

Background Report for ATM Commercial Subdivision Phase 3

Date : August 24, 2021

Applicant : Matt Kelly

Background: Since the June meeting the applicant has submitted a Preliminary Plat and Development Plan for the proposed development. The total number of lots requested has been lowered from ten (10) lots to eight (8) lots. Two of the residential lots have been removed. Detention is not being provided for the residential lots. Lot number eight (8) (R-1 zoning) is encroaching the limits of the floodplain and would require the issuance of a floodplain building permit. Staff has concerns that approving the plat before the floodplain issues are resolved could result in the issuance of floodplain policy insurance for that lot. In addition, staff has concerns for downstream flooding due to not providing detention for the R-1 lots.

Lot number four (4) is being requested for R-3 Multi-Family Zoning and the sketch layout provides for twenty one (21) units or seven (7) triplex buildings. The ROW acquisition and vacation to clean up the alignment of Watson St. should occur before the Final Plat is approved.

Staff provided the amended CCRS in the packet that address the allowance for R-1 Single Family Zoning. No new CCRS were provided for this phase. The development plan is lacking detailed criteria for the home construction that had been established on past approved Planned Development Districts – West Ridge and Longview Subdivisions.

Staff has no assurances from the developer for the scheduling and commitment that the LOMAR will be completed before final platting.

Staff reiterates:

The following items are staff concerns and these issues will need to be addressed by the developer as part of moving forward with the development-

Placement of fill in the floodplain

Placement of the sanitary sewer line in drainage easement

Increasing water capacity (updating the 6" line to minimum City Standards)

Satisfying the current agreement with the City relating to box culvert improvements on New Melville as related to the CLOMAR completion.

Staff has provided review comments from Algier-Martin Engineer, John Forrester as well as comments from the developer's engineer, John Sayer that have additional information and concerns for your consideration.

To date staff has not issued any grading permit or floodplain development permit for the placement of fill within the limits of the floodplain. Staff has been informed that a Land Disturbance Permit was acquired (after staff requested the developer to send copy) and it has not been signed. In addition staff has concerns of downstream water quality due to the lack of installation of bmps and minimal erosion control efforts.

Not mitigating the effects of stormwater runoff from the fill that has been placed near the channel may cause liability that the owner/developer may not be aware of.

Staff recommends that the preliminary plat and development plan be tabled until the developer can prove to the City he is compliance with the local, state and federal stormwater management regulations concerning floodplain management rules and he has provided accurate modeling/surveying information for City approval that will support his proposed grading plan.

Please contact me at City Hall if you have any questions prior to the meeting.

Randy Brown
Director of Development
City of Willard, Mo.

The following files were received from John Sayre this morning:

HECRAS Files *GAUGE CROSSING LOMAR 8-9-21.zip*,
HECRAS centerline and cross section layout *GAUGE CROSSING HEC RUN FOR LOMAR 10-12-20.pdf*
Revised floodplain map *LOMR PLAN 8-10-21.pdf*

The fill placed (for the road) was not included in HEC-RAS files nor in the two pdf's.

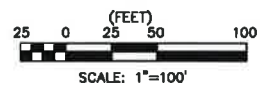
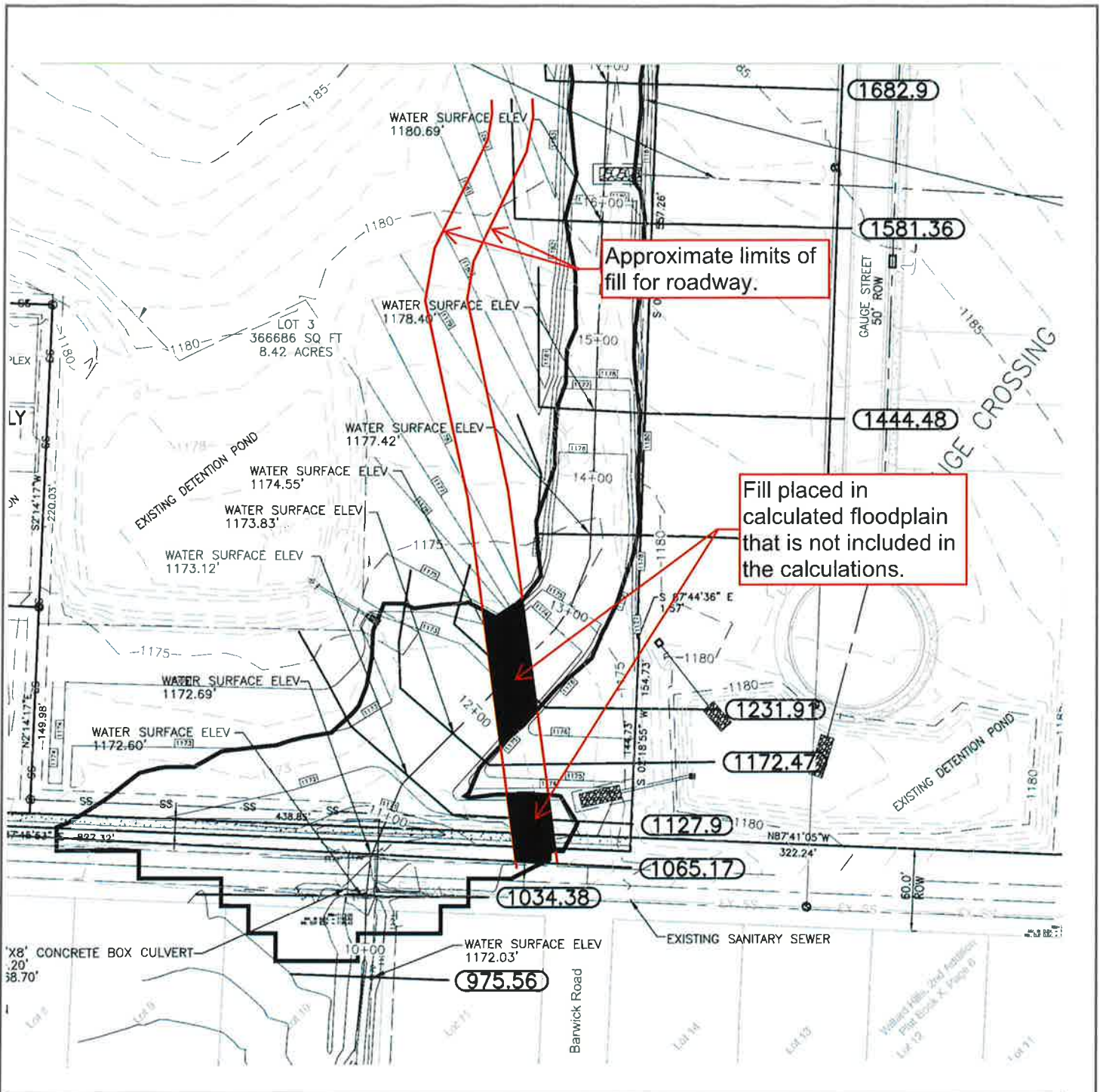
The roadway fill is clearly placed inside the limits of the:

effective FEMA Zone A floodplain map,
and the preliminary FEMA Zone AE floodplain map (including both the floodplain and floodway)
and proposed floodplain map as presented by calculation.
(SEE ATTACHED PDF)

A cursory review of the HEC-RAS model raises the following concerns (in addition to the fill not included):

- Do they plan to concrete line the channel? The Manning's n values for the channel indicate that concrete lining will be used. Changing the Manning's n to appropriate values will raise the calculated water surface elevations.
- The expansion and contraction coefficients at the culverts were not used correctly. The losses at the culvert entrance and exit are under reported. Using the corrected values will raise the calculated water surface elevations.
- Ineffective flow areas were not used. Adding the ineffective flow areas at the culvert entrance and exit will likely show a rise in the calculated water surface elevations.

Charles E. Patterson PhD, PE, CFM

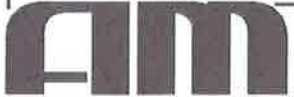


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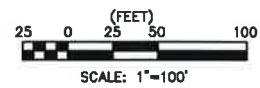
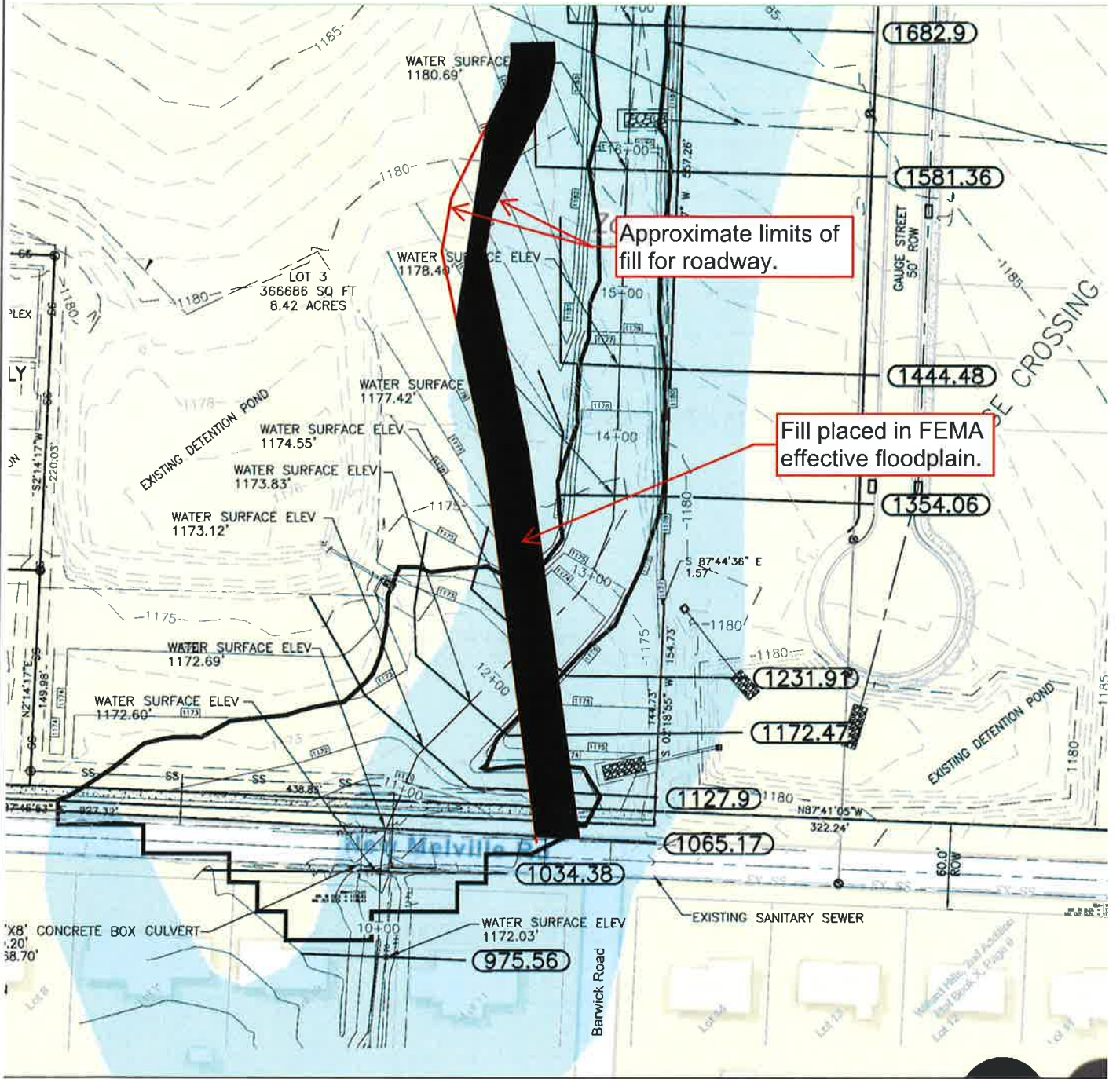
DATE: 8/20/2021
 REV: 01
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DWPN BY: cep
 CKD BY:
 APPD BY:
 DATE: 8/20/2021



LOMR Data (from developer's engineer)
 ATM Commercial Subdivision
 City of Willard

DWG. NO:
1



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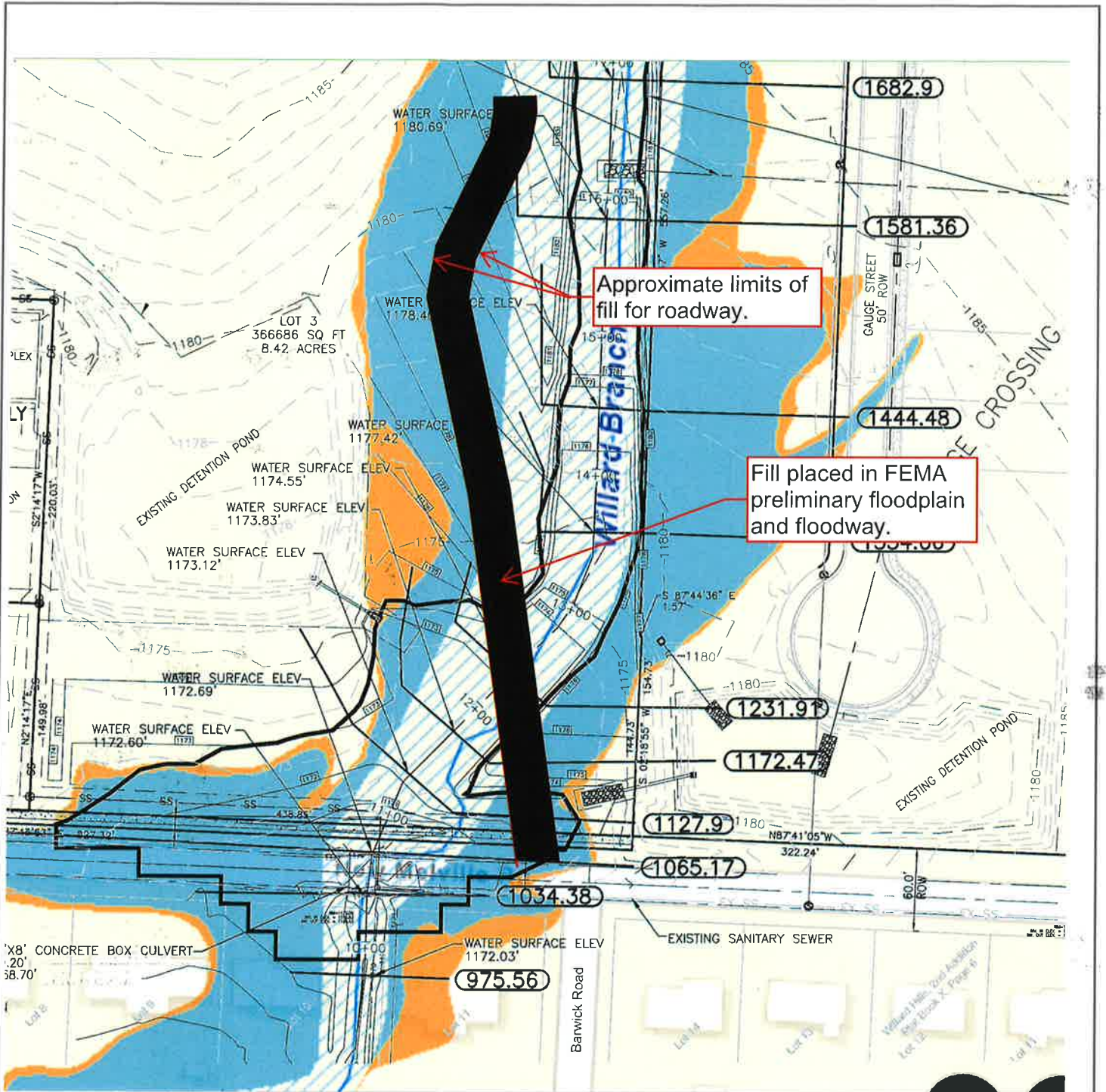
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FEMA EFFECTIVE FLOODPLAIN (data from SEMA)
 ATM Commercial Subdivision
 City of Willard





Approximate limits of fill for roadway.

Fill placed in FEMA preliminary floodplain and floodway.

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FEMA PRELIMINARY FLOODPLAIN AND FLOODWAY (data from SEMA);
 ATM Commercial Subdivision

City of Willard

