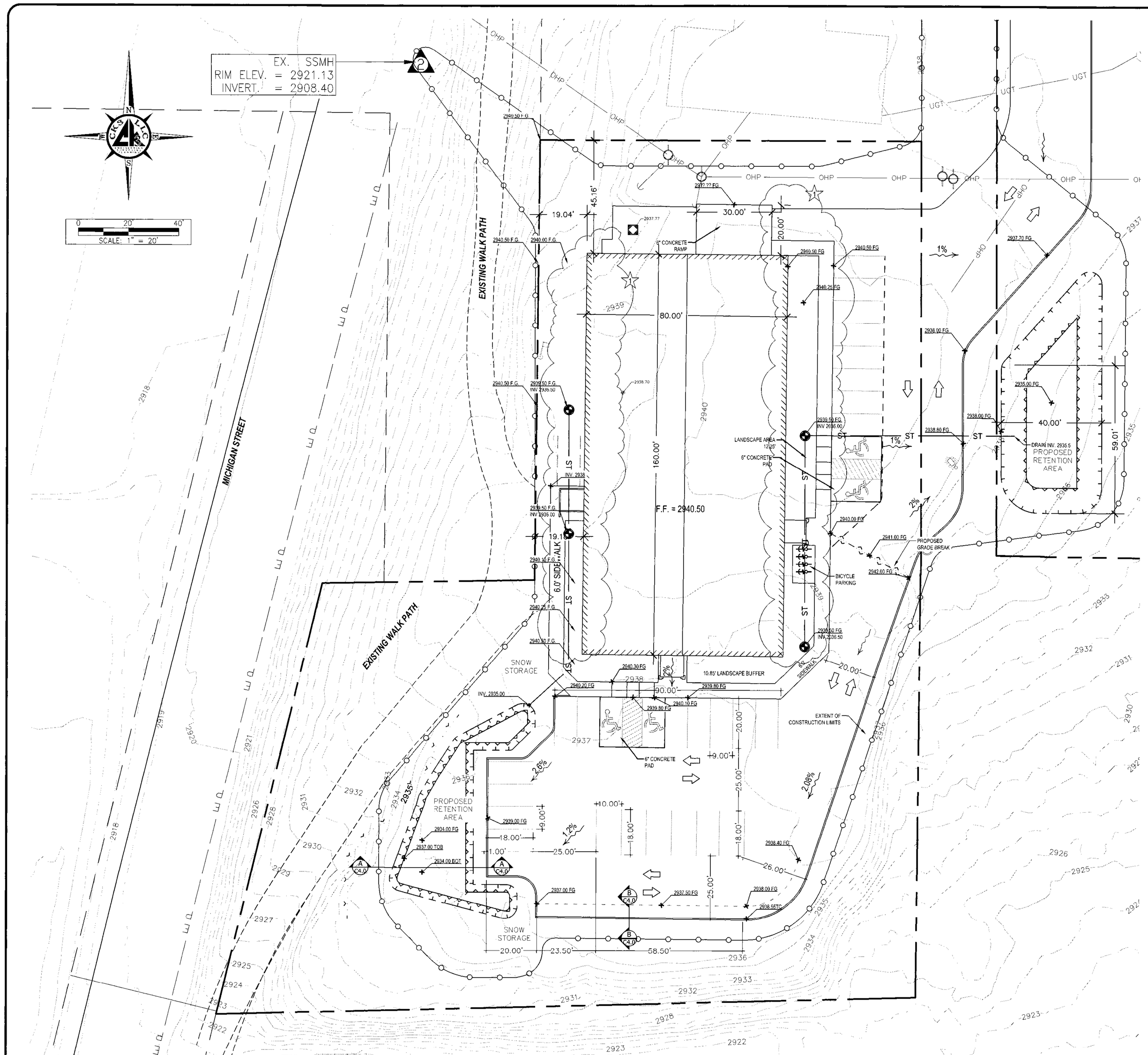

DIMENSIONED SITE PLAN

SCALE AS SHOWN

DRAINAGE AND GRADING NOTES:

1. REFERENCE GENERAL NOTES.
2. REFERENCE CONSTRUCTION NOTES FOR SPECIFIC CONSTRUCTION DETAILS AND/OR METHODS AT INDICATED LOCATIONS.
3. ALL ORGANIC SOIL OR MATERIALS, TO BE REMOVED TO DEPTHS OF 1 FOOT BELOW LAYER OR OBJECT AND WASTED IN OVER DESIGNATED AREA.
4. ALL NON-COMPACTIBLE MATERIALS SHALL BE REMOVED PRIOR TO COMPACTION OF SUBGRADE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTS OF SUBGRADE, SUB-BASE, BASE AND PAVEMENT. ALL IMPORTED SOILS TO BE COMPACTED TO 95% MAX. DRY DENSITY.
6. NO NATIVE MATERIAL DISTURBED OR PLACED SHALL BE USED FOR STRUCTURAL FILL.
7. NO CONCRETE OR AC FROM THE SAWCUT SECTIONS OR BUILDING SECTIONS SHALL BE USED IN ANY FILL.
8. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF DISCREPANCIES IN ELEVATIONS ARE FOUND DURING CONSTRUCTION.
9. TESTING FOR AC AND CONCRETE CONSTRUCTION SHALL INCLUDE: PROOF ROLLING OF THE SUBGRADE; COMPACTION TESTINGS OF THE BASE GRAVEL (95%) (ASTM D1557) AND DENSITY TESTING OF THE ASPHALT (92%) (ASTM D2950).
10. SEE ARCHITECTURAL PLANS FOR COMPACTION REQUIREMENTS WITHIN BUILDING ENVELOPE
11. PROTECT THE HOUSE FROM RUN-OFF AND CONSTRUCTION ACTIVITIES.
12. 6" SCHEDULE 40 PVC DRAIN PIPE, ~~WITH 3 DROPS AND TE'S LOCATED TO MATCH GUTTER DOWNSPOUTS PER ARCHITECT.~~

RETENTION SWALE CALCULATIONS

STORMWATER RUNOFF CALCULATIONS: EAST SWALE

Method Type: Generalized Model

Watershed Area:		
	25200	sq.ft.
	0.58	acres

Weighted Runoff Coefficient (based on rentention areas)

Type	Coefficient	Total Area (sq.ft.)	Total Area (acres)
Roof	0.95	5400	0.15
Asphalt	0.95	0	0.00
Concrete	0.95	2610	0.06
Gravel	0.50	9275	0.21
Landscape	0.20	1288	0.03
Unimproved	0.15	5629	0.13
Other	0.00	0	0.00
Other	0.00	0	0.00
TOTAL AREA (ft^2) =		25200	0.58

WEIGHTED RUNOFF COEFFICIENT "C" = 0.57

Stormwater Minimum Retention Area (based on weight runoff coefficient)

Weighted "C" =	0.57	
Storm Intensity "I" =	1.00 in/hr	<-- Per local code
Drainage Area "A" =	25200.00 sq. ft.	
	0.58 acres	
Average Swale Width "w" =	20.00 ft	<-- Average Width
Average Swale Length "l" =	56.00 ft	<-- Average Length
Average Swale Depth "d" =	2.00 ft	<-- Average Depth w/ 1' Freeboard
Edge Slope =	3.00 to 1	<-- Typical Min. Slope is 3:1
Top of Rention Area "A_t" =	2176.00 ft^2	
Area of Infiltration, "A_i" =	1120.00 ft^2	
Assumed Percolation Rate "R_p"	2.00 in/hr	<-- Based on assumed Soil Type
Assumed Storm Duration:	1.00 hr (100 Year Storm)	<-- Per local code and practice
Runoff Rate, "Q" = C x I x A =	0.33 cubic feet per second	
Runoff Volume "V_R" =	1181.79 cubic feet	
Percolation Volume "V_C" = R_p x [(A$_t$+A$_i$)/2/12] =	274.67 cubic feet	
Storage Req'd "S" = V_C - V_R =	**907.13 cubic feet**	
15% Increase "S_{15}" =	**1043.19 cubic feet**	

Total Storage Required:	**1043.19**	**cubic feet**
Total Storage Provided:	**2240.00**	**cubic feet**
Time to Drain:	**3.80**	**hrs**

STORMWATER RUNOFF CALCULATIONS: WEST SWALE

Method Type: Generalized Model

Watershed Area:		
	53034	sq.ft.
	1.22	acres

Weighted Runoff Coefficient (based on rentention areas)

Type	Coefficient	Total Area (sq.ft.)	Total Area (acres)
Roof	0.95	5400	0.15
Asphalt	0.95	0	0.00
Concrete	0.95	2306	0.05
Gravel	0.50	12245	0.28
Landscape	0.20	1628	0.04
Unimproved	0.15	26153	0.60
Other	0.00	4283	0.10
Other	0.00	0	0.00
TOTAL AREA (ft^2) =		53015	1.22

WEIGHTED RUNOFF COEFFICIENT "C" = 0.39

Stormwater Minimum Retention Area (based on weight runoff coefficient)

Weighted "C" =	0.39	
Storm Intensity "I" =	1.00 in/hr	<-- Per local code
Drainage Area "A" =	53034.00 sq. ft.	
	1.22 acres	
Average Swale Width "w" =	27.00 ft	<-- Average Width
Average Swale Length "l" =	48.00 ft	<-- Average Length
Average Swale Depth "d" =	1.75 ft	<-- Average Depth w/ 1' Freeboard
Edge Slope =	3.00 to 1	<-- Typical Min. Slope is 3:1
Top of Rention Area "A_t" =	2193.75 ft^2	
Area of Infiltration, "A_i" =	1296.00 ft^2	
Assumed Percolation Rate "R_p"	2.00 in/hr	<-- Based on assumed Soil Type
Assumed Storm Duration:	1.00 hr (100 Year Storm)	<-- Per local code and practice
Runoff Rate, "Q" = C x I x A =	0.48 cubic feet per second	
Runoff Volume "V_R" =	1710.41 cubic feet	
Percolation Volume "V_C" = R_p x [(A$_t$+A$_i$)/2/12] =	290.81 cubic feet	
Storage Req'd "S" = V_C - V_R =	**1419.59 cubic feet**	
15% Increase "S_{15}" =	**1632.53 cubic feet**	

Total Storage Required:	**1632.53**	**cubic feet**
Total Storage Provided:	**2268.00**	**cubic feet**
Time to Drain:	**5.61**	**hrs**

CONSTRUCTION PLAN APPROVAL BY THE CITY OF COUNCIL

APPROVED BY DATE

NOTES TO CONTRACTOR:

WARNING: AN ATTEMPT HAS BEEN MADE TO LOCATE AND SHOW UNDERGROUND UTILITIES SUCH AS WATER, SANITARY SEWER, STORM DRAINS, ELECTRIC, GAS, TELEPHONE, CABLE TV, FIBER OPTICS ETC, HOWEVER THE CONTRACTOR SHALL EXERCISE CAUTION AS NOT ALL UNDERGROUND UTILITIES OR IMPROVEMENTS MAY HAVE BEEN LOCATED AND/OR SHOWN HEREON.

Reviewed By: LDH/BWH
Drawn By: AMC
Approved By: LDH
Print Date: August 16, 2018
DWG. Scale: AS SHOWN
Book & Page: NA

No.	REVISION DESCRIPTION	DATE
1	REVISION PER ARCHITECT REVIEW	9/13/2018

DATE SEALED 9-13-18

PROFESSIONAL ENGINEER REGISTRATION 6255 STATE OF IDAHO LARRY D. HINTON

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DIMENSIONED SITE & GRADING PLAN
TRW ARCHITECTURE, CHTD.
COUNCIL COMMUNITY CENTER
COUNCIL, IDAHO

TITLE: TRW ARCHITECTURE, CHTD.
515 EAST PARKWAY CT.
BOISE, ID 83706

CLIENT:

C2.0

SHEET NO. 3 OF 5
DWG NO. CI18010.dwg
JOB NO. CI18010