

COMMUNITY DEVELOPMENT • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1790

DATE: June 8, 2016

TO: City of Hudson Planning Commission for June 13, 2016 Meeting

FROM: Greg Hannan, City Planner

Mark Richardson, Community Development Director

SUBJECT: Site Plan Review for Norton Road Trailhead Park for Summit County

Metroparks, PP#3009954

ZONING: District 8 Overlay – Hike Bike Senior Housing Overlay Zone

PC Case No: 2016-13

Project Introduction

Application has been received for the Norton Road Trailhead Park for the Summit County Metroparks Hike and Bike Trail. The proposed project includes a 15 space parking lot, landscaping, and a trail connection between The Summit County Hike and Bike Trail and Lawnmark Drive. The project is being completed by Redwood Communities, in coordination with Summit County Metroparks, as the public open space dedication for the Trails of Hudson development.

Adjacent Development: South of the subject property is residential property within the City of Stow. West of the property is the Hike and Bike Trail and additional property within District 8. North of the property is the Trails of Hudson development. To the east of the subject property is a residentially used property at 1433 Norton Road.

The following information is attached to this report:

- 1. Site plan submittal from TGC Engineering, Inc. received June 2, 2016.
- 2. Preliminary Comment Letter based on the May 2, 2016 submittal, prepared by City Planner Greg Hannan, dated May 20, 2016.

Trails of Hudson Open Space Dedication

The 2011 approval for the Trails of Hudson development (Case No. 2011-36) required the public open space requirements to be met with a park dedication to the Summit County Metroparks and the development of a parking lot to service the adjacent Hike and Bike trail. The applicant transferred the open space parcel to the Summit County Metroparks in 2012 fulfilling the Phase I requirement. The trailhead park is required to be developed in conjunction with the Phase II base improvements.

The below table summarizes the dedication requirements which were established in 2012. At that time, the city accepted an estimate of cost for the trailhead park and stated a pathway connection to Lawnmark Drive and a sidewalk along Hudson Drive from Redwood Blvd to the Hike and Bike Trail would contribute toward the dedication requirements. An updated cost estimate is needed for the referenced items. Staff anticipates the referenced items will fully meet the open space dedication requirements of the Trails of Hudson development.

<u>Dedication Requirement</u>	<u>Acreage</u>	<u>Value</u>
Phase I dedication requirement	2.84 acres	\$134,900
Phase II dedication requirement	3.04 acres	\$150,480
Total dedication required	5.88 acres	\$285,380
<u>Dedication Proposed</u>		
Donated land	1.6215 acres	\$149,121
Trailhead parking lot estimate		\$106,068.50
Remaining funds to be applied toward the	\$30,190.50	
to Lawnmark Dr. and a sidewalk along Hu	\$30,190.30	
Total Dedication Proposed		\$285,380

Applicable District Regulations

Use: The proposed public park use is permitted by right.

Setbacks: Based on ongoing discussions with the applicant and Summit County Metroparks, staff anticipates the parking lot will be reduced to a 25 foot front setback from Norton Road to allow some additional separation between the parking lot and the trail/kiosk area.

Pedestrian Amenities: Staff suggests realigning the north-south trail connector eastward several feet to provide a direct alignment with the Norton Road crossing. The multi-purpose path along Norton Road depicted in the submittal is to be completed by the City of Hudson as part of the Darrow Road-Norton Road intersection improvements. Staff requests the submittal incorporate a sidewalk connection between Redwood Blvd and the Hike Bike Trail at Hudson Drive as discussed with the Trails of Hudson Phase I approval.

Applicable Zoning Development and Site Plan Standards, Section 1207

Staff compared the proposal to zoning development and site plan standards. We comment on the following:

<u>Landscaping</u>: Bufferyard B has been proposed adjacent to the single family residential unit to the east. Perimeter landscaping is applicable between the parking lot and the Norton Road right of way. A landscape plan has been prepared by TGC Engineering LLC to demonstrate compliance with the applicable standards. Summit County Metroparks and the applicant are reviewing the plan details and may expand the design to incorporate additional shade trees and natural no-mow meadow plantings.

Engineering: City Engineer Thom Sheridan is completing a review of the plan submittal. Mr. Sheridan notes the applicant must review the stormwater management calculations from the Trails of Hudson project to determine if the stormwater needs for the parking lot have been accommodated. If stormwater management is needed, the applicant intends to install a bioswale between the parking lot and the north-south trail segment. The City of Hudson, Summit Metroparks, and the applicant are also coordinating several design details related to the adjacent Norton Road infrastructure project and the operational needs of the Metroparks.

Findings:

The staff finds that the application complies with the purposes and intent of the code and community plans, regulations that minimize land disturbance and protect environmental features, and other applicable development regulations as specified in Section 1204.04 except as discussed above and recommended below.

Required PC Action, Chapter 1203.09(g)(3)

The PC shall consider the development application, the staff report, and then take final action. PC shall approve, approve with conditions, or deny the application based on its compliance with the appropriate review standards. All decisions of the Commission shall be based on findings of fact related to the relevant standards of the Code.

Recommendation

Approve the application for the Norton Road Trailhead Park for Summit Metroparks, Permeant Parcel #3009954 per Case No. 2014-13 according to plans received June 2, 2016 with the following conditions:

- 1. Submit an updated cost estimate for the proposed improvements to confirm the open space dedication obligations have been met.
- 2. Incorporate a sidewalk connection along Hudson Drive between Redwood Blvd and the Hike and Bike Trail.
- 3. Subject to the review and approval of City Engineer Thom Sheridan.
- 4. The applicant shall install silt fencing and/or polypropylene fencing to mark and protect the approved clearing limits, which shall be maintained by the applicant.
- 5. Satisfaction of the above conditions prior to scheduling of a preconstruction meeting with City Officials and no clearing or construction of any kind shall commence prior to the issuance of a Zoning Certificate.



COMMUNITY DEVELOPMENT • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1790

May 20, 2016

RE: PC 2016-13 Trailhead Park for Metroparks Serving Summit County

Ms. Patricia Rakoci-

Thank you for your submission of the site plan application for the proposed trailhead park for Metroparks Serving Summit County. The application has been scheduled for the Planning Commission (PC) meeting of June 13, 2016. In preparation for such, I am forwarding preliminary comments related to compliance with the Land Development Code (LDC). In addition to these comments, engineering design related comments will be forwarded under separate cover. Our goal is to provide you an opportunity to respond to the below comments by June 2, 2016. We will revise the comments accordingly for the staff report scheduled to be issued on June 8, 2016. Additionally I am available to meet and review the comments at your convenience.

Chapter 1205.11 District 8 Hike/Bike Senior Housing Overlay

Use: The proposed public park use is permitted by right.

Setbacks: The proposed parking lot setbacks are acceptable.

Pedestrian Amenities: Sidewalks are required abutting a public street and provisions shall be made for non-vehicular circulation systems including pathways and bikeways. The applicant has proposed a multi-purpose path to connect Lawnmark Drive to the Hike and Bike Trail. Staff suggests realigning the trail connection as depicted on the attached page. The depicted multi-purpose path along Norton Road is to be completed by the City of Hudson and should be labeled as such.

Section 1207 Zoning Development and Site Plan Standards

Wetland/Stream Corridor Protection

The applicant submitted a wetland delineation in September of 2011 as part of the adjacent Trails of Hudson development. No wetlands were identified within or adjacent to the development area.

Landscaping/Buffering

- a) Bufferyards: Bufferyard B is applicable to the adjacent single family residential unit to the east and the trails of Hudson development to the north. This bufferyard has already been proposed to the north as part of the Trails of Hudson development; however, it is needed to the east.
- b) Interior island landscaping: As the proposed parking lot contains less than 20 spaces interior landscaping is not required.
- c) Perimeter landscaping at parking lot: Staff notes the proposed perimeter landscaping is appropriate along the east side of the lot to screen from the adjacent development; however, is not required along the west side adjacent to the trail. Some of the unneeded island and perimeter landscaping could be relocated to screen the lot from east-bound traffic on Norton Road. Perimeter landscaping should be added to screen the parking lot from Norton Road.

Off-Street Parking and Loading Requirements

- a) Stall dimensions: The parking stall depth can be reduced to 19 feet.
- b) Maneuverability area: The northern end of the parking area contains a back up area abutting the trail. This connection should be revised to create a lawn/landscaped area between the two with only a 10 foot wide path connection and a bollard to restrict vehicle access (see attached).

Traffic Analysis: Engineering Department will review applicable sightlines and access.

Stormwater Management: A separate correspondence will be issued by the Engineering Department.

Exterior Lighting: Exterior lighting has not been proposed for the parking lot.

City Arborist Comments

Below are comments received from Public Works Superintendent-City Arborist Tom Munn:

- a) Landscape details listed on Sheet C10 specify sugar maple (highly salt sensitive) and viburnum (subject to defoliation by leaf beetle). I recommend substitution of Autumn Blaze or October Glory maple, and Miss Kim Iilac, respectively, or equivalents.
- b) Siting the shade trees closer to the outer perimeter of the parking lot will provide more root space, and healthier and larger shade trees.
- c) Additional shade trees along the parking lot edges in lieu of shrubs would provide a shaded, cool car for hikers to return to after exercising.

Please contact me for any assistance I can provide.

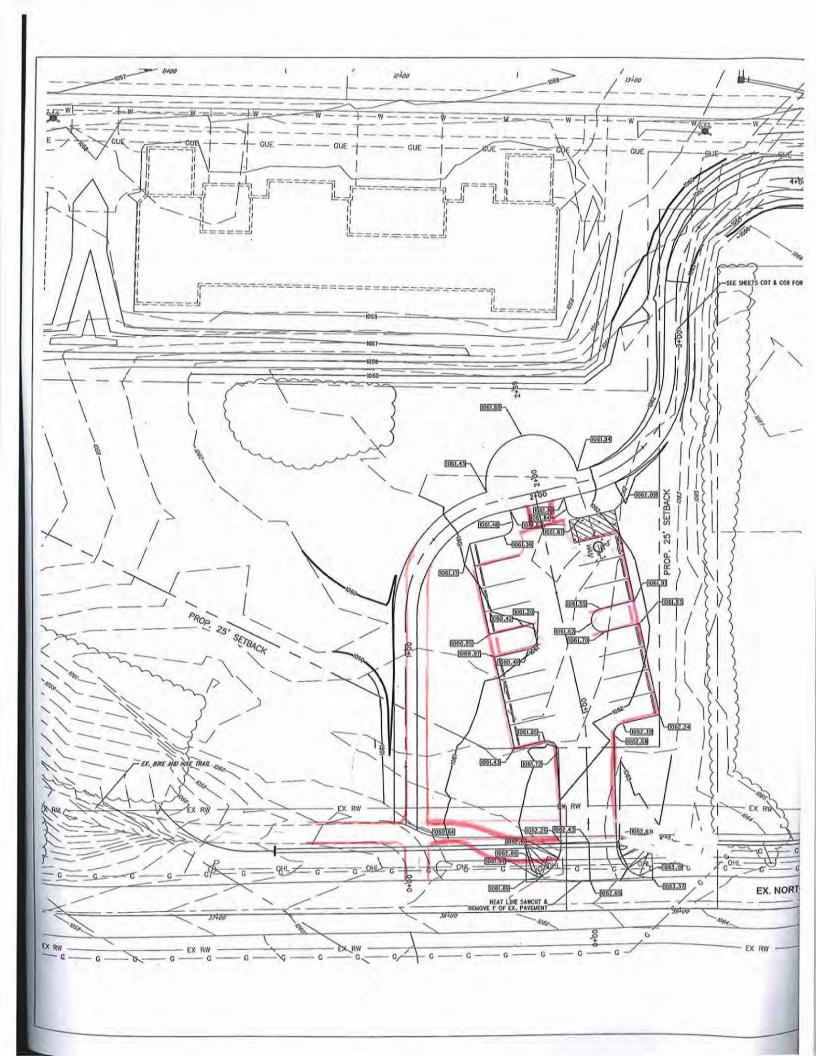
Sincerely,

Gregory P. Hannan, AICP

City Planner

CC: Mark Richardson, Community Development Director

Thom Sheridan, City Engineer Chris Papp, Asst City Engineer



TREES AND STREET LIGHTS SHALL BE COMPLETED WITHIN TWO YEARS OF THE DATE OF APPROVAL BY THE CITY ENGINEER. 40. FAILURE TO COMPLETE THE PROJECT IN ITS ENTIRETY AS APPROVED BY THE PLANNING

PER SECTION 9 - LANDSCAPING AND STREET TREES OF THE CITY'S "ENGINEERING

AS DIRECTED BY THE CITY OF HUDSON OR ITS ENGINEER AT THE END OF EACH WORK DAY,

OR AS REQUIRED DURING THE WORK DAY. THE CITY HAS THE RIGHT TO USE THE BOND IF

25. IF MUD. SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHER PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH

26. ALL PROPOSED SLOPES 3:1 OR STEEPER AND ALL EARTHEN DRAINAGE WAYS SHALL RECEIVE

27. ALL STORM SEWERS WITHIN PUBLIC RIGHTS-OF-WAY AND CITY OF HUDSON EASEMENTS

28. ALL PIPES SHALL BE PLACED OVER 4" OF BEDDING. BEDDING MATERIAL SHALL BE AS

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING THE FLOW

30. NO CONSTRUCTION VEHICLES SHALL BE PARKED WITHIN THE NORTON ROAD RIGHT-OF-WAY

31. THE EXISTING NORTON ROAD LANES SHALL NOT BE BLOCKED OR CLOSED AT ANY TIME.

BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.

NOT CONFORM TO THE APPLICABLE STANDARDS AND SPECIFICATIONS.

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALL

33. ALL DELIVERED MATERIALS SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE

34. THE CITY OF HUDSON OR ITS REPRESENTATIVE, RESERVES THE RIGHT TO HALT ALL

35. ALL CHANGES TO APPROVED DRAWINGS AND/OR SPECIFICATIONS MUST BE RE-APPROVED

MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF

DELIVERED MATERIAL MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL

CITY OF HUDSON OR OTHER APPLICABLE AGENCIES. THE CITY OF HUDSON, OR ITS

REPRESENTATIVE, RESERVES THE RIGHT TO REJECT ANY DELIVERED MATERIAL WHICH DOES

CONSTRUCTION ACTIVITY FOR NON-CONFORMANCE TO PLANS. SPECIFICATIONS AND OTHER

PLAN FOR NORTON ROAD SHALL BE SHOWN ON THE PLANS WITH SIGNAGE.

OF VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE. TRAFFIC CONTROL SHALL

BE COORDINATED WITH THE CITY OF HUDSON POLICE DEPARTMENT. A TRAFFIC CONTROL

SHALL BE PER SECTION 4 - STORM COLLECTION OF THE CITY'S "ENGINEERING STANDARDS

SPECIFIED IN CITY'S "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION",

STANDARDS FOR INFRASTRUCTURE CONSTRUCTION*, LATEST EDITION.

THIS WORK IS NOT COMPLETED WITHIN 2 HOURS OF NOTIFICATION.

JUTE OR EXCELSIOR MATTING AS PER ODOT 667 OR 668.

FOR INFRASTRUCTURE CONSTRUCTION", LATEST EDITION.

AT ANY TIME, UNLESS APPROVED BY THE CITY OF HUDSON.

LATEST EDITION, FOR THE TYPE OF PIPE.

APPLICABLE STANDARDS OR REGULATIONS.

PRE-CONSTRUCTION MEETING.

THE IMPROVEMENT.

BY THE CITY OF HUDSON PRIOR TO CONSTRUCTION

COMMISSION, INCLUDING PUNCH LIST ITEMS, WILL RESULT IN THE CITY OF HUDSON HOLDING ALL FUTURE ZONING CERTIFICATES UNTIL ALL WORK HAS BEEN COMPLETED AND

41. MANUFACTURERS OR SUPPLIERS AFFIDAVIT FOR ALL CONSTRUCTION MATERIALS SHALL BE PROVIDED AS PER THE CITY'S "ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION". LATEST EDITION PRIOR TO THE START OF CONSTRUCTION.

42. THE CONSTRUCTION OF WATER MAINS IS PROHIBITED UNTIL ALL PLANS HAVE BEEN APPROVED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY.

43. FAILURE TO COMPLETE THESE AFOREMENTIONED TASKS AND/OR COMPLY WITH THESE "CITY OF HUDSON GENERAL CONSTRUCTION NOTES AND SPECIFICATIONS" MAY RESULT IN A "STOP WORK ORDER" BY THE CITY OF HUDSON.

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.

CITY OF HUDSON GENERAL CONSTRUCTION NOTES AND SPECIFICATIONS (WORK WITHIN R/W) 1. CONSTRUCTION OF THE SITE WORK AND UTILITIES SHALL BE GOVERNED BY THE CITY OF 24. ALL DISTURBED AREAS SHALL RECEIVE 4" OF TOPSOIL AND BE SEEDED AND MULCHED AS

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.

7. 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 AND SUMMIT METRO PARKS 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. PROVIDE TWO (2) COPIES OF PARKING LOT PLANS AND SHOP DRAWINGS TO SUMMIT METRO PARKS.

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

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

COMMERCIAL DEVELOPMENT

THE CITY OF HUDSON

SUMMIT COUNTY, STATE OF OHIO

LOCATION MAP

NOT TO SCALE

CHRISTOPHER M. SCHMIDT, P.E. NO. E-80749 DATE

DATE CHARLES HAUBER, P.E., P.S. SUMMIT COUNTY METRO PARKS

CITY OF HUDSON - ENGINEER

SUMMIT COUNTY SOIL AND WATER LETTER DATED:

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

EROSION CONTROL PLAN

EROSION CONTROL NOTES

EROSION CONTROL DETAILS

APPROVALS:

CHRISTOPHER SCHMIDT E-80749

TE OF

TRAILS OF HUDSON - SUMMIT METRO

PARKS BIKE AND HIKE TRAILHEAD

DATE

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

DESCRIPTION	EXISTING SYMBOL	PROPOSED SYMBOL
PROPERTY LINE		PL
RIGHT OF WAY CENTERLINE BUILDING SETBACK LINE		PL ————————————————————————————————————
	0-4	
FIRE HYDRANT GATE VALVE	₩ # w #	
STORM SEWER STORM MANHOLE YARD DRAIN		
SANITARY MANHOLE	0	
SPOT ELEVATION	942.99 — — — — — — — — — — — — — — — — — —	942.99 400

IMPROVEMENT PLAN SHEET INDEX DESCRIPTION TITLE SHEET SUMMIT METRO PARKS NOTES C03 STANDARD NOTES **EXISTING CONDITIONS PLAN** C05 OVERALL SITE PLAN GRADING PLAN CO7-CO8 MULTI-USE TRAIL PLAN AND PROFILE LANDSCAPE PLAN C10 LANDSCAPE PLAN NOTES AND SPECIFICATIONS C11-C12 STANDARD DETAILS EROSION CONTROL PLAN SHEET INDEX SHEET DESCRIPTION

DATE
1
05/02/2016
06/02/2016

OWNER:

TOTAL SITE AREA: 1.62 ACRES

LINEAR FEET OF TRAIL: 586 FT

PAVEMENT AREA: 13,713 SF

HOUSING OVERLAY

PARKING SPACES: 15

SITE INFORMATION

CURRENT ZONING: DISTRICT 8 HB SENIOR

975 TREATY LINE RD AKRON, OHIO 44313

SUMMIT METRO PARKS TRAILS OF HUDSON TWO, LLC 23775 COMMERCE PARKWAY, SUITE 7

BEACHWOOD, OH 44256

BENCHMARKS:

OAK DRIVE ELEVATION=1057.69

OAK DRIVE ELEVATION=1043.51

DEVELOPER:

1) EXISTING SAN. MH-9, LOCATED AT THE

2) EXISTING SAN. MH-10, LOCATED AT THE

330-590-8014

INTERSECTION OF REDWOOD BOULEVARD AND SCARLET

INTERSECTION OF SILVER LINDEN LANE AND SCARLET

CONTACT: PATRICIA RAKOCI CONTACT: CHARLES HAUBER, P.E., P.S. 330-865-8040 ext 206

DESIGN ENGINEER:

TGC ENGINEERING, LLC 1310 SHARON COPLEY RD. P.O. BOX 37 SHARON CENTER, OH 44274

CONTACT: CHRISTOPHER M. SCHMIDT, P.E. 330-590-8004

CONTRACTOR:

TO BE DETERMINED

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 D.S.S.S. (330) 926-2400

ELECTRIC LINES: HUDSON PUBLIC POWER (330) 342-1728

WINDSTREAM (866) 445-5880 GAS LINES:

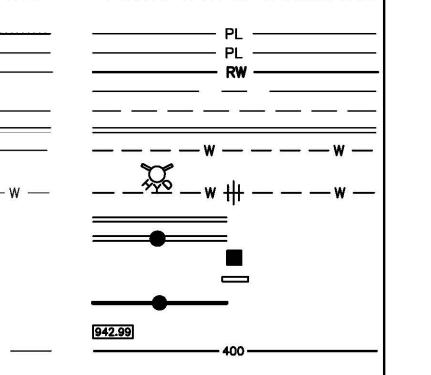
TELEPHONE LINES:

DOMINION EAST OHIO (800)-362-7557

CABLE TV: TIME WARNER (216) 744-1402

REGISTERED UNDERGROUND UTILITIES PROTECTION SERVICE: OHIO UTILITIES PROTECTION SERVICE

1-800-362-2764 OR 8-1-1



SERVICE

Utilities Protection Call Before You Dig 1-800-362-2764 CALL TWO WORKING DAYS BEFORE YOU DIG (NON MEMBERS MUST BE CALLED DIRECTLY)

PROJECT NO. 1229B DATE 2016-06-02

GENERAL NOTES:

- 1. THE FOLLOWING NOTES APPLY TO THE TRAILHEAD CONSTRUCTION AND ALL WORK ON METRO PARKS PROPERTY. REFER TO NOTES ON SHEET CO1 FOR WORK WITHIN R/W.
- 2. THE CONTRACTOR SHALL KEEP A LEGIBLE AND CURRENT COPY OF THE APPROVED PLANS AND BID SPECIFICATIONS ON SITE AT ALL TIMES.
- 3. THE PROJECT MANUAL AND CONTRACT DRAWINGS SHALL GOVERN THIS IMPROVEMENT. WITHIN THIS PROJECT ARE REFERENCES TO THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS (2013 EDITION). THESE REFERENCES TO ODOT SPECIFICATIONS SHALL GOVERN THIS IMPROVEMENT WHERE NOTED ON THE CONTRACT DRAWINGS OR REFERENCED IN THE TECHNICAL SPECIFICATIONS. OTHERWISE THE PROJECT MANUAL AND CONTRACT DRAWINGS WILL PREVAIL.
- 4. UNLESS STATED IN THE PLANS OR PROJECT MANUAL, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS, INCLUDING SAFETY REQUIREMENTS. CONTRACTOR SHALL EXERCISE PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF ALL PERSONS, INCLUDING EMPLOYEES, PARK USERS AND PROPERTY.
- 5. UNLESS STATED IN THE PLANS OR PROJECT MANUAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PAYING ALL FEES, SCHEDULING AND OBTAINING ALL INSPECTIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR SHOP DRAWING SUBMITTALS TO THE NECESSARY AGENCIES FOR PERMITS AND APPROVALS.
- 6. ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR. THE COST OF SAME SHALL BE INCLUDED IN UNIT PRICES FOR THE VARIOUS RELATED ITEMS.
- 7. ANY MATERIAL OR ITEM OF WORK, WHICH HAS NO SPECIFICATION, SHALL BE APPROVED BY METRO PARKS. COST SHALL BE INCLUDED IN UNIT PRICES FOR THE VARIOUS RELATED ITEMS.
- 8. ANY DEFECTS IN CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE METRO PARKS. THE COST SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
- 9. ANY MODIFICATIONS TO THE WORK AS SHOWN ON THESE APPROVED PLANS SHALL HAVE PRIOR WRITTEN APPROVAL OF THE METRO PARKS PRIOR TO PERFORMING THE WORK.
- 10. NORMAL WORKING HOURS ARE BETWEEN 7:00 A.M. AND 3:30 P.M. MONDAY THROUGH FRIDAY EXCLUSIVE OF HOLIDAYS. ANY WORK BEYOND THESE HOURS AND DAYS WILL ONLY BE ALLOWED UPON EXPLICIT APPROVAL OF METRO PARKS.
- 11. MATERIALS AND EQUIPMENT SHALL NOT BE STORED IN PUBLIC RIGHT OF WAYS OR WITHIN THE DRIP LINE OF EXISTING TREES TO REMAIN. ON-SITE STORAGE AREAS, NOT NOTED ON THE PLANS, MUST BE APPROVED BY METRO PARKS PRIOR TO PLACING ANY MATERIAL OR EQUIPMENT.
- 12. THE CONTRACTOR, CONTRACTOR'S EMPLOYEES, SUB-CONTRACTORS AND OTHER PERSONNEL AT THE SITE SHALL ACT APPROPRIATELY AND SHALL NOT USE PROFANE AND/OR OFFENSIVE LANGUAGE. THE CONTRACTOR IS RESPONSIBLE FOR THE BEHAVIOR OF THEIR EMPLOYEES AND SUBCONTRACTORS.
- 13. ALL EXCESS MATERIALS, SUCH AS BUT NOT LIMITED TO TOPSOIL, EXCAVATION, PIPE ETC., SHALL BE HAULED FROM THE SITE AND PROPERLY DISPOSED OF LEGALLY. NO PAYMENT WILL BE MADE FOR HAULING EXCESS MATERIALS FROM THE SITE. PAYMENT FOR HAULING AND DISPOSING OF EXCESS MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE FOR THE RELATED ITEM.
- 14. CONTRACTOR SHALL EMPLOY AN EXPERIENCED AND QUALIFIED SUPERINTENDENT, SATISFACTORY TO METRO PARKS. THE SUPERINTENDENT MUST BE IN ATTENDANCE AT THE JOB SITE AT ALL TIMES DURING THE PROGRESS OF WORK. THE SUPERINTENDENT SHALL NOT BE CHANGED WITHOUT THE CONSENT OF METRO PARKS.

PROTECTION AND RESTORATION OF PROPERTY:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE PROPERTY. ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED AS DIRECTED BY METRO PARKS OR THE LOCAL GOVERNING AGENCY.
- 2. 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 THE AT LEAST THE BEFORE-CONSTRUCTION CONDITION ACCORDING TO LOCAL OR METRO PARKS STANDARDS.
- 3. THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES TO THE PROJECT WORK LIMITS SHOWN ON THE DRAWINGS AND SHALL NOT TRESPASS UPON PRIVATE PROPERTY.
- 4. CONTRACTOR SHALL KEEP ALL STREETS, LANES, AND PARKING AREAS ADJACENT TO THE PROJECT AREA CLEAN AND FREE FROM ANY DEBRIS, MUD AND/OR OTHER CONSTRUCTION EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE ANY DEBRIS AND MUD FROM PUBLIC STREETS AND METRO PARKS ROADS, TRAIL OR PARKING LOTS AT THE END OF EACH WORK DAY OR AS DIRECTED BY THE METRO PARKS.
- 5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY METRO PARKS OR IT'S REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL, MATERIALS THAT MAY CREATE A HEALTH RISK, ARCHEOLOGICAL ARTIFACTS OR BONES ARE DISCOVERED ON SITE.
- 6. AREAS BEYOND THE CONSTRUCTION LIMITS SHALL NOT BE DISTURBED INCLUDING THE STOCKPILE OF ANY MATERIALS OR CONSTRUCTION TRAFFIC.
- 7. ALL DISTURBED AREAS SHALL RECEIVE 4" OF TOPSOIL AND BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED ON THE PLANS. ANY AREAS BEYOND THE CONSTRUCTION LIMITS, SHOWN ON THE PLANS, DISTURBED BY THE CONTRACTOR, SHALL BE RESTORED AT NO EXPENSE TO THE METRO PARKS.
- 8. SEED MIXTURES, PLANTINGS AND OTHER PROPOSED VEGETATION SHALL CONFORM TO THE SPECIFICATIONS NOTED ON THE PLANS AND NOTES.

SURVEY/LAYOUT:

- DO NOT SCALE FROM THESE DRAWINGS. WRITTEN DIMENSIONS SHALL GOVERN.
 ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO
 FACE OF CURB AND EDGE OF PAVEMENT. CONTRACTOR SHALL VERIFY ALL
 DIMENSIONS ON THE GROUND AND REPORT ANY LAYOUT DISCREPANCIES
 IMMEDIATELY TO THE METRO PARKS.
- 2. THE CONSTRUCTION STAKING OF ALL SITE IMPROVEMENTS, INCLUDING THE LIMITS OF CLEARING AND GRADING, SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A SURVEYOR LICENSED IN THE STATE OF OHIO.
- 3. PRECISE LAYOUT SHALL BE STAKED AND APPROVED BY THE METRO PARKS 48 HOURS (2 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION. GPS GUIDED CONSTRUCTION EQUIPMENT MAY BE USED ONLY IF APPROVED BY METRO PARKS. IF GPS GUIDED EQUIPMENT IS USED, METRO PARKS MAY REQUIRE CONTRACTOR TO PROVIDE REFERENCE STAKES FOR INSPECTION PURPOSES. COST OF REFERENCE STAKES SHALL BE INCLUDED IN THE BID FOR THE RELATED ITEM.
- 4. THE CONSTRUCTION LIMITS SHALL BE FIELD STAKED AND ORANGE CONSTRUCTION FENCING OR SILT FENCE SHALL BE INSTALLED AS NOTED ON THE DRAWINGS. CONSTRUCTION FENCE SHALL PROTECT THE PUBLIC AND NATURAL RESOURCES FROM CONSTRUCTION ACTIVITY.
- 5. THE ELEVATION DATUM USED IS NAVD 1988. COORDINATES ARE BASED UPON OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD 1983, GROUND.
- 6. THE CONTRACTOR SHALL REFERENCE ALL IRON PINS AND MONUMENTS IN DANGER OF DESTRUCTION BEFORE EXCAVATION. IF ANY PINS OR MONUMENTS ARE DISTURBED, A SURVEYOR, REGISTERED IN THE STATE OF OHIO, SHALL ACCURATELY RESET THEM AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OR REFERENCING OF THE PRIMARY CONTROL POINTS. ANY POINTS DISTURBED DURING CONSTRUCTION SHALL BE RESET IF NECESSARY BY THE CONTRACTOR'S SURVEYOR AT NO EXPENSE TO THE METRO PARKS.
- 7. THE CONTRACTOR SHALL PROVIDE INFORMATION NECESSARY TO DEVELOP A FINAL SET OF "AS-BUILT" PLANS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE A SET OF PLANS MARKED IN RED, CERTIFIED BY THE CONTRACTOR AS INCLUDING ALL FIELD CHANGES WHICH OCCURRED DURING CONSTRUCTION, AS DOCUMENTED BY ANY CHANGE ORDERS OR OTHERWISE. ALL COST SHALL BE INCLUDED WITH VARIOUS RELATED ITEMS. FINAL CONTRACT PAYMENT WILL NOT BE MADE UNTIL 32AS-BUILT 122 PLANS ARE RECEIVED AND APPROVED BY METRO PARKS. AS-BUILT DRAWINGS SHALL BE PREPARED BY A PROFESSIONAL SURVEYOR AND SHALL BE SUBMITTED IN PDF AND AUTOCAD FORMAT.

UTILITIES:

- 1. THE CONTRACTOR IS RESPONSIBLE, PRIOR TO CONSTRUCTION, TO DETERMINE THE ACTUAL LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL OUPS AT (800) 362-2764 AND OGPUPS AT (800) 925-0988 TWO FULL WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL RELOCATE AND/OR PROVIDE PROTECTION OF UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL PAY THE TOTAL COST AND/OR CHARGE BY THE RESPECTIVE UTILITY COMPANY FOR THE RELOCATION AND/OR PROTECTION OF THE UTILITIES, WHICH COST SHALL BE INCLUDED IN THE BID FOR THE ITEM WHICH NECESSITATED THE RELOCATION AND/OR PROTECTION.
- 3. SEE SHEET CO1 FOR ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.
- 4. THE LOCATION OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THE PLANS-ARE BASED ON A SURVEY PROVIDED BY:

XX ADD CONSULTANT

THE METRO PARKS REPRESENTATIVE AND METRO PARKS ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

EARTHWORK:

- . NUCLEAR COMPACTION TESTING SHALL BE REQUIRED FOR ALL FILL AREAS OVER TWO FEET (2') IN DEPTH, AT 6" LIFTS PER ASTM A-1557, 95% MODIFIED. COST OF TESTING SHALL BE PAID BY THE CONTRACT AND INCLUDED IN THE RELATED PAY ITEMS UNLESS SPECIFIED OTHERWISE IN THE PLANS OR PROJECT MANUAL.
- 2. NO BLASTING WILL BE PERMITTED ON THIS PROJECT.
- METRO PARK'S REPRESENTATIVE SHALL APPROVE ROUGH GRADING PRIOR TO FINISH GRADING, TOPSOIL PLACEMENT AND SEEDING.
- 4. MAINTAIN UNIFORM AND POSITIVE SLOPES ON ALL RE-GRADED SURFACES.
- -5. GEOTECHNICAL INVESTIGATIONS HAVE BEEN PREPARED BY ___, DATED __ AND ARE INCLUDED IN THE PROJECT MANUAL.

MAINTENANCE OF TRAFFIC:

- 1. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC AS PER ODOT ITEM 614.
- 2. SAFE VEHICULAR, PEDESTRIAN AND/OR BICYCLE TRAFFIC SHALL BE MAINTAINED BY THE CONTRACTOR. ROADS, TRAILS AND PARKING AREAS SHALL NOT BE CLOSED UNLESS OTHERWISE SHOWN ON THE PLANS. CONTRACTOR SHALL INSTALL APPROPRIATE BARRIERS AND SIGNAGE TO MAINTAIN SAFE VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC. PAYMENT FOR BARRIERS AND SIGNAGE SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTENANCE OF TRAFFIC.

WETLANDS/STREAM AVOIDANCE:

1. NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PERFOREMED IN ANY WETLANDS, STREAMS OR OTHER WATERS OF THE UNITED STATES, UNLESS THE REQUIRED STATE AND/OR REDERAL PERMITS HAVE BEEN OBTAINED IN ACCORDANCE WITH ALL APPLICABLE STATE AND/OR FEDERAL LAWS AND REGULATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS, STREAMS OR OTHER WATERS OF THE UNITED STATES.

PAVING:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALL MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.
- 2. ALL PAVING MATERIAL MUST BE PROVIDED BY ODOT CERTIFIED SUPPLIER. WRITTEN PROOF SHALL BE REQUIRED UPON DELIVERY OF MATERIALS. THE JOB MIX FORMULA (JMF) MUST BE SUBMITTED TO, AND APPROVED BY METRO PARKS PRIOR TO SCHEDULING A PRECONSTRUCTION MEETING.
- 3. MEASUREMENT AND PAYMENT FOR ALL PAVING MATERIALS, INCLUDING ASPHALT AND AGGREGATE BASE, SHALL BE FOR THE ACCEPTED QUANTITIES, COMPLETE AND IN PLACE. CONTRACTOR MAY NOT PLACE SPOIL MATERIAL ON METRO PARKS PROPERTY. CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF SPOILS AND EXCESS MATERIALS FROM THE SITE.

DRAINAGE:

- 1. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE BY ROUTING DRAINAGE FLOWS THAT ARE INTERRUPTED BY CONSTRUCTION.
- 2. 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.
- 3. 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 CONTRACTOR SHALL NOTIFY THE METRO PARKS BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

BEST MANAGEMENT PRACTICES:

- 1. THE CONDITIONS OF THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT SHALL BE MET DURING ALL STAGES OF CONSTRUCTION. THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACT ON THE RECEIVING WATERS. IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONTINUE THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UPSLOPE DISTURBED AREAS ARE STABILIZED.
- 2. THE OHIO EPA NOTICE OF INTENT WILL BE SUBMITTED TO OHIO EPA AT LEAST 21 DAYS PRIOR TO CONSTRUCTION.

OR

AN NPDES PERMIT IS NOT REQUIRED FOR THIS PROJECT. HOWEVER, THE CONDITIONS OF A TYPICAL NPDES CONSTRUCTION STORM WATER GENERAL PERMIT SHALL BE MET DURING ALL STAGES OF CONSTRUCTION. THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENT CONTROL ITEM SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACT ON THE RECEIVING WATERS.

IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONTINUE THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UPSLOPE DISTURBED AREAS ARE STABILIZED.

- 3. TO PROTECT AND DELINEATE THE BOUNDARY OF THE EXISTING ADJACENT WETLANDS, STREAM CHANNELS AND OR DRAINAGE WAYS A QUANTITY OF ITEM 832 TEMPORARY SEDIMENT AND EROSION CONTROL AND ITEM 832 TEMPORARY CONSTRUCTION FENCE HAS BEEN ADDED TO THE GENERAL SUMMARY. THIS FILTER FABRIC FENCE AND THE TEMPORARY CONSTRUCTION FENCE ARE TO BE INSTALLED AT THE PROPOSED CONSTRUCTION LIMITS AND MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION.
- 4. EROSION CONTROL MATS SHALL BE MADE OF ALL NATURAL MATERIALS. MATS SHALL HAVE NETTING MADE OF JUTE YARN OR OTHER BIODEGRADABLE NATURAL FIBER. MATS CONTAINING NETS MADE WITH POLYPROPYLENE, POLYMERIC PLASTIC OR OTHER NON-NATURAL MATERIALS SHALL NOT BE USED.

STORM SEWERS:

- UNLESS NOTED ON THE DRAWINGS, ALL STORM SEWERS, BASIN OUTLETS AND BIO-SWALE/BASIN OUTLETS SHALL BE PVC-SD35; CORRUGATED HDPE PIPE WITH SMOOTH INTERIOR WALLS OR REINFORCED CONCRETE PIPE.
- 2. ALL STORM SEWERS SHALL BE PLACED OVER 4" OF BEDDING. BEDDING SHALL BE #57 CRUSHED LIMESTONE PLACED 12" ABOVE HDPE AND PVC PIPE AND TO THE CENTERLINE OF REINFORCED CONCRETE PIPE.
- 3. TRENCHES UNDER PAVED ARES SHALL BE BACKFILLED TO THE TOP OF THE TRENCH WITH COMPACTED ODOT ITEM 304.

TESTING AND INSPECTION:

- 1. ALL COMPACTION, ASPHALT, CONCRETE AND OTHER PAVING MATERIALS SHALL BE TESTED AS REQUIRED BY THE ODOT 2013 CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE LOCAL REQUIREMENTS AS APPLICABLE. CONTRACTOR SHALL EMPLOY A CERTIFICATED INDEPENDENT TESTING COMPANY. COPIES OF ALL REPORTS AND TEST RESULTS SHALL BE SUBMITTED TO METRO PARKS. PAYMENT FOR TESTING SHALL BE INCLUDED IN THE LUMP SUM UNIT BID FOR TESTING AND INSPECTION.
- 2. ALL SANITARY SEWERS AND WATER LINES SHALL BE TESTED AND INSPECTED AS REQUIRED BY ALL LOCAL, STATE AND FEDERAL REGULATIONS. COPIES OF ALL REPORTS AND TEST RESULTS SHALL BE SUBMITTED TO METRO PARKS. PAYMENT FOR TESTING SHALL BE INCLUDED IN THE LUMP SUM UNIT BID FOR TESTING AND INSPECTION.

UMMIT METRO PARKS
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DATE 2016-06-02

GENERAL NOTES-EARTHWORK

- 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 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.
- 3. ANY UNSUITABLE SOILS ENCOUNTERED IN PROPOSED PAVEMENT AREAS WITHIN THE R/W AND TRAILHEAD 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.
- 8. PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE CITY ENGINEER AND THE DESIGN ENGINEER.
- 9. UNLESS OTHERWISE INDICATED AT A SPECIFIC LOCATION, ALL FINISHED GRADES AT THE LIMITS OF NEW WORK ARE TO CONFORM TO AND MATCH EXISTING GRADES.
- 10. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE DRAINAGE TO CATCH BASINS OR SHEET FLOW OFF OF OPEN AREAS BY MEANS OF SITE GRADING.
- 11. EXCAVATIONS ARE TO BE PROMPTLY BACKFILLED AND GRADED SO AS TO ELIMINATE AND PREVENT PONDING ON THE SITE.

GENERAL NOTES-CONSTRUCTION

- 1. 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.
- 3. ALL TESTING AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE DEVELOPER (OWNER).
- 4. WARNING DEVICES (ROAD CONSTRUCTION AHEAD ON NORTON ROAD, BOTH 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.
- 5. ADDITIONAL SOIL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE 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.
- 7. VISIBLE ABOVE-GROUND UTILITIES ON SITE HAVE BEEN SHOWN ON THE PLANS. THE CONTRACTOR IS TO FIELD-VERIFY ELEVATIONS, QUANTITIES AND LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER.
- 9. ALL UNDERGROUND LINES ENCOUNTERED BY CONSTRUCTION ARE TO BE COMPLETELY RESTORED AT THE EXPENSE OF THE CONTRACTOR.
- 10. COST OF ANY SHEETING, DEWATERING OR FOUNDATIONS NECESSARY FOR 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.
- 16. 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.

GENERAL NOTES - SITE PREPARATION

- 1. 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. REMOVE SOILS AS NECESSARY TO COMPLETE PROPOSED CONSTRUCTION, PER SUMMIT METRO PARKS.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION, REMOVAL, AND RESTORATION WORK NECESSARY TO PERMIT CONSTRUCTION OF THE PROPOSED PROJECT.

GENERAL NOTES-PAVEMENT

- 1. THE PAVEMENT AND BASE COURSE SHALL BE CONSTRUCTED AS SHOWN ON THE TYPICAL PAVEMENT SECTION SHEET CONTAINED IN THESE PLANS. THE ROAD(S) SHALL BE CONSTRUCTED TO THE LINE AND GRADE SHOWN ON THE ENCLOSED PLANS AND PROFILES.
- 2. 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 SUMMIT METRO PARKS SPECIFICATIONS.
- 3. ALL TESTING AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE DEVELOPER.
- 4. 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 SUMMIT METRO PARKS SPECIFICATIONS.

STANDARD NOTES

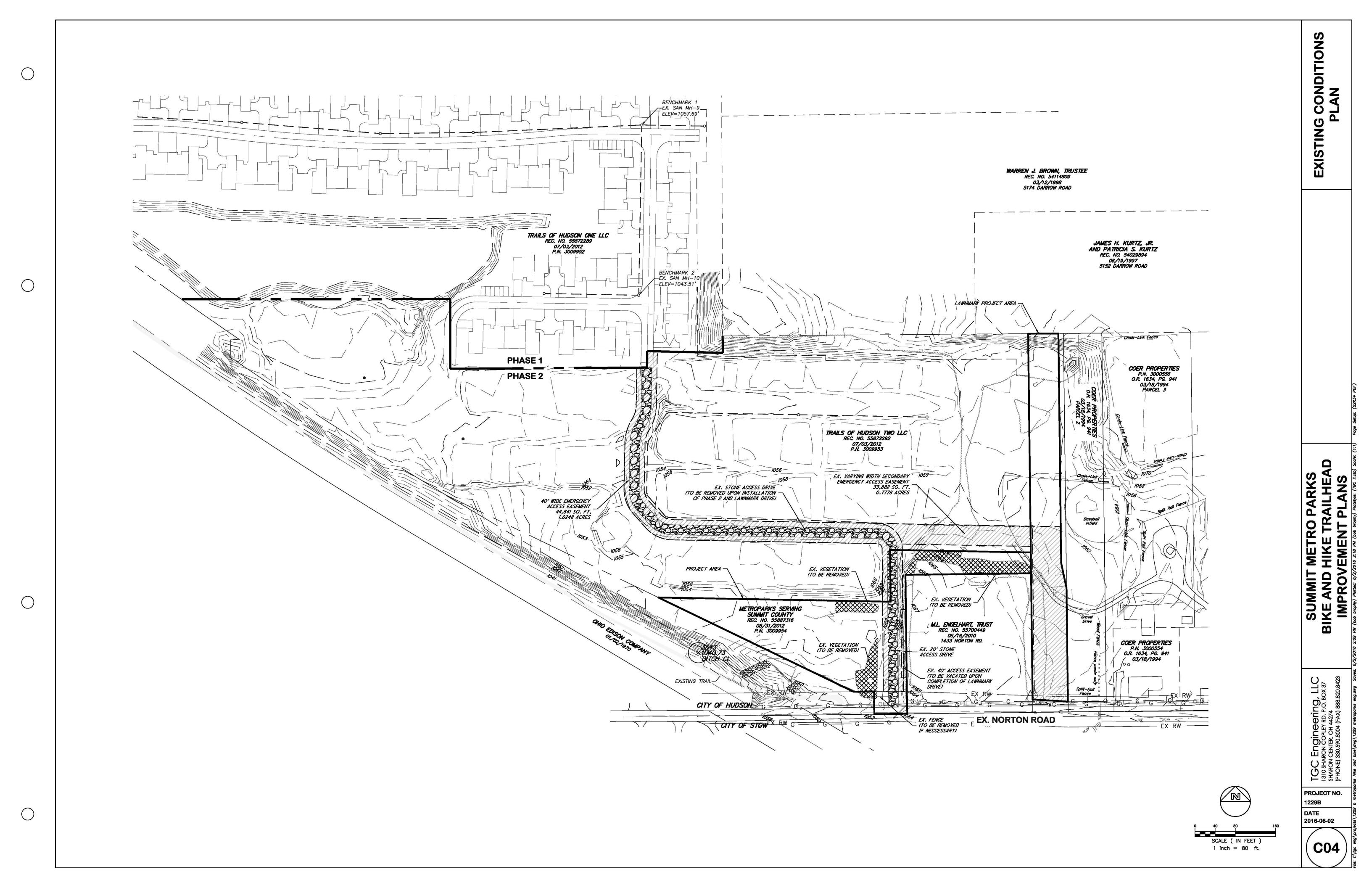
DMMII METRO PARKS E AND HIKE TRAILHEAD APROVEMENT PLANS

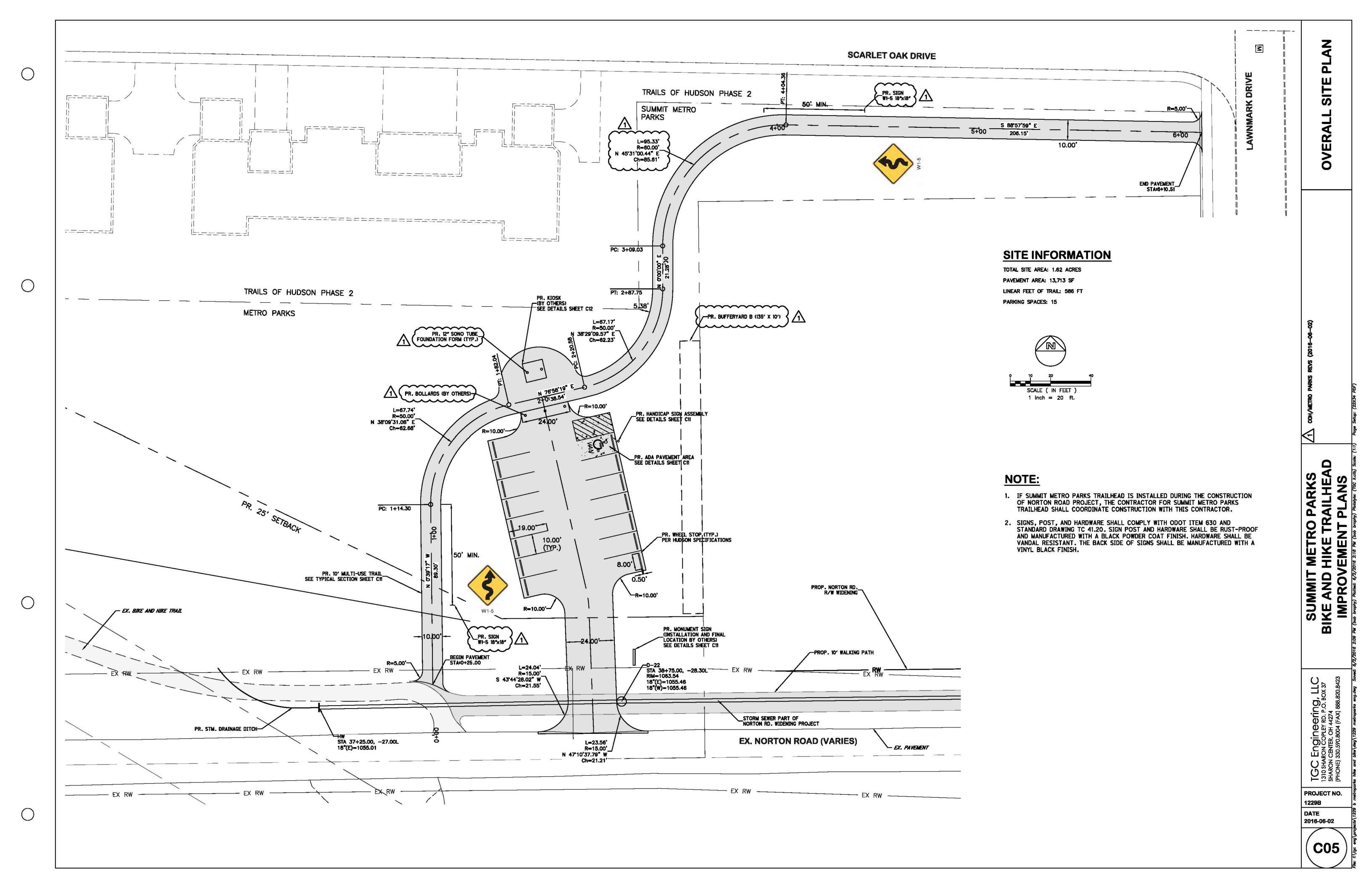
TGC Engineering, LLC 1310 SHARON COPLEY RD. P.O. BOX 37 SHARON CENTER, OH 44274 (PHONE) 330.590.8004 (FAX) 888.820.8423

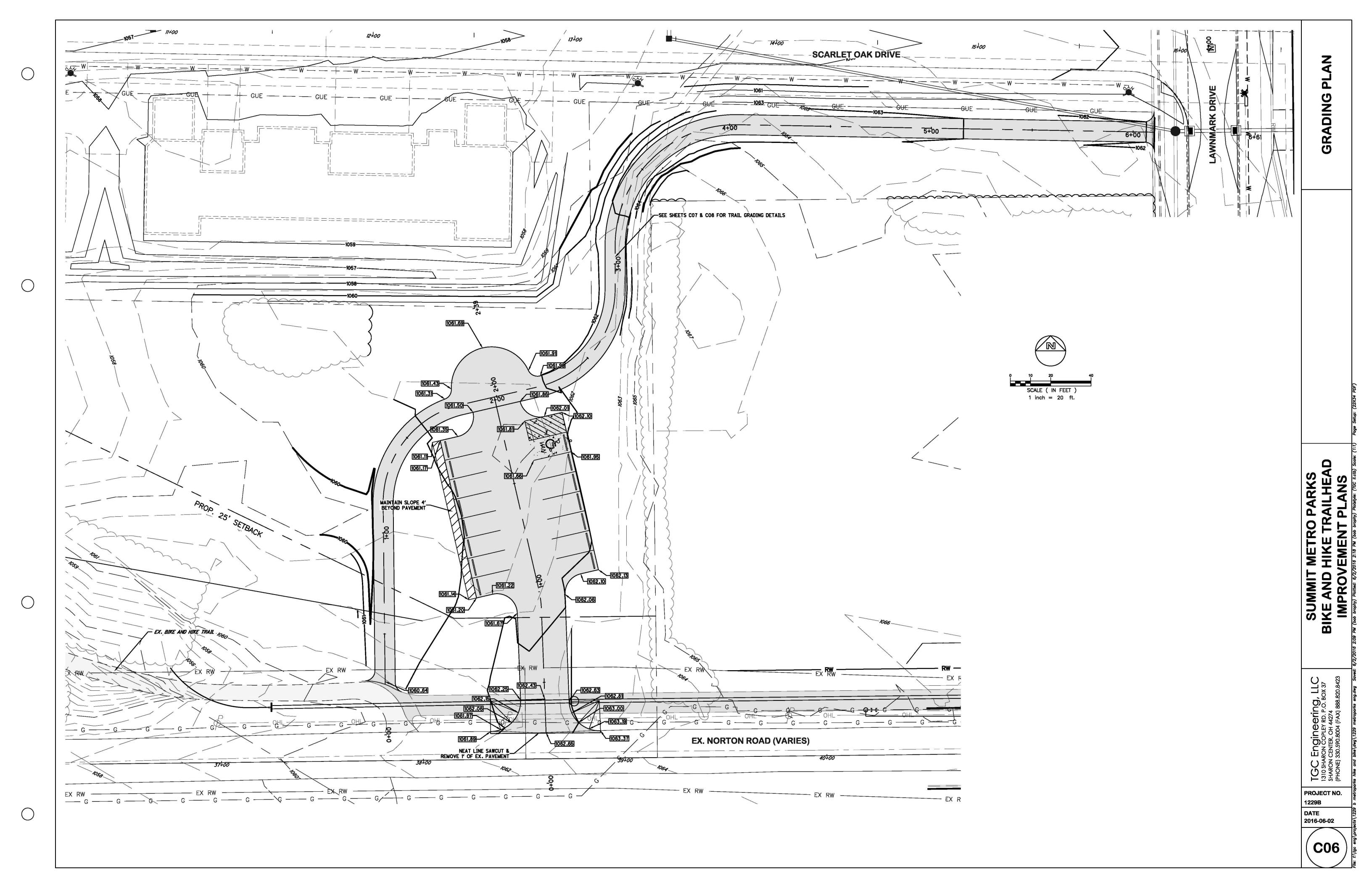
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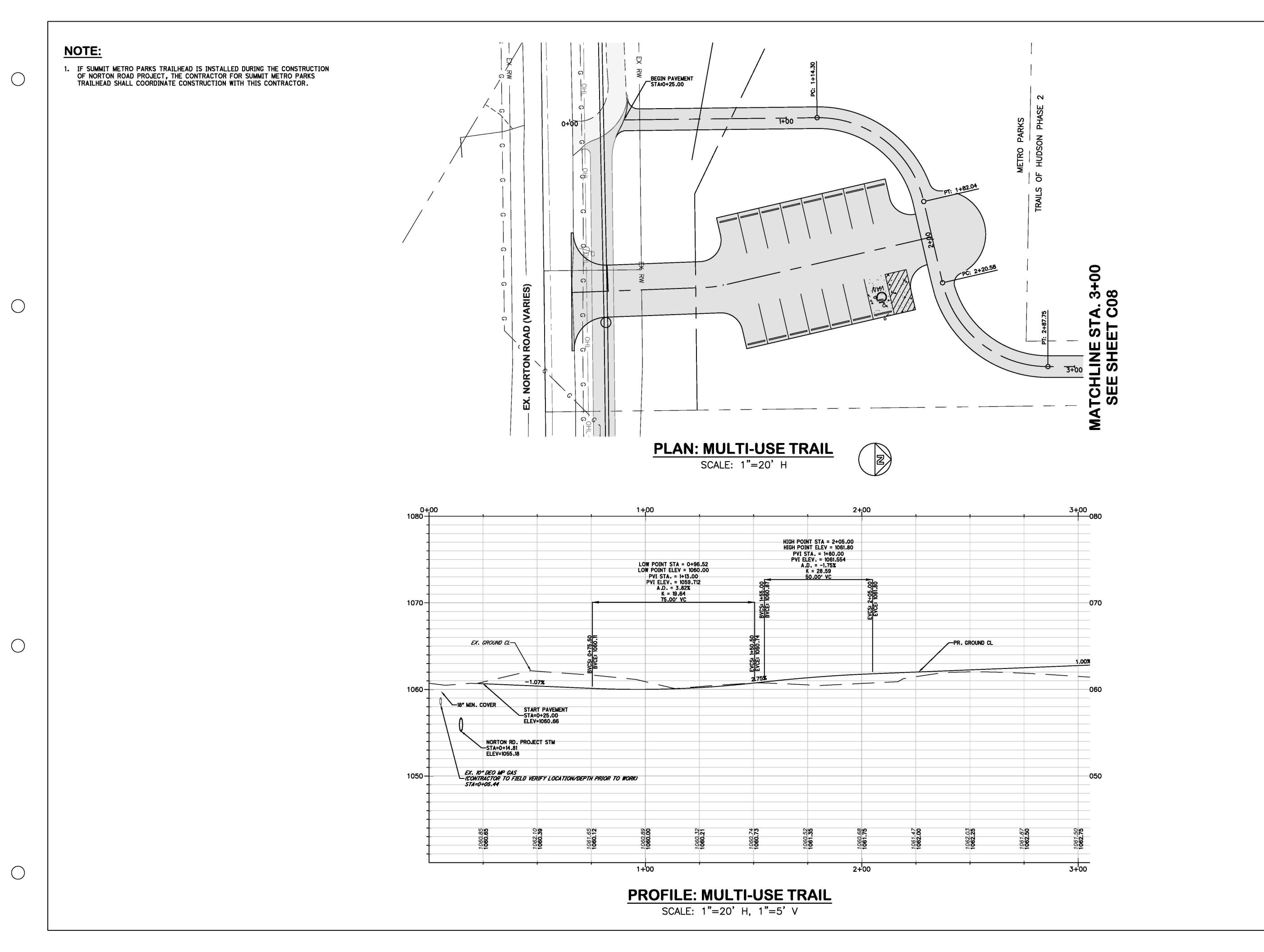
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MULTI-USE TRAIL PLAN AND PROFILE

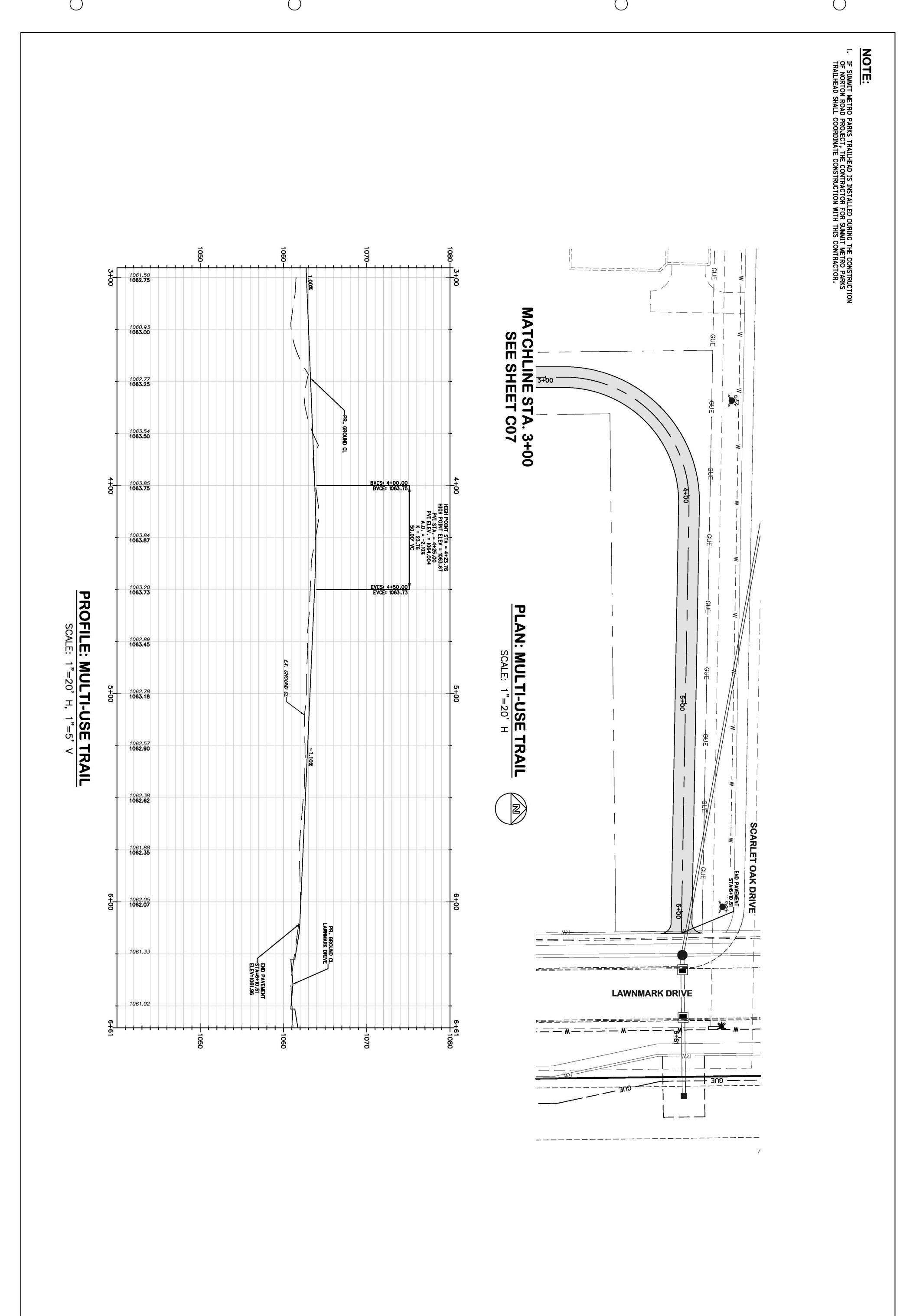
SUMMIT METRO PARKS
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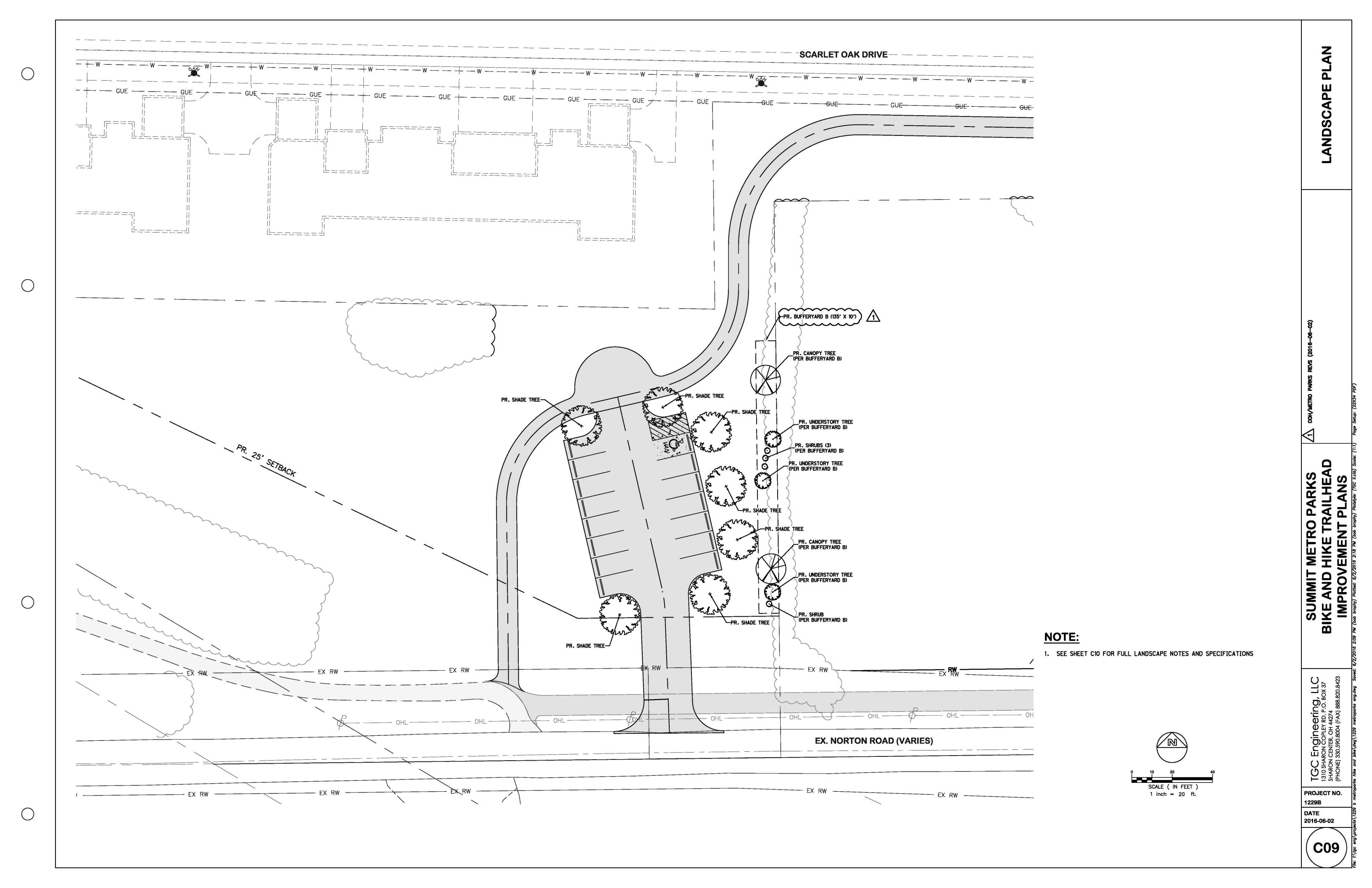
TGC Engineering, LLC 1310 SHARON COPLEY RD. P.O. BOX 37 SHARON CENTER, OH 44274 (PHONE) 330.590.8004 (FAX) 888.820.8423

PROJECT NO. 1229B

2016-06-02 C07

DATE





SEE SEEDING NOTES FOR SUPPLEMENTAL SPECIFICATIONS. FURNISH AND PLACE A MINIMUM OF 4" APPROVED TOPSOIL OVER COMPACTED SUBGRADE, ITEM 203, AS SHOWN ON PLANS & DETAILS. ALL TOPSOIL SHALL BE SCREENED PRIOR TO SPREADING. ROCK HOUNDING IN PLACE WILL NOT BE ACCEPTED. THE SEED MIX SHALL BE AS SHOWN ON THE LANDSCAPE PLANS. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE LIMITS OF CONSTRUCTION SHALL BE SEEDED AND MULCHED BY THE CONTRACTOR AT NO COST TO THE METRO PARKS. THE COST FOR MULCHING, FERTILIZATION. WATERING, INTER-SEEDING, MAINTENANCE, ETC. SHALL BE INCLUDED IN BID PRICE.

ITEMS 661 - PLANTING TREES, SHRUBS, PERENNIAL AND VINES

SEE PLANTING NOTES FOR SUPPLEMENTAL SPECIFICATIONS. ALL TREES SHALL BE WRAPPED, BRACED AND MULCHED AS PER DETAILS AND THESE SPECIFICATIONS AT THE TIME OF INSTALLATION. THE COST FOR ALL PLANT MATERIAL, DIGGING, INSTALLATION COSTS INCLUDING TOPSOIL, MULCH, BRACING, FERTILIZATION, WRAPPING INCLUDING REMOVAL OF ALL STAKING AND WRAPPING AT THE END OF THE WARRANTY PERIOD SHALL BE INCLUDED IN BID PRICE.

ITEM SPEC - TREE PROTECTION FENCE

FURNISH AND INSTALL TREE PROTECTION FENCE PRIOR TO THE START OF CONSTRUCTION AND AS PER DETAIL TREE PROTECTION FENCING AND AS SHOWN ON THE PLANS AND AS DIRECTED BY THE METRO PARKS.

ITEM SPEC — BERM ROOT CUTTING

CUT ROOTS ALONG TRAIL EDGE AS SHOWN ON THE PLANS TO THE DEPTH SHOWN ON DETAIL TYPICAL SECTION B. ALL ASPHALT WORK SHALL BE A SEPARATE PAY ITEM. ROOT CUTTING AND REMOVAL UNDER EXISTING PAVEMENT SHALL BE INCLUDED IN <u>ITEM 202.</u>

ALL DISTURBED AREAS UNLESS OTHERWISE NOTED SHALL BE SEEDED AS PER THE PLANS AND SPECIFICATIONS. SEE LANDSCAPE PLAN FOR THE EXACT LOCATIONS OF SPECIALTY AND TURF LAWN

SUBGRADE GRADING: THE SUBGRADE SHALL BE APPROVED BY THE METRO PARKS PRIOR TO THE SPREADING OF TOPSOIL.

FINISH GRADING: ALL AREAS TO BE GRADED BY THE CONTRACTOR SHALL BE GRADED TO SUBSTANTIALLY PLUS/ MINUS 0.1' OF FINISHED GRADE. FINISH GRADE SHALL BE APPROVED BY METRO PARKS PRIOR TO SEEDING. PLANTING OR MULCHING. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN, UNIFORM PLANE, FREE OF ALL ROCKS, ROOTS OR DEBRIS WITH NO ABRUPT CHANGES OF GRADE.

THE CONTRACTOR SHALL SUBMIT SEED TAGS FROM THE SPECIFIED SEED MIXES TO THE METRO PARKS' LANDSCAPE ARCHITECT.

APPLICATION OF SEED IN TWO OPPOSITE DIRECTIONS TO ENSURE EVEN COVERAGE OF THE SEED AT A RATE GREATER THAN THE MANUFACTURER'S RECOMMENDATIONS.

-RAKE SEED IN TOP 1/4" OF SOIL BY DRAGGING WITH BACK SIDE OF LEAF RAKE. -APPLY FERTILIZER AS PER SPECIFICATIONS.

-HYDRO SEEDING METHOD MAY ALSO BE APPROVED BY THE METRO PARKS.

ACCEPTABLE MULCHING METHODS:

-APPLICATION OF STRAW BY HAND OR MECHANICAL OPERATIONS.

-HYDRO MULCH. -PENN MULCH (PATCHING ONLY).

STRAW MUST BE TACKED DOWN AFTER APPLICATIONS BY:

-ORGANIC LIQUID TACKIFIED.

-BIODEGRADABLE EROSION (GREEN) NETTING. STAPLE DOWN AT INTERVALS TO HOLD DOWN STRAW AGAINST WIND AND TRAFFIC. USE BIODEGRADABLE STAKES. -HYDRO MULCH TACKIFIER OVER STRAW.

8. MAINTAIN SEEDED AREAS BY WATERING OR OTHER METHODS AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE STAND OF TURF LAWN OR SPECIALTY SEEDED AREAS, FREE OF ERODED OR

9. THIS ITEM SHALL INCLUDE COVER CROPS, MOWING, WATERING AS DIRECTED BY THE METRO PARKS AND A SECOND APPLICATION OF FERTILIZER 4-6 WEEKS AFTER THE INSTALLATION OR WEATHER PERMITTING.

TURF LAWN: THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) SUCCESSIVE MOWINGS FOR ALL TURF LAWN AREAS; EACH MOWING SPREAD AT LEAST SEVEN (7) CALENDAR DAYS APART, PROVIDED BARE AREAS HAVE PRODUCED AN ACCEPTABLE STAND OF GRASS. MOWINGS SHALL COMMENCE WHEN TURF LAWN HAS REACHED A THREE INCH (3") HEIGHT. CONTRACTOR MUST NOTIFY METRO PARKS WHEN TURF IS TO BE MOWED.

SPECIALITY SEED MIXES: THE CONTRACTOR SHALL INCLUDE A COVER CROP OF ANNUAL RYE (LOLIUM multiflorum) SOWED AT A RATE OF 10-12 LBS/ACRE. THE CONTRACTOR SHALL NOT ALLOW THE ANNUAL RYE TO RESEED OR SMOTHER THE SPECIALITY SEED MIX DURING THE FIRST YEAR. THE CONTRACTOR SHALL MOW TO A HEIGHT OF 8" PRIOR TO SEED SET AND/OR WHENEVER GROWTH EXCEEDS 24". THIS COST SHALL BE INCLUDED IN THE BID ITEM.

10. THE CONTRACTOR WILL REPAIR ANY SPECIALTY AND/OR TURF LAWN AREAS THAT ARE NOT ESTABLISHED, ACCORDING TO THE METRO PARKS, WITHIN THE NEXT 12 MONTHS OF THE INITIAL PLACEMENT.

<u>PLANTING NOTES:</u>

REFER TO EXISTING CONDITIONS, DEMOLITION AND GRADING PLANS FOR INFORMATION REGARDING EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR MUST VERIFY THE EXACT LOCATIONS OF UTILITIES, DRAINAGE PIPE AND STRUCTURES, ETC. AND SHALL BE SOLELY RESPONSIBLE FOR ANY SUPPORT PRECAUTIONS AND/OR DAMAGES INCURRED.

REFER TO THE DEMOLITION PLANS FOR INFORMATION REGARDING EXISTING PLANT MATERIAL REMOVAL

THE CONTRACTOR SHALL MAINTAIN AND PRESERVE ALL TREES AND SHRUBS NOT BEING REMOVED. THIS SHALL INCLUDE PROTECTION OF THE ROOT ZONE FROM COMPACTION OR DISTURBANCE. TREE PROTECTION FENCING SHALL BE USED AT THE DRIPLINE OF ALL TREES AND GROUPINGS WITHIN 50 FEET OF THE CONSTRUCTION EXCEPT WHERE OTHERWISE NOTED ON THE PLANS.

NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY DAMAGE AND REPAIR BEYOND THE CONSTRUCTION LIMITS.

THE GENERAL CONTRACTOR SHALL SUBMIT A PLANTING SCHEDULE WITH PROJECTED DATES FOR PREPARATION OF PLANT BEDS, INSTALLATION AND SEEDING. THE GENERAL AND LANDSCAPE CONTRACTOR SHALL COORDINATE THEIR WORK TO ALLOW SUFFICIENT TIME FOR THE LANDSCAPE CONTRACTOR TO PERFORM THEIR WORK DURING OPTIMAL SEASONAL CONDITIONS. IN THE EVENT THAT THE PROJECT IS DELAYED OR SIGNIFICANT AREAS ARE NOT READY TO ALLOW PLANTINGS TO BE INSTALLED DURING CORRECT WEATHER OR SOIL MOISTURE CONDITIONS OR WITH SUFFICIENT TIME TO ALLOW THE PLANTS TO BECOME ESTABLISHED BEFORE FALL AND WINTER, METRO PARKS RESERVES THE RIGHT TO DELAY PLANTING UNTIL THE FOLLOWING SEASON.

THE QUANTITY TAKEOFF IS SUPPLIED FOR THE CONTRACTOR'S REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL PLANT AND PLANTING MATERIALS AS PER THE SCHEDULE OF ITEMS. THE CONTRACTOR SHALL NOTIFY THE METRO PARKS IMMEDIATELY IF THERE ARE ANY

VARIETIES AND SIZES OF PLANTS SHALL BE AS SPECIFIED ON THE PLANS. NO SUBSTITUTIONS SHALL BE ACCEPTED WITHOUT WRITTEN PERMISSION OF THE METRO PARKS' LANDSCAPE ARCHITECT.

ALL PLANTS SHALL BE HEALTHY, OF NORMAL GROWTH, WELL ROOTED, FREE FROM DISEASE AND INSECTS. QUALITY AND SIZE OF PLANT MATERIAL SHALL CONFORM TO ANSI Z60.1: "AMERICAN STANDARDS FOR NURSERY STOCK", CURRENT EDITION. PLANTS SHALL BE IN A HEALTHY AND VIGOROUS CONDITION, FREE OF DEAD OR BROKEN BRANCHES, SCARS THAT ARE NOT COMPLETELY HEALED, FROST CRACKS, DISFIGURING KNOTS, BROKEN OR ABRADED BARK, REDUNDANT LEADERS OR BRANCHES, OR ABERRATIONS OF ANY KIND. PLANTS SHALL NOT HAVE MULTIPLE LEADERS UNLESS OTHERWISE NOTED.

BALLED AND BURLAPPED, B&B, PLANTS SHALL BE DUG WITH A FIRM ROOT BALL OF NATURAL EARTH, OF A SIZE PROPORTION TO THE PLANT'S SIZE, AS MEASURED BY CALIPER, HEIGHT OR SPREAD. BALLED AND BURLAPPED PLANTS SHALL BE HANDLED ONLY BY THE ROOTBALL. NOT BY THE TRUNK OR BRANCHES. CONTAINER PLANTS SHALL HAVE BEEN ESTABLISHED FOR A MINIMUM OF ONE FULL GROWING SEASON IN THEIR CONTAINERS BEFORE INSTALLATION. CONTAINER PLANTS SHALL BE HANDLED ONLY BY THE CONTAINER. ANY PLANTS DAMAGED AFTER DELIVERY BY IMPROPER HANDLING OR CARE WILL BE REJECTED AND MUST BE REMOVED OFFSITE AND REPLACED.

PLANTS SHALL BE PROTECTED FROM DRYING OUT DURING SHIPPING WITH TARPAULINS OR OTHER COVERINGS. PLANTS SHALL BE PROTECTED FROM DRYING OUT AFTER DELIVERY BY PLANTING IMMEDIATELY. IF THIS IS NOT POSSIBLE, PLANTS SHALL BE STORED IN A LOCATION PROTECTED FROM SUN AND WIND AND THE ROOTBALLS SHALL BE COVERED WITH MULCH OR EARTH AND WATERED FREQUENTLY TO KEEP MOIST UNTIL PLANTING.

TOPSOIL WILL BE STRIPPED AND STOCKPILED ONSITE FOR REUSE IN LANDSCAPE WORK. IF THE QUANTITY OF STOCKPILED TOPSOIL IS INSUFFICIENT, PROVIDE ADDITIONAL TOPSOIL AS REQUIRED TO COMPLETE THE LANDSCAPE WORK. APPROVED TOPSOIL SHALL CONFORM TO ITEM 653. THE CONTRACTOR SHALL PROVIDE THE METRO PARKS' LANDSCAPE ARCHITECT WITH THE SOURCE AND A SAMPLE OF THE TOPSOIL TO BE IMPORTED AND IT MUST BE APPROVED PRIOR TO DELIVERY TO THE SITE.

TOPSOIL FROM THE STOCKPILE OF ONSITE SOILS SHALL BE USED AS BACKFILL FOR TREE AND SHRUB PLANTING. THIS SOIL SHALL ALSO BE PLACED IN THE BOTTOM OF THE ROOT PIT AND TAMPED FIRMLY TO AVOID SETTLEMENT. FILL SOIL AROUND THE BALL OF THE PLANT AND WATER THOROUGHLY. PREPARE A RAISED EARTH BASIN AS WIDE AS THE PLANTING PIT AROUND EACH PLANT. WATER AGAIN IMMEDIATELY AFTER PLANTING BY FILLING THE BASIN AROUND EACH PLANT WITH WATER. TAKING CARE NOT TO DISTURB THE BACKFILL. WATER TO THE EXTENT NECESSARY TO ENSURE THAT THERE ARE NO AIR POCKETS AROUND THE ROOTBALL AND THAT THE ROOTBALL AND BACKFILL ARE THOROUGHLY SATURATED.

TREE BRACING SHALL BE FLEXIBLE, BIODEGRADABLE TIES. INSTALL LOOSE FITTINGS TIES THAT WILL NOT GIRDLE THE TRUNK. ENSURE THAT THE TIE WILL ALLOW TRUNK MOVEMENT AND GROWTH.

TREE WRAP/DEER GUARDS SHALL BE A SPIRAL. UV PROTECTED PVC. FREE OF HEAVY METALS AND OTHER TOXINS, EXTENDING UP THE TREE A MINIMUM OF 4' ABOVE FINISHED GRADE.

THE LOCATION OF PLANTS AS SHOWN ON THE PLANS IS APPROXIMATE. PLANTS SHALL BE POSITIONED BY THE CONTRACTOR AS SHOWN ON THE PLANS FOR REVIEW BY METRO PARKS' LANDSCAPE ARCHITECT PRIOR TO EXCAVATING. ADJUSTMENTS, IF ANY, TO PLANT LOCATIONS WILL THEN BE MADE ACCORDING TO THE LANDSCAPE ARCHITECT'S DIRECTIONS.

REMOVE ALL SALES TAGS, STRINGS, STRAPS, WIRE, ROPE OR OTHER MATERIALS THAT MAY INHIBIT PLANT GROWTH BOTH ABOVE AND BELOW THE SURFACE OF THE SOIL.

REMOVE ANY BROKEN, SUCKERING, DISEASED, CRISS-CROSSED BRANCHES BACK TO LIVE LEADER OR SIDE LATERAL WITH A FLUSH CUT.

REPLACE ANY REQUIRED PLANTING(S), WHICH SEVERELY DECLINE OR DIE AFTER THE DATE OF PLANTING. SEVERE DECLINE OF A PLANT SHALL BE DEFINED AS THE DEATH OF A MAJOR LEADER OR 50 PERCENT OF THE CROWN OF A TREE OR SHRUB OR DIEBACK OF A PLANT TO THE GROUND, EVEN IF THAT PLANT IS STILL ALIVE.

ALL PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE SUMMER GROWING SEASON AFTER PLANTING. PLANTING MATERIAL INSTALLED IN THE FALL SHALL BE IN FULL COUNT AND THRIFTY CONDITION ON THE NEXT SUCCEEDING SEPTEMBER 15. AT WHICH TIME REPLACEMENTS SHALL BE DETERMINED AND SCHEDULED FOR INSTALLATION DURING THE PLANTING PERIOD OF OCTOBER 15 - DECEMBER 1 OF THAT SAME SEASON. SPRING MATERIAL SHALL BE IN FULL COUNT AND THRIFTY CONDITION ON THE NEXT SUCCEEDING MAY 15, AT WHICH TIME REPLACEMENTS SHALL BE DETERMINED AND SCHEDULED FOR INSTALLATION PRIOR TO JUNE 1 OF THE SAME SEASON. ALL PLANTS INSTALLED IN THE SUMMER SHALL BE GUARANTEED FOR ONE (1) FULL SUMMER AND SHALL BE IN FULL COUNT AND THRIFTY CONDITION THE NEXT SUCCEEDING SEPTEMBER 15.

THE PROJECT MAINTENANCE PERIOD SHALL BEGIN AFTER FINAL ACCEPTANCE WITH THE EXCEPTION OF WATERING. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY WATER ALL PLANT MATERIAL IMMEDIATELY UPON PLANTING. THE CONTRACTOR SHALL MAINTAIN TREES AND SHRUBS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. ANY PLANTING SAUCERS NEEDING RESTORATION OR PLANTS NEEDING TO BE RESET OR STRAIGHTENED SHALL BE DONE PRIOR TO FINAL

ALL PLANTINGS SHALL BE CHECKED THROUGHOUT THE MAINTENANCE PERIOD FOR INSECTS OR DISEASE OR ANY CONDITIONS OF STRESS.

LAWN SEED MIX #1 - LAWNS

-	QUAN	BOTANICAL NAME	COMMON NAME	% SEED	RATE
	XX SF	POE pratensis	Kentucky Blue Grass	0.30	5-6 LBS/1000 SF
		POE pratensis	S-21 Kentucky Blue Grass	0.15	
		FESTUCA rubra	Penn Lawn Red Fescue	0.15	
		LOLIUM perenne	Affinity Perennial Rye	0.10	
		LOLIUM perenne	Catalina Perennial Rye	0.10	
		LOLIUM perenne	Loredo Perennial Rye	0.10	
		LOLIUM perenne	Manhattan 3 Perennial Rye	0.10	

LAWN SEED MIX #2 - TURF FIELDS

QUAN	BOTANICAL NAME	COMMON NAME	RATE
XX SF	*FESTUCA spp.	Tall Fescue	5-6 LBS/1000 SF
* = SEED SHALL BE A MIXED BLEND OF (3) THREE OF THE TOP 50 TALL FESCUE CULTIVARS FOUND ON TABLE 9 — MEAN TURFGRASS QUALITY OF TALL FESCUE CULTIVARS GROWN AT FOUR LOCATIONS IN THE			
	NTRAL REGION FOUND AT THE NATIONAL TO		

SPECIALTY SEED MIX - NO MOW

QUAN	BOTANICAL NAME	COMMON NAME	% SEED	RATE
	GRASSES			-
XX ACRE	ELYMUS canadensis	Canada Wildrye	0.35	15 LBS/ACRE
	PANICUM virgatum	Switchgrass	0.05	
	SCHIZACHYRIUM scoparium	Little Bluestem	0.20	
	SORGHASTRUM nutans	Indian Grass	0.10	
	<u>FORBS</u>			
	ASCLEPIAS syriaca	Common Milkweed	0.03	
	ASTER (Symphotrichum) novae- angliae	New England Aster	0.06	
	HELIOPSIS helianthoides	Ox-eye Sunflower	0.05	
	MONARDA fistulosa	Wild Bergamot	0.02	
	PENSTEMON canescens	Appalachian Beardtongue	0.01	
	PENSTEMON digitalis	Foxglove Beardtongue	0.05	
	RUDBECKIA hirta	Black-eyed Susan	0.04	
	SILPHIUM perfoliatum	Cup Plant	0.03	
	SOLIDAGO nemoralis	Gray Goldenrod	0.02	

Summit(**Metro Parks** 975 TREATY LINE ROAD

AKRON, OHIO 44313 (330) 867-5511

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ering, LLC 'RD. P.O. BOX 37 44274 (FAX) 888.820.9277 PROJECT NO.

1229B DATE

2016-06-02

C10

2. VAN ACCESSIBLE SIGNS SHALL BE PROVIDED FOR ALL HANDICAP STALLS ADJACENT TO AISLES 8' WIDE OR

1. ALL SIGNS, POST, MOUNTING BASE, HARDWARE, LABOR AND ALL MATERIALS

SHALL BE INCLUDED IN THE UNIT BID

NOTES

(EACH) FOR SIGNS.

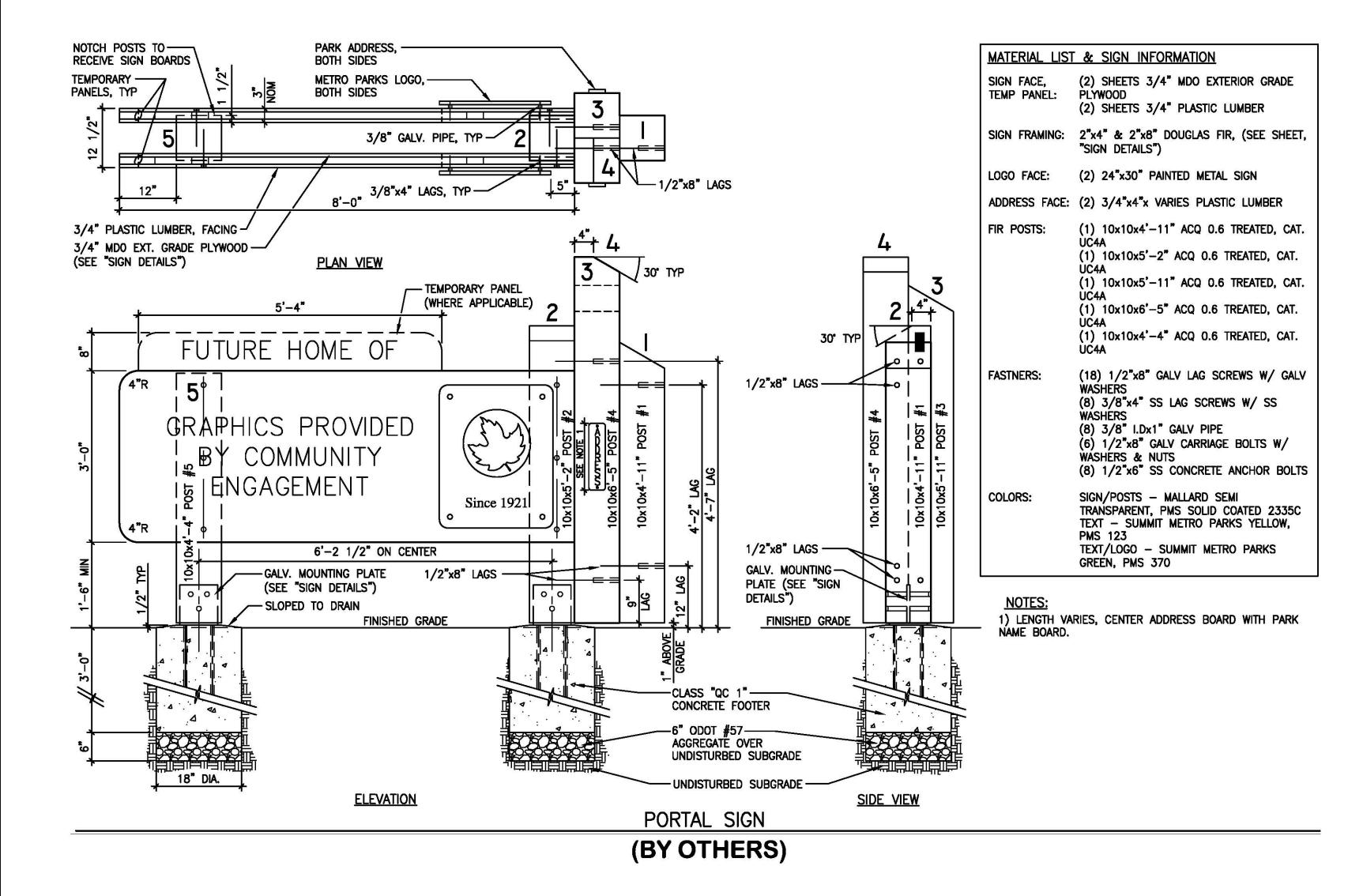
3. MOUNTING BASE, SHALL BE MINIMUM 12" DIAMETER, MANUFACTURED TO ATTACH TO No. 2, TYPE S, SQUARE POST. BASE SHALL BE ANCHORED TO PAVEMENT AND SIGN POST SHALL BE ATTACHED TO BASE AS PER THE MANUFACTURERS INSTRUCTIONS.

4. SIGNS, POST AND HARDWARE SHALL COMPLY WITH ODOT ITEM 630 AND STANDARD DRAWING TC 41.20. SIGN POST AND HARDWARE SHALL BE RUST-PROOF AND MANUFACTURED WITH A BLACK POWDER COAT FINISH. HARDWARE SHALL BE VANDAL RESISTANT. THE BACK SIDE OF SIGNS SHALL BE MANUFACTURED WITH A VINYL BLACK FINISH.

ACCESSIBLE MAX. PENALTY \$500 R7-H8bP(6"X12") No. 2, TYPE S SQUARE POST-PER TC 41.20 MOUNTING BASE SEE NOTE 3 — ANCHOR BOLTS -PAVEMENT

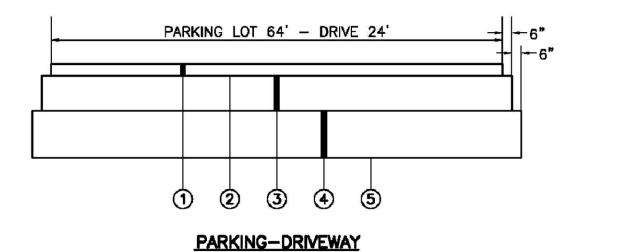
VAN

HANDICAP SIGN WITHIN PROTECTED PAVEMENT NOT TO SCALE

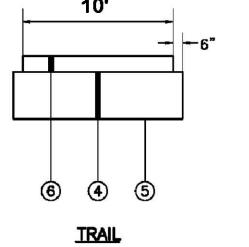




- (1) ITEM 203 SUBGRADE COMPACTION, PER SPECIFICATIONS 2 ITEM 304 - 4" AGGREGATE BASE - MULTIPURPOSE TRAIL/ADA PAVEMENT
- (3) ITEM 450 8" REINFORCED CONCRETE PAVEMENT, CLASS C (WITH 6X6 W4.0/4.0 W.W.F. ON 4" CHAIRS)



- 1 ODOT ITEM 448, 1-1/2" ASPHALT SURFACE COURSE, TYPE 1 (CRUSHED LIMESTONE)
- 2 ODOT ITEM 407, TACK COAT, 0.075 GAL/SY
- 3 ODOT ITEM 301, 4-1/2" ASPHALT CONCRETE BASE (CRUSHED LIMESTONE)



- ODOT ITEM 304, 6" AGGREGATE BASE (CRUSHED LIMESTONE)
- ODOT ITEM 204, SUBGRADE COMPACTION AND PROOF ROLLING
- ODOT ITEM 448, 2" ASPHALT SURFACE COURSE, TYPE 1 (CRUSHED LIMESTONE)

PAVEMENT TYPICAL SECTIONS
NO SCALE

PROJECT NO. 2016-06-02



1. MEASURE HEIGHT FROM THE LOWEST CORNER.

2. MEASURE HEIGHT 12" AWAY FROM THE POST.

LOCATION

KIOSK END ELEVATION

DISTRICT WIDE

KIOSK ADA COMPLIANCE CHECK

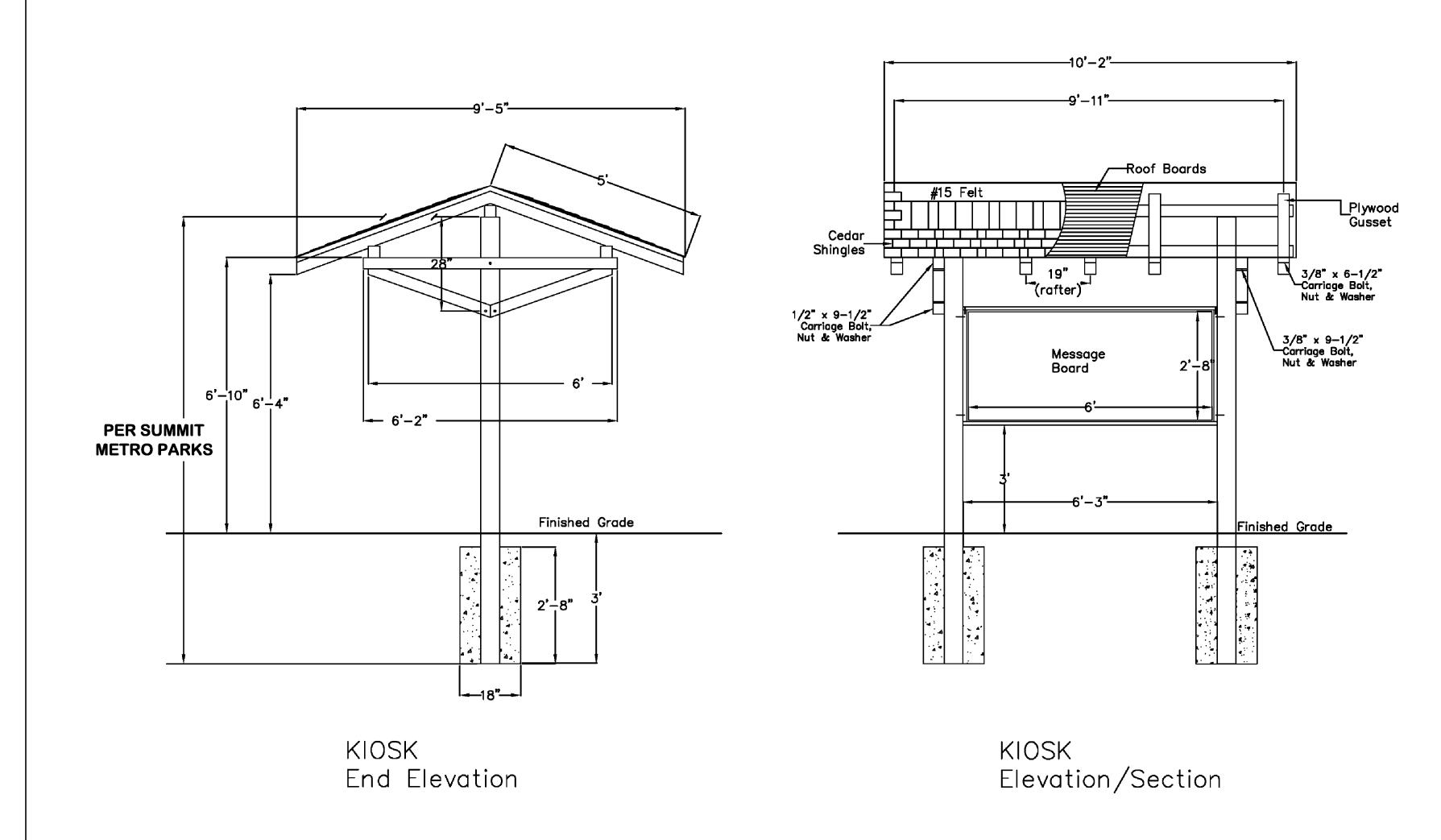
COMPLIANCE STIL

FINISHED GRADE

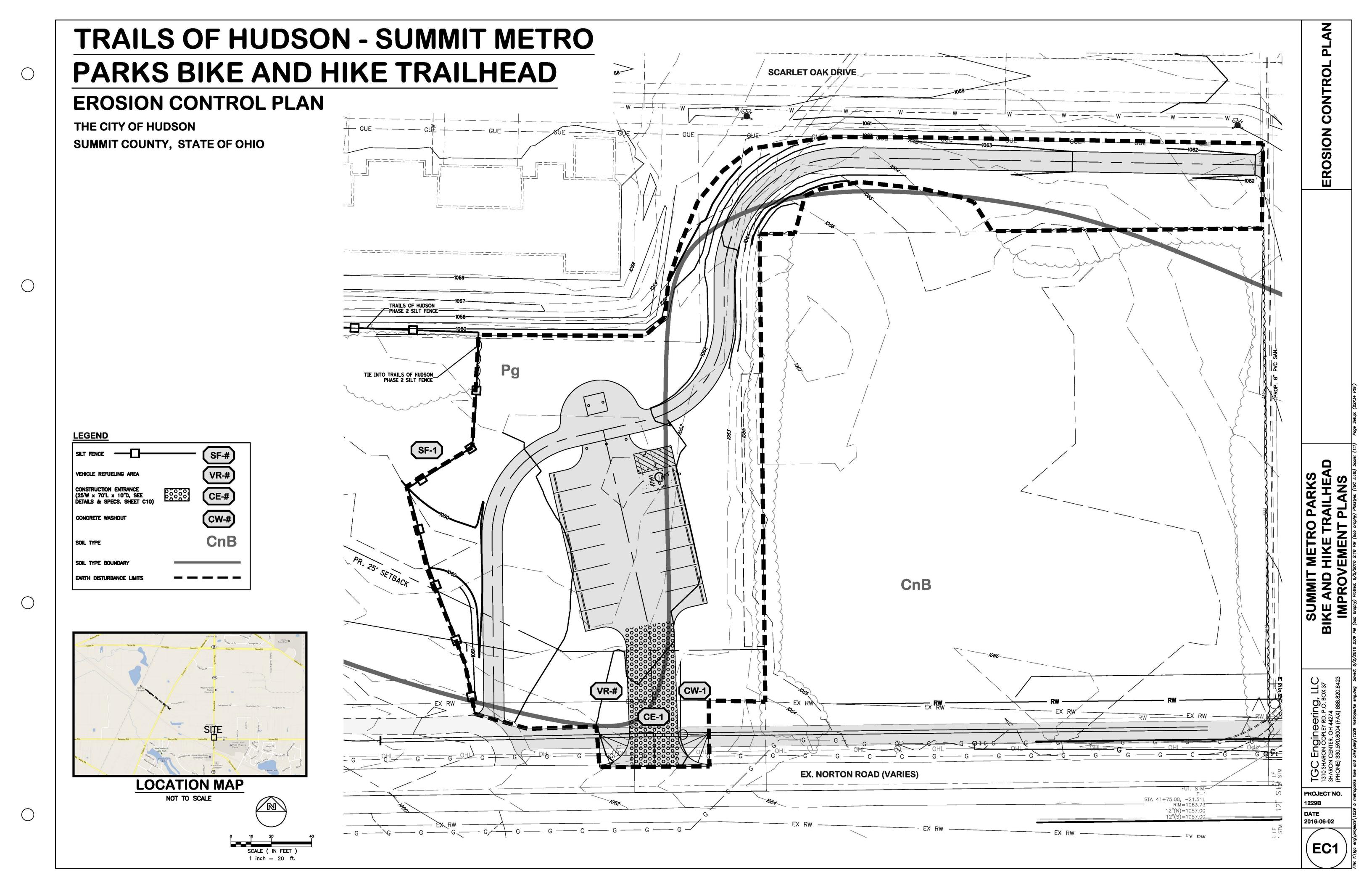


PROJECT NO. DATE 2016-06-02

(C12)



KIOSK DETAILS (BY OTHERS)



PROJECT, ADDITION EROSION CONTROL MEASURES MAY BE REQUIRED.

GENERAL NOTES:

- 1. 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
- 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
- 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. IF THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.
- 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
- 15. THE CONSTRUCTION ENTRANCE SHALL BE PREPARED WITH EROSION MEASURES AND SILT FENCE SHALL BE INSTALLED BEFORE ANY ON-SITE CONSTRUCTION OR DEMOLITION
- 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
- 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 APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITHIN 50 FEET OF A STREAM AND NOT AT FINAL GRADE	WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA
ALL OTHER AREAS	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE IN AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THESE TECHNIQUES MAY INCLUDE MULCHING, EROSION MATTING, OR PLACEMENT OF STONE.

PERMANENT STABILIZATION

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

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.

TEMPORARY EROSION AND SEDIMENT CONTROL IMPLEMENTATION SCHEDULE		
CONSTRUCTION ACTIVITY	ESTIMATED DATES	
CONDUCT PRE-CONSTRUCTION MEETING.		
PROVIDE TEMPORARY SANITARY FACILITIES AND DUMPSTERS.		
INSTALL CONSTRUCTION ENTRANCE. MOBILIZE ONLY THE EQUIPMENT NEEDED FOR THIS BMP.		
INSTALL INLET PROTECTION FOR EXISTING STRUCTURES.		
MOBILIZE CONSTRUCTION EQUIPMENT AS NECESSARY FOR PROJECT.		
PERFORM CLEARING AND GRUBBING. UTILIZE DUST CONTROL.		
INSTALL INLET PROTECTION FOR PROPOSED STRUCTURES CONCURRENT WITH UTILITY CONSTRUCTION.		
PERFORM PERMANENT SEEDING WITHIN (7) DAYS OF COMPLETION OF FINAL GRADING IN UNPAVED AREAS.		
REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SITE ACHIEVES "FINAL STABILIZATION".		

MAINTENANCE & INSPECTION SCHEDULE:

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

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.

- 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

- 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.

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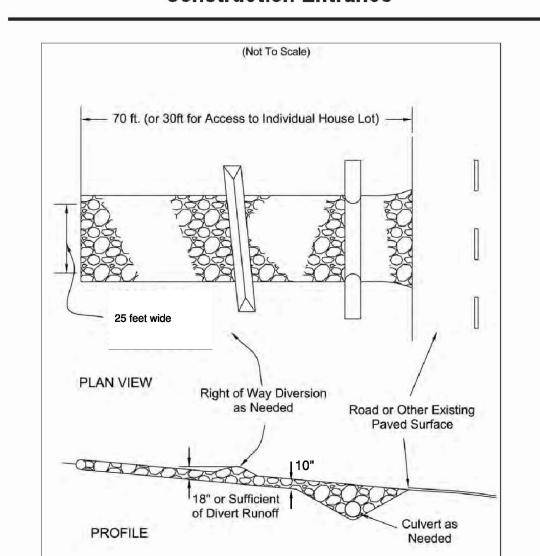
PROJECT NO.

2016-06-02









- 1. Stone Size—ODOT # 2 (1.5-2.5 inch) stone shall be used, or 6. Timing—The construction entrance shall be installed as soon as is practicable before major grading activities.
- recycled concrete equivalent. Length—The Construction entrance shall be as long as required to stabilize high traffic areas but not less than
- 3. Thickness The stone layer shall be 10 inches thick

70 ft. (exception: apply 30 ft. minimum to single

- 4. Width The entrance shall be 25 feet wide
- 5. Geotextile -A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong

Geotextile Specifica	ition for Construction Entrance
Figure 7.4.1	
, ,	ers and meet the following

EOS < 0.6 mm.

1×10-3 cm/sec.

Minimum Tensile Strength

Minimum Tear Strength

Minimum Burst Strength

Equivalent Opening Size

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Minimum Elongation

Minimum Puncture Strength

- 7. Culvert -A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
- 8. Water Bar -A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
- 9. Maintenance -Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
- 10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted
- . Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

Specifications **Temporary Rolled Erosion Control Product**

- 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
- 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

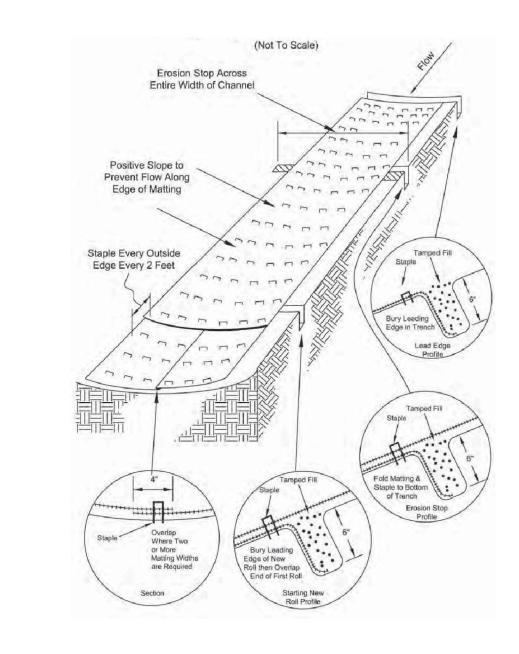
with the soil surface.

- 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
- 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"
- 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

anchor guide.

- 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
- 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 com-
- 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 square yard dependant on slope. Refer to manufacturer's sandy or gravelly soils.

Specifications **Temporary Rolled Erosion Control Product**



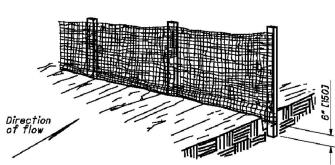
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STEP 2

NOTES Furnish 30" [0.8 m] wide filter fabric with sound wood supports with maximum on-center spacing of 10' [3.0 m]. Use filter fabric conforming to 712.09, Type C.

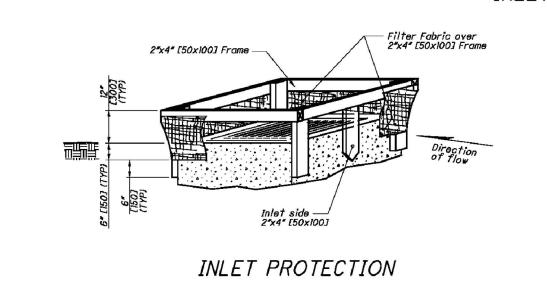
Trench the filter fabric fence as detailed. The contractor may elect to trench the fence detailed on steps I through 3 in one plowing operation. PAYMENT:

The Department will pay for accepted quantities at the prices shown in Appendix F of Supplemental Specification 832 (SS832) for the following items: - Perimeter Filter Fabric Fence

STEP 3

All items shown on this Standard Construction Drawing that are required for construction that are not specifically identified in SS832 Appendix F are considered incidental.

INLET PROTECTION



Excavate a 6*x6" [150x150] trench along the proposed fence line.

STEP I

Furnish inlet protection consisting of 18" [0.5 m] wide filter fabric fence with a securely nailed 2"x4" [50x100] wood frame with a vertically driven 2"x4" [50x100] on the inlet, or flow, side of the structure. Use filter fabric conforming to 712.09, Type C.

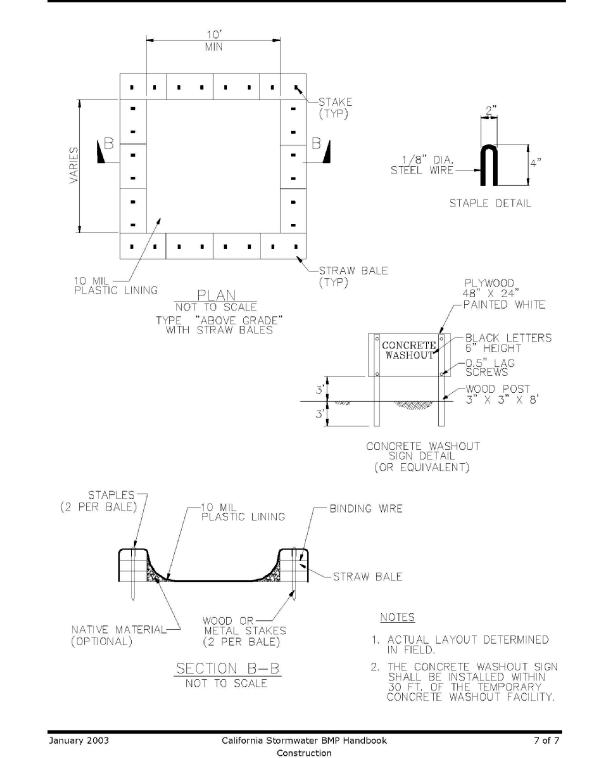
Construct now:

Construct an 18" [0.5 m] wide filter fabric fence supported around a storm drain inlet or catch basin with a securely nailed 2"x4" [50x100] wood frame. Excavate a 6" [150] trench around the inlet, and drive support posts 6" [150] below the excavated trench bottom. Stretch the fabric around the frame. Secure it tightly, ensuring that 6" [150] of fabric is in the trench. Overlap the fabric on one side of the inlet so that the fabric ends are not attached to the same post. Backfill and compact the excavated soil tightly onto the fabric. Place a vertical 2"x4" [50x100] in the center of the inlet so that the top is at the top of the fence and the bottom is at least 6" [150] below the bottom of the ditch.

The Department will pay for accepted quantities at the prices shown in Appendix F of Supplemental Specification 832 (SS832) for the following items:

All items shown on this Standard Construction Drawing that are required for construction that are not specifically identified in SS832 Appendix F are considered incidental.

Concrete Waste Management



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NOTES

REVISIONS 4-29-02 7-19-02 12-01-08 4-17-09

ROADWAY HYDRAULIC ENCINEER