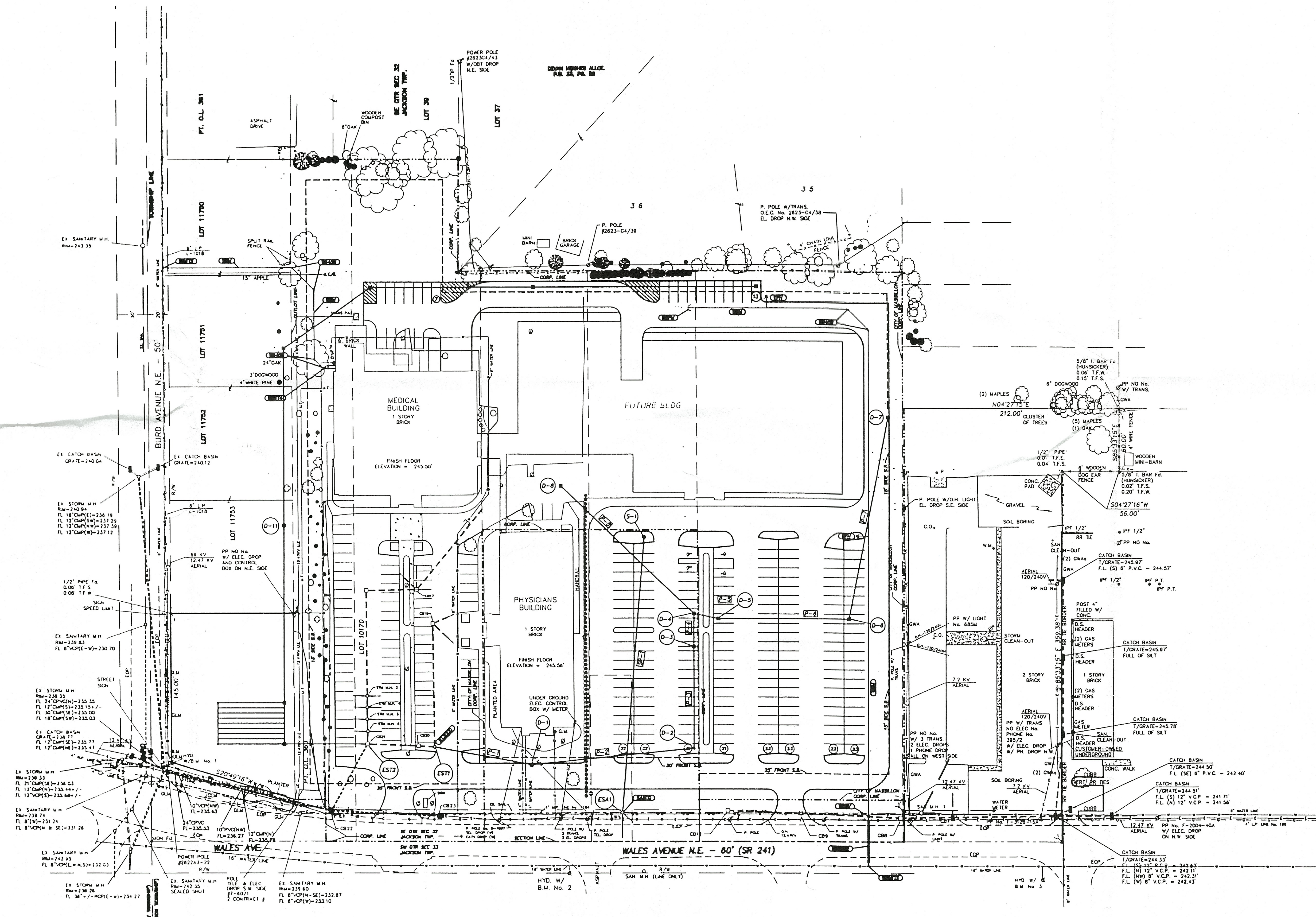


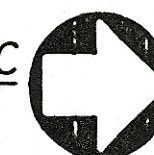
PHASE I IMPROVEMENT PLANS
FOR
AULTMAN WEST
FOR: AULTMAN HEALTH FOUNDATION DATE: APRIL 2000

SHEET INDEX

- C1. TITLE SHEET
- C2. NOTES, DETAILS AND ESTIMATED QUANTITIES
- C3. EXISTING CONDITIONS AND DEMOLITION PLAN
- C4. GRADING PLAN
- C5. UTILITY PLAN
- CEI-CE4. STORM WATER POLLUTION PREVENTION PLANS



SITE SCHEMATIC
SCALE: 1"=50'



PLANS PREPARED BY:
COOPER & ASSOCIATES, LLP
ENGINEERS & SURVEYORS
1359 MARKET AVENUE NORTH
CANTON, OHIO 44714
PHONE: (330) 452-5731 FAX: (330) 452-9110
JOB #: 00149 SHEET # C1 OF C5

DESCRIPTION OF WORK TO BE PERFORMED:

WORK TO BE PERFORMED AS A PART OF THE PHASE 1 IMPROVEMENTS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THE FOLLOWING:

- CLEARING THE SITE AS DESIGNATED BY THE DISTURBANCE LIMITS OF ANY AND ALL OBSTRUCTIONS AS SHOWN ON THE DEMOLITION PLAN. MANY OF OBSTRUCTIONS EXIST WHICH ARE NOT SHOWN ON THE DEMOLITION PLAN. THEREFORE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GRADING PLAN. THE GRADES SHOWN ON THE GRADING PLAN ARE FINISH GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING SITE TO PROPOSED SUBGRADE.
- UTILITY EXTERNSHNS SHALL BE MADE IN CONFORMANCE WITH THE UTILITY PLAN. BUILDING UTILITY CONNECTIONS SHALL BE PART OF THE SUBSEQUENT PHASE.
- PAVEMENT IMPROVEMENTS, PROPOSED BUILDING CONSTRUCTION AND PARKING LOT IMPROVEMENTS ARE NOT INCLUDED IN THIS PHASE. HOWEVER, THEY WILL BE INCLUDED IN PHASE 2.

GENERAL NOTES:

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES, AND STANDARD SPECIFICATIONS OF THE CITY OF MASSILLON. IN LIEU OF ANY LOCAL SPECIFICATIONS, WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS MOST RECENT EDITION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION, WITH THE EXCEPTION OF THE ODOT PERMIT FOR THE DRIVE ENTRANCE AND UTILITY WORK TO BE PERFORMED ON S.R. 161.

ALL EXISTING FIELD CONDITIONS SHALL BE FIELD CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO BIDDING AND CONSTRUCTION. SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR MUST SEEK WRITTEN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.

SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, HE SHALL SEEK CLARIFICATION IN WRITING FROM THE OWNER'S REPRESENTATIVE BEFORE DEMOLITION OPERATIONS COMMENCE.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT ALL ITEMS ON THESE PLANS USING CONSTRUCTION METHODS AND MATERIALS THAT WILL PROTECT PROPERTY AND PREVENT BODILY INJURY AND/OR DEATH. THE CONTRACTOR SHALL TAKE ANY NECESSARY SAFETY PRECAUTIONS TO COMPLY WITH THE SAFETY REQUIREMENTS OF THE CITY, STATE AND FEDERAL GOVERNMENTS.

DEMOLITION NOTES:

DEMOLITION SHALL BE PERFORMED AND EQUIPMENT STORED, IN A MANNER WHICH PERMITS EXISTING FACILITIES TO PERFORM WITHOUT INTERRUPTION.

ALL DEMOLITION ITEMS SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH THE OWNER'S DIRECTION AND SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING ODOT ITEMS:

- ITEM 101 - CLEARING AND GRUBBING, WHICH SHALL CONSIST OF, BUT SHALL NOT BE LIMITED TO, SCALPING AREAS OF PROPOSED EXCAVATION AND EMBANKMENT, REMOVAL OF TREES AND STUMPS, AND ALL VEGETATION AND DEBRIS AS REQUIRED.
- ITEM 102 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS WHICH SHALL CONSIST OF, BUT SHALL NOT BE LIMITED TO, REMOVAL OF ALL BUILDINGS, STRUCTURES, AND ANY OTHER ITEMS SPECIFIED AS SUCH.

EXCAVATING OF REMOVED BUILDINGS AND STRUCTURES AS REQUIRED SHALL BE IN ACCORDANCE WITH ODOT ITEM 101.

ALL PAYMENT GRAVEL & CONCRETE AREAS LOCATED WITHIN THE LIMITS OF DEMOLITION ARE TO BE REMOVED FROM SITE IN ACCORDANCE WITH OWNER'S DIRECTION.

ALL DRIVE ENTRANCES ONTO WALES AVENUE NOT REQUIRED FOR THE PROPOSED ENTRANCE OR FOR CONSTRUCTION ACCESS ARE TO BE REMOVED.

CERTAIN DESIGNATED AREAS DO NOT REPRESENT THE CURRENT TOPOGRAPHY OF THIS SITE, AND ADDITIONAL DEMOLITION WILL BE REQUIRED. THIS INCLUDES TWO ROWS OF PARKING ALONG THE NORTH END OF THE EXISTING PHYSICIAN'S BUILDING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM AN ON-SITE EVALUATION OF THE SITE TO DETERMINE THE EXTENTS OF THE NECESSARY DEMOLITION ITEMS.

ALL ITEMS DESIGNATED FOR RELOCATION SHALL BE DONE SO IN ACCORDANCE WITH THE OWNER AND ANY GOVERNING AGENCY. THE UTILITY COMPANIES ARE APPLICABLE.

DEMOLITION AND REDEMPTION OF EXIST. 6" WATER LINE SHOWN ON THIS PLAN IS NOT TO OCCUR UNTIL SUCH TIME AS THE NEW 12" WATER LINE SERVICE FROM BUND AVENUE HAS BEEN CONNECTED AND APPROVED. SEE UTILITY PLAN, SHEET 5.

GRADING AND PAVING NOTES:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE EROSION CONTROL IN CONFORMANCE WITH REQUIREMENTS OF THE CITY OF MASSILLON.

EXCESS EARTHWORK MATERIALS MAY BE DISTRIBUTED ON THE SITE IN ACCORDANCE WITH THE OWNER'S DIRECTION.

ALL DISTURBED YARD AREAS SHALL BE FINE GRADED, SEDED, FERTILIZED AND MULCHED IN ACCORDANCE WITH ODOT 101.

EMBANKMENT CONSTRUCTION AND SUBGRADE COMPACTION SHALL BE IN GENERAL CONFORMANCE WITH ODOT SPECIFICATIONS AND MORE SPECIFICALLY AS FOLLOWS:

- STANDARD PROCTOR WITHIN BUILDING LIMITS (TO 6" OUTSIDE BUILDING LINE) AND UNDER PAVEMENT - 100%
- STANDARD PROCTOR IN UTILITY TRENCHES - 95%
- STANDARD PROCTOR IN YARD AREAS - 95%

CONTRACTOR SHALL ADJUST FOR EXISTING UTILITIES AS NECESSARY.

UTILITY NOTES:

THE FOLLOWING MATERIALS ARE APPROVED FOR THE STORM SEWER UNLESS OTHERWISE DESIGNATED ON THE PLAN. INSTALLATION TO BE IN ACCORDANCE WITH ODOT TYPE "B" UNLESS OTHERWISE NOTED ON THE PLAN.

- REINFORCED CONCRETE PIPE PER ODOT ITEM 801
- HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR PER ODOT ITEM 841

CATCH BASIN TOP SLAB AND GRATE SHALL BE MODIFIED FOR HIGHWAY LOADS AS REQUIRED. GRATE TO BE BITE SAFE.

THE FOLLOWING MATERIALS ARE ACCEPTABLE FOR THE SANITARY SERVICE LATERAL. HOWEVER, THE COMPLETE SYSTEM SHALL BE UNIFORM MATERIAL.

- VCP EXTRA STRENGTH ASTM C 700 WITH COMPRESSION TYPE JOINTS IN CONFORMANCE WITH ASTM C 428
- 48" COMPOSITE PIPE ASTM D 1685 WITH CHEMICALLY WELODED PREMIUM JOINTS
- PVC PIPE ASTM D 3034, 50% IN MAXIMUM WITH GASKETED PREMIUM JOINTS ASTM D 3213

CONTACT COOPER & ASSOCIATES FOR CONSTRUCTION LAYOUT OR FOR COORDINATE POINT LOCATIONS FOR AS REQUIRED.

ZONING DATA

CITY OF MASSILLON

- ZONING CLASSIFICATION: O-2 OFFICE DISTRICT
- MINIMUM FRONT YARD: 25 FEET
- MINIMUM SIDE YARD: 15 FEET
- MINIMUM REAR YARD: 20 FEET

JACKSON TOWNSHIP

- ZONING CLASSIFICATION: B-3 COMMERCIAL DISTRICT
- MINIMUM FRONT YARD: 50 FEET
- MINIMUM SIDE YARD: 15 FEET (N/A)
- MINIMUM REAR YARD: 20 FEET (N/A)

PARKING DATA

72 SPACES REQUIRED FOR EXISTING P.O.B.
14,400 SF/200 NSF
MEDICAL/DENTAL OFFICE - 601 Z
(PER JACKSON TWP. ZONING)

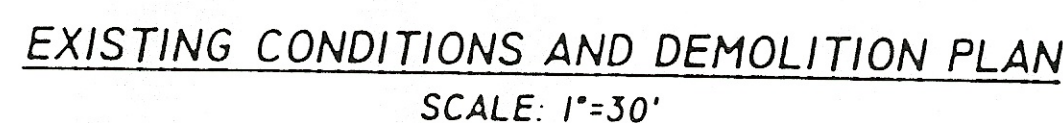
63 SPACES REQUIRED FOR EXISTING H.O.B.
52 SPACES (10,203 SF/200 NSF)
BUSINESS/PROFESSIONAL OFFICE - 1183 OI
-21 SPACES (14 BEDS IN OR + (120 OR STAFF)/33)
HOSPITALS - 1183 OI
(PER CITY OF MASSILLON ZONING)

313 TOTAL SPACES REQUIRED
(8 HANDICAP SPACES, 305 STANDARD SPACES)

374 SPACES PROVIDED

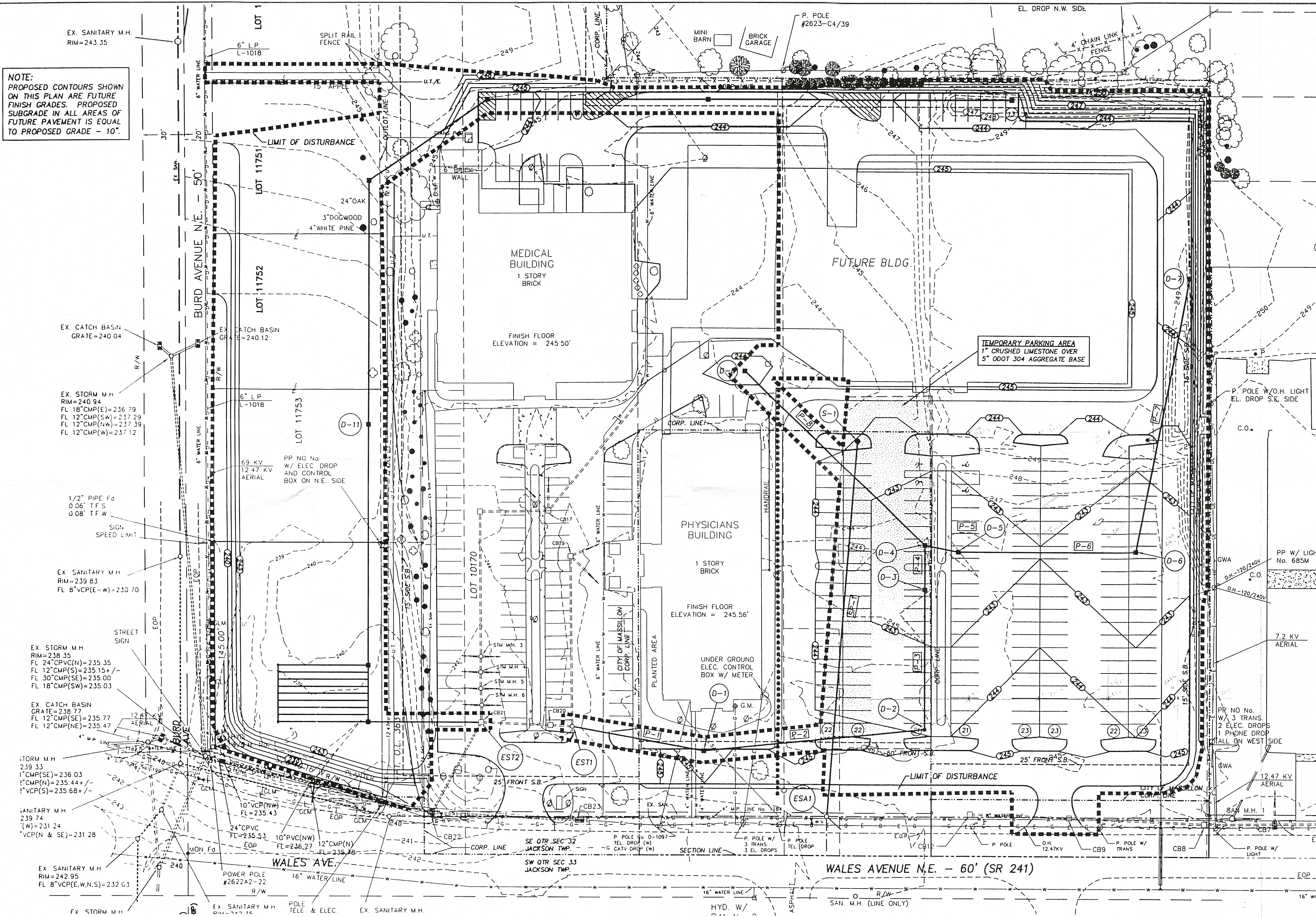
| PLAN DESIGNATION | SHEET NUMBER | | | ESTIMATED QUANTITIES | | | | DESCRIPTION |
|------------------|--------------|---|---|----------------------|---------|------|--|--|
| | 3 | 4 | 5 | ITEM | QTY | UNIT | | |
| 1 | | | | 201 | 1 | LUMP | ROADWAY CONSTRUCTION | |
| | | | | 202 | 1 | LUMP | CLEARING AND GRUBBING | |
| | | | | | | | REMOVAL OF OBSTRUCTIONS | |
| | | | | | | | | |
| 14,900 | | | | 203 | 14,900 | CY | SITE EXCAVATION | |
| | | | | 203 | 6,200 | CY | SITE EMBANKMENT (INCLUDES 10% COMPACTION FACTOR) | |
| | | | | 304 | 304 | CY | AGGREGATE BASE | |
| | | | | 64 | 64 | CY | CRUSHED LIMESTONE | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| W&M | | | | 220 | 638 | 220 | LF | 6" DUCTILE CAST IRON WATER MAIN |
| | | | | 664 | 638 | 664 | LF | 6" DUCTILE CAST IRON WATER MAIN |
| | | | | 1 | 638 | 1 | EACH | 8" PLUG & MARKER |
| | | | | 40 | 638 | 40 | LF | 8" DCP WATER MAIN IN 16" STEEL CASING (BORED INSTALLATION) |
| W&LSB | | | | 4 | 638 | 4 | EACH | 8" L&B BEND |
| | | | | 1 | 638 | 1 | EACH | 8"x10" TAPPING SLEEVE AND VALVE |
| | | | | 1 | 638 | 1 | EACH | 8"x6" TAPPING SLEEVE AND VALVE |
| | | | | 1 | 638 | 1 | EACH | 8"x6" VALVE WITH (2) BLIND FLANGES W/4" TAPS |
| W&GV | | | | 1 | 638 | 1 | EACH | 8" GATE VALVE W/VALVE BOX |
| | | | | 2 | 638 | 2 | EACH | 8" L&B BEND |
| | | | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| SP4 | | | | 264 | 603 | 264 | LF | 6" SANITARY SEWER PIPE |
| | | | | 1 | 604 | 1 | EACH | SANITARY MANHOLES (COMPLETED) (6.62 WF) |
| | | | | 1 | 604 | 1 | EACH | CORE DRILL EXISTING SANITARY MANHOLE |
| | | | | | | | | |
| S-1 | | | | | | | | |
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| ES&ACD | | | | | | | | |
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| | | | | | | | | |
| P-7-P&P-44 | | | | 598 | 603 | 598 | LF | 12" STORM SEWER TYPE B |
| | | | | 159 | 603 | 159 | LF | 18" STORM SEWER TYPE B |
| | | | | | | | | |
| | | | | | | | | |
| P-6-40-P-62-13 | | | | 515 | 603 | 515 | LF | 24" STORM SEWER TYPE B |
| | | | | 356 | 603 | 356 | LF | 30" STORM SEWER TYPE B |
| | | | | | | | | |
| | | | | | | | | |
| P-7-13 | | | | 225 | 603 | 225 | LF | 36" STORM SEWER TYPE B |
| | | | | | | | | |
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| P-9-11 | | | | | | | | |
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| | | | | | | | | |
| D-20-11 | | | | 2 | 604 | 2 | EACH | STORM MANHOLE (ODOT M+3) |
| | | | | 1 | 604 | 1 | EACH | CATCH BASIN TYPE A |
| | | | | 1 | 604 | 1 | EACH | CATCH BASIN TYPE A (MODIFIED) |
| | | | | 3 | 604 | 3 | EACH | CATCH BASIN ODOT 2-3-B |
| D-10-15-14-1 | | | | 3 | 604 | 3 | EACH | CATCH BASIN ODOT 2-3-B |
| | | | | 5 | 604 | 5 | EACH | CATCH BASIN ODOT 2-4-B |
| | | | | 3 | 604 | 3 | EACH | CATCH BASIN ODOT 2-4-B |
| | | | | 1 | 604/604 | 1 | LUMP* | SUBSURFACE DETENTION SYSTEM |
| D-9-11 | | | | 207 | 1 | LUMP | EROSION CONTROL PER STORMWATER POLLUTION PREVENTION PLAN | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE:
REMOVAL OF EXISTING 6" WATER LINE
AS CALLED FOR ON THIS PLAN SHALL
NOT OCCUR UNTIL THE PROPOSED 6"
WATERLINE FROM BURD AVE. IS
EXTENDED TO THE EXISTING MEDICAL
BUILDING (SEE UTILITY PLAN, SHEET
C5)

[illegible]

FOR: AULTMAN HEALTH FOUNDATION

NOTE:
PROPOSED CONTOURS SHOWN
ON THIS PLAN ARE FUTURE
FINISH GRADES. PROPOSED
SUBGRADE IN ALL AREAS OF
FUTURE PAVEMENT IS EQUAL
TO PROPOSED GRADE - 10".

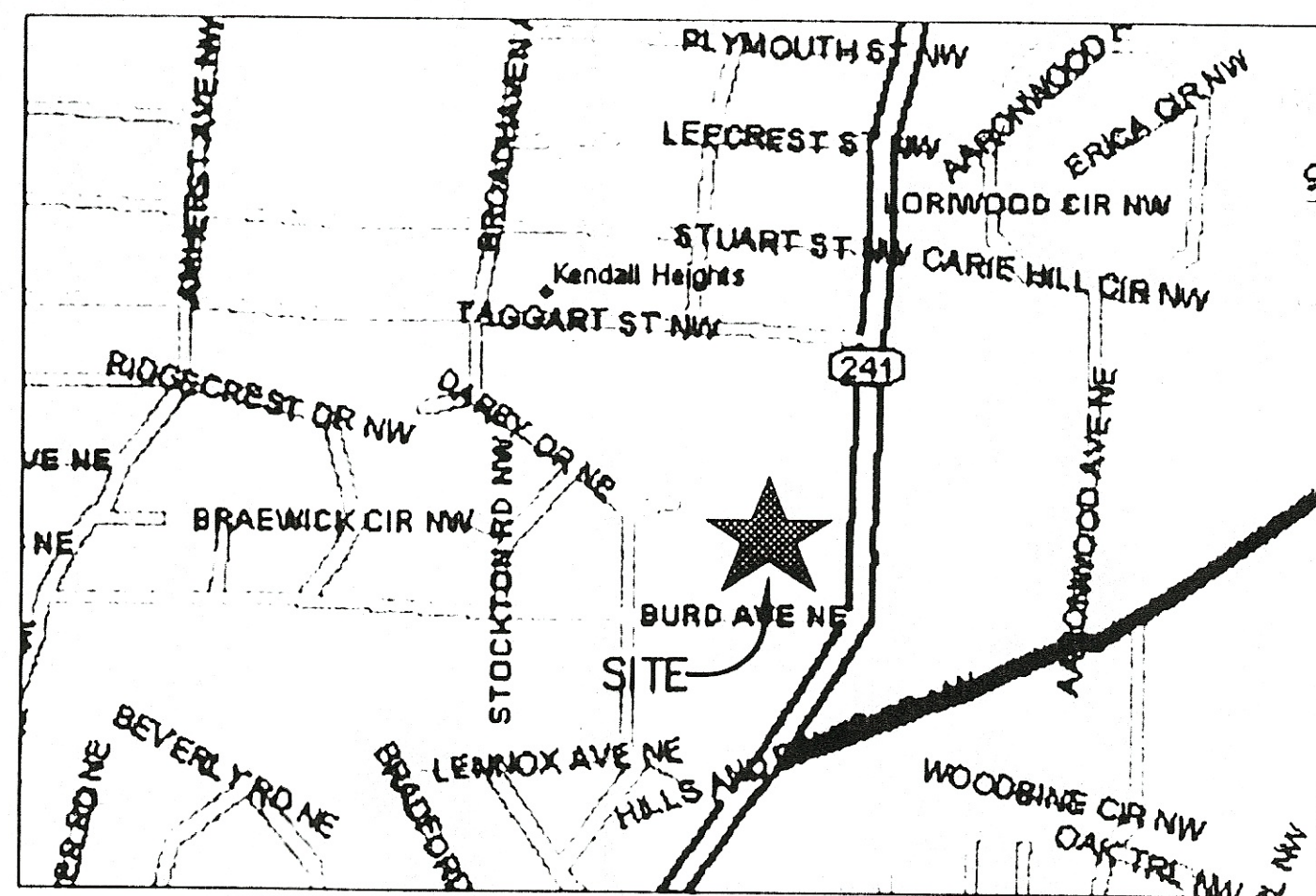


GRADING PLAN
SCALE: 1"=30'

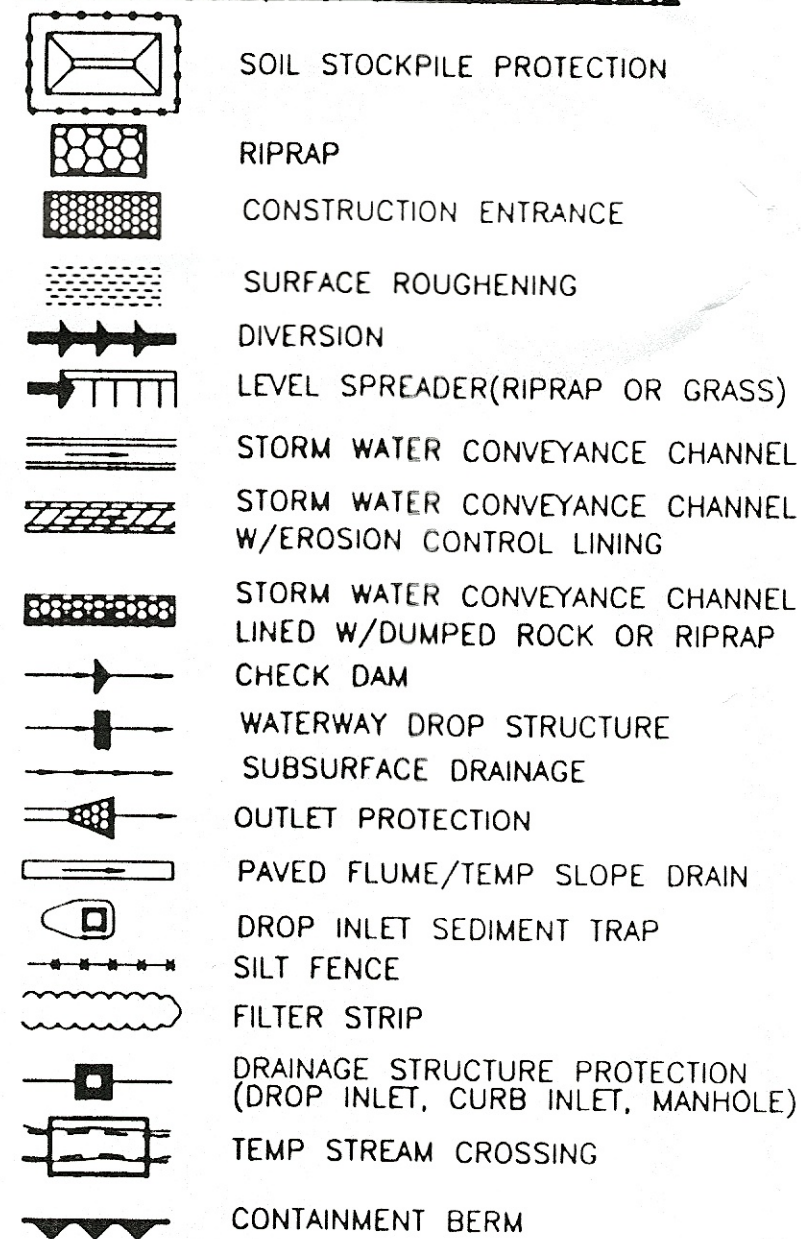
| | | | |
|---|----|---------------------------------|---------------------------|
| BRYAN J. ASHMAN JEROLD E. GEIB | | SCALE: 1"=30' VERT. 1"=30' HOR. | N/A |
| COOPER & ASSOCIATES, LLP ENGINEERS AND SURVEYORS | | DATE: APRIL 2000 | D.C. |
| 1359 MARKET AVENUE, NORTH CANTON, OHIO 44714 | | FIELD BOOK No. | SHEET |
| PHONE (330) 452-5731 FAX (330) 452-9110 | | C4 | C5 |
| GRADING PLAN | | | |
| PHASE 1: AULTMAN WEST | | | |
| FOR: AULTMAN HEALTH FOUNDATION | | | |
| DATE | BY | REVISIONS | OWN BY: M.B.J. CHW.D.B.Y. |
| | | | |
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| | | | |
| | | | |

STORM WATER POLLUTION PREVENTION PLAN

AULTMAN WEST

VICINITY MAP
N.T.S.

BEST MANAGEMENT PRACTICE LEGEND



BEST MANAGEMENT PRACTICES

| PRACTICES USED IN THIS PLAN |
|---|
| TS TEMPORARY SEEDING |
| PS PERMANENT SEEDING |
| DS DORMANT SEEDING |
| SO SODDING |
| M MULCHING |
| MT MATTING |
| TO SOIL STOCKPILE PROTECTION |
| EVP EXIST. VEGETATION PRESERVATION |
| RR RIPRAP |
| CRS CONSTR. ROAD STABILIZATION |
| CE CONSTRUCTION ENTRANCE |
| SR SURFACE ROUGHENING |
| TD TEMP. DIVERSION DIKE |
| FD TEMP. FILL DIVERSION |
| SD SLOPE DRAIN |
| WB WATER BAR |
| DV DIVERSION |
| L(P,R,G) LEVEL SPREADER |
| TSO TEMP. SLOPE DRAIN |
| SCC STORM WATER CONVEYANCE CHANNEL |
| WDS WATERWAY DROP STRUCTURE |
| CD CHECK DAM |
| SD SUBSURFACE DRAINAGE |
| OP OUTLET PROTECTION |
| PF PAVED FLUME |
| SB SEDIMENT BASIN |
| ST SEDIMENT TRAP |
| DI-ST DROP INLET SEDIMENT TRAP |
| SF SILT FENCE |
| DIP DROP INLET PROTECTION |
| CIP CURB INLET PROTECTION |
| FS FILTER STRIP |
| VSS VEGETATIVE STREAMBANK STABILIZATION |
| SSS STRUCTURAL STREAMBANK STABILIZATION |
| TSC TEMP. STREAM CROSSING |
| USC UTILITY STREAM CROSSING |
| SCT SEDIMENT CONTROL TRENCH |
| B CONTAINMENT BERM |

TYPICAL SOIL PROTECTION CHART

| STABILIZATION TYPE | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PERMANENT SEEDING | | | A | | | | | | | A | | |
| DORMANT SEEDING | B | B | | | | | | | | | | |
| TEMPORARY SEEDING | | | C | | | C D | | | D | | | |
| SODDING | | | E | | | | | | E | | | |
| MULCHING | F | | | | | | | | | | | F |

A = KENTUCKY BLUEGRASS AT 90 LB/AC MIXED WITH PERENIAL RYEGRASS AT 30 LB/AC

B = KENTUCKY BLUEGRASS AT 135 LB/AC MIXED WITH PERENIAL RYEGRASS AT 45 LB/AC PLUS 2 TONS/AC STRAW MULCH

C = SPRING OATS AT 100 LB/AC

D = WHEAT OR CEREAL RYE AT 150 LB/AC

E = SOD

F = STRAW MULCH AT 2 TONS/AC

* = IRRIGATION NEEDED DURING JUNE AND JULY

** = IRRIGATION NEEDED FOR 2-3 WEEKS AFTER APPLYING SOD

PROJECT SITE DESCRIPTION
EROSION AND SEDIMENT CONTROL PRACTICES AND PROCEDURES
OWNER CERTIFICATION

INTRODUCTION:

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES PERMIT FOR CONSTRUCTION SITES IN OHIO.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE PRACTICES INDICATED IN ACCORDANCE WITH THE INCLUDED SEQUENCE OF CONSTRUCTION AND THE DETAILS AND SPECIFICATIONS CONTAINED IN RAINWATER AND LAND DEVELOPMENT DIV. OF SOIL AND WATER CONSERVATION, ODNR.

PROJECT DESCRIPTION:

AULTMAN WEST IS THE PROPOSED EXPANSION OF AN EXISTING MEDICAL FACILITY CONSISTING OF BUILDINGS, DRIVES AND PARKING AREAS SIMILAR TO WHAT IS EXISTING AND TYPICAL OF A COMMERCIAL DEVELOPMENT.

THE SITE CONSISTS OF APPROXIMATELY 9 ACRES OF WHICH APPROXIMATELY 6 ACRES OF THE REMAINING AREA WILL BE DISTURBED BY THE CONSTRUCTION OF THE ROADWAYS AND UTILITIES.

THE EXISTING AVERAGE RUNOFF COEFFICIENT IS ASSUMED TO BE 0.45. THE FULLY DEVELOPED RUNOFF COEFFICIENT IS EXPECTED TO BE 0.85. THE ANTICIPATED INCREASE IN RUNOFF IS 90%.

THE SITE SLOPES GENERALLY FROM NORTHWEST TO SOUTHEAST AT A RATE OF APPROXIMATELY 1.3%. THE SITE IS TO BE GENERAL LEVELED, EXCAVATION THE NORTHWEST AND FILLING THE SOUTHEAST PORTIONS.

THE SOILS OF THE SITE ARE CANFIELD SILT LOAMS WHICH HAVE ONLY A MODERATE POTENTIAL FOR EROSION, THE SLOPES ON THE SITE THAT ARE PROPOSED TO BE STEEP ENOUGH FOR EROSION TO BE A HAZARD ARE VERY SHORT. WITH PROPER ATTENTION PAID BY THE CONTRACTOR IN THESE AREAS AND PROMPT STABILIZATION CAN MINIMIZE ANY SIGNIFICANT EROSION.

THERE ARE NO ACTIVE STREAMS OR PONDS ON THE SITE OR ADJACENT TO IT. THERE ARE NO AREAS WHICH CAN BE CONSIDERED CRITICAL AS LONG AS THE APPROPRIATE PRACTICES ARE IMPLEMENTED.

THE CURRENT LAND USE OF THE PORTION TO BE MODIFIED BY THIS IMPROVEMENT IS DORMANT WITH SCRUB AND BRUSH WHICH ARE TYPICAL OF DORMANT LAND.

WITH APPROPRIATE PRECAUTIONS, THE QUALITY OF RUNOFF SHOULD BE UNCHANGED FROM WHAT IS PRODUCED BY THE EXISTING CONDITIONS.

THE RECEIVING WATER FOR RUNOFF FROM THIS SITE IS THE TUSCARAWAS RIVER VIA MUNICIPAL STORM SEWERS AND UNNAMED TRIBUTARIES.

EROSION AND SEDIMENT CONTROL MEASURES:

EROSION AND SEDIMENT CONTROL PRACTICES INDICATED ON THIS PLAN SHALL MEET THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE CURRENT EDITION OF RAINWATER AND LAND DEVELOPMENT, DIV. OF SOIL AND WATER CONSERVATION, ODNR.

IN ACCORDANCE WITH THOSE STANDARDS AND SPECIFICATIONS, NO EXISTING VEGETATION SHALL BE REMOVED OR DISTURBED UNLESS NECESSARY TO ACCOMMODATE SOME CONSTRUCTION REQUIREMENT OR ACTIVITY.

SEQUENCE OF EROSION AND SEDIMENT CONTROL PRACTICE IMPLEMENTATION:

1. INSTALL CONSTRUCTION ENTRANCES AT EVERY POINT OF ACCESS FOR CONSTRUCTION VEHICLES ONTO PAVED PUBLIC ROADWAYS.

2. PRIOR TO ANY GRADING ACTIVITIES TAKING PLACE, SILT FENCING AND OTHER SEDIMENT BARRIERS INDICATED ON THE PLAN, OR AS SHALL BE DEEMED NECESSARY UPON INSPECTION, SHALL BE INSTALLED AND FUNCTIONAL.

3. ALL TOPSOIL STOCKPILES SHALL BE STABILIZED AS SOON AS THE STOCKPILING ACTIVITY IS COMPLETE.

4. ALL DISTURBED AREAS SHALL BE TEMPORARILY OR PERMANENTLY SEEDING, AS INDICATED ON THE PLAN, IN ACCORDANCE WITH THE SPECIFICATIONS UNDER NON-STRUCTURAL PRACTICES, BELOW.

SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, MATTING, AND RIPRAP ARE CONTAINED ON SHEET No. CE4 OF THIS PLAN.

5. UPON COMPLETION OF THE PROPOSED STORM SEWER SYSTEM DROP INLET PROTECTION SHALL BE INSTALLED IN ALL LOCATIONS WHERE SEDIMENT IS BEING CARRIED TO THE INLET AND INTO THE STORM SEWER.

6. TEMPORARY CONTROL MEASURES MAY BE REMOVED AND DISPOSED OF AT THE TIME THAT THE ENTIRE CONTRIBUTING AREA HAS BEEN STABILIZED. TRAPPED SEDIMENTS SHALL BE REMOVED AND DISPOSED OF AT A LOCATION AND IN A MANNER WHICH WILL PREVENT THEIR FURTHER EROSION.

7. FINAL SITE STABILIZATION IS ACHIEVED ONCE ALL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED AND DISPOSED OF AND ALL TRAPPED SEDIMENT HAS BEEN PERMANENTLY STABILIZED. THERE MUST BE NO REMAINING EXPOSED GROUND ON THE SITE, ALL SURFACES BEING PROTECTED BY EITHER PAVEMENT, ROOF AREA, OR PERMANENT VEGETATIVE COVER WITH A DENSITY OF AT LEAST 70%.

NON-STRUCTURAL PRACTICES:

THE CONTRACTOR SHALL INITIATE TEMPORARY SEEDING OR PERMANENT SEEDING ON ALL DISTURBED AREAS WITHIN 7 DAYS IF THEY ARE NOT TO BE FURTHER DISTURBED FOR MORE THAN 45 DAYS.

WHEN SEASONAL CONDITIONS PROHIBIT THE APPLICATION OF TEMPORARY OR PERMANENT SEEDING, NON-VEGETATIVE SOIL STABILIZATION PRACTICES SUCH AS MATTING AND MULCHING SHALL BE USED.

STRUCTURAL PRACTICES:

TIMING SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITY. PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS OF THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RESTABILIZED.

SEDIMENT BARRIERS SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SEDIMENT BARRIERS SUCH AS SILT FENCES AND INLET PROTECTION.

OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL PREVENT SEDIMENT LADEN WATER FROM ENTERING STORM DRAIN SYSTEMS.

POST-CONSTRUCTION STORM WATER POLLUTION PREVENTION:

THE GENERAL PERMIT REQUIRES THAT STORM WATER MANAGEMENT CONTROLS BE INSTALLED FOR CONSTRUCTION PROJECTS WHERE RAINFALL RUNOFF RATE OR VOLUME AFTER CONSTRUCTION EXCEEDS THOSE BEFORE CONSTRUCTION. THIS CONSTRUCTION PROJECT GENERATES A 100% INCREASE IN POST-CONSTRUCTION RAINFALL RUNOFF VOLUME. THE STORM WATER MANAGEMENT PRACTICES REQUIRED TO BE EMPLOYED INCLUDE THE FOLLOWING:

RETENTION PONDS - THAT HOLD RUNOFF IN A RESERVOIR WITHOUT RELEASE EXCEPT BY MEANS OF EVAPORATION, INFILTRATION, OR EMERGENCY BY-PASS.

DETENTION PONDS - THAT HOLD OR DETAIN RUNOFF IN A BASIN FOR A LIMITED TIME RELEASING IT VERY SLOWLY ALLOWING MOST OF THE SEDIMENTS TO DROP OUT.

INFILTRATION MEASURES - THAT ALLOW THE PERCOLATION OF WATER THROUGH THE GROUND SURFACE INTO SUBSURFACE SOIL. SPECIFIC MEASURES INCLUDE INFILTRATION TRENCHES, BASINS, AND DRY WELLS.

VEGETATED SWALES AND NATURAL DEPRESSIONS - THAT TRANSPORT RUNOFF, FILTER SEDIMENTS FROM RUNOFF, AND ENHANCE INFILTRATION OF THE RUNOFF.

(NOTE: STORM WATER MANAGEMENT CONTROLS ARE NOT A PART OF THE STORM WATER POLLUTION PREVENTION PLAN. THE STORM WATER MANAGEMENT CONTROLS ARE TO BE INTEGRAL TO THE SITE DEVELOPMENT ENGINEERING PLANS.)

SURFACE WATER PROTECTION:

NO CONSTRUCTION ACTIVITY OF ANY KIND SHALL BE PERFORMED IN ANY SURFACE WATERS (STREAMS, RIVERS, LAKES, WETLANDS, OR OTHER) ON THE SITE UNLESS THE CONSTRUCTION PLANS FOR THE PROJECT ARE IN COMPLIANCE WITH SECTIONS 404 AND 401 OF THE CLEAN WATER ACT AND THE APPROPRIATE PERMITS HAVE BEEN ACQUIRED FROM THE U.S. ARMY CORPS OF ENGINEERS (SECTION 404 REGULATION) AND/OR THE OHIO ENVIRONMENTAL PROTECTION AGENCY (SECTION 401 REGULATION).

OTHER CONTROLS:

NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF.

CONSTRUCTION VEHICLE MAINTENANCE, FUELING AND LUBRICATING, AND FUEL AND LUBRICANT STORAGE SHALL BE RESTRICTED TO A SINGLE LOCATION ON THE SITE AT ANY ONE TIME AND THAT SITE SHALL BE ADEQUATELY DIKED TO PREVENT ANY SPILLED CHEMICALS FROM ENTERING THE DRAINAGE SYSTEM.

ADDITIONAL NON-SEDIMENT POLLUTION CONTROL SPECIFICATIONS ARE TO BE FOUND ELSEWHERE IN THIS PLAN.

OTHER CONSIDERATIONS:

INSPECTIONS:

INSPECTIONS ARE TO BE PERFORMED BY QUALIFIED PERSONS PROVIDED BY THE PERMITTEE AND THE INSPECTION LOGS ARE TO BECOME A PART OF THIS PLAN.

INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE IN EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH OF RAIN PER 24 HOUR PERIOD, FROM THE BEGINNING OF CONSTRUCTION THROUGH THE FINAL INSPECTION PRIOR TO THE NOTICE OF TERMINATION.

MAINTENANCE:

ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED AND AS INDICATED BY THE INSPECTION REPORTS TO ASSURE THE CONTINUED PERFORMANCE OF THEIR FUNCTION. IN ORDER TO ACCOMPLISH THIS, THERE SHALL BE SUFFICIENT EQUIPMENT AND MATERIALS AVAILABLE AT ALL TIMES TO MAKE ANY REPAIRS OR REPLACEMENTS THAT ARE NECESSARY.

CERTIFICATION:

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR THE GATHERING OF THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

JAMES MILLER -- for AULTMAN HEALTH FOUNDATION

4/25/00

DATE

STORM WATER POLLUTION PREVENTION PLAN

AULTMAN WEST

CITY OF MASSILLON
STARK COUNTY, OHIO

FOR: AULTMAN HEALTH FOUNDATION

PREPARED BY:
C.H.B.

DATE: APRIL 2000

SCALE

HORIZ. N/A

VERT. N/A

SHEET

CE1 of CE4

PROJ.#

00149E

BRYAN J. ASHMAN
JEROLD E. GEIBCOOPER & ASSOCIATES, L.L.P.
ENGINEERS AND SURVEYORS1359 MARKET
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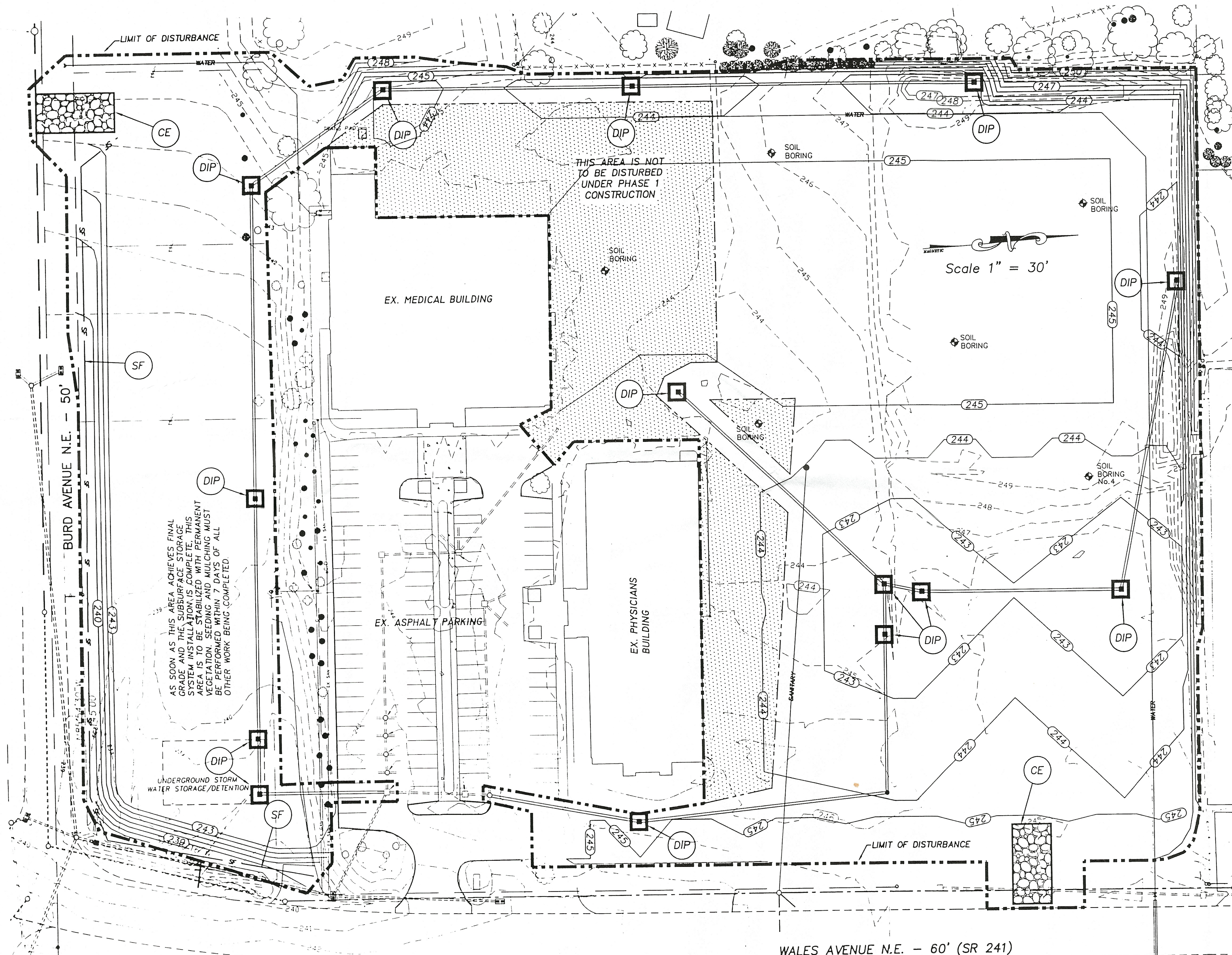
REVISIONS

DESCRIPTION

DATE

BY

STORM WATER POLLUTION PREVENTION PLAN AULTMAN WEST - PHASE 1



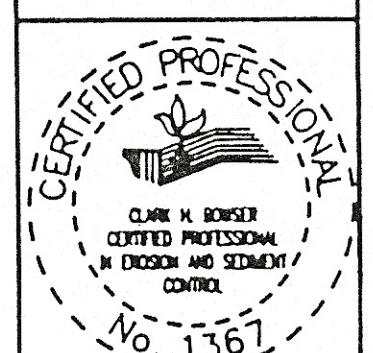
TEMPORARY CONSTRUCTION ENTRANCE
A TEMPORARY CONSTRUCTION ENTRANCE MUST BE INSTALLED AT EVERY POINT WHERE CONSTRUCTION VEHICLES WILL EXIT THE SITE ONTO PAVED PUBLIC ROADWAYS.

A REVIEW OF THE PROPOSED CONSTRUCTION UNDER PHASE 1 INDICATES THAT TWO TEMPORARY CONSTRUCTION ENTRANCES WILL BE REQUIRED. THE LOCATION INDICATED ON THE PLAN ARE CONCEPTUAL. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATIONS. AFTER INSTALLATION, ALL CONSTRUCTION TRAFFIC WILL BE RESTRICTED TO THOSE LOCATIONS.

WHEN THE PHASE 1 CONSTRUCTION IS COMPLETE, THE SOUTHERN TEMPORARY CONSTRUCTION ENTRANCE AT BURD AVENUE MAY BE REMOVED. THE TEMPORARY CONSTRUCTION ENTRANCE AT WALES AVENUE SHALL REMAIN IN SERVICE UNTIL THE PAVING OPERATIONS MAKE IT NO LONGER NECESSARY.

TEMPORARY SEEDING
ALL DISTURBED AREAS WHERE ADDITIONAL DISTURBANCE IS PROPOSED BUT WILL NOT COMMENCE WITHIN 45 DAYS OF THE AREA ACHIEVING FINAL GRADE, THE AREA SHALL BE STABILIZED WITH TEMPORARY VEGETATION WITHIN 7 DAYS AFTER THE GRADING OPERATION IS COMPLETE.

STORM WATER POLLUTION PREVENTION PLAN
AULTMAN WEST
CITY OF MASSILLON
STARK COUNTY, OHIO
FOR: AULTMAN HEALTH FOUNDATION

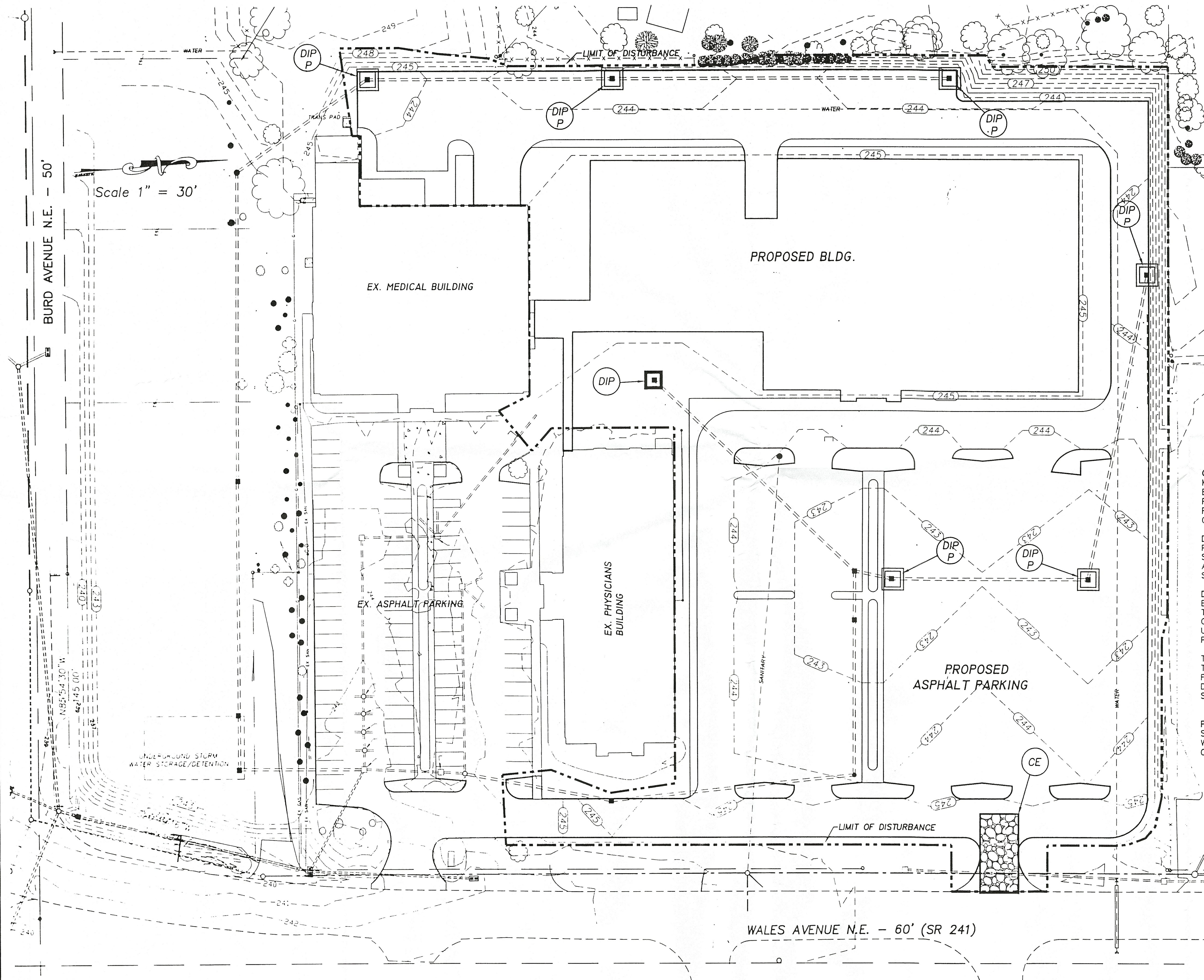


PREPARED BY:
C.H.B.
DATE: APRIL 2000
SCALE:
HORIZ: 1" = 30'
VERT: 1" = 10'
SHEET:
CE2 of CE4
PROJ: 00149E

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STORM WATER POLLUTION PREVENTION PLAN
AULTMAN WEST - PHASE 2 & 3



EROSION AND SEDIMENT CONTROL NOTES

CE --- A SINGLE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL SUCH TIME AS THE PARKING LOT ENTRANCE AND ADJACENT AREAS ARE TO BE PAVED. THE PURPOSE OF THE CONSTRUCTION ENTRANCE IS TO PREVENT CONSTRUCTION VEHICLES FROM TRACKING MUD ONTO PUBLIC ROADWAYS.

DIP --- THE DROP INLET PROTECTION INSTALLED WITH PHASE 1, NORTH OF THE EXISTING PHYSICIANS BUILDING SHALL BE RETAINED AND MAINTAINED UNTIL THE ADJACENT AREA HAS BEEN STABILIZED WITH PERMANENT SEEDING.

DIP-P --- DROP INLETS FOR PAVED SURFACES SHALL BE INSTALLED AT THE LOCATIONS SHOWN AS SOON AS THE ADJACENT PAVEMENT IS CONSTRUCTED TO FINAL GRADE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE UNPAVED CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED WITH VEGETATION.

THE PURPOSE OF THE DROP INLET PROTECTION IS TO TRAP SEDIMENTS ON THE SURFACE AND PREVENT THEM FROM ENTERING THE STORM SEWER SYSTEM AND BEING DEPOSITED IN THE UNDERGROUND STORMWATER STORAGE SYSTEM.

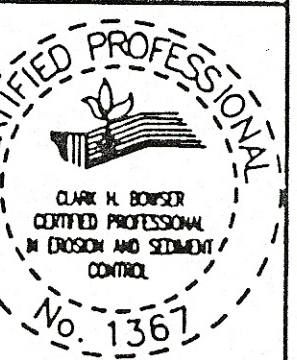
PS --- ALL AREAS NOT OTHERWISE TO BE STABILIZED SHALL BE STABILIZED WITH PERMANENT VEGETATION WITHIN 7 DAYS AFTER ALL OTHER ADJACENT CONSTRUCTION OPERATIONS BEING COMPLETED.

STORM WATER POLLUTION PREVENTION PLAN

AULTMAN WEST

CITY OF MASSILLON
STARK COUNTY, OHIO

FOR: AULTMAN HEALTH FOUNDATION



PREPARED BY:
C.H.B.

DATE: APRIL 2000
SCALE: 1" = 30'
HOR: 1" = 30'
VERT: 1" = 30'

SHEET
CE3 OF CE4

PROJ: 00149E

PHASE 2 & 3:
BUILDING AND PAVEMENT CONSTRUCTION

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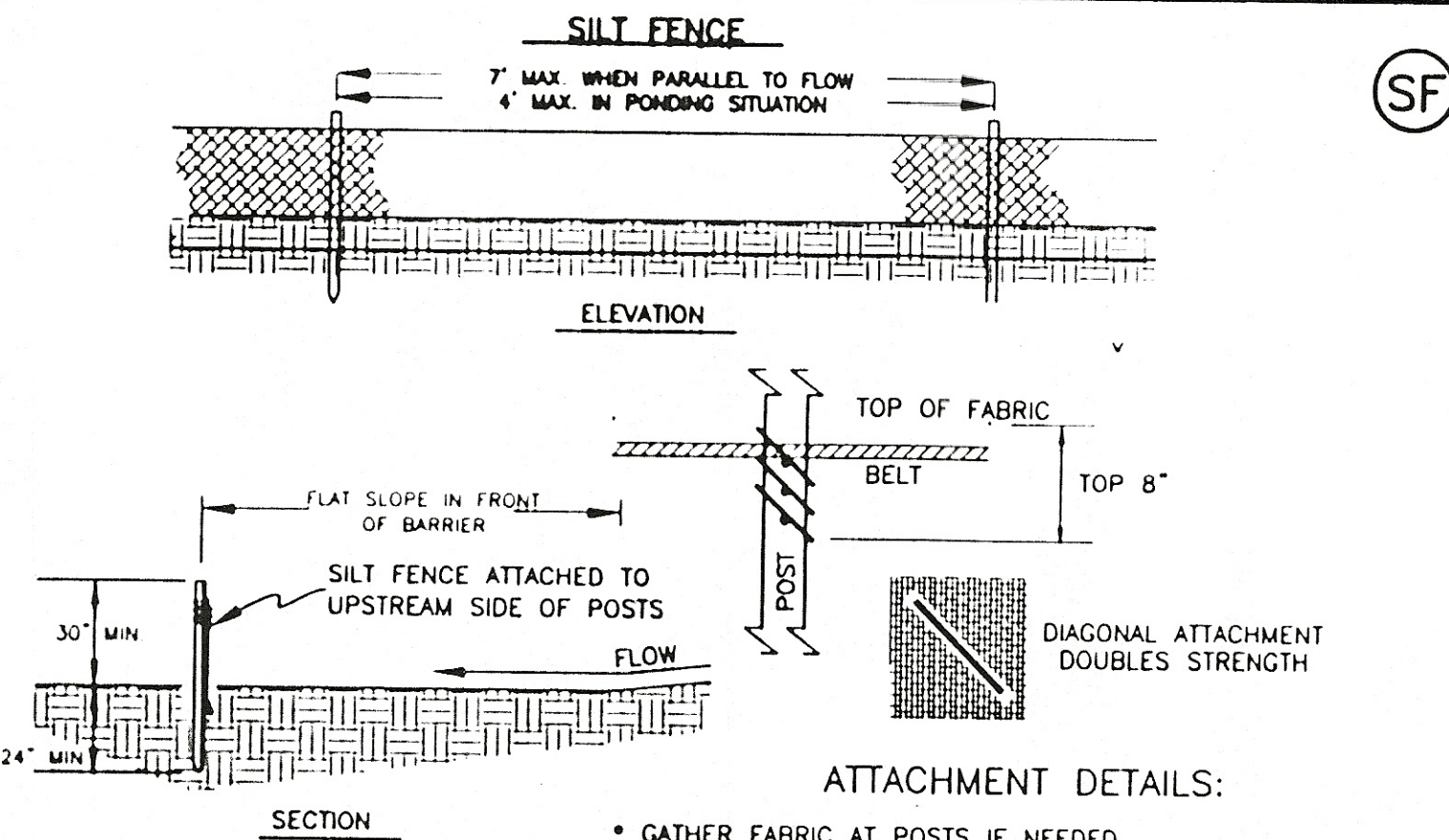
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REVISIONS

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STORM WATER POLLUTION PREVENTION PLAN

AULTMAN WEST



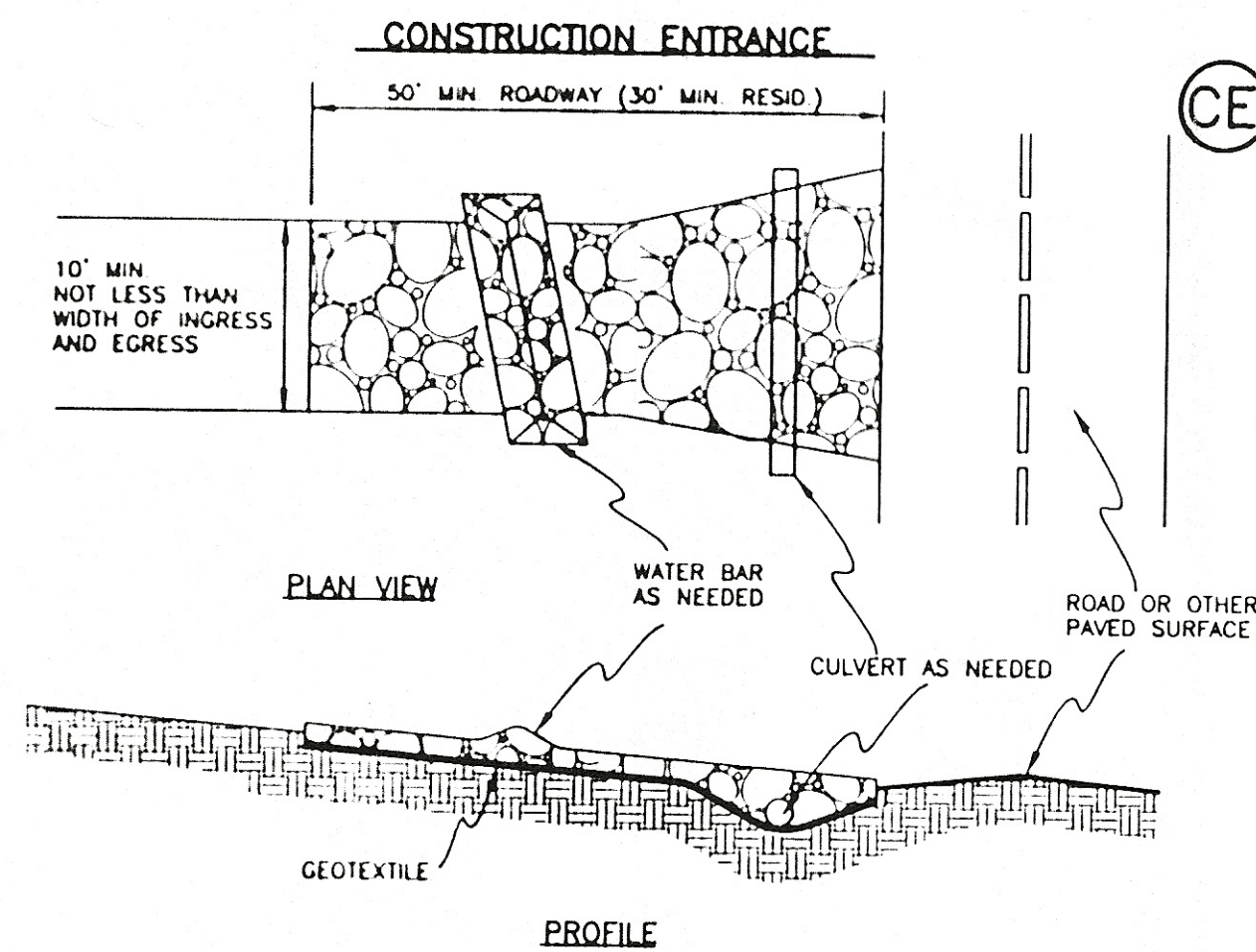
SPECIFICATIONS

- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- SILT FENCE SHALL BE INSTALLED BY THE SLICING METHOD USING AN INTEGRATED SOIL SLICING MACHINE SUCH AS A "TOMMY" BY CARPENTER EROSION CONTROL, OR SIMILAR.
- SLICING MUST BEGIN BEFORE THE CRITICAL POINT TO INSURE ADEQUATE DEPTH OF FABRIC AND CONTINUE BEYOND THE CRITICAL POINT TO INSURE FABRIC DEPTH IS MAINTAINED FOLLOWING REMOVAL OF THE APPARATUS FROM THE SOIL.
- COMPACTION SHALL BE ACHIEVED BY WHEEL ROLLING THE POWER EQUIPMENT OVER EACH SIDE OF THE SILT FENCE -- THE UPSTREAM SIDE FIRST, THEN THE DOWNSTREAM SIDE. COMPACT THE SOIL WITH THE LOADER BUCKET FULL OF MATERIAL FOR ADDED WEIGHT, IN DRY CONDITIONS, OR WHERE LARGE CLODS OF SOIL ARE DISRUPTED. 2 OR 3 COMPACTION PASSES OVER EACH SIDE ARE REQUIRED.
- POSTS SHALL BE PLACED AFTER THE FABRIC IS IN PLACE AND THE ADJACENT SOIL HAS BEEN COMPACTED.

CRITERIA FOR SILT FENCE MATERIALS

- STEEL T-POSTS (RE-USABLE) WEIGHING 1.25 LBS. PER LIN. FT., A MINIMUM OF 48" LONG, SHOULD BE SPACED A MAX. OF 7 FT. APART ON AREAS OF SILT FENCE PARALLEL TO FLOW AND A MAX. OF 4 FT. APART IN AREAS DESIGNED TO POND WATER.
- SILT FENCE FABRIC -- SEE CHART BELOW

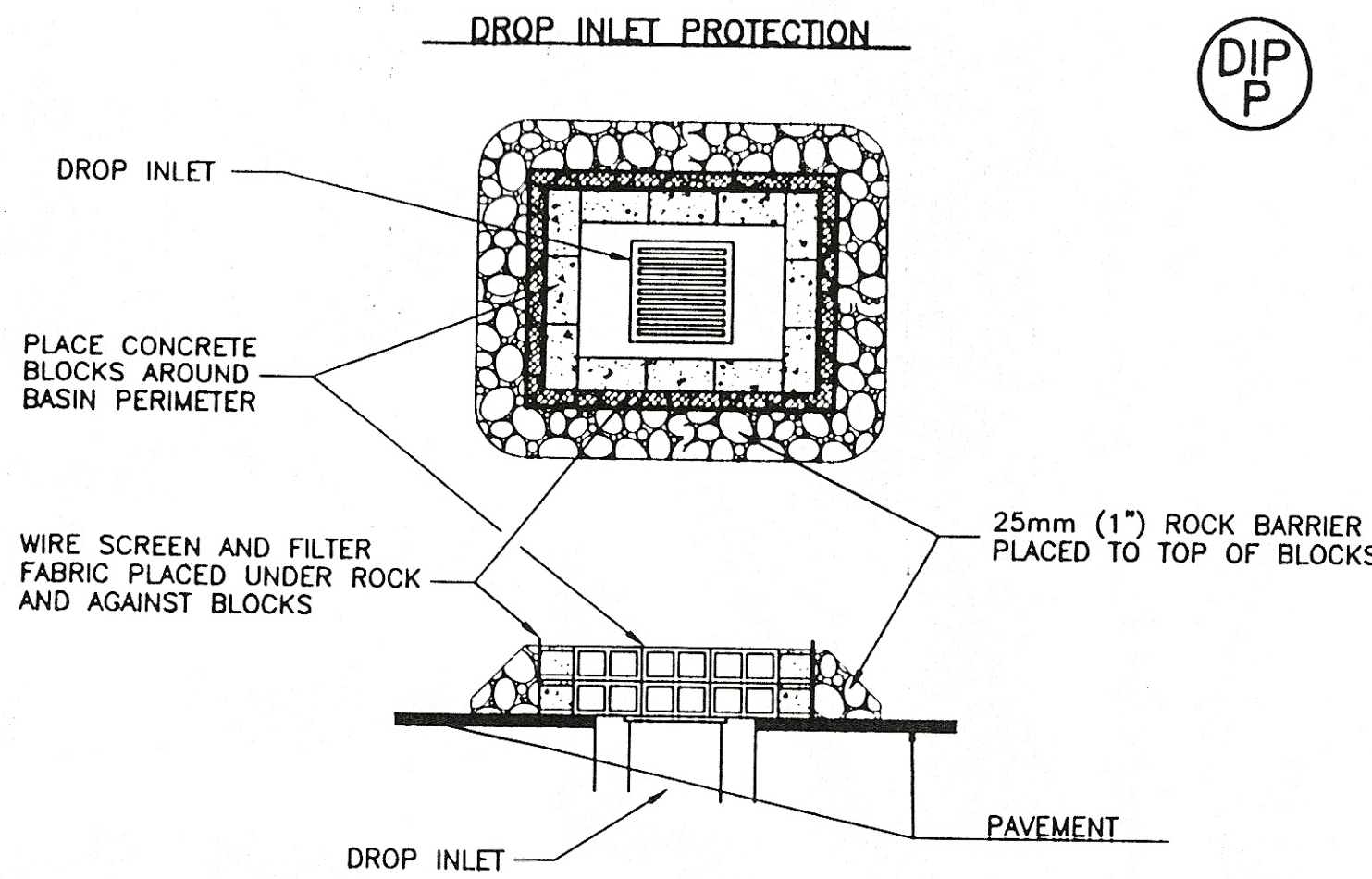
| FABRIC PROPERTIES | VALUES | TEST METHOD |
|---------------------------------|-------------------------------|------------------------|
| GRAB TENSILE STRENGTH | 90 LB. MINIMUM | ASTM D 1682 |
| MULLEN BURST STRENGTH | 190 PSI MINIMUM | ASTM D 3786 |
| SLURRY FLOW RATE | 0.3 GAL./MIN./SQ. FT. MAXIMUM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



FOR ADDITIONAL DETAILS SEE RAINWATER AND LAND DEVELOPMENT

SPECIFICATIONS

- STONE SIZE -- TWO INCH STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH -- THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 50' (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
- THICKNESS -- THE STONE LAYER SHALL BE AT LEAST 6" THICK.
- WIDTH -- THE ENTRANCE SHALL BE AT LEAST 10' WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCURS.
- BEDDING -- A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
- 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.
- WATER BAR -- A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- MAINTENANCE -- TOP DRESSING OF ADDITIONAL STONE 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, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
- 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.



DROP INLET INSTALLATION SPECIFICATIONS

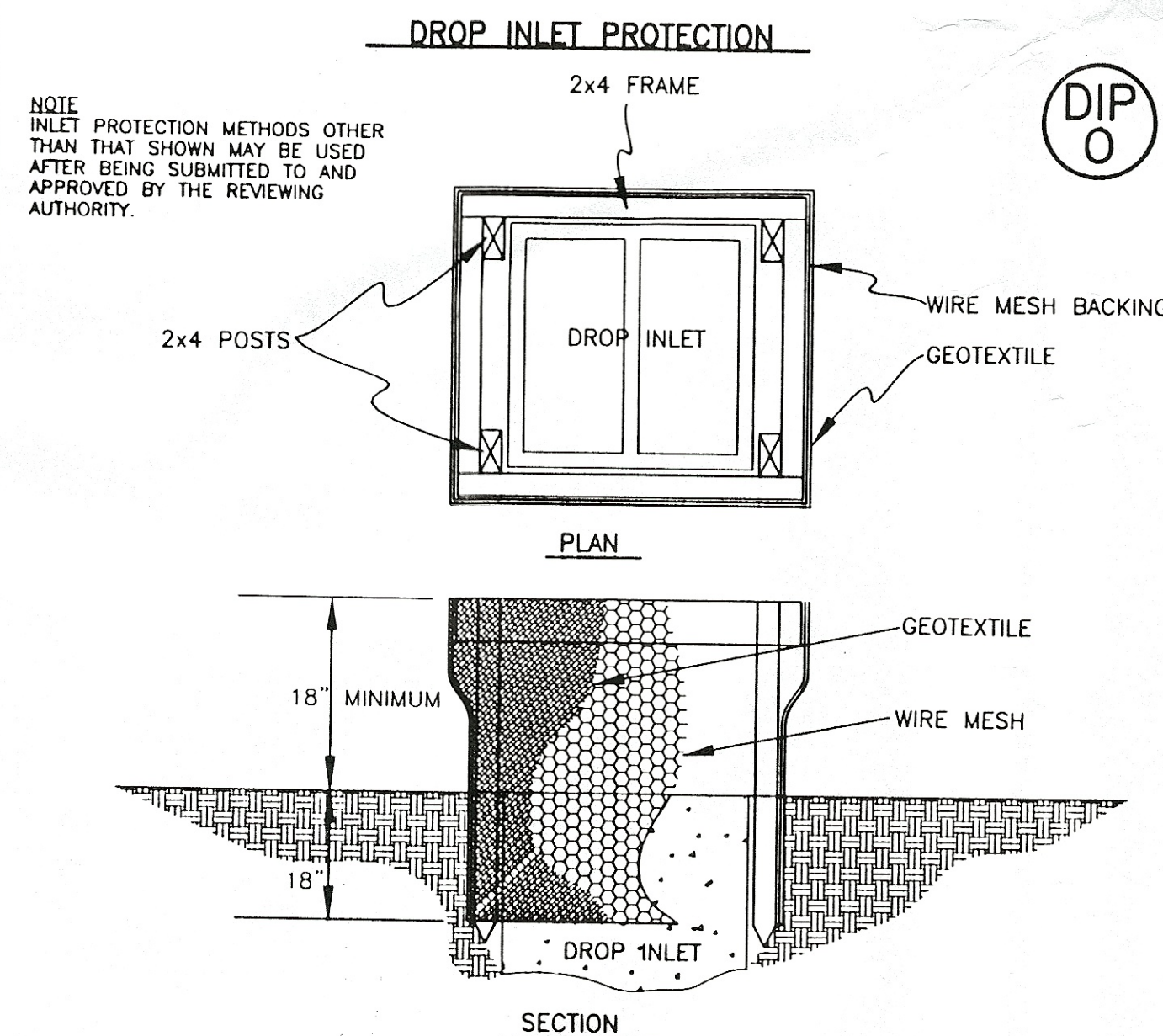
DROP INLET PROTECTION TO BE INSTALLED ON PAVEMENT OR ON GROUND WHERE SILT FENCE PROTECTION IS NOT APPROPRIATE.

CONCRETE BLOCKS TO BE PLACED AROUND PERIMETER OF BASIN WITH OPENINGS HORIZONTAL. BLOCKS TO BE PLACED WITHOUT SPACES BETWEEN BLOCKS.

WIRE MESH AND FILTER FABRIC TO BE PLACED ON PAVEMENT OR GROUND, EXTENDING 6"+/- UNDER ROCK, AND UP AGAINST FACE OF CONCRETE BLOCKS.

25mm (1"+/-) ROCK TO BE PLACED AROUND THE CONCRETE BLOCK BARRIER, OVER THE WIRE MESH AND FILTER FABRIC. ROCK MUST BE PLACED TO THE TOP OF THE BLOCKS AND EXTEND OUTWARD A MINIMUM OF TWO TIMES THE HEIGHT OF THE BLOCKS.

THE INLET PROTECTION MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE ENTIRE CONTRIBUTING AREA HAS BEEN STABILIZED.



FOR ADDITIONAL DETAILS SEE RAINWATER AND LAND DEVELOPMENT

SPECIFICATIONS

- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH OF AT LEAST 18 INCHES.
- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER. THE 2x4 POSTS SHALL BE DRIVEN 1" INTO THE GROUND AT THE FOUR CORNERS OF THE INLET AND THE TOP PORTIONS OF 2x4 FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6" BELOW ADJACENT ROADS IF PONDING WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- 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.
- 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 TO IT. IT SHALL EXTEND OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE EARTH IS EVEN WITH THE NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- 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 THE EARTH DIKE SHALL BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.

PERMANENT SEEDING

SITE PREPARATION

- A SUBSOILER, PLOW OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLOPE-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
- THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
- RESOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION

- LIME -- AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 LB./1,000 S.F. OR 2 TONS/ACRE.
- FERTILIZER -- FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 12 LB./1,000 SQ. FT. OR 500 LB./AC. OF 10-10-10 OR 12-12-12 ANALYSIS.
- THE LIMESTONE AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS

- SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. THESE SEEDING DATES ARE IDEAL BUT, WITH THE USE OF ADDITIONAL MULCH AND IRRIGATION SEEDINGS MAY BE MADE ANY TIME THROUGHOUT THE GROWING SEASON. TILLAGE/SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND.

DORMANT SEEDINGS

- SEEDINGS SHALL NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 30.
- THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":
 - FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
 - FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
 - WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

| PERMANENT SEEDING | | | |
|---------------------------|--------------|----------------|-----------------------|
| SEED MIX | SEEDING RATE | | NOTES: |
| | LB./ACRE | LB./1,000 S.F. | |
| GENERAL USE | | | |
| CREeping RED FESCUE | 20-40 | 1/2 - 1 | |
| DOMESTIC RYE GRASS | 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 | NOT LATER THAN AUGUST |
| TALL FESCUE | 20 | 1/2 | |
| FLAT PEA | 20 | 1/2 | NOT 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 RYE GRASS | 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

MULCHING SEE MULCH

IRRIGATION

- PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.
- EXCESSIVE IRRIGATION RATES SHALL BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.

MAINTENANCE OF PERMANENT SEEDING

- PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING. SEEDING AREAS SHALL BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED, OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL.
- MAINTENANCE FERTILIZATION RATES SHALL BE ESTABLISHED BY SOIL TEST RECOMMENDATIONS OR BY USING THE RATES SHOWN IN THE FOLLOWING TABLE.

| FERTILIZATION AND MOWING | | | | |
|--------------------------|----------|---------|---|--------------------|
| MIXTURE | FORMULA | LB./AC. | LIME | MOWING |
| CREeping RED FESCUE | 10-10-10 | 500 | | NOT CLOSER THAN 3" |
| RYE GRASS | | | FALL, YEARLY OR AS NEEDED | |
| KENTUCKY BLUEGRASS | 10-10-10 | 500 | | NOT CLOSER THAN 4" |
| TALL FESCUE | 10-10-10 | 500 | | NOT CLOSER THAN 2" |
| DWARF FESCUE | 10-10-10 | 500 | | |
| CROWN VETCH | 0-20-20 | 400 | SPRING, YEARLY FOLLOWING ESTABLISHMENT AND EVERY 4-7 YEARS THEREAFTER | DO NOT MOW |
| FLAT PEA | 0-20-20 | 400 | | DO NOT MOW |
| FESCUE | | | | |

NOTE: SOIL TEST RECOMMENDATIONS PREFERRED OVER ABOVE

TEMPORARY SEEDING

- 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.
- TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 45 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDS AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEEDS WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
- THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEEDBED IS NOT POSSIBLE.
- 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.
- SEEDING METHOD -- SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER 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 CULTIPACKER. 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 SPECIES SELECTION | | | |
|-------------------------------------|---------------------|-------------------|----------|
| SEEDING DATES | SPECIES | LB./1,000 SQ. FT. | PER ACRE |
| MARCH 1 TO AUGUST 15 | OATS | 3 | 4 BUSHEL |
| | TALL FESCUE | 1 | 40 LBS. |
| | ANNUAL RYE GRASS | 1 | 40 LBS. |
| | PERENNIAL RYE GRASS | 1 | 40 LBS. |
| AUGUST 16 TO NOVEMBER 1 | TALL FESCUE | 1 | 40 LBS. |
| | ANNUAL RYE GRASS | 1 | 40 LBS. |
| | WHEAT | 1 | 2 BUSHEL |
| | TALL FESCUE | 1 | 40 LBS. |
| NOV. 1 TO SPRING SEEDING | ANNUAL RYE GRASS | 1 | 40 LBS. |
| | PERENNIAL RYE GRASS | 1 | 40 LBS. |
| | ANNUAL RYE GRASS | 1 | 40 LBS. |
| | PERENNIAL RYE GRASS | 1 | 40 LBS. |

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

MULCHING SEE MULCH

NON-SEDIMENT POLLUTION CONTROL

CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, MUST BE MADE AWARE OF THE FOLLOWING GUIDELINES:

- CONTAINERS SHALL BE PROVIDED FOR COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE USED ON SITE. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL.
- NO WASTE MATERIALS SHALL BE BURIED ON-SITE. SITE PERSONNEL, INCLUDING SUBCONTRACTORS SHALL BE NOTIFIED THAT NO CONSTRUCTION-RELATED MATERIALS ARE TO BE BURIED ON-SITE.
- MIXING, PUMPING, TRANSFERRING OR OTHERWISE HANDLING CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.
- EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILL.
- CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW INTO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER.
- IF HAZARDOUS SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST OR KITTY LITTER AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. CONTACT OHIO EPA (1-800-282-9378).
- SPILLS OF 25 GAL. OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MIN. OF THE DISCOVERY OF THE RELEASE.

STORM WATER POLLUTION PREVENTION PLAN

AULTMAN WEST

CITY OF MASSILLON
STARK COUNTY, OHIO

FOR: AULTMAN HEALTH FOUNDATION

PREPARED BY: C.H.B.

DATE: APRIL 2000

SCALE: N/A

HOR: N/A

VERT: N/A

SHEET: CE4 OF CE4

PROJ: 00149E

REVISIONS:

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