

सार्वजनिक स्थलमा सार्वजनिक सूचना टाँसेको मुचुल्का

आज मिति २०७८-११-२२ गतेका दिन, ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP), स्थानीय पूर्वाधार बिभाग (DoLI) प्रस्तावक रहेको रामेछाप जिल्लाको लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजनाको प्रारम्भिक वातावरणीय परिक्षण (IEE) अध्ययन प्रतिवेदन तयार गर्ने सिलसिलामा अभियान-सोइल टेस्ट-कार्ड जे.भी. परामर्शदाताको प्रतिनिधिले निम्न बमोजिमको सार्वजनिक सूचना थान एक (१) यस बागमती प्रदेश रामेछाप जिल्ला खोडादेवी नगरपालिका/गाउँपालिका, वडा नं ६ को खोडादेवी गा.पा.को कार्यालय मा तपसिलका हामीहरुको रोहवरमा टाँस गरियो, मुचुल्कामा सहिछाप गरिदियो।

तपसिल:

- १) रामेछाप जिल्ला खोडादेवी न.पा./गा.पा., वडा नं ६ बस्ने बर्ष ५५ को सुब्बा प्रताप खिमरे
- २) रामेछाप जिल्ला खोडादेवी न.पा./गा.पा., वडा नं ६ बस्ने बर्ष ३८ को प्रेमलाल रिजाल
- ३) रामेछाप जिल्ला खोडादेवी न.पा./गा.पा., वडा नं ६ बस्ने बर्ष २६ को बन्धु प्र. अहिराई
- ४) रामेछाप जिल्ला खोडादेवी न.पा./गा.पा., वडा नं ६ बस्ने बर्ष २३ को उमालाल खत्री

काम तामेल गर्ने

कर्मचारीको नाम र सही: पावेत्रा मातब्बर खत्री
 पद: व्यापिक सहजकर्ता
 कार्यालयको नाम र छाप:





.....स्वास्थ्य.....गाउँपालिका/नगरपालिका
नं. ६..... वडा कार्यालय

पत्र संख्या:- ०७८/१७९

चलानी नं.:- २४६

रामेछाप
 रामेछाप जिल्ला, नेपाल
 स्वास्थ्य प्रशासन

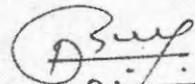
मिति:- २०७८-११-२२

श्री स्थानीय पूर्वाधार विभाग

ग्रामिण सडक सञ्जाल सुधार आयोजना

विषय:- सूचना टाँसको जानकारी सम्बन्धमा

उपरोक्त सम्बन्धमा तहाँ आयोजनाको च.ने ७१
 मिति २०७८-११-२२ को पत्राचार लुगुघाट-वेथान
 सुनापति गा.पा.-ताल्पा दौरम्बा सडक (३३.७२ कि.मि.)
 स्तरमा आयोजनाको प्रारम्भिक वातावरणीय परिक्षण
 (IEE) प्रतिवेदन सम्बन्धमा सार्वजनिक सूचना यस
 कार्यालयमा प्राप्त भई कार्यालयको सूचनाबाट
 टाँस गरिएको ब्यहोरा जानकारीका लागि अनुरोध छ।


 असल सिंह तामाङ
 वडा अध्यक्ष

Government of Nepal
 Ministry of Federal Affairs and General Administration
 Department of Local Infrastructure
 Rural Connectivity Improvement Project (RCIP)
 Project Coordination Unit
 Lalitpur

Joint Venture
 ANVIKAR-SOILTEST-CARP
 Nepal Infrastructure Development

Government of Nepal
 Ministry of Federal Affairs and General Administration
 Singha Durbar, Kathmandu



श्री भूमिथान सामुदायिक वन उपभोक्ता समिति

दोरम्बा-५, रामेछाप

प.सं.: २०६८/०६९
च.नं.: २२०

मिति: २०६८-११-२४

श्री स्थानीय पूर्वाधार विभाग
ग्रामिण सडक सञ्जाल सुधार आयोजना
विषय: सुचना टाँसको जानकारी सम्बन्धमा

उपरोक्त सम्बन्धमा तहँ आयोजनाको च.नं. ०६१ मिति २०६८-११-२२ को पत्रानुसार लुम्बुघाट - वेधान - सुनापति गा.पा - गाल्पा दोरम्बा सडक (३३.०२ कि मी) स्तरोन्नति आयोजनाको प्रारम्भिक वातावरणीय परिक्षण (IEE) प्रतिवेदन सम्बन्धमा सार्वजनिक सुचना यस कार्यालयमा प्राप्त भई कार्यालयको सुचनापट्टीमा टाँस गरिएको ब्यहोरा जानकारीका लागि अनुरोध छ ।


डम्बर वा भोक्ता ?
अर्थात्



सार्वजनिक स्थलमा सार्वजनिक सूचना टाँसेको मुचुल्का

आज मिति २०७८/११/२६ गतेका दिन, ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP), स्थानीय पूर्वाधार बिभाग (DoLI) प्रस्तावक रहेको रामेछाप जिल्लाको लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजनाको प्रारम्भिक वातावरणीय परिक्षण (IEE) अध्ययन प्रतिवेदन तयार गर्ने सिलसिलामा अभियान-सोइल टेस्ट-कार्ड जे.भी. परामर्शदाताको प्रतिनिधिले निम्न बमोजिमको सार्वजनिक सूचना थान एक (१) यस बागमती प्रदेश रामेछाप जिल्ला सुनापति नगरपालिका/गाउँपालिका, वडा नं ४ को सुनापति सहकारी (नं. १३९) मा तपसिलका हामीहरूको रोहवरमा टाँस गरियो, मुचुल्कामा सहिछाप गरिदियो।

तपसिल:

- १) रामेछाप जिल्ला सुनापति न.पा./गा.पा., वडा नं ४ बस्ने बर्ष ५५ को जय व. पाठे गभा
- २) " जिल्ला " न.पा./गा.पा., वडा नं ४ बस्ने बर्ष ४० को विर व. तामा
- ३) " जिल्ला " न.पा./गा.पा., वडा नं ४ बस्ने बर्ष ३६ को विगिता रका
- ४) " जिल्ला " न.पा./गा.पा., वडा नं ४ बस्ने बर्ष ४२ को कल्याण तामा

काम तामेल गर्ने

कर्मचारीको नाम र सही: अशोक कु. शर्मा

पद: सचिव कुमा

कार्यालयको नाम र छाप:



श्री सुनापति सल्लेनी सामुदायिक

वन उपभोक्ता समूह

वेथान २३९



चलानी नं.: २०६८/०६९

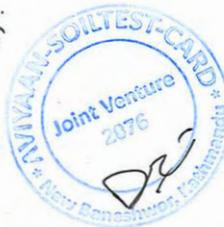
दर्ता नं.: ०४६

मिति: २०६८-११-२५

विषय: सूचना टोलको जानकारी सारबन्धमा।

श्री स्थानीय स्वशासन विभाग, ग्रामीण सडक सञ्जाल सुधार
आयोजना,
आयोजना समन्वय इकाई, पुल्चोक, ललितपुर।

उपरोक्त सारबन्धमा ठाँ आयोजनाको च.नं.०६५
मिति २०६८-११-२८ को पत्रानुसार लुम्बिनी-वेथान-सुनापति-
जा.पा.-गाल्पा दौरम्बा सडक (३३.६५ कि.मी.) सुधारको
आयोजनाको प्रारम्भिक बालबरणीय परिदृश्य (IIE)
प्रतिवेदन सम्बन्धित सार्वजनिक सूचना, यस कार्याल-
यमा प्राप्त भई कार्यालयको सूचना पालीमा टोल
गाउँको व्यहोरा जानकारीको लागि अनुरोध छ।



कोषाध्यक्ष *aba*

सचिव

अध्यक्ष



श्री अग्लेश्वरी सामुदायिक बन उपभोक्ता समूह

खाँडादेवी-७, रामेछाप

२०६४

पत्र संख्या:- २०६८/००५

चलानी नं.:- ०१५

मिति:- २०६८/११/२२



श्री स्थावरी पूर्वाधार (सडक) संयुक्त सञ्चाल सुधार आयोजना,
आयोजना समन्वय केन्द्र, पुल्चोक, ललितपुर

विषय: सुचना टाँसेको जानकारी सम्बन्धमा ।

उपरोक्त सम्बन्धमा त्यहाँ आयोजनाको न.नं. ०६२ मिलाई
२०६८/११/२२ को पत्रअनुसार लुग्रेघाट - वेथान - सुनापछी गा.पा.
गाल्पा - दोम्पा सडक (३३.६५ कि.मी) स्तरोन्नी आयोजना
को प्रारम्भिक वातावरणिय परिक्षण (EIE) प्रतिवेक सम्बन्ध
सार्वजनिक सुनुवडको सुचना यस कार्यालयमा प्राप्त भई
कार्यालयको सुचनापट्टीमा यसै गालिएको कुल जानकारीको
नशी अनुप्रेषण छ ।

चन्द्र व. घिमिसे
अध्यक्ष



Appendix 8
Recommendation Letters

Ministry of Federal Affairs and General Administration
Project Coordination Unit
Lamjung





सुनापति गाउँपालिका
२ नं वडा कार्यालय
दिमीपोखरी, रामेछाप
वागमती प्रदेश, नेपाल

पत्र संख्या : २०७८/०७९
च. नं. ८३२



मिति : २०७८-१२-०६

श्री ग्रामीण सडक सञ्चाल सुधार आयोजना (RCIP)
आयोजना समन्वय इकाई
स्थानीय पूर्वाधार विभाग (DoLI)
पुल्चोक, ललितपुर

विषय : राय/सुझावहरु सहित सिफारिस गरिएको बारे ।

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०७८-११-२७ गते आयोजित सार्वजनिक सुनुवाई र मिति २०७८-११-२६ गते प्रथम प्रारम्भिक वातावरणीय परिक्षण (IAE) सम्बन्धि सार्वजनिक सूचना अनुसार कार्यान्वयन हुने लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना प्रस्तावबाट यस क्षेत्रमा निम्नानुसारको वातावरणीय प्रभाव पर्ने जाने देखिन्छ :-

(क) सकारात्मक प्रभाव

१. रोजगारका अवसर, आय वृद्धि
२. प्रतिव्यक्ति शिपविकास
३. समय र यातायात खर्चको बचत
४. व्यापार व्यवसाय तथा बजार केन्द्रको विकास तथा प्रवर्धन
५. सडक संचालनको कारणले अनियन्त्रित बसाइसराई नियन्त्रण हुने
६. सहज यातायात सुविधा संगसंगै राम्रो शिक्षा र स्वास्थ्य सेवाको पहुँच पुग्ने

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदुषण बढ्दै जाने
२. धुँवा धुलोको समस्या
३. जलस्रोत प्रदुषण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीय व्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव बढी हुने देखिएकोले उल्लेखित प्रस्ताव निम्न आधारमा कार्यान्वयन गर्न मिल्ने व्यहोरा उल्लेख गरी यो सिफारिस गरिएको छ ।

प्रस्ताव कार्यान्वयन गर्न मिल्ने आधार

१. स्थानीयलाई सवारीसाधनमा सहज पहुँच
२. रोजगारीको अवसर व्यापार व्यवसायमा वृद्धि
३. उच्च शिक्षा र राम्रो स्वास्थ्य उपचारको पहुँच
४. नगरमा आयोजना प्रभावित क्षेत्रमा स्थानीयहरूको जीवन स्तर उकास्ने



[Signature]

सुनापति गाउँपालिका
वडा अध्यक्ष





सुनापति गाउँपालिका
३ नं वडा कार्यालय
हिलेदेबी, रामेछाप
वागमती प्रदेश, नेपाल

पत्र संख्या : २०७८-०७९,
च. नं. ६१४

वागमती प्रदेश, नेपाल

मिति : २०७८-१२-०७

श्री ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)
आयोजना समन्वय इकाई
स्थानीय पूर्वाधार विभाग (DoLI)
पुल्चोक, ललितपुर

बिषय : राय/सुझावहरु सहित सिफारिस गरिएको बारे ।

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०७८-११-२७ गते आयोजित सार्वजनिक सुनुवाई र मिति २०७८-११-२६ गते प्राप्त प्रारम्भिक वातावरणीय परिक्षण (IEE) सम्बन्धि सार्वजनिक सूचना अनुसार कार्यान्वयन हुने लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना प्रस्तावबाट यस क्षेत्रमा निम्नानुसारको वातावरणीय प्रभाव पर्न जाने देखिन्छ :-

(क) सकारात्मक प्रभाव

१. रोजगारका अवसर, आय वृद्धि
२. प्राविधिक शिपविकास
३. समय र यातायात खर्चको बचत
४. व्यापार व्यवसाय तथा बजार केन्द्रको विकास तथा प्रवर्धन
५. सडक संचालनको कारणले अनियन्त्रित बसाइसराई नियन्त्रण हुने
६. सहज यातायात सुविधा संगसंगै राम्रो शिक्षा र स्वास्थ्य सेवाको पहुँच पुग्ने

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदुपण बढ्दै जाने
२. धुँवा धुलोको समस्या
३. जलस्रोत प्रदुपण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीय व्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव बढी हुने देखिएकोले उल्लेखित प्रस्ताव निम्न आधारमा कार्यान्वयन गर्न मिल्ने व्यहोरा उल्लेख गरी यो सिफारिस गरिएको छ ।

प्रस्ताव कार्यान्वयन गर्न मिल्ने आधार

१. स्थानीयलाई सवारीसाधनमा सहज पहुँच
२. रोजगारीको अवसर व्यापार व्यवसायमा वृद्धि
३. उच्च शिक्षा र राम्रो स्वास्थ्य उपचारको पहुँच
४. नमग्रहमा आयोजना प्रभावित क्षेत्रका स्थानीयहरुको जीवन स्तर उकास्ने

Ministry of Federal Affairs
Department of Local Government, Rural Cooperatives and Project Unit



सुनापति गाउँपालिका
अध्यक्ष



सुनापति गाउँपालिका

४ नं वडा कार्यालय

बेथान, रामेछाप
बागमती प्रदेश, नेपाल

पत्र संख्या : २०७८/०७९

च. नं. ५३८०

२०७८-११-०६

विषय : राय/सझावहरु सहित सिफारिस गरिएको बारे ।

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०७८-११-२७ गते आयोजित सार्वजनिक सुनुवाई र मिति २०७८-११-२६ गते प्राप्त प्रारम्भिक वातावरणीय परिक्षण (IEE) सम्बन्धि सार्वजनिक सूचना अनुसार कार्यान्वयन हुने लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना प्रस्तावबाट यस क्षेत्रमा निम्नानुसारको वातावरणीय प्रभाव पर्न जाने देखिन्छ :-

(क) सकारात्मक प्रभाव

१. रोजगारका अवसर, आय वृद्धि
२. प्राविधिक शिपविकास
३. समय र यातायात खर्चको बचत
४. व्यापार व्यवसाय तथा बजार केन्द्रको विकास तथा प्रवर्धन
५. सडक संचालनको कारणले अनियन्त्रित घसाइसगई नियन्त्रण हुने
६. सहज यातायात सुविधा संगसंगै राम्रो शिक्षा र स्वास्थ्य सेवाको पहुँच पुग्ने

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदुपण बढ्दै जाने
२. धुँवा घुलोको समस्या
३. जलस्रोत प्रदुपण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीय व्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव बढी हुने देखिएकोले उल्लेखित प्रस्ताव निम्न आधारमा कार्यान्वयन गर्न भिल्ले व्यहोरा उल्लेख गरी यो सिफारिस गरिएको छ ।

प्रस्ताव कार्यान्वयन गर्ने मिल्ने आधार

१. स्थानीयलाई सवारीसाधनमा सहज पहुँच
२. रोजगारीको अवसर व्यापार व्यवसायमा वृद्धि
३. उच्च शिक्षा र राम्रो स्वास्थ्य उपचारको पहुँच
४. समग्रतया आयोजना प्रभावित क्षेत्रका स्थानीयहरुको जीवन स्तर उकास्ने

१९.९.२०१९
बेथान, रामेछाप
वडा अध्यक्ष





सुनापति गाउँपालिका

५ नं वडा कार्यालय

खनियासानी, रामेछाप
बागमती प्रदेश, नेपाल

पत्र संख्या : २०७८/०७९

च. नं. ७५५

मिति : २०७८/१२/१९

श्री ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)
आयोजना समन्वय इकाई
स्थानीय पूर्वाधार विभाग (DoLI)
पुल्चोक, ललितपुर

विषय : राय/सुझावहरु सहित सिफारिस गरिएको बारे ।

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०७८-११-२७ गते आयोजित सार्वजनिक सुनुवाई र मिति २०७८-११-२६ गते प्राप्त प्रारम्भिक वातावरणीय परिक्षण (IEE) सम्बन्धि सार्वजनिक सूचना अनुसार कार्यान्वयन हुने लुभुघाट-बेथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना प्रस्ताववाट यस क्षेत्रमा निम्नानुसारको वातावरणीय प्रभाव पर्न जाने देखिन्छ :-

(क) सकारात्मक प्रभाव

१. रोजगारका अवसर, आय वृद्धि
२. प्राविधिक शिपविकास
३. समय र यातायात खर्चको बचत
४. व्यापार व्यवसाय तथा बजार केन्द्रको विकास तथा प्रबर्धन
५. सडक संचालनको कारणले अनियन्त्रित बसाइसराई नियन्त्रण हुने
६. सहज यातायात सुविधा संगसंगै राम्रो शिक्षा र स्वास्थ्य सेवाको पहुँच पुग्ने

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदुषण बढ्दै जाने
२. धुँवा धुलोको समस्या
३. जलस्रोत प्रदुषण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीय व्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव बढी हुने देखिएकोले उल्लेखित प्रस्ताव निम्न आधारमा कार्यान्वयन गर्न मिल्ने व्यहोरा उल्लेख गरी यो सिफारिस गरिएको छ ।

प्रस्ताव कार्यान्वयन गर्न मिल्ने आधार

१. स्थानीयलाई सवारीसाधनमा सहज पहुँच
२. रोजगारीको अवसर व्यापार व्यवसायमा वृद्धि
३. उच्च शिक्षा र राम्रो स्वास्थ्य उपचारको पहुँच
४. समग्रमा आयोजना प्रभावित क्षेत्रका स्थानीयहरुको जीवन स्तर उकास्ने

(Signature)

नोकिला नामाङ
वडा अध्यक्ष



दोरम्बा शैलुङ गाउँपालिका
२ नं. वडा कार्यालय

दोरम्बा, रामेछाप
बागमती प्रदेश, नेपाल



मिति : २०६८/११/२३

बिषय : राय/सुझावहरु सहित सिफारिस गरिएको बारे।

श्री ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)

आयोजना समन्वय इकाई

स्थानीय पूर्वाधार विभाग (DoLI)

पुल्चोक, ललितपुर

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०६८/११/२५ गते आयोजित सार्वजनिक सुनुवाई र मिति २०६८/११/२३

गते प्राप्त प्रारम्भिक वातावरणीय परिक्षण (IEE) सम्बन्धि सार्वजनिक सूचना अनुसार कार्यान्वयन हुने लुभुघाट-बैथान-

सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना प्रस्तावबाट यस क्षेत्रमा

निम्नानुसारको वातावरणीय प्रभाव पर्न जाने देखिन्छ :-

(क) सकारात्मक प्रभाव

१. रोजगारका अवसर
२. आय वृद्धि
३. प्राविधिक शिपविकास
४. समय र यातायात खर्चको बचत
५. व्यापार व्यवसाय तथा बजार केन्द्रको विकास तथा प्रबर्धन
६. सडक संचालनको कारणले अनियन्त्रित बसाइसराई नियन्त्रण हुने
७. सहज यातायात सुविधा संगसंगै राम्रो शिक्षा र स्वास्थ्य सेवाको पहुँच पुग्ने

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदूषण बढ्दै जाने
२. धुँवा धुलोको समस्या
३. जलस्रोत प्रदूषण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीयव्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव बढी हुने देखिएकोले उल्लेखित प्रस्ताव निम्न आधारमा कार्यान्वयन गर्न मिल्ने व्यहोरा उल्लेख गरी यो सिफारिस गरिएको छ।

प्रस्ताव कार्यान्वयन गर्न मिल्ने आधार

१. स्थानीयलाई स्वारीसाधनमा सहज पहुँच
२. रोजगारीको अवसर
३. व्यापार व्यवसायमा वृद्धि
४. उच्च शिक्षा र राम्रो स्वास्थ्य उपचारको पहुँच
५. समग्रहमा आयोजना प्रभावित क्षेत्रका स्थानीयहरुको जीवन स्तर उकास्ने



दस्तखत
संयुक्त
संघीय
सर्वकार
Federal Affairs and General Administration
Singha Durbar, Kathmandu

२०६८/११/२३
सुबिक बहादुर श्रेष्ठ
वडा अध्यक्ष

श्री सुनापति सल्लेनी सामुदायिक

वन उपभोक्ता समूह

वेधान २०१४

चलानी नं: २०६८/०६९

दस्तां नं: ०५५

मिति: २०६८-११-३०

विषय: राय / सुनापति सल्लेनी लिफारिल गरिष्का वारे ।

श्री स्थानीय स्वशासन विभाग (DOLI)
ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)
आयोजना समन्वय इकाई
पुल्चौख, ललितपुर

सदरत विषयमा तहाँ कार्यालयद्वारा मिति २०६८-११-२६ गते आयोजित सार्वजनिक सुन्वाई र मिति २०६८-११-२२ गते प्रेषित पत्रमात्रमा बालवर्गीय परिदृश्य (IEE) सम्बन्धित सार्वजनिक सूचना अनुसार कार्यालयमा हुने लक्ष्मण-ढेयाल - सुनापति गाउँपालिका - गाल्पा - दैराङ्गा (३३.६२ कि.मी) स्तरमा आयोजना हुने बालवर्गीय प्राविधिक विषय विकास, धार्मिक तथा पर्यटकीय क्षेत्रको प्रवर्धन, रोजगारको अवसर, आय वृद्धि गरी ब्यान्धिहरूको जीवन स्तर उकास्न सकारात्मक भूमिका खेल्ने हुनाले प्राथमिकतया राखी यस आयोजना यथाशक्ति सम्पन्न गर्न अनुरोध साथ लिफारिल गरिष्का हु ।

कोषाध्यक्ष ०५५५





श्री अम्लेश्वरी सामूदायिक बन उपभोक्ता समूह

खाँडादेवी-७, रामेछाप

२०६५

पत्र संख्या:- २०६८/०६९

चलानी नं:- ०३९



मिति:- २०६८/११/३०

श्री आदिपु. लडक. सञ्जाल पुर्वाधार आयोजना, आर्थिक, लघुव्यवसाय विकास
स्थानिय पुर्वाधार विभाग पुर्वाधार, काठमाडौं

विषय: ~~सञ्चालन~~ सञ्चालन सहित लिफाटोले गरिएको सम्बन्ध

प्रस्तुत विषयमा आदिपु. लडक. सञ्जाल पुर्वाधार आयोजना, स्थानिय पुर्वाधार विभाग (DOLA) को मिति २०६८/११/२२ गते प्रकाशित सूचना र २०६८/११/२६ गतेको सार्वजनिक पुनर्वाङ्गीकरण कार्यविषयमा हुने सुनुवाउ - कक्षा - पुनर्वाङ्गीकरण गाउँपालिका - गाँजा - देउरगढा लडक (३३.६५ कि.मी.) इलाका नति विषयको प्रस्तावबाट यस क्षेत्रमा निम्न अनुसारको बालबच्चाको प्रभाव पर्ने जति देखिन्छ।

- १) यस गा.पा.मा सडक इलाकाको हुने भएकोले यस क्षेत्रको समग्र विकास हुने र स्थानिय उत्पादनमा बजार पाउने।
- २) उच्च शिक्षा र राम्रो स्वास्थ्यको पहुँच हुने।
- ३) पर्यटकीय गन्तव्य शैलु, इ.को प्रवर्धन तथा सहज पहुँच हुने।

उक्त प्रस्तावको आधारमा सकारात्मक प्रभावको अभिविधि जहाँ र तत्कालक प्रभाव नभएता पनि हुने योजना, कार्यविषयमा जहाँ सकारात्मक प्रभाव पर्ने हुने देखिएकाले यो प्रस्ताव कार्यविषयमा गर्न मिल्ने व्यहोरा लिफाटोले गरिएको हो।



चन्द्र व. प्रधान



श्री भूमिथान सामुदायिक चयन उपभोक्ता समिति

दोरम्बा-४, रामेछाप

प.सं.: २०६८/०६९

स.सं.: २२९

दि.सं.: २०६८-११-३०

विषय: राय / सुझावसहित सिफारिस गरिएको बारे ।

श्री ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)

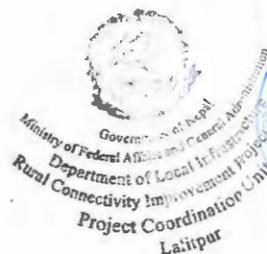
आयोजना समन्वय इकाई

स्थानीय पूर्वाधार विभाग (DoLI)

प्रस्तुत विषयमा तहाँ कार्यालयद्वारा मिति २०६८-११-२६ गते

आयोजित सार्वजनिक सुनुवाई र २०६८-११-२२ गते प्रेषित पत्रागुलक कार्यान्वयन हुने लुम्बिनी-वेदमान सुनापति गा पा-गाल्पा दोरम्बा सडक (३३.६२ कि मी) स्तरोन्नतिको वातावरणीय प्रभाव विषयको प्रस्तावबाट यस क्षेत्रमा निम्नानुसारको वातावरणीय प्रभाव पर्ने जाने देखिन्छ ।

- १ यस गाउँपालिकामा सडक स्तरोन्नति हुने भएकोले यस क्षेत्रको समग्र विकास हुने र स्थानीय उत्पादनले बजार पाउने ।
- २ पर्याप्त गन्तव्य शैलुङ्गको प्रवर्धन तथा सहज पहुँच हुने। उक्त प्रस्तावको आधारमा सकारात्मक प्रभावको अंगीकार गर्ने र नकारात्मक प्रभाव न्यून गर्ने हेतुले योजना कार्यान्वयन गर्दा सकारात्मक प्रभाव बढी हुने देखिएकोले यो प्रस्ताव कार्यान्वयन गर्न मिल्ने ब्यहोरा सिफारिस गरिएको छ ।




डम्बर बहादुर मोकान
अध्यक्ष



बागमती प्रदेश सरकार
वन तथा वातावरण मन्त्रालय
बागमती प्रदेश, वन निर्देशनालय



डिभिजन वन कार्यालय रामेछाप

रामेछाप डाँडा, रामेछाप

आ.सं. ०७९।०८०
च.नं. ६०

मिति : २०७९-०४-२३

विषय : राय/ सुझावहरु सहित सिफारिस गरिएको बारे ।

श्री ग्रामीण सडक सञ्जाल सुधार आयोजना (RCIP)
आयोजना समन्वय इकाई
स्थानीय पूर्वाधार बिभाग (DoLI)
पुल्चोक, ललितपुर

प्रस्तुत विषयमा तहाँ कार्यालयको च. न. २५ मिति २०७९-०४-१५ को पत्रबाट रामेछाप जिल्लामा कार्यान्वयन हुने रस्नालु(भुजीडाँडा) - खोलाखर्क - कालाचौतारा - सिंगटी - गलाम - च्यादलु (प्रिती) सडक (२९.३१० किमि) र लुभुघाट-बैथान-सुनापति गाउँपालिका-गाल्पा-दोरम्बा सडक (३३.७५ किमी) स्तरोन्नति आयोजना सिफारिस माग भएकोमा तपसिल अनुसारको राय सुझाव पठाइएको व्यहोरा अनुरोध छ ।

(क) सकारात्मक प्रभाव

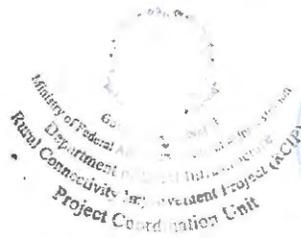
१. स्थानिय रोजगारिको अवसरमा वृद्धि हुने
२. आय वृद्धि
३. प्राविधिक शिपविकास
४. विकासका पुर्वाधारहरुको निर्माण
५. व्यापार व्यवसायमा वृद्धि

(ख) नकारात्मक प्रभाव

१. विकास संगसंगै वातावरणीय प्रदुषण बढ्दै जाने
२. धुँवा धुलोको समस्या
३. जलस्रोत प्रदुषण हुने
४. सडक छेउका रुखहरु कटान हुने

उल्लेखित प्रभावको आधारमा सकारात्मक प्रभाव अभिवृद्धि गर्ने र नकारात्मक प्रभाव न्यूनीकरण गर्ने गरी प्रारम्भिक वातावरणीय परिक्षण अनुरूपको वातावरणीय व्यवस्थापनको योजना कार्यान्वयन गर्दा उल्लेखित प्रस्तावको सकारात्मक प्रभाव वढाउनको लागि देहाय अनुसारका कृयाकलाप समावेश गर्न पर्ने देखिन्छ

- वायोइन्जिनियरिङ को लागि अमृसो प्रजातिको वृक्षारोपण गर्नु पर्नेऽ
- रुख कटान गर्नु पहिले नै वृक्षारोपणको सुनिश्चितता गरिनु पर्नेऽ
- सडकको दाँया वाँया आयमूलक भ डिदार तथा रुख प्रजातीको वृक्षारोपण अनिवार्य गर्नु पर्नेऽ
- पहिरो नियन्त्रणलाइ उच्च प्राथमिकता दिनु पर्ने



Ministry of Federal Affairs and Government Coordination
Government of Nepal
Singha Durbar, Kathmandu
डिभिजन वन अधिकृत

Appendix 9
Abstract of Cost



Department of Local Infrastructure (DoLI)
Rural Connectivity Improvement Project (RCIP)
Project Coordination Unit (PCU)

Pulchowk, Lalitpur

ENGINEER'S ESTIMATE

Lubughat - Bethan - Sunapati Ga. Pa. - Galpa - Doramba Road

Abstract of Cost

| Item No. | Description | Amount | % |
|----------|---|-------------------------|---------------|
| 1 | GENERAL | 73,612,608.17 | 6.26 |
| 2 | SITE CLEARANCE | 3,351,667.72 | 0.29 |
| 3 | PIPE DRAIN, PIPE CULVERTS & CONCRETE CHANNELS | 11,729,907.45 | 1.00 |
| 4 | EARTH WORK | 68,214,344.28 | 5.80 |
| 5 | SUB GRADE | 52,567,917.07 | 4.47 |
| 6 | SUB BASE, BASE, HARD SHOULDER & GRAVEL WEARING | 242,790,914.53 | 20.66 |
| 7 | BITUMINOUS SURFACE AND BASE COURSE | 116,946,892.51 | 9.95 |
| 8 | TRAFFIC SIGN, ROAD MARKING & OTHER ROAD APPURTENANCES | 33,731,910.94 | 2.87 |
| 9 | CONCRETE FOR STRUCTURES | 70,627,676.56 | 6.01 |
| 10 | GABION & PROTECTION WORKS | 67,049,721.97 | 5.70 |
| 11 | MASONRY FOR STRUCTURES | 423,290,439.54 | 36.02 |
| 12 | BIO-ENGINEERING WORKS | 2,342,293.25 | 0.20 |
| 13 | DAY WORKS | 9,028,348.56 | 0.77 |
| A | Total Estimated Cost | 1,175,284,642.54 | 100.00 |
| B | Work Charge Establishment Cost @ 2% of (A) | 23,505,692.85 | |
| C | Miscellaneous Minor Cost @ 2% of (A) | 23,505,692.85 | |
| D | VAT @ 13% (A) | 152,787,003.53 | |
| E | Total Estimated Cost with Contingencies (4%) and VAT (A+B+C+D) | 1,375,083,031.77 | |
| F | Physical Contingencies @ 10% of (A) | 117,528,464.25 | |
| G | Price Contingencies @ 10% of (A) | 117,528,464.25 | |
| H | Grand Total Estimated Cost with Contingencies and VAT (E+F+G) | 1,610,139,960.28 | |
| I | Total Length of Road (km) | 33.75 | |
| J | Cost per km with Contingencies (4%) and VAT (Excluding Physical and Price Contingencies) (E/I) | 40,741,993.77 | |

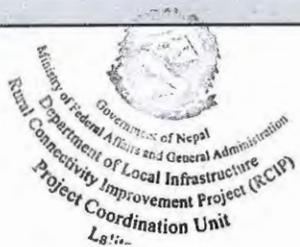


Appendix 10 BoQ of DPR



II of Quantities(BOQ)

| Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|---|----------|----------|------------|----------------------|
| 1 | GENERAL | | | | |
| 01 1.01 | Insurances for the loss of damage to works, plant, material, equipment, property and personnel injury or death, Employer's staffs, Consultant's staff, Contractor's employees, labour, including third party personal and property all complete, as per specification (SS/SP-116) and instruction of engineer | Job | | | 3,500,500.00 |
| 02 1.02 | Provide, operate and maintain Quality Control Laboratory including equipment, accessories, personnel and consumables for both field testing facilities and off-site test with manpower as per specification(SS/SP-504) and instruction of engineer all complete | Month | 36.00 | 110,000.00 | 3,960,000.00 |
| 03 1.03 | Carry out Required Maintenance work to keep the road serviceable through out the contract period as per the specification (SS/SP-107) and instruction of engineer, all complete. | | | | |
| I | During construction | Km-Month | 1,215.00 | 28,916.41 | 35,133,439.97 |
| II | During Defects Liability period until issue of Certificate of completion | Km-Month | 405.00 | 21,179.54 | 8,577,713.14 |
| III | During Performance Based Maintainance Period | Km-Month | 810.00 | 21,179.54 | 17,155,426.27 |
| 04 1.05 | Providing and installation and demolishing after completion of works of Project Signboards with size of 1.8 x 1.2 m as per specification (SS/SP - 110)and instruction of Engineer all complete | No | 2.00 | 20,000.00 | 40,000.00 |
| 05 1.06 | Provides digital progress and record Photographs of the important works (9 photographs each of them shall have 4 Prints and digital files supplied monthly) as per specification (SS-116) and instruction of Engineer all complete. | LS | | | 90,000.00 |
| 06 1.07 | Provides digital Video of the important activities with English/Nepali narration (60 min video equal to 1 set Total 3 set) as per specification (SS-116) and instruction of Engineer all complete. | LS | | | 100,000.00 |
| 1.07 50.04 | Shifting of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 metres and stacking the serviceable and unserviceable Material separately [Shifting of telephone / Electric poles] | PS | 112.00 | 45,138.65 | 5,055,528.80 |
| Sub-Total | | | | | 73,612,608.17 |





Bill of Quantities(BOQ)

| SN | Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|---------------|--|------|------------|-----------|--------------------|
| 2 | | SITE CLEARANCE | | | | |
| 2.01 | 02.01(I-II-A) | Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable Material to be used or auctioned, up to a lead of 30 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness. [[By Mechanical Means) In area of light jungle (less than 15 number per 100 sqm)] | sqm | 211,198.00 | 5.48 | 1,157,069. |
| 2.02 | 02.04(i-II-A) | Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceable Material and stacking the serviceable Material with all lifts and lead of 1000 meters [[By Mechanical Means) Cement Concrete Grade M-15 & M-20] | cum | 31.00 | 2,448.81 | 75,913. |
| 2.03 | 02.04(iii-B) | Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceable Material and stacking the serviceable Material with all lifts and lead of 1000 meters [[By Mechanical Means) Dismantling Stone Masonary in Rubble Stone Masonary in cement mortar.] | cum | 385.00 | 1,796.30 | 691,575. |
| 2.04 | 02.04(iii-F) | Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceable Material and stacking the serviceable Material with all lifts and lead of 1000 meters by Mechanical Means. [Dismantling boulders laid in wire crates including opening of crates and stacking dismantled Material by Mechanical Means] | cum | 1,265.00 | 1,128.15 | 1,427,109. |
| Sub Total | | | | | | 3,351,667. |
| 3 | | PIPE DRAIN, PIPE CULVERTS & CONCRETE CHANNELS | | | | |
| 3.01 | 07.02(D) | Providing and Laying Reinforced cement concrete 900mm NP3 Flush jointed pipe for culverts including fixing with cement mortar 1:2 as per Drawing and Technical Specifications. [Laying RCC 900mm internal dia. Pipe] | m | 710.00 | 16,521.00 | 11,729,907. |
| Sub Total | | | | | | 11,729,907. |



II of Quantities(BOQ)

| Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|--|------|------------|----------|----------------------|
| 4 | EARTH WORK | | | | |
| 09.01(I-B) | Road way Excavation in all types of soil by mechanical means as per Drawing and technical specifications including removal of stumps and other deleterious matter, all lifts and lead as per Drawing and instruction of the Engineer. [Roadway Excavation in all types of soil by mechanical means.] | cum | 519,873.40 | 79.16 | 41,152,311.89 |
| 09.04(I-B-i) | Earth work in excavation of foundation of structures, including construction of shoring and bracing, removal of stumps and other deleterious matter and backfilling with approved Material as per Drawing and Technical Specifications. [Ordinary Soil Depth upto 3m By Mechanical Means] | cum | 54,336.55 | 118.74 | 6,451,785.83 |
| 09.09(B) | Providing, laying, spreading and compacting embankment with roadway cutting material and compact to the required density as per Drawing and Technical Specifications. (With machine) [Construction of Embankment with Material Deposited from Roadway Cutting(With Machine)] | cum | 49,194.69 | 418.95 | 20,610,246.56 |
| Sub Total | | | | | 68,214,344.28 |
| 5 | SUB GRADE | | | | |
| 10.04(II) | Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve dry density as per Drawing and Technical Specifications. [Compacting original ground supporting embankment] | cum | 39,556.38 | 95.01 | 3,758,067.07 |
| 10.08 | Providing and laying of hand pack Stone soling with 150 to 200 mm thick stones and packing with smaller stone on prepared surface as per Drawing and Technical Specifications. [Laying of hand pack Stone soling] | cum | 8,575.12 | 5,692.03 | 48,809,850.00 |
| Sub Total | | | | | 52,567,917.07 |



Bill of Quantities(BOQ)

| SN | Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|--------------|--|------|------------|----------|----------------------|
| 6 | | SUB BASE, BASE, HARD SHOULDER & GRAVEL WEARING | | | | |
| 6.01 | 12.01(A) | Providing and laying granular sub-base on prepared surface, mixing at OMC, and compacting to achieve the desired density, complete as per Drawing and Technical Specifications. [Providing and laying Granular Sub-Base Material By Mechanical means] | cum | 50,601.82 | 2,620.21 | 132,587,471. |
| 6.02 | 12.07(A) | Providing and laying Crusher Run Macadam on a prepared surface, spreading and mixing , watering and compacting to form a layer of Base course as per Drawing and Technical Specifications. [Crusher Run Macadam Base (By Mix in Place Method)] | cum | 35,825.26 | 3,076.14 | 110,203,442. |
| Sub Total | | | | | | 242,790,914.5 |
| 7 | | BITUMINOUS SURFACE AND BASE COURSE | | | | |
| 7.01 | 13.01(A) | Providing and applying prime coat with Hot Bitumen (including cutter) on prepared surface of granular base including cleaning of road surface and spraying by mechanical means as per Technical Specification . [Prime Coat, with MC 30 / 70 by Mechanical Means] | lit | 594,079.40 | 120.41 | 71,533,409. |
| 7.02 | 13.04(A) | Providing and laying penetration macadam over prepared Base by providing a layer of compacted crushed coarse aggregate with applications of bituminous binder and key aggregates as per Drawing and Technical Specifications. [Bituminous Penetration Macadam[50mm thick]] | sqm | 57,889.21 | 515.39 | 29,835,716. |
| 7.03 | 13.07(A-i) | Providing and laying surface dressing as wearing course in single coat using gravel of specified size on a recently applied layer of bituminous binder on prepared surface as per Drawing and Technical Specifications.[By Mechanical Means] [Surface Dressing [19mm nominal chipping size]-Mechanical Means] | sqm | 180,945.90 | 57.46 | 10,396,319. |
| 7.04 | 13.07(A-iii) | Providing and laying surface dressing as wearing course in single coat using gravel of specified size on a recently applied layer of bituminous binder on prepared surface as per Drawing and Technical Specifications [Surface Dressing[10mm nominal size chipping]-Mechanical Means] | sqm | 161,730.90 | 27.43 | 4,435,909. |
| 7.05 | 13.16 | Providing and mixing of Anti stripping agent as per Design/ direction of Engineer [Anti- Stripping agent] | kg | 1,899.93 | 392.40 | 745,537. |
| Sub Total | | | | | | 116,946,892. |



II of Quantities(BOQ)

| Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|--------------|--|------|----------|----------|---------------|
| 8 | TRAFFIC SIGN, ROAD MARKING & OTHER ROAD APPURTENANCES | | | | |
| 15.01 | Providing and fixing of Non reflective warning, mandatory and inforatory sign board of 2 mm thick MS Sheet with back support frame fixed on heavy 50 mm tube or Channel section of 75 mm X 40 mm firmly fixed to the ground by means of properly designed foundation with M 10/40 grade cement concrete 300 mm x 300 mm x 300 mm, I as per drawings and Technical Specification/ DOR Publication. [Non Reflective Traffic Signs] | nos | 24.00 | 4,431.56 | 106,357.38 |
| 15.02 | Providing and fixing of retro- reflectorized warning,Regulatory and inforatory sign as per specification clause 1501 made of high intensity grade sheeting , fixed over aluminum sheeting, 1.5 mm thick supported on a 50 mm internal dia steel tube or mild steel angle iron post 75 mm x 40 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M 10/40 grade cement concrete 30 cm x 30 cm , 30 cm below ground level or as per Drawing and Technical Specifications. [Retro-Reflectorized Traffic Signs] | nos | 114.00 | 3,304.52 | 376,715.70 |
| 15.09(i) | Providing and laying of hot applied thermoplastic compound at least 2 mm thick including reflectorizing glass beads as per DOR Traffic sign manual/ Specifications .The finished surface to be level, uniform and free from streaks and holes. [Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface on smooth surface] | Sqm | 6,750.10 | 1,511.56 | 10,203,185.69 |
| 15.11(i) | Providing and Fixing Reinforced cement concrete M 15 grade kilometer Post including painting and printing as per Standard Drawing-2070 and Technical Specifications. position [Kilometer Stone(Five kilometer post[precast])] | nos | 7.00 | 9,555.19 | 66,886.33 |
| 15.11(ii) | Providing and Fixing Reinforced cement concrete M 15 grade kilometer Post including painting and printing as per Standard Drawing-2070 and Technical Specifications. position [Kilometer Stone(One kilometer post[precast])] | nos | 27.00 | 5,502.47 | 148,566.56 |



Bill of Quantities(BOQ)

| SN | Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|-----------|--------------|--|------|----------|------------|--------------|
| 8.06 | 15.12 | Providing and installation of 150 mm * 150 mm 1.5 m long delineators (road way indicators, hazard markers, object markers), 80-100 cm high above ground level, painted black and white in 20 cm wide strips, buried or pressed into the ground and conforming to the drawings and Technical Specifications. [Road Delineators Post] | nos | 1,101.00 | 1,607.46 | 1,769,818.6 |
| 8.07 | 15.14(A) | Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m center to center, 1.8 m high, 1.1 m below ground/road level metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x75 x 5 mm, 330 mm long complete as per Drawing and Technical Specifications. [Reinforced Cement Concrete Crash Barrier[Type - A, "W" : Metal Beam Crash Barrier]] | m | 1,990.00 | 10,583.11 | 21,060,380.8 |
| Sub Total | | | | | | 33,731,910.9 |
| 9 | | CONCRETE FOR STRUCTURES | | | | |
| 9.01 | 20.01 | Providing and laying of Plain Cement Concrete M 10 (or 1:3:6 for nominal mix) in Foundation complete as per Drawing and Technical Specifications. [PCC M10(1:3:6)] | cum | 7,175.36 | 9,684.60 | 69,490,502. |
| 9.02 | 20.02(D) | Providing and laying of Plain/Reinforced Cement Concrete in Foundation complete as per Drawing and Technical Specifications. [PCC Grade M25] | cum | 46.30 | 14,033.34 | 649,799. |
| 9.03 | 20.09 | Providing and laying , fitting and placing HYSD bar reinforcement in super-structure complete as per Drawing and Technical Specifications [Providing and laying , fitting and placing HYSD bar reinforcement in super-structure] | t | 4.28 | 113,864.59 | 487,374. |
| Sub Total | | | | | | 70,627,676.9 |

Ministry of
Rural Development
Kathmandu



II of Quantities(BOQ)

| Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|--|------|-----------|-----------|-----------------------|
| 10 | GABION & PROTECTION WORKS | | | | |
| 24.02(A) | Providing mechanically woven double twisted crates / mattress including rolling, cutting and with lacing wire and binding wire as per specification. Heavy zinc coated Hexagonal mesh type 100 mm x 120 mm, mesh wire 3 mm, selvage wire 3.9 mm, lacing wire 2.4 mm [Heavy zinc coated Hexagonal mesh type 100 mm x 120 mm, mesh wire 3 mm, selvage wire 3.9 mm, lacing wire 2.4 mm] | sqm | 70,956.43 | 310.67 | 22,044,211.50 |
| 24.03 | Assembling mechanical woven Gabion boxes /mattresses, placing in position including stretching; forming compartments; tying the sides and diaphragms with binding wire in each mesh; tying with bracing wires and tie wires; and tying down the lid complete as per specification (stone filling not included) [Assembling mechanical woven Gabion boxes /mattresses] | sqm | 70,956.43 | 71.30 | 5,059,193.46 |
| 24.04 | Providing and filling stone/boulder in gabion boxes/mattress etc.. Including dressing, bedding, bonding all complete as per Drawing and Technical Specifications. [Filling stone/boulder in gabion boxes/mattress] | cum | 12,974.78 | 2,936.09 | 38,095,185.39 |
| 24.05 | Providing and laying of a geotextile filter between pitching and embankment slopes as per Drawing and Technical Specifications. [Laying and fixing of Geo-Textile all complete as per specification.] | sqm | 7,500.57 | 171.27 | 1,284,646.77 |
| 24.16 | Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification [Providing and laying Filter material underneath pitching in slopes] | cum | 94.05 | 6,023.23 | 566,484.86 |
| Sub Total | | | | | 67,049,721.97 |
| 11 | MASONRY FOR STRUCTURES | | | | |
| 26.05(A) | Providing and laying Stone Masonry work in cement mortar 1:4 in structure complete as per drawing and Technical Specifications [Random Rubble Masonry in Cement mortar (1:4)] | cum | 345.72 | 11,490.50 | 3,972,494.31 |
| 26.06(A) | Providing and laying Stone Masonry work in cement mortar 1:6 in structure complete as per drawing and Technical Specifications [Random Rubble Masonry in Cement mortar (1:6)] | cum | 38,770.94 | 10,815.26 | 419,317,945.23 |
| Sub Total | | | | | 423,290,439.54 |



Bill of Quantities(BOQ)

| SN | Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|--------------|---|-------|-----------|-----------|-------------------|
| 12 | | BIO-ENGINEERING WORKS | | | | |
| 12.01 | 28.08(C) | Planting grass on site- Planting single node culm cutting of grass (eg napier) on hard cut slopes >45o . Approx. length 15-20cm- including digging planting hole 10-20cm depth using a metal rod or hardwood peg. [Planting single node culm cutting of grass on hard cut slopes >45o] | no | 76,407.00 | 9.40 | 718,233. |
| 12.02 | 28.08(G) | Planting grass on site- Planting rooted grass slips on the slopes >60o including preparation of slips on site. Opearation includes dingging planting hole to a max of 5 cm depth with metal rod or hard-wood peg- depending on the nature of the soil.The planting drills should be space 10cm apart. [Planting rooted grass slips on the slopes >60o] | sqm | 1,274.00 | 845.25 | 1,076,848. |
| 12.03 | 28.10(B) | Vegetative paliscade construction- brush layering and fascines- Preparation and planting of live pegs slected species(eg assuro- namdi phul- simali)of minium 1m length to 0.5 m depth into hard ground.Pegs spaced at 5cm centres within rows- and interwoven with vegetation. [Vegetative paliscade construction- Preparation of live pegs] | m | 1,274.00 | 345.09 | 439,647. |
| 12.04 | 28.10(E) | Vegetative paliscade construction- brush layering and fascines- Laying fo live fascines- using live hardwood cuttings of selected species(eg assuro- namdi phul- simali) of minium 1m length placed in bundles to give 4 running meters of cutting per metre of fascine- including backfilling of trench and careful compaction. [Laying fo live fascines] | m | 425.00 | 253.09 | 107,564. |
| Sub Total | | | | | | 2,342,293. |
| 14 | | DAY WORKS | | | | |
| 14.01 | 51.1 | Labour | | | | |
| | | a) Skilled Labour | M-day | 140.00 | 960.00 | 134,400.0 |
| | | b) Unskilled Labour | M-day | 550.00 | 800.00 | 440,000.0 |
| 14.02 | 51.2 | Material | | | | |
| | | Cement | Mt. | 30.00 | 17,150.80 | 514,524.0 |
| | | Reinforcement(8,10,12,16,20,25mm) | Mt. | 20.00 | 76,950.80 | 1,539,016.0 |
| | | Aggregate(10-40mm size) | Cu.m | 30.00 | 2,164.66 | 64,939.8 |
| | | Sand | Cu.m | 30.00 | 2,239.66 | 67,189.8 |



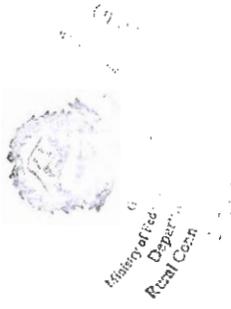
II of Quantities(BOQ)

| Activity No. | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|------------------|---|------|----------|----------|-------------------------|
| 03 51.3 | Plant / Equipment | | | | |
| | The rates shall include all cost of operating on site as fuel, lubricant, driver and associated labour wages, overhead and profit. only time actually employed open the work shall be paid. | | | | |
| | a) Tipper (4- 6 m3 capacity) | Hr. | 500.00 | 4,377.00 | 2,188,500.00 |
| | b) Truck (8-10 T capacity) | Hr. | 500.00 | 4,377.00 | 2,188,500.00 |
| | c) Loader (1-1.5 m3 capacity) | Hr. | 500.00 | 1,004.00 | 502,000.00 |
| | d) Excavator (135 Hp capacity) | Hr. | 500.00 | 523.00 | 261,500.00 |
| | e) Water Bowser (5000 ltr capacity) | Hr. | 170.00 | 1,806.00 | 307,020.00 |
| 04 51.4 | The Bidder's Percentage (max 10%) addition to the net cost of labour provided in item 51.1,51.2 and 51.3 as per day works schedule under "Day work Labour, Material and equipment". | % | 10.00 | | 820,758.96 |
| Sub-Total | | | | | 9,028,348.56 |
| Total | | | | | 1,175,284,642.54 |



Appendix 11

EMP Cost



EMP Cost

| SN | Description of Work | Unit | Quantity | Rate | Amount(NRs) |
|-----|---|------|----------|-----------------|-------------------|
| 1 | Site Clearance | | | | |
| 1.1 | Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable Material with all lifts and up to a lead of 1000 meters and earth filling in the depression/pit. [Girth from 300mm to 600mm] | No | 195 | 1,021.97 | 199,284 |
| 1.1 | Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable Material with all lifts and up to a lead of 1000 meters and earth filling in the depression/pit. [Girth from 600mm to 900mm] | No | 133 | 3,065.90 | 407,765 |
| 1.3 | Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable Material with all lifts and up to a lead of 1000 meters and earth filling in the depression/pit. [Girth from 900mm to 1800mm] | No | 115 | 7,971.80 | 916,757 |
| 1.4 | Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable Material with all lifts and up to a lead of 1000 meters and earth filling in the depression/pit. [Girth from 1800mm to 2500mm] | No | 5 | 18,549.50 | 92,748 |
| 1.2 | Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable Material with all lifts and up to a lead of 1000 meters and earth filling in the depression/pit. [Girth above 2500mm] | No | 3 | 61,318.00 | 183,954 |
| 2 | Compensatory Plantation | | | | |
| 2.1 | Planting trees as compensatory afforestation at the rate of 290 trees per hectare at spacing of 6m by grubbing and leveling the ground upto a depth of 150mm, digging holes 0.9m dia, 1m deep, mixing farmyard/sludge manure with soil, planting of sapling 2m high with 25cm dia stem, backfilling the hole and watering (Including maintenance for 5 Years) | No | 4,510 | 1,992.85 | 8,987,757 |
| 2.2 | Planting trees on compensated Land at the rate of 1600 trees per hectare. | No | 1,520 | 1,992.85 | 3,029,133 |
| 3 | Bio-Engineering Works | | | Included in BoQ | |
| 4 | Environment Monitoring Cost | | | | |
| 4.1 | Water Quality Monitoring (7 Location x 6 Times) | LS | 84 | 5,000.00 | 420,000 |
| 4.2 | Noise Quality Monitoring | LS | 24 | 5,000.00 | 120,000 |
| 4.3 | Air Quality Monitoring | LS | 24 | 5,000.00 | 120,000 |
| 4.4 | Other Direct Observation (2 times) | LS | 2 | 100,000.00 | 200,000 |
| 5 | Relocating service utilities | | | | |
| 5.1 | Shifting Electric pole | No | 112 | Included in BoQ | |
| 6 | Compensatory Land value for the use of Forest land | Ha | 0.95 | 1,598,625.00 | 1,518,694 |
| | Total | | | | 16,196,091 |



Rate Analysis for Tree Cutting and Compensatory Plantation

| SN | Item Code | Description of Work | Qty | Unit | Kind | Description | Analysis Quantity | Unit | Rate | Amount | Total | Overhead (15%) | Grand Total | Item Unit Rate | Total Tree | Cost |
|----|------------|---|-----|------|-----------|---|-------------------|------|------|------------|------------|----------------|-------------|----------------|------------|---------------------|
| 1 | 02.02(i) | Cutting of Trees (Girth from 300mm to 600mm) | 30 | no | Labour | Unskilled | 25 | md | 800 | 20,000.00 | 26,660.00 | 3,999.00 | 30,659.00 | 1,021.97 | 195 | 199,283.50 |
| | | | | | Equipment | Tractor | 6 | hr | 1110 | 6,660.00 | | | | | | |
| 2 | 02.02(ii) | Cutting of Trees (Girth from 600 mm to 900 mm) | 10 | no | Labour | Unskilled | 25 | md | 800 | 20,000.00 | 26,660.00 | 3,999.00 | 30,659.00 | 3,065.90 | 133 | 407,764.70 |
| | | | | | Equipment | Tractor | 6 | hr | 1110 | 6,660.00 | | | | | | |
| 3 | 02.02(iii) | Cutting of Trees (Girth from 900 mm to 1800 mm) | 5 | no | Labour | Unskilled | 35 | md | 800 | 28,000.00 | 34,660.00 | 5,199.00 | 39,859.00 | 7,971.80 | 115 | 916,757.00 |
| | | | | | Equipment | Tractor | 6 | hr | 1110 | 6,660.00 | | | | | | |
| 4 | 02.02(iv) | Cutting of Trees (Girth from 1800 mm to 2500 mm) | 2 | no | Labour | Unskilled | 32 | md | 800 | 25,600.00 | 32,260.00 | 4,839.00 | 37,099.00 | 18,549.50 | 5 | 92,747.50 |
| | | | | | Equipment | Tractor | 6 | hr | 1110 | 6,660.00 | | | | | | |
| 5 | 02.02(v) | Cutting of Trees (Girth above 2500 mm) | 1 | no | Labour | Unskilled | 50 | md | 800 | 40,000.00 | 53,320.00 | 7,998.00 | 61,318.00 | 61,318.00 | 3 | 183,954.00 |
| | | | | | Equipment | Tractor | 12 | hr | 1110 | 13,320.00 | | | | | | |
| | | Total | | | | | | | | | | | | | 451 | 1,800,506.70 |
| 57 | 28.32 | Planting trees as compensatory afforestation at the rate of 290 trees per hectare at spacing of 6m by grubbing and leveling the ground upto a depth of 150mm, digging holes 0.9m dia, 1m deep, mixing farmyard/sludge manure with soil, planting of sapling 2m high with 25cm dia stem, backfilling the hole and watering | 290 | No | Labour | Skilled | 28 | md | 960 | 26,880.00 | 502,545.00 | 75,381.75 | 577,926.75 | 1,992.85 | 4,510 | 8,987,757.39 |
| | | | | | | Unskilled | 275 | md | 800 | 220,000.00 | | | | | | |
| | | | | | Material | Sapling 1 to 1.5m high 2 cm dia stem | 319 | nos | 73 | 23,287.00 | | | | | | |
| | | | | | | Decayed farm yard/ sludge manure (planting) | 60.90 | cum | 2340 | 142,506.00 | | | | | | |
| | | | | | | Decayed farm yard/sludge manure (maintenance) | 4 | cum | 2340 | 9,360.00 | | | | | | |
| | | | | | | Pesticide | 2 | kg | 1310 | 2,620.00 | | | | | | |
| | | | | | | Water | 18 | KL | 400 | 7,200.00 | | | | | | |
| | | | | | Equipment | Dozer | 12 | hr | 5891 | 70,692.00 | | | | | | |

| | | | | | | | | | | | | | | | | |
|----|-------|--|-----|----|-----------|---|-------|-----|------|------------|------------|-----------|------------|----------|-------|--------------|
| 57 | 28.32 | Planting trees as compensatory afforestation at the rate of 1600 trees per hectare at spacing of 6m by grubbing and leveling the ground upto a depth of 150mm, digging holes 0.9m dia, 1m deep, mixing farmyard/sludge manure with soil, planting of sapling 2m high with 25cm dia stem, backfilling the hole and watering | 290 | No | Labour | Skilled | 28 | md | 960 | 26,880.00 | 502,545.00 | 75,381.75 | 577,926.75 | 1,992.85 | 1,520 | 3,029,133.31 |
| | | | | | | Unskilled | 275 | md | 800 | 220,000.00 | | | | | | |
| | | | | | Material | Sapling 1 to 1.5m high 2 cm dia stem | 319 | nos | 73 | 23,287.00 | | | | | | |
| | | | | | | Decayed farm yard/ sludge manure (planting) | 60.90 | cum | 2340 | 142,506.00 | | | | | | |
| | | | | | | Decayed farm yard/sludge manure (maintenance) | 4 | cum | 2340 | 9,360.00 | | | | | | |
| | | | | | | Pesticide | 2 | kg | 1310 | 2,620.00 | | | | | | |
| | | | | | | Water | 18 | KL | 400 | 7,200.00 | | | | | | |
| | | | | | Equipment | Dozer | 12 | hr | 5891 | 70,692.00 | | | | | | |

Ministry of Federal Affairs and General Administration
Singha Durbar, Kathmandu

Ministry of Federal Affairs and General Administration
Department of Local Infrastructure
Project Improvement Project (RCIP)
Lalitpur



Source: Norms for Rate Analysis of Road and Bridge Work 2075, Department of Roads

Appendix 12

Bio-Engineering Details

Joint Venture
2070
DLP
New Banskotwar, Kathmandu



Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of Cut/fill | Len for Bioengineering | Slope Area | Slope Preparation | Single node culm | Planting rooted grass | Live pegs | Live fascines |
|----|----------|------|----------|-----------------|------------------------|------------|-------------------|------------------|-----------------------|-----------|---------------|
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 1 | 0+410 | RHS | Cut | 6.05 | 3.03 | 60.50 | 30.25 | 54 | 0.91 | 0.91 | 0.30 |
| 2 | 0+460 | RHS | Cut | 6.44 | 3.22 | 64.43 | 32.22 | 58 | 0.97 | 0.97 | 0.32 |
| 3 | 0+470 | RHS | Cut | 7.23 | 3.62 | 72.31 | 36.16 | 65 | 1.08 | 1.08 | 0.36 |
| 4 | 0+590 | RHS | Cut | 5.72 | 2.86 | 57.22 | 28.61 | 51 | 0.86 | 0.86 | 0.29 |
| 5 | 0+780 | RHS | Cut | 5.97 | 2.99 | 59.73 | 29.87 | 54 | 0.90 | 0.90 | 0.30 |
| 6 | 0+990 | RHS | Cut | 7.01 | 3.50 | 70.09 | 35.05 | 63 | 1.05 | 1.05 | 0.35 |
| 7 | 1+000 | RHS | Cut | 6.24 | 3.12 | 62.39 | 31.20 | 56 | 0.94 | 0.94 | 0.31 |
| 8 | 1+010 | RHS | Cut | 5.46 | 2.73 | 54.56 | 27.28 | 49 | 0.82 | 0.82 | 0.27 |
| 9 | 1+020 | RHS | Cut | 5.72 | 2.86 | 57.24 | 28.62 | 52 | 0.86 | 0.86 | 0.29 |
| 10 | 1+030 | RHS | Cut | 5.73 | 2.86 | 57.25 | 28.63 | 52 | 0.86 | 0.86 | 0.29 |
| 11 | 1+040 | RHS | Cut | 5.21 | 2.60 | 52.08 | 26.04 | 47 | 0.78 | 0.78 | 0.26 |
| 12 | 1+310 | RHS | Cut | 14.06 | 7.03 | 140.63 | 70.32 | 127 | 2.11 | 2.11 | 0.70 |
| 13 | 1+320 | RHS | Cut | 20.25 | 10.12 | 202.47 | 101.24 | 182 | 3.04 | 3.04 | 1.01 |
| 14 | 1+330 | RHS | Cut | 22.56 | 11.28 | 225.58 | 112.79 | 203 | 3.38 | 3.38 | 1.13 |
| 15 | 1+340 | RHS | Cut | 20.01 | 10.00 | 200.08 | 100.04 | 180 | 3.00 | 3.00 | 1.00 |
| 16 | 1+350 | RHS | Cut | 14.30 | 7.15 | 142.97 | 71.48 | 129 | 2.14 | 2.14 | 0.71 |
| 17 | 1+360 | RHS | Cut | 14.54 | 7.27 | 145.41 | 72.71 | 131 | 2.18 | 2.18 | 0.73 |
| 18 | 1+370 | RHS | Cut | 13.64 | 6.82 | 136.41 | 68.21 | 123 | 2.05 | 2.05 | 0.68 |
| 19 | 1+380 | RHS | Cut | 13.36 | 6.68 | 133.64 | 66.82 | 120 | 2.00 | 2.00 | 0.67 |
| 20 | 1+390 | RHS | Cut | 10.62 | 5.31 | 106.15 | 53.08 | 96 | 1.59 | 1.59 | 0.53 |
| 21 | 1+460 | RHS | Cut | 12.60 | 6.30 | 125.98 | 62.99 | 113 | 1.89 | 1.89 | 0.63 |
| 22 | 1+470 | RHS | Cut | 8.81 | 4.40 | 88.07 | 44.04 | 79 | 1.32 | 1.32 | 0.44 |
| 23 | 1+530 | RHS | Cut | 8.00 | 4.00 | 79.99 | 40.00 | 72 | 1.20 | 1.20 | 0.40 |
| 24 | 1+540 | RHS | Cut | 11.00 | 5.50 | 110.05 | 55.02 | 99 | 1.65 | 1.65 | 0.55 |
| 25 | 1+550 | RHS | Cut | 14.54 | 7.27 | 145.40 | 72.70 | 131 | 2.18 | 2.18 | 0.73 |
| 26 | 1+560 | RHS | Cut | 14.05 | 7.03 | 140.53 | 70.27 | 126 | 2.11 | 2.11 | 0.70 |
| 27 | 1+570 | RHS | Cut | 16.17 | 8.09 | 161.71 | 80.86 | 146 | 2.43 | 2.43 | 0.81 |
| 28 | 1+580 | RHS | Cut | 16.03 | 8.01 | 160.29 | 80.14 | 144 | 2.40 | 2.40 | 0.80 |
| 29 | 1+590 | RHS | Cut | 7.53 | 3.77 | 75.31 | 37.66 | 68 | 1.13 | 1.13 | 0.38 |
| 30 | 1+620 | RHS | Cut | 6.77 | 3.38 | 67.69 | 33.85 | 61 | 1.02 | 1.02 | 0.34 |
| 31 | 1+630 | RHS | Cut | 6.30 | 3.15 | 63.04 | 31.52 | 57 | 0.95 | 0.95 | 0.32 |
| 32 | 1+710 | RHS | Cut | 5.58 | 2.79 | 55.79 | 27.90 | 50 | 0.84 | 0.84 | 0.28 |
| 33 | 1+730 | RHS | Cut | 5.00 | 2.50 | 50.04 | 25.02 | 45 | 0.75 | 0.75 | 0.25 |
| 34 | 1+740 | RHS | Cut | 6.09 | 3.05 | 60.92 | 30.46 | 55 | 0.91 | 0.91 | 0.30 |
| 35 | 1+750 | RHS | Cut | 8.13 | 4.07 | 81.32 | 40.66 | 73 | 1.22 | 1.22 | 0.41 |
| 36 | 1+760 | RHS | Cut | 5.39 | 2.69 | 53.85 | 26.93 | 48 | 0.81 | 0.81 | 0.27 |
| 37 | 2+370 | RHS | Cut | 5.12 | 2.56 | 51.20 | 25.60 | 46 | 0.77 | 0.77 | 0.26 |
| 38 | 2+650 | RHS | Cut | 6.23 | 3.11 | 62.28 | 31.14 | 56 | 0.93 | 0.93 | 0.31 |
| 39 | 2+660 | RHS | Cut | 7.44 | 3.72 | 74.43 | 37.22 | 67 | 1.12 | 1.12 | 0.37 |
| 40 | 2+670 | RHS | Cut | 5.69 | 2.84 | 56.89 | 28.45 | 51 | 0.85 | 0.85 | 0.28 |
| 41 | 2+690 | RHS | Cut | 6.06 | 3.03 | 60.56 | 30.28 | 55 | 0.91 | 0.91 | 0.30 |
| 42 | 2+700 | RHS | Cut | 6.65 | 3.32 | 66.45 | 33.23 | 60 | 1.00 | 1.00 | 0.33 |
| 43 | 2+710 | RHS | Cut | 5.99 | 2.99 | 59.87 | 29.94 | 54 | 0.90 | 0.90 | 0.30 |
| 44 | 2+750 | RHS | Cut | 6.36 | 3.18 | 63.64 | 31.82 | 57 | 0.95 | 0.95 | 0.32 |
| 45 | 2+760 | RHS | Cut | 6.85 | 3.43 | 68.54 | 34.27 | 62 | 1.03 | 1.03 | 0.34 |
| 46 | 2+810 | RHS | Cut | 7.00 | 3.50 | 69.96 | 34.98 | 63 | 1.05 | 1.05 | 0.35 |
| 47 | 2+820 | RHS | Cut | 7.82 | 3.91 | 78.20 | 39.10 | 70 | 1.17 | 1.17 | 0.39 |
| 48 | 2+830 | RHS | Cut | 5.71 | 2.85 | 57.05 | 28.53 | 51 | 0.86 | 0.86 | 0.29 |
| 49 | 2+970 | RHS | Cut | 5.24 | 2.62 | 52.38 | 26.19 | 47 | 0.79 | 0.79 | 0.26 |
| 50 | 2+980 | RHS | Cut | 8.27 | 4.13 | 82.67 | 41.34 | 74 | 1.24 | 1.24 | 0.41 |
| 51 | 2+990 | RHS | Cut | 5.97 | 2.98 | 59.69 | 29.85 | 54 | 0.90 | 0.90 | 0.30 |
| 52 | 3+230 | RHS | Cut | 5.25 | 2.63 | 52.51 | 26.26 | 47 | 0.79 | 0.79 | 0.26 |
| 53 | 3+500 | RHS | Cut | 5.46 | 2.73 | 54.56 | 27.28 | 49 | 0.82 | 0.82 | 0.27 |
| 54 | 3+520 | RHS | Cut | 8.78 | 4.39 | 87.84 | 43.92 | 79 | 1.32 | 1.32 | 0.44 |
| 55 | 3+570 | RHS | Cut | 6.02 | 3.01 | 60.24 | 30.12 | 54 | 0.90 | 0.90 | 0.30 |
| 56 | 3+580 | RHS | Cut | 5.91 | 2.96 | 59.10 | 29.55 | 53 | 0.89 | 0.89 | 0.30 |
| 57 | 3+670 | RHS | Cut | 6.22 | 3.11 | 62.21 | 31.11 | 56 | 0.93 | 0.93 | 0.31 |
| 58 | 3+680 | RHS | Cut | 9.48 | 4.74 | 94.79 | 47.40 | 85 | 1.42 | 1.42 | 0.47 |
| 59 | 3+690 | RHS | Cut | 7.75 | 3.88 | 77.53 | 38.76 | 70 | 1.16 | 1.16 | 0.39 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of Cut/fill | Len for Bioengin eering | Slope Area | Slope Preparati on | Single node culm | Planting rooted grass | Live pegs | Live fascines |
|-----|----------|------|----------|-----------------|-------------------------|------------|--------------------|------------------|-----------------------|-----------|---------------|
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 60 | 3+700 | RHS | Cut | 7.13 | 3.57 | 71.34 | 35.67 | 64 | 1.07 | 1.07 | 0.36 |
| 61 | 3+710 | RHS | Cut | 11.14 | 5.57 | 111.35 | 55.68 | 100 | 1.67 | 1.67 | 0.56 |
| 62 | 3+720 | RHS | Cut | 10.73 | 5.37 | 107.31 | 53.66 | 97 | 1.61 | 1.61 | 0.54 |
| 63 | 3+730 | RHS | Cut | 7.61 | 3.80 | 76.06 | 38.03 | 68 | 1.14 | 1.14 | 0.38 |
| 64 | 3+900 | RHS | Cut | 7.33 | 3.66 | 73.26 | 36.63 | 66 | 1.10 | 1.10 | 0.37 |
| 65 | 3+910 | RHS | Cut | 8.02 | 4.01 | 80.15 | 40.08 | 72 | 1.20 | 1.20 | 0.40 |
| 66 | 3+920 | RHS | Cut | 9.24 | 4.62 | 92.36 | 46.18 | 83 | 1.39 | 1.39 | 0.46 |
| 67 | 3+930 | RHS | Cut | 9.52 | 4.76 | 95.18 | 47.59 | 86 | 1.43 | 1.43 | 0.48 |
| 68 | 3+940 | RHS | Cut | 12.59 | 6.29 | 125.87 | 62.94 | 113 | 1.89 | 1.89 | 0.63 |
| 69 | 3+950 | RHS | Cut | 12.77 | 6.38 | 127.65 | 63.83 | 115 | 1.91 | 1.91 | 0.64 |
| 70 | 3+960 | RHS | Cut | 14.69 | 7.34 | 146.89 | 73.45 | 132 | 2.20 | 2.20 | 0.73 |
| 71 | 3+970 | RHS | Cut | 16.54 | 8.27 | 165.40 | 82.70 | 149 | 2.48 | 2.48 | 0.83 |
| 72 | 3+980 | RHS | Cut | 19.04 | 9.52 | 190.40 | 95.20 | 171 | 2.86 | 2.86 | 0.95 |
| 73 | 3+990 | RHS | Cut | 14.87 | 7.43 | 148.67 | 74.34 | 134 | 2.23 | 2.23 | 0.74 |
| 74 | 4+000 | RHS | Cut | 13.84 | 6.92 | 138.39 | 69.20 | 125 | 2.08 | 2.08 | 0.69 |
| 75 | 4+010 | RHS | Cut | 7.50 | 3.75 | 74.98 | 37.49 | 67 | 1.12 | 1.12 | 0.37 |
| 76 | 4+020 | RHS | Cut | 12.16 | 6.08 | 121.62 | 60.81 | 109 | 1.82 | 1.82 | 0.61 |
| 77 | 4+030 | RHS | Cut | 14.38 | 7.19 | 143.82 | 71.91 | 129 | 2.16 | 2.16 | 0.72 |
| 78 | 4+040 | RHS | Cut | 15.54 | 7.77 | 155.41 | 77.70 | 140 | 2.33 | 2.33 | 0.78 |
| 79 | 4+050 | RHS | Cut | 12.54 | 6.27 | 125.35 | 62.68 | 113 | 1.88 | 1.88 | 0.63 |
| 80 | 4+060 | RHS | Cut | 6.39 | 3.19 | 63.88 | 31.94 | 57 | 0.96 | 0.96 | 0.32 |
| 81 | 4+100 | RHS | Cut | 6.52 | 3.26 | 65.24 | 32.62 | 59 | 0.98 | 0.98 | 0.33 |
| 82 | 4+110 | RHS | Cut | 10.34 | 5.17 | 103.36 | 51.68 | 93 | 1.55 | 1.55 | 0.52 |
| 83 | 4+120 | RHS | Cut | 8.66 | 4.33 | 86.55 | 43.28 | 78 | 1.30 | 1.30 | 0.43 |
| 84 | 4+130 | RHS | Cut | 5.97 | 2.98 | 59.66 | 29.83 | 54 | 0.89 | 0.89 | 0.30 |
| 85 | 4+170 | RHS | Cut | 7.21 | 3.60 | 72.07 | 36.04 | 65 | 1.08 | 1.08 | 0.36 |
| 86 | 4+190 | RHS | Cut | 14.09 | 7.05 | 140.92 | 70.46 | 127 | 2.11 | 2.11 | 0.70 |
| 87 | 4+200 | RHS | Cut | 13.59 | 6.79 | 135.90 | 67.95 | 122 | 2.04 | 2.04 | 0.68 |
| 88 | 4+210 | RHS | Cut | 14.22 | 7.11 | 142.25 | 71.12 | 128 | 2.13 | 2.13 | 0.71 |
| 89 | 4+220 | RHS | Cut | 13.95 | 6.98 | 139.51 | 69.75 | 126 | 2.09 | 2.09 | 0.70 |
| 90 | 4+230 | RHS | Cut | 13.21 | 6.61 | 132.12 | 66.06 | 119 | 1.98 | 1.98 | 0.66 |
| 91 | 4+240 | RHS | Cut | 11.98 | 5.99 | 119.82 | 59.91 | 108 | 1.80 | 1.80 | 0.60 |
| 92 | 4+250 | RHS | Cut | 12.02 | 6.01 | 120.22 | 60.11 | 108 | 1.80 | 1.80 | 0.60 |
| 93 | 4+260 | RHS | Cut | 12.09 | 6.04 | 120.87 | 60.43 | 109 | 1.81 | 1.81 | 0.60 |
| 94 | 4+270 | RHS | Cut | 8.46 | 4.23 | 84.57 | 42.29 | 76 | 1.27 | 1.27 | 0.42 |
| 95 | 4+275 | RHS | Cut | 6.07 | 3.03 | 60.35 | 30.18 | 27 | 0.46 | 0.46 | 0.15 |
| 96 | 4+280 | RHS | Cut | 7.62 | 3.81 | 76.20 | 38.10 | 34 | 0.57 | 0.57 | 0.19 |
| 97 | 4+290 | RHS | Cut | 7.23 | 3.61 | 72.29 | 36.15 | 65 | 1.08 | 1.08 | 0.36 |
| 98 | 4+300 | RHS | Cut | 7.24 | 3.62 | 72.39 | 36.20 | 65 | 1.09 | 1.09 | 0.36 |
| 99 | 4+310 | RHS | Cut | 7.77 | 3.88 | 77.66 | 38.83 | 70 | 1.16 | 1.16 | 0.39 |
| 100 | 4+320 | RHS | Cut | 11.35 | 5.67 | 113.48 | 56.74 | 102 | 1.70 | 1.70 | 0.57 |
| 101 | 4+330 | RHS | Cut | 15.34 | 7.67 | 153.43 | 76.72 | 138 | 2.30 | 2.30 | 0.77 |
| 102 | 4+340 | RHS | Cut | 9.43 | 4.72 | 94.33 | 47.17 | 85 | 1.41 | 1.41 | 0.47 |
| 103 | 4+460 | RHS | Cut | 7.39 | 3.70 | 73.90 | 36.95 | 67 | 1.11 | 1.11 | 0.37 |
| 104 | 4+470 | RHS | Cut | 12.36 | 6.18 | 123.57 | 61.78 | 111 | 1.85 | 1.85 | 0.62 |
| 105 | 4+480 | RHS | Cut | 5.70 | 2.85 | 56.97 | 28.49 | 51 | 0.85 | 0.85 | 0.28 |
| 106 | 4+540 | LHS | Cut | 6.01 | 3.00 | 60.08 | 30.04 | 54 | 0.90 | 0.90 | 0.30 |
| 107 | 4+550 | LHS | Cut | 8.19 | 4.09 | 81.87 | 40.94 | 74 | 1.23 | 1.23 | 0.41 |
| 108 | 4+560 | LHS | Cut | 8.72 | 4.36 | 87.16 | 43.58 | 78 | 1.31 | 1.31 | 0.44 |
| 109 | 4+720 | RHS | Cut | 5.92 | 2.96 | 59.21 | 29.61 | 53 | 0.89 | 0.89 | 0.30 |
| 110 | 4+730 | RHS | Cut | 6.64 | 3.32 | 66.37 | 33.19 | 60 | 1.00 | 1.00 | 0.33 |
| 111 | 4+740 | RHS | Cut | 6.18 | 3.09 | 61.84 | 30.92 | 56 | 0.93 | 0.93 | 0.31 |
| 112 | 4+770 | RHS | Cut | 5.42 | 2.71 | 54.19 | 27.10 | 49 | 0.81 | 0.81 | 0.27 |
| 113 | 4+780 | RHS | Cut | 12.65 | 6.32 | 126.49 | 63.24 | 114 | 1.90 | 1.90 | 0.63 |
| 114 | 4+790 | RHS | Cut | 14.74 | 7.37 | 147.36 | 73.68 | 133 | 2.21 | 2.21 | 0.74 |
| 115 | 4+800 | RHS | Cut | 10.36 | 5.18 | 103.58 | 51.79 | 93 | 1.55 | 1.55 | 0.52 |
| 116 | 4+810 | RHS | Cut | 10.18 | 5.09 | 101.76 | 50.88 | 92 | 1.53 | 1.53 | 0.51 |
| 117 | 4+820 | RHS | Cut | 12.29 | 6.15 | 122.94 | 61.47 | 111 | 1.84 | 1.84 | 0.61 |
| 118 | 4+830 | RHS | Cut | 14.48 | 7.24 | 144.80 | 72.40 | 130 | 2.17 | 2.17 | 0.72 |

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Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 119 | 4+840 | RHS | Cut | 15.90 | 7.95 | 158.99 | 79.49 | 143 | 2.38 | 2.38 | 0.79 |
| 120 | 4+850 | RHS | Cut | 15.50 | 7.75 | 154.97 | 77.49 | 139 | 2.32 | 2.32 | 0.77 |
| 121 | 4+860 | RHS | Cut | 14.21 | 7.11 | 142.15 | 71.07 | 128 | 2.13 | 2.13 | 0.71 |
| 122 | 4+870 | RHS | Cut | 12.59 | 6.29 | 125.88 | 62.94 | 113 | 1.89 | 1.89 | 0.63 |
| 123 | 4+880 | RHS | Cut | 12.24 | 6.12 | 122.36 | 61.18 | 110 | 1.84 | 1.84 | 0.61 |
| 124 | 4+890 | RHS | Cut | 6.61 | 3.31 | 66.10 | 33.05 | 59 | 0.99 | 0.99 | 0.33 |
| 125 | 4+910 | RHS | Cut | 6.32 | 3.16 | 63.19 | 31.60 | 57 | 0.95 | 0.95 | 0.32 |
| 126 | 4+920 | RHS | Cut | 7.55 | 3.78 | 75.54 | 37.77 | 68 | 1.13 | 1.13 | 0.38 |
| 127 | 4+930 | RHS | Cut | 6.23 | 3.12 | 62.30 | 31.15 | 56 | 0.93 | 0.93 | 0.31 |
| 128 | 5+140 | RHS | Cut | 5.05 | 2.53 | 50.50 | 25.25 | 45 | 0.76 | 0.76 | 0.25 |
| 129 | 5+150 | RHS | Cut | 5.31 | 2.65 | 53.07 | 26.54 | 48 | 0.80 | 0.80 | 0.27 |
| 130 | 5+190 | RHS | Cut | 6.44 | 3.22 | 64.43 | 32.22 | 58 | 0.97 | 0.97 | 0.32 |
| 131 | 5+650 | RHS | Cut | 5.07 | 2.54 | 50.72 | 25.36 | 46 | 0.76 | 0.76 | 0.25 |
| 132 | 5+740 | RHS | Cut | 5.47 | 2.74 | 54.72 | 27.36 | 49 | 0.82 | 0.82 | 0.27 |
| 133 | 5+750 | RHS | Cut | 5.78 | 2.89 | 57.81 | 28.91 | 52 | 0.87 | 0.87 | 0.29 |
| 134 | 5+760 | RHS | Cut | 5.97 | 2.99 | 59.74 | 29.87 | 54 | 0.90 | 0.90 | 0.30 |
| 135 | 5+770 | RHS | Cut | 5.46 | 2.73 | 54.58 | 27.29 | 49 | 0.82 | 0.82 | 0.27 |
| 136 | 5+820 | RHS | Cut | 5.05 | 2.53 | 50.52 | 25.26 | 45 | 0.76 | 0.76 | 0.25 |
| 137 | 5+920 | RHS | Cut | 5.18 | 2.59 | 51.81 | 25.91 | 47 | 0.78 | 0.78 | 0.26 |
| 138 | 5+930 | RHS | Cut | 6.85 | 3.42 | 68.48 | 34.24 | 62 | 1.03 | 1.03 | 0.34 |
| 139 | 5+940 | RHS | Cut | 6.43 | 3.22 | 64.31 | 32.16 | 58 | 0.96 | 0.96 | 0.32 |
| 140 | 6+050 | RHS | Cut | 5.73 | 2.86 | 57.26 | 28.63 | 52 | 0.86 | 0.86 | 0.29 |
| 141 | 6+090 | RHS | Cut | 5.36 | 2.68 | 53.61 | 26.81 | 48 | 0.80 | 0.80 | 0.27 |
| 142 | 6+100 | RHS | Cut | 5.79 | 2.90 | 57.92 | 28.96 | 52 | 0.87 | 0.87 | 0.29 |
| 143 | 6+110 | RHS | Cut | 5.13 | 2.56 | 51.28 | 25.64 | 46 | 0.77 | 0.77 | 0.26 |
| 144 | 6+130 | RHS | Cut | 5.06 | 2.53 | 50.61 | 25.31 | 46 | 0.76 | 0.76 | 0.25 |
| 145 | 6+270 | RHS | Cut | 6.71 | 3.35 | 67.09 | 33.55 | 60 | 1.01 | 1.01 | 0.34 |
| 146 | 6+280 | RHS | Cut | 7.28 | 3.64 | 72.84 | 36.42 | 66 | 1.09 | 1.09 | 0.36 |
| 147 | 6+290 | RHS | Cut | 5.97 | 2.98 | 59.67 | 29.84 | 54 | 0.90 | 0.90 | 0.30 |
| 148 | 6+400 | RHS | Cut | 6.94 | 3.47 | 69.39 | 34.70 | 62 | 1.04 | 1.04 | 0.35 |
| 149 | 6+410 | RHS | Cut | 6.21 | 3.10 | 62.05 | 31.03 | 56 | 0.93 | 0.93 | 0.31 |
| 150 | 6+420 | RHS | Cut | 5.74 | 2.87 | 57.40 | 28.70 | 52 | 0.86 | 0.86 | 0.29 |
| 151 | 6+450 | RHS | Cut | 6.62 | 3.31 | 66.18 | 33.09 | 60 | 0.99 | 0.99 | 0.33 |
| 152 | 6+460 | RHS | Cut | 7.77 | 3.89 | 77.74 | 38.87 | 70 | 1.17 | 1.17 | 0.39 |
| 153 | 6+470 | RHS | Cut | 7.94 | 3.97 | 79.41 | 39.71 | 71 | 1.19 | 1.19 | 0.40 |
| 154 | 6+480 | RHS | Cut | 7.83 | 3.91 | 78.25 | 39.13 | 70 | 1.17 | 1.17 | 0.39 |
| 155 | 6+490 | RHS | Cut | 5.70 | 2.85 | 56.97 | 28.49 | 51 | 0.85 | 0.85 | 0.28 |
| 156 | 6+500 | RHS | Cut | 5.56 | 2.78 | 55.62 | 27.81 | 50 | 0.83 | 0.83 | 0.28 |
| 157 | 6+510 | RHS | Cut | 10.09 | 5.04 | 100.86 | 50.43 | 91 | 1.51 | 1.51 | 0.50 |
| 158 | 6+520 | RHS | Cut | 10.93 | 5.47 | 109.30 | 54.65 | 98 | 1.64 | 1.64 | 0.55 |
| 159 | 6+530 | RHS | Cut | 11.74 | 5.87 | 117.37 | 58.68 | 106 | 1.76 | 1.76 | 0.59 |
| 160 | 6+540 | RHS | Cut | 12.64 | 6.32 | 126.44 | 63.22 | 114 | 1.90 | 1.90 | 0.63 |
| 161 | 6+550 | RHS | Cut | 12.88 | 6.44 | 128.83 | 64.42 | 116 | 1.93 | 1.93 | 0.64 |
| 162 | 6+560 | RHS | Cut | 12.93 | 6.46 | 129.27 | 64.64 | 116 | 1.94 | 1.94 | 0.65 |
| 163 | 6+620 | RHS | Cut | 6.25 | 3.12 | 62.48 | 31.24 | 56 | 0.94 | 0.94 | 0.31 |
| 164 | 6+630 | RHS | Cut | 6.19 | 3.10 | 61.90 | 30.95 | 56 | 0.93 | 0.93 | 0.31 |
| 165 | 6+640 | RHS | Cut | 5.75 | 2.87 | 57.45 | 28.73 | 52 | 0.86 | 0.86 | 0.29 |
| 166 | 6+700 | RHS | Cut | 5.22 | 2.61 | 52.18 | 26.09 | 47 | 0.78 | 0.78 | 0.26 |
| 167 | 6+710 | RHS | Cut | 5.55 | 2.78 | 55.50 | 27.75 | 50 | 0.83 | 0.83 | 0.28 |
| 168 | 6+720 | RHS | Cut | 5.31 | 2.65 | 53.08 | 26.54 | 48 | 0.80 | 0.80 | 0.27 |
| 169 | 6+730 | RHS | Cut | 5.68 | 2.84 | 56.75 | 28.38 | 51 | 0.85 | 0.85 | 0.28 |
| 170 | 6+740 | RHS | Cut | 6.18 | 3.09 | 61.82 | 30.91 | 56 | 0.93 | 0.93 | 0.31 |
| 171 | 6+750 | RHS | Cut | 7.08 | 3.54 | 70.75 | 35.38 | 64 | 1.06 | 1.06 | 0.35 |
| 172 | 6+760 | RHS | Cut | 7.86 | 3.93 | 78.59 | 39.30 | 71 | 1.18 | 1.18 | 0.39 |
| 173 | 6+770 | RHS | Cut | 9.07 | 4.54 | 90.70 | 45.35 | 82 | 1.36 | 1.36 | 0.45 |
| 174 | 6+780 | RHS | Cut | 9.64 | 4.82 | 96.41 | 48.21 | 87 | 1.45 | 1.45 | 0.48 |
| 175 | 6+790 | RHS | Cut | 8.58 | 4.29 | 85.77 | 42.89 | 77 | 1.29 | 1.29 | 0.43 |
| 176 | 6+800 | RHS | Cut | 5.35 | 2.68 | 53.54 | 26.77 | 48 | 0.80 | 0.80 | 0.27 |
| 177 | 6+810 | RHS | Cut | 7.22 | 3.61 | 72.17 | 36.09 | 65 | 1.08 | 1.08 | 0.36 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of Cut/fill | Len for Bioengin eering | Slope Area | Slope Preparati on | Single node culm | Planting rooted grass | Live pegs | Live fascines |
|-----|----------|------|----------|-----------------|-------------------------|------------|--------------------|------------------|-----------------------|-----------|---------------|
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 178 | 6+900 | RHS | Cut | 5.54 | 2.77 | 55.44 | 27.72 | 50 | 0.83 | 0.83 | 0.28 |
| 179 | 7+000 | RHS | Cut | 5.21 | 2.60 | 52.08 | 26.04 | 47 | 0.78 | 0.78 | 0.26 |
| 180 | 7+040 | RHS | Cut | 5.74 | 2.87 | 57.36 | 28.68 | 52 | 0.86 | 0.86 | 0.29 |
| 181 | 7+050 | RHS | Cut | 5.74 | 2.87 | 57.35 | 28.68 | 52 | 0.86 | 0.86 | 0.29 |
| 182 | 7+110 | RHS | Cut | 5.09 | 2.54 | 50.85 | 25.43 | 46 | 0.76 | 0.76 | 0.25 |
| 183 | 7+730 | RHS | Cut | 6.12 | 3.06 | 61.23 | 30.62 | 55 | 0.92 | 0.92 | 0.31 |
| 184 | 7+740 | RHS | Cut | 7.12 | 3.56 | 71.16 | 35.58 | 64 | 1.07 | 1.07 | 0.36 |
| 185 | 7+760 | RHS | Cut | 9.14 | 4.57 | 91.38 | 45.69 | 82 | 1.37 | 1.37 | 0.46 |
| 186 | 7+770 | RHS | Cut | 6.61 | 3.30 | 66.09 | 33.05 | 59 | 0.99 | 0.99 | 0.33 |
| 187 | 7+790 | RHS | Cut | 6.37 | 3.19 | 63.73 | 31.87 | 57 | 0.96 | 0.96 | 0.32 |
| 188 | 7+800 | RHS | Cut | 10.39 | 5.20 | 103.90 | 51.95 | 94 | 1.56 | 1.56 | 0.52 |
| 189 | 7+810 | RHS | Cut | 8.76 | 4.38 | 87.55 | 43.78 | 79 | 1.31 | 1.31 | 0.44 |
| 190 | 7+870 | RHS | Cut | 5.32 | 2.66 | 53.20 | 26.60 | 48 | 0.80 | 0.80 | 0.27 |
| 191 | 7+880 | RHS | Cut | 7.52 | 3.76 | 75.22 | 37.61 | 68 | 1.13 | 1.13 | 0.38 |
| 192 | 7+890 | RHS | Cut | 6.16 | 3.08 | 61.62 | 30.81 | 55 | 0.92 | 0.92 | 0.31 |
| 193 | 8+060 | RHS | Cut | 5.56 | 2.78 | 55.56 | 27.78 | 50 | 0.83 | 0.83 | 0.28 |
| 194 | 8+210 | RHS | Cut | 6.14 | 3.07 | 61.44 | 30.72 | 55 | 0.92 | 0.92 | 0.31 |
| 195 | 8+220 | RHS | Cut | 7.07 | 3.54 | 70.71 | 35.36 | 64 | 1.06 | 1.06 | 0.35 |
| 196 | 8+230 | RHS | Cut | 8.45 | 4.23 | 84.52 | 42.26 | 76 | 1.27 | 1.27 | 0.42 |
| 197 | 8+240 | RHS | Cut | 7.81 | 3.91 | 78.11 | 39.06 | 70 | 1.17 | 1.17 | 0.39 |
| 198 | 8+250 | RHS | Cut | 6.82 | 3.41 | 68.18 | 34.09 | 61 | 1.02 | 1.02 | 0.34 |
| 199 | 8+260 | RHS | Cut | 6.05 | 3.03 | 60.51 | 30.26 | 54 | 0.91 | 0.91 | 0.30 |
| 200 | 8+360 | RHS | Cut | 5.17 | 2.58 | 51.68 | 25.84 | 47 | 0.78 | 0.78 | 0.26 |
| 201 | 8+380 | RHS | Cut | 5.50 | 2.75 | 54.99 | 27.50 | 49 | 0.82 | 0.82 | 0.27 |
| 202 | 8+450 | LHS | Cut | 6.93 | 3.47 | 69.34 | 34.67 | 62 | 1.04 | 1.04 | 0.35 |
| 203 | 8+460 | LHS | Cut | 12.19 | 6.09 | 121.87 | 60.94 | 110 | 1.83 | 1.83 | 0.61 |
| 204 | 8+470 | LHS | Cut | 10.62 | 5.31 | 106.21 | 53.11 | 96 | 1.59 | 1.59 | 0.53 |
| 205 | 8+480 | LHS | Cut | 5.82 | 2.91 | 58.17 | 29.09 | 52 | 0.87 | 0.87 | 0.29 |
| 206 | 8+520 | RHS | Cut | 7.80 | 3.90 | 77.97 | 38.99 | 70 | 1.17 | 1.17 | 0.39 |
| 207 | 8+530 | RHS | Cut | 16.17 | 8.08 | 161.70 | 80.85 | 146 | 2.43 | 2.43 | 0.81 |
| 208 | 8+540 | RHS | Cut | 15.59 | 7.79 | 155.87 | 77.94 | 140 | 2.34 | 2.34 | 0.78 |
| 209 | 8+550 | RHS | Cut | 13.36 | 6.68 | 133.63 | 66.82 | 120 | 2.00 | 2.00 | 0.67 |
| 210 | 8+560 | RHS | Cut | 11.55 | 5.78 | 115.52 | 57.76 | 104 | 1.73 | 1.73 | 0.58 |
| 211 | 8+570 | RHS | Cut | 7.66 | 3.83 | 76.60 | 38.30 | 69 | 1.15 | 1.15 | 0.38 |
| 212 | 8+580 | RHS | Cut | 9.46 | 4.73 | 94.63 | 47.32 | 85 | 1.42 | 1.42 | 0.47 |
| 213 | 8+590 | RHS | Cut | 10.43 | 5.22 | 104.30 | 52.15 | 94 | 1.56 | 1.56 | 0.52 |
| 214 | 8+600 | RHS | Cut | 6.62 | 3.31 | 66.17 | 33.08 | 60 | 0.99 | 0.99 | 0.33 |
| 215 | 8+630 | RHS | Cut | 5.06 | 2.53 | 50.60 | 25.30 | 46 | 0.76 | 0.76 | 0.25 |
| 216 | 8+690 | RHS | Cut | 5.94 | 2.97 | 59.42 | 29.71 | 53 | 0.89 | 0.89 | 0.30 |
| 217 | 8+700 | RHS | Cut | 5.40 | 2.70 | 53.99 | 27.00 | 49 | 0.81 | 0.81 | 0.27 |
| 218 | 8+740 | RHS | Cut | 7.19 | 3.59 | 71.85 | 35.93 | 65 | 1.08 | 1.08 | 0.36 |
| 219 | 8+750 | RHS | Cut | 7.36 | 3.68 | 73.63 | 36.82 | 66 | 1.10 | 1.10 | 0.37 |
| 220 | 8+760 | RHS | Cut | 7.52 | 3.76 | 75.15 | 37.58 | 68 | 1.13 | 1.13 | 0.38 |
| 221 | 8+770 | RHS | Cut | 7.04 | 3.52 | 70.40 | 35.20 | 63 | 1.06 | 1.06 | 0.35 |
| 222 | 8+780 | RHS | Cut | 6.42 | 3.21 | 64.23 | 32.12 | 58 | 0.96 | 0.96 | 0.32 |
| 223 | 8+790 | RHS | Cut | 5.23 | 2.61 | 52.26 | 26.13 | 47 | 0.78 | 0.78 | 0.26 |
| 224 | 8+810 | RHS | Cut | 5.14 | 2.57 | 51.44 | 25.72 | 46 | 0.77 | 0.77 | 0.26 |
| 225 | 8+840 | RHS | Cut | 5.26 | 2.63 | 52.56 | 26.28 | 47 | 0.79 | 0.79 | 0.26 |
| 226 | 8+890 | RHS | Cut | 5.34 | 2.67 | 53.37 | 26.69 | 48 | 0.80 | 0.80 | 0.27 |
| 227 | 8+900 | RHS | Cut | 5.19 | 2.60 | 51.93 | 25.97 | 47 | 0.78 | 0.78 | 0.26 |
| 228 | 8+910 | RHS | Cut | 5.22 | 2.61 | 52.23 | 26.12 | 47 | 0.78 | 0.78 | 0.26 |
| 229 | 8+920 | RHS | Cut | 5.07 | 2.53 | 50.67 | 25.34 | 46 | 0.76 | 0.76 | 0.25 |
| 230 | 8+950 | RHS | Cut | 5.01 | 2.51 | 50.11 | 25.06 | 45 | 0.75 | 0.75 | 0.25 |
| 231 | 8+970 | RHS | Cut | 8.11 | 4.05 | 81.08 | 40.54 | 73 | 1.22 | 1.22 | 0.41 |
| 232 | 8+980 | RHS | Cut | 9.50 | 4.75 | 95.01 | 47.50 | 86 | 1.43 | 1.43 | 0.48 |
| 233 | 8+990 | RHS | Cut | 9.76 | 4.88 | 97.56 | 48.78 | 88 | 1.46 | 1.46 | 0.49 |
| 234 | 9+000 | RHS | Cut | 9.42 | 4.71 | 94.20 | 47.10 | 85 | 1.41 | 1.41 | 0.47 |
| 235 | 9+010 | RHS | Cut | 6.38 | 3.19 | 63.79 | 31.90 | 57 | 0.96 | 0.96 | 0.32 |
| 236 | 9+020 | RHS | Cut | 8.42 | 4.21 | 84.20 | 42.10 | 76 | 1.26 | 1.26 | 0.42 |

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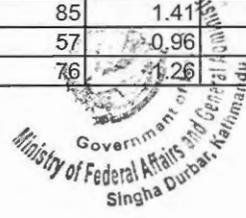


Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of Cut/fill | Len for Bioengineering | Slope Area | Slope Preparation | Single node culm | Planting rooted grass | Live pegs | Live fascines |
|-----|----------|------|----------|-----------------|------------------------|------------|-------------------|------------------|-----------------------|-----------|---------------|
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 237 | 9+150 | RHS | Cut | 5.05 | 2.53 | 50.52 | 25.26 | 45 | 0.76 | 0.76 | 0.25 |
| 238 | 9+160 | RHS | Cut | 5.67 | 2.83 | 56.66 | 28.33 | 51 | 0.85 | 0.85 | 0.28 |
| 239 | 9+190 | RHS | Cut | 5.07 | 2.53 | 50.65 | 25.33 | 46 | 0.76 | 0.76 | 0.25 |
| 240 | 9+460 | RHS | Cut | 5.85 | 2.93 | 58.53 | 29.27 | 53 | 0.88 | 0.88 | 0.29 |
| 241 | 9+470 | RHS | Cut | 6.68 | 3.34 | 66.83 | 33.42 | 60 | 1.00 | 1.00 | 0.33 |
| 242 | 9+480 | RHS | Cut | 5.52 | 2.76 | 55.15 | 27.58 | 50 | 0.83 | 0.83 | 0.28 |
| 243 | 9+530 | RHS | Cut | 6.55 | 3.28 | 65.53 | 32.77 | 59 | 0.98 | 0.98 | 0.33 |
| 244 | 9+540 | RHS | Cut | 6.06 | 3.03 | 60.64 | 30.32 | 55 | 0.91 | 0.91 | 0.30 |
| 245 | 9+640 | RHS | Cut | 5.16 | 2.58 | 51.60 | 25.80 | 46 | 0.77 | 0.77 | 0.26 |
| 246 | 9+650 | RHS | Cut | 5.80 | 2.90 | 58.01 | 29.01 | 52 | 0.87 | 0.87 | 0.29 |
| 247 | 9+680 | RHS | Cut | 5.26 | 2.63 | 52.62 | 26.31 | 47 | 0.79 | 0.79 | 0.26 |
| 248 | 9+720 | RHS | Cut | 5.65 | 2.82 | 56.49 | 28.25 | 51 | 0.85 | 0.85 | 0.28 |
| 249 | 9+730 | RHS | Cut | 5.29 | 2.64 | 52.86 | 26.43 | 48 | 0.79 | 0.79 | 0.26 |
| 250 | 9+740 | RHS | Cut | 5.23 | 2.62 | 52.31 | 26.16 | 47 | 0.78 | 0.78 | 0.26 |
| 251 | 9+750 | RHS | Cut | 8.56 | 4.28 | 85.62 | 42.81 | 77 | 1.28 | 1.28 | 0.43 |
| 252 | 9+760 | RHS | Cut | 9.36 | 4.68 | 93.62 | 46.81 | 84 | 1.40 | 1.40 | 0.47 |
| 253 | 9+770 | RHS | Cut | 6.78 | 3.39 | 67.76 | 33.88 | 61 | 1.02 | 1.02 | 0.34 |
| 254 | 9+850 | RHS | Cut | 6.39 | 3.19 | 63.88 | 31.94 | 57 | 0.96 | 0.96 | 0.32 |
| 255 | 9+860 | RHS | Cut | 5.80 | 2.90 | 57.98 | 28.99 | 52 | 0.87 | 0.87 | 0.29 |
| 256 | 9+910 | RHS | Cut | 5.07 | 2.54 | 50.73 | 25.37 | 46 | 0.76 | 0.76 | 0.25 |
| 257 | 9+920 | RHS | Cut | 6.08 | 3.04 | 60.78 | 30.39 | 55 | 0.91 | 0.91 | 0.30 |
| 258 | 9+930 | RHS | Cut | 5.20 | 2.60 | 52.01 | 26.01 | 47 | 0.78 | 0.78 | 0.26 |
| 259 | 10+080 | RHS | Cut | 5.18 | 2.59 | 51.80 | 25.90 | 47 | 0.78 | 0.78 | 0.26 |
| 260 | 10+730 | RHS | Cut | 5.02 | 2.51 | 50.15 | 25.08 | 45 | 0.75 | 0.75 | 0.25 |
| 261 | 10+860 | RHS | Cut | 5.56 | 2.78 | 55.61 | 27.81 | 50 | 0.83 | 0.83 | 0.28 |
| 262 | 10+920 | RHS | Cut | 5.02 | 2.51 | 50.23 | 25.12 | 45 | 0.75 | 0.75 | 0.25 |
| 263 | 11+000 | RHS | Cut | 7.88 | 3.94 | 78.75 | 39.38 | 71 | 1.18 | 1.18 | 0.39 |
| 264 | 11+010 | RHS | Cut | 9.29 | 4.65 | 92.94 | 46.47 | 84 | 1.39 | 1.39 | 0.46 |
| 265 | 11+020 | RHS | Cut | 5.96 | 2.98 | 59.63 | 29.82 | 54 | 0.89 | 0.89 | 0.30 |
| 266 | 11+030 | RHS | Cut | 7.19 | 3.59 | 71.89 | 35.95 | 65 | 1.08 | 1.08 | 0.36 |
| 267 | 11+270 | RHS | Cut | 6.17 | 3.08 | 61.68 | 30.84 | 56 | 0.93 | 0.93 | 0.31 |
| 268 | 11+360 | RHS | Cut | 7.09 | 3.55 | 70.92 | 35.46 | 64 | 1.06 | 1.06 | 0.35 |
| 269 | 11+370 | RHS | Cut | 6.26 | 3.13 | 62.58 | 31.29 | 56 | 0.94 | 0.94 | 0.31 |
| 270 | 11+380 | RHS | Cut | 7.23 | 3.61 | 72.25 | 36.13 | 65 | 1.08 | 1.08 | 0.36 |
| 271 | 11+390 | RHS | Cut | 6.14 | 3.07 | 61.38 | 30.69 | 55 | 0.92 | 0.92 | 0.31 |
| 272 | 11+400 | RHS | Cut | 5.09 | 2.55 | 50.91 | 25.46 | 46 | 0.76 | 0.76 | 0.25 |
| 273 | 11+410 | RHS | Cut | 5.62 | 2.81 | 56.15 | 28.08 | 51 | 0.84 | 0.84 | 0.28 |
| 274 | 11+420 | RHS | Cut | 7.59 | 3.79 | 75.89 | 37.95 | 68 | 1.14 | 1.14 | 0.38 |
| 275 | 11+430 | RHS | Cut | 6.03 | 3.02 | 60.30 | 30.15 | 54 | 0.90 | 0.90 | 0.30 |
| 276 | 11+770 | LHS | Cut | 5.62 | 2.81 | 56.20 | 28.10 | 51 | 0.84 | 0.84 | 0.28 |
| 277 | 11+910 | RHS | Cut | 10.52 | 5.26 | 105.25 | 52.62 | 95 | 1.58 | 1.58 | 0.53 |
| 278 | 11+920 | RHS | Cut | 12.72 | 6.36 | 127.25 | 63.62 | 115 | 1.91 | 1.91 | 0.64 |
| 279 | 11+930 | RHS | Cut | 7.26 | 3.63 | 72.62 | 36.31 | 65 | 1.09 | 1.09 | 0.36 |
| 280 | 11+950 | RHS | Cut | 5.45 | 2.73 | 54.50 | 27.25 | 49 | 0.82 | 0.82 | 0.27 |
| 281 | 12+010 | LHS | Cut | 14.16 | 7.08 | 141.64 | 70.82 | 127 | 2.12 | 2.12 | 0.71 |
| 282 | 12+020 | LHS | Cut | 15.79 | 7.89 | 157.89 | 78.94 | 142 | 2.37 | 2.37 | 0.79 |
| 283 | 12+030 | LHS | Cut | 8.08 | 4.04 | 80.78 | 40.39 | 73 | 1.21 | 1.21 | 0.40 |
| 284 | 12+060 | LHS | Cut | 6.76 | 3.38 | 67.64 | 33.82 | 61 | 1.01 | 1.01 | 0.34 |
| 285 | 12+070 | LHS | Cut | 5.99 | 3.00 | 59.93 | 29.97 | 54 | 0.90 | 0.90 | 0.30 |
| 286 | 12+410 | RHS | Cut | 5.51 | 2.75 | 55.07 | 27.54 | 50 | 0.83 | 0.83 | 0.28 |
| 287 | 12+420 | RHS | Cut | 5.77 | 2.89 | 57.73 | 28.87 | 52 | 0.87 | 0.87 | 0.29 |
| 288 | 12+430 | RHS | Cut | 5.18 | 2.59 | 51.76 | 25.88 | 47 | 0.78 | 0.78 | 0.26 |
| 289 | 12+440 | RHS | Cut | 5.73 | 2.86 | 57.28 | 28.64 | 52 | 0.86 | 0.86 | 0.29 |
| 290 | 12+450 | RHS | Cut | 7.78 | 3.89 | 77.82 | 38.91 | 70 | 1.17 | 1.17 | 0.39 |
| 291 | 12+460 | RHS | Cut | 11.06 | 5.53 | 110.62 | 55.31 | 100 | 1.66 | 1.66 | 0.55 |
| 292 | 12+470 | RHS | Cut | 13.37 | 6.69 | 133.71 | 66.85 | 120 | 2.01 | 2.01 | 0.67 |
| 293 | 12+480 | RHS | Cut | 12.13 | 6.06 | 121.27 | 60.63 | 109 | 1.82 | 1.82 | 0.61 |
| 294 | 12+490 | RHS | Cut | 12.74 | 6.37 | 127.38 | 63.69 | 115 | 1.91 | 1.91 | 0.64 |
| 295 | 12+610 | RHS | Cut | 5.02 | 2.51 | 50.23 | 25.12 | 45 | 0.75 | 0.75 | 0.25 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of Cut/fill | Len for Bioengin eering | Slope Area | Slope Preparati on | Single node culm | Planting rooted grass | Live pegs | Live fascines |
|-----|----------|---------|----------|-----------------|-------------------------|------------|--------------------|------------------|-----------------------|-----------|---------------|
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 296 | 12+620 | RHS | Cut | 7.06 | 3.53 | 70.58 | 35.29 | 64 | 1.06 | 1.06 | 0.35 |
| 297 | 12+630 | RHS | Cut | 7.16 | 3.58 | 71.60 | 35.80 | 64 | 1.07 | 1.07 | 0.36 |
| 298 | 12+640 | RHS | Cut | 6.55 | 3.27 | 65.49 | 32.75 | 59 | 0.98 | 0.98 | 0.33 |
| 299 | 12+650 | RHS | Cut | 7.95 | 3.98 | 79.54 | 39.77 | 72 | 1.19 | 1.19 | 0.40 |
| 300 | 12+660 | RHS | Cut | 8.02 | 4.01 | 80.24 | 40.12 | 72 | 1.20 | 1.20 | 0.40 |
| 301 | 12+670 | RHS | Cut | 8.24 | 4.12 | 82.40 | 41.20 | 74 | 1.24 | 1.24 | 0.41 |
| 302 | 12+750 | RHS | Cut | 6.44 | 3.22 | 64.43 | 32.22 | 58 | 0.97 | 0.97 | 0.32 |
| 303 | 12+760 | RHS | Cut | 7.52 | 3.76 | 75.15 | 37.58 | 68 | 1.13 | 1.13 | 0.38 |
| 304 | 12+770 | RHS | Cut | 5.01 | 2.51 | 50.13 | 25.07 | 45 | 0.75 | 0.75 | 0.25 |
| 305 | 12+820 | RHS | Cut | 9.36 | 4.68 | 93.56 | 46.78 | 84 | 1.40 | 1.40 | 0.47 |
| 306 | 12+830 | RHS | Cut | 9.19 | 4.59 | 91.85 | 45.93 | 83 | 1.38 | 1.38 | 0.46 |
| 307 | 12+840 | RHS | Cut | 8.58 | 4.29 | 85.79 | 42.90 | 77 | 1.29 | 1.29 | 0.43 |
| 308 | 12+850 | RHS | Cut | 6.50 | 3.25 | 65.02 | 32.51 | 59 | 0.98 | 0.98 | 0.33 |
| 309 | 12+860 | RHS | Cut | 6.87 | 3.44 | 68.71 | 34.36 | 62 | 1.03 | 1.03 | 0.34 |
| 310 | 12+870 | RHS | Cut | 7.81 | 3.91 | 78.11 | 39.06 | 70 | 1.17 | 1.17 | 0.39 |
| 311 | 12+880 | RHS | Cut | 12.33 | 6.16 | 123.26 | 61.63 | 111 | 1.85 | 1.85 | 0.62 |
| 312 | 12+890 | RHS | Cut | 11.83 | 5.91 | 118.29 | 59.15 | 106 | 1.77 | 1.77 | 0.59 |
| 313 | 12+900 | RHS | Cut | 7.48 | 3.74 | 74.82 | 37.41 | 67 | 1.12 | 1.12 | 0.37 |
| 314 | 12+910 | RHS | Cut | 15.29 | 7.64 | 152.86 | 76.43 | 138 | 2.29 | 2.29 | 0.76 |
| 315 | 12+920 | RHS | Cut | 21.99 | 10.99 | 219.87 | 109.93 | 198 | 3.30 | 3.30 | 1.10 |
| 316 | 12+930 | RHS | Cut | 20.01 | 10.00 | 200.09 | 100.04 | 180 | 3.00 | 3.00 | 1.00 |
| 317 | 12+940 | RHS | Cut | 20.63 | 10.31 | 206.26 | 103.13 | 186 | 3.09 | 3.09 | 1.03 |
| 318 | 12+950 | RHS | Cut | 20.33 | 10.17 | 203.33 | 101.67 | 183 | 3.05 | 3.05 | 1.02 |
| 319 | 12+960 | RHS | Cut | 14.01 | 7.00 | 140.07 | 70.04 | 126 | 2.10 | 2.10 | 0.70 |
| 320 | 12+970 | RHS | Cut | 14.00 | 7.00 | 139.97 | 69.98 | 126 | 2.10 | 2.10 | 0.70 |
| 321 | 12+980 | RHS | Cut | 22.71 | 11.35 | 227.08 | 113.54 | 204 | 3.41 | 3.41 | 1.14 |
| 322 | 12+990 | RHS | Cut | 20.90 | 10.45 | 209.00 | 104.50 | 188 | 3.14 | 3.14 | 1.05 |
| 323 | 13+000 | RHS | Cut | 14.91 | 7.45 | 149.06 | 74.53 | 134 | 2.24 | 2.24 | 0.75 |
| 324 | 13+010 | RHS | Cut | 5.21 | 2.61 | 52.10 | 26.05 | 47 | 0.78 | 0.78 | 0.26 |
| 325 | 13+020 | RHS | Cut | 5.22 | 2.61 | 52.23 | 26.12 | 47 | 0.78 | 0.78 | 0.26 |
| 326 | 13+030 | RHS | Cut | 13.03 | 6.52 | 130.32 | 65.16 | 117 | 1.95 | 1.95 | 0.65 |
| 327 | 13+040 | RHS | Cut | 12.77 | 6.39 | 127.71 | 63.85 | 115 | 1.92 | 1.92 | 0.64 |
| 328 | 13+050 | RHS | Cut | 8.45 | 4.23 | 84.53 | 42.27 | 76 | 1.27 | 1.27 | 0.42 |
| 329 | 13+060 | RHS | Cut | 8.91 | 4.45 | 89.08 | 44.54 | 80 | 1.34 | 1.34 | 0.45 |
| 330 | 13+070 | RHS | Cut | 9.34 | 4.67 | 93.35 | 46.68 | 84 | 1.40 | 1.40 | 0.47 |
| 331 | 13+080 | RHS | Cut | 10.18 | 5.09 | 101.75 | 50.88 | 92 | 1.53 | 1.53 | 0.51 |
| 332 | 13+090 | RHS | Cut | 10.40 | 5.20 | 103.99 | 52.00 | 94 | 1.56 | 1.56 | 0.52 |
| 333 | 13+100 | RHS | Cut | 13.00 | 6.50 | 130.01 | 65.00 | 117 | 1.95 | 1.95 | 0.65 |
| 334 | 13+110 | RHS | Cut | 12.74 | 6.37 | 127.38 | 63.69 | 115 | 1.91 | 1.91 | 0.64 |
| 335 | 13+130 | RHS | Cut | 11.68 | 5.84 | 116.77 | 58.39 | 105 | 1.75 | 1.75 | 0.58 |
| 336 | 13+140 | RHS | Cut | 10.34 | 5.17 | 103.42 | 51.71 | 93 | 1.55 | 1.55 | 0.52 |
| 337 | 13+150 | RHS | Cut | 11.81 | 5.90 | 118.06 | 59.03 | 106 | 1.77 | 1.77 | 0.59 |
| 338 | 13+160 | RHS | Cut | 13.27 | 6.63 | 132.70 | 66.35 | 119 | 1.99 | 1.99 | 0.66 |
| 339 | 13+170 | LHS/RHS | Cut-Cut | 18.90 | 9.45 | 189.03 | 94.52 | 170 | 2.84 | 2.84 | 0.95 |
| 340 | 13+180 | RHS | Cut | 11.81 | 5.91 | 118.14 | 59.07 | 106 | 1.77 | 1.77 | 0.59 |
| 341 | 13+190 | RHS | Cut | 8.90 | 4.45 | 89.03 | 44.52 | 80 | 1.34 | 1.34 | 0.45 |
| 342 | 13+200 | RHS | Cut | 7.87 | 3.93 | 78.67 | 39.34 | 71 | 1.18 | 1.18 | 0.39 |
| 343 | 13+210 | RHS | Cut | 6.28 | 3.14 | 62.76 | 31.38 | 56 | 0.94 | 0.94 | 0.31 |
| 344 | 13+220 | RHS | Cut | 5.40 | 2.70 | 54.02 | 27.01 | 49 | 0.81 | 0.81 | 0.27 |
| 345 | 13+360 | RHS | Cut | 7.57 | 3.78 | 75.68 | 37.84 | 68 | 1.14 | 1.14 | 0.38 |
| 346 | 13+370 | RHS | Cut | 10.59 | 5.29 | 105.85 | 52.93 | 95 | 1.59 | 1.59 | 0.53 |
| 347 | 13+380 | RHS | Cut | 9.56 | 4.78 | 95.56 | 47.78 | 86 | 1.43 | 1.43 | 0.48 |
| 348 | 13+490 | RHS | Cut | 5.57 | 2.78 | 55.66 | 27.83 | 50 | 0.83 | 0.83 | 0.28 |
| 349 | 13+500 | RHS | Cut | 5.61 | 2.80 | 56.07 | 28.04 | 50 | 0.84 | 0.84 | 0.28 |
| 350 | 13+510 | RHS | Cut | 10.18 | 5.09 | 101.81 | 50.91 | 92 | 1.53 | 1.53 | 0.51 |
| 351 | 13+560 | RHS | Cut | 18.78 | 9.39 | 187.33 | 93.66 | 170 | 2.84 | 2.84 | 0.95 |
| 352 | 13+570 | RHS | Cut | 26.90 | 13.45 | 269.00 | 134.50 | 240 | 4.13 | 4.13 | 1.38 |
| 353 | 13+580 | RHS | Cut | 29.16 | 14.58 | 291.60 | 145.80 | 270 | 4.61 | 4.61 | 1.54 |
| 354 | 13+590 | RHS | Cut | 30.84 | 15.42 | 308.40 | 154.20 | 290 | 4.91 | 4.91 | 1.64 |

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Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 355 | 13+600 | RHS | Cut | 27.53 | 13.77 | 133.30 | 66.65 | 120 | 2.00 | 2.00 | 0.67 |
| 356 | 13+610 | RHS | Cut | 13.99 | 6.99 | 94.16 | 47.08 | 85 | 1.41 | 1.41 | 0.47 |
| 357 | 13+770 | RHS | Cut | 10.73 | 5.37 | 58.96 | 29.48 | 53 | 0.88 | 0.88 | 0.29 |
| 358 | 13+780 | RHS | Cut | 6.08 | 3.04 | 60.64 | 30.32 | 55 | 0.91 | 0.91 | 0.30 |
| 359 | 13+790 | RHS | Cut | 13.33 | 6.67 | 64.12 | 32.06 | 58 | 0.96 | 0.96 | 0.32 |
| 360 | 13+800 | RHS | Cut | 9.42 | 4.71 | 64.81 | 32.41 | 58 | 0.97 | 0.97 | 0.32 |
| 361 | 14+030 | RHS | Cut | 5.90 | 2.95 | 57.28 | 28.64 | 52 | 0.86 | 0.86 | 0.29 |
| 362 | 14+050 | RHS | Cut | 6.06 | 3.03 | 65.05 | 32.53 | 59 | 0.98 | 0.98 | 0.33 |
| 363 | 14+200 | RHS | Cut | 6.41 | 3.21 | 64.96 | 32.48 | 58 | 0.97 | 0.97 | 0.32 |
| 364 | 14+210 | RHS | Cut | 6.48 | 3.24 | 92.43 | 46.22 | 83 | 1.39 | 1.39 | 0.46 |
| 365 | 14+220 | RHS | Cut | 5.73 | 2.86 | 93.03 | 46.52 | 84 | 1.40 | 1.40 | 0.47 |
| 366 | 14+230 | RHS | Cut | 6.51 | 3.25 | 116.03 | 58.02 | 104 | 1.74 | 1.74 | 0.58 |
| 367 | 14+240 | RHS | Cut | 6.50 | 3.25 | 105.04 | 52.52 | 95 | 1.58 | 1.58 | 0.53 |
| 368 | 14+250 | RHS | Cut | 9.24 | 4.62 | 95.87 | 47.94 | 86 | 1.44 | 1.44 | 0.48 |
| 369 | 14+260 | RHS | Cut | 9.30 | 4.65 | 87.30 | 43.65 | 79 | 1.31 | 1.31 | 0.44 |
| 370 | 14+270 | RHS | Cut | 11.60 | 5.80 | 50.76 | 25.38 | 46 | 0.76 | 0.76 | 0.25 |
| 371 | 14+280 | RHS | Cut | 10.50 | 5.25 | 123.79 | 61.90 | 111 | 1.86 | 1.86 | 0.62 |
| 372 | 14+290 | RHS | Cut | 9.59 | 4.79 | 78.87 | 39.44 | 71 | 1.18 | 1.18 | 0.39 |
| 373 | 14+300 | RHS | Cut | 8.73 | 4.37 | 150.78 | 75.39 | 136 | 2.26 | 2.26 | 0.75 |
| 374 | 14+310 | RHS | Cut | 5.08 | 2.54 | 161.34 | 80.67 | 145 | 2.42 | 2.42 | 0.81 |
| 375 | 14+320 | RHS | Cut | 12.38 | 6.19 | 144.59 | 72.29 | 130 | 2.17 | 2.17 | 0.72 |
| 376 | 14+330 | RHS | Cut | 7.89 | 3.94 | 108.57 | 54.29 | 98 | 1.63 | 1.63 | 0.54 |
| 377 | 14+340 | RHS | Cut | 15.08 | 7.54 | 85.79 | 42.90 | 77 | 1.29 | 1.29 | 0.43 |
| 378 | 14+460 | RHS | Cut | 16.13 | 8.07 | 65.26 | 32.63 | 59 | 0.98 | 0.98 | 0.33 |
| 379 | 14+470 | RHS | Cut | 14.46 | 7.23 | 68.38 | 34.19 | 62 | 1.03 | 1.03 | 0.34 |
| 380 | 14+480 | RHS | Cut | 10.86 | 5.43 | 70.44 | 35.22 | 63 | 1.06 | 1.06 | 0.35 |
| 381 | 14+490 | RHS | Cut | 8.58 | 4.29 | 71.64 | 35.82 | 64 | 1.07 | 1.07 | 0.36 |
| 382 | 14+500 | RHS | Cut | 6.53 | 3.26 | 63.07 | 31.54 | 57 | 0.95 | 0.95 | 0.32 |
| 383 | 14+510 | RHS | Cut | 6.84 | 3.42 | 66.99 | 33.50 | 60 | 1.00 | 1.00 | 0.33 |
| 384 | 14+520 | RHS | Cut | 7.04 | 3.52 | 64.02 | 32.01 | 58 | 0.96 | 0.96 | 0.32 |
| 385 | 14+530 | RHS | Cut | 7.16 | 3.58 | 56.54 | 28.27 | 51 | 0.85 | 0.85 | 0.28 |
| 386 | 14+750 | RHS | Cut | 6.31 | 3.15 | 52.76 | 26.38 | 47 | 0.79 | 0.79 | 0.26 |
| 387 | 14+760 | RHS | Cut | 6.70 | 3.35 | 61.31 | 30.66 | 55 | 0.92 | 0.92 | 0.31 |
| 388 | 14+800 | RHS | Cut | 6.40 | 3.20 | 50.07 | 25.04 | 45 | 0.75 | 0.75 | 0.25 |
| 389 | 14+830 | RHS | Cut | 5.65 | 2.83 | 53.62 | 26.81 | 48 | 0.80 | 0.80 | 0.27 |
| 390 | 14+890 | RHS | Cut | 5.28 | 2.64 | 50.11 | 25.06 | 45 | 0.75 | 0.75 | 0.25 |
| 391 | 15+170 | RHS | Cut | 6.13 | 3.07 | 52.41 | 26.21 | 47 | 0.79 | 0.79 | 0.26 |
| 392 | 15+220 | RHS | Cut | 5.01 | 2.50 | 62.57 | 31.29 | 56 | 0.94 | 0.94 | 0.31 |
| 393 | 15+230 | RHS | Cut | 5.36 | 2.68 | 81.13 | 40.57 | 73 | 1.22 | 1.22 | 0.41 |
| 394 | 15+240 | RHS | Cut | 5.01 | 2.51 | 86.94 | 43.47 | 78 | 1.30 | 1.30 | 0.43 |
| 395 | 15+250 | RHS | Cut | 5.24 | 2.62 | 106.66 | 53.33 | 96 | 1.60 | 1.60 | 0.53 |
| 396 | 15+890 | RHS | Cut | 6.26 | 3.13 | 55.08 | 27.54 | 50 | 0.83 | 0.83 | 0.28 |
| 397 | 15+910 | RHS | Cut | 8.11 | 4.06 | 58.32 | 29.16 | 52 | 0.87 | 0.87 | 0.29 |
| 398 | 16+040 | RHS | Cut | 8.69 | 4.35 | 53.88 | 26.94 | 48 | 0.81 | 0.81 | 0.27 |
| 399 | 16+050 | RHS | Cut | 10.67 | 5.33 | 54.00 | 27.00 | 49 | 0.81 | 0.81 | 0.27 |
| 400 | 16+060 | RHS | Cut | 5.51 | 2.75 | 58.04 | 29.02 | 52 | 0.87 | 0.87 | 0.29 |
| 401 | 16+070 | RHS | Cut | 5.83 | 2.92 | 66.15 | 33.08 | 60 | 0.99 | 0.99 | 0.33 |
| 402 | 16+080 | RHS | Cut | 5.39 | 2.69 | 69.78 | 34.89 | 63 | 1.05 | 1.05 | 0.35 |
| 403 | 16+110 | RHS | Cut | 5.40 | 2.70 | 63.47 | 31.74 | 57 | 0.95 | 0.95 | 0.32 |
| 404 | 16+120 | RHS | Cut | 5.80 | 2.90 | 58.43 | 29.22 | 53 | 0.88 | 0.88 | 0.29 |
| 405 | 16+130 | RHS | Cut | 6.62 | 3.31 | 60.16 | 30.08 | 54 | 0.90 | 0.90 | 0.30 |
| 406 | 16+140 | RHS | Cut | 6.98 | 3.49 | 60.44 | 30.22 | 54 | 0.91 | 0.91 | 0.30 |
| 407 | 16+150 | RHS | Cut | 6.35 | 3.17 | 59.88 | 29.94 | 54 | 0.90 | 0.90 | 0.30 |
| 408 | 16+160 | RHS | Cut | 5.84 | 2.92 | 65.87 | 32.94 | 59 | 0.99 | 0.99 | 0.33 |
| 409 | 16+170 | RHS | Cut | 6.02 | 3.01 | 58.59 | 29.30 | 53 | 0.88 | 0.88 | 0.29 |
| 410 | 16+180 | RHS | Cut | 6.04 | 3.02 | 53.94 | 26.97 | 49 | 0.81 | 0.81 | 0.27 |
| 411 | 16+190 | RHS | Cut | 5.99 | 2.99 | 53.39 | 26.70 | 48 | 0.80 | 0.80 | 0.27 |
| 412 | 16+400 | RHS | Cut | 6.59 | 3.29 | 51.77 | 25.89 | 47 | 0.78 | 0.78 | 0.26 |
| 413 | 16+420 | RHS | Cut | 5.86 | 2.93 | 56.02 | 28.01 | 50 | 0.84 | 0.84 | 0.28 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 414 | 16+430 | RHS | Cut | 5.39 | 2.70 | 54.15 | 27.08 | 49 | 0.81 | 0.81 | 0.27 |
| 415 | 16+440 | RHS | Cut | 5.34 | 2.67 | 88.73 | 44.37 | 80 | 1.33 | 1.33 | 0.44 |
| 416 | 16+450 | RHS | Cut | 5.18 | 2.59 | 87.64 | 43.82 | 79 | 1.31 | 1.31 | 0.44 |
| 417 | 16+460 | RHS | Cut | 5.60 | 2.80 | 87.19 | 43.60 | 78 | 1.31 | 1.31 | 0.44 |
| 418 | 16+470 | RHS | Cut | 5.42 | 2.71 | 52.90 | 26.45 | 48 | 0.79 | 0.79 | 0.26 |
| 419 | 16+680 | RHS | Cut | 8.87 | 4.44 | 58.19 | 29.10 | 52 | 0.87 | 0.87 | 0.29 |
| 420 | 16+690 | RHS | Cut | 8.76 | 4.38 | 71.08 | 35.54 | 64 | 1.07 | 1.07 | 0.36 |
| 421 | 16+700 | RHS | Cut | 8.72 | 4.36 | 52.55 | 26.28 | 47 | 0.79 | 0.79 | 0.26 |
| 422 | 16+730 | RHS | Cut | 5.29 | 2.65 | 60.13 | 30.07 | 54 | 0.90 | 0.90 | 0.30 |
| 423 | 16+780 | RHS | Cut | 5.82 | 2.91 | 50.21 | 25.11 | 45 | 0.75 | 0.75 | 0.25 |
| 424 | 16+840 | RHS | Cut | 7.11 | 3.55 | 52.95 | 26.48 | 48 | 0.79 | 0.79 | 0.26 |
| 425 | 16+850 | RHS | Cut | 5.26 | 2.63 | 53.03 | 26.52 | 48 | 0.80 | 0.80 | 0.27 |
| 426 | 16+860 | RHS | Cut | 6.01 | 3.01 | 57.48 | 28.74 | 52 | 0.86 | 0.86 | 0.29 |
| 427 | 16+870 | RHS | Cut | 5.02 | 2.51 | 55.97 | 27.99 | 50 | 0.84 | 0.84 | 0.28 |
| 428 | 16+880 | RHS | Cut | 5.30 | 2.65 | 61.80 | 30.90 | 56 | 0.93 | 0.93 | 0.31 |
| 429 | 16+910 | RHS | Cut | 5.30 | 2.65 | 61.65 | 30.83 | 55 | 0.92 | 0.92 | 0.31 |
| 430 | 17+040 | RHS | Cut | 5.75 | 2.87 | 66.98 | 33.49 | 60 | 1.00 | 1.00 | 0.33 |
| 431 | 17+050 | RHS | Cut | 5.60 | 2.80 | 63.59 | 31.80 | 57 | 0.95 | 0.95 | 0.32 |
| 432 | 17+060 | RHS | Cut | 6.18 | 3.09 | 66.25 | 33.13 | 60 | 0.99 | 0.99 | 0.33 |
| 433 | 17+070 | RHS | Cut | 6.17 | 3.08 | 61.96 | 30.98 | 56 | 0.93 | 0.93 | 0.31 |
| 434 | 17+080 | RHS | Cut | 6.70 | 3.35 | 67.95 | 33.98 | 61 | 1.02 | 1.02 | 0.34 |
| 435 | 17+090 | RHS | Cut | 6.36 | 3.18 | 64.97 | 32.49 | 58 | 0.97 | 0.97 | 0.32 |
| 436 | 17+320 | RHS | Cut | 6.63 | 3.31 | 66.14 | 33.07 | 60 | 0.99 | 0.99 | 0.33 |
| 437 | 17+330 | RHS | Cut | 6.20 | 3.10 | 95.51 | 47.76 | 86 | 1.43 | 1.43 | 0.48 |
| 438 | 17+340 | RHS | Cut | 6.80 | 3.40 | 75.04 | 37.52 | 68 | 1.13 | 1.13 | 0.38 |
| 439 | 17+350 | RHS | Cut | 6.50 | 3.25 | 61.36 | 30.68 | 55 | 0.92 | 0.92 | 0.31 |
| 440 | 17+470 | RHS | Cut | 6.61 | 3.31 | 53.45 | 26.73 | 48 | 0.80 | 0.80 | 0.27 |
| 441 | 17+480 | RHS | Cut | 9.55 | 4.78 | 71.64 | 35.82 | 64 | 1.07 | 1.07 | 0.36 |
| 442 | 17+490 | RHS | Cut | 7.50 | 3.75 | 63.00 | 31.50 | 57 | 0.95 | 0.95 | 0.32 |
| 443 | 17+500 | RHS | Cut | 6.14 | 3.07 | 50.44 | 25.22 | 45 | 0.76 | 0.76 | 0.25 |
| 444 | 17+560 | LHS | Cut | 5.35 | 2.67 | 79.57 | 39.79 | 72 | 1.19 | 1.19 | 0.40 |
| 446 | 17+570 | LHS | Cut | 7.16 | 3.58 | 81.46 | 40.73 | 73 | 1.22 | 1.22 | 0.41 |
| 447 | 17+580 | LHS | Cut | 6.30 | 3.15 | 50.94 | 25.47 | 46 | 0.76 | 0.76 | 0.25 |
| 448 | 17+620 | LHS | Cut | 5.04 | 2.52 | 72.89 | 36.45 | 66 | 1.09 | 1.09 | 0.36 |
| 449 | 17+630 | LHS | Cut | 7.96 | 3.98 | 71.62 | 35.81 | 64 | 1.07 | 1.07 | 0.36 |
| 450 | 17+700 | RHS | Cut | 8.15 | 4.07 | 111.79 | 55.90 | 101 | 1.68 | 1.68 | 0.56 |
| 451 | 17+710 | RHS | Cut | 5.09 | 2.55 | 145.05 | 72.52 | 131 | 2.18 | 2.18 | 0.73 |
| 452 | 17+720 | RHS | Cut | 7.29 | 3.64 | 132.14 | 66.07 | 119 | 1.98 | 1.98 | 0.66 |
| 453 | 17+730 | RHS | Cut | 7.16 | 3.58 | 73.07 | 36.54 | 66 | 1.10 | 1.10 | 0.37 |
| 454 | 17+820 | LHS | Cut | 11.18 | 5.59 | 153.94 | 76.97 | 139 | 2.31 | 2.31 | 0.77 |
| 455 | 17+830 | LHS | Cut | 14.50 | 7.25 | 135.94 | 67.97 | 122 | 2.04 | 2.04 | 0.68 |
| 456 | 17+840 | LHS | Cut | 13.21 | 6.61 | 81.57 | 40.79 | 73 | 1.22 | 1.22 | 0.41 |
| 457 | 17+850 | LHS | Cut | 7.31 | 3.65 | 63.91 | 31.96 | 58 | 0.96 | 0.96 | 0.32 |
| 458 | 17+860 | LHS | Cut | 15.39 | 7.70 | 88.82 | 44.41 | 80 | 1.33 | 1.33 | 0.44 |
| 459 | 17+890 | LHS | Cut | 13.59 | 6.80 | 55.93 | 27.97 | 50 | 0.84 | 0.84 | 0.28 |
| 460 | 17+900 | LHS | Cut | 8.16 | 4.08 | 70.41 | 35.21 | 63 | 1.06 | 1.06 | 0.35 |
| 461 | 17+910 | LHS | Cut | 6.39 | 3.20 | 55.19 | 27.60 | 50 | 0.83 | 0.83 | 0.28 |
| 462 | 17+920 | LHS | Cut | 8.88 | 4.44 | 52.92 | 26.46 | 48 | 0.79 | 0.79 | 0.26 |
| 463 | 17+930 | LHS | Cut | 5.59 | 2.80 | 54.85 | 27.43 | 49 | 0.82 | 0.82 | 0.27 |
| 464 | 17+940 | LHS | Cut | 7.04 | 3.52 | 72.90 | 36.45 | 66 | 1.09 | 1.09 | 0.36 |
| 465 | 17+950 | LHS | Cut | 5.52 | 2.76 | 104.51 | 52.25 | 94 | 1.57 | 1.57 | 0.52 |
| 466 | 17+960 | LHS | Cut | 5.29 | 2.65 | 99.27 | 49.64 | 89 | 1.49 | 1.49 | 0.50 |
| 467 | 17+970 | LHS | Cut | 5.49 | 2.74 | 106.69 | 53.35 | 96 | 1.60 | 1.60 | 0.53 |
| 468 | 17+980 | LHS | Cut | 7.29 | 3.65 | 115.97 | 57.98 | 104 | 1.74 | 1.74 | 0.58 |
| 469 | 17+990 | LHS | Cut | 10.45 | 5.23 | 139.62 | 69.81 | 126 | 2.09 | 2.09 | 0.70 |
| 470 | 18+010 | LHS | Cut | 9.93 | 4.96 | 62.36 | 31.18 | 56 | 0.94 | 0.94 | 0.31 |
| 471 | 18+060 | RHS | Cut | 10.67 | 5.33 | 148.32 | 74.16 | 133 | 2.22 | 2.22 | 0.74 |
| 472 | 18+070 | RHS | Cut | 11.60 | 5.80 | 111.10 | 55.55 | 100 | 1.67 | 1.67 | 0.56 |
| 473 | 18+080 | RHS | Cut | 13.96 | 6.98 | 76.15 | 38.08 | 69 | 1.14 | 1.14 | 0.38 |

Ministry of Federal Affairs and
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 Rural Connectivity Improvement Project (RCIP)
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 Lalitpur

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Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 474 | 18+090 | RHS | Cut | 6.24 | 3.12 | 62.55 | 31.28 | 56 | 0.94 | 0.94 | 0.31 |
| 475 | 18+100 | RHS | Cut | 14.83 | 7.42 | 77.13 | 38.57 | 69 | 1.16 | 1.16 | 0.39 |
| 476 | 18+110 | RHS | Cut | 11.11 | 5.55 | 78.92 | 39.46 | 71 | 1.18 | 1.18 | 0.39 |
| 477 | 18+120 | RHS | Cut | 7.62 | 3.81 | 82.88 | 41.44 | 75 | 1.24 | 1.24 | 0.41 |
| 478 | 18+130 | RHS | Cut | 6.26 | 3.13 | 58.58 | 29.29 | 53 | 0.88 | 0.88 | 0.29 |
| 479 | 18+180 | RHS | Cut | 7.71 | 3.86 | 60.98 | 30.49 | 55 | 0.91 | 0.91 | 0.30 |
| 480 | 18+190 | RHS | Cut | 7.89 | 3.95 | 61.49 | 30.75 | 55 | 0.92 | 0.92 | 0.31 |
| 481 | 18+200 | RHS | Cut | 8.29 | 4.14 | 55.71 | 27.86 | 50 | 0.84 | 0.84 | 0.28 |
| 482 | 18+260 | LHS | Cut | 5.86 | 2.93 | 125.60 | 62.80 | 113 | 1.88 | 1.88 | 0.63 |
| 483 | 18+270 | LHS | Cut | 6.10 | 3.05 | 123.48 | 61.74 | 111 | 1.85 | 1.85 | 0.62 |
| 484 | 18+280 | LHS | Cut | 6.15 | 3.07 | 62.47 | 31.24 | 56 | 0.94 | 0.94 | 0.31 |
| 485 | 18+290 | LHS | Cut | 5.57 | 2.79 | 76.32 | 38.16 | 69 | 1.14 | 1.14 | 0.38 |
| 486 | 18+300 | LHS | Cut | 12.56 | 6.28 | 67.81 | 33.91 | 61 | 1.02 | 1.02 | 0.34 |
| 487 | 18+310 | LHS | Cut | 12.35 | 6.17 | 62.24 | 31.12 | 56 | 0.93 | 0.93 | 0.31 |
| 488 | 18+330 | LHS | Cut | 6.25 | 3.12 | 65.17 | 32.59 | 59 | 0.98 | 0.98 | 0.33 |
| 489 | 18+340 | LHS | Cut | 7.63 | 3.82 | 90.45 | 45.23 | 81 | 1.36 | 1.36 | 0.45 |
| 490 | 18+350 | LHS | Cut | 6.78 | 3.39 | 105.89 | 52.95 | 95 | 1.59 | 1.59 | 0.53 |
| 491 | 18+360 | LHS | Cut | 6.22 | 3.11 | 74.96 | 37.48 | 67 | 1.12 | 1.12 | 0.37 |
| 492 | 18+370 | LHS | Cut | 6.52 | 3.26 | 59.57 | 29.79 | 54 | 0.89 | 0.89 | 0.30 |
| 493 | 18+380 | LHS | Cut | 9.05 | 4.52 | 56.29 | 28.15 | 51 | 0.84 | 0.84 | 0.28 |
| 494 | 18+400 | LHS | Cut | 10.59 | 5.29 | 53.33 | 26.67 | 48 | 0.80 | 0.80 | 0.27 |
| 495 | 18+410 | LHS | Cut | 7.50 | 3.75 | 50.80 | 25.40 | 46 | 0.76 | 0.76 | 0.25 |
| 496 | 18+470 | RHS | Cut | 5.96 | 2.98 | 66.54 | 33.27 | 60 | 1.00 | 1.00 | 0.33 |
| 497 | 18+480 | RHS | Cut | 5.63 | 2.81 | 127.13 | 63.56 | 114 | 1.91 | 1.91 | 0.64 |
| 498 | 18+490 | RHS | Cut | 5.33 | 2.67 | 112.89 | 56.45 | 102 | 1.69 | 1.69 | 0.56 |
| 499 | 18+500 | RHS | Cut | 5.08 | 2.54 | 78.24 | 39.12 | 70 | 1.17 | 1.17 | 0.39 |
| 500 | 18+510 | RHS | Cut | 6.65 | 3.33 | 54.75 | 27.38 | 49 | 0.82 | 0.82 | 0.27 |
| 501 | 18+540 | RHS | Cut | 12.71 | 6.36 | 52.27 | 26.14 | 47 | 0.78 | 0.78 | 0.26 |
| 502 | 18+630 | RHS | Cut | 11.29 | 5.64 | 58.18 | 29.09 | 52 | 0.87 | 0.87 | 0.29 |
| 503 | 18+640 | RHS | Cut | 7.82 | 3.91 | 60.35 | 30.18 | 54 | 0.91 | 0.91 | 0.30 |
| 504 | 18+650 | RHS | Cut | 5.48 | 2.74 | 71.90 | 35.95 | 65 | 1.08 | 1.08 | 0.36 |
| 505 | 18+660 | RHS | Cut | 5.23 | 2.61 | 118.85 | 59.42 | 107 | 1.78 | 1.78 | 0.59 |
| 506 | 18+670 | RHS | Cut | 5.82 | 2.91 | 128.67 | 64.34 | 116 | 1.93 | 1.93 | 0.64 |
| 507 | 18+680 | RHS | Cut | 6.04 | 3.02 | 123.89 | 61.94 | 111 | 1.86 | 1.86 | 0.62 |
| 508 | 18+690 | RHS | Cut | 7.19 | 3.60 | 115.84 | 57.92 | 104 | 1.74 | 1.74 | 0.58 |
| 509 | 18+700 | RHS | Cut | 11.88 | 5.94 | 98.54 | 49.27 | 89 | 1.48 | 1.48 | 0.49 |
| 510 | 18+710 | RHS | Cut | 12.87 | 6.43 | 72.65 | 36.33 | 65 | 1.09 | 1.09 | 0.36 |
| 511 | 18+720 | RHS | Cut | 12.39 | 6.19 | 60.39 | 30.20 | 54 | 0.91 | 0.91 | 0.30 |
| 512 | 18+760 | RHS | Cut | 11.58 | 5.79 | 111.14 | 55.57 | 100 | 1.67 | 1.67 | 0.56 |
| 513 | 18+770 | RHS | Cut | 9.85 | 4.93 | 127.73 | 63.87 | 115 | 1.92 | 1.92 | 0.64 |
| 514 | 18+780 | RHS | Cut | 7.27 | 3.63 | 137.76 | 68.88 | 124 | 2.07 | 2.07 | 0.69 |
| 515 | 18+790 | RHS | Cut | 6.04 | 3.02 | 150.65 | 75.32 | 136 | 2.26 | 2.26 | 0.75 |
| 516 | 18+800 | RHS | Cut | 11.11 | 5.56 | 161.72 | 80.86 | 146 | 2.43 | 2.43 | 0.81 |
| 517 | 18+810 | RHS | Cut | 12.77 | 6.39 | 121.88 | 60.94 | 110 | 1.83 | 1.83 | 0.61 |
| 518 | 18+820 | RHS | Cut | 13.78 | 6.89 | 112.03 | 56.02 | 101 | 1.68 | 1.68 | 0.56 |
| 519 | 18+830 | RHS | Cut | 15.06 | 7.53 | 141.57 | 70.78 | 127 | 2.12 | 2.12 | 0.71 |
| 520 | 18+840 | RHS | Cut | 16.17 | 8.09 | 164.08 | 82.04 | 148 | 2.46 | 2.46 | 0.82 |
| 521 | 18+850 | RHS | Cut | 12.19 | 6.09 | 133.46 | 66.73 | 120 | 2.00 | 2.00 | 0.67 |
| 522 | 18+860 | RHS | Cut | 11.20 | 5.60 | 113.47 | 56.73 | 102 | 1.70 | 1.70 | 0.57 |
| 523 | 18+870 | RHS | Cut | 14.16 | 7.08 | 128.47 | 64.24 | 116 | 1.93 | 1.93 | 0.64 |
| 524 | 18+880 | RHS | Cut | 16.41 | 8.20 | 129.21 | 64.60 | 116 | 1.94 | 1.94 | 0.65 |
| 525 | 18+890 | RHS | Cut | 13.35 | 6.67 | 123.43 | 61.72 | 111 | 1.85 | 1.85 | 0.62 |
| 526 | 18+900 | RHS | Cut | 11.35 | 5.67 | 131.03 | 65.51 | 118 | 1.97 | 1.97 | 0.66 |
| 527 | 18+910 | RHS | Cut | 12.85 | 6.42 | 122.91 | 61.46 | 111 | 1.84 | 1.84 | 0.61 |
| 528 | 18+920 | RHS | Cut | 12.92 | 6.46 | 156.54 | 78.27 | 141 | 2.35 | 2.35 | 0.78 |
| 529 | 18+930 | RHS | Cut | 12.34 | 6.17 | 163.93 | 81.96 | 148 | 2.46 | 2.46 | 0.82 |
| 530 | 18+940 | RHS | Cut | 13.10 | 6.55 | 204.59 | 102.30 | 184 | 3.07 | 3.07 | 1.02 |
| 531 | 18+950 | RHS | Cut | 12.29 | 6.15 | 165.13 | 82.56 | 149 | 2.48 | 2.48 | 0.83 |
| 532 | 18+960 | RHS | Cut | 15.65 | 7.83 | 109.79 | 54.90 | 99 | 1.65 | 1.65 | 0.55 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 533 | 18+970 | RHS | Cut | 16.39 | 8.20 | 112.20 | 56.10 | 101 | 1.68 | 1.68 | 0.56 |
| 534 | 18+980 | RHS | Cut | 20.46 | 10.23 | 300.67 | 150.34 | 271 | 4.51 | 4.51 | 1.50 |
| 535 | 18+990 | RHS | Cut | 16.51 | 8.26 | 258.14 | 129.07 | 232 | 3.87 | 3.87 | 1.29 |
| 536 | 19+000 | RHS | Cut | 10.98 | 5.49 | 236.51 | 118.26 | 213 | 3.55 | 3.55 | 1.18 |
| 537 | 19+010 | RHS | Cut | 11.22 | 5.61 | 219.96 | 109.98 | 198 | 3.30 | 3.30 | 1.10 |
| 538 | 19+020 | RHS | Cut | 30.07 | 15.03 | 223.08 | 111.54 | 201 | 3.35 | 3.35 | 1.12 |
| 539 | 19+030 | RHS | Cut | 25.81 | 12.91 | 196.65 | 98.32 | 177 | 2.95 | 2.95 | 0.98 |
| 540 | 19+040 | RHS | Cut | 23.65 | 11.83 | 130.46 | 65.23 | 117 | 1.96 | 1.96 | 0.65 |
| 541 | 19+050 | RHS | Cut | 22.00 | 11.00 | 128.85 | 64.42 | 116 | 1.93 | 1.93 | 0.64 |
| 542 | 19+060 | RHS | Cut | 22.31 | 11.15 | 148.20 | 74.10 | 133 | 2.22 | 2.22 | 0.74 |
| 543 | 19+070 | RHS | Cut | 19.66 | 9.83 | 157.48 | 78.74 | 142 | 2.36 | 2.36 | 0.79 |
| 544 | 19+080 | RHS | Cut | 13.05 | 6.52 | 155.37 | 77.69 | 140 | 2.33 | 2.33 | 0.78 |
| 545 | 19+090 | RHS | Cut | 12.88 | 6.44 | 162.49 | 81.24 | 146 | 2.44 | 2.44 | 0.81 |
| 546 | 19+100 | RHS | Cut | 14.82 | 7.41 | 214.29 | 107.15 | 193 | 3.21 | 3.21 | 1.07 |
| 547 | 19+110 | RHS | Cut | 15.75 | 7.87 | 158.54 | 79.27 | 143 | 2.38 | 2.38 | 0.79 |
| 548 | 19+120 | RHS | Cut | 15.54 | 7.77 | 115.04 | 57.52 | 104 | 1.73 | 1.73 | 0.58 |
| 549 | 19+160 | RHS | Cut | 16.25 | 8.12 | 58.31 | 29.16 | 52 | 0.87 | 0.87 | 0.29 |
| 550 | 19+200 | RHS | Cut | 21.43 | 10.71 | 55.47 | 27.74 | 50 | 0.83 | 0.83 | 0.28 |
| 551 | 19+400 | RHS | Cut | 15.85 | 7.93 | 51.88 | 25.94 | 47 | 0.78 | 0.78 | 0.26 |
| 552 | 19+410 | RHS | Cut | 11.50 | 5.75 | 61.01 | 30.51 | 55 | 0.92 | 0.92 | 0.31 |
| 553 | 19+420 | RHS | Cut | 5.83 | 2.92 | 54.41 | 27.21 | 49 | 0.82 | 0.82 | 0.27 |
| 554 | 19+660 | RHS | Cut | 5.55 | 2.77 | 53.43 | 26.72 | 48 | 0.80 | 0.80 | 0.27 |
| 555 | 19+670 | RHS | Cut | 5.19 | 2.59 | 50.21 | 25.11 | 45 | 0.75 | 0.75 | 0.25 |
| 556 | 19+690 | RHS | Cut | 6.10 | 3.05 | 55.16 | 27.58 | 50 | 0.83 | 0.83 | 0.28 |
| 557 | 19+700 | RHS | Cut | 5.44 | 2.72 | 61.41 | 30.71 | 55 | 0.92 | 0.92 | 0.31 |
| 558 | 19+740 | RHS | Cut | 5.34 | 2.67 | 51.92 | 25.96 | 47 | 0.78 | 0.78 | 0.26 |
| 559 | 19+750 | RHS | Cut | 5.02 | 2.51 | 50.48 | 25.24 | 45 | 0.76 | 0.76 | 0.25 |
| 560 | 19+760 | RHS | Cut | 5.52 | 2.76 | 61.09 | 30.55 | 55 | 0.92 | 0.92 | 0.31 |
| 561 | 19+770 | RHS | Cut | 6.14 | 3.07 | 65.09 | 32.55 | 59 | 0.98 | 0.98 | 0.33 |
| 562 | 19+780 | RHS | Cut | 5.19 | 2.60 | 61.44 | 30.72 | 55 | 0.92 | 0.92 | 0.31 |
| 563 | 19+790 | RHS | Cut | 5.05 | 2.52 | 62.54 | 31.27 | 56 | 0.94 | 0.94 | 0.31 |
| 564 | 19+800 | RHS | Cut | 6.11 | 3.05 | 58.53 | 29.27 | 53 | 0.88 | 0.88 | 0.29 |
| 565 | 19+810 | RHS | Cut | 6.51 | 3.25 | 65.85 | 32.93 | 59 | 0.99 | 0.99 | 0.33 |
| 566 | 19+820 | RHS | Cut | 6.14 | 3.07 | 74.00 | 37.00 | 67 | 1.11 | 1.11 | 0.37 |
| 567 | 19+830 | RHS | Cut | 6.25 | 3.13 | 79.43 | 39.72 | 71 | 1.19 | 1.19 | 0.40 |
| 568 | 19+840 | RHS | Cut | 5.85 | 2.93 | 85.36 | 42.68 | 77 | 1.28 | 1.28 | 0.43 |
| 569 | 19+850 | RHS | Cut | 6.59 | 3.29 | 57.45 | 28.73 | 52 | 0.86 | 0.86 | 0.29 |
| 570 | 19+920 | RHS | Cut | 7.40 | 3.70 | 52.70 | 26.35 | 47 | 0.79 | 0.79 | 0.26 |
| 571 | 19+930 | RHS | Cut | 7.94 | 3.97 | 53.94 | 26.97 | 49 | 0.81 | 0.81 | 0.27 |
| 572 | 20+010 | RHS | Cut | 8.54 | 4.27 | 60.12 | 30.06 | 54 | 0.90 | 0.90 | 0.30 |
| 573 | 20+020 | RHS | Cut | 5.75 | 2.87 | 77.17 | 38.59 | 69 | 1.16 | 1.16 | 0.39 |
| 574 | 20+030 | RHS | Cut | 5.27 | 2.64 | 84.20 | 42.10 | 76 | 1.26 | 1.26 | 0.42 |
| 575 | 20+040 | RHS | Cut | 5.39 | 2.70 | 109.57 | 54.79 | 99 | 1.64 | 1.64 | 0.55 |
| 576 | 20+050 | RHS | Cut | 6.01 | 3.01 | 96.58 | 48.29 | 87 | 1.45 | 1.45 | 0.48 |
| 577 | 20+060 | RHS | Cut | 7.72 | 3.86 | 50.43 | 25.22 | 45 | 0.76 | 0.76 | 0.25 |
| 578 | 20+090 | RHS | Cut | 8.42 | 4.21 | 72.80 | 36.40 | 66 | 1.09 | 1.09 | 0.36 |
| 579 | 20+100 | RHS | Cut | 10.96 | 5.48 | 79.18 | 39.59 | 71 | 1.19 | 1.19 | 0.40 |
| 580 | 20+110 | RHS | Cut | 9.66 | 4.83 | 81.75 | 40.88 | 74 | 1.23 | 1.23 | 0.41 |
| 581 | 20+120 | RHS | Cut | 5.04 | 2.52 | 88.07 | 44.04 | 79 | 1.32 | 1.32 | 0.44 |
| 582 | 20+130 | RHS | Cut | 7.28 | 3.64 | 143.17 | 71.59 | 129 | 2.15 | 2.15 | 0.72 |
| 583 | 20+140 | RHS | Cut | 7.92 | 3.96 | 157.57 | 78.78 | 142 | 2.36 | 2.36 | 0.79 |
| 584 | 20+150 | RHS | Cut | 8.18 | 4.09 | 116.68 | 58.34 | 105 | 1.75 | 1.75 | 0.58 |
| 585 | 20+160 | RHS | Cut | 8.81 | 4.40 | 90.66 | 45.33 | 82 | 1.36 | 1.36 | 0.45 |
| 586 | 20+170 | RHS | Cut | 14.32 | 7.16 | 68.46 | 34.23 | 62 | 1.03 | 1.03 | 0.34 |
| 587 | 20+180 | RHS | Cut | 15.76 | 7.88 | 55.29 | 27.65 | 50 | 0.83 | 0.83 | 0.28 |
| 588 | 20+190 | RHS | Cut | 11.67 | 5.83 | 58.71 | 29.36 | 53 | 0.88 | 0.88 | 0.29 |
| 589 | 20+200 | RHS | Cut | 9.07 | 4.53 | 56.95 | 28.48 | 51 | 0.85 | 0.85 | 0.28 |
| 590 | 20+210 | RHS | Cut | 6.85 | 3.42 | 51.43 | 25.72 | 46 | 0.77 | 0.77 | 0.26 |
| 591 | 20+220 | RHS | Cut | 5.529 | 2.76 | 75.92 | 37.96 | 68 | 1.14 | 1.14 | 0.38 |

Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|---------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 592 | 20+230 | RHS | Cut | 5.871 | 2.94 | 147.15 | 73.57 | 132 | 2.21 | 2.21 | 0.74 |
| 593 | 20+240 | RHS | Cut | 5.695 | 2.85 | 202.22 | 101.11 | 182 | 3.03 | 3.03 | 1.01 |
| 594 | 20+250 | RHS | Cut | 5.143 | 2.57 | 148.13 | 74.07 | 133 | 2.22 | 2.22 | 0.74 |
| 595 | 20+260 | RHS | Cut | 7.592 | 3.80 | 119.08 | 59.54 | 107 | 1.79 | 1.79 | 0.60 |
| 596 | 20+270 | RHS | Cut | 14.71453 | 7.36 | 85.23 | 42.62 | 77 | 1.28 | 1.28 | 0.43 |
| 597 | 20+280 | RHS | Cut | 20.22163 | 10.11 | 67.11 | 33.56 | 60 | 1.01 | 1.01 | 0.34 |
| 598 | 20+290 | RHS | Cut | 14.813 | 7.41 | 58.15 | 29.08 | 52 | 0.87 | 0.87 | 0.29 |
| 599 | 20+400 | RHS | Cut | 11.90759 | 5.95 | 55.25 | 27.63 | 50 | 0.83 | 0.83 | 0.28 |
| 600 | 20+410 | RHS | Cut | 8.523 | 4.26 | 50.68 | 25.34 | 46 | 0.76 | 0.76 | 0.25 |
| 601 | 20+420 | RHS | Cut | 6.711 | 3.36 | 53.96 | 26.98 | 49 | 0.81 | 0.81 | 0.27 |
| 602 | 20+430 | RHS | Cut | 5.815 | 2.91 | 60.40 | 30.20 | 54 | 0.91 | 0.91 | 0.30 |
| 603 | 20+440 | RHS | Cut | 5.525 | 2.76 | 61.70 | 30.85 | 56 | 0.93 | 0.93 | 0.31 |
| 604 | 20+450 | RHS | Cut | 5.068 | 2.53 | 64.77 | 32.39 | 58 | 0.97 | 0.97 | 0.32 |
| 605 | 20+460 | RHS | Cut | 5.396 | 2.70 | 64.72 | 32.36 | 58 | 0.97 | 0.97 | 0.32 |
| 606 | 20+470 | RHS | Cut | 6.04 | 3.02 | 66.21 | 33.11 | 60 | 0.99 | 0.99 | 0.33 |
| 607 | 20+480 | RHS | Cut | 6.17 | 3.09 | 59.20 | 29.60 | 53 | 0.89 | 0.89 | 0.30 |
| 608 | 20+490 | RHS | Cut | 6.477 | 3.24 | 50.08 | 25.04 | 45 | 0.75 | 0.75 | 0.25 |
| 609 | 20+520 | RHS | Cut | 6.472 | 3.24 | 56.22 | 28.11 | 51 | 0.84 | 0.84 | 0.28 |
| 610 | 20+540 | RHS | Cut | 6.621 | 3.31 | 60.89 | 30.45 | 55 | 0.91 | 0.91 | 0.30 |
| 611 | 20+550 | RHS | Cut | 5.92 | 2.96 | 58.56 | 29.28 | 53 | 0.88 | 0.88 | 0.29 |
| 612 | 20+560 | RHS | Cut | 5.008 | 2.50 | 73.12 | 36.56 | 66 | 1.10 | 1.10 | 0.37 |
| 613 | 20+570 | RHS | Cut | 5.622 | 2.81 | 83.28 | 41.64 | 75 | 1.25 | 1.25 | 0.42 |
| 614 | 20+580 | RHS | Cut | 6.089 | 3.04 | 79.03 | 39.52 | 71 | 1.19 | 1.19 | 0.40 |
| 615 | 20+590 | RHS | Cut | 5.856 | 2.93 | 72.44 | 36.22 | 65 | 1.09 | 1.09 | 0.36 |
| 616 | 20+600 | RHS | Cut | 7.312 | 3.66 | 72.26 | 36.13 | 65 | 1.08 | 1.08 | 0.36 |
| 617 | 20+610 | RHS | Cut | 8.328 | 4.16 | 67.77 | 33.89 | 61 | 1.02 | 1.02 | 0.34 |
| 618 | 20+620 | RHS | Cut | 7.903 | 3.95 | 65.11 | 32.56 | 59 | 0.98 | 0.98 | 0.33 |
| 619 | 20+630 | RHS | Cut | 7.244 | 3.62 | 105.72 | 52.86 | 95 | 1.59 | 1.59 | 0.53 |
| 620 | 20+640 | RHS | Cut | 7.226 | 3.61 | 80.48 | 40.24 | 72 | 1.21 | 1.21 | 0.40 |
| 621 | 20+650 | RHS | Cut | 6.777 | 3.39 | 88.38 | 44.19 | 80 | 1.33 | 1.33 | 0.44 |
| 622 | 20+660 | RHS | Cut | 6.511 | 3.26 | 80.65 | 40.33 | 73 | 1.21 | 1.21 | 0.40 |
| 623 | 20+670 | RHS | Cut | 10.57204 | 5.29 | 77.21 | 38.61 | 69 | 1.16 | 1.16 | 0.39 |
| 624 | 20+680 | RHS | Cut | 8.048 | 4.02 | 94.41 | 47.21 | 85 | 1.42 | 1.42 | 0.47 |
| 625 | 20+690 | LHS/RHS | Cut-Cut | 8.838 | 4.42 | 158.78 | 79.39 | 143 | 2.38 | 2.38 | 0.79 |
| 626 | 20+700 | RHS | Cut | 8.065 | 4.03 | 87.26 | 43.63 | 79 | 1.31 | 1.31 | 0.44 |
| 627 | 20+740 | RHS | Cut | 7.721 | 3.86 | 53.69 | 26.85 | 48 | 0.81 | 0.81 | 0.27 |
| 628 | 20+770 | RHS | Cut | 9.441 | 4.72 | 55.59 | 27.80 | 50 | 0.83 | 0.83 | 0.28 |
| 629 | 20+780 | RHS | Cut | 15.878 | 7.94 | 68.71 | 34.36 | 62 | 1.03 | 1.03 | 0.34 |
| 630 | 20+790 | RHS | Cut | 8.726 | 4.36 | 79.91 | 39.96 | 72 | 1.20 | 1.20 | 0.40 |
| 631 | 20+800 | RHS | Cut | 5.369 | 2.68 | 76.28 | 38.14 | 69 | 1.14 | 1.14 | 0.38 |
| 632 | 20+860 | RHS | Cut | 5.559 | 2.78 | 53.42 | 26.71 | 48 | 0.80 | 0.80 | 0.27 |
| 633 | 20+870 | RHS | Cut | 6.871 | 3.44 | 69.98 | 34.99 | 63 | 1.05 | 1.05 | 0.35 |
| 634 | 20+880 | RHS | Cut | 7.991 | 4.00 | 82.27 | 41.14 | 74 | 1.23 | 1.23 | 0.41 |
| 635 | 20+890 | RHS | Cut | 7.628 | 3.81 | 73.78 | 36.89 | 66 | 1.11 | 1.11 | 0.37 |
| 636 | 20+900 | RHS | Cut | 5.342 | 2.67 | 66.64 | 33.32 | 60 | 1.00 | 1.00 | 0.33 |
| 637 | 20+910 | RHS | Cut | 6.998 | 3.50 | 67.68 | 33.84 | 61 | 1.02 | 1.02 | 0.34 |
| 638 | 20+920 | RHS | Cut | 8.227 | 4.11 | 71.63 | 35.82 | 64 | 1.07 | 1.07 | 0.36 |
| 639 | 21+050 | RHS | Cut | 7.378 | 3.69 | 51.89 | 25.95 | 47 | 0.78 | 0.78 | 0.26 |
| 640 | 21+060 | RHS | Cut | 6.664 | 3.33 | 55.48 | 27.74 | 50 | 0.83 | 0.83 | 0.28 |
| 641 | 21+070 | RHS | Cut | 6.768 | 3.38 | 57.61 | 28.81 | 52 | 0.86 | 0.86 | 0.29 |
| 642 | 21+120 | RHS | Cut | 7.163 | 3.58 | 52.64 | 26.32 | 47 | 0.79 | 0.79 | 0.26 |
| 643 | 21+130 | RHS | Cut | 5.189 | 2.59 | 56.87 | 28.44 | 51 | 0.85 | 0.85 | 0.28 |
| 644 | 21+140 | RHS | Cut | 5.548 | 2.77 | 60.14 | 30.07 | 54 | 0.90 | 0.90 | 0.30 |
| 645 | 21+190 | RHS | Cut | 5.761 | 2.88 | 52.35 | 26.18 | 47 | 0.79 | 0.79 | 0.26 |
| 646 | 21+610 | RHS | Cut | 5.264 | 2.63 | 53.97 | 26.99 | 49 | 0.81 | 0.81 | 0.27 |
| 647 | 21+620 | RHS | Cut | 5.687 | 2.84 | 62.07 | 31.04 | 56 | 0.93 | 0.93 | 0.31 |
| 648 | 21+630 | RHS | Cut | 6.014 | 3.01 | 50.99 | 25.50 | 46 | 0.76 | 0.76 | 0.25 |
| 649 | 21+980 | RHS | Cut | 5.235 | 2.62 | 64.59 | 32.30 | 58 | 0.97 | 0.97 | 0.32 |
| 650 | 22+010 | RHS | Cut | 5.397 | 2.70 | 65.11 | 32.56 | 59 | 0.98 | 0.98 | 0.33 |

Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|---------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 651 | 22+030 | RHS | Cut | 6.207 | 3.10 | 58.88 | 29.44 | 53 | 0.88 | 0.88 | 0.29 |
| 652 | 22+070 | RHS | Cut | 5.099 | 2.55 | 60.59 | 30.30 | 55 | 0.91 | 0.91 | 0.30 |
| 653 | 22+080 | RHS | Cut | 6.459 | 3.23 | 74.94 | 37.47 | 67 | 1.12 | 1.12 | 0.37 |
| 654 | 22+100 | RHS | Cut | 6.511 | 3.26 | 67.27 | 33.64 | 61 | 1.01 | 1.01 | 0.34 |
| 655 | 22+110 | RHS | Cut | 5.888 | 2.94 | 58.96 | 29.48 | 53 | 0.88 | 0.88 | 0.29 |
| 656 | 22+120 | RHS | Cut | 6.059 | 3.03 | 73.73 | 36.87 | 66 | 1.11 | 1.11 | 0.37 |
| 657 | 22+130 | RHS | Cut | 7.494 | 3.75 | 60.53 | 30.27 | 54 | 0.91 | 0.91 | 0.30 |
| 658 | 22+140 | RHS | Cut | 6.727 | 3.36 | 50.07 | 25.04 | 45 | 0.75 | 0.75 | 0.25 |
| 659 | 22+200 | RHS | Cut | 5.896 | 2.95 | 52.17 | 26.09 | 47 | 0.78 | 0.78 | 0.26 |
| 660 | 22+240 | RHS | Cut | 7.373 | 3.69 | 67.63 | 33.82 | 61 | 1.01 | 1.01 | 0.34 |
| 661 | 22+410 | RHS | Cut | 6.053 | 3.03 | 52.60 | 26.30 | 47 | 0.79 | 0.79 | 0.26 |
| 662 | 22+440 | RHS | Cut | 5.007 | 2.50 | 63.41 | 31.71 | 57 | 0.95 | 0.95 | 0.32 |
| 663 | 22+450 | RHS | Cut | 5.217 | 2.61 | 53.38 | 26.69 | 48 | 0.80 | 0.80 | 0.27 |
| 664 | 22+460 | RHS | Cut | 6.763 | 3.38 | 70.14 | 35.07 | 63 | 1.05 | 1.05 | 0.35 |
| 665 | 22+640 | RHS | Cut | 5.26 | 2.63 | 59.11 | 29.56 | 53 | 0.89 | 0.89 | 0.30 |
| 666 | 22+650 | RHS | Cut | 6.341 | 3.17 | 55.04 | 27.52 | 50 | 0.83 | 0.83 | 0.28 |
| 667 | 22+710 | LHS | Cut | 5.338 | 2.67 | 57.83 | 28.92 | 52 | 0.87 | 0.87 | 0.29 |
| 668 | 22+720 | LHS | Cut | 7.014 | 3.51 | 63.01 | 31.51 | 57 | 0.95 | 0.95 | 0.32 |
| 669 | 22+950 | RHS | Cut | 5.911 | 2.96 | 61.31 | 30.66 | 55 | 0.92 | 0.92 | 0.31 |
| 670 | 22+960 | RHS | Cut | 5.504 | 2.75 | 62.10 | 31.05 | 56 | 0.93 | 0.93 | 0.31 |
| 671 | 23+300 | RHS | Cut | 5.783 | 2.89 | 65.43 | 32.72 | 59 | 0.98 | 0.98 | 0.33 |
| 672 | 23+310 | RHS | Cut | 6.301 | 3.15 | 66.16 | 33.08 | 60 | 0.99 | 0.99 | 0.33 |
| 673 | 23+320 | RHS | Cut | 6.131 | 3.07 | 67.25 | 33.63 | 61 | 1.01 | 1.01 | 0.34 |
| 674 | 23+330 | LHS/RHS | Cut-Cut | 6.21 | 3.11 | 114.38 | 57.19 | 103 | 1.72 | 1.72 | 0.57 |
| 675 | 23+340 | LHS/RHS | Cut-Cut | 6.543 | 3.27 | 110.85 | 55.43 | 100 | 1.66 | 1.66 | 0.55 |
| 676 | 23+350 | RHS | Cut | 6.616 | 3.31 | 51.50 | 25.75 | 46 | 0.77 | 0.77 | 0.26 |
| 677 | 23+400 | RHS | Cut | 6.725 | 3.36 | 54.82 | 27.41 | 49 | 0.82 | 0.82 | 0.27 |
| 678 | 23+410 | RHS | Cut | 11.438 | 5.72 | 50.22 | 25.11 | 45 | 0.75 | 0.75 | 0.25 |
| 679 | 23+420 | RHS | Cut | 11.085 | 5.54 | 52.71 | 26.36 | 47 | 0.79 | 0.79 | 0.26 |
| 680 | 23+760 | RHS | Cut | 5.15 | 2.58 | 54.75 | 27.38 | 49 | 0.82 | 0.82 | 0.27 |
| 681 | 23+770 | RHS | Cut | 5.482 | 2.74 | 57.47 | 28.74 | 52 | 0.86 | 0.86 | 0.29 |
| 682 | 23+780 | RHS | Cut | 5.022 | 2.51 | 64.90 | 32.45 | 58 | 0.97 | 0.97 | 0.32 |
| 683 | 23+790 | RHS | Cut | 5.271 | 2.64 | 65.58 | 32.79 | 59 | 0.98 | 0.98 | 0.33 |
| 684 | 23+800 | RHS | Cut | 5.475 | 2.74 | 103.70 | 51.85 | 93 | 1.56 | 1.56 | 0.52 |
| 685 | 23+810 | RHS | Cut | 5.747 | 2.87 | 108.27 | 54.13 | 97 | 1.62 | 1.62 | 0.54 |
| 686 | 23+820 | RHS | Cut | 6.49 | 3.25 | 89.56 | 44.78 | 81 | 1.34 | 1.34 | 0.45 |
| 687 | 23+830 | RHS | Cut | 6.558 | 3.28 | 120.13 | 60.06 | 108 | 1.80 | 1.80 | 0.60 |
| 688 | 23+840 | RHS | Cut | 10.3695 | 5.18 | 119.40 | 59.70 | 107 | 1.79 | 1.79 | 0.60 |
| 689 | 23+850 | RHS | Cut | 10.82686 | 5.41 | 120.69 | 60.34 | 109 | 1.81 | 1.81 | 0.60 |
| 690 | 23+860 | RHS | Cut | 8.956 | 4.48 | 111.90 | 55.95 | 101 | 1.68 | 1.68 | 0.56 |
| 691 | 23+870 | RHS | Cut | 12.01289 | 6.01 | 120.49 | 60.24 | 108 | 1.81 | 1.81 | 0.60 |
| 692 | 23+880 | RHS | Cut | 11.94021 | 5.97 | 105.64 | 52.82 | 95 | 1.58 | 1.58 | 0.53 |
| 693 | 23+890 | RHS | Cut | 12.06892 | 6.03 | 72.52 | 36.26 | 65 | 1.09 | 1.09 | 0.36 |
| 694 | 23+940 | RHS | Cut | 11.19031 | 5.60 | 51.73 | 25.87 | 47 | 0.78 | 0.78 | 0.26 |
| 695 | 23+960 | RHS | Cut | 12.0485 | 6.02 | 109.38 | 54.69 | 98 | 1.64 | 1.64 | 0.55 |
| 696 | 23+970 | RHS | Cut | 10.56354 | 5.28 | 128.22 | 64.11 | 115 | 1.92 | 1.92 | 0.64 |
| 697 | 23+980 | RHS | Cut | 7.252 | 3.63 | 117.33 | 58.67 | 106 | 1.76 | 1.76 | 0.59 |
| 698 | 23+990 | RHS | Cut | 5.173 | 2.59 | 105.51 | 52.75 | 95 | 1.58 | 1.58 | 0.53 |
| 699 | 24+000 | RHS | Cut | 10.93795 | 5.47 | 102.84 | 51.42 | 93 | 1.54 | 1.54 | 0.51 |
| 700 | 24+010 | RHS | Cut | 12.82182 | 6.41 | 111.58 | 55.79 | 100 | 1.67 | 1.67 | 0.56 |
| 701 | 24+020 | RHS | Cut | 11.73344 | 5.87 | 106.79 | 53.39 | 96 | 1.60 | 1.60 | 0.53 |
| 702 | 24+030 | RHS | Cut | 10.55064 | 5.28 | 100.11 | 50.06 | 90 | 1.50 | 1.50 | 0.50 |
| 703 | 24+040 | RHS | Cut | 10.28439 | 5.14 | 86.89 | 43.45 | 78 | 1.30 | 1.30 | 0.43 |
| 704 | 24+050 | RHS | Cut | 11.15845 | 5.58 | 94.75 | 47.38 | 85 | 1.42 | 1.42 | 0.47 |
| 705 | 24+060 | RHS | Cut | 10.67882 | 5.34 | 88.34 | 44.17 | 80 | 1.33 | 1.33 | 0.44 |
| 706 | 24+070 | RHS | Cut | 10.01139 | 5.01 | 62.61 | 31.31 | 56 | 0.94 | 0.94 | 0.31 |
| 707 | 24+090 | RHS | Cut | 8.689 | 4.34 | 63.55 | 31.78 | 57 | 0.95 | 0.95 | 0.32 |
| 708 | 24+100 | RHS | Cut | 9.475 | 4.74 | 60.58 | 30.29 | 55 | 0.91 | 0.91 | 0.30 |
| 709 | 24+110 | RHS | Cut | 8.834 | 4.42 | 56.72 | 28.36 | 51 | 0.85 | 0.85 | 0.28 |

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Department of Local Infrastructure
Connectivity Improvement Project (CIP)
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2076
MVA
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Singha Durbar, Kathmandu

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 710 | 24+120 | RHS | Cut | 6.261 | 3.13 | 56.86 | 28.43 | 51 | 0.85 | 0.85 | 0.28 |
| 711 | 24+130 | RHS | Cut | 6.355 | 3.18 | 60.46 | 30.23 | 54 | 0.91 | 0.91 | 0.30 |
| 712 | 24+170 | RHS | Cut | 6.058 | 3.03 | 64.14 | 32.07 | 58 | 0.96 | 0.96 | 0.32 |
| 713 | 24+180 | RHS | Cut | 5.672 | 2.84 | 59.30 | 29.65 | 53 | 0.89 | 0.89 | 0.30 |
| 714 | 24+190 | RHS | Cut | 5.686 | 2.84 | 54.16 | 27.08 | 49 | 0.81 | 0.81 | 0.27 |
| 715 | 24+210 | RHS | Cut | 6.046 | 3.02 | 50.91 | 25.46 | 46 | 0.76 | 0.76 | 0.25 |
| 716 | 24+220 | RHS | Cut | 6.414 | 3.21 | 64.21 | 32.11 | 58 | 0.96 | 0.96 | 0.32 |
| 717 | 24+230 | RHS | Cut | 5.93 | 2.97 | 65.27 | 32.64 | 59 | 0.98 | 0.98 | 0.33 |
| 718 | 24+240 | RHS | Cut | 5.416 | 2.71 | 64.31 | 32.16 | 58 | 0.96 | 0.96 | 0.32 |
| 719 | 24+250 | RHS | Cut | 5.091 | 2.55 | 62.06 | 31.03 | 56 | 0.93 | 0.93 | 0.31 |
| 720 | 24+530 | RHS | Cut | 6.421 | 3.21 | 68.27 | 34.14 | 61 | 1.02 | 1.02 | 0.34 |
| 721 | 24+540 | RHS | Cut | 6.527 | 3.26 | 88.39 | 44.20 | 80 | 1.33 | 1.33 | 0.44 |
| 722 | 24+550 | RHS | Cut | 6.431 | 3.22 | 89.52 | 44.76 | 81 | 1.34 | 1.34 | 0.45 |
| 723 | 24+560 | RHS | Cut | 6.206 | 3.10 | 85.91 | 42.96 | 77 | 1.29 | 1.29 | 0.43 |
| 724 | 24+570 | RHS | Cut | 6.827 | 3.41 | 70.85 | 35.43 | 64 | 1.06 | 1.06 | 0.35 |
| 725 | 24+580 | RHS | Cut | 8.839 | 4.42 | 56.89 | 28.45 | 51 | 0.85 | 0.85 | 0.28 |
| 726 | 24+590 | RHS | Cut | 8.952 | 4.48 | 59.86 | 29.93 | 54 | 0.90 | 0.90 | 0.30 |
| 727 | 24+600 | RHS | Cut | 8.591 | 4.30 | 50.55 | 25.28 | 45 | 0.76 | 0.76 | 0.25 |
| 728 | 24+690 | RHS | Cut | 7.085 | 3.54 | 58.22 | 29.11 | 52 | 0.87 | 0.87 | 0.29 |
| 729 | 24+700 | RHS | Cut | 5.689 | 2.84 | 63.68 | 31.84 | 57 | 0.96 | 0.96 | 0.32 |
| 730 | 24+950 | RHS | Cut | 5.986 | 2.99 | 92.93 | 46.47 | 84 | 1.39 | 1.39 | 0.46 |
| 731 | 24+960 | RHS | Cut | 5.055 | 2.53 | 89.00 | 44.50 | 80 | 1.34 | 1.34 | 0.45 |
| 732 | 24+970 | RHS | Cut | 5.822 | 2.91 | 54.21 | 27.11 | 49 | 0.81 | 0.81 | 0.27 |
| 733 | 25+290 | LHS | Cut | 6.368 | 3.18 | 54.84 | 27.42 | 49 | 0.82 | 0.82 | 0.27 |
| 734 | 25+350 | RHS | Cut | 9.293 | 4.65 | 56.93 | 28.47 | 51 | 0.85 | 0.85 | 0.28 |
| 735 | 25+410 | LHS | Cut | 8.9 | 4.45 | 102.02 | 51.01 | 92 | 1.53 | 1.53 | 0.51 |
| 736 | 25+420 | LHS | Cut | 5.421 | 2.71 | 78.53 | 39.27 | 71 | 1.18 | 1.18 | 0.39 |
| 737 | 25+430 | LHS | Cut | 5.484 | 2.74 | 61.66 | 30.83 | 55 | 0.92 | 0.92 | 0.31 |
| 738 | 25+500 | LHS | Cut | 5.693 | 2.85 | 50.14 | 25.07 | 45 | 0.75 | 0.75 | 0.25 |
| 739 | 25+510 | LHS | Cut | 10.202 | 5.10 | 73.23 | 36.62 | 66 | 1.10 | 1.10 | 0.37 |
| 740 | 25+520 | LHS | Cut | 7.853 | 3.93 | 86.81 | 43.41 | 78 | 1.30 | 1.30 | 0.43 |
| 741 | 25+530 | LHS | Cut | 6.166 | 3.08 | 62.86 | 31.43 | 57 | 0.94 | 0.94 | 0.31 |
| 742 | 25+540 | LHS | Cut | 5.014 | 2.51 | 71.74 | 35.87 | 65 | 1.08 | 1.08 | 0.36 |
| 743 | 25+550 | LHS | Cut | 7.323 | 3.66 | 73.93 | 36.97 | 67 | 1.11 | 1.11 | 0.37 |
| 744 | 25+560 | LHS | Cut | 8.681 | 4.34 | 86.82 | 43.41 | 78 | 1.30 | 1.30 | 0.43 |
| 745 | 25+570 | LHS | Cut | 6.286 | 3.14 | 69.79 | 34.90 | 63 | 1.05 | 1.05 | 0.35 |
| 746 | 25+580 | LHS | Cut | 7.174 | 3.59 | 74.16 | 37.08 | 67 | 1.11 | 1.11 | 0.37 |
| 747 | 25+590 | LHS | Cut | 7.393 | 3.70 | 90.05 | 45.03 | 81 | 1.35 | 1.35 | 0.45 |
| 748 | 25+600 | LHS | Cut | 8.682 | 4.34 | 74.70 | 37.35 | 67 | 1.12 | 1.12 | 0.37 |
| 749 | 25+610 | LHS | Cut | 6.979 | 3.49 | 90.84 | 45.42 | 82 | 1.36 | 1.36 | 0.45 |
| 750 | 25+640 | LHS | Cut | 7.416 | 3.71 | 82.66 | 41.33 | 74 | 1.24 | 1.24 | 0.41 |
| 751 | 25+650 | LHS | Cut | 9.005 | 4.50 | 131.45 | 65.72 | 118 | 1.97 | 1.97 | 0.66 |
| 752 | 25+660 | LHS | Cut | 7.47 | 3.74 | 132.33 | 66.16 | 119 | 1.98 | 1.98 | 0.66 |
| 753 | 25+670 | LHS | Cut | 9.084 | 4.54 | 83.77 | 41.89 | 75 | 1.26 | 1.26 | 0.42 |
| 754 | 25+680 | LHS | Cut | 8.266 | 4.13 | 74.52 | 37.26 | 67 | 1.12 | 1.12 | 0.37 |
| 755 | 25+810 | LHS | Cut | 13.14464 | 6.57 | 76.70 | 38.35 | 69 | 1.15 | 1.15 | 0.38 |
| 756 | 25+820 | LHS | Cut | 13.23255 | 6.62 | 115.99 | 57.99 | 104 | 1.74 | 1.74 | 0.58 |
| 757 | 25+830 | LHS | Cut | 8.377 | 4.19 | 108.68 | 54.34 | 98 | 1.63 | 1.63 | 0.54 |
| 758 | 25+840 | LHS | Cut | 7.452 | 3.73 | 135.56 | 67.78 | 122 | 2.03 | 2.03 | 0.68 |
| 759 | 25+850 | LHS | Cut | 7.67 | 3.84 | 156.40 | 78.20 | 141 | 2.35 | 2.35 | 0.78 |
| 760 | 25+860 | LHS | Cut | 11.59881 | 5.80 | 152.81 | 76.41 | 138 | 2.29 | 2.29 | 0.76 |
| 761 | 25+870 | LHS | Cut | 10.86816 | 5.43 | 124.27 | 62.13 | 112 | 1.86 | 1.86 | 0.62 |
| 762 | 25+880 | LHS | Cut | 13.55578 | 6.78 | 126.99 | 63.49 | 114 | 1.90 | 1.90 | 0.63 |
| 763 | 25+890 | LHS | Cut | 15.64003 | 7.82 | 92.85 | 46.43 | 84 | 1.39 | 1.39 | 0.46 |
| 764 | 25+900 | LHS | Cut | 15.28105 | 7.64 | 78.05 | 39.03 | 70 | 1.17 | 1.17 | 0.39 |
| 765 | 25+910 | LHS | Cut | 12.42661 | 6.21 | 88.21 | 44.11 | 79 | 1.32 | 1.32 | 0.44 |
| 766 | 25+920 | LHS | Cut | 12.69853 | 6.35 | 81.93 | 40.97 | 74 | 1.23 | 1.23 | 0.41 |
| 767 | 25+930 | LHS | Cut | 9.285 | 4.64 | 86.22 | 43.11 | 78 | 1.29 | 1.29 | 0.43 |
| 768 | 25+940 | LHS | Cut | 7.805 | 3.90 | 88.74 | 44.37 | 80 | 1.33 | 1.33 | 0.44 |

Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 769 | 25+950 | LHS | Cut | 8.821 | 4.41 | 136.51 | 68.26 | 123 | 2.05 | 2.05 | 0.68 |
| 770 | 25+960 | LHS | Cut | 8.193 | 4.10 | 126.42 | 63.21 | 114 | 1.90 | 1.90 | 0.63 |
| 771 | 25+970 | LHS | Cut | 8.622 | 4.31 | 133.55 | 66.77 | 120 | 2.00 | 2.00 | 0.67 |
| 772 | 25+980 | LHS | Cut | 8.874 | 4.44 | 82.78 | 41.39 | 75 | 1.24 | 1.24 | 0.41 |
| 773 | 25+990 | LHS | Cut | 13.65102 | 6.83 | 66.51 | 33.26 | 60 | 1.00 | 1.00 | 0.33 |
| 774 | 26+000 | LHS | Cut | 12.64222 | 6.32 | 58.51 | 29.26 | 53 | 0.88 | 0.88 | 0.29 |
| 775 | 26+010 | LHS | Cut | 13.3548 | 6.68 | 53.50 | 26.75 | 48 | 0.80 | 0.80 | 0.27 |
| 776 | 26+040 | LHS | Cut | 8.278 | 4.14 | 62.41 | 31.21 | 56 | 0.94 | 0.94 | 0.31 |
| 777 | 26+050 | LHS | Cut | 6.651 | 3.33 | 76.90 | 38.45 | 69 | 1.15 | 1.15 | 0.38 |
| 778 | 26+060 | LHS | Cut | 5.851 | 2.93 | 89.79 | 44.90 | 81 | 1.35 | 1.35 | 0.45 |
| 779 | 26+070 | LHS | Cut | 5.35 | 2.68 | 95.94 | 47.97 | 86 | 1.44 | 1.44 | 0.48 |
| 780 | 26+080 | LHS | Cut | 6.241 | 3.12 | 95.65 | 47.83 | 86 | 1.43 | 1.43 | 0.48 |
| 781 | 26+090 | LHS | Cut | 7.69 | 3.85 | 69.44 | 34.72 | 62 | 1.04 | 1.04 | 0.35 |
| 782 | 26+100 | LHS | Cut | 8.979 | 4.49 | 81.95 | 40.98 | 74 | 1.23 | 1.23 | 0.41 |
| 783 | 26+110 | LHS | Cut | 9.594 | 4.80 | 77.56 | 38.78 | 70 | 1.16 | 1.16 | 0.39 |
| 784 | 26+120 | LHS | Cut | 9.565 | 4.78 | 71.23 | 35.62 | 64 | 1.07 | 1.07 | 0.36 |
| 785 | 26+130 | LHS | Cut | 6.944 | 3.47 | 60.71 | 30.36 | 55 | 0.91 | 0.91 | 0.30 |
| 786 | 26+160 | LHS | Cut | 8.195 | 4.10 | 54.58 | 27.29 | 49 | 0.82 | 0.82 | 0.27 |
| 787 | 26+170 | LHS | Cut | 7.756 | 3.88 | 69.35 | 34.68 | 62 | 1.04 | 1.04 | 0.35 |
| 788 | 26+200 | LHS | Cut | 7.123 | 3.56 | 63.81 | 31.91 | 57 | 0.96 | 0.96 | 0.32 |
| 789 | 26+210 | LHS | Cut | 6.071 | 3.04 | 57.43 | 28.72 | 52 | 0.86 | 0.86 | 0.29 |
| 790 | 26+220 | LHS | Cut | 5.458 | 2.73 | 51.84 | 25.92 | 47 | 0.78 | 0.78 | 0.26 |
| 791 | 26+370 | LHS | Cut | 6.935 | 3.47 | 57.00 | 28.50 | 51 | 0.86 | 0.86 | 0.29 |
| 792 | 26+430 | LHS | Cut | 14.34 | 7.17 | 56.59 | 28.30 | 51 | 0.85 | 0.85 | 0.28 |
| 793 | 26+710 | RHS | Cut | 12.439 | 6.22 | 65.26 | 32.63 | 59 | 0.98 | 0.98 | 0.33 |
| 794 | 26+720 | RHS | Cut | 6.381 | 3.19 | 63.15 | 31.58 | 57 | 0.95 | 0.95 | 0.32 |
| 795 | 26+730 | RHS | Cut | 5.743 | 2.87 | 61.54 | 30.77 | 55 | 0.92 | 0.92 | 0.31 |
| 796 | 26+880 | RHS | Cut | 5.184 | 2.59 | 64.21 | 32.11 | 58 | 0.96 | 0.96 | 0.32 |
| 797 | 26+890 | RHS | Cut | 5.7 | 2.85 | 60.25 | 30.13 | 54 | 0.90 | 0.90 | 0.30 |
| 798 | 26+900 | RHS | Cut | 5.659 | 2.83 | 103.57 | 51.79 | 93 | 1.55 | 1.55 | 0.52 |
| 799 | 26+910 | RHS | Cut | 6.526 | 3.26 | 97.24 | 48.62 | 88 | 1.46 | 1.46 | 0.49 |
| 800 | 26+920 | RHS | Cut | 6.315 | 3.16 | 74.80 | 37.40 | 67 | 1.12 | 1.12 | 0.37 |
| 801 | 27+010 | RHS | Cut | 6.154 | 3.08 | 53.30 | 26.65 | 48 | 0.80 | 0.80 | 0.27 |
| 802 | 27+020 | RHS | Cut | 6.421 | 3.21 | 62.39 | 31.20 | 56 | 0.94 | 0.94 | 0.31 |
| 803 | 27+030 | RHS | Cut | 6.025 | 3.01 | 105.42 | 52.71 | 95 | 1.58 | 1.58 | 0.53 |
| 804 | 27+040 | RHS | Cut | 10.357 | 5.18 | 60.32 | 30.16 | 54 | 0.90 | 0.90 | 0.30 |
| 805 | 27+050 | RHS | Cut | 9.724 | 4.86 | 63.69 | 31.85 | 57 | 0.96 | 0.96 | 0.32 |
| 806 | 27+140 | LHS | Cut | 7.48 | 3.74 | 54.61 | 27.31 | 49 | 0.82 | 0.82 | 0.27 |
| 807 | 27+150 | LHS | Cut | 5.33 | 2.67 | 67.36 | 33.68 | 61 | 1.01 | 1.01 | 0.34 |
| 808 | 27+160 | LHS | Cut | 6.239 | 3.12 | 86.08 | 43.04 | 77 | 1.29 | 1.29 | 0.43 |
| 809 | 27+170 | LHS | Cut | 10.542 | 5.27 | 72.09 | 36.05 | 65 | 1.08 | 1.08 | 0.36 |
| 810 | 27+180 | LHS | Cut | 6.032 | 3.02 | 63.85 | 31.93 | 57 | 0.96 | 0.96 | 0.32 |
| 811 | 27+190 | LHS | Cut | 6.369 | 3.18 | 98.58 | 49.29 | 89 | 1.48 | 1.48 | 0.49 |
| 812 | 27+200 | LHS | Cut | 5.461 | 2.73 | 158.40 | 79.20 | 143 | 2.38 | 2.38 | 0.79 |
| 813 | 27+210 | LHS | Cut | 6.736 | 3.37 | 145.81 | 72.90 | 131 | 2.19 | 2.19 | 0.73 |
| 814 | 27+220 | LHS | Cut | 8.608 | 4.30 | 119.00 | 59.50 | 107 | 1.78 | 1.78 | 0.59 |
| 815 | 27+230 | LHS | Cut | 7.209 | 3.60 | 131.59 | 65.79 | 118 | 1.97 | 1.97 | 0.66 |
| 816 | 27+240 | LHS | Cut | 6.385 | 3.19 | 167.54 | 83.77 | 151 | 2.51 | 2.51 | 0.84 |
| 817 | 27+250 | LHS | Cut | 9.858 | 4.93 | 207.72 | 103.86 | 187 | 3.12 | 3.12 | 1.04 |
| 818 | 27+260 | LHS | Cut | 15.83983 | 7.92 | 167.46 | 83.73 | 151 | 2.51 | 2.51 | 0.84 |
| 819 | 27+270 | LHS | Cut | 14.58072 | 7.29 | 79.76 | 39.88 | 72 | 1.20 | 1.20 | 0.40 |
| 820 | 27+310 | LHS | Cut | 11.8999 | 5.95 | 64.15 | 32.08 | 58 | 0.96 | 0.96 | 0.32 |
| 821 | 27+320 | LHS | Cut | 13.15863 | 6.58 | 75.54 | 37.77 | 68 | 1.13 | 1.13 | 0.38 |
| 822 | 27+330 | LHS | Cut | 16.75431 | 8.38 | 62.57 | 31.29 | 56 | 0.94 | 0.94 | 0.31 |
| 823 | 27+390 | LHS | Cut | 20.77179 | 10.39 | 77.73 | 38.86 | 70 | 1.17 | 1.17 | 0.39 |
| 824 | 27+400 | LHS | Cut | 16.74556 | 8.37 | 141.88 | 70.94 | 128 | 2.13 | 2.13 | 0.71 |
| 825 | 27+410 | LHS | Cut | 7.976 | 3.99 | 158.31 | 79.15 | 142 | 2.37 | 2.37 | 0.79 |
| 826 | 27+420 | LHS | Cut | 6.415 | 3.21 | 203.63 | 101.82 | 183 | 3.05 | 3.05 | 1.02 |
| 827 | 27+430 | LHS | Cut | 7.554 | 3.78 | 154.19 | 77.10 | 139 | 2.31 | 2.31 | 0.77 |

Ministry of Local Infrastructure
Rural Connectivity Improvement Project
Project Coordination Unit
Lalitpur

Joint Venture
2076
ANVITA
New Baneswar, Kathmandu

Ministry of Federal Affairs and
Singha Durbar, Kathmandu

Table II.8.14:Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|---------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 828 | 27+440 | LHS | Cut | 6.257 | 3.13 | 159.19 | 79.59 | 143 | 2.39 | 2.39 | 0.80 |
| 829 | 27+450 | LHS | Cut | 7.772541 | 3.89 | 178.60 | 89.30 | 161 | 2.68 | 2.68 | 0.89 |
| 830 | 27+480 | LHS | Cut | 14.1881 | 7.09 | 163.24 | 81.62 | 147 | 2.45 | 2.45 | 0.82 |
| 831 | 27+490 | LHS | Cut | 15.83091 | 7.92 | 174.69 | 87.34 | 157 | 2.62 | 2.62 | 0.87 |
| 832 | 27+500 | LHS | Cut | 20.36345 | 10.18 | 134.24 | 67.12 | 121 | 2.01 | 2.01 | 0.67 |
| 833 | 27+600 | LHS | Cut | 15.41926 | 7.71 | 131.92 | 65.96 | 119 | 1.98 | 1.98 | 0.66 |
| 834 | 27+610 | LHS | Cut | 15.91893 | 7.96 | 85.56 | 42.78 | 77 | 1.28 | 1.28 | 0.43 |
| 835 | 27+620 | LHS | Cut | 17.86021 | 8.93 | 90.88 | 45.44 | 82 | 1.36 | 1.36 | 0.45 |
| 836 | 27+630 | LHS | Cut | 16.32429 | 8.16 | 60.31 | 30.16 | 54 | 0.90 | 0.90 | 0.30 |
| 837 | 27+700 | RHS | Cut | 17.4686 | 8.73 | 74.51 | 37.26 | 67 | 1.12 | 1.12 | 0.37 |
| 838 | 27+710 | RHS | Cut | 13.42418 | 6.71 | 201.71 | 100.85 | 182 | 3.03 | 3.03 | 1.01 |
| 839 | 27+720 | RHS | Cut | 5.128 | 2.56 | 219.58 | 109.79 | 198 | 3.29 | 3.29 | 1.10 |
| 840 | 27+730 | RHS | Cut | 13.19244 | 6.60 | 137.38 | 68.69 | 124 | 2.06 | 2.06 | 0.69 |
| 841 | 27+740 | RHS | Cut | 8.556 | 4.28 | 75.14 | 37.57 | 68 | 1.13 | 1.13 | 0.38 |
| 842 | 27+750 | RHS | Cut | 9.088 | 4.54 | 107.51 | 53.75 | 97 | 1.61 | 1.61 | 0.54 |
| 843 | 27+760 | RHS | Cut | 6.031 | 3.02 | 100.74 | 50.37 | 91 | 1.51 | 1.51 | 0.50 |
| 844 | 27+770 | RHS | Cut | 7.451 | 3.73 | 73.39 | 36.70 | 66 | 1.10 | 1.10 | 0.37 |
| 845 | 27+780 | LHS/RHS | Cut-Cut | 20.17063 | 10.09 | 290.39 | 145.20 | 261 | 4.36 | 4.36 | 1.45 |
| 846 | 27+790 | LHS | Cut | 21.95786 | 10.98 | 194.54 | 97.27 | 175 | 2.92 | 2.92 | 0.97 |
| 847 | 27+800 | LHS | Cut | 13.7375 | 6.87 | 163.90 | 81.95 | 148 | 2.46 | 2.46 | 0.82 |
| 848 | 27+810 | LHS/RHS | Cut-Cut | 7.51434 | 3.76 | 259.89 | 129.95 | 234 | 3.90 | 3.90 | 1.30 |
| 849 | 27+820 | LHS/RHS | Cut-Cut | 10.75054 | 5.38 | 257.69 | 128.84 | 232 | 3.87 | 3.87 | 1.29 |
| 850 | 27+830 | LHS/RHS | Cut-Cut | 10.07355 | 5.04 | 215.06 | 107.53 | 194 | 3.23 | 3.23 | 1.08 |
| 851 | 27+840 | LHS | Cut | 7.339 | 3.67 | 100.02 | 50.01 | 90 | 1.50 | 1.50 | 0.50 |
| 852 | 27+850 | LHS | Cut | 29.03933 | 14.52 | 75.66 | 37.83 | 68 | 1.13 | 1.13 | 0.38 |
| 853 | 27+860 | LHS | Cut | 19.45359 | 9.73 | 61.63 | 30.82 | 55 | 0.92 | 0.92 | 0.31 |
| 854 | 27+940 | LHS | Cut | 16.38982 | 8.19 | 140.01 | 70.00 | 126 | 2.10 | 2.10 | 0.70 |
| 855 | 27+970 | LHS | Cut | 25.98911 | 12.99 | 106.58 | 53.29 | 96 | 1.60 | 1.60 | 0.53 |
| 856 | 28+020 | LHS | Cut | 25.76855 | 12.88 | 53.42 | 26.71 | 48 | 0.80 | 0.80 | 0.27 |
| 857 | 28+060 | LHS | Cut | 21.50587 | 10.75 | 60.78 | 30.39 | 55 | 0.91 | 0.91 | 0.30 |
| 858 | 28+080 | LHS | Cut | 10.00155 | 5.00 | 64.50 | 32.25 | 58 | 0.97 | 0.97 | 0.32 |
| 859 | 28+090 | LHS | Cut | 7.566 | 3.78 | 62.53 | 31.27 | 56 | 0.94 | 0.94 | 0.31 |
| 860 | 28+290 | LHS | Cut | 6.163 | 3.08 | 138.91 | 69.46 | 125 | 2.08 | 2.08 | 0.69 |
| 861 | 28+310 | LHS | Cut | 14.00068 | 7.00 | 120.06 | 60.03 | 108 | 1.80 | 1.80 | 0.60 |
| 862 | 28+320 | LHS | Cut | 19.92991 | 9.96 | 144.97 | 72.49 | 130 | 2.17 | 2.17 | 0.72 |
| 863 | 28+330 | LHS | Cut | 19.94217 | 9.97 | 131.99 | 66.00 | 119 | 1.98 | 1.98 | 0.66 |
| 864 | 28+340 | LHS | Cut | 10.65817 | 5.33 | 154.00 | 77.00 | 139 | 2.31 | 2.31 | 0.77 |
| 865 | 28+350 | LHS | Cut | 5.342 | 2.67 | 149.57 | 74.79 | 135 | 2.24 | 2.24 | 0.75 |
| 866 | 28+360 | LHS | Cut | 6.078 | 3.04 | 139.91 | 69.95 | 126 | 2.10 | 2.10 | 0.70 |
| 867 | 28+400 | LHS | Cut | 6.45 | 3.23 | 198.55 | 99.28 | 179 | 2.98 | 2.98 | 0.99 |
| 868 | 28+430 | LHS | Cut | 6.253 | 3.13 | 191.21 | 95.61 | 172 | 2.87 | 2.87 | 0.96 |
| 869 | 28+450 | LHS | Cut | 13.891 | 6.95 | 62.20 | 31.10 | 56 | 0.93 | 0.93 | 0.31 |
| 870 | 28+460 | LHS | Cut | 12.00647 | 6.00 | 59.64 | 29.82 | 54 | 0.89 | 0.89 | 0.30 |
| 871 | 28+520 | LHS | Cut | 14.49745 | 7.25 | 77.53 | 38.77 | 70 | 1.16 | 1.16 | 0.39 |
| 872 | 28+530 | LHS | Cut | 13.19923 | 6.60 | 54.51 | 27.26 | 49 | 0.82 | 0.82 | 0.27 |
| 873 | 28+550 | LHS | Cut | 15.39955 | 7.70 | 184.98 | 92.49 | 166 | 2.77 | 2.77 | 0.92 |
| 874 | 28+560 | LHS | Cut | 14.95709 | 7.48 | 157.24 | 78.62 | 142 | 2.36 | 2.36 | 0.79 |
| 875 | 28+570 | LHS | Cut | 13.9907 | 7.00 | 55.63 | 27.82 | 50 | 0.83 | 0.83 | 0.28 |
| 876 | 28+580 | LHS | Cut | 19.85542 | 9.93 | 126.57 | 63.28 | 114 | 1.90 | 1.90 | 0.63 |
| 877 | 28+590 | LHS | Cut | 19.12143 | 9.56 | 103.15 | 51.58 | 93 | 1.55 | 1.55 | 0.52 |
| 878 | 28+600 | LHS | Cut | 18.48094 | 9.24 | 77.50 | 38.75 | 70 | 1.16 | 1.16 | 0.39 |
| 879 | 28+610 | LHS | Cut | 6.22 | 3.11 | 51.97 | 25.99 | 47 | 0.78 | 0.78 | 0.26 |
| 880 | 28+650 | LHS | Cut | 5.964 | 2.98 | 66.43 | 33.22 | 60 | 1.00 | 1.00 | 0.33 |
| 881 | 28+660 | LHS | Cut | 7.753 | 3.88 | 67.40 | 33.70 | 61 | 1.01 | 1.01 | 0.34 |
| 882 | 28+670 | LHS | Cut | 5.451 | 2.73 | 65.75 | 32.88 | 59 | 0.99 | 0.99 | 0.33 |
| 883 | 28+680 | LHS | Cut | 18.49792 | 9.25 | 69.44 | 34.72 | 62 | 1.04 | 1.04 | 0.35 |
| 884 | 28+690 | LHS | Cut | 15.72405 | 7.86 | 51.93 | 25.97 | 47 | 0.78 | 0.78 | 0.26 |
| 885 | 28+700 | LHS | Cut | 5.563475 | 2.78 | 52.37 | 26.19 | 47 | 0.79 | 0.79 | 0.26 |
| 886 | 28+730 | LHS | Cut | 2.65665 | 6.33 | 55.33 | 27.67 | 50 | 0.83 | 0.83 | 0.28 |

Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|---------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 887 | 28+940 | RHS | Cut | 10.315 | 5.16 | 52.67 | 26.34 | 47 | 0.79 | 0.79 | 0.26 |
| 888 | 28+990 | RHS | Cut | 7.75 | 3.88 | 74.96 | 37.48 | 67 | 1.12 | 1.12 | 0.37 |
| 889 | 29+000 | RHS | Cut | 5.197 | 2.60 | 65.22 | 32.61 | 59 | 0.98 | 0.98 | 0.33 |
| 890 | 29+010 | RHS | Cut | 6.643 | 3.32 | 64.51 | 32.26 | 58 | 0.97 | 0.97 | 0.32 |
| 891 | 29+020 | RHS | Cut | 6.74 | 3.37 | 52.88 | 26.44 | 48 | 0.79 | 0.79 | 0.26 |
| 892 | 29+070 | RHS | Cut | 6.575 | 3.29 | 57.19 | 28.60 | 51 | 0.86 | 0.86 | 0.29 |
| 893 | 29+140 | RHS | Cut | 6.944 | 3.47 | 64.92 | 32.46 | 58 | 0.97 | 0.97 | 0.32 |
| 894 | 29+150 | RHS | Cut | 5.193 | 2.60 | 57.10 | 28.55 | 51 | 0.86 | 0.86 | 0.29 |
| 895 | 29+230 | RHS | Cut | 5.237 | 2.62 | 65.50 | 32.75 | 59 | 0.98 | 0.98 | 0.33 |
| 896 | 29+240 | RHS | Cut | 5.533 | 2.77 | 67.86 | 33.93 | 61 | 1.02 | 1.02 | 0.34 |
| 897 | 29+280 | RHS | Cut | 5.267 | 2.63 | 61.01 | 30.51 | 55 | 0.92 | 0.92 | 0.31 |
| 898 | 29+370 | LHS | Cut | 7.496 | 3.75 | 55.95 | 27.98 | 50 | 0.84 | 0.84 | 0.28 |
| 899 | 29+380 | LHS | Cut | 6.522 | 3.26 | 53.02 | 26.51 | 48 | 0.80 | 0.80 | 0.27 |
| 900 | 29+420 | LHS | Cut | 6.451 | 3.23 | 62.36 | 31.18 | 56 | 0.94 | 0.94 | 0.31 |
| 901 | 29+430 | LHS | Cut | 5.288 | 2.64 | 78.60 | 39.30 | 71 | 1.18 | 1.18 | 0.39 |
| 902 | 29+840 | RHS | Cut | 5.719 | 2.86 | 64.20 | 32.10 | 58 | 0.96 | 0.96 | 0.32 |
| 903 | 29+850 | RHS | Cut | 6.492 | 3.25 | 67.16 | 33.58 | 60 | 1.01 | 1.01 | 0.34 |
| 904 | 29+860 | RHS | Cut | 5.71 | 2.86 | 62.82 | 31.41 | 57 | 0.94 | 0.94 | 0.31 |
| 905 | 30+120 | RHS | Cut | 6.55 | 3.28 | 57.49 | 28.75 | 52 | 0.86 | 0.86 | 0.29 |
| 906 | 30+130 | RHS | Cut | 6.786 | 3.39 | 59.20 | 29.60 | 53 | 0.89 | 0.89 | 0.30 |
| 907 | 30+470 | RHS | Cut | 6.101 | 3.05 | 52.17 | 26.09 | 47 | 0.78 | 0.78 | 0.26 |
| 908 | 30+480 | RHS | Cut | 5.595 | 2.80 | 62.38 | 31.19 | 56 | 0.94 | 0.94 | 0.31 |
| 909 | 30+510 | RHS | Cut | 5.302 | 2.65 | 50.33 | 25.17 | 45 | 0.75 | 0.75 | 0.25 |
| 910 | 30+530 | RHS | Cut | 6.236 | 3.12 | 125.76 | 62.88 | 113 | 1.89 | 1.89 | 0.63 |
| 911 | 30+540 | RHS | Cut | 7.86 | 3.93 | 82.99 | 41.50 | 75 | 1.24 | 1.24 | 0.41 |
| 912 | 30+550 | RHS | Cut | 5.68 | 2.84 | 53.96 | 26.98 | 49 | 0.81 | 0.81 | 0.27 |
| 913 | 30+610 | RHS | Cut | 6.42 | 3.21 | 90.37 | 45.19 | 81 | 1.36 | 1.36 | 0.45 |
| 914 | 30+620 | RHS | Cut | 6.716 | 3.36 | 106.43 | 53.22 | 96 | 1.60 | 1.60 | 0.53 |
| 915 | 30+630 | RHS | Cut | 6.282 | 3.14 | 122.93 | 61.47 | 111 | 1.84 | 1.84 | 0.61 |
| 916 | 30+640 | RHS | Cut | 5.749 | 2.87 | 120.91 | 60.45 | 109 | 1.81 | 1.81 | 0.60 |
| 917 | 30+650 | RHS | Cut | 5.92 | 2.96 | 119.07 | 59.53 | 107 | 1.79 | 1.79 | 0.60 |
| 918 | 30+730 | RHS | Cut | 5.217 | 2.61 | 59.07 | 29.54 | 53 | 0.89 | 0.89 | 0.30 |
| 919 | 30+740 | RHS | Cut | 6.238 | 3.12 | 58.15 | 29.08 | 52 | 0.87 | 0.87 | 0.29 |
| 920 | 30+760 | RHS | Cut | 5.033 | 2.52 | 56.32 | 28.16 | 51 | 0.84 | 0.84 | 0.28 |
| 921 | 30+770 | LHS/RHS | Cut-Cut | 12.57646 | 6.29 | 127.87 | 63.94 | 115 | 1.92 | 1.92 | 0.64 |
| 922 | 30+780 | LHS | Cut | 8.299 | 4.15 | 71.73 | 35.87 | 65 | 1.08 | 1.08 | 0.36 |
| 923 | 30+940 | LHS | Cut | 5.396 | 2.70 | 57.45 | 28.73 | 52 | 0.86 | 0.86 | 0.29 |
| 924 | 30+950 | LHS | Cut | 9.037 | 4.52 | 61.55 | 30.78 | 55 | 0.92 | 0.92 | 0.31 |
| 925 | 30+960 | LHS | Cut | 10.643 | 5.32 | 55.51 | 27.76 | 50 | 0.83 | 0.83 | 0.28 |
| 926 | 31+010 | LHS | Cut | 12.29304 | 6.15 | 58.10 | 29.05 | 52 | 0.87 | 0.87 | 0.29 |
| 927 | 31+100 | LHS | Cut | 12.0905 | 6.05 | 54.86 | 27.43 | 49 | 0.82 | 0.82 | 0.27 |
| 928 | 31+110 | LHS | Cut | 11.90675 | 5.95 | 56.92 | 28.46 | 51 | 0.85 | 0.85 | 0.28 |
| 929 | 31+120 | LHS | Cut | 5.907 | 2.95 | 54.50 | 27.25 | 49 | 0.82 | 0.82 | 0.27 |
| 930 | 31+220 | LHS | Cut | 5.815 | 2.91 | 64.51 | 32.26 | 58 | 0.97 | 0.97 | 0.32 |
| 931 | 31+230 | LHS | Cut | 5.632 | 2.82 | 80.16 | 40.08 | 72 | 1.20 | 1.20 | 0.40 |
| 932 | 31+240 | LHS | Cut | 12.787 | 6.39 | 68.92 | 34.46 | 62 | 1.03 | 1.03 | 0.34 |
| 933 | 31+300 | LHS | Cut | 7.173 | 3.59 | 52.87 | 26.44 | 48 | 0.79 | 0.79 | 0.26 |
| 934 | 31+360 | LHS | Cut | 5.745 | 2.87 | 71.98 | 35.99 | 65 | 1.08 | 1.08 | 0.36 |
| 935 | 31+370 | LHS | Cut | 6.155 | 3.08 | 69.35 | 34.68 | 62 | 1.04 | 1.04 | 0.35 |
| 936 | 31+380 | LHS | Cut | 5.551 | 2.78 | 65.38 | 32.69 | 59 | 0.98 | 0.98 | 0.33 |
| 937 | 31+390 | LHS | Cut | 5.81 | 2.91 | 58.70 | 29.35 | 53 | 0.88 | 0.88 | 0.29 |
| 938 | 31+400 | LHS | Cut | 5.486 | 2.74 | 53.28 | 26.64 | 48 | 0.80 | 0.80 | 0.27 |
| 939 | 31+590 | LHS | Cut | 5.692 | 2.85 | 87.27 | 43.64 | 79 | 1.31 | 1.31 | 0.44 |
| 940 | 31+600 | LHS | Cut | 5.45 | 2.73 | 81.12 | 40.56 | 73 | 1.22 | 1.22 | 0.41 |
| 941 | 31+720 | LHS | Cut | 6.451 | 3.23 | 58.04 | 29.02 | 52 | 0.87 | 0.87 | 0.29 |
| 942 | 31+750 | LHS | Cut | 8.016 | 4.01 | 53.19 | 26.60 | 48 | 0.80 | 0.80 | 0.27 |
| 943 | 31+790 | LHS | Cut | 6.892 | 3.45 | 53.03 | 26.52 | 48 | 0.80 | 0.80 | 0.27 |
| 944 | 31+930 | LHS | Cut | 5.287 | 2.64 | 57.87 | 28.94 | 52 | 0.87 | 0.87 | 0.29 |
| 945 | 32+180 | RHS | Cut | 7.198 | 3.60 | 52.31 | 26.16 | 47 | 0.78 | 0.78 | 0.26 |

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Table II.8.14: Bio-engineering Details

| SN | Location | Side | Cut/Fill | Len of | Len for | Slope | Slope | Single | Planting | Live | Live |
|-----|----------|------|----------|----------|----------|--------|-----------|--------|----------|------|----------|
| | | | | Cut/fill | Bioengin | Area | Preparati | node | rooted | pegs | fascines |
| | | | | m | m | sqm | sqm | No. | sqm | rm | rm |
| 946 | 32+190 | RHS | Cut | 6.935 | 3.47 | 66.17 | 33.09 | 60 | 0.99 | 0.99 | 0.33 |
| 947 | 32+350 | RHS | Cut | 6.538 | 3.27 | 50.73 | 25.37 | 46 | 0.76 | 0.76 | 0.25 |
| 948 | 32+430 | RHS | Cut | 5.87 | 2.94 | 56.48 | 28.24 | 51 | 0.85 | 0.85 | 0.28 |
| 949 | 32+660 | RHS | Cut | 5.328 | 2.66 | 52.89 | 26.45 | 48 | 0.79 | 0.79 | 0.26 |
| 950 | 32+670 | RHS | Cut | 8.727 | 4.36 | 58.73 | 29.37 | 53 | 0.88 | 0.88 | 0.29 |
| 951 | 32+790 | RHS | Cut | 8.112 | 4.06 | 51.06 | 25.53 | 46 | 0.77 | 0.77 | 0.26 |
| 952 | 32+800 | RHS | Cut | 5.804 | 2.90 | 56.72 | 28.36 | 51 | 0.85 | 0.85 | 0.28 |
| 953 | 32+820 | RHS | Cut | 5.319 | 2.66 | 51.31 | 25.66 | 46 | 0.77 | 0.77 | 0.26 |
| 954 | 32+860 | RHS | Cut | 5.303 | 2.65 | 72.46 | 36.23 | 65 | 1.09 | 1.09 | 0.36 |
| 955 | 32+870 | RHS | Cut | 5.787 | 2.89 | 63.87 | 31.94 | 57 | 0.96 | 0.96 | 0.32 |
| 956 | 32+900 | RHS | Cut | 5.231 | 2.62 | 53.86 | 26.93 | 48 | 0.81 | 0.81 | 0.27 |
| 957 | 32+910 | RHS | Cut | 6.617 | 3.31 | 64.07 | 32.04 | 58 | 0.96 | 0.96 | 0.32 |
| 958 | 33+000 | LHS | Cut | 5.073 | 2.54 | 52.33 | 26.17 | 47 | 0.78 | 0.78 | 0.26 |
| 959 | 33+010 | LHS | Cut | 5.648 | 2.82 | 54.61 | 27.31 | 49 | 0.82 | 0.82 | 0.27 |
| 960 | 33+020 | LHS | Cut | 5.289 | 2.64 | 74.13 | 37.07 | 67 | 1.11 | 1.11 | 0.37 |
| 961 | 33+040 | RHS | Cut | 5.873 | 2.94 | 50.46 | 25.23 | 45 | 0.76 | 0.76 | 0.25 |
| 962 | 33+090 | RHS | Cut | 5.106 | 2.55 | 57.65 | 28.83 | 52 | 0.86 | 0.86 | 0.29 |
| 963 | 33+140 | RHS | Cut | 5.672 | 2.84 | 51.58 | 25.79 | 46 | 0.77 | 0.77 | 0.26 |
| 964 | 33+270 | RHS | Cut | 5.131 | 2.57 | 58.97 | 29.49 | 53 | 0.88 | 0.88 | 0.29 |
| 965 | 33+280 | RHS | Cut | 7.246 | 3.62 | 58.19 | 29.10 | 52 | 0.87 | 0.87 | 0.29 |
| 966 | 33+290 | RHS | Cut | 6.387 | 3.19 | 56.89 | 28.45 | 51 | 0.85 | 0.85 | 0.28 |
| 967 | 33+370 | RHS | Cut | 5.386 | 2.69 | 58.30 | 29.15 | 52 | 0.87 | 0.87 | 0.29 |
| 968 | 33+380 | RHS | Cut | 6.407 | 3.20 | 63.57 | 31.79 | 57 | 0.95 | 0.95 | 0.32 |
| 969 | 33+410 | RHS | Cut | 5.233 | 2.62 | 72.85 | 36.43 | 66 | 1.09 | 1.09 | 0.36 |
| 970 | 33+420 | RHS | Cut | 5.461 | 2.73 | 117.94 | 58.97 | 106 | 1.77 | 1.77 | 0.59 |
| 971 | 33+430 | RHS | Cut | 7.413 | 3.71 | 160.12 | 80.06 | 144 | 2.40 | 2.40 | 0.80 |
| 972 | 33+440 | RHS | Cut | 5.046 | 2.52 | 166.13 | 83.07 | 150 | 2.49 | 2.49 | 0.83 |
| 973 | 33+450 | RHS | Cut | 5.765 | 2.88 | 134.60 | 67.30 | 121 | 2.02 | 2.02 | 0.67 |
| 974 | 33+470 | RHS | Cut | 5.158 | 2.58 | 86.89 | 43.45 | 78 | 1.30 | 1.30 | 0.43 |
| 975 | 33+480 | RHS | Cut | 5.897 | 2.95 | 189.54 | 94.77 | 171 | 2.84 | 2.84 | 0.95 |
| 976 | 33+490 | RHS | Cut | 5.819 | 2.91 | 169.57 | 84.78 | 153 | 2.54 | 2.54 | 0.85 |
| 977 | 33+500 | RHS | Cut | 5.689 | 2.84 | 112.67 | 56.33 | 101 | 1.69 | 1.69 | 0.56 |
| 978 | 33+510 | RHS | Cut | 5.83 | 2.92 | 74.10 | 37.05 | 67 | 1.11 | 1.11 | 0.37 |
| 979 | 33+520 | RHS | Cut | 6.357 | 3.18 | 123.28 | 61.64 | 111 | 1.85 | 1.85 | 0.62 |
| 980 | 33+530 | RHS | Cut | 7.285 | 3.64 | 123.23 | 61.61 | 111 | 1.85 | 1.85 | 0.62 |
| 981 | 33+540 | RHS | Cut | 11.79356 | 5.90 | 77.28 | 38.64 | 70 | 1.16 | 1.16 | 0.39 |
| 982 | 33+630 | RHS | Cut | 16.01184 | 8.01 | 56.46 | 28.23 | 51 | 0.85 | 0.85 | 0.28 |

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Appendix 13
Details of Affected Trees



Details of Affected Trees

| SN | Chainage | Local Name | Scientific Name | Nos. | Girth (mm) | Height (m) | Coverage (m) | Forest Name |
|----|----------|-------------|--------------------------------|------|------------|------------|--------------|-------------------------------|
| 1 | 0+104 | Kutmiro | <i>Litsea polyantha</i> | 1 | 450 | 8 | 2 | Private Land |
| 2 | 0+304 | Kutmiro | <i>Litsea polyantha</i> | 1 | 135 | 12 | 4 | Private Land |
| 3 | 0+396 | Kutmiro | <i>Litsea polyantha</i> | 1 | 900 | 6 | 1.5 | Private Land |
| 4 | 0+455 | Kutmiro | <i>Litsea polyantha</i> | 1 | 400 | 4 | | Private Land |
| 5 | 0+507 | Kutmiro | <i>Litsea polyantha</i> | 1 | 400 | 4 | | Private Land |
| 6 | 0+510 | Kutmiro | <i>Litsea polyantha</i> | 1 | 700 | 5 | | Private Land |
| 7 | 0+511 | Laati karam | <i>Hymenodictyon flaccidum</i> | 1 | 100 | 4 | 2 | Private Land |
| 8 | 0+514 | Kutmiro | <i>Litsea polyantha</i> | 1 | 500 | 5 | 1 | Private Land |
| 9 | 0+519 | Laati karam | <i>Hymenodictyon flaccidum</i> | 1 | 1300 | 15 | 4 | Private Land |
| 10 | 0+521 | Khirro | <i>Falconeria insignis</i> | 1 | 1900 | 15 | 8 | Private Land |
| 11 | 0+842 | Khirro | <i>Falconeria insignis</i> | 1 | 300 | | | Private Land |
| 12 | 0+868 | Pakhauri | <i>Ficus glaberrima</i> | 1 | 600 | 5 | 2 | Private Land |
| 13 | 1+113 | kutmiro | <i>Litsea polyantha</i> | 1 | 900 | 6 | 2 | Private Land |
| 14 | 1+121 | Aap | <i>Magnifera indica</i> | 1 | 700 | 7 | 3 | Private Land |
| 15 | 1+410 | Utis | <i>Alnus nepalensis</i> | 1 | 110 | 16 | 2.8 | Private Land |
| 16 | 2+572 | Eepil | <i>Leucaena leucocephala</i> | 1 | 400 | 7 | 2 | Private Land |
| 17 | 2+900 | Aap | <i>Magnifera indica</i> | 1 | 3500 | 20 | 10 | Private Land |
| 18 | 3+451 | Kutmiro | <i>Litsea polyantha</i> | 1 | 400 | 7 | 1 | Private Land |
| 19 | 3+452 | Kutmiro | <i>Litsea polyantha</i> | 1 | 700 | 12 | 2 | Private Land |
| 20 | 3+458 | Kutmiro | <i>Litsea polyantha</i> | 1 | 650 | 12 | 2 | Private Land |
| 21 | 3+466 | Khari | <i>Capillipedium assimile</i> | 1 | 300 | 6 | 2 | Private Land |
| 22 | 3+467 | Bakaino | <i>Melia azedarach</i> | 1 | 600 | 7 | 2 | Private Land |
| 23 | 5+133 | Chiuri | <i>Aesendra butyraceae</i> | 1 | 1150 | 25 | 5 | Private Land |
| 24 | 5+724 | Salla | <i>Pinus wallichiana</i> | 1 | 800 | 8 | 2 | Private Land |
| 25 | 5+759 | Siris | <i>Albizia procera</i> | 1 | 600 | 5 | 2 | Private Land |
| 26 | 5+761 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 5 | 3 | Private Land |
| 27 | 6+271 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 3 | 2 | Private Land |
| 28 | 6+510 | Salla | <i>Pinus wallichiana</i> | 1 | 700 | 4 | 3 | Private Land |
| 29 | 6+629 | Salla | <i>Pinus wallichiana</i> | 1 | 350 | 2.5 | 2 | Private Land |
| 30 | 6+651 | Salla | <i>Pinus wallichiana</i> | 1 | 400 | 2 | 1 | Private Land |
| 31 | 6+652 | Salla | <i>Pinus wallichiana</i> | 1 | 1600 | 25 | 10 | Private Land |
| 32 | 6+686 | Salla | <i>Pinus wallichiana</i> | 1 | 700 | 5 | 5 | Private Land |
| 33 | 6+691 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 3 | 2 | Private Land |
| 34 | 6+797 | Mauwa | <i>Madhuca latifolia</i> | 1 | 800 | 20 | 7 | Private Land |
| 35 | 6+940 | Chiuri | <i>Aesendra butyraceae</i> | 1 | 700 | 5 | 2 | Private Land |
| 36 | 7+143 | Salla | <i>Pinus wallichiana</i> | 1 | 100 | 25 | 4 | Private Land |
| 37 | 7+144 | Salla | <i>Pinus wallichiana</i> | 1 | 1100 | 12 | 4 | Private Land |
| 38 | 7+234 | Jamun | <i>Syzygium cumini</i> | 1 | 650 | 8 | 3 | Private Land |
| 39 | 8+143 | Aap | <i>Magnifera indica</i> | 1 | 1600 | 20 | 15 | Private Land |
| 40 | 9+094 | Chilaune | <i>Schima wallichii</i> | 1 | 800 | 25 | 4 | Private Land |
| 41 | 9+697 | Paiyu | <i>Prunus sarasoides</i> | 1 | 900 | 20 | 4 | Private Land |
| 42 | 11+529 | Aap | <i>Magnifera indica</i> | 1 | 1000 | 8 | 5 | Private Land |
| 43 | 11+583 | Katus | <i>Castanopsis indica</i> | 1 | 1500 | 25 | 10 | Sunapati Salleni CF |
| 44 | 11+583 | Chilaune | <i>Schima wallichii</i> | 1 | 100 | 40 | 10 | Sunapati Salleni CF |
| 45 | 11+585 | Salla | <i>Pinus wallichiana</i> | 1 | 700 | 20 | 10 | Sunapati Salleni CF |
| 46 | 11+588 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 20 | 8 | Sunapati Salleni CF |
| 47 | 11+595 | Salla | <i>Pinus wallichiana</i> | 1 | 1500 | 20 | 8 | Sunapati Salleni CF |
| 48 | 11+697 | Aap | <i>Magnifera indica</i> | 1 | 170 | 25 | 10 | Sunapati Salleni CF |
| 49 | 11+742 | Katus | <i>Castanopsis indica</i> | 1 | 600 | 15 | 5 | Sunapati Salleni CF |
| 50 | 12+430 | Mauwa | <i>Madhuca latifolia</i> | 1 | 350 | 3 | 2 | Sunapati Salleni CF |
| 51 | 12+447 | Katus | <i>Castanopsis indica</i> | 1 | 500 | 5 | 2 | Sunapati Salleni CF |
| 52 | 12+813 | Katus | <i>Castanopsis indica</i> | 1 | 800 | 25 | 5 | Sunapati Salleni CF |
| 53 | 12+915 | Salla | <i>Pinus wallichiana</i> | 1 | 800 | 25 | 5 | Sunapati Salleni CF |
| 54 | 12+917 | Salla | <i>Pinus wallichiana</i> | 1 | 1200 | 30 | 5 | Sunapati Salleni CF |
| 55 | 13+017 | Salla | <i>Pinus wallichiana</i> | 1 | 800 | 20 | 5 | Sunapati Salleni CF |
| 56 | 13+046 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 5 | 2 | Sunapati Salleni CF |
| 57 | 13+049 | Salla | <i>Pinus wallichiana</i> | 1 | 700 | 15 | 3 | Sunapati Salleni CF |
| 58 | 13+056 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 10 | 2 | Sunapati Salleni CF |
| 59 | 13+133 | Sal | <i>Shorea robusta</i> | 1 | 1200 | 50 | 10 | Sunapati Salleni CF |
| 60 | 14+118 | Utis | <i>Alnus nepalensis</i> | 1 | 450 | 15 | 2 | Sunapati Sarvajhang Kiprug CF |
| 61 | 14+126 | Utis | <i>Alnus nepalensis</i> | 1 | 350 | 20 | 4 | Sunapati Sarvajhang Kiprug CF |
| 62 | 14+346 | Phalat | <i>Quercus lanata</i> | 1 | 700 | 12 | 4 | Sunapati Sarvajhang Kiprug CF |

| SN | Chainage | Local Name | Scientific Name | Nos. | Girth (mm) | Height (m) | Coverage (m) | Forest Name |
|-----|----------|------------|---------------------------------|------|------------|------------|--------------|--------------|
| 63 | 14+360 | Phalat | <i>Quercus lanata</i> | 1 | 600 | 5 | 4 | Private Land |
| 64 | 14+731 | Hade | <i>Lagerstroemia parviflora</i> | 1 | 1200 | 25 | 5 | Private Land |
| 65 | 14+732 | Malgedi | <i>Cinnamomum glaucescens</i> | 1 | 500 | 6 | 3 | Private Land |
| 66 | 14+739 | Hade | <i>Lagerstroemia parviflora</i> | 1 | 800 | 15 | 8 | Private Land |
| 67 | 15+865 | Paiyu | <i>Prunus sarasoides</i> | 1 | 1300 | 10 | 5 | Private Land |
| 68 | 15+870 | Chilaune | <i>Schima wallichii</i> | 1 | 800 | 12 | 2 | Private Land |
| 69 | 15+874 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 6 | 2 | Private Land |
| 70 | 15+876 | Paiyu | <i>Prunus sarasoides</i> | 1 | 600 | 8 | 3 | Private Land |
| 71 | 15+876 | Chilaune | <i>Schima wallichii</i> | 1 | 650 | 6 | 4 | Private Land |
| 72 | 15+890 | Chilaune | <i>Schima wallichii</i> | 1 | 600 | 5 | 2 | Private Land |
| 73 | 15+896 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 8 | 3 | Private Land |
| 74 | 15+904 | Chilaune | <i>Schima wallichii</i> | 1 | 600 | 10 | 3 | Private Land |
| 75 | 16+183 | Chilaune | <i>Schima wallichii</i> | 1 | 700 | 12 | 4 | Private Land |
| 76 | 16+414 | Rudrachhya | <i>Elaeocarpus ganitrus</i> | 1 | 400 | 4 | 2 | Private Land |
| 77 | 16+439 | Paiyu | <i>Prunus sarasoides</i> | 1 | 500 | 5 | 2 | Private Land |
| 78 | 16+509 | Chilaune | <i>Schima wallichii</i> | 1 | 600 | 15 | 3 | Private Land |
| 79 | 16+510 | Chilaune | <i>Schima wallichii</i> | 1 | 1500 | 60 | 10 | Private Land |
| 80 | 16+519 | Chilaune | <i>Schima wallichii</i> | 1 | 800 | 15 | 5 | Private Land |
| 81 | 16+523 | Mauwa | <i>Madhuca latifolia</i> | 1 | 800 | 15 | 5 | Private Land |
| 82 | 16+546 | Khaniyo | <i>Ficus semicordata</i> | 1 | 1100 | 8 | 2 | Private Land |
| 83 | 16+569 | Lapsi | <i>Choerospondias axillaris</i> | 1 | 500 | 5 | 3 | Private Land |
| 84 | 16+623 | Phalat | <i>Quercus lanata</i> | 1 | 900 | 15 | 4 | Private Land |
| 85 | 16+647 | Utis | <i>Alnus nepalensis</i> | 1 | 400 | 10 | 2 | Private Land |
| 86 | 16+665 | Utis | <i>Alnus nepalensis</i> | 1 | 600 | 20 | 4 | Private Land |
| 87 | 16+814 | Utis | <i>Alnus nepalensis</i> | 1 | 900 | 15 | 5 | Private Land |
| 88 | 16+832 | Khaniyo | <i>Ficus semicordata</i> | 1 | 800 | 5 | 4 | Private Land |
| 89 | 16+840 | Utis | <i>Alnus nepalensis</i> | 2 | 500 | 12 | 2 | Private Land |
| 90 | 16+846 | Utis | <i>Alnus nepalensis</i> | 1 | 400 | 10 | 3 | Private Land |
| 91 | 16+855 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 15 | 3 | Private Land |
| 92 | 16+870 | Chilaune | <i>Schima wallichii</i> | 1 | 600 | 15 | 3 | Private Land |
| 93 | 16+944 | Utis | <i>Alnus nepalensis</i> | 1 | 1400 | 25 | 5 | Private Land |
| 94 | 17+007 | Timila | <i>Ficus sarmentosa</i> | 1 | 800 | 5 | 3 | Private Land |
| 95 | 17+008 | Utis | <i>Alnus nepalensis</i> | 1 | 700 | 25 | 5 | Private Land |
| 96 | 17+008 | Khaniyo | <i>Ficus semicordata</i> | 1 | 600 | 4 | 2 | Private Land |
| 97 | 17+008 | Timila | <i>Ficus sarmentosa</i> | 1 | 800 | 5 | 3 | Private Land |
| 98 | 17+026 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 15 | 4 | Private Land |
| 99 | 17+043 | Utis | <i>Alnus nepalensis</i> | 1 | 300 | 5 | 3 | Private Land |
| 100 | 17+075 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 20 | 5 | Private Land |
| 101 | 17+094 | Utis | <i>Alnus nepalensis</i> | 1 | 1800 | 60 | 7 | Private Land |
| 102 | 17+103 | Utis | <i>Alnus nepalensis</i> | 1 | 450 | 20 | 2 | Private Land |
| 103 | 17+114 | Utis | <i>Alnus nepalensis</i> | 1 | 1800 | 60 | 10 | Private Land |
| 104 | 17+123 | Utis | <i>Alnus nepalensis</i> | 1 | 1800 | 50 | 6 | Private Land |
| 105 | 17+125 | Utis | <i>Alnus nepalensis</i> | 1 | 1800 | 50 | 6 | Private Land |
| 106 | 17+137 | Utis | <i>Alnus nepalensis</i> | 1 | 600 | 12 | 4 | Private Land |
| 107 | 17+143 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 30 | | Private Land |
| 108 | 17+149 | Utis | <i>Alnus nepalensis</i> | 1 | 900 | 40 | 5 | Private Land |
| 109 | 17+153 | Utis | <i>Alnus nepalensis</i> | 1 | 700 | 20 | 5 | Private Land |
| 110 | 17+163 | Utis | <i>Alnus nepalensis</i> | 1 | 1000 | 40 | 5 | Private Land |
| 111 | 17+164 | Utis | <i>Alnus nepalensis</i> | 1 | 350 | 15 | 2 | Private Land |
| 112 | 17+168 | Utis | <i>Alnus nepalensis</i> | 1 | 400 | 15 | 2 | Private Land |
| 113 | 17+168 | Utis | <i>Alnus nepalensis</i> | 1 | 350 | 15 | 2 | Private Land |
| 114 | 17+175 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 16 | 3 | Private Land |
| 115 | 17+176 | Utis | <i>Alnus nepalensis</i> | 1 | 300 | 15 | 2 | Private Land |
| 116 | 17+311 | Utis | <i>Alnus nepalensis</i> | 1 | 900 | 40 | 7 | Private Land |
| 117 | 17+340 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 10 | 3 | Private Land |
| 118 | 17+354 | Utis | <i>Alnus nepalensis</i> | 1 | 1000 | 30 | 5 | Private Land |
| 119 | 17+404 | Chilaune | <i>Schima wallichii</i> | 1 | 800 | 20 | 5 | Private Land |
| 120 | 17+534 | Utis | <i>Alnus nepalensis</i> | 1 | 550 | 20 | 5 | Private Land |
| 121 | 17+546 | Utis | <i>Alnus nepalensis</i> | 1 | 600 | 15 | 5 | Private Land |
| 122 | 17+599 | Chilaune | <i>Schima wallichii</i> | 1 | 700 | 20 | 2 | Private Land |
| 123 | 17+707 | Utis | <i>Alnus nepalensis</i> | 1 | 1200 | 25 | 5 | Private Land |
| 124 | 17+809 | Utis | <i>Alnus nepalensis</i> | 3 | 500 | 10 | 4 | Private Land |
| 125 | 17+810 | Utis | <i>Alnus nepalensis</i> | 3 | 500 | 15 | 2 | Private Land |
| 126 | 17+841 | Utis | <i>Alnus nepalensis</i> | 5 | 50 | 25 | 5 | Private Land |
| 127 | 17+865 | Utis | <i>Alnus nepalensis</i> | 3 | 700 | 30 | 5 | Private Land |
| 128 | 17+868 | Utis | <i>Alnus nepalensis</i> | 1 | 600 | 20 | 5 | Private Land |

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| SN | Chainage | Local Name | Scientific Name | Nos. | Girth (mm) | Height (m) | Coverage (%) | Forest Name |
|-----|----------|------------|-------------------------------|------|------------|------------|--------------|--------------|
| 129 | 18+118 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 8 | 3 | Private Land |
| 130 | 18+122 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 15 | 3 | Private Land |
| 131 | 18+122 | Utis | <i>Alnus nepalensis</i> | 1 | 650 | 15 | 3 | Private Land |
| 132 | 18+220 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 25 | 3 | Private Land |
| 133 | 18+232 | Utis | <i>Alnus nepalensis</i> | 1 | 700 | 20 | 3 | Private Land |
| 134 | 18+247 | Utis | <i>Alnus nepalensis</i> | 12 | 700 | 20 | 10 | Private Land |
| 135 | 18+268 | Utis | <i>Alnus nepalensis</i> | 1 | 400 | 10 | 4 | Private Land |
| 136 | 18+270 | Utis | <i>Alnus nepalensis</i> | 4 | 500 | 15 | 5 | Private Land |
| 137 | 18+281 | Utis | <i>Alnus nepalensis</i> | 4 | 600 | 15 | 5 | Private Land |
| 138 | 18+534 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 5 | 2 | Private Land |
| 139 | 18+535 | Chilaune | <i>Schima wallichii</i> | 1 | 900 | 10 | 3 | Private Land |
| 140 | 18+652 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 15 | 2 | Private Land |
| 141 | 18+816 | Salla | <i>Pinus wallichiana</i> | 1 | 700 | 6 | 2.5 | Private Land |
| 142 | 18+828 | Salla | <i>Pinus wallichiana</i> | 1 | 600 | 12 | 2 | Private Land |
| 143 | 18+898 | Salla | <i>Pinus wallichiana</i> | 1 | 500 | 8 | 2 | Private Land |
| 144 | 18+956 | Salla | <i>Pinus wallichiana</i> | 1 | 1600 | 25 | 5 | Private Land |
| 145 | 18+988 | salla | <i>Pinus wallichiana</i> | 1 | 600 | 5 | 2 | Private Land |
| 146 | 19+049 | salla | <i>Pinus wallichiana</i> | 1 | 450 | 5 | 2 | Private Land |
| 147 | 19+049 | salla | <i>Pinus wallichiana</i> | 1 | 500 | 6 | 2 | Private Land |
| 148 | 19+057 | salla | <i>Pinus wallichiana</i> | 2 | 800 | 15 | 3 | Private Land |
| 149 | 19+058 | salla | <i>Pinus wallichiana</i> | 1 | 600 | 8 | 2 | Private Land |
| 150 | 19+062 | salla | <i>Pinus wallichiana</i> | 2 | 1000 | 15 | 6 | Private Land |
| 151 | 19+155 | Chilaune | <i>Schima wallichii</i> | 1 | 3100 | 30 | 15 | Private Land |
| 152 | 19+222 | Dudhilo | <i>Ficus nerifolia</i> | 1 | 800 | 15 | 5 | Private Land |
| 153 | 19+223 | Dhupi | <i>Cryptomeria japonica</i> | 1 | 800 | 25 | 5 | Private Land |
| 154 | 19+224 | Naspati | <i>Pyrus pyrifolia</i> | 1 | 4500 | 10 | 3 | Private Land |
| 155 | 19+230 | Junar | <i>Citrus sinensis</i> | 1 | 400 | 8 | 5 | Private Land |
| 156 | 19+405 | Pharsa | <i>Grewia sclerophylla</i> | 1 | 700 | 8 | 2 | Private Land |
| 157 | 19+406 | Malgedi | <i>Cinnamomum glaucescens</i> | 1 | 1000 | 8 | 3 | Private Land |
| 158 | 19+422 | Pharsa | <i>Grewia sclerophylla</i> | 2 | 1000 | 10 | 2 | Private Land |
| 159 | 19+437 | Dudhilo | <i>Ficus nerifolia</i> | 1 | 700 | 12 | 3 | Private Land |
| 160 | 19+439 | Malgedi | <i>Cinnamomum glaucescens</i> | 1 | 1200 | 15 | 8 | Private Land |
| 161 | 19+772 | Timila | <i>Ficus sarmentosa</i> | 1 | 800 | 5 | 4 | Private Land |
| 162 | 19+825 | Khaniyo | <i>Ficus semicordata</i> | 1 | 1300 | 10 | 10 | Private Land |
| 163 | 19+827 | Paiyu | <i>Prunus sarasoides</i> | 1 | 700 | 12 | 4 | Private Land |
| 164 | 19+831 | Bhalayo | <i>Semecarpus anacardium</i> | 1 | 350 | 4 | 2 | Private Land |
| 165 | 19+831 | Pharsa | <i>Grewia sclerophylla</i> | 2 | 700 | 10 | 5 | Private Land |
| 166 | 19+839 | Utis | <i>Alnus nepalensis</i> | 1 | 350 | 3 | 2 | Private Land |
| 167 | 19+846 | Utis | <i>Alnus nepalensis</i> | 5 | 60 | 12 | 2 | Private Land |
| 168 | 19+938 | Chilaune | <i>Schima wallichii</i> | 1 | 400 | 12 | 1 | Private Land |
| 169 | 20+323 | Chilaune | <i>Schima wallichii</i> | 1 | 1100 | 20 | 5 | Private Land |
| 170 | 20+449 | Malgedi | <i>Cinnamomum glaucescens</i> | 1 | 700 | 7 | 3 | Private Land |
| 171 | 20+481 | Chilaune | <i>Schima wallichii</i> | 1 | 450 | 8 | 2 | Private Land |
| 172 | 20+489 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 10 | 2 | Private Land |
| 173 | 20+501 | Paiyu | <i>Prunus sarasoides</i> | 1 | 800 | 10 | 2 | Private Land |
| 174 | 20+585 | Guras | <i>Rhododendron arboreum</i> | 1 | 35 | 2 | 1 | Private Land |
| 175 | 20+585 | Utis | <i>Alnus nepalensis</i> | 1 | 450 | 8 | 2 | Private Land |
| 176 | 20+616 | Mauwa | <i>Madhuca latifolia</i> | 1 | 450 | 4 | 2 | Private Land |
| 177 | 20+626 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 12 | 3 | Private Land |
| 178 | 20+864 | chilaune | <i>Schima wallichii</i> | 1 | 600 | 10 | 2 | Private Land |
| 179 | 21+164 | Utis | <i>Alnus nepalensis</i> | 1 | 100 | 40 | 10 | Private Land |
| 180 | 21+168 | Chilaune | <i>Schima wallichii</i> | 1 | 1000 | 25 | 5 | Private Land |
| 181 | 21+175 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 30 | 4 | Private Land |
| 182 | 21+176 | Guras | <i>Rhododendron arboreum</i> | 1 | 450 | 5 | 2 | Private Land |
| 183 | 21+205 | Angeri | <i>Lyonia villosa</i> | 1 | 650 | 8 | 2 | Private Land |
| 184 | 21+255 | Utis | <i>Alnus nepalensis</i> | 1 | 600 | 7 | 1 | Private Land |
| 185 | 21+266 | Utis | <i>Alnus nepalensis</i> | 1 | 35 | 4 | 2 | Private Land |
| 186 | 21+416 | Angeri | <i>Lyonia villosa</i> | 1 | 600 | 4 | 3 | Private Land |
| 187 | 21+541 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 1500 | 25 | 4 | Private Land |
| 188 | 21+546 | Utis | <i>Alnus nepalensis</i> | 1 | 800 | 25 | 5 | Private Land |
| 189 | 21+571 | Khirro | <i>Falconeria insignis</i> | 2 | 500 | 4 | 4 | Private Land |
| 190 | 21+594 | Paiyu | <i>Prunus sarasoides</i> | 1 | 650 | 12 | | Private Land |
| 191 | 21+603 | Chilaune | <i>Schima wallichii</i> | 2 | 450 | 15 | 4 | Private Land |
| 192 | 21+604 | lakuri | <i>Fraxinus floribunda</i> | 1 | 450 | 8 | 3 | Private Land |
| 193 | 21+611 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 500 | 10 | 4 | Private Land |
| 194 | 21+623 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 500 | 8 | 4 | Private Land |

| SN | Chainage | Local Name | Scientific Name | Nos. | Girth (mm) | Height (m) | Coverage (m) | Forest Name |
|-----|----------|-------------|-------------------------------|------|------------|------------|--------------|-------------------|
| 195 | 21+741 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 10 | 4 | Private Land |
| 196 | 21+790 | Paiyu | <i>Prunus sarasoides</i> | 1 | 800 | 10 | 3 | Private Land |
| 197 | 22+008 | Koirala | <i>Bauhinia purpurea</i> | 2 | 100 | 10 | 2 | Private Land |
| 198 | 22+237 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 1400 | 40 | 5 | Private Land |
| 199 | 22+239 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 1400 | 40 | 5 | Private Land |
| 200 | 22+243 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 1000 | 35 | 5 | Private Land |
| 201 | 22+261 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 8 | 2 | Private Land |
| 202 | 22+261 | Utis | <i>Alnus nepalensis</i> | 1 | 1500 | 25 | 8 | Private Land |
| 203 | 22+263 | Chilaune | <i>Schima wallichii</i> | 1 | 1000 | 20 | 2 | Private Land |
| 204 | 22+271 | Dudhe | <i>Ichnocarpus frutescens</i> | 1 | 900 | 8 | 5 | Private Land |
| 205 | 22+272 | Chilaune | <i>Schima wallichii</i> | 1 | 600 | 15 | 2 | Private Land |
| 206 | 22+288 | Dhupi Salla | <i>Cryptomeria japonica</i> | 2 | 800 | 20 | 10 | Private Land |
| 207 | 22+384 | Chilaune | <i>Schima wallichii</i> | 2 | 800 | 8 | 2 | Private Land |
| 208 | 22+386 | Dudhe | <i>Ichnocarpus frutescens</i> | 1 | 450 | 5 | 2 | Private Land |
| 209 | 22+387 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 1300 | 20 | 5 | Private Land |
| 210 | 22+402 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 600 | 10 | 3 | Private Land |
| 211 | 22+403 | Paiyu | <i>Prunus sarasoides</i> | 2 | 1300 | 15 | 5 | Private Land |
| 212 | 22+406 | Paiyu | <i>Prunus sarasoides</i> | 1 | 700 | 5 | 2 | Private Land |
| 213 | 22+410 | Paiyu | <i>Prunus sarasoides</i> | 1 | 1200 | 50 | 5 | Private Land |
| 214 | 22+416 | Angeri | <i>Lyonia villosa</i> | 1 | 50 | 4 | 3 | Private Land |
| 215 | 22+424 | Paiyu | <i>Prunus sarasoides</i> | 1 | 1000 | 18 | 4 | Private Land |
| 216 | 22+427 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 700 | 15 | 5 | Private Land |
| 217 | 22+427 | Paiyu | <i>Prunus sarasoides</i> | 1 | 900 | 10 | 2 | Private Land |
| 218 | 22+433 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 450 | 4 | 3 | Private Land |
| 219 | 22+436 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 400 | 8 | 3 | Private Land |
| 220 | 22+442 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 800 | 10 | 5 | Private Land |
| 221 | 22+443 | Naspati | <i>Pyrus pyrifolia</i> | 1 | 800 | 10 | 5 | Private Land |
| 222 | 22+445 | Paiyu | <i>Prunus sarasoides</i> | 1 | 700 | 15 | 3 | Private Land |
| 223 | 22+451 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 700 | 3 | 2 | Private Land |
| 224 | 22+452 | Chilaune | <i>Schima wallichii</i> | 1 | 900 | 3 | 2 | Private Land |
| 225 | 22+456 | Kutmiro | <i>Litsea polyantha</i> | 1 | 500 | 8 | 2 | Private Land |
| 226 | 22+527 | Dudhe | <i>Ichnocarpus frutescens</i> | 1 | 1200 | 15 | 5 | Private Land |
| 227 | 22+606 | Timila | <i>Ficus sarmentosa</i> | 1 | 600 | 3 | 2 | Private Land |
| 228 | 22+610 | kutmiro | <i>Litsea polyantha</i> | 1 | 650 | 10 | 2 | Private Land |
| 229 | 22+615 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 450 | 10 | 2 | Private Land |
| 230 | 22+615 | Paiyu | <i>Prunus sarasoides</i> | 1 | 500 | 10 | 2 | Private Land |
| 231 | 22+663 | Utis | <i>Alnus nepalensis</i> | 3 | 500 | 15 | 5 | Private Land |
| 232 | 22+663 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 700 | 6 | 1.5 | Private Land |
| 233 | 22+687 | Utis | <i>Alnus nepalensis</i> | 3 | 400 | 15 | 3 | Private Land |
| 234 | 22+873 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 750 | 6 | 3 | Private Land |
| 235 | 23+018 | Chilaune | <i>Schima wallichii</i> | 1 | 900 | 20 | 5 | Private Land |
| 236 | 23+034 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 1200 | 25 | 10 | Private Land |
| 237 | 23+086 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 600 | 5 | 3 | Private Land |
| 238 | 23+137 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 900 | 15 | 5 | Private Land |
| 239 | 23+153 | Chilaune | <i>Schima wallichii</i> | 1 | 1100 | 15 | 5 | Private Land |
| 240 | 23+176 | Dhupi | <i>Cryptomeria japonica</i> | 1 | 800 | 4 | 3 | Private Land |
| 241 | 23+204 | Dudhilo | <i>Ficus neriifolia</i> | 1 | 900 | 15 | 5 | Private Land |
| 242 | 23+584 | Malgedi | <i>Cinnamomum glaucescens</i> | 1 | 1500 | 15 | 10 | Private Land |
| 243 | 23+692 | utis | <i>Alnus nepalensis</i> | 1 | 500 | 15 | 2 | Private Land |
| 244 | 23+876 | Chilaune | <i>Schima wallichii</i> | 1 | 900 | 25 | 5 | Phalam Pokhari CF |
| 245 | 23+879 | Chilaune | <i>Schima wallichii</i> | 1 | 700 | 15 | 5 | Phalam Pokhari CF |
| 246 | 23+884 | Guras | <i>Rhododendron arboreum</i> | 1 | 700 | 5 | 3 | Phalam Pokhari CF |
| 247 | 23+890 | Chilaune | <i>Schima wallichii</i> | 1 | 900 | 20 | 3 | Phalam Pokhari CF |
| 248 | 23+897 | Guras | <i>Rhododendron arboreum</i> | 1 | 700 | 8 | 4 | Phalam Pokhari CF |
| 249 | 23+899 | Chilaune | <i>Schima wallichii</i> | 1 | 800 | 25 | 3 | Phalam Pokhari CF |
| 250 | 23+913 | Utis | <i>Alnus nepalensis</i> | 1 | 1300 | 50 | 15 | Phalam Pokhari CF |
| 251 | 23+936 | Chilaune | <i>Schima wallichii</i> | 1 | 1250 | 40 | 5 | Phalam Pokhari CF |
| 252 | 23+956 | Salla | <i>Pinus wallichiana</i> | 9 | 700 | 25 | 10 | Phalam Pokhari CF |
| 253 | 24+130 | Salla | <i>Pinus wallichiana</i> | 3 | 1200 | 30 | 5 | Phalam Pokhari CF |
| 254 | 24+149 | Utis | <i>Alnus nepalensis</i> | 2 | 450 | 15 | 5 | Phalam Pokhari CF |
| 255 | 24+161 | Paiyu | <i>Prunus sarasoides</i> | 2 | 1200 | 18 | 10 | Phalam Pokhari CF |
| 256 | 24+258 | mail | <i>Pyrus pashia</i> | 1 | 1800 | 30 | 20 | Phalam Pokhari CF |
| 257 | 24+600 | Chilaune | <i>Schima wallichii</i> | 1 | 500 | 7 | 2 | Phalam Pokhari CF |
| 258 | 24+604 | chilaune | <i>Schima wallichii</i> | 1 | 50 | 5 | 2 | Phalam Pokhari CF |
| 259 | 24+821 | Utis | <i>Alnus nepalensis</i> | 10 | 400 | 15 | 5 | Phalam Pokhari CF |
| 260 | 25+381 | Salla | <i>Pinus wallichiana</i> | 2 | 70 | 15 | 5 | Chandramukhi CF |

Government of Nepal
 Ministry of Federal Affairs and General Administration
 Department of Local Infrastructure
 Rural Connectivity Improvement Project (RCIP)
 Project Coordination Unit
 Lalitpur

Joint Venture
 2076
 Singha Durbar, Kathmandu

Government of Nepal
 Ministry of Federal Affairs and General Administration
 Singha Durbar, Kathmandu

| SN | Chainage | Local Name | Scientific Name | Nos. | Girth (mm) | Height (m) | Coverage (m) | Forest Name |
|-----|----------|------------|----------------------------|------------|------------|------------|--------------|---------------------------------|
| 261 | 25+390 | Salla | <i>Pinus wallichiana</i> | 1 | 900 | 15 | 5 | Chandramukhi CF |
| 262 | 25+394 | Salla | <i>Pinus wallichiana</i> | 5 | 900 | 15 | 5 | Chandramukhi CF |
| 263 | 25+398 | Salla | <i>Pinus wallichiana</i> | 6 | 1300 | 25 | 10 | Chandramukhi CF |
| 264 | 25+419 | Salla | <i>Pinus wallichiana</i> | 5 | 900 | 20 | 8 | Chandramukhi CF |
| 265 | 25+433 | Salla | <i>Pinus wallichiana</i> | 3 | 800 | 25 | 8 | Chandramukhi CF |
| 266 | 25+474 | Salla | <i>Pinus wallichiana</i> | 8 | 700 | 15 | 5 | Chandramukhi CF |
| 267 | 25+553 | Salla | <i>Pinus wallichiana</i> | 1 | 1200 | 25 | 6 | Chandramukhi CF |
| 268 | 25+559 | Salla | <i>Pinus wallichiana</i> | 1 | 1100 | 20 | 10 | Chandramukhi CF |
| 269 | 25+570 | Salla | <i>Pinus wallichiana</i> | 4 | 1000 | 15 | 5 | Chandramukhi CF |
| 270 | 25+585 | Salla | <i>Pinus wallichiana</i> | 1 | 70 | 15 | 5 | Chandramukhi CF |
| 271 | 25+622 | Utis | <i>Alnus nepalensis</i> | 3 | 500 | 20 | 5 | Chandramukhi CF |
| 272 | 25+632 | Utis | <i>Alnus nepalensis</i> | 1 | 450 | 5 | 2 | Chandramukhi CF |
| 273 | 26+026 | Salla | <i>Pinus wallichiana</i> | 1 | 800 | 6 | 4 | Chandramukhi CF |
| 274 | 26+092 | Salla | <i>Pinus wallichiana</i> | 1 | 400 | 10 | 2 | Chandramukhi CF |
| 275 | 26+092 | Salla | <i>Pinus wallichiana</i> | 1 | 800 | 10 | 4 | Chandramukhi CF |
| 276 | 26+097 | Lakuri | <i>Fraxinus floribunda</i> | 1 | 450 | 5 | 3 | Chandramukhi CF |
| 277 | 26+106 | Salla | <i>Pinus wallichiana</i> | 1 | 450 | 8 | 4 | Chandramukhi CF |
| 278 | 26+109 | Dudhilo | <i>Ficus nerifolia</i> | 1 | 650 | 10 | 5 | Chandramukhi CF |
| 279 | 26+285 | Utis | <i>Alnus nepalensis</i> | 1 | 500 | 8 | 3 | Chandramukhi CF |
| 280 | 26+541 | Salla | <i>Pinus wallichiana</i> | 3 | 60 | 8 | 5 | Chandramukhi CF |
| 281 | 26+660 | Salla | <i>Pinus wallichiana</i> | 1 | 1000 | 30 | 4 | Chandramukhi CF |
| 282 | 26+716 | Salla | <i>Pinus wallichiana</i> | 18 | 550 | 12 | 5 | Chandramukhi CF |
| 283 | 26+729 | Salla | <i>Pinus wallichiana</i> | 7 | 450 | 12 | 5 | Chandramukhi CF |
| 284 | 26+733 | Salla | <i>Pinus wallichiana</i> | 9 | 1000 | 30 | 5 | Chandramukhi CF |
| 285 | 26+787 | Salla | <i>Pinus wallichiana</i> | 8 | 1000 | 40 | 5 | Chandramukhi CF |
| 286 | 26+789 | Salla | <i>Pinus wallichiana</i> | 1 | 450 | 10 | 5 | Chandramukhi CF |
| 287 | 26+808 | Salla | <i>Pinus wallichiana</i> | 2 | 400 | 10 | 5 | Chandramukhi CF |
| 288 | 26+871 | Salla | <i>Pinus wallichiana</i> | 1 | 900 | 20 | 8 | Chandramukhi CF |
| 289 | 26+882 | Salla | <i>Pinus wallichiana</i> | 2 | 900 | 25 | 4 | Chandramukhi CF |
| 290 | 27+085 | Katus | <i>Castanopsis indica</i> | 4 | 300 | 6 | 3 | Chandramukhi CF |
| 291 | 28+916 | Salla | <i>Pinus wallichiana</i> | 2 | 800 | 18 | 4 | Ratmate CF |
| 292 | 29+102 | Salla | <i>Pinus wallichiana</i> | 3 | 1100 | 25 | 5 | Ratmate CF |
| 293 | 29+223 | Salla | <i>Pinus wallichiana</i> | 1 | 400 | 4 | 3 | Private Land |
| 294 | 29+243 | Salla | <i>Pinus wallichiana</i> | 5 | 800 | 10 | 3 | Private Land |
| 295 | 30+527 | Salla | <i>Pinus wallichiana</i> | 4 | 900 | 20 | 5 | Jhopsing Khola Kabuliyat Forest |
| 296 | 31+602 | Salla | <i>Pinus wallichiana</i> | 4 | 700 | 20 | 5 | Kabling CF |
| 297 | 33+030 | Paiyu | <i>Prunus sarasoides</i> | 1 | 800 | 15 | 2 | Private Land |
| 298 | 33+256 | Utis | <i>Alnus nepalensis</i> | 1 | 1000 | 20 | 10 | Private Forest |
| | | | Total | 451 | | | | |


 Government of Nepal
 Ministry of Federal Affairs and General Administration
 Department of Local Infrastructures
 Rural Connectivity Improvement Project (RCIP)
 Project Coordination Unit
 Lalitpur




 Government of Nepal
 Ministry of Federal Affairs and General Administration
 Singha Durbar, Kathmandu

Appendix 14

Copy of Cabinet Decision on

Plantation on Compensated Land

Ministry of Federal
Department
Rural Cooperation
P.O. Box 20



Ministry of
Government of Nepal
Ministry of Federal Affairs and General Administration
Singha Durbar, Kathmandu



नेपाल सरकार

वन तथा वातावरण मन्त्रालय

EX: प्रो.स.नं.: ३२८७
सिंहदरबार, काठमाडौं

वन तथा जलवायु महाशाखा
नेपाल सरकार
वन तथा वातावरण मन्त्रालय
सिंहदरबार काठमाडौं

वन तथा भू-संरक्षण विभाग
दस्तावेज नं.: २९२६
मिति: ०६०६/०६/१९

मिति: २०७७/१०/१९

पत्र संख्या :- व.भू. ०७७/७८
चलानी नं.:
प्राप्त पत्र संख्या र मिति :-

विषय: मन्त्रपरिषद्को निर्णय सम्बन्धमा ।

श्री वन तथा भू-संरक्षण विभाग,
बबरमहल ।

Handwritten notes and signatures:
A. V. N. M. ०-६५-३ H
१६/११/१९
०६०६/०६/१९

उपरोक्त सम्बन्धमा केही ग्रामीण सडकहरुको स्तरोन्नतिका लागि राष्ट्रिय वन क्षेत्र प्रयोग गर्न दिने विषयको वन तथा वातावरण मन्त्रालयको नं. १५।२२-०७७/६।२५ को प्रस्ताव मं.प.बै.सं. ४२/०७७ मिति २०७७/७/४ को मन्त्रपरिषद्को बैठकमा पेश हुँदा त्यसमा नेपाल सरकार, मन्त्रपरिषद्ले "प्रस्तावमा लेखिएबमोजिम गर्ने" निर्णय गरेकोले सोबमोजिम कार्यान्वयन गर्ने ब्यवस्थाका लागि मन्त्रपरिषद्को सम्बन्धित निर्णय (प्रस्ताव र अनुसूची) को छाँयाप्रति र तहाँको सक्कलै फायलहरु यसैसाथ संलग्न राखी पठाईएको ब्यहोरा आदेशानुसार अनुरोध छ ।

०६०६/०६/१९
लोकनाथ घिमिरे
(स.वन अधिकृत)

बोधार्थ :

श्री संघीय मामिला तथा सामान्य प्रशासन मन्त्रालय, सिंहदरबार ।

श्री योजना, अनुगमन तथा समन्वय महाशाखा, वन तथा वातावरण मन्त्रालय, सिंहदरवार ।

Handwritten notes and stamps:
०६/१२/१९
०६/१२/१९
०६/१२/१९
Ministry of Rural Connectivity
Department of
Project



४
१/०६/१२

विषय: केही ग्रामीण सडकहरूको स्तरोन्नतिका लागि राष्ट्रिय वन क्षेत्र प्रयोग गर्न दिने ।

प्रस्ताव पेश गर्न विभागीय मन्त्रीबाट स्वीकृति प्राप्त मिति: २०७७।६।२१

१. विषयको संक्षिप्त व्यहोरा:

संघीय मामिला तथा सामान्य प्रशासन मन्त्रालय, स्थानीय पूर्वाधार विभागको बजेट कार्यक्रम बमोजिम ग्रामीण सञ्जाल सुधार आयोजना (RCIP) अन्तर्गत परेका धनकुटाको मुद्देशनिश्चरे-डाँडागाउँ-चनुवा सडक लगायतका ४ वटा ग्रामीण सडकहरूको पुनर्निर्माण/स्तरोन्नति गर्नका लागि राष्ट्रिय वन क्षेत्र प्रयोग गर्न अनुमति दिन भनी स्वीकृत प्रारम्भिक वातावरणीय परीक्षण (IEE / Updated EMP) प्रतिवेदनहरू संलग्न राखी सम्बन्धित योजनाहरूबाट माग भई आएको ।

२. प्राप्त परामर्श तथा अन्य प्रासङ्गिक कुरा:

क) संघीय मामिला तथा सामान्य प्रशासन मन्त्रालयको प.सं. ०७७।७८ च.नं. ६८ मिति २०७७/०६/०१ को पत्रहरूमा उक्त सडक लगायतका ४ वटा ग्रामीण सडकहरू स्तरोन्नति गर्ने कार्यका लागि राष्ट्रिय वन क्षेत्रको भोगाधिकार तथा रुखहरू हटाउन दिन सिफारिस भएको, (उक्त पत्रको छाँयाकपी संलग्न छ) ।

ख) राष्ट्रिय योजना आयोगको प.सं. ०७४।७५ च.नं. १०७७ मिति २०७५/०३/०४ को पत्रबाट ग्रामीण सञ्जाल सुधार आयोजना (RCIP) लाई राष्ट्रिय प्राथमिकता प्राप्त कार्यक्रमको रूपमा सिफारिस गरिएको, (उक्त पत्रको छाँयाकपी संलग्न छ) ।

३. प्रस्ताव पेश गर्न पर्नाको कारण र मन्त्रालयको सिफारिस:

नेपाल सरकार स्थानीय पूर्वाधार विभागको बजेट कार्यक्रममा रहेको ग्रामीण सञ्जाल सुधार आयोजना (RCIP) अन्तर्गतका ४ वटा सडकहरू (धनकुटाको मुद्देशनिश्चरे-डाँडागाउँ-चनुवा सडक, रुकुम (हाल पूर्वी रुकुम) को सोलाबाङ-राउखेत-बालुवा नाथगडपुल-जामाबगर सिमलचौर-हुकुम रन्मामडकोट सडक, सिन्धुलीको तल्लो रानिबास-हर्षादी-टाडी धनसरी सडक, सिन्धुलीको दुधौली- लखिमा रातामाटा - कर्था ठाकुरदमार-अरुणठाकुर सडक) को चौडाइ विस्तार/मोड सुधारसहित कालोपत्रेमा स्तरोन्नति (Upgrading) गर्नका लागि धनकुटा, पूर्वी रुकुम र सिन्धुली जिल्लाहरूको कूलजम्मा १८.०९१ हेक्टर राष्ट्रिय वन क्षेत्र प्रयोग गर्न र तहाँ रहेका जम्मा ६७३ वटा रुखविरुवाहरू हटाउनु बाहेक अन्य विकल्प नभएको भनी स्वीकृत प्रारम्भिक वातावरणीय परीक्षण (IEE / Updated EMP) प्रतिवेदनहरूमा उल्लेख भएको र उक्त सडक योजनाहरू राष्ट्रिय प्राथमिकता प्राप्त कार्यक्रम / आयोजना रहेकोले संघीय मामिला तथा सामान्य प्रशासन मन्त्रालयको सिफारिस बमोजिम ती ४ वटा सडकहरू स्तरोन्नति गर्न कूलजम्मा १८.०९१ हेक्टर राष्ट्रिय वन क्षेत्र प्रयोग गरी तहाँ रहेका जम्मा ६७३ वटा रुखविरुवाहरू हटाउन दिन उपयुक्त रहेको भनी स्थलगत विवरणसहितको राय सम्बन्धित डिभिजन वन कार्यालयहरू धनकुटा, पूर्वी रुकुम र सिन्धुली एवं वन तथा भू-संरक्षण विभाग समेतबाट प्राप्त भएको हुनाले यी ४ वटा सडकहरूको पुनर्निर्माण/स्तरोन्नति गर्ने कार्य तोकिएको समयावधिभित्रै सम्पन्न गर्नका लागि उक्त १८.०९१ हेक्टर वन क्षेत्र प्रयोग गर्न दिन वन ऐन, २०७६, वन नियमावली, २०५१ र राष्ट्रिय प्राथमिकता प्राप्त योजनाको लागि राष्ट्रिय वन क्षेत्र प्रयोग गर्ने सम्बन्धी मापदण्ड सहितको कार्यविधि, २०७६ बमोजिम नेपाल सरकार मन्त्रपरिषदमा प्रस्ताव पेश गर्न माननीय वन तथा वातावरण मन्त्रीज्यूबाट मिति २०७७।६।२१ मा स्वीकृति प्राप्त भएकाले नेपाल सरकार (कार्यसम्पादन) नियमावली, २०६४ को अनुसूचि-१ को विषयसंख्या ३५ बमोजिम यो प्रस्ताव पेश गरिएको छ ।



सचिव





४. निर्णय हुनुपर्ने व्यहोरा:

वन ऐन, २०७६ को दफा ४२ अनुसार स्थानीय पूर्वाधार विभागलाई ४ वटा ग्रामीण सञ्जाल सड (धनकुटाको मुदेशनिश्चरे-डाँडागाउँ-चनुवा सडक, पूर्वी रुकुमको सोलाबाड-राउखेत-बालुवा नायगल जामाबगर सिमलचौर-हुकुम रन्मामइकोट सडक र सिन्धुलीको तल्लो रानिबास-हर्षादी-टाडी धनसरी सडक दुधौली- लखिमा रातामाटा - कर्था ठाकुरदमार-अरुणठाकुर सडक) को मोड सुधारसहित पुनर्निमाण/स्तर (Upgrading) गर्नका लागि संलग्न अनुसूचीका शर्तहरू पालना हुनेगरी धनकुटा, पूर्वी रुकुम र सि जिल्लामा रहेको कूलजम्मा १८.०९१ हेक्टर (अठार दशमलव शून्य नौ एक हेक्टर) राष्ट्रिय वन क्षेत्र गर्न दिने र तहाँ रहेका जम्मा ६७३ वटा रुखविरुवाहरू हटाउन समेत स्वीकृति दिने ।

मिति: २०७७।६।२२

(डा. विश्वनाथ ओ
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उक्त ४ वटा सडकहरूको स्तरोन्नति गर्ने क्रममा वन क्षेत्र प्रयोग गर्दा स्थानीय पूर्वाधार विभाग / आयोजन सडक योजनाहरूले पालना गर्नु पर्ने शर्तहरू :

१. स्थानीय पूर्वाधार विभागले निम्न ग्रामीण सडक योजनाहरूको निर्माण सुधार/स्तरोन्नतिका लागि वन प्रयोग गर्नु पूर्व वन तथा भू-संरक्षण विभागसंग सम्झौता / समझदारीपत्र (एमओयू) गर्नु पर्नेछ ।

अ) मुढेशनिधारे-डाँडागाउँ-चनुवा सडक आयोजना (१०.३४ कि.मी.), धनकुटाको लागि ३.७७१ हेक्टर क्षेत्र प्रयोग गर्ने र ८३ वटा रुख हटाउने ।

आ) सोलाबाड-राउखेत-बालुवा नायगडपुल-जामाबगर सिमलचौर-हुकुम रन्मामइकोट सडक आयोजना (११.६३ कि.मी.), पूर्वी रुकुमको लागि ३.७३० हेक्टर वन क्षेत्र प्रयोग गर्ने र २९४ वटा रुख हटाउने

इ) तल्लो रानिबास-हर्षादी-टाडी धनसरी सडक आयोजना, (१२.७५ कि.मी.), सिन्धुलीको लागि ६.४८ हेक्टर वन क्षेत्र प्रयोग गर्ने र १३९ वटा रुख हटाउने ।

ई) दुधौली- लखिमा रातामाटा - कर्था ठाकुरदमार-अरुणठाकुर सडक आयोजना, (१३.०१ कि.मी) सिन्धुलीको लागि ४.१९० हेक्टर वन क्षेत्र प्रयोग गर्ने र १५७ वटा रुख हटाउने ।

२. स्थानीय पूर्वाधार विभाग र उल्लेखित योजनाहरूले स्वीकृत प्रारम्भिक वातावरणीय परीक्षण (IEE Updated EMP) प्रतिवेदनहरू उल्लेखित शर्तहरू र क्षति न्यूनिकरणका उपायहरू एवं वातावरणीय व्यवस्था योजनालाई आफ्नै लागतखर्चमा अनिवार्य रूपमा पालना गर्नु गराउनु पर्नेछ ।

३. क. वन ऐन २०७६ को दफा ४२ (२) बमोजिम आयोजना निर्माण गर्दा वन क्षेत्रभित्र ओगट १८.०९१ हेक्टर (अठार दशमलव शून्य नौ एक हेक्टर) क्षेत्रफल भन्दा कम नहुने गरी प्रवर्द्धक आयोजनाले नेपाल सरकारलाई सम्भव भएसम्म आयोजनास्थलको नजिक पर्ने राष्ट्रिय वनक्षेत्रसँग जोडिएको समान भौगोलिक र पारिस्थिकीय क्षेत्रमा पर्ने तथा वनको विकास गर्न सकिने भूवोट भएको सट्टाभर्नास्वरु जग्गा उपलब्ध गराउनु पर्नेछ । यो जग्गा नेपाल सरकार, वन तथा भूसंरक्षण विभागको नाममा रजिष्ट्रेश पास भएको हुनु पर्नेछ । सम्बन्धित डिभिजन वन कार्यालयको सिफारिसमा विभागले यो जग्गा प्राप्त ग व्यवस्था मिलाउने छ । नेपाल सरकारले यो जग्गा प्राप्त नगरेसम्म योजनाले उल्लेखित वन क्षेत्र प्रयोग ग ल्याउन पाउने छैन । यसरी सट्टा प्राप्ति भएको जग्गालाई राष्ट्रिय वन क्षेत्रका रूपमा कायम गरी संरक्षण गः पर्नेछ ।

ख. उक्त सट्टा जग्गा उपलब्ध गराउन नसकेमा आयोजनाले उल्लेखित कार्यविधि, २०७६ बमोजिमकं रकम वन विकास कोषमा दाखिला हुनेगरी वन तथा वातावरण मन्त्रालयलाई उपलब्ध गराउनु पर्नेछ । यं रकम दाखिला गर्ने आवश्यक प्रबन्ध संघीय मामिला तथा सामान्य प्रशासन मन्त्रालय, स्थानीय पूर्वाधार विभाग र आयोजनाले मिलाउनु पर्नेछ ।

४. प्रवर्द्धक/आयोजनाले सट्टा उपलब्ध गराईएको अवस्थामा उक्त जग्गामा आफ्नै लागतखर्चमा प्रति हेक्टर १६०० बिरुवाको दरले बृक्षरोपण गरी पाँच बर्षसम्म ती बिरुवाको संरक्षण तथा सम्बर्द्धन गरी संबन्धित डिभिजन वन कार्यालयलाई हस्तान्तरण गर्नु पर्नेछ ।

५. उक्त सडक आयोजनाहरू निर्माण गर्दा हटाउनु पर्ने भनी लगत पेश भएका कूलजम्मा ६७३ वटा रुखविरुवाहरू प्रचलित कानून बमोजिम उक्त डिभिजन वन कार्यालयहरू र सम्बन्धित सामुदायिक वनसंग समन्वय गरी आयोजनाहरूले आफ्नै लागतखर्चमा कटानमुद्दान गरी उत्पादन हुन जाने काठदाउरा सुरक्षित घाटगद्दी गर्नु पर्नेछ । उक्त डिभिजन वन कार्यालयहरूले उत्पादित काठदाउराहरू नियन्त्रणसार् हस्तान्तरण र व्यवस्थापनको व्यवस्था मिलाउनेछ ।

६. प्रवर्द्धक / आयोजनाले IEE / Revised EMP बमोजिम हुँदाइने उक्त रुखविरवाहरुको सट्टा १:२५ व दरले हुनेगरी तत् तत् वन कार्यालयले तोकेको स्थानमा बृक्षारोपण गरी सोको ५ वर्षसम्म स्याहारसंभार गर्न उक्त कार्यालयलाई हस्तान्तरण गर्नु पर्नेछ । गरि आयोजना गाउँको बुँदा नं. ४ र ६ बमोजिमको बृक्षारोपण र स्याहारसंभार गर्न नसकेमा स्वीकृत नर्सि अनुसार हुनआउने एकमुष्ट रकम वन बिकास कोषमा जम्मा गर्नु पर्नेछ ।

७. प्रवर्द्धकले स्वीकृत डिजाइन र IEE / Revised EMP प्रतिबेदनहरुमा उल्लेखित भएबमोजिम हुनेगरी सडक आयोजनाका संरचना निर्माण गर्ने व्यवस्था मिलाउनु पर्नेछ । वन तथा भूसंरक्षण विभागको पूर्व स्वीकृति नलिई वन क्षेत्रभित्र यी आयोजनाको तोकिएको संरचना एवं डिजाइनमा कुनै किसिमको परिमार्जन / संशोधन वा फेरबदल गर्न पाइने छैन ।

८. क. प्रवर्द्धक/आयोजनाले उक्त वन क्षेत्रको जग्गा जुन प्रयोजनका लागि प्राप्त गरेको हो सोही प्रयोजनका लागि मात्र प्रयोग गर्नु पर्नेछ ।

ख. उल्लेखित जग्गाको भू-स्वामित्व नेपाल सरकारमा नै रहनेछ । यो जग्गा दर्ता गर्न, अन्यथा हुने गरि प्रयोग गर्न, धितो बन्धकी राख्न र अरु कसैलाई हक हस्तान्तरण गर्न समेत पाइने छैन । यस वरपर अतिक्रमण भएमा वा कुनैपनि कारणबाट भू-उपयोग बदलिएमा आयोजना उपर प्रचलित ऐनकानून अनुसार कारवाही हुनेछ ।

९. क. प्रवर्द्धक र आयोजनाहरुले वन ऐन २०७६, वन नियमावली २०५१, राष्ट्रिय वन क्षेत्र प्रयोग गर्ने सम्बन्धी मापदण्ड सहितको कार्यविधि, २०७६ लगायतका सबै प्रचलित नियम कानूनहरुको पूर्णपालना गर्नु पर्नेछ । साथै विभागसंगको संझौतामा रहेका शर्तहरु लगायत नेपाल सरकार, वन तथा वातावरण मन्त्रालयबाट दिइने / दिईएका निर्देशनहरु समेत पालना गर्नु पर्नेछ । उल्लेखित शर्त एवं निर्देशनहरु पालना नगरेमा वन तथा वातावरण मन्त्रालयबाट आयोजना प्रमुख उपर कारबाही गरी एकपक्षीय रुपमा दिएका अनुमति, निर्णय तथा सम्झौता समेत बदर गरिनेछ ।

ख. यस सन्दर्भमा वन तथा वातावरण मन्त्रालयबाट तोकिएको थप शर्तहरु / निर्देशनहरु समेत आयोजनाले पालना गर्नु पर्नेछ ।

१०. क. आयोजनाले हरेक आ.व.को समासिपछिको २ महिनाभित्र अनिवार्य रुपमा भएगरेको कार्यप्रगति वन तथा भू-संरक्षण विभागमा पेश गर्नु पर्नेछ ।

ख. तोकिएका शर्तहरु पालना गरे नगरेका बारेमा अनुगमन गरी वन तथा वातावरण मन्त्रालय र संबन्धित निकायमा प्रतिबेदन पेश गर्नका लागि निम्न अनुसारको अनुगमन संयन्त्र रहनेछ । अनुगमन संयन्त्रले कम्तिमा पनि वर्षको एक पटक अनुगमन गरी प्रतिबेदन दिनेछ । वन तथा वातावरण मन्त्रालय एवं सो मातहतका निकायले आवश्यकता अनुसार योजना/परियोजनास्थलको अनुगमन गर्न सक्नेछन् । उक्त समितिबाट अनुगमन गराइ प्रतिबेदन पेश गर्ने दायित्व आयोजनाकै हुनेछ ।

क) उपमहानिर्देशक, वन तथा भू-संरक्षण विभाग

ख) संघीय मामिला तथा सामान्य प्रशासन मन्त्रालयको उपसचिव

ग) संबन्धित जि.स.स.को अधिकृत प्रतिनिधि

घ) संबन्धित को.ले.नि.का.को अधिकृत प्रतिनिधि

ङ) संबन्धित आयोजनाको प्रमुख

च) संबन्धित डिभिजनल वन अधिकृतहरु (धनकुटा पूर्वी रुकुम र सिन्धुली)



- सदस्य
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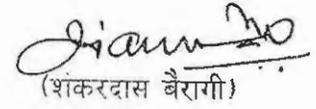
श्री सचिव,
वन तथा वातावरण मन्त्रालय ।

केही ग्रामीण सडकहरूको स्तरोन्नतिका लागि राष्ट्रिय वन क्षेत्र प्रयोग गर्न दिने विषयको वन तथा वातावरण मन्त्रालयको दर्ता नं. १५/२२-०७७/६/२५ को प्रस्ताव मं.प.वै.सं. ४२/०७७ मिति २०७७/७/४ को मन्त्रिपरिषद्को बैठकमा पेश हुँदा त्यसमा नेपाल सरकार मन्त्रिपरिषद्ले देहायबमोजिम निर्णय गरेकाले सोबमोजिम कार्यान्वयन हुन नेपाल सरकार (कार्यसम्पादन) नियमावली, २०६४ को नियम २९, बमोजिम अनुरोध गरेकोछु -

नेपाल सरकारको निर्णय -

"प्रस्तावमा लेखिएबमोजिम गर्ने ।"

A.S.S./Anam Jankari
Sachiv
06/06/92


(शंकरदास बैरागी)

मुख्यसचिव
२०७७/७/४



Appendix 15
Photographs

Ministry of Health and Family Welfare
Department of Health Services
Rural Connectivity Improvement Project (RCIP)
Project Coordination Unit
Lalitpur



Ministry of Federal Affairs and General Administration
Singha Durbar, Kathmandu



Conducting household survey



Road side stone tap at Panighat Ch 11+580



Collecting water sample for lab test at Ch 17+200



Conducting Public hearing at Doramba Sailung Rural Municipality, Ward 2 office



Conducting Public hearing at Sunapati Rural Municipality



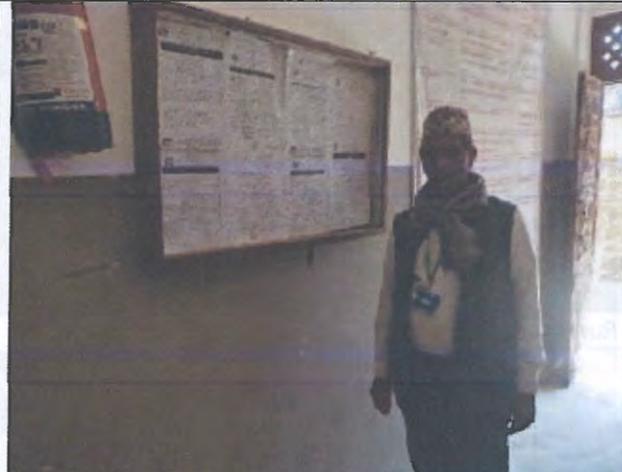


Posting of the public notice on the notice board of Khadadevi Rural Municipality office



Hospital at road side at CH 31+050

School at Galpa 25+400



Posting public notice at Division Forest Office, Ramechhap

Measuring Girth of tree



Appendix 16
Comments and Response Matrix



| SN | Comment | Response |
|----|--|---|
| 1 | निजि जग्गा प्राप्त प्रक्रिया र हालसम्मको अवस्था उल्लेख गर्ने । | Section 2.6 - Impact on Land Use; Section 2.11.2.5 - Community Participation Plan (CPP); Section 5.2.5 - Land Acquisition, Resettlement, and Rehabilitation Policy for Infrastructure Development Project 2071 BS (2015 AD). Section 8.2.3.1 (i) - Mitigation Measures ; |
| 2 | चुरे क्षेत्र र खहरेबाट आउन सक्ने बाढी नियन्त्रण व्यवस्था बारे उल्लेख गर्ने । | The subproject location is not in Chure region |
| 3 | निर्माण सामग्री उपलब्धता र प्रयोग गरिने क्षेत्रको पहिचान । | Included in 4.1.6 |
| 4 | चुरे क्षेत्रको सडक निर्माण गर्दा चुरे क्षेत्र बाहेक बाहिरबाट निर्माण सामग्री ल्याउने सम्बन्धि व्यवस्था उल्लेख गर्ने । | Not applicable for this IEE study: The subproject location is not in Chure region |
| 5 | पुल तथा कल्भर्ट वारेमा बिस्तृतमा उल्लेख गर्ने । | Bridge is not proposed for the subproject. Culverts details in given in Section 3.2 |
| 6 | Landslide, Erosion सहित landscape को बारेमा उपयुक्त व्यवस्था मिलाउने । | Section 4.1.4 and Section 8.2.1.2 |
| 7 | Bioengineering उल्लेख गर्ने, स्थानीय तह र चुरे संरक्षण प्रावधान बमोजिम अनुमति र समन्वयमा काम गर्ने । | Section 8.2.1.2 (i) regarding bioengineering Regarding Chure conservation - The subproject location is not in Chure region |
| 8 | बिद्यमान सडकको वास्तविक अवस्था उल्लेख गर्ने । | Section 3.1 |
| 9 | सडक किनारा बृक्षारोपन व्यवस्था गर्ने । | Section 8.2.2.2 (i) Table 9.3 - Adverse impact "Biological Environment - Construction Phase" |
| 10 | प्रभावित क्षेत्रमा प्रयोगमा आउने रुखको संख्या, प्रकृति सहित बिस्तृतमा उल्लेख गर्ने । | Section 4.2.1 / Table 4-8/ Appendix 13 |
| 11 | वन्यजन्तु मैत्री पूर्वाधार निर्माण गर्ने बारे व्यवस्था गर्ने । | Section 7.2.4.2 (ii) Section 8.2.2.2 (ii) |
| 12 | ऐन कानुन उल्लेख गर्दा दफा र उपदफा समेत उल्लेख गर्ने । | Section 2.4 Section 8.2.2.2 (i) |
| 13 | वैकल्पिक योजना समेत सिफारिस गर्ने । | Chapter 6 has the alternative analysis of the project. |
| 14 | डिभिजन वन कार्यालयको समन्वय र सिफारिस व्यवस्था गर्ने । | Appendix 8 (letter to Division Forest Office requesting the recommendation has been attached) |
| 15 | DPR बमोजिम EMP बनाउने, EMP को format बमोजिम बनाउने । | Updated in Table 9.3 accordingly. |
| 16 | रिपोर्टमा प्रयोग गरिएका डाटाहरुलाई पुनः एकिक हुने साथै भाषागत शुद्धतामा सुधार गर्ने । | Done Accordingly. |
| 17 | प्रभावित घर धुरीको सामाजिक आर्थिक अवस्था उल्लेख गर्ने । | Section 4.3.10 |
| 18 | प्रोजेक्टसंग specific समस्या, चुनौती र अवसर उल्लेख गर्ने । | Section 2.10 |
| 19 | डिभिजन वन कार्यालयलाई उपलब्ध गराउन प्रस्ताव गरिएको रकमहरु के कुन आधारमा कुन प्रावधानमा टेकेर गरिएको हो सो खुलाउनुपर्ने । | Section 8.2.2.2 (i). And document attached in Appendix 14. |
| 20 | सार्वजनिक utility हरू (धारा, चौतारा, टेलिफोन बुथ, विद्यालय, स्वास्थ्य चौकी जस्ता) बारेमा उल्लेख गर्ने । | Section 2.9 Section 7.2.3.1 (i) - Table 7.1 |
| 21 | संरक्षित क्षेत्र भएर जाने भएकाले त्यसका मापदण्ड उल्लेख गर्ने । | The subproject location is not in Chure region and the road does not lie on any other conservation or protected area. |
| 22 | Data Source उल्लेख गर्ने, प्रयोग भएका मापदण्ड र मापदण्ड कहाँबाट ल्याएको उल्लेख गर्ने । | Done Accordingly |

