philippines  
SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

**PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR LOT 1239 (1 BOREHOLE)**

**PROJECT LOCATION: SLSU MAIN CAMPUS, LUCBAN, QUEZON**

**OWNER : Southern Luzon State University**

**ABC :** P 50,000.00

**MODE OF IMPLEMENTATION : by Contract**

**PROJECT DURATION: 45 Calendar Days**

**SUMMARY**

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
II	1	lot	Drilling		
III	1	lot	Laboratory Testing		
IV	1	lot	Geotechnical Evaluation		
V	1	lot	Report Preparation		
				<b>TOTAL ESTIMATED DIRECT COST</b>	<b>P</b>
				<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>
				<b>CONTRACTOR'S PROFIT</b>	<b>P</b>
				<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>
				<b>TOTAL PROJECT COST</b>	<b>P</b>

TOTAL PROJECT COST IN WORDS: \_\_\_\_\_

CONTRACTOR / BIDDER : \_\_\_\_\_



Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for Lot 1239 (1 borehole)  
**PROJECT LOCATION :** SLSU Main Campus, Lucban, Quezon  
**OWNER :** Southern Luzon State University  
**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

- A. Field Works
- B. Laboratory Testing
- C. Soil Investigation and Preparation of Report

The Consultant shall be held solely responsible for the result of this boring/drilling exploration and other activities under this Terms of Reference.

**DETAILED EXPLORATION REQUIREMENTS/SPECIFICATIONS**

**A. FIELD WORKS**

Drilling shall be performed utilizing the Standard Penetration Test (SPT) through ordinary soil encountered using an Auto-trip Hammer to the depths specified above. Standard penetration test shall be performed using 5.0 cm. (2.0 in.) outside diameter split spoon sampler, driven by a 63.6 kg. (140 lbs.) Hammer freely falling at 76.0 cm. (30 in.). The sampling interval shall be at 1.0 meters for the first 6.0m and 1.5m thereafter or as specified by the Client. Undisturbed soil samples, if permissible using a 6.35 cm. (2.50 in) I.D. thin wall tube sampler shall be obtained encountered in all cohesive materials. The undisturbed soil samples shall be taken such that a minimum amount of disturbance in the natural condition of the samples has been caused through drilling, sampling, preserving, storing, and transporting the samples. These undisturbed samples will be brought to the laboratory for special testing or as specified by the Client. Core diameter shall not be less than 45 mm in diameter. An "NMLC" geotechnical core barrel shall be used for core sampling. All measurements, observations, and field test results shall be recorded in appropriate boring logs including a groundwater table if any.

**B. LABORATORY TESTING**

The preparation of samples for testing shall be made in accordance with AASHIO. The following tests shall be conducted but are not limited to:

- a. Standard penetration test (SPT) at maximum interval of 1.5 m at every change in soil stratum
- b. Laboratory Tests

1	Visual Identification of Soil
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2	Index Properties
2.1	<i>Moisture Content</i>
2.2	<i>Specific Gravity</i>
2.3	<i>Sieve Analysis</i>
2.4	<i>Hydrometer Analysis</i>
2.5	<i>Atterberg Limits</i>
2.6	<i>Soil Classification</i>
3	Moisture-Density Relation
4	California Bearing Ratio (CBR)
5	Strength Tests
5.1	<i>Triaxial Test</i>
5.2	<i>Direct Shear Test</i>
6	Consolidation Test (if soft soils are encountered)
6.1	<i>One-Dimensional Consolidation</i>
6.2	<i>Swell-Potential of Clays</i>
6.3	<i>Collapse Potential of Soils</i>

### C. SOIL INVESTIGATION AND PREPARATION OF REPORT

The Consultant shall prepare the following reports and deliverables:

#### Final Report

The Consultant shall prepare the geotechnical report and analysis in three (3) bound copies in a form and substance to be submitted to Southern Luzon State University within Forty-Five (45) calendar days upon receipt of the Notice to Proceed. The final report shall not be limited to the following:

- a. Field Investigation and Methodology
- b. Borehole Drilling and Sampling
- c. Laboratory Testing
- d. Final Boring Logs (BL)
- e. Final Laboratory Tests Results (FLTR)
- f. Borehole Location Plan
- g. Soil Profile along structures showing boring/drilling logs
- h. Soil Liquefaction Investigation Report
- i. Soil Bearing Capacity
- j. Recommendation if called for such as type of measure/structure of work

#### OTHER DATA TO BE SUBMITTED

##### A. Boring Logs

1. Job, boring, hole number, date, time, boring/drilling, foreman, supervisor
2. Weather condition
3. Depth of boring at start of day
4. Water level in casing at start of day
5. Method of penetration and flushing system
6. Description of soil strata encountered
7. Depth of soil boundaries
8. Size, type and depth of samples and sample number

9. Type and depth of in-situ tests
10. Standard Penetration Tests Resistance, "N" Value
11. Recovery ratios of samples
12. Detailed notes on boring/drilling procedure, casing sizes and resistance to driving, description of wash water or spoil from boring/drilling tools
13. Depth of boring at end of day
14. Other relevant information such RQD, percent core recovery, angle of friction etc.

**B. Photographs**

Photographs showing the borehole drilling and sampling at each proposed sites shall be taken by the Contractor and incorporated in the report. Photographs shall be taken at each borehole location depicting the following:

1. Equipment used
2. Core drilling operation
3. Water level measurements
4. Performance of SPT and Shelby tube sampling
5. All cores in the core boxes, SPT and Shelby tube samples
6. Date photographs was taken

Prepared by:

  
Engr. Princess Camille Rondilla  
Asst. Planning Engineer

Approved by:

  
Engr. Melvin A. Makipagay  
Director – Planning and Development Office

Republic of the Philippines  
SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

**PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR SLSU MAIN ANNEX (PIIS) LOT (2 BOREHOLES)**

**PROJECT LOCATION: BRGY. PIIS, LUCBAN, QUEZON**

**OWNER : Southern Luzon State University**

**ABC :** P 100,000.00

**MODE OF IMPLEMENTATION : by Contract**

**PROJECT DURATION: 45 Calendar Days**

**SUMMARY**

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
II	1	lot	Drilling		
III	1	lot	Laboratory Testing		
IV	1	lot	Geotechnical Evaluation		
V	1	lot	Report Preparation		
			<b>TOTAL ESTIMATED DIRECT COST</b>	<b>P</b>	
			<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>	
			<b>CONTRACTOR'S PROFIT</b>	<b>P</b>	
			<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>	
			<b>TOTAL PROJECT COST</b>	<b>P</b>	

**TOTAL PROJECT COST IN WORDS:** \_\_\_\_\_

**CONTRACTOR / BIDDER :** \_\_\_\_\_





Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for SLSU Main Annex (Piis) Lot (2 boreholes)  
**PROJECT LOCATION :** Brgy. Piis, Lucban, Quezon  
**OWNER :** Southern Luzon State University  
**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

- A. Field Works
- B. Laboratory Testing
- C. Soil Investigation and Preparation of Report

The Consultant shall be held solely responsible for the result of this boring/drilling exploration and other activities under this Terms of Reference.

**DETAILED EXPLORATION REQUIREMENTS/SPECIFICATIONS**

**A. FIELD WORKS**

Drilling shall be performed utilizing the Standard Penetration Test (SPT) through ordinary soil encountered using an Auto-trip Hammer to the depths specified above. Standard penetration test shall be performed using 5.0 cm. (2.0 in.) outside diameter split spoon sampler, driven by a 63.6 kg. (140 lbs.) Hammer freely falling at 76.0 cm. (30 in.). The sampling interval shall be at 1.0 meters for the first 6.0m and 1.5m thereafter or as specified by the Client. Undisturbed soil samples, if permissible using a 6.35 cm. (2.50 in) I.D. thin wall tube sampler shall be obtained encountered in all cohesive materials. The undisturbed soil samples shall be taken such that a minimum amount of disturbance in the natural condition of the samples has been caused through drilling, sampling, preserving, storing, and transporting the samples. These undisturbed samples will be brought to the laboratory for special testing or as specified by the Client. Core diameter shall not be less than 45 mm in diameter. An "NMLC" geotechnical core barrel shall be used for core sampling. All measurements, observations, and field test results shall be recorded in appropriate boring logs including a groundwater table if any.

**B. LABORATORY TESTING**

The preparation of samples for testing shall be made in accordance with AASHIO. The following tests shall be conducted but are not limited to:

- a. Standard penetration test (SPT) at maximum interval of 1.5 m at every change in soil stratum
- b. Laboratory Tests

1	Visual Identification of Soil
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2	Index Properties
2.1	<i>Moisture Content</i>
2.2	<i>Specific Gravity</i>
2.3	<i>Sieve Analysis</i>
2.4	<i>Hydrometer Analysis</i>
2.5	<i>Atterberg Limits</i>
2.6	<i>Soil Classification</i>
3	Moisture-Density Relation
4	California Bearing Ratio (CBR)
5	Strength Tests
5.1	<i>Triaxial Test</i>
5.2	<i>Direct Shear Test</i>
6	Consolidation Test (if soft soils are encountered)
6.1	<i>One-Dimensional Consolidation</i>
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6.3	<i>Collapse Potential of Soils</i>

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- d. Final Boring Logs (BL)
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- f. Borehole Location Plan
- g. Soil Profile along structures showing boring/drilling logs
- h. Soil Liquefaction Investigation Report
- i. Soil Bearing Capacity
- j. Recommendation if called for such as type of measure/structure of work

#### OTHER DATA TO BE SUBMITTED

##### A. Boring Logs

1. Job, boring, hole number, date, time, boring/drilling, foreman, supervisor
2. Weather condition
3. Depth of boring at start of day
4. Water level in casing at start of day
5. Method of penetration and flushing system
6. Description of soil strata encountered
7. Depth of soil boundaries
8. Size, type and depth of samples and sample number

9. Type and depth of in-situ tests
10. Standard Penetration Tests Resistance, "N" Value
11. Recovery ratios of samples
12. Detailed notes on boring/drilling procedure, casing sizes and resistance to driving, description of wash water or spoil from boring/drilling tools
13. Depth of boring at end of day
14. Other relevant information such RQD, percent core recovery, angle of friction etc.

**B. Photographs**

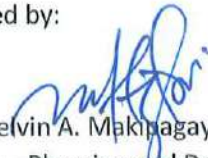
Photographs showing the borehole drilling and sampling at each proposed sites shall be taken by the Contractor and incorporated in the report. Photographs shall be taken at each borehole location depicting the following:

1. Equipment used
2. Core drilling operation
3. Water level measurements
4. Performance of SPT and Shelby tube sampling
5. All cores in the core boxes, SPT and Shelby tube samples
6. Date photographs was taken

Prepared by:

  
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Director – Planning and Development Office



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SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

**PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR LOT C AT SLSU AYUTI CAMPUS (1 BOREHOLE)**

**PROJECT LOCATION: SLSU AYUTI CAMPUS, LUCBAN, QUEZON**

**OWNER : Southern Luzon State University**

**ABC :** P 50,000.00

**MODE OF IMPLEMENTATION : by Contract**

**PROJECT DURATION: 45 Calendar Days**

**SUMMARY**

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
II	1	lot	Drilling		
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			<b>TOTAL ESTIMATED DIRECT COST</b>	<b>P</b>	
			<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>	
			<b>INDIRECT COST</b>	<b>CONTRACTOR'S PROFIT</b>	<b>P</b>
				<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>
				<b>TOTAL PROJECT COST</b>	<b>P</b>

TOTAL PROJECT COST IN WORDS: \_\_\_\_\_

CONTRACTOR / BIDDER : \_\_\_\_\_



Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for Lot C at SLSU Ayuti Campus (1 borehole)  
**PROJECT LOCATION :** SLSU Ayuti Campus, Brgy. Ayuti, Lucban, Quezon  
**OWNER :** Southern Luzon State University  
**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

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**DETAILED EXPLORATION REQUIREMENTS/SPECIFICATIONS**

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The preparation of samples for testing shall be made in accordance with AASHIO. The following tests shall be conducted but are not limited to:

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1	Visual Identification of Soil
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2.1	Moisture Content
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6.3	Collapse Potential of Soils

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The Consultant shall prepare the following reports and deliverables:

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**B. Photographs**

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1. Equipment used
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5. All cores in the core boxes, SPT and Shelby tube samples
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Prepared by:

  
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Engr. Melvin A. Makipagay  
Director – Planning and Development Office

Republic of the Philippines  
SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

**PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR SLSU TAYABAS LOT (1 BOREHOLE)**

**PROJECT LOCATION: SLSU TAYABAS CAMPUS, TAYABAS, QUEZON**

**OWNER : Southern Luzon State University**

**ABC :** P 50,000.00

**MODE OF IMPLEMENTATION : by Contract**

**PROJECT DURATION: 45 Calendar Days**

**SUMMARY**

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
II	1	lot	Drilling		
III	1	lot	Laboratory Testing		
IV	1	lot	Geotechnical Evaluation		
V	1	lot	Report Preparation		
			<b>TOTAL ESTIMATED DIRECT COST</b>	<b>P</b>	
			<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>	
			<b>CONTRACTOR'S PROFIT</b>	<b>P</b>	
			<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>	
			<b>TOTAL PROJECT COST</b>	<b>P</b>	

**TOTAL PROJECT COST IN WORDS:** \_\_\_\_\_

**CONTRACTOR / BIDDER :** \_\_\_\_\_



Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for SLSU Tayabas Lot (1 borehole)  
**PROJECT LOCATION :** SLSU Tayabas Campus, Tayabas, Quezon  
**OWNER :** Southern Luzon State University  
**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

- A. Field Works
- B. Laboratory Testing
- C. Soil Investigation and Preparation of Report

The Consultant shall be held solely responsible for the result of this boring/drilling exploration and other activities under this Terms of Reference.

**DETAILED EXPLORATION REQUIREMENTS/SPECIFICATIONS**

**A. FIELD WORKS**

Drilling shall be performed utilizing the Standard Penetration Test (SPT) through ordinary soil encountered using an Auto-trip Hammer to the depths specified above. Standard penetration test shall be performed using 5.0 cm. (2.0 in.) outside diameter split spoon sampler, driven by a 63.6 kg. (140 lbs.) Hammer freely falling at 76.0 cm. (30 in.). The sampling interval shall be at 1.0 meters for the first 6.0m and 1.5m thereafter or as specified by the Client. Undisturbed soil samples, if permissible using a 6.35 cm. (2.50 in) I.D. thin wall tube sampler shall be obtained encountered in all cohesive materials. The undisturbed soil samples shall be taken such that a minimum amount of disturbance in the natural condition of the samples has been caused through drilling, sampling, preserving, storing, and transporting the samples. These undisturbed samples will be brought to the laboratory for special testing or as specified by the Client. Core diameter shall not be less than 45 mm in diameter. An "NMLC" geotechnical core barrel shall be used for core sampling. All measurements, observations, and field test results shall be recorded in appropriate boring logs including a groundwater table if any.

**B. LABORATORY TESTING**

The preparation of samples for testing shall be made in accordance with AASHIO. The following tests shall be conducted but are not limited to:

- a. Standard penetration test (SPT) at maximum interval of 1.5 m at every change in soil stratum
- b. Laboratory Tests

1	Visual Identification of Soil
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2	Index Properties
2.1	Moisture Content
2.2	Specific Gravity
2.3	Sieve Analysis
2.4	Hydrometer Analysis
2.5	Atterberg Limits
2.6	Soil Classification
3	Moisture-Density Relation
4	California Bearing Ratio (CBR)
5	Strength Tests
5.1	Triaxial Test
5.2	Direct Shear Test
6	Consolidation Test (if soft soils are encountered)
6.1	One-Dimensional Consolidation
6.2	Swell-Potential of Clays
6.3	Collapse Potential of Soils

### C. SOIL INVESTIGATION AND PREPARATION OF REPORT

The Consultant shall prepare the following reports and deliverables:

#### Final Report

The Consultant shall prepare the geotechnical report and analysis in three (3) bound copies in a form and substance to be submitted to Southern Luzon State University within Forty-Five (45) calendar days upon receipt of the Notice to Proceed. The final report shall not be limited to the following:

- a. Field Investigation and Methodology
- b. Borehole Drilling and Sampling
- c. Laboratory Testing
- d. Final Boring Logs (BL)
- e. Final Laboratory Tests Results (FLTR)
- f. Borehole Location Plan
- g. Soil Profile along structures showing boring/drilling logs
- h. Soil Liquefaction Investigation Report
- i. Soil Bearing Capacity
- j. Recommendation if called for such as type of measure/structure of work

#### OTHER DATA TO BE SUBMITTED

##### A. Boring Logs

1. Job, boring, hole number, date, time, boring/drilling, foreman, supervisor
2. Weather condition
3. Depth of boring at start of day
4. Water level in casing at start of day
5. Method of penetration and flushing system
6. Description of soil strata encountered
7. Depth of soil boundaries
8. Size, type and depth of samples and sample number

9. Type and depth of in-situ tests
10. Standard Penetration Tests Resistance, "N" Value
11. Recovery ratios of samples
12. Detailed notes on boring/drilling procedure, casing sizes and resistance to driving, description of wash water or spoil from boring/drilling tools
13. Depth of boring at end of day
14. Other relevant information such RQD, percent core recovery, angle of friction etc.

**B. Photographs**

Photographs showing the borehole drilling and sampling at each proposed sites shall be taken by the Contractor and incorporated in the report. Photographs shall be taken at each borehole location depicting the following:

1. Equipment used
2. Core drilling operation
3. Water level measurements
4. Performance of SPT and Shelby tube sampling
5. All cores in the core boxes, SPT and Shelby tube samples
6. Date photographs was taken

Prepared by:



Engr. Princess Camille Rondilla  
Asst. Planning Engineer

Approved by:



Engr. Melvin A. Makibagay  
Director – Planning and Development Office

Republic of the Philippines  
SOUTHERN LUZON STATE UNIVERSITY  
Planning and Development Office  
Lucban , Quezon

**PROJECT TITLE: GEOTECHNICAL INVESTIGATION FOR SLSU TIAONG LOT (1 BOREHOLE)**

**PROJECT LOCATION: SLSU TIAONG CAMPUS, TIAONG, QUEZON**

**OWNER : Southern Luzon State University**

**ABC :** P 50,000.00

**MODE OF IMPLEMENTATION : by Contract**

**PROJECT DURATION: 45 Calendar Days**

**SUMMARY**

ITEM	QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL
I	1	lot	Mobilization/Demobilization		
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III	1	lot	Laboratory Testing		
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V	1	lot	Report Preparation		
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				<b>OVERHEAD, CONTINGENCIES &amp; MISC.(OCM)</b>	<b>P</b>
				<b>CONTRACTOR'S PROFIT</b>	<b>P</b>
				<b>VALUE ADDED TAX ( VAT )</b>	<b>P</b>
				<b>TOTAL PROJECT COST</b>	<b>P</b>

TOTAL PROJECT COST IN WORDS: \_\_\_\_\_

\_\_\_\_\_

CONTRACTOR / BIDDER : \_\_\_\_\_





Republic of the Philippines  
Southern Luzon State University  
Planning & Development Office  
Lucban, Quezon

**PROJECT TITLE :** Geotechnical Investigation for SLSU Tiaong Lot (1 borehole)  
**PROJECT LOCATION :** SLSU Tiaong Campus, Tiaong, Quezon  
**OWNER :** Southern Luzon State University  
**PROJECT DURATION :** 45 CD

**SCOPE OF WORKS**

The Consultant shall provide all the labor, instrument/ equipment materials and supplies, vehicles, bunkhouses, etc., necessary to perform satisfactorily the sub-surface exploration herein required, viz:

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