Local Government & Community Development Department

Punjab Cities Program

Gap Analysis

of

Municipal Services infrastructure & service delivery

in

Daska City

Punjab Municipal Development Fund Company

Section-1 City Background

1.1. Location

Daska Town is located at 74^{o} -21' East and 32^{o}-20' North at a distance of 24 Km in north-east of Gujranwala City, 24 Km from Sialkot at its south-west and 24 KM from Wazirabad at its south east. This Town is Tehsil Headquarter of Daska Tehil falling under the jurisdiction of Sialkot District.

1.2. History & Importance

It is an ancient town, and was founded during the reign of the emperor Shah Jehan. According to the revenue record it was originally named Shah Jehanahad, but according to the tradition, one Mauja, a Hindu Jat of Mandrianwala village in Daska Tehsil settled at Daska some 500 years ago, and it is believed that its present name was given to it from the land belonging to the Das family. According to another and more popular account the name has a special significance with regard to its location and distance from the important surrounding towns, viz, Gujranwala, Wazirabad and Sialkot. From each of these cities Daska is situated at a distance of das koh (24 kilometers). The actual name due to this significance was originally Das-Koha which later on came to be known as Daska. It is linked with the district head-quarters by two metalled roads which take their course through Ghunike and Sambrial, respectively.

Daska is locally administered by a municipal committee. Because of abundance of fresh reservoir of sub-soil water, cultivators hurried up in the installation of tube-wells. This resulted in setting up of cottage industry for the manufacture of diesel engines and accessories. With the availability of electricity the production has shown signs of improvement and is extending rapidly. A rice and grain market has been set up on the outskirts of the town.

1.3. The Climate

1.3.1. Weather

The climate of the Town is hot in summer and cool in winter. The summer season starts from April and continues till August while the duration of the winter season is from November to February. June is the hottest month. The mean maximum and minimum temperature during the month of June is about 40 and 25 degree Celsius respectively. January is the coldest month. The months of November and March are pleasant.

1.3.2. Rainfall

The average annual rainfall is about 980 millimeters. The highest rainfall is from July to September. Average humidity level is 62%

1.4. Demographic status

A land scan process was done to estimate the population of entire inhabited areas of city in close approximation which was found to be 220,163 persons in the year 2017 with an annual growth rate of 2.65% and it is expected to rise to 284,087 persons in the year 2027. Some inhabitation has developed outside the municipal limits of the city and the municipal

limits need to be extended.

1.5. Data collection

The formats for the data collection about the municipal services were designed and sent to the Municipal Committee. After receipt of these formats, the city was visited to;

1) Verify and correct the data provided by the Municipal Committee.
2) Update the descriptive maps of all the services in consultation with MC staff & Public Health Engineering Department local staff.
3) Identify the required improvements and extension of the municipal services infrastructure.
4) Identification of Public Private Partnership projects already executed.
5) Identify the capacity of the key officers to undertake the PPP projects and collaborative projects with other government agencies and MCs.
6) Public opinion surveys regarding the delivery of municipal services.

1.6. Situation analysis and Gap analysis

Situation analysis of the existing municipal services infrastructure and the quality of service delivery was done. Gap analysis was done to identify the problems, bottlenecks and shortcomings in the infrastructure itself and its operation & maintenance for each municipal service along with the correction/updating of descriptive maps which has been described in the following sections.

Section-2 Water supply systems

2.1 Existing situation

Water supply Zones

The city is divided into two zones, Zone-1 (northern zone) & Zone-2 (southern zone) divided by college road.

Areas served and un-served by existing water supply system, and the areas getting contaminated water along with areas with water shortage have been marked on the map attached with the report.

2.2 The water source & storage

The city has fresh but contaminated sub soil water at shallow depths which is unfit for human consumption. However the water at deeper depth is fresh and not contaminated. Bambanwali-Ravi-Bedian-Depalpur (BRBD) Canal is flowing at the South-Western periphery of the city with quite high discharge which is recharging the aquifer. River Chenab is also the main source for recharge to these aquifers.

Tube wells have been installed at different locations of the city to harness the deep ground fresh water. Water from these tube wells is directly fed to the distribution system. Only two overhead reservoirs have been constructed in the entire water supply system, one in zone-1 and one in zone-2. The reservoir in zone-1 is disconnected from the tube well and is non-functional.

2.3 Installation of Tube-wells

Zone-1 (Northern zone):

3 tube wells have been installed in this zone at different locations and presently all are operational.

Water is being supplied to around 50% area of the zone-1 (northern zone), of which nearly 20% area is supplied with contaminated water. Water shortage exists in 20% area and 50% area of the zone is un-served.

Water supply lines in some areas have been damaged due to laying of sewers and hence water supply to these areas has been abandoned.

Zone-2 (Southern zone):

4 tube wells have been installed in this zone at different locations and presently all are operational.

Water is being supplied to around 50% area of the zone-2 (southern zone), of which nearly 20% area is supplied with contaminated water. Water shortage exists in 20% of the served area whereas 50% area of the zone is un-served.

The present source capacity, working hours of the tubewells and the daily water production is given in the table below;

Total Source capacity

Zone	No. of	Capacity	Total	No of tube wells	working	Daily

	tube wells	each (cusecs)	capacity (cusecs)	Functional	Abandoned	hours per day	water production (mgd)
Zone-1	3	1.0	3.0	3	-	14	0.945
Zone-2	4	1.0	4.0	4	-	14	1.26
Grand total	**7**	**-**	**7.0**	**7**	**-**	**14**	**2.205**

2.4 Overhead Reservoirs

The system has 02 Nos. overhead reservoirs out of which only one OHR is operative and the other one is abandoned for repair and maintenance. The details are given below:

Location	Nos.	Capacity each (Gallons)	Operational Status	Type of repairs required
Model town	1	50,000	Operational	Repair of stairs, plaster & paint if required.
College road	1	50,000	Non-operational	Laying of delivery pipe from tube well to OHR (100 meters), and plaster & paint if required.

2.5 Filtration Plants

10 filtration plants have been installed in various locations in the city which are being used for supply of potable and disinfected water to the citizen. The consumers fetch their drinking water requirement from these plants as the water supplied by municipality is not being used for drinking because of contamination.

Eight of these plants require various kind of repairs.

2.6 Problems and gaps in the system

Under mentioned problems are bottlenecks are faced by the consumers in this water supply system;

2.6.1 Water shortage zones: (shown in yellow color in the map)

The consumers of water supply system in the under mentioned areas are subjected to sever water shortage;

1-Rajpura	2-Mughal pura	3-Mohallah Sohawa
4-Gulshan Colony	5-Islam pura	6-Mohallah Eid gah
7-Hameed Colony	8-Peer Fateh colony	9-Wahabpura

Reasons for water shortage

- The main reason for water shortage as investigated at site is the rapid development of inhabitation in the above mentioned areas whereas the existing source capacity is not

adequate to supply water to the entire population in these areas. Additional source capacity needs to be developed.

- Water wastage and unequal distribution of water is another reason for water shortage wherein the consumers near to the tube-wells waste lot of water by keeping the taps open whereas the consumers at remote end of the distribution system do not get water.

2.6.2 Un-served areas: (shown in pink color in the map)

Under mentioned areas of the city have still not been provided with the facility of water supply.

1-Bara Gagga	2-Chota Gagga	3-Inam Colony
4-Shahab pura	5-Mohalla Naqshbandian wala (partially)	6-Haji pura
7-Gani pura	8-Rehmat pura	9-Rehman pura
10-New Abadi Sohawa	11-Mubin Chowk area	12-Stadium Chowk
13-Khalid Town	14-Nazirabad Colony	15-Gulberg City
16-Raham Colony	17-Shafiq Town	18-Mohalla Mandiwala
19-Gulistan Villas	20-Fruit Market	21-Mohallah Barkat town

2.6.3 Contaminated water zones: (shown in light blue color in the map)

The areas given below are being supplied with contaminated water and required steps to eliminate the contamination of water are required to be taken.

1-Mohalla Haq pura	2-College Road adjacent areas	3-Mohallah Tootian wala
4-Model town (partially)	5-Wazirabad road adjacent areas	6-Daska Kalan
7-Mohallah Shah Sharif	8-Mohallah mission compound	

Causes of contamination

- Main source of contamination is old and substandard consumer connections because of rusted and perforated GI service pipe resulting in ex-filtration and infiltration. Substandard PVC or lawn piping used in the consumer connections also causes pipe bursting and ultimate water contamination.
- Old and rusted main pipes are also leaking and producing contamination in the system. These pipes need replacement.
- The sluice valve chambers are filled with dirt and water and are one of the main sources of water contamination. This is due to non-packing of the valves stuffing boxes which is part of a routine maintenance.
- Non-cleaning and non-disinfection of the reservoirs develop bacteria and ultimately contaminate the system.
- Unfortunately the disinfection of the water is not regular. Either it is done in intervals or the disinfectant quality and dosage are not up to the mark which do not inject required amount of chlorine in the system and the contamination remains in place.

2.7 Water supply hours and consumer connections

Water is being supplied to the city in the below given timings.

Water Supply hours				Consumer connections (Nos)			
Morning	**Midday**	**Evening**	**Total**	**Domestic**	**Commercial**	**Industrial**	**Total**
5.0	4.0	5.0	14	4747	30	Nil	4777

Water shortage prevails at remote ends of the distribution system because of unequal distribution of water in the absence of consumer metering.

2.8 Tariff rates

The consumer connections are not metered and hence water wastage must be predominant over here. The tariff comprises of flat rates not even levied according to the area of houses. The water rates are given below;

Tariff Rates per month		
Domestic	**Commercial.**	**Industrial**
Rs. 80	Rs. 500	Not levied

2.9 Required rehabilitation of the system

Under mentioned components of the existing system need rehabilitation. Component wise details are given below;

2.9.1 Repair & Replacements of Pumping machinery for Tube wells

Type of Pump	Discharge each (cusec)	Replacement of tube wells	Replacement of pumping units	Repairs of pumping machinery
Deep well turbine pumps	1.0	-	04 Nos	-

2.9.2 Repair of Pump House:

Water works	Total Nos	Size (Ft.)	Type of repair
Tube wells	7	12’x12’	Painting and Renovation

2.9.3 Overhead reservoirs (OHR)

Following repairs are required in the overhead reservoirs

Location	Nos.	Capacity each (Gallons)	Operational Status	Type of repairs required
Model town	1	50,000	Operational	Repair of stairs, plaster & paint.
College road	1	50,000	Non-operational	Laying of delivery pipe from tube well to OHR (100 m), and plaster & paint.

2.9.4 Distribution system:

- The unserved areas should be equipped with the distribution system. Efforts should be made to feed the new distribution system with the existing tube-wells. However in case of non-availability of enough water from the existing tube-wells, new tube-wells may be installed as per requirement and to meet the maximum day demand.
- Water supply pipelines have been damaged in below given areas due to subsequent laying of sewerage, which need replacement

Sr. No.	Location	Dia (inch)	Length to be replaced (Rft.)
1	Fawara chowk to Govt degree college boys	8”	8000
2	Awami road chowk to disposal awami road	6”	2650
3	Galla Boota Sabri wala (link college road)	6”	850
4	Galla Sobi wala (link college road)	6”	1600
5	Link galla Sobi wala	4”	700
6	Galla Chaudhary Suleman wala (link college road)	4”	2000
7	Link Bazar Thathyaran	4”	2000
8	Galla Naqashbandia wala	4”	400

2.9.5 Repairs & replacement of other components

These components include;

- Replacement of hypo-chlorinators = 7 Nos.
- Replacement of MCU’s = 7 Nos.
- Repair/Replacement of sluice valve, non-return valve and air valves and chambers. = 30 Nos.
- Installation of bulk water meters = 07 Nos.
- Installation of water pressure gauges = 07 Nos.
- Replacement of underground piping & saddles of approximately 2500 sub-standard consumer connections. The actual number of connections to be replaced will be identified during investigations for the preparation of feasibility report by the planning & design consultants.

2.9.6 Repair of water filtration plants

Total 10 Nos. filtration plants are being maintained by MC in the city, out of which 8 Nos. require repair of certain important component to supply potable water to the inhabitants of the city.

2.9.7 Water wastage & Water management

Lot of water wastage is occurring in the water supply system in below given ways;

a) Some consumer connections have no taps.
b) Some consumers keep the taps open in all water supply hours although they do not need water.

c) Most of the overhead tanks of the consumers have no float valve and when their tank is full, the water flows down to the drains continuously during the supply hours.

The water wastage requires excessive water production and high electricity consumption. It is exerting a large pressure on the municipal budget. Large savings in the electricity bills and ultimately the O&M cost, can be affected by reducing the water wastage at the consumer ends. It will save lot of fresh water and water shortage can be addressed by conservation of water being wasted at present. The best and efficient way to save water and reduce O&M cost is the consumer metering.

2.10 Installation of consumer meters.

The only and the effective way of water preservation and reduction of O&M cost is the consumer metering. Hence all the 4777 consumer connections are required to be metered. This will result in equal distribution of water, addressal of water shortage and supply of adequate water at good terminal pressure to all the consumers in the city. The concept of 24/7 water supply can also be practiced if consumer metering is accomplished.

2.11 O&M Charges and revenue recovery

The operation & maintenance charges and the revenue recovery affected during the last two years is given below;

Year	2013-14	2014-15	2015-16	2016-17	2017-18
O&M charges (million Rs)	Data for these years is missing, because Munipical Committee reported that their record got burnt due to a fire in Munipical Committee office.			18.43	24.57
Revenue recovery (million Rs)				4.492	4.5
Recovery % as compared with O&M exp.				24%	18%
Subsidy injected (million Rs)				13.94	20.07

The total subsidy injected in two years amounts to Rs 34.01 million

The above mentioned data shows a very weak billing and recovery system of the water revenue which is required to be improved by capacity building of the recovery staff.

2.12 Manpower deployment

Slot	Sanctioned strength	Existing strength	Vacant post	Manpower on daily wages	Total man power deployed
Tube-well operators	7	7	-	-	7
Chowkidars	7	7	-	-	7
Electricians	3	2	1	-	2
Plumbers	3	3	-	-	3

Plumber helpers	2	2	-	-	2
Water Superintendent	1	1	-	-	1
Total	23	22	1	-	22

The vacant positions of the field staff need to be filled for satisfactory service delivery.

2.13 Service delivery & recommendations

1 Quite a large area is being supplied with contaminated water due to leaking pipes and substandard consumer connections. Replacement of these pipe lines is required for reduction of water contamination.

2 Most of the area is un-served due to lack of distribution system and deficient source capacity Water supply facility for these areas needs to be planned & developed.

3 Service piping and saddles of all existing substandard consumer connections in the underground should be replaced by HDPE piping and saddles.

4 Illegal connection should be detected by consumer surveys and regularized.

5 It is proposed to meter all the consumer connections to conserve water, reduce O&M cost, address water shortage and supply of adequate quantity of water to every consumer.

Section-3 Sewerage system

3.1. Existing situation

3.1.1. Coverage

- The city has main sewers on approximately 70% area, but lateral sewers are missing in most of the city area. Due to non-provision of lateral sewers, sewerage water is collected though the surface drains and then discharged into the sewers without gulley grating chambers.
- The sewerage system is equipped with three disposal stations. A new disposal station is included in the PHED proposal on the Awami road which will replace the existing disposal on this road. The other two disposal works on Pasrur road and Stadium road need repairs and replacement of machinery & other allied equipment as mentioned in the tables below.
- Gully grating chambers in the entire system are missing, due to which solid waste is being pushed into sewer lines which leads to choking of sewers.
- Waste water is being discharged in the seepage/storm water drains without treatment.

3.1.2. Drainage zones.

The city has been divided in 3 zones in respect of the waste water drainage. Each zone with its coverage is described below;

a) Zone-1

This zone is comprised of areas lying in the north west of the college road. A trunk sewer of 33 inch diameter collects the waste water from areas like Rehman pura, New Abadi Sohawa etc and it joins the 36” dia sewer coming from stadium road from the opposite side and then the 42” diameter outfall sewer discharging in stadium disposal works.

Two sewers are choked in this zone which need replacement as marked on the map.

Waste water from this disposal works is pumped into a sullage carrier which ultimately discharges into Malianwala nullah without treatment. In the way the water is also used for broad irrigation.

b) Zone-2

This drainage zone comprises of the eastern part of the city and is drained off into Pasrur road disposal works. 42” dia outfall sewer collects water from a 36” dia sewer from the muhallah Naqashbandia, Gulistan colony and other areas and also from a 24” size sewer.

Three sewers are choked in this zone which need replacement as marked on the map.

The waste water is pumped into a sullage carrier and ultimately being disposed into Storm water drain without treatment.

Two main sewers first from college road to Pasrur bypass chowk (36”) and the second along Pasrur road (24”) have been included in the PHED proposal as marked on the map.

c) Zone-3

This drainage zone comprises of the southern part of the city and is drained off into Awami road disposal works. The 27" dia outfall sewer along most of the other sewers in the system are choked.

The disposal station on the Awami road is in very poor condition which has been proposed to be replaced with a new disposal on Awami road near B.R.B.D canal. However the construction of new disposal station is held up due to non-availability of funds & it is not clear that exactly when it will be completed. So, the rehabilitation of existing disposal works on Awami road by MC is also under consideration. Two new main sewers one along the Awami road (30"& 48") and the second along the B.R.B.D (24" & 30") canal have been included in the PHED proposal which will feed the new Awami Road disposal works.

The waste water is pumped into a sullage carrier and ultimately being disposed to broad irrigation currently but after the construction of new proposed sullage carrier, it will be disposed-off in storm water drain flowing on the south eastern side of the city.

The detail of the ongoing work by PHED is given below in the one page note.

3.1.3 New sewerage system under construction by PHED

ADP Number/ Name Of Scheme	**2214/20118-19 Provision of Sewerage Drainage and Tuff Tiles in Daska City**		
Approved Cost	PKR 100.00 million	Technical sanction cost	Rs 100.00 million
Expenditure up to June, 2019	Rs 55.000 million	date of completion	30-06-2021

Scope of work

Sr. No	**Description of Items**	**Estimated Quantity**	**Completed**	**Balance work**
1	Providing laying R.C.C Sewer pipe			
	15"dia	450 Rft	410 Rft	40 Rft
	18"dia	530 Rft	530 Rft	Nil
	24"dia	5285 Rft	1968 Rft	3317 Rft
	30"dia	3500 Rft	93 Rft	3407 Rft
	42"dia	3850 Rft	3384 Rft	466 Rft
	54"dia	1050 Rft	Nil	1050 Rft
	Construction of;		--	
3	Screening chamber	1-No	--	1-No
4	Colleting tanks 25' Dia (2 Nos)	2-Nos	--	2-Nos
5	Pumping chamber 30' Dia	1-No	--	1-No
6	Pumping Machinery (Sullage pumps) 5.0 cusec discharge 40 feet head	3-Sets	--	3-Sets

	& 50 BHP motor			
7	Inter connection of S.C & C.T/P.C	1-Job	--	1-Job
8	Discharge sump (8' x 6')	1-Job	--	1-Job
9	External electrification	1-Job	--	1-Job
10	Double room staff quarter	1-No	--	1-No
11	Boundary wall	1-Job	--	1-Job
12	Pacca sullage carrier 4'x2.5' (130 Rft)	130-Rft	--	130-Rft
13	Provision for excavation of katcha sullage carrier	3850-Rft	--	3850-Rft
14	Drain Type I	5410 Rft	148 Rft	5262 Rft
15	PCC in streets	10183 Cft	6123 Cft	4060 Cft
16	Concrete pavers	31252 Sft	--	31252 Sft

The project is thinly funded by PHE Department and nothing can be depicted about the date of completion and commissioning of this project.

However it is not understood that when all the existing sewers in this system are chocked right up to the existing disposal station then how the water from the existing system will be transmitted to the newly proposed sewer of 30”diameter. This will need investigations before the comprehensive sewerage system of the city is planned and executed.

3.2 Sewer lengths

The length of old sewers as per information given by the Municipal Committee, are given below; these are approximate lengths and may vary if actually measured at site;

Approximate lengths of existing sewers

Sewer dia. (inch)	**9**	**12**	**15**	**18**	**21**	**24**	**27**	**Total length in Km**
Length in Km	-	1.3	5	0.6	1.5	2	2.5	
Sewer dia (inch	**30**	**33**	**36**	**42**	**48**	**54**	**66**	**19.2 Km**
Length in Km	1	0.8	3	1.5	-	-	-	

3.3 Existing pumping / disposal stations

The details of each pumping station already working in the city is given below;

Location	**Nos of collect. Tanks**	**Nos of pumps**	**Discharge each (cusecs)**	**Total discharge (cusecs)**	**Motor BHP**	**Working status**	**Sullage carrier**			**Ultimate disposal**
							Size (inch)	**Length (ft)**	**Condition**	
Pasrur road	2	4	5.0	20.0	50	Poor	4’x5’	1500	Poor	Storm water drain
Stadium road	2	6	5.0	30.0	50	Poor	4’x5’	3000	poor	Malianwala nullah
*Awami road	1	2	5.0	10.0	50	v. poor	3’x3’	2000	Poor	Broad irrigation

* The disposal station on the Awami road is in very poor condition which has been proposed to be replaced with a new disposal on Awami road near B.R.B.D canal. However the construction of new disposal station is held up due to non-availability of funds & it is not clear that exactly when it will be completed if ever it is completed. So, the rehabilitation of existing disposal works on Awami road by MC is also under consideration.

3.4 Main issues and problems in the system

The main problems and bottlenecks confronted by the city are given below:

3.4.1 Damaged & surcharging sewers

Some of the sewers have been chocked or damaged and are resulting in surcharging and overflowing of waste water thus damaging public as well as private property. These sewers mentioned below will require replacement;

S.N	From	To	Approximate Length in feet	Dia in inches
1	Katchery chowk	Rest House chowk	1200’	18”
2	Mohallah Rajputa	Mohallah Eid Gah	1200’	15”
3	Mohallah Eid Gah	Octroi Post 8 chowk	1300’	15”
4	Mohallah Shahabpura	Circular road	1200’	15”
5	Mohallah Mohammadpura	Jinnah chowk	1150’	12”
6	Bara Gaga	Sialkot Bypass road	1200’	12”
7	Mohallah Wahabpura	College road	1350’	15”
8	Awami chowk	Awami road Disposal Station	2650’	27”
9	Rangeela chowk	Awami chowk	640’	24”
10	Model chowk	Awami chowk	550’	24”
11	Model chowk	Awami chowk	750’	15”

3.4.2 Areas flooded with waste water

Under mentioned areas of the city are usually subjected to waste water flooding because of sewer surcharging and overflowing.

1-Gulistan Colony	2-Mohalla Baghwala	3- Govt. high school area
4-Pasrur road area	5-Area along the college road	6-Naqashbandian (partially)
7-Madrissa area	8-Mohallah Chaudrian	9-Mohallah peer fateh colony
10-Bus stand	11-Gulshan colony	12-Katchery chowk
13-Hameed Colony	14-Model Town	

3.4.3 Un-served areas

The following areas of the city have not been provided with sewerage system as yet.

1-Mohalla Barkat town	2-Younas abad	3-Ghulistan villas
4-Mohalla Bijli ghar	5-Bara Gagga	6-Bhatti colony
7-Mohallah Mandi wala	8-Abadi Ban wala	9-Inam town

3.4.4 Problems in the pumping stations

Centrifugal pumping units have been installed on all the disposal works which give alignment problems frequently and hence the repairs of these pumps are frequent. MC staff explained that due to repeated repairs the pumping units are not working regularly and the breakdowns are frequent which is choking the sewers. They want to replace these pumps to get rid of the unreliability of the service.

The overall repairs involved in these disposal stations including the replacement of pumping units is given below;

Location of disposal works	Year of construction	Required rehabilitation required
Pasrur road	2006	• Replacement of 4 Nos sullage pumping units along with suction & delivery piping and specials & valves. • Replacement of 4 Nos. MCU's. • Repair of pump house. • Repair of suction & delivery pipes of all pumping units • Repair of collecting tanks, pump house and screening chamber & penstock. • Repair/Replacement of faulty wiring etc. • Development of the premises of disposal work • Installation of power factor improvement equipment on three pumping units.
Stadium road disposal works	2006	• Replacement of 6 Nos sullage pumping units along with suction & delivery piping and specials & valves. • Replacement of 6 Nos. MCU's. • Development of the premises of disposal works • Repair of pump house, collecting tanks, screening chamber & penstock. • Repair/Replacement of faulty wiring etc. • Repair of the Sullage carrier
Awami road	1985	• Replacement of 2 Nos sullage pumping units along with suction & delivery piping and specials & valves. • Repair of boundary wall. • Replacement of 2 Nos. MCU's.

			• Repair of pump house, collecting tanks, screening chamber & penstock. • Repair of pump house. • Development of the premises of disposal works • Repair/Replacement of faulty wiring etc. • Repair of civil works. • Installation of power factor improvement equipment on two pumping units

3.4.5 Provision of gully grating chambers & manhole covers

Gulley grating chambers have been provided on very few points in the sewerage systems to trap the silt and the floating materials. As such all these materials are flowing into the sewers and are the main reason for chocking the sewers.

The gulley grating chambers to connect the surface drains with the sewers are required to be provided in the remaining sewerage system.

Manhole covers at many places are missing and MC is not attending these complaints because of money constraints. Hence MC will need to replace the missing manhole covers along with some base frames. MC should keep adequate number of manhole covers in stock to replace the covers immediately after these are damaged or stolen.

3.5 Waste water treatment

Waste water from all the disposal works is being discharged in the storm water/seepage drains or used for broad irrigation without treatment. Waste water treatment plants are required to be constructed to lower down the BOD level as per National Environmental Quality Standards (NEQS).

3.6 Consumer connections

No consumer sewer/drain connection survey in the city has been conducted by this time. The exact number of these connections is not known to MC staff.

3.7 Tariff structure

Sewerage connections are not being charged by MC at the moment as no tariff has been levied by Municipal Committee.

3.8 Operation & maintenance cost vs revenue recovery

The operation & maintenance cost of the sewerage system for the last two years along with the revenue recovery is given below;

O&M Expenditure vs Revenue Recovery (million Rs) (includes manpower, electricity, repairs/replacement & supplies)					
Year	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
O&M expenditure	Data for these years is missing, because Munipical Committee reported that their record got burnt due to a fire in Munipical			12.34	19.01
Revenue earned				0	0
Percentage recovery vs O&M cost				0	0

Subsidy given	Committee office.	12.34	19.01

3.9 Manpower deployed

Presently 11 sanctioned posts of sewer men and 10 sanctioned post of pump operators are available in MC but these have not been recruited because of recurrent ban on the new recruitments as informed by the Chief Officer. Only one regular sewer man is available with the MC. Presently 10 sanitary workers have been deployed as sewer men and 8 sanitary workers have been deployed as pump operators, along with one chowkidar.

The sanctioned strength of the sewer men is too meager to maintain the sewerage system and that too have not been recruited. Lifting of ban on recruitment is required to employ the staff on 20 regular sanctioned slots.

MC is demanding additional manpower because of increase in population as they are serving those areas in the city which are not included within the municipal boundary.

3.10 Service delivery level

The service delivery is not satisfactory because of below given factors;

- Service delivery in areas with healthy sewerage system is good but it is poor in the areas where the sewers have been chocked and the roads and streets are subjected to sewer surcharging and flooding. Same condition exists in those areas where sewerage system does not exist. Silted up sewers have been marked on the map.
- This shows that the sewers are not being de-silted and cleaned by MC because of shortage of manpower. Under these conditions the new sewers will also go out of service very soon.
- In 30% of the city area no sewerage facilities have been provided.
- The city has main and branch sewers on main roads and streets but most of the streets are not equipped with lateral sewers. These areas are being served with surface drains discharging into the sewers without gulley grating chambers which is allowing all the silt and the floating materials in the sewers. This forms the main reason for chocking of sewers and flooding of the roads and streets.

3.11 Remedy to the main issues

Interventions described below are required to be implemented for relieving the flooded areas.

a) Employment of staff against the sanctioned strength and sanction of adequate stff for O&M of the system.
b) Rehabilitation or replacement of chocked sewers.
c) Rehabilitation of the disposal/pumping stations.
d) Laying the facility in the unserved areas.
e) Construction of waste water treatment plants.

Section-4 Solid Waste Management System

4.1. Existing situation

The existing situation of solid waste management is not satisfactory. Most of the city is partially served and complete service is being provided in few areas. The partially served areas are attended on the complaints of the citizens as regular and daily service cannot be given. Some areas of the city are still not served because of limited resources available with MC Daska as explained in the following paragraphs. The details of the partially served and unserved areas of the city are given below;

4.1.1. Un-served and partially served areas

Most of the areas of the city remain either un-served or these are partially served. The detail of these areas is given blow.

a) Partially served areas

No regular service is rendered in the under mentioned areas. The main complaints are attended by sending the machinery & labor once or twice a week.

1	Mohallah Mandi wala	2	Shafiq town	3	Hameed town
4	Abadi banwala	5	Nazirabad colony	6	Khalid town
7	Canal View town	8	Ramzan town	9	Qazi town
10	Gulshan colony	11	Habib pura	12	Mohallah bijli ghar
13	Rehmat pura	14	New abadi Sohawa	15	Ganj pura
16	Haji pura	17	Mohallah Shahab pura	18	Chota Gagga
19	Bara Gagga	20	Younis abad		

b) Unserved areas

Under mentioned areas are still not served;

1	Mohallah Barkat town	2	Ghulistan villas	3	Village Bhroke
4	Reham colony	5	Gullberg city town	6	Rehman pura
7	City town	8	Inam colony	9	Mohallah Nadimabad

4.1.2. Solid waste Generation & Disposal

The solid waste management efficiency along with present dumping sites are given below;

Total waste generated per day		**Total waste collected (Tons)**		**% Efficiency of disposal**	**Name of dumping sites with distance in Km from the city center**
Cubic meters	Tons	Cubic meters	Tons		Near village Bhobkan wala
144	72	80	40	55%	
Distance from city center (Km)					12 KM
Open dumping= **O** Landfill= **LF**					O

4.2. Equipment & Machinery

Presently available equipment and machinery for collection, transportation and dumping of the solid waste is given below. Some of the existing machinery such as tractor trolleys are not cost effective and efficient giving rise to low efficiency, insanitary conditions and increased waste management cost. Efficient and cost effective machinery is needed for te entire city to increase the efficiency of collection and transportation for improving the sanitary conditions and lower down the operational and maintenance costs;

S.No	**Equipment/machinery**	**Total available Nos**	**Nos. Requiring repair**
1	Tractor	04	04
2	Trolley	04	01
3	1.0 m3 containers	21	-
4	Front blade tractors	02	02
5	Water bowsers	02	-
6	Mechanical sweeper with tractor	01	01
7	Front end loaders	03	01
8	Arm roll truck	01	01

4.3. Landfill Site development

MC is currently dumping the solid waste in an open dumping site near Bobkan wala village, which needs to be converted in to Landfill site.

Location	Description	Unit	Area
Bobkan wala Village	Proposed land fill	Acre	10

The suitability of the landfill sites will be determined after detailed surveys and design of the project by catering the requirement of the environmental standards in vogue in Punjab.

4.4. Vehicle parking Area:

The detail of the site available for construction of parking area for the equipment and machinery to be procured is given below;

Location	Description	Unit	Area
Awami road disposal station	Proposed vehicle parking	Kanal	5.0

4.5. Manpower Deployed and requirement

The manpower deployed for collection, transportation and disposal of the solid waste is shown in the under given table. Due to non-recruitment of the manpower for sewerage system 19 sanitary workers have been deployed on operation & maintenance of the sewerage system which has further reduced the manpower availability for solid waste management. As indicated by MC Officers this manpower is not sufficient to serve the entire city at the given standards. Additional manpower required by the MC is also been indicated. Actual requirement will be identified after detail design and implementation of the project.

Slot	Sanctioned strength	Existing Regular strength	Vacant slots	Manpower on Daily wages	Total manpower deployed
S. S Inspector	01	01	-	-	01
Sanitary Inspector	01	-	01	-	01
Tractor Driver	11	04	07	-	04
Sanitary Supervisor	02	01	01	-	01
Sanitary Worker	204	93	123	72	165
Total	**219**	**99**	**132**	**72**	**172**

4.6. Levying of sanitation fees

No sanitation fee has been levied by MC and the entire expenditure given below is being met from MC's Own Source Revenue and the PFC share being paid by Provincial government to MC.

Solid waste management expenditure& revenue (million Rs)
(Include manpower, energy, repairs, supplies etc)

Year	2013-14	2014-15	2015-16	2016-17	2017-18
O&M Expenditure	Data for these years is missing, because Municipal Committee reported that their record was burnt due to a fire in Municipal Committee office.			57.82	74.09
Sanitation fee/month per house hold				Nil	Nil
Subsidy injected				57.82	74.09

MC will have to levy the sanitation fee to meet the expenditure on solid waste management or at least to lower down the subsidy presently being injected.

4.7. Limitations of MC

The financial and physical resources available to MC to handle the solid waste are too meager to serve the entire population/area of the city. Limitation in resources is described as under;

a) Shortage of sanitary workers and vehicle drivers.
b) Shortage and inefficiency of equipment and machinery.
c) No proper collection points in city are available, except for few locations.
d) The waste is being openly dumped without compaction and provision of earth covers which is creating all sort of hazards say; pollution of underground water, vector and vector borne diseases, obnoxious smell and high insanitary conditions.

4.8. Service delivery

At the average, the service delivery level is poor. Most of the city is either unserved or partially served because of shortage of sanitary staff and machinery & equipment. Some of the existing machinery and equipment is inefficient having costly operation and maintenance.

The solid waste is being dumped openly near village Bhobkan wala about 12 Km from the city which is creating hazards like obnoxious smell, sub soil water pollution and breeding of vectors causing water borne and vector diseases. This is also creating insanitary conditions

Section-5 Roads

5.1. City roads hierarchy

The roads in the city and emerging out from the city have under mentioned hierarchy;

S.No	Name of the road	Owner department
1	Circular road	Provincial Highway road
2	Bypass road	Provincial Highway road
3	All other roads in the city	Municipal Committee roads

5.2. Detail of the MC roads

The inventory of all the roads belonging to Municipal Committee Daska with name, approximate length, paved width, type of pavement and condition has been given in the table below;

SN	Name of Road	From	To	ROW (ft)	Length (Km)	Width (ft)	Existing type of surface	Road condition
1	Awami Rd	Nisbat Rd	Bypass Rd	30	1.5	16	TST	Poor
2	Wadala Rd	Madrassa Darl-aloom	BRB Canal	25-35	1.0	14	TST	Poor
3	Jamkey Rd	Masjid Noor	Jinnah Chowk	30-45	1.5	20	TST	Poor
4	Pasrur Rd	Pasrur Rd Chowk	Bypass Rd	30	2.0	12	TST	Poor
5	Awan-e-Farasat Rd	College Rd	Pasrur Rd	20	1.0	20	Concrete	Poor
6	Jamshed Rd	College Rd	Pasrur Rd	16-20	1.0	12	Concrete	Poor
7	Sohawa Rd	Circular Rd	Mubeen Chowk	16	2.0	10	Concrete	Poor
8	College road	Govt College chowk	Pasrur bypass chowk	20	1.0	10	TST	Poor
9	Bara Gaga road	Circular Rd	Govt primary school Bara Gaga	20	0.5	12	Concrete	Poor
10	College road	Katchery chowk	Govt college chowk	110	2.0	48	TST	Poor
11	Katchery road	Katchery chowk	Rest house chowk	80	0.5	48	TST	Poor
12	Wazirabad road	Rest house chowk	Civil hospital chowk	50	0.25	48	TST	Poor
13	Stadium road	Civil hospital chowk	Stadium chowk	52	1.5	36	TST	Poor
14	Sambrial	Meraj chowk	Chungi no. 8	60	2.0	50	Concrete	Fair

	road						Pavers	
15	Bank road	Bangla chowk	Lorry Adda	100	1.0	60	Asphalt	Fair
			Total Length		**18.75**			

5.3. Existing situation and gaps

Only two primary roads in MC Daska are in good condition & few main roads need resurfacing or provision of concrete pavers. Further some of the secondary roads/streets require either rehabilitation or new construction.

5.4. Problem roads

The MC problem roads as observed, have been given in the under given table;

SN	Name of Road	From	To	ROW (ft)	Length (Km)	Width (ft)	TST, Asphalt or concrete pavers	Road condition
1	Awami Rd	Nisbat Rd	Bypass Rd	28	1.5	22	PCC	Poor
2	Wadala Rd	Madrassa Darl-aloom	BRB Canal	25-35	1	14	TST	Poor
3	Jamkey Rd	Masjid Noor	Jinnah Chowk	30-45	1.5	20	TST	Poor
4	Pasrur Rd	Pasrur Rd Chowk	Bypass Rd	30	2	12	TST	Poor
5	Awan-e-Farasat Rd	College Rd	Pasrur Rd	20	1	20	Concrete	Poor
6	Jamshed Rd	College Rd	Pasrur Rd	16-20	1	12	Concrete	Poor
7	Sohawa Rd	Circular Rd	Mubeen Chowk	16	2	10	Concrete	Poor
8	College road	Govt College chowk	Pasrur bypass chowk	20	1	10	TST	Poor
9	Bara Gaga road	Circular Rd	Govt primary school Bara Gaga	20	0.5	12	Concrete	Poor
10	College road	Katchery chowk	Govt college chowk	110	2	48	TST	Poor
11	Katchery road	Katchery chowk	Rest house chowk	80	0.5	48	TST	Poor
12	Wazirabad road	Rest house chowk	Civil hospital chowk	50	0.25	48	TST	Poor
13	Stadium road	Civil hospital chowk	Stadium chowk	52	1.5	36	TST	Poor
14	Bank road (Service road)	Rest house chowk	Lorry Adda	50	1.45	12x12	TST	Poor
			Total Length		**15.75**			

5.1. The requirements

4 roads in the city have been proposed for resurfacing, 1 for widening and improvement and 8 roads road have been proposed for laying of concrete pavers.

The detail of the proposed provision of facility is as follows;

5.1.1. Resurfacing of roads

Sr. #	Name of road	From	To	ROW	Length	Width
				Feet	Km	Ft
R1	College road	Katchery chowk	Govt college chowk	110	2	48
R2	Katchery road	Katchery chowk	Rest house chowk	80	0.5	48
R3	Wazirabad road	Rest house chowk	Civil hospital chowk	50	0.25	48
R4	Stadium road	Civil hospital chowk	Stadium chowk	52	1.5	36
R5	Bank road (Service road)	Rest house chowk	Lorry Adda	50	1.45	12+12

5.1.2. Widening and improvement of roads

Sr. #	Name of road	From	To	ROW	Length	Existing Width	Proposed Width
				Feet	Km	Ft	Ft
W1	Pasrur Rd	Pasrur Rd Chowk	Bypass Rd	30	2	12	20

5.1.3. Construction of concrete paver roads

Sr#	Name of road	From	To	ROW	Existing width	Length
				feet	Feet	Km
C1	Awami Rd*	Nisbat Rd	Bypass Rd	30	16	0.75
C2	Wadala Rd	Madrassa Darl-aloom	BRB Canal	25-35	14	1
C3	Jamkey Rd	Masjid Noor	Jinnah Chowk	30-45	20	1.5
C4	Awan-e-Farasat Rd	College Rd	Pasrur Rd	20	20	1
C5	Jamshed Rd	College Rd	Pasrur Rd	16-20	12	1
C6	Sohawa Rd	Circular Rd	Mubeen Chowk	16	10	2
C7	College road	Govt College chowk	Mohallah barkat town	20	10	1
C8	Bara Gaga road	Circular Rd	Govt primary school Bara Gaga	20	12	0.5

*This roads is already constructed but its repairs is needed.

Section-6 Parks and open spaces

6.1 Existing situation

Daska City has no existing park for the recreational purposes. Two new parks are under development and their current status is given below;

6.1.1 Shahbaz Sharif park

This has park has been completely funded by the Punjab Government and constructed by PHE Department. Handing over the park is now being considered by the committee responsible for handing over the facilities to ULGs. Hence no additional funds are required for completion of this park.

6.1.2 Shah Wali Park

This park is being constructed by the Municipal Committee by filling an existing pond in the city. Half of the pond has been filled by earth work and the rest of the half is still remaining. Boundary wall for half of the park has also been completed. On asking CO deliberated that MC has to contribute its 20% share to the PCP projects to be undertaken in the year 2019-20 and after doing that they will have no money to complete this park. Hence this should be included in the PCP projects.

6.2 Open spaces

As informed by CO MC one open space is available in the city at college road with a width of 200 to 300 feet and length of 2.00 Km. They want to convert it into a linear park.

6.3 Rehabilitation of the existing park

No rehabilitation of Shehbaz sharif Park is needed as it has been constructed recently. However the detail of all the required interventions to be done in Shah Wali park for its completion are given blow;

S No	Name of Park	Shah Wali Park
1	Location	Near Awami road
2	Area of Park in acres	6 acres
3	Filling of pond by earth work	3 acres
4	Boundary wall	Foror 3 acres
5	Gates	2 Nos new required
6	Plantation of ornamental trees	Required
7	Provision of lighting system	Required
8	Provision and installation of Service cables and LT Control panels	Required
9	Toilets	New toilets required
10	Walkways	Required
11	Swings & other children games	Required
12	Children electric outdoor games	Provision of space and three phase power connections required.
13	Benches	New concrete benches
14	Sewerage system	Provision of sewerage system for toilet
15	Drinking water	Provision of new facilities

16	Cafeteria	Construction of cafeteria
17	Parking lots	Construction of parking lots
18	Podiums	2 Nos required one for each gate
19	Lawn sprinkling system and water source	Required
20	Fountain and water fall structure	Required
21	Staff offices	Required

6.4 Expenditure on Maintenance of Parks

Under mentioned expenditure has been incurred on the upkeep of parks during the last 2 years;

(All figures in million Rs.)

Year	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
O&M cost	Data for these years is missing, because Municipal Committee reported that their record was burnt due to a fire break up in Municipal Committee office.			1.938	3.889
Revenue earned				-	-
Subsidy injected				1.938	3.889

Section-7 Street Light

7.1 Existing Situation

MC Daska has street lights on some major roads and mohallahs.

7.1.1 Street lights on Major roads:

Some main roads in the city have been provided with street light. The detail of these installations is given below;

SN	Name of road/street	Existing type of luminaries	Length (Km)	No of Luminaries
1	Bus Stand to Rest House (Bank Road)	LED (120 W)	1.0	26
2	Rest House to Govt Degree college	LED (120 W)	2.5	108
3	Civil Hospital chowk to Nawaz Sharif Stadium	LED (120 W)	1.5	20
	Total		**5**	**154**

7.1.2 Ward wise detail of existing street lights

LED bulbs are being used in different mohallas on the Wapda poles, as detailed below.

Daska Street Light				
Ward No	**Area**	**LED Bulb (20 W)**	**Operational Status**	**Wapda pole/St light pole**
1	Mohallah Mangu wala mission compound civil line gala Tailian	12	7	WAPDA Pole
2	Mohallah Main Bazar, Mohallah Altaf Garh Subedar Bazar	40	20	WAPDA Pole
3	Shaheen Bazar, Thetheiyanwala bazar gala sheikhanwala	29	18	WAPDA Pole
4	Magribi Jamukey street No.4,5,6,7,8,9,10 gala Gujranwala Jamkey road Muhammad Ali colony, Jinnah Chowk	8	8	WAPDA Pole
5	Mashrqi Jamkey road, Mohallah Chah Kakey wala, Manzoorpura & College road	45	12	WAPDA Pole
6	New Abadi Mohallah Mughal pura	17	12	WAPDA Pole
7	Mohallah Habibpura, Bijli Mohallah & Bashir colony	5	5	WAPDA Pole
8	Mohallah Islampura	15	12	WAPDA Pole
9	Majeed Colony, Muhammadi Town, Shafiq Town Awami Road	18	10	WAPDA Pole
10	Rangila Chowk and Iqbal Chowk	26	20	WAPDA Pole
11	Mohallah bun wala, Main Bazar Old Daska	40	25	WAPDA Pole
12	Mohallah Madina Colony	20	18	WAPDA Pole
13	Mohallah Tootianwala, Mohallah Shah Shareef	17	12	WAPDA Pole

14	Mohallah Raoywala, Model Town, Nisbat Road	90	50	WAPDA Pole
15	Afshan Road, Lorry Adda, pir Fateh Khan Colony & Mohallah Tailianwala	10	10	WAPDA Pole
16	Wazirabad road	16	0	WAPDA Pole
	Total	**408**	**239**	

7.2 Repair/replacement of existing lights

Sr #	Name of road/street	Length (Km)	Existing type of luminaries	No of Luminaries	Proposed Replacement
R1	Rest House Chowk to Civil Hospital chowk (Wazirabad road)	0.75	Sodium Bulb (180W)	16	LED 100 watts
R2	Old Katchery chowk to new katchery (Wadala Road)	2	LED (40 W Bulb)	50	LED 100 watts
R3	Awami road chowk to Awami road disposal works (Awami road)	0.75	LED (40 W Bulb)	20	LED 100 watts
R4	Pasrur road chowk to Rustam road (Pasrur road)	1.5	LED (40 W Bulb)	40	LED 100 watts
	Total	**5**		**126**	

Photo electric switches will be installed with the main switches for the auto switching on and off of lights

As per PITCO Energy Audit Report the number of lights to be repaired or replaced are 176 whereas the staff opted to replace the 126 lights as per detail given above;

7.3 Provision of new street lights

MC Daska requires to provide new street light on the under mentioned main roads of the city;

Sr. #	Name of road/street	Length (Km)
N1	Katchery chowk to Chungi No-8	1.5
N2	Canal Department office to Sialkot bypass (Circular road).	5.0
N3	Al-Noor Marque to Pasrur bypass chowk	1.0
N4	Rustam road	0.8
N5	Nisbat road to Pasrur road	0.3

N6	Katcheri road to Awami chowk (Afshan road)	1.0
N7	Girls college to Canal (Model Town road)	1.0
N8	Bus stand to Darul Aloom (Link Afshan road)	0.8
N9	Galla Tailian wala	1.0
N10	Masjid Noor to Jinnah chowk (Jamke road)	1.5
N11	Check post Katcheri road to Chungi No-9	0.3
N12	Rest House chowk to Mohallah Mission Compound	0.8
N13	Galla Shaheedan Wala (Sambrial road to Circular road)	0.5
	Total length	**15.5**

7.4 Expenditure on street lights

Under mentioned expenditure on the Operation & Maintenance of the existing street lights has been incurred by MC Jhelum during the last 2 years. This includes the energy cost, manpower cost and cost of repairs and replacements.

(All figures in million Rs)

Year	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
O&M Expenditures	Data for these years is missing, because Municipal Committee reported that their record was burnt due to a fire break-up in Municipal Committee office.			3.796	7.847

Section-8

Public Private Partnership projects & Collaborative Projects executed by MC

8.1. Planning & Execution of PPP projects

As informed by Chief Officer no project in the Public Private Partnership Mode & Collaborative Mode has ever been executed by the Municipal Committee or defunct TMA Daska. As such the key officers and staff have no experience as well as capacity for planning estimation and execution of such projects.

Section-9

Budgetary provisions on development of services infrastructure and O&M Cost

9.1. Development expenditure

Municipal Committee Daska has only provided data of 2016-17 and 2017-18, because according to their statement the whole record of the MC got burnt in a fire.

(All figures in million Rs)

Description	2013-14	2014-15	2015-16	2016-17	2017-18
Expenditure on Development Projects	Data not available			48.545	245.23
Source of Financing of Development Projects	PFC share grants and Own Source Revenue				
Expenditure on O&M of services and revenue generated					
Water supply					
Total O&M cost	-	-	-	18.431	24.565
Revenue earned	-	-	-	4.492	4.5
% revenue earned vs O&M charges	-	-	-	24%	18.32
Subsidy injected	-	-	-	13.94	20.07
Sewerage/drainage					
Total O&M cost	-	-	-	12.335	19.009
Revenue earned	-	-	-	0	0
% revenue earned vs O&M charges	-	-	-	0	0
Subsidy injected	-	-	-	12.335	19.009
Solid waste management					
O&M cost	-	-	-	57.817	74.085
Revenue earned	-	-	-	0	0
Subsidy injected	-	-	-	57.817	74.085
Parks					
O&M cost	-	-	-	1.938	3.889

Revenue earned	-	-	-	0	0
Subsidy injected	-	-	-	1.938	3.889
Slaughter houses					
O&M cost	-	-	-	0.285	0.389
Revenue earned	-	-	-	0.754	0.65
Subsidy injected (-) Income (+)	-	-	-	+0.469	+0.261
Street Light					
Total Expenditure	-	-	-	3.796	7.847
Revenue earned	-	-	-	0	0

Section-10 Manpower deployment & shortage

The manpower deployed by MC Daska in various Municipal Services is given below. MC is experiencing manpower shortage in some of the services which is also explained herein.

S.No	Description	Sanctioned Regular strength	Actual Regular deployment	Regular Vacant Slots	Employed on daily basis	Total manpower deployed
A	**Office manpower**					
1	Key officers (BPS-17 & above)	7	1	6	-	1
2	Sub engineers	2	2	-	-	-
3	Support staff (BPS-16 & below	-	-	-	-	-
	Total office manpower (A)	**9**	**3**	**6**	**-**	**6**
B						
1	Water supply	23	22	1	-	1
2	Sewerage	21	1	20	19 deployed from SWM	20
3	Solid waste management	**219**	**99**	**132**	**72**	**172**
4	Parks	5	5	-	-	-
5	Roads	-	-	-	-	-
6	Street lights	6	6	-	-	-
7	Slaughter houses	1	1	-	-	-
	Total municipal services (B)	276	128	148	73	75
	Grand Total (A+B)	285	131	154	73	81

Section-11
Summary public opinion surveys regarding the municipal service delivery

S. No.	Name of Service	Total persons interviewed	Opinion of the persons interviewed				Average consumer opinion
			Poor (Nos)	Fair (Nos)	Good (Nos)	Excellent (Nos)	
1	Water supply quantity	10	6	3	1	0	Poor
2	Water supply quality	10	5	3	2	0	Fair
3	Sewerage	10	8	1	1	0	Poor
4	Drain cleaning	10	4	5	1	0	Fair
5	Street sweeping	10	2	6	2	0	Fair
6	Solid waste collection & disposal	10	7	2	1	0	Poor
7	Condition Parks & play grounds	10	6	3	1	0	Poor
8	Slaughter house functioning	10	4	6	0	0	Fair
9	Street light functioning	10	8	2	0	0	Poor
10	General condition of roads	10	3	5	2	0	Fair
11	Complaint attending capability	10	5	3	2	0	Fair

Survey of Public general view over service delivery

S. No	Name of person interviewed	Muhallah or colony	Water supply		Seweragе	Drain cleaning	Street sweeping	Solid waste collection & disposal	Roads	Parks & play grounds	Slaughter houses	Street light	Complaint addressal
			Quantity	Quality									
1	Fasih Bukhari	Islam pura	Fair	poor	Poor	Fair	Fair	poor	Fair	Fair	Fair	Poor	good
2	Majeed Ali	Mohallah Bagh wala	poor	good	Poor	Fair	Fair	Fair	poor	Fair	poor	Poor	Fair
3	Abdul Hameed	Gulshan colony	poor	poor	Poor	Poor	Fair	poor	poor	poor	Fair	Poor	poor
4	Murtaza Sheikh	Model town	poor	poor	Poor	Poor	Fair	poor	poor	poor	Fair	Poor	Fair
5	Nouman virk	Mohallah chaudrian	Fair	Fair	Poor	Poor	Fair	poor	Fair	poor	Fair	Poor	poor
6	Bilal Jaffar	Mohallah rajputta	poor	Fair	Poor	Poor	Fair	poor	Fair	poor	Fair	Poor	Fair
7	Malik Usman	Haq town	good	good	Fair	good	good	Fair	good	Fair	Fair	Fair	poor
8	Rana Wajid	Habib pura	Fair	Fair	good	Fair	good	good	good	good	poor	Fair	good
9	Zeeshan Bashir	New abadi sohawa	poor	poor	Poor	Fair	Poor	Poor	Fair	poor	Poor	Poor	Poor
10	Umair Majeed	Mohallah mandi wala	poor	poor	Poor	Fair	Poor	Poor	Fair	poor	Poor	Poor	Poor