GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ALL WORK SPECIFIED AS AN ODOT ITEM SHALL BE GOVERNED BY THE CURRENT STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATION HANDBOOK. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATION OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK, CURRENT EDITION. THE CURRENT OHIO EPA PERMIT No.: #3GC07073*AG IS A PART OF THESE CONTRACT DOCUMENTS AND SHALL BE ADHERED TO ACCORDINGLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO POSSESS AND TO BE FAMILIAR WITH APPLICABLE SECTIONS. EROSION CONTROL AND SILTATION CONTROL MEASURES SHALL BE UNDER THE JURISDICTION OF THE SUMMIT SOIL AND WATER CONSERVATION DISTRICT.

ALL UTILITY COMPANIES AND ALL CONTRACTORS MUST COMPLY WITH ALL STORM WATER POLLUTION PREVENTION MEASURES AS DEFINED ON THE STORM WATER POLLUTION PREVENTION PLANS, DETAILS AND NOTES, AND ODNR GUIDELINES IN ACCORDANCE WITH THE CURRENT OHIO EPA GENERAL PERMIT FOR CONSTRUCTION STORMWATER MANAGEMENT.

EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE GOVERNING AGENCY DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH 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 COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORSEEN DURING DESIGN STAGE; THAT REQUIRE ADDITIONAL OR MODIFIED TEMPORARY OR PERMANENT BMP'S SHALL BE IMPLEMENTED AND REFLECTED ON THE REVISED SWP3.

SEDIMENT PONDS, SEDIMENT TRAPS, AND PERIMETER SEDIMENT CONTROLS, SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE RE-ESTABLISHED WITH TEMPORARY VEGETATION. NO SEDIMENT CONTROLS SHALL BE PLACED IN A STREAM.

OFF-SITE VEHICLE TRACKING SEDIMENT SHALL BE MINIMIZED. CONSTRUCTION VEHICLES ARE LIMITED TO THE CONSTRUCTION ACCESS ROAD(S) NOTED ON PLAN. 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 SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE

AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS OR THE STORM SEWER SYSTEM. SILT BARRIERS, CONSTRUCTION ENTRANCES, AND SILT FENCES SHALL REMAIN IN PLACE UNTIL A GOOD STAND OF GRASS HAS BEEN OBTAINED AND/OR PAVING OPERATIONS ARE COMPLETE. CONTRACTOR SHALL KEEP SILT FROM ENTERING ANY STORM DRAINAGE SYSTEM. ONCE SITE HAS BEEN COMPLETELY STABILIZED, ANY SILT IN PIPES AND DRAINAGE SWALES SHALL BE REMOVED WITHIN 10 DAYS.

THE SWP3, NOTES AND DETAILED DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL, LATEST EDITION.

ADDITIONAL EROSION CONTROL BMP'S MAY BE MANDATED BY THE GOVERNING AGENCY AT ANY TIME DURING THIS PROJECT AS UNFORSEEN SITUATIONS MAY ARISE THAT WARRANT FURTHER 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 CONSTRUCTION FENCING. THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODABLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW, AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, WETLANDS OR OTHER AREAS OF WATER IMPOUNDMENT.

CONSTRUCTION ENTRANCE

STONED CONSTRUCTION ENTRANCE(S) SHALL BE INSTALLED FOR ALL INGRESS & EGRESS TO THE SITE. THE MINIMUM DIMENSIONS OF THE DRIVE SHALL BE 14 FT. WIDE AND 70 FT. 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 ROADWAYS DAILY. (SEE DETAILS AND SPECIFICATIONS)

STABILIZATION

PERMANENT AND TEMPORARY STABILIZATION ARE DEFINED IN PART VII OF THE OEPA <u>AUTHORIZATION FOR FOR STORM WATER DISCHARGES</u> ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM OHIO EPA PERMIT #3GC07073*AG EFFECTIVE DATE 03/07/14 - EXPIRATION DATE 4/20/18 DISTURBED AREAS MUST BE STABILIZED AS SPECIFIED.

TEMPORARY SEEDING

PLANT TEMPORARY SEEDING AND MULCHING WITHIN 2 DAYS OF MOST RECENT DISTURBANCE IN ALL AREAS THAT SHALL BE INACTIVE FOR 14 DAYS OR MORE. ALL DISTURBED AND ERODED EARTH SHALL BE REGRADED AND SEEDED WITHIN 7 DAYS (OR 2 DAYS IF WITHIN 50' OF A STREAM/RIVER) WITH SEEDING, AS DEFINED ABOVE AND AS SHOWN ON THE TABLE BELOW, TO ESTABLISH STABILITY AND PROVIDE SEDIMENT CONTROL. WHERE POSSIBLE, TEMPORARY SEEDING GROWTH SHALL NOT BE MOWED UNTIL IT HAS GONE TO SEED FOR 1 YEAR. ALL DETENTION PONDS, RETENTION PONDS, WATER QUALITY STRUCTURES, SEDIMENT PONDS, SEDIMENT TRAPS, EARTHEN DIVERSIONS OR EMBANKMENTS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF COMPLETED CONSTRUCTION. ALL SOIL STOCKPILES TO REMAIN FOR GREATER THAN 14 DAYS SHALL RECEIVE TEMPORARY SEEDING.

| TABLE | 2: TEMPORARY STABILIZATION | TEMPORARY SEE | DING SPECIFICATIONS: | |
|--|--|---|-----------------------------|------------------|
| AREA REQ. TEMP. STABILIZATION | TIME FRAME TO APPLY EROSION CONTROL | SEEDING DATES | SEEDTYPE | APPLICATION RATE |
| ANY DISTURBED AREAS WITHIN | WITHIN TWO DAYS OF THE MOST RECENT | | | PER 1,000 SF |
| 50 FT. OF A STREAM AND NOT AT FINAL GRADE | DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS | MAR. 1–AUG. 15 | OATS PERENNIAL RYE GRASS | #3 |
| DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 | WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA. | | OR TALL FESCUE | |
| | FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT | DENTIAL SUBDIVISIONS, DISTURBED JST BE STABILIZED AT LEAST | PERENNIAL RYE GRASS | #3 #1 |
| | COVERAGE FOR THE INDIVIDUAL LOT(S) | AFTER NOV 1 | STRAY OF HAY MULCH | 2–3 BALES |
| DISTURBED AREAS THAT WILL BE | PRIOR TO ONSET OF WINTER WEATHER (NOV.1) STRAW MULCH 2 TO 3 BALES PER | SEED BED PREPARATION | LIME 10-10-10 OR | #100 |
| | 1000 SQ.FT. AND OR 2 TONS PER ACRE. | FREFARATION | 12–12–12 FERTILIZER | 12-15# |
| TABLE | 3: PERMANENT STABILIZATION | | | |
| AREA REQUIRING PERMANENT STA | BILIZATION TIME FRAME TO APPLY FROSION | CONTROLS | | |

| TABLE 3. FERMANEI | IT STABLIZATION |
|--|--|
| AREA REQUIRING PERMANENT STABILIZATION | TIME FRAME TO APPLY EROSION CONTROLS |
| ANY AREA THAT WILL LIE DORMANT FOR ONE | |
| YEAR OR MORE. | DISTURBANCE. |
| ANY AREA WITHIN 50 FEET OF A | WITHIN 2 DAYS OF REACHING FINAL |
| WATERCOURSE AND AT FINAL GRADE. | GRADE. |
| ANY OTHER AREA AT FINAL GRADE. | WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA. |

PERMANENT STABILIZATION OF CONVEYANCE CHANNELS

OPERATORS SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSIVE FLOWS. MEASURES MAY INCLUDE SEEDING. DORMANT SEEDING (AS DEFINED IN THE LATEST EDITION OF ODNR RAINWATER AND LAND DEVELOPMENT MANUAL), MULCHING, EROSION CONTROL MATTING, SODDING, RIPRAP NATURAL CHANNEL DESIGN WITH BIO ENGINEERING TECHNIQUES OR ROCK CHECK DAMS.

<u>TIMING</u>

SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT THE COURSE OF EARTH DISTURBING ACTIVITY. SEDIMENT BASINS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS PERMANENTLY RESTABILIZED. AS CONSTRUCTION PROGRESSES AND THE TOPOGRAPHY IS ALTERED, APPROPRIATE CONTROLS MUST BE CONSTRUCTED TO ADDRESS THE CHANGING DRAINAGE PATTERNS.

SILT FENCE & DIVERSIONS

SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SILT FENCE OR DIVERSIONS TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED VIA SHEET FLOW. WHERE INTENDED TO PROVIDE SEDIMENT CONTROL, SILT FENCES SHALL BE PLACED ON A LEVEL CONTOUR. SILT FENCE IS NOT PERMITTED TO BE USED FOR CONTROLLING CONCENTRATED SURFACEWATER FLOW (ONLY SHEET FLOW). ALL SILT FENCING SHALL BE ORANGE IN COLOR.

STORMWATER DIVERSION PRACTICES SHALL BE USED TO KEEP RUNOFF AWAY FROM DISTURBED AREAS AND STEEP SLOPES WHERE PRACTICAL. SUCH DEVICES, WHICH INCLUDE SWALES, DIKES OR BERMS, MAY RECEIVE FROM AREAS UP TO 10 ACRES. TEMPORARY DIVERSION SWALES SHALL BE IMPLEMENTED THROUGHOUT ENTIRE SITE TO ENSURE SEDIMENT RUNOFF IS DIRECTED TO THE PROPER TEMPORARY REMOVAL SYSTEM PRIOR TO DISCHARGING ANY WATER FROM THE SITE. STORM WATER POLLUTION PREVENTION MEASURES SHALL BE INSTALLED AROUND ALL DIRT OR TOPSOIL STOCKPILES AND OTHER TEMPORARILY DISTURBED AREAS AS SHOWN ON THESE PLANS, IN ACCORDANCE WITH THE ODNR GUIDELINES, AND AS DIRECTED BY THE ENGINEER.

INLET PROTECTION

INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED. SILT BARRIERS SHALL BE INSTALLED AROUND ALL EXISTING OR NEW STORM INLETS, CATCH BASINS, YARD DRAINS. INSTALL ROCK CHECK DAMS FOR HEADWALL INLETS FOR STORM WATER POLLUTION PREVENTION.

NON-SEDIMENT POLLUTANTS CONTROLS

NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORMWATER RUNOFF. ALL NECESSARY BMP'S MUST BE IMPLEMENTED TO PREVENT THE DISCHARGE OF NON- SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE OR SURFACE WATERS OF THE STATE. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STORM SEWER OR SURFACE WATERS OF THE STATE. NO EXPOSURE OF STORMWATER TO WASTE MATERIALS IS ALLOWED.

TRENCH AND GROUND WATER CONTROL

MAINTENANCE

ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED. THE CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE INCLUDED 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 BMPS MUST BE MAINTAINED AS PROOF ACKNOWLEDGING THAT THEY REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP3.

INSPECTION

ALL STORMWATER CONTROLS ON THE SITE MUST 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. A WRITTEN RECORD DOCUMENTING THE RESULTS OF THESE INSPECTIONS MUST BE CREATED AND MAINTAINED WITH THE SWP3. THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. DISCHARGE LOCATIONS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING.

- II. WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION.

WASTE DISPOSAL

CONTAINERS (e.g., DUMPSTERS, DRUMS) SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL. THE CONTRACTOR SHALL OPERATE ON SITE IN THE DESIGNATED AREAS, BY THE CONSTRUCTION MANAGER, FOR MATERIAL STORAGE AND DISPOSAL, WASHOUT AND REFUELING. THE CONTRACTOR SHALL NOT STORE SOLID, SANITARY AND TOXIC WASTES ON THE PROJECT SITE.

CLEAN HARD FILL

THE STATE.

TYPE OF DISPOSAL.

CONSTRUCTION CHEMICAL COMPOUNDS

OTHER STORMWATER DRAINAGE AREA.

UIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY. FUEL STORAGE TANKS SHALL BE PROPERLY CONTAINED TO EVENT AND CAPTURE ANY SPILLS.

MPORARY SEDIMENT BASIN NOTES

AROUND THE BARREL OR ANTI-SEEP COLLARS. FILL MATERIAL SHOULD BE PLACED AROUND THE PIPE IN 4 INCH LAYERS AND COMPACTED BY HAND TO THE SAME DENSITY AS THE EMBANKMENT. A MINIMUM OF 2 FEET OF FILL SHOULD BE HAND-COMPACTED OVER THE BARREL BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.

THE EMBANKMENT OF THE SEDIMENT BASIN SHOULD BE STABILIZED WITH VEGETATION IMMEDIATELY AFTER COMPLETION OF THE BASIN. THE USE OF A SKIMMER SHALL BE REQUIRED ON ALL SEDIMENT BASINS FOR DEWATERING PURPOSES. SEE SHEET 11.

MAINTENANCE: THE BASIN SHALL BE CHECKED REGULARLY TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE EMERGENCY SPILLWAY SHALL BE CHECKED REGULARLY TO ENSURE THAT ITS LINING IS WELL ESTABLISHED AND EROSION-RESISTANT. THE BASIN SHOULD BE CHECKED AFTER EACH RUNOFF-PRODUCING RAINFALL FOR SEDIMENT CLEANOUT. WHEN SEDIMENT REACHES THE CLEAN-OUT LEVEL, IT SHALL BE REMOVED AND PROPERLY DISPOSED.

SEDIMENT B BASIN #2

OF FUEL.

ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREAS. WHEEL AND CONCRETE WASHOUT AREAS MAY VARY IN LOCATION AS SHOWN ON THIS DRAWINGS DEPENDING ON CONSTRUCTION ACTIVITY AND PHASING. IF CONDITIONS ARE SUCH THAT MUD IS COLLECTING ON VEHICLE TIRES. THE TIRES MUST BE CLEANED BEFORE THE VEHICLES ENTER THE PUBLIC ROADWAY REGARDLESS OF CONSTRUCTION ACTIVITY AND PHASING. THE SITE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. IF IT IS DETERMINED THAT THE SURFACE CONDITIONS DO NOT PROVIDE ADEQUATE MEASURE FOR PREVENTING MATERIAL FROM SPILLING ONTO THE RIGHT-OF-WAY. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO THE ROADWAY MUST BE REMOVED PROMPTLY.

THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS OF THE STATE RESULTING FROM DEWATERING ACTIVITIES. ALL DEWATERING OPERATIONS SHALL BE DONE SO THAT NO CONTAMINATED OR SEDIMENT LADEN WATER IS FREELY DISCHARGED, USE OF SEDIMENT TRAPS, BASINS, HOLDING TANKS, OR WHEN APPROPRIATE, DANDEE BAGS OR EQUAL SHALL BE USED IN ACCORDANCE WITH THE REGULATING JURISDICTION. 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. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL SEDIMENTATION AND STORM WATER POLLUTION PREVENTION ITEMS AT ALL TIMES AND TO ENSURE THAT THERE ARE NO SEDIMENT-LADEN DISCHARGE TO SURFACE WATERS RESULTING FROM DEWATERING ACTIVITIES THROUGHOUT THE CONSTRUCTION PROCESS.

WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE

IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH EXCEPTION OF A SEDIMENT SETTLING POND, IT MUST BE REPAIRED OR MAINTAINED WITHIN THREE DAYS OF INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.

IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWP3, MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF INSPECTION.

WHEN PRACTICES DEPICTED ON THE SWP3 ARE NOT INSTALLED.

IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SWP.3. THE SWP3 MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.

BRICKS, HARDENING CONCRETE, AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF

CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY, SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS

CONSTRUCTION & DEMOLITION DEBRIS

ALL CONSTRUCTION & DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED IN A OHIO EPA APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745-20).

THE CONTRACTOR SHALL UTILIZE THE STAGING AREA DESIGNATED FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME PHALT, OR CONCRETE, THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS,

DUIPMENT FUELING & MAINTENANCE

NOTES AND DETAILS NOT SHOWN, SEE THE "RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT ND DEVELOPMENT AND URBAN STREAM PROTECTION" MANUAL, LATEST EDITION

EAS UNDER THE EMBANKMENT AND ANY STRUCTURES SHOULD BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, GETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL IN ORDER TO FACILITATE CLEANOUT AND RESTORATION, THE POOL AREA SHOULD CLEARED OF ALL BRUSH & TREES. PERVIOUS MATERIALS SUCH AS SAND, GRAVEL AND CRUSHED STONE SHOULD NOT BE USED AS

FILL MATERIAL, IF NEEDED, SHOULD BE TAKEN FROM APPROVED BORROW AREAS. IT SHOULD BE CLEAN SOIL, FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS OR OTHER OBJECTIONABLE MATERIAL. AREAS ON WHICH FILL IS TO BE PLACED SHOULD BE SCARIFIED PRIOR TO THE PLACEMENT OF THE FILL FILL MATERIAL WILL BE PLACED IN 6 TO 8 INCH CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF FILL. COMPACTION SHOULD BE OBTAINED BY ROUTING THE HAULING EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD OF THE EQUIPMENT, OR BY USING A COMPACTOR. ALL MATERIALS AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE GEOTECH RECOMMENDATIONS.

| BASIN | BOTTOM TOP REQUIRED/PROVID 1043.00 1045.50 19,110 CU.FT. | | | | | DEWATERIN | CLEAN-OUT LEVEL | | |
|-------|---|---------|-----------------|-----------|-----------|-----------|-----------------|-----------|--|
| | BOTTOM | TOP | REQUIRED | /PROVIDED | REQUIRED | /PROVIDED | ELEVATION | ELEVATION | |
| | 1043.00 | 1045.50 | 19,110 CU | .FT. | 34,398 CL | J.FT. | 1047.50 | 1044.75 | |
| | | | 19.489 CL | LET. | 38.299 CL | LET. | | | |

A 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 STORAGE OF 1,330 GALLONS, OR BELOW-GROUND STORAGE OF 4,200 GALLONS

THE CONTRACTOR SHALL CONTACT THE OHIO EPA AT 800-282-9378, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (440-951-5252) IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN. ANY DISCHARGE OF PETROLEUM OR PETROLEUM PRODUCTS OF LESS THAN 25 GALLONS ONTO A PREVIOUS SURFACE SHALL BE ILLEGALLY REMOVED AND PROPERLY TREATED OR PROPERLY DISPOSED OF, OR OTHERWISE REMEDIATED, SO THAT NO CONTAMINATION FROM THE DISCHARGE REMAINS ON-SITE.

CONCRETE WASH WATER AND VEHICLE TRACKING

CONTAMINATED SOILS

ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES (TSDFs).

DUST CONTROLS/SUPPRESSANTS

DUST CONTROL SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. IF POSSIBLE GRADING SHALL BE DONE BY PHASING. IF PHASING IS NOT AN OPTION, DUST SHALL BE CONTROLLED WITH WATER DURING EARTHWORK. AFTER EARTHWORK OPERATIONS, THE EXPOSED SOILS SHALL BE COVERED WITH STRAW OR MULCH UNTIL SEEDED. DUST SHALL BE CONTAINED USING WATER, OIL IS NOT TO BE USED AS A DUST SUPPRESSANT. NO DUST SUPPRESSANT SHALL BE APPLIED NEAR CATCH BASINS, STORM SEWERS OR OTHER DRAINAGE WAYS.

OPEN BURNING

OPEN BURNING IS NOT PERMITTED.

MINTERIZATION

ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 14 DAYS OR MORE MUST BE SEEDED AND MULCHED BY NOVEMBER 1 OR MUST HAVE A DORMANT SEEDING OR MULCH COVER APPLIED BETWEEN NOVEMBER 1 AND MARCH 1. PERMITS

THIS SITE IS COVERED UNDER OHIO EPA CONSTRUCTION GENERAL PERMIT #3GC07073*AG. THIS SITE IS COVERED UNDER OEPA 401 /ARMY 404 PERMIT #2013-00572.

AIR PERMITTING REQUIREMENTS

CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS INCLUDING BUT NOT LIMITED TO: MOBILE CONCRETE BATCH PLANTS. MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC. THESE ACTIVITIES WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. OPERATORS MUST SEEK AUTHORIZATION FROM THE CORRESPONDING DISTRICT OF OHIO EPA. FOR DEMOLITION OF ALL CHAPTER 8 POLLUTION/CONSTRUCTION

POST CONSTRUCTION BMP RATIONALE

THIS PROJECT CONSISTS OF A NEW SINGLE-FAMILY RESIDENTIAL DEVELOPMENT WITH ACCESS FROM BOTH SR 18 (MEDINA ROAD) AND MEDINA LINE ROAD. LOCATED IN COPLEY TOWNSHIP. THE PROJECT SITE IS APPROXIMATELY 111 ACRES AND WAS MOSTLY AGRICULTURAL/WOODED, VACANT LAND. THE SOIL TYPES RANGE THROUGHOUT THE SITE FROM B TO D. IN TOTAL THE PROPOSED PROJECT HAS OR WILL HAVE DISTURBED A TOTAL OF APPROXIMATELY 78.4 ACRES AND IS THEREBY GOVERNED UNDER THE LARGE CONSTRUCTION ACTIVITIES OF THE OHIO EPA GENERAL STORM WATER CONSTRUCTION PERMIT. THE POST-CONSTRUCTION BMP INCLUDES STORMWATER QUALITY EXTENDED DETENTION BASINS.

THE FIRST THREE PHASES OF THE PROJECT SITE BUILT 147 SINGLE FAMILY HOMES, ASSOCIATED PAVEMENT AND COMPLETE UTILITY SERVICES, SURROUNDING OPEN SPACE, AND DRAINAGE IMPROVEMENTS. THE REMAINDER OF THE DEVELOPMENT UNDERWENT ROUGH GRADING, BUT NO IMPROVEMENTS WERE BUILT.

PHASE 4 OF THE PROJECT SITE WILL CONSIST OF AN ADDITIONAL 20 SINGLE FAMILY HOMES. ROUGH GRADING FOR THIS AREA WAS COMPLETED IN PHASE

THE EXISTING AND PROPOSED DRAINAGE AREA FOR THE PROPOSED IMPROVEMENTS IS SUBDIVIDED INTO SEVEN DRAINAGE AREAS. BASED ON EXISTING OUTLET LOCATIONS. THE EXISTING WATERSHED CONDITIONS DRAIN IN THE EASTERLY DIRECTION TOWARDS OPEN WETLAND AREAS WHICH DRAINS TO THE YELLOW CREEK. THESE SITE IMPROVEMENTS ARE UNDER THE JURISDICTION OF THE SUMMIT COUNTY ENGINEER, THE SUMMIT SOIL AND WATER CONSERVATION DISTRICT, AND OEPA WATER QUALITY VOLUME REQUIREMENTS. STORMWATER MANAGEMENT HAS BEEN PROVIDED FOR THE WATER QUALITY REQUIREMENTS. AND ALL 24 HOUR STORM EVENTS HAVING AVERAGE RECURRENCE INTERVALS RANGING FROM 1 YEAR TO 100 YEARS. THE PROPOSED TREATMENT TRAIN PROCESS WILL UTILIZE SHEET FLOW EVERYWHERE THAT IT IS POSSIBLE. THE STREET STORM SEWER SYSTEMS ARE DISCHARGED INTO FOREBAY AREAS OF THE EXTENDED DETENTION BASINS. THE ENTERING WATERS ARE FILTERED THROUGH PERMANENT STONE CHECK DAMS WHICH CREATE THE FOREBAY AREAS AFTER FILTERING THROUGH THE STONE IT BECOMES SHEET FLOW THROUGH THE GRASS BOTTOMED FILTER STRIPS ACROSS THE FLOOR OF THE EXTENDED DETENTION BASIN. THERE ARE MICROPOOLS LOCATED IN FRONT OF THE CONTROL STRUCTURES THAT HAVE ADDITIONAL BUILT IN SUMPS AND PROTECTED SMALL ORIFICE TO CONTROL THE RATE OF DISCHARGE FOR THE WATER QUALITY VOLUMES. THE ORIFICES AND CONTROLS FOR THE OTHER STORM EVENTS ARE SET ABOVE THE WATER QUALITY VOLUMES. THE OUTLETS OF THE EXTENDED DETENTION BASINS ARE PROTECTED WITH ROCK CHANNEL OUTLET PROTECTION AND WITH LEVEL SPREADERS SET BETWEEN THE OUTLET PROTECTION AND THE EXIST WETLANDS/STREAMS RIPARIAN SETBACKS.

ANNUAL INSPECTIONS WILL BE PERFORMED BY THE HOME OWNERS ASSOCIATION TO DETERMINE IF THE OUTLETS HAVE ACCUMULATED DEBRIS AND WILL NEED TO BE CLEANED OUT. MAINTENANCE OF THE BASINS WILL ALSO BE THE HOME OWNERS ASSOCIATION'S RESPONSIBILITY. THEY WILL CHECK AND CLEAN OUT THE OUTLETS AND SPILLWAYS AFTER HEAVY STORM EVENTS. ADDITIONALLY, THE ASSOCIATION WILL BE RESPONSIBLE FOR PROPERLY MAINTAINING THE COMMON GRASSED AREAS TO PREVENT EROSION THROUGHOUT THE DEVELOPMENT AND REMOVING ALL DEBRIS IN THE BASINS.

SILT FENCE, INLET PROTECTION, SILT SACK (WHICH WILL REMAIN OPERATIONAL UNTIL THE PROJECT SITE IS FULLY DEVELOPED AND A NOTICE OF TERMINATION (NOT) IS SUBMITTED), SUMPS AND TRAPS IN ALL CATCH BASINS, PERMANENT SEEDING OF ALL DISTURBED AREAS THAT WILL ACT AS GRASS FILTER STRIPS AND ALL CATCH BASIN CASTING GRATES AND INLET COVERS SHALL BE SUPPLIED WITH "DUMP NO WASTE, DRAINS TO WATERWAYS" CAST IN A VISIBLE LOCATION TO PROMOTE POLLUTION PREVENTION AND CONSERVATION AWARENESS.

SITE INFORMATION

- 1. THE PREDEVELOPED CURVE NUMBER OF THE LIMITS OF CONSTRUCTION IS 81.
- 2. THE PREDEVELOPED IMPERVIOUS AREA IS 0.01%; PERVIOUS AREA IS 99.99%
- 3. THE POSTDEVELOPED CURVE NUMBER OF THE LIMITS OF CONSTRUCTION IS 84.
- 4. THE POSTDEVELOPED IMPERVIOUS AREA IS 22%; PERVIOUS AREA IS 78%
- 5. THE TOTAL AREA OF DISTURBANCE FOR THIS IMPROVEMENT PHASE IS 9.71 ACRES.
- 6. THE IMMEDIATE RECEIVING RIVER OF ALL STORMWATER RUNOFF IS THE YELLOW CREEK, WHICH IS JUST EAST OF THE SITE.
- 7. PRIOR LAND USE OF SITE WAS AGRICULTURAL CULTIVATED FARM LAND.
- 8. SITE SOIL TYPE RANGE THROUGHOUT THE SITE FROM B TO D.

AUTHORIZING CONTACT PERSON:

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OEPA PERMIT NUMBER: 3GC07073*AG ISSUE DATE: 3/7/2014

REFERENCE SHEETS SWPP 06 THROUGH 12 FOR ADDITIONAL INFORMATION

| REV. DATE | 01/23/17 | 04/17/17 | | | | | | | | |
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| CONSTRUCTION | | | | | | | | | | |
| | AS-BUILT | | | | | | | | | |
| | PROJECT MANAGER DESIGNER | | | | | | | | | |
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