

GENERAL NOTES:

1. Underground utilities have been plotted from available information and their locations shall be considered approximate only. The verifications of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to any grading or construction improvements.
2. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including building laterals.
3. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre construction conditions.
4. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
5. All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
6. Easements shall be provided for all public sanitary sewers, storm sewers and utilities on the record plot. See record plot (if required) for location and size of easement.
7. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
8. The City of O'Fallon shall be notified of least 48 hours prior to construction for coordination and inspection.
9. All sanitary sewer building connections have been designed so that the minimum vertical distance from the top point of the bottom of the pipe to the flow line of a sanitary sewer at the corresponding building connection is not less than the diameter of the pipe plus the vertical distance of 2-1/2 feet. (unless otherwise noted)
10. All sanitary sewer manholes shall be waterproofed on the exterior in accordance Missouri Dept. of Natural Resources specifications 10-CR-8.120(7)(E).
11. All PVC sanitary sewer pipe is to be SDR-35 or equal with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate back fill over pipe shall consist of some size "clean" or "minus" stone from springline of pipe to 12 inches above the top pipe. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
12. All sanitary and storm sewer trench back fills shall be water jetted. Granular back fill will be used under pavement areas.
13. All pipes shall have positive drainage through manholes. No flat base structures are allowed.
14. Brick shall not be used on sanitary sewer manholes nor shall brick be used in the construction of storm sewer structures.
15. All PVC sanitary sewer pipe shall meet the following standards: A.S.T.M. D-3034 SDR-35 with wall thickness compression joint A.S.T.M. D-3212. An appropriate rubber seal watertight as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures. (Note: All P.V.C. Force Main shall be C-900, Class 200 P.V.C.)
16. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
17. Storm sewers 18 inch diameter and smaller shall be A.S.T.M. C-14 unless otherwise shown on the plans.
18. Storm sewers 21 inch diameter and larger shall be A.S.T.M. C-76, Class II minimum, unless otherwise shown on the plans.
19. All storm sewer pipe in the right-of-way shall be reinforced concrete pipe (A.S.T.M. C-76, Class III minimum).
20. All storm sewer pipe shall be "O-ring" pipe. Joints shall be gasketed O-ring type.
21. All water lines shall be laid at least 10 feet horizontally from any sanitary sewer, or manhole. Whenever water lines must cross sanitary sewers, laterals or storm drains the water line shall be laid at such an elevation that the bottom of the water line is 18 inches above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be equally distant from the center of the sewer line. Vertical separation shall be maintained for that portion of the water line located within 10 feet, horizontally, of any sewer or drain it crosses.
22. All water lines shall be C-900 Class 200 P.V.C.
23. Any permits, easements, or approvals to work on public or private properties or roadways are the responsibility of the developer.
24. All sanitary sewer laterals shall be a minimum of 6 inches in diameter.
25. Maintenance of the sewers designated as "public" shall be the responsibility of the City of O'Fallon upon dedication of the sewers to the district.
26. All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City and MoDOT). Signs designating street name shall be on the opposite side of the street from traffic control signs.
27. There shall be no obstruction, i.e. planting, bushes, trees, signs, light standards, mailboxes, etc. within six (6) feet of any fire hydrant, and/or fire department connection to the automatic sprinkler system.
28. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
29. Existing sanitary sewer service shall not be interrupted.
30. Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot/Mission-type couplings will not be allowed.
31. "Type N" Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required.
32. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.



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FIBER OPTICS MAY BE PRESENT

GENERAL NOTES CONTINUED:

34. Marking to be provided on storm sewer inlets. The City will allow the following markers and adhesive procedures only as shown in the table below. "Peel and Stick" adhesive pads will not be allowed.
- | Manufacturer | Size | Adhesive | Style | Message (Part #) | Website |
|-------------------------|--------|----------|-------------|--|--|
| ACP International | 3 7/8" | Epoxy | Crystal Cap | No Dumping Drains To Waterways (SD-W-CC) | www.acpinternational.com |
| DAS Manufacturing, Inc. | 4" | Epoxy | Standard | No Dumping Drains To Stream (#SDS) | www.dasmfg.com |
35. Developer must supply City Construction Inspectors with soil reports prior to or during site soil testing. The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:
1. Maximum dry density.
 2. Optimum moisture content.
 3. Field capacity or allowable moisture content.
 4. Curve must be plotted to show density from a minimum of 90% Compaction and as determined by the "Modified AASHTO T-180 Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test AASHTO T-99, Method C".
 5. Curve must have at least 5 density points with moisture content and field capacity listed on document.
 6. Specific gravity.
 7. Natural moisture content.
 8. Liquid limit.
 9. Plastic limit.
 10. Observations that if this information is not provided to the City's Construction Inspector the City will not allow grading or construction activities to proceed on any project site.
 11. Each fire hydrant shall not have less than two 2-1/2 inch outlets and one 4-1/2 inch outlet, a 5-1/4 inch valve, a 6 inch barrel and shall be set on the ground, devoid of any chain; left hand open design and have national standard threads.
 12. Fire hydrant shall be provided with a control valve in the hydrant connection such that the hydrant can be removed from service without shutting off water supply to other fire hydrants.
 13. In setting hydrants, due regard shall be given to final grade line. The center of a hose nozzle outlet shall not be less than (18) inches above grade and the outlets must face the street or access drive.
 14. Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible during the next seeding period after grading has been completed.
 15. When grading operations are completed or suspended for more than 30 days permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided.
 16. All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
 17. Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds, earth grubbing and removal of roots and other surface obstructions from the site, and the demolition of any existing structures. All removable material shall be properly disposed of off-site. Topsoil or grime in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
 18. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
 19. The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
 20. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
 21. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal berms placed into the slope to receive fill only. The width and height to be determined by the Soils Engineer. The fill shall be placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
 22. Development of the proposed 12" water main along Technology Drive has not been installed. Until said main is installed and can be flow tested, this facility is protected with a fire suppression system. Without a fire suppression system installed, the minimum required fire flow for this facility will be required to be 4,250 gallons per minute at 20psi. If this flow and pressure requirements can not be met, this building will have a fire suppression system installed. An offsite flow test by Wayne Automatic Sprinkler on 12/02/05 provided results which will provide this site with a fire flow in excess of 3,000 gallons per minute with 20psi residual pressure.
 23. Class III R.C.P. shall have a minimum of 36" of cover.

DUCKETT CREEK SANITARY DISTRICT CONSTRUCTION NOTES

1. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals.
2. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
3. The contractor shall prevent storm, surface water, mud and construction debris from entering the existing sewer system.
4. All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
5. Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plot.
6. All construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.
7. The Duckett Creek Sanitary District shall be notified of least 48 hours prior to construction for coordination of inspection.
8. All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Dept. of Natural Resources specification 10-CR-8.120(7)(E).
9. All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe, SDR-35 or equal, with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipe shall consist of some size "clean" or "minus" stone from springline of pipe to 12 inches above the top of pipe.
10. All sanitary and storm sewer trench backfill shall be water jetted. Granular backfill will be used under pavement areas.
11. All pipes shall have positive drainage through manholes. No flat invert structures are allowed.
12. Brick shall not be used on sanitary sewer manholes.
13. Existing sanitary sewer service shall not be interrupted.
14. Maintain access to existing residential driveways and streets.
15. Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot/Mission-type couplings will not be allowed.
16. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.

REFERENCE BENCHMARK:

RM 57: ELEVATION 548.01 PER FLOOD MAP COMMUNITY PANEL NO. 29183C 0430 E, A CHISELED SQUARE ON SOUTHWEST END OF SOUTH HEADWALL OF A CULVERT LOCATED AT THE JUNCTION OF U.S. HIGHWAY 40 AND COUNTY HIGHWAY K.

SITE BENCHMARK:

ELEVATION 559.88 CROSS IN NORTH RIM OF MANHOLE SOUTHEAST OF THE SOUTHWEST CORNER OF LOT H OF O'FALLON AUTO MALL

ASBUILTS ADDED JULY, 2007

A SET OF AS-BUILT PLANS FOR JIM TRENNARY CHEVROLET INC. LOT E AND G - O'FALLON AUTO MALL

PART OF LOTS 23 AND 24 OF JOHN COALTER'S
SUBDIVISION OF HOWELL'S PRAIRIE TRACT IN U.S.

SURVEY 1669, T.46 N., R.3 E.,
CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI

PRINCIPALS & STANDARDS:

1. All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33%). Steeper grades may be approved by the designated official if the excavation is through rock or the excavation or the fill is adequately protected (a designed head wall or toe wall may be required). Retaining walls that exceed a height of four (4) feet shall require the construction of safety guards as identified in the appropriate section(s) of the adopted BOCA Codes and must be approved by the City Building Department. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.

2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, in accordance with the plans and notes as interpreted by the Geotechnical Engineer.

3. The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
4. All areas shall be allowed to drain. All low points shall be provided with temporary ditches.

5. A sediment control plan that includes monitored and maintained sediment control basins, silt traps or filters, staked straw bales or other approved measures to remove sediment from run-off waters. Temporary siltation control measures shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.

6. Any existing trash and debris currently on this property must be removed and disposed of off-site.

7. Soft soil in the bottom and banks of any existing or former pond sites or tributaries shall be removed, spread out and permitted to dry sufficiently to be used as fill. Native vegetation should be placed in proposed right-of-way locations or on storm sewer locations.

8. Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds, earth grubbing and removal of roots and other surface obstructions from the site, and the demolition of any existing structures. All removable material shall be properly disposed of off-site. Topsoil or grime in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.

9. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.

10. The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.

11. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.

12. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal berms placed into the slope to receive fill only. The width and height to be determined by the Soils Engineer. The fill shall be placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.

13. The surface of the fill shall be finished so that it will not impound water. If the end of a day's work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth and any rain is still falling, the surface shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be spread or frozen during the grading operations continue when the temperature is such as to permit the layer under placement to freeze.

14. All siltation control devices shall be inspected by the contractor after any rain of 1/2" or more with any appreciable accumulation of mud to be removed and siltation measures repaired where necessary.

15. No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded or seeded and mulched.

16. All fill placed under proposed storm and sanitary sewer, proposed roads and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Modified Proctor Test AASHTO T-99. All filled places in proposed roads shall be compacted from the bottom of the fill up to the test depth as determined by the soils engineer concurrent with the grading and backfilling operations. "Excess" or the maximum content of the soil in filled areas is to correspond to the compactive effort as determined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify the soil stability at the discretion of the City of O'Fallon.

17. Any contaminated soil encountered during excavation shall be hauled and placed as directed by the owners environmental engineering representative.

18. Developer must supply City construction inspectors with soil reports prior to or during site soil testing.

19. The Contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The Contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The Contractor's responsibilities include all design and implementation of erosion and sediment control measures. FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as flood plains and wetlands.

20. All lots shall be seeded and mulched or sodded before an occupancy permit shall be issued except that a temporary occupancy permit may be issued by the Building Department in cases of undue hardship because of unfavorable ground conditions.

21. Development of natural watercourses shall have residential lot lines, commercial or industrial improvements, parking areas or driveways set back a minimum of 25 feet from the top of the existing stream bank. The w/course shall be maintained and made the responsibility of the subdivision trustees or in the case of a site plan by the property owner. Permanent vegetation shall be left intact. Variances will include designed stream bank erosion control measures.

22. Detention basins, diversions or any other appropriate structures shall be constructed to prevent velocities above 5 ft/sec.

23. Development shall be designed to accommodate the flow of stormwater runoff from the site. The flow of stormwater runoff shall be controlled by the use of detention basins, infiltration wells, permeable pavements, and other methods as determined by the City of O'Fallon and/or MoDOT.

24. All construction methods and practices to conform with OSHA Standards.

25. Site will be acquired after grading is completed by developer of O'Fallon Auto Mall. Tree line along the East property line as shown on Area Plan will remain. Therefore no trees are being removed or replaced with this plan.

26. Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City Standards.

27. All proposed fencing requires a separate permit through the Planning Division.

28. All sign locations and sizes must be approved separately through the Planning Division.

29. All erosion control systems are inspected and necessary corrections made within 24 hours of any rainfall resulting in one-half inch of rain or more.

30. Occupancy will not be allowed until all offsite work is completed to make utilities and detention functional.

DEVELOPMENT NOTES

1. Area of Tract: Lot A (Dealership) = 5.97 Acres
Lot G (Inventory lot) = 2.36 Acres

2. Existing Zoning: C-2 PUD (City of O'Fallon)

3. Proposed Use: Automotive sales and service facility

4. Area of Building: Total=40,689 sq.ft.

5. The required height and building setbacks are as follows:

- Minimum Front Yard: 25 feet

- Minimum Side Yard: None

- Minimum Rear Yard: None

- Maximum Height of Building: Not to exceed 50'

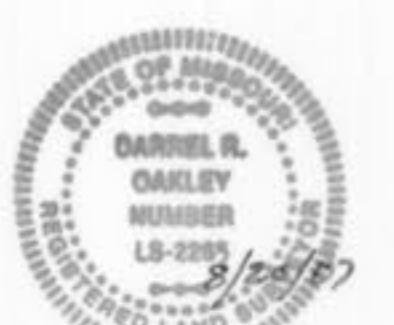
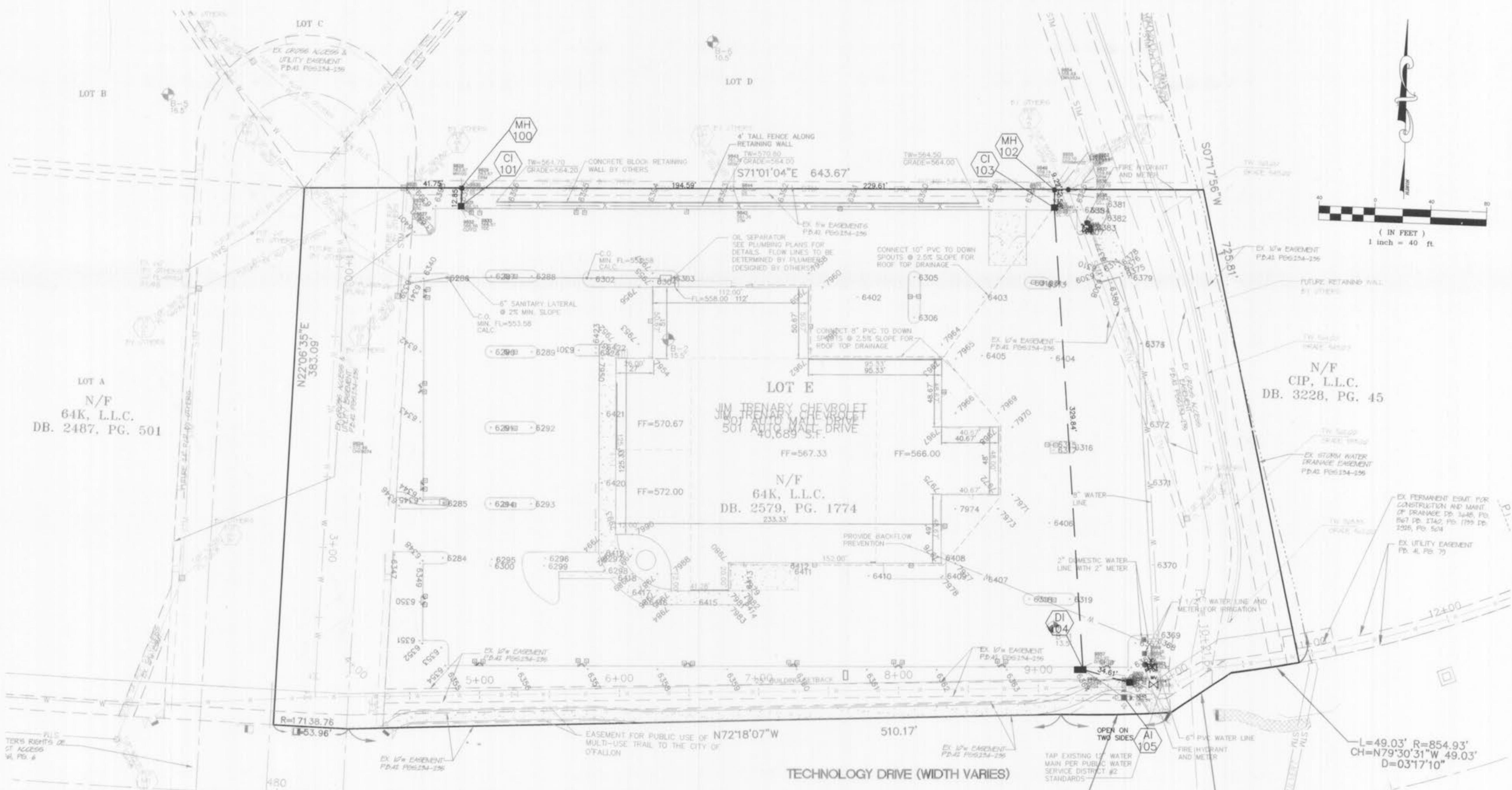
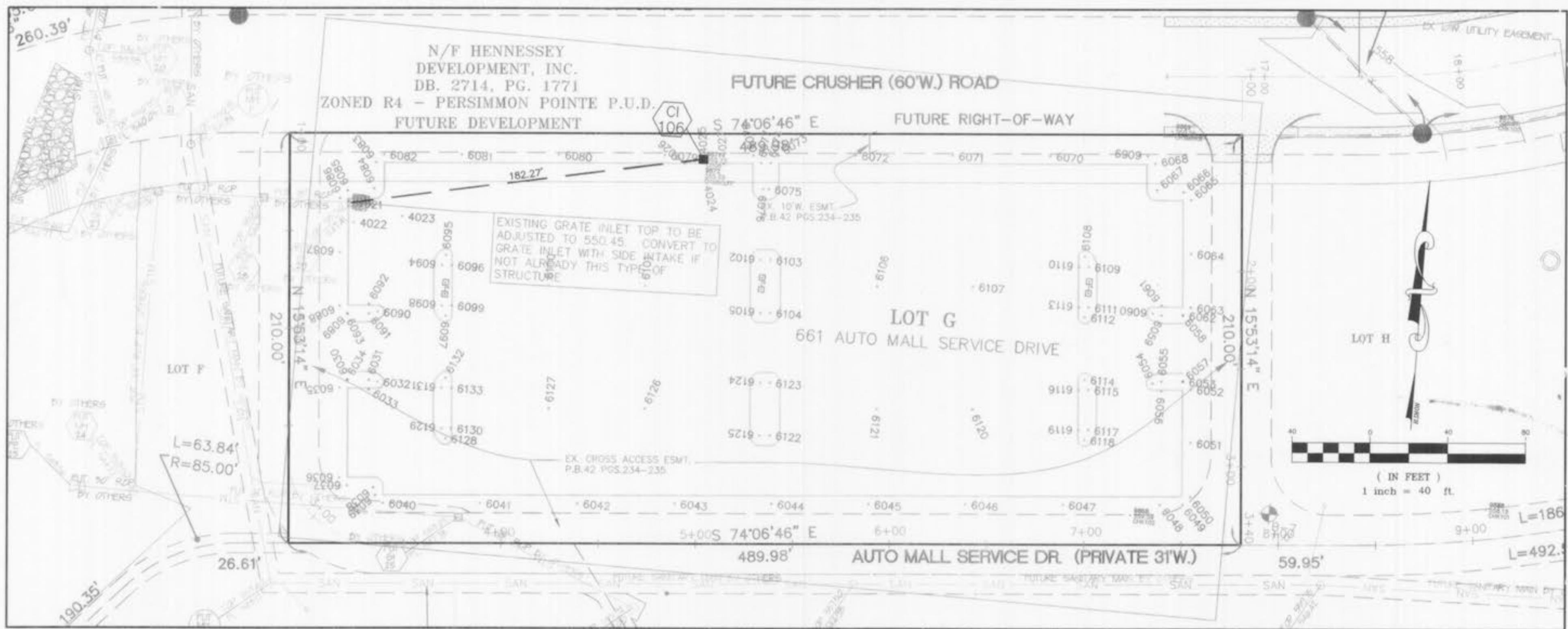
6. Site is served by:

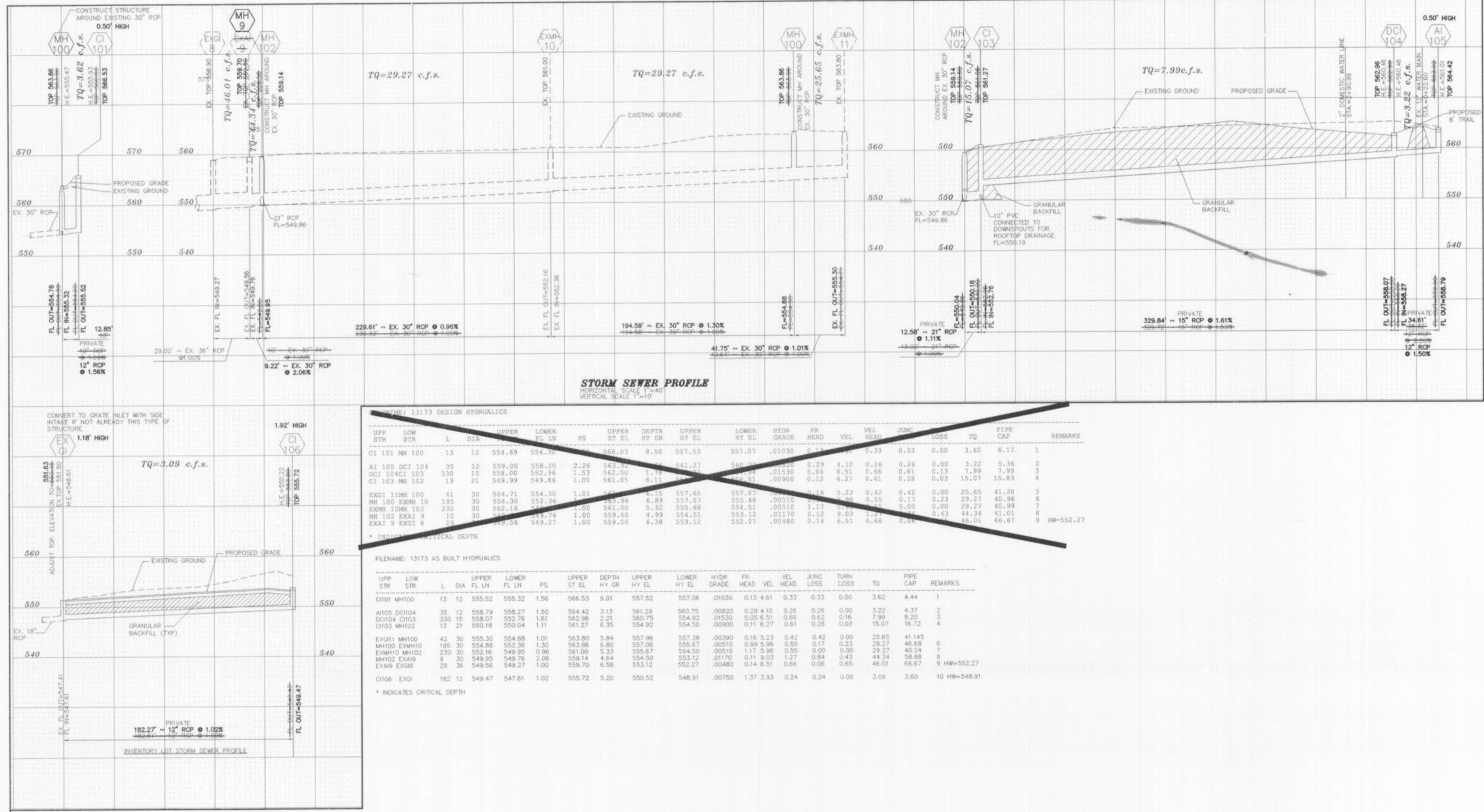
- Duckett Creek Sanitary District

- Amoco Gas Company

- Laclede Gas Company

ASBUILTS ADDED JULY, 2007





**FORM SEWER PROFILE SHEET FOR
GENERAL MOTORS CORPORATION
TRENTON,
MICHIGAN**

6-07

