306 TCW COURT

A TRACT OF LAND BEING ADJUSTED LOT 3C, A RESUBDIVISION OF LOT 3 OF WIES INDUSTRIAL PARK 40, PG. 125, TOWNSHIP 46 NORTH, RANGE 2 EAST, CITY OF LAKE SAINT LOUIS, SAINT CHARLES COUNTY, MISSOURI

Project Directory

OWNER / DEVELOPER

Jerry Finley
228 Silent Meadow Drive

Lake Saint Louis, MO 63367

ARCHITECT LT Designs, LLC 210 El Pescado Drive St. Peters, MO 63376 314-267-3935

Contact: Linda Jarvis

CIVIL ENGINEER Premier Civil Engineering, LLC 308 TCW Court Lake Saint Louis, MO 63367 314-925-7452 Contact: Matt Fogarty

SURVEYOR Premier Civil Engineering, LLC 308 TCW Court Lake Saint Louis, MO 63367 314-925-7456 Contact: David Maxwell

MUNICIPALITY City of Lake Saint Louis 200 Civic Center Drive Lake Saint Louis, MO 63367 636-625-1200

UTILITY CONTACTS

Public Water Supply District #2 100 Water Drive O'Fallon, MO 63368

Electric Ameren UE 200 Callahan Road Wentzville, MO 63385

Laclede Gas Company St. Peters, MO 63376 314-342-0694

Telephone CenturyLink 1151 Century Tel Dr. Wentzville, MO 63385

Fire Department Wentzville Fire Protection 209 W. Pearce Boulevard Wentzville, MO 63385 636-322-9869

| | EXISTING LEGEND | | | | |
|--|--|-------------|--|--|-----------|
| | FOUND IRON PIPE | | | | |
| SET IRON PIPE (2012007849) FOUND STONE MONUMENT | | | | | |
| | | | | | |
| | D-Q | WATER VALVE | | | |
| WATER METER VAULT IN IRRIGATION CONTROL VALV | | | | | |
| | | | | | GAS VALVE |
| | G GAS METER | | | | |
| | ☆ LIGHT STANDARD | | | | |
| | 8 CLEAN OUT | | | | |
| | S SANITARY SEWER MANHOLE | | | | |
| | STORM SEWER MANHOLE STORM SEWER GRATE INLET PIPE BOLLARD | | | | |
| | | | | | |
| | | | | | |
| | ∮ SIGN | | | | |
| | C) BUSH | | | | |

| ı | LIGHT STANDARD | | | | |
|---|----------------|-------------------------|--|--|--|
| | 8 | CLEAN OUT | | | |
| ١ | (\$) | SANITARY SEWER MANHOL | | | |
| | 0 | STORM SEWER MANHOLE | | | |
| | | STORM SEWER GRATE INLE | | | |
| | O | PIPE BOLLARD | | | |
| | 1 | SIGN | | | |
| | | BUSH | | | |
| 1 | Q | DUSH | | | |
| | 0 | TREE | | | |
| | | | | | |
| | 0 | TREE | | | |
| | O TSB | TREE TRAFFIC SIGNAL BOX | | | |

| STORM CURB INLET | | | | | | | |
|------------------|--------|--------------|----------------------|--|--|--|--|
| | 0 | STO | RM DOUBLE CURB INLET | | | | |
| | AC | AIR (| CONDITIONER | | | | |
| | DS | DOWN SPOUT | | | | | |
| | B.O.C. | BACK OF CURB | | | | | |
| | т. | | EX ELECTRIC (OVHD) | | | | |

TELEPHONE LINE MARKER

ELECTRIC METER

— G.--- EX. GAS -- CJ-- EX. COMMUNICATION

636-561-3737

636-327-6203

1999 Trade Center Drive East

636-949-1331

Sanitary Sewer Public Water Supply District #2 100 Water Drive O'Fallon, MO 63368 636-561-3737

| | PROPOSED LEGEND | | | | |
|---|-----------------|-----------------------|--|--|--|
| | ره | UTILITY POLE | | | |
| Ì | 76 | FIRE HYDRANT | | | |
| | M | VALVE . | | | |
| : | • | WATER METER VAULT | | | |
| | 4004 | GAS METER | | | |
| | 0- | LIGHT STANDARD | | | |
| | • | CLEAN OUT | | | |
| | 0 | MONITORING WELL | | | |
| | • | SANITARY SEWER MANHOL | | | |
| | • | STORM SEWER MANHOLE | | | |
| | A | GRATE INLET | | | |
| | | DOUBLE CURB INLET | | | |
| | ¢ | PIPE BOLLARD | | | |
| | ~ | SIGN | | | |
| | | ELECTRIC METER | | | |
| | —Ug E — | UNDERGROUND ELECTRIC | | | |
| | UgT - | UNDERGROUND TELEPHOL | | | |
| | -1.5"₩ <i>-</i> | 1.5" WATER MAIN | | | |
| | 6"W | 6" WATER MAIN | | | |
| | 8ªW | 8" WATER MAIN | | | |
| | | GAS LINE | | | |
| | 507 | CONTOUR LINE | | | |
| | D.S. | DOWN SPOUT | | | |

A.T.G. ADJUST TO GRADE

TYP. TYPICAL



nderground utilities and structures have been plotte from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the itility companies before actual construction.

ORF RD ORF RD WIES -INDUSTRIAL TCW_CT HIGHWAY N **LOCATION MAP** DISTURBED LAND AREA = 1.09 ACRES

SITE COVERAGE CALCULATIONS

SITE AREA = 1.02 ACRES

EXISTING IMPERVIOUS AREA, PARKING LOT AND BUILDING 0.00 ACRES OF PAVEMENT

0.00 ACRES OF BUILDING

1.02 ACRES

EXISTING PERCENT OF IMPERVIOUS AREA COVERAGE = 0% EXISTING GRASS AREAS= 1.02 ACRES @ 1.70 = 1.73 CFS

PROPOSED IMPERVIOUS AREA, PARKING LOT AND BUILDING 0.51 ACRES OF PAVEMENT/GRAVEL

0.25 ACRES OF BUILDING

PROPOSED GREEN SPACE 0.26 ACRES OF GREEN SPACE

PROPOSED PERCENT OF IMPERVIOUS AREA COVERAGE = 75%

PROPOSED IMPERVIOUS AREAS PAVEMENT AREAS = 0.51 ACRES @ 3.54 BUILDINGS AREAS = 0.25 ACRES @ 4.20

= 1.81 CFS = 1.05 CFS

= 0.44 CFS

= 3.30 CFS

PROPOSED PERVIOUS AREAS PROPOSED GRASS = 0.26 ACRES @ 1.70 TOTAL RUN-OFF

OF 631.23' (NAVD 88)

DIFFERENTIAL RUN-OFF: 3.30 CFS (PROPOSED) - 1.73 CFS (EXISTING) = -1.57 CFS INCREASE

MISSOURI DNR GRS ALUMINUM DISK STAMPED "SC-37 2000" IN 12 INCH DIAMETER CONCRETE MONUMENT LOCATED AT THE NORTHEAST ANGLE OF THE T-INTERSECTION OF MISSOURI ROUTE DD AND DIEHR ROAD WITH AN ELEVATION

"O" IN OPEN OF FIRE HYDRANT AT THE APPROXIMATE CENTER OF LOT ALONG POND FORT TRAIL. ELEV = 599.86'

SERVICES. OWNERSHIP OF SUCH WILL BE RETAINED BY THE CIVIL ENGINEER AND MAY NOT BE RELEASED TO CONTRACTORS. CONTRACTORS ARE ADVISED TO CREATE BIDS BASED ON THE USE OF PAPER COPIES OF THE PLANS.

SHEET INDEX

COVER SHEET

DEMOLITION PLAN

SITE PLAN

GRADING PLAN

UTILITY PLAN

EROSION CONTROL PLAN

STORM SEWER PROFILES

CONSTRUCTION DETAILS EROSION CONTROL DETAILS

PRE-DEVELOPED DRAINAGE AREA

POST-DEVELOPED DRAINAGE AREA

LANDSCAPE PLAN

PHOTOMETRIC PLAN

CITY OF LAKE SAINT LOUIS GENERAL NOTES

- 1. ALL IMPROVEMENTS CONSTRUCTED HEREIN SHALL COMPLY WITH ALL CITY ORDINANCES.
- IF AN AREA OF GREATER THAN ONE ACRE IS DISTURBED, A LAND DISTURBANCE PERMIT IS REQUIRED PRIOR TO COMMENCING EXCAVATION OPERATION, PROVIDE A COPY OF APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES TO THE PUBLIC WORKS DEPARTMENT.
- EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MAY BE REQUIRED AS
- 4. WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED VEGETATION IN SUFFICIENT DENSITY TO PROVIDE EFFECTIVE EROSION CONTROL MUST BE REESTABLISHED. WITHIN 30 DAYS. (ORDINANCE 440.050 D.). SEED TYPE, DENSITY REQUIREMENTS, AND FERTILIZER REQUIREMENTS CAN BE FOUND IN SECTION 60.20.2 IR THE DESIGN CRITERIA FOR THE PREPARATION OF IMPROVEMENT PLANS BY SAINT CHARLES COUNTY, MO.
- 5. ALL MUD, MATERIAL AND DEBRIS FROM THE CONSTRUCTION SITE TO BE KEPT OFF OF CITY MAINTAINED STREETS. (ORDINANCE 440.060).
- 6. ALL WATER MAIN CONSTRUCTION INCLUDING VALVES, SLEEVES, METERS, HYDRANTS, AND FITTINGS MUST CONFORM TO PUBLIC WATER SUPPLY DISTRICT #2 DESIGN
- 7. ALL SANITARY SEWER CONSTRUCTION MUST CONFORM TO DUCKETT CREEK SANITARY DISTRICT STANDARDS AND SPECIFICATIONS.
- 8. ALL STREET AND SIDEWALK CONSTRUCTION IS TO BE PER THE LATEST ST. LOUIS COUNTY STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT ADDITION.
- 9. FLOWABLE FILL BACKFILL SHALL BE USED FOR ALL BACKFILL ON SEWER TRENCHES THAT ARE UNDER CITY STREETS, FROM THE TOP OF THE BEDDING MATERIAL (6 INCHES ABOVE THE PIPE) TO THE SURFACE, OR TO WITHIN ONE FOOT OF GRADE IN LANDSCAPED AREAS.
- 10. EARTH BACKFILL (MEETING MSD STANDARDS) MAY BE USED OUTSIDE OF PAVED AREAS, FROM THE TOP OF THE BEDDING MATERIAL TO 6" ABOVE THE PIPE TO THE SURFACE. EARTH BACKFILL SHOULD BE PLACED IN A MAXIMUM 8-INCH LOOSE LIFTS AND SHALL BE MECHANICALLY COMPACTED TO A MINIMUM DENSITY EQUAL TO THAT OF THE
- 11. ALL STORM SEWER CONSTRUCTION IS TO BE PER THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND
- 12. FOR NEW SUBDIVISIONS ONLY: EXCEPT UNDER STREETS, UTILITY TRENCHES MAY BE JETTED. ALL JETTING SHALL BE PERFORMED WITH A PROBE ROUTE ON NOT GREATER THAN 7.5-FOOT CENTERS WITH THE JETTING PROBE CENTERED OVER AND PARALLEL WITH THE DIRECTION OF THE PIPE. TRENCH WIDTHS GREATER THAN 10 FEET WILL REQUIRE MULTIPLE PROBES EVERY 7.5- FOOT CENTERS. TRENCH BACKFILL DEPTHS LESS THAN 8 FEET IN DEPTH SHALL BE PROBED TO A DEPTH EXTENDING TO HALF OF THE TRENCH BACKFILL, BUT NOT LESS THAN 3 FEET. TRENCH BACKFILL GREATER THAN 8 FEET IN DEPTH SHALL BE PROBED TO HALF THE DEPTH OF THE TRENCH BACKFILL BUT NOT GREATER THAN 8 FEET. 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 TO BE ALLOWED TO FLOW AWAY FROM THE DITCH WITHOUT FIRST SATURATING THE TRENCH. CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF 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 BREAK DOWN THE BRIDGED AREAS USING AN APPROPRIATE METHOD SUCH AS THE WHEELS OR BUCKET OF A BACKHOE, WHEN THE SURFACE CRUST IS COLLAPSED; THE VOID SHALL BE BACKFILLED WITH THE SAME MATERIAL WITHIN THE SUNKENJETTED AREA SHALL BE COMPACTED SUCH THAT NO FURTHER SURFACE
- 13. ALL PIPE JOINTS AND JOINTS ON NEW STRUCTURES SHALL USE CITY APPROVED RUBBER COMPRESSION TYPE JOINTS, WATER STOPS ARE REQUIRED AT ALL POINTS OF CONNECTION NOT USING RUBBER COMPRESSION TYPE JOINTS SUCH AS CONNECTIONS TO EXISTING STRUCTURES.
- 14. CONCRETE COVERS ON STRUCTURES WILL NOT BE ALLOWED. ONLY CAST IRON COVERS ARE PERMITTED.
- 15. ALL STORM SEWER DESIGN IS TO CONFORM TO THE CITY OF LAKE SAINT LOUIS DESIGN REQUIREMENTS.
- 16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO PROVIDE TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 17. FINISHED GRADES SHALL NOT EXCEED A 3:1 SLOPE (33%), GRADES IN EXCESS OF 4:1 MUST BE LABELED ON PLANS.
- 18. TRANSVERSE UNDERDRAINS (SHALLOW PERFORATED PIPE IN A FILTER FABRIC SLEEVE BEDDED IN CLEAN ROCK) SHALL BE PROVIDED AT AND CONNECTION TO ALL STORMSEWER STRUCTURE. UNDERDRAINS SHALL TRAVERSE THE ENTIRE PAVEMENT WIDTH AT EACH STORMSEWER STREET CROSSING,
- 19. ALL UTILITIES MUST BE BORED UNDER EXISTING CITY OF LAKE ST. LOUIS STREETS.
- 20. ALL FILLED PLACED UNDER PROPOSED STORM AND SANITARY SEWER AND/OR PAVED AREA SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED COMPACTION TEST AASHTO T-180.

ESTIMATED WATER USAGE:

1 PERSON = 20 GPD 6 PEOPLE MAX. ESTIMATED PER UNIT

4 UNITS x 6 PEOPLE = 24 PEOPLE TOTAL 24 PEOPLE x 20 GPD = 480 GPD ESTIMATED WATER USAGE = 480 GPD

COMMENTS:

SITE ADDRESS: 306 TCW COURT LAKE SAINT LOUIS, MO 63367 LT Designs LLC 314-267-3935

CONSULTANT:

PREMIER CIVIL ENGINEERING

Lake Saint Louis

308 TCW Court Lake Saint Louis, MO 63367

Phone: (314) 925-7444 Fax: (314) 925-7457

Missouri Certificate of Authority # E-201100003

Vissouri Certificate of Authority # LS-201200784

LAKE SAINT LOUIS

INDUSTRIAL OFFICES

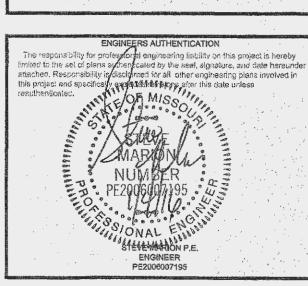
AT 306 TCW COURT

ARCHITECT OF RECORD:

DEVELOPMENT NAME:

OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367

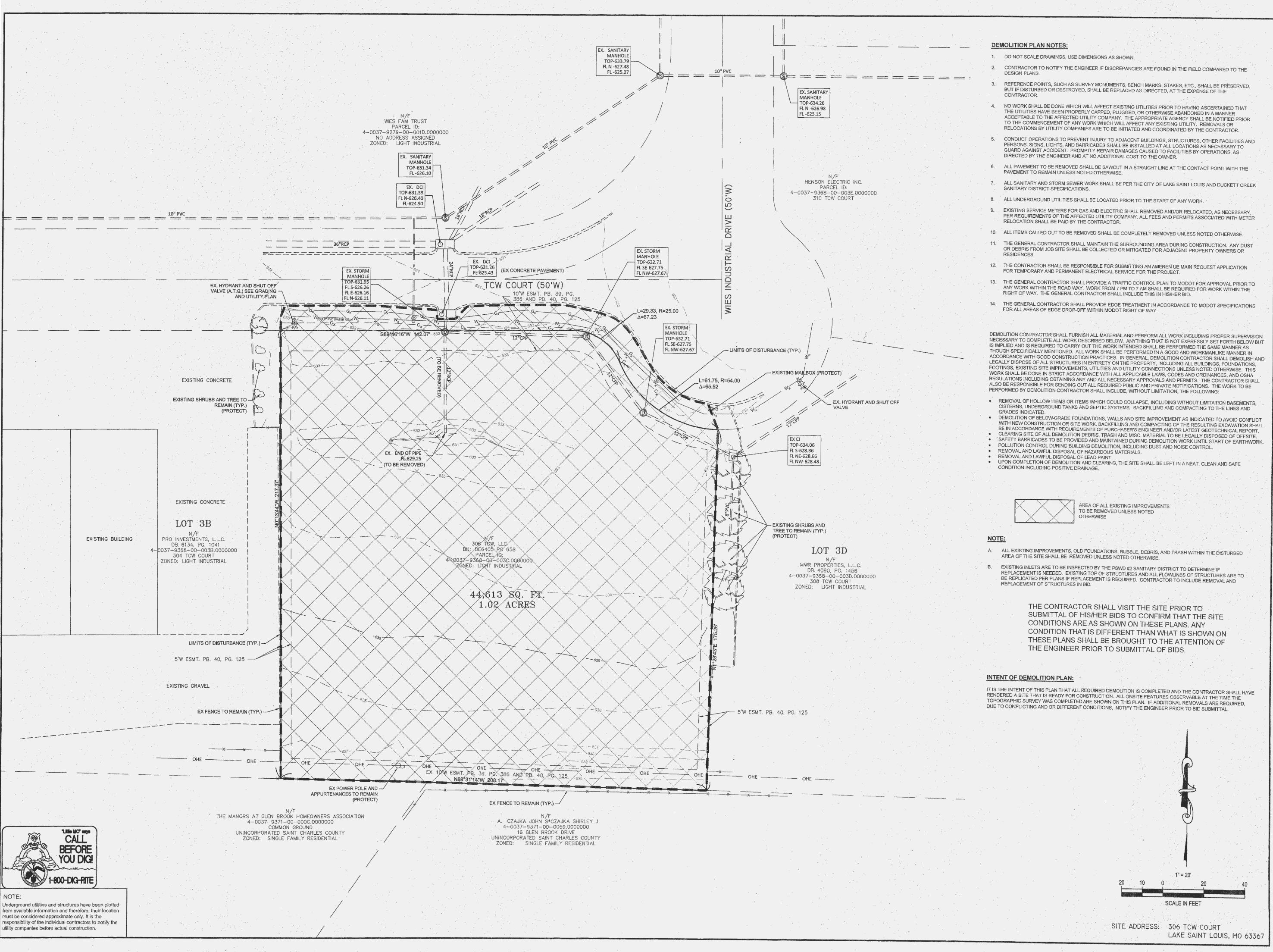


REVISIONS:

12-16-15 REVISED PER CITY COMMENTS 12-29-15 REVISED PER PWSD # 2 COMMENTS

DRAWING BY: D. SHRYOCK 12-8-2015 JOB NUMBER:

COVER SHEET SHEET NUMBER:





Lake Saint Louis

308 TCW Court
Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2012007849
Missouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

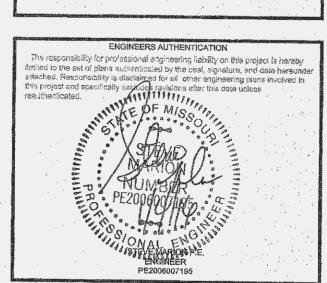
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



REVISIONS:

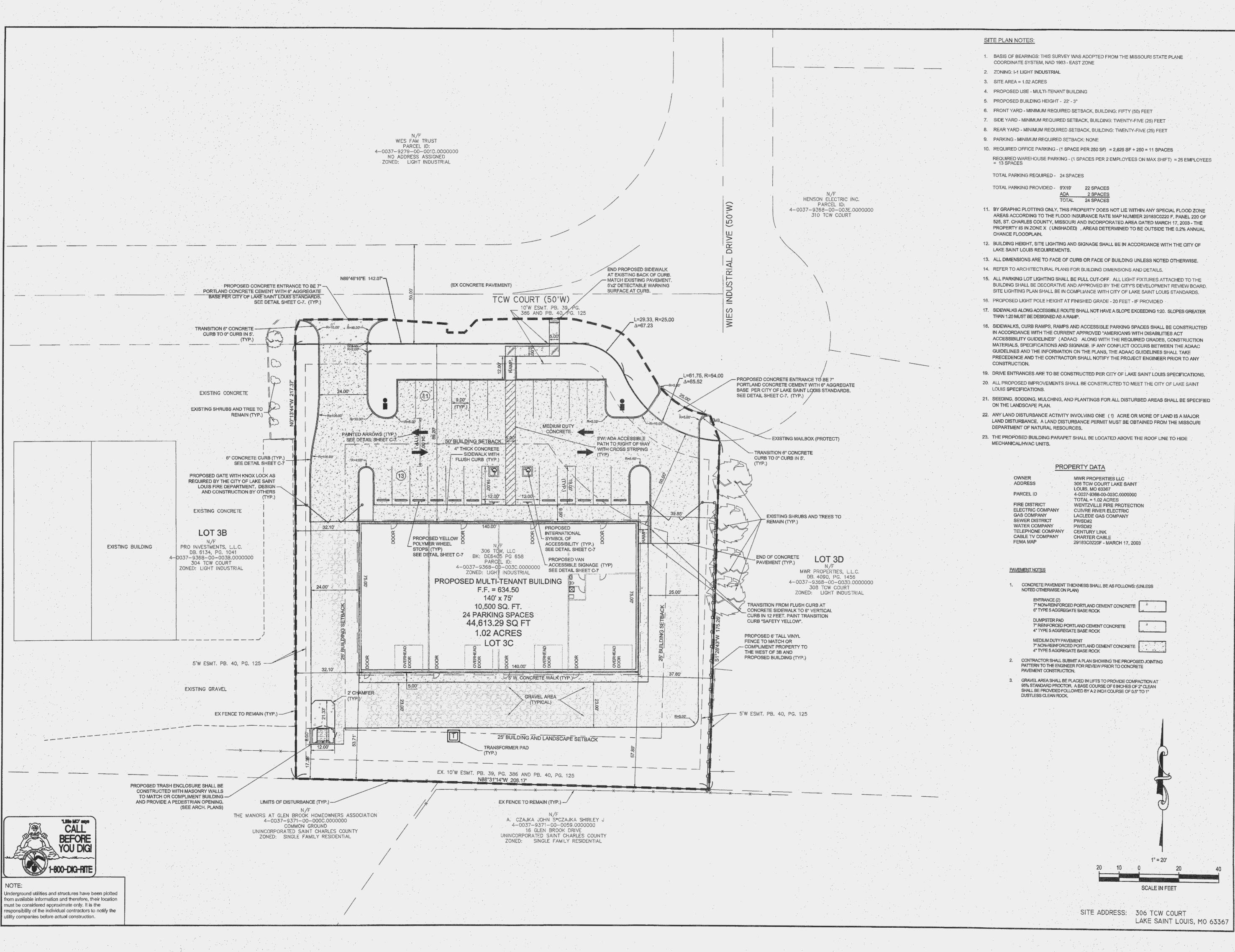
DRAWING BY: D. SHRYOCK
DATE: 12-8-2015
JOB NUMBER: 155301

TITLE:

DEMOLITION PLAN
SHEET NUMBER:

C-

COMMENTS:





Lake Saint Louis

308 TCW Court

Lake Saint Louis, MO 63367

Phone: (314) 925-7444 Fax: (314) 925-7457

Missouri Certificate of Authority # E-2011000031

Missouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

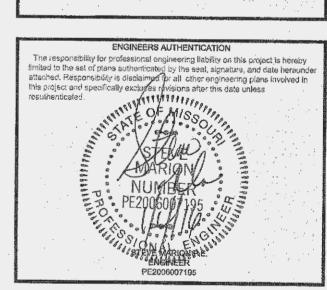
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



| REVISI | ONS: | | | |
|----------|---------|-----|------|--------|
| 12-16-15 | REVISED | PER | CITY | COMMEN |

DRAWING BY: A. JONES
DATE: 12-8-2015

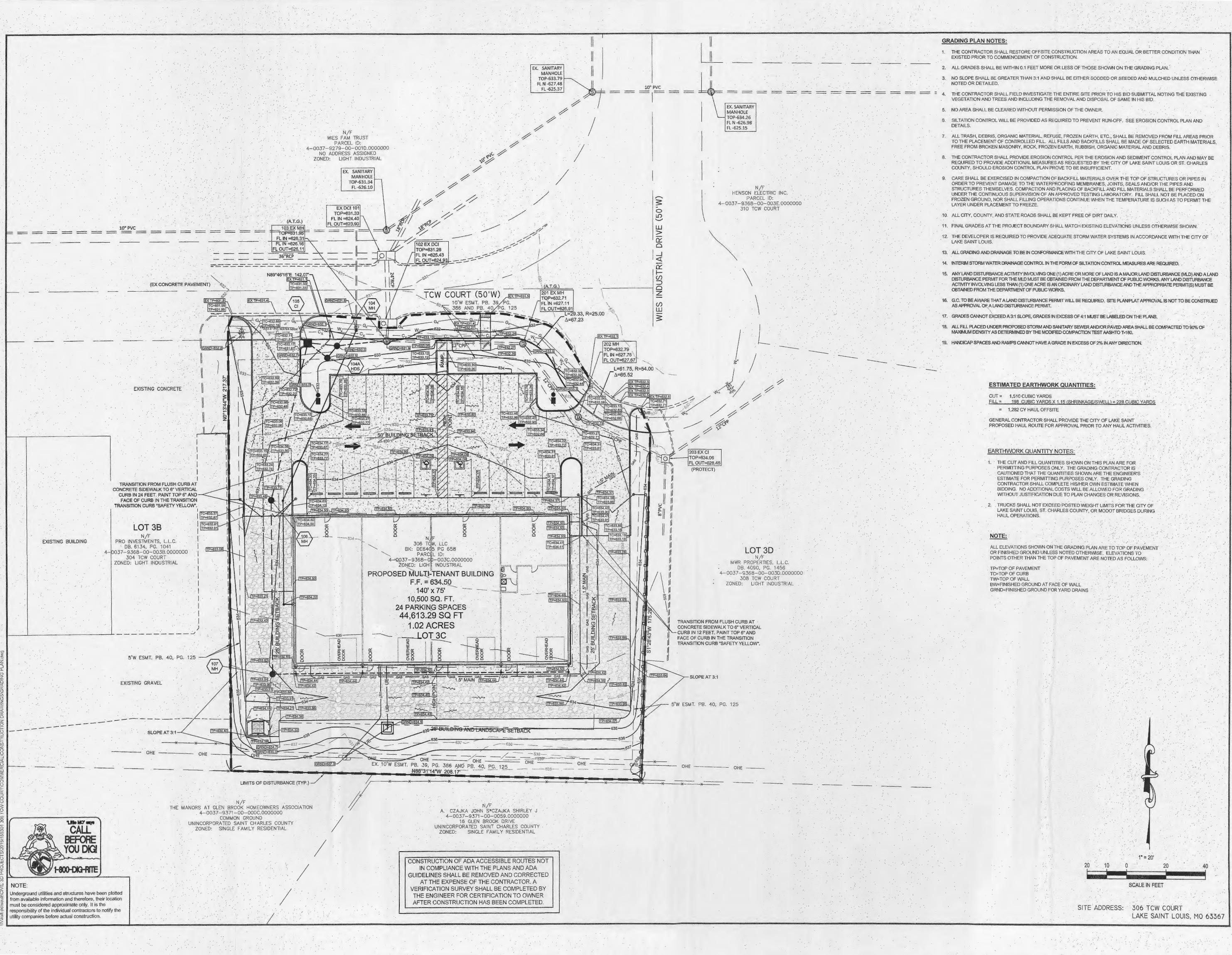
JOB NUMBER: 155301
TITLE:

SITE PLAN

SHEET NUMBER:

C-2

COMMENTS:
NOT RELEASED FOR CONSTRUCTION





Lake Saint Louis
308 TCW Court
Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031
Missouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

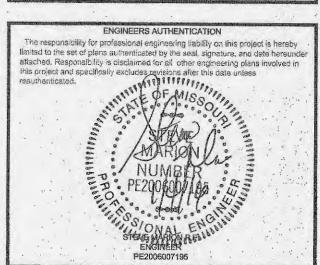
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



REVISIONS:

12-16-15 REVISED PER CITY COMMENTS

DRAWING BY: A. JONES

DATE: 12-8-2015

JOB NUMBER: 155301

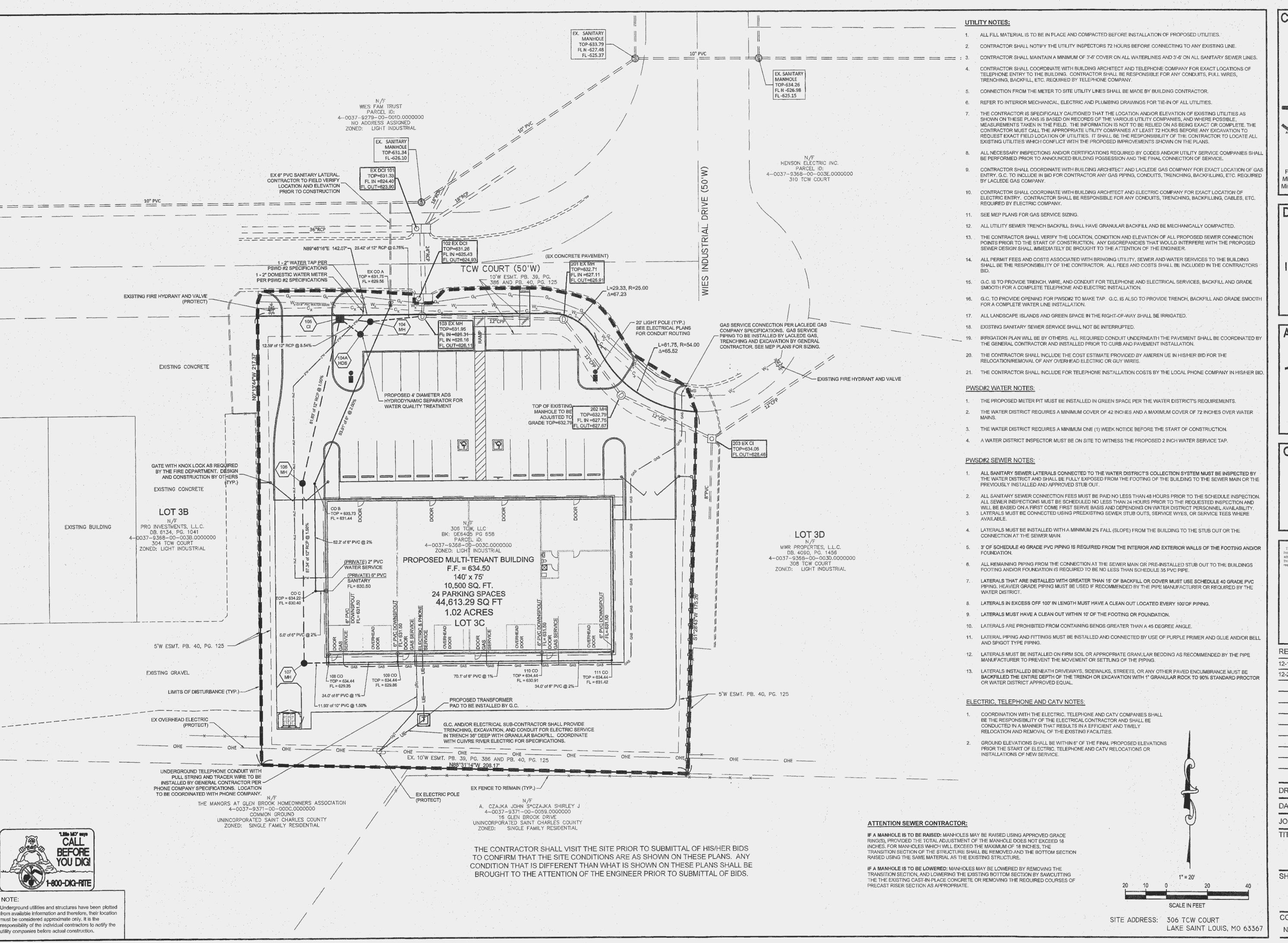
TITLE:

GRADING PLAN

SHEET NUMBER:

C-3

COMMENTS:





Lake Saint Louis
308 TCW Court

Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031
Missouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

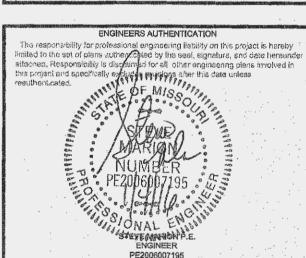
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



REVISIONS:

12-16-15 REVISED PER CITY COMMENTS
12-29-15 REVISED PER PWSD # 2 COMMENTS

DRAWING BY: D. SHRYOCK

DATE: 12-8-2015

JOB NUMBER: 155301

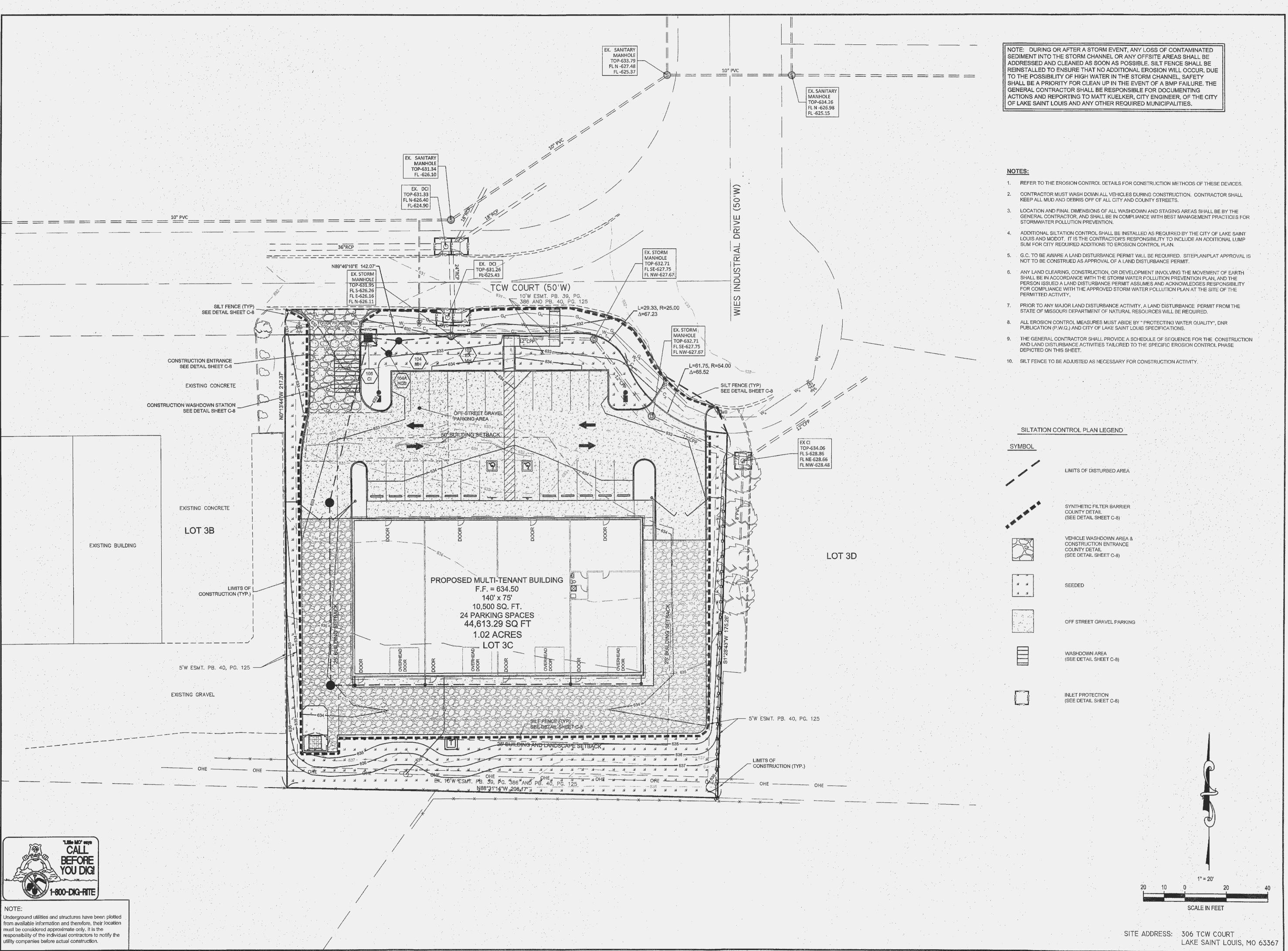
TITLE:

UTILITY PLAN

SHEET NUMBER

C-4

COMMENTS:





Lake Saint Louis
308 TCW Court

Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031
Missouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

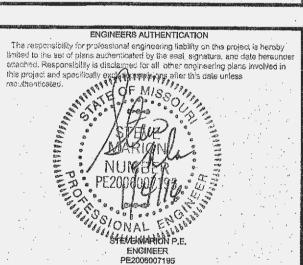
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley
228 Silent Meadow Drive
Lake Saint Louis, MO 63367



| | | · | | | | - |
|---|----|-----|----|---|---|---|
| R | E١ | /[3 | SI | 0 | N | S |

| • | | | |
|---|--|---|---------|
| | | | |
| | | | |
| | | : | |
| | | | |
| | | | 0-93000 |
| | | | |
| | The second of th | | Portal |

DRAWING BY:

DATE: 12-8-2015

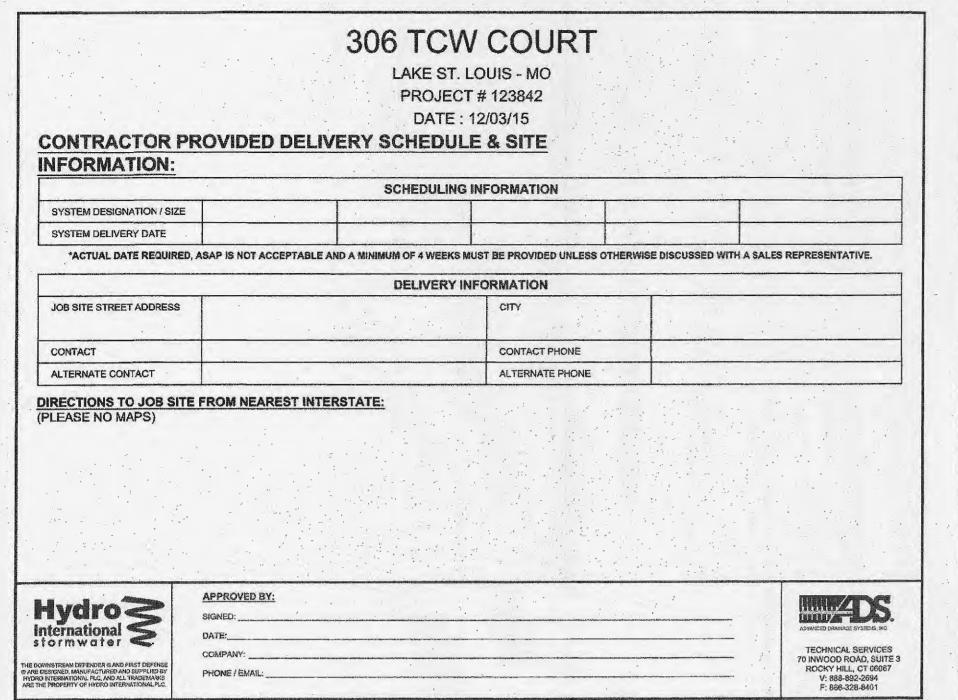
JOB NUMBER: 155301

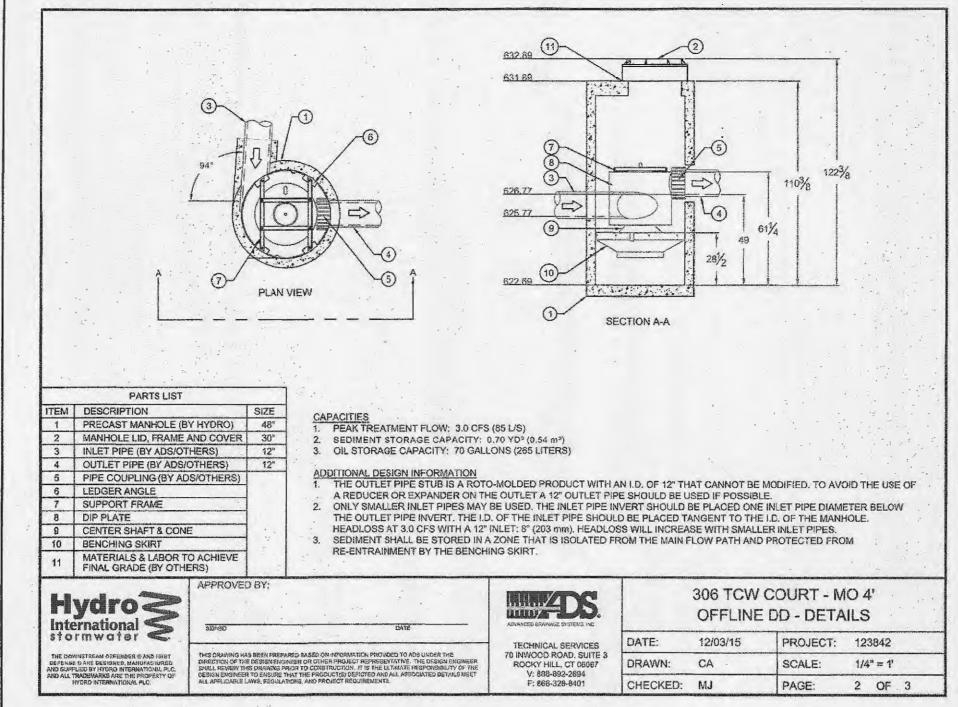
EROSION CONTROL PLAN
SHEET NUMBER:

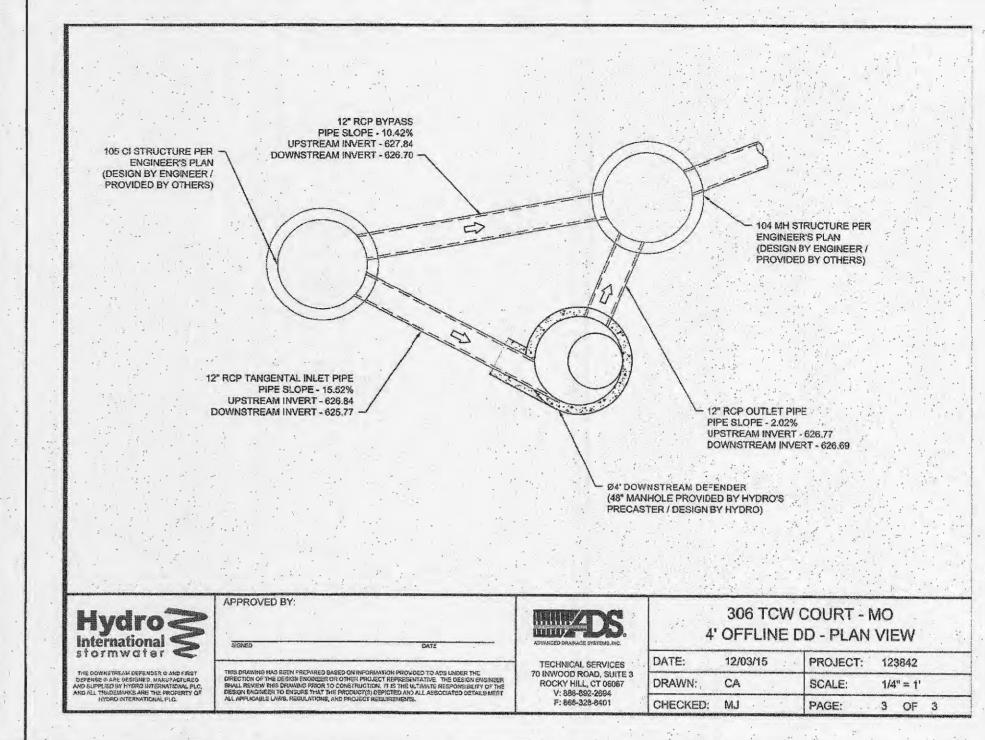
C-5

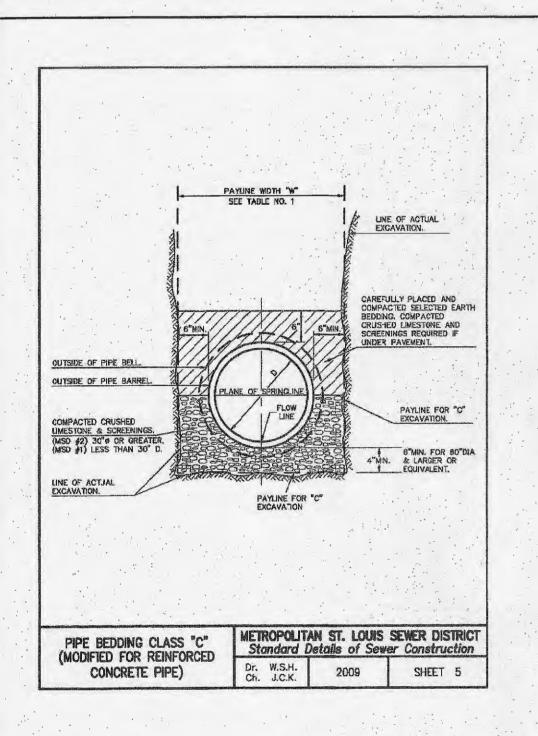
COMMENTS

TITLE:









ATTENTION SEWER CONTRACTOR

IF A MANHOLE IS TO BE RAISED: MANHOLES MAY BE RAISED USING COURSES OF BRICK OR APPROVED GRADE RING(S), PROVIDED THE TOTAL ADJUSTMENT OF THE MANHOLE DOES NOT EXCEED 12 INCHES (INCLUDING EXISTING RINGS OR COURSES OF BRICK). FOR MANHOLES WHICH WILL EXCEED THE MAXIMUM OF 12 INCHES, THE TRANSITION SECTION OF THE STRUCTURE SHALL BE REMOVED AND THE BOTTOM SECTION RAISED USING THE SAME MATERIAL AS THE EXISTING STRUCTURE.

IF A MANHOLE IS TO BE LOWERED: MANHOLES MAY BE LOWERED BY REMOVING THE TRANSITION SECTION. AND LOWERING THE EXISTING BOTTOM SECTION BY SAWCUTTING THE EXISTING CAST-IN-PLACE CONCRETE, REMOVING THE REQUIRED COURSED OF BRICK, OR REMOVING THE PRECAST RISER SECTION AS APPROPRIATE.

STORM SEWER PROFILE NOTES

DENOTES AREA INLET (OPEN 4 SIDES UNLESS NOTED OTHERWISE) DENOTES DOUBLE CURB INLET DENOTES MANHOLE DENOTES 2 GRATE INLET

DENOTES 2 GRATE INLET WITH SIDE INTAKE. (ELEVATION OF INLET TOP IS TO THE TOP OF GRATE, ADD 0.50' FOR TOP OF SIDE INTAKE.) EOP..... DENOTES END OF PIPE DENOTES FLARED END SECTION DENOTES INTERCEPTOR MANHOLE

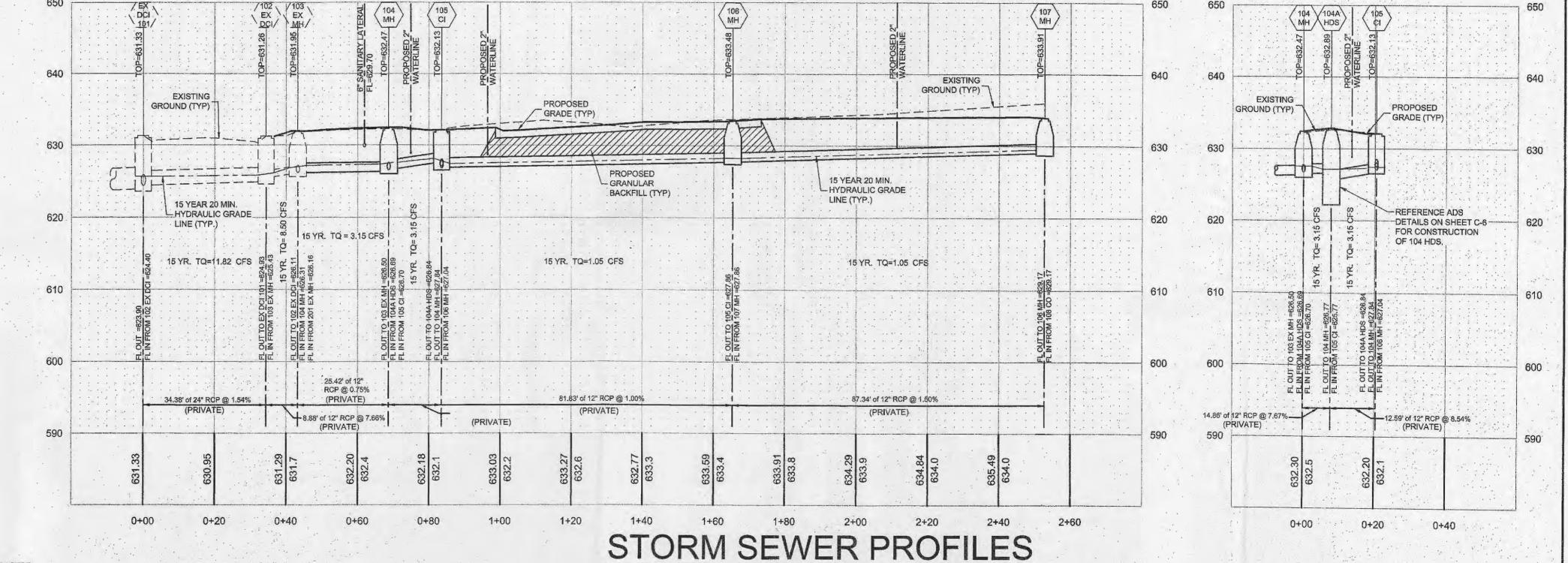
DENOTES 4 GRATE INLET

DENOTES SLOTTED DRAIN HDS.....DENOTES DOWNSTREAM DEFENDER OS.....DENOTES OUTFALL STRUCTURE PUMI...... DENOTES PRIVATE UNDER MSD INSPECTION TQ..... TOTAL Q TO PIPE DENOTES SURCHARGED HGL DENOTES HYDRAULIC JUMP IN INLET OR LINE

PUBLIC..... TO BE MAINTAINED BY THE CITY AS APPLICABLE PRIVATE.... TO BE MAINTAINED BY OWNER

2. ALL DIMENSIONS ARE TO THE CENTERLINE OF STRUCTURE, TO THE END OF FLARED END SECTION OR TO THE END OF PIPE AT

3. ALL PIPES ARE CLASS III UNLESS OTHERWISE NOTED.



ATTENTION SEWER CONTRACTOR

FOR SEWER PIPE (STORM, SANITARY AND COMBINED) WITH A DESIGN GRADE LESS THAN ONE PERCENT (1%), VERIFICATION OF THE PIPE GRADE WILL BE REQUIRED FOR EACH INSTALLED REACH OF SEWER, PRIOR TO ANY SURFACE RESTORATION OR INSTALLATION OF AND SURFACE IMPROVEMENTS. THE CONTRACTOR'S FIELD SUPERVISOR WILL BE REQUIRED TO PROVIDE DAILY DOCUMENTATION VERIFIYING THAT THE AS-BUILT PIPE GRADE MEETS THE DESIGN GRADE THROUGH THE SUBMITTAL OF SIGNED CUT SHEETS TO THE MSD INSPECTOR UPON REQUEST.

FIELD SURVEYED VERIFICATION MUST BE MADE UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR OR REGESTERED ENGINEER. THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND REPLACE ANY SEWER REACH HAVING AN AS-BUILT GRADE WHICH IS FLATTER THAN THE DESIGN BY MORE THAN 0.1%. SEWERS WITH GRADE WHICH IS FLATTER THAN THE DESIGN SLOPE MAY BE LEFT IN PLACE, PROVIDED NO OTHER SEWER GRADE IS REDUCED BY THIS VARIANCE IN THE AS-BUILT.

3. THE CITY OF LAKE ST. LOUIS ALSO RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO REMOVE AND REPLACE ANY SEWER (AT ANY TIME PRIOR TO CONSTRUCTION APPROVAL) FOR WHICH THE AS-BUILT GRADE DOES NOT COMPLY WITH THE GRADE TOLERANCE STATED IN THE ABOVE PARAGRAPH.

4. THE SEWER CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COST ASSOCIATED WITH THE FIELD VERIFICATION OF THE SEWER GRADE, OR REMOVAL AND REPLACEMENT OF THE SEWER PIPE OR ASSOCIATED APPURTENANCES.

5. PROVIDE GRANULAR BACKFILL UNDER ALL PAVED AREAS AND WITHIN THE RIGHT-OF-WAY.

6. FLOW SPLITTER STRUCTURE: CONTRACTOR SHALL VERIFY THE DIMENSIONS BETWEEN THE LOW FLOW PIPE AND THE OVERFLOW PIPE PRIOR TO BACKFILL OF THE STRUCTURE AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCY WITH THE DIMENSIONS ON THE APPROVED PLANS. STRUCTURES BUILT INCORRECTLY WILL REQUIRE REMOVAL AND REPLACEMENT.

7. ALL FILLED AREAS, INCLUDING TRENCH BACKFILLS, UNDER BUILDINGS, PROPOSED STORM AND SANITARY SEWER LINES, AND PAVED AREAS SHALL BE COMPACTED TO 90 PERCENT MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED COMPACTION TEST AASHTO T-180 . FILL IS TO BE PLACED IN A MAXIMUM OF 9-INCH LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50-FOOT INTERVALS ALONG THE ROUTE OF THE PIPE: AT A MAXIMUM OF 2-FOOT VERTICALLY; AND LATERALLY ON EACH SIDE OF THE PIPE, AT A DISTANCE EQUAL TO THE DEPTH OF FILL OVER THE PIPE.

3. PIPE JOINTS WITH ADAPTERS AND COUPLINGS SHALL BE SUPPLIED AND INSTALLED WITH 316 STAINLESS STEEL NUT AND BOLT CLAMPS (T-BOLT) CONFIGURATION; AND WITH STAINLESS STEEL SHEAR BANDS, BEING A MINIMUM OF TWELVE (12) MILS (MSD STD. CONST. SPECS. PT. 2, SUBSECTION H 11). WORM DRIVE HOSE CLAMPS AND CONCRETE BACKFILLING (CAUSTICITY) WILL NO LONGER BE ALLOWED AT THOSE JOINTS. GRANULAR BACKFILL SHOULD BE USED, IF FLOWABLE FILL IS REQUIRED, THE CONTRACTOR SHALL WRAP AND TAPE THE ADAPTERS AND COUPLINGS WITH A SIX (6) MIL POLYETHYLENE SHEET.

HORIZONTAL SCALE: 1" = 20'

8 201 TO 103 68.736 12 3 626.91 626.16 632.71

Notes: s-Supercritical depth; z-Zero Junction Loss

VERTICAL SCALE: 1" = 10"

1 628.71 627.16 3.54

12 527.84 626.7 632.13 0.31 s 628.15 j 627.56 3.98 0 2.93 1.55 0.18 z

15 YEAR 20 MINUTE STORM CrossSlope, Capacity DrainageArea KnownQ FlowRate QCaptured InletEff 3.32 1 628.71 627.16 3.54 5.35 632.13 0.31s 628.15j 627.56 3.98 0 2.93 1.55 0.18z 9 105 TO 104 14.859 12 627.84 626.7 100 YEAR 20 MINUTE STORM LineNo. LineID LineLength LineSize InvertUp InvertDn Elev Up DepthUp HGLUp HGLDn Rim-Hw Coeff VelDn VelHd Dn Coeff EnergyLoss MinorLoss DrainageArea KnownQ FlowRate QCaptured InletEff (%) 100 11.46 4.25 4.25

0.02

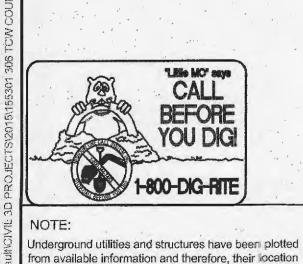
3.72

4.25

7.21

1.44

7.21

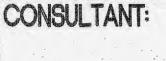


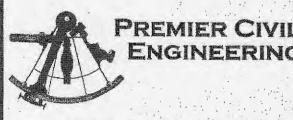
must be considered approximate only. It is the

utility companies before actual construction.

responsibility of the individual contractors to notify the

NOT RELEASED FOR CONSTRUCTION





Lake Saint Louis 308 TCW Court Lake Saint Louis, MO 63367 Phone: (314) 925-7444 Fax: (314) 925-7457 Missouri Certificate of Authority # E-201100003 Missouri Certificate of Authority # LS-201200784

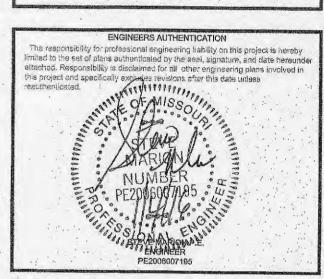
DEVELOPMENT NAME:

LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



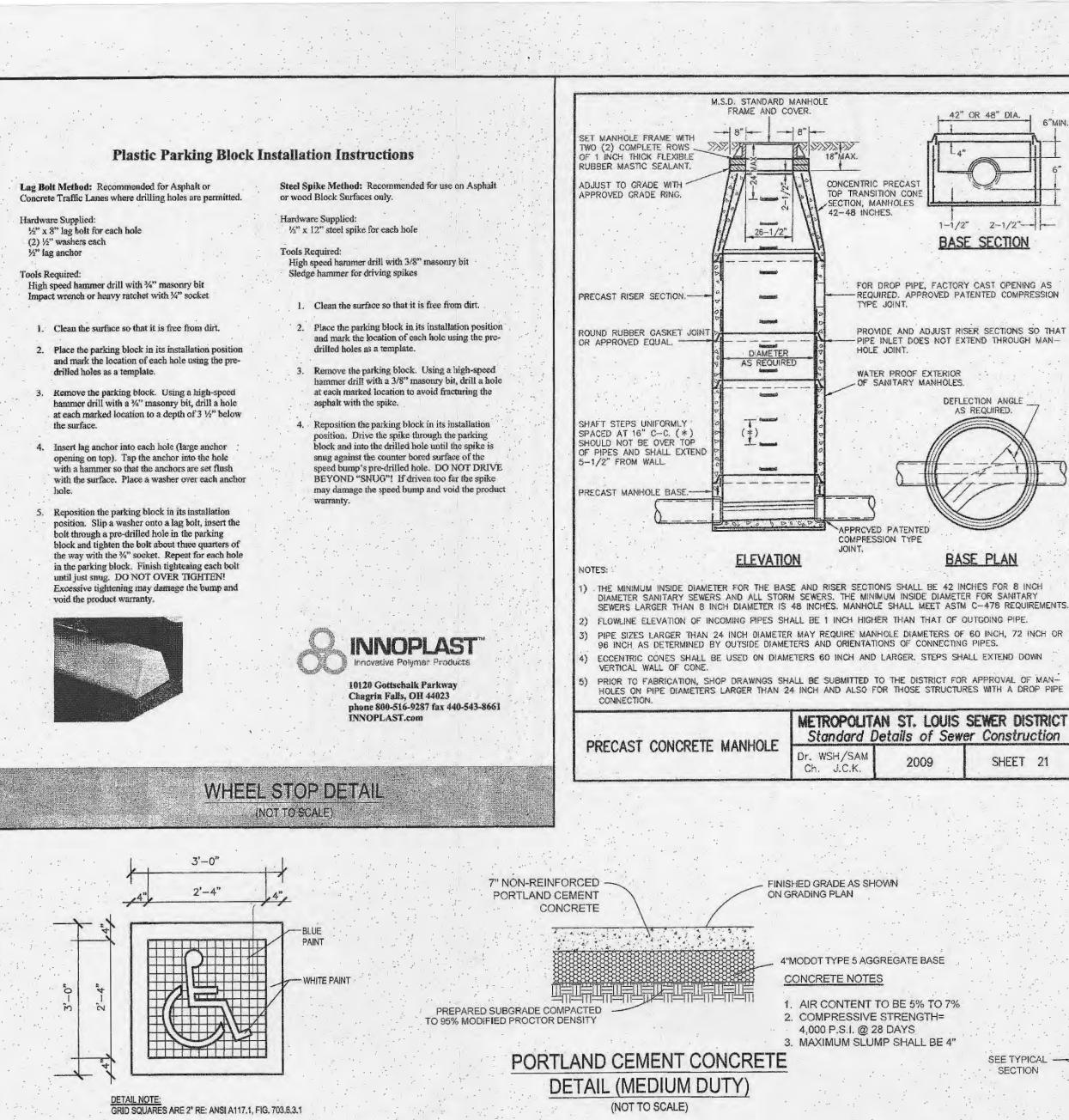
REVISIONS:

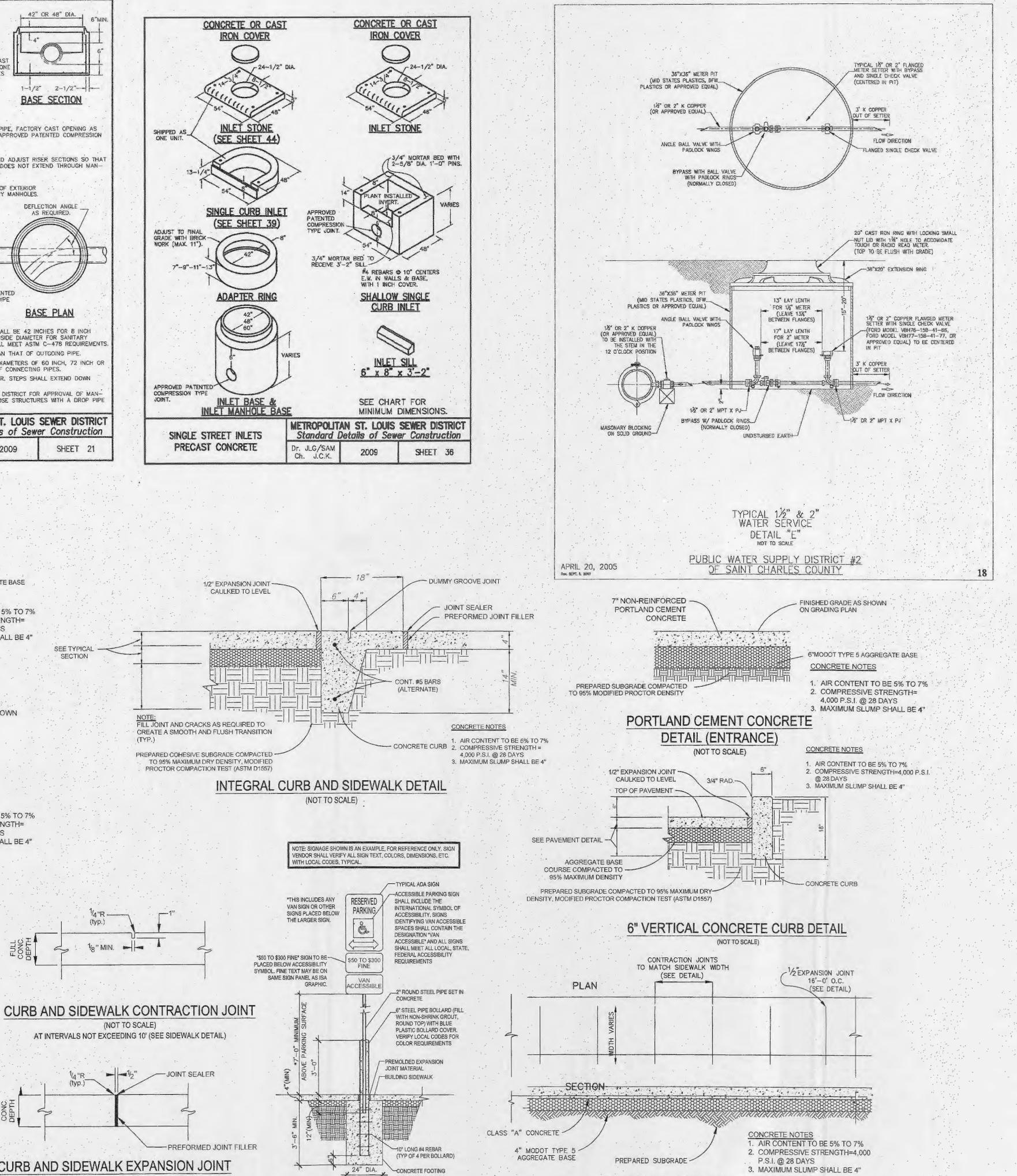
12-16-15 REVISED PER CITY COMMENTS

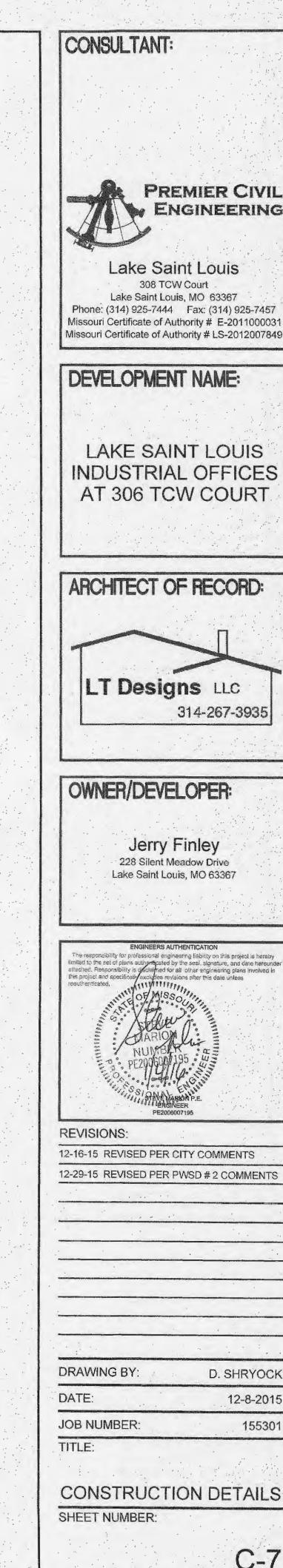
DRAWING BY: A. JONES 12-8-2015 JOB NUMBER: 155301 TITLE:

STORM SEWER PROFILES SHEET NUMBER:

COMMENTS:







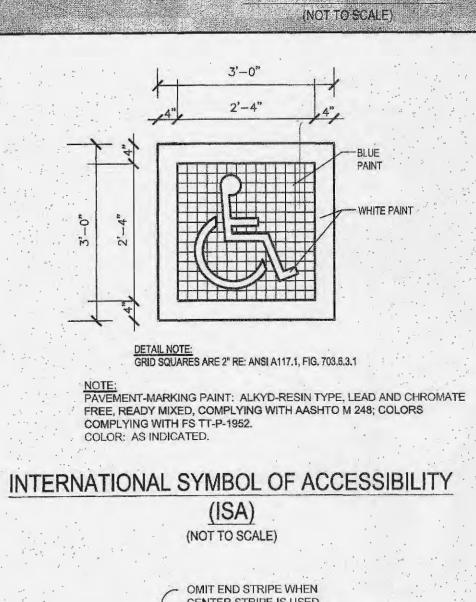
314-267-3935

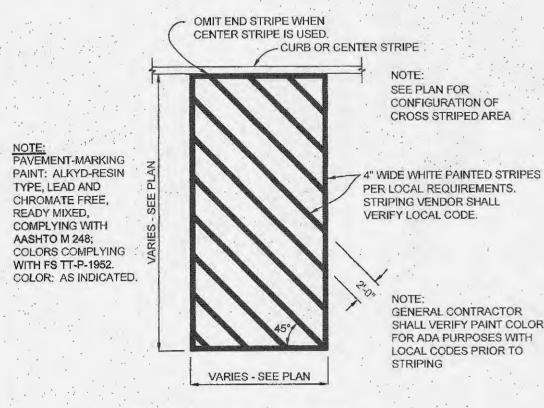
D. SHRYOCK

12-8-2015

155301

COMMENTS: NOT RELEASED FOR CONSTRUCTION

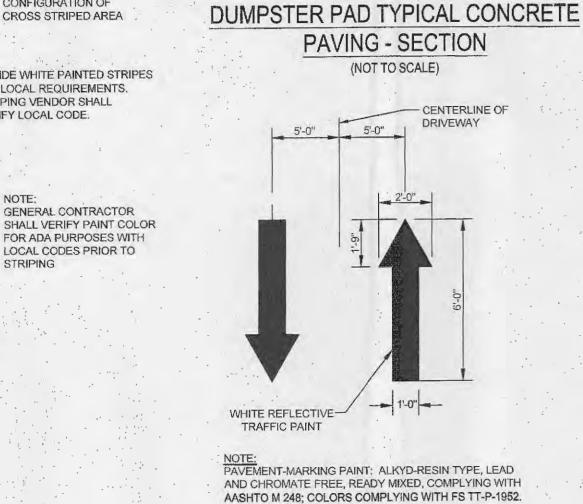




CROSS STRIPING DETAIL (NOT TO SCALE)



Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.



7" REINFORCED -

CONCRETE

PREPARED SUBGRADE

95% MAXIMUM STANDARD

PROCTOR DRY DENSITY

PORTLAND CEMENT

FINISHED GRADE AS SHOWN

ON GRADING PLAN

4" MODOT TYPE 5

CONCRETE NOTES

AGGREGATE BASE

1. AIR CONTENT TO BE 5% TO 7%

3. MAXIMUM SLUMP SHALL BE 4"

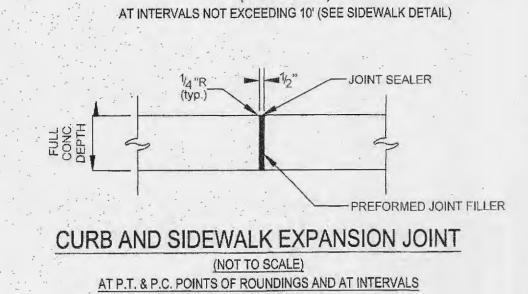
2. COMPRESSIVE STRENGTH=

4,000 P.S.I. @ 28 DAYS

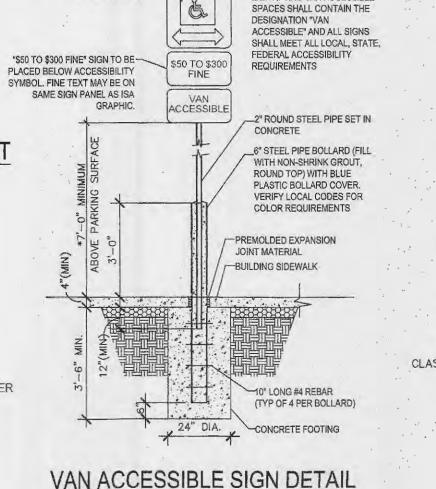
AND CHROMATE FREE, READY MIXED, COMPLYING WITH AASHTO M 248; COLORS COMPLYING WITH FS TT-P-1952. COLOR: AS INDICATED. DRIVEWAY TRAFFIC FLOW DIRECTIONAL

ARROW DETAIL

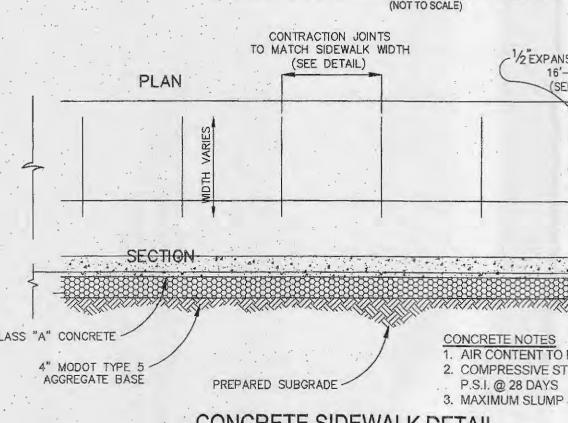
(NOT TO SCALE)



NOT EXCEEDING 30' (SEE SIDEWALK DETAIL)

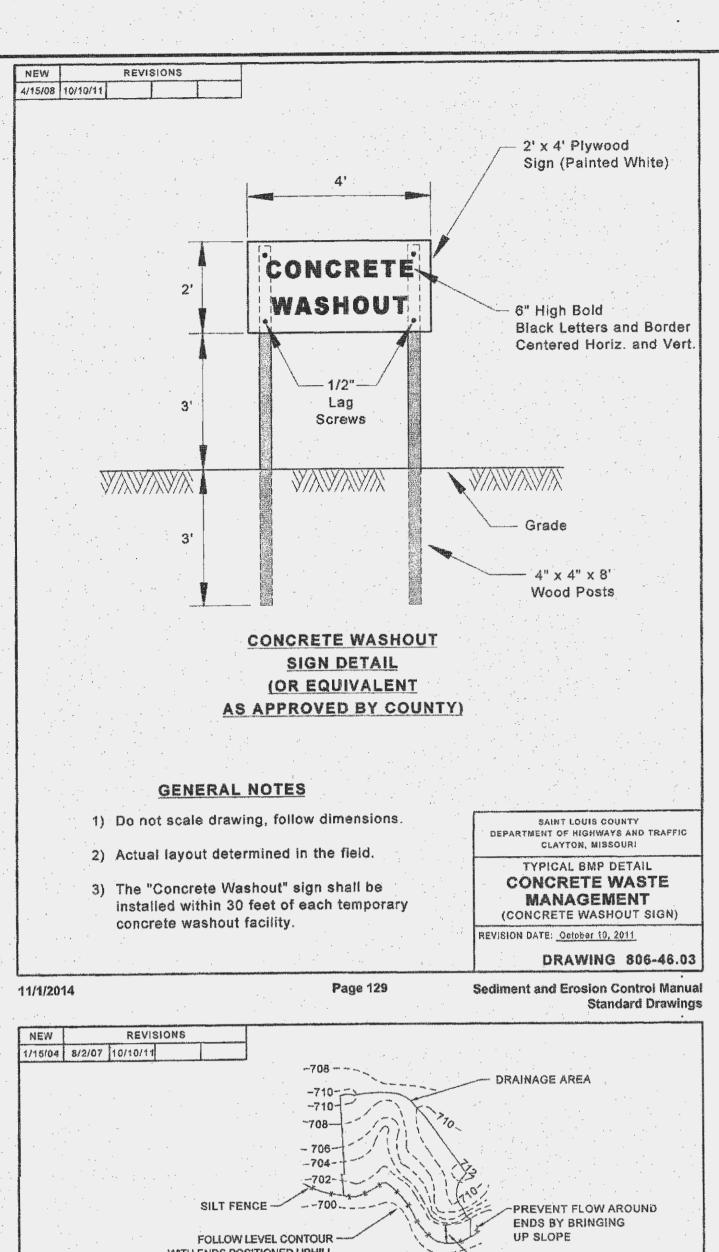


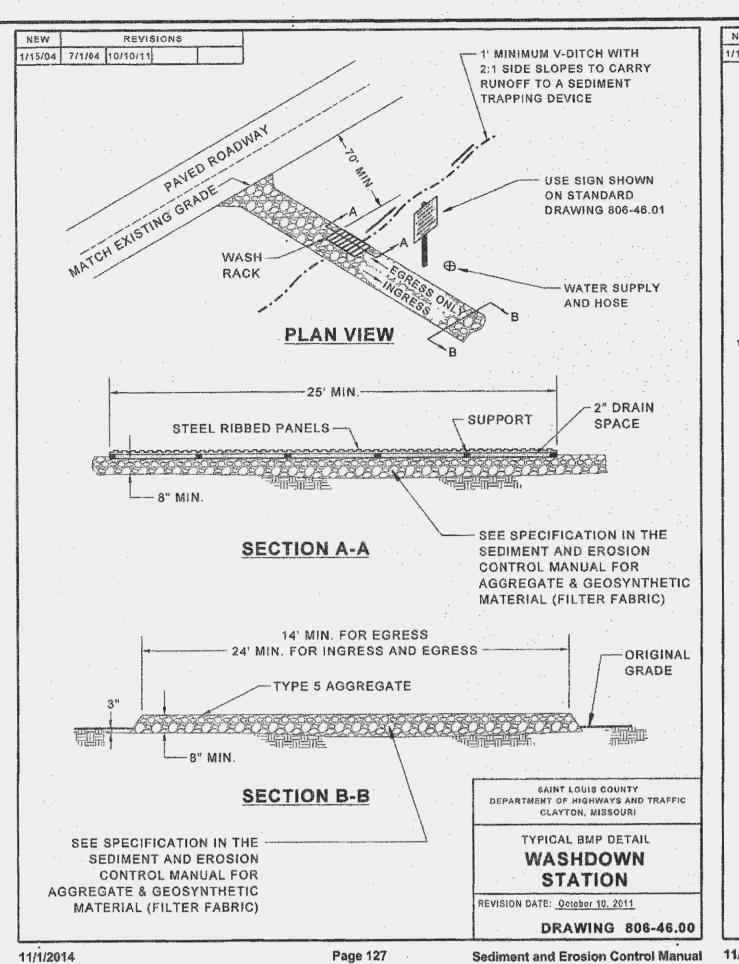
(NOT TO SCALE)

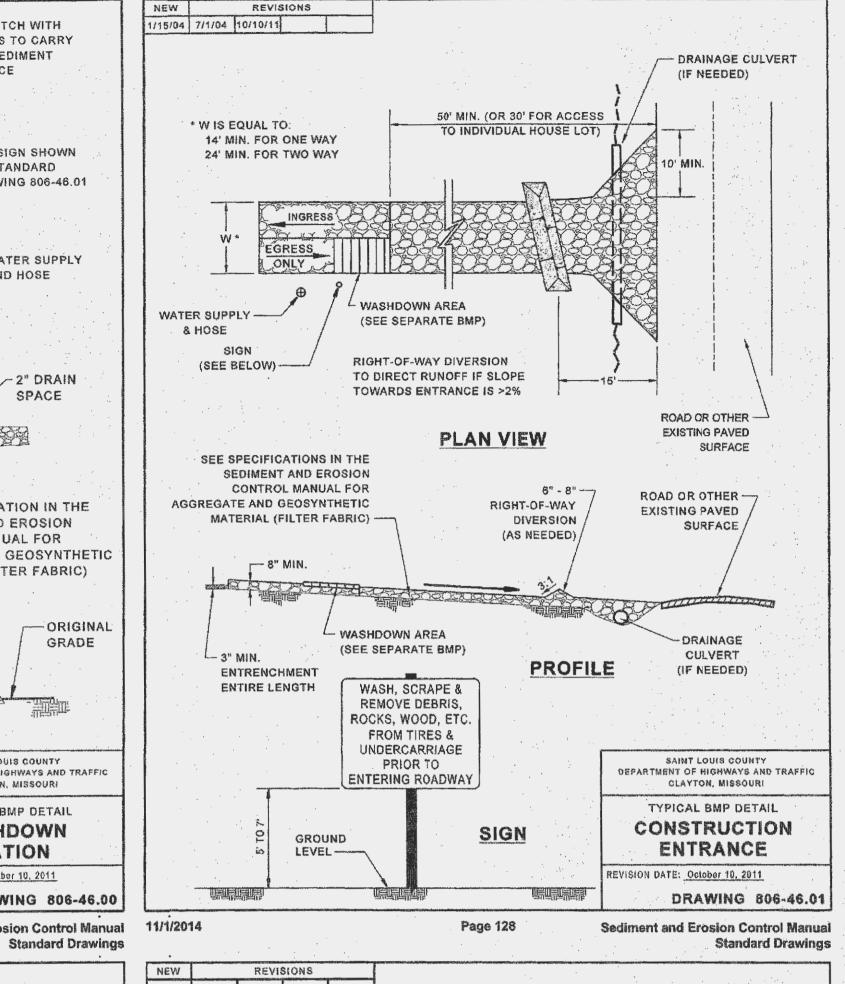


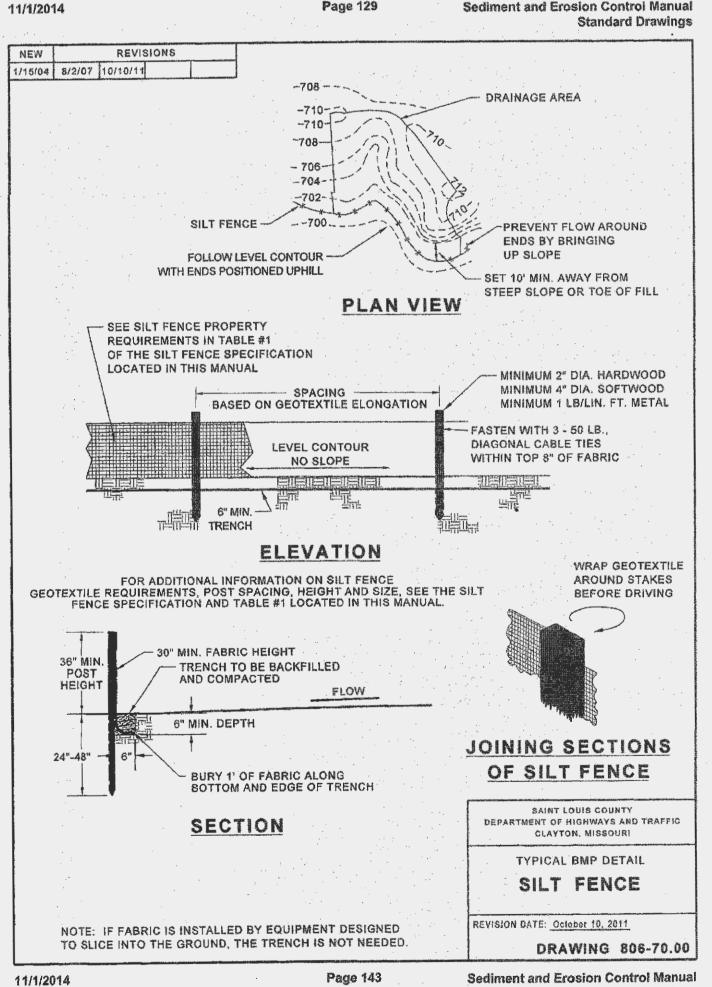
CONCRETE SIDEWALK DETAIL (NOT TO SCALE) (NOT TO BE USED FOR BUILDING SIDEWALK)

SITE ADDRESS: 306 TCW COURT LAKE SAINT LOUIS, MO 63367

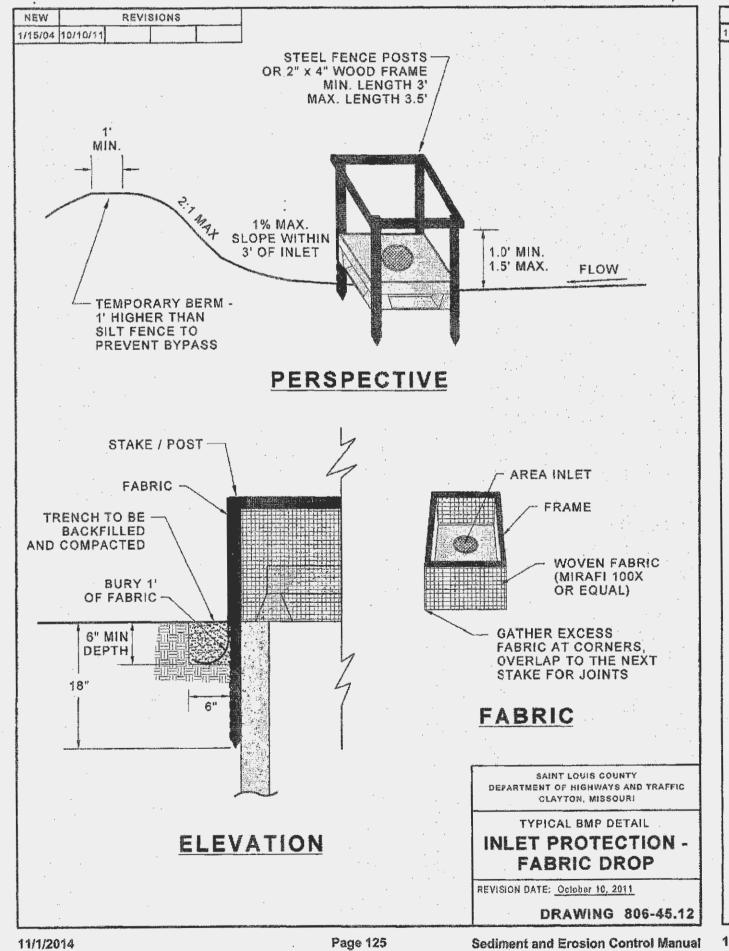




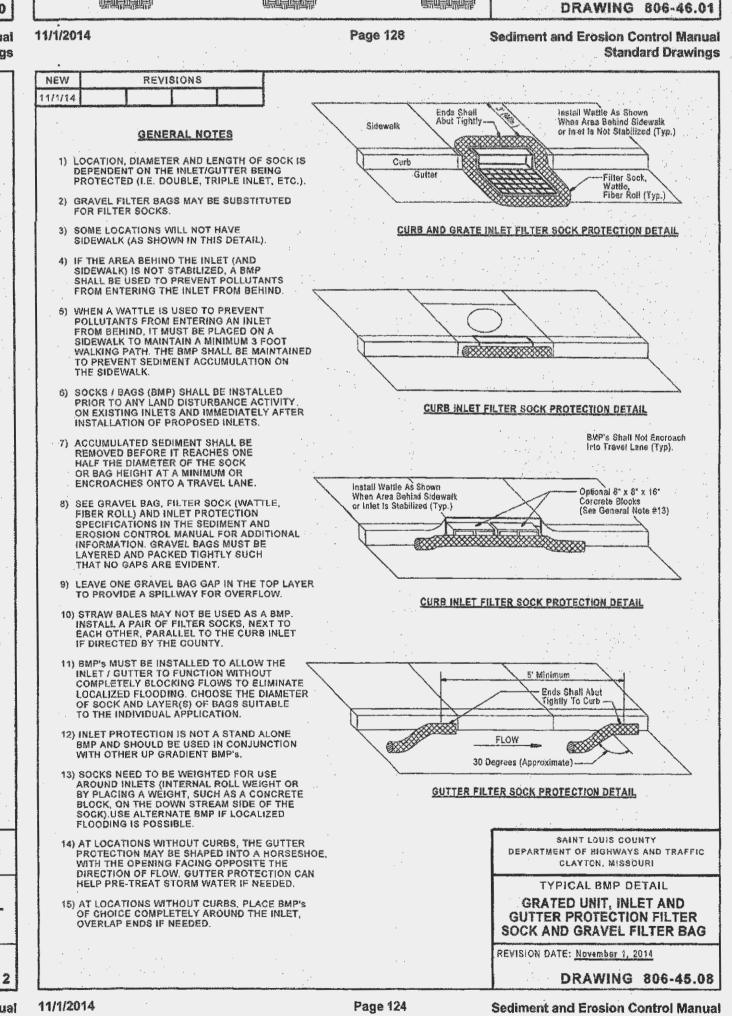




Standard Drawings



Standard Drawings



CONSULTANT:



Lake Saint Louis
308 TCW Court
Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031

Wissouri Certificate of Authority # LS-2012007849

DEVELOPMENT NAME:

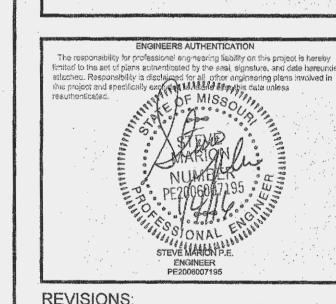
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:

LT Designs LLC
314-267-3935

OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



| · : | |
|---------------------------------------|--|
| · · · · · · · · · · · · · · · · · · · | |
| | |
| | |
| | |
| | The state of the s |
| | |
| DRAWING BY: | D. SHRYOCH |
| DATE: | 12-8-2015 |
| JOB NUMBER: | 155301 |

EROSION CONTROL DETAILS
SHEET NUMBER:

TITLE:

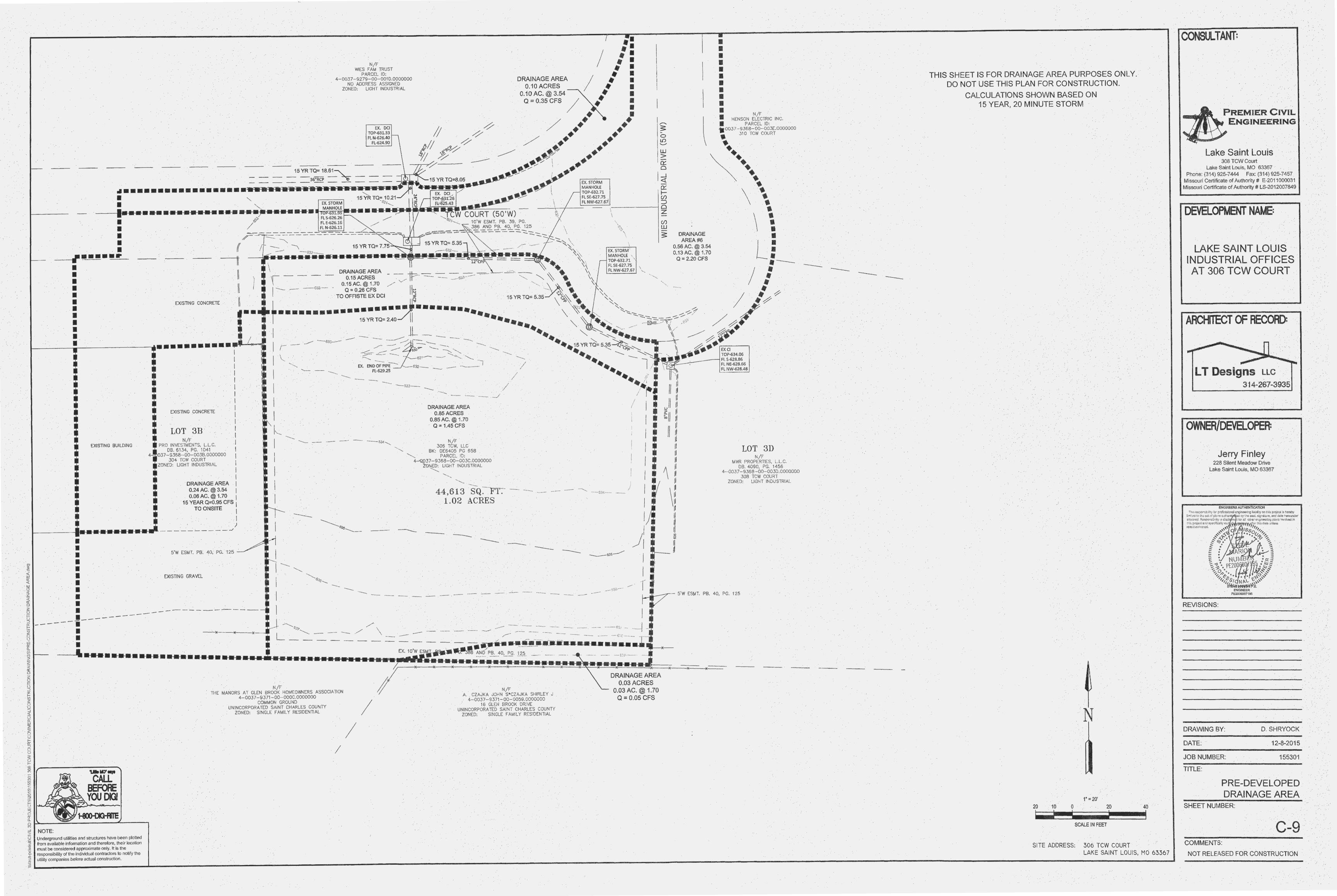
C_8

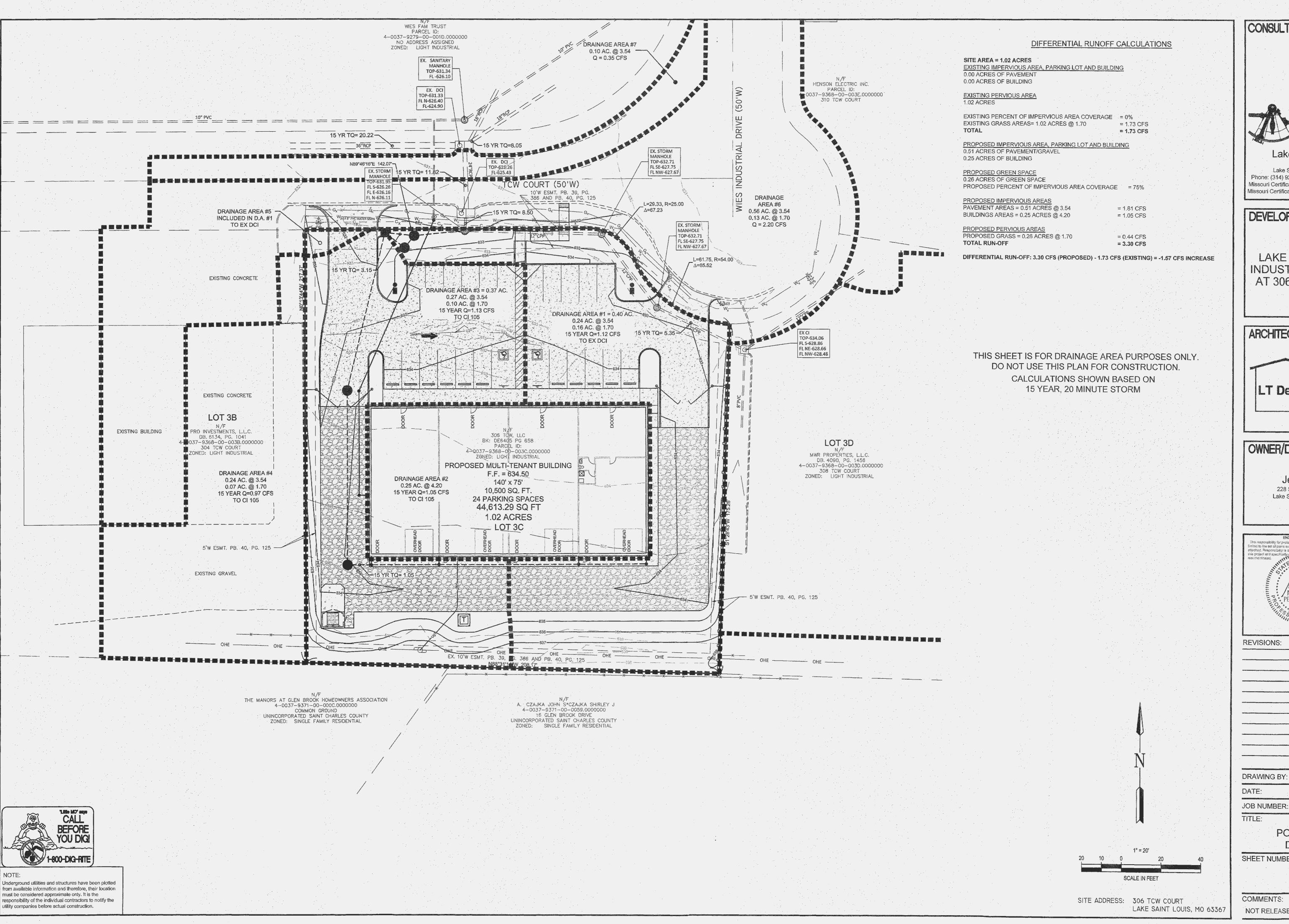
COMMENTS:
NOT RELEASED FOR CONSTRUCTION



NOTE:
Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

Standard Drawings







Lake Saint Louis 308 TCW Court Lake Saint Louis, MO 63367 Phone: (314) 925-7444 Fax: (314) 925-7457 Missouri Certificate of Authority # E-2011000031 Missouri Certificate of Authority # LS-201200784

DEVELOPMENT NAME:

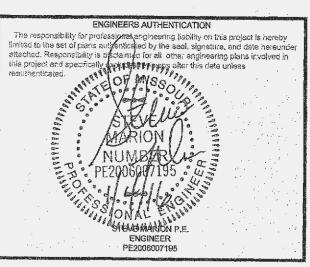
LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley 228 Silent Meadow Drive Lake Saint Louis, MO 63367



REVISIONS:

DRAWING BY: A. JONES 12-8-2015

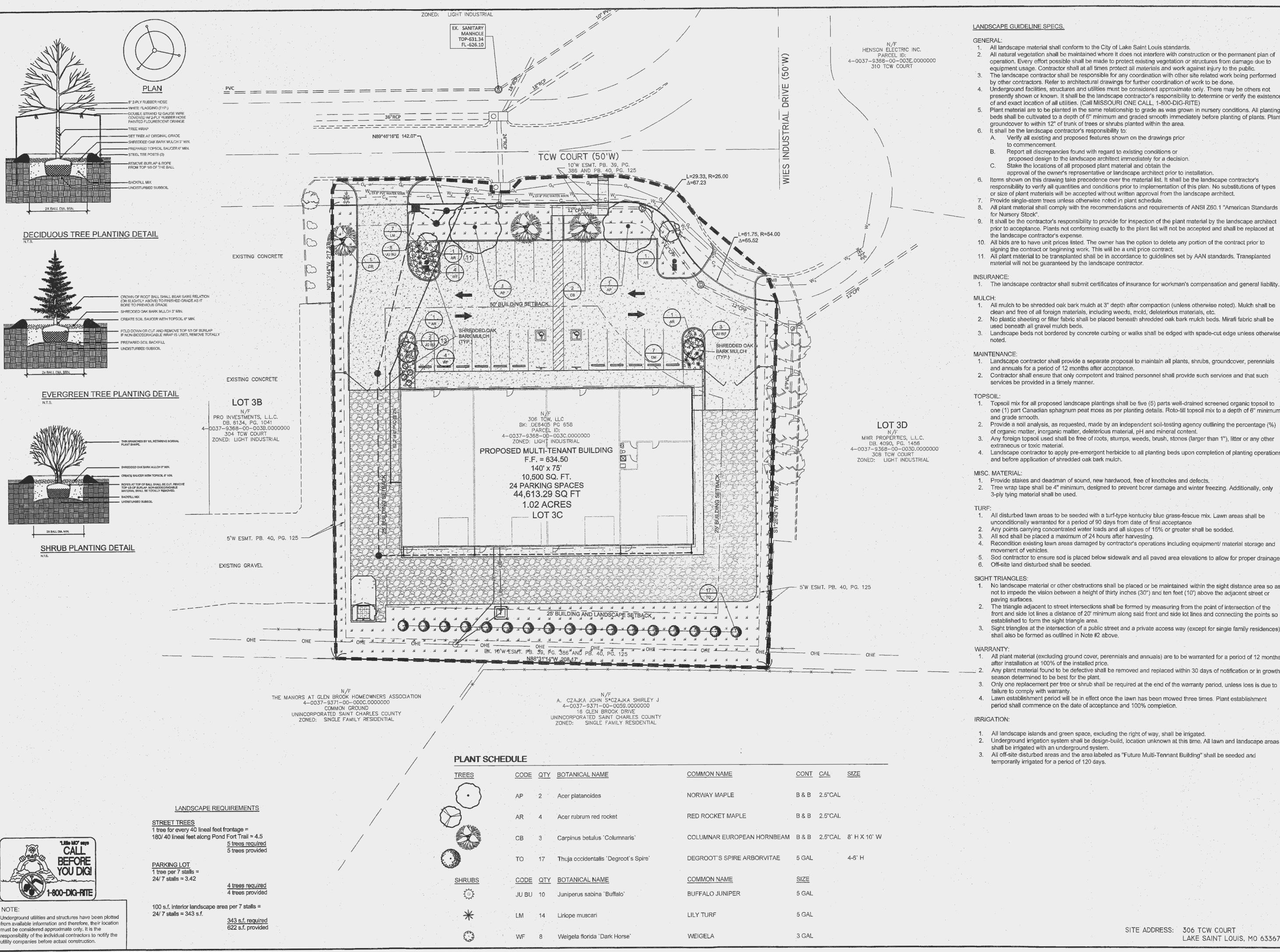
> POST-DEVELOPED DRAINAGE AREA

SHEET NUMBER:

C-10

155301

COMMENTS:



All landscape material shall conform to the City of Lake Saint Louis standards.

- 2. All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing vegetation or structures from damage due to equipment usage. Contractor shall at all times protect all materials and work against injury to the public.
- by other contractors. Refer to architectural drawings for further coordination of work to be done. 4. Underground facilities, structures and utilities must be considered approximate only. There may be others not presently shown or known. It shall be the landscape contractor's responsibility to determine or verify the existence
- of and exact location of all utilities. (Call MISSOURI ONE CALL, 1-800-DIG-RITE) 5. Plant material are to be planted in the same relationship to grade as was grown in nursery conditions. All planting
- beds shall be cultivated to a depth of 6" minimum and graded smooth immediately before planting of plants: Plan groundcover to within 12" of trunk of trees or shrubs planted within the area.
- A. Verify all existing and proposed features shown on the drawings prior
- Report all discrepancies found with regard to existing conditions or
- proposed design to the landscape architect immediately for a decision.
- approval of the owner's representative or landscape architect prior to installation.
- 6. Items shown on this drawing take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of this plan. No substitutions of types or size of plant materials will be accepted without written approval from the landscape architect.
- 8. All plant material shall comply with the recommendations and requirements of ANSI Z60.1 "American Standards
- It shall be the contractor's responsibility to provide for inspection of the plant material by the landscape architect prior to acceptance. Plants not conforming exactly to the plant list will not be accepted and shall be replaced at
- 10. All bids are to have unit prices listed. The owner has the option to delete any portion of the contract prior to
- 11. All plant material to be transplanted shall be in accordance to guidelines set by AAN standards. Transplanted

1. The landscape contractor shall submit certificates of insurance for workman's compensation and general liability.

- 1. All mulch to be shredded oak bark mulch at 3" depth after compaction (unless otherwise noted). Mulch shall be clean and free of all foreign materials, including weeds, mold, deleterious materials, etc.
- Landscape beds not bordered by concrete curbing or walks shall be edged with spade-cut edge unless otherwise
- 1. Landscape contractor shall provide a separate proposal to maintain all plants, shrubs, groundcover, perennials
- 2. Contractor shall ensure that only competent and trained personnel shall provide such services and that such
- 1. Topsoil mix for all proposed landscape plantings shall be five (5) parts well-drained screened organic topsoil to one (1) part Canadian sphagnum peat moss as per planting details. Roto-till topsoil mix to a depth of 6" minimum
- 2. Provide a soil analysis, as requested, made by an independent soil-testing agency outlining the percentage (%) of organic matter, inorganic matter, deleterious material, pH and mineral content.
- 3. Any foreign topsoil used shall be free of roots, stumps, weeds, brush, stones (larger than 1"), litter or any other
- 4. Landscape contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operations and before application of shredded oak bark mulch.

1. Provide stakes and deadman of sound, new hardwood, free of knotholes and defects.

2. Tree wrap tape shall be 4" minimum, designed to prevent borer damage and winter freezing. Additionally, only

- 1. All disturbed lawn areas to be seeded with a turf-type kentucky blue grass-fescue mix. Lawn areas shall be
- unconditionally warranted for a period of 90 days from date of final acceptance
- 2. Any points carrying concentrated water loads and all slopes of 15% or greater shall be sodded.
- 4. Recondition existing lawn areas damaged by contractor's operations including equipment/ material storage and
- 5. Sod contractor to ensure sod is placed below sidewalk and all paved area elevations to allow for proper drainage.
- 1. No landscape material or other obstructions shall be placed or be maintained within the sight distance area so as not to impede the vision between a height of thirty inches (30") and ten feet (10") above the adjacent street or
- 2. The triangle adjacent to street intersections shall be formed by measuring from the point of intersection of the front and side lot lines a distance of 20' minimum along said front and side lot lines and connecting the points so
- 3. Sight triangles at the intersection of a public street and a private access way (except for single family residences) shall also be formed as outlined in Note #2 above.
- 1. All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months
- Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth
- 3. Only one replacement per tree or shrub shall be required at the end of the warranty period, unless loss is due to
- 4. Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment period shall commence on the date of acceptance and 100% completion.
- 1. All landscape islands and green space, excluding the right of way, shall be irrigated.
- 2. Underground irrigation system shall be design-build, location unknown at this time. All lawn and landscape areas shall be irrigated with an underground system.

SITE ADDRESS: 306 TCW COURT

LAKE SAINT LOUIS, MO 63367

3. All off-site disturbed areas and the area labeled as "Future Multi-Tennant Building" shall be seeded and

DRAWING BY: J. DUBOIS DATE: 12-8-2015 JOB NUMBER: 155301

TITLE:

REVISIONS:

CONSULTANT:

PREMIER CIVIL

Lake Saint Louis

308 TCW Court

Lake Saint Louis, MO 63367

Phone: (314) 925-7444 Fax: (314) 925-7457

Missouri Certificate of Authority # E-2011000031

Vissouri Certificate of Authority # LS-2012007849

LAKE SAINT LOUIS

INDUSTRIAL OFFICES

AT 306 TCW COURT

ARCHITECT OF RECORD:

LT Designs LLC

OWNER/DEVELOPER:

Jerry Finley

228 Silent Meadow Drive

Lake Saint Louis, MO 63367

the responsibility for professional entitipeering liability on this project is hereby lited to the set of plans authenticated by the seal, signature, and date hereum

314-267-3935

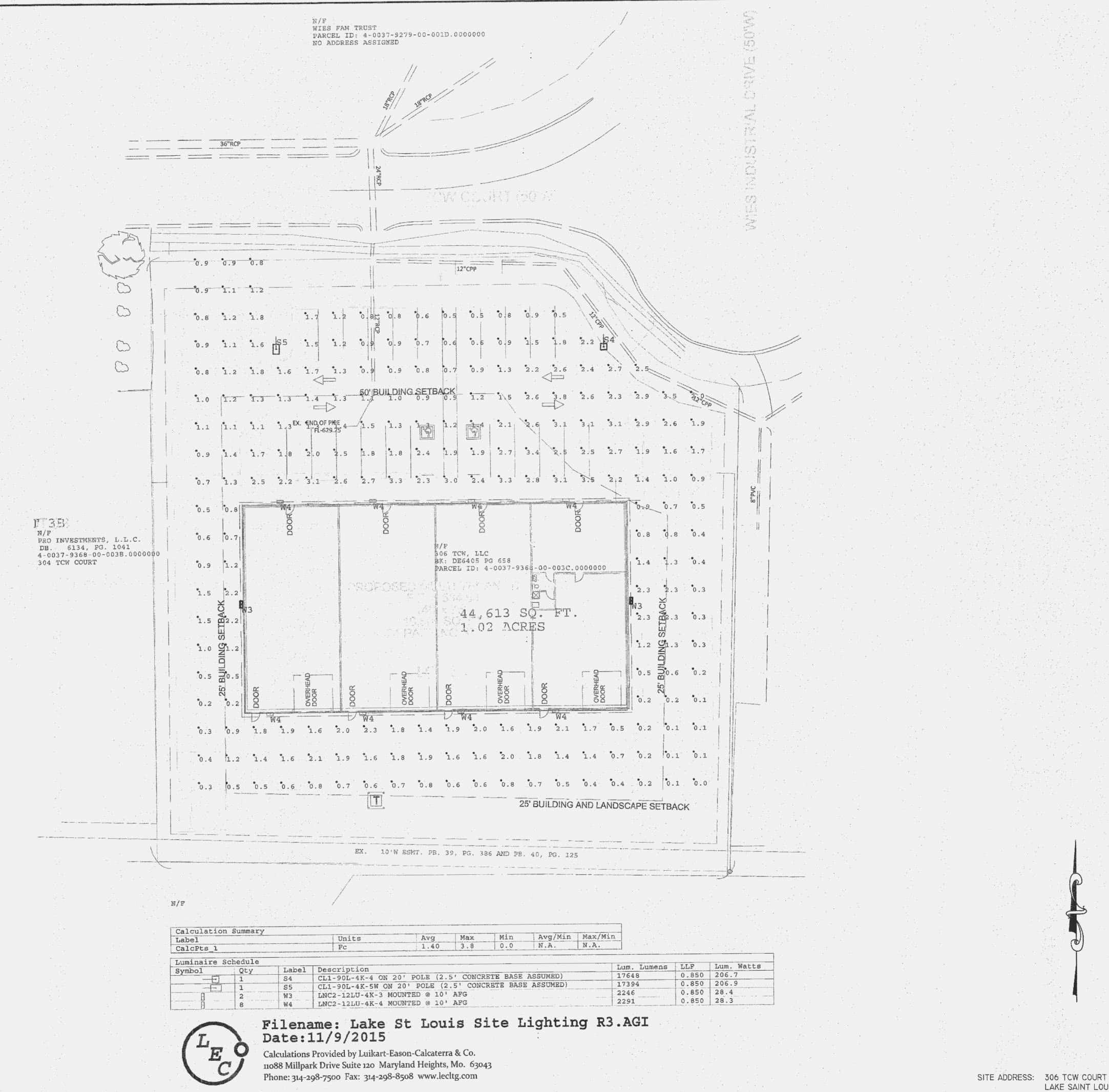
DEVELOPMENT NAME:

ENGINEERING

LANDSCAPE PLAN

SHEET NUMBER:

COMMENTS:



Underground utilities and structures have been plotted

from available information and therefore, their location

responsibility of the individual contractors to notify the

must be considered approximate only. It is the

utility companies before actual construction.

CONSULTANT:



Lake Saint Louis 308 TCW Court Lake Saint Louis, MO 63367 Phone: (314) 925-7444 Fax: (314) 925-7457

Missouri Certificate of Authority # E-2011000031 Missouri Certificate of Authority # LS-201200784

DEVELOPMENT NAME:

LAKE SAINT LOUIS INDUSTRIAL OFFICES AT 306 TCW COURT

ARCHITECT OF RECORD:



OWNER/DEVELOPER:

Jerry Finley Lake Saint Louis, MO 63367

REVISIONS:

DRAWING BY: D. SHRYOCK 12-8-2015 JOB NUMBER: 155301

TITLE:

PHOTOMETRIC PLAN SHEET NUMBER:

PH-1

LAKE SAINT LOUIS, MO 63367

COMMENTS: NOT RELEASED FOR CONSTRUCTION