



O.L. 529

- 1) ITEM 451 6" REINFORCED CONCRETE  
2) ITEM 304 6" AGGREGATE BASE (2-3" LIFTS)  
3) ITEM 203.13 COMPACTED SUBGRADE

ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JAN. 1, 1997.

**CONCRETE PAD DETAIL**

NTS

PT. LOT 14123  
ZONED: I-1, LIGHT INDUSTRIAL

R. & S. PAWLEY  
O.R. 1609, PG. 777.779

- 1) ITEM 411 2" STABILIZED CRUSHED LIMESTONE  
2) ITEM 304 8" LIMESTONE BASE (2-4" LIFTS)  
3) ITEM 203.13 COMPACTED SUBGRADE

ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JAN. 1, 1997.

**LIMESTONE PAVEMENT SECTION DETAIL**

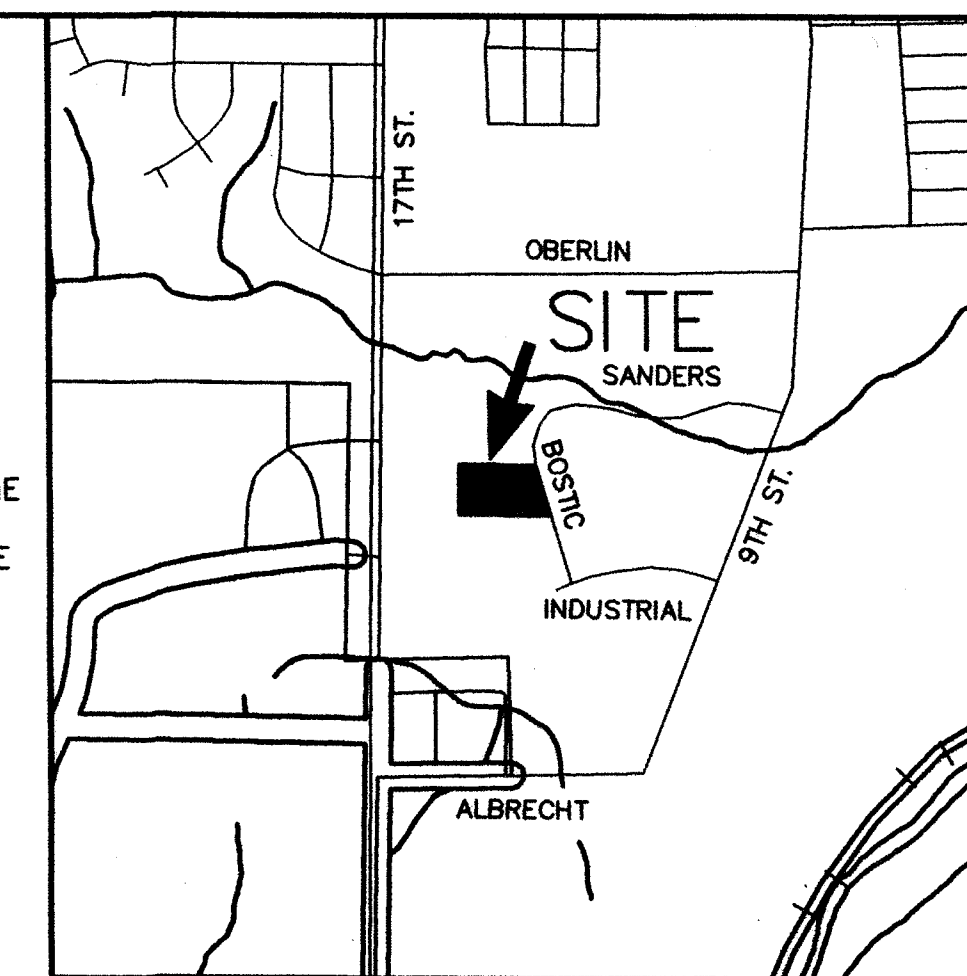
NTS

- 1) ITEM 404 1-1/2" ASPHALT CONCRETE  
2) ITEM 301 3" BITUMINOUS AGGREGATE BASE  
3) ITEM 304 6" AGGREGATE BASE (2-3" LIFTS)  
4) ITEM 203.13 COMPACTED SUBGRADE  
5) ITEM 408 PRIME COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.  
6) ITEM 407 TACK COAT TO BE APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.

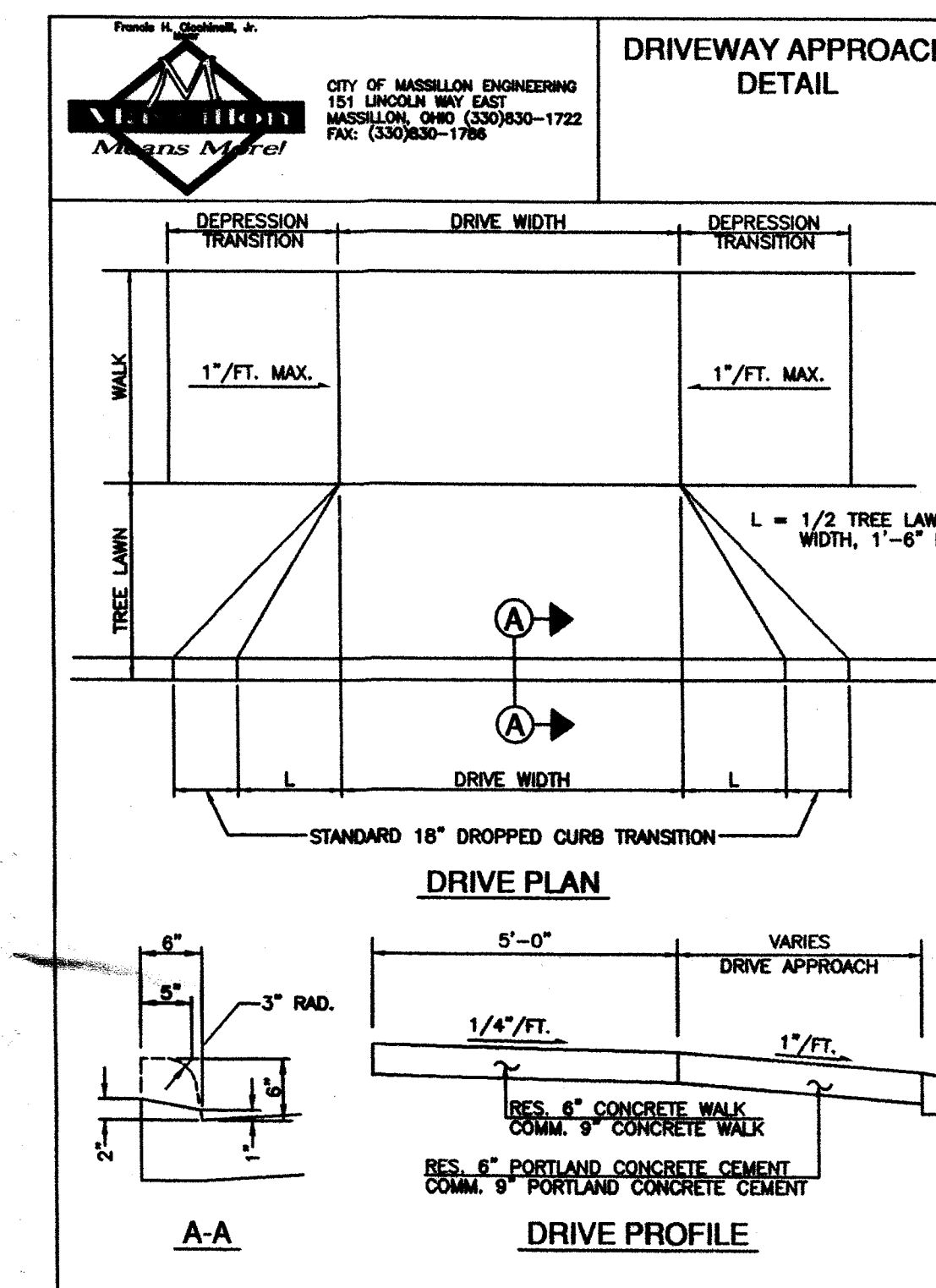
ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, JAN. 1, 1997.

**ASPHALT PAVEMENT SECTION DETAIL**

NTS



**VICINITY MAP**



**NOTE:**

BUILDING DIMENSIONS SHOWN ON THIS PLAN MAY HAVE BEEN ROUNDED. REFER TO ARCHITECTURAL BUILDING PLANS FOR EXACT BUILDING DIMENSIONS.

**SITE INFORMATION:**

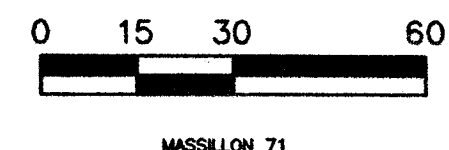
ACREAGE: 5.00 ACRES  
SUBJECT PROPERTY ZONED: I-1, LIGHT INDUSTRIAL  
PROPERTIES TO WEST ZONED: R-1, ONE-FAMILY RESIDENTIAL  
PROPERTIES TO NORTH & SOUTH ZONED: I-1, LIGHT INDUSTRIAL  
BUILDING SETBACKS:  
FRONT: 60'  
SIDE: 50' ADJOINING RESIDENTIAL  
REAR: 50' ADJOINING RESIDENTIAL  
MAX. BUILDING HEIGHT: 40'  
PARKING REQUIRED:  
5 SPACES PLUS 1 PER 1-1/2 EMPLOYEE  
IN LARGEST WORKING SHIFT (25 EMPLOYEES)  
5 + 25/1.5 = 22 SPACES REQUIRED  
PARKING PROVIDED:  
33 REGULAR SPACES  
2 HANDICAPPED SPACES  
35 TOTAL SPACES

**OWNER:**

OHIO DRILLING COMPANY  
P.O. BOX 847  
MASSILLON, OHIO 44648  
PHONE: 330-832-1521

Barry Hammett Smith, P.E. 10/29/02

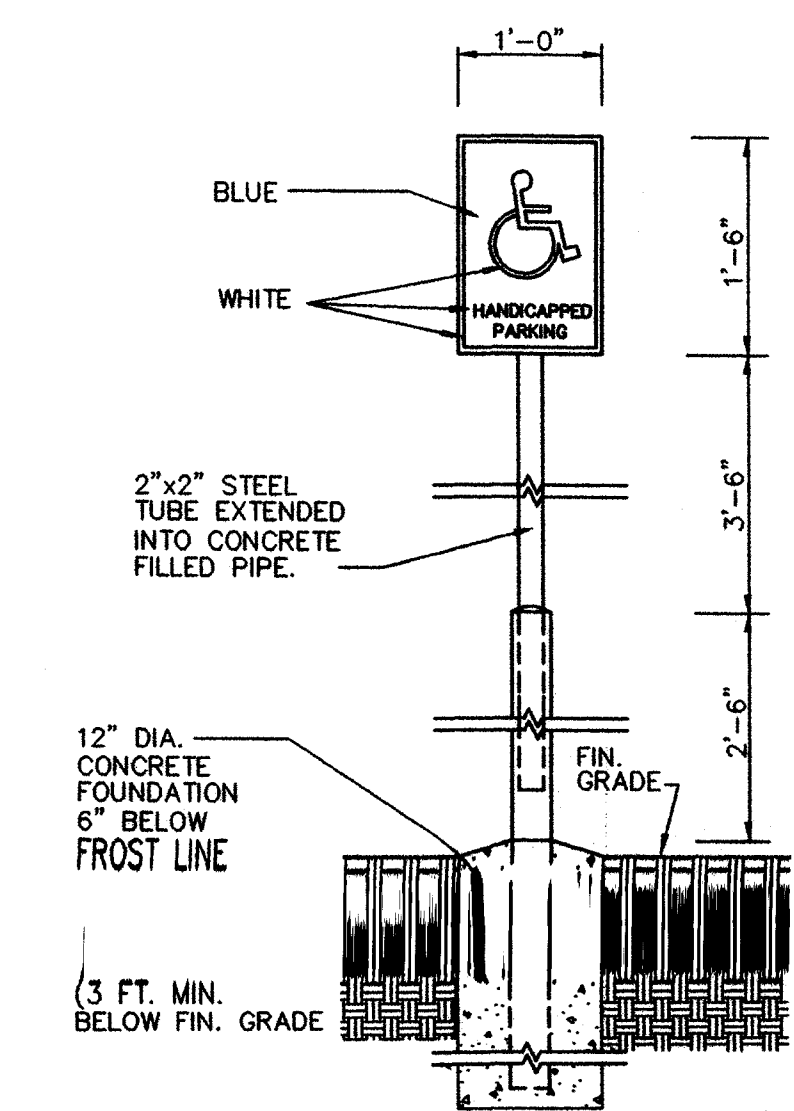
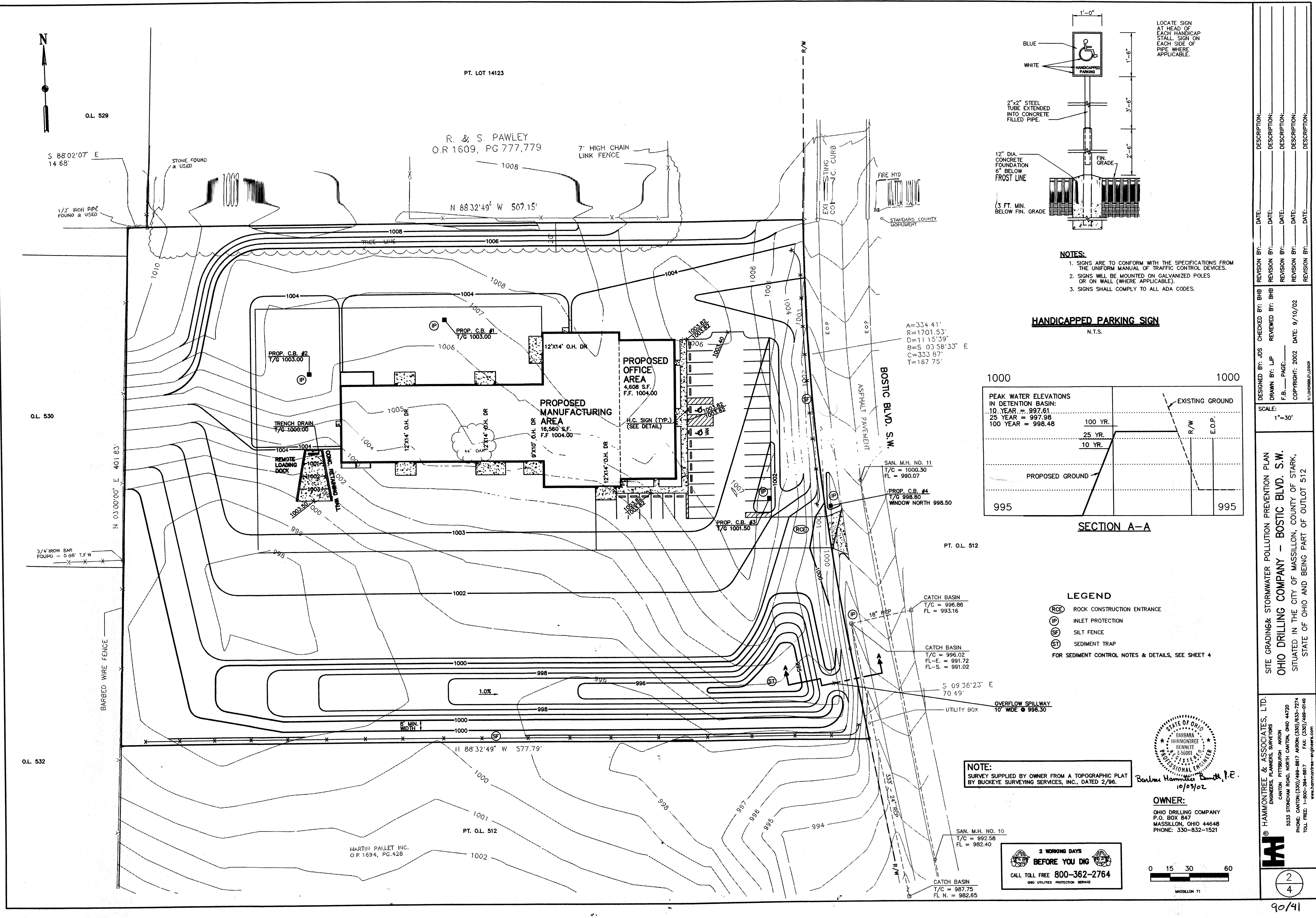
**NOTE:**  
SURVEY SUPPLIED BY OWNER FROM A TOPOGRAPHIC PLAT BY BUCKEYE SURVEYING SERVICES, INC., DATED 2/96.



SITE DIMENSION PLAN  
OHIO DRILLING COMPANY - BOSTIC BLVD. S.W.  
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,  
STATE OF OHIO AND BEING PART OF OUTLOT 512

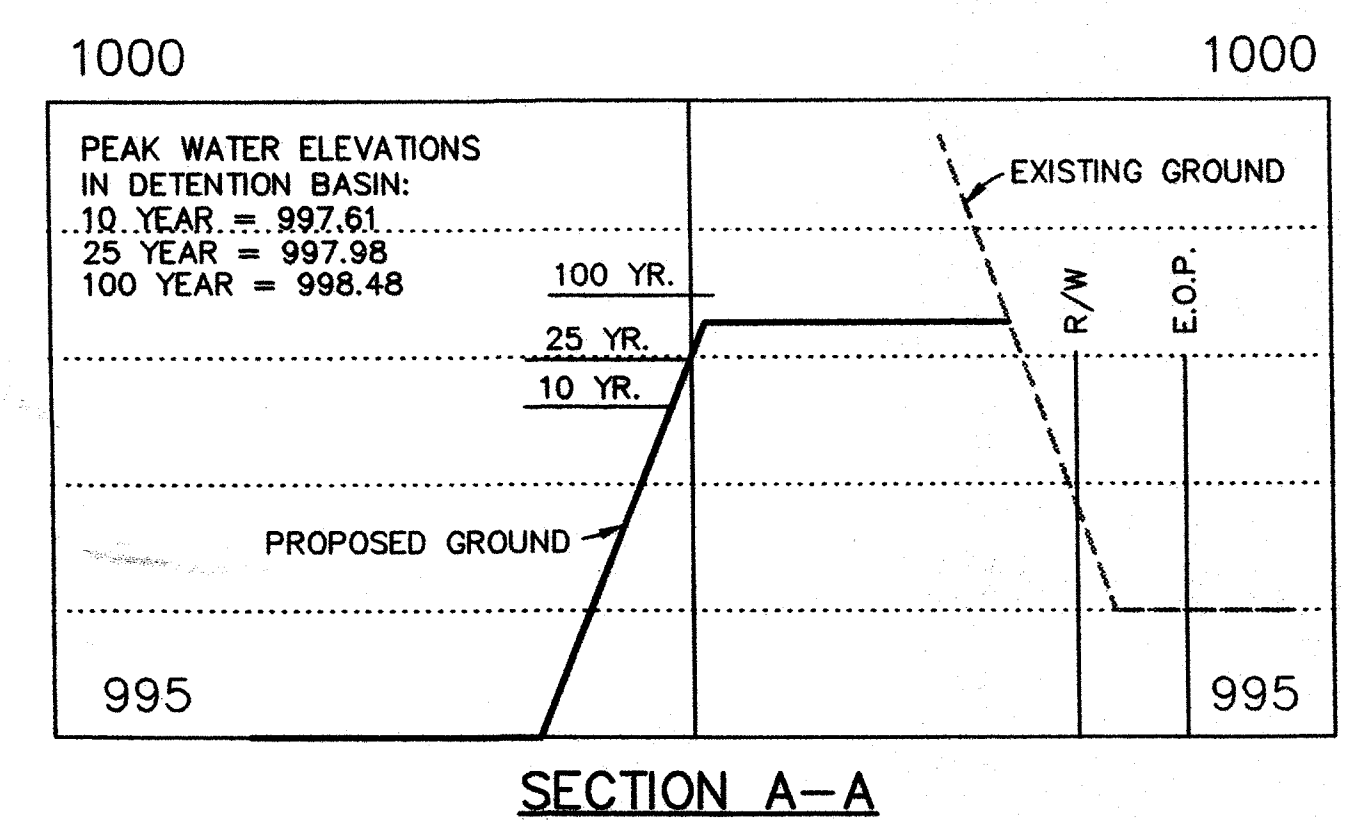
© HAMMONTREE & ASSOCIATES, LTD.  
ENGINEERS, PLANNERS, SURVEYORS  
CANTON, OHIO 44705  
5333 STONEHAM ROAD, NORTH CANTON, OHIO 44720  
PHONE: CANTON (330) 499-8817 FAX: (330) 499-0149  
TOLL FREE: 1-800-394-8817 FAX: (330) 499-0149  
www.hammontree-engineers.com





**NOTES:**

- SIGNS ARE TO CONFORM WITH THE SPECIFICATIONS FROM THE UNIFORM MANUAL OF TRAFFIC CONTROL DEVICES.
- SIGNS WILL BE MOUNTED ON GALVANIZED POLES OR ON WALL (WHERE APPLICABLE).
- SIGNS SHALL COMPLY TO ALL ADA CODES.

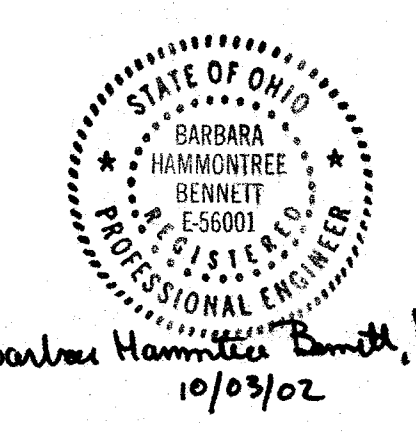


**LEGEND**

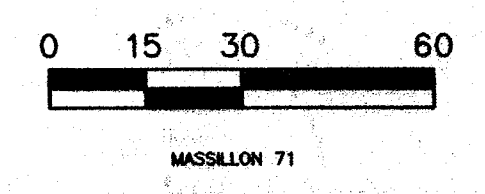
- (RCE) ROCK CONSTRUCTION ENTRANCE
- (IP) INLET PROTECTION
- (SF) SILT FENCE
- (ST) SEDIMENT TRAP

FOR SEDIMENT CONTROL NOTES & DETAILS, SEE SHEET 4

**NOTE:**  
SURVEY SUPPLIED BY OWNER FROM A TOPOGRAPHIC PLAT BY BUCKEYE SURVEYING SERVICES, INC., DATED 2/96.



**OWNER:**  
OHIO DRILLING COMPANY  
P.O. BOX 847  
MASSILLON, OHIO 44648  
PHONE: 330-832-1521



**SITE GRADING & STORMWATER POLLUTION PREVENTION PLAN**  
**OHIO DRILLING COMPANY - BOSTIC BLVD. S.W.**  
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,  
STATE OF OHIO AND BEING PART OF OUTLOT 512

DESIGNED BY: JDS CHECKED BY: BHB  
DRAWN BY: LJP REVIEWED BY: BHB  
F.B. PAGE: 2  
COPYRIGHT: 2002 DATE: 9/10/02  
SCALE: 1"=30'

**REVISIONS:**

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| 1   |      |             |
| 2   |      |             |
| 3   |      |             |
| 4   |      |             |
| 5   |      |             |

**PROFESSIONAL ENGINEER**  
Barbara Hammett, P.E.  
10/03/02

**OHIO DRILLING COMPANY**  
ENGINEERS, PLANNERS, SURVEYORS  
CANTON, PITTSBURGH, AKRON  
5233 STONEHAM ROAD, NORTH CANTON, OHIO 44720  
PHONE: CANTON (330) 499-8817 / AKRON (330) 633-7274  
TOLL FREE: 1-800-364-8817 FAX: (330) 499-0149  
www.barmontree-engineers.com

**90/41**

1) THE WATER LINE SHALL BE INSTALLED SO THAT 4'-0" OF COVER, FROM GRADE TO THE TOP OF THE WATER LINE, IS MAINTAINED AS A MINIMUM.

2) WATER LINE MATERIALS AND INSTALLATION PROCEDURES SHALL MEET OR EXCEED ALL APPLICABLE A.W.W.A. STANDARDS INCLUDING BUT NOT LIMITED TO C800 AND C651.

CONTRACTOR TO USE CONSUMERS OHIO WATER COMPANY STANDARDS AND SPECIFICATIONS. ANY SITUATION REQUIRING A MODIFICATION TO SAID STANDARDS AND SPECIFICATIONS MUST FIRST BE APPROVED BY COWC SERVICE CENTER ENGINEERING DEPARTMENT.

3) THE CONTRACTOR SHALL CAREFULLY LAYOUT THE WATER LINE AND ALL RELATED FACILITIES TO ENSURE THAT THEY ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY AND/OR C.O.W.C. ACQUIRED EASEMENTS AS INDICATED.

4) MEGALUG RETAINERS REQUIRED AT ALL FITTINGS.

5) THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM PRESSURE OF 35 psi DELIVERED TO THE CURB STOP

6) BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. C.O.W.C. MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES AND HIGHER.

7) THE LOCATION OF UTILITIES AND STRUCTURES, BOTH SURFACE AND SUB-SURFACE, ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF SURVEY AND IS NOT NECESSARILY UP-TO-DATE OR CORRECT. THE EXACT LOCATION AND PROTECTION OF UTILITIES AND STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR. DURING CONSTRUCTION THE CONTRACTOR SHALL USE DUE DILIGENCE IN PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. IF DAMAGE IS CAUSED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR RESTORATION OF SAME IN ACCORDANCE WITH THE DIRECTIONS OF THE ENGINEERS AND FOR ANY RESULTING CONTINGENT DAMAGE.

8) MAINTAIN MINIMUM 4' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION BETWEEN WATER AND STORM SEWER LINES.

9) MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES.

10) WATER MAIN PRESSURE TESTING SHALL CONFORM TO AWWA C600.

11) WATER MAIN DISINFECTION SHALL CONFORM TO AWWA C651.

13) NOTIFICATION OF COMMENCING WORK:  
THE CONTRACTOR SHALL KEEP THE CONSUMERS OHIO WATER COMPANY INFORMED AS ACCURATELY AS POSSIBLE WHEN THEY PLAN TO COMMENCE WORK AND IN WHAT WAY THEY INTEND TO PROCEED.  
THE CONTRACTOR IS TO COORDINATE NOTIFICATION OF WATER SERVICE INTERRUPTIONS WITH THE CONSUMERS OHIO WATER COMPANY. TO THE GREATEST EXTENT POSSIBLE, AT LEAST 24 HOURS NOTICE SHALL BE GIVEN TO PERTINENT WATER SYSTEM USERS IN THE EVENT OF SERVICE INTERRUPTION.

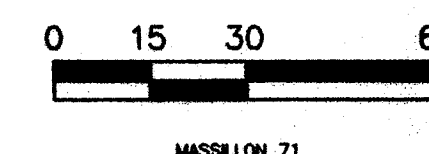
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
CONSUMERS OHIO WATER SERVICE

- 14) ACCESSIBILITY TO PRIVATE PROPERTY  
ACCESS TO ALL DRIVEWAYS AND PARKING AREAS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHILE LAYING THE WATERLINE ACROSS THE DRIVE. THE TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORK DAY TO PROVIDE ACCESS. THE CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS ALONG THE ROUTE OF THE WATERLINE AT LEAST TWO DAYS PRIOR TO THE START OF CONSTRUCTION.
- 15) NOTIFICATION OF SAFETY FORCES  
THE CONTRACTOR SHALL NOTIFY MASSILLON POLICE, FIRE DEPARTMENTS, SARTA, LOCAL SCHOOL DISTRICT TRANSPORTATION SUPERVISORS, AND THE MASSILLON DIRECTOR OF PUBLIC SERVICE AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.
- 16) CONTRACTOR AVAILABILITY  
THE CONTRACTOR SHALL SUPPLY THE ENGINEER, THE CONSUMERS OHIO WATER COMPANY, AND LOCAL SAFETY FORCES WITH A 24 HOUR PHONE NUMBER WHERE THE CONTRACTOR SHALL BE AVAILABLE FOR EMERGENCIES.
- 17) TRAFFIC MAINTENANCE  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC AS REQUIRED THROUGHOUT THE PROJECT LIMITS, AND ALSO THE COORDINATION OF TRAFFIC CONTROL ON ALL STATE, COUNTY, TOWNSHIP, AND CITY MAINTAINED ROADS DURING CONSTRUCTION. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).
- 18) HIGHWAY USE PERMITS  
WHEN WATERLINE INSTALLATION IS IN THE RIGHT-OF-WAY OF STATE ROUTES, A RIGHT-OF-WAY USERS PERMIT WILL BE REQUIRED AND MUST BE DISPLAYED AT THE JOB SITE DURING CONSTRUCTION.  
WHEN WATERLINE INSTALLATION IS IN THE RIGHT-OF-WAY OF COUNTY ROADS, HIGHWAY USE PERMITS WILL BE REQUIRED.  
NOTE: THE STATE COUNTY ENGINEER SEVENTY-TWO (72) HOURS PRIOR TO BEGINNING WORK.  
WHEN WATERLINE INSTALLATION IS IN THE RIGHT-OF-WAY OF CITY ROADS, STREET OPENING PERMITS WILL BE REQUIRED.
- 19) ALL DISTURBED SURFACES (GRASS, GRAVEL, ASPHALT, CONCRETE, etc.) SHALL BE REPLACED WITH LIKE MATERIALS AND RETURNED TO THEIR ORIGINAL CONDITION.
- 20) PREMIUM BACKFILL (COMPACTED) IS REQUESTED WITHIN 5' OF THE EDGE OF PAVEMENT WITHIN THE CITY OF MASSILLON.

1. EXISTING UTILITIES TO REMAIN, WHICH ARE CRUSHED OR DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED BY CONTRACTOR'S EXPENSE.
2. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
3. ANY UTILITIES FOUND DURING EXCAVATION, NOT SHOWN ON PLAN, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND/OR ENGINEER.
4. EACH SUBCONTRACTOR SHALL OBTAIN HIS OWN PERMITS AND CONTACT THE UTILITY COMPANY FOR VERIFICATION AND LOCATION OF HOOK-UP PRIOR TO ANY WORK BEING DONE.
5. UTILITIES SHOWN WERE TAKEN FROM RECORDS OF RESPECTIVE UTILITY COMPANIES AND FROM A TOPOGRAPHIC SURVEY AND DO NOT NECESSARILY REPRESENT ALL UNDERGROUND OR OVERHEAD UTILITIES ADJACENT TO OR UPON THE PREMISES SHOWN ON THE PLAN. CALL OUPS PRIOR TO EXCAVATION.
6. COORDINATE UTILITY CONNECTIONS AT THE BUILDING WITH THE MECHANICAL DRAWINGS.
7. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SLOPE OF BUILDING SEWERS TOWARDS THE LATERAL SEWER IN STRICT ACCORDANCE WITH THE GOVERNING AUTHORITIES PRIOR TO STARTING CONSTRUCTION.
8. CONTRACTOR TO COORDINATE THE WATER MAINLINE EXTENSION WITH CONSUMERS OHIO WATER SERVICE.
9. ALL UTILITIES SHALL BE UNDERGROUND.
10. ALL STORM SEWER SHALL CONFORM TO ODOT ITEM 707.33 OR EQUAL MATERIAL APPROVED BY THE CITY.
11. TRENCH DRAIN SHALL BE NEENAH R-4996-A1 WITH TYPE A FRAME OR APPROVED EQUAL.
12. SANITARY LATERAL SHALL BE A MINIMUM 6" DIAMETER OF PVC PIPE, ASTM D3034, SDR35, WITH RUBBER GASKET JOINTS OR APPROVED EQUAL. LATERAL SHALL BE CONSTRUCTED WITH A MINIMUM OF 1% SLOPE, AND HAVE A MINIMUM OF 3 FOOT OF COVER.
13. WATER SERVICE LATERAL SHALL BE DUCTILE IRON OF THE SIZE SHOWN ON THE MECHANICAL DRAWINGS AND SHALL HAVE BETWEEN 4 AND 5 FOOT OF COVER. ALL BACKFLOW PREVENTION DEVICES SHALL BE APPROVED BY CONSUMERS OF OHIO WATER COMPANY.
14. CITY OF MASSILLON STREET OPENING PERMIT WILL BE REQUIRED FOR INSTALLATION OF WATER LATERALS IN BOSTIC BLVD S.W. (SEE DETAIL). CONTRACTOR TO CONTACT MASSILLON ENGINEERING DEPARTMENT FOR PERMIT AND INSPECTION REQUIREMENTS.
15. A SANITARY PERMIT WILL BE REQUIRED. CONTRACTOR TO CONTACT MASSILLON ENGINEERING DEPARTMENT FOR PERMIT AND INSPECTION REQUIREMENTS.
16. A DRIVEWAY PERMIT WILL BE REQUIRED. CONTRACTOR TO CONTACT MASSILLON ENGINEERING DEPARTMENT FOR PERMIT AND INSPECTION REQUIREMENTS.
17. CONTRACTOR TO BE LICENSED IN THE CITY OF MASSILLON FOR ALL WORK WITHIN THE RIGHT OF WAY.
18. CONTRACTOR TO COORDINATE UNDERGROUND ELECTRIC SERVICE WITH OHIO EDISON, UNDERGROUND TELEPHONE WITH AMERITECH AND UNDERGROUND CABLE SERVICE WITH MASSILLON CABLE TV.

**NOTE:**  
10/20/96 SURVEY SUPPLIED BY OWNER FROM A TOPOGRAPHIC PLAT  
BY BUCKEYE SURVEYING SERVICES, INC., DATED 2/96.

**OWNER:**  
OHIO DRILLING COMPANY  
P.O. BOX 847  
MASSILLON, OHIO 44648  
PHONE: 330-832-1521



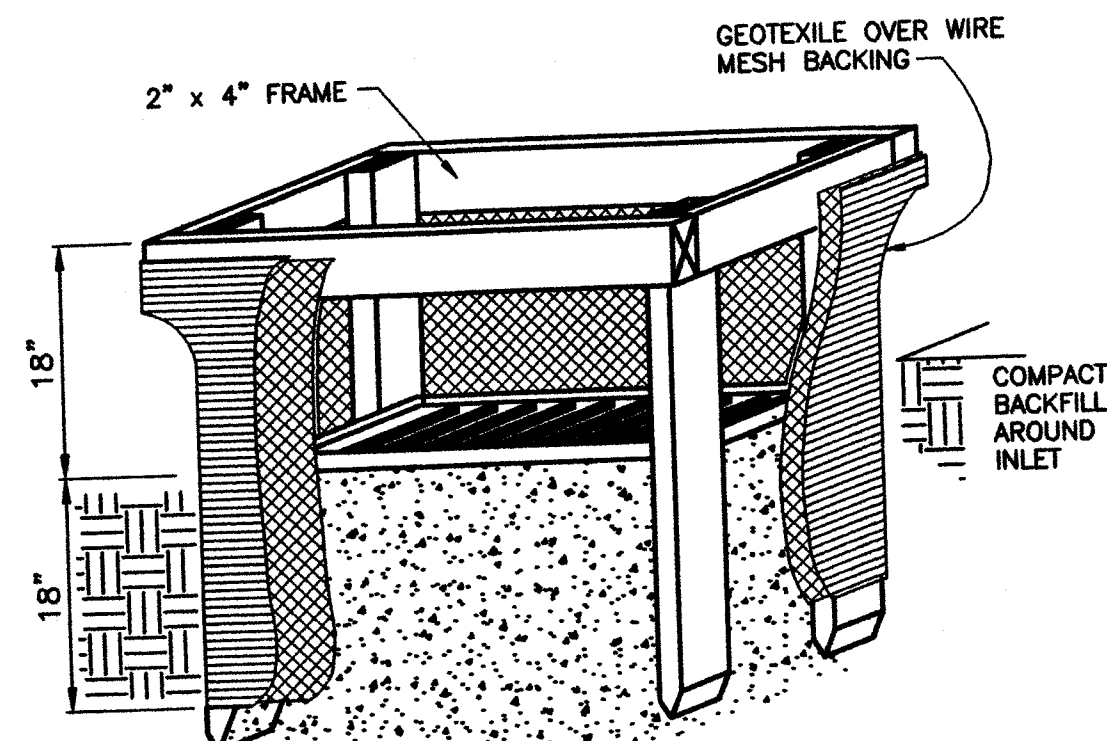
SITE UTILITY PLAN

**OHIO DRILLING COMPANY -- BOSTIC BLVD. S.W.**  
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,  
STATE OF OHIO AND BEING PART OF OUTLOT 512

**NTREE & ASSOCIATES, LTD.**  
ENGINEERS, PLANNERS, SURVEYORS  
CANTON PITTSBURGH AKRON  
144M ROAD, NORTH CANTON, OHIO 44720  
PH: (330)/499-8817 AKRON: (330)/853-7274  
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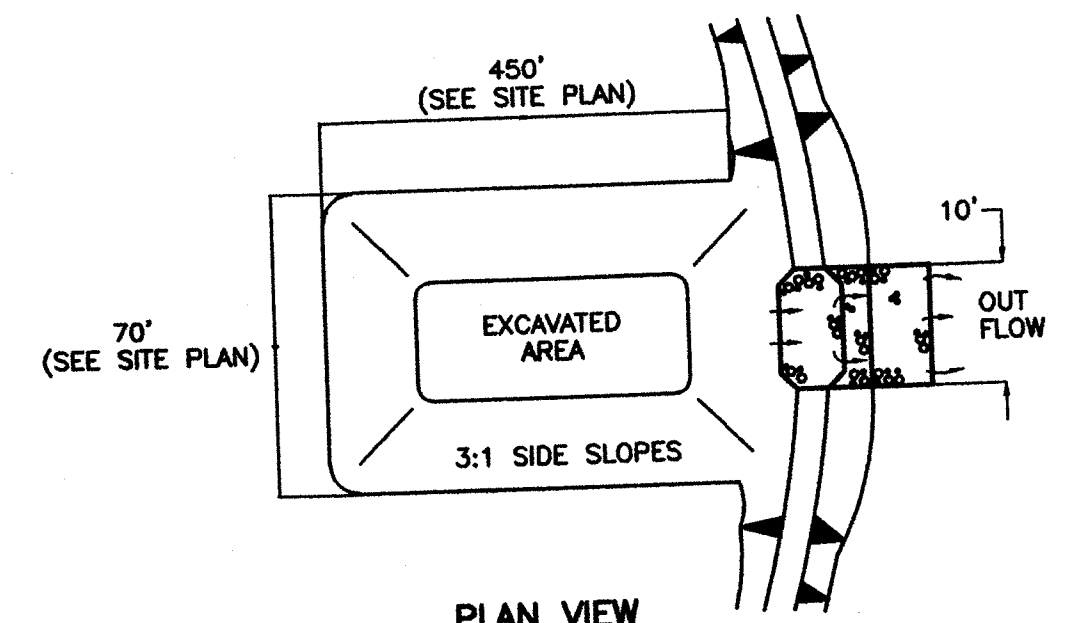
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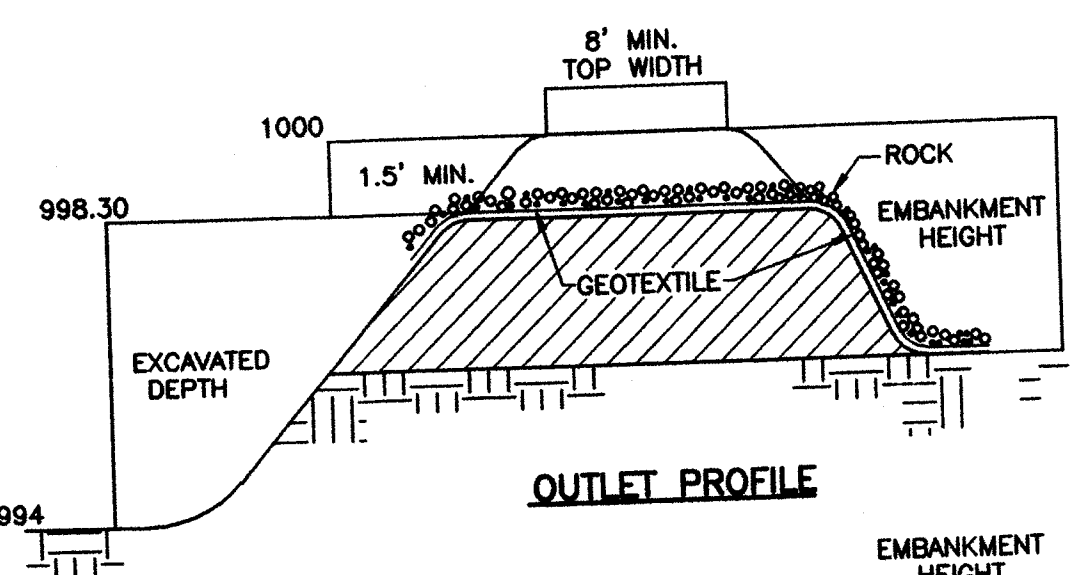
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 IN.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2 IN. BY 4 IN. POSTS SHALL BE DRIVEN 18 IN. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2 IN. BY 4 IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 IN. BELOW ADJACENT ROADS. IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20 - 40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 IN. BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ON SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 IN. HIGHER THAN THE TOP OF THE FRAME.

### INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS

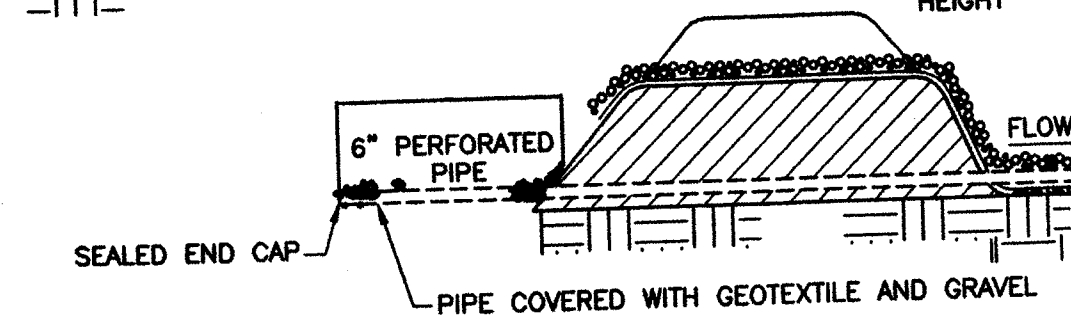
N.T.S.  
(IP)



PLAN VIEW



OUTLET PROFILE



DEWATERING PIPE SECTION



### SEDIMENT TRAPS

(ST)

### SEDIMENT TRAP NOTES:

1. SEDIMENT TRAPS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED AS NEEDED TO FACILITATE SEDIMENT CLEANOUT.
3. FILL MATERIAL USED FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVERSIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY EMBANKMENT TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF THE EMBANKMENT SHALL BE 5 FT. AS MEASURED FROM THE SURROUNDING GROUND.
4. CUT-AND-FILL SLOPES SHALL BE 2:1 OR FLATTER.
5. DIKES DIRECTING WATER TO THE TRAP SHALL BE HIGHER THAN THE HEIGHT OF THE EMBANKMENT.
6. TEMPORARY SEEDING SHALL BE ESTABLISHED ON ALL NON-SUBMERGED AREAS OF THE SEDIMENT TRAP.
7. THE STORAGE VOLUME SHALL BE ACHIEVED TO THE DIMENSIONS SHOWN IN THE PLANS TO ACHIEVE 67 CY OF STORAGE VOLUME BELOW THE CREST OF THE OUTLET FOR EVERY ACRE OF CONTRIBUTING DRAINAGE AREA.
8. THE OUTLET SPILLWAY SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN IN THE PLANS.
9. GEOTEXTILE SHALL BE PLACED OVER THE BOTTOM AND SLOPES OF THE OUTLET SPILLWAY. GEOTEXTILE SHALL CONTINUE DOWNSTREAM OF THE EMBANKMENT TO FORM AN APRON ON THE SURROUNDING GROUND. TO PREVENT RUNOFF FROM FLOWING UNDER THE GEOTEXTILE, THE SECTIONS PLACED NEAREST THE FRONT SHALL OVERLAP FOLLOWING SECTIONS. SECTIONS OF GEOTEXTILE SHALL OVERLAP AT LEAST 2 FT.
10. ROCK USED IN THE OUTLET SPILLWAY SHALL BE PLACED 1 FT THICK ON THE GEOTEXTILE. THE ROCK SHALL BE BETWEEN TYPE C AND TYPE D ROCK WHERE D<sub>50</sub> IS ABOUT 8 IN.
11. SEDIMENT SHALL BE REMOVED AND THE SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS FILLED ONE-HALF THE POND'S ORIGINAL DEPTH. REMOVED SEDIMENT SHALL BE SPREAD IN A SUITABLE AREA AND STABILIZED SO IT WILL NOT ERODE.
12. THE STRUCTURE AND ACCUMULATED SEDIMENT SHALL BE PERMANENTLY STABILIZED WHEN THE DRAINAGE AREA HAS BEEN STABILIZED.
13. THE 6" PERFORATED PIPE SHALL BE REMOVED ONCE THE SITE IS STABILIZED.

| PERMANENT SEEDING                                     |              |                            |                                |
|-------------------------------------------------------|--------------|----------------------------|--------------------------------|
| SEED MIX                                              | SEEDING RATE |                            | NOTES:                         |
|                                                       | LB./AC.      | LB./1,000 FT. <sup>2</sup> |                                |
| GENERAL USE                                           |              |                            |                                |
| CREeping RED FESCUE                                   | 20-40        | 1/2-1                      |                                |
| DOMESTIC RYEGRASS                                     | 10-20        | 1/4-1/2                    |                                |
| KENTUCKY BLUEGRASS                                    | 10-20        | 1/4-1/2                    |                                |
| TALL FESCUE                                           | 40           | 1                          |                                |
| DWARF FESCUE                                          | 40           | 1                          |                                |
| STEEP BANKS OR CUT SLOPES                             |              |                            |                                |
| TALL FESCUE                                           | 40           | 1                          |                                |
| CROWN VETCH                                           | 10           | 1/4                        | DO NOT SEED LATER THAN AUGUST. |
| TALL FESCUE                                           | 20           | 1/2                        |                                |
| FLAT PEA                                              | 20           | 1/2                        | DO NOT SEED LATER THAN AUGUST. |
| TALL FESCUE                                           | 20           | 1/2                        |                                |
| ROAD DITCHES AND SWALES                               |              |                            |                                |
| TALL FESCUE                                           | 40           | 1                          |                                |
| DWARF FESCUE                                          | 90           | 2 1/4                      |                                |
| KENTUCKY BLUEGRASS                                    | 5            |                            |                                |
| LAWNS                                                 |              |                            |                                |
| KENTUCKY BLUEGRASS                                    | 60           | 1 1/2                      |                                |
| PERENNIAL RYEGRASS                                    | 60           | 1 1/2                      |                                |
| KENTUCKY BLUEGRASS                                    | 60           | 1 1/2                      | FOR SHADED AREAS.              |
| CREeping RED FESCUE                                   | 60           | 1 1/2                      |                                |
| NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED. |              |                            |                                |

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

### PERMANENT SEEDING

(S)

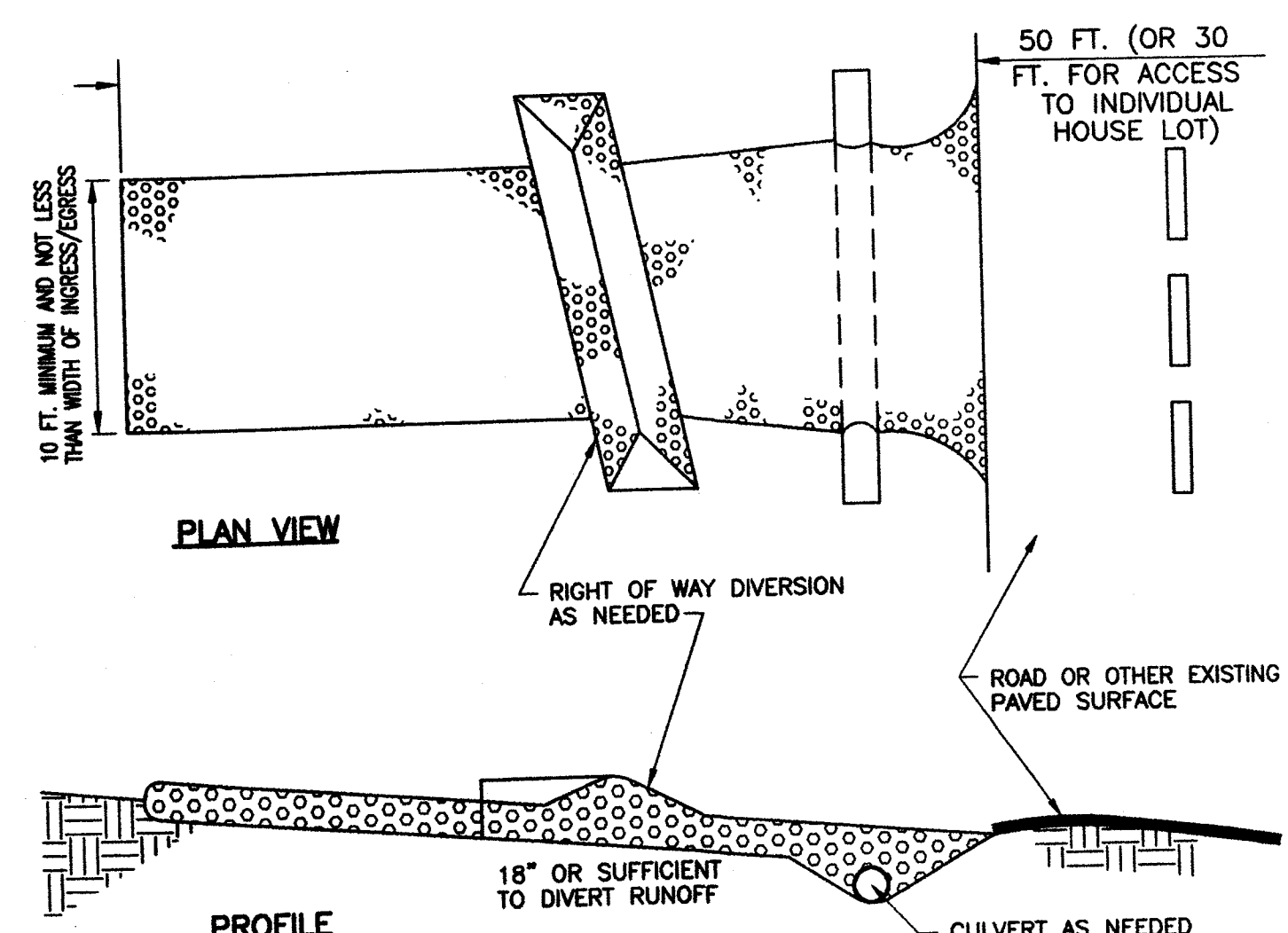
| TEMPORARY SEEDING SPECIES SELECTION |                                                       |                            |          |
|-------------------------------------|-------------------------------------------------------|----------------------------|----------|
| SEEDING DATES                       | SPECIES                                               | LB./1,000 FT. <sup>2</sup> | PER ACRE |
| MARCH 1 TO AUGUST 15                | OATS                                                  | 3                          | 4 BUSHEL |
|                                     | TALL FESCUE                                           | 1                          | 40 LB.   |
|                                     | ANNUAL RYEGRASS                                       | 1                          | 40 LB.   |
|                                     | PERENNIAL RYEGRASS                                    | 1                          | 40 LB.   |
|                                     | TALL FESCUE                                           | 1                          | 40 LB.   |
| AUGUST 16 TO NOVEMBER 1             | RYE                                                   | 3                          | 2 BUSHEL |
|                                     | TALL FESCUE                                           | 1                          | 40 LB.   |
|                                     | ANNUAL RYEGRASS                                       | 1                          | 40 LB.   |
|                                     | WHEAT                                                 | 3                          | 2 BUSHEL |
|                                     | TALL FESCUE                                           | 1                          | 40 LB.   |
| NOVEMBER 1 TO SPRING SEEDING        | PERENNIAL RYEGRASS                                    | 1                          | 40 LB.   |
|                                     | TALL FESCUE                                           | 1                          | 40 LB.   |
|                                     | ANNUAL RYEGRASS                                       | 1                          | 40 LB.   |
|                                     | USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING. |                            |          |
|                                     |                                                       |                            |          |

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

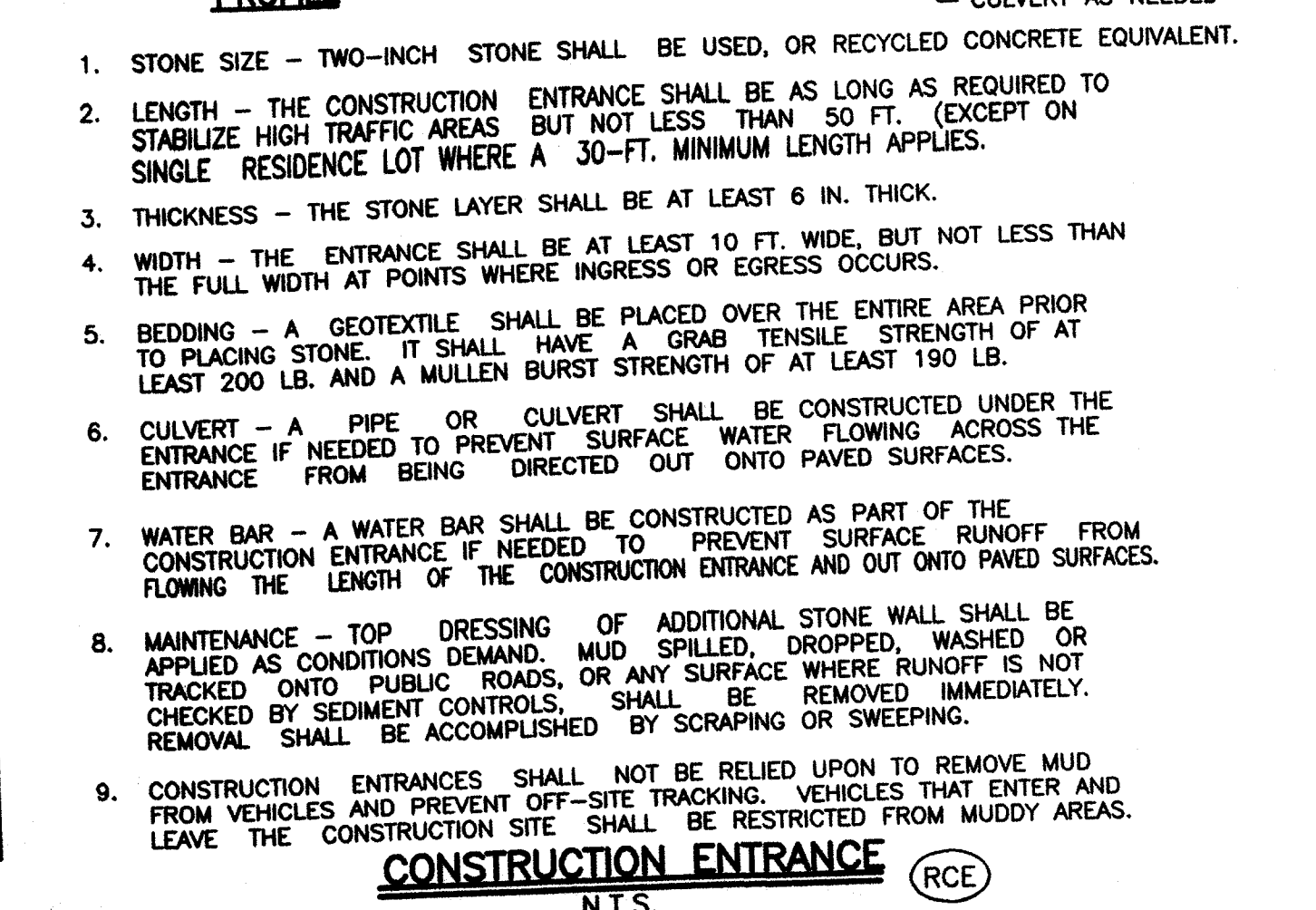
1. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR RE-WORKED FOR 45 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEED AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
3. THE SEED BED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEED BED PREPARATION IS NOT POSSIBLE.
4. SOIL AMENDMENTS - APPLICATIONS OF TEMPORARY VEGETATION SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. SOIL TESTS SHOULD BE TAKEN ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
5. SEEDING METHOD - SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR OF CULTPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

### TEMPORARY SEEDING

(TS)



PLAN VIEW



PROFILE

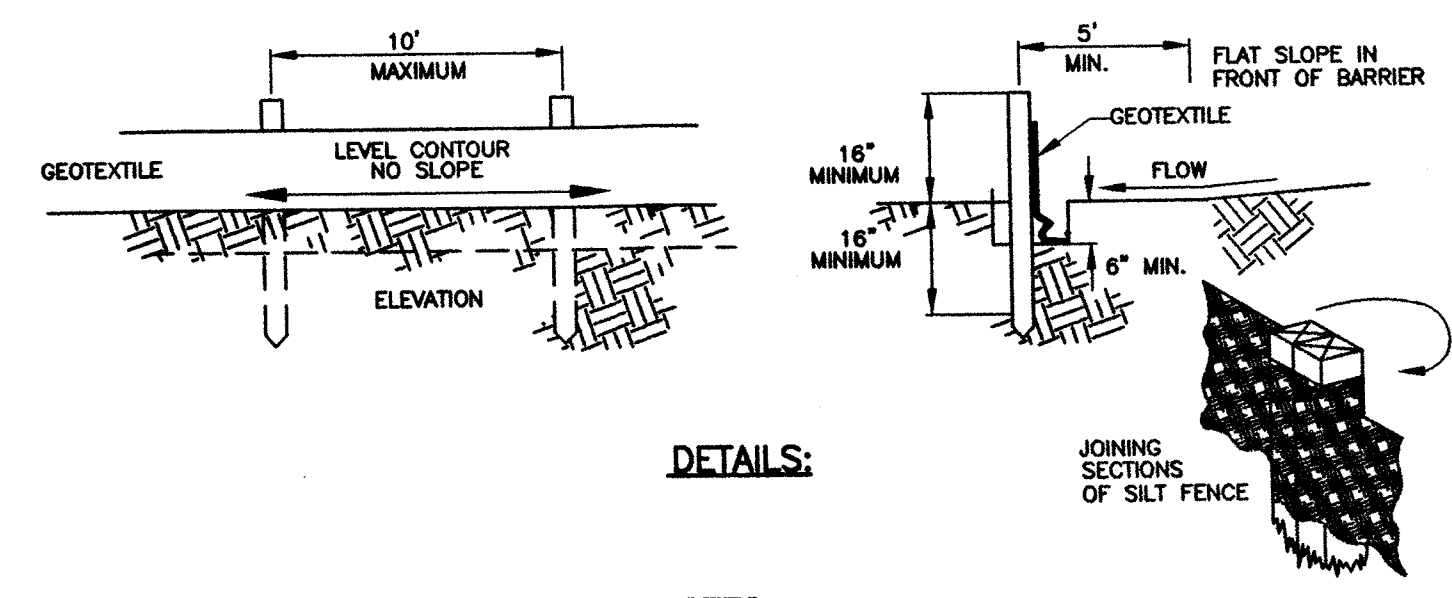
1. STONE SIZE - TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30-FT. MINIMUM LENGTH APPLIES).
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 10 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. BEDDING - A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
6. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
7. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
8. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE WALL SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS. SHAD MATERIAL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

### CONSTRUCTION ENTRANCE

N.T.S. (RCE)

### EROSION CONTROL NOTES

1. ALL PROPERTIES ADJACENT TO THE SITE OF SOIL-DISTURBING ACTIVITY SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE, FROM SOIL EROSION AND SEDIMENT RUNOFF AND DRAINAGE, INCLUDING, BUT NOT LIMITED TO PRIVATE PROPERTIES, NATURAL AND ARTIFICIAL WATERWAYS, WETLANDS, STORM SEWERS AND PUBLIC LANDS.
2. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL PRACTICES USED TO SATISFY THIS REQUIREMENT SHALL CONFORM, AS A MINIMUM, TO STATE OF OHIO STANDARDS AS SET FORTH IN THE MOST-CURRENT EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL, DEFINED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF SOIL AND WATER CONSERVATION AND NATURAL RESOURCES PROTECTION AGENCY, OHIO REVISED CODE CHAPTER 6111 REQUIREMENTS.
3. EROSION AND SEDIMENT CONTROL PLAN APPROVALS ISSUED IN ACCORDANCE WITH THESE RULES DO NOT RELIEVE THE OWNER OF RESPONSIBILITY FOR OBTAINING ALL OTHER NECESSARY PERMITS AND OR APPROVALS FROM FEDERAL STATE, AND/OR COUNTY AGENCIES. IF REQUIREMENTS VARY, THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
4. EROSION AND SEDIMENT CONTROL PRACTICES AT THE SITE, AND AS IDENTIFIED IN THE ESC PLAN SHALL COMPLY WITH THE FOLLOWING:
  - A. AN APPROVED EROSION AND SEDIMENT CONTROL PLAN OR APPROVAL LETTER FROM THE STARK SWCD SHALL BE LOCATED ON SITE FOR REVIEW.
  - B. LIMITS TO CLEARING AND GRADING SHALL BE SHOWN ON ESC PLANS. LIMITS TO CLEARING AND GRADING SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE, FLAGGING, AND/OR FENCING ETC.
  - C. INSTALL EROSION AND SEDIMENT PERIMETER CONTROLS AS A FIRST ACTION OF CONSTRUCTION AS SPECIFIED BY CONSTRUCTION SEQUENCE. THIS SHALL INCLUDE AND IS NOT LIMITED TO PROTECTIVE BMP'S FOR STREAM CORRIDORS AND CROSSINGS, WETLANDS, SITE ENTRANCE, SEDIMENT TRAPS & BASINS, BARRIERS, AND DIVERSION DIKES.
  - D. CONCENTRATED STORM WATER RUNOFF SHALL PASS THROUGH A SEDIMENT CONTROL DEVICE BEFORE EXITING THE SITE BOUNDARIES. CONCENTRATED RUNOFF FROM BARE SOIL AREAS SHALL BE DIVERTED INTO A SETTLING POND OR SEDIMENT CONTROL STRUCTURE, OR OTHER APPROVED SEDIMENT BARRIER BEFORE LEAVING THE SITE.
  - E. EARTHEN STRUCTURES SUCH AS DAMS, BASINS, STREAM MODIFICATIONS AND WATER DIVERSIONS SHALL BE SEED AND MULCHED WITH IN SEVEN (7) DAYS OF THE COMPLETION OF INSTALLATION. DAMS SHALL CONFORM TO THE OHIO DAM LAWS (ORC 1521.06).
  - F. STABILIZATION OF CRITICAL AREAS WITHIN 50 FEET OF ANY STREAM OR WETLAND SHALL BE TEMPORARILY STABILIZED WITHIN TWO (2) DAYS OF DISTURBANCE IF AREA WILL REMAIN INACTIVE FOR FOURTEEN (14) DAYS OR LONGER. CONSTRUCTION VEHICLES SHALL AVOID STREAMS AND THE 50 FOOT BUFFER AREAS. IF AN ACTIVE DRAINAGEWAY MUST BE CROSSED BY CONSTRUCTION VEHICLES REPEATEDLY DURING CONSTRUCTION, A TEMPORARY STREAM CROSSING SHALL BE CONSTRUCTED ACCORDING TO THE SPECIFICATIONS IN THE RAINWATER & LAND DEVELOPMENT BOOK. CONSTRUCTION OF BRIDGES, CULVERTS OR FINE SEDIMENT CONTROL STRUCTURES SHALL NOT PLACE SOIL, DEBRIS AND OTHER FINE PARTICULATE MATERIAL INTO OR CLOSE TO THE WATER RESOURCE IN SUCH A MANNER THAT IT MAY SLOUGH, SLIP OR ERODE.
  - G. STORM SEWER INLETS (AND SANITARY) SHALL BE PROTECTED SO THAT SEDIMENT-LOADED RUNOFF WILL NOT ENTER THE STORM SEWER SYSTEM WITHOUT FIRST BEING FILTERED AND/OR TREATED.
  - H. RE-VEGETATE SOIL. TEMPORARY SOIL STABILIZATION SHALL OCCUR WITHIN SEVEN (7) DAYS AFTER ROUGH GRADING IF THE AREA WILL REMAIN IDLE LONGER THAN THIRTY (30) DAYS. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. PERMANENT VEGETATION IS A GROUND COVER DENSE ENOUGH TO COVER 80% OF THE SOIL SURFACE AND MATURE ENOUGH TO SURVIVE WINTER WEATHER CONDITION.



DETAILS:

### NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RE-ESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE FENCE.
6. SOIL STOCKPILES OR OTHER SOURCES OF SEDIMENT SHALL HAVE SILT FENCE PROTECTION.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8" OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
  - 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
  - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED.
  - 3) OTHER PRACTICES SHALL BE INSTALLED.

CRITERIA FOR SILT FENCE MATERIALS

| FABRIC PROPERTIES               | VALUES                                 | TEST METHOD            |
|---------------------------------|----------------------------------------|------------------------|
| GRAB TENSILE STRENGTH           | 90 LB. MINIMUM                         | ASTM D 1682            |
| MULLEN BURST STRENGTH           | 190 P.S.I. MINIMUM                     | ASTM D 3786            |
| SLURRY FLOW RATE                | 0.3 GAL./MIN./FT. <sup>2</sup> MAXIMUM |                        |
| EQUIVALENT OPENING SIZE         | 40-80                                  | US STD. SIEVE CW-02215 |
| ULTRAVIOLET RADIATION STABILITY | 90% MINIMUM                            | ASTM-G-26              |

### SILT FENCE

N.T.S. (SF)

|                  |                  |                  |               |
|------------------|------------------|------------------|---------------|
| DESIGNED BY: JDS | CHECKED BY: BHB  | REVISION BY: BHB | DATE: 9/10/02 |
| DRAWN BY: LJP    | REVIEWED BY: BHB | REVISION BY: BHB | DATE: 9/10/02 |
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SCALE: N.T.S.

SEDIMENT CONTROL NOTES & DETAILS  
OHIO DRILLING COMPANY - BOSTIC BLVD. S.W.  
SITUATED IN THE CITY OF MASSILLON, COUNTY OF STARK,  
STATE OF OHIO AND BEING PART OF OUTLOT 512

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