

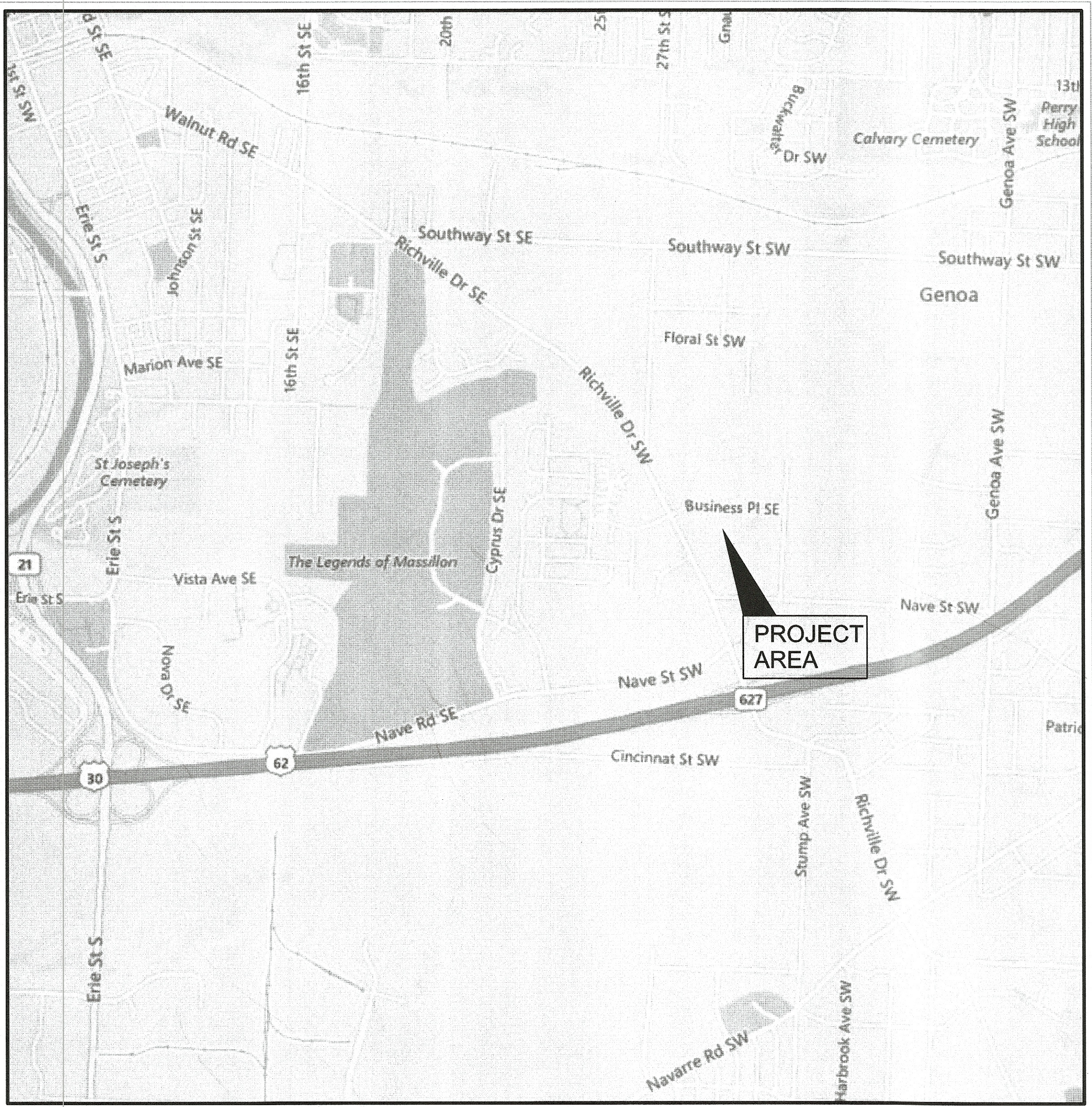
LOCK IT UP MASSILLON, LLC
CIVPRO ENGINEERING, LLC
CITY OF MASSILLON
Stark County, Ohio

PROJECT DESCRIPTION

PROPOSED STORAGE UNITS AND DRAINAGE SYSTEM.

CONVENTIONAL SIGNS

RIGHT OF WAY	EXISTING: — Ex R/W —	PROPOSED: — PE-R/W —
COUNTY LINE		
TOWNSHIP LINE		
CORPORATION LINE		
FENCE LINE	EXISTING: — X —	PROPOSED: — X —
GUARDRAIL	EXISTING: — o o o o —	PROPOSED: — o o o o —
MANHOLES	EXISTING: (S)	PROPOSED: (S), REHABILITATED: (S)
CATCH BASINS	EXISTING: (S)	PROPOSED: (S), REHABILITATED: (S)
SIGNS	1-POST: — T —, 2-POST: — T —, 3-POST: — T —, STREET: — T —	
EXISTING POLES	POWER: — P —, TELEPHONE: — T —, LIGHT: — L —, SPAN: — S —	
PROPOSED POLES	POWER: — P —, TELEPHONE: — T —, LIGHT: — L —, SPAN: — S —	
EXIST. UTILITIES	VALVE: — V —, HYDRANT: — H —, METERS: — M —, GUY: — G —	



LOCATION MAP

PORTION TO BE IMPROVED

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APPROVALS

APPROVED BY: [Signature] 12/5/19
CITY ENGINEER - JASON POPIEL, P.E. DATE

STARK SOIL & WATER CONSERVATION DISTRICT - RICH ROHN DATE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG

 Call Before You Dig
1-800-362-2764
(Non-members must be called directly)

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




PLAN PREPARED BY: CIVPRO ENGINEERING
4450 Belden Village St. NW, Suite 800
Canton, Ohio 44718
(234) 410-3913

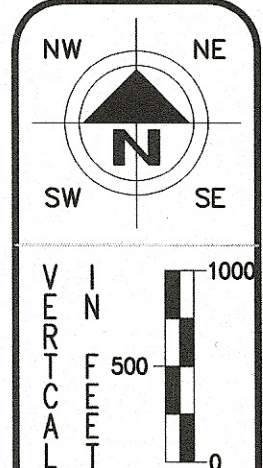
OWNER: LOCK IT UP MASSILLON, LLC
260 Ashland Road
Mansfield, OH 44905
ATTN: Mr. Charles A. Swack
(419) 524-2400
lockitupstorage@yahoo.com

CONTRACTOR: GOLDEN GIANT, INC.
P.O. Box 389
Kenton, OH 43326
ATTN: Mr. Joey Osborn
(419) 674-4038
joey@goldengiant.com

[Signature]
KEITH A. DYLEWSKI, P.E., P.S.
CIVPRO ENGINEERING, LLC



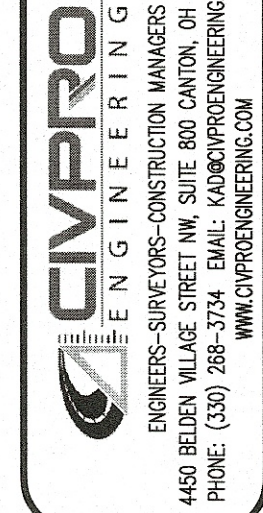
11/13/19
DATE


HORIZONTAL SCALE IN FEET
0 500 1000

CHECKED BY: KAD
DATE: Nov, 2019
DRAWN BY: KAD
DATE: Nov, 2019

REVISIONS: DESCRIPTION DATE

LOCK IT UP MASSILLON, LLC
Title Sheet
City of Massillon
Stark County, Ohio


ENGINEERS-SUPERS-CONSTRUCTION MANAGERS
4450 Belden Village St. NW, Suite 800
Canton, Ohio 44718
PHONE: (330) 288-3747 EMAIL: KAD@CIVPROENGINEERING.COM WWW.CIVPROENGINEERING.COM

DRAWING NAME: Lock It-Title
PROJECT NUMBER: 1 / 13

APPROVED

GENERAL NOTES
THE CONSTRUCTION OF THIS PROJECT SHALL BE GOVERNED BY THE CITY OF MASSILLON AND SUPPLEMENTED WHERE APPLICABLE BY THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (O.D.O. T.) MATERIAL SPECIFICATIONS, 2016.

THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PROJECT, SITE CONDITIONS, WEATHER LIMITATIONS, SCHEDULE LIMITATIONS, PLANS, SPECIFICATIONS, STANDARD DRAWINGS AND ANY OTHER DOCUMENTS ASSOCIATED WITH THE PROJECT PRIOR BIDDING ON THIS PROJECT

ANY CHANGE ORDERS TO THE ORIGINAL CONTRACT DOCUMENTS MUST BE SUBMITTED IN WRITING BY THE CONTRACTOR, TO THE ENGINEER, FOR REVIEW AND APPROVAL/DISAPPROVAL BY THE OWNER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON SUSPECTING A PENDING CHANGE ORDER. THE OWNER WILL REVIEW EACH REQUEST IN A TIMELY FASHION. ANY WORK COMPLETED BY THE CONTRACTOR WITHOUT PRIOR WRITTEN AUTHORIZATION WILL NOT BE PAID BY THE OWNER (COST WILL BE BORNE BY THE CONTRACTOR).

ANY MODIFICATION TO THE WORK SHOWN ON THESE PLANS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ENGINEER.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REQUEST AND ATTEND A PRE-CONSTRUCTION MEETING.

AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE ALL SHOP DRAWINGS AND MATERIAL SHEETS FOR REVIEW, A LIST OF ALL SUBCONTRACTOR S, A WRITTEN SCHEDULE FOR THE PROJECT, EMERGENCY NUMBERS, AND OTHER ITEMS REQUESTED BY THE ENGINEER, PRIOR TO BEGINNING ANY WORK ON THE PROJECT.

THE CONTRACTOR SHALL CONFINE WORK ACTIVITIES TO THE PROJECT ARE A, UNLESS PRIVATE AGREEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR AND PROPERTY OWNERS TO EXTEND ONTO PRIVATE PROPERTY ALL DAMAGE TO AREAS BEYOND THE WORK LIMITS SHALL BE REPAIRED TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION BEFORE CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THIS PROJECT.

ALL ROAD SURFACES, EASEMENTS OR RIGHT OF WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION OR BETTER.

PRICES BID PER FOOT FOR ALL PIPE IS COMPLETE IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS.

NO WORK OR OTHER ACTIVITIES ARE TO TAKE PLACE OUTSIDE OF THE PROPERTY LINES OF THIS PROJECT AS DEFINED IN THE CONTRACT PLANS. CONTRACTOR SHALL LIMIT THE AREA OF DISTURBANCE TO THE PROPOSED LIMITS OF GRADING.

WHERE POSSIBLE. PRIOR TO SOIL STOCKPILING, CONTRACTOR TO REVIEW THE EXISTING SITE CONDITIONS/ELEVATION PRIOR TO BID. EXCAVATE TEST PITS AS NECESSARY. OWNER TO PAY FOR MONITORING BY GEOTECHNICAL ENGINEER.

FERTILIZING, SEEDING AND MULCHING FOR RESTORATION OF DISTURBED AREAS SHALL CONFORM TO CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS.

THE EXISTING CONTOURS WERE FROM FIELD TOPOGRAPHIC SURVEY PRIOR TO SITE CLEARING, DEMOLITION AND TOPSOIL STOCKPILING. THE CONTOURS ARE IN ONE (1) FOOT INCREMENTS.

CONTRACTOR SHALL RESTORE ALL AREAS AND UTILITIES DISTURBED BY HIS WORK SHALL BE REPAIRED TO THE CONDITION EXISTING PRIOR TO CONSTRUCTION AND AS PER CONTRACT DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO EXISTING UTILITIES, BUILDINGS, ROADWAYS, STRUCTURES AND SITE CONDITIONS RESULTING FROM HIS WORK.

CONTRACTOR SHALL STRICTLY ADHERE. TO EROSION CONTROL PLAN. SEE STORM WATER POLLUTION CONTROL SHEETS AND DETAILED EROSION CONTROL NOTES. TEMPORARY WATER POLLUTION. SOIL EROSION AND SILTATION CONTROL MAY BE REQUIRED IN ACCORDANCE WITH ITEM 207 OF THE O. O. T. CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ALL DISTURBED SIGNS. GUARD RAIL, MAIL AND/OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE CITY OF MASSILLON.

ALL DISTURBED AND/OR DAMAGED SEWER PIPES, SEWER APPURTENANCES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND /OR REPLACED AS DIRECTED BY THE CITY OF MASSILLON.

ALL COSTS FOR THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT WITH THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

CONTACT: THE CITY OF MASSILLON
151 LINCOLN WAY E
MASSILLON, OH 44641
(330)830-1922
(330)830-1786

SAFETY
THE CONTRACTOR AND SUBCONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTION AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

THE ENGINEER RESERVES THE RIGHT TO SHUT-DOWN THE PROJECT WITH NO RESPONSIBILITY TO DELAY CLAIMS OR PROJECT SCHEDULE, SHOULD THE CONTRACTOR FAIL TO PROVIDE A SAFE ENVIRONMENT FOR WORKERS AND /OR THE PUBLIC.

WORK LIMITS
THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

UTILITIES

THE FOLLOWING UTILITIES MAY BE LOCATED WITHIN THE WORK LIMITS: UTILITY & CONTACT (IF APPLICABLE) PHONE

CITY ENGINEER, JASON POPIEL, PE	(330) 830-1722
CITY OF MASSILLON (STORM, SANITARY)	(330) 830-1722
AQUA OHIO	(330) 832-5764
MCTV	(330) 833-4134
FIRST ENERGY	(330) 830-7056
DOMINION	(330) 478-1700
AMERITECH	(330) 834-8057

CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 1 -330-786-3145

EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED UPON THE BEST AVAILABLE INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION OF PROPOSED PIPES OR FACILITIES TO VERIFY THE REQUIRED VERTICAL AND HORIZONTAL CLEARANCE IS AVAILABLE, PRIOR TO CONSTRUCTION OF THE PROPOSED FACILITY. IN THE CASE OF CONFLICT BETWEEN UTILITIES, THE ENGINEER SHALL DETERMINE THE PROPOSED COURSE OF ACTION TO ELIMINATE THE CONFLICT. 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.

HE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES. ALL EXISTING UTILITIES, SERVICE LINES, ETC., DAMAGED DURING CONSTRUCTION OF THE PROJECT SHALL BE REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER

AT ALL UTILITY CROSSINGS, THE TRENCH BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL BETWEEN THE PIPES.

ALL EXISTING MANHOLES, CATCH BASINS, UTILITY BOXES, VALVES BOXES, ETC. SHALL BE ADJUSTED TO MATCH THE FINISHED GRADE OF THE PROJECT.

STORM SEWER SYSTEM
ALL STORM STRUCTURES SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611 , CONSTRUCTED PER THE STANDARD DRAWING REFERENCED IN THE PLANS, OR AS MODIFIED BY SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE MATERIALS SHALL BE PRECAST CONCRETE ONLY.

ALL STORM GRATES SHALL BE "BICYCLE SAFE" AND "ADA COMPLIANT".

ALL STORM PIPES SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611 , OR AS MODIFIED BY SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE STORM SEWER MATERIALS SHALL BE RCP (706.02), HDPE (707.33), OR PVC (707.42,707.43).

ALL STORM SEWER S UNDER PAVEMENT SHALL BE ODOT TYPE B. ALL DRIVE PIPES SHALL BE ODOT TYPE D. ALL CULVERTS SHALL BE ODOT TYPE A.

ALL UNDERDRAINS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 605, OR A S MODIFIED BY SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE MATERIALS SHALL BE HOPE (707.31) OR PVC (707.41).

ALL ROOF DRAIN COLLECTOR S SHALL MEET THE REQUIREMENTS OF ODOT ITEM 605, OR AS MODIFIED BY SPECIFIC DETAILS INCLUDED IN THIS PLAN. ACCEPTABLE MATERIALS SHALL BE HOPE (707. 33) OR PVC (707.45).BACKFILL FOR ALL PIPES WITHIN THE INFLUENCE LINE OF THE PAYEMENT (STREET,DRIVEWAYS, SIDEWALKS, ETC.) SHALL BE FULL DEPTH COMPACTED GRANULAR EMBANKMENT MEETING THE REQUIREMENTS OF ODOT ITEM 611. THE INFLUENCE LINE OF THE PAYEMENT IS DEFINED AS A LINE EXTENDING DOWNWARD AT A 45 DEGREE ANGLE FROM A POINT 2 FEET BEYOND THE PAVEMENT. COMPACTION AND TESTING REQUIREMENTS SHALL MEET THE ODOT SPECIFICATION.

ALL EXISTING PIPES, ROOF DRAINS, DRAIN TILES, SUMP PUMP CONNECTIONS, SPRING DRAINS. OR FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE CONNECTED TO THE STORM SEWER SYSTEM OR ROOF DRAIN COLLECTOR SYSTEM, AS DIRECTED BY THE ENGINEER.

ALL COSTS FOR THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT WITH THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATION.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 ITEM.

CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS;

CONSTRUCTION NOTES FOR SANITARY & STORM SEWER INSTALLATION (S-1 & S-2)
*SHEET REFERENCES LISTED BELOW REFER TO CITY OF MASSILLON STANDARD CONSTRUCTION DRAWINGS

1. A) SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SCHEDULE 35 ASTM D- 3034 WITH RING-TITE FACTORY INSTALLED RUBBER SEALING RING
2.ASTM C-443) TO DEPTH OF 17 FT.

B) FOR DEPTHS OF 17 FT. TO 28 FT. SDR 26 ASTM D3034 SHALL BE USED.

C) THE SANITARY PIPE FOR DEPTHS GREATER THAN 28 FT. SHALL BE APPROVED BY THE CITY ENGINEER

2.RCP FOR 12" AND 15" SHALL BE A CLASS IV TYPE. CLASS III FOR 18" AND LARGER PIPE SHALL BE CLASS III WITH LOAD BEARING QUALIFICATION APPROVED BY THE CITY ENGINEER. CLASS IV PIPE SHALL BE USED IN CASES OF DEEP SEWERS OR HEAVY LOADS.

3.STORM SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SCHEDULE 35 ASTM D-3034 WITH RING-TITE FACTORY INSTALLED RUBBER SEALING RING (ASTM C-443) OR RCP, WITH NEOPRENE RUBBER 'O' RING GASKETS.

4.THE CITY MAY CONSIDER THE ON SITE USE OF CORRUGATED SMOOTH INTERIOR HOPE PIPE FOR STORM SEWERS AS SPECIFIED ON SHEET S-18 & S-19.

5.MANHOLE TO MANHOLE DISTANCE SHALL NOT EXCEED 400 FEET.

6.WELL POINTS SHALL BE INSTALLED AT THE DOWN STREAM MANHOLE OF ALL SANITARY MAIN SYSTEMS FOR THE PURPOSE OF MEASURING GROUND WATER, SO AS TO CALCULATE REQUIRED AIR PRESSURE. SEE SHEET S- 2 SANITARY LINE AIR TESTING.

7.SANITARY MANHOLE S SHALL MEET ASTM C -478 FOR MATERIAL AND ASTM C-443 FOR JOINTS
8.FLEXIBLE GASKETS ON ALL SEWER LINE CONNECTIONS AND ALL PRECAST MANHOLE COLLARS SHALL BE ASTM C-923.

9. ALL SANITARY MAINLINE RUNS SHALL END WITH A MANHOLE.

10. ALL MANHOLE CASTINGS ARE TO BE E. J.I.W. 1 040 SERIES HEAVY DUTY CASTING. SANITARY MANHOLE LIDS SHALL BE TYPE "A" GASKET SEAL, "WATERTITE" TYPE WITH 'O' RING GASKETING (ASTM C- 443) EXCEPTING THAT HEAVY DUTY BOLT DOWN CASTING AND COVER (E.J.I. W. 1 040- WT) SHALL BE USED WHENEVER A SANITARY OR STORM MANHOLE IS IN AN OFF-SITE EASEMENT, NEAR A WATERWAY OR WITHIN A ROADWAY ARE AS.

11.ALL ADJUSTMENTS TO CASTING SHALL BE MADE WITH PRECAST CONCRETE GRADE RINGS.

12. ALL PAVEMENT BASINS (i. e. CATCH & INLET) SHALL BE BROUGHT TO GRADE WITH PRECAST OR HAYDITE BRICK & MORTAR. PRECAST IS PREFERRED. CITY WILL CONSIDER EQUAL TO PRECAST ONLY IN WRITING. RED CLAY BRICK WILL NOT BE ALLOWED.

13. FLOW LINES SHALL BE FORMED SO AS TO MATCH ALL PIPE PENETRATION INVERTS.

14. SANITARY SEWER MAINS AT MANHOLES PROPOSED WITHIN 2 FEET OF EXISTING INVERT ELEVATION SHALL BE REQUIRED TO MATCH THE EXISTING INVERT.

15. SANITARY SEWERS IN EXCESS OF 4 FEET SHALL REQUIRE A PRECAST EXTERIOR DROP MANHOLE. (REFERENCE SHEET S-13)

16. PVC SANITARY AND STORM MANHOLE CONNECTIONS SHALL BE THE KOR -N-BOOT TYPE .

17. FOR DROP MANHOLE INSTALLATIONS, SEE SHEET S-13 AND S-14 FOR DETAILS.

18. A MONITORING MANHOLE SHALL BE REQUIRED FOR ALL COMMERCIAL AND INDUSTRIAL APPLICATIONS DURING DEVELOPMENT. THE MONITORING MANHOLE SHALL BE PLACED AS CLOSE TO THE ESTABLISHED RIGHT OF WAY AS POSSIBLE.

19. SANITARY, STORM AND WATER LINE EASEMENTS SHALL BE PROVIDED WITH CITY ACCESS FOR THE PURPOSE OF MAINTENANCE OF UTILITIES. CITY ACCESS IS TO BE A HARDENED SURFACE SUCH AS AGGREGATE, ASPHALT, CONCRETE BLOCKS WITH GRASS GROWTH OR INFORM ACCEPTABLE TO THE CITY UTILITY DEPARTMENT TO BE DETERMINED AT THE TIME OF PLAN REVIEW. SAID EASEMENTS SHALL BE DESIGNATED AS BLOCK S.

20. WHERE A STORM SYSTEM IS PROPOSED ALONG AN EXISTING ROADWAY, AREA DRAINS SHALL BE PROVIDED FOR EACH PROPERTY. LOCATION, SIZE AND MANNER OF

CONNECTION TO THE STORM SYSTEM SHALL BE DETERMINED AT THE PLAN REVIEW STAGE.
21. IN NO CASE SHALL SANITARY OR STORMS LATERALS BE DIRECTLY CONNECTED INTO A MANHOLE.

22. EACH SUBLOT IS TO BE PROVIDED WITH ITS OWN STORM CONNECTION TO BE USED BY THAT SUBLOT ONLY. STORM CONNECTIONS SHALL NOT BE PERMITTED TO BE SHARED BY ADJACENT PROPER TIES.

23. STORM SEWER PVC PIPE CONNECTIONS INTO RCP STORM SHALL BE WITH AN INSTALLED TEE OR SOLID CONCRETE BRICK AND MORTAR

24. RCP STORM SEWER CONNECTIONS INTO RCP STORM SHALL BE WITH AN INSTALLED TEE OR SOLID CONCRETE BRICK AND MORTAR

25. ALL LATERALS SHALL HAVE A DEPTH OF (9) NINE FEET AT ITS RIGHT OF-WAY TERMINUS POINT OR DEEP ENOUGH TO SERVICE THE LOWEST POINT OF THE BUILDING OR A DEPTH IN RELATION TO THE DEPTH OF SANITARY SYSTEM.

26. CLAY DAM IS TO BE PROVIDED 6 FT. FROM THE LATERAL TERMINUS FOR BOTH SANITARY & STORM.

27. CROSSING AS HEREIN DEFINED SHALL BE EITHER PERPENDICULAR TO ANY PART OF A SKEW OR ANGLE AT THE CROSSING.

28. MINIMUM OF 6" CLEARANCE SHALL BE MAINTAINED BETWEEN THE CASING OR AND ANY CROSSING PIPE.

29. PVC SAN. OR PVC STM. MAINS MAY BE INSTALLED IN A STEEL CASING, WITH GROUTING, TO A DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING.

30. WHERE THE SAN. LAT. , STM. LAT OR SAN., STM. MAIN IS WITHIN 18" OF THE WATER MAIN, D.I.P. CLASS 52 SHALL BE USED @ 10' EACH SIDE OF THE CROSSING, 150 PSI SHALL BE PROVIDED.

31. WHERE THE SANITARY OR STORM LATERAL IS LESS THAN 3 FT.IN DEPTH OR WITHIN 12" OF THE WATERMAIN, D.I.P. CLASS 52 SHALL BE USED.

32. TRANSITIONAL ADAPTERS ARE TO BE USED FROM PVC TO D.I.P. PREFERRED SINGLE UNIT ADAPTER IS SPECIFIED FITTINGS 581056 SWR . 6" GXGDRI8CDD XS WR OR EQUAL.FERNCO FITTINGS WILL NOT BE PERMITTED IN PLACED OF ADAPTERS.

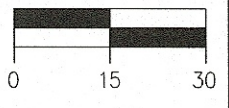
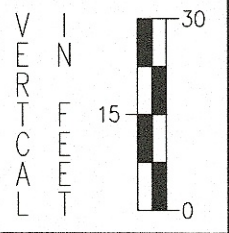
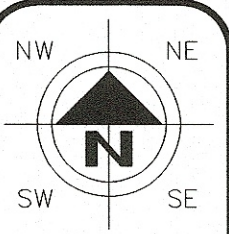
33. PVC SANITARY SEWER REPAIRS SHALL BE MADE USING SOLID SLEEVE COUPLINGS ONLY. FERNCO FITTINGS SHALL NOT BE PERMITTED FOR SANITARY REPAIRS

34. PVC STORM SEWER REPAIRS SHALL BE MADE USING SOLID SLEEVE COUPLINGS OR FERNCO FITTINGS.

35. SHOULD EXCAVATION ENCOUNTER EXISTING DRAIN LINES, REPAIR SHALL BE MADE VIA A MINIMUM (6") SIX INCH TEE OR K OR -N-SEAL BOOT INTO THE STORM SYSTEM. (6") SIX INCH PVC SO R 35 PIPE TO THE RIGHT-OF- WAY LINE, USING A REDUCER AND/OR VARIOUS BENDS TO MAKE THE CONNECTION. FENCES MAY BE USED IN THIS APPLICATION.

36. WHEN A WATER SERVICE AND /OR GAS SERVICE IS DISTURBED OR DISCONNECTED DURING TRENCH OR SHEETING EXCAVATION, SUCH SERVICES SHALL BE PLANKED USING 2"x8" HARDWOOD MINIMUM, 18" INTO VIRGIN SOIL , EACH END.

37. UPON REVIEW OF THE CITY ENGINEER , IF AN ATTRACTIVE NUISANCE OR ANY OTHER SAFETY HAZED IS DEEMED TO EXIST, THE USE OF A STEEL SAFETY RACK OR "CHILD PROOF BARS" WILL BE REQUIRED. REFER TO SHEET S-20 FOR REFERENCE DETAILS.



HORIZONTAL
SCALE IN FEET

CHECKED BY:
KAD

DATE:
July, 2018

DRAWN BY:
KAD

DATE:
July, 2018

REVISIONS:	DESCRIPTION
	DATE

LOCK IT UP MASSILLON, LLC

General Notes
City of Massillon
Stark County, Ohio

CIVIPRO
ENGINEERING
4450 BETHEL RD., SUITE 200
MASSILLON, OH 44641
PHONE (330) 268-3724 EMAIL: KAD@CIVIPROENGINEERING.COM
WWW.CIVIPROENGINEERING.COM

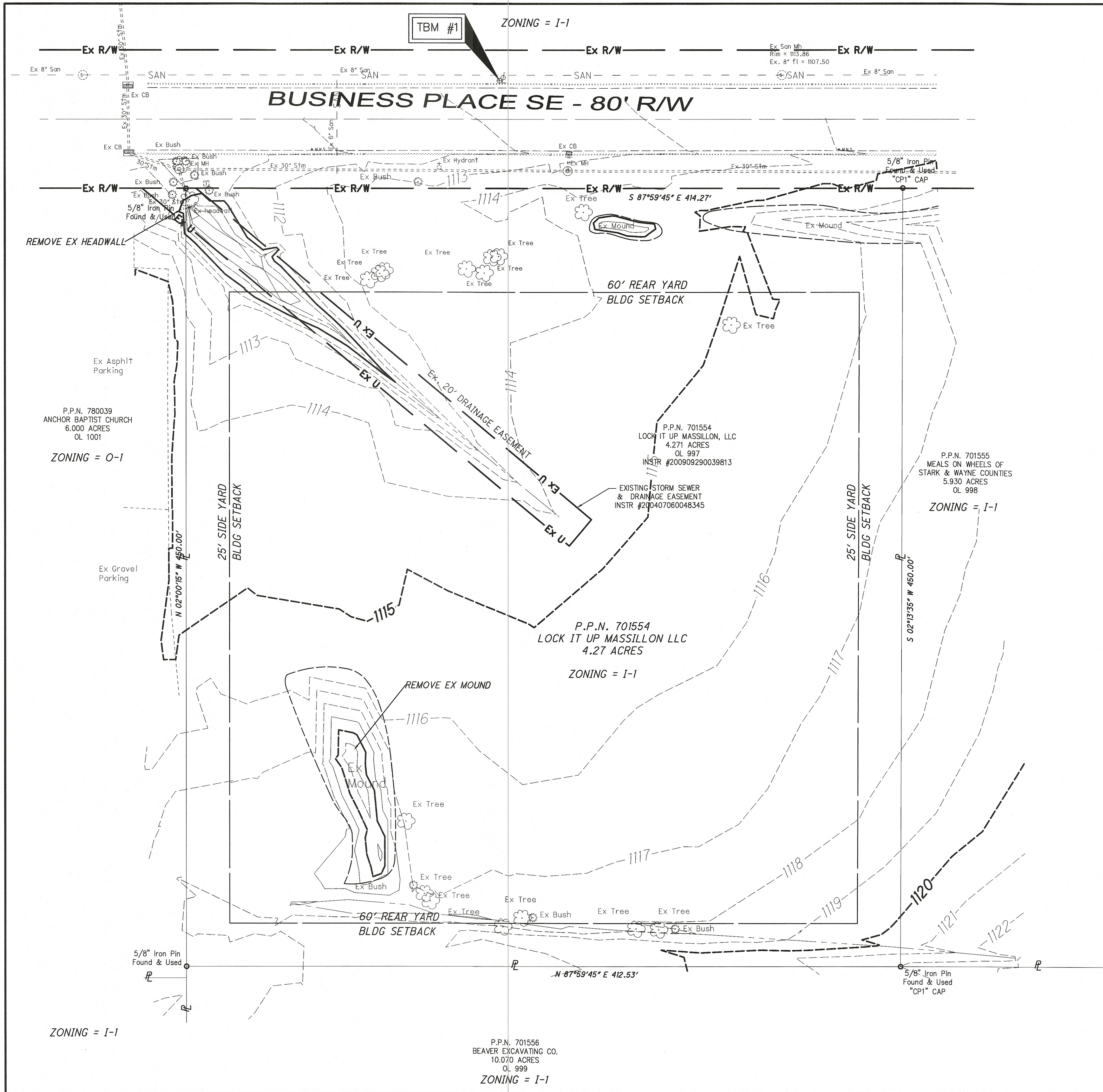
DRAWING NAME:

xxxx.DWG

PROJECT NUMBER:

xxxx.DWG

2 / 13



NOTE:

CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING, AND MAINTAINING THE WORK CONDITION OF ALL EXISTING UTILITIES AND STRUCTURES THAT ARE TO REMAIN ON SITE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE AT THEIR OWN EXPENSE ANY UTILITIES OR STRUCTURES DAMAGED BY CONSTRUCTION TO THE OWNERS SATISFACTION.

CONTRACTOR SHALL REPAIR ALL REMAINING PAVEMENT ALONG SAW CUTS PER DETAIL.

NW NE
SW SE

V
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T
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C
A
L

0 15 30

HORIZONTAL
SCALE IN FEET

CHECKED BY:
KAD

DATE:
Sept, 2018

DRAWN BY:
KAD

DATE:
Sept, 2018

REVISIONS:	DATE	DESCRIPTION

LOCK IT UP MASSILLON, LLC
Existing Conditions Plan
City of Massillon
Stark County, Ohio

TMB #1
TOP OF LIGHT POLE CONCRETE FOUNDATION
62' NORTH OF NORTH PROPERTY LINE AND
230' WEST OF EAST PROPERTY LINE
ELEV. 1112.44

CONTROL

DESCRIPTION	NORTH	EAST
CP1 (IPF)	404381.2569	2250864.1396
CP2 (IPF)	403931.4987	2250846.6864

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS
BEFORE YOU DIG



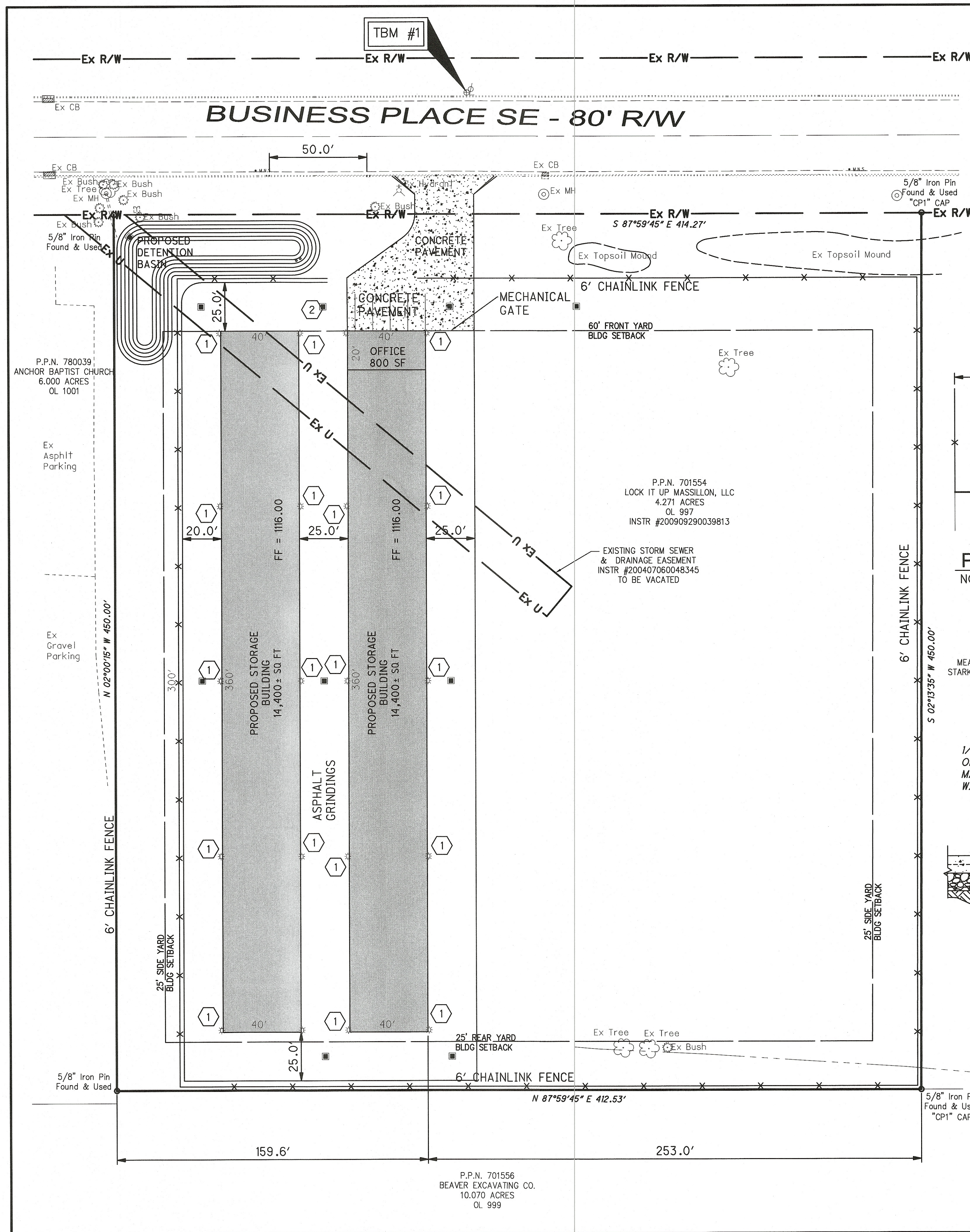
Call Before You Dig
1-800-362-2764

(Non-members must be called directly)

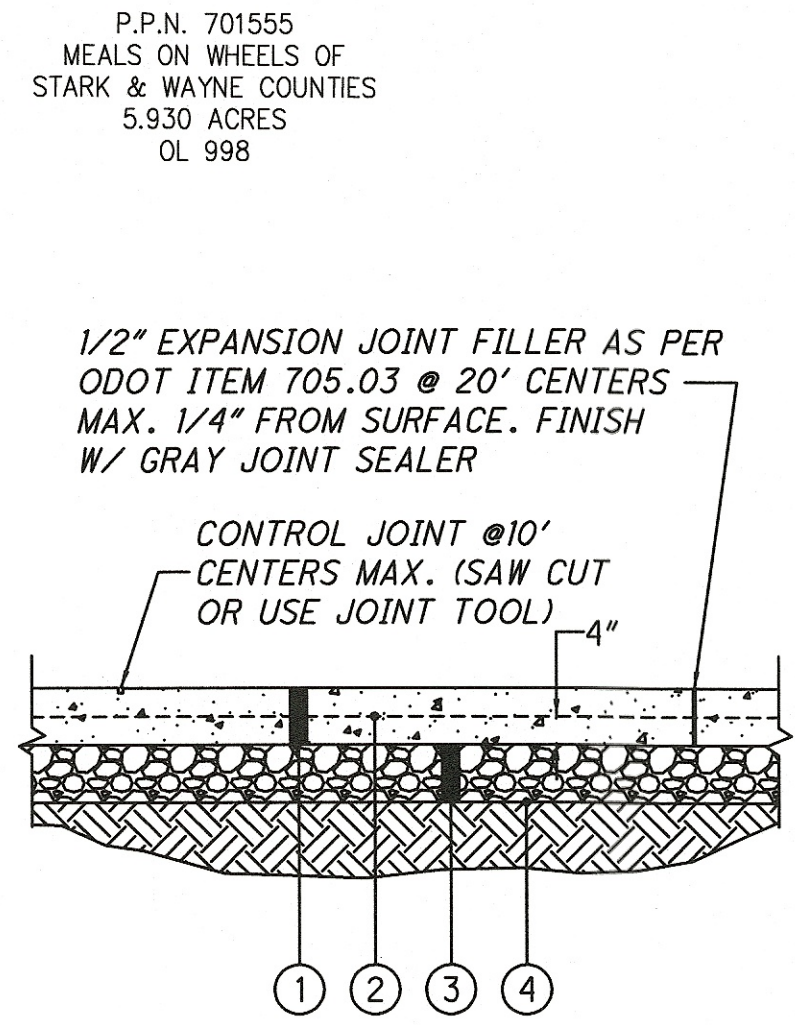
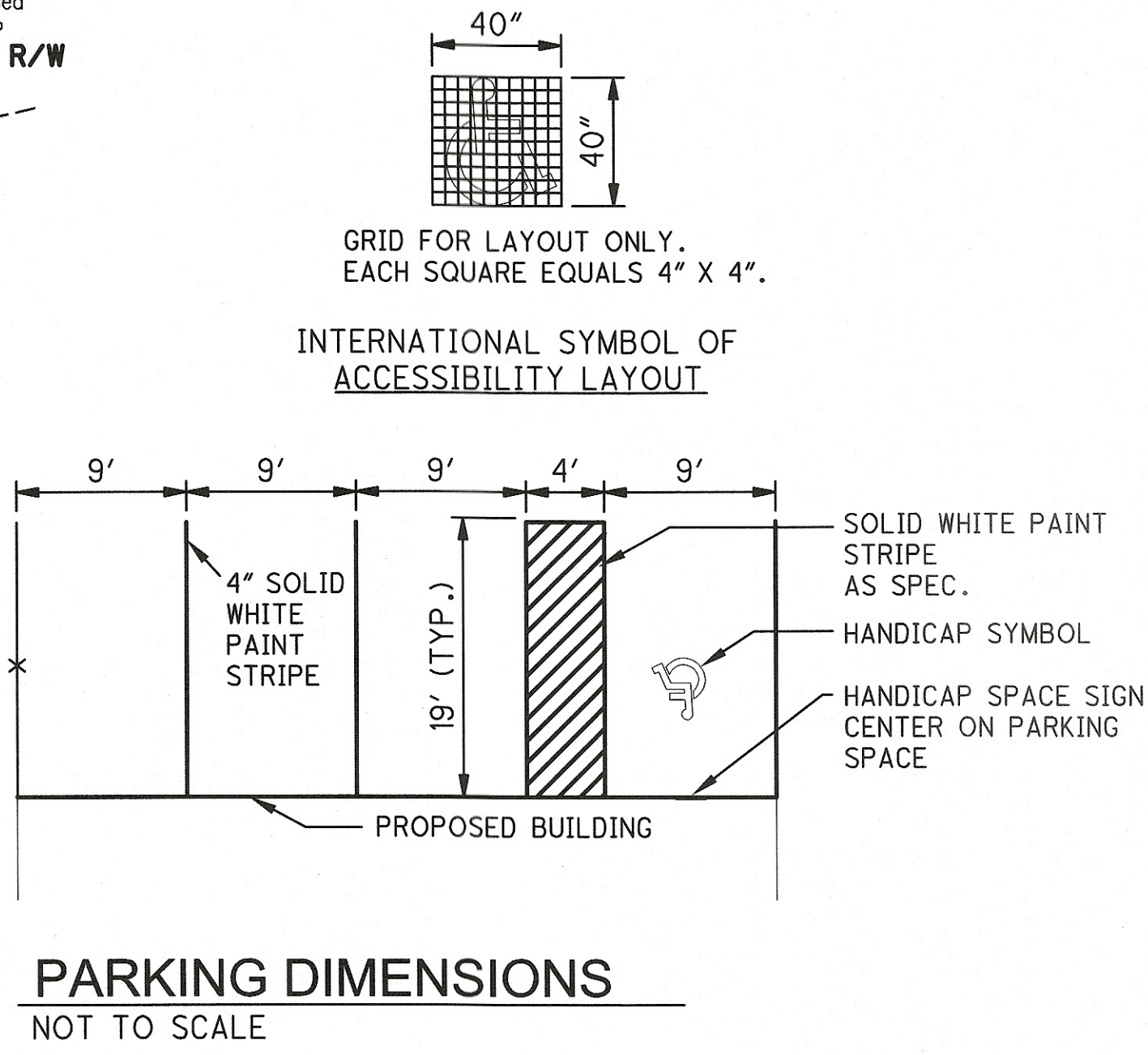
OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
1-800-925-0988

CIVPRO
ENGINEERING
ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS
4400 BOLDEN VALLEY STREET NW, SUITE 800 CANTON, OH 44706
PHONE: (330) 286-3333 FAX: (330) 286-3334
WWW.CIVPROENGINEERING.COM

DRAWING NAME:
xxxx.DWG
PROJECT NUMBER:
xxxx.DWG



- LEGEND:
- ASPHALT PAVEMENT SEE DETAIL.
 - CONCRETE SIDEWALK SEE DETAIL.



- ① ITEM 451 - 6" REINFORCED CONC. PAVEMENT
 - ② 6x6 - 4/4 GA W.W.F.
 - ③ ITEM 304 - 4" AGGREGATE BASE
 - ④ ITEM 204 - SUBGRADE COMPACTION
- NOTE:
- 1.) EXPANSION JOINTS SHALL BE PLACED @ 20' CENTERS MAX. OR AS SHOWN ON THE PLANS.
 - 2.) CONTROL JOINTS SHALL BE PLACED @ 10' CENTERS MAX. OR AS SHOWN ON THE PLANS.
 - 3.) MIN. PAVEMENT CROSS SLOPE SHALL BE 1/8" PER FOOT
 - 4.) USE EDGING TOOL AT PERIMETER.

CONTROL		
DESCRIPTION	NORTH	EAST
CP1 (IPF)	404381.2569	2250864.1396
CP2 (IPF)	403931.4987	2250846.6864

TMB #1
TOP OF LIGHT POLE CONCRETE FOUNDATION
62' NORTH OF NORTH PROPERTY LINE AND
230' WEST OF EAST PROPERTY LINE
ELEV. 1112.44

- 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 RADII 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 INTEGRAL CURBS AND WALK, ALIGN CURB JOINTS WITH WALK JOINTS.
 - CONTRACTORS SHALL VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.

ZONING REQUIREMENTS
(ZONED I-1, LIGHT INDUSTRIAL)

	REQUIRED
MIN. DEVELOPMENT AREA	NONE
MIN. LOT SIZE	N/A
DEVELOPED LOT SIZE	N/A
REMAINING LOT SIZE	N/A
MIN. FRONTAGE:	N/A
MIN. FRONTAGE ON ARTERIAL STREET:	N/A
MIN. LANDSCAPED OPEN AREA	N/A
MAX. BUILDING HEIGHT:	40'
MIN. SETBACKS:	
FRONT	60'
SIDE	25'
REAR	25'
MIN PARKING SPACE DIMENSIONS:	9X18'

- KEY:
- ① WALLPACK LIGHTING PER ARCHITECTURAL PLANS (75' SPACE)
 - ② PARKING SEE PARKING DIMENSIONS

-
- ① ITEM 420 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448)
 - ② ITEM 301 - 4 1/2" BITUMINOUS AGGREGATE BASE
 - ③ ITEM 407 - TACK COAT (SEE NOTE 1)
 - ④ ITEM 408 - BITUMINOUS PRIME COAT (0.4 GAL/SY)
 - ⑤ ITEM 304 - 6" AGGREGATE BASE
 - ⑥ ITEM 204 - SUBGRADE COMPACTION

ASPHALT PAVEMENT DETAIL
SCALE: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS
BEFORE YOU DIG

OHIO
UtilitiesProtection
SERVICE
(Non-members must be called directly)

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

NW NE
SW SE

VERTICAL SCALE
0 15 30
FEET

HORIZONTAL SCALE IN FEET
0 15 30

CHECKED BY:
KAD

DATE:
Sept, 2018

DRAWN BY:
KAD

DATE:
Sept, 2018

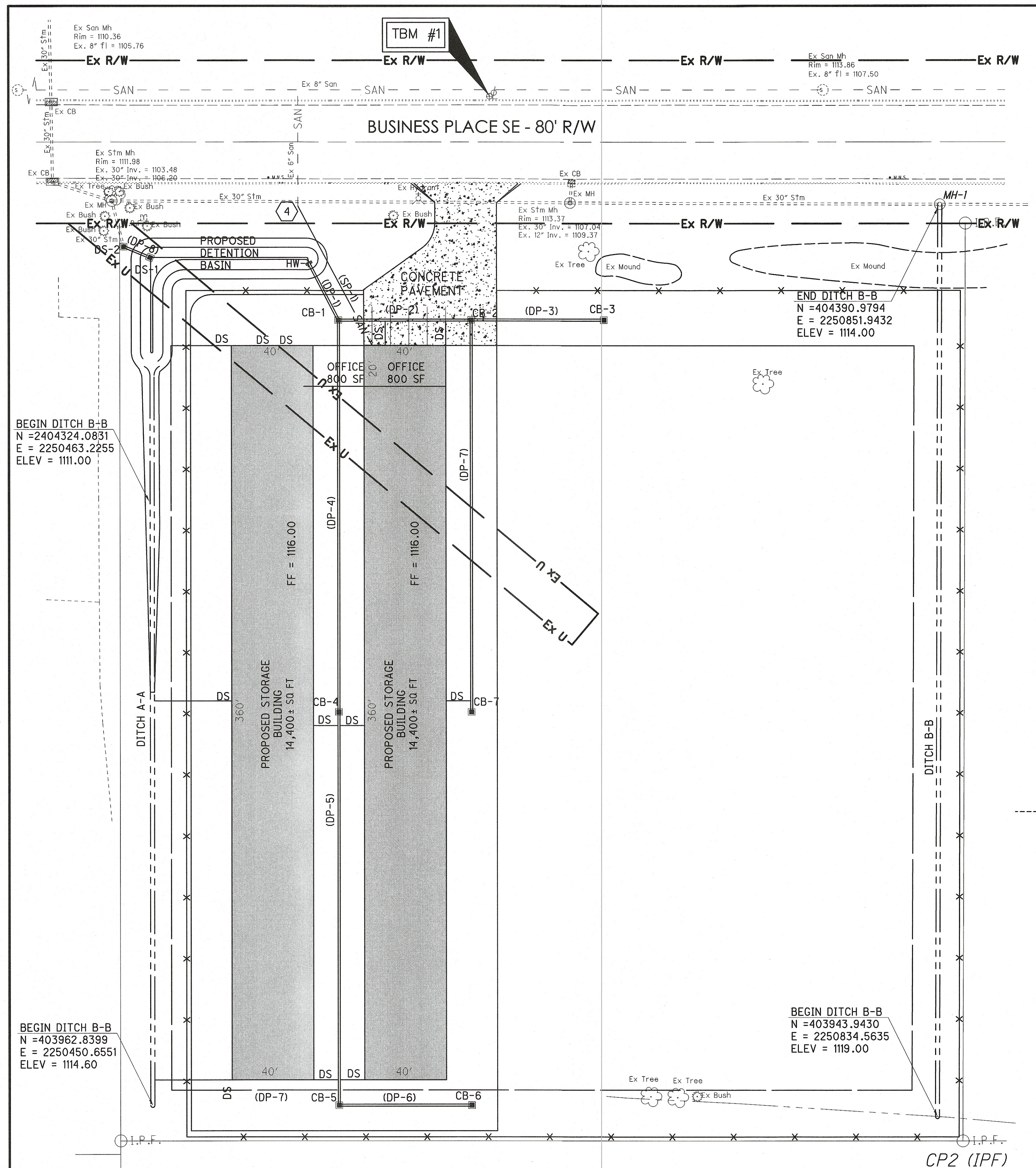
REVISIONS:
DATE DESCRIPTION

LOCK IT UP MASSILLON, LLC
Site Plan
City of Massillon
Stark County, Ohio

DRAWING NAME:
xxxx.DWG

PROJECT NUMBER:
xxxx.DWG

4 / 13

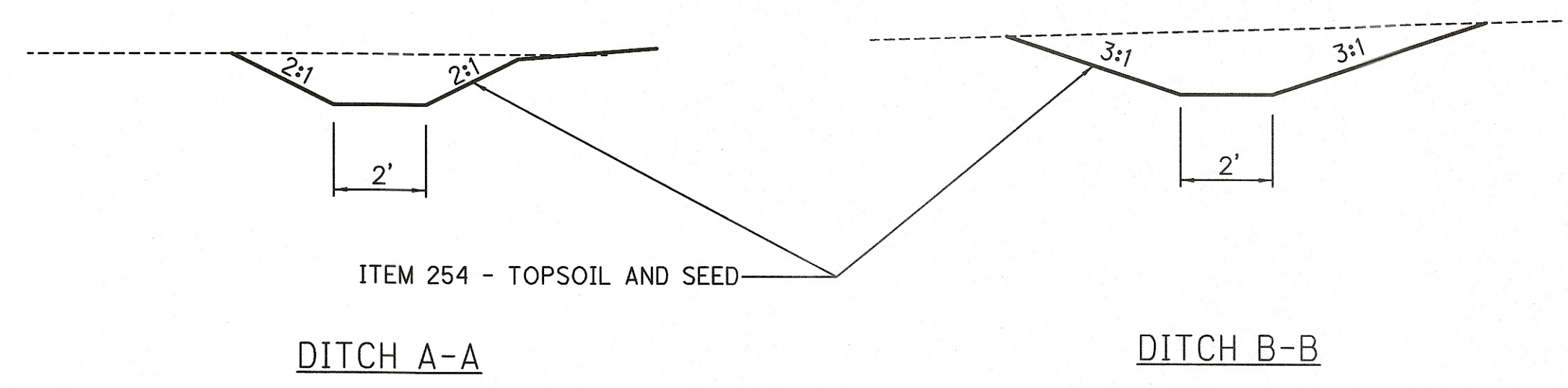


PROPOSED DRAINAGE STRUCTURES					
CB-1 TYPE: NYLOPLAST (24") N=404345.4417 E=2250525.8448 T/G = 1115.00 21" INV. = 1107.34(N) 18" INV. = 1107.34(S) 15" INV. = 1107.59(W) 18" INV. = 1107.34(E)	CB-2 TYPE: NYLOPLAST (24") N=404343.1685 E=2250590.8050 T/G = 1115.00 18" INV. = 1107.99(W) 18" INV. = 1107.99(E) 12" INV. = 1108.49(S)	CB-3 TYPE: ODOT 2-2B N=404340.8953 E=2250655.7652 T/G = 1113.50 18" INV. = 1108.64(W)	CB-4 TYPE: NYLOPLAST (24") N=404183.0411 E=2250520.1617 T/G = 1115.00 18" INV. = 1108.97(N) 18" INV. = 1108.97(S)	CB-5 TYPE: NYLOPLAST (24") N=404020.6405 E=2250514.4787 T/G = 1115.00 18" INV. = 1110.06(N) 12" INV. = 1110.56(W) 12" INV. = 1110.56(E)	CB-6 TYPE: NYLOPLAST (12") N=404018.3673 E=2250579.4390 T/G = 1115.00 12" INV. = 1111.25(W)
CB-7 TYPE: NYLOPLAST (24") N=404180.7679 E=2250585.1220 T/G = 1115.00 12" INV. = 1110.12(S)	MH-1 TYPE: PRECAST N=404390.4802 E=2250851.9134 T/G = 1114.00 30" INV. = 1111.50(N)	HW-1 TYPE: ODOT 2.1 N=404373.2666 E=2250541.7975 21" INV. = 1107.00(S)	DS-1 TYPE: CB MASS 5630 MODIFIED N=404378.2909 E=2250464.2912 PER DETAIL	DS-2 TYPE: ODOT CB 2-3 N=404384.1266 E=2250451.5654 T/G = 1113.00 Ex. 30" inv. = 1106.37(N) 24" INV. = 1106.50	

PROPOSED DRAINAGE PIPE TABLE				
NUMBER	LENGTH	SLOPE	SIZE	TYPE
DP-1	32'	1.06%	21"	TYPE B
DP-2	65'	1.00%	18"	TYPE B
DP-3	65'	1.00%	18"	TYPE B
DP-4	192'	1.00%	18"	TYPE B
DP-5	191'	0.67%	18"	TYPE B
DP-6	65'	1.00%	12"	TYPE B
DP-7	192'	1.00%	12"	TYPE B
DP-8	14'	1.00%	12"	TYPE B
DS	FIELD	1.00% MIN	8"	TYPE B

PROPOSED SANITARY PIPE TABLE						
NUMBER	LENGTH	SLOPE	SIZE	TYPE	WYES	45°
SP-1	108'	1.00% MIN	6"	TYPE B (SDR35)	0	AS NEEDED

- KEY:
- 1 PROP 2" WATER SERVICE
 - 2 PROP WATER VAULT PER AQUA OHIO WATER
 - 3 PROP 2" VALVE
 - 4 REMOVE EXISTING CAP AND CONNECT PROP 6" SANITARY LATERAL CONNECTION METHOD MUST MEET CITY OF MASSILLON STANDARDS.



- NOTES:
- NEOPLASTIC OR ODOT CB2-2B SHALL BE INSTALLED PER LATEST ODOT SCD, MANUFACTURE AND CMS, OR CITY OF MASSILLON APPROVED EQUAL. ALL STRUCTURES REQUIRE SHOP DRAWING APPROVAL PRIOR TO INSTALLATION.
 - ALL SANITARY LATERALS SHALL HAVE A MINIMUM OF 3' OF COVER.
 - WATER VAULT SHALL BE TRAFFIC RATED.
 - BUILDING DOWNSPOUTS SHALL BE CONNECTED TO NEAREST DRAINAGE CONDUIT WITH A TEE CONNECTION. SEE ARCHITECTURE DRAWINGS FOR DOWNSPOUT LOCATION.

TMB #1
TOP OF LIGHT POLE CONCRETE FOUNDATION
62' NORTH OF NORTH PROPERTY LINE AND
230' WEST OF EAST PROPERTY LINE
ELEV. 1112.44

CONTROL		
DESCRIPTION	NORTH	EAST
CP1 (IPF)	404381.2569	2250864.1396
CP2 (IPF)	403931.4987	2250846.6864

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS
BEFORE YOU DIG

OHIO UtilitiesProtection SERVICE
(Non-members must be called directly)
OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
1-800-925-0988

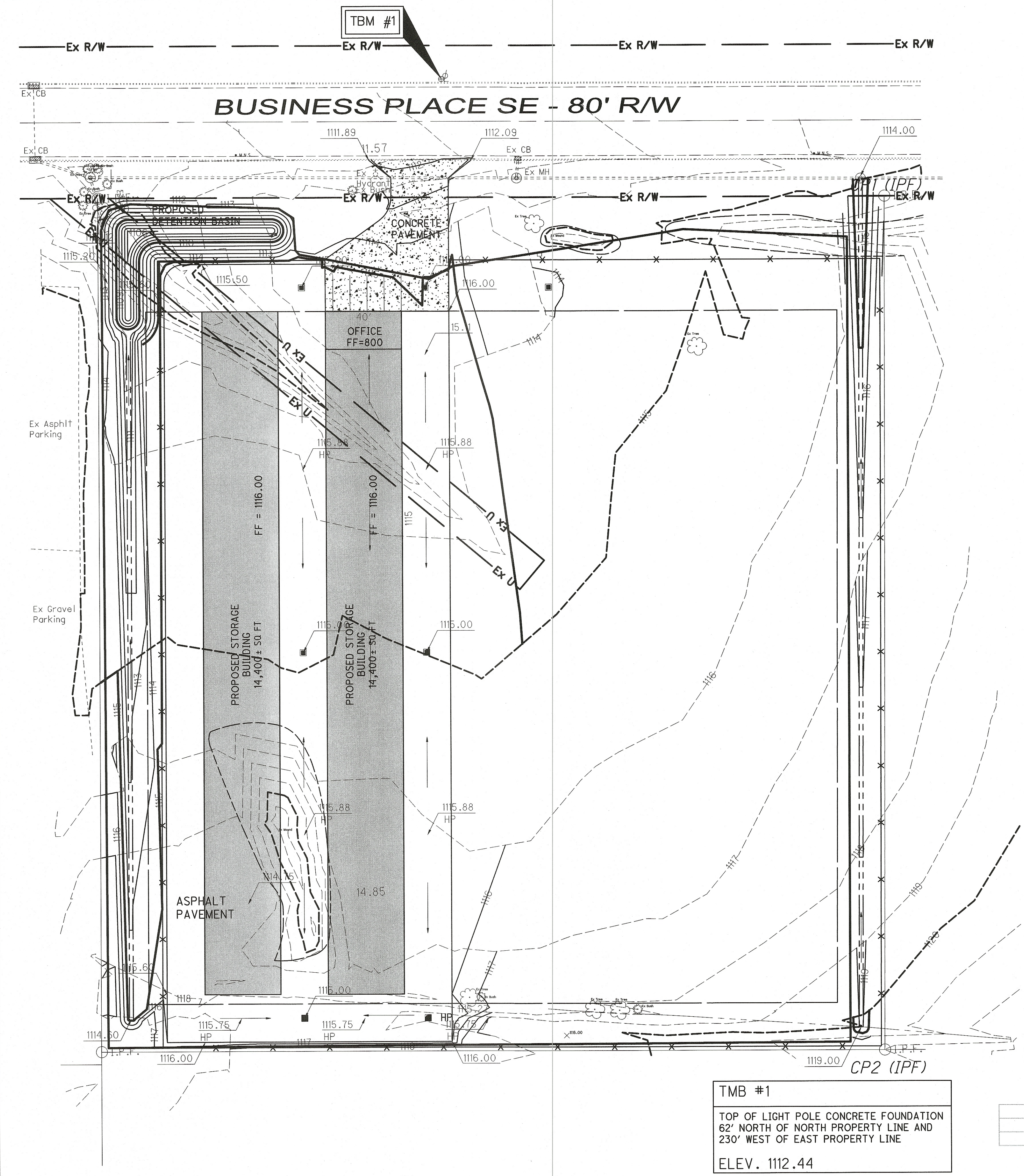
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HORIZONTAL SCALE IN FEET
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DATE: Sept, 2018
DRAWN BY: KAD
DATE: Sept, 2018
REVISIONS: DATE DESCRIPTION

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Utility Plan
City of Massillon
Stark County, Ohio

CIVPRO ENGINEERING
ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS
4450 BELDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44705
PHONE: (330) 268-2555 FAX: (330) 268-2556
WWW.CIVPROENGINEERING.COM

DRAWING NAME: xxxxx.DWG
PROJECT NUMBER: xxxxx.DWG
5 / 13



NOTES:

1. ALL EMBANKMENT UNDER PAVEMENT AND STRUCTURES SHALL BE COMPACTED WITH SELECT SITE MATERIAL PER ODOT SPECIFICATION 203.
2. CONTRACTOR SHALL STRIP ANY TOP SOIL AND STOCKPILE PRIOR TO SITE GRADING.
3. MEET ALL EXISTING SGRADES FLUSH
4. ALL NEW GRADED AREAS SHALL BE GRADED TO ENSURE POSITIVE FLOW TO THE NEAREST DRAINAGE STRUCTURE OR OVERLAND SWALE.

LEGEND:

- 650.0
649.5
650.0
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
- LP LOW POINT
- HP HIGH POINT

FLOOD ZONE:

FLOOD ZONE X
FLOOD PANEL - 39151C0213E

EARTH WORK

CUT = 2386
FILL = 3415

TBM #1
TOP OF LIGHT POLE CONCRETE FOUNDATION
62' NORTH OF NORTH PROPERTY LINE AND
230' WEST OF EAST PROPERTY LINE
ELEV. 1112.44

CONTROL

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CP2 (IPF)	403931.4987	2250846.6864

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VERTICAL SCALE
0 15 30
HORIZONTAL SCALE IN FEET
0 15 30

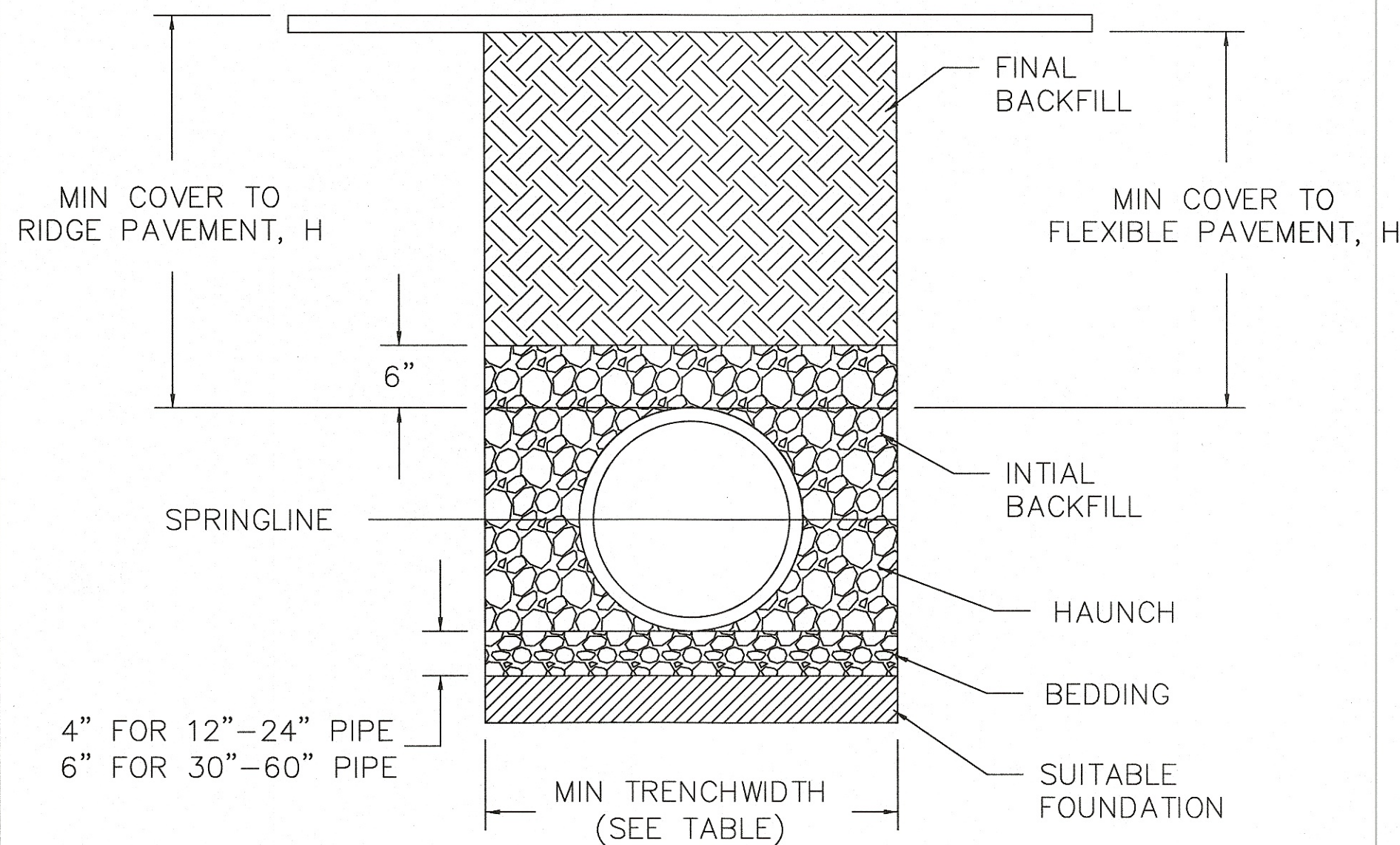
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DATE: Sept, 2018
DRAWN BY: KAD
DATE: Sept, 2018

REVISIONS:	DATE	DESCRIPTION

LOCK IT UP MASSILLON, LLC
Grading Plan
City of Massillon
Stark County, Ohio

CIVIPRO
ENGINEERING
BUSINESS-SURVEYS-CONSTRUCTION MANAGERS
4450 BUDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44705
PHONE: (330) 286-1111 FAX: (330) 286-1112
WWW.CIVIPROENGINEERS.COM

DRAWING NAME:
xxxx.DWG
PROJECT NUMBER:
xxxx.DWG
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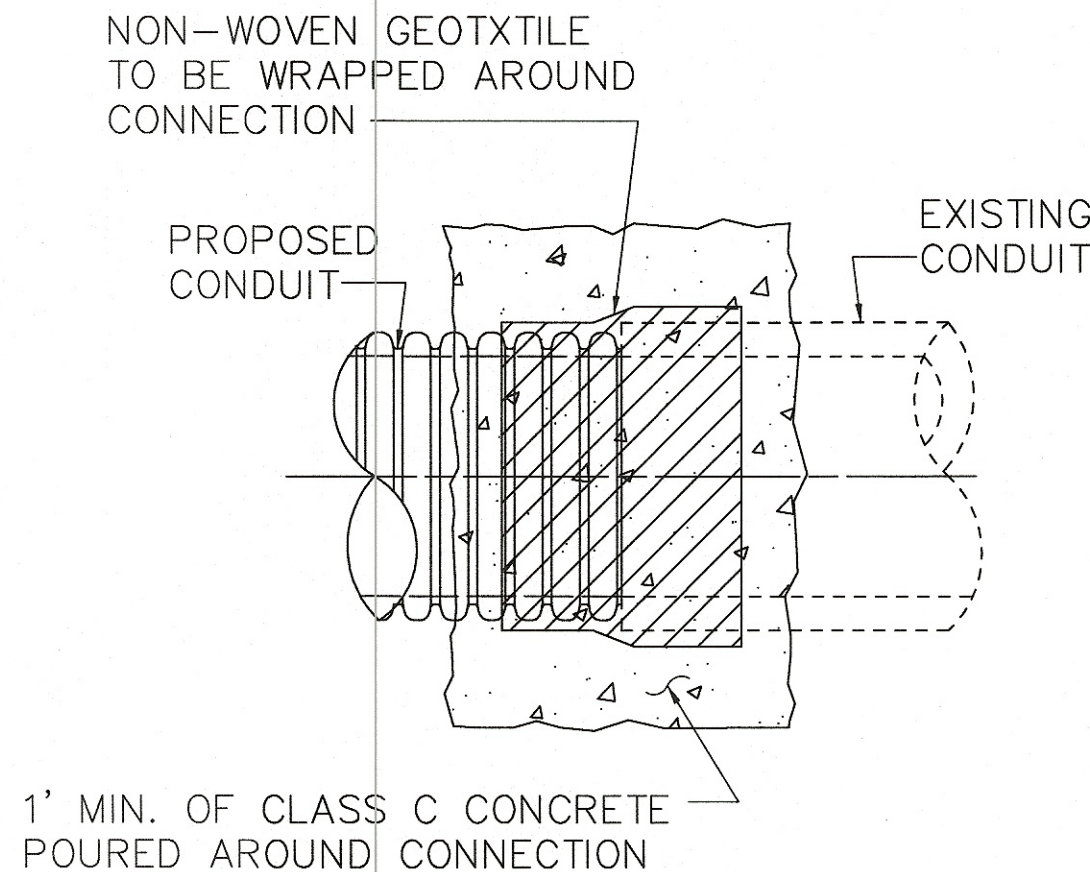
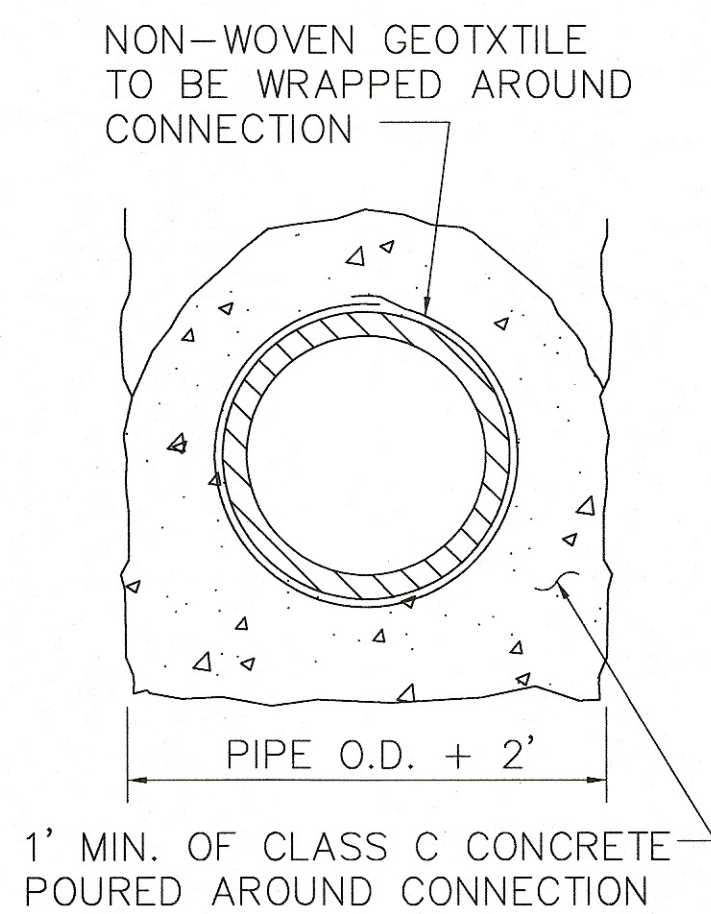
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21'
6"	23'
8"	26'
10"	28'
12"	30'
15"	34'
18"	39'
24"	48'
30"	56'
42"	72'
48"	80'
54"	88'
60"	96'

NOTES:

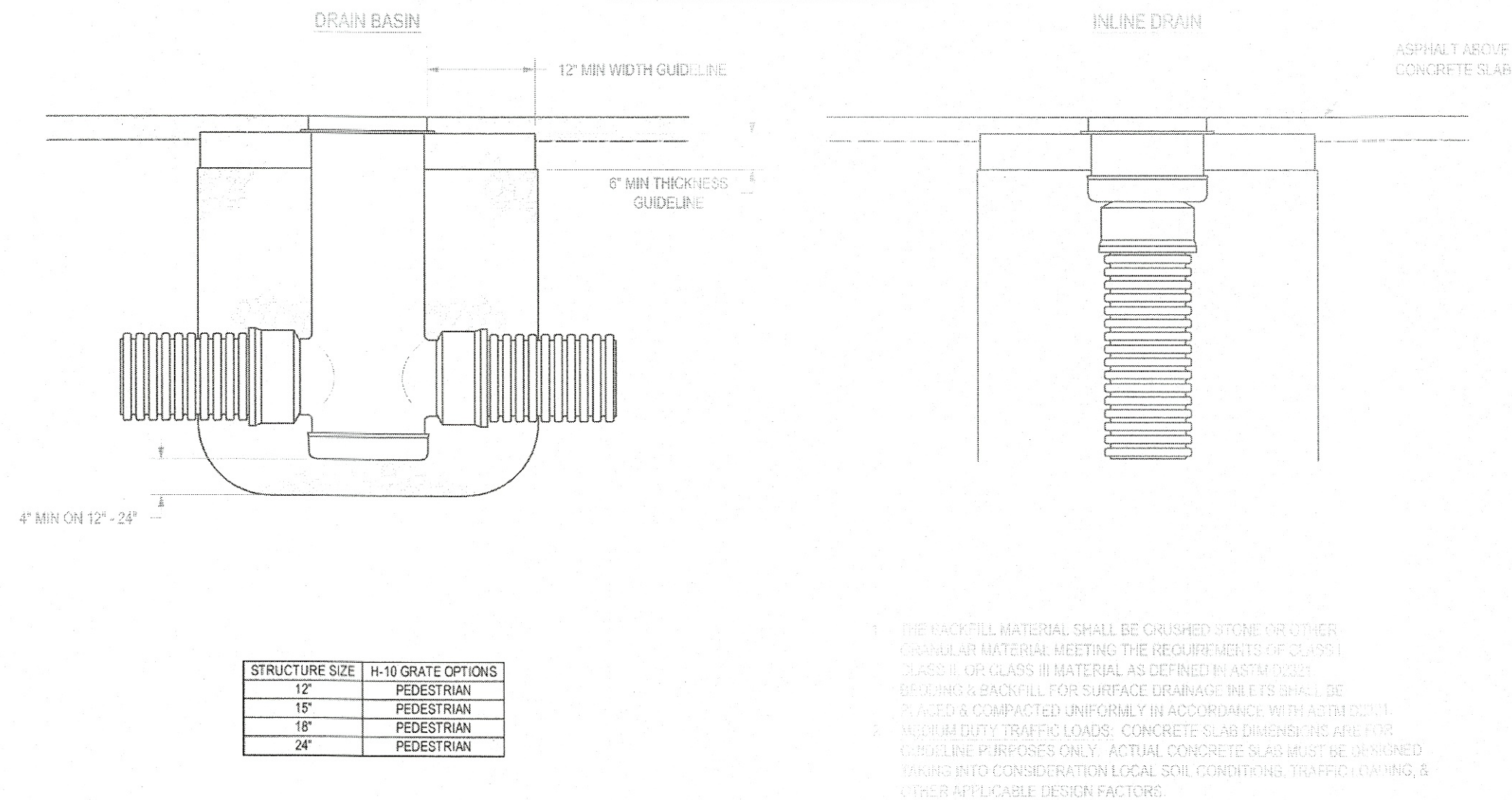
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE APPLICATION", LATEST ADDITION
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III, PER MANUFACTURERS AND ODOT ITEM 611 REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"-24"; 6" FOR 30"-60".
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO THE GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54" TO 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIDGE PAVEMENT.

TRENCHING DETAIL FOR PIPE



CONCRETE COLLAR

ASPHALT INSTALLATION



STRUCTURE SIZE	H-10 GRATE OPTIONS
12"	PEDESTRIAN
15"	PEDESTRIAN
18"	PEDESTRIAN
24"	PEDESTRIAN

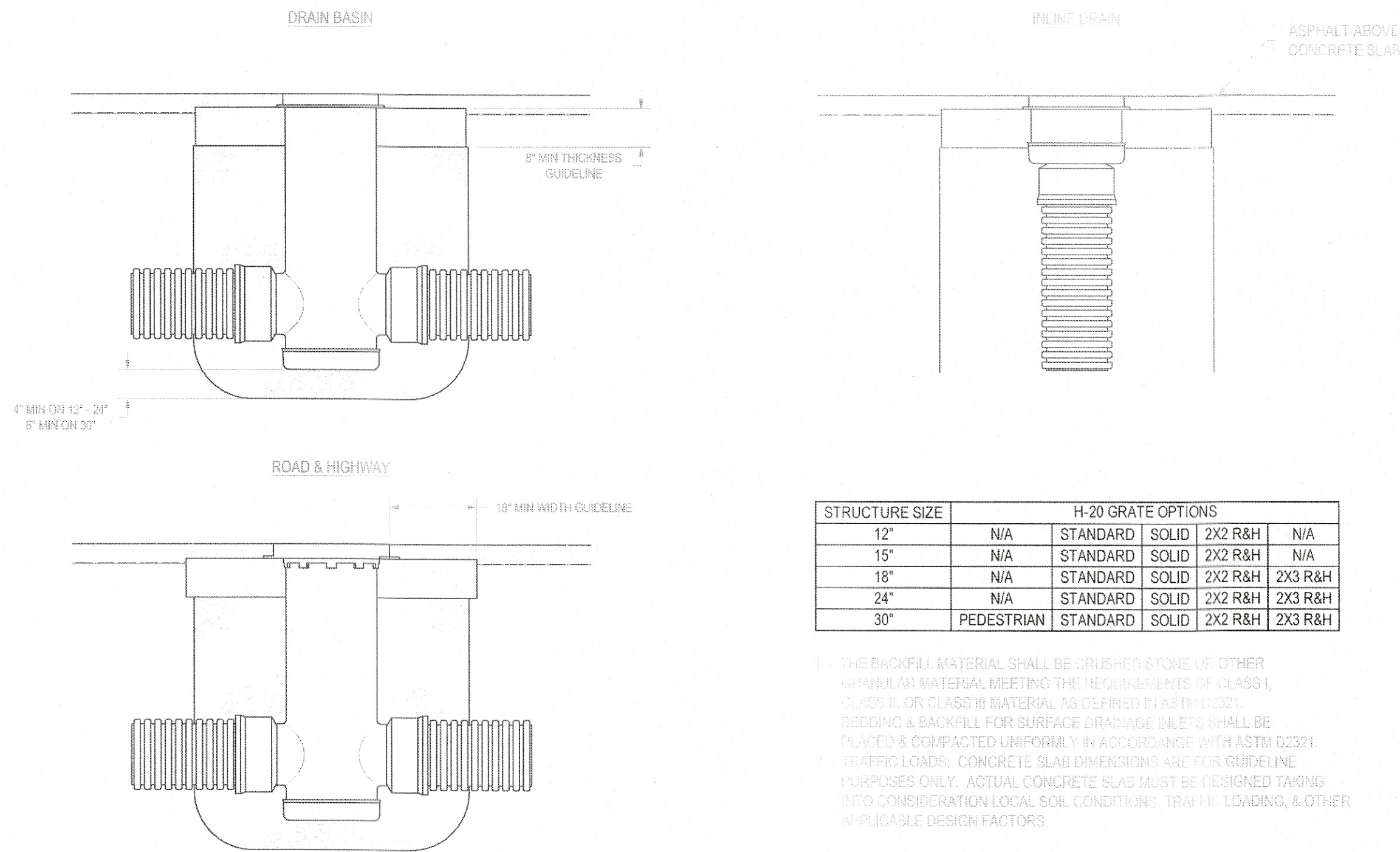
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4000-1101-010-010

DRAWN BY: KSC	DATE: 02-14-18	MATERIAL	1118 VERONA AVE BIRMINGHAM, GA 30018 PHN (770) 532-2643 FAX (770) 532-2408 www.nyloplast.com
APPROVED BY: TMM	PROJECT NO: NAME		
DATE: 02-14-18			
DWG SIZE: A	SCALE: 1/2" = 1'	SHEET: 1 OF 1	DWG NO.: TMM-1118-392 REV: 0

Nyloplast

TITLE: DRAIN BASIN & INLINE DRAIN (H-10 TRAFFIC LOAD) ASPHALT INSTALLATION DETAIL



STRUCTURE SIZE	H-20 GRATE OPTIONS				
12"	N/A	STANDARD	SOLID	2X2 R&H	N/A
15"	N/A	STANDARD	SOLID	2X2 R&H	N/A
18"	N/A	STANDARD	SOLID	2X2 R&H	2X3 R&H
24"	N/A	STANDARD	SOLID	2X2 R&H	2X3 R&H
30"	PEDESTRIAN	STANDARD	SOLID	2X2 R&H	2X3 R&H

1. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321. TRAFFIC LOADS: CONCRETE SLAB DIMENSIONS ARE FOR GUIDELINE PURPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER APPLICABLE DESIGN FACTORS.

Section 2721

Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

NW NE
SW SE

VERTICAL SCALE
0 100 200
FEET

HORIZONTAL SCALE IN FEET
0 100 200

CHECKED BY: KAD
DATE: Sept, 2018
DRAWN BY: KAD
DATE: Sept, 2018

REVISIONS:	DESCRIPTION
DATE	

LOCK IT UP MASSILLON, LLC
Standard Construction Details
City of Massillon
Stark County, Ohio

CIVPRO
ENGINEERING
1465 W. COLUMBIA AVE.
PO BOX 1000
MASSILLON, OHIO 44862
PHONE: (330) 285-3724 FAX: (330) 285-3724
WWW.CIVPROENGINEERING.COM

DRAWING NAME:
PROJECT NUMBER:
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LOCK IT UP MASSILLON, LLC
STORM WATER POLLUTION PREVENTION PLAN
CITY OF MASSILLON
Stark County, Ohio

INDEX OF SHEETS SWP3:

TITLE SHEET	8
SWPP SITE PLAN	9
SWPPP NOTES/DETAILS	10-13

CONSTRUCTION DATES

START DATE: OCTOBER 2018
COMPLETION DATE: JUNE 2019

GENERAL NOTES:

FOR REVISIONS/AMENDMENTS TO THE SWP3, CONTACT KEITH DYLEWSKI AT CIVPRO ENGINEERING, LLC AT (234) 410-3913.

A LOG DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDEMENTS TO THIS SWP3 SHALL BE MAINTAINED WITH THESE PLANS

A PRE-CONSTRUCTION MEETING IS REQUIRED BETWEEN THE DEVELOPER, CONTRACTOR, SSWCD, AND CITY OF MASSILLON PRIOR TO THE BEGINNING OF ANY CONSTRUCTION ACTIVITY ON SITE. CONTACT PARTIES AT LEAST SEVEN DAYS BEFORE COMMENCING ANT LAND DISTURBING ACTIVITY.

OFFSITE BORROW AREAS:

IF OFFSITE BORROW AREA IS REQUIRED. CONTRACTOR SHALL OBTAIN ALL APPLICABLE LOCAL AND STATE PERMITS. LOCATION SHALL BE COVERED BY NOI AND APPROVED SWPPP.

STORMWATER MANAGEMENT

STORMWATER MANAGEMENT FOR THE SITE IS TO BE PROVIDED BY THE PROPOSED ONSITE DETENTION POND.

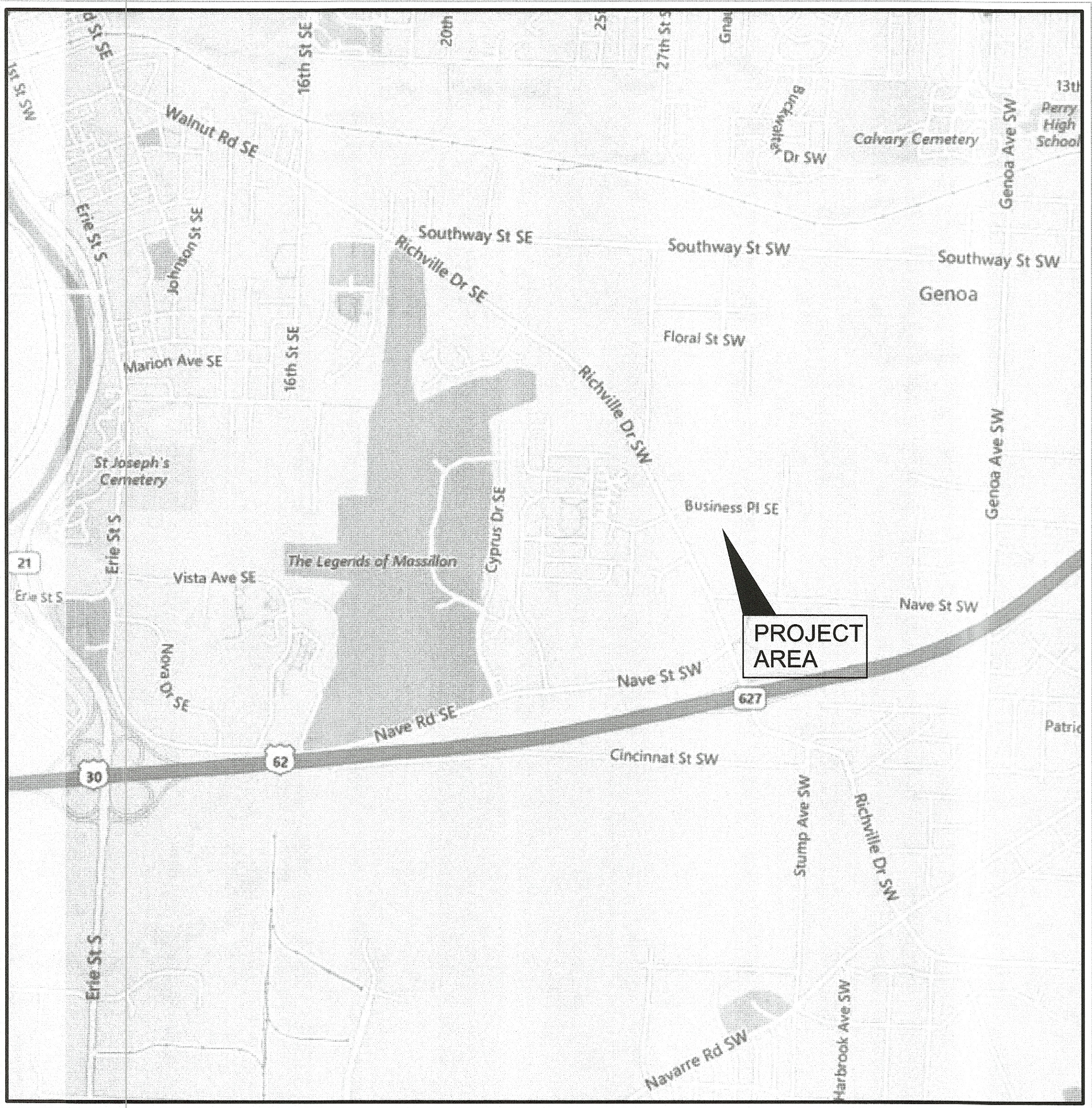
KEITH A. DYLEWSKI

DESIGN ENGINEER - KEITH A. DYLEWSKI, P.E., P.S.

9-27-18

DATE

LONG-TERM MAINTENANCE OF STRUCTURAL POST- CONSTRUCTION CONTROLS SHALL BE THE RESPONSIBY OF THE OWNER.



LOCATION MAP

PORTION TO BE IMPROVED

PLAN CERTIFICATION

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

OWNER	DATE
THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION & MAINTENANCE OF SEDIMENT CONTROL & BMP MEASURES DURING THE SEQUENCE OF CONSTRUCTION.	
SITE CONTRACTOR	DATE
THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION & MAINTENANCE OF SEDIMENT CONTROL & BMP MEASURES ONCE ALL SITE WORK IS COMPLETED.	
BUILDING CONTRACTOR	DATE

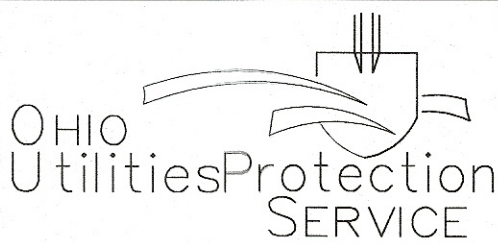
SWP3 STATEMENT:
THIS SWP3 PLAN WAS DEVELOPED TO CONTROL EROSION AND SEDIMENT PRIOR TO EXITING THE SITE. SEDIMENT WILL BE CONTROLLED WITHIN A DETENTION BASIN IN PHASE 14. SILT FENCE SHOULD BE PLACED AT THE BOTTOM OF THE SLOPES THAT WILL NOT BE TREATED WITHIN THE BASIN. SEE THE IMPLEMENTATION SCHEDULE & SEQUENCE OF MAJOR CONSTRUCTION OPERATIONS. THE SCHEDULE SHOULD BE FOLLOWED TO MAINTAIN PROPER CONTROL OF EROSION AND SEDIMENT ON SITE. ALL DISTURBED AREAS WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS MUST BE STABILIZED. SEEDING AND MULCHING SHOULD BE CONSISTENT WITH THE SOIL STABILIZATION REQUIREMENTS SECTION LOCATED ON SHEET 21.1. SLOPES 3:1 OR GREATER REQUIRE EROSION CONTROL MATTING TO BE INSTALLED TO CONTROL EROSION. A LOG OF GRADING AND STABILIZATION ACTIVITIES AND SITE INSPECTION NEEDS TO BE KEPT. INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER A STORM EVENT GREATER THAN 1/8 INCH OF RAINFALL WITHIN A 24-HOUR DURATION. ALL MEASURES SHALL BE OBSERVED TO ENSURE CORRECT OPERATION; REPAIRS TO ANY DAMAGED DEVICE/STRUCTURE SHALL BE COMPLETED WITHIN 3 DAYS OF THE INSPECTION.



PLAN PREPARED BY:	OWNER/DEVELOPER:	CONTRACTOR:
CIVPRO ENGINEERING	Schalmo Properties, Inc.	GOLDEN GIANT BUILDING SYSTEMS
6256 Walnut Ridge Cir NW	464 Etheridge Blvd. S	13300 South Vision Drive
North Canton, Ohio 44720	Canal Fulton, Ohio 46614	Kenton, Ohio 43326
(330) 268-3734	(330) 854-4591	(419) 674-4038

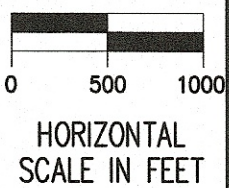
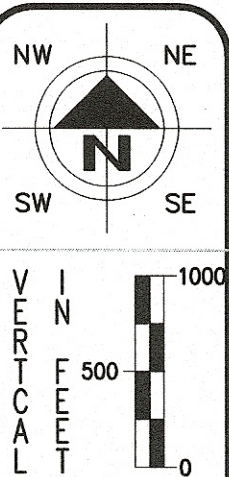
UNDERGROUND UTILITIES

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1-800-362-2764

(Non-members must be called directly)
OIL & GAS PRODUCERS
UNDERGROUND PROTECTION SERVICE
1-800-925-0988



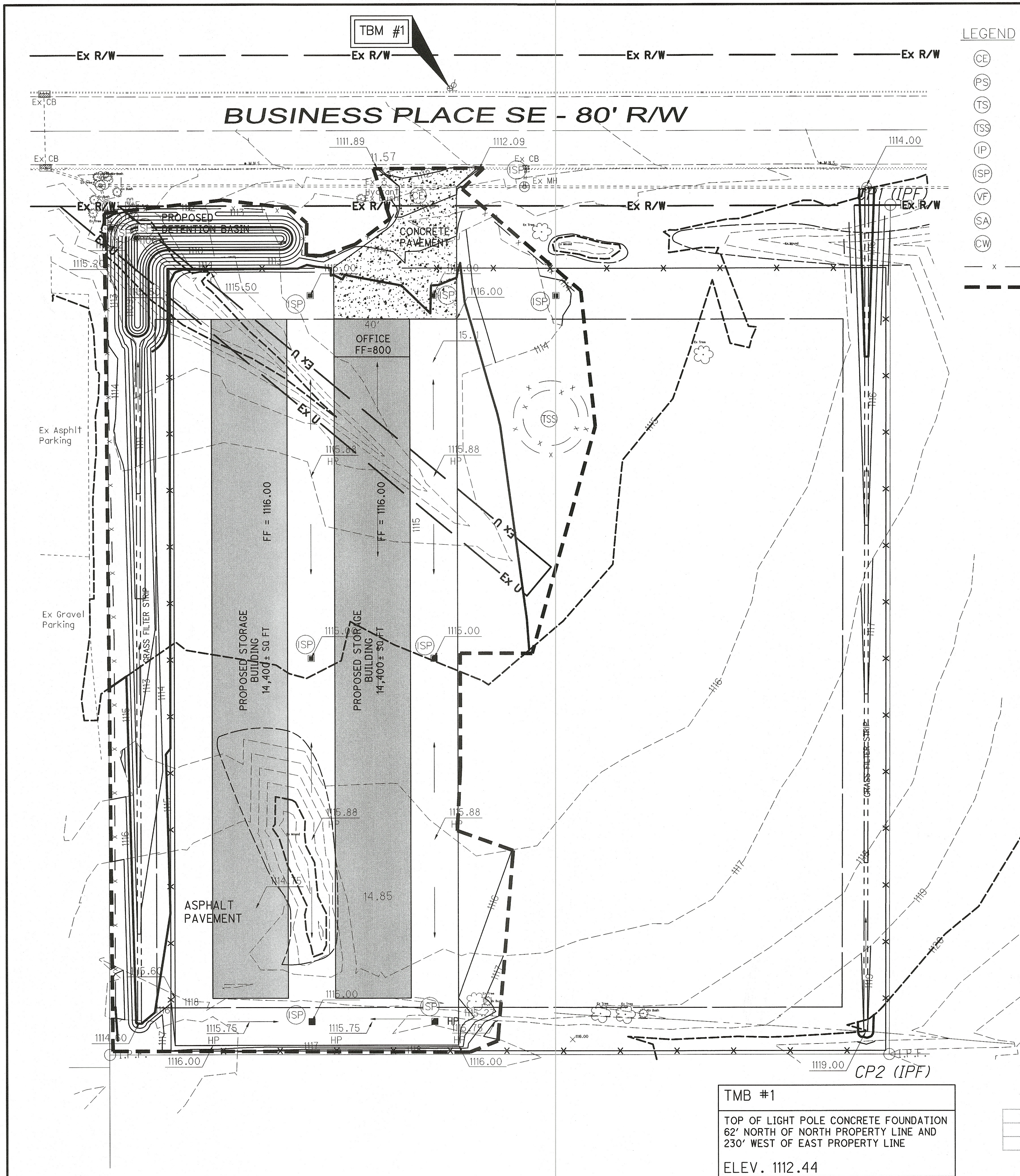
CHECKED BY:	KAD
DATE:	Sept, 2018
DRAWN BY:	KAD
DATE:	Sept, 2018

REVISIONS:	DESCRIPTION
DATE	

LOCK IT UP MASSILLON, LLC
SWP3 Title Sheet
City of Massillon
Stark County, Ohio



DRAWING NAME:	Lock It--Title
PROJECT NUMBER:	



- LEGEND
- (CE) CONSTRUCTION ENTRANCE
 - (PS) PERMANENT SEEDING
 - (TS) TEMPORARY SEEDING
 - (TSS) TOPSOIL STOCKPILE
 - (IP) INLET PROTECTION
 - (SP) EXCAVATED DROP INLET SEDIMENT PROTECTION
 - (VF) VEHICLE FUELING AREA
 - (SA) STORAGE AREA (SOLID, SAN. WASTE.....)
 - (CW) CONCRETE WASHOUT PITS
 - x SILT FENCE
 - LIMITS OF DISTURBANCE-2.27 Acres

- LEGEND:
- 650.0 TOP OF CURB ELEVATION
 - 649.5 PAVEMENT ELEVATION
 - 650.0 PROPOSED SPOT ELEVATION
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - ADA ACCESSIBLE ROUTE
 - FLOW ARROW
 - LP LOW POINT
 - HP HIGH POINT

- NOTES:
- ALL EMBANKMENT UNDER PAVEMENT AND STRUCTURES SHALL BE COMPACTED WITH SELECT SITE MATERIAL PER ODOT 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 BMP BEING ACCOMPLISHED WITH THE USE OF GRASS FILTER STRIPS.
 - WATER QUALITY VOLUME:
- AREA DRAINING TO BMP = 3.80 AC
IMPERVIOUS AREA DRAINING TO BMP = 3.06 AC
IMPERVIOUS FRACTION = 3.06/3.80 = 0.80 (80% IMPERVIOUS)
VOLUMETRIC RUNOFF COEFFICIENT Rv = (0.05+0.9*0.80) = 0.77
WQv = Rv * P * A/12
WQv = (0.77) * (0.9) * (3.80)/12
WQv = 0.22 ACRE-Feet

NW NE
SW SE

VERTICAL SCALE
0 15 30
FOOT

HORIZONTAL SCALE IN FEET
0 15 30

CHECKED BY: KAD
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LOCK IT UP MASSILLON, LLC
SWP3 Plan
City of Massillon
Stark County, Ohio

CIVPRO
ENGINEERING
BUSINESS-SUPREMACY-CONSTRUCTION MANAGERS
4450 ELDON VALLEY STREET NW, SUITE 200, WILLOW PARK, OH 44122
PHONE (330) 286-1100 WWW.CIVPROENGINEERING.COM

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG

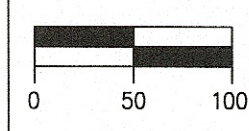
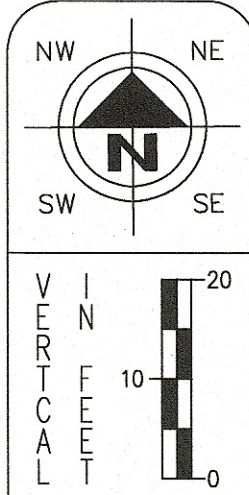
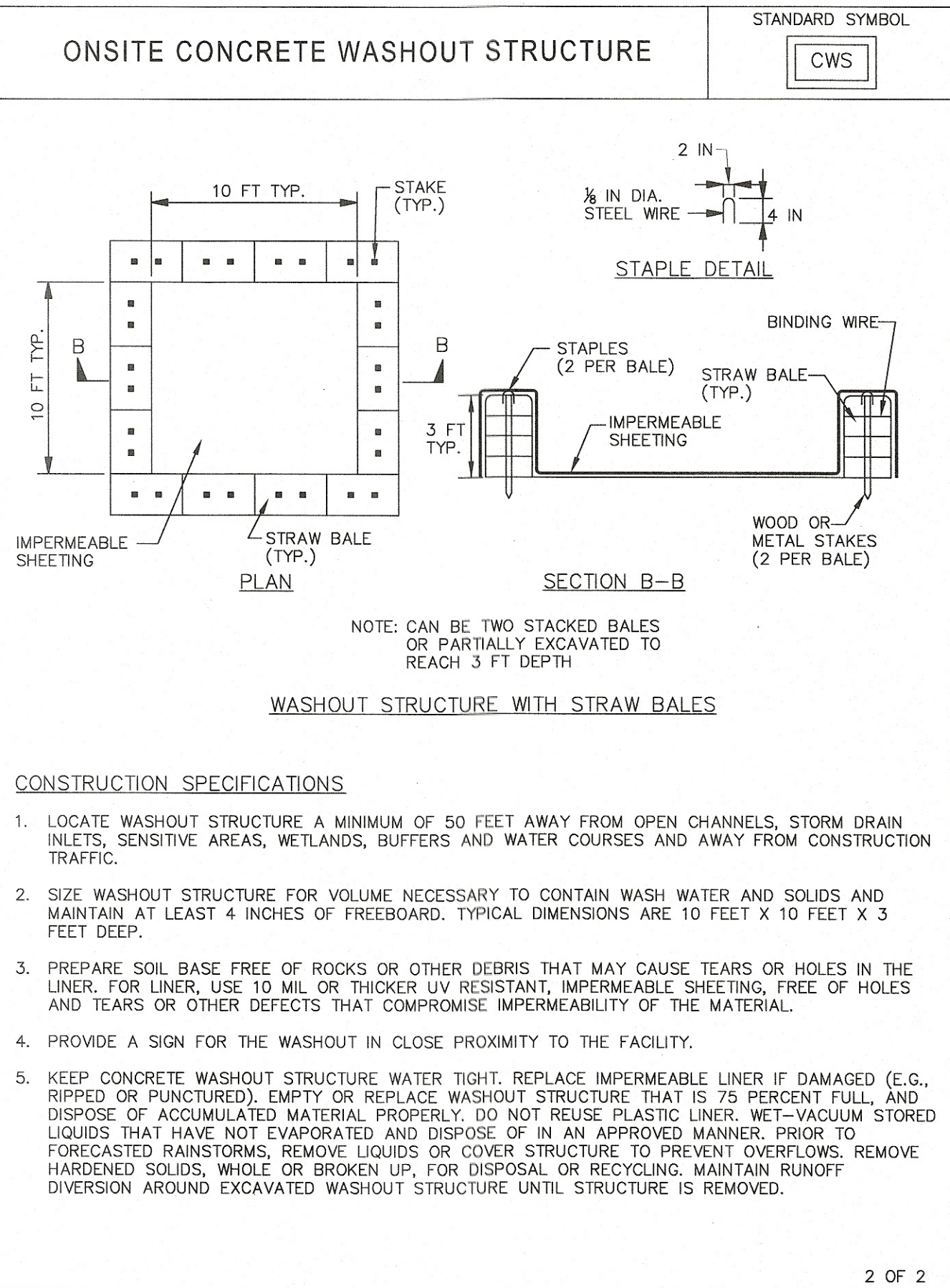
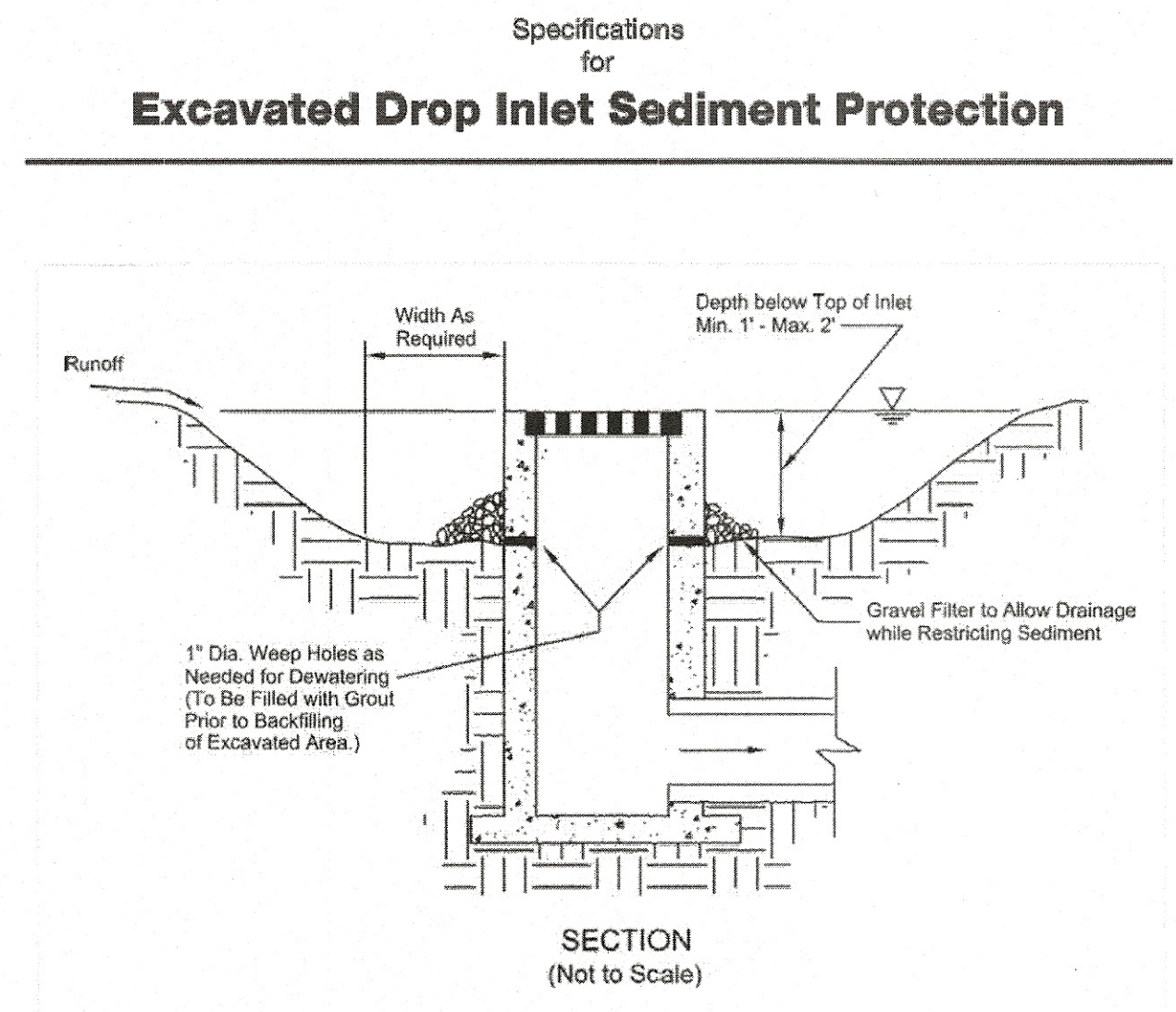
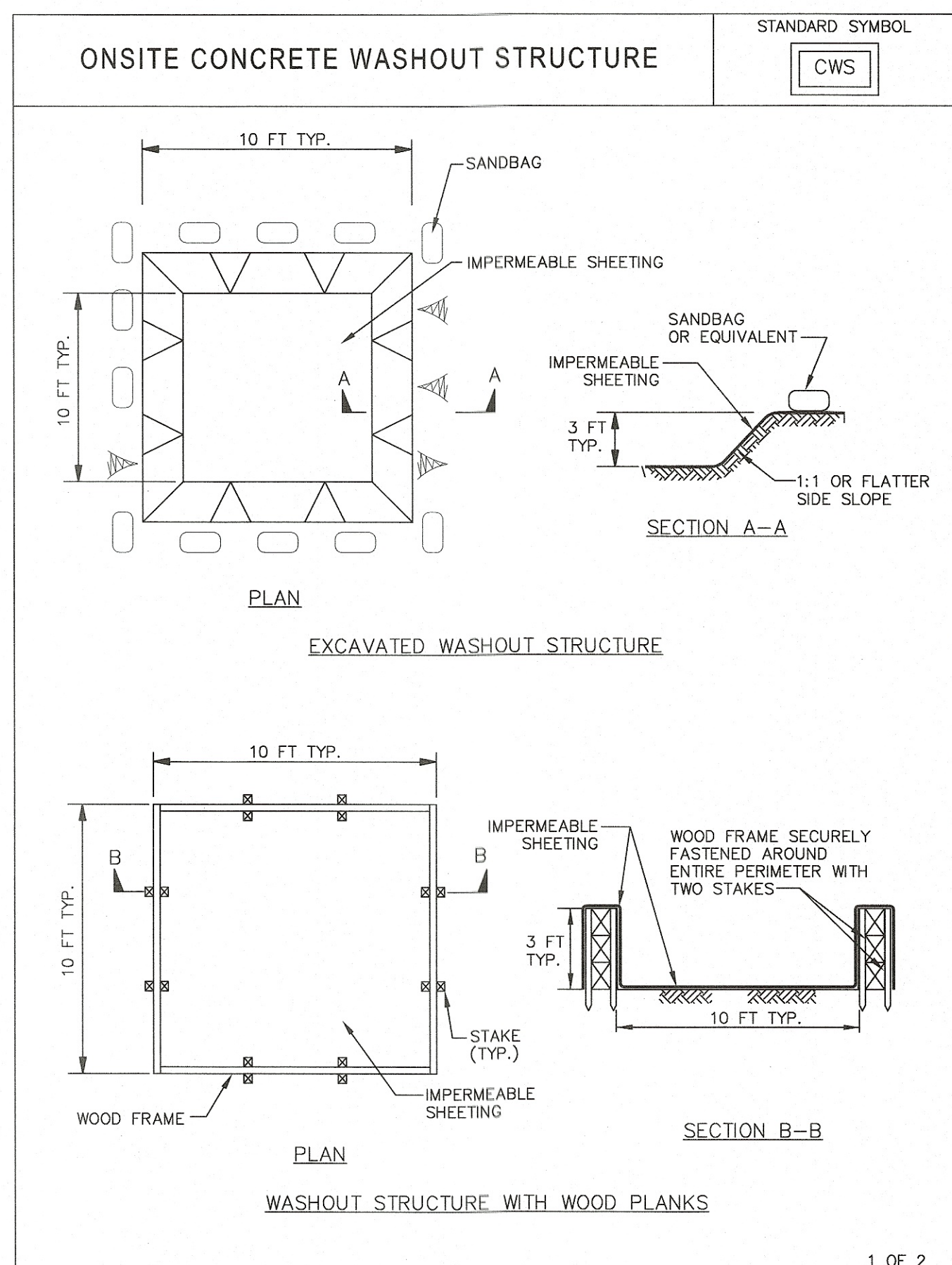
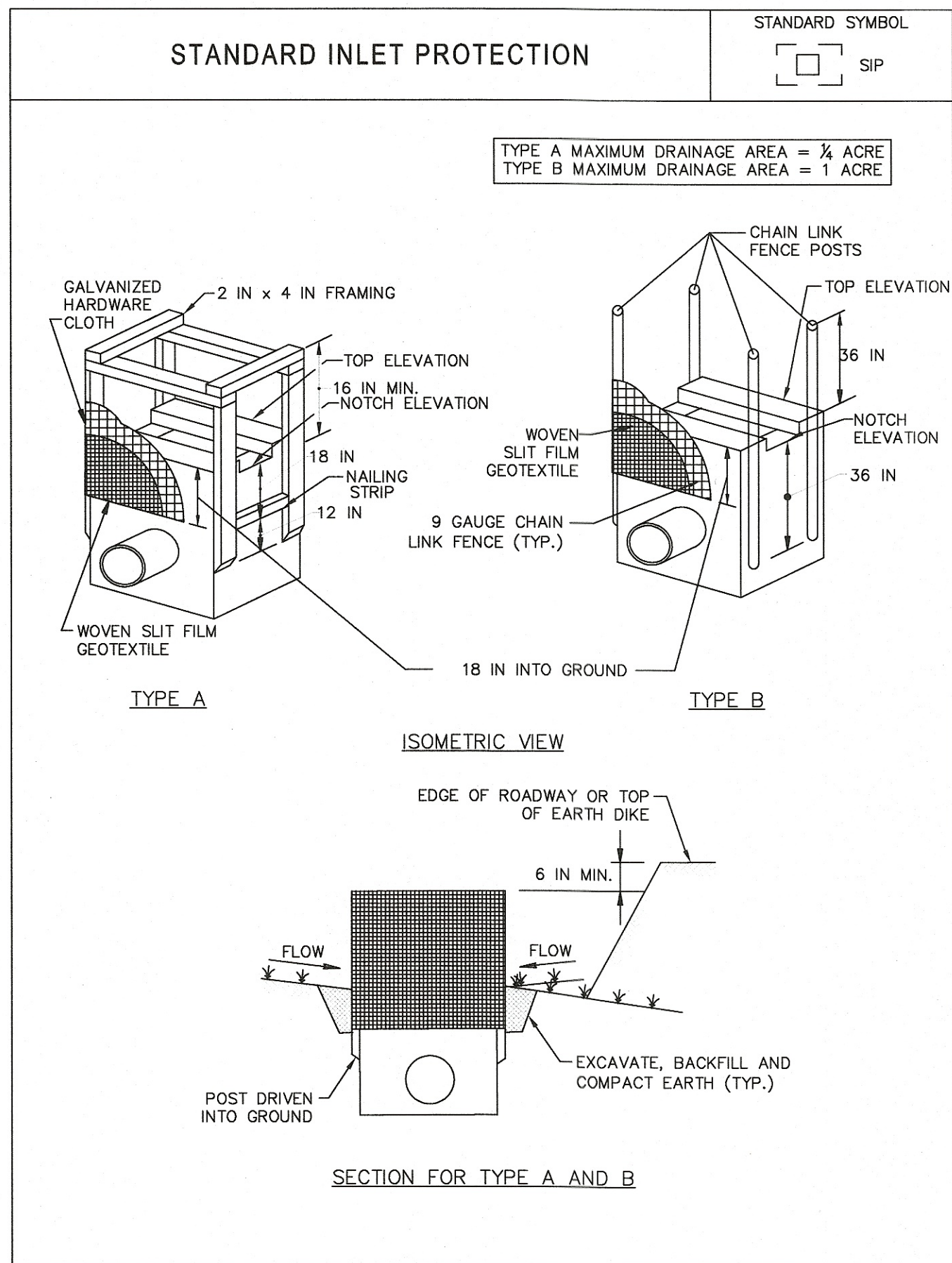
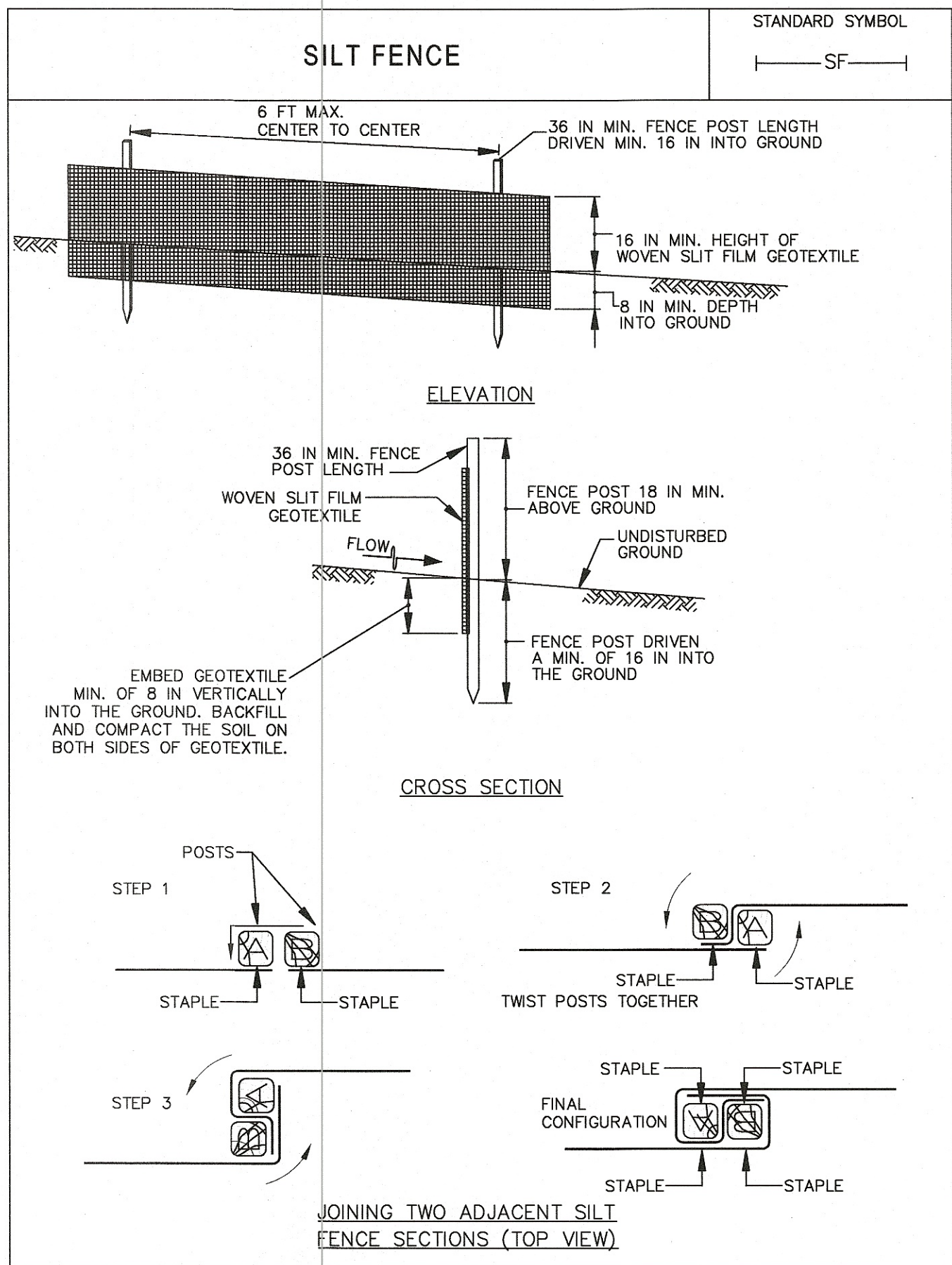
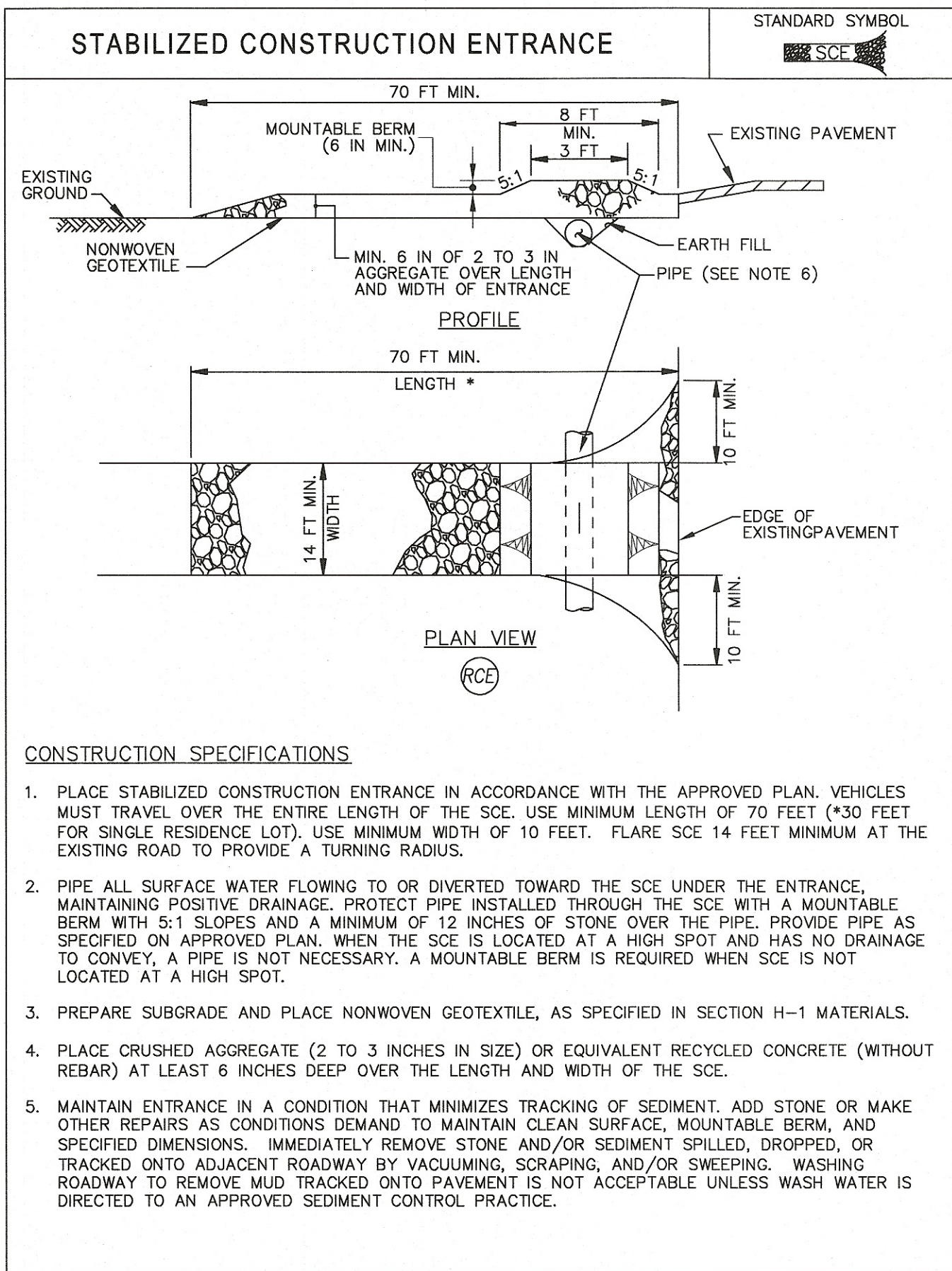
Ohio UtilitiesProtection SERVICE
Call Before You Dig 1-800-362-2764
(Non-members must be called directly)

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

DRAWING NAME: xxxxx.DWG
PROJECT NUMBER: xxxxx.DWG
9 / 13

TBM #1
TOP OF LIGHT POLE CONCRETE FOUNDATION
62' NORTH OF NORTH PROPERTY LINE AND
230' WEST OF EAST PROPERTY LINE
ELEV. 1112.44

CONTROL		
DESCRIPTION	NORTH	EAST
CP1 (IPF)	404381.2569	2250864.1396
CP2 (IPF)	403931.4987	2250846.6864



HORIZONTAL SCALE IN FEET

CHECKED BY: KAD

DATE: Sept, 2017

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LOCK IT UP MASSILLON, LLC
SWP3 Notes & Details
City of Massillon
Stark County, Ohio

CIVIPRO
ENGINEERING
ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS
4450 BELDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44708
PHONE: (330) 268-3734 EMAIL: KAD@CIVIPROENGINEERING.COM
WWW.CIVIPROENGINEERING.COM

DRAWING NAME:

PROJECT NUMBER:

10 / 13

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 EARTHVWORK 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 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 UNFORSEEN 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 LORAIN 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 QUAITY STRUCTURES, SEDIMENT PONDS. SEDIMENT TRAPS. EARTHEN DIVERSIONS. OR EMBANKMENTS SHALL BE SEEDED 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 CONSTRUCT/ON 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 EROSIIVE 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

- SILT FENCE OR CONSTRUCTION FENCE INSTALLED AROUND THE PERIMETER OF THE DEVELOPMENT AREA TO ENSURE ALL VEHICLE TRAFFIC ADHERES TO DESIGNATED CONSTRUCTION ENTRANCES.
- 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 RAMPS 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

THERE 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 BE 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:

- 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.
- 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:
 - THE INSPECTION DATE.
 - NAMES, TITLES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION.
 - 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.
 - 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.
- 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.
- LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE VEHICLE TRACKING
- 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 BORCHERDS@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:

- 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.
- 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.
- 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

SCALE IN FEET

CHECKED BY:

KAD

DATE:

Sept, 2017

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KAD

DATE:

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REVISIONS:

DATE	DESCRIPTION

LOCK IT UP MASSILLON, LLC

SWP3 Notes & Details

City of Massillon

Stark County, Ohio

CIVIPRO

ENGINEERING

PROFESSIONAL ENGINEER

CONSTRUCTION MANAGER

1450 BETEN VILLAGE STREET NW, SUITE 400 CANTON, OH 44708

PHONE: (330) 268-3724 EMAIL: KAD@CIVIPROENGINEERING.COM

WWW.CIVIPROENGINEERING.COM

DRAWING NAME:

PROJECT NUMBER:

11 / 13

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 1330 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 (TSDFs). 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, TARPING 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

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FEET

HORIZONTAL SCALE IN FEET

CHECKED BY:
KAD

DATE:
Sept, 2017

DRAWN BY:
KAD

DATE:
Sept, 2017

REVISIONS:

DATE	DESCRIPTION

LOCK IT UP MASSILLON, LLC
SWP3 Notes & Details
City of Massillon
Stark County, Ohio

CIVIPRO

ENGINEERING

DESIGNER: JAMES E. COOPER, P.E.

4450 BERDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44705

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DRAWING NAME:

PROJECT NUMBER:

12 / 13

SEDIMENT POLLUTANT CONTROLS (GENERAL NOTES):

1. PERIMETER SEDIMENT CONTROLS (I.E. SEDIMENT TRAPS, SILT FENCE, COMPOST SOCKS, COMPOST BERMS, ETC ...) SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPSLOPE AREAS DRAINING TO THEM ARE PERMANENTLY STABILIZED, OR AS DIRECTED BY THE CITY ENGINEER, OR DESIGNATED REPRESENTATIVE.

2. NO EROSION AND SEDIMENT CONTROL BMP 'S SHALL BE REMOVED FROM THE SITE PRIOR TO ADEQUATE PERMANENT STABILIZATION OF THE ASSOCIATED UPLAND DRAINAGE AREAS AND WITHOUT FIRST OBTAINING AUTHORIZATION FROM THE CITY ENGINEER, OR HIS DESIGNATED REPRESENTATIVE, UNLESS THEIR REMOVAL IS SPECIFICALLY PROVIDED FOR WITHIN THE SITE'S APPROVED PLAN.

3. THERE SHALL BE NO SEDIMENT-LADEN OR TURBID DISCHARGES TO WATER RESOURCES OR WETLANDS RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUNDWATER CONTAINS SEDIMENT, IT MUST PASS THROUGH A SEDIMENT TRAP 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.

4. STREETS DIRECTLY ADJACENT TO CONSTRUCTION ENTRANCES AND RECEIVING TRAFFIC FROM THE DEVELOPMENT AREA, SHALL BE CLEANED DAILY TO REMOVE SEDIMENT TRACKED OFF-SITE. IF APPLICABLE, THE CATCH BASINS ON THESE STREETS NEAREST TO THE CONSTRUCTION ENTRANCES SHALL ALSO BE CLEANED WEEKLY. BASED ON SITE CONDITIONS, THE CITY ENGINEER, OR HIS DESIGNATED REPRESENTATIVE, MAY REQUIRE ADDITIONAL BEST MANAGEMENT PRACTICES TO CONTROL OFF-SITE TRACKING OF DUST.

5. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, OR REPRESENTATIVE, TO PROVIDE INSPECTION OF ALL CONTROLS ON THE SITE 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. INSPECTIONS MUST BE COMPLETED BY A QUALIFIED INDIVIDUAL. WHEN INSPECTIONS REVEAL THE NEED FOR REPAIR, REPLACEMENT, OR INSTALLATION OF EROSION AND SEDIMENT CONTROL BMP'S, EMAIL WEEKLY REPORTS TO BORCHERDS@CVELIMITED.COM. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

A. WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE: THE BMP SHALL BE REPAIRED WITHIN 3 DAYS OF INSPECTION. EXCEPTION: SEDIMENT PONDS SHALL BE REPAIRED OR MAINTAINED WITH 10 DAYS OF INSPECTION.

B. WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION: A MORE APPROPRIATE BMP SHALL BE SELECTED AND IMPLEMENTED WITHIN 10 DAYS OF THE INSPECTION.

C. WHEN PRACTICES DEPICTED IN THE SWP3 ARE NOT INSTALLED: THE BMP SHALL BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF THE INSPECTION REVEALS THAT THE BMP IS NOT NECESSARY, THE RECORD MUST CONTAIN AN EXPLANATION FOR THE DECISION.

6. THE APPLICANT SHALL MAINTAIN FOR 3 YEARS FOLLOWING FINAL STABILIZATION, THE RESULTS OF THESE INSPECTIONS, THE NAMES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTIONS, THE DATES OF 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.

7. ALL EROSION AND SEDIMENT CONTROL PRACTICES SPECIFIED ON THIS PLAN SHALL CONFORM WITH THE DETAILS AND SPECIFICATIONS OUTLINED IN THE CURRENT VERSION OF THE OHIO DEPARTMENT OF NATURAL RESOURCES, "RAINWATER AND LAND DEVELOPMENT" MANUAL, OR AS SPECIFIED BY THE CITY ENGINEER, OR DESIGNATED REPRESENTATIVE.

8. EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY SPECIFIED ON THIS PLAN MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND /OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH-MOVING ACTIVITY. ADDITIONAL PRACTICES SHALL BE IMPLEMENTED AT THE DEVELOPER'S EXPENSE AS DIRECTED BY THE CITY ENGINEER, OR DESIGNATED REPRESENTATIVE.

9. NO STRUCTURAL SEDIMENT CONTROLS (SILT FENCE, SEDIMENT TRAPS, ETC.) SHALL BE USED IN A WATER RESOURCE OR WETLAND, UNLESS THEIR USE IS SPECIFICALLY PROVIDED FOR WITHIN THE SITE'S APPROVED PLAN.

10. SOIL STOCK PILES, TOPSOIL OR OTHER WISE, SHALL BE SITUATED A WAY FROM STREETS, SWALES, OR OTHER WATERWAYS AND SHALL BE SEEDED AND /OR MULCHED IMMEDIATELY.

11. ON-SITE PERSONNEL SHALL TAKE ALL NECESSARY MEASURES TO COMPLY WITH APPLICABLE REGULATIONS REGARDING FUGITIVE DUST EMISSIONS, INCLUDING OBTAINING NECESSARY PERMITS FOR SUCH EMISSIONS. THE CITY ENGINEER, OR DESIGNATED REPRESENTATIVE, MAY REQUIRE DUST CONTROLS INCLUDING, BUT NOT LIMITED TO, 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.

1. ANY DISTURBED AREA NOT PAVED, SODDED, OR BUILT UPON SHALL HAVE A MINIMUM OF 80% UNIFORM VEGETATIVE COVER PRIOR TO FINAL INSPECTION AND, IN THE OPINION OF THE CITY ENGINEER OR DESIGNATED REPRESENTATIVE, WILL BE MATURE ENOUGH TO CONTROL EROSION SATISFACTORILY AND SURVIVE SEVERE WEATHER.

NON-SEDIMENT POLLUTANT CONTROLS (GENERAL NOTES):

1. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR ENSURING ALL FORMS OF WASTE ARE PROPERLY DISPOSED OF.

2. NO CONTAMINATED SOILS ARE KNOWN TO EXIST ON SITE. CONTAMINATED SOILS DISCOVERED FROM REDEVELOPMENT SITES SHALL BE DISPOSED OF PROPERLY. 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.

3. CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FEET OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED AWAY FROM ANY WATER CONVEYANCES.

4. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. ANY AND ALL WASTE MATERIALS (SOLID, HAZARDOUS, CONSTRUCTION & DEMOLITION, SANITARY, TOXIC, CONTAMINATED SOILS, ETC.) GENERATED AT THE SITE SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL RULES/REGULATIONS. ON-SITE STORAGE CONTAINERS SHALL BE COVERED AND NOT LEAKING. IT IS PROHIBITED TO BURN, BUY OR POUR OUT ONTO THE GROUND OR INTO THE STORM SEWERS ANY SOLVENTS, PAINTS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND ANY OTHER SUCH TOXIC OR HAZARDOUS MATERIALS OR WASTES.

5. HANDLING CONSTRUCTION CHEMICALS. MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATER COURSE, DITCH OR STORM DRAIN.

6. EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED A WAY FROM WATER COURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT WITH A MINIMUM CAPACITY EQUAL TO 110% OF THE VOLUME OF ALL CONTAINERS IN A STORAGE AREA SHALL BE PROVIDED FOR ALL FUEL/LIQUID STORAGE TANKS AND DRUMS.

7. ALL SANITARY WASTE SHALL BE COLLECTED FROM PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, AS REQUIRED BY LOCAL REGULATION.

8. THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

A. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR APPROPRIATE CONTAINERS, AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

C. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE MANUFACTURER'S LABEL. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

D. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

E. THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

F. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON SITE.

9. IN ADDITION TO PREVIOUS NOTES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEAN-UP:

A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN-UP WILL BE POSTED A NO SITE PERSONNEL MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEAN-UP SUPPLIES.

B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE, BUT NOT LIMITED TO: BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOFFLES, CAT LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY DESIGNATED FOR THIS PURPOSE.

C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

D. THE SPILL AREA WILL BE KEPT WELL-VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

E. SPILLS OF TOXIC OR HAZARDOUS MATERIALS WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE.

F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEANUP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

G. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY OPERATIONS WILL BE THE SPILL PREVENT ON AND CLEANUP COORDINATOR. THEY WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ON SITE.

CONSTRUCTION STANDARDS AND SPECIFICATIONS:

SPECIFICATION FOR TEMPORARY EROSION CONTROL (G-11)

GENERAL

CONTRACTOR SHALL MEET THE EROSION AND SEDIMENT CONTROL REQUIREMENTS OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY, DEPARTMENT OF TRANSPORTATION AND THE SOIL CONSERVATION SPECIFICATIONS. REQUIRED NPDES STORM WATER PERMITS SHALL APPLY.

IN CASES WHERE CONFLICTS EXIST BETWEEN STANDARDS, THE STRICTER REQUIREMENTS SHALL GOVERN.

PROPOSED TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY ENGINEER.

CONSTRUCTION ENTRANCE

THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT.

MATERIAL USED SHALL BE #1 & #2 LIMESTONE AGGREGATE TWO INCH STONE. MINIMUM WIDTH OF 14 FT. AND DEPTH OF 8".

A CULVERT PIPE SHALL BE PLACED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOW ACROSS THE ENTRANCE AND ONTO THE PAVED ROADWAY, PER CITY STANDARDS.

CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING, THEREFORE MUD TRACKED ON TO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY BY SCRAPING OR SWEEPING.

PAVED DETENTION FACILITY

DETENTION FACILITIES WHICH ARE TO REMAIN PERMANENT SHALL BE DESIGNED TO INCLUDE CONCRETE PAVED GUTTERS IN ACCORDANCE WITH THE ODOT STANDARD DRAWING FOR PAVED GUTTERS, DM 2.1.M. GUTTERS SHALL BE CONSTRUCTED OF CLASS C CONCRETE. THE PROPOSED DESIGN, GRADE AND LOCATION SHALL BE SUBMITTED TO THE CITY ENGINEER FOR HIS APPROVAL OR MODIFICATION.

SPECIFICATION FOR SEEDING (G-13)

1. A 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. REOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION:

1. LIME -- AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS REQUIRED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT A RATE OF 100 LB./1,000 SQ.FT. OR 2 TONS/ AC.

2. FERTILIZER -- FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 12 LB./1,000 SQ. FT. OR 500 LB./AC. OF 10-10-10 OR 12-12-12 ANALYSIS.

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 IN. ON SLOPING LAND, THE SOIL SHOULD SHALL BE WORKED ON THE CONTOUR.

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

DORMANT SEEDINGS

1. SEEDING SHALL NOT BE PLANTED 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.

2. THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING"

• FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED A MOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE ELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

• FROM NOVEMBER 20, THROUGH MARCH 15, WHEN SOIL CONDITIONS PER MIX, PREPARE THE SEEDBED. LIME AND FERTILIZE. APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

• APPLY SEEDING UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.

• WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE

MULCHING

1. MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOIL CONDITIONS AND ON VERY FLAT AREAS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION. DORMANT SEEDING SHALL BE MULCHED.

2. MATERIALS

• STRAW -- IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/ AC. OR 90 LB./1,000 SQ. FT. (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREAS INTO APPROXIMATELY 1,000-SQ.-FT. SECTIONS AND SPREAD TWO 45- LB. BALES OF STRAW IN EACH SECTION.

• HYDROSEEDERS -- IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2,000 LB./AC/ OR 46 LB./1,000 SQ.FT.

• OTHER -- OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS/ A C.

3. STRAW MULCH ANCHORING METHODS

STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

- MECHANICAL -- A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PINCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED, BUT GENERALLY, BE LEFT LONGER THAN 6 IN.
- MULCH NETTINGS -- NETTINGS SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
- ASPHALT EMULSION -- ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER OR AT A RATE OF 160 CAL. / AC.
- SYNTHETIC BINDERS -- SYNTHETIC BINDER S SUCH AS ACRYLIC (DLRACRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
- WOOD CELLULOSE FIBER -- WOOD CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./AC. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 L B./100 GAL. OR WOOD CELLULOSE FIBER.

IRRIGATION

1. PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

2. EXCESSIVE IRRIGATION RATES SHALL BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.

SEED MIX

1. SEED MIX SHALL BE PER ODOT 559.09 OR AS APPROVED BY THE CITY SERVICE DEPT.

IMPLEMENTATION SCHEDULE & SEQUENCE OF MAJOR CONSTRUCTION OPERATIONS:

A. BEFORE ANY GRADING ACTIVITIES BEGIN:

1. INSTALL PROTECTION FENCING AROUND WETLAND AREA TO REMAIN UNDISTURBED. FENCING TO BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.

2. CONSTRUCT CONSTRUCTION FENCE AS NECESSARY TO ENCLOSE SITE

3. INSTALL SILT FENCING PER DETAIL

4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE

B. CLEARING AND GRUBBING:

1. INSTALL REMAINING SILT FENCE, PER PLAN REQUIREMENTS

2. CLEAR AND GRUB THE BASIN/WATER QUALITY BASIN AREAS

3. CONSTRUCT BASIN /WATER QUALITY POND PER PLAN WITH OUTLET STRUCTURE, EMERGENCY SPILLWAY, AND ASSOCIATED PIPING

4. CONSTRUCT EAST AND WESTERN DRAINAGE SWALES, FOREBAY, AND CHECK DAMS

5. CLEAR AND GRUB REMAINING AREAS DESIGNATED ON THE PLAN

6. CONSTRUCT CONCRETE WASHOUT AREA, VEHICLE FUELING AREA, CONSTRUCTION DUMPSTER AREA, AND SOLID, SANITARY, AND TOXIC WASTE AREA

C. STRIPPING AND STOCKPILING OF TOPSOIL

1. STRIP TOPSOIL WHERE APPLICABLE AND PLACE IN DESIGNATED STOCKPILE AREA

2. CONSTRUCT FILTER BERM AROUND STOCKPILE

3. INSTALL SOIL STABILIZATION MEASURES AS NEEDED

4. DISTURBED AREAS WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS WILL BE STABILIZED

D. MASS GRADING OPERATIONS:

1. BEGIN MASS GRADING OF SITE PER PLAN

2. INSTALL EROSION CONTROLS MEASURES (ROCK DAMS, EROSION CONTROL MATTING, ETC.), PER PLAN REQUIREMENTS AS NEEDED

3. DISTURBED AREAS WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS WILL BE STABILIZED

E. UTILITY CONSTRUCTION:

1. CONSTRUCT SANITARY SERVICE AND WATERLINE, PER PLAN

2. CONSTRUCT STORM SEWER SYSTEM, INCLUDING HEADWALLS, CATCH BASINS, YARD DRAINS, AND ROCK CHANNEL PROTECTION, PER PLAN

3. INSTALL INLET PROTECTION

4. INSTALL SOIL STABILIZATION MEASURES AS NEEDED

F. PAVING OPERATIONS:

1. CONSTRUCT ASPHALT AND CONCRETE PAVING, SIDEWALK, CURB

2. CLEAN AND RESET ALL UTILITY STRUCTURES TO FINAL GRADE

G. BUILDING:

1. CONSTRUCTION OF BUILDING. MAINTAIN ALL BMPS.

H. FINAL GRADING OPERATIONS:

1. REMOVE SEDIMENT FROM POND AND DRAINAGE STRUCTURES

2. REMOVE BMPS FROM STORM INLETS AND FINALIZE PAVEMENT ACTIVITIES

3. REMOVE TEMPORARY CONCRETE WASHOUT AREA

4. REMOVE ALL TEMPORARY BMPS AND STABILIZE ANY AREAS DISTURBED BY THERE REMOVAL WITH EROSION CONTROLS

5. PREPARE FINAL SEEDING AND LANDSCAPING

6. REMOVE PROTECTION FENCING AROUND WETLAND AREA

7. BASIN MUST BE DREGGED OF ACCUMULATED SEDIMENT AND RESTORED TO ORIGINAL DESIGN CAPACITY

I. POST-GRADING OPERATIONS:

1. MONITOR PROGRESS OF SITE STABILIZATION

2. RE-SEED AND REPAIR DAMAGED AREAS

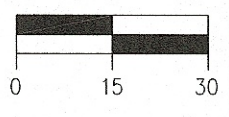
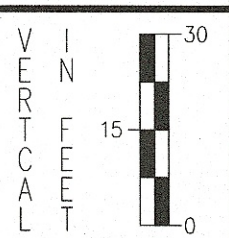
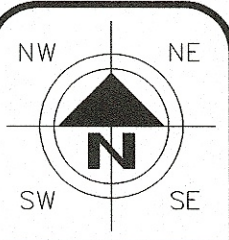
3. MAINTAIN AND INSPECT ALL PERMANENT BMPS

DEWATERING:

1. THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS FROM DEWATERING ACTIVITIES.

2. CONTRACTOR SHALL PREPARE A DEWATERING PLAN PRIOR TO ANY PUMPING ACTIVITIES.

3. WATER FROM TRENCHES SHALL BE DISPOSED OF IN SUCH A MANNER TO AVOID PUBLIC NUISANCE, INJURY TO PUBLIC HEALTH OR ENVIRONMENT, DAMAGE TO PROPERTIES, OR DAMAGE TO WORK COMPLETED.



HORIZONTAL SCALE IN FEET

CHECKED BY: KAD

DATE: Sept, 2018

DRAWN BY: KAD

DATE: Sept, 2018

REVISIONS:	DESCRIPTION
DATE	

LOCK IT UP MASSILLON, LLC
SWP3 Notes & Details
City of Massillon
Stark County, Ohio



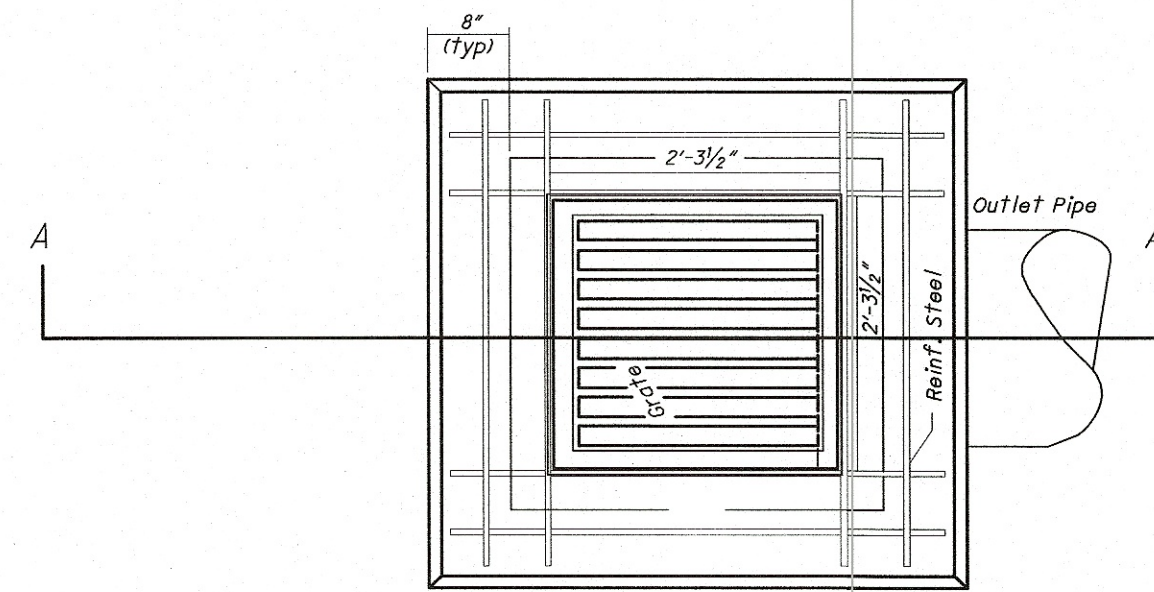
DRAWING NAME:

xxxx.DWG

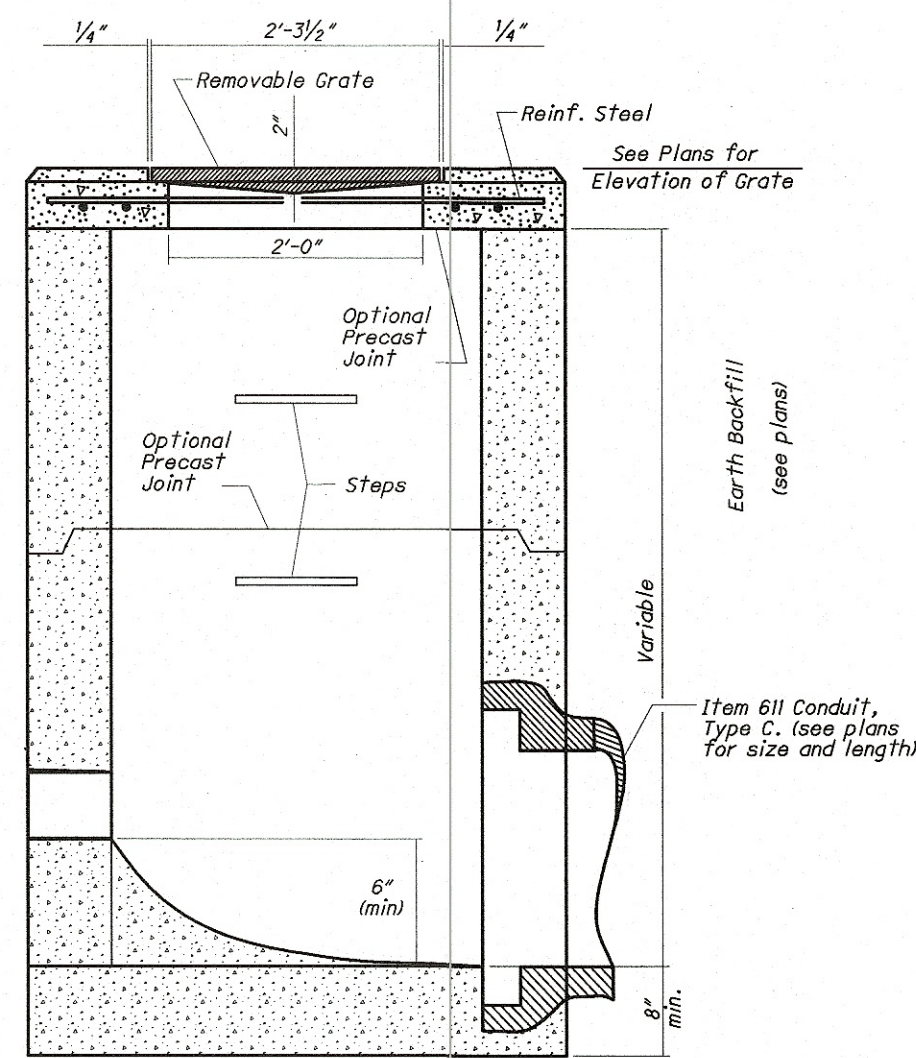
PROJECT NUMBER:

xxxx.DWG

13 / 13



PLAN VIEW (DETENTION SHOWN)
NOT TO SCALE



SECTION A-A (DETENTION SHOWN)
NOT TO SCALE

NOTES

LOCATION AND ELEVATION: When given on the plans, the location and the elevation are at the top center of the grate. Place the orifice holes at the elevations as shown on the plans.

Basin Materials: Provide basin dimensions, materials, and grate per CB-1.2, except as detailed here. Do not use side inlet windows.

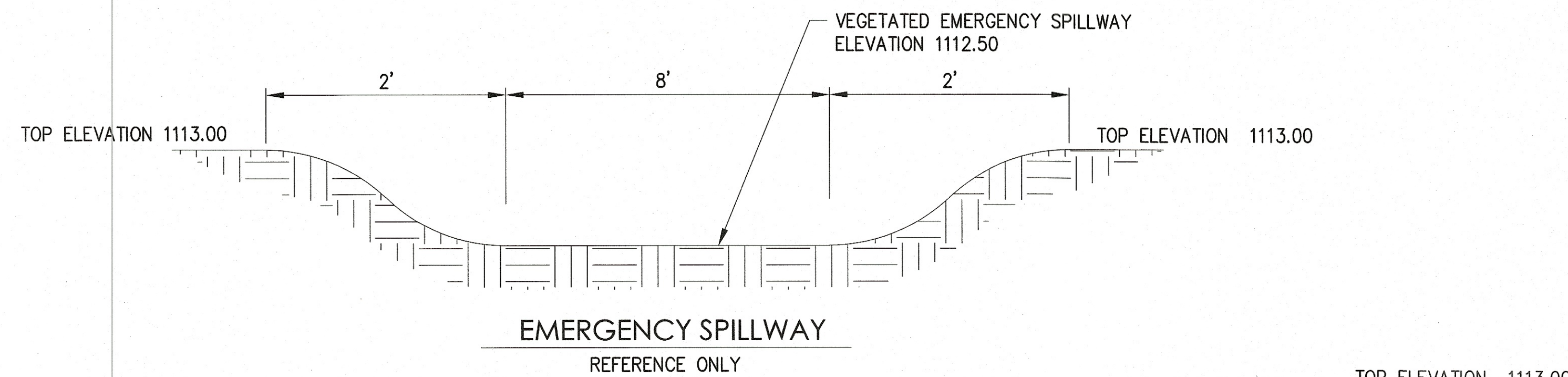
Meet CMS 203.02 H, NATURAL GRANULAR MATERIALS and specified gradations for oil aggregate shown.

Riser Pipe: Use schedule 40 Polyvinyl Chloride Conduit with perforations only as detailed in the plans.

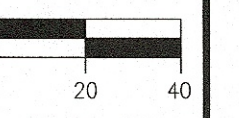
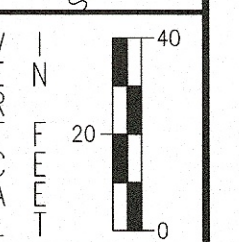
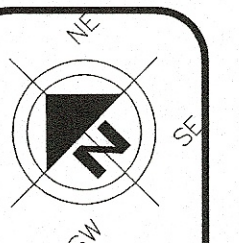
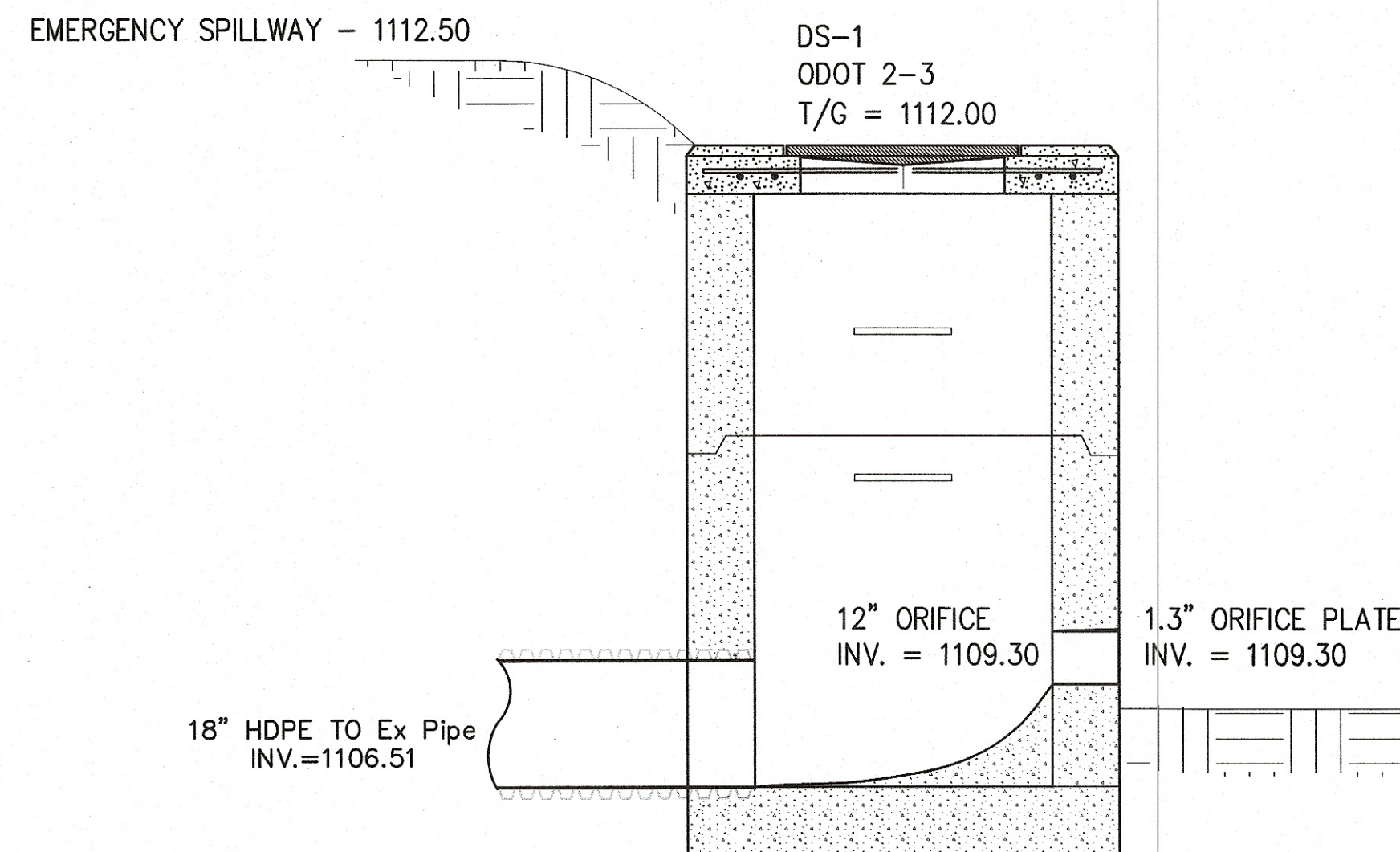
TRASH SKIMMER: Use trash skimmer screens to protect the perforated riser. It must extend from the top of the riser to 2' below the permanent pool level and be open at the top and bottom. The radius of the trash skimmer is 3 times the diameter of the riser pipe or as shown on the plans. Provide stainless steel or galvanized steel trash skimmer per CMS 711.02. Maximum perforation size is 2 inches. Securely fasten trash skimmer to the basin using hardware galvanized per CMS 711.02.

STABILIZER AND ANCHOR STRAP: Securely fasten the riser pipe to the basin in the vertical position using a stabilizer and anchor strap that consists of a universal clamp or a strap and a block. Use only galvanized or stainless steel for metal components. All other materials must be rot resistant.

PAYMENT: All materials and labor, including excavation and backfill, are paid for at the contract price for Item 611 - Water Quality Basin, Retention Detention.



DETENTION BASIN OUTLET STRUCTURE



HORIZONTAL
SCALE IN FEET

CHECKED BY:
KAD

DATE:
Oct, 2019

DRAWN BY:
BMH

DATE:
Oct, 2019

REVISIONS:	DATE	DESCRIPTION

LOCK IT UP MASSILLON, LLC
Outlet Structure Detail
City of Massillon
Stark County, Ohio

CIVPRO
ENGINEERING
ENGINEERS-SURVEYORS-CONSTRUCTION MANAGERS
4450 BELDEN VILLAGE STREET NW, SUITE 800 CANTON, OH 44718
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