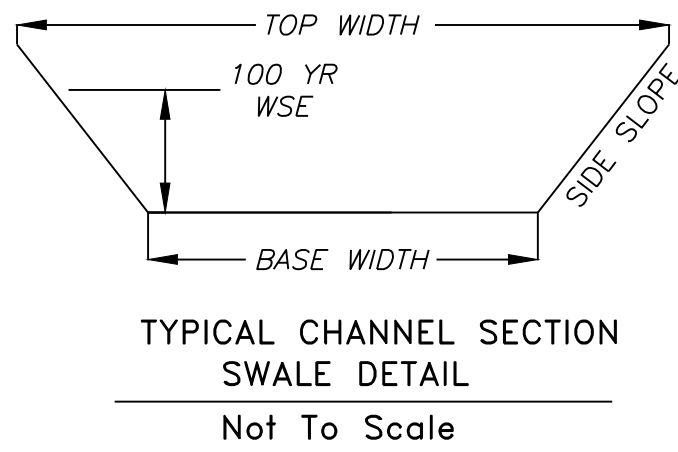


Notes

1. Contractor is responsible for verifying all existing utility locations prior to excavation.
2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction.
3. No part of the project lies within the 100 year flood plain.
4. All erosion and sediment control measures need to be implemented prior to construction.
5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective.
6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity.
7. Contractor responsible for all density testing of roadway subgrade and granular base.

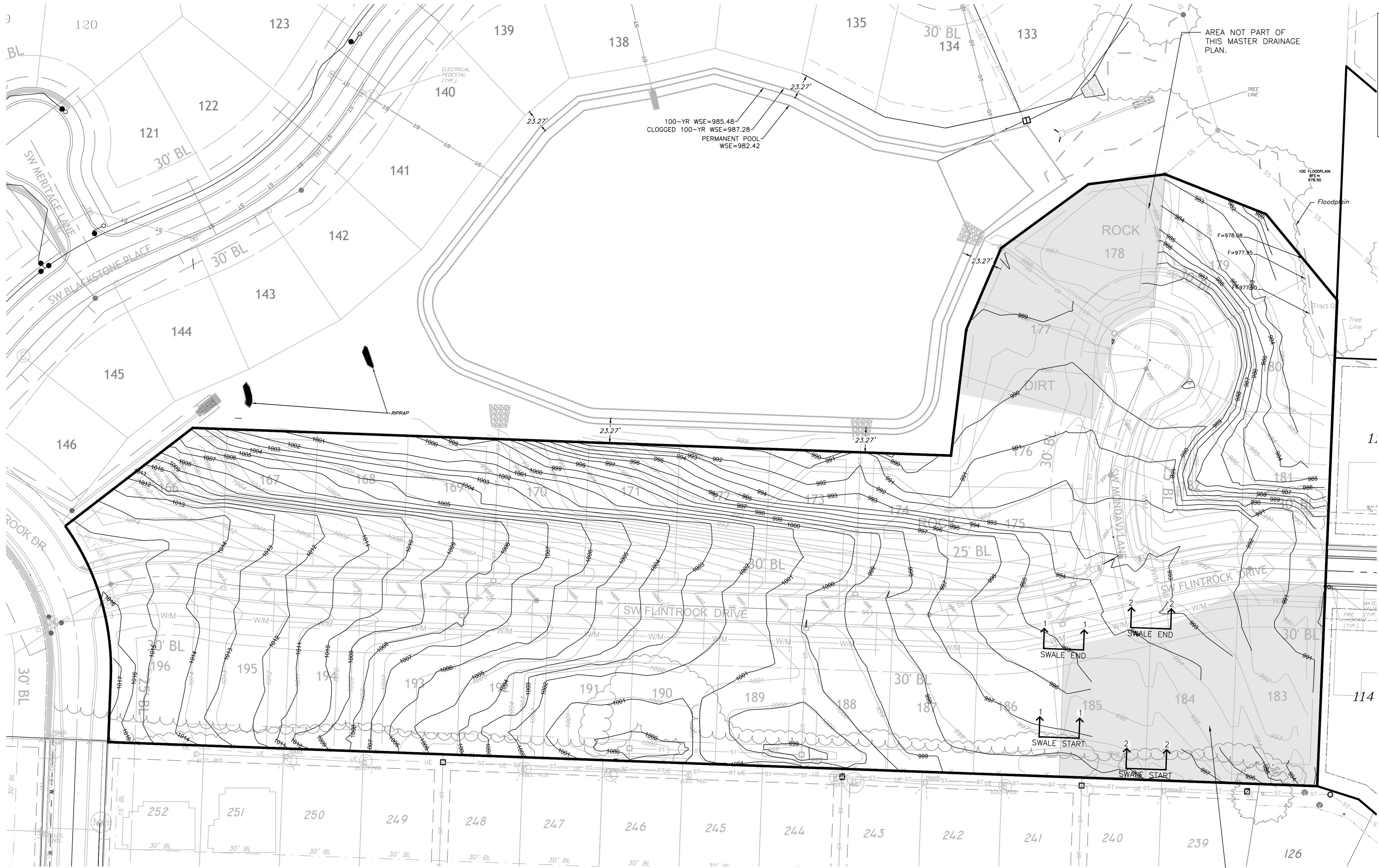
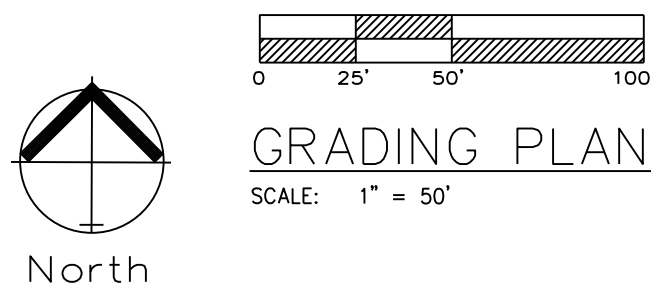
NOTE: Swale sections extend the entire length between upstream and downstream structures with the exception of a transition at each structure. The minimum swale depth shall be 6" over the 100-year water surface elevation.



100 YEAR OVERFLOW SWALE SECTIONS									
Section	100 Yr. Runoff (c.f.s.)	Bed Slope (%)	Base Width (ft)	Side Slope (1:V)	100 Yr WSE (ft)	Sectional Area (f.p.s.)	Velocity 100Yr (f.p.s.)	Hydraulic Radius (ft)	Shear Stress (p.s.f.)
1-1	0.82	2.00	5	6	0.11	0.62	1.32	0.10	0.12
2-2	1.30	2.00	5	6	0.14	0.82	1.59	0.12	0.15

Note: See Table 8.10 of the APWA / MARC BMP Manual for design Summary for Native Vegetation Swales.

NOTE: Swale should be lined with "Straw with Net" turf reinforcement (Curlex Blanket or Eqv.). Per Table 5607-1 in APWA Manual



Estimated Cut / Fill Quantities	
Site Area	9.65 Acres
Cut Volume (Unadjusted)	17,287 c.y.
Fill Volume (Unadjusted)	20,068 c.y.
Street & Sidewalk Cut Volume	1,680 c.y.
Net Fill	1,101 c.y. (Unadjusted)



RECORD DRAWING
The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by my firm.

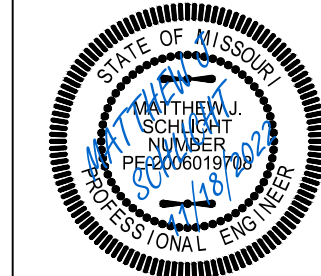
Date: 11/18/2022
Certified by: Matthew J. Schlicht
Title: Engineer
Firm: Engineering Solutions

Master Drainage Plan 1 of 3:

Grading Plan
Street, Stormwater, Master Drainage Plans for:
Napa Valley 5th Plat
Lee's Summit, Jackson County, Missouri

Project: NAPA VALLEY 5TH PLAT
Issue Date: October 31, 2022

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS
11/18/2022 As-Built

Lot Number Baseament Type MBOE

166	Walkout	N/A
167	Walkout	N/A
168	Walkout	N/A
169	Walkout	N/A
170	Walkout	N/A
171	Walkout	N/A
172	Walkout	N/A
173	Walkout	N/A
174	Walkout	N/A
175	Full	N/A
176	Full	N/A
177	Full	N/A
178	Daylight	N/A
179	Walkout	N/A
180	Walkout	N/A
181	Walkout	N/A
182	Daylight	N/A
183	Full	N/A
184	Full	N/A
185	Full	N/A
186	Full	N/A
187	Daylight	N/A
188	Daylight	N/A
189	Walkout	N/A
190	Walkout	N/A
191	Walkout	N/A
192	Walkout	N/A
193	Walkout	N/A
194	Daylight	N/A
195	Full	N/A
196	Full	N/A

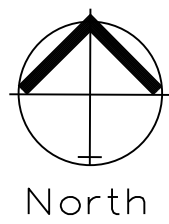
The drawing shows a residential subdivision with lots numbered 134 through 150, 166 through 196, and 239 through 252. A prominent road, SW FLINTROCK DRIVE, runs horizontally across the middle. To the left, SW MERITAGE LANE and SW BLACKSTONE are visible. The drawing includes numerous spot elevations (e.g., 982.82, 987.54, 979.35) and finished ground elevations (F=). It also features street names like SW MONDAY LANE and SW FLINTROCK DRIVE, along with various engineering notes such as "100-YR WSE=985.48 CLOGGED 100-YR WSE=987.28 PERMANENT POOL WSE=982.42". A north arrow and a scale bar (1" = 40') are located in the top right corner.

SPOT ELEVATIONS
SCALE: 1" = 40'

RECORD DRAWING
The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by my firm.

"100-00 100.10", "4-00% 1.15% slope", or "8-inch HDPE-PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 11/18/2022
Certified by: Matthew J. Schlicht
Title: Engineer
Firm: Engineering Solutions



C.20

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by our firm.

"606-06 100.10, "7-00% 1.15% slope", or "8-inch HDPE-PV pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 11/18/2022

Certified by: Matthew J. Schlicht

Title: Engineer

Firm: Engineering Solutions

C.202