



Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

INDEX OF SHEETS

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HILL VALLEY PHASE 1

STORMWATER MANAGEMENT

CITY PROJECT NO. 15669
CONTRACT NO. 9645

PUBLIC IMPROVEMENT PROJECT
APPROVED

JULY 1, 2025

BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

Christoph Pitz 08/28/2025

City Engineer

Date

STORMWATER MANAGEMENT PLAN
DESIGNED BY:

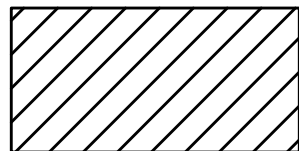


08/28/2025



PHASE 1 LIMITS

SEE PROJECT NO. 15668



PROPOSED PONDS

REVISION 1 - 09/30/25

- UPDATED SHEETS: G1, G2, G3, G4, G7, G8, MN1
- REMOVED SHEETS: G5, G6

PLOT SCALE: 1"=0' = 1'-0" XREF

PLOT NAME: ---

REV. DATE: 8/27/2025 12:50 PM

ORIGINATOR: CITY_OF_MADISON

FILE NAME: \\Gisserver\data\DESIGN\Projects\15669 (Hill Valley Ponds)\CAD\Streets\15669EN-TitleSheet.dwg

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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, SEED AND MULCH. SEED MIXTURE SHALL BE PER THE CITY OF MADISON REQUIREMENTS.
6. ANY AREAS WITHIN STORMWATER OUTLOT THAT ARE NOT BEING GRADED, INVASIVE HERBACEOUS VEGETATION SHOULD BE REMOVED AND RESEEDED WITH NATIVE SEED.
7. SEE APPROVED CITY ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES.
8. PARK DIVISION APPROVAL FOR USE OF PARK LANDS FOR ANY STAGING/STOCKPILING, ETC REQUIRED.
9. GRADING OF PUBLIC OUTLOTS DEDICATED TO PARKLAND SHALL BE APPROVED BY PARKS PRIOR TO SEEDING. THE DEVELOPER SHALL BE RESPONSIBLE FOR ESTABLISHMENT OF TURF SEED IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS. ONCE TURF SEED IS ESTABLISHED, THIS AREA SHALL BE RESPONSIBLE FOR MAINTENANCE BY THE PARKS DIVISION.
10. EROSION CONTROL MATTING LOCATION AND TYPE PER APPROVED HILL VALLEY - PHASE 1 GRADING AND EROSION CONTROL PLANS.

LEGEND

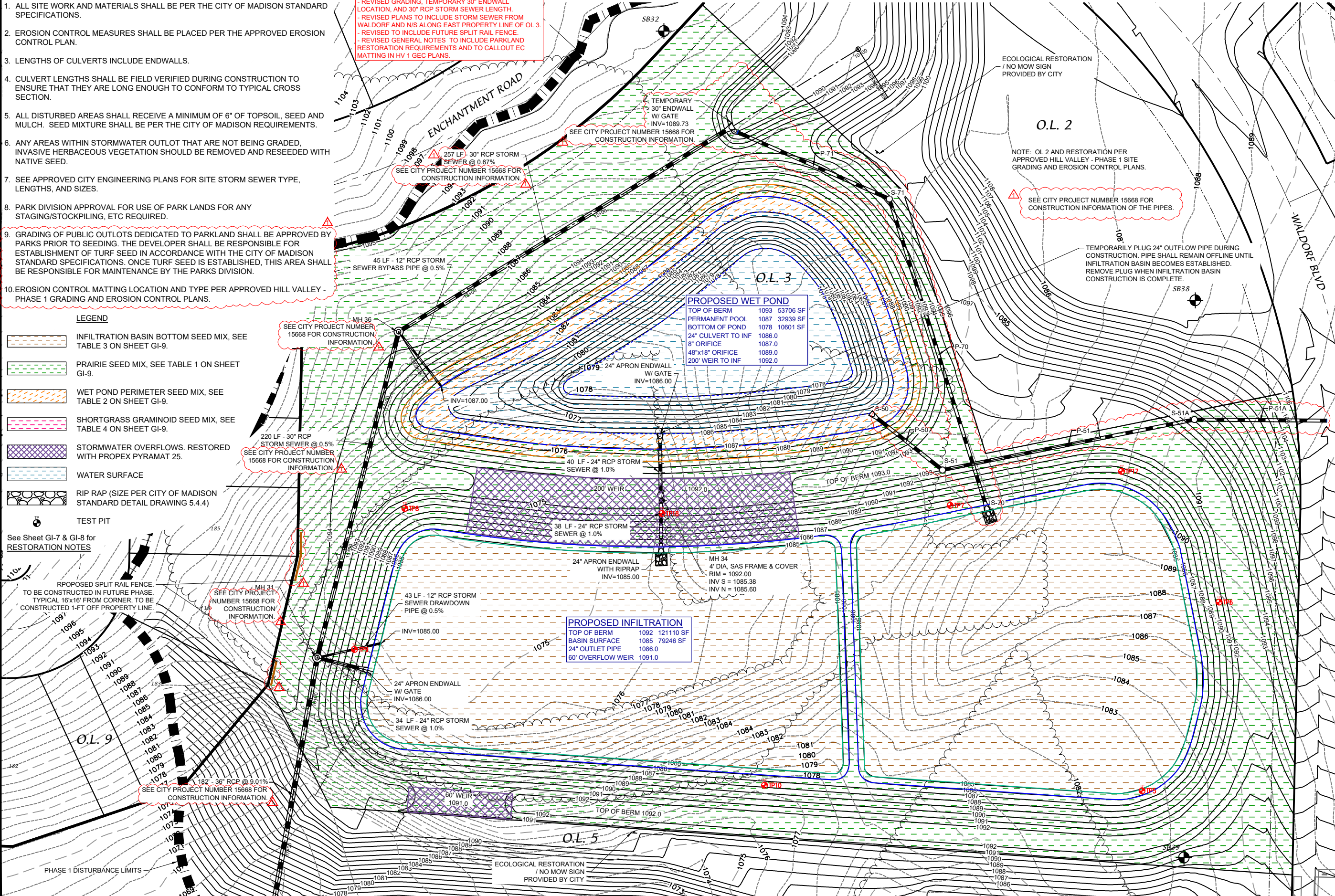
- INFILTRATION BASIN BOTTOM SEED MIX, SEE TABLE 3 ON SHEET GI-9.
- PRAIRIE SEED MIX, SEE TABLE 1 ON SHEET GI-9.
- WET POND PERIMETER SEED MIX, SEE TABLE 2 ON SHEET GI-9.
- SHORTGRASS GRAMINOID SEED MIX, SEE TABLE 4 ON SHEET GI-9.
- STORMWATER OVERFLOWS. RESTORED WITH PROPEX PYRAMAT 25.
- WATER SURFACE
- RIP RAP (SIZE PER CITY OF MADISON STANDARD DETAIL DRAWING 5.4.4)

TEST PIT

See Sheet GI-7 & GI-8 for RESTORATION NOTES

PROPOSED SPLIT RAIL FENCE TO BE CONSTRUCTED IN FUTURE PHASE. TYPICAL 16'x16' FROM CORNER. TO BE CONSTRUCTED 1-FT OFF PROPERTY LINE.

REVISION 1: REVISED 09/26/2025 TAM
REVISED GRADING, TEMPORARY 30" ENDWALL LOCATION, AND 30" RCP STORM SEWER LENGTH.
REVISED PLANS TO INCLUDE STORM SEWER FROM WALDORF AND N/S ALONG EAST PROPERTY LINE OF OL 3.
REVISED TO INCLUDE FUTURE SPLIT RAIL FENCE.
REVISED GENERAL NOTES TO INCLUDE PARKLAND RESTORATION REQUIREMENTS AND TO CALLOUT EC MATTING IN HV 1 GEC PLANS.



CENTRAL SOUTHEAST PONDS - PLAN VIEW

D'ONOFRIO KOTKE AND ASSOCIATES, INC.
7530 Westward Way, Madison, WI 53717
Phone: 608.433.7550 • Fax: 608.433.1089
YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

DETENTION AND INFILTRATION BASIN PLAN DETAILS
OUTLOT 3

HILL VALLEY

CITY OF MADISON, DANE COUNTY, WISCONSIN

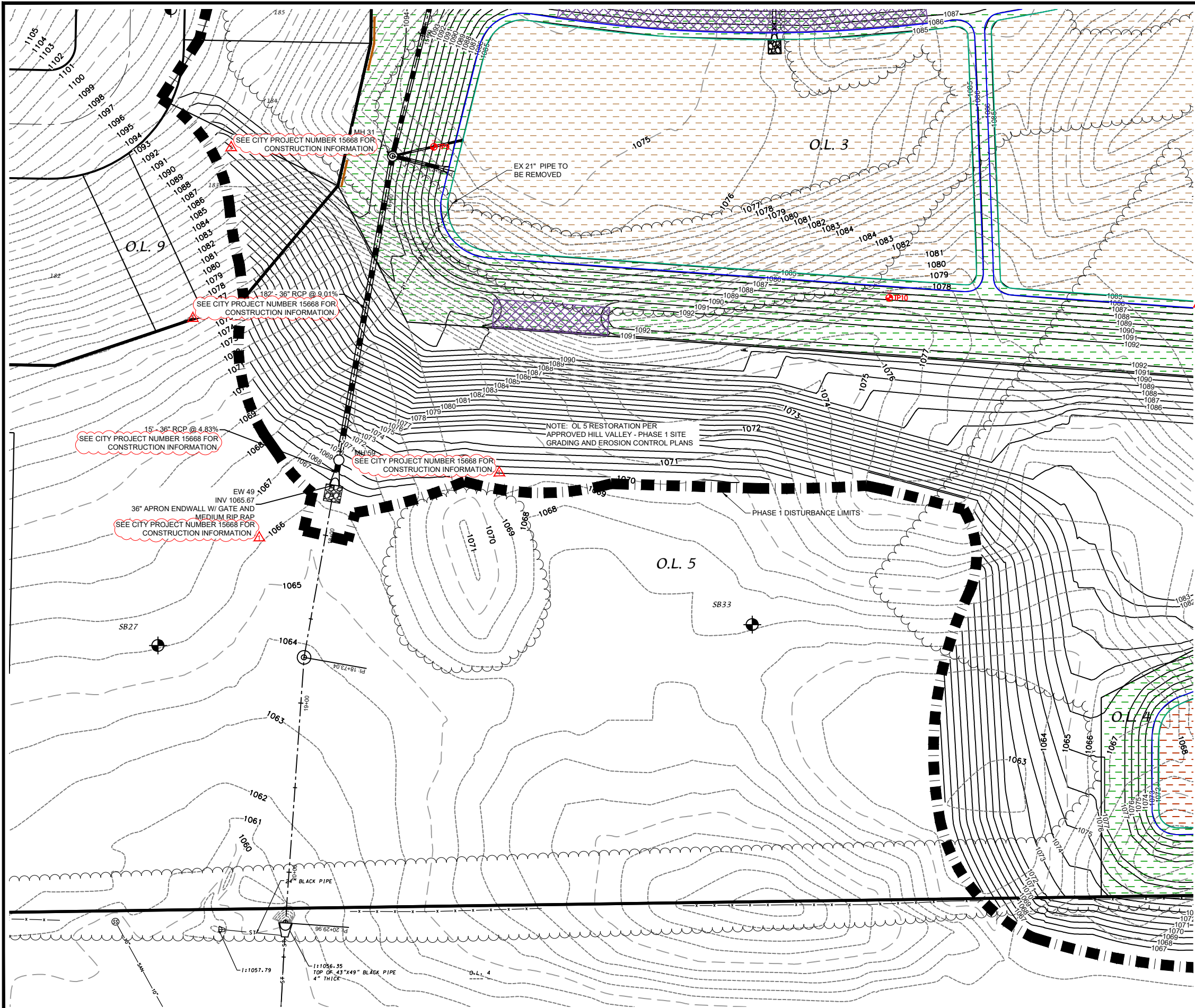
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Sheet Number:
GI-2



- 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, SEED AND MULCH. SEED MIXTURE SHALL BE PER THE CITY OF MADISON REQUIREMENTS.
 6. ANY AREAS WITHIN STORMWATER OUTLOT THAT ARE NOT BEING GRADED, INVASIVE HERBACEOUS VEGETATION SHOULD BE REMOVED AND RESEEDED WITH NATIVE SEED.
 7. SEE APPROVED CITY ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES.
 8. PARK DIVISION APPROVAL FOR USE OF PARK LANDS FOR ANY STAGING/STOCKPILING, ETC REQUIRED.
 9. EROSION CONTROL MATTING LOCATION AND TYPE PER APPROVED HILL VALLEY - PHASE 1 GRADING AND EROSION CONTROL PLANS.

REVISION 1: REVISED 09/26/2025 TAM
- REVISED TO INCLUDE REFERENCE TO CITY PLANS.
- REVISED GENERAL NOTES TO CALLOUT EC MATTING IN HV 1 GEC PLANS.

LEGEND

- INFILTRATION BASIN BOTTOM SEED MIX, SEE TABLE 3 ON SHEET GI-9.
- PRAIRIE SEED MIX, SEE TABLE 1 ON SHEET GI-9.
- WET POND PERIMETER SEED MIX, SEE TABLE 2 ON SHEET GI-9.
- SHORTGRASS GRAMINOID SEED MIX, SEE TABLE 4 ON SHEET GI-9.
- STORMWATER OVERFLOWS. RESTORED WITH PROPEX PYRAMAT 25.
- WATER SURFACE
- RIP RAP (SIZE PER CITY OF MADISON STANDARD DETAIL DRAWING 5.4.4)
- TEST PIT

See Sheet GI-7 & GI-8 for RESTORATION NOTES

PLAN DETAILS
OUTLOT 5

HILL VALLEY

CITY OF MADISON, DANE COUNTY, WISCONSIN

SCALE: 1" = 60'
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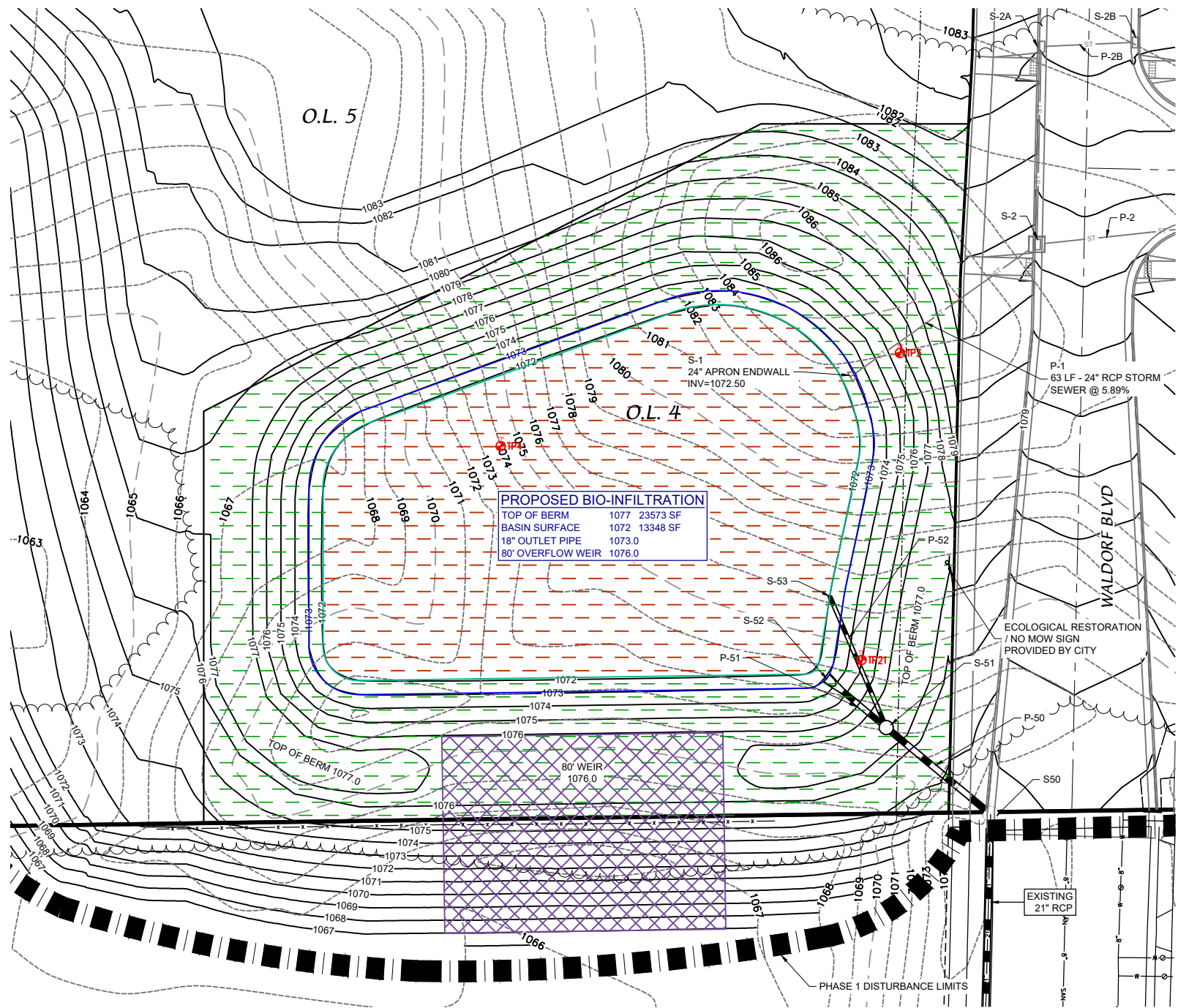
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FN: 25-05-108

Sheet Number:
GI-3

D'ONOFRIO KOTIYE AND ASSOCIATES, INC.
7530 Westward Way, Madison, WI 53717
Phone: 608.833.7530 • Fax: 608.833.1089
YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



CENTRAL SOUTHEAST BIOBED - PLAN VIEW

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, EXCEPT FOR THE BASIN BOTTOM, SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL, SEED AND MULCH. SEED MIXTURE SHALL BE PER THE CITY OF MADISON REQUIREMENTS.
6. BASIN BOTTOM SHALL BE RESTORED PER BIO-INFILTRATION DETAIL ON SHEET GI-8.
7. ANY AREAS WITHIN STORMWATER OUTLOT THAT ARE NOT BEING GRADED, INVASIVE HERBACEOUS VEGETATION SHOULD BE REMOVED AND RESEEDED WITH NATIVE SEED.
8. SEE APPROVED CITY ENGINEERING PLANS FOR SITE STORM SEWER TYPE, LENGTHS, AND SIZES.
9. PARK DIVISION APPROVAL FOR USE OF PARK LANDS FOR ANY STAGING/STOCKPILING, ETC REQUIRED.
10. EROSION CONTROL MATTING LOCATION AND TYPE PER APPROVED HILL VALLEY - PHASE 1 GRADING AND EROSION CONTROL PLANS.



REVISION 1: REVISED 09/26/2025 TAM
- REVISED GENERAL NOTES TO CALLOUT EC MATTING IN HV 1 GEC PLANS.

LEGEND

- BIO-INFILTRATION BASIN BOTTOM PLUG PLANTED, SEE BIO-INFILTRATION DETAIL ON SHEET GI-8.
- PRAIRIE SEED MIX, SEE TABLE 1 ON SHEET GI-9.
- WET POND PERIMETER SEED MIX, SEE TABLE 2 ON SHEET GI-9.
- SHORTGRASS GRAMINOID SEED MIX, SEE TABLE 4 ON SHEET GI-9.
- STORMWATER OVERFLOWS. RESTORED WITH PROPEX PYRAMAT 25.
- WATER SURFACE
- RIP RAP (SIZE PER CITY OF MADISON STANDARD DETAIL DRAWING 5.4.4)



TEST PIT

See Sheet GI-7 & GI-8 for
RESTORATION NOTES

BIO-INFILTRATION BASIN PLAN DETAILS
OUTLOT 4

HILL VALLEY

CITY OF MADISON, DANE COUNTY, WISCONSIN



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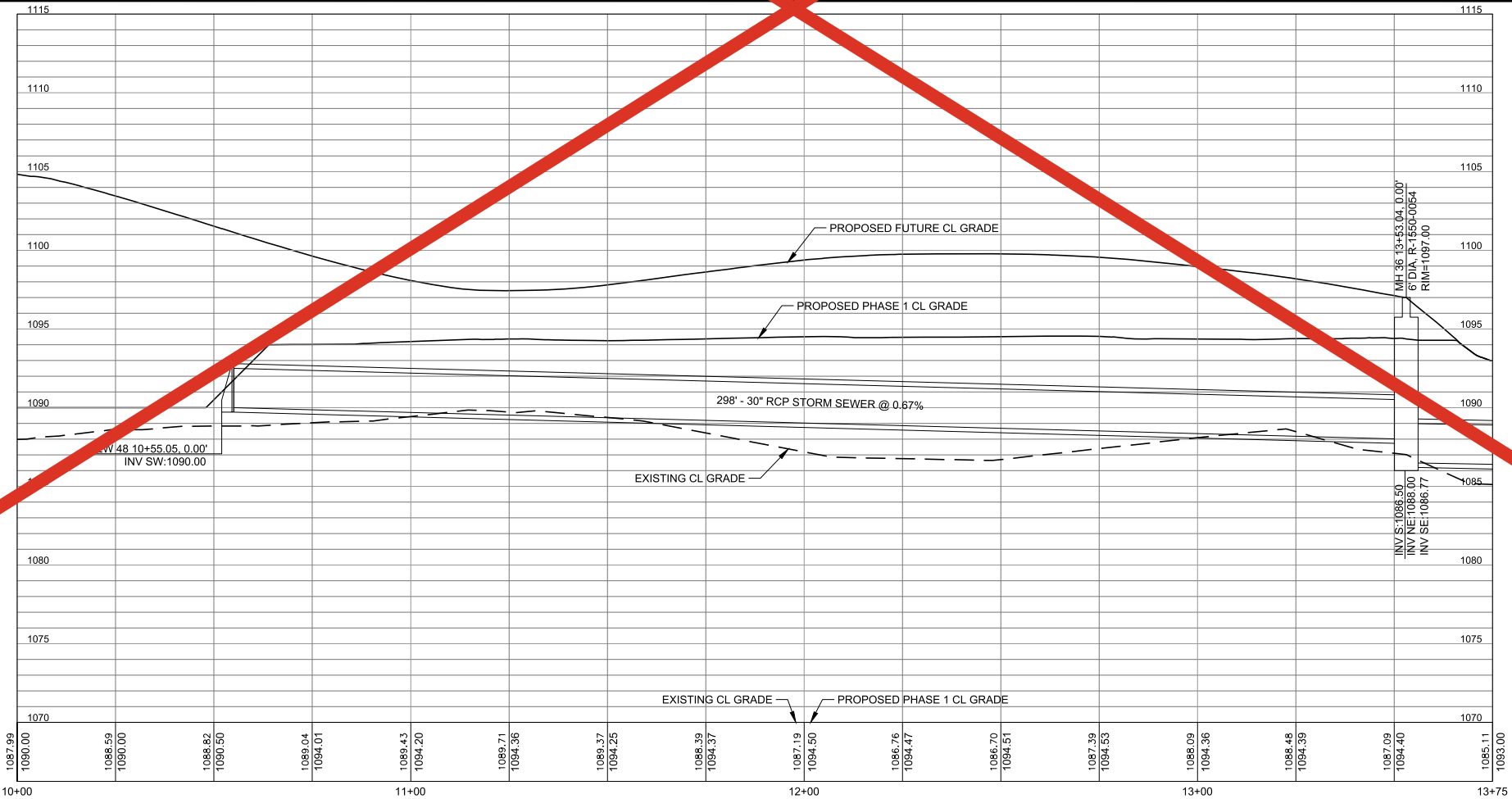
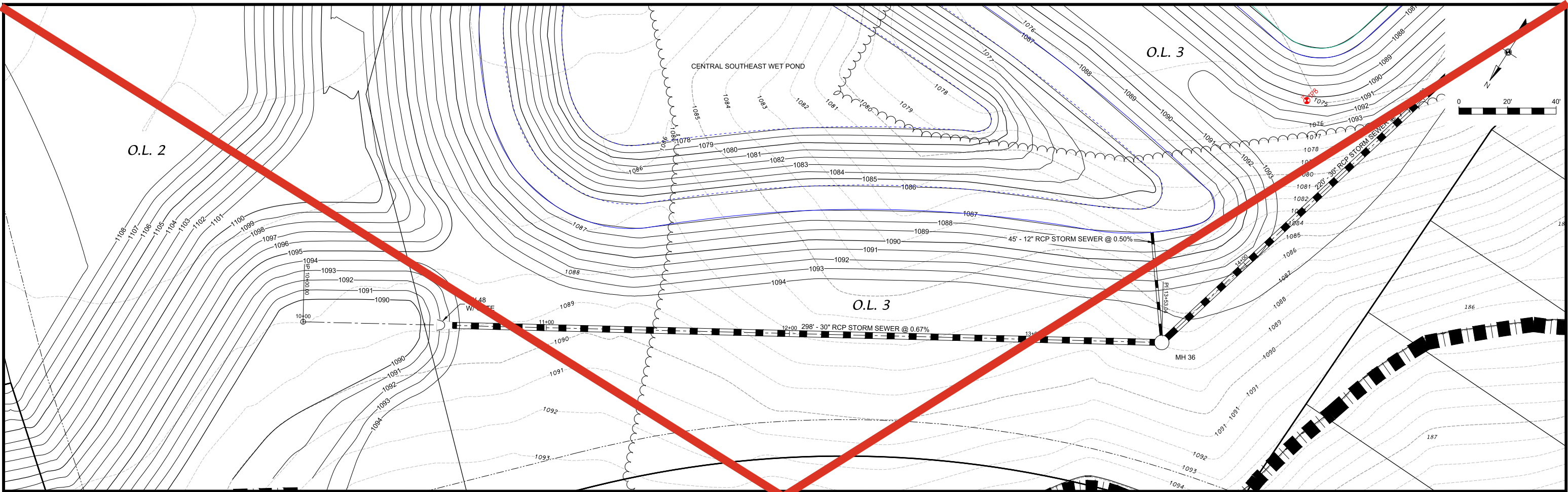
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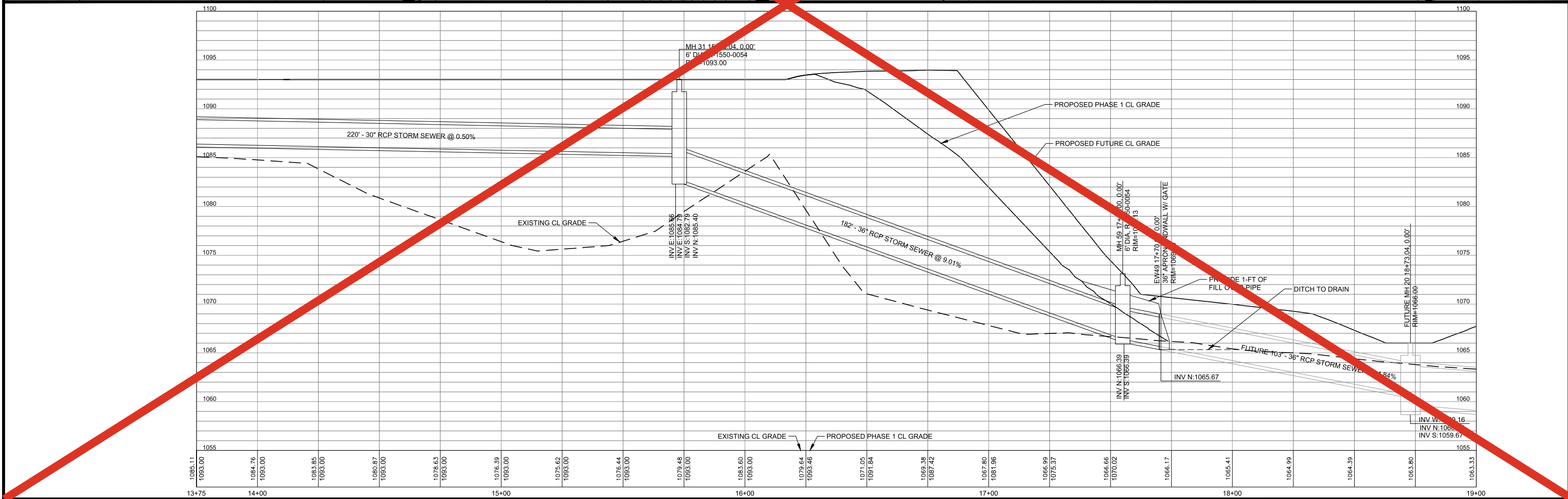
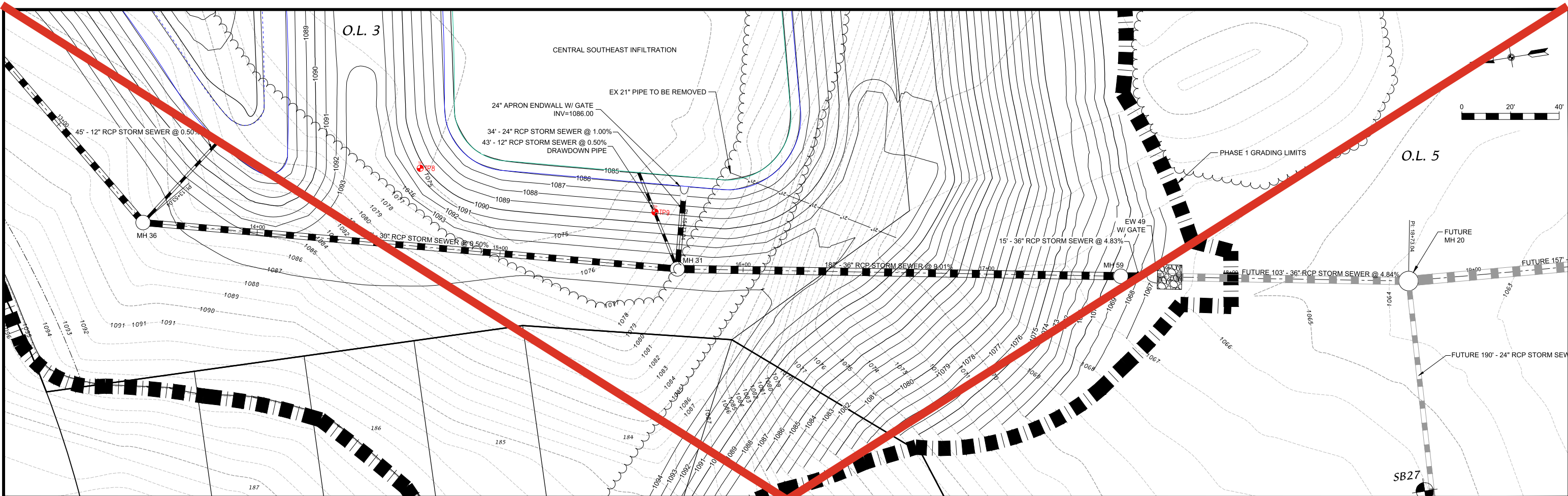
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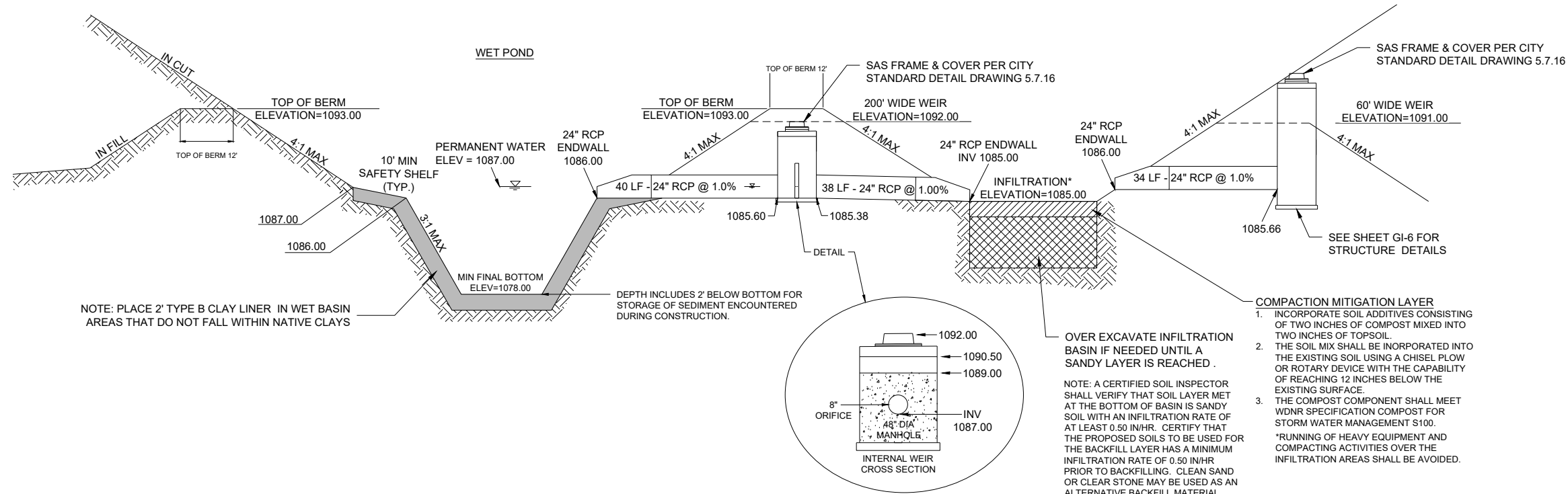
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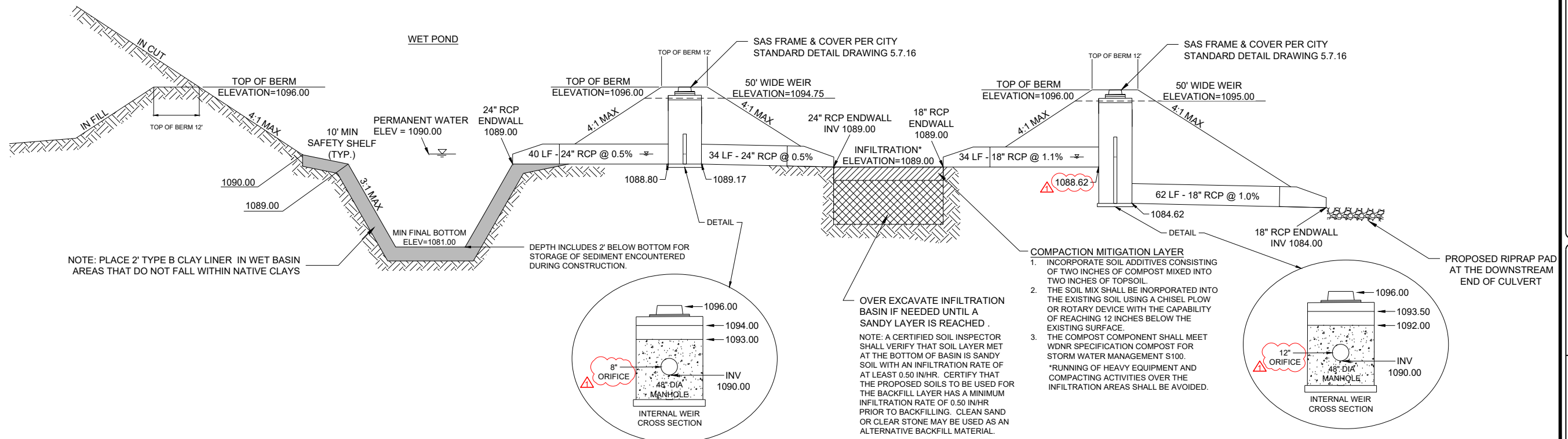
GI-4







CENTRAL SOUTHEAST PONDS - PROFILE VIEW
PROPOSED WET DETENTION BASIN AND INFILTRATION BASIN
NOT TO SCALE



EAST PONDS - PROFILE VIEW
PROPOSED WET DETENTION BASIN AND INFILTRATION BASIN
NOT TO SCALE



DATE: 08-25-2025
REVISED: 09/26/2025

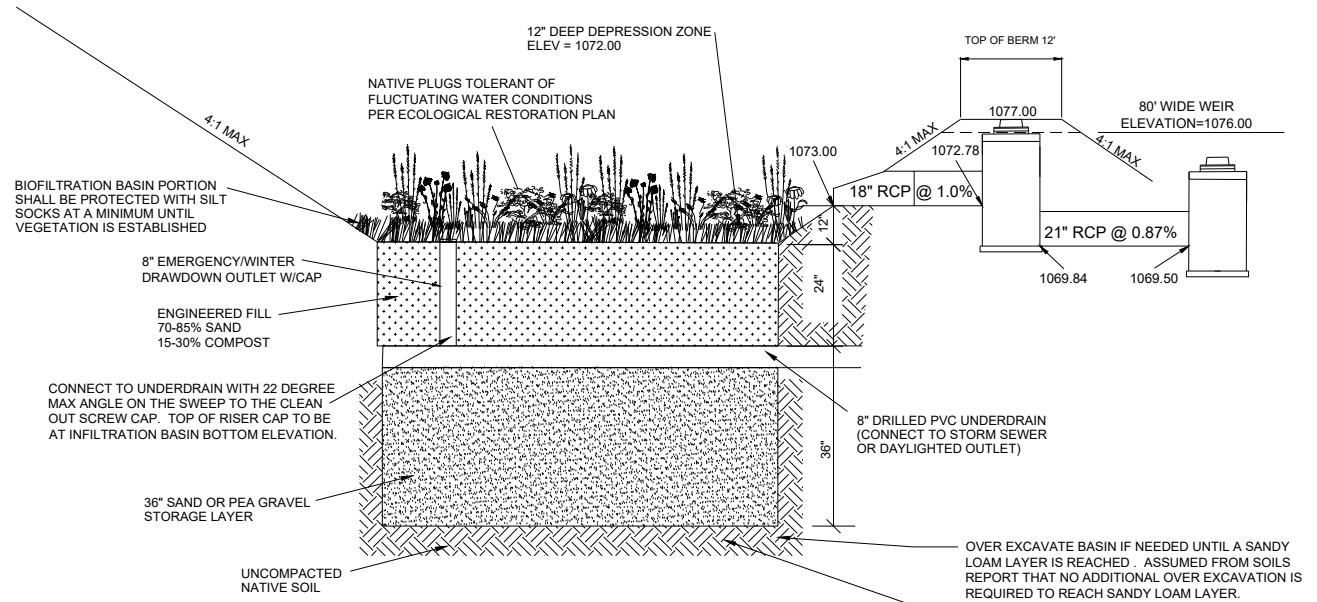
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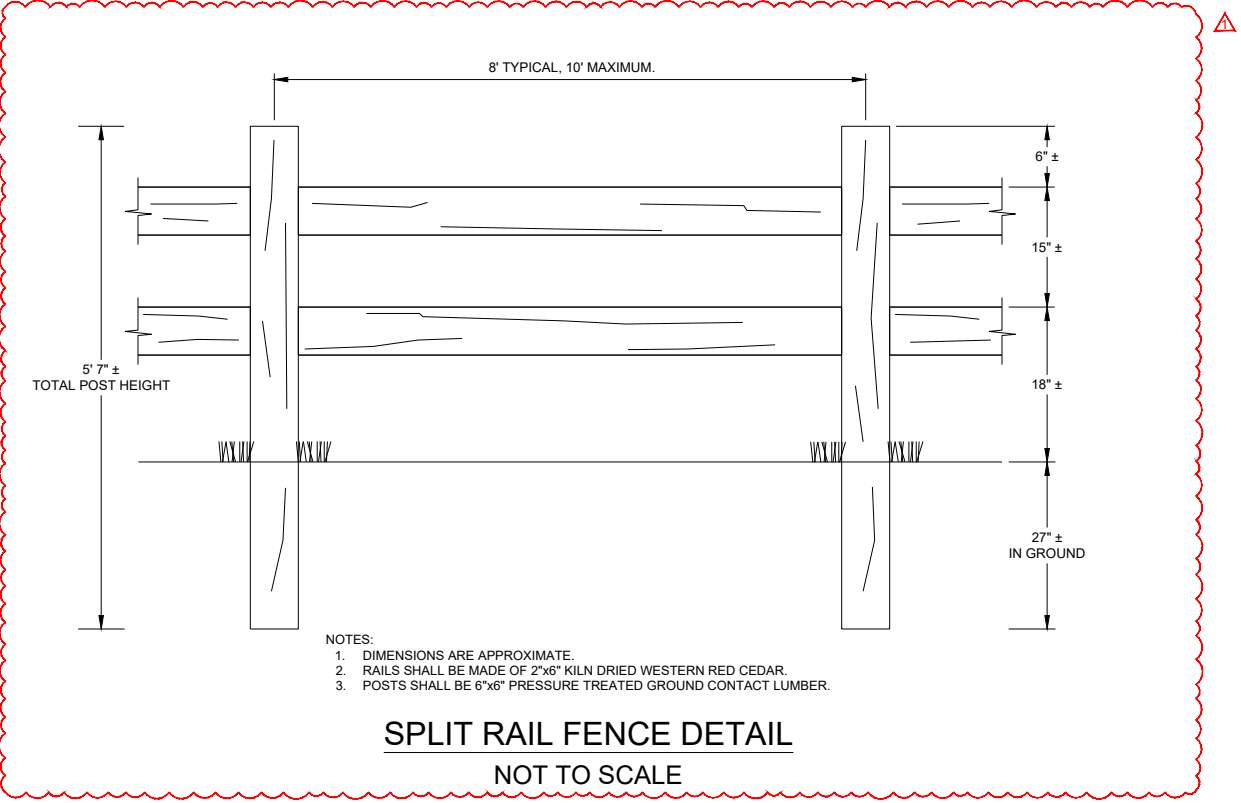
Sheet Number:

GI-7

REVISION 1: REVISED 09/26/2025 TAM
- REVISED STRUCTURE ORIFICE DIAMETERS AND INVERT.



CENTRAL SOUTHEAST - PROFILE VIEW
BIO-INFILTRATION BASIN
NOT TO SCALE



SPLIT RAIL FENCE DETAIL
NOT TO SCALE

- Start of Work - Public Outlots and Green Infrastructure:**
- Prior to beginning work on public improvements or final grading on lands to be dedicated to the public (including outlots and easements) a preconstruction meeting shall be held and notice of the start of work shall be provided to the City Engineer a minimum of fifteen (15) working days prior to starting work. The Contractor's ecosystem/ecological subcontractor shall be required to attend the preconstruction meeting for any work that includes native seeding, planting and professional ecosystem establishment.
 - Rough grading of the lands to be dedicated to the public may occur prior to the preconstruction meeting provided all required land disturbance permits are in place and any applicable site grading and erosion control plans have been approved.
 - Final grading shall not occur until the pre-construction meeting has occurred and the final plans are issued by the City of Madison.
 - Final seeding may not occur until the as-built has been approved by the City of Madison.
 - Final grading and seeding for professional ecosystem establishment for stormwater management outlots and other public storm green infrastructure shall be completed by the date submitted with the erosion control permit.
- As-Built - Public Outlots and Green Infrastructure:**
- Either the Contractor or the City shall be responsible for obtaining asbuilts of construction prior to the Contractor's initial seeding/planting in stormwater outlots and areas of other public green infrastructure. The Contractor shall inform the City at the pre-construction meeting if they will take on the as-built responsibilities or defer to the City to complete the required as-built survey work.
 - The Contractor shall provide the City with a schedule of construction and notify the City at least fifteen (15) working days prior to the anticipated final grading work commencing. The Contractor shall then notify the City at least five (5) working days prior to the anticipated date of final grading completion and the site being ready for as-built surveying.
 - The Contractor shall reimburse the City as defined in Section O of the 9645 Developer Agreement, Hill Valley Phase 1 - Stormwater Management. Developer to Reimburse the City of Costs Sustained.
 - If the City is responsible to complete the as-built survey, was provided proper notice by the Contractor as defined above, and fails to obtain asbuilts within five (5) working days of final grading being completed, the final grading shall be considered approved in regards to as-built survey requirements.
 - If the Contractor is responsible to complete the as-built survey the City shall have two (2) working days to review and approve or reject the asbuilt survey from the date it is submitted by the Contractor. Final grading shall be considered approved in regards to as-built survey requirements should the City fail to approve or provide response to the Contractor's as-built survey submittal within the allowed two (2) working days.
- Professional Ecosystem Establishment on Public Stormwater Outlots and Other Public Green Infrastructure:**
- The Developer shall be required to hire City of Madison prequalified ecological restoration contractor under Category 246 Ecological Restoration of the Prequalified Contractors Qualified for Approval to Bid on Public Works Contracts or work on Public Works contracts and/or Private Developments to seed and to perform professional ecosystem establishment two growing seasons.
 - Developer shall be responsible for removing existing vegetation as recommended by the City Engineer to prepare the site for native plant seeding and professional ecosystem establishment.
 - After seeding, the Developer's ecological restoration contractor shall maintain the newly seeded area with the goal of native seed establishment from the initial native plant seeding for a minimum of two consecutive growing seasons. For all native seeding done after October 14th, the first growing season begins in spring of the following year.
 - The growing season is defined as from the last frost in spring to the first frost in fall.
 - The Developer shall be responsible for seeding with a native species mix that shall be approved by the City of Madison. This mix shall be referenced on the plan sheet provided and sealed by the Developer's Engineer and approved by City Engineering and included in the professional ecosystem establishment plan. Refer to City of Madison Standard Specifications Article 207.2(a) for lists of approved seed mixes by site, custom seed mixes approved by the City shall also be accepted. Seeding shall be performed as specified in Article 207 of the City of Madison Standard Specifications.
 - Requirements of Professional Ecosystem Establishment Plan:
 - The following shall be included in the plan and be considered part of this contract:
 - The means and methods for removal all and any types of vegetation shall be included in the professional ecosystem establishment plan.
 - Overseeding as part of establishment and disturbance shall be included in the contract.
 - All proposed native seed mixes.
 - A schedule of ecosystem establishment activities, including site preparation, seeding, and management.
 - Management means and methods during the first and second growing season for obtaining ecological restoration.
 - In areas where there are existing trees that will not be impacted by grading. This shall include an inventory and assessment of existing trees.
 - Seeding shall be required under erosion control matting, except for overseeding and as required to supplement non stratified seed mix.
 - Seeding that occurs between April 15th and October 14th shall require non stratified seed mix, and entire seeded area shall be overseeded with native seed mix specified in ecological restoration contract after October 14th.
 - The Developer is responsible for submitting the seed mix labels for approval by the City of Madison prior to installation.
 - The Developer shall be required to notify the City Engineer a minimum of five (5) working days prior to seeding. The seeding date will determine the start of the first year growing season.
 - The Developer shall be responsible for all repairs, erosion, etc. during professional ecosystem establishment.
 - Ecological Restoration Guarantee Deposit: The Developer shall provide the City with a deposit to guarantee the restoration and two-year maintenance per plans approved by the City Engineer.
 - The deposit shall be a cash deposit in an amount determined by the City Engineer.

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YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

BIO-INFILTRATION BASIN PROFILE DETAIL & NOTES

HILL VALLEY

CITY OF MADISON, DANE COUNTY, WISCONSIN

0 1

DATE: 08-25-2025
REVISED: 09/26/2025

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FN: 25-05-108

Sheet Number:
GI-8

REVISION 1: REVISED 09/26/2025 TAM
-REVISED TO INCLUDE SPLIT RAIL FENCE DETAIL-

Seed Installation Location and Rates:

1. Prairie Seed Mix, Table 1. Prairie Seed Mix, shall be installed along the pond and basin slopes, and over the remainder of the outlot at a rate of 14 lb/acre and approximately 75 seeds/ft². Refer to seed mix.
2. Wet Pond Perimeter Seed Mix, Table 2. Wet Pond Perimeter Seed Mix, shall be installed in a band covering the safety shelf and 2 ft beyond the waters edge, at a rate of 5 lb/acre and approximately 101 seeds/ft².
3. Infiltration Basin Bottom Seed Mix, Table 3. Infiltration Basin Bottom Seed Mix, shall be installed in the bottom of the infiltration basin at a rate of 8 lb/acre and approximately 91 seeds/ft².

Table 1. Prairie Seed Mix

Nomenclature		Seed Metrics		
		Oz/Acre	Seeds/ft²	% Mix by No. Seeds
Scientific Name	Common Name			
Grasses, Sedges, Rushes				
<i>Andropogon gerardii</i>	Big Bluestem	4.0	0.9	1.23
<i>Bouteloua curtipendula</i>	Side oats Grama	60.0	8.3	11.03
<i>Bromus kalmii</i>	Prairie Brome	4.0	0.7	0.98
<i>Carex bicknellii</i>	Bicknell's Oval Sedge	1.0	0.4	0.52
<i>Carex brevior</i>	Fescue Sedge	1.5	1.0	1.33
<i>Carex molesta</i>	Field Oval Sedge	2.0	1.1	1.53
<i>Elymus canadensis</i>	Canada Wild Rye	36.0	4.3	5.74
<i>Elymus virginicus</i>	Virginia Wild Rye	16.0	1.5	2.06
<i>Panicum virgatum</i>	Switch Grass	2.5	0.8	1.07
<i>Schizachyrium scoparium</i>	Little Bluestem	32.0	11.0	14.71
<i>Sorghastrum nutans</i>	Indian Grass	6.0	1.7	2.21
<i>Sporobolus heterolepis</i>	Prairie Dropseed	1.0	0.4	0.49
Forbs				
<i>Achillea millefolium</i>	Yarrow	1.0	4.1	5.46
<i>Agastache foeniculum</i>	Blue Giant Hyssop	1.0	2.1	2.76
<i>Allium cernuum</i>	Nodding Onion	1.0	0.2	0.23
<i>Amorpha canescens</i>	Lead Plant	1.0	0.4	0.49
<i>Asclepias syriaca</i>	Common Milkweed	1.0	0.1	0.12
<i>Asclepias tuberosa</i>	Butterfly Weed	2.0	0.2	0.26
<i>Astragalus canadensis</i>	Canadian Milk Vetch	1.0	0.4	0.52
<i>Baptisia alba</i>	White Wild Indigo	1.0	<0.1	0.05
<i>Chamaecrista fasciculata</i>	Partridge Pea	8.0	0.5	0.66
<i>Coreopsis palmata</i>	Prairie Coreopsis	1.0	0.2	0.31
<i>Delea candida</i>	White Prairie Clover	1.0	0.4	0.58
<i>Delea purpurea</i>	Purple Prairie Clover	4.0	1.4	1.84
<i>Drymocallis arguta</i>	Prairie Cinquefoil	0.5	2.6	3.52
<i>Echinacea pallida</i>	Pale Purple Coneflower	2.0	0.2	0.32
<i>Echinacea purpurea</i>	Purple Coneflower	2.0	0.3	0.40
<i>Eryngium yuccifolium</i>	Rattlesnake Master	2.0	0.3	0.46
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	0.5	4.0	5.36
<i>Helopsis helianthoides</i>	False Sunflower	2.5	0.4	0.48
<i>Lespedeza capitata</i>	Round-headed Bush Clover	1.0	0.2	0.25
<i>Liatris aspera</i>	Rough Blazing Star	1.0	0.4	0.49
<i>Monarda fistulosa</i>	Wild Bergamot	1.0	1.6	2.15
<i>Oligoneron rigidum</i>	Stiff Goldenrod	2.0	1.9	2.51
<i>Penstemon digitalis</i>	Foxglove Beardtongue	1.0	3.0	3.98
<i>Pycnanthemum virginianum</i>	Mountain Mint	0.5	2.5	3.37
<i>Ratibida pinnata</i>	Yellow Coneflower	2.0	1.4	1.84
<i>Rudbeckia hirta</i>	Black-eyed Susan	3.0	6.3	8.46
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	0.5	0.5	0.66
<i>Rudbeckia triloba</i>	Brown-eyed Susan	0.5	0.4	0.52
<i>Silphium laciniatum</i>	Compass Plant	2.0	<0.1	0.04
<i>Solidago speciosa</i>	Showy Goldenrod	0.5	1.1	1.46
<i>Symphytichium laeve</i>	Smooth Blue Aster	1.5	1.9	2.53
<i>Symphytichium novae-angliae</i>	New England Aster	0.8	1.2	1.62
<i>Tradescantia ohioensis</i>	Ohio Spiderwort	2.0	0.4	0.49
<i>Verbena stricta</i>	Hoary Vervain	2.0	1.3	1.72
<i>Zizia aurea</i>	Golden Alexanders	3.5	0.9	1.18

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft ²	% Mix by No. Seeds
Grasses and Sedges	12	166	32.1	42.9
Forbs	35	57.3	42.8	57.1
Totals	47	223.3	74.9	100

Table 2. Wet Pond Perimeter Seed Mix

Nomenclature		Seed Metrics		
		Oz/Acre	Seeds/ft²	% Mix by No. Seeds
Scientific Name	Common Name			
Grasses, Sedges, Rushes				
<i>Calamagrostis canadensis</i>	Blue Joint Grass	1.0	6.4	6.36
<i>Carex comosa</i>	Bottlebrush Sedge	2.0	1.4	1.36
<i>Carex crinita</i>	Fringed Sedge	2.0	1.1	1.04
<i>Carex hystericina</i>	Porcupine Sedge	2.0	1.4	1.36
<i>Carex scoparia</i>	Lance-fruited Oval Sedge	2.0	3.9	3.82
<i>Carex stipata</i>	Common Fox Sedge	3.0	2.3	2.32
<i>Carex vulpinoidea</i>	Brown Fox Sedge	3.0	6.9	6.81
<i>Elymus virginicus</i>	Virginia Wild Rye	32.0	3.1	3.05
<i>Glyceria grandis</i>	American Manna Grass	1.0	1.6	1.59
<i>Glyceria striata</i>	Fowl Manna Grass	1.0	2.1	2.04
<i>Juncus effusus</i>	Common Rush	0.5	11.5	11.36
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush	3.5	2.5	2.46
<i>Scirpus atrovirens</i>	Dark-green Bulrush	0.7	7.4	7.31
<i>Scirpus cyperinus</i>	Wool Grass	0.2	7.8	7.72
<i>Spartina pectinata</i>	Prairie Cord Grass	4.0	0.6	0.60
Forbs				
<i>Acorus americanus</i>	Sweet Flag	2.0	0.3	0.30
<i>Alisma subcordatum</i>	American Water Plantain	2.0	2.8	2.73
<i>Asclepias incarnata</i>	Swamp Milkweed	2.0	0.2	0.22
<i>Bidens cernua</i>	Nodding Bur Mangold	1.5	0.7	0.72
<i>Eupatorium perfoliatum</i>	Boneset	1.0	3.7	3.63
<i>Eutrochium maculatum</i>	Joe Pye Weed	1.0	2.2	2.16
<i>Helenium autumnale</i>	Sneezeweed	1.0	3	2.95
<i>Iris virginica</i>	Southern Blue Flag	2.0	<0.1	0.05
<i>Lobelia cardinalis</i>	Cardinal Flower	0.2	1.8	1.82
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.3	3.4	3.41
<i>Mimulus ringens</i>	Monkey Flower	0.2	10.6	10.45
<i>Sagittaria latifolia</i>	Common Arrowhead	3.0	4.2	4.16
<i>Sparganium eurycarpum</i>	Broad-fruit Bur Reed	3.0	<0.1	0.03
<i>Symphytichum puniceum</i>	Swamp Aster	1.0	1.8	1.82
<i>Verbena hastata</i>	Blue Vervain	3.0	6.4	6.34
Diversity and Density Metrics				
Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft²	% Mix by No. Seeds
Grasses, Sedges, Rushes	15	57.9	59.9	59.23
Forbs	15	23.2	41.2	40.77
Totals	30	81.1	101.1	100

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft ²	% Mix by No. Seeds
Grasses, Sedges, Rushes	15	57.9	59.9	59.23
Forbs	15	23.2	41.2	40.77
Totals	30	81.1	101.1	100

Table 3. Infiltration Basin Bottom Seed Mix

Nomenclature		Seed Metrics		
		Oz/Acre	Seeds/ft²	% Mix by No. Seeds
Scientific Name	Common Name			
Grasses, Sedges, Rushes				
<i>Andropogon gerardii</i>	Big Bluestem	5.0	1.1	1.27
<i>Bromus ciliatus</i>	Fringed Brome	2.0	0.5	0.51
<i>Bromus kalmii</i>	Prairie Brome	4.0	0.7	0.81
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.5	3.2	3.55
<i>Carex bebbii</i>	Bebb's Owl Sedge	2.0	1.6	1.72
<i>Carex brevior</i>	Fescue Sedge	2.0	1.3	1.47
<i>Carex molesta</i>	Field Owl Sedge	2.0	1.1	1.27
<i>Carex vulpinoidea</i>	Brown Fox Sedge	3.0	6.9	7.60
<i>Elymus canadensis</i>	Canada Wild Rye	24.0	2.9	3.16
<i>Elymus virginicus</i>	Virginia Wild Rye	24.0	2.3	2.56
<i>Glyceria striata</i>	Fowl Manna Grass	1.0	2.1	2.28
<i>Juncus dudleyi</i>	Dudley's Rush	0.2	14.7	16.22
<i>Panicum virgatum</i>	Switch Grass	2.5	0.8	0.89
<i>Schizachyrium scoparium</i>	Little Bluestem	8.0	2.8	3.04
<i>Scirpus atrovirens</i>	Dark-green Bulrush	0.5	5.3	5.83
<i>Sorghastrum nutans</i>	Indian Grass	5.0	1.4	1.52
<i>Spartina pectinata</i>	Prairie Cord Grass	4.0	0.6	0.67
Forbs				
<i>Asclepias incarnata</i>	Swamp Milkweed	2.0	0.2	0.24
<i>Asclepias syriaca</i>	Common Milkweed	2.0	0.2	0.20
<i>Astragalus canadensis</i>	Canadian Milk Vetch	1.0	0.4	0.43
<i>Chamaecrista fasciculata</i>	Partridge Pea	4.0	0.2	0.27
<i>Eupatorium perfoliatum</i>	Boneset	0.5	1.8	2.03
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	0.5	4.0	4.44
<i>Eutrochium maculatum</i>	Joe Pye Weed	0.5	1.1	1.20
<i>Helenium autumnale</i>	Sneezeweed	0.5	1.5	1.65
<i>Helicopsis helianthoides</i>	False Sunflower	2.5	0.4	0.40
<i>Hypericum ascyron</i> ssp. <i>pyramidatum</i>	Great St. John's Wort	0.5	2.2	2.41
<i>Liatris pycnostachya</i>	Prairie Blazing Star	1.0	0.3	0.28
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.5	5.7	6.34
<i>Monarda fistulosa</i>	Wild Bergamot	1.5	2.4	2.66
<i>Oligoneuron riddellii</i>	Riddell's Goldenrod	0.5	1.1	1.18
<i>Oligoneuron rigidum</i>	Stiff Goldenrod	2.0	1.9	2.08
<i>Parthenium integrifolium</i>	Wild Quinine	1.0	0.2	0.18
<i>Physostegia virginiana</i>	Obedient Plant	1.0	0.3	0.28
<i>Pycnanthemum virginianum</i>	Mountain Mint	0.5	2.5	2.79
<i>Ratibida pinnata</i>	Yellow Coneflower	2.0	1.4	1.52
<i>Rudbeckia hirta</i>	Black-eyed Susan	3.0	6.3	7.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	0.5	0.5	0.54
<i>Rudbeckia triloba</i>	Brown-eyed Susan	0.5	0.4	0.43
<i>Silphium integrifolium</i>	Rosinweed	2.0	0.1	0.06
<i>Symphytotrichum ericoides</i>	Heath Aster	0.1	0.5	0.51
<i>Symphytotrichum laeve</i>	Smooth Blue Aster	0.5	0.6	0.70
<i>Symphytotrichum novae-angliae</i>	New England Aster	1.0	1.5	1.67
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue	1.0	0.3	0.28
<i>Tradescantia chiensis</i>	Ohio Spiderwort	1.0	0.2	0.20
<i>Verbena hastata</i>	Blue Vervain	1.0	2.1	2.36
<i>Vernonia fasciculata</i>	Common Ironweed	1.0	0.6	0.61

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft ²	% Mix by No. Seeds
Grasses, Sedges, Rushes	17	89.7	49.2	54.37
Forbs	31	38.1	41.3	45.63
Totals	48	127.8	90.6	100

Table 4. Shortgrass Graminoid Seed Mix

Nomenclature		Seed Metrics		
		Oz/Acre	Seeds/ft ²	% Mix by No. Seeds
Grasses, Sedges, Rushes				
<i>Bouteloua curtipendula</i>	Side oats Grama	80.0	11.0	14.63
<i>Juncus tenuis</i>	Path Rush	2.0	45.9	60.98
<i>Koeleria macrantha</i>	June Grass	4.0	18.4	24.39
Diversity and Density Metrics				
Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft ²	% Mix by No. Seeds
Grasses and Sedges	3	86.0	75.3	100.0
Forbs	0	0.0	0.0	0.0
Totals	3	86.0	75.3	100

Diversity and Density Metrics

Plant Type	Species Richness	Total Oz/Acre	Total Seeds/ft ²	% Mix by No. Seeds
Grasses and Sedges	3	86.0	75.3	100.0
Forbs	0	0.0	0.0	0.0
Totals	3	86.0	75.3	100

SEED MIX DETAILS

HILL VALLEY



DATE: 08-25-2025
REVISED:

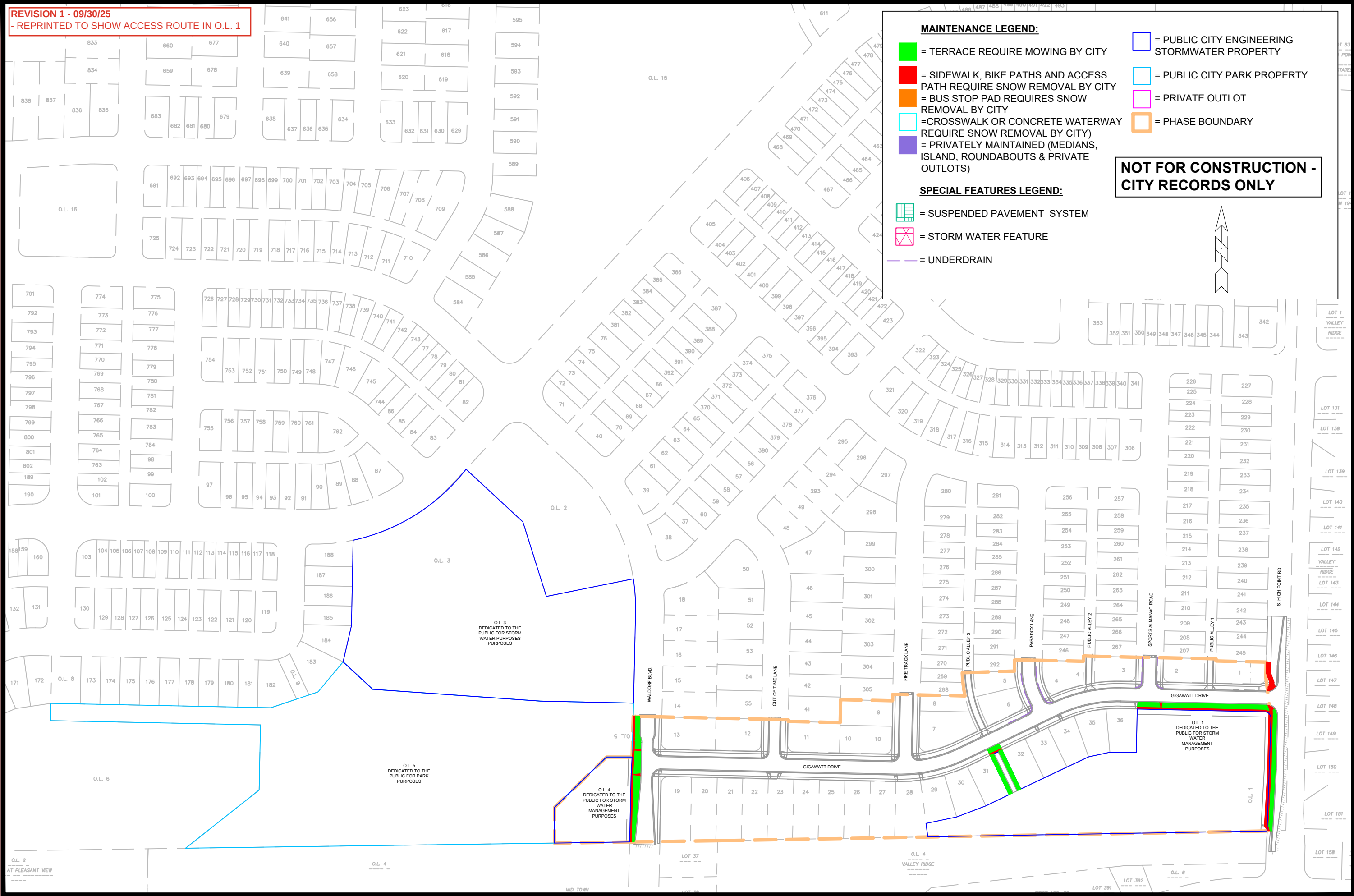
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MAINTENANCE LEGEND:

= TERRACE REQUIRE MOWING BY CITY

= SIDEWALK, BIKE PATHS AND ACCESS PATH REQUIRE SNOW REMOVAL BY CITY

= BUS STOP PAD REQUIRES SNOW REMOVAL BY CITY

= CROSSWALK OR CONCRETE WATERWAY REQUIRE SNOW REMOVAL BY CITY)

= PRIVATELY MAINTAINED (MEDIANS, ISLAND, ROUNDABOUTS & PRIVATE OUTLOTS)

SPECIAL FEATURES LEGEND:

= SUSPENDED PAVEMENT SYSTEM

= STORM WATER FEATURE

= UNDERDRAIN

= PUBLIC CITY ENGINEERING STORMWATER PROPERTY

= PUBLIC CITY PARK PROPERTY

= PRIVATE OUTLOT

= PHASE BOUNDARY

NOT FOR CONSTRUCTION - CITY RECORDS ONLY

15669

MADISON, WI

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MAINTENANCE PLAN (CITY USE ONLY)

HILL VALLEY PHASE 1 STORMWATER MANAGEMENT

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