



" විශිෂ්ට භාජ්‍ය සේවාවක් සඳහා ජප්ප කප්පවෙමු "

ප්‍රධාන ලේකම් කාර්යාලය - බස්නාහිර පළාත
பிரதான செயலாளர் அலுவலகம் - மேல் மாகாணம்
OFFICE OF THE CHIEF SECRETARY - WESTERN PROVINCE



204, ඩෙන්සිල් කොබ්බෑකඩුව මාවත, බත්තරමුල්ල.
 204, டென்சில் கொப்பேகடுவ மாவத்தை, பத்தரமுல்ல.
 204, Denzil Kobbekaduwa Mawatha, Battaramulla.

ප්‍රධාන ලේකම් } දුරකථන / தொலைபேசி / Telephone - 011 - 2092599 } ආදායම් දුරකථන }
 பிரதான செயலாளர் } தொலைபேசி / இலக்கம் / Fax - 011 - 2092601 } தொலைபேசி இலக்கம் }
 Chief Secretary } E-mail - chiefsecretary@wpc.gov.lk } General Telephone } 011 - 2093000

මගේ අංකය }
 எனது இலக்கம் }
 My No. }

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මගේ අංකය }
 உமது இலக்கம் }
 Your No. }

දිනය }
 திகதி }
 Date }

2022.03.30

පළාත් ගොඩනැගිලි අධ්‍යක්ෂ/ වාරිමාර්ග අධ්‍යක්ෂ/ අධ්‍යක්ෂ (ඉංජිනේරු),
 සාමාන්‍යාධිකාරී, පළාත් බඳු මාර්ග සංවර්ධන අධිකාරිය (බ.ප.),
 පළාත් සෞඛ්‍ය සේවා අධ්‍යක්ෂ, ප්‍රාදේශීය සෞඛ්‍ය අධ්‍යක්ෂ (කොළඹ, ගම්පහ, කළුතර)
 පළාත් පාලන කොමසාරිස් සහ සියලුම පළාත් පාලන ආයතන ලේකම්වරුන්,
 බස්නාහිර පළාතේ සියලුම ප්‍රාදේශීය ලේකම්වරුන්,
 ප්‍රාදේශීය ඉංජිනේරුවරුන්,

ගොඩනැගිලි ගාස්තු උපලේඛණය සංශෝධනය කිරීම - 2022 - Revision - 01

2022 වර්ෂයට අදාලව ගොඩනැගිලි ගාස්තු උපලේඛණය සකස් කර 2022.02.03 දින නිකුත් කිරීමෙන් පසු පවතින වෙළෙඳ පොල මිල ගණන් උච්චාවචනය මත ගොඩනැගිලි ද්‍රව්‍යවල මිල ගණන් වැඩි වීම හේතුවෙන් නැවත ගොඩනැගිලි ගාස්තු උපලේඛණය සංශෝධනය කර මේ සමඟ ඉදිරිපත් කර ඇත. පළාත් බඳු මාර්ග සංවර්ධන අධිකාරිය විසින් නිකුත් කරන මාර්ග ගාස්තු උපලේඛණය ද නව මිල ගණන් යටතේ සංශෝධනය කර මේ සමඟ ඉදිරිපත් කරන බව කාරුණිකව දන්වා සිටිමි. මෙම ලේඛණය 2022.03.30 දින සිට නැවත දැනුම් දෙනතුරු වලංගු වේ.

ජී. ඩබ්. පී. පෙරේරා,
 නියෝජ්‍ය ප්‍රධාන ලේකම් (ඉංජිනේරු) - වැ.බ
 බස්නාහිර පළාත.

ජී. ඩබ්. පී. පෙරේරා
 නියෝජ්‍ය ප්‍රධාන ලේකම් (ඉංජිනේරු) (වැ.බ)
 ප්‍රධාන ලේකම් කාර්යාලය (බ.ප)
 පස්වන මහල, අංක 204,
 ඩෙන්සිල් කොබ්බෑකඩුව මාවත,
 බත්තරමුල්ල.

පිටපත්:

1. ප්‍රධාන ලේකම් (බ.ප.) : කරු.දැ.ස.
2. දිස්ත්‍රික් ලේකම්වරුන් (කොළඹ/ ගම්පහ/ කළුතර) :

දිස්ත්‍රික් ලේකම් කාර්යාලයේ
 ඉංජිනේරුවරුන්ගේ දැනගැනීම සඳහා
 යොමුකරන්න

3. බස්නාහිර පළාතේ සියලුම අමාත්‍යාංශ ලේකම්වරුන් : කරු.දැ.ස.
4. නියෝජ්‍ය ප්‍රධාන ලේකම් (මූල්‍ය/ සැලසුම්) : කරු.දැ.ස.
5. අධ්‍යක්ෂ (අභ්‍යන්තර විගණන) : කරු.දැ.ස.
6. විගණන අධිකාරී : කරු.දැ.ස.

ස්වදේශ්‍ය ප්‍රධාන ලේකම් பிரதான செயலாளர் Deputy Chief Secretary	පාලන நிர்வாகம் Administration	පිරිස් හා සුලභී ஆளணி மற்றும் பயிற்சி Personnel & Training	මූල්‍ය நிதி Finance	සංලක්ෂි திட்டமிடல் Planning	ඉංජිනේරු பொறியியல் Engineering	ප්‍රධාන අභ්‍යන්තර විගණන பிரதான உள்ளக அமைச்சர் Chief Internal Auditor	
	Tel : 0112092606 Fax : 0112092609 dcsadmin@cs.wpc.gov.lk	Tel : 0112092631 Fax : 0112092647 dcspt@cs.wpc.gov.lk	Tel : 0112092640 Fax : 0112092636 dcsfinance@cs.wpc.gov.lk	Tel : 0112092532 Fax : 0112092533 dsplan@cs.wpc.gov.lk	Tel : 0112092501 Fax : 0112092505 dcs@eng.wpc.gov.lk	Tel : 0112092628 Fax : 0112092625 cia@cs.wpc.gov.lk	



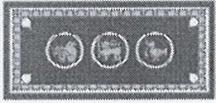
" විශිෂ්ට රාජ්‍ය සේවාවක් සඳහා ජප්ප කප්පවෙමු "

ප්‍රධාන ලේකම් කාර්යාලය - බස්නාහිර පළාත
பிரதான செயலாளர் அலுவலகம் - மேல் மாகாணம்
OFFICE OF THE CHIEF SECRETARY - WESTERN PROVINCE



204, ඩෙන්සිල් කොබ්බෑකඩුව මාවත, බත්තරමුල්ල.
 204, டென்சில் கொப்பேகடுவ மாவத்தை, பத்தரமுல்ல.
 204, Denzil Kobbekaduwa Mawatha, Battaramulla.

ප්‍රධාන ලේකම් பிரதான செயலாளர் Chief Secretary	දුරකථන / தொலைபேசி / Telephone - 011 - 2092599 ලකුණ / பெணம் / Fax - 011 - 2092601 ઈ-මේල් / மின்னஞ்சல் / E-mail - chiefsecretary@wpc.gov.lk	පොදු දුරකථන தொலைபேசி இலக்கம் General Telephone } 011 - 2093000
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මගේ අංකය
எனது இலக்கம்
My No. }

CSWP/ENG-CON/5-2/FI/1(B)

ඔබේ අංකය
உமது இலக்கம்
Your No. }

දිනය
திகதி
Date }

2022.03.30

පළාත් ගොඩනැගිලි අධ්‍යක්ෂ/ වාරිමාර්ග අධ්‍යක්ෂ/ අධ්‍යක්ෂ (ඉංජිනේරු),
 සාමාන්‍යාධිකාරී, පළාත් බදු මාර්ග සංවර්ධන අධිකාරිය (බ.ප.),
 පළාත් සෞඛ්‍ය සේවා අධ්‍යක්ෂ, ප්‍රාදේශීය සෞඛ්‍ය අධ්‍යක්ෂ (කොළඹ, ගම්පහ, කළුතර)
 පළාත් පාලන කොමසාරිස් සහ සියලුම පළාත් පාලන ආයතන ලේකම්වරුන්,
 බස්නාහිර පළාතේ සියලුම ප්‍රාදේශීය ලේකම්වරුන්,
 ප්‍රාදේශීය ඉංජිනේරුවරුන්,

ගොඩනැගිලි ගාස්තු උපලේඛණය - 2022 - Revision - 01

බස්නාහිර පළාතේ පළාත් සභාවේ මූල්‍ය රීති සංග්‍රහයේ රීති අංක 425 ප්‍රකාර ගොඩනැගිලි ඉදිකිරීම් වැඩ දියුණු කිරීම් සහ නඩත්තු කටයුතු සඳහා මුළු පිරිවැය ඇස්තමේන්තු පිළියෙල කර ගැනීමට උපයෝගී කරගත යුතු 2022 මාර්තු 30 දින සිට වලංගු ගොඩනැගිලි ගාස්තු උපලේඛණය මේ සමඟ ඉදිරිපත් කරමි. තවද මෙම ලේඛණය බස්නාහිර පළාත් සභාවේ පළාත් ඉංජිනේරු කාර්යාංශයේ වෙබ් අඩවියෙන් (eng.chiefsec.wp.gov.lk) බාගත හැක. මෙම ලේඛණය 2022.03.30 දින සිට නැවත දැනුම් දෙනතුරු වලංගු වේ.

02. මෙම ලේඛණයේ ඇතුළත් රේච් මිල ගණන් සඳහා එකතු කළ අගය මත බදු (VAT), එකතු කර නොමැත.

03. මෙම ගොඩනැගිලි ගාස්තු ලේඛණයේ සඳහන් මිල ගණන් සකසා ඇත්තේ බස්නාහිර පළාතේ දිස්ත්‍රික්ක තුනම ආවරණය වන පරිදිය. කෙසේ වුවද, මෙහි සඳහන් ද්‍රව්‍ය වල මිල හා ඇතැම් බල ප්‍රදේශ තුළ පවතින මිල ගණන් අතර සැලකිය යුතු වෙනස්කම් තිබෙනම්, ඒ පිළිබඳව මා වෙත දැන්වීමට පියවර ගන්න. එවැනි විශේෂ අවස්ථාවකදී යම් බල ප්‍රදේශයකට පමණක් සීමාවන පරිදි මිල ගණන් සංශෝධනය කිරීමට පියවර ගත හැක. මූලික ගොඩනැගිලි ද්‍රව්‍ය වල මිල ගණන් තීරණය කර ඇත්තේ 2022 වසරේ මාර්තු මාසයේ පැවති VAT රහිත මිල ගණන් පදනම් කරගෙනය. එම මිල ගණන් සඳහා වට්ටම් ඇතුළත් වී නැත.

04. මෙම රේච් මිල ගණන් පිළියෙල කර ගැනීමට උපයෝගී කරගෙන ඇති ගොඩනැගිලි ද්‍රව්‍ය සහ භාණ්ඩවල ප්‍රමිතිය (Specification), ගුණාත්මක බව (quality) සහ ඉදිකිරීම් නිමාව (Workmanship) ශ්‍රී ලංකා ප්‍රමිති (SLS), බ්‍රිතාන්‍ය ප්‍රමිති (BS - EN) සහ (A.S.T.M) ප්‍රමිතීන්ට අනුකූලව සහ ICTAD පිරිවිතර SCA/3/1, SCA/3/2, SCA/3/3, SCA/4(VOL - I), SCA/4(VOL - II), SCA/5, SCA/8 යන ප්‍රකාශනවල සඳහන් අවශ්‍යතාවයන් සහ ගුණාංගයන් සපුරාලන බව උපකල්පනය කරමිනි. ඒ අනුව මෙම මිල ගණන් උපයෝගී කර ගෙන මුළු පිරිවැය ඇස්තමේන්තු සැකසීමේ දී සහ එකී ඇස්තමේන්තු පාදක කරගෙන ගිවිසුම් වලට එළඹ

ජ්‍යෙෂ්ඨ ප්‍රධාන ලේකම් Deputy Chief Secretary	සාමාන්‍ය நிர்வாகம் Administration Tel : 0112092606 Fax : 0112092609 dcsadmin@cs.wpc.gov.lk	පිරිස් හා පුහුණු ஆளணி மற்றும் பயிற்சி Personnel & Training Tel : 0112092631 Fax : 0112092647 dcspt@cs.wpc.gov.lk	මුදල நிதி Finance Tel : 0112092640 Fax : 0112092636 dcsfinance@cs.wpc.gov.lk	සංලඳුම් திட்டமிடல் Planning Tel : 0112092532 Fax : 0112092533 dsplan@cs.wpc.gov.lk	ඉංජිනේරු பொறியியல் Engineering Tel : 0112092501 Fax : 0112092505 dcs@eng.wpc.gov.lk	ප්‍රධාන අභ්‍යන්තර විභාග பிரதான உள்ளகக் கண்காணிப்பு Chief Internal Auditor Tel : 0112092628 Fax : 0112092625 cia@cs.wpc.gov.lk	
	Tel : 0112092606 Fax : 0112092609 dcsadmin@cs.wpc.gov.lk	Tel : 0112092631 Fax : 0112092647 dcspt@cs.wpc.gov.lk	Tel : 0112092640 Fax : 0112092636 dcsfinance@cs.wpc.gov.lk	Tel : 0112092532 Fax : 0112092533 dsplan@cs.wpc.gov.lk	Tel : 0112092501 Fax : 0112092505 dcs@eng.wpc.gov.lk	Tel : 0112092628 Fax : 0112092625 cia@cs.wpc.gov.lk	

ගෙවීම් කිරීමේ දී ඉහත ප්‍රකාශනවල අඩංගු ප්‍රමිතීන්ට අනුකූල ගොඩනැගිලි ද්‍රව්‍ය පමණක් උපයෝගී කර ගෙන පුහුණු ශ්‍රමිකයන්ගේ දායකත්වයෙන්ද යුතුව ඉදිකිරීම් සිදුවිය යුතු බව අවධාරණය කරනු කැමැත්තේ.

05. මෙම රේඛ මිල ගණන් පදනම් කරගෙන පිළියෙල කරන ලද මුළු පිරිවැය ඇස්තමේන්තුව, උද්ධමනය හෝ වෙනත් හේතූන් නිසා ප්‍රසම්පාදන මාර්ගෝපදේශ සංග්‍රහයේ වගන්ති අංක 4.3.3 ප්‍රකාරව යාවත්කාලීන කර ගැනීමට අවශ්‍ය අවස්ථාවන්හිදී මිල විචලන සඳහා CIDA ආයතනයේ ප්‍රකාශිත ලංසු ලේඛන වල ඇතුළත් සූත්‍ර A හෝ B පදනම් කරගෙන රේඛ මිල ලේඛණය වලටද කළ දින සහ ඇස්තමේන්තු කරන දින අතර කාලවකවානුව තුළ සිදුව ඇති මිල විචලනය ගණනය කර ගැනීමේ සුදුසුය.

06. මෙම ගොඩනැගිලි ගාස්තු උපලේඛණයේ රේඛ මිල ගණන් අදාළ කර ගෙන පිළියෙල කරනු ලබන මුලු පිරිවැය ඇස්තමේන්තු තාත්වික වනුයේ ප්‍රසම්පාදන සංග්‍රහයේ වගන්ති අංක 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 සහ 3.8 හි සඳහන් ප්‍රසම්පාදන ක්‍රමවේද අනුගමනය කරමින් ඉටු කිරීමට අපේක්ෂිත “වැඩ” (Works) කොන්ත්‍රාත් සඳහා පමණි. වගන්ති අංක 3.7 හි සඳහන් සේව්‍යයාගේ සේවකයන් (එනම් සෘජු කම්කරු ශ්‍රමය, ද්‍රව්‍ය සහ උපකරණ යොදා Force Account යටතේ) හෝ සේව්‍යා විසින් ද්‍රව්‍ය සපයා ග්‍රම කොන්ත්‍රාත් මත හෝ ප්‍රජා දායකත්වය යටතේ ඉදිකිරීමට අපේක්ෂිත වැඩ සඳහා මෙම රේඛ මිල ගණන් වලටද නොවන අතර එවැනි ඉදිකිරීම් සඳහා 20% ලාභාංශ සහ අනෙකුත් වියදම් සමානුපාතිකව අඩුකර මුලු පිරිවැය ඇස්තමේන්තු සකස් කළ යුතුවේ.

07. මෙම ගොඩනැගිලි ගාස්තු ලේඛනයේ වැඩ විස්තර සහ රේඛ මිල ගණන් පදනම් කර ගෙන සකස් කර ගන්නා ප්‍රසම්පාදන ලියකියවිලි කට්ටලයට ඇතුළත් විය යුතු අනෙකුත් ලිපි ලේඛන සහ ගොඩනැගිලි ගාස්තු ලේඛණය පරිශීලනය කිරීමේදී සෑම නිලධාරියෙකු විසින්ම දැන සිටිය යුතු කරුණු සංක්ෂිප්තව ඇස්තමේන්තු අත්පොතේ (Estimating manual) හි ඇතුළත් කර ඇත. එම අත්පොත ඉහත වෙබ් අඩවියේ ඇතුළත් කර ඇත. මෙම අත්පොත නිරන්තරයෙන් යාවත්කාලීන වන ලේඛණයක් බැවින් වරින් වර වෙබ් අඩවියට ඇතුළු වී යාවත්කාලීන කරන ලද ලේඛණයේ (version) අංකය සමග සසඳා පරිශීලනයට ගත යුතු වේ.

08. පරිසරයට සිදුවන හානිය අවම කර ගැනීම සඳහා රජය විසින් නිකුත් කර ඇති වකුලේඛ වල උපදෙස් ප්‍රකාර ගංගා වලින් ලබා ගන්නා වැලි වෙනුවට ශ්‍රී ලංකා ඉඩම් ගොඩකිරීම් හා සංවර්ධනය කිරීමේ සංස්ථාව (SLRDC) විසින් අලෙවි කරනු ලබන “washed off-shore sand” හෝ “manufactured sand ” යොදා ගත හැකි පරිදි රේඛ මිල ගණන් ගලපා ඇත.

09. මෙම රේඛ මිල ගණන් ගණනය කිරීමට පදනම් කර ගත් කම්කරු ගාස්තු, විශේෂිත ශ්‍රම කොන්ත්‍රාත්කරුවන්ගේ සේවා ගාස්තු, විශේෂිත උප කොන්ත්‍රාත්කරුවන්ගේ (එනම් ද්‍රව්‍ය සහ ශ්‍රමිකයන් සමඟ සේවා/ වැඩ සපයන්නන්ගේ) සේවා ගාස්තු, ගොඩනැගිලි ද්‍රව්‍ය මිල ගනන්, නිම් භාණ්ඩ වල මිල ගණන්, සහ ප්‍රවාහන ගාස්තු ඉහත වෙබ් අඩවියේ ඇතුළත් කර ඇත.

10. තරඟකාරී මිල ගණන් යටතේ ලංසු කැඳවීමේදී රේඛ මිලක තාත්වික බව තීරණය වනුයේ විවිධ සාධක මතය. ඉන් ප්‍රධාන සාධක කිහිපයක් පහත දැක්වේ.

- I. කොන්ත්‍රාත්කරුවකු විසින් ප්‍රමාණ බිල්පතට අයත් වැඩ කොටස් ඉටු කරනු ලබන ආකාරය (එනම් පහත අයිතම අංක 11 “අ” සිට “ඇ” දක්වා වූ ක්‍රමවේද අතුරින් එකක් මත වීම)
- II. ඉටුකරනු ලබන ඉදිකිරීමේ අවධානම (risk) මත
- III. ඉදිකිරීමට අදාළ ප්‍රාරම්භක අයිතම (preliminaries) ප්‍රමාණ බිල්පතට ඇතුළත්ව තිබේද යන්න මත

- IV. කොන්ත්‍රාත්කරුවකු සතු උපකරණ සහ අනෙකුත් මෙවලම්
- V. ඉදිකිරීමක සීමිත කොටසක් පමණක් නිම කළ යුතුව තිබෙන අවස්ථාවක කම්කරු දායකත්වයට වඩා ද්‍රව්‍ය වල දායකත්වය වැඩි වීම, අඩුවීම සහ/ හෝ විශේෂිත උප කොන්ත්‍රාත්/ ශ්‍රම කොන්ත්‍රාත් ලබා දීම සීමිත වීම.
- VI. කොන්ත්‍රාත්කරුවන්ගේ ඉදිකිරීම් කළමනාකරණ හැකියාව
- VII. සේව්‍යාගේ මූල්‍ය හැකියාව, විශ්වාසනීයත්වය සහ සේව්‍යා විසින් නම් කරනු ලබන කොන්ත්‍රාත් කළමනාකරණයට සම්බන්ධ නිලධාරීන්ගේ ප්‍රවීණත්වය
- VIII. ඉදිකිරීමේ සංකීර්ණ බව හා ව්‍යාපෘතියේ භූගෝලීය පිහිටීම
- IX. කොන්ත්‍රාත්කරුවකු විසින් ගොඩනැගිලි ද්‍රව්‍ය මිලදී ගැනීමේදී එම ද්‍රව්‍ය සඳහා ලබා ගන්නා වට්ටම් සහ සහන ගෙවීම් කාලය මත
- X. ලංසුව ඉදිරිපත් කරන අවස්ථාවේ කොන්ත්‍රාත්කරු සතුව පවත්නා අනෙකුත් වැඩ වල වටිනාකම

මෙම සියළු කරුණු පදනම් කර ගෙන මුළු වර්ෂය සඳහා ස්ථාවර වූ තාත්වික රේඛ මිල ගණනක් තීරණය කිරීම ප්‍රායෝගිකව අපහසු වේ. එබැවින් මෙම රේඛ මිල ගණන තීරණය කර ඇත්තේ මිලියන 450 ට අඩු වටිනාකමින් යුතු මහල් 5 කට පමණ සීමා වන ගොඩනැගිලි ඉදිකිරීම් කටයුතු සඳහා පහත අංක 11 හි සඳහන් ක්‍රමවේද අතුරින් එක් ක්‍රමවේදයක් අනුගමනය කරමින් මෙම ලේඛණයේ සඳහන් ප්‍රමිතීන්ට අනුකූල ගොඩනැගිලි ද්‍රව්‍ය සහ පුහුණු ශ්‍රමිකයන් යොදා ගනිමින් ඉදිකිරීම් ඉටුකරනු ලබන්නේ යැයි යන උපකල්පනය මත රඳෙමිනි.

එම නිසා මෙම රේඛ මිල ගනන් හුදෙක් ඇස්තමේන්තුගත රේඛ මිල ගනන් බවට අවධාරණය කරනු ලබන අතර ඒවායේ නිරවද්‍යතාව බොහෝ දුරට ඉදිකිරීමේ ස්වභාවය, භූමියේ පිහිටීම සහ සංකීර්ණත්වය මත රඳා පවතී.

මෙම රේඛ මිල ගනන් වලට අයත් නොවන රේඛ මිල ගනන් තීරණය කිරීමේදී මෙම ලේඛණයට පදනම් කර ගත් කම්කරු ගාස්තු සමඟ ඉදිකිරීම් ඉටුකිරීමට යෝජිත ප්‍රදේශයෙන් ලබාගත් ද්‍රව්‍ය මිල ගණන් හෝ මෙම ලේඛණයට පදනම් කර ගත් මූලික මිල ගනන් සමඟ 20% ලාභාංශය ඇතුළත් වන පරිදි ඉදිකිරීම් ඉටුකිරීමට උපයෝගී කර ගත හැකි ක්‍රමවේදය “method statement” පිළිබඳව නිසි අවබෝධයෙන් යුතුව පිළියෙල කර ප්‍රාදේශීය ඉංජිනේරුගේ අනුමැතිය ගත යුතු අතර ගොඩනැගිලි අධ්‍යක්ෂ/ අධ්‍යක්ෂ ඉංජිනේරුගේ අවධානයට යොමුකර අනාගතයේදී එවැනි විශේෂිත රේඛ මිල ගණන් විශ්ලේෂණ නැවත පරිශීලනය සඳහා ඩිජිටල් තාක්ෂණයෙන් ගබඩා කිරීම සඳහා පියවර ගත යුතු වේ.

11. තවද මෙම රේඛ මිල ගණන් ගණනය කිරීම සඳහා නිරන්තරයෙන් එකතුවන නවීන තාක්ෂණ “මෙවලම්” උපකරණ යොදා ගනිමින් අඩු ශ්‍රමයක් උපයෝගී කර ගෙන ඉටු කරනු ලබන කාර්යයන් සඳහා සම්ප්‍රදායික මිල විශ්ලේෂණ පදනම් කර ගෙන ගණනය කරනු ලබන රේඛ මිල ගණන් තාත්වික නොවන බව පසුගිය වසර 10 තුළ සිදු කළ අධ්‍යයනයේදී නිරීක්ෂණය විය. ඒ අනුව වර්තමානයට ගැලපෙන පරිදි “Work study” සහ “Method study” මඟින් තහවුරු කරගත් ගොඩනැගිලි මිල විශ්ලේෂණයක අවශ්‍යතාව පිළිබඳව අවධාරණය කරනු ලබන අතර එවැනි ලේඛණයක් සැකසෙනතුරු එතෙක් පහත ක්‍රම අතුරින් වඩාත් සුදුසු යැයි සහ මධ්‍ය පරිමාණයේ ගොඩනැගිලි ඉදිකිරීම් සඳහා CIDA ආයතනයේ ලියාපදිංචි කොන්ත්‍රාත්කරුවන් වැඩි දෙනෙකු විසින් අනුගමනය කරනු ලබන ක්‍රමවේද මත රඳෙමින් මෙම රේඛ මිල විශ්ලේෂණය කර ඇත. එසේ විශ්ලේෂණය කරන ලද මිල ගණන් වල තාත්වික බව ඉදිකිරීම් කර්මාන්ත ක්ෂේත්‍රයේ නියුතුවන් සමඟ සාකච්ඡා කර තහවුරු කර ඇත.

(අ) කොන්ත්‍රාත්කරු විසින් භාණ්ඩ මිලදී ගෙන තම සාප්පු කම්කරුවන් (පුහුණු සහ නුපුහුණු) යොදවා ඉටු කරනු ලබන කාර්යයන් (මෙම කාර්යයන් විශ්ලේෂණය සඳහා CIDA ආයතනයෙන් මුද්‍රණය කර අලෙවි කරන මිල විශ්ලේෂණ ලේඛනය හැකිතාක් දුරට පාදක කර ගනිමින්)

(ආ) ප්‍රධාන කොන්ත්‍රාත්කරු ද්‍රව්‍ය සපයා විශේෂිත සේවා සපයන උප කොන්ත්‍රාත් ශ්‍රමිකයන් යොදවා (නිදසුන : පින්තාරු කිරීම)

(ඇ) උප කොන්ත්‍රාත්කරුවන් ලෙස විශේෂිත උප කොන්ත්‍රාත්කරුවන් විසින් (ද්‍රව්‍ය සහ ශ්‍රමය සපයා) ඔවුන් විසින් ඉටු කරනු ලබන කාර්යයන් (නිදසුන : ජල ප්‍රතිරෝදනය)

12. මෙම රේඛි මිල ගණන් තුළ ඇතුළත් 20% උඩස් හා ලාභාංශ සඳහා CIDA ආයතනයේ නිර්දේශ පරිදි යම් ඉදිකිරීමකට අදාළ වන්නා වූ ප්‍රාරම්භක අයිතම (preliminaries) වල මිල අඩංගු නොවේ. එබැවින් යම් වැඩකට ප්‍රමාණ බිල්පත පිළියෙල කිරීමේදී ඉදිකිරීමේ ස්වභාවය අනුව ප්‍රාරම්භක (preliminaries) අයිතම ලංසුකරුවාට තරඟකාරී ලෙස මිල කිරීම සඳහා ප්‍රමාණ බිල්පතට ඇතුළත් කිරීම අනිවාර්ය වේ.

Preliminary items ඇතුළත් ලැයිස්තුවක් වෙබ් අඩවියේ ඇතුළත් කර ඇති අතර එම අයිතම අතුරින් ඉදිකිරීමට අත්‍යවශ්‍ය වන්නාවූ අයිතම පමණක් ඇතුළු කළ යුතු වේ.

13. එක් එක් රේඛි මිල ගණන් වලට ඇතුළත් විය යුතු අයිතම පිළිබඳ විග්‍රහයක් "General preamble" සහ "Pricing preamble" වල ඇතුළත් කර ඇති අතර එකී ලේඛන මෙම රේඛි මිල ගණන් වලට කොටසක් ලෙස සැලකිය යුතු අතර මෙම රේඛි මිල ගණන් පදනම් කර ගෙන සකස් කරනු ලබන ප්‍රමාණ බිල්පත් ලංසු කැඳවීමට උපයෝගී කර ගන්නා අවස්ථාවන්හිදී එකී "General preamble" සහ "Pricing preamble" ද ලංසු ලේඛන වල කොටසක් විය යුතු අතර ඒවාද පැහැදිලිව ඇතුළත් වී ඇති බවට සනාථ කර ගත යුතු වේ. මෙම "General preamble" සහ "Pricing preamble" අවස්ථානුකූලව සහ වරින් වර වැඩිදියුණු කරනු ලබන බැවින් ලංසු කැඳවන අවස්ථාවේ වෙබ් අඩවියේ ඇතුළත් යාවත්කාලීන කරන ලද නව පිටපත බාගත (download) කරගත යුතු බව අවධාරණය කරමි.

14. මෙම රේඛි මිල ගණන් හුදෙක් උපකල්පන මත රඳෙමින් සකස් කරන ලද ඇස්තමේන්තු ගත රේඛි මිල ගණන් බව අවධාරණය කරනු ලබන අතර තරගකාරී ක්‍රමයට කැඳවන ලද ලංසු එකිනෙක සමඟ සැසඳීම සඳහා පාදක කර ගත යුතු මෙවලමක් ලෙස භාවිතා කිරීමට සහ යම් ව්‍යාපෘතියකට මුදල් වෙන් කිරීමේදී මුළු පිරිවැය ඇස්තමේන්තුවක් යම්තාක් දුරට නිරවද්‍යතාවයකින් යුතුව සකසා ගැනීම සඳහා මෙම රේඛි මිල ගණන් පදනම් කර ගැනීම සුදුසු බවට වැඩිදුරටත් අවධාරණය කරනු ලැබේ.

15. මුළු පිරිවැය ඇස්තමේන්තු පිළියෙල කිරීමේදී භාවිතා කිරීම සඳහා මෙම ලේඛනයේ පිටපත් අදාළ තාක්ෂණ නිලධාරීන් වෙත කරුණාකර නිකුත් කරන්න.

*සටහන: කොන්ත්‍රාත්තුවේ ඉංජිනේරුවරයා විසින් වැර ගැන්වූ කොන්ක්‍රීට් සඳහා ශ්‍රී ලංකා ඉඩම් ගොඩනැගීම හා සංවර්ධනය කිරීමේ සංස්ථාව විසින් අලෙවි කරනු ලබන off-shore sand උපයෝගී කර ගැනීමට අවසර දීමේදී පහත සඳහන් ලේඛණ පරීක්ෂාවට ලක් කිරීමෙන් අනතුරුව ශ්‍රී ලංකා ප්‍රමිති 1397:2010 පිරිවිතරට අනුකූල බවට සහතික කළ යුතු වේ.

- (අ) කොන්ත්‍රාත්කරු විසින් වැලි සපයනු ලබන ආයතනයන් විසින් SLS 1397:2010 වගන්ති අංක 5 ප්‍රකාර ලිඛිත තොරතුරු ඉදිරිපත් කළ යුතු වේ.
- (ආ) වැඩ බිමට වැලි ගෙන ඒමෙන් පසු අහඹු ලෙස තෝරා ගත් සාම්පල් රසායනාගාර පරීක්ෂණයකට ලක් කර Shell content (සිප්පි කටු ප්‍රමාණය), Chloride content (ක්ලෝරයිඩ් අයන ප්‍රමාණය) සහ Gradation (වැලි ඇටවල විභිදීම) SLS 1397:2010 සඳහන් නිර්ණායක වලට අනුකූල බවට සනාථ කර ගත යුතු වේ.



ජී. ඩබ්. පී. පෙරේරා,
 නියෝජ්‍ය ප්‍රධාන ලේකම් (ඉංජිනේරු) - වැ.බ
 බස්නාහිර පළාත.

ජී. ඩබ්. පී. පෙරේරා
 ත්‍රිකුණාමලය ප්‍රධාන ලේකම් (ඉංජිනේරු) (වැ.බ)
 ප්‍රධාන ලේකම් කාර්යාලය (බ.ප)
 පස්වන මහල, අංක 204,
 බණ්ඩාරගොඩ පාර, මාවත,
 බත්තරමුල්ල.

පිටපත්:

- | | | |
|----|---|---|
| 1. | ප්‍රධාන ලේකම් (බ.ප.) | : කරු.දැ.ස. |
| 2. | දිස්ත්‍රික් ලේකම්වරුන් (කොළඹ/ ගම්පහ/ කළුතර) | : දිස්ත්‍රික් ලේකම් කාර්යාලයේ
ඉංජිනේරුවරුන්ගේ දැනගැනීම සඳහා
යොමුකරන්න |
| 3. | බස්නාහිර පළාතේ සියලුම අමාත්‍යාංශ ලේකම්වරුන් | : දැ.ස. |
| 4. | නියෝජ්‍ය ප්‍රධාන ලේකම් (මූල්‍ය/ සැලසුම්) | : දැ.ස. |
| 5. | අධ්‍යක්ෂ (අභ්‍යන්තර විගණන) | : දැ.ස. |
| 6. | විගණන අධිකාරී | : දැ.ස. |

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>B - EXCAVATION & EARTH WORK</u>		
	<u>Excavation</u>		
B 01	Clearing site vegetation manually including removal of bushes, shrub removing rubbish up to a distance of 30'-0".	Sqr.	708.00
B 02	Removing top soil manually to a depth not exceeding 6" and removing all debris away from site up to a distance of 30'-0". (Removing top soil up to 2 sqrs.)	Sqr.	609.00
B 03	Removing top soil machinery to a depth not exceeding 6" and removing all debris away from site up to a distance of 30'-0".	Sqr.	430.00
B 04	Manual Excavation over site to reduce level in any material (except rock requiring blasting) including depositing and levelling as directed up to a distance not exceeding 30'-0". (Manual excavation upto 10 cubes)	Cube	4,220.00
B 05	Manual Excavation over site to reduce level in any material (except rock requiring blasting) including depositing and levelling as directed distance exceeding 30'-0" but not exceeding 1/4 mile.(Manual excavation upto 10 cubes)	Cube	4,625.00
	Shoring, dewatering and rock blasting if necessary for the excavation, shall be paid separately for items B 06 to B 20		
B 06	Manual Excavation for column, wall, staircase foundations in any soft/loose soil (except rock requiring blasting) up to 5'-0" depth, part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	2,238.00
B 07	Manual Excavation for column, wall, staircase foundations in any Ordinary soil (except rock requiring blasting) up to 5'-0" depth, part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	3,936.00
B 08	Manual Excavation for column, wall, staircase foundations in hard dense soil (except rock requiring blasting) up to 5'-0" depth, part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	5,916.00
B 09	Manual Excavation for column, wall, staircase foundations in mud/wet soil (except rock requiring blasting) up to 5'-0" depth, part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	5,492.00
B 10	Manual Excavation for column, wall, staircase foundations in soft disintegrated rock (except rock requiring blasting) up to 5'-0" depth, part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	4,218.00
B 11	Manual Excavation for column, wall, staircase foundations in any soft/loose soil (except rock requiring blasting) depth exceeding 5'-0" but not exceeding 10'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	3,653.00
B 12	Manual Excavation for column, wall, staircase foundations in any Ordinary soil (except rock requiring blasting) depth exceeding 5'-0" but not exceeding 10'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	7,755.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
B 13	Manual Excavation for column, wall, staircase foundations in hard dense soil (except rock requiring blasting) depth exceeding 5'-0" but not exceeding 10'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	11,715.00
B 14	Manual Excavation for column, wall, staircase foundations in mud/wet soil (except rock requiring blasting) depth exceeding 5'-0" but not exceeding 10'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	10,867.00
B 15	Manual Excavation for column, wall, staircase foundations in soft disintegrated rock (except rock requiring blasting) depth exceeding 5'-0" but not exceeding 10'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	8,321.00
B 16	Manual Excavation for column, wall, staircase foundations in any soft/loose soil (except rock requiring blasting) depth exceeding 10'-0" but not exceeding 15'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	6,482.00
B 17	Manual Excavation for column, wall, staircase foundations in any Ordinary soil (except rock requiring blasting) depth exceeding 10'-0" but not exceeding 15'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	11,574.00
B 18	Manual Excavation for column, wall, staircase foundations in hard dense soil (except rock requiring blasting) depth exceeding 10'-0" but not exceeding 15'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	17,515.00
B 19	Manual Excavation for column, wall, staircase foundations in mud/wet soil (except rock requiring blasting) depth exceeding 10'-0" but not exceeding 15'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	16,242.00
B 20	Manual Excavation for column, wall, staircase foundations in soft disintegrated rock (except rock requiring blasting) depth exceeding 10'-0" but not exceeding 15'-0", part return fill in and ram and surplus deposited within site as directed. (Transport of material to be paid seperately)	Cube	12,423.00
B 21	Bulk excavation using machinery and deposited within site as directed. .	Cube	1,448.00
	<u>Earth Work Supports</u>		
B 22	Temporary earth work supports, in open planking in trenches total depth up to 5'-0" and details given in Drawing No:- ST/TYPE PLAN/FOUND/2020/DETAIL 01. (shoring designed to carry soil load only)	Sq.ft.	92.00
B 23	Temporary earth work supports, in close planking in trenches of loose soil, total depth up to 5'-0" and details given in Drawing No:- ST/TYPE PLAN/FOUND/2020/DETAIL 01.(shoring designed to carry soil load only)	Sq.ft.	146.00
B 24	Temporary shoring with steel R.S.J's / 10 mm thick Steel plate combination , with steel R.S.J's (6" x 6" x 10 mm thick) vertically driven at 4'-0" c/c permissible intervals and steel sheets inserted between R.S.J's; the R.S.J's shall be driven to an appropriate depth below the final formation of the bottom of excavation to withstand as free-standing cantilevers to hold back the unsupported earth. (Shoring designed to carry soil load only) Contractor shall design the shoring method based on soil report recommendations to suit the specific site requirements and method specification to be submitted before excavation to the Divisional Engineer for approval.	Sq.ft.	1,554.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Filling & Compaction</u>		
	<u>Note:-</u>		
	Approved earth shall mean filling materials that comply to the following :		
(a)	The earth shall be free of vegetation, roots, boulders, easily decomposable materials, chemicals, industrial waste, plastic etc.		
(b)	The maximum size of particle shall not exceed 7.5mm.		
(c)	The earth shall be well graded and the silt and clay (fines) content shall not be more than 25%		
(d)	The Standard proctor density shall be greater than 1.70g/cm³		
B 25	Approved Earth spreading , leveling watering and compaction manually using standard cast iron stamper or equivalent and filling in 150 mm thick layers (loose volume) in restricted areas (Earth available at site) - Earth measured as a volume in loose state before spreading and compaction. (Quantities not exceeding 5.0 Cubes for the entire work are permitted)	Cube	4,220.00
B 26	Approved earth supplying and piled at site (measured at piled volume)	Cube	7,920.00
B 27	River Sand supplying spreading laying and compacting in foundation trenches where measured on compacted volume.	Cube	30,302.00
B 28	Dense graded 37.5mm Aggregate Base Course (ABC) supplying, piling, spreading , levelling , watering in 225mm thick layers and compaction using machine Rammer. (measured on loose volume). Rate include hire charges of the machine rammer & exclude transport).	Cube	12,372.00
B 29	Graded Quarry dust 4.5mm downwards supplying, spreading , levelling , watering in 225mm thick layers and compaction using machine Rammer.(loose volume). Rate include hire charges of the machine rammer. In case where measurements are to be done on compacted volume multiply the rate by 1.20.	Cube	20,033.00
B 30	Supplying and spreading of graded gravel backing surrounding the Pre-cast Soakage pit. This rate is only incorporated with item No. U 35 & U 36.(Refer drg No: WSS/2020/ST-SP/05)	Cube	4,749.00
B 31	Approved earth spreading & levelling manually including watering in 225mm thick layers (measured on piled volume) & Compaction using machine Rammer. Rate include hire charges of the machine rammer. This rate is applicable for building construction with earth work not exceeding 25 cubes. (earth available at site).	Cube	2,361.00
B 32	Spreading & Levelling using backhoe loader or approved equivalent and Compaction of Earth using Vibrating roller (1/2-1 ton) or equivalent including watering in 225mm thick layers (measured on piled volume) . Rate include hire charges of JCB & Vibrating roller. This rate is applicable for building construction with earth work exceeding 25 cubes. (earth available at site).	Cube	1,050.00
B 33	Manually spreading and levelling piled approved earth (applicable for filling out side the building area) rate without compaction.	Cube	550.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Transport</u>		
	(a)The rate of payment for transport shall be made under any relevant item selected from item codes B 34 to B 36 irrespective of the type of vehicle to be used. (up to 2 cubes)		
	(b)However in case the quantity involved is more than 2.0cube for the entire project per kilometer run and in situations other than stipulated in above, the rate of payment for transport shall be selected from item codes B 37 to B 39.		
B 34	Transport of soil 25m to 100 m by any means (including loading and unloading)	Cube	1,516.00
B 35	Transport 100m to 0.5km by any means (Excluding loading and unloading)	Cube	729.00
B 36	Transport 0.5km to 1.0km by any means (Excluding loading and unloading)	Cube	781.00
B 37	Transport of any Material / Debris by any means in bulk including loading (for distance less than or equal 3 kilometers)	Cube	902.00
B 38	Transport of any Material / Debris by any means in bulk excluding loading (from 3km up to 10km Distance)	Cube/km	87.00
B 39	Transport of any Material / Debris by any means in bulk excluding loading (for distance more than 10 km Distance)	Cube/km	77.00
B 40	Transporting debris cleared away from site by tractor trailer including loading (approx.. Dumping up to 3 km).	Per Load	810.00
	<u>Anti-termite Treatment</u>		
B 41	Anti-termite treatment for the new construction with applying Biflexthrine 10Tc (Biflex) or approved equivalent as per manufacturer's standards of application including horizontal & vertical barriers with 10 years warranty on application (Measured on plinth area).	Sq.ft.	36.00
B 42	Anti-termite treatment for the post construction (Existing building) with applying Biflexthrine 10Tc (Biflex) or approved equivalent as per manufacturer's standards of application with 5 years warranty on application (Measured on plinth area).	Sq.ft.	46.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>C - CONCRETE</u>		
	Rates for concrete are grouped under following categories		
	1. In-situ plain concrete (mixed at site either manually or with machine) Item No. C01, C02, C03		
	2. Reinforced concrete of Grade 25 &30 (mixed at site with a concrete mixer) Item No. C04, C05 , C06, C07, C08 & C09		
	These items are meant for Footings, Columns, Plinth beams, Floor beams, Tie-beams & Stair case. i.e. load bearing members.		
	3. Ready mixed concrete of Grade 20 ,Grade 25 . Grade 30 & Grade 35A Item Nos. from C29 to C33.		
	4. Site produced concrete of Grade 20 - (machine mix or in case of small quantities manually mixed) Item No.C11 (along with Item Nos. from C13 to C28 which are derived from C11)		
	These items are meant for pre-cast lintols, stiffeners, copings,concrete drains, etc.		
	5. Curing for In situ plain concrete, In situ reinforced concrete, Site produced concrete of Grade 20 & Ready mix concrete Items C-01 to C-33 should be paid under Item no. C 38.		
	<u>IN - SITU PLAIN CONCRETE</u> (mixed at site either manually or with machine)		
C 01	Cement concrete 1:3:6 (1 1/2") in wall foundations including placing, compacting.	Cube	68,975.00
C 02	Cement concrete 1:3:6 (1") laid to a thickness of 2" under column/stair footings, including placing in position,compacting.	Sqr.	11,869.00
C 03	Cement concrete 1:3:6 (1") in wall foundations, under column/stair footings including placing in position,compacting.	Cube	71,209.00
	<u>IN - SITU REINFORCED CONCRETE OF GRADE 25 &30</u> (mixed at site with a concrete mixer)		
1	Grade 25 concrete shall be used for footings, columns, beams, staircases, tie-beams of reinforced concrete elements in multi-storied building (excluding lintols, stiffener columns, copings, non-structural columns and Drains).		
	Site mixed Grade 30 concrete shall be used only for specific structural works with the approval of the Divisional Engineer.		
2	The rates appearing in BSR Item No. C04,C05 and C06 are strictly applicable for Grade 25 & BSR Item No. C07,C08 and C09 are strictly applicable for Grade 30 concrete produced at site with machine mixer and shall comply to the following requirements in order to be eligible for payment		
3	Constituent material shall comply to following;		
	(i) Cement of strength class 42.5N and shall comply with SLS 107 (Ordinary Portland Cement) , SLS 1253 (Portland Limestone Cement) & SLS 1697;2021 (Portland Composite Cement) that has been stored under proper conditions and has manufactured within 90 days at the time of concreting.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)																		
	(ii) Use of sulfate resistant Portland Cement or Blended Hydraulic Cement confirming to BSEN 197-1:2011 & comply with SLS 1247 . Sulfate resistant class is recommended for aggressive environmental conditions with the specific approval of Divisional Engineer.																				
	(iii) Clean river sand without impurities and clay particles of grain distribution falling within the prescribed grading limit in BS 882:1992.																				
	(iv) Well graded coarse aggregate free of impurities with maximum aggregate size being 20mm. grain distribution falling within the prescribed grading limit in BS 882:1992.																				
	(v) Clean portable water																				
4	Volume batching of constituent material																				
(a)	The equivalent nominal mix suggest for volume batching the Grade 25 & 30 concrete is given in table 4.4 of ICTAD specification for Building Work SCA/4/I of July 2004 for a 50kg cement bag and measuring boxes is reproduced below.																				
	Table 4.4																				
	<table border="1" data-bbox="279 994 1137 1272"> <thead> <tr> <th rowspan="2">Specified Mix by Volume</th> <th rowspan="2">Equivalent Concrete Grade</th> <th colspan="2">Quantities per 50 kg bag of Cement</th> </tr> <tr> <th>Fine Aggregate</th> <th>Coarse Aggregate</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1:1 1/2:3</td> <td rowspan="2">25</td> <td>0.053 m³</td> <td>0.105 m³</td> </tr> <tr> <td>1 1/2 boxes</td> <td>3 boxes</td> </tr> <tr> <td rowspan="2">1:1:2</td> <td rowspan="2">30</td> <td>0.035 m³</td> <td>0.07 m³</td> </tr> <tr> <td>1 box</td> <td>2 boxes</td> </tr> </tbody> </table>	Specified Mix by Volume	Equivalent Concrete Grade	Quantities per 50 kg bag of Cement		Fine Aggregate	Coarse Aggregate	1:1 1/2:3	25	0.053 m ³	0.105 m ³	1 1/2 boxes	3 boxes	1:1:2	30	0.035 m ³	0.07 m ³	1 box	2 boxes		
Specified Mix by Volume	Equivalent Concrete Grade			Quantities per 50 kg bag of Cement																	
		Fine Aggregate	Coarse Aggregate																		
1:1 1/2:3	25	0.053 m ³	0.105 m ³																		
		1 1/2 boxes	3 boxes																		
1:1:2	30	0.035 m ³	0.07 m ³																		
		1 box	2 boxes																		
(b)	Coarse aggregate to be proportioned for the volume batching using the measurement boxes as indicated in the Clause 4.3.1 ICTAD/SCA/4/I. The internal dimensions of the boxes are 400 x 350 x 250mm (which is 0.035m ³ and corresponds to the volume of 1 bag of cement weighing 50 kg). The proportioning of sand shall be on the basis of its dry volume and in the case of damp sand allowance for bulkage shall be made as given in Appendix 4C of ICTAD specification.																				
(c)	Water:Cement ratio shall not exceed 0.45. Based on this Water:Cement ratio, volume of water required (either weight or converted volume of water) shall be decided for a given cement content. Required water content shall then be added by measuring the volume from a calibrated measuring Jar.																				
(d)	Cement shall be added in bag form.																				
(e)	Slump of site mixed concrete before pouring shall be within 150mm±25mm range.																				

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	In order to achieve this slump without exceeding the 0.45 water:cement ratio, the use of a water reducing admixture (super plasticer) complying to BS EN 934-2 is permitted to be added to the concrete mix. Contractor shall ensure that the selected plasticer brand is compatible with the cement brand used for concreting.		
	Super plasticer shall be added to the water and properly mixed. Thereafter only the dry concrete shall be mixed with water containing super-plasticer. Under no circumstances shall the super-plasticer be directly added to the dry concrete. Dosage of super plasticer shall be determined based on manufacture's recommendation with the specific approval of Divisional Engineer.		
5	In order to ensure that the consistency of the mix is in par with the specified values given above, a trial mix shall be prepared at the site and prior approval to be obtained from the Divisional Engineer.		
6	After adding water to the dry concrete, it shall be used within 60 minutes. The layers of concrete shall be so placed that the bottom layer does not fully set before the top layer is placed. Compaction shall be completed before the initial setting starts i.e. within 30 minutes of addition of water to the dry mixture. Re-tempering of concrete with water shall not be permitted.		
7	Contractor shall made available following equipment at site before starting to concrete.		
	(i) Cube moulds -6Nos		
	(ii) Mixer and Vibrator (in working condition)		
	(iii) Gauge Boxes (size as per ICTAD Specification for Building Works)		
	(iv) In case volume of water and admixture to be measured by measuring Jar, accuracy of 0.5ml to measure the volume be available in the Jar.		
	(v) An admixture (super-plasticer) compatible with the cement brand (Technical literature and dosage shall be submitted to the Divisional Engineer well in advance for approval)		
	(vi) Slump cone apparatus		
	(vii) Weighing scale		
	(viii) Covering material for curing		
	(ix) A Supervisor / Forman not below the rank of a NVQ Level 3 in "Construction" category		
	(x) Quality assurance sheet		
	(xi) A written request from the contractor for concreting with date and time, (Request shall forward to the Divisional Engineer at least 3 working days in advance)		
8	Immediately after (removal of formwork) (initial setting is starts), columns shall be continuously cured for 7 consecutive days.		
	Note: Divisional Engineer or Senior technical officer shall authorize the concreting only after receiving a method statement (in either language) from the contractor.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)														
9	Payment for concreting shall be made upon submission of following.																
	(a) Concrete cube crushing strength test results; 28 day results shall be available to make full payment.																
	(b) Quality assurance report signed by the contractor’s technical officer or agent, Divisional Engineer’s technical officer who has witnessed the concreting along with senior technical officer in charge of the site.																
C 04	Volume Batched Grade 25 concrete prepared at site using mixer and vibrator in ground floor.	Cube	92,492.00														
C 05	Volume Batched Grade 25 concrete prepared at site using mixer and vibrator in first floor.	Cube	95,267.00														
C 06	Volume Batched Grade 25 concrete prepared at site using mixer and vibrator in second floor.	Cube	97,116.00														
C 07	Volume Batched Grade 30 concrete prepared at site using mixer and vibrator in ground floor.	Cube	113,554.00														
C 08	Volume Batched Grade 30 concrete prepared at site using mixer and vibrator in first floor.	Cube	116,961.00														
C 09	Volume Batched Grade 30 concrete prepared at site using mixer and vibrator in second floor.	Cube	119,232.00														
	<u>Site produced concrete of Grade 20 - (machine mix or in case of small quantities manually mixed)</u>																
1	The equivalent nominal mixes suggest for the Grade 20 concrete is given in table 4.4 for a 50kg cement bag and measuring boxes as given below. When concrete is prepared at the site with volume batching, instructions given in the ICTAD Publication SCA/4/I shall be followed.																
2	Concrete shall be mixed by a mechanical mixer unless otherwise the Technical officer in-charge permits for hand mixing.In-case of hand mixing, mixture shall be prepared in a surface that will not allow loss of water.																
	<u>Table 4.4</u>																
	<table border="1"> <thead> <tr> <th rowspan="2">Specified Mix by Volume</th> <th rowspan="2">Equivalent Concrete Grade</th> <th colspan="2">Quantities per 50 kg bag of Cement</th> </tr> <tr> <th>Fine Aggregate</th> <th>Coarse Aggregate</th> </tr> </thead> <tbody> <tr> <td>1:2:4</td> <td>20</td> <td>0.07 m³</td> <td>0.14 m³</td> </tr> <tr> <td></td> <td></td> <td>2 boxes</td> <td>4 boxes</td> </tr> </tbody> </table>	Specified Mix by Volume	Equivalent Concrete Grade	Quantities per 50 kg bag of Cement		Fine Aggregate	Coarse Aggregate	1:2:4	20	0.07 m ³	0.14 m ³			2 boxes	4 boxes		
Specified Mix by Volume	Equivalent Concrete Grade			Quantities per 50 kg bag of Cement													
		Fine Aggregate	Coarse Aggregate														
1:2:4	20	0.07 m ³	0.14 m ³														
		2 boxes	4 boxes														
3	In order to ensure that the consistency of the mix is in par with the Appendix 4D of ICTAD Specification, trial mix shall be prepared at the site and prior approval to be obtained from the Divisional Engineer.																

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Constituent material shall comply to following;		
	(a) Cement should be compressive strength Class of 42.5 N.		
	(b) River sand/washed sand marketted by SLRDC / Manufactured sand shall satisfy with the grading criteria prescribed in Table 4.2 in the ICTAD Publication SCA/4/I.		
	(c) Coarse aggregate shall meet the grading criteria prescribed for the volume batching using the measurement boxes as indicated in the Clause 4.3.1 ICTAD/SCA/4/I.		
	(d)The proportioning of sand shall be on the basis of its dry volume and in the case of damp sand allowance for bulkage shall be made as given in Appendix 4C of ICTAD specification.		
	(e) Cement shall be added in bag form. The internal dimensions of the boxes are 400 x 350 x 250mm (which is 0.035m ³ and corresponds to the volume of 1 bag of cement weighing 50 kg).		
5	For more detail refer Chapter 4 of ICTAD specification for building work SCA/4/I.		
6	Water Content (either weight or converted volume of water) shall be measured at site, keeping the maximum water/cement ratio at 0.45		
7	Slump of site mixed concrete before pouring shall be within 150mm±25mm range.		
8	In order to achieve this slump without exceeding the 0.45 water:cement ratio, following guidelines can be adopted.		
	(i) The use of a water reducing admixture (super plasticer) complying to BS EN 934-2 is permitted to be added to the concrete mix. Contractor shall ensure that the selected plasticer brand is compatible with the cement brand used for concreting.		
	(ii) Super plasticer shall be added to the water and properly mixed. Thereafter only shall the dry concrete be mixed with water containing super-plasticer. Under no circumstances shall the super-plasticer be directly added to the dry concrete. Dosage of super plasticer shall be determined based on manufacture's recommendation with the specific approval of Divisional Engineer.		
9	After adding water to the dry concrete, it shall be used within 60 minutes.		
10	The layers of concrete shall be so placed that the bottom layer does not finally set before the top layer is placed. Compaction shall be completed before the initial setting starts i.e. within 30 minutes of addition of water to the dry mixture. Re-tempering of concrete with water shall not be permitted.		
C 10	Volume Batched Grade 20 concrete prepared at site manually . (Applicable for small quantities not exceeding 1.0 Cube for the entire project)	Cube	93,436.00
C 11	Volume Batched Grade 20 concrete prepared at site using mixer and vibrator .	Cube	85,307.00
C 12	Pre-cast lintols size 9" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in ground floor.	L.ft.	935.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
C 13	Pre-cast lintols size 9" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in first floor.	L.ft.	963.00
C 14	Pre-cast lintols size 9" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in second floor.	L.ft.	982.00
C 15	Pre-cast lintols size 4 1/2" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in ground floor.	L.ft.	684.00
C 16	Pre-cast lintols size 4 1/2" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in first floor.	L.ft.	704.00
C 17	Pre-cast lintols size 4 1/2" x 6" deep in Grade 20 concrete, reinforced with 2 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 6" c/c including necessary formwork in second floor.	L.ft.	718.00
C 18	Stiffener columns size 4" x 6" in Grade 20 concrete, reinforced with 2 nos of 10mm dia. Tor steel bars , including necessary form work.	L.ft.	641.00
C 19	Stiffener columns size 4 1/2" x 6" in Grade 20 concrete, reinforced with 2 nos of 10mm dia. Tor steel bars , including necessary form work.	L.ft.	657.00
C 20	Stiffener columns size 9" x 6" in Grade 20 concrete, reinforced with 2 nos of 10mm dia.Tor steel bars and 6mm mild steel stirrups @ 6" c/c , including necessary form work.	L.ft.	904.00
C 21	Copings on the 4 1/2" thick walls, size of 6 1/2" x 3" in Grade 20 concrete, reinforced with 1 no of 10mm dia. Tor steel bar, including necessary form work & 1:3 cement plastering, as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 02	L.ft.	719.00
C 22	Copings on the 9" thick walls, size of 11" x 6" approx. in Grade 20 concrete, reinforced with 2 nos of 10mm dia. Tor steel bars and 6mm mild steel @ 6" c/c, including necessary form work & 1:3 cement plastering, as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 02	L.ft.	1,074.00
C 23	Cement concrete drains of internal size 9" wide and depth varies from 6" - 9" ,consist of 3" thick base and side walls in Grade 20 concrete including 1/2" thick 1:3 rendering without ramp including necessary formwork. (Excavation paid seperately)	L.ft.	946.00
C 24	Cement concrete drains of internal size 9" wide and depth varies from 6" - 9" ,consist of 3" thick base and side walls in Grade 20 concrete including 1/2" thick 1:3 rendering with 3" thick & 1'-6" width concrete ramp, including necessary formwork. (Excavation paid seperately)	L.ft.	1,610.00
C 25	Cement concrete drains of internal size 9" wide and depth varies from 6" - 9" ,consist of 3" thick base and side walls in Grade 20 concrete including 1/2" thick 1:3 rendering with 3" thick & 2'-6" width concrete ramp, including necessary formwork. (Excavation paid seperately)	L.ft.	2,057.00
C 26	Construction of concrete drain 300mm width x 350mm depth and varies up to 400mm. Consists of 75mm thick concrete base and walls in Grade 20 concrete, fair finish internal surface with size 450mm wide x 600mm long, 75mm thick Grade 20 removable cover slabs with side formwork. Drain and cover slab reinforced with tor steel 10mm at 150mm c/c both ways. (Excavation paid seperately)	L.ft.	4,057.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>READY MIX CONCRETE</u>		
1	Requirement for Ready mixed concrete		
	(i) Ready mix concrete is confirming to SLS 1144-1997.		
	(ii) Minimum cement content shall be 300 kg/m ³		
	(iii) Nominal maximum size of aggregate shall be 20mm.		
	(iv) Slump shall be as per the mix design.		
	(v) Maximum temperature 30 ⁰ C		
	(vi) Maximum free water / cement ratio to be 0.5		
	(vii) Coarse and Fine aggregate used shall confirm to BS 882 latest version. Seive analysis reports within 6 months should be submitted for approval .		
	(viii) Concrete grade shall be as specified.		
	(ix) Concrete mix design shall be approved by the Divisional Engineer .		
	(x) The Ready mix supplier's plant should have been calibrated in the recent past.		
	(xi) Admixures should be compatible with the cement and it should be confirmed by Admixure supplier and Cement supplier.		
	(xii) Testing		
	(xiii) Collection of samples for testing shall be at the point of placing. One sample per 5m ³ .		
2	Rate include the transport of 20km from batching plant.		
C 27	Ready mix concrete of grade 15 (15 N/mm ²).	m ³	24,200.00
C 28	Ready mix concrete of grade 20 (20 N/mm ²).	m ³	25,850.00
C 29	Ready mix concrete of grade 25(25 N/mm ²).	m ³	27,500.00
C 30	Ready mix concrete of grade 30(30 N/mm ²).	m ³	28,600.00
C 31	Ready mix concrete of grade 35(35 N/mm ²).	m ³	29,700.00
C 32	Ready mix concrete of grade 35A (35A N/mm ²).	m ³	31,900.00
C 33	Transport charges per Km per 5m ³ truck load for over and above 20 km.	Km/truck	84.00
C 34	Placing , levelling & compacting the pumpable concrete.	m ³	405.00
C 35	Pumping charge for quantities up to 30 m ³ .	Item	35,200.00
C 36	For more than 30 m ³ additional pumping charges. (Rate for every m ³ over and above 30 m ³)	m ³	1,210.00
C 37	Continuous curing of exposed reinforced concrete slabs with ponding water or covering with wet gunny bags. In case of columns, , beams, staircase,Plinth beam & Ground beam etc , covering the exposed concrete surface with gunnies and spraying water and keeping wet for a period of 7 days.	sq.ft/day	2.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>D - FORM WORK</u>		
	Note:		
1	Shuttering boxes for columns of over 5'-0" height are not permitted under any circumstances for the pouring of manually produced (site mix) concrete.		
	If a contractor made an appeal to use shuttering boxes (Customary steel boxes or plywood boxes) of over 5'-0" height, then ,Divisional Engineer may personally approve for casting a column shaft up to a maximum height of 4'-0" at a time subject to the fulfillment of following conditions.		
	(a) The concrete mix designed based on material available at the site for a W/C ratio of 0.45 and to be able to Pour without segregation.		
	(b) The method statement of pouring concrete in to the column shaft signed by a competent technical person from the contractor's side should be submitted.		
	(c)In case of tremie pipe, it shall have a diameter of not less than 4" with a funnel.		
	(d)How the funnel and pipe is lowered and kept in position without disturbing the formwork shall be indicated in the method statement.		
	(e) A Method statement for compaction shall be submitted.		
	(f) Divisional Engineer, upon satisfaction himself/herself to the arrangement of placing concrete and having paying special attention to the method of compaction by a person standing at a height and lowering his head and doing compaction in a restricted cross-section with a tremie pipe inside; may be allowed to proceed with a log note.		
D 01	Shuttering for sides of foundation with 1" thick rubber planking including dismantling	Sqr.	9,031.00
D 02	Shuttering for sides of foundation with 15mm thick Plywood board including dismantling and subject to specific approval by the Divisional Engineer.	Sqr.	19,405.00
D 03	Shuttering for sides of plinth beams, ground beams on top of foundation including dismantling in 15mm thick plywood	Sqr.	20,706.00
D 04	Shuttering for slabs up to 3'-0" height for special purposes (pantry work tops etc.) including dismantling in 15mm thick Plywood board or steel boarding supported by timber props.	Sqr.	19,267.00
D 05	Shuttering for floor slab including dismantling in 15mm thick Plywood board or steel boarding up to 11'-0"soffit height supported by props and details given in Drawing No:- ST/TYPE PLAN/SLAB/2020/DETAIL 04.	Sqr.	25,732.00
D 06	Shuttering for floor Beams including dismantling in 15mm thick plywood board upto 12'-0" soffit height supported by props and details given in Drawing No:- ST/TYPE PLAN/SLAB/2020/DETAIL 02 & 03.	Sqr.	31,363.00
D 07	Shuttering for floor slab including dismantling in 15mm thick Plywood board or steel boarding support by steel jack above 11'-0" upto maximum height of 14'-0" and details given in Drawing No:- ST/TYPE PLAN/SLAB/2020/DETAIL 04.	Sqr.	28,528.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
D 08	Shuttering for columns including dismantling in 15mm thick Plywood board & side supports with props.	Sqr.	30,121.00
	The rate given for item D 09 applicable for pre-fabricated steel shuttering box halves		
D 09	Shuttering for Columns including dismantling using pre-fabricated steel shutter halves including dismantling.	Sqr.	18,044.00
D 10	Shuttering for sides of concrete walls upto 2'-0" height with 12mm thick plywood boards including dismantling.	Sqr.	15,231.00
D 11	Shuttering for sides of concrete walls above 2'-0" up to 4'-6" including dismantling in 15mm thick Plywood board supported by timber props.	Sqr.	17,733.00
D 12	Shuttering for lintols in 12mm thick plywood boards including dismantling.	Sqr.	11,684.00
D 13	Shuttering for stiffener columns in 12mm thick plywood boards between wall panels in 9" walls, 4 1/2" walls and in boundary walls including dismantling.	Sqr.	9,903.00
D 14	Shuttering for R.C.C. copings in 12mm thick plywood boards in top of balcony hand rails , stairway hand rails, boundary walls including dismantling .	Sqr.	10,868.00
D 15	Shuttering for sides of pre-cast concrete cover slabs (man hole covers, septic tank & soakage pit covers, drain covers, water tank covers and other pre-cast concrete items) with 12mm thick rubber planks including dismantling .	Sqr	8,294.00
D 16	Shuttering for sides of R.C.C retaining walls upto 8' 0" height including dismantling in 15mm thick Plywood board supported by timber props.	Sqr	21,082.00
D 17	Shuttering for sides of concrete drain upto 2'-0" height with 15mm thick plywood boards including dismantling.	Sqr	17,871.43

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
<u>E - REINFORCEMENT</u>			
E 01	Mild steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in Ground floor (Laps should be measured as per the drawings).	Kg	524.00
E 02	Mild steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in first floor (Laps should be measured as per the drawings).	Kg	539.00
E 03	Mild steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in second floor (Laps should be measured as per the drawings).	Kg	550.00
E 04	Tor steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in Ground floor (Laps should be measured as per the drawings).	Kg	524.00
E 05	Tor steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in first floor. (Laps should be measured as per the drawings).	Kg	539.00
E 06	Tor steel reinforcement to slabs, beams, lintols, columns, footings etc.. bent to shape, laid in position and tied with 16 B.W.G. Aneal binding wire in second floor. (Laps should be measured as per the drawings).	Kg	550.00
E 07	Supplying and laying in position of B.R.C mesh (6mm) - 8" x 8"	sq.ft	92.00
E 08	Supplying and laying in position of B.R.C mesh (6mm) - 6" x 6"	sq.ft	115.00
E 09	Supplying and laying in position of B.R.C mesh (6mm) - 4" x 4"	sq.ft	151.00
<u>F - BRICK MASONRY</u>			
Note : At special construction when exceeding height above 12' at each floor level rate may consider as upper floor level.			
F 01	Brick work in cement and sand in 1:8 in foundation up to D.P.C. level.	Cube	92,641.00
F 02	Brick work in cement and sand 1:8 in 9" thick walls of ground floor.	Cube	92,902.00
F 03	Brick work in cement and sand 1:8 in 9" thick walls of 1st floor level.	Cube	97,547.00
F 04	Brick work in cement and sand 1:8 in 9" thick walls of 2nd floor level.	Cube	99,405.00
F 05	Brick work in cement and sand 1:5 in 4 1/2" thick walls of ground floor.	Sqr.	42,382.00
F 06	Brick work in cement and sand 1:5 in 4 1/2" thick walls of 1st floor	Sqr.	44,501.00
F 07	Brick work in cement and sand 1:5 in 4 1/2" thick walls of 2nd floor	Sqr.	45,349.00
F 08	Brick drain internal size 9" x 9"(average depth) , including excavation, back filling , 3" thick plain concrete 1:3:6(1") base, 4 1/2" thick Brick side walls in cement and sand mortar 1:5 , rendering 1/2" thick cement and sand 1:3 and finish smooth with cement slurry.	L.ft.	1,788.00
F 09	Steps 1' - 1 1/2" in brick in cement and sand 1:5 finished with 1/2" thick rendering in cement and sand 1:3 and smoothed with cement slurry including 6" high foundation.	L.ft.	944.00
F 10	Brick piers in cement and sand 1:5 in ground floor.	Cube	101,189.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
<u>G - BLOCK MASONRY</u>			
G 01	8" thick cement sand solid block wall (blocks confirming to S.L.S. 855 and subject to the approval in sample blocks) in cement and sand mortar 1:5 in ground floor.	Sqr.	45,424.00
G 02	6" thick cement sand solid block wall (blocks confirming to S.L.S. 855 and subject to the approval of sample blocks) in cement and sand mortar 1:5 in ground floor.	Sqr.	36,011.00
G 03	4" thick cement sand solid block wall (blocks confirming to S.L.S.855 and subject to the approval of sample blocks) in cement and sand mortar 1:5 in ground floor.	Sqr.	26,941.00
G 04	Supply and fixing 1'-0" x 1'-0" x 4" thick Concrete grill on wall.	Sq.ft.	1,005.00
G 05	Supply and fixing 1'-0" x 1'-0" x 2" thick Cement grill on wall.	Sq.ft.	298.00
G 06	Supply and fixing glass blocks size 8" x 8" x 4" thick.	Sq.ft.	2,482.00
<u>H - RUBBLE MASONRY</u>			
H 01	Random rubble (6"-9") masonry in cement sand mortar 1:5.	Cube	60,839.00
H 02	Lifting random rubble masonry or concrete every 1.5 m beyond the initial 1.5m for retaining walls	Cube / lift	3,507.00
H 03	Lowering random rubble masonry or concrete every 1.5m beyond the initial 1.5 m for retaining walls	Cube / lwr	2,338.00
<u>J - FLOORING</u>			
J 01	3/4" thick D.P.C. in cement sand 1:3 finished with 2 coats of D.P.C. tar and blinded with sand.	Sqr.	20,856.00
J 02	Gauge 750 polythene damp proof membrane with 6" laps laid under floors.	Sqr.	403.00
J 03	Rendering 1/2" thick in cement and sand 1:3 in R.C.C. floors and paved floors finished smooth with cement slurry and colour pigment.	Sqr.	10,798.00
J 04	Rendering 1/2" thick in cement and sand 1:3 in R.C.C. stair case including tread, rise & nosing finished smooth with cement slurry and colour pigment.	Sqr.	11,818.00
J 05	Rendering 1/2" thick in cement and sand 1:3 in R.C.C. floors and paved floors finished smooth with cement slurry.	Sqr.	10,596.00
J 06	Rendering 1/2" thick in cement and sand 1:3 in R.C.C. stair case inc. tread, rise & nosing finished smooth with cement slurry.	Sqr.	11,593.00
J 07	1/2" thick Rendering to the top surface of the sunshade with cement and sand 1:3 finished smooth to a slope of 1:80 and treated with two coats of "Aqua Tuff " by M/s Lankem or approved equivalent water proofing agent.	Sqr.	13,719.00
J 08	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating including forming groove in ground floor.	L.ft.	195.00
J 09	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating including forming groove in first floor.	L.ft.	197.00
J 10	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating including forming groove in second floor.	L.ft.	201.00
J 11	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating & Colour pigment including forming groove in ground floor.	L.ft.	196.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
J 12	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating & Colour pigment including forming groove in First floor.	L.ft.	198.00
J 13	Skirting 4" x 1/2" thick in cement and sand 1:3 projected or flush to walls finished with cement slurry floating & Colour pigment including forming groove in Second floor.	L.ft.	202.00
J 14	Rendering 1/2" thick in cement sand 1:3 finished smooth with cement slurry without colour pigment and expansion joints filled with construction expansion joint sealant including the cost for cleaning the joints prior application of construction expansion joint sealant by M/s Bitumix or approved equivalent.	Sqr.	11,208.00
J 15	Rendering 1/2" thick in cement sand 1:3 finished smooth with cement slurry with colour pigment and expansion joints filled with construction expansion joint sealant including the cost for cleaning the joints prior application of construction expansion joint sealant by M/s Bitumix or approved equivalent.	Sqr.	11,433.00
	<u>Water Proofing</u>		
	The rates for Items J 16 to J 19 are strictly applicable, subject to the fulfillment of the following conditions.		
1	The water proofing material shall conform to relevant British, Euro or ASTM specifications		
2	Recommended Distributors/Agents who are marketing water proofing material/product are		
	1. M/s Finco Ltd.		
	2. M/s HE Engineering		
	3. M/s Ranki International		
	4. M/s Solico Engineering		
	5. M/s Sika Lanka		
3	The contractor shall submit;		
	(a) A written certificate stating that all material and workmanship are in conformity with the specifications and the manufactures requirements.		
	(b) The contractor shall jointly with manufacture/supplier of the waterproofing materials shall furnish a warranty to the Employer valid for a period of 10 years / 5 years after handing over of the work against dampness and/or moisture penetration through treated surfaces due to defective materials and/or workmanship		
	payments for items J 16 to J 19 shall be made on receipt of above certificate		
	The rates for items J 16 and J 19 include the cost of surface preparation, but does not include the cost of protective masonry screed. Appropriate B.S.R. item rate shall be used for protective layer. The approving authority for products shall be the Deputy Chief Secretary (Engineering)/ Director (Building)/ Director (Engineering) or Divisional Engineer.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
J 16	Type - 1 - Internal Wet Areas without Exposure to Sunlight (Cementitious water proofing using Barralastic or approved equivalent)	Sq.ft.	578.00
	Application of cementitious water proofing using Barralastic or approved equivalent for internal wet areas such as toilet floors and walls where the surfaces are not directly exposed to sunlight and weathering. Rate shall include for cleaning the substrate and all other work as per manufacturer's specifications on application and shall include ponding test for a 300mm water height kept for a period of 48 hours for horizontal surfaces.		
J 17	Type - 2 - Areas exposed to sunlight (Balconies, Sun-Shades, Concrete Gutters etc) proofing using thorseal or approved equivalent.)	Sq.ft.	280.00
	Application of two coats of elastomeric water proofing material using thorseal or approved equivalent capable to withstand temperature variation for wet areas exposed to sunlight and weathering. (balconies, sun-shades, concrete gutters etc.) rate shall include for cleaning the substrate and all other work as per manufacturer's specifications on application and shall include ponding test for a 300mm water height kept for a period of 48 hours for horizontal surfaces.		
J 18	<u>Type - 3 - Water tanks,Sumps, Swimming pools (water proofing material suitable for portable water storage) (Using XYPEX " modification or approved equivalent.</u>	Sq.ft.	414.00
	Application of crystalline type waterproofing using XYPEX " modification or approved equivalent for under ground sumps, water tanks, (water proofing material recommended for portable water storage tanks) products marketed/installed by a specialist contractor registered at ICTAD.		
J 19	<u>Type - 4 - Application of membrane type water proofing material for Large flat roofs)</u>	Sq.ft.	444.00
	On large flat roofs laying of Topseal 3 mm thick, Torch-on membrane or any other equivalent product marketed/installed by a specialist contractor registered at ICTAD under water proofing category including 1:3 cement,sand protective screed laid to slope. Rate shall include the formation of edges, torch welding and fixing metal strip on vertical walls at termination edges.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>K - PLASTERING</u>		
	<u>Note:</u>		
	1. The rate for column, beam and soffit plastering items includes the cost of "Finex motor plus" or equivalent as a workability enhancer.		
	2. For coarse textured plaster (identified as "semi-rough") all the sand should pass through 4.0mm sieve.		
	3. At special construction when exceeding height above 12' at each floor level rate may consider as upper floor level.		
K 01	5/8" thick plastering to plinth wall in cement sand 1:3 including finishing with cement slurry floating.	Sqr.	12,966.00
K02	5/8" thick plastering to plinth wall in cement sand 1:3 including finishing with cement slurry floating with colour pigment.	Sqr.	13,191.00
K 03	Plastering 5/8" thick to walls in cement and sand 1:5 finished semi-rough.	Sqr.	10,918.00
K 04	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished semi-rough. (Reveals should be measured both side separately.)	L.ft.	167.00
K 05	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished semi-rough in first floor. (Reveals should be measured both side separately.)	L.ft.	172.00
K 06	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished semi-rough in second floor. (Reveals should be measured both side separately.)	L.ft.	175.00
K 07	Applying two coats of skim coat (Not exceeding 3 mm thick) to walls inc. preparation surface..	Sqr.	4,220.00
K 08	Plastering 5/8" thick to walls in cement and sand 1:5 finished smooth with two coats of skim coat.	Sqr.	16,518.00
K 09	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished smooth with two coats of skim coat in ground floor. (Reveals should be measured both side separately.)	L.ft.	195.00
K 10	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished smooth with two coats of skim coat in first floor. (Reveals should be measured both side separately.)	L.ft.	201.00
K 11	Plastering 5/8" thick to reveals width not exceeding 6" in cement and sand 1:5 finished smooth with two coats of skim coat in second floor.(Reveals should be measured both side separately.)	L.ft.	205.00
K 12	Plastering 3/8" thick to soffit of slab, sunshade, sides and soffit of beams, stair cases and sides of columns in cement & sand 1:3 & finished semi rough. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	Sqr.	12,671.00
K 13	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished semi-rough in ground floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	197.00
K 14	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished semi-rough in first floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	203.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
K 15	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished semi-rough in second floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	207.00
K 16	Plastering 3/8" thick to soffit of slab, sunshade, sides and soffit of beams, stair cases and sides of columns in cement & sand 1:3 & finished smooth with two coats of skim coat. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	Sqr.	18,468.00
K 17	Plastering 3/8" thick to concrete wall cement & sand 1:3 & finished semi rough.	Sqr.	10,157.00
K 18	Plastering 3/8" thick to concrete wall cement & sand 1:3 & finished smooth with two coats of skim coat.	Sqr.	14,193.00
K 19	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished smooth with skim coat in ground floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	243.00
K 20	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished smooth with skim coat in first floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	250.00
K 21	Plastering 3/8" thick to reveals at columns & beams width not exceeding 6" in cement and sand 1:3 finished smooth with skim coat in second floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	255.00
K 22	Applying two coats of skim coat (Not exceeding 3 mm thick) to soffit of slab, sunshade & stair cases Inc. preparation surface..	Sqr.	5,927.00
K 23	Applying two coats of skim coat (Not exceeding 3 mm thick) to sides and soffit of beams and sides of columns Inc. preparation surface..	Sqr.	8,028.00
K 24	Forming drip for sunshade edge cement & sand 1: 3 finished semi rough in ground floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	272.00
K 25	Forming drip for sunshade edge cement & sand 1: 3 finished semi rough in first floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	275.00
K 26	Forming drip for sunshade edge cement & sand 1: 3 finished semi rough in second floor. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	277.00
K 27	Plastering 3/4" thick to black board in cement & sand 1:3 finished semi rough and Rendering cement floating coat using black cement finished smooth with carborandum stone. Including preparation of border. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	Sqr.	24,656.00
K 28	Plaster bands 6" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in ground floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent" as a workability enhancer.	L.ft.	268.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
K 29	Plaster bands 6" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in first floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	270.00
K 30	Plaster bands 6" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in second floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	273.00
K 31	Plaster bands 9" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in ground floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	292.00
K 32	Plaster bands 9" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in first floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	295.00
K 33	Plaster bands 9" x 1/2" in cement & sand 1:3 finished semi rough, extra over the plastering in second floor as per the Drawing No:- AR/DETAIL DRG/2010/01/10 & Sheet No. 01. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	298.00
K 34	Roof plaster band in middle & edge 4" wide in cement, sand mortar 1:3 and coloured to match the tiles. Rate includes cost of "Finex motor plus or equivalent"as a workability enhancer.	L.ft.	265.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>L - TILING</u>		
	<u>Note:</u>		
	Ceramic Tiles should comply to SLS 1181:2019 "specification and shall comply to relevant abrasion resistant class.		
	Copy of the first grade tile purchase bill should be produced at the time of payment.		
	For Item L01 Should be tile range manufactured by Lanka Wall Tile or approved equivalent.		
	<u>Wall Tiling (Ceramic)</u>		
L 01	Glazed Ceramic wall tiling of size 12" x 24" approved colour, supplying and fixing to walls on a 1:3 cement sand mortar layer, and pointed with tile grout to match the tile. (Rate does not include the 1:3 cement sand mortar layer and is separately measured under item L02) (Prime Cost of tile Rs.523.00)	Sqr.	55,503.00
L 02	Cement and sand 1:3 screed of 1/2" thick backing to receive wall tiles.	Sqr.	12,193.00
	<u>Floor Tiling</u>		
	<u>Luxuary Range</u>		
	<u>Note :</u>		
(a)	For Item No. L03 to L12 Shall be floor tiles of industrial grade floor tile range manufactured by Rocell , Lanka Wall Tile or approved equivalent.		
(b)	Rates include the cost of 1:3 cement:sand motar leveling bed.		
(c)	Copy of the first grade tile purchase bill should be produced at the time of payment.		
L 03	Ceramic semi - glazed/mat floor tile 12" x 12" paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile. (Prime Cost of tile is Rs.153.00)	Sqr	36,719.00
L 04	Homogeneous porcelain semi - glazed/mat floor tile 16" x 16" paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile. (Prime Cost of tiles is Rs.390.00)	Sqr.	52,319.00
L 05	Homogeneous porcelain semi - glazed/mat floor tile 12" x 24" paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile. (Prime Cost of tile is Rs.727.00)	Sqr	65,885.00
L 06	Porcelain semi - glazed/mat floor tile 24" x 24" paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile. (Prime Cost of tile is Rs.1112.00)	Sqr.	66,751.00
L 07	Homogeneous Porcelain semi - glazed/mat floor tile 24" x 24" paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile. (Prime Cost of tile is Rs.1282.00)	Sqr.	59,139.00
L 08	Supplying and laying homogeneous porcelain tiles at staircases including paving on 1:3 cement & sand bedding and pointed with tile grout to match the tile.	Sqr.	48,628.00
L 09	Supply and laying of 4" high skirting including tile grout to match the tile of tiling confirming to items L 03	L.ft.	187.00
L 10	Supply and laying of 4" high skirting including tile grout to match the tile of tiling confirming to items L 06	L.ft.	247.00
L 11	Supply and laying of 4" high skirting including tile grout to match the tile of tiling confirming to items L 07	L.ft.	300.00
L 12	Supply and laying of 4" high skirting including tile grout to match the tile for staircases.	L.ft.	371.00
	<u>Power Trowelling Flooring</u>		
L 13	Power floating freshly laid concrete floor with power floating machinery before concrete is fully dry. Rate shall include cost of curing using liquid membrane curing compound such as MASTERKURE 128 or any other equivalent. Power floating sub contractor should be approved by the Divisional Engineer.	sq.ft	44.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>M - COLOUR WASHING, PAINTING & POLISHING</u>		
	Painting applications for new wood work should be done after carrying out pressure impregnation treatment for the timber to maintain 12% to 15% final moisture level and timber should be free from greese wax or resin traces.		
	Method of application is accordiong to the manufacturer's method specifications		
M 01	Painting walls with one coat of interior wall primer including preparing surface for interior application before application of emulsion paint.	Sqr.	2,526.00
M 02	Painting walls with one coat of Exterior wall primer including preparing surface for exterior application before application of weathershield paint.	Sqr.	2,705.00
M 03	Painting walls with one coat of emulsion paint including preparing surface.	Sqr.	3,530.00
M 04	Painting walls with two coats of emulsion paint including preparing surface.	Sqr.	6,666.00
M 05	Painting soffit with one coat of emulsion paint including preparing surface..	Sqr.	4,055.00
M 06	Painting soffit with two coats of emulsion paint including preparing surface.	Sqr.	7,717.00
M 07	Painting walls with one coat of weathershield paint including preparing surface.	Sqr.	4,557.00
M 08	Painting walls with two coats of weathershield paint including preparing surface.	Sqr.	7,650.00
M 09	Painting walls & soffits with one coat of crack binder primer.	Sqr.	6,939.00
M 10	Painting walls with one coat of enamel paint including preparing surface.	Sqr.	4,281.00
M 11	On existing wall surfaces where emulsion paint has peel-off, application of plaster coatings of thickness not less than 2mm using "Joint compound powder ", or approved equivalent to walls, slab, beam, column facings.Rate shall include for sand papering and surface preparation.(Applying only for the internal surfaces.)	Sqr.	8,869.00
M 12	Painting Slab soffits, Side of Beams /Asbestos ceiling with one coat of primer and one coat of emulsion paint including preparing surface.	Sqr.	7,454.00
M 13	Painting internal walls of teatre with two coat of antibacterial paint with one coat of primer including preparing surface and subject to specific approval by the Divisional Engineer.	Sqr.	12,028.00
M 14	Painting black boards with two coats of blackboard paint including preparing surface.	Sqr.	6,433.00
M 15	Preparing and painting old wood work with one coat of enamel paint.	Sqr.	4,406.00
M 16	Preparing and painting old wood work with two coats of enamel paint.	Sqr.	7,628.00
M 17	Preparing and painting new wood work with one coat of primer and two coats enamel paint.	Sqr.	10,107.00
M 18	Varnishing two coats with polyurethane varnish after sand papering and application of one coat of sanding sealer.	Sqr.	7,223.00
M 19	Applying two coats of wood preservative (Clear) to wood work.	Sqr.	2,285.00
M 20	Spray Painting for the wood work as per specified in SCA/4/1 clause 14.9 (f).	Sqr.	8,069.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Water Based Application</u>		
	<u>Luxuary Range</u>		
	All water base products are none toxic and conform to EN 71 standards.		
M 21	Preparing and application two coats of water based stain and two coats of water based top coat to new wood work. Rate shall include for preparing the surface and sanding with sand paper 80, 120, 180 and 320 or 400 . (Prime cost of "JAT - Sayerlack Brand" is water base stain - 20 l is Rs.50,230.00 & water base top coat - 5 l is Rs.19,419.00 with 5 year product warranty)	Sqr.	24,346.00
	<u>Normal Range</u>		
M 22	Preparing and application two coats of water based stain and two coats of water based top coat to new wood work. Rate shall include for preparing the surface and sanding with sand paper 80, 120, 180 and 320 or 400 . (Prime cost of "JAT - Masters Brand" is water base stain - 4 l is Rs.5722.00.00 & water base top coat - 5 l is Rs.10743.00 with 5 year product warranty)	Sqr.	20,189.00
	<u>Maintainance Coat For Water Based Application</u>		
M 23	Application of two coats of maintainance wax once two years to maintain the surface where applied two coats of water based stain and two coats of water based top coat to new wood work. Rate shall include for preparing the surface and sanding with sand paper 320 or 400 and subject to specific approval by the Divisional Engineer (Prime cost of "JAT - Sayerlack Brand" of maintainance wax - 4 l is Rs.11950.00.00 with 5 year product warranty)	Sqr.	8,090.00
	<u>Painting Floors</u>		
M 24	Wax polishing to timber panels in floors.	Sqr.	2,155.00
M 25	Applying one coat of approved type floor polish including smoothing.	Sqr.	1,944.00
M 26	Painting floors / plinth wall with one coat of quick drying floor paint including washing and cleaning surfaces.	Sqr.	4,453.00
	<u>Steel Painting</u>		
M 27	Painting steel work (window grills) with two coats of enamel paint and one coat anti-corrosive primer with turpentine or thinner including removing corroded scale and wire brushing.	Sqr.	9,618.00
M 28	Painting steel work (in roof trusses) with two coats of Epoxy Zinc phospate primer including removing corroded scale and wire brushing.	Sqr.	8,834.00
M 29	Painting steel work with one coat of enamel paint with mineral turpentine or thinner including removing corroded scale and wire brushing.	Sqr.	4,523.00
M 30	Painting steel work with one coat of anti-corrosive primer with mineral turpentine or thinner including removing corroded scale and wire brushing.	Sqr.	4,260.00
M 31	Painting steel work with two coat of anti-corrosive primer with mineral turpentine or thinner including removing corroded scale and wire brushing.	Sqr.	7,754.00
M 32	Painting Galvanized or aluminium work with one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint including removing corroded scale and wire brushing.	Sqr.	10,514.00
	<u>Labour Rate for Painting</u>		
M 33	Labour rate for two coats of Emulsion Painting walls including scaffolding (Paint & Brushes supplied by the client)	Sqr.	3,152.00
M 34	Labour rate for single coat of Emulsion Painting walls including scaffolding (Paint & Brushes supplied by the client)	Sqr.	1,576.00
M 35	Labour rate for two coats of enamel painting (Paint & Brushes supplied by the client)	Sqr.	3,678.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>N - TIMBER DOORS & WINDOWS</u>		
	<u>Timber :</u>		
1	Refer preamble note for approved timber species for Doors & Windows.		
2	All timber for doors & windows should be well drying subjected to pressure impregnation treatment using chemical of copper sulphate pentahydrate, Sodium dichromate dihydrate and Boric acid to reduce the moisture level up to 8%- 10% (Final moisture level should be maintain 12% to 15% after Stabilize with the Environment.)		
3	Glass thickness to be 5mm.		
4	Following Brass or stainless steel furniture are recommended for timber Doors/ Windows/ Fan lights. Rate with out following heavy duty brass furniture.		
	(a)Doors :- 3 no. 4"x 3" Solid brass hinges		
	(b)Doors :- 2 no. 6" Solid brass barrel bolts		
	(c)Windows of 4'-0" height :- 2 no. 4"x 2" Solid brass hinges		
	(d)Windows above 4'-0" height :- 3 no. 4"x 2" Solid brass hinges		
	(e)Windows :- 1 no. 2" Solid brass ring		
	(f)Windows :- 1 no. 10" Solid brass Casement Stay		
	(g)Windows :- 1 no. Solid brass Casement Fastener		
	<u>Doors</u>		
N 01	Door flush paneled 1 1/8" thick single sash hung on 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting and lock.	Sq.ft.	2,439.00
N 02	Door glazed and paneled 1 1/8" thick single sash hung on 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting and lock.	Sq.ft.	2,433.00
N 03	Door flush paneled 1" thick single sash hung on 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting and lock.	Sq.ft.	2,350.00
N 04	Door glazed and paneled 1" thick single sash hung with 3 3/4" x 2 3/4" frame . Rate without brass furniture, painting and lock.	Sq.ft.	2,353.00
N 05	Door 32mm thick plywood ordinary sash single hung on 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting and lock.	Sq.ft.	1,347.00
N 06	Door or window glazed and/or paneled 1 1/8" thick double sash hung on 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting and lock.	Sq.ft.	3,887.00
N 07	Ledged, braced & battened door sash made out of 7/8" thick "GINISAPU" timber planks. Rate without brass furniture, painting and lock.	Sq.ft.	1,062.00
N 08	Supply & fixing 1 1/8" thick flush paneled door sash only. Rate without brass furniture's, door lock and painting.	Sq.ft.	2,240.00
N 09	Supply & fixing 1" thick flush paneled door sash only. Rate without brass furniture's, door lock and painting.	Sq.ft.	2,174.00
N 10	Supply & fixing 1 1/8" thick glazed & paneled door sash only. Rate without brass furniture's, door lock and painting.	Sq.ft.	2,129.00
N 11	Supply & fixing 1" thick glazed & paneled door sash only. Rate without brass furniture's, door lock and painting.	Sq.ft.	2,074.00
N 12	Supply & fixing 32mm thick plywood door (ordinary) sash only. Rate without brass furniture's, door lock and painting.	Sq.ft.	595.00
N 13	Door frame 3 3/4" x 2 3/4" in approved timber supplying & fixing in position.	l.ft.	796.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Windows</u>		
N 14	Window glazed 1 1/8" sash and 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting.	Sq.ft.	2,578.00
N 15	Window glazed 1" sash and 3 3/4" x 2 3/4" frame. Rate without brass furniture, painting.	Sq.ft.	2,501.00
N 16	Timber slats with 3 3/4" x 1 3/4" frame , 1" x 2 1/2" vertical slats at 2 1/2" centers. Painting measured separately.	Sq.ft.	1,372.00
N 17	Supply & fixing 1 1/8" thick glazed window sash only. Rate without brass furniture's and painting.	Sq.ft.	1,926.00
N 18	Supply & fixing 1" thick glazed window sash only. Rate without brass furniture's and painting.	Sq.ft.	1,876.00
N 19	Window frame 3 3/4" x 2 3/4" in approved timber supplying & fixing in position.	l.ft.	920.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>P - IRON MONGARY</u>		
	<u>Note:</u>		
	All Iron mongary shall be heavy duty and samples should be approved by the D.E. Prior to installation.		
1	In view of the variety of door locks available in the market, it has become necessary to prescribe the exact quality requirements in terms of performance and durability aspects. The "Union" brand and respective model numbers have been chosen as a bench mark to establish the said requirements.		
2	The brand name and model number appearing in the respective BSR items are purely meant to describe the performance standard of the said fitting/item and does not imply in any manner that only the "Union" brand is recommended or considered to be restricted to the "Union" brand.		
3	Any other make/brand that has equivalent performance characteristics are considered as equivalent provided such fittings met with following criteria.		
	(a) has an authorized local agent in Sri Lanka		
	(b) The local agent has been in the trade of the offered make for not less than 5 years.		
	(c) The fittings are manufactured in conformity to BS, JIS, ASTM, AS or SLS standards.		
	(d) The dimensions and performance characteristics are in par with the stated model.		
4	The brands that may be considered as equivalent are "Miva" of Japan "Whitco" of Australian make or "Dorma" of European make or any other approved make which prior approval to be obtained from Deputy Chief Secretary(Engineering), Director(Building) or Director(Engineering) after producing necessary catalogues and documents.		
5	The BSR Items Nos. P 01 - P 09 are payable only after producing an original invoice from the authorized agent for "Union" brand.		
	<u>Union Brand</u>		
P 01	Supply and fixing Stainless Steel hinges of size 102 x 76 x 3mm of Union Brand & Model no.- X8203-BB-3 or approved equivalent.	Pair	4,597.00
P 02	Supply and fixing Stainless Steel hinges of size 127 x 89 x 3mm of Union Brand & Model no.- X8205-BB-3 or approved equivalent.	Pair	6,537.00
P 03	Supplying and fixing Night - latch lock of Union Brand & Model No. -1022 SEPL or approved equivalent.	Nr.	17,946.00
P 04	Supplying and fixing single lever Mortice door lock for single sash of Union Brand & Model no.-678.24.95 CH or approved equivalent.	Nr.	8,514.00
P 05	Supplying and fixing two lever Mortice door lock for double sash of Union Brand & Model no.- 678.24.42 CH or approved equivalent.	Nr.	15,990.00
P 06	Supplying and fixing cylindrical door lock of Union Brand & Model no. -96300-SS.or approved equivalent	Nr.	6,915.00
P 07	Supplying & fixing rim lock of Union Brand & Model no. -J 1445 BJ BRN 009 or approved equivalent.	Nr.	13,815.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
P 08	Supplying & fixing hydraulic door closer of Union Brand & Model no. - 8823 SIL or approved equivalent.	Nr.	10,005.00
P 09	Supplying & fixing stainless steel Male or Female Symbol of Union Brand & Model no. - 200SS or approved equivalent.	Nr.	1,336.00
	<u>M.M.Noorbhoy Fittings</u>		
P 10	Supplying and fixing 4" x 2 1/2" x 2.5mm thick solid brass hinges inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	2,308.00
P 11	Supplying and fixing 4" x 3" x 3mm thick solid brass hinges inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	2,441.00
P 12	Supplying and fixing 5" x 3" x 3mm thick solid brass hinges inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	2,741.00
P 13	Supplying and fixing heavy duty solid brass casement fastener inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	1,770.00
P 14	Supplying and fixing heavy duty solid brass casement stay - 12" inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	1,889.00
P 15	Supplying and fixing heavy duty solid brass 4" center pivot inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Pair	2,630.00
P 16	Supplying and fixing 4" long heavy duty solid brass tower bolt inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	1,770.00
P 17	Supplying and fixing 6" long heavy duty solid brass tower bolt inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	2,482.00
P 18	Supplying and fixing 8" long heavy duty solid brass tower bolt inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	3,126.00
P 19	Supplying and fixing 10" long heavy duty solid brass tower bolt inclusive of brass screws marketed by M.M.Noorbhoy & company or approved equivalent.	Nr.	3,970.00
P 20	Supplying and fixing hydraulic hinge "Hettich - Sensys 8645i" for pantry cupboards marketed by M.M.Noorbhoy & company or approved equivalent.	Pair	2,495.00
P 21	Supplying and fixing solid brass Door or Window pull ring of 1" dia. (Small)	Nr.	419.00
P 22	Supplying and fixing solid brass Door or Window pull ring of 1 1/4" dia. (Medium)	Nr.	708.00
P 23	Supplying and fixing solid brass fanlight catch.	Nr.	2,132.00
P 24	Supplying & fixing stainless steel Disabled Symbol	Nr.	1,080.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Cupboards Accessories</u>		
P 25	Supply and fixing Stainless Steel hinges of size 100 x 64 x 2.5mm of Magnum Brand & Model no.- 9121NF or approved equivalent.	Nr.	2,067.00
P 26	Supply and fixing Stainless Steel door handle of 160mm long of Magnum Brand & Model no.- SH110 or approved equivalent.	Nr.	1,076.00
P 27	Supply and fixing stainless steel multipurpose door lock of Magnum Brand or approved equivalent.	Nr.	717.00
P 28	Supplying and fixing 1" padlock of "Globe" brand or approved equivalent.	Nr.	375.00
P 29	Supplying and fixing 1 1/2" padlock of "Globe" brand or approved equivalent.	Nr.	585.00
P 30	Supplying and fixing 2" padlock of "Globe" brand or approved equivalent.	Nr.	945.00
P 31	Supplying and fixing hasp & staple	Nr.	135.00
	<u>Other Fittings (for repair and maintenance in the absence of branded items mentioned above, following may be permitted for small quantities</u>		
P 32	Supplying & fixing polished brass hinges 4" x 2 1/2" thickness 4.0mm ± 0.2mm with a weight not less than 265g ± 5g with a smooth surface finish.	Nr.	1,060.00
P 33	Supplying & fixing polished brass hinges of 4" x 3" thickness 4.2mm ± 0.2mm with a weight not less than 310g ± 5g with a smooth surface finish.	Nr.	1,150.00
P 34	Supplying & fixing polished brass hinges 5" x 2 1/2" thickness 5.0mm ± 0.2mm with a weight not less than 345g ± 5g with a smooth surface finish.	Nr.	1,132.00
P 35	Supplying & fixing polished brass hinges 5" x 3" thickness 4.3mm ± 0.2mm with a weight not less than 380g ± 5g with a smooth surface finish.	Nr.	1,402.00
P 36	Supplying & fixing polished brass barrel bolt 4" x 1/2" with a weight not less than 210g ± 5g with a smooth surface finish.	Nr.	732.00
P 37	Supplying & fixing polished brass barrel bolt 6" x 1/2" with a weight not less than 300g ± 5g with a smooth surface finish.	Nr.	984.00
P 38	Supplying & fixing polished brass tower bolt 10" x 1/2" with a weight not less than 345g ± 5g with a smooth surface finish.	Nr.	1,422.00
P 39	Supplying & fixing polished brass 1" dia. Pull ring with a weight not less than 100g ± 5g with a smooth surface finish.	Nr.	369.00
P 40	Supplying and fixing heavy duty solid brass casement fastener 6".	Nr.	593.00
P 41	Supplying and fixing heavy duty solid brass casement stay - 10" long.	Nr.	660.00
P 42	Supplying and fixing heavy duty solid brass casement stay - 12" long.	Nr.	984.00
P 43	Supplying and fixing mortice lock .	Nr.	4,970.00
P 44	Supplying and fixing magnet lock.	Nr.	243.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Q - ROOFING AND CEILING</u>		
Q 01	Roof covering with calicut pattern clay tiles . (Timber frame work and ridge covering measured separately)	Sqr.	16,020.00
Q 02	Roof covering with corrugated asbestos roofing sheets. (Timber frame work and ridge covering measured separately)	Sqr.	20,627.00
Q 03	Roof covering with corrugated asbestos colour roofing sheets. (Timber frame work and ridge covering measured separately)	Sqr.	22,863.00
Q 04	Asbestos roofing close fitting ridges fixed complete with roofing screws or hook bolts.	L.ft.	705.00
Q 05	Asbestos roofing close fitting ridges - colour fixed complete with roofing screws or hook bolts.	L.ft.	827.00
Q 06	Ridging with calicut pattern tiles bedded in cement & sand mortar 1:3 and coloured to match the tiles.	L.ft.	355.00
Q 07	Racking and cutting at hipped roof.	L.ft.	75.00
Q 08	Supplying and Fixing finished size 4" x 2" Coconut Rafters.	L.ft.	151.00
Q 09	Supplying and Fixing finished size 3 1/2 "x1 1/2" Coconut Rafters.	L.ft.	121.00
	<u>DSI TILES (NIVASI PRODUCT)</u>		
	Item Q 10 - Q 14 are using for the laying of DSI (NIVASI Tiles or approved equivalent as per the M/s Samson Rajarata Tiles (pvt)ltd. Manufactures specifications.		
	Timber frame work sizes specified as follows.		
	a) Ridge plate - 45mm x 190mm		
	b) Wall plate - 117mm x 190mm		
	c) Rafters - 45mm x 117mm maximum length 10'-0" @ 18" c/c		
	d) Reepers - 45mm x 25mm @ 10" c/c		
Q 10	Roof covering with Natural type main tiles of "Nivasi" or approved equivalent with approx. size 310mm x 310mm and unit weight of 3.1Kg. (Specified Timber frame work and ridge covering measured separately)	Sqr.	39,802.00
Q 11	Ridging with Natural type ridge tiles bedded in cement, sand mortar 1:5 and coloured to match the tiles.	L.ft.	665.00
Q 12	Roof covering with Natural type gable left tiles or approved equivalent .	L.ft.	418.00
Q 13	Roof covering with Natural type gable right tiles or approved equivalent .	L.ft.	418.00
Q 14	Roof covering with Natural type corner tiles or approved equivalent .	L.ft.	390.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>COLOURCON TILES</u>		
	Item Q 15-Q 16 are using for the laying of COLOURCON TILES or approved equivalent as per the M/s Colourcon (pvt) ltd. Manufactures specifications.		
	Timber frame work sizes specified as follows.		
	a) Ridge plate - 45mm x 190mm		
	b) Wall plate - 117mm x 190mm		
	c) Rafters - 45mm x 117mm maximum length 10'-0" @ 18" c/c		
	d) Reepers - 45mm x 25mm @ 10" c/c		
Q 15	Roof covering with Natural type main tiles of "COLOURCON" or approved equivalent with approx. size 425 mm x 333 mm and unit weight of 4.2Kg/ft ² (Specified Timber frame work and ridge covering measured separately)	Sqr.	24,491.00
Q 16	Ridging with "COLOURCON" type ridge tiles bedded in cement, sand mortar 1:5 and coloured to match the tiles.	L.ft.	395.00
	<u>Flashing</u>		
Q 17	Aluminium valley gutter of 3'-0" wide in gauge 24 Aluminium sheets including fixing into 3/4" thk. Ginisapu timber boarding finished & Application of two coats of wood preservative paid separately.	L.ft.	2,090.00
Q 18	Aluminium valley gutter of 3'-0" wide in gauge 24 Aluminium sheets fixing to existing 3/4" thk. Ginisapu timber boarding finished . (Application of two coats of wood preservative to timber boarding paid separately.)	L.ft.	904.00
Q 19	G.I. Flashing 20 B.W.G. of 1'6" girth with end laps not less than 6" , turned and tuck up not less 6" in wall and pointed with polyurethane sealant including applying three coats of "SYNROOF HI BUILD" waterproofing paint and sticking (GLASCOTE) as reinforcing membrane by M/s Finex Engineering or approved equivalent..	L.ft.	1,035.00
Q 20	G.I. Valley gutter of 3'-0" wide in gauge 18 sheets including fixing into 3/4" thk. Ginisapu timber boarding including two coats of anti-corrosive paint to sheets. (Application of two coats of wood preservative to timber boarding paid separately.) (Only applicable to be specified when repairing an existing G.I. gutter)	L.ft.	2,817.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Roof Timber		
	Note :		
	<p>During the past years, Divisional Engineers have reported that exact imperial sizes on the timber on following categories are not readily available in the market, unless logs are being purchased and sawn to the exact size. Contractor's Association has also made representation indicating that the imperial size specified in the BSR is not available on imported timber varieties, and due to scarcity of the local timber, small scale Contractors are unable to purchase logs and seasoned the timber and sawn to the imperial sizes. Market survey has confirmed the same. Accordingly, it has been decided to indicate the cross sectional size roof timber in the following manner to be in par with sectional sizes readily available in the local market, as it may not be worthwhile to prescribe timber sizes and, then request Contractors to by a large section and produce it to the required size, since there is no standardization of the timber imports. This has been done to avoid subjective decision taken by the Divisional Engineers during the project implementation phase.</p>		
	<p>Accordingly, the following imperial sizes are being now replaced by the following Metric sizes.</p> <p>1" to be replaced by 22mm 2" to be replaced by 45mm 3" to be replaced by 70mm 4" to be replaced by 94mm 5" to be replaced by 117mm 6" to be replaced by 140mm 7" to be replaced by 165mm 8" to be replaced by 190mm</p>		-
	<p>Hence, timber will now be prescribed as</p> <p>2"x 1" as 45mm x 22mm 2"x 2" as 45mm x 45mm 4"x 2" as 94mm x 45mm 5"x 2" as 117mm x 45mm 5"x 3" as 117mm x 70mm 4"x 3" as 94mm x 70mm 6"x 2" as 140mm x 94mm 6"x 3" as 140mm x 70mm 6"x 4" as 140mm x 94mm 165mm x 45mm 8"x 4" as 190mm x 94mm</p> <p style="text-align: right;">7"x 2" as</p>		
	Refer Preamble Notes for approved timber species. The rate for timber items will remain same irrespective of timber species.		
	All Timber should be treated at an approved klin. Timber preservation paid separately as per Item No:M 18.		
	All timber for roof should be well drying subjected to pressure impregnation treatment using chemical of copper sulphate pentahydrate, Sodium dichromate dihydrate and Boric acid to reduce the moisture level up to 8%- 10% (Final moisture level should be maintain 12% to 15% after Stabilize with the Environment.)		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Q 21	Roofing with calicut pattern tiles on approved local timber or imported Balau , Bitis or Kempas timber frame work complete with ridge hips etc. comprising of 165mm x 45mm ridge plate , 94mm x 70mm wall plate , 94mm x 45mm rafters @ 18" c/c and 45mm x 22mm reepers @ 12" c/c. Application of two coats of wood preservative paid separately..	Sqr.	59,852.00
Q 22	Roofing with corrugated asbestos sheets on approved local timber or imported Balau , Bitis, or Kempas timber frame work (Ridging measured separately).Comprising of 165mm x 45mm ridge plate , 94mm x 70mm wall plate , 94mm x 45mm rafters @ 30" c/c and 45mm x 45mm battens @ 3'-0" c/application of two coats of wood preservative paid separately..	Sqr.	45,083.00
Q 23	Supplying and fixing 190mm x 94mm , 165mm x 45mm , 140mm x 94mm , 140mm x 70mm , 140mm x 45mm , 117mm x 190mm and 45mm x 190mm approved local timber or imported Balau , Kempas or Bitis timber purling , hip/valley rafters etc. Application of two coats of wood preservative paid separately..	Cu.ft.	9,061.00
Q 24	Supplying and fixing 117mm x 70mm purling up to 12'-0" length approved local timber or imported Balau, Kempas Application of two coats of wood preservative paid separately..	L.ft.	863.00
Q 25	Supplying and fixing 94mm x 70mm wall plates up to 12'-0" length, approved local timber or imported Balau, Kempas Application of two coats of wood preservative paid separately..	L.ft.	647.00
Q 26	Supplying and fixing 117mm x 70mm , 117mm x 45mm , 94mm x 70mm approved local timber or imported timber varieties of Balau , Bitis ,Kempas timber purlins, wall plates, rafters etc. Application of two coats of wood preservative paid separately..	Cu.ft.	7,389.00
Q 27	Supplying and fixing 94mm x 45mm approved local timber or imported Balau Kempas or Bitis timber purling, rafters etc. Application of two coats of wood preservative paid separately..	L.ft.	350.00
Q 28	Supplying and fixing 45mm x 45mm local timber or Balau, Kempas or Bitis timber bearers Application of two coats of wood preservative paid separately..	L.ft.	124.00
Q 29	Supplying and fixing 45mm x 22mm local timber or Balau, Kempas or Bitis timber reepers. Application of two coats of wood preservative paid separately..	L.ft.	66.00
Q 30	Timber valance/barge board in GINISAPU timber (finished size 225mmX18mm thick) fixed to timber roof frame with 2 nos. of 1 1/2" long screws no. 8 at 1' 6" c/c, Application of two coats of wood preservative paid separately.	L.ft.	399.00
Q 31	Timber valance/barge board in GINISAPU timber (finished size 225mm x 18mm thick) fixed to existing iron brackets with 2 nos. of 5 mm dia, 1 1/2" long G.I. nut & bolt at 1' 6" c/c, Application of two coats of wood preservative paid separately.	L.ft.	396.00
Q 32	Treating of timber by vacuum pressure impregnation technique or approved kiln treatment by "Browns Commodities & Logistics." or any other Authorized company incl. transport. Application of two coats of wood preservative paid separately..	Cu.ft.	688.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Q 33	Supply and fixing 20mm x 5mm x 12" long flat iron bracket 2'-0" c/c for fixing valance board/barge board. Rate shall include for two coats of anti-corrosive paint.	Nr.	276.00
	Ceiling		
Q 34	3/4" x 6" wide tongued and grooved lunumidella ceiling planks fixed to underside of existing rafters with brass screws including leveling with timber strip where necessary.	Sqr.	26,749.00
Q 35	Asbestos eaves ceiling with approved timber coves & fillets fixed to. under side to existing rafter, size of fillet to be 1" x 1/4" & size of cove moulding 1 1/2" x 1 1/2".	Sqr.	18,443.00
Q 36	Asbestos flat ceiling fixed with coves & fillets to local timber or Balau , Bitis or Kempas timber frame work of 94mm x 45mm @ 4' - 0" c/c , 45mm x 45mm @ 2' - 0" c/c, fillet size to be 1 " x 1/4" and cove moulding size to be 1 1/2" x 1 1/2" Application of two coats of wood preservative paid separately..	Sqr.	50,360.00
Q 37	Asbestos flat eaves ceiling fixed with coves and fillets fixed with timber work of approved local timber or imported Balau , Bitis or Kempas timber frame work of 45mm x 45mm @ 2' - 0" c/c, fillet size to be 1 " x 1/4" cove moulding size to be 1 1/2" x 1 1/2". Application of two coats of wood preservative paid separately..	Sqr.	39,773.00
Q 38	3/4" thick x 6" wide tongued and grooved lunumidella ceiling planks fixed flat on 94mm x 45mm approved local timber or imported Balau , Bitis or Kempas. and timber joist at every 2' - 0" c/c. cove moulding size to be 1 1/2" x 1 1/2". Application of two coats of wood preservative paid separately..	Sqr.	59,017.00
Q 39	Supply and fixing of tongued and grooved 3/4"x 6" lunumidella ceiling planks on under side of existing rafters , timber strips size to be 2" x 1/4", cove moulding size to be 1 1/2" x 1 1/2". with double sided aluminium foil fixed on top. Application of water based staining and two coats of water based sealant, application of two coats of wood preservative to be paid separately.	Sqr.	38,813.00
Q 40	Mineral fiber ceiling		
	Supplying & installing of suspended mineral fiber ceiling in 600mm x 600mm grid size reveal / bevel type with hot dipped GI pre - engineered inter - locking main tees (32mm x 24mm) and cross tees (25mm x 24mm) and wall angles expose areas finished with white baked enamel finish and suspended on 04mm dia. adjustable hanger rods with spring clips. Ceiling panel of 600mm x 600mm x 15mm (thickness) and complete to working order as per manufacture's specifications. (Prime cost of 2'-0" x 2'-0" sheet is Rs.1,000.00)	Sq.ft.	665.00
Q 41	Acoustic ceiling		
	Supplying & installing of suspended acoustic ceiling in 600mm x 600mm grid size reveal / bevel type using hot dipped GI pre - engineered inter - locking main tees (32mm x 24mm) and cross tees (25mm x 24mm) and wall angles expose areas finished with white baked enamel finish and suspended on 04mm dia. adjustable hanger rods with spring clips. Ceiling panels of 600mm x 600mm x 15mm (thickness) and complete to working order as per manufacture's specifications. (Prime cost of 2'-0" x 2'-0" sheet is Rs.1,340.00)	Sq.ft.	774.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Q 42	Gypsum ceiling panel		
	Supplying & installing of suspended Gypsum ceiling in 600mm x 600mm grid size reveal / bevel type using hot dipped GI pre - engineered inter - locking main tees (32mm x 24mm) and cross tees (25mm x 24mm) and wall angles expose areas finished with white baked enamel finish and suspended on 4mm dia. adjustable hanger rods with spring clips. Ceiling panels will be SCG Elephant Gypsum Standard tiles 600mm x 600mm x 9mm (thickness) and complete to working order as per manufacture's specifications. (Prime cost of 4'-0" x 2'-0" SCG Gypsum sheet is Rs.700.00)	Sq.ft.	491.00
Q 43	Cement fiber ceiling		
	Supplying & installing of suspended cement fiber ceiling in 600mm x 600 grid size reveal / bevel type using hot dipped GI pre - engineered inter - locking main tees (32mm x 24mm) and cross tees (25mm x 24mm) and wall angles expose areas finished with white baked enamel finish and suspended on 4mm dia. adjustable hanger rods with spring clips. Ceiling panel of 600mm x 600mm x 4.5mm (thickness) and complete to working order as per manufacture's specifications. (Prime cost of 8'-0" x 4'-0" sheet (un painted) is Rs.2,900.00)	Sq.ft.	665.00
Q 44	Aluminium Panel Ceiling		
	Supplying & installing of suspended Aluminium Panel Ceiling in 600mm x 600 grid size reveal / bevel type using hot dipped GI pre – engineered inter - locking main tees (38mm x 15mm) and cross tees (25mm x 15mm) and wall angles expose areas finished with white baked enamel finish and suspended on 4 mm dia. adjustable hanger rods with spring clips. Ceiling panels will be Compton aluminium tiles 600mm x 600mm x 0.7mm (thickness) and complete to working order as per manufacture's specifications.. (Prime cost of 2'-0" x 2'-0" aluminium sheet is Rs.2240.00)	Sq.ft.	722.00
	R - GUTTERS AND DOWN PIPES		
R 01	P.V.C. eaves gutter 4 1/2" square type fixed to valance board with P.V.C. brackets @ 1' - 6" c/c including necessary mitre joints , gutter joiners , running heads & end caps.	L.ft.	563.00
R 02	P.V.C. down pipes 3 1/2" dia. fixed to wall with 1" clearance to wall and Timber plugging buried to walls and P.V.C. clips @ 4'-0" c/c including necessary sockets, bends, elbows.	L.ft.	666.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	S - SANITARY FITTINGS		
	Note :		
1	In view of the variety of sanitary ware and fittings available in the market, it has become necessary to prescribe the exact quality requirements in terms of performance and durability aspects. The "Rocell , American Standard" brands and respective model numbers have been chosen as a bench mark to establish the said requirements.		
2	The brand name and model number appearing in the respective BSR items are purely meant to describe the performance standard of the said fitting/item and does not imply in any way that only the "Rocell , American Standard " brands are recommended or considered to be restricted to the "Rocell & American Standard" brands.		
3	Any other make/brand that has equivalent performance characteristics are considered as equivalent provided such fittings meet with the following criteria.		
	(a). Has an authorized local agent in Sri Lanka		
	(b). The local agent has been in the trade of the offered make for not less than 5 years.		
	(c).The cistern mechanism shall have an assurance for the availability of spares for the next 3 years.		
	(d). The fittings are manufactured in conformity to BS, JIS, A.S.T.M., A.S. or S.L.S. standards.		
	(e).The dimensions and performance characteristics are in par with the stated model.		
	(f).Contractor should submit the purchasing bill and the required warranty for all "Rocell , American Standard" products to the Divisional Engineer.		
4	Warranty		
	(a). Manufacturer's Warranty for American Standard Brand.		
	25 years warranty for Vitreous china ware (VC), 1 year warranty for VC component parts such as Tank fitting, Seat cover, etc., 1 year warranty for Flush valve, 5 years warranty for Faucets (Body) & 1 year warranty for other products.		
	(b). Manufacturer's Warranty for Rocell Brand.		
	25 years warranty for Bath ware, 5 years warranty for Faucets (Body) & Bath room Accessories & 1 year warranty for Plumbing Accessories.		
5	In case where wash basin outlet directly falls on to an open drain, the bottle trap may be omitted.		
6	For wash basins fixed on open areas plastic tap of item T 01 be specified.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Semiluxury Range		
S 01	Supply and fix white vitreous china (vc) floor standing wash basin and pedestal with overflow hole and single tap hole in center of "Rocell" brand or approved equivalent complete to working order inclusive of the 1 1/4" chromium plated waste outlet of "Rocell" brand or approved equivalent and 1 1/4" chromium plated siphon cleanable bottle trap of "Rocell" brand or approved equivalent . Prime cost of the floor standing wash basin and pedestal is Rs.17,593.00	Nr.	34,487.00
S 02	Supply and fix white vitreous china (vc) floor standing wash basin and pedestal with overflow hole and single tap hole in center of "Rocell" brand or approved equivalent complete to working order. Prime cost of the floor standing wash basin and pedestal is Rs.17,593.00	Nr.	23,273.00
S 03	Supply and fix white vitreous china (vc) floor standing close coupled semi back to wall water closet suite with wash down flushing with 6/3 liters dual flushing has horizontal outlet with vario drain bend and two lateral holes for bottom water connection , P trap, cistern with water inlet from rear of "Rocell" brand or approved equivalent complete to working order inclusive of universal bend ("Rocell" brand & model "Vario Joint"). Prime cost of the water closet, tank and seat cover is Rs.38,888.00	Nr.	56,361.00
S 04	Supply and fix white vitreous china (vc) floor standing close coupled semi back to wall water closet , P trap, from rear of "Rocell" brand or approved equivalent complete to working order inclusive of universal bend ("Rocell" brand & model "Vario Joint"). Prime cost of the water closet and seat cover is Rs.28,055.00.	Nr.	37,991.00
S 05	Supply and fix white vitreous china (vc) cistern with water inlet from rear of "Rocell" brand with wash down flushing with 6/3 liters dual flushing has horizontal outlet with vario drain bend and two lateral holes for bottom water connection or approved equivalent complete to working order. Prime cost of the tank is Rs.10,833.00.	Nr.	14,960.00
S 06	Supply and fix wall hung wash basin with half pedestal and single tap hole in center of "Rocell" brand or approved equivalent complete to working order inclusive of the 1 1/4" chromium plated waste outlet of "Rocell" brand or approved equivalent and 1 1/4" chromium plated siphon cleanable bottle trap of "Rocell" brand or approved equivalent. Prime cost of wash basin is Rs.12,037.00.	Nr.	27,621.00
S 07	Supply and fix plastic seat cover for water closet of "Rocell " brand or approved equivalent complete to working order. Prime cost of the seat cover is Rs.5,370.00.	Nr.	7,394.00
S 08	Supply and fix squatting pan with foot rest with p trap of "Rocell" brand or approved equivalent complete to working order. Prime cost of the squatting pan with foot rest with p trap is Rs. 7,593.00.	Nr.	11,923.00
S 09	Supply and fix plastic cistern for squatting pan of "Rocell" brand or approved equivalent including connecting pipe between tank and squatting pan complete to working order. Prime cost of the plastic cistern for squatting pan is Rs. 4,537.00.	Nr.	9,162.00
S 10	Supply and fix Urinal with sensor of "Rocell" brand or approved equivalent complete to working order. Prime cost of the Urinal with sensor is Rs. 42,222.00.	Nr.	54,714.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
S 11	Supply and fix Urinal with flush valve of "Rocell" brand or approved equivalent complete to working order. Prime cost of the Urinal with sensor is Rs. 33,241.00.	Nr.	43,829.00
S 12	Supply and fix Chromium plated 1 1/4" dia.siphon cleanable bottle trap of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated 1 1/4" dia.siphon cleanable bottle trap is Rs.5,370.00.	Nr.	6,791.00
S 13	Supply and fix Chromium plated 1 1/4" chromium plated waste outlet of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated 1 1/4" chromium plated waste outlet is Rs. 2,500.00.	Nr.	3,374.00
S 14	Supply and fix Chromium plated 1/2" dia. angle valve of "Rocell" brand model or approved equivalent. Prime cost of the Chromium plated 1/2" dia. angle valve is Rs. 1,481.00.	Nr.	2,017.00
S 15	Supply and fix Chromium plated 1/2" dia. 18" long flexible horse of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated 1/2" dia. 18" long flexible horse is Rs. 1,204.00.	Nr.	1,681.00
S 16	Supply and fix Chromium plated 1/2" dia. 24" long flexible horse of "Rocell" brand model No."20002" or approved equivalent. Prime cost of the Chromium plated 1/2" dia. 24" long flexible horse is Rs. 1,231.00.	Nr.	1,714.00
S 17	Supply and fix Chromium plated 1/2" dia. concealed valve of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated 1/2" dia. concealed valve is Rs. 4,537.00.	Nr.	5,721.00
S 18	Supply and fix chromium plated Bidet Spray of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Bidet Spray is Rs. 2,037.00.	Nr.	2,818.00
S 19	Supply and fix head shower one spray of "Rocell " brand with shower arm or approved equivalent. Prime cost of the head shower one spray with shower arm is Rs. 17,870.00.	Nr.	22,544.00
S 20	Supply and fix 5mm thick mirror of size 18" x 24" double coated with pencil edge back strecher. Prime cost of the 5mm thick mirror of size 18" x 24" is Rs. 4,000.00.	Nr.	5,066.00
S 21	Supply and fix Chromium plated pillar tap (cold water) for wash basin of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated pillar tap (cold water) for wash basin is Rs. 5093.00.	Nr.	6,394.00
S 22	Supply and fix Chromium plated Bip tap of of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated Bip tap is Rs. 3148.00.	Nr.	4,037.00
S 23	Supply and fix Chromium plated Sink tap (Swan neck type) of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated Sink tap (Swan neck type) is Rs. 2,963.00.	Nr.	3,813.00
S 24	Supply and fix flex shower system with diverter for wall mounting with 1/2" single lever bath mixer of "Rocell" brand or approved equivalent. Prime cost of the flex shower system with diverter for wall mounting with 1/2" single lever bath mixer is Rs. 35,185.00.	Nr.	43,097.00
S 25	Supply and fix Chromium plated single level wash basin mixer tap flexible connection of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated single level wash basin mixer tap is Rs. 10,185.00.	Nr.	12,714.00
S 26	Supply and fix Chromium plated sink mixer tap flexible connection of "Rocell" brand or approved equivalent. Prime cost of the Chromium plated sink mixer tap is Rs. 10,185.00.	Nr.	12,714.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
S 27	Supply and fix Geyser (electric water heaters) of 15litres of "Rocell" brand or approved equivalent. Prime cost of the Geyser (electric water heaters) of 15litres is Rs. 26,389.00.	Nr.	32,679.00
S 28	Supply and fix Geyser (electric water heaters) of 30litres of "Rocell" brand or approved equivalent. Prime cost of the Geyser (electric water heaters) of 30 litres is Rs. 30,093.00.	Nr.	37,142.00
	<u>Bathroom Accessories</u>		
S 29	Supply and fix chromium plated Soap holder of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Soap holder is Rs. 3,519.00.	Nr.	4,617.00
S 30	Supply and fix chromium plated Tumbler Holder of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Tumbler Holder is Rs. 3,611.00.	Nr.	4,670.00
S 31	Supply and fix chromium plated Towel Ring of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Towel Ring is Rs. 4,167.00.	Nr.	5,338.00
S 32	Supply and fix chromium plated Robe Hook of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Robe Hook is Rs. 2,037.00.	Nr.	2,782.00
S 33	Supply and fix chromium plated Toilet Paper Holder of "Rocell" brand or approved equivalent. Prime cost of the chromium plated Toilet Paper Holder is Rs. 2,963.00.	Nr.	3,893.00
	<u>Normal Range</u>		
S 34	Supply and fix toilet set with seat cover and wash basin and full pedestal. Prime cost of the complete set is Rs.38,000.00	Nr.	48,930.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Disable Fittings & Accessories- Luxury Range</u>		
S 35	Supply and fix ceramic wall hung wash basin for disabled of "American Standard" brand &, Model No."TF-0947" with Plush Lock and waste & overflow of Model No."A-8016-A-N"& Bottle Trap Chrome plated of Model No."A-8104-N" or approved equivalent.	Nr.	53,363.00
S 36	Supply and fix Disable close coupled Water Closet "American Standard" brand & Model No."Model No.6927" with seat cover & water tank or approved equivalent complete to working order. (Prime cost of the Water Closet with seat cover & water tank Rs. 225,100.00)	Nr.	273,660.00
S 37	Supply and fix Chromium plated single hole lava faucet for wash basin (Elbow operator) of "American Standard" brand & Model No."CF-1261.105.50" or approved equivalent with 5 year written warranty from the authorized agent.	Nr.	46,395.00
S 38	Supply and fix grip bar (hand rail) for disabled of "American Standard" brand, model Apex - HR-320460-01 or approved equivalent.	Nr.	54,952.00
	J & T Brand		
S 39	Supply and fix Heavy duty Straight grab bar for disabled of "J&T" brand, model "GB029" or approved equivalent.	Nr.	11,818.00
S 40	Supply and fix hand Swing up (Folder) Grab bar for disabled of "J&T" brand, model "GB018" or approved equivalent.	Nr.	44,193.00
S 41	Supply and fix Floor to Wall Heavy Duty Grab Bar for disabled of "J&T" brand, model "GB - 008" or approved equivalent.	Nr.	22,435.00
S 42	Supply and fix Shower Angle - Horizontal Wall Heavy Duty Grab Bar for disabled of "J&T" brand, model "GB-002" or approved equivalent.	Nr.	29,108.00
	Rocell Brand		
S 43	Supply and fix Stainless steel bath seat size 338 x 348mm of "Rocell" brand & model no "HS-01C" or approved equivalent.	Nr.	11,853.00
	<u>Fittings for rough usage (where probability of breakage may be high due to vandalism) Item Nos. S 44 to S 54.</u>		
S 44	Supply and fix closet Squatting pan with foot rest - square type	Nr.	6,607.00
S 45	Supply and fix ceramic wash basin with approved quality (pedestal) and complete to work in order. Rate without pillar tap & bottle trap.	Nr.	12,650.00
S 46	Supply and fix ceramic wall hung corner wash basin with approved quality and complete to work in order. Rate inclusive of brackets and connection to pipe line, but without pillar tap & bottle trap.	Nr.	8,256.00
S 47	Supply and fix ceramic water closet with approved quality and complete to work in order. Rate inclusive of brackets and connection to pipe line.	Nr.	30,497.00
S 48	Supplying and fixing 1 1/4" (40 mm) dia. PVC Bottle Trap.	Nr.	1,185.00
S 49	Shower rose chromium plated 4" dia. Fixed vertically with 1/2" valve socket including water connection.	Nr.	2,126.00
S 50	Supply and fixing plastic seat cover for Water Closet.	Nr.	1,495.00
S 51	Mirror bevelled rectangular 24"x 18" aluminium clips and key hole hanging plate including glass shelves.	Nr.	2,954.00
S 52	Supply and fixing Chromium plated tooth brush holder	Nr.	2,099.00
S 53	Supply and fixing Chromium plated Soap Tray	Nr.	1,859.00
S 54	Supply and fixing Chromium plated Single Towel Bar	Nr.	1,799.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Laboratory Sink</u>		
S 55	Supply and fix laboratory sink of "Rocell" brand & model "Xenon" or approved equivalent complete to working order. (1 1/4" chromium plated waste outlet of "Rocell" brand & model "A706" and 1 1/4" chromium plated siphon cleanable bottle trap of "Rocell" brand & model "A186").	Nr.	34,689.00
	<u>Kitchen Sink</u>		
S 56	Supply and fix 36" x 18" stainless steel 0.6mm thick shiny finish kitchen sink with single bowl & single drain of "Seal core" by mascons or approved equivalent with 5 year written warranty from the authorized agent. including PVC bottle trap and water connection with flexible hose, all complete to working order. (Swan neck tap paid separately.)	Nr.	8,591.00
S 57	Supply and fix 17" x 18" stainless steel 0.6mm thick shiny finish kitchen sink with single bowl of "Seal core" by mascons or approved equivalent with 5 year written warranty from the authorized agent. including PVC bottle trap and water connection with flexible hose, all complete to working order. (Swan neck tap paid separately.)	Nr.	7,122.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>T - PLUMBING</u>		
	<u>ACCESSORIES</u>		
	<u>"Pegler" Brand or Approved Equivalent Fittings(T 01 -T 12)</u>		
	<u>Ball valve (Ball cock) - PB 500</u>		
	The BSR Items Nos. T 01 - T 12 are payable only after producing an original invoice from the authorized agent for "Pegler" brand.		
	Ball Valve Should be brass full bore quarter turn with lever and female ends.		
T 01	Supply and fixing 1/2" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	3,047.00
T 02	Supply and fixing 3/4" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	3,983.00
T 03	Supply and fixing 1" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	5,111.00
T 04	Supply and fixing 1 1/4" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	9,199.00
T 05	Supply and fixing 1 1/2" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	15,279.00
T 06	Supply and fixing 2" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	21,610.00
T 07	Supply and fixing 2 1/2" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	45,568.00
T 08	Supply and fixing 3" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	51,800.00
T 09	Supply and fixing 4" dia Brass Ball valve (Ball cock) "Pegler" Brand or approved equivalent.	Nr.	114,285.00
	<u>Foot Valve</u>		
T 10	Supply and fixing 1 " dia Foot Valve "Pegler" Brand or approved equivalent.	Nr.	2,446.00
T 11	Supply and fixing 1 1/2" dia Foot Valve "Pegler" Brand or approved equivalent.	Nr.	4,409.00
T 12	Supply and fixing 2" dia Foot Valve "Pegler" Brand or approved equivalent.	Nr.	5,936.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>P.V.C. Items</u>		
	<u>"S-lon" Brand or Approved Equivalent Fittings with 1 year manufacturer's warranty for taps</u>		
	<u>P.V.C. Fittings</u>		
T 13	Supplying and fixing Plastic 1/2" Bib tap of "S-lon" brand or approved equivalent.	Nr.	957.00
T 14	Supplying and fixing Plastic 1/2" Angle valve of "S-lon" brand or approved equivalent.	Nr.	993.00
T 15	Supplying and fixing Plastic 1/2" Swan-neck tap of "S-lon" brand or approved equivalent.	Nr.	2,918.00
T 16	Supplying and fixing Plastic 1/2" Piller tap of "S-lon" brand or approved equivalent.	Nr.	1,935.00
T 17	Supplying and fixing Plastic Bidet Shower of "S-lon" brand or approved equivalent.	Nr.	2,144.00
T 18	Supply and fixing Plastic 1/2" stop tap of "S-lon" brand or approved equivalent.	Nr.	788.00
T 19	Supply and fixing 1/2" dia plastic flexible hose - 12" length.	Nr.	649.00
T 20	Supply and fixing 1/2" dia plastic flexible hose - 18" length.	Nr.	805.00
T 21	Supplying and fixing Shower rose of "S-lon" brand or approved equivalent.	Nr.	1,699.00
T 22	Supply and fixing 1/2" dia PVC Compact Ball valve.	Nr.	543.00
T 23	Supply and fixing 3/4" dia PVC Compact Ball valve.	Nr.	776.00
T 24	Supply and fixing 1" dia PVC Compact Ball valve.	Nr.	858.00
T 25	Supply and fixing 1 1/4" dia PVC Compact Ball valve.	Nr.	1,202.00
T 26	Supply and fixing 1 1/2" dia PVC Compact Ball valve.	Nr.	1,528.00
T 27	Supply and fixing 2" dia PVC Compact Ball valve.	Nr.	2,205.00
T 28	Supply and fixing 3" dia PVC Compact Ball valve.	Nr.	5,635.00
T 29	Supply and fixing 1" dia PVC Foot valve.	Nr.	852.00
T 30	Supply and fixing 2" dia PVC Foot valve.	Nr.	2,433.00
	<u>P.V.C. Pipes</u>		
	All P.V.C. pipes should confirm to S.L.S. 147. The fittings should be of the same brand as pipes.		
	<u>Water Supply Pipes.</u>		
T 31	Supplying laying and/or fixing 1/2" dia. uPVC pipe - PN _T 14 (Type 1000) (Specials paid separately).	L.ft.	160.00
T 32	Supplying laying and/or fixing 3/4" dia. uPVC pipe - PN _T 11 (Type 1000) (Specials paid separately).	L.ft.	245.00
T 33	Supplying laying and/or fixing 1" dia. uPVC pipe - PN _T 11 (Type 1000) (Specials paid separately).	L.ft.	301.00
T 34	Supplying laying and/or fixing 1 1/4" dia. uPVC pipe - PN _T 11 (Type 1000) (Specials paid separately).	L.ft.	398.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 35	Supplying laying and/or fixing 1 1/2" dia. uPVC pipe - PN _T 11 (Type 1000) (Specials paid separately).	L.ft.	541.00
T 36	Supplying laying and/or fixing 2" dia. uPVC pipe - PN _T 11 (Type 1000) (Specials paid separately).	L.ft.	823.00
	waste pipe		
T 37	Supplying and Fixing 1 1/4" dia uPVC waste pipe - PN _T 7 (Type 600) Rate without excavation and specials	L.ft.	295.00
T 38	Supplying and fixing 1 1/2" dia uPVC waste pipe - PN _T 7 (Type 600) Rate without excavation and specials	L.ft.	339.00
T 39	Supplying and fixing 2" dia. uPVC waste pipe - PN _T 7 (Type 600) Rate without excavation and specials	L.ft.	529.00
	Sewer Pipes.		
T 40	Supplying and laying 4" dia.uPVC sewer pipe - PN _T 7 (type 600) as per Drg. No:- WSS 270 - Type I . Excavation, Bedding, Haunching & Surrounding to be paid separately. Details of Bedding, Haunching or surrounding are given by the Divisional Engineer as per the location.	L.ft.	1,369.00
T 41	Supplying and laying 6" dia.uPVC sewer pipe - PN _T 7 (type 600) Including cement concrete surrounding 1:3:6: (1") as per Drg. No:- WSS 270 - Type II . Excavation, Bedding, Haunching & Surrounding to be paid separately. Details of Bedding, Haunching or surrounding are given by the Divisional Engineer as per the location.	L.ft.	3,792.00
T 42	Supplying and laying 10" dia. uPVC sewer pipes (type 600) Including cement concrete surrounding 1:3:6: (1") as per Drg. No:- WSS 270 - Type II . Excavation, Bedding, Haunching & Surrounding to be paid separately. Details of Bedding, Haunching or surrounding are given by the Divisional Engineer as per the location.	L.ft.	11,348.00
T 43	Supplying and laying 4" dia.uPVC sewer pipe - PN _T 7 (type 600) fixed to wall and floor slab with uPVC clips.	L.ft.	1,678.00
T 44	Supplying and laying 6" dia. uPVC sewer pipe - PN _T 7 (type 600) fixed to wall and floor slab with uPVC clips.	L.ft.	4,248.00
T 45	Supplying and laying 4" dia. uPVC perforated pipe- PN _T 7 (type 600) with 10mm dia. Holes @ 3" c/c as per details. Necessary excavation & rubble packing to be paid separately.	L.ft.	1,436.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>P.V.C. Specials.</u>		
T 46	Supplying and fixing 1/2" dia uPVC Socket	Nr.	172.00
T 47	Supplying and fixing 1/2" dia. uPVC Valve Socket	Nr.	186.00
T 48	Supplying and fixing 1/2" dia. uPVC Faucet Socket	Nr.	179.00
T 49	Supplying and fixing 1/2" dia. uPVC Elbow	Nr.	172.00
T 50	Supplying and fixing 1/2" dia. uPVC Bend	Nr.	202.00
T 51	Supplying and fixing 1/2" dia. uPVC Equal Tee	Nr.	183.00
T 52	Supplying and fixing 1/2" dia. uPVC Clips	Nr.	66.00
T 53	Supplying and fixing 1/2" dia. uPVC union	Nr.	244.00
T 54	Supplying and fixing 3/4" dia uPVC Socket	Nr.	206.00
T 55	Supplying and fixing 3/4" dia. uPVC Valve Socket	Nr.	219.00
T 56	Supplying and fixing 3/4" dia. uPVC Faucet Socket	Nr.	226.00
T 57	Supplying and fixing 3/4" dia. uPVC Elbow	Nr.	227.00
T 58	Supplying and fixing 3/4" dia. uPVC Bend	Nr.	243.00
T 59	Supplying and fixing 3/4" dia. uPVC Equal Tee	Nr.	244.00
T 60	Supplying and fixing 3/4" dia. uPVC Clips	Nr.	75.00
T 61	Supplying and fixing 3/4" dia. uPVC Union	Nr.	316.00
T 62	Supplying and fixing 1" dia uPVC Socket	Nr.	251.00
T 63	Supplying and fixing 1" dia. uPVC Valve Socket	Nr.	257.00
T 64	Supplying and fixing 1" dia. uPVC Faucet Socket	Nr.	249.00
T 65	Supplying and fixing 1" dia. uPVC Elbow	Nr.	251.00
T 66	Supplying and fixing 1" dia. uPVC Bend	Nr.	307.00
T 67	Supplying and fixing 1" dia. uPVC Equal Tee	Nr.	307.00
T 68	Supplying and fixing 1" dia. uPVC Clips	Nr.	78.00
T 69	Supplying and fixing 1" dia. uPVC Union	Nr.	460.00
T 70	Supplying and fixing 1 1/4" dia uPVC Socket	Nr.	314.00
T 71	Supplying and fixing 1 1/4" dia. uPVC Valve Socket	Nr.	344.00
T 72	Supplying and fixing 1 1/4" dia. uPVC Faucet Socket	Nr.	350.00
T 73	Supplying and fixing 1 1/4" dia. uPVC Elbow	Nr.	364.00
T 74	Supplying and fixing 1 1/4" dia. uPVC Bend	Nr.	514.00
T 75	Supplying and fixing 1 1/4" dia. uPVC Equal Tee	Nr.	436.00
T 76	Supplying and fixing 1 1/4" dia. uPVC Clips	Nr.	84.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 77	Supplying and fixing 1 1/4" dia. uPVC Union	Nr.	1,008.00
T 78	Supplying and fixing 1 1/2" dia uPVC Socket	Nr.	507.00
T 79	Supplying and fixing 1 1/2" dia. uPVC Valve Socket	Nr.	534.00
T 80	Supplying and fixing 1 1/2" dia. uPVC Faucet Socket	Nr.	550.00
T 81	Supplying and fixing 1 1/2" dia. uPVC Elbow	Nr.	606.00
T 82	Supplying and fixing 1 1/2" dia. uPVC Bend	Nr.	868.00
T 83	Supplying and fixing 1 1/2" dia. uPVC Equal Tee	Nr.	746.00
T 84	Supplying and fixing 1 1/2" dia. uPVC Clips	Nr.	126.00
T 85	Supplying and fixing 1 1/2" dia. uPVC Union	Nr.	1,194.00
T 86	Supplying and fixing 2" dia uPVC Socket	Nr.	634.00
T 87	Supplying and fixing 2" dia. uPVC Valve Socket	Nr.	662.00
T 88	Supplying and fixing 2" dia. uPVC Faucet Socket	Nr.	690.00
T 89	Supplying and fixing 2" dia. uPVC Elbow	Nr.	812.00
T 90	Supplying and fixing 2" dia. uPVC Bend	Nr.	1,340.00
T 91	Supplying and fixing 2" dia. uPVC Equal Tee	Nr.	974.00
T 92	Supplying and fixing 2" dia. uPVC Clips	Nr.	132.00
T 93	Supplying and fixing 2" dia. uPVC Union	Nr.	1,569.00
T 94	Supplying and fixing 2 1/2" dia uPVC Socket	Nr.	818.00
T 95	Supplying and fixing 2 1/2" dia. uPVC Valve Socket	Nr.	968.00
T 96	Supplying and fixing 2 1/2" dia. uPVC Faucet Socket	Nr.	1,075.00
T 97	Supplying and fixing 2 1/2" dia. uPVC Elbow	Nr.	1,235.00
T 98	Supplying and fixing 2 1/2" dia. uPVC Bend	Nr.	2,295.00
T 99	Supplying and fixing 2 1/2" dia. uPVC Equal Tee	Nr.	1,457.00
T 100	Supplying and fixing 2 1/2" dia. uPVC Clips	Nr.	242.00
T 101	Supplying and fixing 2 1/2" dia. uPVC Union	Nr.	3,548.00
T 102	Supplying and fixing 3" dia uPVC Socket	Nr.	1,343.00
T 103	Supplying and fixing 3" dia. uPVC Valve Socket	Nr.	1,527.00
T 104	Supplying and fixing 3" dia. uPVC Faucet Socket	Nr.	1,541.00
T 105	Supplying and fixing 3" dia. uPVC Elbow	Nr.	1,788.00
T 106	Supplying and fixing 3" dia. uPVC Bend	Nr.	4,316.00
T 107	Supplying and fixing 3" dia. uPVC Equal Tee	Nr.	2,321.00
T 108	Supplying and fixing 3" dia. uPVC Clips	Nr.	254.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 109	Supplying and fixing 3" dia. uPVC Union	Nr.	4,271.00
T 110	Supplying and fixing 4" dia uPVC Socket	Nr.	1,704.00
T 111	Supplying and fixing 4" dia. uPVC Valve Socket	Nr.	2,222.00
T 112	Supplying and fixing 4" dia. uPVC Faucet Socket	Nr.	2,292.00
T 113	Supplying and fixing 4" dia. uPVC Elbow	Nr.	2,594.00
T 114	Supplying and fixing 4" dia. uPVC Bend	Nr.	6,221.00
T 115	Supplying and fixing 4" dia. uPVC Equal Tee	Nr.	3,333.00
T 116	Supplying and fixing 4" dia. uPVC Clips	Nr.	409.00
T 117	Supplying and fixing 4" dia. uPVC Union	Nr.	7,159.00
T 118	Supplying and fixing 2" - 1 1/2" dia. uPVC. Reducing Socket	Nr.	900.00
T 119	Supplying and fixing 2" - 1 1/4" dia. uPVC. Reducing Socket	Nr.	888.00
T 120	Supplying and fixing 2" - 1" dia. uPVC. Reducing Socket	Nr.	877.00
T 121	Supplying and fixing 2" - 3/4" dia. uPVC. Reducing Socket	Nr.	638.00
T 122	Supplying and fixing 2" - 1/2" dia. uPVC. Reducing Socket	Nr.	632.00
T 123	Supplying and fixing 1 1/2" - 1 1/4" dia. uPVC. Reducing Socket	Nr.	566.00
T 124	Supplying and fixing 1 1/2" - 1" dia. uPVC. Reducing Socket	Nr.	555.00
T 125	Supplying and fixing 1 1/2" - 3/4" dia. uPVC. Reducing Socket	Nr.	516.00
T 126	Supplying and fixing 1 1/2" - 1/2" dia. uPVC. Reducing Socket	Nr.	494.00
T 127	Supplying and fixing 1 1/4" - 1" dia. uPVC. Reducing Socket	Nr.	344.00
T 128	Supplying and fixing 1 1/4" - 3/4" dia. uPVC. Reducing Socket	Nr.	327.00
T 129	Supplying and fixing 1 1/4" - 1/2" dia. uPVC. Reducing Socket	Nr.	299.00
T 130	Supplying and fixing 1" - 3/4" dia. uPVC. Reducing Socket	Nr.	276.00
T 131	Supplying and fixing 1" - 1/2" dia. uPVC. Reducing Socket	Nr.	260.00
T 132	Supplying and fixing 3/4" - 1/2" dia. uPVC. Reducing Socket	Nr.	238.00
T 133	Supplying and fixing 2" - 1 1/2" dia. uPVC. Reducing Tee.	Nr.	1,044.00
T 134	Supplying and fixing 2" - 1 1/4" dia. uPVC. Reducing Tee.	Nr.	1,038.00
T 135	Supplying and fixing 2" - 1" dia. uPVC. Reducing Tee.	Nr.	1,033.00
T 136	Supplying and fixing 2" - 3/4" dia. uPVC. Reducing Tee.	Nr.	1,016.00
T 137	Supplying and fixing 2" - 1/2" dia. uPVC. Reducing Tee.	Nr.	1,010.00
T 138	Supplying and fixing 1 1/2" - 1 1/4" dia. uPVC. Reducing Tee.	Nr.	744.00
T 139	Supplying and fixing 1 1/2" - 1" dia. uPVC. Reducing Tee.	Nr.	683.00
T 140	Supplying and fixing 1 1/2" - 3/4" dia. uPVC. Reducing Tee.	Nr.	672.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 141	Supplying and fixing 1 1/2" - 1/2" dia. uPVC. Reducing Tee.	Nr.	632.00
T 142	Supplying and fixing 1 1/4" - 1" dia. uPVC. Reducing Tee.	Nr.	443.00
T 143	Supplying and fixing 1 1/4" - 3/4" dia. uPVC. Reducing Tee.	Nr.	432.00
T 144	Supplying and fixing 1 1/4" - 1/2" dia. uPVC. Reducing Tee.	Nr.	393.00
T 145	Supplying and fixing 1" - 3/4" dia. uPVC. Reducing Tee.	Nr.	333.00
T 146	Supplying and fixing 1" - 1/2" dia. uPVC. Reducing Tee.	Nr.	321.00
T 147	Supplying and fixing 3/4" - 1/2" dia. uPVC. Reducing Tee.	Nr.	275.00
T 148	Supplying and fixing 1" - 3/4" dia. uPVC. Reducing Foucet Tee.	Nr.	365.00
T 149	Supplying and fixing 1" - 1/2" dia. uPVC. Reducing Faucet Tee.	Nr.	348.00
T 150	Supplying and fixing 3/4" - 1/2" dia. uPVC. Reducing Faucet Tee.	Nr.	310.00
T 151	Supplying and fixing 3/4" - 1/2" dia. uPVC. Reducing Elbow.	Nr.	317.00
	<u>Special Pipe fittings</u>		
T 152	Supplying and fixing 4" (110 mm) dia. Double access branch with cleaning eye (Door tee).	Nr.	2,310.00
T 153	Supplying and fixing 4" (110 mm) dia. Double access branch with cleaning eye (Equal tee).	Nr.	1,894.00
T 154	Supplying and fixing 4" (110 mm) dia. Double access branch with cleaning eye (Swept Door tee).	Nr.	2,566.00
T 155	Supplying and fixing 4" (110 mm) dia. Double access branch with cleaning eye (Swept tee).	Nr.	2,127.00
T 156	Supplying and fixing 4" (110 mm) dia Single access branch with cleaning eye (Single Door Y).	Nr.	2,704.00
T 157	Supplying and fixing 4" (110 mm) dia Single access branch with cleaning eye (Single Y).	Nr.	2,226.00
T 158	Supplying and fixing 4" (110 mm) dia Swept bend with cleaning eye (Door Bend 89°).	Nr.	1,987.00
T 159	Supplying and fixing 4" (110 mm) dia Swept bend (Bend 89°).	Nr.	1,438.00
T 160	Supplying and fixing 4" (110 mm) dia Swept bend with cleaning eye (Door Bend 45°).	Nr.	2,010.00
T 161	Supplying and fixing 4" (110 mm) dia Swept bend (Bend 45°).	Nr.	1,476.00
T 162	Supplying and fixing 4" (110 mm) dia " P " trap.	Nr.	2,127.00
T 163	Supplying and fixing 4" (110 mm) dia " S " trap.	Nr.	2,217.00
T 164	Supplying and fixing 4" (110 x 63 x 50mm) Multi floor trap (Catch pit).	Nr.	2,332.00
T 165	Supplying and fixing 6" (160mm) dia. Bend.	Nr.	11,659.00
T 166	Supplying and fixing 6" (160mm) dia. Socket.	Nr.	3,882.00
T 167	Supplying and fixing Reducing Tee 6" x 4" (160mm x 110mm)	Nr.	4,104.00
T 168	Supplying and fixing 2" (63 mm)dia.Vent Cowl (Wire Dome)	Nr.	481.00
T 169	Supplying and fixing 4" (110mm) dia.Vent Cowl (Wire Dome)	Nr.	571.00
T 170	Supplying and fixing 1 1/2" (50 mm) dia. Double access branch with cleaning eye (Swept Door tee).	Nr.	903.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 171	Supplying and fixing 1 1/2" (50 mm) dia. Double access branch with cleaning eye (Swept tee).	Nr.	965.00
T 172	Supplying and fixing 1 1/2" (50 mm) dia. Double access branch with cleaning eye (Door tee).	Nr.	815.00
T 173	Supplying and fixing 1 1/2" (50 mm) dia. Double access branch with cleaning eye (Equal tee).	Nr.	593.00
T 174	Supplying and fixing 1 1/2" (50 mm) dia Single access branch with cleaning eye (Single Door Y).	Nr.	831.00
T 175	Supplying and fixing 1 1/2" (50 mm) dia Single access branch with cleaning eye (Single Y).	Nr.	665.00
T 176	Supplying and fixing 1 1/2" (50 mm) dia Swept bend with cleaning eye (Door Bend 89°).	Nr.	637.00
T 177	Supplying and fixing 1 1/2" (50 mm) dia Swept bend (Bend 89°).	Nr.	492.00
T 178	Supplying and fixing 1 1/2" (50 mm) dia Swept bend with cleaning eye (Door Bend 45°).	Nr.	614.00
T 179	Supplying and fixing 1 1/2" (50 mm) dia Swept bend (Bend 45°).	Nr.	481.00
T 180	Supplying and fixing 1 1/2" (50 mm) dia Swept tee with cleaning eye.	Nr.	815.00
T 181	Supplying and fixing 1 1/2" (50 mm) dia Swept tee.	Nr.	476.00
T 182	Supplying and fixing 1 1/2" (50 mm) dia Equal tee.	Nr.	648.00
	<u>Hot water Pipes & Fittings</u>		
T 183	Supplying , laying and/or fixing 1/2" dia. CPVC - SDR pipes. (Specials paid separately).	L.ft.	253.00
T 184	Supplying , laying and/or fixing 1" dia. CPVC - SDR pipes. (Specials paid separately).	L.ft.	456.00
T 185	Supplying and fixing 1/2" dia. CPVC Socket.	Nr.	166.00
T 186	Supplying and fixing 1" dia. CPVC Socket.	Nr.	283.00
T 187	Supplying and fixing 1/2" dia. CPVC Valve Socket.	Nr.	183.00
T 188	Supplying and fixing 1" dia. CPVC Valve Socket.	Nr.	332.00
T 189	Supplying and fixing 1/2" dia. CPVC Faucet Socket.	Nr.	210.00
T 190	Supplying and fixing 1" dia. CPVC Faucet Socket.	Nr.	410.00
T 191	Supplying and fixing 1/2" dia. CPVC Tee.	Nr.	227.00
T 192	Supplying and fixing 1" dia. CPVC Tee.	Nr.	649.00
T 193	Supplying and fixing CPVC Elbow 1/2" x 45°	Nr.	210.00
T 194	Supplying and fixing CPVC Elbow 1/2" x 90°	Nr.	187.00
T 195	Supplying and fixing CPVC Elbow 1" x 45°	Nr.	421.00
T 196	Supplying and fixing CPVC Elbow 1" x 90°	Nr.	393.00
T 197	Supplying and fixing CPVC Reducing Socket 1" x 1/2"	Nr.	311.00
T 198	Supplying and fixing CPVC Reducing Tee 1" x 1/2"	Nr.	605.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
T 199	Supplying and fixing 1/2" dia. CPVC End Cap.	Nr.	132.00
T 200	Supplying and fixing 1" dia. CPVC End Cap.	Nr.	233.00
T 201	Supplying and fixing 1/2" dia. CPVC Tap End Plug.	Nr.	155.00
T 202	Supplying and fixing 1/2" dia. CPVC Union.	Nr.	499.00
T 203	Supplying and fixing 1/2" dia. CPVC Elbow Holder.	Nr.	449.00
T 204	Supplying and fixing 1" dia. CPVC Elbow Holder.	Nr.	566.00
T 205	Supplying and fixing 1/2" dia. CPVC Brass Male Adapter.	Nr.	1,133.00
T 206	Supplying and fixing 1/2" dia. CPVC Brass Female Adapter.	Nr.	1,099.00
T 207	Supplying and fixing 1/2" dia. CPVC Brass Elbow.	Nr.	449.00
	<u>Water Tanks</u>		
1	Water tank should combined with three layers of high density polyethylene except 5,000 Ltr. Water tank.		
2	The inner and outer layers made of 100% FDA approved virgin raw materials , ensuring non-contamination.		
3	Contractor should submit the purchasing bill and the required warranty for water tanks (10 year warranty) manufactured by "Anton , Arpico" to the Divisional Engineer.		
T 208	Supplying and installing of water tank 500 Ltr. capacity (fittings paid separately) at an average height of 12'-0" including transporting and hoisting in position.	Nr.	14,084.00
	From T 209 to T 211 hoisting in position paid seperately under item no.Y 61-63.		
T 209	Supplying and installing of water tank 1000 Ltr. capacity (fittings paid separately) including the cost of transport. Hoisting in position to be paid seperately.	Nr.	22,192.00
T 210	Supplying and installing of water tank 2000 ltr. capacity (fittings paid separately) including the cost of transport. Hoisting in position to be paid seperately.	Nr.	41,718.00
T 211	Supplying and installing of water tank 5000 ltr. capacity (fittings paid separately) including the cost of transport. Hoisting in position to be paid seperately.	Nr.	88,774.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Pumps & Accessories</u>		
T 212	Supplying and fixing water pump single phase manufactured by " Jinasena" Model no:- 10CJ 024S ,size 1" x 1" , 0.75 H.P. , total head 80'-0" , out put 1000 l.g/hr. as per manufacturer's specifications. Rate include for fixing 1" dia. Foot valve approved make, Positioning and mount the pump on a concrete bed 9" x 9" x 3" thick in 1:2:4(3/4") with 10mm dia. hexagonal bolts to required length , Nuts & Washers 1/16" thick complete in working order using necessary uPVC pipes, specials...etc. & electrical supply from the closest DB. Pipes , specials & electricity connection paid separately.	Nr.	43,680.00
T 213	Supplying and fixing 1" Deep Well Kit by " Jinasena" Model no:- Type A as per manufacturer's specifications and complete in working order using necessary uPVC pipes, specials...etc. & electrical supply from the closest DB. (Pipes , specials & electricity connection paid separately.)	Nr.	12,057.00
	<u>Weep Hole</u>		
T 214	Supplying and placing 4" dia. uPVC (Type 250) weep holes.	L.ft	276.00
T 215	Supplying and placing 2" dia. uPVC (Type 400) weep holes.	L.ft	286.00
	<u>Dewatering</u>		
T 216	Dewatering using 2" dia. water pump.	Per 8 Hour Day	5,391.00
	<u>U - DRAINAGE</u>		
	<u>Waste Water Manhole - Brick</u>		
U 01	Construction of waste water brick manhole internal size of 1'-0" x 1'-0" & depth upto 1'-3", consist of 3" thick Grade 15 concrete base and 4 1/2" thick brick masonry side walls in 1:3 cement sand mix , 1/2" thick cement rendering in 1:2 mix trowel smooth with neat grey cement to internal & external exposed faces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating. Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm tor steel @ 4" c/c both ways.) paid separately. Refer Drawing No:- WSS/2020/01	Nr.	5,002.00
U 02	Construction of waste water brick manhole internal size of 1'-3" x 1'-3" & depth upto 2'-0", consist of 3" thick Grade 15 concrete base and 4 1/2" thick brick masonry side walls in 1:3 cement sand mix , 1/2" thick cement rendering in 1:2 mix trowel smooth with neat grey cement to internal & external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating. Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm tor steel @ 4" c/c both ways.) paid separately. Refer Drawing No:- WSS/2020/01	Nr.	9,255.00
U 03	Construction of waste water brick manhole internal size of 1'-6" x 1'-6" & depth up to 2'-0", consist of 3" thick Grade 15 concrete base and 4 1/2" thick brick masonry side walls in 1:3 cement sand mix , 1/2" thick cement rendering in 1:2 mix trowel smooth with neat grey cement to internal & external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating. Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm tor steel @ 4" c/c both ways.) paid separately. Refer Drawing No:- WSS/2020/01	Nr.	12,623.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
U 04	Construction of waste water brick manhole internal size of 2'-0" x 2'-0" & depth up to 2'-0", consist of 4" thick Grade 15 concrete base and 9" thick brick masonry side walls in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating. Excavation and 4" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm tor steel @ 4" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/01	Nr.	28,971.00
U 05	Construction of waste water brick manhole internal size of 2'-6" x 2'-6" & depth vary from 2'-0" -4'-0" , consist of 4" thick Grade 15 concrete base and 9" thick brick masonry side walls in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating. Excavation and 4" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm tor steel @ 4" c/c both ways.) paid seperately Refer Drawing No:- WSS/2020/01	Nr.	46,483.00
	Waste Water Manhole - Concrete		
U 06	Construction of waste water concrete manhole internal size of 1'-0" x 1'-0" & depth up to 1'-3", consist of 4" thick Grade 25 concrete base and sides, 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces. (Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks reinforced with 6mm dia.M.S. rods @ 4" c/c both ways paid separately) as per Drawing No:- WSS/2020/02	Nr.	4,571.00
U 07	Construction of waste water concrete manhole internal size of 1'-3" x 1'-3" & depth up to 2'-0", consist of 4" thick Grade 25 concrete base and sides, 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces. (Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks reinforced with 6mm dia.M.S. rods @ 4" c/c both ways paid separately) as per Drawing No:- WSS/2020/02	Nr.	6,660.00
U 08	Construction of waste water concrete manhole internal size of 2'-6" x 2'-6" & depth vary 2'-0' - 3'-0", consist of 3" thick Grade15 lean concrete & 5" thick Grade 25 RCC base and sides, 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/02	Nr.	45,692.00
U 09	Construction of waste water concrete manhole internal size of 2'-6" x 2'-6" & depth vary 3'-0' - 5'-0", consist of 3" thick Grade15 lean concrete & 5" thick Grade 25 RCC base and sides, 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/02	Nr.	61,144.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Sewer Manhole - Brick</u>		
U 10	Construction of brick sewer manhole internal size of 2'-1" x 1'-7" & depth vary from 1'-6" - 2'-0", consist of 6" thick Grade 15 lean concrete base and 9" thick brick masonry side walls in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating and forming channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/03	Nr.	27,472.00
U 11	Construction of brick sewer manhole internal size of 2'-6" x 1'-7" & depth vary from 2'-0" - 3'-0", consist of 6" thick Grade 15 lean concrete base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating and forming channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/03	Nr.	33,758.00
U 12	Construction of brick sewer manhole internal size of 3'-4 1/2" x 2'-3" & depth vary from 2'-0" - 3'-0", consist of 6" thick Grade 15 lean concrete base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating and forming channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/04	Nr.	44,722.00
U 13	Construction of brick sewer manhole internal size of 4'-6" x 2'-7 1/2" & depth vary from 2'-0" - 3'-0", consist of 6" thick Grade 15 lean concrete base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating and forming channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/05	Nr.	57,120.00
U 14	Construction of brick sewer manhole internal size of 4'-6" x 2'-7 1/2" & depth vary from 3'-0" - 5'-0", consist of 6" thick Grade 15 lean concrete base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating and forming channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/05	Nr.	82,058.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
U 15	Construction of brick Interceptor manhole internal size 4'-6"x 2'-7 1/2" depth up to 5'-6" consist of 2" thick Grade 15 lean concrete base , 6" thick Grade 20 R.C.C base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating, forming channel with 1:6 benching, interceptor with stopper and M.S steps . Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm tor steel @ 6" c/c both ways.) paid seperately as per Drawing No:- WSS/2020/06	Nr.	118,460.00
U 16	Construction of brick drop manhole internal size 4'-6"x 2'-7 1/2" and depth up to 5'-0", consist of 3" thick Grade 15 lean concrete base , 6" thick Grade 20 R.C.C base and 9" thick brick masonry side walls in in 1:3 cement sand mix ,1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces of walls finished 5/8" thick plastering in cement sand 1:3 including finishing with cement slurry floating, forming channel with 1:6 benching and M.S steps . (Excavation , 3" thick Grade 20 RCC cover slab with lifting hooks reinforced with 10mm tor steel @ 6" c/c both ways, P.V.C pipes and specials paid seperately) as per Drawing No:- WSS/2020/07	Nr.	79,590.00
	<u>Sewer Manhole - Concrete</u>		
U 17	Construction of RCC sewer manhole internal size of 2'-1" x 1'-7" & depth up to 2'-0", consist of 3" thick Grade 15 lean concrete, base and side walls 6" thick Grade 25 concrete r/f with 10mm dia. tor steel @ 8" c/c bothways , 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces and channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/08	Nr.	39,812.00
U 18	Construction of RCC sewer manhole internal size of 2'-6" x 1'-7" & depth vary from 2'-0" - 3'-0" , consist of 3" thick Grade 15 lean concrete, base and side walls 6" thick Grade 25 concrete r/f with 10mm dia. tor steel @ 8" c/c bothways , 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces and channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/08	Nr.	45,392.00
U 19	Construction of RCC sewer manhole internal size of 3'-4 1/2" x 2'-3" & depth vary from 2'-0" - 3'-0", consist of 3" thick Grade 15 lean concrete, base and side walls 6" thick Grade 25 concrete r/f with 10mm dia. tor steel @ 8" c/c bothways , 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces and channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/08	Nr.	65,777.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
U 20	Construction of RCC sewer manhole internal size of 4'-6" x 2'-7 1/2" & depth vary from 2'-0" - 3'-0" , consist of 3" thick Grade 15 lean concrete, base and side walls 6" thick Grade 25 concrete r/f with 10mm dia. tor steel @ 8" c/c bothways , 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces and channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/09	Nr.	81,685.00
U 21	Construction of RCC sewer manhole internal size of 4'-6" x 2'-7 1/2" & depth vary from 3'-0" - 5'-0" , consist of 3" thick Grade 15 lean concrete, base and side walls 6" thick Grade 25 concrete r/f with 10mm dia. tor steel @ 8" c/c bothways , 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces and external exposed surfaces and channel with 1:6 benching. Excavation and 3" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 10mm dia.M.S. rods @ 6" c/c both ways) paid seperately as per Drawing No:- WSS/2020/09	Nr.	109,294.00
	<u>Soakage Pits - Brick</u>		
U 22	Construction of 4'-0" dia. soakage pit in hard soil including 3" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/01.	Nr.	59,665.00
U 23	Construction of 6'-0" dia. soakage pit in hard soil including 4" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/02.	Nr.	104,884.00
U 24	Construction of 8'-0" dia. soakage pit in hard soil including 4" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia. tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/03.	Nr.	141,376.00
U 25	Construction of 4'-0" dia. soakage pit in loose soil including 3" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/04.	Nr.	158,237.00
U 26	Construction of 6'-0" dia. soakage pit in loose soil including 4" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/05.	Nr.	245,232.00
U 27	Construction of 8'-0" dia. soakage pit in loose soil including 4" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/SP/06.	Nr.	323,799.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Septic tanks- Brick</u>		
U 28	Construction of 30 person Septic tank , internal surface of septic tank to be rendered in cement mortar in two layers 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the first layer of rendering including 3'' thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/01.	Nr.	305,810.00
U 29	Construction of 50 person Septic tank , internal surface of septic tank to be rendered in cement mortar in two layers 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the first layer of rendering including 3'' thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/01.	Nr.	355,455.00
U 30	Construction of 70 person Septic , internal surface of septic tank to be rendered in cement mortar in two layers 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the first layer of rendering including 3'' thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/01.	Nr.	398,489.00
U 31	Construction of 100 person Septic tank , internal surface of septic tank to be rendered in cement mortar in two layers 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the first layer of rendering including 3'' thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/01.	Nr.	482,121.00
U 32	Construction of 150 person Septic tank , internal surface of septic tank to be rendered in cement mortar in two layers 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the first layer of rendering including 3'' thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/02.	Nr.	623,874.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Septic tanks- RCC Grade 25</u>		
U 33	Construction of 100 person RCC Grade 25 Septic tank on hard soil , internal surface of septic tank to be rendered in cement mortar in one layer 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the concrete wall including 3" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/03.	Nr.	868,615.00
U 34	Construction of 150 person RCC Grade 25 Septic tank on hard soil , internal surface of septic tank to be rendered in cement mortar in one layer 1/2" thick cement sand rendering in 1:2 mix trowel smooth with neat grey cement , each two coats of water proofing agent to be applied on the concrete wall including 3" thick Grade 25 RCC cover slab with lifting hooks (Reinforced with 10mm dia.tor steel bars @ 8" c/c both ways), necessary excavation paid separately, all complete as per Drawing No:- WSS/2020/ST/04.	Nr.	1,091,220.00
U 35	Supplying and fixing 4'-0" dia.x 8'-0" Pre-cast Septic tank manufactured by "SEC" or approved equivalent placed on sand or quarry dust bedding from 1'-0" below bottom of the septic tank and fill upto 2'-0" height surrounding the tank. (Excavation and transport of the septic tank paid seperately). Rate shall include hire charges of boomtruck for placing and only accepted special location subjected to the approval by the Director Engineering. All details given in Drawing No:- WSS/2020/ST-SP/05.	Nr.	98,448.00
U 36	Supplying and fixing 3'-0" internal dia.x 4'-0" depth Pre-cast Soakage pit with perporated holes manufactured by "SEC" or approved equivalent. .(Excavation, cost of the 6" thick gravel backing surrounding the tank and transport of the Soakage pit paid seperately). Rate shall include hire charges of boomtruck for placing and only accepted special location subjected to the approval by the Director Engineering. All details given in Drawing No:- WSS/2020/ST-SP/05	Nr.	34,620.00
	<u>Gulleys</u>		
U 37	Construction of gully internal size of 1'-2" x 1'-2" & depth up to 1'-4" , consist of 3" thick Grade 20 concrete base and 4 1/2" thick brick masonry side walls in 1:3 cement sand mix , gully trap infill with grade 20 concrete and 1/2" thick cement & sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces , exposed external surfaces and forming channel with 1:6 benching. Excavation and 2" thick Grade 20 RCC cover slab with lifting hooks (Reinforced with 6mm dia.M.S. rods @ 4" c/c both ways) paid seperately as per as per Drawing No:- WSS/2020/Gully/10	Nr.	7,089.00
	<u>Surface Water Drain</u>		
U 38	Construction of concrete drain internal size 2'-0" width x 2'-0" depth and Consists of 2" thick Grade 15 concrete base and 5" thick Grade 25 concrete walls , fair finish internal surface and reinforced with 10mm dia. tor steel bars @ 6" c/c both ways . Excavation and removable grating to be paid seperately. All details given in Drawing No:- WSS/2020/SWD/11	l.ft.	7,111.00
	<u>Shoe Drain</u>		
U 39	Construction of Shoe drain (in Grade 20 Concrete of width 18" , average thickness 8" , height 12".)	L.ft	1,142.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Manhole Covers</u>		
	<u>RCC Manhole cover - Grade 20</u>		
U 40	RCC Manhole cover 5" thick Consist of Grade 25 concrete reinforced with two layers 10mm dia. Tor steel bars @ 8" C/C both ways. Rate include necessary formwork, lifting hooks and placing in position. All details given in Drawing No:- WSS/2020/MC/12	Sq.ft.	1,502.00
U 41	RCC Manhole cover 3" thick Consist of Grade 20 concrete & 10mm dia. Tor steel bars @ 6" C/C both ways. Rate include necessary formwork, lifting hooks and placing in position. All details given in Drawing No:- WSS/2020/MC/12	Sq.ft.	848.00
U 42	RCC Manhole cover 2" thick Consist of Grade 20 concrete & 6mm dia. Tor steel bars @ 4" C/C both ways. Rate include necessary formwork, lifting hooks and placing in position. All details given in Drawing No:- WSS/2020/MC/12	Sq.ft.	878.00
	<u>Double seal cast iron manhole cover with frame</u>		
	<u>Double seal cast iron manhole cover with frame should comply with European Standard BS EN 124.</u>		
U 43	Supplying & fixing double seal cast iron manhole cover with frame capable of withstanding a 125kN load use in car parks and pedestrian areas where only occasional vehicular access is likely.	sq.ft	11,486.00
U 44	Supplying & fixing double seal cast iron manhole cover with frame capable of withstanding a 400kN load use in areas where cars and lorries have access including carriage ways, hard shoulders and pedestrian areas.	sq.ft	14,786.00
	<u>Removable Grating For Surface Drain</u>		
U 45	Supplying & fixing iron grating for surface drain consists of outer angle iron 2 1/2" x 2 1/2" x 6mm thick welded to top angle iron 1" x 1" x 5mm thick @ 3'-0" c/c horizontally and 16mm dia. tor steel @ 1" internal to internal welded to top of angle iron 1" x 1" x 5mm thick. All details given in Drawing No:- WSS/2020/SWD/11. Rate shall include for applying two coats of anti-corrosive paint.	sq.ft	2,296.00
	<u>RCC Manhole cover - Grade 20</u>		
U 46	RCC Manhole cover 4" thick Consist of Grade 20 concrete & 10mm dia. Tor steel bars @ 6" C/C both ways. Rate include necessary formwork, lifting hooks and placing in position. All details given in Drawing No:- WSS/2020/MC/12	sq.ft	903.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>V - ELECTRICAL INSTALLATION.</u>		
	Note:		
	Work shall be done in accordance with specifications for electrical and mechanical works - ICTAD Publication No.SCA/8 of Aug.2000(2 nd Edition - Revised)		
1	Internal light wiring shall comply with the drawings and shall be in 230/440 volt single core PVC insulated copper cables		
2	All switches and socket outlets shall be plated type make "Clipsal", " Orange X ₅ ", "Krypton" or any other approved equivalent complying to SLS1000:1993 for switches & SLS 1998 : 1991 for socket outlets .		
3	All Fluorescent fittings shall be zinc coated steel sheet finished with powder coated to 0.45mm thickness complete with electronic choke (Make:- "Atco","BG" original or -Equivalent) starter and the tube should be Thron, Philips, or Osram		
4	Rate to include switch boxes, Rowl plugs, square pin plug base, Chromium plated M.S. chains, brass hooks, ceiling roses, holders and any other item necessary.		
5	All distribution boards should be incorporated with multi 9, Orange Industrial, Merlin Gerin, , Hager, LS, Moeller/EATON, clipsal, SIEMENS make MCB's (Miniature circuit Breaker) and cabtree, Clipsal ,Orange Industrial 10 kA, LS , Merlin Gerin,Schinieider make R.C.C.B.'s (Residual Current circuit Breaker) and Schinieider, Merlin Gerin, LS, Dormans Smith ,Orange Industrial (10K), Biticano , Clockner moeller make M.C.C.B.'s (Moulded Case Circuit Breakers)		
6	The whole installation shall be carried out according to CEB/IEE wiring regulations.		
7	All the M.C.C.B.'s, MCB's and RCCB's for the distribution boards should be purchased from the following authorized agents or from their dealers and a certificate or invoice along with their Company seal and Part No., numbers and warranty should be produced at the time of payment.		
	a). All MCB, RCCB, shall have 20 Years warranty and hence products which comes with 20 years warranty are permitted.		
	b). All MCCB shall have 2 Years warranty and hence products which comes with 2 years warranty are permitted.		
	M.C.C.B.'s brand - Figaro Ltd. Schinder Electrical Lanka PVT LTD Electrical (Pvt) Ltd. Corporation(Pvt) Ltd, Internationak (pvt) Ltd	Merlin Gerin Schnieider brand - Moeller/Eaton brand - Richardson - Orange Industrial brand - Orel LS brand - Aklan	
	M.C.B.'s - RotexLtd. kA) - Orel Corporation(Pvt) Ltd. Electrical (Pvt) Ltd. Ltd	SIEMENS brand Orange Industrial brand (10 Moeller/Eaton brand - Richardson - LS brand - Aklan Internationak (pvt)	

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	R.C.C.B's Schinder Electrical Lanka Pvt Ltd. Nawaloka Ltd. -Electrical (Pvt) Ltd. Corporation(Pvt) Ltd. Internationak (pvt) Ltd	Schnieider brand Cabtree brand - Moeller/Eaton brand - Richardson OrangeIndustrial brand - Orel LS brand - Aklan	
	c). Single core PVC insulated copper cable Orel Corporation(Pvt) Ltd. Cables PLC. PLC. PLC.	Kelani ACL Cables Sierra Cables	
	d). Arial Bundle Cable (ABC)Kelani Cables PLC. Cables PLC.	Sierra	
	e). All socket and switches shall have 20 Years warranty and hence products which comes with 20 years warranty are permitted.		
	Switches and Socket outlet Industrial brand - Orel Corporation(Pvt) Ltd. brand - Central Industries PLC.	Orange Krypton	
	f). Powder coated Steel Enclosures Ltd. Figaro Ltd./MSS(Pvt) Ltd Orel Corporation(Pvt) Ltd.	Rotex Marline Ltd.	
	g). Plastic Enclosures, PVC Conduits & fittings, PVC Trunking & Fittings - Polycrome Electrical Industries (pvt) ltd		
	h).Lighting Fittings - Myland Marketing (pvt) Ltd Corporation (Pvt) Ltd Efficient Electronics Lanka (pvt) Ltd Trading (pvt) Ltd. comparable shapes, material properties and warranties are acceptable	Orel Greenee - Nature NVC - Overseas Reality Any product with	
	All Lighting Fittings shall have 2 Years warranty including bulb and hence products which comes with 2 Years warranty are permitted.		
8	The height of the light bracket from floor level is 2.5m		
9	Height of the switches from floor level is 1.5m		
10	No ceiling fan should be installed at a height of less than 2.7m from floor level		
11	The distance of a light source from the wall should be equal to one half the distance between two adjacent light sources and also the distance between light fittings should not exceed 1.5 times the Mounting height.		
12	Point wiring only with and including switches (Rate includes wiring from MCB through switch to lamp point and includes the switch, switch box, lamp holder wire and conduit)		
13	Point wiring only with and including Socket (Rate includes wiring from MCB to the Socket, socket box, and conduit)		
14	In case the cable length of wiring point exceed 80 feet refer item V 65 to V 88 for payment of additional length.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>POINT WIRING WITHOUT EARTHWIRE.</u>		
	Items V 01 - V 20 shall be used for light point wiring with Non-Metal casing lamp fittings.		
V 01	Light point wired through a 10 Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	4,703.00
V 02	Light points wired through a 10 Amp two gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	6,185.00
V 03	Light points wired through a 10 Amp three gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	7,633.00
V 04	Light points wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm (2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	9,033.00
V 05	Light points-wired through a 10 Amp five gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	10,468.00
V 06	Light point wired through a 10 Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	6,808.00
V 07	Light points wired through a 10 Amp two gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	8,845.00
V 08	Light points wired through a 10 Amp three gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	10,847.00
V 09	Light points wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	12,802.00
V 10	Light points wired through a 10 Amp. five gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	14,792.00
V 11	Light point wired through a 10 Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	5,977.00
V 12	Light points wired through a 10 Amp two gang one way using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	7,736.00
V 13	Light points wired through a 10 Amp three gang one way using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	9,461.00
V 14	Light points wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	11,139.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 15	Light points wired through a 10 Amp. five gang one way plate switch using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	12,851.00
V 16	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	5,864.00
V 17	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	7,970.00
V 18	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044)P.V.C. insulated copper wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	7,138.00
V 19	Electric Bell with Bell press switch using 2x1/1.13mm (2x1/.044) PVC/insulated copper wire in fully concealed/ surface PVC conduits. (For a switch circuit)	Nr.	6,778.00
V 20	Electric Bell with bell press switch using flexible wire (twisted twin wire) in fully surface plastic casing and capping. only in the table legs and floor crossings. (For a switch circuit)	Nr.	6,911.00
	<u>POINT WIRING WITH EARTHWIRE.</u>		
	Items V 21 - V 40 shall be used for light point wiring for lamp fittings with metal enclosed which has to be earthed.		
V 21	Light point wired through a 10Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	7,424.00
V 22	Light point wired through a 10Amp two gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	9,814.00
V 23	Light point wired through a 10 Amp three gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	12,169.00
V 24	Light point wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	14,476.00
V 25	Light point wired through a 10 Amp five gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	16,819.00
V 26	Light point wired through a 10 Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	9,530.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 27	Light point wired through a 10 Amp two gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	12,474.00
V 28	Light point wired through a 10 Amp three gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	15,383.00
V 29	Light point wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	18,245.00
V 30	Light point wired through a 10 Amp five gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	21,142.00
V 31	Light point wired through a 10 Amp one gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	8,698.00
V 32	Light point wired through a 10 Amp two gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	11,365.00
V 33	Light point wired through a 10 Amp three gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	13,997.00
V 34	Light point wired through a 10 Amp four gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	16,582.00
V 35	Light point wired through a 10 Amp five gang one way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	19,202.00
V 36	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	8,586.00
V 37	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	10,691.00
V 38	Light point wired through a 10 Amp one gang two way plate switch using 2x1/1.13mm(2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire first half in surface plastic casing & capping and other half in conduit. (For a switch circuit)	Nr.	9,860.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 39	Electric Bell with Bell press switch using 2x1/1.13mm (2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits. (For a switch circuit)	Nr.	9,500.00
V 40	Electric Bell with Bell press switch using 2x1/1.13mm (2x1/.044) P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping. (For a switch circuit)	Nr.	11,163.00
SWITCH SOCKET WIRING (V 41 - V 45)			
V 41	Flush mounted 13 Amp switch socket outlet wired using 2x7/0.67(2x7/.029) insulated copper wire & 1x7/0.67(7/.029) copper earth wire in fully concealed/surface P.V.C. conduits.(Each Radial Circuit feed 4 nos. of sockets as per drawing no. ELE/ST/05)	Nr.	6,523.00
V 42	Flush mounted 13 Amp switch socket outlet wired using 2x7/0.67(2x7/.029) insulated copper wire & 1x7/0.67(7/.029) copper earth wire in fully surface plastic casing and capping..(Each Radial Circuit feed 4 nos. of sockets as per drawing no. ELE/ST/05)	Nr.	7,355.00
V 43	Flush mounted 13 Amp switch socket outlet wired using 2x7/0.67(2x7/.029) insulated copper wire & 1x7/0.67(7/.029) copper earth wire in fully concealed/surface P.V.C. conduits and subject to specific approval by the Divisional Engineer. (Each Radial Circuit feed single no. of socket).	Nr.	10,617.00
V 44	Flush mounted 13 Amp switch socket outlet wired using 2x7/0.67(2x7/.029) insulated copper wire & 1x7/0.67(7/.029) copper earth wire in surface plastic casing and capping and subject to specific approval by the Divisional Engineer. (Each Radial Circuit feed single no. of socket).	Nr.	11,948.00
V 45	Flush mounted 13 Amp. non-reversible type square pin switched socket outlets wired in ring circuit using 4x1x7/0.67 PVC insulated copper wire & 2x7/0.67 PVC insulated copper earth wire in casing and capping (As per drawing no. ELE/ST/06) .	Nr.	
$R = 850/= \times L + 650/= \times N$			
N			
R = Rate per pointt (to be calculated as per formula.			
L = Distance from DB to last socket (in Meter)			
N = Number of 13 Amp. sockets			

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Rate for items V 46 - V 55 shall include the cost of wiring, regulator, fan hook & other accessories. For regulator shall be a three star energy.</u>		
V 46	Fan regulator wired without a switch using 2x1/1.13 mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C. conduits.	Nr.	7,070.00
V 47	Fan regulator wired through a 10 Amp plate one gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/surface P.V.C.conduits.	Nr.	7,413.00
V 48	Fan regulator wired without a switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping.	Nr.	9,260.00
V 49	Fan regulator wired through a 10 Amp plate one gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping	Nr.	9,603.00
V 50	Fan regulator wired without a switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in half surface with plastic casing and copping and other half in conduit.	Nr.	8,165.00
V 51	Fan regulator wired through a 10 Amp plate one gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in half surface with plastic casing and copping and other half in conduit.	Nr.	8,508.00
V 52	Two Fan regulator wired through a 10 Amp plate two gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/ surface PVC conduit.	Nr.	10,199.00
V 53	Two Fan regulator wired through a 10Amp plate two gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping.	Nr.	12,933.00
V 54	Three Fan regulator wired through a 10 Amp plate three gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully concealed/ surface PVC conduit.	Nr.	14,533.00
V 55	Three Fan regulator wired through a 10Amp plate three gang one way switch using 2x1/1.13mm P.V.C. insulated copper wire & 1x7/0.67mm P.V.C. insulated copper earth wire in fully surface plastic casing and capping.	Nr.	18,355.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Supply & installation of ceiling fans</u>		
	Rate of items V 56 - V 57 for Ceiling Fan - Luxury Range		
V 56	Ceiling fan of 56" Sweep KDK- brand (M56RG-model) with Air flow rate of 225 cu.m /min @ RPM 270 with tolerance as per SLS 814 and two star energy label as PER SLS 1600 (This item shall be specific requirements)	Nr.	16,160.00
V 57	Ceiling fan of 56" Sweep "AVIATOR" brand with Air flow rate of 250 cu.m /min @ RPM 290 with tolerance as per SLS 814 and two star energy label as PER SLS 1600 (This item shall be specific requirements)	Nr.	20,772.00
	Rate of items V 58 - V 59 for Ceiling Fan - Semi - Luxury Range		
V 58	Ceiling fan of 56" Sweep "Atom Ex" with Air flow of 240 cu.m /min @ RPM 280 with tolerance as per SLS 814 and two star energy label as per SLS 1600.	Nr.	18,025.00
V 59	Ceiling fan of 48" Sweep "Technix Plus" with Air flow of 215 cu.m /min @ RPM 330 with tolerance as per SLS 814 and two star energy label as per SLS 1600. ((Approx. floor area not less than 12' 0" x 12' 0")	Nr.	18,025.00
V 60	Dimmer type fan regulator with a switch (Orange or equivalent)	Nr.	2,085.00
V 61	Exhaust fan 12" dia. With louver - (K.D.K. or approved equivalent)	Nr.	17,396.00
V 62	Wall mounted fan - (K.D.K. or approved equivalent)	Nr.	21,104.00
V 63	Supply & Fixing 3/4" dia. x 1.8mm thick GI pipes to extend the ceiling fan rod with applying 2 coats of anti-corrosive paint and one coat of enamel paint.	L.ft.	278.00
V 64	Supply & Fixing 1" dia. x 2mm thick GI pipes to extend the ceiling fan rod with applying 2 coats of anti-corrosive paint and one coat of enamel paint.	L.ft.	357.00
	<u>CABLE WIRING.</u>		
V 65	Supplying and wiring 2 x 1.0mm ² (1/.044") Cu/PVC/PVC cable + 1.0mm ² (1/.044) earth wire to working order excluding conduit.	L.ft.	105.00
V 66	Supplying and wiring 2 x 1.0mm ² (1/.044") Cu/PVC/PVC cable complete to working order excluding conduit/casing	L.ft.	76.00
V 67	Supplying and wiring 2 x 2.5mm ² (7/.029") Cu/PVC/PVC cable + 2.5mm ² (7/.029) earth wire to working order excluding conduit.	L.ft.	225.00
V 68	Supplying and wiring 2 x 4mm ² (7/.036") Cu/PVC/PVC cable + 4mm ² (7/.036) earth wire to working order excluding conduit.	L.ft.	328.00
V 69	Supplying and wiring 4 x 4mm ² (7/.036") Cu/PVC/PVC cable + 4mm ² (7/.036) earth wire to working order excluding conduit.	L.ft.	536.00
V 70	Supplying and wiring 2 x 6mm ² (7/.044") Cu/PVC/PVC cable + 6mm ² (7/.044") earth wire complete to working order excluding conduit/casing	L.ft.	475.00
V 71	Supplying and wiring 2 x 6mm ² (7/.044") Cu/PVC/PVC cable complete to working order excluding conduit/casing	L.ft.	350.00
V 72	Supplying and wiring 4 x 6mm ² (7/.044") Cu/PVC/PVC cable + 6mm ² (7/.044") earth wire complete to working order excluding conduit/casing	L.ft.	770.00
V 73	Supplying and wiring 2 x 10mm ² (7/.052") Cu/PVC/PVC cable + 10mm ² (7/.052") earth wire complete to working order excluding conduit/casing	L.ft.	761.00
V 74	Supplying and wiring 4 x 10mm ² (7/.052") Cu/PVC/PVC cable + 10mm ² (7/.052") earth wire complete to working order excluding conduit/casing	L.ft.	1,221.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 75	Supplying and wiring 4 x 10 mm ² (7/.052") Cu/PVC/PVC cable complete to working order excluding conduit/casing	L.ft.	994.00
V 76	Supplying and wiring 2 x 16mm ² (7/.064") Cu/PVC/PVC cable + 16mm ² (7/.064") earth wire complete to working order excluding conduit/casing	L.ft.	1,145.00
V 77	Supplying and wiring 4 x 16mm ² (7/0.064") Cu/PVC/PVC cable + 16mm ² (7/.064") earth wire complete to working order excluding conduit/casing	L.ft.	1,869.00
V 78	Supplying and wiring 4 x 16mm ² (7/0.064") Cu/PVC/PVC cable complete to working order excluding conduit/casing	L.ft.	1,503.00
V 79	Supplying and wiring 4 x 35mm ² Cu/XLPE/PVC cable + 16 mm ² earth wire complete to working order excluding conduit/casing.	L.ft.	3,969.00
V 80	Supplying and wiring 4 x 35mm ² Cu/XLPE/PVC cable complete to working order excluding conduit/casing.	L.ft.	3,640.00
V 81	Supplying and wiring 4 x 50mm ² Cu/XLPE/PVC cable + 25 mm ² earth wire complete to working order excluding conduit/casing.	L.ft.	5,438.00
V 82	Supplying and wiring 4 x 50mm ² Cu/XLPE/PVC cable complete to working order excluding conduit/casing.	L.ft.	4,722.00
V 83	Supplying and wiring 4 x 70mm ² Cu/XLPE/PVC cable +35 mm ² earth wire complete to working order excluding conduit/casing.	L.ft.	8,304.00
V 84	Supplying and wiring 4 x 70mm ² Cu/XLPE/PVC cable complete to working order excluding conduit/casing.	L.ft.	6,679.00
V 85	Supplying and wiring 4 x 95mm ² Cu/XLPE/PVC cable + 50 mm ² earth wire complete to working order excluding conduit/casing.	L.ft.	10,210.00
V 86	Supplying and wiring 4 x 95mm ² Cu/XLPE/PVC cable compete to working order excluding conduit/casing.	L.ft.	9,065.00
V 87	Supplying and wiring 4 x 120mm ² Cu/XLPE/PVC cable + 70 mm ² earth wire complete to working order excluding conduit/casing.	L.ft.	12,949.00
V 88	Supplying and wiring 4 x 120mm ² Cu/XLPE/PVC cable complete to working order excluding conduit/casing.	L.ft.	11,323.00
V 89	Supplying and fixing 2 core flexible (0.5mm ²) .	L.ft.	54.00
V 90	Supplying and wiring 2.5mm ² (7/.029") earth wire complete to working order excluding conduit/casing.	L.ft.	75.00
V 91	Supplying and wiring 6 mm ² (7/.044") earth wire complete to working order excluding conduit/casing.	L.ft.	148.00
V 92	Supplying and wiring 10 mm ² (7/.052") earth wire complete to working order excluding conduit/casing.	L.ft.	233.00
V 93	Supplying and wiring 16 mm ² (7/.064") earth wire complete to working order excluding conduit/casing.	L.ft.	352.00
V 94	Supplying and wiring 1mm ² (7/.029") Cu/PVC/PVC twin wire complete to working order excluding conduit/casing.	L.ft.	66.00
V 95	Supplying and wiring 2.5mm ² (7/.029") Cu/PVC/PVC twin wire complete to working order excluding conduit/casing.	L.ft.	160.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 96	Supplying and wiring with 4mm ² (7/.036") Cu/PVC/PVC twin wire complete to working order excluding conduit/casing.	L.ft.	232.00
V 97	Supplying and wiring with 2 x 4mm ² (7/.036") Cu/PVC/PVC cable + 4mm ² (7/.036) earth wire complete to working order excluding conduit/casing.	L.ft.	328.00
V 98	Supplying and wiring with 4 x 4mm ² (7/.036") Cu/PVC/PVC cable + 4mm ² (7/.036) earth wire complete to working order excluding conduit/casing.	L.ft.	527.00
V 99	Supplying and wiring with 4 x 2.5mm ² (7/.029") Cu/PVC/PVC cable + 2.5mm ² (7/.036) earth wire complete to working order excluding conduit/casing.	L.ft.	362.00
	<u>Arial Bundle Cable</u>		
V 100	Supplying and laying 3 x 35mm ² + N54.6 mm ² + 16 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	758.00
V 101	Supplying and laying 3 x 35mm ² + N54.6 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	653.00
V 102	Supplying and laying 3 x 50mm ² + N54.6 mm ² + 16 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	856.00
V 103	Supplying and laying 3 x 50mm ² + N54.6 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	808.00
V 104	Supplying and laying 3 x 70mm ² + N54.6 mm ² + 16 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	1,077.00
V 105	Supplying and laying 3 x 70mm ² + N54.6 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	1,028.00
V 106	Supplying and laying 3 x 120mm ² + N70 mm ² + 16 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	1,457.00
V 107	Supplying and laying 3 x 120mm ² + N70 mm ² Arial Bundle Cable (ABC) complete to working order excluding conduit/casing.	L.ft.	1,409.00
	<u>Service Drop Aluminium Cable</u>		
V 108	Supplying and laying 4 x 16 mm ² service drop aluminium cable complete to working order excluding conduit/casing.	L.ft.	226.00
V 109	Supplying and laying 4 x 25 mm ² service drop aluminium cable complete to working order excluding conduit/casing.	L.ft.	301.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>AB Cable Accessories</u>		
	Anchor bracket and clamp body are made of corrosion resistant extruded aluminium alloy, metal support is made of stainless steel, wedges are made of weather resistant and anti-UV material with high mechanical strength.		
	Should comply with standard EN-50483-3		
V 110	Supplying and installation of large angle assembly with anchor bracket including nut & bolts starting and end pole complete to working order.	Nr.	9,489.00
V 111	Supplying and installation of dead end assembly with anchor bracket including nut & bolts starting and end pole complete to working order.	Nr.	6,933.00
V 112	Supplying and installation of suspension assembly to support the cable over pole through nutral/ messenger wire complete to working order.	Nr.	4,249.00
V 113	Supplying and installation of piercing connector (95mm ²) for connecting AB cable & service drop alluminium cable complete to working order.	Nr.	1,707.00
V 114	Supplying and installation of piercing connector (35mm ²) for connecting AB cable & service drop alluminium cable complete to working order.	Nr.	1,566.00
	<u>Stay cable installation</u>		
V 115	Supplying and installation of anchor stay including angled thimbleye bolt, nut and square washer for 5/8" stay hole 6" from top of the pole, insulator, stay cable, stay wrap, anchor rod, stay anchor with nut complete to working order. Necessary excavation and 2"x 2" x 5" thick Grade 20 concrete pad & guy cable to be paid seperately. All details as per as per Drawing No.ELEC/ST/05	Nr.	7,430.00
V 116	Supplying and installation of stay cable G.S. 7/3.25mm (Grade 700) in position complete to working order.	kg	457.00
	<u>Electricity transmission RC pole (Grade 40)</u>		
V 117	Suppling and Placing in position 8.3m long electricity transmission RC pole (Grade 40) including the cost of excavation and transport.	Nr.	32,680.00
V 118	Suppling and Placing in position 7.6m long electricity transmission RC pole (Grade 40) including the cost of excavation and transport.	Nr.	27,760.00
	<u>uPVC conduit pipe</u>		
V 119	3/4" - 1" uPVC conduits laying in the slab including placing binding wire to draw through conduits.	L.ft.	81.00
V 120	Supplying and fixing 3/4" uPVC conduit including clips.	L.ft.	65.00
V 121	Supplying and fixing 1" uPVC conduit including clips.	L.ft.	78.00
V 122	Supplying and fixing 1 1/4" dia. uPVC conduit pipe	L.ft.	127.00
V 123	Supplying and fixing 1 1/2" dia. uPVC conduit pipe	L.ft.	164.00
V 124	Supplying and fixing 2" dia. uPVC conduit pipe	L.ft.	187.00
V 125	Supplying and fixing 3/4" dia. uPVC conduit bend	Nr.	101.00
V 126	Supplying and fixing 1" dia. uPVC conduit bend	Nr.	125.00
V 127	Supplying and fixing 1 1/4" dia. uPVC conduit bend	Nr.	218.00
V 128	Supplying and fixing 1 1/2" dia. uPVC conduit bend	Nr.	252.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 129	Supplying and fixing 2" dia. uPVC conduit bend	Nr.	387.00
V 130	Supplying and fixing 3/4" or 1" uPVC conduit junction box.	Nr.	99.00
	<u>uPVC casing</u>		
V 131	Supplying and fixing 3/4" x 1/2" uPVC casing	L.ft.	96.00
V 132	Supplying and fixing 1" x 5/8" uPVC casing	L.ft.	106.00
V 133	Supplying and fixing 1 1/2" x 5/8" uPVC casing	L.ft.	155.00
V 135	Supplying and fixing 2" x 1" uPVC casing	L.ft.	194.00
V 136	Supplying and fixing 2"x 2: box casing. uPVC casing	L.ft.	299.00
V 137	Supplying and fixing 3" x 2" uPVC casing	L.ft.	377.00
V 138	Supplying and fixing 4" x 2" uPVC casing	L.ft.	488.00
	<u>Supply and installation of distribution board</u>		
	<u>Plastic encloser</u>		
V 139	1-4 ways SP&N or TP & N Distribution Board with thermo plastic frame and door, earth and neutral bars din rail type (protection rating IP40)	Nr.	3,359.00
V 140	8-10 ways SP&N or TP & N Distribution board with thermo plastic frame and door, earth and neutral bars din rail type (protection rating IP40)	Nr.	3,829.00
V 141	10-12 ways SP&N or TP & N Distribution board with thermo plastic frame and door, earth and neutral bars din rail type (protection rating IP40)	Nr.	4,137.00
V 142	12-14 ways SP&N or TP & N distribution board with thermo plastic frame and door, earth and neutral bars din rail type (protection rating IP40)	Nr.	4,341.00
V 143	14-16 ways SP&N or TP & N Distribution board with thermo plastic frame and door, earth and neutral bars din rail type (protection rating IP40)	Nr.	5,821.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Steel Enclosure		
	Steel Enclosure with Electo Zinc Coated Sheet Steel (1.0mm - 2.0 mm thick as applicable) b)Surface finished - Powder Coated Hinged door ,Rubber gasket, key lock, outing Plate, Gland Plate Protection - IP 54 a)Material - c)Construction -		
V 144	Size -500mm(W) *250mm(H) * 125mm(D) - Single row 18 way	Nr.	14,367.00
V 145	Size -500mm(W) *400mm(H) * 125mm(D) - Two row 18 way (each way)	Nr.	20,346.00
V 146	Size -500mm(W) *700mm(H) * 150mm(D) - Two row + MCCB 18 way (each raw)	Nr.	31,648.00
V 147	Size -500mm(W) *600mm(H) * 125mm(D) - Three row 18 way (each raw)	Nr.	25,751.00
V 148	Size -500mm(W) *700mm(H) * 125mm(D) - Four row 18 way (each raw)	Nr.	32,385.00
V 149	Size -500mm(W) *850mm(H) * 150mm(D) - Three row + MCCB 18 way (each raw)	Nr.	38,765.00
V 150	Size -500mm(W) *1000mm(H) * 150mm(D) - Four row + MCCB 18 way (each raw)	Nr.	49,338.00
	Note:		
	Supply, install and wire the following items in the distribution board (Distribution board paid seperately)		
V 151	40Amp, 30 mA Double Pole ELCB (RCCB)	Nr.	8,234.00
V 152	40Amp, 100 mA Double Pole ELCB (RCCB)	Nr.	9,436.00
V 153	40Amp, 300 mA Double Pole ELCB (RCCB)	Nr.	9,606.00
V 154	63Amp, 30 mA Double Pole ELCB (RCCB)	Nr.	9,606.00
V 155	63Amp, 100 mA Double Pole ELCB (RCCB)	Nr.	9,822.00
V 156	63Amp, 300 mA Double Pole ELCB (RCCB)	Nr.	10,025.00
V 157	40Amp, 30 mA Four Pole ELCB (RCCB)	Nr.	12,643.00
V 158	40Amp, 100 mA Four Pole ELCB (RCCB)	Nr.	12,904.00
V 159	40Amp, 300 mA Four Pole ELCB (RCCB)	Nr.	13,153.00
V 160	63Amp, 30 mA Four Pole ELCB (RCCB)	Nr.	13,765.00
V 161	63Amp, 100 mA Four Pole ELCB (RCCB)	Nr.	13,765.00
V 162	63Amp, 300 mA Four Pole ELCB (RCCB)	Nr.	13,765.00
V 163	100Amp, 300 mA Four Pole ELCB (RCCB)	Nr.	18,978.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 164	MCCB metal enclosure. Enclosure With Electo Sink Coated Sheet Steel (1 - 1.6 mm thick) Powder Coated door ,Rubber gasket, key lock, outing Plate, Gland Plate d).Protection - IP 54 e). Size - 250mm(W)X300mm(H)X150mm(D)(Size- approximate)	Steel Nr. a). Material - b). Surface finished - c). Construction - Hinged	12,249.00
V 165	30,40,60,100 Amp , 18KA Three Pole MCCB without metal enclosure.	Nr.	18,497.00
V 166	30,40,60,100 Amp , 18KA Four Pole MCCB without metal enclosure.	Nr.	26,815.00
V 167	125 Amp , 25KA Three Pole MCCB without metal enclosure.	Nr.	28,709.00
V 168	160 Amp , 25KA Three Pole MCCB without metal enclosure.	Nr.	31,202.00
V 169	250 Amp , 25KA Three Pole MCCB without metal enclosure.	Nr.	40,869.00
V 170	125 Amp , 25KA Four Pole MCCB without metal enclosure.	Nr.	33,672.00
V 171	160 Amp , 25KA Four Pole MCCB without metal enclosure.	Nr.	38,988.00
V 172	250 Amp , 25KA Four Pole MCCB without metal enclosure.	Nr.	58,005.00
V 173	6 - 25 Amp, 10KA Single Pole MCB	Nr.	1,266.00
V 174	32 Amp, 10KA Single Pole MCB	Nr.	1,300.00
V 175	40 Amp, 10KA Single Pole MCB	Nr.	1,458.00
V 176	63 Amp, 10KA Single Pole MCB	Nr.	1,492.00
V 177	6 - 25 Amp, 10KA Double Pole MCB	Nr.	2,693.00
V 178	32 Amp, 10KA Double Pole MCB	Nr.	2,726.00
V 179	40 Amp, 10KA Double Pole MCB	Nr.	2,784.00
V 180	63 Amp, 10KA Double Pole MCB	Nr.	2,840.00
V 181	6 - 32 Amp, 10KA Three Pole MCB	Nr.	4,030.00
V 182	40 Amp, 10KA Three Pole MCB	Nr.	4,426.00
V 183	63 Amp, 10KA Three Pole MCB	Nr.	4,585.00
V 184	6 - 25 Amp, 10KA Four Pole MCB	Nr.	4,030.00
V 185	32 Amp, 10KA Four Pole MCB	Nr.	4,075.00
V 186	40 Amp, 10KA Four Pole MCB	Nr.	6,047.00
V 187	63 Amp, 10KA Four Pole MCB	Nr.	6,228.00
V 188	40 Amp Double Pole Isolator with plastic enclosure.	Nr.	3,174.00
V 189	63 Amp Double Pole Isolator with plastic enclosure.	Nr.	3,733.00
V 190	100 Amp Double Pole Isolator with plastic enclosure.	Nr.	4,492.00
V 191	40 Amp Three Pole Isolator with plastic enclosure.	Nr.	4,982.00
V 192	63 Amp Three Pole Isolator with plastic enclosure.	Nr.	5,332.00
V 193	100 Amp Three Pole Isolator with plastic enclosure.	Nr.	5,379.00
V 194	40 Amp Four Pole Isolator with plastic enclosure.	Nr.	5,495.00
V 195	63 Amp Four Pole Isolator with plastic enclosure.	Nr.	6,207.00
V 196	100 Amp Four Pole Isolator with plastic enclosure.	Nr.	6,744.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>LIGHT FITTINGS</u>		
	<u>Note:</u>		
	Rate for items V 197 - V 224 shall include the cost of adapter, connecting 2core 1mm² cable of length not exceeding 1.5m , galvanized hanging chain. (incase the cable length exceed 1.5m refer item V 94 for Payment of additional length.)		
	<u>Note:</u>		
	Lamp fitting shall include the cost of fitting and bulb & shall be given a two year Warranty and one year warranty for bulb. This rate for Items V 197- V 224.		
	Lamp fitting with given a two year Warranty for fitting .		
	<u>Supply & Install only the following fittings.</u>		
V 197	Inner diameter of 5" Ceiling recessed down light complete with 12w LED lamp. (Prime cost of the Ceiling recessed down light complete with 12w LED lamp is Rs.2,500.00)	Nr.	3,503.00
V 198	Inner diameter of 5" Ceiling mounted down light complete with 12w LED lamp. (Prime cost of the Ceiling mounted down light complete with 12w LED lamp is Rs.2,500.00)	Nr.	3,503.00
V 199	Inner diameter of 4" wall mounted cylindrical shaped upward light fitting with 18 watt LED bulb. (Prime cost of the wall mounted cylindrical shaped upward light fitting with 18 watt LED bulb is Rs.8,900.00)	Nr.	11,337.00
V 200	Inner diameter of 4" Weatherproof IP65 rated wall mounted cylindrical shaped upward light fitting with 18 watt LED bulb. (Prime cost of the Weatherproof IP65 rated wall mounted cylindrical shaped upward light fitting with 18 watt LED bulb is Rs.5,900.00)	Nr.	7,665.00
V 201	8"dia. wall mounted clear transparent glass globe light fitting and bracket with 9 watt LED bulb. (Prime cost of the wall mounted clear transparent glass globe light fitting and bracket with 9 watt LED bulb is Rs.5,400.00)	Nr.	7,053.00
V 202	Indoor type decorative black and gold type pendent lamp complete with 8/9w LED filament lamp. (Prime cost of the Indoor type decorative black and gold type pendent lamp complete with 8/9w LED filament lamp is Rs.6,900.00)	Nr.	8,889.00
V 203	Indoor type decorative black and gold type pendent lamp complete with 12w LED filament lamp. (Prime cost of the Indoor type decorative black and gold type pendent lamp complete with 8/9w LED filament lamp is Rs.7,900.00)	Nr.	10,113.00
V 204	Pendent type 12.5 watt LED bulb. (Prime cost of the 12.5 watt LED bulb is Rs.1,240.00)	Nr.	2,213.00
V 205	Pendent type 20 watt CFL bulb. (Prime cost of the 20 watt CFL bulb is Rs.960.00)	Nr.	1,860.00
V 206	IP65 weatherproof 50 watt LED Flood light. (Prime cost of the 50 watt LED Flood light is Rs.8,900.00)	Nr.	11,657.00
V 207	IP66 weatherproof 100 watt LED Flood light. (Prime cost of the 100 watt LED Flood light is Rs.10,900.00)	Nr.	14,177.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Note:		
	For items V 208 to V 224, the rate shall include the bulb lamp complete with the fitting. Bulbs make shall be - Philips, osram, nvc, greenee & Orange.		
V 208	4'-0" long 18 watt single fluorescent batton type T5 LED lamp fitting. (Prime cost of the 4'-0" long 18 watt single fluorescent batton type T5 LED lamp fitting is Rs.2,830.00)	Nr.	4,009.00
V 209	2'-0" long 18 watt single fluorescent batton type T5 LED lamp fitting. (Prime cost of the 2'-0" long 18 watt single fluorescent batton type T5 LED lamp fitting is Rs.1,810.00)	Nr.	2,724.00
V 210	1'-0" x 1'-0' LED 24watt ceiling surface mounted panel light fitting - Square Type. (Prime cost of the 1'-0" x 1'-0' LED 24watt ceiling surface mounted panel light fitting - Square is Rs.4,500.00)	Nr.	6,113.00
V 211	0'-9" x 0'-9" LED 18 watt ceiling surface mounted panel light fitting. - Square Type. (Prime cost of the 0'-9" x 0'-9" LED 18 watt ceiling surface mounted panel light fitting. - Square is Rs.3,630.00)	Nr.	5,017.00
V 212	0'-7" x 0'-7" LED 12 watt ceiling surface mounted panel light fitting. - Square Type. (Prime cost of the 0'-7" x 0'-7" LED 12 watt ceiling surface mounted panel light fitting. - Square Type is Rs.2,950.00)	Nr.	4,160.00
V 213	0'-5" x 0'-5" LED 6 watt ceiling surface mounted panel light fitting.- Square Type. (Prime cost of the 0'-5" x 0'-5" LED 6 watt ceiling surface mounted panel light fitting.- Square Type is Rs.2,000.00)	Nr.	2,963.00
V 214	0'-9" dia. LED 18 watt ceiling surface mounted panel light fitting.- Circuler Type. (Prime cost of the 0'-9" dia. LED 18 watt ceiling surface mounted panel light fitting.- Circuler Type is Rs.3,630.00)	Nr.	5,017.00
V 215	0'-7" dia. LED 12 watt Ceiling Surface Mounted Panel Light fitting. - Circuler Type. (Prime cost of the 0'-7" dia. LED 12 watt Ceiling Surface Mounted Panel Light fitting. - Circuler Type is Rs.2,950.00)	Nr.	4,160.00
V 216	0'-5" dia. LED 6 watt ceiling surface mounted panel light fitting. - Circuler Type. (Prime cost of the 0'-5" dia. LED 6 watt ceiling surface mounted panel light fitting. - Circuler Type is Rs.2,000.00)	Nr.	2,963.00
V 217	2'-0" x 2'-0' LED 40 watt ceiling recessed mounted panel light fitting. - Square Type. (Prime cost of the 2'-0" x 2'-0' LED 40 watt ceiling recessed mounted panel light fitting. - Square Type is Rs.7,450.00)	Nr.	9,830.00
V 218	1'-0" x 1'-0' LED 24 watt ceiling recessed mounted panel light fitting. - Square Type. (Prime cost of the 1'-0" x 1'-0' LED 24 watt ceiling recessed mounted panel light fitting. - Square Type is Rs.4,010.00)	Nr.	5,496.00
V 219	0'-9" x 0'-9" LED 18 watt ceiling recessed mounted panel light fitting. - Square Type. (Prime cost of the 0'-9" x 0'-9" LED 18 watt ceiling recessed mounted panel light fitting. - Square Type is Rs.2,990.00)	Nr.	4,210.00
V 220	0'-7" x 0'-7" LED 12 watt ceiling recessed mounted panel light fitting. - Square Type. (Prime cost of the 0'-7" x 0'-7" LED 12 watt ceiling recessed mounted panel light fitting. - Square Type is Rs.2,450.00)	Nr.	3,530.00
V 221	0'-5" x 0'-5" LED 6 watt ceiling recessed mounted panel light fitting. - Square Type. (Prime cost of the 0'-5" x 0'-5" LED 6 watt ceiling recessed mounted panel light fitting. - Square Type is Rs.1,590.00)	Nr.	2,446.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
V 222	0'-9" dia. LED 18 watt ceiling recessed mounted panel light fitting. - Circuler Type (Prime cost of the 0'-9" dia. LED 18 watt ceiling recessed mounted panel light fitting. - Circuler Type is Rs.2,990.00)	Nr.	4,210.00
V 223	0'-7" dia. LED 12 watt ceiling recessed mounted panel light fitting. - Circuler Type (Prime cost of the 0'-7" dia. LED 12 watt ceiling recessed mounted panel light fitting. - Circuler Type is Rs.2,450.00)	Nr.	3,530.00
V 224	0'-5" dia. LED 6 watt ceiling recessed mounted panel light fitting. - Circuler Type (Prime cost of the 0'-5" dia. LED 6 watt ceiling recessed mounted panel light fitting. - Circuler Type is Rs.1,590.00)	Nr.	2,446.00
	Street Light Lamp Post		
V 225	Supply,install, commissioning and maintenance of an Individual solar powered 20 w LED single arm street light including following items and as aestechically suited to required locations such as car park areas, seating areas, etc. of the site as directed by the Divisional Engineer - pole height of street light 6m as per Drawing No.ELE/ST/01 and specifications (post, lamp, panel, charge controller and battery bank) (Prime cost of an Individual solar powered 20 w LED single arm street light is Rs.152,778.00)	No	183,334.00
V 226	Supply, install, commissioning and maintenance of an Individual solar powered 20 w LED double arm street Light including following items and as aestechically suited to required locations such as car park areas, seating areas, etc. of the site as directed by the Divisional Engineer - pole height of street light 6m as per Drawing No.ELE/ST/02 and specifications (post, lamp, panel, charge controller and battery bank) (Prime cost of an Individual solar powered 20 w LED double arm street Light is Rs.162,038.00)	No	194,445.00
	Select either item V 227 or else item V 228 in combination with appropriate number of item V 229. Item V 230 meant for high current capacity main panel board.		
V 227	Provide an earth electrode copper plate 2'-0" x 2'-0" x 3mm thick at 2.0m depth including excavation and backfilling. Rate shall include connection to the main panel, sub main, earth clips, wall plug, screws, & etc. with 1'-0" x 1'-0" x 1'-0" earth pit consist of 4 1/2" brick work , 3" thick Grade 20 concrete cover slab as per drawing no. ELE/ST/04 .(Earth wire paid separately)	Item	69,051.00
V 228	Provide an earth electrode 6'-0" long , 2" dia. x 2.3 mm thick GI pipe. Rate shall include connection to the main panel, sub main, earth clips& etc. with 1'-0" x 1'-0" x 1'-0" earth pit consist of 4 1/2" brick work , 3" thick Grade 20 concrete cover slab as per drawing no. ELE/ST/03. (Earth wire paid separately)	Item	10,285.00
V 229	Provide an earth electrode 5'-0" long , 16 mm dia. copper bonded solid steel rod (coating thickness 25 Micron) Rate shall include connection to the main panel, sub main, earth clips & etc as per drawing no. ELE/ST/04. (Earth wire paid separately)	Nr.	2,252.00
V 230	Supply , Installation and connection of 25 x 3mm copper tape with cupper cad welding, necessary accessories. Rate shall include for connection of both ends with brass.	L.ft.	1,213.00
V 231	Supply and install D'Bracket (small size)	Nr.	1,538.00
V 232	Supply and install complete "D" shape bracket including insulator, Nuts, bolts ect. fixed to working order.	Per Set	2,231.00
V 233	Supply and install 50mm x 50mm x 6mm "L" Iron, including drilling 12mm holes, 10mm G.I. bolt, and application of two coats anticorrosive paint all complete to working order.	L.ft.	552.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Supplying and installation of locable bus bar box</u>		
	Locable bus bar box with a). Material - Electro Zinc Coated Sheet Steel (1.0mm - 2.0 mm thick as applicable) b), Surface finished - Powder Coated c), Construction - Hinged door ,Rubber gasket, key lock, outing Plate, Gland Plate d). Protection - IP 54		
V 234	Supply , installation and connection of 32A - 100A three phase with powder coated locable bus bar box including 4 pole copper bar and earth bar.	Nr.	16,847.00
V 235	Supply , installation and connection of 100A - 125A three phase with powder coated locable bus bar box including 4 pole copper bar and earth bar.	Nr.	18,136.00
V 236	Supply , installation and connection of 0A - 60A single phase with powder coated locable bus bar box including 2 pole copper bar and earth bar.	Nr.	9,485.00
V 237	Testing of the electrical installation and submission of certificate from a chartered Electrical Engineer registered at CEB.		
a)	For Building Floor Area Less than 2,500 Sq. ft.	Item	10,500.00
b)	For Building Floor Area between 2,500 - 5,000 Sq. ft.	Item	23,100.00
c)	For Building Floor Area between 5,000 - 10,000 Sq. ft.	Item	44,100.00
d)	For Building Floor Area more than 10,000 Sq. ft.	Item	68,250.00
	<u>Miscellaneous</u>		
V 238	Supply & replacing one gang one way switch without wiring including removing old one.	Nr.	472.00
V 239	Supply & replacing two gang one way switch without wiring. Rate including removing old one.	Nr.	789.00
V 240	Supply & replacing three gang one way switch without wiring. Rate including removing old one.	Nr.	1,073.00
V 241	Supply & replacing four gang one way switch without wiring. Rate including removing old one.	Nr.	1,311.00
V 242	Supply & replacing five gang one way switch without wiring. Rate including removing old one.	Nr.	1,582.00
V 243	Supply & replacing 13 Amp. Switch socket outlet (max. 6 A) without wiring. Rate including removing old one.	Nr.	1,129.00
V 244	Supply & replacing 13 Amp. Switch socket outlet without wiring. Rate including removing old one.	Nr.	1,129.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>W - METAL WORK</u>		
	<u>Note:</u>		
	Aluminium doors, windows and partitions shall confirm to the following requirements:		
1	Aluminium alloy should confirm to- ISO - 9001:2008, SLS 1410:2011 / SLS 1411:2011		
2	Anodized coating thickness should be 25 ± 5 microns		
3	Aluminium extrusions available in the Local Market are being either manufactured in Sri Lanka or imported material. Due to the continuous change of the extrusion profiles and thicknesses from time to time, it has become very difficult to specify standard section sizes that are to be used for door /window frames and sash members. Hence the rates given herein are based on the recommended minimum sizes and thicknesses of profiles published by leading Aluminium profile manufacturers (Alumex Plc, Swisstek Aluminium Limited) as at present for the doors, windows, fanlights and partitions.		
4	At the time of bidding, all the Bidders shall specifically be requested to submit the following information.		
(a)	The specifications and thickness of Aluminium extrusions bidder proposes to use on the works.		
(b)	Full size cross sections of profiles.		
(c)	Documentary evidence from the Profile Manufacture to the effect that the proposed profile will serve for the intended purpose.		
(d)	A Manufacturer's test certificate be produced as evidence that the powder coating is of required thickness.		
5	Physical properties :-		
	(a) Minimum tensile strength 150 Mpa		
	(b) Elongation 7%		
6	All screws should be stainless steel		
7	But hinges and bar type hinges should be Aluminium or Stainless Steel.		
8	The item descriptions should be read along with the annexed detail drawings. Drawing no:- AR/TYPE PLAN/DOORS & WINDOWS/2019.03.18/DETAIL 1 - 19 (Sheet 1 - 19)		
	The over-all profile dimensions used in deriving B.S.R. rates for main members of each component are as follows. Doors - openable - 100mm x 1.5mm thick, Doors -sliding - 80mm x 1.5mm thick, 70mm x 1.3mm thick Windows - Casement - 70mm x 1.5 mm thick, Windows - Sliding -80mm x 1.5 mm thick, Fan Light - 70mm x 1.5mm thick, Partition - 76mm x 1.2mm thick Shop drawings should be submitted to the Divisional Engineer prior to fabrication.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
9	The rates shall include Neoprene gasket, pop rivets, Rawl plugs, Screws, Aluminium cleats etc.		
10	The rates given herein are for Natural aluminium profiles.		
11	For powder coated aluminium profiles (minimum powder coating thickness of 60 ± 5 microns) the respective item rate shall be increased by 15%.		
12	For Bronze anodized aluminium profiles, the respective item rate shall be increased by 5%.		
13	When clear glass to be replaced with Tinted glass, the respective item rate shall be increased by 2%.		
14	When openable door sashes are to be fitted with floor mounted hinged, deduct 5% from the respective item rate to account for omission of hinges. Add new items for Floor hinge & Door closer to be paid separately as per items W 75, W 76, W 77 & W 78.		
	<u>Doors</u>		
W 01	<u>Openable Single Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side on bottom & Glazed Panel on top) with Louvers on Top</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and louvers on top , panelling with Polyester coated aluminium composite panel of 0.2mm thick aluminium sheets both sides of total thickness 4mm, at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 02 - D1	Sq.ft.	3,965.00
W 02	<u>Openable Single Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side on bottom & Glazed Panel on top) with Fixed Glass on Top</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and fixed glass on top , panelling with Polyester coated aluminium composite panel of 0.2mm thick aluminium sheets both sides of total thickness 4mm, at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 02 - D2	Sq.ft.	3,473.00
W 03	<u>Openable Single Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side on bottom & Glazed Panel on top)</u>		
	Natural aluminium single sash butt hinged openable door with middle rail , panelling with Polyester coated aluminium composite panel of 0.2mm thick aluminium sheets both sides of total thickness 4mm at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 02 - D3	Sq.ft.	3,170.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 04	<u>Openable Single Sash Door (Fully Glazed) with Louvers on Top</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and louvers on top , glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 03 - D4	Sq.ft.	3,552.00
W 05	<u>Openable Single Sash Door (Fully Glazed) with Fixed Glass on Top</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and fixed glass on top , glazed with 5mm thick clear glass panesat top and bottom panel , neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 03 - D5	Sq.ft.	3,113.00
W 06	<u>Openable Single Sash Door (Fully Glazed)</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 03 - D6	Sq.ft.	3,085.00
W 07	<u>Openable Single Sash Door (Fully panelled with Polyester coated 4mm thick Aluminium Composite Panel both side)</u>		
	Natural aluminium single sash butt hinged openable door with middle rail and fully panelling with Polyester coated aluminium composite panel of 0.2mm thick aluminium sheets both sides of total thickness 4mm at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 04 - D7 & D8	Sq.ft.	3,218.00
W 08	<u>Sliding Single Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side on bottom & Glazed Panel on top)</u>		
	Natural aluminium single sash sliding door with middle rail , panelling with Polyester coated aluminium composite panel of 0.2mm thick aluminium sheets both sides of total thickness 4mm at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut roller, flush bolt and approved quality lock , door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 05 - D9	Sq.ft.	2,526.00
W 09	<u>Sliding Single Sash Door (Fully Glazed)</u>		
	Natural aluminium single sash fully glazed sliding door with middle rail , glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut roller, flush bolt and approved quality lock , door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 05 - D10	Sq.ft.	2,516.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 10	<u>Sliding Single Sash Door (Fully panelled with Polyester coated 4mm thick Aluminium Composite Panel both side)</u>		
	Natural aluminium single sash sliding door with middle rail , fully panelling with panelling with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut roller, flush bolt and approved quality lock , door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 05 - D11	Sq.ft.	2,712.00
W 11	<u>Openable Double Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side & Glazed Panel) with Fixed Glass on Top</u>		
	Natural aluminium double sash butt hinged openable door with middle rail and fixed glass on top , panelling with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 06 - D12	Sq.ft.	3,242.00
W 12	<u>Openable Double Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side & Glazed Panel) with Louvers on Top</u>		
	Natural aluminium double sash butt hinged openable door with middle rail and louvers on top , panelling with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 06 - D13	Sq.ft.	3,737.00
W 13	<u>Openable Double Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side & Glazed Panel)</u>		
	Natural aluminium double sash butt hinged openable door with middle rail , panelling with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick and glazed with 5mm thick clear glass panes at top panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 06 - D14	Sq.ft.	3,572.00
W 14	<u>Openable Double Sash Door (Fully Glazed) with Fixed Glass on Top</u>		
	Natural aluminium double sash butt hinged openable door with middle rail and fixed glass on top , fully glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooleed beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2019.03.18/ DETAIL 07 - D15	Sq.ft.	3,252.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 15	<u>Openable Double Sash Door (Fully Glazed) with Louvers on Top</u>		
	Natural aluminium double sash butt hinged openable door with middle rail and louvers on top , fully glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooled beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/DETAIL 07 - D16	Sq.ft.	3,582.00
W 16	<u>Openable double Sash Door (Fully Glazed)</u>		
	Natural aluminium double sash butt hinged openable door with middle rail and fully glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooled beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/DETAIL 07 - D17	Sq.ft.	3,381.00
W 17	<u>Sliding Double Sash Door (Polyester coated 4mm thick Aluminium Composite Panel both side & Glazed Panel)</u>		
	Natural aluminium double sash sliding door with middle rail , panelling with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick at bottom panel and glazed with 5mm thick clear glass panes at top panel, neoprene and wooled beading, gaskets, pop rivots, threaded bar with nut roller, flush bolt and approved quality lock , door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/DETAIL 08 - D18	Sq.ft.	2,668.00
W 18	<u>Sliding Double Sash Door (Fully Glazed) with Fixed Glass on Top</u>		
	Natural aluminium double sash fully glazed sliding door with middle rail , fully glazed with 5mm thick clear glass panes at top and bottom panel, neoprene and wooled beading, gaskets, pop rivots, threaded bar with nut roller, flush bolt and approved quality lock , door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/DETAIL 08 - D19	Sq.ft.	2,647.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 19	<u>Openable Single Sash Door for Toilets (Fully panelled with 3mm thick Aluminium Composite Panel with both sides Polyester coated aluminium sheets of 0.2mm thick) (50mm x 25mm box bar of 0.9 mm thick outer frame & mid rail)</u>		
	50 x 25mm 0.9mm thick natural aluminium door frame with door stopper and single sash butt hinged openable door with 50 x 26 Aluminium door section outer rail and middle rail panelling with Polyester coated aluminium composite panel of 0.12 mm thick aluminium sheets both sides of total thickness 3mm at top and bottom panel , rubber beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut and . As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 04 - D20	Sq.ft.	1,933.00
	<u>Windows</u>		
W 20	<u>Casement Window with Louvers on Top (1 Bay)</u>		
	Natural aluminium casement window single sash with louvers on top, consisting of 5mm thick clear glass panes, casement lock, pull rings , screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/DETAIL 09 - W1	Sq.ft.	3,762.00
W 21	<u>Casement Window with Fixed Glass on Top (1 Bay)</u>		
	Natural aluminium casement window single sash with fixed glass on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 09 - W2	Sq.ft.	3,334.00
W 22	<u>Casement Window (1 Bay)</u>		
	Natural aluminium casement window single sash , consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/ DOORS & WINDOWS/2020/DETAIL 09 - W3	Sq.ft.	3,505.00
W 23	<u>Casement Window with Louvers on Top (2 Bays)</u>		
	Natural aluminium casement window double sash with louvers on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/ DOORS & WINDOWS/2020/ DETAIL 10 - W4	Sq.ft.	3,482.00
W 24	<u>Casement Window with Fixed Glass on Top (2 Bays)</u>		
	Natural aluminium casement window double sash with fixed glass on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/ DOORS & WINDOWS/2020/ DETAIL 10 - W5	Sq.ft.	3,140.00
W 25	<u>Casement Window (2 Bays)</u>		
	Natural aluminium casement window double sash , consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/ DOORS & WINDOWS/2020/ DETAIL 10 - W6	Sq.ft.	3,308.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 26	<u>Sliding Window with Louvers on Top (2 Bays)</u>		
	Natural aluminium sliding window with louvers on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 11 - W7	Sq.ft.	4,642.00
W 27	<u>Sliding Window with Fixed Glass on Top (2 Bays)</u>		
	Natural aluminium sliding window with fixed glass on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 11 - W8	Sq.ft.	3,094.00
W 28	<u>Sliding Window (2 Bays)</u>		
	Natural aluminium sliding window ,consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/ DOORS & WINDOWS/ 2020/ DETAIL 11 - W9	Sq.ft.	2,840.00
W 29	<u>Casement Window with Louvers on Top (3 Bays)</u>		
	Natural aluminium casement window with louvers on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 12 - W10	Sq.ft.	3,340.00
W 30	<u>Casement Window with Fixed Glass on Top (3 Bays)</u>		
	Natural aluminium casement window with fixed glass on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 12 - W11	Sq.ft.	3,029.00
W 31	<u>Casement Window (3 Bays)</u>		
	Natural aluminium casement window, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 12 - W12	Sq.ft.	3,205.00
W 32	<u>Sliding Window with Louvers on Top (3 Bays)</u>		
	Natural aluminium sliding window with louvers on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 13 - W13	Sq.ft.	3,246.00
W 33	<u>Sliding Window with Fixed Glass on Top (3 Bays)</u>		
	Natural aluminium sliding window with fixed glass on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 13 - W14	Sq.ft.	3,021.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 34	<u>Sliding Window (3 Bays)</u>		
	Natural aluminium sliding window ,consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 13 - W15	Sq.ft.	2,927.00
W 35	<u>Top Hung Casement Window with Fixed Louvers on Top & Fixed Glass at Bottom (3 Bays)</u>		
	Natural aluminium top hung casement window with fixed glass on top and fixed glass at bottom, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 14 - W16	Sq.ft.	5,463.00
W 36	<u>Top Hung Casement Window with Fixed Louvers on Top & Fixed Glass at Bottom (2 Bays)</u>		
	Natural aluminium top hung casement window with fixed louvers on top and fixed glass at bottom, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 14 - W17	Sq.ft.	5,610.00
W 37	<u>Casement Window with Louvers on Top (4 Bays)</u>		
	Natural aluminium casement window with louvers on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 15 - W18	Sq.ft.	3,037.00
W 38	<u>Casement Window with Fixed Glass on Top (4 Bays)</u>		
	Natural aluminium casement window with fixed glass on top, consisting of 5mm thick clear glass panes, casement lock, screws, pop rivots, gaskets, hinges, weather strip etc.As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 15 - W19	Sq.ft.	2,543.00
W 39	<u>Sliding Window with Louvers on Top (4 Bays)</u>		
	Natural aluminium sliding window with louvers on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 16 - W20.	Sq.ft.	2,696.00
W 40	<u>Sliding Window with fixed glass on Top (4 Bays)</u>		
	Natural aluminium sliding window with fixed glass on top consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 16 - W21.	Sq.ft.	2,434.00
W 41	<u>Sliding Window (4 Bays)</u>		
	Natural aluminium sliding window consisting of 5mm thick clear glass panes , lock, roller, screws, gaskets, nut felt, pop rivots, cap, plastic guide etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 16 - W22.	Sq.ft.	2,373.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 42	<u>Louver Panel 1</u>		
	Natural aluminium framed lovers, consisting of screws, pop rivots, etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 17 - W23	Sq.ft.	3,434.00
W 43	<u>Louver Panel 2</u>		
	Natural aluminium framed lovers, consisting of screws, pop rivots, etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 17 - W24	Sq.ft.	3,316.00
W 44	<u>Fixed Glazed Window</u>		
	Natural aluminium fixed glazed window with 5mm thick clear glass and screws, pop rivots, gasket and wool felt etc. and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 18 - FG1	Sq.ft.	3,281.00
W 45	<u>Top Hung Fanlight with Louver panel on top</u>		
	Natural aluminium top hung type fanlight with louver on top consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 19 - FL1	Sq.ft.	4,305.00
W 46	<u>Top Hung Fanlight with Fixed Glass on top</u>		
	Natural aluminium top hung type fanlight with fixed glass on top consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 19 - FL2	Sq.ft.	3,765.00
W 47	<u>Centre Pivot Fanlight with Louver panel on top</u>		
	Natural aluminium centre pivot type fanlight with louver on top consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 19 - FL3	Sq.ft.	4,496.00
W 48	<u>Centre Pivot with Fixed Glass on top</u>		
	Natural aluminium centre pivot type fanlight with fixed glass on top consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 19 - FL4	Sq.ft.	3,955.00
W 49	<u>Top Hung Fanlight (3 bays)</u>		
	Natural aluminium top hung type fanlight 3 bays, consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 20 - FL5	Sq.ft.	2,337.00
W 50	<u>Top Hung Fanlight (2 Bays + 1 Bay)</u>		
	Natural aluminium top hung type fanlight 2 bays + 1 bay, consisting of locks, screws, pop rivots, gaskets, hinges, weather strip etc. As per the members , sizes and details given in Drawing No:- AR/ TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 20 - FL6	Sq.ft.	1,807.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Partitions</u>		
W 51	<u>Fully Board Partition with Plywood board (PVC)</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, top portion is panelled with 2.5mm thick PVC plywood board upto 900mm height and bottom portion is panelled with 2.5mm thick PVC plywood board, upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 01	Sq.ft.	639.00
W 52	<u>Fully Board Partition with Melamine MDF</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, top portion is panelled with 5 mm thick Melamine MDF board upto 900mm height and bottom portion is panelled with 5 mm thick Melamine MDF board, upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 01	Sq.ft.	768.00
W 53	<u>Full Board Partition with Polyester coated 4mm thick Aluminium Composite Panel both side</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, top portion is panelled with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick, upto 900mm height and bottom portion is panelled with aluminium composite panel of total thickness 4mm with 2 nos.of Polyester coated aluminium sheets of 0.2mm thick composite upto 1200mm height, completed with board joints taped with necessary pop rivots, gasket & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 02	Sq.ft.	1,182.00
	<u>Glazed & Board Partition with 2.5mm Plywood (PVC) & 5mm thick clear glass panes</u>		
W 54	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, top portion is panelled with 5mm thick clear glass plane upto 900mm height and bottom portion is panelled with 2.5mm thick PVC plywood board, upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 02	Sq.ft.	832.00
W 55	76 x 1.2mm thick natural aluminium partition frame, panelled three portions, top portion is panelled with 5mm thick clear glass plane upto beam or slab bottom level height and middle portion is panelled with 5mm thick clear glass plane upto 900mm height, bottom portion is panelled with 2.5mm thick PVC plywood board upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 03	Sq.ft.	755.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 56	<u>Glazed & Polyester coated Aluminium Composite Panel Partition with Polyester coated 4mm thick Aluminium Composite Panel both side & 5mm thick clear glass panes</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, bottom portion is panelled with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick, upto 1200mm height and top portion is panelled with 5mm thick clear glass upto 900mm height in partitioning including with necessary pop rivots, gasket & etc. work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 03	Sq.ft.	1,043.00
W 57	<u>Full Board Partition with Gypsum board</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, bottom portion is panelled with 9mm thick gypsum board upto 1200mm height and top portion is panelled with 9mm thick gypsum board upto 900mm height kept back to back in partitioning including suitable size of GI channel frame work with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally, natural aluminium skirting, glue & etc. work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 04	Sq.ft.	960.00
W 58	<u>Full Board Partition with veneered plywood board.</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, bottom portion is panelled with 7.5mm thick veneered plywood board (2.5mm thick veneer board + 5mm thick plywood board composite) upto 1200mm height and top portion is panelled with 7.5mm thick veneered plywood board (2.5mm thick veneer board + 5mm thick plywood board composite) upto 900mm height kept back to back in partitioning including suitable size of GI channel frame work with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally, natural aluminium skirting, glue & etc. work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 04	Sq.ft.	869.00
W 59	<u>Glazed & 6mm thick cement fibre board partition</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, top portion is panelled with 5mm thick clear glass plane upto 900mm height and bottom portion is panelled with 6mm thick Cement fibre board upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 05 (Painting of cement board is to be paid seperately)	Sq.ft.	870.00
W 60	<u>Glazed & 6mm thick cement fibre board partition</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled three portions, top portion is panelled with 5mm thick clear glass plane upto beam or slab bottom level height and middle portion is panelled with 5mm thick clear glass plane upto 900mm height, bottom portion is panelled with 6mm thick Cement fibre board upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally ,, natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 05 (Painting of cement board is to be paid seperately)	Sq.ft.	861.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 61	<u>6mm thick cement fibre full board partition</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled two portions, bottom portion is panelled with 6mm thick Cement fibre board upto 1200mm height and top portion is panelled with 6mm thick Cement fibre board upto 900mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally ,, natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 06 . (Painting of cement board is to be paid seperately)	Sq.ft.	709.00
W 62	<u>6mm thick cement fibre full board partition</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled three portions, top portion is panelled with 6mm thick Cement fibre board upto beam or slab bottom level height and middle portion is panelled with 6mm thick Cement fibre board upto 900mm height, bottom portion is panelled with 6mm thick Cement fibre board upto 1200mm height, two boards in both sides of GI channel completed with board joints taped with necessary pop rivots, gasket and suitable size of GI channels at 600mm c/c horizontally , natural aluminium skirting & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 06 (Painting of cement board is to be paid seperately)	Sq.ft.	653.00
W 63	<u>5mm thick full glazed partition</u>		
	76 x 1.2mm thick natural aluminium partition frame, panelled three portions, top portion is panelled with 5mm thick clear glass plane upto beam or slab bottom level height and middle portion is panelled with 5mm thick clear glass plane upto 900mm height, bottom portion is panelled with 5mm thick clear glass plane upto 1200mm height completed with board joints taped with necessary pop rivots, gasket & etc. and work complete in order and details given in Drawing No:- AR/ TYPE PLAN/PARTITIONS/2020/ DETAIL 07	Sq.ft.	1,020.00
	<u>Partition Doors</u>		
	<u>TYPE-I - Partition Door Fully Panelled with Plywood (PVC) (two sheets kept back to back)</u>		
W 64	76 x 1.2mm thick & 100 x 1.6mm Natural aluminium single sash butt hinged openable door with middle rail and fully panelled with 2.5mm thick PVC plywood board, two boards kept back to back (Total thickness is 5mm) , neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 21 - D21	Sq.ft.	2,351.00
W 65	80 x 1.5mm natural aluminium single sash sliding door with middle rail and fully panelled with 2.5mm thick PVC plywood board, two boards kept back to back, (Total thickness is 5mm) neoprene and woold beading, gaskets, pop rivots, threaded bar with nut, flush bolts, rollers and approved quality lock, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 21 - D22	Sq.ft.	2,282.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>TYPE-II - Partition Door Panelled with one part glazing and other part with plywood board (PVC) (two sheets kept back to back)</u>		
W 66	76 x 1.2mm thick & 100 x 1.6mm thick natural aluminium single sash butt hinged openable door with middle rail one part panelled with 2.5mm thick PVC plywood, two boards kept back to back, (Total thickness is 5mm) and other part glazed with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 21 - D23	Sq.ft.	2,446.00
W 67	80 x 1.5mm natural aluminium single sash sliding door with middle rail, one part panelled with 2.5mm thick PVC plywood, two boards kept back to back, (Total thickness is 5mm) and other part panelled with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut, flush bolts, rollers and approved quality lock, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 21 - D24	Sq.ft.	2,376.00
	<u>TYPE-III - Partition Door Panelled with one part glazing and other part with cement board (two sheets kept back to back)</u>		
W 68	76 x 1.2mm thick & 100 x 1.6mm Natural aluminium single sash butt hinged openable door with middle rail one part panelled with 6 mm thick single side cement fibre board, two panels kept back to back and other part glazed with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 22 - D25 (Painting of cement board is to be paid seperately)	Sq.ft.	2,524.00
W 69	80 x 1.5mm thick Natural aluminium single sash sliding door with middle rail, one part panelled with 6 mm thick single side cement fibre board, two panels kept back to back and other part panelled with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut, flush bolts, rollers and approved quality lock, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 22 - D26 (Painting of cement board is to be paid seperately)	Sq.ft.	2,418.00
	<u>TYPE-V - Partition Door Fully Panelled with cement board (two sheets kept back to back)</u>		
W 70	76 x 1.2mm thick & 100 x 1.6mm Natural aluminium single sash butt hinged openable door with middle rail and fully panelled with 6mm thick cement board, two boards kept back to back (Total thickness is 12mm) , neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 21 - D27(Painting of cement board is to be paid seperately)	Sq.ft.	2,436.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 71	80 x 1.5mm natural aluminium single sash sliding door with middle rail and fully panelled with 6mm thick cement board, two boards kept back to back (Total thickness is 12mm) neoprene and woold beading, gaskets, pop rivots, threaded bar with nut, flush bolts, rollers and approved quality lock, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 21 - D28 (Painting of cement board is to be paid seperately)	Sq.ft.	2,367.00
	<u>TYPE-IV - Partition Door Panelled with one part glazing and Polyester coated 4mm thick Aluminium Composite Panel both side</u>		
W 72	76 x 1.2mm thick & 100 x 1.6mm thick Natural aluminium single sash butt hinged openable door with middle rail one part panelled with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick, and other part glazed with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut and approved quality lock, butt hinges, door handle with cap nut. As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/DOORS & WINDOWS/2020/ DETAIL 22 - D29	Sq.ft.	2,677.00
W 73	80 x 1.5mm thick Natural aluminium single sash sliding door with middle rail, one part panelled with aluminium composite panel of total thickness 4mm, with both sides Polyester coated aluminium sheets of 0.2mm thick, and other part panelled with 5mm thick clear glass panes, neoprene and woold beading, gaskets, pop rivots, threaded bar with nut, flush bolts, rollers and approved quality lock, door handle with cap nut. As per the members , sizes and details given in Drawing No:-AR/TYPE PLAN/DOORS & WINDOWS/ 2020/ DETAIL 22 - D30	Sq.ft.	2,607.00
	<u>Door Pull Handle</u>		
W 74	Supplying and fixing Handle Pair I type "Magnum" Brand & model no "2512I" handle 300 mm long stainless steel door pull handle fixed complete to working order.	Nr.	9,468.00
	<u>Floor Hinge</u>		
W 75	Supplying & fixing stainless steel floor hinge of "Union Brand" & model no. - 203E or approved equivalent. Weight of sash upto 65 kg.	Nr.	29,790.00
W 76	Supplying & fixing stainless steel floor hinge of "Union Brand" & model no. - 203E or approved equivalent. Weight of sash between 60-85 kg.	Nr.	31,950.00
	<u>Door closer</u>		
W 77	Supplying & fixing surface mounted door closer of "Union Brand" & Model no. - N8803 or approved equivalent. Weight of sash upto 60 kg.	Nr.	8,665.00
W 78	Supplying & fixing surface mounted door closer of "Union Brand" & Model no. - 88234 or approved equivalent. Weight of upto 80 kg.	Nr.	9,654.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Iron Grill		
W 79	Supply , fabrication and installation of welded Diamond shaped Iron grill, consisting 20mm x 5mm thick flat iron frame and 5mm dia M.S. rods at 3" centers to form 3" x 6" diamond shape grill. Rate shall include for fixing to the wall rawl plugs and brass screws. Rate Shall include for applying two coats of anti-corrosive paint and spray painting two coats of enamel paints. (Based on 2'-0"x4'-0" area) Details as per the Drawing No:-AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01	Sq.ft.	709.00
W 80	Supply , fabrication and installation of welded Diamond shaped iron grill, consisting 20mm x 6mm thick flat iron frame with 2Nos. mid rails without intermediate joints, 5mm dia. M.S. rods welded to form 3" x 6" diamond shaped isolated panels. Rate shall include for fixing to the wall rawl plugs and brass screws.Rate Shall include for applying two coats of anti-corrosive paint and spray painting two coats of enamel paints. (Based on 9'-0"x6'-0" area) Details as per the Drawing No:- AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01	Sq.ft.	737.00
W 81	Supply , fabrication and installation of welded openable Iron grill door window including the door frame fabricated with 38mm x 38mm x 6mm thick angle iron to an over-all size of 3'-0" x 9'-0" high inclusive of 2'-3" high Iron grill on top formed with 5mm dia. m.s.rods welded to form 3" x 6" diamond shape. Door sash outer frame fabricated with 25mm x 25mm x 3mm thick bottom hollow sections and two cross members, top part of the sash fixed with 5mm dia. m.s.rods welded to form 3" x 6" diamond shape and bottom part fixed with gauge 22 G.I. sheet, sash fixed to the frame with 3 No. 4" x 3" M.S. butt hinges and locking arrangement comprising of a Iron tower bolt and Hasp & plate. The fixed window grill fabricated with 20mm x 5mm thick flat iron outer frame and two mullions, 5mm dia. m.s.rods welded to form 3" x 6" diamond shape, All details as per Drawing No:- AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01. Rate shall include the formation of 9" x 9" x 6" holes to insert the door frame legs filled with grade 20 concrete , spray painting of two coats of anti-corrosive paint and spray painting two coats of enamel paints and fixing to the wall rawl plugs and brass screws.	Sq.ft.	862.00
W 82	Supply , fabrication and installation of welded openable Iron grill door without window. The door frame fabricated with 38mm x 38mm x 6mm thick angle iron to an over-all size of 3'-0" x 9'-0" high inclusive of 2'-3" high Iron grill on top formed with 5mm dia. m.s.rods welded to form 3" x 6" diamond shape. Door sash outer frame fabricated with 25mm x 25mm x 3mm thick bottom hollow sections and two cross members, top part of the sash fixed with 5mm dia. m.s.rods welded to form 3" x 6" diamond shape and bottom part fixed with gauge 22 G.I. sheet, sash fixed to the frame with 3 No. 4" x 3" M.S. butt hinges and locking arrangement comprising of a Iron tower bolt and Hasp & plate. All details as per Drawing No:- AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01. Rate shall include the formation of 9" x 9" x 6" holes to insert the door frame legs filled with grade 20 concrete , spray painting of two coats of anti-corrosive paint and spray painting two coats of enamel paints and fixing to the wall rawl plugs and brass screws.	Sq.ft.	977.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
W 83	Welded Iron grill of rectangular pattern , consisting of a flat Iron frame of 25mm x 5.5mm thick with out intermediate joints, 2 nos of 25mm x 5.5mm thick horizontal members , 12mm dia. M.S. round bars as vertical members @ 4" c/c , vertical round bars to be drilled through horizontal flat Irons, fixed complete with counter sunk screws and rawl plugs to the masonry opening or timber. Rate shall include for spray painting of two coats of anti-corrosive paint and spray painting two coats of enamel paints. (for window openings of size 2'-0" x 4'-0"). Details as per the Drawing No:-AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 02.	Sq.ft.	694.00
	<u>Iron Grill for Sliding Window</u>		
W 84	Supplly, fabrication and installation of welded Diamond shaped Iron grill for sliding window (2 Bay) , consisting of 20mm x 5mm thick flat iron frame and 5mm dia M.S. rods at 3" centers to form 3" x 6" diamond shape grill. Rate shall include for fixing to the wall rawl plugs and brass screws. Rate Shall include for applying two coats of anti-corrosive paint and spray painting two coats of enamel paints. Details as per the Drawing No:-AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01	Sq.ft.	1,042.00
W 85	Supplly, fabrication and installation of welded Diamond shaped Iron grill for sliding window (3 Bay) , consisting of 20mm x 5mm thick flat iron frame and 5mm dia M.S. rods at 3" centers to form 3" x 6" diamond shape grill. Rate shall include for fixing to the wall rawl plugs and brass screws. Rate Shall include for applying two coats of anti-corrosive paint and spray painting two coats of enamel paints. Details as per the Drawing No:-AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01	Sq.ft.	1,019.00
W 86	Supplly, fabrication and installation of welded Diamond shaped Iron grill for sliding window (4 Bay) , consisting of 20mm x 6mm thick flat iron frame and 5mm dia M.S. rods at 3" centers to form 3" x 6" diamond shape grill. Rate shall include for fixing to the wall rawl plugs and brass screws. Rate Shall include for applying two coats of anti-corrosive paint and spray painting two coats of enamel paints. Details as per the Drawing No:-AR/TYPE PLAN/IRON GRILL/ 2020/ DETAIL 01	Sq.ft.	1,001.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Aluminium Grill</u>		
W 87	Supply , fabrication and installation of honey comb shaped aluminium mesh fixed with 3/4"x 3/4" x 0.9mm thick aluminium angle frame by pop rivert and brass screws to the timber opening. (Based on 2'-0"x4'-0" area) Details as per the Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	719.00
W 88	Supply , fabrication and installation of honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar and 19mmx 19mm x 0.9mm thick aluminium angle consisting of pop rivert, brass screws, rawl plugs and etc. (Based on 9'-0"x 6'-0" area) Details as per the Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	943.00
W 89	Supplly, fabrication and installation of openable aluminium door window consisting of door frame fabricated with 50mm x 50mm x 1.2mm thick aluminium box bar to an over-all size of 3'-0" x 9'-0" high inclusive of 2'-3" high aluminium grill on top formed with honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar with 3/4"x 3/4" x 0.9mm thick aluminium angle channel inc. door stopper and single sash butt hinged openable door sash panelled three portion, bottom and middle portion panelling gauge 22 G.I. sheet and top portion panelling honey comb shaped aluminium mesh and aluminium grill of honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar, 3/4"x 3/4" x 0.9mm thick aluminium angle channel consisting of pop rivert, brass screws, rawl plugs and etc. , sash fixed to the frame with 3 No. 4" x 3" butt hinges and locking arrangement comprising of a Iron tower bolt and Hasp & plate. Rate shall include the formation of 9" x 9" x 6" holes to insert the door frame legs filled with grade 20 concrete. All details as per Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	1,428.00
W 90	Supplly, fabrication and installation of openable aluminium door consisting of door frame fabricated with 50mm x 50mm x 1.2mm thick aluminium box bar to an over-all size of 3'-0" x 9'-0" high inclusive of 2'-3" high aluminium grill on top formed with honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar with 3/4"x 3/4" x 0.9mm thick aluminium angle channel inc. door stopper and single sash butt hinged openable door sash panelled three portion, bottom and middle portion panelling gauge 22 G.I. sheet and top portion panelling honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar, 3/4"x 3/4" x 0.9mm thick aluminium angle channel consisting of pop rivert, brass screws, rawl plugs and etc. , sash fixed to the frame with 3 No. 4" x 3" butt hinges and locking arrangement comprising of a Iron tower bolt and Hasp & plate. Rate shall include the formation of 9" x 9" x 6" holes to insert the door frame legs filled with grade 20 concrete. All details as per Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	1,510.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Aluminium Grill for Sliding Window</u>		
W 91	Supply, fabrication and installation of aluminium grill for sliding window (2 Bay) consisting of honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar with 3/4"x 3/4" x 0.9mm thick aluminium angle channel for top and bottom panel with 6" height void at the middle consisting of pop rivert, brass screws, rawl plugs and etc. All details as per Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	1,714.00
W 92	Supply, fabrication and installation of aluminium grill for sliding window (3 Bay) consisting of honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar with 3/4"x 3/4" x 0.9mm thick aluminium angle channel for top and bottom panel with 6" height void at the middle consisting of pop rivert, brass screws, rawl plugs and etc. All details as per Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	1,508.00
W 93	Supply, fabrication and installation of aluminium grill for sliding window (4 Bay) consisting of honey comb shaped aluminium mesh fixed to 50mm x 50mm x 1.2mm thick aluminium box bar with 3/4"x 3/4" x 0.9mm thick aluminium angle channel for top and bottom panel with 6" height void at the middle consisting of pop rivert, brass screws, rawl plugs and etc. All details as per Drawing No:- AR/TYPE PLAN/ALUMINIUM GRILL/ 2020/ DETAIL 03.	Sq.ft.	1,501.00
	<u>COLLAPSIBLE DOOR</u>		
W 94	Fabricating and Installation of open type collapsible Iron door consisting with 20mm x 5mm flat iron coding cover and necessary screws, etc.. Rate shall include for applying two coats of anti-corrosive paint.	Sq.ft.	1,920.00
	<u>ROLLER DOORS</u>		
W 95	Supply and fixing powder coated zinc aluminium roller door thickness of 0.6mm, center bar, pulleys, side plate with the racers, fabricating the mechanical box with M.S. square tubes and covering the box and fixing on site with the bottom bars and necessary U channels, nylon strips, etc. (Approx. Size: 10'-6" width x 9'-8" high)	Sq.ft.	1,101.00
W 96	Supply and fixing the motor with two remotes for the roller door.	Item	54,600.00
	<u>Hand Rail</u>		
	<u>G.I Tube Hand Rail</u>		
W 97	Supplying, fabricating & fixing GI tube hand rail, consisting of 2" x 2.3mm thick dia. GI tube as hand rail and 1 1/2" dia. x 2.3mm thick GI tube @ 4' c/c as vertical members fixed top end weld to 2" dia. x 2.3mm thick GI tube and fixed bottom end to brick/concrete wall with the 3" x 3" x 12mm thick M.S. plate connecting with 4 nos of 10mm anchor bolts, work complete in order. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint. All sizes and details as per Drawing No:- AR/TYPE PLAN/HAND RAIL/ 2020/ DETAIL 01.	L.ft.	1,861.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>G.I Box Bar Staircase Hand Rail</u>		
W 98	Supplying, fabricating & fixing G.I box bar stair case hand rail consist of 2"x2"x1.6mm thick G.I box bar upright @ 4' c/c as vertical members fixed bottom end to steps with the 4"x4"x12mm thick M.S. plate connecting with 4 nos of 10mm dia.anchor bolts and top end weld to 2"x2"x1.6mm thick G.I box bar , 3/4"x3/4"x1.6mm thick G.I box bar @ 6" c/c as vertical intermediate members top end weld to 2"x2"x1.6mm thick G.I box bar and bottom end weld to 2"x1"x1.6mm thick G.I box bar finished smooth and work complete in order. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint All sizes & details as per Drawing No:- AR/TYPE PLAN/HAND RAIL/ 2020/ DETAIL 02.	L.ft.	3,883.00
W 99	Supplying, fabricating & fixing G.I box bar stair sase hand rail consist of 2"x2"x1.6mm thick G.I box bar upright @ 4' c/c as vertical members fixed bottom end to steps with the 4"x4"x12mm thick M.S. plate connecting with 4 nos of 10mm dia.anchor bolts and both end weld to 2"x2"x1.6mm thick G.I box bar, 3/4"x3/4"x1.6mm thick G.I box bar @ 6" c/c as vertical members both ends weld to 1 1/2"x1 1/2"x1.6mm thick G.I box bar finished smooth and work complete in order. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint. All sizes & details as per Drawing No:- AR/TYPE PLAN/HAND RAIL/ 2020/ DETAIL 03.	L.ft.	4,392.00
W 100	Supplying, fabricating & fixing G.I box bar guard wall hand rail consist of 1 1/2"x1 1/2"x1.6mm thick G.I box bar upright @ 4' c/c as vertical members fixed bottom end to brick/concrete wall with the 4"x4"x12mm thick M.S. plate connecting with 4 nos of 10mm dia.anchor bolts and top end weld to 2"x2"x1.6mm thick G.I box bar , 3/4"x3/4"x1.6mm thick G.I box bar @ 6" c/c as vertical members top end weld to 2"x2"x1.6mm thick G.I box bar and bottom end weld to 1"x1"x1.6mm thick G.I box bar finished smooth and work complete in order. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint. All sizes & details as per Drawing No:- AR/TYPE PLAN/HAND RAIL/ 2020/ DETAIL 04.	L.ft.	2,314.00
	<u>Sand Blasting Sticker</u>		
W 101	Supplying & fixing of Guage 100 Microns sand blasting sticker including surface preparation as per working order.	sq.ft	131.00
	<u>Tempered Glass</u>		
W 102	Supplying and installation of 12mm thick tempered glass openable double sash door with 12mm tempered glass panel on top, approved quality lock, patch fittings,floor hinges, door handle with cap nut.	sq.ft	3,011.00
W 103	Supplying and installation of 12mm thick tempered glass partition 1 1/2" x 1" x 1 1/2" stainless steel frame work with necessary pop rivets, gasket and etc. work complete in order. Rate shall include for fixing in position.	sq.ft	2,160.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Y - STRUCTURAL STEEL WORK</u>		
Y 01	Supplying and fixing 50mm x 50mm x 6mm thick angle iron purlin at maximum spacing of 4'-0" centers upto maximum span of 10'-0" for a asbestos roof . Rate shall include nuts, necessary bolts & washers etc , hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	533.00
Y 02	Supplying and fixing 65mm x 65mm x 6mm thick angle iron purlin at maximum spacing of 4'-0" centers maximum span of 11'-0" (not less than 10'-0") for a asbestos roof . Rate shall include for necessary nuts, bolts & washers,etc. hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	659.00
Y 03	Supplying and fixing 75mm x 75mm x 6mm thick angle iron purlin at maximum spacing of 4'-0" centers maximum span of 12'-0" (not less than 11'-0") for a asbestos roof. Rate shall include necessary nuts, bolts & washers etc, hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	819.00
Y 04	Supplying and fixing 100mm x 50mm x 6mm thick channel Iron purlin up to 14'-0" span at 4'-0" c/c . Rate shall include for hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	1,160.00
Y 05	Supplying and fixing 125mm x 65mm x 6mm thick channel Iron purlin up to 16'-0" span at 4'-0" c/c. Rate shall include for hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	1,707.00
Y 06	Supplying and fixing 150mm x 75mm x 6mm thick channel Iron purlin up to 18'-0" span at 4'-0" c/c. Rate shall include for hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	2,024.00
Y 07	Supply, installation and fixing of angle iron sleepers over the walls to support purlins formed with 50mm x 50mm x 6mm thick angles welded back to back with 75mm x 50mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 01. Rate shall include for hoisting and placing in position and application of two coats of zinc phosphate paint.	L.ft.	2,059.00
Y 08	Supply, installation and fixing of angle iron sleepers over the walls to support purlins formed with 65mm x 65mm x 6mm thick angles welded back to back with 75mm x 65mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 02. Rate shall include for hoisting and placing in position and placing in position and application of of two coats of zinc phosphate paint.	L.ft.	2,341.00
Y 09	Supply, installation and fixing of angle iron sleepers over the walls to support purlins formed with 75mm x 75mm x 6mm thick angles welded back to back with 75mm x 75mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 03. Rate shall include for hoisting and placing in position and application of of two coats of zinc phosphate paint.	L.ft.	2,673.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Mild steel Roof truss</u>		
Y 10	Mild steel Roof truss for Calicut tile roofing 20'-0" (6.0m) span centre to centre, Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 01. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	135,168.00
Y 11	Mild steel Roof truss for asbestos roofing 20'-0" (6.0m) span centre to centre, Maximum spacing 10'-0" , 18 ⁰ pitch maximum and 12 ⁰ pitch minimum with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:-ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 02. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	129,685.00
Y 12	Mild steel Roof truss for Calicut tile roofing 25'-0" (7.5m) span centre to centre, Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 03. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	154,501.00
Y 13	Mild steel Roof truss for asbestos roofing 25'-0" (7.5m) span centre to centre, Maximum spacing 10'-0" , 18 ⁰ pitch maximum and 12 ⁰ pitch minimum with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts,12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:-ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 04. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	144,208.00
Y 14	Mild steel Roof truss for Calicut tile roofing 30'-0" (9.0m) span centre to centre , Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 65mm x 65mm x 6mm thick angles as top and bottom chords, 2 Nos. 50mm x 50mm x 6mm thick angles as struts , 1 No. 65mm x 65mm x 6mm thick angles as ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 05. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	204,474.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Y 15	Mild steel Roof truss for asbestos roofing 30'-0" (9.0m) span centre to centre, Maximum spacing 10'-0", 18° pitch maximum and 12° pitch minimum, with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 65mm x 65mm x 6mm thick angles as top and bottom chords, 2 Nos. 50mm x 50mm x 6mm thick angles as struts , 1 No. 65mm x 65mm x 6mm thick angles as ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 06. Rate shall include for fabricating , transporting , hoisting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	186,766.00
	From first floor, hoisting & placing in position paid seperately under item no. Y 59 (from Y 16 to Y 30 items)		
Y 16	Supplying and fixing 50mm x 50mm x 6mm thick angle iron purling at maximum spacing of 4'-0" centers upto maximum span of 10'-0" for a asbestos roof . Rate shall include nuts, necessary bolts & washers etc and application of two coats of Zinc Phosphate paint.	L.ft.	531.00
Y 17	Supplying and fixing 65mm x 65mm x 6mm thick angle iron purling at maximum spacing of 4'-0" centers maximum span of 11'-0" (not less than 10'-0") for a asbestos roof . Rate shall include for necessary nuts, bolts & washers,etc. and application of two coats of Zinc Phosphate paint.	L.ft.	657.00
Y 18	Supplying and fixing 75mm x 75mm x 6mm thick angle iron purling at maximum spacing of 4'-0" centers maximum span of 12'-0" (not less than 11'-0") for a asbestos roof . Rate shall include necessary nuts, bolts & washers etc, and application of two coats of Zinc Phosphate paint.	L.ft.	817.00
Y 19	Supplying and fixing 100mm x 50mm x 6mm thick channel Iron purling up to 14'-0" span at 4'-0" c/c . Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	1,157.00
Y 20	Supplying and fixing 125mm x 65mm x 6mm thick channel Iron purling up to 16'-0" span at 4'-0" c/c. Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	1,704.00
Y 21	Supplying and fixing 150mm x 75mm x 6mm thick channel Iron purling up to 18'-0" span at 4'-0" c/c. Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	2,021.00
Y 22	Supply and fixing of angle iron sleepers over the walls to support purlins formed with 50mm x 50mm x 6mm thick angles welded back to back with 75mm x 50mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 01. Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	2,041.00
Y 23	Supply and fixing of angle iron sleepers over the walls to support purlins formed with 65mm x 65mm x 6mm thick angles welded back to back with 75mm x 65mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 02. Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	2,323.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Y 24	Supply and fixing of angle iron sleepers over the walls to support purlins formed with 75mm x 75mm x 6mm thick angles welded back to back with 75mm x 75mm x 10mm thick seperators @ 2'-0" c/c, fixed to the concrete pad laid on the wall with 2 nos 16 mm dia. rod and 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/SLEEPER/2020/DETAIL 03. Rate shall include for application of two coats of Zinc Phosphate paint.	L.ft.	2,656.00
	<u>Mild steel Roof truss</u>		
Y 25	Mild steel Roof truss for Calicut tile roofing 20'-0" (6.0m) span centre to centre, Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 01. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	132,339.00
Y 26	Mild steel Roof truss for asbestos roofing 20'-0" (6.0m) span centre to centre, Maximum spacing 10'-0" , 18 ⁰ pitch maximum and 12 ⁰ pitch minimum with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:-ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 02. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	126,856.00
Y 27	Mild steel Roof truss for Calicut tile roofing 25'-0" (7.5m) span centre to centre, Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 03. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	150,879.00
Y 28	Mild steel Roof truss for asbestos roofing 25'-0" (7.5m) span centre to centre, Maximum spacing 10'-0" , 18 ⁰ pitch maximum and 12 ⁰ pitch minimum with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 50mm x 50mm x 6mm thick angles as top and bottom chords, 1 No. 50mm x 50mm x 6mm thick angles as struts & ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:-ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 04. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	140,672.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Y 29	Mild steel Roof truss for Calicut tile roofing 30'-0" (9.0m) span centre to centre , Maximum spacing 10'-0" , 25 ⁰ pitch maximum and 18 ⁰ pitch minimum. Consisting of 2 Nos. 65mm x 65mm x 6mm thick angles as top and bottom chords, 2 Nos. 50mm x 50mm x 6mm thick angles as struts , 1 No. 65mm x 65mm x 6mm thick angles as ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 05. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	200,231.00
Y 30	Mild steel Roof truss for asbestos roofing 30'-0" (9.0m) span centre to centre, Maximum spacing 10'-0" , 18 ⁰ pitch maximum and 12 ⁰ pitch minimum, with 4'-0" wide eaves at both sides. Consisting of 2 Nos. 65mm x 65mm x 6mm thick angles as top and bottom chords, 2 Nos. 50mm x 50mm x 6mm thick angles as struts , 1 No. 65mm x 65mm x 6mm thick angles as ties, 10mm thick gusset plates, base plates & sole plates, mild steel rag bolts, 12" long 75 x 75 x 6 mm purling cleats, etc.. & all details as per the Drawing No:- ST/TYPE PLAN/ROOF TRUSS/2020/DETAIL 06. Rate shall include for fabricating , transporting , fixing in position and application of two coats of Zinc Phosphate paint.	Nr.	185,228.00
	<u>Zinc Alum Roofing & Sandwich Panel Roofing</u>		
	Zinc Aluminium Coated Profiled Steel Sheets		
	Note -		
	1. Work shall be done in accordance with specifications for electrical and mechanical works - ICTAD Publication No.SCA/8 of Aug.2000(2 nd Edition - Revised)		
	2.Material shall be done in accordance with BS 2989:1992 or with BS EN 10147:1992 or ASTM A792M.		
	3. Coating mass is AZ150 (Min. 150 gms/sq.m total on both sides) zinc alum profile roofing sheet.		
	4. The nominal base metal thickness should be 0.42 mm and total coated thickness(TCT) not less than 0.47mm, HI-Tensile steel with min. 550 Mpa yield strength, metallic hot dip coated Aluminium-Zinc alloy (55% Aluminium , 43.5% Zinc,1.5% Silicon).		
	5. The minimum rib size is 28mm.		
	6.The sheeting shall be fixed to timber purlins using compatible self-drilling hexagon washer head tap screws with neoprene washer & to steel purlins using compatible self drill thread forming nominal 40 µm Zinc coated or 25 µm zinc-tin alloy coated, hexagon washer head screw with EPDM washer.		
	7. Fastners shall be fixed on each rib on purlins at top, bottom & laps of sheets, and on every other rib on intermediate purlins. The fastner size shall be calculated as per the design or manufacturer's recommendations.		
	8.Glamet G5 A40 roofing double skin with zinc aluminium coated metal panel insulated with polyurethane (PU) rigid foam for pitched roof with a minimum slope of 7%. Top sheet should be 0.47mm thick (colour) & bottom sheet should be 0.35mm thick (colour).		
	9.Insulated material is Polyurethane (PU) of density of 40kg/m3		
	10.If PU thickness change, the length of screws should be increased.		

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>NON-COLOUR</u>		
Y 31	Supply and fix zinc alum profile roofing sheet, laid on existing purlings with joints to be properly connected with an adequate side lap to ensure water tightness along the entire length and complete to working order.	Sqr.	50,067.00
Y 32	Supplying and fixing zinc aluminium standard ridge or gable cap (Girth 610mm) using 10 x 16 mm self drilling fasteners at 190mm c/c to existing sheet & work complete in order. .	L.ft.	1,156.00
Y 33	Supplying and fixing Zinc alum flashing to wall & existing sheet using 10 x 16 mm self drilling fasteners at 380mm c/c & work complete in order.	L.ft.	1,020.00
Y 34	Supplying and fixing Zinc alum Valley gutter of girth 470mm using 10 x 16 mm self drilling fasteners at 190mm c/c to existing sheet & work complete in order.	L.ft.	1,021.00
Y 35	Supply and fix proprietary coated zincalum gutter size - Girth 610 complete with stop end plates, pop rivot, etc. All joints to be properly connected with an adequate laps not less than 150mm length and with sealant to ensure water tightness along the entire length of the gutter and including compatible galvanized gutter brackets at 450mm centers with an adequate slope as directed and fix in position.	L.ft.	1,577.00
Y 36	Supply and fix proprietary coated zincalum gutter size - Girth 660 complete with stop end plates, pop rivot, etc. All joints to be properly connected with an adequate laps not less than 150mm length and with sealant to ensure water tightness along the entire length of the gutter and including compatible galvanized gutter brackets at 450mm centers with an adequate slope as directed and fix in position and subject to specific approval by the Divisional Engineer.	L.ft.	3,143.00
Y 37	Supply and fix proprietary coated zincalum square down pipe size 100 x 100mm compatible for girth 610mm gutter complete with necessary nozzle , offset, 30' degree bend down pipes, shoe, down pipe bracket, etc. . All joints to be properly connected and with sealant to ensure water tightness along the entire length. Down pipe brackets @ 1.0 m c/c .	L.ft.	1,083.00
Y 38	Supply and fix proprietary coated zincalum square down pipe size 150 x 150mm compatible for girth 660mm gutter complete with necessary nozzle , offset, 30' degree bend down pipes, shoe, down pipe bracket, etc. . All joints to be properly connected and with sealant to ensure water tightness along the entire length. Down pipe brackets @ 1.0 m c/c .	L.ft.	2,826.00
Y 39	Supply and fixing 0.47 mm zinc alum valance board 313 mm girth with 20mm x 5 mm x 12" long flat iron bracket 2'-0" c/c and complete to working order. Rate shall include for scaffolding.	L.ft.	664.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>COLOUR</u>		
Y 40	Supply and fix zinc alum profile roofing colour sheet, laid on existing purlings with joints to be properly connected with an adequate side lap to ensure water tightness along the entire length and complete to working order.	Sqr.	58,716.00
Y 41	Supplying & fixing 30mm thick of PU Zinc Aluminium roofing sandwich panel "Glamet" or approved equivalent laid on existing purlings with joints to be properly connected with an adequate side lap to ensure water tightness along the entire length and complete to working order as per manufacture's specifications.	Sqr.	110,297.00
Y 42	Supplying and fixing zinc aluminium standard Colour ridge cap or gable cap (Girth 470mm) using 10 x 16 mm self drilling fasteners at 190mm c/c to existing sheet & work complete in order. .	L.ft.	1,314.00
Y 43	Supplying and fixing Zinc alum colour flashing to wall & existing sheet using 10 x 16 mm self drilling fasteners at 380mm c/c & work complete in order.	L.ft.	1,168.00
Y 44	Supplying and fixing Zinc alum colour Valley gutter of girth 610mm using 10 x 16 mm self drilling fasteners at 190mm c/c to existing sheet & work complete in order.	L.ft.	1,168.00
Y 45	Supply and fix proprietary coated zincalum colour gutter size - Girth 610 complete with stop end plates, pop rivot, etc. All joints to be properly connected with an adequate laps not less than 150mm length and with sealant to ensure water tightness along the entire length of the gutter and including compatible galvanized gutter brackets at 450mm centers with an adequate slope as directed and fix in position.	L.ft.	1,741.00
Y 46	Supply and fix proprietary coated zincalum colour gutter size - Girth 660 complete with stop end plates, pop rivot, etc. All joints to be properly connected with an adequate laps not less than 150mm length and with sealant to ensure water tightness along the entire length of the gutter and including compatible galvanized gutter brackets at 450mm centers with an adequate slope as directed and fix in position and subject to specific approval by the Divisional Engineer.	L.ft.	3,481.00
Y 47	Supply and fix proprietary coated zincalum colour square down pipe size 100 x 100mm compatible for girth 610mm gutter complete with necessary nozzle , offset, 30' degree bend down pipes, shoe, down pipe bracket, etc. . All joints to be properly connected and with sealant to ensure water tightness along the entire length. Down pipe brackets @ 1.0 m c/c .	L.ft.	1,343.00
Y 48	Supply and fix proprietary coated zincalum colour square down pipe size 150 x 150mm compatible for girth 660mm gutter complete with necessary nozzle , offset, 30' degree bend down pipes, shoe, down pipe bracket, etc. . All joints to be properly connected and with sealant to ensure water tightness along the entire length. Down pipe brackets @ 1.0 m c/c .	L.ft.	3,005.00
Y 49	Supply and fix open groove type Pvdf coated Aluminium Composite wall cladding of 4mm thickness with both sides Pvdf coated aluminium sheets of 0.4mm thick including bronze anodised aluminium inner frame work to vertical walls up to 30'-0". As per the members , sizes and details given in Drawing No:- AR/TYPE PLAN/CLADDING/ 2019.03.18. Rate shall include for scaffolding.	Sq.ft.	787.00
Y 50	Supply and fixing 0.47 mm zinc alum colour valance board 313 mm girth with 20mm x 5 mm x 12" long flat iron bracket 2'-0" c/c and complete to working order. Rate shall include for scaffolding.	L.ft.	664.00
Y 51	Supply and lay 3 way reinforced double sided aluminium foil heat reflecting material to underside of roof, supported with Gauge 17, 3" x 3" GI mesh and complete to working order. Rate shall include for scaffolding.	Sqr.	5,115.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	High tensile Galvanized iron "C" channels		
	Note -		
	1. Work shall be done in accordance with specifications for electrical and mechanical works - ICTAD Publication No.SCA/8 of Aug.2000(2 nd Edition - Revised)		
	2. Material shall be done in accordance with Standard AS 1397 and Material Tolerance Standard AS 1365.		
	3. Coating mass is Z275 (Min. 275gms/sq.m total on both sides)		
	4. Minimum yield strength 450 Mpa, Hot Dipped, Zinc coated & Chromate Passivated.		
Y 52	Supply and fixing high tensile Galvanized iron "C" channels of 100 x 50 x 14.5 x 2.0mm thick. Rate shall include hoisting.	L.ft.	1,324.00
Y 53	Supply and fixing high tensile Galvanized iron "C" channels of 150 x 65 x 17.5 x 2.0mm thick. Rate shall include hoisting.	L.ft.	1,758.00
Y 54	Supply and fixing high tensile Galvanized iron "C" channels of 200 x 75 x 20 x 2.0mm thick. Rate shall include hoisting.	L.ft.	2,192.00
	From first floor, hoisting & placing paid seperately under item No.Y 61 to Y 63 items		
Y 55	Supply and fixing high tensile Galvanized iron "C" channels of 100 x 50 x 14.5 x 2.0mm thick	L.ft.	1,310.00
Y 56	Supply and fixing high tensile Galvanized iron "C" channels of 150 x 65 x 17.5 x 2.0mm thick	L.ft.	1,744.00
Y 57	Supply and fixing high tensile Galvanized iron "C" channels of 200 x 75 x 20 x 2.0mm thick	L.ft.	2,178.00
	<u>Steel Scaffolding Set</u>		
Y 58	Supplying and erecting steel scaffolding sets. Rate to include for dismantling same after completion of work.	Set per day	89.00
Y 59	Supply and lay glass wool with double sided aluminium foil (total thickness is 50mm and 16kg/m3 density) heat reflecting material to underside of roof, supported with Gauge 17, 3" x 3" GI mesh and complete to working order. Rate shall include for scaffolding.	Sqr.	11,830.00
Y 60	Truss joint at hipped fixing in position. Rate shall include 10mm thick gusset plates, welding application of two coats of Zinc Phosphate paint.	Nr.	4,441.00
	<u>Hoisting & Placing</u>		
Y 61	Hoisting & placing in position angle iron purlin, channel Iron purlin, high tensile Galvanized iron "C" channel, Roof truss & plastic water tank (subject to specific approval by the Divisional Engineer.)	kg/l.ft	2.00
Y 62	Hoisting & placing in position angle iron purlin, channel Iron purlin, high tensile Galvanized iron "C" channel,Roof truss & water tank using 30ton mobile crane (transport of mobile crane to be paid separately)	Per machine hour	14,281.00
Y 63	Hoisting & placing in position angle iron purlin, channel Iron purlin, high tensile Galvanized iron "C" channel,Roof truss & water tank using 25ton mobile crane (transport of mobile crane to be paid separately)	Per machine hour	11,530.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Z - MAINTANANCE WORK</u>		
	<u>Demolishing</u>		
Z 01	Demolishing reinforced cement concrete in suspended floors up to 4" thick , removing reinforcement and clearing debris.	Cube	55,995.00
Z 02	Demolishing cement concrete and clearing debris in floors from 4" to 6" thick floors.	Cube	25,586.00
Z 03	Demolishing reinforced cement concrete in sun shade up to 4" thick , removing reinforcement and clearing debris.	Cube	30,151.00
Z 04	Demolishing reinforced cement, concrete in lintol of 9" x 6" removing reinforcement and clearing debris.	L.ft.	110.00
Z 05	Demolishing reinforced cement, concrete in lintol of 4 1/2"x 6" removing reinforcement and clearing debris.	L.ft.	86.00
Z 06	Demolishing brick piers, stacking brick and clearing debris away.	Cube	3,657.00
Z 07	Demolishing 9" thick brick walls stacking brick and clearing debris away.	Cube	3,657.00
Z 08	Demolishing 4 1/2" thick brick walls stacking brick and clearing debris away.	Sqr.	1,646.00
Z 09	Demolishing 3" thick brick paved floors and clearing debris away.	Sqr.	2,133.00
Z 10	Demolishing drains and clearing debris away.	L.ft.	72.00
Z 11	Demolishing rubble masonry built in cement and sand, stacking rubble and clearing debris away.	Cube	5,852.00
Z 12	Demolishing floor tiles and clearing debris away.	Sqr.	4,975.00
Z 13	Demolishing wall tiles and clearing debris away.	Sqr.	4,023.00
Z 14	Chipping cement rendering and clearing debris away.	Sqr.	3,199.00
Z 15	Chipping cement plastering and clearing debris away.	Sqr.	2,195.00
Z 16	Chipping lime plastering and clearing debris away.	Sqr.	1,098.00
Z 17	Chipping cement plaster in soffits and clearing debris away.	Sqr.	3,292.00
	<u>Masonry work - Small Quantities Up to 1 Square</u>		
Z 18	4 1/2" thick brick work in cement and sand 1:5 up to a 1 square.	Sqr.	41,438.00
Z 19	1/2" thick Rendering in cement and sand 1:3 up to a 1 square finished smooth with neat cement slurry and colour pigments.	Sqr.	14,541.00
Z 20	5/8" thick Plastering to walls in cement and sand 1:5 up to a 1 square finished semi-rough with wooden float. (Sand to be seived).	Sqr.	14,492.00
Z 21	5/8" thick Plastering to walls in cement, lime and sand 1:1:5 up to a 1 square finished smooth with lime putty. (Sand to be seived).	Sqr.	19,008.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	Roof work		
Z 22	Removing and stacking calicut tile or half round tile from roof in single storied building.	Sqr.	1,422.00
Z 23	Removing and stacking calicut tile or half round tile from roof in two storied building.	Sqr.	2,195.00
Z 24	Removing and stacking calicut tile or half round tile from roof in three storied building.	Sqr.	2,926.00
Z 25	Removing and stacking corrugated cement fibre or asbestos roofing sheet from roof in single storied building.	Sqr.	1,098.00
Z 26	Removing and stacking corrugated cement fibre or asbestos roofing sheet from roof in two storied building.	Sqr.	1,463.00
Z 27	Removing and stacking corrugated cement fibre or asbestos roofing sheet from roof in three storied building.	Sqr.	1,829.00
Z 28	Removing roof tiles/cement fibre or asbestos roofing sheets and timber frame work, stacking serviceable materials and clearing debris away in single storied building.	Sqr.	2,926.00
Z 29	Removing roof tiles/cement fibre or asbestos roofing sheets and timber frame work, stacking serviceable materials and clearing debris away in two storied building.	Sqr.	3,657.00
Z 30	Removing roof tiles/cement fibre or asbestos roofing sheets and timber frame work, stacking serviceable materials and clearing debris away in three storied building.	Sqr.	4,389.00
Z 31	Removing and stacking calicut ridge tile.	L.ft	88.00
Z 32	Removing and stacking cement fibre or asbestos ridging.	L.ft	74.00
Z 33	Removing 2" x 1" reepers , 2" x 2" battens ,stacking at site and clearing debris away in single storied building.	L.ft	15.00
Z 34	Removing 2" x 1" reepers , 2" x 2" battens ,stacking at site and clearing debris away in two storied building.	L.ft	22.00
Z 35	Removing 2" x 1" reepers , 2" x 2" battens ,stacking at site and clearing debris away in three storied building.	L.ft	30.00
Z 36	Removing 2" x 4" rafters , 4" x 3" wall plates , stacking at site and clearing debris away in single storied building.	L.ft	30.00
Z 37	Removing 2" x 4" rafters , 4" x 3" wall plates , stacking at site and clearing debris away in two storied building.	L.ft	37.00
Z 38	Removing 2" x 4" rafters , 4" x 3" wall plates , stacking at site and clearing debris away in three storied building.	L.ft	44.00
Z 39	Removing 5" x 3" / 5" x 2" purlings , stacking at site and clearing debris away in single storied building.	L.ft	44.00
Z 40	Removing 5" x 3" / 5" x 2" purlings , stacking at site and clearing debris away in two storied building.	L.ft	52.00
Z 41	Removing 5" x 3" / 5" x 2" purlings , stacking at site and clearing debris away in three storied building.	L.ft	59.00
Z 42	Removing and stacking valance/Barge board materials and clearing debris away in single storied building.	L.ft	28.00
Z 43	Removing and stacking valance/Barge board materials and clearing debris away in two storied building.	L.ft	37.00
Z 44	Removing and stacking eaves gutter from roof of single storied buildings.	L.ft	37.00
Z 45	Removing and stacking eaves gutter from roof of two storied building.	L.ft	57.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
Z 46	Removing and stacking down pipes from roof of single storied building.	L.ft	36.00
Z 47	Removing and stacking down pipe from roof of two storied building.	L.ft	46.00
Z 48	Removing and stacking G.I. Valley gutter and flashing.	L.ft	74.00
Z 49	Re-laying available calicut tiles on the roof in single storied building.	Sqr.	1,463.00
Z 50	Re-laying available calicut tiles on the roof in two storied building.	Sqr.	1,829.00
Z 51	Re-laying available calicut tiles on the roof in three storied building.	Sqr.	2,195.00
Z 52	Re-laying available asbestos roofing sheets on the roof in single storied building.	Sqr.	2,544.00
Z 53	Re-laying available asbestos roofing sheets on the roof in two storied building.	Sqr.	3,180.00
Z 54	Re-laying available asbestos roofing sheets on the roof in three storied building.	Sqr.	3,816.00
Z 55	Fixing available Reepers with wire nails.	L.ft	19.00
Z 56	Fixing sorted out & cut to required size available timber to roof or other carpentry work.	Cu.ft	2,363.00
Z 57	Fixing available corrugated asbestos roofing sheet with hooks , nuts and bolts to roofing.	Sqr.	4,855.00
Z 58	Supply and fixing hooks, nuts & bolts for existing cement fibre or asbestos roof.	Nr.	65.00
Z 59	Ridge tile bedded in lime cement motor 1:1:4 and coloured to match tiles.(Ridge tile available at site)	L.ft	257.00
Z 60	Fixing of available barge/Valance boards & fascia including cutting and minor repairs.	L.ft	75.00
Z 61	Refixing existing G.I. Valley gutter and flashing including repairing any damaged areas.	L.ft	252.00
Z 62	Fixing of existing gutter and down pipe including brackets and repairing any damages to the wall.	L.ft	114.00
	<u>Ceiling work</u>		
Z 63	Removing cement fibre or asbestos ceiling sheets including timber frame work, stacking serviceable materials and clearing debris away in single storied building.	Sqr.	3,467.00
Z 64	Removing cement fibre or asbestos ceiling sheets including timber frame work, stacking serviceable materials and clearing debris away in two storied building.	Sqr.	4,929.00
Z 65	Removing ceiling timber frame work, stacking serviceable materiel and clearing debris away in single storied buildings.	Sqr.	907.00
Z 66	Removing ceiling timber frame work, stacking serviceable materiel and clearing debris away in two storied buildings.	Sqr.	1,272.00
Z 67	Removing existing cement fibre or asbestos ceiling sheet, stacking materials at the site and clearing debris away.	Sqr.	2,004.00
Z 68	Renewing in small quantities of 6" x 5/8" - 3/4" lunumidella ceiling including scaffolding up to 30'-0" high.	L.ft	150.00
Z 69	Fixing available lunumidella ceiling planks with new wire nails.	Sqr.	7,366.00
Z 70	Supplying and fixing 1 1/2" x 1/2" thick Beading , Halmilla or equivalant, planning & chamfering complete with brass screws.	L.ft.	81.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Doors, Windows & Partitions</u>		
Z 71	Removing and stacking door sash only up to 40 S.ft from existing walls.	Nr.	441.00
Z 72	Removing and stacking door sash only over 40 S.ft from existing walls.	Nr.	661.00
Z 73	Removing and stacking door or window frame size up to 40 S.ft from existing walls.	Nr.	2,843.00
Z 74	Removing and stacking door or window frame size over 40 S.ft from existing walls.	Nr.	4,265.00
Z 75	Removing and stacking window sash only up to 40 S.ft from existing walls.	Nr.	441.00
Z 76	Removing and stacking window sash only over 40 S.ft from existing walls.	Nr.	661.00
Z 77	Removing and stacking trellis work	Sq.ft.	44.00
Z 78	Removing and stacking glass panes in doors, windows and fanlights.	Sq.ft.	176.00
Z 79	Removing and stacking partitions at site including making good to walls & floors.	Sq.ft.	48.00
Z 80	Renewing in short lengths with approved timber in existing door or window frames .	L.ft.	1,171.00
Z 81	Door or window frame altering existing rebate fillet using approved quality timber with screws and fixing available sashes.	Nr.	7,004.00
Z 82	Fixing available door or window frame.	L.ft.	84.00
Z 83	Fixing available door or window sash.	Sq.ft.	70.00
Z 84	Removing damage sashes of door or window and preparing & re-fixing.	Per sash	930.00
Z 85	Removing existing mortice lock repairing and re-fixing.	Nr.	1,669.00
Z 86	Supply and fixing Trellis work 1/2" x 1/2" laths with 2" apart diagonally, horizontally or vertically on existing timber framing.	Sq.ft.	699.00
Z 87	Supply and fixing 3mm thick glass panes for the existing door / window or fanlight sashes with approved timber beading.	Sq.ft.	547.00
	<u>Sanitary</u>		
Z 88	Removing wash basin , sink or urinals including all fittings and making walls good.	Nr.	1,066.00
Z 89	Removing squatting pan or standing types water closet with plugging sewer connection and repairing the wall & floor.	Nr.	4,104.00
Z 90	Disconnecting flushing cistern and removing with plugging water connection and making good of all damaged walls, floors & etc.	Nr.	3,042.00
Z 91	Removing 1/2" to 1 1/2" dia. bib tap or stop cock.	Nr.	148.00
Z 92	Fixing available ball valve.	Nr.	456.00
Z 93	Fixing lavatory type basin to existing brackets. (Tap , waste pipe and basin are available)	Nr.	3,753.00
Z 94	Fixing of wash basin, leveling and connecting to existing water connections and making good (Basin, bracket and fittings are available)	Nr.	4,748.00
Z 95	Repairing bib taps and stop cocks by fixing leather washers.	Nr.	470.00
Z 96	Removing & repairing pillar tap and re-fixing to the wash basin carefully without any damaged.	Nr.	859.00
Z 97	Supply & fixing Universal bend of "Rocell" brand & model "Vario Joint" or approved equivalent.	Nr.	2,545.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Painting</u>		
Z 98	Removing painting from walls and clearing debris away.	Sqr.	1,463.00
Z 99	Removing enamel paint from door or window frame and clearing debris away.	Sqr.	2,926.00
Z 100	Removing paint from painted glass panes with paint remover.	Sq.ft.	102.00
Z 101	Removing water proof layers and/or hot bitumen from concrete floors or flat roof and clearing debris away.	Sqr	5,686.00
Z 102	Painting ceiling beading with two coats of enamel paint.	L.ft	36.00
Z 103	Painting existing ceiling fan with one coat of anti-corrosive paint & two coats of enamel paint including removing corroded scale and wire brushing.	Nr.	1,842.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>AA - LANDSCAPING</u>		
	<u>Turfing</u>		
	<u>Note:</u>		
	Depending on the ground conditions and requirements, turfing shall be decided. Following shall be a guide.		
	(a)For landscaping work involving covering gravel areas item AB02 recommend in combination with item AB01.		
	(b) When grass areas are meant for human traffic, item AB03 & AB05 recommend.(ex. Jogging tracks ,sides)		
	(c) For specific areas item AB04 & AB06 with item AB01.		
AA 01	Remove roots and loose gravel particles from the area identified for turfing and level or graded to a uniform surface, spread a 150mm thick layer of top vegetable soil comprising of a mixture of earth and coir dust mixed in proportion of 2:1 and raked to a depth of 150mm while removing gravel pieces.	Sq.ft.	162.00
AA 02	Supply and placing(laying) buffalo grass turves of size not less than 200mm x 150mm and laid closed butted to one another while ensuring lateral joints between turves being staggered, where necessary turves shall be pegged to the soil to prevent movement or slippage. Thereafter, turfing shall be compacted, levelled and maintained for a period of three(3) months by watering, weeding and trimming, untill roots are firmly rooted in to the ground.	Sq.ft.	54.00
AA 03	Supplying grass sods of malesiyan type grown on any soil and laid on jogging tracks, earth slopes etc; Rate inclusive of levelling the ground and maintaining the same for a period of not less than three months .	Sq.ft.	74.00
AA 04	Supplying grass sods of Australian type grown on a prepared surface and maintaining the grass including daily watering, spreading fertilizer, weeding and trimming for a period of three(3) months.	Sq.ft.	112.00
AA 05	Supplying grass carpet of malesiyan type grown on any soil and laid on jogging tracks, earth slopes etc; Rate inclusive of levelling the ground and maintaining the same for a period of not less than three months .	Sq.ft.	80.00
AA 06	Supplying grass carpet of Australian type grown on a prepared surface and maintaining the grass including daily watering, spreading fertilizer, weeding and trimming for a period of three months.	Sq.ft.	99.00
	<u>Note: In case of landscaping work involving, Planting of ball-rooted trees, flower pots and turfing with area of grass turfing under item AA 02 exceeds 2000 sq.ft, item AA07may be incorporated subject to the approval of Divisional Engineer.</u>		
AA 07	Employing a labourer for maintaing the grass ball-rooted trees and flower pots for a period of 3 months. Rate shall include the cost of water, hiring charges for lawn mover/ grass-cutter machine, trimming with hand- held scissors, weeding, re-planting damaged areas and cost of fertilizer.	Per month	21,735.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>ROOT BOWLLING OF PLANTS</u>		
AA 08	Supply & Planting maximum 5" girth and 7'-0" - 8'-0" high Atteria Plant with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	10,196.00
AA 09	Supply & Planting maximum 5" girth and 8'-0" - 10'-0" high Ehala with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	10,196.00
AA 10	Supply & Planting maximum 5" girth and 6'-0" - 8'-0" high Araliya Plant with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	10,196.00
AA 11	Supply & Planting maximum 5" girth and 6'-0" - 8'-0" high Kiripalu Plant with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	10,196.00
AA 12	Supply & Planting maximum 5" girth and 7'-0" - 8'-0" high Foxtail Palm with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	10,196.00
AA 13	Supply & Planting maximum 5" girth and 8'-0" - 10'-0" high Kentiya Palm with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	5,060.00
AA 14	Supply & Planting maximum 5" girth and 6'-0" - 8'-0" high Red Palm with the fertilizing , watering & plant should be maintain for a one week period.	Nr.	5,702.00
	<u>Paving Blocks</u>		
	Natural Colour Blocks - Item No. AA 15 - AA 22		
AA 15	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) natural colour precast interlocking paving blocks of 40 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	51,530.00
AA 16	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) natural colour precast interlocking paving blocks of 30 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	44,083.00
AA 17	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) natural colour precast interlocking paving blocks of 25 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	43,027.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
AA 18	Supply & paving 60mm thick Rectangular (Approx. size 200mm x 100mm) natural colour precast interlocking paving blocks of 15 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	41,015.00
AA 19	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) natural colour precast interlocking paving blocks of 40 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	50,303.00
AA 20	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) natural colour precast interlocking paving blocks of 30 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	42,128.00
AA 21	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) natural colour precast interlocking paving blocks of 25 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	40,348.00
AA 22	Supply & paving 60mm thick Non-Rectangular (Approx. size 220mm x 110mm) natural colour precast interlocking paving blocks of 15 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	35,011.00
	Coloured Blocks - Item No. AB 23 - AB 30		
AA 23	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) coloured precast interlocking paving blocks of 40 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	61,111.00
AA 24	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) coloured precast interlocking paving blocks of 30 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	51,541.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
AA 25	Supply & paving 80mm thick Rectangular (Approx. size 200mm x 100mm) coloured precast interlocking paving blocks of 25 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	49,684.00
AA 26	Supply & paving 60mm thick Rectangular (Approx. size 200mm x 100mm) coloured precast interlocking paving blocks of 15 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	40,871.00
AA 27	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) coloured precast interlocking paving blocks of 40 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	67,927.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
AA 28	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) coloured precast interlocking paving blocks of 30 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	49,159.00
AA 29	Supply & paving 80mm thick Non-Rectangular (Approx. size 220mm x 110mm) coloured precast interlocking paving blocks of 25 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the high volume traffic areas. Paving blocks and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	46,518.00
AA 30	Supply & paving 60mm thick Non-Rectangular (Approx. size 220mm x 110mm) coloured precast interlocking paving blocks of 15 N/mm ² compressive strength , on 2" thick compacted Quarry dust laid on top of a levelled and well compacted earth sub base for the Low volume traffic areas or Pedestrian areas. Paving blocks should confirming to S.L.S 1425 : Part I & II and subject to the approval of the quality & colour including transport and laying. Rate shall include hire charges of 1/2 - 1 ton vibrating roller.	Sqr.	44,719.00
	<u>Concrete Curb</u>		
AA 31	Supply & paving pre cast concrete Curb size 75mm x 175mm x 540mm of 25 N/mm ² compressive strength laid with 1:3 cement mortar on top of a well compacted earth sub base & tied with Grade 20 cement concrete layer of 0' - 6" thick..	L.ft.	741.00
AA 32	Supply & paving pre cast concrete Curb size 125mm x 255mm x 450mm of 25 N/mm ² compressive strength laid with 1:3 cement mortar on top of a well compacted earth sub base & tied with Grade 20 cement concrete layer of 0' - 6" thick..	L.ft.	1,057.00
AA 33	Supply & paving pre cast concrete Curb size 125mm x 255mm x 915mm of 25 N/mm ² compressive strength laid with 1:3 cement mortar on top of a well compacted earth sub base & tied with Grade 20 cement concrete layer of 0' - 6" thick..	L.ft.	1,057.00
	<u>Cement Flower Pots</u>		
AA 34	Supply & placing of 12" dia. Cement pots 4'-0" high (size approximate)	Nr.	1,200.00
AA 35	Supply & placing of 15" dia. Cement pots 4'-0" high (size approximate)	Nr.	2,760.00
AA 36	Supply & placing of 18" dia. Cement pots 4'-0" high (size approximate)	Nr.	3,480.00
AA 37	Supply & placing of 24" dia. Cement pots 4'-0" high (size approximate)	Nr.	5,610.00
AA 38	Supply & placing of 28" dia. Cement pots 4'-0" high (size approximate)	Nr.	7,560.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Cement Flower Pots of Tapering Square Cross-Section</u>		
AA 39	Supply & placing of 8"x8" and 12" x 12" Taper flower pot 12" high (size approximate)	Nr.	930.00
AA 40	Supply & placing of 10"x10" and 15" x 15" Taper flower pot 18" high (size approximate)	Nr.	1,050.00
AA 41	Supply & placing of 6"x6" and 12"x12" Taper flower pot 33" high (size approximate)	Nr.	1,860.00
	<u>Cement Flower Pots of Square Cross-Section</u>		
AA 42	Supply & placing of 8" x 8" Square flower pot 12" high (size approximate)	Nr.	1,320.00
AA 43	Supply & placing of 15" x 15" Square flower pot 15" high (size approximate)	Nr.	2,700.00
AA 44	Supply & placing of 18" x 18" Square flower pot 18" high (size approximate)	Nr.	3,660.00
AA 45	Supply & placing of 24" x 24" Square flower pot 24" high (size approximate)	Nr.	6,000.00
	<u>P.V.C. Coated Chain Link Fence</u>		
AA 46	Supplying & fixing PVC coated G.I. chain link fence (2" x 2") of gauge 10 on to existing GI pipe and flat iron frame (GI pipe & flat iron measured separately) complete with tension J bolts and tension cords.	Sq.ft.	182.00
AA 47	Supplying and fixing 2" dia.x 2.3mm thick Medium quality GI pipe up to 8'-0" clear height above R/R masonry / Concrete wall and 1'-6" length embedded into 1'-0"x 1'-0"x 2'-0" cement concrete base 1:2:4 (3/4") with 1/2" dia. MS rod welded to bottom of G.I. Pipe and drilling 7 Nos. holes to fixed the chain link (chain link measured separately) and fiberglass coping on top. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint.	L.ft.	754.00
AA 48	Supplying and fixing 3" dia.x 2.9 mm thick Medium quality GI pipe up to 8'-0" clear height above R/R masonry / Concrete wall and 1'-6" length embedded into 1'-0"x 1'-0"x 2'-0" cement concrete base 1:2:4 (3/4") with 1/2" dia. MS rod welded to bottom of G.I. Pipe and drilling up to 8 Nos. holes to fixed the chain link (chain link measured separately) and fiberglass coping on top. Rate Shall include for applying one coat of etch primer (50% of etch primer base and 50% etch primer activator), one coat of anti-corrosive primer with two coats of enamel paint	L.ft.	1,224.00
AA 49	Supplying and fixing 20mm x 5mm flat iron to existing GI pipe (GI pipe measured separately) to fix the chain link, Rate inclusive of drilling holes of 6mm dia. at 1' 0" c/c. Rate to include for application of one coat of anticorrosive paint and two coats of enamel paint.	L.ft.	261.00
AA 50	Supplying and fixing 38mm x 38mm x 6mm angle iron horizontal bracings welded to existing GI pipes. Rate to include for application of one coat of anticorrosive paint and two coats of enamel paint.	L.ft.	433.00
AA 51	Supplying and fixing 1" dia. 2mm thick GI pipe horizontal bracings welded to existing GI vertical pipes. Rate to include for application of one coat of anticorrosive paint and two coats of enamel paint.	L.ft.	320.00
AA 52	Supplying & fixing 3" dia. G.I cap on G.I pipe posts as directed.	No	357.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Barbed Wire Fence</u>		
AA 53	Supplying & fixing 2mm dia.gauge 14 galvanized barbed wire, 3" apart on pre-cast concrete fence posts at 8'-0" interval with J bolts & nuts including straining. Maximum distance between barbs should be 100mm and minimum of 4 nodes between barbs.(Concrete fence Posts to be paid seperately)	L.ft.	16.00
	<u>Fence Post - 7strands</u>		
AA 54	Supplying & fixing pre-cast concrete corner or starting Posts of size (6'-3" ht. & (5" x 5") for 7 strands of 12mm dia. holes including necessary excavation, reinforced with 4 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 8" c/c and erecting the post and concreting the base with 1:3:6(1"). All details for fence post as per Drawing No:- CC/237/FENCE POST/03	Nr.	4,155.00
AA 55	Supplying & fixing pre-cast concrete Intermediate Posts of size Intermediate posts - 5'-9" ht. & (5 3/4" x 5 3/4") - (3" x 3") for 7strands of 12mm dia. holes including necessary excavation, reinforced with 4 nos of 6mm dia. mild steel bars and 6mm mild steel stirrups @ 8" c/c and erecting the post and concreting the base with 1:3:6(1"). All details for fence post as per Drawing No:- CC/237/FENCE POST/03	Nr.	2,706.00
AA 56	Supplying & fixing pre-cast concrete struts of size - 6'-5" ht. & (5" x 4") - (3" x 3") for 7strands of 12mm dia. holes including necessary excavation, reinforced with 4 nos of 10mm dia. tor steel bars and 6mm mild steel stirrups @ 8" c/c and erecting the post and concreting the base with 1:3:6(1"). All details for fence post as per Drawing No:- CC/237/FENCE POST/03	Nr.	2,895.00
	<u>AB - TIMBER STAGE</u>		
AB 01	Suplying and Laying 8" x 1 1/4" finished size Kumbuk or Teak timber board fixing tongue & groove joint & 2" brass screws as directed including, levelling with timber strips where necessary in stage area.	Sq.ft.	3,140.00
AB 02	Suplying and Fixing 5"x2" Balau, Thulan or Kempas panelled timber (Sawn timber) joist at 2'-0" c/c and Suplying and Laying 8" x 1 1/4" finished size Kumbuk or Teak timber board fixing tongue & groove joint & 2" brass screws as directed including, levelling with timber strips where necessary in stage area.	Sq.ft.	3,943.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>AC - CONCRETE STRUCTURAL REPAIRS</u>		
	Basic material prices for rates of AC 01 to AC 07 has obtain from Finex Engineering Pvt Ltd.		
	<u>Foundation Repair</u>		
AC 01	Repairing with refilling of spalled out or cracked concrete column base area including, Chipping the top of the column base and clearing debris away, column base expand by 0'-6" both sides ,Shuttering for sides of column base with 1" thick rubber planking including dismantling , Applying as epoxy bonding agent used to bond fresh the concrete to hardened concrete , Reconcreting with 1:1 1/2:3 (3/4") including vibrating & including curing with a superplasticising Admixture , Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. (Excavation & reinforcement to be paid seperately). All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 01	per no.	33,375.00
	<u>Column Jacketting</u>		
AC 02	Repairing with refilling of spalled out or cracked concrete column area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements , Shuttering for sides of column including dismantling in 15mm thick plywood, Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond the fresh concrete to hardened concrete, Reconcreting with 1:1 1/2:3 (3/4") including vibrating & including Curing with a superplasticising Admixture, Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. (If existing bars in the column totally deteriorated , new reinforcements to be fabricated by lapping to existing bars in good condition. These reinforcements are to be estimated seperately. (i.e. These reinforcements are not taken in to account for this rate.)) All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 01	sq.ft	1,347.00
AC 03	Repairing with refilling of spalled out or cracked concrete column area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements , Shuttering for sides of column including dismantling in 15mm thick plywood, Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond fresh concrete to hardened concrete , Reconcreting with flowable micro concrete (Master flow 810 or approved equivalent), Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. (If existing bars in the column completely deteriorated , new reinforcements to be fabricated by lapping to existing bars in good condition. These reinforcements are to be estimated seperately. (i.e. These reinforcements are not taken in to account for this rate.) All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 01	sq.ft	1,695.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>Slab & Slab beam repair with flowable micro concrete</u>		
AC 04	Repairing with refilling of spalled out or cracked concrete slab beam area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements , Shuttering for sides and bottom of beams including dismantling in 15mm thick plywood, Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond fresh concrete to hardened concrete , Reconcreting with flowable micro concrete (Master flow 810 or approved equivalent) , Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 02	sq.ft	3,277.00
AC 05	Repairing with refilling of spalled out or cracked concrete slab area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements , Shuttering for slab including dismantling in 15mm thick plywood, Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond the fresh concrete to hardened concrete , Reconcreting with flowable micro concrete (Master flow 810 or approved equivalent), Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 02	sq.ft	2,648.00
	<u>Slab & Slab beam repair with repair mortar (Trowellable)</u>		
AC 06	Repairing with refilling of spalled out or cracked concrete slab beam area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements ,Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond the fresh concrete to hardened concrete , Reconcreting with repair mortar (MasterEmaco S 5400 or approved equivalent), Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 02	sq.ft	4,101.00
AC 07	Repairing with refilling of spalled out or cracked concrete slab area including Chipping at about 10 mm beyond the inner surface of the reinforcement to form a regular shape so as to expose the sound concrete & all corroded reinforcements, Cleaning the reinforcement using two coats of Rust Remover, Applying Protection coat for the reinforcement, Applying as epoxy bonding agent used to bond the fresh concrete to hardened concrete ,Reconcreting with repair mortar (MasterEmaco S 5400 or approved equivalent), Applying one coat of concrete curing agent, Applying two coats of high performance anti carbonation coating. All details given in Drawing No:- TYPE PLAN/ STRUCTURAL REPAIRS/2020/DETAIL 02	sq.ft	3,589.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	AD - TESTING CHARGES		
	THE FOLLOWING LABORATORY TEST RATES ARE APPLICABLE WHEN IT IS NECESSARY TO DIRECT ADDITIONAL TESTING OVER AND ABOVE THE MINIMUM TESTING SPECIFIED IN THE SPECIFICATIONS.		
	PLEASE NOTE THAT NO PAYMENT SHOULD BE MADE FOR TESTING MENTIONED IN SPECIFICATION.		
	WHEN TESTS ARE CARRIED OUT IN THE FIELD, TRANSPORT CHARGES SHALL BE ADDED IN ADDITION TO THE TESTING CHARGES.		
	TESTING OF CONCRETE		
AD 01	Slump Test of Concrete	Per Test	843.00
AD 02	Casting of Concrete Cubes (3 Cubes)	Per Test	1,960.00
AD 03	Compressive Strength of Concrete Cubes.	Per Test	810.00
AD 04	Rental for casting Mould (1 Mould)	Per Test	268.00
	TESTING OF CONCRETE PAVING BLOCK		
AD 05	Compressive Strength of Concrete Paving Block	Per Test	772.00
	TESTING OF AGGREGATE		
AD 06	Particle Size Distribution (Sieve Analysis)	Per Test	2,268.00
AD 07	Field Density	Per Test	2,804.00
AD 08	Modified Compaction Test	Per Test	5,880.00
AD 09	Standard Compaction Test	Per Test	5,619.00
	TESTING OF SOIL		
AD 10	Particle Size Distribution (Sieve Analysis)	Per Test	2,274.00
AD 11	Consistency Limit Test	Per Test	3,456.00
AD 12	Field Density	Per Test	2,063.00
AD 13	California Bearing Ratio (CBR)	Per Test	4,731.00
AD 14	Modified Compaction Test	Per Test	4,461.00
AD 15	Standard Compaction Test	Per Test	4,229.00
	TESTING OF REINFORCEMENT		
AD 16	Rate for testing of Tor-steel specimen of 1m length for mechanical properties at an approved laboratory.	Per Sample	3,800.00
	TESTING OF TIMBER		
AD 17	Testing of a timber sample for identification from the Timber corporation laboratory.	Per Test	2,400.00
	TESTING OF WATER PRESSURE		
AD 18	Water Pressure testing for PVC pipes for 6 bars.	Item	1,200.00
	TESTING OF WATER TANKS AND SLUMPS		
AD 19	Testing of Water tanks & Sumps as per clause 3.8.6 of SCA/4/11	Item	4,800.00
	WHEN TESTS ARE CARRIED OUT IN THE FIELD, TRANSPORT CHARGES SHALL BE ADDED IN ADDITION TO THE TESTING CHARGES.		
AD 20	Transport charges for testing	Per km	46.00

ITEM NO.	DESCRIPTION	UNIT	RATE 2022 (with o/h)
	<u>AE - MISCELLANEOUS</u>		
	The following AE 01 & AE 03 items are exclusively for estimating purposes for which a standard work norm is not immediately available and at the same time it is impossible to arrive at a realistic break-up of labour component involved at the time of preparation of the estimate. The rate is not to be used for engaging labourers on routine work and the mere appearance of this rate on BSR is not a sanction to pay the daily labourers at this rate. Skillness of the Craftman to be verified by a trade test certificate at the time of engagement.		
AE 01	Engaging special skilled labour services in the trades of fitter, electrician, plumber, carpenter on 8 hour day basis. (Rate Include 20% over head & profit)	Per 8 Hour day Per Person	4,320.00
AE 02	Engaging skilled labour services in the trades of welder, mason, painter on 8 hour day basis. (Rate Include 20% over head & profit)	Per 8 Hour day Per Person	4,080.00
AE 03	Engaging labour services in un-skilled category of any type of manual work on a 8 hour day basis. (Rate Include 20% over head & profit)	Per 8 Hour day Per Person	2,760.00
AE 04	Supplying and fixing 10-0" 'x3'-6" size green board for class rooms	sq.ft	425.00
AE 05	Compressed soil stabilized un - plastered wall built using earth blocks of size 220mm x 220mm x130mm (allow +_ 10mm only for the length) solid type (confirming to SLS 1382 and subject to the approval of the quality of the blocks, dry compressive strength grade 3.28 up to 4.0 N/mm ² , Wet compressive strength - grade 3 > 1.2 up to 1.6 N/mm ² . Pitting depth (erosion resistance) <10mm) in cement and sand 1:5 mortar to filling the groove and painting the exposed groove to match the bricks. rate shall include for 1/2 thick plaster band to bonding surface of brick & concrete.	Sqr.	53,059.00