

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 ELEVATIONS ARE BASED ON BENCHMARKS NOTED ON THIS SHEET BOUNDARY AND TOPOGRAPHIC SURVEY BY MARLER SURVEYING CO.
- ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT CITY OF ST. PETERS STANDARDS.
- ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING AS REQUIRED BY THE CITY OF ST. PETERS, MISSOURI.
- BEFORE BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.
- GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE CITY OF ST. PETERS.
- 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.
- GRADING & STORM WATER PER CITY OF ST. PETERS STANDARDS.
- DRIVE ENTRANCES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF OFTALLOON ON KNAUST & ST. PETERS ON MEXICO.
- SEEDING, SOADING, 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% WITH SLOPES GREATER THAN 1% WITH 20" MUST BE DESIGNED AS A RAMP.
- SIDEWALKS CURB RAMPS, RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH THE REQUIRED GRADING CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ADAAG GUIDELINES AND THE INFORMATION ON THE PLANS, THE ADAAG GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION.
- BUILDING SETBACKS PER ZONING
 - FRONT: 30 FEET
 - SIDE: 10 FEET, 20 FEET ADJACENT TO RESIDENTIAL
 - REAR: 15 FEET, 25 FEET ADJACENT TO RESIDENTIAL
- ALL NEW AND RELOCATED ON-SITE UTILITIES SHALL BE PLACED UNDERGROUND.
- BY GRAPHIC PLOTTING ONLY, THIS PROPERTY DOES NOT LIE WITHIN ANY SPECIAL FLOOD ZONE AREAS ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL NUMBER 2918302A1 E AND COMMUNITY NUMBER 290315 (ST. CHARLES COUNTY UNINCORPORATED) WHICH BEARS AN EFFECTIVE DATE OF AUGUST 2, 1996. THE PROPERTY LIES WITHIN UNSHADED ZONE X (AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD PLAIN).
- NO ON-SITE ILLUMINATION SOURCE SHALL BE SO SITUATED THAT LIGHT IS CAST DIRECTLY ON ADJOINING PROPERTIES OR PUBLIC ROADWAYS ILLUMINATION LEVELS SHALL COMPLY WITH THE PROVISIONS OF THE LIGHTING SECTION, CITY OF ST. PETERS.
- APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIGNAGE. SIGN APPROVAL IS A SEPARATE PROCESS.
- ALL ROOFTOP MECHANICAL EQUIPMENT SHALL BE SCREENED.
- THE SITE SHALL COMPLY WITH CHAPTER 530 STORM WATER MANAGEMENT REQUIREMENTS.
- THE SITE SHALL COMPLY WITH CHAPTER 530 SOIL EROSION AND GRADING REQUIREMENTS.
- THE SITE SHALL COMPLY WITH CHAPTER 530 SOIL EROSION AND GRADING REQUIREMENTS.
- THE SITE SHALL COMPLY WITH CHAPTER 535 TREE & LANDSCAPE REQUIREMENTS.
- ALL EXISTING OVERHEAD LINES & ASSOCIATED POLES ON THE SITE ARE TO BE REMOVED.
- ALL RETAINING WALLS TO BE SOLID MODULAR DECORATIVE WALLS AND NOT HERCULES TYPE WALLS WITH OPEN AREAS.
- SITE DENSITY AND PARKING CALCULATIONS

Greenspace: (includes parking lot landscape areas)	28,781 s.f. pervious	x 100 = 32%
	89,527 s.f. total site	
Pavement Coverage:	41,842 s.f. pervious	x 100 = 47%
	89,527 s.f. total site	
Building Coverage:	18,904 s.f.	x 100 = 21%
	89,527 s.f. total site	
PARKING REQUIRED	5 per 1000 g.s.f. = 18,904 x 5 = 95 STALLS	
PARKING PROVIDED	9 x 15' = 96 STALLS	
	A.D.A. = 3 STALLS	
LOADING REQUIRED	1 SPACES	
LOADING PROVIDED	1 SPACES	

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 ACRE)
- FERTILIZER RATES:** NITROGEN 30 LBS./AC.
PHOSPHATE 30 LBS./AC.
POTASSIUM 30 LBS./AC.
LIME 600 LBS./AC. ELEM.
- *EMM = EFFECTIVE NEUTRALIZING MATERIAL AS PER STATE EVALUATION OF QUARRIED ROCK.

EARTHWORK NOTES

BULK CUT: 1.971 +/- CUBIC YARD
BULK FILL: 1.739 +/- CUBIC YARD (INCLUDES 15% FOR 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
- GRADING 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 THESE ESTIMATED QUANTITIES. THE ENGINEER ALSO ASSUMES NO RESPONSIBILITY FOR THE REMOVAL OF UNSUITABLE MATERIAL WHICH MUST BE REMOVED FROM THE SITE.

ASSUMPTIONS:

- IT IS ASSUMED THAT THE TOPSOIL WILL BE REUSED ON-SITE WITHIN LANDSCAPING AREAS AND WILL NOT BE HAULED OFF.
- SUBGRADE FOR PAVEMENT STRUCTURE - ASSUMED 11"
- ASSUMED 15% SHRINKAGE FACTOR
- BUILDING SUBGRADE - ASSUMED 10"

CITY NOTES

- Construction parking is not allowed on Mexico or Knaust Road.
- All public roads must be kept clear of mud and debris at all times. Failure to do so will be cause for the City to suspend work.
- All new signs shall conform to the City's sign Ordinance requirements. Sign location and sizes cannot be approved with the site improvement plan, a separate application must be made to the Department of Planning.
- The General Contractor shall restore offsite construction areas to an equal or better condition than existed prior to the commencement of work.
- Responsibility to Contractor: In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours.
- The contractor shall be responsible for the raising and removal of the existing structures, including foundations, related utilities, paving, underground facilities and any other existing improvements.
- The contractor will be held solely responsible and shall take all precautions necessary to avoid damage to adjacent properties during all phases of the construction plan.
- Burning on site will not be allowed.
- Disposal of material on-site will only be allowed as directed by the owner and geotechnical engineer and approved by the City Public Works.
- Contractor shall coordinate the disconnection, sealing and/or removal of utilities with the respective utility company.
- The general contractor shall contact all utility companies for new service.
- The general contractor shall flag all sanitary and storm sewer structures with a 2 x 4 painted orange and marked to read "Storm Sewer Structure or Sanitary Sewer Structure Do Not Bury".
- All private sewers are under City inspection.
- All filled places under proposed storm and sanitary sewer lines and/or paved areas shall be compacted to 90% maximum density as determined by the modified AASHTO T-180 compaction test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. A sealed copy of all test reports shall be available for review.
- All excavations, grading, or filling shall have a finished grade not to exceed a 3:1 slope (33 percent). Steeper grades may be approved by the Designated Official if the excavation is through rock or the excavation or the fill is adequately protected (a designed head wall or toe wall may be required). Retaining walls that exceed a height of four (4) feet shall require the construction of safety guards as identified in the appropriate section(s) of the adopted BOCA Codes and must be approved by the City. Permanent safety guards will be constructed in accordance with the appropriate section(s) of the adopted BOCA Codes.
- Temporary siltation control measures (structural) shall be maintained until vegetative control is established on the site, to be determined by the Designated Official.
- Where natural vegetation is removed during grading, vegetation shall be reestablished in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed. (Refer to Appendix A)
- When grading operations are completed or suspended for more than 14 days, permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided according to the Designated Official's recommendation. (Refer to Appendix A)
- All finished grades (grass not to be disturbed by future improvement) in excess of 20 percent slopes (5:1) shall be mulched and topped at the rate of 100 pounds per 1,000 square feet when seeded.
- The adjoining ground to development sites (lots) shall be provided with protection from accelerated and increased surface water, soil from erosion, and any other consequences of erosion. Run-off water from developed areas (parking lots, paved sites and buildings) above the area to be developed shall be directed to diversions, detention basins, concrete gutters and/or underground outlet systems. Sufficiently anchored straw bales may be temporarily substituted with the approval of the Designated Official.
- All lots shall be seeded and mulched at the rates defined in Appendix A or seeded before an occupancy permit shall be issued except that a temporary occupancy permit may be issued by the Building Department in cases of undue hardship because of unfavorable ground conditions.
- All filled places in proposed roads shall be compacted from the bottom of the fill up to 90% maximum density as determined by the modified AASHTO T-180 compaction test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. A soil engineer shall verify all tests concurrent with grading and backfilling operations.
- Runoff water from developed areas (parking lots, paved sites, and buildings) above the area to develop shall be directed to diversions, detention basins, concrete gutters and/or underground outlet systems. Sufficiently anchored straw bales may be temporarily substituted with the approval of the designated official.
- All light standards shall be shaded, shielded or directed to prevent direct light from causing traffic hazards and causing direct light upon adjacent property, causing glare or other objectionable problems to surrounding areas.

SANITARY SEWER NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION FOR SANITARY SEWERS TO MEET REQUIREMENTS OF THE CITY OF ST. PETERS.
- 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 MANHOLE FRAMES AND COVERS SHALL BE CITY STANDARD FRAME AND COVER.
- ALL LATERAL SEWER CONSTRUCTION METHODS TO CONFORM TO LATEST STANDARDS AND SPECIFICATIONS OF THE ST. CHARLES COUNTY PLUMBING CODE.
- 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 ST. PETERS 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.
- TYPE "C" BEDDING PER CITY STANDARDS REQUIRED FOR PIPES IN ROCK.
- 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.
- GETTING 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.
- 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 TO THE CITY INSPECTOR UPON REQUEST.

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

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

- ADJUSTMENT OF MANHOLE TO GRADE:
 - If a manhole is to be raised: Manholes may be raised using approved grade ring(s), only provided the total adjustment of the manhole does not exceed 12-inches (including the existing rings) 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 precast riser section as appropriate.

SEQUENCE OF GRADING OPERATIONS

- On-site grading will utilize standard grading equipment to achieve the proposed grades as shown on this plan.
- Strip the on-site top soil as encountered and stock pile with a silt fence installed at the stock pile perimeter.
- On-site equipment will immediately excavate the ditches as shown starting on the downstream end to prevent water ponding.
- On-site equipment will unload, spread and compact the delivered material in accordance with geotechnical report to the proposed grades shown on this plan.
- All proposed turf areas, once constructed to final grade shall be seeded/sodded within 7 days after final grading of the site where shown on the plan. Should weather cause delays in rework operations, additional silt fences and/or siltation may be required.
- All grading operations subject to the conditions and recommendations of the geotechnical report.

Siltation Control Schedule Implementation

- Installation of perimeter sediment control shall be implemented prior to grading the site.
- Installation of internal silt fences required immediately after the site reaches final grade or as required as intermediate silt control.
- Inspection of siltation control devices shall take place once every day and within 1 day of any rain event. Any siltation control in need of repair shall occur immediately.
- All siltation control devices shall remain in place until upslope areas have been permanently stabilized.
- Temporary Access Roads and Parking Areas Specifications
 - As coordinated and required by the City Inspector
- Temporary roads shall follow the contour of the natural terrain to the extent possible. Slopes should not exceed 10 percent.
- Grades should be sufficient to provide drainage, but should not exceed 10 percent.
- Roadbeds & construction parking shall be as shown on the plan.
- All cuts and fills shall be 3:1 or flatter to the extent possible.
- Drainage ditches shall be provided as needed.
- The roadbed or parking surface shall be cleared of all vegetation, roots and other objectionable material.
- A 10-inch course of 2" MINUS aggregate shall be applied immediately before grading or after the completion of utility installation within the right-of-way. Filter fabric may be applied to the roadbed for additional stability in accordance with fabric manufacturer's specifications.

Vegetation

All roadside ditches, cuts, fills and disturbed areas adjacent to parking areas and roads shall be stabilized with appropriate temporary or permanent vegetation according to the applicable standards and specifications.

Maintenance

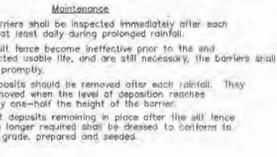
Both temporary and permanent roads and parking areas may require periodic top dressing with new gravel. Seeded areas adjacent to the roads and parking areas should be checked periodically to ensure that a vigorous stand of vegetation is maintained. Roadside ditches and other drainage structures should be checked regularly to ensure that they do not become clogged with silt or other debris.

Silt Fence Specifications

- Silt Fence to be woven geotextile fabric Miraf 100X or equal.
- Fabric shall be entrenched and backfilled. A trench shall be excavated a minimum of 6 inches deep for the length of the fence. The excavated soil shall be backfilled against the fence. See detail for this sheet.
- Fence height shall be a minimum of 2 feet in height above grade, with the fabric installed on the face on the upstream side.
- Silt fences shall be used only on sheet flow conditions.

Maintenance

- Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- Should the silt fence become ineffective prior to the end of the expected usable life, and are still necessary, the barriers shall be replaced promptly.
- Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half the height of the barrier.
- Any sediment deposits remaining in place after the silt fence barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.



STORM SEWER NOTES

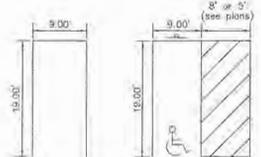
- ALL CONCRETE SHALL BE REINFORCED, AND CONFORM TO A.S.T.M. DESIGNATION C78-80 CLASS, IF UNLESS NOTED.
- ALL STORM SEWER STRUCTURES WITHIN PROJECT SITE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY'S STANDARDS.
- TYPE "C" BEDDING PER M.S.D. STANDARDS IS REQUIRED FOR PIPES IN ROCK.
- ALL TRENCHES UNDER AREAS TO BE PAVED AND UNDER EXISTING PAVEMENT SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE ONLY. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH CITY STANDARDS.
- 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.
- GETTING 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.
- 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 TO THE CITY INSPECTOR UPON REQUEST.

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

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

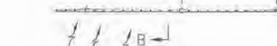
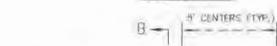
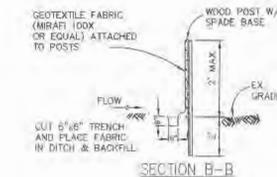
THE SEWER CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE FIELD VERIFICATION OF THE SEWER GRADE, OR REMOVAL AND REPLACEMENT OF THE SEWER PIPE OR ASSOCIATED APPURTENANCES.

- ADJUSTMENT OF MANHOLE TO GRADE:
 - If a manhole is to be raised: Manholes may be raised using approved grade ring(s), only provided the total adjustment of the manhole does not exceed 12-inches (including the existing rings) 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 precast riser section as appropriate.



TYPICAL PARKING STALLS

(n.l.s.)



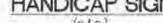
HANDICAP PARKING SIGN

(n.l.s.)



HANDICAP SIGN

(n.l.s.)



ISSUE FOR PERMIT & BIDDING