G+D BUILDING ADDITION

LOCATED O.L. 1179 IN THE CITY OF MASSILLON, STARK COUNTY, OHIO

OCTOBER 2021

LEGEND

⊡	EX. MONUMENT BOX
■	PROP. MONUMENT BOX
○	EX. MONUMENT (AS NOTED)
●	5/8" BAR W/ H&A CAP (SET)
	BENCHMARK (AS NOTED)
	BOUNDARY LINE
	CENTER LINE
	LOT LINE
	PROPERTY LINE
R/W	RIGHT OF WAY
( )	RECORD BEARINGS & DIST.
E.O.P.	EDGE OF PAVEMENT
F.F.	FINISH FLOOR
	EX. CONTOUR LINE
	PROP. CONTOUR LINE
-980-	CONTOUR LABEL
	BOLLARD
	FENCE (AS NOTED)
	GUARDRAIL
	MAILBOX
	RAIL ROAD
	SIGN
	H.C. PARKING SPACE
	DECIDIOUS TREE (AS NOTED)
	EVERGREEN TREE (AS NOTED)
	BUSH (AS NOTED)
	SOIL BORING
	POLE ANCHOR
	GUY POLE
	GENERAL POLE
	FLAG POLE
	LIGHT POLE
	LIGHT & POWER POLE
	LIGHT, POWER, TELE POLE
	LIGHT, POWER, TELE, TV POLE
	POWER POLE
	TELEPHONE POLE
	TELEPHONE, LIGHT POLE
	TELEPHONE, POWER POLE
	PULL BOX
⊠	TRAFFIC CONTROL BOX
	POLE W/ PED. SIGNAL
	POLE W/ TRAFFIC SIGNAL
	OVERHEAD ELECTRIC LINE
	UNDERGROUND ELECTRIC LINE
	ELECTRIC LINE MARKER
	ELECTRIC BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	FIBER OPTIC LINE
	FIBER OPTIC LINE MARKER

	GAS LINE
	GAS LINE MARKER
	GAS METER
	GAS VALVE
G	GAS TANK
	GAS WELL
SAN	SANITARY SEWER LINE
	SANITARY SEWER LINE MARKER
	SANITARY M.H./ C.O.
M.H.	MANHOLE
C.O.	CLEAN OUT
ST	STORM SEWER LINE
	STORM SEWER LINE MARKER
	STORM CATCH BASIN
	STORM CURB INLET
	STORM MANHOLE
	STORM DOWNSPOUT
	STORM HEADWALL
C.B.	CATCH BASIN
C.I.	CURB INLET
T/G	TOP OF GRATE
T/C	TOP OF COVER
T/CU	TOP OF CURB
	FLOWLINE
Y.D.	YARD DRAIN
D.S.	DOWNSPOUT
OT	OVERHEAD TELEPHONE LINE
UT	UNDERGROUND TELEPHONE LINE
	TELEPHONE LINE MARKER
	TELEPHONE BOX
	TELEPHONE MANHOLE
OTV	OVERHEAD TV LINE
UTV	UNDERGROUND TV LINE
	TV LINE MARKER
	TV/CABLE BOX
	TV/CABLE MANHOLE
W	WATER LINE
	WATER LINE MARKER
	WATER MANHOLE
	WATER METER
	WATER VALVE
	WATER SPRINKLER
	FIRE HYDRANT
	MONITORING WELL

BENCHMARK#: A
CHISELED 'X' ON NORTH BOLT OF FIRE HYDRANT LOCATED ON NORTH SIDE OF STATE AVE ON SUBJECT PROPERTY.

ELEV. = 938.71

BENCHMARK#: B
CUT NAIL SET 1" (+/-) UP ON POWER POLE LOCATED ON SOUTH SIDE OF STATE AVE; SECOND POLE WEST OF STATE AVE AND 3RD ST INTERSECTION.

ELEV. = 933.51

ENGINEER/ SURVEYOR

HAMMONTREE & ASSOCIATES, LIMITED
5233 STONEHAM ROAD
NORTH CANTON, OHIO 44720

ATTN– JENNIFER D. SCHUMACHER, PE, LEED–AP

PHONE– 330–499–8817

jschumacher@hammontree–engineers.com

OWNER/DEVELOPER

LOADER WELDING & FAB, INC.
3212 WATERFORD AVE NW
CANTON, OHIO 44708

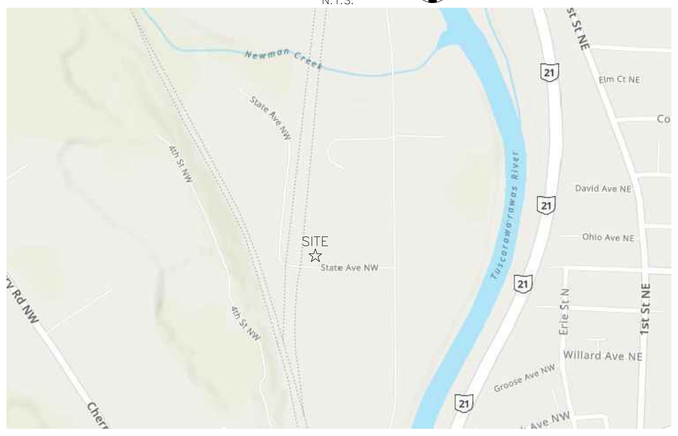
ATTN– GORDON LOADER

PHONE– 330–418–3590

INDEX OF SHEETS

VICINITY MAP

N.T.S.



SITE ADDRESS: STATE ST. NW, MASSILLON, OH 44647

APPROVALS

ONLY APPROVED SIGN PLANS BY THE CITY ENGINEER ARE TO BE USED FOR CONSTRUCTION.

APPROVED BY THE MASSILLON CITY ENGINEER THIS _____ DAY OF _____, 20__.

JASON M. POPIEL, P.E.

SANITARY

CITY OF MASSILLON
MUNICIPAL GOVERNMENT ANNEX
151 LINCOLN WAY EAST
MASSILLON, OH 44646

PH: 330–830–1722

UTILITY CONTACTS

WATER

AQUA OHIO
870 THIRD ST NW
MASSILLON, OH 44647

ATTN: JACOB FLANARY

PH: 330–832–5764 X50650

GAS

DOMINION EAST OHIO
320 SPRINGSIDE DR, SUITE 320
AKRON, OH 44333

ATTN: BRYAN DAYTON

PH: 330–664–2409

ELECTRIC

OHIO EDISON
1910 W. MARKET ST, BLDG 1
AKRON, OH 44313

PH: 800–633–4766

TELEPHONE

AT&T OHIO
50 W. BOWERY ST, 6TH FLOOR
AKRON, OH 44308

ATTN: WAYNE PROUDFOOT

PH: 330–384–3052

CABLE

MASSILLON CABLE TV
814 CABLE COURT
MASSILLON, OH 44647

PH: 330–833–5509

CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES, INCLUDING EARTHWORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNER AND ENGINEER DURING THE BIDDING PROCESS OF ANY QUANTITY DISCREPANCIES IN THE BID DOCUMENTS. ONCE THE CONSTRUCTION CONTRACT IS ISSUED, THE CONTRACTOR ACKNOWLEDGES THE CONTRACT PRICE COVERS ALL LABOR AND MATERIALS TO SUBSTANTIALLY COMPLETE THE PROJECT ACCORDING TO THE CONSTRUCTION DOCUMENTS.

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8–1–1, or 1–800–362–2764
(Non-members must be called directly)

* THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION

STATE OF OHIO
JENNIFER D SCHUMACHER E-68031
REGISTERED PROFESSIONAL ENGINEER
11/05/21

HAMMONTREE & ASSOCIATES, LIMITED
ENGINEERS, PLANNERS, SURVEYORS
5233 STONEHAM RD. NORTH CANTON, OH 44720
PHN: (330) 499–8817 FAX: (330) 499–0149
TOLL FREE: 1–800–394–8817
www.hammontree–engineers.com

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DESN BY: XXX
DRWN BY: HLC
RVWD BY: JDS
FLD BK: 100
BK PG: XXX
DATE: 10/29/21

SCALES
HORZ:
VERT:
CONTOUR INT:

COVER
G&D BUILDING ADDITION
FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #1179, THE CITY OF MASSILLON
STARK COUNTY, OH

C1.1

R:\Stark\City\Massillon\12\GD FAB & WELDING 2021\DWG\2021-10-29- Jeffries - G&D Fab Addition - Land Dev.dwg, 11/09/21 – 12:38pm; hcombs

ENGINEERS HA PLANNERS HA SURVEYORS HA

ENGINEERS HA SURVEYORS PLANNERS

R:\Stark\City\Massillon\12\GD FAB & WELDING 2021\DWG\2021-10-29- Jeffries - G&D Fab Addition - Land Dev.dwg, 11/09/21 - 1:37pm, hcombs

OHIO WATER DEVELOPMENT AUTHORITY
1.06 ACRES
P# 680914
O.L. 734
ZONE: MASS 12

AQUA OHIO INC
0.71 ACRES
P# 617669
O.L. 733
ZONE: MASS 12

1/2" REBAR IN CONCRETE FOUND AND USED

5/8" REBAR WITH CAP "DIEBEL 6673" FOUND AND USED

S 89°47'15" E 197.31'

GRAVEL DRIVE

GRAVEL DRIVEWAY

GRAVEL (TO REMAIN)

20' WATER LINE EASEMENT PLAT 455 PG 35 & PLAT 1241 PG 553

GRAVEL DRIVEWAY

ASPHALT

LOADER REAL ESTATE HOLDINGS, LLC
1.01 ACRES
P# 10010790
O.L. 1194
ZONE: MASS 12

NORTFOLK SOUTHER RR – FORMER PITTSBURGH AND FORT WAYNE RAILROAD
P# 699056
O.L. 10
ZONE: NO ZONE

GRAVEL (TO REMAIN)

LOADER REAL ESTATE HOLDINGS, LLC
2.216 ACRES
P# 10010247
O.L. 1179
ZONE: MASS 12

CONCRETE SLAB
EL 939.0

MONUMENT

5/8" REBAR WITH CAP "DIEBEL 6673" FOUND AND USED FOR SIDE LINE

R/W

OHIO PACKAGING CORPORATION
8.71 ACRES
P# 10012598
O.L. 1212
ZONE: MASS 12

N 05°53'14" E 434.44'

GRAVEL DRIVE

EXISTING PARKING (7 SPACES)

DOG

GRAVEL

S 01°03'23" E 431.56'

10' UTILITY EASEMENT INST. NO. 201810220042368

NORTFOLK SOUTHER RR – FORMER PITTSBURGH AND FORT WAYNE RAILROAD
P# 699070
O.L. 9
ZONE: NO ZONE

GRAVEL (TO REMAIN)

EXISTING BUILDING 4,000 SF F.F=939

TRAILERS

ALLIED TRUCK & TRAILER SALES LLC
1.72 ACRES
P# 10010790
O.L. 1194
ZONE: MASS 12

EXIST. CONC.PAD

8" PVC INV=936.22

GRAVEL (TO REMAIN)

MONUMENT

GRAVEL (TO REMAIN)

5/8" REBAR WITH CAP "COOPER" FOUND AND USED

GRASS

EX.STORM DETENTION

EXIST. OUTLET STRUCTURE 12" INV=937.27

EXIST. GRAVEL DRIVE (TO REMAIN)

EXIST. RCP

EXIST. GRAVEL DRIVE (TO REMAIN)

5/8" REBAR WITH CAP "DIEBEL 6673" FOUND

GROFF MARK A
0.19 ACRES
P# 603877
O.L. 2603
ZONE: MASS 12

ALLIED TRUCK & TRAILER SALES LLC
0.20 ACRES
P# 10010245
O.L. 17534
ZONE: MASS 12

N 00°32'19" W 904.83'

3RD STREET N.W.–80'

SANITARY MANHOLE
T/CASTING=937.00
8" VCP EAST INV=928.00
8" VCP WEST INV=927.85

N 89°59'03" W 249.83'

BENCHMARK A
ELEV=938.71

EXISTING EMERGENCY SPILLWAY. HIGHEST POINT ELEV. = 937.82

N 89°20'36" E 749.12'

STATE AVENUE N.W.–50'

EOP

CONC.

GRAVEL

INV. 12" W=934.95
INV. 12" E=934.89

SANITARY MANHOLE
T/CASTING=933.45
8" VCP WEST INV=927.30
8" VCP EAST INV=926.35

BENCHMARK B
ELEV=933.51

OHIO PACKAGING CORPORATION
5.18 ACRES
P# 607558
2649
ZONE: MASS 12

OHIO PACKAGING CORPORATION
0.17 ACRES
P# 608572
2649
ZONE: MASS 12

OHIO PACKAGING CORPORATION
0.17 ACRES
P# 605619
2649
ZONE: MASS 12

OHIO PACKAGING CORPORATION
0.11 ACRES
P# 611755
2649
ZONE: MASS 12

OHIO PACKAGING CORPORATION
5.18 ACRES
P# 607558
2586–2601,2648
ZONE: MASS 12

SCALE: 1 INCH = 30'
0 15' 30' 60'

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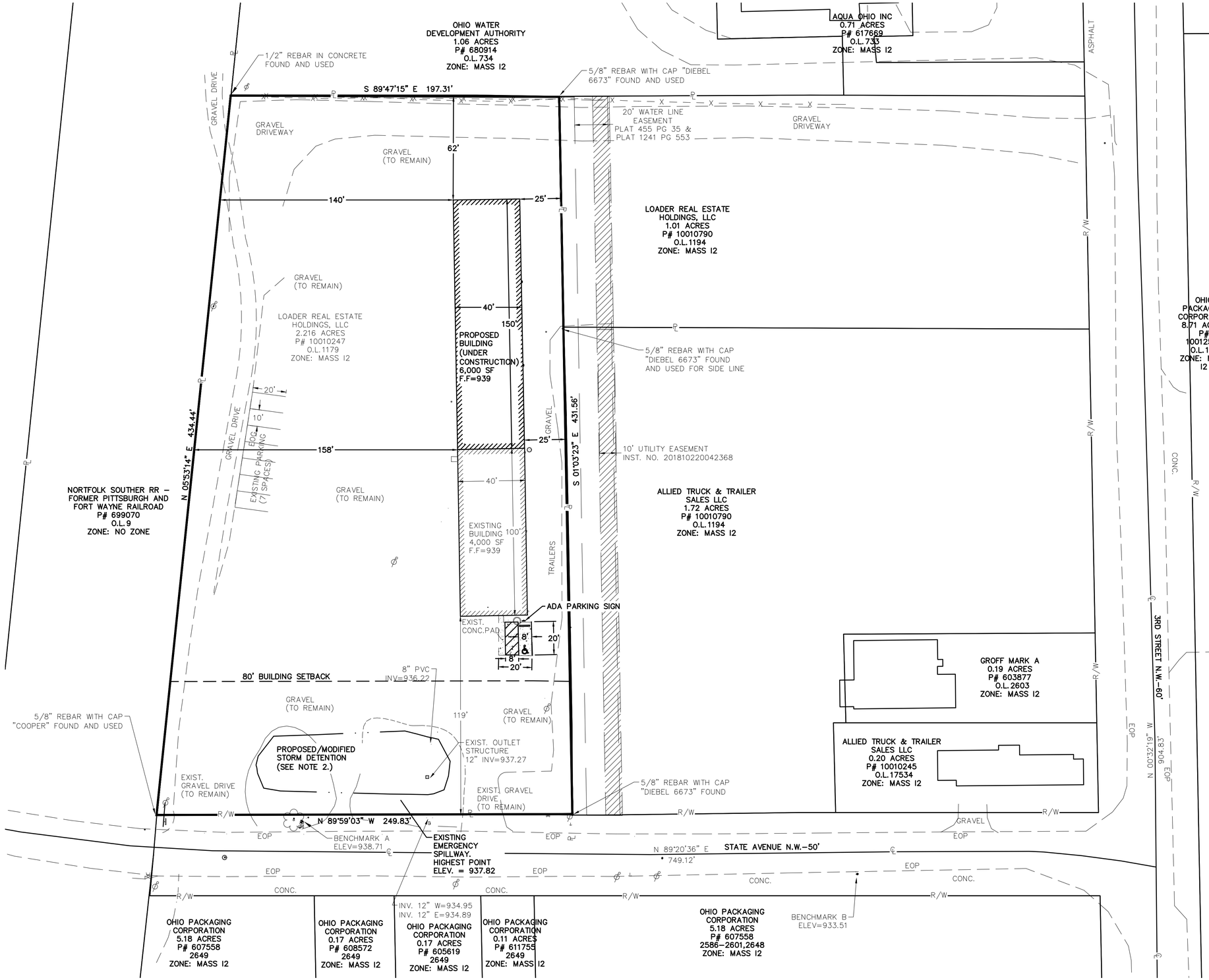
DESN BY: XXX
DRWN BY: HLC
RVWD BY: JDS
FLD BK: 100
BK PG: XXX
DATE: 10/29/21

SCALES
HORZ: X
VERT: X
CONTOUR INT: X

EXISTING SITE
G&D BUILDING ADDITION
FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #179, THE CITY OF MASSILLON
STARK COUNTY, OH

C2.1



SITE DATA

ADDRESS:
STATE STREET NW
MASSILLON, OH 44647

TOTAL SITE AREA: 2.216 AC.

AREA OF SITE TO UNDERGO EXCAVATION: 0.98 AC.

PROPOSED BUILDING AREA: 6,000 SF

PROPOSED USE:
INDUSTRIAL FABRICATION AND WELDING

ZONING

ZONED: I–2 GENERAL INDUSTRIAL

MINIMUM BUILDING SETBACKS
FRONT: 80'
SIDE: 0'
REAR: 0'

MINIMUM PARKING SETBACKS
FRONT: 6'
SIDE: 0'
REAR: 0'

PARKING

PARKING REQUIRED:
5 SPACES PLUS ONE FOR EACH ONE AND A HALF EMPLOYEES ON THE LARGEST WORKING SHIFT

LARGEST SHIFT =4 EMPLOYEES
4 / 1.5 = 3

SPACES REQUIRED = 5 + 3 = 8

PARKING PROVIDED:
8 SPACES WITH ONE BEING ADA COMPLIANT

TYPICAL SPACE SIZE: 10' x 20'

TYPICAL AISLE WIDTH: 24'

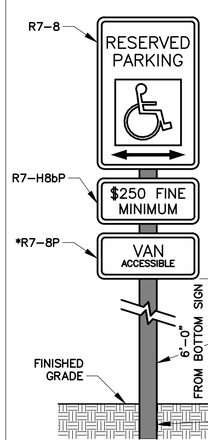
UTILITY NOTES

WATER:
NO NEW LATERALS.

SANITARY:
NO NEW LATERALS.

DRAINAGE:
RUNOFF FROM THE DEVELOPED AREAS WILL BE ROUTED THROUGH THE PROPOSED DETENTION BASIN BEFORE BEING RELEASED TO STATE AVE. ROADSIDE DITCH.

ACCESSIBLE PARKING SIGN
N.T.S.



NOTES:

DETAIL TO BE USED FOR SIGNS INSTALLED OUTSIDE PAVED AREAS.

SIGNS ARE TO CONFORM WITH THE LATEST SPECIFICATIONS FROM THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ODOT CMS ITEM 630.

SIGNS SHALL COMPLY TO ALL ADA CODES.

SIGNS WILL BE MOUNTED ON GALVANIZED POST OR ON WALL (WHERE APPLICABLE).

* ALL PARKING STALLS DESIGNATED AS "VAN" AS SHOWN IN PLAN VIEW SHALL HAVE SIGN R7-8P.

GROUND MOUNTED SUPPORT, NO. 2 POST (U-CHANNEL OR SQUARE)

EXTEND POST TO A DEPTH OF 42" MIN. BELOW FINISHED GRADE

SCALE: 1 INCH = 30'
0 15' 30' 60'

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	DESC.:	DATE:
REV. BY:		
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REV. BY:		

DESN BY:	XXX	FLD BK:	100
DRWN BY:	HLC	BK PG:	XXX
RVWD BY:	JDS	DATE:	10/29/21

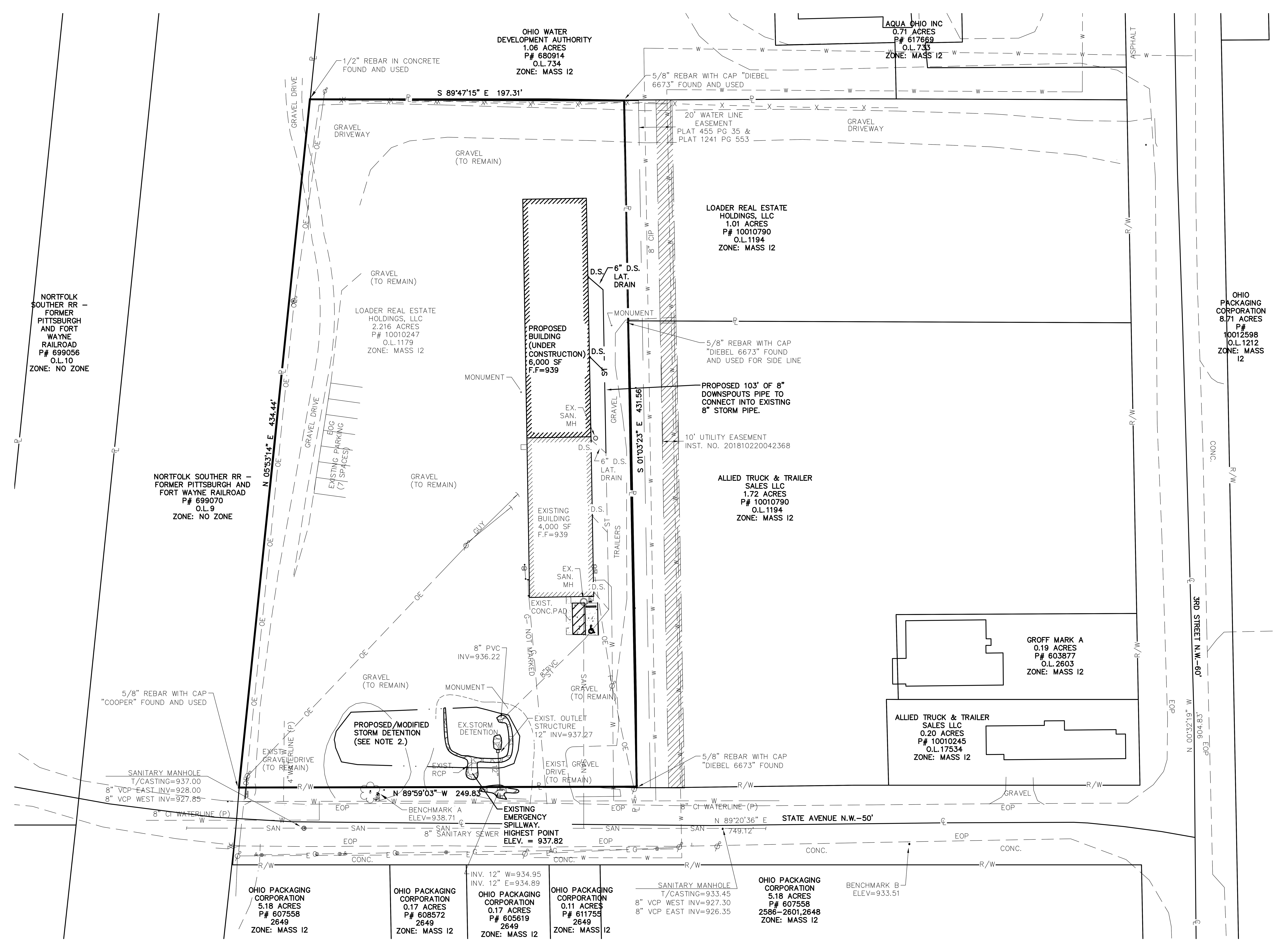
SCALES
HORZ: X
VERT: X
CONTOUR INT: X

SITE PLAN
G&D BUILDING ADDITION
FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #1179, THE CITY OF MASSILLON
STARK COUNTY, OH

C3.1

ENGINEERS PLANNERS SURVEYORS

R:\Stark\City\Massillon\12\GD FAB & WELDING 2021\DWG\2021-10-29- Jeffries - G&D Fab Addition - Land Dev.dwg; 11/09/21 - 11:48am; hcombs



NOTES

1. UTILITIES NEEDED FOR PROPOSED BUILDING WILL BE EXTENDED FROM EXISTING BUILDING. NO NEW LATERALS PROPOSED
2. EXISTING STORM DETENTION BASIN TO BE MODIFIED TO INCREASE STORAGE AREA. EXISTING OUTLET STRUCTURE AND EMERGENCY WEIR TO REMAIN AND WILL NOT NEED MODIFIED.

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0 15' 30' 60'

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RVWD BY:	JDS
FLD BK:	100
BK PG:	XXX
DATE:	10/29/21

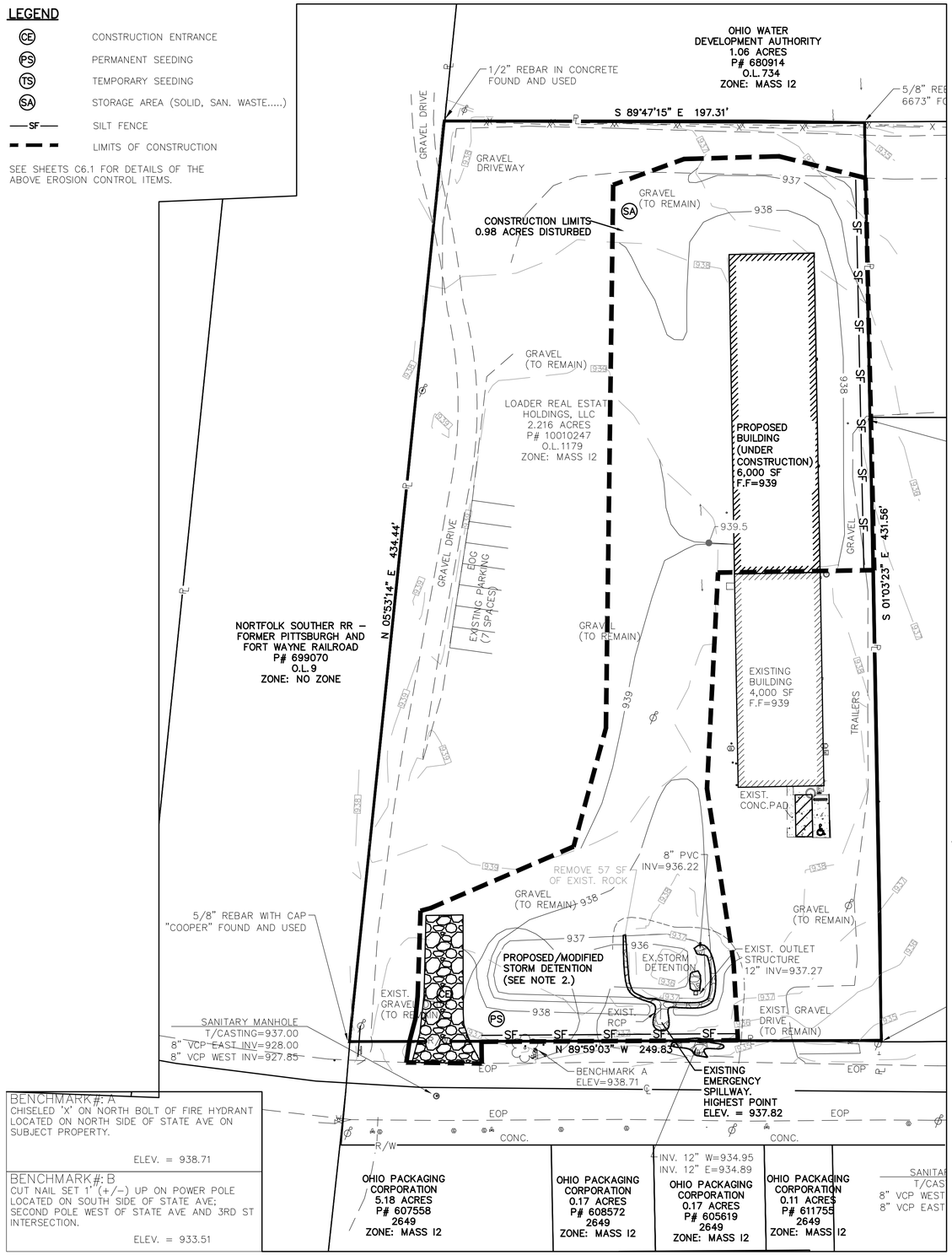
SCALES
HORZ: X
VERT: X
CONTOUR INT: X

UTILITY PLAN
G&D BUILDING ADDITION
FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #1179, THE CITY OF MASSILLON
STARK COUNTY, OH

LEGEND

- (CE) CONSTRUCTION ENTRANCE
- (PS) PERMANENT SEEDING
- (TS) TEMPORARY SEEDING
- (SA) STORAGE AREA (SOLID, SAN. WASTE.....)
- —SF— SILT FENCE
- LIMITS OF CONSTRUCTION

SEE SHEETS C6.1 FOR DETAILS OF THE ABOVE EROSION CONTROL ITEMS.



BENCHMARK#: A
CHISELED 'X' ON NORTH BOLT OF FIRE HYDRANT LOCATED ON NORTH SIDE OF STATE AVE ON SUBJECT PROPERTY.
ELEV. = 938.71

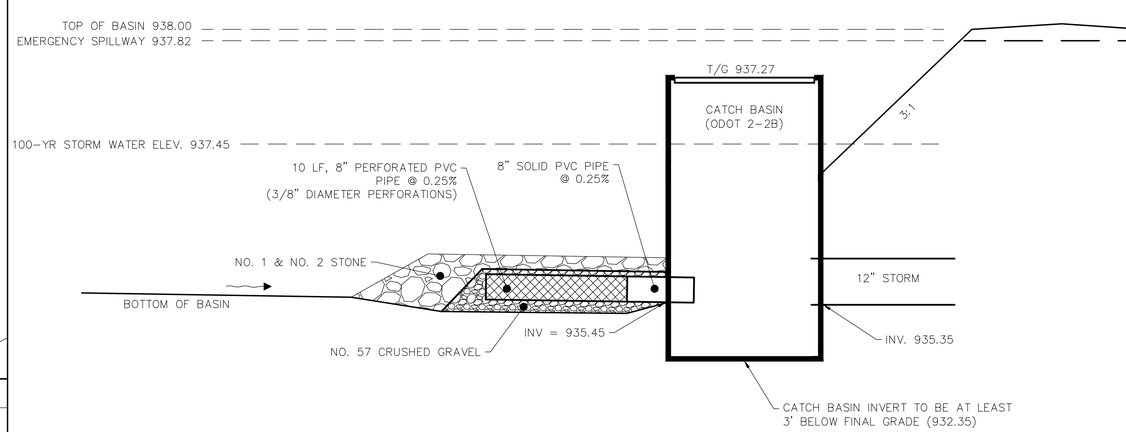
BENCHMARK#: B
CUT NAIL SET 1" (+/–) UP ON POWER POLE LOCATED ON SOUTH SIDE OF STATE AVE; SECOND POLE WEST OF STATE AVE AND 3RD ST INTERSECTION.
ELEV. = 933.51

NOTES

1. THIS SITE IS NOT LOCATED WITHIN A FLOOD PLAIN ZONE. HOWEVER, PART OF THE PROPERTY IS LOCATED WITHIN AN AREA DESIGNATED AS BEING IN ZONE X (AREA WITH FLOOD RISK DUE TO LEVEE). REFER TO FEMA FIRM MAPS NO. 39151C0191F, EFFECTIVE 9/14/2018, AND NO. 39151C0192F, EFFECTIVE 9/14/2018.
2. PROPOSED/MODIFIED DETENTION BASIN
   TOP = 938
   BOTTOM = 936
   TOTAL STORAGE= 4,948 CF

CITY OF MASSILLON NOTE:

THE CONTRACTOR SHALL PREVENT AND/OR REDUCE AND CONTROL SOIL EROSION RESULTING FROM THE PROPOSED IMPROVEMENTS. THE USE OF SILT FENCING, JUTE MATTING, TEMPORARY SEEDING, SILT CHECKS, INLET PROTECTION AROUND ALL CATCH BASINS, STABILIZED CONSTRUCTION ENTRANCES, ETC. WILL BE REQUIRED. SEDIMENT CONTROL STRUCTURES/DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE RAINWATER AND LAND DEVELOPMENT MANUAL – OHIO'S STANDARDS FOR STORM WATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION. SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUED INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS SET FORTH ON THE APPROVED STORM WATER POLLUTION PREVENTION PLAN, IF APPLICABLE, OR AS DETAILED ON THE CONSTRUCTION PLANS, AS SPECIFIED BY THE CITY OF MASSILLON."



EXISTING DETENTION BASIN OUTLET STRUCTURE DETAIL
N.T.S.

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DRWN BY: HLC
RVWD BY: JDS
FLD BK: 100
BK PG: XXX
DATE: 10/29/21

SCALES
HORZ: X
VERT: X
CONTOUR INT: X

GRADING & SWPPP PLAN
G&D BUILDING ADDITION
FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #1179, THE CITY OF MASSILLON
STARK COUNTY, OH

C5.1

CONSTRUCTION ENTRANCE

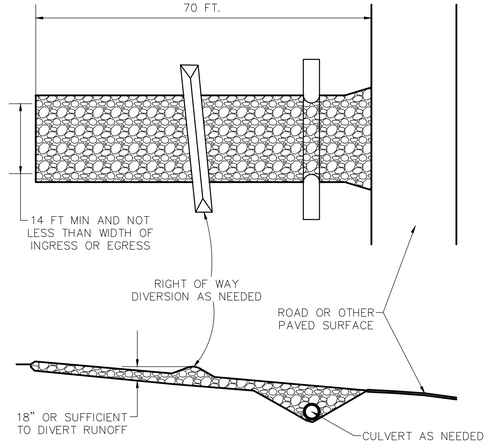
N.T.S.

1. STONE SIZE: ODOT # 2 (1.5–2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDUAL LOTS).
3. THICKNESS: THE STONE LAYER SHALL BE AT LEAST 18 INCHES THICK FOR LIGHT OR HEAVY DUTY USE.
4. THE ENTRANCE SHALL BE AT LEAST 20 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE: A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT–PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE

MINIMUM TENSILE STRENGTH	200 LBS.	MINIMUM PUNCTURE STRENGTH	80 PSI.
MINIMUM TEAR STRENGTH	50 LBS.	MINIMUM BURST STRENGTH	320 PSI.
MINIMUM ELONGATION	20%	EQUIVALENT OPENING SIZE	EOS < 0.6 MM.
PERMITIVITY	1X10–3 CM/SEC.		

6. TIMING: THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT: A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. 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.
9. 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.
10. 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.
11. REMOVAL: THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ENTRANCE.



SILT FENCE

N.T.S.

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, (SEE DETAILS).
10. MAINTENANCE––SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER\FS20 TOPS 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.

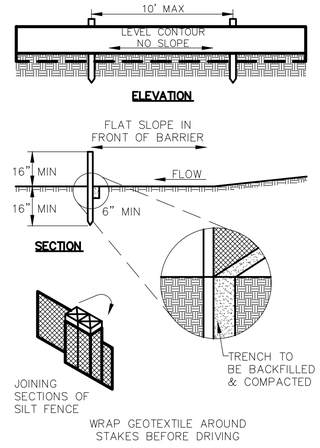
SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE–HALF OF THE HEIGHT OF THE SILT FENCE.

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
MIN TENSILE STRENGTH	120 LBS	ASTM D 4632
MAX. ELONGATION AT 60 LBS	50%	ASTM D 4632
MIN. PUNCTURE STRENGTH	50 LBS	ASTM D 4833
MIN. TEAR STRENGTH	40 LBS	ASTM D 4533
APPARENT OPENING SIZE	0.84 MM	ASTM D 4751
UV EXPOSURE STRENGTH	70%	ASTM G 4355
MIN. PERMITIVITY	1X10–2SEC.–1	ASTM D 4491



PERMANENT SEEDING

SEED MIX	SEEDING RATE		NOTES:
	LBS./ACRE	LBS./1,000 SQ. FEET	
GENERAL USE			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20–40 10–20 20–40	1/2–1 1/4–1/2 1/2–1	FOR CLOSE MOWING & FOR WATERWAYS WITH <2.0 FT/SEC VELOCITY
TALL FESCUE TURF–TYPE (DWARF) FESCUE	40–50 90	1–1 1/4 2 1/4	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE CROWN VETCH TALL FESCUE	40–50 10–20 20–30	1–1 1/4 1/4–1/2 1/2–3/4	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20–25 20–30	1/2–3/4 1/2–3/4	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES			
TALL FESCUE TURF–TYPE (DWARF) FESCUE KENTUCKY BLUEGRASS	40–50 80 5	1–1 1/4 2 1/4 0.1	
LAWNS			
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100–120	2 2	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100–120	2 1–1/2	FOR SHADED AREAS

SITE PREPARATION:
1. SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) 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 SLIP–PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
2. THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3. TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION:
1. 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 POUNDS PER 1,000–SQ. FT. OR 2 TONS PER ACRE.
2. FERTILIZER: FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN PLACE OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000–SQ. FT. OR 1000 POUNDS PER ACRE OF A 10–10–10 OR 12–12–12 ANALYSES.
3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING–TOOTH HARROW, OR OTHER SUITABLE FIELD 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. IF SEEDING OCCURS OUTSIDE OF THE ABOVE–SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDINGS:
1. SEEDINGS SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.

GRADE TREATMENT

CUT SLOPES–GREATER THAN 3:1 SLOPES

1. STAIR–STEP GRADING MAY BE CARRIED OUT ON ANY MATERIAL SOFT ENOUGH TO BE RIPPED WITH A BULLDOZER. THE RATIO OF THE HORIZONTAL DISTANCE TO THE VERTICAL CUT DISTANCE SHALL BE FLATTER THAN 1:1 AND THE HORIZONTAL PORTION OF THE "STEP" SHALL SLOPE TOWARD THE VERTICAL WALL. INDIVIDUAL VERTICAL CUTS SHALL NOT BE MORE THAN 24 INCHES ON SOFT SOIL MATERIALS AND NOT MORE THAN 36 INCHES IN ROCKY MATERIALS.
2. GROOVING MAY BE MADE WITH ANY APPROPRIATE IMPLEMENT WHICH CAN BE SAFELY OPERATED ON THE SLOPE AND WHICH WILL NOT CAUSE UNDUE COMPACTION. SUGGESTED IMPLEMENTS INCLUDE DISCS, TILLERS, SPRING HARROWS, AND THE TEETH ON A FRONT–END LOADER BUCKET. SUCH GROOVES SHALL NOT BE LESS THAN 3 INCHES DEEP NOR FURTHER THAN 15 INCHES APART.

FILL SLOPES–GREATER THAN 3:1 SLOPES

FILL SLOPES STEEPER THAN 3:1 SHALL BE GROOVED OR ALLOWED TO REMAIN ROUGH AS THEY ARE CONSTRUCTED UTILIZING METHOD (1) OR (2) BELOW.

1. GROOVING MAY BE MADE WITH ANY APPROPRIATE IMPLEMENT WHICH CAN BE SAFELY OPERATED ON THE SLOPE AND WHICH WILL NOT CAUSE UNDUE COMPACTION SUCH AS DISCS, TILLERS, SPRING HARROWS, AND THE TEETH ON A FRONT–END LOADER BUCKET. GROOVES LEFT SHALL NOT BE LESS THAN 3 INCHES DEEP NOR FURTHER THAN 15 INCHES APART.
2. AS LIFTS OF THE FILL ARE CONSTRUCTED, SOIL AND ROCK MATERIALS MAY BE ALLOWED TO FALL NATURALLY ONTO THE SLOPE SURFACE. AT NO TIME SHALL SLOPES BE BLADED OR SCRAPED TO PRODUCE A SMOOTH, HARD SURFACE.

CUTS, FILLS, AND GRADED AREAS WHICH WILL BE MOWED

1. MOWED SLOPES SHOULD NOT BE STEEPER THAN 3:1 AND SHALL AVOID EXCESSIVE ROUGHNESS. THESE AREAS MAY BE ROUGHENED WITH SHALLOW GROOVES SUCH AS THOSE, WHICH REMAIN AFTER TILLING, DISCING, HARROWING, RAKING, OR USE OF A CULTIPACKER–SEEDER. THE FINAL PASS OF ANY SUCH TILLAGE IMPLEMENT SHALL BE ON THE CONTOUR (PERPENDICULAR TO THE SLOPE).
2. GROOVES FORMED BY IMPLEMENTS SHALL BE NOT LESS THAN 1 INCH DEEP AND NOT FURTHER THAN 12 INCHES APART. FILL SLOPES THAT ARE LEFT ROUGH DURING CONSTRUCTION MAY BE SMOOTHED WITH A CHAIN HARROW OR SIMILAR IMPLEMENT TO FACILITATE MOWING.

TOPSOILING

SALVAGING AND STOCKPILING:

1. DETERMINE THE DEPTH AND SUITABILITY OF TOPSOIL AT THE SITE. (FOR HELP, CONTACT YOUR LOCAL SWCD OFFICE TO OBTAIN A COUNTY SOIL SURVEY REPORT).
2. PRIOR TO STRIPPING TOPSOIL, INSTALL APPROPRIATE DOWNSLOPE EROSION AND SEDIMENTATION CONTROLS SUCH AS SEDIMENT TRAPS AND BASINS.
3. REMOVE THE SOIL MATERIAL NO DEEPER THAN WHAT THE COUNTY SOIL SURVEY DESCRIBES AS "SURFACE SOIL" (IE. A OR AP HORIZON).
4. CONSTRUCT STOCKPILES IN ACCESSIBLE LOCATIONS THAT DO NOT INTERFERE WITH NATURAL DRAINAGE. INSTALL APPROPRIATE SEDIMENT CONTROLS TO TRAP SEDIMENT SUCH AS SILT FENCE IMMEDIATELY ADJACENT TO THE STOCKPILE OR SEDIMENT TRAPS OR BASINS DOWNSTREAM OF THE STOCKPILE. STOCKPILE SIDE SLOPES SHALL NOT EXCEED A RATIO OF 2:1.
5. IF TOPSOIL IS STORED FOR MORE THAN 21DAYS, IT SHOULD BE TEMPORARY SEEDED, OR COVERED WITH A TARP.

SPREADING THE TOPSOIL

1. PRIOR TO APPLYING TOPSOIL, THE TOPSOIL SHOULD BE PULVERIZED.
2. TO ENSURE BONDING, GRADE THE SUBSOIL AND ROUGHEN THE TOP 3–4 IN. BY DISKING.
3. DO NOT APPLY WHEN SITE IS WET, MUDDY, OR FROZEN, BECAUSE IT MAKES SPREADING DIFFICULT, CAUSES COMPACTION PROBLEMS, AND INHIBITS BONDING WITH SUBSOIL.
4. APPLY TOPSOIL EVENLY TO A DEPTH OF AT LEAST 4 INCHES AND COMPACT SLIGHTLY TO IMPROVE CONTACT WITH SUBSOIL.
5. AFTER SPREADING, GRADE AND STABILIZE WITH SEEDING OR APPROPRIATE VEGETATION.

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DATE: 10/29/21

SCALES
HORZ: X
VERT: X
CONTOUR INT: X

STORMWATER POLLUTION PREVENTION DETAILS

G&D BUILDING ADDITION

FOR: JOSEPH A. JEFFRIES
LOCATED IN THE OUT LOT #179, THE CITY OF MASSILLON
STARK COUNTY, OH

C6.1