

LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1

1630 SOUTH ANKENY BOULEVARD

ANKENY, IOWA

SITE PLAN

NAI #22111

PRELIMINARY - SUBMITTAL #2

1250 SW STATE STREET, SUITE A
ANKENY, IOWA 50023-2555
(515) 965-0123 phone - (515) 965-3322 fax
Civil Engineering - Land Surveying
Landscape Architecture

NILLES ASSOCIATES

REVISIONS:
1) UPDATED PER TECHNICAL REVIEW COMMENTS (9-16-2023)
2) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)
3) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)
4) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)
5) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)
6) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)
7) REVISED PER COMMENTS FROM CITY OF ANKENY (9-16-2023)

NOTE: NILLES ASSOCIATES, INC. WARRANTS ANY PROGRAMS WHICH ARISE FROM FAILURE TO THE ENGINEERING INTENT OF THIS PLAN, OR TO OBTAIN AND/OR FOLLOW THE ENGINEER'S OMBUDSMAN, ACCORDING TO IOWA STATUTES OR CONFLICTS WHICH ARE ALLEGED.

PROJECT NAME: LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
1630 SW SCHOOL STREET, ANKENY, IOWA

COVER SHEET

NAI NO.: 22111
DATE: 09/12/2023
DRAWN BY: BLH
CHECKED BY: JTN
SHEET SIZE: 24" X 36"
SHEET TITLE: CV-1
SHEET NO.: 1/12

EXISTING UTILITY NOTE

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERE TO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

SPECIFICATION REFERENCE

THE 2022 IOWA SUDAS STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE CITY OF ANKENY STANDARD SPECIFICATIONS SHALL APPLY TO ALL ASPECTS OF CONSTRUCTION.

LEGEND

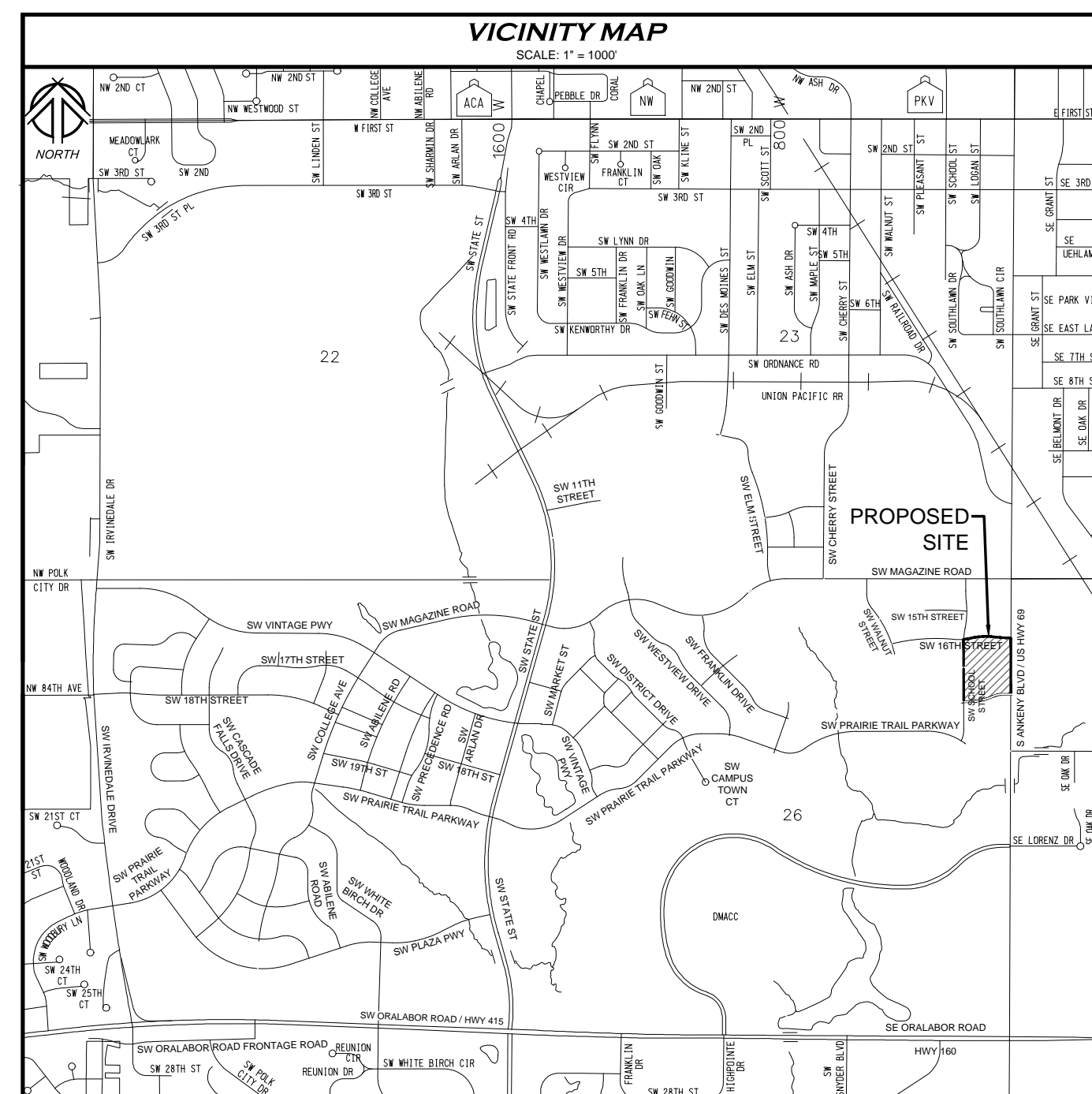
Existing / Proposed	Existing / Proposed	Address
IR	Round iron rebar	Address
IP	Round iron pipe	Spot elevation
PCC	Portland cement concrete	Sanitary sewer manhole
ACC	Asphaltic cement concrete	Cleanout
FL	Pipe flowline elevation	Storm sewer manhole
RCP	Reinforced concrete pipe	Storm sewer intake
CMP	Corrugated metal pipe	Storm sewer beehive
CPP	Corrugated plastic pipe	Flared end section
PVC	Polyvinyl chloride pipe	Water hydrant
CIP	Cast iron pipe	Water valve
CB	Back of curb to back of curb	Water service shut-off
D.E.	Public drainage easement	Water main manhole
G.E.	Public gas easement	Monitoring well
I.E.E.	Public ingress / egress easement	Yard hydrant
M.E.C.	MidAmerican Energy Co underground electric line easement	Well
P.U.E.	Public utility easement	Gas meter
S.S.E.	Public sanitary sewer easement	Gas valve
S.T.S.E.	Public storm sewer easement	Air conditioning unit
S.W.F.E.	Surface water flowage easement	Electric manhole
	Subject boundary line	Electric meter
	Section line	Electric pedestal
	Proposed boundary line	Electric transformer
	Existing boundary line	Utility hand hole
	Future boundary line	Utility pole
	Proposed easement line	Utility pole with light
	Existing easement line	Light pole
	Setback line	Ground up light
	Barbed wire fence line	Guy wire
	Chain-link fence line	Traffic signal
WT	Straw Wattle	Traffic signal with light
SF	Silt fence	Traffic manhole
SS	Sanitary sewer & size	Communication pedestal
ST	Storm sewer and size	Telephone booth
W	Water main and size	TV pedestal
G	Gas main & size	Billboard sign
OHE	Overhead electric & wires	Street sign
OHC	Overhead communication	Down spout
UGE	Underground electric	Tree shrub
UTV	Underground television	Deciduous tree and trunk diameter
UGC	Underground communication	Coniferous tree and trunk diameter
900	Contour elevation	
	Swale flowline	
	Edge of water	
	Edge of tree dripline	
	Construction limits	
	Construction fence	

BENCHMARKS

- CUT 'X' ON PCC TRAIL, 250' +/- SOUTH OF SW 16TH, WEST OF SOUTH ANKENY BLVD. ELEVATION = 957.45'
- CUT 'X' IN CENTERLINE OF SW 16TH STREET, 82' +/- EAST OF SANITARY MANHOLE IN THE INTERSECTION OF SW 16TH STREET AND SW SCHOOL STREET. ELEVATION = 960.89'

GENERAL NOTES

- ONE WEEK PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY PROJECT ENGINEER AND:
 - CITY OF ANKENY
 - ACCURATE DEVELOPMENT
- ALL MATERIALS AND CONSTRUCTION RELATED TO WORK CONDUCTED AS PART OF THESE PLANS SHALL BE IN ACCORDANCE WITH THE 2022 STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS), THE CITY OF ANKENY SUPPLEMENTAL SPECIFICATIONS, AND DETAILS SHOWN ON THIS PLAN UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR, REMOVAL, REPLACEMENT, OR REINSTALLATION OF ANY ITEM, BOTH ON- AND OFF-SITE, ADVERSELY AFFECTED BY FAILURE TO FOLLOW SAID SPECIFICATIONS, REPORTS, AND PLANS.
- CONTRACTOR IS RESPONSIBLE TO UNDERSTAND THE INTENT OF THE WORK TO BE COMPLETED AND TO ADDRESS ANY QUESTIONS, CONCERNS, CONFLICTS, DISCREPANCY OR OTHER ISSUES THAT MAY AFFECT CONSTRUCTION WITH OWNER AND ENGINEER AT LEAST ONE WEEK PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL RESPOND IN A TIMELY MANNER TO ALLOW CONSTRUCTION TO PROCEED.
- CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER IMMEDIATELY OF ANY ISSUE ENCOUNTERED DURING CONSTRUCTION THAT MAY AFFECT PROPOSED DESIGN. OWNER AND ENGINEER SHALL RESPOND IN A TIMELY MANNER TO ALLOW CONSTRUCTION TO PROCEED.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION AND ELEVATION OF, AND PROTECT ALL UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL RECONNECT ALL FIELD TILE OR CONNECT TO STORM SEWER WHERE AVAILABLE DURING CONSTRUCTION. RECONNECTIONS OR CONNECTIONS TO STORM SEWER SHALL BE CONSIDERED INCIDENTAL TO PROJECT COST. NOTIFY CITY OF ANKENY AND NILLES ASSOCIATES PRIOR TO RECONNECTION SO THAT LOCATION OF RECONNECTION CAN BE DOCUMENTED AND INCLUDED ON RECORD DRAWINGS. REPAIRS TO TILE LINES ARE TO BE VERIFIED BY CITY OF ANKENY PERSONNEL.
- SIGNS SHALL CONFORM TO THE CITY OF ANKENY SIGN ORDINANCE.
- DETAILS AND NOTES INCLUDED WITHIN THESE PLANS SHALL BE USED FOR CONSTRUCTION. FOR ITEMS WITH NO DETAILS OR NOTES INCLUDED WITHIN THIS PLANS SET, FOLLOW SUDAS DETAILS AND SPECIFICATIONS FOR MATERIALS AND CONSTRUCTION.
- COORDINATE ALL WORK ACTIVITIES WITH ANY OTHER CONSTRUCTION PROJECTS IN THE AREA.
- ANY DAMAGE TO PROPERTY THAT OCCURS AS A RESULT OF THE CONTRACTOR'S ACTIVITIES OR ACTIONS SHALL BE REPAIRED AND RESTORED IN KIND.
- THE CONTRACTOR SHALL PROTECT UTILITY POLES NEAR CONSTRUCTION ACTIVITIES AS REQUIRED.
- FOR ALL WORK, THE CONTRACTOR SHALL PROVIDE ALL FIELD QUALITY CONTROL AND TESTING AS PER SUDAS. PROVIDE ENGINEER TESTING RESULTS.
- PROVIDE TO THE PROJECT ENGINEER, ALL SHOP DRAWINGS FOR MATERIALS INCORPORATED IN THE WORK SUPPLIED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FOLLOW THE STORM WATER POLLUTION PREVENTION PLAN PREPARED FOR THIS SITE.
- CONTRACTORS ON-SITE SHALL BE RESPONSIBLE FOR DAILY CLEAN-UP OF SEDIMENT AND DEBRIS TRACKED OR WASHED ONTO PUBLIC RIGHTS-OF-WAY AND AREAS OUTSIDE PROJECT LIMITS.
- DURING THE PROGRESS OF THE WORK, IF SUBSURFACE OR LATENT PHYSICAL CONDITIONS ARE ENCOUNTERED AT THE SITE DIFFERING MATERIALLY FROM THOSE INDICATED ON THE PLANS OR IF UNKNOWN PHYSICAL, CULTURAL, AND/OR ENVIRONMENTAL CONDITIONS OF AN UNUSUAL NATURE ARE ENCOUNTERED AT THE SITE, THE PARTY DISCOVERING SUCH CONDITIONS SHALL PROMPTLY NOTIFY THE CITY OF ANKENY, ACCURATE DEVELOPMENT, AND NILLES ASSOCIATES BEFORE THE SITE IS FURTHER DISTURBED.
- CONTRACTOR AND EMPLOYEE VEHICLES WILL BE PARKED LEGALLY UNLESS NEEDED ON-STREET FOR ACTIVE WORK.



PROJECT SUMMARY

TOTAL SITE AREA:	181,482 SF, 4.17ACRES
PROPOSED USE:	MULTI-USE SINGLE-STORY COMMERCIAL
BUILDING INFORMATION:	SINGLE-STORY COMMERCIAL BUILDINGS
PROPOSED BUILDING COVERAGE:	27,744 SF
PARKING REQUIREMENTS:	
RESTAURANT	= 4,260 SF/100 43 STALLS
PATIO SEATING	= 47 SEATS/4 12 STALLS
COMMERCIAL	= 22,073 SF/200 110 STALLS
	165 STALLS
PARKING PROVIDED (PROPOSED):	190 STALLS (161 ON LOT & 29 ON STREET)
PROPOSED PRIVATE DRIVES & PARKING:	75,633 SF (INCLUDES R.O.W.) 64,704 SF (ON LOT)
PROPOSED SIDEWALKS:	20,205 SF (INCLUDES R.O.W.) 15,800 SF (ON LOT)
COMBINED HARD SURFACE:	108,248 SF OR 2.48 ACRES (60%) 27.06 ERU'S (108,248 / 4000)
OPEN SPACE:	73,234 SF (40%)
PROPERTY ZONING:	PRAIRIE TRAIL PUD (PLANNED UNIT DEVELOPMENT)
PROPERTY ADDRESS:	1630 SOUTH ANKENY BLVD.

OWNER

ACCURATE DEVELOPMENT
JARED JOHNSON
9500 UNIVERSITY, STE 2112
WEST DES MOINES, IOWA 50266
515-556-0124

DEVELOPER

ACCURATE DEVELOPMENT
JARED JOHNSON
9500 UNIVERSITY, STE 2112
WEST DES MOINES, IOWA 50266
515-556-0124

LEGAL DESCRIPTION

LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1, AN OFFICIAL PLAT, LOCATED IN THE CITY OF ANKENY, POLK COUNTY, IOWA.

CONTAINING 4.36 ACRES, MORE OR LESS

SAID PARCEL IS SUBJECT TO ANY AND ALL RESTRICTIONS, COVENANTS AND EASEMENTS OF RECORD.

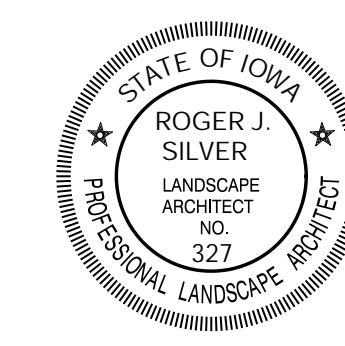
SHEET LIST TABLE

SHEET NO.	SHEET TITLE	DESCRIPTION
1	CV-1	COVER SHEET
2	DP-1	DIMENSION PLAN
3	DP-2	DIMENSION PLAN
4	GP-1	GRADING & EROSION CONTROL PLAN
5	GP-2	GRADING & EROSION CONTROL PLAN
6	GP-3	GRADING & EROSION CONTROL PLAN
7	GP-4	GRADING & EROSION CONTROL PLAN
8	UP-1	UTILITY PLAN
9	UP-2	UTILITY PLAN
10	LP-1	LANDSCAPE PLAN
11	LP-2	LANDSCAPE PLAN
12	DT-1	DETAILS

CONSTRUCTION SCHEDULE

SITE GRADING	FALL 2022
UTILITY INSTALLATION	SPRING 2023
PAVING INSTALLATION	SPRING 2023

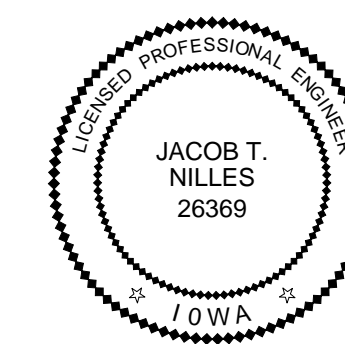
CERTIFICATIONS



I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

ROGER J. SILVER

SIGNATURE _____ DATE _____
PAGES OR SHEETS COVERED BY THIS SEAL: SHEETS 1-7, 10-12

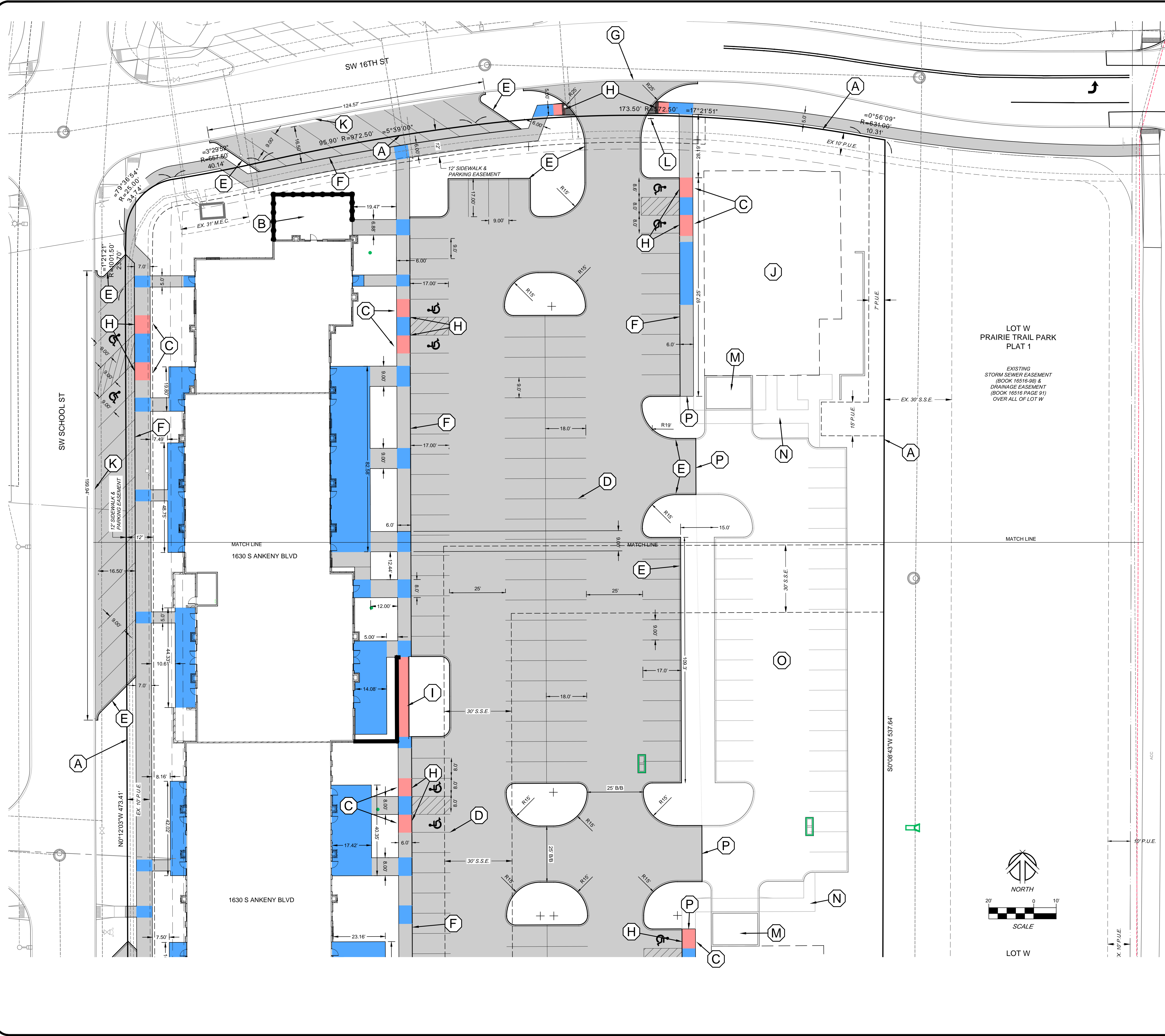


I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

JACOB T. NILLES
26369

SIGNATURE _____ DATE _____
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023

PAGES OR SHEETS COVERED BY THIS SEAL: SHEETS 1-9, 12



GENERAL DIMENSION PLAN NOTES

- BUILDING DIMENSIONS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. REFER TO ARCHITECTURAL PLAN FOR BUILDING DIMENSIONS.
- ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

DIMENSION PLAN NOTES

- PROPERTY LINE.
- PATIO W/ CAPACITY FOR 45-47 SEATS.
- ACCESSIBLE STALL SIGNS IN ACCORDANCE WITH ANSI A117.1-09 SECTION 502.7, 12" BEHIND SIDEWALK. SEE DETAIL Z-1 ON SHEET DT-1.
- PROVIDE PARKING STALL AND LANE STRIPING AS SHOWN PER SUDAS 8020 AND DOT SECTION 2527.
- 6" STANDARD CURB PER SUDAS FIGURE 7010.102.
- CLASS A SIDEWALK CURB. SEE DETAIL 3 ON SUDAS 7030.202.
- GRIND CURB AND INSTALL TYPE A DRIVEWAY CONNECTION TO EXISTING STREET PER SUDAS 7030.101.
- SIDEWALK RAMP - DROP CURB AS NECESSARY.
- RAMP WITH HANDRAILS ON BOTH SIDES.
- FUTURE BUILDING PAD LOCATION.
- SAW CUT AND REMOVE CURB ALONG PROPOSED ON-STREET PARKING.
- INSTALL R1-1 STOP SIGN (30") ON BLACK WRAPPED POST PER MUTCD SECTION 2B.04
- FUTURE TRASH ENCLOSURE LOCATION.
- FUTURE SIDEWALK.
- FUTURE PARKING LOT EXPANSION.
- END OF PAVING.

PAVING NOTES

- PARKING LOT AND DRIVE AISLE PAVING SHALL BE NON-REINFORCED 6" P.C.C. ALL CONCRETE CURBS SHALL BE INTEGRAL TO PAVING SLAB.
- TRASH ENCLOSURE PAD SHALL BE NON-REINFORCED P.C.C. WITH A MINIMUM THICKNESS OF 8".
- SIDEWALKS SHALL BE NON REINFORCED P.C.C. WITH A MINIMUM THICKNESS OF 5 INCHES. PUBLIC SIDEWALK RAMPS SHALL BE NON-REINFORCED P.C.C. WITH A MINIMUM THICKNESS OF 6 INCHES.
- PARKING STALLS ALONG PUBLIC STREETS SHALL BE 7" NON-REINFORCED P.C.C. CONSTRUCTED WITH A BT-1 JOINT ALONG EXISTING PAVEMENT, AS PER SUDAS 7010.101
- REFER TO ARCHITECTURAL PLAN FOR ADDITIONAL INFORMATION ON STOOPS AND SIDEWALKS ADJACENT TO BUILDING.
- ALL TRUNCATED DOME INSERTS FOR SIDEWALK SHALL BE CAST IN PLACE REPLACEABLE IN BLACK (FEDERAL COLOR NO. 37038) MANUFACTURED BY ADA SOLUTIONS, OR APPROVED EQUAL.

SIDEWALK LEGEND

- RAMP
- SPECIAL SHAPING
- TURNING SPACE MAX 1.5% IN ALL DIRECTIONS

PRELIMINARY - SUBMITTAL #2

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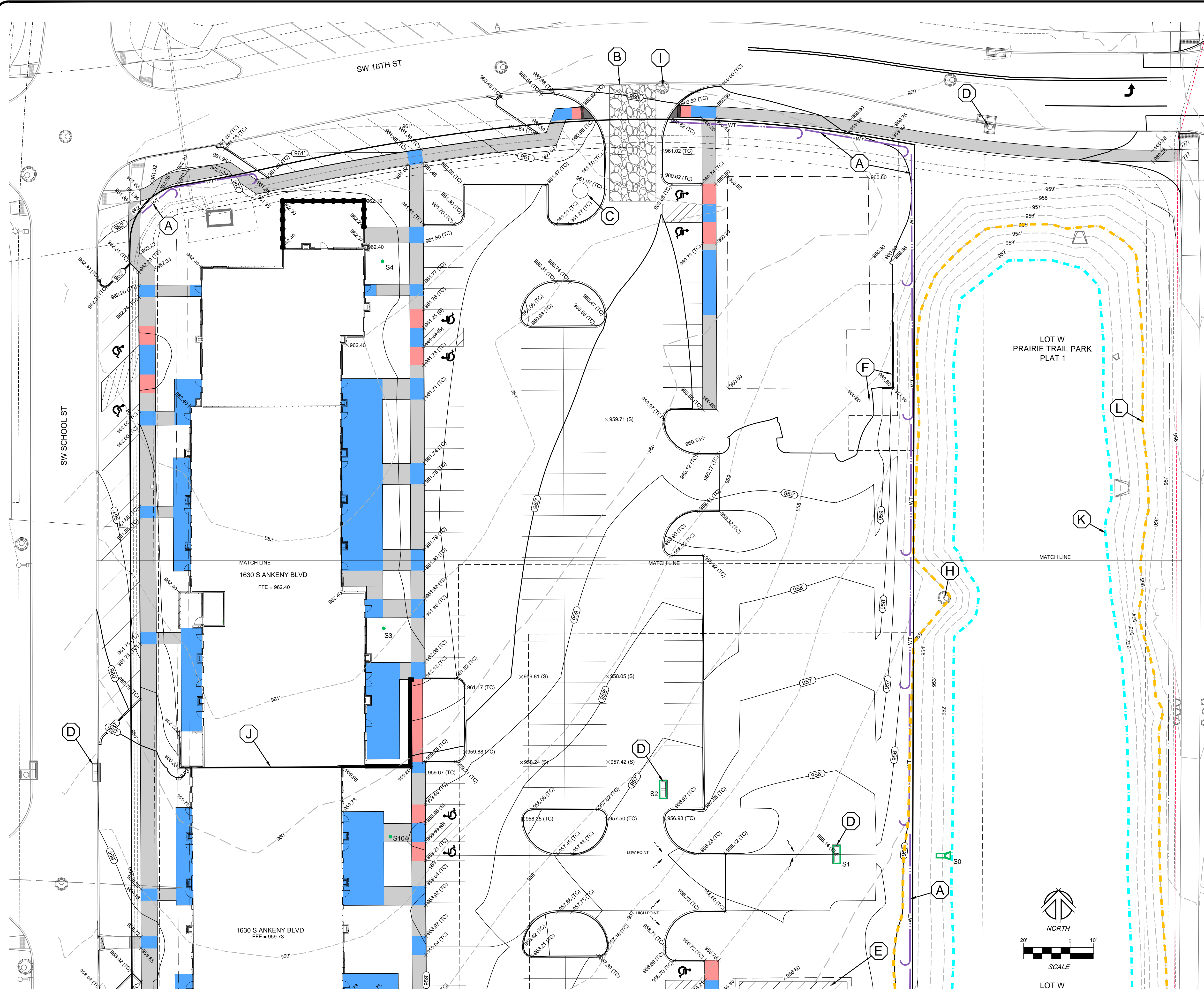
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NOTE: NILLES ASSOCIATES, INC. WAIVES ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES, INCLUDING BUT NOT LIMITED TO, THE ENGINEERING INTENT OF THIS PLAN, OR TO OBTAIN AND/OR FOLLOW THE ENGINEER'S DIMENSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

PROJECT NAME: LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA

DESCRIPTION: DIMENSION PLAN

DATE: 09/12/2022
 DRAWN BY: BLH
 CHECKED BY: JTN
 SHEET SIZE: 24" X 36"
 SHEET TITLE: DP-1
 SHEET NO.: 2/12



GENERAL GRADING PLAN NOTES

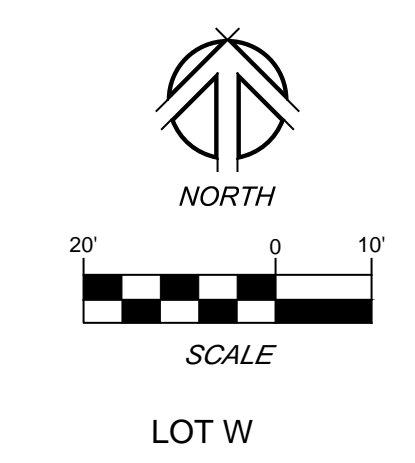
- ALL EXTERIOR PAVING AREAS SHALL HAVE 12" DEPTH SUBGRADE PREPARATION. SCARIFY AND COMPACT PER GEOTECHNICAL REPORT EXTENDING 2' BEYOND PAVING LIMITS.
- ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

GRADING PLAN NOTES

- PROVIDE SILT FENCE AND 9" STRAW WATTLES WHERE SHOWN FOR EROSION CONTROL MEASURES. LINES MARKED ---SF--- AND ---WT--- RESPECTIVELY. 1125 LF OF WATTLE SHOWN. INSTALL PER SUDAS 9040.
- CONSTRUCTION ENTRANCE - 16' WIDE X 60' LONG X 12" DEPTH STONE. INSTALL PER SUDAS 9040.
- CONCRETE WASHOUT AREA.
- INSTALL AND MAINTAIN INLET CONTROL DEVICE PRIOR TO AND FOLLOWING PAVEMENT INSTALLATION. REFER TO DETAIL 3 ON SHEET DT-1 FOR FURTHER INFORMATION.
- TOPSOIL STOCKPILE LOCATION.
- RETAINING WALL - REFER TO ARCHITECTURAL PLAN FOR DETAILS.
- REFER TO SHEET GP-3 & 4 FOR RAMP DETAILS.
- PROTECT EXISTING SANITARY SEWER MANHOLES DURING CONSTRUCTION.
- ADJUST MANHOLE RIM TO FINISHED GRADE. EXISTING RIM ELEVATION = 959.98. PROPOSED RIM ELEVATION = 959.72. CHANGE CASTING TO AN EAST JORDAN SELF LEVEL.
- BUILDING STEP. 2'-8".
- AN-4 NORTH REGIONAL WET DETENTION BASIN. PERMANENT POOL ELEVATION=951.00.
- BASIN 100-YR STORM HIGH WATER ELEVATION=955.10.

GRADING PLAN LEGEND

- TC - TOP OF CURB ELEVATION
- S - TOP OF SLAB ELEVATION
- TW - TOP OF WALL
- BW - BOTTOM OF WALL
- RAMP
- SPECIAL SHAPING
- TURNING SPACE
- MAX 1.5% IN ALL DIRECTIONS
- CONSTRUCTION ENTRANCE



PRELIMINARY - SUBMITTAL #2

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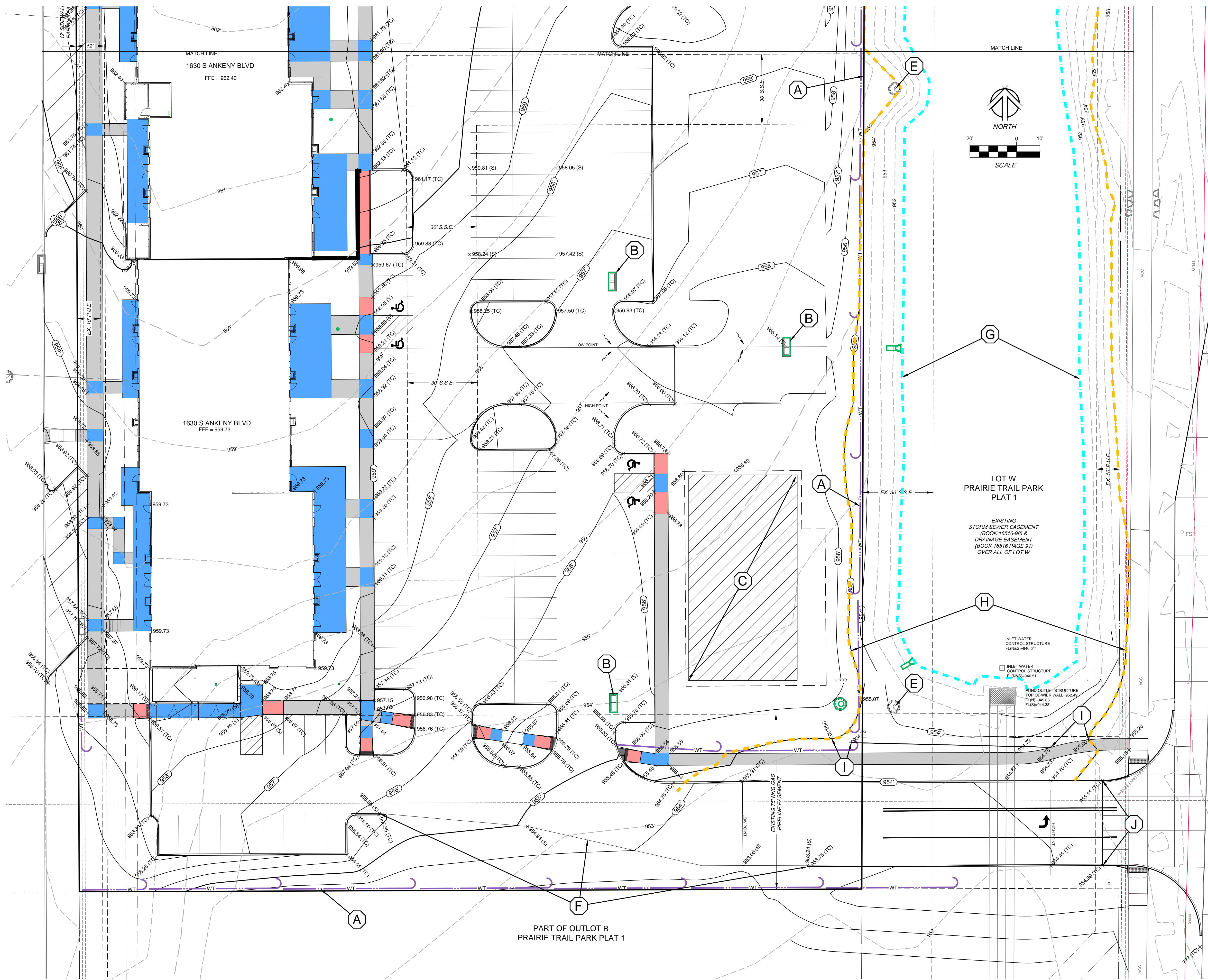


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PROJECT NAME: LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA
 DESCRIPTION: GRADING & EROSION CONTROL PLAN

PROJECT NO.:	22111
DATE:	09/12/2022
DRAWN BY:	BLH
CHECKED BY:	JTN
SHEET SIZE:	24" X 36"
SHEET TITLE:	GP-1
SHEET NO.:	4 / 12



GENERAL GRADING PLAN NOTES

- ALL EXTERIOR PAVING AREAS SHALL HAVE 12" DEPTH SUBGRADE PREPARATION, SCARIFY AND COMPACT PER GEOTECHNICAL REPORT EXTENDING 2' BEYOND PAVING LIMITS.
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GRADING PLAN NOTES

- PROVIDE SILT FENCE AND 9" STRAW WATTLES WHERE SHOWN FOR EROSION CONTROL MEASURES. LINES MARKED ---SF--- AND ---WT--- RESPECTIVELY. 595 LF OF SILT FENCE SHOWN. 1026 LF OF WATTLE SHOWN. INSTALL PER SUDAS 9040.
- INSTALL AND MAINTAIN INLET CONTROL DEVICE PRIOR TO AND FOLLOWING PAVEMENT INSTALLATION. REFER TO DETAIL 3 ON SHEET DT-1 FOR FURTHER INFORMATION.
- TOPSOIL STOCKPILE LOCATION.
- REFER TO SHEET GP-3&4 FOR RAMP DETAILS.
- PROTECT EXISTING SANITARY SEWER MANHOLES DURING CONSTRUCTION.
- NO CURB THROUGH THIS SECTION.
- AN-4 NORTH REGIONAL WET DETENTION BASIN. PERMANENT POOL ELEVATION=951.00.
- BASIN 100-YR STORM HIGH WATER ELEVATION=955.10.
- BASIN OVERFLOW CREST ELEVATION=954.75. TOP OF BERM=955.00.
- PROJECT PAVING LIMITS. REFER TO PLANS FOR PUBLIC IMPROVEMENTS FOR GRADING INFORMATION PERTAINING TO S. ANKENY BLVD TIE-IN.

GRADING PLAN LEGEND

- TC - TOP OF CURB ELEVATION
 S - TOP OF SLAB ELEVATION
 TW - TOP OF WALL
 BW - BOTTOM OF WALL
- RAMP
 - SPECIAL SHAPING
 - TURNING SPACE
 - MAX 1.5% IN ALL DIRECTIONS

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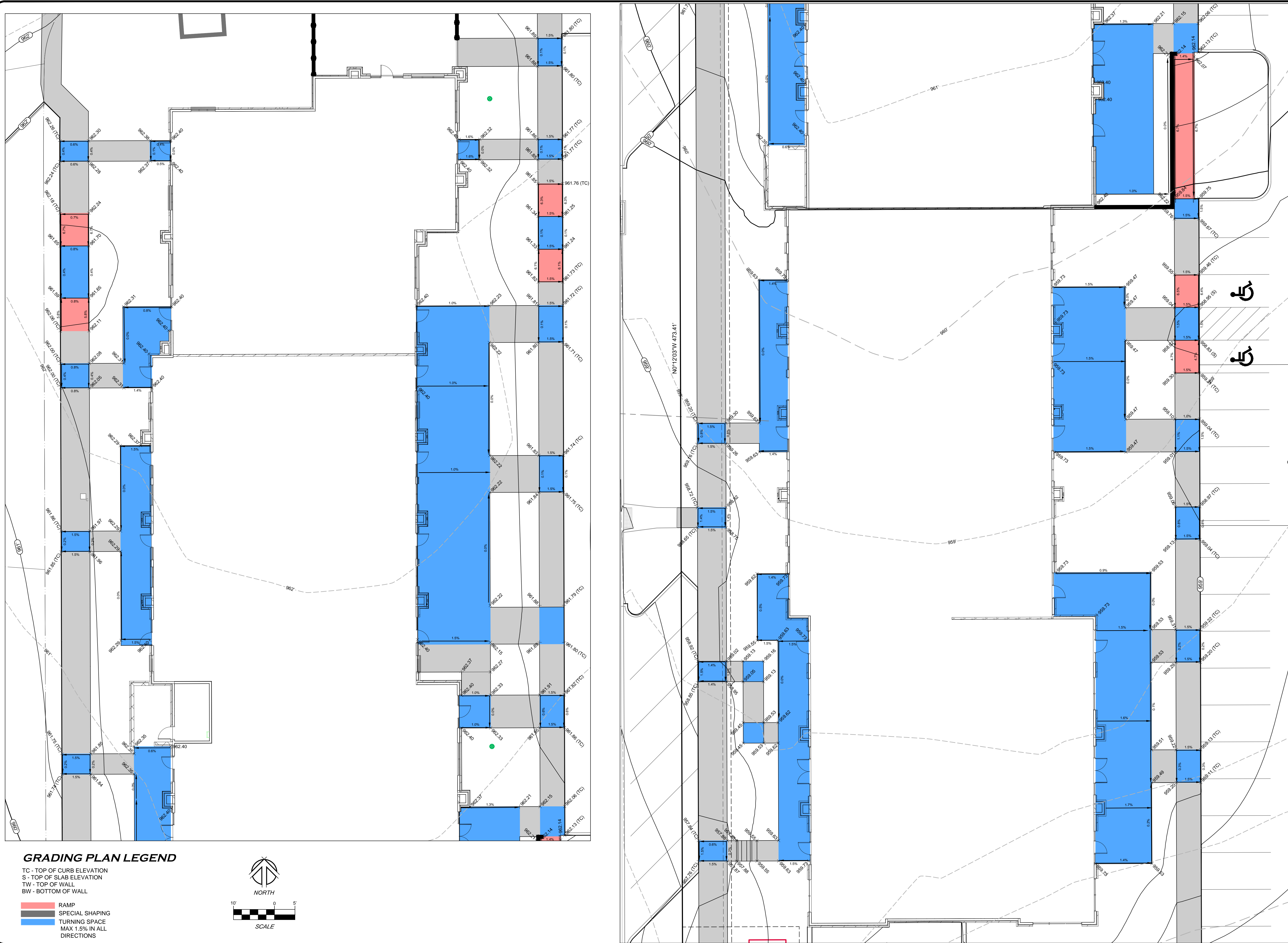
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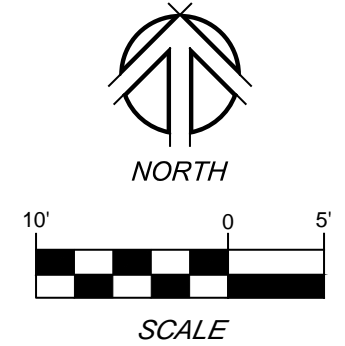
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GRADING PLAN LEGEND

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RAMP
 SPECIAL SHAPING
 TURNING SPACE
 MAX 1.5% IN ALL DIRECTIONS



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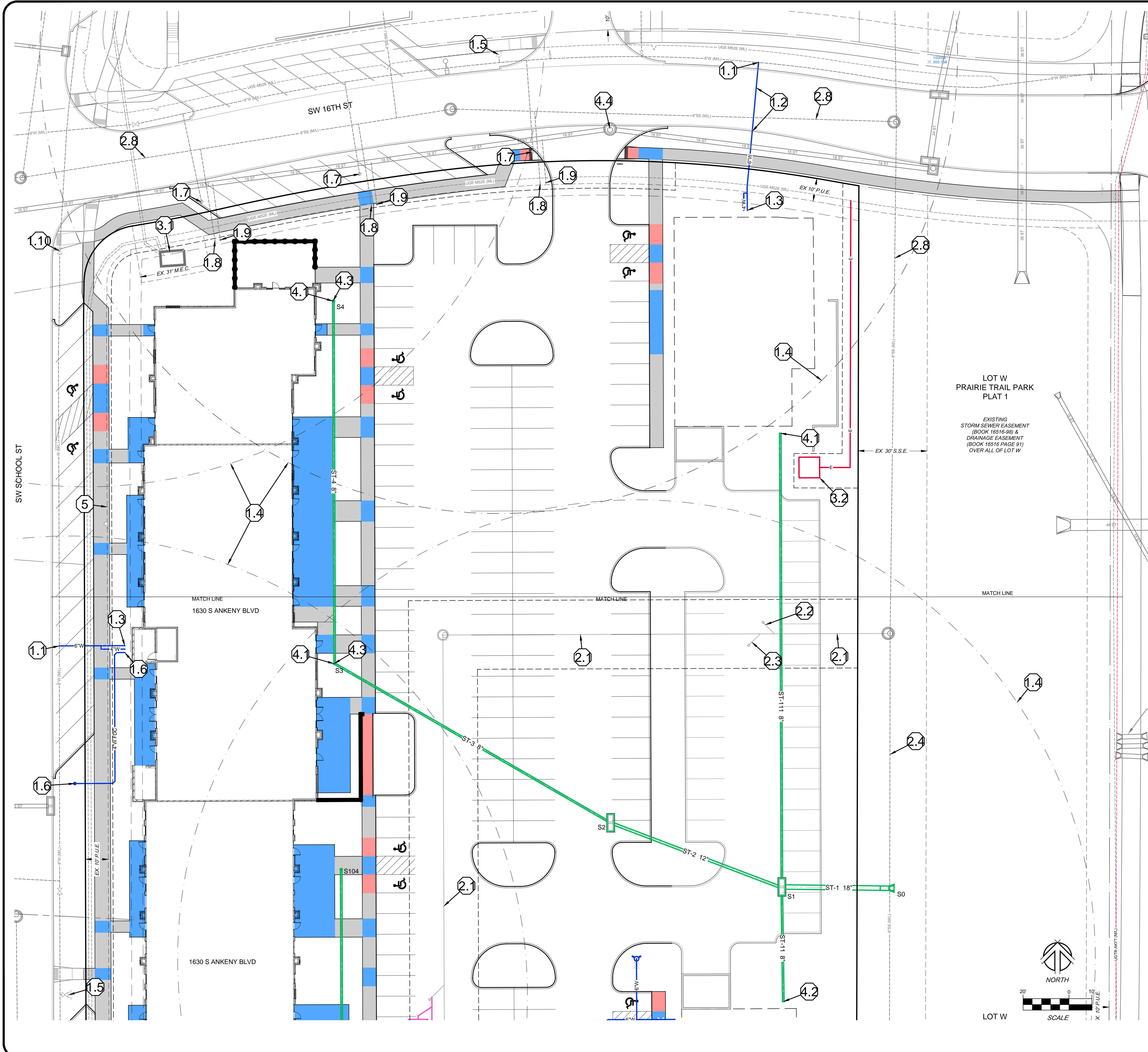
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NOTE: NILLES ASSOCIATES, INC. DISCLAIMS ANY LIABILITY FOR ERRORS OR OMISSIONS WHICH MAY ARISE FROM FAILURE TO OBTAIN NECESSARY PERMITS FROM THE LOCAL GOVERNMENT OR FROM THE ENGINEERING INTENT OF THIS PLAN, OR TO OBTAIN AND/OR FOLLOW THE ENGINEER'S ADVICE AND/OR INSTRUCTIONS. INCONSISTENCIES AMONG DRAWINGS, INCONSISTENCIES AMONG DRAWINGS OR CONFLICTS WHICH ARE ALLEGED.

PROJECT NAME: LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA
 GRADING & EROSION CONTROL PLAN

NAI NO.: 22111
 DATE: 09/12/2022
 DRAWN BY: BLH
 CHECKED BY: JTN
 SHEET SIZE: 24" X 36"
 SHEET TITLE: GP-3
 SHEET NO.: 6/12



GENERAL UTILITY PLAN NOTES

- ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

UTILITY PLAN NOTES

- WATER MAIN SERVICE. 6" WATER MAIN, 203 LF TOTAL (APPROXIMATELY). INSTALL PIPE AND FITTINGS PER SUDAS 5010, 5020, 2015 INTERNATIONAL FIRE CODE, AND CITY OF ANKENY REQUIREMENTS. MAINTAIN DEPTH OF 5.5 FEET MINIMUM. CONSULT BUILDING PLANS FOR FOOTING DEPTH AND EXTENSION OF SERVICES TO METERS.
 - 8" TAPPING SLEEVE AND VALVE.
 - TRENCHLESS WATER SERVICE CONSTRUCTION FOR INSTALLATION OF 6" WATER SERVICE UNDER SW 16TH STREET. 65 LF TOTAL.
 - WATER SERVICE CONNECTION. REFER TO DETAIL 2 ON SHEET DT-1.
 - 200' FIRE HYDRANT COVERAGE RADIUS.
 - EXISTING FIRE HYDRANT.
 - 4" REMOTE FIRE CONNECTION.
 - ABANDON EXISTING WATER SERVICE PIPES BY CAPPING AT MAIN ACCORDING TO SUDAS SECTION 5010. COORDINATE WORK WITH ANKENY WATER DEPARTMENT FOR OBSERVATION.
 - ABANDON EXISTING STORM SEWER SERVICE ACCORDING TO METHODS LISTED IN SUDAS SECTION 4020.
 - ABANDON EXISTING SANITARY SEWER SERVICE ACCORDING TO METHODS LISTED IN SUDAS SECTION 4010. FIBERGLASS PATCH SHALL BE INSTALLED AT SERVICE REMOVAL LOCATIONS. VIDEO INSPECTION MUST BE PROVIDED TO CITY FOR APPROVAL.
 - EXISTING WATER VALVE.
- SANITARY SEWER WORK AND MATERIALS SHALL CONFORM TO SUDAS 4010.
 - PROPOSED 8" SANITARY SEWER MAIN INCLUDING WYE CONNECTIONS TO BE INSTALLED AS PART OF THE PLANS FOR PUBLIC IMPROVEMENT. REFER TO HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1 CONSTRUCTION DRAWINGS FOR MORE INFORMATION.
 - STUB FOR CONNECTION TO FUTURE 6" SANITARY SERVICE FOR FUTURE BUILDING PAD. REFER TO PLANS FOR PUBLIC IMPROVEMENTS FOR SANITARY MAIN DETAILS.
 - STUB FOR CONNECTION TO FUTURE 6" SANITARY SERVICE FOR FUTURE BUILDING PAD. REFER TO PLANS FOR PUBLIC IMPROVEMENTS FOR SANITARY MAIN DETAILS.
 - EXISTING SANITARY SEWER MAIN.
- ELECTRIC SERVICE. COORDINATE TRANSFORMER LOCATION AND CONNECTION TO EXISTING ELECTRIC SERVICE WITH MIDAMERICAN ENERGY.
 - EXISTING TRANSFORMER LOCATION.
 - PROPOSED TRANSFORMER LOCATION.
- STORM SEWER. ALL WORK AND MATERIALS SHALL CONFORM TO SUDAS 4020, 4030, & 6010.
 - CONNECT TO INTERNAL BUILDING ROOF DRAINS.
 - INSTALL STUB FOR CONNECTION TO FUTURE INTERNAL BUILDING ROOF DRAINS.
 - STORM SEWER CLEANOUT, TYPE A.
 - MANHOLE RIM ADJUSTMENT. EXISTING RIM ELEVATION=959.94 PROPOSED RIM ELEVATION=949.71 REMOVE EXISTING CASTING AND REPLACE WITH 3-PIECE SELF-LEVELING MANHOLE CASTING.
- APPROXIMATE LOCATION OF EXISTING TELECOM BOX. COORDINATE RELOCATION OF BOX WITH UTILITY PROVIDER.

STORM STRUCTURE TABLE

NAME	DESCRIPTION	RIM/TC	INVERT
S0	PIPE APRON		INV 951.00 (ST-1)
S1	DOUBLE RECTANGULAR AREA INTAKE		INV 951.39 (ST-2)
			INV 951.29 (ST-1)
			INV 951.39 (ST-111)
			INV 951.39 (ST-11)
S2	DOUBLE RECTANGULAR AREA INTAKE	956.62	INV 952.51 (ST-3) INV 952.41 (ST-2)
S3	STORM SEWER CLEANOUT, TYPE A	962.29	INV 955.95 (ST-3) INV 956.05 (ST-4)
S4	STORM SEWER CLEANOUT, TYPE A	962.20	INV 958.90 (ST-4)
S100	PIPE APRON		INV 951.00 (ST-101)
S101	(SW-401) 48" CIRCULAR STORM SEWER MANHOLE	955.72	INV 951.19 (ST-102) INV 951.09 (ST-101)
S102	DOUBLE RECTANGULAR AREA INTAKE	955.19	INV 951.43 (ST-102) INV 951.53 (ST-103)
S103	6"X6"X6" TEE		INV 953.47 (ST-104) INV 953.47 (ST-103)
			INV 953.47 (ST-1031)
S104	STORM SEWER CLEANOUT, TYPE A	959.35	INV 955.93 (ST-104)
S1031	TRASH ENCLOSURE DRAINAGE INTAKE	958.78	INV 954.33 (ST-1031)

STORM PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	INLET INVERT	OUTLET INVERT
ST-1	18" RCP	48 LF	0.60%	951.29	951.00
ST-2	12" PVC	78 LF	1.30%	952.41	951.39
ST-3	8" PVC	138 LF	2.50%	955.95	952.51
ST-4	8" PVC	157 LF	1.81%	958.90	956.05
ST-11	8" PVC	47 LF	2.48%	952.55	951.39
ST-101	15" RCP	35 LF	0.25%	951.09	951.00
ST-102	15" RCP	95 LF	0.25%	951.43	951.19
ST-103	8" PVC	119 LF	1.64%	953.47	951.53
ST-104	8" PVC	152 LF	1.62%	955.93	953.47
ST-111	8" PVC	194 LF	2.50%	956.25	951.39
ST-1031	8" PVC	53 LF	1.63%	954.33	953.47

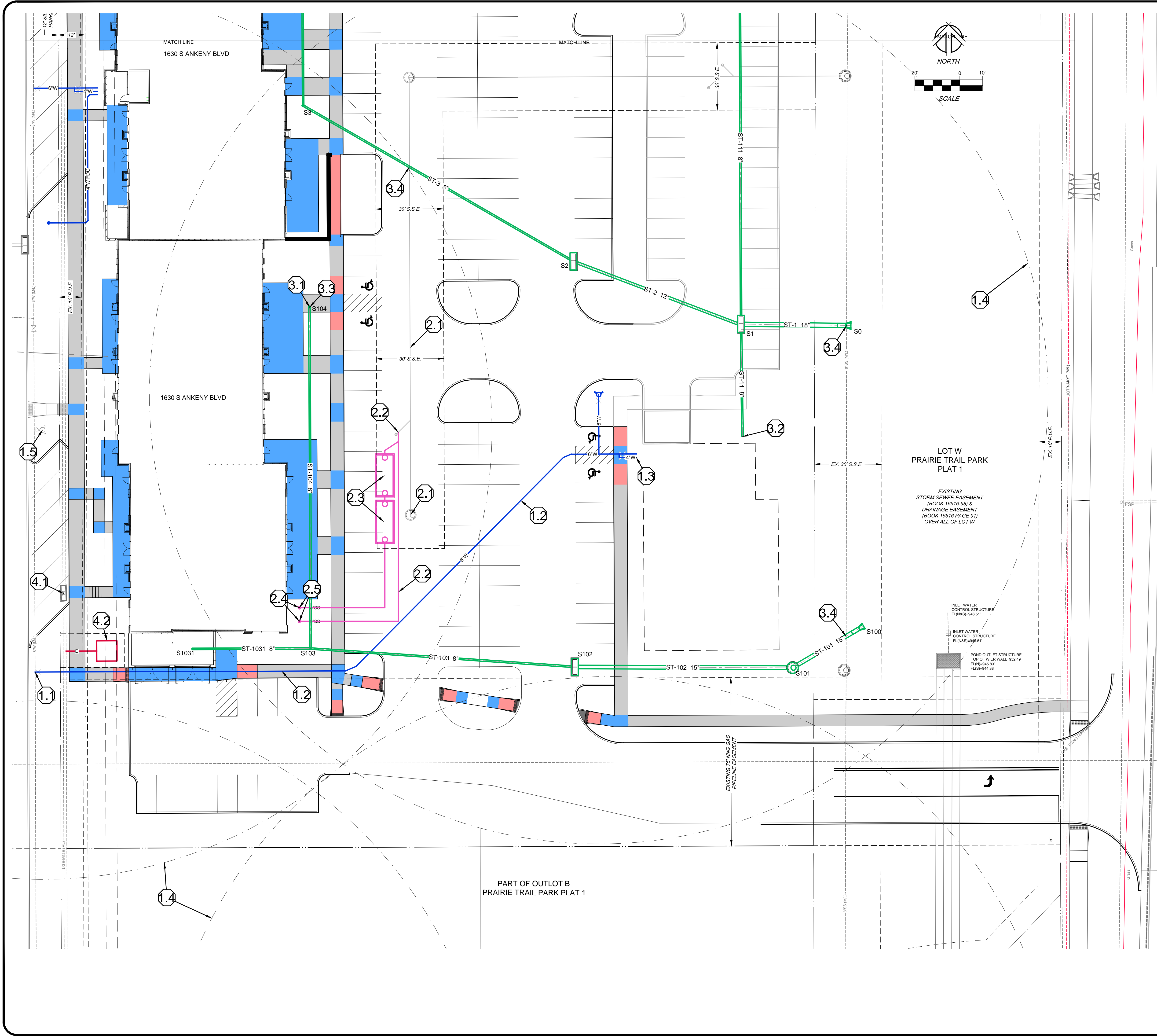
PRELIMINARY - SUBMITTAL #2

1250 SW STATE STREET, SUITE A
 ANKENY, IOWA 50023-2555
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 (515) 965-0123 phone - (515) 965-3322 fax
 Civil Engineering - Land Surveying
 Landscape Architecture

NILLES ASSOCIATES
 REVISIONS:
 1) UPDATED PER TECHNICAL REVIEW COMMENTS (9-16-2022)
 2)

PROJECT NAME:
 LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA

UTILITY PLAN
 NAI NO.: 22111
 DATE: 09/12/2022
 DRAWN BY: BLH
 CHECKED BY: JTN
 SHEET SIZE: 24" X 36"
 SHEET TITLE: UP-1
 SHEET NO.: 8/12



GENERAL UTILITY PLAN NOTES

- ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

UTILITY PLAN NOTES

- WATER MAIN SERVICE. 203 LF TOTAL (APPROXIMATELY) 6" WATER MAIN. INSTALL PIPE AND FITTINGS PER SUDAS 5010, 5020, 2015 INTERNATIONAL FIRE CODE, AND CITY OF ANKENY REQUIREMENTS. MAINTAIN DEPTH OF 5.5 FEET MINIMUM. CONSULT BUILDING PLANS FOR FOOTING DEPTH AND EXTENSION OF SERVICES TO METERS.
 - 8" TAPPING SLEEVE AND VALVE FOR CONNECTION OF 6" SERVICE TO EXISTING 8" WATER MAIN.
 - 6" WATER MAIN SERVICE. 333 LF TOTAL.
 - WATER SERVICE CONNECTION AT BUILDING. REFER TO DETAIL 2 ON SHEET DT-1.
 - 200' FIRE HYDRANT COVER RADIUS.
 - EXISTING FIRE HYDRANT.
 - PROPOSED HYDRANT ASSEMBLY W/ GATE VALVE AS PART OF ASSEMBLY.
 - 4" REMOTE FIRE CONNECTION.
- SANITARY SEWER WORK AND MATERIALS SHALL CONFORM TO SUDAS 4010.
 - PROPOSED 8" SANITARY SEWER MAIN TO BE INSTALLED AS PART OF THE PLANS FOR PUBLIC IMPROVEMENT. REFER TO HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1 CONSTRUCTION DRAWINGS FOR MORE INFORMATION. CONNECT TO 8" SANITARY SEWER WITH WYE AT INV 947.18 AND EXTEND 204 LF OF 6" SANITARY SERVICE TO 1630 SW SCHOOL STREET AT 1.0% MINIMUM SLOPE.
 - SANITARY SEWER GREASE INTERCEPTORS. TANK SIZING SHALL BE APPROVED BY WRA PRIOR TO CONSTRUCTION. EXTEND ACCESS MANHOLES TO FINISH GRADE OF PARKING LOT AND PROVIDE INTERNAL VENTING. REFER TO MECHANICAL AND PLUMBING PLANS FOR ADDITIONAL INFORMATION.
 - SANITARY SEWER CLEANOUT.
 - SANITARY SEWER SERVICES INV - 951.73 AT BUILDING.
- STORM SEWER. ALL WORK AND MATERIALS SHALL CONFORM TO SUDAS 4020, 4030, & 6010
 - CONNECT TO INTERNAL BUILDING ROOF DRAINS.
 - INSTALL STUB FOR CONNECTION TO FUTURE INTERNAL BUILDING ROOF DRAINS.
 - STORM SEWER CLEANOUT, TYPE A.
 - CRITICAL CROSSING LOCATION. MAINTAIN MINIMUM 18" SEPARATION BETWEEN PIPES.
 - SANITARY INVERT ELEVATION=948.10
 - STORM INVERT ELEVATION=952.71
- ELECTRIC SERVICE. COORDINATE TRANSFORMER LOCATION AND CONNECTION TO EXISTING ELECTRIC SERVICE WITH MIDAMERICAN ENERGY.
 - REMOVAL OF EXISTING TRANSFORMER. COORDINATE WORK WITH MIDAMERICAN ENERGY.
 - PROPOSED TRANSFORMER LOCATION.

STORM STRUCTURE TABLE

NAME	DESCRIPTION	RIM/TC	INVERT
S0	PIPE APRON		INV 951.00 (ST-1)
S1	DOUBLE RECTANGULAR AREA INTAKE	955.14	INV 951.39 (ST-2) INV 951.29 (ST-1) INV 951.39 (ST-111) INV 951.39 (ST-111)
S2	DOUBLE RECTANGULAR AREA INTAKE	956.62	INV 952.51 (ST-3) INV 952.41 (ST-2)
S3	STORM SEWER CLEANOUT, TYPE A	962.29	INV 955.95 (ST-3) INV 956.05 (ST-4)
S4	STORM SEWER CLEANOUT, TYPE A	962.20	INV 958.90 (ST-4)
S100	PIPE APRON		INV 951.00 (ST-101)
S101	(SW-401) 48" CIRCULAR STORM SEWER MANHOLE	955.72	INV 951.19 (ST-102) INV 951.09 (ST-101)
S102	DOUBLE RECTANGULAR AREA INTAKE	955.19	INV 951.43 (ST-102) INV 951.53 (ST-103)
S103	6"X6"X6" TEE	958.19	INV 953.47 (ST-104) INV 953.47 (ST-103) INV 953.47 (ST-1031)
S104	STORM SEWER CLEANOUT, TYPE A	969.35	INV 955.93 (ST-104)
S1031	TRASH ENCLOSURE DRAINAGE INTAKE	958.78	INV 954.33 (ST-1031)

STORM PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	INLET INVERT	OUTLET INVERT
ST-1	18" RCP	48 LF	0.60%	951.29	951.00
ST-2	12" PVC	78 LF	1.30%	952.41	951.39
ST-3	8" PVC	138 LF	2.50%	955.95	952.51
ST-4	8" PVC	157 LF	1.81%	958.90	956.05
ST-11	8" PVC	47 LF	2.48%	952.55	951.39
ST-101	15" RCP	35 LF	0.25%	951.09	951.00
ST-102	15" RCP	95 LF	0.25%	951.43	951.19
ST-103	8" PVC	119 LF	1.64%	953.47	951.53
ST-104	8" PVC	152 LF	1.62%	955.93	953.47
ST-111	8" PVC	194 LF	2.50%	956.25	951.39
ST-1031	8" PVC	53 LF	1.63%	954.33	953.47

PRELIMINARY - SUBMITTAL #2

1250 SW STATE STREET, SUITE A
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 (515) 965-0123 phone - (515) 965-3322 fax
 Civil Engineering - Land Surveying
 Landscape Architecture

NILLES ASSOCIATES

REVISIONS:

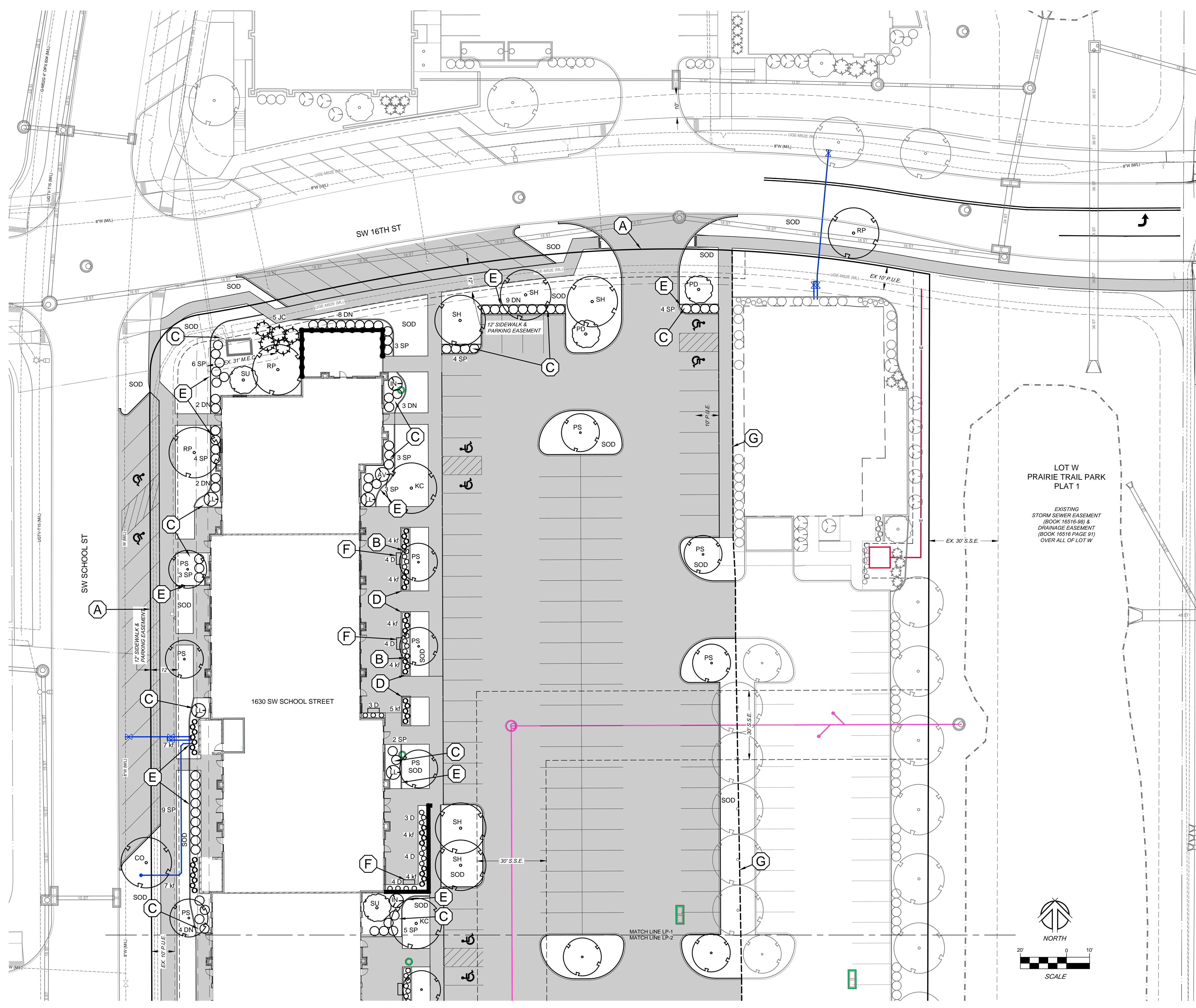
1	UPDATED PER TECHNICAL REVIEW COMMENTS (9-16-2022)
2	
3	
4	
5	
6	
7	

NOTE: NILLES ASSOCIATES, INC. WAIVES ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES WHICH MAY BE INCURRED BY ANY PARTY AS A RESULT OF THE ENGINEERING INTENT OF THIS PLAN, OR TO OBTAIN AND/OR FOLLOW THE ENGINEER'S DESIGN. INCONSISTENCIES AMONG THE DRAWINGS OR CONFLICTS WHICH ARE ALLEGED.

PROJECT NAME: LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA

UTILITY PLAN

NAI NO.: 22111
 DATE: 09/12/2022
 DRAWN BY: BLH
 CHECKED BY: JTN
 SHEET SIZE: 24" X 36"
 SHEET TITLE: UP-2
 SHEET NO.: 9/12



GENERAL SITE PLAN NOTES

1. ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

GENERAL LANDSCAPING NOTES

1. ALL PLANT MATERIAL AND PLANTING SHALL BE IN ACCORDANCE WITH DIVISION 9 - SECTION 9030 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS MANUAL (SUDAS) OMITTING PARTS 2.06 AND 3.08 (TREE WRAPPING) AND SUBJECT TO THE FOLLOWING NOTES.
2. NO SUBSTITUTIONS IN SPECIES LISTED WILL BE ACCEPTED WITHOUT APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT. IF ANY UNAUTHORIZED SUBSTITUTIONS ARE MADE BY THE OWNER OR CONTRACTOR THE PROJECT LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE GROWTH OR PERFORMANCE OF THE PLANT MATERIAL.
3. PLANTINGS SHALL MEET THE MINIMUM SIZES LISTED UNLESS LARGER CALIPER OR HEIGHTS ARE APPROVED BY THE OWNER AND PROJECT LANDSCAPE ARCHITECT.
4. ALL NURSERY STOCK MUST MEET THE MINIMUM STANDARDS ESTABLISHED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
5. LANDSCAPE CONTRACTOR SHALL ENSURE PLANT MATERIAL RECEIVES ADEQUATE WATERING FOR A MINIMUM OF 30 DAYS AFTER PLANTING AND CONTINUING UNTIL SELF-SUFFICIENT.
6. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE TIME OF INSTALLATION. SEE PLANTING DETAILS FOR ADDITIONAL PLANTING INSTRUCTION.
7. DECIDUOUS TREES IN EXCESS OF 2" CALIPER AND CONIFEROUS TREES IN EXCESS OF 6 FEET IN HEIGHT SHALL BE STAKED OR GUYED. STAKING PROCEDURE SHALL ENSURE TRUNKS ARE PROTECTED FROM DAMAGE. STRAPS OR WIRES SHALL NOT BE OVERLY TIGHTENED TO ALLOW FOR SOME LATERAL TRUNK MOVEMENT.
8. ALL DISTURBED AREAS NOT DESIGNATED FOR PLANTING BEDS OR SPECIALTY PLANTING AREAS SHALL BE SEEDED OR SODDED AS DIRECTED BY THE PLAN.
9. SODDING SHALL BE IN ACCORDANCE WITH DIVISION 9 - SECTION 9020 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS FOR PUBLIC IMPROVEMENTS MANUAL (SUDAS).
10. ALL PLANTING BEDS DESIGNATED FOR MULCH INCLUDING AREAS AROUND TREES & SHRUBS SHALL BE 3" DEPTH SHREDDED HARDWOOD - 4" DIAMETER (TREES) AND 2" DIAMETER (SHRUBS). A PRE-EMERGENT SUCH AS "PREERY" OR APPROVED EQUAL HERBICIDE SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE IMMEDIATELY AFTER MULCHING.

LANDSCAPE PLAN NOTES

- A. BOUNDARY LINE.
- B. PLANTING BEDS WITH SHREDDED HARDWOOD MULCH AND NO WEED BARRIER. PREEN PRE-EMERGENT SHALL BE APPLIED IMMEDIATELY AFTER MULCH INSTALLATION.
- C. ROCK SHALL BE 2-3" DEPTH RIVER ROCK OF 1-3" DIAMETER RANDOM LENGTH, SAW-CUT ENDS.
- D. IOWA BUFF LIMESTONE EDGER, 3" THICK x 6" WIDE x VARIABLE RANDOM LENGTH, SAW-CUT ENDS.
- E. PRE-CAST CONCRETE EDGER TO BE SELECTED BY OWNER.
- F. BLACK BENCH TO BE SELECTED BY OWNER.
- G. BOUNDARY OF CONSTRUCTION.

LANDSCAPING CALCULATIONS

OPEN SPACE REQUIREMENT
 2 TREES AND 6 SHRUBS FOR EVERY 3,000 SF OF REQUIRED OPEN SPACE.
 TOTAL AREA: 136,256 SF = 3.13 AC
 136,256 X 20% (0.2) = 27,251 SF (REQUIRED OPEN SPACE)
 27,251 / 3000 = 9.1 - 10 PLANT UNITS
 REQUIRED QUANTITY PROVIDED QUANTITY
 10 x 2 = 20 TREES 25 PROVIDED
 10 x 6 = 60 SHRUBS 208 PROVIDED
 OPEN SPACE QUANTITIES DO NOT INCLUDE STREET TREES OR PARKING LOT SCREENING SHRUBS.
 PARKING LOT SHADING
 PAVED PARKING AND DRIVE AREA TO BE CONSTRUCTED THIS PHASE IS 60,250 SF IN SIZE INCLUDING PROPOSED STREET PARKING STALLS.
 REQUIRED SHADING IS A MINIMUM OF 20% OF THE PAVED AREA. 60,250 X 20% (2) = 12,050 SF
 OVERSTORY TREES PROVIDED WITHIN 15 FEET OF PAVED AREA ON 2 OR MORE SIDES COUNTED AT 100% OF 706 SF = 10 (7,060 SF)
 OVERSTORY TREES PROVIDED WITHIN 15 FEET OF PAVING ON ONE SIDE COUNTED AT 50% OR 353 SF = 15 (5,295 SF)
 TOTAL SF SHADED = 12,355 SF (20.5%)

PLANTING SCHEDULE

KEY	COMMON / SCIENTIFIC NAME	MIN. SIZE	QTY.	ROOT / COMMENT
RM	Red Sunset Maple <i>Acer rubrum 'Franksred'</i>	2" Caliper	1	B&B or Container
KC	Kentucky Coffee Tree 'Espresso' <i>Gymnocladus dioica</i>	2" Caliper	2	B&B or Container
SH	Skyline Honey Locust <i>Gleditsia triacanthos f. inermis 'Skycole'</i>	2" Caliper	9	B&B or Container
PS	Pink Spire Crabapple <i>Malus 'Pink Spire'</i>	1.5" Caliper	15	B&B or Container
CO	Chinkapin Oak <i>Quercus muhlenbergii</i>	2" Caliper	2	B&B or Container
RP	Regal Prince Oak <i>Quercus x warei 'Long'</i>	2" Caliper	4	B&B or Container
PD	Pagoda Dogwood <i>Cornus alternifolia</i>	3-4" Height Multi-stem	3	Container
IN	Incrediball Smooth Hydrangea <i>Hydrangea arborescens 'Incrediball'</i>	30" Height	3	Container
JC	Compact Fitter Juniper <i>Juniperus chinensis 'Pfitzeriana compacta'</i>	18-24" Height	11	Container
DN	Diablo Ninebark <i>Physocarpus 'Diablo'</i>	18-24" Height	42	Container
SU	Staghorn Sumac <i>Rhus typhina</i>	3-4" Height	3	Container
SP	Goldflame Spiraea <i>Spiraea japonica 'Goldflame'</i>	18-24" Height	78	Container
AV	Chicago Lustre Arrowwood Viburnum <i>Viburnum dentatum 'Syrnhvedt'</i>	3-4" Height	8	Container
LL	Dwarf Korean Lilac <i>Syringa meyeri 'Palibin'</i>	3-4" Height	6	Container

PERENNIAL GRASSES AND GROUNDCOVERS

KEY	COMMON / SCIENTIFIC NAME	MIN. SIZE	QTY.	ROOT / COMMENT
D	Stella d'Oro Daylily <i>Hemerocallis 'Stella d'Oro'</i>	#1	45	Container
Kf	Feather Reed Grass <i>Calamagrostis x acutiflora 'Carl Foerster'</i>	#1	51	Container

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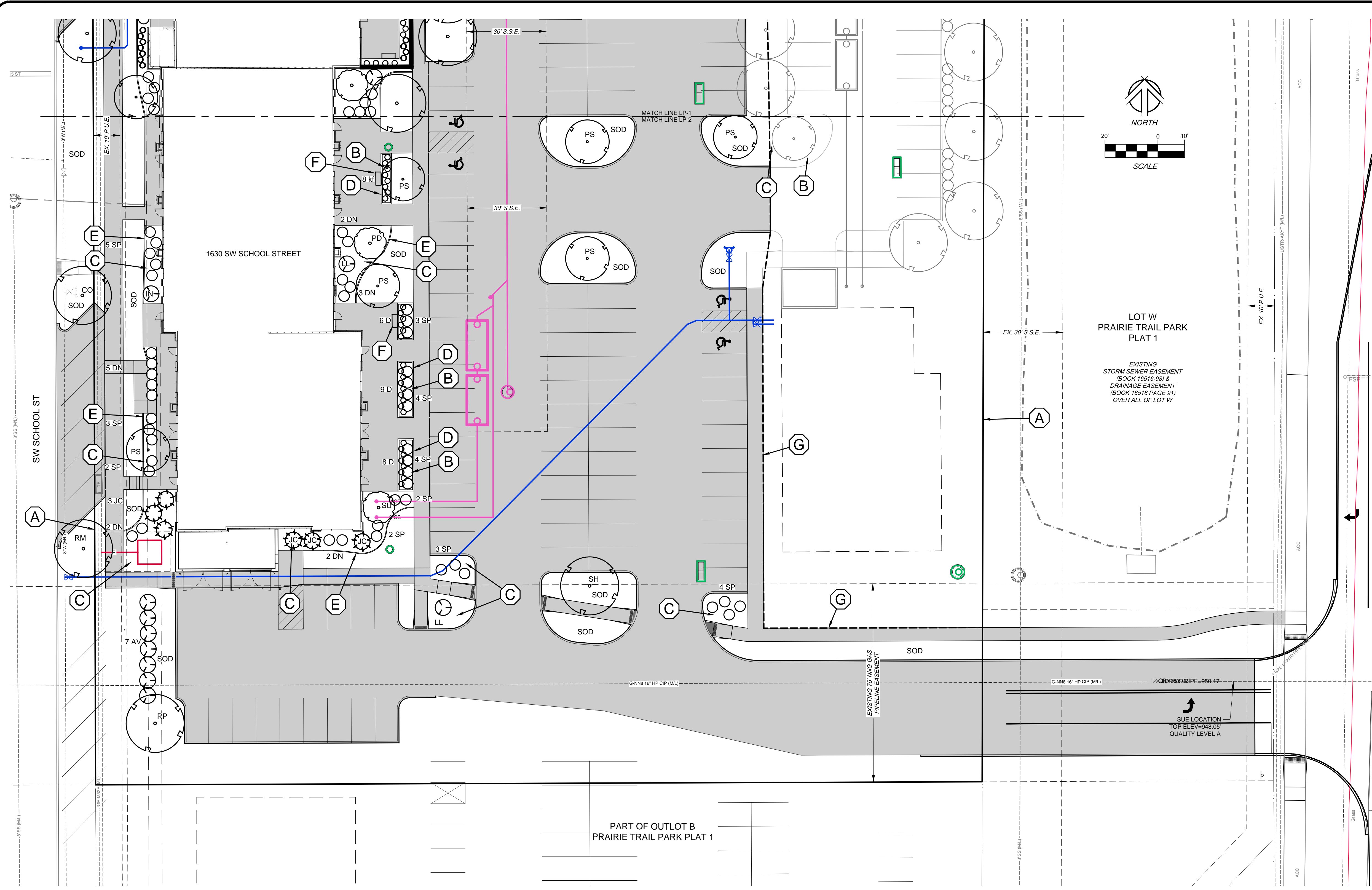


REVISIONS:
 1) UPDATED PER TECHNICAL REVIEW COMMENTS (9-16-2022)
 2) UPDATED PER COMMENTS FROM NILES ASSOCIATES (9-16-2022)

NOTE: NILES ASSOCIATES, INC. WAIVES ANY AND ALL LIABILITY FOR ANY AND ALL DAMAGES WHICH MAY BE INCURRED BY ANY PARTY AS A RESULT OF THE ENGINEERING INTENT OF THIS PLAN, OR THE FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S RECOMMENDATIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

LOT 1, HERITAGE COMMERCIAL AT PRAIRIE TRAIL PLAT 1
 1630 SW SCHOOL STREET, ANKENY, IOWA
 LANDSCAPE PLAN

PROJECT NAME:
 PROJECT NO.: 22111
 DATE: 09/12/2022
 DRAWN BY: BLH
 CHECKED BY: JTN
 SHEET SIZE: 24" X 36"
 SHEET TITLE: LP-1
 SHEET NO.: 10/12

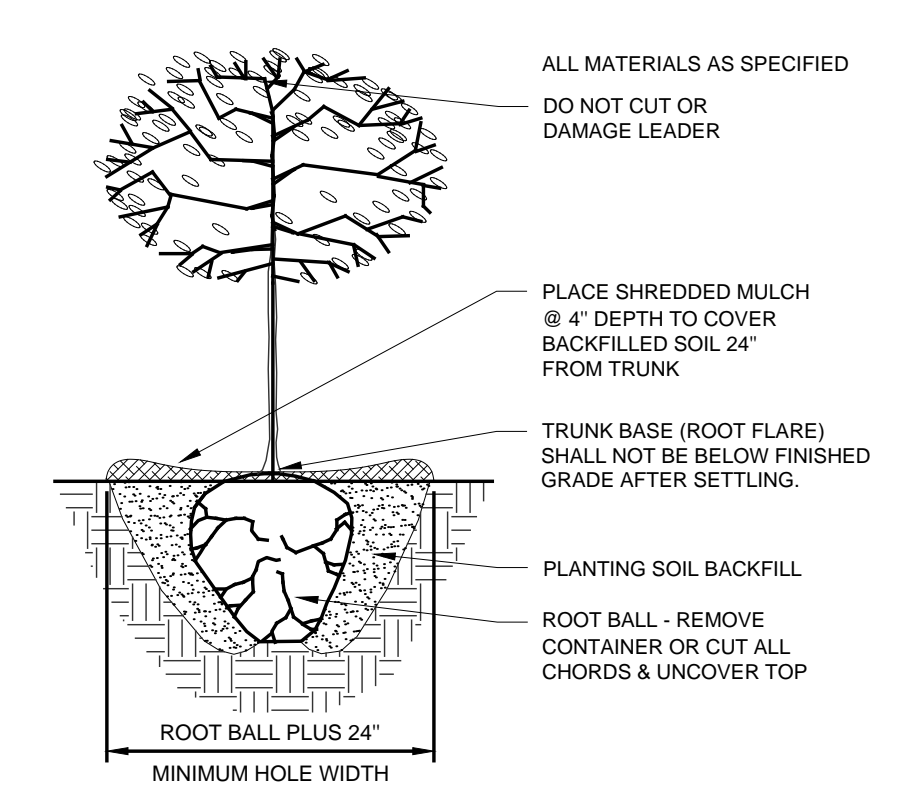


GENERAL SITE PLAN NOTES

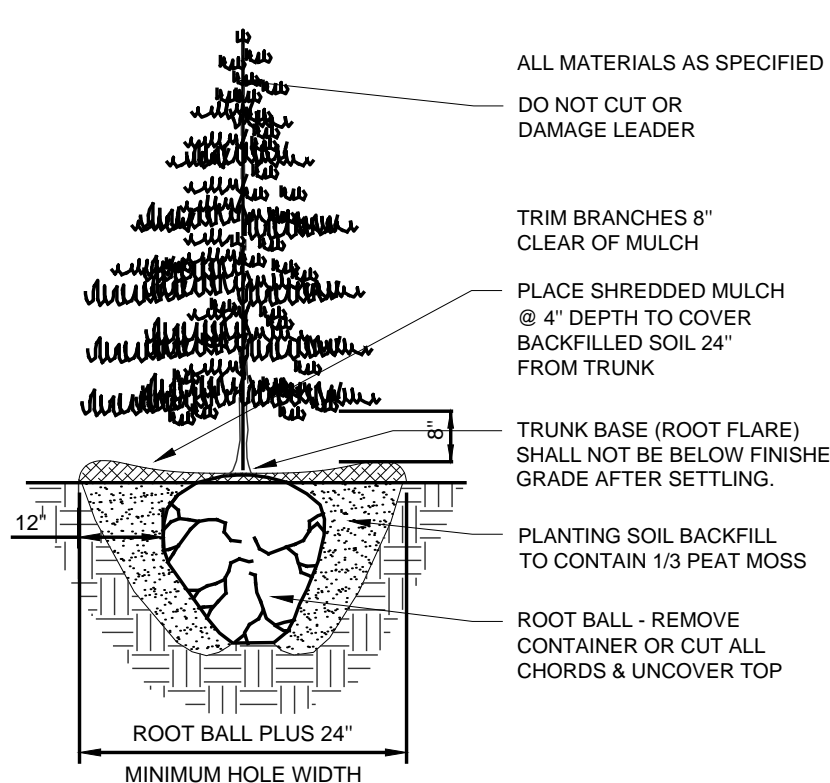
- ALL FUTURE DEVELOPMENT ITEMS ARE SHOWN TO PROVIDE DETAILS ON FUTURE SITE INTENTIONS. IT IS TO BE UNDERSTOOD THAT ALL FUTURE DEVELOPMENT ITEMS SHALL REQUIRE APPROVAL OF A NEW SITE PLAN AT THE TIME OF DEVELOPMENT.

LANDSCAPE PLAN NOTES

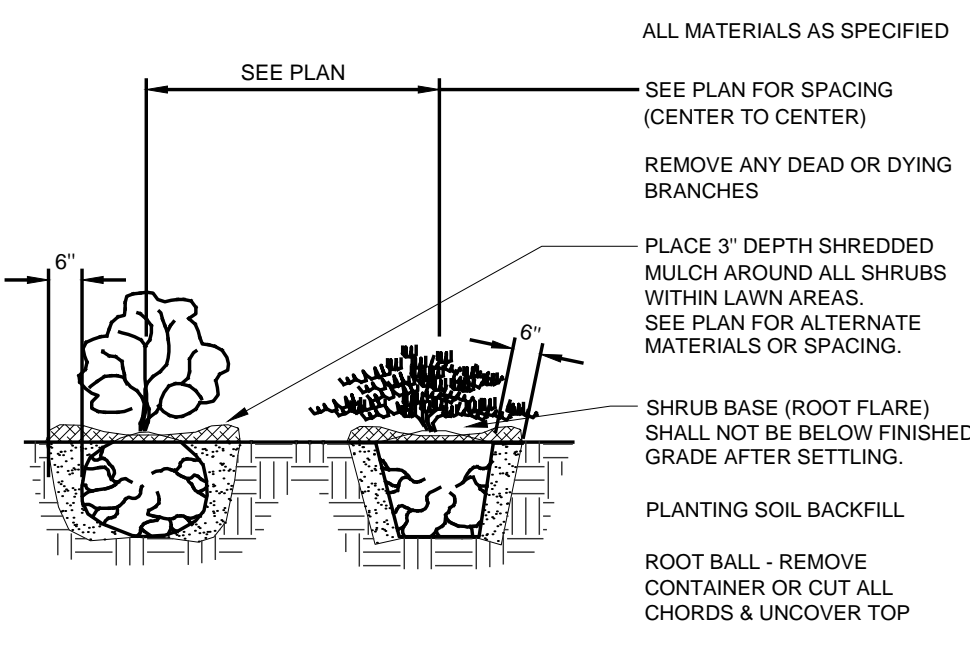
- BOUNDARY LINE.
- PLANTING BEDS WITH SHREDDED HARDWOOD MULCH AND NO WEED BARRIER. PREEN PRE-EMERGENT SHALL BE APPLIED IMMEDIATELY AFTER MULCH INSTALLATION.
- ROCK SHALL BE 2-3" DEPTH RIVER ROCK OF 1-3" DIAMETER PLACED OVER WATER PERMEABLE WEED BARRIER.
- IOWA BUFF LIMESTONE EDGER, 3" THICK x 6" WIDE x VARIABLE RANDOM LENGTH, SAW-CUT ENDS.
- PRE-CAST CONCRETE EDGER TO BE SELECTED BY OWNER.
- BLACK BENCH TO BE SELECTED BY OWNER.
- BOUNDARY OF CONSTRUCTION.



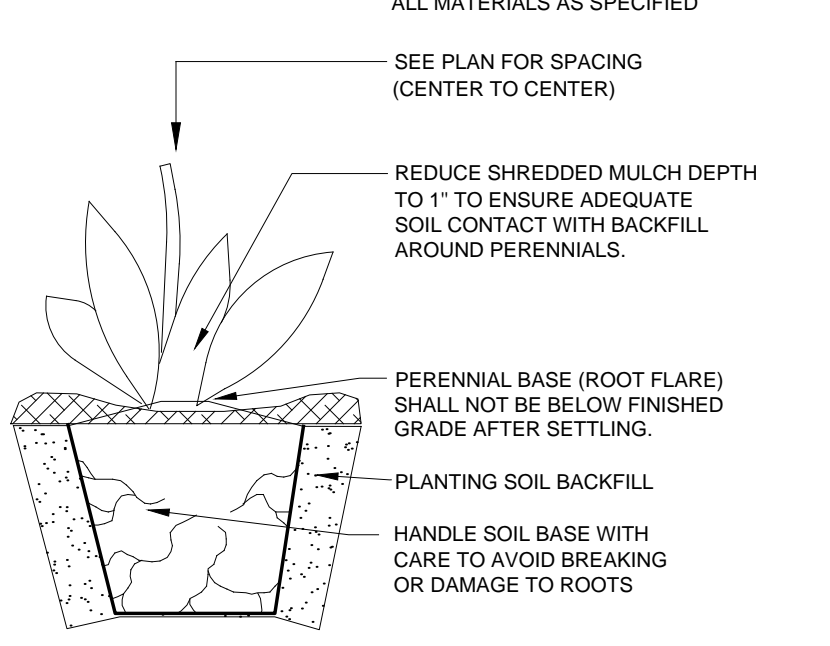
L-1 DECIDUOUS TREE PLANTING
NO SCALE



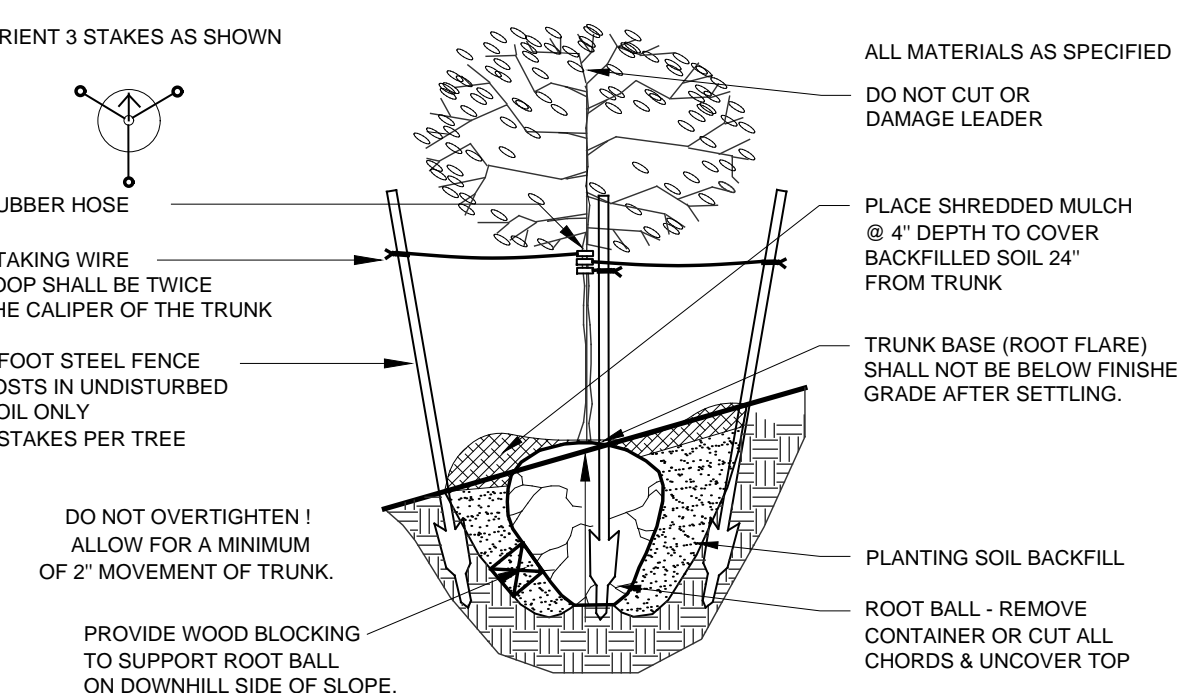
L-2 CONIFEROUS TREE PLANTING
NO SCALE



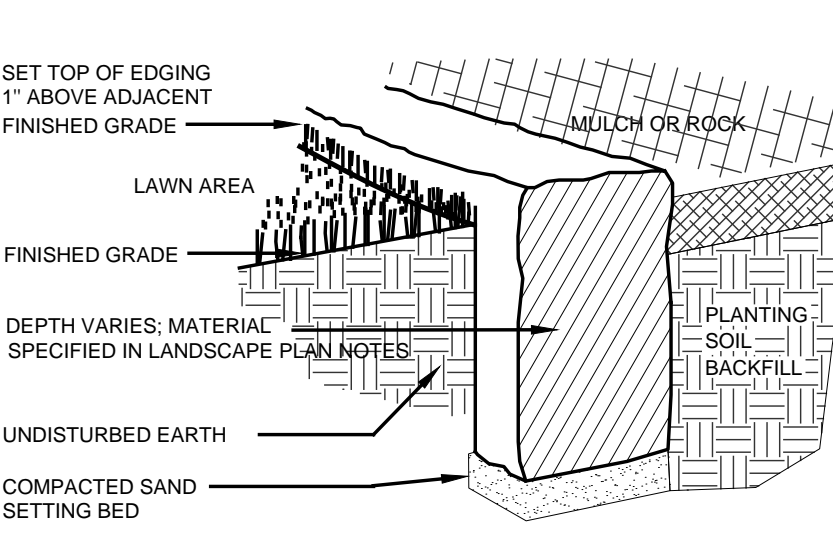
L-3 SHRUB PLANTING
NO SCALE



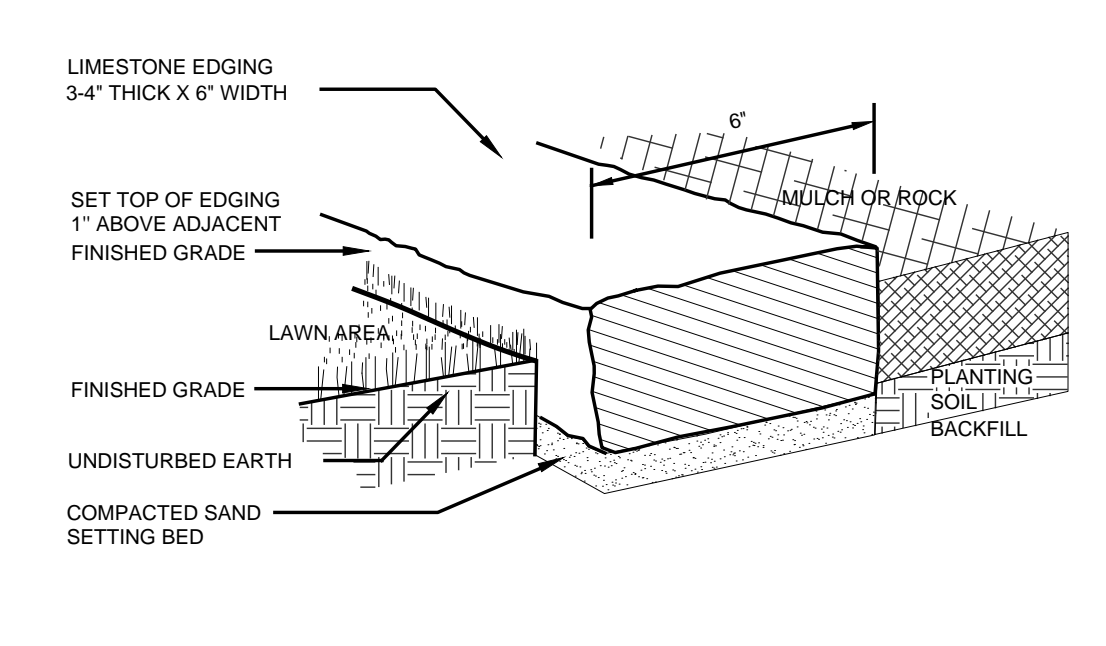
L-4 PERENNIAL PLANTING
NO SCALE



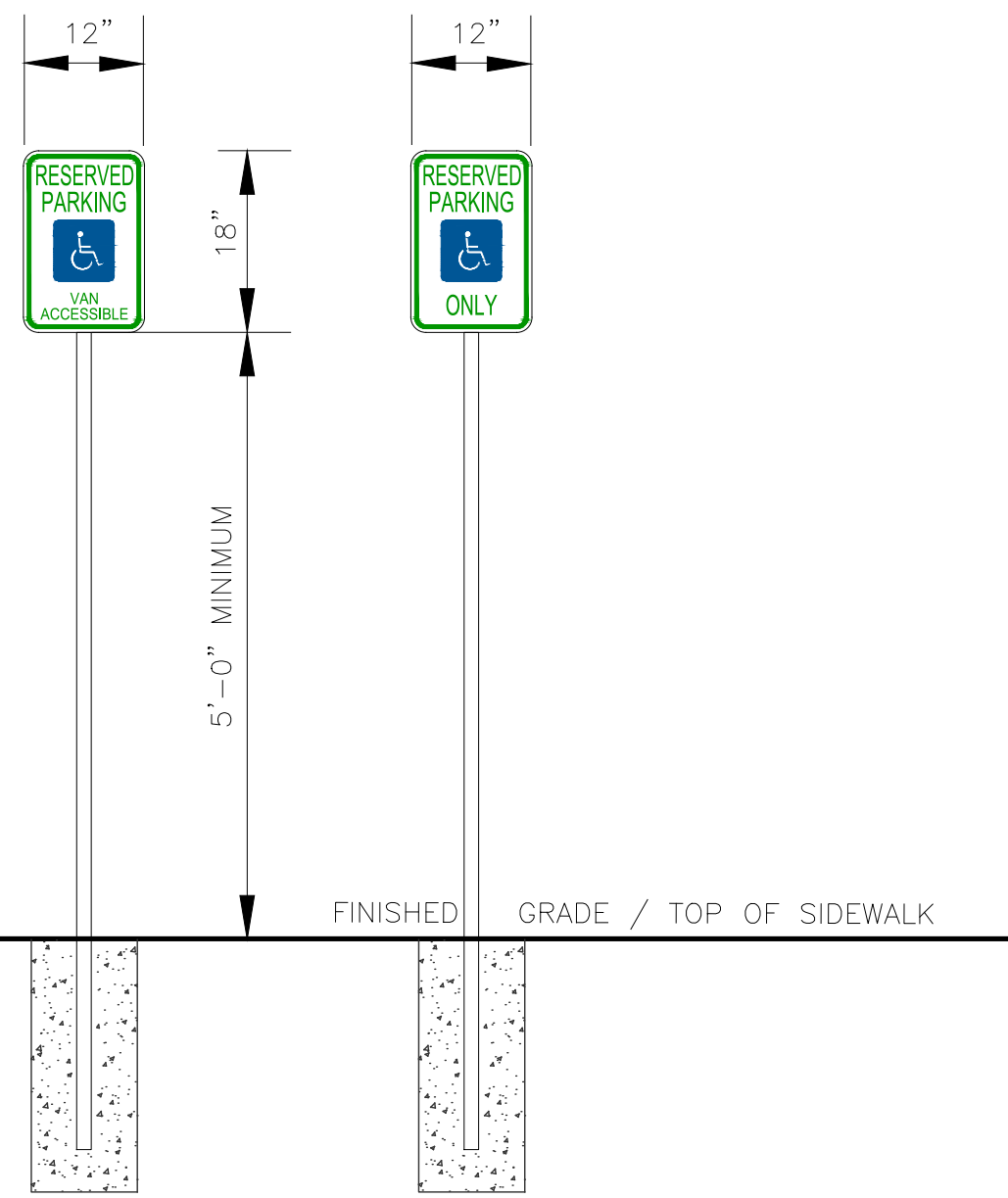
L-5 TREE SLOPE PLANTING & STAKING DETAIL
NO SCALE



L-6 EDGING DETAIL
NO SCALE

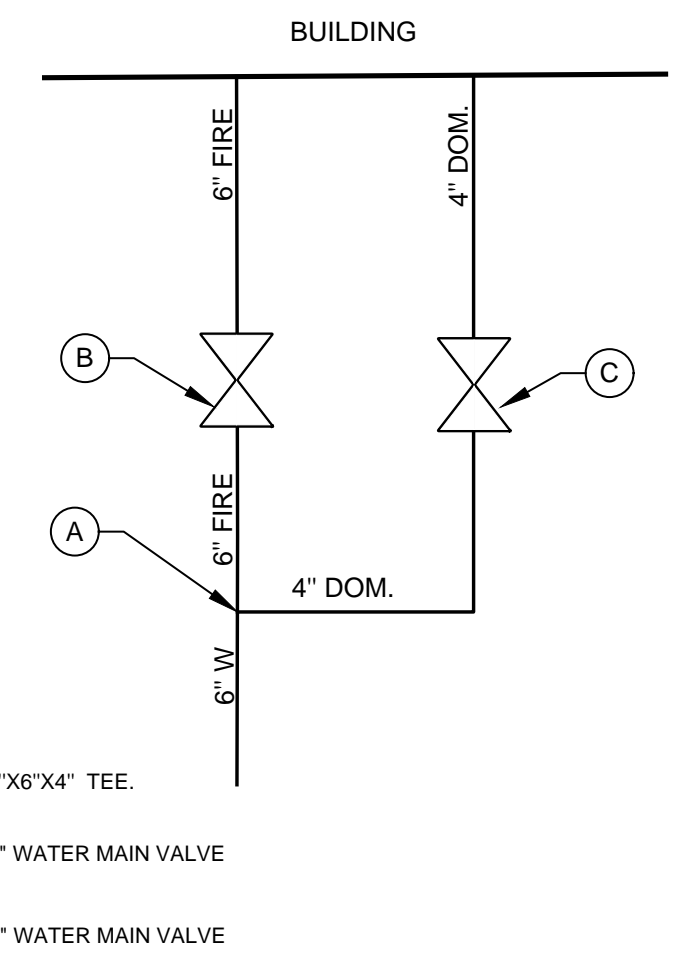


L-7 LIMESTONE EDGING DETAIL
NO SCALE



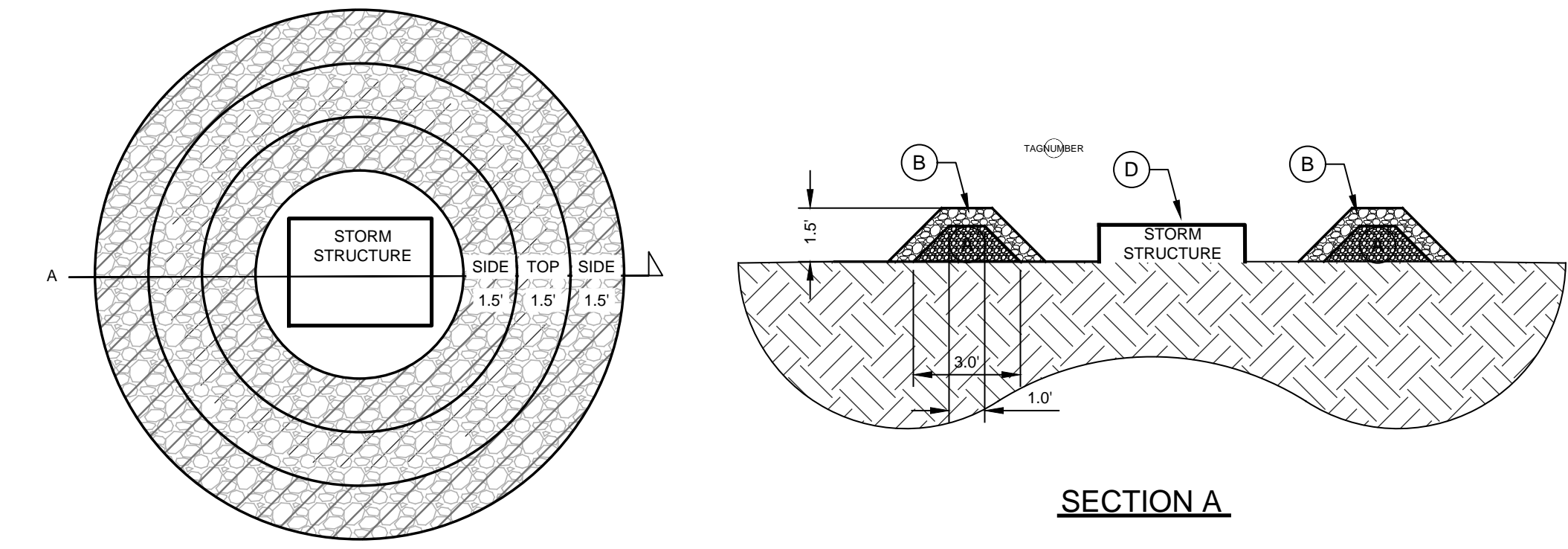
- (A) STANDARD ADA ACCESSIBLE PARKING SIGN IN ACCORDANCE WITH ANSI A117.1-09 SECTION 502.7 - PROVIDE AT ALL STALLS ADJACENT TO 5' WIDE ACCESS ISLE.
- (B) VAN ACCESSIBLE ADA PARKING SIGN IN ACCORDANCE WITH ANSI A117.1-09 SECTION 502.7 - PROVIDE AT ALL STALLS ADJACENT TO 8' WIDE ACCESS ISLE
- (C) METAL POSTS - EPOXY OR POWDER COATED BLACK
- (D) CONCRETE BASE

1 ACCESSIBLE SIGNS
DT-1 NO SCALE



- (A) 6"X6"X4" TEE.
- (B) 6" WATER MAIN VALVE
- (C) 4" WATER MAIN VALVE

2 WATER SERVICE CONNECTION
DT-1 NO SCALE



- (A) 1-INCH CLEAN STONE, TO FORM 1-FOOT HIGH MIN. X 1-FOOT WIDE MIN. CORE.
- (B) EROSION CONTROL STONE, 6-INCHES THICK, ON TOP AND SIDES OF BERM.
- (C) FINISH GRADE SURFACE.
- (D) REFER TO SHEET UP-1 FOR TOP OF STRUCTURE ELEVATIONS.

3 ROCK BERM
DT-1 NOT TO SCALE

PRELIMINARY - SUBMITTAL #2

1250 SW STATE STREET, SUITE A
 ANKENY, IOWA, 50023-2555
 (515) 965-0123 phone - (515) 965-3322 fax
NILLES ASSOCIATES
 Civil Engineering - Land Surveying
 Landscape Architecture

REVISIONS:
 1) UPDATED PER TECHNICAL REVIEW COMMENTS (9-16-2022)
 2)
 3)
 4)
 5)
 6)
 7)

NOTE: NILLES ASSOCIATES, INC. WAIVES ANY AND ALL LIABILITY FOR ANY AND ALL PROBLEMS WHICH MAY ARISE FROM FAILURE TO CONSULT THE ENGINEERING INTENT OF THIS PLAN, OR TO OBTAIN AND/OR FOLLOW THE ENGINEER'S OR ARCHITECT'S DIMENSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

PROJECT NAME: LOT1, HERITAGE COMMERCIAL AT PRIARIE TRAIL PLAT 1
 1030 SW SCHOOL STREET, ANKENY, IOWA
 DESCRIPTION: DETAILS

NAI NO.:	22111
DATE:	09/12/2022
DRAWN BY:	BLH
CHECKED BY:	JTN
SHEET SIZE:	24" X 36"
SHEET TITLE:	DT-1
SHEET NO.:	12/12