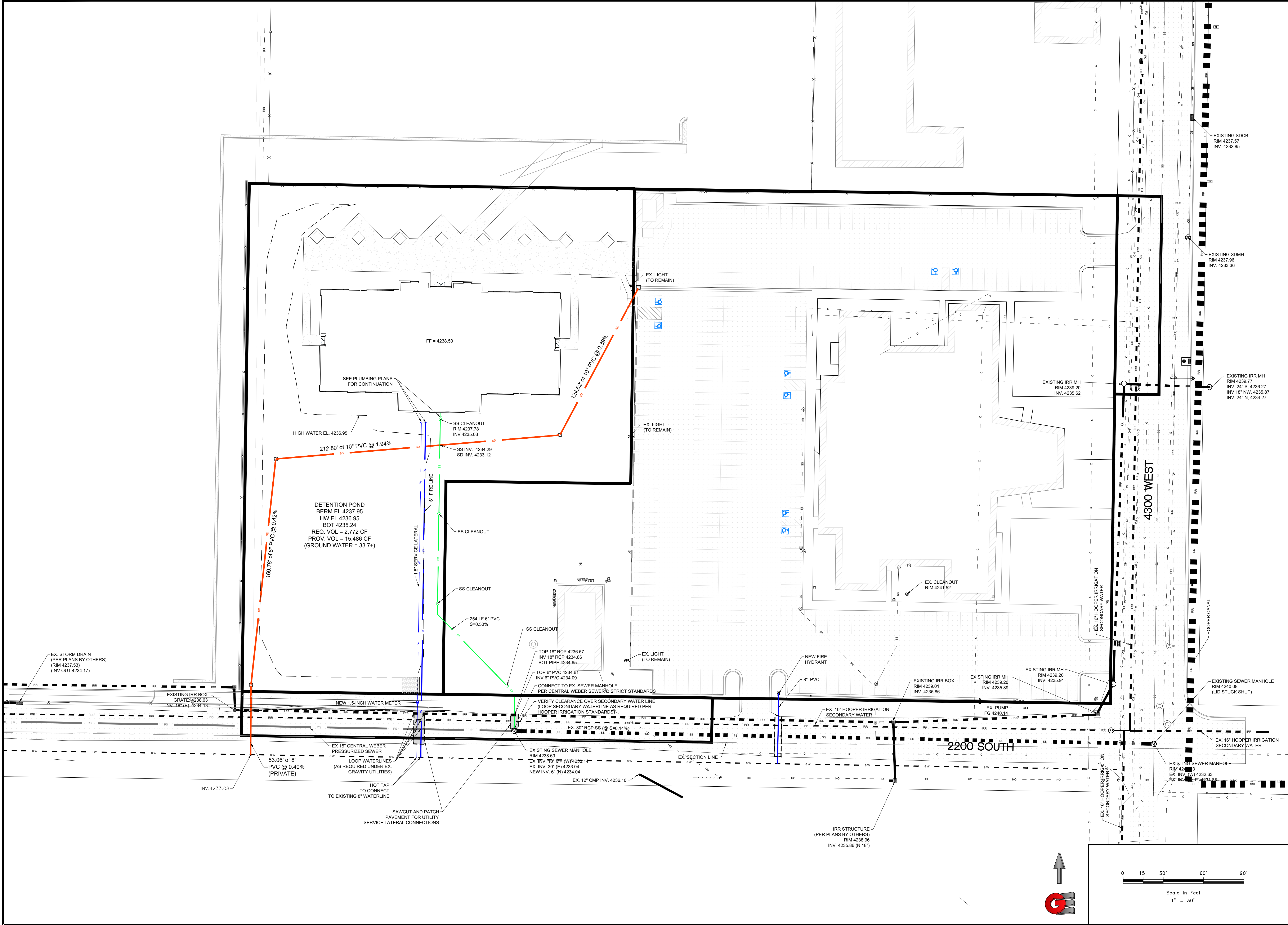


PROFESSIONAL STRUCTURAL ENGINEER
10/18/2022
No. 4859845
TYLER M. NIELSON
LICENSED
STATE OF UTAH

GRADING PLAN
WEST FIELD SR SEMINARY
2200 S 4350 W
TAYLOR, WEBER, UTAH

**GARDNER
ENGINEERING**
CIVIL • LAND PLANNING
MUNICIPAL • LAND SURVEYING
5150 SOUTH 375 EAST OGDEN, UT

CE2-01



REVISIONS	
DATE	DESCRIPTION

SCALE: 1" = 30'

DATE: 10/18/2022

DESIGN: WJS

DRAWN: JKH/WJS

CHECKED: TMN

DWG:

UTILITY PLAN

WEST FIELD SR SEMINARY

2200 S 4350 W

TAYLOR, WEBER, UTAH

GARDNER ENGINEERING

CIVIL • LAND PLANNING

MUNICIPAL • LAND SURVEYING

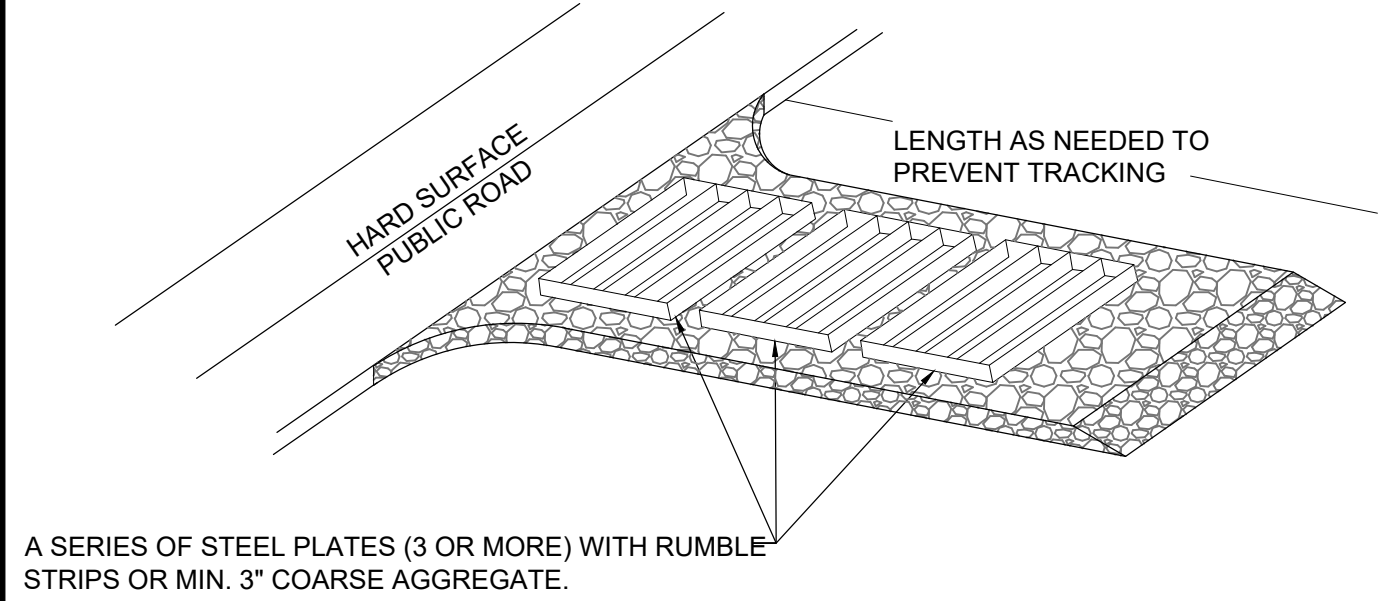
5150 SOUTH 375 EAST OGDEN, UT

OFFICE: 801.476.0202 FAX: 801.476.0066

CE3-01

EROSION CONTROL NOTES:

1. SANDBAGS WILL BE PLACED AT DISCHARGE LOCATIONS TO CONTAIN AND DIVERT STORM WATER THROUGH THE INLET PROTECTION.
2. AN EARTHEN BERM 6" HIGH WILL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIVERT IT TO DISCHARGE AREAS.
3. STORM WATER WILL BE DISCHARGED INTO AN EXISTING DRAINAGE SYSTEM. EXISTING LINES SHALL BE INSPECTED PRIOR TO CERTIFICATE OF OCCUPANCY AND CLEANED IF NECESSARY.
4. THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONFORM TO ALL STATE DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.



ENTRANCE STABILIZATION NOTES:

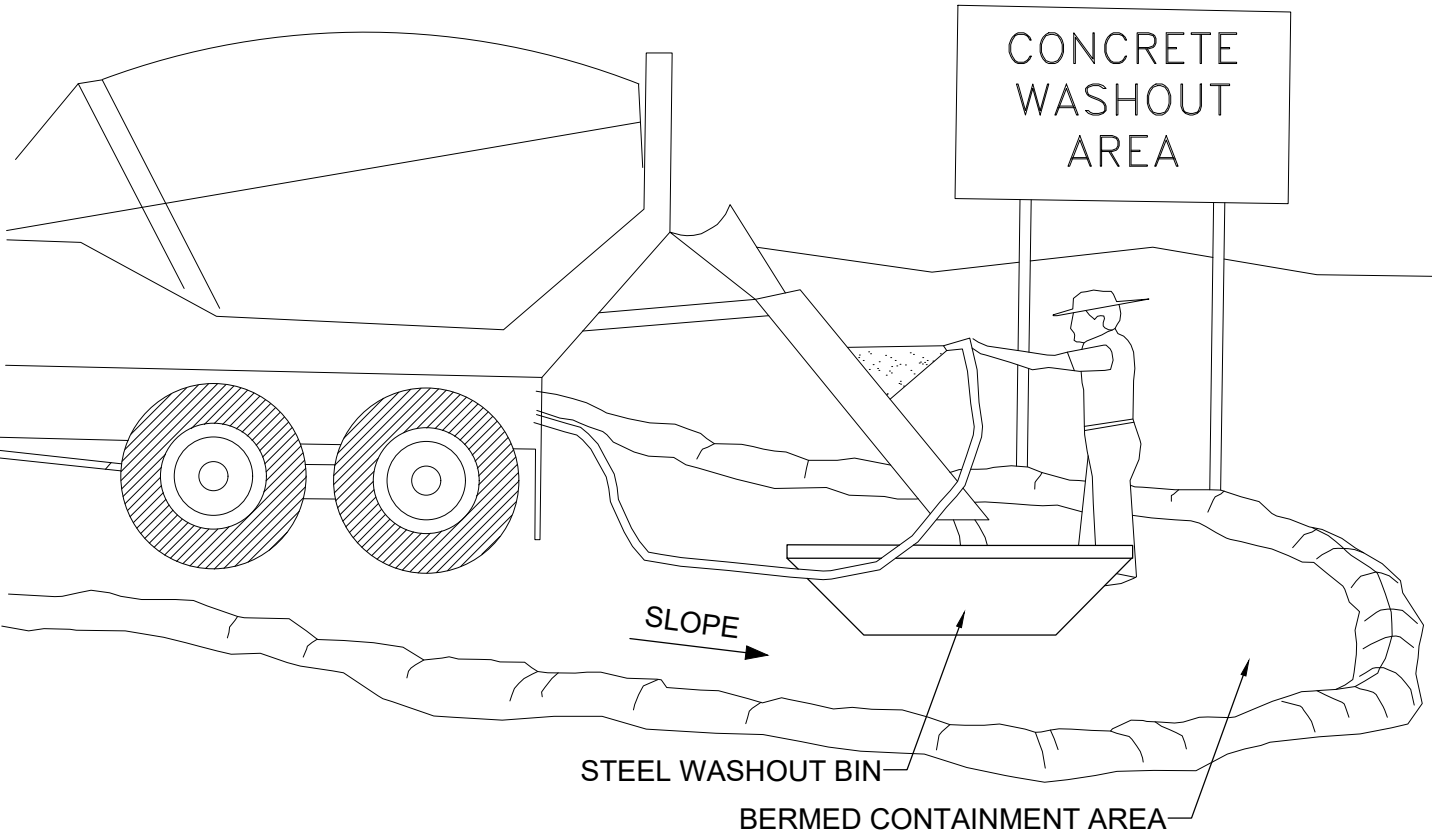
1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE STORM DRAIN SYSTEMS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
- a. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY AND SIDEWALK OR PARKING AREA.
- b. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN. 3" COARSE AGGREGATE WITH LENGTH, WIDTH AND THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE NOTES:

1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

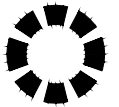
NOTE:

CONTRACTOR SHALL COMPLETE AND SUBMIT A STATE NOTICE OF INTENT (NOI) AND A STORM WATER POLLUTION PREVENTION PLAN BOOKLET

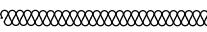


NOTES:

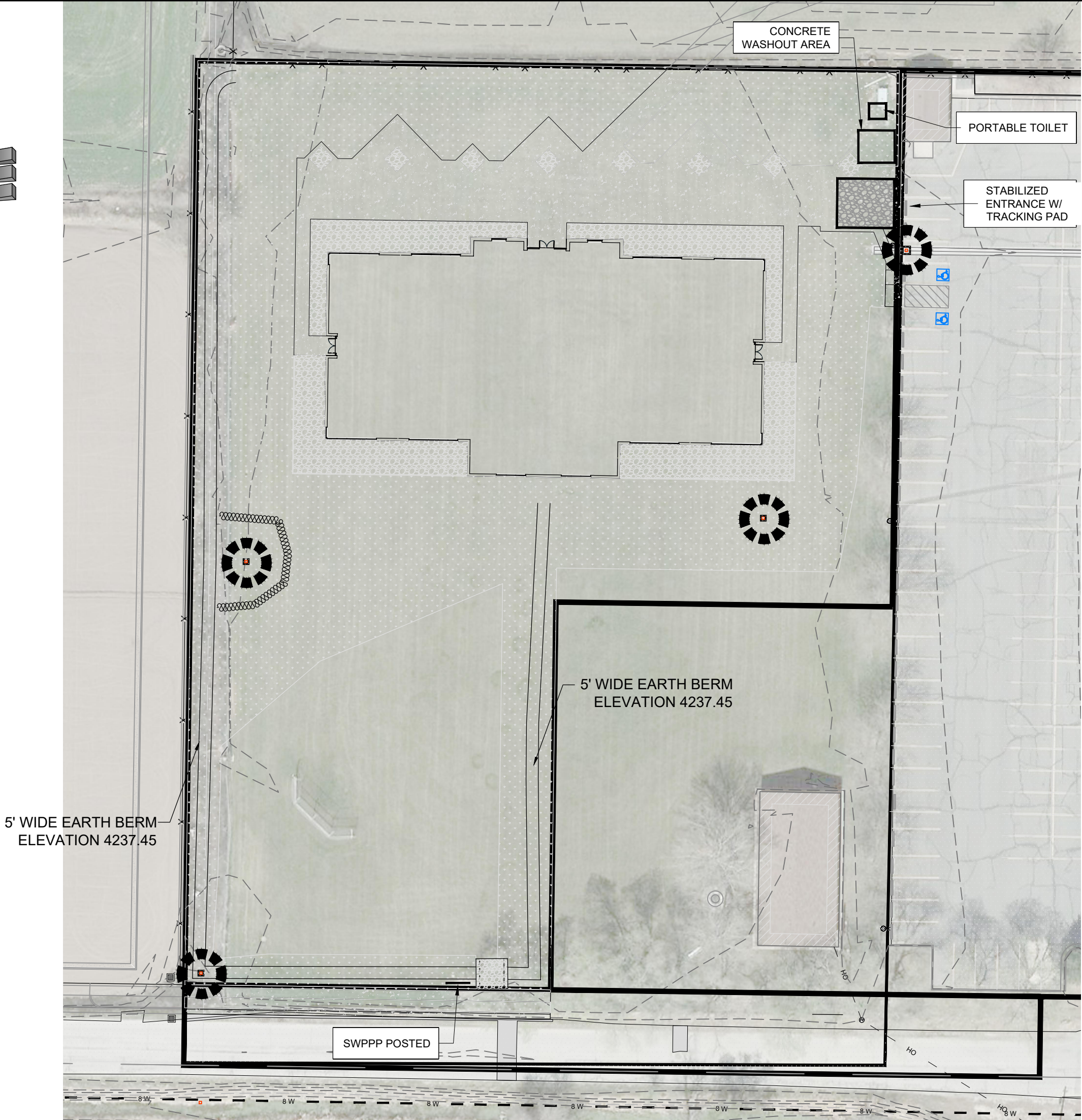
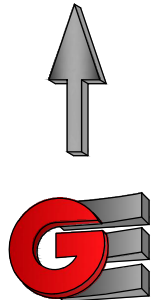
1. EXCESS AND WASTE CONCRETE SHALL BE DISPOSED OF OFF SITE OR AT DESIGNATED AREAS ONLY.
2. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
3. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS ONSITE, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED.
4. ONSITE CONCRETE WASHOUT CONTAINMENT FACILITY SHALL BE A STEEL BIN OR APPROVED ALTERNATE.
5. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHAL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.



INLET PROTECTION
(EITHER OPTION)



SILT FENCE



West Field Sr Seminary
4700 West 2350 South
Taylor, Weber County, Utah



Improved Areas	Total Site		
	Sq. Ft.	Acre	C
Sidewalk	6,795	0.1560	0.85
Gravel or Mulch	5,781	0.1327	0.50
Landscape	33,109	0.7601	0.10
Detention Pond	26,474	0.6078	0.10
Building	15,000	0.3444	0.85
Total/Weighted	87,159	2.0009	0.31
Undetained Area	0	0.00	0.31

Allow Release Rate (cfs/acre) 0.100 cfs/acre
Q Allowable (cfs) 0.20

0.00 cfs

Total Allowed Release 0.20 cfs

Effective Release Rate per Acre 0.10 cfs/Acre

	FEET	YARDS
100 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED	3,126	116

100 yr

MIN	Runoff Vol (cf) Allowable	*Inch / Hr i100	Total Vol (cf) 100 YEAR	Detain Vol (cf) Difference
5	60	6.5	1,225	1,165
10	120	4.95	1,866	1,746
15	180	4.09	2,313	2,133
30	360	2.75	3,111	2,751
60	720	1.7	3,846	3,126
120	1,441	0.928	4,199	2,758
180	2,161	0.633	4,296	2,135
360	4,322	0.353	4,792	470
720	5,837	0.215	5,837	0
1440	6,461	0.119	6,461	0

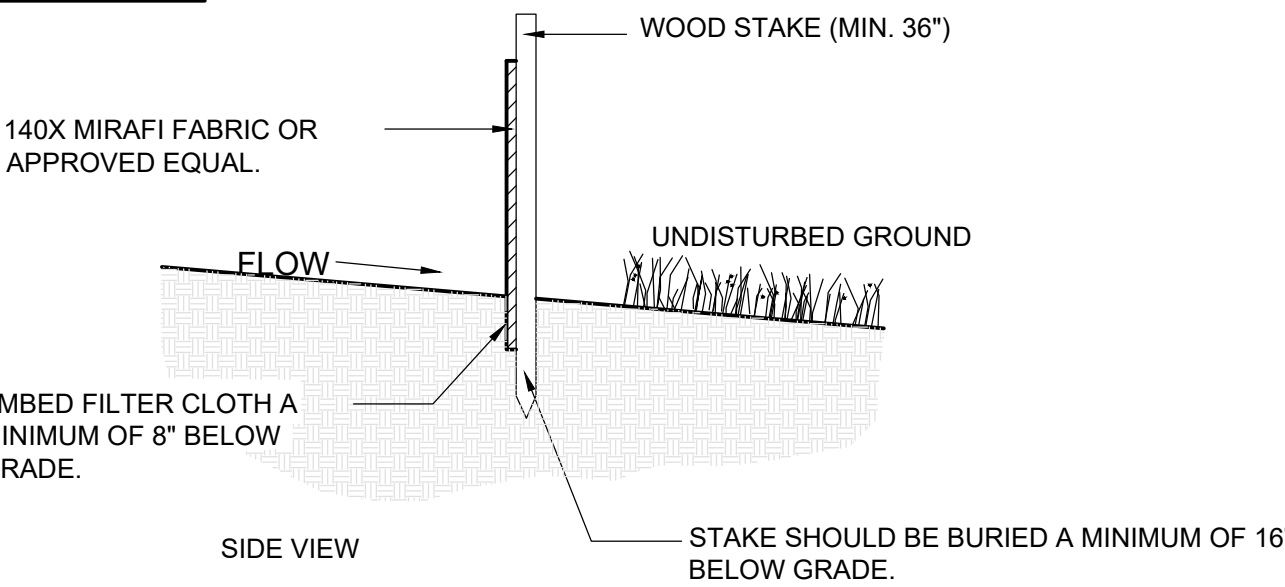
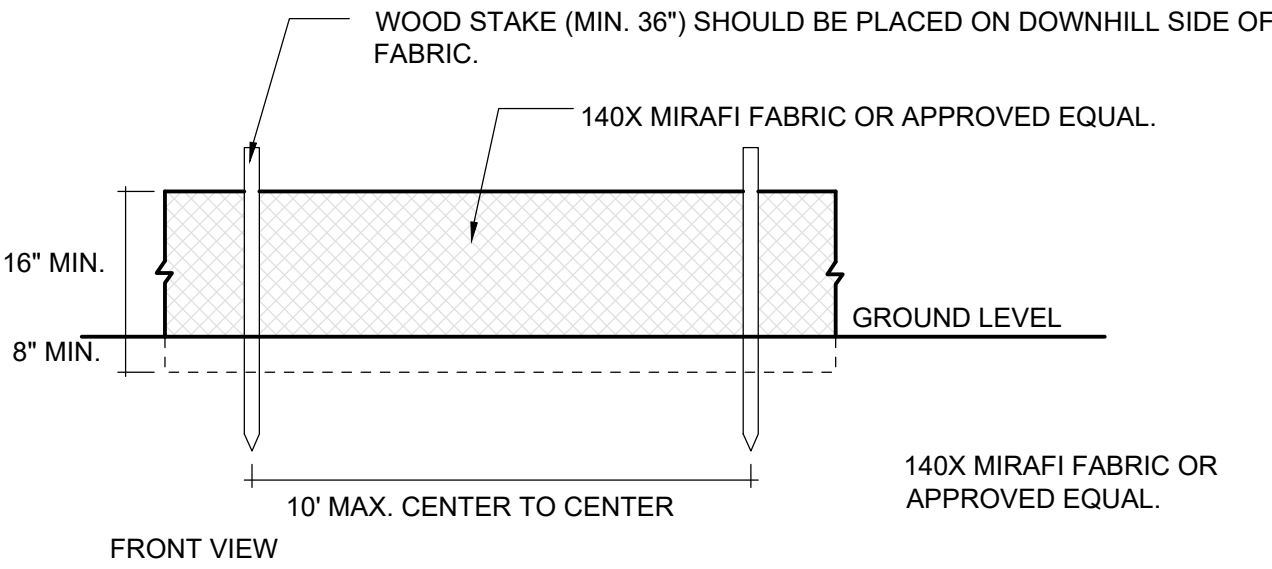
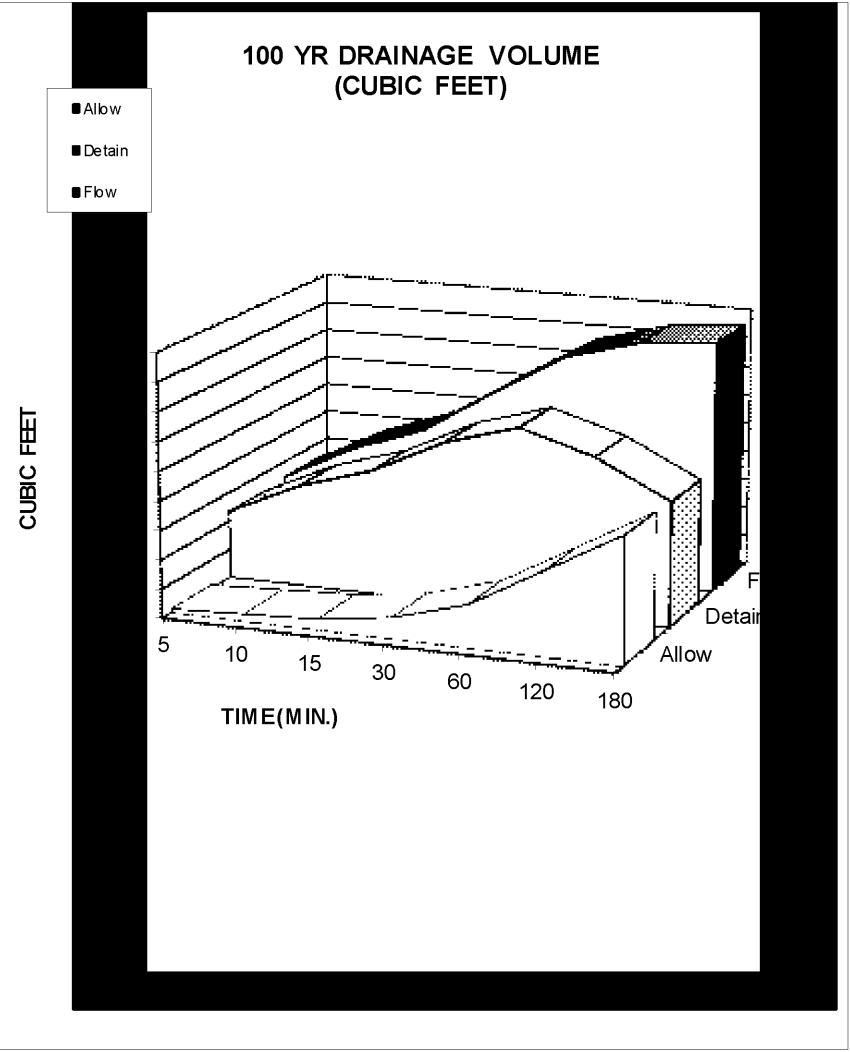
NOAA - Atlas 14

Orifice Calculation

H = 3.66 Maximum water height (ft)
Q = 0.20 Flowrate out of orifice (cfs)
Cc = 0.62 Coefficient of Contraction
Cv = 0.98 Coefficient of Velocity
Area = 0.021 Orifice Area (ft²)
II = 3.14
g = 32.17 Gravitational Constant
d = 1.98 Orifice Diameter (in)
d = 2 Orifice

Upsize to 3" Orifice to Prevent Clogging

Detention Pond Available Volume



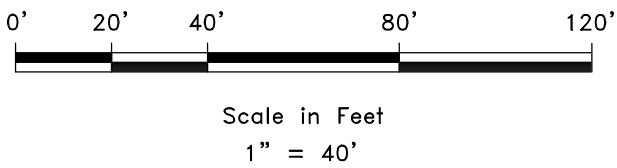
STAKE SHOULD BE BURIED A MINIMUM OF 16" BELOW GRADE.

Scale: NTS

Scale: NTS

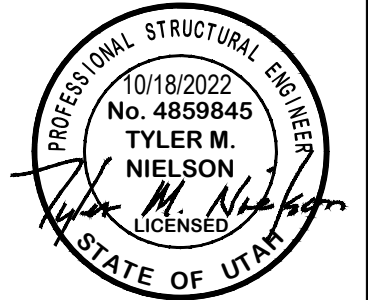
DEVELOPER:

THE CHURCH OF JESUS CHRIST
OF LATTER-DAY SAINTS
UTAH NORTH PM OFFICE
ATTN: BRIAN CHILDS
435 NORTH WALL AVE, STE D
OGDEN, UT 84404
801-450-3475



SCALE	T = 40'
DATE	10/18/2022
DESIGN	WJS
DRAWN	WJS
CHECKED	TJN

REVISIONS	DESCRIPTION
DATE	



SWPPP	WEST FIELD SR SEMINARY
	2200 S 4350 W
	TAYLOR, WEBER, UTAH



CE4-01