PROJECT DIRECTORY

OWNER / DEVELOPER
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280
(317) 705-8800

CIVIL ENGINEER
PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
314-925-7444
CONTACT: MATT FOGARTY

MUNICIPALITY
CITY OF LEE'S SUMMIT
200 SE GREEN
LEE'S SUMMIT, MO 64063
(816) 969-1239
CONTACT: JENNIFER THOMPSON

UTILITY PROVIDERS

WATER
CITY OF LEE'S SUMMIT WATER
1200 SE HAMBLEN RD
LEE'S SUMMIT, MO 64081
(816) 969 1900
CONTACT: T.B.D.

ELECTRIC
EVERGY ELECTRIC
1351 NW WARD RD
LEE'S SUMMIT, MO 64086
(888) 471-5275
CONTACT: T.B.D.

GAS
SPIRE GAS
1117 S. PLEASANT ST
INDEPENDENCE, MO 64050
(800) 582-1234
CONTACT: T.B.D.

TELEPHONE
AT&T BUSINESS COMMUNICATION SERVICES
(618) 346-6400
CONTACT: T.B.D.

FIRE DEPARTMENT
CITY OF LEE'S SUMMIT FIRE PROTECTION
207 E. DOUGLAS BLVD
LEE'S SUMMIT, MO 64063
(816) 969-1313
CONTACT: MIKE SNIDER - FIRE CHIEF

SANITARY SEWER
CITY OF LEE'S SUMMIT SEWER
1200 SE HAMBLEN ROAD
LEE'S SUMMIT, MO 64081
(816) 969 1900
CONTACT: T.B.D.

CABLE
SPECTRUM
188 NW OLDHAM PKWY
LEE'S SUMMIT, MO 64081
(874) 874 2389
CONTACT: T.B.D.

EXISTING LEGEND	
○	FOUND IRON PIPE
⊙	SET IRON PIPE
▪	FOUND STONE MONUMENT
FH	FIRE HYDRANT
WV	WATER VALVE
W	WATER METER VAULT
IRV	IRRIGATION CONTROL VALVE
GV	GAS VALVE
G	GAS METER
☼	LIGHT STANDARD
CO	CLEAN OUT
S	SANITARY SEWER MANHOLE
▪	STORM SEWER MANHOLE
▤	STORM SEWER INLET
BLRD	PIPE BOLLARD
⁄	SIGN
☁	BUSH
✱	TREE
TSB	TRAFFIC SIGNAL BOX
MW	MONITORING WELL
TH	TEST HOLE
PS	PEDESTRIAN SIGNAL
E	ELECTRIC METER
▣	STORM CURB INLET
▣	STORM DOUBLE CURB INLET
AC	AIR CONDITIONER
DS	DOWN SPOUT
TP	TELEPHONE PEDESTAL
B.O.C.	BACK OF CURB

PROPOSED LEGEND	
●	UTILITY POLE
✱	FIRE HYDRANT
⋈	WATER VALVE
■	WATER METER VAULT
▬	GAS METER
○■	LIGHT STANDARD
●	CLEAN OUT
⊠	MONITORING WELL
●	SANITARY SEWER MANHOLE
●	STORM SEWER MANHOLE
▦	GRATE INLET
▩	DOUBLE CURB INLET
•	PIPE BOLLARD
⊸	SIGN
▭	ELECTRIC METER
UgE	UNDERGROUND ELECTRIC
UgT	UNDERGROUND TELEPHONE
OHE	OVERHEAD ELECTRIC/PHONE
2"W	2" WATER MAIN
6"W	6" WATER MAIN
8"W	8" WATER MAIN
X" GAS	GAS LINE
507	CONTOUR LINE

"Little MO" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

Underground utilities and structures have been plotted from availabie 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. All O.S.H.A rules and regulations established for the type of construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

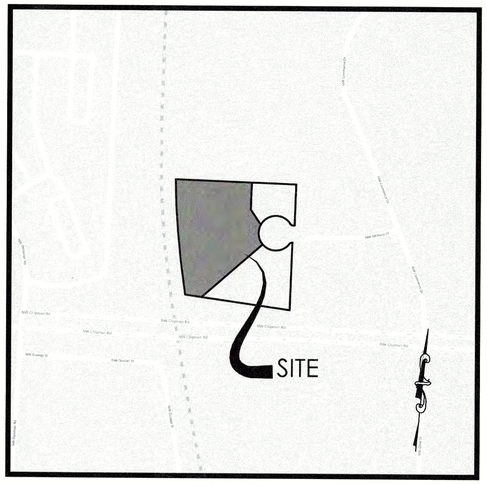
\\Client pc\vault\CIVIL 3D PROJECTS\2020\2008920 PetSuites_McNary Ct Lot 3B, Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\C-000 COVER SHEET.dwg

CONSTRUCTION PLANS FOR

petsuites
STAY • PLAY

250 NW MCNARY CT.

ALL OF LOT 3B, SUMMIT TEC ANNEX-LOTS 3A, 3B, AND 3C, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF, BEING A REPLAT OF LOT I AND TRACT A OF BLOCK 3 OF SUMMIT TEC INDUSTRIAL PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI.



LOCATION MAP
1" = 250'

DISTURBED AREA = 1.63 ACRES

DATUM BENCHMARK

JA-43: KC METRO ALUM GRS DISK SET IN CONCRETE : KC METRO ALUM GRS DISK SET IN CONCRETE ABOUT 0.5 MILES SOUTH OF THE I-470 INTERSECTION WITH DOUGLAS ROAD AND NEAR THE INTERSECTION WITH NW VICTORIA STREET. ELEV:934.77

SITE BENCHMARKS

BM#1 CHISELED SQUARE CUT INTO THE MIDDLE FRONT OF THE : CHISELED SQUARE CUT INTO THE MIDDLE FRONT OF THE WEST CURB INLET AT THE END OF CUL-DE-SAC ELEV= 999.04

BM#2 - CHISELED CROSS AT THE NORTHERN END OF INLET AT END OF CUL-DE-SAC ELEV:999.16

BM#3 - CHISELED CROSS AT THE SOUTHEAST CORNER OF THE SOUTHWESTERN CURB INLET LOCATED PRIOR TO THE CUL-DE-SAC ROUNDING. ELEV: 1006.12

MBOE - (MINIMUM BUILDING OPENING ELEVATION)
ELEV = 1001.00

PREMIER
DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385

SHEET INDEX

C-000	COVER SHEET
C-001	GENERAL NOTES
C-100	SITE PLAN
C-200	GRADING PLAN
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C-400	EROSION CONTROL PLAN
C-401	EROSION CONTROL DETAILS
C-500	EXISTING DRAINAGE AREA MAP
C-501	STORMWATER MANAGEMENT PLAN
C-600	STORM SEWER PROFILES
C-601	OUTFALL STRUCTURE DETAIL
C-602	BASIN DETAILS
C-700	CONSTRUCTION DETAILS
C-701	UTILITY DETAILS
C-702	UTILITY DETAILS
L-100	LANDSCAPE PLAN

PROPERTY DATA

OVERALL SITE ACREAGE	±2.11 ACRES - 92,014 S.F.
ADDRESS	250 NW MCNARY CT.
PARCEL ID#	52-900-03-42-00-0-00-000
EXISTING ZONING	CP-2
CURRENT LAND USE	VACANT COMMERCIAL PROPERTY
PROPOSED LAND USE	PET SERVICES AND VETERINARY CLINIC

LEGAL DESCRIPTION:

ALL OF LOT 3B, SUMMIT TEC ANNEX-LOTS 3A, 3B, AND 3C, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF, BEING A REPLAT OF LOT I AND TRACT A OF BLOCK 3 OF SUMMIT TEC INDUSTRIAL PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI.

SITE COVERAGE CALCULATIONS

SITE AREA = 2.11 ACRES
FLOOR TO AREA RATIO
14,100/92,014 = 0.15 FAR

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

EXISTING GREEN SPACE
2.11 ACRES

EXISTING PERCENT OF IMPERVIOUS AREA COVERAGE = 0%

PROPOSED IMPERVIOUS AREA PARKING LOT AND BUILDING
0.67 ACRES OF PAVEMENT
0.32 ACRES OF BUILDING

PROPOSED GREEN SPACE
1.12 ACRES OF GREEN SPACE

PROPOSED PERCENT OF IMPERVIOUS AREA COVERAGE = 46.9%

ELECTRONIC DRAWING NOTE:
ELECTRONIC MEDIA OR DIGITAL DRAWINGS ARE INSTRUMENT OF PROFESSIONAL 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.

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #: 2008000031
MISSOURI CERTIFICATE OF AUTHORITY #:S-2020007849
MISSOURI CERTIFICATE OF AUTHORITY #:A-2006007358

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
PE-2006007195
PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereon. No responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions made after this date are not authenticated.
STEVEN D. MARION, PE
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title: COVER SHEET

Sheet Number: C-000

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

PAVING, GRADING, AND DRAINAGE NOTES:

1. ALL PAVING, CONSTRUCTION MATERIALS, AND WORKMANSHIP WITHIN CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT.
2. ALL AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY SITE CONSTRUCTION SHALL BE RE-GRADED AND LANDSCAPED OR PAVED, (WHATEVER WAS THERE BEFORE DISTURBANCE). ALL DISTURBED AREAS SHALL BE REPAIRED TO THE PREVIOUS CONDITION OR BETTER THAN BEFORE AREA WAS DISTURBED.
3. TRAFFIC CONTROL ON ALL STATE, CITY AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION . IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE ANY WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL EVENT UNTIL SOIL IS STABILIZED.
5. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS AND THE PROJECT SPECIFICATIONS.
6. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT TO FULL DEPTH OF EXISTING PAVEMENT. CONTRACTOR SHALL PREPARE A SMOOTH, SOUND, VERTICAL FACE AND MATCH THE EXISTING PAVEMENT ELEVATION UNLESS OTHERWISE NOTED. CONTRACTOR SHALL INSTALL LONGITUDINAL BUTT JOINTS WHEN CONNECTING TO EXISTING CONCRETE PAVEMENT.
7. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTING AREAS ARE NOT OVERLY COMPACTED AND DO NOT CONTAIN LIMEROCK. THE CONTRACTOR SHALL EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED.
8. ALL DRAINAGE STRUCTURES SHALL BE DE-SILTED AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
9. STRIP TOPSOIL AND ORGANIC MATTER AND PAVING MATERIAL FROM ALL AREAS UNDER BUILDING. TOPSOIL MAY BE STOCKPILED ON SITE FOR REPLACEMENT IN GREEN AREAS.
10. FIELD DENSITY TESTS SHALL BE TAKEN AT A FREQUENCY AS REQUIRED IN THE PROJECT SPECIFICATIONS.
11. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. REQUIREMENTS) EXIST TO AND FROM EVERY ACCESSIBLE DOOR. IN NO CASE SHALL HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. CONTRACTOR SHALL CONTACT ARCHITECT AND CIVIL ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A. COMPLIANCE ISSUES.
12. CONTRACTOR ADJUSTMENT TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED, ONLY WITH THE PRIOR APPROVAL OF THE CIVIL ENGINEER. CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.
13. SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE. WHERE APPLICABLE, ADD 0.50 FEET TO SPOT GRADES SHOWN FOR TOP OF CURB ELEVATIONS.
14. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE STABILIZED AS SPECIFIED IN THE PLANS AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
16. THE CONTRACTOR TAKE ALL MEASURES NECESSARY TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO, THE INSTALLATION OF BMP'S AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. BMP'S MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE TEMPORARY BARRIERS, AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES LOCAL, STATE, OR FEDERAL WATER QUALITY STANDARDS.
17. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS, IN GOOD CONDITION, AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY JURISDICTIONAL AGENCIES.
18. IF ANY EXISTING STRUCTURES, FACILITIES, OR IMPROVEMENTS (PUBLIC OR PRIVATE) TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE, FACILITY, OR IMPROVEMENT AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
19. REFERENCE THE SWPPP INCLUDED IN THIS PLAN SET AND IN THE PROJECT SPECIFICATIONS FOR THIS PROJECT.
20. CONTRACTOR SHALL REFERENCE ARCHITECT AND ELECTRICAL PLANS AND PROVIDE CONDUIT NEEDED FOR LOT LIGHTING AND SIGNAGE PRIOR TO SITE PAVING.
21. PAVING LINE AND GRADE SHALL "FLUSHOUT" ALONG ALL CONNECTIONS TO EXISTING PAVING.
22. ALL BENDS LESS THAN 42" DIAMETER MUST BE FACTORY MANUFACTURED BENDS.
23. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE PROJECT GEOTECHNICAL SERVICE REPORT FOR THIS SITE.
24. PAVING CONTRACTOR IS RESPONSIBLE FOR ALL LAY DOWN CURBS AT INTERSECTIONS WHERE BARRIER FREE RAMPS ARE TO BE CONSTRUCTED.
25. REFERENCE DETAIL SHEETS FOR PAVEMENT JOINT SPACING AND REQUIREMENTS. ALL SAWCUT AND JOINT LOCATIONS WILL BE AS REQUIRED BY THE CITY OF WENTZVILLE INSPECTOR.
26. PRIVATE STORM PIPE MATERIAL SHALL BE PER CITY OF LEE'S SUMMIT SPECIFICATIONS.
27. ALL ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO TOP OF PAVEMENT OR FINISHED GROUND UNLESS NOTED OTHERWISE. ELEVATIONS TO POINTS OTHER THAN THE TOP OF PAVEMENT ARE NOTED AS FOLLOWS:

    TP=TOP OF PAVEMENT
    TC=TOP OF CURB
    TW=TOP OF WALL
    BW=FINISHED GROUND AT FACE OF WALL
    GRND=FINISHED GROUND AT YARD DRAINS, TOP OF FINISHED GRADE IN NON-PAVEMENT AREAS

GRADING PLAN NOTES:

1. THE CONTRACTOR SHALL RESTORE OFFSITE CONSTRUCTION AREAS TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL GRADES SHALL BE WITHIN 0.1 FEET MORE OR LESS OF THOSE SHOWN ON THE GRADING PLAN.
3. NO SLOPE SHALL BE GREATER THAN 3:1 AND SHALL BE EITHER SODDED OR SEEDED AND MULCHED UNLESS OTHERWISE NOTED OR DETAILED.
4. THE CONTRACTOR SHALL FIELD INVESTIGATE THE ENTIRE SITE PRIOR TO HIS BID SUBMITTAL NOTING THE EXISTING VEGETATION, PAVEMENT AREAS, BUILDING MATERIALS, BUILDING MATERIAL TYPES, PARKING LIGHTING, UTILITIES AND TREES. THE REMOVAL AND DISPOSAL OF ALL ITEMS SHALL BE INCLUDED IN THE BID.
5. NO AREA SHALL BE CLEARED WITHOUT PERMISSION OF THE OWNER/DEVELOPER. SILTATION CONTROL WILL BE PROVIDED AS REQUIRED TO PREVENT RUN-OFF. REFER TO THE EROSION CONTROL PLAN(S) AND DETAILS.
6. ALL TRASH, DEBRIS, ORGANIC MATERIAL, REFUSE, FROZEN EARTH, ETC., SHALL BE REMOVED FROM FILL AREAS PRIOR TO THE PLACEMENT OF CONTROLLED FILL. ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.
7. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL PER THE EROSION CONTROL PLAN(S) AND MAY BE REQUIRED TO PROVIDE ADDITIONAL MEASURES AS REQUESTED BY THE CITY OF LEE'S SUMMIT, SHOULD THE EROSION CONTROL PLAN AND DETAILS PROVE TO BE INSUFFICIENT DUE TO UNFORESEEN CIRCUMSTANCES.
8. CARE SHALL BE EXERCISED IN COMPACTION OF BACKFILL MATERIALS OVER THE TOP OF STRUCTURES OR PIPES IN ORDER TO PREVENT DAMAGE TO THE WATERPROOFING MEMBRANES, JOINTS, SEALS AND/OR THE PIPES AND STRUCTURES THEMSELVES. COMPACTION AND PLACING OF BACKFILL AND FILL MATERIALS SHALL BE PERFORMED UNDER THE CONTINUOUS SUPERVISION OF AN APPROVED TESTING LABORATORY. FILL SHALL NOT BE PLACED ON FROZEN GROUND, NOR SHALL FILLING OPERATIONS CONTINUE WHEN THE TEMPERATURE IS SUCH AS TO PERMIT THE LAYER UNDER PLACEMENT TO FREEZE.
9. ALL CITY, COUNTY, AND STATE ROADS SHALL BE KEPT FREE OF DIRT DAILY.
10. FINAL GRADES SHALL MATCH EXISTING ELEVATIONS AT THE LAND DISTURBANCE LIMITS UNLESS OTHERWISE SHOWN.
11. THE DEVELOPER IS REQUIRED TO PROVIDE ADEQUATE STORM WATER SYSTEMS IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT AND EPA STANDARDS.
12. ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE CITY OF LEE'S SUMMIT AND EPA STANDARDS.
13. INTERIM STORM WATER DRAINAGE CONTROL IN THE FORM OF SILTATION CONTROL MEASURES ARE REQUIRED.
14. ANY LAND DISTURBANCE ACTIVITY INVOLVING ONE (1) ACRE OR MORE OF LAND IS A MAJOR LAND DISTURBANCE (MLD) AND A LAND DISTURBANCE FOR THE MLD MUST BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS. ANY LAND DISTURBANCE ACTIVITY INVOLVING LESS THAN ONE (1) ACRE IS AN ORDINARY LAND DISTURBANCE AND THE APPROPRIATE PERMIT(S) MUST BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS.
15. G.C. TO BE AWARE THAT A LAND DISTURBANCE PERMIT WILL BE REQUIRED. SITE PLAN/PLAT APPROVAL IS NOT TO BE CONSTRUED AS APPROVAL OF A LAND DISTURBANCE PERMIT.
16. ALL WORK SHALL BE IN COMPLIANCE WITH THE PROJECT GEOTECHNICAL SERVICES REPORT FOR THIS PROJECT.
17. ANY DISTURBED SIDEWALK OR CONCRETE PAVEMENT AREAS SHALL BE REPAIRED BY FULL SLAB REPLACEMENT UNLESS SPECIFICALLY AUTHORIZED BY THE DEVELOPER OR MUNICIPALITY HAVING JURISDICTION.
18. ALL UTILITY SPOILS SHALL BE INCLUDED IN THE GENERAL CONTRACTOR'S BID. GENERAL CONTRACTOR SHALL COORDINATE WITH THE EXCAVATOR AND UTILITY INSTALLER.

ADA COMPLIANCE NOTES:

1. CONTRACTOR SHALL CONFIRM ALL EXISTING SLOPES FOR ACCESSIBLE ROUTES AS WELL AS THE ACCESSIBLE PARKING STALLS AND ACCESSIBLE AISLES WITH A SLOPE METER TO CONFIRM MAXIMUM SLOPES ARE NOT EXCEEDED.
2. CONTRACTOR IS REQUIRED TO PROVIDE AS-BUILT SPOT ELEVATIONS ALONG THE ACCESSIBLE ROUTES SHOWN ON THIS PLAN EVERY 10 FEET IN ORDER TO CONFIRM MAXIMUM (2%) CROSS-SLOPE AND MAXIMUM (5%) SLOPES IN THE DIRECTION OF TRAVEL IN ADDITION, SPOT ELEVATIONS ARE REQUIRED ON ALL CORNERS AND MIDPOINTS OF ACCESSIBLE PARKING STALLS AND ACCESSIBLE AISLES TO CONFIRM MAXIMUM 2% SLOPES ARE NOT EXCEEDED IN ALL DIRECTIONS. THIS INFORMATION SHALL BE PROVIDED, A MINIMUM OF 2 WEEKS BEFORE STORE TURNOVER.
3. THE GENERAL AND CONCRETE CONTRACTOR SHALL FIELD VERIFY ADA SLOPES DURING CONCRETE POUR. A 2' SMART LEVEL WITH AN ACCURACY TO .029 PERCENT SHALL BE USED FOR VERIFYING SLOPES. ANY SLOPES IN THE ADA AREAS THAT EXCEED A 2% CROSS SLOPE ALONG THE BUILDING, ADA STALLS AND/OR SIDEWALK, 5% RUNNING SLOPE FOR SIDEWALKS AWAY FROM THE PROPOSED CVS BUILDING, AND EXCEED 8.3% ON RAMPS SHALL BE REMOVED AND REPLACED AT THE CONCRETE CONTRACTOR'S EXPENSE. THE SURVEYOR FOR STAKING CAN PROVIDE A REFERENCE FOR ELEVATION HOWEVER CONFIRMATION IS REQUIRED BY SLOPE LEVEL DURING CONSTRUCTION.

ABBREVIATIONS:

AI..... AREA INLET [OPEN 4 SIDES UNLESS NOTED OTHERWISE]
DAI..... DOUBLE AREA INLET (OPEN 6 SIDES UNLESS NOTED OTHERWISE.)
MH..... MANHOLE
CI..... CURB INLET
DCI..... DOUBLE CURB INLET
GSI..... GRATE INLET WITH SIDE INTAKE. (ELEVATION OF INLET TOP IS TO THE TOP OF GRATE. ADD 0.50' FOR TOP OF SIDE INTAKE.)
2GSI..... 2 GRATE INLET WITH SIDE INTAKE. (ELEVATION OF INLET TOP IS TO THE TOP OF GRATE. ADD 0.50' FOR TOP OF SIDE INTAKE.)
DME..... ADS DOME
EP..... END OF PIPE
FES..... FLARED END SECTION
IMH..... INTERCEPTOR MANHOLE
TD..... TRENCH DRAIN
ATG..... ADJUST TO GRADE
*..... DENOTES HYDRAULIC GRADE JUMP
TBR..... TO BE REMOVED
TBR&R..... TO BE REMOVED & REPLACED

"Little MO" says
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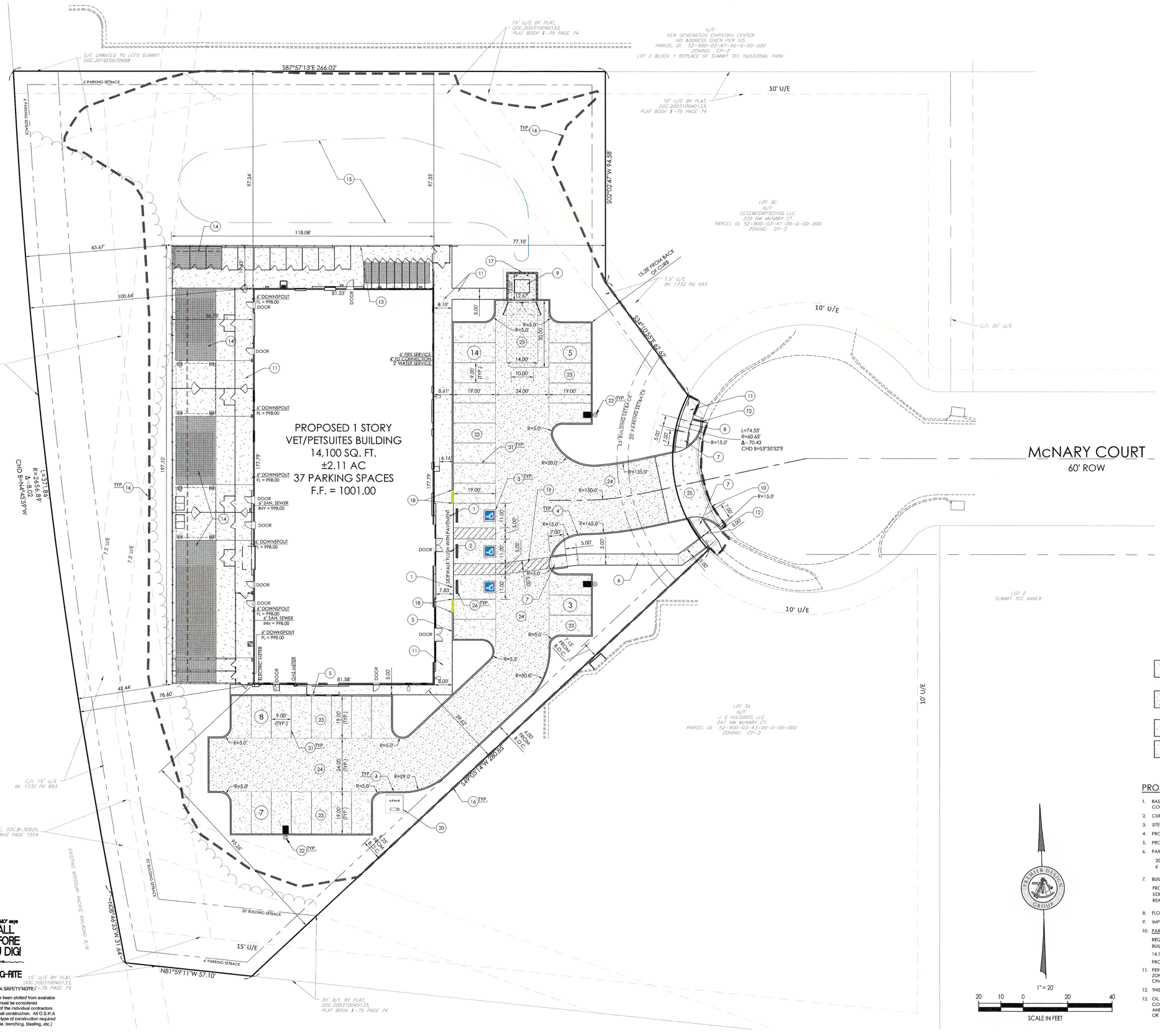
\\Vault pcs\Vault\CIVIL 3D PROJECTS\2020\2008920 PetSuites_McNary Ct Lot 3B Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\GENERAL NOTES.dwg

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT SPECIFICATIONS, CITY OF LEE'S SUMMIT "STANDARD DETAILS", LATEST EDITION, THE PROJECT SPECIFICATIONS BOOK, AND THESE CONSTRUCTION PLANS. IN CASE OF CONFLICTING SPECIFICATIONS FOR DETAILS, THE CIVIL ENGINEER SHALL BE CONTACTED PRIOR TO CONSTRUCTION, GENERALLY, THE MOST STRINGENT SPECIFICATION SHALL APPLY.
2. DURING THE CONSTRUCTION OF THESE IMPROVEMENTS, ANY INTERPRETATION OF THE STANDARD SPECIFICATIONS, AND ANY MATTER WHICH REQUIRES THE APPROVAL OF THE OWNER, MUST BE APPROVED BY THE CITY OF LEE'S SUMMIT ENGINEERING DIVISION BEFORE ANY CONSTRUCTION INVOLVING THAT DECISION COMMENCES. ASSUMPTIONS ABOUT WHAT THESE DECISIONS MIGHT BE WHICH ARE MADE DURING THE BIDDING PHASE WILL HAVE NO BEARING ON THE DECISION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS.
4. ALL EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME THE DRAWINGS WERE PREPARED AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ACCURATE. THE LOCATIONS SHOWN ARE FOR BIDDING PURPOSES ONLY. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK (INCLUDING ORDERING OF MATERIALS) IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR CEC WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. A LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS, 3-WAY CONTRACTS, AND BONDS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, AND EROSION CONTROL PLANS AND INSPECTION REPORTS (SWPPP).
8. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER & CIVIL ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL TO THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND CIVIL ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
9. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE CIVIL ENGINEER OF RECORD AND THE CITY OF LEE'S SUMMIT ENGINEERING DIVISION DIRECTLY FROM THE TESTING AGENCY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE CIVIL ENGINEER AND TO CITY A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MISSOURI DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
11. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
12. CONTRACTORS SHALL VERIFY BENCHMARKS AND DATUMS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
13. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND CIVIL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
14. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
15. ALL DIMENSIONS GIVEN ARE TO FACE OF CURB AND/OR BUILDING. DIMENSIONS FOR PIPES AND STRUCTURES ARE TO THE CENTERLINE, UNLESS OTHERWISE NOTED ON PLANS.
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATIONS AND INSTALLATIONS OF FRANCHISE UTILITIES NECESSARY FOR ON- AND OFF-SITE CONSTRUCTION.
17. ON-SITE AND PERIMETER TRUCK ROUTE AND OTHER DIRECTIONAL SIGNAGE SHALL BE LOCATED OUT OF THE PEDESTRIAN, AUTOMOBILE, AND TRUCK ROUTES AND SHALL BE LOCATED BETWEEN THREE TO FIVE FEET BEHIND THE NEAREST BACK OF CURB UNLESS INDICATED OTHERWISE ON PLANS. SIGN HEIGHT, LOCATION, AND STRUCTURE SHALL BE SUCH THAT THE SIGNS POSE NO THREAT TO PUBLIC SAFETY.
18. ON-SITE AND PERIMETER TRUCK ROUTE AND OTHER DIRECTIONAL SIGNS SHALL BE ORIENTED SO THEY ARE READILY VISIBLE TO THE ONCOMING TRAFFIC FOR WHICH THEY ARE INTENDED. FIELD ADJUSTMENTS OF LOCATION AND ORIENTATION OF THE SIGNS ARE TO BE MADE TO ACCOMPLISH THIS.
19. CONTRACTOR SHALL REPLACE ANY FENCING, CURBING, ETC. THAT IS DESTROYED OR DAMAGED DUE TO THE CONSTRUCTION ACTIVITIES.
20. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL DEVICES AND PLANS FOR ANY STREET WORK.
21. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRENCH SAFETY PLAN TO THE DEVELOPER AT THE TIME OF THE PRE-CONSTRUCTION MEETING, OR PRIOR TO BEGINNING CONSTRUCTION OF THESE IMPROVEMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH MISSOURI STATE LAW AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT. ONSITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
23. LIGHT POLES AND SIGNS SHALL NOT BE PLACED IN ADA ACCESSIBLE ROUTES, ACCESSIBLE ACCESS AISLES, AND/OR REINFORCED ZONES BEHIND RETAINING WALLS.
24. TO THE MAXIMUM EXTENT PRACTICAL, CONSTRUCTION STAGING, WORKER PARKING, AND ANY OTHER POTENTIALLY NOISY OR OFFENSIVE CONSTRUCTION ACTIVITY SHOULD BE LOCATED AS FAR FROM THE RESIDENTIAL NEIGHBORS AS POSSIBLE.
25. CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE SECURE FROM TRESPASSERS AT ALL TIMES.
26. CONTRACTOR SHALL CONTACT CITY BUILDING OFFICIAL TO LEARN OF ANY UNUSUAL CONSTRUCTION SEQUENCING REQUIREMENTS THAT THE CITY MAY REQUIRE. THE CONTRACTOR IS CAUTIONED THAT THIS AND PERHAPS OTHER SUCH REQUIREMENTS MAY EXIST AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND COMPLY WITH THEM.
27. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY FENCE OR WALL PERMITS FROM THE CITY.
28. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE TRAFFIC CONTROL PER CITY OF LEE'S SUMMIT STANDARDS.
29. CONTRACTOR SHALL INCLUDE ALL ITEMS THAT ARE LISTED FROM THE EXHIBIT B WORK LETTER BETWEEN THE DEVELOPER AND STARBUCKS IN THEIR BID. ANY DEVIATIONS FROM THE WORK LETTER WILL REQUIRE DEVELOPER APPROVAL FOR EACH ITEM.

UTILITY PLAN NOTES:

1. ALL FILL MATERIAL SHALL BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3'-6" COVER ON ALL WATERLINES AND 3'-6" ON ALL SANITARY SEWER LINES.
4. CONNECTION FROM THE METER TO SITE UTILITY LINES SHALL BE MADE BY BUILDING CONTRACTOR.
5. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
6. REFER TO MECHANICAL, ELECTRIC AND PLUMBING DRAWINGS FOR ACTUAL TIE-IN LOCATIONS FOR UTILITIES.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO THE FINAL CONNECTION OF SERVICE.
9. ALL UTILITY SEWER TRENCH BACKFILL SHALL HAVE GRANULAR BACKFILL AND BE MECHANICALLY COMPACTED.
10. THE CONTRACTOR SHALL VERIFY THE LOCATION, CONDITION AND ELEVATION OF ALL PROPOSED SEWER CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT WOULD INTERFERE WITH THE PROPOSED SEWER DESIGN SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
11. ALL PERMIT FEES AND COSTS ASSOCIATED WITH BRINGING UTILITY, SEWER AND WATER SERVICES TO THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FEES AND COSTS SHALL BE INCLUDED IN THE CONTRACTORS BID.
12. G.C. IS TO PROVIDE TRENCH, WIRE, AND CONDUIT FOR TELEPHONE AND ELECTRICAL SERVICES. BACKFILL AND GRADE SMOOTH FOR A COMPLETE TELEPHONE AND ELECTRIC INSTALLATION.
13. G.C. SHALL BE RESPONSIBLE FOR ANY TAPS TO BE MADE UNDER THE SUPERVISION OF THE CITY WATER DIVISION.
14. ANY DISTURBED SIDEWALK SHALL BE FULL SLAB REPLACEMENT.
15. EXISTING SANITARY SEWER AND WATER SERVICE SHALL NOT BE INTERRUPTED.
16. THE CONTRACTOR SHALL INCLUDE THE COST ESTIMATE PROVIDED BY EVERGY IN HIS/HER BID FOR THE RELOCATION/REMOVAL OF ANY OVERHEAD ELECTRIC OR GUY WIRES.
17. THE REMOVAL AND REPLACEMENT, OR REHABILITATION OF THE EXISTING STRUCTURE(S) WILL BE DETERMINED BY THE CITY OF LEE'S SUMMIT FIELD INSPECTOR. IF THE STRUCTURE IS DETERMINED TO REMAIN IN PLACE, THEN THE TOP SHALL BE ADJUSTED TO GRADE, IF NEEDED.
18. ALL STORM SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS.
19. ALL LATERAL SEWER CONSTRUCTION METHODS TO CONFORM TO LATEST STANDARDS AND SPECIFICATIONS FOR THE CITY OF LEE'S SUMMIT SEWER STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS.
20. ALL CONNECTIONS TO PUBLIC WATER SHALL BE AS REQUIRED BY THE CITY OF LEE'S SUMMIT WATER WATER DIVISION.
21. CONNECTION TO PUBLIC SEWER MAINS SHALL BE AS REQUIRED BY THE CITY OF LEE'S SUMMIT SEWER SANITARY. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE PROVIDER PRIOR TO CONNECTION TO PUBLIC SEWERS.
22. ALL TRENCHES UNDER AREAS TO BE PAVED AND UNDER EXISTING PAVING SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE ONLY. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH CITY OF LEE'S SUMMIT STANDARDS.
23. TYPE "C" BEDDING PER CITY OF LEE'S SUMMIT STANDARDS REQUIRED FOR PIPES IN ROCK.
24. ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS, OUTSIDE OF PUBLIC RIGH



REFERENCE NOTES	
CODE	DESCRIPTION
1	PROPOSED ACCESSIBLE PARKING SIGN, REFERENCE DETAIL 13 ON SHEET C-700
2	PROPOSED VAN ACCESSIBLE PARKING SIGN, REFERENCE DETAIL 14 ON SHEET C-700
3	PROPOSED INTERNATIONAL SYMBOL OF ACCESSIBILITY, REFERENCE DETAIL 16 ON SHEET C-700
4	PROPOSED 6" VERTICAL CURB (CG-1), REFERENCE DETAIL 18 ON SHEET C-700
5	PROPOSED INTEGRAL CONCRETE CURB AND SIDEWALK, REFERENCE DETAIL 10 ON SHEET C-700
6	PROPOSED SIDEWALK CONNECTION TO RIGHT OF WAY. PROPOSED WALK SHALL NOT EXCEED 2% CROSS SLOPE AND 5% LONGITUDAL SLOPE.
7	PROPOSED ADA ACCESSIBLE RAMP. RAMP SHALL NOT EXCEED 2% CROSS SLOPE AND 8.33% LONGITUDAL SLOPE.
8	PROPOSED ACCESSIBLE LANDING. LANDING SHALL BE 5'X5' AT THE TOP OF THE RAMP.
9	PROPOSED TRASH ENCLOSURE - REFER TO ARCHITECTURAL PLANS FOR DESIGN AND DETAILS.
10	PROPOSED STREET SAWCUT PER JURISDICTIONAL REQUIREMENTS
11	PROPOSED CONCRETE SIDEWALK, REFERENCE DETAIL 07 ON SHEET C-700
12	SAWCUT AND MATCH EXISTING CURB AND/OR PAVEMENT ELEVATION AT NEAREST JOINT.
13	PROPOSED 6' TALL VINYL PLAY YARD FENCE - REFER TO ARCHITECTURAL PLANS FOR DESIGN, DETAILS, DIMENSIONS AND MANUFACTURER
14	PROPOSED TURF AREAS WITH UNDERDRAIN, REFERENCE ARCHITECTURAL PLANS FOR DETAIL OF TURF AREA/ SHEET C-300 FOR UNDERDRAIN DETAIL
15	PROPOSED DETENTION BASIN LIMITS
16	LAND DISTURBANCE LIMITS
17	4' WIDE OPENING AT THE FIRST COURSE OF THE TRASH ENCLOSURE FOR DRAINAGE
18	TRANSITION CURB FROM 6" TALL TO FLUSH CURB, REFERENCE DETAIL 08 ON SHEET C-700
19	PROPOSED CROSS STRIPING, REFERENCE DETAIL 15 ON SHEET C-700
20	TRANSFORMER PAD AND BOLLARDS SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR PER EVERGY SPECIFICATIONS
21	PARKING STALL STRIPING SHALL BE WHITE 4" ROLLED STRIPE DOUBLE PAINTED
22	PROPOSED LIGHT STANDARD. REFERENCE SHEET C-700 FOR LIGHTING BASE DETAILS. VERIFY BASE CENTER AND DIAMTER TO BACK OF CURB LOCATION. LIGHT STANDARD/POLE SHALL BE PLACED 3.0' THE BACK OF CURB TO THE EDGE OF SONOTUBE.
23	LIGHT DUTY ASPHALT PAVEMENT, REFERENCE DETAIL 06 ON SHEET C-700
24	MEDIUM DUTY ASPHALT PAVEMENT, REFERENCE DETAIL 05 ON SHEET C-700
25	HEAVY DUTY CONCRETE PAVEMENT, REFERENCE DETAIL 04 ON SHEET C-700
26	PRECAST WHEEL STOP, REFERENCE DETAIL 09 ON SHEET C-700

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #LC2000001
MISSOURI CERTIFICATE OF AUTHORITY #E-2002007849
MISSOURI CERTIFICATE OF AUTHORITY #A-2006007538

STATE OF MISSOURI STEVEN D. MARION NUMBER PE-2006007195 PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title: SITE PLAN

Sheet Number
C-100

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

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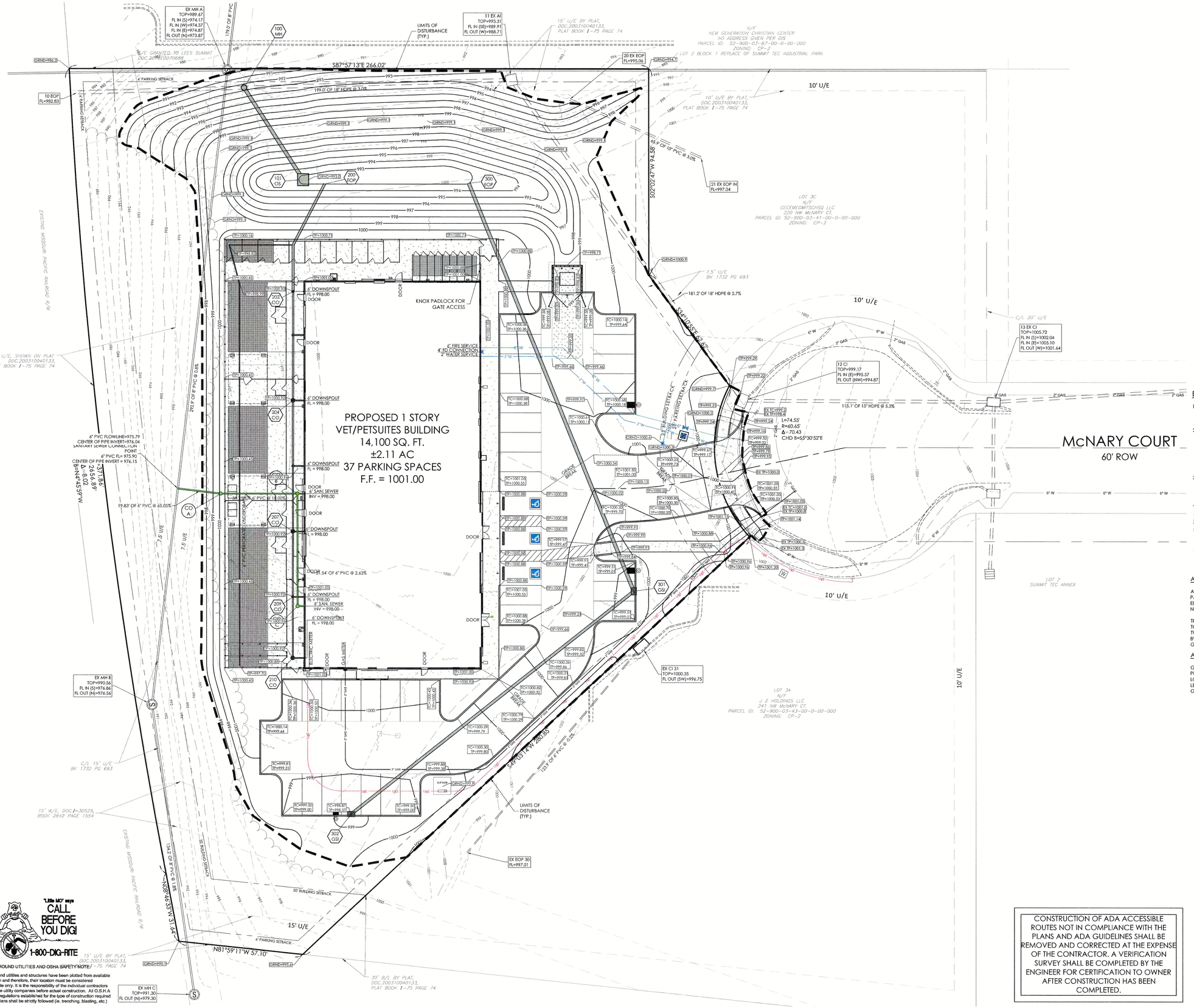

EARTHWORK QUANTITY NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO READ ALL APPLICABLE REPORTS IN ORDER TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS OF THE SITE.
2. THE CUT AND FILL QUANTITIES SHOWN ON THIS PLAN ARE FOR PERMITTING PURPOSES ONLY. THE GRADING CONTRACTOR IS CAUTIONED THAT THE QUANTITIES SHOWN ARE THE ENGINEER'S ESTIMATE FOR PERMITTING PURPOSES ONLY. THE GRADING CONTRACTOR SHALL COMPLETE HIS/HER OWN ESTIMATE WHEN BIDDING. NO ADDITIONAL COSTS WILL BE ALLOWED FOR GRADING WITHOUT JUSTIFICATION DUE TO PLAN CHANGES OR REVISIONS.
3. TRUCKS SHALL NOT EXCEED POSTED WEIGHT LIMITS FOR THE CITY OF LEE'S SUMMIT, COUNTY AND STATE BRIDGES DURING HAUL OPERATIONS.

ESTIMATED EARTHWORK QUANTITIES:

CUT = 1,749 CUBIC YARDS
FILL = 1,347 CUBIC YARDS x 1.15 (SHRINKAGE) = 1,549 CUBIC YARDS
EXPORT = 200 CUBIC YARDS

GENERAL CONTRACTOR SHALL PROVIDE A PROPOSED HAUL ROUTE FOR APPROVAL PRIOR TO ANY HAUL ACTIVITIES

ABBREVIATIONS:

ALL ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO TOP OF PAVEMENT OR FINISHED GROUND UNLESS NOTED OTHERWISE. ELEVATIONS TO POINTS OTHER THAN THE TOP OF PAVEMENT ARE NOTED AS FOLLOWS:

TP=TOP OF PAVEMENT
TC=TOP OF CURB
TW=TOP OF WALL
BW=FINISHED GROUND AT FACE OF WALL
GRND=FINISHED GROUND AT YARD DRAINS

APPLICABLE REPORTS:

GEOTECHNICAL EXPLORATION
PETSUITES
LOT 3B NW McNARY COURT
LEE'S SUMMIT, MISSOURI
GEOTECHNOLOGY PROJECT NO: J036943.01

CONSTRUCTION OF ADA ACCESSIBLE ROUTES NOT IN COMPLIANCE WITH THE PLANS AND ADA GUIDELINES SHALL BE REMOVED AND CORRECTED AT THE EXPENSE OF THE CONTRACTOR. A VERIFICATION SURVEY SHALL BE COMPLETED BY THE ENGINEER FOR CERTIFICATION TO OWNER AFTER CONSTRUCTION HAS BEEN COMPLETED.

1" = 20'
20 10 0 20 40
SCALE IN FEET

"Little MO" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY 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. All O.S.H.A rules and regulations established for the type of construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #LC2002000031
MISSOURI CERTIFICATE OF AUTHORITY #LS-2002007849
MISSOURI CERTIFICATE OF AUTHORITY #LA-2006007538

STATE OF MISSOURI STEVEN D. MARION NUMBER PE-2006007195 PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
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STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TIM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

Description of Changes

Revision Date

Sheet Title
GRADING PLAN

Sheet Number
C-200

Project No. 2008920
Drawn By Z. KUNTZ/A. JONES
Checked By M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

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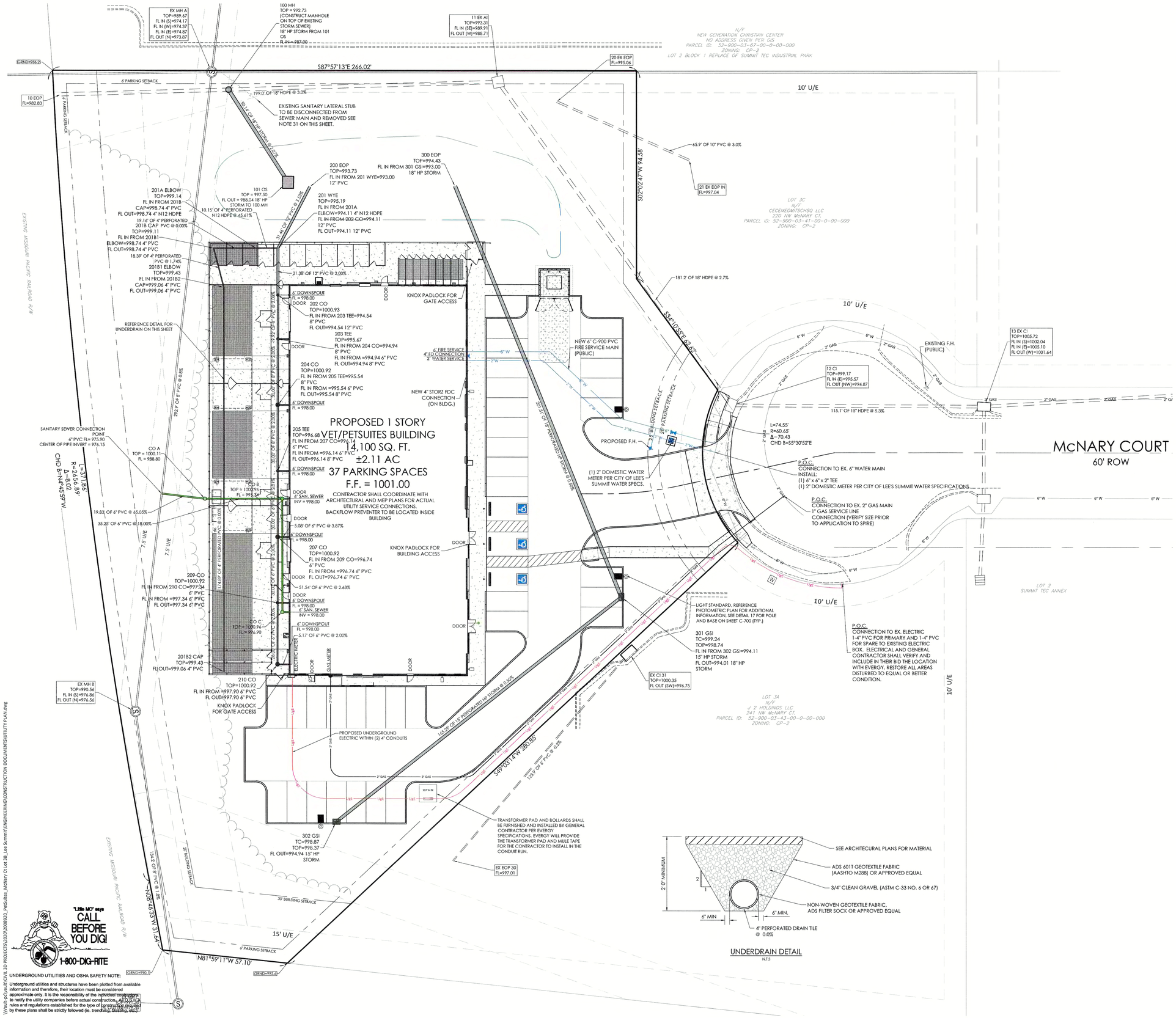


UTILITY PLAN NOTES:

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3'-6' COVER ON ALL WATERLINES AND 3'-6' ON ALL SANITARY SEWER LINES.
4. CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND TELEPHONE COMPANY FOR EXACT LOCATIONS OF TELEPHONE ENTRY TO THE BUILDING. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDUITS, PULL WIRES, TRENCHING, BACKFILL, ETC. REQUIRED BY TELEPHONE COMPANY.
5. CONNECTION FROM THE METER TO SITE UTILITY LINES SHALL BE MADE BY BUILDING CONTRACTOR.
6. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
7. REFER TO INTERIOR MECHANICAL, ELECTRIC AND PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
8. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
9. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
10. CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND SPIRE FOR EXACT LOCATION OF GAS ENTRY, G.C. TO INCLUDE IN BID FOR CONTRACTOR ANY GAS PIPING, CONDUITS, TRENCHING, BACKFILLING, ETC. REQUIRED BY SPIRE .
11. CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND EVERGY FOR EXACT LOCATION OF ELECTRIC ENTRY. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDUITS, TRENCHING, BACKFILLING, CABLES, ETC. REQUIRED BY ELECTRIC COMPANY.
12. REFER TO MEP PLANS FOR GAS SERVICE SIZING.
13. ALL UTILITY SEWER TRENCH BACKFILL SHALL HAVE GRANULAR BACKFILL AND BE MECHANICALLY COMPACTED.
14. THE CONTRACTOR SHALL VERIFY THE LOCATION, CONDITION AND ELEVATION OF ALL PROPOSED SEWER CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT WOULD INTERFERE WITH THE PROPOSED SEWER DESIGN SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
15. ALL PERMIT FEES AND COSTS ASSOCIATED WITH BRINGING UTILITY, SEWER AND WATER SERVICES TO THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FEES AND COSTS SHALL BE INCLUDED IN THE CONTRACTORS BID.
16. ALL CONSTRUCTION MATERIALS USED SHALL CONFORM TO THE CURRENT VERSION OF THE CITY OF LEE'S SUMMIT AND STATE OF MISSOURI SPECIFICATIONS.
17. G.C. IS TO PROVIDE TRENCH PULL WIRE AND CONDUIT FOR TELEPHONE AND ELECTRICAL SERVICES. BACKFILL AND GRADE SMOOTH FOR A COMPLETE TELEPHONE AND ELECTRIC INSTALLATION SHALL BE BY THE GENERAL CONTRACTOR.
18. GENERAL CONTRACTOR IS TO PROVIDE TRENCH, BACKFILL AND GRADE SMOOTH FOR A COMPLETE WATER LINE INSTALLATION.
19. ANY DISTURBED SIDEWALK OR CONCRETE PAVEMENT SHALL BE FULL SLAB REPLACEMENT.
20. EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
21. ALL WATER LINES GREATER THAN 3" SHALL BE CLASS 52 DUCTILE IRON PIPE. WATER LINES SMALLER THAN 3" SHALL BE TYPE "K" COPPER.
22. ALL CONNECTIONS TO PUBLIC WATER SHALL BE AS REQUIRED BY CITY OF LEE'S SUMMIT WATER CODES. WATER TAP AND METER SHALL BE INSTALLED BY CITY OF LEE'S SUMMIT WATER UP TO THE RIGHT-OF-WAY LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING CITY OF LEE'S SUMMIT TO SCHEDULE CONNECTION TO PUBLIC WATER.
23. SANITARY LINES SHALL BE PVC MEETING ASTM D-3034 SDR 26 EXCEPT FOR PIPES THAT CROSS ABOVE WATER MAINS. THIS PIPE SHALL BE AWA C900 UNLESS WATER MAIN IS CASED. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING CITY OF LEE'S SUMMIT SEWER TO SCHEDULE CONNECTION TO PUBLIC SEWER.
24. CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS FOR ANY DISRUPTIONS TO EXISTING UTILITY SERVICES.
25. CONTRACTOR IS RESPONSIBLE FOR PAVEMENT REPAIR AND REPLACEMENT REQUIRED FOR ALL UTILITY CONNECTIONS AND INSTALLATIONS.
26. THE OWNER/DEVELOPER WILL BE RESPONSIBLE FOR ANY AND ALL APPLICABLE TAP AND SERVICE FEES AS LISTED IN THE MOST CURRENT EDITION OF CITY OF LEE'S SUMMIT RULES AND REGULATIONS FOR CUSTOMER SERVICE.
27. COORDINATION WITH THE ELECTRIC, TELEPHONE AND CATV COMPANIES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE CONDUCTED IN A MANNER THAT RESULTS IN AN EFFICIENT AND TIMELY RELOCATION AND REMOVAL OF THE EXISTING FACILITIES.
28. GROUND ELEVATIONS SHALL BE WITHIN 6" OF THE FINAL PROPOSED ELEVATIONS PRIOR THE START OF ELECTRIC, TELEPHONE AND CATV RELOCATIONS OR INSTALLATIONS OF NEW SERVICE.
29. CONTRACTOR SHALL REFERENCE ELECTRICAL PLANS FOR FURTHER INFORMATION AND FOR CONDUIT ROUTING TO LIGHT STANDARDS AND ANY GROUND MOUNTED SIGNS.
30. ALL UTILITY IMPROVEMENTS (SERVICES, EXTENSIONS, CONNECTIONS, ETC.) TO BE "PRIVATE".
31. BUILDING SEWER STUBS BEING DISCONNECTED FROM THE SEWER MAIN SHALL BE DISCONNECTED BY THE WATER UTILITIES DEPARTMENT, AFTER THE CONTRACTOR HAS PROVIDED ACCESS TO THE SEWER MAIN VIA AN OSHA COMPLIANT EXCAVATION WITH PROPER SHORING AS NECESSARY. WATER UTILITIES STAFF RESERVE THE RIGHT TO NOT ENTER ANY TRENCH DETERMINED TO BE UNSAFE.

1" = 20'
20 10 0 20 40
SCALE IN FEET

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #E-2006000031
KANSAS CERTIFICATE OF AUTHORITY #E-2006007594
MISSOURI CERTIFICATE OF AUTHORITY #A-2006007538

STATE OF MISSOURI
STEVEN D. MARION
NUMBER PE-2006019195
PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006019195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW McNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

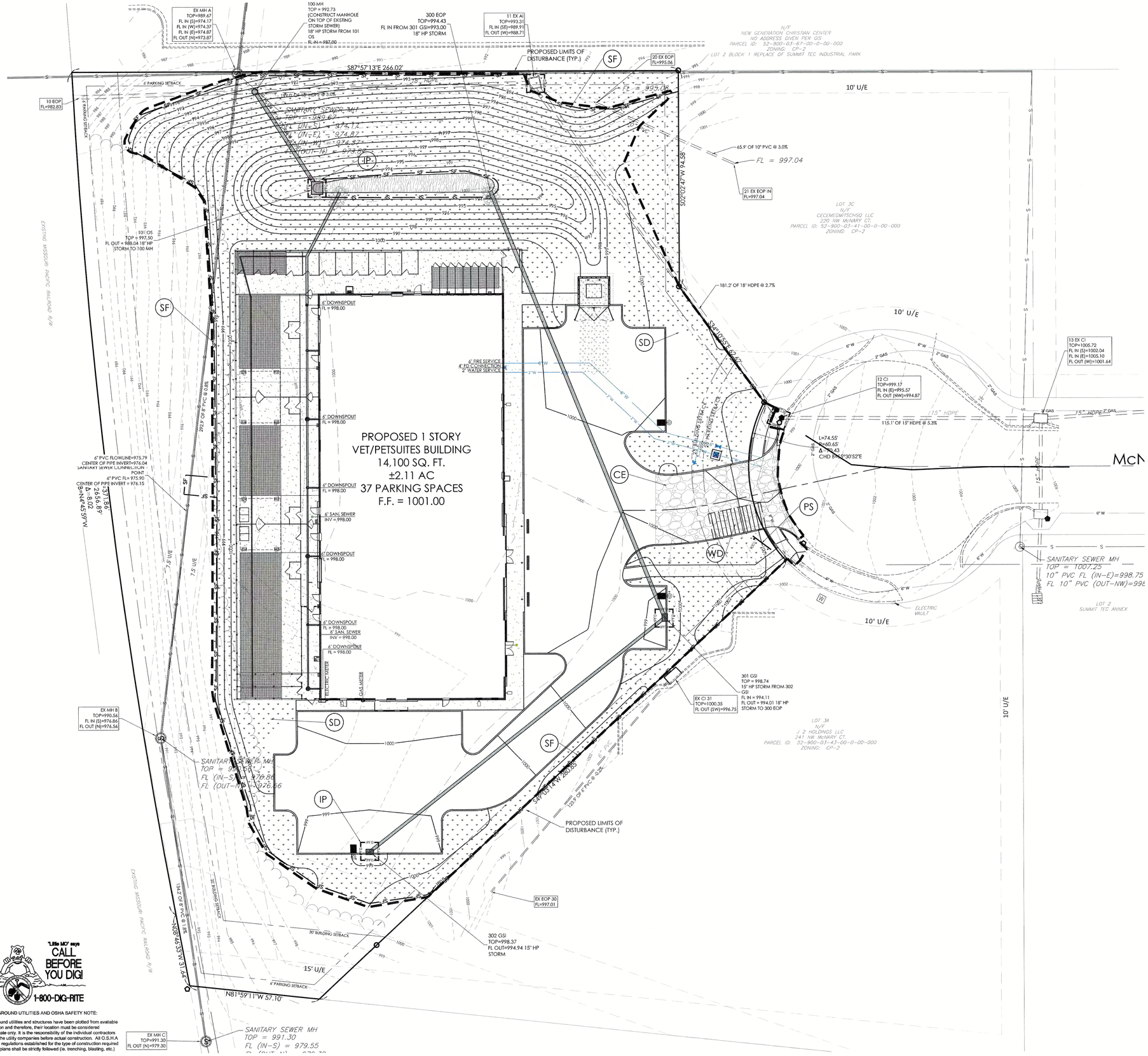
#	Revision Date	Description of Changes

Sheet Title: UTILITY PLAN

Sheet Number
C-300

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION



"Little MO" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY 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. All O.S.H.A rules and regulations established for the type of construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

EROSION CONTROL SYMBOL LEGEND

- LEASE LINE/PROPERTY LINE
- STORM PIPE
- 100 — EXISTING CONTOUR
- 100 — PROPOSED CONTOUR
- (LD) LIMITS OF ANTICIPATED DISTURBED AREA / CONSTRUCTION LIMITS
- (SF) SF — SF — SILT FENCE (REFERENCE DRAWING 806-70.00 ON SHEET C-401)
- (GB) GRAVEL OR SAND BAG PROTECTION (REFERENCE DRAWING 806-45.08 ON SHEET C-401)
- (CE) CONSTRUCTION EXIT (REFERENCE DRAWING 806-46.01 ON SHEET C-401)
- (WD) CONSTRUCTION WASHDOWN STATION (REFERENCE DRAWING 806-46.00 ON SHEET C-401)
- (SD) SEEDING / SOD
- (TS) TOPSOIL WITH VEGETATION (REFERENCE SHEET I-100)
- (IP) IPFD IPFD INLET PROTECTION (REFERENCE DRAWING 806-45.12 ON SHEET C-401)
- (PS) PERMIT SIGN (REFERENCE DETAIL SHEET C-401)

CONSTRUCTION SEQUENCING ACTIVITIES

- INSTALL PROJECT SIGN & POST PERMITS
- INSTALL SILT & CONSTRUCTION FENCING
- INSTALL INLET PROTECTION
- INSTALL CONSTRUCTION ENTRANCE / EXIT
- INSTALL VEHICULAR WASH DOWN AREA
- BEGIN EXCAVATION & SITE DEMOLITION
- BEGIN BUILDING FOOTINGS & FOUNDATIONS
- BEGIN UTILITY TRENCHING & EXCAVATION
- PARKING & DRIVE AREA PAVING
- FINISHED GRADING & LANDSCAPING
- SEEDING & SOD WORK
- REMOVAL OF EROSION CONTROL AND OTHER BMP's

NOTES:

1. REFER TO THE EROSION CONTROL DETAIL SHEET & STORMWATER POLLUTION PREVENTION NARRATIVE FOR ADDITIONAL NOTES AND REQUIREMENTS.
2. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE NPDES PERMIT ISSUED FOR THE SITE AND POST IT AT THE PROJECT SITE PRIOR TO ANY LAND DISTURBING ACTIVITIES. REFER TO SITE SIGN DETAIL ON THE EROSION CONTROL DETAIL SHEET.
3. CONTRACTOR SHALL INSTALL BMP'S NOTED ON THIS PLAN PRIOR TO BEGINNING ANY LAND DISTURBING, DEMOLITION, OR TREE REMOVAL ACTIVITIES.
4. THE CONTRACTOR SHALL INSTALL CONSTRUCTION ENTRANCE/EXIT AND MAINTAIN THESE ENTRANCES DURING CONSTRUCTION.
5. THE JOB SITE TRAILER, DUMPSTER, FUELING AREA, STORAGE & LAY-DOWN AREA SHALL BE LOCATED BY THE GENERAL CONTRACTOR AT THE START OF CONSTRUCTION. THESE ITEMS MUST BE NOTED BY THE CONTRACTOR ON THE SWPPP DRAWINGS.
6. SOIL STOCKPILES AND DEMOLITION DEBRIS STOCKPILES SHALL HAVE SILT FENCES INSTALLED IF LEFT ON SITE & UNDISTURBED FOR MORE THAN 13 DAYS.

ALL PROJECT SITES ARE REQUIRED TO COMPLY WITH REQUIREMENTS OF THE "CLEAN WATER ACT" ESTABLISHED BY THE US ENVIRONMENTAL PROTECTION AGENCY.

THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM REQUIRES PERMITS TO BE ISSUED BY REGULATORY AGENCIES WHEN PROJECT SITES DISTURB 1 ACRE OR MORE.

1" = 20'
20 10 0 20 40
SCALE IN FEET

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #:2010000291
KANSAS CERTIFICATE OF AUTHORITY #:CA-0000709
MISSOURI CERTIFICATE OF AUTHORITY #:LA 2006007538

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
PE-2006007195
PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
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STEVEN D. MARION P.E.
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250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title: EROSION CONTROL PLAN

Sheet Number
C-400

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

\\Vault-pc\vault\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\EROSION CONTROL PLAN.dwg

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE LAND DISTURBANCE PERMIT FOR THIS SITE PRIOR TO THE START OF CONSTRUCTION. A LAND DISTURBANCE PERMIT FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES WILL BE REQUIRED. A GRADING PERMIT FROM THE CITY OF CITY OF LEES SUMMIT WILL BE REQUIRED.

2. THE CONTRACTOR SHALL KEEP & MAINTAIN A COPY OF THE LAND DISTURBANCE PERMIT(S), EROSION CONTROL PLANS, AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AT THE PROJECT SITE DURING CONSTRUCTION.

3. ALL EROSION CONTROL MEASURES MUST MEET LOCAL REQUIREMENTS AND THE "PROTECTING WATER QUALITY, A FIELD GUIDE TO EROSION, SEDIMENT AND STORM WATER BEST MANAGEMENT PRACTICES FOR DEVELOPMENT SITES IN MISSOURI AND KANSAS". THE DOCUMENT IS AVAILABLE FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES AND CAN BE DOWNLOADED FROM THE DNR WEBSITE AT HTTP://WWW.DNR.MO.GOV/ENV/WPP/WPCP GUIDE.HTM.

4. PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES, EROSION AND SEDIMENT CONTROL MEASURES AND APPLICABLE BMPS SHALL BE INSTALLED.

5. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER A MINIMUM OF 48 HOURS PRIOR TO THE START OF GRADING SO THAT SITE BMPS CAN BE VERIFIED.

6. THE GENERAL CONTRACTOR SHALL HAVE ULTIMATE CONTROL OF THE SITE AND REQUIRE THAT ALL SUBCONTRACTORS, UTILITY COMPANIES, AND ANY PERSON PERFORMING LAND DISTURBING ACTIVITIES CONFORM TO THE REQUIREMENTS OF THE PERMITS ISSUED FOR THE SITE. THIS INCLUDES CONFORMANCE TO THE STORM WATER POLLUTION PLAN PREPARED & MAINTAINED FOR THE SITE.

7. THE CONTRACTOR IS RESPONSIBLE FOR MANAGING STORM WATER RUNOFF AND EROSION THROUGHOUT CONSTRUCTION.

8. THIS EROSION CONTROL PLAN HAS BEEN PREPARED AS A BEGINNING POINT AND SHOULD EVOLVE AS SITE CONDITIONS WARRANT. THE GENERAL CONTRACTOR SHALL IMPLEMENT ADDITIONAL BMPS AS DEEMED NECESSARY TO ADEQUATELY RETAIN SEDIMENT ON-SITE.

9. THE CONTRACTOR SHALL MAINTAIN AND PROTECT EXISTING TREES AND VEGETATION.

10. CONSTRUCTION MATERIAL STORAGE AND LAY-DOWN AREAS ARE TO BE AWAY FROM DRAINAGE COURSES AND LOW AREAS.

11. PROVIDE CONTAINERS FOR THE DISPOSAL OF WASTE PAINTS, SOLVENTS, CLEANING COMPOUNDS, ETC.

12. PROVIDE TRASH CONTAINERS ONSITE AND PERFORM REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE. SOLID WASTE SHALL INCLUDE, BUT NOT BE LIMITED TO, SCRAP BUILDING MATERIALS, PRODUCT/MATERIAL PACKAGING, FOOD AND DRINK CONTAINERS.

13. THE CONTRACTOR SHALL INSTALL CONTAINMENT BERMS & DRIP PANS AT PETROLEUM PRODUCT & LIQUID STORAGE TANK AREAS.

14. THE CONTRACTOR SHALL PROVIDE CONCRETE WASH OUT AREAS. CONCRETE TRUCKS SHALL NOT DISCHARGE SURPLUS CONCRETE OR WASH WATER ON THE GROUND OR INTO DITCHES. CONCRETE WASH-OUT AREAS SHALL BE DESIGNED TO ENSURE CONCRETE PARTICLES WILL NOT BE RELEASED FROM THE CONSTRUCTION SITE.

15. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES IF CONDITIONS WARRANT. DUST CONTROL MAY INCLUDE WATERING/IRRIGATION, WIND BARRIERS, SPRAY ON ADHESIVES, TILLING, OR CHEMICAL TREATMENT. ANY CLEANUP TO ADJACENT PROPERTIES DUE TO INADEQUATE DUST CONTROL WILL BE THE CONTRACTOR'S RESPONSIBILITY.

16. THE CONTRACTOR SHALL PROVIDE FOR SOLID WASTE/TRASH COLLECTION. THE CONSTRUCTION SITE SHALL BE KEPT CLEAN AND ORDERLY.

17. THE CONTRACTOR SHALL PROVIDE FOR SANITARY WASTE COLLECTION DURING CONSTRUCTION. PORTA POTTIES SHALL BE LOCATED BY THE CONTRACTOR AND NOTED ON THE DRAWINGS.

CONSTRUCTION SWPPP LOG

1. THE CONTRACTOR SHALL DEVELOP A CONSTRUCTION SWPPP LOG AT THE START OF CONSTRUCTION. THE CONSTRUCTION SWPPP LOG SHALL INCLUDE INSTALLATION DATES OF BMP'S, MAINTENANCE RECORDS, RAINFALL RECORDS, AND ANY ITEM THAT ADDRESSES THE MANAGEMENT OF STORM WATER POLLUTION PREVENTION MEASURES AT THE PROJECT SITE.

2. REFER TO THE SWPPP DOCUMENT/NARRATIVE FOR FORMS AND OTHER DETAILED INFORMATION REGARDING STORM WATER POLLUTION PREVENTION PRACTICES.

3. THE SWPPP LOG SHALL BE KEPT ON THE JOB SITE AND SHALL BE MADE AVAILABLE FOR REVIEW AT THE REQUEST OF APPLICABLE GOVERNING AUTHORITIES.

4. BMP'S SHALL BE INSPECTED ONCE A WEEK AND WITHIN 24 HRS OF RAIN EVENTS OF 1/2" OR GREATER. INSPECTIONS ARE TO BE DOCUMENTED IN THE SWPPP LOG. REPAIR AND MAINTENANCE TO BMP'S SHALL BE DONE IMMEDIATELY.

5. THE CONTRACTOR SHALL SUBMIT AN INSPECTION REPORT WITHIN 72 HOURS AFTER EVERY STORM EVENT TO THE CITY ENGINEER.

6. THE CONTRACTOR SHALL ENSURE THE SITE CONFORMS TO THE REQUIREMENTS OF THE LAND DISTURBANCE PERMIT AND INSTALL ADDITIONAL BMP'S SHOULD SITE CONDITIONS WARRANT.

7. AFTER CONSTRUCTION, THE CONSTRUCTION SWPPP LOG SHALL BE RETAINED BY THE CONTRACTOR FOR A MINIMUM OF 3 YEARS.

FINAL SITE STABILIZATION

1. ONCE GRADED AREAS ARE CONSTRUCTED TO FINAL GRADES, PERMANENT STABILIZATION SHALL BE ESTABLISHED.

2. THE CONTRACTOR SHALL RESTORE OFF-SITE AREAS DAMAGED BY CONSTRUCTION TO A CONDITION, EQUAL TO, OR BETTER THAN THE CONDITION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

3. ALL EROSION CONTROL BMP's SHALL REMAIN IN PLACE UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED.

4. ONCE THE SITE HAS REACH FINAL STABILIZATION, THE CONTRACTOR IS TO CLEAN AND REMOVE DEBRIS FROM BMP'S AND STORM WATER COLLECTION AREAS. BMP'S ARE THEN TO BE REMOVED.

POTENTIAL POLLUTANTS THAT MAY BE FOUND ON SITE DURING CONSTRUCTION:

Material Trade Name	Chemical/Physical Description	Storm Water Pollutants
Erosion	Solid Particles	Soil, sediment
Fertilizer	Liquid or solid grains	Nitrogen, phosphorus
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbonates, arsenic
Asphalt	Black solid	Oil, petroleum distillates
Concrete	White solid	Limestone, sand
Plaster	White granules or powder	Calcium Sulphate, calcium carbonate, sulfuric acid
Glue, adhesives	White or yellow liquid	Polymers, epoxies
Paints	Various colored liquid	Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic
Curing compounds	Creamy white liquid	Naphtha
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethylbenzene, toluene, xylene, MTBE
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)

MATERIALS STORED ON SITE:

1. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS. IF POSSIBLE, MATERIALS SHALL BE STORED UNDER A ROOF OR OTHER ENCLOSURE.

2. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE MANUFACTURER'S LABEL. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF THE PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER. THE MANUFACTURER'S RECOMMENDATIONS FOR THE PROPER USE AND DISPOSAL OF THEIR PRODUCTS SHALL BE FOLLOWED. THE CONSTRUCTION MANGER SHALL INSPECT THE ON-SITE MATERIALS DAILY TO ENSURE THE PROPER USE AND DISPOSAL.

3. HAZARDOUS PRODUCTS SHALL BE KEPT IN RESEALABLE CONTAINERS. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED. ALL FEDERAL, STATE AND CITY REGULATIONS SHALL BE FOLLOWED WHEN DISPOSING OF ANY HAZARDOUS WASTE.

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CALL BEFORE YOU DIG!
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UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

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MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS:

1. SILT FENCING SHALL BE INSPECTED DAILY DURING PERIODS OF RAINFALL. IMMEDIATELY AFTER EACH SIGNIFICANT RAINFALL EVENT, AND WEEKLY DURING PERIODS OF NO RAINFALL. REPAIRS TO SILT FENCES SHALL BE DONE IMMEDIATELY. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN THE SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.

2. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSPECTED REGULARLY, AFTER EVERY RAINFALL EVENT, AND DURING HIGH VOLUMES OF TRAFFIC. REPAIRS TO THE CONSTRUCTION ENTRANCE SHALL BE MADE IMMEDIATELY. ALL SEDIMENTS, AND ALL OTHER MATERIALS, TRACKED ONTO PUBLIC ROADWAYS SHALL BE REMOVED IMMEDIATELY.

3. SELECT STOCKPILE LOCATION TO AVOID SLOPES AND NATURAL DRAINAGE WAYS, AVOIDING TRAFFIC ROUTES. ON LARGE SITES, RE-SPREADING IS EASIER AND MORE ECONOMICAL WHERE TOPSOIL IS STOCKPILED IN SMALL PILES LOCATED NEAR AREAS WHERE THEY WILL BE USED.

4. INSPECT AND MAINTAIN ALL BMPS LOCATED DOWN HILL OF AREA BEING GRADED, AS INDICATED. ADDITIONAL BMPS SHOULD BE CONSTRUCTED IF IT IS OBSERVED THAT THE PROPOSED BMPS ARE NOT EFFECTIVELY LIMITING SEDIMENT TRANSPORT FROM THE SITE. TYPICAL BMPS THAT MIGHT BE UTILIZED INCLUDE, BUT ARE NOT LIMITED TO:

- SEDIMENT BARRIERS - USE SILT FENCES, STRAW BALE SEDIMENT TRAPS OR OTHER BARRIERS WHERE NECESSARY TO RETAIN SEDIMENT
- TEMPORARY SEEDING - PROTECT TOPSOIL STOCKPILES BY TEMPORARILY SEEDING AS SOON AS POSSIBLE, NO MORE THAN 14 CALENDAR DAYS AFTER THE FORMATION OF THE STOCKPILE
- PERMANENT VEGETATION - IF STOCKPILES WILL NOT BE USED WITHIN 12 MONTHS, THEY MUST BE STABILIZED WITH PERMANENT VEGETATION TO CONTROL EROSION AND WEED GROWTH

SPILL CONTROL OF POLLUTANTS:

1. ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND SHALL RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.

2. CONCRETE TRUCKS SHALL ONLY WASH-OUT OR DISCHARGE SURPLUS CONCRETE, OR DRUM-WASH WATER, AT DEDICATED CONCRETE TRUCK WASH-OUT AREAS. NO EXCESS CONCRETE OR DRUM WASH WATER SHALL BE RELEASED FROM THE SITE.

3. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

4. ALL ASPHALTIC SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS.

5. FERTILIZERS SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC CONTAINER TO AVOID SPILLS.

6. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE RELAYED TO SITE PERSONNEL AND THEY SHALL BE MADE AWARE OF THE LOCATION OF THE CLEANUP SUPPLIES. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE STORED ON-SITE. IN CASE OF A SPILL, THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND CLEANUP PERSONNEL SHALL WEAR THE APPROPRIATE CLOTHING TO PREVENT INJURY FROM CONTACT WITH THE HAZARDOUS SUBSTANCE. SPILLS OF TOXIC AND HAZARDOUS MATERIAL, REGARDLESS OF THE SIZE OF THE SPILL, SHALL BE REPORTED TO THE APPROPRIATE STATE AND LOCAL GOVERNMENT AGENCIES IMMEDIATELY AFTER DISCOVERY.

CONSTRUCTION ENTRANCE (CE)

1. THE LOCATION OF A CONSTRUCTION ENTRANCE/EXIT HAS BEEN SHOWN ON THE EROSION CONTROL PLAN(S). THE CONTRACTOR SHALL INSTALL OR ESTABLISH A DESIGNATED CONSTRUCTION ENTRANCE/EXIT AT THE START OF CONSTRUCTION. IN THE EVENT THE ENTRANCE IS LOCATED IN A DIFFERENT LOCATION, THE CONTRACTOR SHALL UPDATE THE EROSION CONTROL PLAN.

2. A PERMIT SIGN SHALL BE INSTALLED AT OR NEAR THE CONSTRUCTION ENTRANCE FOR POSTING RELEVANT CONSTRUCTION PERMITS FOR THE PROJECT.

3. AS PART OF THE CONSTRUCTION ENTRANCE, THE CONTRACTOR SHALL INSTALL A VEHICLE WASH DOWN AREA. THE WASH DOWN AREA IS TO PREVENT THE TRACKING OF MUD AND DEBRIS FROM THE PROJECT SITE.

4. TRACKING IS NOT PERMISSIBLE. ANY TRACKING OF MUD AND/OR DEBRIS ONTO OFF-SITE ROADS SHALL BE CLEANED IMMEDIATELY.

5. LOCATION AND FINAL DIMENSIONS OF THE CONSTRUCTION ENTRANCE, WASH DOWN AREA AND STAGING AREAS SHALL BE ESTABLISHED BY THE GENERAL CONTRACTOR.

6. ALL CONSTRUCTION TRAFFIC LEAVING THE PROJECT SITE SHALL UTILIZE THE CONSTRUCTION ENTRANCE/EXIT.

SILT FENCE (SF)

7. SILT FENCE TO BE ADJUSTED AS NECESSARY FOR CONSTRUCTION ACTIVITY.

8. UNLESS NOTED OTHERWISE, SILT FENCE SHALL BE A WOVEN GEOTEXTILE FABRIC SUCH AS MIRAFI 100X OR EQUAL.

9. REFER TO THE SILT FENCE DETAIL FOR INSTALLATION REQUIREMENTS.

10. SILT FENCES SHALL ONLY BE USED FOR STORM WATER SHEET FLOW CONDITIONS.

11. SILT FENCES SHALL FOLLOW CONTOURS AND UTILIZE "J" HOOKS TO HELP TRAP SEDIMENT.

12. SILT FENCES SHALL BE INSPECTED REGULARLY FOR RIPS, TEARS, OR DETERIORATION. DAMAGED FENCE SHALL BE REPLACED.

13. WHEN SEDIMENT BUILDS UP TO ONE HALF THE HEIGHT OF THE FENCE, IT SHALL BE CLEANED AND REINSTALLED.

INLET PROTECTION (IP)

1. REFER TO THE INLET PROTECTION DETAILS FOR VARIOUS TYPES OF INLET PROTECTION. THE CONTRACTOR SHALL HAVE THE OPTION OF UTILIZING ANY TYPES SHOWN OR ACCEPTABLE ALTERNATE.

2. INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY AROUND EACH INLET ONCE INLET CONSTRUCTION IS COMPLETED. INLET PROTECTION SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE SITE HAS BEEN CONSIDERED STABLE.

SOD OR SEEDING, MULCHING AND FERTILIZING (SD) (SM)

1. ALL DISTURBED AREAS WHICH REMAIN UNWORKED FOR 14 DAYS, SHALL BE TEMPORARILY STABILIZED.

2. ALL TEMPORARY DIVERSION BERMS, DIVERSION DITCHES AND SOIL STOCKPILE AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER GRADING.

3. ALL AREAS DISTURBED DURING CONSTRUCTION, WHICH WILL NOT BE PAVED, SHALL HAVE A MINIMUM OF 4" OF TOPSOIL INSTALLED.

4. GRASSED AREAS SHALL BE EITHER SODDED OR SEEDED AND MULCHED. REFER TO THE SITE AND LANDSCAPING PLANS FOR LOCATIONS OF EACH.

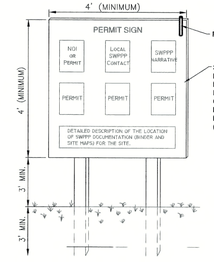
5. ALL RIGHT-OF-WAYS SHALL HAVE SOD INSTALLED. SOD SHALL MEET THE REQUIREMENTS OF THE LOCAL JURISDICTION AND/OR THE DEPARTMENT OF TRANSPORTATION.

6. SOD SHALL BE DROUGHT RESISTANT FESCUE.

7. TEMPORARY IRRIGATION MAY BE REQUIRED TO HELP ESTABLISH SODDED/SEEDED AREAS.

8. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SODDED AND SEEDED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

9. FINAL STABILIZATION MUST MEET THE LAND DISTURBANCE PERMIT REQUIREMENTS.



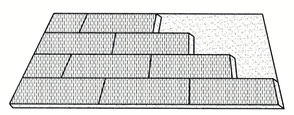
PERMIT SIGN DETAIL
(NOT TO SCALE)

NOTES:

1. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE PERMIT HAS BEEN TERMINATED.
3. CONTRACTOR SHALL POST OTHER STORMWATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
4. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

\\VeluPorOneNAS\ONE 3D PROJECTS\2020\2008920_PetSuites_McMary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\EROSION CONTROL DETAILS.dwg

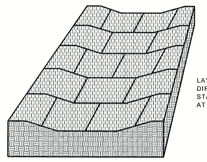
NEW	REVISIONS				
1/15/04	10/10/11	1/1/16			



1) LAY SOD IN A STAGGERED PATTERN WITH STRIPS BUTTED TIGHTLY AGAINST EACH OTHER.

2) ON SLOPES GREATER THAN 4%, USE PEGS OR STAPLES TO FASTEN SOD FIRMLY AT THE CORNERS AND CENTERS.

INSTALLATION OF GRASS SOD



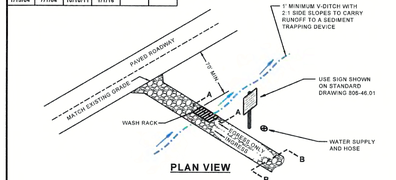
LAY SOD PERPENDICULAR TO THE DIRECTION OF FLOW. USE PEGS OR STAPLES TO FASTEN SOD FIRMLY AT THE CORNERS AND CENTERS.

INSTALLATION OF SOD IN WATERWAYS

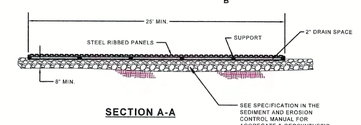
NOTE: JUTE MATTING CAN BE USED WHERE ADDITIONAL STABILITY IS REQUIRED

SAINT LOUIS COUNTY
DEPARTMENT OF HIGHWAYS AND TRAFFIC
CLAYTON, MISSOURI
TYPICAL BMP DETAIL
SODDING
REVISION DATE: November 1, 2014
DRAWING 803-10.00

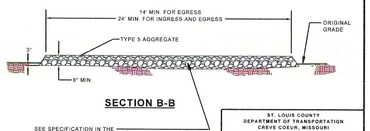
NEW	REVISIONS				
1/15/04	7/1/04	10/10/11	1/1/16		



PLAN VIEW



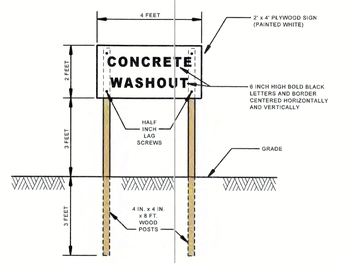
SECTION A-A



SECTION B-B

ST. LOUIS COUNTY
DEPARTMENT OF TRANSPORTATION
CREVE COEUR, MISSOURI
TYPICAL BMP DETAIL
WASHDOWN STATION
REVISION DATE: January 1, 2016
DRAWING 806-46.00

NEW	REVISIONS				
4/15/05	10/10/11	1/1/16			



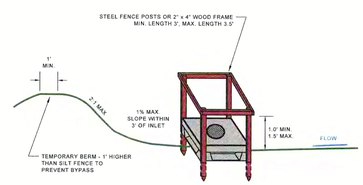
CONCRETE WASHOUT SIGN DETAIL
(OR EQUIVALENT AS APPROVED BY COUNTY)

GENERAL NOTES

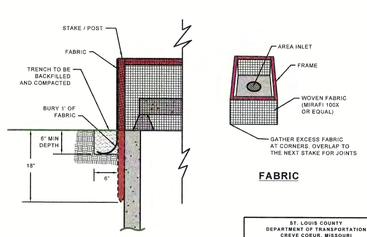
1) DO NOT SCALE DRAWING. FOLLOW DIMENSIONS.
2) ACTUAL LAYOUT DETERMINED IN THE FIELD
3) THE "CONCRETE WASHOUT" SIGN SHALL BE INSTALLED WITHIN 30 FEET OF EACH TEMPORARY CONCRETE WASHOUT FACILITY.

ST. LOUIS COUNTY
DEPARTMENT OF TRANSPORTATION
CREVE COEUR, MISSOURI
TYPICAL BMP DETAIL
CONCRETE WASTE MANAGEMENT
(CONCRETE WASHOUT SIGN)
REVISION DATE: January 1, 2016
DRAWING 806-46.03

NEW	REVISIONS				
1/15/04	10/10/11	1/1/16			



PERSPECTIVE



ELEVATION

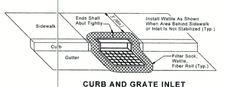
FABRIC

ST. LOUIS COUNTY
DEPARTMENT OF TRANSPORTATION
CREVE COEUR, MISSOURI
TYPICAL BMP DETAIL
INLET PROTECTION - FABRIC DROP
REVISION DATE: January 1, 2016
DRAWING 806-45.12

NEW	REVISIONS				
11/1/14	1/1/16				

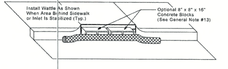
GENERAL NOTES

1) LOCATION, DIAMETER AND LENGTH OF SOCK IS DEPENDENT ON THE INLET/CUTTER BEING PROTECTED (I.E. DOUBLE, TRIPLE INLET, ETC.)
2) GRAVEL FILTER BAGS MAY BE SUBSTITUTED FOR FILTER SOCKS.
3) SOME LOCATIONS WILL NOT HAVE SIDEWALK (AS SHOWN IN THIS DETAIL).
4) IF THE AREA BEHIND THE INLET (AND SIDEWALK) IS NOT STABILIZED, A BMP SHALL BE USED TO PREVENT POLLUTANTS FROM ENTERING THE INLET FROM BEHIND.
5) WHEN A WATTLE IS USED TO PREVENT POLLUTANTS FROM ENTERING AN INLET FROM BEHIND, IT MUST BE PLACED ON A SIDEWALK TO MAINTAIN A MINIMUM 3 FOOT WALKING PATH. THE BMP SHALL BE MAINTAINED TO PREVENT SEDIMENT ACCUMULATION ON THE SIDEWALK.
6) SOCKS / BAGS (BMP) SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITY THAT DRAINS TO THE INLET, AND ACTIVATED AFTER INSTALLATION OF PROPOSED INLETS.
7) ACCUMULATED SEDIMENT SHALL BE REMOVED BEFORE IT REACHES ONE HALF THE DIAMETER OF THE SOCK OR BAG HEIGHT AT A MINIMUM OR ENCROACHES ONTO A TRAVEL LANE.
8) SEE GRAVEL BAG, FILTER SOCK (WATTLE, FIBER ROLL) AND INLET PROTECTION SPECIFICATIONS IN THE SEDIMENT AND EROSION CONTROL MANUAL FOR ADDITIONAL INFORMATION. GRAVEL BAGS MUST BE LAYERED AND PLACED TIGHTLY SUCH THAT NO GAPS ARE EVIDENT.
9) LEAVE ONE GRAVEL BAG GAP IN THE TOP LAYER TO PROVIDE A SPILLWAY FOR OVERFLOW.
10) STRAW BALES MAY NOT BE USED AS A BMP. INSTALL A PAIR OF FILTER SOCKS, NEXT TO EACH OTHER, PARALLEL TO THE CURB INLET IF DIRECTED BY THE COUNTY.
11) BMP'S MUST BE INSTALLED TO ALLOW THE INLET / GUTTER TO FUNCTION WITHOUT COMPLETELY BLOCKING FLOWS TO ELIMINATE LOCALIZED FLOODING. CHOOSE THE DIAMETER OF SOCK AND LAYER(S) OF BAGS SUITABLE TO THE INDIVIDUAL APPLICATION.
12) INLET PROTECTION IS NOT A STAND ALONE BMP AND SHOULD BE USED IN CONJUNCTION WITH OTHER UP GRADIENT BMP's.
13) SOCKS NEED TO BE REMOINTED FOR USE AROUND INLETS (INTERNAL ROLL WEIGHT OR BY PLACING A WEIGHT, SUCH AS A CONCRETE BLOCK, ON THE DOWN STREAM SIDE OF THE SOCK) OR ANOTHER TYPE OF BMP IF LOCALIZED FLOODING IS POSSIBLE.
14) AT LOCATIONS WITHOUT CURBS, THE GUTTER PROTECTION MAY BE SHAPED INTO A HOMESHOE, OR SIMILAR SHAPE, TO PREVENT FLOWS FROM DIRECTION OF FLOW. GUTTER PROTECTION CAN HELP PRE-TREAT STORM WATER IF NEEDED.
15) AT LOCATIONS WITHOUT CURBS, PLACE BMP's OFF CHOICE COMPLETELY AROUND THE INLET. OVERLAP ENDS IF NEEDED.

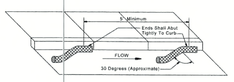


CURB AND GRATE INLET
FILTER SOCK PROTECTION DETAIL

CURB INLET FILTER SOCK PROTECTION DETAIL



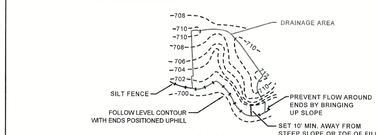
CURB INLET FILTER SOCK PROTECTION DETAIL



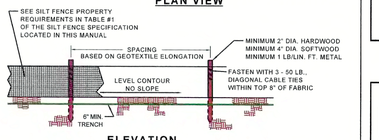
GUTTER FILTER SOCK PROTECTION DETAIL

ST. LOUIS COUNTY
DEPARTMENT OF TRANSPORTATION
CREVE COEUR, MISSOURI
TYPICAL BMP DETAIL
GRATED UNIT, INLET AND GUTTER PROTECTION FILTER SOCK AND GRAVEL FILTER BAG
REVISION DATE: January 1, 2016
DRAWING 806-45.00

NEW	REVISIONS				
1/15/04	8/2/07	10/10/11	1/1/16		

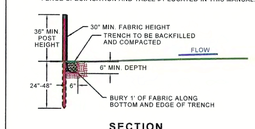


PLAN VIEW



ELEVATION

FOR ADDITIONAL INFORMATION ON SILT FENCE GEOTEXTILE REQUIREMENTS, POST SPACING, HEIGHT AND SIZE, SEE THE SILT FENCE SPECIFICATION AND TABLE #1 LOCATED IN THIS MANUAL.

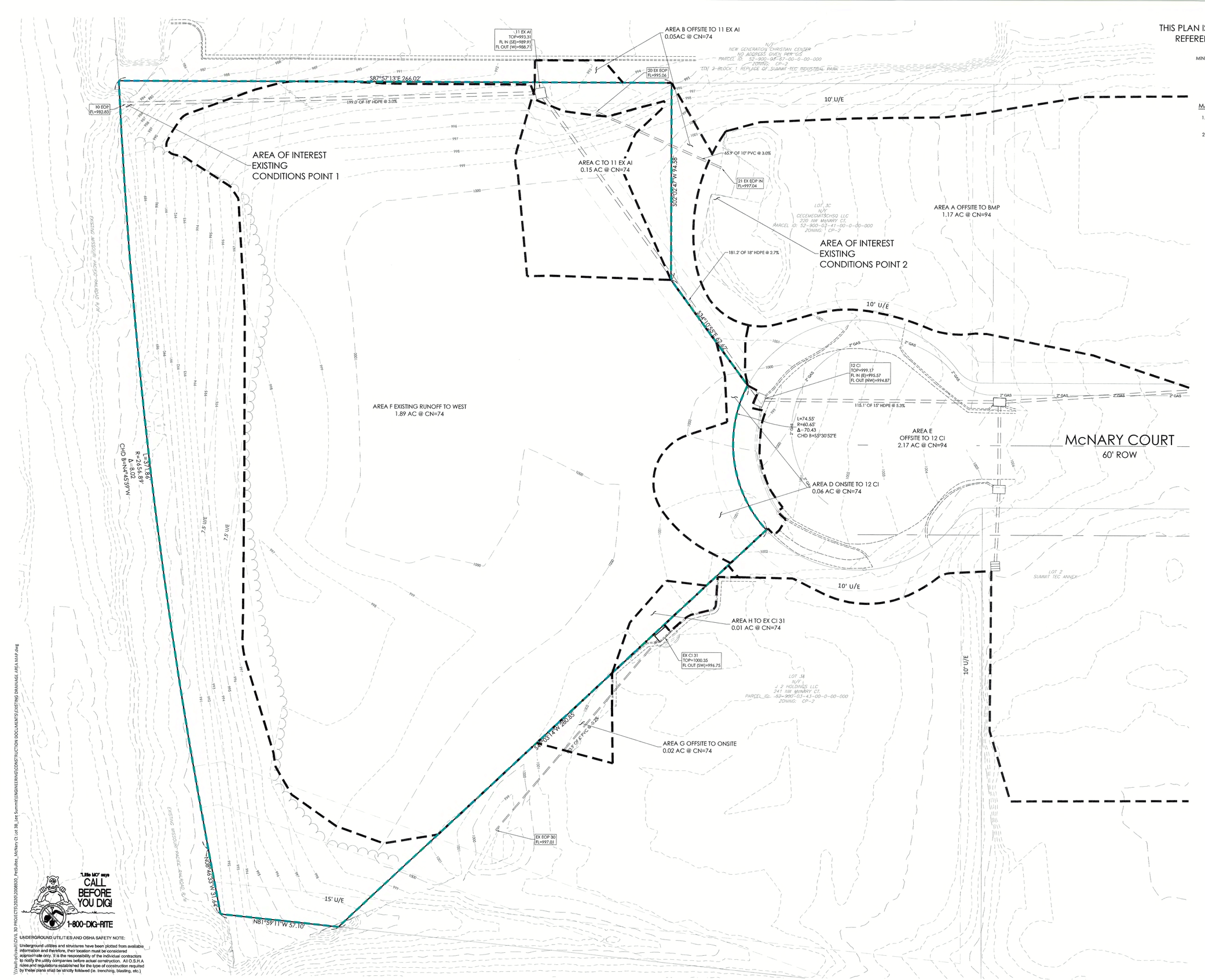


SECTION

JOINING SECTIONS OF SILT FENCE

ST. LOUIS COUNTY
DEPARTMENT OF TRANSPORTATION
CREVE COEUR, MISSOURI
TYPICAL BMP DETAIL
SILT FENCE
REVISION DATE: January 1, 2016
DRAWING 806-70.00

NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED T



"Little Mo" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

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\\Swift-pw\wellt\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\EXISTING DRAINAGE_AREA MAP.dwg

THIS PLAN IS FOR DRAINAGE PURPOSES AND REFERENCE ONLY. DO NOT USE FOR CONSTRUCTION.

MINIMUM TIME OF CONCENTRATION = 5 MINUTES
EXISTING SOILS TYPE = C
CN PVMT = 98
CN GRASS = 74
CN COMMERCIAL AREAS = 94

MASTER DRAINAGE PLAN NOTES

1. MBOE - (MINIMUM BUILDING OPENING ELEVATION) ELEV = 100[1].00
2. THE INDIVIDUAL LOT OWNER(S) SHALL NOT CHANGE OR OBSTRUCT THE OVERALL DRAINAGE FLOW LINES OR PATHS ON THE LOT AS SHOWN ON THE MASTER DRAINAGE PLAN. UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.

1" = 20'

20 10 0 20 40
SCALE IN FEET

EXISTING RUNOFF TABLE

ID	EXISTING Q (CFS)
AREA A	
2-Year	2.79
10-Year	4.43
100-Year	6.58
AREA B	
2-Year	0.12
10-Year	0.24
100-Year	0.42
AREA C	
2-Year	0.35
10-Year	0.73
100-Year	1.27
AREA D	
2-Year	0.14
10-Year	0.29
100-Year	0.51
AREA E	
2-Year	6.56
10-Year	10.38
100-Year	15.41
AREA F	
2-Year	3.57
10-Year	7.6
100-Year	13.44
AREA G	
2-Year	0.04
10-Year	0.08
100-Year	0.14
AREA H	
2-Year	0.02
10-Year	0.04
100-Year	0.07

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #: 2010000081
MISSOURI CERTIFICATE OF AUTHORITY #LC2006007195
MISSOURI CERTIFICATE OF AUTHORITY #LA-2006007538

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
E-2006007195
PROFESSIONAL ENGINEER

ENGINEERS' AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

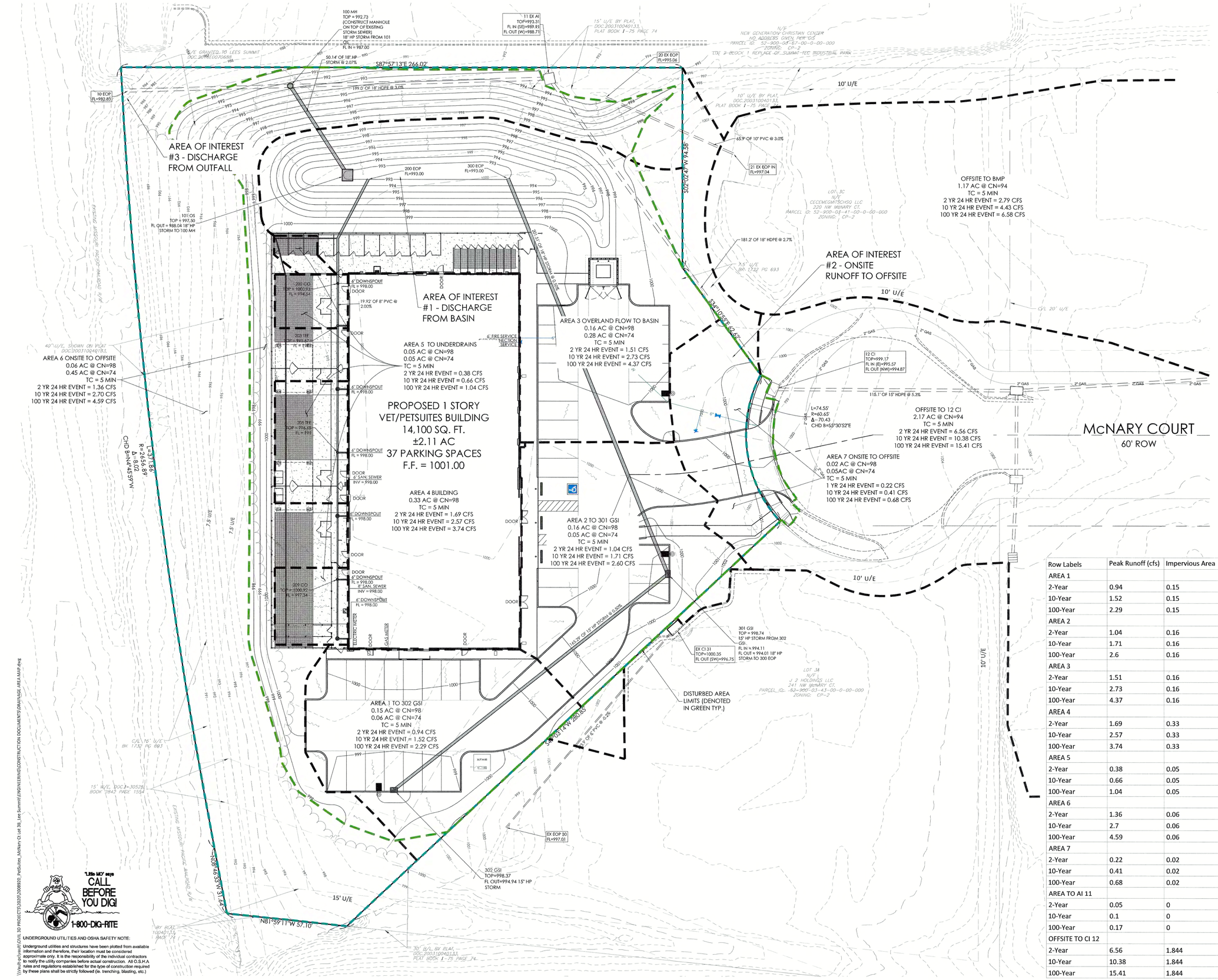
#	Revision Date	Description of Changes	Sheet Title

EXISTING DRAINAGE AREA MAP

Sheet Number
C-500

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION



MINIMUM TIME OF CONCENTRATION = 5 MINUTES
EXISTING SOILS TYPE = C
CN PVMT = 98
CN GRASS = 74
CN COMMERCIAL AREAS = 94

MASTER DRAINAGE PLAN NOTES

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1" = 20'

20 10 0 20 40

SCALE IN FEET

Row Labels	Peak Runoff (cfs)	Impervious Area	Pervious Area	Total Area	Composite CN	TC
AREA 1						
2-Year	0.94	0.15	0.06	0.21	91	5
10-Year	1.52	0.15	0.06	0.21	91	5
100-Year	2.29	0.15	0.06	0.21	91	5
AREA 2						
2-Year	1.04	0.16	0.08	0.24	90	5
10-Year	1.71	0.16	0.08	0.24	90	5
100-Year	2.6	0.16	0.08	0.24	90	5
AREA 3						
2-Year	1.51	0.16	0.28	0.44	83	5
10-Year	2.73	0.16	0.28	0.44	83	5
100-Year	4.37	0.16	0.28	0.44	83	5
AREA 4						
2-Year	1.69	0.33	0	0.33	98	5
10-Year	2.57	0.33	0	0.33	98	5
100-Year	3.74	0.33	0	0.33	98	5
AREA 5						
2-Year	0.38	0.05	0.05	0.1	86	5
10-Year	0.66	0.05	0.05	0.1	86	5
100-Year	1.04	0.05	0.05	0.1	86	5
AREA 6						
2-Year	1.36	0.06	0.45	0.51	77	5
10-Year	2.7	0.06	0.45	0.51	77	5
100-Year	4.59	0.06	0.45	0.51	77	5
AREA 7						
2-Year	0.22	0.02	0.05	0.07	81	5
10-Year	0.41	0.02	0.05	0.07	81	5
100-Year	0.68	0.02	0.05	0.07	81	5
AREA TO AI 11						
2-Year	0.05	0	0.02	0.02	74	5
10-Year	0.1	0	0.02	0.02	74	5
100-Year	0.17	0	0.02	0.02	74	5
OFFSITE TO CI 12						
2-Year	6.56	1.844	0.325	2.17	94	20
10-Year	10.38	1.844	0.325	2.17	94	20
100-Year	15.41	1.844	0.325	2.17	94	20

"Little MO" says CALL BEFORE YOU DIG! 1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

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PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #:2006000931
KANSAS CERTIFICATE OF AUTHORITY #:E-2006000931
MISSOURI CERTIFICATE OF AUTHORITY #:A-2006007338

STATE OF MISSOURI STEVEN D. MARION NUMBER PE-2006007195 PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION

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STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project

PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title

STORMWATER MANAGEMENT PLAN

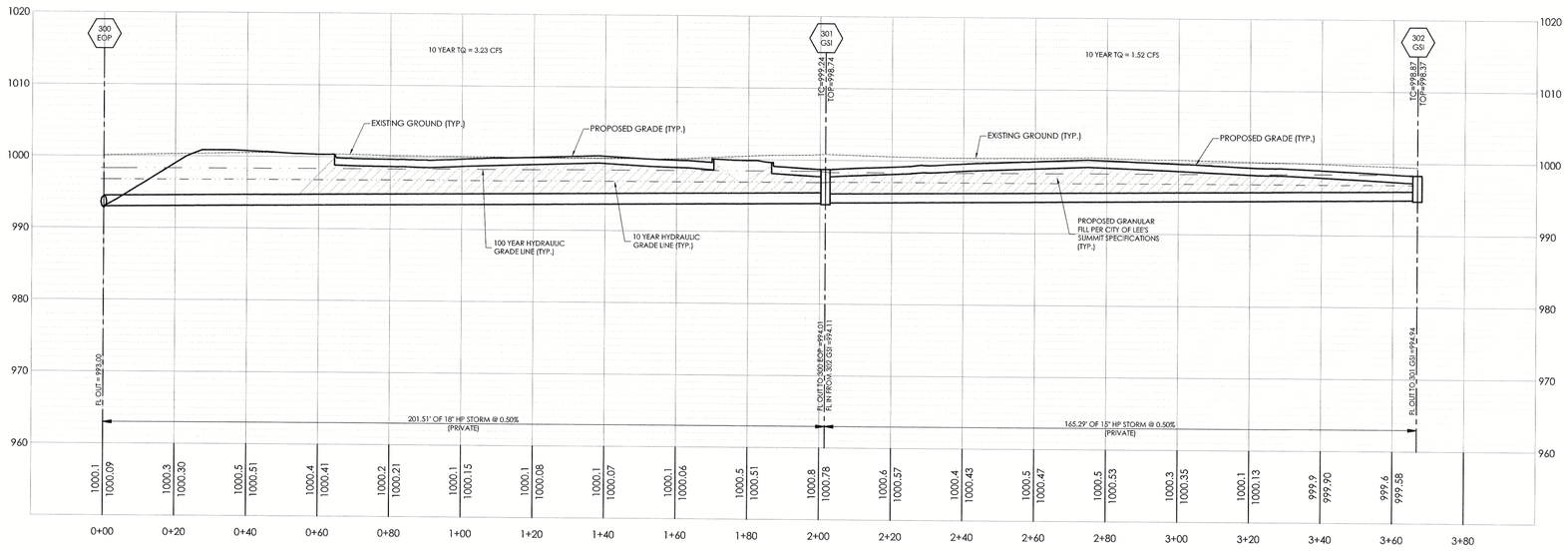
Sheet Number

C-501

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

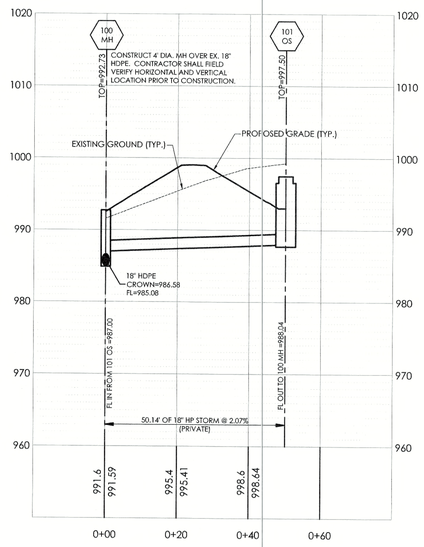
NOT RELEASED FOR CONSTRUCTION

\\Vault-pw\Users\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct. Lot 3B_Lee Summit\LDN\ENGINEERING\CONSTRUCTION DOCUMENTS\DRAINAGE AREA MAP.dwg



STORM SEWER PROFILE
300 EOP TO 302 GSI

1"=20' HORIZONTAL
1"=10' VERTICAL



STORM SEWER PROFILE
100 MH TO 101 OS

1"=20' HORIZONTAL
1"=10' VERTICAL

10 YEAR STORM HYDRAULICS

LineNo.	LineID	InletID	LineLength	LineSize	InvertUp	InvertDn	LineSlope	Grnd/RimElev Up	Grnd/RimElev Dn	DepthUp	HGLUp	HGLDn	Rim-Hw	Defl.Angle	VelDn	VelHd Dn	J-LossCoeff	EnergyLoss	MinorLoss	CrossSlope, Sx	CapacityFull	KnownQ	FlowRate	InletEff	QCaptured
			(ft)	(in)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(Deg)	(ft/s)	(ft)		(ft)	(ft)	(ft/ft)	(cfs)	(cfs)	(cfs)	(%)	(cfs)
1	301-300	301 GSI	201.51	18	994.01	993	0.5	998.74	994.43	1.51	996.92	996.76	1.75	70	1.82	0.05	1.45	0.16	0.07	0.02	8.13	1.71	3.23	100	1.71
2	302-301	302 GSI	165.29	15	994.94	994.11	0.5	998.37	998.74	1.25	997.07	996.99	1.27	73.82	1.24	0.02	1	0.078	0.02	0.02	4.95	1.52	1.52	100	1.52

100 YEAR STORM HYDRAULICS

LineNo.	LineID	InletID	LineLength	LineSize	InvertUp	InvertDn	LineSlope	Grnd/RimElev Up	Grnd/RimElev Dn	DepthUp	HGLUp	HGLDn	Rim-Hw	Defl.Angle	VelDn	VelHd Dn	J-LossCoeff	EnergyLoss	MinorLoss	CrossSlope, Sx	CapacityFull	KnownQ	FlowRate	InletEff	QCaptured
			(ft)	(in)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(Deg)	(ft/s)	(ft)		(ft)	(ft)	(ft/ft)	(cfs)	(cfs)	(cfs)	(%)	(cfs)
1	301-300	301 GSI	201.51	18	994.01	993	0.5	998.74	994.43	1.5	998.16	997.79	0.41	70	2.77	0.12	1.45	0.372	0.17	0.02	8.05	2.6	4.89	100	2.6
2	302-301	302 GSI	165	15	994.94	994.11	0.5	998.37	998.74	1.25	998.51	998.34	-0.2	73.82	1.87	0.05	1	0.177	0.05	0.02	4.96	2.29	2.29	100	2.29

UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

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PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #E-2006000291
MISSOURI CERTIFICATE OF AUTHORITY #LC-2006000290
MISSOURI CERTIFICATE OF AUTHORITY #LA 2006007938

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
PE-2006007195
PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION

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STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Change

Sheet Title
STORM SEWER PROFILES

Sheet Number
C-600

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

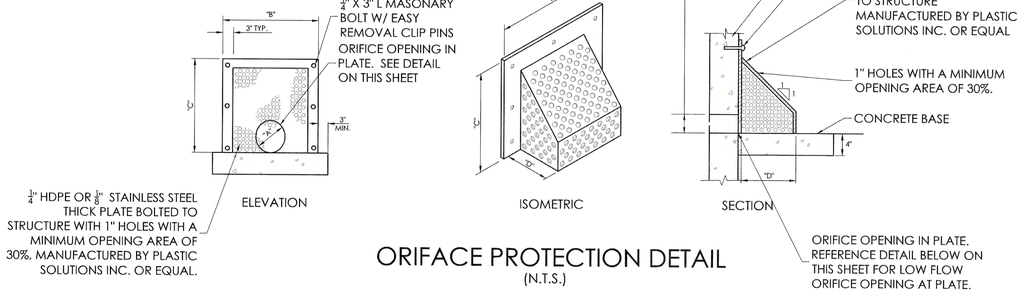
NOT RELEASED FOR CONSTRUCTION

\\Vault-pc\vault\Civil 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\STORM SEWER.dwg

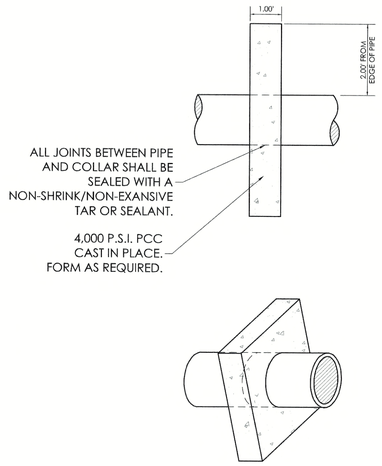
DIMENSION CHART

LOW FLOW CULVERT DIA. "A"	"B"	"C"	"D"
1.00' - 6'	18"	15"	6"
8' - 15'	24"	21"	12"
18" - 24"	42"	39"	30"

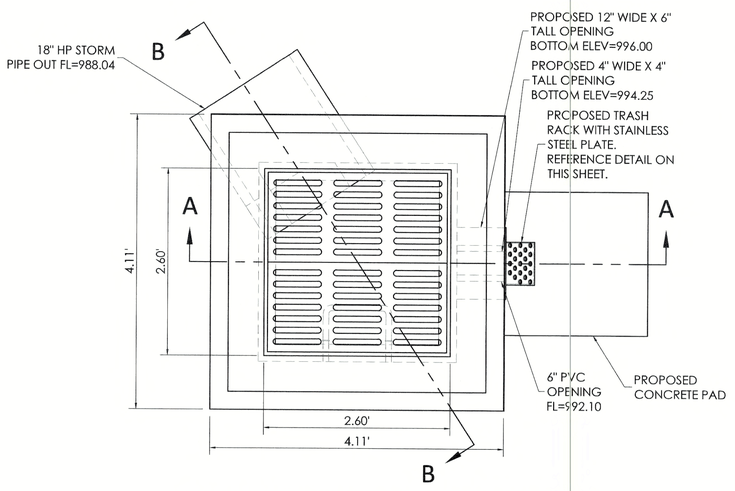
TRASH RACK MUST MEET MINIMUM STANDARDS AS SHOWN ON PLASTICSOLUTIONS.COM OR EQUAL



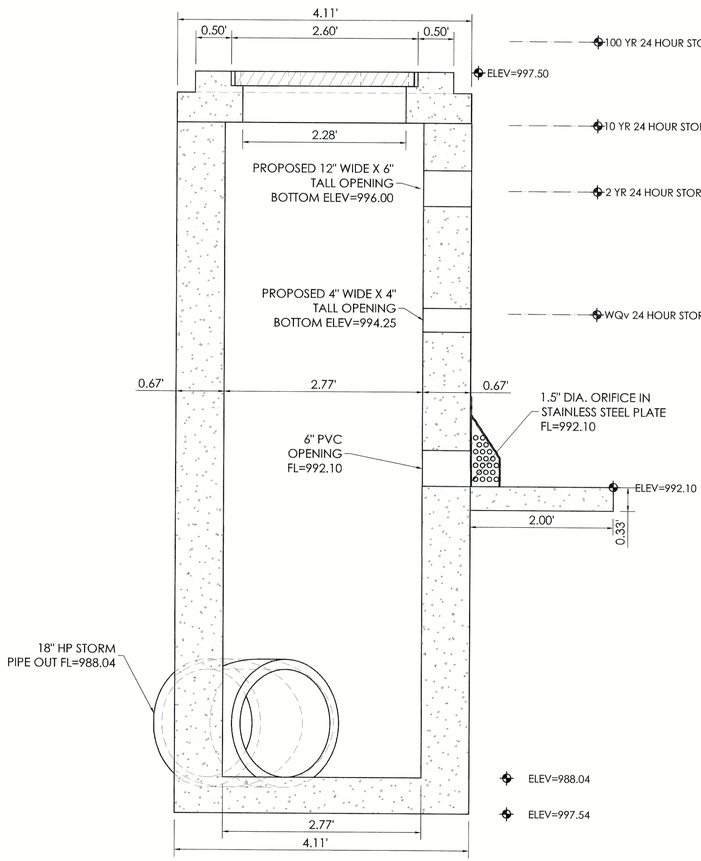
ORIFACE PROTECTION DETAIL
(N.T.S.)



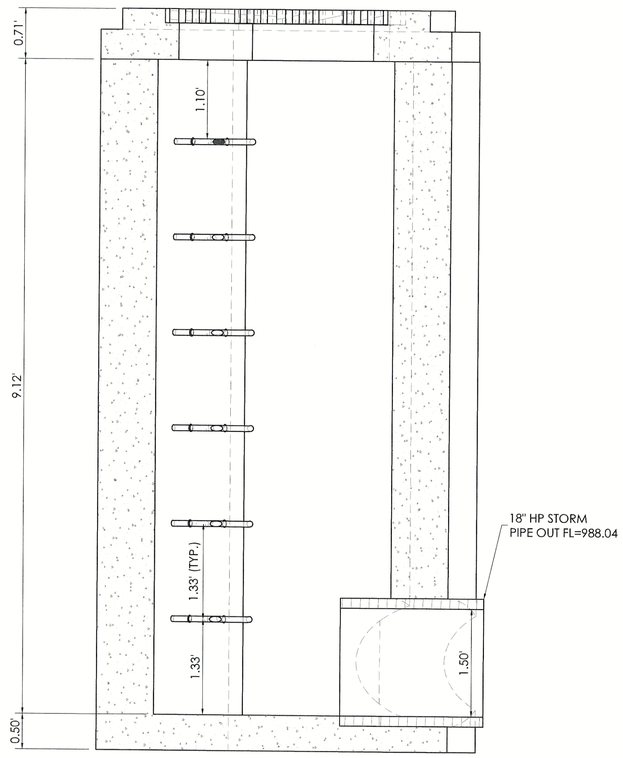
ANTI-SEEPAGE COLLAR DETAIL
(N.T.S.)



DETENTION BASIN OUTFALL STRUCTURE VIEW - 101 OS
SCALE = 1"=1'



SECTION A-A
SCALE 1" = 1'



SECTION B-B
SCALE 1" = 1'

DETENTION BASIN OUTFALL ISOMETRIC VIEW - 101 OS
SCALE = 1"=1'

"Little MO" says CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY 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. All O.S.H.A rules and regulations established for the type of construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #LC2020000031
MISSOURI CERTIFICATE OF AUTHORITY #E-2020007849
MISSOURI CERTIFICATE OF AUTHORITY #A-2006007338

STATE OF MISSOURI
STEVEN D. MARION
NUMBER PE-2006007795
PROFESSIONAL ENGINEER

ENGINEERS' AUTHENTICATION

The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.

STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007795

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TIM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

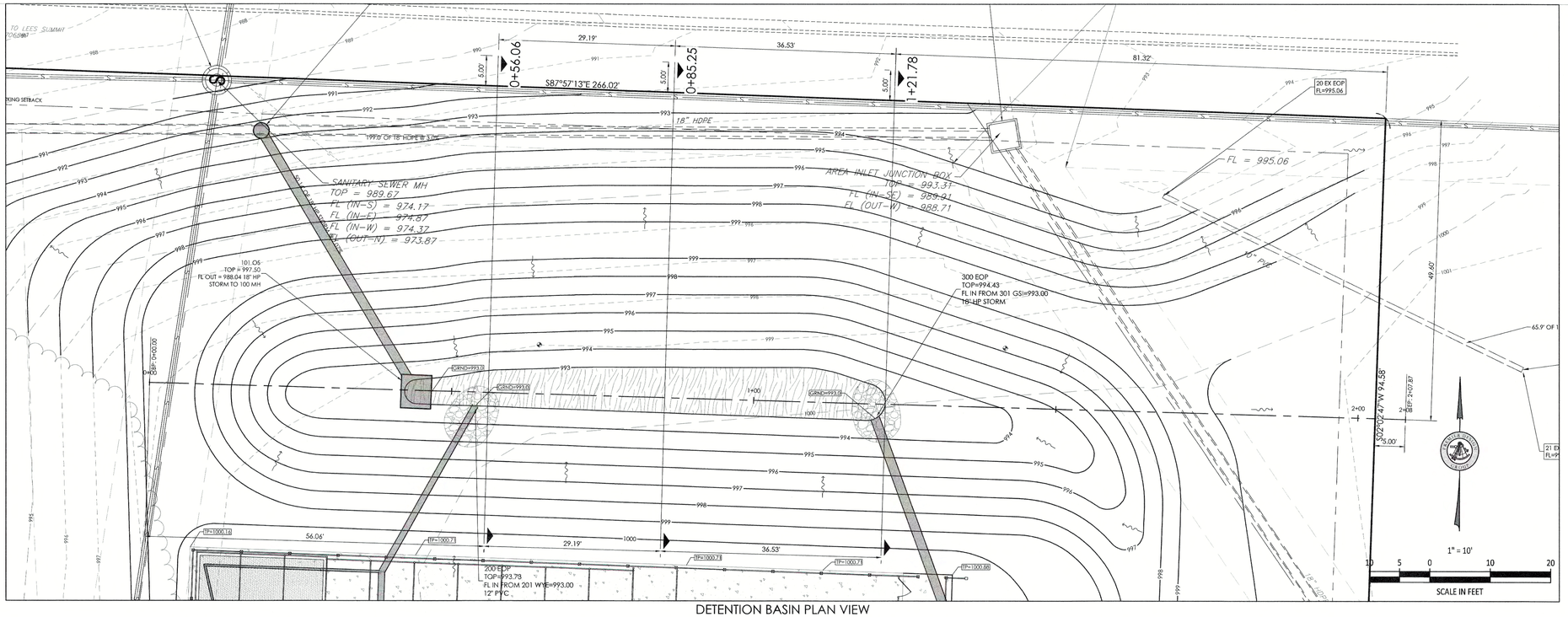
Sheet Title: OUTFALL STRUCTURE DETAIL

Sheet Number
C-601

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

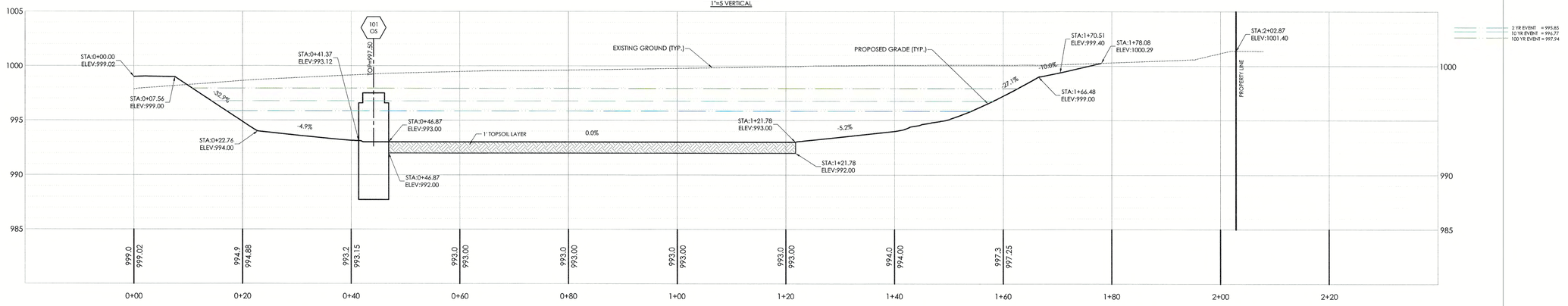
NOT RELEASED FOR CONSTRUCTION

\\Vault-pc\Vault\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\OUTFALL STRUCTURE DETAIL.dwg



DETENTION BASIN PLAN VIEW
SCALE = 1"=10'

SECTION A-B PROFILE
1"=10' HORIZONTAL
1"=5 VERTICAL



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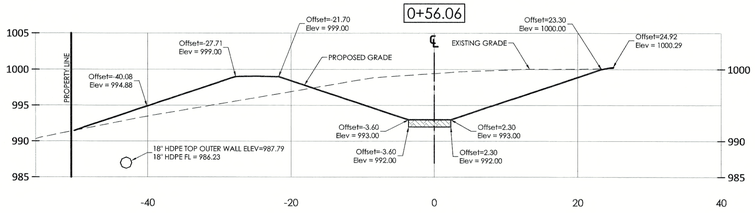

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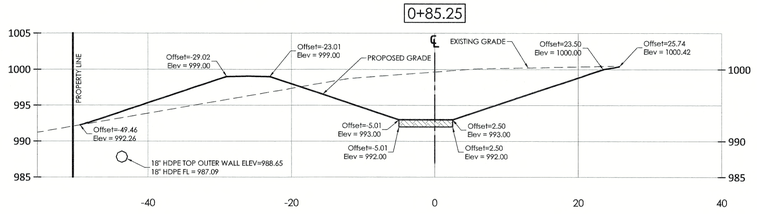

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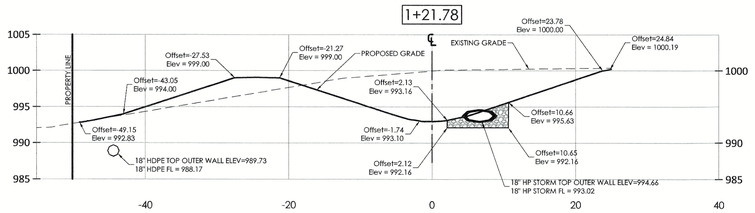

"Little MO" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY NOTE:

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\\Vault-pw\vault\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct. Lot 38_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\BASIN DETAIL.dwg

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #E-2000000319
KANSAS CERTIFICATE OF AUTHORITY #CA-2000000319
MISSOURI CERTIFICATE OF AUTHORITY #A-2006007538

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
PE-2008007195
PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
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STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2008007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

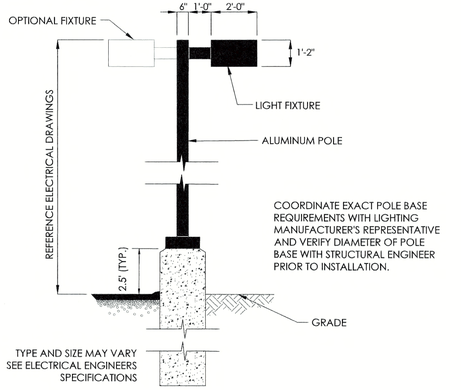
#	Revision Date	Description of Changes

Sheet Title: BASIN DETAILS

Sheet Number
C-602

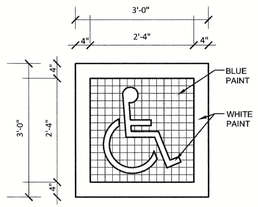
Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION



17 LIGHT STANDARD DETAIL

NOT TO SCALE

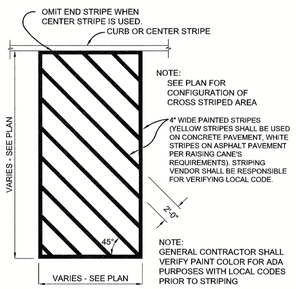


DETAIL NOTE:
GRID SQUARES ARE 2' RE: ANSI A117.1, FIG. 703.6.3.1

NOTE:
PAVEMENT-MARKING PAINT: ALKYD-RESIN TYPE, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH AASHTO M 248; COLORS COMPLYING WITH FS TT-P-1952. COLOR: AS INDICATED.

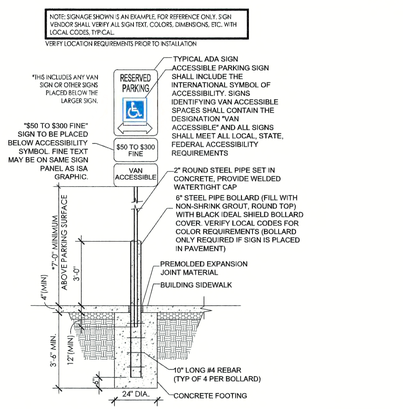
16 INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) DETAIL

NOT TO SCALE



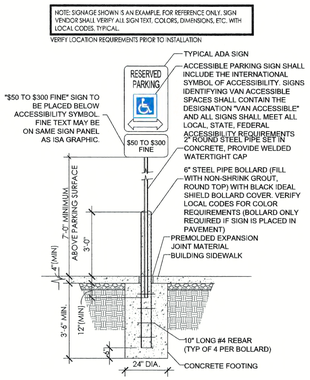
15 CROSS STRIPING DETAIL

NOT TO SCALE



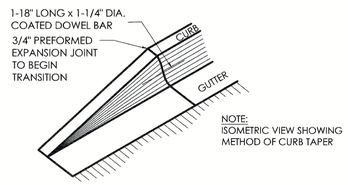
14 VAN ACCESSIBLE SIGN DETAIL

NOT TO SCALE



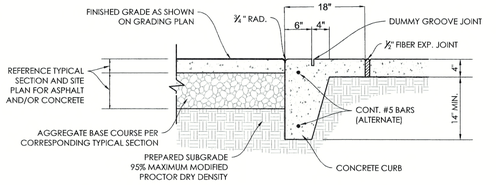
13 ACCESSIBLE SIGN DETAIL

NOT TO SCALE



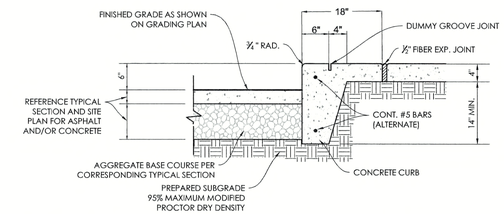
12 CURB TERMINATION DETAIL

NOT TO SCALE



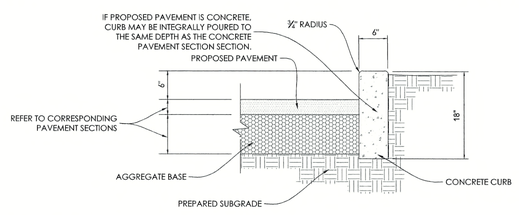
11 FLUSH PAVEMENT AT SIDEWALK DETAIL

NOT TO SCALE



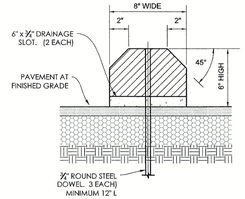
10 6 IN. VERTICAL CONCRETE CURB WITH SIDEWALK DETAIL

NOT TO SCALE

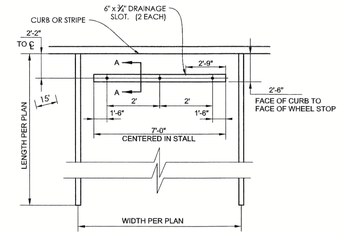


18 6 IN. VERTICAL CURB DETAIL

NOT TO SCALE



SECTION AA

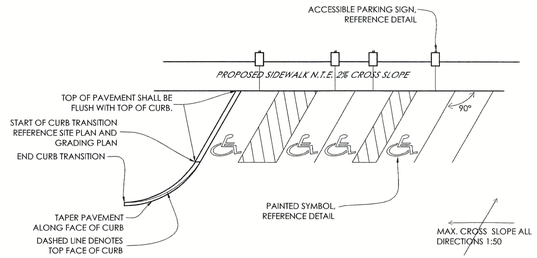


PLAN VIEW

09 PRECAST CONCRETE WHEELSTOP DETAIL

NOT TO SCALE

NOTE:
1. STRIPING AND ARRANGEMENT FOR EXAMPLE PURPOSES ONLY. PLEASE REFERENCE SITE PLAN FOR SITE SPECIFIC LAYOUT AND DIMENSIONS.



08 CURB TRANSITION DETAIL

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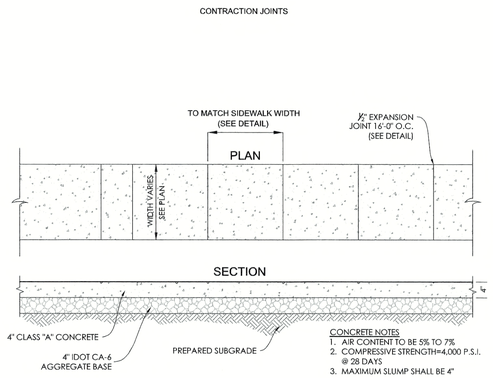


07 CONCRETE SIDEWALK DETAIL

NOT TO SCALE

1.5" TYPE "C" ASPHALTIC CONCRETE OVER TACK COAT
FINISHED GRADE AS SHOWN ON GRADING PLAN
TYPE "X" MIX SHALL INCORPORATE A BINDER GRADE OF PG 64-28
4" TYPE "X" ASPHALTIC CONCRETE OVER PRIME COAT
PREPARED SUBGRADE COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DRY DENSITY
6" MODOT TYPE 5 AGGREGATE BASE WITH GEOGRID OR/ WITH 6" STABILIZED BASE

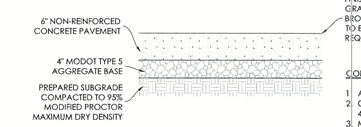
06 ASPHALT PAVEMENT DETAIL (LIGHT DUTY)

NOT TO SCALE

1.5" TYPE "C" ASPHALTIC CONCRETE OVER TACK COAT
FINISHED GRADE AS SHOWN ON GRADING PLAN
TYPE "X" MIX SHALL INCORPORATE A BINDER GRADE OF PG 64-28
5" TYPE "X" ASPHALTIC CONCRETE OVER PRIME COAT
PREPARED SUBGRADE COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DRY DENSITY
6" MODOT TYPE 5 AGGREGATE BASE WITH GEOGRID OR/ WITH 6" STABILIZED BASE

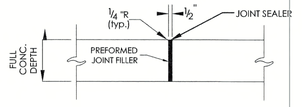
05 ASPHALT PAVEMENT DETAIL (MEDIUM DUTY)

NOT TO SCALE



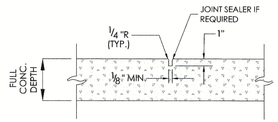
04 HEAVY DUTY & DUMPSTER PAD CONCRETE PAVEMENT DETAIL

NOT TO SCALE



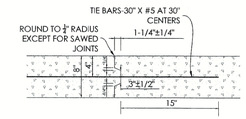
03 EXPANSION JOINT FOR SIDEWALK DETAIL

NOT TO SCALE



02 CONCRETE PAVEMENT CONSTRUCTION JOINT DETAIL

NOT TO SCALE



01 KEYWAY FOR CONCRETE PAVEMENT DETAIL

NOT TO SCALE

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #E-2008000081
JAMES A. MARION, MISSOURI PROFESSIONAL ENGINEER #PE-2006007195
MISSOURI CERTIFICATE OF AUTHORITY #LA-2006000081

STATE OF MISSOURI JAMES A. MARION NUMBER PE-2006007195 PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION
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STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

Revision Date | Description of Changes

Sheet Title
CONSTRUCTION DETAILS

Sheet Number
C-700

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

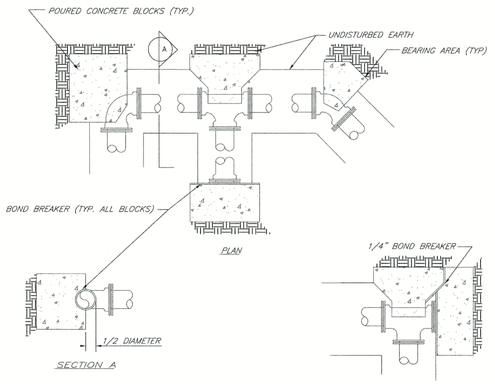
NOT RELEASED FOR CONSTRUCTION

\\Vault-pc\vaultCIVIL 3D PROJECTS\2020\2008920_PetSuites_LMcNary Ct Lot 38_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\CONSTRUCTION DETAILS.dwg

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

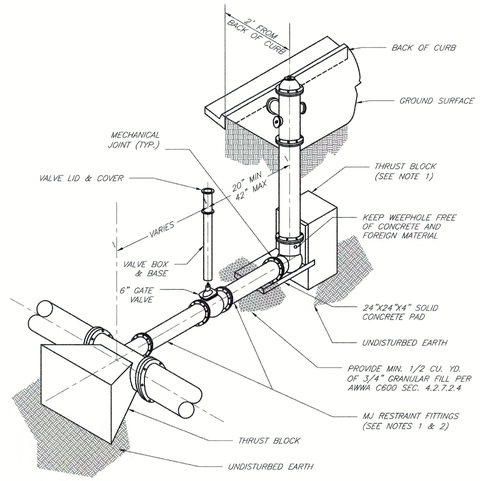
NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HORIZONTAL THRUST BLOCKS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-1
Rev:	1/14
Rev:	

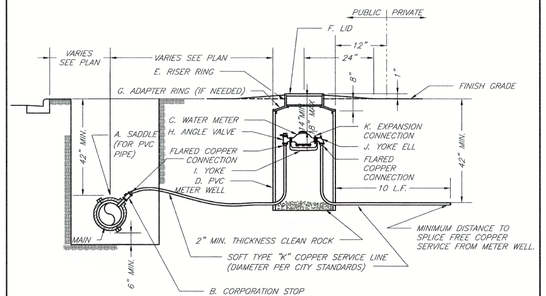


NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HYDRANT INSTALLATION – STRAIGHT SET

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-7
Rev:	1/14
Rev:	



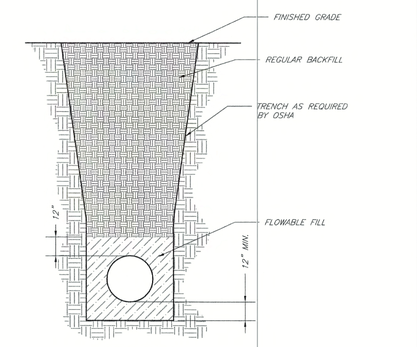
TYPICAL METER INSTALLATION – 2" AND SMALLER
NOT TO SCALE

NOTES:
1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A–K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9 LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SERVICE CONNECTION/METER WELL

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-11
Rev:	1/14
Rev:	



NOT TO SCALE

NOTES:
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

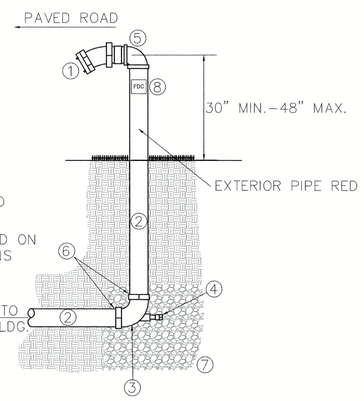
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

TRENCH CHECK

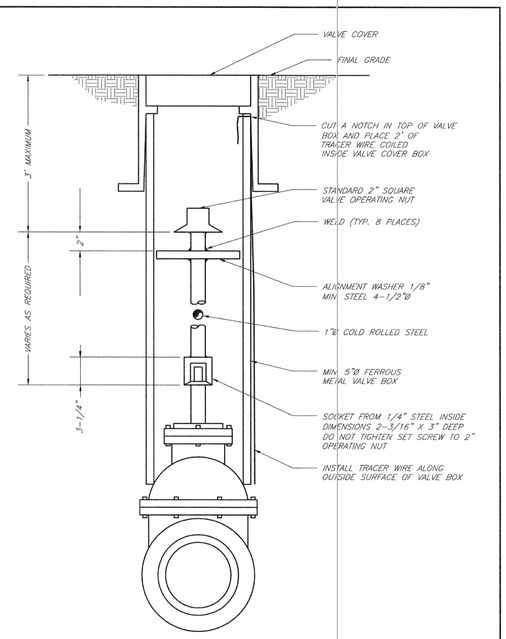
Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-6
Rev:	1/14
Rev:	

STORZ CONNECTION TO BE BLDG. MOUNTED.

1. 4" GALV THREADED 90
2. 4" GALV S40 PIPE
3. 4" GROOVED DRAIN
4. 1/2" BALL DRIP VALVE
5. 4"x5" STORZ CONN. w/KNOX PLUG & 30° BEND
6. ASPHALT SEALANT APPLIED ON ALL GROOVED CONNECTIONS UNDERGROUND
7. GRANULAR FILL FOR DRAINAGE
8. STICKER DENOTING FDC



19 STORZ FDC CONNECTION DETAIL
NOT TO SCALE



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

VALVE STEM EXTENSION AND VALVE BOX

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-9
Rev:	1/14
Rev:	

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #: 2008000319
KANSAS CERTIFICATE OF AUTHORITY #: E-2012
MISSOURI CERTIFICATE OF AUTHORITY #A: 2006007938

STATE OF MISSOURI
STEVEN D. MARION
NUMBER PE-2006007125
PROFESSIONAL ENGINEER
10-7-21

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007125

Project
PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title
UTILITY DETAILS

Sheet Number
C-701

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

\\Vault-pe\vault\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\UTILITY DETAILS.dwg

Section 2723

Engineered Surface Drainage Products

GENERAL

PVC surface drainage inlets shall be of the curb inlet structure type as indicated on the contract drawings and referenced within the contract specifications. The **ductile iron frame, grate and hood** for each of these structures are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The curb inlet structure shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc. or prior approved equal.

MATERIALS

The curb inlet structure required for this contract shall be manufactured from PVC pipe stock, utilizing a thermo-molding process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured form PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the structure. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grate, frame and hood for all curb inlet structures shall be ductile iron and shall be made specifically for each so as to provide a round bottom flange that closely matches the diameter of the PVC structure body. The grate, frame and hood shall be capable of supporting H-20 wheel loading for traffic areas. The hood section will have a solid back and be adjustable by use of three (3) locking hex head bolts. The metal used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05 for ductile iron.

INSTALLATION

The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for the curb inlet structure shall be placed and compacted uniformly in accordance with ASTM D2321. The curb inlet structure body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For H-20 load rated installations, a concrete ring will be poured under the frame, grate, and hood. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

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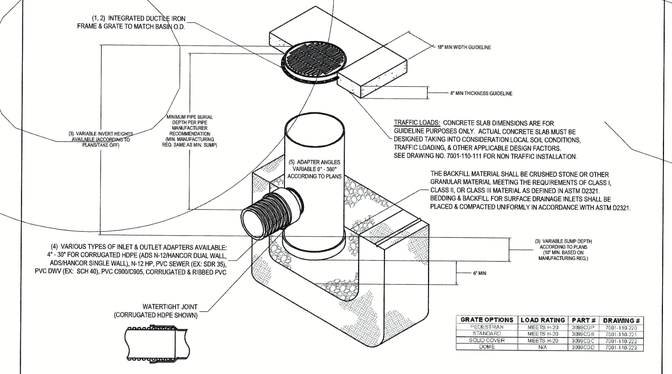
DRAWN BY	CJA	MATERIAL	
DATE	03-19-09		
REVISED BY	MMH	PROJECT NO./NAME	
DATE	03-10-16		
DWG SIZE	A	SCALE 1:1	SHEET 1 OF 1

Nyloplast — 3128 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 2 FT X 2 FT & 2 FT X 3 FT CURB INLET STRUCTURE SPECIFICATIONS

DWG NO. 7902-110-002 REV H

NYLOPLAST 30" DRAIN BASIN: 2830AG _ _X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
HEELSTYLE	MEETS H-20	3380CGR	7001-110-221
STANDARD	MEETS H-20	3380CGS	7001-110-211
SOLID COVER	MEETS H-20	3380CGC	7001-110-222
DOMED	N/A	3380CGD	7001-110-223

1 - GRATE/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR SAGING OVER 84"OUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

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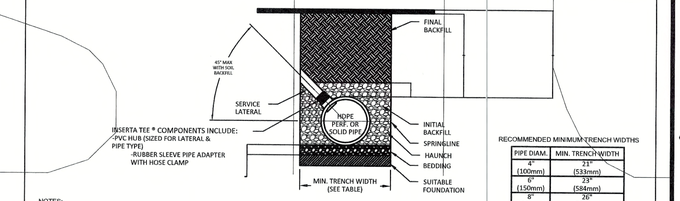
DRAWN BY	ESC	MATERIAL	
DATE	04-03-08		
REVISED BY	MMH	PROJECT NO./NAME	
DATE	03-14-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

Nyloplast — 3128 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 30 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-193 REV G



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4" (100mm)	21" (533mm)
6" (150mm)	23" (584mm)
8" (200mm)	26" (660mm)
10" (250mm)	28" (711mm)
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
54" (1350mm)	88" (2235mm)
60" (1500mm)	96" (2438mm)

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. THE INSERTA TEE® CONNECTION SHOULD NOT BE PLACED AT AN ANGLE EXCEEDING 45° FROM THE SPRINGLINE. GREATER ANGLES ARE SUBJECT TO DESIGN ENGINEER APPROVAL AND MAY REQUIRE PREMIUM BACKFILL
4. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
5. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
6. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
7. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

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3	REV. DRAWING NAME OR NUMBER	TJS	02/26/16
REV.	DESCRIPTION	BY	MM/DD/YY CHK'D

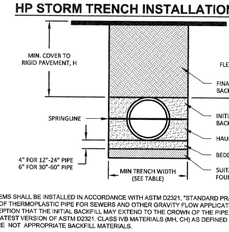
TRENCH INSTALLATION DETAIL (EP STORM)

DRAWING NUMBER: STD-101

ADS — 4640 TRUEMAN BLVD HILLIARD, OHIO 43026 — A WORLD DRAINAGE SYSTEMS, INC.

SIZE	N.E.
DATE	11/5/10
SCALE	NTS
SHEET	1 OF 1

HP STORM TRENCH INSTALLATION DETAIL



NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IVB MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II, OR IV. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT.
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, OR IV IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (300mm) FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS; CLASS I OR II MATERIAL COMPACTED TO 90% SPD AND CLASS III COMPACTED TO 95% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR 60" (1500mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
7. FOR ADDITIONAL INFORMATION SEE TECHNICAL NOTE 2.04.

TABLE 1, RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRUNCH WIDTH
12" (300mm)	30" (762mm)
15" (375mm)	34" (864mm)
18" (450mm)	39" (991mm)
24" (600mm)	48" (1219mm)
30" (750mm)	56" (1422mm)
36" (900mm)	64" (1626mm)
42" (1050mm)	72" (1829mm)
48" (1200mm)	80" (2032mm)
60" (1500mm)	96" (2438mm)

TABLE 2, MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (757 AXLE LOAD) *
12"- 48" (300mm - 1200mm)	12" (305mm)	48" (1219mm)
60" (1500mm)	24" (610mm)	60" (1524mm)

* VEHICLES IN EXCESS OF 757 MAY REQUIRE ADDITIONAL COVER

TABLE 3, MAXIMUM COVER FOR ADS HP STORM PIPE, ft

	CLASS I		CLASS II		CLASS III		CLASS IV
PIPE DIA	COMPACTED	95%	90%	85%	95%	90%	95%
12" (300mm)	41 (12.5m)	28 (8.5m)	21 (6.4m)	16 (4.9m)	20 (6.1m)	15 (4.9m)	16 (4.9m)
15" (375mm)	42 (12.8m)	29 (8.8m)	21 (6.4m)	16 (4.9m)	21 (6.4m)	16 (4.9m)	16 (4.9m)
18" (450mm)	64 (13.4m)	30 (9.1m)	21 (6.4m)	16 (4.9m)	22 (6.7m)	17 (5.2m)	16 (4.9m)
24" (600mm)	37 (11.3m)	28 (7.9m)	18 (5.5m)	14 (4.3m)	19 (5.8m)	14 (4.3m)	14 (4.3m)
30" (750mm)	39 (11.9m)	27 (7.2m)	19 (5.8m)	14 (4.3m)	19 (5.8m)	15 (4.6m)	14 (4.3m)
36" (900mm)	38 (8.5m)	20 (6.1m)	14 (4.3m)	10 (3.0m)	14 (4.3m)	11 (3.4m)	10 (3.0m)
42" (1050mm)	30 (9.1m)	21 (6.4m)	14 (4.3m)	10 (3.0m)	15 (4.6m)	11 (3.4m)	10 (3.0m)
48" (1200mm)	29 (8.8m)	20 (6.1m)	14 (4.3m)	9 (2.7m)	14 (4.3m)	10 (3.0m)	10 (3.0m)
60" (1500mm)	29 (8.8m)	20 (6.1m)	14 (4.3m)	9 (2.7m)	14 (4.3m)	10 (3.0m)	9 (2.7m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE
UNIT WEIGHT OF SOIL (γs) = 120 PCF

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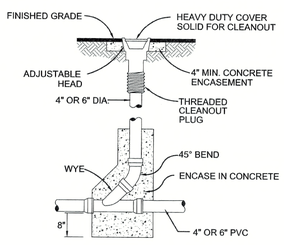
4	REV. MAXIMUM COVER HEIGHTS	TMD	01/11/17
REV.	DESCRIPTION	BY	MM/DD/YY CHK'D

TRENCH INSTALLATION DETAIL (EP STORM)

DRAWING NUMBER: STD-101D

ADS — 4640 TRUEMAN BLVD HILLIARD, OHIO 43026 — ADS WORLD DRAINAGE SYSTEMS, INC.

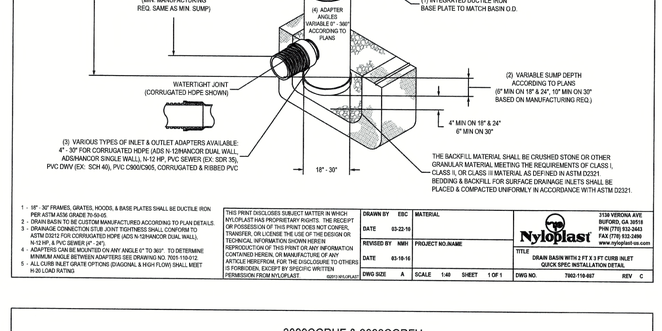
SIZE	N.E.
DATE	01/19/09
SCALE	N.T.S.
SHEET	1 OF 1



CLEANOUT DETAIL

(NOT TO SCALE)

NYLOPLAST 2 FT X 3FT CURB INLET STRUCTURE: 30 _ _ AGR _ _X



1 - 16" - 30" FRAMES, GRATES, HOODS, & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
4 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
5 - ALL CURB INLET GRATE OPTIONS (DIAGONAL & HIGH FLOW) SHALL MEET H-20 LOAD RATING

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DRAWN BY	EBC	MATERIAL	
DATE	03-22-10		
REVISED BY	MMH	PROJECT NO./NAME	
DATE	03-10-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

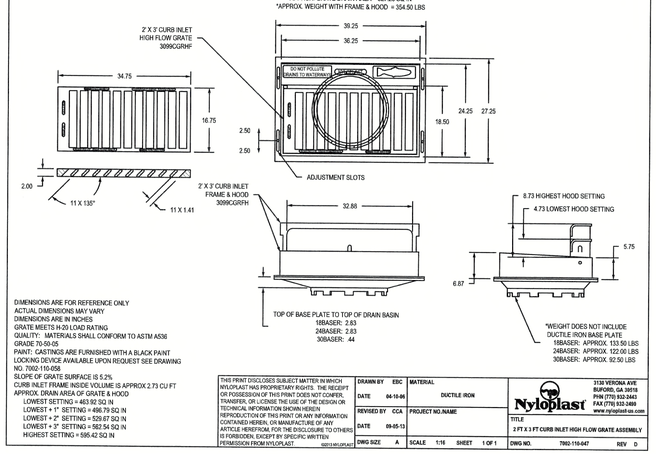
Nyloplast — 3128 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 2 FT X 3 FT CURB INLET STRUCTURE SPECIFICATIONS

DWG NO. 7902-110-007 REV C

3099CGRHF & 3099CGRFH

APPROX. GRATE DRAIN AREA = 327.25 SQ IN
*APPROX. WEIGHT WITH FRAME & HOOD = 354.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536
GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7002-110-058
SLOPE OF GRATE SURFACE IS 5.2%
CURB INLET FRAME INSIDE VOLUME IS APPROX 2.73 CU FT
APPROX. DRAIN AREA OF GRATE & HOOD
LOWEST SETTING = 463.92 SQ IN
LOWEST + 1" SETTING = 496.79 SQ IN
LOWEST + 2" SETTING = 529.67 SQ IN
LOWEST + 3" SETTING = 582.54 SQ IN
HIGHEST SETTING = 595.42 SQ IN

TOP OF BASE PLATE TO TOP OF DRAIN BASIN
18BASER: 2.83
24BASER: 2.83
30BASER: .44

*WEIGHT DOES NOT INCLUDE DUCTILE IRON BASE PLATE
18BASER: APPROX. 133.50 LBS
24BASER: APPROX. 122.00 LBS
30BASER: APPROX. 92.50 LBS

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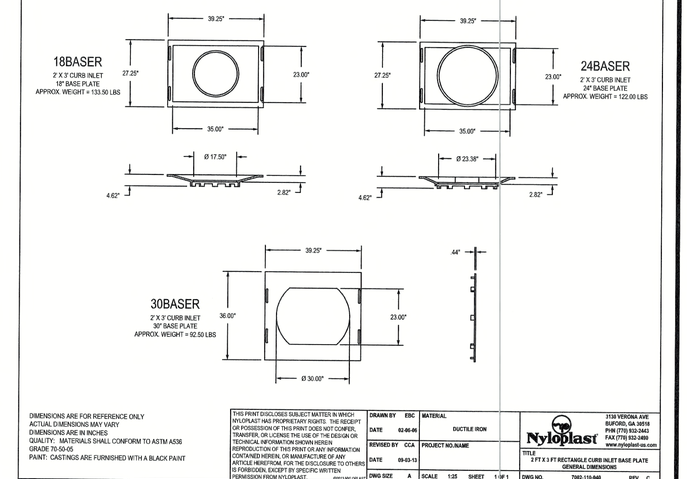
DRAWN BY	EBC	MATERIAL	
DATE	04-10-06	DUCTILE IRON	
REVISED BY	CCA	PROJECT NO./NAME	
DATE	09-05-13		
DWG SIZE	A	SCALE 1:16	SHEET 1 OF 1

Nyloplast — 3128 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 2 FT X 3 FT CURB INLET HIGH FLOW GRATE ASSEMBLY

DWG NO. 7902-110-047 REV D



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY.
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536
GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

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DRAWN BY	ESC	MATERIAL	
DATE	02-06-06	DUCTILE IRON	
REVISED BY	CCA	PROJECT NO./NAME	
DATE	09-03-13		
DWG SIZE	A	SCALE 1:25	SHEET 1 OF 1

Nyloplast — 3128 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 2 FT X 3 FT RECTANGLE CURB INLET BASE PLATE GENERAL DIMENSIONS

DWG NO. 7002-110-040 REV C

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #LC2005000031
MISSOURI CERTIFICATE OF AUTHORITY #S 2002007849
MISSOURI CERTIFICATE OF AUTHORITY #A 2006007358

STATE OF MISSOURI — STEVEN D. MARION — NUMBER PE-2006007195 — PROFESSIONAL ENGINEER

ENGINEERS AUTHENTICATION

The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.

STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project
PETSUITES OF AMERICA
LEES SUMMIT, MO
250 NW MCNARY CT.
LEES SUMMIT, MO 64086
TM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date 1-27-2021

#	Revision Date	Description of Changes

Sheet Title: UTILITY DETAILS

Sheet Number
C-702

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

NOT RELEASED FOR CONSTRUCTION

\\Vault-pe\Vault\CIVIL 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\UTILITY DETAILS.dwg

"Little MO" says
CALL BEFORE YOU DIG!
1-800-DIG-RITE

UNDERGROUND UTILITIES AND OSHA SAFETY 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. All O.S.H.A. rules and regulations established for the type of construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

\\Vault-pw\vaultDWG 3D PROJECTS\2020\2008920_PetSuites_McNary Ct Lot 3B_Lee Summit\ENGINEERING\CONSTRUCTION DOCUMENTS\LANDSCAPE PLAN.dwg

LANDSCAPE PLAN NOTES:

GENERAL:
1. ALL LANDSCAPE MATERIAL SHALL CONFORM TO THE CITY OF LEE'S SUMMIT 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.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER SITE RELATED WORK BEING PERFORMED 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. PLANT GROUNDCOVER TO WITHIN 12" OF TRUNK OF TREES OR SHRUBS PLANTED WITHIN THE AREA.
6. IT SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO:
   A. VERIFY ALL EXISTING AND PROPOSED FEATURES SHOWN ON THE DRAWINGS PRIOR TO COMMENCEMENT.
   B. REPORT ALL DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN TO THE ENGINEER OF RECORD IMMEDIATELY FOR A DECISION.
   C. STAKE THE LOCATIONS OF ALL PROPOSED PLANT MATERIAL AND OBTAIN THE APPROVAL OF THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
7. 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. PROVIDE SINGLE-STEM TREES UNLESS OTHERWISE NOTED IN PLANT SCHEDULE.
9. ALL PLANT MATERIAL SHALL COMPLY WITH THE RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARDS FOR NURSERY STOCK".
10. 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 THE LANDSCAPE CONTRACTOR'S EXPENSE.
11. ALL BIDS ARE TO HAVE UNIT PRICES LISTED. THE OWNER HAS THE OPTION TO DELETE ANY PORTION OF THE CONTRACT PRIOR TO SIGNING THE CONTRACT OR BEGINNING WORK. THIS WILL BE A UNIT PRICE CONTRACT.
12. ALL PLANT MATERIAL TO BE TRANSPLANTED SHALL BE IN ACCORDANCE TO GUIDELINES SET BY AAN STANDARDS. TRANSPLANTED MATERIAL WILL NOT BE GUARANTEED BY THE LANDSCAPE CONTRACTOR.

INSURANCE:
1. THE LANDSCAPE CONTRACTOR SHALL SUBMIT CERTIFICATES OF INSURANCE FOR WORKMAN'S COMPENSATION AND GENERAL LIABILITY.

MULCH:
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. PROVIDE 4' DIAMETER MULCH RING AROUND ALL NEW TREES WITH MIN. 3" DEPTH OF SHREDDED OAK BARK MULCH.
2. MIRAFI FABRIC SHALL BE USED BENEATH ALL GRAVEL MULCH BEDS.
3. LANDSCAPE BEDS NOT BORDERED BY CONCRETE CURBING OR WALKS SHALL BE SPADE CUT EDGE.

MAINTENANCE:
1. LANDSCAPE CONTRACTOR SHALL PROVIDE A SEPARATE PROPOSAL TO MAINTAIN ALL PLANTS, SHRUBS, GROUNDCOVER, PERENNIALS AND ANNUALS FOR A PERIOD OF 12 MONTHS AFTER ACCEPTANCE.
2. CONTRACTOR SHALL ENSURE THAT ONLY COMPETENT AND TRAINED PERSONNEL SHALL PROVIDE SUCH SERVICES AND THAT SUCH SERVICES BE PROVIDED IN A TIMELY MANNER.

TOPSOIL:
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 AND GRADE SMOOTH.
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 EXTRANEOUS OR TOXIC MATERIAL.
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.

MISC. MATERIAL:
PROVIDE STAKES AND DEADMAN OF SOUND, NEW HARDWOOD, FREE OF KNOTHOLES AND DEFECTS.
1. TREE WRAP TAPE SHALL BE 4" MINIMUM, DESIGNED TO PREVENT BORER DAMAGE AND WINTER FREEZING. ADDITIONALLY, ONLY 3-PLY TYING MATERIAL SHALL BE USED.

TURF:
1. ALL DISTURBED LAWN AREAS TO BE SODDED UNLESS NOTED OTHERWISE 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 4:1 OR GREATER SHALL BE SODDED AND THE SOD SHALL HAVE STAKES PLACED.
3. ALL SOD SHALL BE PLACED A MAXIMUM OF 24 HOURS AFTER HARVESTING.
4. RECONDITION EXISTING LAWN AREAS DAMAGED BY CONTRACTOR'S OPERATIONS INCLUDING EQUIPMENT/ MATERIAL STORAGE AND MOVEMENT OF VEHICLES.
5. SOD CONTRACTOR TO ENSURE SOD IS PLACED BELOW SIDEWALK AND ALL PAVED AREA ELEVATIONS TO ALLOW FOR PROPER DRAINAGE.
6. OFF-SITE LAND DISTURBED SHALL BE SODDED AND RESTORED TO A CONDITION BETTER THAN EXISTING.

SIGHT TRIANGLES:
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 PAVING SURFACES.
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 ESTABLISHED TO FORM THE SIGHT TRIANGLE AREA.
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.

WARRANTY:
1. ALL PLANT MATERIAL (EXCLUDING GROUND COVER, PERENNIALS AND ANNUALS) ARE TO BE WARRANTED FOR A PERIOD OF 12 MONTHS AFTER INSTALLATION AT 100% OF THE INSTALLED PRICE.
2. ANY PLANT MATERIAL FOUND TO BE DEFECTIVE SHALL BE REMOVED AND REPLACED WITHIN 30 DAYS OF NOTIFICATION OR IN GROWTH SEASON DETERMINED TO BE BEST FOR THE PLANT.
3. ONLY ONE REPLACEMENT PER TREE OR SHRUB SHALL BE REQUIRED AT THE END OF THE WARRANTY PERIOD, UNLESS LOSS IS DUE TO FAILURE TO COMPLY WITH WARRANTY.
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.

LANDSCAPE PLAN REQUIREMENTS

1. REQUIRED FRONT YARD LANDSCAPING
   A. ONE TREE SHALL BE PLANTED FOR EACH 30 FEET OF STREET FRONTAGE
   B. ONE SHRUB REQUIRED FOR EACH 20 FEET OF STREET FRONTAGE
2. REQUIRED OPEN YARD LANDSCAPING
   A. ONE TREE FOR EVERY 5,000 SQ. FT. OF LOT AREA NOT COVERED BY BUILDINGS/STRUCTURES
   B. TWO SHRUBS PER 5,000 SQ. FT. OF TOTAL LOT AREA
3. REQUIRED TRASH STORAGE CONTAINER LANDSCAPING
   A. REFER TO LANDSCAPE PLAN FOR SCREENING OF TRASH ENCLOSURE.
1. PROVIDED FRONT YARD LANDSCAPING
   A. TREES PROVIDED - 74.55' OF STREET FRONTAGE / 30 FEET = 3 TREES PROVIDED
   B. SHRUBS PROVIDED- 74.55' OF STREET FRONTAGE / 20 FEET = 4 SHRUBS PROVIDED
2. PROVIDED OPEN YARD LANDSCAPING
   A. TREES PROVIDED- 92,014 SQ. FT. - 14,100 BLDG SQ. FT. = 77,917 SQ. FT. / 5,000 SQ. FT. = 17 EX TREES
   B. SHRUBS PROVIDED- 92,014 SQ. FT. / 5,000 SQ. FT = 18.4 x 2 = 37 SHRUBS PROVIDED
3. REQUIRED TRASH STORAGE CONTAINER LANDSCAPING
   A. REFER TO LANDSCAPE PLAN - 10 EMERALD ARBORVITAE PROVIDED

SEED AND MULCH WITH GUARANTEE FOR ESTABLISHMENT OF GRASS WTIHIN 3-6 MONTHS.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL.	SIZE
CH	2	CARPINUS BETULUS 'COLUMNARIS'	COLUMNAR EUROPEAN HORNBEAM	B & B	2"CAL	6' TALL MIN.
TH	10	THUJA OCCIDENTALIS 'EMERALD'	EMERALD ARBORVITAE	15 GAL		6' TALL MIN.
TS	2	TILIA CORDATA 'SPRING GLOW'	LITTELEAF LINDEN	B & B	2"CAL	6' TALL MIN.
EXISTING TREE MASS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL.**	**SIZE**
EX	17	EXISTING	EXISTING TREE	EXISTING	VARIES	VARIES
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**MIN. HEIGHT**	
BG	9	BUXUS X 'GREEN MOUND'	GREEN MOUND BOXWOOD	3 GAL		
CA	3	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	3 GAL		
EC	3	EUONYMUS ALATUS 'COMPACTUS'	COMPACT BURNING BUSH	3 GAL		
PD	3	PHYSOCARPUS OPULIFOLIUS 'DIABLO'	DIABLO NINEBARK	3 GAL		
RG	21	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	3 GAL		
SY	6	SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	3 GAL		
VI CA	5	VIBURNUM CARLESII 'COMPACTUM'	KOREAN SPICE VIBURNUM	3 GAL		

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT
	533 SF	BOUTELOUA DACTYLOIDES	BUFFALO GRASS	SOD
	379	JUNCUS EFFUSUS	SOFT RUSH	4"POT

PREMIER DESIGN GROUP
100 MIDLAND PARK DRIVE
WENTZVILLE, MO 63385
MISSOURI CERTIFICATE OF AUTHORITY #E2000009031
MISSOURI CERTIFICATE OF AUTHORITY #LS-2002000849
MISSOURI CERTIFICATE OF AUTHORITY #A-2006009538

STATE OF MISSOURI
STEVEN D. MARION
NUMBER
PE-2006007195
PROFESSIONAL ENGINEER

STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

Project: PETSUITES OF AMERICA
LEE'S SUMMIT, MO
250 NW MCNARY CT.
LEE'S SUMMIT, MO 64086
TIM CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Date: 1-27-2021

#	Revision Date	Description of Changes

Sheet Title: LANDSCAPE PLAN

Sheet Number: L-100

Project No.	2008920
Drawn By	Z. KUNTZ/A. JONES
Checked By	M.FOGARTY

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