Three Oaks Recreation Area - Scuba Facility

5517 Northwest Highway
Crystal Lake, Illinois 60014

City of Crystal Lake

100 West Municipal Complex
Crystal Lake, Illinois 60039

Issue For Bid

May 01, 2014

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Project Team

Landscape Architect
Hitchcock Design Group
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Structural Engineer
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1684 Quincy Avenue
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T 630.717.5335
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General Notes

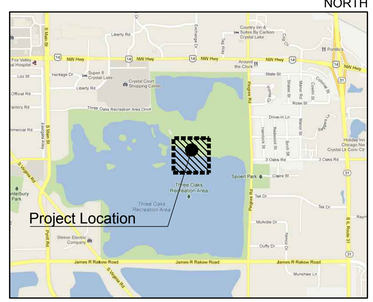
1. Basemap information obtained from plans prepared by Vanderstappen Surveying & Engineering, Incorporated received December 04, 2014.
2. Verify site conditions and information on drawings. Promptly report any concealed conditions, mistakes, discrepancies or deviations from the information shown in the Contract Documents. The Owner is not responsible for unauthorized changes or extra work required to correct unreported discrepancies.
3. Secure and pay for permits, fees and inspections necessary for the proper execution of this work. Comply with codes applicable to this work.
4. Refer to specifications for additional conditions, standards and notes.

Sheet Index

L0.1	Sheet Key
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L2.1	Site Preparation and Removals Plan
L3.1	Grading Plan
L4.1	Layout and Materials Plan
L4.2	Layout and Materials Plan - Alternate Pier Layout
L5.1	Planting Plan
L6.1-L6.6	Details

Project Location Map

NORTH





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Existing boat house and restrooms

See Civil Plans for gravel and paved path improvements

Existing marina

Sheets L1.1, L2.1, L3.1, 4.1-2, L5.1

PREVIOUS SURVEY LIMITS
VANDERSTAPPEN SURVEY LIMITS

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SHEET TITLE
Sheet Key

SCALE IN FEET
1" = 30'

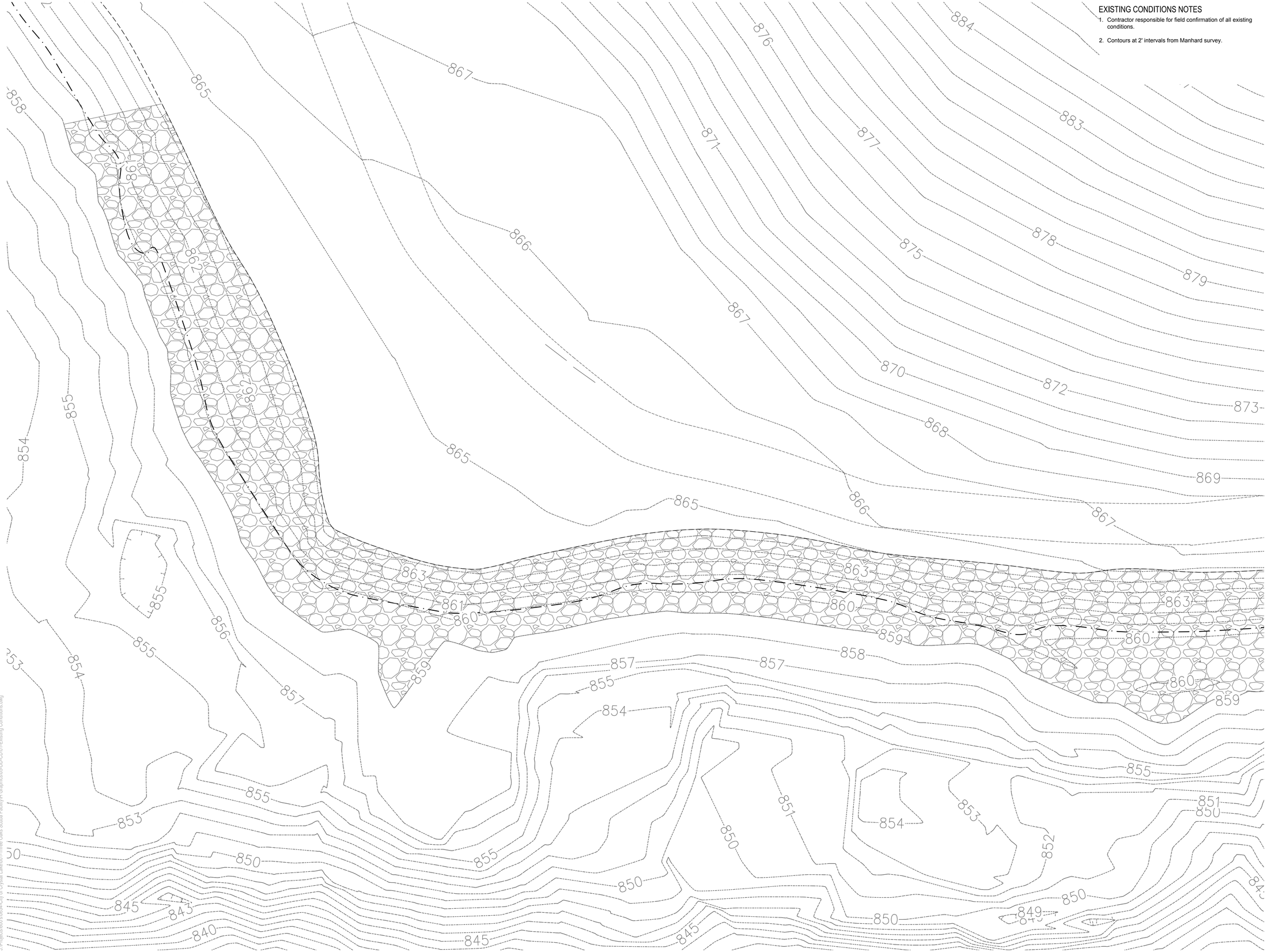
0' 15' 30' 90'

NORTH

SHEET NUMBER
L0.1

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SHEET TITLE
Existing Conditions Plan

SCALE IN FEET
1" = 10'

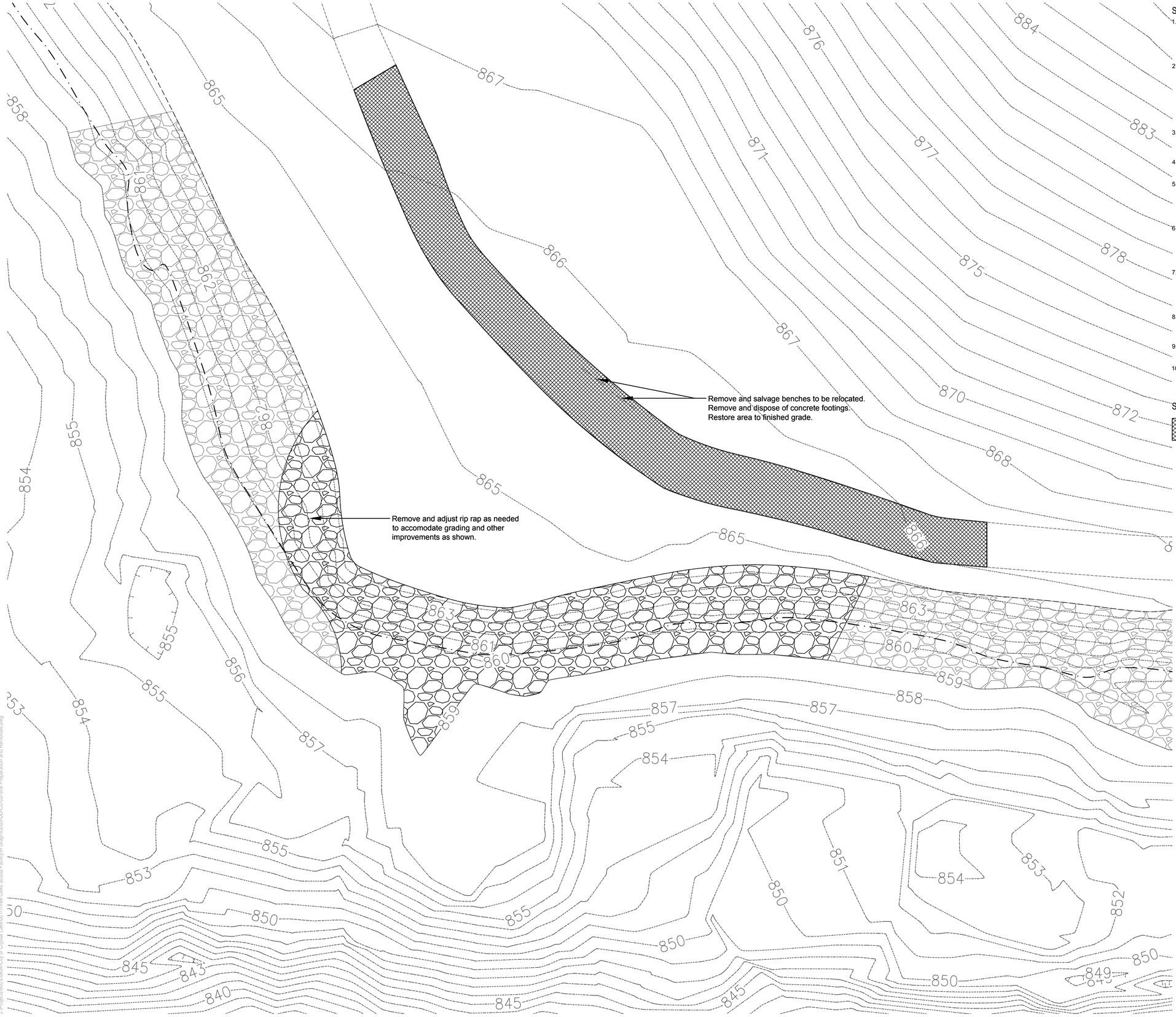
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NORTH

SHEET NUMBER
L1.1

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SITE PREPARATION AND REMOVALS NOTES

1. Contractor shall install construction fence at the limits of construction prior to beginning work. Coordinate limits with Owner. Maintain and adjust construction fencing as needed during progress of construction. Staging and construction access shall be approved by Owner.
2. Plans indicate general location and limits of removals. Contractor shall perform removals only as necessary for construction of proposed improvements. No additional payments will be made for removals or restoration not required to construct the improvements as drawn and specified. Refer to Layout Plan for more specific information regarding proposed improvements and verify conditions in the field prior to performing removals.
3. Tree stumps shall be ground to a minimum depth of 18" below existing grade or as required to properly perform the work.
4. Where turf or plantings are proposed in existing paved areas, remove all base material.
5. Items indicated for Removal shall include complete removal of above grade item and below grade appurtances (foundations, urban fill, wiring, piping, etc.) including disposal off-site following applicable codes and ordinances, unless otherwise shown on the plans.
6. Items indicated as Remove and Salvage shall include careful protection, removal, and storage of items. For reinstall items, Contractor shall store during construction. All other Salvage items shall be delivered to location as indicated by owner unless otherwise shown on the plans.
7. Contractor to protect all existing utilities and all other site features not designated for removal. Contractor is responsible for replacing/repairing any existing utilities or other site features damaged during construction to the original condition at no cost to the Owner.
8. Contractor responsible for maintaining existing utility services (electrical, sanitary, storm) during construction unless otherwise indicated in the Contract Documents.
9. Contractor shall coordinate all work so public sidewalk remains open throughout construction.
10. See Civil Plans for other removals, site preparation, and soil erosion and sediment control information.

SITE PREPARATION AND REMOVALS LEGEND

Remove and stockpile stone paving and gravel base for reuse. Remove and dispose of excess material off site. Remove subgrade material as needed. Verify in the field with City Engineer if existing gravel base is suitable to remain where new concrete paving is designated.

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SHEET TITLE
Site Preparation and Removals Plan

SCALE IN FEET
1" = 10'

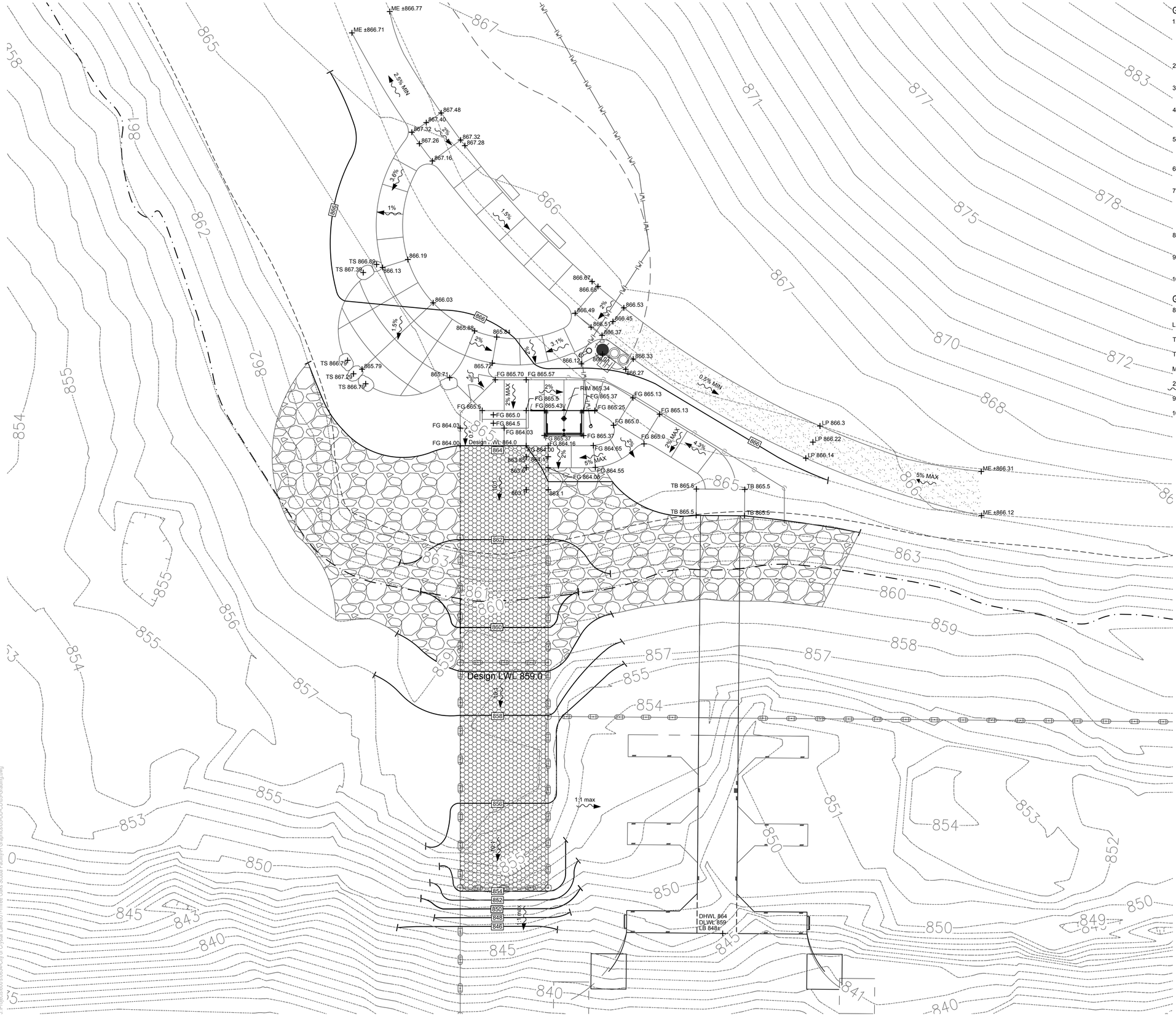
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NORTH

SHEET NUMBER
L2.1

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GRADING NOTES

1. All surfaces shall be graded for positive drainage. Grade pathways for 2% cross slope in direction shown on plan. Grade to divert water away from all walls, columns, steps, and structures. Where direction is not shown, cross slopes shall be in direction needed to achieve positive drainage.
2. Maximum slope of 20:1 on all paved areas unless otherwise noted. Slopes greater than 20:1 will not be accepted.
3. All slopes between spot elevations on pathways shall be consistent.
4. Avoid excessive filling over critical root zone of trees designated to remain. Feather newly graded areas into existing grade.
5. Strip topsoil in area of designated paving and respread in accordance with grading plan. Excess material can be placed on site in accordance with City Engineer's direction.
6. Contractor to import and distribute structural fill material for hardscape areas to achieve grades as shown on the plans.
7. Contractor to import and distribute topsoil for all turf areas to minimum depth of 6" to achieve the grades and planting areas to minimum depth of 18" to achieve the grades, as shown on the plans. Granular fill will not be accepted under areas designated for turf or planting.
8. Promptly notify Owners Representative if unsatisfactory sub-grade materials are discovered.
9. Obtain Landscape Architect's review of fine grading prior to seeding operations.
10. Refer to specifications for additional conditions, standards and notes.

GRADING LEGEND

829.00	Spot Elevation
LP829.00	Low Point
TB829.00	Top of Abutment
TW829.00	Top of Wall
ME	Match Existing
2%	Direction of Slope
99	Minor Contour (1 foot)
100	Major Contour (5 foot)

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SHEET TITLE
Grading Plan

SCALE IN FEET
1" = 10'

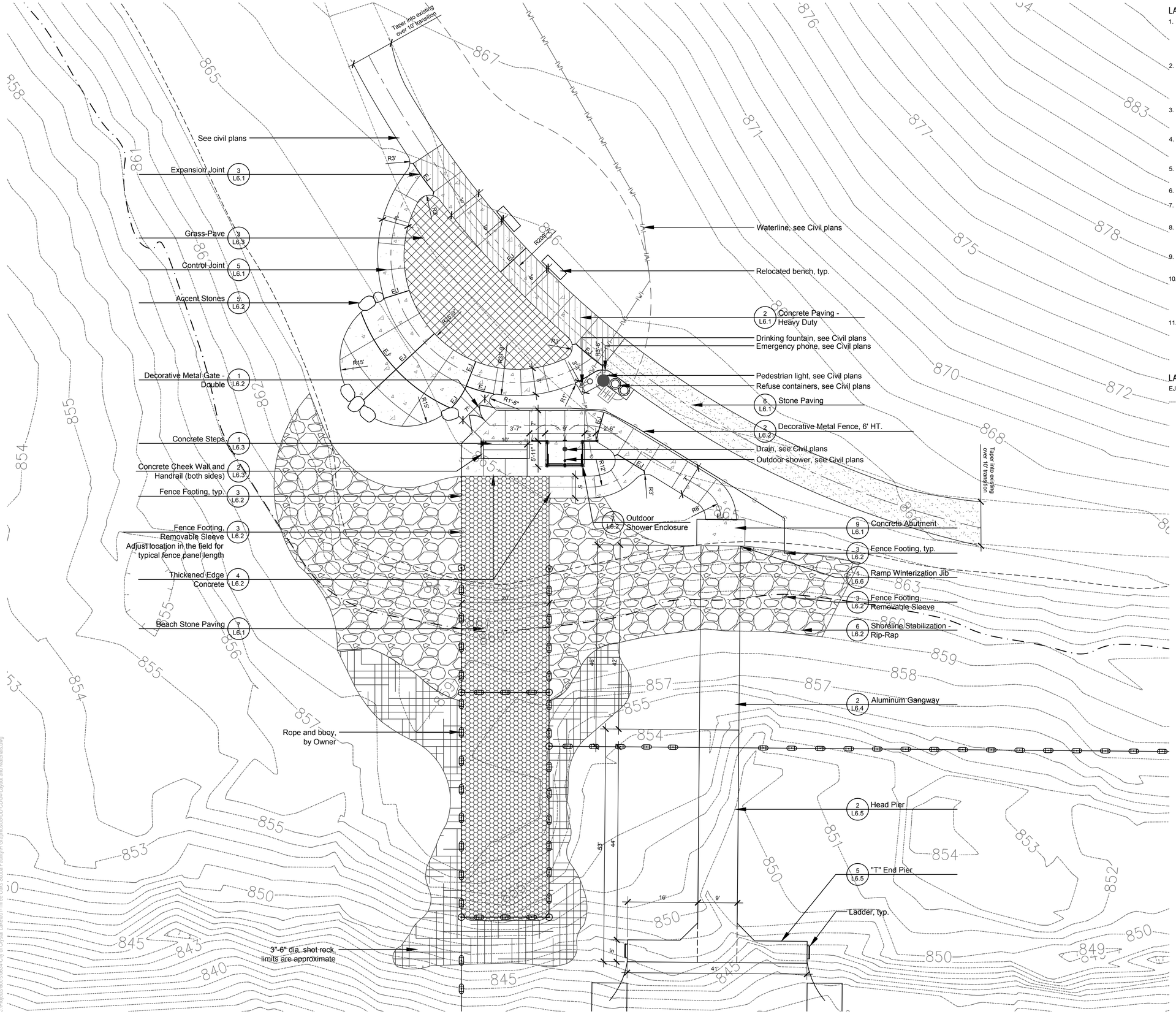
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NORTH

SHEET NUMBER
L3.1

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LAYOUT NOTES

1. Contractor responsible for field layout of all new improvements. Digital files of geometric information will be provided upon request in AutoCAD format. No additional payment will be made for adjustments necessary to construct the work as drawn.
2. Contractor responsible to coordinate work in order to obtain approval of all layout by Owners Representative prior to construction. No additional payment will be made to correct work if constructed incorrectly without pre-approval by Owners Representative.
3. Contractor responsible to maintain all layout stakes during construction. No additional payment will be made to replace layout stakes.
4. Place stakes every 25 feet on center along centerline of all pathways for review by the Owner's Representative prior to earthwork operations.
5. All walls are dimensioned to Face of Wall unless otherwise noted.
6. All curves and radii to be smooth and not segmented.
7. Contractor to provide layout stakes every 10 feet minimum for large arcs where radius points are not accessible.
8. Adjustment to stake locations due to discrepancies between coordinates and dimensions is incidental to the contract. No additional payments will be made for this work.
9. Contractor responsible to take delivery, assemble and install all materials and furnishings per manufacturer's instructions.
10. Place control and expansion joints as shown on plans and details for all curbs, walks, walls, steps, and concrete paving. Where joints are not shown, place control joints a maximum of 10 feet on center, expansion joints a maximum of 30 feet on center, and between all separate pours.
11. Refer to specifications for additional conditions, standards and notes.

LAYOUT LEGEND

EJ — Expansion Joint

---------- Saw Cut Joint

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SHEET TITLE
Layout and Materials Plan

SCALE IN FEET
1" = 10'

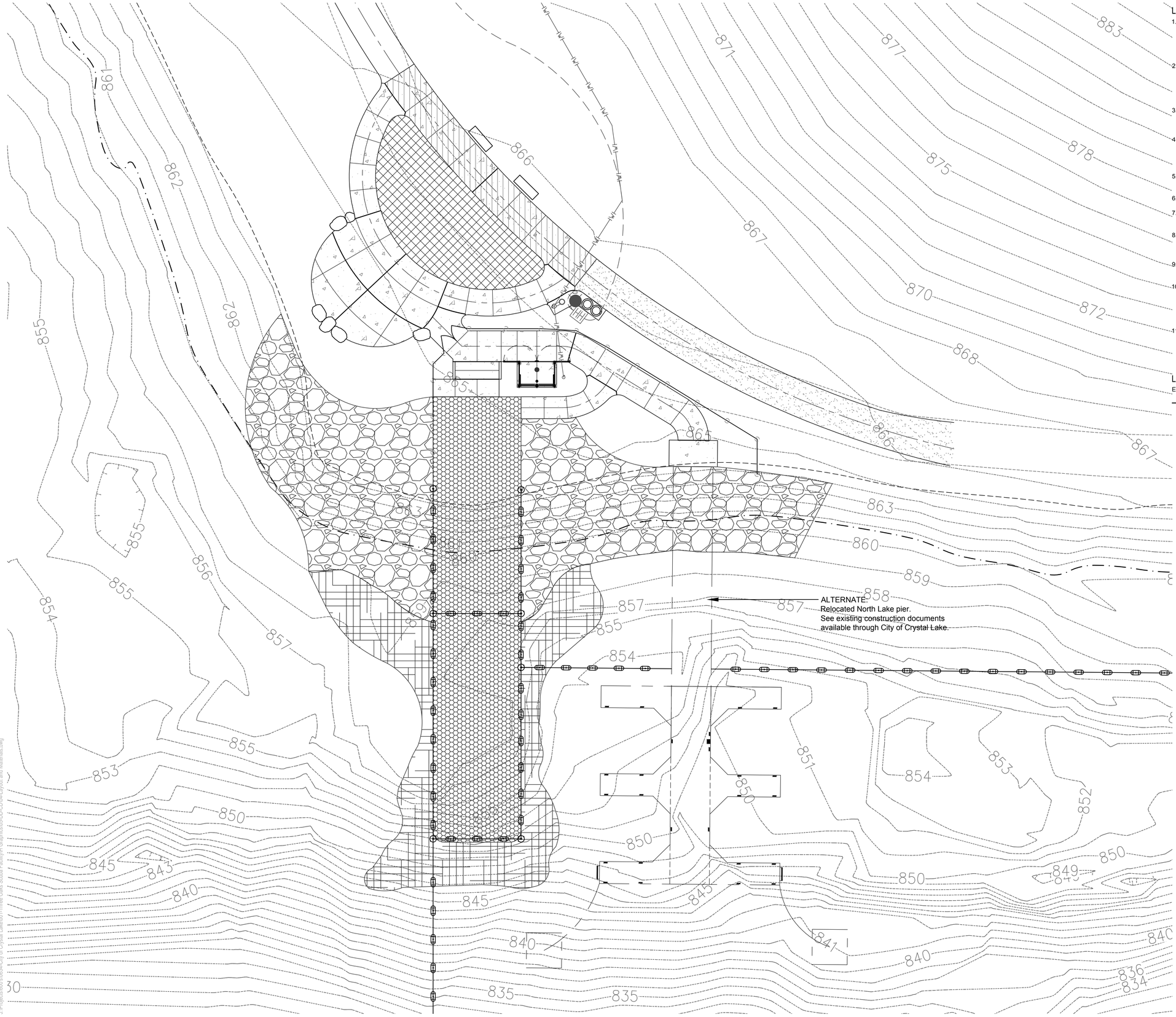
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SHEET NUMBER
L4.1

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LAYOUT NOTES

1. Contractor responsible for field layout of all new improvements. Digital files of geometric information will be provided upon request in AutoCAD format. No additional payment will be made for adjustments necessary to construct the work as drawn.
2. Contractor responsible to coordinate work in order to obtain approval of all layout by Owners Representative prior to construction. No additional payment will be made to correct work if constructed incorrectly without pre-approval by Owners Representative.
3. Contractor responsible to maintain all layout stakes during construction. No additional payment will be made to replace layout stakes.
4. Place stakes at edges of sport courts, fields, limits of playground, shelter, and every 25 feet on center along centerline of all pathways for review by the Owner's Representative prior to earthwork operations.
5. All walls are dimensioned to Face of Wall unless otherwise noted.
6. All curves and radii to be smooth and not segmented.
7. Contractor to provide layout stakes every 10 feet minimum for large arcs where radius points are not accessible.
8. Adjustment to stake locations due to discrepancies between coordinates and dimensions is incidental to the contract. No additional payments will be made for this work.
9. Contractor responsible to take delivery, assemble and install all materials and furnishings per manufacturer's instructions.
10. Place control and expansion joints as shown on plans and details for all curbs, walks, walls, steps, and concrete paving. Where joints are not shown, place control joints a maximum of 10 feet on center, expansion joints a maximum of 30 feet on center, and between all separate pours.
11. Refer to specifications for additional conditions, standards and notes.

LAYOUT LEGEND

EJ — Expansion Joint

——— Saw Cut Joint

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SHEET TITLE
Layout and Materials Plan - Alternate Pier Layout

SCALE IN FEET
1" = 10'

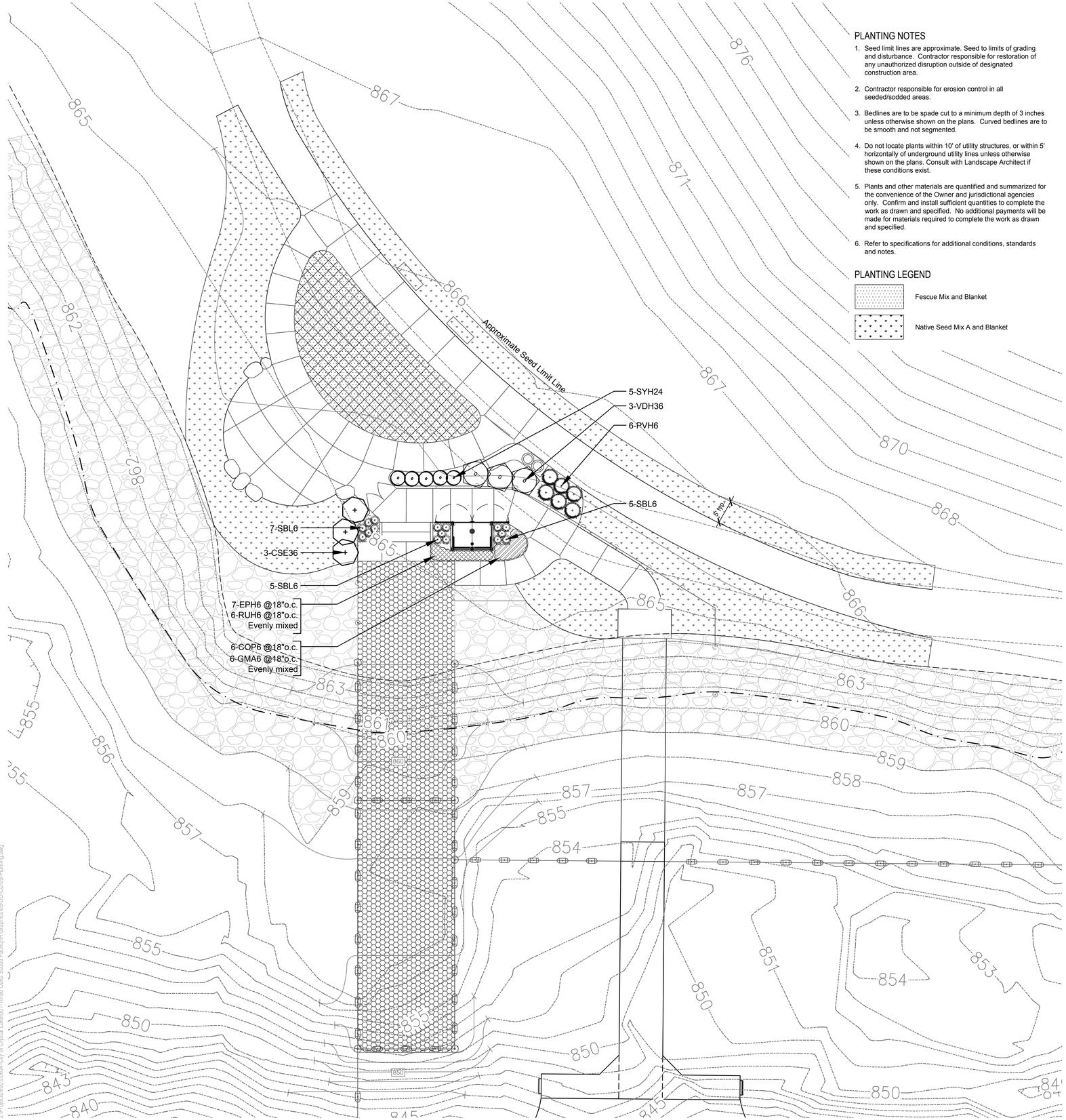
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SHEET NUMBER
L4.2

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PLANTING NOTES

1. Seed limit lines are approximate. Seed to limits of grading and disturbance. Contractor responsible for restoration of any unauthorized disruption outside of designated construction area.
2. Contractor responsible for erosion control in all seeded/sodded areas.
3. Bedlines are to be spade cut to a minimum depth of 3 inches unless otherwise shown on the plans. Curved bedlines are to be smooth and not segmented.
4. Do not locate plants within 10' of utility structures, or within 5' horizontally of underground utility lines unless otherwise shown on the plans. Consult with Landscape Architect if these conditions exist.
5. Plants and other materials are quantified and summarized for the convenience of the Owner and jurisdictional agencies only. Confirm and install sufficient quantities to complete the work as drawn and specified. No additional payments will be made for materials required to complete the work as drawn and specified.
6. Refer to specifications for additional conditions, standards and notes.

PLANTING LEGEND

Fescue Mix and Blanket

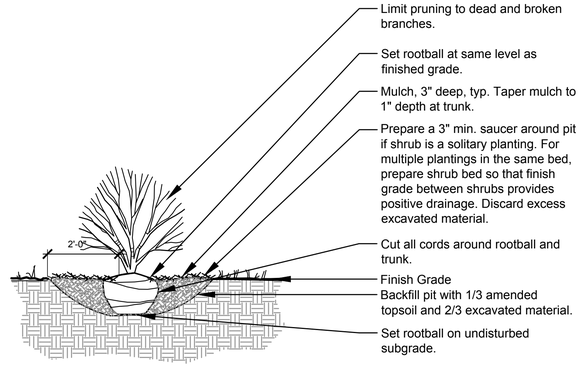
Native Seed Mix A and Blanket

PLANTING LIST

Code	Botanical Name	Common Name	Size	Qty
Deciduous Shrubs				
CSE36	Cornus sericea	Redosier Dogwood	36" HT	3
SYH24	Symphoricarpos x chenaultii 'Hancock'	Hancock' Chenault Coralberry	24" HT	5
VDH36	Viburnum dentatum 'Christom'	Blue Muffin Arrowwood Viburnum	36" HT	3
				11
Perennials				
COP6	Coreopsis palmata	Stiff Coreopsis	1 GAL	6
EPH6	Echinacea purpurea 'Kim's Knee High'	Kim's Knee High Purple Coneflower	1 GAL	7
GMA6	Geranium maculatum	Wild Cranesbill Geranium	1 GAL	6
RUH6	Rudbeckia hirta	Brown-eyed Susan	1 GAL	6
PVH6	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	1 GAL	6
SBL6	Schizachrium scoparium 'The Blues'	The Blues' Little Bluestem	1 GAL	17
				48

PLANTING LISt : NATIVE SEED MIX A

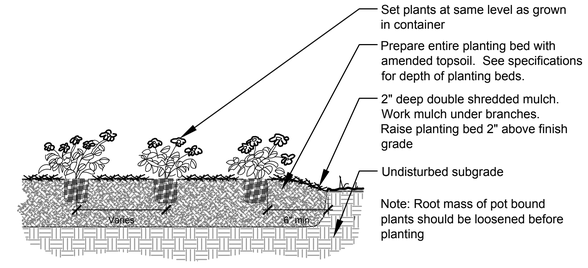
Scientific name	Common name	Seed (oz/acre)
Cover crop		
Avena sativa	Seed oats	112
Lolium multiflorum	Annual ryegrass	96
Grasses		
Andropogon gerardii	Big bluestem	16
Andropogon scoparius	Little bluestem	32
Bouteloua curtipendula	Side-oats grama	32
Elymus canadensis	Canada wild rye	32
Panicum virgatum	Switchgrass	16
Sorghastrum nutans	Indian grass	16
Forbs		
Aster laevis	Smooth blue aster	2
Aster novae-angliae	New England aster	2
Cassia fasiculata	Partridge pea	6
Coreopsis tripteris	Tall coreopsis	2
Echinacea pallida	Pale purple coneflower	4
Eryngium yuccifolium	Rattlesnake master	1
Heliopsis helianthoides	False Sunflower	2
Liatris aspera	Rough blazing star	1
Lupinus perennis	Wild lupine	1
Monarda fistulosa	Wild bergamont	6
Parthenium integrifolium	Wild quinine	2
Petalostemum purpureum	Purple prairie clover	2
Ratibida pinnata	Yellow coneflower	4
Rudbecki hirta	Black-eyed Susan	8
Silphium integrifolium	Rosinweed	2
Silphium laciniatum	Compass plant	2
Silphium terebinthinaceum	Prairie dock	2
Solidago nemoralis	Old field goldenrod	2
Solidago rigida	Stiff goldenrod	2
Tradescantia ohiensis	Common spiderwort	2
Verbena stricta	Hoary vervain	2



1 Shrub Planting

Scale: 1/2" = 1'-0"

d-plant-shrub



2 Perennial Planting

Scale: 1/2" = 1'-0"

d-plant-ann-perenn

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SHEET TITLE
Planting Plan

SCALE IN FEET
1" = 10'

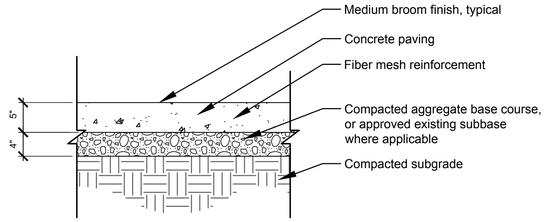
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NORTH

SHEET NUMBER
L5.1

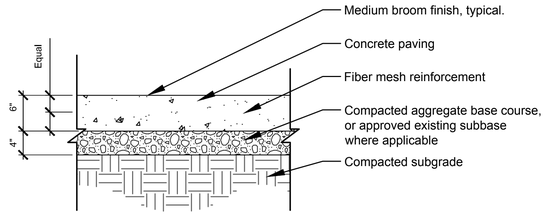
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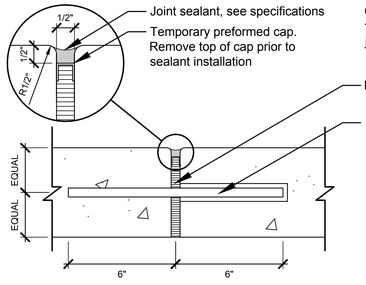
1 Concrete Paving

Scale: 1" = 1'-0" d-conc-pcc-ped



2 Concrete Paving -Heavy Duty

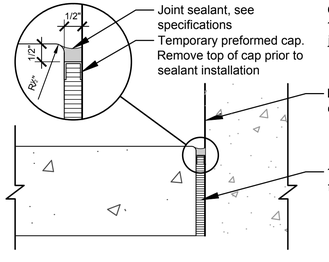
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General Notes:
1 - Refer to layout plans for expansion joint placement information

3 Expansion Joint

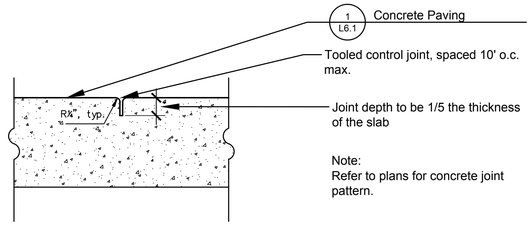
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General Notes:
1 - Refer to layout plans for isolation joint placement

4 Isolation Joint - Section

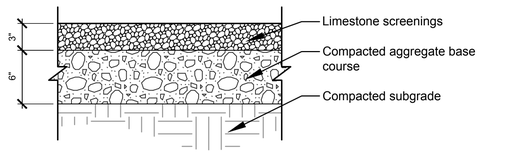
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Note:
Refer to plans for concrete joint pattern.

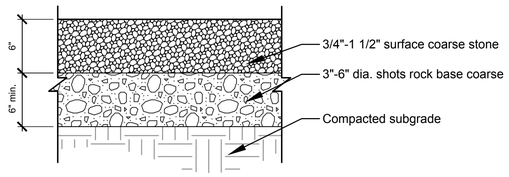
5 Control Joint

Scale: 3" = 1'-0" d-joint-control



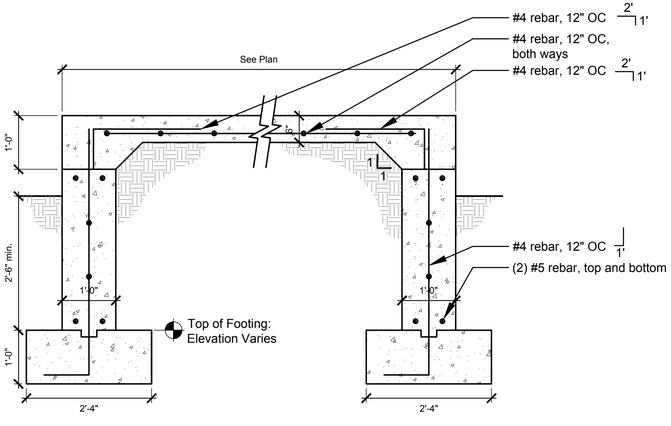
6 Stone Paving

Scale: 1 1/2" = 1'-0" d-stone-pav-ped-full



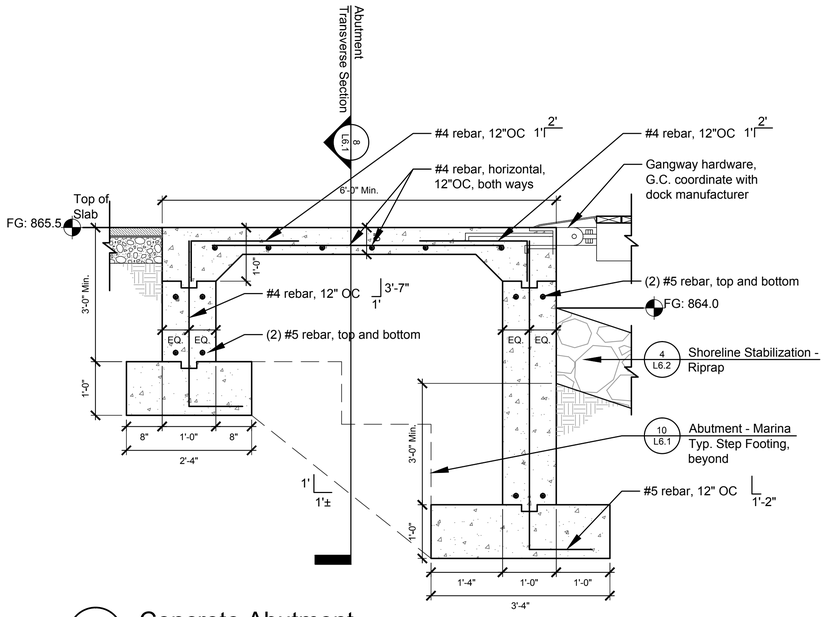
7 Beach Stone Paving

Scale: 1 1/2" = 1'-0" d-stone-pav-beach



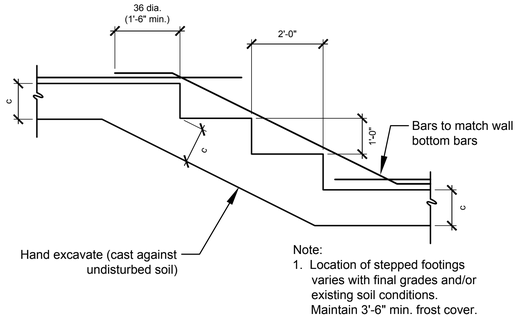
8 Abutment - Transverse Section

Scale: 3/4" = 1'-0" d-conc-abut-sec



9 Concrete Abutment

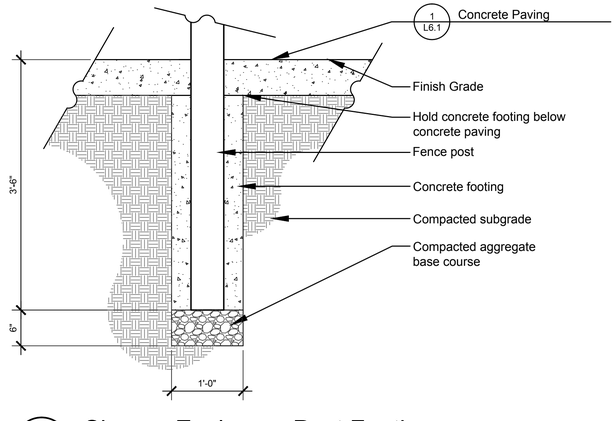
Scale: 3/4" = 1'-0" d-conc-abut



Note:
1. Location of stepped footings varies with final grades and/or existing soil conditions. Maintain 3'-6" min. frost cover.

10 Abutment - Marina - Typ. Step Footing

Scale: 1/2" = 1'-0" d-abut-marina-typ step ftg



11 Shower Enclosure Post Footing

Scale: 1" = 1'-0" d-foot-trex-fence

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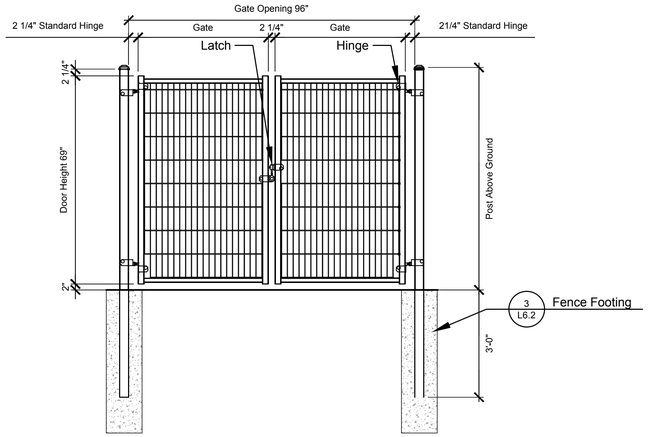
SCALE IN FEET
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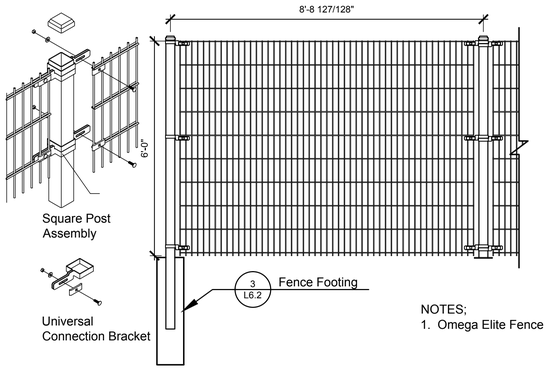
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1 Decorative Metal Gate - Double Swing

Scale: N.T.S.

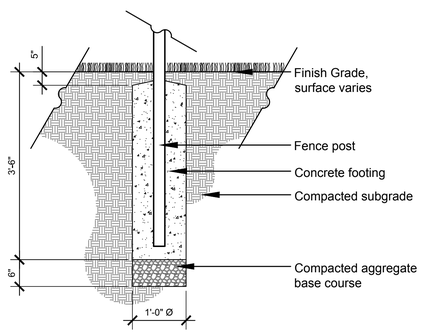
d-fence-gate-double



NOTES;
1. Omega Elite Fence

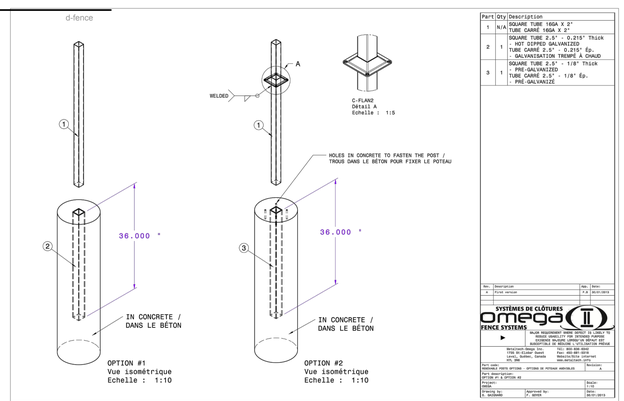
2 Decorative Metal Fence (6' HT)

Scale: 1/2" = 1'-0"



3 Fence Footing

Scale: 3/4" = 1'-0"



Fence Footing, Removable Sleeve

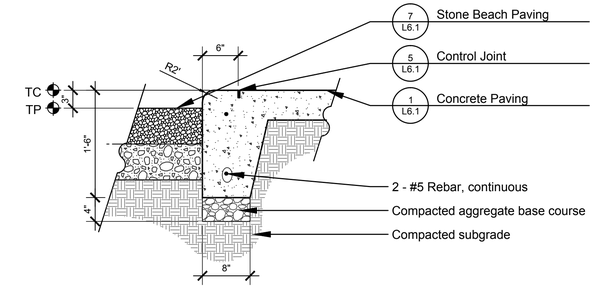
Scale: N.T.S.

d-foot-fence

6 Shoreline Stabilization - Riprap

Scale: 1/4" = 1'-0"

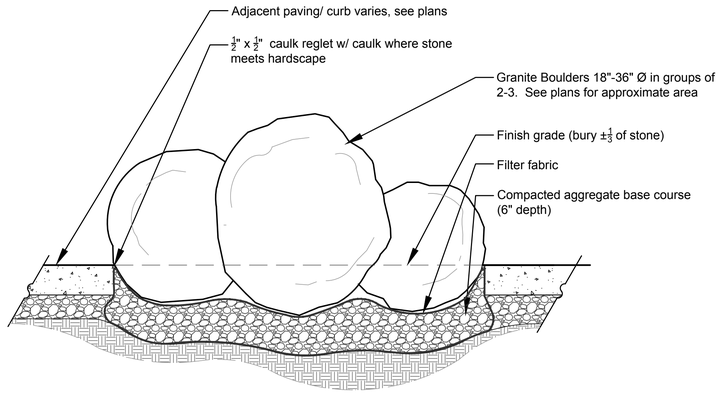
d-rip rap edge



4 Thickened Edge Concrete Walk

Scale: 1" = 1'-0"

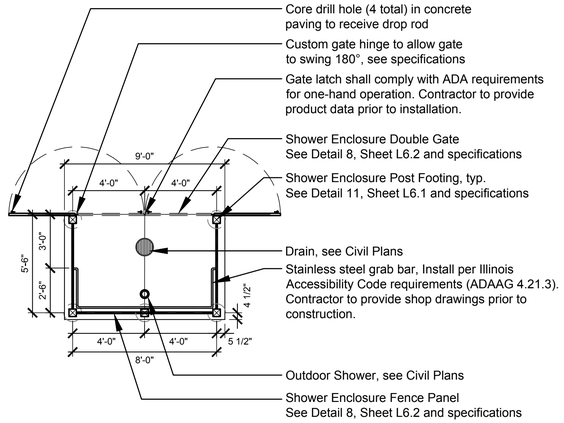
d-conc pav-thick edge



5 Accent Stones

Scale: 1" = 1'-0"

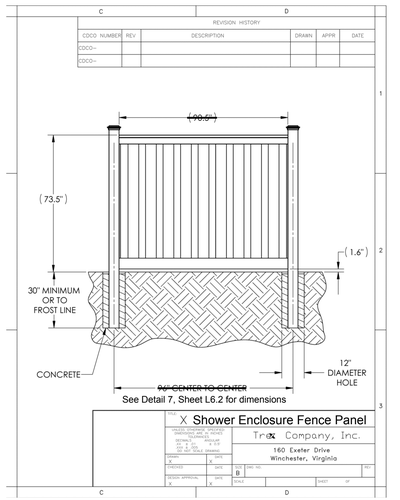
d-stone-accent



Outdoor Shower Enclosure

Scale: 1/4" = 1'-0"

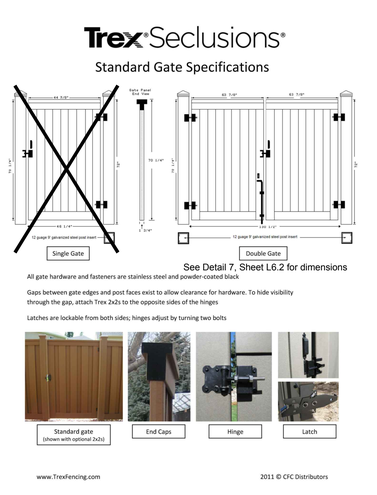
d-shower encl-plan



Shower Enclosure - Fence Panel & Gate

Scale: N.T.S.

d-shower-fence-gate



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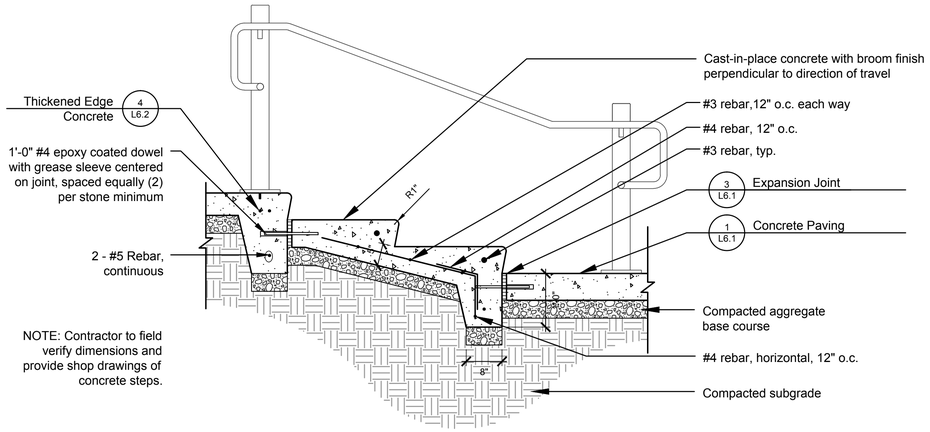
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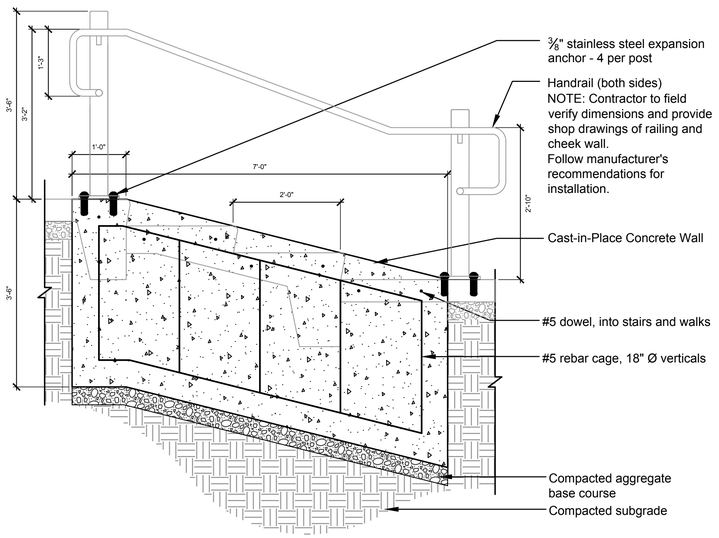
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1 Concrete Steps

Scale: 3/4" = 1'-0"

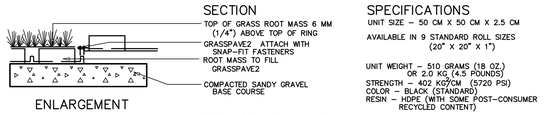
d-steps



2 Cheek Wall and Handrail

Scale: 3/4" = 1'-0"

d-sec-cheek wall



SPECIFICATIONS

UNIT SIZE – 50 CM X 50 CM X 2.5 CM

AVAILABLE IN 9 STANDARD ROLL SIZES (20" X 20" X 1")

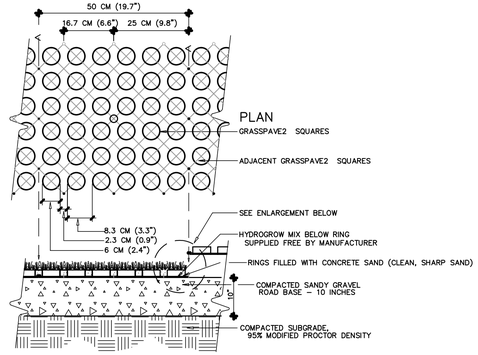
UNIT WEIGHT – 510 GRAMS (18 OZ.) OR 2.0 KG (4.5 POUNDS)

STRENGTH – 402 KG/CM (5720 PSI)

COLOR – BLACK (STANDARD)

RESIN – HDPE (WITH SOME POST-CONSUMER RECYCLED CONTENT)

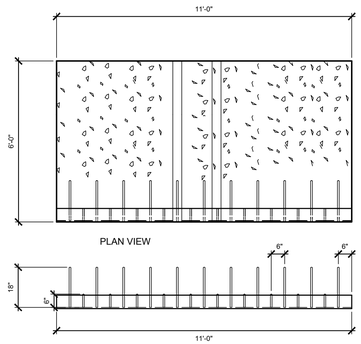
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GOLDEN, COLORADO 80401
800-233-1510 OR 303-233-8383
FAX 303-233-8282
www.invisiblestructures.com
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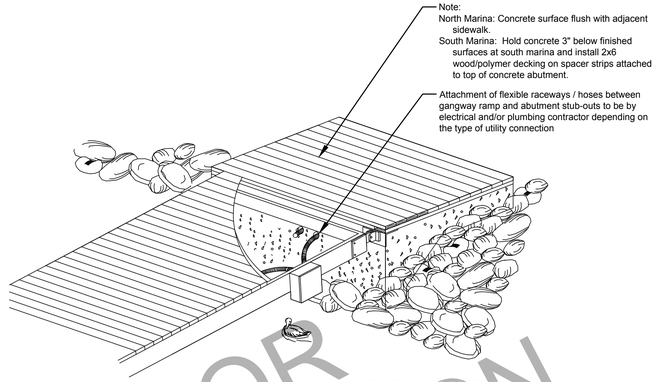


3 Grasspave

Not to Scale

d-grasspave





4 Marina Pier Abutment

Scale: N.T.S.

d-dock-abut-north

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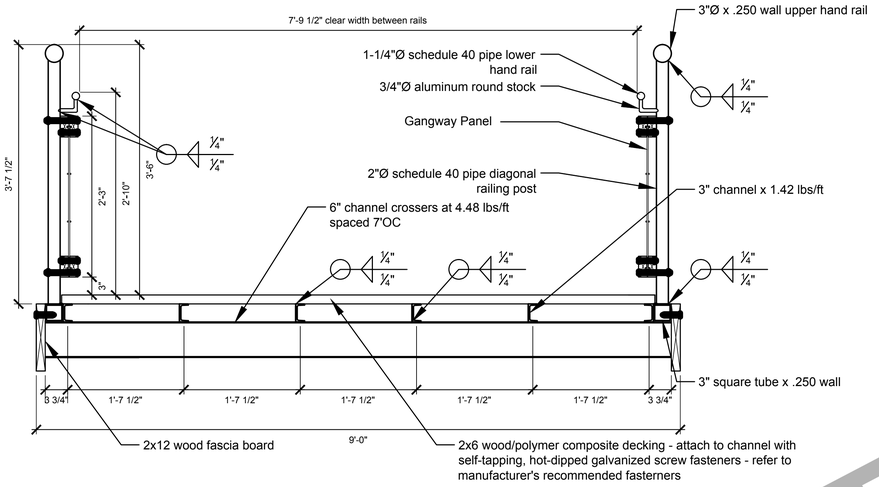
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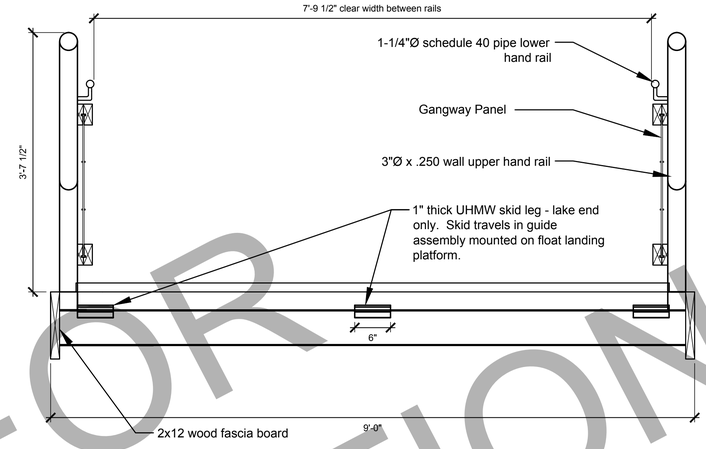
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1 Aluminum Gangway - Transverse Section

Scale: 1" = 1'-0"

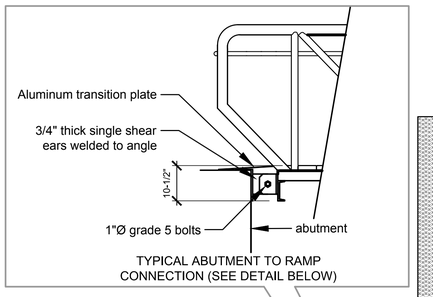
d-dock-gangway-aluminum



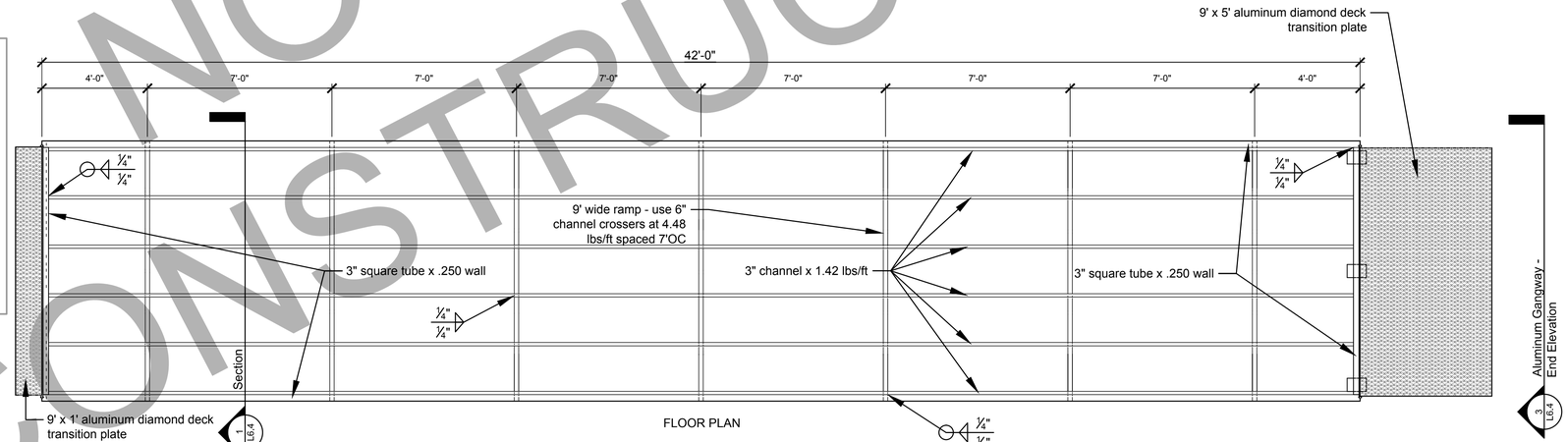
3 Aluminum Gangway - End Elevation

Scale: 1" = 1'-0"

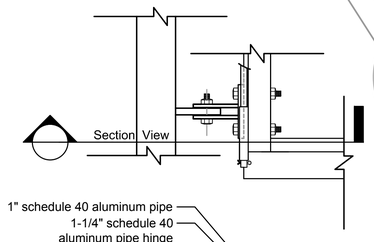
d-dock-gangway-end-elev

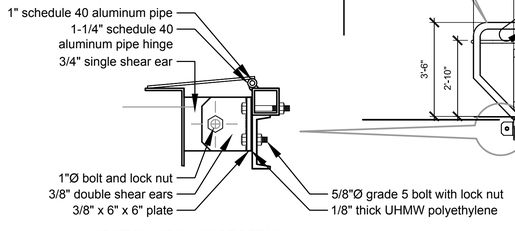


TYPICAL ABUTMENT TO RAMP CONNECTION (SEE DETAIL BELOW)

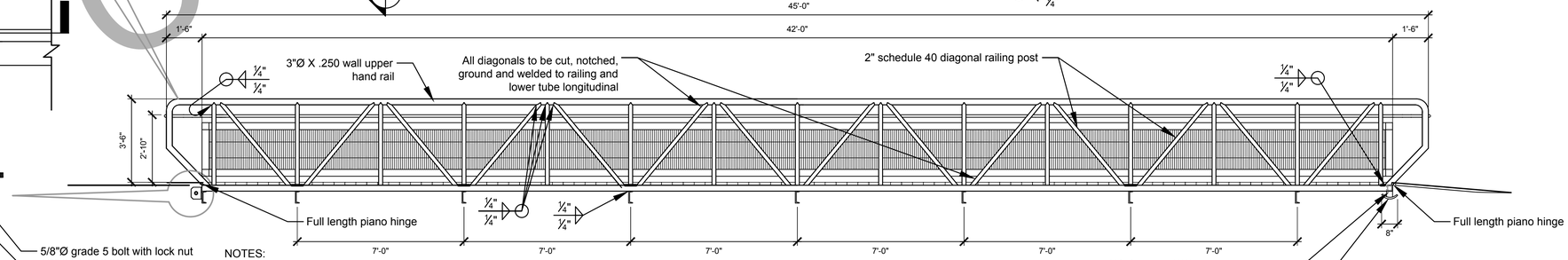


FLOOR PLAN





SECTION VIEW - HINGE DETAIL



SIDE ELEVATION (FASCIA BOARD REMOVED)

NOTES:
1. 3"OD upper hand rail, 2" schedule 40 vertical and diagonal railing post and 1-1/4" schedule 40 hand rail aluminum structural members shall be 6005-T5 aluminum.
2. All other aluminum structural members shall be 6061-T6 aluminum.
3. All welds shall conform to the requirements of the American Welding Society.
4. Decking to be 2x6 wood/polymer composite
5. Dead load 15psf and live load of 50psf
6. Hand rails shall meet IBC 2006 requirements
7. Provide shop drawings for both gangways prior to manufacturing.

2 Aluminum Gangway - Plan and Elevation

Scale: 3/8" = 1'-0"

DETAIL PROVIDED BY: Flotation Docking Systems, Inc. , Cedarville, Michigan

d-dock-gangway-plan-elev

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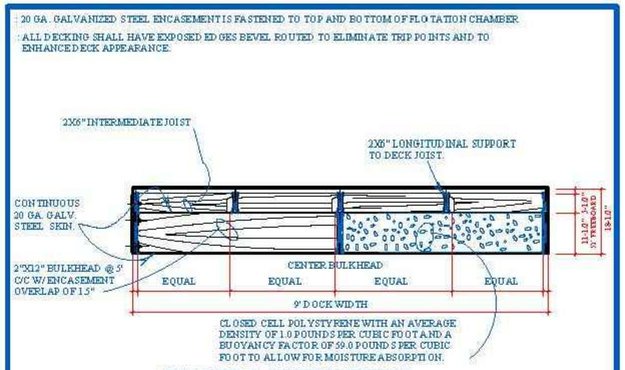
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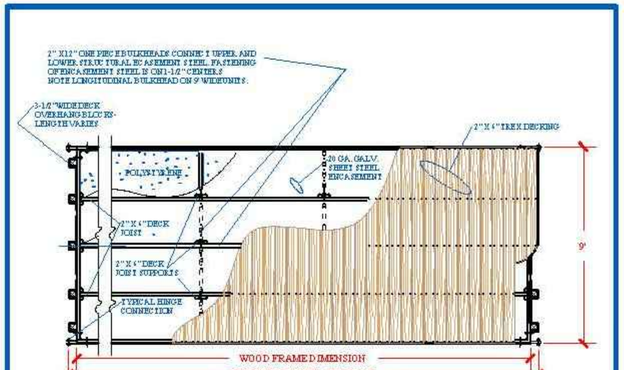
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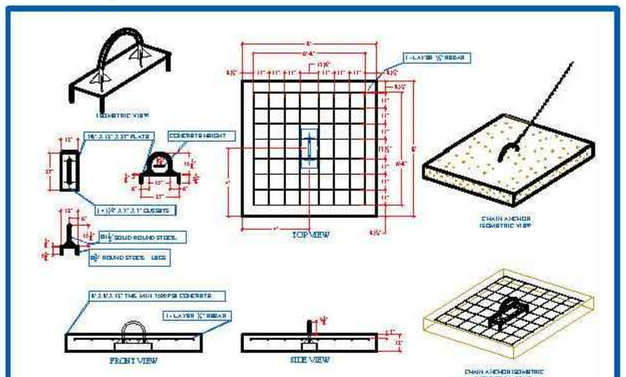
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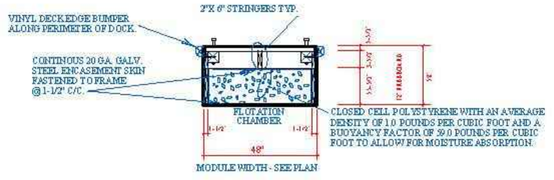
FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | HEAD PIER SECTION | DETAIL #1



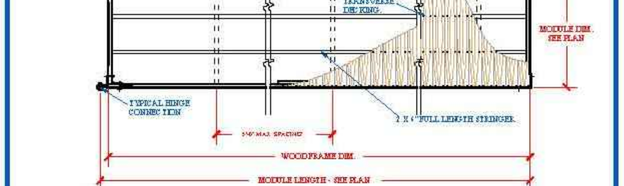
FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | HEAD PIER PLAN | DETAIL # 2



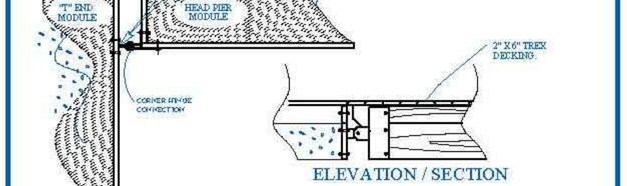
FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | CONCRETE ANCHOR | DETAIL #3



FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | FINGER PIER SECTION | DETAIL #4



FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | "T" END PIER PLAN | DETAIL # 5



FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN | FINGER PIER HINGE CONNECTION | DETAIL # 6

THREE OAKS

FLOTATION DOCKING SYSTEMS of CEDARVILLE MICHIGAN

DETAIL DRAWINGS
DATE: 1/29/13
SCALE: NO SCALE
PAGE: 1

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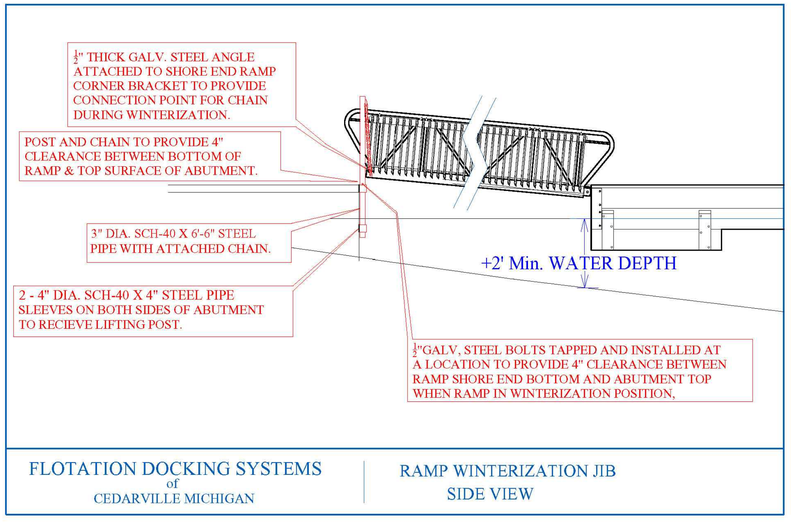
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1 Ramp Winterization Jib

Scale: N.T.S.

d-jib

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