

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

MARCH 15, 2018

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

N- Greg Fries 8/4/2020
City Engineer Date

STORMWATER BASIN DESIGNED BY:

SEE
INDIVIDUAL
SHEETS

INDEX OF SHEETS

FOR CONSTRUCTION WITH PHASE 2 (PROJ NO 11998)

- SHEET NO. 1 SOUTHEAST INFILTRATION/WET DETENTION BASIN PLAN
- SHEET NO. 2 SOUTHEAST INFILTRATION/WET DETENTION BASIN PROFILE

FOR CONSTRUCTION WITH PHASE 3 (PROJ NO 12167)

- SHEET NO. 3 NORTHWEST INFILTRATION/WET DETENTION BASIN PLAN
- SHEET NO. 4 NORTHWEST INFILTRATION/WET DETENTION BASIN PROFILE

FOR CONSTRUCTION WITH PHASE 7 (PROJ. NO. 14926)

- SHEET NO. 5 SOUTHWEST DETENTION/INFILTRATION BASIN PLAN
- SHEET NO. 6 SOUTHWEST DETENTION/INFILTRATION BASIN DETAIL

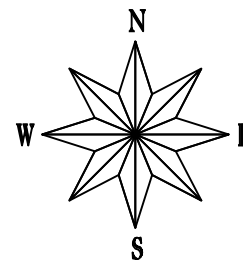
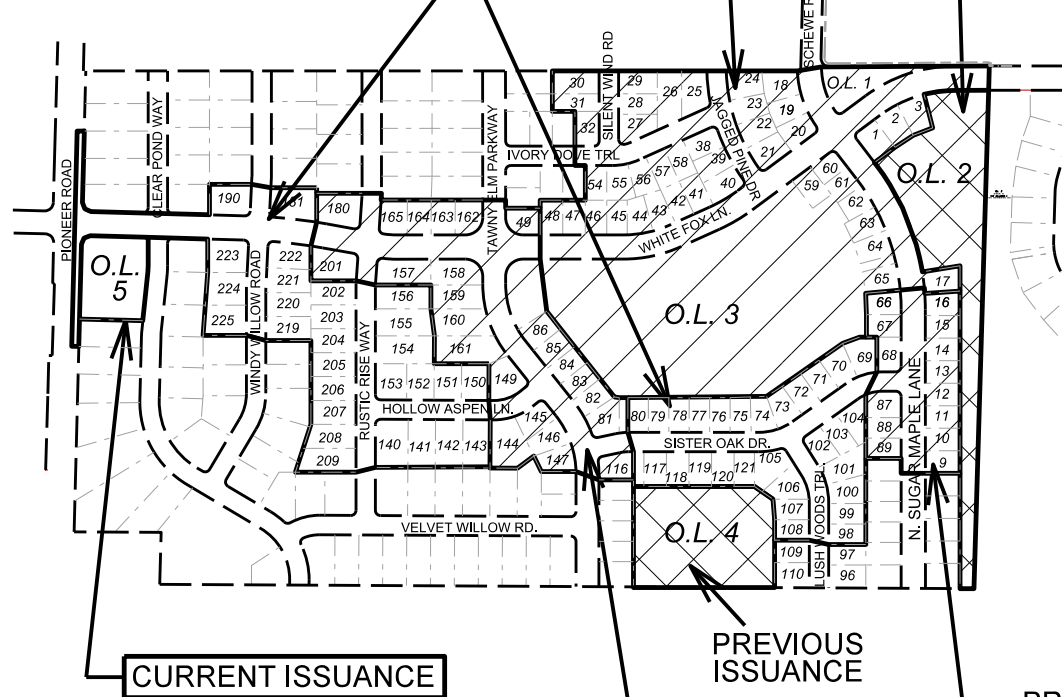
EAGLE TRACE STORMWATER MANAGEMENT PLAN

CITY PROJECT NO. 11930
CITY CONTRACT NO. 8192

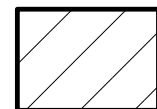
PREVIOUS ISSUANCE
SEE PROJECT NO. 11923
FOR O.L. 2 SWM PLANS

PREVIOUS PHASE
SEE PROJECT NO. 11923
FOR PHASE 1 PLANS

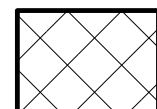
CURRENT PHASE
SEE PROJECT NO. 12167
FOR PHASE 3A & 3B PLANS



PROJECT LOCATION

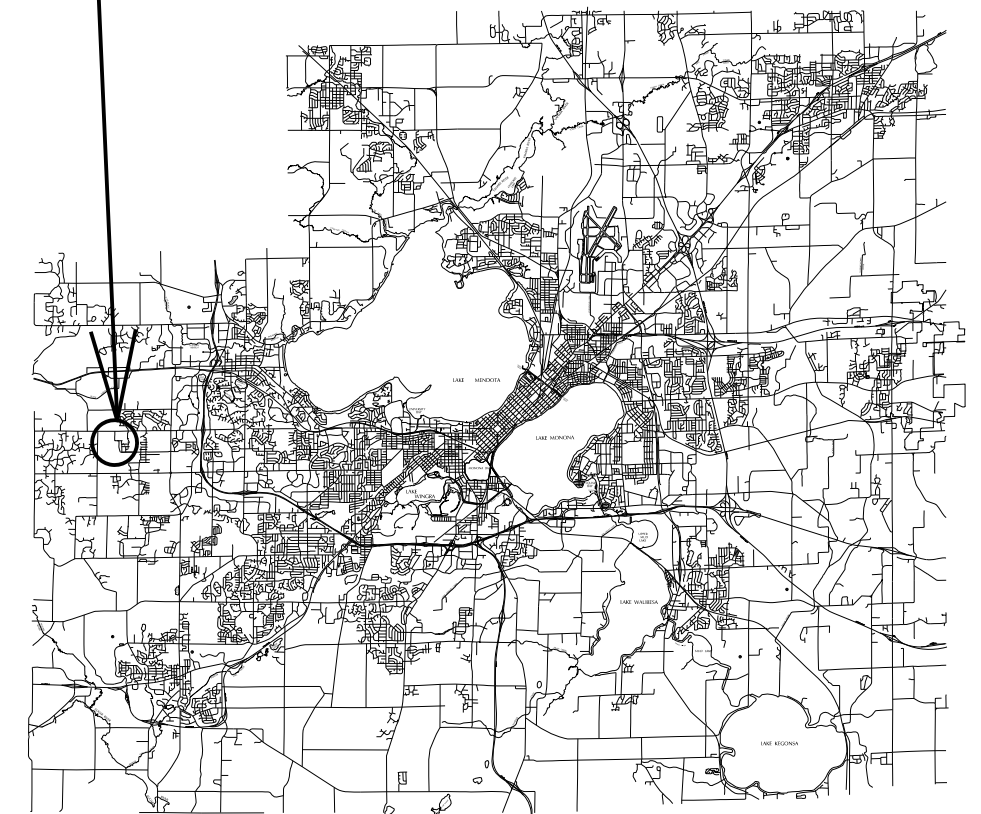


=PREVIOUS PHASE



=PREVIOUS SWM PLAN ISSUANCE

PREVIOUS PHASE
SEE PROJECT NO. 11998
FOR PHASE 2 PLANS



REVISION - 04/09/24
• SHEETS 5 & 6 ADDED

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PROPOSED SE DETENTION BASIN

TOP OF POND BERM -1106.00, AREA = 40,171 SQFT
 NORMAL WATER LEVEL/OUTLET - 1101.00, AREA = 23,752 SQFT
 BOTTOM OF WET POND - 1092.00

24" APRON ENDWALL
 INV = 1097.50

38 LF - 24" RCP STORMSEWER @ 0.00%

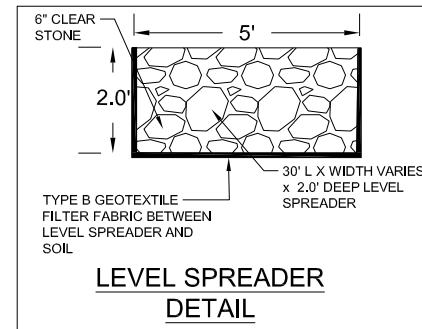
48" STORM CATCH BASIN STRUCTURE WITH OPEN GRATE & INTERNAL CONTROL STRUCTURE

RIM = 1105.30

INTERNAL WALL WITH OVERFLOW WEIR @ 1103.25
 8" ORIFICE IN INTERNAL WALL @ 1101.00

24" RCP INFLOW CULVERT @ 1097.50
 21" RCP OUTFLOW CULVERT @ 1101.00

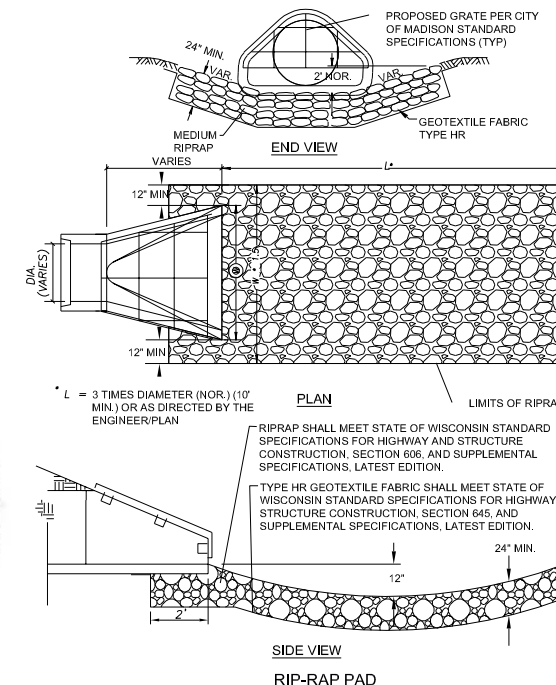
EQUILAZIATION BERM @ 1105.30



GENERAL NOTES:

1. ALL SITE WORK AND MATERIALS SHALL BE PER THE CITY OF MADISON STANDARD SPECIFICATIONS.
2. EROSION CONTROL MEASURES SHALL BE PLACED PER THE APPROVED EROSION CONTROL PLAN.
3. LENGTHS OF CULVERTS INCLUDE ENDWALLS.
4. CULVERT LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION TO ENSURE THAT THEY ARE LONG ENOUGH TO CONFORM TO TYPICAL CROSS SECTION.
5. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL, FERTILIZER, SEED AND MULCH. SEED MIXTURE SHALL BE PER THE CITY OF MADISON REQUIREMENTS. FERTILIZER SHALL BE PLACED PER A SOIL TEST. THE INFILTRATION AREA SHALL BE SEED WITH A SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS.
6. ENGINEERED SOIL IN INFILTRATION BASIN SHALL BE 70-85% SAND & 15-30% COMPOST
7. SEE APPROVED CITY ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES
8. A CERTIFIED SOIL INSPECTOR SHALL CERTIFY THAT THE PROPOSED SOILS TO BE USED FOR THE INFILTRATION BASIN BACKFILL LAYER HAS THE INFILTRATION RATE REQUIRED PRIOR TO BACKFILLING. CLEAN SAND OR CLEAR STONE MAY BE USED AS AN ALTERNATIVE BACKFILL MATERIAL.
9. THE EMERGENCY DRAWDOWN PIPE IN THE INFILTRATION BASIN MAY BE OPEN TO ALLOW FOR RESTORATION UNTIL FINAL INFILTRATION BASIN RESTORATION OCCURS.

HATCH INDICATES INFILTRATION BASIN BOTTOM AREA. THIS AREA SHALL BE SEED WITH A NATIVE SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS.



PLACE 124 LF OF TEMPORARY 21" STORMSEWER @ 1101.00 FROM THE DETENTION BASIN AND CONNECT IT TO THE PROPOSED 36" INFILTRATION BASIN OUTLET PIPE UNTIL CONSTRUCTION OF INFILTRATION BASIN IS COMPLETE. REMOVE TEMPORARY STORMSEWER WHEN INFILTRATION BASIN IS ESTABLISHED

ONCE INFILTRATION BASIN IS CONSTRUCTED AND ESTABLISHED, REMOVE TEMPORARY 21" BYPASS STORMSEWER AND PLACE ENDSECTION IN INFILTRATION BASIN

36" APRON ENDWALL
 INV = 1101.00

50 LF - 36" RCP @ 1.00%

WET DETENTION BASIN
 PERMANENT WATER ELEV = 1101.00

INFILTRATION BASIN
 BOTTOM = 1100.00

O.L. 4

15' OVERFLOW WEIR @ 1104.00 W/ RIP-RAP

58 LF - 6" PVC STORM SEWER @ 0.00%

8" CAPPED EMERGENCY DRAIN @ 1100.00 ROUTED TO DAYLIGHT

EMERGENCY DRAWDOWN PIPE SHALL REMAIN OPEN DURING CONSTRUCTION UNTIL INFILTRATION BASIN HAS BECOME ESTABLISHED

PLACE 70' LONG X 5' WIDE X 2' DEEP LEVEL SPREADER AT THE END OF PROPOSED APRON END WALL. FILL WITH 6" CLEAR STONE (SEE DETAIL)

36" APRON ENDWALL W/ RIPRAP PAD
 INV = 1100.50

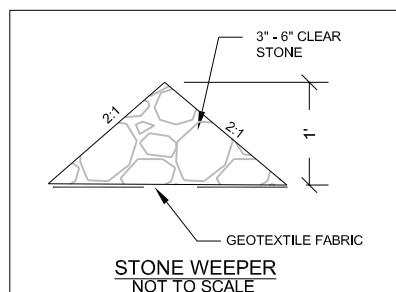
PLUG EXISTING 21" OUTFLOW PIPE DURING CONSTRUCTION. THE PIPE SHALL REMAIN OFFLINE UNTIL THE INFILTRATION BASIN BECOMES ESTABLISHED. REMOVE PLUG WHEN INFILTRATION BASIN CONSTRUCTION IS COMPLETE.

27 LF - 21" RCP STORMSEWER @ 0.00%

21" APRON ENDWALL W/ RIPRAP PAD
 INV = 1101.00

12" TALL STONE WEEPER

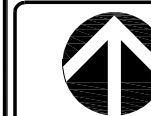
PROPOSED INFILTRATION BASIN
 12" DEPRESSION ZONE
 25,000 SQFT @ 1100.00
 43,908 (TOP OF BERM) @ 1106.00



SOUTHEAST WET DETENTION/INFILTRATION BASIN DETAIL
 PLAN VIEW

EAGLE TRACE

CITY OF MADISON, WISCONSIN



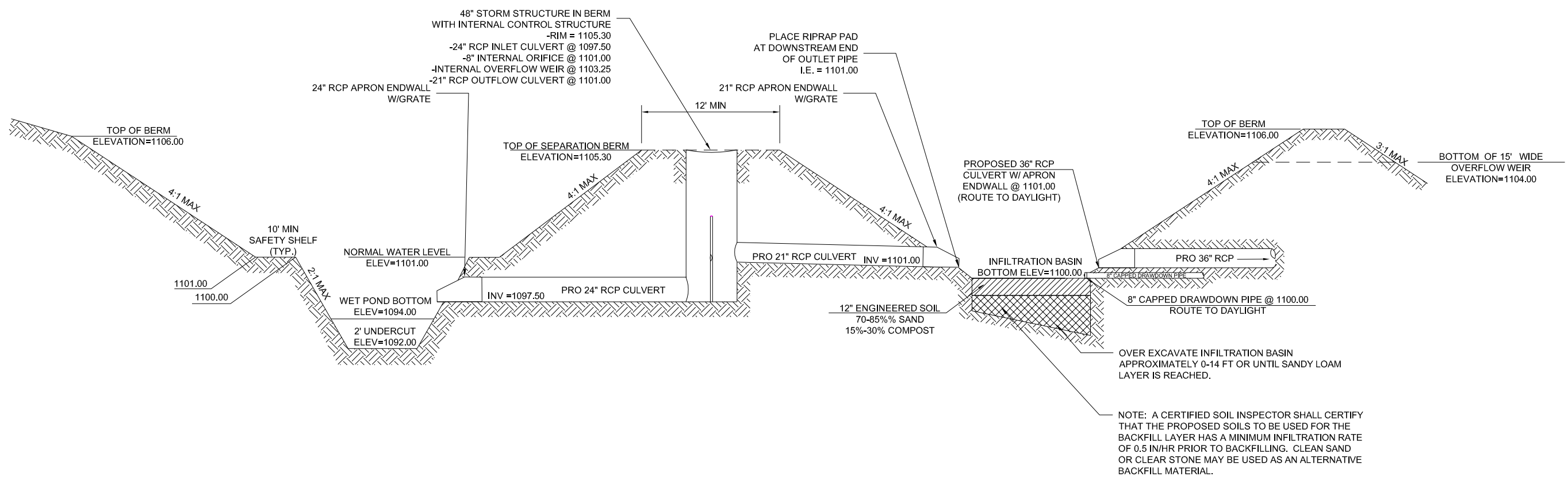
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DRAWN BY: GVP

FN: 17-04-105

Sheet Number:

1 OF 2



PROFILE VIEW

PROPOSED SOUTHEAST WET DETENTION/INFILTRATION BASIN DETAIL
 NOT TO SCALE

SOUTHEAST DETENTION/INFILTRATION BASIN DETAIL

EAGLE TRACE

CITY OF MADISON, WISCONSIN

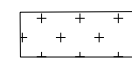


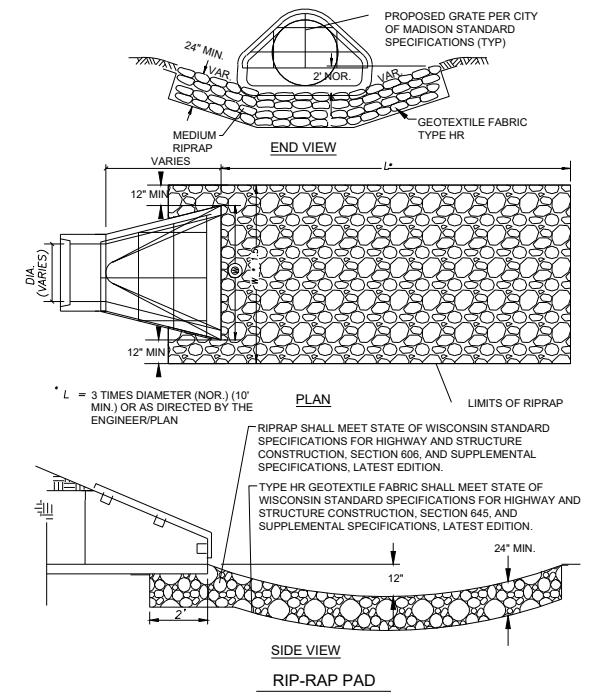
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REV 2020 02-05 JPS

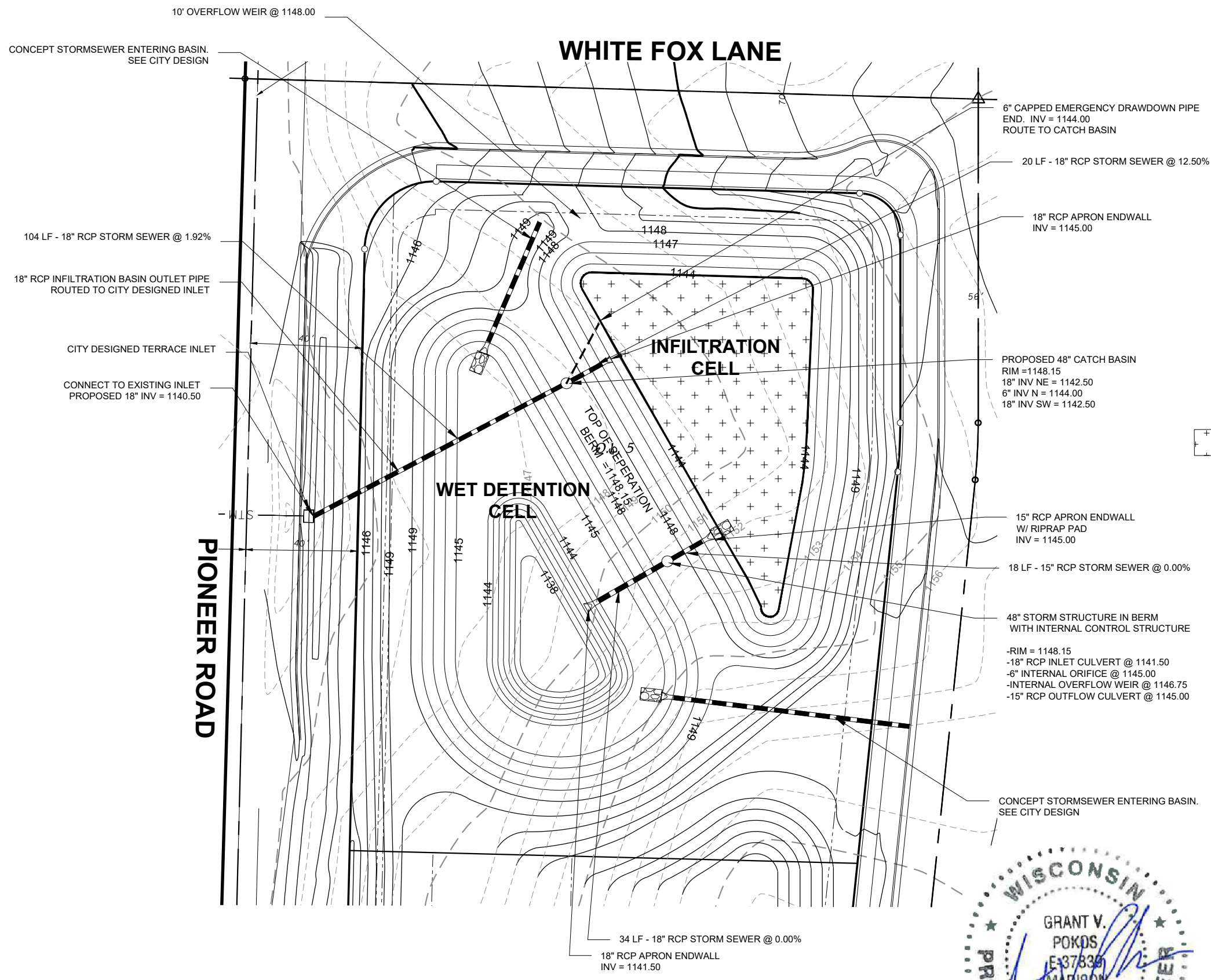
GENERAL NOTES:

1. ALL SITE WORK AND MATERIALS SHALL BE PER THE CITY OF MADISON STANDARD SPECIFICATIONS.
2. EROSION CONTROL MEASURES SHALL BE PLACED PER THE APPROVED EROSION CONTROL PLAN.
3. LENGTHS OF CULVERTS INCLUDE ENDWALLS.
4. CULVERT LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION TO ENSURE THAT THEY ARE LONG ENOUGH TO CONFORM TO TYPICAL CROSS SECTION.
5. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL, FERTILIZER, SEED AND MULCH. SEED MIXTURE WITHIN THE OUTLOT, EXCEPT FOR THE INFILTRATION AND DETENTION BASIN AREA, SHALL BE CITY OF MADISON SHORTGRASS SEEDING OR EQUIVALENT APPLIED PER THE CITY OF MADISON STANDARDS. THE INFILTRATION AND DETENTION BASIN AREAS SHALL BE SEEDED WITH A NATIVE SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS. FERTILIZER SHALL BE PLACED PER A SOIL TEST.
6. ENGINEERED SOIL IN INFILTRATION BASIN SHALL BE 70-85% SAND & 15-30% COMPOST
7. SEE APPROVED ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES
8. A CERTIFIED SOIL INSPECTOR SHALL CERTIFY THAT THE PROPOSED SOILS TO BE USED FOR THE INFILTRATION BASIN BACKFILL LAYER HAS THE INFILTRATION RATE REQUIRED PRIOR TO BACKFILLING. CLEAN SAND OR CLEAR STONE MAY BE USED AS AN ALTERNATIVE BACKFILL MATERIAL.

 HATCH INDICATES INFILTRATION BASIN BOTTOM AREA. THIS AREA SHALL BE SEEDED WITH A NATIVE SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS.




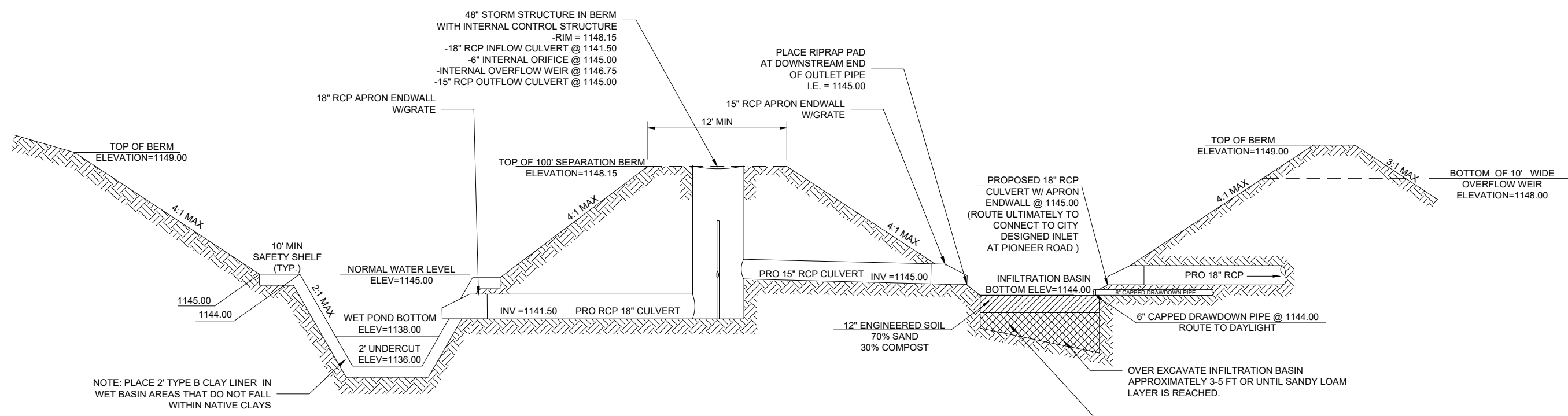
PLAN VIEW
PROPOSED NORTHWEST WET DETENTION/INFILTRATION BASIN DETAIL
NOT TO SCALE



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7530 Westwood Way, Madison, WI 53717
Phone: 608.833.7530 • Fax: 608.833.1089
YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

NORTHWEST DETENTION/INFILTRATION BASIN DETAIL
PLAN VIEW
EAGLE TRACE
CITY OF MADISON, WISCONSIN


DATE: 07/14/20
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PROFILE VIEW

PROPOSED NORTHWEST WET DETENTION/INFILTRATION BASIN DETAIL
 NOT TO SCALE

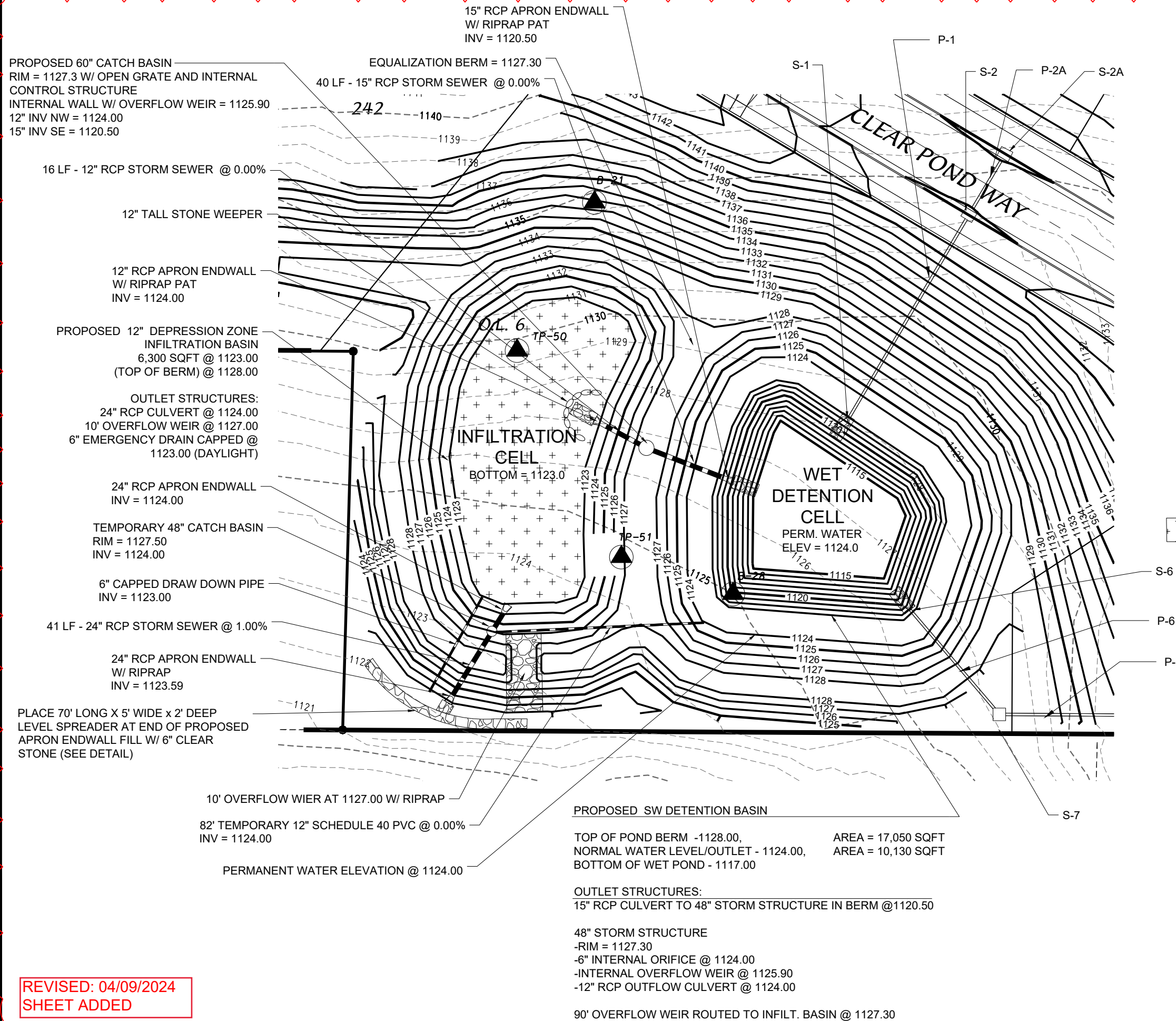
NORTHWEST DETENTION/INFILTRATION BASIN DETAIL

EAGLE TRACE

CITY OF MADISON, WISCONSIN



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GENERAL NOTES:

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- EROSION CONTROL MEASURES SHALL BE PLACED PER THE APPROVED EROSION CONTROL PLAN.
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- ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL, FERTILIZER, SEED AND MULCH. SEED MIXTURE SHALL BE PER THE CITY OF MADISON REQUIREMENTS. FERTILIZER SHALL BE PLACED PER A SOIL TEST. THE INFILTRATION AREA SHALL BE SEEDED WITH A SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS.
- ENGINEERED SOIL IN INFILTRATION BASIN SHALL BE 70-85% SAND & 15-30% COMPOST
- SEE APPROVED CITY ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES
- A CERTIFIED SOIL INSPECTOR SHALL CERTIFY THAT THE PROPOSED SOILS TO BE USED FOR THE INFILTRATION BASIN BACKFILL LAYER HAS THE INFILTRATION RATE REQUIRED PRIOR TO BACKFILLING. CLEAN SAND OR CLEAR STONE MAY BE USED AS AN ALTERNATIVE BACKFILL MATERIAL.

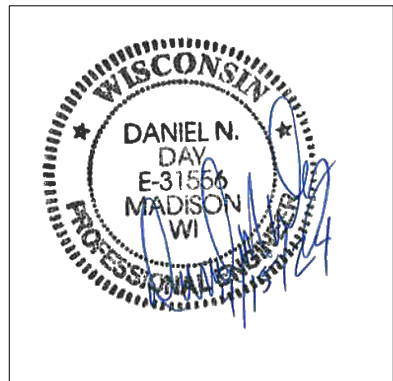
IMPLEMENTATION NOTES:

- THE EMERGENCY DRAWDOWN PIPE IN THE INFILTRATION BASIN SHALL BE OPEN TO ALLOW FOR RESTORATION UNTIL FINAL INFILTRATION BASIN RESTORATION OCCURS.
- INSTALL A TEMPORARY PLATE OVERTOP 6" ORIFICE IN 60" CATCH BASIN WITH 2" ORIFICE AT INVERT ELEVATION OF 1124.00. PLATE TO BE REMOVED WHEN INFILTRATION BECOMES ESTABLISHED.
- WHEN INFILTRATION BASIN IS ESTABLISHED, TEMPORARY CATCH BASIN AND PIPE TO BE REMOVED AND REMAINDER OF 24" PIPE AND ENDWALL TO BE INSTALLED.

HATCH INDICATES INFILTRATION BASIN BOTTOM AREA. THIS AREA SHALL BE SEEDED WITH A NATIVE SEED MIX TOLERANT OF FLUCTUATING WATER CONDITIONS.

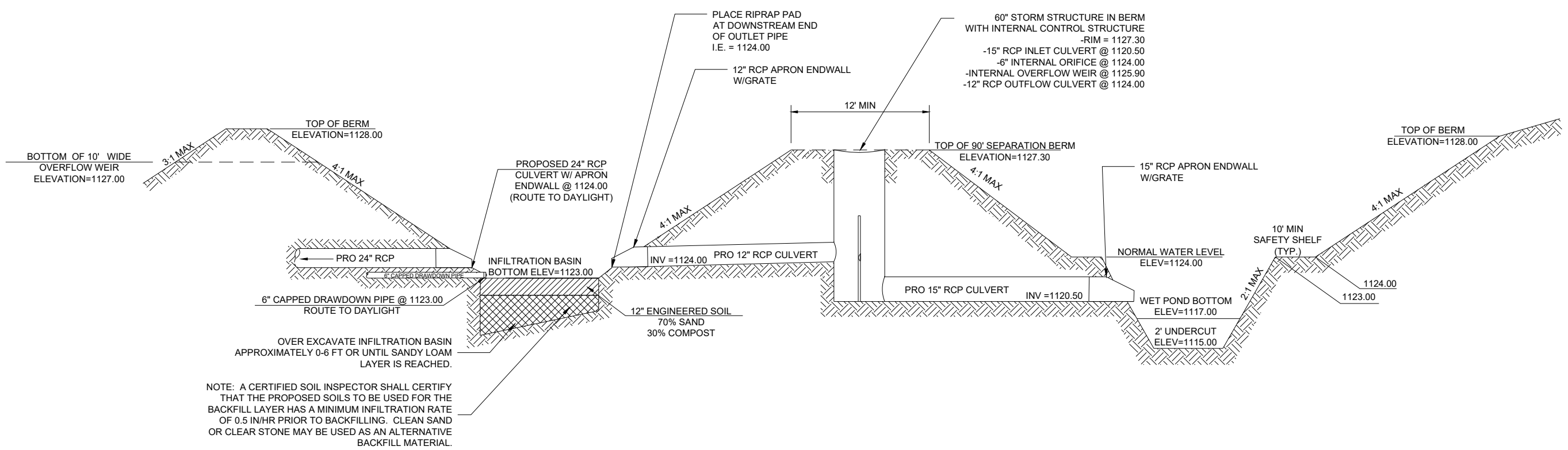
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SOUTHWEST DETENTION/INFILTRATION BASIN PLAN
EAGLE TRACE
CITY OF MADISON, WISCONSIN



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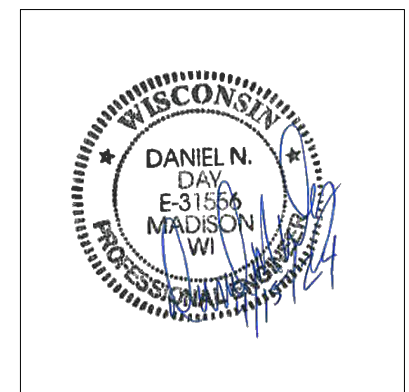
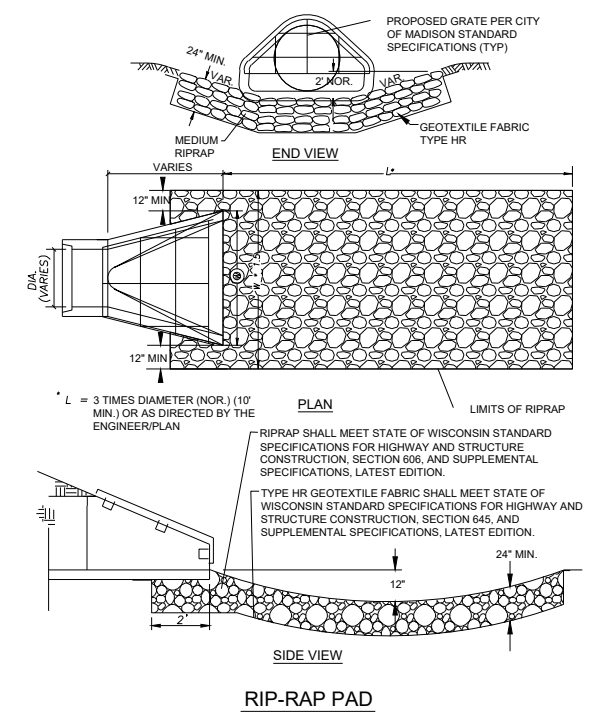
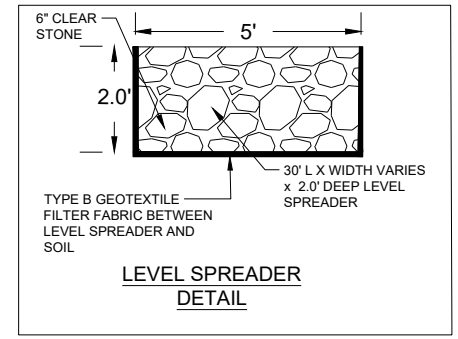
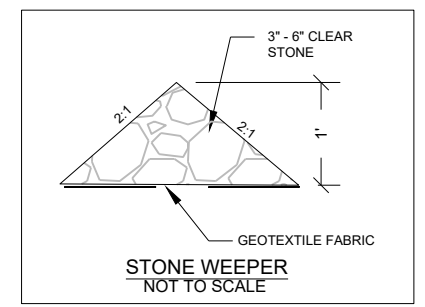
REVISED: 04/09/2024
SHEET ADDED



NOTE: A CERTIFIED SOIL INSPECTOR SHALL CERTIFY THAT THE PROPOSED SOILS TO BE USED FOR THE BACKFILL LAYER HAS A MINIMUM INFILTRATION RATE OF 0.5 IN/HR PRIOR TO BACKFILLING. CLEAN SAND OR CLEAR STONE MAY BE USED AS AN ALTERNATIVE BACKFILL MATERIAL.

PROFILE VIEW

PROPOSED SOUTHWEST WET DETENTION/INFILTRATION BASIN DETAIL
 NOT TO SCALE



REVISED: 04/09/2024
SHEET ADDED

DATE: 02-26-24
 REVISIONS:

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 FN: 23-05-129
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