



III. B.

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Architectural Review Board Staff Report

Project Type: Site Development Section Plan

Meeting Date: January 12, 2017

From: Jessica Henry, AICP
Senior Planner

CC: Aimee Nassif, Planning & Development Services Director

Location: Southeast corner of Ladue Road and Greentrails Drive.

Applicant: St. Charles Engineering & Surveying, Inc. on behalf of Onofrio Serra

Description: **Trails West Village of Greentrails, Lot 270 B:** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 3.6 acre tract of land zoned "C-8" Planned Commercial District, located at the southeast corner of Ladue Road and Greentrails Drive.

PROPOSAL SUMMARY

The request is for a Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a new retail center to be located on Lot 270 B of the Trails West Village of Greentrails subdivision. This project was presented to the ARB in March of 2016, where a motion to recommend approval with recommendations was passed. Since that time, the property owner has engaged a new Architect and this project is being brought back to the ARB due to the extent of the design revisions since it was initially presented. Accordingly, this report will focus on these architectural revisions.



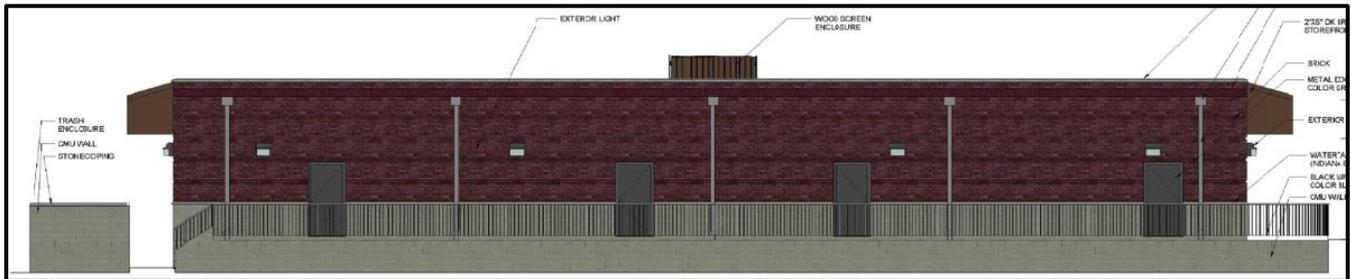
STAFF ANALYSIS

At the March 10, 2016 ARB meeting, the ARB passed a motion to recommend approval of the project with the following recommendations:

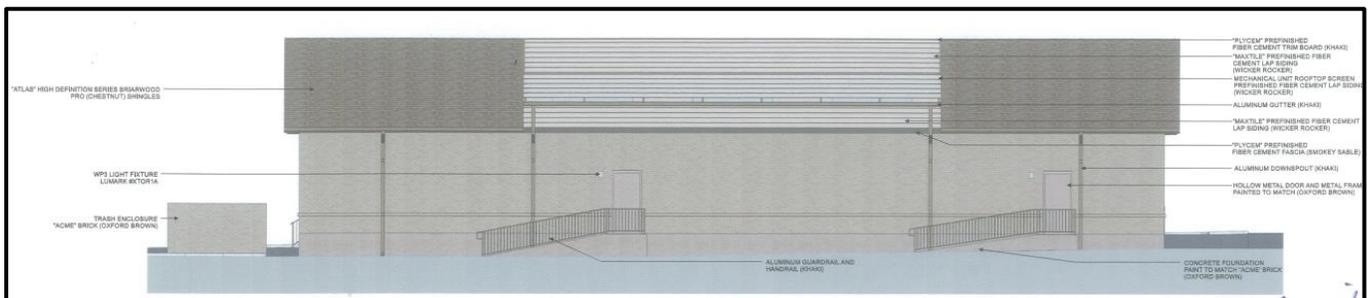
- The design should reflect the residential character of the neighborhood, particularly in regards to the roof design, materials, and color.**

In response to this recommendation, new Architectural Elevations were submitted. Below is a comparison of the previously proposed and currently proposed Architectural Elevations.

Previously Proposed Architectural Elevation—Front and Rear Elevations



Currently Proposed Architectural Elevation—Front and Rear Elevations



2. Screen the roof top mechanical equipment to be integrated into the roof design.

The applicant is proposing to construct a screen out of the same fiber-cement board siding utilized elsewhere on the building. Although the proposed screen will adequately shield the mechanical units from view, the light color of the siding contrasts against the dark brown roof shingles. Regarding roof top screening of equipment, the City’s Architectural Review Design Standards state the following:

- Screen rooftop equipment on all visible sides with materials that are an integral part of the architecture. Parapet walls or screen walls shall be treated as an integral part of the architecture and shall not visually weaken the design of the structure.

The following excerpts from the Architectural Elevations and rendering show the proposed screening unit:



3. The design should be integrated across all four facades given the site relation and proximity to the adjacent buildings.

As shown on the Architectural Elevations, the materials and design are carried across all four building elevations.

4. Incorporate landscaping around the dumpster enclosure.

A small landscape island planted with Juniper shrubs has been added around the rear of the dumpster enclosure.

DEPARTMENTAL INPUT

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect’s Statement of Design. This project is still under review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff’s report to the Planning Commission.

Staff requests review and recommendation on this submittal for Trails West Village of Greentrails, Lot 270 B.

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) “I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect’s Statement of Design for Trails West Village of Greentrails, Lot 270 B, as presented, with a recommendation for approval (or denial) to the Planning Commission.”

- 2) “I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect’s Statement of Design for Trails West Village of Greentrails, Lot 270 B, to the Planning Commission with a recommendation for approval with the following conditions...”

Attachments

1. Architectural Review Packet Submittal

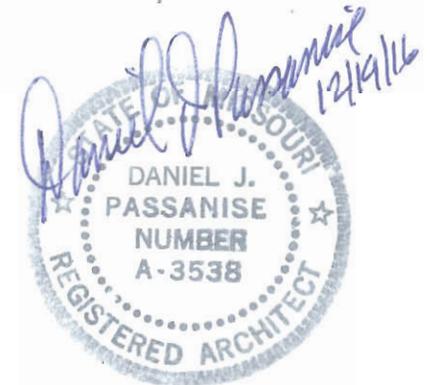
Dan Passanise
ARCHITECT

6842 ARDALE DRIVE
ST. LOUIS, MO 63123
314-677-7738



TRAILS WEST VILLAGE OF GREENTRAILS
LOT B
116 S. GREENTRAILS
CHESTERFIELD, MISSOURI

ARCHITECT'S STATEMENT OF DESIGN



Project Description

The proposed project is a 4000 square foot retail building and site development to accommodate two commercial retail spaces, new parking lot surface, block retaining wall, and landscaping.

The adjacent buildings and uses are an Auto Repair/Service Station and Retail Shopping Strip. (Music Studio, Laundry/Dry Cleaner, Veterinary Clinic, Beauty Parlor, Brokerage Office, Pizza Restaurant, Office Space)

The proposed project is located on a site surrounded by a well maintained residential community. The project site is the only commercial center in the immediate area, and it is well used by the community residence and visitors.

The new proposed retail building will promote a new fresh look to compliment the residential area and the adjacent retail and service businesses on this site.

It is expected that based on the needs of the area, the people in the community will be excited and enthusiastic about the new building (retail space) and site development of what is an existing unsightly, un-used parking area.

Architectural Design Features:

The exterior of the building is designed to reflect the fabric of the surrounding residential architectural scale, details and materials.

"Acme Brick"
Oxford Brown

The exterior walls will be an earth tone brick veneer (with rowlock window sills) color coordinated prefinished fiber cement lap siding gable ends and accent walls with color coordinated trim.

Ledgestone thin set
at column bases
"Designers Image"
"Desert Gold" Dry Stack Stone

The Storefront entrances to the retail spaces will provide for easy pedestrian access from the parking lot areas, including two ADA accessible handicap parking spaces.

Projecting double gables at each retail space with prefinished fiber cement board boxed columns with textured ledgestone column bases provides a building scale that is compatible with the adjacent retail spaces and surrounding homes.

Prefinished Fiber Cement
Siding (Menards) "Maxitile"
siding and color match
trim w/PPG machine applied
coating
"Plycem trim" Smokey Sable Color
"Fypon Brackets"
Smoky Sable Color
"Shake Siding" Khaki Color
"Lap Siding" Wicker Rocker Color

The Storefront area also provides a warm welcoming feeling with prefinished color coordinated wood framed show windows and full glass entry doors.

The double gables will include prefinished fiber cement shake siding and wood bracket accents to provide a more residential scale and add an interesting texture to the predominant entry points.

The shake gable areas will provide space for signage that shall meet the Chesterfield Signage requirements at the time of the retail space build outs.

The roof will be a 5 in 12 pitch (Gable) with Architectural High definition shingles. Aluminum gutters and downspouts to match the siding trim color.

"Atlas" high definition color
series
Briarwood Pro "Chestnut"HD

The condensing units and other rooftop equipment will be placed on a flat section of the roof concealed by a prefinished fiber cement siding screen to match the siding at the main roof gables.

Aluminum tube guardrails will be provided at elevated entry sidewalk areas and at service/delivery door ramps. Aluminum color to match the prefinished fiber cement trim color.

Landscaping will be provided at parking lot islands and trash enclosure area.

The trash enclosure shall be constructed of solid masonry walls 6 foot minimum height with brick veneer to match the building with cast stone or limestone cap. The swing gate will have a galvanized steel frame with fiber cement board lap siding to match the building gable siding.

Optional:

Add 2 feet to the 5 foot wide sidewalk at the front entry to the retail spaces.

This will allow for the ledgestone column bases and adequate width for ADA access and pedestrian circulation.

Provide planters between columns for evergreen and flower arrangements at the front of retail space entry.

Optional planters between double columns.



5 FRONT PERSPECTIVE

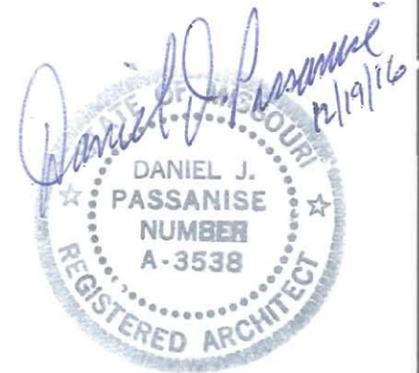


6 REAR PERSPECTIVE

EXP. DATE: 12/31/17
DATE:

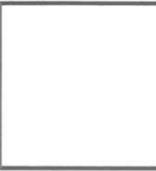


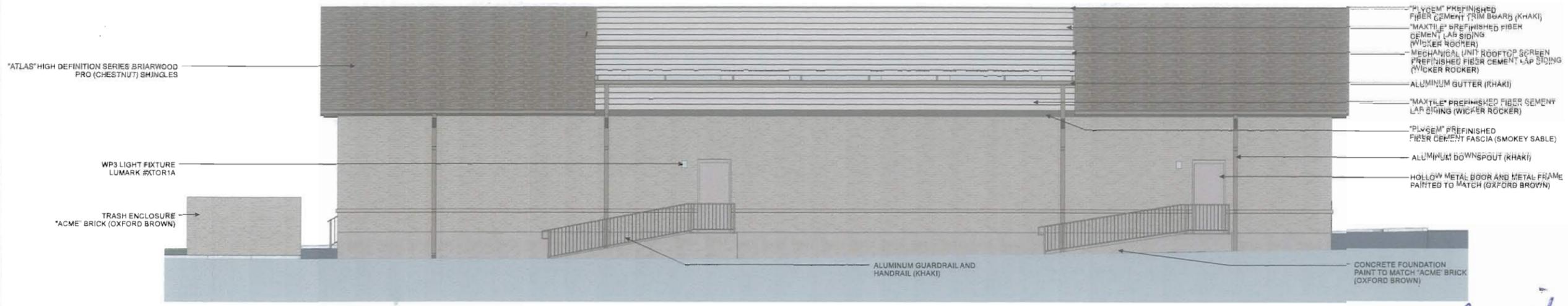
Dan Passanise
ARCHITECT
6842 A RD/ALLE DRIVE
ST. LOUIS, MO 63123
314-677-7738



NEW RETAIL STRIP
AT
116 GREENTRAILS S.
CHESTERFIELD, MO 63368

FRONT AND REAR
PERSPECTIVES





"ATLAS" HIGH DEFINITION SERIES BRIARWOOD PRO (CHESTNUT) SHINGLES

WP3 LIGHT FIXTURE LUMARK #XTOR1A

TRASH ENCLOSURE "ACME" BRICK (OXFORD BROWN)

"PLYCEM" PREFINISHED FIBER CEMENT TRIM BOARDS (KHAKI)

"MAXTILE" PREFINISHED FIBER CEMENT LAP SIDING (WICKER ROCKER)

MECHANICAL UNIT ROOFTOP SCREEN PREFINISHED FIBER CEMENT LAP SIDING (WICKER ROCKER)

ALUMINUM GUTTER (KHAKI)

"MAXTILE" PREFINISHED FIBER CEMENT LAP SIDING (WICKER ROCKER)

"PLYCEM" PREFINISHED FIBER CEMENT FASCIA (SMOKEY SABLE)

ALUMINUM DOWNSPOUT (KHAKI)

HOLLOW METAL DOOR AND METAL FRAME PAINTED TO MATCH (OXFORD BROWN)

ALUMINUM GUARDRAIL AND HANDRAIL (KHAKI)

CONCRETE FOUNDATION PAINT TO MATCH "ACME" BRICK (OXFORD BROWN)

3 EAST ELEVATION



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314-677-7738

NEW RETAIL STRIP
AT
116 GREENTRAILS S.
CHESTERFIELD, MO 63368



"ATLAS" HIGH DEFINITION SERIES BRIARWOOD PRO (CHESTNUT) SHINGLES

"FYRON" BRACKET 7.25X12X4 (SMOKEY SABLE)

"MAXTILE" PREFINISHED FIBER CEMENT LAP SIDING (WICKER ROCKER)

ALUMINUM GUTTER (KHAKI)

WP LIGHT FIXTURE "McGraw-EDISON" #SW-B01-LED-E1-BL4-BZ

ALUMINUM DOWNSPOUT (KHAKI)

"PLYCEM" PREFINISHED FIBER CEMENT BOX COLUMNS COLUMN BASE AND CAP (WICKER ROCKER)

"ACME BRICK" VENEER (OXFORD BROWN) WITH ROWLOCK SILL

STONE COLUMN BASE NATURAL QUARTZITE STONE (DESERT GOLD)

"FYRON" BRACKET 7.25X12X4 (SMOKEY SABLE)

"PLYCEM" PREFINISHED FIBER CEMENT FASCIA (SMOKEY SABLE)

"PLYCEM" PREFINISHED FIBER CEMENT TRIM (KHAKI)

"MAXTILE" PREFINISHED FIBER CEMENT SHAKE SIDING (KHAKI)

WP LIGHT FIXTURE "McGraw-EDISON" #SW-B01-LED-E1-BL4-BZ

WOOD FRAMED STOREFRONT WINDOWS (SMOKEY SABLE)

TRASH ENCLOSURE "ACME" BRICK (OXFORD BROWN)

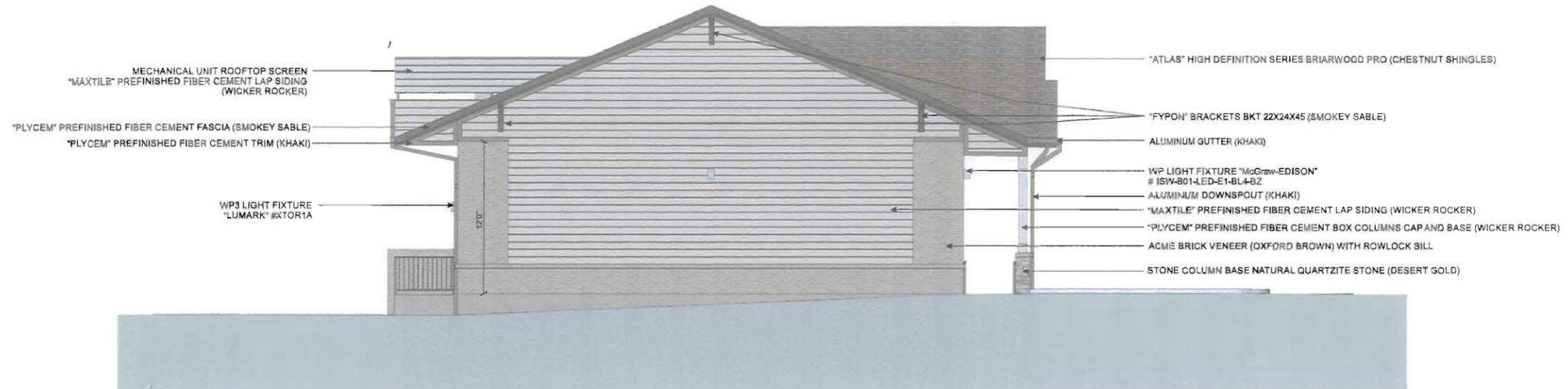
ALUMINUM GUARDRAIL AND HANDRAIL (KHAKI)

"ANDERSON" STOREFRONT DOOR AND WINDOWS FULL GLASS OPERABLE WINDOWS AND TRANSOMS WITH 1" INSULATION CLEAR GLASS

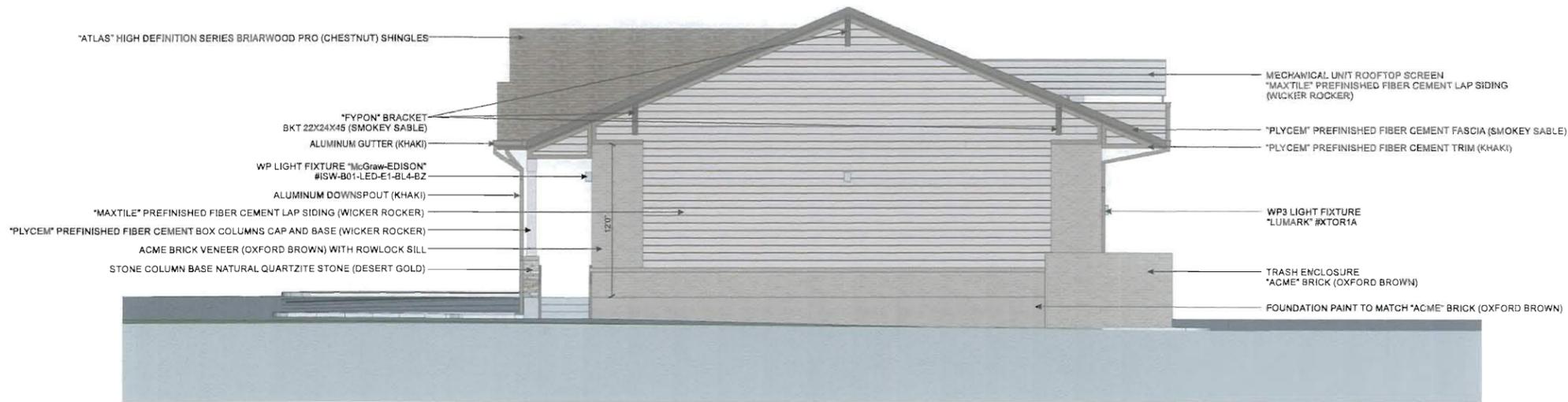
4 WEST ELEVATION

EAST AND WEST ELEVATIONS

EXP. DATE: 12/31/17
 DATE:



1 NORTH ELEVATION



2 SOUTH ELEVATION



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 ARCHITECT
 6842 A RDALE DRIVE
 ST. LOUIS, MO 63123
 314-677-7738

NEW RETAIL STRIP
 AT
 116 GREENTRAILS S.
 CHESTERFIELD, MO 63368

NORTH AND SOUTH
 ELEVATIONS

_____ the owner(s) of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of Section 03. _____ (applicable subsection) (present zoning) Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

(Signature): _____

(Name Typed): _____

State of _____)
County of _____) SS.

On this _____ day of _____, A.D., 20____, before me personally appeared _____ (Officer of Corporation) that he/she is the _____ of _____ (Title) _____ (Name of Corporation) corporation in the State of _____, and that the seal affixed to the foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said _____ (Officer of Corporation) acknowledged said instrument to be the free act and deed of said corporation.

State of _____)
County of _____) SS.

On this _____ day of _____, A.D., 20____, before me personally appeared _____ (Individual) and _____ (Wife) his wife, to me known to be the person(s) described in, and who executed the foregoing instrument, and acknowledged that he, she or they executed the same as his, her, or their free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my Notarial Seal at my Office in _____ (County and State) the day and year last above written.

My term expires _____

(Notary Public)

This Site Development Plan was approved by the City of Chesterfield Planning Commission and duly verified on the _____ day of _____, 20____, by the Chairperson of said Commission, authorizing the recording of this Site Development Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Planning and Development Services Director and the City Clerk.

Aimee Nasrif, AICP
Planning and Development Services Director
City of Chesterfield, Missouri

Vickie Hass, City Clerk
City of Chesterfield, Missouri

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT ST. CHARLES ENGINEERING AND SURVEYING, INC., AT THE REQUEST AND FOR THE EXCLUSIVE USE OF ONOFRIO & LUCRETIA SERRA DURING THE MONTH OF JUNE, 2014 EXECUTED A BOUNDARY & TOPOGRAPHIC SURVEY OF "116 GREENTRAILS DRIVE", TOWNSHIP 45 NORTH, RANGE 4 EAST, ST. LOUIS COUNTY, MISSOURI. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH CHAPTER 16 "MISSOURI MINIMUM STANDARDS FOR URBAN PROPERTY BOUNDARY SURVEYS (20 CSR 2030-16.010-16.110)."

RICHARD KEITH SIECKMANN MO. P.L.S. #2002014094 DATE

COMPLIANCE WITH GEOTECHNICAL REPORT

_____ AND THE UNDERSIGNED ENGINEER HAVE NOT PREPARED THE PLAN ON THIS SHEET. THE SEAL OF THE UNDERSIGNED PROFESSIONAL ENGINEER HAD BEEN AFFIXED AT THE REQUEST OF _____ AND IS A PROFESSIONAL OPINION TO INDICATE THAT THE UNDERSIGNED HAS REVIEWED THE PLANS AND THAT IN HIS OPINION THE GRADING AND IMPROVEMENTS RELATED TO SLOPE CONSTRUCTION AS SHOWN ON THE PLANS, AS WELL AS THE FOUNDATIONS, ARE COMPATIBLE WITH THE SOIL AND GEOLOGIC CONDITIONS AT THE SITE AS DESCRIBED IN THE GEOTECHNICAL REPORT FOR THE DEVELOPMENT DATED _____

_____ AND THE UNDERSIGNED ASSUME NO RESPONSIBILITY FOR SERVICES BY OTHERS (PURSUANT TO RSMO 327.411).

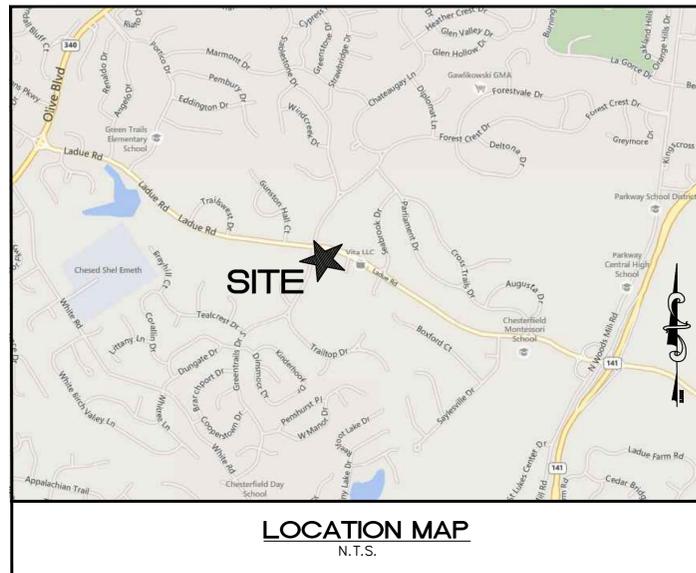
CONSTRUCTION MEANS AND METHODS FOR IMPLEMENTATION OF THE GRADING PLAN SHALL BE LEFT TO THE DEVELOPER/CONTRACTOR. OBSERVATIONS OF THE DEVELOPER/CONTRACTOR'S COMPLIANCE WITH THE APPLICABLE SPECIFICATIONS SHALL BE IDENTIFIED AND VERIFIED IN WRITING.

NAME DATE



UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION 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 AND/OR CONSTRUCTION OF IMPROVEMENTS.

AMENDED SITE DEVELOPMENT SECTION PLAN 116 GREENTRAILS DRIVE LOT B OF THE RESUBDIVISION OF LOT 270 OF TRAILS WEST SECTION OF GREEN TRAILS SUBDIVISION TOWNSHIP 45 NORTH, RANGE 4 EAST ST. LOUIS COUNTY, MISSOURI



UTILITY & SERVICE PROVIDERS

WATER: MISSOURI AMERICAN WATER COMPANY 727 CRAIG ROAD ST. LOUIS, MISSOURI 63141 314-822-5846	SANITARY SEWER: METROPOLITAN ST. LOUIS SEWER DISTRICT 2350 MARKET STREET ST. LOUIS, MISSOURI 63103 314-768-6200
ELECTRIC: AMEREN CORPORATION PO BOX 66149 ST. LOUIS, MISSOURI 63166 314-342-1111	GAS: LACLEDE GAS COMPANY 3950 FOREST PARK ST. LOUIS, MISSOURI 63108 314-658-5417
FIRE PROTECTION: MONARCH FIRE PROTECTION DISTRICT 13725 OLIVE BLVD. CHESTERFIELD, MISSOURI 63017 314-514-0900	CABLE TV: CHARTER COMMUNICATIONS 941 CHARTER COMMONS DRIVE TOWN & COUNTRY, MISSOURI 63017 636-220-2175
TELEPHONE: AT&T 13075 MANCHESTER ROAD, 3RD FLOOR DES PERES, MISSOURI 63631 636-220-2175	

BENCHMARK

ST. LOUIS COUNTY BENCHMARK
12-142 ELEVATION 523.93 - "SQ." IN THE CENTER OF AN ISLAND AT SEABROOK DRIVE (WEST ENTRANCE TO LADUE TRAILS); 10' NORTH OF THE CENTERLINE OF WESTBOUND LANES OF LADUE ROAD.

SITE BENCHMARK

ELEVATION 516.20 - "OLD IRON PIPE" AT THE SOUTHEAST CORNER OF THE INTERSECTION OF GREENTRAILS DRIVE AND LADUE ROAD. 30' EAST OF CENTERLINE OF GREENTRAILS DRIVE.

INDEX OF SHEETS

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GENERAL NOTES:

- PROPERTY OWNER: ONOFRIO & LUCRETIA SERRA
- SITE ADDRESS: 116 GREENTRAILS DRIVE, CHESTERFIELD, MISSOURI 63017
- ST. LOUIS COUNTY PARCEL ID NUMBER: 17R320372
- AREA OF TRACT: 1.11 AC
- CURRENT/PROPOSED ZONING: C8
- REQUIRED SETBACKS:
30' PARKING & LANDSCAPE - GREENTRAILS
40' FRONT - GREENTRAILS
40' SIDE - ALONG SOUTH PROPERTY LINE
0' REAR - LOT B EAST PROPERTY LINE
- PROPOSED USE:
2,000 SF=RETAIL
2,000 SF=RESTAURANT
- PARKING & LOADING REQUIREMENTS AND PROVISIONS PER CITY OF CHESTERFIELD THE UNIFIED DEVELOPMENT CODE:
4 SPACES PER 1000 SF OF RETAIL SPACE
2000 SF RETAIL X 4 SPACES PER 1000 SF= 8 SPACES
12 SPACES PER 1000 SF OF RESTAURANT SPACE
2000 SF RESTAURANT X 12 SPACES PER 1000 SF= 24 SPACES
TOTAL PARKING REQUIRED: 32 SPACES
TOTAL PARKING PROVIDED: 32 SPACES
- PER F.I.R.M. RATE MAP PANEL 29189C0170 K, THIS PARCEL LIES IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE OF THE 500 YEAR FLOODPLAIN HAVING AN EFFECTIVE DATE OF FEBRUARY 4, 2015.
- AREA OF DISTURBANCE: 0.75 AC
- PROPOSED RESTAURANT SHALL BE A SIT DOWN RESTAURANT
- SIGN APPROVAL IS A SEPARATE PROCESS
- ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND
- HVAC SHALL BE PLACED ON THE ROOF OF BUILDING.

PERVIOUS / IMPERVIOUS DIFFERENTIAL CALCULATION

EXISTING
IMPERVIOUS-----0.53 AC
PERVIOUS-----0.58 AC

PROPOSED
IMPERVIOUS-----0.63 AC
PERVIOUS-----0.48 AC

DIFFERENTIAL
IMPERVIOUS-----(+0.10 AC)
PERVIOUS-----(-0.10 AC)

15YR. - 20 MIN. DIFFERENTIAL CALCULATION

EXISTING
IMPERVIOUS-----0.53 AC X 3.54 = 1.87 CFS
PERVIOUS-----0.58 AC X 1.70 = 0.99 CFS

PROPOSED
IMPERVIOUS-----0.63 AC X 3.54 = 2.23 CFS
PERVIOUS-----0.48 AC X 1.70 = 0.82 CFS

DIFFERENTIAL
-----(+0.19 CFS)

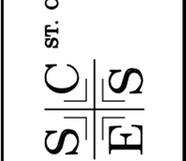
LEGEND

	SANITARY STRUCTURE	B.C.	BACK OF CURB
	STORM STRUCTURE	T.C.	TOP OF CURB
	POWER POLE	T.W.	TOP OF WALL
	LIGHT STANDARD	TYP.	TYPICAL
	CURB INLET	-572-	EXISTING CONTOUR
	DOUBLE CURB INLET	-578-	PROPOSED CONTOUR
	GRATE INLET (EXISTING)	-	TREE LINE
	AREA INLET (EXISTING)	E.O.A.	EDGE OF ASPHALT
	DOUBLE AREA INLET	E.O.C.	EDGE OF CONCRETE
	WATER METER	-	SIGN
	WATER VALVE		CONCRETE PAVEMENT
	WATER SHUT OFF		ASPHALT PAVEMENT
	GAS VALVE		
	CLEAN OUT		
	TELEPHONE HANDHOLE		
	IRON PIPE		
	HYDRANT		
- UT -	UNDERGROUND TELEPHONE (EXISTING)		
- UE -	UNDERGROUND ELECTRIC (EXISTING)		
- G -	UNDERGROUND GAS LINE (PROPOSED)		
- OH -	OVERHEAD ELECTRIC LINE		
- W -	WATER LINE		

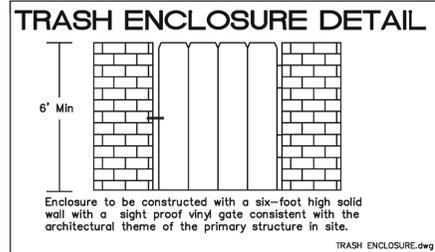
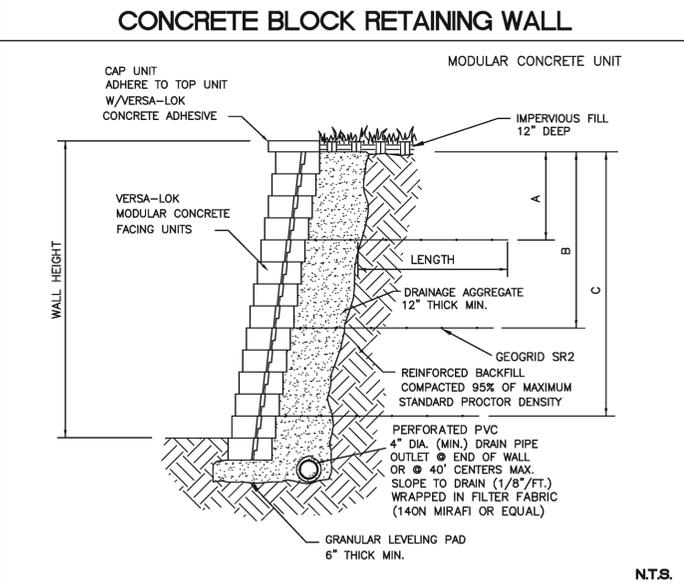
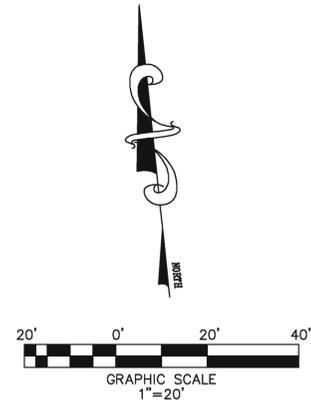
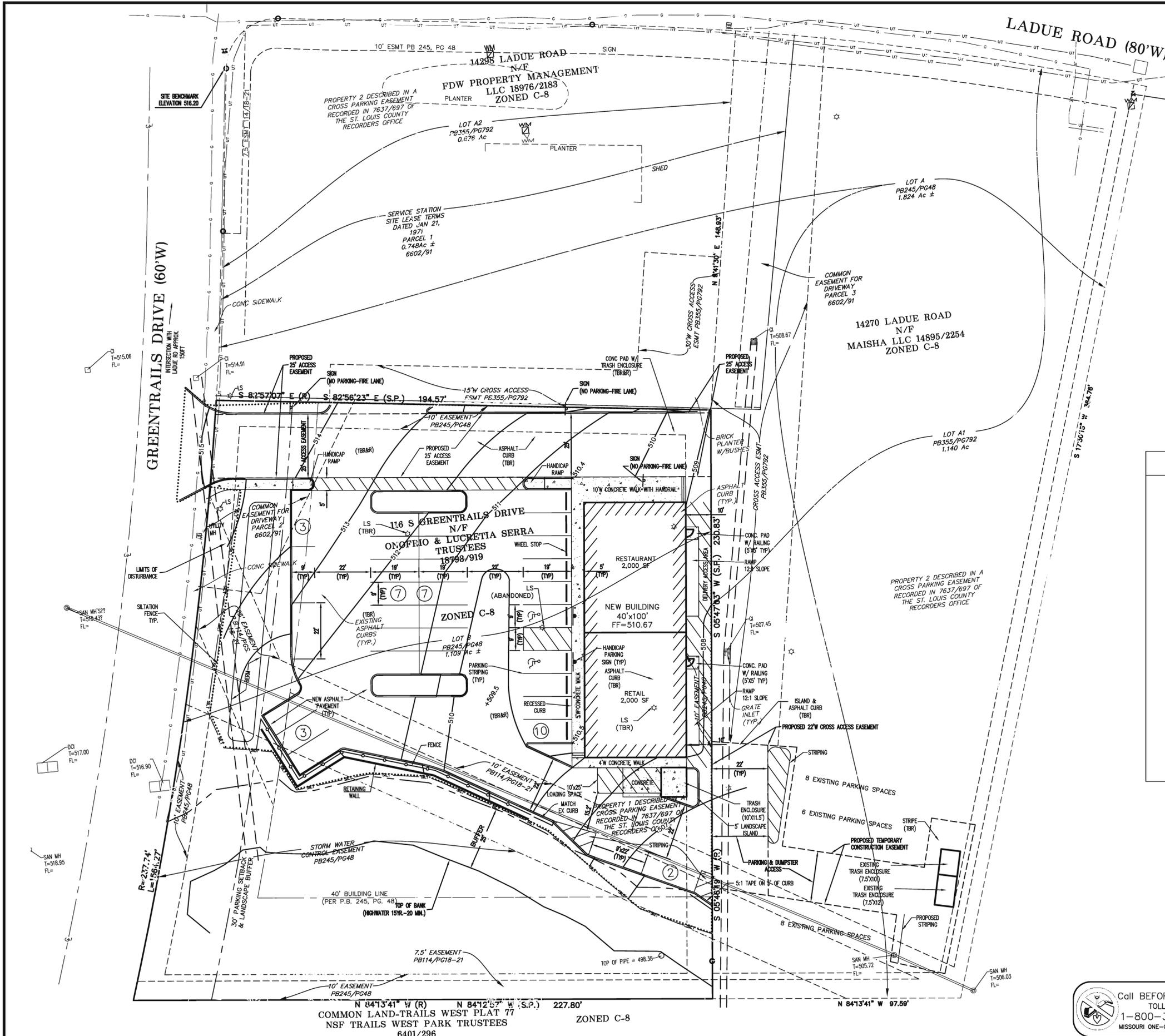
06/15/2015	CITY COMMENTS
07/14/2015	COMMENTS
10/27/2015	CITY COMMENTS
11/18/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
02/24/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT SECTION PLAN
 116 S GREENTRAILS DRIVE
 COVER SHEET

ST. CHARLES ENGINEERING & SURVEYING, INC.
 801 S. FIFTH STREET, SUITE 202
 ST. CHARLES, MO 63801
 TEL: (636) 947-0607 FAX: (636) 947-2448
 ST. CHARLES ENGINEERING AND SURVEYING, INC.
 PROFESSIONAL ENGINEERING CORPORATION
 MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647



ORDER NO. 13-0166
DATE 12/22/16
1



Call BEFORE you DIG
TOLL FREE
1-800-344-7483
MISSOURI ONE-CALL SYSTEM, INC.

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION 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 AND/OR CONSTRUCTION OF IMPROVEMENTS.

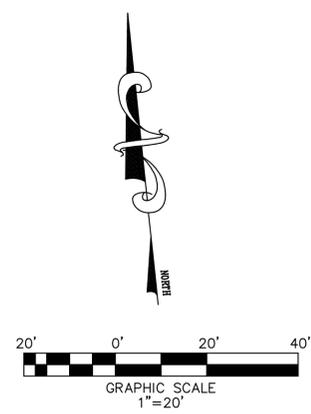
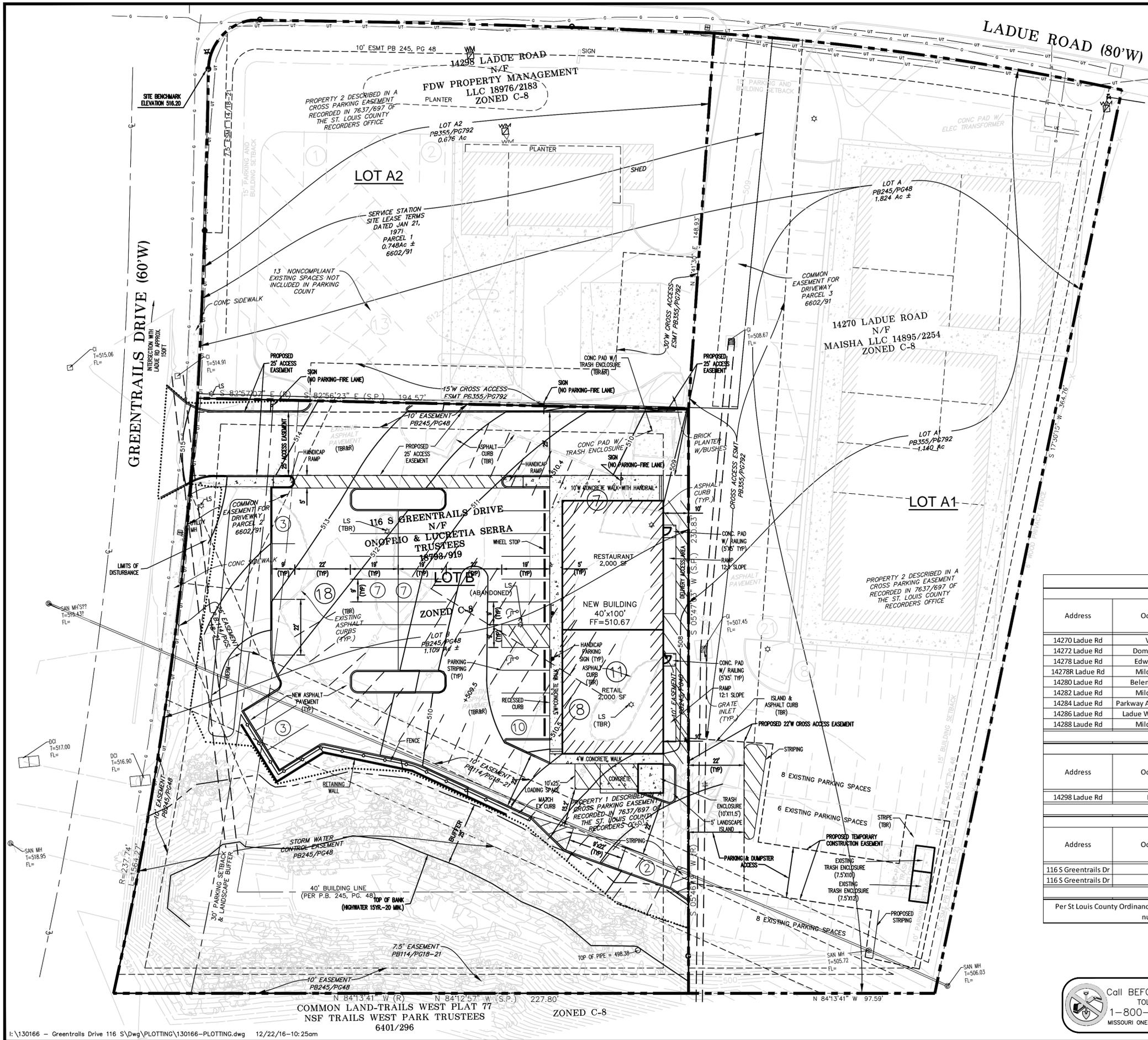
DATE	CITY COMMENTS
06/15/2015	CITY COMMENTS
07/14/2015	COMMENTS
10/27/2015	CITY COMMENTS
11/18/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
02/24/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT SECTION PLAN
116 S GREENTRAILS DRIVE
SITE PLAN

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63801
TEL: (636) 947-0607 FAX: (636) 947-2448
ST. CHARLES ENGINEERING AND SURVEYING, INC.
PROFESSIONAL ENGINEERING CORPORATION
MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647



ORDER NO.
18-0166
DATE
12/22/16
2



LOT B
Existing improvement shown per field survey performed by St Charles Engineering & Surveying, LLC on DEC 2013.

All striping shown scaled in per visual field inspection and best available aerial photos.

No verification of existing drive isles and parking stall dimensions included with this plan.

LOT A1 & A2
Existing improvements (i.e. buildings and pavement) shown scaled in per best available aerial photos.

All striping shown scaled in per visual field inspection and best available aerial photos.

Existing building square footages shown per amended site development plan BK 355, PG 793.

Existing building uses shown per visual field inspection on June 2014.

No verification of existing drive isles and parking stall dimensions included with this plan.

PARKING COUNT		
Lot	Existing	Proposed
Lot A1	51	49
Lot A2	10	10
Lot B	44	32
Total	105	91

PARKING REQUIREMENTS						
Lot A1						
Address	Occupant	Use	Parking Requirement per City of Chesterfield Unified Development Code	Size	Required Spaces	
14270 Ladue Rd	Vacant	Office (general)	3.3 per 1,000 GFA	1,200	4	
14272 Ladue Rd	Dominos Pizza	Restaurant (take out)	5 per 1,000 GFA	1,200	6	
14278 Ladue Rd	Edward Jones	Office (general)	3.3 per 1,000 GFA	1,600	6	
14278R Ladue Rd	Milder Music	Commercial Services	4.5 per 1,000 GFA	800	4	
14280 Ladue Rd	Belens Fashions	Beauty Shop	5 per 1,000 GFA	400	2	
14282 Ladue Rd	Milder Music	Commercial Services	4.5 per 1,000 GFA	800	4	
14284 Ladue Rd	Parkway Animal Hospital	Veterinary Clinic	3.3 per 1,000 GFA	800	3	
14286 Ladue Rd	Ladue West Cleaners	Dry Cleaning	3.3 per 1,000 GFA	1,600	6	
14288 Ladue Rd	Milder Music	Commercial Services	4.5 per 1,000 GFA	3,000	14	
Total					49	
Lot A2						
Address	Occupant	Use	Parking Requirement per City Ordinance 378	Size	Required Spaces	
14298 Ladue Rd	Mobil	Neighborhood Service Station	Not more than 10 automobiles		10	
Total					10	
Lot B						
Address	Occupant	Use	Parking Requirement per City of Chesterfield Unified Development Code	Size	Required Spaces	
116 S Greentrails Dr	N/A	Retail Sales (Neighborhood)	4 per 1,000 GFA	2000 sf	8	
116 S Greentrails Dr	N/A	Restaurant (sit down)	12 per 1,000 GFA	2000 sf	24	
Total					32	
Per St Louis County Ordinance No. 11,900 approved on June 24, 1969, A 20% reduction shall be permitted in the number of parking spaces required for this development.					Grand Total	91
					20% Less Total	73

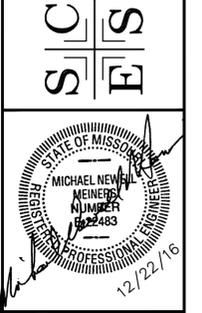
Call BEFORE you DIG
TOLL FREE
1-800-344-7483
MISSOURI ONE-CALL SYSTEM, INC.

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION 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 AND/OR CONSTRUCTION OF IMPROVEMENTS.

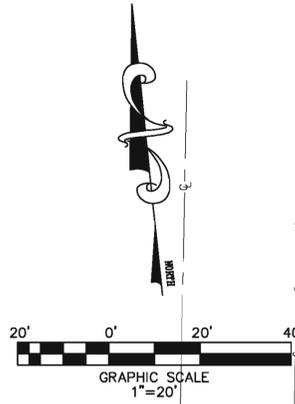
DATE	CITY COMMENTS
06/15/2015	
07/14/2015	
10/27/2015	
11/18/2015	
12/23/2015	
02/24/2016	
05/11/2016	
08/25/2016	
12/01/2016	
12/22/2016	

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
PARKING STUDY

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448
ST. CHARLES ENGINEERING AND SURVEYING, INC.
PROFESSIONAL ENGINEERING CORPORATION
MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647

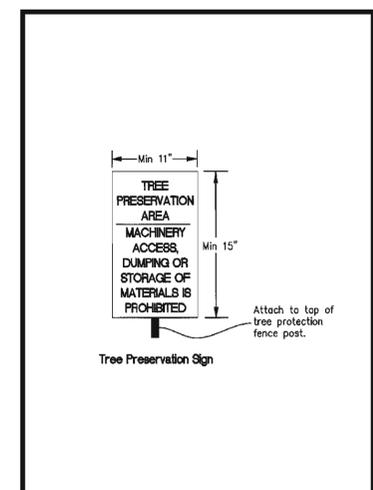
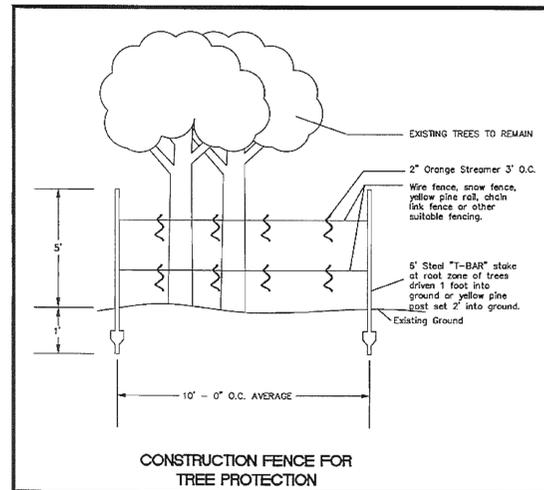
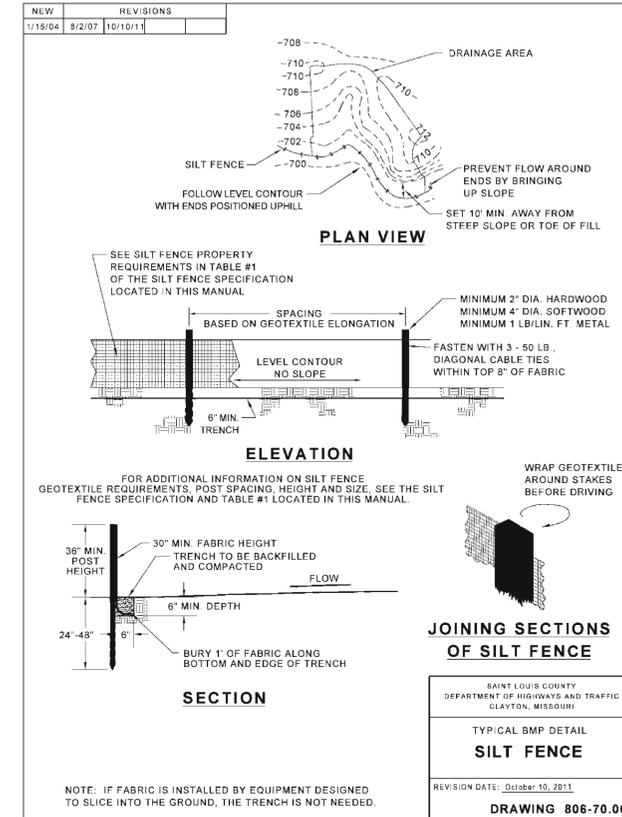


ORDER NO. 13-0166
DATE 12/22/16
3



GENERAL NOTES:

1. AREA OF TRACT: 1.11 AC.
2. LIMITS OF DISTURBANCE: 0.75 AC.
3. EXISTING TREE CANOPY: 0.35 AC.
4. EXISTING TREE CANOPY TO BE REMOVED: 0.10 AC.
5. EXISTING TREE CANOPY TO BE PRESERVED: 0.34 AC.
6. CLEARING LIMITS SHALL BE ROUGH STAKED OR MARKED BY THE APPLICANT'S SURVEYOR IN ORDER TO FACILITATE LOCATION FOR TRENCHING AND FENCING INSTALLATION.
7. NO CLEARING OR GRADING SHALL BEGIN IN AREAS WHERE TREE TREATMENT, PRESERVATION AND PROTECTION MEASURES HAVE NOT YET BEEN COMPLETED.
8. PROTECTIVE DEVICES: CONSTRUCTION FENCE, SILTATION FENCE
9. NO MAINTENANCE SCHEDULE REQUIRED
10. TREE SPECIALIST: TREES, FORESTS AND LANDSCAPING, INC. WILLIAM SPRADLEY, PRESIDENT



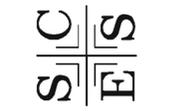
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DATE	CITY COMMENTS
06/15/2015	CITY COMMENTS
07/14/2015	CITY COMMENTS
10/27/2015	CITY COMMENTS
11/18/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
02/24/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
TREE PRESERVATION PLAN

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63801
TEL: (688) 947-0807 FAX: (688) 947-2448
ST. CHARLES ENGINEERING AND SURVEYING, INC.
PROFESSIONAL ENGINEERING CORPORATION
MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647

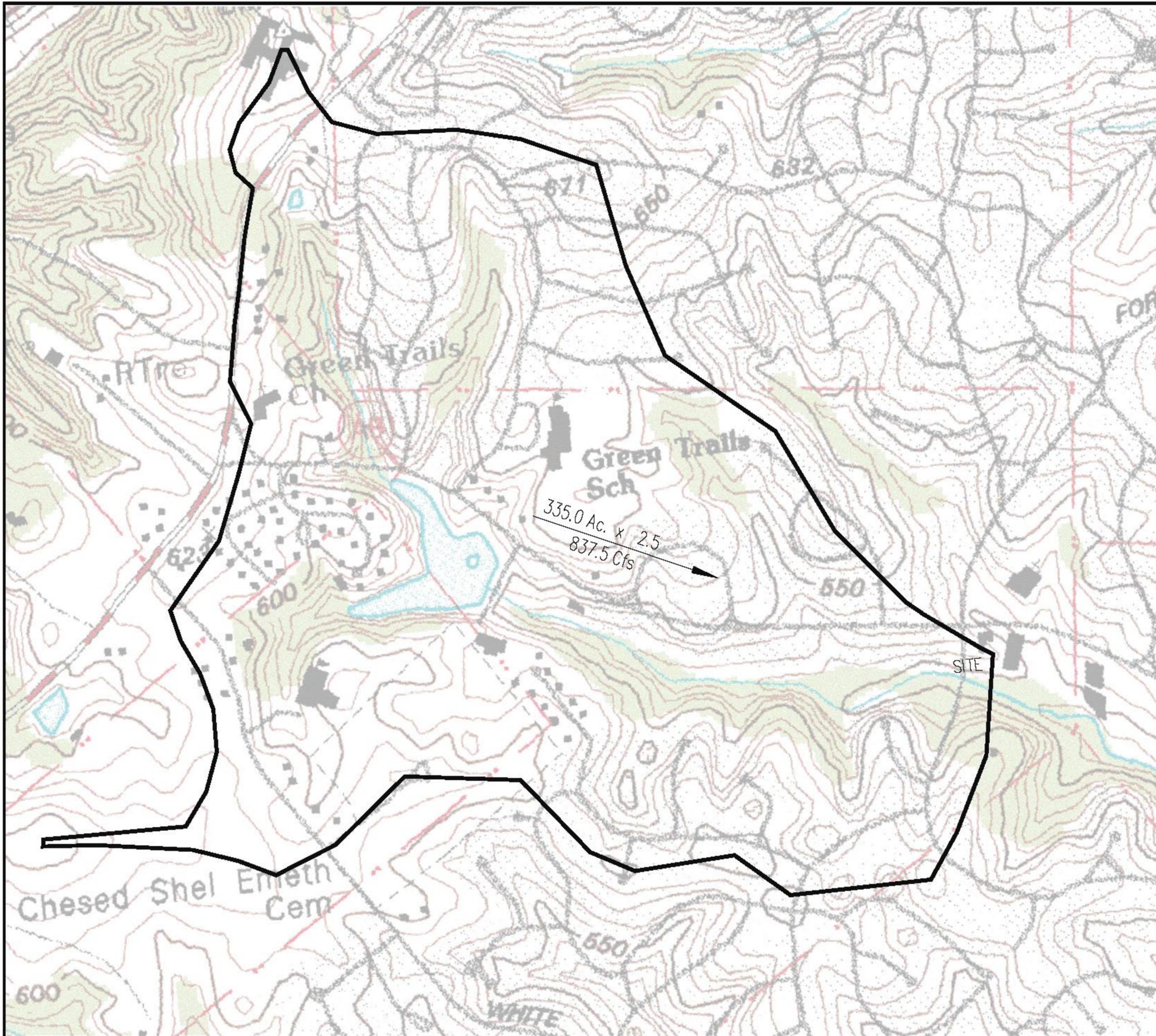


12/22/16

ORDER NO. 18-0166

DATE 12/22/16

4



SCALE - 1"=300'

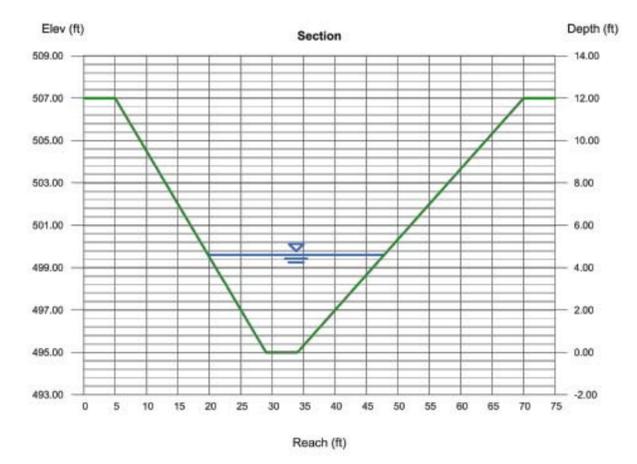
HIGH WATER
15YR. 20MIN.

Channel Report

Hydraflow Express Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. Friday, Oct 9 2015

130166 GREENTRAILS CREEK STUDY

Trapezoidal		Highlighted	
Bottom Width (ft)	= 5.00	Depth (ft)	= 4.60
Side Slopes (z:1)	= 2.00, 3.00	Q (cfs)	= 837.50
Total Depth (ft)	= 12.00	Area (sqft)	= 75.90
Invert Elev (ft)	= 495.00	Velocity (ft/s)	= 11.03
Slope (%)	= 1.00	Wetted Perim (ft)	= 29.83
N-Value	= 0.025	Crit Depth, Yc (ft)	= 4.98
		Top Width (ft)	= 28.00
		EGL (ft)	= 6.49
Calculations			
Compute by:	Known Q		
Known Q (cfs)	= 837.50		



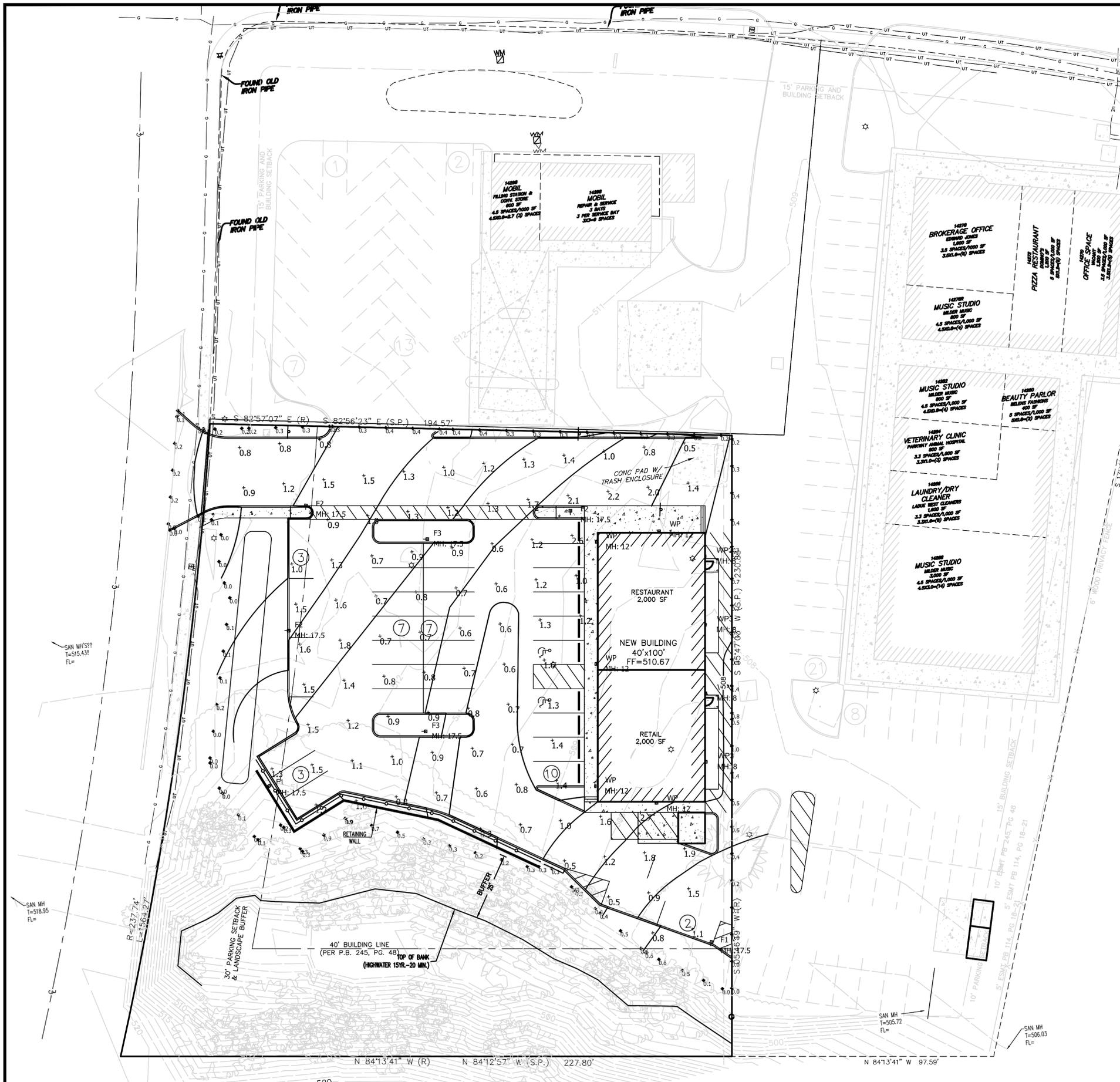
06/15/2015	CITY COMMENTS
07/14/2015	COMMENTS
10/27/2015	CITY COMMENTS
11/18/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
02/24/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
CREEK STUDY

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2445
ST. CHARLES ENGINEERING AND SURVEYING, INC.
PROFESSIONAL ENGINEERING CORPORATION
MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647



ORDER NO.
13-0166
DATE
12/22/16
5



POLE FIXTURES MOUNTED ON 15' POLE & 2.5' BASE
LIGHT LEVEL CALCULATED ON PARKING SURFACE

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING LOT	Illuminance	Fc	1.12	2.7	0.3	3.73	9.00
SPILL LIGHT	Illuminance	Fc	0.34	1.5	0.0	N.A.	N.A.

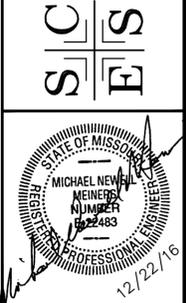
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
	2	F1	SINGLE	30	60	1.000	GLEON-AE-01-LED-EI-SL4-530-HSS
	3	F2	SINGLE	30	90	1.000	GLEON-AE-01-LED-EI-SL2-530-HSS
	2	F3	SINGLE	38	76	1.000	GLEON-AE-01-LED-EI-SWQ-700
	5	WP	SINGLE	27	135	1.000	ISW-B01-LED-EI-B14
	4	WP3	SINGLE	7	28	1.000	XTORIA

NOTES: 1. BASED ON CURRENT INFORMATION PROVIDED BY THE USER OF THIS PLAN.
2. ANY CHANGES IN BUILDING HEIGHT OR LOCATION, LIGHT FIXTURES, LIGHT TYPE, AND
3. VARIOUS AREA CONDITIONS, THEY EFFECT ANY OF THE PROVIDED INFORMATION. WE
4. WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS.

DATE	CITY COMMENTS
06/15/2015	CITY COMMENTS
07/14/2015	COMMENTS
10/27/2015	CITY COMMENTS
11/18/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
02/24/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
LIGHTING PLAN

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448
ST. CHARLES ENGINEERING AND SURVEYING, INC.
PROFESSIONAL ENGINEERING CORPORATION
MISSOURI STATE CERTIFICATE OF AUTHORITY - 001647



ORDER NO.
13-0166
DATE
12/22/16

Catalog #	SSS-4-A-175-S-F-A	Type	POLE
Project	GREEN TRAILS	Date	11/24/2015
Comments	FIXTURE MOUNTED AT 17.5 ON POLE	Date	11/24/2015
Prepared by	G. DIMAGGIO	Date	11/24/2015

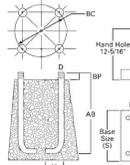
SSS SQUARE STRAIGHT STEEL

ORDERING INFORMATION

Product	Shaft Size (Inches)	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
SSS-Square Straight Steel	4-4" 5-5" 6-6"	A=0.120" B=0.188" C=0.250"	16-10' 16-15' 20-25' 25-35' 35-55'	S-Square Steel	F-Dark Bronze G-Galvanized Steel H-White K-Carbon Bronze L-Dark Platinum M-Primer Powder Coat N-Black O-Silver P-Brushed Metallic Q-Vinyl R-White S-Custom Color T-Black	2-2"3/8" O.D. Tension (4" Long) 3-3"1/2" O.D. Tension (5" Long) 4-4" O.D. Tension (6" Long) 5-5" O.D. Tension (8" Long) 6-6" O.D. Tension (10" Long) 7-7" O.D. Tension (12" Long) 8-8" O.D. Tension (14" Long) 9-9" O.D. Tension (16" Long) 10-10" O.D. Tension (18" Long) 11-11" O.D. Tension (20" Long) 12-12" O.D. Tension (22" Long) 13-13" O.D. Tension (24" Long) 14-14" O.D. Tension (26" Long) 15-15" O.D. Tension (28" Long) 16-16" O.D. Tension (30" Long) 17-17" O.D. Tension (32" Long) 18-18" O.D. Tension (34" Long) 19-19" O.D. Tension (36" Long) 20-20" O.D. Tension (38" Long) 21-21" O.D. Tension (40" Long) 22-22" O.D. Tension (42" Long) 23-23" O.D. Tension (44" Long) 24-24" O.D. Tension (46" Long) 25-25" O.D. Tension (48" Long) 26-26" O.D. Tension (50" Long) 27-27" O.D. Tension (52" Long) 28-28" O.D. Tension (54" Long) 29-29" O.D. Tension (56" Long) 30-30" O.D. Tension (58" Long) 31-31" O.D. Tension (60" Long) 32-32" O.D. Tension (62" Long) 33-33" O.D. Tension (64" Long) 34-34" O.D. Tension (66" Long) 35-35" O.D. Tension (68" Long) 36-36" O.D. Tension (70" Long) 37-37" O.D. Tension (72" Long) 38-38" O.D. Tension (74" Long) 39-39" O.D. Tension (76" Long) 40-40" O.D. Tension (78" Long) 41-41" O.D. Tension (80" Long) 42-42" O.D. Tension (82" Long) 43-43" O.D. Tension (84" Long) 44-44" O.D. Tension (86" Long) 45-45" O.D. Tension (88" Long) 46-46" O.D. Tension (90" Long) 47-47" O.D. Tension (92" Long) 48-48" O.D. Tension (94" Long) 49-49" O.D. Tension (96" Long) 50-50" O.D. Tension (98" Long) 51-51" O.D. Tension (100" Long) 52-52" O.D. Tension (102" Long) 53-53" O.D. Tension (104" Long) 54-54" O.D. Tension (106" Long) 55-55" O.D. Tension (108" Long) 56-56" O.D. Tension (110" Long) 57-57" O.D. Tension (112" Long) 58-58" O.D. Tension (114" Long) 59-59" O.D. Tension (116" Long) 60-60" O.D. Tension (118" Long) 61-61" O.D. Tension (120" Long) 62-62" O.D. Tension (122" Long) 63-63" O.D. Tension (124" Long) 64-64" O.D. Tension (126" Long) 65-65" O.D. Tension (128" Long) 66-66" O.D. Tension (130" Long) 67-67" O.D. Tension (132" Long) 68-68" O.D. Tension (134" Long) 69-69" O.D. Tension (136" Long) 70-70" O.D. Tension (138" Long) 71-71" O.D. Tension (140" Long) 72-72" O.D. Tension (142" Long) 73-73" O.D. Tension (144" Long) 74-74" O.D. Tension (146" Long) 75-75" O.D. Tension (148" Long) 76-76" O.D. Tension (150" Long) 77-77" O.D. Tension (152" Long) 78-78" O.D. Tension (154" Long) 79-79" O.D. Tension (156" Long) 80-80" O.D. Tension (158" Long) 81-81" O.D. Tension (160" Long) 82-82" O.D. Tension (162" Long) 83-83" O.D. Tension (164" Long) 84-84" O.D. Tension (166" Long) 85-85" O.D. Tension (168" Long) 86-86" O.D. Tension (170" Long) 87-87" O.D. Tension (172" Long) 88-88" O.D. Tension (174" Long) 89-89" O.D. Tension (176" Long) 90-90" O.D. Tension (178" Long) 91-91" O.D. Tension (180" Long) 92-92" O.D. Tension (182" Long) 93-93" O.D. Tension (184" Long) 94-94" O.D. Tension (186" Long) 95-95" O.D. Tension (188" Long) 96-96" O.D. Tension (190" Long) 97-97" O.D. Tension (192" Long) 98-98" O.D. Tension (194" Long) 99-99" O.D. Tension (196" Long) 100-100" O.D. Tension (198" Long) 101-101" O.D. Tension (200" Long) 102-102" O.D. Tension (202" Long) 103-103" O.D. Tension (204" Long) 104-104" O.D. Tension (206" Long) 105-105" O.D. Tension (208" Long) 106-106" O.D. Tension (210" Long) 107-107" O.D. Tension (212" Long) 108-108" O.D. Tension (214" Long) 109-109" O.D. Tension (216" Long) 110-110" O.D. Tension (218" Long) 111-111" O.D. Tension (220" Long) 112-112" O.D. Tension (222" Long) 113-113" O.D. Tension (224" Long) 114-114" O.D. Tension (226" Long) 115-115" O.D. Tension (228" Long) 116-116" O.D. Tension (230" Long) 117-117" O.D. Tension (232" Long) 118-118" O.D. Tension (234" Long) 119-119" O.D. Tension (236" Long) 120-120" O.D. Tension (238" Long) 121-121" O.D. Tension (240" Long) 122-122" O.D. Tension (242" Long) 123-123" O.D. Tension (244" Long) 124-124" O.D. Tension (246" Long) 125-125" O.D. Tension (248" Long) 126-126" O.D. Tension (250" Long) 127-127" O.D. Tension (252" Long) 128-128" O.D. Tension (254" Long) 129-129" O.D. Tension (256" Long) 130-130" O.D. Tension (258" Long) 131-131" O.D. Tension (260" Long) 132-132" O.D. Tension (262" Long) 133-133" O.D. Tension (264" Long) 134-134" O.D. Tension (266" Long) 135-135" O.D. Tension (268" Long) 136-136" O.D. Tension (270" Long) 137-137" O.D. Tension (272" Long) 138-138" O.D. Tension (274" Long) 139-139" O.D. Tension (276" Long) 140-140" O.D. Tension (278" Long) 141-141" O.D. Tension (280" Long) 142-142" O.D. Tension (282" Long) 143-143" O.D. Tension (284" Long) 144-144" O.D. Tension (286" Long) 145-145" O.D. Tension (288" Long) 146-146" O.D. Tension (290" Long) 147-147" O.D. Tension (292" Long) 148-148" O.D. Tension (294" Long) 149-149" O.D. Tension (296" Long) 150-150" O.D. Tension (298" Long) 151-151" O.D. Tension (300" Long) 152-152" O.D. Tension (302" Long) 153-153" O.D. Tension (304" Long) 154-154" O.D. Tension (306" Long) 155-155" O.D. Tension (308" Long) 156-156" O.D. Tension (310" Long) 157-157" O.D. Tension (312" Long) 158-158" O.D. Tension (314" Long) 159-159" O.D. Tension (316" Long) 160-160" O.D. Tension (318" Long) 161-161" O.D. Tension (320" Long) 162-162" O.D. Tension (322" Long) 163-163" O.D. Tension (324" Long) 164-164" O.D. Tension (326" Long) 165-165" O.D. Tension (328" Long) 166-166" O.D. Tension (330" Long) 167-167" O.D. Tension (332" Long) 168-168" O.D. Tension (334" Long) 169-169" O.D. Tension (336" Long) 170-170" O.D. Tension (338" Long) 171-171" O.D. Tension (340" Long) 172-172" O.D. Tension (342" Long) 173-173" O.D. Tension (344" Long) 174-174" O.D. Tension (346" Long) 175-175" O.D. Tension (348" Long) 176-176" O.D. Tension (350" Long) 177-177" O.D. Tension (352" Long) 178-178" O.D. Tension (354" Long) 179-179" O.D. Tension (356" Long) 180-180" O.D. Tension (358" Long) 181-181" O.D. Tension (360" Long) 182-182" O.D. Tension (362" Long) 183-183" O.D. Tension (364" Long) 184-184" O.D. Tension (366" Long) 185-185" O.D. Tension (368" Long) 186-186" O.D. Tension (370" Long) 187-187" O.D. Tension (372" Long) 188-188" O.D. Tension (374" Long) 189-189" O.D. Tension (376" Long) 190-190" O.D. Tension (378" Long) 191-191" O.D. Tension (380" Long) 192-192" O.D. Tension (382" Long) 193-193" O.D. Tension (384" Long) 194-194" O.D. Tension (386" Long) 195-195" O.D. Tension (388" Long) 196-196" O.D. Tension (390" Long) 197-197" O.D. Tension (392" Long) 198-198" O.D. Tension (394" Long) 199-199" O.D. Tension (396" Long) 200-200" O.D. Tension (398" Long) 201-201" O.D. Tension (400" Long) 202-202" O.D. Tension (402" Long) 203-203" O.D. Tension (404" Long) 204-204" O.D. Tension (406" Long) 205-205" O.D. Tension (408" Long) 206-206" O.D. Tension (410" Long) 207-207" O.D. Tension (412" Long) 208-208" O.D. Tension (414" Long) 209-209" O.D. Tension (416" Long) 210-210" O.D. Tension (418" Long) 211-211" O.D. Tension (420" Long) 212-212" O.D. Tension (422" Long) 213-213" O.D. Tension (424" Long) 214-214" O.D. Tension (426" Long) 215-215" O.D. Tension (428" Long) 216-216" O.D. Tension (430" Long) 217-217" O.D. Tension (432" Long) 218-218" O.D. Tension (434" Long) 219-219" O.D. Tension (436" Long) 220-220" O.D. Tension (438" Long) 221-221" O.D. Tension (440" Long) 222-222" O.D. Tension (442" Long) 223-223" O.D. Tension (444" Long) 224-224" O.D. Tension (446" Long) 225-225" O.D. Tension (448" Long) 226-226" O.D. Tension (450" Long) 227-227" O.D. Tension (452" Long) 228-228" O.D. Tension (454" Long) 229-229" O.D. Tension (456" Long) 230-230" O.D. Tension (458" Long) 231-231" O.D. Tension (460" Long) 232-232" O.D. Tension (462" Long) 233-233" O.D. Tension (464" Long) 234-234" O.D. Tension (466" Long) 235-235" O.D. Tension (468" Long) 236-236" O.D. Tension (470" Long) 237-237" O.D. Tension (472" Long) 238-238" O.D. Tension (474" Long) 239-239" O.D. Tension (476" Long) 240-240" O.D. Tension (478" Long) 241-241" O.D. Tension (480" Long) 242-242" O.D. Tension (482" Long) 243-243" O.D. Tension (484" Long) 244-244" O.D. Tension (486" Long) 245-245" O.D. Tension (488" Long) 246-246" O.D. Tension (490" Long) 247-247" O.D. Tension (492" Long) 248-248" O.D. Tension (494" Long) 249-249" O.D. Tension (496" Long) 250-250" O.D. Tension (498" Long)			

NOTES: 1. All shaft sizes nominal. 2. Square poles are 3 at 90° round poles are 13 at 130°. 3. Outer is located 4" above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. 4. Additional hand hole is located 12" before pole top and 80" from standard hand hole location, unless otherwise specified.

DIMENSIONS



WARNING: The use of unapproved accessories such as banners, signs, cameras or sensors for which the pole was not designed voids the pole warranty from Eaton's Cooper Lighting business and may result in pole failure causing serious injury or property damage. Upon request, Eaton's Cooper Lighting business will supply information regarding total loading capacity. The pole warranty from Eaton's Cooper Lighting business is void unless poles are used and installed as a complete pole/fixture combination. This warranty specifically excludes failure as the result of a third party air or emission, misuse, unapproved uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product. Specifications and dimensions subject to change without notice. Consult your Eaton's Cooper Lighting business representative or visit www.cooperlighting.com for available options, accessories and ordering information.

Cooper Lighting

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McGraw-Edison

Catalog #	ISW-B01-LED-E1-BL4-BZ	Type	WP
Project	Greentrails	Date	11/24/2015
Comments	Mounted at 12'	Date	11/24/2015
Prepared by	J. Dimaggio	Date	11/24/2015

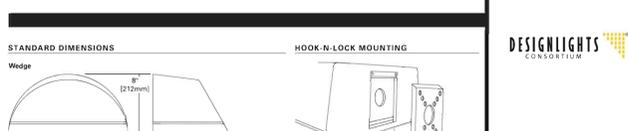
DESCRIPTION

The IMPACT Elite family of cutoff wall luminaires is the ideal complement to site design. Incorporating modular LightBAR™ technology, Impact Elite provides outstanding uniformity and energy conscious illumination. Combined with a rugged construction, the Impact Elite is the ideal facade and security luminaire for areas surrounding schools, office complexes, apartments, and recreational facilities. UL/UL listed for wet locations.

STANDARD DIMENSIONS



STANDARD DIMENSIONS WITH BACK BOX



CERTIFICATION DATA

UL/UL Listed
LM79 LM85 Compliant
IP66 LightBARS
ADA Compliant
E130001

ENERGY DATA

Electronic LED Driver
0.3 Power Factor
0.5% Total Harmonic Distortion
100-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA

Approximate Net Weight: 18 lbs. (8 kg.)

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COOPER Lighting

SSS SQUARE STRAIGHT STEEL

Mounting Height (Feet)	Catalog Number 1	Wall Thickness (Inches)	Base Square 1 (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection 1 (Inches)	Shaft Size 1 (Inches)	Anchor Bolt Diameter 1 (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet)	Max. Fixture Load - Includes Bracket (Pounds)
10	SSS4A10S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	85	30.0	22.0
15	SSS4A15S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	118	15.0	11.5
20	SSS4A20S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	150	8.7	5.9
25	SSS4A25S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	183	15.1	7.9
30	SSS4A30S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	222	9.3	6.0
35	SSS4A35S	0.120	12-1/2	12	5	6	1 x 36 x 4	284	3.9	6.1
40	SSS4A40S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	260	4.7	2.1
45	SSS4A45S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	392	10.4	6.4
50	SSS4A50S	0.120	12-1/2	12	5	6	1 x 36 x 4	330	4.3	1.4
55	SSS4A55S	0.120	12-1/2	12	5	6	1 x 36 x 4	489	19.0	13.0
60	SSS4A60S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	483	5.8	2.8
65	SSS4A65S	0.120	12-1/2	12	5	6	1 x 36 x 4	564	12.8	3.7
70	SSS4A70S	0.250	12-1/2	12	5	6	1 x 36 x 4	738	16.5	10.0
75	SSS4A75S	0.188	12-1/2	12	5	6	1 x 36 x 4	618	7.0	3.0
80	SSS4A80S	0.250	12-1/2	12	5	6	1 x 36 x 4	816	13.0	7.0

Effective Projected Area (At Pole Top)

Mounting Height (Feet)	Catalog Number 1	Wall Thickness (Inches)	Base Square 1 (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection 1 (Inches)	Shaft Size 1 (Inches)	Anchor Bolt Diameter 1 (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet)	Max. Fixture Load - Includes Bracket (Pounds)
10	SSS4A10S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	85	30.0	22.0
15	SSS4A15S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	118	15.4	10.2
20	SSS4A20S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	150	6.2	3.4
25	SSS4A25S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	183	13.8	9.9
30	SSS4A30S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	222	8.1	5.5
35	SSS4A35S	0.120	12-1/2	12	5	6	1 x 36 x 4	284	9.1	6.6
40	SSS4A40S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	260	1.8	--
45	SSS4A45S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	392	9.6	5.9
50	SSS4A50S	0.120	12-1/2	12	5	6	1 x 36 x 4	330	4.1	1.3
55	SSS4A55S	0.188	12-1/2	12	5	6	1 x 36 x 4	489	18.5	12.8
60	SSS4A60S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	483	5.5	2.4
65	SSS4A65S	0.188	12-1/2	12	5	6	1 x 36 x 4	564	11.8	7.0
70	SSS4A70S	0.250	12-1/2	12	5	6	1 x 36 x 4	738	16.0	10.9
75	SSS4A75S	0.188	12-1/2	12	5	6	1 x 36 x 4	618	7.0	2.4
80	SSS4A80S	0.250	12-1/2	12	5	6	1 x 36 x 4	816	12.0	6.7

NOTES: 1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained from Eaton's Cooper Lighting business. 2. Net area or mounting for rectangular arms must be specified. Hand hole position relative to end location. 3. Shaft size, base square, anchor bolts and projections may vary slightly. All dimensions nominal. 4. EPA based on shaft properties with wind normal to flat. EPA calculated using base wind velocity as indicated plus 35% gust factor.

Cooper Lighting

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ISW IMPACT ELITE LED WEDGE

Number of LightBARS	Power (Watts)	Current @ 120V (A)	Current @ 277V (A)	BL2	BL3	BL4	GWZ	SLR/SLL
C01	27	0.23	0.13	1,770	1,625	1,720	1,725	1,571
C02	54	0.46	0.21	3,540	3,249	3,440	3,450	3,142
B01	27	0.23	0.13	2,377	1,968	2,115	2,122	1,9

DESCRIPTION
The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (± 275K CCT and minimum 70 CRI), Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard with 0-10V dimming. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 100V of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available to meet customized application requirements. Offered standard in 4000K (± 275K CCT and minimum 70 CRI), Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Finish
Housing finished in super durable TGIC polyester powder coat finish. 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.

Mounting
Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. Round pole top adaptor included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Easy positioning of fixture during assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. Round pole top adaptor included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

DIMENSIONS

POLE MOUNT



WALL MOUNT



ENERGY DATA

Number of Light Squares	*A* Width (Inch)	*B* Standard Arm Length (Inch)	*C* Optional Arm Length (Inch)	Weight with Arm (Lbs.)	EMA with Arm 7 (Lbs.)
1-4	15-10" (381mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs)	0.85
5-8	21-5" (533mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs)	1.00
7-8	27-5" (700mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs)	1.07
9-10	33-3" (838mm)	7" (178mm)	15" (406mm)	63 (28.6 kgs)	1.12

Notes: EA extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. EA extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. EA extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table.

Cooper Lighting by E-T-N

McGraw-Edison

Catalog #	GLEON-AE-01-LED-E1-SL4-530-HSS	Type
Project	Greentrails	F1
Comments	Mounted at 17.5'	Date
Prepared by	J. DiMaggio	11/24/2015



GLEON GALLEON LED
1-10 Light Squares
Solid State LED
AREA/SITE LUMINAIRE

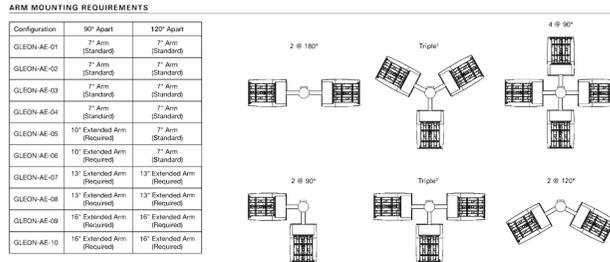
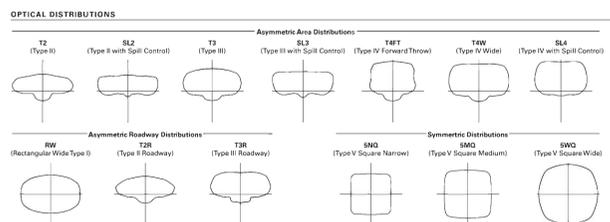
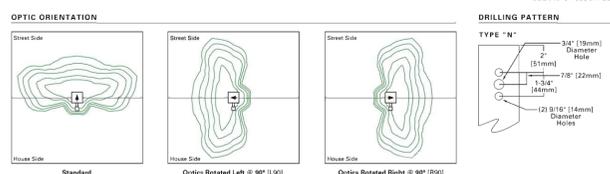
CERTIFICATION DATA

UL Listed: Wet Location Listed
ISO 9001
ULP791 EMC Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium® Qualified*

ENERGY DATA

Electronic LED Driver
+3.8 Power Factor
-20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
50°C Max. Temperature
50°C Max. Temperature (HA Option)

Cooper Lighting by E-T-N



Cooper Lighting by E-T-N

NOMINAL POWER AND LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	14	14	14	14	14	14	14	14	14	14
Nominal Power (Watt)	56	107	157	213	264	315	370	421	475	528
Input Current @ 120V (A)	0.47	0.90	1.31	1.79	2.21	2.64	3.08	3.51	3.96	4.41
Input Current @ 208V (A)	0.28	0.51	0.74	1.02	1.25	1.48	1.76	1.99	2.22	2.50
Input Current @ 240V (A)	0.25	0.45	0.65	0.90	1.10	1.30	1.55	1.75	1.95	2.20
Input Current @ 277V (A)	0.23	0.41	0.59	0.82	1.00	1.18	1.41	1.59	1.77	2.00

Optics

Optics	Lumens	1	2	3	4	5	6	7	8	9	10
T2	Lumens	5,272	10,303	15,373	20,713	25,168	30,116	35,618	40,257	45,018	49,840
T2R	Lumens	5,987	10,838	16,211	21,566	26,719	31,874	37,813	42,844	47,922	52,814
T3	Lumens	5,374	10,501	15,669	20,704	25,652	30,697	36,303	41,334	45,884	50,602
T3R	Lumens	5,463	10,735	16,017	21,164	26,222	31,379	37,110	42,948	48,304	51,900
T4FT	Lumens	5,455	10,560	15,760	20,824	25,801	30,875	36,514	41,279	46,150	51,066
T4TW	Lumens	5,335	10,426	15,506	20,505	25,468	30,476	36,426	41,838	46,554	50,438
T4SL	Lumens	5,263	10,285	15,347	20,278	25,124	30,066	35,506	40,288	44,940	48,756
T4SW	Lumens	5,373	10,500	15,667	20,701	25,649	30,693	36,298	41,758	46,878	50,794
T4RW	Lumens	5,105	9,976	14,856	19,659	24,370	29,103	34,458	39,078	43,591	48,262
T4TR	Lumens	5,542	10,830	16,160	21,352	26,455	31,658	37,439	42,421	47,300	52,390
T4SN	Lumens	5,644	11,059	16,457	21,745	26,942	32,241	38,128	43,202	48,191	53,356
T4SM	Lumens	5,659	11,059	16,507	21,803	27,014	32,357	38,250	43,517	48,200	53,048
T4SWQ	Lumens	4,722	9,227	13,787	18,191	22,538	26,971	31,897	36,141	40,315	44,635
T4SLR	Lumens	5,492	10,732	16,014	21,159	26,216	31,372	37,101	42,638	48,363	51,918
T4AFL	Lumens	5,512	10,771	16,072	21,236	26,311	31,496	37,236	42,191	47,063	52,107
T4SLR	Lumens	5,512	10,771	16,072	21,236	26,311	31,496	37,236	42,191	47,063	52,107

*Nominal data for 4000K CCT

Cooper Lighting by E-T-N

NOMINAL POWER AND LUMENS (700MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	700mA									
Nominal Power (Watt)	56	72	105	156	210	270	336	396	462	528
Input Current @ 120V (A)	0.32	0.59	0.86	1.14	1.40	1.72	2	2.38	2.88	3.41
Input Current @ 208V (A)	0.21	0.36	0.51	0.67	0.87	1.02	1.18	1.34	1.53	1.69
Input Current @ 240V (A)	0.19	0.32	0.45	0.59	0.77	0.90	1.04	1.18	1.35	1.49
Input Current @ 277V (A)	0.20	0.29	0.40	0.51	0.69	0.80	0.91	1.02	1.20	1.31

Optics

Optics	Lumens	1	2	3	4	5	6	7	8	9	10
T2	Lumens	3,854	7,531	11,237	14,847	18,395	22,013	26,033	29,497	32,904	36,430
T2R	Lumens	4,391	7,995	11,929	15,762	19,589	23,510	27,588	31,318	35,382	39,618
T3	Lumens	3,928	7,676	11,453	15,133	18,750	22,437	26,534	30,665	33,537	37,132
T3R	Lumens	4,015	7,846	11,707	15,468	19,186	22,988	27,124	30,733	34,283	37,957
T4FT	Lumens	3,951	7,720	11,519	15,221	18,858	22,567	26,688	30,240	33,732	37,347
T4TW	Lumens	3,900	7,600	11,370	15,020	18,619	22,278	26,343	29,849	32,996	36,684
T4SL	Lumens	3,947	7,818	11,217	14,821	18,364	21,975	25,988	29,447	32,847	36,368
T4RW	Lumens	3,810	7,400	10,922	14,403	17,804	21,104	24,304	27,304	30,104	32,604
T4TR	Lumens	3,957	7,875	11,451	15,131	18,747	22,434	26,531	30,661	33,533	37,126
T4SN	Lumens	3,971	7,792	10,880	14,378	17,712	21,215	25,208	28,640	31,861	35,275
T4SM	Lumens	3,987	7,844	10,923	14,418	17,742	21,215	25,208	28,640	31,861	35,275
T4SWQ	Lumens	4,051	7,916	11,811	15,506	19,316	23,139	27,306	31,006	34,567	38,234
T4SLR	Lumens	4,125	8,062	12,029	15,894	19,992	23,665	27,869	31,577	35,224	38,999
T4AFL	Lumens	4,136	8,063	12,061	15,936	19,745	23,628	27,843	31,661	35,318	39,103
T4SLR	Lumens	4,014	7,844	11,704	15,465	19,182	22,930	27,118	30,726	34,274	37,948
T4AFL	Lumens	4,009	7,873	11,747	15,522	19,231	23,014	27,216	30,838	34,399	38,088

*Nominal data for 4000K CCT

Cooper Lighting by E-T-N

NOMINAL POWER AND LUMENS (530MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	530mA									
Nominal Power (Watt)	30	54	80	105	130	159	184	209	234	259
Input Current @ 120V (A)	0.25	0.45	0.66	0.86	1.07	1.23	1.52	1.73	1.93	2.14
Input Current @ 208V (A)	0.17	0.28	0.39	0.51	0.63	0.78	0.9	1.02	1.14	1.26
Input Current @ 240V (A)	0.17	0.25	0.35	0.45	0.55	0.70	0.80	0.90	1.00	1.10
Input Current @ 277V (A)	0.19	0.24	0.32	0.40	0.49	0.64	0.72	0.80	0.89	0.98

Optics

Optics	Lumens	1	2	3	4	5	6	7	8	9	10
T2	Lumens	3,079	6,017	8,978	11,862	14,687	17,688	20,800	23,567	26,289	29,106
T2R	Lumens	3,289	6,388	9,531	12,593	15,603	18,712	22,082	25,200	27,989	30,600
T3	Lumens	3,138	6,133	9,150	12,091	14,880	17,626	21,000	24,021	26,796	29,687
T3R	Lumens	3,208	6,269	9,354	12,359	15,313	18,205	21,671	24,555	27,300	30,326
T4FT	Lumens	3,116	6,088	9,084	12,004	14,872	17,797	21,047	23,848	26,602	29,463
T4TW	Lumens	3,074	6,006	8,962	11,842	14,672	17,568	20,764	23,527	26,244	29,056
T4SL	Lumens	3,138	6,132	9,149	12,089	14,978	17,824	21,197	24,018	26,791	29,682
T4RW	Lumens	2,981	5,926	8,893	11,786	14,231	17,030	20,140	22,820	25,456	28,134
T4TR	Lumens	3,236	6,224	9,437	12,469	15,449	18,467	21,863	24,773	27,834	30,895
T4SN	Lumens	3,296	6,441	9,610	12,698	15,723	18,828	22,266	25,229	28,142	31,158
T4SM	Lumens	3,296	6,441	9,610	12,698	15,723	18,828	22,266	25,229	28,142	31,158
T4SWQ	Lumens	3,287	6,287	9,351	12,356	15,309	18,200	21,666	24,549	27,364	30,319
T4SLR	Lumens	3,207	6,207	9,182	12,186	15,109	18,030	21,666	24,549	27,364	30,319
T4AFL	Lumens	3,219	6,290	9,385	12,401	15,365	18,287	21,745	24,638	27,464	30,429

*Nominal data for 4000K CCT

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
20°C	1.00
40°C	0.99
50°C	0.97

LUMEN MAINTENANCE

Ambient Temperature	T81 21 Lumens Maintenance (80,000 Hours)	Theoretical L70
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C	> 94%	> 170,000

Cooper Lighting by E-T-N

ORDERING INFORMATION

Product Family	Light Engine	Number of Light Squares	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON-Galleon	AE-1A Drive Current	01-1 02-2 03-3 04-4 05-5 06-6 07-7 08-8 09-9 10-10	LED-Solid State Light Emitting Diodes	E1-120-277V 247-247V 480-480V	T2-Type II T2R-Type II Roadway T3-Type II T4FT-Type IV Forward Throw T4TW-Type IV Wide T4RW-Type V Square Wide T4TR-Type V Square Medium T4SN-Type V Square Wide T4SM-Type II w/Spill Control T4SWQ-Type II w/Spill Control T4SLR-Type II w/Spill Control T4AFL-Automotive Frontline	AP-Grey BC-Black DP-Dark Platinum GM-Graphite Metallic WH-White	[Blank] for Round or Square Pole EA-

DESCRIPTION
The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard with 0-10V dimming. Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in 40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 530mA and 700mA drive currents.

Mounting
Extruded aluminum arm includes internal bolt guides allowing for

easy positioning of fixture during assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA Extended arm may be required. Refer to arm mounting requirement table on page 3. Round pole top adapter included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish
Housing finished in super durable TGIC polyester powder coat paint. 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.

McGraw-Edison®

Product	GLEON-AE-01-LED-E1-SL2-S30-HSS	Type	F2
Project	Greentrails	Date	11/24/2015
Comments	Mounted at 17.5'		
Prepared by	J. DiMaggio		



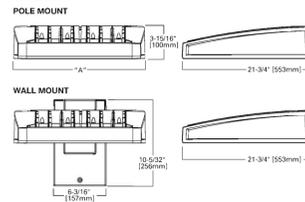
GLEON GALLEON LED

1-10 Light States LED

AREA/SITE LUMINAIRE

Optics
Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (± 275K) CCT and minimum 70 CRI. Optional 6000K CCT and 8000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can

DIMENSIONS



DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"C" Optional Arm Length	Weight with Arm (lbs.)	EMF with Arm* (dB/Ft)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.36
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (707mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

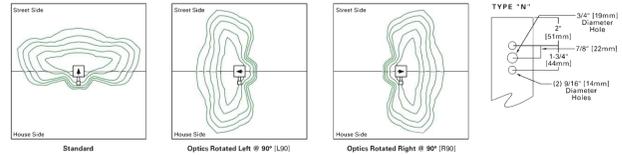
Cooper Lighting

1701 Highway 16 South, Peachtree City, GA 30092
 770-488-4600
 www.cooperlighting.com

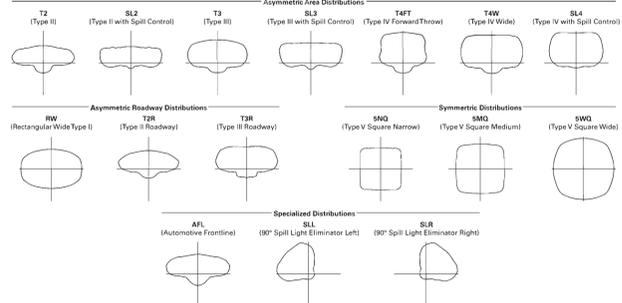
DLC
CERTIFICATION DATA
 UL/cUL Wet Location Listed
 IES E16
 LMT9 / LM80 Compliant
 3G Vibration Rated
 IP66 Rated
 DesignLights Consortium® Qualified*

Cooper Lighting
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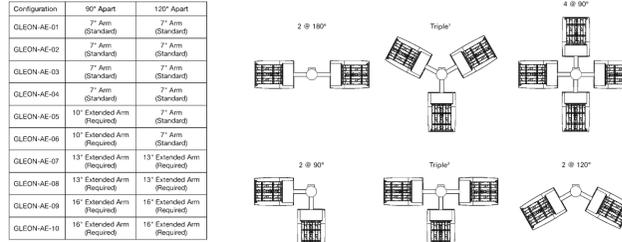
GLEON GALLEON LED



OPTICAL DISTRIBUTIONS



ARM MOUNTING REQUIREMENTS



Cooper Lighting
 1701 Highway 16 South, Peachtree City, GA 30092
 770-488-4600
 www.cooperlighting.com

GLEON GALLEON LED

NOMINAL POWER AND LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	1A									
Nominal Power (Watts)	38	72	105	138	171	204	237	270	303	336
Input Current @ 120V (A)	0.32	0.59	0.86	1.14	1.42	1.70	2.00	2.28	2.56	2.84
Input Current @ 208V (A)	0.21	0.38	0.51	0.67	0.82	0.97	1.12	1.27	1.42	1.57
Input Current @ 240V (A)	0.19	0.32	0.45	0.58	0.71	0.84	0.97	1.10	1.23	1.36
Input Current @ 277V (A)	0.20	0.33	0.46	0.59	0.72	0.85	0.98	1.11	1.24	1.37

NOMINAL POWER AND LUMENS (530MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	530mA									
Nominal Power (Watts)	30	54	80	105	130	156	181	207	232	258
Input Current @ 120V (A)	0.25	0.45	0.66	0.86	1.07	1.32	1.52	1.72	1.93	2.14
Input Current @ 208V (A)	0.17	0.28	0.39	0.51	0.63	0.78	0.9	1.02	1.14	1.26
Input Current @ 240V (A)	0.17	0.25	0.35	0.45	0.55	0.70	0.80	0.90	1.00	1.10
Input Current @ 277V (A)	0.19	0.24	0.32	0.40	0.49	0.64	0.72	0.80	0.88	0.98

*Nominal data for 4000K CCT

GLEON GALLEON LED

NOMINAL POWER AND LUMENS (700MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	700mA									
Nominal Power (Watts)	38	72	105	138	171	204	237	270	303	336
Input Current @ 120V (A)	0.32	0.59	0.86	1.14	1.42	1.70	2.00	2.28	2.56	2.84
Input Current @ 208V (A)	0.21	0.38	0.51	0.67	0.82	0.97	1.12	1.27	1.42	1.57
Input Current @ 240V (A)	0.19	0.32	0.45	0.58	0.71	0.84	0.97	1.10	1.23	1.36
Input Current @ 277V (A)	0.20	0.33	0.46	0.59	0.72	0.85	0.98	1.11	1.24	1.37

*Nominal data for 4000K CCT

GLEON GALLEON LED

NOMINAL POWER AND LUMENS (530MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10
Drive Current	530mA									
Nominal Power (Watts)	30	54	80	105	130	156	181	207	232	258
Input Current @ 120V (A)	0.25	0.45	0.66	0.86	1.07	1.32	1.52	1.72	1.93	2.14
Input Current @ 208V (A)	0.17	0.28	0.39	0.51	0.63	0.78	0.9	1.02	1.14	1.26
Input Current @ 240V (A)	0.17	0.25	0.35	0.45	0.55	0.70	0.80	0.90	1.00	1.10
Input Current @ 277V (A)	0.19	0.24	0.32	0.40	0.49	0.64	0.72	0.80	0.88	0.98

*Nominal data for 4000K CCT

LUMEN MULTIPLIER

Ambient Temperature (°C)	Lumen Multiplier
10°C	1.03
15°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

LUMEN MAINTENANCE

Ambient Temperature (°C)	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000
50°C*	> 90%	> 170,000

Cooper Lighting
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AMENDED SITE DEVELOPMENT SECTION PLAN
116 S GREENTRAILS DRIVE
 LIGHTING PLAN
 06/15/2015 CITY COMMENTS
 07/14/2015 COMMENTS
 10/27/2015 CITY COMMENTS
 11/18/2015 CITY COMMENTS
 12/03/2015 CITY COMMENTS
 02/24/2016 CITY COMMENTS
 05/11/2016 CITY COMMENTS
 09/29/2016 CITY COMMENTS
 12/01/2016 CITY COMMENTS
 12/22/2016 CITY COMMENTS

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 801 S. FIFTH STREET, SUITE 202
 ST. CHARLES, MO 63301
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ORDER NO.
 13-0166
DATE
 12/22/16
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LOT B SOUTHEAST VIEW



LOT B EAST VIEW TO LOT A1



LOT B NORTHWEST VIEW



LOT B WEST VIEW



SOUTH GREENTRAILS DRIVE



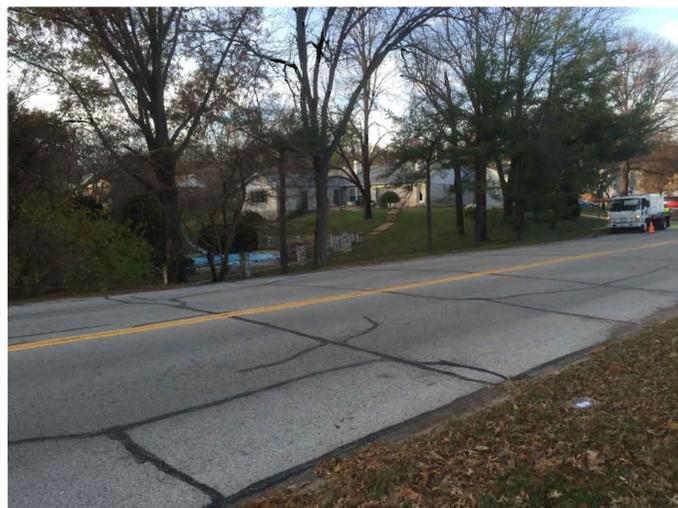
CREEK SOUTH OF LOT B



NORTH GREENTRAILS DRIVE



HOME NORTHWEST OF LOT B



HOME WEST OF LOT B



LOT A1 EAST VIEW



LOT A1 NORTH VIEW

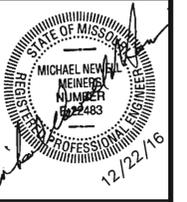


LOT A1 SOUTHEAST VIEW

06/15/2015	CITY COMMENTS
07/14/2015	COMMENTS
10/27/2015	CITY COMMENTS
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12/23/2015	CITY COMMENTS
02/04/2016	CITY COMMENTS
05/11/2016	CITY COMMENTS
08/25/2016	CITY COMMENTS
12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
SITE PHOTOS

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18-0166
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LOT A1 NORTHEAST VIEW



LOT A2 NORTHEAST VIEW



LOT A2 NORTHWEST VIEW



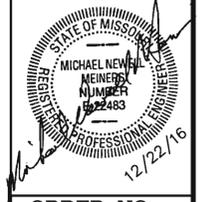
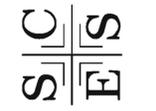
LOT A2 SOUTHEAST VIEW

DATE	CITY COMMENTS
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07/14/2015	CITY COMMENTS
10/27/2015	CITY COMMENTS
11/16/2015	CITY COMMENTS
12/23/2015	CITY COMMENTS
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12/01/2016	CITY COMMENTS
12/22/2016	CITY COMMENTS

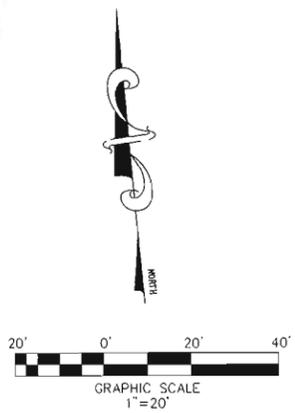
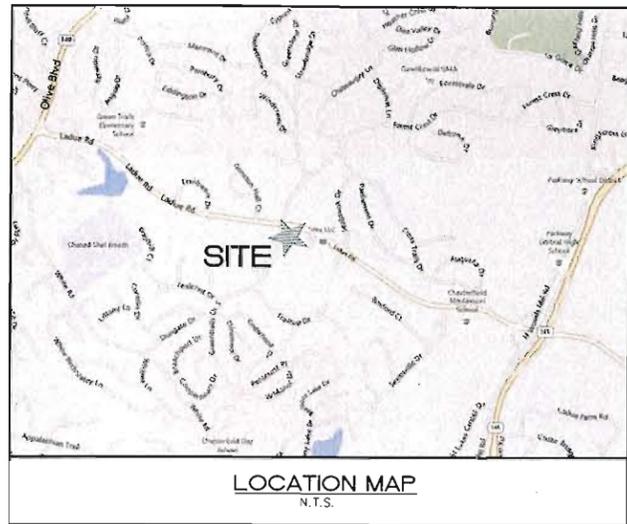
AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE

SITE PHOTOS

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DATE
12/22/16

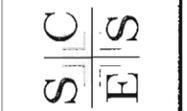


LEGEND	
	SANITARY STRUCTURE
	STORM STRUCTURE
	POWER POLE
	LIGHT STANDARD
	CURB INLET
	DOUBLE CURB INLET
	GRATE INLET (EXISTING)
	AREA INLET (EXISTING)
	DOUBLE AREA INLET
	WATER METER
	WATER VALVE
	WATER SHUT OFF
	GAS VALVE
	CLEAN OUT
	TELEPHONE HANDHOLE
	IRON PIPE
	HYDRANT
	UT UNDERGROUND TELEPHONE (EXISTING)
	UE UNDERGROUND ELECTRIC (EXISTING)
	G UNDERGROUND GAS LINE (PROPOSED)
	OH OVERHEAD ELECTRIC LINE
	W WATER LINE
	B.C. BACK OF CURB
	T.C. TOP OF CURB
	T.W. TOP OF WALL
	TYP. TYPICAL
	578 EXISTING CONTOUR
	578 PROPOSED CONTOUR
	TREE LINE
	E.O.A. EDGE OF ASPHALT
	E.O.C. EDGE OF CONCRETE
	SIGN
	CONCRETE PAVEMENT
	ASPHALT PAVEMENT

12/23/2015	CITY SUBMITTAL
02/24/2016	CITY SUBMITTAL
05/18/2016	CITY SUBMITTAL
12/22/2016	CITY SUBMITTAL

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
SITE PLAN COLOR EXHIBIT

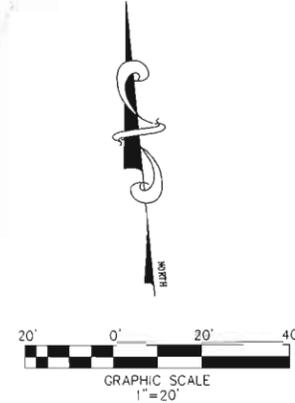
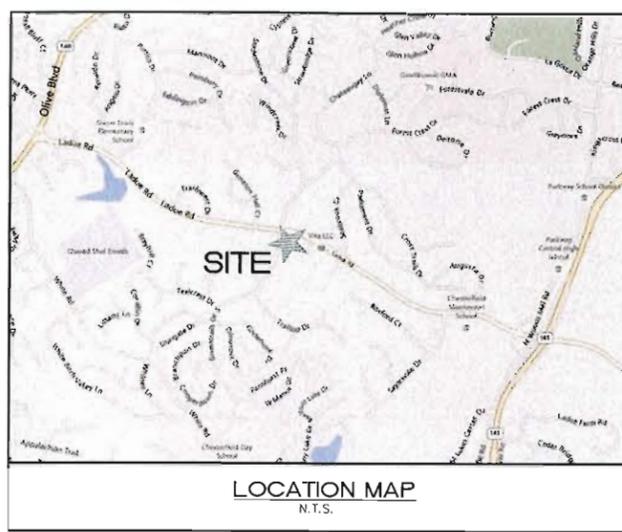
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12/22/16

ORDER NO.	130186
DATE	12/22/2016
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LEGEND

	SANITARY STRUCTURE		B.C. BACK OF CURB
	STORM STRUCTURE		T.C. TOP OF CURB
	POWER POLE		T.W. TOP OF WALL
	LIGHT STANDARD		TYP. TYPICAL
	CURB INLET		EXISTING CONTOUR
	DOUBLE CURB INLET		PROPOSED CONTOUR
	GRATE INLET (EXISTING)		TREE LINE
	AREA INLET (EXISTING)		E.O.A. EDGE OF ASPHALT
	DOUBLE AREA INLET		E.O.C. EDGE OF CONCRETE
	WATER METER		SIGN
	WATER VALVE		CONCRETE PAVEMENT
	WATER SHUT OFF		ASPHALT PAVEMENT
	GAS VALVE		
	CLEAN OUT		
	TELEPHONE HANDHOLE		
	IRON PIPE		
	HYDRANT		
	UT UNDERGROUND TELEPHONE (EXISTING)		
	UE UNDERGROUND ELECTRIC (EXISTING)		
	UG UNDERGROUND GAS LINE (PROPOSED)		
	OH OVERHEAD ELECTRIC LINE		
	W WATER LINE		

12/23/2015 CITY SUBMITTAL
02/24/2016 CITY SUBMITTAL
05/16/2016 CITY SUBMITTAL
12/22/2016 CITY SUBMITTAL

AMENDED SITE DEVELOPMENT
SECTION PLAN
116 S GREENTRAILS DRIVE
COLOR RENDERING PROPOSED TOPOGRAPHY

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PROFESSIONAL ENGINEERING AND SURVEYING
MISSOURI STATE DEPARTMENT OF REVENUE - 1001647

C S E S

MICHAEL NEWMAN
REGISTERED PROFESSIONAL ENGINEER
12/22/16

ORDER NO. 130666
DATE 12/22/2016
2

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1 Landscape Development Planting Plan

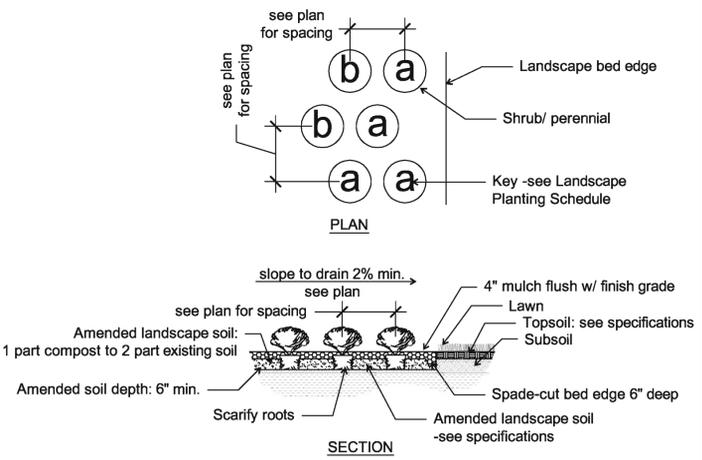
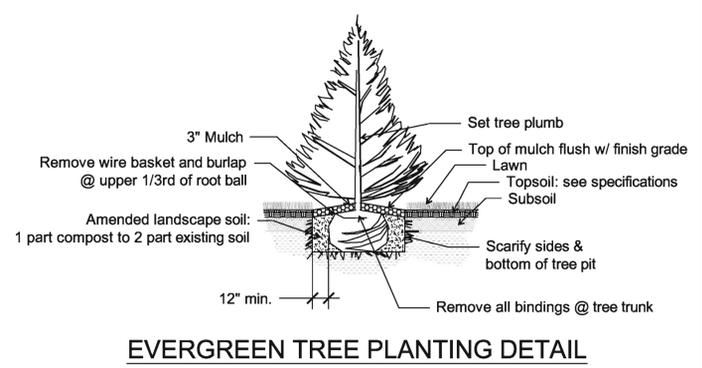
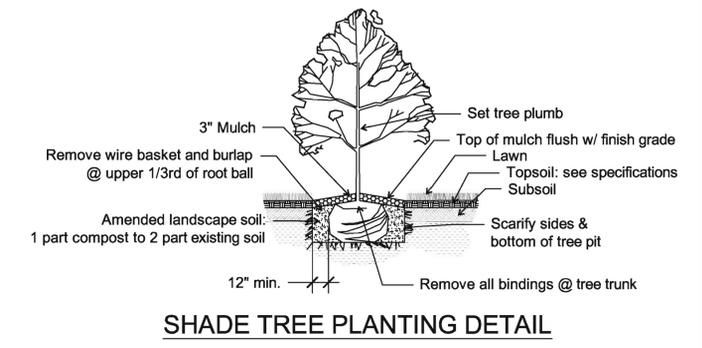
- SITE DEVELOPMENT SECTION PLAN-LANDSCAPING NOTES:**
- See Civil sheets for specific information pertaining to existing and proposed easement, ROW, utilities and boundary
 - All trees shown on this plan are selected from TREE PRESERVATION AND LANDSCAPE REQUIREMENTS (see City of Chesterfield Unified Development Code).
 - Parking lots trees are located within 50 feet of parking stalls and 33.3% of parking lot trees species are a slow or medium growth rate (30% min. required).
 - Contractor to review and field verify existing and proposed conditions prior to installation.
 - Contractor to notify owner of any discrepancies. Contractor to coordinate and cooperate with other trades.
 - Contractor to adjust plantings accordingly, notify owner and City of Chesterfield of any changes to landscape design due to unforeseen field conditions
 - Proposed plant material is to be selected by the contractor and approved by Owner prior to installation.
 - All planting beds and islands to receive 4 inch layer of mulch in a continuous bed. Apply a granular pre-emergent weed control prior to mulching.
 - 6" Spade cut landscape bed areas.
 - Repair all landscape and lawn areas disturbed during and due to construction. See Civil sheets for limits of site construction.
 - Contractor is responsible for installing all plant material, seed, topsoil and mulch as shown on plan.
 - Plant Schedule is for informational purposes only. Contractor is responsible for verifying and installation of quantities on drawings.
 - Contractor to provide in-ground automatic irrigation system. Coordinate point of connection, back-flow prevent and controller location with owner's representative.
 - Lawn areas to be irrigated with 6" pop-up spray heads with head-to-head coverage
 - Annuals to be irrigated with 12" pop-up spray heads with head-to-head coverage
 - Shrubs and grasses to be irrigated with drip irrigation
 - See Civil sheets for limits of disturbance and removal. Repair all lawn and landscape areas disturbed during construction.
 - Shrub border along parking lot will screen front of cars from roadway and residential neighborhood across from project.

LANDSCAPE PLANTING SCHEDULE:

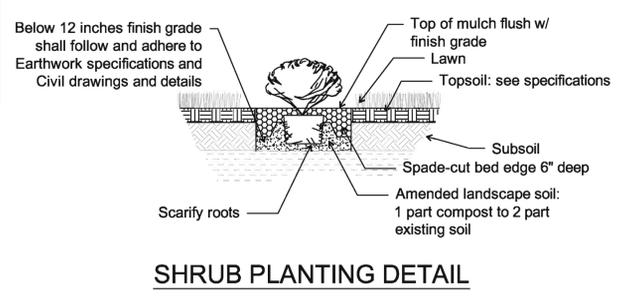
Key	Qty.	Scientific Name	Common Name	Size	Condition	Mature Height	Grow th Rate	Type	PLANT TYPE	% PLANT SPECIES
A	5	Acer rubrum 'Columnare'	Upright Red Maple	2 1/2" Cal.	B&B	45+	Fast	Parking Lot Tree	SHADE TREES	45.5%
B	2	Gleditsia triacanthos inermis 'Skyline'	Honey Locust	2 1/2" Cal.	B&B	45+	Fast	Street Tree		18.2%
C	4	Cercis canadensis 'Forest Pansy'	Redbud -Forest Pansy	2 1/2" Cal.	B&B	20-40"	Med	Parking Lot Tree	ACCENT TREE	36.4%
a	18	Juniperus chinensis 'Sea Green'	Juniper	18-20"	5 Gal.	Hedge	Slow	Buffer Planting	EVERGREEN	42.9%
b	10	Rosa 'Home Run'	Home Run Rose	2 Gal.	3 canes	48-60"	Fast	Buffer Planting	FLOWERING	23.8%
c	8	Panicum virgatum 'Shenandoah'	Red Switch Grass	1 Gal.		36-48"	Fast	Buffer Planting	NATIVE GRASS	19.0%
d	6	Schizachyrium scoparium	Little Blue Stem	1 Gal.		20-36"	Fast	Parking Lot Island	NATIVE GRASS	14.3%
	970	sf Double Ground Bark Mulch								
	4,820	sf Fescue Sod								

Open Space Site Calculations

Description	Sq. Ft. Area	Site %
Property	48,520	100%
Non-Open Space Area	27,070	55.80%
Open Space	21,450	44.20%



SHRUB/ PERENNIAL/ ANNUAL PLANTING DETAIL



SHRUB PLANTING DETAIL

Revisions:

No.	Description	Date:
1	City Comment	4/4/2015
2	City Comment	7/14/2015
3	City Comment	9/14/2015
4	City Comment	11/18/2015
5	City Comment	12/23/2015
6	City Comment	1/14/2016
7	City Comment	5/16/2016



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Issue Date: December 15, 2014
Drawn by: EMD
Checked By:

Landscape Development Planting Plan

Project Number: 454.001