MAHARASHTRA JEEVAN PRADHIKARAN

State Schedule of Rates

Year 2021-22

Effective from 15/06/2021

MAHARASHTRA JEEVAN PRADHIKARAN

STATE SCHEDULE OF RATES

YEAR 2021 - 2022

Effective from 15 th June 2021

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LIST OF HILLY AREA

शासन निर्णय, ग्राम विकास विभाग क्र.

ग्रापापु १०९०/सीआर-१६३/३९-अ, दि. ७ डिसेंबर १९९०

चे सहपत्र

परिशिष्ट - १

राज्यातील डोंगरी विभागाचे क्षेत्र दर्शविणारे विवरणपत्र

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगराचे नाव	पूर्ण गट ज्या तालुक्यात ५० टक्के पेक्षा जास्त क्षेत्र आहे तो पूर्ण गट	उपगट ज्या तालुक्यात २० टक्के पेक्षा जास्त व ५० टक्के पेक्षा कमी आहे तो उप गट	शेरा
१	२	३	४	५	६
१ ठाणे वसई	१. मोखाडा	सहयाद्री पर्वत रांगा	पूर्ण गट (१)		
	२. वाडा	पश्चिम घाट	पूर्ण गट (२)		
	३. शहापूर	पश्चिम घाट	पूर्ण गट (३)		
	४. मुरबाड	पश्चिम घाट	पूर्ण गट (४)		
	५. जव्हार	पश्चिम घाट	पूर्ण गट (५)		
	६. वसई	पश्चिम घाट	-	उपगट (१)	पूर्व भाग
	७. भिवंडी	पश्चिम घाट	-	उपगट (२)	उत्तर पश्चिम भाग
२. रायगड	८. कर्जत	पश्चिम घाट	पूर्ण गट (६)		
	९. खालापूर	पश्चिम घाट	पूर्ण गट (७)		
	१०. सुधागड	पश्चिम घाट	पूर्ण गट (८)		
	११. रोहा	पश्चिम घाट	पूर्ण गट (९)		
	१२. माणगांव	पश्चिम घाट	पूर्ण गट (१०)		
	१३. महाड	पश्चिम घाट	पूर्ण गट (११)		
	१४. पोलादपूर	पश्चिम घाट	पूर्ण गट (१२)		
	१५. पेण	पश्चिम घाट	पूर्ण गट (१३)		
	१६. मुरुड	पश्चिम घाट	पूर्ण गट (१४)		
	१७. म्हसळा	पश्चिम घाट	पूर्ण गट (१५)		
	१८. पनवेल	पश्चिम घाट		उपगट (३)	दक्षिण भाग
३. रत्नागिरी	१९. खेड	पश्चिम घाट	पूर्ण गट (१६)		
	२०. चिपळूण	पश्चिम घाट	पूर्ण गट (१७)		
	२१. संगमेश्वर	पश्चिम घाट	पूर्ण गट (१८)		
	२२. लांजा	पश्चिम घाट	पूर्ण गट (१९)		
	२३. राजापूर	पश्चिम घाट	पूर्ण गट (२०)		
	२४. मंडणगड	पश्चिम घाट	-	उपगट (४)	उत्तरेकडील भाग
४. सिंधुदुर्ग	२५. कणकवली	पश्चिम घाट	पूर्ण गट (२१)		
	२६. सावंतवाडी	पश्चिम घाट	पूर्ण गट (२२)		

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगराचे नाव	पूर्ण गट ज्या तालुक्यात ५० टक्के पेक्षा जास्त क्षेत्र आहे तो पूर्ण गट	उपगट ज्या तालुक्यात २० टक्के पेक्षा जास्त व ५० टक्के पेक्षा कमी आहे तो उप गट	शेरा
१	२	३	४	५	६
	२७. देवगड	पश्चिम घाट	पूर्ण गट (२३)		
	२८. कुडाळ	पश्चिम घाट	पूर्ण गट (२४)		
	२९. वैभववाडी	पश्चिम घाट	पूर्ण गट (२५)		
	३०. मालवण	पश्चिम घाट	-	उपगट (५)	पूर्व भाग
५. नाशिक	३१. इगतपुरी	पश्चिम घाट	पूर्ण गट (२७)		
	३२. नाशिक	पश्चिम घाट	पूर्ण गट (२८)		
	३३. दिंडोरी	पश्चिम घाट	पूर्ण गट (२९)		
	३४. पेठ	पश्चिम घाट	पूर्ण गट (३०)		
	३५. सुरगाणा	पश्चिम घाट	पूर्ण गट (३१)		
	३६. कळवण	पश्चिम घाट	पूर्ण गट (३२)		
	३७. बागलाण (सटाणा)	पश्चिम घाट	पूर्ण गट (३३)		
	३८. सिन्नर	पश्चिम घाट	पूर्ण गट (३४)		
६. अहमदनगर	३९. अकोला	पश्चिम घाट	पूर्ण गट (३५)		
	४०. संगमनेर	पश्चिम घाट	पूर्ण गट (३५)		
७. पुणे	४१. जुन्नर	सहयाद्री पर्वत रांगा	पूर्ण गट (३६)		
	४२. आंबेगांव	सहयाद्री पर्वत रांगा	पूर्ण गट (३७)		
	४३. खेड (राजगुरुनगर)	सहयाद्री पर्वत रांगा	पूर्ण गट (३८)		
	४४. मावळ	सहयाद्री पर्वत रांगा	पूर्ण गट (३९)		
	४५. हवेली	सहयाद्री पर्वत रांगा	पूर्ण गट (४०)		
	४६. मुळेशी	सहयाद्री पर्वत रांगा	पूर्ण गट (४१)		
	४७. वेल्हे	सहयाद्री पर्वत रांगा	पूर्ण गट (४२)		
	४८. भोर	सहयाद्री पर्वत रांगा	पूर्ण गट (४३)		
	४९. पुरंदर	सहयाद्री पर्वत रांगा	पूर्ण गट (४४)		
८. सातारा	५०. सातारा	सहयाद्री पर्वत रांगा	पूर्ण गट (४५)		
	५१. वाई	सहयाद्री पर्वत रांगा	पूर्ण गट (४६)		
	५२. पाटणा	सहयाद्री पर्वत रांगा	पूर्ण गट (४७)		
	५३. जावळी	सहयाद्री पर्वत रांगा	पूर्ण गट (४८)		
	५४. महाबळेश्वर	सहयाद्री पर्वत रांगा	पूर्ण गट (४९)		
	५५. खटाव	सहयाद्री पर्वत रांगा	पूर्ण गट (५०)		
	५६. खंडाळा	सहयाद्री पर्वत रांगा	पूर्ण गट (५१)		

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगराचे नाव	पूर्ण गट ज्या तालुक्यात ५० टक्के पेक्षा जास्त क्षेत्र आहे तो पूर्ण गट	उपगट ज्या तालुक्यात २० टक्के पेक्षा जास्त व ५० टक्के पेक्षा कमी आहे तो उप गट	शेरा
१	२	३	४	५	६
	५७. कोरेगांव	सहयाद्री पर्वत रांगा	पूर्ण गट (५२)		
	५८. कराड	सहयाद्री पर्वत रांगा	पूर्ण गट	उपगट (६)	पूर्वेकडील पश्चिम भाग
				उपगट (७)	पूर्वेकडील काही भाग,
	६०. फलटण	सहयाद्री पर्वत रांगा	पूर्ण गट	उपगट (८)	दक्षिणेकडील व पूर्वेकडील भाग
९. सांगली	६१. शिराळा	सहयाद्री पर्वत रांगा	पूर्ण गट (५३)		
१०. कोल्हापूर	६२. शाहूवाडी	सहयाद्री पर्वत रांगा	पूर्ण गट (५४)		
	६३. पन्हाळा	सहयाद्री पर्वत रांगा	पूर्ण गट (५५)		
	६४. करवीर	सहयाद्री पर्वत रांगा	पूर्ण गट (५६)		
	६५. गगनबावडा	सहयाद्री पर्वत रांगा	पूर्ण गट (५७)		
	६६. राधानगरी	सहयाद्री पर्वत रांगा	पूर्ण गट (५८)		
	६७. कागल	सहयाद्री पर्वत रांगा	पूर्ण गट (५९)		
	६८. भुदरगड	पश्चिम घाट	पूर्ण गट (६०)		
	६९. आजरा	पश्चिम घाट	पूर्ण गट (६१)		
	७०. चंदगड	पश्चिम घाट	पूर्ण गट (६२)		
	७१. गडहिग्लंज	पश्चिम घाट	पूर्ण गट (६३)		
११. धुळे	७२. साक्री	पश्चिम घाट	पूर्ण गट (६४)		
	७३. नवापूरी	पश्चिम घाट	पूर्ण गट (६५)		
	७४. अक्कलकुवा	सातपुडा डोंगर	पूर्ण गट (६६)		
	७५. अकाणी	सातपुडा डोंगर	पूर्ण गट (६७)		
	७६. शिरपूर	सातपुडा डोंगर	पूर्ण गट (६८)		
	७७. शहादा	सातपुडा डोंगर		उपगट (९)	पूर्वेकडील व थोडा उत्तरे - कडील भाग
	७८. तळोदा	सातपुडा डोंगर		उपगट (१०)	उत्तरेकडील भाग
१२. जळगांव	७९. चोपडा	सातपुडा डोंगर		उपगट (११)	उत्तरेकडील भाग
	८०. यावल	सातपुडा डोंगर		उपगट (१२)	उत्तरेकडील भाग
	८१. रावेर	सातपुडा डोंगर		उपगट (१३)	उत्तरेकडील भाग
	८२. ऐदलाबाद	सातपुडा डोंगर		उपगट (१४)	काही भाग पूर्वेकडील व काही भाग उत्तरेकडील
१३. अमरावती	८३. धारणी	सातपुडा डोंगर	पूर्णगट (६९)		
	८४. चिखलदरा	सातपुडा डोंगर	पूर्णगट (७०)		
१४. यवतमाळ	८५. पुसद	सतमाळा रांगा	पूर्णगट	उपगट (१५)	उत्तर पश्चिमेकडील भाग, थोडा मध्यमभाग
	८६. अमरखेड	सतमाळा रांगा		उपगट (१६)	उत्तरेकडील व पूर्वेकडील भाग
१५. नांदेड	८७. किनवट	सतमाळा रांगा	पूर्णगट (७१)		

जिल्हा	तालुका	ज्या डोंगरी भागात आहे त्या डोंगराचे नाव	पूर्ण गट ज्या तालुक्यात ५० टक्के पेक्षा जास्त क्षेत्र आहे तो पूर्ण गट	उपगट ज्या तालुक्यात २० टक्के पेक्षा जास्त व ५० टक्के पेक्षा कमी आहे तो उप गट	शेरा
१	२	३	४	५	६
१६. अकोला	८८. पातूर	अजिंठाचे डोंगर	-	उपगट (१७)	दक्षिण व पूर्व
१७. बुलढाणा	८९. खामगांव	अजिंठाचे डोंगर	-	उपगट (१८)	उत्तर व पूर्वेकडील भाग
१८. औरंगाबाद	९०. कन्नड	अजिंठाचे डोंगर	-	उपगट (१९)	उत्तरे व पूर्वेकडील भाग
	९१. खुलताबाद	अजिंठाचे डोंगर	-	उपगट (२०)	मधला व दक्षिणेकडील भाग
	९२. सोयगांव	अजिंठाचे डोंगर	पूर्णगट (७२)	-	-
	९३. सिल्लोड	अजिंठाचे डोंगर	-	उपगट (२१)	उत्तरेकडील व थोडा दक्षिण पश्चिमेकडील भाग
१९. परभणी	९४. हिंगोली	अजिंठाचे डोंगर	-	उपगट (२२)	दक्षिणेकडील भाग
	९५. कलमनूरी	अजिंठाचे डोंगर	-	उपगट (२३)	दक्षिणेकडील भाग

शासन निर्णय, ग्राम विकास विभाग क्र.

ग्रापापु १०९०/सीआर-१६३/३९-अ, दि. ७ डिसेंबर १९९० चे सहपत्र

परिशिष्ट - २

तालुकावार यादीतील उपगट म्हणून घोषित केलेल्या तालुक्यातील गावांची यादी दर्शविणारे विवरणपत्र

जिल्हा म्हणून घोषित केलेला तालुका	उपगट तालुक्यातील गावांची नावे
१) ठाणे वसई	१) चांदज २) तिपलिया ३) शिवनासा ४) पानसा ५) उसगांव ६) पारोळ ७) शिरवली ८) जळकीया ९) वसई १०) सारवण ११) घाटेघर १२) भावखल १३) पेलाट १४) साजिवली १५) दापेवली १६) कार्जुरा १७) खाडेकर १८) भिडा १९) खोलसट २०) खैरे २१) संदा २२) चुडाल २३) तिल्हेस २४) सावट २५) मरतारी २६) बिलवूडा २७) गया २८) दडविरा २९) सातिवली ३०) खाडी ३१) दैंडा ३२) दडीप ३३) वामन ३४) काजू ३५) कोल्ही ३६) कोळा ३७) चिंचाटी ३८) होवाऊन
२) भिवंडी	१) गणेशपूरी २) वडवली ३) उसगांव ४) धाडगांव ५) आंदीपाडा ६) गोबाटा ७) मोहिली ८) बावची ९) मालवियोर १०) बेलोली ११) उसपाडी पाडा १२) आंबराई पाडा १३) घ्यार १४) खडकी खुर्द १५) पिंपळशेत १६) खडकी बुद्रुक १७) भाऊपोळ १८) कुहापाडा १९) कुहा २०) आंबापाडा २१) देवपाडा कुलईपाडा २९) पायगांव ३०) पाया ३१) पेरुनपाडा ३२) भावडीपाडा ३३) खार भाव ३५) गाना ३६) लाकेवली ३७) चिंचपाडा ३८) गौरीपाडा ३९) डोकरपाडा ४०) अलकौअरी
रायगड ३) पनवेल	१) माणिकघर २) घोडसावना ३) सावना ४) बामणोरी ५) नामदेवी ६) देवलोळी ७) छावना ८) कालेवली ९) सारसाई १०) आपटा ११) कासव १२) कारडा १३) देवटी १४) बुलसुडा १५) अकूवडी १६) घुराडाव १७) वावेघर १८) कोष्टी १९) दापोवली २०) देवतुला २१) सावला २२) करनाहा २३) कला २४) वंडाना २५) कारल २६) दुलघट २७) कासभाट २८) दिघारी २९) हातवंडी
रत्नागिरी ४) मंडणगड	१) अंबावना बुद्रुक २) केंजालघर ३) लोरी ४) हेल्टी ५) गारीपाडा ६) पेवा ७) पांडेरी ८) पाडवा ९) अंबरसेंट १०) टी व्हेसाई ११) टेरी १२) लोकरवन १३) महाप्रत १४) हडघर १५) तांभी १६) लोहरा १७) गौरज १८) कुंभार १९) गोवेळे २०) पन्हाली २१) धुरी २२) तारवली २३) आंबेगण २४) धनगर २५) सारळ २६) अडखळ २७) व्हेसाई २८) पाट २९) अंजला ३०) सोडली तर्फे व्हेसाई ३१) बुडळ ३२) खुर्द ३३) शिगाव ३४) साडा ३५) तळघर ३६) टाकेडी ३७) पाचरोल ३८) धामणी ३९) वोरखट ४०) गोवा ४१) धमणघर ४२) सामोटी ४३) निगडी
सिंधूदूर्ग ५) मालवण	१) कुसीस २) असरुडी ३) भवानी ४) वंजकार ५) टाटारभाव ६) भाटपावणी ७) शिरावडे ८) राटीवडे ९) आजगणी १०) ब्राम्हण ११) हिवाळे १२) ओवलीये १३) खाटले १४) डुंडुल १५) वायंनगावडे १६) वायरन १७) पोईप १८) नेसूरे १९) वाडेच्या पाट २०) नवापाट २१) गोलवणे २२) डीकवळ २३) चापेखोल २४) कुमामे २५) नांदोसा २६) तिरावडे २७) पारस २८) डेहूल

जिल्हा म्हणून घोषित केलेला तालुका	उपगट तालुक्यातील गावांची नावे
सातारा ६) कराड	१) मरळी २) चोरजवाडी ३) कोरीवळे ४) बेलदारे ५) म्होप्रे ६) भोळेवाडी ७) साकुडी ८) येणके ९) कोळे १०) कुसूर ११) तुळवण १२) सवादे १३) लाटकेवाडी १४) हवेलवाडी १५) म्हासोळी १६) शेळके वाडी १७) मनु १८) येवती १९) घराळवाडी २०) हणमंतवाडी २१) टाळगांव २२) येळगांव २३) गौरेवाडी २४) गणेशवाडी २५) भरेवाडी २६) सोळशिरभे २७) महारगडेवाडी २८) जिती २९) अक्काईवाडी ३०) कासारशिरमे ३१) निगडी ३२) धोलपावाडी ३३) किवळ ३४) खोडताईवाडी ३५) मसूर ३६) हणबरवाडी ३७) वाण्याची वाडी ३८) मालवाडी ३९) कांबीखाडी ४०) शिरगाव ४१) तुळी ४२) पाल ४३) हरपळवाडी ४४) रिसवड ४५) वस्ती साकडी ४६) सांजूर ४७) ताबवे ४८) आरेवाडी ४९) गमेवाडी ५०) मोळवाडी ५१) डोळेवाडी ५२) पांढरीवाडी ५३) आणे ५४) अंबवडे ५५) तारुख ५६) भवानपाडा ५७) शितलवाडी ५८) चिरवली ५९) घरचुंद ६०) कामथी ६१) वाघेरी ६२) करवडी ६३) हजरार माची ६४) वानरमाची ६५) वनवासमाची ६६) राजमाची ६७) टेंभू ६८) भयापूर ६९) कोरेगाव ७०) कार्वे ७१) वडगांव हवलेली ७२) शेपोली कालवडे
सातारा ७) फलटण	१) सालपे २) आदकीखुर्द ३) आळजापूर ४) कोराळे ५) वाघोशी ६) लाथवडा ७) मानेवाडी ८) झाडकबाईवाडी ९) वेलोशी १०) उजलवे ११) दाववाडी १२) भीरेवाडी १३) गिरवी १४) धुमाळवाडी १५) बेडकेवाडी १६) साकळ १७) भाडळी खुर्द १८) दुधेभावी १९) जावली २०) आंदुड २१) कुरवाली बु.
सातारा ८) मान	१) कळसकर वाडी २) गाडेवाडी ३) भिंडी बुद्रुक ४) पाळवण ५) तोंडले ६) उगळेवाडी ७) शिंदी बुद्रुक ८) शिंगणापूर ९) भांडळी १०) इंजतात ११) कळचांडी १२) विरळी १३) वळई १४) कुक्कडवाड १५) मखणे १६) काळेवाडी १७) बोरगेवाडी १८) किरकसाड १९) हिमानगड २०) दिवडी २१) पांढरीवाडी २२) स्वरपवानवाडी २३) शिंदी बुद्रुक २४) बोथे
धुळे ९) शहादा	१) काकरेदे खुर्द २) काकरेदे बुद्रुक ३) कोंढावळ ४) चांदसेली ५) चिंरडे ६) वरुड बुद्रुक ७) मळगाव ८) भुलाना ९) दरा १०) राणीपूरी ११) आकसपूर १२) मानमोडया १३) नागझरी १४) लंगडी भवसनी १५) कुक्कडवाड १६) मखणे १७) आभाडपूर खुर्द १८) टरबा १९) नायगांव २०) सिसुरा २१) पेटा २२) फोफाराळे २३) चांदपूर २४) गुदा २५) इकरास २६) काटघर २७) पिरपूर
धुळे १०) तळोदा	१) सोजूरवाडा २) माळखुर्द ३) चौगाव खुर्द ४) लाकुड शेट ५) खर्डी खुर्द ६) काठोर ७) बंधारा ८) खडी बुद्रुक ९) जुवाणी १०) लाखापूर ११) माळ १२) मोरामाळ १३) आंबा गव्हाण १४) सीत पावळी १५) बामनी १६) मलुवा १७) राजापूर
जळगांव ११) चोपडा	१) मराठा २) सत्रासेन ३) खांडरा ४) भोरचिडा ५) उमरटी ६) गोवापाडा ७) कृष्णापूर ८) खाऱ्यापाडा ९) विजापूर १०) मुख्यावतार ११) शेतपाणी १२) बोअरअंनती १३) मालापूर १४) विषणापूर १५) बोरमळी १६) कर्जाणा १७) मेलाना १८) देव्हारी
जळगांव १२) यावल	१) मनुबाई देवस्थान २) लंगडया आंबा ३) गढून्या ४) जामन्या ५) उसमळी ६) हरीपूरी ७) नागदेवी ८) वाघझीर ९) आसरा वारी

जिल्हा म्हणून घोषित केलेला तालुका	उपगट तालुक्यातील गावांची नावे
जळगांव १३) रावेर	१) तिडया २) अंधारमाळी ३) मोहमोडी ४) चिचाडी ५) चिमडया ६) गारखेडा ७) मोहमांडली सून ८) पिंपट कुंड ९) पाल १०) मोरव्हाल ११) जिन्सी १२) गारखेड १३) सहस्नलिंग १४) लालमाती
जळगांव १४) ऐदलाबाद	१) दुई २) सुकली ३) सोमणगांव ४) डोलरखेड ५) नोंदवेल ६) वायल ७) चारठाणे ८) देवी मंदिर ९) मोरझिरा १०) जोनधखेड ११) लालगोडा १२) हलखेंडा
बुलढाणा १५) खामगांव	१) गिरोळी २) इसालवाडी ३) चिंचखेडनाथ ४) कठडेगांव ५) चिंचखेडबंड ६) शेंद्री ७) मांडणी ८) बोथा ९) खेर्डी १०) वाकी ११) गारखेड १२) गारोडी १३) धार १४) माटरगांव १५) चिंचखेड १६) कान्टी १७) कझर १६) पिंपरी १७) धनगर १८) लाखनवाडी खुर्द १९) पत्तेपूर २०) निमखेडा २१) हिवरखेडा २२) निरोडा
अकोला १६) पातूर	१) अंबारी २) भानोसा ३) बेलवळ ४) बलकापूर ५) भोकद कंदोली ६) बडीआमराई ७) बोडसा ८) खानापूर ९) काकडदारी १०) कोठारी बुद्रुक ११) पासटल १२) कोसगांव १३) माळराजूरा १४) सावरखेड १५) चिंचखेड पातूर १६) शेकापूर १७) कार्ला १८) चारमुळी १९) धरम २०) पांदुर्णा २१) सोनुना २२) चिखलपाव्हळ २३) चोंडी २४) जांब २५) चिंचखेड २६) गोळेगांव २७) आधार सावंगी २८) गावडगाव २९) सावरगांव
यवतमाळ १७) पुसद	१) पिंपळगांव २) हौसापूर ३) बामनवाडी ४) कोन्होळ ५) गहूळी ६) चोडी ७) चिंचघाट ८) देवगव्हाण ९) बेलगव्हाण १०) जामनी धुद ११) मोरगड १२) उडाणी १३) पारवा १४) पांदूणी खुर्द १५) खटकोला १६) पन्हाळा १७) मांजरजवळा खुर्दा १८) मांजरजवळा १९) सावतमाळ २०) हनवंतखेड २१) मारवाडी २२) अमृतनगर २३) धनतळ २४) अनजळ २५) उपवनवाडी २६) रामपूरनगर २७) दुधगिरी २८) अनसिंग २९) जांबनाइकर ३०) शिलोना
यवतमाळ १८) उमरखेड	१) दिडाळा २) पाडी ३) पिंरजी ४) गोविदपूर ५) कुरळी ६) जाम ७) अकोली ८) सातारा ९) मसळग १०) पाडी ११) जेवळी १२) पिंपळगांव १३) बोडखा १४) पेधा १५) उदापूर १६) सावरगांव १७) परोटी १८) नानी १९) बोरी २०) धेरडी २१) पवनाळा २२) सोनदामी २३) येकंबा २४) मोरचंडी २५) कोसंबी २६) चिखली २७) रामपूर २८) बोरगांव २९) डोंगरगाव ३०) धडोली ३१) भोईर ३२) नवेलालपूर ३३) दिग्रस ३४) काटी ३५) कवठा ३६) वहेली ३७) वानोरा ३८) शिवाजीनगर ३९) जवराळा ४०) उमरी ४१) असोली ४२) सेवालालनगर ४३) वडगांव ४४) दामसरी ४५) थार बु. ४६) सेरंडी ४७) दरारी ४८) मधुरानगर
औरंगाबाद १९) सिल्लोड	१) धनशिगवाडी २) बाभुळगाव ३) पोखरी ४) बावरा ५) मोमोनाबाद ६) लेहा ७) बाधेगाव बु. ८) अंधारी ९) जातवा १०) अमरावती ११) घाटनांदा १२) परदेशीवाडी १३) चारनेर १४) धावडा १५) अंधारवाडी १६) कडेगाव १७) सिरसाम १८) नातेगाव १९) घाटमखेळ २०) हालदा २१) पिंपळदरी २२) मुखबार २३) वाघरा २४) रांजणी २५) अजिंठा २६) अनाड २७) आमसरी २८) नारवी २९) वडाळी

जिल्हा म्हणून घोषित केलेला तालुका	उपगट तालुक्यातील गावांची नावे
परभणी २०) हिंगोली	१) नरसी २) लोहगांव ३) सेवली ४) पिंपळी ५) बोरळा ६) जळगांव ७) शेलेगांव ८) सोनेगांव ९) पिंपरखेड १०) देवळा ११) अनपनवाडी १२) ससुळापूर १३) माथा १४) मूर्तिजापूर १५) केहरपिंपरी १६) सिध्देश्वर १७) दिघुळ १८) टुडचना १९) बडचुना २०) ओढा २१) हनुमानदरी २२) शिवकार २३) जामला २४) जामदन २५) बैजापूर २६) खंबाळा २७) फासेले २८) तबलीगव्हाण २९) मांडेगांव ३०) राख ३१) जामरी खुर्द ३२) पांगरी ३३) बोराळा ३४) नांदूरा ३५) कडवी ३६) आमनखेड ३७) ब्रम्हपूरी ३८) खळगांव ३९) जामसन ४०) पारडी ४१) खळगांव ४२) रिधोस ४३) तेजगांव ४४) कोळंब ४५) सूकली बु. ४६) सुकली ४७) शिंदेपळ ४८) धनगरवाडी ४९) सबळखेड ५०) बा भुळगांव ५१) गोरेगाव ५२) पोंडीखुर्द ५३) ब्रम्हणवाडी ५४) पिंपरी पाथबळ ५५) बोरखेड ५६) एकवा ५७) खंडाळा ५८) चिंचोळी ५९) बेलरा ६०) आडगांव ६१) देवठाण ६२) काळेगांव ६३) कलोखेड ६४) कपकुली ६५) चाटोना ६६) देवठाण
औरंगाबाद २१) कन्नड	१) तांदूळवाडी २) पेवली ३) मुमसापूर ४) पेकडवाडी ५) कोंडवाडी ६) कल्याणी ७) वडनेर ८) अंबाला ९) आंबा १०) जामडी ११) रेळ १२) कुंजखेड १३) नांदगिरवाडी १४) हिवरखेड १५) वडाळी १६) जेतखेड १७) मालेगांव ढोंकळ १८) भारवा १९) मालेगांव लाखोंडे २०) मोहाडी २१) हस्ता २२) माहेगांव २३) चेडसर २४) पळशी खुर्द २५) कांबळी २६) भिलदरी २७) गोर पिंपरी २८) सवखेड बु. २९) पिंपरखोडा ३०) सफीयाबाद ३१) खडकी ३२) पिशीर ३३) भातवाडी ३४) वासडी ३५) निंभोरा ३६) उमरखेड ३७) सावरगांव ३८) धामणी ३९) आंबेवाडी बु. ४०) मेहुण ४१) हारेवाडी ४२) वडगांव ४३) लोझा ४४) पांगेरी ४५) भापेवाडी ४६) सोनवाडी ४७) शिवघाट ४८) चिमणापूर ४९) नागापूर ५०) करंजखेड ५१) रेडळगांव ५२) नेवूपूर ५३) घाटशेंटा ५४) टाकळी ५५) अंतूर ५६) लोहगांव
औरंगाबाद २२) खुलाताबाद	१) वडगांव २) पाडळी ३) शिरोळ बु. ४) सावरखेडा ५) लोधी ६) बोडक ७) खुलताबाद ८) धामणगांव ९) अब्दुलापूर १०) निरगुडी बु. ११) पिंपरी १२) जमालवाडी १३) म्हैसमाळ १४) शिरसमाळ १५) टाकळी खुर्द १६) आखतवाड १७) वेरुळ १८) मंत्रापूर १९) खुलताबाद २०) सराई २१) बदलाबाई २२) नंदुबाद २३) मापसाळा २४) रसुलपूर २५) शंकरपूरवाडी २६) साबुखेडा २७) खिर्डी २८) सोनखेडा २९) भटजी ३०) लामनगांव ३१) खोतेनापूर ३२) विरमगांव
परभणी २३) कळमनुरी	१) खेड २) धानापूर ३) धोतरा ४) अमरखोजा ५) शिरसखुर्द ६) शिरस बुद्रुक ७) डिग्रस वापी ८) पिंपळी ९) सांडस १०) रेटकर ११) वराडी १२) खडकत ब्रुद्रुक १३) खडकस खुर्द १४) मंदारी १५) गारखेड १६) महरी खुर्द १७) खडकेत १८) बैज १९) दुधेरी २०) चिंचोळी २१) खोडतला २२) पेडगांव २३) डोंगी २४) नांदुरा २५) बोलापूरी २६) तळेगांव २७) जावा २८) मिसे बुद्रुक २९) कापस ३०) शिपगी ३१) माळवाडी ३२) दाडेगांव ३३) मोतीचोर ३४) विठ्ठलवाडी ३५) पिंपरी खुर्द ३६) कानेगाव ३७) फाटणा ३८) दाभाडी ३९) पुंचा ४०) मोरगांव

GENERAL NOTES

MAHARASHTRA JEEVAN PRADHIKARAN

STATE SCHEDULE OF RATES FOR THE YEAR 2021-2022

GENERAL NOTES

1.These rates are applicable to all MJP works in the the Maharashtra State with effect from 15/06/2021

2 Item of excavation is inclusive of normal manual dewatering, however, seperate item for dewatering shall be proposed in the estimate where underground water is anticipated in significant magnitude.

3 The rates of excavation for O & M works where limited working space is available and work is required to be carried out on emergency basis, the rate should be adopted as per the actual rate analysis which shall be approved by concerned S.E. for that particular work only.

4 All Material Rates are exclusive of GST(Goods and service Tax). Rates for completed items are also exclusive of GST. While preparation of estimates prevailing GST Percentage, provision should be made separately in recapitulation sheet.

5 For all completed items, initial lead of 5 kms. is considered for collection of materials like sand, bricks, metal, stone etc. Appropriate addition for lead charges excluding loading , materials shall be done while estimation. Following quantities shall be considered for additional lead charges beyond 5 Kms for materials required for concrete and reinforcement structures.

RCC ESR			
Capacity (Lit)	Staging (M)	Concrete Qty (Cum)	Reinforcement Qty. (MT)
20000	12	27.4	2.14
30000	12	32.7	2.55
40000	12	37.8	2.95
50000	12	41.9	3.27
60000	12	46.4	3.62
70000	12	51.2	3.99
75000	12	53	4.13
80000	12	56	4.37
90000	12	62.4	4.87
125000	25	107.4	8.38
150000	12	89.8	7.00
160000	12	94.3	7.36
175000	16	117.6	9.17
200000	20	143.6	11.20
200000	25	157	12.25
250000	25	177	13.81
300000	25	206	16.07
Note: Spiral staircase not considered. Above quantities shall be considered for all types of foundation (SBC) and all types of Seismic Zones.			

RCC GSR		
Capacity (Lit)	Concrete Qty	Reinforcement Qty. (MT)
25000	13.58	0.9448
50000	18.45	1.5856
75000	30.45	2.0952
1,00,000	39.31	2.7072
1,50,000	54.699	3.778
2,00,000	73.313	6.577
3,00,000	95.092	9.874
5,00,000	143.277	11.90
10,00,000	222.441	15.418
(For WTP/STP works.quantities of completed/ongoing works shall be considered.)		

6 These rates are applicable to water supply and sewerage schemes and its allied works only. Rates for Items required for general construction, buildings, roads, Irrigation Works etc. shall be adopted from the current schedule of rates of P.W.D. or Irrigation Deptt. in respective areas. For bore wells, CSR. of GSDA shall be followed. Increase in percentage over normal schedule of rates will also be as per norms of respective C.S.R

7 For mechanical and electrical items related to water supply and sewerage schemes, CSR for 2021-22 prepared by Superintending Engineer (Mechanical), Maharashtra Jeevan Pradhikaran shall be adopted.

8 Following increase in % over normal schedule of rates of M.J.P. for 2021-22 will be applicable. (Ref. PWD GR. No. DSR/1091/CR-6577/Planning-3,dated 08/07/2003).

Sr. No	Area	% Increase
a	Works in Corporation area	5%
b	Works in Municipal areas	2%
c	Works in tribal area/ hilly and inaccessible areas	10%
d	Suger cane area (within 10.0 Km radius)	5%
e	Prison/ Jail area	15%
f	Defense area	20%
g	Excavation for pipeline work along National Highway	10%
h	Excavation for Dist. system pipe lines, Sewerage system in towns	10%

Note:-The superintending engineer should specify sugar factory areas.

9. In case more than one percentage increase on basic rates becomes admissible, instead of adding both, the higher percentage only be taken. (e.g. if any Municipal Council falls in hilly area, then additional percentage in rates will be only 10 % and not with 2 % +10 %). This additional percentage is only on completed item of work and not applicable to items of providing of materials like steel, pipes, valves, specials etc.

10 For hilly and inaccessible areas / tribal areas approved by Government, Planning Department's Circular Nos. (1) 1089/CR-66/Plan-19, dt.23/11/1990 and (2) 1094/P-36/K-1455 dt.02/09/1994, shall be followed. In addition to amendment notified by the Planning Deptt. from time to time.

11 For Action Plan Notified Area, Government's Circular in force from time to time shall be followed.

12 Whenever basic rates of completed items are increased by percentage given at Sr. No. 8, the issue rates of materials to be supplied by the Department (if any) shall be increased by same percentage.

13 This schedule of rates is based on following basic rates for important materials.

Sr. No	Material	Rate in Rs. Per MT.
a	Cement	6000/-
b	Mild Steel	43937/-
c	Tor Steel/CTD bars	47793/-
d	Structural Steel	47074/-
e	Corrosion Resistant Steel (Fe 500)	48756/-

14) Details of standard cement consumption are incorporated in this CSR .

15) Rates for supply of various types of pipes, specials and valves are exclusive of GST but inclusIve of, third party inspection charges, storage charges, overhead charges and divisional stores and stacking.

16) Cost of carting of pipes and valves from departmental stores to site of work is not considered in rate analysis, hence this item must be incorporated in each scheme. While inviting tenders if supply is from departmental store, then this item shall appear in the tender, and if the supply is by contractor then this item shall not appear in the tender, even though same is provided in sanctioned scheme, because the contractor is supposed to bring the pipes and valves directly at site.

17) Though the contractor is required to do refilling before hydraulic testing to avoid traffic hurdle, no payment for refilling of the trenches of pipeline shall be payable till satisfactory hydraulic testing is given. Re-excavation required if any, during testing, shall be done by the contractor at his own cost.

18) 10 % of cost of items of water retaining structures, such as GSR/ESR/MBR shall be retained till satisfactory hydraulic testing is given as per IS code.

19) 10 % of cost of total subwork of pipeline work shall be retained, till satisfactory hydraulic testing is given as per IS code or as per tender condition.

20) In case of supply of pipes/valves etc. by contractor, only 80% payment shall be released after supply and 15% after satisfactory hydraulic testing or as per tender condition.

21) AC/PVC Pipes shall not be used in urban areas with respect to circular No. 130 Dtd. 09.03.2009 of MS MJP. HDPE Pipes may be used in distribution system of urban areas with diameter restricted upto 300 mm only provided that area where these pipes are to be laid shall not be rocky area. HDPE pipe shall be as per latest is specification, Also HDPE pipes upto 110 mm Dia. shall be in coil form.

22) For use of ready mix cement concrete prior permission of Chief Engineer must be obtained in writing.

23) For Dams , Balancing Tanks , Aerated Lagoons and similar structures, the rates for Film membranes as per prevailing rates for Irrigation Department will be followed

24) Capacity of ESR / GSR to be constructed shall be rounded to nearest 1000 litres always on higher side i.e. if required capacity is 1,23,570 litre, it shall be rounded to 1,24,000 litre. required capacity is 8,26,070 litre, it shall be rounded to 8,27,000 litre.Similarly, if

25) Capacity of Unconventional / conventional Treatment Plants shall be rounded to nearest 0.5 Mld-always on higher side i.e. if WTP of 2.37 Mld is required; it shall be rounded to 2.5 Mld. For WTP having capacity less than 0.5 mld, package type WTP should be considered.

26) Provision for insurance at 1% is considered in Rate analysis of CSR 2021-22. These rates are applicable only for tendered works,these rates should be reduced by 1 % of total rate when works are to be carried out on piecemeal works and other small works without tendering.

27) Rates given in this CSR are for estimation purpose only.

28) The makes of Sluice / Butterfly valves etc. to be used for inlet / outlets of ESRs / GSRs / MBRs /Pumping main / Rising main and WTP should be from approved makes of M.J.P .

29) Mechanical CSR rates for respective items shall be followed while estimation and the list of approved makes shall be given in the item.

30) Incase of Geo membrane sheet to be provided by the agency 50% payment against supply. 30% payment against lowering and 20% against Hydraulic testing is to be given.

31) The royalty charges are considered in the rate analysis of CSR 2021-22 As per Government Resolution No. Rev and forest Dept Gaukhani 10/1009/ Pra.Kra.309/Kha. Mantralaya dt.11.2.2010.

32) As per Govt. circular no DSR-1090/CR 6453/PLN3 Dtd. 14.07.1992. 1% for labour amenities is considered while arriving the rates.

33) As per Govt. in Idustries and Power GR No. BCA 2009/CR 108/Labour 7A Dtd. 17.06.2010. 1% cess on labour welfare is considered while arriving the rates.

34) (1) Item of hydraulic testing should be measured separately, as per detail item in respective sub work.

(2) In case of water Supplied by the MJP, amount of Water Supplied should be deducted from the Item of the hydraulic testing, with prevailing rates of Non Domestic (Bulk Supply)of the WSS, as per MJPs latest notification.

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SECTION - A

MATERIALS

Sr. No	Description	Unit	Rate (Rs.) 2021-2022	Rate (Rs.) 2022-2023
	MATERIAL			
1	Acetylene Gas	No	772	
2	Alum Grade I First	MT	7843	
3	Alum Grade IV Ex-factory	MT	8241	
4	Binding Wire	Kg	73	
5	Black enemal paint Anti corrosive	Lit	183	
6	Bricks	No	6	
7	Bullies, Struts (125 mm dia 1.5 M long)	Rmt	177	
8	C.C.Teak wood planks(3" X 6")	Cum	69507	
9	Cement (Bags)	Bag	300	
10	Cement (M.T.)	MT	6000	
11	Cement Sulphar Resistant	MT	6636	
12	Charcoal	Kg	29	
13	Corrosion Resistant steel	MT	48756	
14	Diesel	Lit	70	
15	Epoxy paint	Kg	386	
16	Fuse	No	21	
17	Gun Powder	Kg	72	
18	Liquid chlorine 100 kg Deptt. Container	No	2368	
19	Liquid chlorine 100 kg supplier Container	No	2350	
20	Liquid chlorine 900 kg Supplier Container		16017	
21	Liquid chlorine 900 kg Deptt Container	No	14423	
22	Lubricant Oil	lit	232	
23	M.S.angle(50x50x6mm)	Kg	47	
24	M.S.Bars (Delivery at site)	MT	43937	
25	M.S.Bars (in kgs)	Kg	44	
26	M.S.Flats (40 mm x 3 mm)	Kg	49	
27	M.S.plate	Kg	54	
28	Magnafloc coagulant aid	MT	11250	
29	Mild steelGrill ready	Kg	71	
30	Mildsteel grill railing	Kg	71	
31	Mobile oil	Lit	268	
32	Murum	cum	285	
33	Nails	Kg	71	
34	Nutbolts	Kg	84	
35	Oxygen Gas (Refill)	Cylinder	331	

36	Polling board	cum	15755	
37	Quarry spalls	cum	288	
38	R.S.Joist channel etc	MT	47708	
39	Rapid sand Gravity filter sand At Source (Godhara, Gokak, Kanhan, Yesagi sand)	Cum	1730	
40	Rapid sand Gravity filter Gravel At Source	Cum	1730	
41	Ready mixed lead/zinc paint	Lit	201	
42	Ready mix oil paint	Lit	213	
43	Ready mix primer	Lit	153	
44	Ready mix primer for steel	Lit	147	
45	Rubber Gasket (6 mm thick)	Kg	80	
46	Sand	cum	1689	
47	Kasarde sand (for mortar lining work) @ source	cum	1919	
48	Spun Yarn	Kg	90	
49	Stone Aggregate 10 mm	cum	900	
50	Stone Aggregate 20 mm	cum	900	
51	Stone Aggregate 40 mm	cum	900	
52	Rubble (Stone at quarry)	cum	469	
53	Structural Steel	MT	47074	
	T.C.L.(bleaching poweder Gr.I) (5kg pack)	Kg		
	T.C.L.(bleaching poweder Gr.I) (10kg pack)	Kg		
54	T.C.L.(bleaching poweder Gr.I) (25kg pack)	Kg	22	
55	Teak wood	Cum	68410	
56	Tor Steel	MT	47793	
57	Walling (100x100mm)	cum	15218	
58	Welding Rod Having weight 5.25 kg	Box	1198	
59	White cement	Kg	26	
60	White lead	Kg	153	
61	Wire	Kg	77	
62	Plywood Commercial 12 mm thick Waterproof for centering (Taken in analysis for RCC items only)	Sqm	463	
63	Coarse Sand	Cum	1343	
64	PAC Poweder High Basecity	MT	29030	
65	PAC Poweder High Basecity Liquid	MT	10002	
66	Ready mixed Synthetic Enamel paint	Lit	157	
67	Ready mixed Aluminium paint	Lit	285	

SECTION - B
LABOUR & MACHINERY

Sr. No	Description	Unit	Rate (Rs.) 2021-2022	Rate (Rs.) 2022-2023
	LABOUR AND MACHINERY			
1	Asst Fitter	No.	611	
2	Bhandhani	No.	611	
3	Bhisti with pakahal	No.	611	
4	Blacksmith IInd class	No.	611	
5	Breaker	No.	611	
6	Carpainter 1st class	No.	641	
7	Carpainter 2nd class	No.	641	
8	Chiseller	No.	611	
9	Excavator	No.	579	
10	Fitter 1st class	No.	641	
11	Glazier	No.	641	
12	Helper	No.	579	
13	Hole Driller	No.	611	
14	Mason 1st class	No.	641	
15	Mason 2nd class	No.	641	
16	MAZDOOR (FEMALE)	No.	579	
17	Mazdoor(Heavy)	No.	579	
18	Mazdoor (Light)	No.	579	
19	MAZDOOR (MALE)	No.	579	
20	Maistry	No.	641	
21	Mukadam	No.	641	
22	Painter (for coloring)	No.	641	
23	Painter	No.	641	
24	Polisher	No.	641	
25	Pump Driver	No.	611	
26	StoneCutter or dresser	No.	641	
27	Tile layer	No.	641	
28	Welder	No.	641	
29	Welder for pipe line	No.	641	
30	WhiteWasher	No.	611	
31	TileTurner	No.	641	
32	L.M.V. Driver	No.	641	
33	Electrician	No.	641	
	HIRE CHARGES OF MACHINERIES			
1	Rent for polishing machine with crew	Day	1173	
2	Rent for chain pully block with tripod	Day	567	
3	Rent for pump including operator & excluding fuel	BHP-Day	217	
4	Rent for Mech.Mixer with fuel & crew	Day	2913	
5	Rent for vibrator with fuel and crew	Day	1091	
6	Plate Bender	Day	1058	
7	Rent for welding set with Electric set	Day	1277	
8	Rent for welding set with Generator	Day	2654	
9	Rent for Compressor with fuel	Day	2904	

Sr. No	Description	Unit	Rate (Rs.) 2021-2022	Rate (Rs.) 2022-2023
10	Rent for Concrete breaker & Compressor	Day	2946	
11	Rent for poclain	Hour	2541	
12	Rent for Crane	Hour	1653	
13	Rent for JCB	Hour	1239	
14	Truck hire charges upto 20 km	Day	2784	
15	Truck hire charges for 20 km to 50 km	Day	2585	
16	Truck hire charges for 50 km & above	Day	2268	
17	Pipe cutter with operator	Day	1510	
18	Desludging / Desilting mud Pump with Operator	Day	2858	
19	Jeep hire Charges with driver (Upto 300 Km)& fuel	Day	3758	
20	Plumber (Building/Pipeline)	Day	641	
21	Painter for epoxy paint	Day	641	

SECTION - C
TRANSPORTATION

STATEMENT I										
									Rate (Rs.) 2021-2022	
Sr.No.	**Item of work**	**Unit**	**Collecting the railway**		**Lifting the material from**		**Loading the material into**		**Unloading the material from**	
1	2	3	4		5		6		7	
(A)	**MANUAL HANDLING** (Weight upto & including 300 kg.)									
1	C.I. / D.I. /M.S./H.D.P.E. pipes of all classes upto & including 200 mm dia. Pipes of any length.	M.T.	349		426		110		110	
2	R.C.C. pipes of all classes upto & including 350 mm dia.	M.T.	349		433		110		110	
3	A.C. pipes of all classes & dia.	M.T.	184		257		66		66	
4	P.V.C. pipes of all classes & dia.	M.T.	184		257		66		66	
5	All other materials such as C.I. Specials of individual weight upto 300 kg.	M.T.	349		433		110		110	
6	Mild steel / for steel / R.S.J.	M.T.	220		296		165		165	
7	Cement / bleaching powder / alum.	M.T.	105		161		84		84	
(B)	**CRANE HANDLING** (Materials having individual weight above 300 kg.)									
1	C.I./D.I./B.W.S.C./ M.S./ R.C.C. pipes of all classes having individual weight more than 300 kg. & alsoother heavy materials, valves, machinery having individual weight more than 300 kg.	M.T.	207		269		193		193	
	1)The above rates in col. 1 to 5 are applicable only for Railway clearence purpose and not for other carting.									
	2) The rates given in col. 6 to 7 shall be adopted for estimate purpose only, however actual quotations / D-tender will prevail.									
	3) Irrespective of supply of C.I./D.I. Pipes as per rate contract when pipes are directly supplied by the firms by road railway freight upto destination station and carting as per schedule from Railway Station to work site is allowed In such cases rate of Mathadi Kamgar shall not be applicable for carting and normal loading, unloading carting shall be allowed.									

STATEMENT II

Including loading, unloading and stacking

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S)+1)	Km. Done (2NL+6)	Litres of diesel consumed	cost of diesel @ Rs. 70 / LIT	Lit. of Mobile oil consumed	cost of M.Oil @ Rs. 268 / lit	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
0.5	15	7.5	13.50	4.50	315.00	0.096	25.73	3908.25	2784	7032.98	703.3	7736.28	1031.5
1	16	7.11	20.22	6.74	471.80	0.144	38.59	3908.25	2784	7202.64	720.26	7922.90	1114.33
1.5	16.5	6.77	26.31	8.77	613.90	0.188	50.38	3908.25	2784	7356.53	735.65	8092.18	1195.3
2	17	6.48	31.92	10.64	744.80	0.228	61.10	3908.25	2784	7498.15	749.82	8247.97	1272.83
2.5	17.25	6.2	37.00	12.33	863.10	0.264	70.75	3908.25	2784	7626.10	762.61	8388.71	1353.02
3	17.5	5.96	41.76	13.92	974.40	0.298	79.86	3908.25	2784	7746.51	774.65	8521.16	1429.72
3.5	17.75	5.74	46.18	15.39	1077.30	0.330	88.44	3908.25	2784	7857.99	785.8	8643.79	1505.89
4	18	5.54	50.32	16.77	1173.90	0.359	96.21	3908.25	2784	7962.36	796.24	8758.60	1580.97
4.5	18.25	5.36	54.24	18.08	1265.60	0.387	103.72	3908.25	2784	8061.57	806.16	8867.73	1654.43
5	18.5	5.19	57.90	19.30	1351.00	0.414	110.95	3908.25	2784	8154.20	815.42	8969.62	1728.25
6	18.75	4.88	64.56	21.52	1506.40	0.461	123.55	3908.25	2784	8322.20	832.22	9154.42	1875.91
7	19	4.61	70.54	23.51	1645.70	0.504	135.07	3908.25	2784	8473.02	847.3	9320.32	2021.76
8	19.183	4.36	75.76	25.25	1767.50	0.541	144.99	3908.25	2784	8604.74	860.47	9465.21	2170.92
9	19.6	4.17	81.06	27.02	1891.40	0.579	155.17	3908.25	2784	8738.82	873.88	9612.70	2305.2
10	20	4	86.00	28.67	2006.90	0.614	164.55	3908.25	2784	8863.70	886.37	9750.07	2437.52
15	25	3.64	115.20	38.40	2688.00	0.823	220.56	3908.25	2784	9600.81	960.08	10560.89	2901.34
20	25	3.08	129.20	43.07	3014.90	0.923	247.36	3908.25	2784	9954.51	995.45	10949.96	3555.18
25	25	2.67	139.50	46.50	3255.00	0.996	266.93	3908.25	2585	10015.18	1001.52	11016.70	4126.1
30	25	2.35	147.00	49.00	3430.00	1.050	281.40	3908.25	2585	10204.65	1020.47	11225.12	4776.65
35	30	2.4	174.00	58.00	4060.00	1.243	333.12	3908.25	2585	10886.37	1088.64	11975.01	4989.59
40	30	2.18	180.40	60.13	4209.10	1.289	345.45	3908.25	2585	11047.80	1104.78	12152.58	5574.58
45	30	2	186.00	62.00	4340.00	1.329	356.17	3908.25	2585	11189.42	1118.94	12308.36	6154.18
50	30	1.85	191.00	63.67	4456.90	1.364	365.55	3908.25	2585	11315.70	1131.57	12447.27	6728.25
60	30	1.6	198.00	66.00	4620.00	1.414	378.95	3908.25	2268	11175.20	1117.52	12292.72	7682.95
70	30	1.41	203.40	67.80	4746.00	1.453	389.40	3908.25	2268	11311.65	1131.17	12442.82	8824.7

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S)+1)	Km. Done (2NL+6)	Litres of diesel consumed	cost of diesel @ Rs. 70 / LIT	Lit. of Mobile oil consumed	cost of M.Oil @ Rs. 268 / lit	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
80	30	1.26	207.60	69.20	4844.00	1.483	397.44	3908.25	2268	11417.69	1141.77	12559.46	9967.83
90	30	1.14	211.20	70.40	4928.00	1.509	404.41	3908.25	2268	11508.66	1150.87	12659.53	11104.85
100	40	1.12	230.00	76.67	5366.90	1.643	440.32	3908.25	2268	11983.47	1198.35	13181.82	11769.48
125	40	1.1	281.00	93.67	6556.90	2.007	537.88	3908.25	2268	13271.03	1327.1	14598.13	13271.03
150	40	0.94	288.00	96.00	6720.00	2.057	551.28	3908.25	2268	13447.53	1344.75	14792.28	15736.47
175	40	0.82	293.00	97.67	6836.90	2.093	560.92	3908.25	2268	13574.07	1357.41	14931.48	18209.12
200	40	0.73	298.00	99.33	6953.10	2.129	570.57	3908.25	2268	13699.92	1369.99	15069.91	20643.71
250	40	0.59	301.00	100.33	7023.10	2.150	576.20	3908.25	2268	13775.55	1377.56	15153.11	25683.24

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S) +1)	Km. Done (2NL+6)	Litres of diesel cons umed	cost of diesel @ Rs. 70 / LIT	Lit. of Mobile oil con- sumed	cost of M.Oil @ Rs. 268 / lit	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+ 9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
300	45	0.56	342.00	114.00	7980.00	2.443	654.72	3908.25	2268	14810.97	1481.1	16292.07	29092.98
420	45	0.41	350.40	116.80	8176.00	2.503	670.80	3908.25	2268	15023.05	1502.31	16525.36	40305.76
540	45	0.32	351.60	117.20	8204.00	2.511	672.95	3908.25	2268	15053.20	1505.32	16558.52	51745.38
660	45	0.26	349.20	116.40	8148.00	2.494	668.39	3908.25	2268	14992.64	1499.26	16491.90	63430.38
780	45	0.22	349.20	116.40	8148.00	2.494	668.39	3908.25	2268	14992.64	1499.26	16491.90	74963.18
900	45	0.2	366.00	122.00	8540.00	2.614	700.55	3908.25	2268	15416.80	1541.68	16958.48	84792.4
1020	45	0.17	352.80	117.60	8232.00	2.520	675.36	3908.25	2268	15083.61	1508.36	16591.97	97599.82
1140	45	0.15	348.00	116.00	8120.00	2.486	666.25	3908.25	2268	14962.50	1496.25	16458.75	109725.00

Note:

1) No. of trips in a working of 8 hours N=8 / (2(L+S) + 1) where L = Lead in km and S = speed, 1 hour is allowed for loading

2) Consumption of diesel taken as 3 km / litre

3) Consumption of Mobile oil taken as 140 km / litre

4) In col. 4 6 hours has been added for movement from parking place to duty and back

5) Hire charges will remain Rs. 1500.00 for 1200 and above km lead

6) Labour required for loading unloading and stacking after the No. of trips reduced below 1 is factorised with actual number of trip.

STATEMENT III

Excluding loading, unloading and stacking

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S) +1)	Km. Done (2NL+6)	Litres of diesel cons umed	cost of diesel @ Rs. 70 / LIT	Lit. of Mobile oil con- sumed	cost of M.Oil @ Rs. 268 / lit	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+ 9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
0.5	15	7.5	13.50	4.50	315.00	0.096	25.73	0	2784	3124.73	312.47	3437.20	458.29
1	16	7.11	20.22	6.74	471.80	0.144	38.59	0	2784	3294.39	329.44	3623.83	509.68
1.5	16.5	6.77	26.31	8.77	613.90	0.188	50.38	0	2784	3448.28	344.83	3793.11	560.28
2	17	6.48	31.92	10.64	744.80	0.228	61.10	0	2784	3589.90	358.99	3948.89	609.4
2.5	17.25	6.2	37.00	12.33	863.10	0.264	70.75	0	2784	3717.85	371.79	4089.64	659.62
3	17.5	5.96	41.76	13.92	974.40	0.298	79.86	0	2784	3838.26	383.83	4222.09	708.4
3.5	17.75	5.74	46.18	15.39	1077.30	0.330	88.44	0	2784	3949.74	394.97	4344.71	756.92
4	18	5.54	50.32	16.77	1173.90	0.359	96.21	0	2784	4054.11	405.41	4459.52	804.97
4.5	18.25	5.36	54.24	18.08	1265.60	0.387	103.72	0	2784	4153.32	415.33	4568.65	852.36
5	18.5	5.19	57.90	19.30	1351.00	0.414	110.95	0	2784	4245.95	424.6	4670.55	899.91
6	18.75	4.88	64.56	21.52	1506.40	0.461	123.55	0	2784	4413.95	441.4	4855.35	994.95
7	19	4.61	70.54	23.51	1645.70	0.504	135.07	0	2784	4564.77	456.48	5021.25	1089.21
8	19.183	4.36	75.76	25.25	1767.50	0.541	144.99	0	2784	4696.49	469.65	5166.14	1184.89
9	19.6	4.17	81.06	27.02	1891.40	0.579	155.17	0	2784	4830.57	483.06	5313.63	1274.25
10	20	4	86.00	28.67	2006.90	0.614	164.55	0	2784	4955.45	495.55	5451.00	1362.75
15	25	3.64	115.20	38.40	2688.00	0.823	220.56	0	2784	5692.56	569.26	6261.82	1720.28
20	25	3.08	129.20	43.07	3014.90	0.923	247.36	0	2784	6046.26	604.63	6650.89	2159.38
25	25	2.67	139.50	46.50	3255.00	0.996	266.93	0	2585	6106.93	610.69	6717.62	2515.96
30	25	2.35	147.00	49.00	3430.00	1.050	281.40	0	2585	6296.40	629.64	6926.04	2947.25
35	30	2.4	174.00	58.00	4060.00	1.243	333.12	0	2585	6978.12	697.81	7675.93	3198.3
40	30	2.18	180.40	60.13	4209.10	1.289	345.45	0	2585	7139.55	713.96	7853.51	3602.53
45	30	2	186.00	62.00	4340.00	1.329	356.17	0	2585	7281.17	728.12	8009.29	4004.65
50	30	1.85	191.00	63.67	4456.90	1.364	365.55	0	2585	7407.45	740.75	8148.20	4404.43
55	30	1.71	194.10	64.70	4529.00	1.386	371.45	0	2268	7168.45	716.85	7885.30	4611.29

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S) +1)	Km. Done (2NL+6)	Litres of diesel cons umed	cost of diesel @ Rs. 70 / LIT	Lit. of Mobile oil con- sumed	cost of M.Oil @ Rs. 268 / lit	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+ 9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
65	30	1.5	201.00	67.00	4690.00	1.436	384.85	0	2268	7342.85	734.29	8077.14	5384.76
75	30	1.33	205.50	68.50	4795.00	1.468	393.42	0	2268	7456.42	745.64	8202.06	6166.96
85	30	1.2	210.00	70.00	4900.00	1.500	402.00	0	2268	7570.00	757	8327.00	6939.17
95	40	1.39	270.10	90.03	6302.10	1.929	516.97	0	2268	9087.07	908.71	9995.78	7191.21
105	40	1.28	274.80	91.60	6412.00	1.963	526.08	0	2268	9206.08	920.61	10126.69	7911.48
130	40	1.07	284.20	94.73	6631.10	2.030	544.04	0	2268	9443.14	944.31	10387.45	9707.9
155	40	0.91	288.10	96.03	6722.10	2.058	551.54	0	2268	9541.64	954.16	10495.80	11533.85

Lead in km	Av. Speed	No. of Trips(N)= 8/ ((2L/S) +1)	Km. Done (2NL+6)	Litres of diesel consumed	cost of diesel @ diesel @	Lit. of Mobile oil con-sumed	cost of M.Oil @ M.Oil @	cost of 6 mazdoor	Hire charges of truck Rs. Per day	Total cost (6+8+ 9+10)	Add 10% overhead charges	Total 11+12	cost per trip (13/3)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
180	40	0.8	294.00	98.00	6860.00	2.100	562.80	0	2268	9690.80	969.08	10659.88	13324.85
230	40	0.64	300.40	100.13	7009.10	2.146	575.13	0	2268	9852.23	985.22	10837.45	16933.52
280	45	0.6	342.00	114.00	7980.00	2.443	654.72	0	2268	10902.72	1090.27	11992.99	19988.32
400	45	0.43	350.00	116.67	8166.90	2.500	670.00	0	2268	11104.90	1110.49	12215.39	28407.88
520	45	0.33	349.20	116.40	8148.00	2.494	668.39	0	2268	11084.39	1108.44	12192.83	36947.97
640	45	0.27	351.60	117.20	8204.00	2.511	672.95	0	2268	11144.95	1114.5	12259.45	45405.37
760	45	0.23	355.60	118.53	8297.10	2.540	680.72	0	2268	11245.82	1124.58	12370.40	53784.35
880	45	0.2	358.00	119.33	8353.10	2.557	685.28	0	2268	11306.38	1130.64	12437.02	62185.1
1000	45	0.18	366.00	122.00	8540.00	2.614	700.55	0	2268	11508.55	1150.86	12659.41	70330.06
1120	45	0.16	364.40	121.47	8502.90	2.603	697.60	0	2268	11468.50	1146.85	12615.35	78845.94

STATEMENT VI

Including loading, unloading and stacking

Lead in km	Cost / trip	Lime murum building rubbish	Earth	Manure or sludge	Excavated rock	Sand stone aggregate 40 mm & below	Aggregate 40 mm & above	Soling stone	Concrete block (form)	Timber
1	2	3	4	5	6	7	8	9	10	11
	Pay load	6.0 cum	4.8 cum	5.52 cum	3.0 cum	5.75 cum	5.5 cum	4.7 cum	6.0 cum	5.75 cum
0.5	1031.5	171.92	214.9	186.87	343.83	179.39	187.55	219.47	171.92	179.39
1	1114.33	185.72	232.15	201.87	371.44	193.80	202.61	237.09	185.72	193.80
1.5	1195.3	199.22	249.02	216.54	398.43	207.88	217.33	254.32	199.22	207.88
2	1272.83	212.14	265.17	230.59	424.28	221.36	231.42	270.81	212.14	221.36
2.5	1353.02	225.5	281.88	245.11	451.01	235.31	246.00	287.88	225.50	235.31
3	1429.72	238.29	297.86	259.01	476.57	248.65	259.95	304.20	238.29	248.65
3.5	1505.89	250.98	313.73	272.81	501.96	261.89	273.80	320.40	250.98	261.89
4	1580.97	263.5	329.37	286.41	526.99	274.95	287.45	336.38	263.50	274.95
4.5	1654.43	275.74	344.67	299.72	551.48	287.73	300.81	352.01	275.74	287.73
5	1728.25	288.04	360.05	313.09	576.08	300.57	314.23	367.71	288.04	300.57
6	1875.91	312.65	390.81	339.84	625.30	326.25	341.07	399.13	312.65	326.25
7	2021.76	336.96	421.2	366.26	673.92	351.61	367.59	430.16	336.96	351.61
8	2170.92	361.82	452.28	393.28	723.64	377.55	394.71	461.90	361.82	377.55
9	2305.2	384.2	480.25	417.61	768.40	400.90	419.13	490.47	384.20	400.90
10	2437.52	406.25	507.82	441.58	812.51	423.92	443.19	518.62	406.25	423.92
15	2901.34	483.56	604.45	525.61	967.11	504.58	527.52	617.31	483.56	504.58
20	3555.18	592.53	740.66	644.05	1185.06	618.29	646.40	756.42	592.53	618.29
25	4126.1	687.68	859.6	747.48	1375.37	717.58	750.20	877.89	687.68	717.58
30	4776.65	796.11	995.14	865.34	1592.22	830.72	868.48	1016.31	796.11	830.72
35	4989.59	831.6	1039.5	903.91	1663.20	867.75	907.20	1061.61	831.60	867.75
40	5574.58	929.1	1161.37	1009.89	1858.19	969.49	1013.56	1186.08	929.10	969.49
45	6154.18	1025.7	1282.12	1114.89	2051.39	1070.29	1118.94	1309.40	1025.70	1070.29
50	6728.25	1121.38	1401.72	1218.89	2242.75	1170.13	1223.32	1431.54	1121.38	1170.13
60	7682.95	1280.49	1600.61	1391.84	2560.98	1336.17	1396.90	1634.67	1280.49	1336.17
70	8824.7	1470.78	1838.48	1598.68	2941.57	1534.73	1604.49	1877.60	1470.78	1534.73

80	9967.83	1661.31	2076.63	1805.77	3322.61	1733.54	1812.33	2120.81	1661.31	1733.54
Lead in km	Cost / trip	Lime murum building rubbish	Earth	Manure or sludge	Excavated rock	Sand stone aggregate 40 mm & below	Aggregate 40 mm & above	Soling stone	Concrete block (form)	Timber
1	2	3	4	5	6	7	8	9	10	11
90	11104.85	1850.81	2313.51	2011.75	3701.62	1931.28	2019.06	2362.73	1850.81	1931.28
100	11769.48	1961.58	2451.98	2132.15	3923.16	2046.87	2139.91	2504.14	1961.58	2046.87
125	13271.03	2211.84	2764.8	2404.17	4423.68	2308.01	2412.91	2823.62	2211.84	2308.01
150	15736.47	2622.75	3278.43	2850.81	5245.49	2736.78	2861.18	3348.19	2622.75	2736.78
175	18209.12	3034.85	3793.57	3298.75	6069.71	3166.80	3310.75	3874.28	3034.85	3166.80
200	20643.71	3440.62	4300.77	3739.80	6881.24	3590.21	3753.40	4392.28	3440.62	3590.21
250	25683.24	4280.54	5350.68	4652.76	8561.08	4466.65	4669.68	5464.52	4280.54	4466.65
300	29092.98	4848.83	6061.04	5270.47	9697.66	5059.65	5289.63	6190.00	4848.83	5059.65

Lead in km	Cost / trip	Lime murum building rubbish	Earth	Manure or sludge	Excavated rock	Sand stone aggregate 40 mm & below	Aggregate 40 mm & above	Soling stone	Concrete block (form)	Timber
1	2	3	4	5	6	7	8	9	10	11
420	40305.76	6717.63	8397.03	7301.77	13435.25	7009.70	7328.32	8575.69	6717.63	7009.70
540	51745.38	8624.23	10780.29	9374.16	17248.46	8999.20	9408.25	11009.66	8624.23	8999.20
660	63430.38	10571.73	13214.66	11491.01	21143.46	11031.37	11532.80	13495.83	10571.73	11031.37
780	74963.18	12493.86	15617.33	13580.29	24987.73	13037.07	13629.67	15949.61	12493.86	13037.07
900	84792.4	14132.07	17665.08	15360.94	28264.13	14746.50	15416.80	18040.94	14132.07	14746.50
1020	97599.82	16266.64	20333.3	17681.13	32533.27	16973.88	17745.42	20765.92	16266.64	16973.88
1140	109725	18287.5	22859.38	19877.72	36575.00	19082.61	19950.00	23345.74	18287.50	19082.61

STATEMENT VII

Including loading, unloading and stacking

Lead in km	Cost / trip	Cement stone block, GI CI CC AC Pipes below 120 mm dia	Tar bitumenn Asphalt roofing felt & Flooring Asphalt etc.	Steam coal	Matting thatching bambu ceiling board rubber PVC pipes fittings	Sheet & plate glass in packs Paints & Distempers AC Sheets & fittings iron fittings and iron sheets	Bricks modular bricks & Traditional bricks	Tiles half round tiles & Roofing tiles cement flooring tiles	Glass blocks (hollow) 200x200 x120 mm	Empty cement bags
1	2	3	4	5	6	7	8	9	10	11
	Pay load	7.0 Mt	4.5 MT	5.5 MT	3.0 MT	7.0 MT	3500 No.	3200 No.	1000 No.	2000 No.
		per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1 M.T.	per 1000 Nos.	per 1000 Nos.	per 1000 Nos.	per 1000 Nos.
0.5	1031.50	147.36	229.22	187.55	343.83	147.36	294.71	322.34	103.15	515.75
1	1114.33	159.19	247.63	202.61	371.44	159.19	318.38	348.23	111.43	557.17
1.5	1195.30	170.76	265.62	217.33	398.43	170.76	341.51	373.53	119.53	597.65
2	1272.83	181.83	282.85	231.42	424.28	181.83	363.67	397.76	127.28	636.42
2.5	1353.02	193.29	300.67	246.00	451.01	193.29	386.58	422.82	135.30	676.51
3	1429.72	204.25	317.72	259.95	476.57	204.25	408.49	446.79	142.97	714.86
3.5	1505.89	215.13	334.64	273.80	501.96	215.13	430.25	470.59	150.59	752.95
4	1580.97	225.85	351.33	287.45	526.99	225.85	451.71	494.05	158.10	790.49
4.5	1654.43	236.35	367.65	300.81	551.48	236.35	472.69	517.01	165.44	827.22
5	1728.25	246.89	384.06	314.23	576.08	246.89	493.79	540.08	172.83	864.13
6	1875.91	267.99	416.87	341.07	625.30	267.99	535.97	586.22	187.59	937.96
7	2021.76	288.82	449.28	367.59	673.92	288.82	577.65	631.80	202.18	1010.88
8	2170.92	310.13	482.43	394.71	723.64	310.13	620.26	678.41	217.09	1085.46
9	2305.20	329.31	512.27	419.13	768.40	329.31	658.63	720.38	230.52	1152.60
10	2437.52	348.22	541.67	443.19	812.51	348.22	696.43	761.73	243.75	1218.76
15	2901.34	414.48	644.74	527.52	967.11	414.48	828.95	906.67	290.13	1450.67
20	3555.18	507.88	790.04	646.40	1185.06	507.88	1015.77	1110.99	355.52	1777.59
25	4126.10	589.44	916.91	750.20	1375.37	589.44	1178.89	1289.41	412.61	2063.05
30	4776.65	682.38	1061.48	868.48	1592.22	682.38	1364.76	1492.70	477.67	2388.33
35	4989.59	712.80	1108.80	907.20	1663.20	712.80	1425.60	1559.25	498.96	2494.80

Lead in km	Cost / trip	Cement stone block, GI CI CC AC Pipes below 120 mm dia	Tar bitumenn Asphalt roofing felt & Flooring Asphalt etc.	Steam coal	Matting thatching bambu ceiling board rubber PVC pipes fittings	Sheet & plate glass in packs Paints & Distempers AC Sheets & fittings iron fittings and iron sheets	Bricks modular bricks & Traditional bricks	Tiles half round tiles & Roofing tiles cement flooring tiles	Glass blocks (hollow) 200x200 x120 mm	Empty cement bags
1	2	3	4	5	6	7	8	9	10	11
40	5574.58	796.37	1238.80	1013.56	1858.19	796.37	1592.74	1742.06	557.46	2787.29
45	6154.18	879.17	1367.60	1118.94	2051.39	879.17	1758.34	1923.18	615.42	3077.09
50	6728.25	961.18	1495.17	1223.32	2242.75	961.18	1922.36	2102.58	672.83	3364.13
60	7682.95	1097.56	1707.32	1396.90	2560.98	1097.56	2195.13	2400.92	768.30	3841.48
70	8824.70	1260.67	1961.04	1604.49	2941.57	1260.67	2521.34	2757.72	882.47	4412.35
80	9967.83	1423.98	2215.07	1812.33	3322.61	1423.98	2847.95	3114.95	996.78	4983.92
90	11104.85	1586.41	2467.74	2019.06	3701.62	1586.41	3172.81	3470.27	1110.49	5552.43
100	11769.48	1681.35	2615.44	2139.91	3923.16	1681.35	3362.71	3677.96	1176.95	5884.74

Lead in km	Cost / trip	Cement stone block, GI CI CC AC Pipes below 120 mm dia	Tar bitumenn Asphalt roofing felt & Flooring Asphalt etc.	Steam coal	Matting thatching bambu ceiling board rubber PVC pipes fittings	Sheet & plate glass in packs Paints & Distempers AC Sheets & fittings iron fittings and iron sheets	Bricks modular bricks & Traditional bricks	Tiles half round tiles & Roofing tiles cement flooring tiles	Glass blocks (hollow) 200x200 x120 mm	Empty cement bags
1	2	3	4	5	6	7	8	9	10	11
125	13271.03	1895.86	2949.12	2412.91	4423.68	1895.86	3791.72	4147.20	1327.10	6635.52
150	15736.47	2248.07	3496.99	2861.18	5245.49	2248.07	4496.13	4917.65	1573.65	7868.24
175	18209.12	2601.30	4046.47	3310.75	6069.71	2601.30	5202.61	5690.35	1820.91	9104.56
200	20643.71	2949.10	4587.49	3753.40	6881.24	2949.10	5898.20	6451.16	2064.37	10321.86
250	25683.24	3669.03	5707.39	4669.68	8561.08	3669.03	7338.07	8026.01	2568.32	12841.62
300	29092.98	4156.14	6465.11	5289.63	9697.66	4156.14	8312.28	9091.56	2909.30	14546.49
420	40305.76	5757.97	8956.84	7328.32	13435.25	5757.97	11515.93	12595.55	4030.58	20152.88
540	51745.38	7392.20	11498.97	9408.25	17248.46	7392.20	14784.39	16170.43	5174.54	25872.69
660	63430.38	9061.48	14095.64	11532.80	21143.46	9061.48	18122.97	19821.99	6343.04	31715.19
780	74963.18	10709.03	16658.48	13629.67	24987.73	10709.03	21418.05	23425.99	7496.32	37481.59
900	84792.40	12113.20	18842.76	15416.80	28264.13	12113.20	24226.40	26497.63	8479.24	42396.20
1020	97599.82	13942.83	21688.85	17745.42	32533.27	13942.83	27885.66	30499.94	9759.98	48799.91
1140	109725.00	15675.00	24383.33	19950.00	36575.00	15675.00	31350.00	34289.06	10972.50	54862.50

STATEMENT VIII

Including loading, unloading and stacking

Lead in km Cost / trip UNREINFORCED CEMENT PIPES, PRECAST COCRETE PIPES

		100 mm	125 mm	150 mm	200 mm	250 mm	300 mm	300 & 400 mm	450 & 500 mm	600, 700 & 750 mm	800, 900 & 1000 mm	1200 & 1800 MM
	Pay load in Rmt	292.8	219.6	183	109.8	80.52	62.22	54.9	29.28	18.183	15	5
1	2	3	4	5	6	7	8	9	10	11	12	13
UNIT PER 100 RMT												
0.5	1031.5	352.29	469.72	563.66	939.44	1281.05	1657.83	1878.87	3522.88	5636.61	6876.67	20630
1	1114.33	380.58	507.44	608.92	1014.87	1383.92	1790.95	2029.74	3805.77	6089.23	7428.87	22286.6
1.5	1195.3	408.23	544.31	653.17	1088.62	1484.48	1921.09	2177.23	4082.31	6531.69	7968.67	23906
2	1272.83	434.71	579.61	695.54	1159.23	1580.76	2045.69	2318.45	4347.1	6955.36	8485.53	25456.6
2.5	1353.02	462.1	616.13	739.36	1232.26	1680.35	2174.57	2464.52	4620.97	7393.55	9020.13	27060.4
3	1429.72	488.29	651.06	781.27	1302.11	1775.61	2297.85	2604.23	4882.92	7812.68	9531.47	28594.4
3.5	1505.89	514.31	685.74	822.89	1371.48	1870.21	2420.27	2742.97	5143.07	8228.91	10039.27	30117.8
4	1580.97	539.95	719.93	863.92	1439.86	1963.45	2540.94	2879.73	5399.49	8639.18	10539.8	31619.4
4.5	1654.43	565.04	753.38	904.06	1506.77	2054.68	2659	3013.53	5650.38	9040.6	11029.53	33088.6
5	1728.25	590.25	787	944.4	1574	2146.36	2777.64	3148	5902.49	9443.99	11521.67	34565
6	1875.91	640.68	854.24	1025.09	1708.48	2329.74	3014.96	3416.96	6406.8	10250.87	12506.07	37518.2
7	2021.76	690.49	920.66	1104.79	1841.31	2510.88	3249.37	3682.62	6904.92	11047.87	13478.4	40435.2
8	2170.92	741.43	988.58	1186.3	1977.16	2696.13	3489.1	3954.32	7414.34	11862.95	14472.8	43418.4
9	2305.2	787.3	1049.73	1259.67	2099.45	2862.89	3704.92	4198.91	7872.95	12596.72	15368	46104
10	2437.52	832.49	1109.98	1331.98	2219.96	3027.22	3917.58	4439.93	8324.86	13319.78	16250.13	48750.4
15	2901.34	990.89	1321.19	1585.43	2642.39	3603.25	4663.03	5284.77	9908.95	15854.32	19342.27	58026.8
20	3555.18	1214.2	1618.93	1942.72	3237.87	4415.28	5713.89	6475.74	12142.01	19427.21	23701.2	71103.6
25	4126.1	1409.19	1878.92	2254.7	3757.83	5124.32	6631.47	7515.66	14091.87	22546.99	27507.33	82522
30	4776.65	1631.37	2175.16	2610.19	4350.32	5932.25	7677.03	8700.64	16313.7	26101.91	31844.33	95533
35	4989.59	1704.09	2272.13	2726.55	4544.25	6196.71	8019.27	9088.51	17040.95	27265.52	33263.93	99791.8
40	5574.58	1903.89	2538.52	3046.22	5077.03	6923.22	8959.47	10154.06	19038.87	30462.19	37163.87	111491.6
45	6154.18	2101.84	2802.45	3362.94	5604.9	7643.05	9891	11209.8	21018.37	33629.4	41027.87	123083.6
50	6728.25	2297.9	3063.87	3676.64	6127.73	8356	10813.65	12255.46	22979	36766.39	44855	134565
60	7682.95	2623.96	3498.61	4198.33	6997.22	9541.67	12348.04	13994.44	26239.58	41983.33	51219.67	153659
70	8824.7	3013.9	4018.53	4822.24	8037.07	10959.64	14183.06	16074.13	30139	48222.4	58831.33	176494

		100 mm	125 mm	150 mm	200 mm	250 mm	300 mm	300 & 400 mm	450 & 500 mm	600, 700 & 750 mm	800, 900 & 1000 mm	1200 & 1800 MM
	Pay load in Rmt	292.8	219.6	183	109.8	80.52	62.22	54.9	29.28	18.183	15	5
1	2	3	4	5	6	7	8	9	10	11	12	13
80	9967.83	3404.31	4539.08	5446.9	9078.17	12379.32	16020.3	18156.34	34043.14	54469.02	66452.2	199356.6
90	11104.85	3792.64	5056.85	6068.22	10113.71	13791.42	17847.72	20227.41	37926.4	60682.24	74032.33	222097
100	11769.48	4019.63	5359.51	6431.41	10719.02	14616.84	18915.91	21438.03	40196.31	64314.1	78463.2	235389.6
125	13271.03	4532.46	6043.27	7251.93	12086.55	16481.66	21329.2	24173.1	45324.56	72519.29	88473.53	265420.6
150	15736.47	5374.48	7165.97	8599.16	14331.94	19543.55	25291.66	28663.88	53744.77	85991.64	104909.8	314729.4

		100 mm	125 mm	150 mm	200 mm	250 mm	300 mm	300 & 400 mm	450 & 500 mm	600, 700 & 750 mm	800, 900 & 1000 mm	1200 & 1800 MM
	Pay load in Rmt	292.8	219.6	183	109.8	80.52	62.22	54.9	29.28	18.183	15	5
1	2	3	4	5	6	7	8	9	10	11	12	13
UNIT PER 100 RMT												
175	18209.12	6218.96	8291.95	9950.34	16583.9	22614.41	29265.7	33167.8	62189.62	99503.39	121394.13	364182.4
200	20643.71	7050.45	9400.6	11280.72	18801.19	25637.99	33178.58	37602.39	70504.47	112807.16	137624.73	412874.2
250	25683.24	8771.6	11695.46	14034.56	23390.93	31896.72	41278.11	46781.86	87715.98	140345.57	171221.6	513664.8
300	29092.98	9936.13	13248.17	15897.8	26496.34	36131.37	46758.24	52992.68	99361.27	158978.03	193953.2	581859.6
420	40305.76	13765.63	18354.17	22025.01	36708.34	50056.83	64779.43	73416.68	137656.28	220250.05	268705.07	806115.2
540	51745.38	17672.6	23563.47	28276.16	47126.94	64264.01	83165.19	94253.88	176726.02	282761.64	344969.2	1034907.6
660	63430.38	21663.38	28884.51	34661.41	57769.02	78775.93	101945.32	115538.03	216633.81	346614.1	422869.2	1268607.6
780	74963.18	25602.18	34136.24	40963.49	68272.48	93098.83	120480.84	136544.95	256021.79	409634.86	499754.53	1499263.6
900	84792.4	28959.15	38612.2	46334.64	77224.41	105306.01	136278.37	154448.82	289591.53	463346.45	565282.67	1695848
1020	97599.82	33333.27	44444.36	53333.23	88888.72	121211.9	156862.46	177777.45	333332.72	533332.35	650665.47	1951996.4
1140	109725	37474.39	49965.85	59959.02	99931.69	136270.49	176350.05	199863.39	374743.85	599590.16	731500	2194500

STATEMENT IX

Including loading, unloading and stacking

STONEWARE PIPES

Lead in km	Cost/trip	100 mm	150 mm	200 mm	230 mm	250 mm	300 mm	350 mm	400 mm
	Pay Load	480 m	240 m	135 m	105 m	84 m	66 m	43 m	27 m
1	2	3	4	5	6	7	8	9	10
Unit Per 100 Rmt									
0.5	1031.5	214.9	429.79	764.07	982.38	1227.98	1562.88	2398.84	3820.37
1	1114.33	232.15	464.3	825.43	1061.27	1326.58	1688.38	2591.47	4127.15
1.5	1195.3	249.02	498.04	885.41	1138.38	1422.98	1811.06	2779.77	4427.04
2	1272.83	265.17	530.35	942.84	1212.22	1515.27	1928.53	2960.07	4714.19
2.5	1353.02	281.88	563.76	1002.24	1288.59	1610.74	2050.03	3146.56	5011.19
3	1429.72	297.86	595.72	1059.05	1361.64	1702.05	2166.24	3324.93	5295.26
3.5	1505.89	313.73	627.45	1115.47	1434.18	1792.73	2281.65	3502.07	5577.37
4	1580.97	329.37	658.74	1171.09	1505.69	1882.11	2395.41	3676.67	5855.44
4.5	1654.43	344.67	689.35	1225.5	1575.65	1969.56	2506.71	3847.51	6127.52

Lead in km	Cost/trip	100 mm	150 mm	200 mm	230 mm	250 mm	300 mm	350 mm	400 mm
	Pay Load	480 m	240 m	135 m	105 m	84 m	66 m	43 m	27 m
1	2	3	4	5	6	7	8	9	10
5	1728.25	360.05	720.1	1280.19	1645.95	2057.44	2618.56	4019.19	6400.93
6	1875.91	390.81	781.63	1389.56	1786.58	2233.23	2842.29	4362.58	6947.81
7	2021.76	421.2	842.4	1497.6	1925.49	2406.86	3063.27	4701.77	7488
8	2170.92	452.28	904.55	1608.09	2067.54	2584.43	3289.27	5048.65	8040.44
9	2305.2	480.25	960.5	1707.56	2195.43	2744.29	3492.73	5360.93	8537.78
10	2437.52	507.82	1015.63	1805.57	2321.45	2901.81	3693.21	5668.65	9027.85
15	2901.34	604.45	1208.89	2149.14	2763.18	3453.98	4395.97	6747.3	10745.7
20	3555.18	740.66	1481.33	2633.47	3385.89	4232.36	5386.64	8267.86	13167.33
25	4126.1	859.6	1719.21	3056.37	3929.62	4912.02	6251.67	9595.58	15281.85
30	4776.65	995.14	1990.27	3538.26	4549.19	5686.49	7237.35	11108.49	17691.3
35	4989.59	1039.5	2079	3695.99	4751.99	5939.99	7559.98	11603.7	18479.96
40	5574.58	1161.37	2322.74	4129.32	5309.12	6636.4	8446.33	12964.14	20646.59
45	6154.18	1282.12	2564.24	4558.65	5861.12	7326.4	9324.52	14312.05	22793.26
50	6728.25	1401.72	2803.44	4983.89	6407.86	8009.82	10194.32	15647.09	24919.44
60	7682.95	1600.61	3201.23	5691.07	7317.1	9146.37	11640.83	17867.33	28455.37
70	8824.7	1838.48	3676.96	6536.81	8404.48	10505.6	13370.76	20522.56	32684.07
80	9967.83	2076.63	4153.26	7383.58	9493.17	11866.46	15102.77	23181	36917.89
90	11104.85	2313.51	4627.02	8225.81	10576.05	13220.06	16825.53	25825.23	41129.07
100	11769.48	2451.98	4903.95	8718.13	11209.03	14011.29	17832.55	27370.88	43590.67
125	13271.03	2764.8	5529.6	9830.39	12639.08	15798.85	20107.62	30862.86	49151.96
150	15736.47	3278.43	6556.86	11656.64	14987.11	18733.89	23843.14	36596.44	58283.22
175	18209.12	3793.57	7587.13	13488.24	17342.02	21677.52	27589.58	42346.79	67441.19
200	20643.71	4300.77	8601.55	15291.64	19660.68	24575.85	31278.35	48008.63	76458.19
250	25683.24	5350.68	10701.35	19024.62	24460.23	30575.29	38914	59728.47	95123.11
300	29092.98	6061.04	12122.08	21550.36	27707.6	34634.5	44080.27	67658.09	107751.78

Lead in km	Cost/trip	100 mm	150 mm	200 mm	230 mm	250 mm	300 mm	350 mm	400 mm
	Pay Load	480 m	240 m	135 m	105 m	84 m	66 m	43 m	27 m
1	2	3	4	5	6	7	8	9	10
Unit Per 100 Rmt									
420	40305.76	8397.03	16794.07	29856.12	38386.44	47983.05	61069.33	93734.33	149280.59
540	51745.38	10780.29	21560.58	38329.91	49281.31	61601.64	78402.09	120338.09	191649.56
660	63430.38	13214.66	26429.33	46985.47	60409.89	75512.36	96106.64	147512.51	234927.33
780	74963.18	15617.33	31234.66	55528.28	71393.5	89241.88	113580.58	174332.98	277641.41
900	84792.4	17665.08	35330.17	62809.19	80754.67	100943.33	128473.33	197191.63	314045.93
1020	97599.82	20333.3	40666.59	72296.16	92952.21	116190.26	147878.52	226976.33	361480.81
1140	109725	22859.38	45718.75	81277.78	104500	130625	166250	255174.42	406388.89

STATEMENT IV

Including loading, unloading and stacking

Lead in km	Cost per trip	Cement pay load 9.00 MT	Steel pay load 9.00 MT	Bulk Asphalt in Bouzer pay load 4.50 MT	M.S.Bar 9.0 MT	Sand 5.75 cum
1	2	3	4	5	6	7
0.50	1031.5	114.61	114.61	229.22	114.61	179.39
1.00	1114.33	123.81	123.81	247.63	123.81	193.80
1.50	1195.3	132.81	132.81	265.62	132.81	207.88
2.00	1272.83	141.43	141.43	282.85	141.43	221.36
2.50	1353.02	150.34	150.34	300.67	150.34	235.31
3.00	1429.72	150.34	150.34	300.67	158.86	248.65
3.50	1505.89	167.32	167.32	334.64	167.32	261.89
4.00	1580.97	175.66	175.66	351.33	175.66	274.95
4.50	1654.43	183.83	183.83	367.65	183.83	287.73
5.00	1728.25	192.03	192.03	384.06	192.03	300.57
6.00	1875.91	208.43	208.43	416.87	208.43	326.25
7.00	2021.76	224.64	224.64	449.28	224.64	351.61
8.00	2170.92	241.21	241.21	482.43	241.21	377.55
9.00	2305.2	256.13	256.13	512.27	256.13	400.90
10.00	2437.52	270.84	270.84	541.67	270.84	423.92
15.00	2901.34	322.37	322.37	644.74	322.37	504.58
20.00	3555.18	395.02	395.02	790.04	395.02	618.29
25.00	4126.1	458.46	458.46	916.91	458.46	717.58
30.00	4776.65	530.74	530.74	1061.48	530.74	830.72
35.00	4989.59	554.40	554.40	1108.80	554.40	867.75
40.00	5574.58	619.40	619.40	1238.80	619.40	969.49
45.00	6154.18	683.80	683.80	1367.60	683.80	1070.29
50.00	6728.25	747.58	747.58	1495.17	747.58	1170.13
60.00	7682.95	853.66	853.66	1707.32	853.66	1336.17
70.00	8824.7	980.52	980.52	1961.04	980.52	1534.73
80.00	9967.83	1107.54	1107.54	2215.07	1107.54	1733.54
90.00	11104.85	1233.87	1233.87	2467.74	1233.87	1931.28
100.00	11769.48	1307.72	1307.72	2615.44	1307.72	2046.87
125.00	13271.03	1474.56	1474.56	2949.12	1474.56	2308.01
150.00	15736.47	1748.50	1748.50	3496.99	1748.50	2736.78
175.00	18209.12	2023.24	2023.24	4046.47	2023.24	3166.80
200.00	20643.71	2293.75	2293.75	4587.49	2293.75	3590.21
250.00	25683.24	2853.69	2853.69	5707.39	2853.69	4466.65
300.00	29092.98	3232.55	3232.55	6465.11	3232.55	5059.65
420.00	40305.76	4478.42	4478.42	8956.84	4478.42	7009.70
540.00	51745.38	5749.49	5749.49	11498.97	5749.49	8999.20
660.00	63430.38	7047.82	7047.82	14095.64	7047.82	11031.37
780.00	74963.18	8329.24	8329.24	16658.48	8329.24	13037.07
900.00	84792.4	9421.38	9421.38	18842.76	9421.38	14746.50
1020.00	97599.82	10844.42	10844.42	21688.85	10844.42	16973.88
1140.00	109725	12191.67	12191.67	24383.33	12191.67	19082.61

STATEMENT V

Excluding loading, unloading and stacking

Lead in km	Cost per trip	Cement pay load 9.00 MT	Steel pay load 9.00 MT	Bulk Asphalt in Bouzer pay load 4.50 MT
1	2	3	4	5
0.5	458.29	50.92	50.92	101.84
1	509.68	56.63	56.63	113.26
1.5	560.28	62.25	62.25	124.51
2	609.4	67.71	67.71	135.42
2.5	659.62	73.29	73.29	146.58
3	708.4	73.29	73.29	146.58
3.5	756.92	84.10	84.10	168.20
4	804.97	89.44	89.44	178.88
4.5	852.36	94.71	94.71	189.41
5	899.91	99.99	99.99	199.98
6	994.95	110.55	110.55	221.10
7	1089.21	121.02	121.02	242.05
8	1184.89	131.65	131.65	263.31
9	1274.25	141.58	141.58	283.17
10	1362.75	151.42	151.42	302.83
15	1720.28	191.14	191.14	382.28
20	2159.38	239.93	239.93	479.86
25	2515.96	279.55	279.55	559.10
30	2947.25	327.47	327.47	654.94
35	3198.3	355.37	355.37	710.73
40	3602.53	400.28	400.28	800.56
45	4004.65	444.96	444.96	889.92
50	4404.43	489.38	489.38	978.76
55	4611.29	512.37	512.37	1024.73
65	5384.76	598.31	598.31	1196.61
75	6166.96	685.22	685.22	1370.44
85	6939.17	771.02	771.02	1542.04
95	7191.21	799.02	799.02	1598.05
105	7911.48	879.05	879.05	1758.11
130	9707.9	1078.66	1078.66	2157.31
155	11533.85	1281.54	1281.54	2563.08
180	13324.85	1480.54	1480.54	2961.08
230	16933.52	1881.50	1881.50	3763.00
280	19988.32	2220.92	2220.92	4441.85
400	28407.88	3156.43	3156.43	6312.86
520	36947.97	4105.33	4105.33	8210.66
640	45405.37	5045.04	5045.04	10090.08
760	53784.35	5976.04	5976.04	11952.08
880	62185.1	6909.46	6909.46	13818.91
1000	70330.06	7814.45	7814.45	15628.90
1120	78845.94	8760.66	8760.66	17521.32

STATEMENT 'E'

Including loading, unloading & stacking.

Lead in km	Cost per trip.	Asbestos cement pipes			
	Pay Load. M	50mm dia.	80mm dia.	100mm dia.	150mm dia.
		960.00	576.00	512.00	288.00
1	2	3	4	5	6
Unit : Per 100 RMT.					
0.50	1031.50	107.45	179.08	201.46	358.16
1.00	1114.33	116.08	193.46	217.64	386.92
1.50	1195.30	124.51	207.52	233.46	415.03
2.00	1272.83	132.59	220.98	248.60	441.95
2.50	1353.02	140.94	234.90	264.26	469.80
3.00	1429.72	148.93	248.22	279.24	496.43
3.50	1505.89	156.86	261.44	294.12	522.88
4.00	1580.97	164.68	274.47	308.78	548.95
4.50	1654.43	172.34	287.23	323.13	574.45
5.00	1728.25	180.03	300.04	337.55	600.09
6.00	1875.91	195.41	325.68	366.39	651.36
7.00	2021.76	210.60	351.00	394.88	702.00
8.00	2170.92	226.14	376.90	424.01	753.79
9.00	2305.20	240.13	400.21	450.23	800.42
10.00	2437.52	253.91	423.18	476.08	846.36
15.00	2901.34	302.22	503.70	566.67	1007.41
20.00	3555.18	370.33	617.22	694.37	1234.44
25.00	4126.10	429.80	716.34	805.88	1432.67
30.00	4776.65	497.57	829.28	932.94	1658.56
35.00	4989.59	519.75	866.25	974.53	1732.50
40.00	5574.58	580.69	967.81	1088.79	1935.62
45.00	6154.18	641.06	1068.43	1201.99	2136.87
50.00	6728.25	700.86	1168.10	1314.11	2336.20
60.00	7682.95	800.31	1333.85	1500.58	2667.69
70.00	8824.70	919.24	1532.07	1723.57	3064.13
80.00	9967.83	1038.32	1730.53	1946.84	3461.05
90.00	11104.85	1156.76	1927.93	2168.92	3855.85
100.00	11769.48	1225.99	2043.31	2298.73	4086.63
125.00	13271.03	1382.40	2304.00	2592.00	4608.00
150.00	15736.47	1639.22	2732.03	3073.53	5464.05
175.00	18209.12	1896.78	3161.31	3556.47	6322.61
200.00	20643.71	2150.39	3583.98	4031.97	7167.95
250.00	25683.24	2675.34	4458.90	5016.26	8917.79
300.00	29092.98	3030.52	5050.86	5682.22	10101.73
420.00	40305.76	4198.52	6997.53	7872.22	13995.06
540.00	51745.38	5390.14	8983.57	10106.52	17967.15
660.00	63430.38	6607.33	11012.22	12388.75	22024.44
780.00	74963.18	7808.66	13014.44	14641.25	26028.88
900.00	84792.40	8832.54	14720.90	16561.02	29441.81
1020.00	97599.82	10166.65	16944.41	19062.46	33888.83
1140.00	109725.00	11429.69	19049.48	21430.66	38098.96

STATEMENT SHOWING STANDARD WEIGHT OF PIPES TO BE FOLLOWED FOR CARTING OF VARIOUS DIAMETERS AND TYPES OF PIPES

I) C.I. Pipes (IS : 1536-1989)

Diameter of Pipe in mm	Class of Pipes and Its Weight in Kg. per Metre Length		
	LA	A	B
80	16.00	17.38	18.46
100	19.82	21.82	23.27
125	25.82	28.18	30.36
150	32.10	35.27	38.00
200	47.09	51.09	55.27
250	63.45	69.09	74.73
300	81.82	89.45	96.91
350	103.09	111.82	121.27
400	125.45	137.09	140.00
450	151.27	166.10	179.27
500	177.09	192.91	208.73
600	236.00	257.64	335.01
700	304.55	335.73	359.45
750	341.09	372.91	404.55
800	381.00	416.00	450.00
900	465.09	507.45	549.80
1000	558.73	610.36	659.64

II) M.S. Pipes

Note : Weight of M.S. Pipes is to be computed by considering density of steel as 7850 Kg./Cum considering the diameter and thickness of plate used for manufacturing of M.S. Pipes.

III) A.C. Pressure Pipes (IS0-160)

Diameter of Pipe in mm	Class of pipes and its weight in Kg. per meter length			
	Class - 5	Class – 10	Class - 15	Class - 20
80	6.00	6.20	6.40	6.80
100	7.60	7.70	8.20	10.30
125	9.57	9.80	11.00	13.30
150	11.87	12.20	15.30	19.00
200	15.57	19.30	25.60	32.70
250	19.25	25.20	32.70	41.50
300	24.97	32.30	45.10	58.10
350	39.77	47.52	55.27	71.42
400	49.20	60.20	71.36	93.10
450	56.92	70.27	83.63	111.37
500	72.84	89.54	104.25	136.52
600	102.50	137.32	148.35	193.16

IV) D.I. K-9 PIPES INCLUDING WEIGHT OF MORTAR LINING PER M LENGTH

(1) Barrel Mass as per IS-8329-1994 (2) Socket Mass as per IS-8329-1994 (3) Cement Mortar Lining Wt as per ISO-4179-1985

Nominal Diameter	Weight / M Length of D.I. K-9 Pipes of			
	4 M	5 M	5.50 M	6 M
80 mm wt. of DI pipe / M	13.00	13.00	12.91	12.67
Weight Mortar / M	1.56	1.56	1.56	1.56
Total Weight / M	14.56	14.56	14.47	14.23
100 mm wt. of DI pipe / M	16.25	16.00	16.00	15.86
Weight Mortar / M	1.93	1.93	1.93	1.93
Total Weight / M	18.18	17.93	17.93	17.79
125 mm wt. of DI pipe / M	20.50	20.00	20.00	19.83
Weight Mortar / M	2.42	2.42	2.42	2.42
Total Weight / M	22.92	22.42	22.42	22.25
150 mm wt. of DI pipe / M	24.75	24.20	24.18	24.00
Weight Mortar / M	2.90	2.90	2.90	2.90
Total Weight / M	27.65	27.10	27.08	26.90
200 mm wt. of DI pipe / M	33.25	32.60	32.54	32.33
Weight Mortar / M	3.88	3.88	3.88	3.88
Total Weight / M	37.13	36.48	36.42	36.21
250 mm wt. of DI pipe / M	43.75	43.00	42.73	42.50
Weight Mortar / M	4.84	4.84	4.84	4.84
Total Weight / M	48.59	47.84	47.57	47.34
300 mm wt. of DI pipe / M	55.50	54.60	54.18	53.83
Weight Mortar / M	5.80	5.80	5.80	5.80
Total Weight / M	61.30	60.40	59.98	59.63
350 mm wt. of DI pipe / M	69.25	68.00	67.45	67.17
Weight Mortar / M	12.12	12.12	12.12	12.12
Total Weight / M	81.37	80.12	79.57	79.29
400 mm wt. of DI pipe / M	82.75	81.40	80.91	80.33
Weight Mortar / M	13.82	13.82	13.82	13.82
Total Weight / M	96.57	95.22	94.73	94.15
450 mm wt. of DI pipe / M	98.75	97.00	96.36	95.83
Weight Mortar / M	15.53	15.53	15.53	15.53
Total Weight / M	114.28	112.53	111.89	111.36
500 mm wt. of DI pipe / M	115.00	112.80	112.00	111.50
Weight Mortar / M	17.26	17.26	17.26	17.26
Total Weight / M	132.26	130.06	129.26	128.76
600 mm wt. of DI pipe / M	152.00	149.00	147.82	147.00
Weight Mortar / M	20.75	20.75	20.75	20.75
Total Weight / M	172.75	169.73	168.57	167.75
700 mm wt. of DI pipe / M	193.75	189.80	188.36	187.70
Weight Mortar / M	29.45	29.45	29.45	29.45
Total Weight / M	223.20	219.25	217.81	211.15
750 mm wt. of DI pipe / M	217.50	213.00	211.45	210.00
Weight Mortar / M	31.56	31.56	31.56	31.56
Total Weight / M	249.06	244.56	243.01	241.56
800 mm wt. of DI pipe / M	240.75	235.80	233.82	232.33
Weight Mortar / M	33.69	33.69	33.69	33.69
Total Weight / M	274.44	269.49	267.51	266.02
900 mm wt. of DI pipe / M	292.75	286.20	283.82	281.83
Weight Mortar / M	37.89	37.89	37.89	37.89
Total Weight / M	330.64	324.09	321.71	319.72
1000 mm wt. of DI pipe / M	349.75	341.60	338.55	336.17
Weight Mortar / M	42.08	42.08	42.08	42.08
Total Weight / M	391.83	383.68	380.63	378.25

Note : These weights are as per the circular issued by Superintending Engineer (HQ) vide Lt No. MJP / 10 - 2000 / SE (H/Q) / DI / 15 / AMDT / Stores / 255 dt. 26.06.2000

V) P.V.C. Pipes (IS : 4985-1988)

Diameter of Pipe in mm	Class of Pipes and its weight in Kg. per meter length		
	4.00	6.00 Kg./Sq.cm.	10.00
63	0.47	0.67	1.01
75	0.67	0.93	1.44
90	0.92	1.33	2.05
110	1.32	1.89	3.08
140	2.13	3.10	4.99
160	2.78	3.92	6.56
180	3.56	5.07	8.10
200	4.26	7.00	10.20
225	5.48	7.84	12.56
250	6.63	10.19	15.31
280	8.34	12.16	19.80
315	10.55	15.37	25.00

VI) R.C.C. Pipes

Diameter of Pipe in mm	Class of Pipes and its weight in Kg. per meter length					
	P - 1	P – 2	P - 3	NP - 2	NP - 3	NP - 4
100	23.56	23.56	23.56	21.20	21.20	21.20
150	33.00	33.00	33.00	29.40	29.40	29.40
200	42.10	42.10	42.10	37.90	37.90	37.90
250	51.84	63.40	75.18	57.10	67.60	77.20
300	74.64	102.50	117.10	92.25	105.40	119.10
350	92.28	134.30	168.10	120.80	151.30	170.20
400	104.16	169.60	208.10	152.60	187.30	212.40
450	127.92	188.70	235.23	169.90	211.70	240.80
500	141.36	229.90	261.37	206.90	235.23	270.50
600	192.96	305.70	313.64	275.10	282.27	320.20
700	225.59	325.80	365.92	293.20	329.32	370.90
800	257.82	345.19	418.19	310.60	376.30	425.40
900	290.00	389.58	470.47	350.60	423.00	482.30
1000	322.28	443.98	510.00	399.80	459.00	531.40

VII) P.S.C. Pipes of all classes and B.W.S.C. Pipes of all classes

Diameter of Pipe	Weight of pipe per meter length for	Diameter of Pipe in mm	Weight of pipe per meter
350	197.50	1100	947.50
400	240.00	1200	1115.00
450	257.50	1300	1190.00
500	292.50	1400	1370.00
600	375.00	1500	1560.00
700	432.50	1600	1767.50
800	582.50	1700	1987.50
900	705.00	1800	2205.50
1000	825.00		

SECTION - D
CEMENT CONSUMPTION

Sr. No	Description	Unit	CONSUMPTION	
	STANDARD CEMENT CONSUMPTION TO BE FOLLOWED FOR VARIOUS ITEMS OF WORK			
A	**P.C.C. / R.C.C. Works**			
1	1 : 1% : 1 (M-300) with finishing in CM 1:3 proportion	Cum	9.20	bags
2	1: 1: 2 (M-250) with finishing in CM 1:3 proportion	Cum	8.50	bags
3	1: 1% : 3 (M-200) with finishing in CM 1:3 proportion	Cum	6.90	bags
4	1: 1% : 3 (M-200) without finishing	Cum	6.80	bags
5	1 : 2 : 4 (M-150) with finishing in CM 1:3 proportion	Cum	5.90	bags
6	1 : 2 : 4 (M-150) without finishing	Cum	5.80	bags
B	**Brick Masonry Works**			
1	BB Masonry - IInd sort in CM 1:6 proportion	Cum	1.44	bags
2	BB Masonry - IInd sort in CM 1:5 proportion	Cum	1.62	bags
3	BB Masonry - IInd sort in CM 1:4 proportion	Cum	2.30	bags
4	Half brick walls in CM 1:4 proportion	Cum	0.22	bags
C	**Stone Masonry Works**			
1	U.C.R. Masonry - IInd sort in CM 1:6 proportion	Cum	1.77	bags
2	U.C.R. Masonry - IInd sort in CM 1:4 proportion	Cum	2.65	bags
3	Random Rubble Masonry - IInd sort in CM 1:6 proportion	Cum	1.77	bags
4	Random Rubble Masonry - IInd sort in CM 1:4 proportion	Cum	2.65	bags
5	C.R. Masonry - IInd sort in CM 1:4 proportion	Cum	2.65	bags
6	C.R. Masonry - IInd sort in CM 1:6 proportion	Cum	1.50	bags
D	**Waterproofing Works**			
1	Damp-proof course 50 mm thick in 1:2:4 proportion with bitumen layer W.P. compound.	Sqm	0.35	bags
2	Integral finishing to newly laid slab in CM 1:3 proportion with W.P. compound.	Sqm	0.06	bags
3	Waterproofing treatment over old slab with W.P. cement slurry as tack coat 12 mm thick, W.P. plaster in CM 1:3 proportion, brickbat coba average 9.50 cm thick in CM 1:6 proportion and 20 mm thick W.P. cement plaster over it in CM 1:3 proportion and finishing with cement slurry with novelling.	Sqm.	0.37	bags
E	**Plastering and Pointing Works**			
1	**12 mm thick plaster**			
	a) CM 1:2 proportion	Sqm	0.16	bags
	b) CM 1:3 proportion	Sqm	0.12	bags
	c) CM 1:4 proportion	Sqm	0.10	bags
2	**20 mm thick plaster**			
	a) CM 1:2 proportion	Sqm	0.27	bags
	b) CM 1:3 proportion	Sqm	0.19	bags
	c) CM 1:4 proportion	Sqm	0.15	bags

Sr. No	Description	Unit	CONSUMPTION	
3	**25 mm thick plaster**			
	a) CM 1:2 proportion	Sqm	0.34	bags
	b) CM 1:3 proportion	Sqm	0.25	bags
	c) CM 1:4 proportion	Sqm	0.19	bags
4	Cement pointing in CM 1:3 proportion	Sqm	0.03	bags
5	Tuck cement pointing in CM 1:3 proportion	Sqm	0.05	bags
6	Sand faced plaster in CM 1:4 proportion including base coat 15 mm thick in CM 1:4 proportion with W.P. compound.	Sqm	0.22	bags
7	Rough cast cement plaster in CM 1:4 proportion in two coats.	Sqm	0.22	bags
F	**Flooring Works**			
1	I.P.S. flooring - 40 mm thick	Sqm	0.30	bags
2	I.P.S. flooring - 50 mm thick	Sqm	0.37	bags
3	Rough Shahabad - any other similar flooring in CM 1:4 proportion bedding	Sqm	0.15	bags
4	All types of cement / kadappa / polished / mosaic tiles flooring or skirting / dado set on CM 1:4 proportion bedding	Sqm	0.18	bags
5	Glazed / ceramic tiles flooring or skirting / dado fixed with plain cement slurry	Sqm	0.22	bags

SECTION - E

EXCAVATION

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	Excavation for foundation / pipe trenches in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-1/259)					
	Lift 0 to 1.5 M	Cum	150.00	147		
2	Excavation for foundation / pipe trenches in hard murum including removing the excavated material upto a distance of 50 M and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-2/259)					
	Lift 0 to 1.5 M	Cum	170.00	165		
3	Excavation for foundation / pipe trenches in hard murum and boulders, W.B.M. road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking and spreading as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-3/259)					
	Lift 0 to 1.5 M	Cum	192.00	184		
4	Add for every additional lift of 1.5 M beyond initial lift of 1.5 M for Item Nos. 1 to 3	Cum	14.00	14		
5	Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including removing the excavated material upto a distance of 50 M beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, preparing the bed for foundation and excluding backfilling, etc. complete. (Bd-A-4/259)					
	Lift 0 to 1.5 M	Cum	572.00	511		

6	Excavation for foundation / pipe trenches in **hard rock by controlled blasting,** including trimming and levelling the bed by chiselling where necessary and removing the excavated material and stacking it in measurable heaps within a distance of 50 metres from the area and lifts as below, normal dewatering, excluding backfilling, etc. complete. (Bd-A-5/259)					
	Lift 0 to 1.5 M	Cum	755.00	640		
7	Excavation for foundation / pipe trenches in **hard rock and concrete road by chiselling, wedging, line drilling by mechanical means or by all means other than blasting** including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the area and lifts as below, stacking as directed by Engineer-in-charge, normal dewatering, excluding backfilling, etc. complete by all means. (Bd-A-6/259)					
	Lift 0 to 1.5 M	Cum	1017.00	997		
8	Excavation in **laterite rock masses mechanically,** including lift upto 1.5 M including trimming and levelling the bed removing the excavated material upto a distance of 50 metres beyond the area and lift as below stacking by as directed by Engineer-in-charge, normal dewatering **excluding backfilling**, etc. complete. .					
	Lift 0 to 1.5 M	Cum	1201.00			
8	Excavation for foundation / pipe trenches in **slush muddy / marshy / slushy / soil including use of poclain,** labour for dewatering during execution including removing the excavated material upto a distance of 50 metres and lifts as below, stacking and spreading as directed, preparing the bed by cleaning the mud, labour required for execution for shuttering item but excluding backfilling, etc. complete. Providing and fixing shuttering shall be paid separately.					
	Lift 0 to 1.5 M	Cum	370.00	221		
9	Add for every **additional lift beyond initial lift of 1.5 M** for Item Nos. 5 to 10	Cum	25.00	25		
	HEAD WORKS					

10	Excavation in general in **s**oft material comprising of soft soil, soft murum, sand, hard murum with boulders in wet or dry condition for Head Works i.e. Intake Well, Connecting Pipe, Jack Well, Pump House, Supply Well, etc. for lift 0 to 1.5M and lead of 150 M including barricading, guarding, disposing off surplus excavated stuff within a radius of 0.5 km. as directed by Engineer-in-charge, etc. complete excluding refilling.					
a)	For Head Works on river or dam submergence for initial lift of 0 to 1.5 M	Cum	464.00	446		
b)	For Head Works on nalla or any other site of GSDA for initial lift of 0 to 1.5 M	Cum	304.00	299		
c)	Add for each additional lift of 1.5 M beyond initial lift 1.5 M	Cum	27.00	23		
11	Excavation in general in hard material comprising of soft rock, hard rock, Manjara rock, etc. by blasting / controlled blasting, chiselling as required in wet or dry condition for Head Works i.e. Intake Well, Connecting Pipe, Jack Well, Pump House, Supply Well, etc. for lift 0 to 1.5 M and lead of 150 M including barricading, guarding, disposing off surplus excavated stuff within a radius of 0.5 km. as directed by Engineer-in-charge, excluding refilling.					
a)	For Head Works on river or dam submergence for initial lift of 0 to 1.5 M	Cum	1016.00	817		
b)	For Head Works on nalla or any other site of GSDA for initial lift of 0 to 1.5 M	Cum	707.00	535		
c)	Add for each additional lift of 1.5 M beyond initial lift 1.5 M	Cum	28.00	24		
12	Excavation in general in soft material comprising of soft soil, soft murum, sand, hard murum with boulders in wet or dry condition for Head Works and allied works by well sinking process for average depth of 12 M and lead of 150 M including shoring, barricading, guarding, refilling, disposing off surplus excavated stuff as directed by Engineer-in-charge, etc. complete.					
a)	Diameter upto and including 3 M	Cum	924.00	877		
b)	Diameter more than 3 M	Cum	775.00	728		

13	Desilting the Supply Well, Intake Well / Head Works, Sump of water supply / sewerage works etc. in wet or dry condition including lifts upto 9 M and lead upto 150 M as required beyond the work site, stacking, spreading, including necessary guarding, etc. complete, as directed by Engineer-in-charge.	Cum	744.00	704		
	Add for each additional lift of 1.5 M beyond initial lift 9.0 M	Cum	25.00	24		
14	Dewatering the excavated trenches and pools of water in the building trenches / pipeline trenches, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge (including cost of machinery, labour, fuel), etc. complete. (Bd-A-9/261)	HP/ Hr.	77.00	13		
	(i) The Contractor at his request may be allowed to start construction of masonry steining so as not to allow silting of well in oncoming monsoon and while paying masonry, 25% amount shall be withheld and released only when excavation to the full depth is completed.					
	(ii) Dewatering : Total dewatering charges are to be proposed in the tender as lumpsum amount and 75% is payable for excavation and 25% is payable for construction of well / gallery. Out of 75% excavation, break-up shall be as under					
	25% for last 1 M depth.					
	20% for 2 M depth which is just above last 1 M depth.					
	15% for 2 M depth which is just above last 3 M depth.					
	15% for the rest of depth from water table level.					
	The above conditions will restrict the tendencies of agencies to avoid deepening of wells, etc. to the required depth.					
15	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, surcharging, etc. complete.	Cum	84.00	81		
16	Filling in plinth and floors murum bedding in trenches with approved murum from excavated materials from foundation in 15 cm to 20 cm layers including watering and compaction, etc. complete. (Bd-A-10/263)	Cum	84.00	81		

17	Filling in plinth and floors / trenches with **contractor's murum** for bedding in 15 cm to 20 cm layers including watering and compaction, etc. complete. (Bd-A-11/263)	Cum	829.00	132		
18	Providing dry trap/ granite/ quartzite/ gneiss, **rubble stone soling** in 15 cm to 20 cm thick layers including hand packing and compacting, etc. complete. (Bd-A-12/264)	Cum	1175.00	345		
19	Providing and filling in **sand boxing** in pipeline or for foundation with sand of approved quality including watering and compaction, etc. complete. (Bd-A-13/264)	Cum	1158.00	190		
20	**Open timbering in trenches** of depth more than 1.5 M for shoring and strutting including use of and waste of all necessary timber works including walling, strutts, open polling boards / horizontal sheeting, runners, etc. as may be necessary and fixing and removal complete. (Measurements to be taken of the face area timbered) (N.B.O. Item No. 4-15, P.No. 59)					
	a) Lift 0 to 1.5 M for non-water logged area	Sqm	189.00	8		
	Additional per Sqm for further lifts of 1.5 M each	Sqm	35.00	20		
	b) Lift 0 to 1.5 for water logged area	Sqm	201.00	18		
	Additional per Sqm for further lifts of 1.5 M each	Sqm	29.00	16		
	Note : For the trenches with more than 1.5 M depth, shoring if required from GL is to be done and is payable from GL.					

SECTION - F
IRON & STRUCTURAL STEEL WORK

No.	Description	Unit	Rate (Rs.) 2021-2022		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	Providing and fixing **mild steel grill** work for windows/ ventilators of 20 Kg/Sqm. as per drawings including necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting, etc. complete. (Bd-U-1/537)	Sqm	1895	148		
2	Providing and fixing **mild steel grill railing** of 20 Kg/Sqm with teak wood hand railing, still and newel posts for staircase and including fabricating, fixtures, erecting, painting the grill work with approved oil paint and polishing the hand rail and newel posts with French polish two coats, etc. complete. (Bd-U-2/537)	Sqm	2856	377		
3	Providing **structural steel work in rolled stanchions fixed with connecting plates or angle cleats** as in main and cross beams, hip and jack rafters, purlins connecting to truss members and like as per detailed designs and drawings or as directed by Engineer-in-charge including cutting, fabricating, hoisting, erecting, fixing in position, making riveted / bolted / welded connections and one coat of anticorrosive paint and over it two coats of oil painting, etc. complete. (Bd-C-3/275)	MT	71286	9636		
4	Providing structural steel work in single stanchions composed of RSJ, channel, etc. with caps, bases, mild steel plates, angles, brackets, cleats, gusset plates, anchor bolts, etc. as per detailed design and drawing or as directed by Engineerin-charge including cutting, fabrication, hoisting, erecting, fixing in position, making riveted / bolted / welded connections and one coat of anticorrosive paint and over it two coats of oil painting, etc. complete. (Bd-C-6/277)	MT	70017	9015		

No.	Description	Unit	Rate (Rs.) 2021-2022		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
5	Providing **structural steel work in rolled sections like joists, channels, angles, tees**, etc. as per detailed designs and drawings including fixing in position without connecting plates, braces, etc. and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade, etc. complete. (Bd-C-2/275)	MT	74618	10236		
6	Providing **structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates,** etc. as per detailed design and drawing or as directed by Engineer-in-charge including cutting, fabricating, hoisting, erecting and fixing in position, making riveted / bolted / welded connections and one coat of anticorrosive paint and over it two coats of oil painting, etc. complete. (Bd-C-8/278)	MT	95325	23646		

SECTION - G

PLAIN, REINFORCED AND READY MIX CONCRETE

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	**Providing and laying in situ Cement Concrete M-15** of trap/ granite / quartzite / gneiss metal for **foundation and bedding** including bailing out water, form work, compaction, curing, etc. complete. (Cement 5.90 bags / cum)					
	Spec. No. - Bd E /1 Page No. 287 and B-7, Page No. 38					
	a) In PCC M-100	Cum	5185	1436		
	b) In PCC M-150	Cum	5640	1435		
2	**Providing and laying in situ Cement Concrete** of trap/ granite / quartzite / gneiss metal **for RCC work in foundation like raft, grillage, strip foundation and footing of RCC columns** and steel stanchions including normal dewatering, form work, compaction, finishing and curing, etc. complete. (By weigh batching and mix design for M250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	a) In RCC M-150	Cum	6604	1704		
	b) In RCC M-200	Cum	6653	1692		
	c) In RCC M-250	Cum	7206	1693		
	d) In RCC M-300	Cum	7448	1629		
3	**Providing and casting in situ Cement Concrete** of trap/ granite / quartzite / gneiss metal of approved quality **for RCC works** as per detailed drawings and designs or as directed by Engineerin-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	For all types of Columns					
	a) In RCC M-150	Cum	7475	2948		
	b) In RCC M-200	Cum	8014	1607		
	c) In RCC M-250	Cum	8549	1626		
	d) In RCC M-300	Cum	8774	1808		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
4	Providing and casting in situ C.C. of trap / granite/ quartzite / gneiss metal of approved quality for RCC works as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	For Beams / Braces / Lintels					
	a) In RCC M-150	Cum	7543	1357		
	b) In RCC M-200	Cum	7885	1531		
	c) In RCC M-250	Cum	8400	1535		
	d) In RCC M-300	Cum	8624	1535		
5	**Providing and casting in situ C.C.** of trap / granite/ quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	Slabs / Landings / Vertical Walls / Waist Slabs / Steps for Staircase					
	a) In RCC M-150	Cum	8046	1456		
	b) In RCC M-200	Cum	8466	1518		
	c) In RCC M-250	Cum	9009	1521		
	d) In RCC M-300	Cum	9247	1521		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
6	**Providing and casting in situ C.C**. of trap / granite/ quartzite / gneiss metal of approved quality **for RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing, etc. complete. (By weigh batching and mix design for M-250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	Chajjas / Parapets / Curtain Walls /Partition Walls / Pardies					
	a) In RCC M-150	Cum	8155	1493		
	b) In RCC M-200	Cum	8430	1516		
	c) In RCC M-250	Cum	9017	1534		
	d) In RCC M-300	Cum	9218	1534		
7	**Providing and laying in situ R.C.C.** of trap / granite/ quartzite / gneiss metal of approved quality for **RCC works** of domes as per detailed drawings and designs approved by Engineer-in-charge including centering, finishing, roughening the surfaces with special finish or plaster to be provided separately, curing, etc. complete. (By weigh batching and mix design for M250 and M-300 only. Use of L&T, A.C.C., Ambuja, Birla Gold, Manikgad, Rajashree, etc. cement is permitted.) (Excluding M.S. or Tor reinforcement)					
	Domes					
	a) In RCC M-150	Cum	8516	1498		
	b) In RCC M-200	Cum	8768	1511		
	c) In RCC M-250 - Bottom Domes only	Cum	9262	1503		
	d) In RCC M-300 - Bottom Domes only	Cum	9442	1503		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
8	Providing and fixing in position **steel bar reinforcement** of various diameters for RCC piles, caps, footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, copings, fins, arches, etc. as per detailed designs, drawings and schedules; including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required, etc. complete **(including cost of binding wire).** (Bd-F-17/306)					
	a) Mild Steel	MT	64122	9403		
	b) To r Steel	MT	66218	9394		
	c) Corrosion Resistant Steel (Fe 500)	MT	70658	11230		
	d) Only fabrication (Labour) (For all types of steel)	MT				
9	Providing **fusion bonded epoxy coating** to reinforcement bars as per IS-13620/1993 specification for a thickness of 175 (±50) microns including extra cost on account of careful handling, extra cost on account of using PVC coated binding wire instead of G.I. wire, extra cost on account of touch-up material supplied by coating agency and repair work, extra cost on account of transportation to and fro from steel yard at Regional Centre to plant at Daman and plant at Daman to work site by trailer, loading, unloading, including all taxes (Central and local), etc. complete.					
A	**For Reinforcement Diameterwise Rates**					
	1) 8 mm dia	MT	19393			
	2) 10 mm dia	MT	17194			
	3) 12 mm dia	MT	15748			
	4) 16 mm dia	MT	15194			
	5) 20 mm dia	MT	14003			
	6) 25 mm dia	MT	12758			
	7) 28 mm dia	MT	12177			
	8) 32 mm dia	MT	11281			
B	**Average Rates (For estimation only)**					
	1) For 8 mm to 20 mm dia	MT	16162			
	2) For above 20 mm dia	MT	11761			

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
	Notes for Estimation					
	1) All the rates of Reinforced Cement Concrete Items from 1 to 6 shall be increased by 10% for each brace height above 1st brace for R.C.C. E.S.R.s. e.g. For a R.C.C. E.S.R. with 7 M staging and first brace at 3.50 M above ground, the concrete in columns above first brace, concrete of ring beam and bottom slab is entitled for 10% increase, concrete of vertical wall, roof slab and roof beams, columns in container are entitled for 20% increase.					
	2) All the rates of Reinforced Cement Concrete Items from 1 to 6 shall be increased by 2% for every floor height above ground floor for building works.					
	3) These rates are applicable for R.C.C. well works also. These rates shall be increased by 10% for every 5 M depth below initial 5 M depth.					
	4) Rates for Item Nos. 7 and 8 shall be increased by 5% for each brace height above first brace for R.C.C. E.S.R.s. By 5% for every ring beam below first ring beam for R.C.C. wells. By 1% building works for every floor height.					
	5) Volumetric mix as per 1:1%:3 shall be adopted with 56.5 kg of cement for RCC-250 and 59.5 kg of cement for RCC-300, per load of mixer of 1 bag capacity.					
	6) Fusion bonded epoxy coating to be proposed only in Coastal Area with prior approval of the Chief Engineer.					
	7) For estimation purpose, average rates as per Item No. 8b shall be considered wherever necessary.					

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	READY MIX CONCRETE					
10	Providing and laying in situ Ready Mix Cement Concrete grade of trap / granite / quartzite / gneiss metal for **RCC works in foundation** like raft, grillage, strip foundation and footing of RCC column and steel stanchions including normal dewatering, form work, compaction, finishing and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel)**					
	For Foundation					
	a) In RCC M-150	Cum	5782	1157		
	b) In RCC M-200	Cum	6198	1016		
	c) In RCC M-250	Cum	6629	1067		
	d) In RCC M-300	Cum	6949	1109		
11	**Providing and casting in situ Ready Mix Cement Concrete** grade of trap / granite / quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel**)					
	For all types of Columns					
	a) In RCC M-150	Cum	7009	1907		
	b) In RCC M-200	Cum	7457	2246		
	c) In RCC M-250	Cum	7883	2253		
	d) In RCC M-300	Cum	8150	1886		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
12	Providing and casting in situ **Ready Mix Cement Concrete** grade of trap / granite / quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel**)					
	For Beams / Braces / Lintels					
	a) In RCC M-150	Cum	6994	1017		
	b) In RCC M-200	Cum	7374	1993		
	c) In RCC M-250	Cum	7442	2031		
	d) In RCC M-300	Cum	8067	2070		
13	Providing and casting in situ **Ready Mix Cement Concrete** grade of trap / granite / quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel)**					
	Slabs / Landings / Vertical Walls / Waist					
	a) In RCC M-150	Cum	7424	1065		
	b) In RCC M-200	Cum	8011	2579		
	c) In RCC M-250	Cum	8436	2678		
	d) In RCC M-300	Cum	8702	2667		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
14	Providing and casting in situ **Ready Mix Cement Concrete** grade of trap / granite / quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel)**					
	Chajjas / Parapets / Curtain Walls / Partition Walls / Pardies					
	a) In RCC M-150	Cum	7511	1126		
	b) In RCC M-200	Cum	7912	2524		
	c) In RCC M-250	Cum	8337	2640		
	d) In RCC M-300	Cum	8658	2667		
15	Providing and casting in situ **Ready Mix Cement Concrete** grade of trap / granite / quartzite / gneiss metal of approved quality for **RCC works** as per detailed drawings and designs or as directed by Engineer-in-charge including normal dewatering, centering, form work, compaction, finishing the formed surfaces with CM 1:3 of sufficient minimum thickness to give a smooth and even surface wherever necessary or roughening if special finish is to be provided and curing including transporting from mixing plant upto distance of 25 km., pouring the concrete at work site for 1.5 M lift above G.L. and 5.0 M lift below G.L., etc. complete. **(Excluding reinforcement and structural steel)**					
	Domes					
	a) In RCC M-150	Cum	7757	1092		
	b) In RCC M-200	Cum	8208	2832		
	c) In RCC M-250	Cum	8632	2960		
	d) In RCC M-300	Cum	8898	2947		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
	Notes					
	1) Add Rs. 10/- per Cum for transportation beyond 25 km. for every additional lead of 1 km.					
	2) Beyond 1.5 M above G.L. and 5.0 M below G.L., concreting is to be done by pumping by the Company.					
	3) Additional rate of pumping is					
	a) Static Pump : Rs. 175/- per Cum					
	b) Mobile Pump : Rs. 250/- per Cum					
	4) For Ready Mix Concrete, prior permission from Chief Engineer must be obtained.					
	Note : Completed rates are inclusive of 12.5% EPF and 1% Insurance Charges.					

SECTION - H
MISCELLANEOUS

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	**Providing and fixing G.I. pipe railing** having 1.0 M height consisting 50 x 50 x 6 mm thick M.S. angles as verticals at 1.5 M c/c and additional posts at every corner with 3 rows of 25 mm dia G.I. pipes of medium class variety as horizontal and painting 3 coats of oil paint over 1 coat of anticorrosive paint of approved colour and shade including cost of all labour, transporting bends to curved shape, etc. complete.	RM	916	85.00		
A	As above but with only 2 rows.	RM	691	57.00		
2	**Dismantling of ESRs** of various capacities and heights using crane (10 MT capacity) and handing over M.S./ C.I./G.I. pipes, valves, bends, etc. to the Department. However taking steel reinforcement by the dismantling agency including removing dismantled materials from site and disposing them at suitable place as directed, etc. complete.					
A	Capacity of E.S.R. upto 2 lakh litres and staging upto 12 M height.					
	i) Congested Area	Lit	2.41	2.20		
	ii) Open Area	Lit	1.23	1.09		
B	Capacity of E.S.R. above 2 lakh litres and staging upto 12 M height					
	i) Congested Area	Lit	2.12	1.23		
	ii) Open Area	Lit	1.21	1.09		
	Note : Above 12 M staging height, add 5% per metre staging of E.S.R. of any capacity.					
3	**Providing and fixing M.S. gate 2.5 M wide** for compound with 40 mm dia G.I. pipe, approved grill work, RCC M-150 side pillars of 25 cm x 40 cm x 2.5 M height, its foundation, finishing, painting, etc. complete.	No.	31862	4018.00		
4	**Providing and fixing Wicket gate 1.0 M wide** for compound with 40 mm dia G.I. pipe, approved grill work, RCC M-150 side pillars of 25 cm x 40 cm x 2.5 M height, its foundation, finishing, painting, etc. complete.	No.	18347	2425.00		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
5	**Taking trial bore (Core Bore Sampling) by Callyx machine with TCT/NX bits to gather undisturbed strata samples** for investigation in all types of strata, soft soil, murum, hard murum with boulders, soft rock, hard rock and quartzite, etc. The item includes all hire and running cost of Callyx machine, conveying all materials to site of work excluding conveyance of callyx machine and back sampling all over burden strata in glass jar and core samples serially numbered at site in a wooden core box, samples to be taken at 1.0 M interval and conveying to the place as directed by Engineer-in-charge. The diameter of bore in overburden shall be 100 mm and of NX size (50 mm) in other strata. The item shall also include M.S. casing pipe of 2.5 mm thick plate in overburden only and shall be 1.0 M above GL with cap over it.					
	a) In overburden (soft soil, murum)	RMT	1538	232.00		
	b) In weathered rock with boulders	RMT	6024	1310.00		
	c) In weathered rock / soft rock	RMT	3084	666.00		
	d) In hard rock other than quartzite	RMT	4186	923.00		
	e) In hard rock quartzite	RMT	8935	1904.00		
6	Providing **pressure grouting at a pressure of 5.6 kg/sqcm** in required row / zigzag fashion as specified at 1.5 M interval as per site conditions to stop leakages through water retaining structures to the entire satisfaction of the Engineer-in-charge including material compound, hardening materials, compressor equipment including scaffolding, smooth finishing, etc. complete					
	i) For masonry structure	Bag	1030	137.00		
	ii) For concrete structure	Bag	1023	144.00		
7	**Drilling 40 mm dia holes** in masonry or concrete structure with providing and fixing 0.5 M long G.I. pipeline for pressure grouting including all material, labour cost and machinery charges, etc. complete.	RM	871	110.00		
8	**Providing and casting ferrocrate water tank** at site including all cost of labour and material, etc. complete upto 25,000 litres (for foundation and providing and fixing taps, etc. shall be considered separately).	Lit	5	1.00		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
9	**Providing and applying one coat of gamma coating** or equivalent such as Dr.Bake, Krishna Conchem, Asian Paint, Atul Limited, Burger Paint, epoxy primer 50 to 60 microns thick and covering two coats of gamma coatings or equivalent such as Dr. Bake, Krishna Conchem, Asian Paint, Atul Limited, Burger Paints 30 microns thick each to new M.S. pipes and structural steel or concrete surface including repainting the surface by finishing by solvent degreasing and de-rusting by applying chemical method and scaffolding if necessary, etc. complete as per manufacturer's specifications.	Sqm	366	165.00		
10	Making cross connection to existing distribution main of any type including excavation, breaking and removing existing pipes, lowering, laying of specials and pipes in their position, refilling, closing the water supply in that area, dewatering and restarting the water supply, etc. complete as directed by Engineer-in-charge for following diameters of existing pipeline, irrespective of diameter of branch line. (The number of joints involved will be paid separately depending upon the nature of joints and required pipes, valves and specials will be supplied free of cost at stores.)					
i)	80 mm	No	2492	2088.00		
ii)	100 mm	No	2839	2369.00		
iii)	125 mm	No	3116	2609.00		
iv)	150 mm	No	3485	2950.00		
v)	200 mm	No	3648	3108.00		
vi)	250 mm	No	4333	3690.00		
vii)	300 mm	No	5164	4348.00		
viii)	350 mm	No	6085	5179.00		
ix)	400 mm	No	7336	6200.00		
x)	450 mm	No	8217	6970.00		
xi)	500 mm	No	9842	8592.00		
xii)	600 mm	No	18068	15095.00		
xiii)	700 mm	No	22302	18605.00		
xiv)	750 mm	No	28040	23395.00		
xv)	800 mm	No	36053	30020.00		
xvi)	900 mm	No	47376	39335.00		
xvii)	1000 mm	No	66176	54760.00		
	Note : Only 75% rate shall be payable till satisfactory hydraulic testing is given.					

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
11	Dismantling dead pipeline of M.S./ R.C.C./ C.I./ P.S.C. and G.I./ A.C./ P.V.C./ S.W./ H.D.P.E. pipe including cost of necessary excavation and refilling of trenches, breaking the joints, lifting the pipes and stacking to the place as directed by Engineer-in-charge with all leads and lifts including cleaning the surface, etc. complete.					
A	For M.S. / R.C.C. / C.I. / P.S.C.					
i)	80 mm	RMT	180	38.00		
ii)	100 mm	RMT	199	57.00		
iii)	125 mm	RMT	203	61.00		
iv)	150 mm	RMT	207	64.00		
v)	200 mm	RMT	228	76.00		
vi)	250 mm	RMT	252	90.00		
vii)	300 mm	RMT	274	103.00		
viii)	350 mm	RMT	307	127.00		
ix)	400 mm	RMT	334	143.00		
x)	450 mm	RMT	379	158.00		
xi)	500 mm	RMT	398	161.00		
xii)	600 mm	RMT	487	210.00		
xiii)	700 mm	RMT	568	245.00		
xiv)	750 mm	RMT	640	277.00		
B	For G.I. / A.C. / P.V.C. / S.W. / H.D.P.E.					
i)	80 mm	RMT	108	24.00		
ii)	100 mm	RMT	119	34.00		
iii)	125 mm	RMT	121	36.00		
iv)	150 mm	RMT	123	38.00		
v)	200 mm	RMT	137	46.00		
vi)	250 mm	RMT	152	55.00		
vii)	300 mm	RMT	163	61.00		
viii)	350 mm	RMT	184	76.00		
ix)	400 mm	RMT	201	87.00		
x)	450 mm	RMT	227	95.00		
xi)	500 mm	RMT	239	99.00		
xii)	600 mm	RMT	292	127.00		
xiii)	700 mm	RMT	342	147.00		
xiv)	750 mm	RMT	384	166.00		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
12	**Providing and constructing two taps standpost** as per type design with excavation 15 cm thick PCC 1:3:6 bedding 20 mm thick PCC 1:2:4 concrete for platform of 1.75 M dia. with side curb and bucket rest, 80 mm dia, heavy duty GI pipe central post duly filled therein with C.C. 1:2:4, 5 M long, 20 mm dia. medium G.I. pipe from point of tapping to standpost, additional 20 mm dia G.I. pipe fixed vertically upto 15 mm dia self closing water taps, one brass ferrule, etc. complete together with all labour and material charges as per drawing and as directed by Engineer-in-charge when good foundation is available. Rate includes draining arrangement by excavating open gutters.	No	9609	1258.00		
A	As above but when precast RCC platform or precast standpost is issued free of cost at departmental stores including cost of transportation and fixing, etc. complete.	No	5271	544.00		
13	**Providing and constructing two taps standpost** as per type design with excavation 30 cm thick boulder filling 15 cm thick PCC in 1:3:6, 20 mm thick RCC, 1:2:4 platform of 1.75 M dia. with side curb and bucket rest, 80 mm dia, heavy duty GI pipe central post duly filled therein with C.C. 1:2:4, 5 M long, 20 mm dia. medium G.I. pipe from point of tapping to standpost, additional 20 mm dia G.I. pipe fixed horizontally and providing and fixing two 15 mm dia GI self closing water taps, one brass ferrule, etc. complete together with all labour and material charges as per drawing and as directed by Engineer-in-charge when B.C. soil is available. Rate includes draining arrangement by excavating open gutters.	No	10291	1281.00		
A	As above but when precast RCC platform or precast standpost is issued free of cost at departmental stores including cost of transportation and fixing, etc. complete.	No	6190	693.00		

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
14	**Pushing of M.S. pipes** of following dia for road crossing and railway crossing by push through method in all types of strata by using hydraulic jack and drilling machine of required diameter of below M.S. casing pipes, lowering, laying , jointing of material, required welding machinery, tripod, shain -pulley block crain, blower, compressor, loading and unloading of machinery into the trench, etc. transportation and dewatering, etc complete, as directed by engineer-in-charge but excluding the cost of M.S. pipes.					
	a) 200 mm to 499 mm dia MS pipe	RMT	25107			
	b) 500 mm to 1000 mm dia MS pipe	RMT	31384			
15	**Providing and erecting slip form shuttering** including dismantling after completion for constructing vertical shutters, such as jackwell, balancing tank, bridge column and for horizontal structure in R.C.C. The item includes lifting arrangement, centering, form work, normal dewatering, electrical arrangement with generator set and with all equipments for slip form shuttering work with labour, material and machinery, all rents, fuels, insurance charges. The rate is for various dia, depth and various sizes of structures, etc. complete. Note : A) All risks and costs lie with the contractor itself. B) The arrangement for lighting with cables till top height to be provided by the contractor. C) Any accident arising out of the work will be responsibility of the contractor. D) No idle charges for machinery and labour will be paid. E) Insurance for all types of machinery and workers will be borne by contractor.	Sq.M.	3299			

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
16	**Providing and Laying HDPE Geomembrane sheet** of following thickness 100% acid, alkali proof, 100% reinforced sealing quality, every joint electronically welded, as per relevant IS specification and placing in proper position on prepared bed on foundation/ embankment with welding the joints of sheet using hot sedge and extrusion welding techniques according to the leanier manufaturers specifications at ambient temperaturesnof 5qC to 45qC including all taxes and labour for jointing and placing etc. complete.					

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	500 micron	Sq.M.	272	68.00		
	250 micron	Sq.M.	188	47.00		
17	Providing and making **UPVC/MDPE pipe consumer service** connection on Distribution main by drilling hole with suitable means , including all labour , **UPVC/MDPE** Pipe of required length with or without Road crossing as described below, including cost of specials like Saddle/Clamp Saddle of suitable material, and diameter suitable for Distribution main, 15mm **/20mm/ 25mm respective** Dia Heavy duty Brass/Polyprophylyne(Twin Jacketed) Ferrule , Male and Female thread adapter Elbow, Bends,couplers ,Tees, Clamps of suitable material and sundry materials as per requirment, including providing and fixing medium duty 15.mm brass bib tap, **GI casing pipe of suitable diameter of 32mm/ 40mm/ 50mm respectively of required length for Road crossing**, including requird labour for excavation in all types of strata up to the depth of 0.75m or as per site requirement,all types of plumbing fittings, refilling , Closing the water supply in that area, dewatering, hydraulic testing and restarting the water supply ,transportation of material etc. complete as directed by Engineer in					
	A) Household Connection without water meter (Comression Saddle+ISI Mark Ferrul) for HDPE & PVC pipe					
	For **MDPE/UPVC Pipe** Service Connection on Disribution main					
	(With Road Crossing)					
	For 15 mm Service connection	No	3452			
	For 20 mm Service connection	No	4094			
	For 25 mm Service connection	No	5219			
	(Without Road Crossing)					
	For 15 mm Service connection	No	2501			
	For 20 mm Service connection	No	2969			
	For 25 mm Service connection	No	3856			
	B)Household Connection without water meter (With Integrated Saddle & compression Specials) For HDPE/PVC pipe					

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	(With Road Crossing)					
	For 15 mm Service connection	No	3115			
	For 20 mm Service connection	No	3954			
	For 25 mm Service connection	No	5449			
	(Without Road Crossing)					
	For 15 mm Service connection	No	2164			
	For 20 mm Service connection	No	2829			
	For 25 mm Service connection	No	4086			
18	Providing and making **GI pipe consumer service** connection on **GI Distribution main** by drilling hole with suitable means , including all labour ,**GI** Pipe of required length with or without Road crossing as described below, including cost of specials like Saddle/Clamp Saddle of suitable material, and diameter suitable for Distribution main, 15mm/20mm/25mm respective Dia. Heavy duty Brass/ Polyprophylyne (Twin Jacketed) Ferrule, Male and Female thread adapter Elbow, Bends, couplers ,Tees, Clamps of suitable material and sundry materials as per requirment, including providing and fixing medium duty 15.mm brass bib tap, **GI casing pipe of minimum 32mm/40mm/50mm respective dia of required length for Road crossing**, including requird labour for excavation in all types of strata up to the depth of 0.75m or as per site requirement,all types of plumbing fitting, refilling , Closing the water supply in that area, dewatering, hydraulic testing and restarting the water supply ,transportation of material etc. complete as directed by Engineer in charge.					
	(With Road Crossing)					
	For 15 mm Service connection	No	3734			
	For 20 mm Service connection	No	4604			
	For 25 mm Service connection	No	6160			
	(Without Road Crossing)					
	For 15 mm Service connection	No	2547			
	For 20 mm Service connection	No	3183			
	For 25 mm Service connection	No	4631			

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
19	Providing and applying 3 layer polyethylene coating of minimum 3000 micron composite coating and internal fusion bonded epoxy lining as per IS 3589 anex C of 400 micron thickness for underground laying M.S. pipes, Similarly dual layer polyester coating of 400 micron externally and internal fusion bonded lining as per IS 3531 for above ground laying M.S pipe. Rates shall include cost of material coating and wrapping over the pipes, handling charges , preparation of pipe surface all labour, material, including transportation of pipes from site of works to factory and back to site of works after coating etc complete. (The rate is for inside plus outside area both included.) Note- Pipe coating shall be done at factory		1439			
20	**External Coating** Providing and applying 100% Solids **Polyurethane Coating** meeting BIS16719 & Rigid, Directto Metal,100% Solids Polyurethane Coating meeting AWWA C-222 of minimum 1000 micron thickness on the external surface of MS Pipe after blast cleaning to SA 2½ with Anchor profile of >75Microns using angular Steel Grit. Pipe blast cleaning and coating shall only be permitted in the pipe manufacturer's facility, preferably on rolling conveyor using fast set materials. The rates are including loading, unloading, handling and transportation of Pipe etc complete.	Sqm	662			
	Product shall be supplied and applied as per detailed specification provided by the department.					

No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
21	**Internal Lining** Providing and applying 100% Solids **Polyurethane Coating** meeting BIS 16719 & Rigid, Directto Metal,100% Solids Polyurethane Coating meeting AWWA C-222 and satisfying the criterionfordrinking water as per WRAS-BS 6920 to a thickness of 500 Microns (SSPC PA2) on theinternal surface of MS Pipe afterblast cleaning to SA 2½ with Anchor Profile of >75 Microns Using angular Steel Grit.The Coating should meetTotal Organic Carbon (TOC) as per APHA-AWWAWEF5310C < 2.00 milligram/ Litre. Pipe lining shall only be permitted in the pipe manufacturer's facility. Site application shall not be permitted. The rates are including loading, unloading, handling and transportation of Pipe etc complete.	Sqm	470			
	Product shall be supplied and applied as per detailed specification provided by the department.					
22	**Internal Lining (food grade Epoxy)** Providing and applying two part food grade polyamide cured solvent less **epoxy lining,** meeting BIS 16676on the internal surface of MS Pipe afterblast cleaning to SA 2½ with Anchor Profile of >75 Microns Using angular Steel Grit.The minimum dry film thickness (DFT) of internal lining shall be 400 micron (SSPC PA2). The epoxy coating should offer highest resistance to cathodic disbondment and provide excellent adhesion to steel. The manufacturer shall have the certificate issued in support of portable water service for tests of pH, turbidity, total hardness, chloride nitrate, iron, arsenic & fluoride as per IS 10500 : 2003 and IS 16676 : 2017. Site application shall not be permitted.The rates are including loading, unloading, handling and transportation of Pipe etc complete.	Sqm	415			
	Product shall be supplied and applied as per detailed specification provided by the department.					

SECTION - I (I)

C.I./D.I. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	1. C.I. PIPES					
1.	Providing and supplying ISI mark **C.I. S&S pipes** (push on joints pressure pipes of C.I of following class and diameters confirming to the I.S.specification inclusive cost of jointing materials(Rubber gasket of EPDM Quality) excluding GST levied by GoI and GoM in all respect, Third party inspection charges of TPI Agency approved by MJP including Transit insurance, Railway Freight, Unloading from railway wagon, Loading into Truck, Transportation to departmental store/site of work,unloading, stacking etc. completed as directed by Engineer –in-charge (IS 1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition / revision with amendments for Rubber Gaskets.					
	(Suitable for Tyton / Pig lead joints)					
	a) Class 'LA'					
	i) 80 mm	Rmt	877.00			
	ii) 100 mm	Rmt	1099.00			
	iii) 150 mm	Rmt	1784.00			
	iv) 200 mm	Rmt	2569.00			
	v) 250 mm	Rmt	3462.00			
	vi) 300 mm	Rmt	4464.00			
1.	**C.I. PIPES 'A' Class Continued**					
B)	**Class 'A'**					
i)	80 mm	Rmt	905.00			
ii)	100 mm	Rmt	1131.00			
iii)	125 mm	Rmt	1472.00			
iv)	150 mm	Rmt	1812.00			
v)	200 mm	Rmt	2618.00			
vi)	250 mm	Rmt	3538.00			
vii)	300 mm	Rmt	4579.00			
viii)	350 mm	Rmt	5724.00			
ix)	400 mm	Rmt	7021.00			
x)	450 mm	Rmt	8505.00			
xi)	500 mm	Rmt	9752.00			
xii)	600 mm	Rmt	13021.00			
xiii)	700 mm	Rmt	16970.00			
xiv)	750 mm	Rmt	18849.00			
xv)	800 mm	Rmt	21072.00			
xvi)	900 mm	Rmt	25648.00			
xvii)	1000 mm	Rmt	30851.00			
c)	**Class 'B'**					
i)	80 mm	Rmt	963.00			
ii)	100 mm	Rmt	1206.00			
iii)	125 mm	Rmt	1584.00			
iv)	150 mm	Rmt	1950.00			
v)	200 mm	Rmt	2829.00			
vi)	250 mm	Rmt	3826.00			
vii)	300 mm	Rmt	4961.00			
viii)	350 mm	Rmt	6210.00			
xiv)	400 mm	Rmt	7170.00			
x)	450 mm	Rmt	9177.00			
xi)	500 mm	Rmt	10549.00			
xii)	600 mm	Rmt	13900.00			
xiii)	700 mm	Rmt	18169.00			
xiv)	750 mm	Rmt	20449.00			
xv)	800 mm	Rmt	22794.00			
xvi)	900 mm	Rmt	27788.00			
xvii)	1000 mm	Rmt	33339.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
2.	**Lowering laying and jointing with SBR ruber gaskets C.I. S/S pipes** of various classes with CI / MS specials of following diameter in proper position, grade and alignment as directed by Engineer-in-charge including conveyance of material from stores to site of work, **including cost of jointing materials and rubber rings labour** etc. complete.		Without Rubber Rings	With Rubber Rings		
	Note : Only SBR Rubber gaskets to be used as per					
a)	**C.I. 'L.A.' Class / Mortar inlined DI K-9/K-7**					
i)	80 mm.	Rmt	53.00	61.00		
ii)	100 mm.	Rmt	64.00	70.00		
iii)	125 mm.	Rmt	80.00	88.00		
iv)	150 mm.	Rmt	86.00	96.00		
v)	200 mm.	Rmt	113.00	125.00		
vi)	250 mm.	Rmt	149.00	164.00		
vii)	300 mm.	Rmt	161.00	184.00		
viii)	350 mm.	Rmt	200.00	226.00		
ix)	400 mm.	Rmt	241.00	278.00		
x)	450 mm.	Rmt	241.00	293.00		
xi)	500 mm.	Rmt	278.00	339.00		
xii)	600 mm.	Rmt	365.00	450.00		
xiii)	700 mm.	Rmt	472.00	634.00		
xiv)	750 mm.	Rmt	528.00	693.00		
xv)	800 mm.	Rmt	646.00	813.00		
xvi)	900 mm.	Rmt	772.00	1021.00		
xvii)	1000 mm.	Rmt	912.00	1238.00		
B)	**C.I. 'A' Class**					
i)	80 mm.	Rmt	55.00	68.00		
ii)	100 mm.	Rmt	68.00	80.00		
iii)	125 mm.	Rmt	87.00	96.00		
iv)	150 mm.	Rmt	95.00	103.00		
v)	200 mm.	Rmt	122.00	134.00		
vii)	250 mm.	Rmt	161.00	177.00		
viii)	300 mm.	Rmt	176.00	197.00		
viii)	350 mm.	Rmt	216.00	242.00		
ix)	400 mm.	Rmt	243.00	279.00		
x)	450 mm.	Rmt	255.00	295.00		
xi)	500 mm.	Rmt	300.00	360.00		
xii)	600 mm	Rmt	397.00	481.00		
xiii)	700 mm.	Rmt	510.00	672.00		
xiv)	750 mm.	Rmt	575.00	737.00		
xv)	800 mm.	Rmt	678.00	843.00		
xvi)	900 mm.	Rmt	815.00	1064.00		
xvii)	1000 mm.	Rmt	953.00	1278.00		
c)	**CI 'B' Class**					
i)	80 mm.	Rmt	61.00	70.00		
ii)	100 mm.	Rmt	72.00	87.00		
iii)	125 mm.	Rmt	94.00	103.00		
iv)	150 mm.	Rmt	105.00	117.00		
v)	200 mm.	Rmt	134.00	150.00		
vi)	250 mm.	Rmt	174.00	197.00		
vii)	300 mm.	Rmt	190.00	212.00		
viii)	350 mm.	Rmt	233.00	271.00		
ix)	400 mm.	Rmt	271.00	307.00		
x)	450 mm.	Rmt	276.00	316.00		
xi)	500 mm.	Rmt	323.00	383.00		
xii)	600 mm.	Rmt	430.00	510.00		
xiii)	700 mm.	Rmt	552.00	710.00		
xiv)	750 mm.	Rmt	624.00	785.00		
xv)	800 mm.	Rmt	727.00	890.00		
xvi)	900 mm.	Rmt	861.00	1109.00		
xvii)	1000 mm.	Rmt	983.00	1306.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	Note :Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.					
3.	**Providing D.I. pipes** (push on joints pressure pipes of D. I. of following class and diameters confirming to the I. S. specification inclusive cost of jointing materials (Rubber gasket of EPDM Quality) excluding GST levied by GOI & GOM in all respect including Third party inspection charges of TPI Agency approved by MJP including Transit insurance, Railway Freight, Unloading from railway wagon, Loading into Truck, Transportation to departmental store, unloading, stacking etc. completed as directed by Engineer in charges (IS 1536/2001 for pipes and IS 158/1969 and IS 12820/1989 or latest edition/revision with amendments for Rubber Gaskets.					
	(IS:8329-2000 Latest Version)					
i)	100mm	Rmt	753.00	934.00		
ii)	150mm	Rmt	1051.00	1232.00		
iii)	200mm	Rmt	1393.00	1674.00		
iv)	250mm	Rmt	1811.00	2254.00		
v)	300mm	Rmt	2225.00	2792.00		
vi)	350 mm	Rmt	2782.00	3441.00		
vii)	400 mm	Rmt	3320.00	4124.00		
viiii)	450 mm	Rmt	3954.00	5019.00		
ix)	500 mm	Rmt	4606.00	5839.00		
x)	600 mm	Rmt	6085.00	7637.00		
xi)	700 mm	Rmt	8254.00	9847.00		
xii)	750 mm	Rmt	9531.00	11077.00		
xiii)	800 mm	Rmt	10846.00	12055.00		
xiv)	900 mm	Rmt	13150.00	14734.00		
xv)	1000 mm	Rmt	15741.00	17816.00		
xvi)	1100 mm	Rmt	20830.00	21310.00		
xvii)	1200 mm	Rmt	24189.00	24670.00		
	Note: For DI pipe supply from MJP 18% GST would be applicable					
4.	**Providing and making lead caulked joint with molten lead to Cast Iron pipes** and / or specials of all classes and fitting of following dia including cost of lead and all jointing material, labour, hydraulic testing etc. complete.					
i)	80 mm.	Joint	871.00			
ii)	100 mm.	Joint	1078.00			
iii)	125 mm.	Joint	1283.00			
iv)	150 mm.	Joint	1593.00			
v)	200 mm.	Joint	2322.00			
vi)	250 mm.	Joint	2819.00			
vii)	300 mm.	Joint	3400.00			
viiii)	350 mm.	Joint	3854.00			
ix)	400 mm.	Joint	4496.00			
x)	450 mm.	Joint	6243.00			
xi)	500 mm.	Joint	6711.00			
xii)	600 mm.	Joint	8623.00			
xiii)	700 mm.	Joint	10130.00			
xiv)	750 mm.	Joint	11505.00			
xv)	800 mm.	Joint	12355.00			
xvi)	900 mm.	Joint	13178.00			
xvii)	1000 mm.	Joint	14051.00			
	Note :Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.					

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
5.	**Providing and supplying ISI standard CI double flanged pipes** excluding GST levied by GOI & GOM in all respect including railway freight, insurance, unloading from railway wagon, loading into truck transport to stores, unloading etc. complete as directed by Engineer-in-charge.					
i)	80 mm.	Rmt	1466.00			
ii)	100 mm.	Rmt	1813.00			
iii)	125 mm.	Rmt	2360.00			
iv)	150 mm.	Rmt	2945.00			
v)	200 mm.	Rmt	4519.00			
vi)	250 mm.	Rmt	6089.00			
vii)	300 mm.	Rmt	7829.00			
viii)	350 mm.	Rmt	10218.00			
ix)	400 mm.	Rmt	12459.00			
x)	450 mm.	Rmt	14960.00			
xi)	500 mm.	Rmt	17557.00			
xii)	600 mm.	Rmt	24976.00			
xiii)	700 mm.	Rmt	33461.00			
xix)	750 mm.	Rmt	36407.00			
6.	Providing and supplying ISI standard **CI flanged / S& S specials** including all statutory duties & taxes such as GST levied by GOI & GOM in all respect, railway freight, insurance, unloading from railway wagon, loading into truck transport to departmental store /site, unloading stacking etc. complete.					
a)	**D/F Specials**					
i)	80 to 300 mm dia	Kg.	73.00			
ii)	350 to 600 mm dia	Kg.	78.00			
iii)	Above 600 mm dia	Kg.	84.00			
b)	**S/S Specials / Socketed Branch Flanged Specials**					
i)	80 to 300 mm dia	Kg.	70.00			
ii)	350 to 600 mm dia	Kg.	75.00			
iii)	Above 600 mm dia	Kg.	80.00			
	C) Plain ended/ plain ended branch flanged specials					
i)	80 to 300 mm dia	Kg.	68.00			
ii)	350 to 600 mm dia	Kg.	75.00			
iii)	Above 600 mm dia	Kg.	80.00			
7.	Providing and supplying ISI standard **MS specials** of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra & Mahindra make) from inside and outside excluding all statutory duties & taxes such as GST levied by GOI & GOM in all respect, inspection charges, transportation to stores / site, and stacking, etc. complete.					
a)	Machine ends suitable for PSC pipes of all diameters as per detailed drawing with 10 mm thick x 0.7 M long barrel welded to it.	Kg.	101.00			
b)	Only flanges with machining and drilling holes, etc. com-plete more than 40 mm thick.	Kg.	98.00			
c)	Double flanged specials of all diameters	Kg.	95.00			
d)	All socketed specials or socketed branch flanged specials of all diameters.	Kg.	95.00			
e)	Plain ended specials or plain ended branch flanged specials of all diameters.	Kg.	95.00			
f)	MS barrels (pipe pieces) locally manufactured (for small quantities)	Kg.	92.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
8.	**Providing and making flanged joints to flanged C.I./M.S. pipes** of all classes/specials etc. including cost of all jointing materials (rubber packing, nut bolts, etc.), labour, hydraulic testing etc. complete.					
i)	80 mm.	Joint	263.00			
ii)	100 mm.	Joint	453.00			
iii)	125 mm.	Joint	474.00			
iv)	150 mm.	Joint	910.00			
v)	200 mm.	Joint	943.00			
vi)	250 mm.	Joint	1352.00			
vii)	300 mm.	Joint	1404.00			
viii)	350 mm.	Joint	1828.00			
ix)	400 mm.	Joint	2278.00			
x)	450 mm.	Joint	2784.00			
xi)	500 mm.	Joint	2882.00			
xii)	600 mm.	Joint	3094.00			
xiii)	700 mm.	Joint	4661.00			
xiv)	750 mm.	Joint	4792.00			
xv)	800 mm.	Joint	6631.00			
xvi)	900 mm	Joint	6873.00			
xvii)	1000 mm	Joint	7115.00			
	Note :Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.					
9.	**Erecting and hoisting in position and jointing, testing M.S./ C.I. D/F pipes and specials** in vertical position including cost of all jointing materials (rubber packing, nut bolts, etc.) labour, scaffolding, hydraulic testing etc. complete.					
i)	80 mm.	Joint	266.00			
ii)	100 mm.	Joint	450.00			
iii)	125 mm.	Joint	475.00			
iv)	150 mm.	Joint	884.00			
v)	200 mm.	Joint	939.00			
vi)	250 mm.	Joint	1342.00			
vii)	300 mm.	Joint	1416.00			
viii)	350 mm.	Joint	1839.00			
ix)	400 mm.	Joint	2287.00			
x)	450 mm.	Joint	2794.00			
xi)	500 mm.	Joint	2924.00			
xii)	600 mm.	Joint	3209.00			
xiii)	700 mm.	Joint	4760.00			
xiv)	750 mm.	Joint	4941.00			
xv)	800 mm.	Joint	6691.00			
xvi)	900 mm	Joint	7043.00			
xvii)	1000 mm	Joint	7424.00			
	Note :Only 85 % rate shall be payable till satisfactory Hydraulic testing is given.					
10.	Providing and supplying ISI standard D. I. specials & fitting with sealing rubber gasket of S.B.R, complete with cast iron follower gland and M. S. nut bolts coated or otherwise protected from rusting and suitable for D.I.pipes including cost of labour ,materials, and transportation to stores / site, loading and unloading excluding GST levied by GOI & GOM in all respect, complete as per IS-9523. **For all types of specials, bends tees etc.**					
	a) 80 to 300 mm dia.	Kg.	111.00			
	b) 350 mm & above dia.	Kg.	135.00			
	Providing and supplying ISI standard welded DI double					

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
11.	Providing and supplying ISI standard welded **DI double flanged pipe** excluding GST levied by GOI & GOM in all respect, railway freight, insurance, unloading from railway wagon, loading into truck transport to store / site, unloading, stacking etc. complete as directed by Engineer -in- charge. (for 2.75 m bare pipe)					
	i) 100 mm	Rmt.	1984.00			
	ii) 150 mm	Rmt.	2694.00			
	iii) 200 mm	Rmt.	3447.00			
	iv) 250 mm	Rmt.	4679.00			
	v) 300 mm	Rmt.	5888.00			
	vi) 350 mm	Rmt.	7669.00			
	vii) 400 mm	Rmt.	9283.00			
	viii) 450 mm	Rmt.	11093.00			
	ix) 500 mm	Rmt.	12894.00			
	x) 600 mm	Rmt.	16976.00			
	xi) 700 mm	Rmt.	22844.00			
	xii) 800 mm	Rmt.	27923.00			
	xiii) 900 mm	Rmt.	34660.00			
	xiv) 1000 mm	Rmt.	40696.00			
12.	**Hydraulic testing of C.I./D.I. pipe line** to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position using water supplied by the contractor.		Without Rubber Rings	With Rubber Rings		
i)	80 mm.	Km	5876.00	6771.00		
ii)	100 mm.	Km	7153.00	7921.00		
iii)	125 mm.	Km	8815.00	9836.00		
iv)	150 mm.	Km	9453.00	10603.00		
v)	200 mm.	Km	12647.00	13925.00		
vii)	250 mm.	Km	16479.00	18140.00		
vii)	300 mm.	Km	17885.00	20439.00		
viii)	350 mm.	Km	22228.00	24911.00		
ix)	400 mm.	Km	26699.00	30914.00		
x)	450 mm.	Km	26699.00	32575.00		
xi)	500 mm.	Km	30914.00	37557.00		
xii)	600 mm.	Km	40623.00	50076.00		
xiii)	700 mm.	Km	52377.00	70385.00		
xiv)	750 mm.	Km	58636.00	77031.00		
xv)	800 mm.	Km	71793.00	90444.00		
xvi)	900 mm.	Km	85718.00	113439.00		
xvii)	1000 mm.	Km	101431.00	137581.00		
	B) C.I."A" Class					
i)	80 mm.	Rmt	6133.00	7537.00		
ii)	100 mm.	Rmt	7537.00	8815.00		
iii)	125 mm.	Rmt	9581.00	10603.00		
iv)	150 mm.	Rmt	10475.00	11497.00		
v)	200 mm.	Rmt	13670.00	14819.00		
vii)	250 mm.	Rmt	17885.00	19545.00		
vii)	300 mm.	Rmt	19417.00	21844.00		
viii)	350 mm.	Rmt	24016.00	26827.00		
ix)	400 mm.	Rmt	26954.00	31043.00		
x)	450 mm.	Rmt	28360.00	32831.00		
xi)	500 mm.	Rmt	33342.00	39985.00		
xii)	600 mm.	Rmt	44072.00	53397.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xiii)	700 mm.	Rmt	56719.00	74604.00		
xiv)	750 mm.	Rmt	63745.00	81885.00		
xv)	800 mm.	Rmt	75242.00	93638.00		
xvi)	900 mm.	Rmt	90699.00	118292.00		
xvii)	1000 mm.	Rmt	105774.00	141925.00		
	C) C.I."B" Class					
i) ii)	80	Rmt	6771.00	7921.00		
	100 mm.	Rmt	8048.00	9581.00		
iii)	125 mm.	Rmt	10348.00	11497.00		
iv)	150 mm.	Rmt	11625.00	12902.00		
v)	200 mm.	Rmt	14819.00	16608.00		
vii)	250 mm.	Rmt	19290.00	21973.00		
vii)	300 mm.	Rmt	21078.00	23506.00		
viii)	350 mm.	Rmt	25933.00	30149.00		
ix)	400 mm.	Rmt	30149.00	34235.00		
x)	450 mm.	Rmt	30531.00	35130.00		
xi)	500 mm.	Rmt	35897.00	42412.00		
xii)	600 mm.	Rmt	47649.00	56719.00		
xiii)	700 mm.	Rmt	61318.00	78819.00		
xiv)	750 mm.	Rmt	69238.00	87251.00		
xv)	800 mm.	Rmt	80735.00	98876.00		
xvi)	900 mm.	Rmt	95809.00	123146.00		
xvii)	1000 mm.	Rmt	109223.00	145119.00		
13.	**Providing and supplying C.I. detachable joints** suitable for A. C. pressure pipes manufactured as per IS-1538-1993 standards of following calass and diameter including cost of insurance, railway freight, inspection charges, unloding from railway wagon, loding into truck, transporting to departmental store, unloading, stacking and cost of rubber rings, nut bolts. excluding GST levied by GOI & GOM in all respect etc. complete (IS-1538-1993)					
	Class 10/15					
	i) 80 mm.	Rmt.	279.00			
	ii) 100 mm.	Rmt.	353.00			
	iii) 125 mm.	Rmt.	475.00			
	iv) 150 mm.	Rmt.	592.00			
	v) 200 mm.	Rmt.	893.00			
	vii) 250 mm.	Rmt.	1119.00			
	vii) 300 mm.	Rmt.	1535.00			
	Class 20					
	i) 80 mm.	Rmt.	431.00			
	ii) 100 mm.	Rmt.	449.00			
	iii) 125 mm.	Rmt.	558.00			
	iv) 150 mm.	Rmt.	669.00			
	v) 200 mm.	Rmt.	899.00			
	vii) 250 mm.	Rmt.	1268.00			
	vii) 300 mm.	Rmt.	1816.00			

SECTION - I (II)

P.V.C. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
II.	P. V. C. PIPES					
1.	Providing and supplying in standard lengths ISI mark rigid unplasticised PVC pipes suitable for potable water with solvent cement joints including cost of couplers, as per IS specification no. 4985 / 1988 excluding GST levied by GOI and GOM in all respect, including transportation, freight charges, inspection charges, loading, unloading, conveyance to the departmental stores and stacking the same in closed shed duly protected from sun rays and rains including cost of jointing material i.e. solvent cement, etc. complete (selffit type to be jointed with cement solvent).					
Note	: 1) 10% of cost of pipes shall be considered for cost of PVC specials for estimate purpose only.					
	2) One coupler and required cement solvent shall be provided with each full length pipe cost of which is included in rates below.					
a)	Working Pressure 4 Kg./Sq.cm					
i)	63 mm.	Rmt	63.00			
ii)	75 mm.	Rmt	89.00			
iii)	90 mm.	Rmt	124.00			
iv)	110 mm.	Rmt	169.00			
v)	140 mm	Rmt	283.00			
vi)	160 mm.	Rmt	371.00			
vii)	180 mm.	Rmt	508.00			
viii)	200 mm.	Rmt	626.00			
ix)	225 mm.	Rmt	801.00			
x)	250 mm.	Rmt	979.00			
xi)	280 mm.	Rmt	1301.00			
xii)	315 mm.	Rmt	1655.00			
b)	Working Pressure 6 Kg. / Sq.cm					
i)	63 mm.	Rmt	89.00			
ii)	75 mm.	Rmt	126.00			
iii)	90 mm.	Rmt	184.00			
iv)	110 mm.	Rmt	251.00			
v)	140 mm.	Rmt	419.00			
vi)	160 mm.	Rmt	541.00			
vii)	180 mm.	Rmt	719.00			
viii)	200 mm.	Rmt	920.00			
ix)	225 mm.	Rmt	1160.00			
x)	250 mm.	Rmt	1448.00			
xi)	280 mm.	Rmt	1909.00			
xii)	315 mm.	Rmt	2436.00			
C	Working Pressure 8 Kg/Sq.cm					
i)	63 mm.	Rmt	123.00			
ii)	75 mm.	Rmt	175.00			
iii)	90 mm.	Rmt	248.00			
iv)	110 mm.	Rmt	351.00			
v)	140 mm.	Rmt	581.00			
vi)	160 mm.	Rmt	763.00			
vii)	180 mm.	Rmt	1009.00			
viii)	200 mm.	Rmt	1269.00			
ix)	225 mm.	Rmt	1611.00			
x)	250 mm.	Rmt	2015.00			
xi)	280 mm.	Rmt	2654.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xii)	315 mm.	Rmt	3361.00			
d)	Working Pressure 10 Kg./Sq.cm					
ii)	63 mm.	Rmt	149.00			
ii)	75 mm.	Rmt	211.00			
iii)	90 mm.	Rmt	303.00			
iv)	110 mm.	Rmt	428.00			
v)	140 mm.	Rmt	693.00			
vi)	160 mm.	Rmt	906.00			
vii)	180 mm.	Rmt	1249.00			
viii)	200 mm.	Rmt	1544.00			
ix)	225 mm.	Rmt	1969.00			
x)	250 mm.	Rmt	2488.00			
xi)	280 mm.	Rmt	3129.00			
xii)	315 mm.	Rmt	3974.00			
e)	Working Pressure 12.50 Kg./Sq.cm					
ii)	63 mm.	Rmt	189.00			
ii)	75 mm.	Rmt	265.00			
iii)	90 mm.	Rmt	384.00			
iv)	110 mm.	Rmt	543.00			
v)	140 mm.	Rmt	884.00			
vi)	160 mm.	Rmt	1163.00			
vii)	180 mm.	Rmt	1589.00			
viii)	200 mm.	Rmt	1970.00			
ix)	225 mm.	Rmt	2504.00			
x)	250 mm.	Rmt	3166.00			
xi)	280 mm.	Rmt	3985.00			
xii)	315 mm.	Rmt	5080.00			
2.	Providing and supplying in standard lengths ISI mark rigid unplastised PVC for potable water with rubber ring joints including cost of rubber ring as per IS-4985-1998, excluding GST levied by GOI and GOM in all respect, including transportation, freight charges, transit insurance, inspection charges, loading, unloading, conveyance to store and stacking the same in closed shed duly protected from sun rays and rains, etc. complete (with third party inspection) (socketed)					
	a) Working Pressure 4 Kg/Sq.cm					
i)	63 mm.	Rmt	69.00			
ii)	75 mm.	Rmt	96.00			
iii)	90 mm.	Rmt	138.00			
iv)	110 mm.	Rmt	189.00			
v)	125 mm	Rmt	259.00			
vi)	140 mm.	Rmt	314.00			
vii)	160 mm.	Rmt	414.00			
viii)	180 mm.	Rmt	563.00			
ix)	200 mm.	Rmt	693.00			
x)	225 mm.	Rmt	890.00			
xi)	250 mm.	Rmt	1090.00			
xii)	280 mm.	Rmt	1445.00			
xiii)	315 mm.	Rmt	1836.00			
	b) Working Pressure 6 Kg/Sq.cm					
i)	63 mm.	Rmt	98.00			
ii)	75 mm.	Rmt	141.00			
iii)	90 mm.	Rmt	204.00			
iv)	110 mm.	Rmt	278.00			
v)	125 mm	Rmt	384.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
vi)	140 mm.	Rmt	466.00			
vii)	160 mm.	Rmt	600.00			
viii)	180 mm.	Rmt	801.00			
ix)	200 mm.	Rmt	1019.00			
x)	225 mm.	Rmt	1288.00			
xi)	250 mm.	Rmt	1609.00			
xii)	280 mm.	Rmt	2120.00			
xiii)	315 mm.	Rmt	2704.00			
	c) Working Pressure 8 Kg./Sq.cm					
i)	63 mm.	Rmt	134.00			
ii)	75 mm.	Rmt	196.00			
iii)	90 mm.	Rmt	275.00			
iv)	110 mm.	Rmt	389.00			
v)	125 mm	Rmt	536.00			
vi)	140 mm.	Rmt	645.00			
vii)	160 mm.	Rmt	846.00			
viii)	180 mm.	Rmt	1123.00			
ix)	200 mm.	Rmt	1410.00			
x)	225 mm.	Rmt	1789.00			
xi)	250 mm.	Rmt	2236.00			
xii)	280 mm.	Rmt	2948.00			
xiii)	315 mm.	Rmt	3735.00			
	d) Working Pressure 10 Kg./Sq.cm					
i)	63 mm.	Rmt	165.00			
ii)	75 mm.	Rmt	235.00			
iii)	90 mm.	Rmt	335.00			
iv)	110 mm.	Rmt	476.00			
v)	125 mm	Rmt	654.00			
vi)	140 mm.	Rmt	769.00			
vii)	160 mm.	Rmt	1006.00			
viii)	180 mm.	Rmt	1386.00			
ix)	200 mm.	Rmt	1714.00			
x)	225 mm.	Rmt	2186.00			
xi)	250 mm.	Rmt	2765.00			
xii)	280 mm.	Rmt	3475.00			
xiii)	315 mm.	Rmt	4415.00			
	e)Working Pressure 12.5 Kg./Sq.cm					
i)	63 mm.	Rmt	208.00			
ii)	75 mm.	Rmt	294.00			
iii)	90 mm.	Rmt	426.00			
iv)	110 mm.	Rmt	605.00			
v)	125 mm	Rmt	834.00			
vi)	140 mm.	Rmt	981.00			
vii)	160 mm.	Rmt	1289.00			
viii)	180 mm.	Rmt	1764.00			
ix)	200 mm.	Rmt	2188.00			
x)	225 mm.	Rmt	2781.00			
xi)	250 mm.	Rmt	3515.00			
xii)	280 mm.	Rmt	4424.00			
xiii)	315 mm.	Rmt	5638.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
3.	Providing and supplying in ISI mark rigid PVC-O class-500 s/s pipe (push on joints) pressure pipes confirming to IS specifications no 16647-2017 inclusive cost of EPDM gasket seals on joints including all statutory duties excluding GST levied by Government of India and Government of Maharashtra in all respect including third party inspection charges of agency approved by MJP, transit insurance loading, unloading charges conveyance to the departmental store / site and stacking the same in closed shade duly protected from sunrays etc complete.					
	Note :- a) 10% cost of pipe shall be considered for the cost of O-PVC/DI compatable specials for estimate purpose b) Diameter wise overlapping lengths are respectively, 110mm 2.92%, 160mm- 3.33%, 200mm 3.75%, 250mm 4.5%, 315mm 5.42%, 400mm 6.25%					
	a) Class - 500 PN - 12.5					
i)	110 mm.	Rmt	571.00			
ii)	160 mm.	Rmt	985.00			
iii)	200 mm.	Rmt	1349.00			
iv)	250 mm.	Rmt	1849.00			
v)	315 mm.	Rmt	2398.00			
vi)	400 mm.	Rmt	3696.00			
vii)	450 mm.	Rmt	4328.00			
viii)	500 mm.	Rmt	5015.00			
ix)	560 mm.	Rmt	6685.00			
x)	630 mm.	Rmt	8503.00			
	b) Class - 500 PN - 16					
i)	110 mm.	Rmt	684.00			
ii)	160 mm.	Rmt	1146.00			
iii)	200 mm.	Rmt	1421.00			
iv)	250 mm.	Rmt	2000.00			
v)	315 mm.	Rmt	2520.00			
vi)	400 mm.	Rmt	3845.00			
vii)	450 mm.	Rmt	4932.00			
viii)	500 mm.	Rmt	6154.00			
ix)	560 mm.	Rmt	7662.00			
x)	630 mm.	Rmt	9706.00			
	c) Class - 500 PN - 25					
i)	110 mm.	Rmt	853.00			
ii)	160 mm.	Rmt	1239.00			
iii)	200 mm.	Rmt	1685.00			
iv)	250 mm.	Rmt	2358.00			
v)	315 mm.	Rmt	3678.00			
vi)	400 mm.	Rmt	5579.00			
vii)	450 mm.	Rmt	6951.00			
viii)	500 mm.	Rmt	8603.00			
ix)	560 mm.	Rmt	10772.00			
x)	630 mm.	Rmt	13621.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
4.	Lowering, laying and jointing with P.V.C. pipes and specials of following class and diameter including cost of conveyance from stores to site of works including cost of all labour, material, except cement solvent, rubber ring, as per IS code, etc. complete (with cement solvent joint / ring fit joint).					
	a) Working Pressure 4 Kg/Sq.cm					
i)	63 mm.	Rmt	20.00			
ii)	75 mm.	Rmt	25.00			
iii)	90 mm.	Rmt	31.00			
iv)	110 mm.	Rmt	35.00			
v)	125 mm.	Rmt	37.00			
vi)	140 mm.	Rmt	41.00			
vii)	160 mm.	Rmt	46.00			
viii)	180 mm.	Rmt	51.00			
xi)	200 mm	Rmt	55.00			
x)	225 mm	Rmt	64.00			
xi)	250 mm	Rmt	69.00			
xii)	280 mm	Rmt	76.00			
xiii)	315 mm	Rmt	86.00			
	b) Working Pressure 6 to 12.5 Kg./Sq.cm.					
i)	63 mm.	Rmt	26.00			
ii)	75 mm.	Rmt	35.00			
iii)	90 mm.	Rmt	40.00			
iv)	110 mm.	Rmt	45.00			
v)	125 mm.	Rmt	48.00			
vi)	140 mm.	Rmt	53.00			
vii)	160 mm.	Rmt	56.00			
viii)	180 mm.	Rmt	64.00			
xi)	200 mm	Rmt	70.00			
x)	225 mm	Rmt	76.00			
xi)	250 mm	Rmt	84.00			
xii)	280 mm	Rmt	95.00			
xiii)	315 mm	Rmt	105.00			
xiv	400 mm	Rmt	116.00			
xv	450 mm	Rmt	125.00			
xvi	500 mm	Rmt	138.00			
xvii	560 mm	Rmt	150.00			
xviii	630 mm	Rmt	164.00			
5.	Hydraulic testing of PVC pipe line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position.					
	a) Working Pressure 4 Kg/Sq.cm					
i)	63 mm.	Km	2481.00			
ii)	75 mm.	Km	2481.00			
iii)	90 mm.	Km	3721.00			
iv)	110 mm.	Km	3721.00			
v)	125 mm	Km	4342.00			
vi)	140 mm.	Km	4961.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
vii)	160 mm.	Km	4961.00			
viii)	180 mm.	Km	6202.00			
ix)	200 mm	Km	6202.00			
x)	225 mm	Km	7442.00			
xi)	250 mm	Km	7442.00			
xii)	280 mm	Km	8682.00			
xiii)	315 mm	Km	9922.00			
	b) Working Pressure 6 to 12.5 Kg./Sq.cm.					
i)	63 mm.	Km	2481.00			
ii)	75 mm.	Km	3721.00			
iii)	90 mm.	Km	4961.00			
iv)	110 mm.	Km	4961.00			
v)	125 mm	Km	5581.00			
vi)	140 mm.	Km	6202.00			
vii)	160 mm.	Km	6202.00			
viii)	180 mm.	Km	7442.00			
ix)	200 mm	Km	7442.00			
x)	225 mm	Km	8682.00			
xi)	250 mm	Km	8682.00			
xii)	280 mm	Km	9922.00			
xiii)	315 mm	Km	11163.00			
xiv	400 mm	Km	11163.00			
xv	450 mm	Km	12403.00			
xvi	500 mm	Km	12403.00			
xvii	560 mm	Km	13643.00			
xviii	630 mm	Km	14883.00			
	1) Only 85% rate shall be payable till satisfactory hydraulic testing is given. **2) Third party inspecting agency shall invariably carry out. I) Specific Gravity Test. II) Weight / Rmt. III) Ash Content Test and confirm in writing that those are within prescribed limits. This condition shall appear in tender conditions.** **3) After receipt of pipes at site, concerned Deputy Engineer shall confirm that weight of pipe for every class and diameter is not less than the prescribed standard weight as per IS-4985/1998 (Which is given in CSR), Under weight pipes shall be rejected. This condition shall appear in the tender conditions.**					

SECTION - I (III)

G.I. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
III.	**G. I. PIPES**					
1.	Providing **ISI mark G.I. pipe** of following class and dia. excluding GST levied by GOI & GOM in all respect, inspection charges, transportation to stores, etc. complete as per IS-1239/2004. **Note : One coupler shall be provided with each full length of pipe cost of which is included in rates below.**					
a)	**LIGHT**					
i)	15 mm. (0.96 kg./m)	Rmt	70.00			
ii)	20 mm. (1.42 kg./m)	Rmt	105.00			
iii)	25 mm. (2.03 kg./m)	Rmt	143.00			
iv)	32 mm. (2.61 kg./m)	Rmt	182.00			
v)	40 mm. (3.29 kg./m)	Rmt	228.00			
vi)	50 mm. (4.18 kg./m)	Rmt	278.00			
vii)	65 mm. (5.92 kg./m)	Rmt	383.00			
viii)	80 mm. (6.98 kg./m)	Rmt	460.00			
ix)	100 mm. (10.20 kg./m)	Rmt	652.00			
b)	**MEDIUM**					
i)	15 mm. (1.23 kg./m)	Rmt	84.00			
ii)	20 mm. (1.59 kg./m)	Rmt	108.00			
iii)	25 mm. (2.40 kg./m)	Rmt	165.00			
iv)	32 mm. (3.17 kg./m)	Rmt	207.00			
v)	40 mm. (3.65 kg./m)	Rmt	239.00			
vi)	50 mm. (5.16 kg./m)	Rmt	330.00			
vii)	65 mm. (6.63 kg./m)	Rmt	419.00			
viii)	80 mm. (8.64 kg./m)	Rmt	551.00			
ix)	100 mm. (12.40 kg./m)	Rmt	785.00			
xx)	125 mm (16.70 kg/m)	Rmt	1069.00			
xxi)	150 mm.(19.70 kg./m)	Rmt	1257.00			
c)	**HEAVY**					
i)	15 mm. (1.46 kg./m)	Rmt	96.00			
ii)	20 mm. (1.91 kg./m)	Rmt	123.00			
iii)	25 mm. (2.99 kg./m)	Rmt	193.00			
iv)	32 mm. (3.97 kg./m)	Rmt	244.00			
v)	40 mm. (4.47 kg./m)	Rmt	283.00			
vi)	50 mm. (6.24 kg./m)	Rmt	392.00			
vii)	65 mm. (8.02 kg./m)	Rmt	504.00			
viii)	80 mm. (10.30 kg./m)	Rmt	644.00			
ix)	100 mm. (14.70 kg./m)	Rmt	930.00			
x)	125 mm (18.30 kg/m)	Rmt	1151.00			
xi)	150 mm (21.80 kg./m)	Rmt	1383.00			
2.	**Lowering, laying and jointing G. I. pipes and specials** of following class and diameter including conveyance from stores to site of works, all labour, etc. complete either underground or in vertical position, as directed by Engineer-in-charge.					
a)	**LIGHT**					
i)	15 mm. (0.96 kg./m)	Rmt	29.00			
ii)	20 mm. (1.42 kg./m)	Rmt	32.00			
iii)	25 mm. (2.03 kg./m)	Rmt	40.00			
iv)	32 mm. (2.61 kg./m)	Rmt	45.00			
v)	40 mm. (3.29 kg./m)	Rmt	55.00			
vi)	50 mm. (4.18 kg./m)	Rmt	67.00			
vii)	65 mm. (5.92 kg./m)	Rmt	97.00			
viii)	80 mm. (6.98 kg./m)	Rmt	107.00			
ix)	100 mm. (10.20 kg./m)	Rmt	129.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
b)	MEDIUM					
i)	15 mm. (1.23 kg./m)	Rmt	31.00			
ii)	20 mm. (1.59 kg./m)	Rmt	34.00			
iii)	25 mm. (2.40 kg./m)	Rmt	41.00			
iv)	32 mm. (3.17 kg./m)	Rmt	47.00			
v)	40 mm. (3.65 kg./m)	Rmt	62.00			
vi)	50 mm. (5.16 kg./m)	Rmt	72.00			
vii)	65 mm. (6.63 kg./m)	Rmt	105.00			
viii)	80 mm. (8.64 kg./m)	Rmt	118.00			
ix)	100 mm. (12.40 kg./m)	Rmt	129.00			
x)	125 mm (16.70 kg/m)	Rmt	138.00			
xi)	150 mm.(19.70 kg./m)	Rmt	144.00			
c)	HEAVY					
i)	15 mm. (1.46 kg./m)	Rmt	33.00			
ii)	20 mm. (1.91 kg./m)	Rmt	37.00			
iii)	25 mm. (2.99 kg./m)	Rmt	44.00			
iv)	32 mm. (3.97 kg./m)	Rmt	51.00			
v)	40 mm. (4.47 kg./m)	Rmt	65.00			
vi)	50 mm. (6.24 kg./m)	Rmt	81.00			
vii)	65 mm. (8.02 kg./m)	Rmt	113.00			
viii)	80 mm. (10.30 kg./m)	Rmt	138.00			
ix)	100 mm. (14.70 kg./m)	Rmt	129.00			
x)	125 mm (18.30 kg/m)	Rmt	143.00			
xi)	150 mm (21.80 kg./m)	Rmt	154.00			
	Note : Only 85% rate shall be payable till satisfactory hydraulic testing is given.					
3	Hydraulic testing of G. I. pipe line to specified pressure including cost of all materials and labour and water for testing for the length upto 1km using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour operation charges etc. required for testing, The rates under this item shall also include cost of retesting if necessary and reinstating to original postion.					
a)	LIGHT					
i)	15 mm. (0.96 kg./m)	Km	2481.00			
ii)	20 mm. (1.42 kg./m)	Km	3721.00			
iii)	25 mm. (2.03 kg./m)	Km	3721.00			
iv)	32 mm. (2.61 kg./m)	Km	4961.00			
v)	40 mm. (3.29 kg./m)	Km	6202.00			
vi)	50 mm. (4.18 kg./m)	Km	7442.00			
vii)	65 mm. (5.92 kg./m)	Km	11163.00			
viii)	80 mm. (6.98 kg./m)	Km	12403.00			
ix)	100 mm. (10.20 kg./m)	Km	13643.00			
b)	MEDIUM					
i)	15 mm. (1.23 kg./m)	Km	3721.00			
ii)	20 mm. (1.59 kg./m)	Km	3721.00			
iii)	25 mm. (2.40 kg./m)	Km	4961.00			
iv)	32 mm. (3.17 kg./m)	Km	4961.00			
v)	40 mm. (3.65 kg./m)	Km	6202.00			
vi)	50 mm. (5.16 kg./m)	Km	7442.00			
vii)	65 mm. (6.63 kg./m)	Km	11163.00			
viii)	80 mm. (8.64 kg./m)	Km	12403.00			
ix)	100 mm. (12.40 kg./m)	Km	13643.00			
x)	125 mm (16.70 kg/m)	Km	14883.00			
xi)	150 mm.(19.70 kg./m)	Km	16124.00			
c)	HEAVY					

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
i)	15 mm. (1.46 kg./m)	Km	3721.00			
ii)	20 mm. (1.91 kg./m)	Km	3721.00			
iii)	25 mm. (2.99 kg./m)	Km	4961.00			
iv)	32 mm. (3.97 kg./m)	Km	6202.00			
v)	40 mm. (4.47 kg./m)	Km	7442.00			
vi)	50 mm. (6.24 kg./m)	Km	8682.00			
vii)	65 mm. (8.02 kg./m)	Km	12403.00			
viii)	80 mm. (10.30 kg./m)	Km	14883.00			
ix)	100 mm. (14.70 kg./m)	Km	13643.00			
x)	125 mm (18.30 kg/m)	Km	16124.00			
xi)	150 mm (21.80 kg./m)	Km	17364.00			

SECTION - I (IV)

D.I. SPECIALS & D.I. MECHANICAL JOINTS

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	(IV) D.I. Specials & D.I. Mechnical Joints :			
1	D.I. Socket and flanged fittings :-Providing and supplying **D.I. fitting with ISI mark** socket pushon joints or flanged joints confirming to table 12 to 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM tyton rings. Fittings should be with internally ordinary portland cement mortor lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation & excluding all statutary duties and taxes such as GST levied by GoI and GoM in all respect etc. complete.			
	Diameter in mm	Unit		
I	**Double socket bend 90 degree**			
	80 mm dia	Nos	1146.00	
	100 mm dia	Nos	1428.00	
	150 mm dia	Nos	2573.00	
	200 mm dia	Nos	3272.00	
	250 mm dia	Nos	6256.00	
	300 mm dia	Nos	8682.00	
	350 mm dia	Nos	12263.00	
	400 mm dia	Nos	16210.00	
	450 mm dia	Nos	21143.00	
	500 mm dia	Nos	26656.00	
	600 mm dia	Nos	43281.00	
	700 mm dia	Nos	67260.00	
II	**Double socket bend 45 degree**			
	80 mm dia	Nos	1061.00	
	100 mm dia	Nos	1286.00	
	150 mm dia	Nos	1990.00	
	200 mm dia	Nos	3382.00	
	250 mm dia	Nos	4760.00	
	300 mm dia	Nos	6664.00	
	350 mm dia	Nos	9162.00	
	400 mm dia	Nos	11981.00	
	450 mm dia	Nos	15222.00	
	500 mm dia	Nos	18732.00	
	600 mm dia	Nos	28530.00	
	700 mm dia	Nos	43578.00	
III	**Double socket bend 22.50 degree**			
	80 mm dia	Nos	928.00	
	100 mm dia	Nos	1193.00	
	150 mm dia	Nos	1849.00	
	200 mm dia	Nos	2854.00	
	250 mm dia	Nos	3876.00	
	300 mm dia	Nos	5712.00	
	350 mm dia	Nos	7533.00	
	400 mm dia	Nos	9343.00	
	450 mm dia	Nos	11981.00	
	500 mm dia	Nos	14697.00	
	600 mm dia	Nos	22765.00	
	700 mm dia	Nos	34176.00	
IV	**Double socket bend 11.25 degree**			
	80 mm dia	Nos	928.00	
	100 mm dia	Nos	1146.00	
	150 mm dia	Nos	1709.00	
	200 mm dia	Nos	2713.00	
	250 mm dia	Nos	3760.00	
	300 mm dia	Nos	5064.00	
	350 mm dia	Nos	6006.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	400 mm dia	Nos	8104.00	
	450 mm dia	Nos	10712.00	
	500 mm dia	Nos	12968.00	
	600 mm dia	Nos	19020.00	
	700 mm dia	Nos	27464.00	
V	Double socket concentric reducer			
	100 x 80 mm dia	Nos	1061.00	
	150 x 80 mm dia	Nos	1709.00	
	150 x 100 mm dia	Nos	1849.00	
	200 x 80 mm dia	Nos	2652.00	
	200 x 100 mm dia	Nos	2652.00	
	200 x 150 mm dia	Nos	2814.00	
	250 x 80 mm dia	Nos	3672.00	
	250 x 100 mm dia	Nos	3534.00	
	250 x 150 mm dia	Nos	3899.00	
	250 x 200 mm dia	Nos	3760.00	
	300 x 100 mm dia	Nos	5167.00	
	300 x 150 mm dia	Nos	5305.00	
	300 x 200 mm dia	Nos	5205.00	
	300 x 250 mm dia	Nos	4895.00	
	350 x 200 mm dia	Nos	7245.00	
	350 x 250 mm dia	Nos	7055.00	
	350 x 300 mm dia	Nos	6959.00	
	400 x 200 mm dia	Nos	9585.00	
	400 x 250 mm dia	Nos	8738.00	
	400 x 300 mm dia	Nos	8458.00	
	400 x 350 mm dia	Nos	7533.00	
	450 x 350 mm dia	Nos	10148.00	
	450 x 400 mm dia	Nos	9343.00	
	500 x 350 mm dia	Nos	13705.00	
	500 x 400 mm dia	Nos	12968.00	
	500 x 450 mm dia	Nos	12246.00	
	600 x 300 mm dia	Nos	20748.00	
	600 x 350 mm dia	Nos	21354.00	
	600 x 400 mm dia	Nos	20172.00	
	600 x 450 mm dia	Nos	19596.00	
	600 x 500 mm dia	Nos	17866.00	
	700 x 450 mm dia	Nos	34007.00	
	700 x 500 mm dia	Nos	30259.00	
	700 x 600 mm dia	Nos	32232.00	
	800 x 600 mm dia	Nos	42208.00	
	800 x 700 mm dia	Nos	31648.00	
VI	All Socket Tee			
	80 x 80 mm dia	Nos	1568.00	
	100 x 80 mm dia	Nos	1849.00	
	100 x 100 mm dia	Nos	1990.00	
	150 x 80 mm dia	Nos	2652.00	
	150 x 100 mm dia	Nos	2854.00	
	150 x 150 mm dia	Nos	3277.00	
	200 x 80 mm dia	Nos	3719.00	
	200 x 100 mm dia	Nos	3999.00	
	200 x 150 mm dia	Nos	4563.00	
	200 x 200 mm dia	Nos	5308.00	
	250 x 80 mm dia	Nos	5032.00	
	250 x 100 mm dia	Nos	5346.00	
	250 x 150 mm dia	Nos	5789.00	
	250 x 200 mm dia	Nos	6800.00	
	250 x 250 mm dia	Nos	7752.00	
	300 x 80 mm dia	Nos	6371.00	
	300 x 100 mm dia	Nos	6511.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	300 x 150 mm dia	Nos	7819.00	
	300 x 200 mm dia	Nos	8682.00	
	300 x 250 mm dia	Nos	9520.00	
	300 x 300 mm dia	Nos	10607.00	
	350 x 80 mm dia	Nos	8174.00	
	350 x 100 mm dia	Nos	8316.00	
	350 x 150 mm dia	Nos	9585.00	
	350 x 200 mm dia	Nos	10570.00	
	350 x 250 mm dia	Nos	12686.00	
	350 x 300 mm dia	Nos	14095.00	
	350 x 350 mm dia	Nos	14377.00	
	400 x 80 mm dia	Nos	10290.00	
	400 x 100 mm dia	Nos	10148.00	
	400 x 150 mm dia	Nos	12686.00	
	400 x 200 mm dia	Nos	12968.00	
	400 x 250 mm dia	Nos	14800.00	
	400 x 300 mm dia	Nos	16587.00	
	400 x 400 mm dia	Nos	18325.00	
	450 x 100 mm dia	Nos	12686.00	
	450 x 150 mm dia	Nos	14800.00	
	450 x 200 mm dia	Nos	16210.00	
	450 x 250 mm dia	Nos	16874.00	
	450 x 300 mm dia	Nos	18876.00	
	450 x 350 mm dia	Nos	21143.00	
	450 x 400 mm dia	Nos	23259.00	
	450 x 450 mm dia	Nos	23681.00	
	500 x 100 mm dia	Nos	15480.00	
	500 x 150 mm dia	Nos	18011.00	
	500 x 200 mm dia	Nos	18732.00	
	500 x 250 mm dia	Nos	21612.00	
	500 x 300 mm dia	Nos	23055.00	
	500 x 400 mm dia	Nos	26656.00	
VII	**Double Socket Tee with Flange branch-PN-10**			
	80 x 80 mm dia	Nos	1947.00	
	100 x 80 mm dia	Nos	2085.00	
	100 x 100 mm dia	Nos	2224.00	
	150 x 80 mm dia	Nos	2919.00	
	150 x 100 mm dia	Nos	2988.00	
	150 x 150 mm dia	Nos	3753.00	
	200 x 80 mm dia	Nos	4030.00	
	200 x 100 mm dia	Nos	4307.00	
	200 x 150 mm dia	Nos	5003.00	
	200 x 200 mm dia	Nos	5768.00	
	250 x 80 mm dia	Nos	5271.00	
	250 x 100 mm dia	Nos	5343.00	
	250 x 150 mm dia	Nos	6553.00	
	250 x 200 mm dia	Nos	7408.00	
	250 x 250 mm dia	Nos	8548.00	
	300 x 80 mm dia	Nos	6839.00	
	300 x 100 mm dia	Nos	7124.00	
	300 x 150 mm dia	Nos	8121.00	
	300 x 200 mm dia	Nos	9261.00	
	300 x 250 mm dia	Nos	10544.00	
	300 x 300 mm dia	Nos	11398.00	
	350 x 80 mm dia	Nos	8563.00	
	350 x 100 mm dia	Nos	8712.00	
	350 x 150 mm dia	Nos	10335.00	
	350 x 200 mm dia	Nos	11222.00	
	350 x 250 mm dia	Nos	13291.00	
	350 x 300 mm dia	Nos	16242.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	350 x 350 mm dia	Nos	16833.00	
	400 x 80 mm dia	Nos	10335.00	
	400 x 100 mm dia	Nos	10779.00	
	400 x 150 mm dia	Nos	11814.00	
	400 x 200 mm dia	Nos	13585.00	
	400 x 250 mm dia	Nos	16242.00	
	400 x 300 mm dia	Nos	16833.00	
	400 x 400 mm dia	Nos	21412.00	
	450 x 80 mm dia	Nos	12847.00	
	450 x 100 mm dia	Nos	12994.00	
	450 x 150 mm dia	Nos	14471.00	
	450 x 200 mm dia	Nos	15947.00	
	450 x 250 mm dia	Nos	17720.00	
	450 x 300 mm dia	Nos	19787.00	
	450 x 350 mm dia	Nos	25102.00	
	450 x 400 mm dia	Nos	25251.00	
	450 x 450 mm dia	Nos	25710.00	
	500 x 80 mm dia	Nos	15396.00	
	500 x 100 mm dia	Nos	15547.00	
	500 x 150 mm dia	Nos	18567.00	
	500 x 200 mm dia	Nos	19020.00	
	500 x 250 mm dia	Nos	22641.00	
	500 x 300 mm dia	Nos	23246.00	
	500 x 400 mm dia	Nos	27322.00	
VIII	**Flange Socket-PN-10**			
	80 mm dia	Nos	1001.00	
	100 mm dia	Nos	1125.00	
	150 mm dia	Nos	1751.00	
	200 mm dia	Nos	2624.00	
	250 mm dia	Nos	3451.00	
	300 mm dia	Nos	4530.00	
	350 mm dia	Nos	6069.00	
	400 mm dia	Nos	7449.00	
	450 mm dia	Nos	8346.00	
	500 mm dia	Nos	10154.00	
	600 mm dia	Nos	14809.00	
	700 mm dia	Nos	25591.00	
IX	**Flange Spigot-PN-10**			
	80 mm dia	Nos	986.00	
	100 mm dia	Nos	1242.00	
	150 mm dia	Nos	1990.00	
	200 mm dia	Nos	2856.00	
	250 mm dia	Nos	4031.00	
	300 mm dia	Nos	5153.00	
	350 mm dia	Nos	7575.00	
	400 mm dia	Nos	8638.00	
	450 mm dia	Nos	11029.00	
	500 mm dia	Nos	10118.00	
	600 mm dia	Nos	21193.00	
	700 mm dia	Nos	31940.00	
X	**Blank Flange -PN-1**			
	80 mm dia	Nos	512.00	
	100 mm dia	Nos	620.00	
	150 mm dia	Nos	1025.00	
	200 mm dia	Nos	1409.00	
	250 mm dia	Nos	2232.00	
	300 mm dia	Nos	3206.00	
	350 mm dia	Nos	4581.00	
	400 mm dia	Nos	5691.00	
	450 mm dia	Nos	7773.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	500 mm dia	Nos	9214.00	
	600 mm dia	Nos	13326.00	
	700 mm dia	Nos	27719.00	
XI	Double Flange Bend 90 Deg -PN-'10			
	80 mm dia	Nos	1271.00	
	100 mm dia	Nos	1525.00	
	150 mm dia	Nos	2745.00	
	200 mm dia	Nos	4000.00	
	250 mm dia	Nos	7111.00	
	300 mm dia	Nos	9621.00	
	350 mm dia	Nos	12655.00	
	400 mm dia	Nos	16230.00	
	450 mm dia	Nos	23384.00	
	500 mm dia	Nos	25847.00	
	600 mm dia	Nos	41581.00	
	700 mm dia	Nos	79676.00	
XII	Double Flange Bend 45 Deg -PN-10			
	80 mm dia	Nos	1207.00	
	100 mm dia	Nos	1525.00	
	150 mm dia	Nos	2413.00	
	200 mm dia	Nos	3495.00	
	250 mm dia	Nos	5318.00	
	300 mm dia	Nos	9996.00	
	350 mm dia	Nos	10592.00	
	400 mm dia	Nos	13480.00	
	450 mm dia	Nos	16505.00	
	500 mm dia	Nos	25950.00	
	600 mm dia	Nos	38588.00	
	700 mm dia	Nos	55048.00	
XIII	Double Flange Duck Foot Bend -PN-10			
	80 mm dia	Nos	2023.00	
	100 mm dia	Nos	2528.00	
	150 mm dia	Nos	4360.00	
	200 mm dia	Nos	6841.00	
	250 mm dia	Nos	10932.00	
	300 mm dia	Nos	15208.00	
	350 mm dia	Nos	22173.00	
	400 mm dia	Nos	27379.00	
	450 mm dia	Nos	38784.00	
	500 mm dia	Nos	49395.00	
	600 mm dia	Nos	69174.00	
	700 mm dia	Nos	120812.00	
XIV	All Flange Tee -PN-10			
	80 x 80 mm dia	Nos	2033.00	
	100 x 80 mm dia	Nos	2287.00	
	100 x 100 mm dia	Nos	2413.00	
	150 x 80 mm dia	Nos	3557.00	
	150 x 100 mm dia	Nos	3684.00	
	150 x 150 mm dia	Nos	4066.00	
	200 x 80 mm dia	Nos	5209.00	
	200 x 100 mm dia	Nos	5489.00	
	200 x 150 mm dia	Nos	5718.00	
	200 x 200 mm dia	Nos	6226.00	
	250 x 80 mm dia	Nos	7070.00	
	250 x 100 mm dia	Nos	8461.00	
	250 x 150 mm dia	Nos	8025.00	
	250 x 200 mm dia	Nos	9892.00	
	250 x 250 mm dia	Nos	10023.00	
	300 x 80 mm dia	Nos	8477.00	
	300 x 100 mm dia	Nos	11271.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	300 x 150 mm dia	Nos	9897.00	
	300 x 200 mm dia	Nos	12364.00	
	300 x 250 mm dia	Nos	12109.00	
	300 x 300 mm dia	Nos	14708.00	
	350 x 80 mm dia	Nos	12540.00	
	350 x 100 mm dia	Nos	15405.00	
	350 x 150 mm dia	Nos	14377.00	
	350 x 200 mm dia	Nos	16175.00	
	350 x 250 mm dia	Nos	17396.00	
	350 x 300 mm dia	Nos	18841.00	
	350 x 350 mm dia	Nos	21044.00	
	400 x 80 mm dia	Nos	15082.00	
	400 x 100 mm dia	Nos	19168.00	
	400 x 150 mm dia	Nos	17219.00	
	400 x 200 mm dia	Nos	19944.00	
	400 x 250 mm dia	Nos	20780.00	
	400 x 300 mm dia	Nos	21731.00	
	400 x 400 mm dia	Nos	23384.00	
	450 x 100	Nos	24354.00	
	450 x 150 mm dia	Nos	19492.00	
	450 x 200 mm dia	Nos	25583.00	
	450 x 250 mm dia	Nos	23085.00	
	450 x 300 mm dia	Nos	23993.00	
	450 x 350 mm dia	Nos	27508.00	
	450 x 400 mm dia	Nos	27435.00	
	450 x 450 mm dia	Nos	30948.00	
	500 x 100 mm dia	Nos	29500.00	
	500 x 150 mm dia	Nos	29921.00	
	500 x 200 mm dia	Nos	30202.00	
	500 x 250 mm dia	Nos	30904.00	
	500 x 300 mm dia	Nos	37080.00	
	500 x 400 mm dia	Nos	37627.00	
	500 x 500 mm dia	Nos	40999.00	
	600 x 100 mm dia	Nos	48699.00	
	600 x 150 mm dia	Nos	49204.00	
	600 x 200 mm dia	Nos	48809.00	
	600 x 250 mm dia	Nos	52256.00	
	600 x 300 mm dia	Nos	50649.00	
	600 x 400 mm dia	Nos	52620.00	
	600 x 500 mm dia	Nos	52660.00	
	600 x 600 mm dia	Nos	58213.00	
XV	**Double Socket Level Invert Flange Branch Tee PN10**			
	200 x 80 mm dia	Nos	3834.00	
	250 x 80 mm dia	Nos	4999.00	
	300 x 80 mm dia	Nos	6672.00	
	350 x 80 mm dia	Nos	8336.00	
	350 x 100 mm dia	Nos	9115.00	
	400 x 100 mm dia	Nos	10900.00	
	450 x 80 mm dia	Nos	13250.00	
	450 x 100 mm dia	Nos	13531.00	
	500 x 80 mm dia	Nos	15196.00	
	500 x 100 mm dia	Nos	16634.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
XVI	Cap			
	80 mm dia	Nos	485.00	
	100 mm dia	Nos	625.00	
	150 mm dia	Nos	1109.00	
	200 mm dia	Nos	1975.00	
	250 mm dia	Nos	2375.00	
	300 mm dia	Nos	3744.00	
	350 mm dia	Nos	6057.00	
	400 mm dia	Nos	7901.00	
	450 mm dia	Nos	10007.00	
	500 mm dia	Nos	12249.00	
	600 mm dia	Nos	17096.00	
	700 mm dia	Nos	30331.00	
XVII	Plug			
	80 mm dia	Nos	355.00	
	100 mm dia	Nos	607.00	
	150 mm dia	Nos	1078.00	
	200 mm dia	Nos	1669.00	
	250 mm dia	Nos	2309.00	
	300 mm dia	Nos	3640.00	
	350 mm dia	Nos	5793.00	
	400 mm dia	Nos	6847.00	
	450 mm dia	Nos	9067.00	
	500 mm dia	Nos	11038.00	
	600 mm dia	Nos	16345.00	
	D.I. FITTINGS (Mechanical Joints)			
1.	Providing and supplying D.I. fittings with ISI mark Mechanical joint confirming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortor lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutary duties and taxes such as GST levied by GoI and GoM in all respect etc. complete.			
I	MJ Collar/Coupling			
	80 mm dia	Nos	2203.00	
	100 mm dia	Nos	2407.00	
	150 mm dia	Nos	2945.00	
	200 mm dia	Nos	5266.00	
	250 mm dia	Nos	6967.00	
	300 mm dia	Nos	9030.00	
	350 mm dia	Nos	12775.00	
	400 mm dia	Nos	15984.00	
	450 mm dia	Nos	18500.00	
	500 mm dia	Nos	23910.00	
	600 mm dia	Nos	30199.00	
II	Double Socket Bend 90 degree			
	80 mm dia	Nos	1295.00	
	100 mm dia	Nos	1631.00	
	150 mm dia	Nos	2812.00	
	200 mm dia	Nos	4219.00	
	250 mm dia	Nos	5980.00	
	300 mm dia	Nos	7991.00	
	350 mm dia	Nos	11631.00	
	400 mm dia	Nos	14976.00	
	450 mm dia	Nos	19371.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	500 mm dia	Nos	22093.00	
	600 mm dia	Nos	32269.00	
III	Double Socket Bend 45 degree			
	80 mm dia	Nos	1295.00	
	100 mm dia	Nos	1518.00	
	150 mm dia	Nos	2376.00	
	200 mm dia	Nos	3627.00	
	250 mm dia	Nos	4878.00	
	300 mm dia	Nos	6820.00	
	350 mm dia	Nos	10142.00	
	400 mm dia	Nos	12942.00	
	450 mm dia	Nos	14797.00	
	500 mm dia	Nos	17235.00	
	600 mm dia	Nos	24753.00	
IV	Double Socket Bend 22.5 degree			
	80 mm dia	Nos	1196.00	
	100 mm dia	Nos	1518.00	
	150 mm dia	Nos	2277.00	
	200 mm dia	Nos	3249.00	
	250 mm dia	Nos	4331.00	
	300 mm dia	Nos	6061.00	
	350 mm dia	Nos	8773.00	
	400 mm dia	Nos	10702.00	
	450 mm dia	Nos	13440.00	
	500 mm dia	Nos	16043.00	
	600 mm dia	Nos	20717.00	
V	Double Socket Bend 11.25 degree			
	80 mm dia	Nos	1196.00	
	100 mm dia	Nos	1570.00	
	150 mm dia	Nos	2165.00	
	200 mm dia	Nos	3136.00	
	250 mm dia	Nos	4119.00	
	300 mm dia	Nos	5526.00	
	350 mm dia	Nos	7591.00	
	400 mm dia	Nos	9769.00	
	450 mm dia	Nos	12652.00	
	500 mm dia	Nos	15120.00	
	600 mm dia	Nos	18792.00	
VI	Double socket concentric reducer			
	100 x 80 mm dia	Nos	1946.00	
	150 x 80 mm dia	Nos	2804.00	
	150 x 100 mm dia	Nos	3056.00	
	200 x 80 mm dia	Nos	3945.00	
	200 x 100 mm dia	Nos	3959.00	
	200 x 150 mm dia	Nos	4404.00	
	250 x 80 mm dia	Nos	5159.00	
	250 x 100 mm dia	Nos	5393.00	
	250 x 150 mm dia	Nos	5749.00	
	250 x 200 mm dia	Nos	5749.00	
	300 x 100 mm dia	Nos	7151.00	
	300 x 150 mm dia	Nos	7502.00	
	300 x 200 mm dia	Nos	7210.00	
	300 x 250 mm dia	Nos	7737.00	
	350 x 200 mm dia	Nos	10898.00	
	350 x 300 mm dia	Nos	11338.00	
	400 x 200 mm dia	Nos	13511.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	400 x 300 mm dia	Nos	13767.00	
	400 x 350 mm dia	Nos	12944.00	
	450 x 400 mm dia	Nos	15713.00	
	500 x 300 mm dia	Nos	20979.00	
	500 x 350 mm dia	Nos	19467.00	
	500 x 400 mm dia	Nos	19205.00	
	600 x 350 mm dia	Nos	26992.00	
	600 x 400 mm dia	Nos	26702.00	
	600 x 500 mm dia	Nos	24858.00	
VII	All Socket Tee			
	80 x 80 mm dia	Nos	2745.00	
	100 x 80 mm dia	Nos	3225.00	
	100 x 100 mm dia	Nos	3466.00	
	150 x 80 mm dia	Nos	4671.00	
	150 x 100 mm dia	Nos	4913.00	
	150 x 150 mm dia	Nos	5653.00	
	200 x 80 mm dia	Nos	6079.00	
	200 x 100 mm dia	Nos	6525.00	
	200 x 150 mm dia	Nos	7414.00	
	200 x 200 mm dia	Nos	8668.00	
	250 x 80 mm dia	Nos	7896.00	
	250 x 100 mm dia	Nos	8305.00	
	250 x 150 mm dia	Nos	9026.00	
	250 x 200 mm dia	Nos	10491.00	
	250 x 250 mm dia	Nos	11603.00	
	300 x 80 mm dia	Nos	9992.00	
	300 x 100 mm dia	Nos	10232.00	
	300 x 150 mm dia	Nos	11938.00	
	300 x 200 mm dia	Nos	13068.00	
	300 x 250 mm dia	Nos	14512.00	
	300 x 300 mm dia	Nos	15810.00	
	350 x 80 mm dia	Nos	14365.00	
	350 x 100 mm dia	Nos	14643.00	
	350 x 150 mm dia	Nos	16312.00	
	350 x 200 mm dia	Nos	17608.00	
	350 x 250 mm dia	Nos	20482.00	
	350 x 300 mm dia	Nos	22706.00	
	350 x 350 mm dia	Nos	24189.00	
	400 x 80 mm dia	Nos	18350.00	
	400 x 100 mm dia	Nos	18258.00	
	400 x 150 mm dia	Nos	21478.00	
	400 x 200 mm dia	Nos	22148.00	
	400 x 250 mm dia	Nos	24003.00	
	400 x 300 mm dia	Nos	26136.00	
	400 x 400 mm dia	Nos	30676.00	
	450 x 100 mm dia	Nos	22173.00	
	450 x 150 mm dia	Nos	25111.00	
	450 x 200 mm dia	Nos	25646.00	
	450 x 250 mm dia	Nos	26877.00	
	450 x 300 mm dia	Nos	29564.00	
	450 x 350 mm dia	Nos	35264.00	
	450 x 400 mm dia	Nos	35965.00	
	450 x 450 mm dia	Nos	37257.00	
	500 x 100 mm dia	Nos	23212.00	
	500 x 150 mm dia	Nos	26624.00	
	500 x 200 mm dia	Nos	27172.00	
	500 x 250 mm dia	Nos	32692.00	
	500 x 300 mm dia	Nos	33725.00	
	500 x 400	Nos	37685.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
VIII	Double Socket Tee with Flange branch-PN-10			
	80 x 80 mm dia	Nos	2883.00	
	100 x 80 mm dia	Nos	3389.00	
	100 x 100	Nos	3642.00	
	150 x 80 mm dia	Nos	4909.00	
	150 x 100 mm dia	Nos	5162.00	
	150 x 150 mm dia	Nos	5940.00	
	200 x 80 mm dia	Nos	6388.00	
	200 x 100 mm dia	Nos	6857.00	
	200 x 150 mm dia	Nos	7791.00	
	200 x 200 mm dia	Nos	9109.00	
	250 x 80 mm dia	Nos	8298.00	
	250 x 100	Nos	8727.00	
	250 x 150 mm dia	Nos	9486.00	
	250 x 200 mm dia	Nos	11025.00	
	250 x 250 mm dia	Nos	12194.00	
	300 x 80 mm dia	Nos	10499.00	
	300 x 100 mm dia	Nos	10752.00	
	300 x 150 mm dia	Nos	12544.00	
	300 x 200 mm dia	Nos	13732.00	
	300 x 250 mm dia	Nos	15251.00	
	300 x 300 mm dia	Nos	16615.00	
	350 x 80 mm dia	Nos	15096.00	
	350 x 100 mm dia	Nos	15388.00	
	350 x 150 mm dia	Nos	17140.00	
	350 x 200 mm dia	Nos	18504.00	
	350 x 250 mm dia	Nos	21524.00	
	350 x 300 mm dia	Nos	23860.00	
	350 x 350 mm dia	Nos	25419.00	
	400 x 80 mm dia	Nos	19251.00	
	400 x 100 mm dia	Nos	19186.00	
	400 x 150 mm dia	Nos	22572.00	
	400 x 200 mm dia	Nos	23274.00	
	400 x 250 mm dia	Nos	25224.00	
	400 x 300 mm dia	Nos	27466.00	
	400 x 400 mm dia	Nos	32237.00	
	450 x 80	Nos	23301.00	
	450 x 100 mm dia	Nos	26390.00	
	450 x 150 mm dia	Nos	26951.00	
	450 x 200 mm dia	Nos	28244.00	
	450 x 250 mm dia	Nos	31068.00	
	450 x 300 mm dia	Nos	37058.00	
	450 x 350 mm dia	Nos	37795.00	
	450 x 400 mm dia	Nos	39153.00	
	450 x 450 mm dia	Nos	24393.00	
	500 x 80 mm dia	Nos	27979.00	
	500 x 100 mm dia	Nos	28554.00	
	500 x 150 mm dia	Nos	34355.00	
	500 x 200 mm dia	Nos	35441.00	
	500 x 250 mm dia	Nos	39602.00	
	500 x 300 mm dia	Nos	33730.00	
	500 x 400 mm dia	Nos	38024.00	
	500 x 500 mm dia	Nos	44625.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
IX	Flange Socket-PN-10			
	80 mm dia	Nos	1583.00	
	100 mm dia	Nos	1737.00	
	150 mm dia	Nos	2635.00	
	200 mm dia	Nos	3672.00	
	250 mm dia	Nos	5060.00	
	300 mm dia	Nos	6620.00	
	350 mm dia	Nos	9827.00	
	400 mm dia	Nos	11920.00	
	450 mm dia	Nos	13374.00	
	500 mm dia	Nos	16014.00	
	600 mm dia	Nos	22293.00	

SECTION - I (V)

R.C.C. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	V. R.C.C. PIPES					
1.	**Providing ISI standard R.C.C. pipes** in standard lengths of following class and diameter suitable for either collar joints or rubber ring joints, excluding GST lev-ied by GOI & GOM in all respect including inspec-tion charges, transport to departmental stores, unloading and stacking etc. complete as per IS-458/1988.					
	Note :One collar should be supplied with each full length plain ended RCC pipe, cost including in rates below. One rubber ring should be supplied with each full length of socketed pipe, cost included in rates below.					
a)	**Class 'P-I'**					
i)	80 mm.	Rmt	272.00	240.00		
ii)	100 mm.	Rmt	284.00	258.00		
iii)	150 mm.	Rmt	330.00	293.00		
iv)	200 mm.	Rmt	383.00	343.00		
v)	225 mm.	Rmt	437.00	393.00		
vi)	250 mm.	Rmt	479.00	429.00		
vii)	300 mm.	Rmt	612.00	547.00		
viii)	350 mm.	Rmt	659.00	592.00		
ix)	400 mm.	Rmt	836.00	756.00		
x)	450 mm.	Rmt	1029.00	928.00		
xi)	500 mm.	Rmt	1239.00	1114.00		
xii)	600 mm.	Rmt	1561.00	1408.00		
xiii)	700 mm.	Rmt	2034.00	1829.00		
xiv)	800 mm.	Rmt	2347.00	2111.00		
xv)	900 mm.	Rmt	2954.00	2659.00		
xvi)	1000 mm.	Rmt	3462.00	3117.00		
xvii)	1100 mm.	Rmt	3931.00	3540.00		
xviii)	1200 mm.	Rmt	4723.00	4256.00		
b)	**Class 'P-II'**					
i)	80 mm.	Rmt	290.00	256.00		
ii)	100 mm.	Rmt	308.00	277.00		
iii)	150 mm.	Rmt	406.00	366.00		
iv)	200 mm.	Rmt	546.00	495.00		
v)	225 mm.	Rmt	647.00	583.00		
vi)	250 mm.	Rmt	701.00	637.00		
vii)	300 mm.	Rmt	925.00	882.00		
viii)	350 mm.	Rmt	1155.00	1045.00		
ix)	400 mm.	Rmt	1288.00	1173.00		
x)	450 mm.	Rmt	1562.00	1401.00		
xi)	500 mm.	Rmt	2181.00	1988.00		
xii)	600 mm.	Rmt	2705.00	2439.00		
xiii)	700 mm.	Rmt	3685.00	3352.00		
xiv)	800 mm.	Rmt	4431.00	4038.00		
xv)	900 mm.	Rmt	4992.00	5029.00		
xvi)	1000 mm.	Rmt	6040.00	5438.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
c)	Class 'P-III'					
i)	80 mm.	Rmt	312.00	307.00		
ii)	100 mm.	Rmt	338.00	332.00		
iii)	150 mm.	Rmt	384.00	384.00		
iv)	200 mm.	Rmt	548.00	548.00		
v)	225 mm.	Rmt	653.00	653.00		
vi)	250 mm.	Rmt	764.00	763.00		
vii)	300 mm.	Rmt	1064.00	1063.00		
viii)	350 mm.	Rmt	1386.00	1386.00		
ix)	400 mm.	Rmt	1908.00	1908.00		
x)	450 mm.	Rmt	2218.00	2190.00		
xi)	500 mm.	Rmt	2672.00	2671.00		
xii)	600 mm.	Rmt	3431.00	3431.00		
xiii)	700 mm.	Rmt	4896.00	4895.00		
xiv)	800 mm.	Rmt	6217.00	6217.00		
d)	Class 'NP-II' (For 2.00 m. length)					
i)	80 mm.	Rmt	234.00	236.00		
ii)	100 mm.	Rmt	240.00	245.00		
iii)	150 mm.	Rmt	262.00	262.00		
iv)	200 mm.	Rmt	327.00	327.00		
v)	225 mm.	Rmt	366.00	373.00		
vi)	250 mm.	Rmt	394.00	402.00		
vii)	300 mm.	Rmt	510.00	510.00		
	(For 2.50 m. length)					
viii)	350 mm.	Rmt	708.00	723.00		
ix)	400 mm.	Rmt	817.00	817.00		
x)	450 mm.	Rmt	966.00	980.00		
xi)	500 mm.	Rmt	1035.00	1035.00		
xii)	600 mm.	Rmt	1307.00	1307.00		
xiii)	700 mm.	Rmt	1742.00	1742.00		
xiv)	800 mm.	Rmt	1960.00	1960.00		
xv)	900 mm.	Rmt	2505.00	2505.00		
xvi)	1000 mm.	Rmt	3049.00	3049.00		
xvii)	1100 mm.	Rmt	4158.00	4158.00		
xviii)	1200 mm.	Rmt	4963.00	4963.00		
xix)	1400 mm.	Rmt	6012.00	6131.00		
xx)	1600 mm.	Rmt	6903.00	7040.00		
xxi)	1800 mm.	Rmt	9668.00	9862.00		
e)	Class NP-III (For 2.00 m. length)					
)	80 mm	Rmt	265.00	269.00		
ii)	100 mm	Rmt	291.00	306.00		
iii)	150 mm	Rmt	331.00	337.00		
iv)	200 mm	Rmt	455.00	372.00		
v)	225 mm	Rmt	510.00	434.00		
vi)	250 mm	Rmt	540.00	510.00		
vii)	300 mm.	Rmt	701.00	714.00		
viii)	350 mm.	Rmt	1239.00	1188.00		
ix)	400 mm.	Rmt	1388.00	1267.00		
x)	450 mm.	Rmt	1651.00	1366.00		
xi)	500 mm.	Rmt	1833.00	1683.00		
xii)	600 mm.	Rmt	2415.00	1980.00		
xiii)	700 mm.	Rmt	3218.00	2772.00		
xiv)	800 mm.	Rmt	3911.00	2970.00		
xv)	900 mm.	Rmt	4518.00	3466.00		
xvi)	1000 mm.	Rmt	5148.00	3862.00		
xvii)	1100 mm.	Rmt	6394.00	6522.00		
xviii)	1200 mm.	Rmt	7435.00	7435.00		
xix)	1400 mm	Rmt	8742.00	8742.00		
xx)	1600 mm	Rmt	13135.00	13263.00		
xxi)	1800 mm	Rmt	16233.00	16233.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
f)	Class 'NP-IV'					
i)	80 mm.	Rmt	285.00	290.00		
ii)	100 mm.	Rmt	334.00	340.00		
iii)	150 mm.	Rmt	378.00	386.00		
iv)	200 mm.	Rmt	528.00	421.00		
v)	225 mm.	Rmt	582.00	495.00		
vi)	250 mm.	Rmt	639.00	582.00		
vii)	300 mm.	Rmt	896.00	891.00		
viii)	350 mm.	Rmt	1361.00	1267.00		
ix)	400 mm.	Rmt	1457.00	1386.00		
x)	450 mm.	Rmt	1718.00	1485.00		
xi)	500 mm.	Rmt	2100.00	1832.00		
xii)	600 mm.	Rmt	2568.00	2376.00		
xiii)	700 mm.	Rmt	3844.00	2970.00		
xiv)	800 mm.	Rmt	4390.00	3218.00		
xv)	900 mm.	Rmt	5140.00	3763.00		
xvi)	1000 mm.	Rmt	7278.00	4159.00		
xvii)	1100 mm.	Rmt	7895.00	7981.00		
xviii)	1200 mm.	Rmt	7931.00	8089.00		
xix)	1400 mm.	Rmt	12383.00	11522.00		
xx)	1600 mm.	Rmt	15439.00	15481.00		
xxi)	1800 mm.	Rmt	21164.00	19980.00		
	Note :Only 85% rate is payable till satisfactory hydraulic testing is given.					
2.	Lowering, laying and jointing in proper grade and alignment R.C.C. pipes with collar joints in C.M.1:1 proportion or socketed R.C.C. pipes with rubber joints (excluding cost of rubber ring or R.C.C. collar,) including cost of conveyance from stores to site of work, cost of jointing material, labour, etc. complete as directed by Engineerin- charge (For all class of pipes.) as per IS- 783-1985.		Collar Joints	Rubber Ring Joints		
i)	80 mm.	Rmt	53.00	39.00		
ii)	100 mm.	Rmt	63.00	45.00		
iii)	150 mm.	Rmt	97.00	68.00		
iv)	200 mm.	Rmt	129.00	91.00		
v)	225 mm.	Rmt	150.00	106.00		
vi)	250 mm.	Rmt	168.00	118.00		
vii)	300 mm.	Rmt	204.00	143.00		
viii)	350 mm.	Rmt	208.00	146.00		
ix)	400 mm.	Rmt	265.00	188.00		
x)	450 mm.	Rmt	323.00	224.00		
xi)	500 mm.	Rmt	351.00	244.00		
xii)	600 mm.	Rmt	444.00	307.00		
xiii)	700 mm.	Rmt	503.00	349.00		
xiv)	800 mm.	Rmt	582.00	403.00		
xv)	900 mm.	Rmt	640.00	446.00		
xvi)	1000 mm.	Rmt	701.00	487.00		
xvii)	1100 mm.	Rmt	975.00	660.00		
xviii)	1200 mm.	Rmt	1033.00	702.00		
xix)	1400 mm.	Rmt	1151.00	788.00		
xx)	1600 mm.	Rmt	1269.00	872.00		
xxi)	1800 mm.	Rmt	1388.00	956.00		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
3.	**Hydraulic testing of RCC pipe line** to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide speci-fied test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position.		Collar Joints	Rubber Ring Joints		
i)	80 mm.	Km	6202.00	3721.00		
ii)	100 mm.	Km	7442.00	4961.00		
iii)	150 mm.	Km	11163.00	7442.00		
iv)	200 mm.	Km	13643.00	9922.00		
v)	225 mm.	Km	16124.00	11163.00		
vi)	250 mm.	Km	18604.00	13643.00		
vii)	300 mm.	Km	22325.00	16124.00		
viii)	350 mm.	Km	23565.00	16124.00		
ix)	400 mm.	Km	29766.00	21085.00		
x)	450 mm.	Km	35968.00	24805.00		
xi)	500 mm.	Km	38448.00	27286.00		
xii)	600 mm.	Km	49610.00	34727.00		
xiii)	700 mm.	Km	55812.00	38448.00		
xiv)	800 mm.	Km	64493.00	44649.00		
xv)	900 mm.	Km	70695.00	49610.00		
xvi)	1000 mm.	Km	78136.00	54571.00		
xvii)	1100 mm.	Km	107902.00	73175.00		
xviii)	1200 mm.	Km	115344.00	78136.00		
xix)	1400 mm.	Km	127746.00	88058.00		
xx)	1600 mm.	Km	141389.00	96740.00		
xxi)	1800 mm.	Km	153791.00	106662.00		

SECTION - I (VI)

P.S.C. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	VI. P. S. C. PIPES					
1.	**Providing ISI standard Pre - stressed Cement concrete pipes** of following class and diameter including cost of all meterial and labour required, cost, inspection charges, transportaion to stores, unloading and stacking excluding GST levied by GI & GOM in all respect etc. complete as per IS-784-2001.					
	i) Factory test pressure a) Site test pressure + 01N/mm2, For working pressure upto 1 N/mm2					
	b) Site test pressure + 02N/mm2, For working pressure upto 1 N/mm2					
	ii) Site test pressure - 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be control within 25% of pumphead incase of pumping main) **iii) Working pessure -** The maximum sustained internal pressure excluding surge to which each portion of pipeline my be subjected when installed.					
	Note : One rubber ring should be supplied with each pipe, cost included in rates below.					
a)	**Factory Test Pressure 2 kg/Sqcm**					
i)	350 mm.	Rmt	3350.00			
ii)	400 mm.	Rmt	3605.00			
iii)	450 mm.	Rmt	3781.00			
iv)	500 mm.	Rmt	4162.00			
v)	600 mm.	Rmt	5004.00			
vi)	700 mm.	Rmt	5571.00			
vii)	800 mm.	Rmt	6881.00			
viii)	900 mm.	Rmt	8557.00			
ix)	1000 mm.	Rmt	9976.00			
x)	1100 mm.	Rmt	11392.00			
xi)	1200 mm.	Rmt	13163.00			
xii)	1300 mm.	Rmt	15221.00			
xiii)	1400 mm.	Rmt	16748.00			
xiv)	1500 mm.	Rmt	19168.00			
xv)	1600 mm.	Rmt	21260.00			
xvi)	1700 mm.	Rmt	23353.00			
xvii)	1800 mm.	Rmt	25446.00			
b)	**Factory Test Pressure 4 kg/Sqcm**					
i)	350 mm.	Rmt	3350.00			
ii)	400 mm.	Rmt	3606.00			
iii)	450 mm.	Rmt	3781.00			
iv)	500 mm.	Rmt	4162.00			
v)	600 mm.	Rmt	5005.00			
vi)	700 mm.	Rmt	5574.00			
vii)	800 mm.	Rmt	6881.00			
viii)	900 mm.	Rmt	8558.00			
ix)	1000 mm.	Rmt	9979.00			
x)	1100 mm.	Rmt	11394.00			
xi)	1200 mm.	Rmt	13164.00			
xii)	1300 mm.	Rmt	15225.00			
xiii)	1400 mm.	Rmt	16749.00			
xiv)	1500 mm.	Rmt	19172.00			
xv)	1600 mm.	Rmt	21263.00			
xvi)	1700 mm.	Rmt	23357.00			
xvii)	1800 mm.	Rmt	25449.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
c)	Factory Test Pressure 6 kg/Sqcm					
i)	350 mm.	Rmt	3357.00			
ii)	400 mm.	Rmt	3625.00			
iii)	450 mm.	Rmt	3792.00			
iv)	500 mm.	Rmt	4193.00			
v)	600 mm.	Rmt	5072.00			
vi)	700 mm.	Rmt	5767.00			
vii)	800 mm.	Rmt	7135.00			
viii)	900 mm.	Rmt	8896.00			
ix)	1000 mm.	Rmt	10376.00			
x)	1100 mm.	Rmt	11814.00			
xi)	1200 mm.	Rmt	13684.00			
xii)	1300 mm.	Rmt	15809.00			
xiii)	1400 mm.	Rmt	17394.00			
xiv)	1500 mm.	Rmt	19924.00			
xv)	1600 mm.	Rmt	22129.00			
xvi)	1700 mm.	Rmt	24333.00			
xvii)	1800 mm.	Rmt	26536.00			
d)	Factory Test Pressure 8 kg/Sqcm					
i)	350 mm.	Rmt	3360.00			
ii)	400 mm.	Rmt	3652.00			
iii)	450 mm.	Rmt	3816.00			
iv)	500 mm.	Rmt	4252.00			
v)	600 mm.	Rmt	5243.00			
vi)	700 mm.	Rmt	6058.00			
vii)	800 mm.	Rmt	7438.00			
viii)	900 mm.	Rmt	9274.00			
ix)	1000 mm.	Rmt	10842.00			
x)	1100 mm.	Rmt	12407.00			
xi)	1200 mm.	Rmt	14366.00			
xii)	1300 mm.	Rmt	16616.00			
xiii)	1400 mm.	Rmt	18364.00			
xiv)	1500 mm.	Rmt	21044.00			
xv)	1600 mm.	Rmt	23743.00			
xvi)	1700 mm.	Rmt	26444.00			
xvii)	1800 mm.	Rmt	29148.00			
e)	Factory Test Pressure 10 kg/Sqcm					
i)	350 mm.	Rmt	3378.00			
ii)	400 mm.	Rmt	3700.00			
iii)	450 mm.	Rmt	3948.00			
iv)	500 mm.	Rmt	4422.00			
v)	600 mm.	Rmt	5469.00			
vi)	700 mm.	Rmt	6301.00			
vii)	800 mm.	Rmt	7817.00			
viii)	900 mm.	Rmt	9741.00			
ix)	1000 mm.	Rmt	11409.00			
x)	1100 mm.	Rmt	13093.00			
xi)	1200 mm.	Rmt	15167.00			
xii)	1300 mm.	Rmt	17561.00			
xiii)	1400 mm.	Rmt	19850.00			
xiv)	1500 mm.	Rmt	22757.00			
xv)	1600 mm.	Rmt	25357.00			
xvi)	1700 mm.	Rmt	27960.00			
xvii)	1800 mm.	Rmt	30562.00			
f)	Factory Test Pressure 12 kg/Sqcm					
i)	350 mm.	Rmt	3158.00			
ii)	400 mm.	Rmt	3468.00			
iii)	450 mm.	Rmt	3719.00			
iv)	500 mm.	Rmt	4175.00			
v)	600 mm.	Rmt	5190.00			
vi)	700 mm.	Rmt	6012.00			
vii)	800 mm.	Rmt	7476.00			
viii)	900 mm.	Rmt	9295.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
ix)	1000 mm.	Rmt	10892.00			
x)	1100 mm.	Rmt	12485.00			
xi)	1200 mm.	Rmt	14715.00			
xii)	1300 mm.	Rmt	16945.00			
xiii)	1400 mm.	Rmt	18856.00			
xiv)	1500 mm.	Rmt	21591.00			
xv)	1600 mm.	Rmt	24060.00			
xvi)	1700 mm.	Rmt	26526.00			
xvii)	1800 mm.	Rmt	28994.00			
g)	Factory Test Pressure 14 kg./Sqcm.					
i)	350 mm.	Rmt	3236.00			
ii)	400 mm.	Rmt	3561.00			
iii)	450 mm.	Rmt	3833.00			
iv)	500 mm.	Rmt	4310.00			
v)	600 mm.	Rmt	5391.00			
vi)	700 mm.	Rmt	6272.00			
vii)	800 mm.	Rmt	7814.00			
viii)	900 mm.	Rmt	9739.00			
ix)	1000 mm.	Rmt	11617.00			
x)	1100 mm.	Rmt	13350.00			
xi)	1200 mm.	Rmt	15476.00			
xii)	1300 mm.	Rmt	17866.00			
xiii)	1400 mm.	Rmt	20360.00			
xiv)	1500 mm.	Rmt	23330.00			
xv)	1600 mm.	Rmt	26090.00			
xvi)	1700 mm.	Rmt	28851.00			
xvii)	1800 mm.	Rmt	31610.00			
h)	Factory Test Pressure 16 kg./Sqcm.					
i)	350 mm.	Rmt	3540.00			
ii)	400 mm.	Rmt	3912.00			
iii)	450 mm.	Rmt	4229.00			
iv)	500 mm.	Rmt	4766.00			
v)	600 mm.	Rmt	5979.00			
vi)	700 mm.	Rmt	6994.00			
vii)	800 mm.	Rmt	8723.00			
viii)	900 mm.	Rmt	11578.00			
ix)	1000 mm.	Rmt	13030.00			
x)	1100 mm.	Rmt	15638.00			
xi)	1200 mm.	Rmt	18051.00			
xii)	1300 mm.	Rmt	20777.00			
xiii)	1400 mm.	Rmt	22933.00			
xiv)	1500 mm.	Rmt	27239.00			
xv)	1600 mm.	Rmt	30554.00			
xvi)	1700 mm.	Rmt	33867.00			
xvii)	1800 mm.	Rmt	37178.00			
i)	Factory Test Pressure 18 kg/Sqcm					
i)	350 mm.	Rmt	3620.00			
ii)	400 mm.	Rmt	4020.00			
iii)	450 mm.	Rmt	4350.00			
iv)	500 mm.	Rmt	4913.00			
v)	600 mm.	Rmt	6193.00			
vi)	700 mm.	Rmt	7648.00			
vii)	800 mm.	Rmt	9544.00			
viii)	900 mm.	Rmt	12071.00			
ix)	1000 mm.	Rmt	14185.00			
x)	1100 mm.	Rmt	16370.00			
xi)	1200 mm.	Rmt	18921.00			
xii)	1300 mm.	Rmt	21793.00			
xiii)	1400 mm.	Rmt	28757.00			
xiv)	1500 mm.	Rmt	32425.00			
xv)	1600 mm.	Rmt	36549.00			
xvi)	1700 mm.	Rmt	40669.00			
xvii)	1800 mm.	Rmt	44789.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
J)	Factory Test pressure 20 kg/Sqcm.					
i)	350 mm.	Rmt	3704.00			
ii)	400 mm.	Rmt	4116.00			
iii)	450 mm.	Rmt	4476.00			
iv)	500 mm.	Rmt	5065.00			
v)	600 mm.	Rmt	6411.00			
vi)	700 mm.	Rmt	8472.00			
vii)	800 mm.	Rmt	11272.00			
viii)	900 mm.	Rmt	13324.00			
ix)	1000 mm.	Rmt	16029.00			
x)	1100 mm.	Rmt	19055.00			
xi)	1200 mm.	Rmt	23963.00			
xii)	1300 mm.	Rmt	26366.00			
xiii)	1400 mm.	Rmt	30802.00			
xiv)	1500 mm.	Rmt	34918.00			
xv)	1600 mm.	Rmt	39053.00			
xvi)	1700 mm.	Rmt	43186.00			
xvii)	1800 mm.	Rmt	47321.00			
	Note :1) Only 85% rates of providing item shall be payable till satisfactory hydrulic testing is given.					
2.	Lowering, laying and jointing in proper grade and alignment Pre-Stressed Cement Concrete Pipes with rubber ring joints including cost of conveyance from stores to site of works, all labour involved, etc. complete but excluding cost of rubber rings (for all class of pipes)					
i)	350 mm.	Rmt	128.00			
ii)	400 mm.	Rmt	179.00			
iii)	450 mm.	Rmt	217.00			
iv)	500 mm.	Rmt	244.00			
v)	600 mm.	Rmt	328.00			
vi)	700 mm.	Rmt	359.00			
vii)	800 mm.	Rmt	404.00			
viii)	900 mm.	Rmt	416.00			
ix)	1000 mm.	Rmt	537.00			
x)	1100 mm	Rmt	705.00			
xi)	1200 mm	Rmt	755.00			
xii)	1300 mm	Rmt	897.00			
xiii)	1400 mm	Rmt	946.00			
xiv)	1500 mm	Rmt	1194.00			
xv)	1600 mm	Rmt	1343.00			
xvi)	1700 mm.	Rmt	1496.00			
xvii)	1800 mm.	Rmt	1454.00			
3.	Hydraulic testing of Pre-Stressed Cement Concrete Pipes with rubber ring joints to specified pressure including cost of all materials and labour and water for testing for the length upto 1 km., using reciprocating type pumps which should be able to provide specified test pressure guages and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary.					
i)	350 mm.	Km	13643.00			
ii)	400 mm.	Km	19844.00			
iii)	450 mm.	Km	23565.00			
iv)	500 mm.	Km	27286.00			
v)	600 mm.	Km	35968.00			
vi)	700 mm.	Km	39688.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
vii)	800 mm.	Km	44649.00			
viii)	900 mm.	Km	45890.00			
ix)	1000 mm.	Km	59532.00			
x)	1100 mm	Km	78136.00			
xi)	1200 mm	Km	84337.00			
xii)	1300 mm	Km	99220.00			
xiii)	1400 mm	Km	105422.00			
xiv)	1500 mm	Km	132707.00			
xv)	1600 mm	Km	148830.00			
xvi)	1700 mm.	Km	166194.00			
xvii)	1800 mm.	Km	176116.00			

SECTION - I (VII)

BAR WRAPPED STEEL CYLINDER PIPES (BWSC)

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	VII. BAR WRAPPED STEEL CYLINDER PIPES (BWSC)			
1.	**Providing and supplying European Standard EN 639/1994 and EN 641/1994 or AWWA C-303 standard and reinforced concrete pressure pipes cylinder type or IS-15155-2002** (Bar wrapped steel cylinder pipes suitable for overlaping steel welded joint or butt welded steel joints) of following class and diameter including cost of all material and labour required, inspection charges, transportation to stores, transit insurance, loading, unloding and stacking excluding GST levied by GOI & GOM in all respect,etc. complete. **i) Factory test pressure** a) Site test pressure + 01N/mm2, For working pressure upto 1 N/mm2 b) Site test pressure + 02N/mm2, For working pressure upto 1 N/mm2 **ii) Site test pressure -** 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be control within 25% of pumphead incase of pumping main) **iii) Working pressure -** The maximum sustained internal pressure excluding surge to which each portion of pipeline may be subjected when installed.			
	Note : 1) Class mentioned below represents the working pressure of pipe. 2) For external coating at site to the joints, necessary polythene wrap ping for pouring cement slurry shall also be given free with each pipe.			
a)	**Factory Test Pressure 4 kg / Sqcm**			
i)	300 mm	Rmt	3312.00	
ii)	350 mm.	Rmt	3725.00	
iii)	400 mm.	Rmt	4087.00	
iv)	450 mm.	Rmt	4524.00	
v)	500 mm.	Rmt	5033.00	
vi)	600 mm.	Rmt	6544.00	
vii)	700 mm.	Rmt	7562.00	
viii)	800 mm.	Rmt	8213.00	
ix)	900 mm.	Rmt	11477.00	
x)	1000 mm.	Rmt	13226.00	
xi)	1100 mm.	Rmt	19913.00	
xii)	1200 mm.	Rmt	22208.00	
xiii)	1300 mm.	Rmt	25935.00	
xiv)	1400 mm.	Rmt	27817.00	
xv)	1500 mm.	Rmt	29687.00	
xvi)	1600 mm.	Rmt	31981.00	
xvii)	1700 mm.	Rmt	33930.00	
xviii)	1800 mm.	Rmt	36227.00	
b)	**Factory Test Pressure 6 kg / Sqcm**			
i)	300 mm	Rmt	3316.00	
ii)	350 mm.	Rmt	3729.00	
iii)	400 mm.	Rmt	4091.00	
iv)	450 mm.	Rmt	4527.00	
v)	500 mm.	Rmt	5042.00	
vi)	600 mm.	Rmt	6553.00	
vii)	700 mm.	Rmt	7569.00	
viii)	800 mm.	Rmt	8219.00	
ix)	900 mm.	Rmt	11483.00	
x)	1000 mm.	Rmt	13232.00	
xi)	1100 mm.	Rmt	19923.00	
xii)	1200 mm.	Rmt	22217.00	
xiii)	1300 mm.	Rmt	25940.00	
xiv)	1400 mm.	Rmt	27826.00	
xv)	1500 mm.	Rmt	29695.00	
xvi)	1600 mm.	Rmt	31991.00	
xvii)	1700 mm.	Rmt	33936.00	
xviii)	1800 mm.	Rmt	36233.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
c)	Factory Test Pressure 8 kg / Sqcm			
i)	300 mm	Rmt	3319.00	
ii)	350 mm.	Rmt	3735.00	
iii)	400 mm.	Rmt	4094.00	
iv)	450 mm.	Rmt	4530.00	
v)	500 mm.	Rmt	5053.00	
vi)	600 mm.	Rmt	6563.00	
vii)	700 mm.	Rmt	7579.00	
viii)	800 mm.	Rmt	8230.00	
ix)	900 mm.	Rmt	11494.00	
x)	1000 mm.	Rmt	13244.00	
xi)	1100 mm.	Rmt	19934.00	
xii)	1200 mm.	Rmt	22227.00	
xiii)	1300 mm.	Rmt	25951.00	
xiv)	1400 mm.	Rmt	27834.00	
xv)	1500 mm.	Rmt	29706.00	
xvi)	1600 mm.	Rmt	32002.00	
xvii)	1700 mm.	Rmt	33947.00	
xviii)	1800 mm.	Rmt	36246.00	
d)	Factory Test Pressure 10 kg / Sqcm			
i)	300 mm.	Rmt	3320.00	
ii)	350 mm.	Rmt	3736.00	
iii)	400 mm.	Rmt	4098.00	
iv)	450 mm.	Rmt	4532.00	
v)	500 mm.	Rmt	5067.00	
vi)	600 mm.	Rmt	6579.00	
vii)	700 mm.	Rmt	7596.00	
viii)	800 mm.	Rmt	8247.00	
ix)	900 mm.	Rmt	11510.00	
x)	1000 mm.	Rmt	13258.00	
xi)	1100 mm.	Rmt	19949.00	
xii)	1200 mm.	Rmt	22244.00	
xiii)	1300 mm.	Rmt	25969.00	
xiv)	1400 mm.	Rmt	27850.00	
xv)	1500 mm.	Rmt	29722.00	
xvi)	1600 mm.	Rmt	32017.00	
xvii)	1700 mm.	Rmt	33965.00	
xviii)	1800 mm.	Rmt	36263.00	
e)	Factory Test Pressure 12 kg / Sqcm			
i)	300 mm	Rmt	3261.00	
ii)	350 mm.	Rmt	3670.00	
iii)	400 mm.	Rmt	4025.00	
iv)	450 mm.	Rmt	4453.00	
v)	500 mm.	Rmt	4995.00	
vi)	600 mm.	Rmt	6475.00	
vii)	700 mm.	Rmt	7473.00	
viii)	800 mm.	Rmt	9241.00	
ix)	900 mm.	Rmt	11295.00	
x)	1000 mm.	Rmt	14042.00	
xi)	1100 mm.	Rmt	19598.00	
xii)	1200 mm.	Rmt	21849.00	
xiii)	1300 mm.	Rmt	25505.00	
xiv)	1400 mm.	Rmt	27354.00	
xv)	1500 mm.	Rmt	29500.00	
xvi)	1600 mm.	Rmt	32633.00	
xvii)	1700 mm.	Rmt	35320.00	
xviii)	1800 mm.	Rmt	39280.00	
f)	Factory Test Pressure 14 kg / Sqcm			
i)	300 mm	Rmt	3267.00	
ii)	350 mm.	Rmt	3676.00	
iii)	400 mm.	Rmt	4028.00	
iv)	450 mm.	Rmt	4466.00	
v)	500 mm.	Rmt	5083.00	
vi)	600 mm.	Rmt	6593.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
vii)	700 mm.	Rmt	8580.00	
viii)	800 mm.	Rmt	10058.00	
ix)	900 mm.	Rmt	12407.00	
x)	1000 mm.	Rmt	14937.00	
xi)	1100 mm.	Rmt	19679.00	
xii)	1200 mm.	Rmt	21842.00	
xiii)	1300 mm.	Rmt	26135.00	
xiv)	1400 mm.	Rmt	29534.00	
xv)	1500 mm.	Rmt	32860.00	
xvi)	1600 mm.	Rmt	36642.00	
xvii)	1700 mm.	Rmt	40233.00	
xviii)	1800 mm.	Rmt	44015.00	
g)	**Factory Test Pressure 16 kg / Sqcm**			
i)	300 mm	Rmt	3269.00	
ii)	350 mm.	Rmt	3679.00	
iii)	400 mm.	Rmt	4033.00	
iv)	450 mm.	Rmt	4623.00	
v)	500 mm.	Rmt	5452.00	
vi)	600 mm.	Rmt	7077.00	
vii)	700 mm.	Rmt	9132.00	
viii)	800 mm.	Rmt	10943.00	
ix)	900 mm.	Rmt	13533.00	
x)	1000 mm.	Rmt	16449.00	
xi)	1100 mm.	Rmt	20757.00	
xii)	1200 mm.	Rmt	24204.00	
xiii)	1300 mm.	Rmt	28834.00	
xiv)	1400 mm.	Rmt	32549.00	
xv)	1500 mm.	Rmt	36299.00	
xvi)	1600 mm.	Rmt	40368.00	
xvii)	1700 mm.	Rmt	44806.00	
xviii)	1800 mm.	Rmt	49996.00	
h)	**Factory Test Pressure 18 kg / Sqcm**			
i)	300 mm.	Rmt	3430.00	
ii)	350 mm.	Rmt	3860.00	
iii)	400 mm.	Rmt	4287.00	
iv)	450 mm.	Rmt	4996.00	
v)	500 mm.	Rmt	5881.00	
vi)	600 mm.	Rmt	7695.00	
vii)	700 mm.	Rmt	10117.00	
viii)	800 mm.	Rmt	11940.00	
ix)	900 mm.	Rmt	14757.00	
x)	1000 mm.	Rmt	18002.00	
xi)	1100 mm.	Rmt	22692.00	
xii)	1200 mm.	Rmt	26441.00	
xiii)	1300 mm.	Rmt	31396.00	
xiv)	1400 mm.	Rmt	35878.00	
xv)	1500 mm.	Rmt	39626.00	
xvi)	1600 mm.	Rmt	44952.00	
xvii)	1700 mm.	Rmt	49854.00	
xviii)	1800 mm.	Rmt	55179.00	
i)	**Factory Test Pressure 20 kg / Sqcm**			
i)	300 mm.	Rmt	3500.00	
ii)	350 mm.	Rmt	3845.00	
iii)	400 mm.	Rmt	4528.00	
iv)	450 mm.	Rmt	5171.00	
v)	500 mm.	Rmt	6271.00	
vi)	600 mm.	Rmt	8203.00	
vii)	700 mm.	Rmt	10665.00	
viii)	800 mm.	Rmt	13018.00	
ix)	900 mm.	Rmt	16076.00	
x)	1000 mm.	Rmt	19668.00	
xi)	1100 mm.	Rmt	24729.00	
xii)	1200 mm.	Rmt	28750.00	
xiii)	1300 mm.	Rmt	34151.00	
xiv)	1400 mm.	Rmt	39358.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
xv)	1500 mm.	Rmt	44326.00	
xvi)	1600 mm.	Rmt	49509.00	
xvii)	1700 mm.	Rmt	55308.00	
xviii)	1800 mm.	Rmt	61224.00	

Notes

1) For lowering, laying & pouring of cement mortar in the field on joints (

2) For field welding rates applicable for similar welding in M. S. pipes given in that section shall be abopted.

3) Whenever manufacturer is separate and contractor for lowering laying, jointing and testing is separate, the principal contractor shall be enter into an agreement with B. W. S. C. pipe manufacturer for satisfactory manufacturing transporting, lowering, laying, jointing and testing of pipes.

This footnote shall appear into the tender condition.

ayable till satisfatory Hydraulic testing is given.

5) No negative tolerance shall be accepted for the M. S. Shell thickness of B. W. S. C. pipes over the thickness mentioned in E. N. 641 of AWWA AC 303.

SECTION - I (VIII)

GLASS REINFORCED PLASTIC PIPES (GRP)

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	VIII. GLASS REINPORCED PLASTIC PIPES (GRP)			
1.	**Providing and supplying Glass fibre reinfor ced polyester pipes confirming to BIS -12709 / BIS 14402** with double bell REKA GRP coupling EPDM rubber gaskets for sealing of following pressure diameter and stiffness class including cost of all material and labour required, insurance, transportation to store, unloading and stacking excluding GST levied by GOI & GOM in all respect etc. complete.			
	A. Class (SN) 2500			
a)	**3 Kg/Sq. cm :**			
i)	300 mm	Rmt	1667.00	
ii)	350 mm	Rmt	1927.00	
iii)	400 mm	Rmt	2122.00	
iv)	450 mm	Rmt	2387.00	
v)	500 mm	Rmt	2701.00	
vi)	600 mm	Rmt	3471.00	
vii)	700 mm	Rmt	4314.00	
viii)	800 mm	Rmt	5297.00	
ix)	900 mm	Rmt	6471.00	
x)	1000 mm	Rmt	7676.00	
xi)	1100 mm	Rmt	9331.00	
xii)	1200 mm	Rmt	10864.00	
xiii)	1300 mm	Rmt	12301.00	
xiv)	1400 mm	Rmt	14204.00	
xv)	1500 mm	Rmt	16144.00	
xvi)	1600 mm	Rmt	18801.00	
xvii)	1700 mm	Rmt	22470.00	
xviii)	1800 mm	Rmt	24519.00	
xix)	1900 mm	Rmt	27409.00	
xx)	2000 mm	Rmt	29633.00	
xxi)	2100 mm	Rmt	33114.00	
xxii)	2200 mm	Rmt	35545.00	
xxiii)	2300 mm	Rmt	38414.00	
xiv)	2400 mm	Rmt	41063.00	
b)	**6 Kg/Sq. cm :**			
i)	300 mm	Rmt	1730.00	
ii)	350 mm	Rmt	1977.00	
iii)	400 mm	Rmt	2222.00	
iv)	450 mm	Rmt	2466.00	
v)	500 mm	Rmt	2804.00	
vi)	600 mm	Rmt	3632.00	
vii)	700 mm	Rmt	4516.00	
viii)	800 mm	Rmt	5533.00	
ix)	900 mm	Rmt	6741.00	
x)	1000 mm	Rmt	8018.00	
xi)	1100 mm	Rmt	9716.00	
xii)	1200 mm	Rmt	11243.00	
xiii)	1300 mm	Rmt	12865.00	
xiv)	1400 mm	Rmt	14721.00	
xv)	1500 mm	Rmt	16793.00	
xvi)	1600 mm	Rmt	19586.00	
xvii)	1700 mm	Rmt	23416.00	
xviii)	1800 mm	Rmt	25479.00	
xix)	1900 mm	Rmt	28511.00	
xx)	2000 mm	Rmt	30790.00	
xxi)	2100 mm	Rmt	34422.00	
xxii)	2200 mm	Rmt	37095.00	
xxiii)	2300 mm	Rmt	39980.00	
xiv)	2400 mm	Rmt	42692.00	
c)	**9 Kg/Sq. cm :**			
i)	300 mm	Rmt	1785.00	
ii)	350 mm	Rmt	2074.00	
iii)	400 mm	Rmt	2312.00	
iv)	450 mm	Rmt	2621.00	
v)	500 mm	Rmt	2972.00	
vi)	600 mm	Rmt	3854.00	
vii)	700 mm	Rmt	4800.00	
viii)	800 mm	Rmt	5979.00	
ix)	900 mm	Rmt	7304.00	
x)	1000 mm	Rmt	8648.00	
xi)	1100 mm	Rmt	10451.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
xii)	1200 mm	Rmt	12135.00	
xiii)	1300 mm	Rmt	14013.00	
xiv)	1400 mm	Rmt	16102.00	
xv)	1500 mm	Rmt	18286.00	
xvi)	1600 mm	Rmt	21349.00	
xvii)	1700 mm	Rmt	25579.00	
xviii)	1800 mm	Rmt	27974.00	
xix)	1900 mm	Rmt	31076.00	
xx)	2000 mm	Rmt	33721.00	
xxi)	2100 mm	Rmt	37525.00	
xxii)	2200 mm	Rmt	40343.00	
xxiii)	2300 mm	Rmt	43560.00	
xiv)	2400 mm	Rmt	46977.00	
d)	**12 Kg/Sq. cm :**			
i)	300 mm	Rmt	1891.00	
ii)	350 mm	Rmt	2182.00	
iii)	400 mm	Rmt	2431.00	
iv)	450 mm	Rmt	3175.00	
v)	500 mm	Rmt	2751.00	
vi)	600 mm	Rmt	4139.00	
vii)	700 mm	Rmt	5135.00	
viii)	800 mm	Rmt	6362.00	
ix)	900 mm	Rmt	7801.00	
x)	1000 mm	Rmt	9299.00	
xi)	1100 mm	Rmt	11398.00	
xii)	1200 mm	Rmt	13295.00	
xiii)	1300 mm	Rmt	15045.00	
xiv)	1400 mm	Rmt	17316.00	
xv)	1500 mm	Rmt	19799.00	
xvi)	1600 mm	Rmt	22965.00	
xvii)	1700 mm	Rmt	27568.00	
xviii)	1800 mm	Rmt	30225.00	
xix)	1900 mm	Rmt	33457.00	
xx)	2000 mm	Rmt	36383.00	
xxi)	2100 mm	Rmt	40560.00	
xxii)	2200 mm	Rmt	43769.00	
e)	**15 Kg/Sq. cm :**			
i)	300 mm	Rmt	1969.00	
ii)	350 mm	Rmt	2274.00	
iii)	400 mm	Rmt	2530.00	
iv)	450 mm	Rmt	2915.00	
v)	500 mm	Rmt	3351.00	
vi)	600 mm	Rmt	4428.00	
vii)	700 mm	Rmt	5521.00	
viii)	800 mm	Rmt	6889.00	
ix)	900 mm	Rmt	8493.00	
x)	1000 mm	Rmt	10079.00	
xi)	1100 mm	Rmt	12366.00	
xii)	1200 mm	Rmt	14348.00	
xiii)	1300 mm	Rmt	16469.00	
xiv)	1400 mm	Rmt	18956.00	
xv)	1500 mm	Rmt	21505.00	
xvi)	1600 mm	Rmt	24952.00	
xvii)	1700 mm	Rmt	30373.00	
xvii)	1800 mm	Rmt	33194.00	
xix)	1900 mm	Rmt	37065.00	
xx)	2000 mm	Rmt	40338.00	
B.	**Class (SN) 5000**			
a)	**3 Kg/Sq. cm :**			
i)	300 mm	Rmt	1786.00	
ii)	350 mm	Rmt	2096.00	
iii)	400 mm	Rmt	2387.00	
iv)	450 mm	Rmt	2717.00	
v)	500 mm	Rmt	3005.00	
vi)	600 mm	Rmt	3917.00	
vii)	700 mm	Rmt	4903.00	
viii)	800 mm	Rmt	6075.00	
ix)	900 mm	Rmt	7482.00	
x)	1000 mm	Rmt	8898.00	
xi)	1100 mm	Rmt	10788.00	
xii)	1200 mm	Rmt	12643.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
xiii)	1300 mm	Rmt	14397.00	
xiv)	1400 mm	Rmt	16545.00	
xv)	1500 mm	Rmt	18883.00	
xvi)	1600 mm	Rmt	21949.00	
xvii)	1700 mm	Rmt	26302.00	
xviii)	1800 mm	Rmt	28848.00	
xix)	1900 mm	Rmt	32108.00	
xx)	2000 mm	Rmt	34922.00	
xxi)	2100 mm	Rmt	38881.00	
xxii)	2200 mm	Rmt	41967.00	
b)	**6 Kg/Sq. cm :**			
i)	300 mm	Rmt	1814.00	
ii)	350 mm	Rmt	2132.00	
iii)	400 mm	Rmt	2355.00	
iv)	450 mm	Rmt	2685.00	
v)	500 mm	Rmt	3093.00	
vi)	600 mm	Rmt	4002.00	
vii)	700 mm	Rmt	5028.00	
viii)	800 mm	Rmt	6222.00	
ix)	900 mm	Rmt	7664.00	
x)	1000 mm	Rmt	9098.00	
xi)	1100 mm	Rmt	11129.00	
xii)	1200 mm	Rmt	12935.00	
xiii)	1300 mm	Rmt	14782.00	
xiv)	1400 mm	Rmt	16961.00	
xv)	1500 mm	Rmt	19323.00	
xvi)	1600 mm	Rmt	22491.00	
xvii)	1700 mm	Rmt	26945.00	
xviii)	1800 mm	Rmt	29544.00	
xix)	1900 mm	Rmt	32910.00	
xx)	2000 mm	Rmt	35856.00	
xxi)	2100 mm	Rmt	39886.00	
xxii)	2200 mm	Rmt	43120.00	
c)	**9 Kg/Sq. cm :**			
i)	300 mm	Rmt	1880.00	
ii)	350 mm	Rmt	2203.00	
iii)	400 mm	Rmt	2479.00	
iv)	450 mm	Rmt	2823.00	
v)	500 mm	Rmt	3230.00	
vi)	600 mm	Rmt	4437.00	
vii)	700 mm	Rmt	5270.00	
viii)	800 mm	Rmt	6787.00	
ix)	900 mm	Rmt	8011.00	
x)	1000 mm	Rmt	9558.00	
xi)	1100 mm	Rmt	15430.00	
xii)	1200 mm	Rmt	17555.00	
xiii)	1300 mm	Rmt	19779.00	
xiv)	1400 mm	Rmt	22141.00	
xv)	1500 mm	Rmt	25363.00	
xvi)	1600 mm	Rmt	28813.00	
xvii)	1700 mm	Rmt	34690.00	
xviii)	1800 mm	Rmt	37800.00	
d)	**12 Kg/Sq. cm :**			
i)	300 mm	Rmt	1934.00	
ii)	350 mm	Rmt	2294.00	
iii)	400 mm	Rmt	2536.00	
iv)	450 mm	Rmt	2936.00	
v)	500 mm	Rmt	3353.00	
vi)	600 mm	Rmt	4428.00	
vii)	700 mm	Rmt	5580.00	
viii)	800 mm	Rmt	6887.00	
ix)	900 mm	Rmt	8601.00	
x)	1000 mm	Rmt	10116.00	
xi)	1100 mm	Rmt	12433.00	
xii)	1200 mm	Rmt	14449.00	
xiii)	1300 mm	Rmt	16559.00	
xiv)	1400 mm	Rmt	19082.00	
xv)	1500 mm	Rmt	21673.00	
xvi)	1600 mm	Rmt	25050.00	
xvii)	1700 mm	Rmt	30154.00	
xviii)	1800 mm	Rmt	33150.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
xix)	1900 mm	Rmt	36736.00	
e)	**15 Kg/Sq. cm :**			
i)	300 mm	Rmt	2003.00	
ii)	350 mm	Rmt	2384.00	
iii)	400 mm	Rmt	2665.00	
iv)	450 mm	Rmt	3078.00	
v)	500 mm	Rmt	3512.00	
vi)	600 mm	Rmt	4662.00	
vii)	700 mm	Rmt	5869.00	
viii)	800 mm	Rmt	7343.00	
ix)	900 mm	Rmt	9055.00	
x)	1000 mm	Rmt	10795.00	
xi)	1100 mm	Rmt	13131.00	
xii)	1200 mm	Rmt	15386.00	
xiii)	1300 mm	Rmt	17581.00	
xiv)	1400 mm	Rmt	20286.00	
xv)	1500 mm	Rmt	23073.00	
xvi)	1600 mm	Rmt	26714.00	
xvii)	1700 mm	Rmt	32077.00	
xviii)	1800 mm	Rmt	35329.00	

Note : 1) For lowering, laying & jointing rates of GRP pipes 50 % rates for lowering, laying &
2) Where manufacturer is seperate & contractor for lowering,laying jointing &testing is
This foot Note shall appear in tender conditions.
3) Only 85 % Payment shall be payable till satisfactory hydraulic testing is given.

SECTION - I (IX)

H.D.P.E. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	IX. H. D. P. E. PIPES					
1.	**Providing and supplying in** standard lengths Polyethelene Pipes, confirming to IS 4984 / 14151 / 12786 / 13488 with nesessary jointing material like mechanical connector i. e. thread / insert joint / quick release coupler joint / compression fitting joint or flanged joint excluding coupler/specials, including transportation and freight charges, inspection charges, loading / unloading charges, conveyance to the departmental stores & stacking the same in closed shade duly protecting from sunrays & rains, excluding GST levied by GI & GOM in all respect etc. complete.					
	Note:- H.D.P.E. Pipes shall be as per latest IS Specifications Also HDPE pipes upto 110 mm Dia shall be in coil form					
A.)	**PE-100 a) 6 Kg/Sq. cm :**					
i)	63 mm	Rmt	96.00			
ii)	75 mm	Rmt	134.00			
iii)	90 mm	Rmt	190.00			
iv)	110 mm	Rmt	276.00			
v)	125 mm	Rmt	378.00			
vi)	140 mm	Rmt	475.00			
vii)	160 mm	Rmt	615.00			
viii)	180 mm	Rmt	774.00			
ix)	200 mm	Rmt	908.00			
x)	225 mm	Rmt	1169.00			
xi)	250 mm	Rmt	1438.00			
xii)	280 mm	Rmt	1801.00			
xiii)	315 mm	Rmt	2281.00			
xiv)	355 mm	Rmt	2891.00			
xv)	400 mm	Rmt	3787.00			
xvi)	450 mm	Rmt	4990.00			
xvii)	500 mm	Rmt	6170.00			
xviii)	560 mm	Rmt	7723.00			
xix)	630 mm	Rmt	9720.00			
xx)	710 mm	Rmt	12550.00			
xxi)	800 mm	Rmt	15129.00			
xxii)	900 mm	Rmt	19168.00			
xxiii)	1000 mm	Rmt	23636.00			
b)	**8 Kg/Sq. cm :**					
i)	63 mm	Rmt	121.00			
ii)	75 mm	Rmt	162.00			
iii)	90 mm	Rmt	231.00			
iv)	110 mm	Rmt	338.00			
v)	125 mm	Rmt	438.00			
vi)	140 mm	Rmt	600.00			
vii)	160 mm	Rmt	777.00			
viii)	180 mm	Rmt	980.00			
ix)	200 mm	Rmt	1153.00			
x)	225 mm	Rmt	1481.00			
xi)	250 mm	Rmt	1825.00			
xii)	280 mm	Rmt	2288.00			
xiii)	315 mm	Rmt	2899.00			
xiv)	355 mm	Rmt	3667.00			
xv)	400 mm	Rmt	4815.00			
xvi)	450 mm	Rmt	6437.00			
xvii)	500 mm	Rmt	7940.00			
xviii)	560 mm	Rmt	9968.00			
xix)	630 mm	Rmt	12542.00			
xx)	710 mm	Rmt	16194.00			
xxi)	800 mm	Rmt	19536.00			
xxii)	900 mm	Rmt	24136.00			
xxiii)	1000 mm	Rmt	24729.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
c)	10 Kg/Sq. cm :					
i)	63 mm	Rmt	149.00			
ii)	75 mm	Rmt	210.00			
iii)	90 mm	Rmt	303.00			
iv)	110 mm	Rmt	446.00			
v)	125 mm	Rmt	572.00			
vi)	140 mm	Rmt	715.00			
vii)	160 mm	Rmt	930.00			
viii)	180 mm	Rmt	1177.00			
ix)	200 mm	Rmt	1381.00			
x)	225 mm	Rmt	1768.00			
xi)	250 mm	Rmt	2206.00			
xii)	280 mm	Rmt	2725.00			
xiii)	315 mm	Rmt	3498.00			
xiv)	355 mm	Rmt	4390.00			
xv)	400 mm	Rmt	5848.00			
xvi)	450 mm	Rmt	7780.00			
xvii)	500 mm	Rmt	9617.00			
xviii)	560 mm	Rmt	11567.00			
xix)	630 mm	Rmt	15182.00			
xx)	710 mm	Rmt	19285.00			
xxi)	800 mm	Rmt	23244.00			
xxii)	900 mm	Rmt	23521.00			
xxiii)	1000 mm	Rmt	26426.00			
d)	12.5 Kg/Sq. cm :					
i)	63 mm	Rmt	177.00			
ii)	75 mm	Rmt	249.00			
iii)	90 mm	Rmt	358.00			
iv)	110 mm	Rmt	527.00			
v)	125 mm	Rmt	680.00			
vi)	140 mm	Rmt	854.00			
vii)	160 mm	Rmt	1110.00			
viii)	180 mm	Rmt	1403.00			
ix)	200 mm	Rmt	1649.00			
x)	225 mm	Rmt	2127.00			
xi)	250 mm	Rmt	2616.00			
xii)	280 mm	Rmt	3281.00			
xiii)	315 mm	Rmt	4154.00			
xiv)	355 mm	Rmt	5275.00			
xv)	400 mm	Rmt	6932.00			
xvi)	450 mm	Rmt	9264.00			
xvii)	500 mm	Rmt	11418.00			
xviii)	560 mm	Rmt	13897.00			
xix)	630 mm	Rmt	18255.00			
xx)	710 mm	Rmt	18825.00			
xxi)	800 mm	Rmt	20622.00			
xxii)	900 mm	Rmt	26126.00			
xxiii)	1000 mm	Rmt	31820.00			
e)	16 Kg/Sq. cm :					
i)	63 mm	Rmt	201.00			
ii)	75 mm	Rmt	286.00			
iii)	90 mm	Rmt	409.00			
iv)	110 mm	Rmt	604.00			
v)	125 mm	Rmt	782.00			
vi)	140 mm	Rmt	975.00			
vii)	160 mm	Rmt	1279.00			
viii)	180 mm	Rmt	1609.00			
ix)	200 mm	Rmt	2527.00			
x)	225 mm	Rmt	3193.00			
xi)	250 mm	Rmt	3939.00			
xii)	280 mm	Rmt	4940.00			
xiii)	315 mm	Rmt	6245.00			
xiv)	355 mm	Rmt	7920.00			
xv)	400 mm	Rmt	10262.00			
xvi)	450 mm	Rmt	13006.00			
xvii)	500 mm	Rmt	16039.00			
xviii)	560 mm	Rmt	17645.00			
xix)	630 mm	Rmt	18526.00			
xx)	710 mm	Rmt	19778.00			
xxi)	800 mm	Rmt	23829.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xxii)	900 mm	Rmt	30160.00			
xxiii)	1000 mm	Rmt	37030.00			
2.	**Lowering, Laying and Jointing H. D. P. E./M. D. P. E. pipes** in proper position including all specials by compression fitting/electrofusion and butt fusion jointing procedure as per relevent IS Code complete with all materials for jointing procedure like Electrofusion machine, Electric heater/butt fusion welding machine with hydraulic jack, top loading clamp etc. and all labours as directed by engineer in charge as per IS-7634 Part II					
	For all classes.					
i)	20 mm	Rmt.	12.00			
ii)	25 mm	Rmt.	19.00			
iii)	32 mm	Rmt.	23.00			
iv)	40 mm	Rmt.	31.00			
v)	50 mm	Rmt.	37.00			
vi)	63 mm	Rmt.	45.00			
vii)	75 mm	Rmt.	48.00			
viii)	90 mm	Rmt.	67.00			
ix)	110 mm	Rmt.	70.00			
x)	125 mm	Rmt.	80.00			
xi)	140 mm	Rmt.	107.00			
xii)	160 mm	Rmt.	116.00			
xiii)	180 mm	Rmt.	116.00			
xiv)	200 mm	Rmt.	129.00			
xv)	225 mm	Rmt.	165.00			
xvi)	250 mm	Rmt.	169.00			
xvii)	280 mm	Rmt.	210.00			
xviii)	315 mm	Rmt.	231.00			
xix)	355 mm	Rmt.	252.00			
xx)	400 mm	Rmt.	255.00			
xxi)	450 mm	Rmt.	288.00			
xxii)	500 mm	Rmt.	371.00			
xxiii)	560 mm	Rmt.	416.00			
xxiv)	630 mm	Rmt.	468.00			
3.	**Hydraulic testing of H. D. P. E./ M. D. P. E. pipe line** to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position..					
i)	20 mm dia	Km.	1241.00			
ii)	25 mm dia	Km.	2481.00			
iii)	32 mm dia	Km.	2481.00			
iv)	40 mm dia	Km.	3721.00			
v)	50 mm dia	Km.	3721.00			
vi)	63 mm dia	Km.	4961.00			
vii)	75 mm dia	Km.	4961.00			
viii)	90 mm dia	Km.	7442.00			
ix)	110 mm dia	Km.	7442.00			
x)	125 mm dia	Km.	8682.00			
xi)	140 mm dia	Km.	12403.00			
xii)	160 mm dia	Km.	12403.00			
xiii)	180 mm dia	Km.	12403.00			
xiv)	200 mm dia	Km.	13643.00			
xv)	225 mm dia	Km.	18604.00			
xvi)	250 mm dia	Km.	18604.00			
xvii)	280 mm dia	Km.	23565.00			
xviii)	315 mm dia	Km.	26046.00			
xix)	355 mm dia	Km.	28526.00			
xx)	400 mm dia	Km.	28526.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xxi)	450 mm dia	Km.	32247.00			
xxii)	500 mm dia	Km.	40929.00			
xxiii)	560 mm dia	Km.	45890.00			
xxiv)	630 mm dia	Km.	52091.00			
4.	**Providing supplying in standard length (PE material)** HDPE Double wall corrugated pipe for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material coupler including transportation and freight charges, inspection charges, loading and unloading charges, conveyance to departmental store and stacking the same in closed shade duly protecting from direct sun ray and rains excluding GST levied by GoI and GoM in all respect, etc. complete.					
	Rate for SN 4 and SN 8					
	i) ID 135 mm dia	Rmt.	249.00	328.00		
	ii) ID 150 mm dia	Rmt.	318.00	419.00		
	iii) ID 170 mm dia	Rmt.	370.00	487.00		
	iv) ID 200 mm dia	Rmt.	506.00	669.00		
	v) ID 250 mm dia	Rmt.	835.00	1102.00		
	vi) ID 300 mm dia	Rmt.	1289.00	1703.00		
	vii) ID 400 mm dia	Rmt.	1740.00	2297.00		
	viii) ID 500 mm dia	Rmt.	2874.00	3794.00		
	ix) ID 600 mm dia	Rmt.	4374.00	5774.00		
	x) ID 800 mm dia	Rmt.	7093.00	9361.00		
5.	**Lowering, Laying and Jointing** (PE material) HDPE double wall corrugated pipe for non pressure underground by heating to the ends of pipes with the help of tefflon coated electric heater to the required temparature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. The pressing may be required to be done with Jacks/ Hydraulic Jacks/Butt fusion machine etc. complete with all materials labours as directed by Engineer - in - charge. including					
	Rate for SN 4 and SN 8					
	i) ID 135 mm dia	Rmt.	37.00			
	ii) ID 150 mm dia	Rmt.	40.00			
	iii) ID 170 mm dia	Rmt.	44.00			
	iv) ID 200 mm dia	Rmt.	47.00			
	v) ID 250 mm dia	Rmt.	58.00			
	vi) ID 300 mm dia	Rmt.	72.00			
	vii) ID 400 mm dia	Rmt.	87.00			
	viii) ID 500 mm dia	Rmt.	103.00			
	ix) ID 600 mm dia	Rmt.	119.00			
	x) ID 800 mm dia	Rmt.	138.00			
6.	**Hydraulic testing of HDPE** double wall corrugated pipe for non pressure underground line to specified pressure including cost of all materials and labour and water for testing for specified length including cutting, placing end cap making arrangement for filling safe water using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary and reinstating to original position					
	Rate for SN 4 and SN 8					
	i) ID 135 mm dia	Km.	3721.00			
	ii) ID 150 mm dia	Km.	3721.00			
	iii) ID 170 mm dia	Km.	4961.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	iv) ID 200 mm dia	Km.	4961.00			
	v) ID 250 mm dia	Km.	6202.00			
	vi) ID 300 mm dia	Km.	7442.00			
	vii) ID 400 mm dia	Km.	8682.00			
	viii) ID 500 mm dia	Km.	9922.00			
	ix) ID 600 mm dia	Km.	12403.00			
	x) ID 800 mm dia	Km.	13643.00			
	Only 85% rates of providing item shall be payable till satisfactory hydraulic testing is given.					

SECTION - I (X)

M.D.P.E. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	X. M. D. P. E. PIPES					
1.	**Providing and Supplying Blue MDPE pipes** conforming to ISO 4427:1996 manufactured from virgin resin PE 80 Food grade compounded Raw Material having Blue Colour only with quality assurance certificate from quality agencies like WRC / CIPET (India) / DVGM / KIWA / SPGN etc. for usage in Drinking Water system. The cost shall include testing of all materials, Inspection charges, transportation up to store, transit insurance, loading, as specified and directed, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete as specified and directed.					
a)	**PN 16 (SDR 9)**					
i)	20 mm	Rmt	25.00			
ii)	25 mm	Rmt	34.00			
iii)	32 mm	Rmt	56.00			
iv)	40 mm	Rmt	83.00			
v)	50 mm	Rmt	124.00			
vi)	63 mm	Rmt	184.00			
vii)	75 mm	Rmt	248.00			
viii)	90 mm	Rmt	359.00			
ix)	110 mm	Rmt	531.00			
x)	125 mm	Rmt	686.00			
xi)	140 mm	Rmt	862.00			
xii)	160 mm	Rmt	1143.00			
xiii)	180 mm	Rmt	1448.00			
xiv)	200 mm	Rmt	1790.00			
xv)	225 mm	Rmt	2266.00			
xvi)	250 mm	Rmt	2787.00			
xvii)	280 mm	Rmt	3502.00			
xviii)	315 mm	Rmt	4505.00			
b)	**PN 12.5 (SDR 11)**					
i)	25 mm	Rmt	32.00			
ii)	32 mm	Rmt	53.00			
iii)	40 mm	Rmt	78.00			
iv)	50 mm	Rmt	110.00			
v)	63 mm	Rmt	149.00			
vi)	75 mm	Rmt	207.00			
vii)	90 mm	Rmt	300.00			
viii)	110 mm	Rmt	441.00			
ix)	125 mm	Rmt	575.00			
x)	140 mm	Rmt	717.00			
xi)	160 mm	Rmt	939.00			
xii)	180 mm	Rmt	1219.00			
xiii)	200 mm	Rmt	1493.00			
xiv)	225 mm	Rmt	1890.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xv)	250 mm	Rmt	2341.00			
xvi)	280 mm	Rmt	2917.00			
xvii)	315 mm	Rmt	3698.00			
c)	PN 10 (SDR 13.6)					
i)	63 mm	Rmt	127.00			
ii)	75 mm	Rmt	178.00			
iii)	90 mm	Rmt	256.00			
iv)	110 mm	Rmt	378.00			
v)	125 mm	Rmt	487.00			
vi)	140 mm	Rmt	612.00			
vii)	160 mm	Rmt	799.00			
viii)	180 mm	Rmt	1011.00			
ix)	200 mm	Rmt	1246.00			
x)	225 mm	Rmt	1580.00			
xi)	250 mm	Rmt	1944.00			
xii)	280 mm	Rmt	2437.00			
xiii)	315 mm	Rmt	3078.00			
d)	PN 8 (SDR 17)					
i)	63 mm.	Rmt	101.00			
ii)	75 mm	Rmt	144.00			
iii)	90 mm	Rmt	208.00			
iv)	110 mm	Rmt	308.00			
v)	125 mm	Rmt	394.00			
vi)	140 mm	Rmt	495.00			
vii)	160 mm	Rmt	647.00			
viii)	180 mm	Rmt	822.00			
ix)	200 mm	Rmt	1011.00			
x)	225 mm	Rmt	1284.00			
xi)	250 mm	Rmt	1609.00			
xii)	280 mm	Rmt	2015.00			
xiii)	315 mm	Rmt	2553.00			
e)	PN 6 (SDR 21)					
i)	63 mm.	Rmt	78.00			
ii)	75 mm.	Rmt	114.00			
iii)	90 mm	Rmt	161.00			
iv)	110 mm	Rmt	243.00			
v)	125 mm	Rmt	307.00			
vi)	140 mm	Rmt	388.00			
vii)	160 mm	Rmt	507.00			
viii)	180 mm	Rmt	634.00			
ix)	200 mm	Rmt	789.00			
x)	225 mm	Rmt	998.00			
xi)	250 mm	Rmt	1221.00			
xii)	280 mm	Rmt	1543.00			
xiii)	315 mm	Rmt	1940.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
2.	**Providing & Supply of Electro Fusion Fittings in accordance with BS EN12201: Part-3** suitable for drinking water with in black/ blue colour manufactured from compounded PE80/ PE100 virgin polymer and compatible with PE80/PE100 pipes, in pressure rating SDR11 with min PN12.5 rated for water application and shall be inclusive of all cost such as testing, inspection charges, transportation up to store, transit insurance, loading, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete.					
	Couplers 20	No.	87.00			
	Couplers 25	No.	87.00			
	Couplers 32	No.	87.00			
	Couplers 40	No.	151.00			
	Couplers 50	No.	188.00			
	Couplers 63	No.	224.00			
	Couplers 75	No.	379.00			
	Couplers 90	No.	415.00			
	Couplers 110	No.	577.00			
	Couplers 125	No.	588.00			
	Couplers 140	No.	1257.00			
	Couplers 160	No.	1366.00			
	Couplers 180	No.	1960.00			
	Couplers 200	No.	2202.00			
	Couplers 225	No.	2775.00			
	Couplers 250	No.	4325.00			
	Couplers 280	No.	4871.00			
	Couplers 315	No.	5321.00			
	Couplers 355	No.	5818.00			
	Couplers 400	No.	7582.00			
	Couplers 450	No.	13734.00			
	Couplers 500	No.	14448.00			
	Equal Tee					
	Equal Tee 20	No.	183.00			
	Equal Tee 25	No.	183.00			
	Equal Tee 32	No.	183.00			
	Equal Tee 40	No.	404.00			
	Equal Tee 50	No.	412.00			
	Equal Tee 63	No.	674.00			
	Equal Tee 75	No.	988.00			
	Equal Tee 90	No.	1409.00			
	Equal Tee 110	No.	1957.00			
	Equal Tee 125	No.	2700.00			
	Equal Tee 160	No.	4680.00			
	Equal Tee 180	No.	5878.00			
	Equal Tee 200	No.	9422.00			
	Equal Tee 225	No.	10626.00			
	Equal Tee 250	No.	15567.00			
	Equal Tee 315	No.	16906.00			
	Equal Tee 400	No.	23560.00			
	Elbow 90 Deg.					
	Elbow 90 Deg. 20	No.	103.00			
	Elbow 90 Deg. 25	No.	103.00			
	Elbow 90 Deg. 32	No.	104.00			
	Elbow 90 Deg. 40	No.	141.00			
	Elbow 90 Deg. 50	No.	167.00			
	Elbow 90 Deg. 63	No.	232.00			
	Elbow 90 Deg. 75	No.	364.00			
	Elbow 90 Deg. 90	No.	429.00			
	Elbow 90 Deg. 110	No.	590.00			
	Elbow 90 Deg. 125	No.	753.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	Elbow 90 Deg. 160	No.	1647.00			
	Elbow 90 Deg. 180	No.	1909.00			
	Elbow 90 Deg. 200	No.	2471.00			
	Elbow 90 Deg. 225	No.	5385.00			
	Elbow 90 Deg. 250	No.	10090.00			
	Elbow 90 Deg. 315	No.	10267.00			
	Elbow 90 Deg. 400	No.	13908.00			
	Elbow 45 Deg.					
	Elbow 45 Deg. 32	No.	110.00			
	Elbow 45 Deg. 40	No.	134.00			
	Elbow 45 Deg. 50	No.	159.00			
	Elbow 45 Deg. 63	No.	222.00			
	Elbow 45 Deg. 75	No.	346.00			
	Elbow 45 Deg. 90	No.	408.00			
	Elbow 45 Deg. 110	No.	590.00			
	Elbow 45 Deg. 125	No.	753.00			
	Elbow 45 Deg. 160	No.	1386.00			
	Elbow 45 Deg. 180	No.	1817.00			
	Elbow 45 Deg. 200	No.	1909.00			
	Elbow 45 Deg. 225	No.	2471.00			
	Elbow 45 Deg. 250	No.	5385.00			
	Elbow 45 Deg. 315	No.	10237.00			
	Elbow 45 Deg. 400	No.	13885.00			
	Reducer					
	Reducer 25X20	No.	139.00			
	Reducer 32X20	No.	145.00			
	Reducer 32X25	No.	153.00			
	Reducer 40X32	No.	165.00			
	Reducer 50X32	No.	165.00			
	Reducer 50X40	No.	165.00			
	Reducer 63X32	No.	199.00			
	Reducer 63X40	No.	199.00			
	Reducer 63X50	No.	199.00			
	Reducer 75 x 63	No.	451.00			
	Reducer 90X63	No.	495.00			
	Reducer 90X75	No.	502.00			
	Reducer 110X50	No.	611.00			
	Reducer 110X63	No.	611.00			
	Reducer 110X75	No.	642.00			
	Reducer 110X90	No.	642.00			
	Reducer 125X90	No.	713.00			
	Reducer 160X90	No.	1197.00			
	Reducer 160X110	No.	1262.00			
	Reducer 180X125	No.	1572.00			
	Reducer 200X63	No.	1815.00			
	Reducer 200X90	No.	1938.00			
	Reducer 200X110	No.	2250.00			
	Reducer 200X160	No.	1863.00			
	Reducer 225X160	No.	2725.00			
	Reducer 250X110	No.	3495.00			
	Reducer 250X160	No.	3764.00			
	Reducer 250X200	No.	4116.00			
	Reducer 315 x 200	No.	7822.00			
	Reducer 315 x 250	No.	7930.00			
	Reducer 400 x 200	No.	8424.00			
	Reducer 400 x 315	No.	9047.00			
	End Cap					
	End Cap 20	No.	36.00			
	End Cap 25	No.	36.00			
	End Cap 32	No.	51.00			
	End Cap 40	No.	55.00			
	End Cap 50	No.	58.00			
	End Cap 63	No.	77.00			
	End Cap 75	No.	284.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	End Cap 90	No.	323.00			
	End Cap 110	No.	454.00			
	End Cap 125	No.	576.00			
	End Cap 140	No.	941.00			
	End Cap 160	No.	1020.00			
	End Cap 180	No.	1118.00			
	End Cap 200	No.	1895.00			
	End Cap 225	No.	3255.00			
	End Cap 250	No.	4195.00			
	End Cap 315	No.	6941.00			
	Ferrule Tapping Tee					
	Ferrule tapping tee 63 x 1/2"	No.	658.00			
	Ferrule tapping tee 63 x 3/4"	No.	658.00			
	Ferrule tapping tee 63 x 1"	No.	658.00			
	Ferrule tapping tee 75 x 1/2"	No.	658.00			
	Ferrule tapping tee 75 x 3/4"	No.	658.00			
	Ferrule tapping tee 75 x 1"	No.	658.00			
	Ferrule tapping tee 90 x 1/2"	No.	658.00			
	Ferrule tapping tee 90 x 3/4"	No.	649.00			
	Ferrule tapping tee 90 x 1"	No.	649.00			
	Ferrule tapping tee 90 x 1%"	No.	855.00			
	Ferrule tapping tee 90 x 1^"	No.	855.00			
	Ferrule tapping tee 90 x 2"	No.	855.00			
	Ferrule tapping tee 110 x 1/2"	No.	658.00			
	Ferrule tapping tee 110 x 3/4"	No.	658.00			
	Ferrule tapping tee 110 x 1"	No.	658.00			
	Ferrule tapping tee 110 x 1 %"	No.	855.00			
	Ferrule tapping tee 100 x 1^"	No.	855.00			
	Ferrule tapping tee 110 x 2"	No.	855.00			
	Ferrule tapping tee 160 x 1/2"	No.	658.00			
	Ferrule tapping tee 160 x 3/4"	No.	658.00			
	Ferrule tapping tee 160 x 1 "	No.	658.00			
	Ferrule tapping tee 160 x 1%"	No.	931.00			
	Ferrule tapping tee 160 x 1^"	No.	931.00			
	Ferrule tapping tee 160 x 2"	No.	931.00			
	Ferrule tapping tee 200 x 1/2"	No.	929.00			
	Ferrule tapping tee 200 x 3/4"	No.	929.00			
	Ferrule tapping tee 200 x 1"	No.	929.00			
	Ferrule tapping tee 200 x 1 %"	No.	1340.00			
	Ferrule tapping tee 200 x 1	No.	1340.00			
	Ferrule tapping tee 200 x 2"	No.	1340.00			
	Ferrule tapping tee 250 x 1/2"	No.	929.00			
	Ferrule tapping tee 250 x 3/4"	No.	929.00			
	Ferrule tapping tee 250 x 1 "	No.	929.00			
	Ferrule tapping tee 250 x 1 %"	No.	1340.00			
	Ferrule tapping tee 250 x 1	No.	1340.00			
	Ferrule tapping tee 250 x 2"	No.	1340.00			
	Ferrule tapping tee 315 x 1/2"	No.	1106.00			
	Ferrule tapping tee 315 x 3/4"	No.	1106.00			
	Ferrule tapping tee 315 x 1 "	No.	1106.00			
	Ferrule tapping tee 315 x 1 %"	No.	1502.00			
	Ferrule tapping tee 315 x 1	No.	1502.00			
	Ferrule tapping tee 315 x 2"	No.	1502.00			
	Electrofusion Reducing Tee					
	Reducing Tee 32 x 32 x 20	No.	153.00			
	Reducing Tee 32 x 32 x 25	No.	153.00			
	Reducing Tee 40 x 40 x 20	No.	344.00			
	Reducing Tee 40 x 40 x 25	No.	348.00			
	Reducing Tee 40 x 40 x 32	No.	373.00			
	Reducing Tee 50 x 50 x 20	No.	383.00			
	Reducing Tee 50 x 50 x 25	No.	393.00			
	Reducing Tee 50 x 50 x 32	No.	407.00			
	Reducing Tee 50 x 50 x 40	No.	427.00			
	Reducing Tee 63 x 63 x 20	No.	614.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	Reducing Tee 63 x 63 x 25	No.	628.00			
	Reducing Tee 63 x 63 x 32	No.	642.00			
	Reducing Tee 63 x 63 x 40	No.	659.00			
	Reducing Tee 63 x 63 x 50	No.	682.00			
	Reducing Tee 75 x 75 x 40	No.	873.00			
	Reducing Tee 75 x 75 x 50	No.	887.00			
	Reducing Tee 75 x 75 x 63	No.	906.00			
	Reducing Tee 90 x 90 x 50	No.	1271.00			
	Reducing Tee 90 x 90 x 63	No.	1299.00			
	Reducing Tee 90 x 90 x 75	No.	1322.00			
	Reducing Tee 110 x 110 x 50	No.	1756.00			
	Reducing Tee 110 x 110 x 63	No.	1785.00			
	Reducing Tee 110 x 110 x 75	No.	1812.00			
	Reducing Tee 110 x 110 x 90	No.	1844.00			
	Reducing Tee 125 x 125 x 63	No.	2368.00			
	Reducing Tee 125 x 125 x 75	No.	2394.00			
	Reducing Tee 125 x 125 x 90	No.	2425.00			
	Reducing Tee 125 x 125 x 110	No.	2454.00			
	Reducing Tee 160 x 160 x 50	No.	4128.00			
	Reducing Tee 160 x 160 x 63	No.	4146.00			
	Reducing Tee 160 x 160 x 75	No.	4167.00			
	Reducing Tee 160 x 160 x 90	No.	4267.00			
	Reducing Tee 160 x 160 x 110	No.	4362.00			
	Reducing Tee 180 x 180 x 160	No.	5378.00			
	Reducing Tee 200 x 200 x 63	No.	8539.00			
	Reducing Tee 200 x 200 x 75	No.	8581.00			
	Reducing Tee 200 x 200 x 90	No.	8620.00			
	Reducing Tee 200 x 200 x 110	No.	8670.00			
	Reducing Tee 200 x 200 x 160	No.	8717.00			
	Reducing Tee 250 x 250 x 63	No.	13181.00			
	Reducing Tee 250 x 250 x 75	No.	13235.00			
	Reducing Tee 250 x 250 x 90	No.	13277.00			
	Reducing Tee 250 x 250 x 110	No.	13317.00			
	Reducing Tee 250 x 250 x 160	No.	13355.00			
	Reducing Tee 250 x 250 x 200	No.	13412.00			
	Reducing Tee 315 x 315 x 200	No.	17647.00			
	Reducing Tee 315 x 315 x 250	No.	18016.00			
	Reducing Tee 400 x 400 x 110	No.	23037.00			
	Reducing Tee 400 x 400 x 160	No.	23553.00			
	Reducing Tee 400 x 400 x 200	No.	24055.00			
	Reducing Tee 400 x 400 x 250	No.	24417.00			
	Reducing Tee 400 x 400 x 315	No.	24801.00			
	Spigot Long Neck Pipe End (Stub End) for Electro Fusion joint					
	LNPE 63	No.	374.00			
	LNPE 75	No.	421.00			
	LNPE 90	No.	529.00			
	LNPE 110	No.	807.00			
	LNPE 125	No.	1269.00			
	LNPE 140	No.	1445.00			
	LNPE 160	No.	2068.00			
	LNPE 180	No.	2788.00			
	LNPE 200	No.	3279.00			
	LNPE 225	No.	3933.00			
	LNPE 250	No.	4516.00			
	LNPE 280	No.	5055.00			
	LNPE 315	No.	6571.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
3.	**Providing & Supply of Compression fittings,** PN16 rated in conformation to ISO:14236-2000 and shall be tested as per ISO:3459, ISO:3501 & ISO:3503, suitable for drinking water & approved by WRAS, UK/ KIWA etc, in food grade polypropylene and shall be inclusive of all cost such as testing, inspection charges, transportation up to store, transit insurance, loading, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc. complete.					
	Male Adaptor					
	Male Adaptor 20 x 1/2"	No.	57.00			
	Male Adaptor 25 x 3/4"	No.	66.00			
	Male Adaptor 32 x 1"	No.	85.00			
	Male Adaptor 40 x 1 %"	No.	155.00			
	Male Adaptor 50 x *IV2"*	No.	204.00			
	Male Adaptor 63 x 2"	No.	289.00			
	Female Adaptor					
	Female Adaptor 20 x 1/2"	No.	61.00			
	Female Adaptor 25 x 3/4"	No.	72.00			
	Female Adaptor 32 x 1 "	No.	91.00			
	Female Adaptor 40 x 1 %"	No.	171.00			
	Female Adaptor 50 x m"	No.	217.00			
	Female Adaptor 63 x 2"	No.	307.00			
	Coupling					
	Coupling 20 x 20	No.	59.00			
	Coupling 25 x 25	No.	65.00			
	Coupling 32 x 32	No.	83.00			
	Coupling 40 x 40	No.	148.00			
	Coupling 50 x 50	No.	191.00			
	Coupling 63 x 63	No.	276.00			
	Reducing Coupling					
	Reducing Coupling 25 x 20	No.	102.00			
	Reducing Coupling 32 x 20	No.	135.00			
	Reducing Coupling 32 x 25	No.	135.00			
	Reducing Coupling 40 x 25	No.	230.00			
	Reducing Coupling 40 x 32	No.	230.00			
	Reducing Coupling 50 x 32	No.	297.00			
	Reducing Coupling 50 x 40	No.	297.00			
	Reducing Coupling 63 x 50	No.	422.00			
	90 Deg. Elbow 20	No.	104.00			
	90 Deg. Elbow 25	No.	124.00			
	90 Deg. Elbow 32	No.	151.00			
	90 Deg. Elbow 40	No.	248.00			
	90 Deg. Elbow 50	No.	352.00			
	90 Deg. Elbow 63	No.	477.00			
	90 Deg. Elbow threaded male take off					
	90 Deg. Elbow threaded male off take 20 x 1/2"	No.	66.00			
	90 Deg. Elbow threaded male off take 25 x 3/4"	No.	81.00			
	90 Deg. Elbow threaded male off take 32 x 1"	No.	104.00			
	90 Deg. Elbow threaded male off take 40 x 1/4"	No.	165.00			
	90 Deg. Elbow threaded male off take 50 x 1/2"	No.	227.00			
	90 Deg. Elbow threaded male off take 63 x 2"	No.	315.00			
	90 Deg. Elbow threaded female off take					
	90 Deg. Elbow threaded Female off take 20 x 1/2"	No.	75.00			
	90 Deg. Elbow threaded Female off take 25 x 3/4"	No.	92.00			
	90 Deg. Elbow threaded Female off take 32 x 1"	No.	111.00			
	90 Deg. Elbow threaded Female off take 40 x 1 %"	No.	216.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	90 Deg. Elbow threaded Female off take 50 x 1 'A"	No.	283.00			
	90 Deg. Elbow threaded Female off take 63 x 2"	No.	373.00			
	Equal Tee					
	Equal Tee 20 x 20 x 20	No.	124.00			
	Equal Tee 25 x 25 x 25	No.	162.00			
	Equal Tee 32 x 32 x 32	No.	209.00			
	Equal Tee 40 x 40 x 40	No.	347.00			
	Equal Tee 50 x 50 x 50	No.	469.00			
	Equal Tee 63 x 63 x 63	No.	667.00			
	End Cap					
	End Cap 20	No.	33.00			
	End Cap 25	No.	33.00			
	End Cap 32	No.	47.00			
	End Cap 40	No.	51.00			
	End Cap 50	No.	53.00			
	End Cap 63	No.	71.00			

SECTION - I (XI)

P.C.C. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	XI. P. C. C. PIPES Providing and Supplying					
1.	**Prestressed Concrete Cylinder Pipes** suitable for sliding ovrelap weld joint or confined rubber ring joint with necessary rubber ring of following class and diameter including cost of transportation, inspection charges to store, transit insurance, unloading and stacking excluding GST levied by GOI & GOM in all respect etc. complete. **i) Factory test pressure** a) Site test pressure + 01N/mm2, For working pressure upto 1 N/mm2 b) Site test pressure + 02N/mm2, For working pressure upto 1 N/mm2 **ii) Site test pressure** - 1.5 times working pressure pertaining to the section or 1.1 times static pressure, which ever is more (such pressure is to be control within 25% of pumphead incase of pumping main) **iii) Working pessure -** The maximum sustained internal pressure excluding surge to which each portion of pipeline my be subjected when installed. **As Per 784 : 2001 a) F T P - 4 Kg/Sq. cm**					
i)	350 mm	Rmt	4890.00			
ii)	400 mm	Rmt	5375.00			
iii)	450 mm	Rmt	5905.00			
iv)	500 mm	Rmt	6534.00			
v)	600 mm	Rmt	7901.00			
vi)	700 mm	Rmt	9128.00			
vii)	800 mm	Rmt	10280.00			
viii)	900 mm	Rmt	12597.00			
ix)	1000 mm	Rmt	14548.00			
x)	1100 mm	Rmt	16288.00			
xi)	1200 mm	Rmt	17907.00			
xii)	1300 mm	Rmt	20690.00			
xiii)	1400 mm	Rmt	22468.00			
xiv)	1500 mm	Rmt	25138.00			
xv)	1600 mm	Rmt	26832.00			
xvi)	1700 mm.	Rmt	28529.00			
xvii)	1800 mm.	Rmt	30220.00			
b)	**T P - 5.5 Kg/Sq. cm**					
i)	350 mm	Rmt	4890.00			
ii)	400 mm	Rmt	5400.00			
iii)	450 mm	Rmt	5937.00			
iv)	500 mm	Rmt	6571.00			
v)	600 mm	Rmt	7956.00			
vi)	700 mm	Rmt	9200.00			
vii)	800 mm	Rmt	10398.00			
viii)	900 mm	Rmt	12714.00			
ix)	1000 mm	Rmt	14691.00			
x)	1100 mm	Rmt	16476.00			
xi)	1200 mm	Rmt	18795.00			
xii)	1300 mm	Rmt	20995.00			
xiii)	1400 mm	Rmt	22857.00			
xiv)	1500 mm	Rmt	25545.00			
xv)	1600 mm	Rmt	27240.00			
xvi)	1700 mm.	Rmt	28934.00			
xvii)	1800 mm.	Rmt	30630.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
c)	F T P - 7 Kg/Sq. cm					
i)	350 mm	Rmt	4901.00			
ii)	400 mm	Rmt	5422.00			
iii)	450 mm	Rmt	5963.00			
iv)	500 mm	Rmt	6607.00			
v)	600 mm	Rmt	8009.00			
vi)	700 mm	Rmt	9287.00			
vii)	800 mm	Rmt	10547.00			
viii)	900 mm	Rmt	12877.00			
ix)	1000 mm	Rmt	14914.00			
x)	1100 mm	Rmt	16748.00			
xi)	1200 mm	Rmt	19120.00			
xii)	1300 mm	Rmt	21381.00			
xiii)	1400 mm	Rmt	23497.00			
xiv)	1500 mm	Rmt	25583.00			
xv)	1600 mm	Rmt	27278.00			
xvi)	1700 mm.	Rmt	28975.00			
xvii)	1800 mm.	Rmt	30668.00			
d)	F T P - 8.5 Kg/Sq. cm					
i)	350 mm	Rmt	4920.00			
ii)	400 mm	Rmt	5453.00			
iii)	450 mm	Rmt	5994.00			
iv)	500 mm	Rmt	6644.00			
v)	600 mm	Rmt	8081.00			
vi)	700 mm	Rmt	9396.00			
vii)	800 mm	Rmt	10696.00			
viii)	900 mm	Rmt	13059.00			
ix)	1000 mm	Rmt	15137.00			
x)	1100 mm	Rmt	17019.00			
xi)	1200 mm	Rmt	19612.00			
xii)	1300 mm	Rmt	21944.00			
xiii)	1400 mm	Rmt	23945.00			
xiv)	1500 mm	Rmt	26049.00			
xv)	1600 mm	Rmt	27743.00			
xvi)	1700 mm.	Rmt	29438.00			
xvii)	1800 mm.	Rmt	31132.00			
e)	F T P - 10 Kg/Sq. cm					
i)	350 mm	Rmt	4938.00			
ii)	400 mm	Rmt	5474.00			
iii)	450 mm	Rmt	6032.00			
iv)	500 mm	Rmt	6700.00			
v)	600 mm	Rmt	8158.00			
vi)	700 mm	Rmt	9502.00			
vii)	800 mm	Rmt	10857.00			
viii)	900 mm	Rmt	13241.00			
ix)	1000 mm	Rmt	15359.00			
x)	1100 mm	Rmt	17446.00			
xi)	1200 mm	Rmt	19943.00			
xii)	1300 mm	Rmt	22336.00			
xiii)	1400 mm	Rmt	24402.00			
xiv)	1500 mm	Rmt	26527.00			
xv)	1600 mm	Rmt	28225.00			
xvi)	1700 mm.	Rmt	29919.00			
xvii)	1800 mm.	Rmt	31613.00			
f)	F T P - 11.5 Kg/Sq. cm					
i)	350 mm	Rmt	4958.00			
ii)	400 mm	Rmt	5508.00			
iii)	450 mm	Rmt	6076.00			
iv)	500 mm	Rmt	6756.00			
v)	600 mm	Rmt	8240.00			
vi)	700 mm	Rmt	9610.00			
vii)	800 mm	Rmt	11160.00			
viii)	900 mm	Rmt	12254.00			
ix)	1000 mm	Rmt	15585.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
x)	1100 mm	Rmt	17724.00			
xi)	1200 mm	Rmt	20277.00			
xii)	1300 mm	Rmt	22732.00			
xiii)	1400 mm	Rmt	24866.00			
xiv)	1500 mm	Rmt	27009.00			
xv)	1600 mm	Rmt	28703.00			
xvi)	1700 mm.	Rmt	30399.00			
xvii)	1800 mm.	Rmt	32094.00			
g)	F T P - 13 Kg/Sq. cm					
i)	350 mm	Rmt	4996.00			
ii)	400 mm	Rmt	5553.00			
iii)	450 mm	Rmt	6127.00			
iv)	500 mm	Rmt	6812.00			
v)	600 mm	Rmt	8319.00			
vi)	700 mm	Rmt	9719.00			
vii)	800 mm	Rmt	11345.00			
viii)	900 mm	Rmt	13604.00			
ix)	1000 mm	Rmt	15912.00			
x)	1100 mm	Rmt	18006.00			
xi)	1200 mm	Rmt	20618.00			
xii)	1300 mm	Rmt	23132.00			
xiii)	1400 mm	Rmt	25322.00			
xiv)	1500 mm	Rmt	27487.00			
xv)	1600 mm	Rmt	29183.00			
xvi)	1700 mm.	Rmt	30876.00			
xvii)	1800 mm.	Rmt	32558.00			
h)	F T P - 14.5 Kg/Sq. cm					
i)	350 mm	Rmt	5040.00			
ii)	400 mm	Rmt	5603.00			
iii)	450 mm	Rmt	6190.00			
iv)	500 mm	Rmt	6877.00			
v)	600 mm	Rmt	8404.00			
vi)	700 mm	Rmt	10359.00			
vii)	800 mm	Rmt	11529.00			
viii)	900 mm	Rmt	13919.00			
ix)	1000 mm	Rmt	16145.00			
x)	1100 mm	Rmt	18286.00			
xi)	1200 mm	Rmt	20953.00			
xii)	1300 mm	Rmt	23526.00			
xiii)	1400 mm	Rmt	26465.00			
xiv)	1500 mm	Rmt	28679.00			
xv)	1600 mm	Rmt	30375.00			
xvi)	1700 mm.	Rmt	32069.00			
xvii)	1800 mm.	Rmt	33763.00			
i)	F T P - 17 Kg/Sq. cm					
i)	350 mm	Rmt	5080.00			
ii)	400 mm	Rmt	5655.00			
iii)	450 mm	Rmt	6251.00			
iv)	500 mm	Rmt	6953.00			
v)	600 mm	Rmt	8513.00			
vi)	700 mm	Rmt	9942.00			
vii)	800 mm	Rmt	11752.00			
viii)	900 mm	Rmt	14117.00			
ix)	1000 mm	Rmt	16380.00			
x)	1100 mm	Rmt	18583.00			
xi)	1200 mm	Rmt	21295.00			
xii)	1300 mm	Rmt	23928.00			
xiii)	1400 mm	Rmt	26974.00			
xiv)	1500 mm	Rmt	29214.00			
xv)	1600 mm	Rmt	30908.00			
xvi)	1700 mm.	Rmt	32604.00			
xvii)	1800 mm.	Rmt	34298.00			
j)	F T P - 18.5 Kg/Sq. cm					

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
i)	350 mm	Rmt	5118.00			
ii)	400 mm	Rmt	5706.00			
iii)	450 mm	Rmt	6315.00			
iv)	500 mm	Rmt	7029.00			
v)	600 mm	Rmt	8620.00			
vi)	700 mm	Rmt	10066.00			
vii)	800 mm	Rmt	12139.00			
viii)	900 mm	Rmt	14364.00			
ix)	1000 mm	Rmt	16661.00			
x)	1100 mm	Rmt	18873.00			
xi)	1200 mm	Rmt	21636.00			
xii)	1300 mm	Rmt	25078.00			
xiii)	1400 mm	Rmt	27675.00			
xiv)	1500 mm	Rmt	29340.00			
xv)	1600 mm	Rmt	31037.00			
xvi)	1700 mm.	Rmt	32732.00			
xvii)	1800 mm.	Rmt	34426.00			
k)	**F T P - 20 Kg/Sq. cm**					
i)	350 mm	Rmt	5159.00			
ii)	400 mm	Rmt	5759.00			
iii)	450 mm	Rmt	6378.00			
iv)	500 mm	Rmt	7109.00			
v)	600 mm	Rmt	8727.00			
vi)	700 mm	Rmt	10316.00			
vii)	800 mm	Rmt	12429.00			
viii)	900 mm	Rmt	14692.00			
ix)	1000 mm	Rmt	17047.00			
x)	1100 mm	Rmt	19320.00			
xi)	1200 mm	Rmt	22768.00			
xii)	1300 mm	Rmt	25617.00			
xiii)	1400 mm	Rmt	28287.00			
xiv)	1500 mm	Rmt	29978.00			
xv)	1600 mm	Rmt	31673.00			
xvi)	1700 mm.	Rmt	33369.00			
xvii)	1800 mm.	Rmt	35063.00			
l)	**F T P - 21.5 Kg/Sq. cm**					
i)	350 mm	Rmt	5205.00			
ii)	400 mm	Rmt	5810.00			
iii)	450 mm	Rmt	6439.00			
iv)	500 mm	Rmt	7184.00			
v)	600 mm	Rmt	8855.00			
vi)	700 mm	Rmt	10821.00			
vii)	800 mm	Rmt	12627.00			
viii)	900 mm	Rmt	15019.00			
ix)	1000 mm	Rmt	17436.00			
x)	1100 mm	Rmt	20293.00			
xi)	1200 mm	Rmt	23332.00			
xii)	1300 mm	Rmt	26212.00			
xiii)	1400 mm	Rmt	29839.00			
xiv)	1500 mm	Rmt	31598.00			
xv)	1600 mm	Rmt	33296.00			
xvi)	1700 mm.	Rmt	34990.00			
xvii)	1800 mm.	Rmt	36686.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
m)	**F T P - 23 Kg/Sq. cm**					
i)	350 mm	Rmt	5244.00			
ii)	400 mm	Rmt	5860.00			
ii)	450 mm	Rmt	6505.00			
iv)	500 mm	Rmt	7260.00			
v)	600 mm	Rmt	9041.00			
vi)	700 mm	Rmt	11163.00			
vii)	800 mm	Rmt	13014.00			
viii)	900 mm	Rmt	15344.00			
ix)	1000 mm	Rmt	17823.00			
x)	1100 mm	Rmt	20831.00			
xi)	1200 mm	Rmt	23909.00			
xii)	1300 mm	Rmt	26956.00			
xiii)	1400 mm	Rmt	30393.00			
xiv)	1500 mm	Rmt	32175.00			
xv)	1600 mm	Rmt	33871.00			
xvi)	1700 mm.	Rmt	35566.00			
xvii)	1800 mm.	Rmt	37258.00			
n)	**F T P - 24.5 Kg/Sq. cm**					
i)	350 mm	Rmt	5284.00			
ii)	400 mm	Rmt	5914.00			
iii)	450 mm	Rmt	6569.00			
iv)	500 mm	Rmt	7339.00			
v)	600 mm	Rmt	9404.00			
vi)	700 mm	Rmt	11316.00			
vii)	800 mm	Rmt	13028.00			
viii)	900 mm	Rmt	15605.00			
ix)	1000 mm	Rmt	18659.00			
x)	1100 mm	Rmt	21370.00			
xi)	1200 mm	Rmt	24488.00			
xii)	1300 mm	Rmt	29093.00			
xiii)	1400 mm	Rmt	30973.00			
xiv)	1500 mm	Rmt	32778.00			
xv)	1600 mm	Rmt	34473.00			
xvi)	1700 mm.	Rmt	36166.00			
xvii)	1800 mm.	Rmt	37862.00			
	Note	:				
1)	For PCCP pipes lowering, laying, and pouring of cement mortar in the field on joints (after laying and welding), rates as per PSC pipes lowering, laying and					
2)	For field welding rates applicable for similar welding in MS pipes given in that section shall be adopted.					
3)	Whenever manufacturer is separate and contractor for lowering, laying, jointing and testing is separate the principal contractor shall enter into an agreement with PCCP pipe manufacturer for satisfactory manufacturing transporting,					
	This foot notes shall appear in the tender conditions.					
4)	Only 85% providing rates shall be payable til satisfactory Hydraulic testing is					

SECTION - I (XII)
PIPE APPURTENANCES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
	XII. PIPES APPURTENANCES					
1.	Providing and supplying ISI mark CI D/F reflux valves (non-return valves) of following dia including railway freight, inspection charges, unloading from railway wagon, loading into truck, transportation upto departmental stores, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. complete. Reflux valves as per I.S.5312 Part I (1984)					
a)	**Without by pass arrangement -PN -1**					
i)	50 mm.	No.	3319.00			
ii)	65 mm.	No.	3885.00			
iii)	80 mm.	No.	4092.00			
iv)	100 mm.	No.	5713.00			
v)	125 mm.	No.	8157.00			
vi)	150 mm.	No.	9876.00			
vii)	200 mm.	No.	17751.00			
viii)	250 mm.	No.	30294.00			
ix)	300 mm.	No.	41510.00			
x)	350 mm.	No.	64567.00			
xi)	400 mm.	No.	76801.00			
xii)	450 mm.	No.	110436.00			
xiii)	500 mm.	No.	163634.00			
xiv)	600 mm.	No.	200380.00			
xv)	700 mm.	No.	470024.00			
b)	**With by pass arrangement - PN -1**					
i)	80 mm.	No.	4724.00			
ii)	100 mm.	No.	6730.00			
iii)	125 mm.	No.	9165.00			
iv)	150 mm.	No.	10883.00			
v)	200 mm.	No.	20290.00			
vi)	250 mm.	No.	33166.00			
vii)	300 mm.	No.	44518.00			
viii)	350 mm.	No.	72989.00			
ix)	400 mm.	No.	88323.00			
x)	450 mm.	No.	114595.00			
xi)	500 mm.	No.	185979.00			
xii)	600 mm.	No.	230436.00			
xiii)	700 mm.	No.	711534.00			
xiv)	750 mm.	No.	778840.00			
xv)	800 mm.	No.	846147.00			
xvi)	900 mm.	No.				
xvii)	1000 mm.	No.				
c)	**Without by pass arrangement - PN -1.6**					
i)	50 mm.	No.	3237.00			
ii)	65 mm	No.	3497.00			
iii)	80 mm.	No.	5736.00			
iv)	100 mm.	No.	7348.00			
v)	125 mm.	No.	10237.00			
vi)	150 mm	No.	13915.00			
vii)	200 mm.	No.	24364.00			
viii)	250 mm.	No.	39113.00			
ix)	300 mm.	No.	52879.00			
x)	350 mm.	No.	80709.00			
xi)	400 mm.	No.	96003.00			
xii)	450 mm.	No.	128344.00			
xiii)	500 mm.	No.	204541.00			
xiv)	600 mm.	No.	250474.00			
xv)	700 mm.	No.	370214.00			
xvi)	750 mm.	No.	424990.00			
xvii)	800 mm.	No.	483546.00			
xviii)	900 mm.	No.	611985.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
xix)	1000 mm.	No.	755539.00			
xx)	1100 mm	No.	914199.00			
xxi)	1200 mm	No.	1088375.00			
d)	**With by pass arrangement - PN -1.6**					
i)	50 mm.	No.	3322.00			
ii)	65 mm	No.	3740.00			
iii)	80 mm.	No.	5503.00			
iv)	100 mm.	No.	7116.00			
v)	125 mm.	No.	9944.00			
vi)	150 mm	No.	12069.00			
vii)	200 mm.	No.	24377.00			
viii)	250 mm.	No.	36836.00			
ix)	300 mm.	No.	55653.00			
x)	350 mm.	No.	85993.00			
xi)	400 mm.	No.	110404.00			
xii)	450 mm.	No.	131784.00			
xiii)	500 mm.	No.	213911.00			
xiv)	600 mm.	No.	288045.00			
xv)	700 mm.	No.	377079.00			
xvi)	750 mm.	No.	432872.00			
xvii)	800 mm.	No.	492512.00			
xviii)	900 mm.	No.	623336.00			
xix)	1000 mm.	No.	769548.00			
xx)	1100 mm	No.	931155.00			
xxi)	1200 mm	No.	1108150.00			
2.	Providing **double flange sluice valve** confirming for IS- 14846 including worn gear arrangements as per test pressure, stainless steel spindle, caps, including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. complete					
a)	**Sluice valves - PN -1 (Without by pass)**					
i)	50 mm.	No.	4198.00			
ii)	65 mm.	No.	4966.00			
iii)	80 mm.	No.	5132.00			
iv)	100 mm.	No.	6835.00			
v)	125 mm.	No.	8548.00			
vi)	150 mm.	No.	10251.00			
vii)	200 mm.	No.	18581.00			
viii)	250 mm.	No.	28727.00			
ix)	300 mm.	No.	36471.00			
x)	350 mm.	No.	53651.00			
xi)	400 mm.	No.	70635.00			
xii)	450 mm.	No.	75940.00			
xiii)	500 mm.	No.	109450.00			
xiv)	600 mm.	No.	162155.00			
xv)	700 mm.	No.	301409.00			
xvi)	750 mm.	No.	341452.00			
xvii)	800 mm.	No.	416521.00			
xviii)	900 mm.	No.	546167.00			
xix)	1000 mm.	No.	816847.00			
xx)	1100 mm	No.	1047212.00			
xxi)	1200 mm.	No.	1238134.00			
b)	**Sluice valves - PN -1.0 (With by pass arrangement)**					
i)	50 mm.	No.	4405.00			
ii)	65 mm.	No.	4977.00			
iii)	80 mm.	No.	5132.00			
iv)	100 mm.	No.	6835.00			
v)	125 mm.	No.	8548.00			
vi)	150 mm.	No.	10795.00			
vii)	200 mm.	No.	18615.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
viii)	250 mm.	No.	28761.00			
ix)	300 mm.	No.	36503.00			
x)	350 mm.	No.	55645.00			
xi)	400 mm.	No.	70740.00			
xii)	450 mm.	No.	87217.00			
xiii)	500 mm.	No.	109614.00			
xiv)	600 mm.	No.	162395.00			
xv)	700 mm.	No.	306488.00			
xvi)	750 mm.	No.	341791.00			
xvii)	800 mm.	No.	416932.00			
xviii)	900 mm.	No.	546707.00			
xix)	1000 mm.	No.	829313.00			
xx)	1100 mm	No.	1048249.00			
xxi)	1200 mm.	No.	1239317.00			
c)	**Sluice valve - PN - 1.6 (Without by pass arrangement)**					
i)	50 mm.	No.	5261.00			
ii)	65 mm.	No.	6206.00			
iii)	80 mm.	No.	6758.00			
iv)	100 mm.	No.	9005.00			
v)	125 mm.	No.	11251.00			
vi)	150 mm.	No.	11933.00			
vii)	200 mm.	No.	23231.00			
viii)	250 mm.	No.	35919.00			
ix)	300 mm.	No.	45613.00			
x)	350 mm.	No.	69454.00			
xi)	400 mm.	No.	88171.00			
xii)	450 mm.	No.	108957.00			
xiii)	500 mm.	No.	136740.00			
xiv)	600 mm.	No.	202645.00			
xv)	700 mm.	No.	306941.00			
xvi)	750 mm.	No.	342297.00			
xvii)	800 mm.	No.	417551.00			
xviii)	900 mm.	No.	547518.00			
xix)	1000 mm.	No.	844584.00			
xx)	1100 mm	No.	1049806.00			
xxi)	1200 mm.	No.	1241198.00			
d)	**Sluice valve - PN - 1.6 (With by pass arrangement)**					
i)	50 mm.	No.	5823.00			
ii)	65 mm.	No.	6218.00			
iii)	80 mm.	No.	6770.00			
iv)	100 mm.	No.	9022.00			
v)	125 mm.	No.	11267.00			
vi)	150 mm.	No.	13493.00			
vii)	200 mm.	No.	23264.00			
viii)	250 mm.	No.	35953.00			
ix)	300 mm.	No.	45645.00			
x)	350 mm.	No.	69556.00			
xi)	400 mm.	No.	88303.00			
xii)	450 mm.	No.	109119.00			
xiii)	500 mm.	No.	136942.00			
xiv)	600 mm.	No.	202947.00			
xv)	700 mm.	No.	307321.00			
xvi)	750 mm.	No.	342720.00			
xvii)	800 mm.	No.	418068.00			
xviii)	900 mm.	No.	548195.00			
xix)	1000 mm.	No.	845626.00			
xx)	1100 mm	No.	1051101.00			
xxi)	1200 mm.	No.	1242732.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
3	Providing, **double flanged short body pattern type manually operated Butterfly Valve** having body, disc and end cover in graded cast iron to IS-210 Gr.CF 200 generally confirming to IS-13095-1991, Synthetic rubber faced ring secured on disc by retaining ring with stainless steel screw stub shaft of stainless steel riding in teflon bearing including inspection charges, transportation up to departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. excluding C.C. foundation /structural steel support.					
a)	**Butterfly valve - PN - 1 (With by pass arrangement)**					
i)	80 mm.	No.	5826.00			
ii)	100 mm.	No.	7448.00			
iii)	125 mm.	No.	8495.00			
iv)	150 mm.	No.	10980.00			
v)	200 mm.	No.	14632.00			
vi)	250 mm.	No.	18290.00			
vii)	300 mm.	No.	28939.00			
viii)	350 mm.	No.	47484.00			
ix)	400 mm.	No.	58911.00			
x)	450 mm.	No.	68764.00			
xi)	500 mm.	No.	74280.00			
xii)	600 mm.	No.	86990.00			
xiii)	700 mm.	No.	130434.00			
xiv)	750 mm.	No.	154472.00			
xv)	800 mm.	No.	164519.00			
xvi)	900 mm.	No.	211216.00			
xvii)	1000 mm.	No.	272296.00			
xviii)	1100 mm	No.	583655.00			
xix)	1200 mm.	No.	552294.00			
xx)	1400 mm	No.	842106.00			
xxi)	1500 mm	No.	1046357.00			
b)	**Butterfly valve - PN - 1.6 (With by pass arrangement)**					
i)	80 mm.	No.	6465.00			
ii)	100 mm.	No.	8465.00			
iii)	125 mm.	No.	9346.00			
iv)	150 mm.	No.	12626.00			
v)	200 mm.	No.	16830.00			
vii)	250 mm.	No.	21033.00			
viii)	300 mm.	No.	33280.00			
viii)	350 mm.	No.	59355.00			
ix)	400 mm.	No.	72712.00			
x)	450 mm.	No.	84006.00			
xi)	500 mm.	No.	92239.00			
xii)	600 mm	No.	108738.00			
xiii)	700 mm	No.	163042.00			
xiv)	750 mm	No.	193089.00			
xv)	800 mm	No.	205650.00			
xvi)	900 mm	No.	264020.00			
xvii)	1000 mm	No.	340369.00			
xviii)	1100 mm	No.	690371.00			
xix)	1200 mm	No.	729560.00			
xx)	1400 mm	No.	1052633.00			
xxi)	1500 mm	No.	1299103.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
4.	Lowering, laying and jointing in position following **C.I.D/F Reflex valves, Butterfly valves and Sluice valves** including cost of all labour jointing material, including nut bolts and giving satisfactory hydraulic testing etc. complete. (Rate for all class of valves.)					
i)	50 mm.	No.	833.00			
ii)	65 mm.	No.	1251.00			
iii)	80 mm.	No.	1738.00			
iv)	100 mm.	No.	2272.00			
v)	125 mm.	No.	2828.00			
vi)	150 mm.	No.	3570.00			
vii)	200 mm.	No.	3714.00			
viii)	250 mm.	No.	4839.00			
ix)	300 mm.	No.	5019.00			
x)	350 mm.	No.	6185.00			
xi)	400 mm.	No.	7462.00			
xii)	450 mm.	No.	8879.00			
xii)	500 mm.	No.	9194.00			
xiv)	600 mm.	No.	9759.00			
xv)	700 mm.	No.	10522.00			
xvi)	750 mm.	No.	11587.00			
xvii)	800 mm.	No.	13807.00			
xviii)	900 mm.	No.	14651.00			
xix)	1000 mm.	No.	17271.00			
xx)	1100 mm.	No.	19943.00			
xxi)	1200 mm.	No.	21915.00			
b.	Giving satisfactory **hydraulic testing of following C. I. D / F Reflex valves, Butterfly valves and Sluice valves.**					
i)	50 mm.	No.	94.00			
ii)	65 mm.	No.	140.00			
iii)	80 mm.	No.	194.00			
iv)	100 mm.	No.	252.00			
v)	125 mm.	No.	314.00			
vi)	150 mm.	No.	397.00			
vii)	200 mm.	No.	413.00			
viii)	250 mm.	No.	537.00			
ix)	300 mm.	No.	558.00			
x)	350 mm.	No.	688.00			
xi)	400 mm.	No.	831.00			
xii)	450 mm.	No.	987.00			
xii)	500 mm.	No.	1023.00			
xiv)	600 mm.	No.	1085.00			
xv)	700 mm.	No.	1170.00			
xvi)	750 mm.	No.	1287.00			
xvii)	800 mm.	No.	1535.00			
xviii)	900 mm.	No.	1629.00			
xix)	1000 mm.	No.	1920.00			
xx)	1100 mm.	No.	2217.00			
xxi)	1200 mm. to 1500 mm	No.	2434.00			
5.	Providing and **supplying Air Valves** as per IS- 14845-2000 and MJP's standard specifications of approved make and quality of following diameters including railway freight, inspection charges, unloading from railway wagons, loading into truck, transportation upto departmental stores, unloding and stacking excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**Air Valve Single Ball Flanged / Screwed Type - PN -1**					

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
i)	12/15 mm.	No.	633.00			
ii)	20 mm.	No.	764.00			
iii)	25 mm.	No.	1054.00			
iv)	32 mm.	No.	1151.00			
v)	40 mm.	No.	1267.00			
vi)	50 mm.	No.	1391.00			
b)	**Air Valve Single Ball Flanged / Screwed Type - PN -1.6**					
i)	12/15 mm.	No.	742.00			
ii)	20 mm.	No.	1054.00			
iii)	25 mm.	No.	1267.00			
iv)	32 mm.	No.	1365.00			
v)	40 mm.	No.	1463.00			
vi)	50 mm.	No.	1909.00			
6.	Providing and **supplying Air Valves** as per IS- 14845 and MJP's standard specifications double orifice type combined with screw down isolating valve, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**Air Valve Double Ball Flanged Type - PN -1**					
i)	50 mm.	No.	5850.00			
ii)	65 mm.	No.	6826.00			
iii)	80 mm.	No.	7796.00			
b)	**Air Valve Double Ball Flanged Type - PN - 1.6**					
i)	50 mm.	No.	7749.00			
ii)	65 mm.	No.	8775.00			
iii)	80 mm.	No.	10858.00			
7.	Providing and **supplying Air Valves** as per IS- 14845-2000 and MJP's standard specifications double orifice type combined with isolating sluice valve, mounted in horizontal position and operated by wheel gearing, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental store, excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**Air Valve Double Ball Flanged Type - PN -1**					
i)	100 mm.	No.	9859.00			
ii)	150 mm.	No.	17967.00			
iii)	200 mm.	No.	30216.00			
b)	**Air Valve Double Ball Flanged Type - PN - 1.6**					
i)	100 mm.	No.	15073.00			
ii)	150 mm.	No.	21234.00			
iii)	200 mm.	No.	35711.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
8.	Providing and **supplying Kinetic Double Orifice type Air Valves** confirming to IS 14845 as per MJP's standard specifications combined with screw down isolating valve, small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**Kinetic Air Valve Flanged Type - PN -1**					
i)	40 mm.	No.	9064.00			
ii)	50 mm.	No.	10246.00			
iii)	80 mm.	No.	12019.00			
b)	**Kinetic Air Valve Flanged Type - PN -1.6**					
i)	40 mm.	No.	11329.00			
ii)	50 mm.	No.	12807.00			
iii)	80 mm.	No.	15023.00			
9.	Providing and **supplying Kinetic Double Orifice type Air Valves** confirming to IS 14845 as per MJP's standard specifications having small orifice elastic ball resting on a gun metal orifice nipple, large orifice vulcanite ball seating on moulded seat ring,with built-in Kinetic features, isolating sluice valve mounted in horizontal position and operated by wheel gearing, inlet face and drilled, including insurance, third party inspection charges, loading, unloading, transportation upto departmental stores, excluding GST levied by GOI & GOM in all respect etc. complete.					
	a) Kinetic Air Valve Flanged Type - PN -1					
	i) 100 mm.	No.	13102.00			
	ii) 150 mm.	No.	18325.00			
	iii) 200 mm.	No.	28569.00			
	b) Kinetic Air Valve Flanged Type - PN -1.6					
	i) 100 mm.	No.	16380.00			
	ii) 150 mm.	No.	22904.00			
	iii) 200 mm.	No.	35711.00			
10.	**Lowering, laying and fixing** in proper alignment and position all types of **C.I. air valves** as directed by Engineer-in-charge including cost of conveyance from stores to site of work, cost of all material and giving satisfactory hydraulic testing, etc. complete. (for all class of valves)					
a)	**Air Valve Single Ball (PN-1 and PN - 1.6)**					
i)	15 mm.	No.	133.00			
ii)	20 mm.	No.	168.00			
iii)	25 mm.	No.	218.00			
iv)	32 mm.	No.	241.00			
v)	40 mm.	No.	257.00			
vi)	50 mm.	No.	279.00			
vii)	65 mm.	No.	294.00			
viii)	80 mm.	No.	307.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
ix)	100 mm.	No.	343.00			
x)	125 mm.	No.	416.00			
xi)	150 mm.	No.	462.00			
xii)	200 mm.	No.	508.00			
b)	**Air Valve Double Ball (PN-1 and PN - 1.6)**					
i)	15 mm.	No.	145.00			
ii)	20 mm.	No.	180.00			
iii)	25 mm.	No.	218.00			
iv)	32 mm.	No.	246.00			
v)	40 mm.	No.	288.00			
vi)	50 mm.	No.	333.00			
vii)	65 mm.	No.	384.00			
viii)	80 mm.	No.	458.00			
ix)	100 mm.	No.	484.00			
x)	125 mm.	No.	532.00			
xi)	150 mm.	No.	728.00			
xii)	200 mm.	No.	801.00			
	c) Kinetic Air Valve (PN-1 and PN - 1.6)					
i)	40 mm.	No.	330.00			
ii)	50 mm.	No.	382.00			
iii)	65 mm.	No.	416.00			
iv)	80 mm.	No.	458.00			
v)	100 mm.	No.	504.00			
vi)	125 mm.	No.	549.00			
vii)	150 mm.	No.	788.00			
viii)	200 mm.	No.	858.00			
11.	**Providing erecting Cast Steel/ Spheroidal Graphite (S.G) Iron D/F Sluice Valves / Butterfly Valves** with jointing to pipe work (including all hardware and packing) water works quality, having non-rising spindle with hand wheel and without bypass arrangement, spindle of stainless steel as per requirement, inspection charges, transportation upto departmental store, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. excluding C. C. foundation / structural steel support.					
A)	**A) For Rating Class 150 (Working Pressure 20 kg/cm2 and Test Pressure 30 kg/cm2)**					
a)	**Sluice Valves. CS-150**					
i)	80 mm dia.	No.	15113.00			
ii)	100 mm dia.	No.	20149.00			
iii)	150 mm dia.	No.	30224.00			
iv)	200 mm dia.	No.	47137.00			
v)	250 mm dia.	No.	67834.00			
vi)	300 mm dia.	No.	86793.00			
vii)	350 mm dia.	No.	115725.00			
viii)	400 mm dia.	No.	193111.00			
ix)	450 mm dia.	No.	263480.00			
x)	500 mm dia.	No.	309976.00			
xi)	600 mm dia.	No.	353888.00			
b)	**Butterfly Valves. CS-150**					
i)	300 mm	No.	109139.00			
ii)	350 mm	No.	116348.00			
iii)	400 mm	No.	130683.00			
iv)	450 mm	No.	139217.00			
v)	500 mm	No.	161154.00			
vi)	600 mm	No.	181361.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
12.	**Providing erecting Cast Steel D/F Sluice Valves / Butterfly Valves** with jointing to pipe work (including all hardware and packing) water works quality having non-rising spindle with hand wheel and without bypass arrangement, spindle of stainless steel as per requirement, inspection charges, transportation upto departmental store, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. excluding C. C. foundation / structural steel support.					
	For Rating Class 300 (Working Pressure 52 kg/cm2 and Test Pressure 78 kg/cm2)					
a)	**Sluice Valves CS-300**					
i)	80 mm	No.	15203			
ii)	100 mm	No.	24003			
iii)	150 mm	No.	36596			
iv)	200 mm	No.	57395			
v)	250 mm	No.	61956			
vi)	300 mm	No.	104445			
vii)	350 mm	No.	176149			
viii)	400 mm	No.	256971			
ix)	450 mm	No.	309395			
x)	500 mm	No.	482009			
xi)	600 mm	No.	728543			
b)	**Butterfly Valves CS-300**					
i)	300 mm	No.	124438			
ii)	350 mm	No.	132659			
iii)	400 mm	No.	149003			
iv)	450 mm	No.	158733			
v)	500 mm	No.	183747			
vi)	600 mm	No.	206785			
13.	**Providing erecting Cast Steel /Spheroidal Graphite (S.G.) Iron D/F Reflux Valves** Single Door with jointing to pipe work (including all hardware and packing) water works quality with jointing to pipe without bypass arrangement, with gunmental seats including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. completed but excluding C. C. foundation / structural steel support.					
	For Rating Class 150 (Working Pressure 20 kg/cm2 and Test Pressure 30 kg/cm2)					
	Reflux valve CS-150					
i)	80 mm	No.	9856			
ii)	100 mm	No.	15091			
iii)	150 mm	No.	25566			
iv)	200 mm	No.	48610			
v)	250 mm	No.	84641			
vi)	300 mm	No.	111510			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
14.	**Providing erecting Cast Steel D/F Reflux Valves** Single door with jointing to pipe work (including all hardware and packing) water works quality with jointing to pipe without bypass arrangement, with gunmetal seat including inspection charges, transportation upto departmental store, unloading, stacking excluding GST levied by GOI & GOM in all respect etc. completed but excluding excluding C. C. foundation / structural steel support					
	For Rating Class 300 (Working Pressure 52 kg/cm2 and Test Pressure 78 kg/cm2)					
	Reflux valve CS-300					
i)	80 mm	No.	15712.00			
ii)	100 mm	No.	22146.00			
iii)	150 mm	No.	36828.00			
iv)	200 mm	No.	65243.00			
v)	250 mm	No.	118121.00			
vi)	300 mm	No.	143820.00			
15.	Providing, erecting **Kinetic Double Orifice Cast Steel Air Valves** with an isolating Sluice Valve mounted in horizontal position operated by wheel gear suitable for working pressure of Class 300 rating (52 kg/cm2)					
	Air valve CS-150					
i)	80 mm	No.	30467.00			
ii)	100 mm	No.	42467.00			
iii)	150 mm	No.	81377.00			
iv)	200 mm	No.	105190.00			
16.	Providing, erecting **Kinetic Double Orifice Cast Steel Air Valves** with an isolating Sluice Valve mounted in horizontal position operated by wheel gear suitable for working pressure of Class 300 rating (52 kg/cm2)					
	KDB Air valve CS-300					
i)	80 mm	No.	37117.00			
ii)	100 mm	No.	42429.00			
iii)	150 mm	No.	99150.00			
iv)	200 mm	No.	119685.00			
17.	**Providing and fixing in position air valve shaft** including providing and fixing GI Medium Class or 6 mm thick M.S. pipe shaft 2.70 M long over branch flange of air valve tee, providing PCC block of M-150 concrete, 150 mm thick around the air valve tee including encasing of vertical shaft in PCC M-150 as shown in type design together with providing and making flanged joints wherever required and fixing of air valve tee, etc. complete as per type design and as directed by Engineer -in- charge for following diameters of pipe lines (type design attached.)					
a)	**Foundation on Murum and Harder Strata.**					
i)	upto 150mm	No.	5578.00			
ii)	200 to 400 mm	No.	6535.00			
iii)	450 to 900mm	No.	13290.00			
iv)	1000 to 1200 mm	No.	16689.00			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
b)	**Foundation in B. C. Soil or Any Other Soil.**					
i)	upto 150 mm	No.	6609.00			
ii)	200 to 400 mm	No.	7972.00			
iii)	450 to 900 mm	No.	15181.00			
iv)	1000 to 1200 mm	No.	19038.00			
18.	Providing and supplying **C.I. D/F angle type spring loaded pressure relief valves** of approved make and quality including inspection charges, transportation to departmental stores excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**Type PN-1**					
i)	25 mm	No.	3974			
ii)	40 mm	No.	5179			
iii)	50 mm	No.	6707			
iv)	80 mm	No.	10171			
v)	100 mm	No.	14238			
vi)	125 mm	No.	19414			
vii)	150 mm	No.	22184			
viii)	200 mm	No.	48987			
ix)	250 mm	No.	68860			
x)	300 mm	No.	90812			
b)	**Type PN-1.6**					
i)	25 mm	No	4968			
ii)	40 mm	No	6470			
iii)	50 mm	No	7334			
iv)	80 mm	No	11772			
v)	100 mm	No	16162			
vi)	125 mm	No	24261			
vii)	150 mm	No	27729			
viii)	200 mm	No	61230			
ix)	250 mm	No	86074			
x)	300 mm	No	113780			
19.	**Lowering, laying and fixing in proper alignment and position all types of C.I. D/F** angle type spring loaded pressure relief valves including cost of all material, labour, cost of conveyance from stores to site of work and giving satisfactory hydraulic testing, etc. complete. (For all class of valves.)					
i)	25 mm	No	249			
ii)	40 mm	No	330			
iii)	50 mm	No	383			
iv)	80 mm	No	457			
v)	100 mm	No	501			
vi)	125 mm	No	558			
vii)	150 mm	No	788			
viii)	200 mm	No	859			
ix)	250 mm	No	1003			
x)	300 mm	No	1145			
20.	**Cutting and champhering of pipes** of following diameters including cost of all materials and labour involved, etc. complete as directed by Engineer-in-charge (for all class of pipes).					
a)	**C.I.Pipes**					
i)	80 mm	No	45			
ii)	100 mm	No	52			
iii)	150 mm	No	80			
iv)	200 mm	No	101			
v)	250 mm	No	145			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
vi)	300 mm	No	172			
vii)	350 mm	No	177			
viii)	400 mm	No	224			
ix)	450 mm	No	261			
x)	500 mm	No	311			
xi)	600 mm	No	380			
xii)	700 mm	No	448			
xiii)	750 mm	No	535			
xiv)	800 mm	No	584			
xv)	900 mm	No	642			
xvi)	1000 mm	No	699			
21.	Providing and supplying I.S.I. mark **rubber gasket suitable** for C.I. or D. I. pipe of all class for tyton joints including inspection charges, transportation upto departmental stores excluding GST levied by GOI & GOM in all respect etc. complete.					
a)	**S.B.R. Gaskets for C. I. / D.I. Pipes**					
i)	80 mm	No	40			
ii)	100 mm	No	44			
III)	150 mm	No	62			
iv)	200 mm	No	105			
v)	250 mm	No	136			
vi)	300 mm	No	192			
vii)	350 mm	No	219			
viii)	400 mm	No	305			
ix)	450 mm	No	333			
x)	500 mm	No	454			
xi)	600 mm	No	630			
xii)	700 mm	No	1122			
xiii)	750 mm	No	1166			
xiv)	800 mm	No	1208			
xv)	900 mm	No	1747			
xvi)	1000 mm	No	2244			
b)	**Sealing ' O' Rings of SBR (for CID Joints)**					
i)	80 mm	Set.	45			
ii)	100 mm	Set.	56			
iii)	125 mm	Set.	65			
iv)	150 mm	Set.	77			
c)	**Flat Flanged Gaskets moulded out of SBR (ForFlanged Joints)**					
i)	80 mm	No.	84			
ii)	100 mm	No.	111			
iii)	125 mm	No.	132			
iv)	150 mm	No.	181			
v)	200 mm	No.	224			
vi)	250 mm	No.	314			
vii)	300 mm	No.	333			
viii)	350 mm	No.	404			
ix)	400 mm	No.	499			
x)	450 mm	No.	545			
xi)	500 mm	No.	639			
xii)	600 mm	No.	859			
d)	**Providing Rubber Gasket -**					
	EPDM Gaskets for C. I. / D.I. Pipes					
i)	80 mm.	No	46			
ii)	100 mm.	No	48			
iii)	150 mm.	No	72			
iv)	200 mm.	No	121			
v)	250 mm.	No	165			
vi)	300 mm.	No	217			
vii)	350 mm.	No	253			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
viii)	400 mm.	No	346			
ix)	450 mm.	No	387			
x)	500 mm.	No	513			
xi)	600 mm.	No	720			
xii)	700 mm.	No	1352			
xiii)	750 mm.	No	1417			
xiv)	800 mm.	No	1728			
xv)	900 mm.	No	2231			
xvi)	1000 mm	No	2593			
22.	Providing and fixing in position and jointing **high performance C. I. Air valves** for water combination type (Kinetic air valve along with automatic air valves) double ball, double orifice with stainless steel ball, tamper proof air vents rolling seal mechanism for air release and anti vacuum application designed for 16 Kg. Per sq. cm. working pressure and tested for 20 for kg per sq. cm. pressure. (Rate to include cost of gaskets, bolt, nut and any other material required for jointing and its transportation etc. excluding GST levied by GOI & GOM in all respect.					
i)	1. C. I. ARV FLFF PN 1.6 50mm Dia.	No	9544			
ii)	2. C. I. ARV FLFF PN 1.6 80mm Dia.	No	13243			
iii)	3. C. I. ARV FLFF PN 1.6 100mm Dia.	No	21294			
iv)	4. C. I. ARV FLFF PN 1.6 150mm Dia.	No	35644			
v)	5. C. I. ARV FLFF PN 1.6 200mm Dia.	No	43176			
23.	Providing and supplying at site of **ductile iron /spheroidal graphite (S.G.) iron D/F double eccentric resilient seated short body butterfly valves** with gear box & handwheel, without bypass arrangement. Valves in accordance with BS EN 593 of PN 10/16 rated, with body & disc of ductile iron confirming to EN 1563/IS 1865 Gr.500/7 or Gr.400/15, Body seat of intergral SG Iron/S.S. AISI 316, seal retaining ring of steel C45/S.S. 1.4436, Shaft of S.S. 1.4021, Periferial disc seal and "O" rings of WRAS approved EPDM rubber (suitable for drinking water), Internal fasteners of stainless steel A2. Body & disc coated inside & outside with electrostatically applied epoxy powder coated blue colour. (suitable for drinking water.) as per DIN 30677- 2 & GSK guidelines with a coating thickness of min. 250 microns. Valves should be 100% tight shutoff. Face to face is per IS 13095 short body. Flange drilling as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 13095. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete.					
			PN-10	**PN-16**		
i)	200 mm.	No.	78201	94454		
ii)	250 mm.	No.	97940	122226		
iii)	300 mm.	No.	125722	161484		
iv)	350 mm.	No.	156538	190897		
v)	400 mm.	No.	186577	217850		
vi)	450 mm.	No.	241754	295294		

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
vii)	500 mm.	No.	263725	353968		
viii)	600 mm.	No.	383942	540867		
ix)	700 mm.	No.	638558	744983		
x)	800 mm.	No.	758287	911275		
xi)	900 mm.	No.	931228	1104170		
xii)	1000 mm	No.	1317023	1418135		
24.	Providing and supplying at site of **ductile iron / spheroidal graphite (S.G.) iron D/F non-rising spindle resil-ient seated glandless sluice valves** with handwheel &without bypass arrangement. Valves in accordance with BS 5163 of PN-10/ 16 rated, with body and bonnet of ductile iron confirming to IS 1865 Gr. 500/7 or Gr.400/15. Wedge fully encapsulated WRAS approved EPDM rubber (approved for drinking water), Wedge nut of brass,shaft of stainless steel 1.4021/1.4104, stem seals min. 3 nos. of NBR, internal fasteners of stainless steel A2. Body& Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guidelines with a coating thickness of min. 250 microns. Valves should be full bore & tight shut-off. Flange drilling as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14846. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete. (For PN 10 & 16)					
i)	50 mm	No.	10969			
ii)	80 mm.	No.	13928			
iii)	100 mm.	No.	17256			
iv)	150 mm.	No.	24070			
v)	200 mm.	No.	38201			
vi)	250 mm.	No.	67679			
vii)	300 mm.	No.	90722			
viii)	350 mm.	No.	207636			
ix)	400 mm.	No.	250551			
x)	450 mm.	No.	342354			
xi)	500 mm.	No.	432348			
xii)	600 mm.	No.	625517			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022		Rate (in Rs.) 2022-2023	
1	2	3	4		5	
25.	Providing and supplying at site **ductile iron / Spheroidal Graphite (S.G.) iron single / Double chamber tamper proof air valve** without isolating sluice valve. Valves in accordance with BSEN 1074-4 of PN 10/16 rated, with body and bonnet of ductile iron confirming to EN 1563/IS 1865 Gr. 500/7 or Gr.400/15 floats, float guide, seat ring of stainless steel 1.4436/1.4306, seat ring gasket of WRAS approved EPDM rubber (suitable for drinking water), internal fasteners of stainless steel A2. Body & Bonnet coated inside & outside with electrostatically applied epoxy powder coated blue colour (suitable for drinking water) as per DIN 30677-2 & GSK guidelines with a coating thickness of min. 250 microns. Flange connections as per IS 1538 raised face & pressure testing at manufactures works shall be done as per IS 14845. including transportation charges excluding GST levied by GOI & GOM in all respect etc. complete. (For PN 10 & 16)					
i)	50 mm	No.	24790			
ii)	80 mm.	No.	25438			
iii)	100 mm.	No.	31292			
iv)	150 mm.	No.	43521			
v)	200 mm.	No.	45270			

SECTION - I (XIII)
MECHANICAL JOINTS/FITTINGS

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	XIII. MECHANICAL JOINTS / FITTING			
1.	**Supply of C. I. Mechanical Compression Flanged / Socket Tailpiece** (Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes (as per - IS - 1536 /2001) and D. I. Pipes (as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R, C.I. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, freight charges, loading, transportation and unloading at departemental store, excluding GST levied by GoI and GoM in all respect, etc. complete as directed.			
i)	80 mm dia	No.	1311.00	
ii)	100 mm dia	No.	1430.00	
III)	125 mm dia	No.	1800.00	
iv)	150 mm dia	No.	2574.00	
v)	200 mm dia	No.	3335.00	
vi)	250 mm dia	No.	5031.00	
vii)	300 mm dia	No.	5632.00	
viii)	350 mm dia	No.	7427.00	
ix)	400 mm dia	No.	9694.00	
x)	450 mm dia	No.	11380.00	
xi)	500 mm dia	No.	14299.00	
xii)	600 mm dia	No.	18336.00	
xiii)	700 mm dia	No.	25009.00	
xiv)	750 mm dia	No.	30390.00	
2.	**Supply of C. I. Mechanical Compression Collar Coupling** suitable for C. I. Spun Pipes (as per - IS - 1536 /2001) and complete with sealing rubber gasket of SBR,.C.I. follower Glands and M.S. nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993.			
i)	80 mm dia	No.	826.00	
ii)	100 mm dia	No.	886.00	
III)	125 mm dia	No.	1181.00	
iv)	150 mm dia	No.	1593.00	
v)	200 mm dia	No.	1818.00	
vi)	250 mm dia	No.	2914.00	
vii)	300 mm dia	No.	3729.00	
viii)	350 mm dia	No.	4597.00	
ix)	400 mm dia	No.	7154.00	
x)	450 mm dia	No.	8033.00	
xi)	500 mm dia	No.	10977.00	
xii)	600 mm dia	No.	13692.00	
xiii)	700 mm dia	No.	17889.00	
xiv)	750 mm dia	No.	20990.00	
3.	**Supply of C. I. Mechanical Joint Double Socket 900 (11/4'') Bends** as dimensionally described in Table-14 of IS-13382/ 1992 complete with sealing rubber gasket of SBR (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
i)	80 mm dia	No.	2227.00	
ii)	100 mm dia	No.	2583.00	
III)	125 mm dia	No.	3017.00	
iv)	150 mm dia	No.	4744.00	
v)	200 mm dia	No.	6295.00	
vi)	250 mm dia	No.	9369.00	
vii)	300 mm dia	No.	11402.00	
viii)	350 mm dia	No.	18880.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
ix)	400 mm dia	No.	25732.00	
x)	450 mm dia	No.	32845.00	
xi)	500 mm dia	No.	40872.00	
xii)	600 mm dia	No.	57765.00	
xiii)	700 mm dia	No.	91180.00	
xiv)	750 mm dia	No.	103559.00	
4.	**Supply of CI Mechanical joint Double Socket 450 (11/8'') Bends** as dimensionally described in Table -15 of IS - 13382/ 1992 complete with sealing rubber gasket of S.B.R. (dimensionally described in IS-12820/1989) with cast iron follower gland mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
i)	80 mm dia	No.	2068.00	
ii)	100 mm dia	No.	2302.00	
III)	125 mm dia	No.	2909.00	
iv)	150 mm dia	No.	3995.00	
v)	200 mm dia	No.	5263.00	
vi)	250 mm dia	No.	7720.00	
vii)	300 mm dia	No.	9314.00	
viii)	350 mm dia	No.	15538.00	
ix)	400 mm dia	No.	19173.00	
x)	450 mm dia	No.	26743.00	
xi)	500 mm dia	No.	29795.00	
xii)	600 mm dia	No.	41254.00	
xiii)	700 mm dia	No.	58789.00	
xiv)	750 mm dia	No.	77749.00	
5.	**Supply of C. I. Mechanical Joint Double Socket 22.50 (1/6'') Bends** as dimensionally described in Table -16 of IS-13382/ 1992 complete with sealing rubber gasket of SBR (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
i)	80 mm dia.	No.	1985.00	
ii)	100 mm dia.	No.	2209.00	
iii)	125 mm dia.	No.	2653.00	
iv)	150 mm dia.	No.	3751.00	
v)	200 mm dia.	No.	4703.00	
vi)	250 mm dia.	No.	7113.00	
vii)	300 mm dia.	No.	8585.00	
viii)	350 mm dia.	No.	13553.00	
ix)	400 mm dia.	No.	17375.00	
x)	450 mm dia.	No.	21980.00	
xi)	500 mm dia.	No.	25616.00	
xii)	600 mm dia.	No.	33940.00	
xiii)	700 mm dia.	No.	51056.00	
xiv)	750 mm dia.	No.	56223.00	
6.	**Supply of CI Mechanical joint Double Socket 11.250 (1/32'') Bends** as dimensionally described in Table -17 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R.(dimensionally described in IS-12820 /1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
i)	80 mm dia.	No.	1965.00	
ii)	100 mm dia.	No.	2158.00	
iii)	125 mm dia.	No.	2345.00	
iv)	150 mm dia.	No.	3667.00	
v)	200 mm dia.	No.	4515.00	
vi)	250 mm dia.	No.	6674.00	
vii)	300 mm dia.	No.	7395.00	
viii)	350 mm dia.	No.	11670.00	
ix)	400 mm dia.	No.	15806.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
x)	450 mm dia.	No.	19951.00	
xi)	500 mm dia.	No.	21748.00	
xii)	600 mm dia.	No.	29813.00	
xiii)	700 mm dia.	No.	40190.00	
xiv)	750 mm dia.	No.	44837.00	
7	Supply of CI Mechanical joint All Socket Tees as dimensionally described in Table -18 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R. (dimensionally described in IS-12820/1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
i)	80x80x80 mm dia	No.	3039.00	
ii)	100x100x80 mm dia	No.	3267.00	
iii)	100x100x100 mm dia	No.	3622.00	
iv)	150x150x80 mm dia	No.	5074.00	
v)	150x150x100 mm dia	No.	5146.00	
vi)	150x150x150 mm dia	No.	6382.00	
vii)	200x200x80 mm dia	No.	6120.00	
viii)	200x200x100 mm dia	No.	6188.00	
ix)	200x200x150 mm dia	No.	7370.00	
x)	200x200x200 mm dia	No.	8109.00	
xi)	250x250x80 mm dia	No.	8619.00	
xii)	250x250x100 mm dia	No.	8809.00	
xiii)	250x250x150 mm dia	No.	10513.00	
xiv)	250x250x200 mm dia	No.	11108.00	
xv)	250x250x250 mm dia	No.	12459.00	
xvi)	300x300x80 mm dia	No.	9451.00	
xvii)	300x300x100 mm dia	No.	9664.00	
xviii)	300x300x150 mm dia	No.	12393.00	
xix)	300x300x200 mm dia	No.	12803.00	
xx)	300x300x250 mm dia	No.	13555.00	
xxi)	300x300x300 mm dia	No.	14960.00	
8.	Supply of CI Mechanical joint Double Socket with Flanged **Tees** dimensionally described in Table -19 of IS - 13382/1992 complete with sealing rubber gasket of S.B.R.(dimensionally described in IS-12820/ 1989) with cast iron follower gland and mild steel nut bolts coated or galvanised coated or otherwise protected from rusting and suitable for C. I. pipes.			
	80x80x80 mm dia	No.	2976.00	
	100x100x80 mm dia	No.	3266.00	
	100x100x100 mm dia	No.	3455.00	
	150x150x80 mm dia	No.	4928.00	
	150x150x100 mm dia	No.	5050.00	
	150x150x150 mm dia	No.	6015.00	
	200x200x80 mm dia	No.	5784.00	
	200x200x100 mm dia	No.	6170.00	
	200x200x150 mm dia	No.	7106.00	
	200x200x200 mm dia	No.	8147.00	
	250x250x80 mm dia	No.	8169.00	
	250x250x100 mm dia	No.	8597.00	
	250x250x150 mm dia	No.	10200.00	
	250x250x200 mm dia	No.	10673.00	
	250x250x250 mm dia	No.	11052.00	
	300x300x80 mm dia	No.	9590.00	
	300x300x100 mm dia	No.	9778.00	
	300x300x150 mm dia	No.	11289.00	
	300x300x200 mm dia	No.	11385.00	
	300x300x250 mm dia	No.	12564.00	
	300x300x300 mm dia	No.	15398.00	
	350x350x80 mm dia	No.	13413.00	
	350x350x100 mm dia	No.	14265.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	350x350x150 mm dia	No.	15348.00	
	350x350x200 mm dia	No.	17885.00	
	350x350x300 mm dia	No.	18323.00	
	350x350x350 mm dia	No.	20968.00	
	400x400x80 mm dia	No.	17534.00	
	400x400x100 mm dia	No.	18587.00	
	400x400x150 mm dia	No.	20694.00	
	400x400x200 mm dia	No.	21111.00	
	400x400x300 mm dia	No.	25442.00	
	400x400x400 mm dia	No.	29130.00	
	450x450x80 mm dia	No.	20913.00	
	450x450x100 mm dia	No.	21969.00	
	450x450x200 mm dia	No.	25764.00	
	450x450x300 mm dia	No.	32511.00	
	450x450x350 mm dia	No.	34304.00	
	450x450x450 mm dia	No.	37261.00	
	500x500x100 mm dia	No.	23529.00	
	500x500x250 mm dia	No.	32175.00	
	500x500x300 mm dia	No.	33333.00	
	500x500x400 mm dia	No.	40191.00	
	500x500x500 mm dia	No.	48523.00	
	600x600x100 mm dia	No.	33626.00	
	600x600x300 mm dia	No.	46175.00	
	600x600x400 mm dia	No.	52605.00	
	600x600x500 mm dia	No.	56927.00	
	600x600x600 mm dia	No.	69896.00	
	700x700x100 mm dia	No.	44565.00	
	700x700x200 mm dia	No.	51630.00	
	700x700x350 mm dia	No.	62385.00	
	700x700x400 mm dia	No.	67024.00	
	750x750x150 mm dia	No.	53153.00	
	750x750x250 mm dia	No.	60958.00	
	750x750x750 mm dia	No.	116950.00	
9.	**Supply of CI Mechaincal joint Double Socket Reducers** as described in Table -21 of IS - 13382/1992 complete with sealing rubber gasket of SBR(dimensionally described in IS-12820/ 1989) with cast iron follower gland and mild steel nut bolts coated or otherwise protected from rusting and suitable for C. I. pipes.			
	100x80 mm dia	No.	2088.00	
	150x80 mm dia	No.	3286.00	
	150x100 mm dia	No.	3479.00	
	200x100 mm dia	No.	4005.00	
	200x150 mm dia	No.	4380.00	
	250x150 mm dia	No.	5837.00	
	250x200 mm dia	No.	5983.00	
	300x150 mm dia	No.	7360.00	
	300x200 mm dia	No.	7372.00	
	300x250 mm dia	No.	7497.00	
	350x200 mm dia	No.	10595.00	
	350x250 mm dia	No.	10629.00	
	350x300 mm dia	No.	10503.00	
	400x250 mm dia	No.	16002.00	
	400x300 mm dia	No.	14177.00	
	400x350 mm dia	No.	14271.00	
	450x300 mm dia	No.	17721.00	
	450x350 mm dia	No.	17711.00	
	450x400 mm dia	No.	17489.00	
	500x350 mm dia	No.	21304.00	
	500x400 mm dia	No.	20979.00	
	500x450 mm dia	No.	20448.00	
	600x400 mm dia	No.	30933.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	600x450 mm dia	No.	30106.00	
	600x500 mm dia	No.	28267.00	
	700x500 mm dia	No.	42461.00	
	700x600 mm dia	No.	38536.00	
	750x600 mm dia	No.	45769.00	
	750x700 mm dia	No.	42306.00	
	800x450 mm dia	No.	62966.00	
	800x700 mm dia	No.	54053.00	

SECTION - I (XIV)
M.S. PIPES

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	XIV. M. S. PIPES			
1.	**Manufacturing, providing and supplying spirally welded / ERW/ SAW / fabricated M. S. pipes** (Commercial Quality) including procurements of plates, gas cutting to requried size rolling, tack welding assembling in suitable lengths to form pipes, welding on automatic welding machine and forming 'V' edge on both ends of pipes including railway freight, insurance, unloading from railway wagon, loading into truck, transport to stores, unloading, stacking excluding GST levied by GOI & GOM in all respect, etc, complete as per IS - 3589 and IS-5504 as applicable as per specifications (No negative tolerance in thickness is permissible).			
a)	**Dia of Pipe : 219.10 mm (O. D.)** **Thickness of pipe :**			
i)	4.8 mm	RMT	1892.00	
ii)	5.6 mm	RMT	2198.00	
iii)	6.4 mm	RMT	2504.00	
iv)	7.0 mm	RMT	2730.00	
v)	7.9 mm	RMT	3068.00	
vi)	8.2 mm	RMT	3181.00	
vii)	8.7 mm	RMT	3367.00	
viii)	9.5 mm	RMT	3662.00	
b)	**Dia of Pipe : 273.10 mm (O. D.)** **Thickness of pipe :**			
i)	4.8 mm	RMT	2369.00	
ii)	5.6 mm	RMT	2755.00	
iii)	6.4 mm	RMT	3139.00	
iv)	7.2 mm	RMT	3521.00	
v)	7.8 mm	RMT	3806.00	
vi)	8.7 mm.	RMT	4231.00	
vii)	9.3 mm.	RMT	4512.00	
c)	**Dia of Pipe : 323.90 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm	RMT	3278.00	
ii)	6.4 mm	RMT	3737.00	
iii)	7.1 mm	RMT	4135.00	
iv)	7.9 mm	RMT	4591.00	
v)	8.4 mm	RMT	4874.00	
vi)	8.7 mm.	RMT	5042.00	
vii)	9.5 mm.	RMT	5494.00	
d)	**Dia of Pipe : 355.7 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	3605.00	
ii)	6.4 mm.	RMT	4111.00	
iii)	7.1 mm.	RMT	4552.00	
iv)	7.9 mm.	RMT	5052.00	
v)	8.7 mm.	RMT	5550.00	
vi)	9.5 mm.	RMT	6048.00	
e)	**Dia of Pipe : 406.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	4123.00	
ii)	6.4 mm.	RMT	4703.00	
iii)	7.1 mm.	RMT	5208.00	
iv)	7.9 mm.	RMT	5784.00	
v)	8.7 mm.	RMT	6356.00	
vi)	9.5 mm.	RMT	6928.00	
vii)	10.00 mm.	RMT	7284.00	
f)	**Dia of Pipe : 457.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	5.6 mm.	RMT	4650.00	
	6.4 mm.	RMT	5304.00	
iii)	7.1 mm.	RMT	5875.00	
iv)	7.9 mm.	RMT	6524.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
v)	8.7 mm.	RMT	7172.00	
vi)	9.5 mm.	RMT	7819.00	
vii)	10.00 mm.	RMT	8221.00	
g)	**Dia of Pipe : 508.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	5176.00	
ii)	6.4 mm.	RMT	5904.00	
iii)	7.1 mm.	RMT	6540.00	
iv)	7.9 mm.	RMT	7266.00	
v)	8.7 mm.	RMT	7990.00	
vi)	9.5 mm.	RMT	8711.00	
vii)	10.00 mm.	RMT	9160.00	
h)	**Dia of Pipe : 559.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	5700.00	
ii)	6.4 mm.	RMT	6504.00	
iii)	7.1 mm.	RMT	7207.00	
iv)	7.9 mm.	RMT	8008.00	
v)	8.7 mm.	RMT	8806.00	
vi)	9.5 mm.	RMT	9602.00	
vii)	10.00 mm.	RMT	10097.00	
i)	**Dia of Pipe : 610.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm	RMT	6226.00	
ii)	6.4 mm.	RMT	7105.00	
iii)	7.1 mm.	RMT	7872.00	
iv)	7.9 mm.	RMT	8748.00	
v)	8.7 mm.	RMT	9620.00	
vi)	9.5 mm.	RMT	10492.00	
vii)	10.00 mm.	RMT	11035.00	
viii)	12.00 mm	RMT	13198.00	
j)	**Dia of Pipe : 660.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm	RMT	6740.00	
ii)	6.4 mm.	RMT	7692.00	
iii)	7.1 mm.	RMT	8526.00	
iv)	7.9 mm.	RMT	9474.00	
v)	8.7 mm.	RMT	10421.00	
vi)	9.5 mm.	RMT	11366.00	
vii)	10.00 mm.	RMT	11954.00	
k)	**Dia of Pipe : 711.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	7265.00	
ii)	6.4 mm.	RMT	8293.00	
iii)	7.1 mm.	RMT	9192.00	
iv)	7.9 mm.	RMT	10216.00	
v)	8.7 mm.	RMT	11237.00	
vi)	9.5 mm.	RMT	12257.00	
vii)	10.00 mm.	RMT	12893.00	
viii)	12.00 mm	RMT	15427.00	
l)	**Dia of Pipe : 762.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	7790.00	
ii)	6.4 mm.	RMT	8894.00	
iii)	7.1 mm.	RMT	9858.00	
iv)	7.9 mm.	RMT	10956.00	
v)	8.7 mm.	RMT	12053.00	
vi)	9.5 mm.	RMT	13148.00	
vii)	10.00 mm.	RMT	13831.00	
m)	**Dia of Pipe : 813.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	8316.00	
ii)	6.4 mm.	RMT	9494.00	
iii)	7.1 mm.	RMT	10524.00	
iv)	7.9 mm.	RMT	11698.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
v)	8.7 mm.	RMT	12869.00	
vi)	9.5 mm.	RMT	14039.00	
vii)	10.00 mm.	RMT	14768.00	
viii)	12.00 mm	RMT	17677.00	
n)	**Dia of Pipe : 864.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	8840.00	
ii)	6.4 mm.	RMT	10094.00	
iii)	7.1 mm.	RMT	11190.00	
iv)	7.9 mm.	RMT	12439.00	
v)	8.7 mm.	RMT	13685.00	
vi)	9.5 mm.	RMT	14928.00	
vii)	10.00 mm.	RMT	15706.00	
o)	**Dia of Pipe : 914.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	9355.00	
ii)	6.4 mm.	RMT	10682.00	
iii)	7.1 mm.	RMT	11842.00	
iv)	7.9 mm.	RMT	13164.00	
v)	8.7 mm.	RMT	14485.00	
vi)	9.5 mm.	RMT	15804.00	
vii)	10.00 mm.	RMT	16625.00	
p)	**Dia of Pipe : 965.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	9880.00	
ii)	6.4 mm.	RMT	11284.00	
iii)	7.1 mm.	RMT	12508.00	
iv)	7.9 mm.	RMT	13762.00	
v)	8.7 mm.	RMT	15301.00	
vi)	9.5 mm.	RMT	16694.00	
vii)	10.00 mm.	RMT	17563.00	
q)	**Dia of Pipe : 1016.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	5.6 mm.	RMT	10477.00	
	6.4 mm.	RMT	11885.00	
iii)	7.1 mm.	RMT	13174.00	
iv)	7.9 mm.	RMT	14647.00	
v)	8.7 mm.	RMT	16118.00	
vi)	9.5 mm.	RMT	17585.00	
vii)	10.00 mm.	RMT	18502.00	
viii)	12.00 mm	RMT	22159.00	
r)	**Dia of Pipe : 1067.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	5.6 mm.	RMT	10932.00	
	6.4 mm.	RMT	12484.00	
iii)	7.1 mm.	RMT	13840.00	
iv)	7.9 mm.	RMT	15388.00	
v)	8.7 mm.	RMT	16933.00	
vi)	9.5 mm.	RMT	18475.00	
vii)	10.00 mm.	RMT	19439.00	
s)	**Dia of Pipe : 1118.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	11456.00	
ii)	6.4 mm.	RMT	13084.00	
iii)	7.1 mm.	RMT	14506.00	
iv)	7.9 mm.	RMT	16129.00	
v)	8.7 mm.	RMT	17749.00	
vi)	9.5 mm.	RMT	19367.00	
vii)	10.00 mm.	RMT	20377.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
t)	**Dia of Pipe : 1168.00 mm (O. D.)** **Thickness of pipe :**			
i)	5.6 mm.	RMT	11972.00	
ii)	6.4 mm.	RMT	13673.00	
iii)	7.1 mm.	RMT	15158.00	
iv)	7.9 mm.	RMT	16855.00	
v)	8.7 mm.	RMT	18550.00	
vi)	9.5 mm.	RMT	20240.00	
vii)	10.00 mm.	RMT	21298.00	
u)	**Dia of Pipe : 1219.00 mm (O. D.)** **Thickness of pipe :**			
i)	6.4 mm.	RMT	14273.00	
ii)	7.1 mm.	RMT	15824.00	
iii)	7.9 mm.	RMT	17596.00	
iv)	8.7 mm.	RMT	19366.00	
v)	9.5 mm.	RMT	21132.00	
vi)	10.00 mm.	RMT	22235.00	
vii)	12.00 mm.	RMT	26638.00	
v)	**Dia of Pipe : 1296.00 mm (O. D.)** **Thickness of pipe :**			
i)	9.5 mm.	RMT	22477.00	
ii)	9.98 mm.	RMT	23603.00	
iii)	10.00 mm.	RMT	23652.00	
w)	**Dia of Pipe : 1321.00 mm (O. D.)** **Thickness of pipe :**			
i)	6.4 mm.	RMT	15473.00	
ii)	7.1 mm.	RMT	17156.00	
iii)	7.9 mm.	RMT	19079.00	
iv)	8.7 mm.	RMT	20998.00	
v)	9.5 mm.	RMT	22913.00	
vi)	10.00 mm.	RMT	24112.00	
x)	**Dia of Pipe : 1422.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.1 mm.	RMT	18475.00	
ii)	7.9 mm.	RMT	20546.00	
iii)	8.7 mm.	RMT	22614.00	
iv)	9.5 mm.	RMT	24679.00	
v)	10.00 mm.	RMT	25969.00	
vi)	12.00 mm.	RMT	31118.00	
y)	**Dia of Pipe : 1473.00 mm (O. D.)** **Thickness of pipe :**			
i)	9.5 mm.	RMT	25570.00	
ii)	9.98 mm.	RMT	26854.00	
z)	**Dia of Pipe : 1524.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.1 mm.	RMT	19807.00	
ii)	7.9 mm.	RMT	22027.00	
iii)	8.7 mm.	RMT	24245.00	
iv)	9.5 mm.	RMT	26461.00	
v)	10.00 mm.	RMT	27845.00	
vi)	11.90 mm.	RMT	33092.00	
vii)	12.00 mm.	RMT	33370.00	
aa)	**Dia of Pipe : 1550.00 mm (O. D.)** **Thickness of pipe :**			
i)	10.00 mm.	RMT	28322.00	
ii)	11.00 mm.	RMT	31134.00	
ab)	**Dia of Pipe : 1576.00 mm (O. D.)** **Thickness of pipe :**			
i)	9.5 mm.	RMT	27370.00	
ii)	10.00 mm.	RMT	28801.00	
ac)	**Dia of Pipe : 1626.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.1 mm.	RMT	21139.00	
ii)	7.9 mm.	RMT	23510.00	
iii)	8.7 mm.	RMT	25878.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
iv)	9.5 mm.	RMT	28243.00	
v)	10.00 mm.	RMT	29720.00	
vi)	12.00 mm.	RMT	35621.00	
ad)	**Dia of Pipe : 1650.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	23860.00	
ii)	8.7 mm.	RMT	26261.00	
iii)	9.5 mm.	RMT	28662.00	
iv)	10.00 mm.	RMT	30161.00	
v)	12.00 mm.	RMT	36150.00	
ae)	**Dia of Pipe : 1700.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	24583.00	
ii)	8.7 mm.	RMT	27060.00	
iii)	9.5 mm.	RMT	29536.00	
iv)	10.00 mm.	RMT	31081.00	
v)	12.00 mm.	RMT	37253.00	
af)	**Dia of Pipe : 1750.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	25310.00	
ii)	8.7 mm.	RMT	27862.00	
iii)	9.5 mm.	RMT	30410.00	
iv)	10.00 mm.	RMT	32002.00	
v)	12.00 mm.	RMT	38357.00	
ag)	**Dia of Pipe : 1800.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	26038.00	
ii)	8.7 mm.	RMT	28662.00	
iii)	9.5 mm.	RMT	31284.00	
iv)	10.00 mm.	RMT	32920.00	
v)	12.00 mm.	RMT	39461.00	
ah)	**Dia of Pipe : 1850.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	0.00	
ii)	8.7 mm.	RMT	29461.00	
iii)	9.5 mm.	RMT	32156.00	
iv)	10.00 mm.	RMT	33840.00	
v)	12.00 mm.	RMT	40564.00	
ai)	**Dia of Pipe : 1900.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	7.9 mm.	RMT	27491.00	
	8.7 mm.	RMT	30262.00	
iii)	9.5 mm.	RMT	33031.00	
iv)	10.00 mm.	RMT	34760.00	
v)	12.00 mm.	RMT	41668.00	
aj)	**Dia of Pipe : 1950.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	7.9 mm.	RMT	28217.00	
	8.7 mm.	RMT	31061.00	
iii)	9.5 mm.	RMT	33904.00	
iv)	10.00 mm.	RMT	35678.00	
v)	12.00 mm.	RMT	42770.00	
ak)	**Dia of Pipe : 2000.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	7.9 mm.	RMT	28944.00	
	8.7 mm.	RMT	31861.00	
iii)	9.5 mm.	RMT	34777.00	
iv)	10.00 mm.	RMT	36599.00	
v)	12.00 mm.	RMT	43876.00	
al)	**Dia of Pipe : 2050.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	7.9 mm.	RMT	29670.00	
	8.7 mm.	RMT	32662.00	
iii)	9.5 mm.	RMT	35650.00	
iv)	10.00 mm.	RMT	37518.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
v)	12.00 mm.	RMT	44978.00	
am)	**Dia of Pipe : 2100.00 mm (O. D.)** **Thickness of pipe :**			
i) ii)	7.9 mm.	RMT	30397.00	
	8.7 mm.	RMT	33461.00	
iii)	9.5 mm.	RMT	36914.00	
iv)	10.00 mm.	RMT	38438.00	
v)	12.00 mm.	RMT	46081.00	
an)	**Dia of Pipe : 2150.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	31124.00	
ii)	8.7 mm.	RMT	34262.00	
iii)	9.5 mm.	RMT	37398.00	
iv)	10.00 mm.	RMT	39358.00	
v)	12.00 mm.	RMT	47184.00	
ao)	**Dia of Pipe : 2200.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	31848.00	
ii)	8.7 mm.	RMT	35062.00	
iii)	9.5 mm.	RMT	38273.00	
iv)	10.00 mm.	RMT	40277.00	
v)	12.00 mm.	RMT	48289.00	
ap)	**Dia of Pipe : 2250.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	32575.00	
ii)	8.7 mm.	RMT	35862.00	
iii)	9.5 mm.	RMT	39145.00	
iv)	10.00 mm.	RMT	41197.00	
v)	12.00 mm.	RMT	49392.00	
aq)	**Dia of Pipe : 2300.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	33302.00	
ii)	8.7 mm.	RMT	36662.00	
iii)	9.5 mm.	RMT	40019.00	
iv)	10.00 mm.	RMT	42115.00	
v)	12.00 mm.	RMT	50495.00	
ar)	**Dia of Pipe : 2350.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	34028.00	
ii)	8.7 mm.	RMT	37462.00	
iii)	9.5 mm.	RMT	40891.00	
iv)	10.00 mm.	RMT	43036.00	
v)	12.00 mm.	RMT	51598.00	
as)	**Dia of Pipe : 2400.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	34756.00	
ii)	8.7 mm.	RMT	38262.00	
iii)	9.5 mm.	RMT	41766.00	
iv)	10.00 mm.	RMT	43956.00	
v)	12.00 mm.	RMT	52703.00	
at)	**Dia of Pipe : 2450.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	35482.00	
ii)	8.7 mm.	RMT	39061.00	
iii)	9.5 mm.	RMT	42641.00	
iv)	10.00 mm.	RMT	44875.00	
v)	12.00 mm.	RMT	53806.00	
au)	**Dia of Pipe : 2500.00 mm (O. D.)** **Thickness of pipe :**			
i)	7.9 mm.	RMT	36208.00	
ii)	8.7 mm.	RMT	39862.00	
iii)	9.5 mm.	RMT	43514.00	
iv)	10.00 mm.	RMT	45794.00	
v)	12.00 mm.	RMT	54908.00	
vi)	16.00 mm.	RMT	73096.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
2.	**Manufacturing, providing and supplying spirally welded / ERW/ SAW / fabricated M. S. pipes** (Commercial Quality) including procurements of plates, gas cutting to required size rolling, tack welding assembling in suitable lengths to form pipes, welding on automatic welding machine and forming 'V' edge on both ends of pipes including railway freight, insurance, unloading from railway wagon, loading into truck, transport to stores, unloading, stacking, excluding GST levied by GOI & GOM in all respect etc. complete as per IS - 3589 and IS-5504 as applicable as per specifications (No negative tolerance in thickness is permissible).			
a)	**Dia of Pipe : 200.00 mm (I. D.)**			
	Thickness of pipe :			
	i) 5.00 mm.	RMT	1885.00	
	ii) 6.00 mm.	RMT	2273.00	
	iii) 7.00 mm.	RMT	2665.00	
	iv) 8.00 mm.	RMT	3060.00	
	v) 9.00 mm.	RMT	3458.00	
	vi) 10.00mm.	RMT	3862.00	
b)	**Dia of Pipe : 250.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	2346.00	
ii)	6.00 mm.	RMT	2825.00	
iii)	7.00 mm.	RMT	3310.00	
iv)	8.00 mm.	RMT	3796.00	
v)	9.00 mm.	RMT	4289.00	
vi)	10.00mm.	RMT	4782.00	
c)	**Dia of Pipe : 300.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	2803.00	
ii)	6.00 mm.	RMT	3377.00	
iii)	7.00 mm.	RMT	3952.00	
iv)	8.00 mm.	RMT	4531.00	
v)	9.00 mm.	RMT	5114.00	
vi)	10.00mm.	RMT	5702.00	
d)	**Dia of Pipe : 350.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	3264.00	
ii)	6.00 mm.	RMT	3929.00	
iii)	7.00 mm.	RMT	4596.00	
iv)	8.00 mm.	RMT	5268.00	
v)	9.00 mm.	RMT	5942.00	
vi)	10.00mm.	RMT	6622.00	
e)	**Dia of Pipe : 400.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	3724.00	
ii)	6.00 mm.	RMT	4480.00	
iii)	7.00 mm.	RMT	5240.00	
iv)	8.00 mm.	RMT	6002.00	
v)	9.00 mm.	RMT	6770.00	
vi)	10.00mm.	RMT	7541.00	
f)	**Dia of Pipe : 450.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	4184.00	
ii)	6.00 mm.	RMT	5032.00	
iii)	7.00 mm.	RMT	5884.00	
iv)	8.00 mm.	RMT	6739.00	
v)	9.00 mm.	RMT	7597.00	
vi)	10.00mm.	RMT	8460.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
g)	**Dia of Pipe : 500.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	4644.00	
ii)	6.00 mm.	RMT	5585.00	
iii)	7.00 mm.	RMT	6526.00	
iv)	8.00 mm.	RMT	7475.00	
v)	9.00 mm.	RMT	8425.00	
vi)	10.00mm.	RMT	9380.00	
h)	**Dia of Pipe : 550.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	5104.00	
ii)	6.00 mm.	RMT	6136.00	
iii)	7.00 mm.	RMT	7171.00	
iv)	8.00 mm.	RMT	8209.00	
v)	9.00 mm.	RMT	9253.00	
vi)	10.00mm.	RMT	10298.00	
i)	**Dia of Pipe : 600.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	5563.00	
ii)	6.00 mm.	RMT	6686.00	
iii)	7.00 mm.	RMT	7814.00	
iv)	8.00 mm.	RMT	8945.00	
v)	9.00 mm.	RMT	10080.00	
vi)	10.00mm.	RMT	11218.00	
vii)	12.00mm.	RMT	13506.00	
j)	**Dia of Pipe : 650.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	6024.00	
ii)	6.00 mm.	RMT	7238.00	
iii)	7.00 mm.	RMT	8458.00	
iv)	8.00 mm.	RMT	9682.00	
v)	9.00 mm.	RMT	10908.00	
vi)	10.00mm.	RMT	12138.00	
vii)	12.00mm.	RMT	14610.00	
k)	**Dia of Pipe : 700.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	6482.00	
ii)	6.00 mm.	RMT	7790.00	
iii)	7.00 mm.	RMT	9102.00	
iv)	8.00 mm.	RMT	10417.00	
v)	9.00 mm.	RMT	11735.00	
vi)	10.00mm.	RMT	13058.00	
vii)	12.00mm.	RMT	15715.00	
l)	**Dia of Pipe : 750.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	6943.00	
ii)	6.00 mm.	RMT	8342.00	
iii)	7.00 mm.	RMT	9746.00	
iv)	8.00 mm.	RMT	11153.00	
v)	9.00 mm.	RMT	12563.00	
vi)	10.00mm.	RMT	13976.00	
vii)	12.00mm.	RMT	16817.00	
m)	**Dia of Pipe : 800.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	7402.00	
ii)	6.00 mm.	RMT	8894.00	
iii)	7.00 mm.	RMT	10390.00	
iv)	8.00 mm.	RMT	11888.00	
v)	9.00 mm.	RMT	13391.00	
vi)	10.00mm.	RMT	14897.00	
vii)	12.00mm.	RMT	17921.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
n)	**Dia of Pipe : 850.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	7862.00	
ii)	6.00 mm.	RMT	9445.00	
iii)	7.00 mm.	RMT	11032.00	
iv)	8.00 mm.	RMT	12623.00	
v)	9.00 mm.	RMT	14218.00	
vi)	10.00mm.	RMT	15816.00	
vii)	12.00mm.	RMT	19024.00	
o)	**Dia of Pipe : 900.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	8322.00	
ii)	6.00 mm.	RMT	9998.00	
iii)	7.00 mm.	RMT	11677.00	
iv)	8.00 mm.	RMT	13358.00	
v)	9.00 mm.	RMT	15046.00	
vi)	10.00mm.	RMT	16735.00	
vii)	12.00mm.	RMT	20129.00	
p)	**Dia of Pipe : 950.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	8783.00	
ii)	6.00 mm.	RMT	10549.00	
iii)	7.00 mm.	RMT	12320.00	
iv)	8.00 mm.	RMT	14095.00	
v)	9.00 mm.	RMT	15875.00	
vi)	10.00mm.	RMT	17656.00	
vii)	12.00mm.	RMT	21230.00	
q)	**Dia of Pipe : 1000.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	9242.00	
ii)	6.00 mm.	RMT	11101.00	
iii)	7.00 mm.	RMT	12965.00	
iv)	8.00 mm.	RMT	14832.00	
v)	9.00 mm.	RMT	16702.00	
vi)	10.00mm.	RMT	18575.00	
vii)	12.00mm.	RMT	22334.00	
r)	**Dia of Pipe : 1050.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	9701.00	
ii)	6.00 mm.	RMT	11652.00	
iii)	7.00 mm.	RMT	13607.00	
iv)	8.00 mm.	RMT	15566.00	
v)	9.00 mm.	RMT	17530.00	
vi)	10.00mm.	RMT	19495.00	
vii)	12.00 mm.	RMT	23437.00	
s)	**Dia of Pipe : 1100.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	10160.00	
ii)	6.00 mm.	RMT	12204.00	
iii)	7.00 mm.	RMT	14251.00	
iv)	8.00 mm.	RMT	16302.00	
v)	9.00 mm.	RMT	18358.00	
vi)	10.00mm.	RMT	20413.00	
vii)	12.00 mm.	RMT	24542.00	
t)	**Dia of Pipe : 1150.00 mm (I. D.)**			
	Thickness of pipe :			
i)	5.00 mm.	RMT	10621.00	
ii)	6.00 mm.	RMT	12757.00	
iii)	7.00 mm.	RMT	14896.00	
iv)	8.00 mm.	RMT	17038.00	
v)	9.00 mm.	RMT	19183.00	
vi)	10.00mm.	RMT	21334.00	
vii)	12.00 mm.	RMT	25645.00	
u)	**Dia of Pipe : 1200.00 mm (I. D.)**			
	Thickness of pipe :			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
i)	5.00 mm.	RMT	11081.00	
ii)	6.00 mm.	RMT	13308.00	
iii)	7.00 mm.	RMT	15539.00	
iv)	8.00 mm.	RMT	17772.00	
v)	9.00 mm.	RMT	20011.00	
vi)	10.00mm.	RMT	22254.00	
vii)	12.00 mm.	RMT	26748.00	
v)	**Dia of Pipe :1250.00 mm (I. D.)**			
	Thickness of pipe :			
i)	6.00 mm.	RMT	13860.00	
ii)	7.00 mm.	RMT	16183.00	
iii)	8.00 mm.	RMT	18510.00	
iv)	9.00 mm.	RMT	20839.00	
v)	10.00mm.	RMT	23172.00	
vi)	12.00 mm.	RMT	27852.00	
w)	**Dia of Pipe :1300.00 mm (I. D.)**			
	Thickness of pipe :			
i)	6.00 mm.	RMT	14412.00	
ii)	7.00 mm.	RMT	16826.00	
iii)	8.00 mm.	RMT	19246.00	
iv)	9.00 mm.	RMT	21666.00	
v)	10.00mm.	RMT	24092.00	
vi)	12.00 mm.	RMT	28956.00	
x)	**Dia of Pipe :1350.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	17470.00	
ii)	8.00 mm.	RMT	19980.00	
iii)	9.00 mm.	RMT	22494.00	
iv)	10.00mm.	RMT	25013.00	
v)	12.00 mm.	RMT	30060.00	
y)	**Dia of Pipe :1400.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	18113.00	
ii)	8.00 mm.	RMT	20716.00	
iii)	9.00 mm.	RMT	23322.00	
iv)	10.00mm.	RMT	25932.00	
v)	12.00 mm.	RMT	31162.00	
z)	**Dia of Pipe :1450.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	18757.00	
ii)	8.00 mm.	RMT	21451.00	
iii)	9.00 mm.	RMT	24149.00	
iv)	10.00mm.	RMT	26851.00	
v)	12.00 mm.	RMT	32266.00	
aa)	**Dia of Pipe :1500.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	19402.00	
ii)	8.00 mm.	RMT	22186.00	
iii)	9.00 mm.	RMT	24977.00	
iv)	10.00mm.	RMT	27770.00	
v)	12.00 mm.	RMT	33370.00	
ab)	**Dia of Pipe :1550.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	20045.00	
ii)	8.00 mm.	RMT	22924.00	
iii)	9.00 mm.	RMT	25805.00	
iv)	10.00mm.	RMT	28691.00	
v)	12.00 mm.	RMT	34474.00	
ac)	**Dia of Pipe :1600.00 mm (I. D.)**			
	Thickness of pipe :			
i)	7.00 mm.	RMT	20688.00	
ii)	8.00 mm.	RMT	23659.00	
iii)	9.00 mm.	RMT	26633.00	
iv)	10.00mm.	RMT	29611.00	
v)	12.00 mm.	RMT	35575.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
ad)	Dia of Pipe :1650.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	24395.00	
ii)	9.00 mm.	RMT	27461.00	
iii)	10.00mm.	RMT	30529.00	
iv)	12.00 mm.	RMT	36679.00	
ae)	Dia of Pipe : 1700.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	25129.00	
ii)	9.00 mm.	RMT	28289.00	
iii)	10.00 mm.	RMT	31450.00	
iv)	12.00mm.	RMT	37783.00	
af)	Dia of Pipe : 1750.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	25865.00	
ii)	9.00 mm.	RMT	29116.00	
iii)	10.00 mm.	RMT	32369.00	
iv)	12.00mm.	RMT	38887.00	
ag)	Dia of Pipe : 1800.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	26602.00	
ii)	9.00 mm.	RMT	29944.00	
iii)	10.00 mm.	RMT	33288.00	
iv)	12.00mm.	RMT	39990.00	
ah)	Dia of Pipe : 1850.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	27337.00	
ii)	9.00 mm.	RMT	30772.00	
iii)	10.00 mm.	RMT	34208.00	
iv)	12.00mm.	RMT	41093.00	
ai)	Dia of Pipe : 1900.00 mm (I. D.) Thickness of pipe :			
	Thickness of pipe :			
i)	8.00 mm.	RMT	28073.00	
ii)	9.00 mm.	RMT	31598.00	
iii)	10.00 mm.	RMT	35128.00	
iv)	12.00mm.	RMT	42198.00	
aj)	Dia of Pipe : 1950.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	28808.00	
ii)	9.00 mm.	RMT	32426.00	
iii)	10.00 mm.	RMT	36048.00	
iv)	12.00mm.	RMT	43301.00	
ak)	Dia of Pipe : 2000.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	29543.00	
ii)	9.00 mm.	RMT	33254.00	
iii)	10.00 mm.	RMT	36967.00	
iv)	12.00mm.	RMT	44405.00	
v)	16.00 mm.	RMT	59323.00	
al)	Dia of Pipe : 2050.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	30278.00	
ii)	9.00 mm.	RMT	34080.00	
iii)	10.00 mm.	RMT	37886.00	
iv)	12.00mm.	RMT	45506.00	
v)	16.00 mm.	RMT	60796.00	
am)	Dia of Pipe : 2100.00 mm (I. D.)			
	Thickness of pipe :			
i)	8.00 mm.	RMT	31016.00	
ii)	9.00 mm.	RMT	34908.00	
iii)	10.00 mm.	RMT	38807.00	
iv)	12.00mm.	RMT	46612.00	
v)	16.00 mm.	RMT	62266.00	
an)	Dia of Pipe : 2150.00 mm (I. D.)			
	Thickness of pipe :			

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
i)	8.00 mm.	RMT	31751.00	
ii)	9.00 mm.	RMT	35735.00	
iii)	10.00 mm.	RMT	39725.00	
iv)	12.00mm.	RMT	47714.00	
v)	16.00 mm.	RMT	63737.00	
ao)	**Dia of Pipe : 2200.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	32486.00	
ii)	9.00 mm.	RMT	36563.00	
iii)	10.00 mm.	RMT	40645.00	
iv)	12.00mm.	RMT	48818.00	
v)	16.00 mm.	RMT	65209.00	
ap)	**Dia of Pipe : 2250.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	33222.00	
ii)	9.00 mm.	RMT	37392.00	
iii)	10.00 mm.	RMT	41566.00	
iv)	12.00mm.	RMT	49920.00	
v)	16.00 mm.	RMT	66679.00	
aq)	**Dia of Pipe : 2300.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	33958.00	
ii)	9.00 mm.	RMT	38219.00	
iii)	10.00 mm.	RMT	42485.00	
iv)	12.00mm.	RMT	51025.00	
v)	16.00 mm.	RMT	68150.00	
ar)	**Dia of Pipe : 2350.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	34692.00	
ii)	9.00 mm.	RMT	39047.00	
iii)	10.00 mm.	RMT	43404.00	
iv)	12.00mm.	RMT	52128.00	
v)	16.00 mm.	RMT	69623.00	
as)	**Dia of Pipe : 2400.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	35430.00	
ii)	9.00 mm.	RMT	39875.00	
iii)	10.00 mm.	RMT	44323.00	
iv)	12.00mm.	RMT	53232.00	
v)	16.00 mm.	RMT	71093.00	
at)	**Dia of Pipe : 2450.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	36166.00	
ii)	9.00 mm.	RMT	40702.00	
iii)	10.00 mm.	RMT	45242.00	
iv)	12.00mm.	RMT	54334.00	
v)	16.00 mm.	RMT	72566.00	
au)	**Dia of Pipe : 2500.00 mm (I. D.)**			
	Thickness of pipe :			
i)	8.00 mm.	RMT	36900.00	
ii)	9.00 mm.	RMT	41530.00	
iii)	10.00 mm.	RMT	46162.00	
iv)	12.00mm.	RMT	55439.00	
v)	16.00 mm.	RMT	74036.00	

SECTION - I (XV)
FABRICATION OF
M.S. PIPES & SPECIALS

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	XV. FABRICATION OF M.S. PIPES & SPECIALS			
1.	Providing, fabricating and fixing **expansion joints** for pipelines as per the drawing. The rate to include machining the strakes and steel ring as shown in the drawing and welding on either automatic welding machine or manually, Rate includes plates and flats required for expansion joint and all other materials such as synthetic rubber, rubber ring, etc. including packing as per specifications, grease, bolts and nuts, local handling, excluding GST levied by GOI & GOM in all respect etc. complete.			
	Expansion joints suitable for pipe diameters.			
i)	300 mm	Each	33445.00	
ii)	400 mm	Each	48265.00	
iii)	450 mm	Each	62782.00	
iv)	500 mm	Each	84173.00	
v)	600 mm	Each	98885.00	
vi)	700 mm	Each	123099.00	
vii)	750 mm	Each	135655.00	
viii)	800 mm	Each	157871.00	
ix)	900 mm	Each	183299.00	
x)	1000 mm	Each	219481.00	
xi)	1200 mm	Each	291496.00	
2.	**Blast cleaning the surface** of the old or new pipeline **internally** to remove all rust etc. complete, including providing copper slag/garnet, machinery, labour, cutting of pipes at required places and rewelding the same etc, complete as directed by Engineer-in-charge. (Pipes pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	144.00	
3.	**Blast Cleaning** of old or new pipeline surface internally with mechanical cleaning machine having steel scraper blades with required passes including removing all rust, scaling etc. including cutting of pipes at required places, rewelding the same including cost of all materials and labour, etc, complete (Pipes pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	144.00	
4.	**Blast Cleaning** of old pipeline surface internally by using swabbing method by passing polyurethane foam "Pig" with required hydraulic pressure, cutting of pipes at required places, rewelding the same including cost of all materials and labour, etc. complete. (Pipe pieces if required for rewelding of old pipeline shall be paid separately.)	Sqm.	169.00	
5.	**Blast cleaning** the surface of the old or new pipeline externally to remove all rust including providing copper slag/garnet machinery etc. complete as directed by Engineer-in-charge.	Sqm.	155.00	
6.	Providing and applying **primer** and **one coat of red oxide** of iron paint internally to blast cleaned surface of the pipes.	Sqm.	46.00	
7.	Providing and applying **primer and one coat of red oxide** of iron paint **internally** including cleaning the surface of the pipes with steel scrappers, wire brushes, and metal cleaning solution, etc.	Sqm.	78.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
8.	Providing and applying primer and one coat of red oxide of iron paint externally to blast cleaned surface of the pipes.	Sqm.	51.00	
9	Providing and applying primer and one coat of red oxide of iron paint externally including cleaning the surface of the pipes with steel scrappers, wire brushes, and metal cleaning solution, etc.	Sqm.	111.00	
10.	Providing and applying covering coat of grey graphite of approved quality including dusting the surface etc. complete.	Sqm.	57.00	
11.	Providing and applying one coat of zinc rich epoxy primer to the internal surface of pipe line at site.	Sqm.	121.00	
12.	Providing and applying primer first coat of intertol 49 W emaline 05/58 pipe coat or any other equivalent approved paint to the internal surface of pipe line at site.	Sqm.	93.00	
	b) Second coat	Sqm.	75.00	
	c) Third coat	Sqm.	74.00	

SECTION - I (XVI)

M.S. PIPE LAYING

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
	XVI. M. S. PIPES LAYING			
1.	**Lowering, laying in position** to correct line and level including M. S. pipes with / without any outcoating on pedestals or chairs upon prepared formation. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and transportation upto 500 M. etc. completed as specified.			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	454.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	535.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	613.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	694.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	776.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	924.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1030.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1136.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	1245.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	1352.00	
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	1459.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1570.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	1390.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1500.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	1602.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	1705.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	1807.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	1913.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	2101.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2218.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2335.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2449.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	2567.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	2685.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	2863.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3026.00	
2.	**Lowering, laying in position to correct line and level including M. S. specials** with / without any outcoating such as distance pieces, straps, bends, tapers, etc. on pedestals or chairs upon formation. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and transportation upto 500M			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	634.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	745.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	860.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	970.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	1085.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	1294.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1443.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1592.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	1741.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	1895.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	2042.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2192.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	2016.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2098.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	2245.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2387.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2536.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2677.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	2892.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	3022.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	3269.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	3432.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	3593.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3758.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	4004.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	4235.00	
3.	**Lowering, laying in position to correct line and level including M. S. pipes** with / without any outcoating, on pedestals or chairs upon piers, trestles etc. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, transportation upto 500 m. etc. complete.			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	543.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	638.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	736.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	833.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	931.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	1109.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1235.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1365.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	1493.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	1624.00	
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	1751.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1878.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	1599.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1678.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	1923.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2048.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2175.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2279.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	2520.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2662.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2800.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2939.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	3080.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3221.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	3433.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3631.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
4	**Lowering and laying in position to correct line and level including M. S. specials** such as distance pieces, straps, bends, tapers, etc. on pedestals or chairs upon piers or trestles. The rate to include loading, unloading, hoisting, marginal cutting wherever required, assembling and tack welding, and including transportation upto 500 m. etc. complete as specified.			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	760.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	895.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	1029.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	1166.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	1297.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	1552.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1733.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1912.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	2091.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	2273.00	
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	2454.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2633.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	2419.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2516.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	2693.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2867.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	3038.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	3216.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	3533.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	3726.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	3923.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	4113.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	4311.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	4510.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	4808.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	5081.00	
5.	Transporting within 500 meters,laying in position to correct line and level **M. S. pipes with / without any outcoating, on prepared bedding in trenches** including marginal cutting wherever required, assembling tack welding the same. The rate to include loading, unloading, hoisting, etc. complete as specified.			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	463.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	548.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	630.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	712.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	795.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	947.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1056.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1166.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	1278.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	1384.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	1493.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1602.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	1474.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1538.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	1643.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	1749.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	3235.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	1962.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	2148.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2265.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2387.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2508.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	2167.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	2748.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	2925.00	
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3094.00	
6.	Transporting within 500 meters,laying in position to correct line and level **M. S. specials pipes with / without any outcoating, such as distance pieces, straps, bends, tapers, etc. on prepared bedding in trenches** including marginal cutting wherever required, assembling tack welding, the same. The rate to include loading, unloading, hoisting, etc. complete as specified.			
a)	**5 mm to 8 mm thick**			
i)	Upto 250 mm. dia.	Rmt	653.00	
ii)	Above 250 mm. Upto 500 mm. dia.	Rmt	765.00	
iii)	Above 500 mm. Upto 750 mm. dia.	Rmt	881.00	
iv)	Above 750 mm. Upto 1000 mm. dia.	Rmt	994.00	
v)	Above 1000 mm. Upto 1250 mm. dia.	Rmt	1113.00	
b)	**Above 8 mm upto 12 mm thick**			
i)	From 750 mm.Upto 1000 mm. dia.	Rmt	1327.00	
ii)	Above 1000 mm. Upto1250 mm. dia.	Rmt	1480.00	
iii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	1631.00	
iv)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	1785.00	
v)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	2074.00	
vi)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	2165.00	
vii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2245.00	
c)	**Above 12 mm upto 16 mm thick**			
i)	From 2000 mm. Upto 2250 mm. dia.	Rmt	2064.00	
ii)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	2233.00	
iii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	2298.00	
iv)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	2448.00	
v)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	2602.00	
vi)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	2748.00	
d)	**Above 16 mm upto 20 mm thick**			
i)	From 2500 mm. Upto 2750 mm. dia.	Rmt	2985.00	
ii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	3175.00	
iii)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	3343.00	
iv)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	3511.00	
v)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	3678.00	
vi)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	3849.00	
e)	**Above 20 mm upto 25 mm thick**			
i)	From 3500 mm. Upto 3750 mm. dia.	Rmt	4093.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
ii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	4333.00	
7.	**Welding** in all positions with required number of runs, for M. S. pipes internally and / or externally including gauging wherever necessary, fixing appurtenances and other accessories in connection with pipe laying work as per specification.			
i)	4 mm.	Rmt	210.00	
ii)	5 mm.	Rmt	318.00	
iii)	6 mm.	Rmt	749.00	
iv)	7 mm.	Rmt	835.00	
v)	8 mm.	Rmt	1049.00	
vi)	10 mm.	Rmt	1285.00	
vii)	12 mm.	Rmt	1376.00	
viii)	14 mm.	Rmt	1638.00	
ix)	16 mm.	Rmt	1984.00	
x)	18 mm.	Rmt	2148.00	
xi)	20 mm.	Rmt	2574.00	
xii)	22 mm.	Rmt	3231.00	
xiii)	25 mm.	Rmt	4385.00	
i)	**B) Lap joints** with convex fillet welds Lap Lengths			
ii)	5 mm.	Rmt	295.00	
iii)	6 mm.	Rmt	377.00	
iv)	8 mm.	Rmt	499.00	
v)	10 mm.	Rmt	558.00	
vi)	12 mm.	Rmt	835.00	
vii)	14 mm.	Rmt	1134.00	
viii)	16 mm.	Rmt	1249.00	
ix)	18 mm.	Rmt	1516.00	
x)	20 mm.	Rmt	1708.00	
xi)	22 mm.	Rmt	2285.00	
xii)	25 mm.	Rmt	2773.00	
8.	**Shifting and aligning ring girders** including removing tack welds and re-tacking in the correct position etc. complete as per specification for the pipes of following diameter.			
i)	From 1000 mm. Upto1250 mm. dia.	Rmt	572.00	
ii)	Above 1250 mm. Upto 1500 mm. dia.	Rmt	701.00	
iii)	Above 1500 mm. Upto 1750 mm. dia.	Rmt	826.00	
iv)	Above 1750 mm. Upto 2000 mm. dia.	Rmt	954.00	
v)	Above 2000 mm. Upto 2250 mm. dia.	Rmt	1079.00	
vi)	Above 2250 mm. Upto 2500 mm. dia.	Rmt	1206.00	
vii)	Above 2500 mm. Upto 2750 mm. dia.	Rmt	1331.00	
viii)	Above 2750 mm. Upto 3000 mm. dia.	Rmt	1461.00	
ix)	Above 3000 mm. Upto 3250 mm. dia.	Rmt	1587.00	
x)	Above 3250 mm. Upto 3500 mm. dia.	Rmt	1715.00	
xi)	Above 3500 mm. Upto 3750 mm. dia.	Rmt	1840.00	
xii)	Above 3750 mm. Upto 4000 mm. dia.	Rmt	1979.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
9.	Transporting within 500 meters and fixing in position **stools, base plates, roller sets, grease box covers, etc.** including welding wherever necessary. The rate also to include fixing stools, base plates, etc. in true line and level, connecting the base plate to anchor bolts by flush welding including cutting the bolts, if required, assembling and aligning C. I. or M. S. roller sets of any size including oiling, greasing, etc. The rate also to include grouting anchor bolts, welding of two halves of grease box covers as directed by Engineer-in-charge, for pipes of following dia.			
i)	From 1000 mm. Upto1250 mm. dia.	Each	2091.00	
ii)	Above 1250 mm. Upto 1500 mm. dia.	Each	2262.00	
iii)	Above 1500 mm. Upto 1750 mm. dia.	Each	2433.00	
iv)	Above 1750 mm. Upto 2000 mm. dia.	Each	2603.00	
v)	Above 2000 mm. Upto 2250 mm. dia.	Each	2773.00	
vi)	Above 2250 mm. Upto 2500 mm. dia.	Each	2944.00	
vii)	Above 2500 mm. Upto 2750 mm. dia.	Each	3116.00	
viii)	Above 2750 mm. Upto 3000 mm. dia.	Each	3284.00	
ix)	Above 3000 mm. Upto 3250 mm. dia.	Each	3456.00	
x)	Above 3250 mm. Upto 3500 mm. dia.	Each	3627.00	
xi)	Above 3500 mm. Upto 3750 mm. dia.	Each	3827.00	
xii)	Above 3750 mm. Upto 4000 mm. dia.	Each	3966.00	
10.	Transporting within 500 meters and aligning, fixing in position and tack welding **expansion joints** suitable for pipeline of diameters.			
i)	From 1000 mm. Upto1250 mm. dia.	Each	7075.00	
ii)	Above 1250 mm. Upto 1500 mm. dia.	Each	7337.00	
iii)	Above 1500 mm. Upto 1750 mm. dia.	Each	7602.00	
iv)	Above 1750 mm. Upto 2000 mm. dia.	Each	7866.00	
v)	Above 2000 mm. Upto 2250 mm. dia.	Each	14870.00	
vi)	Above 2250 mm. Upto 2500 mm. dia.	Each	15202.00	
vii)	Above 2500 mm. Upto 2750 mm. dia.	Each	15533.00	
viii)	Above 2750 mm. Upto 3000 mm. dia.	Each	15763.00	
ix)	Above 3000 mm. Upto 3250 mm. dia.	Each	16199.00	
x)	Above 3250 mm. Upto 3500 mm. dia.	Each	16532.00	
xi)	Above 3500 mm. Upto 3750 mm. dia.	Each	16860.00	
xii)	Above 3750 mm. Upto 4000 mm. dia.	Each	17193.00	
11.	Transporting within 500 meters aligning and fixing in position and tack welding only, including marginal cutting, supplying and providing **rubber packing** etc. where necessary.			
	A) Minor fixtures such as manhole cover, pressure and non-	MT	12664.00	
	B) Minor fixtures such as tees, domes, 'Y' branches,	MT	6435.00	
12.	**Gas cutting** (either square cut or V cut) **pipes, plates,** etc. of thickness.			
	i) Upto 5 mm.	Rmt	96.00	
	ii) Above 5 mm. Upto 10 mm.	Rmt	135.00	
	iii) Above 10 mm. Upto 14 mm.	Rmt	174.00	
	iv) Above 14 mm. Upto 18 mm.	Rmt	200.00	
	v) Above 18 mm. Upto 22 mm.	Rmt	277.00	
	vi) Above 22 mm.	Rmt	371.00	
13.	**Gas cutting** holes upto 50 mm dia (for plugs) Thickness of shell			
	a) 5 mm. to 12 mm	No.	105.00	
	b) Above 12 mm	No.	146.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
14.	Providing **M.S. bar mesh** prepared out of 16 mm dia M.S. bar at 15 cm. c/c both ways, welded to flanged ring including tack welding of bars and fixing the same with nuts and bolts on open faces of outlet/inlet pipes in the sump or reservoir, etc. complete as directed by Engineer-in-charge.	Sqm	1921.00	
15.	Providing **permanent test points** on the pipe line as per drawing and as directed by Engineer-in-charge including providing and fixing sluice valves, road boxes for sluice valves of size 80 mm to 250 mm in one brick masonry chamber 300 mm x 300 mm clear C. M. 1:5 with 12 mm thick in 1:3 cement plaster both inside and outside on M-100 C.C. 150 mm thick etc. complete as specified and directed.	No.	4307.00	
16.	Supplying transporting, the **S.P. fire hydrants** including duck foot bend, S.V. and S.V. road box, painting the hydrant,fixing the saddle piece, supplying, and laying required length of C.I. pipeline and jointing the same spun yarn, molten lead including caulking, fixing the S.V. road box in one brick masonary chamber in 1:5 C.M. with 12 mm thick 1:3 cement plaster both inside and outside on 1:3:6: C.C.150 mm thick etc, complete specified and directed. [As per I.S.900/1965 Revised]	No.	17058.00	
17.	**Hydraulic testing** of M.S. pipeline to specified pressure including cost of all materials and labour and water for testing for the length upto 1km., using reciprocating type pumps which should be able to provide specified test pressure gauges and other necessary equipments, labour, operation charges, etc. required for testing. The rate under this item shall also include cost of retesting, if necessary.			
a)				
i)	Upto 600 mm. dia. (I.D.)	Km.	59954.00	
ii)	Above 600 mm. upto 750 mm. dia. (I.D.)	Km.	60042.00	
iii)	Above 750 mm. upto 900 mm. dia. (I.D.)	Km.	60181.00	
iv)	Above 900 mm. upto 1050 mm. dia. (I.D.)	Km.	60389.00	
v)	Above 1050 mm. upto 1200 mm. dia. (I.D.)	Km.	60595.00	
vi)	Above 1200 mm. upto 1500 mm. dia. (I.D.)	Km.	61004.00	
vii)	Above 1500 mm. upto 1800 mm. dia. (I.D.)	Km.	61603.00	
viii)	Above 1800 mm. upto 2250 mm. dia. (I.D.)	Km.	62610.00	
ix)	Above 2250 mm. upto 2500 mm. dia. (I.D.)	Km.	63345.00	
x)	Above 2500 mm. dia. (I.D.)	Km.	64077.00	
b)	**Extra work initial km**			
xi)	Upto 600 mm dia. (I.D.)	Km.	304.00	
xii)	Above 600 mm dia. upto 750 mm dia. (I.D.)	Km.	437.00	
xiii)	Above 750 mm dia. upto 900 mm dia. (I.D.)	Km.	648.00	
xiv)	Above 900 mm dia. upto 1050 mm dia. (I.D.)	Km.	856.00	
xv)	Above 1050 mm dia. upto 1200 mm dia. (I.D.)	Km.	1101.00	
xvi)	Above 1200 mm dia. upto 1500 mm dia. (I.D.)	Km.	1628.00	
xvii)	Above 1500 mm dia. upto1800 mm dia. (I.D.)	Km.	2459.00	
xviii)	Above 1800 mm dia. upto 2250 mm dia. (I.D.)	Km.	3773.00	
xix)	Above 2250 mm dia. upto 2500 mm dia. (I.D.)	Km.	4698.00	
xx)	Above 2500 mm dia. upto 2750 mm dia. (I.D.)	Km.	5684.00	
xxi)	Above 2750 mm dia. upto 3000 mm dia. (I.D.)	Km.	6706.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
18.	Providing and applying with mechanical arrangement 1:3 proportion **cement sand gunite, 40 to 50 mm thick to M. S. pipe** surface under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials as directed by Engineer-in-charge and including scrapping the surface with wire brushes, degreasing, cleaning by compressed air and providing fixing BRC fabric no.14 as reinforcement, curing for 21 days, disposing off the rebound materials within a lead of 50 M, etc. complete as directed by Engineer-in-charge	Sqm.	670.00	
19.	Providing and applying **pipe coating of fibres, coal tar and solvent based rubber modified bituminous primer** of density 0.92 gms/cu cm and viscosity of 1000-2000 cps @ 150 gms/sqm followed by seven layers(4mm thick) of polythene polymerised bitumen and polyester of local 7 layers) pipe coat 4 mm should conform to requirement of IS-10221 and AWWA C-203 for prefabricated tapes including covering cost on pipe coating. Rates shall include cost of material coating and wrapping over the pipes, handling charges, preparation of pipe surface, all labour, material, etc. complete.	Sqm.	722.00	
	Note : Pipe coating is to be done at laying work site only.			
20.	Providing and applying with mechanical arrangement **cement sand gunite** of 50 mm thickness to floors, walls, floor slabs or any other structure under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials on surface, cleaning with comperssed air, degreasing, etc. including scaffolding and curing for 21 days, providing and fixing BRC fabric no. 14 but excluding cost of reinforcement, if any and removing rebound materials within a lead of 50 M, etc. complete as directed by Engineer-in-charge **(for GSRs and buildings.)**	Sqm.	660.00	
21.	Providing and applying with mechanical arrangement **cement sand gunite** of 50 mm thickness to floors, walls, roof slabs or any other structure under 2.1 kg. per sqcm. to 2.80 kg. per sqcm. pressure including removing the loose materials on surface, cleaning with compressed air, degreasing, etc. including scaffolding and curing for 21 days, providing and fixing BRC fabric no. 14 but excluding cost of reinforcement, if any and removing rebound materials within a lead of 50 M, for staging and bottom of bottom slab, etc. complete as directed by Engineer-in-charge **(for RCC ESRs)**	Sqm.	583.00	

Sr. No.	Description	Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2	3	4	5
22.	Providing and making inner cement mortar lining to M.S. pipes with mechanical devices in cement mortar 1:1 proportion, including cost of all materials, labour, special sand required, machinery, power generation, all equipments and taking necessary access openings and manholes, cuts at suitable intervals as directed by Engineer-in-charge and rewelding the same after done with doubler plates pipes including necessary excavation, refilling concrete breaking and remaking if any, breaking guniting and remaking the same, repainting wherever required with epoxy paint in 3 coats, all dewatering including emptying the pipeline and refilling the same after done with (water to be supplied by department free of cost within 5 km. lead at fixed point and all other arrangements to be done by agency), including carrying out "C" value performance test of pipeline, complete job as per the directions of the Engineer-in-charge.			
	i) 9 mm thick for pipes upto 700 mm dia.	Sqm.	524.00	
	ii) 12 mm thick for pipes above 700 mm dia.	Sqm.	607.00	
23.	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm^2, antifungal, antibacterial, anticorrosive, graft co-polymer Coating on smooth plastered surface. 100 Micron dyufilm thickness of self bonding with plastered surface and 100 Micron of top cost. For sewage treatment plant (R. C. C. Tank inside coating) and water treatment plant.	Sqm.	1702.00	
24.	Providing and applying external and internal coating for steel structures in sewage treatement plant/water treatement plant with elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/cm2, antifungal, antibacterial, anticorrosive, graft co-polymer. 50 Micron DFT. of self bonding with steel, 50 Micron DFT. of inner coat and 50 Micron DFT of top coat.	Sqm.	994.00	
25.	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 kg/ cm^2, antifungal, antibacterial, anticorrosive, graft co-polymer coating on external pipe lines in unlaid/laid condition after proper cleaning. 50 micron DFT of self bonding grade with metal surface, 50 Micron DFT of self bonding grade with metal surface, 50 Micron DFT inner coat and 50 Micron DFT of top coat.			
	1) Water and sewage pipe lines (external) in unlaid condition.	Sqm.	1041.00	
	2) Water and sewage pipe lines (external) in laid condition.	Sqm.	1067.00	
26.	Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating skin tensile strength 18 to 21 Kg/ cm^2, antifungal, antibacterial, anticorrosive, graft co-polymer coating on internal surface of pipe lines. 100 Micron DFT of site bonding grade with steel surface and 100 Micron DFT of top coat.			
	1) Pipe line in unlaid condition	Sqm.	1310.00	
	2) Pipe line in laid condition	Sqm.	1398.00	

Sr. No.	Description			Unit	Rate (in Rs.) 2021-2022	Rate (in Rs.) 2022-2023
1	2			3	4	5
27.	**Providing and applying of elastomeric (450% elongation), thermoplastic, fire retardant, coating** skin tensile strength 18 to 21 kg/cm^2, antifungal, antibacterial, anticorrosive, graft co-poly-mer coating on cleaned steel reinforcement bars. 80 to 100 micron DFT With self bonding trade of bar coating.					
1.	6 mm dia.			MT	47640.00	
2.	8 mm dia.			MT	36454.00	
3.	10 mm dia.			MT	28886.00	
4.	12 mm dia.			MT	24037.00	
5.	16 mm dia.			MT	17999.00	
6.	20 mm dia.			MT	14648.00	
7.	25 mm dia.			MT	11567.00	
8.	32 mm dia.			MT	9270.00	
9.	40 mm dia.			MT	7040.00	
28.	Providing and **applying of H D P E coating for MS pipe internally as well as externally** including cost of H D P E powder moulding pipe grade, labour, scrapping the pipe surface with wire brushes, degreasing, cleaning by compressed air and surface grinding and finishing including cost of loading , unloading and handling of pipe at factory etc. complete as directed by Engineer -in -charge.					
	HDPE coating thickeess in micron		**Total coating thickness in**	**Unit**		
	External	**Internal**				
1.	0	2000	2000	Sq. m	2621.00	
2.	2000 micron	1000	3000	Sq. m	3292.00	
3.	3000 micron	1000	4000	Sq. m	3784.00	
4.	3000 micron	2000	5000	Sq. m	4348.00	

SECTION - J (I)
TREATMENT PLANTS (WTP & STP)

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	Water Treatment Plant (WTP)					
1	**Designing (aesthetically), providing and constructing high rate Unconventional Water Treatment Plant** i.e. Simplified Water Treatment Plant consisting of Civil, Mechanical and Electrical works including cost of providing and applying epoxy paint to inside surface of water retaining structures in contact with chlorine and providing anti-termite treatment to entire structure below ground level, mechanical and electrical components of various sub-works as given below, including necessary hydraulic testing, structural testing and trial run for 3 months, etc. complete as directed by Engineer-in-charge (turnkey job) works.					
1)	Aeration fountain					
2)	Inlet arrangements					
3)	Mixing channel with ventury flume and flow measuring arrangement					
4)	Inlet channel					
5)	Flocculator - Conforming to I.S. 72081974 (Type-C) with detention period of 30 minutes					
6)	Tube settlers - Designing, fabricating and constructing Tube Settlers with square or any other shaped tube like Circular, Cheveron, Hexagonal etc. having proven performance.					
7)	Rapid sand gravity filters					
8)	Filter house					
9)	Chemical house					
10)	Alum tanks - 2 Nos. with mixing, carrying and dosing arrangements with piping.					
11)	Gravity feed gas chlorinator with 100% standby.					
12)	TCL solution tank with mixing, carrying and dosing arrangement with piping.					
13)	Bypass arrangement					
14)	External and internal electrification					
15)	Laboratory equipments					
16)	Wash water tanks of capacity equal to 2% of designed quantity of filtered water in a day (+)10%.					
17)	Wash water pumps with 100% standby.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
18)	Air blowers capable of delivering 600 LMP per square metre of free air of filter area at 0.4 Kg/ sqcm at the under drains (100% standby).					
19)	Pure water sump of capacity equal to 1 hour pumping capacity.					
20)	Pure water pump house over the sump / by the side pump.					
21)	Drainage arrangements					
22)	Alum store					
23)	Sanitary block with necessary water supply and drainage arrangements and internal WBM roads.					
24)	These rates are applicable for seismic zones 2, 3 and 4.					
25)	Rates given below are inclusive of uplift pressure if any and dewatering during the entire work.					
26)	All RCC structures shall be constructed in M-300.					
27)	Unconventional Treatment Plants less than 1 MLD capacity shall not be constructed.					
28)	Up to 3 MLD capacity no air blower will be required.					
29)	Up to 5 MLD WTP, 100 kg. and for above 5 MLD WTP 900 kg. Chlorine Tonner supply shall be provided.					
30)	i) Glandless valves shall be provided. ii) Stainless steel railing shall be provided. (32 mm dia.(SS316) as per relevant standard) iii) All WTP & its components outside faces shall be painted by Acrylic Emulsion with silicon additives paint only. iv) Ceramic tiles shall be provided for flooring and Dado.					
	Note : Conditions from Sr. No. 1 to 30 shall form a part and parcel of the tender and must be included in draft tender papers for the work of unconventional treatment plants.					
	Unconventional Water Treatment Plant					
1)	Fixed cost for 1 MLD	Job	63.71	25.42		
2)	Add for capacity above 1 MLD upto 2 MLD	MLD	28.21	10.99		
3)	Cost of 2 MLD treatment plant	Job	91.92	36.41		
4)	Add for capacity above 2 MLD upto 5 MLD	MLD	21.36	6.35		
5)	Cost of 5 MLD treatment plant	Job	156.01	55.45		
6)	Add for capacity above 5 MLD	MLD	16.72	7.83		
7)	Cost of 10 MLD treatment plant	Job	239.63	94.60		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
2	**Designing (aesthetically), providing, constructing and commissioning Conventional Water Treatment Plant** consisting of all Civil, Mechanical and Electrical works including cost of providing and applying epoxy paint to inside surface of water retaining structures in contact with chlorine and providing anti-termite treatment to entire structure below ground level, mechanical and electrical components of various sub-works as given below, including necessary hydraulic testing, structural testing, equipment testing and trial run for a period of 3 months, etc. complete as directed by Engineerin-charge (turn-key job).					
1)	Aeration Fountain - Plan area not less than 0.625 square metre per MLD					
2)	Ventury Flume - With necessary devices, consisting of simple mechanical indicator. (Pedestal type gauge)					
3)	Flash Mixer - Rapid mixing device, detention time 60 seconds to give velocity gradient 300 to 400 sec-1, vane mixer type conforming to I.S. 7090 of 1985.					
4)	Flocculator - Conforming to I.S. 72081974 (Type-C) with detention period of 30 minutes.					
5)	Clarifier - Horizontal flow circular tank, detention period 2-5 hours, overflow rate 30 cubic metre per square metre per day (to be specified), Weir loading not more than 300 cubic metre per metre per day, with mechanical sludge scraper conforming to I.S. No. 103131982.					
6)	Rapid Sand Filters and Filter House -Filter designed for filteration rate of 5,000 litres per square metre per hour, minimum 2 beds for plant upto 10 MLD, for larger plants as specified, filters to be located in filter house with roof slab, pipe gallery and platform minimum 5.5 metre in width.					
a)	Filter Sand - Effective size 0.45 to 0.70 mm, uniformity coefficient not more than 1.7, nor less than 1.3, depth of water over sand 0.75 M, free board 50 cm, gravel 0.45 M in depth, sand and gravel conforming to I.S. 8491(i)-77, backwash by air wash, standard appurtenances (to be specified), rate of flow controller, filter gauge, sand expansion gauge, etc.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
b)	Wash Water Tank - Capacity to be specified and suitable to supply water to wash 2 filter units at a time where the units are 4 or more.					
c)	Wash Water Pumps - Capacity to fill water tank in 1 hour with 100% standby.					
d)	Air Blowers - Capable of delivering 600 LMP per square metre of free air, of filter area at 0.4 kg/sqcm at the underdrains (100% standby).					
7)	Chemical House in Two Storeys					
a)	Ground floor to accommodate 7 days' alum requirement and sundry storage.					
b)	First floor to accommodate alum and lime tanks. etc.					
c)	Solution tanks - Minimum 3 tanks (one for preparation, second for dosing and third as standby), each tank capable of giving 8 hours maximum dose without interruption, minimum free board 0.30 M, trays for dissolving, level indicator, mechanical agitation devices, solution feed and drain lines, solution feed device (constant head device, strength of solution upto 10% only) conforming to I.S. 9222 Part-I 1979.					
8)	Pure Water Sump and Sump House.					
a)	Capacity of sump - One hour of designed flow.					
b)	Pump House - Pump house of required size over the sump or by the side.					
9)	Store House - Suitable for alum storage of three months' requirement in monsoon with 10% extra capacity for other sundry articles.					
10)	Vacuum feed type Chlorinators - Make to be approved by MJP.					
a)	Conforming to I.S. 10533 - A Part-II 1983.					
b)	Rate for withdrawal					
	Temperature Kg. of Chlorine discharge Degree 'C' per day (Cylinders)					
	45 67 Tonnes					
	10 6.35 9.50 110					
	15 10.75 16.10 130					
	20 14.50 21.24 254					
	27&Above 18.70 28.12 315					
c)	Chlorinator equipment and container room to conform to I.S. 10553 Part-I 1983.					
d)	100% standby shall be provided.					
11)	By pass arrangements - C.I. or M.S. pipes.					
12)	Drainage arrangements - RCC pipes upto plot boundary.					
13)	Electrical installation - Both internal and external including entire plant area.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
14)	Laboratory equipment - As per requirement (to be specified during tendering).					
15)	Sanitary blocks - Carpet area - 15 square metre minimum upto 25 Mld and 25 square metre above 25 Mld.					
16)	Administrative block and internal road -To accommodate office room, chlorine room, laboratory room, panel board room, blower room etc. and WBM road to connect all units from main gate of plot.					
17)	Rates given below are inclusive of uplift pressure if any and dewatering during entire work.					
18)	These rates are applicable for seismic zones 2, 3 and 4.					
19)	All RCC structures shall be constructed in M-300.					
20)	Upto 5 MLD WTP , 100 kg. & for above 5MLD WTP , 900 kg. Chlorine Tonner supply shall be provided.					
21)	i) Glandless valves shall be provided. ii) Stainless steel railing shall be provided. (32 mm dia.(SS316) as per relevant standard) iii) All WTP & its components outside faces shall be painted by Acrylic Emulsion with silicon additives paint only. iv) Ceramic tiles shall be provided for flooring and Dado.					
	Note : Conditions from Sr. No.1 to 21 shall form a part and parcel of the tender and must be included in draft tender papers of conventional treatment plants.					
	Conventional Water Treatment Plant					
1)	Upto 5 MLD	MLD	39.35	15.62		
2)	Cost of 5 MLD treatment plant	Job	196.77	78.09		
3)	Add for capacity above 5 MLD upto 10 MLD	MLD	28.24	11.16		
4)	Cost of 10 MLD treatment plant	Job	337.98	133.89		
5)	Add for capacity above 10 MLD upto 20 MLD	MLD	18.05	8.35		
6)	Cost of 20 MLD treatment plant	Job	518.5	217.35		
7)	Add for capacity above 20 MLD upto 50 MLD	MLD	16.73	6.31		
8)	Cost of 50 MLD treatment plant	Job	1020.39	406.71		
9)	Add for capacity above 50 MLD upto 100 MLD	MLD	14.12	5.29		
10)	Cost of 100 MLD treatment plant	Job	1726.51	671.06		
11)	Add for capacity above 100 MLD	MLD	10.29	3.39		
3	Designing (aesthetically), providing, fabricating **Package Water Treatment Plan**t at the shop, transporting to site, installing, testing and commissioning at the site, giving necessary one month's free test and trail run with guarantee for one year, etc. complete.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Prefabricated Package Water Treatment Plant comprising following :					
1)	Rapid mixing channel in M.S. sheets and M.S. baffle.					
2)	Flocculator not less than 10 minutes detention, in M.S. prefabricated box, flocculation being achieved either by glass pebbles of graded size or PVC tetrapod or equivalent arrangement to ensure good floc formation.					
3)	Plate or tube settlers of not less than 30 minutes detention in M.S. prefabricated box, the plates / tubes mounted in the settler basin with inclination of not less than 60 degree to horizontal.					
4)	Rapid sand gravity filter in M.S. prefabricated box with filter sand not less than 500 mm thick, supported on false floor below with polypropylene nozzles spaced at not more than 500 mm centres in either direction.					
5)	Backwashing, inlet & outlet facilities shall be provided.					
###	Air blowers - Air Blowers are not required for WTP having capacity less than and equal to 3 MLD, for WTP having capacity more than 3 MLD air blowers capacity of delevering 600 LPM per sqm of free air of filter area 0.4 kg/sqcm at underdrain (100% standby)					
###	Wash water tank capacity equal to 2 % of designed quantity of filer water in a day + 10 %					
##	wash water pump with 100 % standby (Minimum 3 HP with all accessories)					
##	Backwash with water not less than 0.6 cum/sqm of filter bed area in filter box.					
#	Piping of outlet upto sump					
6)	Laboratory equipments					
7)	External & Internal electrification					
8)	TCL solution tank with mixing, carrying and dosing arrangement with piping.					
9)	Gravity feed gas chlorinator with 100% standby.					
10)	Four alum storage unit					
11)	Drainage arrangement					
12)	Providing room with RCC roof for office and Lab space with necessary water supply & drainage arrangement & internal roads					
13)	RCC sump of one hour cap.and pump house on it.					
14)	Internal Road					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
15)	Wire fencing with gate for WTP premises.					
16)	All civil works for foundation, consisting of raised RCC platform above G.L. or walls in B.B. masonry or UCR masonry shall be provided as per needs at site.					
17)	Bypass in the form of pipes or M.S. channels included in the design, effecting bypass of such new tank and filter individually or both. (Limit upto 5.0 M. from W.T.P. face)					
18)	The entire M.S. fabricated tank provided with FRP lining (5 mm thick) to inside face in contact with water epoxy painting- two coats with one coat of primer on outside. The thickness of plates employed shall not be less than 6 mm					
19)	Alum dosing and mixing arrangements to be provided in twin tanks, each of 8 hours capacity, capable of importing does of 20 ppm with 5% solution. The alum tanks provided with a dose in steps of 5 ppm and entire unit mounted on the top of flocculator / settler box, in the form of prefabricated structure, with access platform and ladder. Alum boxes with FRP lining (5 mm thick) inside and epoxy paint two coats with one coat of primer on outside.					
20)	Both flocculator and settling basins provided with hopper bottom with slope not less than 45 degrees to the horizontal drain pipes and valves provided to both flocculator and settling basin.					
21)	Flow ratings to conform following parameters :					
a)	Velocities in channels not to exceed 0.6 M./Second.					
b)	Velocities in filter outlet pipes and valves not to exceed 1 M./Second.					
c)	Velocities in interconnecting pipe and controls not to exceed 1M./Second.					
d)	Backwash with air : Not required.					
e)	Backwash with water : Not less than 0.6 M./ Sqm. of filter bed area in filter box.					
23)	Free board for all units not less than 300 mm					
23)	Rates as above include all taxes, octroi and duties which would be specific to the site locations.					
	Package Water Treatment Plant					
1)	21 Cum/Hr. (0.50 MLD)	Each	32.25	9.97		
2)	34 Cum/Hr. (0.80 MLD)	Each	39.94	11.96		
3)	42 Cum/Hr. (1.00 MLD)	Each	45.02	13.48		
4)	63 Cum/Hr. (1.50 MLD)	Each	56.39	16.92		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
5)	83 Cum/Hr. (2.00 MLD)	Each	66.79	20.13		
6)	125 Cum/Hr. (3.00 MLD)	Each	85.51	25.90		
	Note : Depending upon the capacity required for the scheme, one of the above capacities should be chosen.					
	Sewage Treatment Plant (STP)					
4A	Designing (aesthetically), providing, constructing and giving satisfactory trials of **modernised Sewage Treatment Plant** consisting of receiving chamber, screen chamber, grit chamber, measuring flume, distribution chamber with primary and secondary treatment, etc. as detailed below, administration block of suitable size including allied units for waste disposal with all civil and mechanical works involved, etc. complete (turn key job).					
	Primary treatment - with extended					
	sludge drying beds					
	Rates					
1)	Upto 10 MLD	MLD	56.20	22.08		
2)	Cost of 10 MLD plant	Job	562.03	220.77		
3)	Add for capacity above 10 MLD upto 20 MLD	MLD	49.14	19.28		
4)	Cost of 20 MLD plant	Job	1053.41	413.59		
5)	Add for capacity above 20 MLD	MLD	42.10	16.58		
6)	Cost of 50 MLD plant	Job	2316.41	911.09		
7)	Add for capacity above 50 MLD	MLD	31.82	11.81		
8)	Cost of 100 MLD plant	Job	3907.20	1501.36		
B	Designing (aesthetically), providing, constructing and giving satisfactory hydraulic testing, commissioning and giving satisfactory trials of **modernised Sewage Treatment Plant** consisting of inlet chamber, screen chamber, detritus tanks, parshall flume, primary settling tanks, aeration tanks, secondary settling tanks, sludge sump and pump house, sludge thickener, primary digester, secondary digester, SST sump and pump house, chlorine contact tank, chlorinators, chlorinator room, sump cum blending tank, PST sludge sump cum blending tank, pump house, sludge centrifuge, gas holder, necessary piping work with required valves, gates, drains, pathways, administrative building cum laboratory, laboratory equipments, tools and plants, spare parts, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes, etc. complete.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Inlet Chamber Designing, providing and constructing RCC (M-300) inlet chamber designed for the peak flow 2 DWF including necessary excavation in all types of strata including walkway around the periphery. Each compartment will have phosphor bronze, steel gate with extension rod, head stock, operating wheel, G.I. pipe railing, etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications.					
	Screen Chambers Designing, providing, constructing, testing and commissioning screen chamber designed for average 1 DWF and maximum 2 DWF in RCC (M-300) including inlet pipe/ channel from inlet chamber, outlet pipe/ channel to detritus tank, free board of 0.50 M minimum, RCC walkway 1.2 M wide with G.I. pipe railing, RCC staircase of 1.2 M width from GL to screen chamber.					
	Detritus Tank Designing, providing and constructing continuously grit removal type of detritus tank, mechanically operated in RCC (M-300) capable of removing 100%, 0.20 mm size particle and above, having specific gravity 2.30 designed for one peak 2 DWF with suitable arrangement of separation of grit from putrescible solids including providing and making necessary arrangement of JB-1 inlet and outlet channel of required sizes as may be required to connect the flow to parshall flume, etc. complete including hydraulic testing for water tightness of the structure having minimum free board of 0.30 M washout arrangement to grit chamber and platform 1.20 M wide RCC walkway with G.I. pipe hand railing shall be provided. A pit for collecting grit conveyed by conveyor shall be provided.. It should be suitable to handle the grit for carting. All arrangements shall be as per detailed specifications and as directed.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Parshall Flume Designing, providing and constructing parshall flume channel in RCC (M-300) for measuring quantity of sewage received at the treatment works, max. flow of 2 DWF and minimum flow of % DWF including providing and making necessary arrangement of approach channel as may be required to connect the flow having minimum velocity of 0.3 M per second to distribution box (DB-1). The unit shall be provided with walkway and RCC staircase having width of 1.20 M each etc. complete, including hydraulic testing for watertightness of the civil structure having free board of 0.6 M including electrically operated, flow indicating and flow integrating devices having a standby of float operated ROF meter. All arrangements as per specifications.					
	Primary Settling Tanks with Equipments Designing, providing, constructing and hydraulic testing in RCC (M-300) watertight primary settling tanks of 1 DWF capacity with feed chamber, sludge and effluent chamber, base adequately supported, providing 1.20 M wide clear peripheral and approach walkway inter connecting C.I. double flanged pipes from feed chamber of the clarifier distribution well, grouting wherever necessary, including foundation, etc. as per specifications, water depth at outer side shall be minimum 3.0 M, weir loading shall not be greater than 125 cum, DWF for average flow, bottom slope shall be 1:12.					
	The floor of clarifier shall have 40 mm thick (min.)screed course of cement grout of mix in CM 1:2 detention period shall be 2.25 hrs. dispersion box and stiffened weir plate made of mild steel plate not less than 8 mm thick, anticorrosive epoxy paint on both faces shall be provided. Minimum free board of 0.50 M be provided. It includes inlet pipe from distribution chamber, central shaft, inlet baffle, outlet chamber, scum remover, skimming device, scum chamber, connecting channel from PST, outlet chamber to DB-2 as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Aeration Tank (AT) Designing, providing and constructing in RCC mix (M-300) aeration tank in compartments to handle combined flow of 1 DWF incoming flow and recirculation flow including construction of inlet, outlet and distribution chamber DB-3 and providing 1.20 m wide clear peripheral approach walkways, expansion joints wherever necessary, including foundation, etc. as per specifications. Peak factor shall be 2, F/M ratio shall be 0.40, low speed aerator speed between 20 to 100 RPM, recirculation flow @50% and free board 0.60 m depth, (SWD) 3.50 M minimum, D.O. level at A.T. 2 mg/lit, MLVSS concentration shall be 2500 mg/lit and MLVSS concentration shall be 2000 mg/lit, HRT shall be 4 to 6 hours and STR 6-8 days.					
	It should have compartments for washing, oxygen transfer capacity of mechanical aerator shall not be less than 1.5 kg/KWH, BOD of effluent 20 mg/lit with input to aerator 0.15 to 0.30 KWH/1000 cum of aeration tank. All related works shall be as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Secondary Settling Tanks with Equipments Designing, providing and constructing in RCC (M-300) water tight secondary settling tank having detention period 2 hours and SWD shall be 4.20 M. The effluent BOD & SS from the secondary clarifier shall not be more than 20 Mg/lit and 30 Mg/lit respectively. It should be hydraulically tested, bottom floor slope of 1:12 and free board of 0.60 M minimum. Dispersion box shall be made of mild steel plate not less than 8 mm thick with anticorrosive epoxy paint from both faces and well stiffened. The sewage admitted at the centre flowing upward and outward towards periphery be slowly and continuously collected towards a convenient discharge point near centre by a rotating wheel arm. The clarifier will be completed with end drive half rotating bridge, structural steel rake, overflow weir, walkway diffuser, over load alarms, having push buttons, starters for the clarifier, walkway and the suitable sludge withdrawing arrangement with flush valve capable of withdrawing moisture content not more than 97% to 98% slopping floor shall have 40 mm thickness (minimum), screed course of cement grout of mix 1 cement : 2 sand, rotating sludge scrapper mechanism fitted with squeezes including					
	Sludge Thickener with Equipments Designing, providing and constructing watertight of sludge thickener (gravity type) including foundation in RCC (M300) with inlet and outlet chamber influent well, inlet and outlet pipes, with sludge pit and sludge removal arrangement, grouting wherever necessary with walkway all around of 1.20 M width G.I. pipe railing interconnecting CI pipes all complete as per specifications, detention time 24 hours. SWD shall be 4.25 metre with necessary fixed bridge scraper arrangement as per detailed specifications and necessary inlet and outlet arrangement. All other arrangement as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Primary Digester with Mixer Equipment (Fixed Cover) Designing, providing and constructing unit of watertight and gastight primary digester suitable for 1 DWF plant and complete with pipe gallery, building, staircase for access from dome of digester into inside staircase, walkways at springing levels, etc. walls and base slab being in RCC (M-300), domes in structural concrete including providing burners and civil works for gas collection, grouting wherever necessary, etc. complete as per specifications. It should be designed for min 9°C and max. 45°C and minimum detention time of 30 days, water depth shall not be more than 8.5 M, free board shall be 0.6 M with inlet and outlet arrangement of C.I. flanged pipes including giving hydraulic testing and airtightness testing. The item includes providing works for collecting gas and gas burner as per specifications.					
	Secondary Digester with Equipment (Fixed Cover) Designing, providing and constructing including foundation unit of watertight and gastight secondary digester to deal with 1 DWF complete with pipe gallery, building, staircase for access from dome of digester into inside, staircase to walkways at springing levels, etc. Walls and base slab and domes being in RCC M-300, providing arrangement for digested sludge from digesters to centrifuge, providing burners and civil works for gas collection grouting wherever necessary, etc. complete as per specifications and obligatory provision. All other arrangements as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	S.S.T. Sump and Pump House with Recirculation Pumps and Sludge Pumps to Digester Designing, providing and constructing sump and pump house of requisite capacity with ceiling height not less than 6 M, sludge stream for recirculation to aeration tank and excess sludge to SCBT, including C.I. piping to carry this flow to sump as per detailed specification and as directed by Engineer-in-charge.					
	Chlorine Contact Tank Designing, providing and constructing chlorine contact chamber of adequate capacity to deal with 1 DWF average flow. The chlorine contact tank should be of 30 minutes capacity during average flow to achieve 99.99% coliform reduction. Chlorine dose shall be maintained as per standard provisions including designing, providing and constructing water supply arrangement for chlorination including providing dewatering and bypass arrangements, jointing to final effluent main and outlet weir, etc. complete. The effluent quality should match with the standards laid down by Maharashtra Water Pollution Control Board and as per the obligatory provisions and detailed specifications and as directed by Engineer-in-charge.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Chlorinator and Chlorinator Room / Tonner Room Designing, providing and constructing chlorinators, vacuum type 2 nos. each having capacity of 10 Kg/hr as per obligatory provisions and detailed specifications with necessary provision of chlorinator room having floor area not less than 30 sqm including automatic residual chlorine controller with actuator and residual chlorine analyser including cost of chlorine cylinder, piping, valves, measuring and controlling equipments, safety devices, lifting equipments, etc. complete as per I.S.-10553 (Part II) 1982. The tonner room should have 3 MT capacity crane for loading and unloading facility. Tonner storage should distinctly isolated and should be for minimum 10 tonners space and arrangements as per gas laws 1981 and factory act shall be provided and all other matching amenities be provided, 5 MT gantry shall be provided for full length of tonner room at 6 M height from floor level, with outlet chamber and treated effluent outlet channel, etc. complete as per					
	Sump cum Blending Tank (SCBT) Designing, providing and constructing sump cum blending tank of appropriate size and detention time with free board of 0.60 M. The slope of floor 1:4 with suction pit at the centre as per detailed specifications and obligatory requirements.					
	P.S.T. Sump cum Blending Tank, Pump House with Recirculation Pumps Designing, providing and constructing pump house of appropriate size with pumps, ceiling height minimum 6 M over the circular sump for discharging the sludge to thickener and recycling of flow for blending with C.I. piping, etc. complete as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Sludge Centrifuge Room with Centrifuges Designing, providing, constructing and installing including foundation, etc. sludge centrifuge to handle the sludge flow of one day in one hour per unit with sludge dewatering unit, drain, etc. complete as per specifications, sludge centrifuge with all necessary arrangements as per detailed specifications mentioned in Volume-II and Volume-III of tender and obligatory provisions, be provided with satisfactory functioning.					
	Gas Holder Designing, providing and constructing gas holder having gas collection system, gas flow meter and gas burner with floating dome arrangement and storage time 6 hrs. to be constructed in M-300 having appropriate diameter as per detailed specifications and obligatory provisions. The floating dome shall be of 8 mm thick M.S. plate minimum and shall be provided with two coats of anti-corrosive epoxy coating from both faces.					
	Outfall Sewer Designing, providing and constructing appropriate outfall sewer of RCC NP-2 pipe to discharge treated effluent, untreated effluent from outlet chamber (after basin / chlorination tank) to the local nalla at a point shown on the drawing including necessary chambers for inspection / cleaning including necessary excavation , dewatering, refilling, concrete encasing/ bedding concrete steps to reach the nalla bed level, pitching and energy dissipation chamber in the nalla portion, etc. complete upto 50 M length RCC NP-2 pipeline and including all above items.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
	Piping Work in CI 'LA' class including Sluice Valve, Reflux Valve, M.S. Gate Providing, laying and jointing pipes other than those already included in the above items for interconnection bypass drains, etc. of all units including adequate numbers of manhole chambers. The item includes excavations, refilling and hydraulic testing of pipes, valves, gates, accessories and cost of jointing materials. The item includes required channels with gates for interconnection of units, bypass drains, etc. for all units and as directed, etc. complete as per detailed specifications.					
	Administrative Building cum Laboratory (G+1) Designing, providing and constructing administrative building, office cum labo rat o ry including stores. This shall be a building having appropriate carpet area at ground floor and at first floor complete as per specifications including necessary excavation, foundation in RCC M-200 framed structure, BB masonry (IInd class in CM 1:6) 20 mm cement plaster in CM 1:3 inside and outside painting, aluminium door and window with glass panels, mosaic tile flooring and skirting and all other allied items, fixtures, fastening electrification arrangements, water supply arrangement, etc. complete. The building will have laboratory on upper floor of administrative building and should be so centralised that it should not be attached with any unit but should have complete control of every unit as per laboratory equipment, beautification, telephone and intercom arrangement and wireless system.					
	Primary and secondary treatment-with digesters, sludge drying beds, etc. complete.					
	Rates					
1)	Upto 10 MLD	MLD	67.15	26.57		
2)	Cost of 10 MLD plant	Job	671.53	265.73		
3)	Add for capacity above 10 MLD upto 20 MLD	MLD	58.75	23.31		
4)	Cost of 20 MLD plant	Job	1259	498.80		
5)	Add for capacity above 20 MLD	MLD	50.65	19.93		
6)	Cost of 50 MLD plant	Job	2778.61	1096.62		
7)	Add for capacity above 50 MLD	MLD	37.98	14.99		
8)	Cost of 100 MLD plant	Job	4677.41	1845.92		

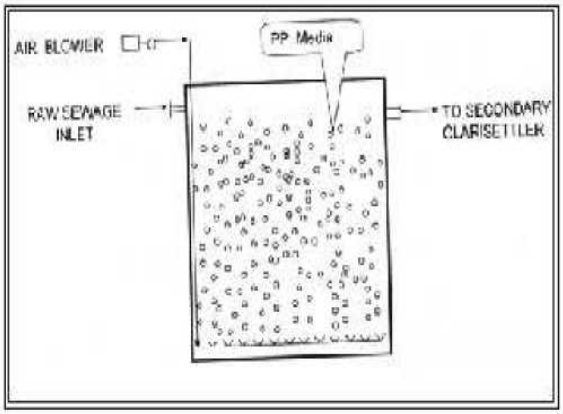
Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
5	Designing, manufacturing, supplying and erecting of **Filter Plant** including cost of underdrain system, cost of filter media, transportation to work site connecting inlet, outlet pipelines of water supply scheme to the plant with fixing of required appurtenances, gauges, valves, water level and flow indicator, etc. including all duties and taxes. The cost includes supply of operation and maintenance manual free of cost, one month trial run after completion of erection work with labour cost, the required training to the staff of Department and Gram Panchayat, 5 years' performance guarantee after commissioning against manufacturing defect. The work includes cost of construction of RCC masonry as and where necessary including excavation if required, epoxy painting to all units inside and outside of the plant, etc. complete.					
	Rates					
1)	0.5 MLD plant	---				
2)	1.5 MLD plant	---				

SECTION - J (II)

MOVING MEDIA BIO REACTOR TECHONOLOGY

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
I	**PROCESS DESCRIPTION - MOVING MEDIA BIO REACTOR TECHNOLOGY**					
	The Moving Media Bio Reactor Technology is a advanced biological treatment process which has a combination of activated sludge process and attached growth process. The bio reactor has lot of packing material called carrier media in suspension and provides a large surface area for micro organisms to grow and degrade the organic matter in aerobic condition. Due to the use of carrier media, the higher concentration of bio mass is developed which helps to reduce the basin size, accept higher loading rates and take shock loads. The sewage after screening and grit removal flows by gravity into the BIO REACTOR wherein the attached growth, aerobic microbes will utilize pollutant in presence of oxygen thereby, further reducing BOD. The air required will be provided through coarse bubble air diffusers provided on the aeration grid at the bottom of reactor and using positive displacement, twin lobe, root type air blower for supply of oxygen. The PP media is provided in the aeration tank to allow the aerobic microbes to grow and get attached. This media remains in fluid state in the aeration tank thereby keeping large					
	The dead bio mass generated will be separated in the **CLARISETTLER TANK** wherein tube media is provided for providing additional surface area for settlement of bio mass and thereby reducing the space requirement.					
	The solid-liquid separation is achieved in this tank and clear supernatant will flow by gravity.					
	The treated wastewater will be disinfected with Chlorine and allowed to react in CHLORINE CONTACT TANK prior to suitable disposal.					
	A typical sketch of bio reactor showing various components is given below.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	The MMBR / FAB Technology has following advantages over Conventional Systems like :					
1	Low on civil works					
2	Low space requirement					
3	Low on operating cost due to higher Oxygen Transfer Efficiency.					
4	Low on maintenance cost					
5	Easy to operate with semi-skilled manpower					
6	Higher efficiencies in pollutant removal					
7	Effective removal of nitrates and phosphates					
8	Quick retrieval of system after shutdown / power failure					



Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
II	**SPECIFICATIONS OF SEWAGE TREATMENT SCHEME** Raw Sewage Characteristics Temperature Ambient ph 7.0 - 8.0 Total Suspended Solids 210 mg/l BOD 5 days at 20° C 170 mg/l COD 340 mg/l Oil & Grease 30 mg/l MPN 10^6 to 10^7 per 100 ML Treated Sewage Quality pH 6.5 - 8.5 Total Suspended Solids < 30 mg/l BOD < 20 mg/l COD < 100 mg/l Oil & Grease < 10 mg/l MPN < 1000 per 100 ML					
	Moving Media Bio Reactor (MMBR) / FAB (Fluidised Aerated Bed) Process Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP consisting of inlet chamber, screen chamber, grit separator, MMBR / FAB (based on technologies providing attached growth on plastic meddi kept suspended in the waste water due to low density of plastic and provided with compressed air for aeration with very high MLSS of greater than 15,000 mg/lit.) tank, secondary clari settler, sludge sump, sludge thickener, chlorine contact tank, chlorinator room/shed, sludge centrifuge, associated piping work with required valves, gates, drains, pathways, administration block cum laboratory, laboratory equipments, spare parts for 2 years of operation, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specifications for civil, electrical and mechanical components with all duties and taxes, etc. complete. Treated sewage can be used for irrigation, horticulture purposes.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	FOLLOWING UNITS ARE INCLUDED **1. Inlet Chamber** Designing, providing and constructing RCC (M-25) inlet chamber designed for the peak flow including necessary excavation in all types of strata including walkway all around the periphery. Each compartment will have CI gates with extension rod, head stock, operating wheels, GI pipe railing, etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications. 2. Screen Chamber Designing, providing, constructing, testing and commissioning of screen chamber, designed for peak flow in RCC (M-25), including walkway 1.2 m wide with GI pipe.	1 No. 2 Nos				
	3. Grit Separator Designing, providing and constructing detritor type grit removal mechanism in RCC (M-25) capable of removing 100% 0.2 mm size particle and above, having specific gravity 2.30 designed for peak flow with suitable arrangement of separation of grit from putrescible solids including providing and making necessary arrangements of Jb-1. Inlet and outlet channels of required sizes as make be required to connect the flow to connecting unit, etc. complete including hydraulic testing for watertightness of structure having minimum FB of 0.3 m, washout arrangement to grit chamber and platform 1.2 m wide RCC walkway with GI pipe handling shall be provided. A pit for collecting grit conveyed by conveyor shall be provided. It should be suitable to handle the grit for carting. All arrangements shall be as detailed specifications and as	2 No				

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	4. MMBR / FAB Tank Designing, providing and constructing in RCC (M-25) biological reactor tank for removal of BOD along with nutrient removal to handle the average flow and having hydraulics suitable to handle peak flow conditions with suitable 1.2 m wide walkway, expansion joints as required, including foundation, etc as per specifications. The tank shall be equipped with inlet and outlet arrangement, air blowers for supply of air, coarse bubble diffusers and aeration grid in SS 304, PP carrier bio media, etc. FB of 0.5 m and SWD as required should be complete as per detailed specifications.	1 No.				
	5. Secondary Clari Settler Designing, providing and constructing in RCC (M-25) watertight secondary clari settler having SWD of 3.75 m + 0.5 m FB and has tube media in the clarification zone to provide additional surface area for settling. The settler shall be provided with a scraper mechanism in MS with epoxy painting for collecting the settled solids at the bottom (bottom slope 1:12). The central feed well shall be made of MS with epoxy painting from both faces and well stiffened. The sewage will be	1 No .				
	6. Chlorine Contact Tank Designing, providing and constructing chlorine contact tank of adequate capacity to deal with average flow. The contact time provided is 30 mm to achieve 99.99% reduction in coliform during average flow condition. Chlorine dosage will be as per standard provisions including designing, providing and constructing water supply provision for chlorination, including providing dewatering and bypass arrangement for joining to final effluent mains and outlet weir, etc. complete. The effluent quality should match with the standards laid down by Maharashtra Pollution Control Board and as per obligatory provision and as detailed specification and as directed by Engineer-in-charge.	1 No.				

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	7. Chlorinator and Chlorinator Room / Tonner Room Designing, providing and constructing vacuum type chlorinators having adequate capacity for dosage of adequate chlorine to ensure 99.99% coliform reduction as per obligatory provisions, detailed specifications with necessary provision of having chlorinator room of adequate size. The chlorinator equipment shall include chlorine cylinders / tonners, piping, valves, measuring, controlling equipments, safety devices, lifting equipment, etc. complete as per IS 10553 (Part II) 1982. The tonner room should have min. 3 MT capacity crane for loading and unloading facility. Tonner storage should be distinctly isolated and should have min. storage space as per the detailed specifications and as per gas law 1981 and factory act shall be provided. All other matching amenities shall be provided, 5 MT gantry rail shall be provided for full length of tonner room at 6 m ht. from level of tonner room with outlet.	1 No				
	8. Sludge Sump Designing, providing and constructing of sludge sump and pump for discharging sludge to sludge thickener using MS pipe, etc. complete as per detailed specification. **9. Sludge Thickener** Designing, providing and constructing watertight of sludge thickener - gravity type in RCC (M-25) with inlet and outlet pipes, central feed well, sludge it and sludge removal arrangement, grouting wherever necessary with walkway all around of 1.20 m with GI pipe railing interconnecting CI pipes all complete as per specifications, having bottom slope 1:8 and 3 m SWD with necessary fixed bridge scraper arrangement as per detailed specifications and necessary inlet and outlet arrangement, all other arrangement as per detailed specifications.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	10. Sludge Centrifuge Platform with Centrifuge Designing, providing, constructing and installing including foundation, etc.,sludge centrifuge to handle the sludge flow of 1 day in 18 hrs per unit with sludge dewatering unit, drain, etc complete is per specification. Sludge centrifuge with necessary arrangements as per detailed specification mentioned in tender and obligatory provisions to be provided with satisfactory functioning	1 No				
	11. Outfall Sewer Designing, providing, constructing appropriate outfall sewer of RCC NP2 pipe to discharge treated effluent, untreated effluent from outlet chamber (after basin / chlorination tank) to the local Nallah at the point shown on the drawing including necessary chambers for inspection and cleaning including excavation, dewatering, refilling, concrete, encasing / bedding concrete.(after basin / chlorination tank) to the local Nallah at the point shown on the drawing including necessary chambers for inspection and cleaning including excavation, dewatering, refilling, concrete, encasing / bedding concrete.	1 No				
	12. Piping Work in CI LA class including Sluice Valves, Reflux Valves, MS Gates Providing, laying and jointing pipes other than those already included in the above items for interconnection, bypass drains, etc. of all units including adequate number of manhole chambers. The item includesexcavations, refilling and hydraulic testing of pipes, valves, gates, accessories and cost of jointing materials. The item includes required channels with gates or interconnection of units, bypass drains, etc. for ill units as directed, etc complete as per detailed specifications.	Lot				

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	13. Administrative Building cumLaboratory (G+1) Designing, providing and constructing administrative building, office cum laboratory including stores. This shall be building having appropriate carpet area, at ground floor and at first floor complete as per specifications including necessary excavation, foundation in RCC M-20 framed structure, BB masonry (IInd class in CM 1:6), 20 mm cement plaster in CM 1:3, inside and outside painting, aluminum door and window with glass panels, mosaic tile flooring and skirting and all other allied items, fixtures, fastening, electrification arrangement, water supply arrangement, etc complete. The building will have laboratory on upper floor of administrative building and should have complete control of every unit as per laboratory equipment, beautification, telephone and intercom arrangement and wireless system.					
III	**PRICE SCHEDULE** Capacity of the Plant in MLD Area required in Sqm.	Unit				
	1 450	MLD	173.33			
	3 600	MLD	102.30			
	5 1000	MLD	87.93			
	8 1500	MLD	80.24			
	10 1800	MLD	78.13			
	13 2500	MLD	70.75			
	15 2650	MLD	64.50			
	18 3250	MLD	63.46			
	20 3500	MLD	61.15			
	25 4350	MLD	58.75			
	NOTES					
1 2	Screen chamber and grit separator upto 5 MLD capacity are manual type. Upto 5 MLD capacity STP, chlorination is done by using sodium hypochlorite solution. Above 5 MLD capacity, gas chlorinator is provided.					
3	Sludge thickener is not provided upto 3 MLD capacity STP. Sludge will be collected into sludge sump and pumped directly to sludge dewatering system.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
4	For all STP, sludge dewatering is using solid bowl centrifuge.					
5	Chlorinator room not provided for STP upto 3 MLD. For STP upto 3 MLD, labo rat o ry / administration building is not provided. Only a room for operator is provided.					
6	Boundary wall, fencing, gate, storm water drains, site clearance is not considered in the scope.					
7	All water retaining structures are in M30 grade of concrete.					
8	Water table is considered 5 m below GL for design.					
9	Soil bearing capacity is considered as 20 T/m^2 at 1.5 m below GL.					
10	Lead for excavation is considered as 0.5 km.					
11	Grade of cement used is OPC 43 grade.					
12	Grade of steel used is Fe 415.					
13	Peak factor considered for design for plants upto 3 MLD is 3, 4; upto 15 MLD is 2.5, 16; upto 20 MLD is 2.0.					
14	Chemicals required during trial run and commissioning are not considered.					
15	Water and power during construction, trial run and commissioning shall be provided by client.					
16	Power available at STP location is assumed as LT power supply.					
IV	**MAKES OF EQUIPMENT**					
No.	Description	Make				
1	Centrifugal Pumps	Kirloskar / Jhonson / Kishor / Eqv.				
2	Screw Pumps	Roto / Tushaco / Eqv.				
3	Air Blower	Usha / Swam / Kay / Kulkarni / Eqv.				
4	Dosing Pumps	Milton Roy / VK Pumps / Positive / Minimax / Eqv.				
5	Agitators / Flocculators	Pavan / Fibre & Fibre / Ceecons				
6	Clarifier / Thickener Mechanism	To be fabricated as per MJP approved design/make				
7	Screens	To be fabricated as per MJP approved design/make				
'8	Grit Separator	To be fabricated as per MJP approved design / make				
9	Chlorinator	Toshcon Jesco / Banaco / Perfect Chloro / Chlorocontrol / Metito / Eqv.				
10	Chlorine Tonner	Meenakshi / Eqv.				

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
11	Solid Bowl Centrifuge	Alfa Laval / Humbolt / Wedag / Hiller / Eqv.				
12	Motors	Crompton / Siemens / Lakshmi				
13	Cables	Finolex / Polycab				
14	MS pipes	Mahalakshmi Seamless / Maharashtra Seamless / Suryaroshni / Jindal / Eqv.				
15	CI Pipes	Truform/ Electrosteel/ Kejriwal/ Eqv.				
16	Valves	Intervalve / BDK / Procon / Tyco / AV Valves / Eqv.				
17	Clarisettler Media	Cooldeck / Munters				
18	Bio Reactor Carrier Media	As per MJP approved design / make				
A	**Cyclic Activated Sludge Process** Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of STP based on SBR technology consisting of Inlet Chamber, Screen Chamber, Detritus Tanks, Distribution Chamber and Biological CASP Basins, Sludge Sump, Chlorine Contact Tank, Chlorinator Room/Shed, Sludge Centrifuge necessary piping work with required valves, gates, drains, pathways Administration Block cum Laboratory, Laboratory Equipments, Tools and Plants, Spare Parts, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specification for civil, electrical and mechanical components with all duties and taxes, etc. complete to achieve BOD < 5 ppm, COD < 100 ppm, TSS < 10 ppm, to get recyclable quality of water for industrial / agricultural purposes. (In Case Cyclic activated sludge plant is designed for N, P outlet parameters shall also include TN < 10 ppm, Nh3N < 2 ppm and TP < 1 ppm)					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	UNITS INCLUDED **1. Inlet Chamber** Designing, providing, and constructing RCC (M-250) inlet chamber for the peak low of 2 DWF including necessary excavation in all types of strata including walkway all around the periphery. Each compartment will have phosphor bronze steel gates with extension rod, head stock, operating wheels, GI pipe railing, etc. The work includes providing and making necessary arrangements to connect the flow to screen chamber by approach channel as directed and as per specifications.					
	2. Screen Chamber Designing, providing, constructing, testing and commissioning of screen chamber, designed for average 1 DWF and maximum peak flow of 2 DWF in RCC (M-250), including inlet pipe / channel from inlet chamber, outlet pipe channel to detritus tank, free board of 0.5 m minimum, RCC walkway 1.2 m wide with GI pipe railing, RCC staircase of 1.2 m width from GL to screen chamber.					
	3. Detritus Tank Designing, providing and constructing continuous grit removal type Detritus Tank, mechanically operated in RCC (M-250) capable of removing 100% of 0.2 mm size particle and above, having specific gravity 2.30, designed for one peak 2 DWF with suitable arrangement of separation of grit from putrescible solids. Inlet and outlet channels of required sizes as may be required to connect the flow to connecting unit etc. complete including hydraulic testing for watertightness of structure having minimum FB of 0.3 m, washout arrangement to grit chamber and platform 1.2 m wide RCC walkway with GI pipe handling shall be provided. A pit for collecting grit conveyed by conveyor shall be provided. It should be suitable to handle the grit for carting. All arrangements shall be as detailed specifications and as directed.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	4. CASP Basins Designing, providing and constructing in RCC (M-250), CASP basins for biological removal of BOD along with nitrification, denitrification, Bio-P removal in compartments to handle combine flow of 1 DWF incoming flow and recirculation flow including construction of selector compartments and providing 1.2 m wide clear approach walkways, expansion joints wherever necessary, including foundations, etc as per specifications. Peak factor shall be 2, F/M ratio shall be 0.15, complete with air blowers, fine diffused aeration grid / equipment and FB 0.5 m and SWD as required. DO level in basin to be minimum 2 mg/l complete with 'Oxygen Uptake Rate' control system and all related instruments, stainless steel decanters and automation works. MLSS concentrations shall be 2000-5500 mg/l or more. MLVSS to MLSS ratio to be 0.8. HRT shall be between 12 to 13 hrs and SRT suitable for fully digested sludge. It should have all other related works as per detailed specification. In case CASP is designed to achieve N,P removal HRT shall be between 15-18 hrs and SRT shall be suitably provided to a.					
	5. Chlorine Contact Tank Designing, providing and constructing chlorine contact chamber of adequate capacity to deal with 1 DWF average flow. The chlorine contact tank should be 30 min capacity, during average flow to achieve 99.99% coliform reduction. Chlorine dose shall be maintained as per standard provisions, including designing, providing and constructing water supply provision for chlorination including providing dewatering and bypass arrangement, jointing to final effluent mains and outlet weir, etc . complete. The effluent quality should match with the standards laid down by Maharashtra Water Pollution Control Board and as per obligatory provision and as detailed specification and as directed by Engineer-in-charge.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	6. Chlorinator and Chlorinator Room /Tonner Room Designing, providing and constructing chlorinators vacuum type 2 Nos. with auto switchover facility and having capacity for dosage of adequate chlorine to ensure 99.99% coliform reduction as per obligatory provisions and detailed specifications with necessary provision of having chlorinator room of adequate size. The chlorinator equipment shall include cost of chlorine cylinders / tonner piping, valves, measuring and controlling equipments, safety devices, lifting equipments, etc. complete as per IS-10553 (Part II) 1982. The tonner room should have minimum 3 MT capacity hoist for loading and unloading facility. Tonner storage should be distinctly isolated and should be for minimum storage space as directed in the design specification and as per Gas Laws 1981 and Factory Act shall be provided. All other matching amenities shall be provided.					
	5 MT gantry rail shall be provided for full length of tonner room at 6 m height from level of tonner room, with outlet chamber and treated effluent outlet channel, etc. complete as per detailed specification.					
	7. Sludge Sump Designing, providing and constructing of sludge sump and pump house of appropriate size with pumps, ceiling height minimum 6 m over sump for discharging sludge to centrifuge using CI pipe, etc. complete as per detailed specification. **8. Sludge Centrifuge Platform withCentrifuges** Designing, providing, constructing and installing including foundation etc., sludge centrifuge to handle the sludge flow of 1 day in 20 hours per unit with sludge dewatering unit, drain etc. complete as per specification. Sludge centrifuges with the necessary arrangement, as per detailed specification mentioned in tender and obligatory provisions to be provided with satisfactory functioning.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	9. Outfall Sewer Designing, providing and constructing appropriate outfall sewer of RCC NP2 pipe, to discharge treated effluent from outlet chamber after chlorination tank to the local nallah at the point shown on the drawing including necessary chamber for inspection and cleaning including necessary excavation, dewatering, refilling, concrete encasing / bedding concrete steps to reach the nallah bed level, pitching and energy dissipation chamber in nallah portion, etc. complete upto 50 m length RCC NP2 pipe line and including all above items.					
	10. Piping Work in CI-LA class including Sluice Valves, Reflux Valves, MS Gates Providing, laying and jointing pipes other than those already included in the above items for interconnection, bypass drains, etc. of all units including adequate number of manhole chambers. The item includes excavations, refilling and hydraulic testing of pipes, valves, gates, accessories and cost of jointing materials. The items includes required channels with gates for interconnection of units, bypass drains, etc. for all units as directed, etc complete as per detailed specifications.					
	11. Administrative Building cum Laboratory (G+1) Designing, providing and constructing administrative building, office cum laboratory including stores. This shall be a building having appropriate carpet area at ground floor and at first floor complete as per specifications including necessary excavation, foundation in RCC M-200 framed structure BB masonry (IInd class in C.M. 1:6), 20 mm cement plaster in CM 1:3 inside and outside painting. Aluminium door and window with glass panels, mosaic tile flooring and skirting and all other allied items, fixtures, fastening, electrification arrangement, water supply arrangement, etc. complete.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
	The building will have laboratory on upper floor of administrative building and should be so centralized that it should not be attached with any unit but should have complete control of every unit as per laboratory equipment, beautification, telephone and intercom arrangement and wireless system					
	Capacity of Plant in MLD , Area required in Ha., No. of Basins	Unit				
	1 0.16 2	MLD	329.92			
	2 0.20 2	MLD	220.61			
	5 0.40 2	MLD	138.62			
	10 0.70 2	MLD	113.29			
	15 0.75 2	MLD	99.78			
	20 0.80 4	MLD	94.63			
	25 1.00 4	MLD	92.21			
	30 1.20 4	MLD	86.97			
	40 1.60 4	MLD	81.73			
	50 1.75 4	MLD	79.81			
	60 1.90 4	MLD	73.31			
	75 2.25 4	MLD	71.44			
	100 2.40 6	MLD	68.34			
	125 3.00 6	MLD	65.76			
	150 3.50 6	MLD	63.95			
	NOTES					
a	These Rates are for Civil Works, in M30 grade RCC.					
b	Water Table is considered at 5 m below ground level.					
c	Soil bearing capacity considered as 20 T/m^2 at 1.5 m below ground level.					
d	OPC has been considered for costing purposes.					
e	All civil items, electrical, piping, valves, pumps, motors, blowers, etc. are considered as per MJP Schedule of Rates.					
f	I.Nos.1, 2 include sludge drying beds instead of sludge centrifuge and DWPE dosing system.					
g	I.Nos.1, 2, 3 include NaOCl dosing system instead of Gas Chlorination.					
h	I.Nos.1, 2, 3 do not include Lab and Lab Equipments.					

SECTION - K (I)
RCC GSRS AND SUMPS

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
1	**Designing (aesthetically), and constructing RCC ground service reservoirs / RCC sumps in M-300 mix** of required capacity including excavation in all types of strata, foundation concrete, container walls, bottom slab top RCC roof slab / or dome, 20 mm thick cement plaster with water proofing compound in CM 1:3 proportion to inside face of the container, including epoxy paint from inside including refilling and disposing of surplus stuff within lead of 50 M, all labour and material charges, for laying and jointing of pipe assembly for inlet, outlet washout, over flow and bypass arrangement consisting of C.I. M.S. D/F. pipes, specials and valves of given diameters, providing and fixing accessories such as M.S. ladder inside and outside, C.I. Manhole frame and cover, water top slab, B.B. masonry chamber for all valves, ventilating shafts, including giving satisfactory hydraulic test and water tightness test as per IS code and providing three coats of cement paints to all exposed surface of structure including roof surface etc. complete as per design data, criteria, obligatory requirements and detailed specifications. Anti-termite treatment shall be given for underground portion of the structure.					
	Notes					
1)	The design shall be in accordance with various relevant I.S. specification (I.S. 456/1978, I.S. 875 - 1987, I.S. 3370 -1965 or revised.)					
2)	Only M.S. bars grade I conforming to I.S. 432 part-I or high yield strength deformed bars conforming to I.S. 1786 or I.S. 1139 shall be used. Grade -II M.S. bars shall not be used.					
3)	Entire structure shall be in M-300 only.					
4)	The scope of pipe assembly work shall be upto 5 metre beyond outside face of the wall, cost of pipes valves and specials is not included in the rate but labour cost for laying and jointing is included.					
5)	The G.S.R. / Sump above 15 lakh litres capacity shall be in two compartment.					
6)	The Job includes designing the structure for uplift pressure and dewatering if required during entire execution and disposal of surplus excavated stuff within lead of 50 metres as directed by Engineer-in-charge. If uplifts considered in design, then these rates shall be increased by 7.5%.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
7)	G.S.R. outlets shall be with bell mouth of approved pattern in bottom slab and cost of designing bell mouth is included in the rate. Sump well includes cost of suction pit required at bottom.					
8)	For pipe diameters upto 300 mm only CI pipes and CI specials shall be used. For pipe diameters above 300 mm, M.S. pipes and specials minimum 10 mm thick shall be used with proper anticorrosive epoxy treatment from inside and outside.					
9)	Cost of pump house is not included in these rates.					
10)	Above rates are applicable for Seismic Zones 2, 3 and 4.					
11)	75% part rate shall be payable for reinforcement, concrete and plastering items of all types of G.S.R.s and sumps till satisfactory hydraulic testing for water tightness test is given and till that work shall be treated as incomplete.					
	Note : Conditions from Sr. No. 1 to 11 shall form a part and parcel of tender and must be included in the draft tender papers for work of R.C.C. GSRs and sumps.					
	Rates for RCC GSRs and Sumps					
1)	Upto 25,000 litres	Lit	14.88	5.84		
2)	Cost of 25,000 litres capacity	Job	372114	145990		
3)	Add for capacity above 25,000 upto 50,000 litres	Lit	8.83	3.37		
4)	Cost of 50,000 litres capacity	Job	592832	230132		
5)	Add for capacity above 50,000 upto 75,000 litres	Lit	7.18	2.79		
6)	Cost of 75,000 litres capacity	Job	772215	299787		
7)	Add for capacity above 75,000 upto 1,00,000 litres	Lit	6.35	2.49		
8)	Cost of 1,00,000 litres capacity	Job	930990	362104		
9)	Add for capacity above 1,00,000 upto 1,50,000 litres	Lit	6.19	2.43		
10)	Cost of 1,50,000 litres capacity	Job	1240373	483796		
11)	Add for capacity above 1,50,000 upto 2,00,000 litres	Lit	5.40	2.13		
12)	Cost of 2,00,000 litres capacity	Job	1510446	590471		
13)	Add for capacity above 2,00,000 upto 3,00,000 litres	Lit	4.99	1.96		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
14)	Cost of 3,00,000 litres capacity	Job	2009910	786097		
15)	Add for capacity above 3,00,000 upto 5,00,000 litres	Lit	4.05	1.60		
16)	Cost of 5,00,000 litres capacity	Job	2820143	1106299		
17)	Add for capacity above 5,00,000 upto 10,00,000 litres	Lit	3.59	1.42		
18)	Cost of 10,00,000 litres capacity	Job	4614766	1817671		
19)	Add for capacity above 10,00,000 upto 15,00,000 litres	Lit	2.80	1.09		
20)	Cost of 15,00,000 litres capacity	Job	6016568	2363967		
21)	Add for capacity above 15,00,000 litres	Lit	2.27	0.92		
	Note : 10% shall be added over the cost of GSR for sump where overhead pump house is proposed.					

SECTION - K (II)

RCC ESRS

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
1	**Designing (aesthetically), and constructing RCC elevated service reservoirs** of following capacity with RCC staging consisting of columns, internal and external bracings spaced vertically not more than 4.5 metres centre to centre for ESR having capacity upto 500 cum and not more than 6 m c/c for ESRs having capacity above 500 Cum including excavation in all types of strata, foundation concrete, cement plaster with water proofing compound to the inside face of the container including refilling disposing off the surplus stuff within a lead of 50 metres, all labour and material charges including lowering, laying, erecting, hoisting and jointing of pipe					
	assembly of inlet, outlet, washout, overflow and bypass arrangements as per departmental design, providing and fixing accessories such as M.S. ladder, C.I. manhole frame and covers, water level indicators, lightening conductor, G.I. pipe railing around walk way and top slab, providing spiral stair case from ground level to roof level, M.S. grill gate of 2 M height with locking arrangement of approved design, B.B. masonry chambers for all valves, ventilating shafts, providing and applying three coats of cement paint to the structure including roof slab, epoxy painting to internal surface and anti-termite treatment for underground parts of the structure and giving satisfactory water tightness test as per I.S. code. The job to include painting the name of the scheme and other details on the reservoir as per the directions of Engineer-in-Charge.					
	Notes					
1)	The design of the structure be in accordance with relevant I.S. specification (I.S. 3370 - 1965 or revised.)					
2)	The design shall satisfy the stipulations as per I.S. 1893 - 1984 and I.S. 13920 / 1993 for seismic force and I.S. - 11682 / 1985 for R.C.C. staging of overhead tanks.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
3)	For design having more than 6 columns, provision of internal bracing is obligatory. External bracings is also obligatory.					
4)	The entire structure shall be in M-300 mix only.					
5)	Plain round mild steel bars grade-I conforming to I.S. 432 part-I or high yield strength deformed bars conforming to I.S. 1786 or I.S. 1139 shall be used, grade-II mild steel bars will not be allowed.					
6)	Irrespective of the type of foundation proposed in the design, one set of bracing be provided at the ground level.					
7)	These rates include providing M.S. ladder for E.S.R.s upto 2 lakh litres capacity and providing spiral staircase for E.S.R. above 2 lakh litres capacity.					
8)	Staging shall have to be designed with stresses of M-200 concrete for ESR. However all RCC construction should be done in M-300.					
9)	These rates are including the cost of uplift pressure if any and entire dewatering during execution. In case of water logging area where water is stretch at shallow depth, extra provision of dewatering shall be made as per site condition.					
10)	All conditions given in the Member Secretary's Circular No. MJP / TS-I / 350 / 1668 dt. 2-8-97 and MJP / S-I / 350 / 2127 dt. 13-7-99 shall be strictly followed and additional cost, if any, due to these conditions is included in the rates mentioned below.					
11)	75% part rate shall be payable for reinforcement concrete and plastering items of containers of E.S.R. till satisfactory hydraulic testing for water tightness is given; and till that work shall be treated as incomplete.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
12)	The rates indicated in the table are excluding the cost of pipes, specials and valves required for inlet, outlet, washout, overflow and bypass arrangement. The scope of work, however, includes cost of erecting, laying and jointing of pipes and valves including cost of jointing materials upto 5 M beyond outer face of outermost column					
13)	For ESR upto 500 cum capacity C.I. double flanged pipes upto 300 mm dia shall be provided and C.I. specials shall be used. For ESR above 500 cum capacity C.I./M.S. pipe assembly with minimum 8 mm thickness upto 500 mm dia and minimum 10 mm thickness above 500 mm dia can be used with proper anti-corrosive epoxy treatment from inside and outside.					
14)	Below mentioned rates are for foundations with individual footing with bearing capacity of 20 tonnes per square metre. For raft foundations, these rates shall be increased by 7.5% where safe bearing capacity (SBC) is 5 MT per sqm and by 5% where SBC is more than 5 MT/sqm and upto 10 MT/sqm. This % of 5% or 7.5% is applicable for estimation of amount of lumpsum item of ESR. For extra item due to change from individual foundation to raft, actual increase in concrete and steel be paid as per relevant DSR item.					
15)	The rate shall be increased by 30% for bearing piles upto depth of 10 M and for further increased in depth by 5 M each, it shall be increased by another 10%. These rates are applicable where raft is not feasible. For pile foundations sulphate resistant cement shall only be used. Single pile for the column is not permitted, group of piles shall be designed with pile cap for each column of ESR.					
16)	The rates are applicable for staging height of 12 M. These rates shall be increased or decreased for per metre variation in this staging height as below					
	12 to 16 M staging - 2% per metre					
	16 to 20 M staging - 3% per metre					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
	20 M and above - 4% per metre					
	For 17 M staging height, percentage calculation will be like below :					
	12 to 16 M --- 4 x 2 = 8%					
	16 & 17 M --- 1 x 3% = 3% Total = 11%					
	For 21 M staging height, percentage calculation will be like below :					
	12 to 16 M --- 4 x 2 = 8%					
	16 to 20 M --- 4 x 3% = 12%					
	20& 21 M --- 1 x 4% = 4% Total = 24%					
17)	Following rates are for seismic zone III. For zone IV, these rates shall be increased by 5% and for zone II, these rates shall be decreased by 5%. Concerned Executive Engineer shall confirm the seismic zone for the scheme from seismic zones plan before estimation and adopt appropriate rates as per actual seismic zones. (Seismic maps attached in this CSR).					
	Notes					
1)	Conditions from Sr. No. 1 to 11 shall form a part and parcel of the tender and must be included in the draft tender papers for works of R.C.C. E.S.R.					
2)	Conditions from Sr. No. 12 to 17 are for estimation purpose only and shall not appear in the tender.					
	Rates for RCC ESRs					
1)	Upto 25,000 litres	Lit	30.01	10.01		
2)	Cost of 25,000 litres capacity	Job	750358	250357		
3)	Add for capacity above 25,000 upto 50,000 litres	Lit	15.68	4.99		
4)	Cost of 50,000 litres capacity	Job	1142482	375182		
5)	Add for capacity above 50,000 upto 75,000 litres	Lit	11.07	3.57		
6)	Cost of 75,000 litres capacity	Job	1419311	464454		
7)	Add for capacity above 75,000 upto 1,00,000 litres	Lit	10.3	8.41		
8)	Cost of 1,00,000 litres capacity	Job	1676925	674661		
9)	Add for capacity above 1,00,000 upto 1,50,000 litres	Lit	8.13	2.63		
10)	Cost of 1,50,000 litres capacity	Job	2083287	806296		
11)	Add for capacity above 1,50,000 upto 2,00,000 litres	Lit	7.4	2.93		
12)	Cost of 2,00,000 litres capacity	Job	2453410	952599		
13)	Add for capacity above 2,00,000 upto 2,50,000 litres	Lit	6.56	2.35		
14)	Cost of 2,50,000 litres capacity	Job	2781462	1070324		
15)	Add for capacity above 2,50,000 upto 3,00,000 litres	Lit	5.94	2.49		
16)	Cost of 3,00,000 litres capacity	Job	3078655	1195021		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
17)	Add for capacity above 3,00,000 upto 4,00,000 litres	Lit	5.83	2.23		
18)	Cost of 4,00,000 litres capacity	Job	3661543	1418022		
19)	Add for capacity above 4,00,000 upto 5,00,000 litres	Lit	5.27	1.93		
20)	Cost of 5,00,000 litres capacity	Job	4188846	1611238		
21)	Add for capacity above 5,00,000 upto 7,50,000 litres	Lit	5.13	2.01		
22)	Cost of 7,50,000 litres capacity	Job	5472126	2114580		
23)	Add for capacity above 7,50,000 upto 10,00,000 litres	Lit	5.19	2.08		
24)	Cost of 10,00,000 litres capacity	Job	6769303	2635520		
25)	Add for capacity above 10,00,000 upto 15,00,000 litres	Lit	4.63	1.78		
26)	Cost of 15,00,000 litres capacity	Job	9082863	3526225		
27)	Add for capacity above 15,00,000 upto 20,00,000 litres	Lit	4.25	1.66		
28)	Cost of 20,00,000 litres capacity	Job	11206530	4357484		
29)	Add for capacity above 20,00,000 upto 25,00,000 litres	Lit				
30)	Cost of 25,00,000 litres capacity	Job				

SECTION - K (III)
ANCILLARY ITEMS FOR RESERVOURS

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	**Providing and fixing in position copper lightening conductor** including copper rod of 20 mm dia as per upper terminal 1.5 M long with a knob at end and with conical spike at top, copper tape conductor 20 x 3 mm size, copper earth plate of 3 mm thick and 0.81 sqm. in area, clamps at 1 M centre to centre including, necessary excavation, laying and fixing the conductor, providing and fixing 40 mm G.I. pipe upto 3 M height from ground and 0.5 M below ground including making all connections, filling earthing pit with charcoal, salt, etc. & refilling & watering, etc. complete as per specifications laid down in relevant I.S. codes.					
i)	For tape of 10 M length	No	13543	1029		
ii)	Rebate/ extra rate per metre length or part thereof over and above initial length of 10 M.	Mtr.	379	14		
2	**Providing and fixing in position copper lightening conductor** including copper rod of 20 mm dia upper terminal 1.5 M long with a knob at the end with a conical spike at top, aluminium tape conductor 20 x 3 mm size, copper earth plate of 3 mm thick and 0.81 sqm. in area, clamps at 1 M centre to centre including, necessary excavation, laying and fixing the conductor, providing and fixing 40 mm G.I. pipe upto 3 M height from ground and 0.5 M below ground including making all connections, filling earthing pit with charcoal, salt, etc. & refilling & watering, etc. complete as per specifications laid down in relevant I.S. codes.					
i)	For tape of 10 M length	No	12411	1060		
ii)	Rebate/ extra rate per metre length or part thereof over and above initial length of 10 M.	Mtr.	136	5		
3	**Providing, hoisting and fixing in position inverted 'J' type 100 mm dia** C.I. cowl type ventilators with mosquitoproof aluminium mesh at top in including applying 2 coats of anti-corrosive paint, etc. complete as directed by Engineerin-charge, weighing not less than 35 kg.	No	2352	1090		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
4	**Providing, hoisting and fixing in position C.I. manhole, frame and cover** of best quality and of required size and shape with locking arrangements including applying 2 coats of anti-corrosive paint, etc. complete					
i)	90 x 60 cm size and weight 35 kg.	No	2898	217		
ii)	Rate on weight basis for any size and type of frame and cover.	Kg	82	6		
5	**Providing and fixing in position M.S. ladder 0.50 M wide** consisting of 75 x 10 mm M.S. flats as stringers and 16 mm dia M.S. bars in double rows as steps placed at 25 cm c/c including cost of material and labour involved, welding, anchoring and applying 3 coats of anticorrosive paint, etc. complete as directed by Engineer-in-charge.	RMT	1493	252		
6	**Providing and applying epoxy paint of approved make** (Shalimar, Ciba or Mahindra & Mahindra) to concrete surface for RCC ESR or GSR or any other structure including cleaning the surface by scrapping and air blowers to the satisfaction of Engineer-in-charge, necessary scaffolding, etc. complete with all leads and lifts and giving satisfactory hydraulic test for water tightness as per I.S. codes.					
i)	For new surfaces - Two coats	Sqm	735	382		
ii)	For old surfaces - Two coats	Sqm	829	455		
7	**Providing and constructing RCC spiral staircase** in M-150 mix concrete at site of work and consisting of central vertical column of 400 mm dia and steps in RCC M-150, tie members at each brace level, RCC parapet wall 80 cm high including cost of all labour and material involved, cost of scaffolding, centering, shuttering, curing, finishing in CM 1:3 proportion including RCC M-150 footing foundation, its excavation, refilling and cleaning the site, etc. complete as per type design, with 3 coats of cement paint.	RMT	6800	560		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
8	**Providing and constructing RCC ventilating shaft** of diameters and height mentioned below with required number of RCC 15 x 15 cm size columns and RCC circular slab or dome over the pillars in M-150 including cost of all material and labour, providing and fixing steel or wooden frame and providing and fixing G.I. flyproof mesh of 26 gauge and providing and applying in 3 coats of oil paint to wooden or steel frame and cement paint to concrete structure, etc. complete as directed by Engineer-in-charge.					
i)	0.9 M dia x 1.35 M height	No	6699	743		
ii)	1.2 M dia x 1.80 M height	No	8658	964		
iii)	1.5 M dia x 2.25 M height	No	13564	1523		
9	Providing and installing mercury water level indicator for RCC ESR and wash water tank site as per instructions of Engineer-in-charge at ground level of the tank or nearing pump house or room for RCC ESR having 15 mtrs. stage height and 5 mtrs. water storage height with indication of water height in storage tank in metre and 1/10th of metre including providing and installing 15 mm dia class 'B' G.I. piping with necessary accessories from bottom of the tank upto the instrument as per instructions of Engineer-in-charge.	No	20866	3469		
	For extra stage height over 15 mtrs. or part thereof and water depth over 5 mtrs. or part thereof for Item No. 9.	Mtr.	1104	186		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
10	**Providing, erecting, installing and commissioning Barometric leg chlorination system for water treatment plant upto 5 MLD capacity** as per manufacturer's specification with all required materials viz. 15 kg. pressure yellow PVC pipe, specially prepared chamber, mixing chamber, scrubber unit, gas pressure flexible pipe, brass nozzle nipple, electronic alarm unit, PPM dose, indicator of 25 mm dia, 4 mm thick glass tube borosil, gas unit opening spanner 3 hole type, instruction board, aluminium pipe upto sump (max. length 15 M) including civil works wherever required for above materials, fittings, including satisfactory test and trial at work site, etc. complete. (Item do not include construction of chlorine gas room of 3.0 x 3.0 M or adequate size) as per drawing attached.					
i)	For 5.0 Mld capacity	No	126736	12368		
ii)	Add / deduct per Mld or part of per Mld capacity	Mld	4462	436		
11	**Providing and fixing water level indicator upto 5 M height** including M.S. enamelled gauge plate 300 mm wide and 3 mm thick, copper float, providing and fixing required accessories such as pointer, pulleys, nylon thread including cost of all material, labour, etc. complete.	No	10583	1854		
12	**Providing and fixing water level indicator upto 5 M height** including M.S. enamelled gauge plate 150 mm wide and 3 mm thick, copper float, providing and fixing required accessories such as pointer, pulleys, nylon thread including cost of all material, labour, etc. complete.	No	6770	1964		

SECTION - L
CHAMBERS, MANHOLES & DRAINAGE DROPS

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	**Valve Chamber with Precast RCC Covers** Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast RCC frame and cover, etc. complete as directed by Engineer-in-charge.					
	Note : Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M.					
A	As above of 60 x 45 cm internal size and depth upto 0.9 M with precast R.C.C. slab cover.	No	6595	1753		
a)	Add for every increase in depth of 30 cm or part there of	30 cm depth	1452	418		
B	As above of 90 x 45 cm internal size and depth upto 1.2 M with precast R.C.C slab cover.	No	9770	2649		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1734	501		
C	As above of 90 x 60 cm internal size and depth upto 1.2 M with precast R.C.C slab cover.	No	10624	2896		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1897	544		
D	As above of 90 x 90 cm internal size and depth upto 1.2 M with precast R.C.C slab	No	12309	3313		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2137	621		
E	As above of 90 cm internal dia. size and depth upto 1.2 M with precast R.C.C slab cover.	No	9644	3227		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1739	584		
F	As above of 1.2 x 1.2 M internal size and depth upto 1.2 M with precast R.C.C slab cover.	No	16283	4499		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2665	792		
G	As above of 1.5 x 1.5 M internal size and depth upto 1.5 M with precast R.C.C slab cover.	No	24758	5496		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	3444	889		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
2	**Valve chamber with cast iron manhole frame and covers** Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion, 12 mm thick cement plaster in CM 1:4 proportion on both sides with providing and fixing C.I. manhole frame and cover in RCC 1:2:4 coping or RCC 1:2:4 proportion x 15 cm thick slab, etc. complete as directed by Engineer-in-charge.					
	Note : Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M.					
A	As above of 60 x 45 cm internal size and depth upto 0.9 M with 60 x 45 cm size CI manhole frame and cover of 40 kg.	No	9809	1716		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1369	401		
B	As above of 90 x 45 cm internal size and depth upto 1.2 M with 90 x 45 cm size CI manhole frame and cover of 40 kg.	No	12424	2427		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1580	462		
C	As above of 90 x 60 cm internal size and depth upto 1.2 M with 90 x 60 cm size CI manhole frame and cover of 50 kg.	No	14200	2691		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1707	504		
D	As above of 90 x 90 cm internal size and depth upto 1.2 M with 53 cm dia CI manhole frame and cover of 90 kg. fixed in RCC slab.	No	19732	3379		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2083	612		
E	As above of 1.2 x 1.2 M internal size and depth upto 1.2 M with 53 cm dia CI manhole frame and cover of 90 kg. fixed in RCC slab.	No	23042	4258		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2654	790		
F	As above of 1.5 x 1.5 M internal size and depth upto 1.5 M with 53 cm dia CI manhole frame and cover of 90 kg. fixed in RCC slab.	No	29656	6093		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	3372	989		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
3	**Valve chamber with precast steel fibre reinforced concrete frame and covers (S.F.R.C. frame and covers)** Providing and constructing B.B. masonry valve chamber with 15 cm thick 1:3:6 proportion PCC bedding, excluding excavation, B.B. masonry in CM 1:5 proportion precast S.F.R.C. frame and cover, etc. complete as directed by Engineer-in-charge.					
	Note : Wall thickness : 0.23 M for depth of 1.2 M and 0.35 M for balance depth exceeding 1.2 M.					
A	As above of 60 x 45 cm internal size and depth upto 0.9 M with S.F.R.C. frame and cover.	No	8888	1923		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1444	336		
B	As above of 90 x 45 cm internal size and depth upto 1.2 M with S.F.R.C. frame and cover.	No	12772	2781		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1629	378		
C	As above of 90 x 60 cm internal size and depth upto 1.2 M with S.F.R.C. frame and cover.	No	13724	3059		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	1742	409		
D	As above of 90 x 90 cm internal size and depth upto 1.2 M with S.F.R.C. frame and cover.	No	17404	3616		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2038	480		
E	As above of 1.2 x 1.2 M internal size and depth upto 1.2 M with S.F.R.C. frame and cover of size 540 mm dia. fixed in RCC slab.	No	21532	4467		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	2740	636		
F	As above of 1.5 x 1.5 M internal size and depth upto 1.5 M with S.F.R.C. frame and cover of size 540 mm dia. fixed in RCC slab.	No	28980	6013		
a)	Add for every increase in depth of 30 cm or part thereof	30 cm depth	3450	792		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
4	Providing and fixing in position **M.S. air valve boxes fabricated** with 2 mm thick M.S. plate, 30 x 30 x 3 mm size M.S. angle frame, concreting in M-150 for fixing the box in position, applying two coats of oil paint, painting chainage, locking arrangement, etc. complete as directed by Engineer-in-charge.					
a)	For single ball air valve	No	2388	212		
b)	For double ball air valve	No	3353	435		
5	Providing and fixing **C.I. road box** including loading, unloading and carting to site of work including all necessary excavation in all types of strata and fixing in murum packing, etc. complete.					
a)	100 mm x 225 mm (20 kg)	No	1544	349		
b)	225 mm x 300 mm (40 kg)	No	3043	689		
6	Providing and constructing on sewer, **B. B. masonry circular manhole with concentric cone 1.2 M dia. at bottom and 0.5 M dia. at top** and upto a depth of 2.00 M with 23 cm brick work in CM 1:4 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C. C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc. complete as directed by Engineerin-charge.	No	26498	5096		
a)	Rebate for every decrease in depth of 50 cm (Rebate to be taken in proportionate to decerease in depth)	50 cm depth	3556	1325		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
7	Providing and constructing on sewer, B. B. masonry circular manhole concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 5.00 M with 23 cm brick work, upto depth of 2 M from top and 35 cm thick brick work for balance depth in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C. C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc. complete as directed by Engineerin-charge.	No	75545	6591		
a)	Rebate for every decrease in depth of 50 cm (Rebate to be taken in proportionate to decerease in depth)	50 cm depth	7691	3439		
8	Providing and constructing on sewer, B.B. masonry circular manhole with concentric cone 1.5 M dia. at bottom and 0.5 M dia. at top and upto a depth of 9.00 M with 23 cm brick work, upto depth of 2 M from top and 35 cm thick brick work for depth of 2 M and 45 cm thick brick work for remaining depth upto 9 M in CM 1:4 proportion with 20 mm thick smooth plaster on both sides in CM 1:2 proportion excluding excavation including foundation concrete 250 mm thick and haunches and channels in C.C. 1:2:4 proportion, finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., 1:2:4 coping and providing and fixing approved make and quality S.F.R.C. frame and cover of 56 cm dia. etc. complete as directed by Engineer-in-charge.	No	161223	10448		
a)	Rebate for every decrease in depth of 50 cm (Rebate to be taken in proportionate to decerease in depth)	50 cm depth	9773	5148		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
9	Providing and constructing **B.B. masonry circular manhole without conical shape** excluding excavation, RCC 1:2:4 proportion, 20 cm bedding brick masonry in CM 1:4 proportion, 23 cm thick for 2 M depth from top 35 cm thick for 2 M below it and 45 cm thick for balance depth, RCC slab at top and at 2 M depth from top for supporting brick masonry above it, plastering with smooth finish in CM 1:2 proportion, C.C. 1:2:4 finishing channels in smooth rendering, providing C.I. dapuri type steps each weighing 5.5 kg., providing and fixing S.F.R.C. frame and co ver of 56 cm dia. at top including cost of all materials and labour, etc. complete.					
A	1.00 M dia. x 2 M depth	No	22544	5210		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	3345	885		
B	1.00 M dia. x 3 M depth	No	37175	8577		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	5795	1387		
C	1.00 M dia. x 4.5 M depth	No	57824	13633		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	7419	1759		
D	1.50 M dia. x 2 M depth	No	37504	8529		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	5029	1274		
E	1.50 M dia. x 3 M depth	No	50964	11956		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	7721	1893		
F	1.50 M dia. x 4.5 M depth	No	78323	13687		
a)	Rebate for every decrease in depth of 50 cm or part thereof	50 cm depth	9853	2380		
10	**Drainage Drops** Providing 150 mm dia. S.W. or R.C.C. pipes in **vertical drop arrangement** including providing 150 mm dia S.W. and R.C.C. pipe fixed in B.B. masonry of manhole at the required level including providing 150 mm dia double tee, 150 mm dia right angled bend, encasing in B.B. masonry 1:4 proportion all around the pipe, double tee, bend upto the foundation of manhole, jointing, cutting, filleting including neat cement rendering, plugging the opening with jungle wood knob complete as directed by Engineer-in-charge (0.60 M depth) excluding cost of chamber.		2089	411		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	759	151		
11	As above but for 200 mm dia pipes and depth 0.60 M	No	2704	510		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	877	175		
12	As above but for 250 mm dia pipes and depth 0.60 M	No	3298	628		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	1042	223		
13	As above but for 300 mm dia pipes and depth 0.60 M	No	3985	751		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	1171	236		
14	As above but for 400 mm dia pipes and depth 0.60 M	No	5557	1032		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	1518	323		
15	As above but for 500 mm dia pipes and depth 0.60 M	No	7093	1442		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	1862	361		
16	As above but for 600 mm dia pipes and depth 0.60 M	No	9094	1857		
a)	Extra for every 0.5 M depth beyond initial depth of 0.60 M.	50 cm depth	2147	425		
17	Providing and fixing in position **steel fibre reinforced concrete (S.F.R.C.) frame and covers** of approved make including loading, unloading, transportation, all taxes, etc. complete as directed by Engineer-in-charge (20 tonnes capacity).					
a)	540 mm dia	No	3036	674		
b)	560 mm dia	No	3973	907		
c)	90 x 45 cm size	No	3036	674		
d)	90 x 60 cm size	No	3290	729		
e)	60 x 60 cm size	No	3005	666		
f)	60 x 45 cm size	No	2604	578		
18	Providing and fixing **intercepting sewer trap** including concrete bedding, etc. complete.					
a)	150 x 100 mm	No	478	84		
b)	100 x 100 mm	No	342	60		
19	Providing and fixing in position **S.W. bends** of various size, etc. complete.					
a)	100 mm	No	152	26		
b)	150 mm	No	177	30		
20	Providing and fixing **'Y' junction** and labour, etc. complete.					

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	**Labour**	**Complete**	**Labour**
a)	Saddle junction 100 x 100 M	No	185	30		
b)	'Y' junction 150 x 150 x 100 mm	No	213	36		
c)	'Y' junction 300 x 300 x 300 mm	No	251	43		
d)	'Y' junction 300 x 300 x 100 mm	No	213	36		
21	Providing and fixing in position **A.C. soil ventilators / slotted** as necessary and as directed by Engineer-in-charge, etc. complete.					
a)	80 mm	No	180	30		
b)	100 mm	No	219	36		
c)	150 mm	No	310	50		
22	Providing and fixing **A.C. soil pipe or downtake pipe** with all required fittings, taking hole, etc. complete (as per manufacturer's code of practice).					
a)	80 mm	No	316	53		
b)	100 mm	No	376	62		
c)	150 mm	No	589	96		
23	Providing and fixing **Cast Iron soil pipe** of 1.8 M length including taking out holes and all required fittings, etc. complete.					
	S/S					
a)	80 mm	No	1093	179		
b)	100 mm	No	1241	205		
	D/S					
a)	80 mm	No	1180	194		
b)	100 mm	No	1368	225		

SECTION - M

WELL SINKING & RIVER INFILTRATION WORKS

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	Providing, constructing **coffer dam** in river basin / dam storages as per type design including excavation, filling the middle portion with B.C. soil (in gunny bags if required). Providing impervious / semipervious materials on both sides of B.C. soil (in gunny bags if required) including ramming, compacting to the satisfaction of Engineer-in-charge till the completion of work including dismantling coffer dam after completion of works and disposing off the material as directed by the Engineer-in-charge.	Cum	682	23		
	Note : Pay line maximum. Top width payable shall be 2 Mtr. and maximum payable side slopes shall be 1.5 horizontal to 1 vertical, if the constructed top width of the side slopes are less, then the measurements at actual are payable. Extra top width or flat slopes are not payable. Contractor is free to use ballies, plastic sheets, piles, pipes, CGI sheets for supporting hearting materials instead of impervious/ semi-pervious hearting materials for which no extra payments shall be payable. 30% payment shall be withheld for dismantling of coffer dam. This foot note shall appear in tender condition. (Type section is shown on last page of type design section of CSR).					
2	Providing and fabricating at work shop, carting to site of work, including transport, loading, unloading, hoisting, lowering and setting out at actual site of well, sinking **M.S. plate cutting edge for R.C.C. well curb** consisting of 350 mm M.S. plate, 10 mm thick, champhering at bottom. Cutting edge should be provided in pieces not less than 2 M in length. Each joint should be plain from outside and jointed by gusset plate 400 x 200 x 12 mm thick M.S. plate with 12 nos. of 20 mm dia. crushank headed bolts (gusset plates from inside) with unequal angle of 90 x 60 x 10 mm should be welded from top of chamfered portion at 14 mm from bottom so that 15 mm side should be in contact with cutting edge with overlap of 300 mm joints. 16 mm dia bar should be welded to M.S. plate 200 mm below the top surface and length should be 1.8 M above plate with a bend 300 mm from plate surface including 3 coats of anticorrosive paint as directed by Engineerin-charge.	Kg	94	21		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
3	Providing and filling **puddle** (selected good impervious clay) in Kolhapur type weirs in proper layers of 15 cm including watering, ramming and compaction, etc. complete with all leads and lifts.	Cum	308	133		
4	Providing and filling around the well **boulders filling** of selected variety and size of boulders including cost of all materials, labour, transportation, etc. complete with all leads and lifts.	Cum	974	237		
5	Providing and fixing 80 mm dia **A.C./ P.V.C. pipe weep holes** at 1.5 M c/c staggered including cost of all materials and labour involved with all leads and lifts, etc. complete.	RMT	201	22		
6	Providing and fixing M.S. chequerred plate flooring of following thickness supported on M.S. angles (25 x 25 x 5 mm size) including welding, cutting and fabricating the plates to the required square or rounding shape, making holes in the plate, including providing and applying 3 coats of anticorrosive paint, etc. complete as directed by Engineer-in-charge.					
a)	6 mm thick	Sqm	4125	581		
b)	8 mm thick	Sqm	5111	568		
7	Providing at site of works ISI standard **RCC slotted pipes of NP-3 class** including cost of all central and local taxes, octroi, inspection, transportation, etc. complete including cost of RCC collar, etc. complete.					
a)	450 mm dia	RMT	4411			
b)	600 mm dia	RMT	6612			
8	**Lowering, laying and jointing RCC slotted pipes** of following diameters including all leads and lifts, cost of jointing material, labour, etc. complete as directed by Engineer-in-charge.					
a)	450 mm dia	RMT	246	151		
b)	600 mm dia	RMT	328	198		
9	**Lowering, laying and jointing CI 'B' class connecting mains with rubber gaskets** including transportation of pipes from stores to site of works, cost of jointing materials, cost of rubber gasket with all leads and lifts, etc. complete.					
i)	300 mm dia	RMT	284	210		
ii)	350 mm dia	RMT	331	250		
iii)	400 mm dia	RMT	424	316		
iv)	450 mm dia	RMT	437	313		
v)	500 mm dia	RMT	520	364		
vi)	600 mm dia	RMT	712	508		
vii)	700 mm dia	RMT	946	640		
viii)	750 mm dia	RMT	1069	735		

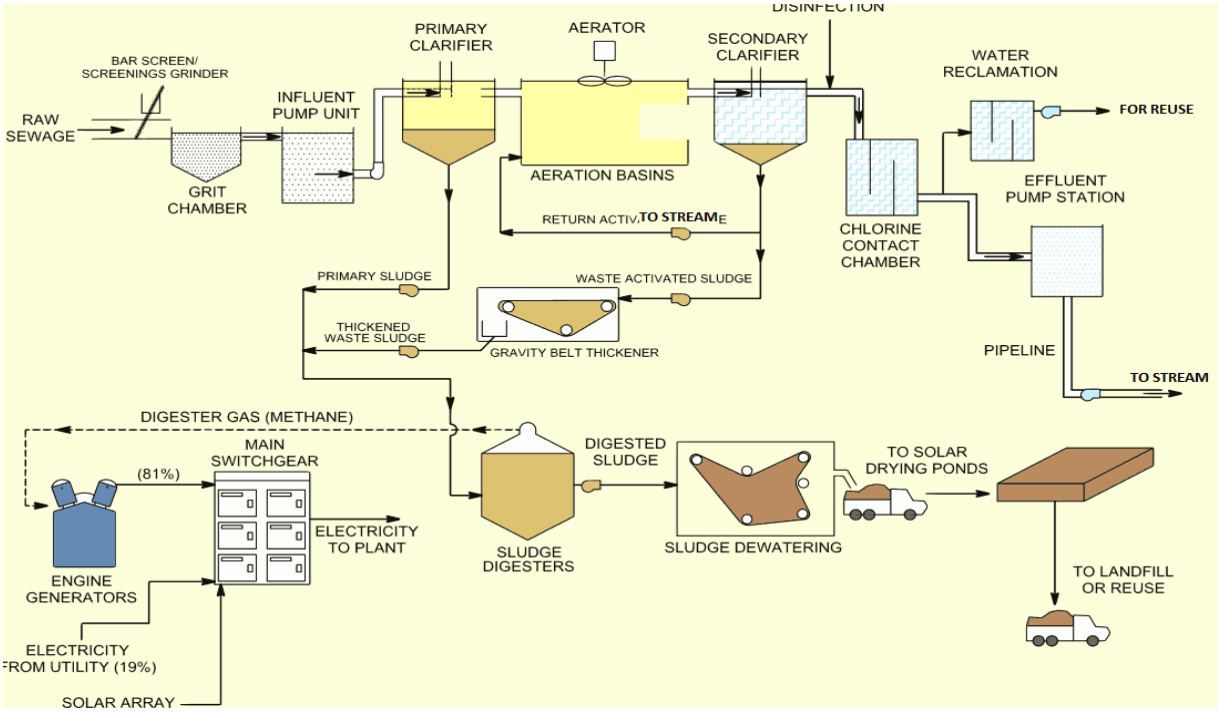
Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
10	Providing, lowering, laying and placing in position, **shrouding material** for porous pipe gallery / slotted pipe gallery / trench gallery with all leads and lifts involved including transportation of materials to site of works, screening and washing of materials and placing in position with given section, etc. complete as directed by Engineer-in-charge.					
a)	40 mm gauge pebbles	Cum	1688	346		
b)	12 mm to 20 mm gauge pebbles	Cum	1988	407		
c)	6 to 12 mm gauge pebbles	Cum	2239	461		
d)	Coarse sand (from river sand at site)	Cum	1242	299		
e)	Fine sand (from river sand at site)	Cum	1420	231		
11	Providing and fixing in position **CI dapuri steps** or 22 mm dia. M.S. bar step with proper anchorage, etc. and providing and applying 3 coats of anticorrosive paint, etc. complete as directed by Engineer-in-charge.	No	387	87		
12	Providing and fixing **M.S. sluice gates** in position as per detailed drawings and specification including cost of all materials, labour, operating pedestal, connecting rod, painting with three coats of anti-corrosive paint, etc. complete as directed by Engineer-in-charge.	Kg	119	39		
13	Providing and fixing in position **C.I. / M.S. rose pieces** in intake wells including cost of all materials and labour, painting with three coats of anticorrosive oil paint, etc. complete as directed by Engineer-in-charge.	Kg	100	18		
14	Providing and fixing in position 80 mm dia. x 1.5 M deep **G.I. pipe anchorage** below invert of pipeline for nalla or river crossings where soft materials or sand is anticipated for considerable depth including hammering the pipe upto 1.5 M depth below invert of pipe, removing sand/ loose materials in the pipe with small and long spoons, providing and fixing 16 mm dia x 1.75 M clear length M.S. hook for holding the pipeline in position, through G.I. pipe already hammered and cleared, pouring cement grout through this pipe upto top of pipe to form a cement bulb at bottom of pipe and to hold M.S. hook tight in the pipe including cost of all material and labour involved but excluding cost of excavation on pipeline for its exposure upto invert, as per type design.	Anchor Pipe				
	Note : This type of pipe anchorage shall be provided at 30 M centre to centre on alternate side of pipeline for full width of nalla or river.					
15	**Providing and spreading** around the well 1 mm thick **polyethylene sheet** complete as directed by Engineer-in-charge.	Sqm	25	4		

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
16	**Dewatering charges for estimation purpose for head works in river basin or dam :**					
i)	Approach Channel	RMT	6219	934		
ii)	Intake Well of 3 M dia.	No	81798	13063		
iii)	Inspection Well of 2 M dia.	No	53189	9019		
iv)	Connecting Main	RMT	5000	841		
v)	Jack Well of 6 M dia.	No	249579	34612		
vi)	Approach Bridge	RMT	834	196		
	Notes					
1)	The Contractor at his request may be allowed to start construction of masonry steining so as not to allow silting of well in oncoming monsoon and while paying masonry, 25% amount shall be withheld and released only when excavation to the full depth is completed.					
2)	Dewatering : Total dewatering charges are to be proposed in the tender as lumpsum amount and 75% is payable for excavation and 25% is payable for construction of well/ gallery. Out of 75% excavation, break-up shall be as under:					
	25% for last 1 M depth.					
	20% for 2 M depth which just above last 1 M depth.					
	15% for 2 M depth which just above last 3 M depth.					
	15% for the rest of depth from water table level.					
3)	The provisions made for dewatering in the tender being on lumpsum basis, the same shall have to be reduced / increased proportionately as the length of approach channel, connecting main or approach bridge reduces / increases during actual execution.					
	Condition Nos. (1) & (2) shall appear in tender conditions.					
17	**Carrying out recuperation/ yield test** for asserting the discharge of constructed well/ excavated profile as directed by Engineer-in-charge. The test is carried out by drawing down water from the well/profile below normal/ subsoil water level upto full depth rise in water level is recorded. The normal water level/ subsoil water level in the well/ profile as well as stainer/ suction level at pump as per design of W.S. scheme shall be recorded prior to the test including cost of all materials, overhead, labourers, etc. completed as directed.					
	The test shall be carried out as per Tech. Circular No. 2597 & 2011 -97 and shall be carried out for 7 days.					
i)	Lps more than 25,000	Day	3010	1988		
ii)	Lps less than 25,000	Day	2167	1815		

SECTION - N

TRIAL RUN

Sr. No.	Description	Unit	Rate (Rs.) 2021-22		Rate (Rs.) 2022-2023	
			Complete	Labour	Complete	Labour
1	**Commissioning, running and maintaining the scheme** to quantities, rated capacity, including manning necessary personnel such as operator, valveman, etc. as per requirements of the scheme and who should also administer chemical dose for a period of **1 month** for individual scheme and for regional scheme, together with training of personnel spared by MJP / Local Body and handing over the scheme to Local Body after completion of the above period as directed by Engineer-in-charge.					
	Note : Required chemicals to be supplied by Department free of cost and electricity bill will also be paid by the Department.					
a)	For single village without WTP	Month	26244	17200		
b)	For single village with WTP	Month	30574	20067		
c)	For regional scheme upto 3 villages with raw water pumping, one treatment plant with pumps, raw water pumping main, leading main, ESR, BPT and distribution system, etc.	Month	54255	44252		
d)	For regional scheme upto 3 villages with raw water pumping with pumps, raw water pumping main, leading main, ESR, BPT and distribution system, etc. (For six months) without WTP	Month	35108	28622		
e)	For regional scheme upto 3 villages trial period shall be one year with raw water pumping, one treatment plant with pumps, raw water pumping main, leading main, ESR, BPT and distribution system, etc. (For one year)	Month	55034	44481		
f)	For regional scheme upto 3 villages trial period shall be one year with raw water pumping with pumps, raw water pumping main, leading main, ESR, BPT and distribution system, etc. (For one year) without WTP	Month	35683	29056		
g)	Add for every additional villages or part thereof	Month	9691	6905		
h)	Add for every additional pumping station	Month	16096	14941		



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