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* City of O'Fallon Construction work hours per City Ordinance 3429 as shown in Section 500.420 of the Municipal Code of the City of O'Fallon are as follows:

October 1 through May 31
 7:00 A.M. To 7:00 P.M. Monday Through Sunday
 June 1 Through September 30
 6:00 A.M. To 8:00 P.M. Monday Through Friday
 7:00 A.M. to 8:00 P.M. Saturday and Sunday

* The area of this phase of development is 1.68 Acres
 The area of land disturbance is 1.87 Acres
 Number of proposed lots is 1

Building setback information:
FRONT YARD: Not less than twenty-five (25) feet, excluding all signs, pump islands, and canopies of gasoline service stations.
SIDE YARD: No side yard is required except that where a side line of a lot in this district abuts the side line of a lot in any residential or office district, a side yard shall then be provided the same as required in the district it abuts. a side yard of not less than twenty-five (25) feet shall be provided on the street side of a corner lot.
REAR YARD: No rear yard is required except that where a rear line of a lot in this district abuts lots zoned residential or office a rear yard of not less than ten (10) feet shall be provided.

* The estimated sanitary flow in gallons per day is 660.

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1-800-344-7483
 Missouri ONE-CALL SYSTEM INC.

Underground facilities, structures & utilities have been plotted from available surveys, records & information and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act.

The original signed and sealed of this drawing is on file at the office of The Clayton Engineering Company. Any modifications to this drawing shall release said The Clayton Engineering Company, the Engineer and/or Surveyor whose seal appears hereon from any liability resulting from said unauthorized modifications. The signed and sealed original is the official document and shall take precedence over any digital version.

Benchmarks

PROJECT BENCHMARK (NAVD88):
 GPS OBSERVATIONS PER MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) GPS NETWORK SYSTEM, MISSOURI EAST (2401) STATE PLANE COORDINATE SYSTEM.

SITE BENCHMARK (NAVD88):
 CUT CROSS ON THE NORTHERN MOST ISLAND AT THE INTERSECTION OF MO ROUTE DD AND CALEDONIA PARKWAY AS SHOWN ON THESE PLANS. ELEVATION = 585.93 FJUS (NAVD88)

BASIS OF BEARINGS: PLAT BOOK PL51 PAGES 85-88

Legal Description

A tract of land being part of U.S. Survey 297 and part of Fractional Sections 11, 12, 13 and 14, Township 46 North, Range 2 East of the 5th P.M., City of O'Fallon, St. Charles County, Missouri described as follows:

Commencing at a found stone at the center of said Section 11 being the Southwest corner of Watson Subdivision according to the plat thereof recorded in Plat Book 4 Page 91;

thence along the south line of said Watson Subdivision S89°03'51"E a distance of 712.43 feet to the Southwesterly right of way line of 1-64 (Hwy 40-61) per MODOT plans job No. J6P06724;

Thence along said Southwest right of way line S36°11'38"E a distance of 3169.74 feet;

Thence S23°54'16"E a distance of 232.12 feet to the northerly most corner of a tract of land now or formerly conveyed to Drury Development Company recorded in Book 2371 Page 1023;

Thence departing said Southwest right of way line and along the North and West lines of said Drury tract S00°33'23"E a distance of 463.99 feet;

Thence S81°24'06"W a distance of 520.13 feet to the west right of way line of the South Service Road;

Thence along said west right of way line of South Service Road the following courses and distances:

Southerly along a curve to the left having a radius of 1034.93 feet, an arc length of 653.22 feet to the point of beginning;

Continuing along said curve to the left having a radius of 1034.93 feet, an arc length of 59.90 feet;

S33°21'23"E a distance of 80.01 feet;

S07°23'16"W a distance of 96.50 feet;

Thence departing said South Service Road S56°36'22"W a distance of 271.40 feet;

Thence N28°58'51"W a distance of 228.04 feet to a point of curvature;

Thence along a curve to the right having a radius of 25.00 feet and an arc length of 42.14 feet to a point of reverse curvature;

Thence along a curve to the left having a radius of 1012.50 feet and an arc length of 74.64 feet;

Thence N63°22'07"E a distance of 216.82 feet to the beginning and having an area of 73,213 square feet or 1.68 acres.

FINAL ASBUILT MEASUREMENTS

THE EXISTING SEWER LENGTHS, SIZES, FLOW LINES, DEPTH OF STRUCTURES & SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED CONDITIONS HAVE BEEN MEASURED. THE RESULTS OF THESE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS. SINCE THE PROFILE UTILITY LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

SIGNED: *Erik J. Staley*

DATE: 12/20/2022

MOTO, INC. MOTOMART NEW CONVENIENCE CENTER AND CARWASH



AS-BUILT ~~SITE~~ CONSTRUCTION PLANS

A TRACT OF LAND BEING LOT 6 OF
 "THE STREETS OF CALEDONIA - PLAT 1",
 CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI

Legend

ABBREVIATIONS		PROPOSED		EXISTING	
AI	- Area Inlet	⊕	- Area Light	○	- Clean Out
Asph	- Asphalt	⊕	- Double Area Light	⊕	- Catch Basin/Curb Inlet/Area Inlet
ATG	- Adjust to Grade	⊕	- Connection (Proposed)	⊕	- Double Catch Basin/Curb Inlet
B/B	- Back to Back	⊕	- Fire Hydrant	⊕	- Nyloplast Yard Drain
BW	- Base of Wall	⊕	- Fire Hydrant	⊕	- Grated Inlet
CB	- Catch Basin	⊕	- Concrete	⊕	- Light Standard
ChB	- Cord Bearing	⊕	- Doorway Entrance	⊕	- Manhole
CI	- Curb Inlet	⊕	- Drainage Flow	⊕	- Sign
CL or ⋈	- Centerline	⊕	- Swale	⊕	- Utility Pole
CMP	- Corrugated Metal Pipe	⊕	- Water Meter Or Valve	⊕	- Valve or Meter
Co	- Cleanout	⊕	- Gas Meter Or Valve	⊕	- Twin Light Pole
Conc	- Concrete	⊕	- Utility Pole w/ Guy Wires	⊕	- Single Light Pole
CTV	- Cable Television	⊕	- Handicap Parking Space		
DB	- Deed Book	⊕	- Direction Of Traffic		
DCB	- Double Catch Basin	⊕			
DFL(N)	- Drop FL from North	⊕			
DIP	- Ductile Iron Pipe	⊕			
E	- Electric	⊕			
F/F	- Face to Face	⊕			
FES	- Flared End Section	⊕			
FF	- Finish Floor	⊕			
FG	- Finish Grade	⊕			
FL	- Flow Line	⊕			
GB	- Grade Break	⊕			
GI	- Grate Inlet	⊕			
Gr MH	- Grate Manhole	⊕			
L	- Length of Curve	⊕			
MH	- Manhole	⊕			
N/F	- Now or Formerly	⊕			
N.I.C.	- Not in Contract	⊕			
OHE	- Overhead Electric	⊕			
OHE&T	- Overhead Electric & Telephone	⊕			
PB	- Plat Book	⊕			
PG	- Page	⊕			
PL	- Property Line	⊕			
PVC	- Polyvinyl Chloride Pipe	⊕			
R	- Radius	⊕			
R.D.	- Roof Drain	⊕			
RW	- Right of Way	⊕			
RCP	- Reinforced Concrete Pipe	⊕			
TBR	- To Be Removed	⊕			
TBR&R	- To Be Removed & Replaced	⊕			
TBR&T	- To Be Relocated	⊕			
TC	- Top of Curb	⊕			
TF	- Top of Foundation	⊕			
TG	- Top of Ground	⊕			
TP	- Top of Pavement	⊕			
TW	- Top of Wall	⊕			
Typ	- Typical	⊕			
UGE	- Underground Electric	⊕			
UGFO	- Underground Fiber Optic	⊕			
UGT	- Underground Telephone	⊕			
UIP	- Use In Place	⊕			
VCP	- Verified Clay Pipe	⊕			
W	- Water Service	⊕			

Conditions of Approval From Planning and Zoning

On April 1, 2021, the Planning and Zoning Commission voted to forward a recommendation of approval to the City Council for (21-001406) Public Comment. Request for Consideration and Motion for Recommendation to the City Council regarding a Conditional Use Permit for 8601 Highway DD - Moto, Inc. contract purchaser- THF DD Development LLC, property owner - proposed use: convenience store with fuel sales; car wash and drive thru (Ward 3).

On April 22, 2021, the City Council approved 21-001406) Conditional Use permit for 8601 Highway DD-Moto, Inc. contract purchaser- THF DD Development LLC, property owner - proposed use: convenience store with fuel sales; car wash and drive thru (Ward 3).

This approval would be contingent upon the following:

- The holder of this Conditional Use Permit shall be and remain fully licensed with the State of Missouri and the City of O'Fallon. Both licenses shall remain in good standing throughout the term of this conditional use permit.
- This Conditional Use Permit is granted solely to the owner of MotoMart. Should ownership transfer in the future, the new owner shall be required to apply for a transfer of a Conditional Use Permit through the Planning and Development Department.
- This Conditional Use Permit shall be revoked upon: i) breach or failure to comply with the conditions of this permit, ii) disciplinary action or other action affecting the status of the holder's state or city licenses, and iii) as otherwise provided by ordinance or other applicable law.
- The occurrence of activities which are deemed to disturb the peace is defined in Title II, Public Health, Safety and Welfare of the Municipal Code shall prompt the City to revoke the Conditional Use Permit.
- Outdoor storage of restaurant related equipment shall be prohibited. Equipment includes, but is not limited to soda canisters, bread racks, floor mats.
- Should the Conditional Use cease operations for a period of one (1) year, the CUP shall be revoked.
- Drive thru order facility and other outdoor speakers shall not produce any sound exceeding 60dB at a straight-line distance of 100 feet or greater or at any property line abutting a residential use, up to a height of eight feet above the ground at such property line.

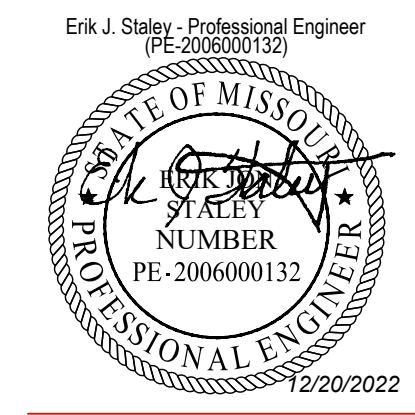
On April 1, 2021, the Planning and Zoning Commission approved (21-001406) Request for Consideration and Motion for Action on a Site Plan for 8601 Highway DD - Moto, Inc., contract purchaser- THF DD Development, LLC, property owner proposed use: convenience store with fuel sales; car wash and drive thru (Ward 3).

The approval is conditional upon the following Staff recommendations being met:

- The Right-In entrance and trail, located off Highway DD, has not been built yet. It will be built with the pending Highway DD project. Developer will need to coordinate the project plans to ensure the elevations are correct to be in this property.
- It is not clear who is building the internal access roadways adjacent to the station. The applicant shall provide revised plans showing these improvements along with the typical pavement sections.
- Provide internal access road street lights around the property lines. These lights shall be private.
- Provide sidewalks around the perimeter of the lot, along the internal access roadways, and connect to the public sidewalks and trails.
- Ensure that the storm sewer from Dalriada extends all the way to service this site.
- The "concrete sidewalk within the drive aisle" is not acceptable. This cannot be within the drive pavement.
- The drive aisle south of the canopy shall be 25 feet in width.
- Confirm that the sanitary sewer terminal manhole is on the north side of the Access Road as depicted. There is no easement for this sewer line crossing the access road, so one will be needed and provided to Duckett Creek.

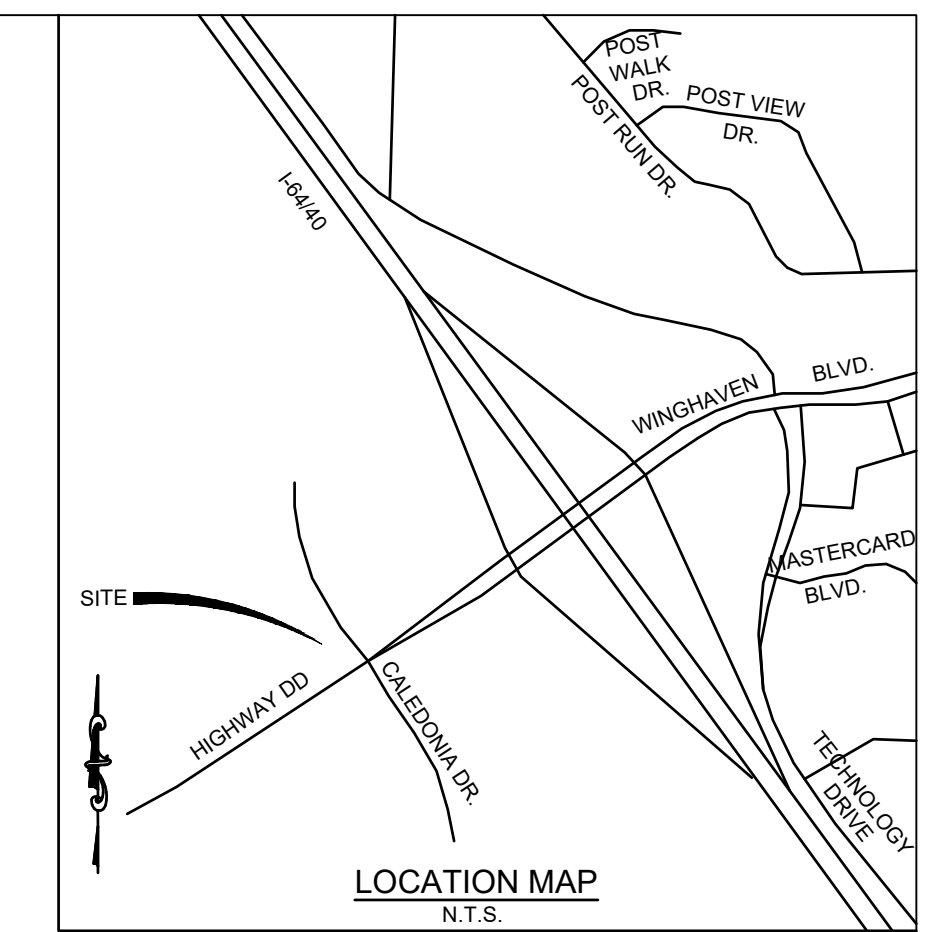
The approval is also conditional upon the following Municipal Code requirements being provided in conjunction with the Construction Site Plans:

- Provide a passive entrance for the dumpster enclosure. This should be an open entrance blocked by a partition wall.
- The trees listed on the landscape plan must be trees listed in Code Section 402.250.
- Each commercial lot is required to provide their own water quality.



ERIK J. STALEY, PE-2006000132
 CLAYTON ENGINEERING CO.

ASBUILTS 12/20/22



PROPERTY OWNER / DEVELOPER
 MOTO, INC.
 (C/O ANDY WALL)
 721 WEST MAIN STREET
 BELLEVILLE, IL 62220
 618-233-6754

EXISTING ZONING:
 C-2 "GENERAL BUSINESS DISTRICT"

SCHOOL DISTRICT:
 WENTZVILLE SCHOOL DISTRICT

SITE ADDRESS:
 8601 HIGHWAY DD

PARCEL I.D. NUMBER:
 4-0068-C900-00-0006.0000000

CIVIL ENGINEERING COMPANY:
 THE CLAYTON ENGINEERING CO., INC.
 (C/O ERIC STALEY, P.E.)
 2268 WELSH INDUSTRIAL COURT
 ST. LOUIS, MO 63146
 314-692-8888

SITE DATA:

- EXISTING / PROPOSED USE: VACANT / CONVENIENCE STORE WITH FUEL SALES, CAR WASH, AND DRIVE THRU
- PARCEL ID: 4-0068-C900-00-0006.0000000
- PROPERTY DATA:
 - TOTAL LOT 6 PROPERTY AREA = 1.68 ACRES.
 - PROPERTY BOUNDARY INFORMATION BASED ON RECORD DOCUMENTS.
 - BUILDING AREA (0.17 AC.) = 10.1% LOT COVERAGE
 - 12'W. RIGHT-OF-WAY TO BE VACATED BY OTHERS AND THEN CONSOLIDATED INTO LOT 6 BY MOTO, INC. = 0.07 ACRES.
- WE HAVE EXAMINED FLOOD INSURANCE RATE MAP NUMBER 29183C0410-G, HAVING AN EFFECTIVE DATE OF JANUARY 20, 2016 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE AREA CONTAINING THE SUBJECT PROPERTY. BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE "X" - AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THIS NOTE IS FOR THE PURPOSE OF PROVIDING INFORMATION AS INDICATED ON THE CURRENT FLOOD INSURANCE RATE MAPS FOR THIS AREA, AND SHOULD NOT BE CONSTRUED AS AN INDICATION AS TO WHETHER FLOOD INSURANCE SHOULD, OR SHOULD NOT BE PURCHASED.

Utility Contacts

Sanitary Sewers	Gas
Duckett Creek Sanitary District 3550 Highway K O'Fallon, MO 63368 636-441-1244	Spire Gas 700 Market Street St. Louis, MO 63101 314-575-4831
Water	Telephone
Public Water Supply District No. 2 100 Water Drive O'Fallon, MO 63368 636-561-3737	Centurylink 2342 Technology Drive O'Fallon, MO 63368 636-445-7055
Storm Sewer	Fire District
City of O'Fallon 100 N. Main St. O'Fallon, MO 63366 636-240-2000	Wentzville Fire Protection District 502 Luetkenhaus Blvd. Wentzville, MO 63385 636-332-9969
Electric	
Culvre River Electric Coop 8757 Highway N Lake St. Louis, MO 63367 636-695-4741	

CITY OF O'FALLON
 ENGINEERING DEPARTMENT
 ACCEPTED FOR CONSTRUCTION
 BY: *Karl Ebert - AB Plan* DATE 12/27/2022
 PROFESSIONAL ENGINEER'S SEAL
 INDICATES RESPONSIBILITY FOR DESIGN

ON APRIL 1, 2021, THE PLANNING AND ZONING COMMISSION APPROVED (21-001406) REQUEST FOR CONSIDERATION AND MOTION FOR ACTION ON A SITE PLAN FOR 8601 HIGHWAY DD - MOTO, INC., CONTRACT PURCHASER- THF DD DEVELOPMENT, LLC. PROPERTY OWNER PROPOSED USE: CONVENIENCE STORE WITH FUEL SALES; CAR WASH AND DRIVE THRU (WARD 3).

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ENGINEERS • SURVEYORS • PLANNERS
 2268 WELSH INDUSTRIAL COURT
 ST. LOUIS, MISSOURI 63146
 (314) 692-8888 FAX: (314) 692-8888 claytoneng.com
 Mo. Cert. of Authority - Prof. Engineering #000067
 & Prof. Surveying #000014
 IL Dept. Financial & Prof. Reg. Prof. Design
 & Engineering Comp. #184-000879

Project Number: 20350
 DESIGNED: EJS / RPK
 DRAWN: EJS / RPK
 DATE: 12/14/22

SHEET NO. **C0.0**
 JOB NO. 21-31331.01
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 MISSOURI CERTIFICATE OF AUTHORITY #000311

ARCHITECTURE
 FGM ARCHITECTS
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 ST. LOUIS, MISSOURI 63102
 314.439.1601 (O) 314.439.1602(F)
 MO STATE CERTIFICATE OF AUTHORITY
 NO. 000311

CIVIL
 THE CLAYTON ENGINEERING COMPANY, INC.
 2268 WELSH INDUSTRIAL CT.
 ST. LOUIS, MO 63146
 314.692.8888 (O) 314.692.8888(F)
 MO STATE CERTIFICATE OF AUTHORITY
 PROF. ENG. NO. 000067 & PROF. SURVEYING NO. 000014

STRUCTURAL
 ASDG, LLC
 1000 LINCOLN HIGHWAY
 FAIRVIEW HEIGHTS, IL 62206
 618.272.0887 (O) 618.272.0889(F)
 IL STATE CERTIFICATE OF AUTHORITY
 NO. 184-003843

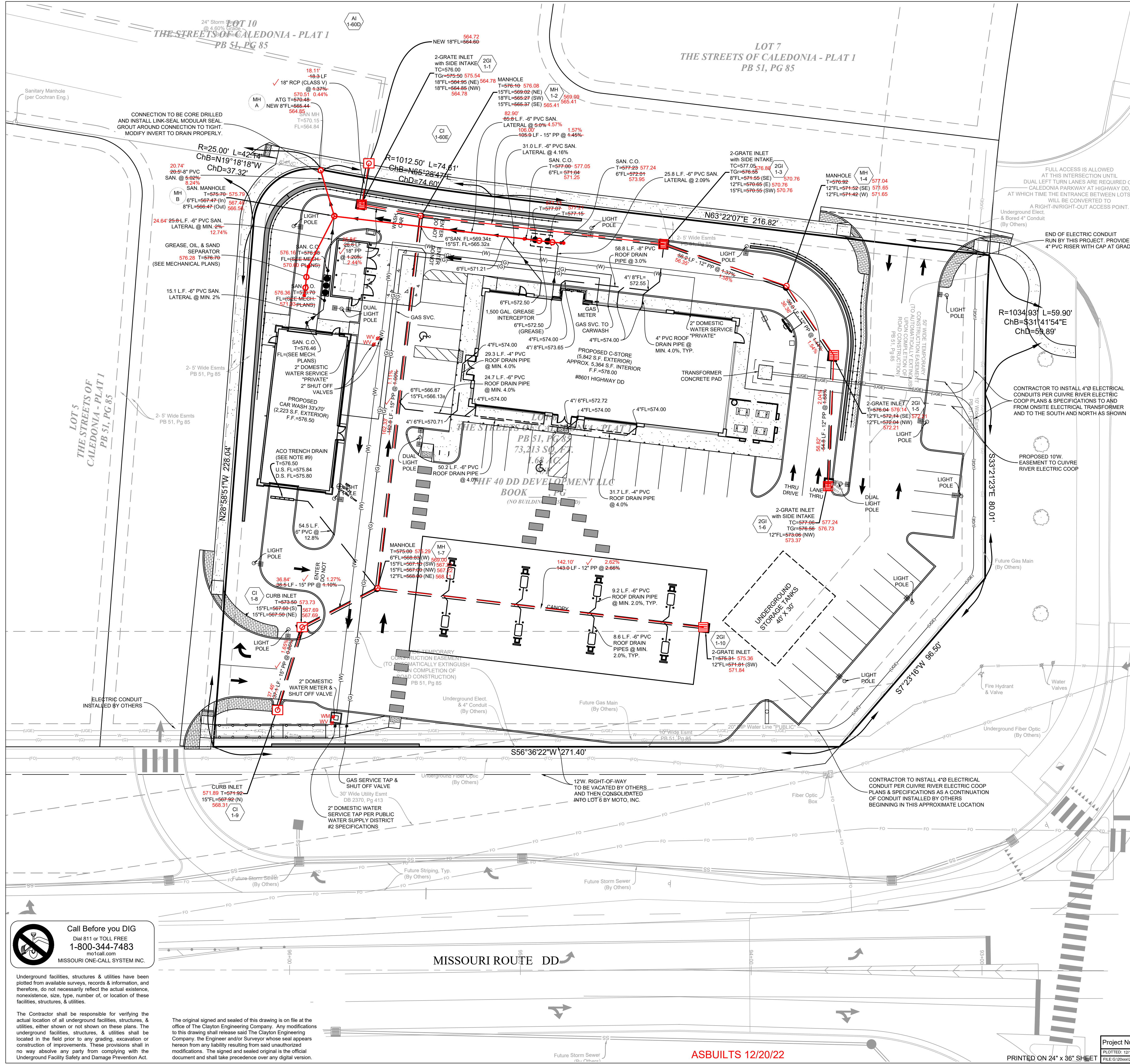
M.E.P.
 BRIC PARTNERSHIP, LLC
 100 EAST WASHINGTON, SUITE 220
 BELLEVILLE, IL 62220
 618.277.5200 (O) 618.277.5271(F)
 IL STATE CERTIFICATE OF AUTHORITY
 NO. 184-002479

ERIK J. STALEY, PE
 ENGINEER No. 2006000132
 The professional engineer seal offered to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not containing this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plans, drawings or documents not containing this seal.
 DATE 08/25/2021

NO	DATE	DESCRIPTION
1.	08/25/21	CITY SUBMITTAL
2.	09/22/21	2nd CITY SUBMITTAL
3.	10/06/21	3rd CITY SUBMITTAL
4.	11/22/21	4th CITY SUBMITTAL (BID SET)
5.	04/18/22	Revised Grading to Match ASB

**O'FALLON, MO MOTOMART
 NEW CONVENIENCE CENTER
 AND CARWASH
 FKG OIL COMPANY**

COVER SHEET & NOTES



- ADDITIONAL UTILITY NOTES:**
- LIMITS OF DISTURBANCE: THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS AND MINIMIZE DISTURBANCE WITHIN THE WORK AREA WHEREVER POSSIBLE.
 - ALL DISTURBED AREAS SHALL EITHER BE PAVED, LANDSCAPED, OR SODED FOR THESE PROJECT IMPROVEMENTS. SEEDING WILL NOT BE PERMITTED ON THIS DEVELOPMENT.
 - STORM SEWERS ARE PROPOSED WITH THESE IMPROVEMENTS. SEWER DESIGN IS PROVIDED IN ACCORDANCE WITH CITY RULES & REGULATIONS THIS PROJECT, AND ACCOUNTS FOR THE IMPROVEMENTS SHOWN ON THESE PLANS.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY CITY OR MODOT PERMITS REQUIRED TO WORK ALONG THE ROADWAYS.
 - ALL EXISTING UTILITIES (PIPING) EXPOSED DURING TRENCHING FOR NEW UTILITY INSTALLATIONS, SHALL BE SUPPORTED ACCORDING TO THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ANY DAMAGE TO THESE EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR TO THE RESPECTIVE UTILITY COMPANY'S SATISFACTION.
 - STORMWATER RUNOFF WILL FOLLOW SIMILAR DRAINAGE PATTERNS TO THE EXISTING STORMWATER COLLECTION & DETENTION SYSTEM. A STORMWATER DETENTION BASIN WITH WATER QUALITY TREATMENT SHALL BE INSTALLED WITH THE STREETS OF CALEDONIA DEVELOPMENT PROJECT. THIS PARCEL'S (LOT 6) IMPROVEMENTS AND ITS LAND DISTURBANCE IS INCLUDED IN THE DESIGN OF THOSE STORMWATER BMP'S.
 - USE CONTINUOUS REINFORCED FOOTING OR GRADE BEAM & PIERS FOR NEW RETAINING WALLS OVER NEW SANITARY AND STORM SEWER PIPES.
 - TRENCH DRAIN AT CARWASH EXIT SHALL BE ACO KLASSIKDRAIN K200 WITH SLOPED CHANNEL & DRAIN/LOAD CLASS C SLOTTED IRON GRATE (OR APPROVED EQUIV) WITH MIN. LOAD CLASS C GRATE).
 - THE NEW BUILDING DOWNSPOUTS SHALL ALL BE PIPED. REFER TO THE ARCHITECTURAL PLANS FOR DOWNSPOUT PIPE BOOTS AND SIZES, CONNECTION DETAILS, AND LOCATION WITH THE BUILDING PLANS. WATERSHED SHALL TAKE PRECEDENCE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS FOUND.
 - LIGHT POLES TO BE 16-FOOT PLUS A 2-FOOT CONCRETE BASE. SEE LIGHTING PLAN.
 - ALL HVAC AND MECHANICAL UNITS ON SITE SHALL BE PROPERLY SCREENED AS REQUIRED BY CITY CODE 400.27B. ROOF TOP UNITS SHALL BE SCREENED BY A PARAPET WALL AT LEAST AS HIGH AS TALLEST MOUNTED UNIT ON ROOF. REFER TO THE ARCHITECTURAL PLANS FOR MORE INFORMATION.
 - REFER TO ELECTRICAL PLANS FOR UNDERGROUND ELECTRIC SERVICES AND TRANSFORMER LOCATION. THESE ITEMS, IF SHOWN ON CIVIL PLANS, ARE APPROXIMATE AND FOR REFERENCE ONLY. THE CONTRACTOR TO COORDINATE WITH CUWIRE RIVER ELECTRIC COOP FOR FINAL SERVICE LINE ROUTES. CONTRACTOR IS RESPONSIBLE TO INSTALL ELECTRICAL CONDUIT WITH THE DOWNSPOUTS AND TO COORDINATE WITH CUWIRE RIVER ELECTRIC COOP FOR CUWIRE RIVER ELECTRIC COOP TO ENSURE THE LINE IS WITHIN EASEMENTS PROVIDED.
 - ANY GAS SERVICE, WATER SERVICE, ETC. BORINGS, OR EXCAVATIONS IN THE STATE RIGHT-OF-WAY SHALL REQUIRE A MODOT UTILITY PERMIT. THE CONTRACTOR SHALL CONTACT MODOT SENIOR TRAFFIC SPECIALIST, PAUL GRAHAM AT (314) 565-6714, AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES. IT IS SUGGESTED THIS PROCESS SHOULD BE STARTED IMMEDIATELY AFTER THE PROJECT IS AWARDED.
 - THIS PROJECT DOES NOT PROPOSE ANY IRRIGATION OR ELECTRIC SERVICE LINES FOR RESTAURANT HAS A 1,500 GALLON GREASE INTERCEPTOR LOCATED EXTERIOR OF THE BUILDING. SEE THIS PLAN AND DETAIL ON C6.3.
 - WATER SERVICE NOTE: 2" METER AND LINE - 12" POLYS BUTYRATE NYLON DISTRICT NO. 2 WILL SUPPLY ONLY THE WATER METER, GASKETS AND BOLTS AND NUTS NEEDED TO COMPLETE THE SERVICE INSTALLATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE TAPPING SADDLE AS WELL AS EXCAVATION, TRENCHING, BACKFILLING AND INSTALLATION. IT SHALL BE WITNESSED AND INSPECTED BY THE WATER DISTRICT. PROVIDE MINIMUM OF ONE (1) WEEK NOTICE TO WATER DISTRICT. 2" LINES CAN BE TYPE K COPPER ON DISCHARGE SIDE OF THE METER. ALL INSTALLATION TO FOLLOW PUBLIC WATER SUPPLY DISTRICT NO. 2 STANDARDS AND SPECIFICATIONS.
 - ALL WATER AND FIRE FITTINGS SHOWN ARE FOR HORIZONTAL CHANGES IN DIRECTION. THE CONTRACTOR SHALL DETERMINE BEST LOCATIONS FOR FITTINGS TO ACHIEVE VERTICAL CHANGES IN ALIGNMENT WHILE MAINTAINING PROPER INSTALLATION DEPTH AND OBTAINING PROPER CLEARANCES. ADDITION OF AIR RELEASE VALVES MAY BE NECESSARY IF ISOLATED HIGH POINTS IN WATER/FIRE LINES ARE CREATED WHERE AIR MAY BE TRAPPED.
 - ALL WATER AND FIRE LINE FITTINGS TO BE THRUST BLOCKED PER PUBLIC WATER SUPPLY DISTRICT NO. 2 STANDARDS AND SPECIFICATIONS.
 - MINIMUM VERTICAL CLEARANCE BETWEEN WATER LINES AND SANITARY/STORM SEWERS SHALL BE 18-INCHES. CONTRACTOR TO DIP NEW WATER LINES UNDER SANITARY/STORM SEWER TO OBTAIN CLEARANCE. AS AN ALTERNATIVE OPTION AND WITH PRIOR APPROVAL FROM THE ENGINEER, CONCRETE ENCASE WATER LINES WHEN CLEARANCE IS NOT POSSIBLE. THE WATER DISTRICT REQUIRES A MINIMUM OF 42" OF COVER AND A MAXIMUM OF 72" OF COVER OVER ITS WATER MAINS. ADDITIONALLY ALL EXISTING VALVES MUST REMAIN OR BE BROUGHT TO GRADE.
 - ALL EXISTING LIGHT POLES, UTILITY POLES, OVERHEAD ELECTRIC & TELEPHONE WIRES, AND/OR UNDERGROUND ELECTRIC MARKED TO BE REMOVED AND/OR RELOCATED ARE TO BE DONE SO BY THE CONTRACTOR. THE CONTRACTOR MUST COORDINATE WITH CUWIRE RIVER ELECTRIC COOP, AT&T, AND ANY ADDITIONAL COMPANIES WHO HAVE WIRES ON THESE POLES. PRIOR TO ANY WORK IN THIS AREA, REFER TO THE ELECTRICAL PLANS FOR NEW LOCATIONS AND FURTHER INFORMATION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY COORDINATION AND SCHEDULING.
 - EXISTING UTILITIES (UNDERGROUND ELECTRIC, GAS, AND WATER) ARE SHOWN APPROXIMATELY. THESE LOCATIONS WERE PLOTTED FROM MISSOURI ONE-CALL SYSTEM MARKINGS AT THE TIME OF THE SURVEY FIELD WORK OR AS PROVIDED BY UTILITY MAPS AND DESIGN PLANS BY OTHERS.
 - ALL ITEMS LABELED AS "FUTURE" (BY OTHERS) ARE ITEMS TO BE CONSTRUCTED BY THE DEVELOPER OF THE STREETS OF CALEDONIA PROJECT OR OTHERS TO BE SUBMITTED AND PERMITTED SEPARATELY FROM THIS MOTOMART PROJECT. THESE ITEMS ARE REPRESENTED AS BEING EXISTING ON THESE MOTOMART PLANS TO SHOW THE OVERALL INTENT OF THE DEVELOPMENT.
 - ALL METER PITS/VALVETS MUST BE INSTALLED WITHIN GREENSPACE PER THE WATER DISTRICT'S SPECIFICATIONS.

- DUCKETT CREEK SANITARY DISTRICT (DCSD) NOTES:**
- EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
 - CONNECTION TO DCSD SANITARY SEWERS REQUIRES DCSD INSPECTION. CONTACT THE DCSD INSPECTION DEPARTMENT AT 636-441-1244 TO SCHEDULE INSPECTION. 48-HOUR ADVANCE NOTICE IS REQUIRED.
 - THE SANITARY CONNECTION IS A PRIVATE LATERAL CONNECTION. NO TESTING OF SANITARY MANHOLES OR MAINS IS NEEDED.

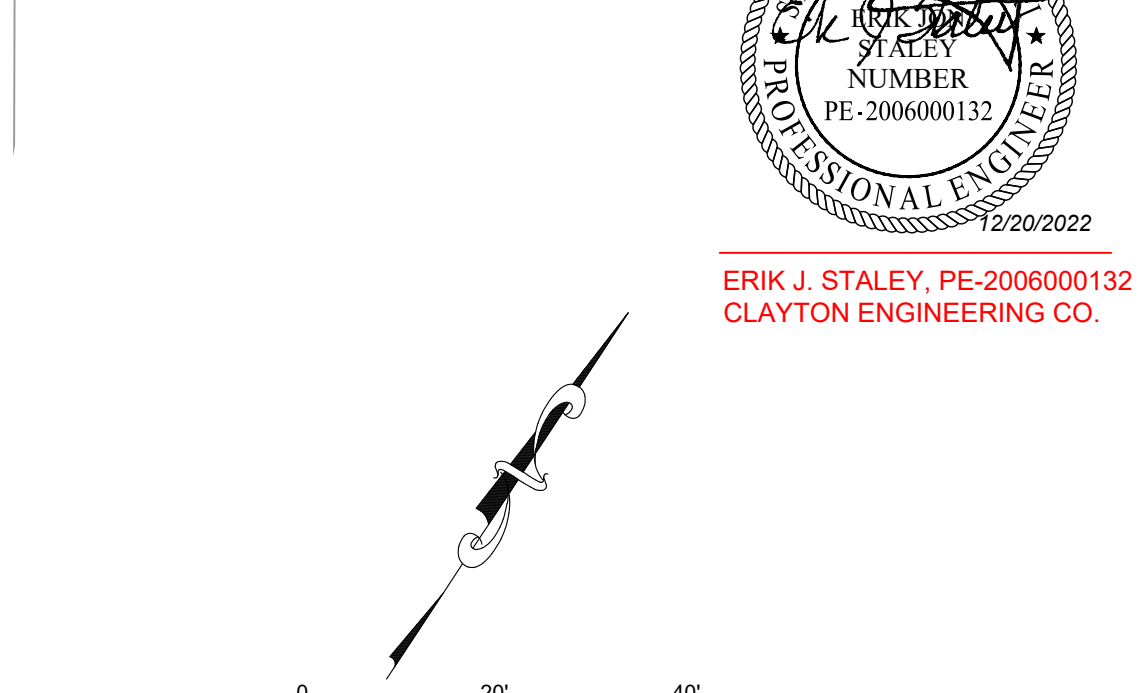
FINAL ASBUILT MEASUREMENTS

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SIGNED: *Erik J. Staley*
 DATE: 12/20/2022



ERIK J. STALEY, PE-200600132
 CLAYTON ENGINEERING CO.



STORM SEWER STRUCTURES:
 MEET MSD STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES LATEST EDITION.

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Designed: EJS/RFK
 Drawn: EJS/RFK
 Date: 12/14/22

Project Number: 20350
 PLOTTED: 12/16/2022 2:48 PM BY: KETI/FRIEER
 FILE: C:\2021\20350_MOTOMART\DWG\ASBUILT\ASBUILT_Hwy_DD_ASBULTS.dwg

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Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act.

The original signed and sealed of this drawing is on file at the office of The Clayton Engineering Company. Any modifications to this drawing shall reference said The Clayton Engineering Company, the Engineer and/or Surveyor whose seal appears hereon from any liability resulting from said unauthorized modifications. The signed and sealed original is the official document and shall take precedence over any digital version.

MISSOURI ROUTE DD

ASBULTS 12/20/22

UTILITY PLAN

**O'FALLON, MO MOTOMART
 NEW CONVENIENCE CENTER
 AND CARWASH
 FKG OIL COMPANY**

fgma

FGM Architects Inc.
 1 Metropolitan Sq, Ste. 1945
 St. Louis, Missouri 63102

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 314.439.1602 FAX

MISSOURI CERTIFICATE OF AUTHORITY #000311

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ERIK J. STALEY, PE
ENGINEER NO. 200600132

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DATE 08/25/2021

ISSUANCE

NO.	DATE	DESCRIPTION
1.	08/25/21	CITY SUBMITTAL
2.	09/22/21	2nd CITY SUBMITTAL
3.	10/04/21	3rd CITY SUBMITTAL
4.	11/22/21	4th CITY SUBMITTAL (BID SET)
5.	04/18/22	Revised Grading to Match ASB

THE CITY OF MISSOURI
 PROFESSIONAL ENGINEER
 NUMBER
 PE-200600132
 12/20/2022

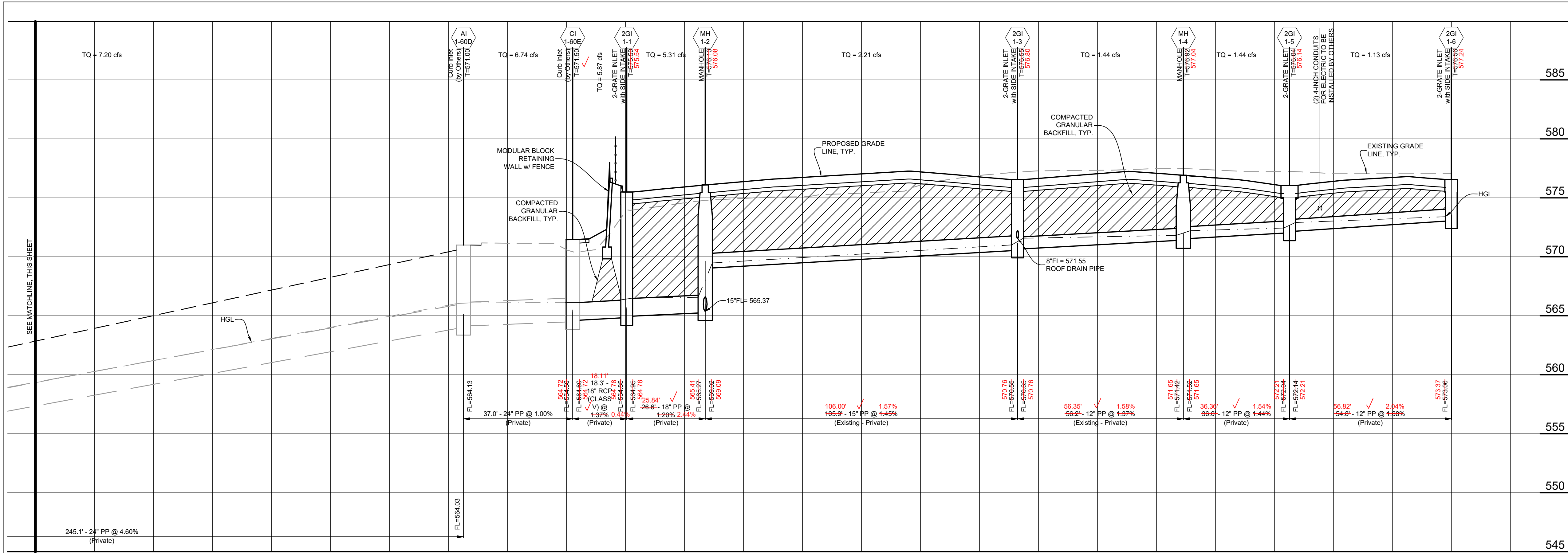
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 CLAYTON ENGINEERING CO.

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 (314) 628-8888 FAX: (314) 628-8888 claytoneng.com
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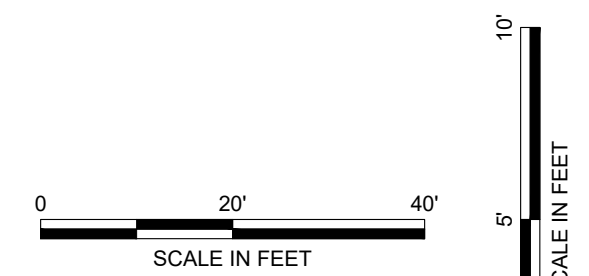
LEGEND:
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 HGL - HYDRAULIC GRADE LINE (15-YR STORM*)
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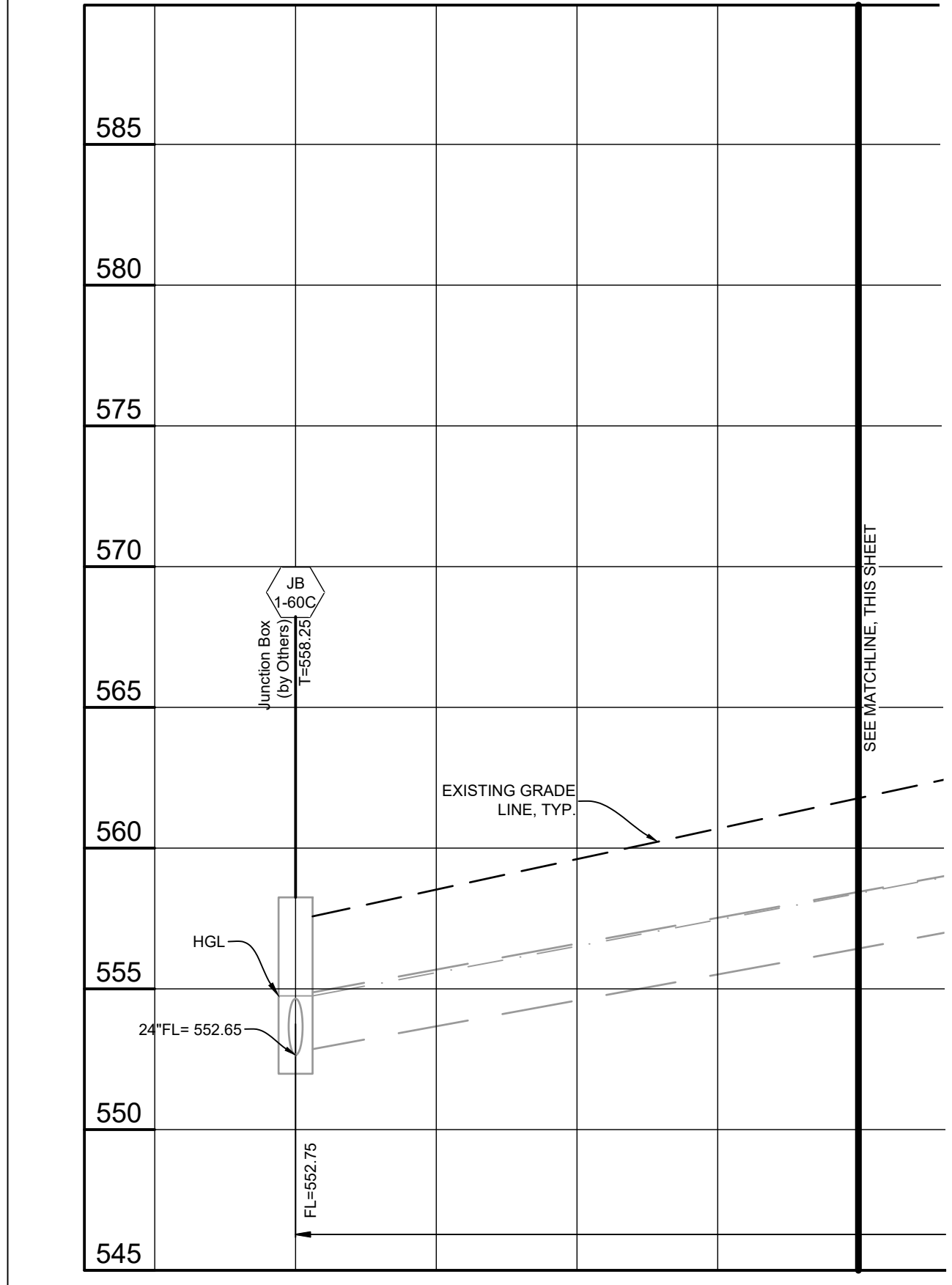
GRANULAR BACKFILL NOTE:
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STORM01



STORM01

System Name = Storm01
 Description = Storm 01 - Onsite Storm Sewers to Connection with DS Storm
 Sewer Type = Storm
 System Number = 1
 Return Period (yr) = 15
 Rainfall duration (min) = 20
 Runoff Factor Multiplier = 1.000
 Starting HGL Elev. (ft) = 554.75
 Use St. Louis Co./MSD Losses? = Y

STRUCTURES UP/LWR	FLOWLINES UP/LWR	SIZE/ ANGLE	LENGTH/ CURVED?	n	AREA/ PI	Qadd	Qtotal/ Qfull	Cons/ Reqds	Yn/ Yc	PARTIAL V/Y	FULL V/Vhead	LOSSES F/C	COND U/L	HGL UP/LWR	UPR STR TOP/FRBD	
2GI 1-10	571.81	12"	143.00	0.013	0.45	1.55	1.55	2.66	0.35	1.97	1.97	2.85	0.08	OF	572.89	575.31
MH 1-7	568.00	90°	N	N	3.44		5.83	0.19	0.53	1.96	0.06	0.00	0.00	FP	569.96	2.42
CI 1-9	567.92	15"	37.06	0.013	0.12	0.46	0.46	0.86	0.23	0.37	0.37	0.00	0.00	FP	570.00	571.92
CI 1-8	567.60	46°	N	N	3.83		6.02	0.01	0.26	2.40	0.00	0.00	0.00	FP	570.00	1.92
CI 1-8	567.50	15"	36.51	0.013	0.25	0.90	1.36	1.10	0.38	1.11	1.11	0.02	0.02	FP	570.00	573.50
MH 1-7	567.10	56°	N	N	3.60		6.78	0.04	0.46	2.86	0.02	0.00	0.00	FP	569.96	3.50
MH 1-7	567.00	15"	162.75	0.013	0.05	0.19	3.10	1.00	0.61	2.53	2.53	0.37	0.08	FP	569.96	575.00
MH 1-2	565.37	86°	N	N	3.80		6.48	0.23	0.71	4.11	1.10	0.00	0.03	FP	569.48	5.04
2GI 1-6	573.06	12"	54.82	0.013	0.43	1.13	1.13	1.68	0.34	1.75	1.40	0.49	0.49	ND	573.89	576.56
2GI 1-5	572.14	36°	N	N	2.63		4.63	0.10	0.45	0.77	0.03	0.00	0.00	OJ	572.91	2.67
2GI 1-5	572.04	12"	36.00	0.013	0.09	0.31	1.44	1.44	0.40	2.45	1.83	0.22	0.45	ND	572.91	576.04
MH 1-4	571.52	36°	N	N	3.44		4.29	0.16	0.51	0.70	0.05	0.00	0.01	OJ	572.22	3.13
MH 1-4	571.42	12"	56.17	0.013	0.00	0.00	1.44	1.37	0.40	1.89	1.83	0.25	0.36	ND	572.22	576.92
2GI 1-3	570.65	13°	N	N	1.70		4.18	0.16	0.51	0.93	0.05	0.00	0.04	OJ	571.58	4.70
2GI 1-3	570.55	15"	105.87	0.013	0.22	0.77	2.21	1.45	0.46	5.46	1.80	1.53	0.57	OC	571.58	576.55
MH 1-2	569.02	4°	N	N	3.50		7.79	0.12	0.59	0.46	0.05	0.00	0.01	ND	569.48	4.97
MH 1-2	565.27	18"	26.60	0.013	0.00	0.00	5.31	1.20	0.71	3.00	3.00	0.07	0.14	OC	566.75	576.10
2GI 1-1	564.95	90°	N	N	1.70		11.55	0.25	0.89	1.55	0.14	0.00	0.04	FP	566.50	9.35
2GI 1-1	564.85	18"	18.31	0.013	0.16	0.56	5.87	1.37	0.73	3.32	3.32	0.22	0.06	FP	566.50	575.50
CI 1-60E	564.60	0°	N	N	3.50		12.31	0.31	0.94	1.53	0.17	0.00	0.09	FP	566.13	9.00
CI 1-60E	564.50	24"	37.00	0.013	0.24	0.87	6.74	1.00	0.75	2.15	2.15	0.03	0.00	OC	566.13	571.50
AI 1-60D	564.13	88°	N	N	3.63		22.68	0.09	0.92	1.97	0.07	0.00	0.00	OJ	566.10	5.37
AI 1-60D	564.03	24"	245.11	0.013	0.12	0.46	7.20	4.60	0.52	2.29	2.29	11.28	0.02	OF	566.10	571.00
JB 1-60C	552.75	0°	N	N	3.83		48.66	0.10	0.95	2.00	0.08	0.00	0.03	OJ	554.75	4.90

LEGEND

UPR - At upper end of pipe
 LWR - At lower end of pipe
 SIZE - Sewer size (diam or WxH)
 ANGLE - Downstream deflection (deg)
 LENGTH - Pipe length (ft)
 CURVED - Pipe is curved?
 n - Manning's roughness factor
 AREA - Upper drainage area (ac)
 Qadd - Added flowrate (cfs)
 Qtotal - Total flowrate (cfs)
 Qfull - Pipe full capacity (cfs)
 Cons - Construction slope of pipe (%)
 Reqds - Minimum required slope (%)

Yn - Normal depth (ft)
 Yc - Critical depth (ft)
 PARTIAL - Conditions at lower end of pipe
 FULL - Conditions assuming full pipe flow
 V - Velocity (fps)
 Y - Depth (ft)
 Vhead - Velocity head (ft)

LOSSES - Major and minor head losses
 F - Friction in pipe (ft)
 C - Curve in pipe (ft)
 V - Velocities in upper structure (ft)
 T - Turns in upper structure (ft)

COND - Flow condition code at each pipe end:
 FP - full pipe flow
 OC - open channel flow
 ND - set to normal depth
 CD - set to critical depth
 OF - initially set to open channel depth then set to full pipe flow
 OJ - open channel flow but hydraulic jump may occur downstream

HGL - Hydraulic grade line elevation (ft)
 TOP - Elev. of top of upper structure (ft assl)
 FRBD - Difference btwn upper HGL and TOP (ft)

Notes:
 1. Friction losses computed w/ Manning's formula if full pipe flow or back-calculated if open channel flow (simulating flow profile)
 2. HGL at upper structure includes structure losses calculated with actual inflowing velocities using iterative procedure
 3. Velocity and turn structure loss components only computed for incoming pipes with invert elevations below outlet crown elevation

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SIGNED: *[Signature]*

DATE: 12/20/2022



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ASBUILTS 12/20/22

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Project Number: 20350
 DESIGNED: EJS/RFK
 DRAWN: EJS/RFK
 CHECKED: EJS/RFK
 DATE: 12/14/22

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DATE 08/25/2021

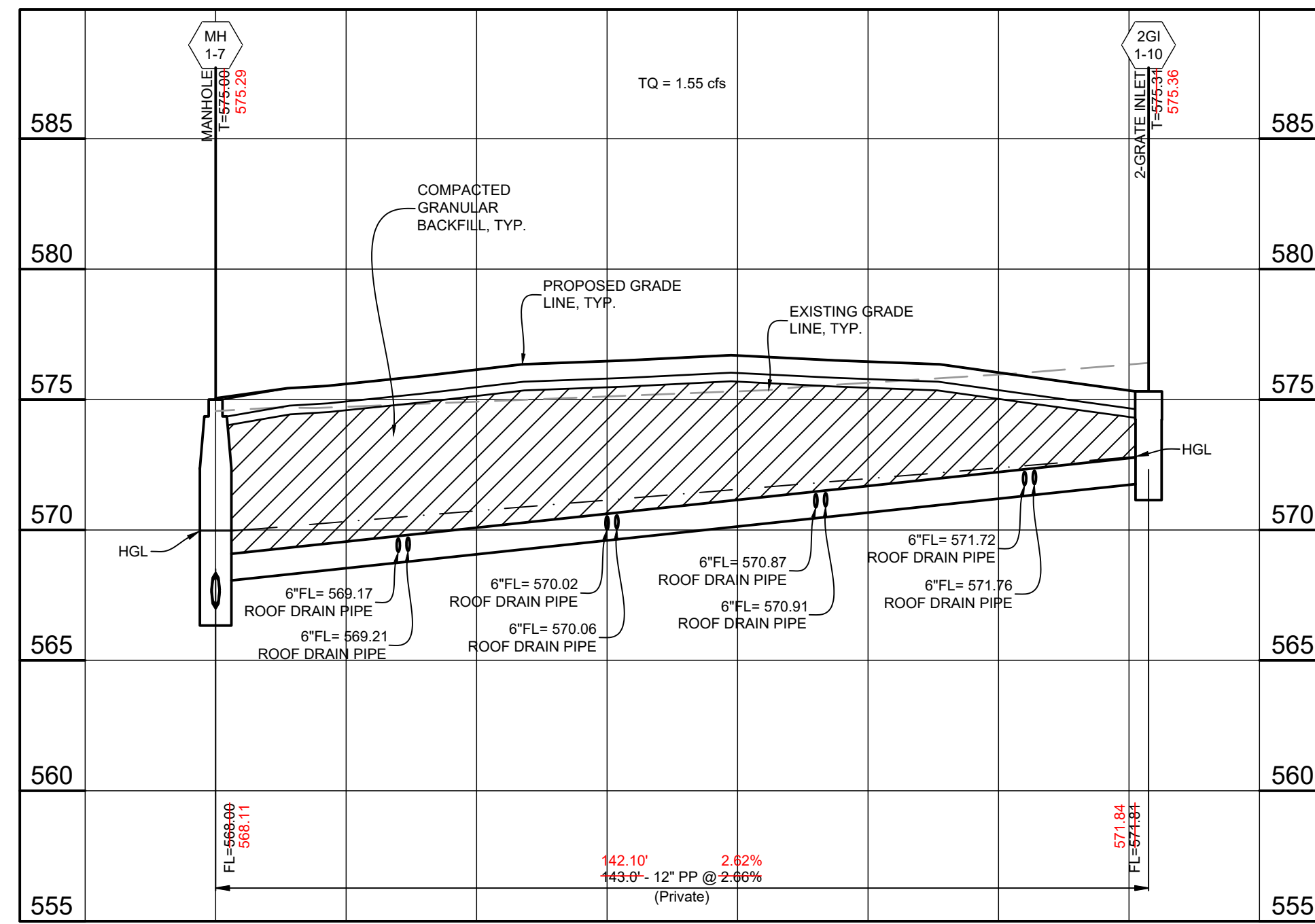
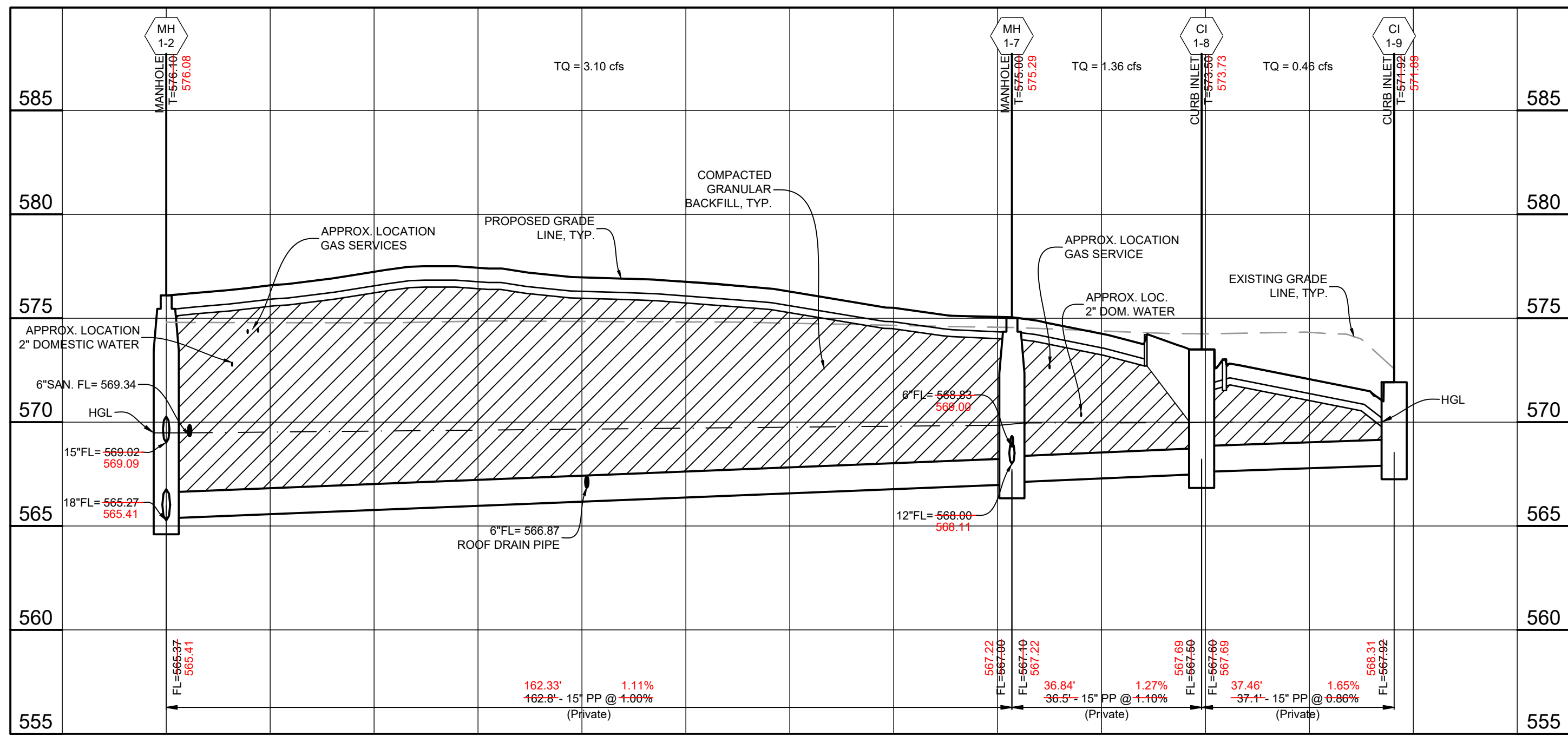
ISSUANCE

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2.	09/22/21	2nd CITY SUBMITTAL
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**O'FALLON, MO MOTOMART
 NEW CONVENIENCE CENTER
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 FKG OIL COMPANY**

SEWER PROFILES 1

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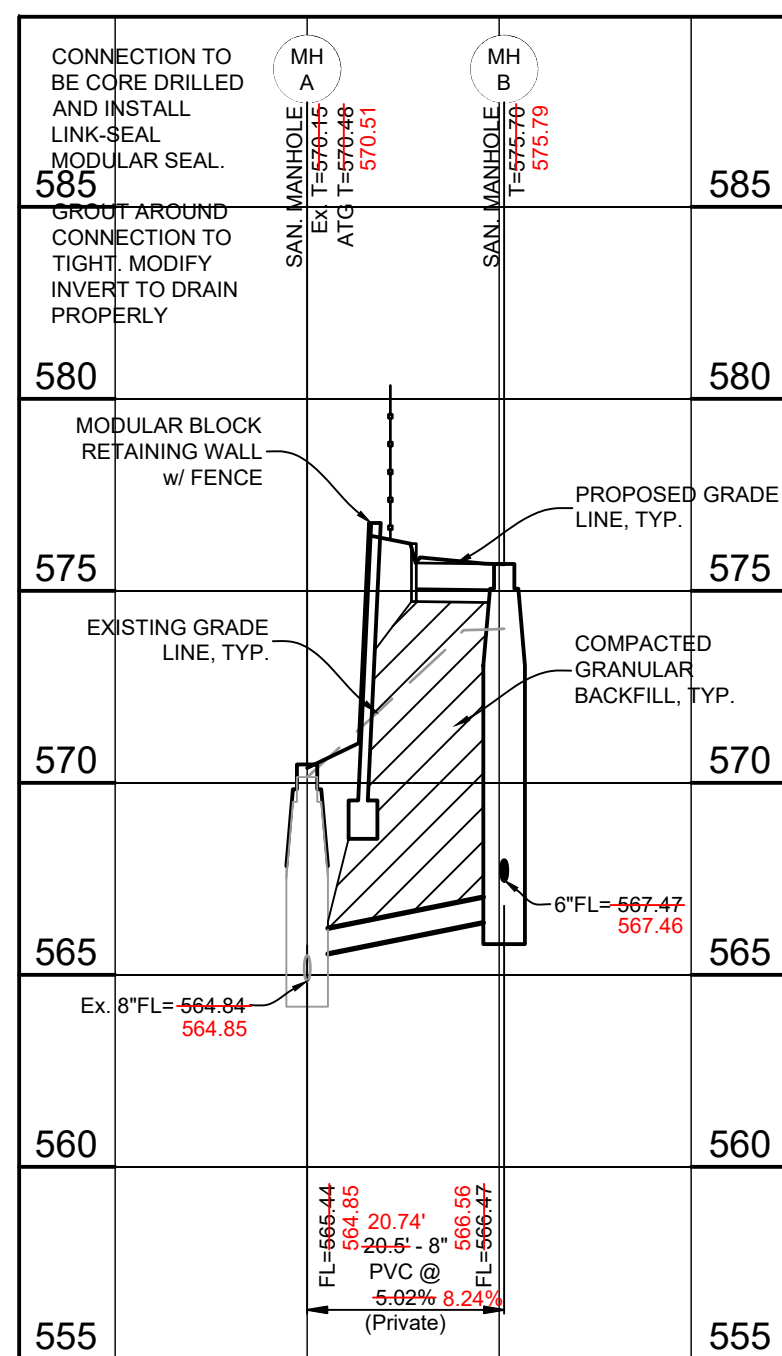
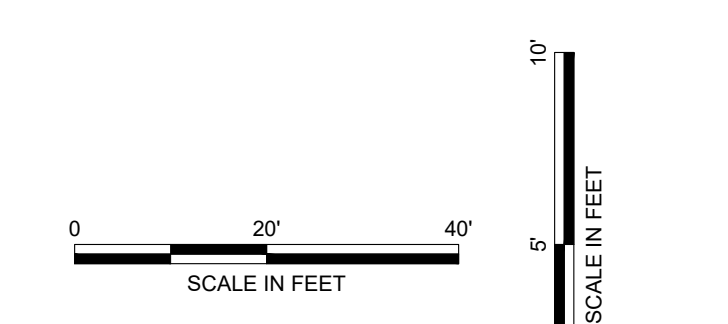
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DUCKETT CREEK SANITARY DISTRICT (DCSD) NOTES:
 1. ABANDONMENT OF EXISTING LATERALS REQUIRES DCSD INSPECTION.
 2. CONTACT DCSD INSPECTION DEPARTMENT AT 638-441-1244 TO SCHEDULE INSPECTION. 48-HOUR ADVANCED NOTICE IS REQUIRED.

System Name = Storm01
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 Sewer Type = Storm
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 Return Period (yr) = 15
 Rainfall duration (min) = 20
 Runoff Factor Multiplier = 1.000
 Starting HGL Elev. (ft) = 554.75
 Use St. Louis Co./MSD Losses? = Y

STRUCTURES UPR/LWR	FLOWLINES UPR/LWR	SIZE/ ANGLE	LENGTH/ CURVED?	n	AREA/ PI	Qadd	Qtotal/ Qfull	Cons/ Reqds	Yn/ Yc	PARTIAL V/Y	FULL V/Vhead	LOSSES F/C	COND U/L	HGL UPR/LWR	UPR STR TOP/FRBD	
2GI 1-10	571.81	12"	143.00 N	0.013	0.45	1.55	1.55	2.66	0.35	1.97	1.97	2.85	0.08	OF	572.89	575.31
MH 1-7	568.00	90°	N		3.44		5.83	0.19	0.53	1.96	0.06	0.00	0.00	FP	569.96	2.42
CI 1-9	567.92	15"	37.06 N	0.013	0.12	0.46	0.46	0.86	0.23	0.37	0.37	0.00	0.00	FP	570.00	571.92
CI 1-8	567.60	46°	N		3.83		6.02	0.01	0.26	2.40	0.00	0.00	0.00	FP	570.00	1.92
CI 1-8	567.50	15"	36.51 N	0.013	0.25	0.90	1.36	1.10	0.38	1.11	1.11	0.02	0.02	FP	570.00	573.50
MH 1-7	567.10	56°	N		3.60		6.78	0.04	0.46	2.86	0.02	0.00	0.00	FP	569.96	3.50
MH 1-7	567.00	15"	162.75 N	0.013	0.05	0.19	3.10	1.00	0.61	2.53	0.37	0.08	FP	569.96	575.00	
MH 1-2	565.37	86°	N		3.80		6.48	0.23	0.71	4.11	0.10	0.00	0.03	FP	569.48	5.04
2GI 1-6	573.06	12"	54.82 N	0.013	0.43	1.13	1.13	1.68	0.34	1.75	1.40	0.49	0.49	ND	573.89	576.56
2GI 1-5	572.14	36°	N		2.63		4.63	0.10	0.45	0.77	0.03	0.00	0.00	OJ	572.91	2.67
2GI 1-5	572.04	12"	36.00 N	0.013	0.09	0.31	1.44	1.44	0.40	2.45	1.83	0.22	0.45	ND	572.91	576.04
MH 1-4	571.52	36°	N		3.44		4.29	0.16	0.51	0.70	0.05	0.00	0.01	OJ	572.22	3.13
MH 1-4	571.42	12"	56.17 N	0.013	0.00	0.00	1.44	1.37	0.40	1.89	1.83	0.25	0.36	ND	572.22	576.92
2GI 1-3	570.65	13°	N		1.70		4.18	0.16	0.51	0.93	0.05	0.00	0.04	OJ	571.58	4.70
2GI 1-3	570.55	15"	105.87 N	0.013	0.22	0.77	2.21	1.45	0.46	5.46	1.80	1.53	0.57	OC	571.58	576.55
MH 1-2	569.02	4°	N		3.50		7.79	0.12	0.59	0.46	0.05	0.00	0.01	ND	569.48	4.97
MH 1-2	565.27	18"	26.60 N	0.013	0.00	0.00	5.31	1.20	0.71	3.00	3.00	0.07	0.14	OC	566.75	576.10
2GI 1-1	564.95	90°	N		1.70		11.55	0.25	0.89	1.55	0.14	0.00	0.04	FP	566.50	9.35
2GI 1-1	564.85	18"	18.31 N	0.013	0.16	0.56	5.87	1.37	0.73	3.32	3.32	0.22	0.06	FP	566.50	575.50
CI 1-60E	564.60	0°	N		3.50		12.31	0.31	0.94	1.53	0.17	0.00	0.09	FP	566.13	9.00
CI 1-60E	564.50	24"	37.00 N	0.013	0.24	0.87	6.74	1.00	0.75	2.15	2.15	0.03	0.00	OC	566.13	571.50
AI 1-60D	564.13	88°	N		3.63		22.68	0.09	0.92	1.97	0.07	0.00	0.00	OJ	566.10	5.37
AI 1-60D	564.03	24"	245.11 N	0.013	0.12	0.46	7.20	4.60	0.52	2.29	2.29	11.28	0.02	OF	566.10	571.00
JB 1-60C	552.75	0°	N		3.83		48.66	0.10	0.95	2.00	0.08	0.00	0.05	OJ	554.75	4.90

LEGEND

UPR - At upper end of pipe
 LWR - At lower end of pipe
 SIZE - Sewer size (diam or WxH)
 ANGLE - Downstream deflection (deg)
 LENGTH - Pipe length (ft)
 CURVED - Pipe is curved?
 n - Manning's roughness factor
 AREA - Upper drainage area (ac)
 F1 - Runoff factor (cfs/ac)
 Qadd - Added flowrate (cfs)
 Qtotal - Total flowrate (cfs)
 Qfull - Pipe full capacity (cfs)
 Cons - Construction slope of pipe (%)
 Reqds - Minimum required slope (%)

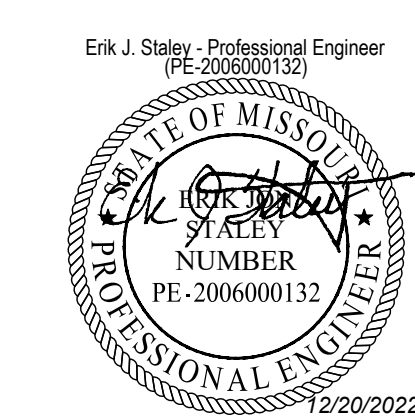
Yn - Normal depth (ft)
 Yc - Critical depth (ft)
 PARTIAL - Conditions at lower end of pipe
 FULL - Conditions assuming full pipe flow
 V - Velocity (fps)
 Y - Depth (ft)
 Vhead - Velocity head (ft)

COND - Flow condition code at each pipe end:
 FP - full pipe flow
 OC - open channel flow
 ND - set to normal depth
 CD - set to critical depth
 OF - initially set to open channel depth then set to full pipe flow
 OJ - open channel flow but hydraulic jump may occur downstream

LOSSES - Major and minor head losses
 F - Friction in pipe (ft)
 C - Curve in pipe (ft)
 V - Velocities in upper structure (ft)
 T - Turns in upper structure (ft)

HGL - Hydraulic grade line elevation (ft)
 TOP - Elev. of top of upper struct (ft assl)
 FRBD - Difference btwn upper HGL and TOP (ft)

Notes:
 1. Friction losses computed w/ Manning's formula if full pipe flow or back-calculated if open channel flow (simulating flow profile)
 2. HGL at upper structure includes structure losses calculated with actual inflowing velocities using iterative procedure
 3. Velocity and turn structure loss components only computed for incoming pipes with invert elevations below outlet crown elevation



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FINAL ASBUILT MEASUREMENTS

THE EXISTING SEWER LENGTHS, SIZES, FLOW LINES, DEPTH OF STRUCTURES & SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED CONDITIONS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS. SINCE THE PROFILE UTILITY LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

SIGNED: *E. Staley*

DATE: 12/20/2022

ASBUILTS 12/20/22

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Project Number: 20350
 Design: EJS / RPK
 Drawn: EJS / RPK
 Date: 12/14/22

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 DATE 08/25/2021

ISSUANCE

NO	DATE	DESCRIPTION
1.	08/25/21	CITY SUBMITTAL
2.	09/22/21	2nd CITY SUBMITTAL
3.	10/06/21	3rd CITY SUBMITTAL
4.	11/22/21	4th CITY SUBMITTAL (BID SET)
5.	04/18/22	Revised Grading to Match ASB

SHEET NO. **C5.1**

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SEWER PROFILES 2