

**GENERAL NOTES**

- ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. THE CONTRACTOR SHALL BE ON RECORD WITH THE MISSOURI ONE CALL SYSTEM. ALL PROPOSED UTILITIES TO BE UNDERGROUND.
- ALL ELEVATIONS ARE BASED ON BENCHMARK NOTED ON THIS SHEET.
- BOUNDARY AND TOPOGRAPHIC SURVEY BY MARKER SURVEYING COMPANY, INC.
- ALL ON-SITE MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF OFFALLOM DEPARTMENT OF PUBLIC WORKS.
- ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING AS REQUIRED BY THE CITY.
- PRIOR TO BEGINNING ANY WORK ON THE SITE, THE SUB-CONTRACTOR SHALL CONTACT THE GENERAL CONTRACTOR FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.
- GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL DEVICES PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE CITY.
- ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.
- GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS.
- ALL GRADING & DRAINAGE TO BE IN CONFORMANCE WITH CITY STANDARDS.
- DRIVE ENTRANCES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY.
- SEEDING, SODDING, MULCHING AND PLANTINGS FOR ALL DISTURBED AREAS SHALL BE SPECIFIED ON THE LANDSCAPE PLAN.
- SIDEWALKS ALONG THE ACCESSIBLE ROUTE SHALL NOT HAVE A SLOPE EXCEEDING 1% TO 20%. SLOPES GREATER THAN 1% TO 20% MUST BE DESIGNED AS A RAMP. SIDEWALKS TO BE CONSTRUCTED TO ADA STANDARDS.
- SIDEWALKS, CURB RAMPS, RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAC) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ADAAC GUIDELINES AND THE INFORMATION ON THE PLANS, THE ADAAC GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION.
- A DRAINAGE PERMIT IS REQUIRED BY THE CITY DEPARTMENT OF PUBLIC WORKS FOR ALL PRIVATE STORM SEWERS.
- BY GRAPHIC PLOTTING ONLY, THIS PROPERTY DOES LIE WITHIN SPECIAL FLOOD ZONE AREAS ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL NUMBER 29183C0237 E AND COMMUNITY NUMBER 290316 (CITY OF OFFALLOM) WHICH BEARS AN EFFECTIVE DATE OF AUGUST 2, 1996. THE PROPERTY LIES WITHIN ZONE AE (SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD).
- NO GRADE SHALL EXCEED 3:1 SLOPE.
- STORMWATER SHALL BE DISCHARGED AT ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.
- ALL LANDSCAPE AREAS TO BE FILLED WITH A MINIMUM OF 6" OF TOPSOIL.
- ALL LANDSCAPED AREAS DISTURBED BY OFF-SITE WORK SHALL BE IMMEDIATELY SEED OR SODDED, AS DIRECTED BY CITY DEPARTMENT OF PUBLIC WORKS UPON COMPLETION OF WORK IN AREA AFFECTED.
- ADEQUATE TEMPORARY OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES SHALL BE PROVIDED. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEES' VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS.
- ALL PUBLIC SEWER CONSTRUCTION MUST CONFORM TO 2000 M.S.D. "STANDARD CONSTRUCTION SPECIFICATION & DETAILS".
- NO STEP ALLOWED AT ACCESSIBLE ENTRANCE DOORS.
- ALL ROOF TOP UNITS SHALL BE SCREENED BY A PARAPET WALL THAT EXTENDS AROUND THE PERIMETER OF THE BUILDING.
- STORM WATER DETENTION SHALL BE PROVIDED BY THE UNDERGROUND DETENTION SYSTEM ON LOT 3B.
- ALL PAVING TO BE TO ST. CHARLES COUNTY STANDARDS EXCEPT AS MODIFIED BY THE CITY OF OFFALLOM.
- THE SITE WILL BE IN COMPLIANCE WITH PHASE II ILLICIT STORM WATER DISCHARGE GUIDELINES PER ORD. 50B2 (THIS SITE IS TRIBUTARY TO AN EXISTING STORMWATER TREATMENT SYSTEM-PIDGEON PARK WEST PLAT 3).
- SETBACKS PER ZONING
 

BUILDING	PARKING
FRONT = 25'	FRONT = 10'
SIDE = 0'	SIDE = 0'
REAR = 0'	REAR = 0'
- ALL PROPOSED FENCING REQUIRES A SEPARATE PERMIT.
- ALL SIGN LOCATIONS AND SIZES MUST BE APPROVED SEPARATELY THROUGH THE PLANNING DIVISION.
- REQUIRED INTERIOR LANDSCAPING, 6% OF 51 P.S. X 270 S.F. = 826 S.F. PROVIDED INTERIOR LANDSCAPING = 1892 S.F.
- 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.

**DENSITY CALCULATIONS**

**SITE COVERAGE:**  
 34,380 s.f. (bldg & pvt.) X 100 = 79%  
 44,811 s.f. total site

**E.A.R.**  
 3,056 s.f. bldg. = 0.07  
 44,811 s.f. total site

Greenspace: (includes parking lot landscape areas)  
 9,587 s.f. pervious X 100 = 21%  
 44,811 s.f. total site

Pavement Coverage (includes walks)  
 30,947 s.f. impervious X 100 = 69%  
 44,811 s.f. total site

Building Coverage (with cooler):  
 3,433 s.f. X 100 = 8%  
 44,811 s.f. total site

**PARKING CALCULATIONS**

**PARKING REQUIRED:**  
 1) 20 SPACES PLUS 1 PER 100 S.F.  
 3,056/100 = 31 SPACES  
 \* 3,056 S.F. DOES NOT INCLUDE AREA OF COOLER  
**TOTAL PARKING REQUIRED = 51 SPACES REQUIRED**

**PARKING PROVIDED:**  
 9'x19' = 48 SPACES  
 A.D.A. = 3 SPACES  
 Total = 51 SPACES

**TOTAL BIKE PARKING REQUIRED = 4 SPACES**  
**BIKE PARKING PROVIDED = 4 SPACES**

- ALL SIGN POST 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.
- TRAFFIC CONTROL IS TO BE PER MODOT OR MUTCD WHICHEVER IS MOST STRINGENT.
- TREES, ORGANIC DEBRIS, RUBBLE, FOUNDATIONS AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED 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 ON THE GRADING PLAN AND DOCUMENTED BY THE SOILS ENGINEER.

**SANITARY SEWER NOTES**

- ALL MATERIALS AND METHODS OF CONSTRUCTION FOR SANITARY SEWERS TO MEET REQUIREMENTS OF THE CITY OF OFFALLOM, MO.
- 6" AND 8" LATERALS CONSTRUCTED OF P.V.C. S.D.R.-35 THICKWALL PIPE, A.S.T.M. D-3034.
- 6" AND 8" LATERAL JOINTS TO CONFORM TO A.S.T.M. STANDARD S.D.R.-35 THICKWALL COMPRESSION JOINT FOR P.V.C.
- ALL LATERAL SEWER CONSTRUCTION METHODS TO CONFORM TO LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF OFFALLOM.
- ALL TRENCHES UNDER AREAS TO BE PAVED SHALL BE GRANULARLY FILLED WITH 3/4" CRUSHED LIMESTONE. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH THE CITY OF OFFALLOM STANDARDS.
- CONTRACTOR TO START LAYING PIPE AT DOWNSTREAM MANHOLE AND WORK UPSTREAM.
- CLEANOUTS SHALL BE LOCATED AT ALL HORIZONTAL AND VERTICAL CHANGES IN DIRECTION OF FLOW OF HOUSE LATERALS AND ANY SANITARY LATERAL OF 100 FEET OR LONGER.
- VERTICAL CLEARANCE BETWEEN SEWER AND WATER MAINS SHALL BE A MINIMUM OF 2' - 0".
- ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS, OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILL IN LIEU OF THE EARTH BACKFILL COMPACTED TO 90 PERCENT OF THE MODIFIED AASHTO T-180 COMPACTION TEST A.S.T.M. D-1557.
- JETTING IS NOT AN ACCEPTABLE METHOD OF ACHIEVING BACKFILL COMPACTION. ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- ADJUSTMENT OF MANHOLE TO GRADE:  
 If a manhole is to be raised:  
 Manholes may be raised using courses of brick or approved grade ring(s), provided the total adjustment of the manhole does not exceed 12-inches (including the existing rings or courses of brick). For manholes which will exceed the maximum of 12-inches, the transition section of the structure shall be removed and the bottom section raised using the same material as the existing structure.  
 If a manhole is to be lowered:  
 manholes may be lowered by removing the transition section, and lowering the existing bottom section by sawcutting the existing cast-in-place concrete, removing the required courses of brick, and removing the precast riser section as appropriate.
- CONNECTIONS AT STRUCTURES TO BE MADE WITH A-LOCK JOINT OR EQUAL.
- BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF SANITARY SEWER STRUCTURES. PRE-CAST CONCRETE STRUCTURES ARE TO BE USED UNLESS OTHERWISE APPROVED BY THE CITY.

**EARTHWORK NOTES**

BULK CUT 433 +/- CUBIC YARD  
 BULK FILL 1,737 +/- CUBIC YARD (INCLUDES 15% SHRINKAGE)

THE CALCULATED EARTHWORK QUANTITIES SHOULD BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT AND/OR REDISTRIBUTION OF SOILS FOR THE SUBJECT PROPERTY. THE CALCULATED QUANTITIES ARE INTENDED FOR GENERAL USE, AND SHOULD BE USED AS A COMPARISON WITH THE QUANTITIES CALCULATED BY THE EARTHWORK SUBCONTRACTOR. THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR FILL SHORTAGES. DISCREPANCIES BETWEEN THE ENGINEER'S CALCULATED QUANTITIES AND THE EARTHWORK SUBCONTRACTOR'S ESTIMATE SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.

THE EARTHWORK QUANTITIES ESTIMATED FOR THE SUBJECT SITE ARE BASED UPON HORIZONTAL AND VERTICAL LOCATION OF THE IMPROVEMENTS AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY CIVIL ENGINEERING DESIGN CONSULTANTS, INC.

THE ENGINEER'S ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS PERTAINING TO EARTHWORK QUANTITIES THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT:

- MISCELLANEOUS UNDERGROUND CONDUITS AND MANHOLES
- SEWER LINES AND WATER MAINS LESS THAN TWENTY-FOUR INCHES IN DIAMETER
- BUILDING FOOTINGS AND FOUNDATIONS
- UTILITY AND/OR LIGHT STANDARD BASES

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE INSTALLATION OF UNDERGROUND STRUCTURES, AND THEREFORE, THE ACTUAL EARTHWORK QUANTITIES MAY VARY FROM THE THESE ESTIMATED QUANTITIES. THE ENGINEER ALSO ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO THE REMOVAL OF UNSUITABLE MATERIAL WHICH MUST BE REMOVED FROM THE SITE.

**ASSUMPTIONS:**

- IT IS ASSUMED THAT THE TOPSOIL, IF ANY, WILL BE REUSED ON-SITE WITHIN LANDSCAPING AREAS AND WILL NOT BE HAULED OFF.
- SUBGRADE FOR BUILDING PAD - 10"
- SUBGRADE FOR ASPHALT PAVEMENT SECTIONS - 12"
- ASSUMED 15% SHRINKAGE FACTOR

**APPENDIX A**

**SEEDING RATES:**

**PERMANENT:**  
 TALL FESCUE: 30 LBS./AC.  
 SMOOTH BROME: 20 LBS./AC.  
 COMBINED: FESCUE @ 15 LBS./AC. AND BROME @ 10 LBS./AC.

**TEMPORARY:**  
 WHEAT OR RYE: 150 LBS./AC.  
 OATS: 120 LBS./AC.

**SEEDING PERIODS:**  
 FESCUE OR BROME: MARCH 1 TO JUNE 1  
 AUGUST 1 TO OCTOBER 1  
 WHEAT OR RYE: MARCH 15 TO NOVEMBER 1  
 OATS: MARCH 15 TO SEPTEMBER 15

**MULCH RATES: 100 LBS. PER 1,000 S.F. (4,356 LBS. PER ACREA)**

**FERTILIZER RATES: NITROGEN 30 LBS./AC.  
 PHOSPHATE 30 LBS./AC.  
 POTASSIUM 30 LBS./AC.  
 LIME 600 LBS./AC. ENM\***

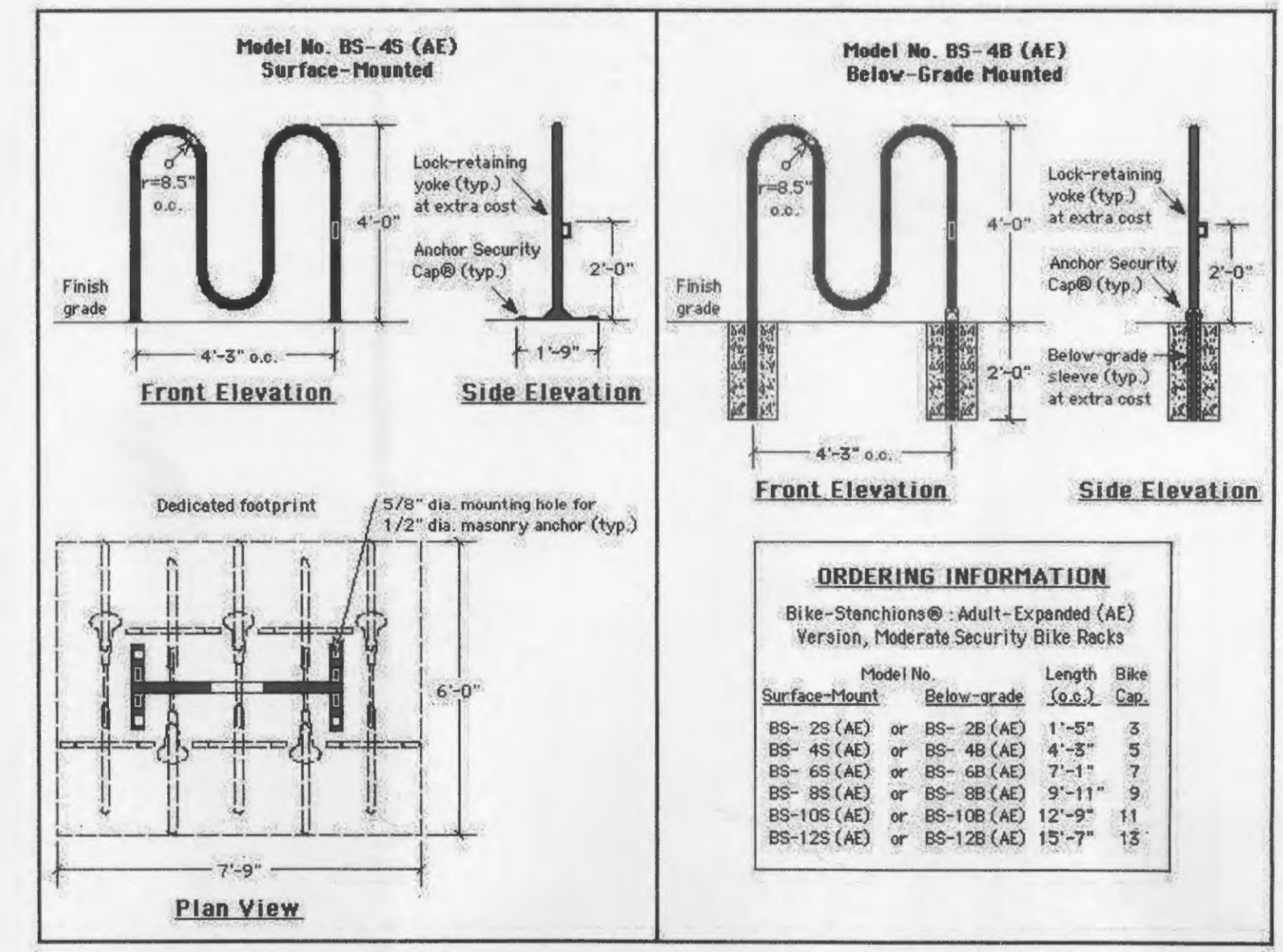
\*ENM = EFFECTIVE NEUTRALIZING MATERIAL AS PER STATE EVALUATION OF QUARRIED ROCK.

**GRADING NOTES**

- Notify the City of O'Fallon Department of Public Works 48 hours prior to the commencement of grading and/or prior to the commencement of construction.
- Parking on non-surfaced areas is prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked onto the pavement causing hazardous roadway and driving conditions. Contractor shall keep road clear of mud and debris.
- The streets surrounding this development and any street used for construction access thereto shall be cleaned throughout the day.
- Erosion and siltation control shall be installed prior to any grading and be maintained throughout the project until acceptance of the work by the owner and/or controlling regulatory agency and adequate vegetative growth insures no further erosion of the soil.
- Additional siltation control may be required as deemed necessary by the City of O'Fallon.
- Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.
- Where natural vegetation is removed during grading, vegetation shall be reestablished in such a density as to prevent erosion.
- When clearing and/or grading operations are completed or suspended for more than 14 days, all necessary precautions shall be taken to retain soil materials on site. Protective measures may be required by the Director of Public Works. Such as permanent seeding, periodic wetting, mulching, or other suitable means.
- If cut and fill operations occur during a season not favorable for immediate establishment of permanent ground cover, a fast germinating annual such as ryegrass or sudan grasses shall be utilized to retard erosion, if adequate stormwater detention and erosion control devices have not been established.
- All finished grades (areas not to be disturbed by future improvement) shall be seeded/sodded.
- Siltation fences shall be installed periodically for damage and for the amount of sediment which has accumulated. Removal of sediment will be required when it reaches 1/2 the height of the siltation fence.
- All trash and debris on-site, either or from construction, must be removed and properly disposed of off-site.
- Any wells, cisterns and/or springs, which may exist on this property, should be located and sealed in a manner acceptable to the City of O'Fallon and the Missouri Department of Natural Resources.
- All excavations, grading or filling shall have a finished grade not to exceed a 3:1 slope (33%), unless specifically approved otherwise.
- Storm water pipes, outlets, and channels shall be protected by silt barriers and kept free of waste and silt at all times prior to final surface stabilization and/or paving.
- No construction parking shall be permitted on Highway K.
- No excavation shall be made so close to the property line as to endanger any adjoining property of any public or private street without supporting and protecting such public or private street or property from settling, cracking or other damage.
- Developer must supply city construction inspectors with soil reports prior to or during site soil testing.  
 The soil report will be required to contain the following information on soil test curves (Proctor Reports):
  - Maximum Dry Density
  - Optimum Moisture Content
  - Maximum and Minimum allowable moisture content
  - Curve must be plotted to show density from a minimum of 95% compaction and above as determined by the "Modified AASHTO T-180 Compaction Test" (A.S.T.M. D-1157) or from a minimum of 100% as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M. D-998). 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
- Graded areas that are to remain bare for over 2 weeks shall be seeded and mulched. (DNR requirement)
- All erosion control systems are to be inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- All fill placed under proposed storm and sanitary sewer. Proposed roads, and/or paved areas shall be compacted to 95% of maximum density as determined by the modified aashto t-180 compaction test or 100% 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. Note that the moisture content of the soil in the fill areas is to correspond to the compactive effort as defined by the standard or modified proctor test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the owner and/or the City of O'Fallon and/or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The owner and/or the City of O'Fallon and/or MoDOT may at their option direct the contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud in new or existing pavement shall be removed immediately. Any depositing of silt or mud in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the owner and/or the City of O'Fallon and/or MoDOT.

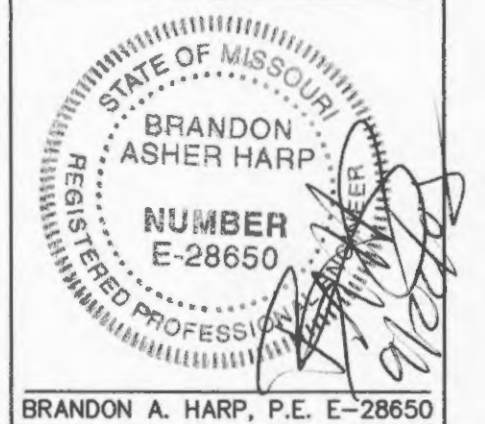
**STORM SEWER NOTES**

- ALL CONCRETE SHALL BE REINFORCED, AND CONFORM TO A.S.T.M. DESIGNATION C76-80 CLASS III UNLESS NOTED.
- ALL STORM SEWER STRUCTURES WITHIN PROJECT SITE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF OFFALLOM STANDARD CONSTRUCTION SPECIFICATIONS AND CITY OF OFFALLOM SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- TYPE "C" BEDDING PER CITY OF OFFALLOM STANDARDS IS REQUIRED FOR PIPES IN ROCK
- 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 THE CITY OF OFFALLOM STANDARDS AND SPECIFICATIONS AND CITY OF OFFALLOM SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS, OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILL IN LIEU OF THE EARTH BACKFILL COMPACTED TO 90 PERCENT OF THE MODIFIED AASHTO T-180 COMPACTION TEST A.S.T.M. D-1557.
- ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- FOR SEWER PIPE (STORM, SANITARY AND COMBINED) WITH A DESIGN GRADE LESS THAN ONE PERCENT (1%), VERIFICATION OF THE PIPE GRADE WILL BE REQUIRED FOR EACH INSTALLED REACH OF SEWER. PRIOR TO ANY SURFACE RESTORATION OR INSTALLATION OF ANY SURFACE IMPROVEMENTS, THE CONTRACTOR'S FIELD SUPERVISOR WILL BE REQUIRED TO PROVIDE DAILY DOCUMENTATION VERIFYING THAT THE AS-BUILT PIPE GRADE MEETS THE DESIGN GRADE THROUGH THE SUBMITTAL OF SIGNED CUT SHEETS.  
 THE SEWER CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE FIELD VERIFICATION OF THE SEWER GRADE, OR REMOVAL AND REPLACEMENT OF THE SEWER PIPE OR ASSOCIATED APPURTENANCES.
- BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES. PRE-CAST CONCRETE STRUCTURES ARE TO BE USED UNLESS OTHERWISE APPROVED BY THE CITY.
- STORM SEWER INLETS SHALL BE LABELED "NO DUMPING DRAINS TO STREAM" PER OFFALLOM REQUIREMENTS. PEEL AND STICK ADHESIVE PADS WILL NOT BE ALLOWED. MARKERS AND ADHESIVE PROCEDURES SHALL BE AS APPROVED BY THE CITY.
- 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.
- CONNECTIONS AT STRUCTURES TO BE MADE WITH A-LOCK JOINT OR EQUAL.
- PIPE JOINTS SHALL BE GASKETED O-RING TYPE.



**BIKE RACK DETAIL**

Planning and Development No. 9987.07.01  
 Planning and Zoning Commission  
 Approval - March 6, 2008  
 City Council Approval - March 27, 2008



11402 Gravitas Road  
 Suite 100  
 St. Louis, Missouri 63126  
 Phone: 314.729.1400  
 Fax: 314.729.1404  
 www.cedco.net

**CEDCO**  
 CIVIL ENGINEERING  
 DESIGN CONSULTANTS

Improvement Plans  
**Wendy's Restaurant**  
 O'Fallon, Misso-Road East

Proj. # 47  
 No. Descript Date  
 Agency Subm 04/25/08  
 Per City 07/15/08  
 07/30/08

Specification sheet