













CONTROL			
DESCRIPTION	NORTH	EAST	
CPI (IPS)	406112.0470	2236514.9440	
CP2 (IPS)	406336.6169	2236366.6322	

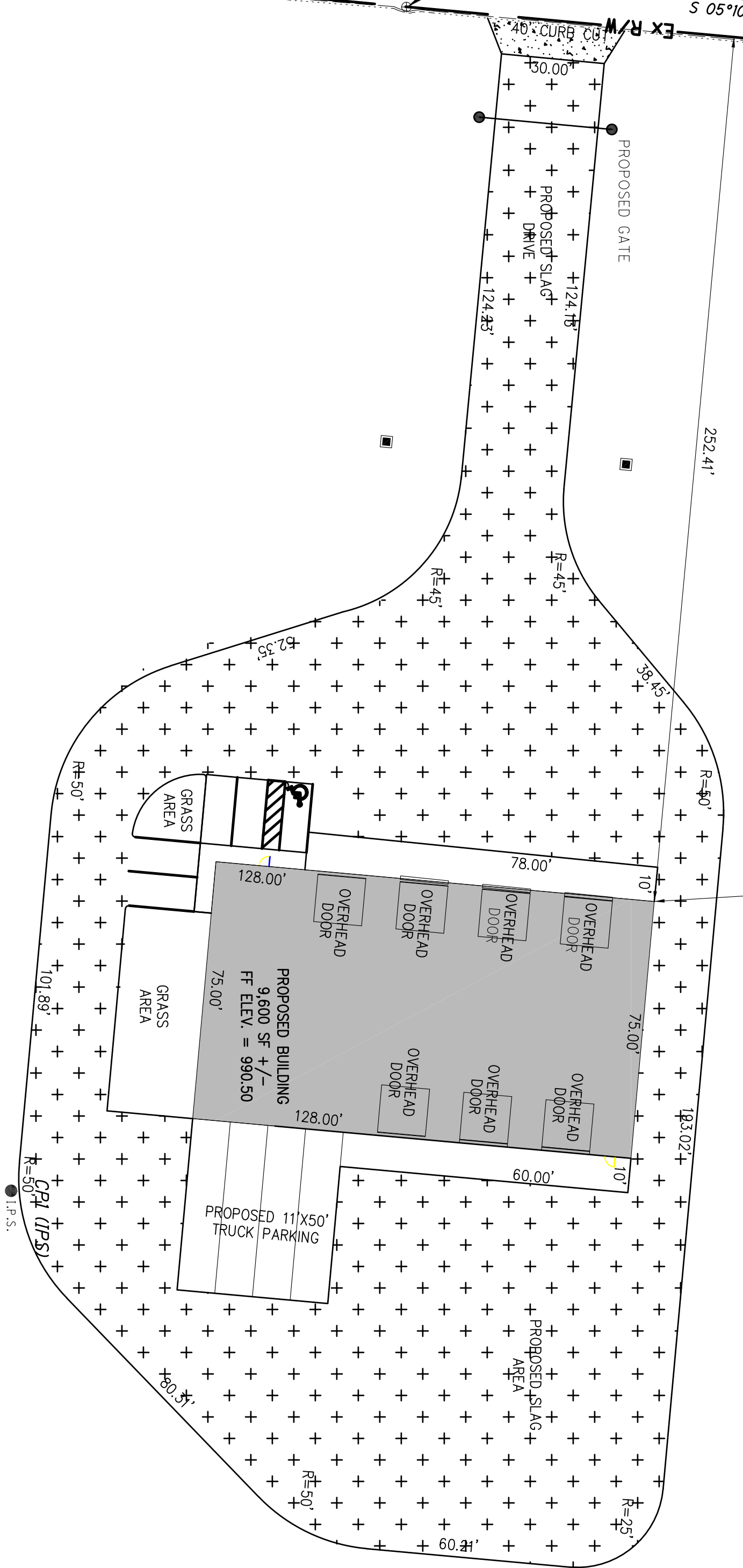
- LEGEND:
- SLAG PAVEMENT SEE DETAIL.
  - CONCRETE PAVEMENT SEE DETAIL.
  - PARKING SPACES

TMB #1
TOP OF CATCH BASIN GRATE
ELEV. 990.00

DISTURBED AREA:  
2.285 ACRES

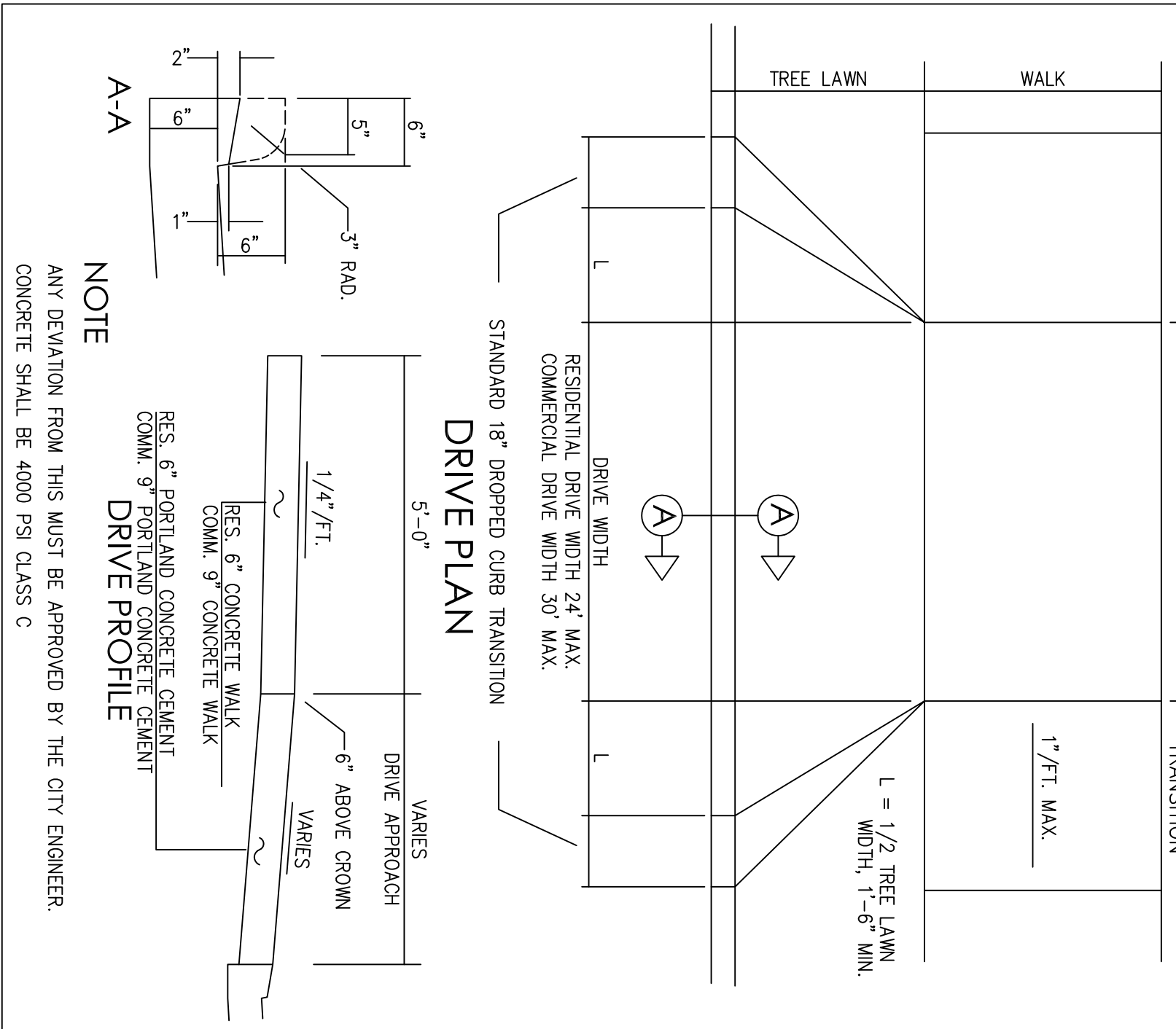
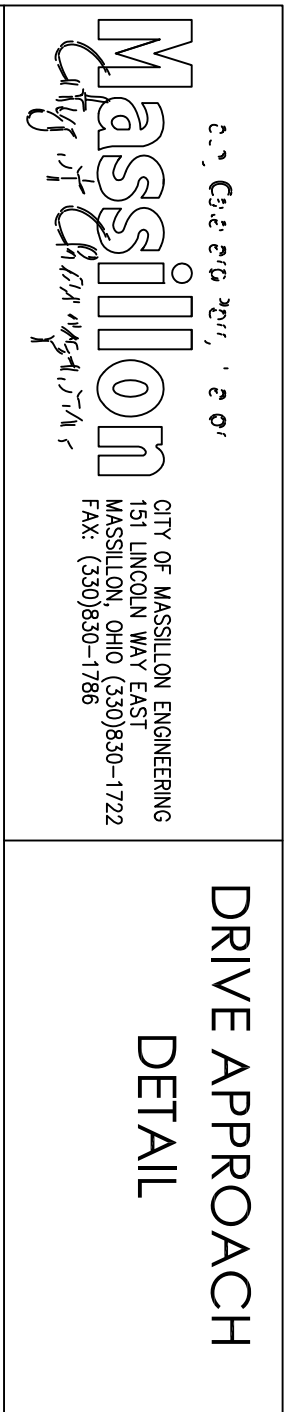
P.P.N. 617093  
MASSILLON ENERGY TECHNOLOGY PARK, LLC  
INSTR. # 200403090015487  
176.77 ACRES

CP2 (IPS)  
I.P.S.

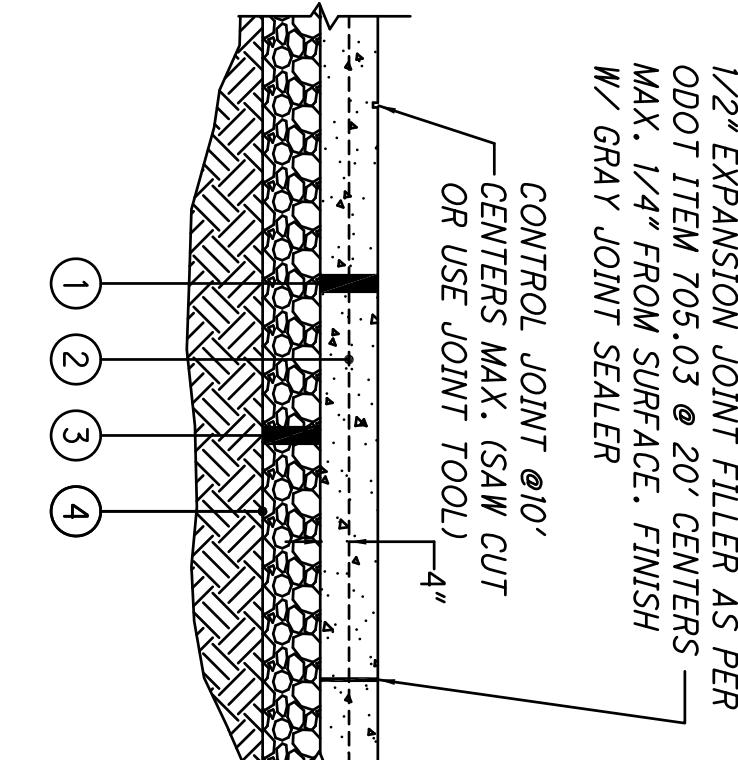
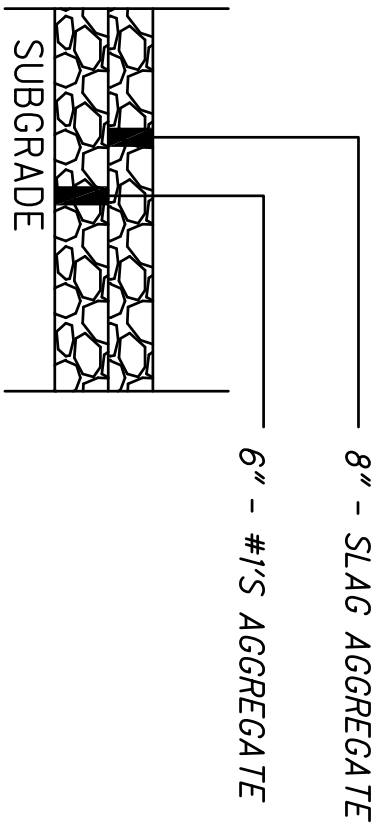


- ZONING REQUIREMENTS  
(ZONED I-2, GENERAL INDUSTRIAL)
- | REQUIREMENT                                       | REQUIRED   |
|---|------------|
| MIN. DEVELOPMENT AREA                             | NONE       |
| MIN. LOT SIZE                                     | N/A        |
| DEVELOPED LOT SIZE REMAINING LOT SIZE             | N/A        |
| MIN. FRONTAGE- MIN. FRONTAGE ON ARTERIAL STREET:  | N/A        |
| MIN. LANDSCAPED OPEN AREA                         | N/A        |
| MAX. BUILDING HEIGHT:                             | 60'        |
| MIN. SETBACKS: FRONT                              | 80'        |
| SIDE  | 25'        |
| REAR  | 25'        |
| MIN PARKING SPACE DIMENSIONS: MIN NUMBER REQUIRED | 9x18'<br>8 |

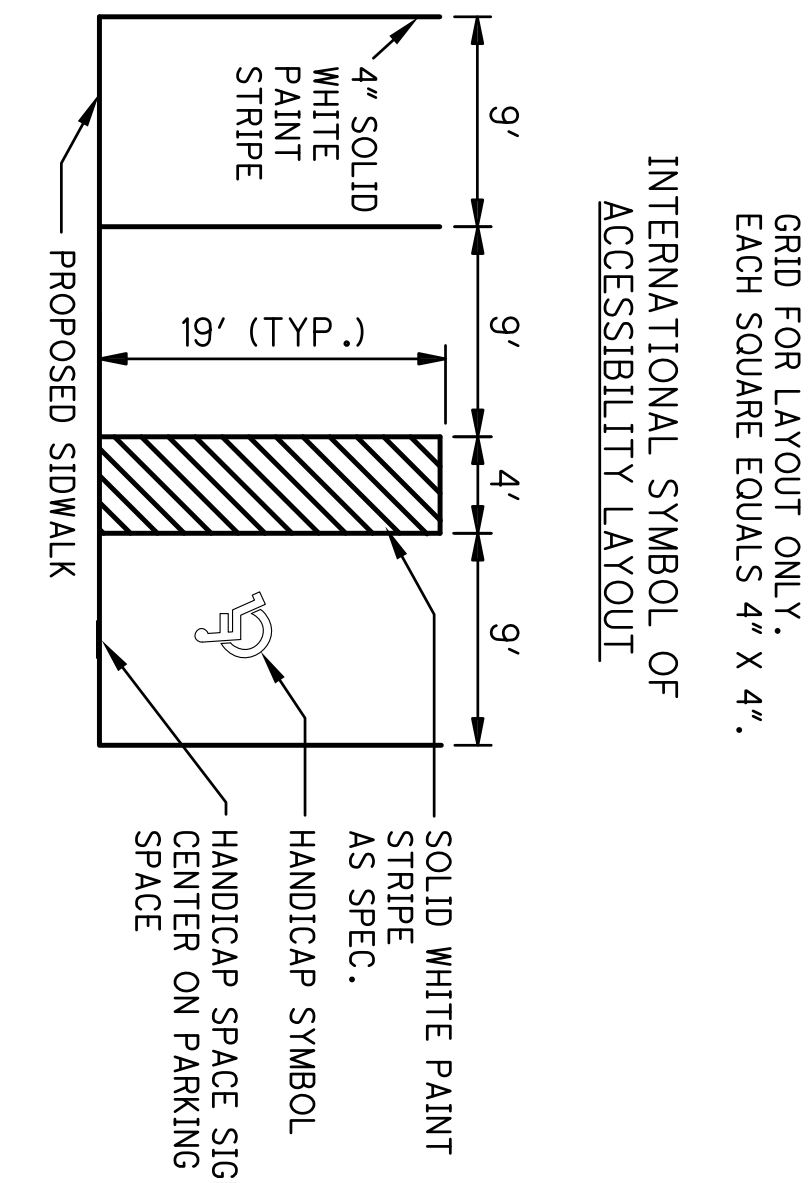
- NOTES:
- PAVEMENT MARKINGS SHALL BE INSTALLED PER ODOT ITEM 642, TYPE 1. THE PARKING STALL LINES SHALL BE WIDTH 4', COLOR: WHITE. THE NON-PARKING AREAS ADJACENT TO THE ADA STALLS SHALL BE WIDTH: 4' ALIGNED 45° DIAGONAL TO ADJACENT PARKING STALL LINES. ADA SYMBOL AND ASSOCIATED STRIPING SHALL BE ODOT STANDARD AND COLOR: BLUE.
  - ALL DIMENSIONS AND CURVES RADI ARE AT EDGE OF PAVEMENT OR FACE OF CURB WHERE APPLICABLE UNLESS OTHERWISE NOTED.
  - PROVIDE CONTROL JOINTS ON CURBS EVERY 10' MAXIMUM, AND AT P.C.'S AND P.T.'S. PROVIDE EXPANSION JOINTS EVERY 30' MAXIMUM. FOR INTERNAL CURBS AND WALK, ALIGN CURB JOINTS WITH WALK JOINTS.
  - CONTRACTORS SHALL VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.



NOTE  
ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.  
CONCRETE SHALL BE 4000 PSI CLASS C



- NOTE:
- EXPANSION JOINTS SHALL BE PLACED @ 20' CENTERS MAX. OR AS SHOWN ON THE PLANS.
  - CONTROL JOINTS SHALL BE PLACED @ 10' CENTERS MAX. OR AS SHOWN ON THE PLANS.
  - MIN. PAVEMENT CROSS SLOPE SHALL BE 1/8" PER FOOT
  - USE EDGING TOOL AT PERIMETER.



GRAVEL PAVEMENT DETAIL  
NOT TO SCALE  
AREA = 34966

CONCRETE PAVEMENT DETAIL  
SCALE: NONE  
AREA = 4939 SF

PARKING DIMENSIONS  
NOT TO SCALE

**UNDERGROUND UTILITIES**  
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG

**Ohio UtilitiesProtection Service**  
Call Before You Dig  
1-800-362-2764

**OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE**  
1-800-925-0988

REVISIONS:

DATE	DESCRIPTION

HORIZONTAL SCALE IN FEET  
0 15 30

DATE: FEB. 2019  
DRAWN BY: BMH  
CHECKED BY: KAD  
DATE: FEB. 2019

**TIGER TARPS BUILDING**  
Site Plan  
City of Massillon  
Stark County, Ohio

PROJECT NUMBER: 4 / 9

**CIVPRO ENGINEERING**  
ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS  
4450 BELDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44718  
PHONE: (234) 410-3913 EMAIL: KAD@CIVPROENGINEERING.COM  
WWW.CIVPROENGINEERING.COM

FRAMING STATE: XXXX.DWG  
PROJECT NUMBER: XXXX.DWG



FLOODPLAIN:  
ZONE: X  
FLOOD MAP: 3915IC0133E

DESCRIPTION	NORTH	EAST
CPI (IPSI)	406112.0470	2236514.3440
CP2 (IPSI)	406336.6169	2236356.6322

CONTROL

LEGEND

CONSTRUCTION ENTRANCE  
PERMANENT SEEDING  
TEMPORARY SEEDING

TOPSOIL STOCKPILE

INLET PROTECTION

EXCAVATED DROP INLET SEDIMENT PROTECTION

VEHICLE FUELING AREA

STORAGE AREA (SOLID, SAN. WASTE....)

CONCRETE WASHOUT PITS

CHECK DAM

ROCK CHANNEL PROTECTION - 4'x5'x6" TYPE C

SILT FENCE - OH-E

GRASSED SWALE

LIMITS OF CONSTRUCTION - 1.88 Acres

LEGEND:

TOP OF CURB ELEVATION  
PAVEMENT ELEVATION

PROPOSED SPOT ELEVATION

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

ADA ACCESSIBLE ROUTE

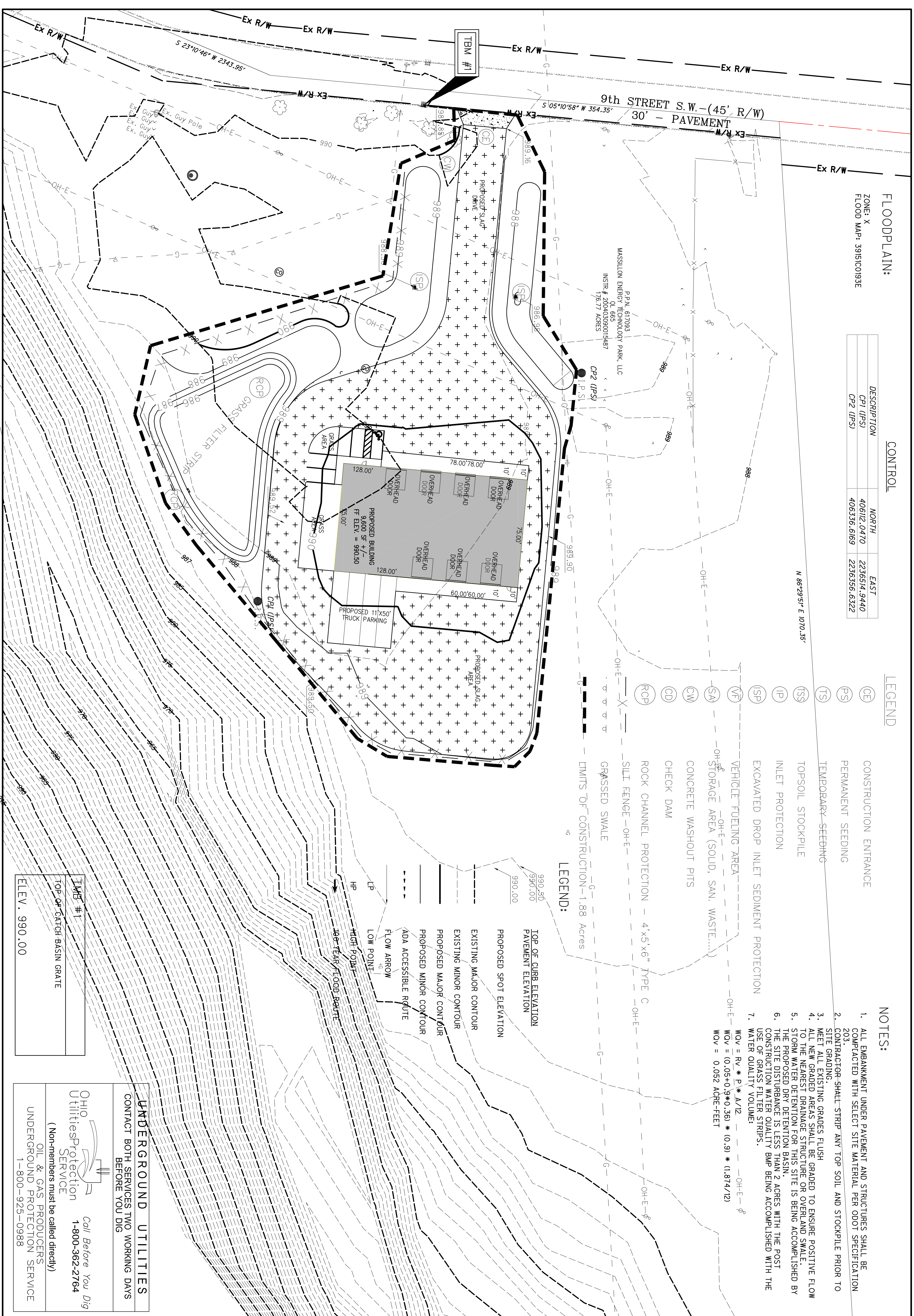
FLOW ARROW

LOW POINT

HIGH POINT

100' TEAR FLOOD ROUTE

- NOTES:
- ALL EMBANKMENT UNDER PAVEMENT AND STRUCTURES SHALL BE COMPACTED WITH SELECT SITE MATERIAL PER DOT SPECIFICATION 203.
  - CONTRACTOR SHALL STRIP ANY TOP SOIL AND STOCKPILE PRIOR TO SITE GRADING.
  - MEET ALL EXISTING GRADES FLUSH
  - ALL NEW GRADED AREAS SHALL BE GRADED TO ENSURE POSITIVE FLOW TO THE NEAREST DRAINAGE STRUCTURE OR OVERLAND SWALE.
  - STORM WATER DETENTION FOR THIS SITE IS BEING ACCOMPLISHED BY THE PROPOSED DRY DETENTION BASIN.
  - THE SITE DISTURBANCE IS LESS THAN 2 ACRES WITH THE POST CONSTRUCTION WATER QUALITY BWP BEING ACCOMPLISHED WITH THE USE OF GRASS FILTER STRIPS.
  - WATER QUALITY VOLUME:  
 $WQV = Rv * P * A / 12$   
 $WQV = (0.05 + 0.9 * 0.36) * (0.9) * (1.874 / 12)$   
 $WQV = 0.052 \text{ ACRE-FEET}$



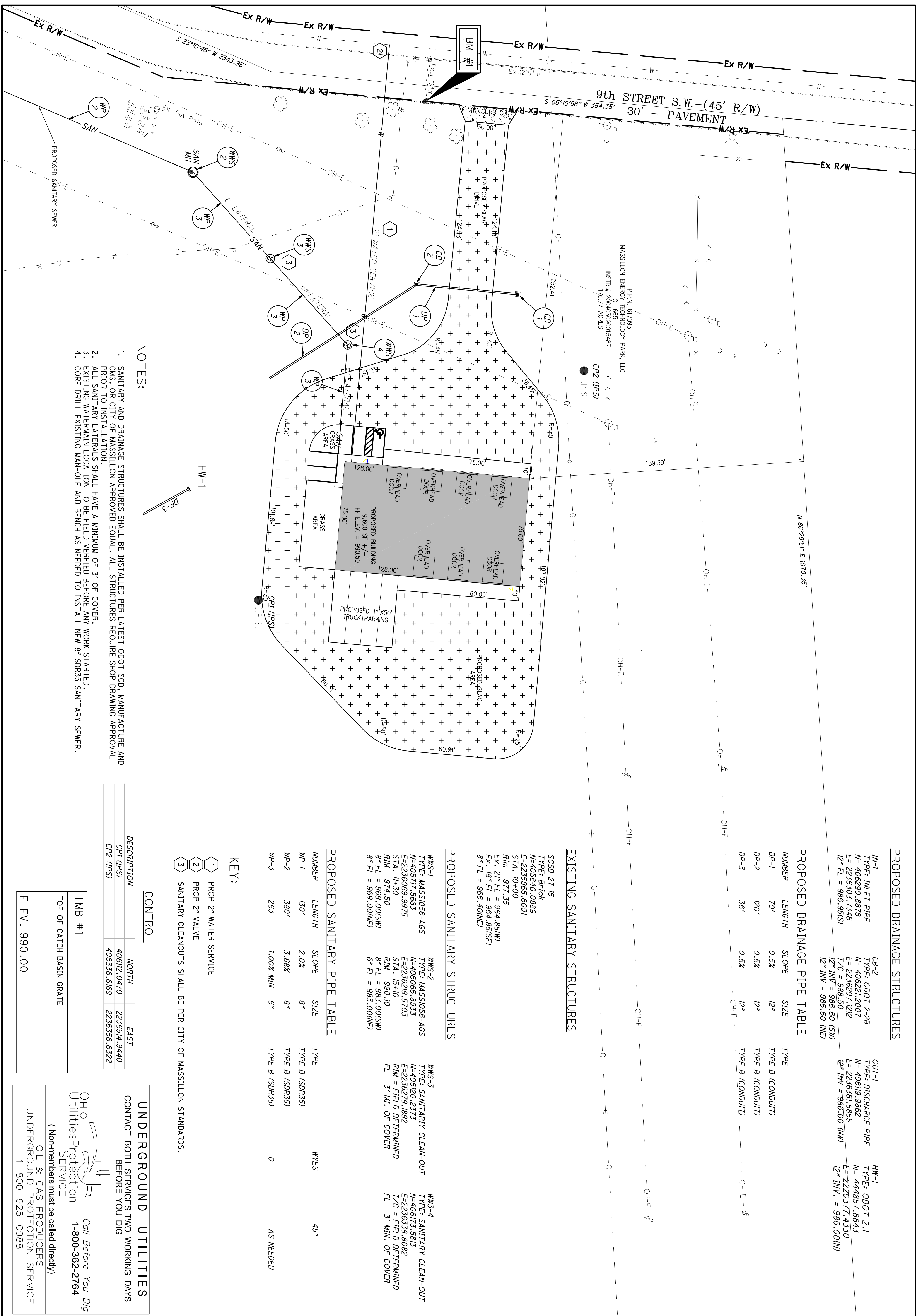
TBM #1
TOP OF CATCH BASIN GRADE
ELEV. 990.00

**UNDERGROUND UTILITIES**  
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(Non-members must be called directly)  
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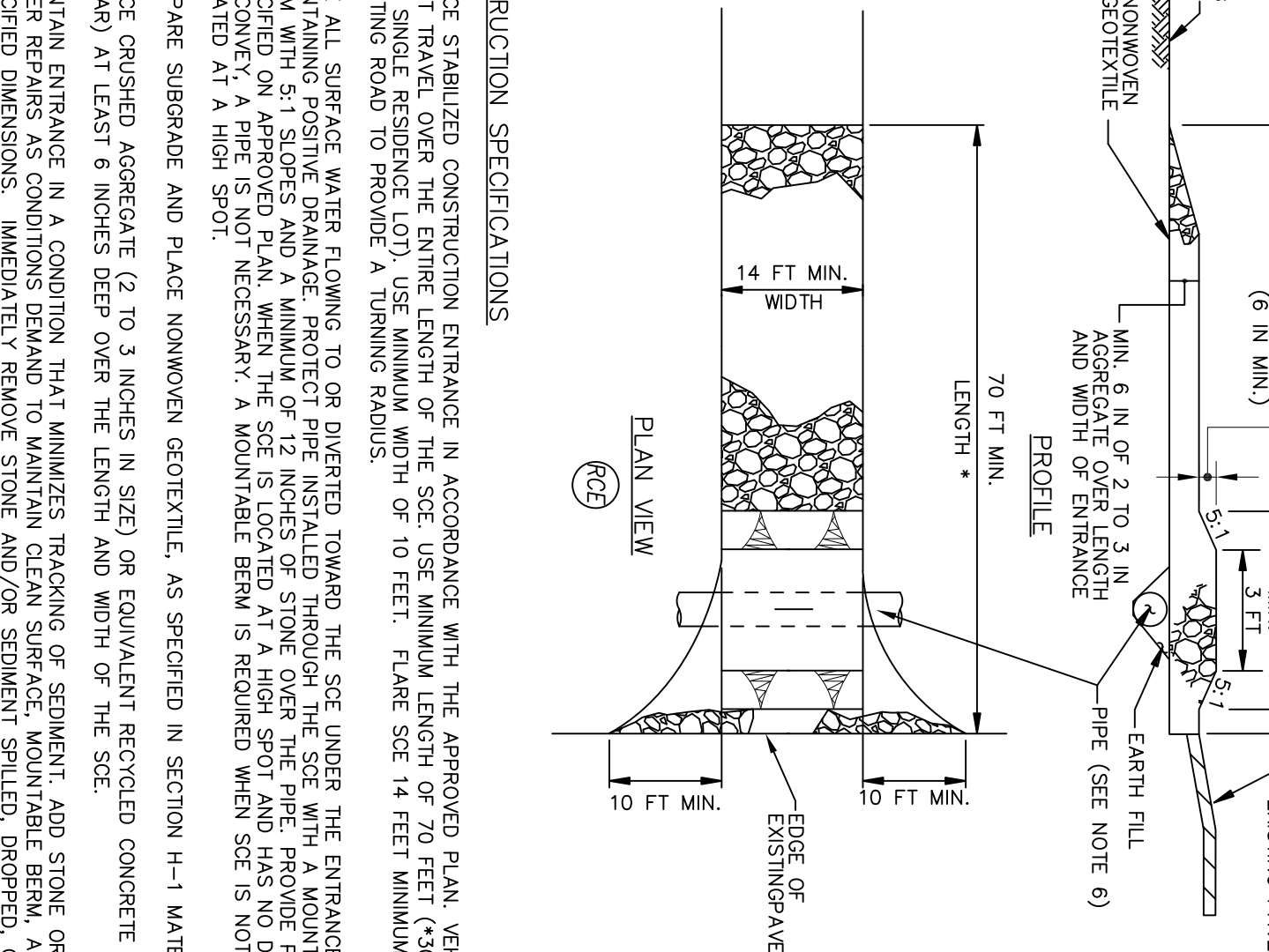






## STABILIZED CONSTRUCTION ENTRANCE

  
STANDARD SYMBOL  
FOR  
STABILIZED CONSTRUCTION ENTRANCE



1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SEE. USE MINIMUM LENGTH OF 70 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SIDE 14 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.

2. PILE ALL SURFACE WATER FLOWING TO OR DIVERGED TOWARD THE SEE UNDER THE ENTRANCE. PROVIDE A 6 INCHES DEEP GRASSY BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PILE. PROVIDE PILE AS NECESSARY. A MOUNTAIN BEAM IS REQUIRED WHEN SEE IS NOT LOCATED AT A HIGH SPOT.

3. PREPARE SUBGRADE AND PLACE UNWORNEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SEE.

5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, AND STONE OR MAKE REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MAINTAIN MOUNTAIN BEAM, AND TRACKED ONTO ADJACENT ROADWAY BY WALKING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

**SILT FENCE**

6 FT. MAX.  
CENTER TO CENTER

36 IN. MIN. FENCE POST LENGTH  
DRIVEN MIN. 16 IN. INTO GROUND

16 IN. MIN. HEIGHT OF  
WOVEN SLIT FILM GEOTEXTILE  
16 IN. MIN. DEPTH  
INTO GROUND

**ELEVATION**

36 IN. MIN. FENCE  
POST LENGTH

WOVEN SLIT FILM  
GEOTEXTILE

FLOW

16 IN. MIN. FENCE  
POST LENGTH  
DRIVEN MIN. 16 IN.  
INTO GROUND

ADJACENT  
GROUND  
DISTURBED  
GROUND

**CROSS SECTION**

EMBED GEOTEXTILE  
MIN. 16 IN. DEPTH  
INTO THE GROUND. BACKFILL  
AND COMPACT THE SOIL ON  
BOTH SIDES OF GEOTEXTILE.

**STEPS:**

**STEP 1**  
POSTS  
STAPLE

**STEP 2**  
STAPLE  
TWIST POSTS TOGETHER  
STAPLE

**STEP 3**  
FINAL  
CONFIGURATION  
STAPLE

**JOINING TWO ADJACENT SILT  
FENCE SECTIONS (TOP VIEW)**

STANDARD SYMBOL  
SF

# STANDARD INLET PROTECTION

Diagram illustrating the Standard Inlet Protection structure, showing two types (Type A and Type B) and an isometric view.

**TYPE A:** A frame structure with a woven split film geotextile filter. The frame is made of 2 in. x 4 in. framing. The geotextile filter is 18 in. wide and 12 in. high. The structure is 18 in. into the ground. The top elevation is 18 in. min. notch elevation. The frame is made of 18 in. making strip. The structure is 9 gang chain link fence (typ.).

**TYPE B:** A frame structure with a woven split film geotextile filter. The frame is made of 2 in. x 4 in. framing. The geotextile filter is 18 in. wide and 12 in. high. The structure is 18 in. into the ground. The top elevation is 18 in. min. notch elevation. The frame is made of 18 in. making strip. The structure is 9 gang chain link fence (typ.).

**ISOMETRIC VIEW:** Shows the structure installed at the edge of the roadway or top of the earth dike. The structure is 6 in. min. high. The flow is indicated by arrows. The structure is excavated, backfilled, and compacted (typ.).

**SECTION FOR TYPE A AND B:** Shows the cross-section of the structure. The structure is 6 in. min. high. The flow is indicated by arrows. The structure is excavated, backfilled, and compacted (typ.).

**TYPE A MAXIMUM DRAINAGE AREA = 1/2 ACRE**  
**TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE**

ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL  
CWS

PLAN

EXCAVATED WASHOUT STRUCTURE

SECTION A-A

SECTION B-B

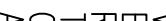
WASHOUT STRUCTURE WITH WOOD PLANKS

1 OF 2

[illegible]


REVISIONS:

DATE	DESCRIPTION



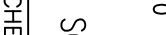
NW NE  
SW SE

Y R T C A L  
V N E C E I



0 50 100

HORIZONTAL  
SCALE IN FEET



0 50 100

CHECKED BY: KAD

DATE: \_\_\_\_\_

DRAWN BY: \_\_\_\_\_

DATE: \_\_\_\_\_



GENERAL EROSION AND SEDIMENT CONTROL NOTES

EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE CITY OF MASSILLON DURING THE TERM OF CONSTRUCTION TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH THE USE OF EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S).

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING DESIGN STAGE, THAT REQUIRE ADDITIONAL OR MODIFIED TEMPORARY OR PERMANENT BMP'S SHALL BE APPROVED BY THE DESIGN ENGINEER AND REFLECTED ON THE REVISED SWP3.

SEDIMENT PONDS, SEDIMENT TRAPS, AND PERIMETER SEDIMENT CONTROLS, SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UP SLOPE DEVELOPMENT AREAS ARE RE-ESTABLISHED WITH VEGETATION. SEDIMENT CONTROLS SHALL NOT BE PLACED IN A STREAM.

TRENCH DEWATERING OR GROUND WATER, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG, OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS, WATER RESOURCES, OR THE STORM SEWER SYSTEM.

THE SWP3, NOTES AND DETAILED DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT MANUAL.

ADDITIONAL EROSION AND SEDIMENT CONTROL BMP'S MAY BE REQUIRED BY THE CITY OF MASSILLON AS UNFORESEEN SITUATIONS MAY ARISE THAT REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES.

CLEARING AND GRUBBING

LIMITS OF CLEARING AND GRADING SHALL BE CLEARLY MARKED ON THE SITE WITH SIGNAGE, FLAGGING AND/OR ORANGE CONSTRUCTION FENCING.

THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS, WATER RESOURCES, WETLANDS, OR OTHER AREAS OF WATER IMPOUNDMENT.

CONSTRUCTION ENTRANCE

A STONED CONSTRUCTION ENTRANCE SHALL BE INSTALLED FOR ALL INGRESS AND EGRESS TO THE SITE. THE MINIMUM DIMENSIONS OF THE DRIVE SHALL BE 14 FEET WIDE BY 70 FEET LONG. THE STONE SHALL BE 6 INCHES DEEP WITH AN UNDERLAIN GEOTEXTILE FABRIC. THE DRIVE SHALL BE INSTALLED PRIOR TO ANY CLEARING AND GRUBBING. SEDIMENTS SHALL BE REMOVED FROM THE ROADWAY DAILY OR MORE FREQUENTLY IF REQUIRED BY LOANIN COUNTY.

STABILIZATION

PERMANENT AND TEMPORARY STABILIZATION SHALL OCCUR AS REQUIRED IN THE FOLLOWING TABLES:

TABLE 1. - PERMANENT STABILIZATION

PERMANENT STABILIZATION	
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREA WITHIN 50 FT. OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN 2 DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY SEEDING

SEEDED AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE RESEEDD BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH STRAW MULCH WHEN CONDITIONS PROHIBIT SEEDING.

STRAW MULCH SHALL BE APPLIED AT A RATE OF 2-3 STANDARD 45 LB. BALES PER 1000 SQ. FT OF DISTURBED AREA OR 2 TONS PER ACRE. ALL HYDROSEEDING MUST BE STRAW MULCHED ACCORDING TO THE ABOVE SPECIFICATIONS UNLESS IT IS WATERED WEEKLY

ALL DETENTION PONDS, RETENTION PONDS, WATER QUALITY STRUCTURES, SEDIMENT PONDS, SEDIMENT TRAPS, EARTHEN DIVERSIONS, OR EMBANKMENTS SHALL BE SEEDD AND STRAW MULCHED WITHIN 7 DAYS OF COMPLETED CONSTRUCTION.

TABLE 2: TEMPORARY STABILIZATION

TEMPORARY STABILIZATION	
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN 1 YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE.	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
DISTURBED AREAS THAT WILL REMAIN IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER (NOV 1) STRAW MULCH 2-3 BALES PER 1000 SQ. FT OR 2 TONS PER ACRE.

NOTE: WHERE VEGETATIVE STABILIZATION TECHNIQUES ARE UNOBTAINABLE DUE TO INSTABILITY, EROSION MATTING MAY BE USED.

PERMANENT STABILIZATION OF CONVEYANCE CHANNELS

THE CONTRACTOR SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSION FLOWS. MEASURES MAY INCLUDE SEEDING, DORMANT SEEDING, MULCHING, EROSION CONTROL MATTING, SODDING, RIPRAP, NATURAL CHANNEL DESIGN WITH BIO-ENGINEERING TECHNIQUES, OR ROCK CHECK DAMS. ALL AS DEFINED IN THE MOST RECENT EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL, PUBLISHED BY ODNR.

SOIL TRANSPORT ONTO PUBLIC ROADS

WHERE SOIL IS TRANSPORTED ONTO PUBLIC ROAD SURFACES, THE ROADS SHALL BE CLEANED THOROUGHLY BY EITHER SWEEPING OR SCRAPING AT THE END OF EACH WORK DAY OR MORE FREQUENTLY IF NEEDED IN ORDER TO ENSURE PUBLIC SAFETY. STREET WASHING IS NOT PERMITTED. IF APPLICABLE, THE CATCH BASINS NEAREST TO THE CONSTRUCTION ENTRANCE SHALL BE CLEANED WEEKLY.

ADDITIONAL REQUIREMENTS TO CONTROL SOIL TRANSPORT ONTO PUBLIC ROADS MAY INCLUDE

1. SILT FENCE OR CONSTRUCTION FENCE INSTALLED AROUND THE PERIMETER OF THE DEVELOPMENT AREA TO ENSURE ALL VEHICLE TRAFFIC ADHERES TO DESIGNATED CONSTRUCTION ENTRANCES.
2. DESIGNATED WHEEL WASHING AREAS. WASH WATER FROM THESE AREAS MUST BE DIRECTED TO A DESIGNATED SEDIMENT TRAP, SEDIMENT SETTLING POND, OR TO A DEWATERING SUMP PIT.

ERODIBLE MATERIAL RAMPAS IN STREETS TO ENABLE EQUIPMENT TO CROSS CURBS SHALL BE PROPERLY REMOVED IMMEDIATELY AFTER USE.

SILT FENCE AND DIVERSIONS

SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SILT FENCE OR DIVERSIONS TO PROTECT ADJACENT PROPERTIES, WATER RESOURCES, AND WETLANDS FROM SEDIMENT TRANSPORTED VIA SHEET FLOW. WHERE INTENDED TO PROVIDE SEDIMENT CONTROL, SILT FENCE SHALL BE PLACED ON A LEVEL CONTOUR AND SHALL BE CAPABLE OF TEMPORARILY PONDING RUNOFF. THE EPA PERMIT NO. DOES NOT PRECLUDE THE USE OF OTHER SEDIMENT BARRIERS DESIGNED TO CONTROL SHEET FLOW RUNOFF.

STORM WATER DIVERSION PRACTICES SHALL BE USED TO KEEP RUNOFF AWAY FROM DISTURBED AREAS AND STEEP SLOPES. SUCH DEVICES, WHICH INCLUDE SWALES, DIKES OR BERMS, MAY RECEIVE STORM WATER RUNOFF FROM AREAS UP TO 10 ACRES.

INLET PROTECTION

INLET PROTECTION IS MANDATORY. INLET PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT VERSION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL BY ODNR. ALL INLETS RECEIVING RUNOFF FROM DRAINAGE AREAS OF ONE OR MORE ACRES WILL REQUIRE A SEDIMENT SETTLING POND, STRAW OR HAY BALES ARE NOT ACCEPTABLE FORMS OF INLET PROTECTION.

NON-SEDIMENT POLLUTANTS CONTROLS

NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL NECESSARY BMP'S MUST BE IMPLEMENTED TO PREVENT THE DISCHARGE OF NON-SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE, WATER RESOURCES, OR WETLANDS. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STREET, STORM SEWER, OR OTHER PUBLIC FACILITY OR NATURAL RESOURCE. EXPOSURE OF WASTE MATERIALS TO STORM WATER IS NOT PERMITTED.

TRENCH AND GROUNDWATER CONTROL

TRENCH SHALL BE NO SEDIMENT LADEN OR TURBID DISCHARGES TO WATER RESOURCES OR WETLANDS RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUND WATER CONTAINS SEDIMENT, IT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTLING IN PLACE OR BY DEWATERING INTO A SUMP PIT, FILTER BAG, OR COMPARABLE PRACTICE. GROUND WATER DEWATERING WHICH DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS IS NOT REQUIRED TO BE TREATED PRIOR TO DISCHARGE. HOWEVER, CARE MUST BE TAKEN WHEN DISCHARGING GROUND WATER TO ENSURE THAT IT DOES NOT BECOME POLLUTANT LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.

INSPECTION

ALL CONTROLS ON THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF INCH OF RAIN PER 24 HOUR PERIOD. THE CONTRACTOR SHALL ASSIGN QUALIFIED INSPECTION PERSONNEL TO CONDUCT THESE INSPECTIONS TO ENSURE THAT THE CONTROL PRACTICES ARE FUNCTIONAL AND TO EVALUATE WHETHER THE SWP3 IS ADEQUATE, OR WHETHER ADDITIONAL CONTROL MEASURES ARE REQUIRED. QUALIFIED INSPECTION PERSONNEL ARE INDIVIDUALS WITH KNOWLEDGE AND EXPERIENCE IN THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROLS.

INSPECTIONS SHALL MEET THE FOLLOWING REQUIREMENTS:

1. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM.
2. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY THE CONTRACTOR SHALL UTILIZE AN INSPECTION FORM ACCEPTABLE TO THE CITY OF MASSILLON. THE INSPECTION FORM SHALL INCLUDE:
  - a. THE INSPECTION DATE.
  - b. NAMES, TITLES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION.
  - c. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION, INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT AND APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT IN INCHES, AND WHETHER ANY DISCHARGES OCCURRED.
  - d. LOCATIONS OF:-
    - DISCHARGES FROM SEDIMENT OR OTHER POLLUTANTS FROM THE SITE.
    - BMP'S THAT NEED TO BE MAINTAINED.
    - BMP'S THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.
    - WHERE ADDITIONAL BMP'S ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION.
    - CORRECTIVE ACTION REQUIRED INCLUDING ANY NECESSARY CHANGES TO THE SWP3 AND IMPLEMENTATION DATES.
  3. DISCHARGE LOCATIONS SHALL BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATER RESOURCE OR WETLANDS.
  4. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING
  5. THE PERMIT APPLICANT SHALL MAINTAIN FOR 3 YEARS FOLLOWING FINAL STABILIZATION THE RESULTS OF THESE INSPECTIONS, THE NAMES AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTIONS, THE DATES OF THE INSPECTIONS, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWP3, A CERTIFICATION AS TO WHETHER THE FACILITY IS IN COMPLIANCE WITH THE SWP3, AND INFORMATION ON ANY INCIDENTS OF NON-COMPLIANCE DETERMINED BY THESE INSPECTIONS. EMAIL WEEKLY REPORTS TO BORCHERD@CVELIMITED.COM

MAINTENANCE

ALL CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION UNTIL FINAL STABILIZATION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL REACH FINAL STABILIZATION. THE CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE CONTAINED IN THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS. A WRITTEN DOCUMENT CONTAINING THE SIGNATURES OF ALL CONTRACTORS AND SUB-CONTRACTORS INVOLVED IN THE IMPLEMENTATION OF THE BMP'S SHALL BE MAINTAINED AT THE JOB SITE AS PROOF ACKNOWLEDGING THAT THEY HAVE REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP3.

WHEN INSPECTIONS REVEAL THE NEED FOR REPAIR, REPLACEMENT, OR INSTALLATION OF EROSION AND SEDIMENT CONTROL BMP'S, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

1. WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE CONTROL PRACTICES IN NEED OF REPAIR OR MAINTENANCE, WITH THE EXCEPTION OF A SEDIMENT SETTLING POND, MUST BE REPAIRED OR MAINTAINED WITHIN 3 DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.
2. WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION: CONTROL PRACTICES THAT FAIL TO PERFORM THEIR INTENDED FUNCTION AS DETAILED IN THE SWP3 SHALL BE REPLACED WITH ANOTHER MORE APPROPRIATE CONTROL WITHIN 10 DAYS. THE SWP3 SHALL BE AMENDED TO SHOW THE NEW CONTROL PRACTICE.
3. WHEN PRACTICES ON THE SWP3 ARE NOT INSTALLED, CONTROL PRACTICES REQUIRED BY THE SWP3 BUT NOT IMPLEMENTED AT THE TIME OF THE INSPECTION SHALL BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF THE PLANNED CONTROL IS NOT NEEDED, AN EXPLANATION AS TO WHY THE CONTROL IS NOT NEEDED SHALL BE ADDED TO THE SWP3.

WASTE DISPOSAL

A COVERED DUMPSTER SHALL BE MADE AVAILABLE FOR THE PROPER DISPOSAL OF GARBAGE, PLASTER, DRYWALL, GROUT, GYPSUM, AND OTHER WASTE MATERIALS. ALL CONTAINERS MUST BE LEAK PROOF. ALL WASTE MATERIAL INCLUDING TOXIC OR HAZARDOUS WASTE SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.

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HORIZONTAL

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CHECKED BY:

K AD

DATE:

FEB. 2019

DRAWN BY:

BMH

DATE:

FEB. 2019

REVISIONS:

DATE	DESCRIPTION

Tiger Tarps Building  
SWP3 Notes/Details  
City of Massillon  
Stark County, Ohio

CIVPRO

ENGINEERING

ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS

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WWW.CIVPROENGINEERING.COM

DRAWING NAME:

PROJECT NUMBER:

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CLEAN HARD FILL

BRICKS, HARDENING CONCRETE, AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATER RESOURCES OR WETLANDS. CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED OF INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.

CONSTRUCTION AND DEMOLITION DEBRIS (C&DD)

ALL C&DD SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714. MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20).

CONSTRUCTION CHEMICAL COMPOUNDS

AREAS SHALL BE DESIGNATED FOR THE MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME, ASPHALT, OR CONCRETE. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORM WATER DRAINAGE AREAS.

EQUIPMENT FUELING AND MAINTENANCE

ALL FUEL/LIQUID TANKS AND DRUMS SHALL BE STORED IN A MARKED STORAGE AREA. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL, OIL, STORAGE TANKS, VEHICLE FUELING, AND MAINTENANCE SHALL OCCUR IN DESIGNATED AREAS. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORM WATER DRAINAGE AREAS.

SPILL PREVENTION CONTROL AND COUNTERMEASURES

A SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE GROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVE GROUND TANK STORAGE OF 1300 GALLONS, OR BELOW GROUND STORAGE OF 42,000 GALLONS OF FUEL.

CONCRETE WASH WATERS

CONCRETE CHUTE OR OTHER CONCRETE WASH WATERS SHALL BE DISCHARGED INTO DESIGNATED AREAS ONLY. DESIGNATED AREAS SHALL BE IDENTIFIED WITH SIGNAGE AND LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORM WATER DRAINAGE AREAS.

CONTAMINATED SOILS

ALL CONTAMINATED SOILS MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES (TSDs). RUNOFF FROM CONTAMINATED SOILS SHALL NOT BE DISCHARGED FROM THE SITE. PROPER PERMITS SHALL BE OBTAINED FOR DEVELOPMENT PROJECTS ON SOLID WASTE LANDFILL SITES OR REDEVELOPMENT SITES.

SPILL REPORTING REQUIREMENTS

IN THE EVENT OF A SMALL RELEASE (LESS THAN 25 GALLONS) OF PETROLEUM WASTE, THE LOCAL FIRE DEPARTMENT SHALL BE CONTACTED. IN THE EVENT OF A LARGER RELEASE (25 OR MORE GALLONS) OF PETROLEUM WASTE, CONTACT OHIO EPA AT 1-800-282-9378, AND THE LOCAL FIRE DEPARTMENT.

OPEN BURNING

OPEN BURNING IS NOT PERMITTED.

DUST CONTROLS AND SUPPRESSANTS

USED OIL SHALL NOT BE USED AS A DUST SUPPRESSANT. DUST CONTROLS MAY INCLUDE THE USE OF WATER TRUCKS TO WET DISTURBED AREAS, TAPPING STOCKPILES, TEMPORARY STABILIZATION OF DISTURBED AREAS, AND REGULATION OF THE SPEED OF VEHICLES ON THE SITE.

STREAM CROSSINGS

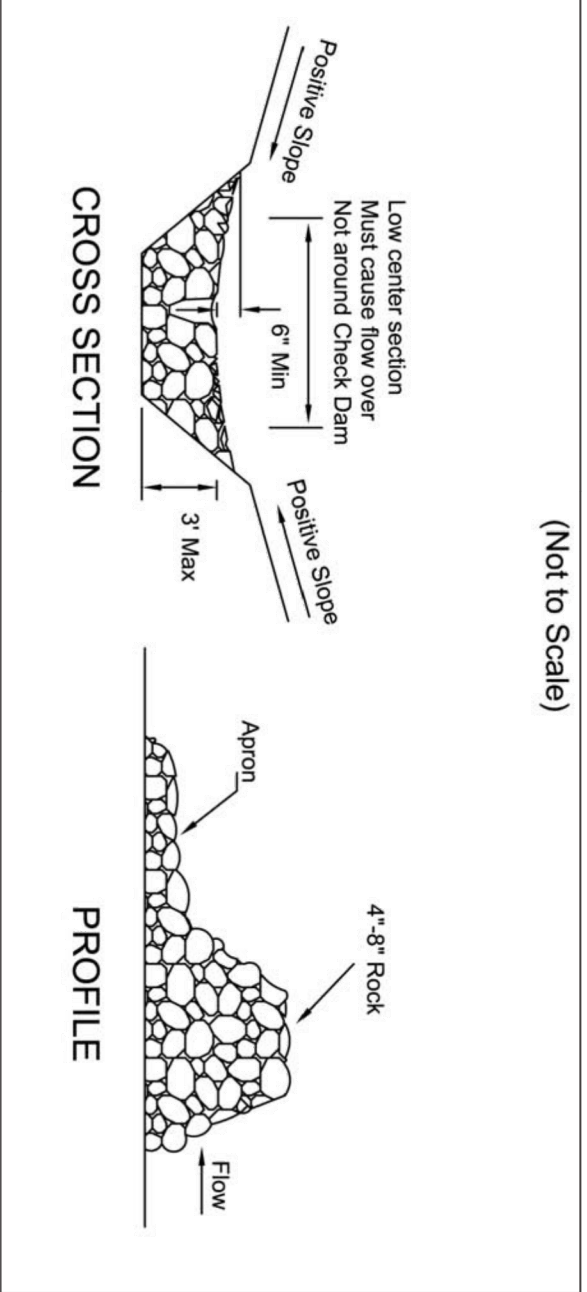
STREAM CROSSINGS SHALL BE CONSTRUCTED ENTIRELY OF STONE, ROCK, OR CLEAN RECYCLED CONCRETE. SOIL OR EARTHEN MATERIAL MAY NOT BE USED. A 20 FOOT STONE APRON ON EITHER SIDE OF THE STREAM SHALL BE CONSTRUCTED TO PREVENT LOCALIZED SEDIMENTATION. THE CHANNEL BED AND BANKS SHALL BE RESTORED, AND ALL DISTURBED AREAS OF THE BANK WITHIN 50 FEET OF THE STREAM SHALL BE STABILIZED WITH SEED AND STRAW MULCH WITHIN 2 DAYS OF THE DISTURBANCE.

SEEDING AND MULCHING

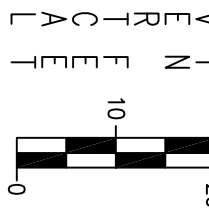
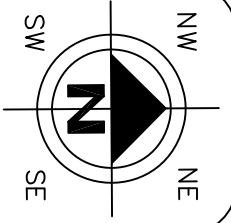
SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING UPON COMPLETION OF EXCAVATION OR FILL AND FINISHED GRADING IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 659 OR AS DIRECTED BY THE ENGINEER. THE FOLLOWING MIXTURES SHALL BE USED FOR SEEDING.

GENERAL USE (ODOT 659.09, CLASS 1)			
SEED MIX	SEEDING RATE	FERTILIZER	MULCH
KENTUCKY BLUEGRASS	3 LBS./1000 SQ. FT.	10-20-10@20 LBS./1000 SQ. FT.	STRAW - 2 TONS/ACRE
CREEPING RED FESCUE	3 LBS./1000 SQ. FT.		
ANNUAL RYEGRASS	2 LBS./1000 SQ. FT.		
PERENNIAL RYEGRASS	2 LBS./1000 SQ. FT.		
ROADSIDE DITCHES AND SWALES (ODOT 659.09, CLASS 2)			
SEED MIX	SEEDING RATE	FERTILIZER	MULCH
PERENNIAL RYEGRASS	1.5 LBS./1000 SQ. FT.	10-20-10@20 LBS./1000 SQ. FT.	STRAW - 2 TONS/ACRE
KENTUCKY 31 FESCUE	2.0 LBS./1000 SQ. FT.		
KENTUCKY BLUEGRASS	1.5 LBS./1000 SQ. FT.		
STEEP BANKS, CUT SLOPES, DETENTION AREAS, WHERE SLOPES ARE STEEPER THAN 3:1 (ODOT 659.09, CLASS 3C)			
SEED MIX	SEEDING RATE	FERTILIZER	MULCH
PERENNIAL RYEGRASS	1.8 LBS./1000 SQ. FT.		
ANNUAL RYEGRASS	0.3 LBS./1000 SQ. FT.		
TEMPORARY EROSION CONTROL (ODOT 659.09, CLASS 7)			
SEED MIX	SEEDING RATE	FERTILIZER	MULCH
ANNUAL RYEGRASS	2.02 LBS./1000 SQ. FT.	10-20-10@20 LBS./1000 SQ. FT.	STRAW - 2 TONS/ACRE

Specifications  
for  
Rock Check Dam



1. The check dam shall be constructed of 4-8 inch diameter stone, placed so that it completely covers the width of the channel. ODOT type D stone is acceptable, but should be upstream with a gravel filter consisting of ODOT No. 5 or 4 or sandier filter fabric.
2. Maximum height of check dam shall not exceed 3.0 feet.
3. The midpoint of the rock check dam shall be a minimum of 6 inches lower than the sides in order to direct across the center and away from the channel sides.
4. The base of the check dam shall be entrenched approximately 6 inches.
5. Spacing of check dams shall be in a manner such that the top of the upstream dam is at the same elevation as the top of the downstream dam.
6. A Sloped Apron shall be constructed where check dams are expected to be in use for an extended period of time; a stone apron shall be constructed immediately downstream of the check dam to prevent holes from undermining the structure. The apron shall be 6 to 12 inches high and its length two times the height of the dam.
7. Stone placement shall be performed either by hand or mechanically as long as the center of check dam is lower than the sides and extends across entire channel.
8. Side slopes shall be a minimum of 2:1.



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