

GENERAL NOTES

- 1. CITY APPROVAL OF THE CONSTRUCTION SITE PLANS DOES NOT MEAN THAT ANY BUILDING CAN BE CONSTRUCTED ON THE LOTS WITHOUT MEETING THE BUILDING SETBACKS AS REQUIRED BY THE ZONING CODE. ON JULY 8, 2009 THE OTFALLON BOARD OF ADJUSTMENT APPROVED A BUILDING SETBACK OF 25 FEET.
2. ALL PROPOSED UTILITIES AND/OR UTILITY RELOCATIONS SHALL BE LOCATED UNDERGROUND.
3. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS, TREES AND BRUSH, AND OTHER MATERIAL CREATED AS A RESULT OF CONSTRUCTION. MATERIAL SHALL BE DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. LANDFILL TICKETS FOR SUCH DISPOSAL SHALL BE MAINTAINED ON FILE BY THE DEVELOPER. BURNING ON SITE SHALL BE ALLOWED ONLY BY PERMIT FROM THE LOCAL FIRE DISTRICT. IF A BURN PIT IS PROPOSED, THE LOCATION AND MITIGATION SHALL BE SHOWN IN THE GRADING PLANS AND DOCUMENTED BY THE SOILS ENGINEER.
4. NO SLOPES SHALL EXCEED 3 (HORIZONTALLY):1 (VERTICALLY).
5. ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER, PROPOSED ROADS, AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-186 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL FILL PLACED IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS. THE MOISTURE CONTENT OF THE SOIL IN FILL AREAS IS TO CORRESPOND TO THE COMPACTIVE EFFORT AS DEFINED BY THE STANDARD OR MODIFIED PROCTOR TEST. OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED USING THE SAME TEST THAT WAS USED FOR COMPACTION. SOIL COMPACTION CURVES SHALL BE SUBMITTED TO THE CITY OF OTFALLON PRIOR TO THE PLACEMENT OF FILL. PROOF ROLLING MAY BE REQUIRED TO VERIFY SOIL STABILITY AT THE DISCRETION OF THE CITY OF OTFALLON.
6. DEVELOPER MUST SUPPLY CITY CONSTRUCTION INSPECTORS WITH AN ENGINEER'S SOIL REPORT PRIOR TO AND DURING SITE SOIL TESTING. THE SOIL REPORT WILL BE REQUIRED TO CONTAIN THE FOLLOWING INFORMATION ON SOIL TEST CURVES (PROCTOR REPORTS) FOR PROJECTS WITHIN THE CITY:
- MAXIMUM DRY DENSITY
- OPTIMUM MOISTURE CONTENT
- MAXIMUM AND MINIMUM ALLOWABLE MOISTURE CONTENT
- CURVE MUST BE PLOTTED TO SHOW DENSITY FROM A MINIMUM OF 90% AS DETERMINED BY THE "MODIFIED AASHTO T-186 COMPACTION TEST" (A.S.T.M.-D-1557) OR FROM A MINIMUM OF 95% AS DETERMINED BY THE "STANDARD PROCTOR TEST AASHTO T-99, METHOD C. (A.S.T.M.-D-698). PROCTOR TYPE MUST BE DESIGNATED ON DOCUMENT. CURVE MUST HAVE AT LEAST 5 DENSITY POINTS WITH MOISTURE CONTENT AND SAMPLE LOCATIONS LISTED ON DOCUMENT.
- SPECIFIC GRAVITY.
- NATURAL MOISTURE CONTENT.
- LIQUID LIMIT.
- PLASTIC LIMIT.
- BE ADVISED THAT IF THIS INFORMATION IS NOT PROVIDED TO THE CITY'S CONSTRUCTION INSPECTOR THE CITY WILL NOT ALLOW GRADING OR CONSTRUCTION ACTIVITIES TO PROCEED ON ANY PROJECT SITE.
7. THE PERMITTEE SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN). CONTROL SHALL COMMENCE WITH CLEARING OPERATIONS AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE CITY OF OTFALLON AND AS NECESSARY BY MODOT. THE PERMITTEE'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE CITY OF OTFALLON AND MODOT WILL BE NOTIFIED OF ANY DEVIATION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT SHALL BE REMOVED IMMEDIATELY. ANY DEPOSITION OF SILT OR MUD IN NEW OR EXISTING STORM SEWERS OR MANHOLES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF OTFALLON AND AS REQUIRED BY MODOT. FOR THIS PROJECT, THE CONTRACTOR SHALL PROVIDE ALL EROSION CONTROL.
8. ALL EROSION CONTROL SYSTEMS SHALL BE INSPECTED AND CORRECTED WEEKLY, ESPECIALLY WITHIN 48 HOURS OF ANY RAINSTORM RESULTING IN ONE-HALF INCH OF RAIN OR MORE. ANY SILT OR DEBRIS LEAVING THE SITE AND AFFECTING PUBLIC RIGHT-OF-WAYS OR STORM WATER DRAINAGE FACILITIES SHALL BE CLEANED UP WITHIN 24 HOURS AFTER THE END OF THE STORM.
9. ANY EXISTING WELLS AND/OR SPRINGS WHICH MAY EXIST ON THE PROPERTY MUST BE SEALED IN A MANNER ACCEPTABLE TO THE CITY OF OTFALLON CONSTRUCTION INSPECTION DEPARTMENT AND FOLLOWING MISSOURI DEPARTMENT OF NATURAL RESOURCES STANDARDS AND SPECIFICATIONS.
10. ALL PAVING TO BE IN ACCORDANCE WITH THE ST. CHARLES COUNTY STANDARDS AND SPECIFICATIONS, EXCEPT AS MODIFIED BY THE CITY OF OTFALLON ORDINANCES.
11. SIDEWALKS, CURB RAMP, AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ABOVE INFORMATION AND THE PLANS, THE ADAAG GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR, PRIOR TO ANY CONSTRUCTION, SHALL NOTIFY THE PROJECT ENGINEER.
12. ALL INSTALLATIONS AND CONSTRUCTION SHALL CONFORM TO THE APPROVED ENGINEERING DRAWINGS. HOWEVER, IF THE DEVELOPER CHOOSES TO MAKE MINOR MODIFICATIONS IN DESIGN AND/OR SPECIFICATIONS DURING CONSTRUCTION, HE/SHE SHALL MAKE SUCH CHANGES AT HIS/HER OWN RISK, WITHOUT ANY ASSURANCE THAT THE CITY ENGINEER WILL APPROVE THE COMPLETED INSTALLATION OR CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE CITY ENGINEER OF ANY CHANGES FROM THE APPROVED DRAWINGS. THE DEVELOPER MAY BE REQUIRED TO CORRECT THE INSTALLED IMPROVEMENTS SO AS TO CONFORM TO THE APPROVED ENGINEERING DRAWINGS. THE DEVELOPER MAY REQUEST A LETTER FROM THE CONSTRUCTION INSPECTION DIVISION REGARDING ANY FIELD CHANGES APPROVED BY THE CITY INSPECTORS.
13. TRAFFIC CONTROL SHALL BE PER MISSOURI DEPARTMENT OF TRANSPORTATION OR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, WHICHEVER IS MOST STRINGENT.
14. ALL TRAFFIC SIGNALS, STREET SIGNS, SIGN POSTS, AND BACKS AND BRACKET ARMS SHALL BE PAINTED BLACK USING CARBOLINE RUSTBOND PENETRATING SEALER 50 AND CARBOLINE 133 HB PAINT (OR EQUIVALENT AS APPROVED BY CITY AND MODOT). SIGNS DESIGNATING STREET NAME SHALL BE ON THE OPPOSITE SIDE OF THE STREET FROM TRAFFIC CONTROL SIGNS.
15. ALL SANITARY SEWER LATERALS AND SANITARY MAINS CROSSING UNDER ROADWAYS MUST HAVE THE PROPER ROCK BACKFILL AND TO REQUIRED COMPACTION.
16. LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION. CORRECTIONS WILL NEED TO BE MADE IF NOT IN COMPLIANCE WITH CITY STANDARDS.
17. CONNECTIONS AT ALL SANITARY OR STORM STRUCTURE TO BE MADE WITH A-LOK JOINT OR EQUAL.
18. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF SANITARY OR STORM SEWER STRUCTURES. CONTRACTOR SHALL USE PRECAST CONCRETE STRUCTURES UNLESS OTHERWISE NOTED AND APPROVED BY THE CITY OF OTFALLON.
19. ALL CONCRETE PIPES WILL BE INSTALLED WITH O-RING RUBBER TYPE GASKETS.
20. PVC STORM SEWER PIPE SHALL BE SDR 35 OR GREATER AS REQUIRED BY DEPTH, WATER TIGHT TO MEET ASTM F1417 WATER TIGHT FIELD TEST, AND MEET THE REQUIREMENT OF CITY OF OTFALLON FOR GASKETED O-RING TYPE PIPE CONNECTION. INSTALLATION SHALL FOLLOW THE "EMBEDMENT OF PLASTIC STORM SEWER PIPE" DETAIL. HOPE MAY BE USED IN LIEU OF PVC PIPE. HOPE PIPE SHALL BE ADS N-12WT WATER TIGHT (TO MEET ASTM F1417 WATER TIGHT FIELD TEST), SMOOTH INTERIOR PIPE OR APPROVED EQUAL, TO MEET THE REQUIREMENT OF CITY OF OTFALLON FOR GASKETED O-RING TYPE PIPE CONNECTION.
21. RIP RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD AFTER INSTALLATION FOR EFFECTIVENESS AND FIELD MODIFIED IF NECESSARY TO REDUCE EROSION ON AND OFF SITE.
22. PROVIDE A MARKING ON THE STORM SEWER INLETS. THE CITY WILL ALLOW THE FOLLOWING MARKERS AND ADHESIVE PROCEDURES ONLY AS SHOWN IN THE TABLE BELOW OR AN APPROVED EQUAL BY ALMETEK INDUSTRIES. "PEEL AND STICK" ADHESIVE PADS WILL NOT BE ALLOWED.
MANUFACTURER SIZE ADHESIVE STYLE MESSAGE (PART #) WEBSITE
ACP INTERNATIONAL 3 7/8" EPOXY CRYSTAL "NO DUMPING DRAINS TO WATER WAYS" (SD-W-02) WWW.ACPINTERNATIONAL.COM
DAS MANUFACTURING, INC. 4" EPOXY STANDARD "NO DUMPING DRAINS TO STEAM" (#SDS) WWW.DASMANUFACTURING.COM
23. A 5/8" DIA. TRASH BAR SHALL BE CENTERED WITHIN THE OPENING(S) OF ALL CURB INLETS AND AREA INLETS.
24. ALL IDENTIFICATION AND DIRECTIONAL SIGN(S) MUST HAVE LOCATIONS AND SIZES APPROVED AND PERMITTED SEPARATELY THROUGH THE PLANNING AND DEVELOPMENT DIVISION. SIGN LOCATIONS ARE SHOWN ON THE PLANS.
25. NO GRADED AREAS ARE TO REMAIN BARE FOR OVER 14 DAYS WITHOUT BEING SEEDED AND MULCHED.
26. ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT FROM THE PLANNING AND DEVELOPMENT DIVISION.
27. ALL CONSTRUCTION TRAFFIC RELATED TO THIS SITE MUST ENTER AND EXIT THIS SITE VIA J-MARK DRIVE TO SOUTH WOODLAWN AVENUE AND NOT FROM VETERAN'S MEMORIAL PARKWAY.

GRADING & DRAINAGE NOTES

- 1. 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 RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
3. ALL STORM SEWER PIPES AND INLETS SHALL MEET HEAVY DUTY TRAFFIC (HS20) LOADING AND BE INSTALLED ACCORDINGLY.
4. CONNECTION AT ALL SANITARY AND STORM SEWER STRUCTURES SHALL BE MADE WITH A-LOK JOINTS, OR APPROVED EQUAL.
5. BUILDING PAD AND PARKING AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY ANY SOFT OR UNSUITABLE AREAS. PRIOR TO BASE ROCK PLACEMENT, THE PROOF-ROLL SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER. AREAS IDENTIFIED AS UNSUITABLE SHALL BE OVER EXCAVATED AND RECONSTRUCTED WITH ENGINEERED FILL.
6. CONTRACTOR SHALL ADJUST ALL GRATES, MANHOLES, VALVE BOXES, ETC. TO MATCH FINISH GRADES, AS REQUIRED.
7. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT. MINIMUM 0.20" DROP THROUGH ALL STRUCTURES AND MANHOLES.
8. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE FLUSH WITH FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". TOP OF BOXES SHALL BE SLOPED TO MATCH PAVEMENT GRADE.
9. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
10. ALL SITES USED FOR IMPORTING OR EXPORTING OF FILL MATERIAL SHALL HAVE AN ACTIVE MISSOURI DEPARTMENT OF NATURAL RESOURCES LAND DISTURBANCE PERMIT.
11. CONTRACTOR SHALL NOT ADVANCE TRENCH EXCAVATION BEYOND AMOUNT THAT CAN ACCOMMODATE PIPE INSTALLATION AND BACKFILLING AT THE END OF EACH DAY.
13. ENGINEERED FILL SHOULD BE FREE OF FROZEN SOIL, ORGANICS, RUBBISH, LARGE ROCKS, WOOD, OR OTHER DELETERIOUS MATERIAL. COHESIVE FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY AND BE WITHIN -2 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT AS DESCRIBED BY ASTM D698. GRANULAR FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY AND SHOULD BE DRIER THAN +4 PERCENT OF OPTIMUM MOISTURE CONTENT. PLACE FILL MATERIAL IN LOOSE LIFTS NOT TO EXCEED 8 INCHES IN THICKNESS.

SWPPP NOTES

- 1. CONTRACTOR SHALL FOLLOW STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. A COPY OF THIS PLAN AND PERMIT SHALL REMAIN ON SITE THROUGHOUT CONSTRUCTION.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME. CONTRACTOR SHALL REFERENCE THE ST. CHARLES COUNTY SOIL AND WATER CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL GUIDELINES.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVAL HAS BEEN RECEIVED FROM ALL GOVERNING AUTHORITIES. CONTRACTOR SHALL UTILIZE TOPSOIL FROM SITE IN LANDSCAPED AREAS WITH ANY EXCESS BEING STOCKPILED ON SITE.
4. IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPING AREAS SHALL BE SEEDDED AND MULCHED.
5. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
6. CONTRACTOR SHALL PROVIDE A 20' x 50' TEMPORARY TRUCK WASH OFF AREA, CONSTRUCT PER CONSTRUCTION ENTRANCE DETAIL. CONTRACTOR SHALL PROVIDE WATER TO THE TEMPORARY WASH OFF AREA. IF ON-SITE WATER IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE A WATER TRUCK. SITE WILL BE ACCESSED VIA EXITING PAVEMENT.
7. CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS, TREES & BRUSH AND OTHER MATERIAL CREATED AS A RESULT OF THE CONSTRUCTION WORK AND THE SITE SHALL BE RETURNED TO ITS ORIGINAL CONDITION.
8. ALL PERIMETER LANDSCAPED AREAS SHALL BE GRASS COVERED.
9. NO GRADED AREAS ARE TO REMAIN BARE FOR OVER 14 DAYS ARE SEEDDED AND MULCHED.

WATER JETTING NOTE

PUBLIC STREET CONSTRUCTION REQUIREMENTS (405.210)

- 1. JETTING. GRANULAR MATERIALS AND EARTH MATERIALS ASSOCIATED WITH NEW CONSTRUCTION BEYOND THE PAVEMENT MAY BE JETTED. TAKING CARE TO AVOID DAMAGE TO NEWLY LAID SEWERS. THE JETTING SHALL BE PERFORMED WITH A PROBE ROUTE ON NOT GREATER THAN SEVEN AND ONE-HALF (7.5) FOOT CENTERS WITH THE JETTING PROBE CENTERED OVER AND PARALLEL WITH THE DIRECTION OF THE PIPE. TRENCH WIDTHS GREATER THAN TEN (10) FEET WILL REQUIRE MULTIPLE PROBES EVERY SEVEN AND ONE-HALF (7.5) FOOT CENTERS.
a. DEPTH. TRENCH BACKFILL LESS THAN EIGHT (8) FEET IN DEPTH SHALL BE PROBED TO A DEPTH EXTENDING TO HALF THE DEPTH OF THE TRENCH BACKFILL, BUT NOT LESS THAN THREE (3) FEET. TRENCH BACKFILL GREATER THAN EIGHT (8) FEET IN DEPTH SHALL BE PROBED TO HALF THE DEPTH OF THE TRENCH BACKFILL BUT NOT GREATER THAN EIGHT (8) FEET.
b. EQUIPMENT. THE JETTING PROBE SHALL BE A METAL PIPE WITH AN EXTERIOR DIAMETER OF ONE AND ONE-HALF (1.5) TO TWO (2) INCHES.
c. METHOD. JETTING SHALL BE PERFORMED FROM THE LOW SURFACE TOPOGRAPHIC POINT AND PROCEED TOWARD THE HIGH POINT, AND FROM THE BOTTOM OF THE TRENCH BACKFILL TOWARDS THE SURFACE. THE FLOODING OF THE SOIL WATER IS NOT ALLOWED TO FLOW AWAY FROM THE DITCH WITHOUT FIRST SATURATING THE TRENCH.
d. SURFACE BRIDGING. THE CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF THE SURFACE BRIDGING (THE TENDENCY FOR THE UPPER BACKFILL CRUST TO ARCH OVER THE TRENCH RATHER THAN COLLAPSE AND CONSOLIDATE DURING THE JETTING PROCESS). THE CONTRACTOR SHALL BREAKDOWN THE BRIDGED AREAS USING AN APPROPRIATE METHOD SUCH AS WHEELS OR BUCKET OF A BACKHOE. WHEN THE SURFACE CRUST IS COLLAPSED, THE VOID SHALL BE BACKFILLED WITH THE SAME MATERIAL USED AS TRENCH BACKFILL AND REJETTED. COMPACTION OF THE MATERIALS WITHIN THE SUNKEN/JETTED AREA SHALL BE COMPACTED SUCH THAT NO FURTHER SURFACE SUBSIDENCE OCCURS.

CONDITIONS OF APPROVAL

- 1. PRIOR TO CONSTRUCTION SITE PLAN APPROVAL, A PHOTOMETRIC LIGHTING PLAN IN ACCORDANCE WITH THE CITY'S EXTERIOR LIGHTING STANDARDS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL FOR ALL PROPOSED EXTERIOR LIGHTING.
2. ALL CONSTRUCTION TRAFFIC RELATED TO THIS SITE MUST ENTER AND EXIT THIS SITE VIA J-MARK DRIVE TO SOUTH WOODLAWN AVENUE AND NOT FROM VETERAN'S MEMORIAL PARKWAY.

- 14. ROCKS AND STONES THAT EXCEED THE THICKNESS OF THE LOOSE LIFT FILL LAYER SHOULD BE REMOVED AND DISPOSED OF OFF THE IMMEDIATE CONSTRUCTION AREA.
15. IMPORTED SOILS PROPOSED FOR USE AS FILL OR BACKFILL SHOULD BE REVIEWED AND ANALYZED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE ON SITE. SOIL CLASSIFIED AS MH, OH, OL, OR PT (HIGH PLASTICITY SOILS AND ORGANIC SOILS) BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487) SHOULD NOT BE IMPORTED FOR USE AS ENGINEERED FILL. SUITABLE IMPORTED MATERIALS FOR GENERAL SITE FILL ARE THOSE THAT CLASSIFY AS GW, GM, GC, SC, AND CL IN ACCORDANCE WITH ASTM D 2487. MATERIALS CLASSIFIED AS CH SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO THEIR IMPORTATION AND ONLY USED OUTSIDE THE BUILDING PAD AT DEPTHS BELOW THE UPPER 2 FEET OF SUBGRADE.
16. NATURAL SLOPES TO RECEIVE FILL WHICH ARE STEEPER THAN 5H:1V SHOULD BE BENCHED PRIOR TO PLACEMENT OF FILL. BENCHING WILL PROVIDE LEVEL SURFACES FOR COMPACTION AND REDUCE THE POTENTIAL FOR DEVELOPMENT OF INCLUDED PLANES OF WEAKNESS BETWEEN THE NATURAL SOIL AND COMPACTED FILL. THE BENCHES SHOULD BE SPACED SUCH THAT THE HEIGHT OF THE CUT AT THE UP-SLOPE END OF THE BENCH IS LESS THAN 5 FEET.
17. FILL AND SUBGRADE CONSTRUCTION SHOULD NOT BE STARTED ON FOUNDATION SOIL, PARTIALLY COMPLETED FILL, OR SUBGRADES THAT CONTAIN FROST OR ICE. FILL SHOULD NOT BE CONSTRUCTED OF FROZEN SOIL. FROZEN SOIL SHOULD BE REMOVED PRIOR TO PLACING FILL MATERIAL.
18. AFTER STRIPPING AND GRUBBING OPERATIONS ARE COMPLETED AND PRIOR TO FILL PLACEMENT, AREAS TO BE FILLED SHALL BE PROOF ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY SOFT AND UNSUITABLE AREAS, PER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND THE CITY OF OTFALLON. SOFT MATERIAL MAY BE MOISTURE CONDITIONED AND REUSED AS ENGINEERED FILL. UNSUITABLE AND DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE.
19. ALL NEW UTILITY TRENCHES SHOULD BE BACKFILLED IN ACCORDANCE WITH APPROPRIATE CONTROLLED ENGINEERED FILL SPECIFICATIONS.
20. FIELD DENSITY TESTS SHOULD BE CONDUCTED IN ACCORDANCE WITH ASTM D6938 (NUCLEAR METHODS) OR ASTM D1556 (SAND CONE METHOD). FIELD DENSITY TESTS SHOULD BE PERFORMED AT THE RATE OF ONE TEST PER 2,000 SQUARE FEET PER LIFT WITHIN THE BUILDING AND 2,000 SQUARE FEET PER LIFT BENEATH PAVEMENTS, SIDEWALKS, AND OTHER POTENTIAL STRUCTURAL AREAS WITH A MINIMUM OF 3 TESTS PER LIFT AND ONE TEST PER 150 LINEAL FEET PER LIFT FOR FOUNDATION, TRENCH AND WALL BACKFILL.
21. ALL SANITARY LATERALS AND SANITARY MAINS CROSSING UNDER PAVEMENT MUST HAVE THE PROPER ROCK BACKFILL AND TO REQUIRED COMPACTION.
22. ALL LOW PLACES WHETHER ON-SITE OR OFF-SITE SHALL BE GRADED TO ALLOW DRAINAGE. THIS CAN BE ACCOMPLISHED WITH TEMPORARY DITCHES, ANY NECESSARY OFF-SITE DRAINAGE EASEMENTS WILL BE ACQUIRED BEFORE GRADING BEGINS.
23. HIGH DENSITY POLYETHYLENE (HDPE) SHALL MEET AASHTO M-284 TYPE S, OR ASTM F-2306 WITH JOINTS MEETING THE PERFORMANCE TEST REQUIREMENTS OF ASTM D-3212. HDPE PIPE INSTALLATIONS SHALL UTILIZE STANDARD CONCRETE DRAINAGE STRUCTURES AND FLARED END SECTIONS.

SEQUENCE OF EVENTS

- 1. INSTALL CONSTRUCTION ENTRANCE.
2. INSTALL TREE PROTECTION FENCING AS SHOWN ON THE PLAN.
3. INSTALL DITCH CHECKS AND INLET PROTECT AS SHOWN ON THE PLAN.
4. INSTALL DIVERSION DIKES, SILT FENCE, AND SEDIMENT TRAPS AS SHOWN ON THE INITIAL SEDIMENT AND EROSION CONTROL PLAN.
5. BEGIN CLEARING AND GRUBBING OPERATIONS. CLEARING AND GRUBBING SHALL BE DONE ONLY IN AREAS WHERE EARTHWORK SHALL BE PERFORMED AND ONLY IN AREAS WHERE BUILDING IS PLANNED TO COMMENCE WITHIN 14 DAYS AFTER CLEARING AND GRUBBING. STRIP TOP SOIL AND STOCKPILE (WHERE NOTED ON THE PLAN).
6. BEGIN SITE GRADING. RESPREAD TOPSOIL THEN SEED AND MULCH ALL SLOPES GREATER THAN 15% UPON REACHING FINAL GRADE.
7. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS (OR 7 DAYS IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 (3 FEET HORIZONTAL TO 1 FOOT VERTICAL) OR IF THE SLOPE IS GREATER THAN 3% AND GREATER THAN 150 FEET IN LENGTH) SHALL BE TEMPORARILY SEEDDED AND WATERED, EXCEPT AS PRECLUDED BY SNOW COVER. IN THE EVENT OF SNOW COVER, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICAL THEREAFTER. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL CEASE FOR 12 MONTHS SHALL BE PERMANENTLY SEEDDED AND MULCHED.
8. INSTALL STORM SEWERS AND EXTEND UNDERGROUND DETENTION BASIN AS GRADES ALLOW. INSTALL INLET PROTECT IMMEDIATELY UPON COMPLETION OF INLET CONSTRUCTION.
9. INSTALL SITE UTILITIES AS GRADES ALLOW.
10. BEGIN BUILDING CONSTRUCTION.
11. BEGIN PAVEMENT SUBGRADE PREPARATION.
12. PLACE PAVEMENT BASE ROCK.
13. CONSTRUCTION CURB AND PAVEMENT. REMOVE INLET PROTECTION NO SOONER THAN 24 HOURS PRIOR TO PAVEMENT CONSTRUCTION.
14. RESPREAD TOPSOIL THEN PLACE SOD OR SEED AND MULCH ALL EXPOSED AREAS AS NOTED BY THE LANDSCAPE PLAN.
15. CLEAN OUT ALL PHASE 2 STORMTECH UNDERGROUND DETENTION SYSTEM ISOLATOR ROWS VIA JETVAC PROCESS AS RECOMMENDED BY MANUFACTURER. OBTAIN OWNERS APPROVAL OF CLEANOUT.
16. REMOVE SEDIMENT AND EROSION CONTROL ONLY AFTER THE SITE HAS BEEN STABILIZED.

SITE COVERAGE-PHASE 2 (ONLY)

Table with 3 columns: Category, Area, Percentage. Includes TOTAL AREA (155,522 SF), BUILDING FOOTPRINT AREA (42,700 SF), LANDSCAPED AREA (65,716 SF), PAVEMENT AREA (31,064 SF), SIDEWALK & PORCH AREA (16,442 SF).

PARKING NOTE

- REQUIRED PARKING: 42 UNITS @ 0.5 SPACE / UNIT = 21 SPACES
PROVIDED PARKING - PHASE 2: 69 SPACES / 42 UNITS = 1.6 SPACES / UNIT

OPEN SPACE STANDARDS

Table with 3 columns: Category, Area, Percentage. Includes PERMANENT PROTECTED OPEN SPACE (LOT AREA = 155,522 SF, REQUIRED = 46,656 SF), ACTIVE/PASSIVE OPEN SPACE (LOT AREA = 42,700 SF, REQUIRED = 18,663 SF).

SANITARY FLOW NOTE

ESTIMATED SANITARY FLOW: 42 APARTMENTS TOTAL x 2 PERSON/UNIT x 80 GALLONS/PERSON = 6,720 GALLONS PER DAY

CONSTRUCTION NOTES

- 1. INTEGRAL CURB SECTION IS AN ACCEPTABLE ALTERNATIVE TO CURB & GUTTER IN AREAS IDENTIFIED ON THE PLANS AS CURB & GUTTER.
2. ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF THICKENED SIDEWALK. ALL RADII ARE 5' UNLESS OTHERWISE NOTED.
3. PEDESTRIAN CROSSWALKS SHALL BE STRIPED AS DETAILED IN THESE PLANS.
4. WHERE WATER MAINS MUST CROSS OVER STORM DRAINS, OR SANITARY SEWERS, THE WATER MAIN MUST BE LVD AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, AND A FULL LENGTH OF WATER MAIN PIPE MUST BE CENTERED OVER THE SEWER TO BE GROSSED SO BOTH OF THE JOINTS WILL BE EQUALLY DISTANT FROM THE SEWER AND AS REMOTE FROM THERE AS POSSIBLE. WHERE CONDITIONS PREVENT THE MINIMUM VERTICAL SEPARATION FROM BEING MAINTAINED OR WHERE IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER LINE, THE WATER MAIN MUST BE BACKFILLED WITH COMPACTED CLAY TO A MINIMUM OF 18 INCHES ABOVE AND BELOW THE OUTSIDE DIMENSION OF THE WATER MAIN AND FOR A HORIZONTAL DISTANCE OF 10 FEET FROM THE SEWER BEING GROSSED. IN NO CASE SHALL THE WATER MAIN AND THE SEWER SHARE THE SAME GRANULAR FILL BED. IN MAKING SUCH CROSSINGS, A FULL LENGTH OF PIPE MUST BE CENTERED OVER OR UNDER THE SEWER TO BE GROSSED SO THAT THE JOINTS WILL BE EQUALLY DISTANT FROM THE SEWER AND AS REMOTE THERE FROM AS POSSIBLE. WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF THE SEWER LINE AND THE TOP OF THE WATER MAIN MUST BE MAINTAINED WITH ADEQUATE SUPPORT FOR THE LARGER SIZE SEWER LINES TO PREVENT THEM FROM SETTLING.
5. HANDICAP PARKING SIGNS WITH A FINE LEGEND (\$50 - \$300) SHALL BE PROVIDED FOR ALL ACCESSIBLE PARKING SPACES.
6. BIKE RACKS SHALL BE HUNTO BR SERIES STEEL PIPE WAVE DESIGN WITH BLACK POWDER COATING AND FLANGE MOUNTING OPTION, OR APPROVED EQUAL.

ADDITIONAL GENERAL NOTES

- 1. ALL THE REQUIREMENTS OF THE PLANNING & ZONING COMMISSION ARE ADDRESSED.
2. THIS SITE WILL BE IN COMPLIANCE WITH PHASE II ILICIT STORM WATER DISCHARGE GUIDELINES PER ORDINANCE 5082.
3. THE STORMTECH ISOLATION CHAMBERS ARE THE POST CONSTRUCTION BMP'S. THE POST CONSTRUCTION BMP MAINTENANCE IS FOUND IN THE "STORM WATER CALCULATIONS" REPORT.
4. ALL HVAC & MECHANICAL UNITS SHALL BE PROPERLY SCREENED.
5. ALL STORM SEWERS, STORM SEWER DRAINAGE FACILITIES, SANITARY SEWERS, AND WATER MAINS ON SITE ARE PRIVATE, EXCEPT AS NOTED ON PLANS.
6. 10' UTILITY EASEMENT IS BEHIND PUBLIC RIGHT OF WAY.
7. CITY WATER METERS ARE PLACED IN DEDICATED EASEMENT.
8. ALL LIGHT FIXTURES ARE WITHIN LANDSCAPE ISLANDS.
9. ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT THROUGH THE PLANNING DIVISION.

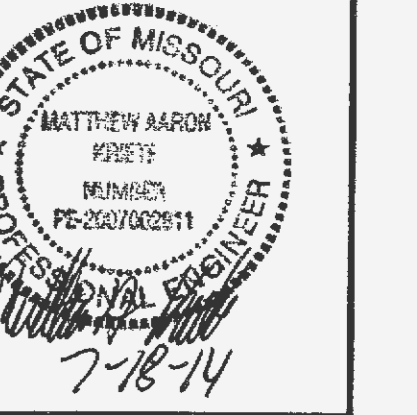
UTILITY CONSTRUCTION NOTES

- 1. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
2. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS. BACKFILL OF TRENCHES THROUGH ANY IMPROVED AREAS, SUCH AS STREET, DRIVES OR PARKING LOTS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY (ASTM D-698).
3. CONTRACTOR SHALL SUPPLY & INSTALL SCHEDULE 40 PVC CONDUITS FOR TELEPHONE AND TELEVISION (SEE PLAN).
4. SUMMARY OF SINGLE PHASE ELECTRIC RESIDENTIAL DEVELOPMENT WITH AMEREN MO. AMEREN SUPPLIES:
A. ALL PRIMARY CABLE AND LABOR TO INSTALL.
B. ALL SECONDARY CABLE AND LABOR TO INSTALL.
C. ALL PRIMARY, SECONDARY AND STREET LIGHT CONDUIT WHEN THE DEVELOPER IS INSTALLING AMEREN MAINTAINED LIGHTS. (MATERIAL ONLY)
D. ALL STREET LIGHT MATERIAL AND CABLE.
E. ALL TRANSFORMERS AND TRANSFORMER PADS AND LABOR TO INSTALL.
F. ALL SECONDARY POWER PEDESTALS.
THE DEVELOPER SUPPLIES:
G. ALL LABOR TO INSTALL THE ENTIRE CONDUIT SYSTEM PER AMEREN SPECS AND DESIGN.
H. ALL TRANSFORMER PAD SITES MUST BE PREPARED PER AMEREN SPECS WHERE DESIGNATED.
I. ALL TRANSFORMER DOORS OPEN TO THE ROAD.
II. ALL PAD SITES MUST BE LEVEL WITH COMPACTED ROCK.
III. ALL CONDUITS MUST BE INSTALLED PRIOR TO AMEREN SETTING A TRANSFORMER WITH ALL PULL STRING INSTALLED AND CUT OFF TO 6" ABOVE FINAL GRADE.
I. ALL METER BASES AND LABOR TO INSTALL PER OUR SPECS. ALL METER BASES MUST BE ON AMEREN'S PRE-APPROVED LIST.
J. ALL STREET LIGHT BASES, CONDUIT SYSTEM, AND PULL STRING MUST BE INSTALLED PRIOR TO AMEREN SETTING ANY TRANSFORMERS. THE LIGHT CONDUIT SYSTEM MAY NOT BE INSTALLED LATER.
7. SITE LIGHTING WIRING IS NOT SHOWN. SEE SEPARATE SITE ELECTRICAL PLANS BY THE MEP AND AMEREN MO FOR SITE LIGHTING DETAILS, CONDUIT, POWER PEDESTALS, ETC.
8. LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY CONTRACTOR AND THE PROPER UTILITY COMPANY PROVIDING SERVICE PRIOR TO THE START OF CONSTRUCTION.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
10. UTILITY TIE-INS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO MEP FOR EXACT TIE-IN OF ALL UTILITIES.
11. SITE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
12. SITE CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
13. ALL UNDERGROUND UTILITY CONDUITS SHALL BE PLACED 48" BELOW FINISH GRADE UNLESS NOTED OTHERWISE.
14. ALL UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
15. TOPS OF EXISTING HANDHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED FINISHED ELEVATIONS.
16. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODE AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
17. REFER TO MEP PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
18. PVC CONDUIT SHALL BE SCHEDULE 40 PVC WITH LONG SHEEPS ONLY (36" MINIMUM RADIUS) AND CONTAIN PULLTAPE, UNLESS OTHERWISE NOTED.



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WOODBURY PLACE II 121 WOODLAWN AVENUE OTFALLON, ST. CHARLES COUNTY, MISSOURI



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