

JAJMAU PHASE 1 - NAWABGANJ IPS

Date of Issue: 08-12-2022

CHECKLIST OF BALANCE WORKS

Issued by: STC, Kanpur

S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
A	Nawabganj IPS					
A.1	Rising main					
1		Rising main & trunk sewer line maintenace & cleaning work, should be conducted as per CA	NA	Not Started	Pending	
A.2	Coarse screen channel (Manual)					
1		Manual Coarse screen, 1 No.	Pending	Pending	Pending	
2		Sluice gate, 1 Nos	Pending	Pending	Pending	
A.3	Wet well					
1		Manual screen, 2 Nos.	Pending	Pending	Pending	
2		Wheeled trolley, 3 Nos.	Pending	Pending	NA	
3		Ultrasonic Level transmitter, 2 Nos.	Pending	Pending	Pending	
A.4	Pump House-1					
1		Horizontal Centrifugal Pump, 3 Nos. (2W+1S)	Pending	Pending	Pending	
2		Sluice gate valves, 6 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 3 Nos.	Pending	Pending	Pending	
4		Sluice valve, 250 mm, 2 Nos.	Pending	Pending	Pending	
5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		Ball valves, 6 Nos.	Pending	Pending	Pending	
7		EOT hoist, 1 No.	Pending	Pending	Pending	
8		Pressure indicator , 3 Nos.	Pending	Pending	Pending	
9		pressure transmitter , 3 Nos.	Pending	Pending	Pending	
10		Inlet flow meter-1nos.	Pending	Pending	Pending	
11		Inlet flow meter Chamber	NA	Pending	Pending	
A.5	Pump House-2					
1		Horizontal Centrifugal Pump, 4 Nos. (2W+2S)	Completed	Completed	Pending	

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2		Sluice gate valves, 8 Nos.	Completed	Completed	Pending	
3		Non return valve (NRV), 4 Nos.	Completed	Completed	Pending	
4		Sluice valve, 300 mm, 2 Nos.	Pending	Pending	Pending	
		Ball valves, 8 Nos.				
5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		EOT hoist, 1 No.	Pending	Pending	Pending	
7		Pressure indicator , 4 Nos.	Pending	Pending	Pending	
8		pressure transmitter , 4 Nos.	Pending	Pending	Pending	
9		Inlet flow meter-1nos.	Pending	Pending	Pending	
10		Inlet flow meter Chamber	NA	Pending	Pending	
A.6	Electrical & Related Works					
3		Main Distribution Panel-1	Pending	Pending	Pending	
4		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Pending	Pending	Pending	
5		Indoor & Outdoor Lighting	Pending	Pending	Pending	
6		MCC Panel-2 nos	Pending	Pending	Pending	
		APFC Panel -1 nos	Pending	Pending	Pending	
A.7	Civil & Site Improvement Works					
1		Pump house	NA	Pending	Pending	Pump hous 1, renvation still pending, Pump house 2- Partially completed
2		Overhead service tank	Pending	Pending	Pending	
3		Service water pumps & plumbing	Pending	Pending	Pending	
4		Tiling / Flooring at all Buildings	Pending	Pending	Pending	
5		All Buildings Roof rainwater drains, Roof treatment, Plinth protection	NA	Pending	Pending	

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6		Indoor & Outdoor Painting	Completed	Pending	Pending	
7		Doors, Windows, Shutters, etc.	Pending	Pending	Pending	
8		Stormwater drains	NA	Pending	Pending	
10		Landscaping	Pending	Pending	Pending	
11		Entry Road	NA	Pending	Pending	
12		Internal Pathways / Access Roads	NA	Pending	Pending	
A.8	Site Safety & Security					
1		Guard Room	NA	Not Started	Pending	
2		Entrance Gate	NA	Pending	Pending	
3		Boundary Wall	NA	Pending	Pending	
4		Handrailing	Pending	Not Started	Pending	
5		Fire fighting extinguishers	Pending	Pending	Pending	
6		Nomenclature on Units / Buildings, Signboards, Site Plan, Project Banner, Site Name Banner, etc.	Pending	Pending	Pending	
7		Site Surveyance / CCTV	NA	Pending	Pending	
8		Logbooks - Attendance Register, Visitor logs, RSPS logs, DG logs, Maintenance logs, etc.	NA	Work in Progress	Pending	
A.9	Miscellaneous					
1		Permanent Gasket	Pending	Pending	Pending	
2		Hydrotest for all pumps discharge lines	NA	NA	Pending	
3		Hydrotest for all water retaining units	NA	NA	Pending	
4		Pipe support for all units	Pending	Pending	Pending	
5		Stud bolts for all units	Pending	Pending	Pending	
6		Pipes and fittings for all units	Pending	Pending	Pending	
7		Painting for all units & equipments	Pending	Pending	Pending	
8		<u>Submittals:</u>				
8.1		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	

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8.2		Design / Specifications for Pressure gauge	Pending	NA	Pending	
8.3		Design / Specifications for Radar level transmitter	Pending	NA	Pending	
8.4		Design / Specifications for Conductivity type level switch	Pending	NA	Pending	
8.5		Design / Specifications for Mechanical float type level switch	Pending	NA	Pending	
8.6		Design / Specifications for Temperature gauge	Pending	NA	Pending	
8.7		Design / Specifications for Level switch	Pending	NA	Pending	
8.8		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.9		Drawing & documents for PLC/SCADA system	Pending	NA	Pending	
8.10		O&M Manual	Pending	NA	Pending	
8.11		Scheduled Maintenance Plan	Pending	NA	Pending	
8.12		Spares List	Pending	NA	Pending	
8.13		Insurance Policy for the Facility	Pending	NA	Pending	To be included with 130 MLD STP

JAJMAU PHASE 1 - PARMAT IPS

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
B	PARMAT IPS					
B.1	Rising main					
1		Rising main & trunk sewer line maintenace & cleaning work, should be conducted as per CA	NA	Not Started	Pending	
B.2	Wet well					
1		Manual screen, 2 Nos.	Pending	Pending	Pending	
2		Wheeled trolley, 2 Nos.	Pending	Pending	NA	
3		Ultrasonic Level transmitter, 1 Nos.	Pending	Pending	Pending	
B.3	Pump House-1					
1		Horizontal Centrifugal Pump, 3 Nos. (2W+1S)	Completed	Pending	Pending	
2		Sluice gate valves, 6 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 3 Nos.	Pending	Pending	Pending	
4		Sluice valve, 600 mm, 2 Nos.	Pending	Pending	Pending	
5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		Ball valves, 6 Nos.	Pending	Pending	Pending	
7		EOT hoist, 1 No.	Pending	Pending	Pending	
8		Pressure indicator , 3 Nos.	Pending	Pending	Pending	
9		pressure transmitter , 3 Nos.	Pending	Pending	Pending	
10		Inlet flow meter-1nos	Pending	Pending	Pending	
11		Inlet flow meter Chamber	NA	Pending	Pending	
B.4	Pump House-2					
1		Horizontal Centrifugal Pump, 2 Nos. (1W+1S)	Completed	Pending	Pending	
2		Sluice gate valves, 4 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 2 Nos.	Pending	Pending	Pending	
4		Sluice valve, 450 mm, 1 Nos.	Pending	Pending	Pending	
		Ball valves, 4 Nos.	Pending	Pending	Pending	

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5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		EOT hoist, 1 No.	Pending	Pending	Pending	
7		Pressure indicator , 2 Nos.	Pending	Pending	Pending	
8		pressure transmitter , 2 Nos.	Pending	Pending	Pending	
9		Inlet flow meter	Pending	Pending	Pending	
10		Inlet flow meter Chamber	NA	Pending	Pending	
B.5	Pump House-3					
1		Vertical turbine pumps , 2 Nos. (1W+1S)	Pending	Pending	Pending	
2		Sluice gate valves, 4 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 2 Nos.	Pending	Pending	Pending	
4		Sluice valve, 1 Nos.	Pending	Pending	Pending	
		Ball valves, 4 Nos.	Pending	Pending	Pending	
5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		EOT hoist, 1 No.	Pending	Pending	Pending	
7		Pressure indicator , 2 Nos.	Pending	Pending	Pending	
8		pressure transmitter , 2 Nos.	Pending	Pending	Pending	
9		Inlet flow meter	Pending	Pending	Pending	
10		Inlet flow meter Chamber	NA	Pending	Pending	
B.6	Electrical & Related Works					
4		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Pending	Pending	Pending	
		Main Distribution panel -2nos.	Pending	Pending	Pending	
		MCC panel -2 nos	Pending	Pending	Pending	
5		Indoor & Outdoor Lighting	Pending	Pending	Pending	
6		APFC Panel-2 nos.	Pending	Pending	Pending	
B.7	Civil & Site Improvement Works					
1		Pump house	NA	Not Started	Pending	

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2		Overhead service tank	Pending	Not Started	Pending	
3		Service water pumps & plumbing	Pending	Not Started	Pending	
4		Tiling / Flooring at all Buildings	Pending	Not Started	Pending	
5		All Buildings Roof rainwater drains, Roof treatment, Plinth protection	NA	Not Started	Pending	
6		Indoor & Outdoor Painting	Completed	Pending	Pending	internal paint work pending
7		Doors, Windows, Shutters, etc.	Pending	Not Started	Pending	
8		Stormwater drains	NA	Not Started	Pending	
10		Landscaping	Pending	Not Started	Pending	
11		Entry Road	NA	Not Started	Pending	
12		Internal Pathways / Access Roads	NA	Not Started	Pending	
B.8	Site Safety & Security					
1		Guard Room	NA	Not Started	Pending	
2		Entrance Gate	Pending	Not Started	Pending	
3		Boundary Wall	NA	Not Started	Pending	
4		Handrailing	Pending	Pending	Pending	
5		Fire fighting extinguishers	Pending	Pending	Pending	
6		Nomenclature on Units / Buildings, Signboards, Site Plan, Project Banner, Site Name Banner, etc.	Pending	Pending	Pending	
7		Site Surveyance / CCTV	Pending	Pending	Pending	
8		Logbooks - Attendance Register, Visitor logs, IPS logs, DG logs, Maintenance logs, etc.	NA	Work in Progress	Pending	
B.9	Miscellaneous					
1		Permanent Gasket	Pending	Pending	Pending	
2		Hydrotest for all pumps discharge lines	NA	NA	Pending	
3		Hydrotest for all water retaining units	NA	NA	Pending	
4		Pipe support for all units	Pending	Pending	NA	
5		Stud bolts for all units	Pending	Pending	NA	
6		Pipes and fittings for all units	Pending	Pending	Pending	

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7		Painting for all units & equipments	Pending	Pending	Pending	
8		<u>Submittals:</u>				
8.1		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.2		Design / Specifications for Pressure gauge	Pending	NA	Pending	
8.3		Design / Specifications for Radar level transmitter	Pending	NA	Pending	
8.4		Design / Specifications for Conductivity type level switch	Pending	NA	Pending	
8.5		Design / Specifications for Mechanical float type level switch	Pending	NA	Pending	
8.6		Design / Specifications for Temperature gauge	Pending	NA	Pending	
8.7		Design / Specifications for Level switch	Pending	NA	Pending	
8.8		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.9		Drawing & documents for PLC/SCADA system	Pending	NA	Pending	
8.10		O&M Manual	Pending	NA	Pending	
8.11		Scheduled Maintenance Plan	Pending	NA	Pending	
8.12		Spares List	Pending	NA	Pending	
8.13		Insurance Policy for the Facility	Pending	NA	Pending	To be included with 130 MLD STP

JAJMAU PHASE 1 - BABA GHAT IPS

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
C	PARMAT IPS					
C.1	Rising main					
1		Rising main & trunk sewer line maintenace & cleaning work, should be conducted as per CA	NA	Not Started	Pending	
C.2	Manual coarse screen channel					
1		Manual screen, 2 Nos.	Pending	Pending	Pending	
2		Sluice gate , 3 Nos.	Pending	Pending	Pending	
3		Wheeled trolley, 1 Nos.	Pending	Pending	NA	
4		Ultrasonic Level transmitter, 1 Nos.	Pending	Pending	Pending	
C.3	wet well					
1		Pumps, 3 Nos. (2W+1S)	Completed	Pending	Pending	
2		Sluice gate valves, 3 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 3 Nos.	Pending	Pending	Pending	
4		Sluice valve, 2 Nos.	Pending	Pending	Pending	
5		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
6		Ball valves, 6 Nos.	Pending	Pending	Pending	
7		EOT hoist, 1 No.	Pending	Pending	Pending	
8		Pressure indicator , 3 Nos.	Pending	Pending	Pending	
9		pressure transmitter , 3 Nos.	Pending	Pending	Pending	
10		Inlet flow meter	Pending	Pending	Pending	
11		Inlet flow meter Chamber	NA	Pending	Pending	
C.4	Electrical & Related Works					
1		PMCC Panel- 1 nos	Pending	Pending	Pending	
2		APFC Panel 1 nos.	Pending	Pending	Pending	

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
3		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Pending	Pending	Pending	
4		Indoor & Outdoor Lighting	Pending	Pending	Pending	
C.5	Civil & Site Improvement Works					
1		Inlet chamber	NA	Pending	Pending	
3		Pump house	NA	Pending	Pending	
4		Valve chamber	NA	Not Started	Pending	
5		Inlet flow meter Chamber	NA	Not Started	Pending	
6		Overhead service tank	Pending	Pending	Pending	
7		Service water pumps & plumbing	Pending	Pending	Pending	
8		Tiling / Flooring at all Buildings	Pending	Not Started	Pending	
9		All Buildings Roof rainwater drains, Roof treatment, Plinth protection	NA	Not Started	Not Started	
10		Indoor & Outdoor Painting	Completed	Pending	Pending	
11		Doors, Windows, Shutters, etc.	Pending	Not Started	Pending	
12		Stormwater drains	NA	Pending	Pending	
13		Landscaping	NA	Not Started	Pending	
14		Entry Road	NA	Not Started	Pending	
15		Transformer area	NA	Not Started	Pending	
16		Internal Pathways / Access Roads	NA	Not Started	Not Started	
C.6	Site Safety & Security					
1		Handrailing	Pending	Pending	Pending	
2		Fire fighting extinguishers	Pending	Pending	Pending	
3		Nomenclature on Units / Buildings, Signboards, Site Plan, Project Banner, Site Name Banner, etc.	Pending	Pending	Pending	
4		Site Surveyance / CCTV	Pending	Pending	Pending	

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5		Logbooks - Attendance Register, Visitor logs, IPS logs, DG logs, Maintenance logs, etc.	NA	Work in Progress	NA	
C.7	Miscellaneous					
1		Permanent Gasket	Pending	Pending	Pending	
2		Hydrotest for all pumps discharge lines	NA	NA	Pending	
3		Hydrotest for all water retaining units	NA	NA	Pending	
4		Pipe support for all units	Pending	Pending	Pending	
5		Stud bolts for all units	Pending	Pending	Pending	
6		Pipes and fittings for all units	Pending	Pending	Pending	
7		Painting for all units & equipments	Pending	Pending	Pending	
8		<u>Submittals:</u>				
8.1		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.2		Design / Specifications for Pressure gauge	Pending	NA	Pending	
8.3		Design / Specifications for Radar level transmitter	Pending	NA	Pending	
8.4		Design / Specifications for Conductivity type level switch	Pending	NA	Pending	
8.5		Design / Specifications for Mechanical float type level switch	Pending	NA	Pending	
8.6		Design / Specifications for Temperature gauge	Pending	NA	Pending	
8.7		Design / Specifications for Level switch	Pending	NA	Pending	
8.8		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.9		Drawing & documents for PLC/SCADA system	Pending	NA	Pending	
8.10		O&M Manual	Pending	NA	Pending	
8.11		Scheduled Maintenance Plan	Pending	NA	Pending	

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8.12		Spares List	Pending	NA	Pending	
8.13		Insurance Policy for the Facility	Pending	NA	Pending	To be included with 130 MLD STP

JAJMAU PHASE 1 - CSPS

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D	CSPS					
D.1	Rising main					
1		Rising main & trunk sewer line maintenace & cleaning work, should be conducted as per CA	NA	Not Started	Pending	
D.2	Receiving chamber					
1		Sluice gate, 2 Nos	Pending	Pending	Pending	
2		Manual Coarse screen, 2 Nos.	Pending	Pending	Pending	
D.3	Coarse screen channel (Mechanical)					
1		Mechanical Coarse screen, 2 No.	Pending	Pending	Pending	
2		Sluice gate, 2 Nos	Pending	Pending	Pending	
3		Level indicating transmitter, 2 Nos.	Pending	Pending	Pending	
4		Wheeled trolley, 2 Nos.	Pending	Pending	NA	
D.4	Wet well					
1		Ultrasonic level transmitter, 1 Nos.	Pending	Pending	Pending	
D.5	Pump House					
1		Horizontal Centrifugal Pump, 7 Nos. (4W+3S)	Pending	Pending	Pending	
2		Sluice valves, 20 Nos.	Pending	Pending	Pending	
3		Non return valve (NRV), 9 Nos.	Pending	Pending	Pending	
4		Miscellaneous items (pipes, fittings etc.), 1 lot	Pending	Pending	Pending	
5		Ball valves, 14 Nos.	Pending	Pending	Pending	
6		EOT hoist, 1 No.	Pending	Pending	Pending	
7		Pressure indicator , 7 Nos.	Pending	Pending	Pending	
8		pressure transmitter , 7 Nos.	Pending	Pending	Pending	
9		Inlet flow meter-1nos	Pending	Pending	Pending	

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D.6	Electrical & Related Works					
1		Transformer 630 KVA -2nos	Work in Progress	Pending	Pending	
2		DG set	Pending	Pending	Pending	
		VFD Starter -7 nos	Pending	Pending	Pending	
3		Power Distribution board-3 nos.	Pending	Pending	Pending	
4		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Pending	Pending	Pending	
5		Indoor & Outdoor Lighting	Pending	Pending	Pending	
8		APFC Panel-2 nos	Pending	Pending	Pending	
D.7	Civil & Site Improvement Works					
1		Inlet chamber	NA	Not Started	Pending	
2		Collection sump	NA	Not Started	Pending	
3		Pump house	NA	Not Started	Pending	
4		Valve chamber	NA	Not Started	Pending	
5		Inlet flow meter chamber	NA	Not Started	Pending	
6		Overhead service tank	Pending	Pending	Pending	
7		Service water pumps & plumbing	Pending	Pending	Pending	
8		Tiling / Flooring at all Buildings	Pending	Pending	Pending	
9		All Buildings Roof rainwater drains, Roof treatment, Plinth protection	Pending	Pending	Pending	
10		Indoor & Outdoor Painting	Completed	Not Started	Pending	
11		Doors, Windows, Shutters, etc.	Pending	Pending	Pending	
12		Stormwater drains	NA	Not Started	Pending	
13		Landscaping	NA	Not Started	Pending	
14		Entry Road	NA	Not Started	Pending	
15		Transformer area	Completed	Not Started	Pending	
16		Internal Pathways / Access Roads	NA	Not Started	Pending	
D.8	Site Safety & Security					
1		Guard Room	NA	Not Started	Pending	

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2		Entrance Gate	NA	Not Started	Pending	
3		Boundary Wall	NA	Not Started	Pending	
4		Handrailing	Pending	Not Started	Pending	
5		Fire fighting extinguishers	Pending	Not Started	Pending	
6		Nomenclature on Units / Buildings, Signboards, Site Plan, Project Banner, Site Name Banner, etc.	Pending	Not Started	Pending	
7		Site Surveyance / CCTV	Pending	Not Started	Pending	
8		Logbooks - Attendance Register, Visitor logs, CSPS logs, DG logs, Maintenance logs, etc.	NA	Work in Progress	Pending	
D.9	Miscellaneous					
1		Permanent Gasket	Pending	Pending	Pending	
2		Hydrotest for all pumps discharge lines	NA	NA	Pending	
3		Hydrotest for all water retaining units	NA	NA	Pending	
4		Pipe support for all units	Pending	Pending	NA	
5		Stud bolts for all units	Pending	Pending	NA	
6		Pipes and fittings for all units	Pending	Pending	Pending	
7		Painting for all units & equipments	Pending	Pending	Pending	
8		<u>Submittals:</u>				
8.1		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.2		Design / Specifications for Pressure gauge	Pending	NA	Pending	
8.3		Design / Specifications for Radar level transmitter	Pending	NA	Pending	
8.4		Design / Specifications for Conductivity type level switch	Pending	NA	Pending	
8.5		Design / Specifications for Mechanical float type level switch	Pending	NA	Pending	

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
8.6		Design / Specifications for Temperature gauge	Pending	NA	Pending	
8.7		Design / Specifications for Level switch	Pending	NA	Pending	
8.8		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
8.9		Drawing & documents for PLC/SCADA system	Pending	NA	Pending	
8.10		O&M Manual	Pending	NA	Pending	
8.11		Scheduled Maintenance Plan	Pending	NA	Pending	
8.12		Spares List	Pending	NA	Pending	
8.13		Insurance Policy for the Facility	Pending	NA	Pending	To be included with 130 MLD STP

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
E	130 MLD STP					
E.1	Collection Chamber					
		Sluice Gate , 2 Nos.	Pending	Pending	Pending	Existing sluice gates to be replaced with new sluice gate.
E.2	Mechanical & Manual Fine screen chamber					
1		Mechanical fine screen,3 Nos.	Completed	Completed	Pending	
2		Manual fine screen,1 No.	Completed	Completed	Pending	
3		Conveyor belt & chute Arrangement, 1 No.	Completed	Pending	Pending	
4		Wheeled trolley, 1 No.	Pending	Pending	NA	
5		Sluice gate, 8 Nos	Pending	Pending	Pending	Existing sluice gates to be replaced with new sluice gate.
6		Differentail Ultra. level transmitter -6 Nos	Pending	Pending	Pending	
E.3	Grit Chamber					
1		Grit mechanism, 3 Nos.	Completed	Completed	Pending	
2		Sluice gate, 3 Nos.	Pending	Pending	Pending	Existing sluice gates to be replaced with new gates.
3		Organic return Pumps , 3 Nos	Completed	Completed	Pending	
4		Screw Classifier , 3 Nos	Completed	Completed	Pending	
5		Drain valve, 200mm, 3 Nos.	Pending	Pending	Pending	Existing drain valves to be replaced with new valves.
6		torque Switch-3Nos.	Completed	Pending	Pending	
E.4	Parshal flume					
1		Open channel flow meter -1nos.	Completed	Completed	Pending	
2		Manual scale and flow measurement chart	Pending	Pending	Pending	
3		Online water qauality Anylzer-1 Nos.	Pending	Pending	Pending	
E.5	Distribution Chamber					
1		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
E.6	Primary sedimentation tank (PST)					
1		Primary clarifier mechanism , 3 Nos	Completed	Pending	Pending	1. 2 out of 3 PST are installed & installation for PST no.3 is pending. 2. Commisionig of all 3 nos PST are pending.

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
2	E.7 Aeration tank	Sluice gate, 3 Nos	Pending	Pending	Pending	Existing sluice gates to be replaced with new sluice gate.
3		Knife Gate valves, 3 Nos.	Pending	Pending	Pending	Existing Sludge outlet valves to be replaced with new valves.
4		torque Switch-3 Nos.	Pending	Pending	Pending	
1		Surface aerators, 18 Nos	Completed	Completed	Pending	
2	E.8 Final Sedimentation tank (FST)	Sluice gate, 6 Nos	Completed	Completed	Pending	
3		DO meter , 3nos.	Pending	Pending	Pending	To be installed as per CA
1		FST mechanism ,3 Nos	Completed	Pending	Pending	1. 2 out of 3 FST are installed & installation for FST no.3 is pending. 2. Commisionig of all 3 nos FST are pending.
2		Kinfe gate Valves, 3 Nos	Pending	Pending	Pending	Existing Sludge outlet valves to be replaced with new valves.
3	E.9 Return sludge Pump house	torque Switch-3 Nos.	Completed	Pending	Pending	
4		Sluice gate, 3 Nos	Pending	Pending	Pending	Existing sluice gates to be replaced with new sluice gate.
1		Return sludge pump ,4 Nos.	Completed	Pending	Pending	
2		Knife gate Valve (KGV), 8 Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
3	E.10 Sludge Thickener & Blending Tank	Non return Valves, 4Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
4		Ball Valves, 4 Nos.	Pending	Pending	Pending	
5		Pressure indicators , 4 Nos	Pending	Pending	Pending	
6		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
1		Gravity Sludge Mechanism, 2 Nos.	Completed	Pending	Pending	

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2		Knife gate Valves, 4 Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
3		torque Switch-2 Nos.	Completed	Pending	Pending	
4		LPBS-3 Nos.	Pending	Pending	Pending	
5		Sludge blendig tank agitator,1 No.	Completed	Completed	Pending	
6		level indicating transmitter,1 No.	Pending	Pending	Pending	
7		Ultrasonic level transmitter-2 nos.	Pending	Pending	Pending	
E.11	Thickned Sludge Sump					
1		Sludge sump agitator , 1 No.	Completed	Completed	Pending	
2		Knife gate Valves, 4 Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
3		level indicating transmitter,1 No.	Pending	Pending	Pending	
4		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
E.12	Digester Unit					
1		Digester Feed pumps, (2w+2s) Nos	Completed	Pending	Pending	
2		Sludge digster mixer primary,2 Nos	Pending	Pending	Pending	
3		Sludge recirculation pumps , 2Nos	Completed	Pending	Pending	
4		Valve for digste , 1 lot	Pending	Pending	Pending	
5		Knife gate Valve (KGV), 4 Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
6		Non return Valves,4 Nos	Pending	Pending	Pending	Existing valves to be replaced with new valves.
7		Ball Valves, 4Nos.	Pending	Pending	Pending	
8		pressure indicator ,6 Nos	Pending	Pending	Pending	
9		Valves for Secondary sludge digester ,2 No.	Pending	Pending	Pending	Existing valves to be replaced with new valves.
10		Digester Sludge Sump agitator, 1 No.	Pending	Pending	Pending	
11		level indicating transmitter,1 No.	Pending	Pending	Pending	
12		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
13		Radar level transmitter-2 nos.	Pending	Pending	Pending	
E.13	Belt fiter press feed pumps unit					
1		Feed pumps, 04 Nos.	Completed	Pending	Pending	

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2		Knife gate Valve (KGV), 8 Nos	Pending	Pending	Pending	
3		Ball Valves, 12 Nos.	Pending	Pending	Pending	
4		Non return Valves, 8 Nos	Pending	Pending	Pending	
5		pressure indicator ,4 Nos	Pending	Pending	Pending	
E.14	Belt filter press Building					
1		Belt filter press , 4 Nos	Pending	Pending	Pending	
2		BFP WASH WATER PUMP,2(W) + 2(S)	Pending	Pending	Pending	
3		AIR COMPRESSOR,2(W) + 2(S)	Pending	Pending	Pending	
4		Flocculation tank with motor drive,4 Nos	Pending	Pending	Pending	
5		Valves for Belt filter system, 1 Lot	Pending	Pending	Pending	
6		EOT hoist, 1 No.	Pending	Pending	Pending	
7		Monorail beam, 1 No.	Pending	Pending	Pending	
E.15	Supernatant Sump unit					
1		Supernatant transfer Pumps, 4 nos	Pending	Pending	Pending	
2		Knife gate Valve (KGV), 4 Nos	Pending	Pending	Pending	
3		Non return Valves,4 Nos	Pending	Pending	Pending	
4		Ball Valves, 4 Nos.	Pending	Pending	Pending	
5		pressure indicator ,4 Nos	Pending	Pending	Pending	
6		level indicating transmitter,1 No.	Pending	Pending	Pending	
7		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
E.16	Poly Dosing System					
1		Dewatering polymer agitator , (4w+4s) Nos	Completed	Pending	Pending	
2		Polymer dosing pumps, 4 Nos	Completed	Pending	Pending	
3		Valves, 1 Lot	Pending	Pending	Pending	
4		Overflow & drain line work	Pending	Pending	Pending	
5		Non return Valves, 1 lot	Pending	Pending	Pending	
6		Pressure indicator , 1 lot	Pending	Pending	Pending	
7		Level switch, 1 lot	Pending	Pending	Pending	
8		Polymer material stock	Pending	Pending	Pending	
9		conductivity type level switch -8 nos.	Pending	Pending	Pending	

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E.17 Biogas handling unit						
1		Biogas genset, 2 Nos.	Completed	Pending	Pending	
2		Main water pumps, 2 Nos.	Pending	Pending	Pending	
3		Auxiliary water pumps, 2 Nos.	Pending	Pending	Pending	
4		Gas train, 2 Nos.	Pending	Pending	Pending	
5		Air cooled radiator , 2 Nos.	Pending	Pending	Pending	
6		Ventilation system, 2 Nos.	Pending	Pending	Pending	
7		Flow meter, 2 Nos.	Pending	Pending	Pending	
8		Hot water pumps for heat recovery, 2Nos.	Pending	Pending	Pending	
9		HT PHE(plate type heat exchanger) for heat water recovery , 2 Nos.	Pending	Pending	Pending	
10		Tube in tube heat exchanger , 1 Nos.	Pending	Pending	Pending	
11		Digester gas holder dome, 2 Nos.	Pending	Pending	Pending	
12		Air blower for gas holder, 2 Nos	Pending	Pending	Pending	
13		Miscellaneous items for gas holder , 1lot	Pending	Pending	Pending	
14		Valves ,1 Lot	Pending	Pending	Pending	
15		Pipe line ,1 Lot	Pending	Pending	Pending	
16		Gas Flare System with accessories, 1 Lot.	Pending	Pending	Pending	
17		Temperature gauge-1 nos.	Pending	Pending	Pending	
18		Level transmitter- 1 nos.	Pending	Pending	Pending	
19		Gas Analyzer-1 nos.	Pending	Pending	Pending	
E.18 Chlorination Building						
1		EOT hoist, 1 No.	Pending	Pending	Pending	
2		Monorail beam, 1 No.	Pending	Pending	Pending	
3		Tonner lifting bar, 1 No.	Pending	Pending	Pending	
4		Tonner load indicator , 1No.	Pending	Pending	Pending	
5		Chlorine gas filter, 2 Nos.	Pending	Pending	Pending	
6		Pipe work for chlorine buliding	Pending	Pending	Pending	
7		Ejector, 3 Nos.	Pending	Pending	Pending	
8		Chlorinators, 3 Nos	Pending	Pending	Pending	

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
9		Chlorine Booster Pumps, 3 Nos	Pending	Pending	Pending	
10		Recirculation pumps ,2 Nos.	Pending	Pending	Pending	
11		Leak absorption system,1 No.	Pending	Pending	Pending	
12		Chlorine solution diffuser ,1 lot	Pending	Pending	Pending	
13		Chlorine neutralization pit drain pump, 1 No.	Pending	Pending	Pending	
14		Air Blowers, 2 Nos	Pending	Pending	Pending	
15		Chlorine tonner,29 Nos.	Pending	Pending	Pending	
16		Chlorine leak detector-1 No.	Pending	Pending	Pending	
17		Chlorine leak sensor, 3Nos	Pending	Pending	Pending	
18		Valves ,1 lot	Pending	Pending	Pending	
19		Pressure gauges, 1 Lot	Pending	Pending	Pending	
20		Residual chlorine analyser ,1 No.	Pending	Pending	Pending	
21		Miscellaneous items for chlorine system , 1lot	Pending	Pending	Pending	
E.19	Chlorine contact Tank (CCT)					
1		Level switch, 1 Nos	Pending	Pending	Pending	
2		Utility water pumps, 2 Nos	Pending	Pending	Pending	
3		Borewell pumps, 2 Nos	Pending	Pending	Pending	
4		Overhead tank, 2 Nos.	Pending	Pending	Pending	
5		Butterfly Valve (BFV), 1 lot	Pending	Pending	Pending	
6		Non return Valves, 1 lot	Pending	Pending	Pending	
7		Pressure gauges, 1 lot	Pending	Pending	Pending	
8		Panel-1 Lot	Pending	Pending	Pending	
9		Chlorine analyzer-1 nos.	Pending	Pending	Pending	
10		Level gauge glass-1 nos.	Pending	Pending	Pending	
E.20	Treated effluent Pump house					
1		Pumps , capacity 1800 m3/hr, 11 Nos.	Completed	Pending	Pending	
2		EOT hoist, 1 No.	Pending	Pending	Pending	
3		Monorail beam, 1 No.	Pending	Pending	Pending	
4		Sluice gate valve , 11 Nos.	Pending	Pending	Pending	
5		Butterfly Valve (BFV), 11 Nos.	Pending	Pending	Pending	
6		Non return valves, 11 Nos.	Pending	Pending	Pending	

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
7		Ball valve , 1 lot	Pending	Pending	Pending	
8		Pressure gauges, 11 lot	Pending	Pending	Pending	
9		DM joint ,11 Nos	Pending	Pending	Pending	
10		Miscellaneous items (pipes, fittings etc.), 1lot	Pending	Pending	Pending	
11		Ultrasonic level transmitter-1 nos.	Pending	Pending	Pending	
E.21	Overhead Ground water tank					
1		Floating type level switch-2 Nos.				
E.22	PLC / SCADA					
1		BOP Panel	Pending	Pending	Pending	
2		Cable	Completed	Work in Progress	Pending	cable termination work pending
3		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Completed	Work in Progress	Pending	
E.23	Electrical & Related Works					
1		Transformer-2 nos	Completed	Completed	Pending	
2		DG set-2 nos.	Pending	Pending	Pending	
3		LPBS-91 nos.	Pending	Pending	Pending	
4		Exhaust fan, ceiling fan, internal electrification, earthing, AC for panel room	Pending	Pending	Pending	
5		Indoor & Outdoor Lighting	Completed	Pending	Pending	
6		Main LT PCC Panel-1nos	Pending	Pending	Pending	
7		HT VCB PANEL-1nos	Completed	Pending	Pending	
8		LT distribution panel-1 nos.	Pending	Pending	Pending	
9		T.E.P.H panel-1 nos.	Pending	Pending	Pending	
10		APFC Panel -2 nos.	Pending	Pending	Pending	
11		R.S.P.H Panel-1 nos.	Pending	Pending	Pending	
12		BFP+Digester+ Centret panel-1 nos.	Pending	Pending	Pending	
13		Thickner panel-1 nos	Pending	Pending	Pending	
14		Bar Screen panel-1 nos.	Pending	Pending	Pending	
15		DG Synchronization panel -1 nos.	Pending	Pending	Pending	
16		Metering Room	Work in Progress	Pending	Pending	
E.24	Civil work					
1		Chlorine contact Tank (CCT)	NA	Not Started	Pending	New construction
2		Chlorination Building	NA	Not Started	Pending	New construction
3		Treated effluent Pump house (TEPH)	NA	Work in Progress	Pending	PCC work in progress
4		Belt felter press (extension)	NA	Work in Progress	Pending	Column Shuttering work in progress

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5		Collection Chamber	NA	Completed	Pending	
6		Mechanical & Manual Fine screen chamber	NA	Completed	Pending	
7		Grit Chamber	NA	Completed	Pending	
8		Parshal flume	NA	Completed	Pending	
9		Distribution Chamber	NA	Pending	Pending	Finshing work pending
10		Primary sedimentation tank (PST)	NA	Work in Progress	Pending	PST 1&2 completed, PST -3 work in progress
11		Aeration tank	NA	Pending	Pending	
12		Final Sedimention tank (FST)	NA	Completed	Pending	FST 1&2 completed, FST -3 work in progress
13		Return sludge Pump house	NA	Pending	Pending	flooring , door window, sump renovation work pending
14		Sludge Thickener & Blending Tank	NA	Completed	Pending	
15		Thickned Sludge pum house and Sump	NA	Not Started	Pending	
16		Digester Unit	NA	Not Started	Pending	
17		Belt fiter press feed pumps unit	NA	Not Started	Pending	
18		Belt filter press Building	NA	Not Started	Pending	
19		Supernatant Sump unit	NA	Not Started	Pending	
20		Poly Dosing System	NA	Not Started	Pending	
21		Biogas handling unit	NA	Pending	Pending	
22		HT & LT pannel Room	NA	Work in Progress	Pending	Column Shuttering work in progress
E.25 Civil & Site Improvement Works						
1		Service water pumps & plumbing all units	Pending	Pending	Pending	
2		Tiling / Flooring at all Buildings	Pending	Pending	Pending	
3		All Buildings Roof rainwater drains, Roof treatment, Plinth protection	NA	Pending	Pending	
4		Indoor & Outdoor Painting	NA	Pending	Pending	
5		Doors, Windows, Shutters, etc.	Pending	Pending	Pending	
6		Stormwater drains	NA	Pending	Pending	
7		Backfilling, Grading	NA	Pending	Pending	
8		Landscaping	NA	Pending	Pending	
9		Entry Road	NA	Pending	Pending	
10		Internal Pathways / Access Roads	NA	Pending	Pending	
D.24 Site Safety & Security						
1		Guard Room	NA	Completed	Work in Progress	
2		Entrance Gate	NA	Work in Progress	NA	
3		Boundary Wall	NA	Work in Progress	NA	
4		Handrailing	NA	Work in Progress	NA	
5		Fire fighting extinguishers	Completed	Work in Progress	Pending	

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S. No.	Unit /Location	Items / Description of Work	Supply	Installation / Construction	Commissioning / Testing / Inspection	Remarks / Balance Works
6		Nomenclature on Units / Buildings, Signboards, Site Plan, Project Banner, Site Name Banner, etc.	Completed	Pending	Pending	
7		Site Surveyance / CCTV	Pending	Pending	Pending	
8		Safety shower at Chlorination unit	Completed	Pending	Pending	
9		Logbooks - Attendance Register, Visitor logs, RSPS logs, DG logs, Maintenance logs, etc.	Pending	Pending	Pending	
D.25	Miscellaneous					
1		Laboratory Setup	Pending	Pending	Pending	
2		Permanent Gasket	Pending	Pending	Pending	
3		Hydrotest for all pumps discharge lines	NA	NA	Pending	
4		Hydrotest for all water retaining units	NA	NA	Pending	
5		Pipe support for all units	Pending	Pending	NA	
6		Stud bolts for all units	Pending	Pending	NA	
7		Pipes and fittings for all units	Pending	Pending	Pending	
8		Painting for all units & equipments	Pending	Pending	Pending	
9		<u>Submittals:</u>				
9.1		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
9.2		Design / Specifications for DO transmitter/Analyzer	Pending	NA	Pending	
9.3		Design / Specifications for Pressure gauge	Pending	NA	Pending	
9.4		Design / Specifications for Radar level transmitter	Pending	NA	Pending	
9.5		Design / Specifications for Conductivity type level switch	Pending	NA	Pending	
9.6		Design / Specifications for Mechanical float type level switch	Pending	NA	Pending	
9.7		Design / Specifications for Temperature gauge	Pending	NA	Pending	
9.8		Design / Specifications for Level switch	Pending	NA	Pending	
9.9		Design / Specifications for Gas Analyzer	Pending	NA	Pending	
9.10		Design / Specifications for Ultrasonic Level transmitter	Pending	NA	Pending	
9.11		Drawing & documents for PLC/SCADA system	Pending	NA	Pending	
9.12		O&M Manual	Pending	NA	Pending	
9.13		Scheduled Maintenance Plan	Pending	NA	Pending	
9.14		Spares List	Pending	NA	Pending	
9.15		Insurance Policy for the Facility	Pending	NA	Pending	To include all IPS & CSPS facilities

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9.16		Consent-to-Operate (CTO)	Not Started	NA	Pending	To be obtained for STP because of addition of new sludge dewatering (BFP), gas handling facilities (scrubber, gas engines, etc.), TEPH, CCT, LT-HT Panel room, laboratory facilities.