INSPIRED PEOPLE ▲ CREATIVE DESIGN ▲ TRANSFORMING COMMUNITIES

GENERAL NOTES

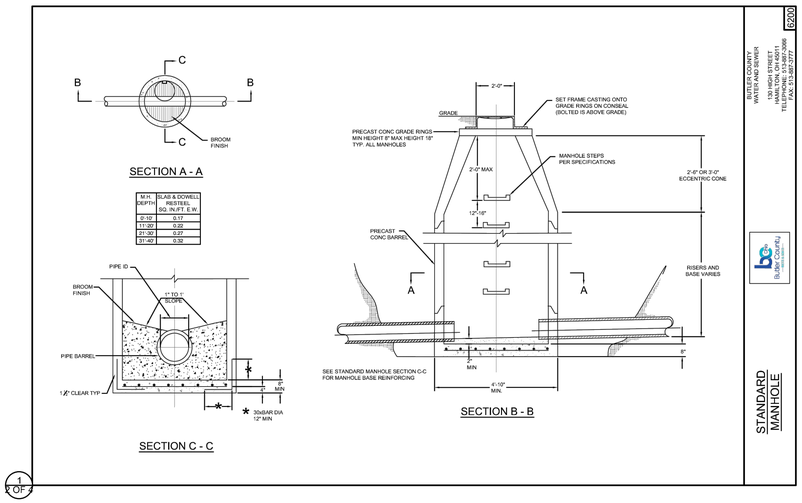
1. THE BUTLER COUNTY, AND THE CURRENT EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT CMS), INCLUDING ALL SUPPLEMENTS, SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THIS PLAN. IGNORE REFERENCES TO MEASUREMENT AND PAYMENT IN THE ODOT CMS UNLESS NOTED OTHERWISE. IN THE CASE OF CONFLICTS BETWEEN THE ODOT CMS AND THE BUTLER COUNTY REQUIREMENTS, THE BUTLER COUNTY REQUIREMENTS SHALL PREVAIL.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES WHO ARE NON-MEMBERS OF THE OHIO UTILITIES PROTECTION SERVICE AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.
3. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
4. THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS.
5. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.
6. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR EXPENSES INCURRED DUE TO SOIL CONDITIONS, GROUNDWATER, AND/OR ROCK EXCAVATION, ALL OF THESE ITEMS SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
7. THE COST OF ALL DEWATERING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
8. THE DIRECT OR INDIRECT DISCHARGE OR PUMPING OF UNFILTERED SEDIMENT-LADEN WATER INTO THE STORM DRAINAGE SYSTEM OR WATERCOURSE IS ILLEGAL AND PROHIBITED.
9. ANY WELL, WELL POINT, PIT, OR OTHER DEVICE INSTALLED FOR THE PURPOSE OF LOWERING THE GROUND WATER TO FACILITATE CONSTRUCTION OF THIS PROJECT SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 3745-9-10 OF THE OHIO ADMINISTRATIVE CODE OR IN ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AS DIRECTED BY THE DIRECTOR OF PUBLIC UTILITIES OR HIS REPRESENTATIVE.
10. ANY CONTRACTOR INSTALLING ANY WELL, WELL POINT, PIT, OR OTHER DEVICE USED FOR THE PURPOSE OF REMOVING GROUND WATER FROM AN AQUIFER SHALL COMPLETE AND FILE A WELL LOG AND DRILLING REPORT FORM WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), DIVISION OF WATER, WITHIN 30 DAYS OF THE WELL COMPLETION IN ACCORDANCE WITH THE OHIO REVISED CODE SECTION 1521.01 AND 1521.05 IN ADDITION, ANY SUCH FACILITY IS COMPLETED IN ACCORDANCE WITH SECTION 1521.16 OF THE OHIO REVISED CODE. FOR COPIES OF THE NECESSARY WELL LOG, DRILLING REPORT, OR REGISTRATION FORMS, PLEASE CONTACT: DIVISION OF WATER, OHIO DEPARTMENT OF NATURAL RESOURCES, FOUNTAIN SQUARE, COLUMBUS, OHIO 43224, (614)2656717.
11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO THE ODNR FOR THE REGISTRY, MAINTENANCE AND ABANDONMENT OF ANY WITHDRAWAL DEVICE USED IN CONSTRUCTION OF THIS PROJECT.
12. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT AND/OR FACE OF CURB, UNLESS OTHERWISE NOTED.
13. ALL SITE SIGNAGE, STRIPING COLOR AND WIDTH SHALL BE PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
14. ALL EXISTING PAVEMENTS, WALKS, CURBS, ETC, SHALL BE SAWCUT BEFORE REMOVAL. IF, DURING CONSTRUCTION, THE PAVEMENT, WALKWAY, CURB, ETC. IS DAMAGED BEYOND THE ORIGINAL SAWCUT, THE DAMAGED AREA SHALL BE RECUT TO NEAT LINES AS DIRECTED BY THE ENGINEER. PAYMENT FOR SAWCUTTING SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
15. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT TO PROVIDE A SMOOTH VERTICAL FULL DEPTH BUTT JOINT BETWEEN THE EXISTING PAVEMENT OR CURB AND THE PROPOSED PAVEMENT. CONTRACTOR SHALL LOCATE SOUND PAVEMENT EDGE AND CUT AND TRIM PAVEMENT TO A NEAT LINE. INCLUDE THE COST OF PAVEMENT REMOVAL AND DISPOSAL IN THE PRICE BID FOR THE PROJECT.

GRADING NOTES

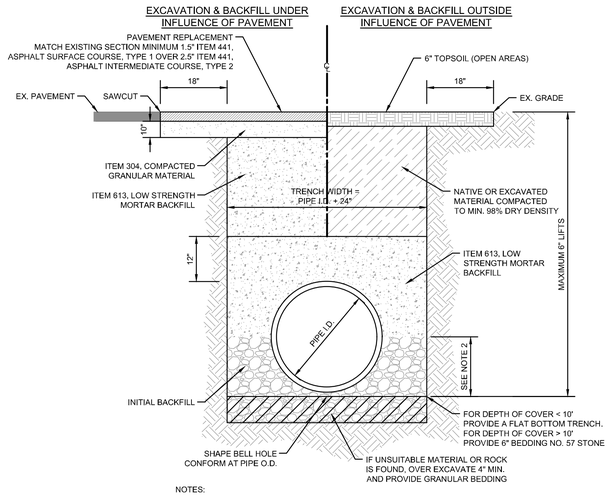
1. CONTRACTOR TO REMOVE TREES AND CLEAR AREAS AS NECESSARY TO PERFORM ALL SITE WORK INCLUDING GRADING AND UTILITY WORK.
2. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
3. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
4. ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR BURY/BORROW PITS AS NEEDED TO BALANCE THE SITE. GEOTECH AND ENGINEER MUST APPROVE AREAS PRIOR TO BURY/BORROW OPERATIONS. AS-BUILT OF BURY/BORROW PIT WILL BE REQUIRED AT COMPLETION OF CONTRACTOR WORK AND MUST BE SUBMITTED TO THE CONSTRUCTION MANAGER.
6. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL PRACTICES REQUIRED BY BUTLER COUNTY AND THE OHIO EPA.
7. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF NO SPECIFICATIONS ARE SUPPLIED, USE ODOT ITEM 659.

UTILITY NOTES

1. ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETTED INTO THE ROADWAY DITCH AS APPLICABLE. REPLACED DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION. COST OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
2. ALL EXISTING UTILITIES KNOWN TO EXIST HAVE BEEN SHOWN ON THESE PLANS IN THEIR APPROXIMATE LOCATION. PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE UTILITIES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ANY UTILITIES THAT MAY EXIST AND ARE NOT SHOWN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR PROTECTION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.
4. UTILITY POLES WITHIN INFLUENCE OF THE UTILITY OPERATIONS SHALL BE REINFORCED BY THE UTILITY COMPANY PRIOR TO THESE CONSTRUCTION ACTIVITIES. NOTIFICATION OF THE UTILITY COMPANY PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REQUIRED.
6. ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
7. ALL STORM AND SANITARY SEWER MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
8. DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
9. IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIP RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING LIFT HOLES, ETC.
10. ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER. EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE STABILIZATION.
11. ALL STORM STRUCTURES ARE ODOT TYPES UNLESS OTHERWISE INDICATED.
12. STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35 PER ODOT ITEM 707.45, PVC PROFILE PIPE PER ODOT ITEM 707.43, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, ALUMINIZED CORRUGATED METAL, ODOT ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. ALL STORM IS TO BE INSTALLED PER ODOT ITEM 611, ALL STORM PIPE USED MUST HAVE A MANUFACTURER SPECIFIED FRICTION FACTOR OF 0.013 (N=0.013) OR LESS.
13. ALL EXISTING INVERTS ALONG PROPOSED PIPE ALIGNMENTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.
14. ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
15. THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHALL BE
16. MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.
17. SANITARY SEWER SHALL BE SDR-35 OR APPROVED EQUAL AND CONFORM TO THE STANDARDS AND SPECIFICATIONS OF BUTLER COUNTY. PIPE MUST MEET MINIMUM SLOPE REQUIREMENTS OF BUTLER COUNTY AND OHIO EPA. SANITARY SEWER SHALL BE INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHERWISE NOTED. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE CROSSINGS. SANITARY SERVICE JOINTS SHALL CONFORM TO ASTM D-3212.
18. SANITARY SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL-AGGREGATES NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" ABOVE THE PIPE.



1 2 OF 4

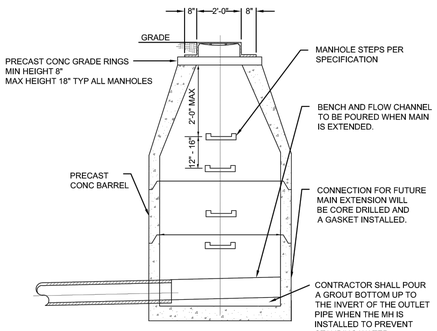


NOTES:

1. REFER TO OSHA REQUIREMENTS FOR MAXIMUM ALLOWABLE TRENCH SLOPES.
2. THIS PORTION OF THE PIPE EMBEDMENT ZONE MUST BE RECOMPACTED TO PROPER DENSITIES AFTER MOVING SUPPORT SYSTEM FORWARD.
3. PROVIDE FILTER FABRIC WHEN VERY FINE OR UNSTABLE MATERIAL IS ENCOUNTERED.
4. APPLY ITEM 407 TACK COAT TO VERTICAL FACE OF SAWCUT PAVEMENT.

UTILITY CONDUIT OPEN CUT DETAIL
N.T.S.

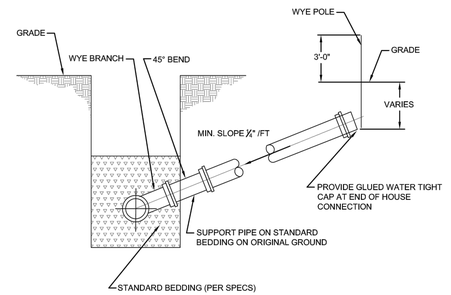
4 2 OF 4



DEAD END MANHOLE DETAIL

BUTLER COUNTY WATER AND SEWER
130 HIGH STREET HAMILTON, OH 45011 TELEPHONE: 513-887-3066 FAX: 513-887-3777
6190

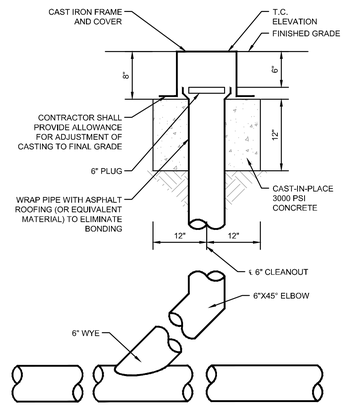
2 2 OF 4



HOUSE CONNECTION FOR SHALLOW SEWER

BUTLER COUNTY WATER AND SEWER
130 HIGH STREET HAMILTON, OH 45011 TELEPHONE: 513-887-3066 FAX: 513-887-3777
6290

3 2 OF 4



CLEANOUT DETAIL
N.T.S.

5 2 OF 4

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www.kleingers.com
6305 Centre Park Dr.
West Chester, OH 45069
513.779.7851

BRIDGEWATER CHURCH
SANITARY EXTENSION
FAIRFIELD TOWNSHIP
BUTLER COUNTY, OHIO

SEAL:
STATE OF OHIO
STEVEN R. KOBTE
E-61033
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	02/02/21	OEPA SANITARY PTI SUBMITTAL

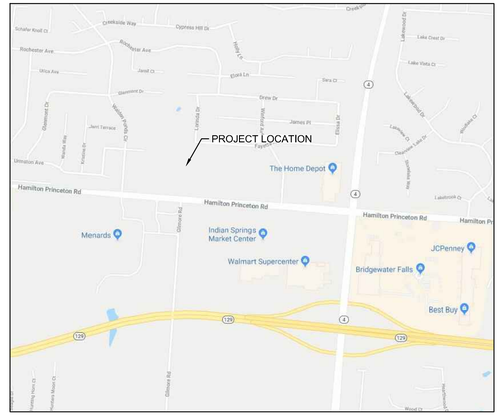
PROJECT NO: 180075.000
DATE: 02/02/2021
SCALE:

SHEET NAME:
GENERAL NOTES & DETAILS

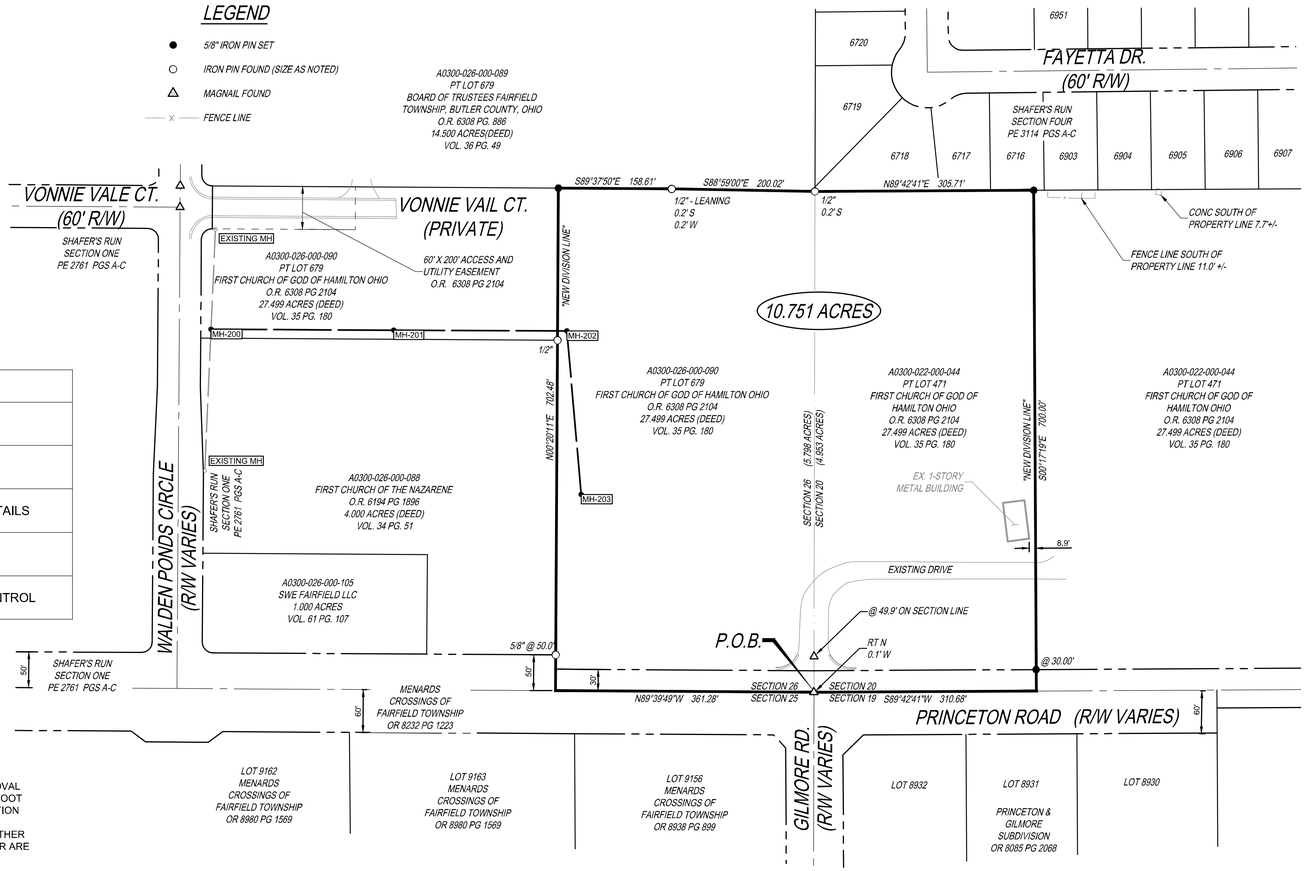
SHEET NO.
2 OF 4

INSPIRED PEOPLE ▲ CREATIVE DESIGN ▲ TRANSFORMING COMMUNITIES

BRIDGEWATER CHURCH
SANITARY SEWER EXTENSION
SECTIONS 20 & 26, T-2, R-3, BTM
FAIRFIELD TOWNSHIP
BUTLER COUNTY, OHIO



VICINITY MAP
N.T.S



SHEET INDEX	
SHEET	TITLE
1 OF 4	TITLE SHEET
2 OF 4	GENERAL NOTES & DETAILS
3 OF 4	SCHEMATIC PLAN
4 OF 4	PROFILE / EROSION CONTROL

GENERAL NOTES

- DO NOT CONSTRUCT BEFORE OHIO EPA APPROVAL
- SEWER LINES SHALL MAINTAIN A MINIMUM 10'-FOOT HORIZONTAL AND 1.5-FOOT VERTICAL SEPARATION DISTANCE BETWEEN WATER LINES
- ROOF DRAINS, FOUNDATION DRAINS OR ANY OTHER CLEAR CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED

SANITARY SEWER LEGEND

SAN — EXISTING SANITARY SEWER PIPE

EX. MH — EXISTING SANITARY SEWER MANHOLE

SAN — PROPOSED SANITARY SEWER PIPE

MH — PROPOSED SANITARY SEWER MANHOLE

NOTES:

1. *SOURCE DOCUMENTS AS NOTED.*
2. *OCCUPATION IN GENERAL FITS SURVEY.*
3. *MONUMENTATION IS IN GOOD CONDITION UNLESS OTHERWISE NOTED.*
4. *BEARINGS ARE BASED ON S.R. 35-180.*

INDEX MAP
BOUNDARY SURVEY AND DIVISION
10.751 ACRES
SECTIONS 20 & 26, T-2, R-3, BTM
FAIRFIELD TOWNSHIP
BUTLER COUNTY, OHIO

0 50 100 200

SITE DATA:

ZONING: AGRICULTURAL DISTRICT (A-1)

TOTAL SUBDIVIDED AREA:
10.751 ACRES

TOTAL SUBDIVISION LOTS:
2 LOTS

OWNER:
FIRST CHURCH OF GOD
OF HAMILTON OHIO
3100 PRINCETON ROAD
HAMILTON, OH 45011
CONTACT: DREW WILKERSON
513-867-9961

SITE ENGINEER:
THE KLEINGERS GROUP
6219 CENTRE PARK DRIVE
WEST CHESTER, OH 45069
CONTACT: STEVE KORTE
513-779-7851

SURVEYOR:
THE KLEINGERS GROUP
6219 CENTRE PARK DRIVE
WEST CHESTER, OH 45069
CONTACT: RANDY WOLFE
513-779-7851

UTILITY CONTACTS:

TELECOM

CINCINNATI BELL
221 E 4TH ST. BLDG. 43
CINCINNATI, OH 45201
(513)565-7043
CONTACT:MARK CONNER

TIME WARNER CABLE
11252 CORNELL PARK DR.
CINCINNATI, OH 45242
(513)386-5483
CONTACT: JIM O'REILLY

WATER & SEWER

BUTLER COUNTY WATER & SEWER
130 HIGH STREET
HAMILTON, OH 45011
(513)887-3066
CONTACT: STEVE THOMPSON

GAS

DUKE ENERGY
139 E FOURTH ST.
ROOM 460A
CINCINNATI, OH 45202
(513)287-1593
CONTACT: CHRIS COLYER

ELECTRIC

DUKE ENERGY
139 E. 4TH ST.
CINCINNATI, OH 45202
(513)287-3852
CONTACT: CRAIG HUTCHISON

STORM

BUTLER COUNTY ENGINEERS OFFICE
1921 FAIRGROVE AVENUE
(513)785-4121
CONTACT: ERIC POTTENGER

TRAFFIC

BUTLER COUNTY ENGINEERS OFFICE
1921 FAIRGROVE AVENUE
(513)785-4109
CONTACT: MATT LOEFFLER, PE

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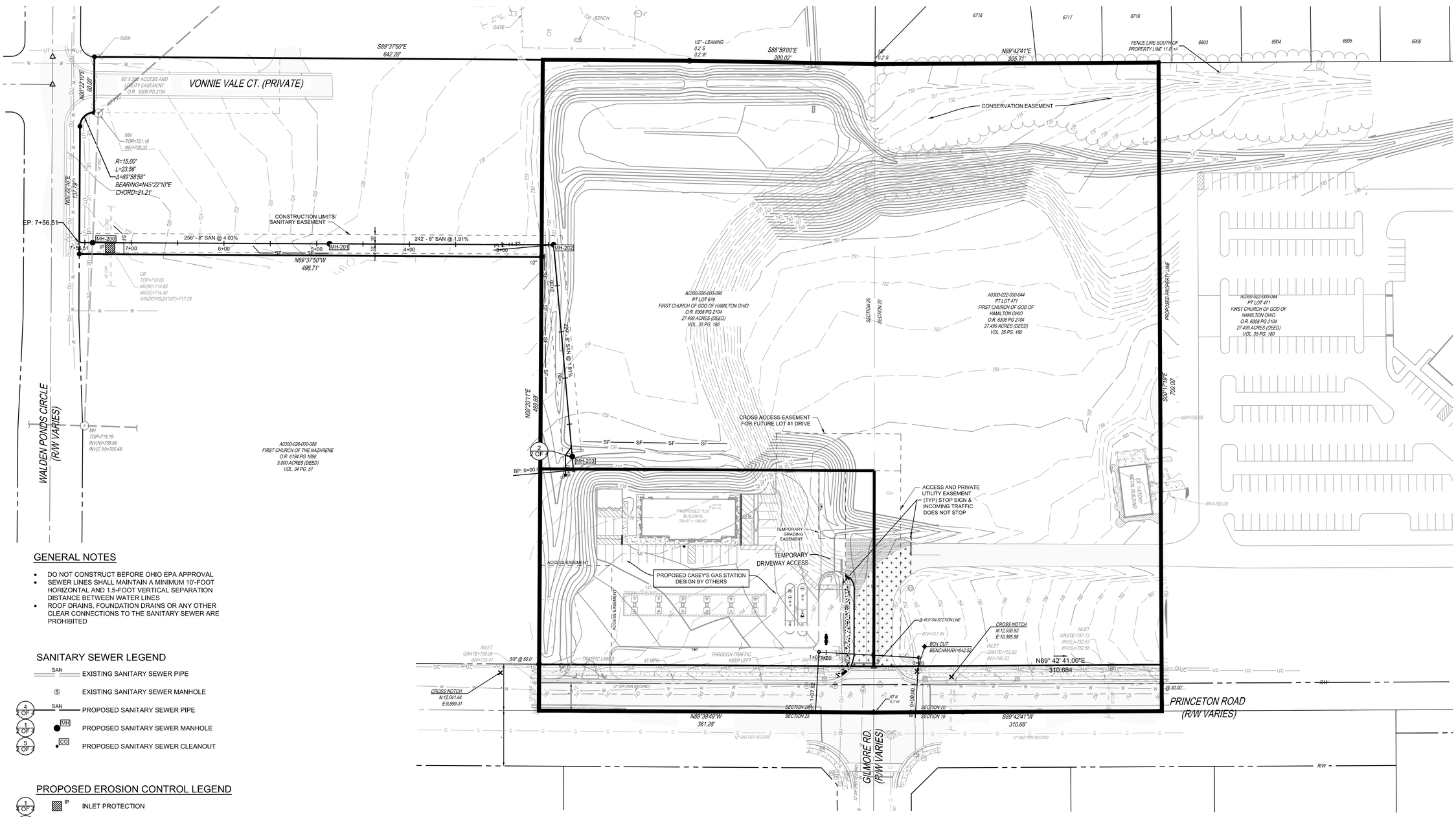
NO.	DATE	DESCRIPTION
1	02/02/21	OEPA SANITARY PTI SUBMITTAL

PROJECT NO: **180075.000**
DATE: **02/02/2021**
SCALE:

SHEET NAME:
TITLE SHEET

SHEET NO.
1 OF 4

INSPIRED PEOPLE ▲ CREATIVE DESIGN ▲ TRANSFORMING COMMUNITIES



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- SAN — EXISTING SANITARY SEWER PIPE
- Ⓢ — EXISTING SANITARY SEWER MANHOLE
- 4 / 4 OF 4 — SAN — PROPOSED SANITARY SEWER PIPE
- 1 / 4 OF 4 — MH — PROPOSED SANITARY SEWER MANHOLE
- 5 / 4 OF 4 — CO — PROPOSED SANITARY SEWER CLEANOUT

PROPOSED EROSION CONTROL LEGEND

- 1 / 4 OF 4 — IP — INLET PROTECTION
- 2 / 4 OF 4 — SF — SILT FENCE
- CONSTRUCTION LIMITS / EASEMENT

NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION, GIS AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE KENTUCKY UTILITY PROTECTION SERVICE AT 1-800-752-6007 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.

811 Know what's below. Call before you dig.

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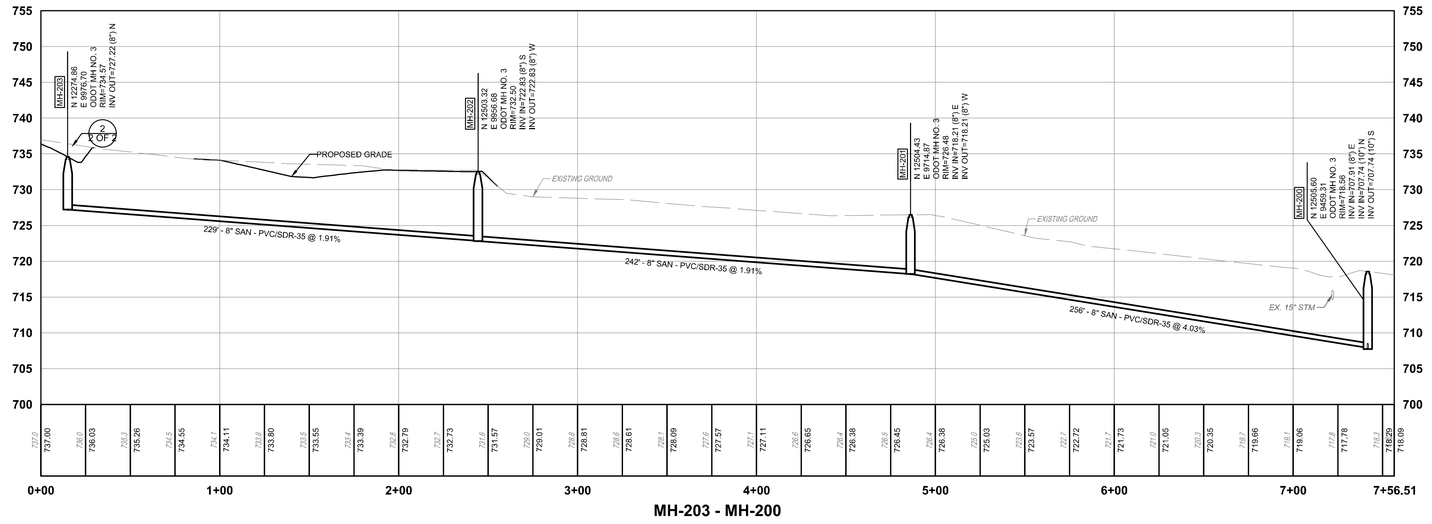
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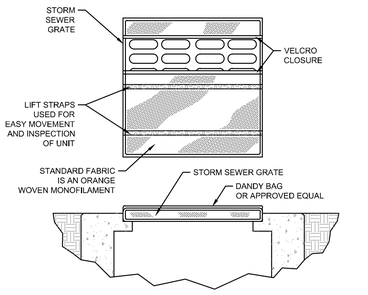
NO.	DATE	DESCRIPTION
1	02/02/21	OEPA SANITARY PTI SUBMITTAL

PROJECT NO: 180075.000
DATE: 02/02/2021
SCALE: 0 25 50 100
SHEET NAME: SCHEMATIC PLAN
SHEET NO. 3 OF 4

plotted: 2/2/2021 7:21:43 PM by: Mark Hahn
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MH-203 - MH-200



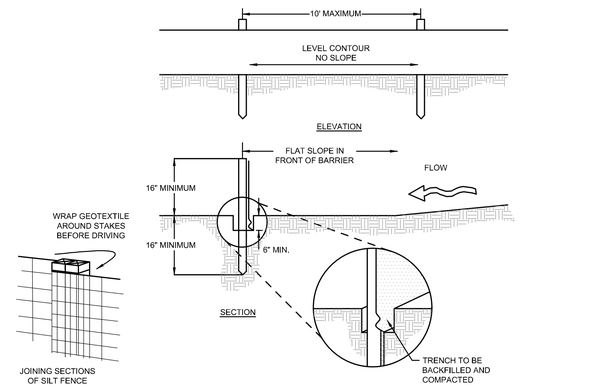
SPECIFICATIONS

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.33 (75)
UV RESISTENCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	1/MIN/M²(GAL/MIN/FT²)	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC⁻¹	2.1

INSTALLATION: THE EMPTY DANDY BAG SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS: PLACE ABSORBENT PILLOW IN POUCH, ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DANDY BAG AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

1 4 OF 4 DANDY BAG DETAIL
N.T.S.



NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND.
10. MAINTENANCE—SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

    SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.

    SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POST – THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS. THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC – SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS. (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS. (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS. (180 N)	ASTM D 4533
APPARENT OPENING SIZE	<0.84 MM	ASTM D 4751
MINIMUM PERMITTIVITY	1X10-2 SEC-1	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355

2 4 OF 4 SILT FENCE DETAIL
N.T.S.

STABILIZATION PRACTICES

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION

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

TEMPORARY SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000005. (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITH 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED.

SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

1) MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN.
2) MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
3) SYNTHETIC BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
4) WOOD CELLULOSE FIBER - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW, THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL

SEED TYPE	PER 1,000 SQ FT	PER ACRE
PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 POUND 1 POUND 1 POUND	40 POUNDS 40 POUNDS 40 POUNDS
SMALL GRAIN STRAW	90 POUNDS	2 TONS
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

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PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	02/02/21	OEPA SANITARY PTI SUBMITTAL

PROJECT NO: 180075.000
DATE: 02/02/2021
SCALE: V 0 5 10 20 / H 0 20 40 80

SHEET NAME:
PROFILE & EROSION CONTROL

SHEET NO.
4 OF 4

INSPIRED PEOPLE ▲ CREATIVE DESIGN ▲ TRANSFORMING COMMUNITIES

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