



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

DATE: May 4, 2016

TO: City of Hudson Planning Commission for May 9, 2016 Meeting

FROM: Greg Hannan, City Planner
Mark Richardson, Community Development Director

SUBJECT: Final Plat and Improvement Plans: Lawnmark Drive
North of Norton Road 800 feet west of Darrow Road

ZONING: District 8 Overlay: Hike Bike Senior Housing Overlay
District 9: Darrowville Commercial Corridor

PC Case No: 2016-11

Project Introduction

Application has been received for Final Plat and Improvement Plan approval for Lawnmark Drive to be centered on the zoning district boundary between District 8 Overlay- Hike Bike Senior Housing Overlay and District 9 – Darrowville Commercial Corridor north of Norton Road. The purpose of the subdivision is to begin the north/south access drive on the west side of and parallel to Darrow Road in accordance with the SR91 Traffic Corridor Study. This application was previously before the commission and received preliminary plan approval on September 8, 2014 per case 2014-18. The present plan is in substantial compliance with a preliminary plan approved by PC in 2011, but later expired.

The road is required as part of the previous site plan approvals for the Trails of Hudson project approved by the Planning Commission on September 8, 2014. The project was previously delayed for an extended period due to water service being withheld from the City of Akron system. The site plan approvals included requirements related to the construction of Lawnmark Drive and the anticipated trailhead park to comply with applicable open space requirements. Staff understands the applicant intends to construction all three projects in 2016.

Adjacent Development: To the west is a single family residence and the Trails of Hudson project. North of the subject property in undeveloped land within District 8 and 9. To the east is commercial development oriented toward Darrow Road. To the south is undeveloped land within the City of Stow.

The following information is attached to this report:

1. Preliminary review comments, prepared by City Planner Greg Hannan, dated April 22, 2016.

2. Preliminary engineering review comments prepared by City Engineer Thom Sheridan, P.E., dated April 22, 2016.
3. Decisions of the Planning Commission for Case No. 2014-18 Preliminary Plan approval for Lawnmark Drive and Case 2014-19 Site Plan approval for the Trails of Hudson Phase II dated September 8, 2014.
4. Staff report (w/o attachments) for the September 8, 2014 Planning Commission meeting for case PC 2014-18.
5. Draft Final Subdivision Improvement Agreement.
6. Final Plat and Improvement plans received April 5, 2016 from TGC Engineering, Inc.

Chapter 1205 – District Regulations

The proposed right of way will be established from parcel No. 3009953. No other sublots or block parcels are proposed.

Section 1207 - Zoning Development and Site Plan Standards

Adequate Public Facilities Public utilities have been proposed within the Lawnmark Drive right of way. The final plat documentation will require acceptance and signature from all applicable utility providers including City of Akron water, sanitary provider Summit County Department of Environmental Services, and Hudson Public Power.

Landscaping and Tree Protection A landscape plan for the required street trees was received on April 28, 2016 and has been forwarded to City Arborist Tom Munn for review and acceptance.

Engineering Comments: City Engineer Thom Sheridan, P.E. has completed a review of the submitted plat and improvement plans with a review letter issued on April 22, 2016. Mr. Sheridan's review includes comments on the following:

1. Right of way width: The review letter notes a discussion item related to determination of the right of way width. Staff and Mr. Sheridan have since confirmed the proposed 60 ft right of way widening to 70 feet adjacent to Norton Road to accommodate a future turn lane is in compliance with the LDC standards and previous preliminary plan approvals.
2. The proposed temporary cul-de-sac easement must be revised to incorporate a 60 foot radius rather than the proposed 50 feet.
3. Sightline distance calculations shall be incorporated on the improvement plans.

Chapter 1208 – Subdivision Design and Improvement/Dedication Standards

Improvement guarantees At the time of final plat approval, the subdivider and the city shall execute a Subdivision Improvement Agreement setting forth what improvements are to be installed. A performance bond or other financial guarantee shall be posted by the applicant for the purpose of assuring the installation of such improvements at or before a time the agreement is executed. A draft Final Subdivision Improvement Agreement is attached.

Additional Comments

1. Trails of Hudson: Lawnmark Drive is being established in connection with the site plan approvals for Trails of Hudson Phase Two approved on September 8, 2014 per case 2014-19. The Phase II development, Lawnmark Drive, and the Metroparks Serving

Summit County trailhead are intended to be constructed at one time. Applicable conditions of the previous site plan approval included the following requirement:

Zoning certificates may not be issued for more than four buildings in Phase II prior to the completion of the base improvements for Lawnmark Drive. Such buildings may not be occupied until such time as Lawnmark Drive, the trailhead park, and all associated improvements are completed.

Staff expects application for the site plan approval of the trailhead will be before PC at the June 13, 2016 meeting.

2. Parcel No. 3009974: Coer Properties LLC, the property owner to the east, must sign the plat to be recorded as the proposed temporary cul-de-sac and utility easements are partially located on the adjacent parcel. A work agreement must be established to grant access to the site for the limited grading work proposed on the adjacent parcel.
3. The Final Plat document must be revised to incorporate a 10 foot utility easement parallel to and outside of the public right of way and applicable signature lines for City of Akron Water, Summit County Department of Environmental Services, Coer Properties, and City of Hudson Planning Commission.
4. Asst. City Solicitor Aimee Lane notes the following revisions needed to the Final Plat document:
 - a. Planning Commission approval should be added to the cover sheet.
 - b. Language should be added to the cover page under "Approvals" for Council's acceptance of dedication stating: Dedication was accepted by the Council of the City of Hudson, Ohio by Ordinance No. _____ effective on the _____ day of _____ 2016.
 - c. Temporary Cul-de-Sac easement has a Doc. No. reference. Please confirm this has not yet been recorded.
 - d. The recorded emergency access agreement for Trails of Hudson must be terminated by a recorded instrument when Lawnmark Drive is completed.

Findings: Section 1204.05(c) Final Subdivision Plat

The staff finds that the application complies with the purposes and intent of the code and community plans, subdivision development and design standards, regulations that minimize land disturbance and protect environmental features, and other applicable development regulations as specified in Section 1204.05(b) except as discussed above and recommended below.

Required PC Action, Chapter 1203.10(d)(2)(A)

The PC shall take final action on a final subdivision application by reviewing the application and all submitted plans and reports, and then either approving, approving with conditions, or denying the application based on its compliance with the standards summarized in this report.

All decisions of the Commission shall be based on written findings of fact related to the relevant standards of the Code.

Recommendation

Approve the application for Final Subdivision Plat and Improvement Plan approval for Case No. 2016-11 for Lawnmark Drive, according to plans dated as received April 5, 2016 subject to the following conditions:

1. The Final Subdivision Improvement Agreement must be accepted and signed by the City and Developer.
2. The final landscape plan must be accepted by City Arborist Tom Munn and include applicable notes, specifications, details, and plant lists.
3. Plans must address the comments of City Engineer Thom Sheridan P.E. as stated in the review letter dated April 22, 2016.
4. Plans must address the comments of Asst City Solicitor Aimee Lane as listed on page three of the staff report.
5. Coer Properties LLC must sign the final plat as the proposed temporary cul-de-sac and utility easements are partially located on Parcel No. 3009974.
6. A work agreement must be established with Coer Properties LLC to grant access to the site for the limited grading work proposed.
7. The Final Plat document must be revised to incorporate a 10 foot utility easement parallel to and outside of the public right of way.
8. The Final Plat document must incorporate applicable signature lines for City of Akron Water, Summit County Department of Environmental Services, Coer Properties, and City of Hudson Planning Commission.
9. A performance bond or other financial guarantee shall be posted by the applicant for the purpose of assuring the installation of improvements at or before a time the Final Subdivision Improvement Agreement is executed.
10. No clearing or grading 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

DATE: April 22, 2016

TO: Redwood Communities

FROM: Greg Hannan, City Planner, Community Development

CC: Mark Richardson, Community Development Director

SUBJECT: 2016-11 - Lawnmark Drive Final Plat & Improvement Plans – Preliminary review

Thank you for your submission of the Final Subdivision Plat and Improvement Plans for Lawnmark Drive. The application has been scheduled for the Planning Commission (PC) agenda for the May 9, 2016 meeting. In preparation for such, I am forwarding preliminary comments related to compliance with the Land Development Code (LDC). Our goal is to provide you an opportunity to review the below comments and submit any additional or revised information by April 28, 2016. We will revise the comments accordingly for the staff report scheduled to be issued on May 4, 2016. Additionally I am available to meet and review the comments and the review process at your convenience.

Submittal Requirements

Below is a summary of additional information needed for the final plat and improvement plan submittals.

Final Plat:

1. A signature line for approval by Coer Properties must be added
2. A signature line for approval by City of Hudson Planning Commission must be added.

Improvement Plans:

1. Landscape plan must be submitted.
2. Exterior lighting plan must be submitted.

Chapter 1207 Zoning Development and Site Plan Standards

Section 1207.04 Landscaping A landscape plan must be submitted to show all aspects of activities pertaining to trees including the limits of disturbance, trees to be maintained and the means of protecting them, new street tree plantings, and the required notes, specifications, and details.

Section 1207.11 Adequate Public Facilities City of Akron water and Summit County sanitary must review and accept the proposed improvements.

Section 1207.13 Transportation/Circulation

Streets: The proposed street must be extended to terminate at the reservation strip.

A ten foot general utility easement shall be established along and outside of the right of way.

Chapter 1208 – Subdivision Design and Improvement/Dedication Standards

Standards for Review for a Preliminary Subdivision Plan, Section 1204.05(b)

A. Compliance with the purpose and intent of the Code and community plans

The subdivision plan is in substantial compliance with the district regulations and zoning development and site plan standards and therefore staff believes the purpose and intent of the LDC. The preliminary subdivision plan has also been found to be in compliance with the findings of the 2015 Comprehensive Plan and the SR91 Traffic Corridor Study.

B. Compliance with Subdivision Design and Improvements/Dedication Standards, Section 1208

1. Improvements: Installation of the improvement plans will be guaranteed with a Final Subdivision Improvement Agreement.

C. The site layout is to minimize land disturbance and protect natural features by considering applicable sections of the Zoning Development and Site Plan Standards, Section 1207

1. Environmental Features: The city's Geographic Information System does not identify any environmental features such as wetlands, stream, or significant tree growth.
2. Engineering Requirements: City Engineering Department is completing a review of the plans with comments to be issued under separate cover. A traffic impact study was reviewed in 2012 as part of the previous preliminary plan approval.

D. Subdivision shall comply with all applicable development regulations, standards, and requirements

1. The cul-de-sac shall incorporate a pavement radius of 40 feet, a minimum right of way radius of 60 feet, and a five foot reservation strip at the northern terminus.
2. Written authorization must be obtained from Coer Properties, the property owner to the east, for the proposed grading, cul-de-sac and utility easements.
3. A 10 foot utility easement parallel to and outside of the public right of way must be incorporated.

Stormwater Management/Drainage/Erosion Control Engineering Department will complete an applicable review and forward comments under separate cover.

Improvement guarantees The subdivider and the city shall execute a Subdivision Improvement Agreement setting forth what improvements are to be installed. A performance bond or other financial guarantee shall be posted by the applicant for the purpose of assuring the installation of

such improvements at or before a time the agreement is executed. A draft Final Subdivision Improvement Agreement is attached.

Trails and Hudson and Lawnmark Drive: Below is a brief summary of the applicable conditions related to the Trails of Hudson project.

1. Phasing Plan: Phasing plan was submitted April 12, 2016. Staff will confirm any comments from the Fire Department by April 27, 2016.
2. Zoning certificates may not be issued for more than four buildings in Phase II prior to the completion of the base improvements for Lawnmark Drive. Such buildings may not be occupied until such time as Lawnmark Drive, the trailhead park, and all associated improvements are completed.
3. Lighting plan and revised landscape plan must be submitted.
4. Comments of the Engineering Department must be addressed.
5. Open Space Dedication: The below table summarizes the dedication requirements which were established in 2012. At that time, the city stated the pathway connection to Lawnmark Drive and the sidewalk along Hudson Drive south of the subject property could also be applied toward the dedication requirements; however, costs were not submitted. Please provide additional information related to the costs of the referenced items and indicate if the applicant is intending to apply the remaining \$30,190.50 to these items.

	Acreage	Value
Phase I	2.84 acres	\$134,900
Phase II	3.04 acres	\$150,480
Total	5.88 acres	\$285,380
Donated land	1.6215 acres	\$149,121
Trailhead parking lot		\$106,068.50
Remaining funds		\$30,190.50

Additional Staff Comments

1. Prior to authorization to proceed, the City of Hudson will need to receive applicable certificate of liability insurance and commitment of title insurance.
2. A work agreement must be established with Coer Properties as the limits of disturbance extend onto parcel #3009974.
3. Asst Solicitor Aimee Lane notes the following related to the Plat:
 - a. Planning Commission approval should be added to the cover sheet
 - b. Acceptance of dedication: language should be added to the cover page under "Approvals" for Councils acceptance of dedication. IT may be worded as follows: Dedication was accepted by the Council of the City of Hudson, Ohio by Ordinance No. _____ effective on the _____ day or _____ 2016.
 - c. Temporary Cul-de-sac easement has a Doc. No. reference. Confirm this has not yet been recorded.

- d. The recorded emergency access agreement must be terminated by a recorded instrument when Lawnmark Drive is completed.

Thank you for your significant investment in the community and 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
Shawn Kasson, Fire Marshal



Thomas J. Sheridan, P.E., P.S.

City Engineer
(330) 342-1770

M E M O R A N D U M

DATE: April 22, 2016
TO: Greg Hannan, Community Development
FROM: Thomas J. Sheridan P.E., P.S., City Engineer
RE: Lawnmark Drive - Engineering Review

Below is the engineering review of the improvement plans submitted for the Lawnmark Drive. A final engineering review will be required following revised plans and the information addressed below:

(Review all the red-lined comments on the plan sheets. Revise and address as stated. Note: REDLINED plans shall be resubmitted with next submittal.)

1. The Summit County Dept. of Environmental Services approval will be needed. An OEPA Sanitary Sewer Permit-to-Install approval will be needed.
2. The City of Akron approval will be needed for the waterline extension along the proposed right-of-way and how this waterline will be supplied currently with water and if a future extension is supplied from Norton Road for example. How will the waterline to Trails of Hudson be disconnected when this connection to Norton Road is completed and approved? An OEPA waterline permit will be needed for this proposed right-of-way plan.
3. Discussion topic: Per the Hudson Land Development Code, the additional right of way (R/W) will be needed for the Lawnmark Drive, which may impact the Trails of Hudson - phase 2 property line. The minimum R/W width is 70 feet for the commercial right-of-way typical section per the LDC 1207.13 for District 6 & 8. A 30-foot wide utility easement is required outside of the commercial right-of-way per the LDC 1207.13 c (8), unless otherwise specified by the City.
4. A temporary cul-de-sac shall be a min. 60 ft. radius vs the 50 ft. radius shown. A culdesac agreement will be needed in order for the cul-de-sac to be removed whenever the road is extended in the future. No utilities shall be placed within the temporary cul-de-sac easement. (This is only for the temporary culdesac pavement.)
5. The fire hydrants shall conform to the City of Hudson Fire Dept. regulations and thread type.

6. Stop sign, no parking signs, street signs, no outlet sign, etc.. need to be shown on the plan and shall conform to the City of Hudson Engineering Standards. The developer is required to purchase and install these signs.
7. A street light cobra-head style shall be installed at the intersection with Norton Road. Review the lighting on site and with the ODOT project and coordinate the location accordingly. This is required by the Hudson Land Development Code.
8. The roadway and backfill shall conform to the City of Hudson design standards. Please review the notes for any conflicts with other referenced County, City, or ODOT, as applicable.
9. Submit a preliminary report from a traffic engineer regarding the estimated number of vehicle trips per day proposed for this roadway. Provide sight distance calculations on this improvement plan.
10. Add note to title sheet: **This project developer shall coordinate their design with the City of Hudson Project - The Norton Road/SR 91 ODOT PID Project No. 93452, which construction is scheduled for 2016.**

Respectfully,



Thomas J. Sheridan, P.E., P.S.
Hudson City Engineer

C: File

CITY OF HUDSON
PLANNING
COMMISSION

CASE NO. 2014-18
PRELIMINARY APPROVAL OF SUBDIVISION
LAWNMARK DRIVE, PARCEL NO. 3009953
NORTON ROAD, DISTRICT 8

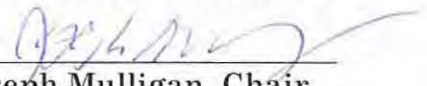
DECISION

Based on the evidence and representations to the Commission by Redwood Management, 23775 Commerce Park, Suite 7, Beachwood, Ohio 44122, as applicant, Trails of Hudson Two, LLC, 23775 Commerce Park, Suite 7, Beachwood, Ohio 44122, as property owner, and City staff at a Regular Meeting on September 8, 2014, the Planning Commission in Case No. 2014-18, approved the preliminary subdivision for Lawnmark Drive to be located west of Darrow Road and extending north of Norton Road 800 feet according to plans dated as received August 7, 2014 with the condition that the applicant must address the following as part of the final plat and improvement plan submissions:

1. Improvement plans must be submitted with the final plat application in conformance with applicable regulations of the Land Development Code including:
 - a. A 70 foot right of way must be incorporated for the commercial roadway per the typical cross sections of Section 1207.13.
 - b. The cul-de-sac shall incorporate a pavement radius of 40 feet, a minimum right of way radius of 60 feet, and a five foot reservation strip at the northern terminus. The cul-de-sac shall be extended to the reservation strip.
 - c. Written authorization will be required from Coer Properties, the property owner to the east, for the proposed grading and cul-de-sac easements.
 - d. A 15 foot utility easement parallel to the public right of way must be incorporated.
2. Plans must address the preliminary engineering comments of City Engineer, Thom Sheridan, from letter dated August 29, 2014.

Dated: September 8, 2014

CITY OF HUDSON
PLANNING COMMISSION

By 
Joseph Mulligan, Chair

CITY OF HUDSON
PLANNING
COMMISSION

CASE NO. 2014-19
SITE PLAN APPROVAL
TRAILS OF HUDSON, PHASE II
PARCEL 3009953, NORTON ROAD, DISTRICT 8

DECISION

Based on the evidence and representations to the Commission by Redwood Management, 23775 Commerce Park, Suite 7, Beachwood, Ohio 44122, as applicant, Trails of Hudson Two, LLC, 23775 Commerce Park, Suite 7, Beachwood, Ohio 44122, as property owner, and City staff at a Regular Meeting on September 8, 2014, the Planning Commission in Case No. 2014-19, approved the site plan for Trails of Hudson, Phase II on Norton Road, Permanent Parcel 3009953 according to plans received August 7, 2014, with the following conditions listed in the staff report dated September 4, 2014, with the change to condition 2 to read "zoning certificates may be issued for not more than four buildings in Phase II but such buildings shall not be occupied until such time as Lawnmark Drive and the Metro Park trailhead and all associated improvements are complete":

1. Submit a phasing plan to demonstrate how temporary emergency access will be maintained during construction of phase two, until the permanent secondary means of access is installed.
2. Zoning certificates may be issued for not more than four buildings in Phase II prior to the completion of the base improvements; however, but such buildings shall not be occupied until such time as Lawnmark Drive, the Metro Park trailhead, and all associated improvements are complete.
3. A landscaping plan shall be submitted to depict the following:
 - a. A twenty foot depth strip of existing vegetation must be preserved along the trail boundary or Bufferyard B incorporated.
 - b. Front yards of all buildings must be landscaped with a mixture of trees, shrubs, and perennials.
4. A lighting plan, including fixture cut sheets and photometric layout, shall be submitted and approved for compliance with applicable standards of Section 1207.14.
5. The comments of City Engineer Thom Sheridan must be addressed per the August 29, 2014 correspondence.

6. Provide public water within the project and incorporate water system design within the plan submittal.
7. Revise the eastern parcel boundary of the site as needed to accommodate the required 70 foot right of way for Lawnmark Drive and the minimum front yard setbacks required per Section 1205.11(f)(4).
8. The comments of Fire Marshal Shawn Kasson must be addressed per the August 29, 2014 correspondence.
9. 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.
10. 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.

Dated: September 8, 2014

**CITY OF HUDSON
PLANNING COMMISSION**

By 
Joseph Mulligan, Chair



CITY OF HUDSON

115 Executive Parkway . Suite 400 . Hudson, OH . 44236 . (330) 650-1799 . www.hudson.oh.us

DATE: September 4, 2014

TO: City of Hudson Planning Commission for September 8, 2014 Meeting

FROM: Greg Hannan, City Planner
Mark Richardson, Community Development Director

SUBJECT: Preliminary Subdivision Plan: Lawnmark Drive
North of Norton Road 800 feet west of Darrow Road

ZONING: District 8 Overlay: Hike Bike Senior Housing Overlay
District 9: Darrowville Commercial Corridor

PC Case No: 2014-18

Project Introduction

Application has been received for preliminary subdivision plan approval for Lawnmark Drive to be centered on the zoning district boundary between District 8 Overlay- Hike Bike Senior Housing Overlay and District 9 – Darrowville Commercial corridor north of Norton Road. The purpose of the subdivision is to begin the north/south access drive on the west side of and parallel to Darrow Road in accordance with the SR91 Traffic Corridor Study. The road is required as part of the previous approvals for the Trails of Hudson residential project and will ultimately connect to Corporate Drive. This application was previously before the commission and received preliminary plan approval on November 14, 2011 per case 2011-35. As the previous decision has expired, the application has been resubmitted in connection with the site plan for Phase II of the Trails of Hudson project. The project must return to the Planning Commission for final plat and improvement plan approval following the preliminary subdivision plan approval.

To the west is a single family residence and the Trails of Hudson project. North of the subject property is undeveloped land within District 8. To the east is commercial development oriented toward Darrow Road. To the south is undeveloped land within the City of Stow.

The following information is attached to this report:

1. Preliminary subdivision plan received August 7, 2014 from TGC Engineering, Inc.
2. Preliminary review comments, prepared by City Planner Greg Hannan, dated August 26, 2014.
3. Preliminary engineering review comments prepared by City Engineer Thom Sheridan, P.E., dated August 29, 2014.

4. Decision of the Planning Commission Case 2011-35 dated November 14, 2011.

Application has also been received for site plan approval of Phase II of the Trails of Hudson immediately west of the proposed Lawnmark Drive right of way per case 2014-19. As part of the approvals in 2011, Lawnmark Drive was required to be installed within two years of the issuance of zoning certificates for the first dwellings within the Trails of Hudson. The first dwelling certificates were released on September 18, 2012. As these required improvements have not been commenced, staff has requested a condition of the Trails of Hudson site plan request that zoning certificates for dwelling units within Phase II should not be released until the base infrastructure for Phase II, Lawnmark Drive, and the trailhead parking lot have been satisfactorily completed.

Standards for Review for a Preliminary Subdivision Plan, Section 1204.05(b)

A. Compliance with the purpose and intent of the Code and community plans

The preliminary subdivision plan is in substantial compliance with the district regulations and zoning development and site plan standards and therefore staff believes the purpose and intent of the LDC. The preliminary subdivision plan has also been found to be in compliance with the findings of the 2004 Comprehensive Plan. It is in conformance with the SR91 Traffic Corridor Study.

B. Compliance with Subdivision Design and Improvements/Dedication Standards, Section 1208

1. Establishment of Limits of Disturbance: The limits of disturbance must be shown with the improvement plans.
2. Standards for lots: The subdivision is being created to extend a road into the property.
3. Improvements: Improvement plans will be reviewed with the final plat submission. Their installation will be guaranteed with a Final Subdivision Improvement Agreement.

C. The site layout is to minimize land disturbance and protect natural features by considering applicable sections of the Zoning Development and Site Plan Standards, Section 1207

1. Environmental Features: The city's Geographic Information System does not identify any environmental features such as wetlands, stream, or significant tree growth. Index of Ecological Integrity (1996): The Land Characterization Study for Hudson identifies this site with a composite IEI score of -2 to 1, the lowest quality ranking for undisturbed lands.
2. Engineering Requirements: City Engineer Thom Sheridan P.E. reviewed the preliminary plans and presented his comments in a letter dated August 29, 2014. Of note, Mr. Sheridan indicates the City of Akron approval will be required for the waterline extension along the proposed right of way. Mr. Sheridan also notes the improvement plan design will need to be coordinated with the City of Hudson's improvements to Norton Road, scheduled for 2016. A traffic impact study was submitted in 2012 as part of the previous submittal. Engineering Department will be reviewing the study as part of the upcoming final plat and improvement plan submittal.
3. Landscaping: The applicant must work with the City Arborist on the selection of street trees to be planted in the right-of-way.

D. Subdivision shall comply with all applicable development regulations, standards, and requirements

The subdivision does or can meet all applicable requirements including District 8OL and 9 zoning standards and the development standards of Section 1207. We comment on the following items to be addressed with the final plat and improvement plans submittal:

1. A 70 ft right of way must be incorporated for the commercial roadway per the typical cross sections of Section 1207.13.
2. The cul-de-sac shall incorporate a pavement radius of 40 feet, a minimum right of way of 60 feet, and a five foot reservation strip at the northern terminus. The cul-de-sac shall be extended to the reservation strip.
3. Written authorization will be required from Coer Properties, the property owner to the east, for the proposed grading and cul-de-sac easements.
4. A 15 ft utility easement parallel to the public right of way must be incorporated.

Findings: Section 1204.05(b) Preliminary Subdivision Plans

The staff finds that the application complies with the purposes and intent of the code and community plans, subdivision development and design standards, regulations that minimize land disturbance and protect environmental features, and other applicable development regulations as specified in Section 1204.05(b) except as discussed above and recommended below.

Required PC Action, Chapter 1203.10(d)(1)(B)

The PC shall take final action on a preliminary subdivision application by reviewing the application and all submitted plans and reports, and then either approving, approving with conditions, or denying the application based on its compliance with the standards summarized in this report.

All decisions of the Commission shall be based on written findings of fact related to the relevant standards of the Code.

Recommendation

Approve the application for Preliminary Subdivision Plan approval for Case No. 2014-18 for Lawnmark Drive to be located north of Norton Road approximately 800 feet west of Darrow Road according to plans dated as received August 7, 2014 with the condition that the applicant must address the following as part of the final plat and improvement plan submissions.

1. Improvement plans must be submitted with the final plat application in conformance with applicable regulations of the Land Development Code including:
 - a. A 70 ft right of way must be incorporated for the commercial roadway per the typical cross sections of Section 1207.13.
 - b. The cul-de-sac shall incorporate a pavement radius of 40 feet, a minimum right of way of 60 feet, and a five foot reservation strip at the northern terminus. The cul-de-sac shall be extended to the reservation strip.
 - c. Written authorization will be required from Coer Properties, the property owner to the east, for the proposed grading and cul-de-sac easements.
 - d. A 15 ft utility easement parallel to the public right of way must be incorporated.
2. Plans must address the preliminary engineering comments of City Engineer Thom Sheridan, from his letter dated August 29, 2014.

FINAL SUBDIVISION IMPROVEMENT AGREEMENT

THIS AGREEMENT, made at Hudson, Ohio, this ____ day of _____, 2016, by and between **Trails of Hudson Two LLC** (hereinafter referred to as "Developer") and **Hudson, Ohio**, a municipal corporation organized as a city under the laws of the State of Ohio (hereinafter referred to as "City").

WITNESSETH:

WHEREAS, Developer is desirous of developing certain lands situated in the City, known as Lawnmark Drive; and

WHEREAS, a final plat for said Lawnmark Drive, has heretofore been filed with the Planning Commission of the City, and said Planning Commission has approved the final plat at its regularly scheduled meeting of May 9, 2016 which is to be recorded with the Summit County Recorder's Office; and

WHEREAS, Developer desires to comply with the "Land Development Code" of the City of Hudson, so that it may proceed with the improvements for the Lawnmark Drive; and

WHEREAS, the Planning Commission recommends the execution of this Agreement between the City and Developer.

NOW, THEREFORE, IT IS AGREED THAT:

1. The Developer will complete the improvements for Lawnmark Drive, (hereinafter referred to as "Subdivision"), as further defined herein, within a period of eighteen (18) months from the date of approval by the City of the Performance Bond (s), an irrevocable letter(s) of credit, or any other security acceptable to the City, for the various portions of construction with proper surety in the amount of One Hundred Ten Percent (110%) of the cost of the improvements as a condition of the approval of the Planning Commission, and as a guarantee that such work will be completed. The total cost of the improvements to be done has been determined by the City Engineer as an estimate of cost in the amount of \$XXX,XXX. All improvements are to be done in accordance with the plans and specifications for such improvements approved by the Planning Commission and City Engineer

which by reference hereto are made a part hereof and are dated _____, as may be revised and approved by the City Engineer.

2. All such improvements shall be inspected during the course of construction and improvement by an inspector appointed by the City Manager, the compensation for which and other costs shall be paid by Developer. The estimated cost of inspection is \$X,XXX.

The initial deposit with the City by the Developer for the inspection costs shall be \$X,XXX, which amount shall be deposited with the City prior to construction of the improvements commencing. When the costs of inspection are within \$1,000 of exhausting the initial \$X,XXX, the Developer will be notified in writing of the need to deposit the remaining \$X,XXX of the required deposit and shall have ten (10) calendar days from the date of the written notice to deposit said \$X,XXX.

In the event the cost of inspection exceeds the amount on deposit at any time, the City shall have the right to demand a sum of money to bring the deposit equal to the actual cost of inspection within ten (10) days of written notice upon the Developer, whether or not the actual cost of inspection exceeds the estimate of \$X,XXX. Failure to comply with the written demand to bring the inspection deposit current shall be cause to stop all work upon the improvements until such demand is complied with.

3. The Performance Bond (s), an irrevocable letter(s) of credit, or any other security acceptable to the City, shall be conditioned upon completion of the improvements as shown on the improvement plans and conditioned that the Developer will construct and install all of said improvements at its own expense within eighteen (18) months from the date hereof. Zoning certificates may be issued for not more than four buildings in Trails of Hudson Phase II prior to the completion of the base improvements for Lawnmark Drive and Trails of Hudson Phase II; however such buildings may not be occupied until such time as Lawnmark Drive, the Summit County

Metropark trail head, and all associated improvements for Trails of Hudson Phase II are completed.

4. Upon completion of the improvements and receipt of the approval of the City Engineer and before the Performance Bond(s), irrevocable letter(s) of credit or other security is released by the City, the Developer shall submit a Maintenance Bond in an amount equal to Fifteen Percent (15%) of the final construction cost to guarantee the workmanship and material for a period of two (2) years following the completion of the improvements.

5. In the event that the Developer defaults on its obligations hereunder to construct the improvements in accordance with the City specifications and approval, the City shall have the right to collect the proceeds of the financial guarantee and to enter upon the property of the Developer to make the appropriate improvements and to withhold additional approvals until the default is corrected or the City collects on the proceeds.

6. Developer shall also, prior to commencement of construction, file with the City a Certificate of Public Liability Insurance in an amount not less than One Million Dollars (\$1,000,000.00) for personal injuries, including wrongful death due to injuries and subject to the same limit for each person, and an amount of not less than Three Million Dollars (\$3,000,000.00) on account of any one accident, and property damage insurance with limits of One Hundred Thousand Dollars (\$100,000.00). This insurance shall be written with an acceptable company authorized to do business in the State of Ohio; shall be taken out before any operations of Developer are commenced; shall name the city as an additional insured; and shall be kept in effect until all operations shall be satisfactorily completed. The Developer shall provide title insurance in the amount of One Thousand Dollars (\$1,000.00) meeting the approval of the City Solicitor, covering the streets, lands, and public improvements to be dedicated to public use, showing the good title to said dedicated streets, lands and public improvements in the name of the City of Hudson, Ohio.

7. Upon completion of construction of the improvements and approval by the City

Engineer, Developer shall dedicate to the City all streets, lands and public improvements set forth in the final plat.

9. Upon completion of the work, Developer shall furnish to the City "as built" drawings on reproducible material and in a digital form approved by the City.

10. Upon execution of the Agreement and the deposit of all the items mentioned herein, the City will issue any applicable building and/or zoning permits provided that the applicants for said permits have met the necessary requirements for the issuance of said permits in the City's Land Development Code.

11. This Agreement shall be made a part of and incorporated into any and all bonds or other security agreements that may be issued or entered into pursuant hereto.

IN WITNESS WHEREOF, the parties have set forth their hands the day and year first written above.

WITNESSES:

Trails of Hudson Two LLC
("Developer")

By: _____
Signature

Print Name and Title

WITNESSES:

CITY OF HUDSON, OHIO
(A Municipal Corporation - Incorporated as a City in Ohio)

By: _____
JANE HOWINGTON
CITY MANAGER

PLANNING COMMISSION
CITY OF HUDSON, OHIO

By: _____
_____, CHAIR

APPROVED AS TO LEGAL FORM:
R. TODD HUNT, CITY SOLICITOR

By _____
AIMEE W. LANE
ASSISTANT TO CITY SOLICITOR

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

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 hereon, shaded in light grey.

TRAILS OF HUDSON TWO LLC, or agent/assign.

Authorized Agent _____ Date _____
Witness _____ Witness _____
County of _____ }
State of Ohio } ss

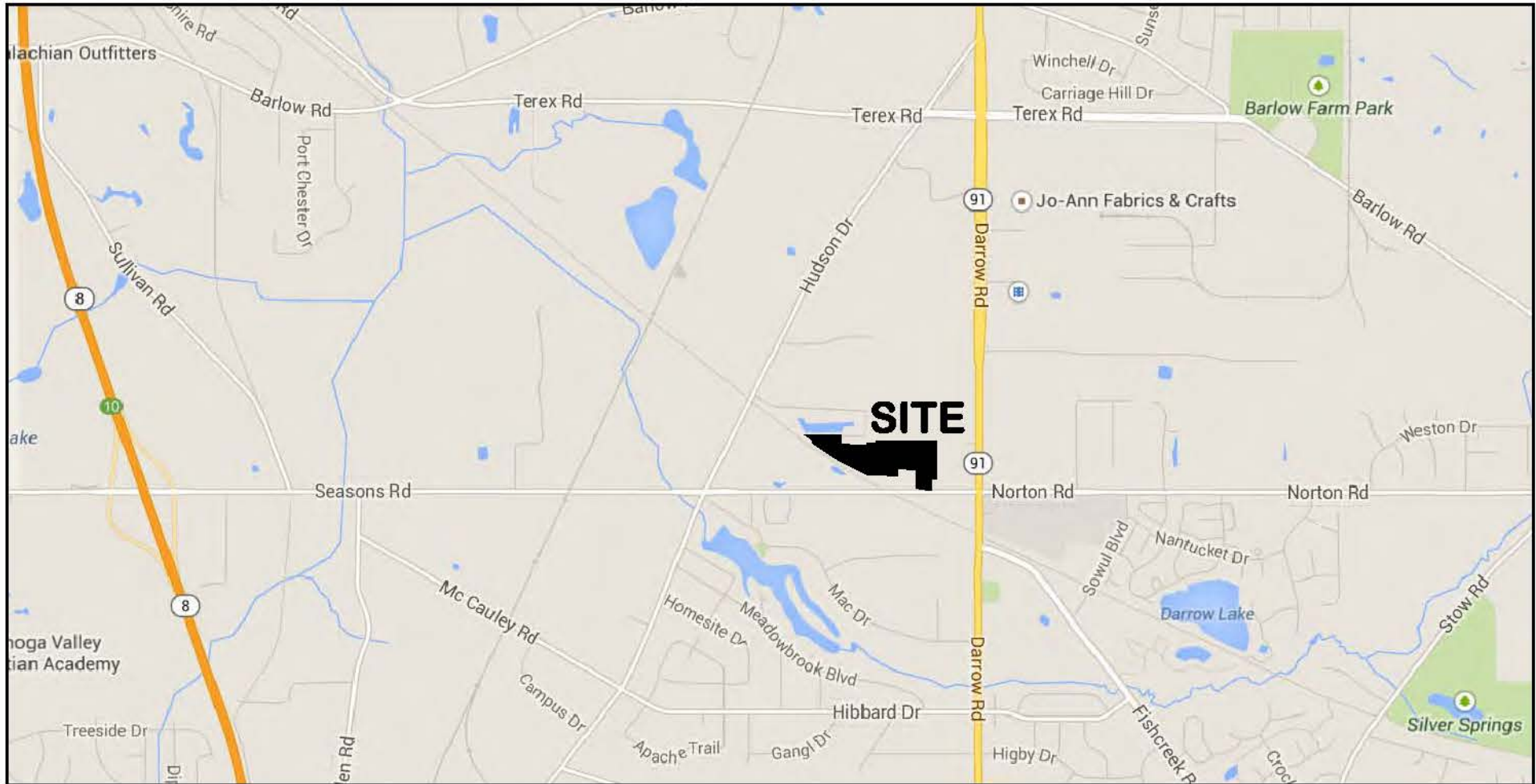
Before me a Notary Public in and for said County and State, personally appeared the above named authorized
agent for Trails of Hudson Two LLC, who acknowledged the making of the foregoing instrument and the signing of this
plat to be his own free act and deed. In testimony whereof I have hereunto set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

at _____, Ohio this
_____ day of _____, 2016.

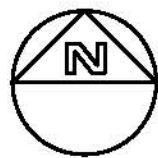
Notary public _____

My commission expires _____

VICINITY MAP



NOT TO SCALE



SURVEY TOTALS

LAND IN ROW 1.0591 AC.
LAND IN PARCEL 14.4009 AC.
TOTAL LAND AS SURVEYED: 15.4600 AC.

APPROVALS

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

CITY ENGINEER, THOMAS J. SHERIDAN, P.E., P.S. _____ DATE: _____

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

CITY MANAGER, JANE HOWINGTON _____ DATE: _____

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 REAL 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>

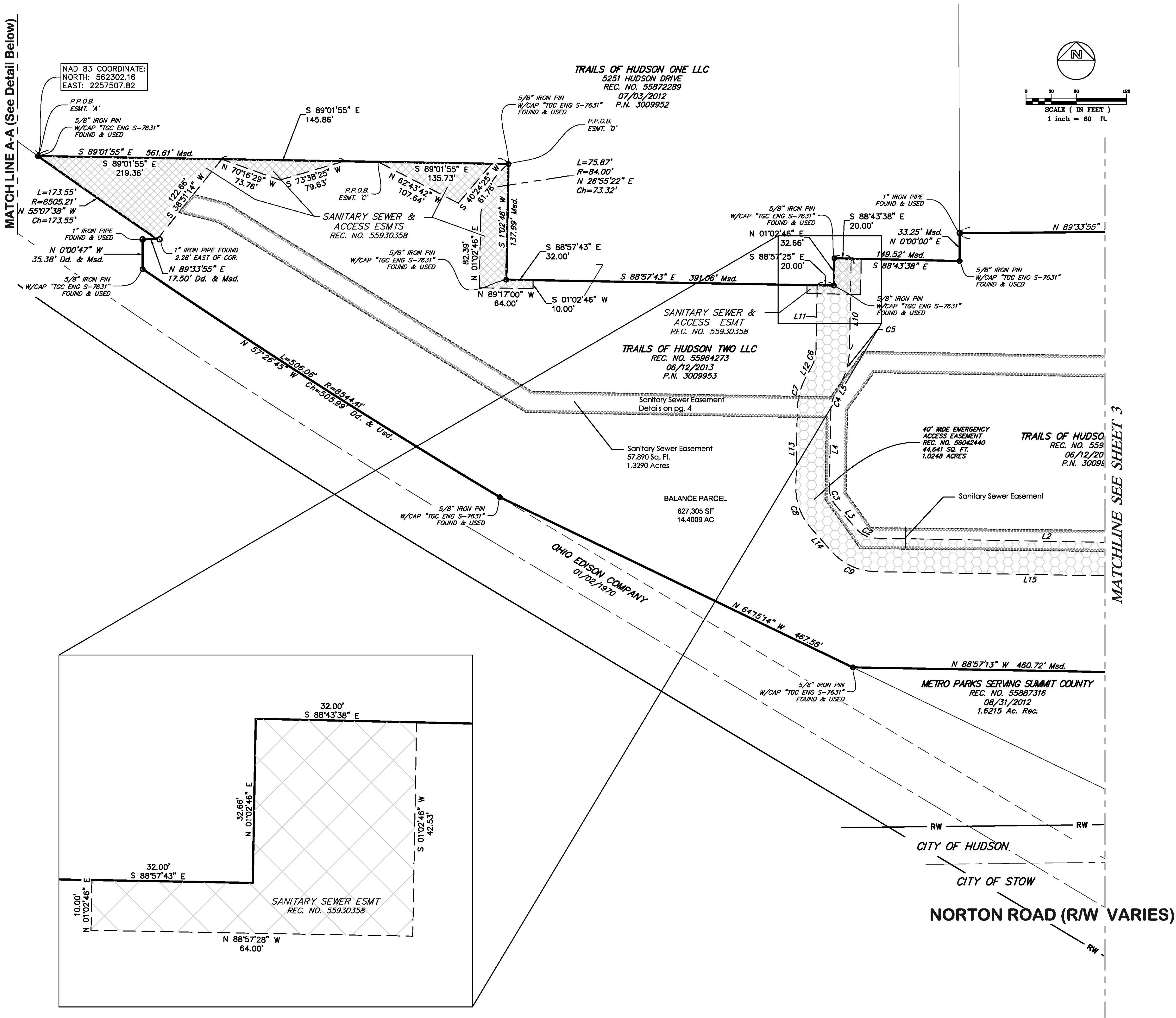
BOUNDARY SURVEY, LOT SPLIT
AND DEDICATION MAP

TRAILS OF HUDSON
HUDSON, OHIO

TGC Engineering, LLC
1310 SHARON COPLEY ROAD,
SHARON CENTER, OH 44274
(PHONE) 330.590.8004 (FAX) 888.820.6423

PROJECT NO.
1229
DATE
2016-04-05

MATCH LINE A-A (See Detail Below)



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

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 65°14'28" E
C3	23.78'	32.00'	23.23'	S 20°14'28" 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 20°14'28" W
C9	59.60'	72.00'	57.91'	N 65°14'28" W
C10	15.44'	10.00'	13.95'	N 44°43'25" W

LEGEND

NAIL MONUMENT BOX
5/8" x 30" IRON PIN SET WITH CAP READING
"TGC ENG 7631-8557"

DRILL HOLE
IRON PIN FOUND (SURVEYOR)

CENTERLINE
PROPERTY LINE
RIGHT-OF-WAY LINE
EASEMENT LINE
ORIGINAL PROP. LINE
ORIGINAL LOT LINE

REC./R. RECORD
MEAS./AL. MEASURED
CALC./C. CALCULATED
OBS. OBSERVED
ENCR. ENCROACHES
CLR. CLEARS
ADJ. ADJACENT
D.H. DRILL HOLE
AC. ACRES
S.F. SQUARE FEET

VOL./V. VOLUME
D.E.D. DEED VOLUME
PG./P. PAGE
DOC. DOCUMENT
O.R. OFFICIAL RECORD
S.C.P.R. SUMMIT COUNTY
PLAT RECORDS
R/W RIGHT-OF-WAY
CL CENTERLINE
FL PROPERTY LINE

BOUNDARY SURVEY, LOT SPLIT
AND DEDICATION MAP

TRAILS OF HUDSON
HUDSON, OHIO

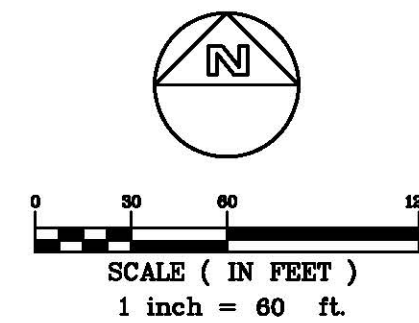
TGC Engineering, LLC
1310 SHARON COPLEY ROAD,
SHARON CENTER, OH 44274
(PHONE) 330.590.8004 (FAX) 330.590.8423

PROJECT NO.
1229
DATE
2016-04-05

MATCHLINE SEE SHEET 2

WARREN J. BROWN, TRUSTEE
5174 DARROW ROAD
REC. NO. 54114809
03/12/1998
5174 DARROW ROAD

JAMES H. KURTZ, JR.
AND PATRICIA S. KURTZ
5152 DARROW ROAD
REC. NO. 54029894
06/19/1997
5152 DARROW ROAD



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.

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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

Easement Details on Pg. 4

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

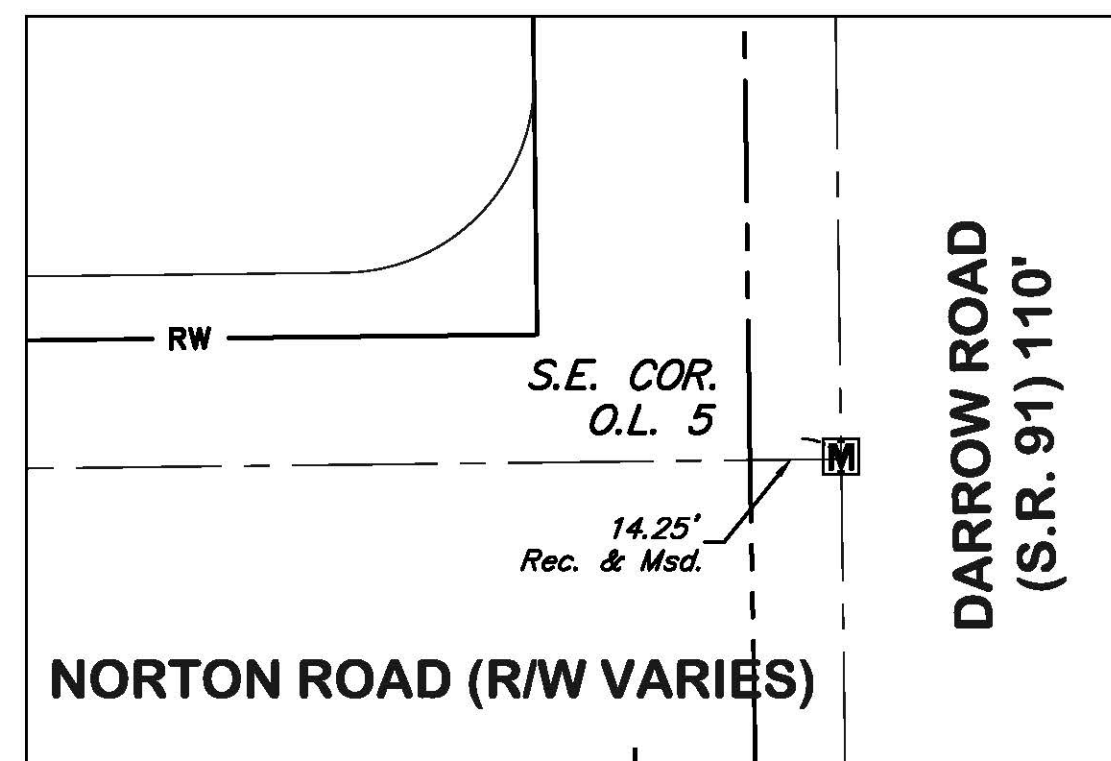
● -5/8 x 30 INCH IRON REBAR SET WITH CAP MARKED G.HANEY, S-7631

■ -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

NAIL MONUMENT BOX	DRILL HOLE
5/8" x 30" IRON PIN SET WITH CAP READING	IRON PIN FOUND (SURVEYOR)
TGC ENG 7631-B557	
CENTERLINE	
PROPERTY LINE	
RIGHT-OF-WAY LINE	
EASEMENT LINE	
ORIGINAL PROP. LINE	
ORIGINAL LOT LINE	
REC./R.	RECORD
MEAS./M.	MEASURED
CALC./C.	CALCULATED
ENCR.	ENROACHES
ADJ.	ADJACENT
D.H.	DRILL HOLE
AC.	ACRES
S.F.	SQUARE FEET
VOL./V.	VOLUME
D.V.	DEED VOLUME
PG./P.	PAGE
DOC.	DOCUMENT
G.R.	OFFICIAL RECORD
S.C.P.R.	SUMMIT COUNTY PLAT RECORDS
R/W	RIGHT-OF-WAY
CL	CENTERLINE
PL	PROPERTY LINE



DETAIL SCALE: 1" = 30'

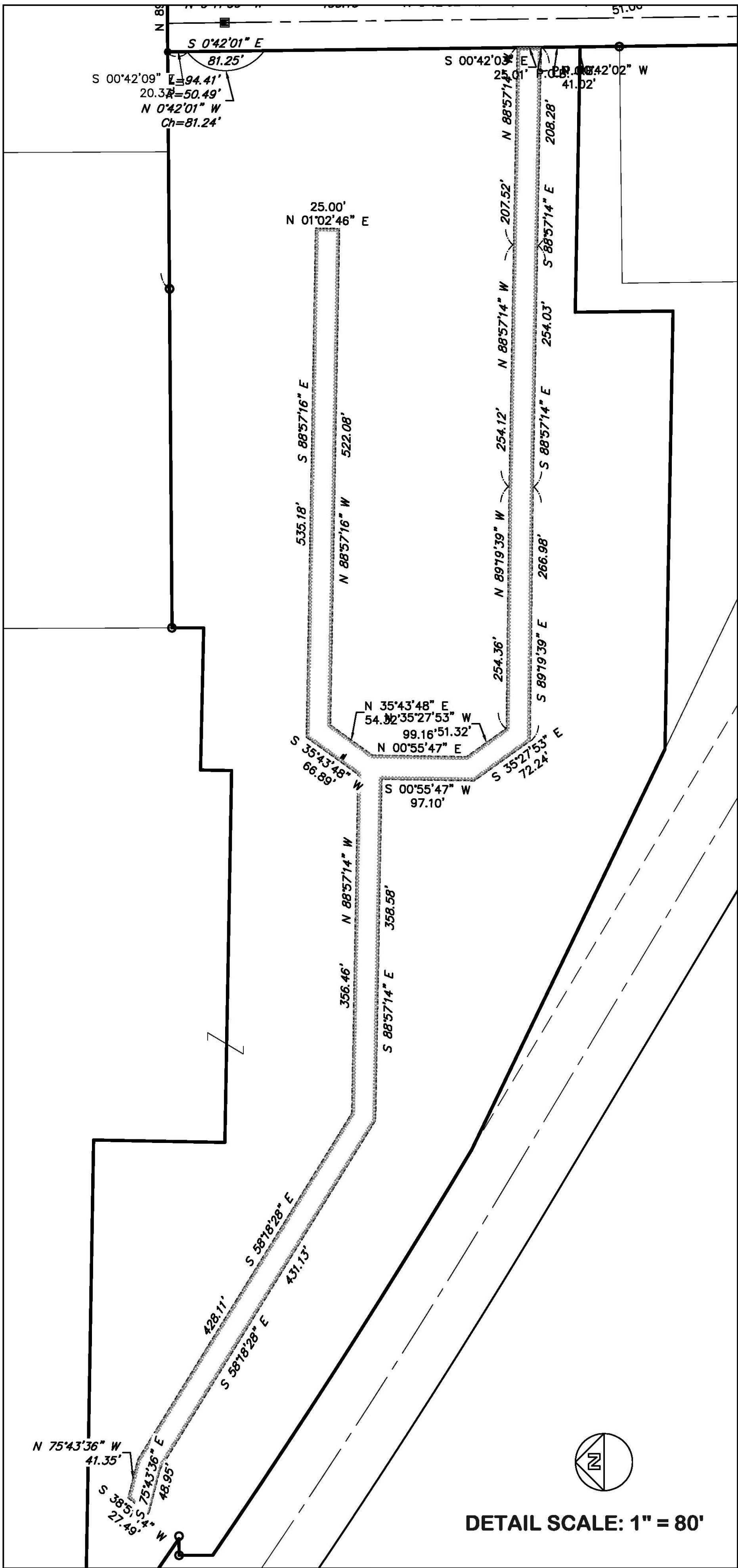
BOUNDARY SURVEY, LOT SPLIT
AND DEDICATION MAP

TRAILS OF HUDSON
HUDSON, OHIO

TGC Engineering, LLC
1310 SHARON COPLEY ROAD,
SHARON CENTER, OH 44274
(PHONE) 330-590-8004 (FAX) 330-820-8423

PROJECT NO.
1229
DATE
2016-04-05

3/4



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.

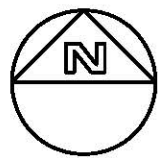
GUY P. HANEY, P.S. NO. S-7631
T.G.C. Engineering, LLC
1310 Sharon Copley Road, P.O. Box 37
Sharon Center, OH 44274
330-590-8004
ghaney@tgcengineering.com

DATE: April 05, 2016

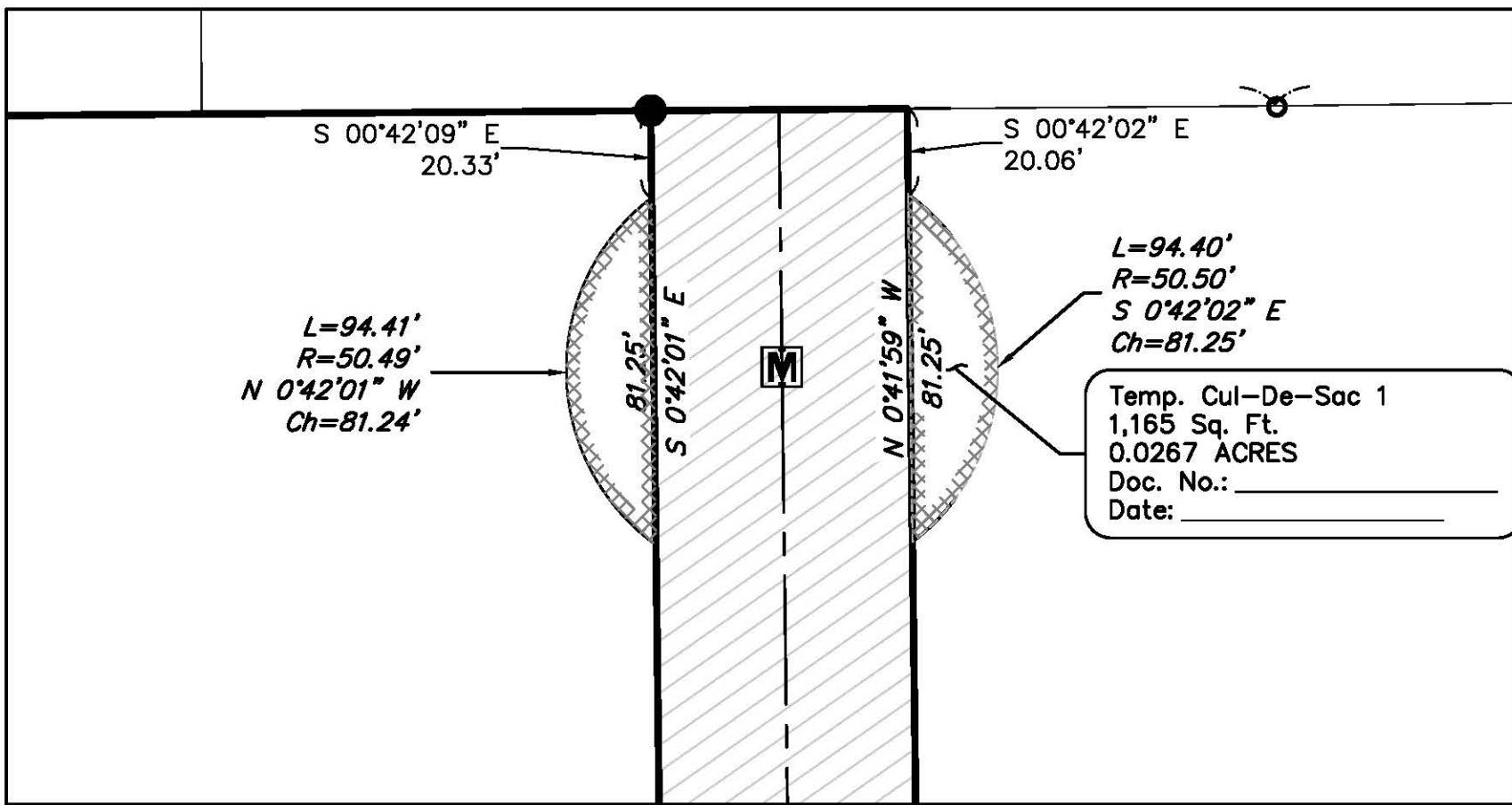
BEARINGS ARE BASED NAD83 OHIO STATE PLANE COORDINATES (GROUND), NORTH ZONE.

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

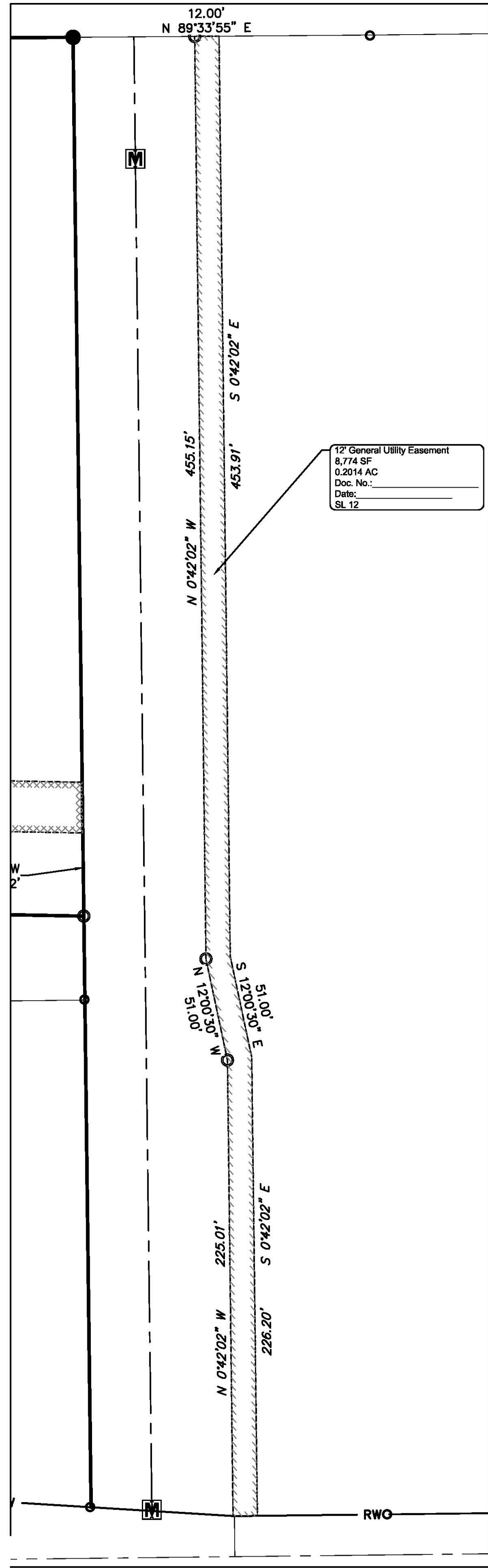
Reference Survey: Boundary Survey and Lot Split Map, Rec. No. 55872295
Map of Lot Split & Consolidation, Rec. No. 55588022



DETAIL SCALE: 1" = 40'



NOTE: TEMP. CUL-DE-SAC EASEMENT 2 TO BE GRANTED WITH THE EXECUTION OF THIS PLAT,
AND EXTINGUISHED UPON THE EXTENSION OF LAWNMARK DRIVE.



BOUNDARY SURVEY, LOT SPLIT
AND DEDICATION MAP

TRAILS OF HUDSON
HUDSON, OHIO

TGC Engineering, LLC
1310 SHARON COPLEY ROAD,
SHARON CENTER, OH 44274
(PHONE) 330.590.8004 (FAX) 330.820.8423

PROJECT NO.
1229
DATE
2016-04-05

4/4

GENERAL NOTES-CONSTRUCTION

- THIS PLAN HAS BEEN BASED UPON DIGITAL COUNTY ORTHOPHOTO INFORMATION AND TOPOGRAPHIC AND BOUNDARY SURVEY WORK PERFORMED BY TGC ENGINEERING, LLC.
- 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 DEVELOPER (OWNER).
- 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 INTERSECTIONS) OF EXISTING ROADS AND THE ROAD(S) UNDER CONSTRUCTION.
- ADDITIONAL SOIL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE CITY OF HUDSON ENGINEER DURING CONSTRUCTION AND THE TWO YEAR MAINTENANCE PERIOD.
- 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. 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 RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER.
- ALL UNDERGROUND LINES ENCOUNTERED BY CONSTRUCTION ARE TO BE COMPLETELY RESTORED AT THE EXPENSE OF THE CONTRACTOR.
- COST OF ANY SHEETING, DEWATERING OR FOUNDATIONS NECESSARY FOR CONSTRUCTION SHALL BE INCLUDED IN THE PRICE BID FOR RESPECTIVE ITEMS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE PROPOSED CONSTRUCTION.
- 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.
- ANY APPARENT DISCREPANCIES OR QUESTIONS IN CONTRACT DOCUMENTS ARE TO BE BROUGHT TO THE ATTENTION OF THE DEVELOPER'S REPRESENTATIVES IMMEDIATELY.
- 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.
- 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.
- 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.
- 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.
- 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.
- EXISTING UTILITIES, SIDEWALKS, DRIVE APRONS, ETC WITHIN THE RIGHT-OF-WAY ARE TO REMAIN UNDISTURBED UNLESS NOTED OTHERWISE.
- REMOVE SOILS AS NECESSARY TO COMPLETE PROPOSED CONSTRUCTION, PER THE CITY OF HUDSON LAND DEVELOPMENT CODE.
- BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS FOR FILL OUTLINED IN THE SOILS REPORT.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION, REMOVAL AND RESTORATION WORK NECESSARY TO PERMIT CONSTRUCTION OF THE PROPOSED PROJECT.

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 PREVENTION PLAN FOR EROSION CONTROL STRUCTURES AND SPECIFICATIONS.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE JOB.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL NOT USED ON THE JOB SITE.
- 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.
- 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.
- UNLESS OTHERWISE INDICATED AT A SPECIFIC LOCATION, ALL FINISHED GRADES AT THE LIMITS OF NEW WORK ARE TO CONFORM TO AND MATCH EXISTING GRADES.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE DRAINAGE TO CATCH BASINS OR SHEET FLOW OFF OF OPEN AREAS BY MEANS OF SITE GRADING.
- EXCAVATIONS ARE TO BE PROMPTLY BACKFILLED AND GRADED SO AS TO ELIMINATE AND PREVENT PONDING ON THE SITE.

GENERAL NOTES-UTILITIES

- THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 163.64 OF THE OHIO REVISED CODE.
- 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.
- ALL UTILITY WORK, BACKFILLING AND RESTORATION WITHIN THE EXISTING RIGHT-OF-WAY SHALL BE PER THE CITY OF HUDSON ENGINEERING STANDARDS.
- 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.
- UNDERGROUND UTILITY CONSTRUCTION PRACTICES ARE TO CONFORM TO THE SAFETY REQUIREMENTS OF OSHA AND THE CITY OF HUDSON CODIFIED ORDINANCES.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, PROTECTION, AND CONTINUATION OF SERVICE FOR ALL UTILITIES SERVICING ADJOINING AREAS.
- 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

- 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.
- UNDERDRAINS SHALL BE INSTALLED AS SPECIFIED ON THE TYPICAL PAVEMENT SHEET CONTAINED IN THESE PLANS.
- 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.
- ALL TESTING AND INSPECTION FEES ARE THE RESPONSIBILITY OF THE DEVELOPER.
- 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.
- 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

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

GENERAL NOTES

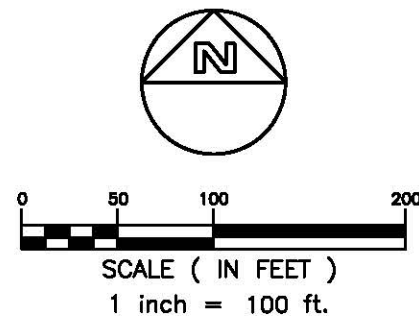
TRAILS OF HUDSON LAWNMARK DRIVE IMPROVEMENT PLANS

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.
1229A

DATE
2016-04-05

C02



WARREN J. BROWN, TRUSTEE
REC. NO. 54114809
03/12/1998
5174 DARROW ROAD

JAMES H. KURTZ, JR.
AND PATRICIA S. KURTZ
REC. NO. 54029894
06/19/1997
5152 DARROW ROAD

COER PROPERTIES
P.N. 3000556
O.R. 1634, PG. 941
03/18/1994
PARCEL 3

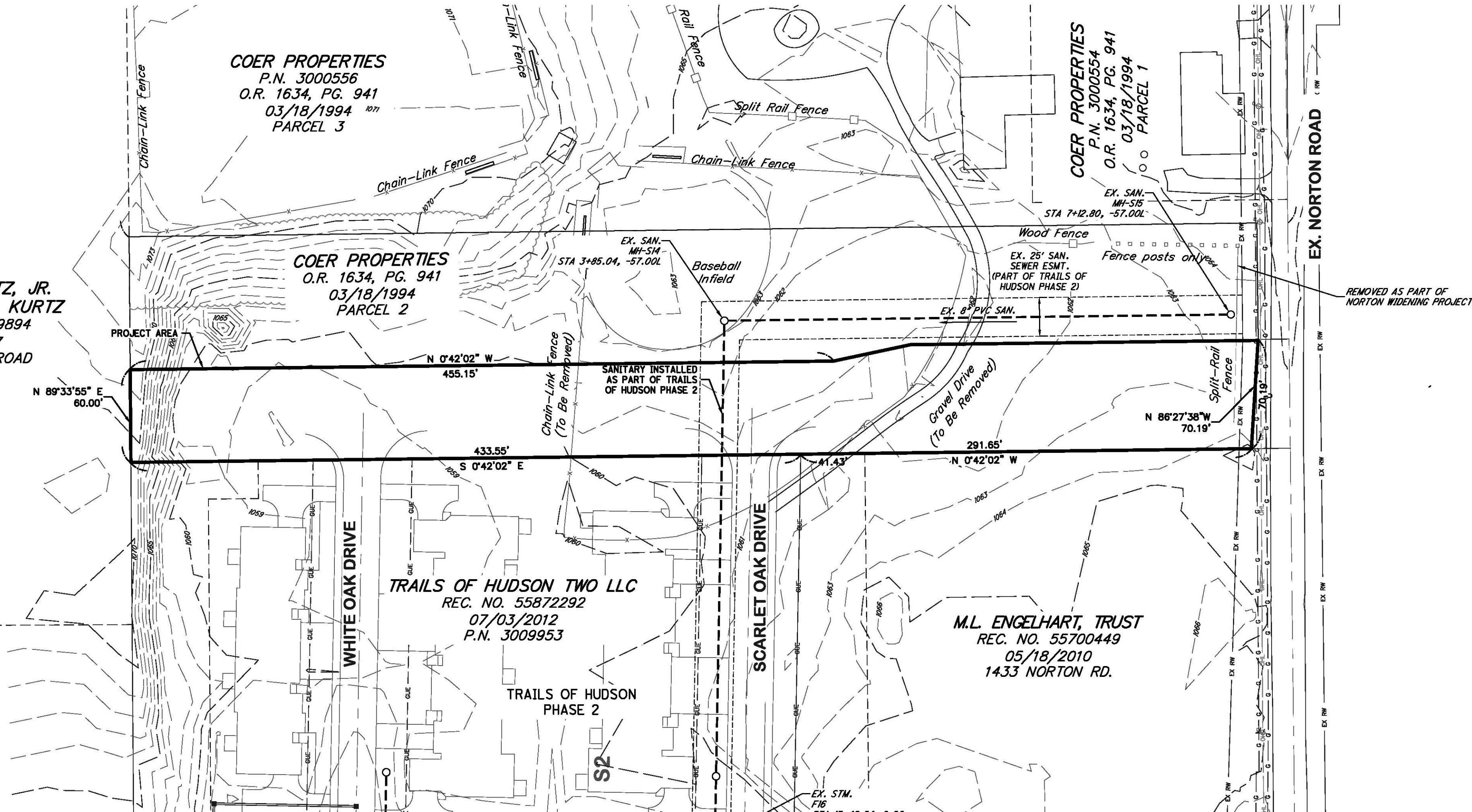
COER PROPERTIES
O.R. 1634, PG. 941
03/18/1994
PARCEL 2

TRAILS OF HUDSON TWO LLC
REC. NO. 55872292
07/03/2012
P.N. 3009953

TRAILS OF HUDSON
PHASE 2

M.L. ENGELHART, TRUST
REC. NO. 55700449
05/18/2010
1433 NORTON RD.

COER PROPERTIES
P.N. 3000554
O.R. 1634, PG. 941
03/18/1994
PARCEL 1



TGC Engineering, LLC
1310 SHARON COPLEY RD. P.O. BOX 37
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PROJECT NO.
1229A
DATE
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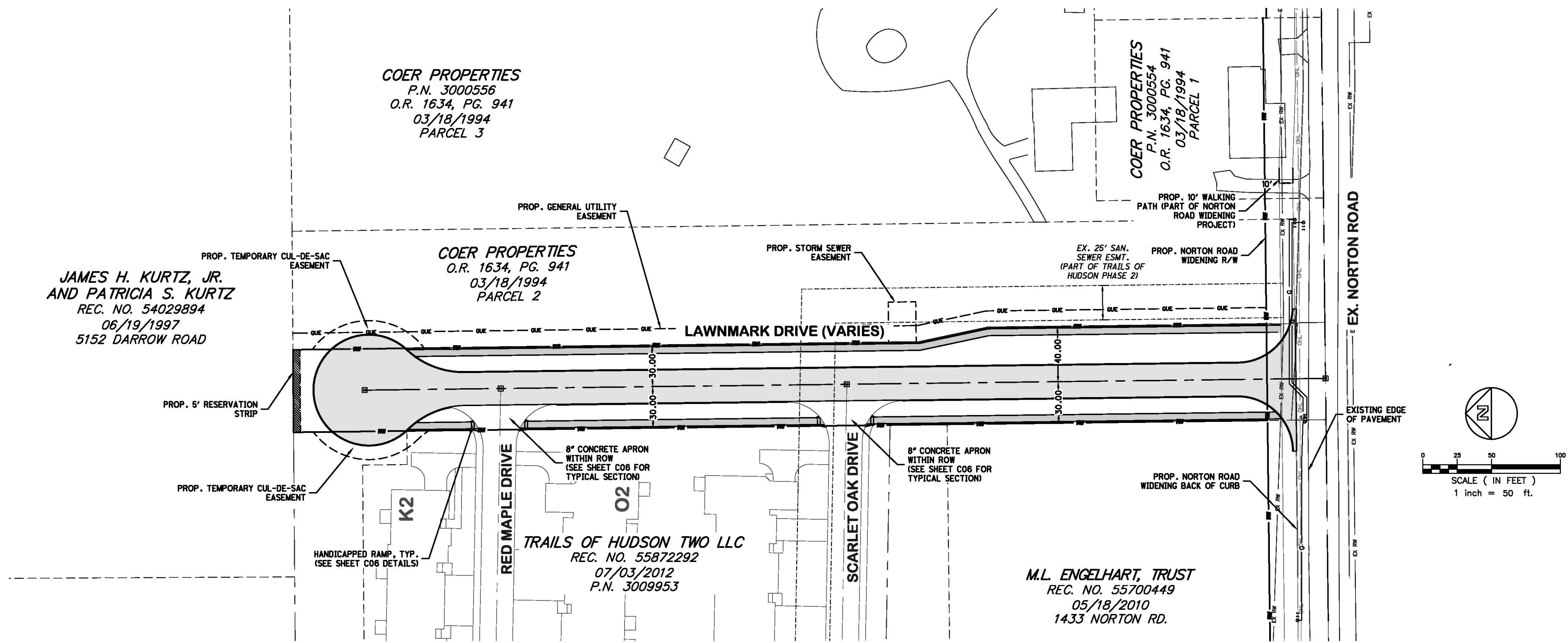
C03

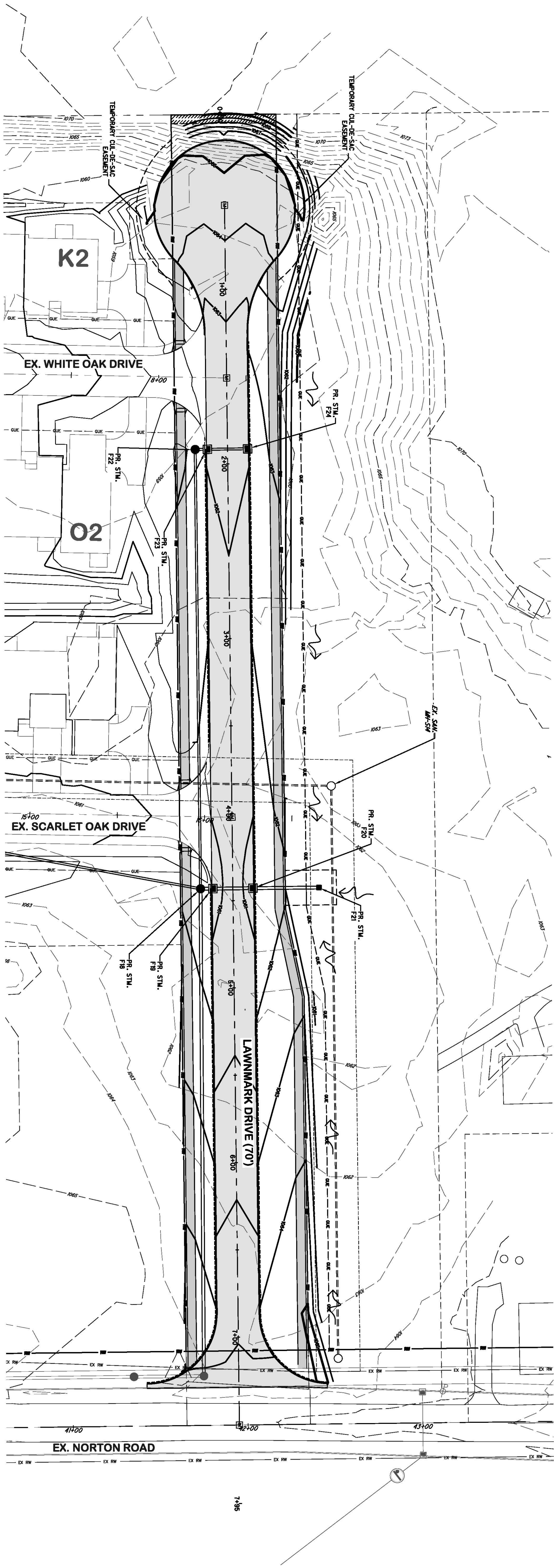
TRAILS OF HUDSON
LAWNMARK DRIVE
IMPROVEMENT PLANS

EXISTING CONDITIONS
DEMOLITION PLAN

SITE INFORMATION

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





TRAILS OF HUDSON
LAWNMARK DRIVE
IMPROVEMENT PLANS

GRADING PLAN

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

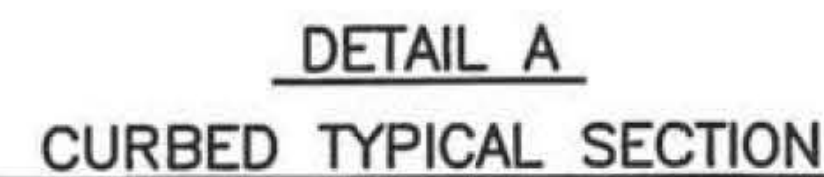
PROJECT NO.

1229A

DATE

2016-04-05

C05





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

TYPICAL 'PUBLIC' PAVEMENT SECTION
(TRAILS OF HUDSON PHASE ROADS
WITHIN LAWNMARK ROW)

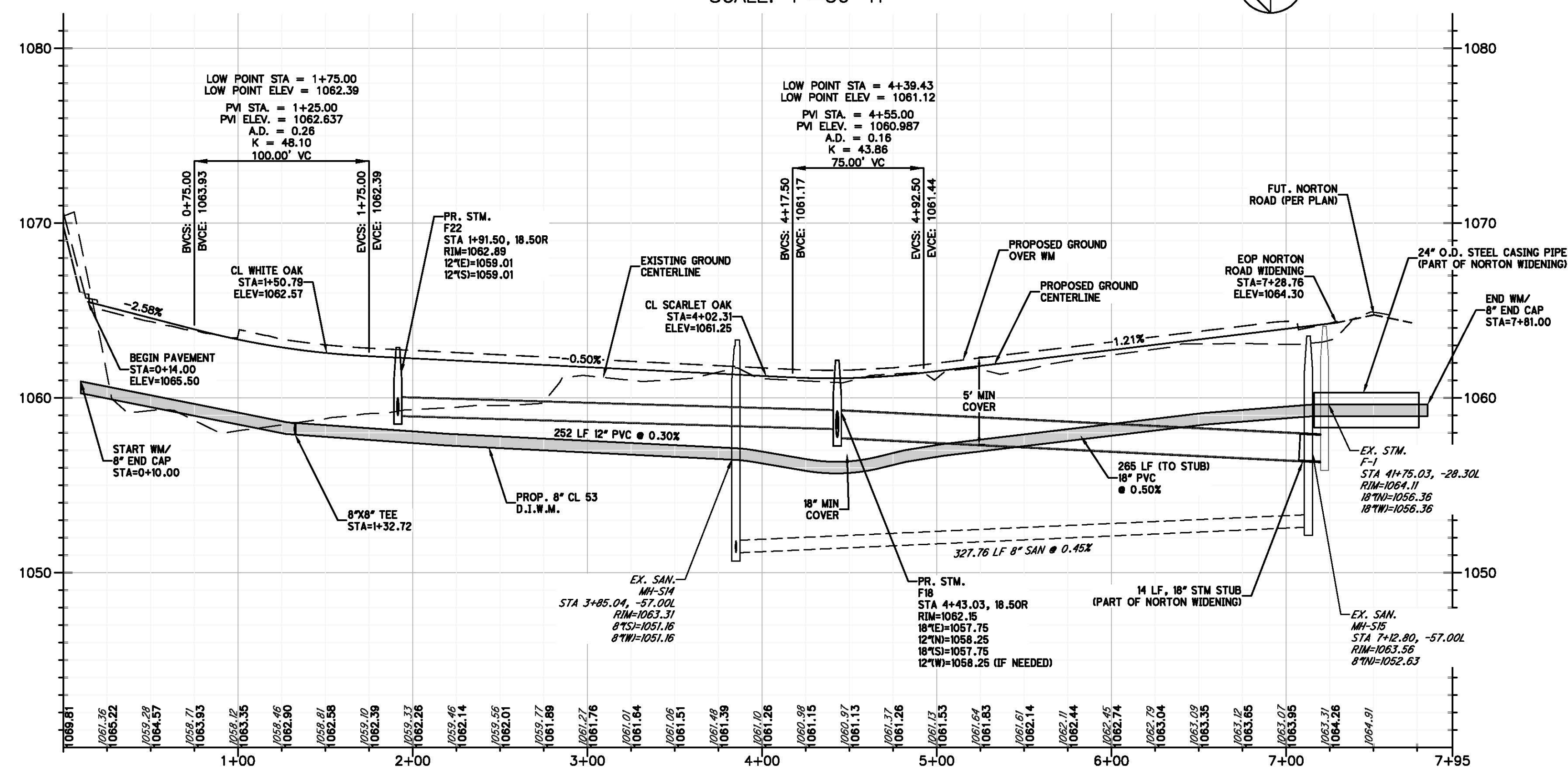
NOT TO SCALE

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INTERSECTION PAVEMENT DETAILS

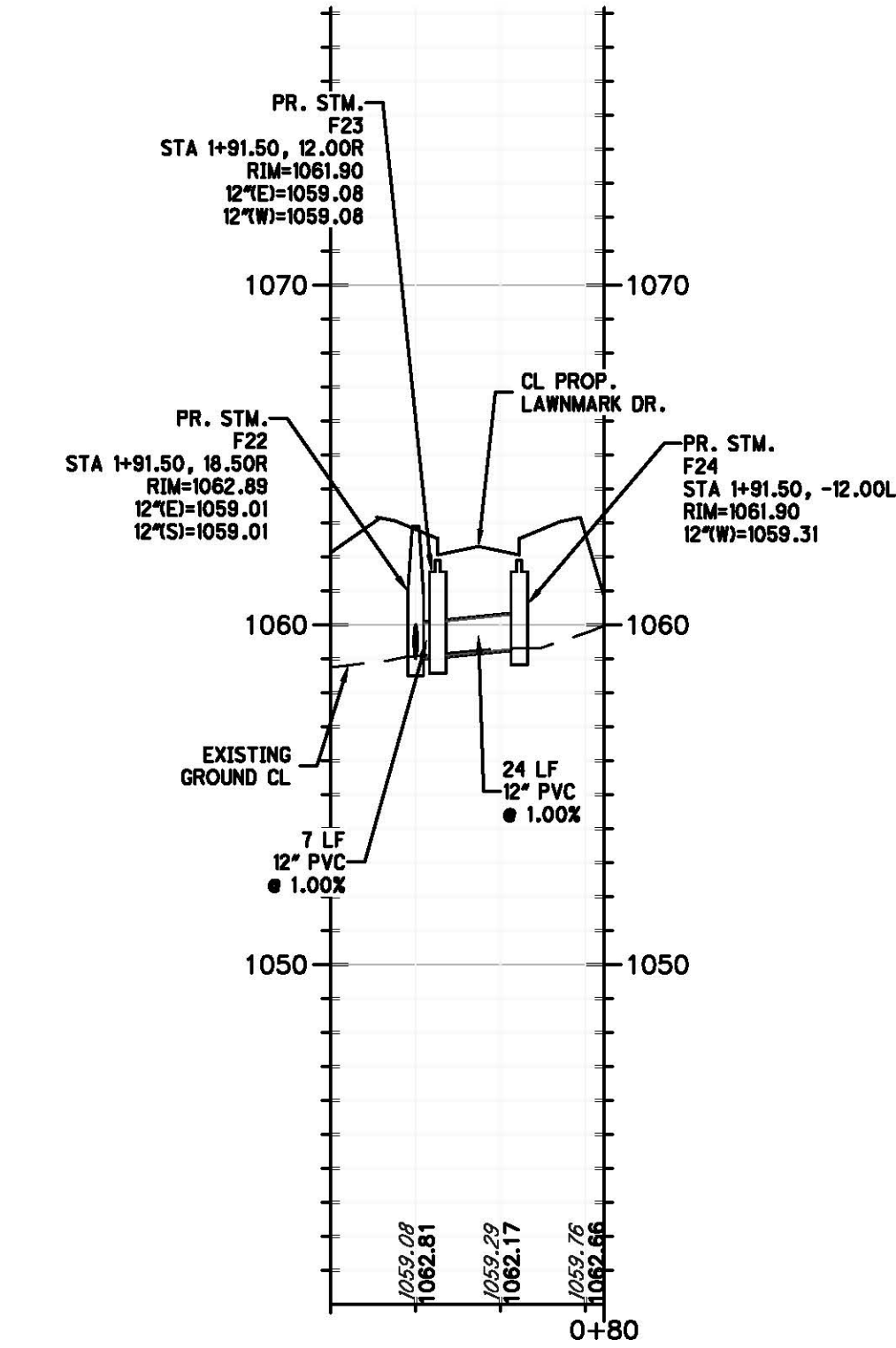


SCALE: 1"=50' H



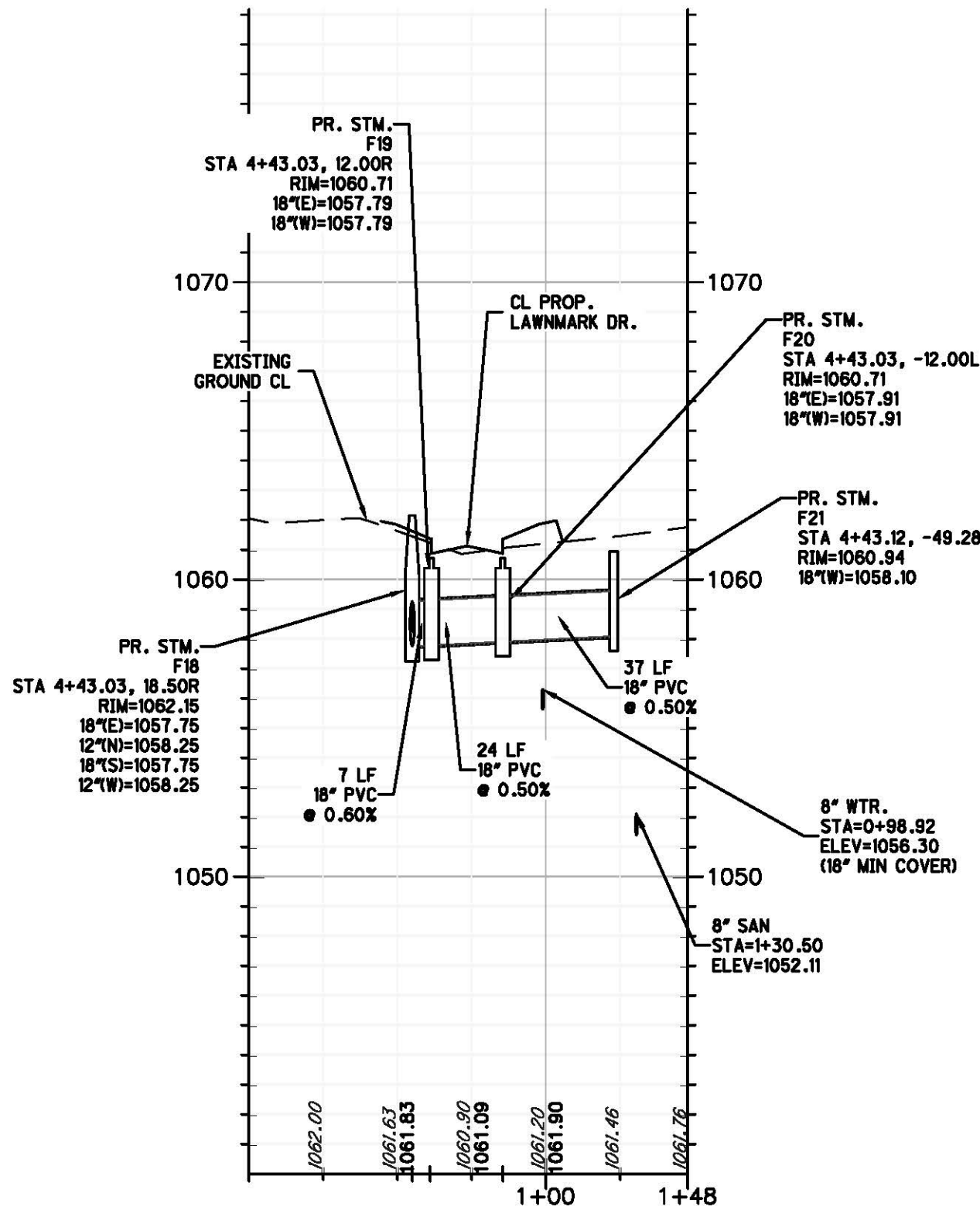
PROFILE: LAWNMARK DRIVE (VARIES)

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



PROFILE: STORM 'A'

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



PROFILE: STORM 'B'

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

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

- 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.
- 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.
- 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.
- 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.
- 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.
- Where water mains cross sewer trenches, the trench is to be backfilled with approved granular material.
- 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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01/20/2015

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 16-inch 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 alloyed ductile iron bolts. T-head bolts shall be ¼-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 yolo corrosion resistant material. Plug must be cast iron and thread into a brass ring.

- 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.
- 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.
- 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.
- 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.
- 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.

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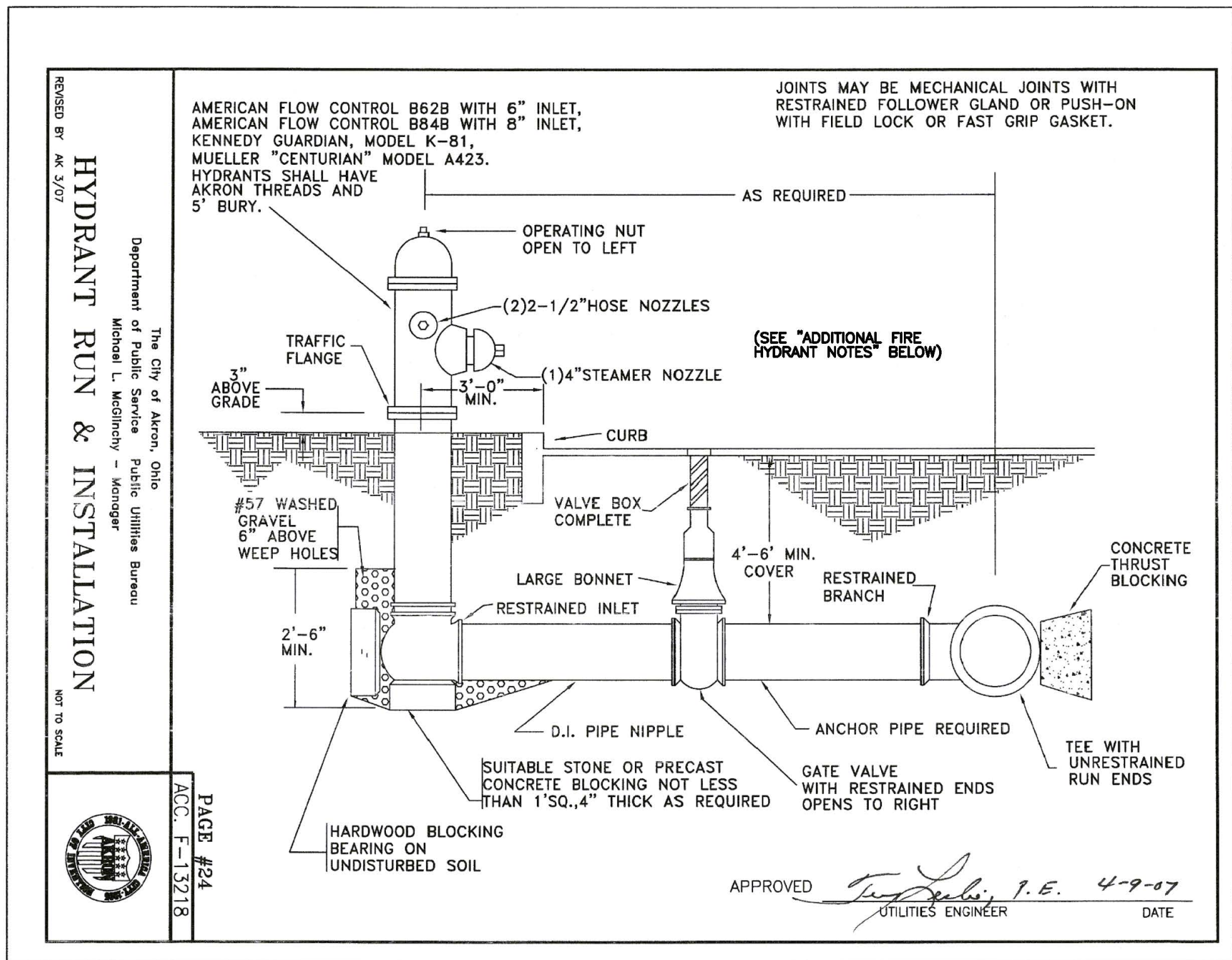
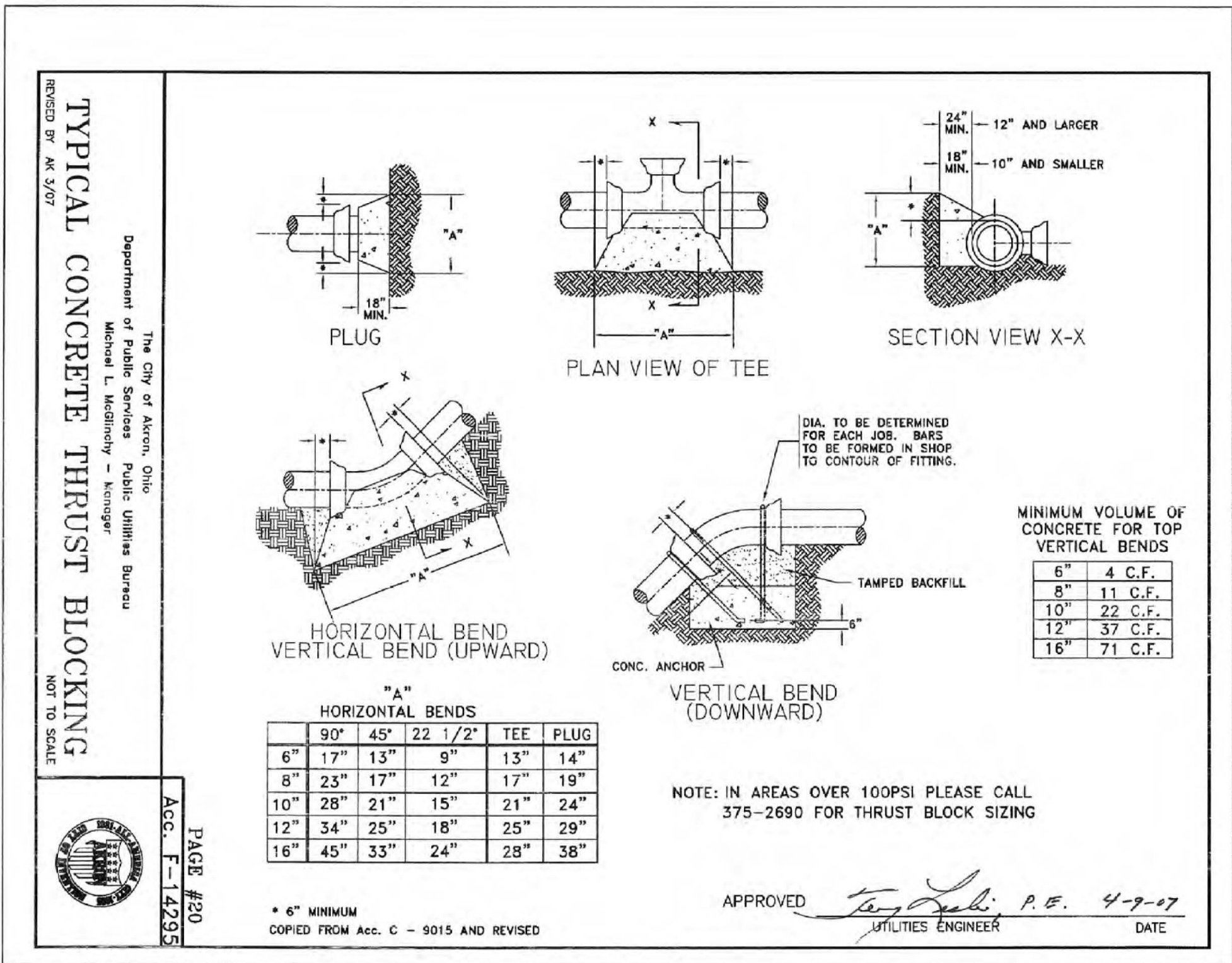
- Use extreme caution when excavating in the area of existing water main pipes, valves, hydrants and thrust blocks.
- The contractor shall supply a temporary safe water service to all homes that will have their water service interrupted by this construction.
- The proposed facilities must maintain a minimum of 35 psi pressure delivered to the curb stop during normal operating conditions.
- Booster pumps are not permitted on service connections.
- 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.

Optional

- 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 reimburse the City for any damage incurred in this operation.
- All hydrants and valves shown to be removed by the contractor are to be salvaged and delivered to the Akron Water Department store yard at 565 Johnston Street. Cost of this work shall be included in the price bid for Item 254, Ductile Iron Pipe.
- 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.
- After the installation of the proposed water main is complete and after the line has passed 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.
- 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.
- 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.

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01/20/2015



ADDITIONAL FIRE HYDRANT NOTES:

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

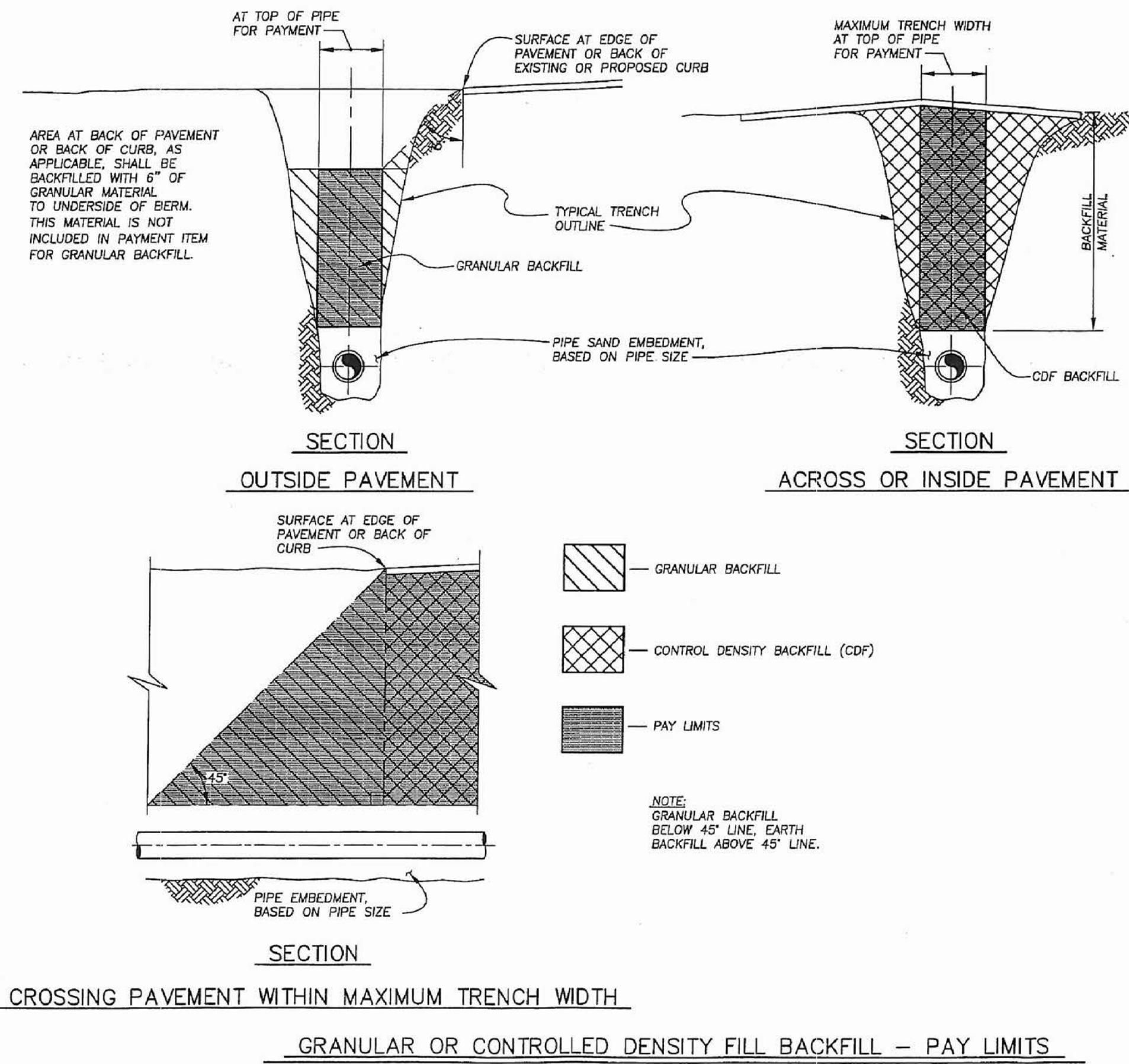
STANDARD NOTES AND DETAILS

TRAILS OF HUDSON
LAWNMARK DRIVE
IMPROVEMENT PLANS

TGC Engineering, LLC
1310 SHARON COPLEY RD. P.O. BOX 37
SHARON CENTER, OH 44274
(PHONE) 330.970.8004 (FAX) 888.820.8423

PROJECT NO.
1229A
DATE
2016-04-05

C09



CONDNBKFL.DWG 09-15-99

NO SCALE

FIG 2.25.1

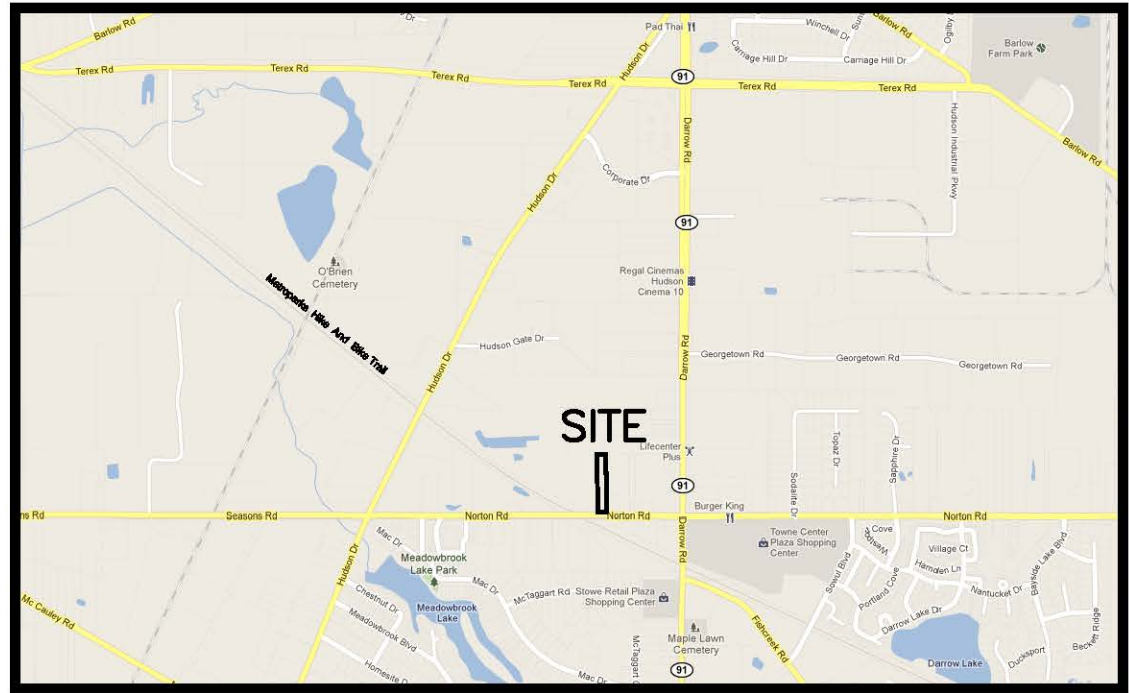
STANDARD NOTES AND DETAILS

TRAILS OF HUDSON
LAWNMARK DRIVE
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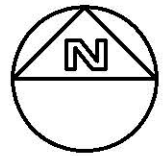
TGC Engineering, LLC
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SHARON CENTER, OH 44274
(PHONE) 330.970.8004 (FAX) 888.820.8423

PROJECT NO.
1229A
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2016-04-05

C10



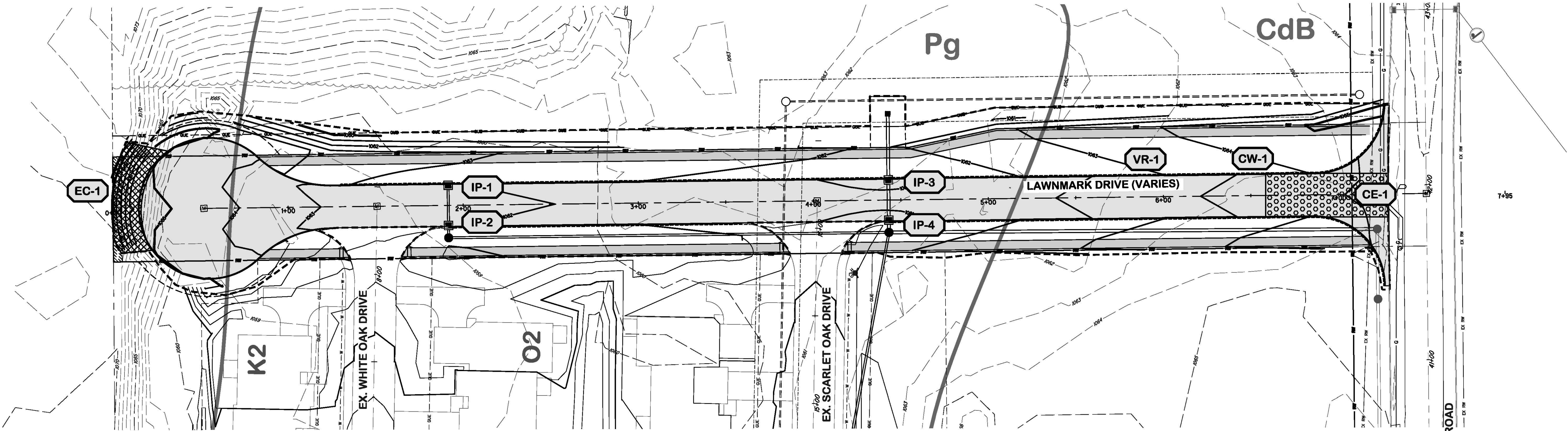
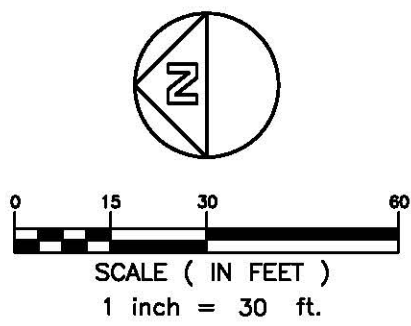
LOCATION MAP
NOT TO SCALE



PROJECT DATA	
TOTAL PROJECT AREA	1.04 AC
EARTH DISTURBED AREA	1.29 AC
IMPERVIOUS AREA FOR PRE-CONSTRUCTION SITE	0.04 AC
PERCENT IMPERVIOUS PRE-CONSTRUCTION SITE	4%
IMPERVIOUS AREA FOR POST-CONSTRUCTION SITE	0.65 AC
PERCENT IMPERVIOUS POST-CONSTRUCTION SITE	62%
"C" COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.07
"C" COEFFICIENT FOR POST-CONSTRUCTION SITE	0.41
CURVE NUMBER PRE-DEVELOPMENT	60
CURVE NUMBER POST-DEVELOPMENT	88
PRIOR LAND USE	OPEN SPACE
TYPE OF CONSTRUCTION ACTIVITY	RESIDENTIAL
IMMEDIATE RECEIVING WATERS	UNNAMED TRIBUTARY
SUBSEQUENT RECEIVING WATERS	POWER BROOK
PROJECT START DATE	6/1/2016
PROJECT END DATE	6/1/2017

SWPPP LEGEND

INLET PROTECTION	IP-#
CONCRETE WASHOUT AREA	CW-#
VEHICLE REFUELING AREA	VR-#
CONSTRUCTION ENTRANCE (25'W x 70'L x 10"D, SEE DETAILS & SPECS. SHT SW3)	CE-#
EROSION CONTROL MATTING	EC-#
SOIL TYPE	CyD
SOIL TYPE BOUNDARY	---
EARTH DISTURBANCE LIMITS	----



EROSION CONTROL NOTES:

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

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 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. 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 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 BUILDING.
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 EROSIIVE 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 DATS 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 COMINGLED. 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 (TSD/PS).
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 HEREIN. 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 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.

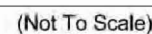
SWPPP NARRATIVE

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 1

Specifications for



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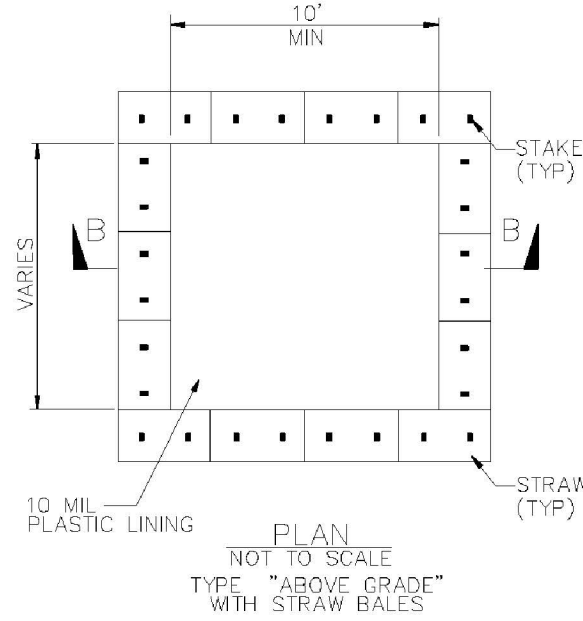
Specifications for

6. **Timing**—The construction entrance shall be installed as soon as is practicable before major grading activities.

Geotextile Specification for Construction Entrance

Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	50 lbs.
Minimum Burst Strength	320 psi.
Minimum Elongation	20%
Equivalent Opening Size	EOS < 0.6 mm.
Permittivity	1x10 ⁻³ cm/sec.

2

WM-8

Construction
www.cabmphandbooks.com

Specifications for

- ## Channel Installation

Slope Installation

**TRAILS OF HUDSON
LAWNMARK DRIVE
IMPROVEMENT PLANS**

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

PROJECT NO
1229A

DATE
2016-04-05

SW3

File: f: tqc eng projects 1229 a trails of hudson lawnmark dwg 1229 lawnmark enq.dwg	Saved: 4/5/2016 1:31 PM	Plotted: 4/5/2016 1:40 PM	Plotstyle: (TGC ll.ctb)	Scale: (1:1)	Page Setup: (-----)
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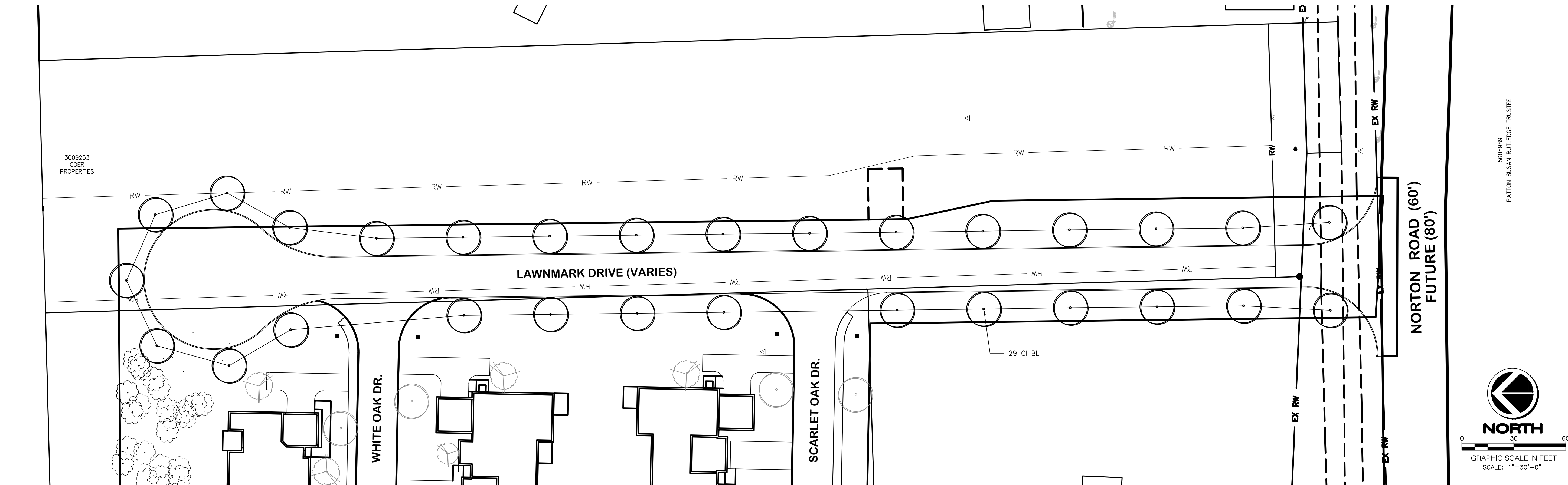
TRAILS OF HUDSON LAWNMARK DRIVE IMPROVEMENT PLANS

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.
229A

DATE
2016-04-05

SW4



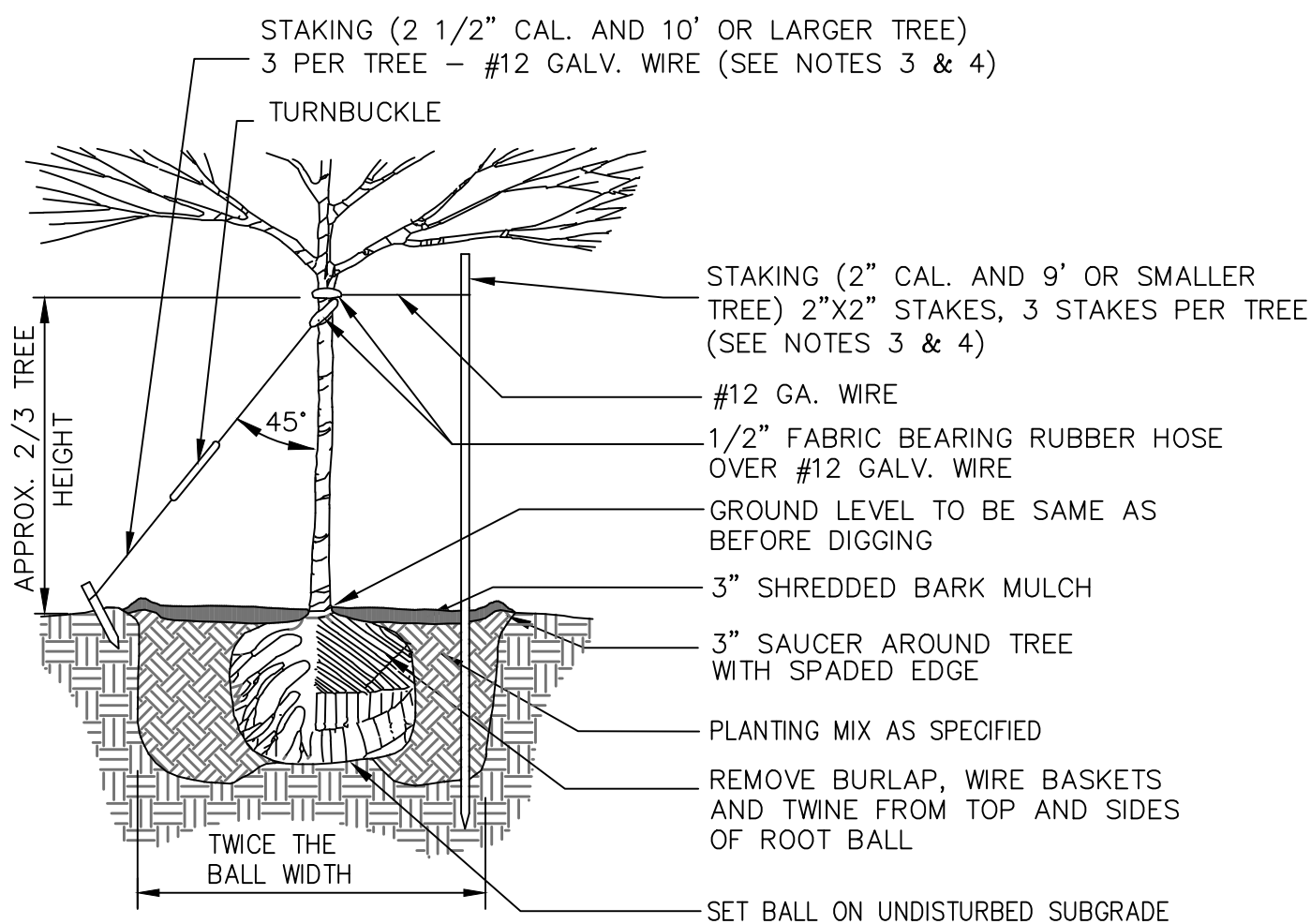
LAWNMARK DRIVE TREE PLANTING PLAN

PLANTING NOTES:

- THIS SHEET FOR PLANTING REFERENCES ONLY. SEE DETAILS FOR PLANTING INSTALLATION.
- CONTRACTOR TO STAKE LOCATIONS OF TREES AND LARGE SHRUBS AND OUTLINE BED AREAS FOR ACCEPTANCE BY OWNER'S REPRESENTATIVE 3 BUSINESS DAYS PRIOR TO INSTALLATION.
- GROWING MEDIUM SHALL CONSIST OF 1/3 TOPSOIL, 1/3 SHARP, CLEAN BEDDING SAND, 1/3 DECOMPOSED LEAF HUMUS BY VOLUME. GROWING MEDIUM SHALL BE MECHANICALLY COMBINED BY A SUPPLIER. GROWING MEDIUM SHALL HAVE A PH BETWEEN 6.2 AND 6.8. FINAL BLEND FROM PART 'A' SHALL BE CLASSIFIED IN THE "SANDY LOAM" PORTION OF THE U.S.D.A SOIL TEXTURAL TRIANGLE.
- DECOMPOSED LEAF MULCH: DECOMPOSED, NITROGEN-TREATED, OF UNIFORM TEXTURE, FREE OF CHIPS, STONES, STICKS, SOIL, OR TOXIC MATERIALS. SHALL CONFORM TO THE FOLLOWING:
 - 100% SHALL PASS THROUGH A 1" SCREEN.
 - PATHOGEN FREE; TIME AND TEMPERATURE TESTS MINIMUM 55 DEGREE CELSIUS FOR A MINIMUM OF THREE DAYS.
 - HEAVY METAL CONTENT SHALL NOT EXCEED OHIO EPA CLASS 1
 - ORGANIC CONTENT SHALL BE BETWEEN 35% AND 75%; EACH SOURCE SHALL NOT VARY MORE THAN 5%.
 - INERT CONTAMINATION SHALL BE LESS THAN 1% BY WEIGHT.
 - MATERIAL SHALL BE CURED FOR AT LEAST 90 DAYS.
 - SOLUBLE SALTS SHALL BE BETWEEN 1 - 5 MMHOLS.
 - PH SHALL BE BETWEEN 6.0 AND 8.0
- REUSE SURFACE SOIL STOCKPILED ON THE SITE. VERIFY SUITABILITY OF SURFACE SOIL TO PRODUCE TOPSOIL MEETING REQUIREMENTS AND AMEND WHEN NECESSARY. SUPPLEMENT WITH IMPORTED TOPSOIL WHEN QUANTITIES ARE INSUFFICIENT. CLEAN TOPSOIL OF ROOTS, PLANTS, SODS, STONES, CLAY LUMPS, AND OTHER EXTRANEIOUS MATERIALS HARMFUL TO PLANT GROWTH.
- PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF TREES AND SHRUBS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK."
- ALL DISTURBED AREAS TO BE SEEDED. CONTRACTOR MAY HYDROSEED AREAS TO RECEIVE SEED. HYDROSEEDING: MIX SPECIFIED SEED, FERTILIZER, AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. CONTINUE MIXING UNTIL UNIFORMLY BLENDED INTO HOMOGENOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION. PROTECT AREAS NOT TO BE SEEDED FROM SLURRY OVERSPRAY. RESPREAD ON-SITE TOPSOIL TO A DEPTH OF 4" AND PREPARE GRADE FOR SEEDING; RAKE OUT CLUMPS, DEBRIS, AND ROOTS.
- SEED MIX: PROVIDE CERTIFIED GRASS-SEED BLENDS OR MIXES, PROPORTIONED BY WEIGHT FOR APPROVAL BY OWNER'S REP. SEED SHALL BE PROFESSIONALLY MIXED WITH 30% KENTUCKY BLUEGRASS; 35% FESCUE (FESTUCA CVLT.) SUCH AS PENNLAWN, "FINELAWN PETITE" OR "CROSS FIRE"; 35% PERENNIAL RYEGRASS SUCH AS CITATION II OR MANHATTAN.
- WARRANT THE FOLLOWING LIVING PLANTING MATERIALS FOR A PERIOD OF ONE YEAR AFTER DATE OF SUBSTANTIAL COMPLETION, AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE, NEGLIGENCE, OR ABUSE BY OWNER, ABNORMAL WEATHER CONDITIONS UNUSUAL FOR WARRANTY PERIOD, OR INCIDENTS THAT ARE BEYOND CONTRACTOR'S CONTROL. REPLACE PLANTING MATERIALS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.
- PROVIDE A MINIMUM OF 3" LAYER OF LOCAL SHREDDED HARDWOOD BARK MULCH OVER ALL BEDS AND TREE PITS. DOUBLE SHREDDED HARDWOOD MULCH: GRADE A, 6-MONTH OLD WELL ROTTED SHREDDED NATIVE HARDWOOD BARK MULCH NOT LARGER THAN 4" IN LENGTH AND 1/2" IN WIDTH, FREE OF WOOD CHIPS AND SAWDUST.
- CONTRACTOR IS TO PREPARE A SINGLE BED FOR SHRUBS AND PERENNIALS. REMOVE EXISTING PLANTS, DEBRIS, AND DELETERIOUS MATERIAL FROM AREA. ROTOTILL EXISTING SOIL SUPPLEMENTING WITH GROWING MEDIUM AS NEEDED. ONCE PLANTING IS COMPLETE, MULCH ENTIRE BED WITH 3" OF MULCH.
- SEE GRADING PLAN FOR PROPOSED GRADING.
- SEE STORM WATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL.

NOTES:

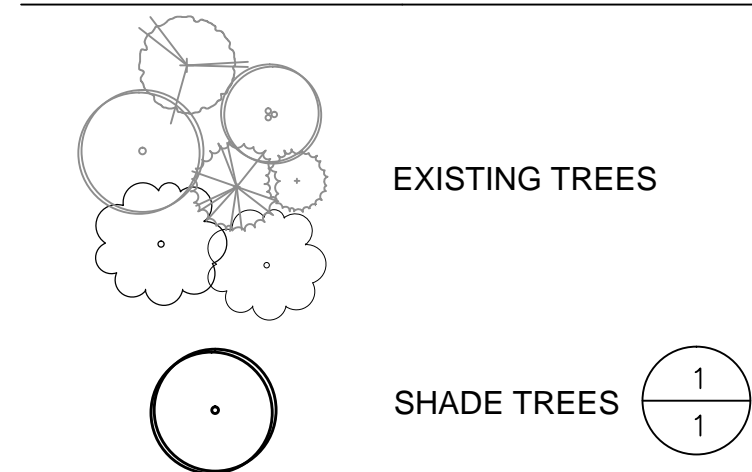
- REMOVE BURLAP, WIRE BASKETS AND TWINE FROM TOP AND SIDES OF ROOT BALL. CENTER TREE IN HOLE SET TOP OF BALL 1" ABOVE FINISH GRADE.
- PRUNE ONLY DEAD OR BROKEN LIMBS. DO NOT CUT THE CENTRAL LEADER.
- STAKING & GUYING TREES IS OPTIONAL, HOWEVER THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLED TREES STAYING PLUMB AND STABLE. IF A NON-STAKED TREE MOVES OUT OF PLUMB DURING THE WARRANTY PERIOD THE CONTRACTOR SHALL STRAIGHTEN & STAKE THE TREE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL RETURN TO REMOVE ALL STAKES, GUYS & ASSOCIATED HARDWARE ON THE TREES ONE YEAR AFTER STAKING OR PER THE DIRECTION OF THE OWNER OR ARCHITECT.



SHADE TREE PLANTING DETAIL

NOT TO SCALE

PLANT LEGEND:



PLANT MATERIAL LIST							
ABBR.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	CONDITION	QUANTITY	REMARKS
Shade Trees							
GI BL	Ginkgo Biloba 'Autumn Gold'	Autumn Gold Ginkgo	2" CAL.	AS SHOWN	B&B	29	Street Tree Form

TRAILS OF HUDSON PHASE 2 ENHANCEMENTS Residential Development City of Hudson Summit County, Ohio

PROJECT NO.: 15-00139-050
DRAWN BY: JCS
CHECKED BY: SVE
DATE ISSUED: April 20, 2016

OVERALL SITE LANDSCAPE PLAN