# **OWNER'S ACCEPTANCE & DEDICATION**

I/We, the undersigned owners of and holders of liens and other interest in and to the land embraced within this plat of survey do hereby declare this plat to be our free act and deed, and do voluntarily consent to the execution of this plat and do hereby dedicate Lawnmark Drive, shown hereon, shaded with diagonal hatch, for public use and roadway purposes and grant a temporary Cul-De-Sac easement, shown heron, shaded in light grey.

TRAILS OF HUDSON TWO LLC, or agent/assign.

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Authorized Agent	Date	
Witness	Witness	
County of}		
State of Obio	•	

Before me a Notary Public in and for said County and State, personally appeared the above named authorized agent for Trails of Hudson Two LLC, who acknowledged the making of the foregoing instrument and the signing of this plat to be his own free act and deed. In testimony whereof I have hereunto set my hand and official seal

, Ohio this

day of , 2016.

Notary public

My commission expires

# PLAT OF SURVEY FOR LOT SPLIT AND DEDICATION OF LAWNMARK DRIVE TRAILS OF HUDSON TWO LLC

SITUATED IN THE CITY OF HUDSON, COUNTY OF SUMMIT AND STATE OF OHIO AND KNOWN AS BEING PART OF ORIGINAL HUDSON TOWNSHIP LOTS NOS. 4 AND 5.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE PREMISES SHOWN HEREON, THAT ALL MONUMENTS SHOWN HEREON HAVE BEEN FOUND OR SET AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF ALL THE INFORMATION SHOWN HEREON IS CORRECT. ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF.

DATE: April 05, 2016

GUY P. HANEY, P.S. NO. S-7631 T.G.C. Engineering, LLC 1310 Sharon Copley Road, P.O. Box 37 Sharon Center, OH 44274 330-590-8004 ghaney@tgcengineering.com

# VICINITY MAP



NOT TO SCALE



# SURVEY TOTALS

LAND IN ROW LAND IN PARCEL TOTAL LAND AS SURVEYED:

1.0591 AC. 14.4009 AC. 15.4600 AC.

# **APPROVALS**

<u>CITY ENGINEER</u> THIS PLAT IS HEREBY APPROVED BY THE CITY ENGINEER OF THE CITY OF HUDSON, OHIO.

CITY ENGINEER, THOMAS J. SHERIDAN, P.E., P.S.

CITY MANAGER THIS PLAT IS HEREBY APPROVED BY THE CITY MANAGER OF THE CITY OF HUDSON, OHIO.

DATE:

DATE:

CITY MANAGER, JANE HOWINGTON

# GENERAL NOTES

ZONING: DISTRICT 8 HB SENIOR HOUSING OVERLAY

THIS SURVEY WAS PERFORMED USING CONVENTIONAL SURVEYING INSTRUMENTATION AND METHODS IN ACCORDANCE WITH CHAPTER 4733-37 OF THE OHIO ADMINISTRATIVE CODE AND THE COUNTY OF SUMMIT, OHIO STANDARDS FOR THE APPROVAL AND LEGAL DESCRIPTIONS USED IN TEAL PROPERTY CONVEYANCES REVISED JANUARY 2002.

NO TRANSFER IS TAKING PLACE WITH THE RECORDING OF THE SURVEY. THIS SURVEY IS BEING RECORDED AS A GRAPHIC REPRESENTATION OF A LEGAL DESCRIPTION IN A DEED,

BEARINGS ARE BASED NAD83 OHIO STATE PLANE COORDINATES (GROUND), NORTH ZONE.

This property is situated in Zone "X", areas of minimal flooding as shown on The Federal Emergency Management Agency's Flood Insurance Rate Map Panel No. 0129E for Community No. 39153C having an effective date of July 20, 2009.

Source http://store.msc.fema.gov

C Engineering, LLC 310 SHARON COPLEY ROAD, SHARON CENTER, OH 44274 E) 330.590.8004 (FAX) 888.820.8423 PROJECT NO. 1229 DATE 2016-04-05 1/4



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# PLAT OF SURVEY FOR LOT SPLIT AND DEDICATION OF LAWNMARK DRIVE TRAILS OF HUDSON TWO LLC

#### SITUATED IN THE CITY OF HUDSON, COUNTY OF SUMMIT AND STATE OF OHIO AND KNOWN AS BEING PART OF ORIGINAL HUDSON TOWNSHIP LOTS NOS. 4 AND 5.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE PREMISES SHOWN HEREON, THAT ALL MONUMENTS SHOWN HEREON HAVE BEEN FOUND OR SET AND THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF ALL THE INFORMATION SHOWN HEREON IS CORRECT. ALL DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF.

GUY P. HANEY, P.S. NO. S-7631 T.G.C. Engineering, LLC 1310 Sharon Copley Road, P.O. Box 37 Sharon Center, OH 44274 330-590-8004 ghaney@tgcengineering.com DATE: April 05, 2016

BEARINGS ARE BASED NAD83 OHIO STATE PLANE COORDINATES (GROUND), NORTH ZONE.

-5/8 x 30 INCH IRON REBAR SET WITH CAP MARKED G.HANEY, S-7631

Reference Survey: Boundary Survey and Lot Split Map, Rec. No. 55872295

Easement Details on Pg. 4

NOTE: SANITARY SEWER EASEMENT 1 TO BE GRANTED WITH THE EXECUTION OF THIS PLAT.

EASEMENT LINE DATA			
SEGMENT	LENGTH	DIRECTION	
L1	283.81'	S 0'29'37" E	
L2	406.70'	S 88'57'14" E	
L3	36.97'	S 41"31'38" E	
L4	91.45'	S 1'02'46" W	
L5	9.00'	S 28'53'36" W	
L11	76.34'	N 1'02'46" E	
L12	8.24'	N 28'53'36" E	
L13	91.45'	N 1'02'46" E	
L14	36.97'	N 41"31"38" W	
L15	406.70'	N 88'57'14" W	
L16	138.30'	N 0*29'37" W	
L18	25.41'	S 89"20'43" W	

EASEMENT CURVE DATA				
SEGMENT	LENGTH	RADIUS	CHORD	CHORD BEARING
C1	77.20'	50.00'	69.75'	S 44'43'25" E
C2	26.49'	32.00'	25.74'	S 6514'26" E
C3	23.78'	32.00'	23.23'	S 2014'26" E
C4	25.48'	48.00'	25.18'	S 16"15'04" W
C6	23.33'	48.00'	23.10'	N 14'58'11" E
C7	45.68'	88.00'	45.17'	N 15'54'58" E
C8	53.50'	72.00'	52.28'	N 2074'26" W
C9	59.60'	72.00'	57.91'	N 6574'26" W
C10	15. <b>44'</b>	10.00'	13.95'	N 44*43'25" W

# LEGEND

NAIL MONUMENT 5/8" × 30 "TGC ENG	BOX M IR " IRON PIN SET WIT 7631-8557"	rill Hole On Pin Fou H Cap Read	ND (SURVEYOR) O NNG O
Centerlini Property Right—OF- Easement Original F Original L	E LINE WAY LINE LINE PROP. LINE	;	
REC. /R. MEAS. /M. CALC. /C. OBS. ENCR. CLR. ADJ. D.H. AC. S.F.	RECORD MEASURED CALCULATED OBSERVED ENCROACHES CLEARS ADJACENT DRILL HOLE ACRES SQUARE FEET	VOL./V. D.V. PG./P. DOC. O.R. S.C.P.R. R/W CL PL	VOLUME DEED VOLUME PAGE DOCUMENT OFFICIAL RECORD SUMMIT COUNTY PLAT RECORDS RIGHT-OF-WAY CENTERLINE PROPERTY LINE



PLAT OF SURVEY FOR LOT SPLIT AND DEDICATION OF LAWNMARK DRIVE TRAILS OF HUDSON TWO LLC STUATED IN THE CITY OF HUDSON, COUNTY OF SUMMIT AND STATE OF OHIO AND KNOWN AS BEING PART OF ORIGINAL HUDSON TOWNSHIP LOTS NOS. 4 AND 5.			
GUY P. HANEY, P.S. NO. S-7631DATE: April 05, 2016T.G.C. Engineering, LLC1310 Sharon Copley Road, P.O. Box 37Sharon Center, OH 44274330-590-8004ghaney@tgcengineering.com			
Easement Details on Pg. 4			
BEARINGS ARE BASED NAD83 OHIO STATE PLANE COORDINATES (GROUND), NORTH ZONE.			
● -5/8 x 30 INCH IRON REBAR SET WITH CAP MARKED G.HANEY, S-7631			
-5/8 x 30 INCH IRON REBAR SET WITH CAP MARKED G.HANEY, S-7631  Reference Survey: Boundary Survey and Lot Split Map. Rec. No. 55872295			
Map of Lot Split & Consolidation, Rec. No. 55588022			
LEGEND			
NALL TOX BRILL HOLE FOR FOUND (SURVEYOR) O 5/8" x 30" IRON PIN SET WITH CAP READING • "GC ENG 7831-8857" CENTERLINE PROPERTY LINE EASEMENT LINE CONIGNAL PROP. LINE ORIGINAL OT LINE REC./R. RECORD VOL./V. VOLUME CALC./C. CALCULATED PG./P. PAGE CALC./C. CALCULATED PG./P. PAGE S.C.P.R. SUMMIT COUNTY ADJ./ ADJACENT D.H. DRILLHOLE R/W RIGHT-OF-WAY AC. ACRES CL. CENTERLINE S.F. SQUARE FEET PL PROPERTY LINE			



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**TRAILS** 

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DATE

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# **TRAILS OF HUDSON -**LAWNMARK DRIVE

# **COMMERCIAL DEVELOPMENT**

**PUBLIC RIGHT OF WAY** THE CITY OF HUDSON SUMMIT COUNTY, STATE OF OHIO



NOT TO SCALE

CHRISTOPHER M. SCHMIDT, P.E. NO. E-80749 DATE **APPROVALS:** 

E OF CHRISTOPHER M. SCHMIDT E-80749 GISTER ONA'

DATE

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**CITY OF HUDSON - ENGINEER** THOMAS J. SHERIDAN, P.E., P.S.

OHIO EPA WATER APPROVAL LETTER DATED: SUMMIT COUNTY SOIL AND WATER LETTER DATED:

SHEET INDEX			
SHEET	DESCRIPTION		
C01	TITLE SHEET		
C02	GENERAL NOTES		
C03	EXISTING CONDITIONS PLAN		
C04	OVERALL SITE PLAN		
C05	OVERALL UTILITY PLAN		
C06	INTERSECTION DETAILS		
C07	PLAN/PROFILE - LAWNMARK DRIVE		
C08	PLAN/PROFILE - STORM SEWERS		
C09-10	NOTES & DETAILS		
SWI	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)		
SW2	SWPPP NOTES		
SW3	SWPPP NOTES & DETAILS		
SW4	SWPPP INSPECTION FORM		
	SUBMISSION INDEX		

# SUBMISSION DATE SUBMISSION #1: CITY OF HUDSON, AKRON WATER 04/05/2016

# **PROJECT INFORMATION:**

# SITE INFORMATION

CURRENT ZONING: DISTRICT 8 HB SENIOR HOUSING OVERLAY PROJECT AREA:1.06 AC.

#### **DEVELOPER:**

TRAILS OF HUDSON TWO, LLC 23775 COMMERCE PARKWAY, SUITE 7 BEACHWOOD, OHIO 44256

CONTACT: PATRICIA RAKOCI 330-590-8014

#### **ULTIMATE OWNER:**

CITY OF HUDSON 115 EXECUTIVE PARKWAY HUDSON, OHIO 44236

**CONTACT: THOMAS SHERIDAN** 330-342-1770

#### **DESIGN ENGINEER:** TGC ENGINEERING. LLC

1310 SHARON COPLEY ROAD SHARON CENTER, OHIO 44274

CONTACT: CHRIS SCHMIDT, P.E. 330-590-8004

#### CONTRACTOR:

TO BE DETERMINED

# **BENCHMARKS**:

1) EXISTING SAN. MH-9, LOCATED AT THE INTERSECTION OF REDWOOD BOULEVARD AND SCARLET OAK DRIVE ELEVATION=1057.69

2) EXISTING SAN. MH-10, LOCATED AT THE INTERSECTION OF SILVER LINDEN LANE AND SCARLET OAK DRIVE ELEVATION=1043.51

#### **UTILITIES:** LISTED BELOW ARE ALL THE KNOWN UTILITIES

LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS, TOGETHER WITH THEIR RESPECTIVE OWNERS:

WATER LINES: AKRON PUBLIC UTILITIES BUREAU (330) 375-2420

STORM SEWERS CITY OF HUDSON (330) 342-1770

SANITARY SEWERS: SUMMIT COUNTY DOES

(330) 342-1728

(330) 926-2400 ELECTRIC LINES: HUDSON PUBLIC POWER

WINDSTREAM (866) 445-5880 GAS LINES: DOMINION EAST OHIO (800) 362-7557

TELEPHONE LINES:

CABLE TV: TIME WARNER (866) 744-1402

REGISTERED UNDERGROUND UTILITIES PROTECTION SERVICE: OHIO UTILITIES PROTECTION SERVICE (OUPS) 1-800-362-2764 OR 8-1-1

- CITY OF HUDSON GENERAL CONSTRU
- 1. CONSTRUCTION OF THE SITE WORK AND UTILITIES SHALL BE GOVERNED BY THE CITY OF HUDSON'S "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION", LATEST EDITION.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED FOR THE PROJECT.
- 3. THE CONTRACTOR MUST ALERT THE OHIO UTILITY PROTECTION SERVICES AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATION IS TO BEGIN.
- 4. ALL EXISTING APPURTENANCES (UTILITY POLES, VALVES, HYDRANTS, MANHOLES, ETC.) ARE TO BE MAINTAINED BY THE CONTRACTOR UNLESS OTHERWISE SHOWN ON THE PLANS.
- 5. THE DESIGN ENGINEER CERTIFIES THAT ALL UTILITIES ARE SHOWN AS THEY APPEAR ON EXISTING RECORDS OR ARE FIELD LOCATED.
- 6. ALL KNOWN ABOVE AND UNDERGROUND SERVICES HAVE BEEN NOTED ON THE DRAWINGS. THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY SERVICES DAMAGED DURING THE CONSTRUCTION OF THE PROJECT WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SERVICE AS SOON AS POSSIBLE AT THE CONTRACTOR'S OWN EXPENSE.
- VIDEO TAPING OF PROJECT SHALL BE DELIVERED AND ACCEPTED BY THE CITY OF HUDSON ENGINEERING DEPARTMENT A MINIMUM OF 14 CALENDAR DAYS PRIOR TO START OF CONSTRUCTION ACTIVITIES.
- 8. NOTIFY THE CITY OF HUDSON ENGINEERING DEPARTMENT A MINIMUM OF FORTY-EIGHT HOURS (2 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION.
- 9. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED A MINIMUM OF 48 HOURS (2 WORKING DAYS) AFTER SUBMISSION OF A MINIMUM OF 6 APPROVED SETS OF PLANS AND ALL SHOP DRAWINGS APPLICABLE TO THE PROPOSED IMPROVEMENTS. A PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO START OF ANY CONSTRUCTION.
- 10. THE LIMITS OF CLEARING AND GRADING SHALL BE FIELD STAKED AND LINED WITH ORANGE CONSTRUCTION FENCING 48 HOURS (2 WORKING DAYS) PRIOR TO THE PRE-CONSTRUCTION MEETING. AREAS BEYOND THE LIMITS OF CLEARING AND GRADING SHALL NOT BE DISTURBED INCLUDING THE STOCKPILE OF ANY MATERIALS OR CONSTRUCTION TRAFFIC.
- 11. ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED ACCORDING TO THE CITY OF HUDSON "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION" AS DIRECTED BY THE CITY OF HUDSON AND/OR ITS ENGINEER.
- 12. THE CONTRACTOR SHALL EXPEDITE THE RESTORATION OF ANY EXISTING PAVEMENT AS NOTED ON THE PLANS, OR WORK SHALL BE STOPPED BY THE CITY UNTIL RESTORATION IS COMPLETED.
- 13. ALL PAVEMENT SHALL BE NEAT-LINE SAW CUT, AS NEEDED TO PRODUCE A CLEAN EDGE AT PAVEMENT RESTORATION AND TRAFFIC CONTROL DEVICES SHALL BE USED TO PROTECT ANY EDGES. ALL PAVEMENT RESTORATIONS SHALL BE COMPLETED QUICKLY BY THE CONTRACTOR.
- 14. THE DEPTH AND TYPE OF PAVEMENT INCLUDING THE TYPICAL SECTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF HUDSON ENGINEERING STANDARDS.
- 15. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY OF HUDSON OR ITS REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL OR ANY OTHER MATERIAL THAT MAY CREATE A HEALTH RISK IS DISCOVERED ON SITE.
- 16. ALL DISTURBED STORM SEWERS AND/OR APPURTENANCES, SIGNS, GUARD RAILING, MAIL AND/OR PAPER BOXES, DRIVE CULVERTS, FENCES, TREES, LANDSCAPING, OR OTHER ITEMS DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED OR REPAIRED TO AT LEAST THE **BEFORE-CONSTRUCTION CONDITION.**
- 17. ANY DEFECTS DISCOVERED IN NEW CONSTRUCTION, WORKMANSHIP, EQUIPMENT OR MATERIALS SHALL BE REPAIRED, OR CORRECTED BY APPROVED METHODS AS DIRECTED BY THE CITY OF HUDSON.
- 18. NUCLEAR COMPACTION TESTING SHALL BE REQUIRED FOR ALL FILL AREAS (PROPOSED OR EXISTING) WITHIN THE RIGHT-OF-WAY OVER TWO FEET (2') IN DEPTH, AT 6" LIFTS PER ASTM A-1557, 95% MODIFIED.
- 19. APPROVAL BY THE CITY OF HUDSON ENGINEER CONSTITUTES NEITHER EXPRESSED NOR IMPLIED WARRANTIES AS TO THE FITNESS, ACCURACY, OR SUFFICIENCY OF PLANS, DESIGNS OR SPECIFICATIONS.
- 20. DURING TAPPING OF EXISTING UTILITIES, ANY TRAFFIC CONTROL REQUESTED OR REQUIRED BY THE CITY OF HUDSON WILL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY.
- 21. COMPLIANCE WITH THE OCCUPATIONAL AND SAFETY ACT OF 1970 IS REQUIRED BY ALL CONTRACTORS ON THIS PROJECT.
- 22. THE BACKFILL SHALL BE COMPACTED PRIOR TO REMOVING THE TRENCH SHORING.
- 23. ALL DRIVEWAY OR TRAIL UTILITY TRENCHES (PROPOSED OR EXISTING) WITHIN CITY OF HUDSON RIGHT-OF-WAY SHALL BE BACKFILLED WITH VIRGIN 304 LIMESTONE UP TO SUBGRADE AND 100% COMPACTED PER THE CITY OF HUDSON ENGINEERING STANDARDS. WHEN A UTILITY TRENCH IS OUTSIDE OF PAVEMENT OR A TRAIL OF ANY KIND. THE TRENCH SHALL BE BACKFILLED WITH VIRGIN 304 LIMESTONE UP TO A 45 DEGREE ANGLE OF REPOSE PROJECTED OFF OF THE TOP SURFACE EDGE OF ANY PAVEMENT OR TRAIL IN THE VICINITY.

# **OVERALL NOTE:**

ALL BACKFILL AND COMPACTION FOR UTILITY TRENCHES OR ANY OTHER EXCAVATIONS TO BE FILLED WITHIN THE CITY OF HUDSON RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF HUDSON ENGINEERING STANDARDS FOR BACKFILL, FOR COMPACTION, AND FOR ANGLE OF REPOSE AND BACKFILL MATERIAL WHEN IN THE VICINITY OF ANY PAVEMENT.

ALL WORK WITHIN CITY OF HUDSON RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF HUDSON ENGINEERING STANDARDS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). THE BACKFILL REQUIREMENTS, DRIVEWAY/ROADWAY RESTORATION, AND LANDSCAPING RESTORATION, INCLUDING THE CITY OF AKRON UTILITY LINES SHALL CONFORM TO THE CITY OF HUDSON ENGINEERING STANDARDS. THE PIPE TYPE, SLOPE, ETC., AND BEDDING SHALL CONFORM TO THE UTILITY COMPANY'S STANDARDS.

ALL SITE RESTORATIONS SHALL BE PERFORMED IN A TIMELY MANNER. ANY AFFECTED DRIVEWAYS SHALL BE COMPLETELY RESTORED AND OPEN AS QUICKLY AS IS REASONABLY POSSIBLE. ANY CLOSURES OR PUBLIC ACCESS RESTRICTIONS SHALL CONFORM TO THE TIME FRAMES SPECIFIED IN THESE PLANS.

# DESCRIP

PROPERTY LINE

RIGHT OF WAY CENTERLINE BUILDING SETBACK I

FIRE HYDRANT GATE VALVE

STORM SEWER STORM MANHOLE YARD DRAIN

SANITARY MANHOLE SPOT ELEVATION

JCT	ION NOTES AND SPECIFICATIONS	
24.	ALL DISTURBED AREAS SHALL RECEIVE 4" OF TOPSOIL AND BE SEEDED AND MULCHED AS PI SECTION 9 - LANDSCAPING AND STREET TREES OF THE CITY'S "ENGINEERING STANDARDS FO INFRASTRUCTURE CONSTRUCTION", LATEST EDITION.	ER DR
25.	IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHE PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH A DIRECTED BY THE CITY OF HUDSON OR ITS ENGINEER AT THE END OF EACH WORK DAY, O AS REQUIRED DURING THE WORK DAY. THE CITY HAS THE RIGHT TO USE THE BOND IF TH WORK IS NOT COMPLETED WITHIN 2 HOURS OF NOTIFICATION.	
26.	ALL PROPOSED SLOPES 3:1 OR STEEPER AND ALL EARTHEN DRAINAGE WAYS SHALL RECEIVING OR EXCELSIOR MATTING AS PER ODOT 667 OR 668.	<sup>Æ</sup> UU
27.	ALL STORM SEWERS WITHIN PUBLIC RIGHTS-OF-WAY AND CITY OF HUDSON EASEMENTS SHA BE PER SECTION 4 - STORM COLLECTION OF THE CITY'S "ENGINEERING STANDARDS FO INFRASTRUCTURE CONSTRUCTION", LATEST EDITION.	
28.	ALL PIPES SHALL BE PLACED OVER 4" OF BEDDING. BEDDING MATERIAL SHALL BE A SPECIFIED IN CITY'S "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION", LATES EDITION, FOR THE TYPE OF PIPE.	AS ST
29.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING THE FLOW ( VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE. TRAFFIC CONTROL SHALL I COORDINATED WITH THE CITY OF HUDSON POLICE DEPARTMENT. A TRAFFIC CONTROL PLAN FO NORTON ROAD SHALL BE SHOWN ON THE PLANS WITH SIGNAGE.	DF 3E DR
30.	NO CONSTRUCTION VEHICLES SHALL BE PARKED WITHIN THE HUDSON DRIVE RIGHT-OF-WAY AT A TIME, UNLESS APPROVED BY THE CITY OF HUDSON.	NY:
31.	THE EXISTING HUDSON DRIVE LANES SHALL NOT BE BLOCKED OR CLOSED AT ANY TIME.	
32.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR AN MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHAN BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.	_L )F _L
33.	ALL DELIVERED MATERIALS SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF HUDSON OR OTHER APPLICABLE AGENCIES. THE CITY OF HUDSON, OR IT REPRESENTATIVE, RESERVES THE RIGHT TO REJECT ANY DELIVERED MATERIAL WHICH DOWNOT CONFORM TO THE APPLICABLE STANDARDS AND SPECIFICATIONS.	HE IS ES
34.	THE CITY OF HUDSON OR ITS REPRESENTATIVE, RESERVES THE RIGHT TO HALT AN CONSTRUCTION ACTIVITY FOR NON-CONFORMANCE TO PLANS, SPECIFICATIONS AND OTH APPLICABLE STANDARDS OR REGULATIONS.	_L ER
35.	ALL CHANGES TO APPROVED DRAWINGS AND/OR SPECIFICATIONS MUST BE RE-APPROVI BY THE CITY OF HUDSON PRIOR TO CONSTRUCTION	ED
36.	ALL PAVING MATERIAL MUST BE PROVIDED BY ODOT CERTIFIED SUPPLIER. WRITTEN PROC SHALL BE REQUIRED UPON DELIVERY OF MATERIALS. THE CERTIFIED MIX DESIGN MUST E SUBMITTED TO, AND APPROVED BY, THE CITY OF HUDSON PRIOR TO SCHEDULING PRE-CONSTRUCTION MEETING.	DF 3E A
37.	CONTRACTOR/DEVELOPER SHALL PROVIDE ALL REQUIRED ROADWAY SIGNAGE (INCLUDIN STOP SIGNS, NO PARKING SIGNS, AND SPEED SIGNS AS SHOWN ON THE SIGN & STREE LIGHTING PLAN) AS PER ODOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTO INCLUDING STREET IDENTIFICATION SIGNAGE PER CITY STANDARDS FOR ALL ASPECTS ( THE IMPROVEMENT.	VG ⊆T D) ⊃F
38.	ALL BONDS AND/OR LETTERS OF CREDIT SHALL NOT BE RELEASED OR REDUCED AND N WATER OR SANITARY SEWER CUSTOMERS MAY BE CONNECTED UNTIL ALL RECORD DRAWING HAVE BEEN SUBMITTED, REVIEWED AND APPROVED BY THE CITY OF HUDSON.	10 35
39.	ALL WORK, EXCEPT SIDEWALKS, STREET TREES AND STREET LIGHTS, AS PART OF THE PLANS, SHALL BE COMPLETED, INCLUDING PUNCH LIST ITEMS AND DEFICIENCY WOR WITHIN 1 YEAR OF THE DATE OF APPROVAL BY THE CITY ENGINEER. SIDEWALKS, STREE TREES AND STREET LIGHTS SHALL BE COMPLETED WITHIN TWO YEARS OF THE DATE O APPROVAL BY THE CITY ENGINEER.	ANS ANS
40.	FAILURE TO COMPLETE THE PROJECT IN ITS ENTIRETY AS APPROVED BY THE PLANNIN COMMISSION, INCLUDING PUNCH LIST ITEMS, WILL RESULT IN THE CITY OF HUDSO HOLDING ALL FUTURE ZONING CERTIFICATES UNTIL ALL WORK HAS BEEN COMPLETED AN APPROVED.	1UDS T PL
41.	MANUFACTURERS OR SUPPLIERS AFFIDAVIT FOR ALL CONSTRUCTION MATERIALS SHALL F PROVIDED AS PER THE CITY'S "ENGINEERING STANDARDS FOR INFRASTRUCTUR CONSTRUCTION", LATEST EDITION PRIOR TO THE START OF CONSTRUCTION.	
42.	THE CONSTRUCTION OF WATER MAINS IS PROHIBITED UNTIL ALL PLANS HAVE BEI APPROVED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY.	N N N N
43.	FAILURE TO COMPLETE THESE AFOREMENTIONED TASKS AND/OR COMPLY WITH THESE " <u>CI</u> <u>OF HUDSON GENERAL CONSTRUCTION NOTES AND SPECIFICATIONS</u> " MAY RESULT IN "STOP WORK ORDER" BY THE CITY OF HUDSON.	
6		
	NOTE: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.	
	SYMBOLS LEGEND	37 C
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# **GENERAL NOTES-CONSTRUCTION**

- THIS PLAN HAS BEEN BASED UPON DIGITAL COUNTY ORTHOPHOTO INFORMATION AND TOPOGRAPHIC AND BOUNDARY SURVEY WORK PERFORMED BY TGC ENGINEERING, LLC.
- 2. THE CONTRACTOR SHALL KEEP ALL EXISTING STREETS CLEAN OF ALL SOIL, DIRT, MUD, AND DEBRIS. THE CONTRACTOR SHALL EXERCISE DILIGENT CARE TO PROTECT ALL TREES, SHRUBS, AND PLANTS NOT DESIGNATED FOR REMOVAL CONTRACTOR SHALL REPLACE, TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE OWNER, ANY TREES, SHRUBS, PLANTS, AND OTHER OBJECTS REMOVED, DESTROYED, DISFIGURED, OR DAMAGED DUE TO CONTRACTOR'S NEGLIGENCE.
- ALL TESTING AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE 3. DEVELOPER (OWNER).
- WARNING DEVICES (ROAD CONSTRUCTION AHEAD ON NORTON ROAD, BOTH 4. DIRECTIONS, TRUCKS ENTERING/ EXITING ROADWAY ONTO NORTON ROAD, FLAGGERS AHEAD, IF / WHEN NEEDED) SHALL BE PROVIDED (AT THE DEVELOPER'S EXPENSE) AT THE INTERSECTION(S) OF EXISTING ROADS AND THE ROAD(S) UNDER CONSTRUCTION.
- ADDITIONAL SOIL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE 5. CITY OF HUDSON ENGINEER DURING CONSTRUCTION AND THE TWO YEAR MAINTENANCE PERIOD.
- 6. THE DEVELOPER IS ULTIMATELY RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES ON THE SITE DURING ROAD CONSTRUCTION AND THROUGH THE TWO YEAR MAINTENANCE PERIOD. THE DEVELOPER MAY BE REQUIRED TO POST SUITABLE FINANCIAL GUARANTEES PRIOR TO PLAT APPROVAL TO ENSURE COMPLIANCE WITH THIS REQUIREMENT.
- VISIBLE ABOVE-GROUND UTILITIES ON SITE HAVE BEEN SHOWN ON THE PLANS. 7. THE CONTRACTOR IS TO FIELD-VERIFY ELEVATIONS, QUANTITIES AND LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL 8. RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER.
- ALL UNDERGROUND LINES ENCOUNTERED BY CONSTRUCTION ARE TO BE 9. COMPLETELY RESTORED AT THE EXPENSE OF THE CONTRACTOR.
- COST OF ANY SHEETING, DEWATERING OR FOUNDATIONS NECESSARY FOR 10. CONSTRUCTION SHALL BE INCLUDED IN THE PRICE BID FOR RESPECTIVE ITEMS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE PROPOSED CONSTRUCTION.
- 12. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS (INCLUDING BUT NOT LIMITED TO CLEARING/GRUBBING, EARTHWORK, BUILDING CONSTRUCTION, STREET OPENINGS AND UTILITY CONNECTIONS) REQUIRED BY LOCAL AND STATE AGENCIES PRIOR TO CONSTRUCTION.
- 13. ANY APPARENT DISCREPANCIES OR QUESTIONS IN CONTRACT DOCUMENTS ARE TO BE BROUGHT TO THE ATTENTION OF THE DEVELOPER'S REPRESENTATIVES IMMEDIATELY.
- 14. THE DESIGN ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES OR SEQUENCES OF CONSTRUCTION NOT SPECIFIED HEREIN, NOR FOR THE SAFETY ON THE JOB SITE, NOR SHALL THE DESIGN ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 15. ANY MODIFICATIONS TO THE WORK SHOWN ON THE PLANS MUST HAVE PRIOR WRITTEN APPROVAL FROM THE DEVELOPER AND THE REVIEWING AGENCIES.

# **GENERAL NOTES** · SITE PREPARATION

- WITHIN THE SUBJECT PROPERTY, THE INTENT IS TO HAVE A CLEAN, CLEAR SITE, FREE OF ALL EXISTING ITEMS NOTED TO BE REMOVED IN ORDER TO PERMIT THE CONSTRUCTION OF THE NEW PROJECT.
- 2. WHERE EXISTING ITEMS ARE SHOWN TO REMAIN. CARE SHOULD BE TAKEN TO INSURE PROTECTION OF THAT ITEM FROM DAMAGE. ANY ITEM DISTURBED BY CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN EXISTING AND TO THE SATISFACTION OF THE OWNER OF THE ITEM.
- 3. WHERE PROPOSED CONSTRUCTION IS TO BE WITHIN 10 FEET OF AN ADJACENT PROPERTY. THE PROPERTY LINE SHALL BE CLEARLY MARKED EVERY 50 FEET BY A PROFESSIONAL SURVEYOR AND CONSTRUCTION FENCE SHALL BE PLACED 2 FEET INSIDE THE MARKED PROPERTY LINE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION AND CLEARING OF ALL EXISTING ON-SITE FACILITIES NOTED TO BE REMOVED UNLESS OTHERWISE NOTED AS PART OF THE CONTRACT FOR GENERAL CONSTRUCTION. ALL STRUCTURES IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BELOW GRADE FOUNDATIONS, FOOTERS AND BASEMENT AREAS. THE CONTRACTOR SHALL PERFORM CLEARING, GRUBBING, REMOVAL OF TREES AND STUMPS, REMOVAL AND DISPOSAL OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL FROM THE SITE OF ALL DEMOLISHED MATERIALS AND THE FILLING OF ALL DEPRESSIONS CAUSED BY DEMOLITION AND GRADING OF THESE AREAS.
- 5. EXISTING UTILITIES, SIDEWALKS, DRIVE APRONS, ETC WITHIN THE RIGHT-OF-WAY ARE TO REMAIN UNDISTURBED UNLESS NOTED OTHERWISE.
- 6. REMOVE SOILS AS NECESSARY TO COMPLETE PROPOSED CONSTRUCTION. PER THE CITY OF HUDSON LAND DEVELOPMENT CODE.
- 7. BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS FOR FILL OUTLINED IN THE SOILS REPORT.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION. REMOVAL AND RESTORATION WORK NECESSARY TO PERMIT CONSTRUCTION OF THE PROPOSED PROJECT.

# **GENERAL NOTES-EARTHWORK**

- 1. THE CONTRACTOR SHALL INSTALL ALL SEDIMENTATION CONTROLS TO MINIMIZE SOIL EROSION AND OFF-SITE SILTATION BEFORE ANY CLEARING, GRUBBING OR EARTHWORK HAS BEGUN. REFERENCE STORM WATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL STRUCTURES AND SPECIFICATIONS.
- 2. ALL TIMBER, LOGS, BRUSH, RUBBISH, AND VEGETATIVE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OF FILL AREAS SHALL BE REMOVED FROM THE ROAD CONSTRUCTION AREAS.
- ANY UNSUITABLE SOILS ENCOUNTERED IN PROPOSED PAVEMENT AREAS WITHIN THE R/W SHALL BE REMOVED AND REPLACED WITH COMPACTED MATERIAL APPROVED BY THE CITY ENGINEER PER SECTION 7 OF HUDSON ENGINEERING STANDARDS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE JOB.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL NOT USED ON THE JOB SITE.
- 6. FOR OFF-SITE BORROW AND/ OR WASTE AREAS: THE CONTRACTOR OR DEVELOPER NEEDS TO SUPPLY SITE LOCATIONS AND OTHER INFORMATION INCLUDING OWNER, ADDRESS AND PHONE NUMBER AT THE CITY OF HUDSON PRE-CONSTRUCTION MEETING. A SEPARATE STORMWATER POLLUTION PREVENTION PLAN WILL NEED TO BE PRODUCED AND IMPLEMENTED PER LOCAL SOIL AND WATER REGULATIONS.
- 7. PROPOSED PAVEMENT AND BUILDING AREAS ARE TO BE PROOF-ROLLED PER SPECIFICATIONS IMMEDIATELY PRIOR TO CONSTRUCTION. ANY AREAS FOUND TO BE "SOFT" OR "SPONGY" ARE TO BE OVER-EXCAVATED TO FIRM EARTH AND BACKFILLED PER SPECIFICATIONS.
- PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE CITY ENGINEER AND THE DESIGN ENGINEER.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING AND IN AREAS SELECTED BY THE DEVELOPER. PER THE CITY OF HUDSON LAND DEVELOPMENT CODE.
- 10. UNLESS OTHERWISE INDICATED AT A SPECIFIC LOCATION, ALL FINISHED GRADES AT THE LIMITS OF NEW WORK ARE TO CONFORM TO AND MATCH EXISTING GRADES.
- 11. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE DRAINAGE TO CATCH BASINS OR SHEET FLOW OFF OF OPEN AREAS BY MEANS OF SITE GRADING.
- 12. EXCAVATIONS ARE TO BE PROMPTLY BACKFILLED AND GRADED SO AS TO ELIMINATE AND PREVENT PONDING ON THE SITE.

# **GENERAL NOTES-UTILITIES**

- 1. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.
- 2. THE OHIO UTILITIES PROTECTION SERVICE (OUPS, 1-800-362-2764) SHALL BE CONTACTED BY THE DEVELOPER/CONTRACTOR AT LEAST TWO WORKING DAYS IN ADVANCE OF WORK TO BE DONE NEAR ANY EXISTING UTILITY.
- EXISTING UTILITIES, INCLUDING PRIVATE OIL/GAS LINES, ENCOUNTERED DURING CONSTRUCTION SHALL BE LOWERED AS NECESSARY TO A MINIMUM OF THREE FEET BELOW FINISHED GRADE.
- 4. ALL UTILITY WORK, BACKFILLING AND RESTORATION WITHIN THE EXISTING RIGHT-OF-WAY SHALL BE PER THE CITY OF HUDSON ENGINEERING STANDARDS.
- 5. EXCAVATIONS SHALL BE SHORED OR SLOPED AS NECESSARY TO PROVIDE SAFE WORKING CONDITIONS DURING CONSTRUCTION. IN DEEP TRENCHES OR WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, A TRENCH BOX OR OTHER METHOD OF EMBANKMENT STABILIZATION WILL BE REQUIRED.
- 6. UNDERGROUND UTILITY CONSTRUCTION PRACTICES ARE TO CONFORM TO THE SAFETY REQUIREMENTS OF OSHA AND THE CITY OF HUDSON CODIFIED ORDINANCES.
- 7. THE CONTRACTOR SHALL SHOW ALL MODIFIED PIPING, CONDUIT RUNS, UTILITIES AND ANY MODIFICATIONS MADE TO THE ORIGINAL DRAWINGS ON AS-BUILT PRINTS AND TURN OVER TO DEVELOPER'S REPRESENTATIVE UPON COMPLETION OF THE JOB.
- ALL STORM SEWER RUN DISTANCES GIVEN ARE FROM CENTERLINE TO CENTERLINE OF MANHOLES. ALL PIPE INVERT ELEVATIONS GIVEN AT MANHOLES ARE AT CENTERLINE OF MANHOLE. STORM SEWER GRADES ARE ESTABLISHED FROM CENTERLINE OF MANHOLE AND CARRIED THROUGH MANHOLE INVERT TO ASSURE FLOW THROUGH MANHOLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, PAVEMENT AND STRUCTURES DESIGNATED TO REMAIN OR BE REPLACED UNTIL ALL CONSTRUCTION IS COMPLETE. ANY ITEM DISTURBED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 10. EXISTING UTILITY SERVICES NOT BEING SAVED SHALL BE CUT AND CAPPED AT THE PROPERTY LIMITS. ALL ON-SITE PIPING SHALL BE REMOVED AND BE PROPERLY BACKFILLED. THE DEMOLITION CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR TERMINATION OF SERVICE PRIOR TO DEMOLITION.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, PROTECTION AND CONTINUATION OF SERVICE FOR ALL UTILITIES SERVICING ADJOINING AREAS.
- 12. PROPOSED MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE FRAMES AND COVERS. CATCH BASIN GRATES, VALVE BOXES, ETC., TO BE RAISED OR LOWERED AS NECESSARY, TO PROPOSED FINISHED GRADE, FLUSH WITH THE ADJACENT GRADE.

# **GENERAL NOTES-PAVEMENT**

- 1. THE PAVEMENT AND BASE COURSE SHALL BE CONSTRUCTED AS SHOWN ON THE TYPICAL PAVEMENT SECTION SHEET CONTAINED IN THESE PLANS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE ODOT "CONSTRUCTION AND MATERIAL SPECIFICATIONS." THE ROAD(S) SHALL BE CONSTRUCTED TO THE LINE AND GRADE SHOWN ON THE ENCLOSED PLANS AND PROFILES.
- 2. UNDERDRAINS SHALL BE INSTALLED AS SPECIFIED ON THE TYPICAL PAVEMENT SHEET CONTAINED IN THESE PLANS.
- 3. ANY AREA IN WHICH THE PAVEMENT IS IN A FILL SITUATION, THE TOP SOIL OR ANY UNSUITABLE SOIL SHALL BE STRIPPED AND A SUITABLE BACKFILL MATERIAL IS TO BE COMPACTED TO MEET CITY OF HUDSON SPECIFICATIONS.
- 4. ALL TESTING AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE DEVELOPER.
- 5. PRIOR TO PAVING, THE SUBGRADE SHALL BE TESTED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK FURNISHED BY THE CONTRACTOR. ANY YIELDING AREAS IN THE SUBGRADE SHALL BE REMOVED AND/OR REPLACED PER MEDINA COUNTY SPECIFICATIONS.
- 6. NO TRAFFIC SHALL BE PERMITTED ON THE CONCRETE PAVEMENT FOR A PERIOD OF 7 DAYS UNLESS TESTING INDICATES A MINIMUM FLEXURAL STRENGTH OF 600 PSI HAS BEEN OBTAINED.

# **OHIO EPA NOTES**

- 1. A TEN (10) FEET MINIMUM SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND THE SANITARY LINE.
- 2. AN 18-INCH MINIMUM VERTICAL CLEARANCE (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND THE SANITARY LINE AT ALL CROSSINGS.
- 3. A FOUR (10) FEET MINIMUM SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND THE STORM SEWER.
- 4. A 18-INCH MINIMUM VERTICAL CLEARANCE (OUT-TO-OUT. CLEAR) WILL BE MAINTAINED THE WATER LINE AND THE STORM SEWER AT ALL CROSSINGS.
- 5. SANITARY SEWER AIR TESTING SHALL CONFORM WITH ASTM C-1244.
- 6. NO SANITARY PIPE SHALL EXCEED A DEFELECTION OF 5% AS PER GLUMRB 33.85.
- 7. FLEXIBLE GASKETS ON SEWER LINE CONNECTIONS ARE TO CONFORM WITH ASTM C-923
- 8. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
- 9. THE PROPOSED IMPROVEMENTS WILL PROVIDE A MINIMUM 35 PSI PRESSURE AT THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
- 10. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI AT GROUND LEVEL AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

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<b>C02</b>	Ellar fol tao anal amina



# **SITE INFORMATION**

TOTAL SITE AREA: 1.04 ACRES PAVEMENT AREA: 21,360 SF LINEAR FEET OF SIDEWALK:1367 LINEAR FEET OF CURB:1212

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OVERALL SITE PLAN	
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# **TYPICAL 'PUBLIC' PAVEMENT SECTION** (TRAILS OF HUDSON PHASE ROADS WITHIN LAWNMARK ROW)

# 1 ITEM 452: 8" CONCRETE WITH MICROFIBERS (2) ITEM 304: 3" AGGREGATE BASE



# **TYPICAL PUBLIC PAVEMENT SECTION**

(1) ITEM 203 - SUBGRADE COMPACTION AND PROOF ROLLING (CEMENT STABILIZATION OF THE SUBGRADE SHALL BE REQUIRED WHERE THE CBR VALUE IS LESS THAN 6. SEE DETAILS F, G, & H FO PAVEMENT BUILD UP WHEN CEMENT STABILIZATION IS REQUIRED
(2) ITEM 304 - 4" AGGREGATE BASE, LIMESTONE
(3) ITEM 301 - 6" BITUMINOUS AGGREGATE BASE (2-3" LIFTS) OR 9" BITUMINOUS AGGREGATE BASE (3-3" LIFTS)
(4) ITEM 402 - 1 3/4" ASPHALT CONCRETE, LIMESTONE
5) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.06 GAL./S.Y.)
6 ITEM 404 - 1 1/2" ASPHALT CONCRETE, LIMESTONE
(7) ITEM 609 - CURB, TYPE 6
B ITEM 659 - SEEDING AND MULCHING
9 ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN, ASTM 3034, SDR 35 w/2" BEDDING
(1) ITEM SPECIAL - PAVEMENT REINFORCING FABRIC (AS REQUIRED BY THE CIT
(1) ITEM SPECIAL - GEOGRID (TENSAR BX-1100 OR APPROVED EQUAL)
(12) ITEM 608 - 4" REINFORCED CONCRETE WALK WITH 3" 304 LIMESTONE BAS
(13) ITEM 404 - 1 1/2" MIN. ASPHALT CONCRETE, LIMESTONE
(4) ITEM 451 - 8" MIN. REINFORCED CONCRETE
15 ITEM 304 - 6" MIN. LIMESTONE AGGREGATE BASE, COMPACTED
15 ITEM 402 - 2" MIN. ASPHALT CONCRETE, LIMESTONE
17 ITEM 304 - 4" MIN. AGGREGATE BASE, LIMESTONE
18 ITEM 451 - 7" MIN. REINFORCED CONCRETE
(19) #57 LIMESTONE BEDDING AND BACKFILL (PAYMENT INCLUDED WITH (9))
20 ITEM BO4 - 9" OF SOIL CEMENT STABILIZATION
(2) ITEM 304 - 3" LIMESTONE AGGREGATE BASE, COMPACTED
2) ITEM 402 - 2 3/4" ASPHALT CONCRETE, LIMESTONE
(23) ITEM 404 - 1 1/4" ASPHALT CONCRETE, LIMESTONE
24) ITEM 301 – 4" BITUMINOUS AGGREGATE BASE, LIMESTONE
25 ITEM 609 - CURB, TYPE 3
20 ITEM 304 - VARIES 6" TO 12" AGGREGATE BASE, LIMESTONE
(2) ITEM 605 - STRIP DRAIN/CONTECH BRAND BO OR APPROVED EQUAL

2 % <u></u>

# PROPOSED LEGEND

# L=35.84 R=60.00 4=34°13'3' TAN=18.47



SCALE: 1"=20', ELEVATIONS BOTTOM OF CURB

**C06** )

![](_page_10_Figure_0.jpeg)

![](_page_11_Picture_0.jpeg)

![](_page_11_Figure_1.jpeg)

# **PROFILE: STORM 'B'**

SCALE: 1"=50' H, 1"=5' V

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#### AKRON PUBLIC UTILITIES BUREAU WATER MAIN NOTES 11-1-2013

- 1. The contractor shall supply all of the water main materials, including the ductile iron pipe, fittings and fitting restraints, hydrants and valves, polyethylene encasement, all other appurtenances and any items specially itemized as required for the water main installation. All water main materials shall comply with the City of Akron, Akron Engineering Bureau, Construction and Material Specifications (Latest Edition) Item 715, Water Main Materials. Installation of all water main materials shall be in accordance with Section 250, Water Mains. Submittals of material specifications are to be made to the Utilities Engineer prior to purchasing material.
- 2. Must maintain a ten-foot minimum horizontal clearance from edge of all water main pipe to edge of all sanitary and storm sewer pipes and/or force main pipes.
- 3. Must maintain an 18-inch minimum vertical clearance from edge of all water main pipe and/or service lines to edge of all sanitary sewer and storm pipes where they cross.
- 4. The contractor must maintain a 12-inch minimum vertical clearance from edge of all water main pipe to edge of all direct burial conduits, concrete encased electrical conduits, light pole bases, and hand hole pull boxes.
- 5. The contractor must maintain a 36-inch minimum horizontal clearance from edge of all water main pipe to edge of all direct burial conduits, concrete encased electrical conduits, light pole bases, and hand hole pull boxes.
- 6. Where water mains cross sewer trenches, the trench is to be backfilled with approved granular material.
- 7. Approved pipe fittings, bolts, etc., for Akron system water main installation:

Pipe: Class 53 ductile iron per AWWA C151 specifications, with cement-lining per AWWA C104. Labeled polyethylene encasement per AWWA C105 is required.

Pipe Joints: Push-on joints (Tyton, Bell-Tite, etc.), per AWWA C151 specifications with plain or restraining rubber gaskets per AWWA C111 specifications.

Fittings: Class 350 ductile iron compact fittings per AWWA C153 or full thickness castings per AWWA C110 are acceptable, with mechanical joint ends and ductile iron follower glands. Anchor pipe is required on all hydrant runs between the tee and hydrant run valve.

Restrained pipe systems: Push-on joint with Field Lock (4 through 12-inch only) or Fast Grip gaskets (4 through 12-inch only), or mechanical joint with restrained follower glands, and 6 ounce zinc anode caps on every bolt thread. Super Lock, TR Flex or Flex-Ring required on all 16-inch or larger pipe diameters.

Restrained fitting devices: All valves, bends, offsets, hydrant inlets, caps, plugs, and branches of tees and wyes must be restrained using mechanical joint with restrained follower glands or restraining gaskets. Hardwood blocking is required for all diameters 4 through 8-inch, concrete blocking and strapping for all diameters 12-inch and larger.

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![](_page_12_Figure_14.jpeg)

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Concrete blocking is required on all fire lines and on all diameters in areas over 100 psi. Restrained joints for diameters 12-inch and under shall be installed for a length of 30 feet on each side of a valve, bend or offset using Field-Lock or Fast-Grip restraining gaskets or mechanical joint with restrained follower glands. Restrained joints for diameters 16inch and larger, shall be installed for a length of 30 feet on each side of a valve, bend or offset using mechanical joint with restrained follower glands.

Mechanical Joint T-head Bolts: All mechanical joints shall be made with Cor-Ten or construction-grade alloved ductile iron bolts. T-head bolts shall be ½-inch longer than standard length and must include a 6 oz. zinc anode cap on every bolt thread.

Hydrants: Akron-style Mueller "Centurian" Model A423; Kennedy "Guardian" Model K-81A; EJ "FlowMaster" CD250; American Flow Control Model B62B with 6-inch inlet, American Flow Control Model B84B with 8-inch inlet. Threads shall be Akron style as shown on Akron Water Works Standard Construction Drawings F-3258 and F-3440. Hydrants must be lead-free per NSF 61-G. (SEE "ADDITIONAL FIRE HYDRANT NOTES" BELOW)

Gate Valves: Resilient-seat wedge (RSW) valves with restrained mechanical joints. Valves shall have non-rising stems and shall open to the right (clockwise).

Butterfly Valves, 16-inch and up: Restrained mechanical joint or shouldered (not grooved) Victaulic ends with Style 44N couplings and stainless steel 316 bolts. Rubber seals in the valve must be replaceable. Flanged end or wafer-style valves are not acceptable.

Valve Boxes: Bibby, Tyler, Bingham and Taylor or East Jordan brands are acceptable for compatibility.

Curb Boxes: Riser pipe must be of yoloy corrosion resistant material. Plug must be cast iron and thread into a brass ring.

- 8. Compacted premium backfill is required for underground construction under or within three feet of any proposed or existing sidewalk or pavement. The backfilling shall conform to Section 551.09 of the City of Akron Construction and Material Specifications, Latest Edition.
- 9. Any existing water mains, hydrants, valves, valve boxes, meter vaults, service lines, or curb boxes that are damaged or must be adjusted and/or moved must be repaired, adjusted, moved and/or replaced at the contractor's expense. Contact Doug Zwahlen, Water Distribution Supervisor, at (330) 375-2420 to schedule this work.
- 10. No taps for water services shall be made until after the mainline has been tested and sterilized. All taps 2-inch and smaller shall be made by the contractor and inspected by the City of Akron. All brass fittings used shall be lead-free per NSF 61-G.
- 11. All water main construction shall be inspected by the City of Akron. Notify the City of Akron (Tony Puglia or Doug Zwahlen) at (330) 375-2420 at least 48 hours prior to beginning construction and for all preconstruction meetings.
- 12. Prior to acceptance, the water line shall be pressure tested, as specified in AWWA C600, and disinfected as specified in AWWA C651 latest revisions, by the contractor.

![](_page_12_Figure_27.jpeg)

![](_page_12_Figure_28.jpeg)

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#### ADDITIONAL FIRE HYDRANT NOTES:

- 1. FIRE HYDRANTS SHALL MEET CITY OF HUDSON NOZZLE AND THREAD SPECIFICATIONS.
- 2. FIRE HYDRANT SPACING SHALL MEET CITY OF HUDSON FIRE HYDRANT SPACING REQUIREMENTS.

![](_page_12_Figure_34.jpeg)

reimburse the City for any damage incurred in this operation. 2. All hydrants and values shown to be removed by the contractor are to be salvaged and delivered to the Akron Water Department store vard at 565 Johnston Street. Cost of this work shall be included in the price bid for Item 254, Ductile Iron Pipe.

3. Existing water main to be abandoned, as designated on the plans, shall be abandoned per Item 202.11 for diameters 12 inches and larger or Item 251.18 for diameters less than 12 inches.

the bacteria test. the contractor is to assist Public Utilities in the transfer of water services from the old water main to the new water main. While transferring water services, the contractor is responsible for the excavation required to expose the water service at the right-of-way and at the new main with a typical 3' x 5' trench. Cost of this work is to be included in Item 252, Trenches for Water Services in Earth.

4. After the installation of the proposed water main is complete and after the line has passed

5. The contractor is also responsible for all excavation required assisting Public Utilities in the installation of new and renewed copper services on existing water mains. The cost of this work shall be included in Item 252, Trenches for Water Service in Earth.

6. In casing pipe, all joints shall be restrained by using either Field Lock or Fast Grip restraining gaskets (4 through 12-inch only) or boltless (TR Flex) anchors. Carrier pipe shall have casing spacers with plastic runners. Sand shall be blown into the annular space. Wooden runners are not allowed.

13. Use extreme caution when excavating in the area of existing water main pipes, valves, hydrants and thrust blocks.

14. The contractor shall supply a temporary safe water service to all homes that will have their water service interrupted by this construction.

15. The proposed facilities must maintain a minimum of 35 psi pressure delivered to the curb stop during normal operating conditions.

16. Booster pumps are not permitted on service connections.

17. Any connection to existing ductile iron water main shall be made with a ductile iron solid sleeve with restraining gland. Any connection to existing cast iron water main may be made with a cast coupling or ductile iron solid sleeve with restraining gland.

Handling of Pipe: Proper and suitable tools and appliances for the safe and convenient handling and laying of pipe shall be used, and great care shall be taken to prevent the pipe coating from being damaged, particularly on the inside of the pipe. After approval by the contractor of the pipe at the Johnston Street store yard, any damage incurred in hauling, loading, unloading, delivering, etc., shall be at the contractor's expense, and in the case damage occurs, the contractor shall replace any materials so damaged or

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STANDARD NOTES AND DETAILS	
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TGC Engineering, LLC 1310 SHARON COPLEY RD. P.O. BOX 37 SHARON CENTER, OH 44274 (PHONE) 330.590.8004 (FAX) 888.820.8423	19 a trails of hudson lawnmark/dwg/1229 lawnmark eng.dwg Saved: 4,
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![](_page_14_Figure_0.jpeg)

PROJECT DATA	
	1.04 AC
	1.29 AC
CONSTRUCTION SITE	0.04 AC
ONSTRUCTION SITE	4%
-CONSTRUCTION SITE	0.65 AC
CONSTRUCTION SITE	62%
ONSTRUCTION SITE	0.07
CONSTRUCTION SITE	0.41
PMENT	60
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RS	POWER BROOK
	6/1/2016
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#### EROSION CONTROL NOTES:

REFERENCE THE STORMWATER POLLUTION PREVENTION PLAN (SWP3) REPORT FOR ADDITIONAL REQUIREMENTS.

#### GENERAL NOTES:

- . CONTRACTOR SHALL REVIEW AND STUDY THE PLANS AND SPECIFICATIONS. IMPLEMENTATION OF THE EROSION CONTROL ACTIVITIES SHOULD CORRESPOND TO CONSTRUCTION ACTIVITIES.
- 2. EROSION CONTROL MEASURES HAVE BEEN SHOWN FOR THE WORK AREAS AS IDENTIFIED ON THESE PLAN SHEETS. IF WORK IS CONDUCTED IN OTHER AREAS AS PART OF THIS PROJECT, ADDITION EROSION CONTROL MEASURES MAY BE REQUIRED.
- 3. THE OEPA PERMIT ASSOCIATED WITH THIS PLAN SHALL ACCOMPANY THIS PLAN. THE PLAN SHALL BE SIGNED IN ACCORDANCE WITH PART V.G. OF THE PERMIT AND BE RETAINED ON SITE DURING WORKING HOURS.
- 4. THE SWP3 SHALL CONTAIN SIGNATURES FROM ALL OF THE SUBCONTRACTORS ENGAGED IN ACTIVITIES THAT COULD IMPACT STORM WATER RUNOFF, INDICATING THAT THEY HAVE BEEN INFORMED AND UNDERSTAND THEIR ROLES AND RESPONSIBILITIES IN COMPLYING WITH THE SWP3. OHIO EPA RECOMMENDS THAT THE PRIMARY SITE OPERATOR REVIEW THE SWP3 WITH THE PRIMARY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND KEEP A SWP3 TRAINING LOG TO DEMONSTRATE THAT THIS REVIEW OCCUR.
- 5. THE PROJECT ENGINEER OR EROSION CONTROL INSPECTOR SHOULD BE ABLE TO EXPLAIN THE SEDIMENT AND EROSION CONTROLS AND PLAN TO AN OUTSIDE INSPECTOR (I.E. OHIO EPA, ENVIRONMENTAL SERVICES, QAR INSPECTOR, COUNTY SCS).
- 6. OWNER AND CONTRACTOR SHALL COMPLY WITH SOIL SEDIMENT POLLUTION CONTROL ORDINANCES DURING CONSTRUCTION AND SHALL IMPLEMENT SEDIMENT CONTROL AS DIRECTED BY THE ENGINEER OR THE GOVERNING AGENCY.
- 7. ALL EROSION AND SEDIMENT CONTROL PRACTICES SPECIFIED ON THE PLANS SHALL CONFORM WITH DETAILS AND SPECIFICATIONS OUTLINED IN THE OHIO DEPARTMENT OF NATURAL RESOURCES BOOKLET, "RAINWATER AND LAND DEVELOPMENT".
- 8. ALL CONTRACTORS AND BUILDERS ARE REQUIRED TO INSTALL, REGULARLY INSPECT AND MAINTAIN TEMPORARY SEDIMENTATION CONTROLS TO MINIMIZE SOIL EROSION AND OFF-SITE SILTRATION.
- 9. REGULAR INSPECTION AND MAINTENANCE SHALL BE PROVIDED FOR ALL EROSION CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY SEVEN DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD. REFERENCE SECTION 5 OF THE SWP3 REPORT.
- 10. IF AN INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH THE EXCEPTION OF A SEDIMENT SETTLING POND, IT MUST BE REPAIRED OR MAINTAINED WITHIN THREE DAYS OF THE INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.
- 11. IF AN INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWP3 SHALL BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.
- 12. IF AN INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE EROSION CONTROL IMPLEMENTATION SCHEDULE, THE CONTROL PRACTICE MUST BE IMPLEMENTED WITHIN 10 DAYS FROM THE DATE OF THE INSPECTION. I THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.
- 13. EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY SPECIFIED MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN THE DRAINAGE PATTERNS CAUSED BY EARTH-MOVING ACTIVITY. IF UNFORESEEN EROSION IS ENCOUNTERED DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES SHALL BE PROVIDED, AS DIRECTED BY THE ENGINEER, AT THE OWNER'S EXPENSE.
- 14. THE CONTRACTOR SHALL COMPLY WITH ANY FIELD ORDERS FOR SEDIMENT CONTROL AS ISSUED BY EITHER THE ENGINEERING DEPARTMENT, THE COUNTY OR THE OWNER'S ENGINEER.
- 15. THE CONSTRUCTION ENTRANCE SHALL BE PREPARED WITH EROSION MEASURES AND SILT FENCE SHALL BE INSTALLED BEFORE ANY ON-SITE CONSTRUCTION OR DEMOLITION COMMENCES.
- 16. SEDIMENT TRAPS AND INLET PROTECTION SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. UPON COMPLETION OF CONSTRUCTION OF PONDS, SEEDING AND MULCHING SHALL IMMEDIATELY FOLLOW TO AID IN THE STABILIZATION AND MINIMIZE EROSION AND SEDIMENT TRANSPORT OF THE SOIL BEFORE WATER LEAVES THE POND. ALL EROSION AND SEDIMENT CONTROLS SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE RE-STABILIZED.
- 17. ROCK RIP-RAP, IF SPECIFIED, SHALL BE IN PLACE BEFORE THE STORM SEWER IS FUNCTIONING.
- 18. TEMPORARY SILT BASINS & TEMPORARY DIVERSIONS ARE TO BE REMOVED, RESTORED TO ORIGINAL GRADE, AND STABILIZED WITH VEGETATION WHEN CONTRIBUTING DRAINAGE AREA IS STABILIZED WITH VEGETATION, EXCLUDING DISTURBANCES RESULTING FROM ACTIVE HOME
- 19. EROSION CONTROL NETTING SHALL BE USED ON DITCHES GREATER THAN 1.5% AND EROSION CONTROL MATTING ON ALL OTHER SLOPES GREATER THAN 6%.
- 20. SILT FENCE IS TO BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS PER "SPECIFICATIONS FOR SILT FENCE". SILT FENCE SHALL BE PLACED PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
- 21. EROSION CONTROL MEASURES MUST BE PROVIDED AROUND ALL DIRT STOCKPILES AND OTHER TEMPORARILY DISTURBED AREAS.
- 22. THE OUTLET OF THE STORM COLLECTION SYSTEM WILL BE PROPERLY DESIGNED WITH VELOCITY DISSIPATING STRUCTURES/MEDIA. BY USING THESE PRACTICES, NO EROSIVE FLOW VELOCITIES ARE EXPECTED AT THE DISCHARGE LOCATION.
- 23. UPON THE COMPLETION OF EARTH MOVING ACTIVITIES IN ANY GIVEN AREA, ALL DISTURBED AND ERODED EARTH SHALL BE REGRADED AND SEEDED WITHIN SEVEN DAYS BY USING BIN RUN OATS OR ANNUAL RYE TO PROVIDE STABILITY AND SEDIMENT CONTROL. WHERE POSSIBLE, GROWTH SHALL NOT BE MOWED UNTIL IT HAS GONE TO SEED FOR ONE YEAR.
- 24. PERMANENT GROUND COVER SHALL BE ESTABLISHED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE PLAN.
- 25. MINIMIZE TRACKING OF SEDIMENTS BY VEHICLES BY UTILIZING THE CONSTRUCTION ENTRANCE AS THE ONLY ENTRANCE FOR VEHICLES. MAINTAIN THIS ENTRANCE WITH STONE AS NEEDED TO PREVENT DIRT AND MUD FROM TRACKING ONTO THE ROADWAY. REGULAR SWEEPING OF THE ROADWAY MAY BE NECESSARY TO ENSURE ROADWAY DOES NOT BUILD UP WITH SEDIMENTS. 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 THE CONSTRUCTION ENTRANCES SHALL ALSO BE CLEANED WEEKLY.
- 26. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF (THIS INCLUDES WASHING OUT OF CEMENT TRUCKS). WASH PIT AREAS ARE TO BE DESIGNATED BY THE CONTRACTOR IN AREAS AWAY FROM AREAS OF CONCENTRATED STORM WATER RUNOFF.
- 27. ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 21 DAYS OR MORE MUST BE SEEDED AND MULCHED BY NOVEMBER 1 OR MUST HAVE DORMANT SEEDING OR MULCH COVER APPLIED BETWEEN NOVEMBER 1 AND MARCH 1.
- 28. MAKE FIELD ADJUSTMENTS TO:
- A) MEET FIELD CONDITIONS B) ANTICIPATE FUTURE WORK
- C) MAKE CORRECTION BASED ON THE WEEKLY INSPECTIONS
- 29. THERE ARE NO DESIGNATED FUELING AND MAINTENANCE LOCATIONS FOR THIS PROJECT. ALL FUELING VEHICLES SHALL BE EQUIPPED WITH SPILL KITS. ANY SPILLS OVER 5 GALLONS (OR THE MINIMUM REPORTING LEVEL) SHALL BE REPORTED TO THE APPROPRIATE AGENCY ACCORDING TO STATE AND LOCAL LAWS. FOR SPILLS OVER 25 GALLONS, CONTACT THE EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) WITHIN 30 MINUTES.
- 30. SITE STABILIZATION, EITHER PERMANENT OR TEMPORARY, MUST FOLLOW THE REQUIREMENTS AS APPLICABLE ON THE TABLES ON THIS SHEET.
- 31. CONTRACTOR TO IMPLEMENT GOOD HOUSEKEEPING PRACTICES THROUGHOUT CONSTRUCTION.

#### EROSION CONTROL NOTES (CONTINUED):

- 32. ANY CONTAMINATED SOILS ENCOUNTERED SHALL BE STOCKPILED PER DIRECTION OF OWNER'S REPRESENTATIVE. "CLEAN" SOIL SHALL BE STOCKPILED SEPARATELY FROM CONTAMINATED SOIL AND SHALL NOT BE COMMINGLED. CONTAMINATED SOILS SHALL BE PLACED ON, AND COVERED WITH VISQUEEN. A BERM SHALL BE CONSTRUCTED AROUND ENTIRE STOCKPILE TO HOLD VISQUEEN DOWN AND PREVENT SURFACE WATER AND RAIN FROM ENTERING SOIL PILE. ALL SEALS OR OVERLAPS IN THE VISQUEEN COVERING SHALL BE SECURED. 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 (TSDF'S).
- 33. ADDITIONAL EROSION CONTROL MEASURES MAY BECOME NECESSARY DUE TO CONSTRUCTION SEQUENCING. CONTRACTOR SHALL CONSULT WITH ENGINEER TO DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY.
- 34. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STORM SEWER OR SURFACE WATERS OF THE STATE.
- 35. CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS. WASTE DISPOSAL BY OPEN BURNING IS PROHIBITED. CONTRACTOR SHALL PROPERLY DISPOSE ANY CONTAMINATED SOILS, HAZARDOUS WASTE OR ASBESTOS CONTAINING MATERIAL ENCOUNTERED ON SITE ACCORDING TO CONTRACT DOCUMENTS.
- 36. CONTAINERS (E.G., DUMPSTERS, DRUMS) MUST BE MADE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTE. ALL CONTAINERS MUST BE COVERED AND LEAK- PROOF. NO TOXIC OR HAZARDOUS WASTES SHALL BE DISPOSED INTO STORM DRAINS, SEPTIC TANKS, OR BY BURYING, BURNING, OR MIXING OF WASTES.
- 37. CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE TRANSPORTED TO A LICENSED DISPOSAL FACILITY. THE MATERIAL SHALL BE COVERED WHILE BEING TRANSPORTED.
- 38. THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS OF THE STATE RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUND WATER CONTAINS SEDIMENT. IT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE, PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTING 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.
- 39. ALL EROSION AND SEDIMENT CONTROL SPECIFICATIONS, APPLICATIONS AND TIMETABLES ARE BASED ON THE DESCRIPTIONS AND STANDARDS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES "RAINWATER AND LAND DEVELOPMENT MANUAL"

#### TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO
ANY DISTURBED AREAS WITHIN 50 FEET OF A STREAM AND NOT AT FINAL GRADE	WITHIN 2 DAYS O DISTURBANCE WI
ALL OTHER AREAS	WITHIN 7 DAYS C DISTURBANCE IN DORMANT FOR M
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE O
WHERE VEGETATIVE STABILIZATION TECHNIQUES M	AY CAUSE STRUCT

OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLI TECHNIQUES MAY INCLUDE MULCHING, EROSION MATTING, OR PLACEMENT OF STONE.

#### PERMANENT STABILIZATION

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO A
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DA DISTURBANCE WIT
ANY AREAS WITHIN 50 FEET OF A STREAM AND AT FINAL GRADE	WITHIN TWO DAYS
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DA GRADE WITHIN TH

#### CONSTRUCTION SEEDING AND MULCHING:

APPLY SEED AND MULCH MATERIALS ACCORDING TO 2014 CMS ITEM 659 AS MODIFIED HEREI WHEN STRAW MULCH IS USED. APPLY AT A RATE OF 2 TONS PER ACRE, SEED AND MULCH DURING AND AFTER CONSTRUCTION, AND BEFORE OR DURING WINTER SHUT DOWN TO STABILIZE EDA AREAS AS REQUIRED. FERTILIZE CONSTRUCTION SEEDING AREAS AT ONE-HALF THE APPLICATION RATE SPECIFIED IN 2014 CMS ITEM 659. IF PROJECT CONDITIONS PREVENT FERTILIZING THE SOIL AND PREPARING THE SEEDBED. THEN THE FERTILIZING AND PREPARATION REQUIREMENTS OF 2014 CMS ITEM 659 MAY BE WAIVED. DO NOT PLACE CONSTRUCTION SEED ON FROZEN GROUND.

TEMPORARY EROSION AND SEDIMENT CONTROL IMPLEMENTATION SCHEDULE - NARRATIVE THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO THE FOLLOWING CONSTRUCTION SCHEDULE IDENTIFIED BELOW. THE CONTRACTOR SHALL

ESTIMATE THE TIME FRAME REQUIRED AND NOTE ON THE PLANS.

IMPLEMENTATION
ESTIMATE

APPLY EROSION CONTROLS OF THE MOST RECENT THIN THE AREA OF THE MOST RECENT AREAS THAT WILL BE ORE THAN 14 DAYS

NSET OF WINTER WEATHER

TURAL INSTABILITY OR ARE JES MUST BE EMPLOYED. THESE

APPLY EROSION CONTROLS YS OF THE MOST RECENT THIN THE AREA S OF REACHING FINAL YS OF REACHING FINAL AT AREA

# SCHEDULE D DATES

#### MAINTENANCE & INSPECTION SCHEDULE:

ALL PRACTICES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH 0.5 INCH RAINFALL EVENT.

#### CONSTRUCTION ENTRANCE:

- 1. ENSURE THAT THE CONSTRUCTION ENTRANCE IS APPROPRIATELY SIZED TO MINIMIZED TRACKING ONTO THE ROADWAY.
- 2. TOP DRESS GRAVEL EMBEDDED WITH SEDIMENT WITH CLEAN GRAVEL AS NEEDED.
- 3. RESTRICT VEHICULAR ACCESS TO STABILIZED AREAS TO MINIMIZED OFF SITE TRACKING.

#### VEGETATIVE STABILIZATION:

- 1. ENSURE A 70% STAND ESTABLISHMENT RATE.
- 2. REPAIR THOSE AREAS THAT DO NOT MINIMIZE OFF SITE TRACKING.

#### INLET PROTECTION:

- 1. INSURE THE BOTTOM OF THE FABRIC IS EMBEDDED IN THE GROUND AND THE FRAME OF THE INLET PROTECTOR HAS NOT COLLAPSED.
- 2. CLEAN OUT SEDIMENT ONCE 40% OF CAPACITY IS LOST.
- 3. INSURE THAT THE INLET IS NOT CAUSING STORM WATER TO BYPASS THE INLET.
- 4. MAINTAIN BYPASS PREVENTION DIKE.

#### BMP DECOMMISSIONING

#### CONSTRUCTION ENTRANCE

- REMOVE SILT AND STABILIZE ON-SITE OR TRANSFER TO AN APPROVED OFF-SITE FACILITY. • STONE SHALL BE REMOVED. CLEAN STONE MAY BE INCORPORATED IN SUBBASE FOR PAVED
- AREAS (AS SPECIFICATIONS ALLOW). STONE NOT RE-USED SHALL BE TRANSPORTED TO AN OFF-SITE FACILITY FOR DISPOSAL. RE-GRADE AND SEED DISTURBED AREAS.

#### PROCESS WATER / LEACHATE MANAGEMENT

- ALL PROCESS WASTEWATERS (EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, AND CONCRETE WASH-OUTS) WILL BE COLLECTED AND DISPOSED OF PROPERLY TO A PUBLICLY-OWNED TREATMENT WORKS. THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT ONLY AUTHORIZES THE
- DISCHARGE OF STORM WATER AND CERTAIN UNCONTAMINATED NON-STORM WATERS. THE DISCHARGE OF NON-STORM WATERS TO WATERS OF THE STATE MAY BE IN VIOLATION OF LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS.

#### SWPPP NARRATIVE

LAWNMARK DRIVE IS THE COMMERIAL CONSTRUCTION OF A PUBLICLY OWNED ROAD WITH PAVEMENT AND STORM SEWERS. THE SITE CONTAINS 1.04 ACRES (1.29 ACRES DISTURBED), THE RECEIVING WATERS FOR THIS SITE IS AN UNNAMED DRAINAGE DITCH THAT FLOWS INTO POWERS BROOK. THE PREVIOUS CONDITION OF THIS SITE WAS OPEN SPACE. THE IMPERVIOUS AREA AS A RESULT OF CONSTRUCTION IS 0.65 ACRES (62% IMPERVIOUS). THE CALCULATED RUNOFF COEFFICIENT FOR THE PRE-DEVELOPED SITE IS 0.07 AND THE POST-DEVELOPED SITE IS 0.41.

#### WATER QUALITY CALCULATIONS:

SEE STORMWATER CALCULATIONS FOR TRAILS OF HUDSON PHASE

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CHAPTER 7 Soil Stabilization 19

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20 CHAPTER 7 Soil Stabilization

![](_page_16_Figure_3.jpeg)

- 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. 1. Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

![](_page_16_Figure_6.jpeg)

 ACTUAL LAYOUT DETERMINED IN FIELD. 2. THE CONCRETE WASHOUT SIGN

CONCRETE WASHOUT FACILITY

#### California Stormwater BMP Handbook Construction www.cabmphandbooks.com

STAKES

(2 PER BALE)

SECTION B-B NOT TO SCALE

January 2003

#### Specifications for

#### **Temporary Rolled Erosion Control Product**

- 1. Channel/Slope Soil Preparation Grade and compact area of **Channel Installation** installation, preparing seedbed by loosening 2"-3" of topsoil 9. Excavate initial anchor trench (12"x6") across the lower end above final grade. Incorporate amendments such as lime and fertilizer into soil. Remove all rocks, clods, vegetation or other debris so that installed RECP will have direct contact with the soil surface.
- 2. Channel/Slope Seeding Apply seed to soil surface prior to installation. All check slots, anchor trenches, and other disturbed areas must be reseeded. Refer to the Permanent Seeding specification for seeding recommendations.

#### Slope Installation

- 3. Excavate top and bottom trenches (12"x6"). Intermittent erosion check slots (6"x6") may be required based on slope length. Excavate top anchor trench 2' x 3' over crest of the slope
- 4. If intermittent erosion check slots are required, install RECP in 6"x6" slot at a maximum of 30' centers or the mid point of the slope. RECP should be stapled into trench on 12" centers.
- 5. Install RECP in top anchor trench, anchor on 12" spacings, backfill and compact soil.
- 6. Unroll RECP down slope with adjacent rolls overlapped a minimum of 3". Anchor the seam every 18". Lay the RECP loose to maintain direct soil contact, do not pull taught.
- 7. Overlap roll ends a minimum of 12" with upslope RECP on top for a shingle effect. Begin all new rolls in an erosion check slot if required, double anchor across roll every 12".
- 8. Install RECP in bottom anchor trench (12"x6"), anchor every 12". Place all other staples throughout slope at 1 to 2.5 per square yard dependant on slope. Refer to manufacturer's anchor guide.

- of the project area.
- 10. Excavate intermittent check slots (6"x6") across the channel at 30' intervals along the channel. 11. Excavate longitudinal channel anchor slots (4"x4") along
- both sides of the channel to bury the edges. Whenever possible extend the RECP 2'-3' above the crest of channel side slo
- 12. Install RECP in initial anchor trench (downstream) anchor every 12", backfill and compact soil.
- 13. Roll out RECP beginning in the center of the channel toward the intermittent check slot. Do not pull taught. Unroll adjacent rolls upstream with a 3" minimum overlap (anchor every 18") and up each channel side slope.
- 14. At top of channel side slopes install RECP in the longitudinal anchor slots, anchor every 18". 15. Install RECP in intermittent check slots. Lay into trench and
- secure with anchors every 12", backfill with soil and compact
- 16. Overlap roll ends a minimum of 12" with upstream RECP on top for a shingling effect. Begin all new rolls in an intermittent check slot, double anchored every 12".
- 17. Install upstream end in a terminal anchor trench (12"x6"); anchor every 12", backfill and compact.
- 18. Complete anchoring throughout channel at 2.5 per square yard using suitable ground anchoring devices (U shaped wire staples, metal geotextile pins, plastic stakes, and triangular wooden stakes). Anchors should be of sufficient length to resist pullout. Longer anchors may be required in loose sandy or gravelly soils.

CHAPTER 7 Soil Stabilization 55

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TRAILS OF HUDSO LAWNMARK DRIVE IMPROVEMENT PLA

TGC Engineering, LLC 1310 SHARON COPLEY RD. P.O. BOX 37 SHARON CENTER, OH 44274 (PHONE) 330.590.8004 (FAX) 888.820.8423

PROJECT NO.

SW3

1229A

DATE 2016-04-05

			INSF	PECTION FORM	/CORRECTIVE	ACTION LOG	
NSPECTION DATE	INSPECTOR(S) NAME, TITLE AND QUALIFICATIONS	WEATHER INFORMATION (SEE PERMIT PART III.G.2I)	WEATHER INFORMATION AT TIME OF INSPECTION NOTING ANY DISCHARGES	LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE	LOCATION/DESCRIPTION OF BMP WITH DEFECIENCIES OR MAINTENANCE NEEDS	LOCATION/DESCRIPTION OF BMP'S THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION	LOCATION/DESCRIPTION OF BMP ARE NEEDED THAT DID NOT EXI THE TIME OF INSPECTION

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ON FORM			
SWPPP INSPECTIC	DATE ACTION TAKEN/RESPONSIBLE PARTY	CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES NECESSARY TO THE SWP3 (INCLUDE PLANNED DATE/RESPONSIBLE PARTY)	S THAT
S OF HUDSON NMARK DRIVE VEMENT PLANS			
TRAIL LAW IMPRO			
Engineering, LLC Ron Copley RD. P.O. BOX 37 CENTER, OH 44274 130.590.8004 (FAX) 888.820.8423			
PROJECT NO. 1229A DATE 2016-04-05			
(sw4)			

![](_page_18_Figure_0.jpeg)

# LAWNMARK DRIVE TREE PLANTING PLAN

![](_page_18_Figure_25.jpeg)

![](_page_18_Picture_28.jpeg)

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