

<i>Project Name:</i>	Rivergate Subdivision
<i>Proponent/Owner:</i>	Ben Steele / Rivergate LLC
<i>Project Address:</i>	Approximately 1900 West 600 South
<i>Request:</i>	109 Lot Subdivision
<i>Current Zoning:</i>	NR-6
<i>Date of Hearing:</i>	Dec 15 th 2022
<i>Type of Action:</i>	Quasi-Judicial
<i>Submitted By:</i>	Russ Holley, Senior Planner

Staff recommends that the Planning Commission **approve** a Subdivision Permit for project PC 22-066 Rivergate Subdivision, located on approximately 30.54 acres at approximately 1900 West 600 South; TIN #02-076-0002; -0008.

<i>North:</i>	Outside of City: Vacant	<i>East:</i>	NR-6 Single Family Homes
<i>South:</i>	NR-6 Single Family Homes	<i>West:</i>	Outside of City: Vacant

The proponent is requesting a single-family subdivision for 109 building lots, a parcel "A" (appears to be wetland area) and remainder storm-water retention ponds and open spaces. The property is currently vacant and relatively flat with some low-lying area near the west border. Historically, the property has been used for agricultural purposes. 1900 West and 600 South provide access but are not fully developed streets (cross sections).



The Future Land Use Plan (FLUP) adopted in 2008 identifies this property as Detached Residential (DR) and explains that designation as being areas for detached single-family homes developed at a density range of 4-6 units per acre of land. The recently adopted Woodruff Neighborhood Plan also indicates this project area as single-family residential. This area was recently (within the last 12 months) annexed into Logan City.

Land Development Code (LDC) - Zoning

The current zoning designation is Traditional Neighborhood Residential (NR-6), which is described as being detached single-family zoning with a maximum density of six (6) homes per acre. Minimum building lot sizes are 6,000 SF with minimum 50-foot lot widths. At 30.54 acres and a proposed 109-lot subdivision, density would equal 3.5 homes per acre. As submitted the subdivision complies with NR-6 density.

Subdivision

The LDC 17.40 requires Subdivision Permits to be issued in accordance to zoning district standards for orderly development patterns. Approvals are based on conformance to lot size, lot width, access and physically suitable for development. The proposed 109-lot subdivision complies with lot sizes and range from 6,000 SF to 13,440 SF. Lot width is shown at or above the 50-foot minimum. As submitted, the subdivision complies with minimum lot sizes and widths.

Street Grid Connectivity & Site Layout

The LDC 17.30.190 requires projects serving twenty (20) or more dwelling units have at least three (3) street connections or stubs for future connections unless adjustments are warranted as per LDC 17.30.170.D. The LDC street connectivity requirement ensures equitable traffic distribution, efficient utility/infrastructure networks, better walkability and the continuation of Logan City's historic grid/block patterns. This proposal includes 4 total points of connection (including street stubs), and the creation of several internal blocks for project connectivity. The two southern access points align across 600 South. The west access connects to 1900 West and the north access is shown as a street stub to future development areas. No connections or future stubs are shown connecting to the east. A total of four (4) street connections are made with this proposal as submitted meeting the minimum connectivity requirements in the LDC.



Figure 2 shows the proposed subdivision layout in context with the surroundings.

Street Width

The Logan City Engineering Standards and Specifications contain the adopted street cross-section designs for all areas and all types of development within the city. For standard neighborhood residential developments, a “Local Residential Street” with a 60-foot cross section containing vehicle travel lanes, on-street parking, landscaping (park strip) and sidewalks are required. The proposed 109-lot subdivision shows a 60-foot cross section throughout the interior areas of the project site with 66-foot cross sections for the perimeter streets. The expansion of 600 South street, as conditioned below by the City Engineer, will need to be accounted for in the layout of this subdivision.

Setbacks

The Land Development Code (LDC) requirements for setbacks in the NR-6 zone are as follows (as measured from property lines):

Front:	25'
Corner	20'
Side:	8'
Rear:	10'

Setbacks will be reviewed and approved with compliance to LDC standards by city Staff when building permit applications are submitted for new single-family homes.

Lot Coverage

The LDC 17.07.060 limits lot coverage at a maximum of 60% (building(s) footprint) in the NR-6 zone. Lot coverage will be reviewed and approved with compliance to LDC standards when building permit applications are submitted for new single-family homes.

Parking Stall Requirements

The LDC 17.31.040 requires two (2) parking stalls per every dwelling unit. The parking stalls must be located outside of building setbacks in either a garage, carport or paved parking lot. Driveway cuts are limited to 24-foot max width at the curb to preserve street character and limit ingress/egress onto public streets. Parking and driveways will be reviewed and approved with compliance to LDC standards when building permit applications are submitted for new single-family homes.

Rear Facing Homes/Fencing

The LDC 17.30.100 regulates fencing and walls in residential developments. When subdivisions are adjacent to perimeter streets, collector or arterial streets, developers will often choose to align lots with rear yards abutting the perimeter streets. For this submittal, lots 101-404 (26 lots) abut 600 South with rear yards. In these configurations, a rear yard fence that is 4 feet tall or less may be placed on the property line, but a 6-foot-tall fence must be setback 10 feet from the rear property line. Corner lots are treated differently and allow 6-foot-tall fencing without setbacks in areas of the corner yard behind the home's front façade.

LDC 17.09.020 addresses these situations and requires additional landscaping buffers along the back sides of these homes. Depending on whether the street is a local, collector or arterial, the landscape buffer ranges from 10-50 feet wide. For consistency, these areas will have better long-term appearance and maintenance if they are designed as a whole, commonly owned, and maintained through an HOA. As conditioned with adherence to 17.09.020 for the rear facing lots, the project meets the requirements in the LDC.

Open Space

The LDC does not require open space in the NR-6 zoning district. With generous setbacks and limited lot coverages, NR-6 projects contain larger areas between homes for private landscaping and vegetation. As subdivisions are approved and building permit impact fees

collected, the Logan City Parks and Recreation Department acquires and develops lands for nearby neighborhood parks. If subdivisions choose to develop common open space, they will need to follow landscaping and stormwater buffering regulations. The pending critical lands ordinance will require a 50-foot setback from any delineated wetland boundary. With phase one being outside of the possible wetland overlay zone, staff will assess wetland issues and code compliance in phases 2-4.

Staff Summary

The proposed subdivision complies with the LDC standards and limitations as proposed. Unless delineated as jurisdictional wetlands, the existing low-lying area on-site can be amended. Wetland will likely only be an issue in phases 2-4. The city department comment regarding the widening of 600 South has the potential to be very impactful to the subdivision layout and the landscape buffer along the south border. The total number of street stubs to adjacent areas need to be considered as one could make the argument that a stub to the east and additional one to the north would allow for better walkability and connectivity to the future surrounding development areas.

AGENCY AND CITY DEPARTMENT COMMENTS

Comments were solicited from the following departments or agencies:

• Environmental	• Water
• Fire	• Engineering

PUBLIC COMMENTS

Notices were mailed to property owners within 300 feet of the subject property. As of the time of this report, staff has not received any written comments.

PUBLIC NOTIFICATION

Legal notices were published in the Herald Journal on 12/03/22, posted on the City's website and the Utah Public Meeting website on 12/05/22 and mailed out to adjacent property owners within 300' on 11/28/22.

RECOMMENDED CONDITIONS OF APPROVAL

This project is subject to the proponent or property owner agreeing to comply with the following conditions as written, or as may be amended by the Planning Commission.

1. All standard conditions of approval will be recorded with the Design Review and are available in the Community Development Department.
2. This subdivision permits authorizes 109 lots in four phases.
3. The wetland delineation must be completed and approved by the Army Corp of Engineers prior to phases 2-4. If the delineation result in significant changes to phases 2-4, the project must return to the planning commission for future reviews and approvals.
4. The stormwater common areas and wetland areas shall be listed as non-buildable on the final plat.
5. The planning commission will review and approved the street connections and street stubs to future areas.
6. Street design shall conform to Logan City adopted standards and specifications. All streets adjacent to or within the development shall be improved to current city standards and specifications.
7. Building setbacks, lot coverages, parking and driveway specifications shall be reviewed and approved on an individual basis and comply with the NR-6 requirements.
8. A performance landscaping plan, prepared in accordance with §17.32 of the LDC, shall be submitted for approval to the Community Development Department prior to the issuance of the building permit. The plan shall include the following:

- a) Street trees along all streets provided every thirty (30) feet on center unless otherwise noted by the City Forrester.
 - b) Storm water retention areas that are adjacent to public streets shall be landscaped and designed so the trees and shrubbery screen pond areas from view at the street.
 - c) The landscape buffer areas adjacent to 600 South shall comply with tree and shrub specifications in 17.09.020.
9. Exterior lighting, including gas canopy lighting, shall be concealed source, down-cast and shall not illuminate or cast light onto adjacent properties.
 10. No signs are approved with this Design Review Permit. All signage shall be approved and permitted by staff in accordance with the Land Development Code.
 11. No fences are approved with this Design Review Permit. All fences shall be approved and permitted by staff in accordance with the Land Development Code.
 12. All critical lands, as defined in the Logan Land Development Code, shall be identified, and listed on the final plat.
 13. HOA and CC&R's shall be submitted to the City for review and compliance with applicable maintenance and landscaping requirements.
 14. Prior to issuance of a Building Permit, the Director of Community Development shall receive a written memorandum from each of the following departments or agencies indicating that their requirements have been satisfied:
 - a. *Environmental—contact 716-9760*
 1. Residential cart/cans will be provided. Place all carts at or above the minimum separation distance and clear of all overhead obstacles.
 - b. *Water—contact 716-9622*
 1. All landscape irrigation system's fed from Logan City water must have a high hazard rated backflow assembly installed and tested. All backflow assemblies must be tested within 10 days of turning water into them and annually thereafter.
All points of use of water must comply with the 2018 IPC and State of Utah Amendments and the Utah Admin Code 309-305 during and after construction.
 2. Project shall comply with all current plumbing codes, Utah State Amendments and the Utah Division of Drinking Water rules and regulations including, but not limited to, those pertaining to backflow protection and cross connection prevention.
 - c. *Engineering – contact 716-9160*
 1. Provide water shares or in-lieu fee for indoor and outdoor increased demands to the City system. This requirement shall be per City Code and Utah Administrative Rule R509-519-7
 2. Show all existing easements on the preliminary plat and reference the recording information for each on the plat, where non-existent or insufficient, provide a 10' Public Utility Easement along all frontages and perimeter property lines, and provide a 5' Public Utility Easement along each side of all interior property lines.
 3. Provide all necessary cross access easements/agreements for private road and private utilities across all properties.
 4. CC&R's shall include language that addresses the requirement of the HOA to maintain private water lines, private sewer lines, common access and parking areas, and the Storm Water management system, basins, swales, and related infrastructure outside of a dedicated street.
 5. Provide Development Agreement and financial surety of at least 110% of the cost to construct all infrastructure & storm water improvements. Financial assurances shall not expire for a minimum of 2 years from date of City acceptance.
 6. Provide a Geotechnical Report that includes but is not limited to: 1) California Bearing Ratio (CBR) of subgrade of pavement section, 2) Historical high ground water elevation, and 3) Percolation rate of soils at bottom of all storm water retention ponds.

7. There are large areas of the project that appear to be wetland and / or riparian in nature. Developer shall prepare appropriate wetland / riparian area delineation documents sufficient to determine the extent of these areas as defined by City, State, and Federal codes and standards and shall provide sufficient mitigations as required by these codes and standards.

UTILITIES

8. Water lines in 600 S and 1900 W shall be upsized or installed as may be required to satisfy City and State pressure and looping requirements as determined by a water model completed by Logan City.
9. All utilities outside of the public right-of-way shall be private lines and shall be owned, maintained, repaired/replaced by Homeowners Association. All infrastructure shall be installed, maintained, and repaired/replaced in accordance with Logan City Standards.
10. Provide City with private Water Utility agreement for all private water and sewer lines (including fire lines) not located within a Public Right of Way. The agreement shall be recorded with the County Recorder.
11. All lots shall have separate water service and sewer service connections to water distribution and sewer collection systems.
12. Coordinate with the Fire Marshall to ensure sufficient fire hydrants are located in and around the development to meet fire code requirements.
13. All existing utility service lines to development that are not used with the new development shall be capped at the City main line.
14. New local street water lines and sewer lines shall be a minimum of 8 inches in diameter unless modeling indicates larger lines are necessary.

STORMWATER / IRRIGATION

15. Provide storm water detention/retention per Logan City Design standards. This includes the retention of adjacent half street offsite where an existing management system is not established and onsite stormwater. Retention of the 90% storm event is required and shall be provided through the use of Low Impact design methods.
16. Provide a stormwater maintenance agreement for City Review, approval and recordation at County Recorder's Office.
17. Area is greater than 1 acre so compliance with State Storm Water Permit is required. Development shall comply with Logan City design standards for storm water detention/retention. Development shall also provide a sediment and erosion control plan for all construction activities.
18. Maintain the capacity, size, and location of all existing irrigation system infrastructure along and within the project; or where irrigation infrastructure is required to be relocated or changed, improve the infrastructure to the irrigation company standards. The City will require all affected Irrigation companies to provide a signature approval on all final construction plans and final plats.
19. Sufficient information has not been provided to confirm the size requirements of the storm water detention/retention basins. Additional common / open space area may be required to comply with the City's storm water management standards.
20. The minimum diameter of stormdrain piping in a City right of way shall be 15 inches unless a larger size is required to handle irrigation plus storm water design flows.

STREETS

21. The City's gridded street system is identified to extend on every even block alignment. The street south of the 1500 W street identified on this plat is 1580 W. Adjust street names to coincide with streets to the south. Revise the through street (1500 W) to align closer to the 1550 W alignment to preserve the 1600 W gridded street alignment.

22. 600 West is identified as a major arterial on the City's transportation master plan and as such requires a 102' right of way. Dedicate sufficient property to achieve a total 83' of right of way. Preserve an additional 13' of right of way for future roadway improvements and acquisition. Prepare construction plans to build a total pavement width of 48' (5, 12, 14, 12, 5) including curb, gutter, sidewalk, parkstrip.
 23. 1900 W is designated as a gridded street and as such shall be designed and constructed to Logan City's gridded street standards.
 24. 575 S shall remain a minimum 125' from the 600 S / 1900 W intersection as measured from nearest edges.
 25. Pavement cross-sections of all roads shall meet the minimum standards for a minor arterial, collector, and local roads per Logan City Design Standards.
 26. All development accesses shall be in accordance with Logan Design Standards.
 27. Coordinate with Community Development and Fire Marshall to ensure that the number of accesses to the site comply with City standards. Modify current site plan as required.
 28. Where the existing half street or portion thereof is in poor condition in regards to cracking, developer shall reconstruct the pavement cross section out to an area of good condition asphalt. At a minimum 3' of existing asphalt shall be removed and replaced. Provide a trip generation and distribution memo using a land use representative of the types of housing proposed.
- d. Fire – contact 716-9515*
1. Fire hydrants shall be installed within 600 ft of all buildable areas, including to the back of lots, and measured along drivable routes. Include plan indicating distance to fire hydrants in construction plans.
- e. Forestry – contact 716-9749*
1. Park strip trees shall be provided by developer for gold card sign off. *
 2. Species selection must be approved by City Forester prior to planting*
 3. Trees shall be planted at correct depth by International Society of Arboriculture standards. Meaning root flare shall be at final grade level.
 4. Tree stakes shall be loose and only provided when necessary.
 5. Only low growing variety of trees will be permitted under power lines.
 6. 30' tree setback is required on park strip trees located near corner intersections for sight distance. Rex.davis@loganutah.org

RECOMMENDED FINDINGS FOR APPROVAL FOR THE SUBDIVISION PERMIT

The Planning Commission bases its decisions on the following findings supported in the administrative record for this project:

1. The proposed project is compatible with surrounding land uses and will not interfere with the use and enjoyment of adjacent properties because of the conditioned building design, site layout, materials, landscaping, building orientation, heights and setbacks.
2. The Subdivision Permit conforms to the requirements of Title 17 of the Logan Municipal Code.
3. The proposed project provides off-street parking in compliance with the LDC.
4. The project meets the goals and objectives of the NR-6 designation within the Logan General Plan by providing high quality projects designed in way for easy circulation of both pedestrian and vehicles.
5. The proposed project complies with maximum height, density and building design standards and is in conformance with Title 17.
6. The project met the minimum public noticing requirements of the Land Development Code and the Municipal Code.
7. The surrounding streets provide access, utilities and are adequate in size and design to sufficiently handle all traffic modes and infrastructure related to the land use.

This staff report is an analysis of the application based on adopted city documents, standard city development practices, and available information. The report is to be used to review and consider the merits of the application prior to and during the course of the Planning Commission meeting. Additional information may be revealed by participants at the Planning Commission meeting which may modify the staff report and become the Certificate of Decision. The Director of Community Development reserves the right to supplement the material in the report with additional information at the Planning Commission meeting.



APPLICATION FOR PROJECT REVIEW

For Staff Only <input checked="" type="checkbox"/> Planning Commission		<input type="checkbox"/> Land Use Appeal Board		<input type="checkbox"/> Administrative Review	
Date Received Nov. 3	Planner	Zone/Neighborhood NR-6/Woodruff	Scheduled Meeting Date DEC. 15	Application Number PC 22-066	
Type of Application (Check all that apply): <input type="checkbox"/> Design Review <input type="checkbox"/> Conditional Use <input checked="" type="checkbox"/> Subdivision <input type="checkbox"/> Administrative Design Review <input type="checkbox"/> Code Amendment <input type="checkbox"/> Appeal <input type="checkbox"/> Zone Change <input type="checkbox"/> Other					
PROJECT NAME Rivergate					
PROJECT ADDRESS 1900 West & Mendon Road (6th South)				COUNTY PLAT TAX ID # 02-076-0002, 02-076-0008	
AUTHORIZED PROJECT REPRESENTATIVE FOR OWNER Ben Steele, Project Manager				PHONE # 208-559-4016	
MAILING ADDRESS		CITY	STATE	ZIP	
50 East 2500 North, Suite 101, North Logan, Utah 84341					
EMAIL ADDRESS bsteele@visionaryhomes.com					
PROPERTY OWNER OF RECORD Rivergate LLC				PHONE # 208-559-4016	
MAILING ADDRESS		CITY	STATE	ZIP	
50 East 2500 North, Suite 101, North Logan, Utah 84341					
EMAIL ADDRESS bsteele@visionaryhomes.com					
DESCRIBE THE PROPOSED PROJECT AS IT SHOULD BE NOTICED AND PRESENTED (Include as much detail as possible - attach a separate sheet if needed) (See enclosed separate sheet for description)				Total Lot Size (acres) 30.54 acres	
				Size of Proposed New Building (square feet)	
				Number of Proposed New Units/Lots 109 Lots	
I certify that the information contained in this application and all supporting plans are correct and accurate. I also certify that I am authorized to sign all further legal documents and permit on behalf of the property owner.			Signature of Property Owner's Authorized Project Representative 		
I certify that I am the property owner on record of the subject property and that I consent to the submittal of this project. I understand that all further legal documents and permits will be sent to my authorized agent listed above.			Signature of Property Owner 		

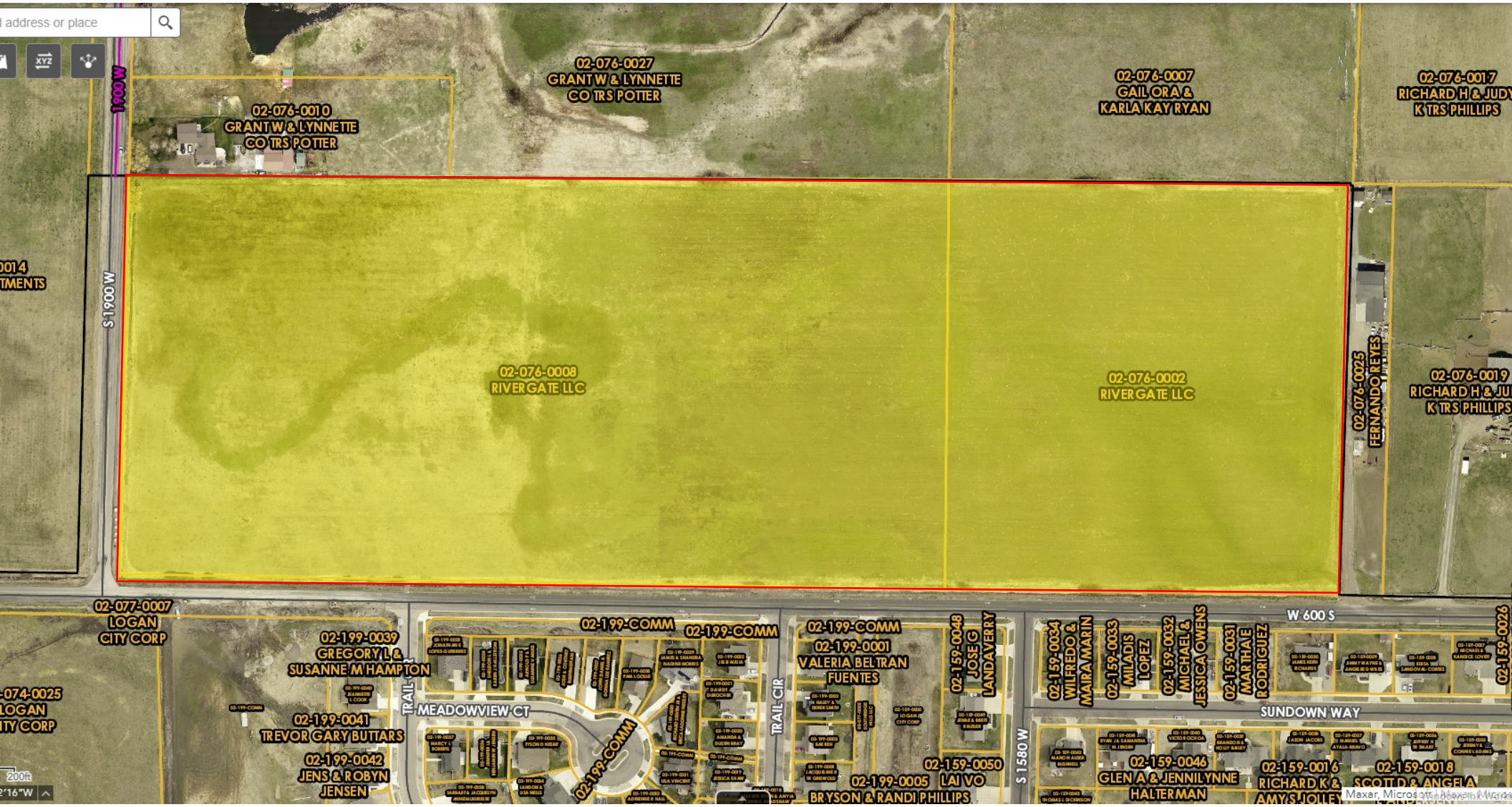
APPLICATION MUST BE ACCURATE AND COMPLETE
NO SITE ACTIVITY MAY OCCUR UNTIL AFTER APPROPRIATE COMMITTEE APPROVAL.

Rivergate Preliminary Plat Application
November 3, 2022

Visionary Homes believes that everyone deserves the opportunity to be a homebuyer and own their own home. After all a home is more than land, concrete, sticks and bricks – its family security, where lifelong memories are made with loved-ones. Our expertise is creating and building an environment where these moments can happen.

Housing is in demand statewide - the Cache Valley being no exception - especially housing that is built with the first home buyer in mind. The purpose of this preliminary plat application is to secure approvals that enable us to provide housing to this much needed clientele.

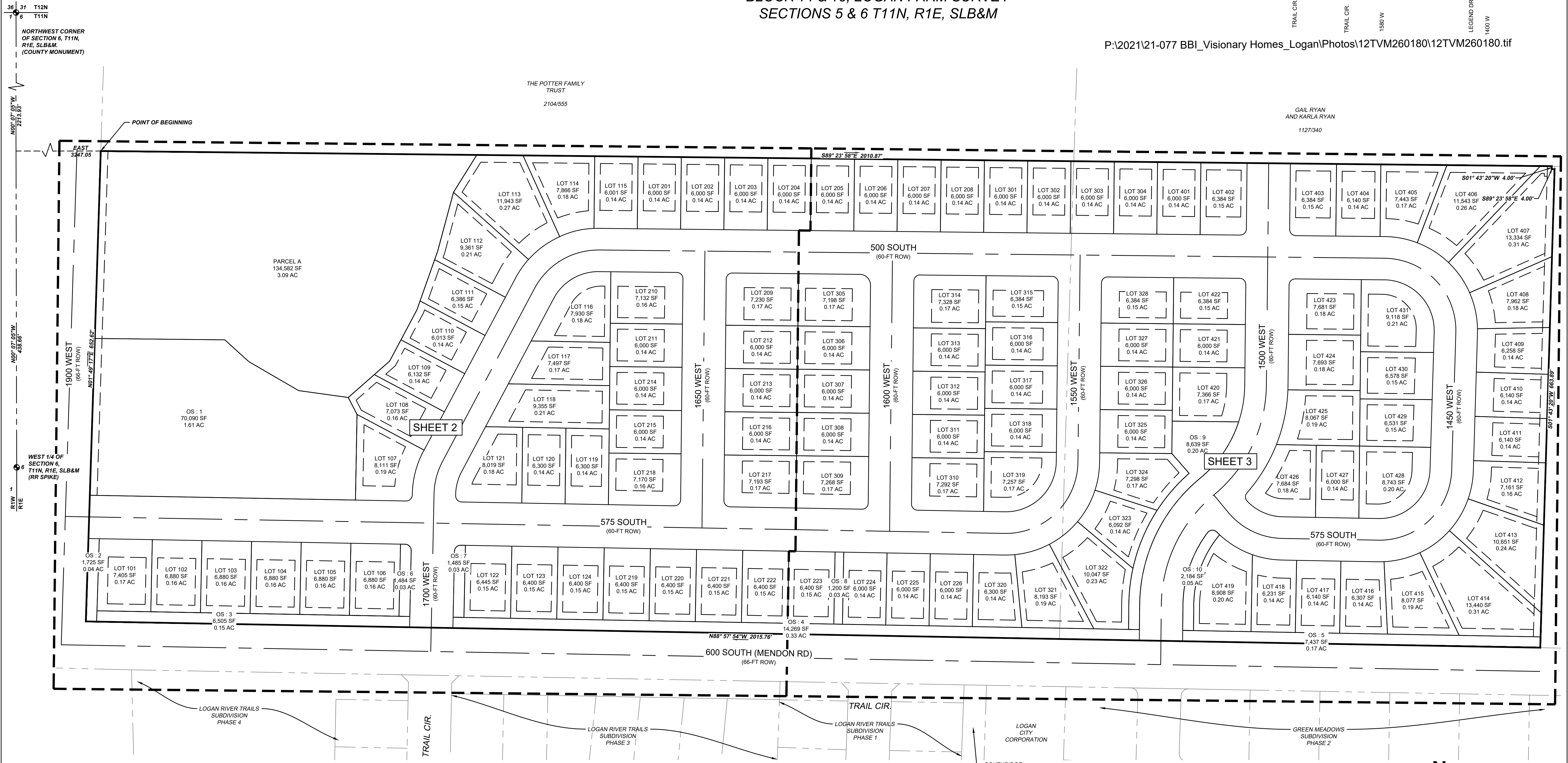
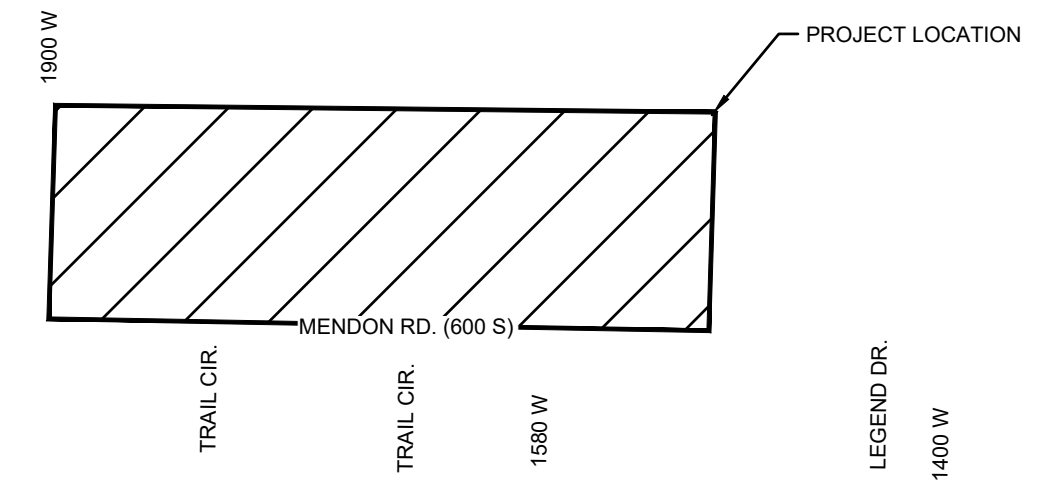
We also desire to continue building a relationship of trust with city staff and officials together with the surrounding community and public at large in working together to develop this property.





**BLOCK 14 & 15, LOGAN FARM SURVEY
SECTIONS 5 & 6 T11N, R1E, SLB&M**

P:\2021\21-077 BBI_Visionary Homes_Logan\Photos\12TVM260180\12TVM260180.tif



1. DEVELOPER:

VISIONARY HOMES/RIVERGATE, LLC.
50 EAST 2500 NORTH
NORTH LOGAN, UTAH 84341
2. CIVIL ENGINEER/SURVEYOR:

CIVIL SOLUTIONS GROUP, INC
MICHAEL TAYLOR, PE
CURTIS BROWN, PLS
498 WEST 100 SOUTH
PROVIDENCE, UTAH 84322
435-213-3762

THE WEST 1/2 OF LOT 1 AND ALL OF LOT 2, BLOCK 14, LOGAN FARM SURVEY, LOCATED IN THE NE1/4 & SE1/4 OF SECTION 6, TOWNSHIP 11 NORTH, RANGE 1 EAST, S.L.B. & M. LOGAN, UTAH, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A REBAR & CAP FOUND AT THE NORTHWEST CORNER OF LOT 2, BLOCK 14, LOGAN FARM SURVEY, UTAH, AND GOING ALONG THE SECTION LINE 438.68 FEET AND EAST 32.474 FEET TO THE WEST 1/4 CORNER OF SECTION 6, T11N, R1E, S.L.B. & M., SAID POINT IS ALSO DESCRIBED AS BEING N42°42'58" W, 2.266 68 FEET ALONG THE MONUMENT LINE BETWEEN LC-303 & LC-315 AND S47°17'02" W, 1.342 82 FEET ALONG LOGAN CITY GIS MONUMENT LC-303 TO POINT N89°23'58" ALONG THE NORTH LINE OF SAID LOTS AND A 1/4 SECTION FENCE LINE 2,010.87 FEET TO POINT N89°23'58" 4.00 FEET TO THE WEST 1/4 CORNER OF LOT 2, BLOCK 14, THENCE S20°12'40" W, 1.400 FEET THENCE N89°23'58" 4.00 FEET TO THE EASTERLY LINE OF THE WEST 1/2 OF SAID LOT 1; THENCE S1°42'30" W, 142.00 FEET ALONG SAID EASTERLY LINE 663.89 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF 800 SOUTH AT THE SOUTH LINE OF SAID BLOCK 14; THENCE N88°57'54" W, 142.00 FEET ALONG THE SOUTH LINE OF SAID BLOCK 14 TO THE WEST 1/4 CORNER OF LOT 2, BLOCK 14; THENCE N1°49'17" E, 142.00 FEET ALONG THE WEST LINE OF SAID LOT 2 652.62 FEET TO THE POINT OF BEGINNING.

CONTAINS: 30.54+/- ACRES

1. CURRENT ZONE: NR-6
2. ALL SETBACKS AND PUES TO CONFORM TO CURRENT CITY STANDARDS.
3. ALL PROPOSED PUBLIC RIGHT OF WAYS TO BE DEDICATED TO LOCAN CITY.
AREA: 8.29+/- ACRES
4. OPEN SPACE PARCELS: "OS 1" "OS 10" TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOA.
AREA: 2.64+/- ACRES
5. "PARCEL A" TO BE PRIVATELY OWNED AND MAINTAINED BY HOA OR RETAINED AND MAINTAINED BY VISIONARY HOMES/RIVERCRAFT LLC.
AREA: 1.09+/- ACRES
6. THE ENTIRETY OF PARCELS "OS 2" "OS 5" WILL ALSO BE ENCUMBERED BY A BLANKET EASEMENT TO BE GRANTED TO SOUTHWEST FIELDS IRRIGATION COMPANY.

SUBDIVISION BOUNDARY	
SHEET OUTLINE	
PROPOSED PROPERTY LINE	
SETBACK LINE	
EXISTING PROPERTY LINE	
EXISTING ROW CENTERLINE	
PROPOSED ROW CENTERLINE	



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF CIVIL SOLUTIONS GROUP, INC. WITHOUT THE WRITTEN PERMISSION, THE OWNERS AND ENGINEERS OF CIVIL SOLUTIONS GROUP, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.

civilsolutionsgroupinc.



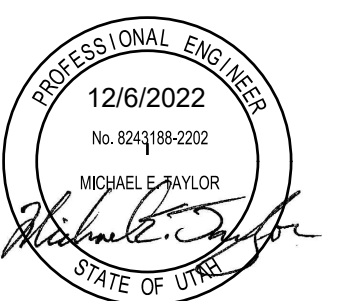
CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net

RIVERGATE SUBDIVISION
PRELIMINARY PLAT

PRELIMINARY PLAT
1900 WEST & MENDON RD.
LOGAN, UT, 84321

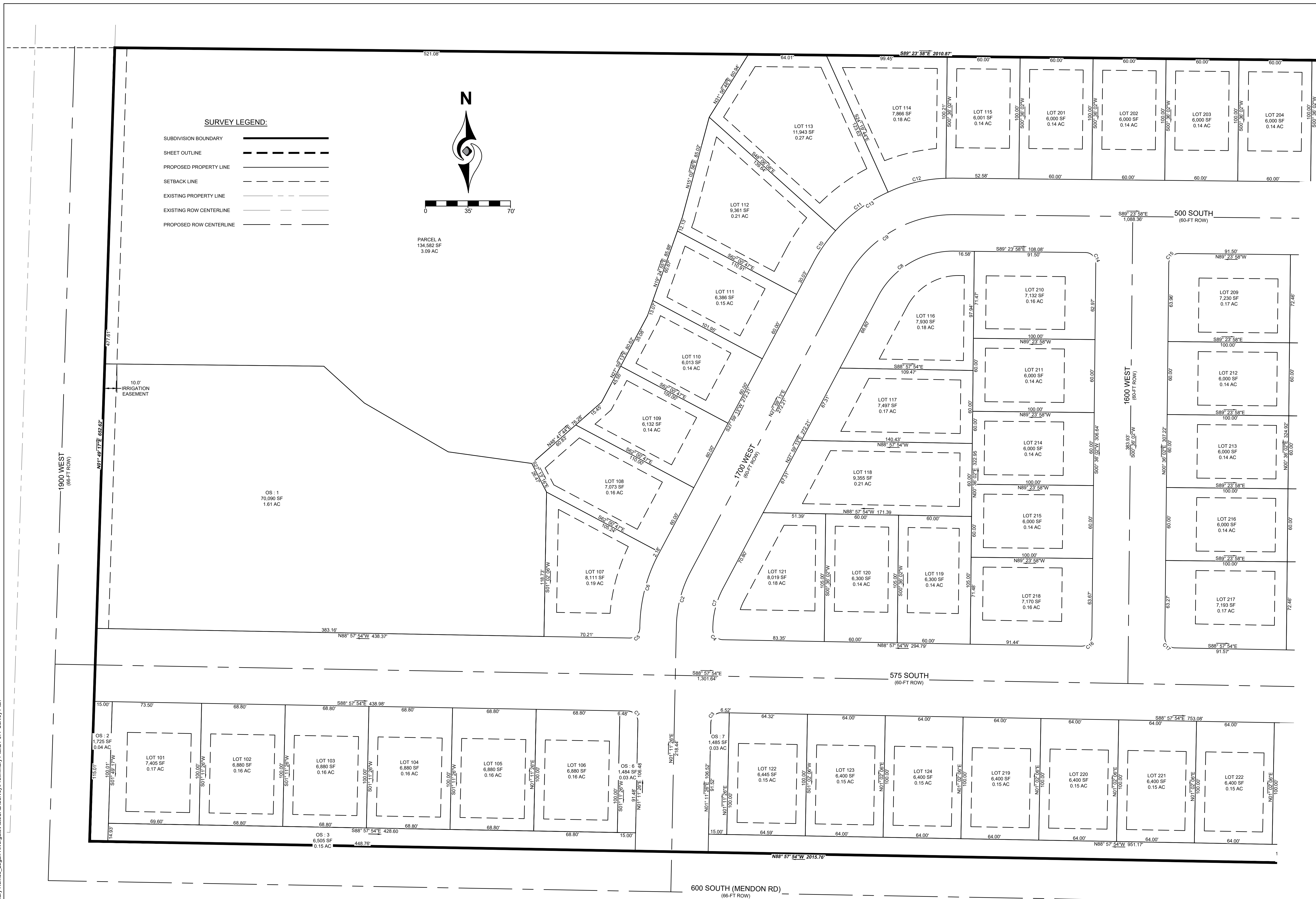
[illegible]

PROJECT #: 21-077
DRAWN BY: C. SCHAFFNER
PROJECT MANAGER: M. TAYLOR
ISSUED: 12/6/2022



SURVEY OVERVIEW

1 OF 8



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE ONE SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF CIVIL SOLUTIONS GROUP, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.



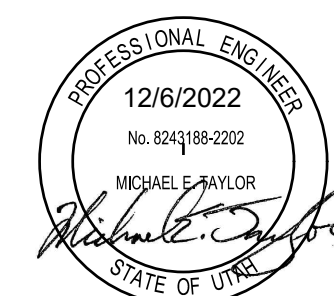
CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net

RIVERGATE SUBDIVISION

PRELIMINARY PLAT
1900 WEST & MENDON RD.
LOGAN, UT, 84321

[illegible]

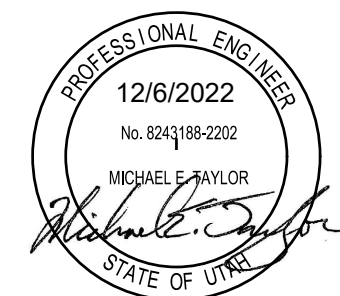
PROJECT #: 21-077
DRAWN BY: C. SCHAFFNER
PROJECT MANAGER: M. TAYLOR
ISSUED: 12/6/2022



PRELIMINARY SURVEY PLAN

[illegible]

PROJECT #: 21-077
DRAWN BY: C. SCHAFFNER
PROJECT MANAGER: M. TAYLOR
ISSUED: 12/6/2022



PRELIMINARY SURVEY PLAN

CURVE TABLE				
CURVE #	RADIUS	DELTA	ARC LENGTH	CHORD
C1	8.50	90°09'20"	13.37	N43°53'14" 12.04
C2	100.00	26°47'47"	46.77	N14°35'19"E 46.34
C3	8.50	89°50'40"	13.33	S46°06'46"W 12.00
C4	8.50	88°26'53"	13.12	S44°44'28"E 11.86
C5	8.50	90°41'12"	13.45	N45°41'28"E 12.09
C6	130.00	27°38'27"	62.72	N14°09'59"E 62.11
C7	70.00	28°30'14"	34.82	S13°44'06"W 34.47
C8	70.00	62°36'49"	76.50	S59°17'37"W 72.75
C9	100.00	62°36'49"	109.28	N59°17'37"E 103.92
C10	130.00	13°54'40"	31.56	N34°56'32"E 31.49
C11	130.00	23°46'24"	56.94	N53°47'04"E 53.55
C12	116.07	24°17'44"	49.22	N76°30'02"E 48.85
C13	130.00	59°20'34"	134.64	N57°39'30"E 128.71
C14	8.50	90°00'00"	13.35	N44°23'58"W 12.02
C15	8.50	90°00'00"	13.35	S45°36'02"W 12.02
C16	8.50	90°26'04"	13.42	N45°49'04"E 12.07
C17	8.50	89°33'56"	13.29	S44°10'56"E 11.98
C18	8.50	90°26'04"	13.42	N45°49'04"E 12.07
C19	8.50	89°33'56"	13.29	S44°10'56"E 11.98
C20	15.00	90°00'00"	23.56	N44°23'58"W 21.21
C21	8.50	90°00'00"	13.35	S45°36'02"W 12.02
C22	8.50	90°00'00"	13.35	N44°23'58"W 12.02
C23	8.50	90°00'00"	13.35	S45°36'02"W 12.02
C24	70.00	90°26'04"	110.49	N45°49'04"E 99.37
C25	130.00	22°10'44"	50.32	S73°22'45"W 50.01
C26	130.00	22°10'44"	50.32	S51°12'00"W 50.01
C27	130.00	22°10'44"	50.32	S29°01'16"W 50.01
C28	130.00	17°19'52"	39.32	S9°15'58"W 39.17
C29	100.00	90°26'04"	157.84	N45°49'04"E 141.96
C30	130.00	6°33'59"	14.90	S67°45'06"W 14.89
C31	130.00	90°26'04"	205.19	N45°49'04"E 184.54
C32	8.50	90°00'00"	13.35	N45°36'02"E 12.02
C33	8.50	90°00'00"	13.35	S44°23'58"E 12.02
C34	8.50	90°00'00"	13.35	N44°23'58"W 12.02
C35	8.50	90°00'00"	13.35	S45°36'02"W 12.02
C36	70.00	91°07'18"	111.33	N43°50'19"W 99.96
C37	100.00	91°07'18"	159.04	S43°50'19"E 142.80

CURVE TABLE				
CURVE #	RADIUS	DELTA	ARC LENGTH	CHORD
C38	130.00	20'20"16"	46.14	S79°13'50"E 45.90
C39	130.00	22°41'47"	51.50	S57°42'48"E 51.16
C40	130.00	22°41'47"	51.50	S35°01'01"E 51.16
C41	130.00	22°41'47"	51.50	S12°19'13"E 51.16
C42	130.00	2°21'40"	6.11	S20°23'30"W 6.16
C43	130.00	91°07'18"	206.75	S43°50'19"E 185.64
C44	70.00	89°18'46"	109.12	N46°22'43"E 98.40
C45	100.00	89°18'46"	155.88	S46°22'43"W 140.57
C46	130.00	17°27'33"	39.61	S10°27'06"W 39.46
C47	130.00	22°41'47"	51.50	S30°31'46"W 51.16
C48	130.00	22°41'47"	51.50	S53°13'34"W 51.16
C49	130.00	22°41'47"	51.50	S75°55'21"W 51.16
C50	130.00	3°45'51"	8.54	S89°09'10"W 8.54
C51	130.00	89°18'46"	202.64	S46°22'43"E 182.74
C52	130.00	18°26'44"	41.93	N79°43'32"E 41.75
C53	130.00	22°56'43"	52.06	N59°00'49"W 51.71
C54	130.00	2°24'42"	5.47	N45°42'07"W 5.47
C55	8.50	98°35'32"	14.63	S86°12'29"W 12.89
C56	170.00	36°18'40"	107.74	S18°45'22"W 105.94
C57	70.00	45°22'04"	55.43	S66°16'52"E 53.99
C58	100.00	49°28'31"	86.35	N64°13'39"W 83.69
C59	8.50	84°46'45"	12.98	N51°12'27"E 11.48
C60	130.00	44°28'08"	100.90	S66°43'02"E 98.36
C61	200.00	49°54'35"	174.22	S25°33'19"W 168.76
C62	230.00	49°54'35"	200.35	S25°33'19"W 194.08
C63	245.00	9°31'13"	40.71	N5°21'39"E 40.66
C64	245.00	19°33'03"	83.60	N22°10'01"E 83.20
C65	245.00	15°52'57"	67.92	N40°51'12"E 67.70
C66	245.00	48°11'38"	208.08	N24°41'51"E 200.06
C67	200.00	49°54'35"	174.22	S25°33'19"W 168.76
C68	170.00	32°22'00"	96.03	S34°19'37"W 94.76
C69	170.00	17°32'34"	52.05	N9°22'19"E 51.85
C70	170.00	49°54'35"	148.09	S25°33'19"W 143.45
C71	230.00	19°38'32"	78.85	S31°21'40"W 78.46
C72	230.00	19°24'36"	77.92	S11°50'06"W 77.54
C73	230.00	1°31'46"	6.14	S1°21'55"W 6.14
C74	230.00	40°34'54"	162.90	N20°53'29"E 159.52

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF CIVIL SOLUTIONS GROUP, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.



CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net

RIVERGATE SUBDIVISION

PRELIMINARY PLAT
1900 WEST & MENDON RD.
LOGAN, UT, 84321

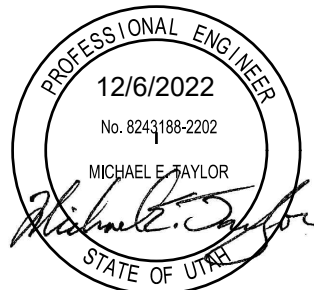
[illegible]

PROJECT #: 21-077

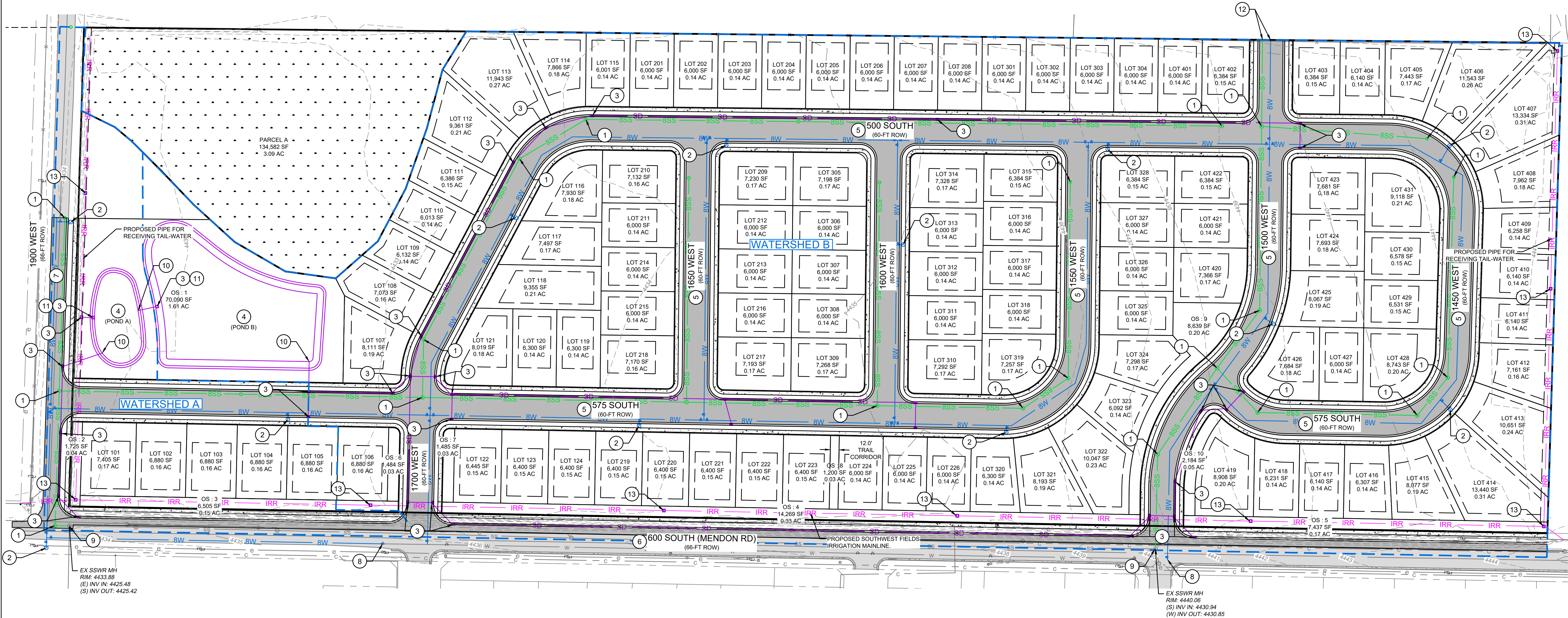
DRAWN BY: C. SCHAFFNER

PROJECT MANAGER: M. TAYLOR

ISSUED: 12/6/2022



CURVE TABLES



GENERAL NOTES:

- CONSTRUCTION TO BE COMPLETED IN PHASES
- ALL EXISTING GRADE IS A CLASS 1 SLOPE
- THERE ARE NO KNOWN ACTIVE OR ABANDONED WELLS ON OR WITHIN 100' OF THE PROPERTY.
- THERE ARE NO EXISTING DITCHES, CANALS, NATURAL DRAINAGE CHANNELS, OPEN WATERWAYS, OR PROPOSED ALIGNMENTS ON OR WITHIN 100' OF THE TRACT.
- DRIVEWAY LOCATIONS, WIDTHS AND SECTIONS FOR ALL LOTS SHALL CONFORM TO CITY STANDARDS.
- ALL SEWER LINES WILL BE A MINIMUM 8FT DEEP THROUGHOUT THE PROJECT.

UTILITY GENERAL NOTES:

- ALL LOTS TO BE SERVICED WITH A 1" Ø CULINARY WATER LATERAL & METER & A 4" Ø SANITARY SEWER LATERAL.

① SITE SHEET KEY NOTES:

- SEWER MANHOLE
- FIRE HYDRANT
- STORM WATER STRUCTURE
- STORM WATER POND
- 86'-FT ROW CROSS-SECTION (1/SHEET 7)
- 600 SOUTH ROW CROSS-SECTION (2/SHEET 7)
- 1900 WEST ROW CROSS-SECTION (3/SHEET 7)
- CONNECTION TO EXISTING WATER LINE
- CONNECTION TO EXISTING SEWER MANHOLE
- POND INLET
- POND OUTLET
- UTILITY STUB FOR FUTURE USE
- IRRIGATION STRUCTURE

STORMWATER NARRATIVE:

THIS SITE SHALL BE DESIGNED TO DETAIN THE CACHE VALLEY 100-YR 24-HR STORM, AND RETAIN THE CACHE VALLEY 90TH PERCENTILE STORM OF 0.60-IN. NO RETENTION WILL BE PROVIDED IN THE EVENT THE SITE'S PERCOLATION RATES ARE LESS THAN 120 MIN. STORMWATER WILL BE RELEASED AT THE SITE'S PRE-DEVELOPMENT RUNOFF RATE OF 2.72 CFS ONCE THE RETENTION VOLUME HAS BEEN ACHIEVED. THIS SITE SHALL CONFORM TO ALL STANDARDS OUTLINED IN THE CACHE VALLEY STORMWATER DESIGN STANDARDS. SEE SHEET 6 FOR STORMWATER CALCULATIONS.

ALL RUNOFF WILL BE CONVEYED AND STORED IN TWO STORMWATER PONDS. POND B WILL BE SIZED TO STORE THE MAJORITY OF THE SITE. SEE ABOVE FOR THE ANTICIPATED WATERSHED B. THIS POND WILL BE APPROXIMATELY 3+/- FT. POND A IS ANTICIPATED TO BE A SHALLOW (1+/- FT) POND AND WILL BE SIZED TO STORE THE REMAINING RUNOFF. SEE ABOVE FOR THE ANTICIPATED WATERSHED A. STORMWATER WILL DISCHARGE FROM POND A, INTO A PROPOSED IRRIGATION LINE LOCATED BEHIND THE BACK OF WALK OF 1900 WEST (SEE ABOVE) THAT IS TO BE INSTALLED IN THE SCOPE OF THIS PROJECT.

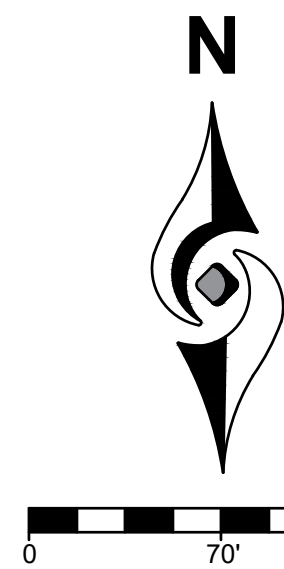
POND A:
TOTAL REQUIRED DETENTION VOLUME: 5,980 CF
TOTAL REQUIRED RETENTION VOLUME: 6,650 CF

POND B:
TOTAL REQUIRED DETENTION VOLUME: 103,706 CF
TOTAL REQUIRED RETENTION VOLUME: 91,579 CF

ASSUMPTIONS:
• LOTS WILL INCLUDE A 2,000 SF HOME AND A 20'x25' DRIVEWAY

LEGEND:

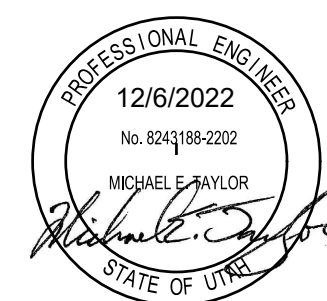
- EXISTING ASPHALT
- PROPOSED ASPHALT
- SANITARY SEWER LINE
- STORM DRAIN LINE
- CULINARY WATER LINE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- STORM DRAIN BOX
- STORM WATER CATCH BASIN
- SEWER MANHOLE
- WATERSHED BOUNDARY

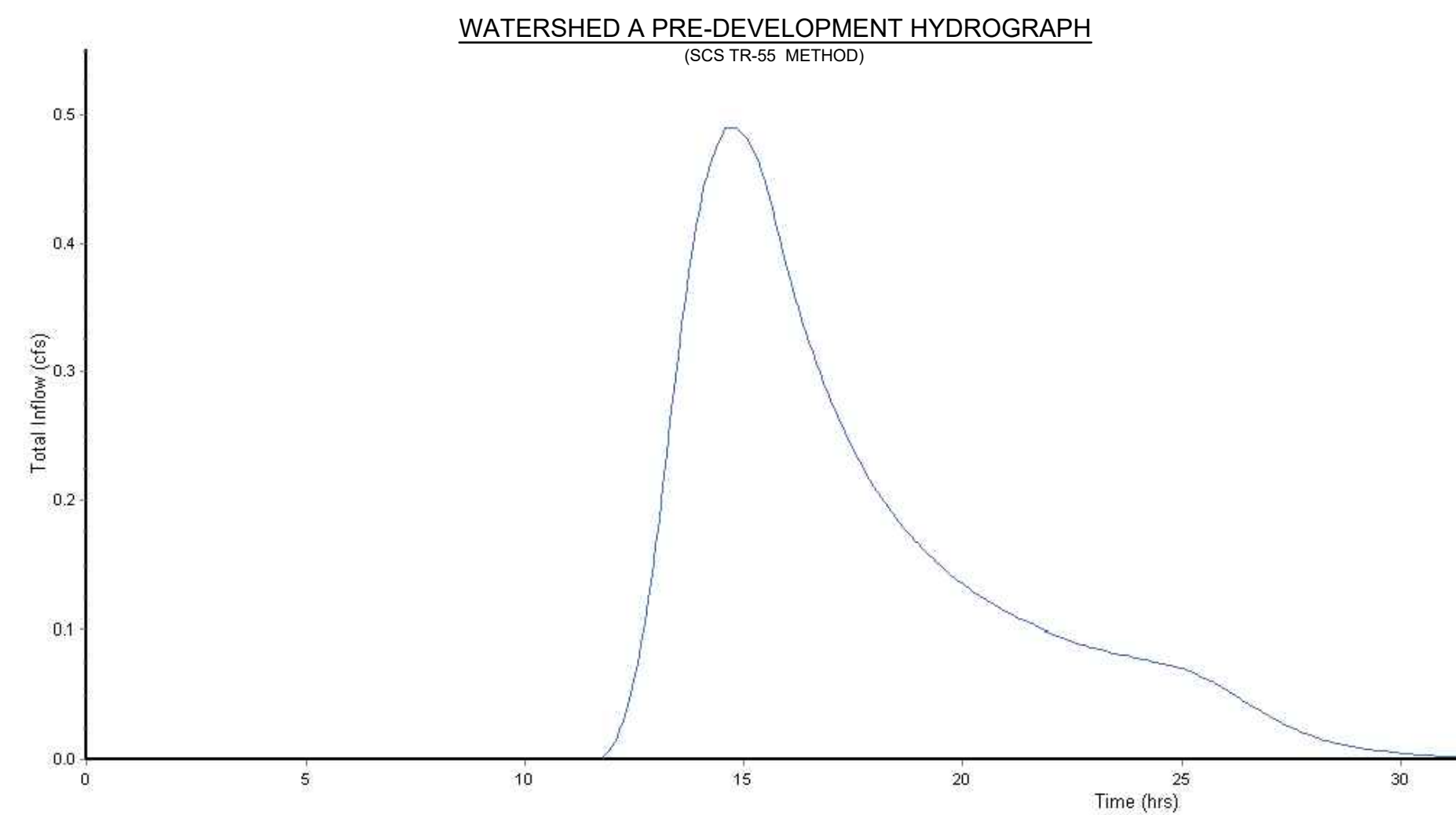


THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF CIVIL SOLUTIONS GROUP, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.

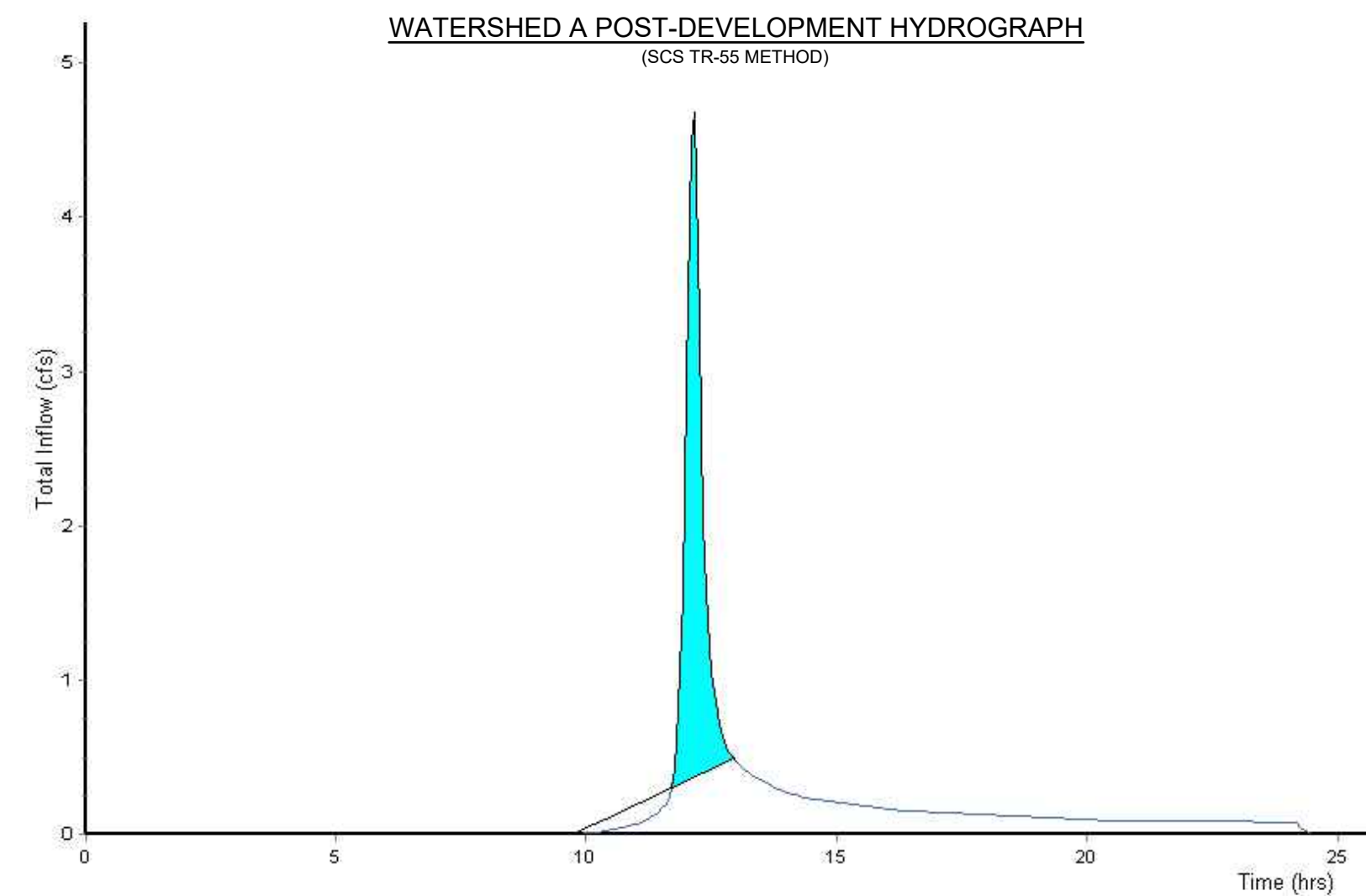
MARK:	DATE:	DESCRIPTION:

PROJECT #: 21-077
DRAWN BY: C. SCHAFFNER
PROJECT MANAGER: M. TAYLOR
ISSUED: 12/6/2022





Time period		Total Inflow Summary Table	
From:	06/12/2013, 12:00:00 AM	Element ID	Out-Pre
To:	06/14/2013, 12:00:00 AM	Maximum Total Inflow (cfs)	0.49
Thresholds:		Minimum Total Inflow (cfs)	0.00
Exceedance:	0	Event Mean Total Inflow (cfs)	0.06
Deficit:	0	Duration of Exceedances (hrs)	N/A
		Duration of Deficits (hrs)	N/A
Detention storage:		Number of Exceedances	N/A
		Number of Deficits	N/A
Max flow:	0	Volume of Exceedance (ft³)	N/A
		Volume of Deficit (ft³)	N/A
		Total Inflow Volume (ft³)	10199.8
		Detention Storage (ft³)	N/A



RIVERGATE - WATERSHED A STORMWATER CALCULATIONS

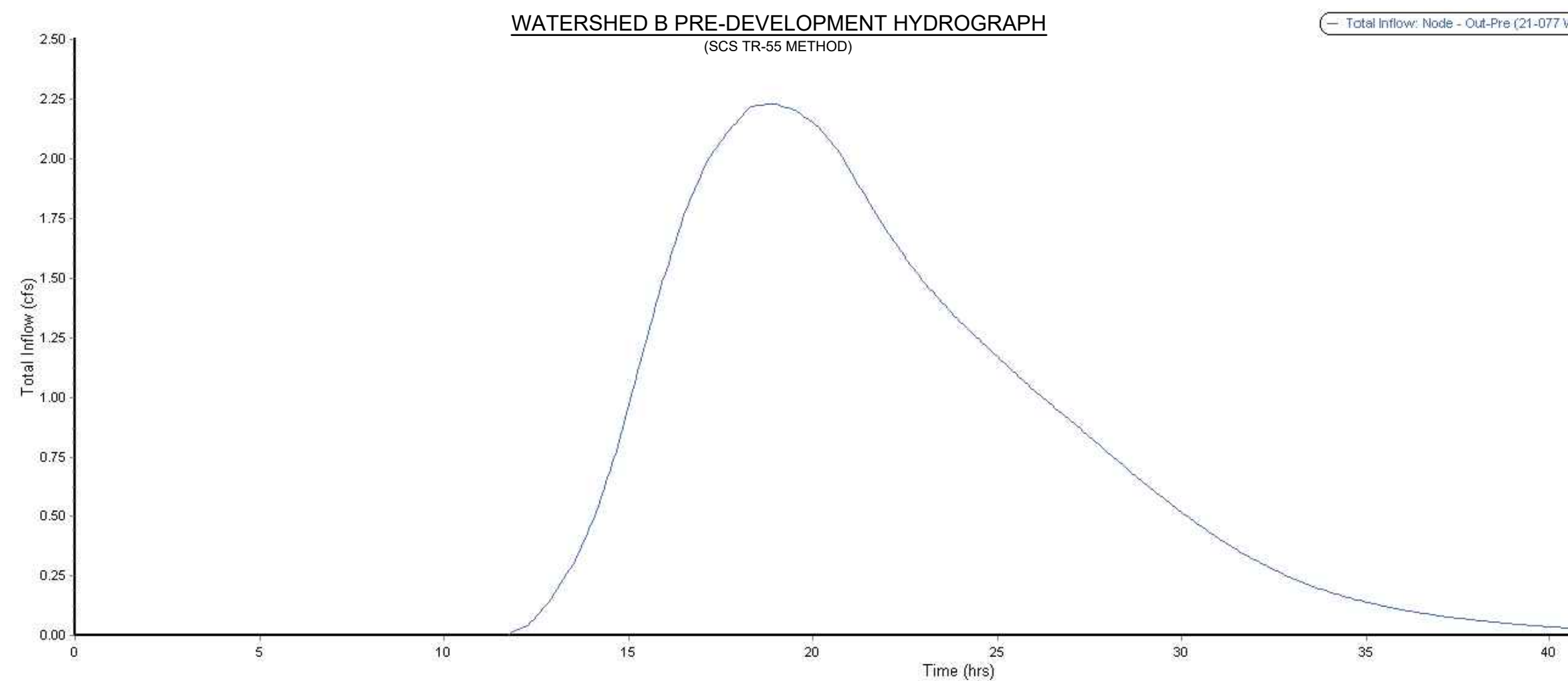
Description	Area (sq ft)	Area (ac)	CN (Group C)	(SubArea / TotalArea)*CN
Impervious	34,656	0.80	98	26
Pervious	98,347	2.26	74	55
Total Area:	133,003	3.05	80	

Pre Development (Pasture, grassland, or range; good):	133,003	3.05	78.26
---	---------	------	-------

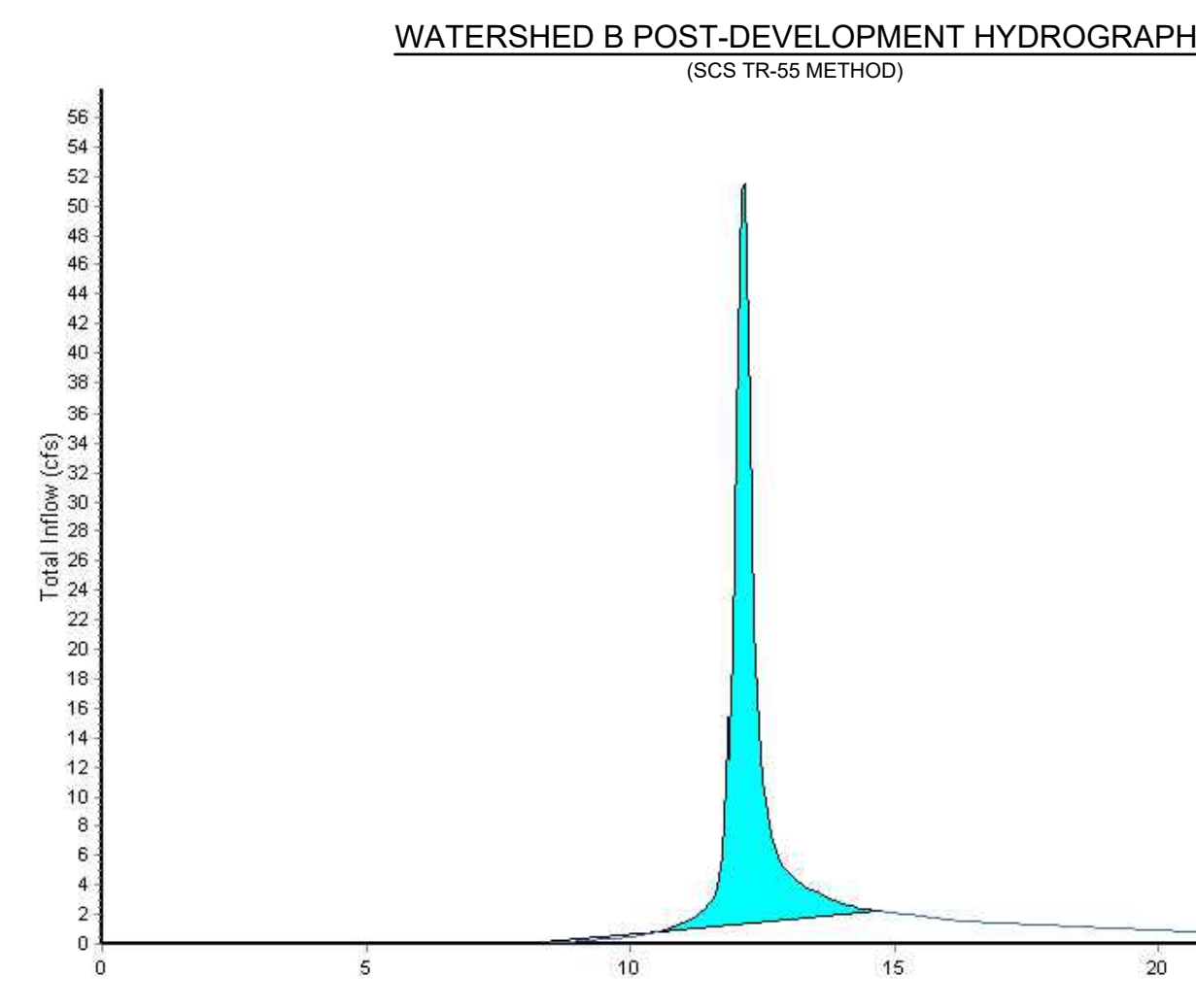
90th-Percentile Storm Volume (0.60-inches): 6,650 cu-ft ← REQUIRED RETENTION STORAGE VOLUME

Initial Abstraction		0.49	inches
for pre dev		0.56	inches
Precipitation (10 Yr)	24 hour storm	2.04	inches
Precipitation (25 Yr)	24 hour storm	2.41	inches
Precipitation (100 Yr)	24 hour storm	3.02	inches
Direct Runoff (10 Yr)	24 hour storm	0.60	total runoff depth
for pre dev (10 Yr)	24 hour storm	0.52	total runoff depth
Direct Runoff (25 Yr)	24 hour storm	0.84	total runoff depth
for pre dev (25 Yr)	24 hour storm	0.74	total runoff depth
Direct Runoff (100 Yr)	24 hour storm	1.28	total runoff depth
for pre dev (100 Yr)	24 hour storm	1.16	total runoff depth

Post Development				
10-Year Direct Runoff	0.15	acre-ft	6,625	ft3
25-Year Direct Runoff	0.21	acre-ft	9,311	ft3
100-Year Direct Runoff	0.33	acre-ft	14,198	ft3
Pre-Development				
10-Year Direct Runoff	0.13	acre-ft	5,730	ft3
25-Year Direct Runoff	0.19	acre-ft	8,228	ft3
100-Year Direct Runoff	0.29	acre-ft	12,841	ft3



Total Inflow Summary Table		
Time period	Element ID	Out-Pre
From: 06/12/2013, 12:00:00 AM	Maximum Total Inflow (cfs)	2.23
To: 06/14/2013, 12:00:00 AM	Minimum Total Inflow (cfs)	0.00
Thresholds:	Event Mean Total Inflow (cfs)	0.52
Exceedance: 0	Duration of Exceedances (hrs)	N/A
Deficit: 0	Duration of Deficits (hrs)	N/A
Detention storage	Number of Exceedances	N/A
Max flow: 0	Number of Deficits	N/A
	Volume of Exceedance (ft³)	N/A
	Volume of Deficit (ft³)	N/A
	Total Inflow Volume (ft³)	89542.71
	Detention Storage (ft³)	N/A



Time period		Element ID	Out-Post
From:	06/12/2013, 12:00:00 AM	Maximum Total Inflow (cfs)	1.55
To:	06/14/2013, 12:00:00 AM	Minimum Total Inflow (cfs)	0.00
		Event Mean Total Inflow (cfs)	0.91
Thresholds		Duration of Exceedances (hrs)	N/A
Exceedance	0	Duration of Deficits (hrs)	N/A
Deficit	0	Number of Exceedances	N/A
		Number of Deficits	N/A
Detention storage		Volume of Exceedance (ft³)	N/A
Max. flow:	2.23	Volume of Deficit (ft³)	N/A
		Total Inflow Volume (ft³)	57,143.68
		Detention Storage (ft³)	915,875.85 ← REQUIRED DETENTION STORAGE VOLUME

RIVERGATE - WATERSHED B STORMWATER CALCULATIONS

Description	Area (sq ft)	Area (ac)	CN (Group C)	(SubArea / TotalArea)*CN
Impervious	543,411	12.48	98	46
Pervious	623,693	14.32	74	40
Total Area:	1,167,104	26.79	85	

Pre Development (Pasture, grassland, or range; good):	1,167,104	26.79	78.26
---	-----------	-------	-------

90th-Percentile Storm Volume (0.60-inches): 58,355 cu-ft ← REQUIRED RETENTION STORAGE VOLUME

Initial Abstraction		0.35	inches
for pre dev		0.56	inches
Precipitation (10 Yr)	24 hour storm	2.04	inches
Precipitation (25 Yr)	24 hour storm	2.41	inches
Precipitation (100 Yr)	24 hour storm	3.02	inches
Direct Runoff (10 Yr)	24 hour storm	0.83	total runoff depth
for pre dev (10 Yr)	24 hour storm	0.52	total runoff depth
Direct Runoff (25 Yr)	24 hour storm	1.12	total runoff depth
for pre dev (25 Yr)	24 hour storm	0.74	total runoff depth
Direct Runoff (100 Yr)	24 hour storm	1.62	total runoff depth
for pre dev (100 Yr)	24 hour storm	1.16	total runoff depth

Post Development				
10-Year Direct Runoff	1.86	acre-ft	81,107	ft3
25-Year Direct Runoff	2.50	acre-ft	108,740	ft3
100-Year Direct Runoff	3.61	acre-ft	157,355	ft3
Pre-Development				
10-Year Direct Runoff	1.15	acre-ft	50,280	ft3
25-Year Direct Runoff	1.66	acre-ft	72,201	ft3
100-Year Direct Runoff	2.59	acre-ft	112,676	ft3

civilsolutionsgroup inc.

CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net

RIVERGATE SUBDIVISION
PRELIMINARY PLAT
1900 WEST & MENDON RD.
LOGAN, UT, 84321

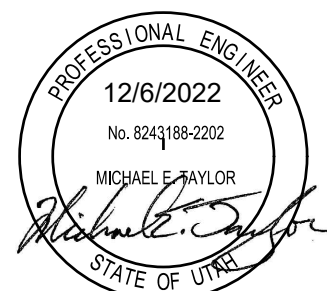
[illegible]

PROJECT #: 21-077

DRAWN BY: C. SCHAFFNER

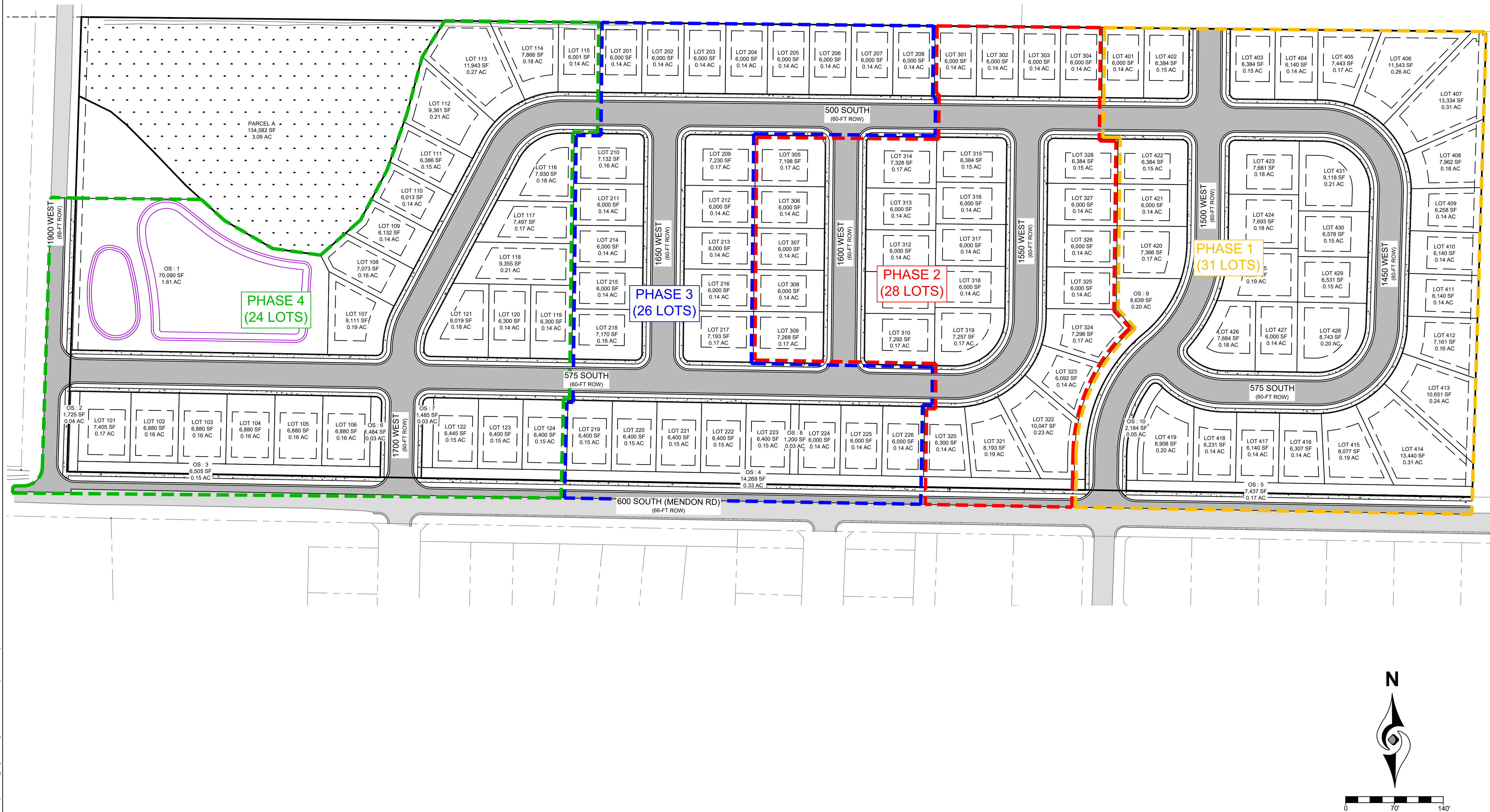
PROJECT MANAGER: M. TAYLOR

ISSUED: 12/6/2022



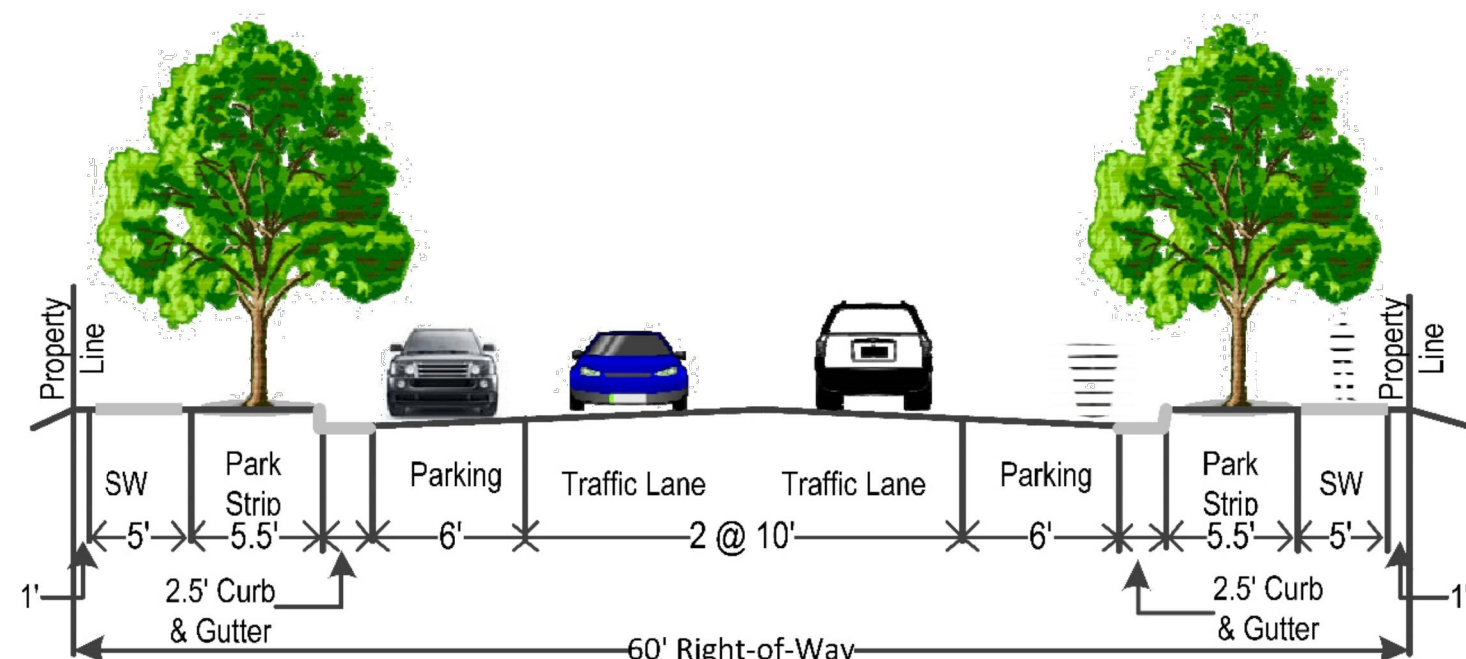
STORMWATER CALCULATIONS

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION. THE OWNER AND ENGINEERS OF CIVIL SOLUTIONS GROUP SHALL DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" x 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.

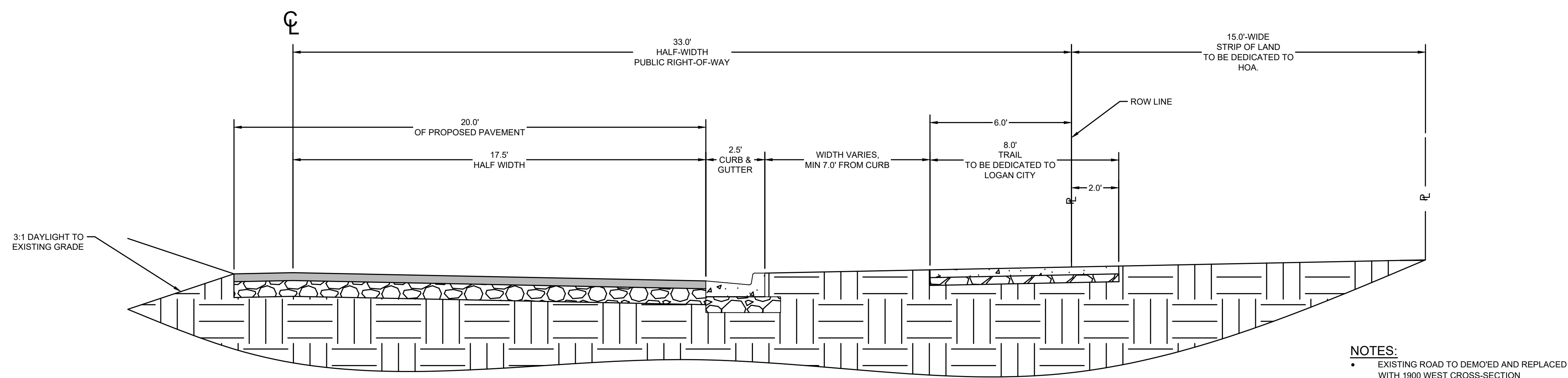


THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION, IN WRITING, FROM CIVIL SOLUTIONS GROUP, INC. CIVIL SOLUTIONS GROUP, INC. DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PRODUCED IN COLOR AND SHOULD BE PLOTTED AS SUCH.

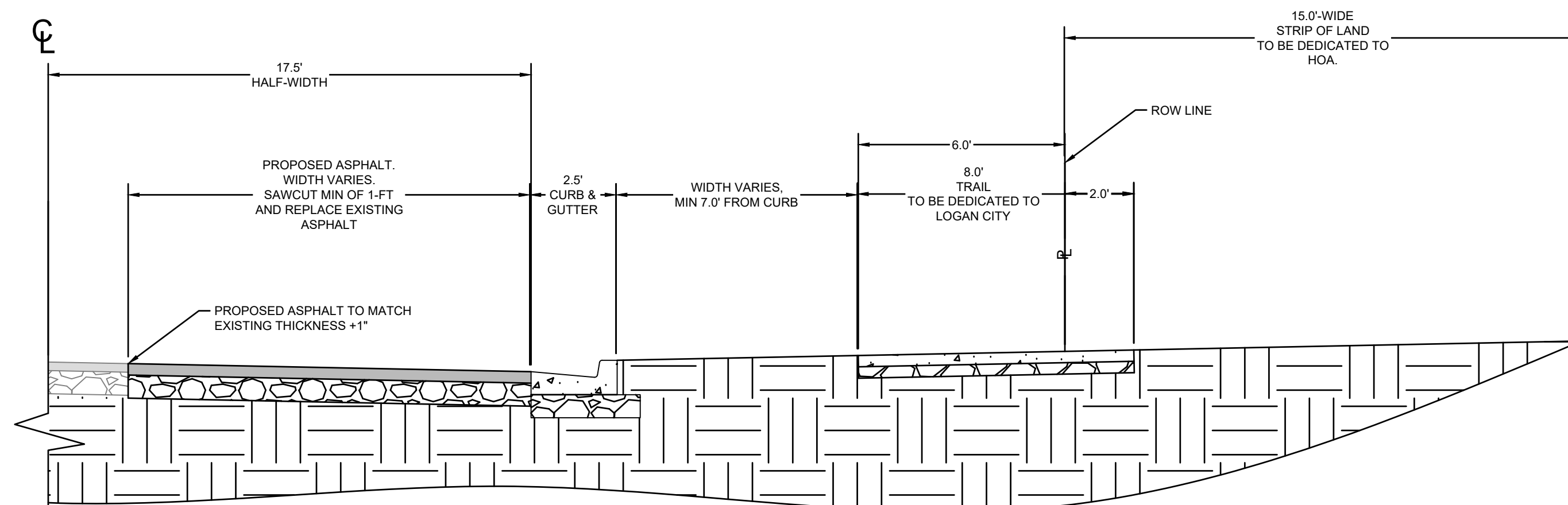
- < 2000 Vehicles Per Day
- 25 mph Design Speed



1. Striped bike lane – Add 5' each side
2. Buffered bike lane – Add 7' each side
3. Island – Add 14' to Center



PROPOSED ROW WIDTH 66-FT



PROPOSED ROW WIDTH 66-FT

ROW Width	Pavement Width	Number of Lanes	Design Speed	Pavement	Vehicle Design	Stopping Sight Distance	Horizontal Alignment & Radius	Vertical Curve Min "K" Sag/Crest Requirement	Grades
60	32	2	25	See minimum Pavement Section Table.	Passenger, School Buses, Delivery Trucks	200	200	26/12	0.4 - 10

Intersection Sight Distance	Minimum Signalized Intersection Spacing	Minimum Full Movement Access Spacing	Corner Curb Radius	Minimum Un-signalized Full Movement Access Spacing (ft.)**	Minimum Right In/Right-off Access Spacing (ft.)**	Residential Driveways Permitted
280	N/A	125	13-25	N/A	N/A	Yes

**Distances to be measured from center of driveway to center of driveway

RIVERGATE SUBDIVISION
PRELIMINARY PLAT
1900 WEST & MENDON RD.
LOGAN, UT, 84321

[illegible]

PROJECT #: 21-077
DRAWN BY: C. SCHAFFNER
PROJECT MANAGER: M. TAYLOR
ISSUED: 12/6/2022

ROW
CROSS-
SECTIONS

8 OF 8

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF CIVIL SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY OTHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF CIVIL SOLUTIONS GROUP, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT. THESE PLANS ARE DRAWN TO SCALE WHEN PLOTTED ON A 24" X 36" SHEET OF PAPER. THESE PLANS ARE PROVIDED IN COLOR AND SHALL BE IN PICTORIAL FORM AS SUCH.



CACHE VALLEY | P: 435.213.3762
SALT LAKE | P: 801.216.3192
UTAH VALLEY | P: 801.874.1432
info@civilsolutionsgroup.net
www.civilsolutionsgroup.net



Legend

— City Limits

Wetlands 2022

■ Freshwater Emergent Wetland

■ Freshwater Forested/Shrub Wetland

■ Freshwater Pond

■ Lake

■ Riverine

■ Other

■ <all other values>

■ Red: Band_1

■ Green: Band_2

■ Blue: Band_3