

GENERAL NOTES

- ALL UTILITIES SHOWN HAVE BEEN LOCATED BY OTHERS 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.
- ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.
- BOUNDARY AND TOPOGRAPHIC INFORMATION BY STOCK & ASSOCIATES.
- ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARD CONSTRUCTION PRACTICES SHALL FOLLOW CITY OF OFALLON, ST. CHARLES COUNTY & DUCKETT CREEK SANITARY DISTRICT.
- ALL GRADED AREAS INDICATED SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES, SEEDING AND MULCHING AS INDICATED.
- PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE OFFICE OF THE DEVELOPER FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.
- ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS. CONSULT PROJECT GEOTECHNICAL ENGINEER.
- GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS. CONTRACTOR TO GRADE ALL AREAS TO REQUIRED SUBGRADE.
- NO GRADE SHALL EXCEED 3:1 SLOPE.
- ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF 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. ALL TEST SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- ALL SLOPES TO BE STABILIZED IMMEDIATELY AFTER GRADING.
- ALL SIGNAGE TO BE PERMITTED SEPARATELY.
- 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. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- THE EROSION CONTROL PLAN SHOULD BE IMPLEMENTED BEFORE GRADING BEGINS.
- EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN. WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES, AND DITCHES.
- CONTRACTOR SHALL COORDINATE FINAL ARCHITECTURAL DESIGN WITH THE ARCHITECTURAL REVIEW COMMISSION.
- CONTRACTOR SHALL GRADE AREA TO DRAIN POSITIVELY AND WITHOUT ANY PONDING.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE LATEST SET OF CONSTRUCTION DOCUMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS.
- THE FIRE SPRINKLER (IF REQ.) AND SERVICE LINE AFTER THE WATER METER WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
- THE DEVELOPER WILL BE REQUIRED TO INSTALL THE NECESSARY WATER LINES, SEWER LINES, FIRE HYDRANTS AND DOMESTIC WATER SERVICE LINES WITHIN THIS SITE.
- EXISTING STORMWATER DETENTION HAS BEEN PROVIDED FOR MONTICELLO PLAZA AND THIS LOT.
- BUILDING HEIGHT FROM PEAK OF ROOF TO FINISHED FLOOR = 22'.
- PROPOSED SIDEWALK ON THE SITE TO BE CONCRETE.
- 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.
- ALL UTILITIES SERVING BUILDING SHALL BE LOCATED UNDERGROUND.
- INTERIOR OIL & GREASE INTERCEPTOR IS PROPOSED.
- SITE SHALL HAVE AN IRRIGATION SYSTEM IN LAWN AREAS OF LANDSCAPING.
- THE DEVELOPER SHALL SUPPLY THE CITY CONSTRUCTION INSPECTOR WITH THE SOILS REPORT(S) PRIOR TO OR DURING SOIL TESTING.
- 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 OF CONTROL ARE DETAILED IN THE PLAN). CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGH OUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF OFALLON 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 OFALLON 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 ON NEW OR EXISTING PAVEMENT OR 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 OFALLON AND/OR MODOT.
- ALL GRADED AREAS THAT ARE TO REMAIN BARE FOR OVER 3 MONTHS MUST BE SEED AND MULCHED.
- SIDEWALK, CURB RAMPS, RAMP ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICANS 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.

SANITARY SEWER NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION FOR SANITARY SEWERS TO MEET REQUIREMENTS OF THE DUCKETT CREEK SANITARY DISTRICT.
- ALL MANHOLES SHALL BE 42" DIA. PRE-CAST CONCRETE PER ASTM C-478.
- ALL LATERAL SEWER CONSTRUCTION METHODS TO CONFORM TO LATEST STANDARDS AND SPECIFICATIONS OF THE DUCKETT CREEK SEWER DISTRICT.
- ALL TRENCHES UNDER AREAS TO BE PAVED SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE.
- CONTRACTOR TO START LAYING PIPE AT DOWNSTREAM MANHOLE AND WORK UPSTREAM.
- TALLSTAKE ELEVATIONS AND WYE LOCATIONS ARE SHOWN ON THE SANITARY SEWER PROFILES.
- CLEANOUTS SHALL BE LOCATED AT ALL HORIZONTAL AND VERTICAL CHANGES IN DIRECTION OF FLOW OF BUILDING LATERALS AND ANY SANITARY LATERAL OF 100 FEET OR LONGER.
- ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY AND RAILROAD SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS, OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILL ALSO IN LIEU OF THE COMPACTED EARTH BACKFILL.
- JETTING IS NOT AN ACCEPTABLE METHOD OF ACHIEVING BACKFILL COMPACTION. ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 90 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- GAS, WATER, AND OTHER UNDERGROUND UTILITIES SHALL NOT CONFLICT WITH THE DEPTH OF HORIZONTAL LOCATION OF EXISTING OR PROPOSED SANITARY AND STORM SEWERS.
- THE CONTRACTOR SHALL PREVENT ALL STORM, SURFACE WATER, MUD AND CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SEWER SYSTEMS.
- THE DUCKETT CREEK SANITARY DISTRICT SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION FOR COORDINATION OF INSPECTION.
- ALL SANITARY SEWER MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR IN ACCORDANCE WITH MISSOURI DEPT. OF NATURAL RESOURCES SPECIFICATION TO CSR-8.120(7)(E).
- ALL PVC SANITARY SEWER PIPE IS TO BE SDR-35 OR EQUAL WITH "CLEAN" 1/2 INCH TO 1 INCH GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO SPRINGLINE OF PIPE. IMMEDIATE BACKFILL OVER PIPE SHALL CONSIST OF SAME SIZE "CLEAN" OR "MINUS" STONE FROM SPRINGLINE OF PIPE TO 6 INCHES ABOVE THE TOP OF PIPE.
- BRICK SHALL NOT BE USED ON SANITARY SEWER MANHOLES.
- EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
- ALL SANITARY FLOW LINES AND TOPS BUILT WITHOUT ELEVATIONS FURNISHED BY THE ENGINEER WILL BE THE RESPONSIBILITY OF THE SEWER CONTRACTOR.
- ALL PIPES SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLES. NO FLAT INVERT STRUCTURES ARE ALLOWED.
- PRE-MANUFACTURED ADAPTERS SHALL BE USED AT ALL PVC AND DIP CONNECTIONS. RUBBER BOOT/MISSION-TYPE COUPLINGS WILL NOT BE ALLOWED.
- ANY PERMITS, LICENSES, EASEMENTS, OR APPROVALS REQUIRED TO WORK ON PUBLIC OR PRIVATE PROPERTIES OR ROADWAYS ARE THE RESPONSIBILITY OF THE DEVELOPER.

STORM SEWER NOTES

- ALL CONCRETE SHALL BE REINFORCED, AND CONFORM TO A.S.T.M. DESIGNATION C78 CLASS III UNLESS NOTED.
- ALL STORM SEWER STRUCTURES WITHIN PROJECT SITE TO BE CONSTRUCTED IN ACCORDANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS.
- TYPE "C" BEDDING 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.
- 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 ALSO IN LIEU OF THE COMPACTED EARTH BACKFILL.
- JETTING IS NOT AN ACCEPTABLE METHOD OF ACHIEVING BACKFILL COMPACTION. ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 90 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- ALL CONCRETE PIPE OR ADS N-12 PIPE SHALL BE INSTALLED WITH "O-RING", RUBBER TYPE GASKETS PER M.S.D. STANDARD SPECIFICATIONS OR MANUFACTURER.
- ALL STORM SEWER PIPE SHALL HAVE A MINIMUM OF 36" COVER.

SITE PARKING CALCULATIONS

(1 SPACE/500 s.f. floor area)(2,044 s.f.) = 4 SPACES REQUIRED
TOTAL PROVIDED = 8 SPACES (7 REGULAR, 1 HANDICAP)

SEEDING RATES:

PERMANENT:
TALL FESCUE - 30 #/AC
SMOOTH BROME - 20 #/AC
COMBINED: FESCUE @ 15 #/AC AND BROME @ 10 #/AC

TEMPORARY:
WHEAT OR RYE - 150 #/AC (3.5 #/1000 S.F.)
OATS - 120 #/AC (2.75 #/1000 S.F.)

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

MULCH RATES: 100 #/ 1000 S.F. (4356 #/AC)
FERTILIZER RATES: NITROGEN 30 #/AC
PHOSPHATE 30 #/AC
POTASSIUM 30 #/AC
LIME 600 #/AC

EARTHWORK NOTES

BULK CUT.....759.....+ CUBIC YARD
BULK FILL.....39 x 115% = 44.9.....+ CUBIC YARD
(INCLUDES 15% SHRINKAGE)

THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF FILL.

THE QUANTITIES ESTIMATED FOR EACH OF THE IMPROVEMENT ITEMS LISTED ABOVE ARE BASED UPON THE HORIZONTAL AND VERTICAL LOCATION OF THE IMPROVEMENTS AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY STOCK AND ASSOCIATES CONSULTING ENGINEERS.

THE ENGINEER'S EARTHWORK ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT: MISCELLANEOUS UNDERGROUND CONDUITS, INCLUDING SEWER LINES AND WATER MAINS LESS THAN TWENTY-FOUR INCHES IN DIAMETER, STANDARD MANHOLES, PROCESS OR TRANSFER PIPING, ELECTRICAL OR TELEPHONE CONDUITS, BASES FOR LIGHT STANDARDS, BUILDING FOOTINGS AND FOUNDATIONS, ETC.

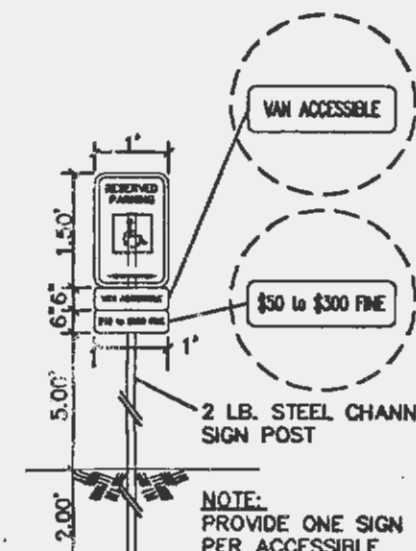
THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE INSTALLATION OF UNDERGROUND STRUCTURES, AND AS SUCH, THE ACTUAL QUANTITIES OF EARTHWORK FROM SUCH ITEMS MAY VARY FROM THE ESTIMATE SHOWN ABOVE.

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO REMOVAL UNSUITABLE MATERIAL WHICH MUST BE REMOVED FROM SITE.

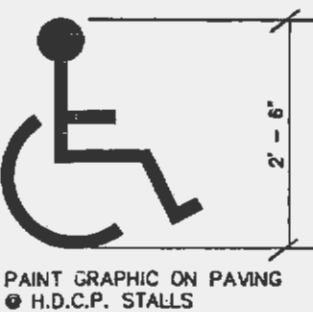
CONTRACTOR SHALL PERFORM HIS OWN EARTHWORK CALCULATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

EARTHWORK ASSUMPTIONS

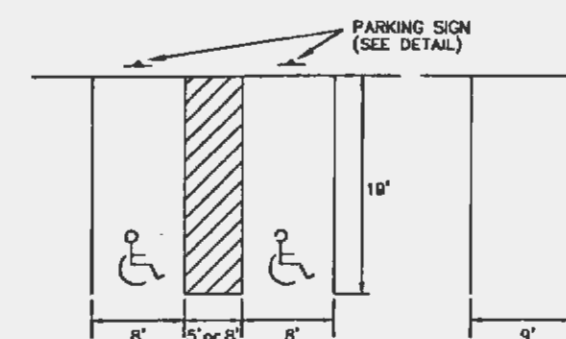
FINISHED FLOOR TO SUB-GRADE (w/B.S.M.T.) - 8.75 feet
CAR PARKING AREAS - 11 inches
DUMPSTER AREA TO SUB-GRADE - 7 inches
SIDEWALKS TO SUB-GRADE - 4 inches



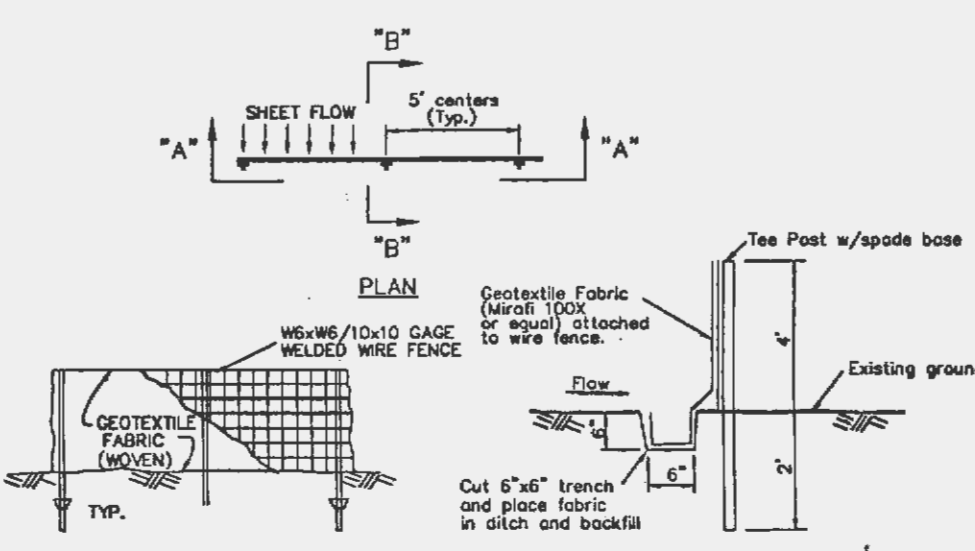
HANDICAP PARKING SIGN DETAIL (n.t.s.)



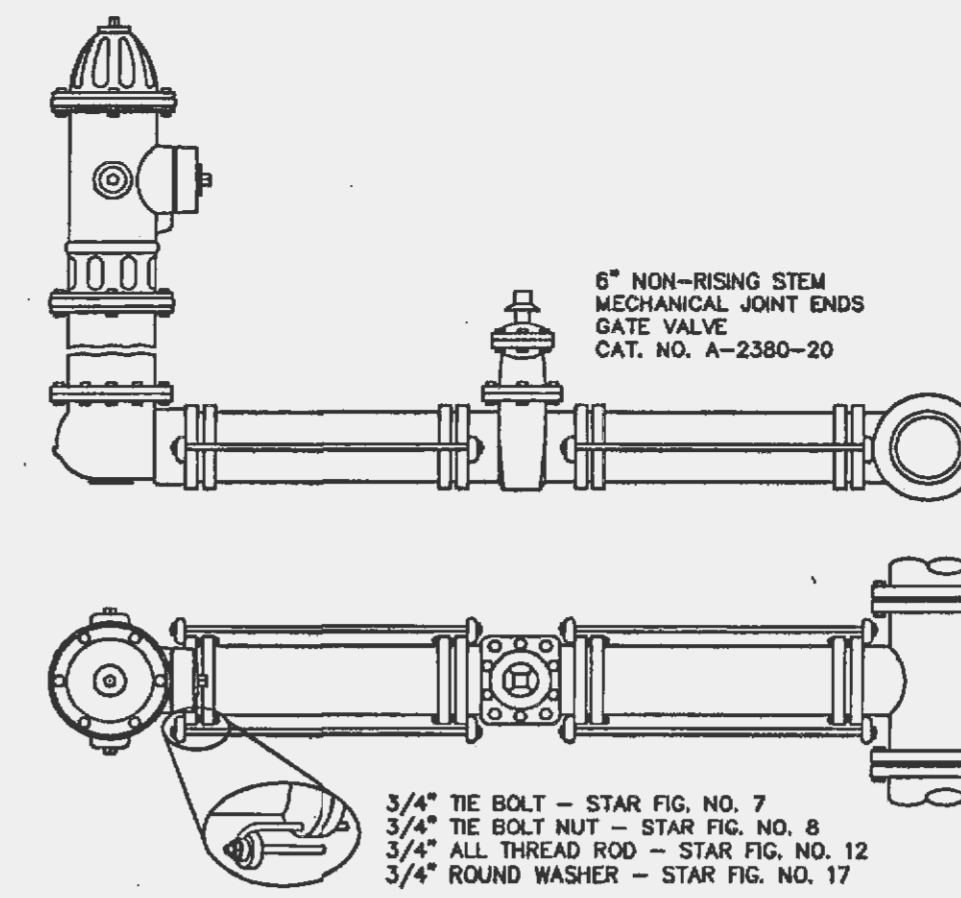
HANDICAP SIGN DETAIL (n.t.s.)



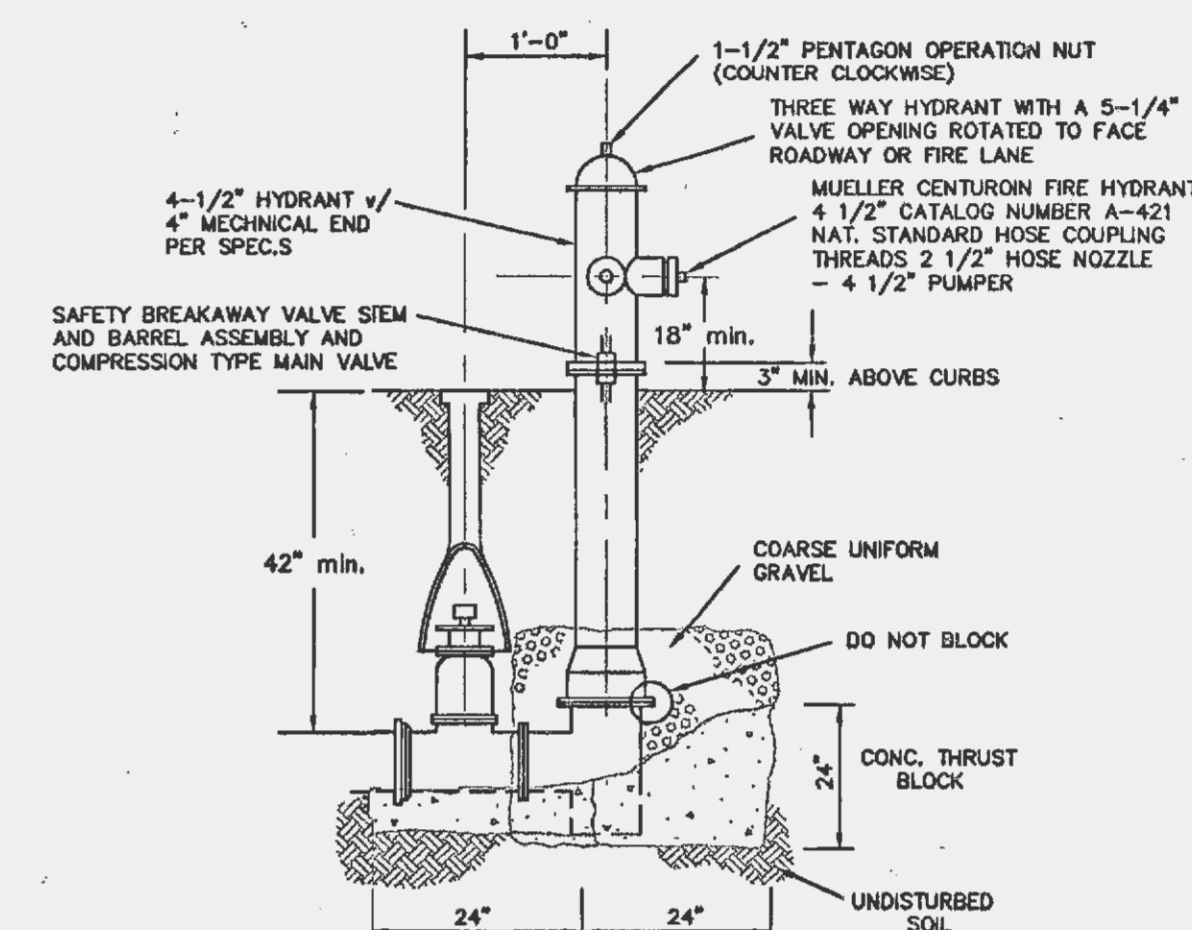
TYPICAL PARKING STALLS DETAIL (n.t.s.)



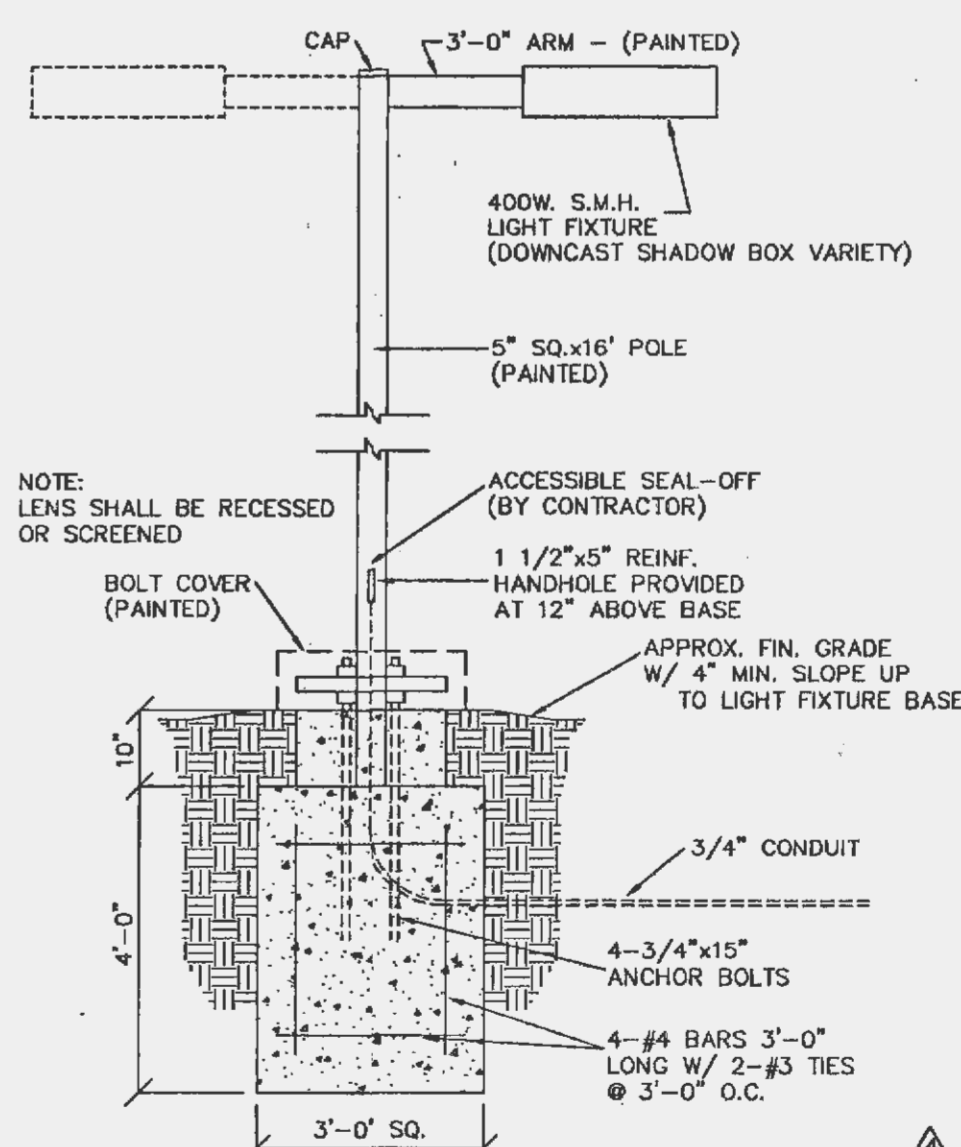
SILTATION CONTROL SILT FENCE DETAIL (n.t.s.)



HYDRANT SETTING (n.t.s.)

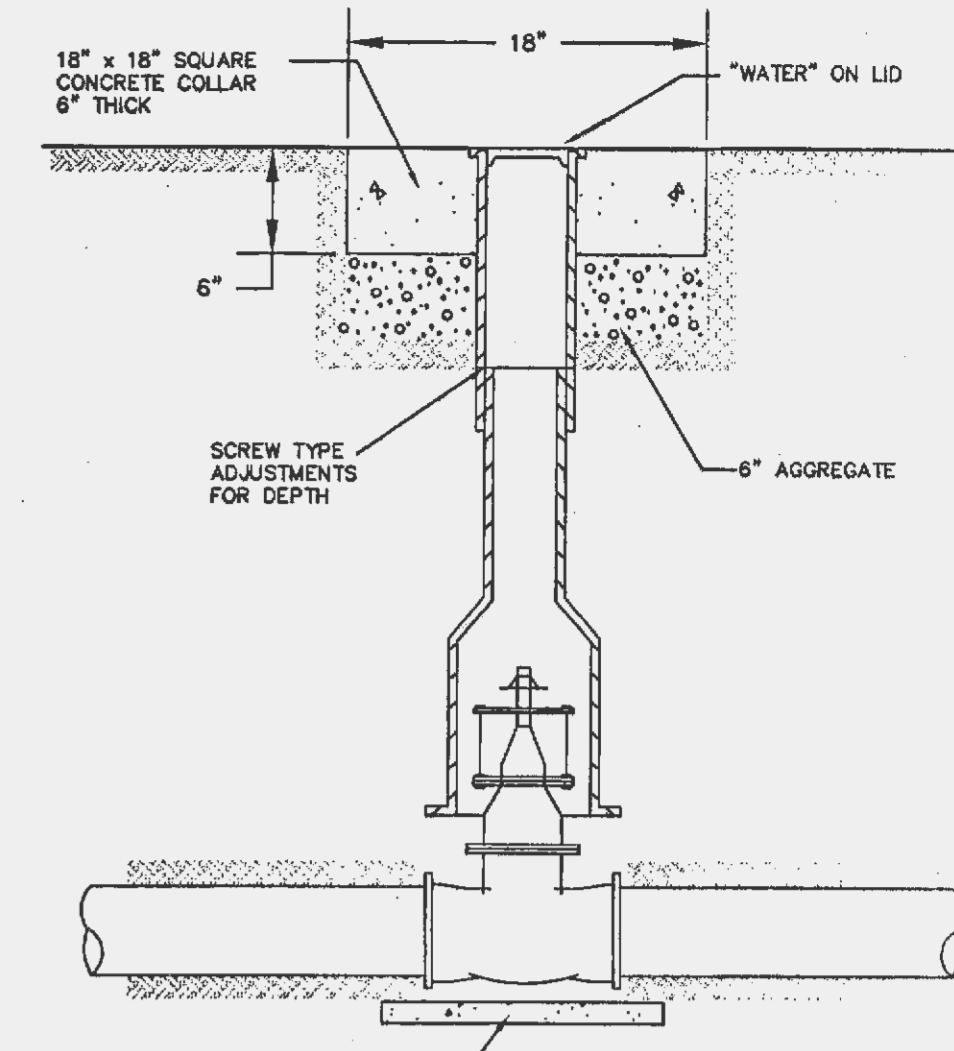


FIRE HYDRANT DETAIL (n.t.s.)



AREA LIGHT & POLE DETAIL (n.t.s.)

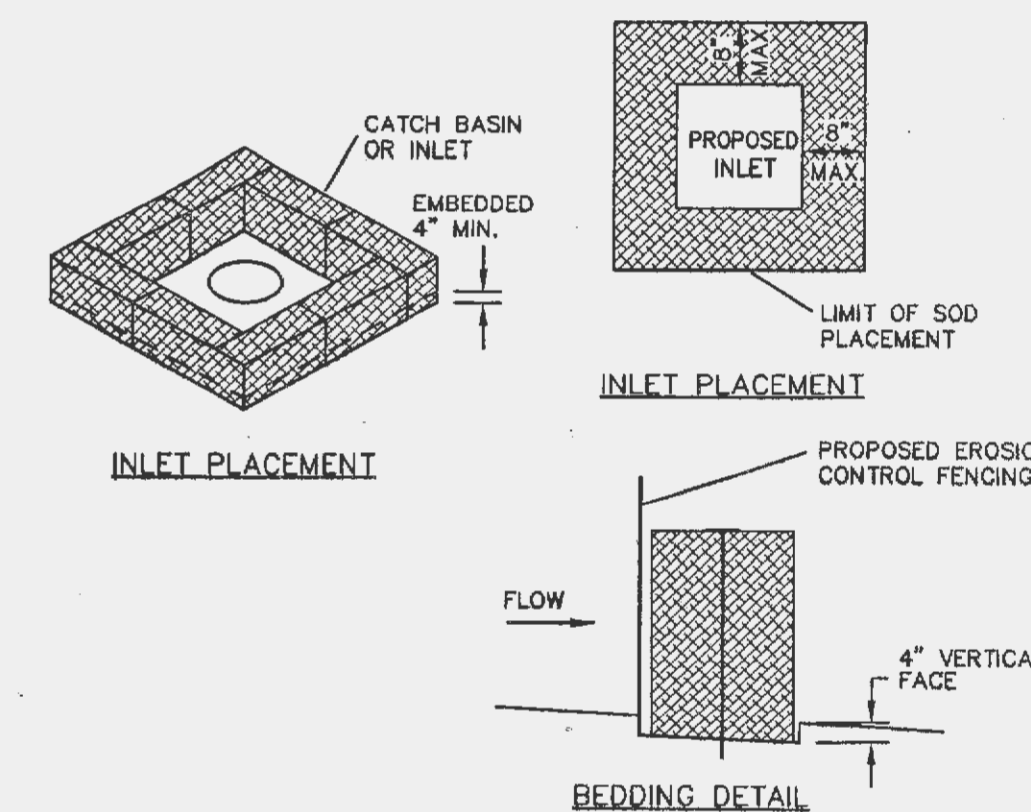
NOTE: CONTRACTOR SHALL COORDINATE FINAL LIGHTING PLAN w/CITY PLANNING DEPT. TO VERIFY COVERAGE OF THE SITE. SUBMIT SHOP DRAWINGS TO CITY PRIOR TO INSTALLATION.



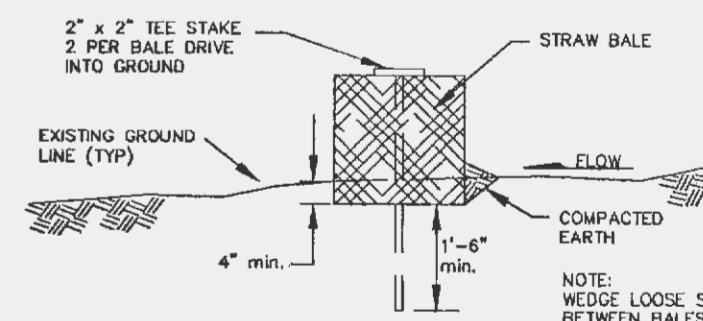
TYPICAL VALVE BOX INSTALLATION (n.t.s.)

FIRE HYDRANT NOTES

- THE FIRE HYDRANT SHALL BE PROVIDED WITH A CONTROL VALVE IN THE HYDRANT CONNECTION SUCH THAT THE HYDRANT CAN BE REMOVED FROM SERVICE WITHOUT SHUTTING OFF WATER SUPPLY TO OTHER FIRE HYDRANTS.
- THE FIRE HYDRANT SHALL HAVE NOT LESS THAN TWO 2-1/2 INCH OUTLETS AND ONE 4-1/2 INCH OUTLET, A 5-1/4 INCH VALVE, A 6 INCH BARREL AND SHALL BE OF THE BREAKAWAY DESIGN, FROST FREE WITH CHAIN, LEFT HAND OPEN DESIGN AND HAVE NATIONAL STANDARD THREADS.
- THERE SHALL BE NO OBSTRUCTIONS, I.E. PLANTINGS, BUSHES, TREES, SIGNS, LIGHT STANDARDS, MAILBOXES, ETC. WITHIN SIX (6) FEET OF ANY FIRE HYDRANT.



STORM INLET SEDIMENT TRAP DETAIL (n.t.s.)



SILTATION CONTROL STRAW BALE DETAIL (n.t.s.)

- △ CITY 05/22/2003
- △ REVISED PER CITY COMMENTS 04/01/2003
- △ REVISED PER ARCHITECTS COMMENTS 02/27/2003
- △ REVISED PER ARCHITECTS COMMENTS 02/11/2003

CITY FILE: #98-74.04-5

VALVOLINE INSTANT OIL CHANGE - OFALLON, MISSOURI

SPECIFICATION SHEET

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DRAWN BY: B.O.S. DATE: 01/07/03 CHECKED BY: C.A.M. DATE: 01/07/03 JOB NUMBER: 202-2821 SHEET: C2 of 10

GEORGE M. STOCK E-25116

