



O'fallon, MO

STORE NUMBER 23

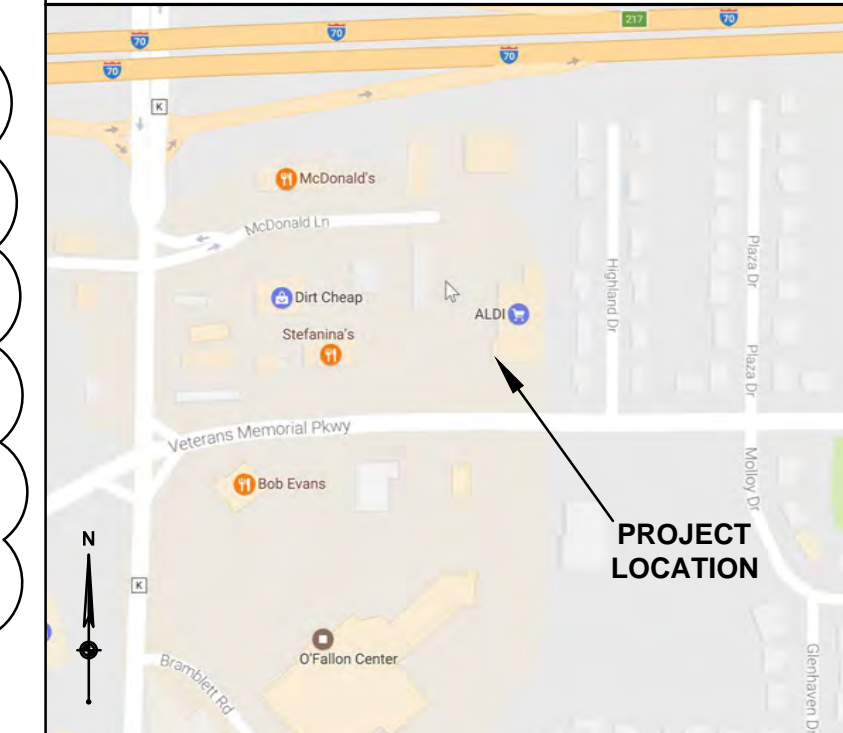
PARKING CALCULATIONS

1 PER 200 SF BUILDING
 18,599 SF/200 = 80 SPACES REQUIRED
 98 SPACES PROVIDED
 ACCESSIBLE SPACES REQUIRED 4 OF 98
 5 OF 98 SPACES ARE ACCESSIBLE

SHEET INDEX

INCLUDED	SHEET	TITLE
●	C000	COVER SHEET
●	C001	NOTES
●	C100	EXISTING CONDITIONS
●	C101	STAGING PLAN
●	C200	SITE PLAN
●	C300	GRADING PLAN
●	C301	SIDEWALK GRADING
●	C400	UTILITY PLAN
●	C500	STORM PROFILES
●	C600	LANDSCAPING PLAN
●	C800	DETAILS
●	C801	DETAILS

LOCATION MAP



ISSUE/REVISION/DATE
 REVISION 2 (8/15/2017)

GENERAL NOTES:

ALL WORK PERFORMED ON THIS PROJECT SHALL CONFORM TO ALL APPLICABLE SECTIONS, ORDINANCES, AND REQUIREMENTS OF THE CITY OF O'FALLON, MISSOURI DEPARTMENT OF TRANSPORTATION, O'FALLON BOARD OF MUNICIPAL UTILITIES (BMU) STANDARD CONSTRUCTION SPECIFICATIONS, SPECIFIC PROJECT SPECIFICATIONS, ALL APPLICABLE REQUIREMENTS OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, AND ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF ALL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADES, IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

WHEN A CONFLICT BETWEEN PLANS AND SPECIFICATIONS OR NOTES OCCURS, THE ENGINEER SHALL DECIDE WHICH GOVERNS. GENERALLY, THE MORE RESTRICTIVE, MORE SPECIFIC, OR STRICTER PROVISION SHALL GOVERN. IF ANY DISCREPANCIES ARE DISCOVERED ON THE PLANS OR BETWEEN THE PLANS AND THE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN CLARIFICATION OF THE INTENT FROM THE ENGINEER PRIOR TO CONSTRUCTION OR INSTALLATION OF PROPOSED IMPROVEMENTS.

EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, SHOWN ON THE PLANS ARE ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHAT SO EVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THEM.

FIELD LOCATIONS OF UNDERGROUND FACILITIES SHALL BE OBTAINED BY CALLING MISSOURI DIGRTE 800.DIG.RITE TO PROVIDE A 48-HOUR ADVANCE NOTICE OF ANY UTILITY ACTIVITIES. NON-MISSOURI UNDERGROUND MEMBERS MAY BE CONTACTED DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS ARE LISTED IN THESE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR CONSTRUCTION TO EXISTING CONDITIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

WHERE SECTION OR SUBSECTION SURVEY MONUMENTS ARE ENCOUNTERED, THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AN AUTHORIZED SURVEYOR OR AGENT, HAVE WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ONLY THOSE DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE USED FOR DETERMINATION OF LOCATION AND SIZES OF PROPOSED IMPROVEMENTS. DO NOT SCALE DRAWINGS. IF ANY DISCREPANCIES ARE DISCOVERED ON THE PLANS OR BETWEEN THE PLANS AND THE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN CLARIFICATION OF THE INTENT FROM THE ENGINEER PRIOR TO CONSTRUCTION OR INSTALLATION OF PROPOSED IMPROVEMENTS.

ALL ITEMS NOTED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

ALL PROPOSED ITEMS ARE TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

BENCHMARKS:

REFERENCE BENCHMARK: MISSOURI DEPARTMENT OF TRANSPORTATION GPS IERTUAL REFERENCE SYSTEM, VERTICAL DATUM IS NAVD 1988.

SITE BENCHMARK: FOUND IRON PIPE AT THE NORTH WEST CORNER OF LOT B, ELEVATION = 575.41'.

MUNICIPAL NOTES :

Construction work shall only be allowed during the following hours:

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

Construction work to be done outside of these hours requires prior written approval from the City Administrator or City Engineer.

City approval of the construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.

All proposed utilities and/or utility relocations shall be located underground.

If materials such as trees, organic debris, rubble, foundations and other deleterious material are not to be reused, they shall be removed from the site and disposed of in compliance with all applicable laws and regulations. If the materials listed previously are reused, a letter from a soils engineer must clearly amount, location, depth, etc and be approved with the construction plans. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.

No slopes shall exceed 3 (horizontal): 1 (vertical).

All fill placed under proposed storm and sanitary sewers, 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 Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Moisture content of the soil in fill areas is to correspond to the compactive effort as defined 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 soil stability at the discretion of the City of O'Fallon.

Developer must supply City construction inspectors with an Engineer's soil reports prior to and during site soil testing. The soils report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:

- Maximum dry density.
- Optimum moisture content.
- Maximum and minimum allowable moisture content.
- Curve must be plotted to show density from a minimum of 90% as determined by the "Modified AASHTO T180 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" (A.S.T.M.-D-698). Proctor type must be designated on the document.
- Curve must have at least 5 density points with moisture content and sample locations listed on document.
- Specific gravity.
- Natural moisture content.
- Liquid limit.
- Plastic limit.

Be advised 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.

The Permittee shall assume complete responsibility for controlling all siltation and erosion of the project area. The Permittee shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with the clearing operations and be maintained throughout the project until acceptance of the work by the City of O'Fallon and as necessary by MoDOT. The Permittee's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The City of O'Fallon and as required by MoDOT may at their option direct the Permittee in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement shall be removed immediately. Any depositing of silts or mud in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the City of O'Fallon and as required by MoDOT.

All erosion control systems are inspected and corrected weekly, especially within 48 hours of any rainstorm resulting in one-half inch of rain or more. Any silt or debris leaving the site and affecting public right-of-ways or storm water drainage facilities shall be cleaned up within 24 hours after the end of the storm.

Any existing wells and/or springs which may exist on the property must be sealed in a manner acceptable to the City of O'Fallon Construction Inspection Department and following Missouri Department of Natural Resources standards and specifications.

All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

Sidewalks, curb ramps and accessible parking spaces shall be constructed in accordance with currently approved Americans with Disabilities Act Accessibility Guidelines along with the required grades, signage, specifications and construction materials. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall be followed and the contractor, prior to any construction, shall notify the Project Engineer.

All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, he/she shall make such changes at his/her own risk, without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvements so as to conform to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City inspectors.

Traffic control is to be per MoDOT or MUTCD whichever is more stringent.

All traffic signals, street signs, sign post, backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by the City of O'Fallon and MoDOT).

Lighting values will be reviewed on site prior to the final occupancy inspection.

All identification or directional sign(s) must have the locations and sizes approved and permitted separately through the Planning and Development Division.

No graded areas are to remain bare for over 14 days without being seeded and mulched.

All proposed fencing requires a separate permit from the Planning & Development Division.

City approval of the construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the Zoning Code.

SEWER NOTES:

Estimated sanitary sewer flow is 145 GPD.

All sanitary laterals and sanitary mains crossing under pavement must have proper rock backfill and required compaction.

Connections at all sanitary or storm structures to be made with A-lock joint or equal.

Brick shall not be used in the construction of sanitary or storm sewer structures. Pre-cast concrete structures are to be used unless otherwise approved by the City.

All concrete pipes will be installed with O-ring rubber type gaskets.

HDPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field test.

Outside (beyond) the pavement limits, excavations shall be jetted with water and allowed to set for a length of time satisfactory to the City Engineer.

1. Jetting. Granular materials and earth materials associated with new construction beyond the pavement may be jetted, taking care to avoid damage to newly laid sewers. The jetting shall be performed with a probe route on not greater than seven and one-half (7.5) foot centers with the jetting probe centered over and parallel with the direction of the pipe. Trench widths greater than ten (10) feet will require multiple probes every seven and one-half (7.5) foot centers.

a. Depth. Trench backfill less than eight (8) feet in depth shall be probed to a depth extending to half the depth of the trench backfill, but not less than three (3) feet. Trench backfill greater than eight (8) feet in depth shall be probed to half the depth of the trench backfill but not greater than eight (8) feet.

b. Equipment. The jetting probe shall be a metal pipe with an exterior diameter of one and one-half (1.5) to two (2) inches.

c. Method. Jetting shall be performed from the low surface topographic point and proceed toward the high point, and from the bottom of the trench backfill towards the surface. The flooding of each jetting probe shall be started slowly allowing slow saturation of the soil. Water is not allowed to flow away from the ditch without first saturating the trench.

d. Surface bridging. The contractor shall identify the locations of the surface bridging (the tendency for the upper backfill crust to arch over the trench rather than collapse and consolidate during the jetting process). The contractor shall breakdown the bridged areas using an appropriate method such as wheels or bucket of a backhoe. When the surface crust is collapsed, the void shall be backfilled with the same material used as trench backfill and jetted. Compaction of the materials within the sunken/jetted area shall be compacted such that no further surface subsidence occurs.

Rip-rap shown at flared ends will be evaluated in the field by the Engineer, Contractor and City Inspector after installation for effectiveness and field modified, if necessary, to reduce erosion on and off-site.

Provide a marking on the storm sewer inlets. The City will allow the following markers and adhesive procedures only as shown in the table below or an approved equal. 'Peel and stick' adhesive pads will not be allowed.

ACP International 3 7/8" Epoxy Crystal Cap "No Dumping Drains To Waterways" (SD-W-CC)

DAS Manufacturing, Inc. 4" Epoxy Standard Style "No Dumping Drains To Stream" (#SDS)

A 5/8" trash bar shall be centered within the opening(s) of all curb inlets and area inlets.

STORMWATER DETENTION MAINTENANCE:

BASIN SHALL BE INSPECTED ANNUALLY IN JUNE AND AUGUST.

ALL WEEDS AND CAT TAILS SHALL BE REMOVED AT THESE TIMES. REMOVE ANY DEBRIS FROM THE BASIN AND MAKE SURE PIPES ARE NOT OBSTRUCTED.

SEE LANDSCAPE PLAN FOR BASIN CLEAN UP AND SOD INSTALLATION IN BASIN AS PART OF THIS PROJECT.

PROJECT INFORMATION

PROPERTY OWNER & DEVELOPER	ALDI, INC.
LOT AREA	2.03 AC 88,544 SF
ZONING	C-2 GEN. BUSINESS DIST.
FRONT YARD SETBACK	25 FT
SIDE YARD SETBACK ABUTTING C-2	6 FT
SIDE YARD SETBACK ABUTTING R-1	NO SIDE YARD
REAR YARD SETBACK	NO REAR YARD
FLOOD ZONE	ZONE X FEMA MAP 2918360237E
100 YR FLOODPLAIN	OUTSIDE 100 YR FLOODPLAIN
EXISTING USE & PROPOSED USE	RETAIL GROCERY STORE
PROJECT TYPE	BUILDING ADDITION
EXISTING BUILDING SQ FT	16,518 SQ FT
PROPOSED BUILDING SQ FT WITH ADDITION	18,599 SQ FT
TOTAL PARKING SPACES REQUIRED	80 SPACES
TOTAL PARKING SPACES PROVIDED	98 SPACES
ACCESSIBLE SPACES REQUIRED	4 SPACES
ACCESSIBLE SPACES PROVIDED	5 OF TOTAL SPACES
LOADING SPACE REQUIRED	1 SPACES
LOADING SPACE PROVIDED	1 SPACE
UTILITIES	USING EXISTING UTILITY CONNECTIONS
STORMWATER DETENTION	UTILIZE EXISTING DETENTION BASIN

SYMBOLGY LEGEND

EXISTING	PROPOSED	
SANITARY SEWER STRUCTURE		PROPOSED INTERMEDIATE CONTOUR
STORM SEWER STRUCTURE		PROPOSED INDEX CONTOUR
CATCH BASIN		EXISTING INTERMEDIATE CONTOUR
CURB INLET		EXISTING INDEX CONTOUR
END SECTION		EXISTING FENCE
STORM MANHOLE		PROPOSED STORM DRAIN
SANITARY MANHOLE		EXISTING STORM DRAIN
CLEANOUT		PROPOSED ROOF DRAIN
FIRE HYDRANT		EXISTING ROOF DRAIN
WATER VALVE		EXISTING STORM DRAIN (UNKNOWN SIZE)
GROUND LIGHT		PROPOSED SANITARY SEWER
LIGHT POLE		EXISTING SANITARY SEWER
POWER POLE		EXISTING SANITARY SEWER (UNKNOWN SIZE)
TELEPHONE POLE		PROPOSED WATER LINE
TRANSFORMER		EXISTING WATER LINE
GAS VALVE		EXISTING WATER LINE (SIZE UNKNOWN)
GAS METER		PROPOSED ELECTRIC (UNDERGROUND)
GAS REGULATOR		EXISTING ELECTRIC (UNDERGROUND)
GRADE ELEVATION		PROPOSED TELEPHONE (UNDERGROUND)
TOP OF CURB		EXISTING TELEPHONE (UNDERGROUND)
BOTTOM OF CURB		PROPOSED GAS
TOP OF WALL		EXISTING GAS
SURFACE GRADE		EXISTING TREE LINE
TOP OF PAVEMENT		PROPOSED GUARD RAIL
TOP OF FINISH		EXISTING GUARD RAIL
DRAINAGE FLOW DIRECTION		EXISTING OVERHEAD TELEPHONE
TREES		EXISTING OVERHEAD ELECTRIC
BUSH/SHRUB		EXISTING FIBER OPTIC
SIGN		

CONTACT INFORMATION

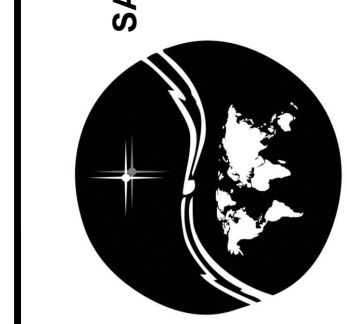
ELECTRIC AMEREN UE 200 N. Callahan Road Wentzville, MO 63385	TELECOMMUNICATIONS GTE (Verizon) 680 Parr Road Building AA Wentzville, MO 63385	FIRE DISTRICT O'Fallon FPD 119 East Elm Street O'Fallon, MO 63366
Cuivre River Electric Co-Op PO Box 160 Troy, MO 63379	Southwestern Bell 402 North Third Street St. Charles, MO 63301	City of O'Fallon The City of O'Fallon shall also be contacted for utility locates under its maintenance responsibility. For water main, sanitary sewer and storm sewer locates, contact 636-281-2858, for traffic locates, contact 636-379-5602. Contact the Engineering Division at 636-379-5556 and the Construction Inspection Division at 636-379-7631.
GAS Laclede Gas 2950 Forest Park Avenue St. Louis, MO 63108	Charter (Spectrum) 100 North Main Street O'Fallon, MO 63366	
WATER & SANITARY SEWER Alliance 410 East Elm Street O'Fallon, MO 63366		

CITY OF O'FALLON
 PUBLIC WORKS DEPARTMENT
 ACCEPTED FOR CONSTRUCTION
 BY Juanita Kunkle DATE 09/13/2017
 PROFESSIONAL ENGINEER'S SEAL
 INDICATES RESPONSIBILITY FOR DESIGN

O'Fallon Planning and Development Division File Number: 17-005276
 Planning and Zoning Commission Approval Date: July 6, 2017
 Municipal Code Requirements to be addressed on the Construction Site Plans:
 1. Bufferyard landscaping shall be replaced. It appears the vegetation has been removed.

Aldi, Inc.
 475 Pearl Drive
 O'Fallon, Missouri 63376
 Ph: (636) 278-4700

SAWYER ENGINEERING, INC.
 P.O. Box 157
 Gillespie, Illinois 62033
 Phone 314-800-5914
 Fax 618-982-6113
 SawyerEngr.com



ALDI O'FALLON, MO
 8615 Veterans Memorial Parkway, O'Fallon, Missouri 63366
COVER SHEET

Professional Engineer's seal and signature placed on this sheet apply only to the material and items shown on the sheet. All changes, revisions and other annotations not including the seal and signature shall not be considered authorized by the engineer, and the engineer assumes no responsibility for such items, drawings or documents not including the seal and signature.

 Date: 8/15/2017
 John P. Sawyer, PE
 License No. E-2001031672
 Civil Engineer

Job Number
2016-130
 Date
8/15/2017
 Designed: SWU Sheet
 Drawn: SWU **C000**
 Checked: JPS