



TONGANOXIE PLANNING COMMISSION

Agenda

November 7, 2019

7:00 p.m.

City Council Chambers

321 S. Delaware St.

*Note – This meeting may be transmitted via Facebook Live on the City of Tonganoxie page

CALL TO ORDER – Planning Commission Meeting

1. **APPROVAL OF PC MINUTES** – October 3, 2019
2. **OPEN AGENDA** – In order to speak during open agenda, you must sign in **before the meeting**. Please give your name and address to the City Clerk or designee. Comments will be limited to 3 minutes. Please wait to be recognized by the Chair and before speaking **state your name and address** for the record.
3. **NEW BUSINESS**
 - a) Final Plat – 304 Shawnee Street – Submitted by Schoolyard Townhomes, LLC.
 - b) Development/Site Plan – 304 Shawnee Street – Submitted by Schoolyard Townhomes, LLC
 - c) *CONTINUED TO 12/5/19* - Special Use Permit – 704 E 4th Street – Submitted by Desiree Kenney & Tots to Teens Childcare LLC
4. **OLD BUSINESS**
 - a) Final Plat – Saunders Estates on Smiley Road – Submitted by Jack Willis
5. **GENERAL INFORMATION**
6. **ADJOURN**



City of Tonganoxie, Kansas

PLANNING STAFF REPORT

Case#: 2019-007P

Date of Report: November 1, 2019

Application: Final Plat & Final Development Plan – R-MF-2P Zoning

Action: *A final plat requires review and approval by the Planning Commission. If the plat meets the standards of the subdivision regulations, the Planning Commission shall approve the final plat. If there are any dedications of land for public purposes, they require acceptance by the City Council.*

A final development plan requires a review by the Planning Commission with a recommendation to the City Council. If the final development plan is in substantial compliance with the Preliminary Development Plan, meets any conditions placed on approval of an Outline Development Plan or Preliminary Development plan, and meets all other applicable standards, it should be recommended for approval.

Applicant Name: Schoolyard Townhomes LLC

Property Owner Name: Tongie5 LLC, Kay Soetaert or Ben Robbins

Subject Property Address: 210 E. Second Street

Property Size: 2.4 acres (106,600 s.f.)

Zoning: R-MF-2P (conditioned on final development plan)

Legal Description: (varied – multiple lots between Church and Shawnee, and between Second Street and Third Street extended)

Date of Application: 10/25/2019
Date of Public Hearing: 11/7/2019

I. SUMMARY:

This application is a Final Plat and Final Development Plan for 32 townhomes in 6 blocks of buildings at Second Street, between Church and Shawnee Streets. The project is part of the school redevelopment that includes the Library fronting on Fourth Street.

The planning commission reviewed a proposal in September to rezone approximately 2.45 acres from “R-SF” Single-family District to “RMF-2-P” Multiple-Family 2 District, with a “P” designation to account for deviations from the development standards based on a specific plan. The Planning Commission recommended approval of the rezoning to the City Council, with specific conditions to be addressed in the Final Development Plan. The Planning Commission took no action on a preliminary plat for the same project at the September meeting, but approved a preliminary plat at the October meeting. The City Council approved the rezoning from R-SF to R-MF-2P at its October 14th meeting, subject to the conditions recommended by Planning Commission.

II. ANALYSIS

A. *Final Development Plan*

1. **Zoning.** The rezoning to the “P” designation accommodated requests for specific deviations from the R-MF-2 development standards based on the preliminary development plan which included:
 - a. a reduction in the front setbacks along Church, Second Street, and Shawnee Street;
 - b. a reduction in the side setbacks for buildings with sides along Church Street and Shawnee Street;
 - c. a reduction in the parking; and
 - d. the allowance of attached buildings with more than 4 dwelling units and per-unit lot and building widths of approximately 20’ to 30’.
2. **Preliminary Development Plan.** The preliminary development plan also placed the following additional limits on the project:
 - a. the density would be limited to 32 units;
 - b. the buildings would be limited to 1.5 and 2-story buildings;
 - c. the arrangement of open spaces and pedestrian circulation would be as specified on the plan; and
 - d. the following specific items were recommended by staff as “next steps” between preliminary development plan and final development plan:
 - A final landscape plan be submitted and approved by planning staff in association with the final development plan. The plan shall
 - identifying species and planting specifications;
 - consideration of street trees between the sidewalk and street in conjunction with the street improvements.
 - Specifically trees spaced along Shawnee between curb and sidewalk if possible and some added to the north end; and on second street some trees added to the landscape areas that bulb out within the on-street parking.
 - Other landscape treatments to soften facades along the side elevations closest to Church and Shawnee shall be considered.
 - Further detail on planting, landscape or structural hardscape components should be explored to add definition and human scale to the entry court and entry features of each unit along the streetscape.

- Site plans in substantial conformance with the preliminary development plan, elevations, materials, and above conditions be reviewed and approved by Planning Commission prior to building permits.
3. **Planning Commission Review & Recommendation.** The Planning Commission also conditioned the recommendation for approval on specific issues to be addressed in this Final Development Plan:
 - a. Revisit the design of on-street parking on Second Street, and locate as much parking as possible internal to the site;
 - b. Review side setbacks requested along Church and Shawnee, and address by either relocating the buildings, limit blank walls on the close side elevations, increase landscape to soften these areas, or a combination of all of these elements.
 4. **Final Development Plan.** The final development plan is in substantial conformance with the preliminary development plan and addresses the above criteria and conditions in the following manner:
 - a. **Parking.** All of the existing head in parking on Second Street is proposed to be removed in place of a continuous curb line and landscape area. The on-site parking has been increased from 36 in the preliminary plan to 50 in the final development plan. The ordinance requires 48, so this plan complies with the R-MF-2 zoning district standards, and the project no longer needs to take advantage of deviations offered by the planned zoning designation. Additionally, although the on-street parking is no longer present, spaces for approximately 20 to 25 spaces exist on the streets for visitor or similar accessory parking, as is the case in all neighborhoods. Planning staff considers on-street parking a benefit to walkable neighborhood streetscapes since it calms traffic, buffers pedestrians from moving vehicles, and eliminates unnecessary or repetitive driveways of surface parking areas. All of these benefits are applicable in this context. The final plan meets the ordinance requirement for parking and the Planning Commission recommendations for approval.
 - b. **Side Setbacks.** The side setbacks remain as proposed in the preliminary development plan. They are:
 - 1.7 feet (Building C-1 on Church Street)
 - 6.7 feet (Building A-1 on Church Street)
 - 5.1 feet (Building B-1 on Shawnee Street)
 - 5.1 feet (Building B-2 on Shawnee Street)
 This is consistent with the preliminary plan and presents an exception to the R-MF-2 required side yard of 10'. There is an additional 12' to 18' to the street edge in each case. The applicant has elected to address the staff recommendation and Planning Commission concerns with the preliminary development plan by: (1) adding windows and doors, and material changes to all side elevations to break down the scale of the walls; (2) using 1-story elevations on some sides – particularly those closest to the side lot line; and (3) increasing the landscape elements – particularly using street trees in the right of way, which will provide a “second layer” buffer creating a more pedestrian scale to the streetscape and when viewed from the opposite block face.
 - c. **Entry Features.** Most of the entrances are side-oriented, and do not directly front the street. However, each unit has and change in material and color associated with the paired or mirrored entries. The entrances will be visible alternating down the streetscape, depending on the angle. Additionally, the corner units also have direct entries /entry areas. All of the entry areas are lined with low hedges, which combined with the shade tree canopy should provide a sufficient “social space” that helps activate the streetscape with a more pedestrian-oriented atmosphere.

- d. *Landscape Plan.* The landscape plan does a good job of providing accent to the buildings and frontages, softening some portions of elevations where larger wall expanses exist or utility areas, and improving the public realm and relationship of the site to the streetscape. Staff may still have some species and location recommendations to ensure longevity of plants and to be coordinated with final construction plans – particularly as it relates to street trees. Ideally, as many of the trees as possible should be located in the tree lawn between the sidewalk and curb. Where that is not possible due to limited space or other infrastructure considerations, the frontage locations are an acceptable alternate.
- e. *Building Elevations.* The elevations are consistent with the previous elevations but include more details on materials. Additionally, the two-story elements are mid-block on Second Street, and the end units nearest the Library on Church and Shawnee Streets. The materials are a limestone veneer, with cementitious lap siding (alternating green and blue pale hues), with dark grey trim, white or light grey shingles differentiate the massing of upper stories and gables, and use standing seam metal roofs.

B. Final Plat

The final plat is in substantial conformance with the approved preliminary plat, and meet all lot requirements of the R-MF-2 zoning and the preliminary development plan. Since this project is a single-lot plat with multi-unit buildings, the planning issues with the plat are routine and merely document the lot as a legal ownership within the bounds of the current rights-of-way on surrounding streets. The engineering and utility issues are the more important platting considerations, and are documented in the City Engineer's review and comments and included in the Planning Commission packet.

III. EFFECT OF DECISION

The Planning Commission makes a recommendation to the City Council on the Final Development Plan, since it is associated with the planned rezoning of the property. Approval of a Final Development Plan authorizes the applicant to prepare building plans and construction documents, and apply for permits demonstrating that they meet all applicable City standards and any conditions of the final development plan.

The Planning Commission approves final plats, however any dedication of land for public use must be accepted by the City Council (none in this case since all rights-of-way are established and all other utilities are in private easements). Upon approval by the Planning Commission (and acceptance of any public dedications), the applicant may record the plat with the County.

IV. STAFF RECOMMENDATION

Staff recommends approval of the Final Development Plan subject to:

1. The stormwater calculations and quantifications requested by the City Engineer be provided and all issues resolved prior to or in conjunction with construction permits.
2. The landscape plan is approved in concept with some final staff recommendations to be made on specific locations or species of plants – particularly the street trees – in coordination with construction plans.

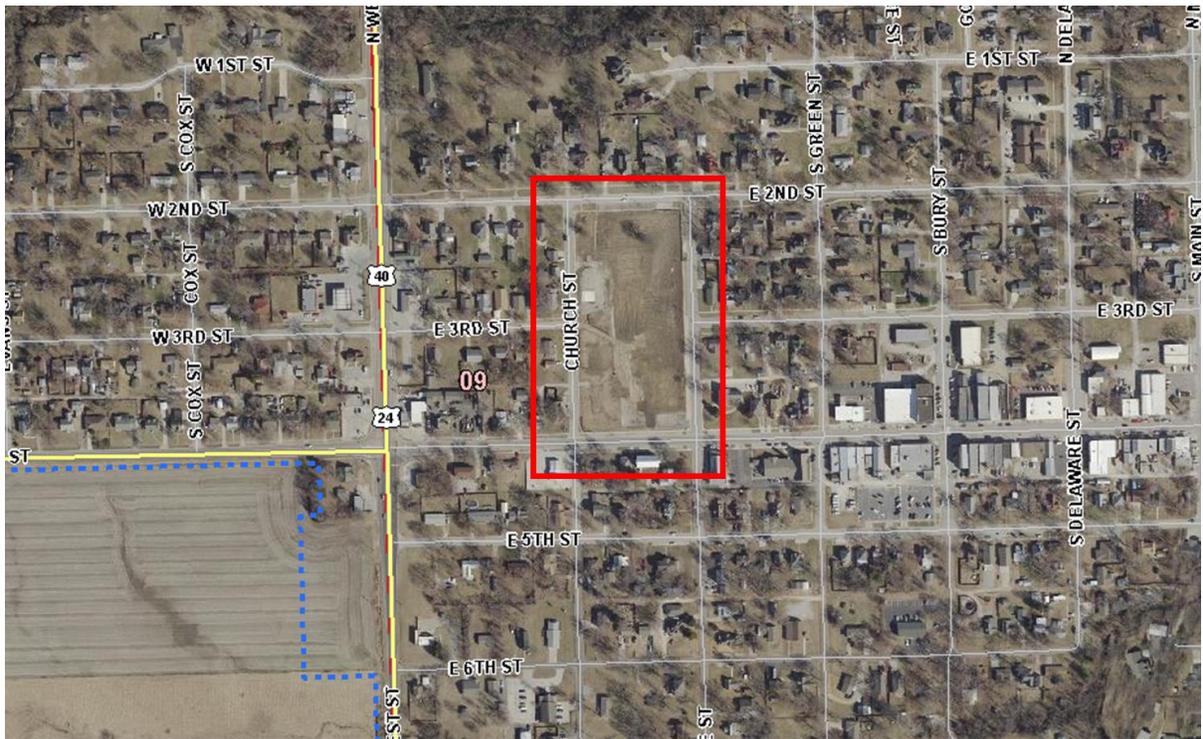
Staff recommends approval of the Final Plat subject to the City Engineer comments submitted with the Planning Commission packet.



Chris Brewster
Contract City Planner



Current City Zoning (property in red box now zoned R-SF)



Property



Future Land Use (Tonganoxie Comprehensive Plan 2006)



MEMO

To: George Brajkovic, City Manager
City of Tonganoxie

Cc: Dan Porter, Asst. City Manager
Chris Brewster, City Planner, Gould Evans
Melanie Tweedy, City of Tonganoxie
Kent Heskett, City Superintendent
Brian Lavery, PE, Continental Consulting Engineers, Inc.

From: Brian Kingsley, PE, City Engineer

Date: November 11, 2019

Re: Schoolyard Lofts
Development Construction Documents Review
19-1001L

Documents included in this review include:

Final Development Plan dated: 10-25-19

Final Plat dated: 9-4-19

Sanitary Sewer Construction plans dated: 10-25-19

Public Street and Water Main Construction plans dated 10-25-19

Stormwater Drainage Study dated: 10-25-19

The following are the City Engineer and staff review comments related to Engineering issues:

Final Development Plan:

- 1) Staff requests additional detail to quantify the amount of runoff and grading detail for storm water discharge at the Southwest corner of the site.

Recommendation: The City should consider approval of the Final Development Plan contingent upon the above items being addressed. We believe the details can be addressed at the staff level.

Final Plat:

- 1) The Final Plat appears to be in substantial compliance with the Preliminary Plat.

Recommendation: The City should consider approval of the Final Plat without contingency.

Sanitary Sewer Construction Plans:

- 1) The applicant is required to submit the construction plans to KDHE and obtain a permit for extension of the City Sanitary Sewer System. Applicant can coordinate with City Hall staff for example past permit.

Recommendation: The City should consider approval of the Sanitary Sewer Construction Plans contingent upon the applicant obtaining a KDHE permit. We believe the details can be addressed at the staff level.

Public Street and Water Main Construction Plans:

- 1) The applicant is encouraged to review sidewalk condition along the East side of Church Street. The City does not have any plans for replacement of this sidewalk in their CIP.
- 2) The traffic control plan shows closing portions of Church Street, 2nd Street and Shawnee Street.
 - a. Closing of portions of Streets should occur on a limited basis for short durations to accommodate construction.
 - b. The contractor shall be required to notify the City Superintendent prior to closing any public street during construction.
- 3) Eliminate the air release valve at Sta. 1 + 80.
- 4) 4" water service lines crossing streets need to be separated by a minimum of 3' measured center of pipe to center of pipe.
- 5) Typical water meter vault detail. Consider lowering the bottom of the vault by 1' and adding 6" washed rock in the bottom of the vault. Consider running a 10' corrugated drain tile out of the vault to allow water to drain. Details to be worked out with City Superintendent.

Recommendation: The City should consider approval of the Public Street and Water Main Construction Plans contingent upon the above items being addressed. We believe the details can be addressed at the staff level.

Stormwater Drainage Study:

- 1) The Stormwater Drainage Study documents a reduction in the rate of storm water discharge from the site from the prior developed state consisting of a school.

Recommendation: The City should consider approval of the Stormwater Drainage Study without contingency.

--END

For questions or comments, please contact:

Brian Kingsley, PE

President

Direct: 785-727-7261

E: brian.kingsley@bgcons.com

Stormwater Drainage Study for:

**Schoolyard Lofts
NW Corner of 3rd St. and Shawnee St.
Tonganoxie, Kansas 66086**

October 25, 2019

Owner/Developer:

Schoolyard Townhomes, LLC
1125 Grand Blvd, Suite 202
Kansas City, MO 64106
Phone: (816) 581-3992
jswords@sunflowerkc.com

Architect:

Odimo
701 E. 63rd Street, Suite 210
Kansas City, MO 64110
Phone: (816) 708-1500

Engineer/Prepared By:

Continental Consulting Engineers, Inc.
9000 State Line Road
Leawood, Kansas 66206
Phone: (913) 642-6642
bl@ccengineers.com



Table of Contents

General Information	1
Methodology	1
Existing Condition Analysis	1
Proposed Condition Analysis	2
Summary and Conclusions	4
Exhibits	5
Appendix	8

General Information

This drainage study addresses the stormwater drainage requirements for the proposed Schoolyard Lofts multi-family development at the northwest corner of 3rd Street and Shawnee Street in Tonganoxie, Leavenworth County, Kansas. This project consists of the construction of 6 multifamily residential buildings, an office/community space and associated parking and green space. The development lies on the north portion the former Tonganoxie Elementary School site.

Methodology

This study uses the guidelines from the City of Tonganoxie, Kansas, Ordinance #1064. The hydrologic modeling software is Bentley PondPack and uses the SCS TR-20 methodology. Per the City guidelines, a 10-yr and 100-yr storm will be analyzed with a Type II distribution and duration of 3 hours.

Existing Condition Analysis

Currently the property is covered in pavement and grass following the demolition of the elementary school in late 2017. This study will consider the existing condition as having the elementary school and playground in place. See Exhibit 1 for the “Existing Conditions”, based off topography and historical aerial imagery 5 sub-basins will be analyzed. Based off the NRCS mapping the soil is of Hydrologic Group C/D.

Basin N1 consists of grassed courtyard and 2 trailers used as school facilities and drains north into 2nd Street. Basin E1 consists mainly of the eastern portion of the old school roof and drains into Shawnee Street. All of the drainage from the N1 and E1 subbasins flows overland (no storm sewer) and joins at the intersection of 2nd and Shawnee.

Basin S1 comprised some roof area and green space that drains toward the southwest and into the property that is currently being developed as the City library.

Basin W1 is made up of some roof, playground, and green space and appeared to drain toward a north school driveway on Church Street. Basin W2 is primarily roof and parking/playground area that drained toward a south drive on Church Street. All of the drainage from W1, and W2 flowed overland (no storm sewer) toward Church Street at the southwest corner of this property.

Representatives from the City have indicated that there are flooding concerns further southwest of this property in residential areas. There are capacity issues with drainage to the southwest and the system can not handle any more runoff in this direction.

A summary of existing areas, curve numbers and flows is shown in Tables 1 and 2. A further breakdown of these calculations is shown in the Appendix in Tables A.1, A.3, and the PondPack output.

Table 1: Existing Condition Analysis:

Subbasin	Area (ac)	Curve Number	10-yr flow (cfs)	100-yr flow (cfs)
N1	0.44	86.3	2.12	3.97
E1	0.64	96.2	4.41	7.24
W1	0.46	89.2	2.56	4.65
W2	0.63	95.3	4.27	7.07
S1	0.28	82.0	1.09	2.17

Table 2: Summary of Existing Flows:

Area	10-yr flow (cfs)	100-yr flow (cfs)
2 nd and Shawnee St (Northeast: N1 and E1)	6.31	10.81
3 rd and Church St (West: W1, W2)	6.82	11.72
Library (S1)	1.09	2.17

Proposed Condition Analysis

The proposed condition of the project consists of the construction of 6 multifamily buildings totaling 32 units with an associated office/community building as well as parking and green space. With no storm sewer available on the site, it is proposed that the drainage will flow in swales or curb and gutter back to the street, following similar patterns that existing when the school was in place. There is a targeted attempt to divert some of the flow currently heading southwest back to the northeast to alleviate a small portion of the existing drainage concerns further southwest of this project. See Exhibit 2 for “Proposed Conditions”. Based off the layout and proposed grading, 9 sub-basins will be analyzed.

Basin N101 consists of the north half of most of the roofs along 2nd Street and the front yards of these units. Basin E101 is the rear roofs of the 2 northeast buildings, basin E201 is mainly the east parking lot, some green space, and roof area and finally E301 is the front roof and yards of the southeast building. These areas drain out into 2nd Street and Shawnee and combine at the intersection of 2nd and Shawnee.

Basin S101 is mainly greenspace that sheetflows toward the south and onto the proposed library site.

Basin W101 consists of the rear roofs and backyards of the 2 northwest buildings. Basin W201 consists of the west parking and some roof, it outlets to a similar point as W1 did in the existing condition. Basin W301 sheet flows the front yard and roofs of the southwest building. Finally W401 is mostly green space and a little roof. This area is diverted around the southwest building in a swale and out toward Church to a point that would compare to the outlet of W2 in the existing condition.

A summary of proposed areas, curve numbers and flows is shown in Tables 3 and 4. A further breakdown of these calculations is shown in the Appendix in Tables A.2 and A.3 and the PondPack output.

Table 1: Proposed Condition Analysis:

Subbasin	Area (ac)	Curve Number	10-yr flow (cfs)	100-yr flow (cfs)
N101	0.19	91.4	1.16	2.02
E101	0.29	88.1	1.43	2.64
E201	0.41	95.1	2.70	4.84
E301	0.12	88.8	0.71	1.31
S101	0.09	79.3	0.74	1.33
W101	0.26	87.8	1.23	2.39
W201	0.34	93.7	2.24	3.81
W301	0.12	92.0	0.74	1.28
W401	0.63	79.0	1.36	2.87

Table 2: Summary of Proposed Flows:

Area	10-yr flow (cfs)	100-yr flow (cfs)
2 nd and Shawnee St (Northeast: N1 and E1)	5.33	9.23
3 rd and Church St (West: W1, W2)	6.11	11.52
Library (S1)	0.31	0.65

Summary and Conclusions

The proposed Schoolyard Lofts development at the northwest corner of 3rd and Shawnee Streets will reduce the impervious area of the site as well as reduce runoff from the site. A comparison of the existing vs proposed conditions at 3 critical runoff points is summarized below:

Table 5: Comparison of Existing vs Proposed Flows

Area	Existing 10-yr flow (cfs)	Proposed 10-yr flow (cfs)	Existing 100-yr flow (cfs)	Proposed 100-yr flow (cfs)
2 nd and Shawnee St (Northeast: N1 and E1)	6.31	5.33	10.81	9.23
3 rd and Church St (West: W1, W2)	6.82	6.11	11.72	11.52
Library (S1)	1.09	0.31	2.17	0.65

In all 3 cases, the peak runoff has been reduced. Since none of the drainage is conveyed by storm sewer, the streets and curb and gutter convey the runoff. With the reduction in peak flows the street spread should be reduced. In addition, the reduction in peak flows toward the southwest should not aggravate any existing drainage issues toward that area.

Exhibits

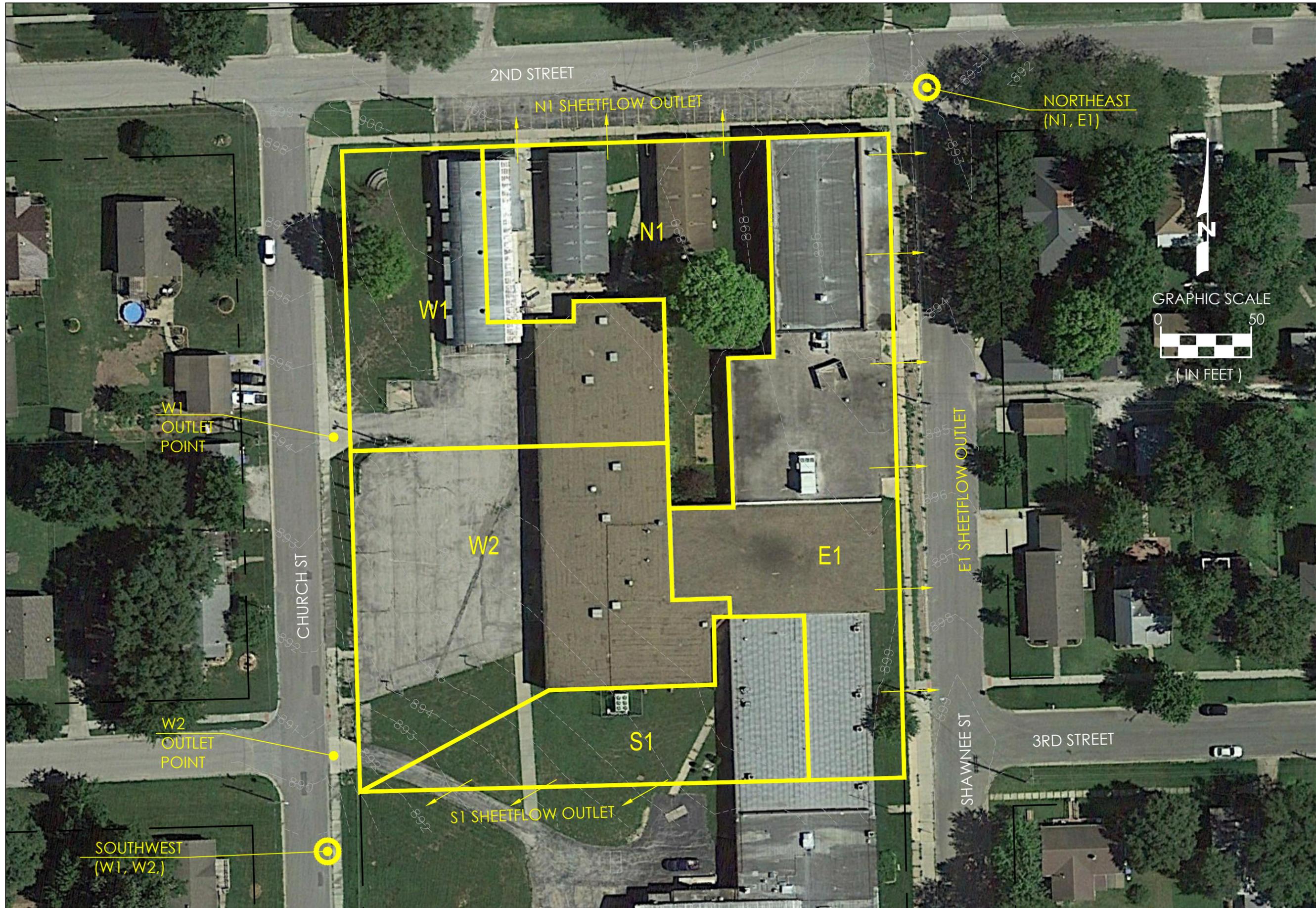


EXHIBIT 1:
SCHOOLYARD LOFTS
EXISTING CONDITIONS

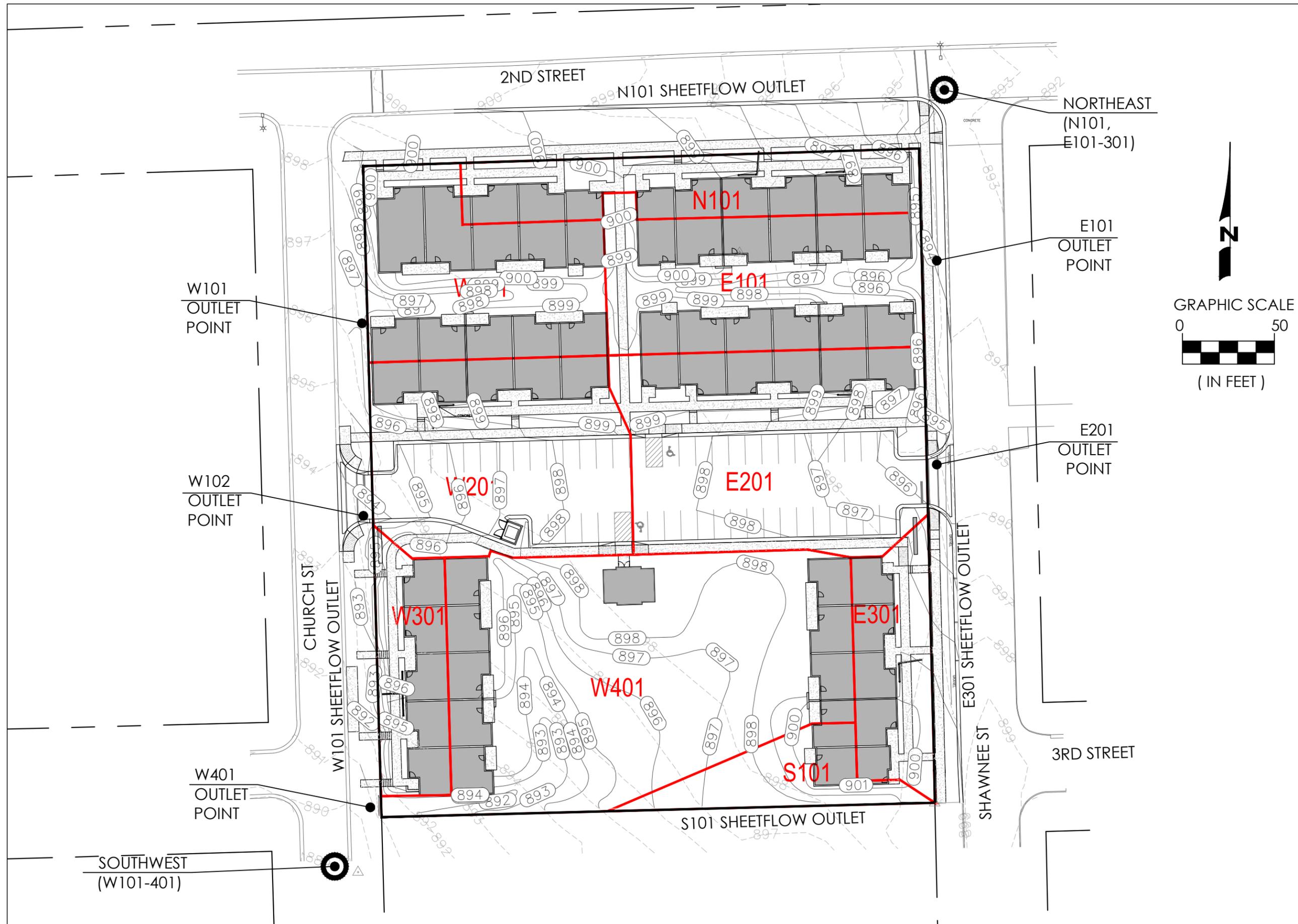


EXHIBIT 2:
SCHOOLYARD LOFTS
PROPOSED CONDITIONS

Appendix

SCHOOLYARD LOFTS, 2ND AND CHURCH STREET, TONGANOXIE, KS

TABLE A.1
 AREA AND CURVE NUMBER SUMMARY
 EXISTING CONDITIONS, TR-20 METHODOLOGY

EXISTING CONDITIONS				
COVER TYPE	AREA (ac)	AREA (sf)	SOIL TYPE	CURVE NUMBER
Area: N1				
Impervious Area: Paved parking lots, roofs, driveways	0.22	9769	C	98.0
Open Space: Lawn: Good condition	0.21	9364	C	74.0
<i>Composite North Drainage Area</i>	<i>0.44</i>	<i>19133</i>		<i>86.3</i>
Area: W1				
Impervious Area: Paved parking lots, roofs, driveways	0.29	12749	C	98.0
Open Space: Lawn: Good condition	0.17	7355	C	74.0
Area: W2				
Impervious Area: Paved parking lots, roofs, driveways	0.56	24420	C	98.0
Open Space: Lawn: Good condition	0.07	3148	C	74.0
<i>Composite West Drainage Area</i>	<i>1.09</i>	<i>47672</i>		<i>92.7</i>
Area: S1				
Impervious Area: Paved parking lots, roofs, driveways	0.09	4116	C	98.0
Open Space: Lawn: Good condition	0.19	8195	C	74.0
<i>Composite South Drainage Area</i>	<i>0.28</i>	<i>12311</i>		<i>82.0</i>
Area: E1				
Impervious Area: Paved parking lots, roofs, driveways	0.59	25598	C	98.0
Open Space: Lawn: Good condition	0.05	2083	C	74.0
<i>Composite East Drainage Area</i>	<i>0.64</i>	<i>27681</i>		<i>96.2</i>
TOTAL	2.45	106797		91.2

SCHOOLYARD LOFTS, 2ND AND CHURCH STREET, TONGANOXIE, KS

TABLE A.2
 AREA AND CURVE NUMBER SUMMARY
 PROPOSED CONDITIONS, TR-20 METHODOLOGY

PROPOSED CONDITIONS				
COVER TYPE	AREA (ac)	AREA (sf)	SOIL TYPE	CURVE NUMBER
Area: N101				
Impervious Area: Paved parking lots, roofs, driveways	0.14	5930	C	98.0
Open Space: Lawn: Good condition	0.05	2246	C	74.0
<i>Composite North Drainage Area</i>	<i>0.19</i>	<i>8176</i>		<i>91.4</i>
Area: W101				
Impervious Area: Paved parking lots, roofs, driveways	0.15	6732	C	98.0
Open Space: Lawn: Good condition	0.11	4576	C	74.0
Area: W201				
Impervious Area: Paved parking lots, roofs, driveways	0.28	12257	C	98.0
Open Space: Lawn: Good condition	0.06	2614	C	74.0
Area: W301				
Impervious Area: Paved parking lots, roofs, driveways	0.09	3722	C	98.0
Open Space: Lawn: Good condition	0.03	1451	C	74.0
Area: W401				
Impervious Area: Paved parking lots, roofs, driveways	0.13	5663	C	98.0
Open Space: Lawn: Good condition	0.50	21780	C	74.0
<i>Composite West Drainage Area</i>	<i>1.35</i>	<i>58795</i>		<i>85.6</i>
Area: S101				
Impervious Area: Paved parking lots, roofs, driveways	0.02	871	C	98.0
Open Space: Lawn: Good condition	0.07	3049	C	74.0
<i>Composite South Drainage Area</i>	<i>0.09</i>	<i>3920</i>		<i>79.3</i>
Area: E101				
Impervious Area: Paved parking lots, roofs, driveways	0.17	7569	C	98.0
Open Space: Lawn: Good condition	0.12	5266	C	74.0
Area: E201				
Impervious Area: Paved parking lots, roofs, driveways	0.36	15682	C	98.0
Open Space: Lawn: Good condition	0.05	2178	C	74.0
Area: E301				
Impervious Area: Paved parking lots, roofs, driveways	0.08	3595	C	98.0
Open Space: Lawn: Good condition	0.05	1992	C	74.0
<i>Composite East Drainage Area</i>	<i>0.83</i>	<i>36282</i>		<i>91.8</i>
TOTAL	2.46	107173		87.9

SCHOOLYARD LOFTS, 2ND AND CHURCH STREET, TONGANOXIE, KS

TABLE A.3
TIMES OF CONCENTRATION

TR-20 METHODOLOGY

Sub-basin	Overland Flow							Shallow Concentrated Flow						Channel Flow or Pipe Flow						Total Time of Concentration (minutes)‡	
	Tc Method	n	Cover	L (ft)	delta H (ft)	S (ft/ft)	Tol (min)	L (ft)	delta H (ft)	S (ft/ft)	Cover or Pipe	V (ft/s)	Tsc (min)	L (ft)	delta H (ft)	S (ft/ft)	n	R (ft)	V (ft/s)		Tch1 (min)
N1	TR-55	0.24	Dense Grass	50	2	0.040	5.76	150	3	0.020	unpaved	2.28	1.10	0	0	1.000	0.013	0.10	24.50	0.00	6.86
W1	TR-55	0.011	Roof	192	1	0.005	3.24	0.01	0.01	1.000	paved	20.33	0.00	0	0	1.000	0.013	0.10	24.50	0.00	3.24
W2	TR-55	0.011	Roof	205	1	0.005	3.51	0.01	0.01	1.000	paved	20.33	0.00	0	0	1.000	0.013	0.10	24.50	0.00	3.51
S1	TR-55	0.24	Dense Grass	90	4	0.044	8.84	0.01	0.01	1.000	unpaved	16.13	0.00	0	0	1.000	0.013	0.10	24.50	0.00	8.84
E1	TR-55	0.011	Roof	125	1	0.008	1.94	0.01	0.01	1.000	paved	20.33	0.00	0	0	1.000	0.013	0.10	24.50	0.00	1.94

Sub-basin	Overland Flow							Shallow Concentrated Flow						Channel Flow or Pipe Flow						Total Time of Concentration (minutes)‡	
	Tc Method	n	Cover	L (ft)	delta H (ft)	S (ft/ft)	Tol (min)	L (ft)	delta H (ft)	S (ft/ft)	Cover or Pipe	V (ft/s)	Tsc (min)	L (ft)	delta H (ft)	S (ft/ft)	n	R (ft)	V (ft/s)		Tch1 (min)
N101	TR-55	0.011	Roof	33	2	0.061	0.30	0.01	0.01	1.000	paved	20.33	0.00	0	0	1.000	0.013	0.10	24.50	0.00	0.30
W101	TR-55	0.24	Dense Grass	50	1	0.020	7.60	80	1.6	0.020	unpaved	2.28	0.58	0	0	1.000	0.013	0.10	24.50	0.00	8.19
W201	TR-55	0.011	Roof	50	4	0.080	0.37	130	4	0.031	paved	3.57	0.61	0	0	1.000	0.013	0.10	24.50	0.00	0.98
W301	TR-55	0.011	Roof	50	4	0.080	0.37	70	2	0.029	paved	3.44	0.34	0	0	1.000	0.013	0.10	24.50	0.00	0.71
W401	TR-55	0.24	Dense Grass	100	6	0.060	8.53	126	5	0.040	unpaved	3.21	0.65	0	0	1.000	0.013	0.10	24.50	0.00	9.18
S101	TR-55	0.24	Dense Grass	100	4.5	0.045	9.57	0.01	0.01	1.000	unpaved	16.13	0.00	0	0	1.000	0.013	0.10	24.50	0.00	9.57
E101	TR-55	0.24	Dense Grass	50	1	0.020	7.60	150	4	0.027	unpaved	2.63	0.95	0	0	1.000	0.013	0.10	24.50	0.00	8.55
E201	TR-55	0.24	Dense Grass	95	2	0.021	12.45	90	3	0.033	paved	3.71	0.40	0	0	1.000	0.013	0.10	24.50	0.00	12.85
E301	TR-55	0.011	Roof	50	1	0.020	0.65	0.01	0.01	1.000	paved	20.33	0.00	0	0	1.000	0.013	0.10	24.50	0.00	0.65

Min. Tc=5 min.

Schoolyard Lofts

Project Summary

Title	Schoolyard Lofts
Engineer	Brian C Lavery, P.E.
Company	Continental
Date	8/14/2019

Notes

Table of Contents

Master Network Summary	2
Type II 3 Hr Tonganoxie - Atlas 14	
Time-Depth Curve, 10 years (10-yr)	4
Time-Depth Curve, 100 years (100-yr)	5

Schoolyard Lofts

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft ³ /s)
W1	10-yr	10	0.086	84.000	2.56
W1	100-yr	100	0.158	84.000	4.65
W2	10-yr	10	0.149	84.000	4.27
W2	100-yr	100	0.252	84.000	7.07
S1	10-yr	10	0.038	90.000	1.09
S1	100-yr	100	0.079	90.000	2.17
N1	10-yr	10	0.072	87.000	2.12
N1	100-yr	100	0.137	87.000	3.97
E1	10-yr	10	0.156	84.000	4.41
E1	100-yr	100	0.261	84.000	7.24
W101	10-yr	10	0.046	87.000	1.29
W101	100-yr	100	0.086	87.000	2.39
W201	10-yr	10	0.076	84.000	2.21
W201	100-yr	100	0.131	84.000	3.74
W301	10-yr	10	0.025	84.000	0.74
W301	100-yr	100	0.044	84.000	1.28
W401	10-yr	10	0.076	90.000	2.16
W401	100-yr	100	0.163	90.000	4.54
N101	10-yr	10	0.039	84.000	1.16
N101	100-yr	100	0.070	84.000	2.02
E101	10-yr	10	0.052	90.000	1.43
E101	100-yr	100	0.097	87.000	2.64
E201	10-yr	10	0.096	90.000	2.28
E201	100-yr	100	0.163	90.000	3.78
S101	10-yr	10	0.011	90.000	0.31
S101	100-yr	100	0.024	90.000	0.65
E301	10-yr	10	0.024	84.000	0.71
E301	100-yr	100	0.044	84.000	1.31

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft ³ /s)
West Existing	10-yr	10	0.235	84.000	6.82
West Existing	100-yr	100	0.410	84.000	11.72
Northeast Existing	10-yr	10	0.227	87.000	6.31
Northeast Existing	100-yr	100	0.398	84.000	10.81
West Proposed	10-yr	10	0.223	87.000	6.11
West Proposed	100-yr	100	0.425	87.000	11.52
Northeast Proposed	10-yr	10	0.211	90.000	5.33
Northeast Proposed	100-yr	100	0.374	87.000	9.29
South Existing	10-yr	10	0.038	90.000	1.09

Schoolyard Lofts

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft ³ /s)
South Existing	100-yr	100	0.079	90.000	2.17
South Proposed	10-yr	10	0.011	90.000	0.31
South Proposed	100-yr	100	0.024	90.000	0.65

Schoolyard Lofts

Subsection: Time-Depth Curve
 Label: Type II 3 Hr Tonganoxie - Atlas 14
 Scenario: 10-yr

Return Event: 10 years
 Storm Event: Type II, 3 hr - 10 yr

Time-Depth Curve: Type II, 3 hr - 10 yr	
Label	Type II, 3 hr - 10 yr
Start Time	0.000 min
Increment	6.000 min
End Time	180.000 min
Return Event	10 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 6.000 min
Time on left represents time for first value in each row.

Time (min)	Depth (in)				
0.000	0.0	0.0	0.1	0.1	0.1
30.000	0.2	0.2	0.3	0.3	0.4
60.000	0.5	0.6	0.9	1.3	2.1
90.000	2.6	2.7	2.8	2.9	2.9
120.000	3.0	3.1	3.1	3.1	3.2
150.000	3.2	3.2	3.3	3.3	3.3
180.000	3.4	(N/A)	(N/A)	(N/A)	(N/A)

Schoolyard Lofts

Subsection: Time-Depth Curve
 Label: Type II 3 Hr Tonganoxie - Atlas 14
 Scenario: 100-yr

Return Event: 100 years
 Storm Event: Type II, 3 hr - 100 yr

Time-Depth Curve: Type II, 3 hr - 100 yr	
Label	Type II, 3 hr - 100 yr
Start Time	0.000 min
Increment	6.000 min
End Time	180.000 min
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 6.000 min
Time on left represents time for first value in each row.

Time (min)	Depth (in)				
0.000	0.0	0.1	0.1	0.2	0.2
30.000	0.3	0.4	0.4	0.5	0.6
60.000	0.7	0.9	1.4	2.0	3.3
90.000	4.1	4.3	4.5	4.6	4.7
120.000	4.8	4.9	4.9	5.0	5.1
150.000	5.1	5.2	5.2	5.3	5.3
180.000	5.4	(N/A)	(N/A)	(N/A)	(N/A)

Schoolyard Lofts

Index

M

Master Network Summary...2, 3

T

Type II 3 Hr Tonganoxie - Atlas 14 (Time-Depth Curve, 10 years (10-yr))...4

Type II 3 Hr Tonganoxie - Atlas 14 (Time-Depth Curve, 100 years (100-yr))...5



NOAA Atlas 14, Volume 8, Version 2
Location name: Tonganoxie, Kansas, USA*
Latitude: 39.1105°, Longitude: -95.0909°
Elevation: 900.26 ft**

* source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.395 (0.306-0.505)	0.469 (0.363-0.599)	0.591 (0.456-0.756)	0.694 (0.532-0.890)	0.838 (0.623-1.10)	0.951 (0.692-1.25)	1.07 (0.751-1.42)	1.18 (0.802-1.60)	1.34 (0.877-1.85)	1.47 (0.934-2.03)
10-min	0.579 (0.448-0.739)	0.687 (0.531-0.877)	0.866 (0.667-1.11)	1.02 (0.779-1.30)	1.23 (0.912-1.61)	1.39 (1.01-1.83)	1.56 (1.10-2.08)	1.73 (1.18-2.35)	1.97 (1.29-2.71)	2.15 (1.37-2.98)
15-min	0.706 (0.547-0.901)	0.838 (0.648-1.07)	1.06 (0.814-1.35)	1.24 (0.950-1.59)	1.50 (1.11-1.96)	1.70 (1.24-2.24)	1.90 (1.34-2.54)	2.12 (1.43-2.86)	2.40 (1.57-3.30)	2.62 (1.67-3.63)
30-min	1.00 (0.777-1.28)	1.20 (0.924-1.53)	1.51 (1.17-1.93)	1.78 (1.36-2.28)	2.15 (1.60-2.82)	2.45 (1.78-3.22)	2.75 (1.93-3.67)	3.05 (2.07-4.14)	3.47 (2.26-4.77)	3.78 (2.41-5.25)
60-min	1.32 (1.02-1.68)	1.57 (1.22-2.01)	2.01 (1.55-2.57)	2.37 (1.82-3.04)	2.89 (2.15-3.79)	3.30 (2.40-4.35)	3.72 (2.62-4.97)	4.15 (2.81-5.63)	4.73 (3.10-6.52)	5.19 (3.31-7.20)
2-hr	1.63 (1.27-2.06)	1.95 (1.53-2.47)	2.50 (1.95-3.17)	2.97 (2.30-3.77)	3.63 (2.73-4.71)	4.15 (3.06-5.43)	4.69 (3.34-6.21)	5.25 (3.60-7.06)	6.00 (3.97-8.20)	6.59 (4.25-9.07)
3-hr	1.83 (1.44-2.30)	2.20 (1.73-2.77)	2.82 (2.21-3.56)	3.36 (2.62-4.24)	4.12 (3.12-5.33)	4.73 (3.50-6.15)	5.35 (3.84-7.06)	6.01 (4.15-8.05)	6.90 (4.59-9.39)	7.59 (4.93-10.4)
6-hr	2.19 (1.75-2.73)	2.63 (2.09-3.28)	3.38 (2.68-4.21)	4.02 (3.17-5.03)	4.94 (3.79-6.35)	5.68 (4.26-7.34)	6.45 (4.69-8.45)	7.26 (5.07-9.65)	8.37 (5.64-11.3)	9.24 (6.07-12.6)
12-hr	2.59 (2.08-3.19)	3.08 (2.47-3.80)	3.92 (3.14-4.84)	4.65 (3.70-5.76)	5.70 (4.42-7.26)	6.55 (4.97-8.39)	7.43 (5.46-9.65)	8.37 (5.92-11.0)	9.65 (6.58-12.9)	10.7 (7.08-14.4)
24-hr	3.01 (2.44-3.67)	3.54 (2.88-4.33)	4.46 (3.61-5.46)	5.25 (4.23-6.45)	6.40 (5.02-8.06)	7.32 (5.62-9.28)	8.28 (6.16-10.7)	9.29 (6.65-12.2)	10.7 (7.38-14.2)	11.8 (7.93-15.8)
2-day	3.46 (2.85-4.19)	4.03 (3.32-4.89)	5.00 (4.10-6.07)	5.84 (4.76-7.10)	7.04 (5.59-8.79)	8.01 (6.21-10.1)	9.01 (6.78-11.5)	10.1 (7.28-13.0)	11.5 (8.03-15.2)	12.6 (8.60-16.8)
3-day	3.78 (3.14-4.55)	4.36 (3.61-5.26)	5.35 (4.41-6.45)	6.20 (5.09-7.50)	7.43 (5.94-9.21)	8.42 (6.58-10.5)	9.44 (7.15-12.0)	10.5 (7.66-13.6)	12.0 (8.43-15.7)	13.2 (9.01-17.4)
4-day	4.07 (3.39-4.88)	4.66 (3.87-5.59)	5.66 (4.70-6.81)	6.53 (5.39-7.87)	7.78 (6.25-9.61)	8.79 (6.90-10.9)	9.83 (7.48-12.4)	10.9 (8.00-14.0)	12.4 (8.79-16.2)	13.6 (9.38-17.9)
7-day	4.84 (4.07-5.76)	5.49 (4.61-6.54)	6.60 (5.52-7.86)	7.54 (6.28-9.01)	8.89 (7.20-10.9)	9.97 (7.90-12.3)	11.1 (8.50-13.9)	12.2 (9.04-15.6)	13.8 (9.85-17.9)	15.1 (10.5-19.7)
10-day	5.51 (4.65-6.52)	6.25 (5.28-7.40)	7.49 (6.30-8.88)	8.54 (7.15-10.2)	10.0 (8.16-12.2)	11.2 (8.93-13.7)	12.4 (9.58-15.4)	13.7 (10.1-17.3)	15.3 (11.0-19.8)	16.7 (11.7-21.6)
20-day	7.34 (6.27-8.59)	8.38 (7.16-9.82)	10.1 (8.60-11.9)	11.5 (9.76-13.6)	13.5 (11.1-16.2)	15.0 (12.1-18.2)	16.5 (12.9-20.3)	18.0 (13.6-22.6)	20.1 (14.6-25.6)	21.6 (15.3-27.9)
30-day	8.90 (7.66-10.4)	10.2 (8.75-11.9)	12.2 (10.5-14.3)	13.9 (11.9-16.3)	16.2 (13.4-19.3)	17.9 (14.5-21.5)	19.6 (15.4-23.9)	21.3 (16.1-26.4)	23.4 (17.1-29.7)	25.1 (17.9-32.1)
45-day	11.0 (9.51-12.7)	12.5 (10.8-14.5)	14.9 (12.9-17.3)	16.8 (14.4-19.5)	19.3 (16.0-22.8)	21.2 (17.2-25.2)	22.9 (18.1-27.8)	24.6 (18.7-30.4)	26.8 (19.6-33.6)	28.3 (20.3-36.1)
60-day	12.8 (11.1-14.8)	14.5 (12.6-16.7)	17.1 (14.8-19.8)	19.1 (16.5-22.2)	21.8 (18.1-25.5)	23.6 (19.3-28.0)	25.4 (20.1-30.5)	27.0 (20.6-33.1)	28.9 (21.3-36.1)	30.2 (21.8-38.4)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

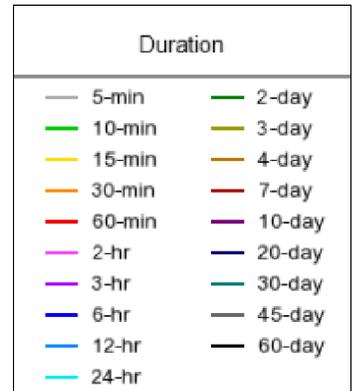
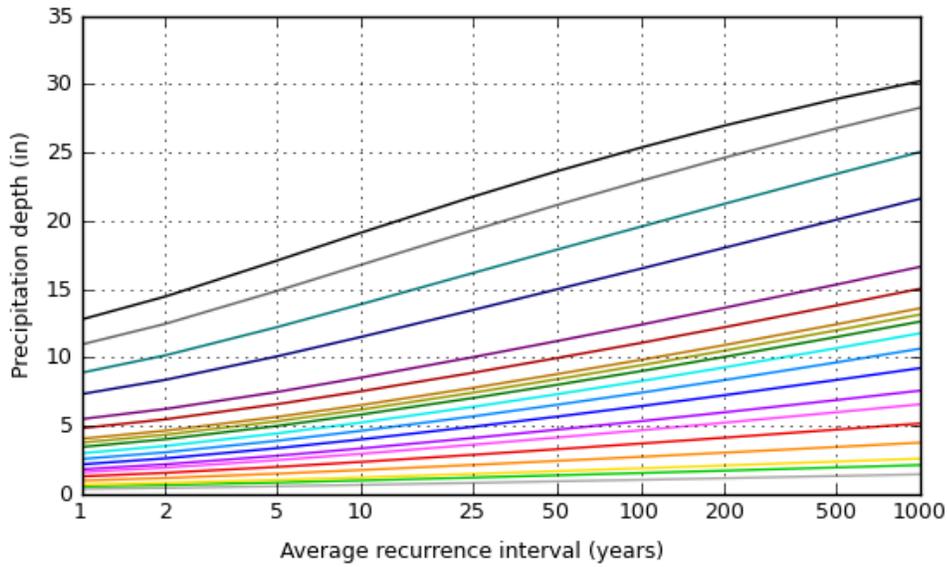
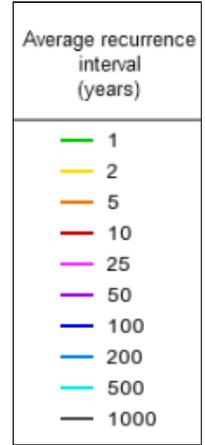
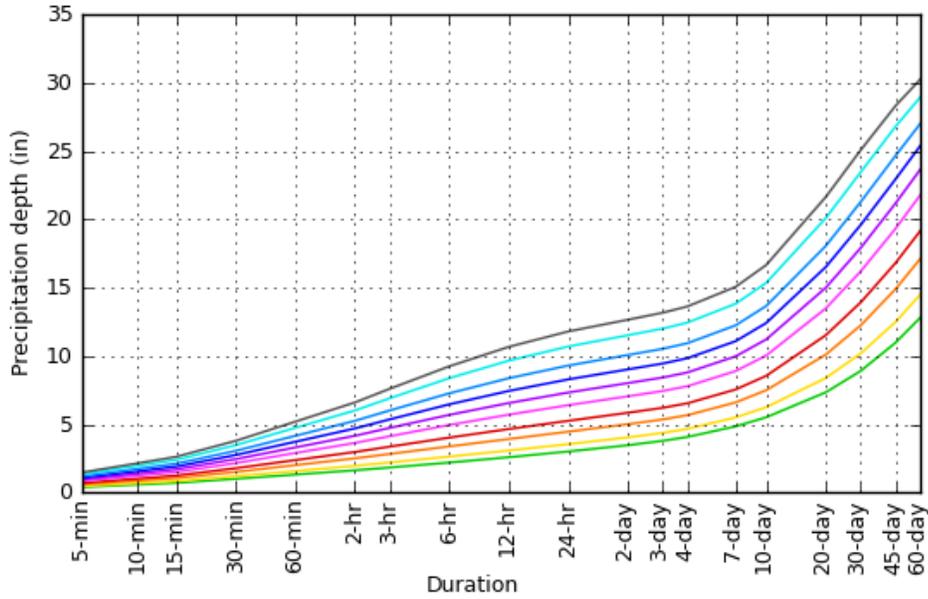
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

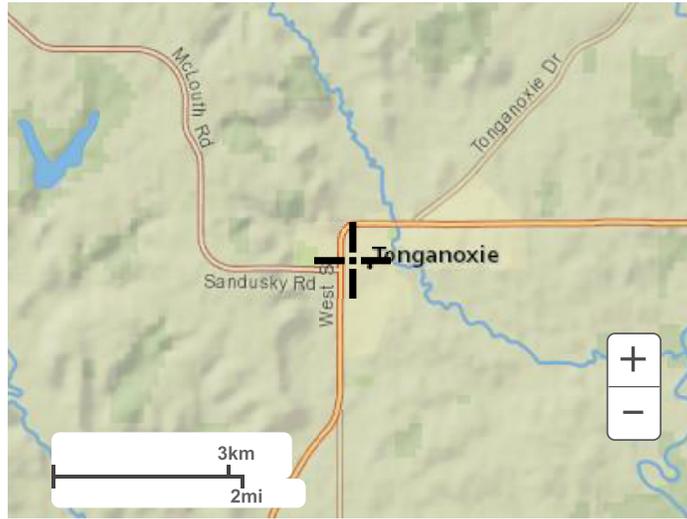
PDS-based depth-duration-frequency (DDF) curves
Latitude: 39.1105°, Longitude: -95.0909°



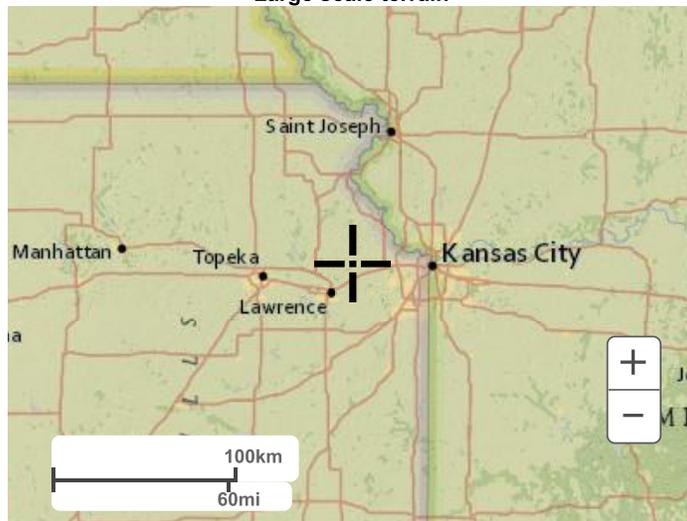
[Back to Top](#)

Maps & aerials

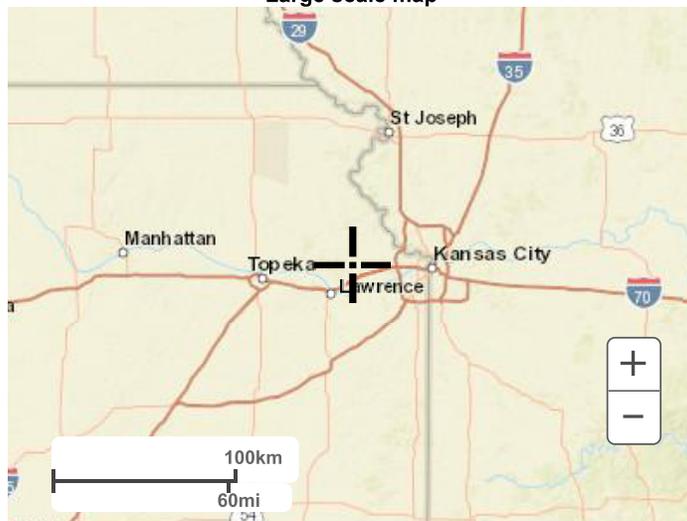
Small scale terrain



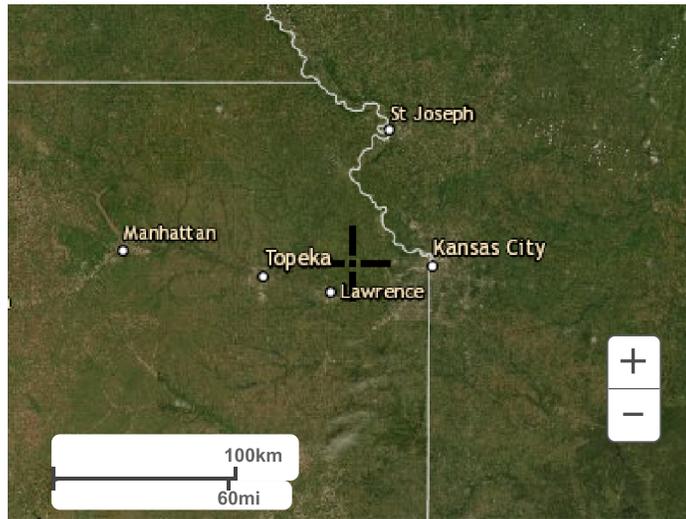
Large scale terrain



Large scale map



Large scale aerial



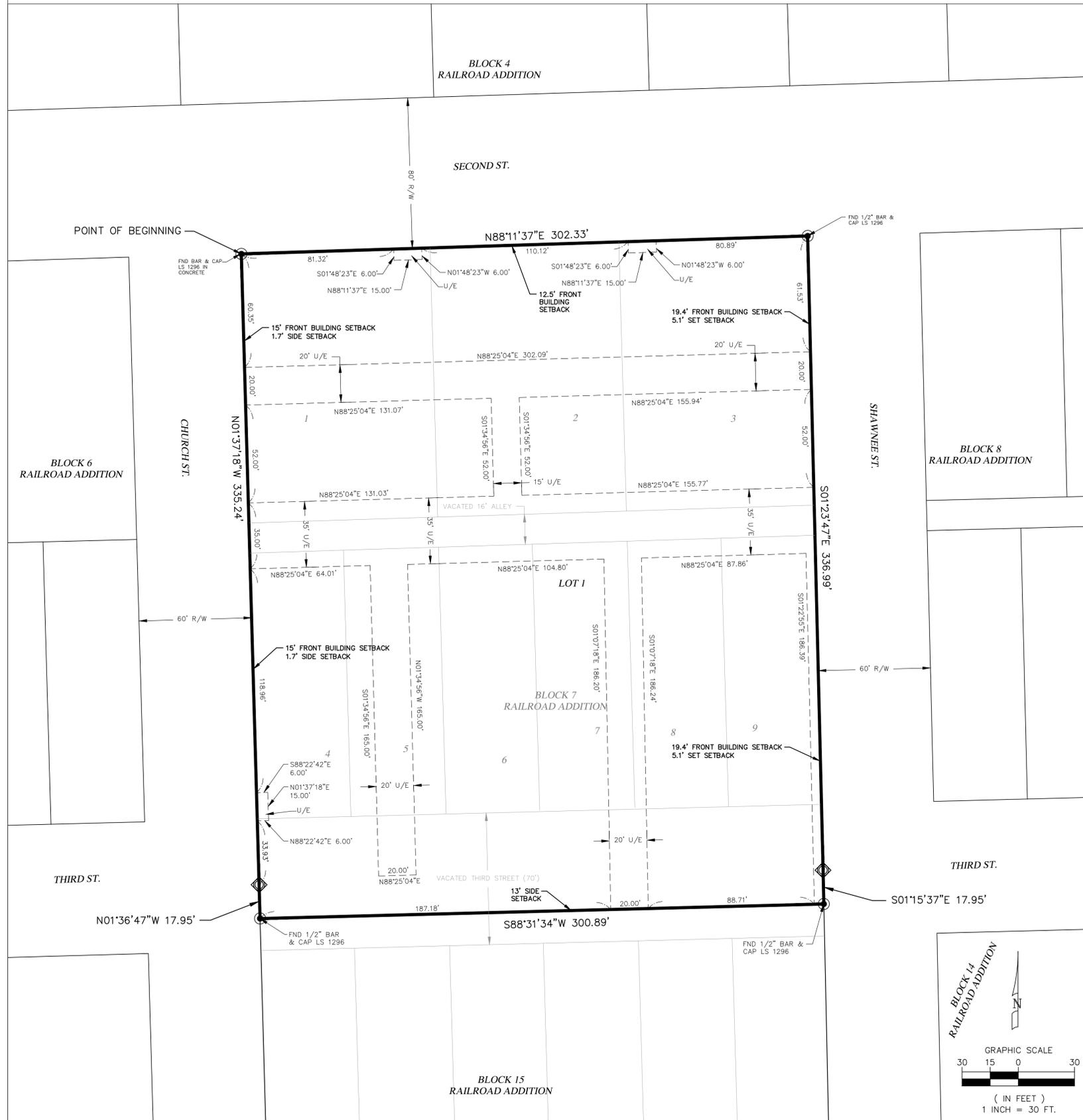
[Back to Top](#)

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[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

FINAL PLAT SCHOOL YARD LOFTS

A REPLAT OF BLOCK 7 RAILROAD ADDITION AND PART OF VACATED THIRD STREET, A SUBDIVISION IN THE CITY OF TONGANOXIE, LEAVENWORTH COUNTY, KANSAS



BOUNDARY DESCRIPTION

All of Lots 1 through 9 Block 7, and all that part of vacated Third Street, all being part of Railroad Addition to the City of Tonganoxie, and lying within the Northwest Quarter of Section 9, Township 11 South, Range 21 East of the Sixth Principal Meridian and being in Leavenworth County, Kansas, being more particularly described as follows: beginning at the northwest corner of said Lot 1 Block 7, Railroad Addition; thence North 88 degrees 11 minutes 37 seconds East, with the north line of Lots 1 through 3, Block 7 and the south right-of-way line of Second Street, a distance of 302.33 feet to the northeast corner of said Lot 3, Block 7; said point being on the west right-of-way line of Shawnee Street; thence South 01 degree 23 minutes 47 seconds East, with the east line of Lots 3 and 9, Block 7, and its southerly prolongation, and the west right-of-way line of Shawnee Street, a distance of 336.99 feet; thence South 01 degree 15 minutes 37 seconds East, continuing with the west right-of-way line of Shawnee Street, a distance of 17.95 feet; thence South 88 degrees 31 minutes 34 seconds West, and no longer with the west right-of-way line of Shawnee Street, a distance of 300.89 feet to a point on the east right-of-way line of Church Street; thence North 01 degree 36 minutes 47 seconds West, with the east right-of-way line of Church Street, a distance of 17.95 feet; thence North 01 degree 37 minutes 18 seconds West, with the east right-of-way of Church Street and the west line of Lots 1 and 4, Block 7, and its southerly prolongation, a distance of 335.24 feet to the point of beginning.

SURVEYOR'S REPORT

- This basis of bearing for this survey is Kansas State Plane, North Zone, North American Datum, 1983.
- The easements shown on this survey have been taken from the title commitment NCS-966704-OMHA, dated June 14, 2019, provided by First American Title Company of Kansas.
- A 1/2" x 24" rebar with a plastic cap marked CCEI 1351 has been set at all property corners, unless otherwise noted.
- The subject property lies in Zone X - Areas determined to be outside the 0.2% annual chance floodplain, as shown on Flood Insurance Rate Map 20103C03026, effective July 16, 2015.
- The gross land area of the subject property is 106,797 square feet, or 2.45 acres.
- The error of closure is 1:262,247. The angular and distance error is S44°00'00"W 0.005'.

DEDICATION

The undersigned proprietors of the above described tract of land have caused the same to be subdivided in the manner as shown on the accompanying plat which hereafter shall be known as "Schoolyard Lofts".

The Streets, Drives, Terraces and other ways shown hereon and not heretofore dedicated to the public are hereby so dedicated.

An EASEMENT is hereby granted all public utility companies, their successors or assigns or rural water districts duly incorporated and authorized to do business in Leavenworth County, Kansas, to enter upon, over and under these areas outlined and designated on this plat as "Utility Easement" or "U/E" and "Drainage Easement" or "D/E" for purposes of utility installations and maintenance thereof. The use of said easement by any such entity shall oblige such entity to return said easement to its condition prior to any installation, maintenance or repair performed on said easement with the exception of paved, curbed and sidewalked areas. Those areas within the Utility Easement that are paved, curbed or sidewalked shall be restored to their original condition by the owner in the event of any maintenance.

There will be no restrictions other than those shown hereon.

OWNER'S CERTIFICATE

This is to certify that the undersigned is the owner of the land described in the plat, and that all previous taxes have been paid, and that they have caused the same to be surveyed and subdivided as indicated thereon, for the uses and purposes therein set forth, and do hereby acknowledge and adopt the same under the style and title thereon indicated.

Given under my hand at Tonganoxie, Kansas this _____ day of _____ A.D. 2019.

Jason Swords, Managing Member
Schoolyard Townhomes, LLC

NOTARY CERTIFICATE:
STATE OF KANSAS
COUNTY OF LEAVENWORTH } ss

Be it remembered that on this _____ day of _____ 2019, before me, a notary public in and for said County and State came Jason Swords, Managing Member, Schoolyard Townhomes, LLC, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of same, in testimony whereof, I have hereunto set my hand and affixed my notarial seal the day and year above written.

(SEAL) Notary Public

My Commission Expires:

PLANNING COMMISSION APPROVAL:

This plat of Schoolyard Lofts has been Submitted to and Approved by the Tonganoxie Planning Commission this _____ day of _____ A.D. 2019.

John Morgan, Chairman

Zach Stoltenberg, Secretary

CITY COUNCIL APPROVAL:

The easements and rights-of-way accepted by the Governing Body of Tonganoxie, Kansas, this _____ day of _____ A.D. 2019.

Jason Ward, Mayor

ATTEST: Nathan McCommon, City Clerk

CITY ENGINEER APPROVAL:

The City Engineer's review is only for general conformance with the Subdivision Regulations as adopted by the City of Tonganoxie. The City is not responsible for the accuracy and adequacy of the design, dimensions, elevations, and quantities.

Brian Kingsley, City Engineer

COUNTY SURVEYOR'S CERTIFICATE:

I hereby certify this plat meets the requirements of K.S.A. 58-2005. The face of this plat was reviewed based on Kansas Minimum Standards for Boundary Surveys. No field verification is implied. This review is for survey information only.

Wayne Malnicof, Leavenworth County Surveyor

REGISTER OF DEEDS CERTIFICATE:

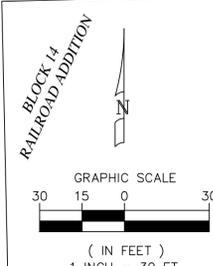
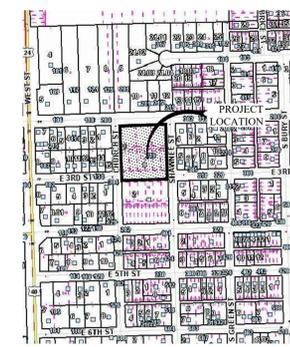
Plat of Schoolyard Lofts of Tonganoxie was filed for record this _____ day of _____ A.D., 2019, at _____: _____ M., and duly recorded as Document No. _____.

Stacy Driscoll, Register of Deeds, Leavenworth Co. Kansas

SURVEYOR'S CERTIFICATE:

I, Samuel J. DePriest, a Professional Surveyor in the State of Kansas, License Number 1351, do hereby certify that the survey shown hereon was completed in the field in August 2019, by me or under my direct supervision and that this plat is a true and accurate exhibit of said field survey, based on actual field measurements, where the monuments are of the character and occupy the positions indicated.

Samuel J. DePriest, P.L.S. 1351



SYMBOL LEGEND

- Found property corner as noted
- ◆ Set property corner with 1/2" x 24" rebar and cap CCEI 1351

SURVEYOR / ENGINEER:
Continental Consulting Engineers, Inc.
9000 State Line Road
Leawood, KS 66206
Samuel J. DePriest, PLS
Brian Lavery, PE

OWNER / DEVELOPER:
Schoolyard Townhomes LLC
1125 Grand Blvd, Suite 202
Kansas City, MO 64106
Jason Swords Managing Member



SEPTEMBER 4, 2019

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD LOFTS

Tonganoxie, KS



ARCHITECT
ATTN: ASHLEY SADOWSKI, AIA
701 E. 63RD STREET
KANSAS CITY, MISSOURI 64110
816.708.1500
asadowski@odimo.us

CIVIL ENGINEER
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KANSAS CITY, MO 66109
903.642.6642
bl@ccengineers.com

STRUCTURAL ENGINEERING
ATTN: PAT SIXTA, PE
APEX ENGINEERING
1625 LOCUST STREET
KANSAS CITY, MO 64108
816.421.3222
patrick@apex-engineers.com

Date Description

Issue

FINAL DEVELOPMENT PLAN
25 October, 2019

Seal / Signature

NOT FOR CONSTRUCTION

Description

Site Plan

C2.0

©2019 Odimo

LEGEND

-  6" STANDARD DUTY ASPHALT
-  8" HEAVY DUTY ASPHALT
-  8" CONCRETE
-  4" CONCRETE SIDEWALK/PATIO

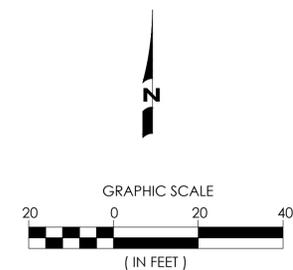
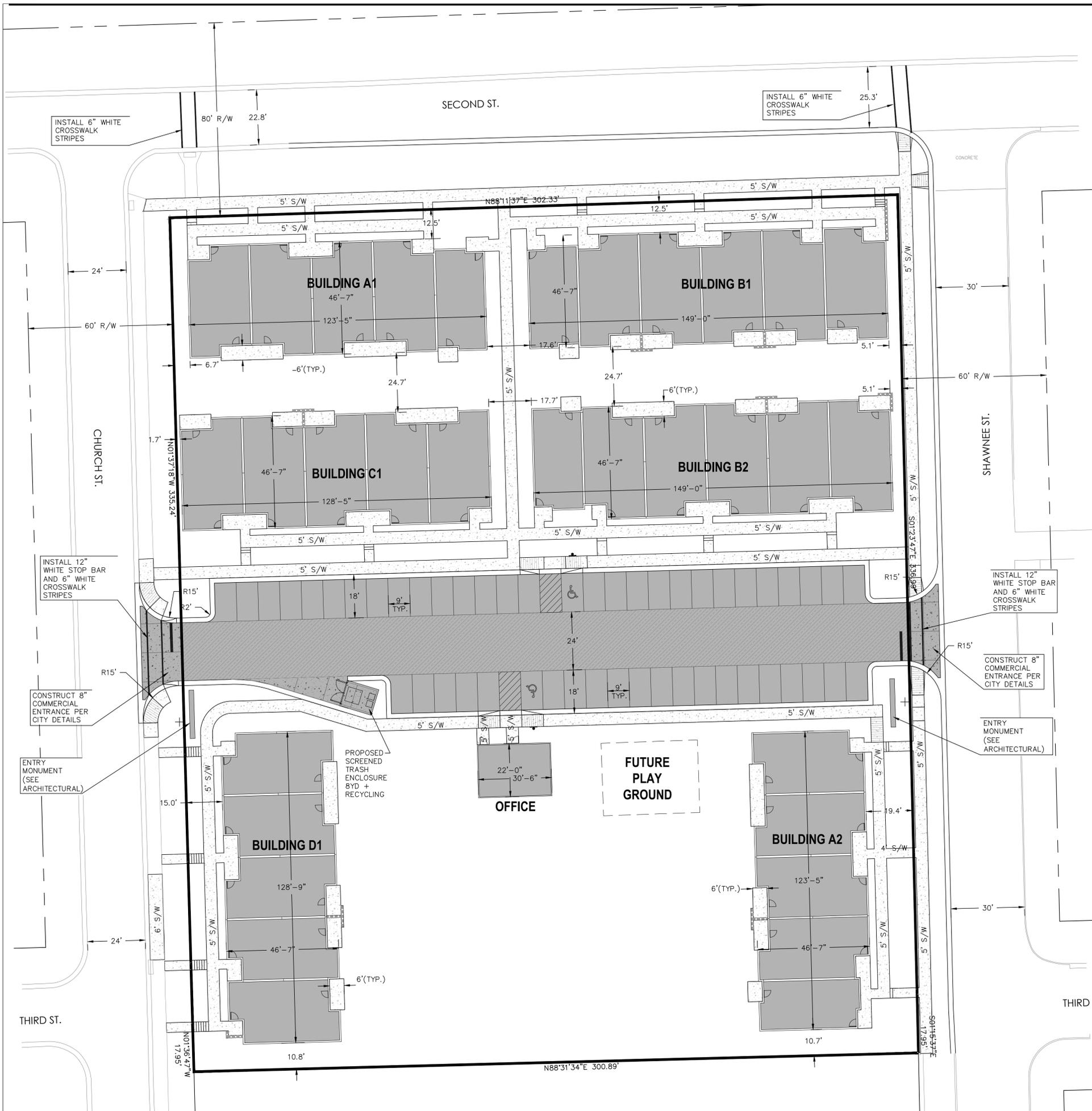
PROPOSED ZONING R-MF-2P
(PLANNED MULTIPLE FAMILY 2 DISTRICT)

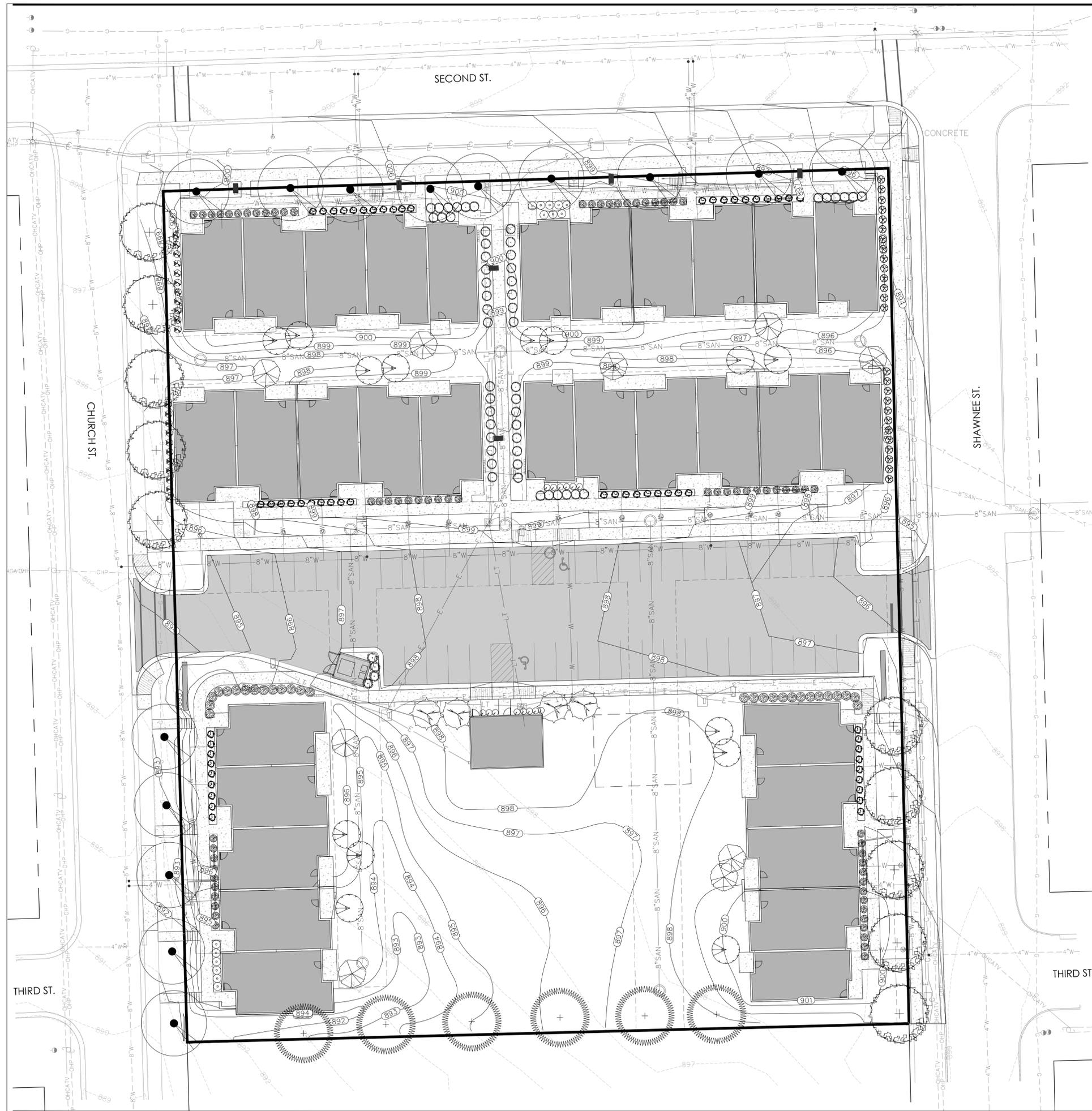
EXCEPTIONS TO BASE ZONING FOR FRONT, SIDE, AND REAR YARD SETBACKS, INCLUDING PARKING ALONG 2ND STREET IN TOTAL.

DWELLING UNITS: 32 EA PARKING REQ'D 1.5/UNIT TOTAL 48

OFFICE: 500 SF 1/200 SF = 3

TOTAL REQUIRED = 51
TOTAL PROVIDED ONSITE = 51





Landscape Legend

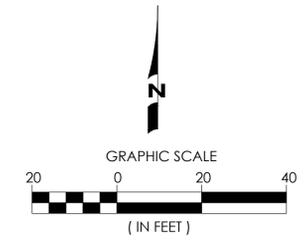
- Quercus rubra (Northern Red Oak), 2" Caliper, B&B
- Taxodium distichum (Bald Cypress), 2" Caliper, B&B
- Quercus bicolor (Swamp White Oak), 2" Caliper, B&B
- Quercus robur (English Oak), 2" Caliper, B&B
- Magnolia virginiana (Sweetbay Magnolia), Min. 6'-8" Ht, B&B
- Amelanchier x grandiflora (Autumn Brilliance Serviceberry), Min. 7" Ht., 16 Gal. Container
- Taxus x media 'Hicksii' (Hicksii Yew), 5 Gal. Container or B&B
- Spiraea nipponica (Snowmound Spiraea), 5 Gal. Container
- Juniperus chinensis 'Sea Green' (Sea Green Juniper), 3 Gal. Container
- Itea virginica (Sweetspire), 3 Gal. Container
- Calamagrostis x acutiflora 'Karl Foerster' (Foerster Grass), 3 Gal. Container
- Thuja occidentalis 'Hetz Midget' (Hetz Midget Arborvitae), 3 Gal. Container
- Spiraea japonica 'Little Princess' (Little Princess Spiraea), 3 Gal. Container
- Euonymus alatus compactus (Dwarf Burning Bush), 3 Gal. Container or Taxus x media 'Densiformis' (Densiformis Yew), 5 Gal. Container or B&B

NOTES:

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
2. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
3. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
6. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED, SEEDED, OR SODDED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS AND LAWN UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE ONE YEAR PERIOD.
11. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
12. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
14. ALL SHRUB AND GROUND COVER BEDS ARE TO BE COMPLETELY COVERED WITH MULCH (REFER TO SPECIFICATIONS) TO A MINIMUM DEPTH OF THREE INCHES.
15. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
16. SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN. CONTACT LANDSCAPE ARCHITECT IF ADDITIONAL PLANTS ARE NEEDED.
18. ALL AREAS SHOWN AS PLANTED (TREES, SEED, SOD) SHALL RECEIVE 4" OF TOPSOIL.

PLANTING NOTES:

1. REMOVE BURLAP AT THE TOP 1/3 OF THE B&B ROOTBALL TO EXPOSE THE ROOT FLARE (THE ENLARGED OR SWOLLEN AREA WHERE THE LARGE LATERAL ROOTS EMERGE) AND PLANT WITH THE ROOT FLARE LEVEL WITH THE SURROUNDING SOIL.
2. THE PLANTING HOLE SHALL NOT BE DEEPER THAN THE BOTTOM OF THE ROOT BALL - MEASURE THE DEPTH FROM THE ACTUAL FOOT FLARE TO THE BOTTOM OF THE ROOT BALL. DIG THE HOLE TO THAT DEPTH, NO DEEPER, WHILE ALSO DIGGING IT TWICE AS WIDE AS THE ROOT BALL.
3. ALL WIRE, TWINE AND CANVAS (NATURAL OR SYNTHETIC) SHALL BE REMOVED FROM THE TOP 1/3 OF ROOT BALL. FILL SOIL SHALL BE SOIL FROM THE PLANTING HOLE. IF AMENDMENTS ARE REQUIRED THEY SHALL BE APPLIED TO THE ENTIRE PLANTING BED NOT THE INDIVIDUAL PLANTING HOLE.
4. ALL TREES SHALL BE WATERED AND MULCHED. MULCH SHALL BE 3 INCHES DEEP, TAPERING TO ZERO NEAR THE TRUNK. A MULCH BERM SHALL BE USED TO CREATE A WATERING PIT.



PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD LOFTS
Tonganoxie, KS



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Date	Description
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Issue
FINAL DEVELOPMENT PLAN
25 October, 2019

Seal / Signature

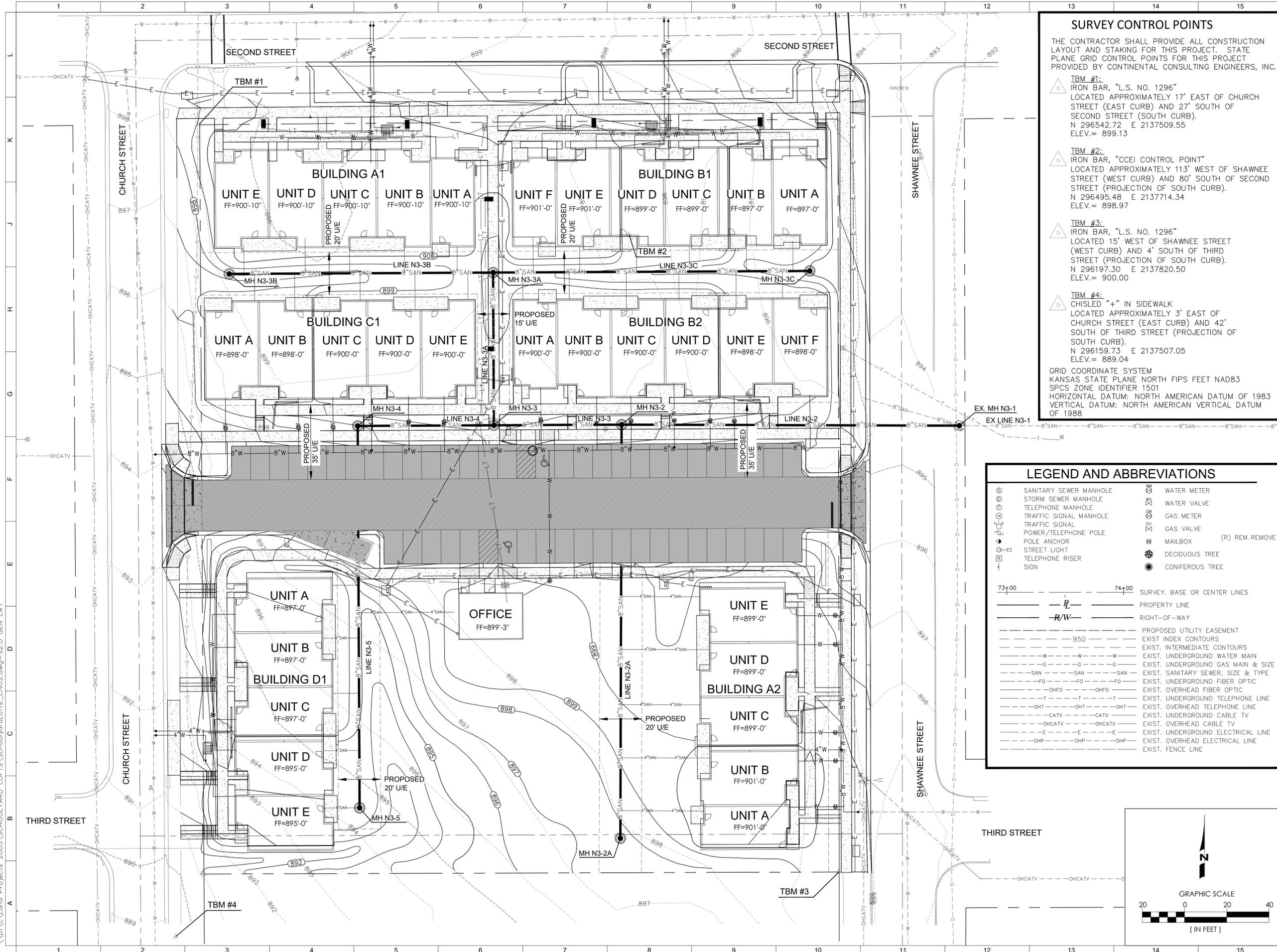
NOT FOR CONSTRUCTION



Description
Landscape Plan

L1.0

10/24/2019 1:38 PM
 \\D:\c\Land Projects\2005\SCHOOLYARD LOFTS\SchoolyardLofts_Civ02.dwg - S2.0 GEN LAY



SURVEY CONTROL POINTS

THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND STAKING FOR THIS PROJECT. STATE PLANE GRID CONTROL POINTS FOR THIS PROJECT PROVIDED BY CONTINENTAL CONSULTING ENGINEERS, INC.

TBM #1:
 IRON BAR, "L.S. NO. 1296"
 LOCATED APPROXIMATELY 17' EAST OF CHURCH STREET (EAST CURB) AND 27' SOUTH OF SECOND STREET (SOUTH CURB).
 N 296542.72 E 2137509.55
 ELEV.= 899.13

TBM #2:
 IRON BAR, "CCEI CONTROL POINT"
 LOCATED APPROXIMATELY 113' WEST OF SHAWNEE STREET (WEST CURB) AND 80' SOUTH OF SECOND STREET (PROJECTION OF SOUTH CURB).
 N 296495.48 E 2137714.34
 ELEV.= 898.97

TBM #3:
 IRON BAR, "L.S. NO. 1296"
 LOCATED 15' WEST OF SHAWNEE STREET (WEST CURB) AND 4' SOUTH OF THIRD STREET (PROJECTION OF SOUTH CURB).
 N 296197.30 E 2137820.50
 ELEV.= 900.00

TBM #4:
 CHISLED "+" IN SIDEWALK
 LOCATED APPROXIMATELY 3' EAST OF CHURCH STREET (EAST CURB) AND 42' SOUTH OF THIRD STREET (PROJECTION OF SOUTH CURB).
 N 296159.73 E 2137507.05
 ELEV.= 889.04

GRID COORDINATE SYSTEM
 KANSAS STATE PLANE NORTH FIPS FEET NAD83
 SPCS ZONE IDENTIFIER 1501
 HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983
 VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988

LEGEND AND ABBREVIATIONS

⊙	SANITARY SEWER MANHOLE	⊙	WATER METER
⊙	STORM SEWER MANHOLE	⊙	WATER VALVE
⊙	TELEPHONE MANHOLE	⊙	GAS METER
⊙	TRAFFIC SIGNAL MANHOLE	⊙	GAS VALVE
⊙	TRAFFIC SIGNAL POWER/TELEPHONE POLE	⊙	MAILBOX (R) REM. REMOVE
⊙	POLE ANCHOR	⊙	DECIDUOUS TREE
⊙	STREET LIGHT	⊙	CONIFEROUS TREE
⊙	TELEPHONE RISER		
⊙	SIGN		

---	73+00	---	74+00	SURVEY, BASE OR CENTER LINES
---		---		PROPERTY LINE
---		---		RIGHT-OF-WAY
---		---		PROPOSED UTILITY EASEMENT
---		---		EXIST. INTERMEDIATE CONTOURS
---		---		EXIST. UNDERGROUND WATER MAIN
---		---		EXIST. UNDERGROUND GAS MAIN & SIZE
---		---		EXIST. SANITARY SEWER, SIZE & TYPE
---		---		EXIST. UNDERGROUND FIBER OPTIC
---		---		EXIST. OVERHEAD FIBER OPTIC
---		---		EXIST. UNDERGROUND TELEPHONE LINE
---		---		EXIST. OVERHEAD TELEPHONE LINE
---		---		EXIST. UNDERGROUND CABLE TV
---		---		EXIST. OVERHEAD CABLE TV
---		---		EXIST. UNDERGROUND ELECTRICAL LINE
---		---		EXIST. OVERHEAD ELECTRICAL LINE
---		---		EXIST. FENCE LINE

SINCE 1976
Continental
 CONSULTING ENGINEERS, INC.

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TEL (913) 642-8642
 FAX (913) 642-6941
 www.cceengineers.com

Schoolyard Lofts
 Leavenworth County, Tonganoxie, Kansas

PUBLIC SANITARY SEWER EXTENSION

FOR CONSTRUCTION

REVISIONS

No.	Issued Date	Notes/Comments

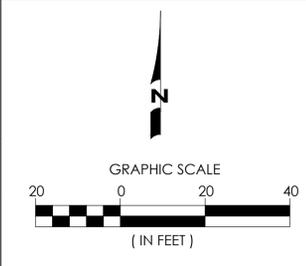
811
 Know what's below.
 Call before you dig.

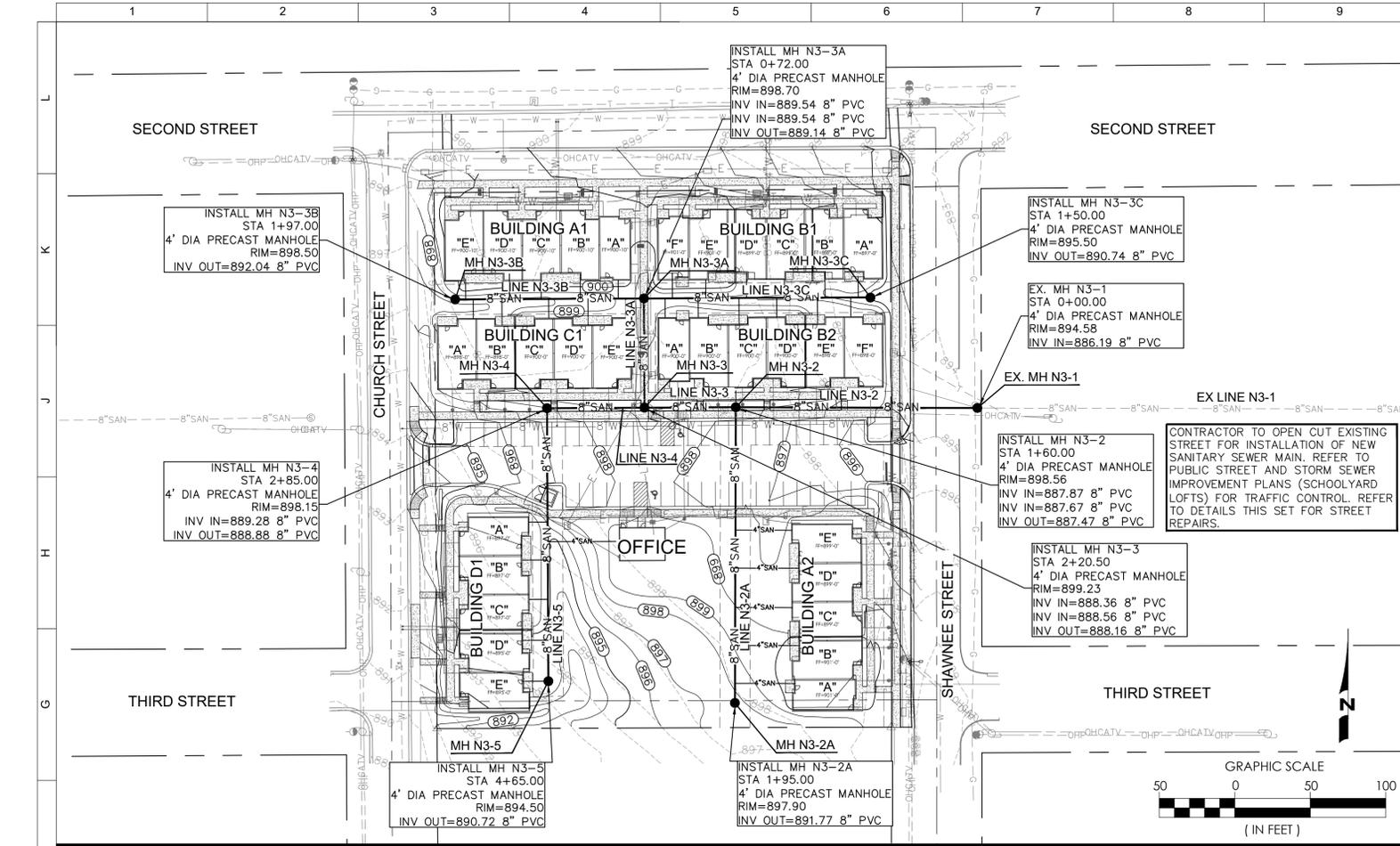
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PROJECT NO: 1906-19
 DATE: October 25, 2019
 DRAWN BY: DSL

SHEET TITLE
 2 of 7
**GENERAL LAYOUT/
 SURVEY CONTROL**

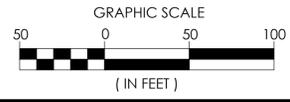
S2.0





SEWER SERVICE LINE INFORMATION

BUILDING	UNIT SERVED	SANITARY SERVICE LINE CONNECTION	LINE NUMBER	STA.	F.F.B.	MSFE	STUB LENGTH (ft)	END OF STUB FL ELEVATION
A2	A	8" x 4" Tee	N3-2A	1+82.00	901.00	898.67	35	896.93
	B	8" x 4" Tee	N3-2A	1+57.00	901.00	898.67	38	896.92
	C	8" x 4" Tee	N3-2A	1+32.00	899.00	896.67	33	895.01
	D	8" x 4" Tee	N3-2A	1+06.00	899.00	896.67	37	895.01
	E	8" x 4" Tee	N3-2A	0+81.00	899.00	896.67	32	894.86
D1	A	8" x 4" Tee	N3-5	3+60.00	897.00	894.67	7	892.61
	B	8" x 4" Tee	N3-5	3+85.00	897.00	894.67	12	892.94
	C	8" x 4" Tee	N3-5	4+11.00	897.00	894.67	7	892.78
	D	8" x 4" Tee	N3-5	4+38.00	895.00	892.67	12	892.24
	E	Manhole Stub	N3-5	4+65.00	895.00	892.67	12	891.46
Office		8" x 4" Tee	N3-5	3+73.00	899.25	896.92	40	895.24

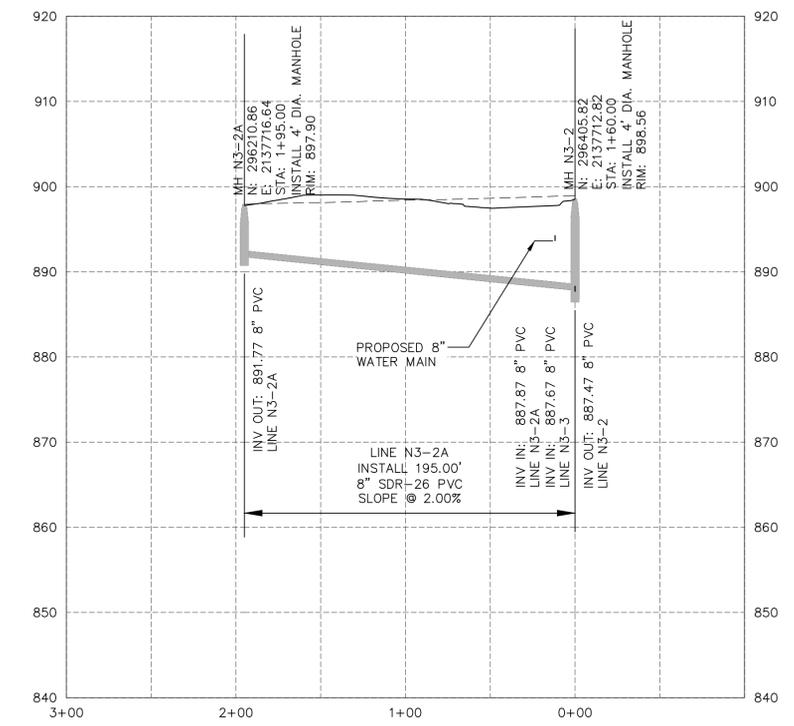


9000 STATE LINE ROAD
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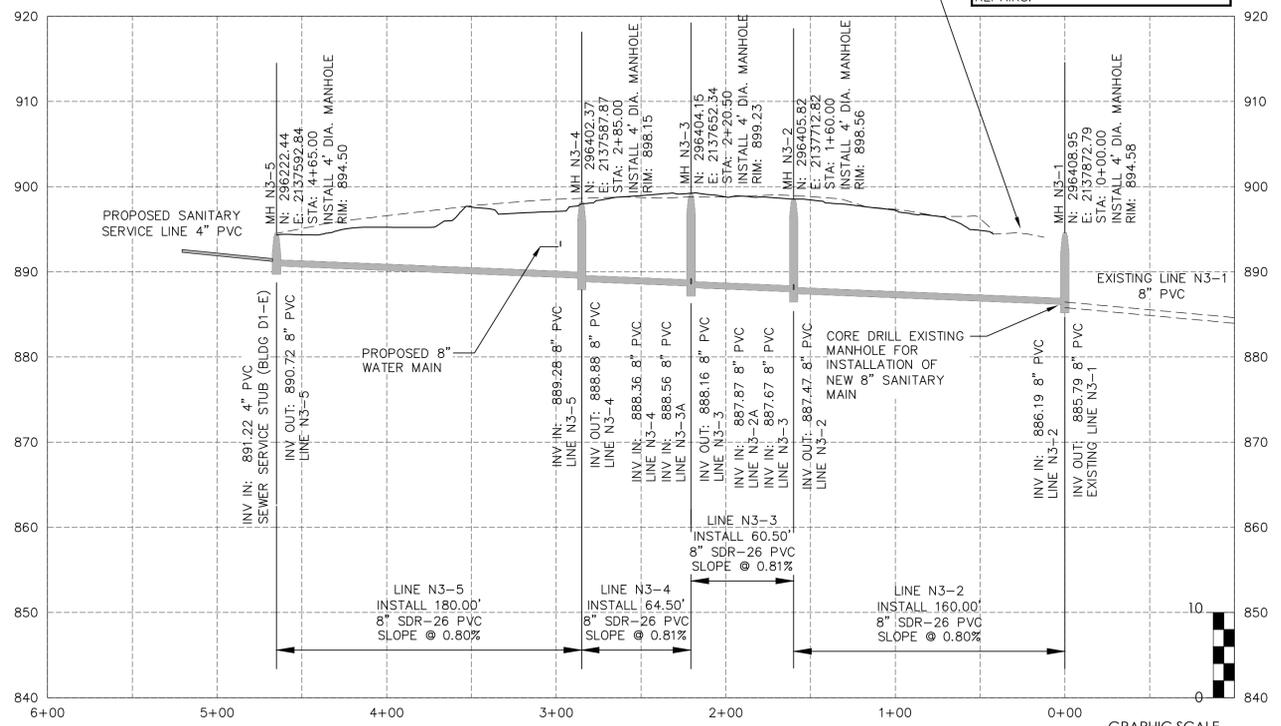
Schoolyard Lofts
Leavenworth County, Tonganoxie, Kansas
PUBLIC SANITARY SEWER EXTENSION

FOR CONSTRUCTION

LINE N3-2A

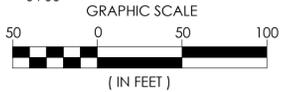


LINE N3-2 TO LINE N3-5



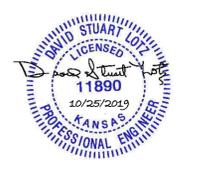
CONTRACTOR TO OPEN CUT EXISTING STREET FOR INSTALLATION OF NEW SANITARY SEWER MAIN. REFER TO PUBLIC STREET AND STORM SEWER IMPROVEMENT PLANS (SCHOOLYARD LOFTS) FOR TRAFFIC CONTROL. REFER TO DETAILS THIS SET FOR STREET REPAIRS.

NOTE: MAINTAIN A MINIMUM TWO FOOT VERTICAL CLEARANCE AND A MINIMUM 10 FOOT HORIZONTAL SEPARATION BETWEEN SANITARY SEWERS AND WATER MAIN.



REVISIONS

No.	Issued Date	Notes/Comments

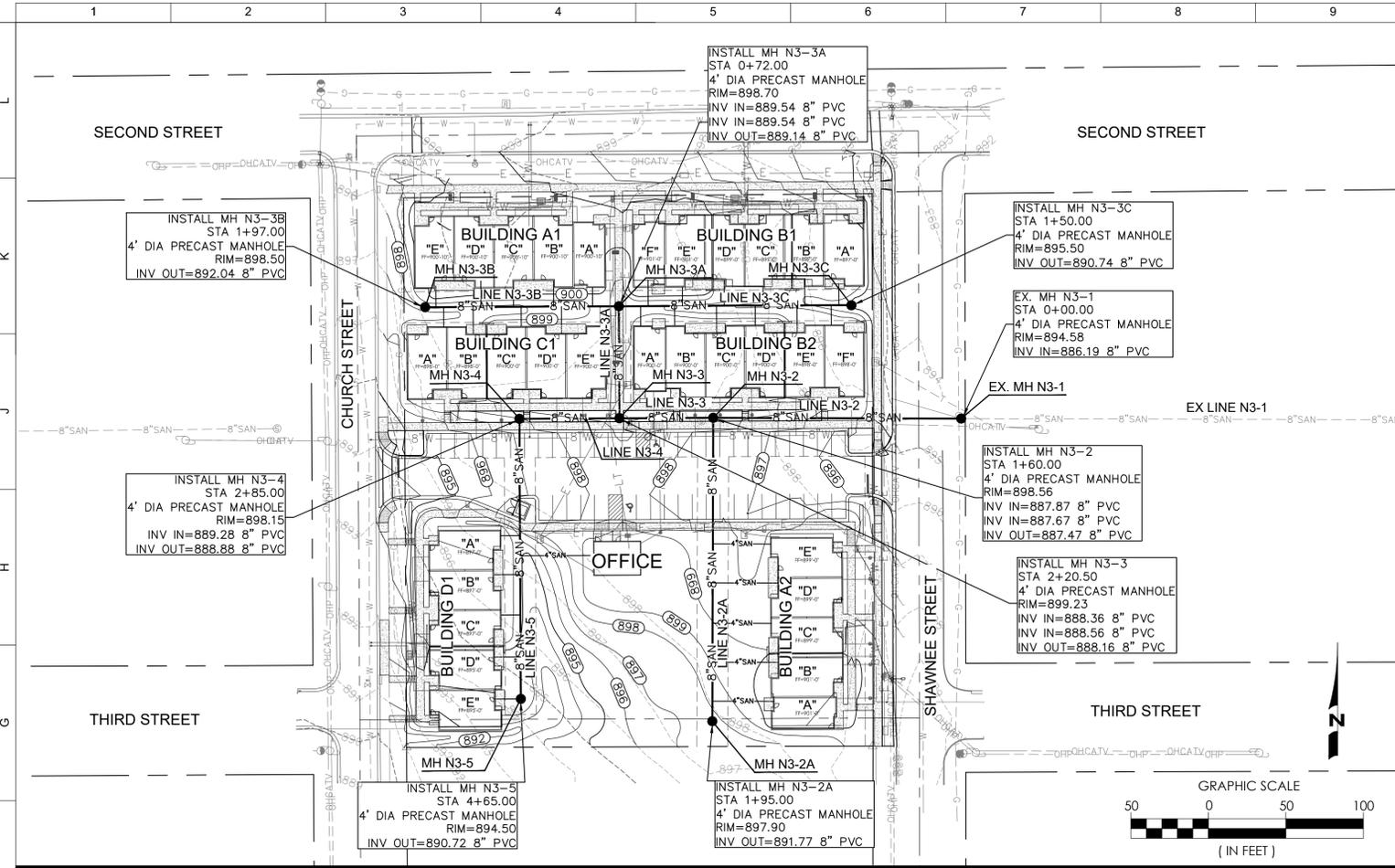


PROJECT NO: 1906-19
DATE: October 25, 2019
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SHEET TITLE
3 of 7
PLAN AND PROFILE SHEET

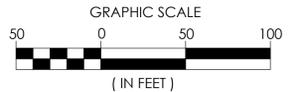
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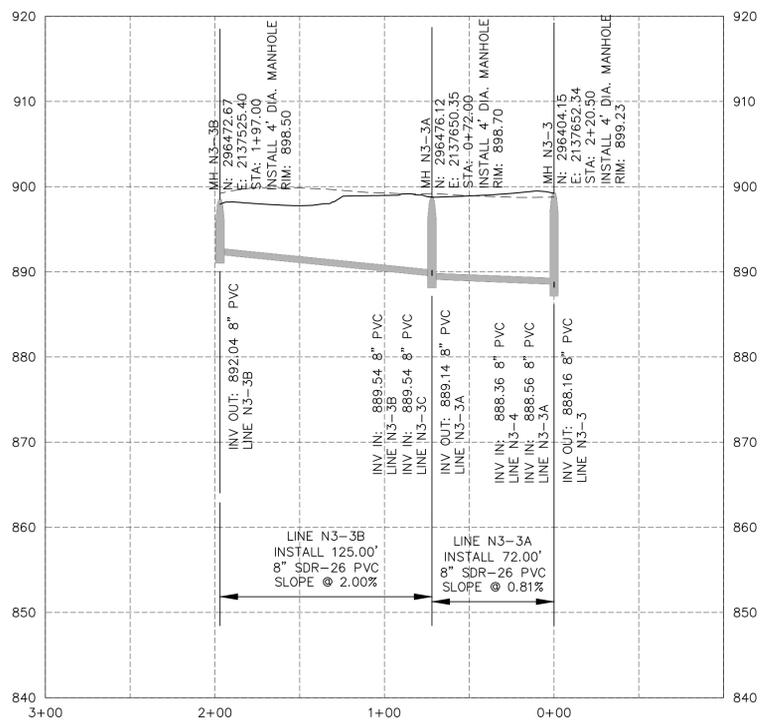


SEWER SERVICE LINE INFORMATION

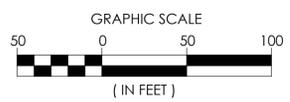
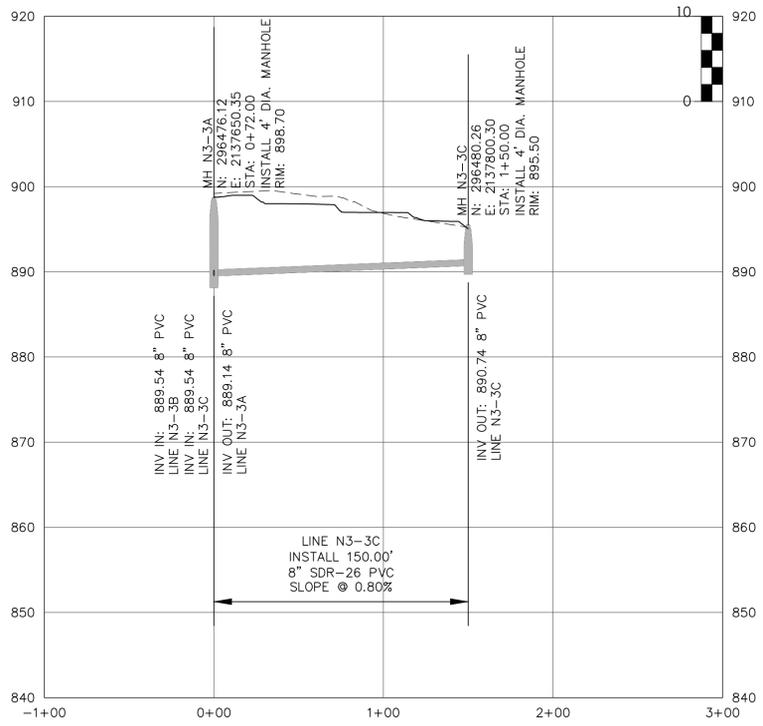
BUILDING	UNIT SERVED	SANITARY SERVICE LINE CONNECTION	LINE NUMBER	STA.	F.F.B.	MSFE	STUB LENGTH (ft)	END OF STUB FL ELEVATION
A1	A	8" x 4" Tee	N3-3B	0+89.00	900.83	898.50	7	894.37
	B	8" x 4" Tee	N3-3B	1+14.00	900.83	898.50	12	895.61
	C	8" x 4" Tee	N3-3B	1+40.00	900.83	898.50	7	894.92
	D	8" x 4" Tee	N3-3B	1+61.00	900.83	898.50	12	895.76
	E	8" x 4" Tee	N3-3B	1+90.00	900.83	898.50	9	895.54
B1	A	8" x 4" Tee	N3-3C	1+42.00	897.00	894.67	9	893.02
	B	8" x 4" Tee	N3-3C	1+20.00	897.00	894.67	12	893.06
	C	8" x 4" Tee	N3-3C	0+93.00	899.00	896.67	7	893.95
	D	8" x 4" Tee	N3-3C	0+68.00	899.00	896.67	12	894.34
	E	8" x 4" Tee	N3-3C	0+41.00	901.00	898.67	7	894.52
	F	8" x 4" Tee	N3-3C	0+19.00	901.00	898.67	12	895.63
B2	A	8" x 4" Tee	N3-3C	0+14.00	900.00	897.67	8	894.43
	B	8" x 4" Tee	N3-3C	0+36.00	900.00	897.67	8	894.50
	C	8" x 4" Tee	N3-3C	0+63.00	900.00	897.67	12	895.04
	D	8" x 4" Tee	N3-3C	0+88.00	900.00	897.67	8	894.66
	E	8" x 4" Tee	N3-3C	1+15.00	898.00	895.67	12	893.75
	F	8" x 4" Tee	N3-3C	1+37.00	898.00	895.67	8	893.58
C1	A	8" x 4" Tee	N3-3B	1+85.00	898.00	895.67	8	894.04
	B	8" x 4" Tee	N3-3B	1+66.00	898.00	895.67	12	894.04
	C	8" x 4" Tee	N3-3B	1+35.00	900.00	897.67	8	894.88
	D	8" x 4" Tee	N3-3B	1+09.00	900.00	897.67	12	895.10
	E	8" x 4" Tee	N3-3B	0+84.00	900.00	897.67	8	894.48



LINE N3-3A TO LINE N3-3B



LINE N3-3C



NOTE: MAINTAIN A MINIMUM TWO FOOT VERTICAL CLEARANCE AND A MINIMUM 10 FOOT HORIZONTAL SEPARATION BETWEEN SANITARY SEWERS AND WATER MAIN.



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Schoolyard Lofts
 Leavenworth County, Tonganoxie, Kansas
PUBLIC SANITARY SEWER EXTENSION

FOR CONSTRUCTION

REVISIONS

No.	Issued Date	Notes/Comments



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DRAWN BY: DSL

SHEET TITLE
4 of 7
PLAN AND PROFILE SHEET

S4.0

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 \\D:\c\Land Projects 2005\SCHOOLYARD LOFTS\Civ02.dwg-S5.0 MH DETAILS



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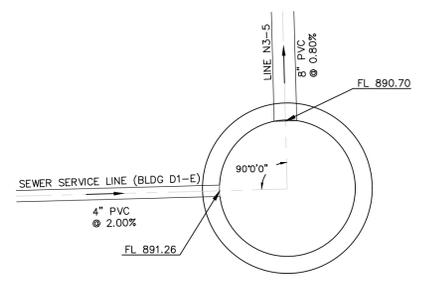
No.	Issued Date	Notes/Comments



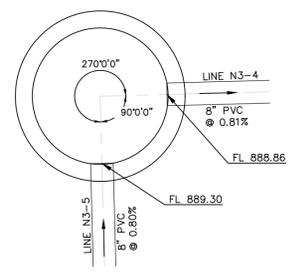
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 DRAWN BY: DSL

SHEET TITLE
 5 of 7
MANHOLE DETAIL SHEET

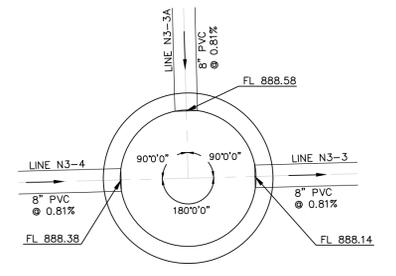
S5.0



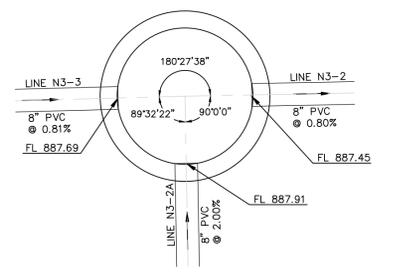
PROPOSED 4' DIA. PRECAST MANHOLE (SHALLOW)
MH STRUCTURE N3-5
 STA. 4+65.00
 N 296222.44
 E 2137592.84
 RIM = 894.50
 FL IN (SERVICE STUB) = 891.22 4" PVC
 FL OUT (N3-5) = 890.72 8" PVC



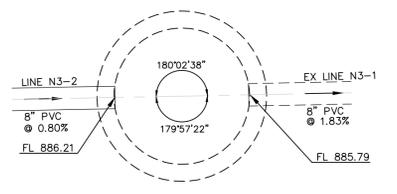
PROPOSED 4' DIA. PRECAST MANHOLE
MH STRUCTURE N3-4
 STA. 2+85.00
 N 296402.37
 E 2137587.87
 RIM = 899.23
 FL IN (N3-5) = 889.28 8" PVC
 FL OUT (N3-4) = 888.88 8" PVC



PROPOSED 4' DIA. PRECAST MANHOLE
MH STRUCTURE N3-3
 STA. 2+20.50
 N 296404.15
 E 2137652.34
 RIM = 899.23
 FL IN (N3-4) = 888.36 8" PVC
 FL IN (N3-3A) = 888.56 8" PVC
 FL OUT (N3-3) = 888.16 8" PVC

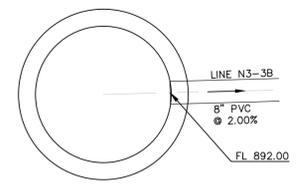


PROPOSED 4' DIA. PRECAST MANHOLE
MH STRUCTURE N3-2
 STA. 1+60.00
 N 296405.82
 E 2137712.82
 RIM = 898.56
 FL IN (N3-3) = 887.67 8" PVC
 FL IN (N3-2A) = 887.87 8" PVC
 FL OUT (N3-2) = 887.47 8" PVC

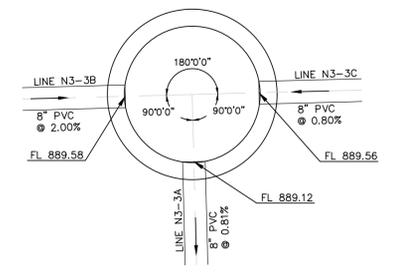


EXISTING 4' DIA. PRECAST MANHOLE
MH STRUCTURE N3-1
 STA. 0+00.00
 N 296408.95
 E 2137872.79
 RIM = 894.58
 FL IN (NW) = 885.88 (EX. 8" PVC SERVICE LINE)
 (SERVICE LINE TO BE REMOVED AND MANHOLE PATCHED)
 FL IN (N3-2) = 886.19 8" PVC
 FL OUT (N3-1) = 885.79 (EX. 8" PVC)

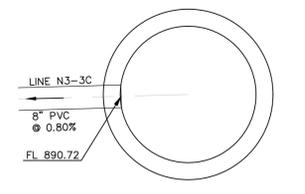
THE CONTRACTOR SHALL USE AN A-LOK G3 BOOT SYSTEM WHEN CONNECTING TO AN EXISTING MANHOLE. REFER TO DETAILS ON SHEET S6.0 AND S7.0 OF THIS PLAN SET.



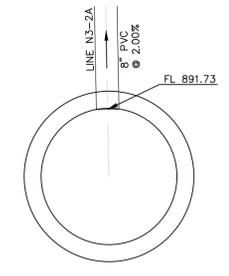
PROPOSED 4' DIA. PRECAST MANHOLE (SHALLOW)
MH STRUCTURE N3-3B
 STA. 1+97.00
 N 296472.67
 E 2137525.40
 RIM = 898.50
 FL OUT (N3-3B) = 892.04 8" PVC



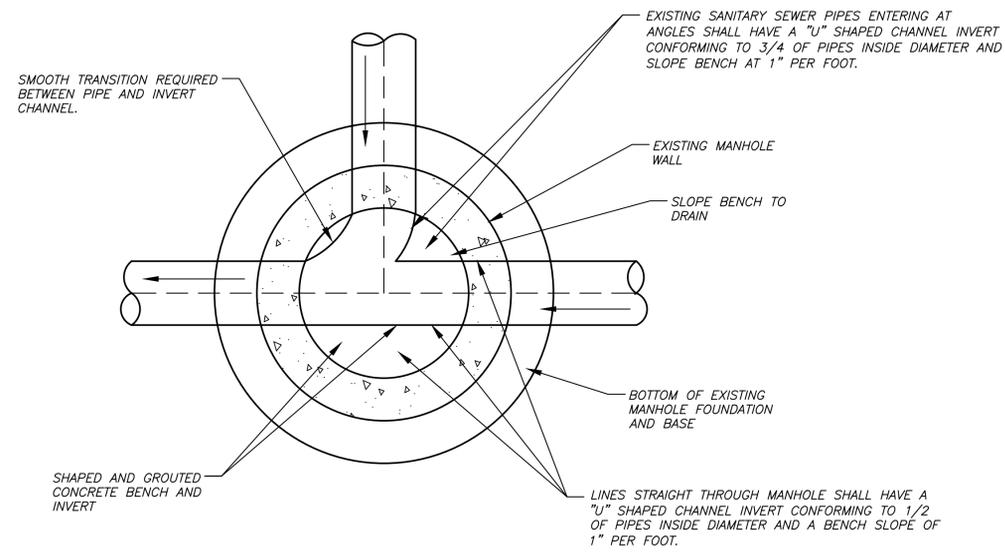
PROPOSED 4' DIA. PRECAST MANHOLE
MH STRUCTURE N3-3A
 STA. 0+72.00
 N 296476.12
 E 2137650.35
 RIM = 898.70
 FL IN (N3-3B) = 889.54 8" PVC
 FL IN (N3-3C) = 889.54 8" PVC
 FL OUT (N3-3A) = 889.14 8" PVC



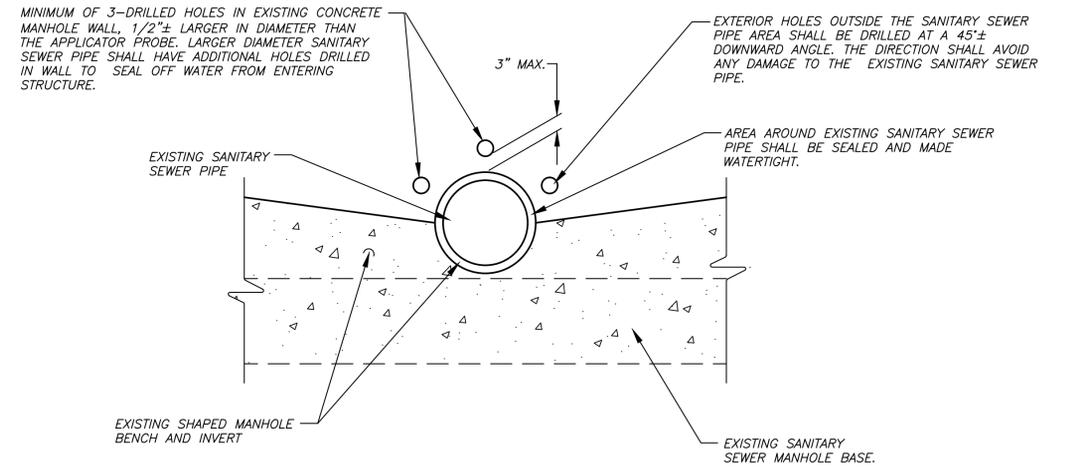
PROPOSED 4' DIA. PRECAST MANHOLE (SHALLOW)
MH STRUCTURE N3-3C
 STA. 1+50.00
 N 296480.26
 E 2137800.30
 RIM = 895.50
 FL OUT (N3-3C) = 890.74 8" PVC



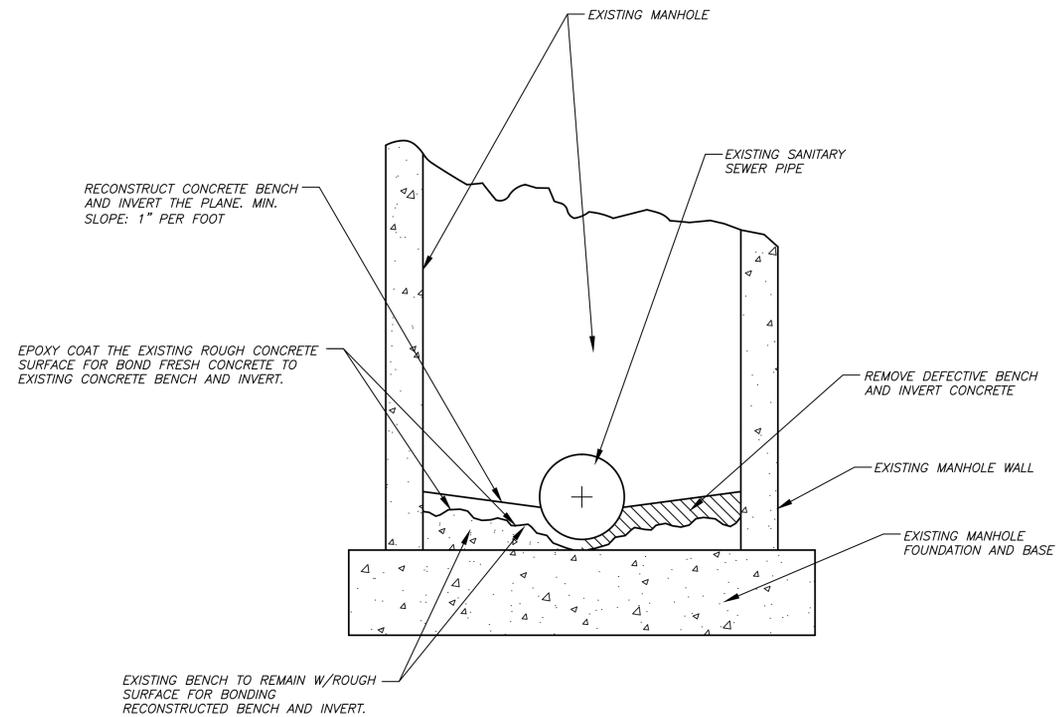
PROPOSED 4' DIA. PRECAST MANHOLE (SHALLOW)
MH STRUCTURE N3-2A
 STA. 1+95.00
 N 296210.86
 E 2137716.64
 RIM = 897.90
 FL OUT (N3-2A) = 891.77 8" PVC



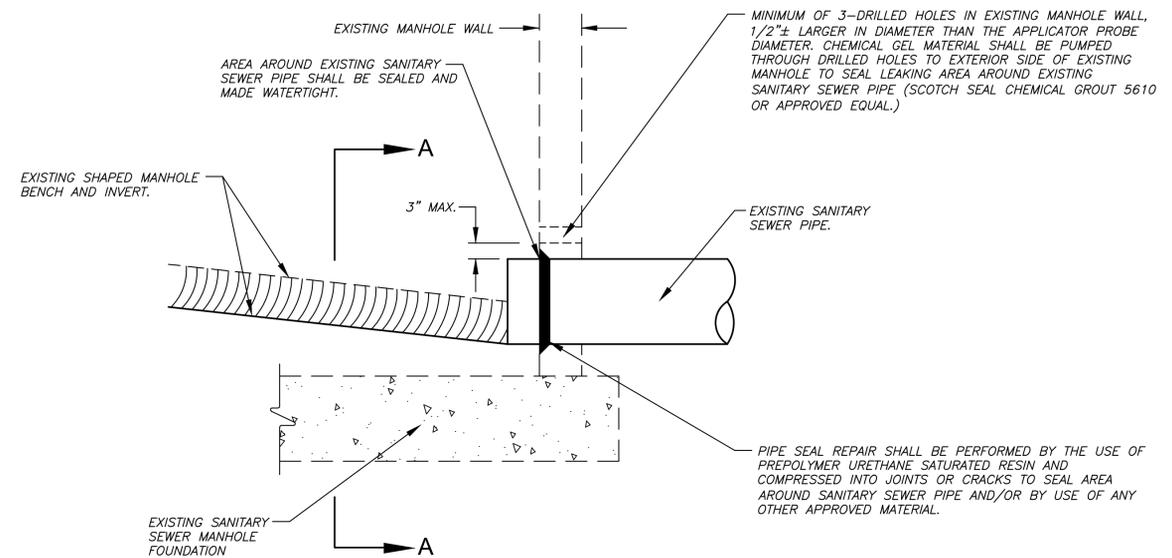
PLAN



SECTION A-A



MANHOLE BENCH INVERT REHABILITATION DETAILS



PIPE SEAL REPAIR DETAILS

NO.	DESCRIPTION	DATE

REVISIONS


 Prepared by: **W. D. ...**
 Checked by: **S. D. ...**
 2017 Edition

SANITARY SEWER DETAILS #2

Scale: **7/8" = 1'-0"**
 Sheet: **7** of **7**



SHT. NO.	TITLE
1	COVER SHEET
2	GENERAL LAYOUT / SURVEY CONTROL
3	DEMOLITION PLAN
4	TRAFFIC CONTROL PLAN
5	SECOND STREET PLAN
6	SHAWNEE STREET PLAN
7	WATER MAIN PLAN & PROFILE
8	WATER SERVICE PLAN
9	METER VAULT DETAILS
10	SUPPLEMENTAL WATER DETAILS
11	TRAFFIC CONTROL DETAILS
12	CITY STREET DETAILS
13	CITY SIDEWALK DETAILS
14	CITY WATERLINE DETAILS
15	CITY WATERLINE DETAILS

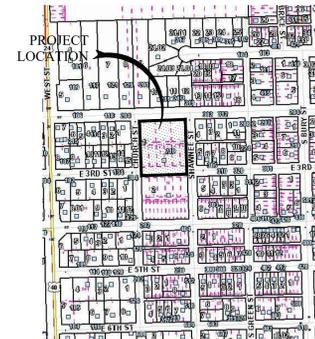
PLANS FOR PUBLIC STREET AND WATER MAIN for SCHOOLYARD LOFTS IN THE NW 1/4 OF SEC 9 - T 11S - R 21E TONGANOXIE, LEAVENWORTH COUNTY, KANSAS

GENERAL NOTES

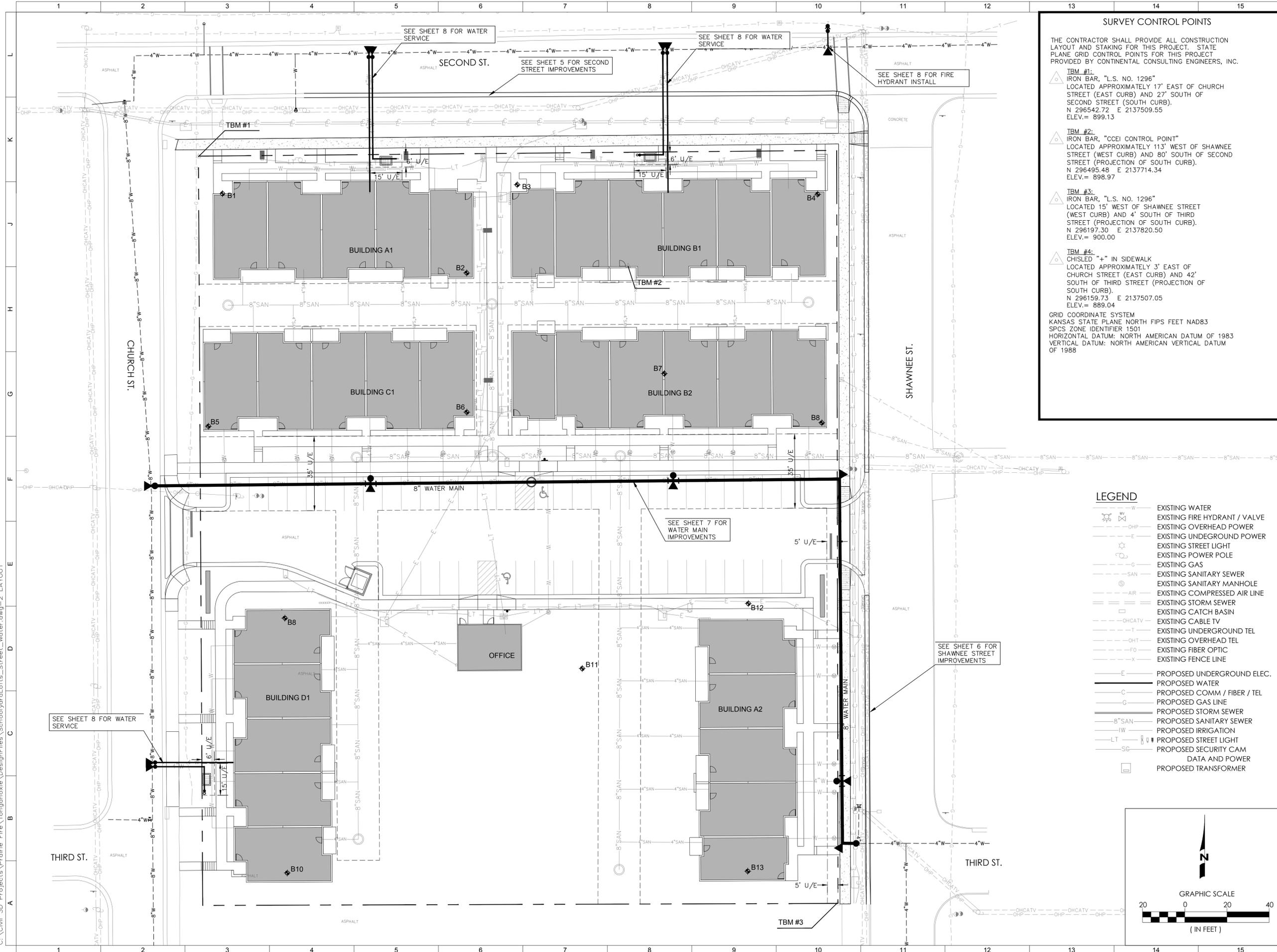
- THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE CITY OF TONGANOXIE DESIGN GUIDELINES AND STORM WATER DRAINAGE STANDARDS. THE CITY ENGINEER'S REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH THESE STANDARDS. THE CITY DID NOT VERIFY AND IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, ELEVATIONS AND QUANTITIES. THE CITY OF TONGANOXIE AND BG CONSULTANTS SHALL BE HELD HARMLESS FOR ERRORS AND OMISSIONS AS STATED HEREIN. THE DESIGN ENGINEER IS RESPONSIBLE FOR COMPLYING WITH ALL CITY STANDARDS AS WELL AS GENERALLY ACCEPTED ENGINEERING DESIGN STANDARDS AND PRINCIPLES, INCLUDING ITEMS WHICH MAY HAVE BEEN OVERLOOKED DURING THE CITY'S REVIEW. THESE PLANS ARE ACCEPTED FOR ONE YEAR FROM THE DATE OF APPROVAL, AFTER WHICH THEY BECOME VOID UNLESS CONSTRUCTION HAS BEEN COMPLETED AND APPROVED.
- SPECIFICATIONS FOR MOST OF THE WORK TO BE PERFORMED ON THIS PROJECT ARE LOCATED IN THE "CITY OF TONGANOXIE STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION". SPECIFICATIONS COVERING THE REMAINDER OF THE WORK ARE LOCATED IN THE "STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION", PUBLISHED BY THE KANSAS DEPARTMENT OF TRANSPORTATION, 2007 EDITION. IF ANY GENERAL NOTES CONFLICT WITH THE STANDARDS OF THE CITY OF TONGANOXIE, KANSAS, THE CITY'S STANDARDS SHALL OVERRIDE.
- THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE CITY SUPERINTENDENT AND REPRESENTATIVE FROM BG CONSULTANTS PRIOR TO BEGINNING CONSTRUCTION. THE CITY ADMINISTRATOR SHALL ISSUE A NOTICE TO PROCEED FOR CONSTRUCTION ONCE THE PROPER BONDING IS IN PLACE AND PRECONSTRUCTION MEETING HAS TAKEN PLACE.
- CONSTRUCTION OBSERVATION SERVICES SHALL BE PROVIDED BY THE CITY AND PAID FOR BY THE OWNER. CONTRACTOR TO PROVIDE A PROPOSED CONSTRUCTION SCHEDULE. BG CONSTRUCTION OBSERVATION STAFF WILL USE THIS INFORMATION TO PROVIDE AN ESTIMATE OF PROBABLE CONSTRUCTION OBSERVATION COST TO THE DEVELOPER BASED UPON THIS SCHEDULE.
- A GEOTECHNICAL ENGINEER SHALL BE PRESENT ON SITE FOR TESTING AND DURING PROOF-ROLLING OF ALL SUBGRADE PRIOR TO PLACING SURFACING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SCHEDULING OF THIS WORK AND AVAILABILITY OF THE GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEERING SERVICES WILL BE PAID FOR BY THE CONTRACTOR.
- ALL CLEARING DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH THE CITY OF TONGANOXIE REGULATIONS.
 - CLASS C FLYASH SHALL BE USED FOR TREATMENT OF THE SUBGRADE (9" THICKNESS). FLYASH SHALL BE ADDED TO THE SUBGRADE AT A RATE OF 12%-15% BASED ON DRY UNIT WEIGHT. THE CONTRACTOR SHALL SUBMIT CERTIFICATIONS VERIFYING THE FLYASH COMPLIES WITH THE REQUIREMENTS OF ASTM D5239 6.4 & ASTM C-618, PRIOR TO USE. ONLY POTABLE WATER WILL BE ALLOWED. EQUIPMENT NECESSARY FOR PROPER BLENDING OF THE SOIL FLYASH MIXTURE SHALL BE BY A DOWING MPH 100 OR EQUIVALENT. INITIAL COMPACTION SHALL BE DONE USING A VIBRATORY PAD FOOT ROLLER. TEMPORARY STORAGE (LESS THAN 12 HOURS) OF FLYASH IN OPEN PITS WILL BE ALLOWED PROVIDED FLYASH IS PROTECTED FROM RAIN AND GROUND WATER. THE CONTRACTOR SHALL PROVIDE CITY CONSTRUCTION OBSERVER WITH WEIGHT TICKETS FROM CERTIFIED PUBLIC SCALES FOR THE FLYASH DELIVERED TO THE PROJECT. AREAS TO BE STABILIZED SHALL BE CUT & SHAPED IN CONFORMANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS. SOFT OR YIELDING SUBGRADES SHALL BE SCARIFIED AND COMPACTED UNTIL IT IS UNIFORMLY STABLE. DURING THE SPREADING, MIXING AND COMPACTION OPERATION, THE CONTRACTOR SHALL HAVE ON SITE A GEOTECHNICAL ENGINEER TO VERIFY THE PROPER RATE OF FLYASH APPLICATION, THE FINAL MOISTURE CONTENT OF THE MIX PRIOR TO COMPACTION AND THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM-698. NO PAYMENT WILL BE MADE FOR FLYASH STABILIZATION UNTIL ALL TEST RESULTS HAVE BEEN SUBMITTED TO THE CITY. MIXING OPERATIONS SHALL COMMENCE WITHIN 1 HOUR AFTER DISTRIBUTION. COMPACTION OF THE MIXTURE SHALL BE COMPLETED WITHIN 1 HOUR OF THE MIXING OF THE FLYASH. IF THE MATERIAL FAILS TO MEET THE DENSITY OR MOISTURE REQUIREMENTS, THE INSPECTOR MAY REQUIRE IT TO BE REWORKED AS NECESSARY. WHEN SOIL TEMPERATURES ARE BELOW 50° AND ABOVE 40° ADDITIONAL MIXING AND COMPACTION EFFORTS MAY BE REQUIRED TO ACHIEVE THE DESIRED RESULTS. STABILIZATION OPERATIONS SHALL CEASE WHEN SOIL TEMPERATURES ARE BELOW 40°. AFTER THE FLYASH TREATED COURSE HAS BEEN FINISHED THE SURFACE SHALL BE PROTECTED AGAINST RAPID DRYING BY MAINTAINING A THOROUGH & CONTINUOUS MOIST CONDITION BY SPRINKLING FOR A PERIOD OF NOT LESS THAN 96 HOURS. AFTER THE 96 HOUR PERIOD THE SUBGRADE MAY THEN BE TRIMMED TO LINE & GRADE AND PAVED. IF THE TREATED SUBGRADE CANNOT SUPPORT, WITHOUT DISPLACEMENT, CONSTRUCTION EQUIPMENT, ADDITIONAL CURE TIME MAY BE REQUIRED. PAYMENT FOR TREATMENT OF SUBGRADE WILL BE UNDER BID ITEM NO. 5 (9" TYPE C FLYASH)
 - CEMENT MAY BE USED FOR TREATMENT OF SUBGRADE IN LIEU OF FLY ASH. CEMENT SHALL BE ADDED TO THE SUBGRADE AT A RATE OF 5% BASED ON DRY UNIT WEIGHT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE ALL STATE AND CITY PERMITS, INCLUDING PERMITS REQUIRED BY OTHER GOVERNING BODIES, REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT.
- THE UTILITY SURVEY FOR THIS PROJECT IS ASSIGNED A SUE QUALITY LEVEL OF SERVICE "C". PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND NOTIFYING ALL UTILITY COMPANIES AND SHALL FIELD VERIFY ALL UTILITIES THAT MAY BE ENCOUNTERED. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR COMPLETE. IN THE EVENT THAT EXISTING UTILITIES ARE CONTACTED, DISRUPTED, OR IN ANY WAY ALTERED, CONTACT THE RESPECTIVE UTILITY COMPANY IMMEDIATELY. IN CASE OF EMERGENCY, DIAL 911.
- THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS OF ALL SANITARY SEWERS ADJACENT TO THE PROJECT LIMITS. NOTIFY THE PROJECT ENGINEER OF ANY PRE-EXISTING CONDITIONS WHICH NEED ATTENTION. ONCE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING SANITARY SEWERS IN WORKING ORDER UNTIL SUBSTANTIAL COMPLETION.
- EXISTING TOPOGRAPHY FOR THIS PROJECT HAS BEEN PROVIDED BY A COMBINATION OF AERIAL SURVEY AND BY FIELD SURVEY METHODS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THESE PLANS WITHOUT EXCEPTIONS, HE SHALL HAVE MADE AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- ALL EXISTING PIPES, SANITARY STRUCTURES, ETC. THAT WILL BECOME NONFUNCTIONAL AND CONFLICT WITH THESE IMPROVEMENTS SHALL BE REMOVED BY THE CONTRACTOR AND HAULED TO AN APPROVED, LEGAL OFF-SITE DISPOSAL AREA.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION AND SILT PROTECTION AS REQUIRED DURING CONSTRUCTION AND SHALL BE RESPONSIBLE FOR KEEPING EXISTING STREET AND ADJACENT LAND FEATURES AND PROPERTY FREE OF MUD AND SILT.
- THE CONTRACTOR MUST SUPPORT ALL UTILITIES DURING THIS CONSTRUCTION TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY. ALL SHORING AND TEMPORARY SUPPORTS ARE TO BE INCLUDED IN THE CONTRACT PRICE.
- THE CONTRACTOR SHALL EXPOSE ALL UTILITIES AT PIPE CROSSINGS AND VERIFY ELEVATIONS TO DETERMINE CONFLICTS PRIOR TO THE SETTING OF STRUCTURES OR LAYING OF PIPE.
- THE CONTRACTOR SHALL VERIFY THE PIPE FLOWLINE ELEVATIONS AND HORIZONTAL LOCATION OF EACH MANHOLE INSTALLED PRIOR TO LAYING THE NEXT UPSTREAM PIPE LINE. IF DEVIATIONS ARE FOUND, THE PIPE PROFILE GRADE SHALL BE RECALCULATED BY THE ENGINEER TO ENSURE THE NEXT UPSTREAM MANHOLE FLOWLINE ELEVATIONS ARE AT PLAN GRADE.
- TREE CLEARING SHALL BE COMPLETED BETWEEN NOVEMBER 1, 2019 AND MARCH 31, 2019. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR TO MINIMIZE THE LOSS OF TREES AND VEGETATION DUE TO THIS CONSTRUCTION. WHEN IT HAS BEEN DETERMINED (AFTER ALL CONSTRUCTION STAKING) WHAT TREES ARE TO BE PRESERVED, THE FOLLOWING METHOD SHALL BE USED TO MINIMIZE ROOT DAMAGE:
 - WHEN THE LIMITS OF THE EXCAVATION ENCRUSH INTO THE DRIP LINE BY 1/3 THE RADIUS OR GREATER, THE ROOT SYSTEM SHALL BE SLICED BY MEANS OF A SMALL TRENCHER (DITCH WITCH) OR OTHER APPROVED METHOD TO A DEPTH OF 36" WITHIN THE DRIP LINE PRIOR TO THE EXCAVATION BY BACKHOE OR DOZER. IF ROOTS ARE ENCOUNTERED BELOW THE 36" DEPTH, THESE ROOTS SHALL BE SLICED AND NOT RIPPED BY THE HOE BUCKET.
 - THE AFFECTED TREES SHALL BE MARKED BY THE CONTRACTOR AND PRUNED BY CONTRACTOR PROVIDED TREE SERVICE.
 - MINIMUM OVERHEAD PRUNING WILL BE ALLOWED FOR WORKING CLEARANCE AND THEN ONLY PRUNING BY CHAINSAW WILL BE ALLOWED.

GENERAL NOTES (CONT.)

- IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REMOVE AND DISPOSE OF ANY AND ALL TREES AND BRUSH WHICH WERE CLEARED FOR THE CONSTRUCTION OF THIS PROJECT. THIS INCLUDES MATERIALS CLEARED BY THE GEOTECHNICAL CONSULTANT TO ACCESS BORING LOCATIONS. IN INSTANCES WHERE THE PRIVATE LAND OWNER REQUESTS THAT FELLED TREES BE RETURNED, THE TREES SHALL BE LIMBED AND STUMPS REMOVED. ALL WOOD 3-INCHES AND LARGER SHALL ALSO BE RETURNED TO LANDOWNER. LIMBS AND BRANCHES SMALLER THAN 3-INCHES SHALL BE GROUND INTO MULCH OR HAULED OFF BY THE CONTRACTOR.
- TREES AND BRUSH GROUND INTO MULCH SHALL NOT BE USED IN PIPE TRENCH BACKFILL. THE MULCH SHALL BE SPREAD EVENLY OVER CLEARED AREAS DISTURBED BY CONSTRUCTION AND NOT LEFT IN MOUNDS OR WINDROWS.
- WARRANTY/DISCLAIMER: THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR IT'S PERSONNEL CAN OR DO CERTIFY THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER OBSERVES AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTINUAL BASIS.
- SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE.
- THE CONTRACTOR SHALL PROVIDE AT LEAST ONE (1) CHEMICALLY TREATED PORTABLE TOILET UNIT, "SATELLITE CORPORATION", OR EQUAL FOR EVERY 20 WORKMEN ON THE JOB SITE. IN NO CASE SHALL LESS THAN ONE (1) BE PROVIDED. THE UNIT(S) SHALL REMAIN ON THE SITE DURING ALL ACTIVE PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL ENFORCE THE USE OF THE FACILITIES BY PERSONNEL AT THE SITE. THE UNIT(S) SHALL BE OBTAINED FROM PUBLIC VIEW TO THE GREATEST EXTENT PRACTICABLE.
- ALL EXCAVATION WILL BE UNCLASSIFIED. THERE SHALL BE NO ADDITIONAL PAYMENT FOR ROCK EXCAVATION, HAUL-OFF AND DISPOSAL OF EXCESS EXCAVATED MATERIALS.
- STRIP TOPSOIL FROM AREAS OF EXCAVATION AND STOCK PILE FOR REUSE. TOPSOIL SHALL BE PLACED ON TOP 6-INCHES AS TRENCH BACKFILL.
- THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND STAKING FOR THIS PROJECT. STATE PLANE GRID CONTROL POINTS FOR THIS PROJECT SHALL BE PROVIDED BY CONTINENTAL CONSULTING ENGINEERS, INC.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST STRUCTURES, PIPES AND ANY MATERIALS TO BE USED ON THIS PROJECT FOR APPROVAL BY THE DESIGN ENGINEER AND THE CITY OF TONGANOXIE, KANSAS.
- THESE DOCUMENTS, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, ARE INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THESE DOCUMENTS WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY CONTINENTAL CONSULTING ENGINEERS, INC., SHALL BE WITHOUT LIABILITY TO CONTINENTAL CONSULTING ENGINEERS, INC.



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SURVEY CONTROL POINTS

THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND STAKING FOR THIS PROJECT. STATE PLANE GRID CONTROL POINTS FOR THIS PROJECT PROVIDED BY CONTINENTAL CONSULTING ENGINEERS, INC.

TBM #1:
 IRON BAR, "L.S. NO. 1296"
 LOCATED APPROXIMATELY 17' EAST OF CHURCH STREET (EAST CURB) AND 27' SOUTH OF SECOND STREET (SOUTH CURB).
 N 296542.72 E 2137509.55
 ELEV.= 899.13

TBM #2:
 IRON BAR, "CCEI CONTROL POINT"
 LOCATED APPROXIMATELY 113' WEST OF SHAWNEE STREET (WEST CURB) AND 80' SOUTH OF SECOND STREET (PROJECTION OF SOUTH CURB).
 N 296495.48 E 2137714.34
 ELEV.= 898.97

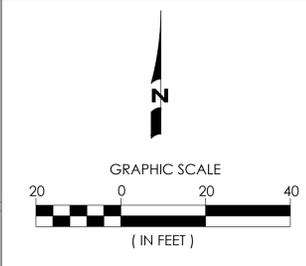
TBM #3:
 IRON BAR, "L.S. NO. 1296"
 LOCATED 15' WEST OF SHAWNEE STREET (WEST CURB) AND 4' SOUTH OF THIRD STREET (PROJECTION OF SOUTH CURB).
 N 296197.30 E 2137820.50
 ELEV.= 900.00

TBM #4:
 CHISLED "+" IN SIDEWALK
 LOCATED APPROXIMATELY 3' EAST OF CHURCH STREET (EAST CURB) AND 42' SOUTH OF THIRD STREET (PROJECTION OF SOUTH CURB).
 N 296159.73 E 2137507.05
 ELEV.= 889.04

GRID COORDINATE SYSTEM
 KANSAS STATE PLANE NORTH FIPS FEET NAD83
 SPCS ZONE IDENTIFIER 1501
 HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983
 VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988

LEGEND

	EXISTING WATER
	EXISTING FIRE HYDRANT / VALVE
	EXISTING OVERHEAD POWER
	EXISTING UNDERGROUND POWER
	EXISTING STREET LIGHT
	EXISTING POWER POLE
	EXISTING GAS
	EXISTING SANITARY SEWER
	EXISTING SANITARY MANHOLE
	EXISTING COMPRESSED AIR LINE
	EXISTING STORM SEWER
	EXISTING CATCH BASIN
	EXISTING CABLE TV
	EXISTING UNDERGROUND TEL
	EXISTING OVERHEAD TEL
	EXISTING FIBER OPTIC
	EXISTING FENCE LINE
	PROPOSED UNDERGROUND ELEC.
	PROPOSED WATER
	PROPOSED COMM / FIBER / TEL
	PROPOSED GAS LINE
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED IRRIGATION
	PROPOSED STREET LIGHT
	PROPOSED SECURITY CAM
	DATA AND POWER
	PROPOSED TRANSFORMER



Continental
 CONSULTING ENGINEERS, INC.

SINCE 1976

9000 STATE LINE ROAD
 LEAWOOD, KANSAS 66206

11006 PARALLEL PARKWAY
 KANSAS CITY, KANSAS 66109

TEL (913) 642-8642
 FAX (913) 642-6941
 www.cceengineers.com

Schoolyard Lofts
 Leavenworth County, Tonganoxie, Kansas

PUBLIC STREET AND WATER MAIN

FOR CONSTRUCTION

REVISIONS

No.	Issued Date	Notes/Comments

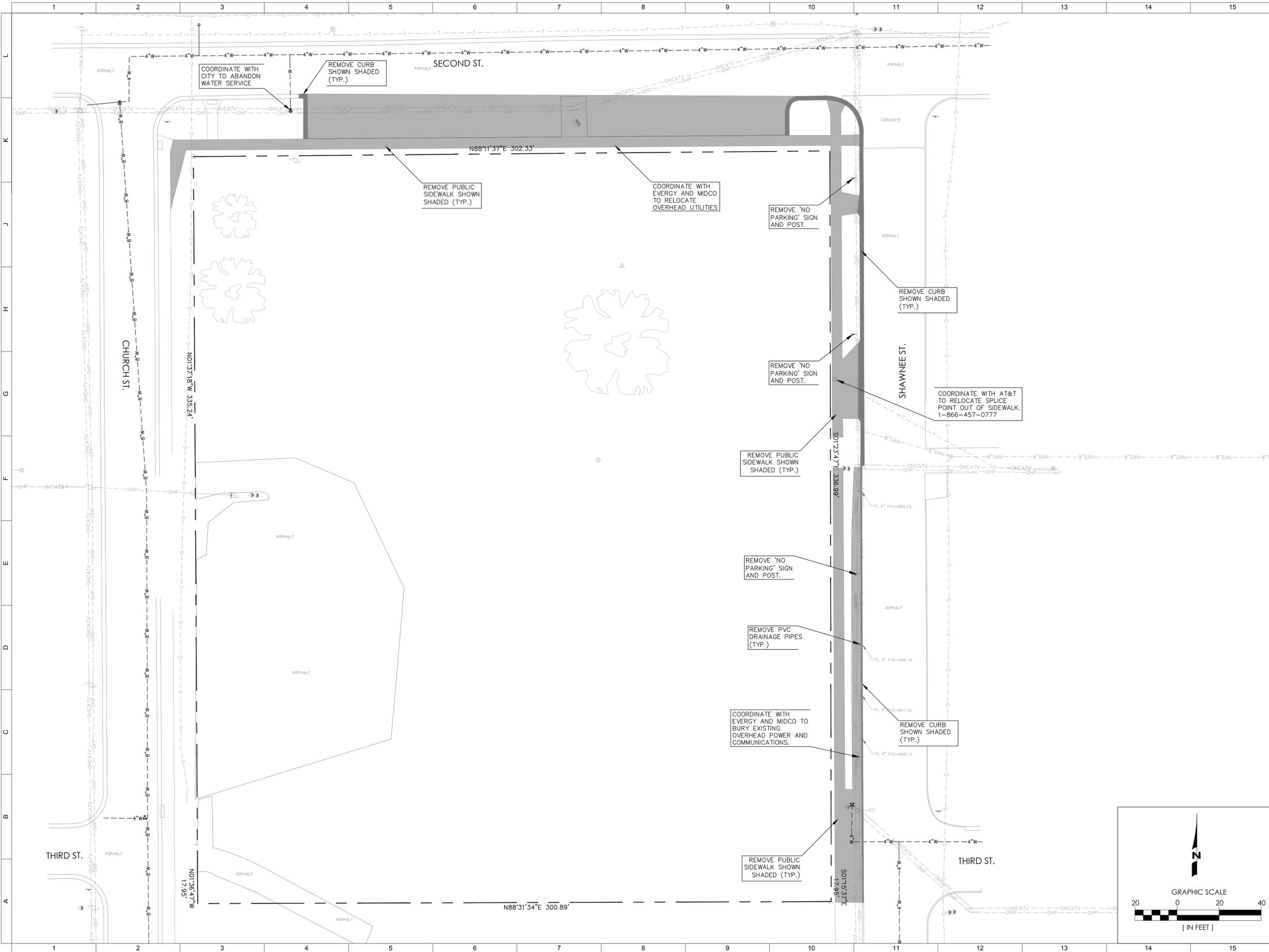
SEAL

PROJECT NO: 1906-19
 DATE: October 25, 2019
 DRAWN BY: BCL

SHEET TITLE
GENERAL LAYOUT SHEET

2

8/26/2019 11:59 AM
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9000 STATE LINE ROAD
 LEAWOOD, KANSAS 66206
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Schoolyard Lofts
 Leavenworth County, Tonganoxie, Kansas

PUBLIC STREET AND WATER MAIN

FOR CONSTRUCTION

REVISIONS		
No.	Issued Date	Notes/Comments



Know what's below.
 Call before you dig.

SEAL

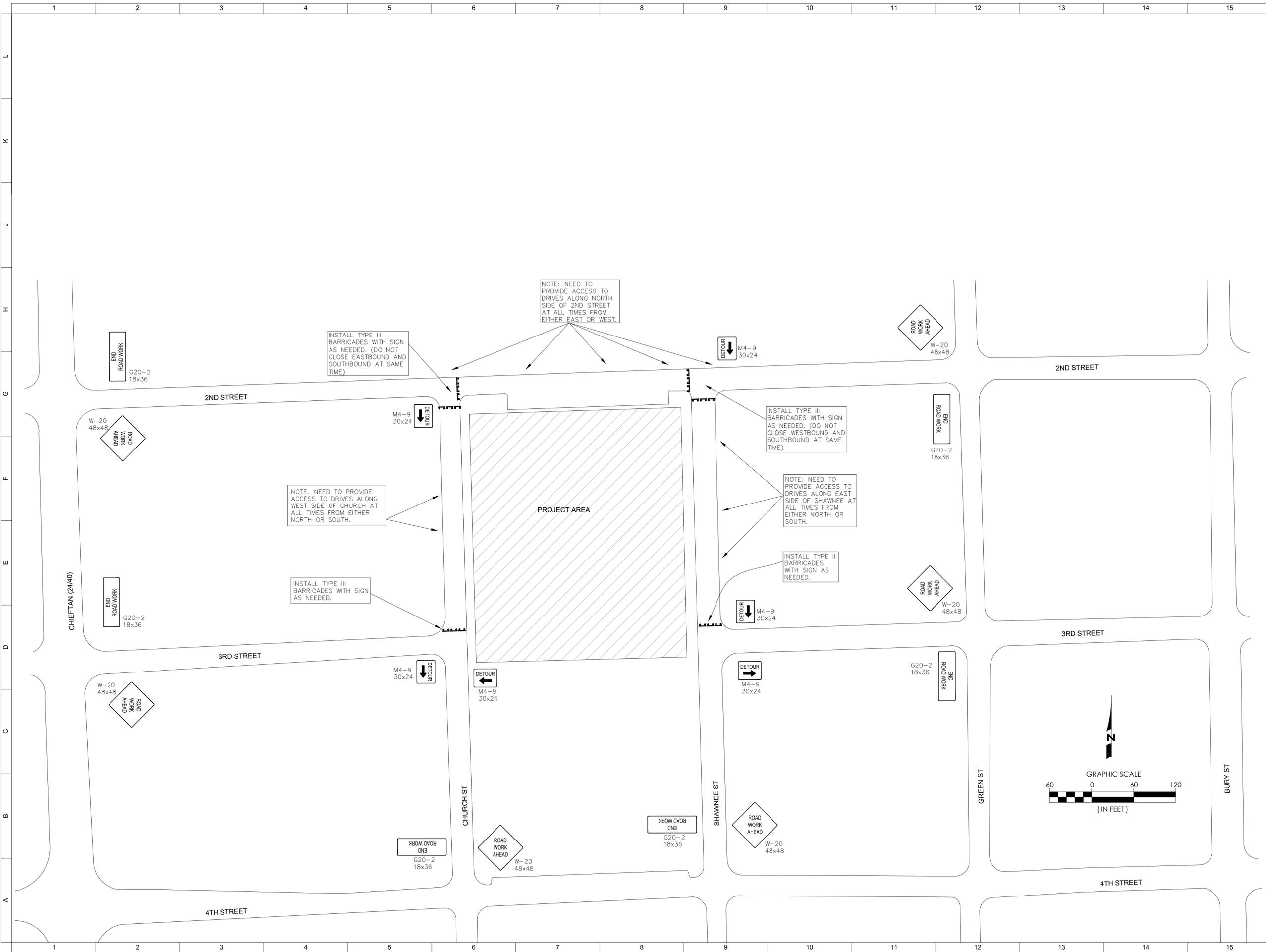
PROJECT NO: 1906-19
 DATE: October 25, 2019
 DRAWN BY: BCL

SHEET TITLE

DEMOLITION PLAN

3

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9000 STATE LINE ROAD
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 TEL: (913) 642-8642
 FAX: (913) 642-6941
 www.ccengineers.com

Schoolyard Lofts
 Leavenworth County, Tonganoxie, Kansas

PUBLIC STREET AND WATER MAIN

FOR CONSTRUCTION

REVISIONS

No.	Issued Date	Notes/Comments



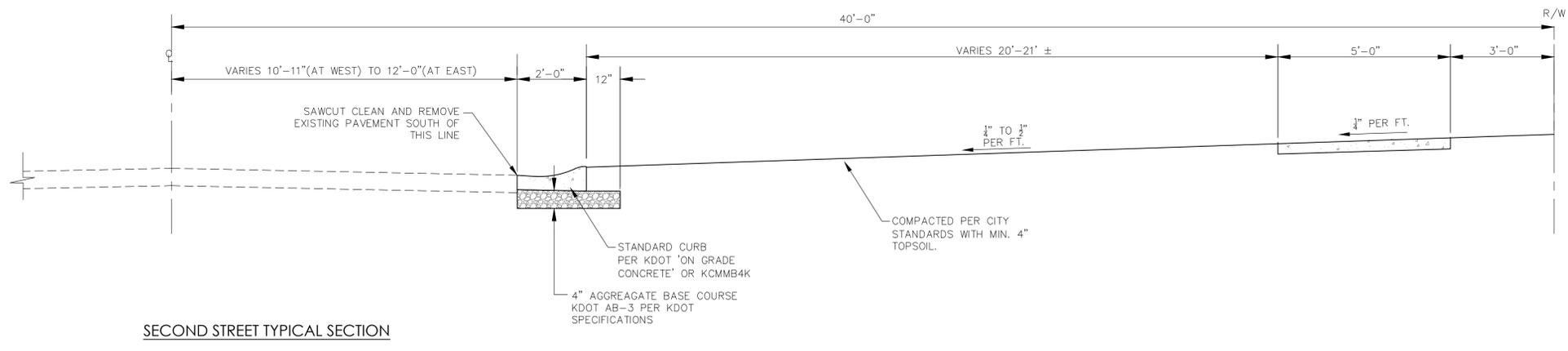
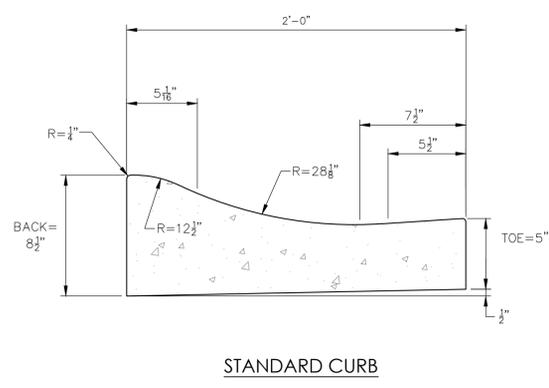
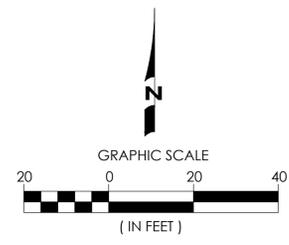
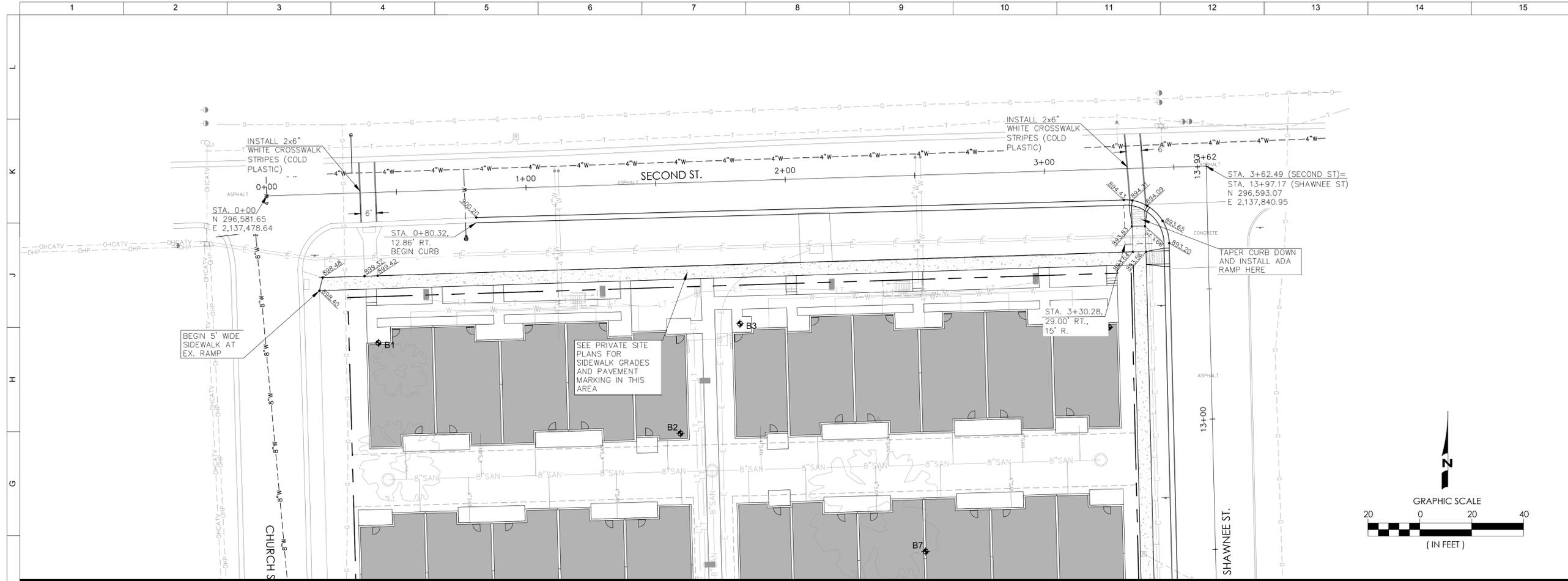
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SHEET TITLE
TRAFFIC CONTROL PLAN

4

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No.	Issued Date	Notes/Comments



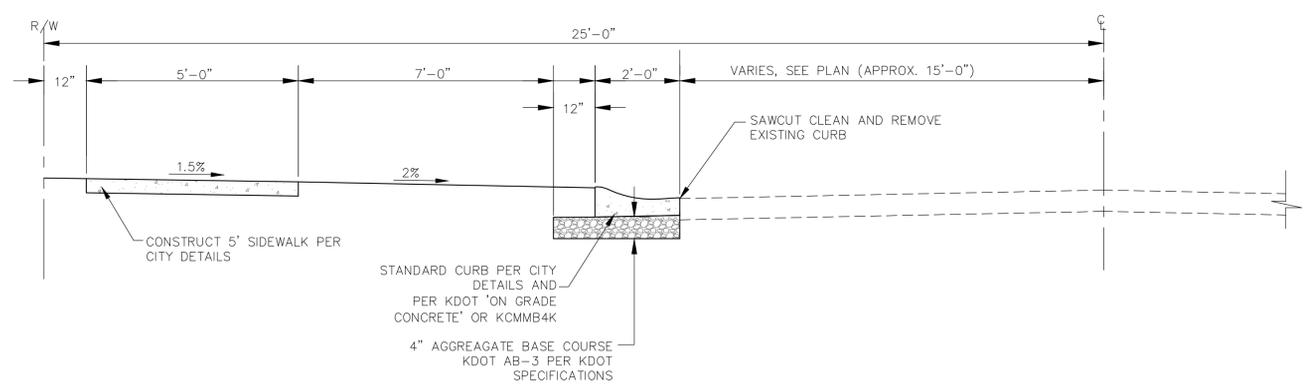
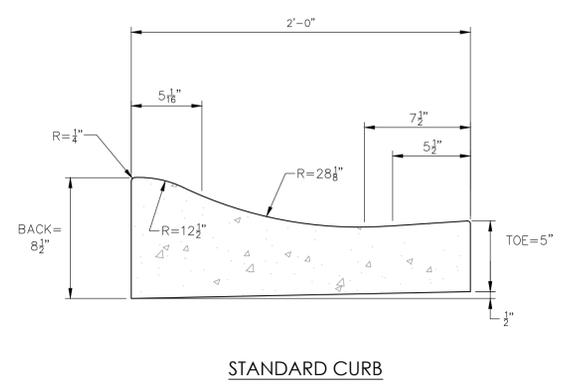
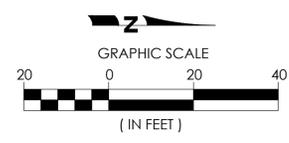
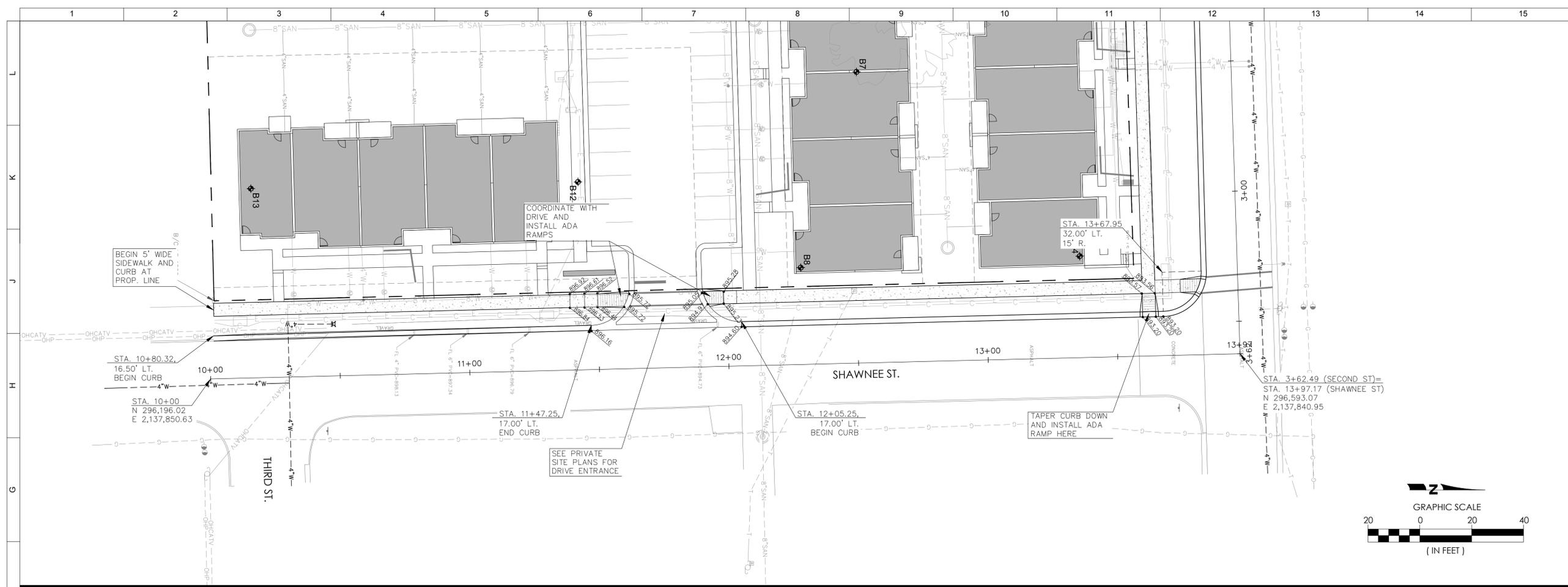
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SHEET TITLE
SECOND STREET PLAN

5

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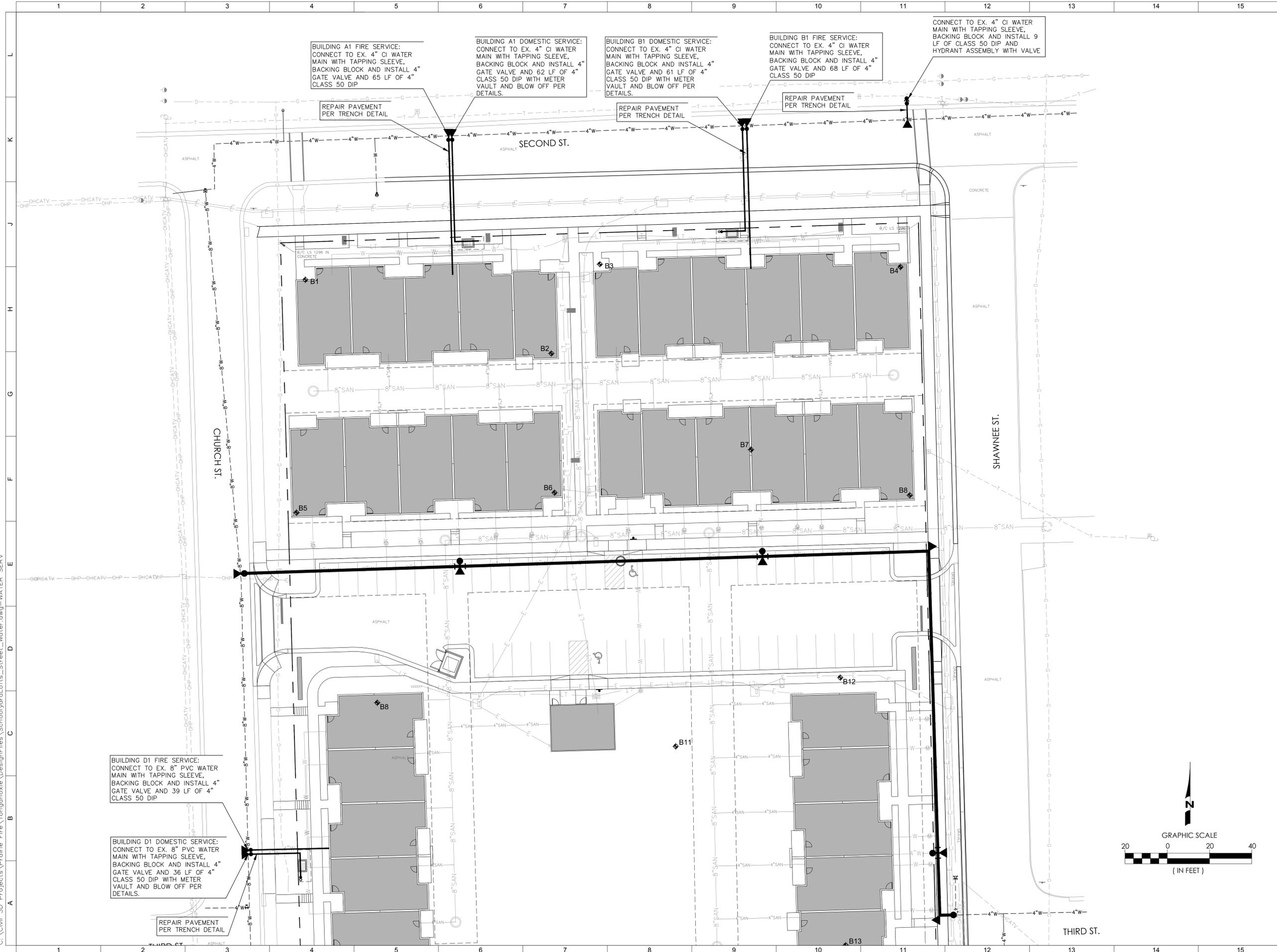
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SHEET TITLE
SHAWNEE STREET PLAN

6

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BUILDING D1 FIRE SERVICE:
 CONNECT TO EX. 8" PVC WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 39 LF OF 4"
 CLASS 50 DIP

BUILDING D1 DOMESTIC SERVICE:
 CONNECT TO EX. 8" PVC WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 36 LF OF 4"
 CLASS 50 DIP WITH METER
 VAULT AND BLOW OFF PER
 DETAILS.

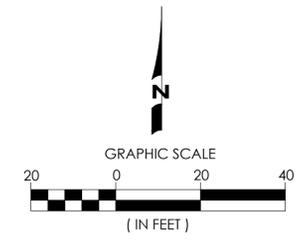
BUILDING A1 FIRE SERVICE:
 CONNECT TO EX. 4" CI WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 65 LF OF 4"
 CLASS 50 DIP

BUILDING A1 DOMESTIC SERVICE:
 CONNECT TO EX. 4" CI WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 62 LF OF 4"
 CLASS 50 DIP WITH METER
 VAULT AND BLOW OFF PER
 DETAILS.

BUILDING B1 DOMESTIC SERVICE:
 CONNECT TO EX. 4" CI WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 61 LF OF 4"
 CLASS 50 DIP WITH METER
 VAULT AND BLOW OFF PER
 DETAILS.

BUILDING B1 FIRE SERVICE:
 CONNECT TO EX. 4" CI WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 4"
 GATE VALVE AND 68 LF OF 4"
 CLASS 50 DIP

CONNECT TO EX. 4" CI WATER
 MAIN WITH TAPPING SLEEVE,
 BACKING BLOCK AND INSTALL 9
 LF OF CLASS 50 DIP AND
 HYDRANT ASSEMBLY WITH VALVE



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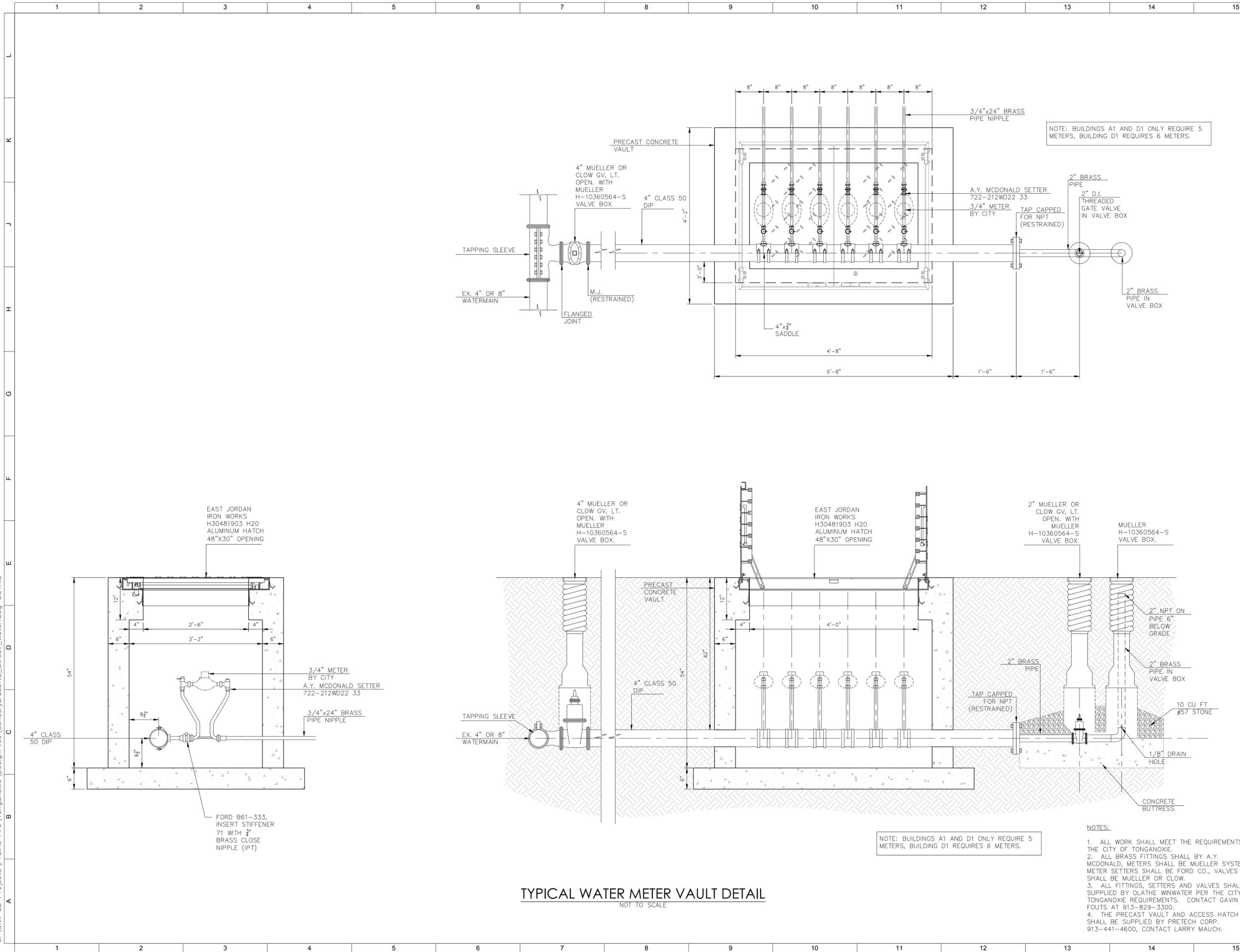
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SHEET TITLE
WATER SERVICE PLAN

8

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TYPICAL WATER METER VAULT DETAIL
 NOT TO SCALE

NOTE: BUILDINGS A1 AND D1 ONLY REQUIRE 5 METERS, BUILDING D1 REQUIRES 6 METERS.

- NOTES:
1. ALL WORK SHALL MEET THE REQUIREMENTS OF THE CITY OF TONGANOXIE.
 2. ALL BRASS FITTINGS SHALL BE A.Y. MCDONALD, METERS SHALL BE MUELLER SYSTEMS, METER SETTERS SHALL BE FORD CO., VALVES SHALL BE MUELLER OR CLOW.
 3. ALL FITTINGS, SETTERS AND VALVES SHALL BE SUPPLIED BY OLATHE WINWATER PER THE CITY OF TONGANOXIE REQUIREMENTS. CONTACT GAVIN FOUTS AT 913-829-3300.
 4. THE PRECAST VAULT AND ACCESS HATCH SHALL BE SUPPLIED BY PRETECH CORP. 913-441-4600, CONTACT LARRY MAUCH.



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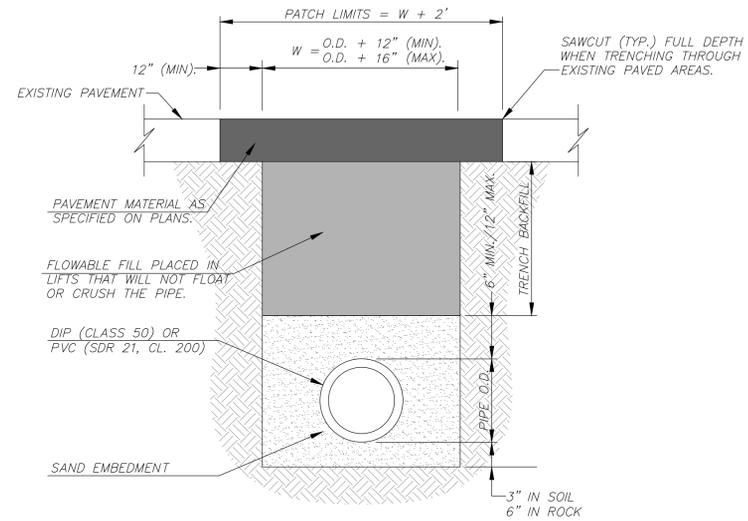
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 DATE: October 25, 2019
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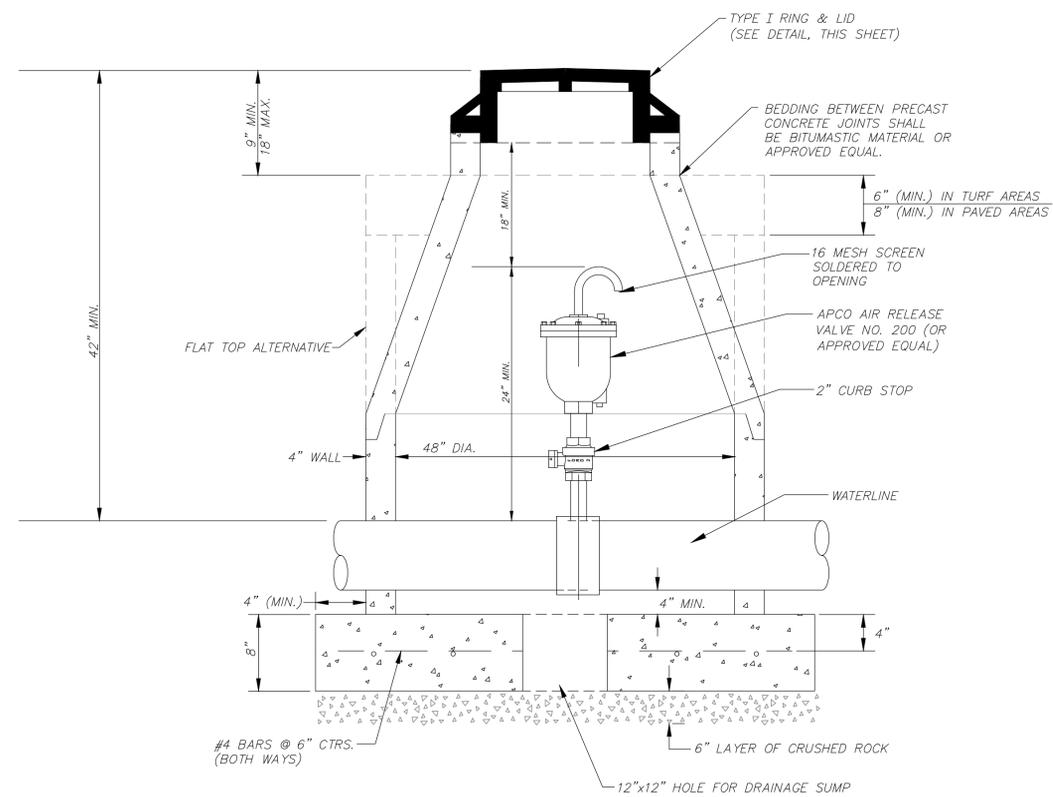
METER VAULT
 DETAILS

9

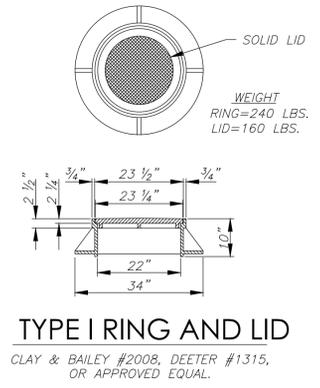
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TRENCH DETAIL PAVEMENT REPAIR



AIR RELEASE IN SHALLOW MANHOLE DETAIL



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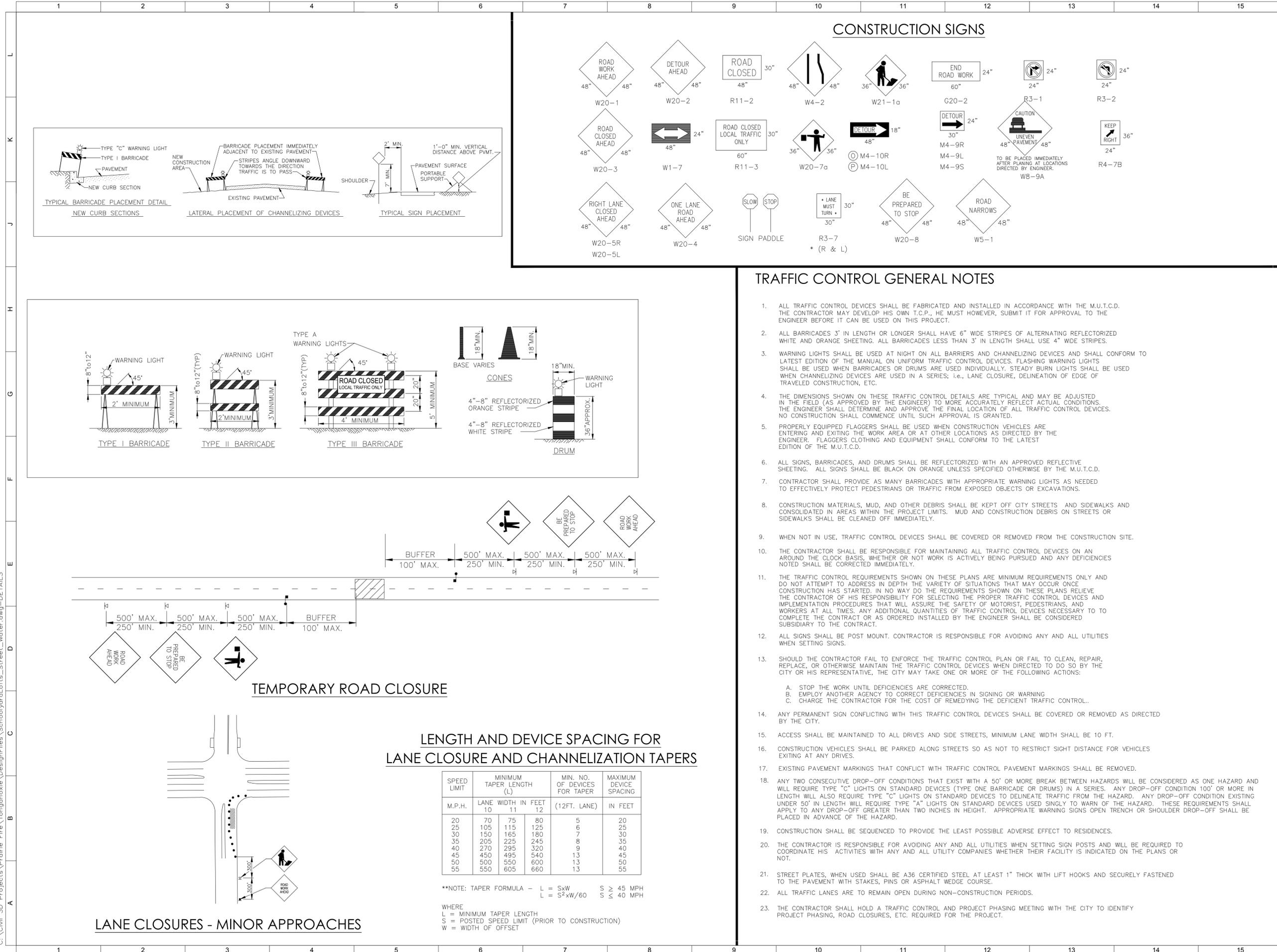
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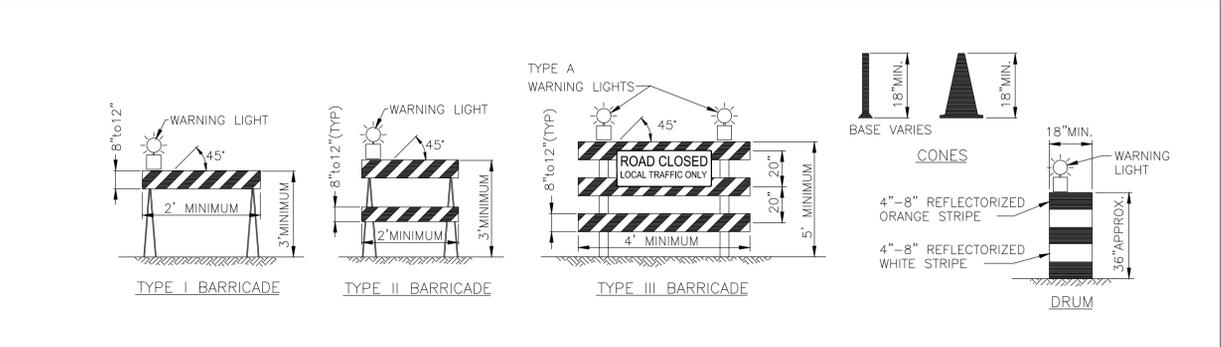
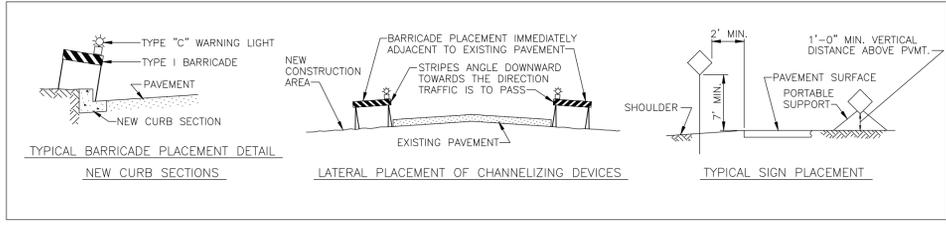
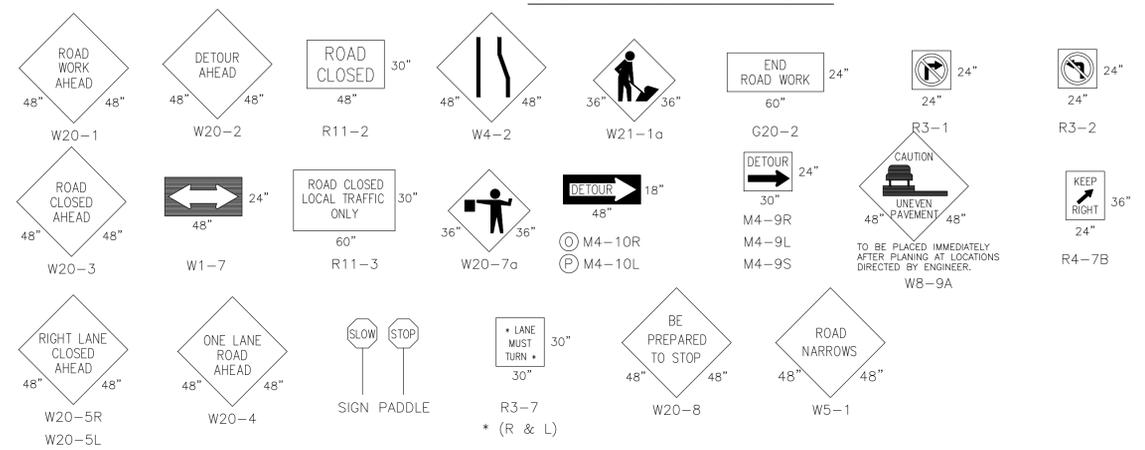
SHEET TITLE
SUPPLEMENTAL WATER DETAILS

10

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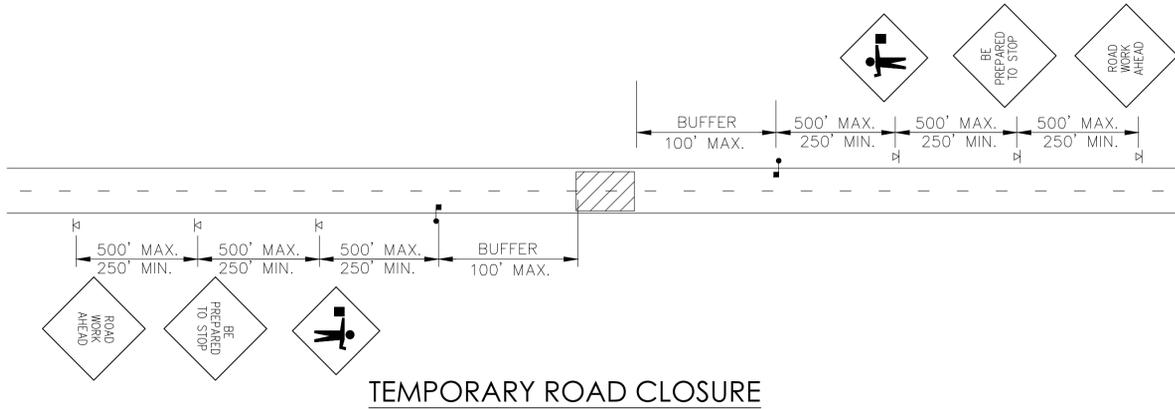


CONSTRUCTION SIGNS



TRAFFIC CONTROL GENERAL NOTES

- ALL TRAFFIC CONTROL DEVICES SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE M.U.T.C.D. THE CONTRACTOR MAY DEVELOP HIS OWN T.C.P., HE MUST HOWEVER, SUBMIT IT FOR APPROVAL TO THE ENGINEER BEFORE IT CAN BE USED ON THIS PROJECT.
- ALL BARRICADES 3' IN LENGTH OR LONGER SHALL HAVE 6" WIDE STRIPES OF ALTERNATING REFLECTORIZED WHITE AND ORANGE SHEETING. ALL BARRICADES LESS THAN 3' IN LENGTH SHALL USE 4" WIDE STRIPES.
- WARNING LIGHTS SHALL BE USED AT NIGHT ON ALL BARRIERS AND CHANNELIZING DEVICES AND SHALL CONFORM TO LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. FLASHING WARNING LIGHTS SHALL BE USED WHEN BARRICADES OR DRUMS ARE USED INDIVIDUALLY. STEADY BURN LIGHTS SHALL BE USED WHEN CHANNELIZING DEVICES ARE USED IN A SERIES; I.E., LANE CLOSURE, DELINEATION OF EDGE OF TRAVELED CONSTRUCTION, ETC.
- THE DIMENSIONS SHOWN ON THESE TRAFFIC CONTROL DETAILS ARE TYPICAL AND MAY BE ADJUSTED IN THE FIELD (AS APPROVED BY THE ENGINEER) TO MORE ACCURATELY REFLECT ACTUAL CONDITIONS. THE ENGINEER SHALL DETERMINE AND APPROVE THE FINAL LOCATION OF ALL TRAFFIC CONTROL DEVICES. NO CONSTRUCTION SHALL COMMENCE UNTIL SUCH APPROVAL IS GRANTED.
- PROPERLY EQUIPPED FLAGGERS SHALL BE USED WHEN CONSTRUCTION VEHICLES ARE ENTERING AND EXITING THE WORK AREA OR AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. FLAGGERS CLOTHING AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D.
- ALL SIGNS, BARRICADES, AND DRUMS SHALL BE REFLECTORIZED WITH AN APPROVED REFLECTIVE SHEETING. ALL SIGNS SHALL BE BLACK ON ORANGE UNLESS SPECIFIED OTHERWISE BY THE M.U.T.C.D.
- CONTRACTOR SHALL PROVIDE AS MANY BARRICADES WITH APPROPRIATE WARNING LIGHTS AS NEEDED TO EFFECTIVELY PROTECT PEDESTRIANS OR TRAFFIC FROM EXPOSED OBJECTS OR EXCAVATIONS.
- CONSTRUCTION MATERIALS, MUD, AND OTHER DEBRIS SHALL BE KEPT OFF CITY STREETS AND SIDEWALKS AND CONSOLIDATED IN AREAS WITHIN THE PROJECT LIMITS. MUD AND CONSTRUCTION DEBRIS ON STREETS OR SIDEWALKS SHALL BE CLEANED OFF IMMEDIATELY.
- WHEN NOT IN USE, TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED FROM THE CONSTRUCTION SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES ON AN AROUND THE CLOCK BASIS, WHETHER OR NOT WORK IS ACTIVELY BEING PURSUED AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED IMMEDIATELY.
- THE TRAFFIC CONTROL REQUIREMENTS SHOWN ON THESE PLANS ARE MINIMUM REQUIREMENTS ONLY AND DO NOT ATTEMPT TO ADDRESS IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION HAS STARTED. IN NO WAY DO THE REQUIREMENTS SHOWN ON THESE PLANS RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR SELECTING THE PROPER TRAFFIC CONTROL DEVICES AND IMPLEMENTATION PROCEDURES THAT WILL ASSURE THE SAFETY OF MOTORIST, PEDESTRIANS, AND WORKERS AT ALL TIMES. ANY ADDITIONAL QUANTITIES OF TRAFFIC CONTROL DEVICES NECESSARY TO COMPLETE THE CONTRACT OR AS ORDERED INSTALLED BY THE ENGINEER SHALL BE CONSIDERED SUBSIDIARY TO THE CONTRACT.
- ALL SIGNS SHALL BE POST MOUNT. CONTRACTOR IS RESPONSIBLE FOR AVOIDING ANY AND ALL UTILITIES WHEN SETTING SIGNS.
- SHOULD THE CONTRACTOR FAIL TO ENFORCE THE TRAFFIC CONTROL PLAN OR FAIL TO CLEAN, REPAIR, REPLACE, OR OTHERWISE MAINTAIN THE TRAFFIC CONTROL DEVICES WHEN DIRECTED TO DO SO BY THE CITY OR HIS REPRESENTATIVE, THE CITY MAY TAKE ONE OR MORE OF THE FOLLOWING ACTIONS:
 - STOP THE WORK UNTIL DEFICIENCIES ARE CORRECTED.
 - EMPLOY ANOTHER AGENCY TO CORRECT DEFICIENCIES IN SIGNING OR WARNING.
 - CHARGE THE CONTRACTOR FOR THE COST OF REMEDYING THE DEFICIENT TRAFFIC CONTROL.
- ANY PERMANENT SIGN CONFLICTING WITH THIS TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED AS DIRECTED BY THE CITY.
- ACCESS SHALL BE MAINTAINED TO ALL DRIVES AND SIDE STREETS, MINIMUM LANE WIDTH SHALL BE 10 FT.
- CONSTRUCTION VEHICLES SHALL BE PARKED ALONG STREETS SO AS NOT TO RESTRICT SIGHT DISTANCE FOR VEHICLES EXITING AT ANY DRIVES.
- EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TRAFFIC CONTROL PAVEMENT MARKINGS SHALL BE REMOVED.
- ANY TWO CONSECUTIVE DROP-OFF CONDITIONS THAT EXIST WITH A 50' OR MORE BREAK BETWEEN HAZARDS WILL BE CONSIDERED AS ONE HAZARD AND WILL REQUIRE TYPE "C" LIGHTS ON STANDARD DEVICES (TYPE ONE BARRICADE OR DRUMS) IN A SERIES. ANY DROP-OFF CONDITION 100' OR MORE IN LENGTH WILL ALSO REQUIRE TYPE "C" LIGHTS ON STANDARD DEVICES TO DELINEATE TRAFFIC FROM THE HAZARD. ANY DROP-OFF CONDITION EXISTING UNDER 50' IN LENGTH WILL REQUIRE TYPE "A" LIGHTS ON STANDARD DEVICES USED SINGLY TO WARN OF THE HAZARD. THESE REQUIREMENTS SHALL APPLY TO ANY DROP-OFF GREATER THAN TWO INCHES IN HEIGHT. APPROPRIATE WARNING SIGNS OPEN TRENCH OR SHOULDER DROP-OFF SHALL BE PLACED IN ADVANCE OF THE HAZARD.
- CONSTRUCTION SHALL BE SEQUENCED TO PROVIDE THE LEAST POSSIBLE ADVERSE EFFECT TO RESIDENCES.
- THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING ANY AND ALL UTILITIES WHEN SETTING SIGN POSTS AND WILL BE REQUIRED TO COORDINATE HIS ACTIVITIES WITH ANY AND ALL UTILITY COMPANIES WHETHER THEIR FACILITY IS INDICATED ON THE PLANS OR NOT.
- STREET PLATES, WHEN USED SHALL BE A36 CERTIFIED STEEL AT LEAST 1" THICK WITH LIFT HOOKS AND SECURELY FASTENED TO THE PAVEMENT WITH STAKES, PINS OR ASPHALT WEDGE COURSE.
- ALL TRAFFIC LANES ARE TO REMAIN OPEN DURING NON-CONSTRUCTION PERIODS.
- THE CONTRACTOR SHALL HOLD A TRAFFIC CONTROL AND PROJECT PHASING MEETING WITH THE CITY TO IDENTIFY PROJECT PHASING, ROAD CLOSURES, ETC. REQUIRED FOR THE PROJECT.



TEMPORARY ROAD CLOSURE

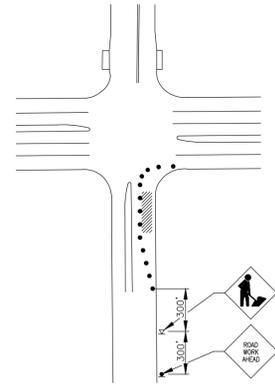
LENGTH AND DEVICE SPACING FOR LANE CLOSURE AND CHANNELIZATION TAPERS

SPEED LIMIT	MINIMUM TAPER LENGTH (L)			MIN. NO. OF DEVICES FOR TAPER (12FT. LANE)	MAXIMUM DEVICE SPACING
	10	11	12		
M.P.H.	LANE WIDTH IN FEET				IN FEET
20	70	75	80	5	20
25	105	115	125	6	25
30	150	165	180	7	30
35	205	225	245	8	35
40	270	295	320	9	40
45	450	495	540	13	45
50	500	550	600	13	50
55	550	605	660	13	55

**NOTE: TAPER FORMULA - $L = S \times W$ $S \geq 45$ MPH
 $L = S^2 \times W / 60$ $S < 40$ MPH

WHERE
 L = MINIMUM TAPER LENGTH
 S = POSTED SPEED LIMIT (PRIOR TO CONSTRUCTION)
 W = WIDTH OF OFFSET

LANE CLOSURES - MINOR APPROACHES



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SHEET TITLE

TRAFFIC CONTROL DETAILS

11

GENERAL NOTES FOR STREET CONSTRUCTION

1. SPECIFICATIONS FOR STREET CONSTRUCTION CAN BE FOUND ON THIS DETAIL SHEET AND THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, 2015 EDITION PUBLISHED BY THE KDOT, HEREBY REFERRED TO AS THE KDOT STANDARD SPECIFICATIONS. WHEN THE KDOT STANDARD SPECIFICATIONS HAVE BEEN AMENDED BY SPECIAL PROVISIONS, THE USE OF THE TERM KDOT STANDARD SPECIFICATIONS SHALL ALSO REFER TO THE MOST CURRENT SPECIAL PROVISION. KDOT STANDARD SPECIFICATIONS CAN BE OBTAINED HERE: <http://ksdot.org/bureaus/burConsMain/specprov/2015specprov.asp>.

EARTHWORK:
 2. MINIMUM REQUIREMENTS FOR COMPACTION OF SOILS ARE SPECIFIED ON THE "TYPICAL SECTION - STREET GRADING", THIS SHEET. SITE CONDITIONS MAY REQUIRE MORE STRINGENT EARTHWORK CONSTRUCTION EFFORTS AS SPECIFIED BY A GEOTECHNICAL ENGINEER LICENSED TO PRACTICE ENGINEERING IN THE STATE OF KANSAS.

3. TOP SOIL SHALL BE STRIPPED FROM THE SITE PRIOR TO PLACING EMBANKMENT MATERIAL.
 4. PROOF-ROLLING. PROOF-ROLLING SHALL BE ACCOMPLISHED WITH A 25-TON LOADED TANDEM-AXLE DUMP TRUCK. THE PROOF-ROLLING PROCEDURE SHALL BE PERFORMED UNDER THE OBSERVATION OF THE CITY INSPECTOR AND SHALL CONSIST OF THREE CYCLES OF LOADING OVER THREE SEPARATE PATHS ON THE ROADWAY.

SUBGRADE STABILIZATION:
 5. THE EARTHEN SUBGRADE FOR ALL STREET CONSTRUCTION SHALL BE STABILIZED WITH CLASS C FLY ASH. THE CONTRACTOR SHALL SUBMIT VERIFICATION TO THE CITY THAT THE FLY ASH TO BE USED COMPLIES WITH THE REQUIREMENTS OF ASTM D5239 6.4 AND ASTM C-618, PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE CITY WITH WEIGHT TICKETS FROM CERTIFIED PUBLIC SCALES FOR ALL FLY ASH USED IN THE WORK.

6. UNLESS SPECIFIED OTHERWISE, FLY ASH SHALL BE MIXED INTO THE TOP 9 INCHES OF THE SUBGRADE AT A RATE OF 16% BASED ON THE MAXIMUM DRY UNIT WEIGHT OF THE SUBGRADE SOIL AS DETERMINED BY THE STANDARD PROCTOR DENSITY PROCESS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING BY AN ACCREDITED GEOTECHNICAL ENGINEER FOR STANDARD PROCTOR AND MOISTURE DENSITY RESULTS. NO SUBGRADE WILL BE CONSIDERED FOR ACCEPTANCE UNTIL ALL TEST RESULTS HAVE BEEN SUBMITTED TO THE CITY. IF ANY PART OF THE STABILIZED SUBGRADE FAILS TO MEET THE DENSITY OR MOISTURE REQUIREMENTS IT IS TO BE REWORKED AS NECESSARY.

8. TEMPORARY (LESS THAN 12 HOURS) ON SITE STORAGE OF FLY ASH WILL BE ALLOWED PROVIDED THE FLY ASH IS KEPT DRY AT ALL TIMES PRIOR MIXING WITH THE SUBGRADE SOIL.

9. ONLY POTABLE WATER SHALL BE USED AS MIX WATER. BLENDING OF THE SOIL FLY ASH AND SOIL MIXTURE SHALL BE ACCOMPLISHED BY EQUIPMENT WITH A RECYCLING OR MIXING DRUM AND AN AUTOMATIC WATER PROPORTIONING SYSTEM TO PULVERIZE THE SUBGRADE TO THE SPECIFIED DEPTH.

10. THE CITY INSPECTOR SHALL BE ON SITE DURING THE SPREADING, MIXING, AND COMPACTING OPERATION TO VERIFY THE FLY ASH APPLICATION RATE, THE FINAL MOISTURE CONTENT OF THE MIX PRIOR TO COMPACTION, AND THE COMPACTION OF THE TREATED SUBGRADE AS DETERMINED BY ASTM-698 AT A DEPTH OF 9 INCHES. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION SCHEDULE ACCORDINGLY.

11. TEMPERATURE RESTRICTIONS. WHEN SOIL TEMPERATURES ARE BETWEEN 40° AND 50° F, ADDITIONAL MIXING AND COMPACTION EFFORT WILL BE REQUIRED TO ACHIEVE THE DESIRED RESULTS. FLY ASH STABILIZATION OPERATIONS SHALL NOT BE DONE WHEN SOIL TEMPERATURES ARE LESS THAN 40° F.

12. AFTER THE FLY ASH TREATED SUBGRADE HAS BEEN FINISHED, THE SURFACE SHALL BE PROTECTED AGAINST RAPID DRYING BY MAINTAINING CONTINUOUS MOIST CONDITIONS FOR THE NEXT 96 HOURS. AFTER THE 96 HOUR CURE PERIOD, THE SUBGRADE MAY BE TRIMMED TO LINE AND GRADE AND PROOF-ROLLED. IF THE TREATED SUBGRADE CANNOT SUPPORT THE AFOREMENTIONED TRUCK WITHOUT DISPLACEMENT, ADDITIONAL CURE TIME WILL BE REQUIRED.

AGGREGATE BASE/CRUSHED STONE SUBGRADE OPTION:
 13. FOR ASPHALT STREET CONSTRUCTION ONLY, THE CONTRACTOR HAS THE OPTION TO CONSTRUCT A 6" THICK AGGREGATE BASE (AB-3) IN LIEU OF STABILIZING THE EARTHEN SUBGRADE WITH FLY ASH. CONSTRUCT AGGREGATE BASE IN ACCORDANCE WITH THE KDOT STANDARD SPECIFICATIONS.

14. FOR PORTLAND CEMENT CONCRETE STREET CONSTRUCTION ONLY, THE CONTRACTOR HAS THE OPTION TO CONSTRUCT A 6" THICK CRUSHED STONE SUBGRADE IN LIEU OF STABILIZING THE EARTHEN SUBGRADE WITH FLY ASH. CONSTRUCT CRUSHED STONE SUBGRADE IN ACCORDANCE WITH THE KDOT STANDARD SPECIFICATIONS.

15. PRIOR TO CONSTRUCTING THE AGGREGATE BASE OR CRUSHED STONE SUBGRADE, THE EARTHEN SUBGRADE SHALL BE PROOF-ROLLED. AREAS OBSERVED TO BE SOFT OR YIELDING SHALL BE SCARIFIED AND REWORKED, OR REPLACED, UNTIL UNIFORMLY STABLE.

HOT MIX ASPHALT (HMA) PAVEMENT NOTES:
 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING HMA MIX DESIGN(S) TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

17. ASPHALT MIX DESIGN AND STREET CONSTRUCTION SHALL CONFORM TO THE KDOT STANDARD SPECIFICATIONS FOR "HOT MIX ASPHALT (HMA) - COMMERCIAL GRADE".

18. THE FLY ASH STABILIZED SUBGRADE OR AGGREGATE BASE SHALL BE PROOF-ROLLED PRIOR TO CONSTRUCTION OF THE HMA PAVEMENT. AREAS OBSERVED TO BE SOFT OR YIELDING SHALL BE SCARIFIED AND REWORKED, OR REPLACED, UNTIL UNIFORMLY STABLE.

CONCRETE PAVEMENT NOTES:
 19. PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) STREET CONSTRUCTION SHALL CONFORM TO THE KDOT STANDARD SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENT (NON-OC/QA). CONCRETE PAVEMENT DESIGN(S) SHALL BE EITHER CONTINUOUSLY REINFORCED PCCP OR NON-REINFORCED, DOWEL JOINTED (NRDJ) PCCP.

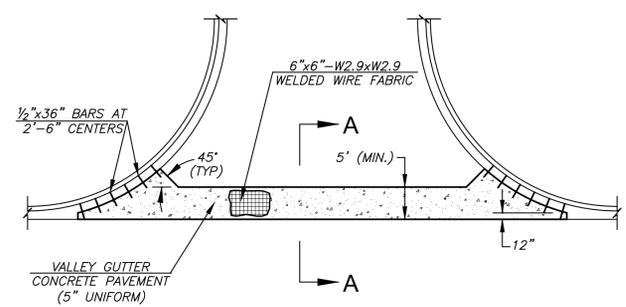
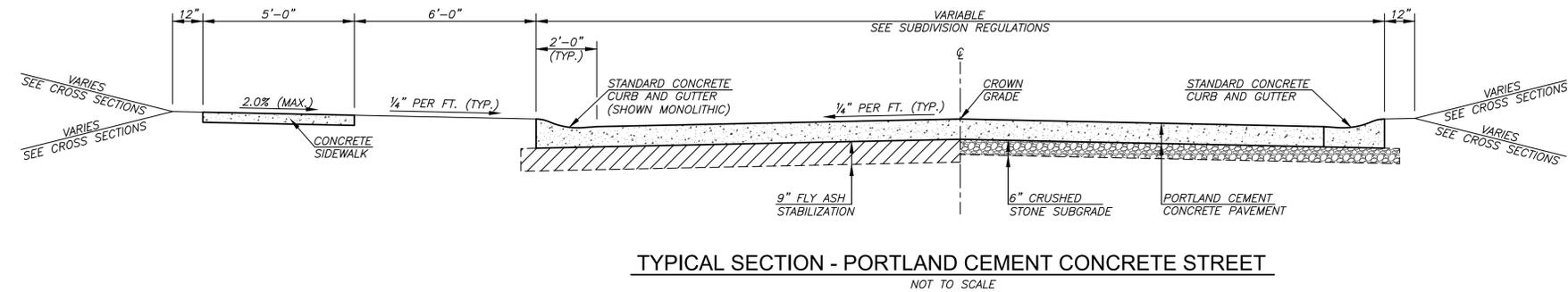
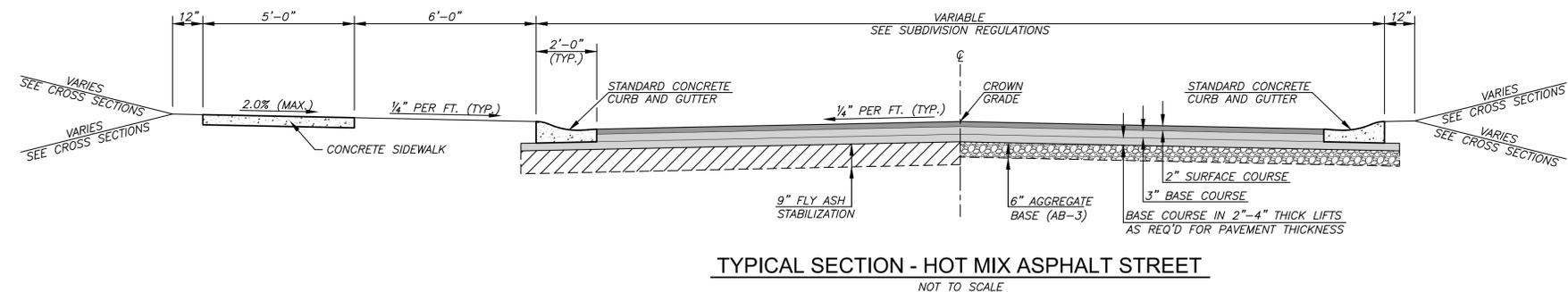
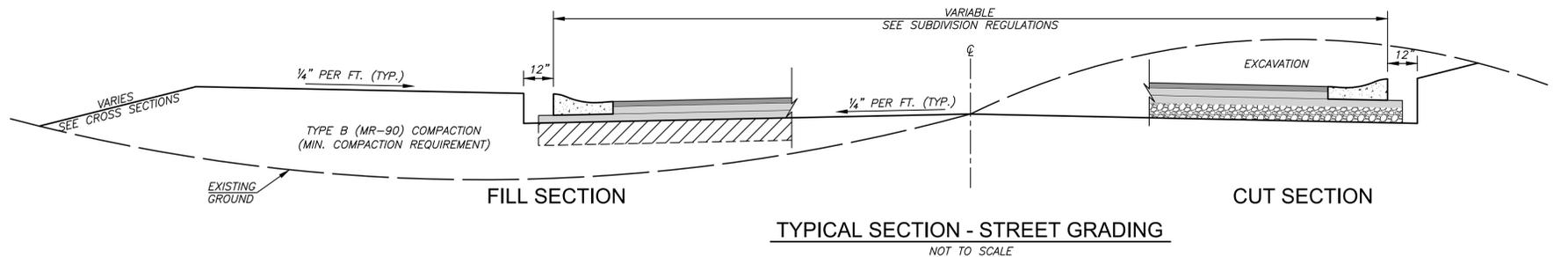
20. THE CONTRACTOR HAS THE OPTION TO CONSTRUCT CURB AND GUTTER MONOLITHIC WITH THE CONCRETE PAVEMENT.

21. FINISHED SURFACE TOLERANCE. THE FINISHED PAVEMENT SHALL BE CHECKED WITH A 10 FOOT STRAIGHTEDGE PLACED PARALLEL TO THE CENTERLINE AT ANY LOCATION WITHIN A DRIVING LANE. AREAS SHOWING HIGH SPOTS OF MORE THAN 1/4 INCH IN 10 FEET SHALL BE MARKED AND GROUND DOWN WITH AN APPROVED GRINDING TOOL TO AN ELEVATION WHERE THE AREA WILL NOT SHOW SURFACE DEVIATIONS IN EXCESS OF 1/8 INCH WHEN TESTED WITH A 10 FOOT STRAIGHT EDGE.

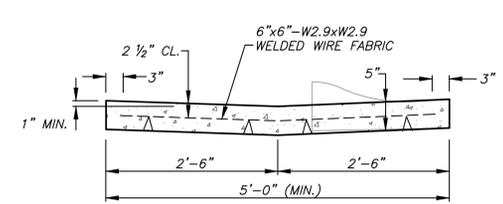
22. THE FLY ASH STABILIZED SUBGRADE OR CRUSHED STONE SUBGRADE SHALL BE PROOF-ROLLED PRIOR TO CONSTRUCTION OF A PCCP STREET. AREAS OBSERVED TO BE SOFT OR YIELDING SHALL BE SCARIFIED AND REWORKED, OR REPLACED, UNTIL UNIFORMLY STABLE.

PORTLAND CEMENT CONCRETE:
 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONCRETE MIX DESIGN(S) TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONCRETE MIX DESIGN(S) FOR SIDEWALK, CURB AND GUTTER, PAVEMENT, VALLEY GUTTER, DRIVEWAY, AND ANY OTHER ON GRADE CONCRETE INFRASTRUCTURE SHALL CONFORM TO THE KDOT STANDARD SPECIFICATIONS FOR "ON GRADE CONCRETE" USING A DURABLE COARSE AGGREGATE ON KDOT'S APPROVED LIST. THE MIX SHALL BE DESIGNED TO ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS WITH AN AIR CONTENT OF 6 1/2% (±1 1/2%).

24. THE CONTRACTOR HAS THE OPTION TO USE A CONCRETE MIX THAT COMPLIES WITH THE MOST CURRENT KANSAS CITY METRO MATERIALS BOARD (KCMMB) SPECIFICATIONS FOR A "KCMMB 4K" MIX.

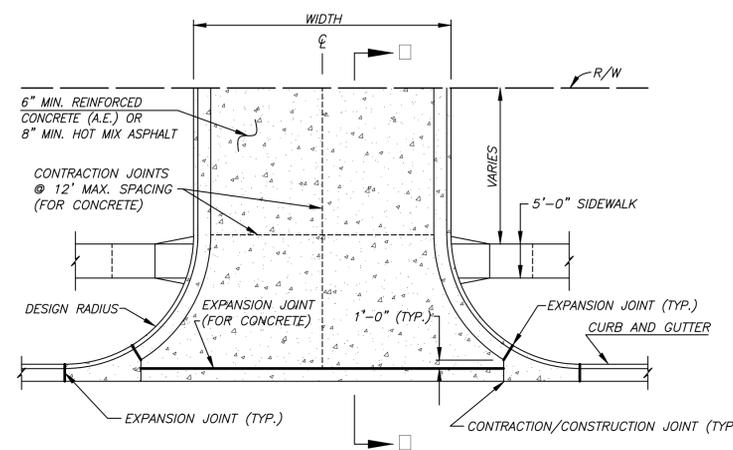


PLAN VIEW



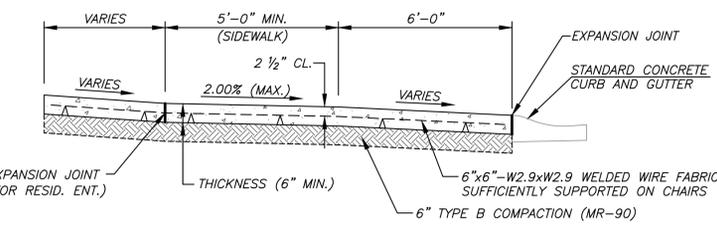
SECTION A-A

CONCRETE VALLEY GUTTER



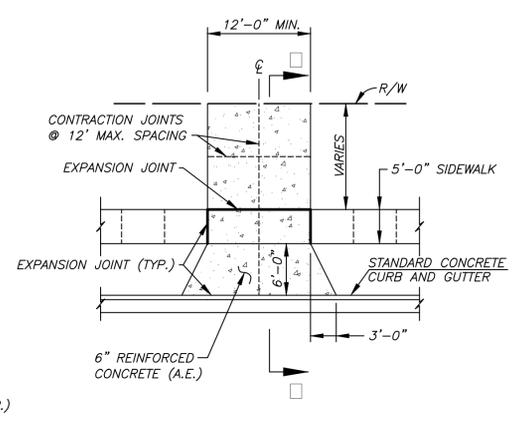
COMMERCIAL ENTRANCE PLAN VIEW

NOT TO SCALE



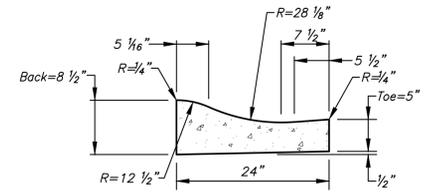
CONCRETE ENTRANCE SECTION

NOT TO SCALE



RESIDENTIAL ENTRANCE PLAN VIEW

NOT TO SCALE



STANDARD CONCRETE CURB AND GUTTER

NOT TO SCALE

TOE AND BACK DIMENSIONS SHOWN ARE FOR ASPHALT STREETS. FOR CONCRETE STREETS, THESE DIMENSIONS SHALL BE UNIFORMLY INCREASED SO THE TOE DIMENSION IS EQUAL TO THE CONCRETE PAVEMENT THICKNESS.

- CURB AND GUTTER NOTES:**
- 1/2" PREMOLDED, BITUMINOUS EXPANSION JOINTS (NON-EXTRUDING) CUT TO THE DIMENSION OF CURB AND GUTTER SHALL BE PLACED AT POINTS OF CURVATURE, END OF CURB RETURNS, CURB INLETS, AND AT A SPACING NOT EXCEEDING 250 FEET.
 - FOR CURB AND GUTTER PLACED ON ASPHALT STREETS, CONTRACTION JOINTS (SAWCUT ONLY) SHALL BE SPACED AT 10 FOOT INTERVALS.
 - FOR CURB AND GUTTER PLACED ON CONCRETE STREETS, CONTRACTION JOINTS (SAWCUT ONLY) SHALL BE ALIGNED WITH THE CONCRETE PAVEMENT JOINTS.

REVISIONS		
2017 Edition		
STREET DETAILS		
C E K P I G H S S O N		

GENERAL NOTES FOR SIDEWALK CONSTRUCTION

- ALL SIDEWALKS AND RAMPS SHALL BE CONSTRUCTED TO BE ADA COMPLIANT. PEDESTRIAN FACILITIES WITHIN PUBLIC RIGHTS-OF-WAY SHALL CONFORM TO THE MOST CURRENT VERSION OF THE "PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES" (PROWAG) PUBLISHED BY THE U.S. ACCESS BOARD.
- CONCRETE FOR SIDEWALK AND SIDEWALK RAMPS SHALL BE AS SPECIFIED ON THE CITY OF TONGANOXIE'S "STREET DETAILS".
- PRIOR TO CONSTRUCTING SIDEWALK, THE SUBGRADE SHALL BE COMPACTED TO TYPE B (MR-90) SPECIFICATIONS TO A DEPTH OF 6" (MIN.).
- CONTRACTION JOINTS SHALL BE PLACED IN 5' WIDE SIDEWALKS AT 5'-0" INTERVALS. WHEN OTHER WIDTHS OF SIDEWALK ARE USED, CONTRACTION JOINTS SHALL BE PLACED AS DIRECTED BY THE CITY ENGINEER OR AN AUTHORIZED REPRESENTATIVE.
- EXPANSION JOINTS SHALL BE PLACED AT ALL LOCATIONS WHERE SIDEWALK ABUTS EXISTING STRUCTURES AND AT 100' INTERVALS ON LONG RUNS, OR AS DIRECTED BY THE CITY ENGINEER OR AN AUTHORIZED REPRESENTATIVE.
- SIDEWALK RAMPS SHALL BE CONSTRUCTED AT ALL LOCATIONS WHERE A SIDEWALK INTERSECTS A STREET AND AS OTHERWISE SHOWN ON THE PLANS.
- REINFORCING STEEL SHALL BE DEFORMED, GRADE 60 (ASTM A 615 COMPLIANT), AND SHALL BE SUFFICIENTLY SUPPORTED BY CHAIRS.
- RESIDENTIAL DRIVEWAY CONSTRUCTION SHALL CONFORM TO CITY STANDARDS.

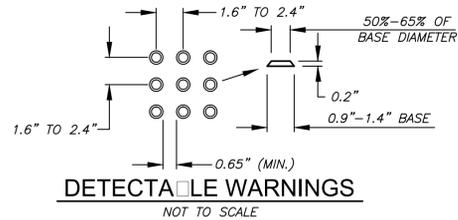
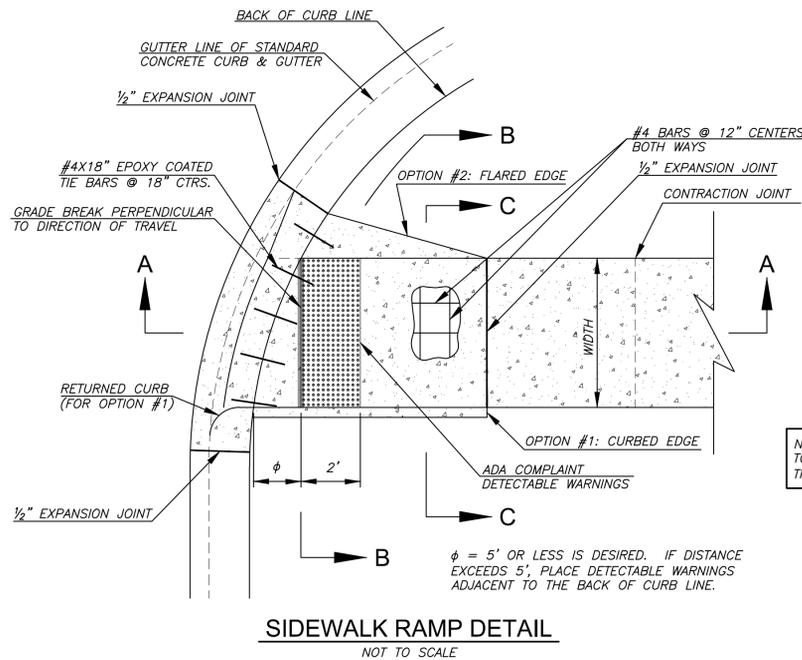
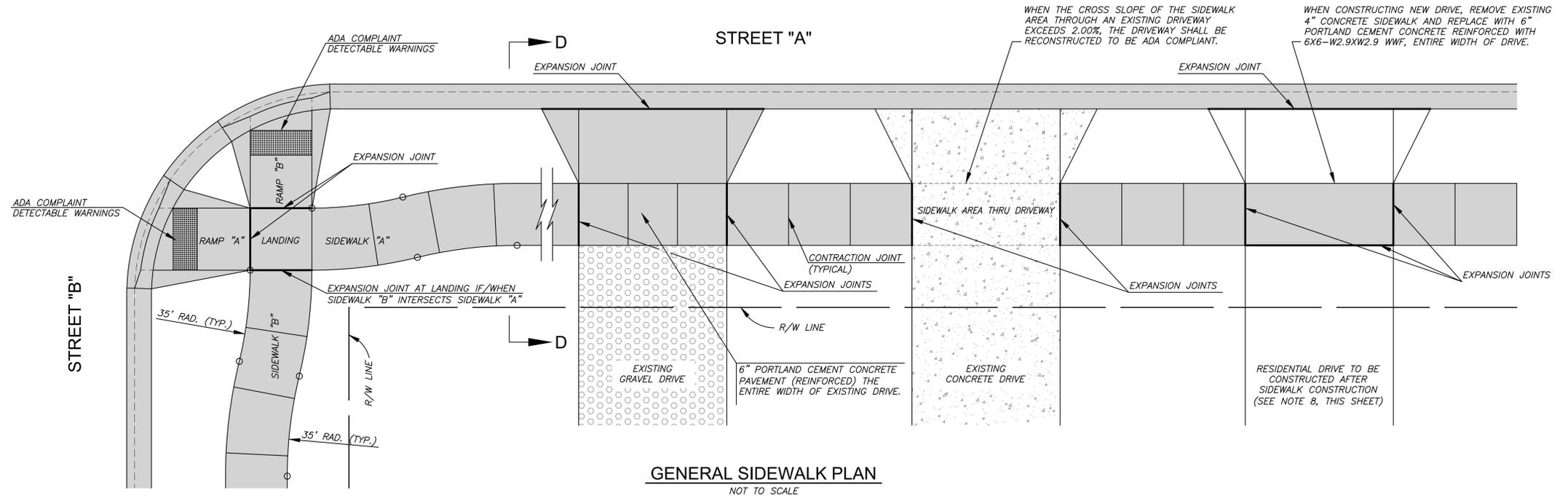
SIDEWALK AND SIDEWALK RAMP ELEMENTS

RAMP: MAX. CROSS SLOPE = 2.00% (50:1)
 MAX. LONGITUDINAL SLOPE = 8.33% (1" PER FT.)
 MIN. CLEAR WIDTH = 4 FT. (5 FT. PREFERRED)
 LENGTH = AS DETERMINED BY PROWAG AND FIELD CONDITIONS

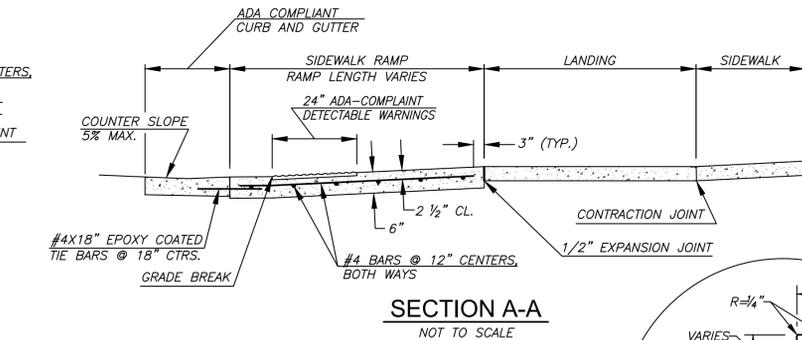
LANDING: MAX. CROSS SLOPE = 2.00% (50:1)
 MAX. LONGITUDINAL SLOPE = 2.00% (50:1)
 MIN. SIZE = 5 FT. X 5 FT.

SIDEWALK: MAX. CROSS SLOPE = 2.00% (50:1)
 LONGITUDINAL SLOPE = AS DETERMINED BY PROWAG (R302.5)
 MIN. WIDTH = 5 FT.

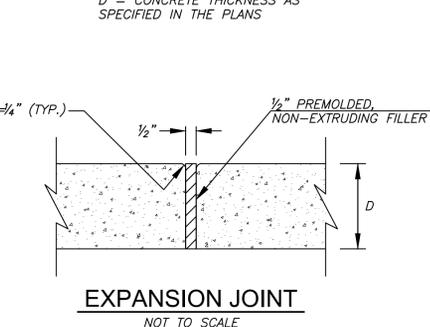
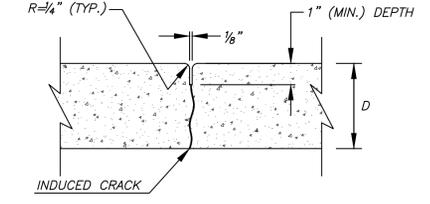
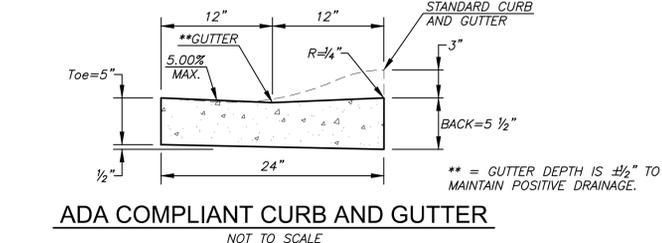
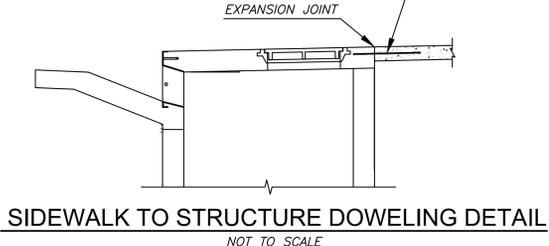
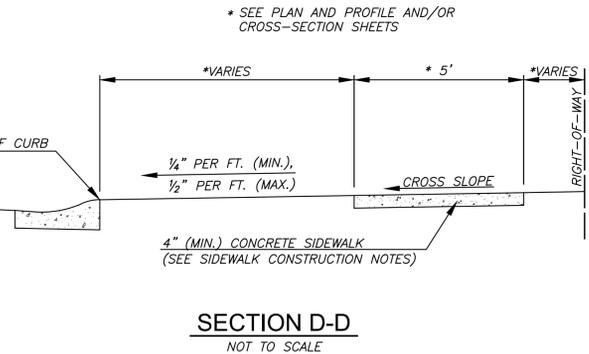
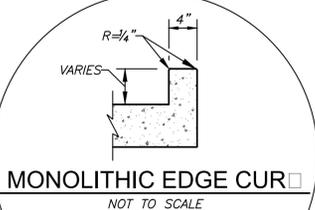
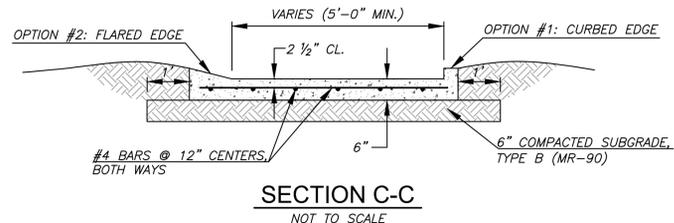
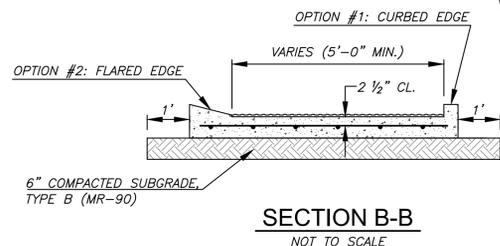
AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE (PROWAG R304.5.3).



DETECTABLE WARNINGS NOTES:
 DETECTABLE WARNING SYSTEM SHALL BE A CAST-IN-PLACE REPLACEABLE SYSTEM.
 DETECTABLE WARNING SYSTEM SHALL BE ADA COMPLIANT AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE SIDEWALK RAMP, EXCLUDING THE CURBS/FLARES.
 DETECTABLE WARNINGS SHALL BE ALIGNED IN THE DIRECTION OF PEDESTRIAN TRAVEL.

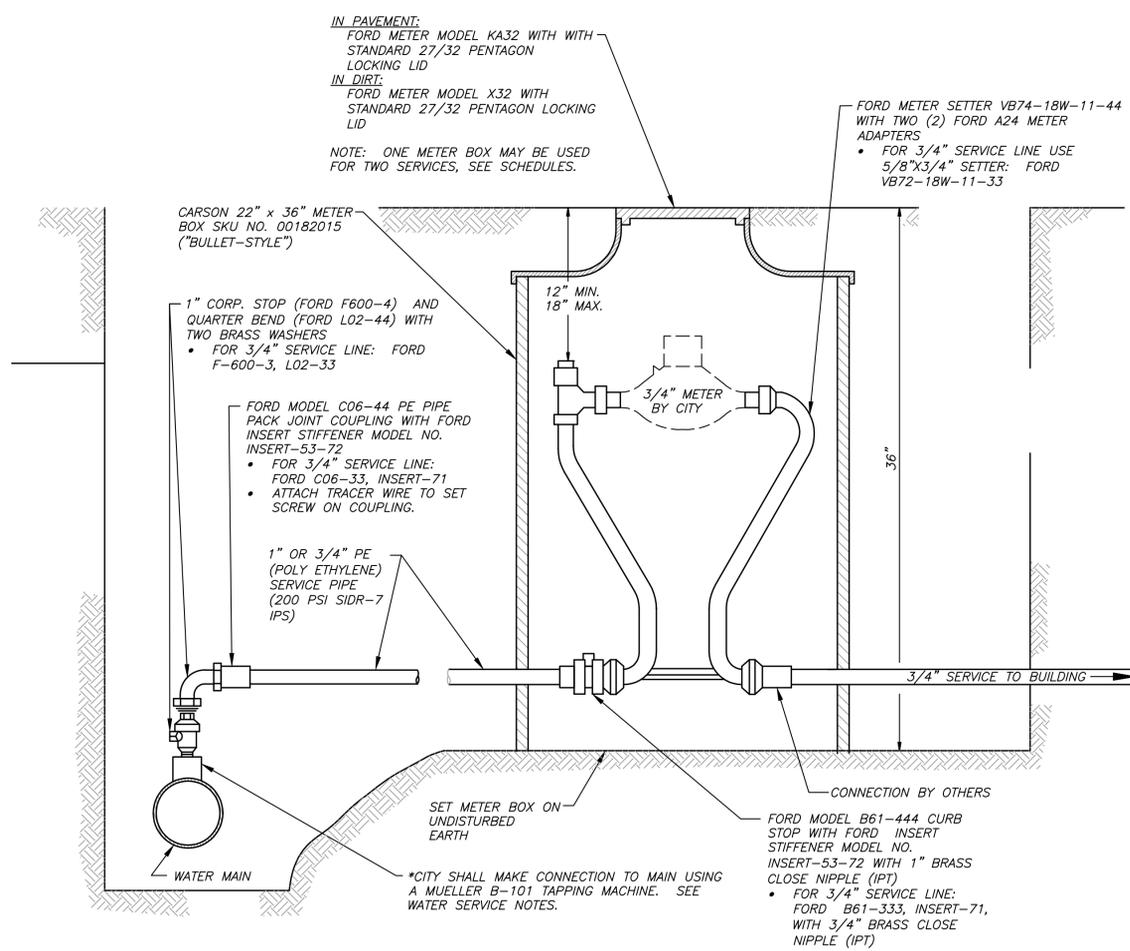


NOTE: THE CONTRACTOR WILL HAVE THE OPTION TO USE A FLARED EDGE OR A CURBED EDGE ON THE SIDES OF SIDEWALK RAMP(S).

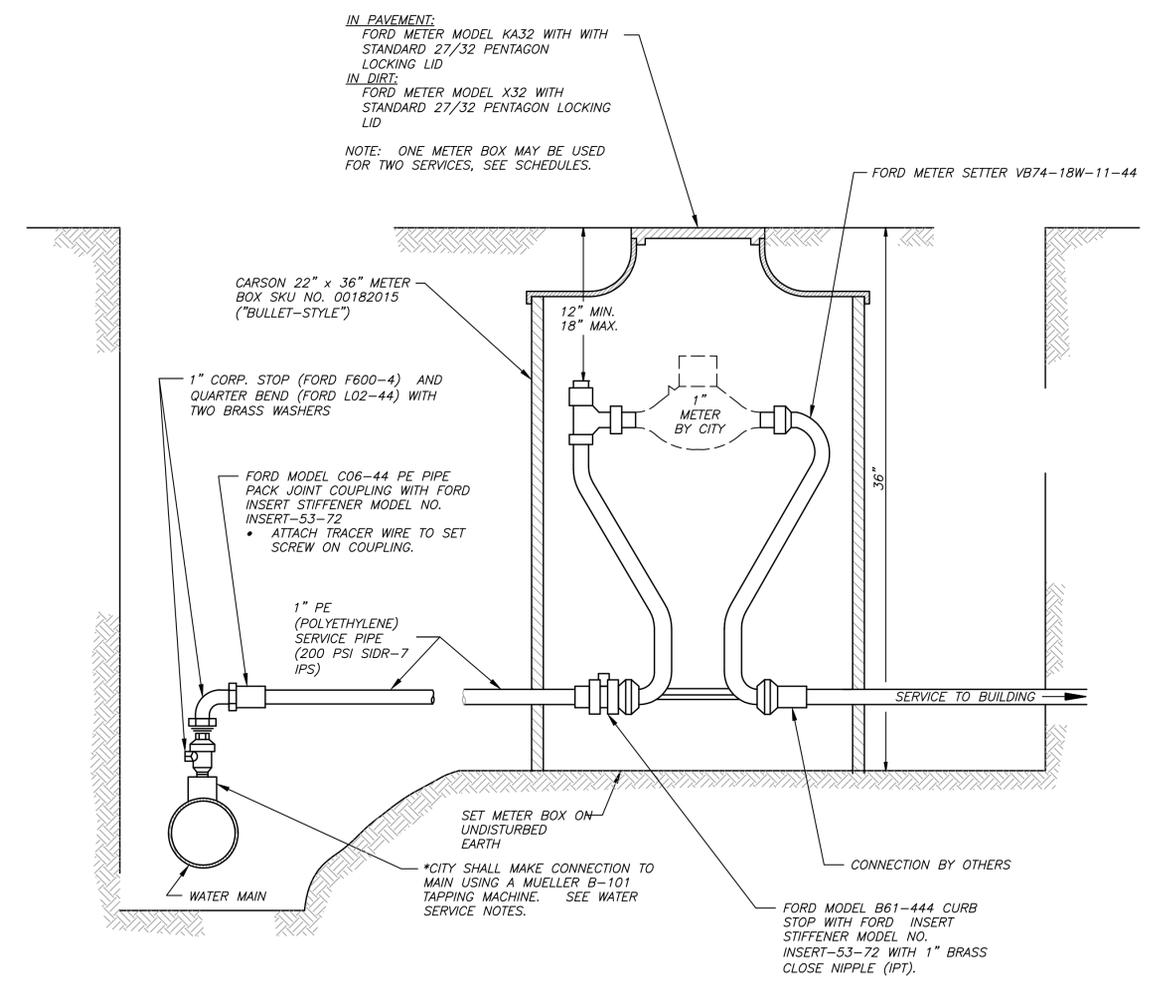


NO.	REVISIONS

2017 Edition
SIDEWALK DETAILS



TYPICAL 3/4" WATER SERVICE



TYPICAL 1" WATER SERVICE

NO.	DESCRIPTION	DATE

REVISIONS


 P... W... D...
 C... S... D...
 2017 Edition

WATERLINE DETAILS 02

C... E... C... K... P... G... I...
S... N... 02

CITY OF TONGANOXIE, KANSAS

APPLICATION FOR PRELIMINARY PLAT AND FINAL PLAN APPROVAL

Requested Action	Fee Paid	Date Rec'd	Date Published	Hearing Date
<input type="checkbox"/> Preliminary Plat	_____	_____	_____	_____
<input checked="" type="checkbox"/> Street & Storm Sewer Plan	_____	_____	_____	_____
<input checked="" type="checkbox"/> Sanitary Sewer Plan	_____	_____	_____	_____
<input checked="" type="checkbox"/> Waterline Plan	_____	_____	_____	_____
<input checked="" type="checkbox"/> Final Plat	_____	_____	_____	_____
<input checked="" type="checkbox"/> Site Plan	_____	_____	_____	_____
<input checked="" type="checkbox"/> Landscaping Plan	_____	_____	_____	_____

Name of Development Schoolyard Lofts

General Location Between 2nd and 3rd Street and between Church St. and Shawnee St.

Applicant:

Name: Schoolyard Townhomes, LLC Contact: Jason Swords

Address: 1125 Grand Blvd, Suite 202, Kansas City, MO 64106

Phone/Fax: 816-581-3992

E-mail address Jswords@sunflowerkc.com

Owner Developer:

Name: Schoolyard Townhomes, LLC Contact: Jason Swords

Address: 1125 Grand Blvd, Suite 202, Kansas City, MO 64106

Phone/Fax: 816-581-3992

E-mail Address Jswords@sunflowerkc.com

Engineer:

Name: Continental Consulting Engineers Contact: Brian Lavery, P.E.

Address: 9000 State Line Road, Leawood, KS 66206

Phone/Fax: 913-642-6642 / 913-642-6941

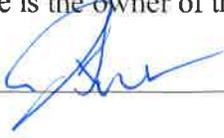
E-Mail Address bl@ccengineers.com

SUBDIVISION INFORMATION:

- Gross acreage of plat: 2.45 ac
- Total number of lots: 1
 - Residential Business _____ Industrial _____ Other _____
- Existing zoning Single Family Proposed zoning R-MF2-P

THE owner herein agrees to comply with the subdivision regulations for Tonganoxie, as amended, and all other pertinent ordinances or resolutions of Tonganoxie, and statutes of the State of Kansas. The undersigned further states that he is the owner of the proposed for platting.

OWNER'S SIGNATURE



OFFICE USE:

RECEIVED BY _____

Date _____ Fee Submitted _____

Final Plat Checklist

Submit a minimum of 4 copies of the Final Plat, 1-11x17 copy, 1 address map, with required signatures and professional certifications for review by the Planning Commission.

- Review: See Planning Application & Review Schedule for submittal dates. Staff review will include Planner, Administrator, City Superintendent, Engineer, Fire Chief, Police Chief and Building Inspector
- Fee: See Application Fee schedule for current fee amounts as established by the City Council. Costs incurred by the city for review of revised plats will be billed to the applicant.
- Checklist:

- Clearly marked with legal description
- Boundary lines marked with accurate distances & angles
- Mark highways, streets, alleys with width and names
- Outline of property dedicated for public use
- Lines of departure from one street to another
- Lines adjoining property and lines of adjoining streets with width & names
- All lots designated by numbers or letters
- All streets avenues and other grounds by names , letters or numbers
- Location & widths of building lines on front & side streets
- Location & widths of utility easements, easements for future construction and easements for drainage purposes.
- All dimensions both linear & angular for locating boundaries

n/a The radii, arcs, chords, points of tangency and central angles for all curvilinear streets and radii for rounded corners

n/a for replat Location and description of survey monuments and bench marks

- Subdivision name, Clearly marked as Final Plat, Points of compass, and names of every owner or subdividers

n/a Reference to Private restrictions and trusteeships if on a separate instrument

- Plat Restrictions, dedication of public use, granting of easement acknowledged by owners
- Signature lines & verification of owners
- Signature lines for Land Surveyor or Licensed Professional Engineer of the State of Kansas
- Signature lines for Chairman & Secretary of the Planning Commission
- Signature lines for City Engineer
- Signature lines for Mayor and City Clerk
- Signature lines for Register of Deeds
- Signature line for the County Surveyor
- True north point, graphic scale, & date

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD TOWNHOMES
Tonganoxie, KS



ARCHITECT
ATTN: ASHLEY SADOWSKI, AIA
701 E. 63RD STREET
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816.708.1500
asadowski@odimo.us

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CC ENGINEERING
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903.642.6642
bl@ccengineers.com

STRUCTURAL ENGINEERING
ATTN: PAT SIXTA, PE
APEX ENGINEERING
1625 LOCUST STREET
KANSAS CITY, MO 64108
816.421.3222
patrick@apex-engineers.com

Date	Description
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Issue

FINAL DEVELOPMENT PLAN
06 September, 2019

Seal / Signature

NOT FOR CONSTRUCTION

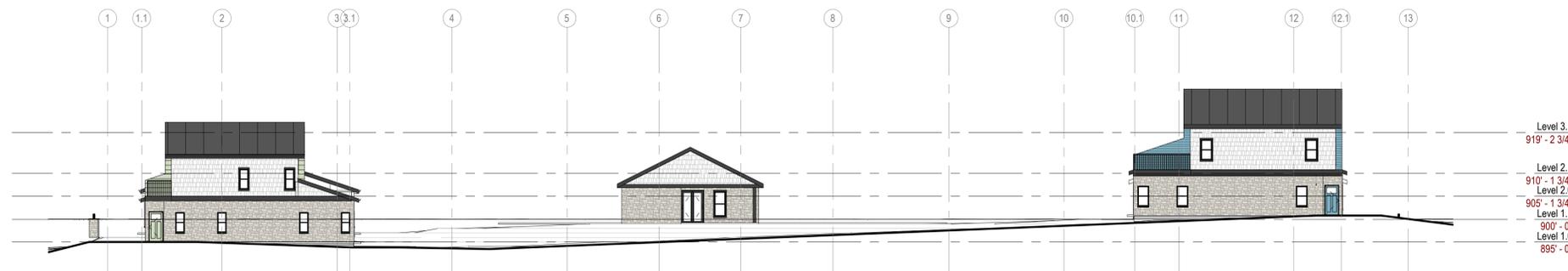
Description

OVERALL ELEVATIONS

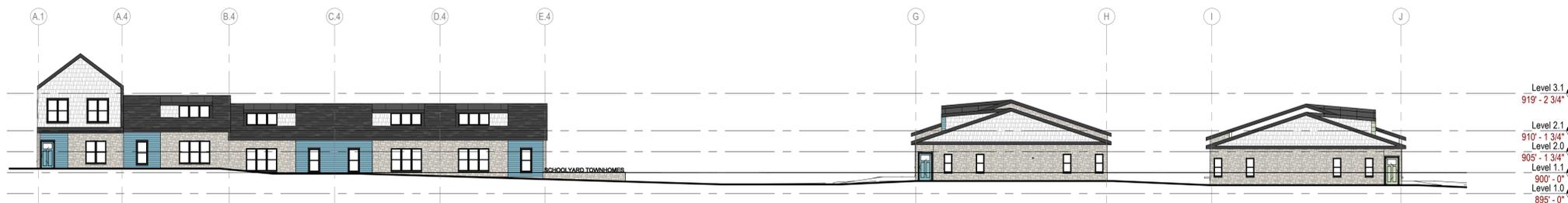
A200



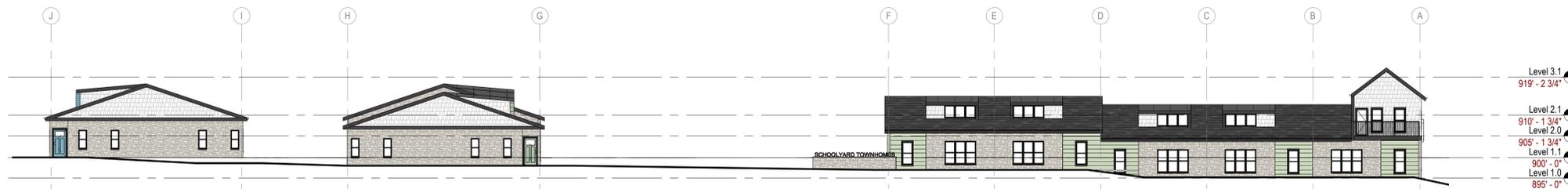
4 SITE ELEVATION - NORTH
1/16" = 1'-0"



3 SITE ELEVATION - SOUTH
1/16" = 1'-0"



2 SITE ELEVATION - EAST
1/16" = 1'-0"



1 SITE ELEVATION - WEST
1/16" = 1'-0"

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD TOWNHOMES
Tonganoxie, KS



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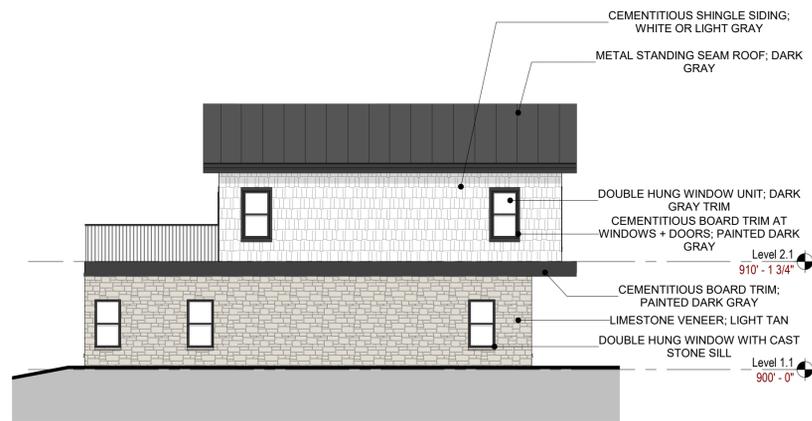
Seal / Signature

NOT FOR CONSTRUCTION

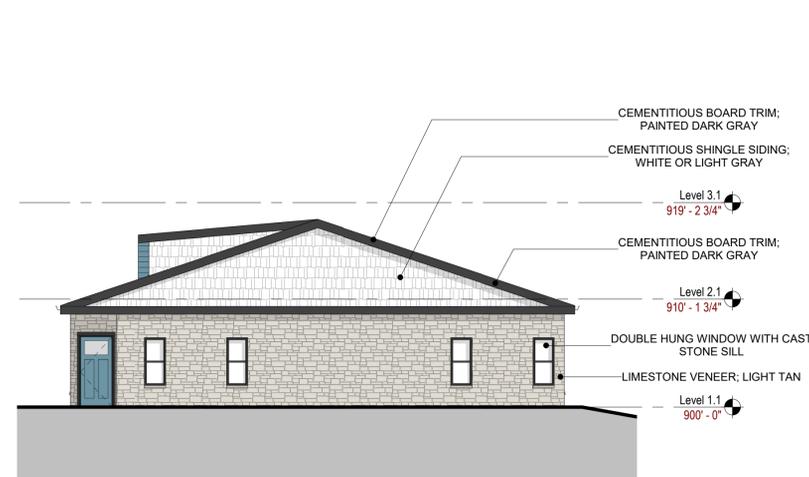
Description

ELEVATIONS - BUILDING A1

A201



3 BUILDING A - ELEVATION - EAST
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A101



1 BUILDING A - ELEVATION - WEST
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A101



4 BUILDING A - ELEVATION - NORTH
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A101



2 BUILDING A - ELEVATION - SOUTH
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A101

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD TOWNHOMES
Tonganoxie, KS

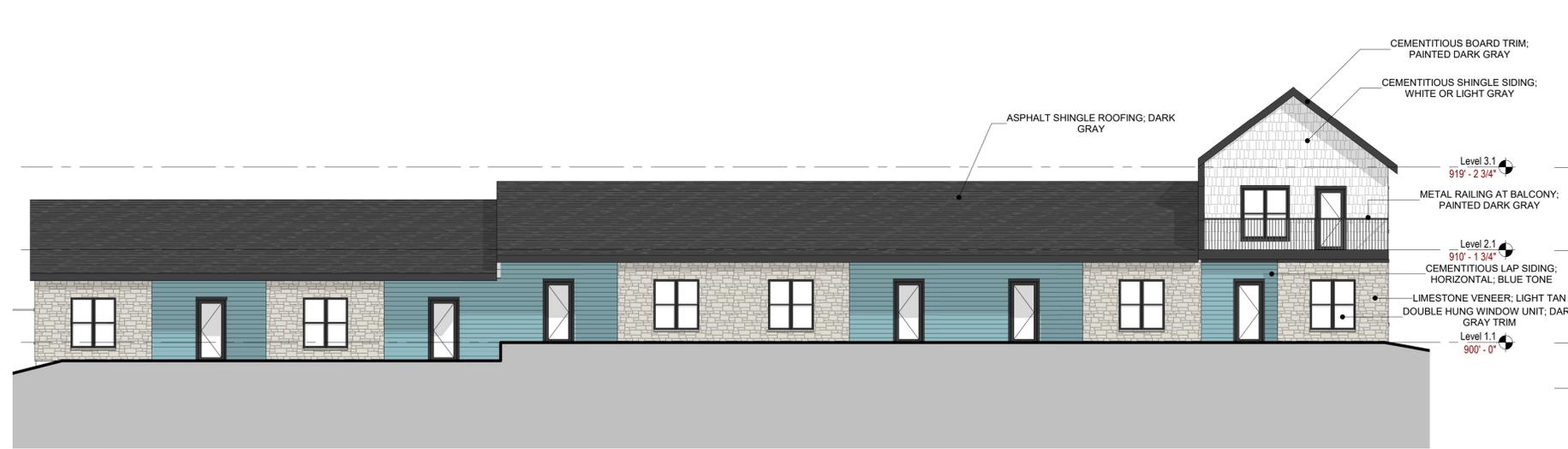


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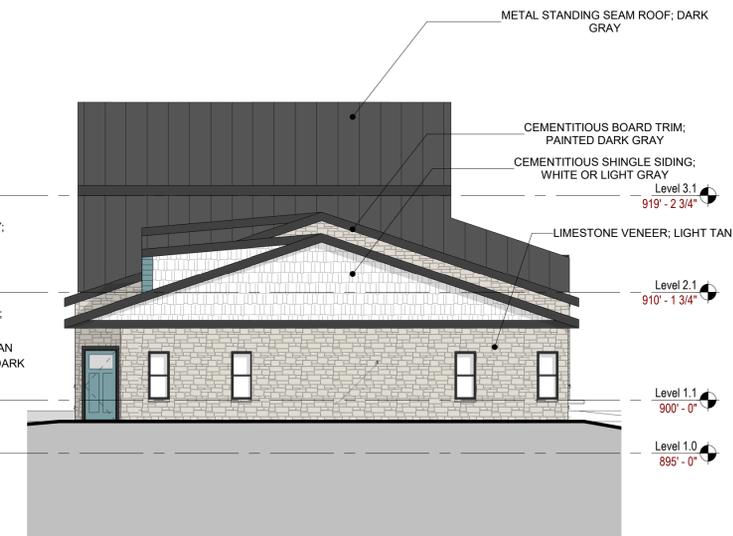
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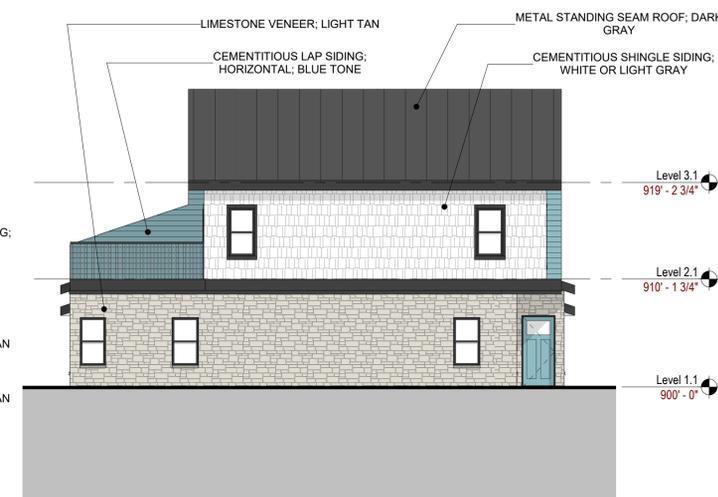
4 BUILDING B - ELEVATION - NORTH
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A102



3 BUILDING B - ELEVATION - EAST
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A102



2 BUILDING B - ELEVATION - SOUTH
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A102



1 BUILDING B - ELEVATION - WEST
0" 1/2" 1" 2" 1/8" = 1'-0" RE: 01 / A102

Issue

FINAL DEVELOPMENT PLAN
06 September, 2019

Seal / Signature

NOT FOR CONSTRUCTION

Description

ELEVATIONS - BUILDING B2

A202

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD TOWNHOMES
Tonganoxie, KS



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Date	Description
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Issue

FINAL DEVELOPMENT PLAN
06 September, 2019

Seal / Signature

NOT FOR CONSTRUCTION

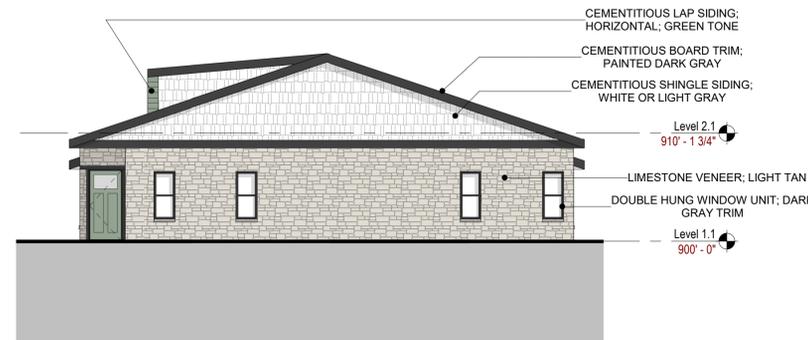
Description

ELEVATIONS - BUILDING C1 + CLUBHOUSE

A203



12 BUILDING C - ELEVATION - NORTH
1/8" = 1'-0" RE: 1 / A103



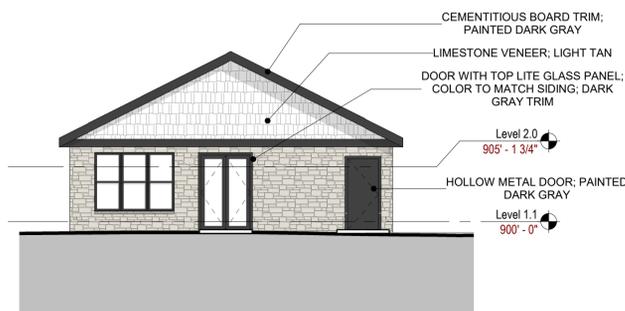
11 BUILDING C - ELEVATION - EAST
1/8" = 1'-0" RE: 1 / A103



10 BUILDING C - ELEVATION - SOUTH
1/8" = 1'-0" RE: 1 / A103



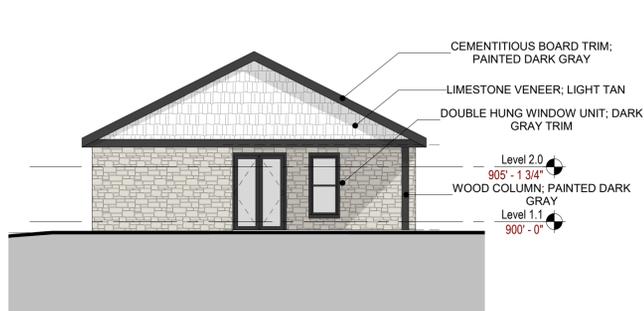
9 BUILDING C - ELEVATION - WEST
1/8" = 1'-0" RE: 1 / A103



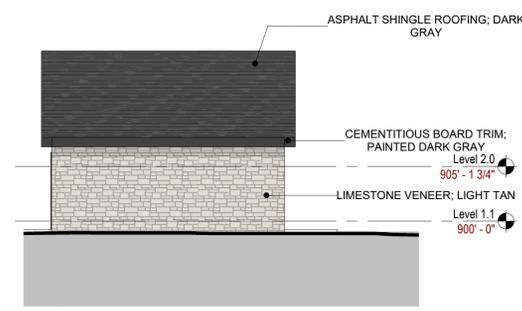
8 CLUBHOUSE - ELEVATION - NORTH
1/8" = 1'-0" RE: 2 / A103



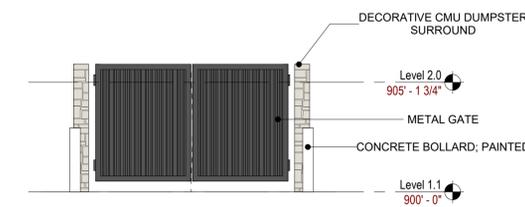
7 CLUBHOUSE - ELEVATION - EAST
1/8" = 1'-0" RE: 2 / A103



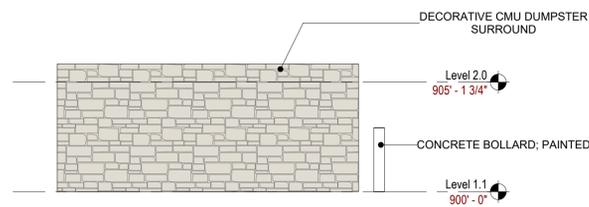
6 CLUBHOUSE - ELEVATION - SOUTH
1/8" = 1'-0" RE: 2 / A103



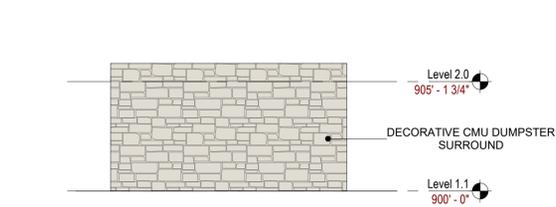
5 CLUBHOUSE - ELEVATION - WEST
1/8" = 1'-0" RE: 2 / A103



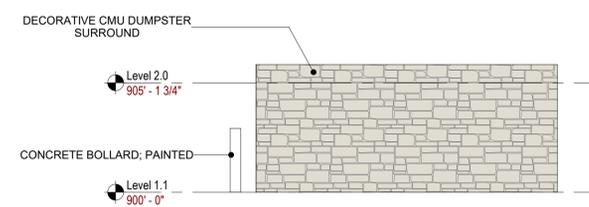
4 ELEVATION - DUMPSTER - NORTH
1/4" = 1'-0" RE: 3 / A103



3 ELEVATION - DUMPSTER - EAST
1/4" = 1'-0" RE: 3 / A103



2 ELEVATION - DUMPSTER - SOUTH
1/4" = 1'-0" RE: 3 / A103



1 ELEVATION - DUMPSTER - WEST
1/4" = 1'-0" RE: 3 / A103

PRAIRIE FIRE DEVELOPMENT GROUP

SCHOOLYARD TOWNHOMES
Tonganoxie, KS



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Date	Description
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Issue

FINAL DEVELOPMENT PLAN
06 September, 2019

Seal / Signature

NOT FOR CONSTRUCTION

Description

ELEVATIONS - BUILDING D1

A204



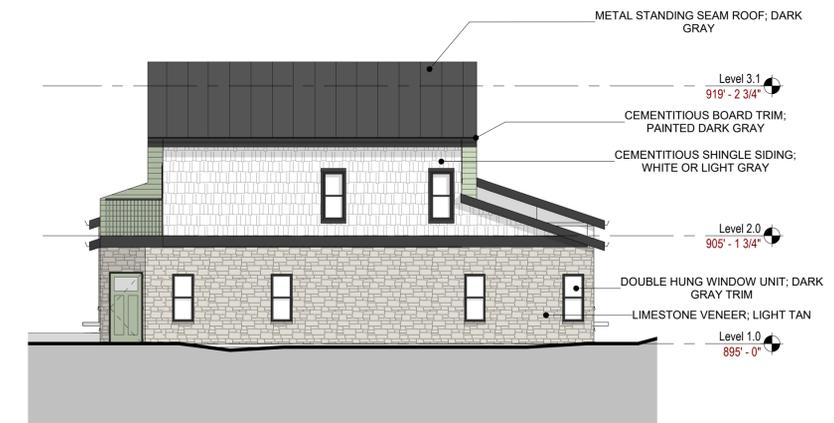
5 BUILDING D - ELEVATION - WEST
1/8" = 1'-0" RE: 01 / A104



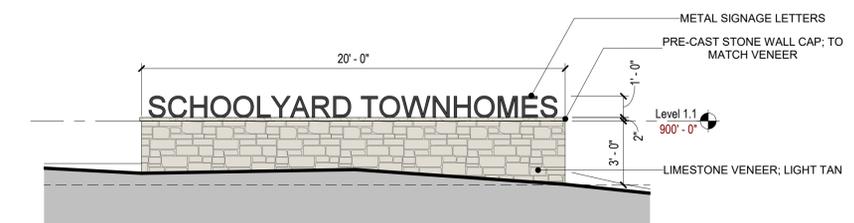
4 BUILDING D - ELEVATION - NORTH
1/8" = 1'-0" RE: 01 / A104



3 BUILDING D - ELEVATION - EAST
1/8" = 1'-0" RE: 01 / A104



2 BUILDING D - ELEVATION - SOUTH
1/8" = 1'-0" RE: 01 / A104



1 SIGN ELEVATION
1/4" = 1'-0"

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Date Description

Issue

FINAL DEVELOPMENT PLAN
25 October, 2019

Seal / Signature

NOT FOR CONSTRUCTION

Description

Site Plan

C2.0

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LEGEND

- 6" STANDARD DUTY ASPHALT
- 8" HEAVY DUTY ASPHALT
- 8" CONCRETE
- 4" CONCRETE SIDEWALK/PATIO

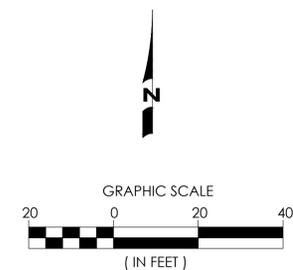
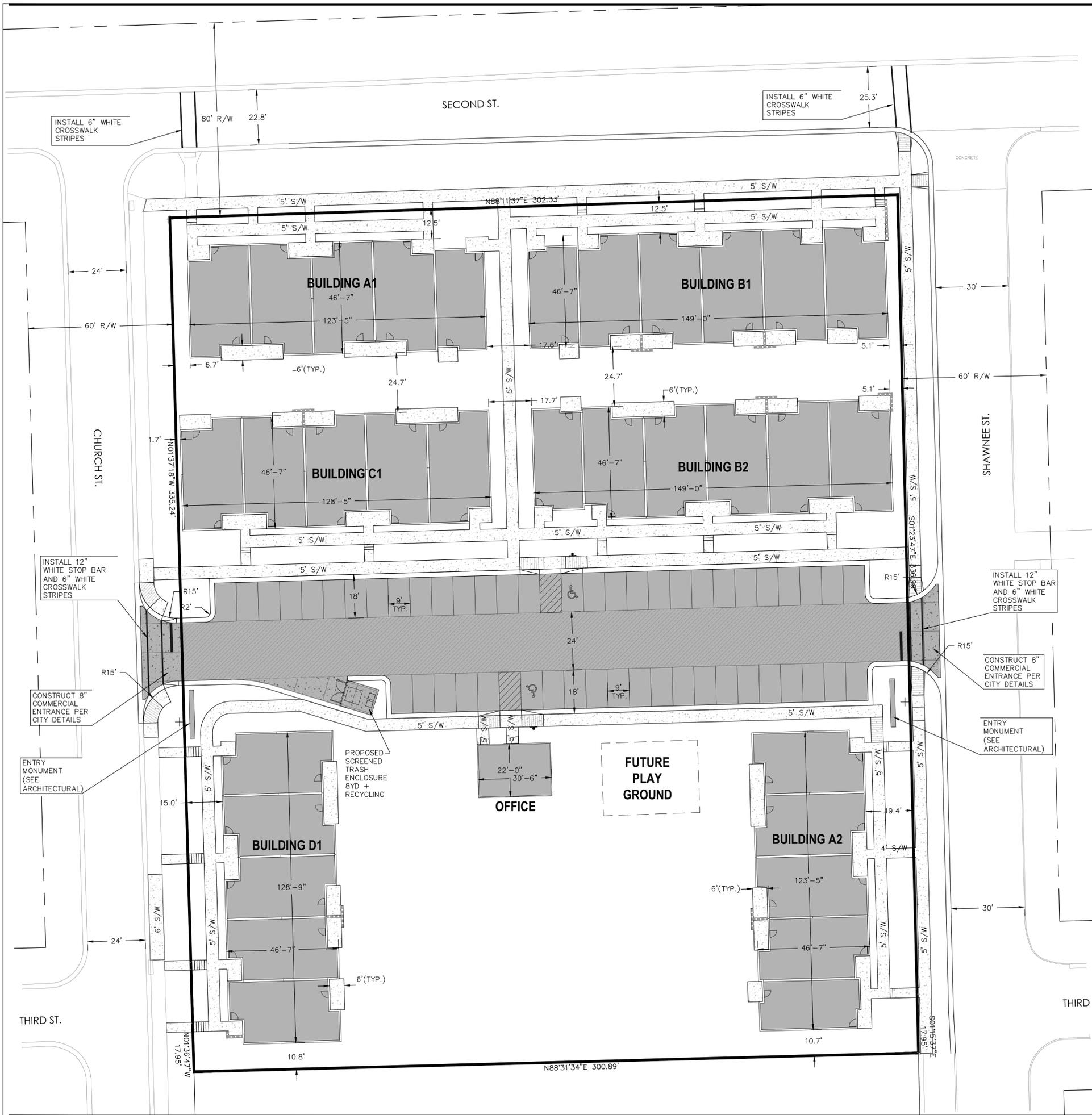
PROPOSED ZONING R-MF-2P
(PLANNED MULTIPLE FAMILY 2 DISTRICT)

EXCEPTIONS TO BASE ZONING FOR FRONT, SIDE, AND REAR YARD SETBACKS, INCLUDING PARKING ALONG 2ND STREET IN TOTAL.

DWELLING UNITS: 32 EA
PARKING REQ'D: 1.5/UNIT = 48
TOTAL: 48

OFFICE: 500 SF
1/200 SF = 3

TOTAL REQUIRED = 51
TOTAL PROVIDED ONSITE = 51





SITE GRADING NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS.
3. TOPOGRAPHIC INFORMATION IS TAKEN FROM GROUND SURVEYS. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER NOT FOR CONSTRUCTION.
4. ALL UNSURFACED AREAS THAT ARE DISTURBED BY GRADING OPERATION SHALL RECEIVE A 4 INCHES MINIMUM OF TOPSOIL. TOPSOIL SHALL BE BLACK SOIL FROM THE LOCAL VICINITY THAT PRODUCES HEAVY GROWTH.
5. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
6. PRIOR TO PLACING FILL, ANY EXISTING SLOPES EXCEEDING 5 HORIZONTAL TO 1 VERTICAL SHOULD BE BENCHED. THE BENCHES SHOULD BE CUT WIDE ENOUGH TO ACCOMMODATE THE COMPACTION EQUIPMENT.
7. UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL ENGINEER, EARTHWORK OPERATIONS SHOULD NOT BE ALLOWED TO PROCEED IF AMBIENT TEMPERATURES ARE AT 40°F AND ARE DROPPING. THEY CAN BE RE-STARTED WHEN TEMPERATURES ARE 34°F AND RISING.
8. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED. NO SEPARATE OR ADDITIONAL PAYMENTS SHALL BE MADE FOR EXCAVATION.
9. REFER TO STRUCTURAL PLANS FOR SUBGRADE TREATMENT OF UNDERSLAB AREA
10. ALL AREAS SHALL BE GRADED TO WITHIN 0.10± FEET OF FINAL ELEVATION.
11. PRIOR TO BEGINNING PREPARATION OF SUBGRADE, ALL AREAS UNDER PAVEMENTS SHALL BE STRIPPED OF ALL TOPSOIL, VEGETATION, LARGE ROCK FRAGMENTS (GREATER THAN 6 INCHES IN ANY DIMENSION) AND ANY OTHER DELETERIOUS MATERIALS. ALL VEGETATION SHALL BE HAULLED OFF. TOPSOIL MAY BE RESPREAD AT THE END OF GRADING OPERATIONS. THE ACTUAL STRIPPING DEPTH SHOULD BE BASED ON VISUAL EXAMINATION DURING CONSTRUCTION AND THE RESULTS OF PROOF-ROLLING OPERATIONS. THE ROOT SYSTEMS OF ALL TREES (NOT DESIGNATED TO REMAIN) SHALL BE REMOVED IN THEIR ENTIRETY.
12. SUBSEQUENT TO COMPLETION OF STRIPPING AND OVER-EXCAVATION, ALL BUILDING AND DRIVEWAY AREAS TO RECEIVE ENGINEERED FILL SHOULD BE SYSTEMATICALLY PROOF-ROLLED USING A TANDEM AXLE DUMP TRUCK LOADED TO APPROXIMATELY 20,000 POUNDS PER AXLE. UNSUITABLE SOILS THAT ARE DETECTED AND THAT CAN NOT BE RECOMPACTED SHOULD BE OVER-EXCAVATED AND REPLACED WITH ENGINEERED FILL.

SUMMARY OF GEOTECHNICAL REPORT REQUIREMENTS:

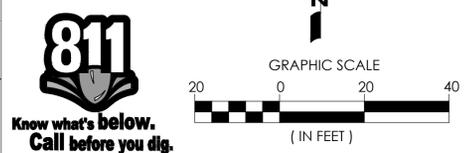
1. CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT BY GSI ENGINEERING DATED SEPTEMBER 4, 2019, JOB. NO. 1973132 AND BECOME FAMILIAR WITH THIS REPORT. ADDITIONAL RECOMMENDATIONS MAY BE INCLUDED IN THIS REPORT.
2. SITE PREPARATION AREAS TO RECEIVE FILL AND BACKFILL SHOULD BE STRIPPED OF SURFACE VEGETATION, TOPSOIL, SOFT SOIL, UNCONTROLLED FILL, AND OTHER DELETERIOUS MATERIALS. THE EXPOSED SUBGRADE SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FILL. PROOF-ROLLING WITH A TANDEM AXLE DUMP TRUCK LOADED TO APPROXIMATELY 20,000 POUNDS PER AXLE (OR EQUIVALENT PROOF ROLLING EQUIPMENT) CAN BE CONSIDERED AS A MEANS OF EVALUATING THE SUBGRADE. ANY SOFT SOILS OR YIELDING AREAS OBSERVED DURING PROOF ROLLING SHOULD BE EXCAVATED AND BACKFILLED WITH SOIL OR CRUSHED ROCK COMPACTED TO THE DENSITIES SPECIFIED IN THE SUBSEQUENT COMPACTION SUMMARY. SEE GSI ENGINEERING REPORT NO. 1973132 FOR FULL RECOMMENDATIONS. UNDOCUMENTED FILL AND DEMOLITION DEBRIS HAS PREVIOUSLY BEEN PLACED ON THIS PROJECT SITE. IT IS RECOMMENDED BY GSI ENGINEERING THAT THIS UNDOCUMENTED FILL OR DEMOLITION DEBRIS BENEATH BUILDINGS, PAVEMENTS AND PARKING LOTS BE COMPLETELY REMOVED AND REPLACED WITH ENGINEERED, CONTROLLED FILL.
3. SUITABLE FILL MATERIALS, THE RECOMMENDED MATERIAL FOR FILL AND BACKFILL BENEATH LIGHTLY LOADED STRUCTURAL SLABS, FEATURES AND PAVEMENTS IS LOW VOLUME CHANGE (LVC) MATERIAL CONSISTING OF GRANULAR OR COHESIVE MATERIAL WITH A LIQUID LIMIT (LL) LESS THAN 40 AND A PLASTICITY INDEX (PI) BETWEEN 10 AND 20. THE ONSITE NATIVE MATERIAL IS NOT CONSIDERED ACCEPTABLE LVC MATERIAL UNLESS CHEMICALLY STABILIZED BY 6%-8% CLASS C FLY ASH, 6%-8% CEMENT KILN DUST, OR 3%-5% PORTLAND CEMENT.
4. IF CHEMICAL STABILIZATION OF THE SOIL IS USED, IT SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER TO DETERMINE THE PROPER PERCENTAGE OF ADDITIVE, MOISTURE CONTENT, MIXING, AND PLACEMENT.
5. DEPENDING ON THE SOIL MOISTURE AT THE TIME OF CONSTRUCTION, AERATION OR WETTING MAY BE REQUIRED TO ACHIEVE PROPER COMPACTION. DELETERIOUS MATERIAL SHOULD NOT BE INCLUDED IN FILL, AND THE FILL SHOULD NOT BE PLACED ON SOFT MATERIALS OR FROZEN GROUND.
6. ONSITE INSPECTION AND TESTING BY THE GEOTECHNICAL ENGINEER SHALL BE A REQUIREMENT. IN ALL FILL AND CUT AREAS, TOPSOIL AND OTHER MATERIALS DEEMED UNSUITABLE BY THE ONSITE GEOTECHNICAL ENGINEER SHALL BE REMOVED AND REPLACED WITH CONTROLLED FILL.
7. THE CONTRACTOR SHALL STRIP THE UPPER TOPSOIL AND VEGETATION LAYER. ANY EXISTING TOPSOIL SHALL BE STOCKPILED AND REUSED.
8. PROPER SITE GRADING SHALL BE DONE TO CONTROL RUNOFF AND EROSION. PROPER GRADING AVOIDS PONDING OF WATER AND DIRECTS RUNOFF TO DESIGNATED EROSION CONTROLS. PONDING OF WATER ON FINISHED SUBGRADE, INFILTRATION OF WATER INTO EXCAVATIONS AND SOFTENING OR DAMAGING OF THE BEARING MATERIALS DUE TO RAIN OR WATER ACCUMULATION SHALL BE PREVENTED BY USING TEMPORARY DIVERSION BERMS OR CHANNELS.
9. UTILITY TRENCHES BENEATH SLABS AND 5' OUT FROM BUILDINGS SHALL BE BACKFILLED AND COMPACTED WITH IMPERVIOUS CLAY MATERIAL.
10. FILL OR BACKFILL SHOULD BE PLACED IN UNIFORMLY THICK LIFTS AND COMPACTED. THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED 8 INCHES ON SITE AND 6 INCHES WITHIN THE AREA OF THE BUILDINGS. SOIL SHALL BE COMPACTED PER THE FOLLOWING TABLE:

PARKING/SIDEWALK SUBGRADE PREPARATION:
 1. NINE INCHES OF PROPERLY MOISTURE CONDITIONED AND COMPACTED LVC MATERIAL SHALL BE REQUIRED BENEATH ALL PAVEMENTS AND 2 FEET BEYOND. SUBGRADE SHALL BE COMPACTED TO 95% OF MAX. DENSITY PER ASTM D-698 AT 0% TO +4% OF OPTIMUM MOISTURE. FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 9 INCHES.

FOUNDATION AND BUILDING PAD PREPARATION:
 1. FOUNDATION UNDERCUT: ALL FOOTINGS AND FOUNDATIONS SHALL BEAR ON SIMILAR MATERIAL. IF ROCK IS ENCOUNTERED IN EXCAVATION FOR FOOTINGS OR FOUNDATIONS, IT SHALL BE UNDERCUT TO PROVIDE ONE (1) FOOT BELOW BOTTOM OF FOOTING OF LOW VOLUME CHANGE MATERIAL.
 2. CUT THE SUBGRADE A MINIMUM OF 16 INCHES BENEATH THE BASE OF SLAB ELEVATION TO ALLOW FOR PLACEMENT OF A 12 INCH LVC SUBBASE AND A 4 INCH GRANULAR BASE COURSE BENEATH THE SLAB ON GRADE.
 3. SCARIFY AND RECOMPACT THE UPPER 9" OF EXPOSED SUBGRADE TO 95% OF THE STANDARD PROCTOR (ASTM D-698) MAX. DRY DENSITY WITH A MOISTURE CONTENT AT 0% TO +4% OF OPTIMUM.
 4. FOR THE 12" LVC SUBBASE, COMPACT TO 95% OF MAX. DRY DENSITY PER ASTM D-698, AT 0% TP +4% OF OPTIMUM APPLY MOISTURE TO ACHIEVE PROPER COMPACTION.
 5. PLACE A 4 INCH LAYER OF CLEAN OPEN GRADED CRUSHED LIMESTONE TO BE COMPACTED WITH A VIBRATORY STEEL WHEEL ROLLER BENEATH THE SLAB.

LEGEND

- DRAINAGE STRUCTURE
- FLARED END SECTION
- GEOTECHNICAL BORING
- RETAINING WALL
- WET CURB HIGH BACK
- DRY CURB HIGH BACK



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 SCHOOLYARD LOFTS
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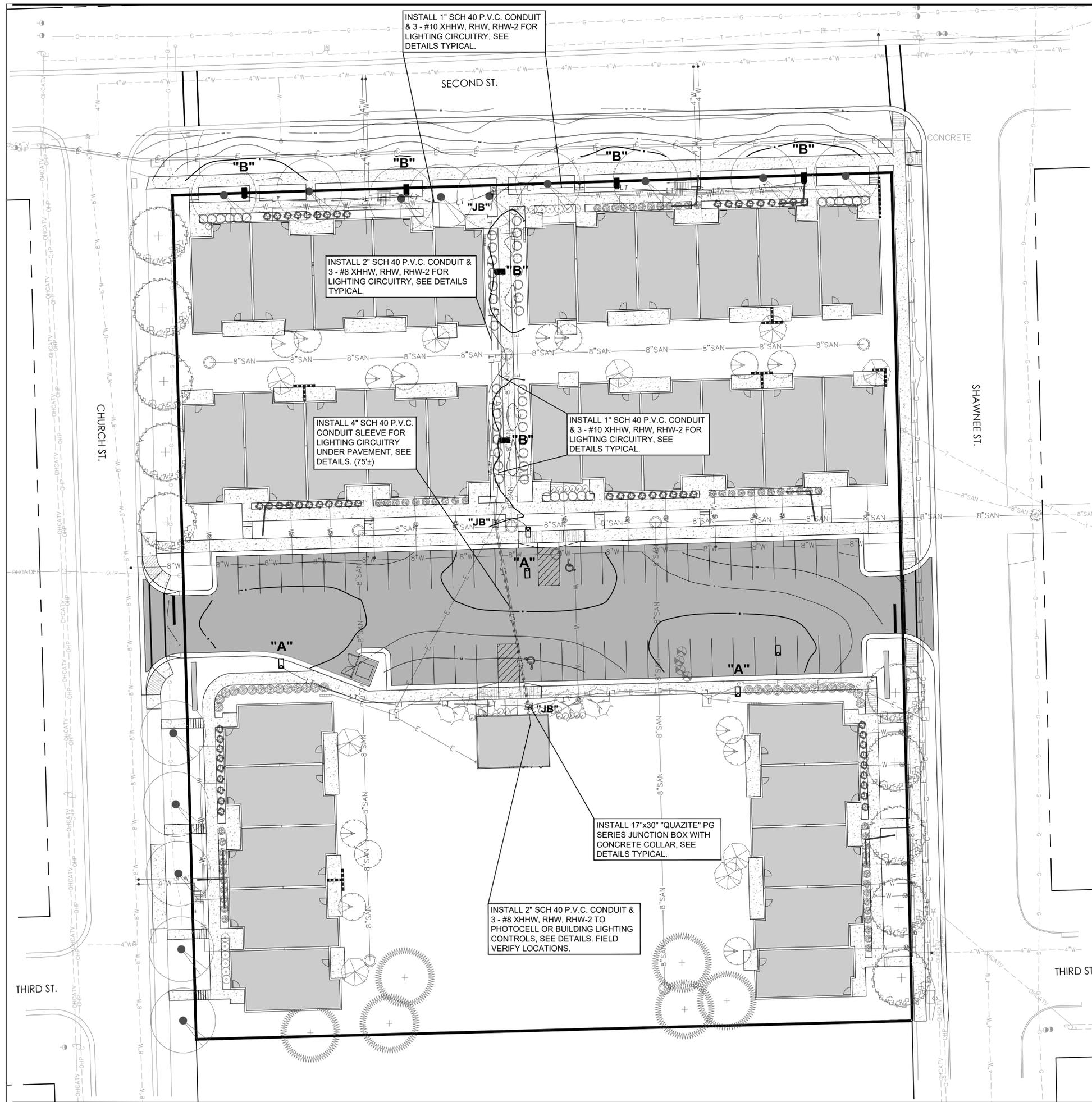
Issue
FINAL DEVELOPMENT PLAN
 25 October, 2019

Seal / Signature

NOT FOR CONSTRUCTION

Description
Grading Plan

C3.0



Parking Lot Lighting Visionaire Image



Parking Lot Lighting Pole Legend

Type - "A" Visionaire Lighting LLC VMX-1-T3-96LC-5-4K-UNV_CLS- Visionaire Lighting Photometric Laboratory test report no. S103017T3029
 lamp(s): XXX
 candela file 'VMX-1_T3_96LC_5_4K-UNV_CLS.IES'
 1 lamp(s) per luminaire, photometry is absolute
 Light Loss Factor = 1.000, watts per luminaire = 157
 Outreach (from mounting axis to photometric center)= 9 in
 mounting height= 25 ft
 number locations= 3, number luminaires= 3
 kw all locations= 0.5

Type - "B" Visionaire Lighting LLC VBL-1-T2-32LC-S-3-4K-UNV Visionaire Lighting Photometric Laboratory test report no. S040218T2016
 lamp(s): XXX
 candela file 'VBL-1_T2_32LC-S_3_4K.IES'
 1 lamp(s) per luminaire, photometry is absolute
 Light Loss Factor = 1.000, watts per luminaire = 32
 Outreach (from mounting axis to photometric center)= 10.75 in
 mounting height= 11.5 ft
 number locations= 6, number luminaires= 6
 kw all locations= 0.2

Parking Lot Lighting Photometrics

North Right of Way
 99 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
 Average 2.9
 Maximum 5.5
 Minimum 0.1
 Avg:Min 9.20
 Max:Min 55.00
 Coef Var 1.31
 UniGrad 11.31

South Parking
 174 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
 Average 1.8
 Maximum 5.0
 Minimum 0.2
 Avg:Min 8.79
 Max:Min 25.00
 Coef Var 0.74
 UniGrad 3.50

Walkway
 128 points at z=0, sp 5ft by 5ft
HORIZONTAL FOOTCANDLES
 Average 2.4
 Maximum 6.5
 Minimum 0.5
 Avg:Min 4.85
 Max:Min 13.00
 Coef Var 0.60
 UniGrad 5.00

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 Tonganoxie, KS



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Date	Description
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Issue

FINAL DEVELOPMENT PLAN
 25 October, 2019

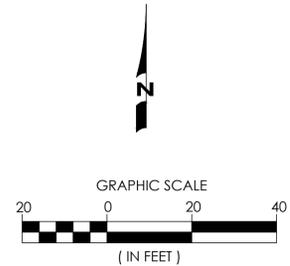
Seal / Signature

NOT FOR CONSTRUCTION

Description

Site Lighting Plan

C5.0



SITE PLAN REVIEW APPLICATION
City of Tonganoxie, Kansas

Please complete all of the following information (type or print):

Project Name: Schoolyard Lofts
Project Address/Location: Between 2nd and 3rd Street and between Church and Shawnee Streets
Description: New Construction Addition Exterior Remodel Tenant Finish
Other: _____

Send Review Comments To:

Contact Person: Brian Lavery, P.E.
Company Name: Continental Consulting Engineers
Address: 9000 State Line Road
City, State Zip: Leawood, KS 66206
Phone Number: 913-642-6642 x213 Fax Number: 913-642-6941

Owner/Developer (If different from above):

Contact Person: Jason Swords
Company: Schoolyard Townhomes, LLC
Address: 1125 Grand Blvd Suite 202
City, State Zip: Kansas City, MO 64106
Phone Number: 816-581-3992 Fax Number: _____

- Site Plan--buildings, walls, fences, exterior equipment, refuse disposal
- Landscape plan w/schedule
- Drainage calculations for City Engineer
- Elevations showing materials, colors, textures, etc.

Date Submitted: _____ Fee Paid: _____ Received by _____

***It is the responsibility of the Applicant to read and comply with all of the regulations contained in the Site Review Ordinance. Applicant should anticipate a minimum 2 week review period by City staff. Any revisions required will require additional review time.**

CITY OF TONGANOXIE
Site Review Checklist

- ✓ Application and fee
- ✓ Projected review period and process--proposed meeting date(s) Nov 7, 2019 PC, Dec 2 CC
- ✓ Goals of the Site Review Board: **(Section 1.1)**
 - Compatibility both on the site and in the neighborhood--building arrangement and appearance, parking, access, lighting, & landscaping
 - Traffic--streets & sidewalks designed for safe movement of vehicles and pedestrians?
 - Landscaping--does the site present a pleasant public appearance, is sufficient screening & buffering provided? Location?
 - Drainage--will the improvements to the site affect the amount of water leaving the site during and after a storm? If so, how do you plan to mitigate this problem?

Preliminary Planning Meeting (Section 1.3.1)

- ✓ Site sketch
- ✓ Information concerning site and adjacent areas--contours, topography, floodplain, existing and proposed improvements, streets, driveways, drainage areas, fire hydrants

Submittal Materials (Sections 2.0, 3.0, 4.0)

- ✓ Completed application form and fee
- ✓ Engineered Stormwater Plan **(Section 1.4.5)**
- ✓ Sufficient drawings to clearly depict all requirements of plan
- ✓ Projected timeline **Begin Jan 1, 2020, complete Mar 1, 2021**

Stormwater Plan - Contact Brian Kingsley at BG Consultants, (785) 749-4474 for city standards concerning stormwater calculations.

Drawings (may be separate or combined)

- ✓ Site Plan **(Section 2.0)**
 - Site boundary dimensions/bearings
 - Legal description
 - On-site and adjacent streets, drives, entrances, sidewalks, medians, turning lanes, etc with widths and curb cuts.
 - Existing and proposed structures/improvements and significant vegetation (dimension)
 - Label all improvements
 - Stormwater detention areas
 - Exterior refuse and mechanical equipment locations
 - Signs--size and location
 - Loading and service areas
- ✓ Grading Plan showing finish grades/contours at 2 foot intervals **(Section 2.1.3)**
- ✓ Exterior lighting and sound--location, height and intensity of fixtures/lamps/speakers **(Section 2.1.8-9)**
- ✓ Landscaping Plan--location & schedule of landscaping materials (plants, structures, fences, walls, etc.) **(4.0)**
 - Contributes to the aesthetic appearance of site
 - Plan safeguards the natural environment
 - Provides sufficient buffering and screening
- ✓ Elevations--materials, dimensions, design, windows, doors **(Section 3.0)**
- ✓ Material samples **(Section 3.4)**
- ✓ CBD/Downtown Design Standards **(Section 3.8)**

NOTE: This is not a comprehensive list. Please refer to the Site Review Regulations for a complete explanation of the above items. Normally, bid drawings will contain all the needed information except for stormwater calculations



The Special Use Permit application submitted for 702 E 4th Street has been continued to a future date TBD in the Council Chambers, located at 321 S Delaware Street.



MEMO

To: George Brajkovic, City Manager
City of Tonganoxie

Cc: Dan Porter, Asst. City Manager
Kent Heskett, City Superintendent
Joe Herring, Herring Surveying

From: Brian Kingsley, City Engineer

Date: October 11, 2019

Re: Saunders Estates Subdivision
Preliminary Plat and Final Plat
19-1001L

The following are the City Engineer and staff review comments related to Engineering issues:

Preliminary Plat:

- 1) The Planning Commission's motion included the following language regarding access from Smiley Road:

Access to the 4 lots on Smiley Road shall be subject to review and approval by the City Engineer, and generally be consolidated to two points. Options to explore include shared drives between two lots, access from the proposed side street to the south of the property, access from a shared "frontage lane" connecting all lots with a common access drive, or combinations of these or similar strategies.

It appears that the proposed access shown on the plats includes 3 points of access to Smiley Road.

- 2) The preliminary plat does not contain the required content (proposed infrastructure).
 - a. A stormwater management plan dated October 9th, 2019 has been submitted and meets the requirements of the City Regulations.
 - i. Existing and proposed contours are a requirement for the preliminary plat content. The applicant has requested that the requirement to show proposed contours be waived for the preliminary plat. The applicant proposes to address the proposed contours with construction plans to be submitted if a variance is

not granted by the City Council to waive the requirement for storm water detention.

Recommendation: To be consistent with City Planning Commission requirements, I recommend that the City require no direct access from Lot 1 to Smiley Road and require construction of storm water detention as per the City regulations.

Final Plat:

Recommendation: I recommend approval of the Final Plat contingent upon meeting recommendations above for the Preliminary Plat and contingent upon submitting construction plans for the storm water detention.

--END

For questions or comments, please contact:

Brian Kingsley, PE

President

T: 785.749.4474 ext. 2105

E: brian.kingsley@bgcons.com



City of Tonganoxie, Kansas

PLANNING STAFF REPORT

Case#: 2019-008P Reconsideration of Application for Preliminary Plat and Final Plat

Date of Report: November 4, 2019

Applicant Name: Jack Willis, South Park Development

Property Owner Name: South Park Development Company, LLC

Subject Property Address: 520 Smiley Road

Application:

Zoning District: R-R Rural District and R-SF Single Family District

Type of Approval Desired: Preliminary and Final Plat

Date of Application: June, 2019

Date of Meeting: August 1, 2019

Surrounding Property – Zoning and Use:

West: RR-2.5 (unincorporated Leavenworth County), undeveloped wooded lot; and R-R, house on remnant parcel that was part of previous rezoning application

South: R-SF – 3 single family lots (approximately .5 acres), 2 single-family lots (approximately 1-2 acres), and 1 remnant lot (approximately 15 acres)

East: R-R and R-SF– 4 single-family lots (approximately 1 acre), 1 large remnant parcel, church

North: R-SF and R-R – 17 single-family lots (approximately 7,000 – 12,000 square feet), 4 remnant parcels (approximately 2 to 10 acres)

UPDATE:

This item is a reconsideration of a previous Planning Commission approval. It is based on changes proposed by the applicant since the Planning Commission Action. This cover page includes an outline of the issues before the Planning Commission on reconsideration. The following pages are for background only, and include the original staff report associated with the August 2019 submittal. Staff will be prepared to answer any specific questions at the November 7, 2019 meeting.

Reconsideration of Application for Preliminary Plat and Final Plat – Saunders Estates

August 1, 2019 Planning Commission Consideration

The staff report recommended approval of the preliminary and final plat subject to the following conditions:

1. The final plat be revised prior to city signatures and recording to show restricted access on all lots – limited to two access points on Smiley Road, and that all access points be approved by the City Engineer prior to construction.
2. A storm water management plan and engineer study be submitted for review by the City engineer prior to any construction on any lots, and that any necessary detention shall be noted on the plat prior to signatures and recording, or other similar documentation prepared by a licensed professional engineer and approved by the City Engineer is recorded with the plats.
3. The final plat be revised prior to city signatures and recording to show all building lines applicable to the R-SF zoning on each of the lots.
4. Sanitary sewer construction plans may be required in association with future construction documents or building permits, as indicated in the City Engineer comments (July 23, 2019)
5. The remainder of the property (outside of the 4 platted lots) shall remain subject to the R-R zoning district standards, and any future development on this property shall require review according to the rezoning and platting procedures and criteria at that time.

Access

Following discussion, a motion was made to approve the application in conjunction with staff's recommendations, while amending staff recommendation #1 to allow for two new access points, for a total of 3, off Smiley Road. This motion was not carried by a vote of 2 ayes and 2 nays.

After additional discussion, a motion was made to approve the application in conjunction with staff's recommendations numbered 2-5, while making an adjustment to add a 60' access corridor between lots 1 and 2.

Storm Water Detention Construction Plans

Prior to consideration of the final plat by the City Council, the applicant notified City staff that a waiver was requested for the requirement in the City regulations to complete and submit storm water detention construction plans for the project. The preliminary and final plat application is now being brought back before the Planning Commission for consideration of this request.



Chris Brewster
Contract City Planner

I. SUMMARY:

In March, 2019 this property was subject to a proposed rezoning from R-R to R-SF. At that time, staff recommended that the applicant only rezone the front portion of the property, since there was no intention to plat or develop the entire property. The applicant preferred to submit a request to rezone the entire 19 acre parcel. The staff report for the previous application recommended approval, subject to a condition that a preliminary plat and conceptual street network plan for the entire property be created, and that this be shown at the time of preliminary or final plat. Staff's rationale for this condition is that once the property is officially rezoned, future plats simply need to meet the City standards and they should then be approved. Many different utility, street, and lot configurations are possible under the R-SF zoning designation that would technically meet the subdivision regulations; several of which would not be appropriate for this area and could negatively impact transitions, future planning and potential development on adjacent sites. Therefore, it was not possible to fully understand the potential impacts of rezoning the remainder of the property without at least a conceptual street network, with block and lot layouts. The Planning Commission recommended approval of the rezoning subject to the condition of a conceptual street network for the entire property being submitted with the preliminary plat, and the City Council approved this action on April 1, 2019.

The applicant has not submitted a conceptual street network for the entire property, and there is no intention to develop this property at this time. The condition for the rezoning of the rear portions of this lot have not been fulfilled, and the property should remain as zoned prior to the previous application (R-R). Any development of the west portions of the property should be subject to the full rezoning procedures and considerations at that time, including the requirement for a street network demonstrating capacity for utility plans, block and lot layouts and other issues impacting potential planning and development on this and adjacent property.

The current application is a preliminary and final plat for the 4 lots that were originally intended for development as part of previous rezoning application. The proposed preliminary and final plat fulfills the conditions of rezoning for this portion of the property.

II. ANALYSIS

Section 3.3 provides that the Planning Commission shall review preliminary and final plats to find conformance with the requirements of the subdivision regulations. Section 4.1 and 4.2 of the Tonganoxie Subdivision Regulations include the following subdivision design standards – the ones in bold are applicable to this application and with staff comments below:

- a. **Acreage subdivision** (potential for re-subdivision or logical arrangement of lots of "acreage lots" and / or undeveloped portions.)
- b. **Relation to adjoining street system.**
- c. Streets in relation to railroads
- d. Major Street classifications
- e. Minimum roadway and right-of-way width.
- f. cul-de-sac and dead end streets
- g. private streets and reserve strips.
- h. **Restriction of access.**
- i. Street grades.
- j. Intersections and geometrics.
- k. Street names
- l. **Drainage.**
- m. **Stormwater detention plans.**
- n. Blocks.

- o. **Lots.**
- p. **Building lines**
- q. **Underground wiring.**

The design standards require subdivisions – particularly those with large lots or remnant parcels to show the opportunity for re-subdivision and future streets. The easement to the south boundary of this property would provide a potential for street access to the property to the west in the event of future development. As indicated in the summary, in the event of future development of this area, this condition and design standard would need to be reconsidered for the remainder of the property at that time, subject to all of the applicable rezoning, preliminary and final plat procedures and criteria. (4.01.a and b.)

The rezoning in April, 2019 was conditioned on restricted access to Smiley Road, to be further identified and approved by the City Engineer at the time of platting. The plat shows no access on Smiley Road for the southernmost lot. This lot will likely get access from the easement and existing driveway. However, the other 3 lots do not show specific access or access restrictions. Per the previous rezoning conditions and the City Engineer comments on this application, (July 23, 2019), only two access points shall be allowed on Smiley Road. Therefore, the plat will need to be amended to show specific access points and/or include a note showing that access is restricted to two points, which must receive City Engineer approval (4.01.h)

A stormwater management plan and engineering study by a professionally licensed engineer is required by the regulations, and as noted in the City Engineer comments (July 23, 2019). The City may waive any requirements based on the study demonstrating to the City Engineer’s determination that no issues will arise from potential development of the site. Otherwise detention deemed necessary by that plan shall be included on the plat prior to signatures and recording. (4.01.l and m.; and Article 9, Section 5. Stormwater Detention Plan)

The four lots all meet the standards of the R-SF zone and they will allow for appropriate building sites according to the zoning district standards. The final plat shows the front building lines, and by default the side building lines (which correspond to the easements). However it does not include the applicable rear building line which should be added prior to recording of the final plat. The applicable building lines for the R-SF district are: 30-feet front setback; 10 feet side setback; 30-feet rear setback. (4.01.o. and p.; 4.02.c; and 5-014 of the zoning ordinance)

III. EFFECT OF DECISION

The Planning Commission approves preliminary plats, recommends final plats to the Governing Body for acceptance of any dedicated easements. Due to the routine nature of this particular application, the preliminary and final plat are submitted concurrently, as permitted in the subdivision regulations. Based on the record and other findings, the Planning Commission may:

1. Approve / recommend approval,
2. Approve / recommend approval with conditions
3. Deny / recommend denial of the plat.

Subsequent to any approval of a preliminary and final plat, the applicant may record the plat with the county, and any development will require construction drawings and permits, reviewed by staff subject to all applicable city codes.

IV. RECOMMENDATION.

Staff recommends approval preliminary plat, subject to the following conditions. If the Planning Commission elects to recommend approval of the final plat, a storwater management plan / engineer study will need to be approved by the City Engineer and approval of the final plat should be limited to these same conditions.

1. The final plat be revised prior to city signatures and recording to show restricted access on all lots – limited to two access points on Smiley Road, and that all access points be approved by the City Engineer prior to construction.
2. A storwater management plan and engineer study be submitted for review by the City engineer prior to any construction on any lots, and that any necessary detention shall be noted on the plat prior to signatures and recording, or other similar documentation prepared by a licensed professional engineer and approved by the City Engineer is recorded with the plats.
3. The final plat be revised prior to city signatures and recording to show all building lines applicable to the R-SF zoning on each of the lots.
4. Sanitary sewer construction plans may be required in association with future construction documents or building permits, as indicated in the City Engineer comments (July 23, 2019)
5. The remainder of the property (outside of the 4 platted lots) shall remain subject to the R-R zoning district standards, and any future development on this property shall require review according to the rezoning and platting procedures and criteria at that time.



Chris Brewster
Contract City Planner



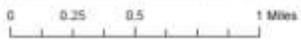
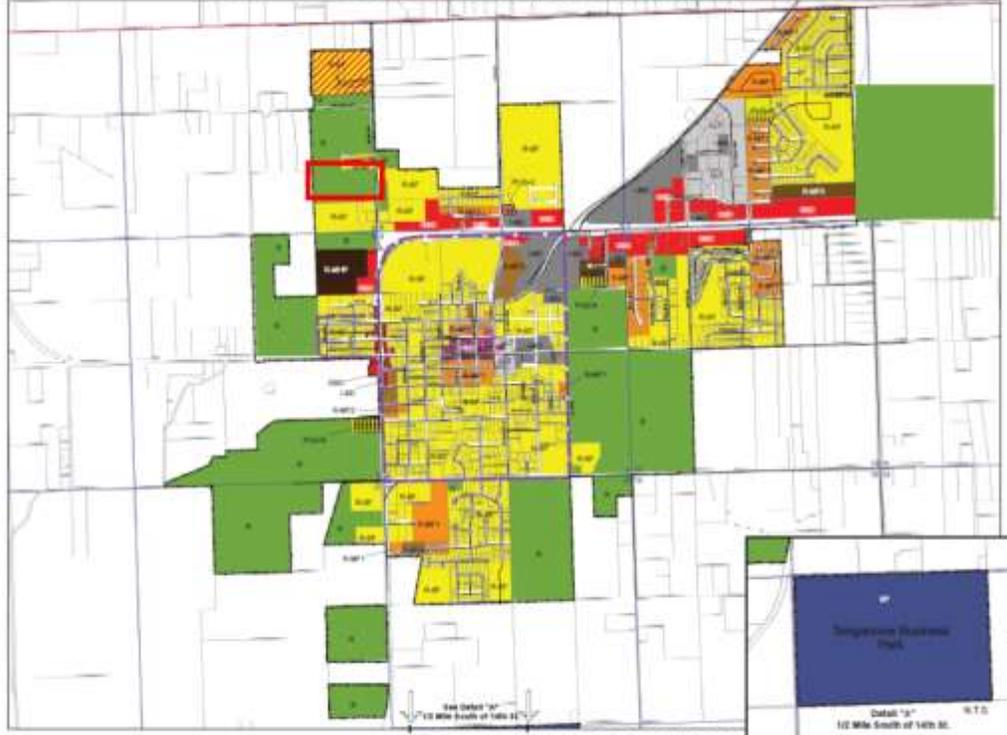
CITY OF TONGANOXIE, KS ZONING MAP

- Zoning Classification**
- Rural
 - R-1 Res. Estate
 - Single Family
 - Multi-Fam. 1
 - Multi-Fam. 2
 - Multi-Fam. 3
 - Manuf. Home Pl.
 - (PUD-R) Planned Res.
 - (HBD) Historic Bus.
 - Ltd. General Bus.
 - General Bus.
 - (PUD-C) Plan. Comm.
 - Bus. Park
 - Light Ind.
 - Mod. Ind.
 - Heavy Ind.
 - Community Util. Pln.
 - Unincorporated
 - R-1 Infil. Dist.
 - City Limits

Revisions:
 Date: April 22, 2014
 Last Ordinance: 1383



Source Data: Map Layers were obtained from Leavenworth County, Kansas GIS Department. The map was created in Arc GIS 10.1 from the official AutoCAD map created and maintained by SO Engineers.



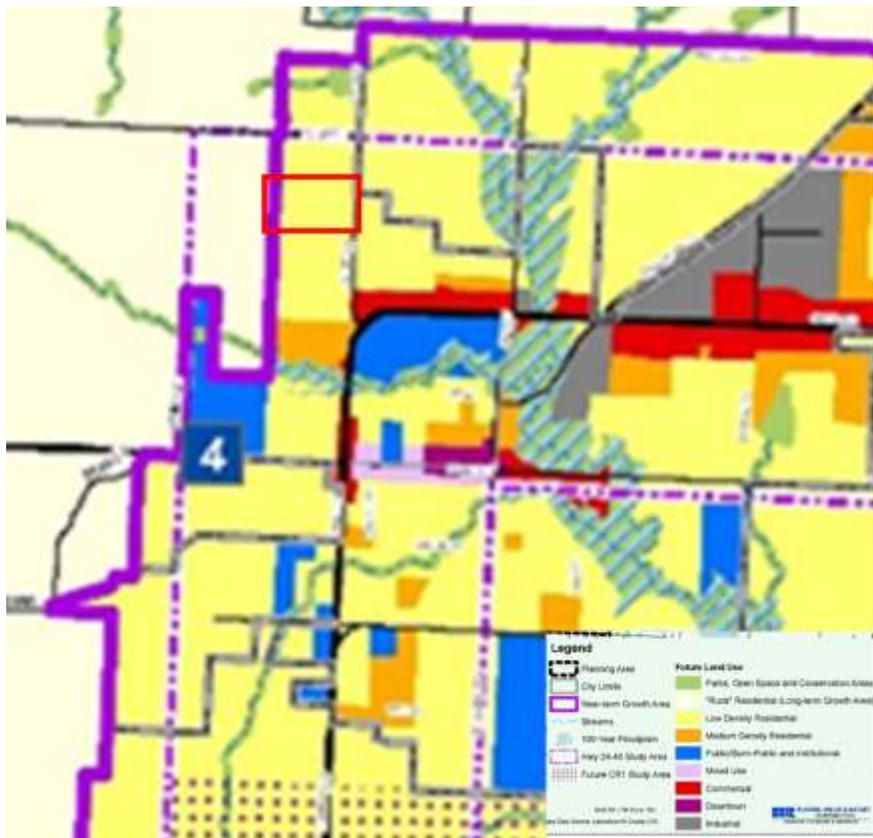
Current City Zoning (property in red box now zoned RR)



Vicinity



Property



Future Land Use (Tonganoxie Comprehensive Plan 2006)

SAUNDERS ESTATES

A Minor Subdivision in the North Half of the Southeast Quarter of the Southeast Quarter of Section 5, Township 11 South, Range 21 East of the 6th P.M., City of Tonganoxie, Leavenworth County, Kansas.

FINAL PLAT

PREPARED FOR:
South Park Development Co. LLC
520 Smiley Road
Tonganoxie, KS
PID # 193-05-0-40-01-009

DESCRIPTION OF RECORD Parent Tract: Doc #2018R08491
The North One-Half (N1/2) of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section Five (5), Township Eleven (11) South, Range Twenty-One (21) East of the 6th P.M., excepting public highways.

SURVEYOR'S DESCRIPTION:
A tract of land in the Southeast Quarter of Section 5, Township 11 South, Range 21 East of the 6th P.M., in the City of Tonganoxie, Leavenworth County, Kansas, more fully described as follows:
Commencing at the Northeast corner of said Southeast Quarter; thence South 01 degrees 53'01" East for a distance of 601.18 feet along the East line of said Southeast Quarter; thence South 88 degrees 43'43" West for a distance of 215.01 feet; thence North 01 degrees 53'01" West for a distance of 600.99 feet to the South line of TWIN CEDAR ESTATES; thence North 88 degrees 40'40" East for a distance of 215.01 feet along said line to the point of beginning, together with and subject to covenants, easement and restriction of record. Said property contain 2.97 acres, more or less, including road right of way.

CERTIFICATION AND DEDICATION
The undersigned proprietors state that all taxes of the above described tract of land have been paid and that they have caused the same to be subdivided in the manner shown on the accompanying plat, which subdivision shall be known as: SAUNDERS ESTATES.

Easements shown on this plat are hereby dedicated for public use, the rights of way which are shown with dashed lines on the accompanying plat, and said easements may be employed to locate and maintain sewers, water lines, gas lines, poles and wires and any other form of public utility now and hereafter used by the public over, under and along the strips marked "Utility Easement" (U/E) or "Drainage Easement" (D/E).

Streets shown on the accompanying plat and not heretofore dedicated for public use are hereby so dedicated.

Building Lines or Setback Lines (B.S.L.) are hereby established as shown on the accompanying plat and no building or portion thereof shall be built or constructed between this line and the street line.

OWNER: SOUTHPARK DEVELOPMENT

Jack Willis

NOTARY CERTIFICATE:
Be it remembered that on this _____ day of _____, 2018, before me, a notary public in and for said County and State came Christopher Gratton, Member of the Tongue5, LLC, to me personally known to be the same persons who executed the foregoing instrument of writing, and duly acknowledged the execution of same. In testimony whereof, I have hereunto set my hand and affixed my notary seal the day and year above written.

NOTARY PUBLIC _____ My Commission _____
Expires: _____ (seal)

ENDORSEMENTS

Approved by
City of Tonganoxie
Planning Commission
Leavenworth County, Kansas
On this Date: _____

John Morgan Zach Stoltenberg
Chairman Secretary

Notary Public
State of Kansas
County of Leavenworth

Be it remembered that on the _____ day of _____, 20 _____ before me a Notary Public in and for said County and State came the above city officials known personally to be the same person who executed the foregoing instrument and acknowledged the same to be their voluntary act and deed.

My Commission Expires: _____ Name: _____

Notary Signature

Rights of Way and Easements
accepted by
City of Tonganoxie
Tonganoxie KS
On this Date: _____

Attest:

Jason K. Ward Patricia C. Hagg
Mayor City Clerk

Recommendation of Approval:
Brian Kingsley, City Engineer

REGISTER OF DEED CERTIFICATE:
Filed for Record as Document No. _____ on this _____ day of _____, 2019 at _____ o'clock _____ M in the Office of the Register of Deeds of Leavenworth County, Kansas,

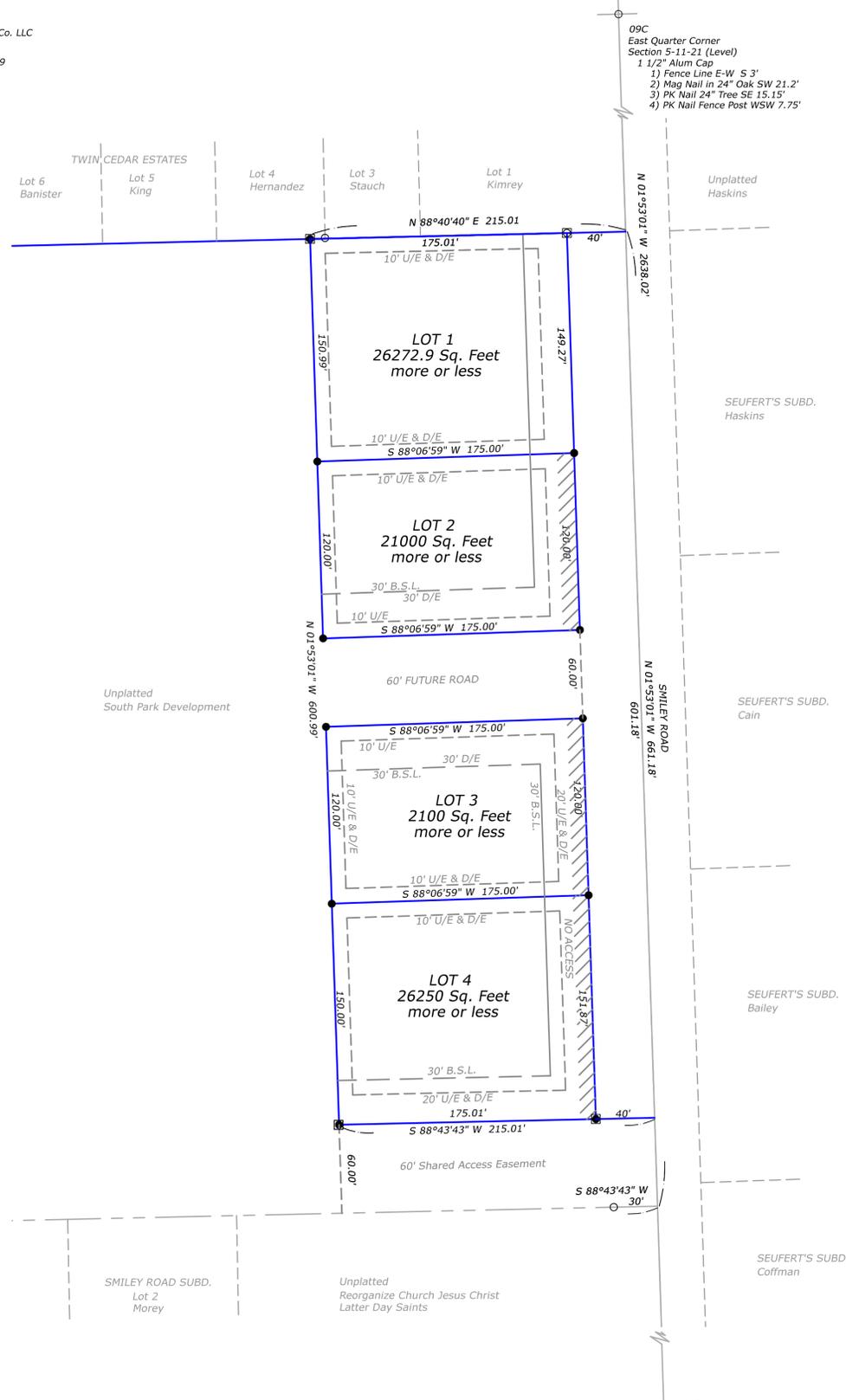
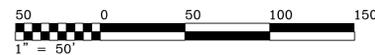
Register of Deeds - Stacy Driscoll

COUNTY SURVEYOR
I hereby certify this plat meets the requirements of KSA-58-2001 through 58-2005. The face of this plat was reviewed based on Kansas Minimum Standards for Boundary Surveys. No field verification is implied. This review is for surveying information only.

COUNTY SURVEYOR - Wayne Malnicof, RLS



Scale 1" = 50'



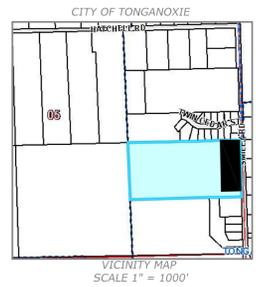
09C
East Quarter Corner
Section 5-11-21 (Level)
1 1/2" Alum Cap
1) Fence Line E-W S 3'
2) Mag Nail in 24" Oak SW 21.2'
3) PK Nail 24" Tree SE 15.15'
4) PK Nail Fence Post WSW 7.75'

ZONING:
R-SF - Residential Single Family

ACCESS:
- Lot 1 subject of City of Tonganoxie Access Management Policy.
- Lots 2 and 3 have a shared access.
- Lot 4 does not have direct access to Smiley Road, is limited to a shared access drive to the South.
- All access subject to approval by City Engineer.

STORM WATER DETENTION:
- Storm Water Detention Areas are proposed with the Drainage Easement along the common Lots Lines between Lots 1 and 2, the 30' Drainage Easement on the South side of Lot 2 and the North side of Lot 3.
- See Storm Water Management Plan for Design.
- Property Owner(s) are responsible for maintenance of the Detention Area.

- LEGEND:
● - 1/2" Bar Set with Cap No. 1296
○ - 1/2" Bar Found, unless otherwise noted.
□ - Concrete Base to be Set around Point
△ - PK Nail Found in Place
() - Record / Deeded Distance
U/E - Utility Easement
D/E - Drainage Easement
B.S.L. - Building Setback Line
R/W - Permanent Dedicated Roadway Easement dedicated this plat
C - Centerline
S - Section Line
BM - Benchmark
POB - Point of Beginning
POC - Point of Commencing



I hereby certify that this survey was made by me, or under my direct supervision, on the ground during the dates of December 2018 thru April 2019 and this map or plat is correct to the best of my knowledge.

Joseph A. Herring
PS # 1296

SAUNDERS ESTATES

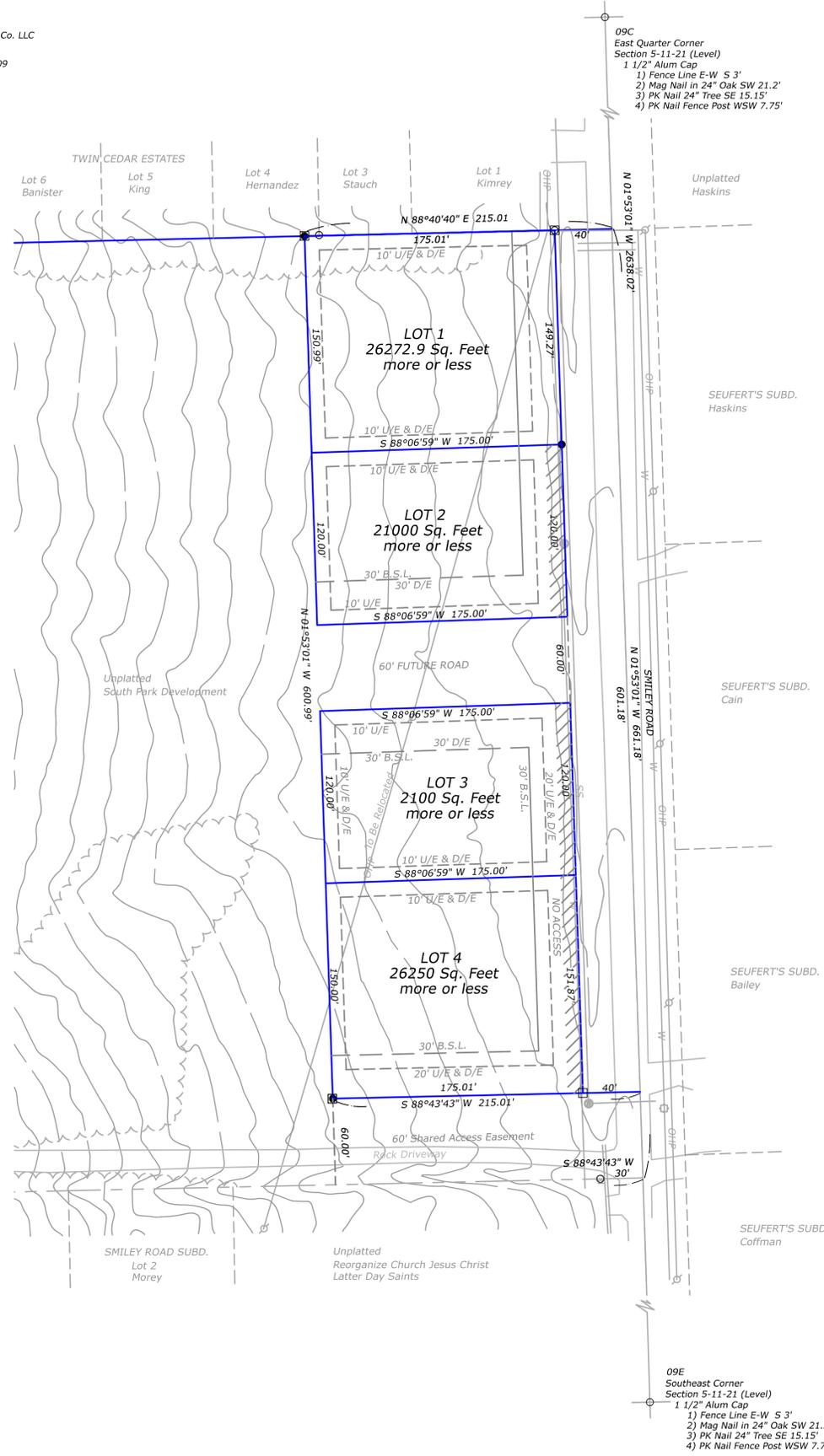
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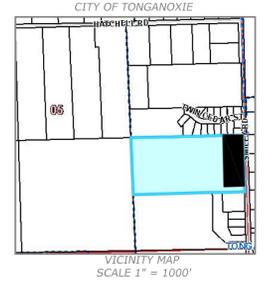


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 - D/E - Drainage Easement
 - B.S.L. - Building Setback Line
 - R/W - Permanent Dedicated Roadway Easement dedicated this plat
 - - Centerline
 - - Section Line
 - BM - Benchmark
 - - - - DIRECTION OF WATER FLOW
 - ⊙ - Power Pole
 - X - Fence Line
 - OHP - Overhead Power Lines
 - T - Underground Telephone/Fiber Optic Line
 - ⊕ - Gas Valve
 - ⊕ - Water Meter/Valve
 - ⊕ - Telephone Pedestal
 - W - 6" Water Line - location as per district
 - ~ ~ ~ - Tree/Brush Line



J. Herring, Inc. (dba)
HERRING
SURVEYING
& COMPANY

315 North 5th Street, Leav., KS 66048
Ph. 913.651.3858 Fax 913.674.5381
Email - survey@eamcash.com



Scale 1" = 50'



1" = 50'



I hereby certify that this survey was made by me, or under my direct supervision, on the ground during the dates of December 2018 thru April 2019 and this map or plat is correct to the best of my knowledge.

Joseph A. Herring
PS # 1296

Job # K-18-1254
April 8, 2019 Rev. 10/10/19

CITY OF TONGANOXIE, KANSAS

APPLICATION FOR PRELIMINARY PLAT AND FINAL PLAN APPROVAL

Requested Action	Fee Paid	Date Rec'd	Date Published	Hearing Date
<input checked="" type="checkbox"/> Preliminary Plat	_____	_____	_____	_____
_____ Street & Storm Sewer Plan	_____	_____	_____	_____
_____ Sanitary Sewer Plan	_____	_____	_____	_____
_____ Waterline Plan	_____	_____	_____	_____
<input checked="" type="checkbox"/> Final Plat	_____	_____	_____	_____
_____ Site Plan	_____	_____	_____	_____
_____ Landscaping Plan	_____	_____	_____	_____

Name of Development SANDERS ESTATES

General Location N 1/2 SE 1/4 SE 1/4 SEC. 5-11-21

Applicant:

Name: JACK WILLIS Contact: _____

Address: 520 SMILEY RD.

Phone/Fax: _____

E-mail address _____

Owner Developer:

Name: SOUTH PARK DEVELOPMENT Contact: _____

Address: _____

Phone/Fax: _____

E-mail Address _____

Engineer: SURVEYOR

Name: HERRING SURVEYING Contact: JOE

Address: 315 N. 5TH ST. LV KS 66048

Phone/Fax: 913-651-3858

E-Mail Address survey@teamcash.com

SUBDIVISION INFORMATION:

• Gross acreage of plat: 20

• Total number of lots: 4

Residential Business _____ Industrial _____ Other _____

• Existing zoning R-SF Proposed zoning _____

THE owner herein agrees to comply with the subdivision regulations for Tonganoxie, as amended, and all other pertinent ordinances or resolutions of Tonganoxie, and statutes of the State of Kansas. The undersigned further states that he is the owner of the proposed for platting.

OWNER'S SIGNATURE _____



OFFICE USE:

RECEIVED BY _____

Date _____ Fee Submitted _____

\$ 520
220

\$ 740

GENERAL INFORMATION

This general checklist is provided only to aid the understanding of the plat and plan approval process. The plat and plan approval process is detailed in the subdivision regulations. The subdivision regulations are available online at www.tongie.org or at City Hall. It is the responsibility of the applicant and/or his representative to meet all of the regulations applicable to this subdivision.

The Tonganoxie Planning Application and Review Schedule will be followed to allow time for staff review and a public hearing. A public hearing on the proposed plat will be held before the Planning Commission. When a plat is submitted, public notice must be published in the official paper of Tonganoxie, Kansas, giving the name of the subdivision, owner, legal description, location and approximate acreage.

Approval of the Preliminary Plat does not constitute final approval or acceptance of the subdivision by the City Planning Commission or authorization to proceed with the construction of improvements within the subdivision, but shall constitute approval of the general layout.

The approval of the Preliminary Plat shall only be effective for one (1) year, unless the Planning Commission grants an extension. The Planning Commission may not grant an extension for a period in excess of one (1) year. If the final plat has not been submitted for approval within this period, a Preliminary Plat must be re-submitted for Planning Commission approval.

When the Final Plat has been approved by the City Council, the developer shall supply 3 copies of the plat on reproducible drafting film and 11 blueline copies for proper signatures. The developer is responsible for filing the Final Plat with the Register of Deeds in Leavenworth County.

After receiving the recorded final plats and a performance bond or irrevocable letter of credit from the developer, he may proceed with the installation and construction of the required improvements. Building permits will be issued after improvements have been completed and approved by the City Engineer.

The developer shall file performance and maintenance bonds with the City.

As built plans, profiles and cross sections of the required improvements shall be filed with the City Engineer.

See complete information in the Subdivision Regulations:

Section S-2 Preliminary Plat Procedure and Content

Section S-3 Final Plat Procedure, Content, and Action by the Planning Commission

Section S-4 Minimum Subdivision Design Standards & General Requirements

Section S-5 Improvements and Improvement Plan

Site Plan Review Standards and Site Review Committee

Preliminary Plat Checklist

- Submit a minimum of 6 copies
- Current Title Report - no more than 3 months old & a certificate of title verifying ownership no more than 30 days old
- Review: See Planning Application & Review Schedule for submittal dates. Staff review will include Planner, Administrator, City Superintendent, Engineer, Fire Chief, Police Chief and Building Inspector
- Fee: See Application Fee schedule for current fee amounts as established by the City Council. Costs incurred by the city for review of revised plats will be billed to the applicant.
- Checklist:
 - Clearly marked "Preliminary Plat"
 - Name of subdivision (If replatting, original plat must be referenced in title)
 - Name & address of owner, and name, address and registration of the engineer and/or surveyor preparing the plat
 - Surveyor's seal, signature & date--see KS Minimum Standards for Boundary Surveys
 - Date completed, Scale, North point, Key map
 - Legal description--including section, township, range and meridian
 - Drawing to scale of platted area, dimensioned and tied to at least 2 section corners
 - Contours at a minimum of 2 foot intervals
 - Names and location of adjacent owners and subdivisions
 - Location and dimension of property lines, streets, alleys, easements, buildings, utilities, watercourses and other items that will affect the plat
 - Existing & proposed zoning
 - Location and elevation of 100 year floodplain and floodway boundaries
 - Layout, number and dimensions of proposed lots and building or setback lines
 - Location, width & dimensions of all lands proposed for dedication to public use including easements
 - Proposed names for streets
 - New utilities--method and timeline for all installations proposed, 3 copies of preliminary layouts of the street paving and all utility lines and all appurtenant work such as manholes & fire hydrants, utility lines and power poles
 - Written & signed statements from City-County Health Department stating approval of lot sizes and type of sewage system if not connecting to the city sewer system.
 - Written & signed commitments of utility availability from appropriate Utility officials gas, electric, telephone, water, cable.
 - Restrictions proposed for the plat in the Owner's Declaration of Plat.

Final Plat Checklist

Submit a minimum of 4 copies of the Final Plat, 1-11x17 copy, 1 address map, with required signatures and professional certifications for review by the Planning Commission.

- Review: See Planning Application & Review Schedule for submittal dates. Staff review will include Planner, Administrator, City Superintendent, Engineer, Fire Chief, Police Chief and Building Inspector
- Fee: See Application Fee schedule for current fee amounts as established by the City Council. Costs incurred by the city for review of revised plats will be billed to the applicant.
- Checklist:
 - Clearly marked with legal description
 - Boundary lines marked with accurate distances & angles
 - Mark highways, streets, alleys with width and names
 - Outline of property dedicated for public use
 - Lines of departure from one street to another
 - Lines adjoining property and lines of adjoining streets with width & names
 - All lots designated by numbers or letters
 - All streets avenues and other grounds by names , letters or numbers
 - Location & widths of building lines on front & side streets
 - Location & widths of utility easements, easements for future construction and easements for drainage purposes.
 - All dimensions both linear & angular for locating boundaries
 - The radii, arcs, chords, points of tangency and central angles for all curvilinear streets and radii for rounded corners
 - Location and description of survey monuments and bench marks
 - Subdivision name, Clearly marked as Final Plat, Points of compass, and names of every owner or subdividers
 - Reference to Private restrictions and trusteehips if on a separate instrument
 - Plat Restrictions, dedication of public use, granting of easement acknowledged by owners
 - Signature lines & verification of owners
 - Signature lines for Land Surveyor or Licensed Professional Engineer of the State of Kansas
 - Signature lines for Chairman & Secretary of the Planning Commission
 - Signature lines for City Engineer
 - Signature lines for Mayor and City Clerk
 - Signature lines for Register of Deeds
 - Signature line for the County Surveyor
 - True north point, graphic scale, & date