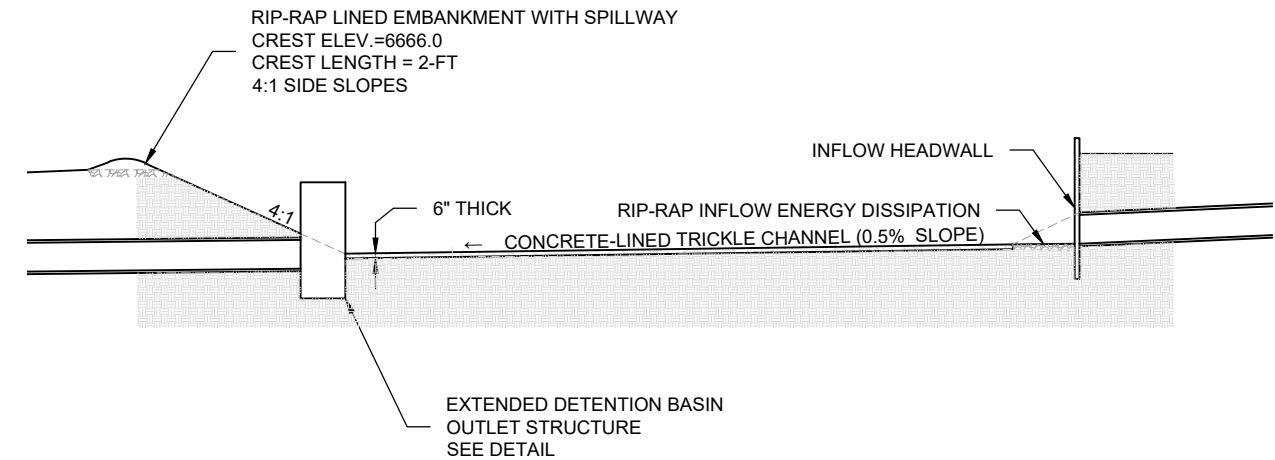
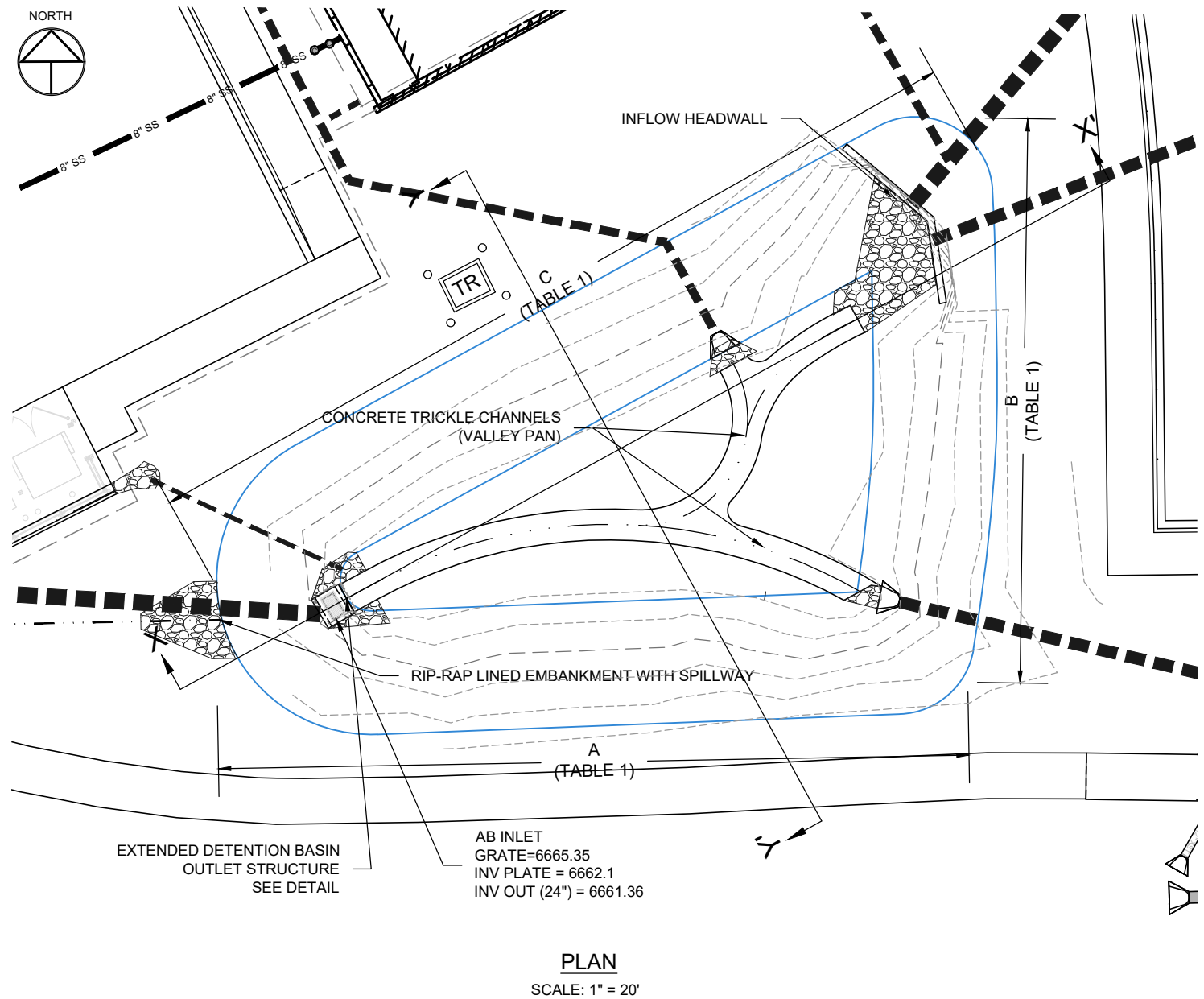


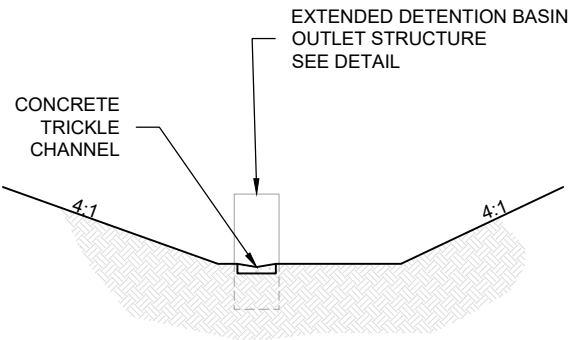
STEAMBOAT BASECAMP EXTENDED DETENTION BASIN
OWNERSHIP AND MAINTENANCE PLAN
CONSTRUCTED IN AUGUST, 2023,
MAINTENANCE TO BE PERFORMED BY STEAMBOAT BASECAMP



SECTION X-X'

TABLE 1: POND DIMENSIONS	
DIM A (ft)	97
DIM B (ft)	73
DIM C (ft)	113

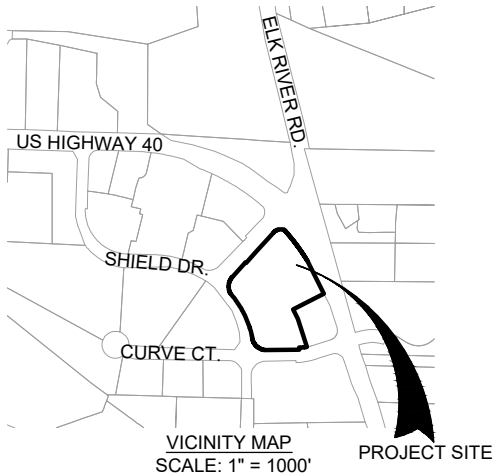
- NOTES:
- FOR ADDITIONAL DESIGN INFORMATION REFER TO THE CONSTRUCTION DRAWINGS FOR THIS PROJECT.
 - DISTURBANCE OF WETLAND AREAS SHALL BE AVOIDED DURING MAINTENANCE OPERATIONS.
 - SEE DETAILED NOTES ON THE THIRD SHEET OF THIS PLAN FOR ALL MAINTENANCE REQUIREMENTS.



SECTION Y-Y'



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PROJECT: 2387-004	NO.	DATE:	BY:	DESCRIPTION:
DATE: 9/23/2023				
DRAWN BY: DCS				
CHECKED BY: LCI				

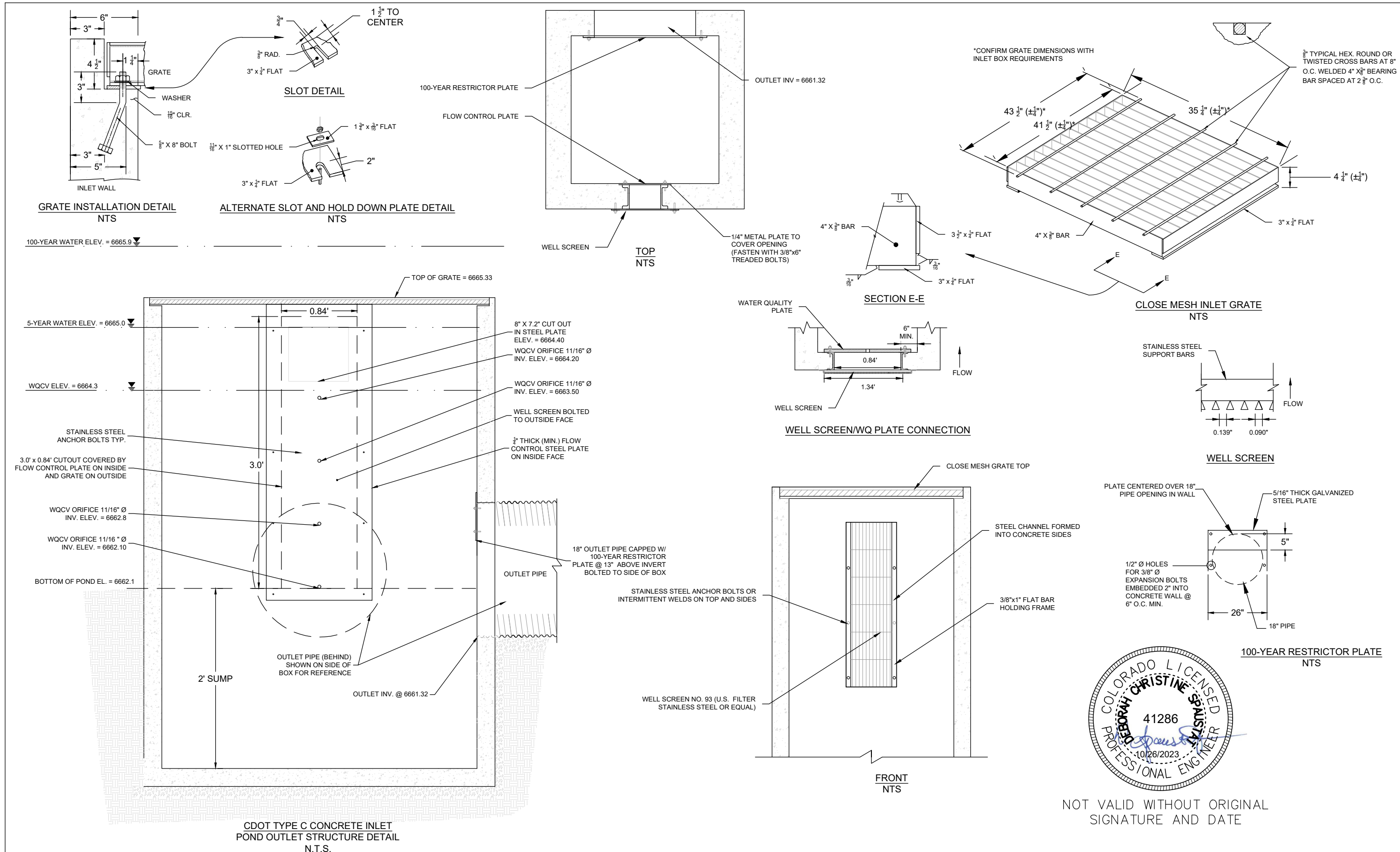
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Steamboat Springs, Colorado 80477
(970) 871-9494 www.LANDMARK-CO.com

Steamboat Basecamp
Ownership & Maintenance Plan
Extended Detention Basin

SHEET
1
3



PROJECT: 2387-004	NO.	DATE:	BY:	DESCRIPTION:	<p>These drawings are instruments of service provided by Landmark Consultants, Inc. and are not to be used for any type of construction or contracting unless signed and sealed by a Professional Engineer in the employ of Landmark Consultants, Inc.</p> 	CIVIL ENGINEERS SURVEYORS	<p>Steamboat Basecamp Ownership & Maintenance Plan Outlet Structure Details</p>	SHEET
DATE: 9/21/2023								2
DRAWN BY: DCS								
CHECKED BY: LCI								3

DRAWING FILENAME: P:\2387-004\Engineering\Drainage\Pond Registration\2387-004 O&M EDB-AB.dwg LAYOUT NAME: O&M NOTES DATE: Oct 26, 2023 - 9:48am CAD OPERATOR: deb
LIST OF XREFS: [####-###-xBORDER-1x17] [xVICMAP] [2387-004-xExist] [2387-004-xSite-Pnt] [2387-004-xUtl-Pnt]

STEAMBOAT BASECAMP EXTENDED DETENTION BASIN

OWNERSHIP AND MAINTENANCE PLAN

CONSTRUCTED IN AUGUST, 2023, MAINTENANCE TO BE PERFORMED BY STEAMBOAT BASECAMP

1. **GENERAL PROJECT INFORMATION**

- A. STEAMBOAT BASECAMP. LOT 1, WORLDWEST SUBDIVISION
- B. RECEIVING WATER: ROADSIDE DITCH ON CURVE COURT. ULTIMATE OUTFALL YAMPA RIVER.
- C. PROPERTY OWNER: MAY RIEGLER PROPERTIES
- 2201 WISCONSIN AVE NW
SUITE 200
WASHINGTON DC 20007
gaby@mayriegler.com
- D. AGENCY RESPONSIBLE FOR MAINTENANCE: SAME AS OWNER
- E. DESIGN ENGINEER: LANDMARK CONSULTANTS, INC.
- 141 9TH STREET
STEAMBOAT SPRINGS, CO 80487
970-871-9494
ATTN: ERIK GRIEPENTROG, P.E.
ERIKG@LANDMARK-CO.COM

2. **GENERAL FACILITY DESCRIPTION**

THIS FACILITY IS AN EXTENDED DETENTION BASIN THAT WILL RELEASE THE WATER QUALITY CAPTURE VOLUME OVER 40-HOURS. THE FACILITY HAS BEEN ADOPTED AND APPROVED BY THE MAY RIEGLER PROPERTIES AS A PART OF THE STEAMBOAT BASECAMP PROJECT. IT WILL RECEIVE RUNOFF FROM 3.17-ACRES AND WILL OCCUPY A PARCEL OF 0.12-ACRES THAT WILL BE USED TO TREAT RUNOFF VIA SETTLING AND PROVIDE ACCESS FOR MAINTENANCE ACTIVITIES.

3. **INSPECTION & MAINTENANCE FREQUENCY & PROCEDURE**

- A. MAINTENANCE ACTIVITIES SHALL OCCUR ACCORDING TO TABLE 3:

TABLE 3: MAINTENANCE ACTIVITY/FREQUENCY	
ACTIVITY	REQUIRED FREQUENCY
LAWN MOWING AND LAWN CARE	ROUTINE - DEPENDING ON AESTHETIC REQUIREMENTS
DEBRIS AND LITTER REMOVAL	ROUTINE - TWICE ANNUALLY UPON INSPECTION AND AS NEEDED FOLLOWING SIGNIFICANT RAINFALL EVENTS
SEDIMENT REMOVAL FROM FOREBAY AND MICROPOOL	ROUTINE - ONCE ANNUALLY AFTER COMPLETION OF SNOWMELT FROM CONTRIBUTING BASIN
NUISANCE CONTROL	NON-ROUTINE - HANDLE AS NECESSARY PER INSPECTION OR LOCAL COMPLAINTS
EROSION AND SEDIMENT CONTROL	NON-ROUTINE - PERIODIC REPAIR AS NECESSARY BASIN ON INSPECTION
STRUCTURAL	NON-ROUTINE REPAIR AS NEEDED BASED ON INSPECTIONS
INSPECTIONS	ROUTINE - TWO TIMES ANNUALLY, ONCE AFTER COMPLETION OF SNOWMELT AND ONCE AFTER SIGNIFICANT RAINFALL EVENT
SEDIMENT REMOVAL	NON ROUTINE - PERFORMED WHEN SEDIMENT ACCUMULATION OCCUPIES 20% OF WQCV (1,091-CF OR 1.4-FT DEEP). THIS MAY VARY CONSIDERABLY, BUT EXPECT TO DO THIS EVERY 15 TO 20 YEARS

- B. REVISIONS TO MAINTENANCE FREQUENCY:

DATES/REASONS FOR CHANGES:

- C. TRAFFIC CONTROL: N/A
- D. THE FACILITY DOES NOT REQUIRE CONFINED SPACE ENTRY PROCEDURES.
- E. DEWATERING AND WATER CONTROL: DEWATERING OF THE MICRO-POOL BY PUMPING ONTO THE EDB'S BOTTOM GRASSES WILL BE NEEDED TO REMOVE ACCUMULATED SEDIMENT FROM THE MICRO-POOL'S BOTTOM.
- F. DEBRIS, & TRASH REMOVAL & DISPOSAL
- REMOVAL SHALL BE CONDUCTED IF THERE IS PRESENCE OF TRASH OR DEBRIS AT INSPECTION. SEDIMENT AND DEBRIS SHALL BE REMOVED MANUALLY USING A SHOVEL OR RAKE AND DISPOSED OF AT A LICENSED FACILITY. THE LONGEST DISTANCE BETWEEN THE EDGE OF AN ACCESS ROAD AND THE FAR CORNER OF A STRUCTURE REQUIRING SEDIMENT REMOVAL IS 35 FEET.
- G. VEGETATION MANAGEMENT
- SEE SECTION 3 OF THE NOTES ON THIS SHEET
- H. WETLAND AREAS: NA.
- I. DESCRIBE ADDITIONAL REQUIRED MAINTENANCE PROCEDURES AND FREQUENCIES - N/A
- J. MATERIALS TESTING OF SEDIMENT REMOVED FROM SITE IS NOT REQUIRED.
- K. ALL MAINTENANCE MATERIALS AND TOOLS SHALL BE REMOVED FROM THE SITE FOLLOWING MAINTENANCE COMPLETION.

3. **EQUIPMENT, STAFFING, AND VEGETATION MANAGEMENT**

- A. EQUIPMENT REQUIRED: SHOVEL, RAKE, BACKHOE, CAMERA, DATA LOG / INSPECTION REPORT
- B. STAFFING: ONE PERSON WHO IS QUALIFIED TO RUN THE REQUIRED EQUIPMENT IS REQUIRED FOR MAINTENANCE.
- C. SEED: SEED MIXES ARE AS FOLLOWS:

- D. MOWING: MOWING MAY BE REQUIRED DEPENDING ON THE TYPE OF PLANTINGS. IF GRASS IS STARTED FROM SEED, ALLOW TIME FOR GERMINATION AND ESTABLISHMENT OF GRASS PRIOR TO MOWING. IF MOWING IS REQUIRED DURING THIS PERIOD FOR WEED CONTROL, IT SHOULD BE ACCOMPLISHED WITH HAND-HELD STRING TRIMMERS TO MINIMIZE DISTURBANCE TO THE SEEDBED. AFTER ESTABLISHED, MOW AS DESIRED OR AS NEEDED FOR WEED CONTROL. MOWING OF NATIVE/DROUGHT TOLERANT GRASSES MAY STOP OR BE REDUCED TO MAINTAIN A LENGTH OF NO LESS THAN 6 INCHES.
- E. WEEDS & UNDESIRABLE VEGETATION: MAINTAIN HEALTHY, WEED FREE VEGETATION. WEEDS SHOULD BE REMOVED BY HAND TOOLS, MOWING, WEED WHACKING OR OTHER MEANS AS APPROPRIATE BEFORE THEY FLOWER. THE FREQUENCY OF WEEDING WILL DEPEND ON THE PLANTING SCHEME AND COVER.

4. **SNOW AND ICE CONTROL**

FACILITY IS LOCATED WITHIN A SNOW STORAGE AREA. FACILITY SHALL BE INSPECTED AFTER SNOWMELT AND DEBRIS AND LITTER REMOVED.

5. **RIGHT-OF-WAY, ADJACENT OWNERSHIP, & ACCESS**

- A. RIGHT-OF-WAY DESCRIPTION: CURVE COURT, ROW VARIES. SHIELD DRIVE, ROW VARIES.
- B. ADJACENT OWNERSHIP: NA
- C. ACCESS INFORMATION AND DETAILS: MAINTENANCE ACCESS TO THE FACILITY IS VIA THE DRIVEWAY OFF OF SHIELD DRIVE. PROCEED TO THE SOUTH SIDE OF THE MAIN PARKING AREA.
- D. MAINTENANCE OPERATIONS WILL NOT IMPACT OR OBSTRUCT RIGHT-OF-WAY AND A RIGHT-OF-WAY PERMIT IS NOT REQUIRED.

7. **HYDRAULIC DESIGN**

- A. FLOW RATES (CFS):
- | | INFLOW | OUTFLOW |
|------------|-----------|----------|
| BASE FLOW: | 0 CFS | 0 CFS |
| WQ EVENT: | NA | NA |
| 5-YEAR: | 10.26 CFS | 0.31 CFS |
| 100-YEAR: | 31.01 CFS | 7.90 CFS |
- B. VOLUMES, DEPTHS, & WSELS:
- | ITEM | VOLUME | WSEL | DEPTH | INVERT |
|--------------------------|--------------|--------|-------|--------|
| EXTENDED DETENTION BASIN | 213,429.6 CF | | 4.8' | 6662.1 |
| WQCV | 1,907 CF | 6663.9 | 1.8' | |
| 5-YEAR | 1,918 CF | 6663.9 | 1.8' | |
| 100-YEAR | 2,675 CF | 6664.2 | 2.1' | |
- C. WQCV DRAIN TIME = 40 HOURS

8. **SENSITIVE AREAS, WETLANDS, & PERMITS**

THE SITE INCLUDES 0.24-ACRES OF WETLANDS LOCATED NORTH OF THE DEVELOPMENT. MAINTENANCE ACTIVITIES WILL NOT IMPACT THE WETLANDS.

8. **MISCELLANEOUS INFORMATION**

- A. PROJECT SURVEY:
- TOPOGRAPHIC AND EXISTING CONDITIONS PER LANDMARK GROUND SURVEY 10-30-2020. SOME OFFSITE AND ADJACENT PROPERTY INFORMATION WAS DIGITIZED FROM AERIAL IMAGERY. LANDMARK IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING CONDITIONS AND/OR PROPERTY INFORMATION INCLUDING EASEMENTS AND ENCUMBRANCES AND THE OWNER ASSUMES ALL RISK WITH COMPLYING WITH THE LEGAL REQUIREMENTS OF THIS PROJECT.
- PROJECT BENCHMARKS IS RECOVERED NO. 5 REBAR W/ 1 1/2" ALUMINUM CAP STAMPED LANDMARK LS 29039, ELEV=6667.80 NAVD 88. THE COORDINATE SYSTEM IS COLORADO COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011), NAVD88, COMBINED SCALE FACTOR: (N)1415866.11



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