GENERAL NOTES

- 1. THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.
- -STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH
- -THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- -WDNR STORMWATER RUNOFF TECHNICAL STANDARDS.
- -WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION -CITY OF WAUKESHA STANDARDS & REQUIREMENTS FOR DEVELOPMENT, LATEST EDITION.
- 2. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
- 3. EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, AN APPROVED EROSION CONTROL PLAN WILL BE PROVIDED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY IMPLEMENTING THE APPROVED PLAN.

THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY FLOOR, CURB OR PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

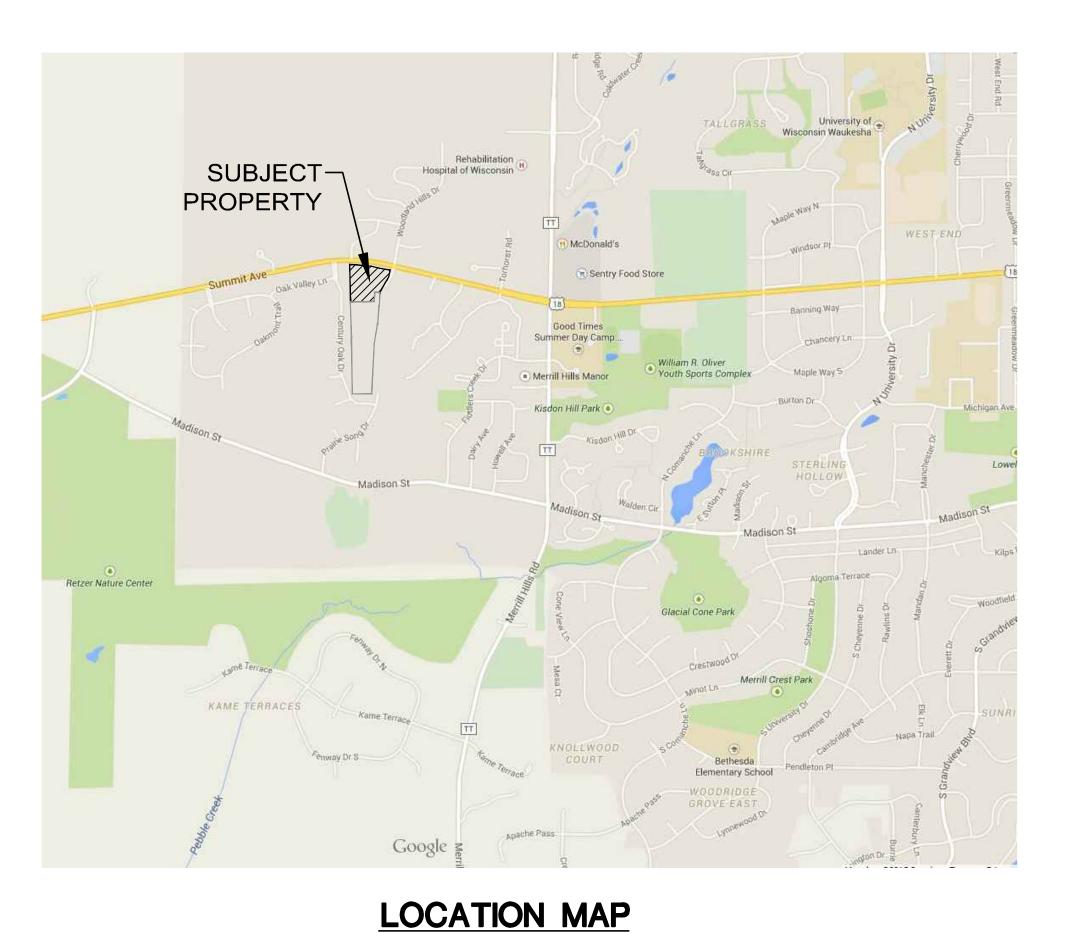
- 5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (CALL DIGGERS HOTLINE AT 800-242-8511). COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY
- 6. EXISTING UTILITY INFORMATION IS SHOWN FROM SURVEY WORK, FIELD OBSERVATIONS, AVAILABLE PUBLIC RECORDS, AND AS-BUILT DRAWINGS EXACT LOCATIONS AND ELEVATIONS OF UTILITIES SHALL BE DETERMINED PRIOR TO INSTALLING NEW WORK. EXCAVATE TEST PITS AS REQUIRED.
- 7. PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED UNTIL THEY HAVE BEEN REFERENCED BY A PROFESSIONAL LAND SURVEYOR. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 8. ENGINEER SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF PERFORMING ANY
- 9. ALL TRENCHING SHALL BE PERFORMED ACCORDING TO OSHA STANDARDS.
- 10. ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
- 11. THE CONTRACTOR SHALL CLEAN ALL ADJACENT STREETS OF ANY SEDIMENT OR DEBRIS AS REQUIRED BY MUNICIPAL ORDINANCE.

ALL SITE IMPROVEMENTS AND CONSTRUCTION SHOWN ON THE PLANS SHALL CONFORM TO THE CITY OF WAUKESHA DEVELOPMENT HANDBOOK & INFRASTRUCTURE SPECIFICATIONS. WHERE THE PLANS DO NOT COMPLY, IT SHALL BE THE SOLE RESPONSIBILITY AND EXPENSE OF THE DEVELOPER TO MAKE REVISIONS TO THE PLANS AND/OR CONSTRUCTED

PRAIRIE SONG COURTYARDS

"A CONDOMINIUM COMMUNITY" PRELIMINARY SITE DEVELOPMENT PLANS

CITY OF WAUKESHA, WISCONSIN

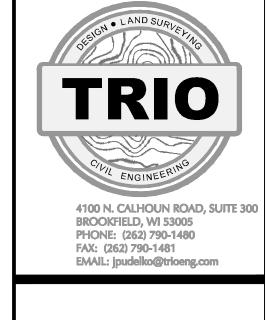




NOT TO SCALE



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T1	_	COVER SHEET
C1.0	_	OVERALL EXISTING SITE PLAN
C1.1	_	PROPOSED SITE PLAN
C1.2	_	PROPOSED SUMMIT AVE. IMPROVEMENT PLAN
C2.0	-	GRADING & DRAINAGE PLAN
C2.1	_	PROPOSED POND PLAN
C3.0	_	EROSION CONTROL PLAN
C4.0	_	UTILITY PLAN
C5.0	_	CONSTRUCTION DETAILS
C5.1	_	CONSTRUCTION SPECIFICATIONS



PUDELKO

E-39420 WAUWATOSA,

REVISION HISTORY				
DATE	DESCRIPTION			
08/09/19	CITY SUBMITTALS			

DATE:

AUGUST 9, 2019

JOB NUMBER: 01006

DESCRIPTION:

COVER SHEET

SHEET

CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

CALL DIGGERS HOTLINE 1-800-242-8511

BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY

INFRASTRUCTURE TO COMPLY.





4100 N. CALHOUN ROAD, SUITE 300 BROOKFIELD, WI 53005 PHONE: (262) 790-1480 FAX: (262) 790-1481 EMAIL: jpudelko@trioeng.com

REVISION HISTORY DATE DESCRIPTION 08/09/19 CITY SUBMITTALS

DATE:

AUGUST 9, 2019

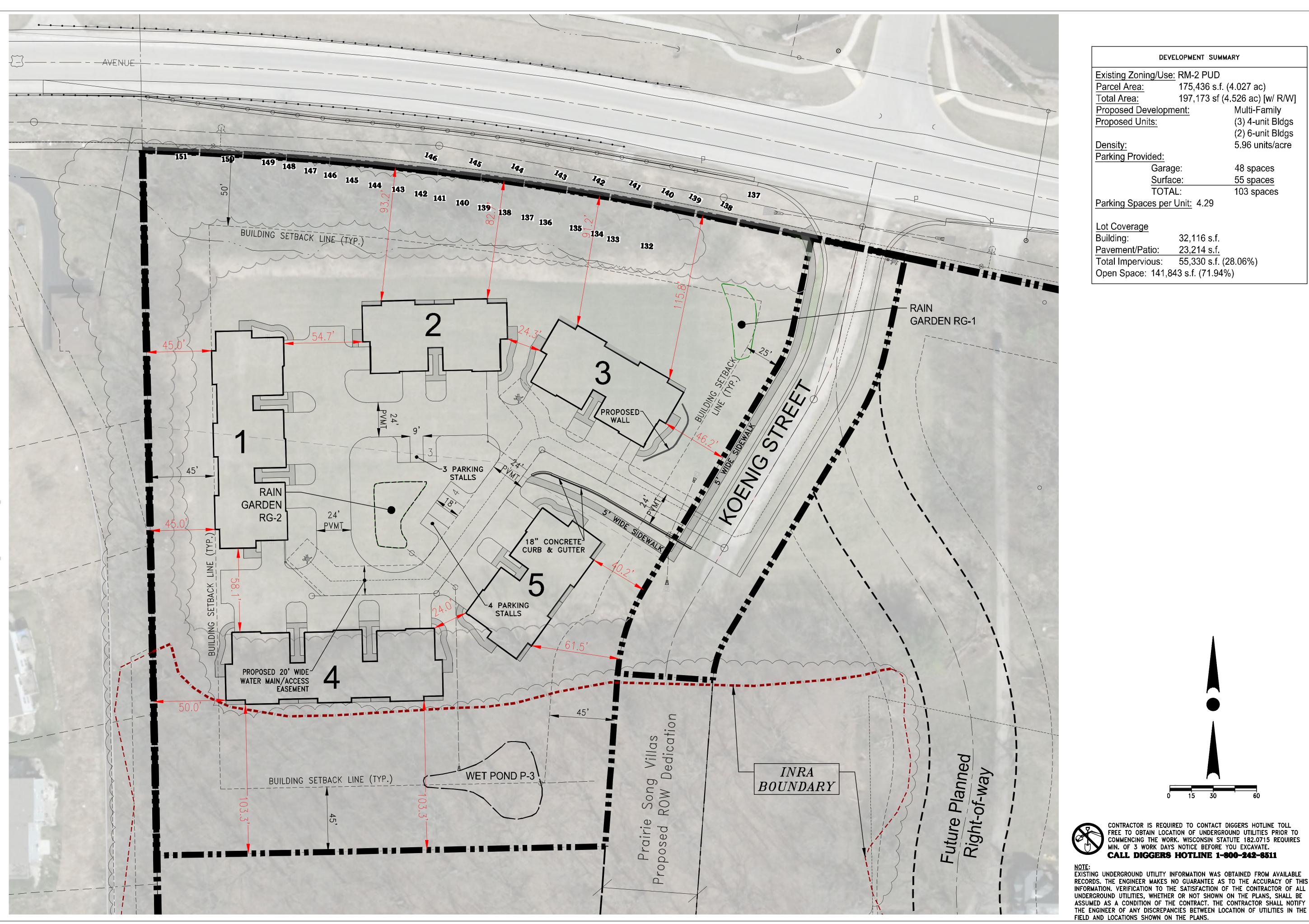
JOB NUMBER: 01006

DESCRIPTION:

OVERALL EXISTING SITE **PLAN**

SHEET

C1.0



DEVELOPMENT SUMMARY

Existing Zoning/Use: RM-2 PUD

175,436 s.f. (4.027 ac) Parcel Area:

197,173 sf (4.526 ac) [w/ R/W] Total Area: Proposed Development: Multi-Family **Proposed Units:** (3) 4-unit Bldgs

(2) 6-unit Bldgs 5.96 units/acre

Parking Provided:

48 spaces Garage: 55 spaces Surface: TOTAL: 103 spaces

0 15 30 60

CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

CALL DIGGERS HOTLINE 1-800-242-8511

Parking Spaces per Unit: 4.29

Lot Coverage

32,116 s.f. Building: 23,214 s.f. Pavement/Patio:

Total Impervious: 55,330 s.f. (28.06%) Open Space: 141,843 s.f. (71.94%)





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FAX: (262) 790-1481 EMAIL: jpudelko@trioeng.com

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/09/19	CITY SUBMITTALS	

DATE:

AUGUST 9, 2019

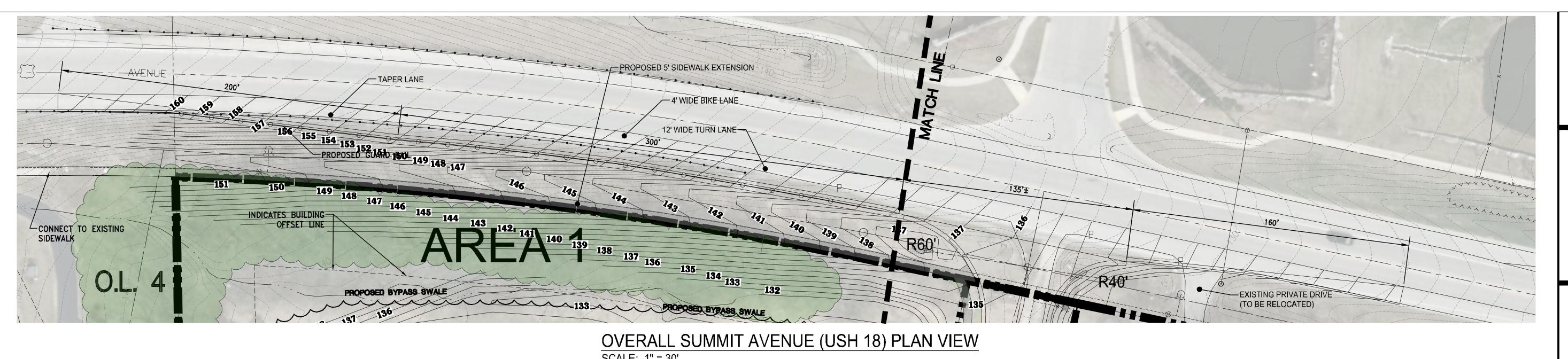
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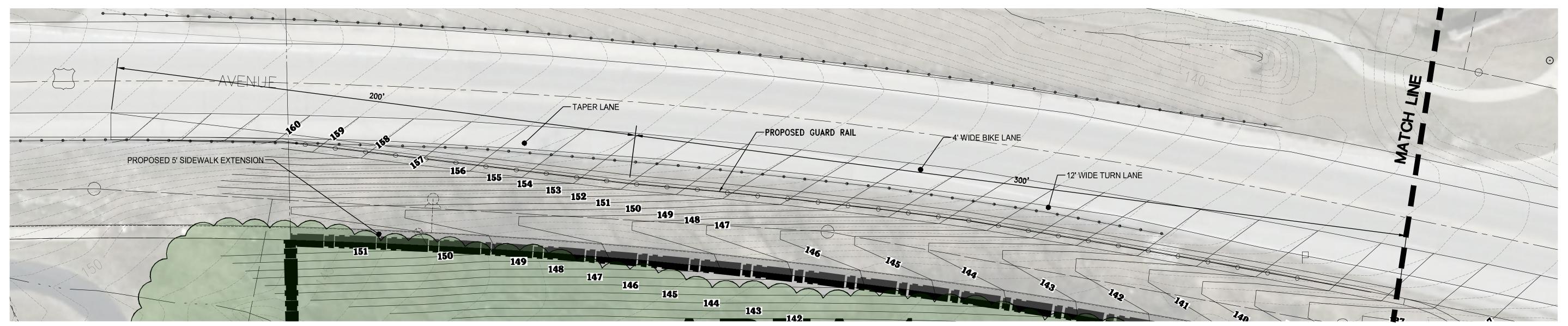
PROPOSED SITE **PLAN**

SHEET

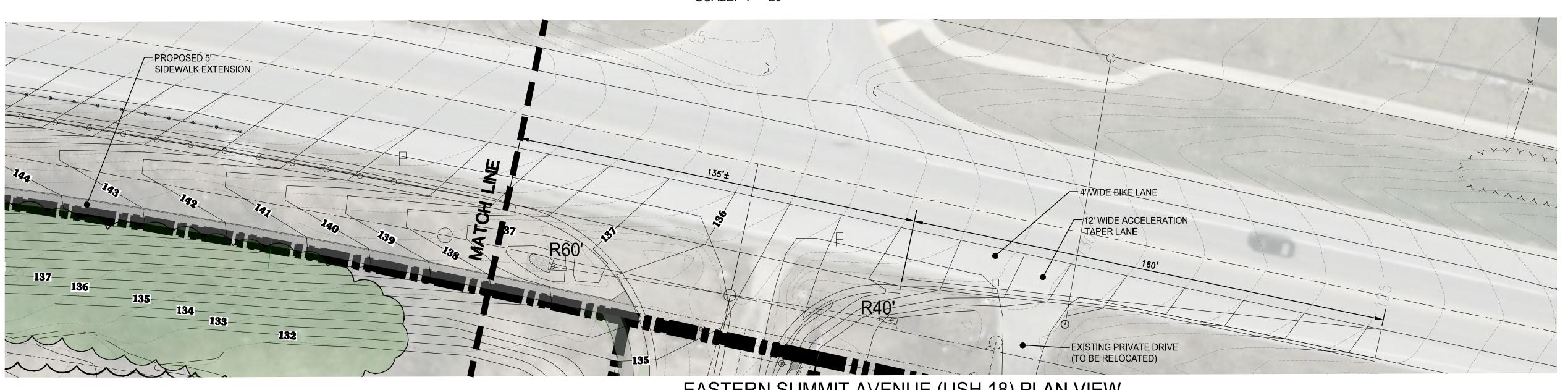
C1.1



SCALE: 1" = 30'



WESTERN SUMMIT AVENUE (USH 18) PLAN VIEW SCALE: 1" = 20'



EASTERN SUMMIT AVENUE (USH 18) PLAN VIEW

SCALE: 1" = 20'





FAX: (262) 790-1481 EMAIL: jpudelko@trioeng.com

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REVISION HISTORY		
DATE	DESCRIPTION	
08/09/19	CITY SUBMITTALS	

DATE: AUGUST 9, 2019

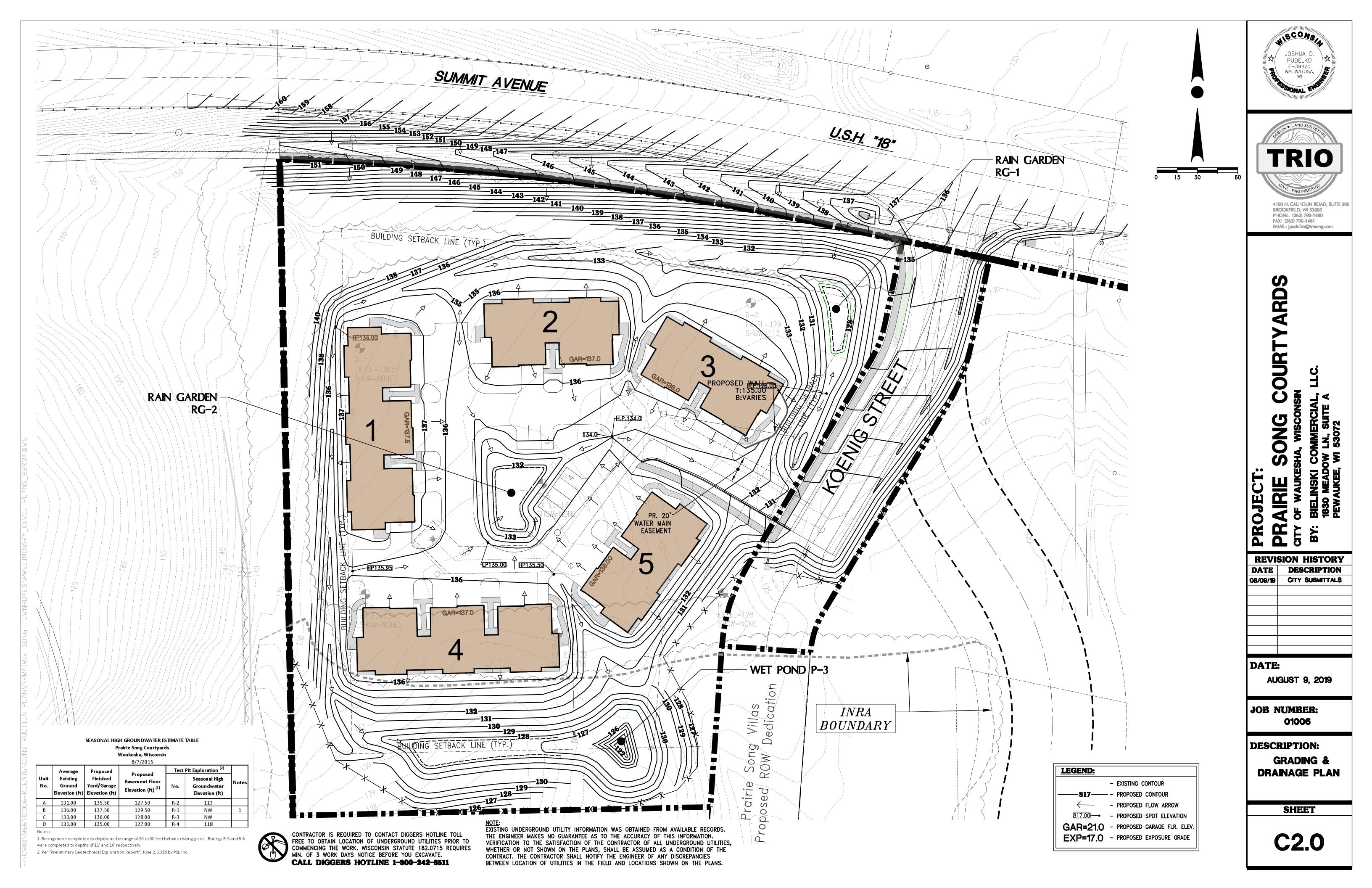
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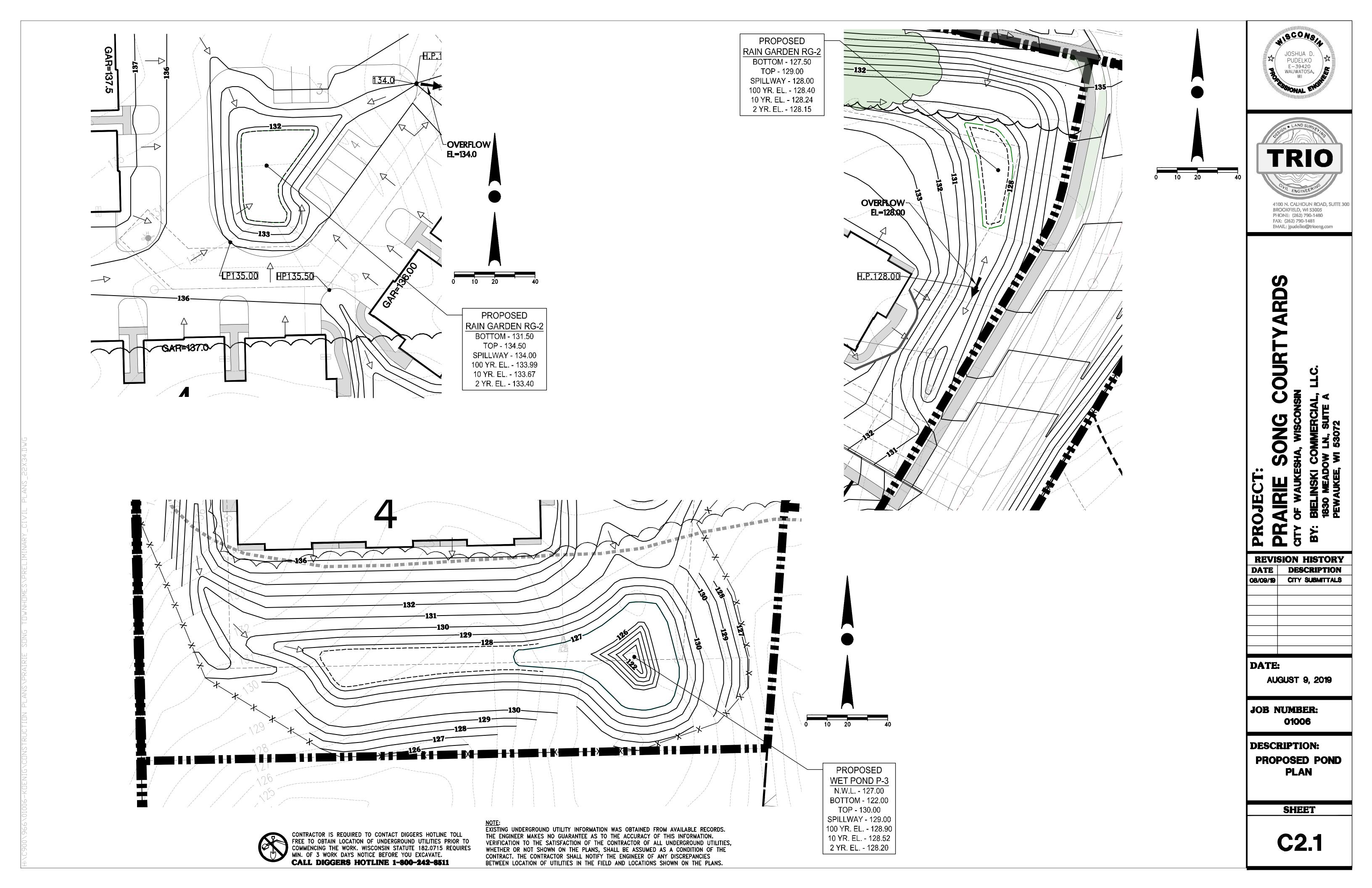
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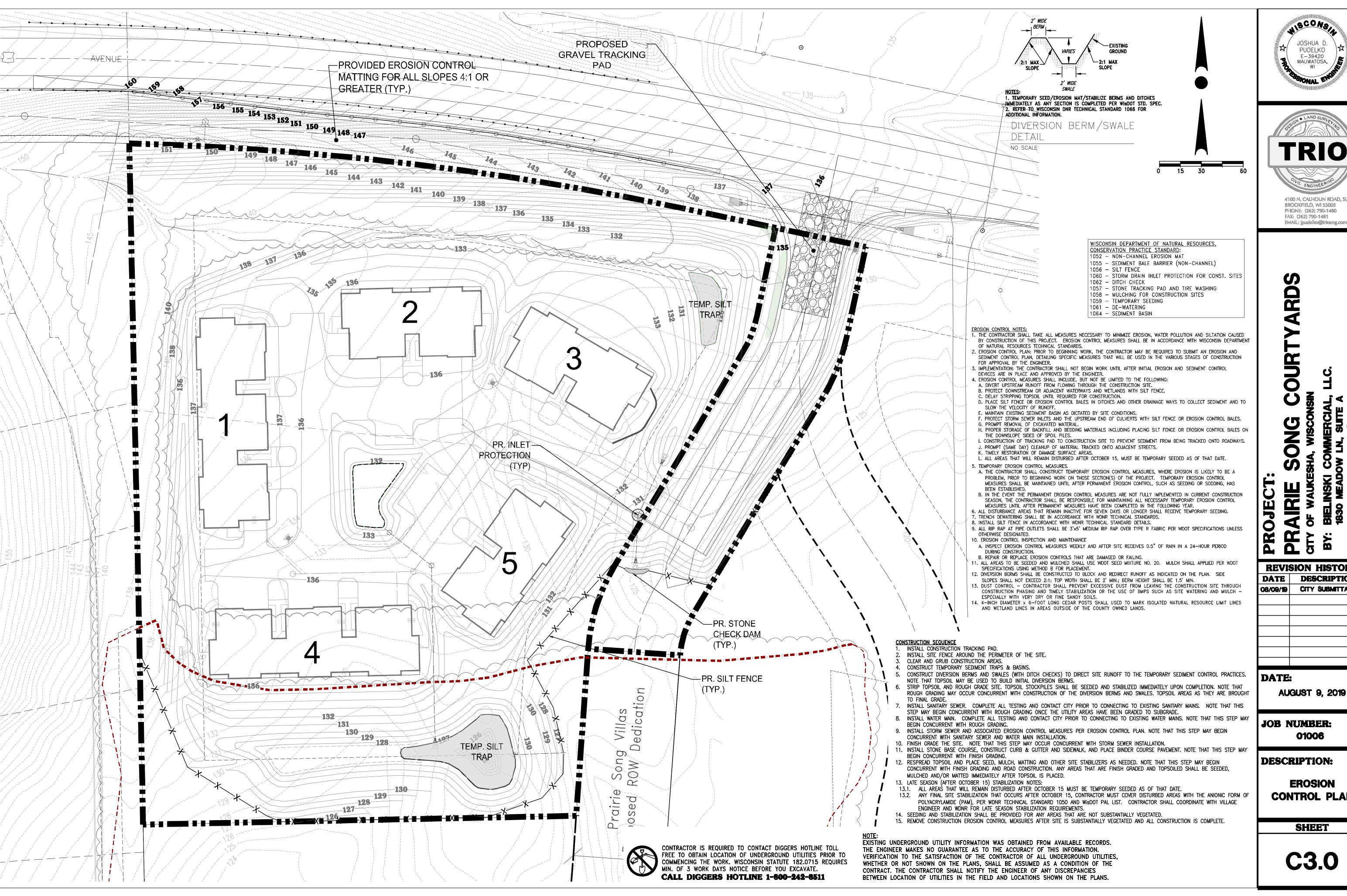
DESCRIPTION: **PROPOSED** SUMMIT AVE., **IMPROVEMENT PLAN**

SHEET

C1.1











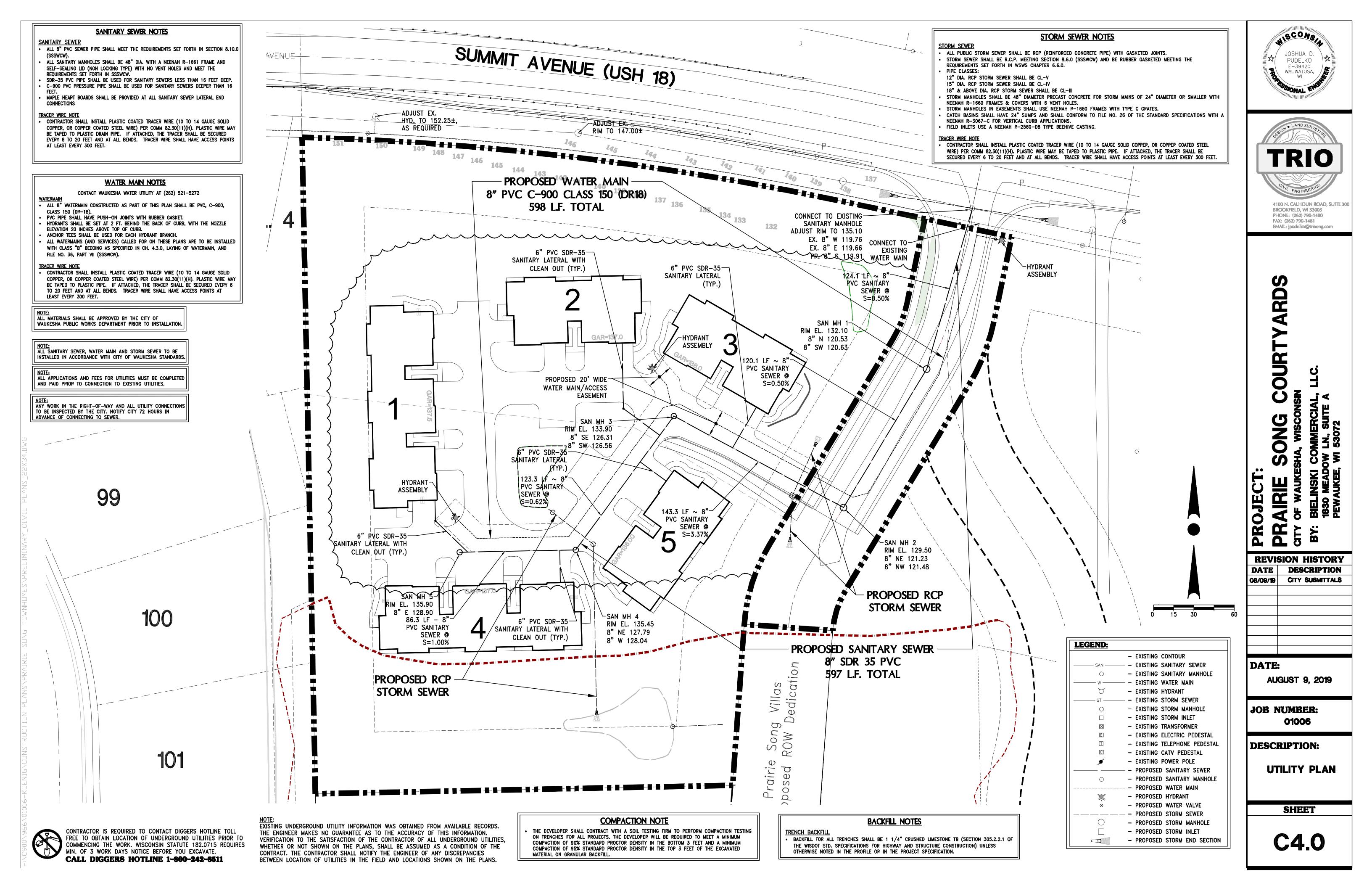
4100 N. CALHOUN ROAD, SUITE 300 BROOKFIELD, WI 53005

PHONE: (262) 790-1480 FAX: (262) 790-1481 EMAIL: jpudelko@trioeng.com

REVISION HISTORY	
DATE	DESCRIPTION
08/09/19	CITY SUBMITTALS

DESCRIPTION:

EROSION CONTROL PLAN



COMPLIANT DOCUMENTATION:

- THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED.
- -STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, 6TH
- EDITION (SSSWCW) -THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
- WDNR STORMWATER RUNOFF TECHNICAL STANDARDS.
- -WISDOT PAL APPROVED EROSION CONTROL MEASURES LIST, LATEST EDITION. -CITY OF WAUKESHA DEVELOPMENT STANDARDS, LATEST EDITION.

CONTRACTOR RESPONSIBILITY:

-EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD SURVEY. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

-THE LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.

-THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR(S) TO INITIATE, ALL MANHOLES-MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS WORK. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR AN INSIDE DIA. ALL REQUIRED PERMITS, UNLESS OTHERWISE SPECIFIED.

-THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AS CONSTRUCTION ACTIVITIES ARE COMPLETED TO PROVIDE CONSTRUCTION OVERSIGHT AND INSPECTION IN ACCORDANCE WITH THE COSTRUCTION INSPECTION PLAN.

-THE OWNER WILL PROVIDE ALL SURVEYING AND CONSTRUCTION STAKING FOR THIS CONTRACT. THE CONTRACTOR SHALL EXERCISE CARE AND DILIGENCE IN PROTECTING THE SAME. ANY EXPENSE INCURRED FOR ADDITIONAL RESTAKING CAUSED BY CONTRACTOR'S NEGLECT MAY BE CHARGED TO THE CONTRACTOR AND DEDUCTED FROM THE SUMS DUE HIM UNDER THIS CONTRACT.

—ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON—WORKING HOURS.

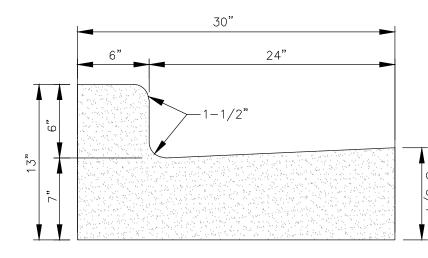
-CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE FOR DEWATERING AND REMOVAL OF ALL SEDIMENT PER CITY, COUNTY AND WDNR REQUIREMENTS PER TECHNICAL STANDARD 1061.

TRAFFIC CONTROL:

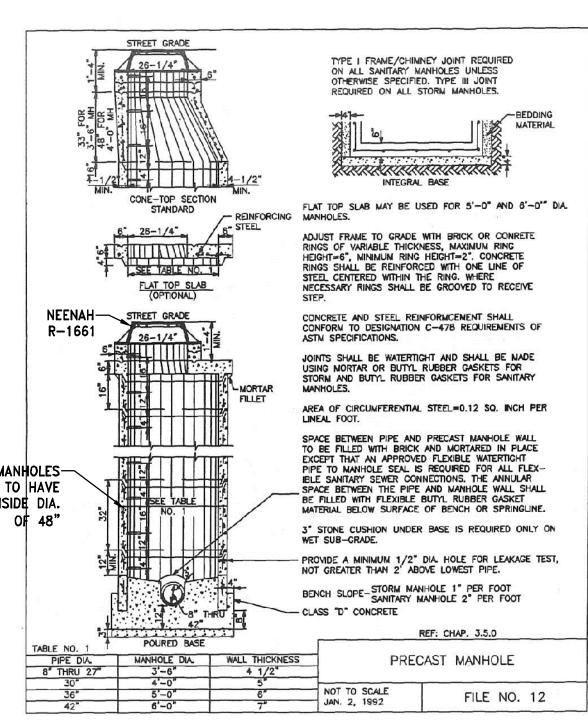
-PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SHALL BE LIMITED TO THE GRAVEL ENTRANCE TO THE

CONSTRUCTION NOTES:

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, STATE OF WISCONSIN, LATEST EDITION, UNLESS OTHERWISE CALLED FOR ON THE PLANS, SPECIFICATIONS OR SPECIAL PROVISIONS.
- 2. ALL EROSION CONTROL MEASURES SPECIFIED ON THIS PLAN SHALL MEET THE DESIGN CRITERIA, STANDARDS AND SPECIFICATIONS AS SET FORTH IN THE DEPARTMENT OF NATURAL RESOURCES WISCONSIN BEST MANAGEMENT PRACTICE HANDBOOK AND TECHNICAL STANDARDS.
- 3. ALL EROSION CONTROL DEVICES (I.E., SILT FENCE, SILT SOCK, GRAVEL ENTRANCE, SILTATION BASIN, ETC.), SHALL BE INSTALLED PRIOR TO COMMENCING ANY GRADING OR UTILITY CONSTRUCTION. GRADING ASSOCIATED WITH INSTALLATION OF EROSION OR SEDIMENTARY PRACTICES MAY OCCUR CONCURRENTLY WITH INSTALLATION OF PRACTICES.
- 4. ALL ACTIVITIES ON THE SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME. REFER TO THE CONSTRUCTION SEQUENCING PLAN FOR ADDITIONAL INFORMATION.
- 5. THE OWNER IS RESPONSIBLE FOR OBTAINING A GRADING AND/OR EROSION CONTROL PERMIT (OR ANY OTHER APPLICABLE PERMITS) PRIOR TO CONSTRUCTION.
- 6. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE, ALL TOWN UTILITY DEPARTMENTS, AND GOVERNMENT UNITS WHOSE PROPERTY MAY BE AFFECTED BY THE CONTRACTOR'S OPERATIONS AT LEAST THREE (3) DAYS BEFORE BREAKING GROUND. DIGGERS HOTLINE NUMBER IS 1-800-242-8511.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT AND PUBLIC ROADWAYS DURING CONSTRUCTION PER THE REQUIREMENTS SET FORTH BY THE LOCAL AND COUNTY AGENCIES, STREETS SHALL BE KEPT FREE OF SILT OR DIRT TRACKED FROM AREAS UNDER CONSTRUCTION BY SWEEPING OR OTHER APPROPRIATE MEASURES. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING OR OTHER APPROPRIATE METHODS.
- 8. INLETS SHALL BE PROTECTED WITH AN EROSION BARRIER MEETING WDNR TECHNICAL STANDARD 1060 UNTIL THE AREA HAS BEEN STABILIZED. FREQUENT INSPECTION AND TIMELY MAINTENANCE IS REQUIRED.
- 9. UPON COMPLETION OF THE WORK AS SPECIFIED, RESPREAD A MINIMUM OF FOUR (4") INCHES OF SALVAGED TOPSOIL OVER ALL DISTURBED AREAS AND PROVIDE SEED, FERTILIZER AND MULCH PER THE STANDARD SPECIFICATIONS.
- 10. ALL DISTURBED AREAS SHALL BE REVEGATATED WITHIN SEVEN DAYS AFTER BEING DISTURBED USING THE SEED MIX SPECIFIED ON THE PLANS.
- 11. ALL EROSION CONTROL DEVICES SHALL BE ROUTINELY INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND REPAIR BMP'S AS NEEDED.
- 12. REFER TO EROSION CONTROL PLAN FOR SITE EROSION CONTROL ELEMENTS, REQUIREMENTS.

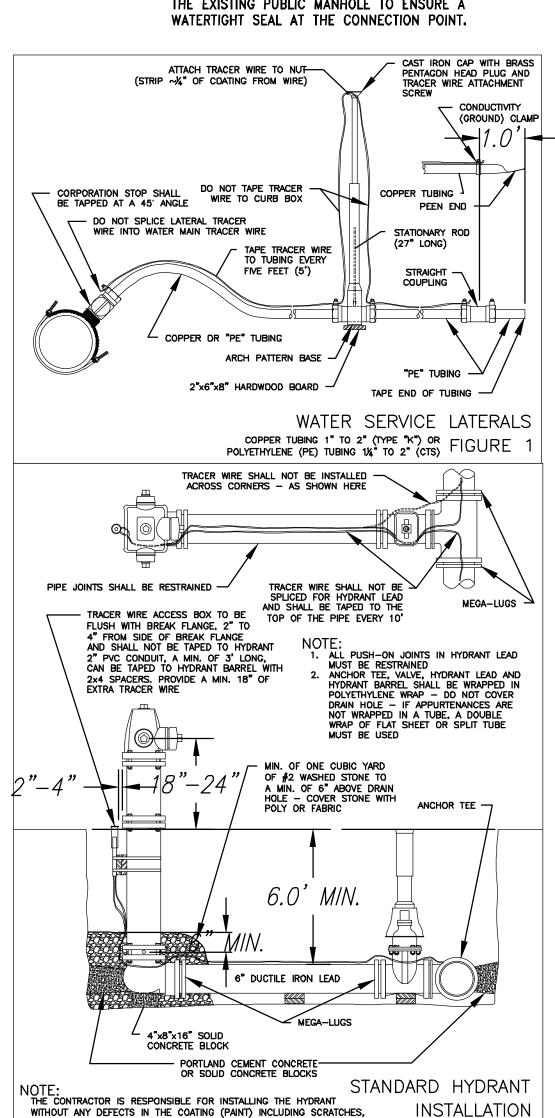


VERT. FACE CURB & GUTTER NO SCALE



SANITARY MANHOLE DETAL

NOTE: POLYPROPYLENE CHIMNEY RINGS SHALL BE USED. A RUBBER BOOT SHALL BE USED IN THE CONNECTION TO THE EXISTING PUBLIC MANHOLE TO ENSURE A



CHIPS OR RUST. ANY DEFECTS FOUND IN THE COATING (PAINT). THE

CONTRACTOR SHALL REPAINT THE HYDRANT(S) PER THE WAUKESHA WATER

FIGURE 2

-INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH FLAP POCKET AND WIDTH TO MATCH. ROD FOR REMOVAL FOR INLETS WITH CAST-USE WOOD 2x4. EXTEND 10" BEYOND GRATE WIDTH ON BOTH FRONT, BACK, AND-SIDES, LENGTH VARIES BOTTOM TO BE SECURE TO GRATE MADE FROM SINGLE PIECE OF FABRIC. MINIMUM DOUBLE-STITCHED SEAMS '-4"x6" 0VAI ALL AROUND SIDE HOLE SHALL BE PIECES AND ON FLAP POCKETS. ALL FOUR SIDE INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY

INLET TYPE WITH OR WITHOUT

<u>GENERAL NOTES</u>

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED

. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR

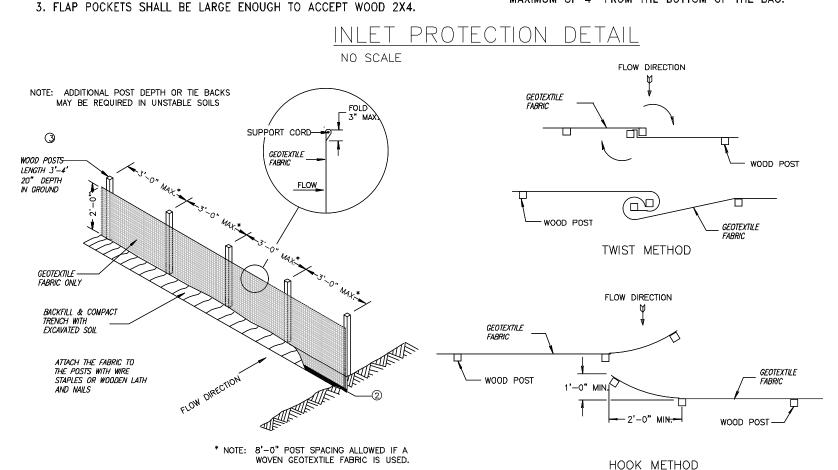
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX). AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

A CURB BOX AS PER NOTE 2) INSTALLATION NOTES

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3"

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



TEBACK BETWEEN FENCE FLOW DIRECTION (2) FLOW DIRECTION -ANCHOR STAKE MIN. 18" LONG SILT FENCE TIE BACK

NO SCALE

SILT FENCE

JOINING TWO LENGTHS OF SILT FENCE

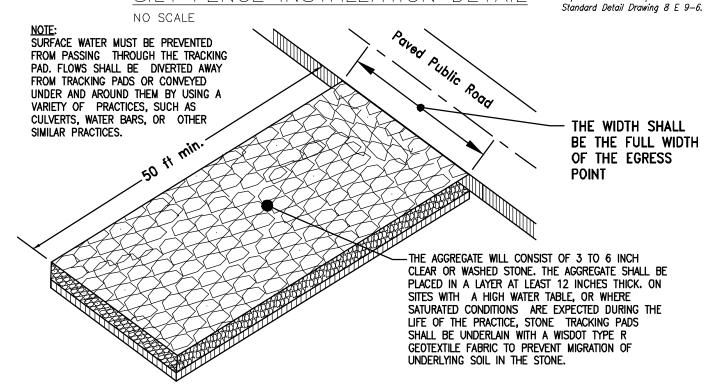
GENERAL NOTES

1 HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT ② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

3 WOOD POSTS SHALL BE A MINIMUM SIZE OF 1?" X 1?" OF OAK OR HICKORY. (4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

(5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING

LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR TRENCH DETAIL ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE (WHEN ADDITIONAL SUPPORT REQUIRED) This drawing based on Wisconsin SILT FENCE INSTALLATION DETAIL Department of Transportation



CONSTRUCTION ENTRANCE DETAIL

TEMPORARY DEWATERING GEOTEXTILE BAG

- IF DEWATERING IS REQUIRED, A GEOTEXTILE DEWATERING BAG MEETING THE SPECIFICATIONS IN THE TABLE TO THE RIGHT SHALL
- BE UTILIZED AS STATED ON THE EROSION CONTROL PLAN. REFER TO WDNR TECHNICAL STANDARDS 1061 AND MANUFACTURERS REQUIREMENTS FOR INSTALLATION AND MAINTENANCE REQUIREMENTS.
- CONTRACTOR MAY INSTALL HAY BALES AROUND DEWATERING BAG

OR FUNCTIONAL EQUIVALENT TO MEET TECHNICAL STANDARD

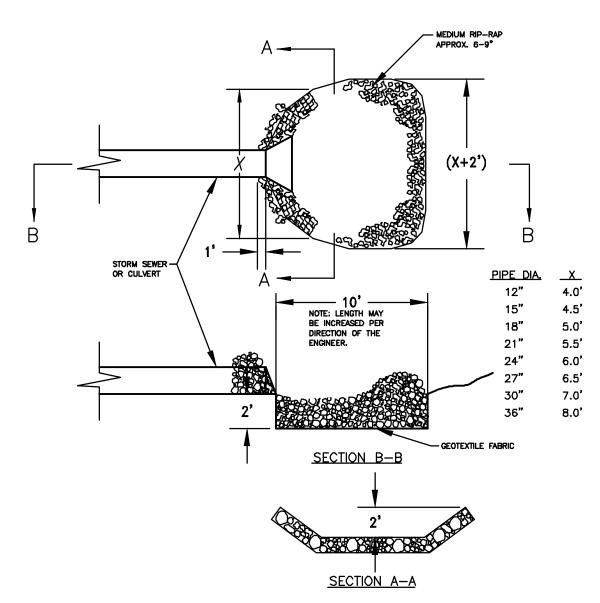
FOR STABILIZATION AS DICTATED BY SITE CONDITIONS. MAX FLOW RATE SHALL NOT EXCEED 70GPM GEOTEXTILE BAG SHALL BE LOCATED ON UNDISTURBED GROUND WITH ESTABLISHED VEGETATIVE COVER, DISCHARGES OF TREATED

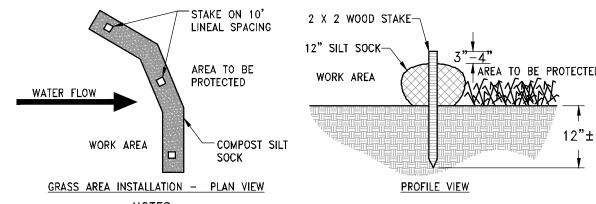
WATER FROM THE GEOTEXTILE FILTER BAG SHALL NOT FLOW OVER

UNSTABILIZED GROUND.

CONTRACTOR MAY USE THRACE-LINQ, INC 275EX GEOTEXTILE BAG

Test Method Type I Property Value ASTM D-4751 0.212 mm Maximum Apparent Opening Sizes Grab Tensile ASTM D-4632 200 lbs. Mullen Burst ASTM D-3786 350 psi Permeability ASTM D-4491 0.28 cm/sec Nominal 8 oz Representative Weight

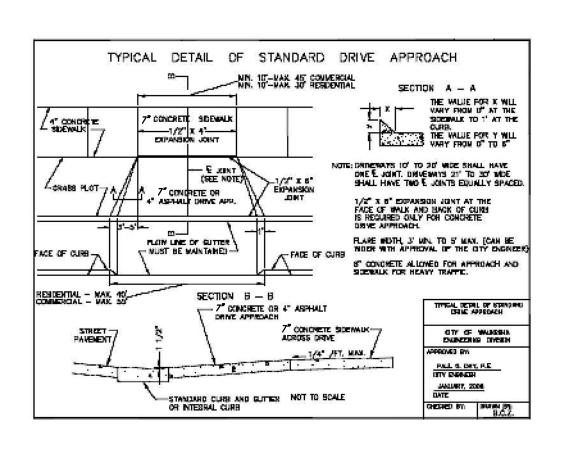




ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS

REFER TO MANUFACTURERS AND/OR SUPPLIERS. SPECIFICATIONS FOR INSTALLATION RECOMMENDATIONS.

ACTUAL LOCATION MAY BE FIELD ADJUSTED TO MINIMIZE DISTURBANCE TO EXISTING VEGETATION.



SCONS PUDELKO E-39420 WAUWATOSA,



4100 N. CALHOUN ROAD, SUITE 300 BROOKFIELD, WI 53005 PHONE: (262) 790-1480 FAX: (262) 790-1481 EMAIL: jpudelko@trioeng.com

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REVISION HISTORY				
DATE	DESCRIPTION			
08/09/19	CITY SUBMITTALS			

DATE: **AUGUST 9, 2019**

JOB NUMBER: 01006

DESCRIPTION: CONSTRUCTION **DETAILS**

SHEET

C5.0

THERETO.

- 1.THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED:
- a. WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) STORM WATER TECHNICAL STANDARDS
- b. WISCONSIN EROSION CONTROL PRODUCT ACCEPTABILITY LIST
- c.STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (SSSWCW) d. WISCONSIN ADMINISTRATIVE CODE, SECTIONS SPS 382-387
- e.WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
- f. FEDERAL HIGHWAY ADMINISTRATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- q.CITY OF WAUKESHA DEVELOPMENT STANDARDS 2.THE OWNER, ENGINEER AND MUNICIPALITY SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION ACTIVITIES.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE WITH THIS PLAN.
- 4.EXISTING UTILITY INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON BEST AVAILABLE PUBLIC RECORDS, AS-BUILT DRAWINGS, AND FIELD OBSERVATIONS. NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR ACCURACY OR COMPLETENESS. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND NATURE OF EXISTING UTILITIES, AS MAY BE NECESSARY TO AVOID DAMAGE
- 5. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL PROPOSED UTILITY CONNECTIONS AND CROSSINGS PRIOR TO PROCEEDING WITH ANY WORK. ANY CONFLICTS OR DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED. COST OF REPLACEMENT OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE THE SOLE
- RESPONSIBILITY OF THE CONTRACTOR. 6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT IS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF
- THE GEOTECHNICAL ENGINEER. 7.THE CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF THE BENCHMARKS AND HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES IN EITHER
- VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH ANY WORK. 8.SURVEY BENCHMARKS AND CONTROL POINTS SHALL BE MAINTAINED AND PROTECTED FROM DISTURBANCE
- 9.PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED AT ALL TIMES. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 10. ANY ADJACENT PROPERTIES OR ROAD RIGHT—OF—WAYS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED. 11. PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE
- PROJECT SITE SHALL BE LIMITED TO THE GRAVEL CONSTRUCTION ENTRANCE. 12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND
- SUPERVISE ALL SAFETY REQUIREMENTS. PRECAUTIONS. AND PROGRAMS IN CONNECTION WITH THE WORK. 13. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS AND FOR ABIDING BY ALL PERMIT
- REQUIREMENTS AND RESTRICTIONS. 14. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.

- 1. WORK SHALL CONSIST OF DEMOLITION, ABANDONMENT, AND REMOVAL OF EXISTING FOUNDATIONS, WALLS, SLABS, FENCES, PIPING, PAVEMENTS, AND OTHER MANMADE ITEMS INTERFERING WITH NEW CONSTRUCTION. WORK SHALL ALSO CONSIST OF CLEARING AND GRUBBING OF TREES, SHRUBS, VEGETATION, ROOTS, STUMPS, RUBBISH, AND OTHER PERISHABLE MATTER INTERFERING WITH NEW CONSTRUCTION.
- 2.CONTACT DIGGERS HOTLINE AT 800-242-8511 TO NOTIFY UTILITY PROVIDERS AND REQUEST FIELD LOCATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES.
- 3.INSTALL PERIMETER FENCING AND TEMPORARY EROSION CONTROL PRACTICES AS INDICATED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY.
- 4.CLEARLY IDENTIFY ALL VEGETATION TO BE PRESERVED AND/OR RELOCATED PRIOR TO CLEARING AND GRUBBING. 5.PROTECT EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY DAMAGED IMPROVEMENTS SHALL BE
- RESTORED TO ORIGINAL CONDITION, OR AS OTHERWISE ACCEPTABLE TO THE OWNER. 6.REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO CONSTRUCT
- PROPOSED IMPROVEMENTS.
- 7. SAWCUT ALL PAVEMENT TO BE REMOVED IN STRAIGHT LINES TO FULL DEPTH.
- 8.DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS. BREAK UP CONCRETE SLABS THAT ARE 2 FEET OR MORE BELOW PROPOSED SUBGRADE TO PERMIT DRAINAGE. 9.DISCONNECT AND SEAL/CAP EXISTING UTILITIES TO BE REMOVED, RELOCATED, OR ABANDONED IN ACCORDANCE WITH
- REQUIREMENTS OF UTILITY PROVIDERS. 10. DO NOT INTERRUPT UTILITY SERVICE TO EXISTING FACILITIES UNLESS PERMITTED BY THE OWNER
- 11. REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE.

EROSION CONTROL

- 1.WORK SHALL CONSIST OF INSTALLATION OF TEMPORARY AND PERMANENT PRACTICES FOR SEDIMENTATION CONTROL, EROSION CONTROL, SLOPE PROTECTION, AND REMOVAL OF PRACTICES UPON FINAL SITE STABILIZATION.
- 2.INSTALLATION AND MAINTENANCE OF PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WDNR TECHNICAL STANDARD, OR THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK IF A TECHNICAL STANDARD IS NOT AVAILABLE.
- 3.ALL PRACTICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY. EARTHWORK ASSOCIATED WITH INSTALLATION OF PRACTICES MAY OCCUR CONCURRENTLY.
- 4.ALL PRACTICES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH PERMIT REQUIREMENTS.
- 5.ALL PRACTICES SHALL BE ROUTINELY INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. THE CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND CONDUCT REPAIRS AS
- 6.ALL DISTURBED AREAS SHALL DRAIN TO A CONTROL PRACTICE AT ALL TIMES DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING UPON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL ADDITIONAL CONTROL PRACTICES IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT SITE. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL PRACTICES NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
- 7.ALL DISTURBED GROUND LEFT INACTIVE FOR 7 DAYS SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE AND MULCH. THE TEMPORARY SEED MIXTURE SHALL BE IN ACCORDANCE WITH SECTION 630 OF WISDOT STANDARD SPECIFICATIONS. WINTER WHEAT OR RYE SHALL BE USED FOR TEMPORARY SEED AFTER SEPTEMBER 1.
- 8.DISTURBED AREAS THAT CAN NOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM).
- 9.ALL ACTIVITIES ON THE PROJECT SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME.
- 10. DUST GENERATED BY CONSTRUCTION RELATED ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING, OR OTHER APPROPRIATE MEASURES.
- 11. THE CONTRACTOR SHALL BE PREPARED FOR DEWATERING CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED PRIOR TO DISCHARGE FROM THE PROJECT SITE.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT SITE AND PUBLIC ROADS DURING CONSTRUCTION. PUBLIC ROADS SHALL BE KEPT FREE OF SEDIMENT TRACKED FROM AREAS UNDER CONSTRUCTION BY DAILY SWEEPING OR OTHER APPROPRIATE MEASURES.

- 1.WORK SHALL CONSIST OF STRIPPING AND STORAGE OF TOPSOIL, EXCAVATION, EMBANKMENT, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE LAND BALANCE, COMPACTION, FINISH GRADING, SUBGRADE PREPARATION, AND REPLACEMENT OF
- 2.ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND THESE REQUIREMENTS. THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
- 3. SATISFACTORY MATERIAL SHALL INCLUDE SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM AS ACCORDING TO ASTM D2487. IT SHALL BE FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES, FROZEN MATERIALS, VEGETATION, DEBRIS, AND ANY OTHER DELETERIOUS MATERIAL.
- 4.UNSATISFACTORY MATERIAL SHALL INCLUDE SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT AS ACCORDING TO ASTM D2487. IT SHALL ALSO INCLUDE FILL MATERIAL NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
- 5.ENGINEERED FILL MATERIAL SHALL INCLUDE A MIXTURE OF NATURAL OR CRUSHED STONE, GRAVEL, AND SAND AS ACCORDING TO ASTM D2940, WITH AT LEAST 90 PERCENT PASSING A 37.5-MM SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE. IT SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES. CLAY CONTENT SHALL HAVE A LIQUID LIMIT OF LESS THAN 45 AND A PLASTICITY INDEX BETWEEN 11 AND 20.

- 6.EXCAVATE TO SUBGRADE REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. EXCAVATED MATERIAL MAY INCLUDE ROCK AND UNCLASSIFIED OBSTRUCTIONS, WHICH IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE WORK.
- 7.EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND BUILDING PAD AREAS, ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- 8.EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE REMOVED TO A MINIMUM OF 2 FEET BELOW PROPOSED SUBGRADE WITHIN GREENSPACE AND PAVEMENT AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
- 9.FILL MATERIAL SHALL BE WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT, PLACED IN MAXIMUM LIFTS OF 8 INCHES, AND COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR
- 10. AREAS SHALL BE GRADED TO WITHIN 1 INCH, MORE OR LESS, OF PROPOSED SUBGRADE. DEVIATIONS SHALL NOT BE CONSISTENT IN ONE DIRECTION.
- 11. DISKING, HARROWING, AND AERATION TECHNIQUES SHALL BE USED TO DRY SUBGRADE PRIOR TO PROOF ROLLING. 12. IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER, PROOF ROLL SUBGRADE BELOW BUILDING PAD AND PAVEMENT AREAS DURING DRY WEATHER WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK WHERE COHESIZE SOILS ARE PREDOMINANT, AND WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PREDOMINANT. SUBGRADE WHICH IS OBSERVED TO RUT OR DEFLECT EXCESSIVELY SHALL BE UNDERCUT IN ACCORDANCE WITH
- RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. DO NOT PROOF ROLL WET OR SATURATED SUBGRADE. 13. THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENETERING EXCAVATIONS, PONDING ON PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
- 14. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ALL EARTHWORK COMPUTATIONS AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.

- 1.WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE SANITARY SEWERAGE SYSTEM AND ALL APPURTENANCES. 2.ALL PUBLIC SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- 3.ALL PRIVATE SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- 4.POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 FOR DEPTHS LESS THAN 18 FEET, AND SHALL BE SDR 18 CONFORMING TO AWWA C900 FOR DEPTHS GREATER THAN 18 FEET, BOTH WITH PUSH-ON RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTIONS 8.10.6 AND 8.41.4 OF SSSWCW.
- 5.MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
- ADJUSTMENTS RINGS SHALL BE HDPE RINGS SEALED WITH BUTYL. 6.TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
- 7.PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- 8.TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON ROAD PAVEMENT
- 9.ALL CONNECTIONS TO EXISTING SANITARY SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE. PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR ALL BUILDING SANITARY SERVICE PIPES, UNLESS NOTED OTHERWISE.
- 10. CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED VEHICULAR TRAFFIC AREAS. FRAMES AND COVERS SHALL BE SET FLUSH WITH SURFACE.
- 11. TRACER WIRE SHALL BE GREEN INSULATED SINGLE CONDUCTOR WIRE INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC SANITARY SEWER PIPE, PRIVATE SANITARY INTERCEPTOR PIPE, AND BUILDING SANITARY SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 10 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- 12. AFTER INSTALLATION OF SANITARY SEWERAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

- 1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE WATER DISTRIBUTION SYSTEM AND ALL APPURTENANCES. 2.ALL PUBLIC WATER SUPPLY WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- .ALL PRIVATE WATER SUPPLY WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS.
- 4.POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 18, CLASS 150 CONFORMING TO AWWA C900 WITH INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS IN ACCORDANCE WITH SECTION 8.20.0 OF SSSWCW.
- 5.DUCTILE IRON PIPE (DIP) SHALL BE CLASS 150 CONFORMING TO AWWA C151 WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 8.18.0 OF SSSWCW. 6.POLYETHYLENE TUBING SHALL BE SDR 9 IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO AWWA
- 7.COPPER TUBING SHALL BE TYPE "K" IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO ASTM B88. 8.BALL VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.30.0 OF SSSWCW AND CONFORM TO AWWA C800 AND ASTM
- 9.GATE VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.27.0 OF SSSWCW AND CONFORM TO AWWA C500. 10. BUTTERFLY VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.28.0 OF SSSWCW AND CONFORM TO AWWA C504. 11. VALVE BOXES SHALL BE IN ACCORDANCE WITH SECTION 8.29.0 OF SSSWCW AND CONFORM TO ASTM A48. VALVE BOXES SHALL BE SIZE DD, SCREW TYPE, 3 PIECE ASSEMBLY, WITH COVERS MARKED "WATER". ALL VALVE BOXES SHALL BE SET TO PROPOSED GRADE, TRULY VERTICAL, AND SUPPORTED BY USE OF ADAPTOR.
- 12. HYDRANTS SHALL BE IN ACCORDANCE WITH SECTION 8.26.0 OF SSSWCW AND CONFORM TO AWWA C502. PUMPER NOZZLE SHALL BE PERPENDICULAR TO AND ORIENTED TOWARDS THE PAVEMENT, HYDRANTS SHALL BE ATTACHED BY MEANS OF ANCHORING TEE AND HAVE A GROUND LINE TO CENTER DISTANCE OF 24 INCHES.
- 13. FITTINGS SHALL BE CLASS 150 IN ACCORDANCE WITH SECTION 8.22.0 OF SSSWCW, CONFORMING TO AWWA C110, AND PROVIDED WITH MECHANICAL JOINTS. 14. MECHANICAL JOINTS SHALL BE MADE WITH "COR TEN" NUTS AND BOLTS, OR CORROSION-RESISTANT EQUIVALENTS
- CONFORMING TO AWWA C111. 15. POLYETHYLENE WRAP SHALL BE IN ACCORDANCE WITH SECTION 8.21.0 OF SSSWCW AND PROVIDED FOR ALL METAL PIPES AND FITTINGS.
- 16. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH SECTION 4.3.13 OF SSSWCW AND PROVIDED FOR ALL BENDS, CAPS, PLUGS, AND TEES.
- 17. TRENCH SECTION SHALL BE IN ACCORDANCE WITH FILE NO. 36 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES. 18. PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER
- OVER PIPE SHALL BE 12 INCHES. 19. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON
- 20. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC WATER MAIN PIPE, PRIVATE WATER MAIN PIPE, AND BUILDING WATER SERVICE PIPE. TRACER WIRE SHALL BE BLUE INSULATED, SINGLE—CONDUCTOR, 10 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- 21. THE CONTRACTOR IS RESPONSIBLE FOR PRESSURE TESTING AND SAFE WATER SAMPLING. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH SECTION 4.15.0 OF SSSWCW. DISINFECTION SHALL BE IN ACCORDANCE WITH SECTION 4.16.0 OF SSSWCW AND CONFORM TO AWWA C651. WATER MAINS SHALL BE FLUSHED AND TESTED IN THE PRESENCE OF THE WATER UTILITY OPERATOR.

ROAD PAVEMENT LIMITS.

- 1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE STORM DRAINAGE SYSTEM AND ALL APPURTENANCES. 2.ALL PUBLIC STORM DRAINAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND CITY OF WAUKESHA DEVELOPMENT
- 3.ALL PRIVATE STORM DRAINAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND CITY OF WAUKESHA DEVELOPMENT STANDARDS. 4.REINFORCED CONCRETE PIPE (RCP) AND END SECTIONS SHALL BE IN ACCORDANCE WITH SECTION 8.6.0 OF SSSWCW

- AND CONFORM TO ASTM C76 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM C443. UNLESS NOTED OTHERWISE, 12-INCH DIAMETER PIPE SHALL BE CLASS V, 15-INCH DIAMETER PIPE SHALL BE CLASS IV, AND 18-INCH DIAMETER PIPE AND LARGER SHALL BE CLASS III.
- 5.CORRUGATED METAL PIPE (CMP) AND END SECTIONS SHALL BE 16 GAUGE CONFORMING TO ASTM A760. 6.HIGH-DENSITY POLYETHYLENE (HDPE) PIPE AND FITTINGS SHALL BE ADS N12 AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER.
- 7.POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 WITH PUSH-ON RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212.
- 8.MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING. 9.CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING
- 10. INLETS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C913. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING. 11. AREA DRAINS SHALL BE ADS NYLOPLAST AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND
- PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER. 12. FRAMES AND GRATES SHALL BE AS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FRAMES AND
- GRATES ARE COMPATIBLE WITH PRECAST STRUCTURES PRIOR TO ORDERING. 13. TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE
- TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES. 14. PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
- 15. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS. SLURRY BACKFILL SHALL BE USED WITHIN 5 FEET OF LISBON ROAD PAVEMENT LIMITS.
- 16. ALL CONNECTIONS TO EXISTING STORM SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE.
- 17. CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED VEHICULAR TRAFFIC AREAS. FRAMES AND COVERS SHALL BE SET FLUSH WITH SURFACE.
- 18. TRACER WIRE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 2.11.1 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC STORM SEWER PIPE, PRIVATE STORM INTERCEPTOR PIPE, AND BUILDING STORM SERVICE PIPE TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
- 19. AFTER INSTALLATION OF STORM DRAINAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

- 1. WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF
- CRUSHED STONE BASE, INSTALLATION OF CONCRETE, AND CLEANUP. 2.CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
- 3.CONCRETE SHALL BE GRADE A AIR-ENTRAINED IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- 4.AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS. 5.WATER SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C94 / C94M. 6.AIR-ENTRAINING SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C260. 7.LIQUID CURING COMPOUND SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS AND
- AASHTO M 148. 8.CURBING SHALL BE IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS 9. SIDEWALK AND PATIO SHALL BE IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
- 10. CONCRETE FORMS SHALL REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE INSTALLATION AND SHALL BE CLEANED AFTER EACH USE. CONCRETE FORMS SHALL BE COATED WITH RELEASE AGENT TO ALLOW SEPARATION WITHOUT DAMAGE TO CONCRETE.
- 11. CONSTRUCTION AND CONTRACTION JOINTS SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS. 12. ISOLATION JOINTS SHALL CONSIST OF PREFORMED JOINT FILLER STRIPS ABUTTING CURBING, INLETS, CATCH BASINS,
- MANHOLES, STRUCTURES, AND OTHER FIXED OBJECTS. 13. EDGES OF CONCRETE PAVEMENT, CURBING, SIDEWALK, PATIOS, AND JOINTS SHALL BE TOOLED IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING AFTER APPLYING SURFACE FINISHES AND ELIMNATE TOOL MARKS ON SURFACES.
- 14. FINISH, CURE, AND PROTECT CURBING IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS. 15. FINISH (LIGHT BROOM), CURE, AND PROTECT SIDEWALK AND PATIOS IN ACCORDANCE WITH SECTION 602 OF WISDOT
- STANDARD SPECIFICATIONS. 16. FINISH (ARTIFICIAL TURF DRAG), CURE, AND PROTECT VEHICULAR PAVEMENT AND PADS IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS.
- 17. MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PRIOR TO SUBSTANTIAL COMPLETION INSPECTION. 18. REMOVE AND REPLACE CONCRETE THAT IS BROKEN, DAMAGED, DEFECTIVE, OR DOES NOT COMPLY WITH THE
- REQUIREMENTS LISTED ABOVE.

ASPHALT PAVING

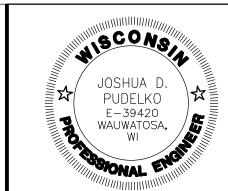
- 1.WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF HOT-MIX ASPHALT, PAVEMENT MARKING, SIGNAGE, AND CLEANUP. 2.CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS. 3.ASPHALTIC MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 455 OF WISDOT STANDARD SPECIFICATIONS. 4.AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 460 OF WISDOT STANDARD SPECIFICATIONS.
- 5.PAVEMENT MARKING PAINT SHALL BE IN ACCORDANCE WITH WISDOT APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON THIS PLAN. 6.DO NOT CONDUCT ASPHALT PAVING IF ANY OF THE FOLLOWING CONDITIONS EXIST: CRUSHED STONE BASE IS WET OR EXCESSIVELY DAMP; TEMPERATURE IS BELOW 30 DEGREES FAHRENHEIT AT TIME OF BINDER COURSE INSTALLATION; TEMPERATURE HAS BEEN BELOW 35 DEGREES FAHRENHEIT WITHIN 12 HOURS PRIOR TO TACK COAT APPLICATION;
- TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AT TIME OF SURFACE COURSE INSTALLATION. 7.COMPACT ASPHALT IN ACCORDANCE WITH SECTION 450 OF WISDOT STANDARD SPECIFICATIONS. COMPACT ASPHALT TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS 1/4-INCH FOR BINDER COURSE, AND WITHIN PLUS 1/4-INCH
- FOR SURFACE COURSE (NO MINUS). 8.APPLY TACK COAT BETWEEN ASPHALT COURSES AT A MINIMUM RATE OF 0.25 GAL/SY.
- 9.NO TRAFFIC SHALL BE ALLOWED ON ASPHALT AFTER FINAL ROLLING UNTIL IT HAS COOLED AND HARDENED. 10. FINAL ASPHALT SURFACE SHALL BE WITHIN A 1/8-INCH TOLERANCE AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED LONGITUDINALLY OR TRANSVERSELY. REMOVE AND REPLACE ALL RAISED AND DEPRESSED AREAS
- 11. APPLY PAVEMENT MARKINGS TO CLEAN AND DRY SURFACE, FREE FROM FROST, TO ENSURE PROPER BONDING. APPLY PAINT IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS TO PRODUCE MARKINGS AS INDICATED WITH UNIFORM, STRAIGHT EDGES.

RETAINING WALLS

- 1. WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT, SUPERVISION, AND DIRECTION TO CONSTRUCT RETAINING WALL SYSTEMS IN REASONABLY CLOSE CONFORMITY TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THIS PLAN. RETAINING WALLS SHOWN ON THIS PLAN ARE FOR GENERAL LOCATION AND MATERIAL REFERENCE
- 2.THE CONTRACTOR SHALL PROCURE DETAILED DESIGN CALCULATIONS AND DRAWINGS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER EXPERIENCED WITH RETAINING WALL DESIGN AND LICENSED IN THE STATE IN WHICH THE RETAINING WALLS ARE TO BE CONSTRUCTED.

DISTURB OR PLACE TEMPORARY LOADS ON THE RETAINING WALLS THAT EXCEED DESIGN LOADS.

3.THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SURROUNDING STRUCTURES AND UTILITIES ARE PROTECTED FROM THE EFFECTS OF EXCAVATION AND PROVIDING ANY NECESSARY EXCAVATION SUPPORT. 4.THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION ADJACENT TO THE RETAINING WALLS DOES NOT





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REVISION HISTORY		
DATE	DESCRIPTION	
08/09/19	CITY SUBMITTALS	

DATE: **AUGUST 9, 2019**

JOB NUMBER: 01006

DESCRIPTION: CONSTRUCTION **SPECIFICATIONS**

SHEET