

Minutes of Meeting # 10

Project : Development of STPs and TTP Projects along with associated infrastructure in Mathura under Hybrid Annuity based PPP mode, Uttar Pradesh

Date : 24th & 25th January 2019

Location : Office of the Project Manager, Drainage and Sewerage Unit, UPJN, Mathura

List of Attendees:

1. Mr. Deepak Chauhan, Project Manager (E&M), UP Jal Nigam, Agra.
2. Mr. Waseem Athar, Project Engineer, UP Jal Nigam, Mathura.
3. Mr. Sumit Project Engineer (E&M), UP Jal Nigam, Agra
4. Mr. A. Srinivasan, General Manager – MACE
5. Mr. Amit Ghosh, Project Manager, MACE
6. Mr. M. Jaya Krishnan, Project Engineer, MACE
7. Mr. Anshul Khandelwal, Deputy Manager, Triveni
8. Mr. Biswajit Majunder, Deputy Manager, Triveni
9. Mr. Mohit Kumar, Addl. Manager, Triveni
10. Mr. M.K. Gupta, Manager, Triveni

Agenda of the Meeting:

- To discuss and approve first milestone drawing of Vrindavan and its associated infrastructure drawings at Masani Zone. Major observations on the drawings and documents of the Vrindavan Gate IPS and its related associated infrastructure were explained to MWMPL.

Sr. No.	Description	Action by	Remarks
A	P&ID of Vrindavan		
1	Motorized valve needs to be provided for Manual screen channel also, as provided in the R1 drawing. MWMPL informed that they are providing the interface arrangement as per CA in order to enable to install only the actuator alone in future as and when required MACE and UPJN agreed for the same. Further it is informed that	MWMPL	MWMPL to modify the drawings and document accordingly

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	except actuator all other interface requirements to be provided by MWMPPL and the valve should be compatible to convert into motorized operation at later stage.		
2	Belt conveyor need to be provided for the mechanical screen.	MWMPPL	MWMPPL has agreed to provide Belt conveyor which shall be indicated in the revised drawing which is to be submitted on or before 29 th January 2019
3	Screen motor and belt conveyor to be remote operated from plant PLC/SCADA. Feedback signal (ON/OFF/TRIP) from motor circuit of Mechanical screen to be hooked up to plant PLC.	MWMPPL	MWMPPL informed that is already mentioned in the note and the same has been agreed by MACE and UPJN
B	Pump Head Calculation of Vrindavan		
1	For delivery line approximate length is taken, since dia & IL of the sump and layout are in finalization stage, please consider correct length. In addition to the fitting considered by MWMPPL, 2 No. of 90° bend, 3 No. of KGV, 1 No. of flow meter, 1 No. of air valve, 1 No. of reducer and 2 No. of Tee is missed out please recheck and correct it in the header line calculation. Instead of considering WL in peak flow(below 1.00m), please considered IL of the sump.	MWMPPL	MWMPPL agreed to provide the actual length of delivery line MWMPPL agreed to change the no of fittings as per drawing MWMPPL agreed to consider IL of sump
2	In R2 drawing minimum submergence is not marked. Please recheck and correct it	MWMPPL	MWMPPL agreed to show the submergence level in GA drawing
C	PDC of Vrindavan		
1	Effective depth adopted to be mentioned and effective volume	MWMPPL	MWMPPL agreed to mention the effective depth and volume.

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	available after deducting minimum submergence need to be included.		
2	<p>As per CA clause 1.4 "Coarse Screen In Facilities where it is applicable. Coarse screens shall be installed at the Interception and Diversion works. The material of construction shall be SS 304. The flats of the screen shall be 10 mm X 8 mm with clear opening of 50 mm. The inclination of the screen shall be 45° horizontal. A suitable SS 304 hand rake for cleaning the screens shall be provided.</p> <p>Medium and fine screens In Facilities where it is applicable. the following specifications would be applicable to medium and fine screens"</p> <p>As per the CA coarse screen is specified only for I&D not for pumping station. Please provide medium screen with 20.00mm clear open scaping.</p>	MWMPL	MWMPL agreed to provide the 20 mm spacing of screen as per CA
D	I&D – P&ID		
1	<p>The submitted drawing is only a schematic flow diagram without any information on I&C. Hence the drawing needs to be resubmitted duly showing all information on the various instruments to be provided at these I&D location along with the control and telemetry schematic diagrams.</p> <p>Please revise CCTV Drawing and put a note in the drawing.</p>	MWMPL	MWMPL agreed to provide the revise drawing of CCTV
E	Layout_Chakrateerth_I and D		
1	MOM 5A, 28th November 2018 S.No.39. Since Octroi Post nala is located near the IPS, actuator need to be provided. Camera need to be provided at the locations where there is no possibility for providing flow	MWMPL	MWMPL agreed to revise the CCTV drawing

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	meters connected with online monitoring system. Please revise CCTV Drawing and put a note in the drawing.		
F	PDC_Chakrateerth_I and D		
1	<p>As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. In case MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p> <p>While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.</p> <p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of water logging problem during storm weather.</p> <p>(and)</p> <p>As per CA MWMPL need to submit "Procedure to handle excessive</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	incoming Sewage due to rain, storm or infiltration"		
2	<p>Head over weir need to be designed for stormflow not for peak flow of sewage.</p> <p>Incase MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly
G	Layout_Shahganj_I and D		
1	<p>As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. Incase MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p> <p>While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.</p> <p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of water logging problem during storm</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	<p>weather.</p> <p>(and)</p> <p>As per CA, MWMPL need to submit "Procedure to handle excessive incoming Sewage due to rain, storm or infiltration"</p>		
2	Please revise CCTV Drawing and put a note in the drawing.	MWMPL	MWMPL agreed to revise the CCTV drawing
3	Cut-off depth and creep length need to be shown	MWMPL	MWMPL agreed to provide the creep length and cut off depth required along with the note of existing site condition in order to decide whether it is to be constructed or not
H	PDC_Shahganj_I and D		
1	<p>As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. Incase MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p> <p>While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	<p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of water logging problem during storm weather.</p> <p>(and)</p> <p>As per CA MWMPL need to submit "Procedure to handle excessive incoming Sewage due to rain, storm or infiltration"</p>		
I	HFD and HFC Octroi Post I&D		
1	<p>As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. In case MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p> <p>While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.</p> <p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	<p>water logging problem during storm weather.</p> <p>(and)</p> <p>As per CA MWMPL need to submit "Procedure to handle excessive incoming Sewage due to rain, storm or infiltration"</p>		
J	HFD and HFC Shahganj I&D		
1	<p>As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. In case MWMPL not revising the design considering SWF, MWMPL should confirm how the SWF is protected from entering the Nala.</p> <p>While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.</p> <p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of water logging problem during storm weather.</p> <p>(and)</p>	MWMPL	MWMPL agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	As per CA MWMP need to submit "Procedure to handle excessive incoming Sewage due to rain, storm or infiltration"		
K	Layout Octroi Post I&D		
1	Why manual coarse screen of I&D is proposed after receiving chamber? It should be before the receiving chamber of the pumping station...	MWMP	MWMP agreed to provide the screen before the receiving chamber with necessary bypass and control gate
2	Noted & weir calculation has been incorporated as per CPHHO manual. I & D has been designed on peak flow including the catchment area of Vrindavan gate road.	MWMP	MWMP agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly
L	PDC Octroi Post I&D		
1	As a general scenario all nallas are designed to discharge storm water and sewage from the respective catchment area. In some cases, nalla may also have constant flow discharged from the water treatment facilities/irrigation structures. In case MWMP not revising the design considering SWF, MWMP should confirm how the SWF is protected from entering the Nala. While designing I&D structure, the weir height needs to be designed for expected peak flow during DWF (Dry weather flow) and head over weir need to be designed for Expected Storm water flow (SWF). Proximal approach needs to be done to arrive at catchment area and expected SWF in the nallah. Head over weir need to be deducted from the Max SWD during SWF. This help us to discharge complete SWF and prevent water logging at upstream area of the nallah.	MWMP	MWMP agreed to check and provide the weir head calculation for the peak flow and provide the weir height with margin and revise the drawings accordingly

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	<p>(or)</p> <p>MWMPL need to discuss with UPJN to utilize the levels of the existing weir, subjected to there was no problem of water logging problem during storm weather.</p> <p>(and)</p> <p>As per CA MWMPL need to submit "Procedure to handle excessive incoming Sewage due to rain, storm or infiltration"</p>		
M	Proposed pipe Routing I&D IPS		
1	<p>Even though the overall slope between IL at first manhole to IL at receiving chamber meets the CPHEEO standard, the slope adopted by MWMPL between the manhole is not in line with the CPHEEO standard. We request MWMPL to provide the intercept sewer design in this format given below which is standard practice followed elsewhere.</p> <p>More over the sewer design is carried out considering full bore flow which is not meeting the design criteria to be adopted as per CPHEEO manual.</p> <p>MACE and UPJN informed that this kind of basic design flaws are really dragging the approval process which could have been avoided if quality checking process is in place and requested MWMPL to ensure that these kind of concept and basic mistakes are not happening in future submissions.</p>	MWMPL	MWMPL agreed to revise the design in line with the CPHEEO manual
N	Proposed pipe Routing Rising Main		
1	Pipe is routed under the carriage way between the turnings point 4 & 6. Moreover, the minimum cover is not	MWMPL	MWMPL has agreed to reroute the pipeline or increase the depth of pipe i.e Minimum 1 m clearance

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	maintained in this section which will damage the pipeline due to direct vehicle impact load. Hence it is suggested to reroute the pipeline avoiding the carriageway/provide sufficient cover based on the calculation by lowering the pipe.		from the bottom of culvert pipe to top of sewer pipe
O	L_Section_Vrindavan_Gate_IPS		
1	Pipe is routed under the carriage way between the turnings point 4 & 6. Moreover, the minimum cover is not maintained in this section which will damage the pipeline due to direct vehicle impact load. Hence it is suggested to reroute the pipeline avoiding the carriageway/provide sufficient cover based on the calculation by lowering the pipe.	MWMPL	MWMPL has agreed to reroute the pipeline or increase the depth of pipe i.e minimum 1 m clearance from the bottom of culvert pipe to top of sewer pipe
2	Crossing of rising main from Vrindavan IPS, gravity sewer from Krishna Ganga IPS and boundary wall need to be shown.	MWMPL	MWMPL agreed to incorporate the same
3	Pipe support details to be provided for all Nala crossings to be submitted. Civil GA drawing need to be submitted.	MWMPL	MWMPL has agreed to submit the separate drawing. MWMPL agreed to indicate the load will take over the existing structure in the document and necessary design calculation along with undertaking shall be provided by MWMPL
4	Thrust block design and Valve chamber details to be submitted and same to be included in proposed pipe routing layout and L-section. Thrust load calculation need to be justified with the calculation. The same need to be provided with thrust block design. Valve chamber dimension is not indicated	MWMPL	MWMPL has agreed to submit the thrust block design and drawings, valve chamber drawing, etc Also informed that the location of thrust block, valve chamber shall be indicated in the pipe routing and L section drawing Thrust block location will be indicated in drawing
P	L_Section_from_Shahganj_I and D		

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1	Even though the overall slope between IL at first manhole to IL at receiving chamber meets the CPHEEO standard, the slope adopted by MWMPL between the manhole is not in line with the CPHEEO standard.	MWMPL	MWMPL agreed to revise the design in line with the CPHEEO manual
2	All the I&Ds are to be designed to capture the maximum peak flow of sewage to IPS and to discharge the maximum expected storm flow to the river. The same is not available in any of the submitted document. The design calculation of head over weir, I&D pipe size should be carried out considering the above scenario. MACE and UPJN informed that MWMPL designer does not have competent knowledge to design the sewer system as per CPHEEO manual.	MWMPL	MWMPL agreed to provide the head over weir for peak flow
Q	HFD and HFC		
1	How head loss of 0.56m between Octroi post I&D and receiving chamber is maintained? In order to ensure and to avoid back flow the water level has been assumed below the IL of Shahganj I&D. MACE and UPJN agreed for the same	Info	
2	As per HFC TWL at Octroi Post I & D is mentioned as 165.71 m, whereas in HFD it is mentioned as 165.61m. Please recheck and correct it.	MWMPL	MWMPL informed that HFC calculation shall be revised accordingly
3	TWL of Octroi Nala is 166.32m, it may be higher during SWF, Hence, all the facilities need to be planned in order to operate and maintain at all weather conditions.	MWMPL	Based on the discussion, the same will be revised as per the standards

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4	IL of the pipeline from Krishna Ganga IPS and Intercept sewer from Shah Ganj need to be shown	MWMPL	MWMPL agreed to show the IL of Krishna Ganga IPS pipeline
R	Site_Layout		
1	The available clearance between the existing octroi post Nala and the proposed intercept sewer from Shahganj Nala is very minimal and hence there are chances of damaging the existing wall of the octroi post Nala during execution. In case of any damage MWMPL to make necessary arrangement to diversion of sewer and to construct new wall in place of existing wall as per the design calculations which is to be submitted at that time.	MWMPL	MWMPL agreed to move the intercept sewer from Shahganj Nala as per site condition and to ensure that minimum interference with the existing structure so that the work can be completed during scheduled outage period.
2	Existing gravity sewer from Krishna Ganga IPS connecting with existing facility at Vrindavan IPS to be shown in the layout. Pipeline from existing sewer to be proposed pumping station at Vrindavan Gate need to be shown as proposed pipe. Two different dia meter of pipe from Krishna Ganga IPS is shown. Please verify and correct it.	MWMPL	MWMPL informed that existing sewer line info in not available. Based on the info available the existing dia is mentioned and from manhole it is proposed new line.
3	As per Layout some of the structure and pipelines are falling with existing structures. As per CA MWMPL to provide the interim availability on or before 14th March,2019 along with detailed working plan and scheduled outage period to implement the proposal within the scheduled time as per construction plan.	MWMPL	MWMPL agreed to relook into the same and correct in the drawings and documents
S	MACE and UPJN requested MWMPL to indicate the timeline for submission of final revised drawing and document duly incorporating the suggestion.	MWMPL	MWMPL confirmed that all the revised drawings and documents shall be submitted on or before 29 th January 2019

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UPJN informed that if there is any discrepancy in the minutes of meeting content then the same need to be raised by the concern person within a day from the date of receipt of MOM. Otherwise it is deemed that the minutes of meeting is accepted by everyone and there should not be discussion / apprehension on the same in the upcoming meetings.

MWMPL

UPJALNIGAM

PROJECT ENGINEER