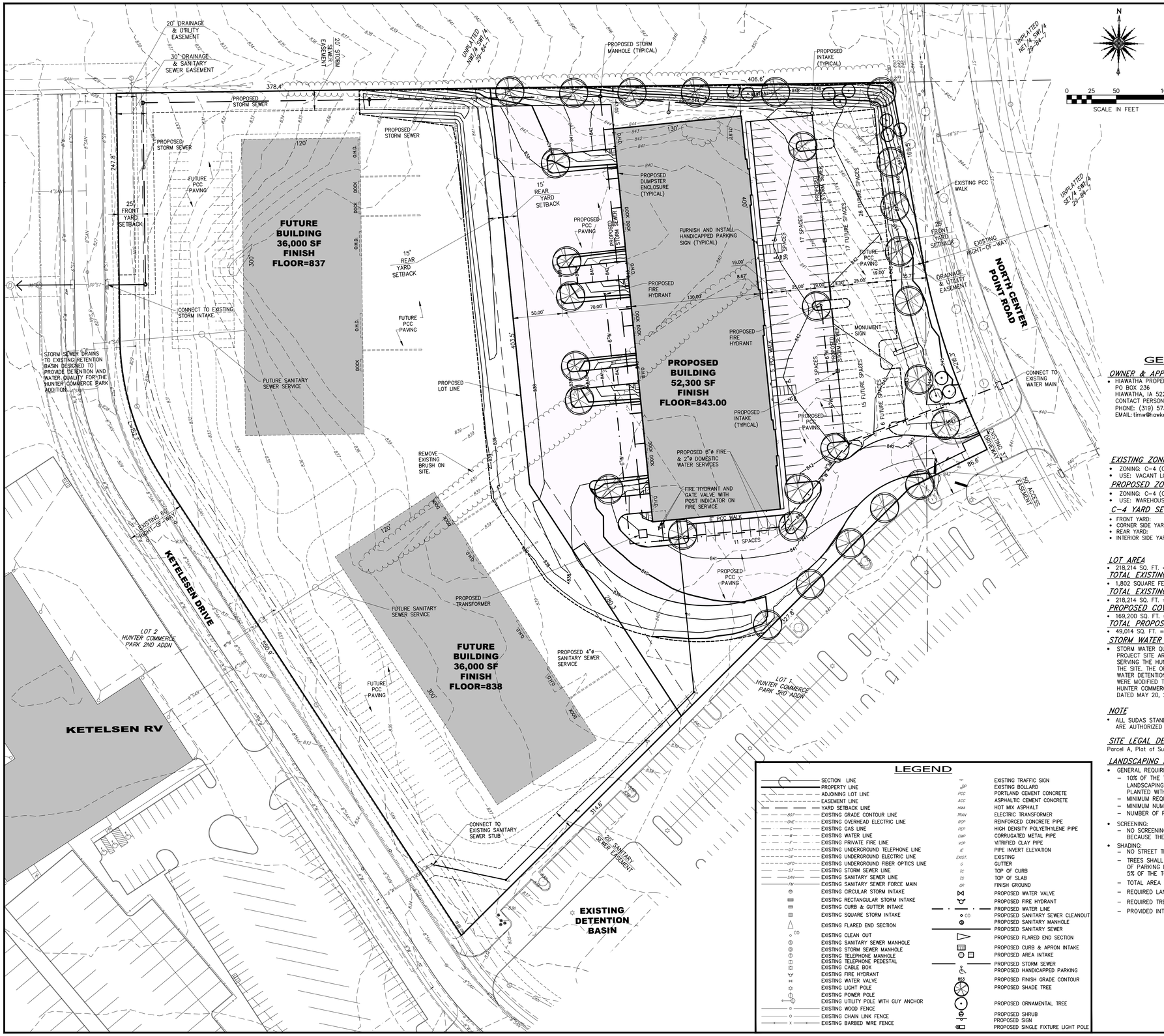

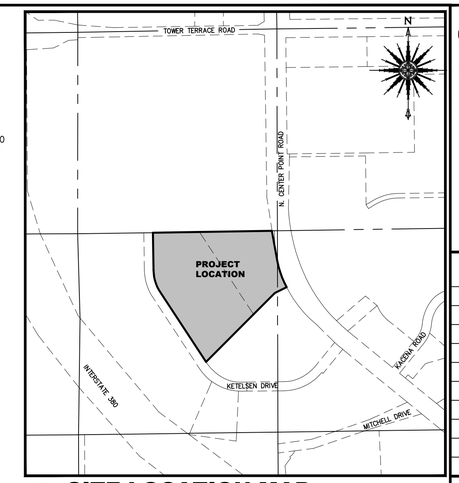

1 **SITE LOCATION MAP**
NOT TO SCALE

LEGEND

SECTION LINE	EXISTING TRAFFIC SIGN
PROPERTY LINE	EXISTING BOLLARD
ADJOINING LOT LINE	PCC PORTLAND CEMENT CONCRETE
EASEMENT LINE	ACC ASPHALTIC CEMENT CONCRETE
YARD SETBACK LINE	HMA HOT MIX ASPHALT
807 EXISTING GRADE CONTOUR LINE	TRAN ELECTRIC TRANSFORMER
OHE EXISTING OVERHEAD ELECTRIC LINE	RCP REINFORCED CONCRETE PIPE
G EXISTING GAS LINE	PEP HIGH DENSITY POLYETHYLENE PIPE
W EXISTING WATER LINE	CMP CORRUGATED METAL PIPE
F EXISTING PRIVATE FIRE LINE	VCP VITRIFIED CLAY PIPE
UT EXISTING UNDERGROUND TELEPHONE LINE	IE PIPE INVERT ELEVATION
UE EXISTING UNDERGROUND ELECTRIC LINE	EXIST. EXISTING
UFO EXISTING UNDERGROUND FIBER OPTICS LINE	G GUTTER
ST EXISTING STORM SEWER LINE	TC TOP OF CURB
SAN EXISTING SANITARY SEWER LINE	TS TOP OF SLAB
FM EXISTING SANITARY SEWER FORCE MAIN	GR FINISH GROUND
EXISTING CIRCULAR STORM INTAKE	PROPOSED WATER VALVE
EXISTING RECTANGULAR STORM INTAKE	PROPOSED FIRE HYDRANT
EXISTING CURB & GUTTER INTAKE	PROPOSED WATER LINE
EXISTING SQUARE STORM INTAKE	CO PROPOSED SANITARY SEWER CLEANOUT
	PROPOSED SANITARY MANHOLE
EXISTING FLARED END SECTION	PROPOSED SANITARY SEWER
CO EXISTING CLEAN OUT	PROPOSED FLARED END SECTION
EXISTING SANITARY SEWER MANHOLE	
EXISTING STORM SEWER MANHOLE	PROPOSED CURB & APRON INTAKE
EXISTING TELEPHONE MANHOLE	PROPOSED AREA INTAKE
EXISTING TELEPHONE PEDESTAL	PROPOSED STORM SEWER
EXISTING CABLE BOX	PROPOSED HANDICAPPED PARKING
EXISTING FIRE HYDRANT	
EXISTING WATER VALVE	853 PROPOSED FINISH GRADE CONTOUR
EXISTING LIGHT POLE	PROPOSED SHADE TREE
EXISTING POWER POLE	
EXISTING UTILITY POLE WITH GUY ANCHOR	PROPOSED ORNAMENTAL TREE
EXISTING WOOD FENCE	PROPOSED SHRUB
EXISTING CHAIN LINK FENCE	PROPOSED SIGN
EXISTING BARBED WIRE FENCE	PROPOSED SINGLE FIXTURE LIGHT POLE

GENERAL NOTES

OWNER & APPLICANT
- HIAWATHA PROPERTIES, LLC
  PO BOX 236
  HIAWATHA, IA 52233
  CONTACT PERSON: MR. TIM WILSON
  PHONE: (319) 573-2777
  EMAIL: timw@hawkeye-electric.com

PREPARED BY

CONTACT PERSON:	JED SCHNOOR, P.E.
TELEPHONE NO.:	(319) 298-8888
EMAIL:	JSCHNOOR@S-B-ENGINEERING.COM
MAILING ADDRESS:	SCHNOOR-BONIFAZI ENGINEERING & SURVEYING, LC 431 FIFTH AVENUE SW CEDAR RAPIDS, IA 52404
DATE SUBMITTED:	12/5/2019
DATE REVISED:	

EXISTING ZONING & USE
- ZONING: C-4 (CENTRAL SERVICE DISTRICT)
- USE: VACANT LOT

PROPOSED ZONING & USE
- ZONING: C-4 (CENTRAL SERVICE DISTRICT)
- USE: WAREHOUSE/OFFICE BUILDING

C-4 YARD SETBACK REQUIREMENTS
- FRONT YARD: 25 FEET
- CORNER SIDE YARD: 15 FEET
- REAR YARD: 15 FEET
- INTERIOR SIDE YARD: NONE

LOT AREA
- 218,214 SQ. FT. = 5.01 ACRES

TOTAL EXISTING COVERED AREA
- 1,802 SQUARE FEET= 0.04 ACRES (1% OF TOTAL AREA)

TOTAL EXISTING OPEN SPACE
- 218,214 SQ. FT. = 4.97 ACRES (99% OF TOTAL AREA)

PROPOSED COVERED AREA
- 169,200 SQ. FT. = 3.89 ACRES (78% OF TOTAL AREA)

TOTAL PROPOSED OPEN SPACE
- 49,014 SQ. FT. = 1.12 ACRES (22% OF TOTAL AREA)

STORM WATER DETENTION
- STORM WATER QUALITY AND DETENTION REQUIREMENTS FOR THE PROJECT SITE ARE PROVIDED IN THE TWO EXISTING DETENTION BASINS SERVING THE HUNTER COMMERCE PARK LOCATED WEST AND SOUTH OF THE SITE. THE ORIGINAL BASINS WERE BUILT IN 1999 TO PROVIDE STORM WATER DETENTION FOR THE SITE AND IN 2004 THE OULTET STRUCTURES WERE MODIFIED TO TREAT THE WATER QUALITY VOLUME. REFER TO HUNTER COMMERCE PARK STORM WATER MANAGEMENT CALCULATIONS DATED MAY 20, 2004.

NOTE
- ALL SUDAS STANDARDS APPLY UNLESS SPECIFIC DESIGN EXCEPTIONS ARE AUTHORIZED BY THE CITY OF HIAWATHA.

SITE LEGAL DESCRIPTION
Parcel A, Plat of Survey No. 2363, Hiawatha, Linn County, Iowa.

LANDSCAPING REQUIREMENTS
- GENERAL REQUIREMENTS:
  - 10% OF THE TOTAL LOT AREA SHALL BE PLACED IN APPROVED LANDSCAPING. 1/3 OF THE TOTAL LANDSCAPED AREA SHALL BE PLANTED WITH TREES. ONE TREE COVERS 200 SQ. FT.
  - MINIMUM REQUIRED LANDSCAPE AREA = 201,889 x 0.10 = 20,189 S.F.
  - MINIMUM NUMBER OF REQUIRED TREES = (20,189/3)/200 = 34 TREES
  - NUMBER OF PROPOSED TREES = 34 TREES
- SCREENING:
  - NO SCREENING IS NECESSARY ALONG THE ADJACENT PROPERTIES BECAUSE THEY ARE ZONED COMMERCIAL AND INDUSTRIAL.
- SHADING:
  - NO STREET TREES ARE REQUIRED BECAUSE THE SITE IS ZONED C-4.
  - TREES SHALL BE PROVIDED TO SHADE AND BREAK UP THE EXPANSE OF PARKING LOTS. INTERIOR LANDSCAPING SHALL BE A MINIMUM OF 5% OF THE TOTAL PARKING AREA.
  - TOTAL AREA OF PARKING = 20,8 SQ. FT.
  - REQUIRED LANDSCAPE AREA = 22,081 x 0.05 = 1,104 SQ. FT.
  - REQUIRED TREES = 1,104/200 = 6 TREES
  - PROVIDED INTERIOR PARKING LOT TREES = 6 PROPOSED TREES

REQUIRED PARKING
- 15,000 S.F. OF BUILDING AREA WILL BE OFFICE SPACE:
  CLASS 6 – 4 SPACES PER 1,000 SQ. FT.
  REQ'D PARKING = 15,000 S.F. x $\frac{4 \text{ SPACES}}{1{,}000 \text{ SQ. FT.}}$ = 60 SPACES
  REMAINING BUILDING AREA WILL BE WAREHOUSE SPACE:
  CLASS 24 – 1 SPACE PER 2 EMPLOYEES
  REQ'D PARKING = 32 EMPLOYEES x $\frac{1 \text{ SPACE}}{2 \text{ EMPLOYEES}}$ = 16 SPACES
- TOTAL PARKING SPACES REQUIRED = 76 SPACES
- TOTAL PARKING SPACES PROVIDED = 82 SPACES
- POTENTIAL FUTURE PARKING SPACES AVAILABLE = 64 SPACES

JED SCHNOOR 19241 PROFESSIONAL ENGINEER IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: Jed Schnoor
NAME: JED D. SCHNOOR
DATE: 12/5/2019
MY LICENSE RENEWAL DATE IS: DECEMBER 31, 2018
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL:
C1.1, C2.1, C2.2 C3.1, C3.2, C4.1 & C5.1

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REVISIONS

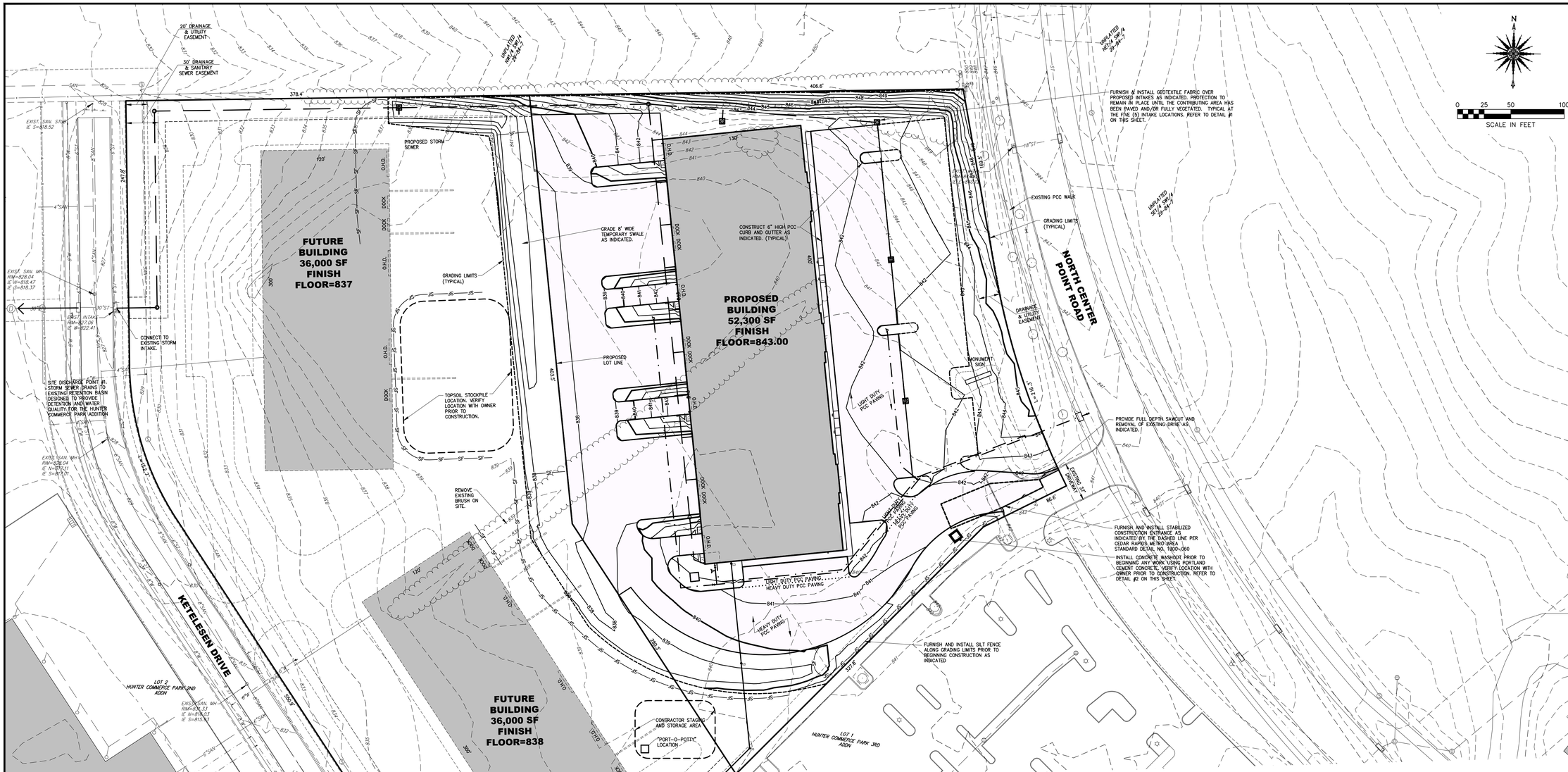
DRAWN:	JED SCHNOOR
APPROVED:	JED SCHNOOR
ISSUED FOR:	APPROVAL
DATE:	12/5/2019
PROJECT NO.:	19005

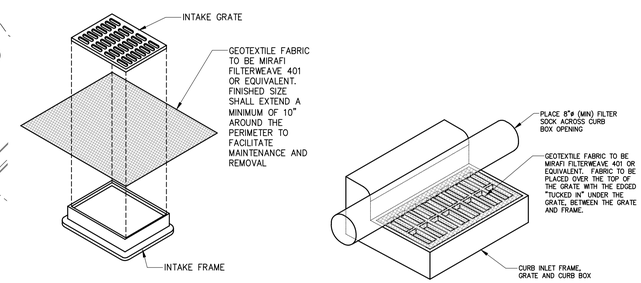
HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE

LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

SITE DEVELOPMENT PLAN

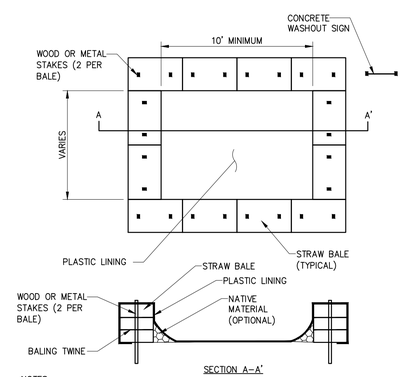
C1.1





NOTES:
1. INTAKE PROTECTION SHALL BE AT A MINIMUM INSPECTED WEEKLY.
2. SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 2-INCHES OR MORE IN DEPTH.
3. REMOVE INLET PROTECTION DEVICES ONCE THE CONTRIBUTING AREA HAS BEEN STABILIZED WITH APPROPRIATE VEGETATION OR IMPERVIOUS AREA.
4. THE CONTRACTOR MAY ELECT TO USE AN EQUIVALENT PROPRIETARY PRACTICE SUCH AS A "DANDY BAG" OR "DANDY SACK".

1 INTAKE PROTECTION
NOT TO SCALE



NOTES:
1. THE CONTRACTOR MAY ELECT TO USE AN EQUIVALENT PRACTICE SUCH AS A PRE-FABRICATED WASHOUT OR FILTER SOCK WASHOUT.

2 CONCRETE WASHOUT DETAIL
NOT TO SCALE

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HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE
LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

SITE GRADING & EROSION CONTROL PLAN

C2.1

NOTES:

1. VERIFY UTILITY SERVICE (INCLUDING SANITARY SEWER AND WATER) SIZES AND BUILDING ENTRANCE LOCATIONS WITH OWNER REPRESENTATIVE PRIOR TO BEGINNING UTILITY INSTALLATION.
2. VERIFY ROOF DRAIN BUILDING CONNECTION LOCATIONS WITH THE BUILDING PLANS PRIOR TO BEGINNING STORM SEWER INSTALLATION. CONTRACTOR SHALL FURNISH ALL NECESSARY FITTINGS AND CLEANOUT RISERS/LIDS FOR UNDERGROUND ROOF DRAIN PIPING INSTALLATION.

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HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE

LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

SITE UTILITY PLAN

C2.2

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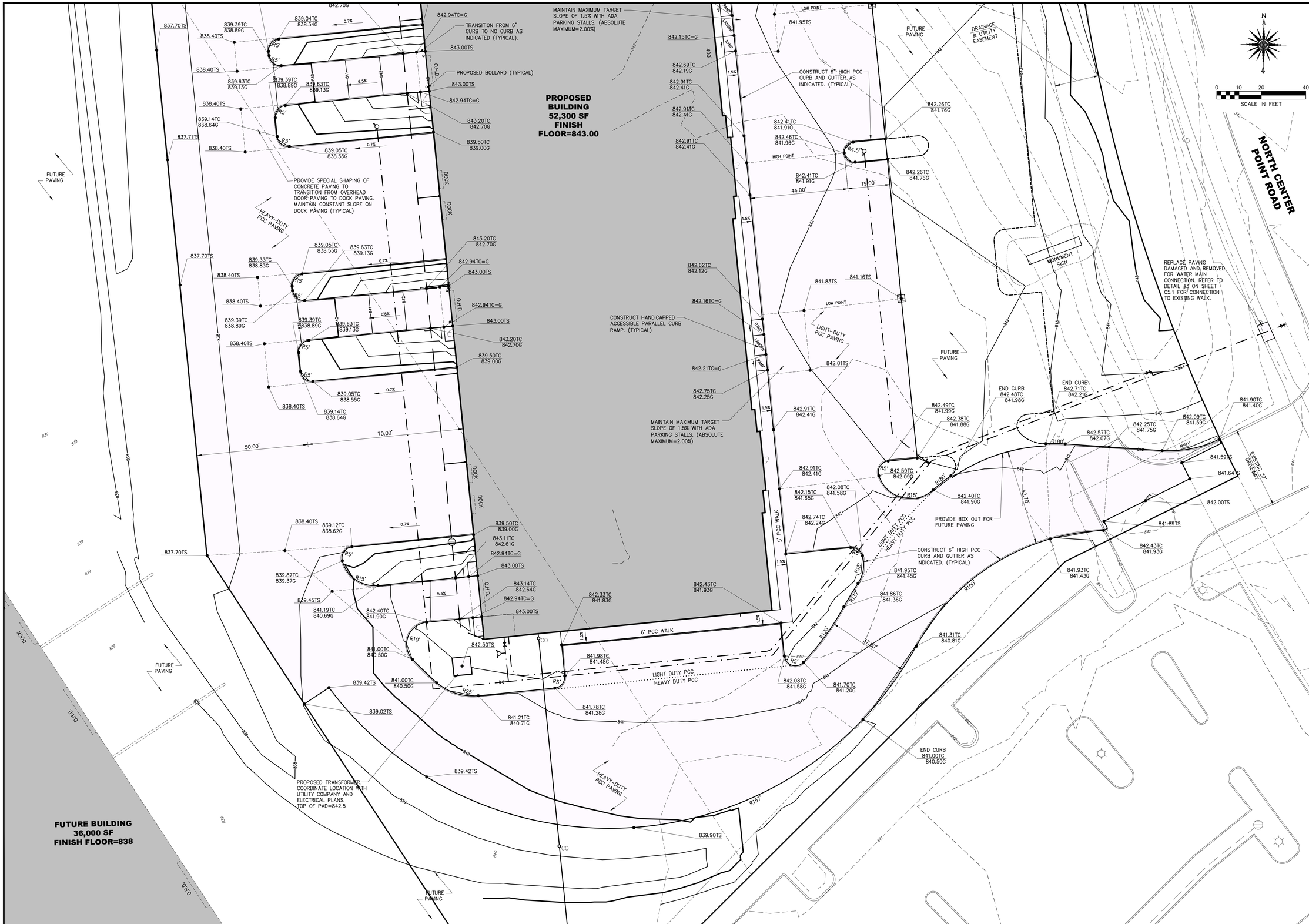
HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE

LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

SITE PAVING AND SPOT ELEVATION PLAN

C3.1



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REVISIONS

DRAWN:	APPROVAL
APPROVED:	JED SCHNOOR
ISSUED FOR:	REVIEW
DATE:	12/5/2019
PROJECT NO.:	19005

HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE

LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

SITE PAVING AND SPOT ELEVATION PLAN

C3.2

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SUDAS STANDARD SPECIFICATIONS, LATEST EDITION, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

2. THE LOCATIONS OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS PLOTTED ON THIS DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SCHNOOR-BONIFAZI ENGINEERING AND SURVEYING, LC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO SCHNOOR-BONIFAZI ENGINEERING AND SURVEYING, LC AND NOT SHOWN ON THIS DRAWING.

3. NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN CONSTRUCTION LIMITS OF THE SCHEDULE PRIOR TO EACH STAGE OF CONSTRUCTION.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION.

5. IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL 1-800-292-8989, NOT LESS THAN 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.

6. NOTIFY THE APPROPRIATE GOVERNING AUTHORITY 48 - 72 HOURS PRIOR TO BEGINNING CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY. THE CITY OF HIAWATHA SHALL BE THE PUBLIC AGENCY RESPONSIBLE FOR INSPECTION DURING CONSTRUCTION OF THE PUBLIC PORTIONS OF THE PROJECT.

7. NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.

8. PROVIDE TRAFFIC AND PEDESTRIAN CONTROL MEASURES (SIGNS, BARRICADES, FLAGGERS, ETC.) IN COMPLIANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION AND THE CITY OF CEDAR RAPIDS STANDARDS.

9. ADJUST ALL VALVES, MANHOLES, CASTINGS, GAS VENTS, ETC., TO MATCH THE NEW SURFACE. ADJUSTMENT SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDENTAL TO THE CONSTRUCTION. AT NO ADDITIONAL COST TO THE OWNER, REPAIR ANY DAMAGE TO SAID STRUCTURES AND APPURTENANCES THAT OCCUR DURING CONSTRUCTION.

10. CONTRACTOR SHALL REFER TO BUILDING PLANS FOR BUILDING DIMENSIONS, STOOP SIZES AND LOCATIONS, AND BUILDING UTILITY ENTRANCE LOCATIONS, SIZES, AND ELEVATIONS.

11. REPLACE ANY PROPERTY MONUMENTS REMOVED OR DESTROYED BY CONSTRUCTION. MONUMENTS SHALL BE SET BY A LAND SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF IOWA.

GRADING NOTES

1. STRIP EXISTING VEGETATION AND TOPSOIL WITHIN THE GRADING LIMITS AND AREAS TO RECEIVE FILL. STOCKPILE ON-SITE FOR REUSE IF SUITABLE. VERIFY EXISTING TOPSOIL THICKNESS PRIOR TO CONSTRUCTION.

2. PROOFROLL ALL FILL AREAS TO IDENTIFY SOFT OR DISTURBED AREAS IN THE SUBGRADE. ALL UNSUITABLE MATERIAL IDENTIFIED SHALL BE REMOVED AND RECOMPACTED. PROOFROLL WITH 25 TON MINIMUM GROSS VEHICLE WEIGHT.

3. REMOVE AND RECOMPACT AREAS OF SUBGRADE WHICH ARE SOFT OR UNSTABLE TO MEET SPECIFIED LIMITS FOR DENSITY AND MOISTURE CONTENT.

4. SCARIFY EXISTING SUBGRADE TO A DEPTH OF 12 INCHES AND RECOMPACT TO 95% OF STANDARD PROCTOR DENSITY (ASTM D698) PRIOR TO PLACEMENT OF FILL.

5. DO NOT PLACE, SPREAD, OR COMPACT ANY FILL MATERIAL DURING UNFAVORABLE WEATHER CONDITIONS AND DO NOT RESUME COMPACTION OPERATIONS UNTIL MOISTURE CONTENT AND DENSITY OF IN-PLACE FILL MATERIAL ARE WITHIN SPECIFIED LIMITS.

6. PLACE FILL MATERIAL IN 9" MAXIMUM LIFTS.

7. FILLS PLACED BELOW LAWN AREAS SHALL BE COMPACTED TO 90% OF MATERIALS MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D698).

8. SCARIFY SUBGRADE TO DEPTH OF 3 INCHES WHERE TOPSOIL IS SCHEDULED. SCARIFY AREAS WHERE EQUIPMENT USED FOR HAULING AND SPREADING TOPSOIL HAS CAUSED COMPACTED SUBSOIL.

9. FILL MATERIAL OBTAINED FROM OFF-SITE SOURCES SHALL BE SOIL OR SOIL AND ROCK MIXTURE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. IT SHALL CONTAIN NO ROCKS OR LUMPS OF 6 INCHES IN GREATEST DIMENSION AND NOT MORE THAN 15% OF THE ROCKS OR LUMPS SHALL BE LARGER THAN 2-1/2 INCHES IN GREATEST DIMENSION.

10. SCARIFY AND RECOMPACT THE TOP 12" OF SUBGRADE IN ALL CUT AREAS AFTER ROUGH GRADING IS COMPLETED. COMPACT THE ENTIRE PAVING AND BUILDING SUBGRADE TO 95% STANDARD PROCTOR DRY DENSITY TO WITHIN 1.0' OF FINAL SUBGRADE. THE FINAL 1.0' OF FILL TO BE COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY (ASTM D698).

11. IN AREAS TO RECEIVE ADDITIONAL FILL OVER EXISTING FILL MATERIALS. REMOVE TOP 12" OF MATERIAL AND SCARIFY AND RECOMPACT THE NEXT 9" OF RESULTING SUBGRADE. COMPACT RESULTING SUBGRADE TO 95% STANDARD PROCTOR DRY DENSITY. SUBSEQUENT FILL TO BE COMPACTED TO 95% STANDARD PROCTOR DRY DENSITY TO WITHIN 1.0' OF FINAL SUBGRADE. THE FINAL 1.0' OF FILL TO BE COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY (ASTM D698).

12. FILL PLACED WITHIN THE BUILDING AREA AND IN AREAS TO BE PAVED SHOULD CONSIST OF APPROVED MATERIALS WHICH ARE FREE OF ORGANIC MATTER AND DEBRIS. THE FILL SHOULD BE PLACED AND COMPACTED IN LIFTS OF 9 INCHES OR LESS IN LOOSE THICKNESS. FILL PLACED ABOVE SHALLOW FOOTING BASE ELEVATION FOR FLOOR SLAB SUPPORT IN THE BUILDING AREA AND MORE THAN 12 INCHES BELOW FINISHED SUBGRADE ELEVATION IN AREAS TO BE PAVED SHOULD BE COMPACTED TO AT LEAST 95% STANDARD PROCTOR DRY DENSITY (ASTM D698). THE UPPER 12 INCHES OF SUBGRADE IN AREAS TO BE PAVED AND FILL PLACED BELOW SHALLOW FOOTING BASE ELEVATION IN THE BUILDING AREA SHOULD BE COMPACTED TO AT LEAST 98% STANDARD PROCTOR DRY DENSITY (ASTM D-698). THE HIGHER DEGREE OF FILL COMPACTION BELOW FLOORINGS IN THE BUILDING AREAS SHOULD EXTEND LATERALLY BEYOND THE EXTERIOR EDGES OF PERIMETER FOOTINGS AT LEAST 8 INCHES PER FOOT BELOW FOOTING BASE ELEVATION.

13. FINISH CONTOURS SHOWN ARE TO TOP OF PAVEMENT OR TO TOP OF TOPSOIL.

SITE PREPARATION NOTES

1. PROTECT ADJACENT PROPERTY DURING DEMOLITION.

2. DEMOLITION LIMIT LINE IS THE EXISTING PROPERTY LINE UNLESS NOTED OTHERWISE.

3. MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION.

4. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACED WITHIN THE EASEMENTS, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE ENGINEER. DISPOSAL SITES MUST BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND TEMPORARY HAUL ROADS TO PREVENT THE SPREAD OF DUST. OFF-SITE DISPOSAL SHALL BE IN ACCORDANCE WITH THE APPLICABLE GOVERNMENTAL REGULATIONS.

5. KEEP ADJACENT PUBLIC STREETS FREE FROM SOIL AND DEBRIS GENERATED BY THE PROJECT. CLEAN SOIL AND DEBRIS FROM THE ADJACENT STREETS ON A DAILY BASIS.

6. DURING CONSTRUCTION, CONTROL DUST SPREADING FROM ALL WORK AND STAGING AREAS.

7. REMOVAL OR ABANDONMENT OF PUBLIC UTILITIES SHALL BE FULLY COORDINATED WITH APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.

8. ANY EXISTING FACILITIES (CURBS, PAVEMENT, UTILITIES, ETC.) THAT THE CONTRACTOR'S OPERATIONS DAMAGE SHALL BE REPAIRED BY THAT CONTRACTOR AT HIS/HER COST.

9. REMOVE ALL DESIGNATED STREETS, DRIVEWAYS, ETC. IN THEIR ENTIRETY. BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 98% STANDARD PROCTOR DRY DENSITY (ASTM D698).

10. WHERE A SECTION OF PAVEMENT, CURB AND GUTTER OR SIDEWALK IS CUT OR OTHERWISE DAMAGED BY THE CONTRACTOR, THE ENTIRE SECTION SHALL BE REMOVED AND REPLACED. PAVEMENT, CURBS, GUTTERS AND SIDEWALKS SHALL BE REMOVED A MINIMUM OF TWO FEET BEYOND THE EDGE OF THE TRENCH CUT AND TO THE NEAREST JOINT.

11. SAWCUT EDGES OF PAVEMENT FULL DEPTH PRIOR TO REMOVAL TO PREVENT DAMAGE TO ADJACENT SLABS AND FIXTURES.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXISTING CONCRETE STRUCTURES ON THE SITE AS SHOWN ON THE PLANS. THE REMOVAL INCLUDES DRIVEWAYS, CURB AND GUTTER, SIDEWALK, AND BASEMENT FOUNDATION FOOTINGS, FLOOR AND WALLS. THE REMOVAL ALSO INCLUDES STORM SEWER INTAKES AND PIPE AS SHOWN ON THE PLANS.

13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT TREES AND SHRUBS NOTED ON THE PLANS TO REMAIN IN PROJECT AREA FROM DAMAGE DUE TO CONSTRUCTION ACTIVITY. PROTECTION INCLUDES, BUT IS NOT LIMITED TO, CONSTRUCTION FENCING AROUND THE DRIP LINE OF TREES AND PROHIBITING VEHICLE TRAFFIC WITHIN THE DRIP LINE OF TREES.

14. REMOVAL AND DISPOSAL OF EXISTING TREES AND SHRUBS WITHIN CONSTRUCTION LIMITS SHALL BE INCIDENTAL TO THE GRADING PORTION OF THE PROJECT. STUMPS ARE TO BE GROUND TO TWO FEET BELOW FINISHED GRADE.

15. EXISTING FIELD TILE LINES ENCOUNTERED IN THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR IN ONE OF THE FOLLOWING WAYS:

A. CONNECT TILE TO THE NEAREST STORM SEWER.
B. DAYLIGHT TO FINISHED GROUND.
C. REPAIR TILE AND MAINTAIN SERVICE.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF A TILE IS ENCOUNTERED AND SHALL INDICATE THE METHOD OF RESOLVING THE CONFLICT. THE ENGINEER SHALL APPROVE THE PROPOSED METHOD. THE LOCATION OF THE FIELD TILE SHALL BE RECORDED ON THE CONSTRUCTION RECORD DOCUMENTS.

PAVEMENT GENERAL NOTES

1. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.

2. ALL DIMENSIONS TO BACK-OF-CURB UNLESS NOTED OTHERWISE.

3. REMOVE AND REPLACE OR RESTORE ALL STREET SIGNS, PAVEMENT MARKINGS, SIDEWALK LAMPS, SIDEWALKS, STEPS, LANDSCAPE STRUCTURES, CURB AND GUTTER, STREETS, DRIVES AND ALL OTHER SURFACE STRUCTURES REMOVED OR OTHERWISE DAMAGED DURING THE COURSE OF THE WORK. SIDEWALKS SHALL BE REMOVED AND REPLACED TO NEAREST JOINT BEYOND CONSTRUCTION AREA.

4. COMPACT SUBGRADE BENEATH PAVEMENTS IN ACCORDANCE WITH GRADING NOTES.

5. GRANULAR SUBBASE FOR PAVEMENTS SHALL MEET THE LIMITS OF GRADATION NO. 14, IOWA DOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4123.

6. PROOF-ROLL SUBGRADE WITH A MINIMUM 25 TON G.V.W. TRUCK TO IDENTIFY AREAS OF SOFT OR UNSTABLE SUBGRADE. REMOVE AND REPLACE UNSTABLE AREAS WITH SUITABLE COMPACTED MATERIAL.

PCC PAVEMENT NOTES

1. PCC PAVING THICKNESS SHALL BE AS NOTED ON THE PLANS.

2. MATERIALS AND CONSTRUCTION FOR PORTLAND CEMENT CONCRETE PAVEMENTS SHALL MEET THE REQUIREMENT OF IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST REVISION, SECTION 2301. THE PARAGRAPHS FOR MEASUREMENT AND PAYMENT SHALL NOT APPLY.

3. MINIMUM 28-DAY COMPRESSIVE STRENGTH FOR CONCRETE USED FOR PAVEMENTS SHALL BE 4000 PSI. CONCRETE SHALL BE C-3 OR C-4 WITH TYPE 1 CEMENT. AIR CONTENT SHALL BE 6-1/2% ± 1.5% COARSE AGGREGATE. AIR ENTRAINMENT ADMIXTURES AND WATER REDUCING ADMIXTURES SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4103. DURABILITY FOR PORTLAND CEMENT CONCRETE SHALL BE CLASS 2. JOINT SEALER SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4136 FOR HOT POURED JOINT SEALER.

CURING COMPOUND (WHITE, DARK OR CLEAR) SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR SECTION 4105. APPLICATION METHOD AND CURING SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 2301.19.

FLYASH PER IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4108 MAY BE SUBSTITUTED FOR CEMENT AT THE RATES SPECIFIED IN SECTION 2301.04E AFTER NOTIFICATION AND AUTHORIZATION BY THE OWNER'S REPRESENTATIVE.

PAVEMENT TIE BARS AND DOWEL BARS SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151. EPOXY COATING, WHEN SPECIFIED, SHALL CONFORM TO IOWA DOT SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION SECTION 4151.03B.

4. CURBS SHALL BE CAST INTEGRAL WITH CONCRETE PAVEMENT UNLESS NOTED OTHERWISE. EDGES SHALL BE ROUNDED BUT NOT ROLLED.

5. PCC SIDEWALKS SHALL BE 4 INCHES THICK, EXCEPT AT DRIVEWAYS. THICKNESS OF PCC WALKS AT DRIVEWAYS SHALL MATCH THAT OF THE ADJACENT DRIVEWAY. TRANSVERSE CONSTRUCTION JOINTS SPACING SHALL BE AT 3 FEET MAXIMUM CENTERS FOR 3 FEET WIDE WALKS, 4 FEET MAXIMUM CENTERS FOR 4 FEET WIDE WALKS, AND 5 FEET MAXIMUM CENTERS FOR 5 FEET WIDE WALKS, 6 FEET MAXIMUM CENTERS FOR WALKS GREATER THAN 5 FEET IN WIDTH. LONGITUDINAL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN SLABS GREATER THAN 8 FEET IN WIDTH. PLACE EXPANSION JOINTS WHERE WALK MEETS OTHER WALKS, BACK OF CURBS, FIXTURES, OR OTHER STRUCTURES, AND AT INTERVALS NOT EXCEEDING 50 FEET. SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1.5% DRAINING TOWARDS BACK OF CURB, UNLESS OTHERWISE NOTED.

6. ONE INCH PREFORMED FOAM EXPANSION JOINT MATERIAL SONOFLEX "F" BY SONOBORN OR APPROVED EQUAL SHALL BE PLACED BETWEEN NEW PAVEMENT CONSTRUCTION AND THE FACES OF BUILDINGS, STOOPS, EXISTING SLABS, AND OTHER FIXTURES, UNLESS NOTED ON THE DRAWINGS. JOINTS AT THESE LOCATIONS SHALL BE SEALED WITH A SELF-LEVELING POLYURETHANE SUCH AS SONOLASTIC SL-1 OR APPROVED EQUAL.

7. FIVE INCH PCC SHALL BE JOINTED AT 10 FEET O.C. MAXIMUM DISTANCE SEVEN INCH PCC SHALL BE JOINTED AT 14 FEET O.C. MAXIMUM DISTANCE . JOINTING SHALL BE IN ACCORDANCE WITH STATEWIDE URBAN DESIGN STANDARDS AND SPECIFICATIONS (SUDAS) FIGURE NO. 7010.101.

8. CONSTRUCT 1" EXPANSION JOINTS ON PCC CURB AT ALL ENDS OF RETURN RADII.

PAVEMENT MARKING NOTES

1. PAINT PARKING STRIPING AND SIDEWALK CURBS, TRAFFIC DIRECTION ARROWS, HANDICAP SYMBOLS AND FACE OF LIGHT POLE BASES "TRAFFIC YELLOW" WHERE SHOWN ON PLANS. VERIFY COLOR OF PAVEMENT MARKINGS WITH OWNER PRIOR TO CONSTRUCTION.

2. PAVEMENT MARKINGS SHALL BE FAST DRY TRAFFIC LANE MARKING PAINT CONFORMING TO IOWA DOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION, SECTION 4183.03. REFLECTORIZED SPHERES FOR TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF IOWA DOT STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION, SECTION 4184.

3. PAINTING SHALL NOT BEGIN UNTIL PAVEMENT SURFACE HAS BEEN POWER BROOMED AND HAND SWEPT AS NECESSARY TO REMOVE LOOSE MATERIALS AND DIRT; AND NOT BEFORE ADEQUATE CURING TIME HAS BEEN OBTAINED ON THE PAVEMENT. MINIMUM CURING TIME FOR ASPHALT PAVING SHALL BE 7 DAYS.

4. APPLY PAINT AT MANUFACTURER'S RECOMMENDED RATES IN TWO SEPARATE COATS FOR ALL PAVEMENT MARKINGS. ALL STRIPES ARE 4 INCHES WIDE UNLESS OTHERWISE INDICATED. HANDICAP SYMBOLS SHALL CONFORM TO APPLICABLE ADA REGULATIONS.

5. ALL TRAFFIC CONTROL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

UTILITY NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SUDAS SPECIFICATIONS, LATEST EDITION, AS APPROVED BY THE IOWA DNR, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

2. VERIFY THE ELEVATION OF POSSIBLE CONFLICTING UTILITIES PRIOR TO CONSTRUCTING PROPOSED WATER MAINS, SANITARY SEWERS, STORM SEWERS, ETC. ANY CONFLICTS MUST IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION.

3. SITEWORK UTILITY CONTRACTOR TO EXTEND ALL PIPING TO WITHIN 5' OF BUILDING AND CAPPED FOR CONNECTION BY BUILDING UTILITY CONTRACTOR UNLESS OTHERWISE INDICATED. COORDINATE ALL INVERT ELEVATIONS AND PIPING LOCATIONS WITH BUILDING PLANS.

4. ALL OPEN EXCAVATIONS SHALL BE PROTECTED WITH SAFETY FENCE, BARRIERS OR BARRICADES IN ACCORDANCE WITH OSHA.

5. CONTRACTOR SHALL REFER TO BUILDING PLANS FOR UTILITY ENTRANCE LOCATIONS, SIZES, AND ELEVATIONS PRIOR TO BEGINNING UTILITY CONSTRUCTION.

TRENCH EXCAVATION AND BACKFILL NOTES

1. ALL TRENCH EXCAVATION AND BACKFILL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS, LATEST EDITION, AS SUPPLEMENTED BY CITY OF HIAWATHA SUPPLEMENTAL SPECIFICATIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS. A COPY OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS REFERENCED IN THESE PLANS CAN BE FOUND AT: http://www.iowasudas.org/

2. REINFORCED CONCRETE PIPE (RCP) STORM SEWER SHALL BE INSTALLED WITH COLD APPLIED BITUMINOUS OR RUBBER ROPE GASKET JOINTING MATERIALS AND MAY BE BACKFILLED WITH SUITABLE NATIVE EXCAVATED MATERIAL.

3. REINFORCED CONCRETE PIPE (RCP) STORM SEWER SHALL BE INSTALLED WITH BEDDING CLASS R-1. REFER TO SUDAS STANDARD FIGURE NO. 3010.102.

4. HIGH DENSITY POLYETHYLENE (HDPE) STORM SEWER SHALL BE INSTALLED WITH BEDDING CLASS F-3. REFER TO SUDAS STANDARD FIGURE NO. 3010.103

5. POLYVINYL CHLORIDE (PVC) TRUSS SANITARY SEWER PIPE SHALL BE INSTALLED WITH BEDDING CLASS F-3. REFER TO SUDAS STANDARD FIGURE NO. 3010.103.

6. POLYVINYL CHLORIDE (PVC) SANITARY SEWER SERVICE PIPE SHALL BE INSTALLED WITH BEDDING CLASS F-3. REFER TO SUDAS STANDARD FIGURE NO. 3010.103

7. POLYVINYL CHLORIDE (PVC) WATER MAIN AND SERVICE PIPE SHALL BE INSTALLED WITH BEDDING CLASS P-1. REFER TO SUDAS STANDARD FIGURE NO. 3010.104.

8. UNLESS OTHERWISE SPECIFIED ABOVE, PIPE TRENCHES MAY BE BACKFILLED WITH SUITABLE NATIVE EXCAVATED MATERIAL.

STORM SEWER NOTES

1. ALL STORM SEWER (SEWER MAINS, MANHOLES, INTAKES) AND SUBDRAIN (SUBDRAIN, CLEANOUTS) CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS, LATEST EDITION, AS SUPPLEMENTED BY CITY OF HIAWATHA SUPPLEMENTAL SPECIFICATIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS. A COPY OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS REFERENCED IN THESE PLANS CAN BE FOUND AT: http://www.iowasudas.org/

2. REINFORCED CONCRETE PIPE (RCP) AND APRONS/FLARED END SECTIONS SHALL BE CLASS III PIPE. REFER TO THE "TRENCH EXCAVATION & BACKFILL NOTES" ON THIS PLAN SHEET FOR BEDDING AND BACKFILL REQUIREMENTS, AS WELL AS JOINTING REQUIREMENTS.

3. HIGH DENSITY POLYETHYLENE (HDPE) STORM SEWER SHALL BE DUAL WALL (CORRUGATED EXTERIOR AND SMOOTH INTERIOR). REFER TO THE "TRENCH EXCAVATION & BACKFILL NOTES" ON THIS PLAN SHEET FOR BEDDING AND BACKFILL REQUIREMENTS.

4. THE CONTRACTOR SHALL FURNISH & INSTALL ALL FITTINGS (TEES, BENDS, RISERS, ELBOWS, ETC.) NECESSARY TO COMPLETE THE INSTALLATION OF THE PROPOSED HDPE ROOF DRAIN LATERALS AND ROOF DRAIN COLLECTORS. THIS SHALL BE CONSIDERED INCIDENTAL TO THE ROOF DRAIN INSTALLATION WORK.

5. FOLLOWING COMPLETION OF STORM SEWER INSTALLATION, THE CONTRACTOR SHALL CLEAN, INSPECT AND TEST THE STORM SEWER IN ACCORDANCE WITH THE REQUIREMENTS OF SUDAS SPECIFICATION SECTION 4060.

6. FOLLOWING COMPLETION OF STORM SEWER STRUCTURE (MANHOLES AND INTAKES) INSTALLATION, THE CONTRACTOR SHALL CLEAN AND INSPECT THE STORM SEWER STRUCTURES IN ACCORDANCE WITH THE REQUIREMENTS OF SUDAS SPECIFICATION SECTION 6030

WATER DISTRIBUTION NOTES

1. ALL WATER SYSTEM (WATER MAINS, WATER SERVICES, VALVES, HYDRANTS & OTHER REQUIRED APPURTENANCES) CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS, LATEST EDITION, AS SUPPLEMENTED BY CITY OF HIAWATHA SUPPLEMENTAL SPECIFICATIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS. A COPY OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS REFERENCED IN THESE PLANS CAN BE FOUND AT: http://www.iowasudas.org/

2. WATER MAIN PIPE SHALL BE DR 18 POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF ANSI/AWWA C900 OR C905 WITH CAST IRON PIPE EQUIVALENT OUTSIDE DIAMETERS.

3. WATER MAIN SHALL BE INSTALLED TO MAINTAIN MINIMUM 5.5-FEET OF COVER.

4. FITTINGS FOR PVC PIPE SHALL BE DUCTILE IRON MECHANICAL JOINT FITTINGS MEETING THE REQUIREMENTS OF THE SUDAS STANDARD SPECIFICATIONS, LATEST EDITION.

5. DIP RUBBER GASKETS, LUBRICANT, GLANDS, BOLTS, AND NUTS SHALL CONFORM TO ANSI A21.11.

6. MINIMUM HYDRANTS DEPTH OF BURY FOR WATER MAIN SHALL BE 5.5 FEET BELOW FINISHED GRADE. GATE VALVES AND CURB STOPS SHALL BE CONSTRUCTED TO MAINTAIN 5.5' TO 6' MAX. DEPTH UNLESS OTHERWISE NOTED.

7. ALL PVC WATER MAIN, FITTINGS, VALVES, AND HYDRANTS SHALL BE INSTALLED WITH TRACER SYSTEM PER THE SUDAS STANDARD SPECIFICATIONS, LATEST EDITION.

8. CONTRACTOR SHALL PERFORM HYDROSTATIC TEST, DISINFECTION, AND BACTERIOLOGICAL TESTS ON COMPLETED WATER MAIN ACCORDING TO THE SUDAS STANDARD SPECIFICATIONS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

9. ONLY WATER DEPARTMENT PERSONNEL SHALL OPERATE EXISTING VALVES OUTSIDE THE WORK AREA.

10. HAND-DELIVER NOTICE OF SERVICE INTERRUPTION TO ALL AFFECTED CUSTOMERS 24 HOURS BEFORE ANY PLANNED OUTAGES. NOTIFY THE FIRE DEPARTMENT 48 HOURS IN ADVANCE OF SUCH OUTAGES.

11. ALL FIRE HYDRANT ASSEMBLIES MUST RECEIVE WATER DEPARTMENT APPROVAL PRIOR TO INSTALLATION.

12. ALL VALVES SHALL BE PLACED ON A SOLID 8" X 16" X 2" MASONRY UNIT RESTING ON A SUITABLY COMPACTED SUBGRADE. VALVES SHALL BE SET PLUMB AND LEVEL WITH VALVE BOXES COVERS ADJUSTED TO FINISHED GRADE.

13. ALL FIRE HYDRANT ASSEMBLIES WILL INCORPORATE AT LEAST 4 CUBIC FEET OF 3/4" OR 1" CLEAN ROCK AS A WEEPHOLE DRAINAGE FIELD.

14. ALL THRUST BLOCK JOINT RESTRAINTS WILL BE READY MIXED 3000 PSI PORTLAND CEMENT CONCRETE PLACED BETWEEN VALVE, BEND, ETC. AND UNDISTURBED EARTH. ALL APPURTENANCES SHALL BE COVERED WITH HEAVY DUTY POLYETHYLENE FILM PRIOR TO PCC PLACEMENT. NO BLOCKS, TIMBERS OR OTHER DEVICES WILL BE ALLOWED. CONSULT ENGINEER FOR NUMBER OF CUBIC YARDS OF PCC REQUIRED AT EACH LOCATION.

15. RESTRAINED JOINT FITTINGS SHALL BE USED WHERE STIPULATED IN THE PLANS OR WHERE PCC THRUST BLOCKS ALONE WILL NOT PREVENT JOINT MOVEMENT.

16. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN A RECORD DRAWING SET SHOWING LOCATIONS OF ALL SERVICES AND OTHER PERTINENT INFORMATION REGARDING THE WATER MAIN CONSTRUCTION, WITNESS DIMENSIONS TO ENDS OF SERVICE LINES WILL BE REQUIRED. THE RECORD DRAWING SET WILL BE PROVIDED TO THE OWNER.

SANITARY SEWER

1. ALL SANITARY SEWER CONSTRUCTION (SEWER MAINS, SEWER SERVICES, MANHOLES) SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS, LATEST EDITION, AS SUPPLEMENTED BY CITY OF HIAWATHA SUPPLEMENTAL SPECIFICATIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS. A COPY OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) PROGRAM SPECIFICATIONS REFERENCED IN THESE PLANS CAN BE FOUND AT: http://www.iowasudas.org/

2. SANITARY SEWER SERVICE SHALL BE FOUR-INCH (4") DIAMETER SDR 23.5 POLYVINYL CHLORIDE (PVC) PIPE MEETING THE REQUIREMENTS OF SUDAS SPECIFICATION SECTION 4010, PART 2.04, C, 1.

3. SITE WORK UTILITY CONTRACTOR TO EXTEND ALL PIPING TO WITHIN 5' OF BUILDING AND CAPPED FOR CONNECTION BY BUILDING UTILITY CONTRACTOR UNLESS OTHERWISE INDICATED. COORDINATE ALL INVERT ELEVATIONS AND PIPING LOCATIONS WITH BUILDING PLANS.

4. FOLLOWING COMPLETION OF SANITARY SEWER INSTALLATION, THE CONTRACTOR SHALL CLEAN, INSPECT AND TEST THE SANITARY SEWER IN ACCORDANCE WITH THE REQUIREMENTS OF SUDAS SPECIFICATION SECTION 4060.

SURFACE RESTORATION NOTES

1. A MINIMUM OF 9" TOPSOIL SHALL BE RESPREAD ON LAWN AREAS AND A MINIMUM OF 12" SHALL BE PLACED IN PLANTING AREAS. SCARIFY AREAS TO RECEIVE TOPSOIL TO A DEPTH OF 3". REMOVE ALL STONES, WOOD AND OTHER DEBRIS LARGER THAN 2" FROM AREAS TO RECEIVE TOPSOIL. DO NOT COMPACT TOPSOIL. THE CONTRACTOR SHALL BE CAREFUL TO PREPARE THE SUBGRADE SUCH THAT THE COMBINED DEPTH OF THE TOPSOIL AND SOD, OR THE TOPSOIL AND MULCH, DOES NOT CAUSE THE FINISH GRADE TO EXCEED THAT SHOWN ON THESE PLANS.

2. REFER TO THE SITE LANDSCAPING PLANS FOR TREATMENT (I.E. SOD, SEED, MULCH, ETC.) OF THOSE AREAS NOT TO BE HARD SURFACED WITH BUILDING, CONCRETE OR ASPHALT.

3. EXISTING FACILITIES (CURBS, PAVEMENT, UTILITIES, ETC.) THAT ARE TO REMAIN AND ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

4. MAINTAIN SEEDED AREAS UNTIL AN ADEQUATE STAND OF GRASS HAS BEEN ESTABLISHED. RESEED ANY AREAS AS NECESSARY DURING THE MAINTENANCE PERIOD.

5. FURNISH AND INSTALL ROLLED EROSION CONTROL MAT ON ALL SLOPES WITH A 5:1 OR GREATER SLOPE. THE ROLLED EROSION CONTROL MAT SHALL MEET THE REQUIREMENTS FOR RECP TYPE 3.B AS SPECIFIED IN SUDAS SPECIFICATION SECTION 9040, PART 2.05. INSTALL THE TURF REINFORCEMENT IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION LITERATURE FOR THE SLOPE APPLICATION.

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL, SEDIMENT, AND DUST CONTROL IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND THE PROJECT'S STORM WATER POLLUTION PREVENTION PLAN.

2. THE CONTRACTOR SHALL INCORPORATE ALL EROSION CONTROL FEATURES INTO THE PROJECT PRIOR TO DISTURBING THE SOIL AS NOTED ON THE PLANS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES A MINIMUM OF ONCE PER WEEK. IF A CONTROL MEASURE HAS BEEN REDUCED IN CAPACITY BY 50% OR MORE, THE CONTRACTOR SHALL RESTORE SUCH FEATURES TO THEIR ORIGINAL CONDITION IMMEDIATELY, WEATHER PERMITTING.

4. ERECT SILT FENCE AS SHOWN ON THE PLANS TO LIMIT LOSS OF MATERIAL FROM THE SITE. DEVICES TO REMAIN IN PLACE AND TO BE MAINTAINED UNTIL A PERMANENT GROUND COVER IS ESTABLISHED.

5. MINIMIZE SOIL EROSION BY MAINTAINING ALL EXISTING VEGETATIVE GROWTH WITHIN THE GRADING LIMITS FOR AS LONG AS PRACTICAL.

6. INSTALL A SILT FENCE AROUND ALL STOCKPILED TOPSOIL.

7. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING IMMEDIATELY FOR ALL AREAS THAT ARE DISTURBED AND OPERATIONS WILL NOT COMMENCE OR PERMANENT SEEDING WILL NOT BE COMPLETED IN LESS THAN 14 DAYS.

8. REFER TO THE SITE LANDSCAPING PLANS FOR TREATMENT (I.E. SOD, SEED, MULCH, ETC.) OF THOSE AREAS NOT TO BE HARD SURFACED WITH BUILDING, CONCRETE OR ASPHALT.

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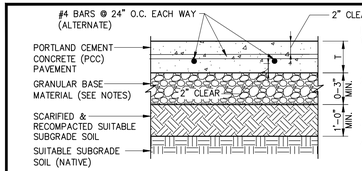
APPROVED: JED SCHNOOR
ISSUED FOR: APPROVAL
DATE: 12/5/2019
PROJECT NO.: 19005

HUNTER COMMERCE PARK INDUSTRIAL FLEX SPACE

LOTS 2 & 3, HUNTER COMMERCE PARK 3RD ADDITION
1460 NORTH CENTER POINT ROAD, HIAWATHA, IA 52233

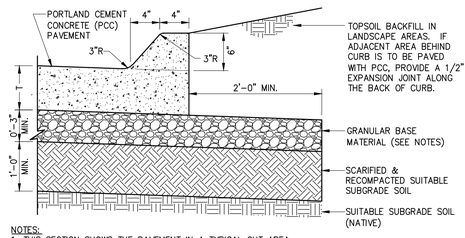
SITE CONSTRUCTION NOTES

C4.1



NOTES:
1. THIS SECTION SHOWS THE PAVEMENT IN A TYPICAL CUT AREA. WHEN IN A FILL AREA, PLACE COMPACTED ENGINEERED FILL BETWEEN THE GRANULAR BASE LAYER AND THE SCARIFIED & RECOMPACTED SUITABLE SUBGRADE SOIL LAYER.
2. GRANULAR BASE MATERIAL SHALL MEET THE REQUIREMENTS SECTION 4123 (MODIFIED GRANULAR SUBBASE, GRADATION NO. 14) OF THE IOWA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. ALL EARTHWORK AND COMPACTION SHALL BE COMPLETED IN CONFORMANCE WITH THE GRADING NOTES OF THESE PLANS.
4. PCC PAVING THICKNESS SHALL BE 6-INCHES IN THE HEAVY DUTY AREAS AND 5-INCHES IN THE LIGHT-DUTY PAVING AREAS.

1 TYPICAL PCC PAVEMENT SECTION
NOT TO SCALE



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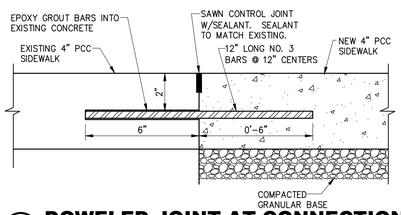
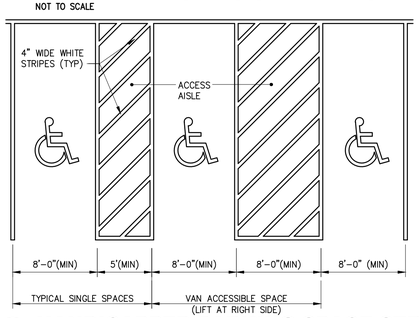
2 6" HIGH INTEGRAL CURB & GUTTER
NOT TO SCALE

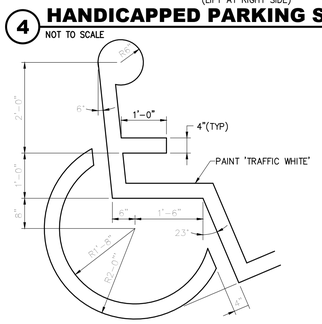


NOTES:
1. DOWEL ALL NEW SIDEWALKS INTO EXISTING ADJACENT SIDEWALKS PER THIS DETAIL.
2. PLACE BARS SO THAT NO BAR WILL BE CLOSER THAN 6" FROM ANY JOINT.
3. THE HOLES DRILLED INTO THE EXISTING PCC SLAB SHALL BE 1/8" LARGER THAN THE BARS. THE BARS SHALL BE EPOXY GROUTED INTO THE EXISTING PCC SLAB. DRIVING BARS INTO THE DRILLED HOLES SHALL NOT BE PERMITTED.

3 DOWELED JOINT AT CONNECTION BETWEEN NEW AND EXISTING SIDEWALKS
NOT TO SCALE

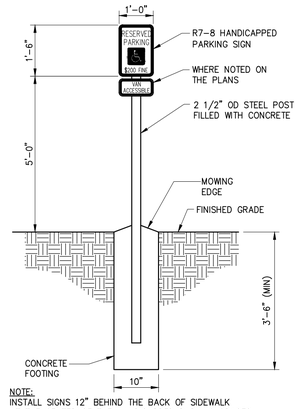


4 HANDICAPPED PARKING SPACE STRIPING
NOT TO SCALE



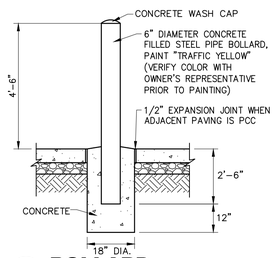
NOTE: SYMBOL TO BE CENTERED IN PARKING SPACE AND ORIENTED AS ILLUSTRATED ON PLANS.

5 HANDICAPPED PARKING SYMBOL
NOT TO SCALE

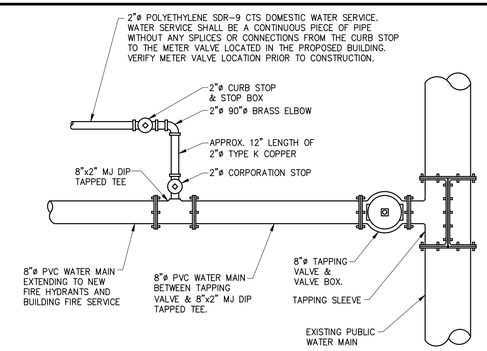


NOTE:
INSTALL SIGNS 12" BEHIND THE BACK OF SIDEWALK AT THE CENTER OF THE HANDICAPPED PARKING SPACES.

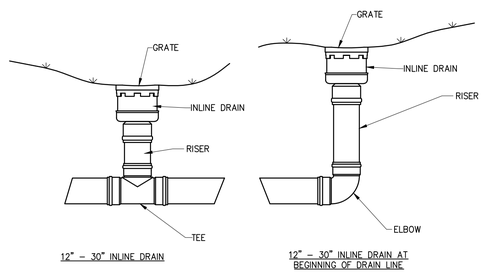
6 HANDICAPPED PARKING SIGN
NOT TO SCALE



7 BOLLARD
NOT TO SCALE



9 WATER SERVICE LAYOUT DETAIL
NOT TO SCALE



8 INLINE DRAIN TYPICAL DETAIL IN NON-TRAFFIC INSTALLATION
NOT TO SCALE

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SITE CONSTRUCTION DETAILS

C5.1