

CLIENT:		Jackson Dearborn		DATE:	2021-26-05	Case No:
PROJECT:		Artisan Scottsdale		REFERENCE:	City Comments	3-ZN-2021
No.	Sheet No.	Reviewer	COMMENT	Responsible Company	RESPONSE	Response by: (PM/Designer)
The following comments are from: Ghassan Aouad, P.E.				Drainage Report Bound		
1		Pg. 3	A copy of the G&D plans can be included in the drainage report, however, G&D plans need to always be provided separately	SEG	Preliminary G&D plans will be provided separately	LP
2		Pg. 5	Not reflected on the G&D plan !	SEG	A call-out for the south driveway entrance at 1st Ave. was added to the grading plan to clarify its location.	LP
3		Pg. 5	Clarify on the G@D plan. It assumed that this modification will not alter the described drainage conditions along the alley !	SEG	Existing drainage patterns will be maintained in the alley. The abandonment is due to the proposed underground parking structure. Description was extended in the report to clarify as such.	LP
4		Pg. 5	Septemebr 18, 2020	SEG	Date changed.	LP
5		Pg. 5	Update Figure 3 which should reflect the above corrected date	SEG	FIRM Map was updated to the newer version.	LP
6		Pg. 5	Off-Site Drainage Description typically discusses flows from off-site watershed or off-site areas that enter or cross the site. The clouded text discusses on-site drainage that is also mostly repeated in the following On-Site Drainage. Move text and incorporate in Section 3.2	SEG	Discussion on on-site drainage areas was incorporated in section 3.2, discussion of off-site drainage was expanded.	LP
7		Pg. 5	Provide the full name of the FLO-2D study	SEG	Full name added.	LP
8		Pg. 5	describe in section 4 how this minor flow will be managed	SEG	Description was added in section 4.1 to explain that existing minor contributions will enter the site and discharge at Marshall Way.	LP
9		Pg. 5	minor	SEG	Word changed.	LP
10		Pg. 6	see comment on section 4.6	SEG	Noted.	LP
11		Pg. 6	Please check/edit exhibits titles and page numbers on all exhibits	SEG	Exhibit titles and pages were updated.	LP
12		Pg. 6	(Exhibit C) !!	SEG	Title added.	LP
13		Pg. 6	Specify corresponding design storm	SEG	Design storm added.	LP

14		Pg. 6	Cwt	SEG	Variable name corrected.	LP
15		Pg. 6	and refer to Cwt calculations in Appendix II	SEG	Reference to Appendix II was added.	LP
16		Pg. 6	See comment on calculations in App II	SEG	Comments adressed.	LP
17		Pg. 6	No Rational Method calculations printout was provided. If the rainfall intensity used was based on minimum Tc of 5 minutes, as it appears to be the case, please add text to clarify	SEG	Text added to clarify that 5-min was used as the time of concentration for the on-site drainage areas.	LP
18		Pg.7	To clarify, the requirement for redeveloped sites is to provide onsite stormwater storage equals to the post minus pre-development conditions volume of the 100-year, 2-hour storm in addition to maintaining any existing volume. When first flush mitigation is also required and is to be mitigated through storing the first flush volume in retention basins, then the higher of retention and first flush volumes is the final required volume. Table 3 show pre-vs post peak flows!	SEG	Noted. Description of the retention requirement was updated to match the comment. Table 4 was updated to show pre. Vs post storage volumes.	LP
19		Pg.7	Corrolate and cross reference with the calculations provided in App II	SEG	Values were matched with those in Appendix II, reference to Appendix II also added.	LP
20		Pg.7	See comment on Table 1	SEG	Tc is described as 5-min in the next line.	LP
21		Pg.7	Apply comments on the table on page 5	SEG	Comments applied.	LP
22		Pg. 8	See comment on Section 4.2	SEG	Noted.	LP
23		Pg. 8	Provide calculations at each outfall point seperately	SEG	Calculations were updated to show required volumes for each outfall in table 5.	LP
24		Pg. 8	Rainfall Also reference the appendix for raifall data	SEG	Appendix I referenced.	LP
25		Pg. 8	It is one project and this logic is not valid. First flush requirements can be addressed by storing the first flush volume or can mitigated through alternative measures to be reviewed and approved by city staff	SEG	Further description was provided on the first flush requirement. Since most of the proposed project's surface is roof, the first flush requirement was applied to the area that may contribute pollutants during a storm event (pavement, sidewalk). This area is less than one acre, therefore, it was concluded that the first flush requirement may be waived.	LP

26		Pg. 9	<p>Generally, the fact there is an additional capacity in a public stormdrain, does not entitle any one particular development to utilize this additional capacity. For this application, however, several stormdrains in the Indian Bend Wash Area were oversized to accommodate more interception to mitigate ongoing flooding issues. such description will need to be added to this section text.</p> <p>Per the comment on section 4, however, first flush mitigation is required and the option to convey this flow to the storm drain has to address the first flush mitigation requirement, such as in using mechanical devices, unless other alternative measure are submitted for review and approval by city staff.</p>	SEG	Description about the existing storm drain having additional capacity to mitigate flooding was included. As mentioned in the response to comment #25, first flush requirement might be waived due to the surface of the project contributing pollutants being less than acre.	LP
27		Pg. 9	See comment on Section 4.4	SEG	Noted. Refer to comment response #25.	LP
28		Pg. 9	Street names called out on the supporting ADMS-sheet SD29 are incorrect. Please edit/mark accordingly	SEG	Street names corrected.	LP
29		Pg. 24	Parking/Compacted Gravel Area (Cw=0.88)	SEG	Surface type corrected.	LP
30		Pg. 24	Specify corresponding storm	SEG	Storm event specified.	LP
31		Pg. 24	Clarify table. C-value references can be shown at the bottom of table	SEG	C value references were added to the bottom of the tables.	LP
32		Pg. 24	Overall Cwt is irrelevant. Analysis should be based on each outfall location separately	SEG	Overall C-weight was removed from table.	LP
33		Pg. 24	Apply comments above	SEG	Comments applied.	LP
34		Pg. 25	See comments on the calculation tables on the previous sheet	SEG	Exhibits were updated accordingly.	LP
The following comments are from: Levi Dillion			Water Report			

1		Pg. 1	<p>Proposed alley water line is not in conformance with required clearances. Provide resolution in BOD. DS&amp;PM 6-1.402 Water lines shall not be located within 10 feet of a building or retaining wall without providing additional protection. Additional protection shall include placing the water line in a sleeve or modifying the footing to prevent damage in the event of a water line break.</p>			
2			<p>DS&amp;PM 6-1.402 Provide 2 connections in distribution system between existing lines as discussed prior to case submittal (Sub4 discussion and emails).These new connections account for severing the looped connection provided by the existing alley line. Refer to utility plan markups herein.</p>			
3			<p>Based on model demand flows you are very close to needing a 3-inch meter. In revised BOD provide fixture count for meter sizing described in DS&amp;PM Chapter 6. If 3-inch meter is required a meter vault will be required and need to be located and called out.</p>			

4			<p>DS&amp;PM 6-1.403 Capped dead-end lines will be fitted with a flushing pipe per MAG Standard Detail No. 390, Type "B", or a flushing assembly per COS Standard Detail No. 2383, or a fire hydrant to allow periodic flushing of the lines. Flushing devices shall not be in washes, detention areas, retention areas, sidewalks, driveways, or paved areas. Appears to be wrong type and in paved area. Please resolve. Address drainage when flushing occurs. Address alley/parking conflicts.</p>			
5			<p>Hydrant line isolation valve shall be adjacent to tee on main where lines originate. Shown far from tee. Refer to MAG 360. Revise utility plan.</p>			
6			<p>Explicitly call out service lines, valve, and sizes to be reinstated on utility plan. If lines are not 1-inch minimum they must be reinstated as 1-inch per City requirements (or per existing size if larger than 1-inch). Refer to utility plan comments.</p>			
7			<p>Provide specific details to document determination of fire flow per DS&amp;PM. Provide height to finished floor. Provide info in BOD.</p>			
8			<p>Revise hydraulic model per required connections.</p>			
9			<p>Refer to and address applicable comments indicated on utility plan herein.</p>			
10		Pg. 5	1N/1S			
11		Pg. 5	serves zone 1A north of Indian School			
12		Pg. 5	1N/1S			

13		Pg. 5	several of the proposed hydrants aren't on the portion of the system tested. Connect segregated parts of system as shown on utility plan. since other 3 hydrants in proximity will then connect in close proximity to large transmission main Water Resources will assume performance of these hydrants will exceed that tested.			
14		Pg. 6	Single 2-inch meter shown on utility plan. Based on model demand flows you are very close to needing a 3-inch meter. In final BOD provide fixture count for meter sizing described in DS&PM Chapter 6. If 3-inch meter is required a meter vault will be required.			
15		Pg. 6	then provide info and value per table. Provide table in Appendix			
16		Pg. 6	If high rise min fire flow is 2,500gpm. Except per March 2021 case narrative document below. Note, if bonus is used building will be high rise. Note exact height to finished flow in the BOD.			
17		Pg.16	the highlighted portion seems to conflict with ITS fiber lines per the City's map system. Coordinate alignment with exist. Utilities			
18		Pg.16	show lane lines, route line such that only one lane closure is necessary, coordinate with transportation department			
19		Pg.16	Confirm this is building exterior edge line. What is shown here does not correspond with the site plan exterior/bldg edge.			
20		Pg.16	What is below ground parking edge? How deep is building foundation/below ground parking? Show section.			
21		Pg.16	need isolation valve			

22		Pg.16	As shown this will require a tee fitting to be installed. Suggest you move further north or west to use tapping sleeve and valve.			
23		Pg.16	call out tee and valve for new line			
24		Pg.16	DS&PM 6-1.403 Capped dead-end lines will be fitted with a flushing pipe per MAG Standard Detail No. 390, Type "B", or a flushing assembly per COS Standard Detail No. 2383, or a fire hydrant to allow periodic flushing of the lines. Flushing devices shall not be in washes, detention areas, retention areas, sidewalks, driveways, or paved areas. Appears to be wrong type and in paved area. Please resolve. Address drainage when flushing occurs. Address alley/parking conflicts.			
25		Pg.16	ALL new services on new line should be tees with isolation valves, call out as such			
26		Pg.16	valve should be just off of 8" main , refer to MAG 360			
27		Pg.16	show existing line, tee, and iso valve			
28		Pg.16	no line here			
29		Pg.16	install 12x6 TS&V			
30		Pg.16	8X8 Tee			
31		Pg.16	leave open once installed			
32		Pg.16	install 12X8 TS&V			
33		Pg.16	new 8" DIP connection line			
34		Pg.16	Completely remove existing 4" line and 8X4 fitting on the main.			

35		Pg.16	<p>call out each (not typ.) existing fire, domestic, or landscape service on 4" main and call out new service to be placed on new 6" main with meter size and service line size. Note that any deficient service lines shall be upsized between the main and meter. Min service line size is 1" type K copper. Describe in BOD and note here that new main will be constructed first and services will be swapped over with little to no interruption in service</p>			
36		Pg.16	<p>water main must be 10ft from structures and 6ft clear from sewer. How will you resolve? Describe/note. Must be reviewed and approved by city structural reviewer. Currently it appears entire length to the street edge would need extra protection due to existing and possible future structures closer than 10ft to main.          DS&amp;PM 6-1.402          Water lines shall not be located within 10 feet of a building or retaining wall without providing additional protection. Additional protection shall include placing the water line in a sleeve or modifying the footing to prevent damage in the event of a water line break.</p>			
37		Pg.16	<p>No details on this. Describe. You appear to be manifolding meters. Not allowed. 1 meter per building (unless distinct uses or separations are provided/evident) and 1 service line per meter. Call out all new meter and service line sizes or existing and reinstated sizes.</p>			



38		Pg.16	Based on model demand flows you are very close to needing a 3-inch meter. In revised BOD provide fixture count for meter sizing described in DS&PM Chapter 6. If 3-inch meter is required a meter vault will be required and need to be located and called out.			
39		Pg.16	TS&V?			
40		Pg.16	install 8X8 tapping sleeve and valve			
41		Pg.16	Leave open once installed			
42		Pg.16	install 12x8 tapping sleeve			
43		Pg.16	connect with 8"DIP and 8" valve			
44		Pg. 21	provide tie-in of two existing lines			
45		Pg. 21	provide tie-in of two existing lines			
46		Pg. 21	this tie-in doesn't exist			
The following comments are from: Levi Dillion				Sewer Report		
1		Pg. 1	Stipulation: Construct approximately 350ft of 8" SDR-35 sewer. Connect at Goldwater Blvd existing manhole.			
2		Pg. 1	Stipulation: Construct three(3) new 4-foot diameter manholes. Two (2) on new sewer line, One (1) on east side of proposed buildings.			
3		Pg. 1	Stipulation: Modify existing manhole and based on Goldwater Blvd to provide MAG detail 426 type B drop manhole connection. Reconstruct base channels to accept new sewer line.			
4		Pg. 1	Stipulation: Remove approximately 438ft of existing 8" sewer in alley. Line not to be abandoned in-place. Shown as to be removed on utility plan herein.			
5		Pg. 1	Confirm in final BOD submitted with DR case that south building flows will be routed to Marshall Rd. sewer. Show connection to new manhole.			

6		Pg. 1	In final BOD submitted with DR case on sewer profile show proposed alley grade and new proposed water line and necessary clearances.			
7		Pg. 5	remove as called out on utility plan herein			
8		Pg. 6	Your are taking 20gpm of existing commerical flows off of Marshal Way/Osborn sewer and placing about the equivalent back...therefore no net change. If more than about 20gpm is routed south an in-lieu payment may be required.			
9		Pg. 7	ok, but utility plan seems to indicate south building being routed to the manhole/sewer to the east that goes to Marshal Way			
10		Pg.18	this indicates that the south building will connect to this manhole			
11		Pg.18	ok greater than 5 foot drop			
12		Pg.18	Removed, not abandoned in place.			
13		Pg.18	what about proposed grade? Show proposed in final BOD			
14		Pg.18	proposed water line (beyond) with service line crossings?			
15		Pg.18	confirm clearance to water service line on final BOD			

2021-06-07 LA

**REDLINES SCANNED**